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Finishing Products Catalog



PROVEN QUALITY. LEADING TECHNOLOGY

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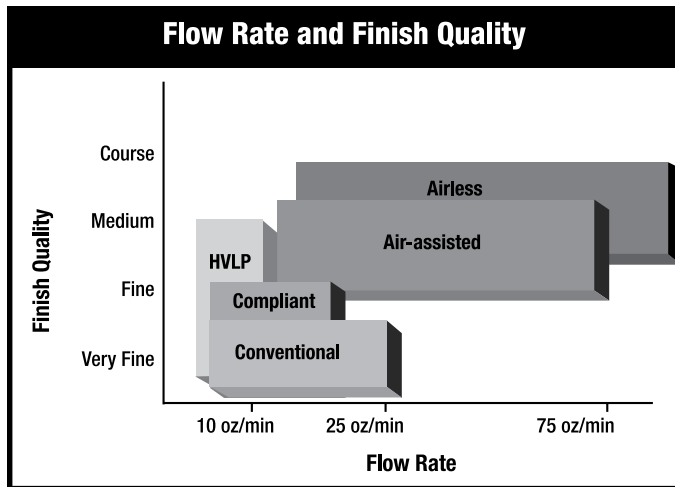
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Industrial Customer Service

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Applicators

Spray Finishing Technologies



Definitions and Graco Brands by Technology

Transfer Efficiency

Transfer efficiency rates the spray painting equipment's ability to put material on the target, compared to how much escapes as overspray bounce back material. Transfer efficiency relates directly to material savings and environmental compliance.

Flow Rate

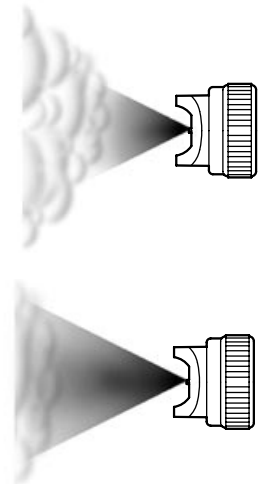
Flow rate is the volume of material that can effectively be atomized through an applicator. It is typically referred to in ounces per minute (oz/min) or grams per minute (g/min)

Conventional – AirPro and Finex

Air spray is the most widely used finishing method because of its ease of use, flexibility and ability to produce fine, smooth finishes. It is used for the application of low to medium viscosity fluids for products requiring a high quality, Class A or decorative finish. Air spray is typically used in automotive, wood and metal finishing operations that require superior finish quality, typically utilizing atomizing air pressure of 60 psi and fluid pressures in the range of 5-20 psi at the gun.

High Volume Low Pressure (HVLP) – AirPro and Finex

HVLP is a controlled air spray technology that limits the air pressure in the air cap in order to reduce bounce-back and over spray. Although HVLP guns come very close to achieving the finish quality of air spray, atomization is generally more coarse when working with higher viscosity fluids and higher flow rates. HVLP is typically used on wood and metal finishing and touch-up applications utilizing up to 10 psi atomizing air pressure and fluid pressures in the range of 5-20 psi.



Applicators

Spray Finishing Definitions

Compliant – AirPro™

Compliant is a controlled air spray technology that limits the gun inlet air pressure to reduce bounce-back and overspray. Compliant utilizes a lower air consumption and higher spray rates than HVLP. It is typically used on wood and metal finishing with a gun inlet air pressure under 28 psi (1.9 bar).

Electrostatic – PRO Xs™

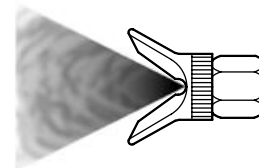
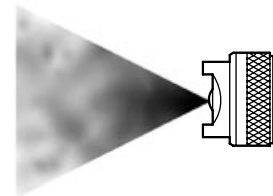
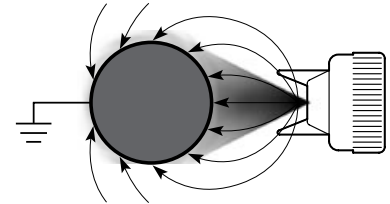
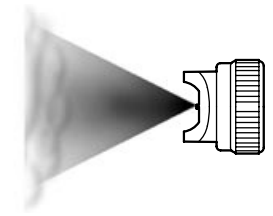
Electrostatic technology can be applied to air spray, air-assisted and airless spray methods. Electrostatic applicators greatly reduce over spray while providing better film coverage than non-electrostatic applicators. Electrostatics are commonly used in automobile, aircraft, heavy equipment manufacturing and metal finishing. Graco offers both air spray and air-assisted/airless electrostatic spraying equipment.

Air-Assist – G15/G40 AA Series™

Air-assisted atomization is a hybrid application method that combines the hydraulic atomization method of airless with the atomization of air spray. The result is an atomization level between air spray and airless. This process is ideal for many finishing and coating applications that require high production levels and a relatively smooth finish, such as wood furniture topcoats, fabricated metal parts, and farm and construction equipment. Air-assisted atomization typically utilizes air pressures up to 35 psi and fluid pressures range from 250 to 4000 psi at the gun.

Airless – XTR-5

Airless atomization is accomplished by directing fluid under high pressure through a controlled orifice. Airless works best when used to quickly apply high volumes of coatings to large surfaces, such as bridges, storage tanks, or large sheets of metal. Airless is most often used to apply protective, rather than decorative coatings. Typical fluid pressures are up to 5000 psi at the gun.



AirPro™

Air Spray Gun

Technical Specifications



Pressure Feed



Siphon Feed



Gravity Feed

	HVLP	Conventional	Compliant
Maximum Air Inlet Pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Maximum Fluid Inlet Pressure	300 psi (21 bar, 2.1 MPa)	300 psi (21 bar, 2.1 MPa)	300 psi (21 bar, 2.1 MPa)
Maximum HVLP/Compliant Inbound Air Pressure*	**19-30 psi (1.3-2.1 bar, 0.1-0.21 MPa)		**9-35 psi (2.0-2.4 bar, 0.2-0.24 MPa)
Air Consumption			
Conventional General Metal @ 36 psi (2.5 bar, 0.25 MPa)		12.6 cfm	
HVLP General Metal @ 19 psi (1.3 bar, 0.13 MPa)	14.9 cfm		
Compliant General Metal @ 29 psi (2.0 bar, 0.2 MPa)			11.7 cfm
Weight	410 g (14.46 oz)	410 g (14.46 oz)	410 g (14.46 oz)
Air Inlet	1/4 npsm (R1/4-19)	1/4 npsm (R1/4-19)	1/4 npsm (R1/4-19)
Fluid Inlet	3/8 npsm (R3/8-19)	3/8 npsm (R3/8-19)	3/8 npsm (R3/8-19)
Wetted Parts	303 SST, 17-4 PH SST, PEEK, acetal, UHMWPE	303 SST, 17-4 PH SST, PEEK, acetal, UHMWPE	303 SST, 17-4 PH SST, PEEK, acetal, UHMWPE
Instruction manual			
Pressure Feed	312414	312414	312414
Gravity Feed	312579	312579	312579
Siphon Feed	312578	312578	312578
Sales Literature			
AirPro Brochure	339377	339377	339377

* Produces 10 psi (0.07 MPa, 0.7 bar) spraying pressure at aircap

** Dependent on application type

AirPro

Air Spray Gun

How to Order:

- 1 Determine feed (pressure, gravity or siphon)
- 2 If pressure feed, identify application type
- 3 Select spray type (conventional, HVLP or compliant)
- 4 Select material viscosity
- 5 Select average flow rate

Material Viscosity

Viscosity (centipoise)

Light	5-15
Light-Medium	15-30
Medium	30-70
Medium-Heavy	70-100
Heavy	>100

Pressure Feed Ordering Information

General Metal Spray Guns

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/ Nozzle Kit
288726	Conventional	0.020 (0.5)	light	4-8 (0.12-0.24)	289773	289458
288929	Conventional	0.030 (0.8)	light	4-12 (0.12-0.35)	289773	289459
288930	Conventional	0.042 (1.1)	light-medium	8-20 (0.24-0.59)	289773	289460
288931	Conventional	0.055 (1.4)	medium	16-30 (0.47-0.89)	289773	289462
288932	Conventional	0.070 (1.8)	medium-heavy	16-35 (0.47-1.04)	289784	289464
288933	Conventional	0.086 (2.2)	medium-heavy	16-40 (0.47-1.18)	289068	289466
288934	Conventional	0.110 (2.8)	heavy	16-45 (0.47-1.33)	289069	289467
288935	HVLP	0.020 (0.5)	light	4-8 (0.12-0.24)	289041	289458
288936	HVLP	0.030 (0.8)	light	4-10 (0.12-0.30)	289041	289459
288937	HVLP	0.042 (1.1)	light-medium	6-12 (0.18-0.35)	289041	289460
288938	HVLP	0.055 (1.4)	medium	12-18 (0.36-0.53)	289041	289462
288939	HVLP	0.070 (1.8)	medium-heavy	16-20 (0.47-0.59)	289041	289464
288940	HVLP	0.086 (2.2)	medium-heavy	18-22 (0.53-0.65)	289070	289466
288941	HVLP	0.110 (2.8)	heavy	20-24 (0.59-0.71)	289043	289467
288942	Compliant	0.020 (0.5)	light	4-8 (0.12-0.24)	289042	289458
288943	Compliant	0.030 (0.8)	light	4-10 (0.12-0.30)	289042	289459
288944	Compliant	0.042 (1.1)	light-medium	6-12 (0.18-0.35)	289042	289460
288945	Compliant	0.055 (1.4)	medium	12-18 (0.36-0.53)	289042	289462
288946	Compliant	0.070 (1.8)	medium-heavy	16-20 (0.47-0.59)	289042	289464
288947	Compliant	0.086 (2.2)	medium-heavy	18-22 (0.53-0.65)	289044	289466
288948	Compliant	0.110 (2.8)	heavy	20-24 (0.59-0.71)	289045	289467

General Metal with Stainless Steel Tip

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/ Nozzle Kit
288949	Conventional	0.042 (1.1)	light-medium	8-20 (0.24-0.59)	289773	289461
288950	Conventional	0.055 (1.4)	medium	16-30 (0.47-0.89)	289773	289463
288951	Conventional	0.070 (1.8)	medium-heavy	16-35 (0.47-1.04)	289784	289465
288952	HVLP	0.042 (1.1)	light-medium	8-14 (0.24-0.41)	289041	289461
288953	HVLP	0.055 (1.4)	medium	12-16 (0.36-0.53)	289041	289463
288954	HVLP	0.070 (1.8)	medium-heavy	16-20 (0.47-0.59)	289041	289465
288955	Compliant	0.042 (1.1)	light-medium	8-14 (0.24-0.41)	289042	289461
288956	Compliant	0.055 (1.4)	medium	12-18 (0.36-0.53)	289042	289463
288957	Compliant	0.070 (1.8)	medium-heavy	16-20 (0.47-0.59)	289042	289465

AirPro

Air Spray Gun

Pressure Feed Ordering Information (continued)

Automotive Applications

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/Nozzle Kit
288929	Conventional	0.030 (0.8)	light	4-12 (0.12-0.35)	289773	289459
288930	Conventional	0.042 (1.1)	light-medium	8-20 (0.24-0.59)	289773	289460
288931	Conventional	0.055 (1.4)	medium	16-30 (0.47-0.89)	289773	289462
289034	HVLP	0.040 (1.0)	light	6-12 (0.18-0.35)	289771	289468
289035	HVLP	0.047 (1.2)	light-medium	10-14 (0.30-0.41)	289771	289469
289541	HVLP	0.055 (1.4)	medium	12-18 (0.36-0.53)	289771	289495
289036	Compliant	0.040 (1.0)	light	6-12 (0.18-0.35)	289772	289470
289037	Compliant	0.047 (1.2)	light-medium	10-14 (0.30-0.41)	289772	289471
289542	Compliant	0.055 (1.4)	medium	12-18 (0.36-0.53)	289772	289497

Wood Applications

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/Nozzle Kit
288958	Conventional	0.020 (0.5)	light	4-8 (0.12-0.24)	288862	289472
288959	Conventional	0.030 (0.8)	light	4-12 (0.12-0.35)	288862	289473
289109	Conventional	0.040 (1.0)	light	8-20 (0.24-0.59)	288862	289474
288960	HVLP	0.020 (0.5)	light	4-8 (0.12-0.24)	288864	289472
288961	HVLP	0.030 (0.8)	light	4-10 (0.12-0.30)	288864	289473
289110	HVLP	0.040 (1.0)	light	6-12 (0.18-0.35)	288864	289474
288962	Compliant	0.020 (0.5)	light	4-8 (0.12-0.24)	288863	289472
288963	Compliant	0.030 (0.8)	light	4-10 (0.12-0.30)	288863	289473
289111	Compliant	0.040 (1.0)	light	6-12 (0.18-0.35)	288863	289474

High Wear Applications

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/Nozzle Kit
288973	Conventional	0.059 (1.5)	medium	16-35 (0.47-0.95)	288861	289478
288974	Conventional	0.070 (1.8)	medium-heavy	16-35 (0.47-1.04)	289049	289479
288975	Conventional	0.086 (2.2)	medium-heavy	16-40 (0.47-1.18)	289049	289480
289982	Conventional	0.110 (2.8)	heavy	16-45 (0.47-1.33)	289049	289980
288976	HVLP	0.059 (1.5)	medium	14-18 (0.41-0.53)	289115	289481
288977	HVLP	0.070 (1.8)	medium-heavy	16-20 (0.47-0.59)	289325	289482
288978	HVLP	0.086 (2.2)	medium-heavy	18-22 (0.53-0.65)	289325	289483
289983	HVLP	0.110 (2.8)	heavy	20-24 (0.59-0.71)	289325	289981
288979	Compliant	0.059 (1.5)	medium	14-18 (0.41-0.53)	289050	289481
288980	Compliant	0.070 (1.8)	medium-heavy	16-20 (0.47-0.59)	289327	289482
288981	Compliant	0.086 (2.2)	medium-heavy	18-22 (0.53-0.65)	289327	289483
289984	Compliant	0.110 (2.8)	heavy	20-24 (0.59-0.71)	289327	289981

AirPro

Air Spray Gun

Pressure Feed Ordering Information (continued)

Waterborne Applications

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/Nozzle Kit
288964	Conventional	0.030 (0.8)	light	4-12 (0.12-0.35)	289046	289475
288965	Conventional	0.042 (1.1)	light-medium	8-20 (0.24-0.59)	289046	289476
288966	Conventional	0.055 (1.4)	medium	16-30 (0.47-0.89)	289046	289477
288967	HVLP	0.030 (0.8)	light	4-10 (0.12-0.30)	289047	289475
288968	HVLP	0.042 (1.1)	light-medium	8-14 (0.24-0.41)	289047	289476
288969	HVLP	0.055 (1.4)	medium	12-18 (0.36-0.53)	289047	289477
288970	Compliant	0.030 (0.8)	light	4-10 (0.12-0.30)	289048	289475
288971	Compliant	0.042 (1.1)	light-medium	8-14 (0.24-0.41)	289048	289476
288972	Compliant	0.055 (1.4)	medium	12-18 (0.36-0.53)	289048	289477

Adhesive Applications

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/Nozzle Kit
288982	Conventional	0.051 (1.3)	medium	14-25 (0.41-0.74)	289051	289484
288983	Conventional	0.070 (1.8)	medium-heavy	16-35 (0.47-1.04)	289051	289485

Spatter Applications

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/Nozzle Kit
288985	HVLP	0.042 (1.1)	light-medium	8-14 (0.24-0.41)	289053	289460

Siphon Feed Ordering Information

Without Siphon Cup*

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/Nozzle Kit
289991	Conventional	0.055 (1.4)	light-medium	4-10 (0.12-0.30)	289769	289487
289992	Conventional	0.070 (1.8)	light-medium	8-12 (0.24-0.36)	289769	289488
289993	HVLP	0.055 (1.4)	light-medium	3-5 (0.09-0.15)	289435	289489
289994	HVLP	0.070 (1.8)	light-medium	4-6 (0.12-0.18)	289435	289490
289995	Compliant	0.055 (1.4)	light-medium	3-5 (0.09-0.15)	289768	289491
289996	Compliant	0.070 (1.8)	light-medium	4-6 (0.12-0.18)	289768	289492

* Purchase 3M™ PPS™ cup or aluminum cup separately

With Metal Siphon Cup

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/Nozzle Kit
289028	Conventional	0.055 (1.4)	light-medium	4-10 (0.12-0.30)	289769	289487
289029	Conventional	0.070 (1.8)	light-medium	8-12 (0.24-0.36)	289769	289488
289030	HVLP	0.055 (1.4)	light-medium	3-5 (0.09-0.15)	289435	289489
289031	HVLP	0.070 (1.8)	light-medium	4-6 (0.12-0.18)	289435	289490
289032	Compliant	0.055 (1.4)	light-medium	3-5 (0.09-0.15)	289768	289491
289033	Compliant	0.070 (1.8)	light-medium	4-6 (0.12-0.18)	289768	289492

AirPro

Air Spray Gun

Gravity Feed Ordering Information

Without Cup

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/Nozzle Kit
289002	Conventional	0.055 (1.4)	light-medium	4-10 (0.12-0.30)	289773	289493
289003	Conventional	0.070 (1.8)	light-medium	8-12 (0.24-0.36)	289773	289494
289005	HVLP	0.055 (1.4)	light-medium	3-5 (0.09-0.15)	289771	289495
289006	HVLP	0.070 (1.8)	light-medium	4-6 (0.12-0.18)	289771	289496
289008	Compliant	0.055 (1.4)	light-medium	3-5 (0.09-0.15)	289772	289497
289009	Compliant	0.070 (1.8)	light-medium	4-6 (0.12-0.18)	289772	289498

With Plastic Gravity Cup

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/Nozzle Kit
289011	Conventional	0.055 (1.4)	light-medium	4-10 (0.12-0.30)	289773	289493
289012	Conventional	0.070 (1.8)	light-medium	8-12 (0.24-0.36)	289773	289494
289014	HVLP	0.055 (1.4)	light-medium	3-5 (0.09-0.15)	289771	289495
289015	HVLP	0.070 (1.8)	light-medium	4-6 (0.12-0.18)	289771	289496
289017	Compliant	0.055 (1.4)	light-medium	3-5 (0.09-0.15)	289772	289497
289018	Compliant	0.070 (1.8)	light-medium	4-6 (0.12-0.18)	289772	289498

With 3M™ PPS™ Cup

Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Kit	Needle/Nozzle Kit
289020	Conventional	0.055 (1.4)	light-medium	4-10 (0.12-0.30)	289773	289493
289021	Conventional	0.070 (1.8)	light-medium	8-12 (0.24-0.36)	289773	289494
289023	HVLP	0.055 (1.4)	light-medium	3-5 (0.09-0.15)	289771	289495
289024	HVLP	0.070 (1.8)	light-medium	4-6 (0.12-0.18)	289771	289496
289026	Compliant	0.055 (1.4)	light-medium	3-5 (0.09-0.15)	289772	289497
289027	Compliant	0.070 (1.8)	light-medium	4-6 (0.12-0.18)	289772	289498

Needle Tip Identification

5-Pack Part Number	Needle Tip Size in (mm)	# of Grooves
289350	0.20 (0.5)	1
288183	0.30 (0.8)	2
288184	0.40-0.42 (1.0-1.1)	3
288185	0.51-0.55 (1.3-1.4)	4
288187	0.70 (1.8)	5
288984	Siphon Conv/Compliant	6
289001	Gravity and Siphon HVLP	7
289004	0.86 (2.2)	0
289007	1.10 (2.8)	0



AirPro

Air Spray Gun

Accessories

HOSE

- 239631 4 ft (1.2 m) Air Whip Hose Assembly**
Max. working pressure: 100 psi (7 bar, 0.7 MPa). ID: 5/16 in (7.9 mm)
Swivel: 1/4 npsm(f), nitrile
- 239636 15 ft (4.6 m) Air Hose Assembly**
Max. working pressure: 100 psi (7 bar, 0.7 MPa). ID: 5/16 in (7.9 mm)
Swivel: 1/4 npsm(f), nitrile
- 239637 25 ft (7.6 m) Air Hose Assembly**
Max. working pressure: 100 psi (7 bar, 0.7 MPa). ID: 5/16 in (7.9 mm)
Swivel: 1/4 npsm(f), nitrile
- 239655 Air Swivel Inlet Fitting**
- 239622 4 ft (1.2 m) Fluid Whip Hose Assembly**
Max. working pressure: 100 psi (7 bar, 0.7 MPa). ID: 3/16 in (4.8 mm).
3/8 npsm(fbe), nylon with polyurethane cover
- 239633 15 ft (4.6 m) Fluid Hose Assembly**
Max. working pressure: 100 psi (7 bar, 0.7 MPa). ID: 3/16 in (4.8 mm).
3/8 npsm(fbe), nylon with polyurethane cover
- 239634 25 ft (7.6 m) Fluid Hose Assembly**
Max. working pressure: 100 psi (7 bar, 0.7 MPa). ID: 3/16 in (4.8 mm).
3/8 npsm(fbe), nylon with polyurethane cover

AIR VALVES

- 234784 Air Control Valve Kit (Cheater Valve) with Gauge**
Attaches to any HVLP spray gun for precise air pressure setting with a 0-160 psi (0-11 bar, 0-1.1 MPa) gauge
- 235119 Gun Air Regulator Assembly**
0-100 psi (7 bar, 0.7 MPa)

CLEANING KITS

- 105749 Cleaning Brush**
- 111265 4 oz Gun Lubricant (non-silicone)**
- 15C161 Ultimate Gun Cleaning Kit**
Includes brushes and tools for maintenance

SIPHON FEED GUN KITS

- 24C173 0.086 in (2.2 mm) Conventional Aircap**
- 24C175 0.086 in (2.2 mm) Conventional Needle and Nozzle Kit**

AIR PRESSURE VERIFICATION KIT

For use in checking aircap atomizing air pressure. Not to be used for actual spraying. Note: To be HVLP compliant, the atomizing air pressure must not exceed 10 psi (70 bar 0.7 MPa).

ORIFICE SIZE IN INCHES (mm)

- 289563** General Metal 0.020 – 0.070 in (0.5 – 1.8 mm)
- 289564** General Metal 0.086 in (2.2 mm)
- 289565** General Metal 0.110 in (2.8 mm)
- 289566** Wood
- 289567** Waterborne
- 289568** High Wear 0.059 in (1.5 mm)
- 289569** High Wear 0.070 – 0.086 in (1.8 – 2.2 mm)
- 289803** Automotive and Gravity Feed
- 289589** Siphon Feed

GRAVITY, SIPHON AND PRESSURE CUPS

- 289770 23 oz (650 cc) Gravity Cup, Plastic**
- 289797 23 oz (650 cc) Gravity Cup, Aluminum**
- 289802 34 oz (1 l) Gravity Cup, Aluminum**
- 192407 Gravity Cup Holder**

- 244130 1 qt (0.9 l) Siphon Cup, Aluminum**

- 239802 1 qt (0.9 l) SST Pressure Cup with Single Air Regulator**

Includes a pressure relief valve and a single cup air regulator and gauge.

- 239803 1 qt (0.9 l) SST Pressure Cup with Double Air Regulator**

Includes a pressure relief valve, a 0-100 psi (0-7 bar, 0-0.7 MPa) air regulator for gun atomization, and 0-15 psi (0-1.0 bar, 0-104 kPa) air regulator for the cup air supply.

- 239804 1 qt (0.9 l) Remote SST Pressure Cup**
Includes air pressure regulator and gauge, 4 ft (1.2 m) length air and fluid hose with 1/4 npsm(f) swivel ends, pressure relief valve and rigid hook handle.

- 235117 2 qt (1.9 l) Remote Aluminum Pressure Cup**
Includes air pressure regulator and gauge, 6 ft (1.8 m) length air and fluid hose with 3/8 npsm(f) swivel ends, pressure relief valve and rigid hook handle.

- 240266 Disposable Polyethylene Cup Liners**

1 qt (0.9 l) capacity, paint and solvent resistant. Must be used with pressure and siphon cups. 40 liners.

3M's PPS™ Paint Preparation System Accessories from Graco

For use with gravity and siphon feed guns

6 oz (150 ml) 3M™ PPS™

- 234941** Cup and Collar (box of 8)
- 234940** Lid and Liner (box of 50)
- 234942** Measurement Insert (box of 50)

25 oz (650 ml) 3M™ PPS™

- 234771** Cup and Collar (box of 8)
- 234772** Lid and Liner (box of 50)
- 15F531** Measurement Insert (box of 100)

32 oz (850 ml) 3M™ PPS™

- 234937** Cup and Collar (box of 4)
- 234938** Lid and Liner (box of 25)
- 234939** Measurement Insert (box of 100)

289486 Gravity Kit (25 oz)

One each: cup, collar, lid, liner, adapter

289795 3M™ PPS™ Gravity Feed Adapter

234773 Siphon Kit (25 oz)

One each: cup, collar, lid, liner, adapter

289405 3M™ PPS™ Siphon Feed Adapter

[310693](#) Instruction Manual

STAINLESS STEEL AIRCAPS

Gun Type	Nozzle Orifice in (mm)	Aircap with locating pin	Aircap without locating pin
Conventional	0.020-0.55 (0.5-1.4)	24B667	24B671
Conventional	0.070 (1.8)	24B668	24B672
HVLP	0.020-0.070 (0.5-1.8)	24B665	24B669
Compliant	0.020-0.070 (0.5-1.8)	24B666	24B670

Technical Specifications



Pressure Feed

	Pressure Feed	Mini Gravity Feed	Gravity Feed
Maximum Air Inlet Pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Maximum Fluid Working Pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Maximum HVLP Inbound Air Pressure*	24 psi (1.7 bar, 0.17 MPa)		29 psi (2 bar, 0.2 MPa)
Air Consumption			
Mini HVLP Gravity at 29 psi (0.2 MPa, 2.0 bar)		7.0 SCFM	
HVLP Gravity at 29 psi (0.2 MPa, 2.0 bar)			9.5 SCFM
Conventional Gravity at 43 psi (0.3 MPa, 3.0 bar)			9.5 SCFM
HVLP Pressure at 24 psi (0.17 MPa, 1.7 bar)	11.8 SCFM		
Conventional Pressure at 50 psi (0.34 MPa, 3.4 bar)	11.0 SCFM		



Mini Gravity Feed

Spray Gun			
Air Inlet	1/4 npsm (R1/4-19)	1/4 npsm (R1/4-19)	1/4 npsm (R1/4-19)
Fluid Inlet (pressure feed)	3/8-18 npsm (R3/8-19)		
Weight (Includes Cup for Gravity Feed Guns)	0.8 lb (0.37 kg)	0.9 lb (0.4 kg)	1.1 lb (0.5 kg)
Wetted Parts	Aluminum, stainless steel, engineered plastic	Aluminum, stainless steel, engineered plastic	Aluminum, stainless steel, engineered plastic
Instruction manual	312388	312388	312388
Sales Literature			
Finex Flyer	339461	339461	339461

*Produces 10 psi (0.07 MPa, 0.7 bar) spraying pressure at aircap



Gravity Feed

Finex

Air Spray Gun

Ordering Information

Gravity Feed

Part Number	Spray Type	Nozzle in (mm)	Needle/Nozzle/Aircap Kit	Needle Packing Kit	Gravity Cup Kits	PPS Adapter
289256	Mini-HVLP	0.024	289286	288890	289323 (125 cc Plastic)	289520
289257	Mini-HVLP	0.031	289287	288890	289323 (125 cc Plastic)	289520
289258	Mini-HVLP	0.039	289288	288890	289323 (125 cc Plastic)	289520
289259	Mini-HVLP	0.047	289289	288890	289323 (125 cc Plastic)	289520
289260	Mini-HVLP	0.055	289290	288890	289323 (125 cc Plastic)	289520
289243	Conventional	0.051	289292	288891	289322 (600 cc Plastic)	289520
289244	Conventional	0.055	289293	288891	289322 (600 cc Plastic)	289520
289245	Conventional	0.059	289294	288891	289322 (600 cc Plastic)	289520
289246	Conventional	0.071	289295	288891	289322 (600 cc Plastic)	289520
289238	Standard HVLP	0.051	289297	288891	289322 (600 cc Plastic)	289520
289239	Standard HVLP	0.055	289298	288891	289322 (600 cc Plastic)	289520
289240	Standard HVLP	0.059	289299	288891	289322 (600 cc Plastic)	289520
289241	Standard HVLP	0.071	289300	288891	289322 (600 cc Plastic)	289520

Pressure Feed

Part Number	Spray Type	Nozzle in (mm)	Needle/Nozzle/Aircap Kit	Needle Packing Kit
289247	Standard HVLP	0.039 (1.0)	289301	288891
289248	Standard HVLP	0.047 (1.2)	289302	288891
289249	Standard HVLP	0.055 (1.4)	289303	288891
289250	Standard HVLP	0.071 (1.8)	289304	288891
289252	Conventional	0.039 (1.0)	289306	288891
289253	Conventional	0.047 (1.2)	289307	288891
289254	Conventional	0.055 (1.4)	289308	288891
289255	Conventional	0.071 (1.8)	289309	288891

Accessories

3M's PPS Accessories

For use with gravity feed guns

6 oz (150 ml) 3M PPS

234941 Cup and Collar (box of 8)

234940 Lid and Liner (box of 50)

234942 Measurement Insert (box of 50)

25 oz (650 ml) 3M PPS

234771 Cup and Collar (box of 8)

234772 Lid and Liner (box of 50)

15F531 Measurement Insert (box of 100)

32 oz (850 ml) 3M PPS

234937 Cup and Collar (box of 4)

234938 Lid and Liner (box of 25)

234939 Measurement Insert (box of 100)

Aluminum Cups

289517 125 cc Aluminum

289321 250 cc Aluminum

289320 600 cc Aluminum

AirPro EFX™

Automatic Air Spray Gun

Technical Specifications



Manifold Style



Direct Connect Style

AirPro EFX	
Maximum working fluid pressure	100 psi (7 bar, 0.7 MPa)
Maximum working air pressure	100 psi (7 bar, 0.7 MPa)
Maximum working fluid temperature	120°F (49°C)
Minimum air cylinder actuation pressure	50 psi (3.4 bar, 0.34 MPa)
Weight	
Manifold style guns	1.3 lb (575 g)
Direct Connect style guns	0.6 lb (275 g)
Wetted Parts - Manifold style guns	
Nylon, PTFE, Stainless Steel, Tungsten Carbide Ultra High Molecular Weight Polyethylene,	
Wetted Parts - Direct Connect style guns	
Anodized Aluminum, Stainless Steel, Ultra High Molecular Weight Polyethylene, Tungsten Carbide, Nylon	
Instruction manual	313869
Sales Literature	
AirPro EFX Brochure	344813

Triggering Speed

These values apply to a new gun with a 12 ft (3.6 m), 1/4 in (6.3 mm) OD cylinder air line and a 1.1 mm (0.043 in) nozzle. Values will vary slightly with use and with variations in equipment.

Cylinder Air Pressure	Fluid Pressure	Air Pressure	MSEC to Fully Open	MSEC to Fully Close
50 psi (3.5 bar, 0.35 kPa)	50 psi (3.5 bar, 0.35 kPa)	100 psi (7 bar, 0.7 kPa)	48	84

AirPro EFX

Automatic Air Spray Gun

Ordering Information

How to Order:

- 1 Choose Manifold or Direct Connect style gun
- 2 Select Spray Type (HiTEch, LVMP, HVLP, Conventional or Air Brush)
- 3 Select material viscosity
- 4 Select average flow rate

Manifold Style Guns

Part Number	Spray Type	Nozzle	Material Viscosity	Flow	Needle Tip/ Nozzle Material	Fluid Adjustment Knob	Needle/ Nozzle Kit Part No	Air Cap with Pin Part No
24B866	HiTEch	0.028 in (0.7 mm)	light	10 - 100 cc/min (0.3 - 3.4 oz/min)	SST	Ultra Precision	24D303	24D703
24B867	HiTEch	0.039 in (1.0 mm)	light-medium	20 - 200 cc/min (0.7 - 6.8 oz/min)	Carbide	Ultra Precision	24C221	24D703
24B868	HiTEch	0.059 in (1.5 mm)	medium	45 - 450 cc/min (1.5 - 15.2 oz/min)	Carbide	Ultra Precision	24C201	24D704
24B869	LVMP	0.020 in (0.5 mm)	light	5 - 50 cc/min (0.2 - 1.7 oz/min)	SST	Ultra Precision	24D277	24C184
24B870	LVMP	0.028 in (0.7 mm)	light	10 - 100 cc/min (0.3 - 3.4 oz/min)	SST	Ultra Precision	24D278	24C184
24B871	LVMP	0.035 in (0.9 mm)	light-medium	15 - 150 cc/min (0.5 - 5.1 oz/min)	SST	Ultra Precision	24D279	24C184
24B872	LVMP	0.043 in (1.1 mm)	light-medium	25 - 250 cc/min (0.8 - 8.5 oz/min)	SST	Ultra Precision	24D280	24C184
24B873	LVMP	0.051 in (1.3 mm)	medium	35 - 350 cc/min (1.2 - 11.8 oz/min)	SST	Ultra Precision	24D281	24C184
24B874	LVMP	0.059 in (1.5 mm)	medium	45 - 450 cc/min (1.5 - 15.2 oz/min)	Carbide	Ultra Precision	24D284	24C184
24B862	HVLP	0.020 in (0.5 mm)	light	5 - 50 cc/min (0.2 - 1.7 oz/min)	SST	Indexing	24D302	24C183
24B863	HVLP	0.028 in (0.7 mm)	light	10 - 100 cc/min (0.3 - 3.4 oz/min)	SST	Indexing	24D303	24C183
24B864	HVLP	0.043 in (1.1 mm)	light-medium	25 - 250 cc/min (0.8 - 8.5 oz/min)	SST	Indexing	24D305	24C183
24B865	HVLP	0.051 in (1.3 mm)	medium	35 - 350 cc/min (1.2 - 11.8 oz/min)	SST	Indexing	24D306	24C183
24B857	Conventional	0.028 in (0.7 mm)	light	10 - 100 cc/min (0.3 - 3.4 oz/min)	SST	Indexing	24C197	24C182
24B858	Conventional	0.035 in (0.9 mm)	light-medium	15 - 150 cc/min (0.5 - 5.1 oz/min)	SST	Indexing	24C198	24C182
24B859	Conventional	0.043 in (1.1 mm)	light-medium	25 - 250 cc/min (0.8 - 8.5 oz/min)	SST	Indexing	24C199	24C182
24B860	Conventional	0.051 in (1.3 mm)	medium	35 - 350 cc/min (1.2 - 11.8 oz/min)	SST	Indexing	24C200	24C182
24B861	Conventional	0.059 in (1.5 mm)	medium	45 - 450 cc/min (1.5 - 15.2 oz/min)	Carbide	Indexing	24C201	24C182
24B875	Air Brush	0.028 in (0.7 mm)	light	10 - 100 cc/min (0.3 - 3.4 oz/min)	SST	Indexing	24C197	24D705

Direct Connect Style Guns

Part Number	Spray Type	Nozzle	Material Viscosity	Flow	Needle Tip/ Nozzle Material	Fluid Adjustment Knob	Needle/ Nozzle Kit Part No	Air Cap with Pin Part No
24B884	HiTEch	0.028 in (0.7 mm)	light	10 - 100 cc/min (0.3 - 3.4 oz/min)	SST	Ultra Precision	24D303	24D703
24B885	HiTEch	0.039 in (1.0 mm)	light-medium	20 - 200 cc/min (0.7 - 6.8 oz/min)	Carbide	Ultra Precision	24C221	24D703
24B886	HiTEch	0.059 in (1.5 mm)	medium	45 - 450 cc/min (1.5 - 15.2 oz/min)	Carbide	Ultra Precision	24C201	24D704
24B887	LVMP	0.020 in (0.5 mm)	light	5 - 50 cc/min (0.2 - 1.7 oz/min)	SST	Indexing	24D277	24C184
24B888	LVMP	0.028 in (0.7 mm)	light	10 - 100 cc/min (0.3 - 3.4 oz/min)	SST	Indexing	24D278	24C184
24B889	LVMP	0.035 in (0.9 mm)	light-medium	15 - 150 cc/min (0.5 - 5.1 oz/min)	SST	Indexing	24D279	24C184
24B890	LVMP	0.043 in (1.1 mm)	light-medium	25 - 250 cc/min (0.8 - 8.5 oz/min)	SST	Indexing	24D280	24C184
24B891	LVMP	0.051 in (1.3 mm)	medium	35 - 350 cc/min (1.2 - 11.8 oz/min)	SST	Indexing	24D281	24C184
24B881	HVLP	0.028 in (0.7 mm)	light	10 - 100 cc/min (0.3 - 3.4 oz/min)	SST	Indexing	24D303	24C183
24B882	HVLP	0.043 in (1.1 mm)	light-medium	25 - 250 cc/min (0.8 - 8.5 oz/min)	SST	Indexing	24D305	24C183
24B883	HVLP	0.051 in (1.3 mm)	medium	35 - 350 cc/min (1.2 - 11.8 oz/min)	SST	Indexing	24D306	24C183
24B877	Conventional	0.028 in (0.7 mm)	light	10 - 100 cc/min (0.3 - 3.4 oz/min)	SST	Lock Ring	24C197	24C182
24B878	Conventional	0.035 in (0.9 mm)	light-medium	15 - 150 cc/min (0.5 - 5.1 oz/min)	SST	Lock Ring	24C198	24C182
24B879	Conventional	0.043 in (1.1 mm)	light-medium	25 - 250 cc/min (0.8 - 8.5 oz/min)	SST	Lock Ring	24C199	24C182
24B880	Conventional	0.051 in (1.3 mm)	medium	35 - 350 cc/min (1.2 - 11.8 oz/min)	SST	Lock Ring	24C200	24C182
24B892	Air Brush	0.028 in (0.7 mm)	light	10 - 100 cc/min (0.3 - 3.4 oz/min)	SST	Indexing	24C197	24D705

*Light: 20 or less centipoise; Light-Medium: 21 - 42 centipoise; Medium: 43 - 64 centipoise

AirPro EFX

Automatic Air Spray Gun

Needle Assembly Identification

Part Number	Needle Assembly Size	# of Grooves	Material
24C190	0.5 mm (0.020 in)	1	SST
24C191	0.7 mm (0.028 in)	2	SST
24C192	0.9 mm (0.035 in)	3	SST
24C220	1.0 mm (0.039 in)	0	Carbide
24C193	1.1 mm (0.043 in)	4	SST
24C194	1.3 mm (0.051 in)	5	SST
24C195	1.5 mm (0.059 in)	0	Carbide

Accessories

24C216 Fittings Kit, 1/4 inch

Includes 3 air fittings and 2 fluid fittings

24D143 Robot Adapter Kit Fanuc Paint Mate 200

Compatible with and without manifold

24D008 Inlet Air Needle Valve

Includes needle valve and 6 mm tube fitting

24C214 HVLP Pressure Verification Kit

For use in checking air cap atomizing and fan pattern air pressure at various supply air pressures. Not to be used for actual spraying.

FLUID ADJUSTMENT KNOBS

24D065 Ultra-Precision Knob

Micrometer telescoping knob which is indexed for precision adjustment

24C204 Indexing Knob

Fluid adjustment in fine flow increments

24C203 Lock Ring and Cap

Simple thread adjustment with locking ring

AirPro Automatic

Automatic HVLP, Conventional and Compliant Guns

Technical Specifications



AirPro Auto HVLP



AirPro Auto Conventional



AirPro Auto Compliant

	HVLP/Conventional/ Compliant
Maximum Working Fluid Pressure	100 psi (0.7 MPa, 7 bar)
Maximum Working Air Pressure	100 psi (0.7 MPa, 7 bar)
Minimum Air Cylinder Actuation Pressure	50 psi (0.34 MPa, 3.4 bar)
Maximum Working Fluid Temperature	120° F (49° C)
Weight	1.5 lb (680 g)
Gun and Manifold Weight	2.0 lb (907 g)
Atomizing Air	3/8 in OD tube
Fan Air	3/8 in OD tube
Cylinder Air	1/4 in OD tube
Fluid Inlet	1/4 in npsm
Wetted Parts	stainless steel, UHMWPE, acetal, PTFE, PEEK
Dimensions (excluding fittings)	5.3 in L x 3.0 in H x 2.0 in W (135 mm L x 76 mm H x 51 mm W)
Length with Fluid Knob	6.4 in (163 mm)
Instruction Manual	313516
Sales Literature	
AirPro Automatic Flyer	344790

AirPro Automatic

Automatic HVLP, Conventional and Compliant Guns

How to Order:

- 1 Identify application type (general metal, high wear or wood)
- 2 Determine type of technology (conventional, HVLP or compliant)
- 3 Select material viscosity
- 4 Select average flow rate
- 5 Order gun assembly
- 6 Select manifold

Material Viscosity

Material Viscosity	Viscosity (centipoise)
Light	5-15
Light-Medium	15-30
Medium	30-70
Medium-Heavy	70-100
Heavy	>100

Ordering Information

General Metal Spray Gun

Gun Assembly Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Part Number	Needle/Nozzle Kit Part Number
24B333	Conventional	0.020 (0.5)	light	2-6 (0.06-0.18)	24B544	24B332
24A747	Conventional	0.030 (0.8)	light	4-10 (0.12-0.30)	24B544	24A687
24A748	Conventional	0.042 (1.1)	light-medium	8-14 (0.24-0.42)	24B544	24A688
24A749	Conventional	0.055 (1.4)	medium	12-18 (0.36-0.54)	24B544	24A689
24A750	Conventional	0.070 (1.8)	medium-heavy	16-20 (0.48-0.60)	24B545	24A690
24B334	HVLP	0.020 (0.5)	light	2-6 (0.06-0.18)	24B539	24B332
24A754	HVLP	0.030 (0.8)	light	4-10 (0.12-0.30)	24B539	24A687
24A755	HVLP	0.042 (1.1)	light-medium	8-14 (0.24-0.42)	24B539	24A688
24A756	HVLP	0.055 (1.4)	medium	12-18 (0.36-0.54)	24B539	24A689
24A757	HVLP	0.070 (1.8)	medium-heavy	16-20 (0.48-0.60)	24B539	24A690
24B335	Compliant	0.020 (0.5)	light	2-6 (0.06-0.18)	24B540	24B332
24A761	Compliant	0.030 (0.8)	light	4-10 (0.12-0.30)	24B540	24A687
24A762	Compliant	0.042 (1.1)	light-medium	8-14 (0.24-0.42)	24B540	24A688
24A763	Compliant	0.055 (1.4)	medium	12-18 (0.36-0.54)	24B540	24A689
24A764	Compliant	0.070 (1.8)	medium-heavy	16-20 (0.48-0.60)	24B540	24A690

General Metal with Fluid Control Knob

Gun Assembly Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Part Number	Needle/Nozzle Kit Part Number
24A751	Conventional	0.030 (0.8)	light	4-10 (0.12-0.30)	24B544	24A687
24A752	Conventional	0.042 (1.1)	light-medium	8-14 (0.24-0.42)	24B544	24A688
24A753	Conventional	0.055 (1.4)	medium	12-18 (0.36-0.54)	24B544	24A689
24A758	HVLP	0.030 (0.8)	light	4-10 (0.12-0.30)	24B539	24A687
24A759	HVLP	0.042 (1.1)	light-medium	8-14 (0.24-0.42)	24B539	24A688
24A760	HVLP	0.055 (1.4)	medium	12-18 (0.36-0.54)	24B539	24A689
24A765	Compliant	0.030 (0.8)	light	4-10 (0.12-0.30)	24B540	24A687
24A766	Compliant	0.042 (1.1)	light-medium	8-14 (0.24-0.42)	24B540	24A688
24A767	Compliant	0.055 (1.4)	medium	12-18 (0.36-0.54)	24B540	24A689

High Wear Applications

Gun Assembly Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Part Number	Needle/Nozzle Kit Part Number
24A774	Conventional	0.059 (1.5)	medium	12-18 (0.36-0.54)	24B537	24A693
24A775	Conventional	0.070 (1.8)	medium-heavy	16-20 (0.48-0.60)	24B536	24A694
24B336	Conventional	0.086 (2.2)	heavy	>20 (>0.60)	24B536	24B358
24C316	Conventional	0.110 (2.8)	heavy	>20 (>0.60)	24B536	24B358
24A776	HVLP	0.059 (1.5)	medium	12-18 (0.36-0.54)	24B541	24A695
24A777	HVLP	0.070 (1.8)	medium-heavy	16-20 (0.48-0.60)	24B542	24A696
24A778	Compliant	0.059 (1.5)	medium	12-18 (0.36-0.54)	24B538	24A695
24A779	Compliant	0.070 (1.8)	medium-heavy	16-20 (0.48-0.60)	24B543	24A696

AirPro Automatic

Automatic HVLP, Conventional and Compliant Guns

Wood Applications

Gun Assembly Part Number	Spray Type	Nozzle in (mm)	Material Viscosity	Flow oz/min (l/min)	Aircap Part Number	Needle/Nozzle Kit Part Number
24A768	Conventional	0.030 (0.8)	light	4–10 (0.12–0.30)	24B533	24A691
24A769	Conventional	0.040 (1.0)	light-medium	8–14 (0.24–0.42)	24B533	24A692
24A770	HVLP	0.030 (0.8)	light	4–10 (0.12–0.30)	24B535	24B351
24A771	HVLP	0.040 (1.0)	light-medium	8–14 (0.24–0.42)	24B535	24A692
24A772	Compliant	0.030 (0.8)	light	4–10 (0.12–0.30)	24B534	24A691
24A773	Compliant	0.040 (1.0)	light-medium	8–14 (0.24–0.42)	24B534	24A692

Accessories

Manifolds (A manifold is required for each gun to be installed)

- 288221 Manifold with bottom fluid ports
- 288217 Manifold with side fluid ports
- 288223 Manifold with manual fan control with side fluid ports

- 288160 **Rear Port Manifold**
Rear exit fluid fitting manifold. Designed for robotic or compact applications

- 288197 **Manifold Adapter Plate**
Allows the manifold to be attached to a variety of bolt patterns

Other

- 288091 **Fluid Control Knob**
Replaces the piston cap for precision fluid adjustment
- 24B609 **Gun Mounting Bracket Kit**
Includes bracket and screw
- 24B707 **Inline Fluid Filter**
Removable inline filter without disconnecting the fluid line

HVLP Air Pressure Verification Kit

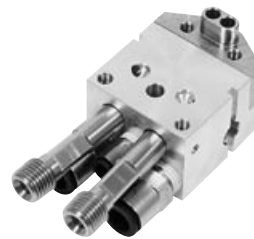
For use in checking aircap atomizing and pattern air pressure at various supply air pressures. Not to be used for actual spraying. Install the kit aircap on the gun. Turn on the air to the gun, then trigger the gun and read the air pressure on the gauge.

NOTE: To be "HVLP compliant," the atomizing and pattern pressure air pressures must not exceed 10 psi (0.7 bar, 70 kPa).

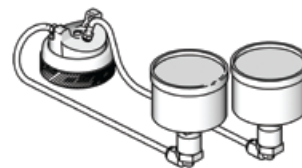
- 289563 HVLP General Metal
- 289568 HVLP High Wear 0.059 in (1.5 mm)
- 289569 HVLP High Wear 0.070 in (1.8 mm)
- 289566 HVLP Stain

Stainless Steel Aircaps

Gun Type	Nozzle Orifice in (mm)	Aircap with locating pin	Aircap without locating pin
Conventional	0.020-0.55 (0.5-1.4)	24B667	24B671
Conventional	0.070 (1.8)	24B668	24B672
HVLP	0.020-0.070 (0.5-1.8)	24B665	24B669
Compliant	0.020-0.070 (0.5-1.8)	24B666	24B670



Rear Port Manifold



HVLP Pressure Verification Kit

PRO Xs™ Manual Guns

Electrostatic Air Spray

Technical Specifications



PRO Xs2

	PRO Xs2	PRO Xs3	PRO Xs4
Max. working fluid pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Max. working air pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Gun weight	23.5 oz. (667.6 g)	25.1 oz. (711.6 g)	27.8 oz. (788.1 g)
Gun length	8.6 in. (21.8 cm)	9.7 in. (24.6 cm)	11.1 in. (28.2 cm)
Recommended paint resistivity range	7 to 150 megohm-cm	7 to ∞ megohm-cm	25 to ∞ megohm-cm
Max. voltage output	20 kilovolts	60 kilovolts	85 kilovolts
Max. fluid working temp	120°F (48.8°C)	120°F (48.8°C)	120°F (48.8°C)
Air inlet	1/4 npsm (l.h.)	1/4 npsm (l.h.)	1/4 npsm (l.h.)
Fluid inlet	3/8-18 npsm (R 3/8-19) compound thread	3/8-18 npsm (R 3/8-19) compound thread	3/8-18 npsm (R 3/8-19) compound thread
Wetted parts	polyethylene, SST, nylon, acetal, PTFE, UHMWPE, fluoroelastomer, PEEK	polyethylene, SST, nylon, acetal, PTFE, UHMWPE, fluoroelastomer, PEEK	polyethylene, SST, nylon, acetal, PTFE, UHMWPE, fluoroelastomer, PEEK
Noise data*			
Sound pressure	87.0 dBA	87.0 dBA	87.0 dBA
Sound power	90.4 dBA	90.4 dBA	90.4 dBA
Operator manual	309294 309291	309294 309292	309294 309292
Sales Literature	300542	300542	300542

*All readings were taken at 40 psi (2.8 bar, 0.3 MPa). Sound pressure was tested to CAGI-PNUEROP-1969 and sound power to ISO 3744-1981.

PRO Xs Manual Guns

Electrostatic Air Spray

Ordering Information

- 244399 PRO Xs2**
Gun includes 1.5 mm nozzle, 24A376 air cap. Grounded air hose must be ordered separately.
- 244400 PRO Xs3 for Standard Coatings**
Gun includes 1.5 mm nozzle and 24A376 air cap. Grounded air hose must be ordered separately.
- 244579 PRO Xs3 Smart for Standard Coatings**
Includes Smart Display showing voltage and current at the gun, adjustable voltage, 1.5 mm nozzle and 24A376 air cap. Grounded air hose must be ordered separately.
- 24A511 PRO Xs3, Smart**
Includes Smart Display showing voltage and current at the gun, adjustable voltage, 1.2 mm nozzle and 24A376 air cap. Grounded air hose must be ordered separately.
- 244401 PRO Xs4, Standard**
Gun includes 1.5 mm nozzle and 24A376 air cap. Grounded air hose must be ordered separately.
- 244580 PRO Xs4, Smart**
Includes Smart Display showing voltage and current at the gun, adjustable voltage, 1.5 mm nozzle and 24A376 air cap. Grounded air hose must be ordered separately.
- 244575 PRO Xs3 High Conductivity Coatings**
Gun includes H.C. fluid tube, 1.5 mm nozzle and 24A376 air cap. Grounded air hose must be ordered separately.
- 244576 PRO Xs3 Smart Gun for High Conductivity Coatings**
Includes Smart Display showing voltage and current at the gun, adjustable voltage, H.C. fluid tube, 1.5 mm nozzle and 24A376 air cap. Grounded air hose must be ordered separately.
- 244581 PRO Xs3 for Waterborne Coatings**
For use with isolation systems. Gun includes 1.5 mm nozzle and 24A276 air cap. Waterborne fluid hose must be ordered separately (includes fluid tube and gun fittings). Grounded air hose must be ordered separately.
- 244582 PRO Xs3 Smart Gun for Waterborne Coatings**
For use with isolation systems. Includes Smart Display showing voltage and current at the gun, adjustable voltage, 1.5 mm nozzle and 24A276 air cap. Waterborne fluid hose must be ordered separately (includes fluid tube and gun fittings). Grounded air hose must be ordered separately.

Accessories

Pro Xs Aircaps

Aircap Part No	Pattern Width** in (mm)	Recommended Production Rates	Recommended Coating Type
24A438	15-17 (381-432)	Less than 15 oz/min	Light to medium viscosity
24A279	14-16 (356-406)	Less than 15 oz/min	Medium to high viscosity
24A376*	17-19 (432-483)	Less than 15 oz/min	Light to medium viscosity
24A274	14-16 (356-406)	Less than 15 oz/min	Light to medium viscosity
24A439	11-13 (279-330)	Less than 15 oz/min	Medium to high viscosity and high solids
24A275	14-16 (346-406)	Greater than 15 oz/min	Light to medium viscosity and high solids

*Available in multiple colors
** Pattern width at 10 inch target distance with wide pattern kit (24A431) installed

- 24A431 Wide Pattern Kit**
Distributes air so aircap delivers a wider spray pattern.

Aircap Colors

Aircap Part No.	Aircap Color
24A276	Blue
24A277	Red
24A278	Green

Grounded Air Hose (required for use)

Length	Air Flex™	Standard	Waterborne*
6 ft (1.8 m)	244963	223068	235068
15 ft (4.6 m)	244964	223069	235069
25 ft (7.6 m)	244965	223070	235070
36 ft (11 m)	244966	223071	235071
50 ft (15 m)	244967	223072	235072
75 ft (23 m)	244968	223073	235073
100 ft (30.5 m)	244969	223074	235074

Air Flex: EPDM rubber core and cover for extra flexibility.
Standard: Modified semi-conductive polyamide core, urethane cover for added durability.
*Waterborne (required for isolated waterborne applications): Conductive SST wire braid for grounding. Polyurethane tube and cover.

- 24A225 3/8" ID Grounded Air Hose**
50 ft (15 m)
- 24A226 3/8" ID Grounded Air Hose**
75 ft (23 m)
- 245252 Waterborne Fluid Hose**
25 ft (7.6 m) fluid hose. For isolation system, used only with PRO Xs3 waterborne guns
- 215637 Fluid Hose**
1/4 in ID x 25 ft (7.6 m)
- 215638 Fluid Hose**
1/4 in ID x 50 ft (15.2 m)
- 185493 Air Hose Adapter Nipple**
Allows for the connection of multiple air hoses as needed for the special grounded PRO Xs air hoses. 1/4 npsm (L.H.) x 1/4 npsm.
- 112534 Air Quick Disconnect/Swivel**
Swiveling air quick disconnect designed to replace the standard air swivel fitting in the gun handle.

PRO Xs Manual Guns

Electrostatic Air Spray

Accessories (continued)

Round Pattern Kits

Consists of fluid tip, diffuser and air cap.

245217 4-6 in (102-152 mm) diameter

245219 8-10 in (203-254 mm) diameter

277851 6-12 in (152-305 mm) diameter
Low velocity swirling spray pattern that provides excellent transfer efficiency

Air Spray Fluid Nozzles

Part no.	Size
197263	0.75 mm (0.030 in)
197264	1.0 mm (0.042 in)
197265	1.2 mm (0.047 in)
197266	1.5 mm (0.055 in)
197267	1.8 mm (0.070 in)
197268	2.0 mm (0.080 in)

Air Spray Glass Reinforced Fluid Nozzles

Part no.	Size
249920	0.75 mm (0.030 in)
249921	1.0 mm (0.042 in)
249922	1.2 mm (0.047 in)
249923	1.5 mm (0.055 in)
249924	1.8 mm (0.070 in)
249925	2.0 mm (0.080 in)

Miscellaneous

276697 SnapBack Electrode Replacement Needle

277007 Abrasive Material Electrode Replacement Needle

244912 Push/Pull Valve
For quick change of fan size.

24A337 Aluminum Inlet Bracket
Reduces gun weight by 1.3 oz (39 g).

24A335 Composite Trigger Kit
Allows the conversion of PRO Xs guns to a light weight trigger.

244916 Four Finger Trigger Kit
Allows the conversion of PRO Xs3 and PRO Xs4 guns to be used with a four-finger trigger.

244919 High Conductivity Kit
Allows standard coating PRO Xs3 guns to effectively spray high conductivity coatings.

245277 kV Test Kit
Test fixture, high voltage test probe and kV meter.

236003 kV Test Kit
High voltage probe and kV meter.

241079 Megohm Meter
500 volt output, 0.01-2000 megohms.

244731 1 Quart (0.95 l) Remote Pressure Cup
Includes air regulators for both gun atomization and supply air to the pressure cup.

198405 Gun Flush Box
Used to convert existing gun flush boxes to hold PRO Xs3 and Xs4 models guns

245270 Gun Washer Kit
Used to convert Graco gun washers so they can clean PRO Xs air spray guns.

244914 Gun Covers (box of 10)
For PRO Xs2 gun.

244915 Gun Covers (set of 10)
For PRO Xs3, PRO Xs4 and PRO Xs4 AA guns.

239945 Gun Covers (box of 10)
For PRO Auto Xs guns.

223688 Turbine Alternator Bearing Repair Kit

105749 Cleaning Brush

Select Comfort Grips

Snap-on grips to increase the handle size to reduce operator fatigue.

245263 Medium Grip Kit

245264 Large Grip Kit

PRO™ Auto Xs Automatic Guns

Electrostatic Air Spray

Technical Specifications



PRO Auto Xs

PRO Auto Xs	
Maximum fluid pressure	100 psi (7 bar, 0.7 MPa)
Maximum air pressure	100 psi (7 bar, 0.7 MPa)
Weight (including gun, manifold and mounting bracket)	3.52 lb (1.60 kg)
Length	12.25 in (31.1 cm)
Voltage output	85 kV
Air inlets (fittings are included with gun)	
Atomizing air	3/8 in OD nylon tube
Fan air	3/8 in OD nylon tube
Cylinder pilot	5/32 in OD nylon tube
Hi-lo voltage selector	5/32 in OD nylon tube
Turbine air	1/4 npsm (l.h.)
Fluid inlet	1/4-18 npsm
Wetted parts	SST, nylon, PEEK, UHMWPE, acetal
Instruction manual (gun)	309297
Sales Literature	
Pro Xs Brochure	300542

Ordering Information

244589 PRO Auto Xs for Standard Coatings

Includes gun shroud, mounting bracket, gun manifold and gun with 1.5 mm fluid nozzle and 24A438 air cap. Grounded air hose must be ordered separately.

244590 PRO Auto Xs for High Conductivity Coatings

Includes gun shroud, H.C. fluid tube, mounting bracket, gun manifold and gun with 1.5 mm fluid nozzle and 24A438 air cap. Grounded air hose must be ordered separately.

244591 PRO Auto Xs for Waterborne Coatings

For use with isolation systems. Includes gun shroud, mounting bracket, gun manifold and gun with 1.5 mm fluid nozzle and 24A276 air cap. Waterborne fluid hose must be ordered separately, (includes fluid tube and gun fittings). Grounded air hose must be ordered separately.

PRO Xs Waterborne

Electrostatic Guns for Waterborne Applications

Technical Specifications



PRO Xs WB



PRO Auto Xs WB

	PRO Xs WB	PRO Auto Xs WB
Max. working fluid pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Max. working air pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Gun weight	22.4 oz (634 g)	3.40 lb (1.54 kg)
Gun length	9.7 in (24.6 cm)	10.40 in (26.4 cm)
Recommended paint resistivity range	less than or equal to 1 megohm-cm	
Max. voltage output	60 kilovolts	60 kilovolts
Max. fluid working temp	120°F (48.8°C)	
Air inlet	1/4 npsm (l.h.)	
Atomizing air		3/8 in OD nylon tube
Fan air		3/8 in OD nylon tube
Cylinder pilot		5/32 in OD nylon tube
Hi-lo voltage selector		5/32 in OD nylon tube
Turbine air		1/4 npsm (l.h.)
Fluid inlet	3/8-18 npsm (R 3/8-19) compound thread	1/4-18 npsm
Wetted parts	polyethylene, SST, nylon, acetal, PTFE, UHMWPE, fluoroelastomer, PEEK, nickel	SST, nylon, PEEK, UHMWPE, acetal
Noise data*		
Sound pressure	87.0 dBA	87.0 dBA
Sound power	90.4 dBA	90.4 dBA
Operator manual	312900	313227
Sales Literature	340001	300542

*All readings were taken at 40 psi (2.8 bar, 0.3 MPa). Sound pressure was tested to CAGI-PNUEROP-1969 and sound power to ISO 3744-1981.

PRO Xs Waterborne

Electrostatic Guns for Waterborne Applications

Ordering Information

No isolation system needed for operation.

247936 PRO Xs Waterborne

Gun includes 1.5 mm nozzle and 24A276 aircap. Order fluid hose and grounded air hose separately.

247937 PRO Xs Waterborne Smart Gun

Includes Smart Display showing adjustable voltage at the gun, 1.5 mm nozzle and 24A276 aircap. Order fluid hose and grounded air hose separately.

24A206 PRO Auto Xs Waterborne External Charge Gun

External charge gun includes shroud, two external charging probes, mounting brackets, gun manifold and 24A276 aircap. Grounded air hose must be ordered separately.

Accessories

Pro Xs Aircaps

Aircap Part No.	Pattern Width** Inches (mm)	Recommended Production Rates	Recommended Coating Type
24A438	15-17 (381-432)	Less than 15 oz/min	Light to medium viscosity
24A279	14-16 (356-406)	Less than 15 oz/min	Medium to high viscosity
24A376*	17-19 (432-483)	Less than 15 oz/min	Light to medium viscosity
24A274	14-16 (356-406)	Less than 15 oz/min	Light to medium viscosity
24A439	11-13 (279-330)	Less than 15 oz/min	Medium to high viscosity and high solids
24A275	14-16 (346-406)	Greater than 15 oz/min	Light to medium viscosity and high solids

*Available in multiple colors

** Pattern width at 10 inch target distance with wide pattern kit (24A431) installed

24A431 Wide Pattern Kit

Distributes air so aircap delivers a wider spray pattern.

Aircap Colors

Aircap Part No.	Aircap Color
24A276	Blue
24A277	Red
24A278	Green

Grounded Air Hose (required for use)

Length	Air Flex™	Standard
6 ft (1.8 m)	244963	223068
15 ft (4.6 m)	244964	223069
25 ft (7.6 m)	244965	223070
36 ft (11 m)	244966	223071
50 ft (15 m)	244967	223072
75 ft (23 m)	244968	223073
100 ft (30.5 m)	244969	223074

Air Flex: EPDM rubber core and cover for extra flexibility.

Standard: Modified semi-conductive polyamide core, urethane cover for added durability.

24A225 3/8" ID Grounded Air Hose
50 ft (15 m)

24A226 3/8" ID Grounded Air Hose
75 ft (23 m)

215637 Fluid Hose
1/4 in ID x 25 ft (7.6 m)

215638 Fluid Hose
1/4 in ID x 50 ft (15.2 m)

185493 Air Hose Adapter Nipple
Allows for the connection of multiple air hoses as needed for the special grounded PRO Xs air hoses. 1/4 npsm (L.H.) x 1/4 npsm.

112534 Air Quick Disconnect/Swivel
Swiveling air quick disconnect designed to replace the standard air swivel fitting in the gun handle.

External Charging Probe
Replacement quick release probe

G15/G40 AA Series™

Manual Air-Assist Spray Guns

Technical Specifications



G15



G40



G40 RAC

	G15	G40
Maximum Working Fluid Pressure	1500 psi (105 bar, 10 MPa)	4000 psi (280 bar, 28 MPa)
Maximum Working Air Pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Maximum Working Fluid Temperature	110° F (43° C)	110° F (43° C)
Fluid Inlet	1/4-18 npsm*	1/4-18 npsm*
Air Inlet	1/4-18 npsm (R1/4-19) compound male thread**	1/4-18 npsm (R1/4-19) compound male thread**
Gun Weight	16 oz (450 grams)	16 oz (450 grams)
Sound Pressure at 20 psi (1.4 bar, 0.14 MPa)	66.9 dB(A)	66.9 dB(A)
Gun Body	Forged Aluminum	Forged Aluminum
Fluid Filter	100 mesh	100 mesh
Trigger Pull	3.9 lb	3.9 lb
Wetted Parts	Stainless Steel, Carbide, Ultra High Molecular Weight Polyethylene, Acetal, PTFE, nylon	Stainless Steel, Carbide, Ultra High Molecular Weight Polyethylene, Acetal, PTFE, nylon
Instruction Manual	3A0149	3A0149
Sales Literature G15/G40 Brochure	336937	336937

* Optional swivel fitting available

** Optional quick-disconnect available

Ordering Information

G15 carbide model is recommended for low to medium viscosity materials

G15 acetal seat model is recommended for acid-catalyzed materials

G40 models are recommended for high viscosity materials above 1500 psi (105 bar, 10 MPa)

24C853 G15 Air-Assist Carbide Gun

Medium pressure gun includes carbide seat/ball, indexing aircap and choice of AAM or AAF spray tip from chart, which is specified when order is placed.

24C854 G15 Air-Assist Gun

Medium pressure gun includes a plastic seat, indexing aircap and choice of AAM or AAF spray tip from chart, which is specified when order is placed.

24C855 G40 Air-Assist Gun

High pressure gun includes a carbide seat, tip guard aircap and choice of AAM, AAF or GG4 spray tip from chart, which is specified when order is placed.

24C856 G40 Air-Assist Hi-Flow Gun

High pressure gun with no restrictions to avoid pressure drop with heavy viscosity materials. Includes a carbide seat, tip guard and a choice of AAM, AAF or GG4 spray tip.

24C857 G40 Air-Assist Reverse-A-Clean (RAC) Spray Gun

High pressure gun with a RAC spray tip to reduce downtime caused by frequent tip clogging. Includes a carbide seat, tip guard, and a choice of LTX spray tip.

G15/G40 AA Series

Manual Air-Assist Spray Guns

AAM and GG4 Air-Assist Spray Tip Selection Chart

AAM Tips: Fine Finish Tips recommended for *high finish quality* applications at *low and medium pressures*.

GG4 Tips: High Wear Industrial Tips recommended for *high pressure* applications.

Do not use tips in the gray shaded area of the chart with Model G15 guns (24C853 or 24C854).

All tips in the Spray Tip Selection Chart can be used with Model G40 guns. Use tips in the gray shaded area of the chart with Model G40 guns only.

Order desired tip (part no. AAMxxx or GG4xxx) from matrix below. *xxx = 3 digit number below Maximum Pattern Width. (Example: AAM409)*

Orifice Size in (mm)	*Fluid Output, fl oz/min (lpm)		Maximum Pattern Width at 12 in (300 mm)									
	at 600 psi (4.1 MPa, 41 bar)	at 1000 psi (7.0 MPa, 70 bar)	2 to 4 (100)	4 to 6 (150)	6 to 8 (200)	8 to 10 (250)	10 to 12 (300)	12 to 14 (350)	14 to 16 (400)	16 to 18 (450)	18 to 20 (500)	
† 0.007 (0.178)	4.0 (0.1)	5.2 (0.15)	◆ 107	207	307							
† 0.009 (0.229)	7.0 (0.2)	9.1 (0.27)	109	209	309	409	509					
† 0.011 (0.279)	10.0 (0.3)	13.0 (0.4)	111	211	311	411	511	611				
0.013 (0.330)	13.0 (0.4)	16.9 (0.5)		213	313	413	513	613	713			
0.015 (0.381)	17.0 (0.5)	22.0 (0.7)		215	315	415	515	615	715	815		
0.017 (0.432)	22.0 (0.7)	28.5 (0.85)		217	317	417	517	617	717	817	917	
0.019 (0.483)	28.0 (0.8)	36.3 (1.09)		219	319	419	519	619	719	819	919	
0.021 (0.533)	35.0 (1.0)	45.4 (1.36)			321	421	521	621	721	821	921	
± 0.023 (0.584)	40.0 (1.2)	51.9 (1.56)				423	523	623	723		923	
± 0.025 (0.635)	50.0 (1.5)	64.8 (1.94)				425		625	725	825		
± 0.027 (0.686)	58.5 (1.7)	75.8 (2.27)					527	627		827		
± 0.029 (0.737)	68.0 (1.9)	88.2 (2.65)						629				
± 0.031 (0.787)	78.0 (2.2)	101.1 (3.03)				431		631				
± 0.033 (0.838)	88.0 (2.5)	114.1 (3.42)						633		◆ 833		
± 0.035 (0.889)	98.0 (2.8)	127.1 (3.81)				435						
± 0.037 (0.940)	108.0 (3.1)	140.0 (4.20)							737			
± 0.039 (0.991)	118.0 (3.4)	153.0 (4.59)					539	639		839		

† These tip sizes include a 150 mesh lip filter
 ◆ GG4 tips only
 ‡ Do not use these tips with Model G15 guns (24C853 and 24C854)

*Tips are tested in water.

AAF Air-Assist Fine Finish Pre-Orifice Spray Tip Selection Chart

Fine Finish Tips recommended for high finish quality applications at low and medium pressures. AAF tips have a pre-orifice which assists in atomizing shear thinning materials, including waterbornes and lacquers.

Order desired tip (part no. AAFxxx) from matrix below.

Orifice Size in (mm)	*Fluid Output, fl oz/min (lpm)		Maximum Pattern Width at 12 in (300 mm)			
	at 600 psi (4.1 MPa, 41 bar)	at 1000 psi (7.0 MPa, 70 bar)	6 to 8 (200)	8 to 10 (250)	10 to 12 (300)	12 to 14 (350)
0.011 (0.279)	9.5 (0.28)	12.5 (0.37)	310	410	510	610
0.013 (0.330)	12.0 (0.35)	16.0 (0.47)	312	412	512	612
0.015 (0.381)	16.0 (0.47)	21.0 (0.62)		414	514	614
0.017 (0.432)	20.0 (0.59)	26.5 (0.78)		416	516	616

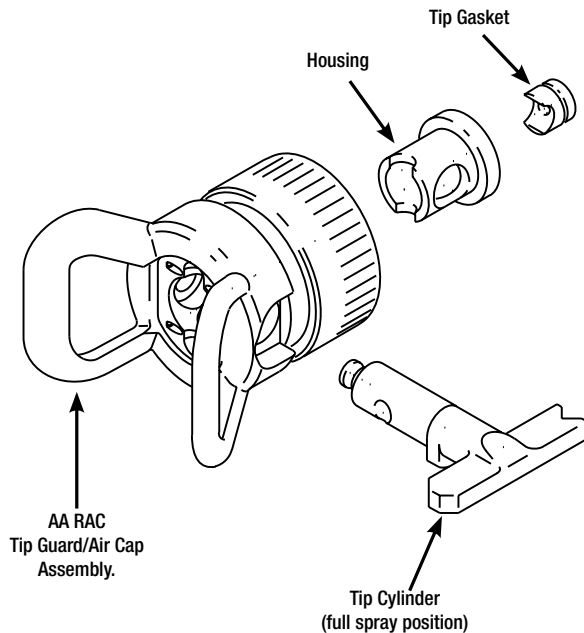
*Tips are tested in water.

G15/G40 AA Series

Manual Air-Assist Spray Guns

Accessories

- 224453 100 Mesh Fluid Filter Kit**
100 mesh (.005 gap spacing) replacement fluid filters.
Quantity of 5.
- 238563 60 Mesh Fluid Filter Kit**
60 mesh (.009 gap spacing) replacement fluid filters for coarser particle filtering to replace standard 100 mesh filters. Quantity of 3.
- 241804 Tip Filter Kit**
Replacement filters for spray tip orifice sizes 0.007, 0.009, and 0.011.
Quantity of 10.
- 189018 Fluid Swivel Connector**
7500 psi (516 bar, 51.6 MPa) maximum working pressure.
Connector to ease movement of the gun and fluid hose.
- 238694 High Pressure Fluid Ball Valve**
5000 psi (350 bar, 35 MPa) maximum working pressure 3/8 npt(mbe).
SST wetted parts, PEEK seats, PTFE seals. Compatible with acid-catalyzed materials. Can be used as fluid drain valve.
- 241812 Fluid Hose**
3500 psi (242 bar, 24 MPa) maximum working pressure
1/4-18 npsm(fbe), 3/16 in (5 mm) ID, 25 ft (7.62 m) long, nylon tubing with polyurethane cover.
- 249473 Air Fitting and Tubing Kit**
Alternative-style connector for air inlet and hose.
3/8 in to 1/4 Push-To-Lock fitting, 25 ft (7.62 m) long, nylon tubing.
Optional quick disconnect available.
- 241811 Air Hose**
100 psi (7 bar, 0.7 MPa) maximum working pressure 1/4-18 npsm(fbe),
1/4 in (6 mm) ID, 25 ft (7.62 m) long polyurethane tubing.
- 15G093 G15 Gun Flush Box Insert**
Insert for use with Gun Flush Box 244105 and AA Series G15 Spray Guns.
- 15G346 G40 Gun Flush Box Insert**
Insert for use with Gun Flush Box 244105 and AA Series G40 Spray Guns.
- 249140 HVLP Verification Kit**
Use to check air cap air pressure at various air supply air pressures. Do not use for actual spraying.
- 249598 Unclogging Needle Kit**
Kit includes picks for unclogging gun tip.
- 101892 Gun Brush**
Use to clean the gun.
- 15C161 Ultimate Gun Cleaning Kit**
Kit includes brushes and tools for gun maintenance.
- 24C356 JIC Fluid Fitting**
Replaces standard npsm fluid fitting.
- 289499 Fine Adjust Fan Pattern Knob**
Replacement fan valve assemble for fine adjustment accuracy.



G40 Automatic AA Series

Automatic Air-Assist Spray Guns

Technical Specifications



G40 Automatic



G40 Automatic With Manifold

AA G40	
Maximum fluid pressure	4000 psi (276 bar, 27.6 MPa)
Maximum working air pressure	100 psi (7 bar, 0.7 MPa)
Max. cylinder air pressure	100 psi (7 bar, 0.7 MPa)
Minimum actuating pressure	50 psi (3.5 bar, 0.3 MPa)
Triggering speed	60 msec (fully open or close)
Wetted parts	stainless steel, carbide, UHMWPE, acetal, polyethylene, chemically resistant fluoroelastomer, PTFE, polyimide
Gun weight	1.2 lb (545 g)
Gun and manifold weight	1.7 lb (770 g)
Air inlet	
Atomizing air	3/8 in OD tube
Fan air	3/8 in OD tube
Cylinder air	1/4 in OD tube
Fluid inlet	1/4 in npsm
Dimensions (excluding fittings)	5.3 in L x 3.0 in H x 2.0 in W (135 mm L x 76 mm H x 51 mm W)
Instruction manual	311052
Sales Literature	
AA G40 Automatic Flyer	320530

Ordering Information

288046 Standard Gun

Includes carbide needle/ball and carbide diffuser seat. AAP precision spray tip of choice is specified when ordered.

288044 Acid Catalyst Gun

Specially designed to handle low viscosity, non-abrasive or acid-catalyzed materials. Includes a stainless steel needle/ball and an acetal seat. AAP precision spray tip of choice is specified when ordered.

288053 Reverse-A-Clean® (RAC) Gun

Designed with a RAC spray tip to reduce downtime caused by frequent tip clogging. Includes a carbide needle and seat, tip guard aircap and a choice of LTX spray tip.

Manifolds (A manifold is required for each gun to be installed)

288221 Manifold with bottom fluid ports

288217 Manifold with side fluid ports

288224 Manifold with manual fan control with side fluid ports

288160 Rear Port Manifold

Rear exit fluid fitting manifold. Designed for robotic or compact applications

288197 Manifold Adapter Plate

Allows the manifold to be attached to a variety of bolt patterns

G40 Automatic AA Series

Automatic Air-Assist Spray Guns

Tip Selection Chart

AAP Tip Chart

All tips in the AAP selection chart can be used with Models 288046 and 288044 G40 guns.

Order desired tip (part no AAPxxx) from the selection chart below.

Orifice Size in (mm)	*Fluid Output, fl oz/min (lpm)		Maximum Pattern Width at 12 in (300 mm)						
	at 600 psi (4.1 MPa, 41 bar)	at 1000 psi (7.0 MPa, 70 bar)	4 to 6 (150)	6 to 8 (200)	8 to 10 (250)	10 to 12 (300)	12 to 14 (350)	14 to 16 (400)	16 to 18 (450)
† 0.009 (0.229)	7.0 (0.2)	9.1 ((0.27)	209	309	409	509			
† 0.011 (0.279)	10.0 (0.3)	13.0 (0.4)	211	311	411	511	611		
0.013 (0.330)	13.0 (0.4)	16.9 (0.5)	213	313	413	513	613	713	
0.015 (0.381)	17.0 (0.5)	22.0 (0.7)	215	315	415	515	615	715	815
0.017 (0.432)	22.0 (0.7)	28.5 (0.85)		317	417	517	617	717	817
0.019 (0.483)	28.0 (0.8)	36.3 (1.09)			419	519	619	719	
0.021 (0.533)	35.0 (1.0)	45.4 (1.36)			421	521	621		

† These tip sizes include a 150 mesh tip filter

*Tips are tested in water

AAF Air-Assist Fine Finish Pre-Orifice Spray Tip Selection Chart

Fine Finish Tips recommended for high finish quality applications at low and medium pressures. AAF tips have a pre-orifice which assists in atomizing shear thinning materials, including waterbornes and lacquers.

Order desired tip (part no. AAFxxx) from matrix below.

Orifice Size in (mm)	*Fluid Output, fl oz/min (lpm)		Maximum Pattern Width at 12 in (300 mm)			
	at 600 psi (4.1 MPa, 41 bar)	at 1000 psi (7.0 MPa, 70 bar)	6 to 8 (200)	8 to 10 (250)	10 to 12 (300)	12 to 14 (350)
0.011 (0.279)	9.5 (0.28)	12.5 (0.37)	310	410	510	610
0.013 (0.330)	12.0 (0.35)	16.0 (0.47)	312	412	512	612
0.015 (0.381)	16.0 (0.47)	21.0 (0.62)		414	514	614
0.017 (0.432)	20.0 (0.59)	26.5 (0.78)		416	516	616

*Tips are tested in water

Accessories

249140 HVLP Verification Kit

Use to check air cap air pressure at various air supply air pressures.
Do not use for actual spraying.

249598 Unclogging Needle Kit

Kit includes picks for unclogging gun tip

15C161 Ultimate Gun Cleaning Kit

Kit includes brushes and tools for gun maintenance

249424 Acetal Seat Repair Kit

Kit includes replacement, acetal seat (pack of 10), and seat nut

249456 Carbide Seat Repair Kit

Kit includes carbide seat, seat nut and seat gasket

287962 SST Seat Repair Kit

Kit includes assembled diffuse with SST seat for use with pigmented acid catalyst material

253032 Aircap Seal Kit

Pack of 5 seals and 5 o-rings for the aircap assembly

248936 RAC Acetal Gasket

Pack of five plastic (acetal) replacement RAC gaskets

287917 RAC Conversion Kit

Converts a gun from a standard air cap and AAP spray tip to a RAC aircap and LTX spray tip

PRO Xs AA Series

Electrostatic Air-Assist Spray Guns

Technical Specifications



PRO Xs4 AA



PRO Auto Xs AA

	PRO Xs4 AA	PRO Auto Xs AA
Max. working fluid pressure	3000 psi (207 bar, 20.7 MPa)	3000 psi (207 bar, 20.7 MPa)
Max. working air pressure	100 psi (7 bar, 0.7 MPa)	100 psi (7 bar, 0.7 MPa)
Gun weight	29.1 oz (825 g)	3.52 lb (1.60 kg)
Gun length	11.4 in (24.6 cm)	12.25 in (31.1 cm)
Recommended paint resistivity range	7 to ∞ megohm-cm	
Max. voltage output	85 kilovolts	60 kilovolts
Max. fluid working temp	120°F (48.8°C)	
Air inlet	1/4 npsm (l.h.)	
Atomizing air		3/8 in OD nylon tube
Fan air		N/A
Cylinder pilot		5/32 in OD nylon tube
Hi-lo voltage selector		5/32 in OD nylon tube
Turbine air		1/4 npsm (l.h.)
Fluid inlet	1/4-18 npsm	1/4-18 npsm
Wetted parts	SST, nylon, PEEK, UHMWPE, carbide, acetal	SST, nylon, PEEK, UHMWPE, carbide, acetal
Noise data*		
Sound pressure	95.0 dBA	
Sound power	99.7 dBA	
Operator manual	309296 309295	309298
Sales Literature	300542	300542

*All readings were taken at 40 psi (2.8 bar, 0.3 MPa). Sound pressure was tested to CAGI-PNUEROP-1969 and sound power to ISO 3744-1981.

Ordering Information

- 244572 PRO Xs4, Air-Assisted, Standard**
Includes tip of choice when ordering. Grounded air hose must be ordered separately.
- 244573 PRO Xs4, Air-Assisted, Smart**
Includes Smart display showing voltage and current at the gun, adjustable voltage and tip of choice when ordering. Grounded air hose must be ordered separately.
- 244592 PRO Auto Xs AA**
Includes gun shroud, mounting brackets, gun manifold with tip of choice. Grounded air hose must be ordered separately.

PRO Xs AA Series Accessories

Electrostatic Air-Assist Spray Guns

Accessories

Air-Assisted PRO Xs Guns

245282 PRO Xs4 AA Round Spray Kit (manual guns)
Round spray provides a higher level of performance to electrostatic spraying. Includes tip of choice.

245298 PRO Auto Xs AA Round Spray Kit
Round spray provides a higher level of performance to electrostatic spraying. Includes tip of choice.

AA Round Spray Tip

Part No.	Pattern Width	Flow Rate at 600 psi (41 bar, 4.1 MPa)
236836	9 in	4.1 oz/min
236837	10 in	5.1 oz/min
236838	10 in	5.4 oz/min
236839	14 in	7.8 oz/min
236840	13 in	9.1 oz/min
236841	12 in	11.8 oz/min
236842	11 in	16.2 oz/min

244917 Electrode Replacement Kit
Includes 5 electrodes.

115898 Fluid Swivel

238563 In-Line Fluid Filter, 60 mesh (3 pack)
To replace the 100 mesh filter that is included with the gun.

244834 Integral Air Swivel with Left Handed Threads

Air Whip Hose

Grounded air hose for extra flexibility.

236130	3 ft (0.9 m)
236131	6 ft (1.8 m)

Fluid Whip Hose

Maximum working pressure: 3000 psi (207 bar, 20.7 MPa)
ID: 1/8 in. (3.2 mm). Thread size: 1/4 npsm(f) x 1/4 npt(m).

236134	Length: 3 ft. (0.9 m)
236135	Length: 6 ft. (1.8 m)

Fluid Hose

240793	1/4 in. ID x 25 ft. (7.6 m)
240794	1/4 in. ID x 50 ft. (15.2 m)

244913 E/S Always on Kit
Replaces inlet fitting with ball valve to shut air off during flushing.
Converts ES on/off lever to always ON condition.

245271 Gun Washer Kit
Used to convert Graco gun washers to clean PRO Xs air-assisted guns.

198405 Gun Flush Box
Used to convert existing gun flush boxes to hold PRO Xs3 and Xs4 models guns

Tip Selection Chart

Orifice Size in (mm)	Fan Width at 10 in (260 mm) in (mm)	Part No.
0.007 (0.178)	2-4 (50-100)	GG3107
	4-6 (100-150)	GG3207
	6-8 (150-200)	GG3307
0.009 (0.229)	4-6 (100-150)	GG3209
	6-8 (150-200)	GG3309
	8-10 (200-250)	GG3409
0.011 (0.279)	4-6 (100-150)	GG3211
	6-8 (150-200)	GG3311
	8-10 (200-250)	GG3411
	10-12 (250-300)	GG3511
	12-14 (300-350)	GG3611
0.013 (0.330)	4-6 (100-150)	GG3213
	6-8 (150-200)	GG3313
	8-10 (200-250)	GG3413
	10-12 (250-300)	GG3513
	12-14 (300-350)	GG3613
0.015 (0.381)	4-6 (100-150)	GG3215
	6-8 (150-200)	GG3315
	8-10 (200-250)	GG3415
	10-12 (250-300)	GG3515
	12-14 (300-350)	GG3615
0.017 (0.432)	4-6 (100-150)	GG3217
	6-8 (150-200)	GG3317
	8-10 (200-250)	GG3417
	10-12 (250-300)	GG3517
	12-14 (300-350)	GG3617
0.019 (0.483)	6-8 (150-200)	GG3319
	8-10 (200-250)	GG3419
	10-12 (250-300)	GG3519
	12-14 (300-350)	GG3619
	14-16 (350-400)	GG3719
0.021 (0.533)	8-10 (200-250)	GG3421
	10-12 (250-300)	GG3521
	12-14 (300-350)	GG3621
	14-16 (350-400)	GG3721
0.023 (0.584)	8-10 (200-250)	GG3423
	10-12 (250-300)	GG3523
	12-14 (300-350)	GG3623
0.025 (0.635)	8-10 (200-250)	GG3425
	12-14 (300-350)	GG3625

XTR™ Airless Spray Guns

Airless Spray Guns

Technical Specifications



XTR Gun

	XTR-5	XTR-7
Maximum fluid working pressure	5000 psi (345 bar, 34.5 MPa)	7250 psi (500 bar, 50 MPa)
Fluid orifice	0.090 in (2.3 mm)	0.090 in (2.3 mm)
Fluid inlet	1/4 npsm	1/4 npsm
Maximum fluid temperature	160° F (71° C)	160° F (71° C)
Sound pressure	84.3dB(A)*	84.3dB(A)*
Sound power	95.7dB(A)*	95.7dB(A)*
Dimensions	Weight: 14.5 oz (411 g)	Weight: 24 oz (688 g)
	Length: 4.35 in (111 mm)	Length: 4.35 in (111 mm)
	Height: 7.1 in (180 mm)	Height: 7.1 in (180 mm)
Wetted parts	Aluminum, stainless steel, polyethylene, polyurethane, polypropylene, nylon, acetal, carbide, solvent-resistant O-rings	Aluminum, stainless steel, polyethylene, polyurethane, polypropylene, nylon, acetal, carbide, solvent-resistant O-rings
Instruction Manual	312145	312145
Sales Literature	XTR Airless Spray Guns Flyer	
	336053	336053

* Results are maximum readings taken at 6000 psi (414 bar, 41 MPa), with GHD519 tip, using water. Sound power level was tested to ISO 9614-2.

Ordering Information

XTR-5 Airless Spray Gun

Maximum working pressure: 5000 psi (345 bar, 34.5 MPa)

- XTR500 1" round handle, four-finger trigger, no tip
- XTR501 1" round handle, four-finger trigger, flat tip*
- XTR502 Oval insulated handle, four-finger trigger, GHD RAC tip*
- XTR503 Oval insulated handle, two-finger trigger, GHD RAC tip*
- XTR504 1" round handle, four-finger trigger, GHD RAC tip*
- XTR505 1" round handle, two-finger trigger, GHD RAC tip*
- XTR506 7/8" round handle, four-finger trigger, GHD RAC tip*
- XTR507 7/8" round handle, two-finger trigger, GHD RAC tip*

XTR-7 Airless Spray Gun

Maximum working pressure: 7250 psi (500 bar, 50.0 MPa)

- XTR700 Round handle, four-finger trigger, no tip
- XTR701 Round handle, four-finger trigger, flat tip*
- XTR702 Oval insulated handle, four-finger trigger, GHD RAC tip*
- XTR703 Oval insulated handle, two-finger trigger, GHD RAC tip*
- XTR704 Round handle, four-finger trigger, GHD RAC tip*
- XTR705 Round handle, two-finger trigger, GHD RAC tip*

*Includes 519 tip

Accessories

- 287450 2-finger trigger kit
- 287449 4-finger round trigger kit
- 287451 4-finger oval insulation trigger kit
- 246294 10 in (254 mm) gun extension, 7250 psi (500 bar, 50 MPa)
- 246295 15 in (380 mm) gun extension, 7250 psi (500 bar, 50 MPa)
- 246296 18 in (457 mm) gun extension, 7250 psi (500 bar, 50 MPa)
- 246297 180° spray nozzle, 7/8-14 UNC-2B, 7250 psi (500 bar, 50 MPa)
- 248837 Gun repair kit, includes gasket, needle and seat
- 245994 GHD tip guard kit
- 287032 Filter, 60 mesh, included in every gun
- 287033 Filter, 100 mesh
- 287034 Filter, 60 and 100 mesh combination

AL Automatic

Airless Spray Gun

Technical Specifications



AL Automatic

AL Automatic	
Maximum fluid pressure	4000 psi (276 bar, 27.6 MPa)
Maximum working air pressure	100 psi (7 bar, 0.7 MPa)
Maximum cylinder air pressure	100 psi (7 bar, 0.7 MPa)
Minimum air cylinder actuating pressure	70 psi (4.9 bar, 0.5 MPa)
Maximum working fluid temperature	140°F (60°C)
Triggering speed	50-70 msec (fully open or close)
Wetted parts	Stainless steel, carbide, UHMWPE, acetal, PEEK, PTFE
Gun weight	1.2 lb (545 g)
Dimensions	5.2 in L x 3.0 in H x 2.0 in W (135 mm L x 76 mm H x 51 mm W)
Instruction Manual	311053
Sales Literature	338202
	AL Automatic Flyer

Ordering Information

288048 Airless Gun
Includes GGO precision spray tip of choice and internal filter

Manifolds (required for gun installation)

241161 Standard 1/4" npsm inlets
244930 High flow ambient manifold

Accessories

288171 Air Seal Repair Kit
239896 Fluid Seal Repair Kit
210500 In-Line Fluid Filter

GGO Tip Chart

Orifice Size in (mm)	*Fluid Output, fl oz/min (lpm)	Maximum Pattern Width at 12 in (300 mm)								
	at 600 psi (41 bar, 4.1 MPa)	2 to 2.5 (50)	4 to 4.5 (100)	6 to 6.5 (150)	8 to 8.5 (200)	10 to 10.5 (250)	12 to 13 (300)	14 to 15 (350)	16 to 17 (400)	18 to 19 (450)
0.007 (0.178)	.053 (0.20)	107		307						
0.009 (0.229)	.087 (0.33)	109	209	309						
0.011 (0.279)	0.13 (0.49)	111	211	311	411	511	611			
0.013 (0.330)	0.18 (0.69)		213	313	413	513	613	713		
0.015 (0.381)	0.24 (0.91)	115	215	315	415	515	615	715	815	
0.017 (0.432)	0.31 (1.17)	117	217	317	417	517	617		817	917
0.019 (0.483)	0.39 (1.47)		219	319	419	519	619	719	819	
0.021 (0.533)	0.47 (1.79)		221	321	421	521	621	721	821	921
0.023 (0.584)	0.57 (2.15)			323	423	523	623	723	823	923
0.025 (0.635)	0.67 (2.54)			325	425	525	625	725	825	925
0.027 (0.686)	0.78 (2.96)			327	427	527	627	727	827	927
0.029 (0.737)	0.90 (3.42)				429	529	629	729		
0.031 (0.787)	1.03 (3.90)			331	431	531	631	731		931
0.033 (0.838)	1.17 (4.42)				433	533	633	733		933
0.035 (0.889)	1.31 (4.98)			335	435	535	635	735		
0.037 (0.940)	1.47 (5.56)							737		
0.039 (0.991)	1.63 (6.18)					539	639			
0.041 (1.041)	1.80 (6.83)					541			841	
0.043 (1.092)	1.99 (7.51)					543	643			
0.045 (1.143)	2.17 (8.23)					545				
0.047 (1.197)	2.37 (8.98)					547				
0.049 (1.245)	2.58 (9.76)							749		
0.053 (1.35)	3.02 (11.4)					553				
0.055 (1.40)	3.25 (12.3)						655			

*Tips are tested in water

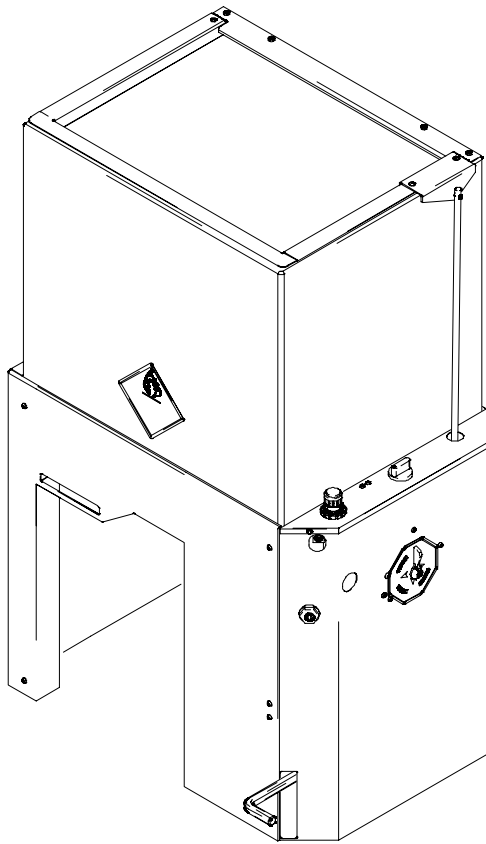
PRO Wash™

Gun Washers

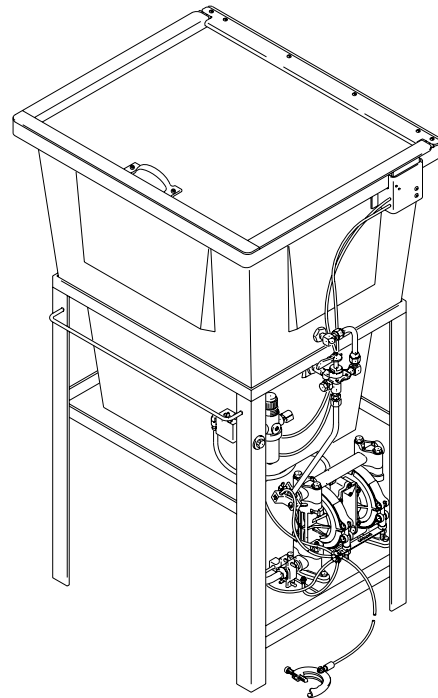
PRO Wash™ Gun Washers

Model	Part No.	Air Pressure Operating Range	Maximum Tank Capacity	Air Inlet	Fluid Drain Valve	Approximate Dry Weight	Wetted Parts	Inst. Manual
Economy	112634	25 to 100 psi (1.7 to 7 bar)	5 gal (18.9 l)	1/4 npt(f)	1 in npt(m)	63 lb (28.6 kg)	carbon steel, polyethylene (tank) stainless steel, aluminum, brass, PTFE, acetal	308393
Standard	• 112635	25 to 100 psi (1.7 to 7 bar)	5 gal (18.9 l)	1/4 npt(f)	1 in npt(m)	65 lb (29.5 kg)	stainless steel, aluminum, polyethylene (tank), brass, PTFE, acetal	308393
Premium	• 117438*	25 to 100 psi (1.7 to 7 bar)	5 gal (18.9 l)	1/4 npt(f)	1 in npt(m)	86 lb (39 kg)	stainless steel, brass, PTFE, acetal	308393

• Waterborne compatible
* FM Approved



117438 Premium Washer



112635

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Industrial Customer Service

Hours: Monday-Friday 7:30 AM - 5:30 PM Central Time
Phone: 800-328-0211
Fax: 877-340-6427

Pumping Technologies

2

Definitions

Continuous Duty

A pump operating 24 hours a day, seven days a week, 52 weeks a year.

Cycle Rate

The number of times the pump completes a pump cycle in a given period of time.

Flow Rate

The volume of material that can be pumped in a given period of time.

Maximum Fluid Outlet Pressure

The maximum outlet fluid pressure a pump can achieve at stall, no flow.

Pressure

The amount of force exerted evenly on a given surface area, typically reported in pounds per square inch (psi), MegaPascals (MPa), or bar (bar).

Pump

The term referring to equipment that supplies fluid pressure and flow for fluid handling needs.

Pump Cycle

A complete upstroke and downstroke operation of the lower displacement pump.

Pump Ratio

The relationship between the air or hydraulic motor piston effective area and the lower displacement pump's piston effective area.

Pump Stroke

The upstroke or downstroke operation of a pump.

Pump Volume per Cycle

The volume of material pumped in a complete upstroke and downstroke pump operation.

Sound Pressure Level

The number of decibels (dBA) produced by the pump at a given pump cycle rate.

Shear

One layer of fluid slipping relative to an adjacent layer of fluid. The more a fluid slips in a pump, the higher the shear rate.

Viscosity

The resistance of a fluid to flowing. The more a fluid resists flowing, the higher its viscosity.

Technical Specifications and Ordering Information

	Part Number	218763	223186	224350	224343	224345	218956	239327	223844	223596	237958
PUMP SPECIFICATIONS	Model	1.5:1	2:1	5:1	5:1	5:1	5:1	15:1	15:1	23:1	23:1
	Output per cycle	429 cc	343 cc	157 cc	157 cc	157 cc	135 cc	44 cc	44 cc	27 cc	27 cc
	Maximum working pressure psi (bar, MPa)	180 (12, 1.2)	200 (12, 1.4)	900 (62, 6.2)	600 (42, 4.2)	900 (62, 6.2)	900 (62, 6.2)	2700 (186, 18.6)	2700 (186, 18.6)	3450 (238, 23.8)	2760 (190, 19.0)
	Maximum air input pressure psi (bar, MPa)	120 (8, 0.8)	100 (7, 0.7)	180 (12.4, 1.2)	120 (8, 0.8)	180 (12.4, 1.2)	180 (12.4, 1.2)	180 (12.4, 1.2)	100 (7, 0.7)	150 (10, 1.0)	120 (8, 0.8)
	Output at 60 CPM gpm (lpm)	6.8 (25.7)	5.4 (20.5)	2.5 (9.4)	2.5 (9.4)	2.5 (9.4)	2.1 (8.1)	0.7 (2.6)	0.7 (2.6)	0.4 (1.6)	0.4 (1.6)
INLET/OUTLET	Pump inlet size	1-1/2 npt(f)	1-1/2 npt(f)	1-1/5 (f)	3/4 npt(f)	3/4 npt(f)	N/A	3/4 npt(m)	3/4 npt(m)	3/4 npt(m)	3/4 npt(m)
	Pump outlet size	1 npt(f)	1 npt(f)	3/4 npt(f)	1/2 npt(f)	1/2 npt(f)	3/4 npt(f)	3/8 npt(f)	3/8 npt(f)	3/8 npt(f)	3/8 npt(f)
MANUALS	Pump manual assembly	307653	307985	308118	308116	308117	307044	308739	308106	307619	307619
	Lower manual	307652	307983	308118	308116	308117	307044	306981	308106	307619	307619
	Motor manual	307141	307043	307043	307043	307043	307043	307043	307043	307043	307043



	Type	Seals	1.5:1	2:1	5:1	5:1	5:1	5:1	15:1	15:1	23:1	23:1
PUMP CONSTRUCTION	CARBON STEEL	Stubby UHMWPE/Leather		223186					239327		223596	
		Drum UHMWPE/Leather		223185								
		PTFE					218956					
	STAINLESS STEEL	Stubby UHMWPE/Leather	218763									237958
		UHMWPE/PTFE				224343						
		UHMWPE/Neoprene					224345					
	PTFE/Leather							223844				
	Drum UHMWPE/PTFE			224350								

Replacement Parts Index S = Standard • = Optional

		Pump Part No	218763	223186	224350	224343	224345	218956	239327	223844	223596	237958
Part No	Description		1.5:1	2:1	5:1	5:1	5:1	5:1	15:1	15:1	23:1	23:1
206728	Air motor repair kit		S	S	S	S	S	S	S	S	S	S
220927	Seal repair kit - 3 UHMWPE/2 Leather		S									
223320	Seal repair kit - 3 UHMWPE/2 Leather			S								
224401	Seal repair kit - 2 UHMWPE/2 PTFE					S						
224402	Seal repair kit - UHMWPE/Neoprene						S					
208520	Seal repair kit - 2 UHMWPE/2 PTFE							S				
237197	Seal repair kit - 3 Leather/2 PTFE		•									
237194	Seal repair kit - 3 Leather/2 PTFE			•								
224889	Seal repair kit - 4 PTFE					•						
224404	Seal repair kit - UHMWPE/PTFE						•					
224889	Seal repair kit - 4 PTFE				•							
237200	Seal repair kit - 5 PTFE		•									
223321	Seal repair kit - 5 PTFE			•								
218757	Seal repair kit - UHMWPE U-Cup		•									
235635	Seal Repair Kit - 3 PTFE/3 Leather								S	S		
239328	Seal Repair Kit - 4 Leather/1 PTFE										S	•
235636	Seal Repair Kit - 2 PTFE/2 Leather										•	S
223675	Seal Repair Kit - 3 UHMWPE/3 Leather								•	•		
223674	Seal Repair Kit - 2 UHMWPE/2 Leather										•	•
237725	Seal Repair Kit - 6 PTFE								•	•		
236724	Seal Repair Kit - 4 PTFE										•	•
243687	Seal Repair Kit - Tuff-Stack™*								•	•		
243615	Seal Packings - Tuff-Stack*										•	•
243616	Seal Packings - Tuff-Stack*										•	•
243621	Seal Packings - Tuff-Stack*								•	•		

* Tuff-Stack part numbers sold as 12-count convenience pack.

Monark

Pneumatic 2-Ball Piston Pumps

Replacement Parts Index (continued) S = Standard • = Optional

Part No	Description	Pump Part No									
		218763 1.5:1	223186 2:1	224350 5:1	224343 5:1	224345 5:1	218956 5:1	239327 15:1	223844 15:1	223596 23:1	237958 23:1
243622	Throat Seal Packings - Tuff-Stack™*			•	•		•				
243624	Throat Seal Packings - Tuff-Stack*					•					
243623	Piston Seal Packings - Tuff-Stack*			•	•	•	•				
243625	Piston Seal Packings - Tuff-Stack*					•					
180954	Displacement Rod - SST	S									
185650	Displacement Rod - CS		S								
186997	Displacement Rod - SST			S	S	S					
169504	Displacement Rod - SST						S				
223589	Displacement Rod - SST							S	S		
223603	Displacement Rod - SST									S	S
178902	Housing Sleeve - SST							S	S		
178898	Housing Sleeve - SST									S	S
177721	Cylinder - SST	S									
185649	Cylinder - CS		S								
186994	Cylinder - SST				S	S					
186986	Cylinder - SST			S			S				

*Tuff-Stack part numbers sold as 12-count convenience pack.

Additional Lower Displacement Pump**

Pump	Lower Displacement		Standard Seal Repair Kit		Standard Displacement Rod		Sleeve Housing	
	Mat'l	Kit	Const.	Rod	Const.	Housing	Const.	
243663	CS	237725	6 PTFE	223589	SST	178902	SST	

**This lower displacement pump is not offered in complete Monark pump assemblies. To configure a complete Monark 15:1 or 23:1 pump with these lowers:

1. Select desired lower displacement pump, based on fluid pressure and flow requirements and seal construction.
2. Order Monark air motor 215363 for Monark 15:1 or Monark air motor 222791 for Monark 23:1.
3. Order tie rods 164722 (qty: 3), locknuts 101566 (qty: 3), cotter pin 101946 and o-ring seal 156082.

Accessories

- 207365 Wall Bracket**
For mounting 5:1 Monark pump to wall.
- 206220 Wall Bracket**
For mounting 1.5:1 and 2:1 Monark pump to wall.
- 194248 Accessory Packing Tool**
Eases insertion of position assembly into cylinder (model 218763, 223186 and 223185).
- 168085 Accessory Assembly Tool**
Used to install piston assembly into cylinder (models 218956).
- 241953 Monark Muffler Retrofit Kit**
Upgrades previous Monark air motor design with foam attached to air motor plates. Reduces sound level of Monark air motor.
- 207579 Padded Pliers**
For servicing Monark air motor trip rod.
- 171818 Adjustment Tool**
A 0.145 in (3.7 mm) gauge used to ensure proper clearance between the poppets and the piston on the Monark air motor.

- 236054 Suction Kit (Monark 1.5:1 and 2:1 only)**
Use to siphon material out of 55 gal (200 l) closed-end drum. Includes siphon tube, bung adapter, 6 ft (1.8 m) nitrile hose, 1-1/2 npt(m) outlet fitting.
- 207484 Siphon Kit, Aluminum (Monark 5:1 only)**
Use to siphon fluid from a 5 gal (18.9 l) pail. Includes nylon suction hose 214960, 3/4 in ID, 3.5 ft (1.1 m) long, 3/4 in npt(f) swivel outlet fitting.
- 208259 Siphon Kit, Carbon Steel (Monark 5:1 only)**
Use to siphon fluid from a 55 gal (200 l) drum. Includes nylon suction hose 214961, 3/4 in ID, 6 ft (1.8 m), 3/4 in npt(f) swivel outlet fitting, bung adapter.
- 208920 Siphon Kit, Aluminum (Monark 5:1 only)**
Use to siphon fluid from a 5 gal (18.9 l) pail. Includes nylon suction hose 170706, 1 in ID, 4 ft (1.2 m) long, 3/4 in npt(f) swivel outlet fitting, inlet strainer.

President®

Pneumatic 2-Ball Piston Pumps

Technical Specifications and Ordering Information

2

	Model	3:1	4:1	10:1	15:1	30:1	46:1
PUMP SPECIFICATIONS	Output per cycle	630 cc	500 cc	189 cc	112 cc	62 cc	36 cc
	Maximum working pressure psi (bar, MPa)	360 (25, 2.5)	400 (28, 2.8)	1800 (124, 12.4)	1800 (124, 12.4)	3600 (250, 25.0)	4600 (317, 31.7)
	Maximum air input pressure psi (bar, MPa)	120 (8, 0.8)	100 (7, 0.7)	180 (12, 1.2)	120 (8, 0.8)	120 (8, 0.8)	100 (7, 0.7)
	Output at 60 CPM gpm (lpm)	10 (37.8)	8 (30.2)	3 (11.3)	1.8 (6.8)	1 (3.8)	0.58 (2.2)
INLET/ OUTLET	Pump inlet size	1-1/2 npt(f)	1-1/2 npt(f)	Stubby: 3/4 npt(f) Drum: No intake thread	3/4 npt(m)	316 SST Model: 3/4 npt(f) All Other Models: 3/4 npt(m)	3/4 npt(f)
	Pump outlet size	Stubby: 3/4 npt(m) Drum: 1 npt(f)	1 npt(f)	Models 239326, 224347, 224348: 3/4 npt(f) Models 224342, 224348: 1/2 npt(f)	1-1/2 npt(f)	316 SST Model: 1/4 npt(f) All Other Models: 3/8 npt(f)	3/8 npt(f)
MANUALS	Pump manual assembly	307674	307986	308116 (Model 224342) 308117 (Models 224346, 224347) 308118 (SST Drum Pumps) 308738 (CS Drum Pumps)	306936	306769 (316 SST model) 308106 (304 SST model) 306981 (CS models)	307619

Type		Seals	3:1	4:1	10:1	15:1	30:1	46:1	
PUMP CONSTRUCTION	CARBON STEEL	Stubby	4 Leather/1 PTFE	237142					
		Stubby	3 Leather/ 2 PTFE	237143					
		Stubby	3 UHMWPE/2 Leather		223184				
		Stubby	PTFE/Leather				217580	223586	
		Stubby	Tuff-Stack *					243664	
		Drum	4 Leather/1 PTFE	237144					
	STAINLESS STEEL	Drum	3 UHMWPE/2 Leather	218795	223183				
		Drum	PTFE	237145		239326			
		Drum	PTFE/Leather					221075	
		Stubby	3 UHMWPE/2 Leather	218747					
		Stubby	5 PTFE	237146					
		Stubby	UHMWPE/PTFE			224342			
STAINLESS STEEL	Stubby	UHMWPE/Neoprene			224346				
	Stubby w/Riser Tube	UHMWPE/Neoprene			224347				
	Stubby 316 SST	PTFE					206897		
	Stubby 304 SST	PTFE/Leather					223843		
	Drum	3 UHMWPE/2 Leather	218795						
	Drum	5 PTFE	237145						
Drum	UHMWPE/PTFE			224348					

* Tuff-Stack part numbers sold as 12-count convenience pack.

President

Pneumatic 2-Ball Piston Pumps

Replacement Parts Index

S = Standard • = Optional

Part No	Description	Pump Part No	237142	237143	218747	237146	237144	218795	237145	223184	223183	239140
			3:1	3:1	3:1	3:1	3:1	3:1	3:1	4:1	4:1	46:1
207385	Air motor repair kit		S	S	S	S	S	S	S	S	S	S
237198	Seal repair kit - 4 Leather/1 PTFE		S	•	•	•	β	•	•			
237197	Seal repair kit - 3 Leather/2 PTFE		•	S	•	•	•	•	•			
220927	Seal repair kit - 3 UHMWPE/2 Leather		•	•	S	•	•	S	•			
237200	Seal repair kit - 5 PTFE		•	•	•	S	•	•	S			
223320	Seal repair kit - 3 UHMWPE/2 Leather									S	S	
218757	Seal repair kit - UHMWPE U-Cup		•	•	•	•	•	•	•			
237193	Seal repair kit - 4 Leather/1 PTFE									•	•	
237194	Seal repair kit - 3 Leather/2 PTFE									•	•	
223321	Seal repair kit - 5 PTFE									•	•	
180954	Displacement Rod - SST		S	S	S	S	S	S	S			
177721	Cylinder - SST		S	S	S	S	S	S	S			
185650	Displacement Rod - CS									S	S	
185649	Cylinder - CS									S	S	
235636	Seal Repair Kit - 2 PTFE/2 Leather											S
223674	Seal Repair Kit - 2 UHMWPE/2 Leather											•
236724	Seal Repair Kit - 4 PTFE											•
239328	Seal Repair Kit - 4 Leather/1 PTFE											•
243615	Seal Packings - Tuff-Stack*											•
243616	Seal Packings - Tuff-Stack*											•
223603	Displacement Rod - SST											S
178898	Housing Sleeve - SST											S

Part No	Description	Pump Part No	239326	224342	224346	224347	224348	217580	221075	223586	243664	206897	223843
			10:1	10:1	10:1	10:1	10:1	15:1	30:1	30:1	30:1	30:1	30:1
207385	Air Motor Repair Kit		S	S	S	S	S	S	S	S	S	S	S
208520	Seal Repair Kit - PTFE		S										
224401	Seal Repair Kit - UHMWPE/PTFE			S									
224402	Seal Repair Kit - UHMWPE/Neoprene				S	S							
224403	Seal Repair Kit - UHMWPE/PTFE						S						
224404	Seal Repair Kit - UHMWPE/PTFE				•	•							
235634	Seal Repair Kit - PTFE/Leather							S					
235635	Seal Repair Kit - PTFE/Leather								S	S	•		S
243687	Seal Repair Kit - Tuff-Stack*								•	•	S		•
224889	Seal Repair Kit - PTFE			•			•						
220396	Seal Repair Kit - UHMWPE/Leather						•						
223675	Seal Repair Kit - UHMWPE/Leather								•	•	•		•
237725	Seal Repair Kit - PTFE								•	•	•		•
243621	Seal Repair Kit - Tuff-Stack*											•	
169504	Displacement Rod - SST		S										
186997	Displacement Rod - SST			S	S	S	S						
178895	Displacement Rod - SST							S					
223589	Displacement Rod - 17-4PH SST								S	S	S		S
165609	Displacement Rod - 316 SST											S	
186986	Cylinder		S				S						
186994	Cylinder			S	S	S							
178902	Housing Sleeve - 304 SST								S	S	S	S	S
178896	Housing Sleeve - SST							S					

*Tuff-Stack part numbers sold as 12-count convenience pack.

President

Pneumatic 2-Ball Piston Pumps

Additional Lower Displacement Pumps

Lower Displacement		Standard Seal Repair		Standard Displacement Rod		Sleeve Housing	
Pump	Mat'l	Kit	Const.	Rod	Const.	Housing	Const.
223595	CS	239328	4 Leather/ 1 PTFE	223603	SST	178898	SST

*This lower displacement pump is not offered in complete President 46:1 pump assembly. To configure a complete carbon steel President 46:1 pump with this lower:

1. Order lower displacement pump 223595.
2. Order President air motor 207352.
3. Order adapter 191995, cotter pin 101946 (qty 2), o-ring 154771, carbon steel tie rods 191996 (qty 3) and locknuts 101566 (qty 3).

2

Accessories

- 206220 Wall Bracket**
For mounting President pump to wall.
- 207365 Wall Bracket**
For mounting a President pump to a wall.
- 205640 Pump Floor Stand**
For mounting a President pump in a suction feed system. Adapter 206108 is required.
- 205700 Pump Floor Stand**
For mounting a President pump in a suction feed system.
- 220581 Pump Floor Stand**
For mounting a President pump in a suction-feed system.
- 194248 Accessory Packing Tool**
Eases insertion of piston assembly into cylinder.
- 168085 Accessory Assembly Tool**
Use to install piston assembly into cylinder (model 239326).
- 171818 Adjustment Tool**
A 0.145 in (3.7 mm) gauge used to ensure proper clearance between the poppets and the piston on the President air motor.
- 207579 Padded Pliers**
For servicing President air motor trip rod.
- 208920 Siphon Kit, Aluminum**
Use to siphon fluid from a 5 gal (18.9 l) pail. Includes nylon suction hose 170706, 1 in ID, 4 ft (1.2 m) long, 3/4 in npt(f) swivel outlet fitting. Requires 1-1/2 in to 3/4 in npt reducer and 3/4 in npt nipple.
- 207484 Siphon Kit, Aluminum**
Use to siphon fluid from a 5 gal (18.9 l) pail. Includes nylon suction hose 214960, 3/4 in ID, 3.5 ft (1.1 m) long, 3/4 in npt(f) swivel outlet fitting. Requires 1-1/2 in to 3/4 in npt reducer and 3/4 in npt nipple.
- 208259 Siphon Kit, Carbon Steel**
Use to siphon fluid from a 55 gal (200 l) drum. Includes nylon suction hose 214961, 3/4 in ID, 6 ft (1.8 m) long, 3/4 in npt(f) swivel outlet fitting, bung adapter. Requires 1-1/2 in to 3/4 in npt reducer and 3/4 in npt nipple.
- 243801 President Remote Exhaust Muffler Kit**
Kit allows remote exhaust piping to be installed to President air motor exhaust port. Redirects noise and exhaust contaminants to a remote location. Kit includes air motor covers with 3/4 in npt(f) exhaust port and cork gasket.
- 243421 President Muffler Kit**
Kit includes external muffler and plates and gaskets used in muffler kit 243801. External muffler provides noise reduction to President air motor.

DuraFlo® & Xtreme®

With NXT Technology

Use the Smart Numbering System!*

The six-digit Smart Numbering System can help you order quickly and accurately. Simply follow the diagram for the part you want and build your order.

2



P x x x x x x

Dura-Flo™ and Xtreme® Pumps with NXT

Product Identifier:

P = Dura-Flo and Xtreme Pumps

Pump Ratio:

06 = 6:1/3400 cc motor/1000cc lower	25 = 25:1/3400 cc motor/290cc lower
10 = 10:1/6500 cc motor/1000cc lower	30 = 30:1/3400 cc motor/220cc lower
12 = 12:1/3400 cc motor/580cc lower	31 = 31:1/2200 cc motor/145cc lower
15 = 15:1/3400 cc motor/430cc lower	32 = 32:1/6500 cc motor/430cc lower
16 = 16:1/2200 cc motor/290cc lower	40 = 40:1/3400 cc motor/180cc lower
21 = 21:1/2200 cc motor/220cc lower	45 = 45:1/6500 cc motor/290cc lower
23 = 23:1/6500 cc motor/580cc lower	46 = 46:1/3400 cc motor/145cc lower
24 = 24:1/2200 cc motor/180cc lower	

Motor Type:

D: De-Icing NXT	L: Low Noise NXT
E: De-Icing NXT with DataTrak	M: Low Noise NXT with DataTrak

Lower Material:

C: Carbon Steel	S: Stainless Steel
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Packing:

Dura-Flo:		Xtreme NXT:
A: 3 UHMWPE / 2 PTFE	E: 4 Leather / 1 PTFE	1: 3 Xtreme / 2 Leather
B: 3 UHMWPE / 2 Tuffstack	G: PTFE / PTFE	
D: 3 PTFE / 2 Leather	H: PTFE / Leather	
	K: UHMWPE / Leather	

Accessories

- 247472 Kit, Suction, CS, 5 gal (19 l), 1 1/4", Xtreme
- 247473 Kit, Suction, CS, 55 gal (208 l), 1 1/4", Xtreme
- 247474 Kit, Filter, CS, Xtreme
- 247475 Kit, Suction, SST, 5 gal (19 l), 1 1/2", Dura-Flo
- 247476 Kit, Suction, SST, 55 gal (208 l), 1 1/2", Dura-Flo
- 247477 Kit, Suction, SST, 5 gal (19 l), 2", Dura-Flo
- 247478 Kit, Suction, SST, 55 gal (208 l), 2", Dura-Flo
- 247479 Kit, Suction, SST, 3/4", Dura-Flo
- 247480 Kit, Suction, SST, 1", Dura-Flo

DuraFlo & Xtreme

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Technical Specifications and Ordering Information



		6:1	10:1	12:1	15:1	16:1	21:1	23:1	24:1	25:1
PUMP SPECIFICATIONS	Output per cycle	1000 cc	1000 cc	580 cc	430 cc	290 cc	220 cc	580 cc	180 cc	290 cc
	Motor Size	NXT 3400	NXT 6500	NXT 3400	NXT 3400	NXT 2200	NXT 2200	NXT 6500	NXT 2200	NXT 3400
	Maximum Working Pressure psi (bar, MPa)	620 (43, 4.3)	1190 (82, 8.2)	1190 (82, 8.2)	1580 (109, 10.9)	1520 (105, 10.5)	2030 (140, 14.0)	2270 (156, 15.6)	2430 (167, 16.7)	2380 (164, 16.4)
	Maximum Air Input Pressure psi (bar,MPa)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)
	Output at 60 CPM gpm (lpm)	17.4 (65.8)	17.4 (65.8)	9.2 (34.8)	6.9 (26.1)	4.6 (17.5)	3.4 (12.9)	9.2 (34.8)	2.9 (11.0)	4.6 (17.5)
	INLET/ OUTLET	CS Pump Inlet Size	2" npt (f)	2" npt (f)	2" npt (f)	2" npt (f)	1 1/4" npt(m)	1 1/4" npt(m)	2" npt (f)	1 1/4" npt(m)
CS Pump Outlet Size		1 1/2" npt (f)	1 1/2" npt (f)	1 1/2" npt (f)	1 1/2" npt (f)	1" npt (f)	1" npt (f)	1 1/2" npt (f)	3/4" npt (f)	1" npt (f)
SST Pump Inlet Size		2" npt (f)	n/a	2" npt (f)	2" npt (f)	2" npt (f)	2" npt (f)	2" npt (f)	1 1/2" npt (f)	2" npt (f)
SST Pump Outlet Size		1" npt (f)	n/a	1 1/2" npt (m)	1 1/2" npt (m)	1" npt (f)	1" npt (f)	1 1/2" npt (m)	3/4" npt (f)	1" npt (f)
MANUALS	CS Pump Manual	311833	311833	311826	311826	311164	311164	311826	311164	311164
	SST Pump Manual	311833	n/a	311826	311826	311828	311828	311826	311828	311828
	CS Lower Manual	311717	311717	311825	311825	311762	311762	311825	311762	311762
	SST Lower Manual	311716	n/a	311825	311825	311827	311827	311825	311827	311827
	Motor Manual	311238	311238	311238	311238	311238	311238	311238	311238	311238

	MOTOR TYPE	DATATRAK INCLUDED	PACKINGS	6:1	10:1	12:1	15:1	16:1	21:1	23:1	24:1	25:1
CARBON STEEL	D		1					P16DC1	P21DC1		P24DC1	P25DC1
	D	D				P12DCD	P15DCD			P23DCD		
	D	K		P06DCK	P10DCK							
	E	Yes	1					P16EC1	P21EC1		P24EC1	P25EC1
	E	Yes	D			P12ECD	P15ECD			P23ECD		
	E	Yes	K		P06ECK	P10ECK						
	L		1					P16LC1	P21LC1		P24LC1	P25LC1
	L		D			P12LCD	P15LCD			P23LCD		
	L		K		P06LCK	P10LCK						
	M	Yes	1					P16MC1	P21MC1		P24MC1	P25MC1
	M	Yes	D			P12MCD	P15MCD			P23MCD		
	M	Yes	K		P06MCK	P10MCK						
PUMP CONSTRUCTION	STAINLESS STEEL	D	A			P12DSA				P23DSA		
		D	B				P15DSB					
		D	E					P16DSE	P21DSE		P24DSE	P25DSE
		D	G		P06DSG							
		E	Yes	A			P12ESA			P23ESA		
		E	Yes	B				P15ESB				
		E	Yes	E				P16ESE	P21ESE		P24ESE	P25ESE
		E	Yes	G		P06ESG						
		E	Yes	H								
	L	A			P12LSA				P23LSA			
	L	B				P15LSB						
	L	E					P16LSE	P21LSE		P24LSE	P25LSE	
	L	G		P06LSG								
	L	H										
	M	Yes	A			P12MSA			P23MSA			
	M	Yes	B				P15MSB					
	M	Yes	E				P16MSE	P21MSE		P24MSE	P25MSE	
	M	Yes	G		P06MSG							
M	Yes	H										

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2

Technical Specifications and Ordering Information

		30:1	31:1	32:1	40:1	45:1	46:1
PUMP SPECIFICATIONS	Output per cycle	220 cc	145 cc	530 cc	180 cc	290 cc	145 cc
	Motor Size	NXT 3400	NXT 2200	NXT 6500	NXT 3400	NXT 6500	NXT 3400
	Maximum Working Pressure psi (bar, MPa)	3170 (218, 21.8)	3040 (209, 20.9)	3030 (209, 20.9)	3800 (262, 26.2)	4550 (313, 13.3)	4750 (327, 32.7)
	Maximum Air Input Pressure psi (bar, MPa)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)
	Output at 60 CPM gpm (lpm)	3.4 (12.9)	2.3 (8.8)	6.9 (26.1)	2.9 (11.0)	4.6 (17.5)	2.3 (8.8)
INLET/ OUTLET SIZE	CS Pump Inlet Size	1 1/4" npt(m)	1 1/4" npt(m)	2" npt (f)	n/a	n/a	n/a
	CS Pump Outlet Size	1" npt (f)	3/4" npt (f)	1 1/2" npt (f)	n/a	n/a	n/a
	SST Pump Inlet Size	2" npt (f)	1 1/2" npt (f)	2" npt (f)	1 1/2" npt (f)	2" npt (f)	1 1/2" npt (f)
	SST Pump Outlet Size	1" npt (f)	3/4" npt (f)	1 1/2" npt (m)	3/4" npt (f)	1" npt (f)	3/4" npt (f)
MANUALS	CS Pump Manual	311164	311164	311826	n/a	n/a	n/a
	SST Pump Manual	311828	311828	311826	311828	311828	311828
	CS Lower Manual	311762	311762	311825	n/a	n/a	n/a
	SST Lower Manual	311827	311827	311825	311827	311827	311827
	Motor Manual	311238	311238	311238	311238	311238	311238

	MOTOR TYPE	DATATRAK INCLUDED	PACKINGS	30:1	31:1	32:1	40:1	45:1	46:1
CARBON STEEL	D		1	P30DC1	P31DC1				
	D		D			P32DCD			
	D		K						
	E	Yes	1	P30EC1	P31EC1				
	E	Yes	D			P32ECD			
	E	Yes	K						
	L		1	P30LC1	P31LC1				
	L		D			P32LCD			
	L		K						
	M	Yes	1	P30MC1	P31MC1				
	M	Yes	D			P32MCD			
	M	Yes	K						
PUMP CONSTRUCTION	STAINLESS STEEL	D		A					
		D		B			P32DSB		
		D		E	P30DSE			P40DSE	P45DSE
		D		G					
		D		H		P31DSH			P46DSH
		E	Yes	A					
		E	Yes	B			P32ESB		
		E	Yes	E	P30ESE			P40ESE	P45ESE
	E	Yes	G						
	E	Yes	H		P31ESH			P46ESH	
	L		A						
	L		B			P32LSB			
	L		E	P30LSE			P40LSE	P45LSE	
	L		G						
	L		H		P31LSH			P46LSH	
	M	Yes	A						
M	Yes	B			P32MSBI				
M	Yes	E	P30MSE			P40MSE	P45MSE		
M	Yes	G							
M	Yes	H		P31MSH			P46MSH		

Technical Specifications and Ordering Information

		Viscount I		Viscount II		
		1000	3000	1000	2000	2600
PUMP SPECIFICATIONS	Output per cycle	188 cc	62 cc	945 cc	580 cc	430 cc
	Maximum working pressure psi (bar, MPa)	1000 (69, 6.9)	3000 (207, 20.7)	1000 (69, 6.9)	2000 (138, 13.8)	2600 (179, 17.9.2)
	Maximum hydraulic input pressure psi (bar, MPa)	1000 (69, 6.9)	1000 (69, 6.9)	1500 (103, 10.3)	1500 (103, 10.3)	1500 (103, 10.3)
	Oil flow @ 60 CPM gpm (lpm)	3 (11.3)	3 (11.3)	12 (45)	12 (45)	12 (45)
	Output at 60 CPM gpm (lpm)	3 (11.3)	1 (3.8)	15 (56.7)	9.2 (34.7)	6.8 (25.9)
INLET/ OUTLET	Hydraulic fluid inlet	3/4 unf (37° flare)	3/4 unf (37° flare)	3/4 npt (f)	3/4 npt(f)	3/4 npt(f)
	Hydraulic fluid outlet	7/8 unf (37° flare)	7/8 unf (37° flare)	1 npt(f)	1 npt(f)	1 npt(f)
	CS pump inlet size	3/4 npt(f)	3/4 npt(f)	2 npt(f)	2 npt(f)	2 npt(f)
	CS pump outlet size	3/8 npt(f)	3/8 npt(f)	1-1/2 npt(f)	1-1/2 npt(m)	1-1/2 npt(m)
	SST pump inlet size	3/4 npt(f)	3/4 npt(f)	2 npt(f)	2 npt(f)	2 npt(f)
	SST pump outlet size	1/2 npt(f)	1/2 npt(f)	2 npt(f)	1-1/2 npt(m)	1-1/2 npt(m)
MANUALS	CS/SST pump manual	307622	307623	307160	311826	311826
	CS/SST lower manual	308117	306981	308043	311825	311825
	Motor manual	307654	307654	307158	307158	307158

			Viscount I		Viscount II		
			1000	3000	1000	2000	2600
PUMP CONSTRUCTION	CARBON STEEL	Nitride	NPT				
		Chrome	NPT	221080	210313	222834	222892
	STAINLESS STEEL	Electropolished	NPT				
		Electropolished	BSPP				
		Chrome	NPT	218077		222900	222897
		Chrome	BSPP				
		Chrome	Tri-Clamp (Sanitary)				
		Maxlife	NPT				
		Maxlife	BSPP				
		Maxlife	Tri-Clamp (Sanitary)				

*BSPP models require inlet and outlet seals to perform optimally. See manual 311211, page 9, for accessories.

Viscount

Hydraulic 2-Ball Piston Pumps

Replacement Parts Index S = Standard • = Optional

Part No	Description	Pump Part No	218077	221080	210313	222834	222900	222892	222897
NPT	Fittings Material		S	S	S	S	S	S	S
218210	Hydraulic motor repair kit		S	S					
223654	Hydraulic motor repair kit				S	S	S	S	S
224402	Seal Repair Kit - UHMWPE/Neoprene		S						
235635	Seal Repair Kit - PTFE/Leather			S					
224404	Seal Repair Kit - UHMWPE/PTFE		•						
223675	Seal Repair Kit - UHMWPE/Leather			•					
237725	Seal Repair Kit - PTFE			•					
223439	Seal Repair Kit - 4 UHMWPE/2 Leather				S				
222879	Seal Repair Kit - 3 PTFE/2 Leather					S	•		
222875	Seal Repair Kit - 3 UHMWPE/2 PTFE					•	S		
222849	Seal Repair Kit - 3 PTFE/2 Leather							S	•
222845	Seal Repair Kit - 3 UHMWPE/2 PTFE							•	S
224443	Seal Repair Kit - 4 UHMWPE/2 Leather				•				
222876	Seal Repair Kit - 5 PTFE					•	•		
222847	Seal Repair Kit - 4 Leather/1 PTFE							•	•
222877	Seal Repair Kit - 4 Leather/1 PTFE					•	•		
222846	Seal Repair Kit - 5 PTFE							•	•
222878	Seal Repair Kit - 3 UHMWPE/2 Leather					•	•		
222848	Seal Repair Kit - 3 UHMWPE/2 Leather							•	•
222880	Seal Repair Kit - 3 UHMWPE/2 Tuff-Stack					•	•		
243624	Throat Seal Packings - Tuff-Stack		•						
243621	Throat/Piston Seal Packings - Tuff-Stack			•					
243623	Piston Seal Packings - Tuff-Stack		•						
243625	Piston Seal Packings - Tuff-Stack		•						
276788	Piston Seal Repair Kit with Wave Spring and Wiper - 3 UHMWPE/2 PTFE					•			
186997	Displacement Rod - SST		S						
223589	Displacement Rod - SST			S					
217478	Displacement Rod - CS				S				
184002	Displacement Rod - SST					S	S		
184276	Displacement Rod - SST							S	S
687119	Displacement Rod - Ceramic					•	•		
687118	Displacement Rod - Ceramic							•	•
186994	Cylinder - SST - No Housing Sleeve		S						
181269	Cylinder - SST				S				
184003	Cylinder - SST					S	S		
184461	Cylinder - SST							S	S
178902	Housing Sleeve - SST - No Cylinder			S					

Note: Tuff-Stack is a proprietary PTFE blend.

Viscount

Hydraulic 2-Ball Piston Pumps

Additional Lower Displacement Pumps

	Lower Displacement		Standard Seal and Ball		Standard Displacement Rod		Standard Cylinder	
	Pump	Mat'l	Kit	Const.	Rod	Const.	Cylinder	Const.
Viscount II 2000	222991	CS	222877	4 Leather/1 PTFE	184002	SST	184003	SST
	222992	CS	222876	5 PTFE	184002	SST	184003	SST
	241648	SST	222880	3 UHMWPE/2 Tuff-Stack	184002	SST	184003	SST
	236226	SST	222875	3 UHMWPE/2 PTFE	184002	SST	184003	SST
	222994	SST	222876	PTFE	184002	SST	184003	SST
	236230	SST	222877	4 Leather/1 PTFE	184002	SST	184003	SST
	222993	SST	222879	3 PTFE/2 Leather	184002	SST	184003	SST
Viscount II 2600	222988	CS	222846	5 PTFE	184276	SST	184461	SST
	241956	SST	222845	3 UHMWPE/2 PTFE	687118	Ceramic	184461	SST
	687055	SST	N/A	3 UHMWPE/2 Tuff-Stack	184276	SST	184461	SST
	C59703	SST w/ carbide balls	222845	3 UHMWPE/2 PTFE	184276	SST	184461	SST

Note: Tuff-Stack is a proprietary PTFE blend.

Accessories

- 206221 Wall Bracket**
For mounting a Viscount II pump to a wall.
- 207365 Wall Bracket**
For mounting a Viscount pump to a wall.
- 109508 Service Tool**
Fits over the top of the displacement rod, making it easier to apply a 24-inch adjustable wrench or 3/4 in drive socket when connecting or disconnecting the rod from the piston assembly.
- 169236 Hydraulic Oil**
5 gal (18.9 l) size container.
- 102644 Shut-off Valve**
For hydraulic supply or return line; 3/4 npt(f).
- 102646 Shut-off Valve**
For hydraulic supply or return line; 1 npt(f).
- 515258 Hydraulic Pressure Control Valve**
3/4 npt inlet, 3/4 npt outlet, 1/4 npt drain, 1/4 npt gauge.
- 208920 Siphon Kit, Aluminum**
Use to siphon fluid from a 5 gal (18.9 l) pail. Includes nylon suction hose 170706, 1 in ID, 4 ft (1.2 m) long, 3/4 npt(f) swivel outlet fitting. Requires 2 in(m) x 1 in(f) bushing (102283) and 1 in(m) x 3/4 in(m) reducing nipple (158555).
- 207484 Siphon Kit, Aluminum**
Use to siphon fluid from a 5 gal (18.9 l) pail. Includes nylon suction hose 214960, 3/4 in ID, 3.5 ft (1.1 m) long, 3/4 npt(f) swivel outlet fitting. Requires 2 in(m) x 1 in(f) bushing (102283) and 1 in(m) x 3/4 in(m) reducing nipple (158555).
- 208259 Siphon Kit, Carbon Steel**
Use to siphon fluid from a 55 gal (200 l) drum. Includes nylon suction hose 214961, 3/4 in ID, 6 ft (1.8 m) long, 3/4 npt(f) swivel outlet fitting and bung adapter. Requires 2 in(m) x 1 in(f) bushing (102283) and 1 in(m) x 3/4 in(m) reducing nipple (158555).
- 220581 Pump Floor Stand**
For mounting a Viscount pump to the floor.
- 222780 Floor Stand**
Use to mount Viscount II 2000 and 2600 pumps to floor. Includes 222274 floor stand, ball valve and 109495 Viton gasket.
- 109507 Socket Service Tool, Viscount II 2600**
Use to connect or disconnect displacement rod from piston assembly. Tool fits over the top of the displacement rod, making it easier to apply a 24 inch adjustable wrench or 3/4 inch drive socket for servicing displacement rod.
- 109508 Socket Service Tool, Viscount II 2000**
Use to connect or disconnect displacement rod from piston assembly. Tool fits over the top of the displacement rod, making it easier to apply a 24 inch adjustable wrench or 3/4 inch drive socket for servicing displacement rod.
- 189305 Assembly Tool**
Required for servicing the yoke and trip rod in the Viscount motor.
- 222976 Connection Kit, Viscount II 2000 and 2600**
Kit to install lower displacement pump under existing Viscount II motor. Includes carbon steel tie rods and other connecting hardware.
- 184278 Packing Nut Wrench, Viscount II 2000 and 2600**
For adjusting throat packing compression in pump.
- 237782 Adapter, Ram**
Use to mount Viscount II 2000 and 2600 pumps to a ram. Includes 2 npt(m) x flange and lug kit.
- 184545 Suction Tube Extension**
Screws into fluid intake to make a drum length pump for Viscount II 2000 and 2600 pumps.

President 1.5:1, 2:1 and 3:1

Pneumatic Mid-Range, High-Flo 4-Ball Piston Pumps

Technical Specifications and Ordering Information

2



Model		1.5:1	2:1	3:1
PUMP SPECIFICATIONS	Output per cycle (cc)	1100	830	610
	Maximum working pressure psi (bar, MPa)	270 (19, 1.9)	360 (25, 2.5)	500 (34, 3.4)
	Maximum air input pressure psi (bar, MPa)	180 (12, 1.2)	180 (12, 1.2)	180 (12, 1.2)
	Output at 60 CPM gpm (lpm)	18.2 (68.9)	13 (49.2)	9.7 (36.9)
INLET/ OUTLET SIZE	Pump inlet size	1-1/2 npt(f)	1-1/2 npt(f)	1-1/2 npt(f) 1-1/2 BSPP(f)
	Pump outlet size	1 npt(f)	1 npt(f)	1 npt(f) 1-1/4 BSPP(f)
Pump manual assembly		308793	308793	308793

		TYPE	FITTINGS	THROAT SEALS	1.5:1	2:1	3:1
PUMP CONSTRUCTION	CARBON STEEL	Standard	NPT	UHMWPE/Leather		220560	220561
		Standard	NPT	PTFE			237223
		Stubby	NPT	UHMWPE/Leather			239855
	STAINLESS STEEL	Standard	NPT	UHMWPE/Leather	220562	220563	220564
		Standard	NPT	PTFE			237222
		Standard	BSPP	UHMWPE/Leather			240618
		Standard	BSPP/ Tri-Clamp	UHMWPE/Leather			240618
		Stubby	NPT	UHMWPE/Leather			239854
	CERAMIC	Standard	NPT	UHMWPE/Leather			15D788

Replacement Parts Index S = Standard • = Optional

Part No	Description	220562	220560	220563	220561	237223	239855	220564	15D788	237222	239854	240618	240619
207385	Air motor repair kit	S	S	S	S						S	S	S
220587	Piston Seal Kit - 4UHMWPE	S											
220588	Piston Seal Kit - 4UHMWPE		S	S									
220589	Piston Seal Kit - 4UHMWPE				S	•	S	S	S	•		S	S
224934	Piston Seal Kit - PTFE				•	S	•	•	•	S	•	•	•
224935	Piston Seal Kit - PTFE		•	•									
224936	Piston Seal Kit - PTFE	•											
239872	Throat Seal Kit - UHMWPE/Leather	S	S	S	S		S	S	S		S	S	S
239866	Throat Seal Kit - PTFE	•	•	•	•	S				S	•	•	•
239868	Throat Seal Kit - Leather	•	•	•	•	•	•	•	•	•	•	•	•
181898	Displacement Rod - SST	S	S	S	S	S	S	S	•	S	S	S	S
685970	Displacement Rod - Ceramic	•	•	•	•	•	•	•	S	•	•	•	•
183048	Cylinder - CS	S											
183032	Cylinder - CS		S										
183047	Cylinder - SST												
183049	Cylinder - SST							S	•	S	S	S	S
181899	Cylinder - CS				S	S	S						
686614	Cylinder - Ceramic	•											
685971	Cylinder - Ceramic				•	•	•	•	S	•	•	•	•

President 1.5:1, 2:1 and 5:1

Pneumatic Mid-Range, High-Flo 4-Ball Piston Pumps

Accessories

- 220581 Pump Floor Stand**
For mounting High-Flo pumps in a suction-feed system.
- 206221 Pump Wall Bracket**
For mounting a President, Senator or Bulldog High-Flo pump to a wall.
- 218028 Portable Cart**
For mounting a President, Senator or Bulldog High-Flo pump to a 2-wheel cart.
- 236054 Siphon Tube, Carbon Steel**
Use to siphon fluid from a 55 gal (200 l) drum. Includes nylon suction hose 109105, 3/4 in ID, 6 ft (1.8 m) long, 1-1/2 in npt(m) outlet fitting.
- 239805 Intake Valve Seat with relief valve, carbide seat**
- 239865 Intake Valve Seat without relief valve, carbide seat**
- 239869 Throat Cartridge Conversion Kit**
Converts Series A Mid-Range High-Flo pump designs to a throat cartridge design. Includes stainless steel pump housing, throat cartridge and ptfe o-ring.
- 207579 Padded Pliers**
For servicing President air trip rod.
- 110335 Packing Nut Wrench**
For adjusting throat packings compression in pump.
- 171818 Adjustment Tool**
A 0.145 in (3.7 mm) gauge used to ensure proper clearance between the poppets and the piston on the President air motor.
- 239867 Intake Seat Conversion Kit**
Converts Series A Mid-Range High-Flo pump designs to intake seat design with relief valve. Includes intake seat with relief valve, stainless intake housing, intake seat without relief valve, gaskets, washers and cap screws.
- 221159 Pump Mounting Adapter Kit, President**
Provides adapter plate and tie rods for mounting President motor to a Mid-Range High-Flo displacement pump.
- 243801 President Remote Exhaust Muffler Kit**
Kit allows for remote exhaust piping to be installed to President air motor exhaust port. Redirects noise and exhaust contaminants to a remote location. Kit includes air motor covers with 3/4 npt(f) exhaust port and cork gaskets.
- 243421 President Muffler Kit**
Kit includes external muffler and plates and gaskets used in muffler kit 243801. External muffler provides noise reduction to President air motor.

High-Flo® & High-Flo Plus

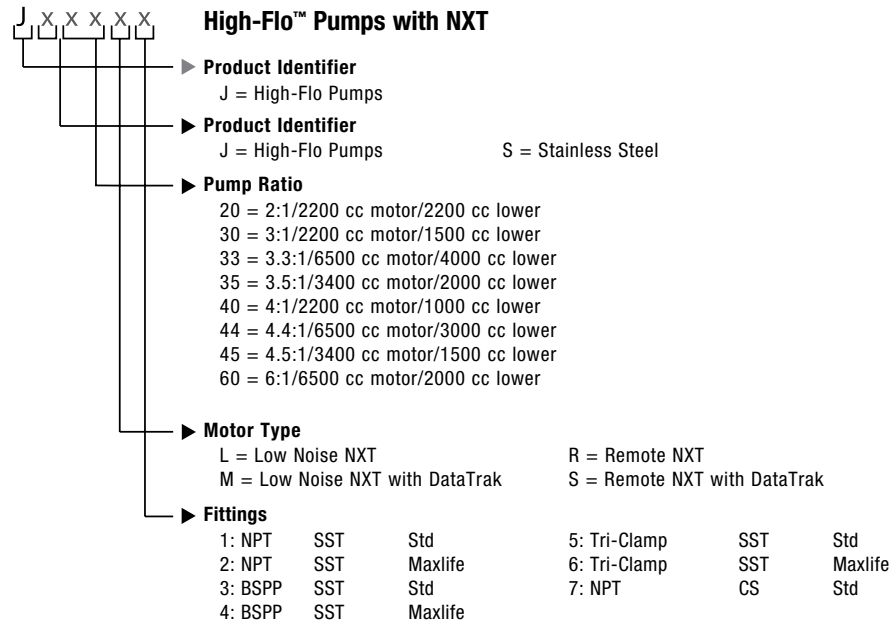
4-Ball Piston Pumps

2



Use the Smart Numbering System!*

The six-digit Smart Numbering System can help you order quickly and accurately. Simply follow the diagram for the part you want and build your order.



* Some configurations may not be available.

Accessories

Mounting Accessories

- 110335 Packing wrench
- 218742 Floor stand (High-Flo Plus)
- 247312 Wall mount and floor stand adapter for 2200 motor
- 253679 Wall mount bracket
- 253692 Floor stand
- 255143 Wall mount bracket kit
- 289279 Cart adapter kit
- 287884* Heavy duty cart
- 287919* Light duty cart

Pump Accessories

- 193424 Seal to adapter 196321
- 196321 BSPP to NPT adapter
- 261721* Wet cup booster cup (for mid-range High-Flo pumps)
- NXT011 Integrated air control
- NXT031 Integrated air control (for JX60XX pumps)
- NXT206 DataTrak upgrade kit for the NXT 2200
- NXT306 DataTrak upgrade kit for the NXT 3400
- NXT606 DataTrak upgrade kit for the NXT 6500

Suction Kits

- 247472 For 1.25 in(m) 5 gallon CS suction kit
- 247473 For 1.25 in(m) 55 gallon CS suction kit
- 247475 For 1.5 in(f) 5 gallon SST suction kit
- 247476 For 1.5 in(f) 55 gallon SST suction kit
- 247477 For 2 in(f) 5 gallon SST suction kit
- 247478 For 2 in(f) 55 gallon SST suction kit

Fluid Filter Kits

- 247474 Aluminum fluid filter kit
- 247479 For .75 in(f) SST fluid filter kit
- 247480 For 1 in(f) SST fluid filter kit

High-Flo & High-Flo Plus

4-Ball Piston Pumps

Technical Specifications and Ordering Information

2

		2:1	3:1	3.3:1	3.5:1	4:1	4.4:1	4.5:1	6:1
PUMP SPECIFICATIONS	Output per cycle	2000 cc	1500 cc	4000 cc	2000 cc	1000 cc	3000 cc	1500 cc	2000 cc
	Motor Size	NXT 2200	NXT 2200	NXT 6500	NXT 3400	NXT 2200	NXT 6500	NXT 3400	NXT 6500
	Maximum Working Pressure psi (bar, MPa)	200 (14, 1.4)	290 (20, 2.0)	325 (22, 2.2)	340 (23, 2.3)	400 (28, 2.8)	460 (32, 3.2)	450 (31, 3.1)	500 (34, 3.4)
	Maximum Air Input Pressure psi (bar,MPa)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	78 (5.4, 0.54)
	Output at 60 CPM gpm (lpm)	31.9 (119.3)	23.2 (87.9)	63 (238.6)	31.5 (119.3)	16.9 (64)	47.3 (179)	23.2 (87.9)	31.5 (119.3)
	INLET/OUTLET SIZE	CS Pump Inlet Size	1.5" npt (f)	1.5" npt (f)	2" npt (f)	1.5" npt (f)	1.5" npt (f)	2" npt (f)	1.5" npt (f)
CS Pump Outlet Size		1" npt (f)	1" npt (f)	2" npt (f)	1" npt (f)	1" npt (f)	2" npt (f)	1" npt (f)	2" npt (f)
SST Pump Inlet Size		1.5" npt (f)	1.5" npt (f)	2" npt (f)	1.5" npt (f)	1.5" npt (f)	2" npt (f)	1.5" npt (f)	2" npt (f)
SST Pump Outlet Size		1" npt (f)	1" npt (f)	2" npt (f)	1" npt (f)	1" npt (f)	2" npt (f)	1" npt (f)	2" npt (f)
SST Pump Inlet Size		1.5" BSPP (f)	1.5" BSPP (f)	2" BSPP (f)	1.5" BSPP (f)	1.5" BSPP (f)	2" BSPP (f)	1.5" BSPP (f)	2" BSPP (f)
SST Pump Outlet Size		1.25" BSPP (f)	1.25" BSPP (f)	2" BSPP (f)	1.25" BSPP (f)	1.25" BSPP (f)	2" BSPP (f)	1.25" BSPP (f)	2" BSPP (f)
SST Pump Inlet Size		2" Tri-Clamp	2" Tri-Clamp	N/A	2" Tri-Clamp	2" Tri-Clamp	N/A	2" Tri-Clamp	N/A
SST Pump Outlet Size		2" Tri-Clamp	2" Tri-Clamp	N/A	2" Tri-Clamp	2" Tri-Clamp	N/A	2" Tri-Clamp	N/A
MANUALS	Pump Manual	311211	311211	311831	311211	311211	311831	311211	311831
	Lower Manual	311690	311690	311832	311690	311690	311832	311690	311832
	Motor Manual	311238	311238	311238	311238	311238	311238	311238	311238

		MOTOR TYPE	DATATRAK INCLUDED	FITTINGS/LOWER MATERIALS	2:1	3:1	3.3:1	3.5:1	4:1	4.4:1	4.5:1	6:1	
PUMP CONSTRUCTION	CARBON STEEL	L	1		JC20L1		JC33L1	JC35L1		JC44L1		JC60L1	
		L	7			JC30L7			JC40L7		JC45L7		
		M	Yes	1		JC20M1		JC33M1	JC35M1		JC44M1		JC60M1
		M	Yes	7			JC30M7			JC40M7		JC45M7	
		L	1			JS20L1	JS30L1	JS33L1	JS35L1	JS40L1	JS44L1	JS45L1	JS60L1
		L	2			JS20L2	JS30L2		JS35L2	JS40L2		JS45L2	
	L	3			JS20L3	JS30L3	JS33L3	JS35L3	JS40L3	JS44L3	JS45L3	JS60L3	
	L	4			JS20L4	JS30L4		JS35L4	JS40L4		JS45L4		
	L	5			JS20L5	JS30L5		JS35L5	JS40L5		JS45L5		
	L	6			JS20L6	JS30L6		JS35L6	JS40L6		JS45L6		
	M	Yes	1		JS20M1	JS30M1	JS33M1	JS35M1	JS40M1	JS44M1	JS45M1	JS60M1	
	M	Yes	2		JS20M2	JS30M2		JS35M2	JS40M2		JS45M2		
	M	Yes	3		JS20M3	JS30M3	JS33M3	JS35M3	JS40M3	JS44M3	JS45M3	JS60M3	
	M	Yes	4		JS20M4	JS30M4		JS35M4	JS40M4		JS45M4		
	M	Yes	5		JS20M5	JS30M5		JS35M5	JS40M5		JS45M5		
	M	Yes	6		JS20M6	JS30M6		JS35M6	JS40M6		JS45M6		
	R	1			JS20R1	JS30R1	JS33R1	JS35R1	JS40R1	JS44R1	JS45R1	JS60R1	
	R	2			JS20R2	JS30R2		JS35R2	JS40R2		JS45R2		
	R	3			JS20R3	JS30R3	JS33R3	JS35R3	JS40R3	JS44R3	JS45R3	JS60R3	
	R	4			JS20R4	JS30R4		JS35R4	JS40R4		JS45R4		
R	5			JS20R5	JS30R5		JS35R5	JS40R5		JS45R5			
R	6			JS20R6	JS30R6		JS35R6	JS40R6		JS45R6			
S	Yes	1		JS20S1	JS30S1	JS33S1	JS35S1	JS40S1	JS44S1	JS45S1	JS60S1		
S	Yes	2		JS20S2	JS30S2		JS35S2	JS40S2		JS45S2			
S	Yes	3		JS20S3	JS30S3	JS33S3	JS35S3	JS40S3	JS44S3	JS45S3	JS60S3		
S	Yes	4		JS20S4	JS30S4		JS35S4	JS40S4		JS45S4			
S	Yes	5		JS20S5	JS30S5		JS35S5	JS40S5		JS45S5			
S	Yes	6		JS20S6	JS30S6		JS35S6	JS40S6		JS45S6			

High-Flo & High-Flo Plus

4-Ball Piston Pumps

Replacement Parts Index

S = Standard • = Optional

Part No	Description	2:1	3:1	3.3:1	3.5:1	4:1	4.4:1	4.5:1	6:1
235854	Piston Seal Kit - PTFE			•					
235855	Piston Seal Kit - PTFE						•		
235856	Piston Seal Kit - PTFE								•
277359	Piston Seal Kit - PTFE	•			•				
277361	Piston Seal Kit - PTFE					•			
277363	Piston Seal Kit - PTFE		•					•	
243727	Piston Seal Kit - UHMWPE			S					
243728	Piston Seal Kit - UHMWPE						S		
243729	Piston Seal Kit - UHMWPE								S
277358	Piston Seal Kit - UHMWPE	S			S				
277360	Piston Seal Kit - UHMWPE					S			
277362	Piston Seal Kit - UHMWPE		S					S	
277356	Throat Seal Kit - Leather	•	•		•	•		•	
239866	Throat Seal Kit - PTFE	•	•		•	•		•	
243672	Throat Seal Kit - PTFE			•			•		•
243671	Throat Seal Kit - UHMWPE/Leather			S			S		S
277357	Throat Seal Kit - UHMWPE/Leather	S	S		S	S		S	
243673	Throat Seal Kit UHMWPE TripleLip™			•			•		•
685954	Piston Rod - Ceramic			•			•		•
15H280	Piston Rod - Chromex	S	S		S	S		S	
15H589	Piston Rod - Maxlife	S	S		S	S		S	
196228	Piston Rod - SS/PlasmaCoat™			S			S		S
185197	Piston Rod - SST/Chrome			•			•		•
686522	Cylinder - Ceramic			•					
183047	Cylinder - Chrome					S			
183048	Cylinder - Chrome		S					S	
156882	Cylinder - Chrome	S			S				
180497	Cylinder - Chrome (SST)		S						
180498	Cylinder - Chrome (SST)						S		
180499	Cylinder - Chrome (SST)								S
15H451	Cylinder - Maxlife	S			S				
15H452	Cylinder - Maxlife					S			
15H453	Cylinder - Maxlife		S					S	
183032	Cylinder - Niride (CS)					S			
181900	Cylinder - Nitride (CS)		S					S	
243731	Pump Lower CS NPT								S
243732	Pump Lower CS NPT						S		
243734	Pump Lower SS BSPP								S
243735	Pump Lower SS BSPP						S		
243736	Pump Lower SS BSPP			S					
243771	Pump Lower SS NPT								S
243772	Pump Lower SS NPT						S		
243773	Pump Lower SS NPT			S					
255143	Wall Mount Bracket Kit	•	•		•	•		•	

Graco recommends 20 cpm or less for supply applications and 12 cpm or less for circulation applications.

Viscount I+ and Viscount II

4-Ball Hydraulic Pumps

Technical Specifications and Ordering Information



2

		Viscount I+			Viscount II			
		225	300	450	300	400	460	600
PUMP SPECIFICATIONS	Output per cycle	1500 cc	1000 cc	610 cc	4000 cc	3000 cc	2000 cc	2000 cc
	Maximum working pressure psi (bar, MPa)	225 (16, 1.6)	300 (21, 2.1)	450 (31, 3.1)	300 (21, 2.1)	400 (28, 2.8)	460 (32, 3.2)	600 (41, 4.1)
	Maximum hydraulic input pressure psi (bar, MPa)	1500 (103, 10.3)	1500 (103, 10.3)	1500 (103, 10.3)	1500 (103, 10.3)	1500 (103, 10.3)	1200 (83, 8.3)	1500 (103, 10.3)
	Oil flow @ 60 CPM gpm (lpm)	3.5 (13.2)	3.5 (13.2)	3 (11.3)	12 (45)	12 (45)	12 (45)	12 (45)
	Output at 60 CPM gpm (lpm)	23.2 (87.9)	16.9 (64)	9.6 (36.4)	63 (239)	47 (179)	31.7 (120)	31 (119)
INLET/OUTLET SIZE	Hydraulic fluid inlet	3/4 in (37° flare)	3/4 in (37° flare)	3/4 in (37° flare)	3/4 npt (f)	3/4 npt(f)	3/4 npt(f)	3/4 npt(f)
	Hydraulic fluid outlet	3/4 in (37° flare)	3/4 in (37° flare)	3/4 in (37° flare)	1 npt(f)	1 npt(f)	1 npt(f)	1 npt(f)
	CS pump inlet size	1-1/2 npt(f)	1-1/2 npt(f)	1-1/2 npt(f)	2 npt(f)	2 npt(f)	2 npt(f)	2 npt(f)
	CS pump outlet size	1 npt(f)	1 npt(f)	1 npt(f)	2 npt(f)	2 npt(f)	2 npt(f)	2 npt(f)
	SST pump inlet size	1-1/2 npt(f)	1-1/2 npt(f)	1-1/2 npt(f)	2 npt(f)	2 npt(f)	2 npt(f)	2 npt(f)
	SST pump outlet size	1 npt(f)	1 npt(f)	1 npt(f)	2 npt(f)	2 npt(f)	2 npt(f)	2 npt(f)
MANUALS	CS/SST pump manual	311211	311211	311211	311831	311831	311211	311831
	CS/SST lower manual	311690	311690	311690	311832	311832	311690	311832
	Motor manual	308330	308330	308330	308048	308048	308048	308048

			Viscount I+			Viscount II				
			225	300	450	300	400	460	600	
PUMP CONSTRUCTION	CARBON STEEL	Nitride	NPT	253647	253646					
		Chrome	NPT			236601	243742	243741	247356	243740
	STAINLESS STEEL	Electro-polished	NPT				243755	243753		243751
			BSPP				243756	243754		243752
		Chrome	NPT	253643	253642	236602 244142	248345	348343	247355*	
			BSPP	253649	253648		348346	348344	247357	
			Tri-Clamp (Sanitary)	253653	253652				247359	
		Maxlife	NPT	253645	253644				247361	
			BSPP	253651	253650				247358*	
			Tri-Clamp (Sanitary)	253655	253654				247360	

*BSPP models require inlet and outlet seals to perform optimally. See manual 311211, page 9, for accessories.

Viscount I+ and Viscount II

4-Ball Hydraulic Pumps

2

Accessories

Viscount I+

- 206221 Wall Bracket**
For mounting a Viscount I+ High-Flo pump to a wall.
- 220581 Pump Floor Stand**
For mounting High-Flo pumps in a suction feed system.
- 189305 Assembly Tool**
Required for servicing the yoke and trip rod in the motor.
- 110335 Packing Nut Wrench**
For adjusting throat packings compression in pump.
- 239805 Intake Valve Seat with Relief Valve, Carbide Seat**
- 239865 Intake Valve Seat Without Relief Valve, Carbide Seat**
- 515258 Hydraulic Pressure Control Valve**
3/4 npt inlet, 3/4 npt outlet, 1/4 npt drain, 1/4 npt gauge.
- Hydraulic Shutoff Valves**
- 512150 Maximum working pressure: 2000 psi**
(13.8 MPa, 138 bar). 1/2 npt (f/b).
- 102644 Maximum working pressure: 3000 psi**
(20.7 MPa, 207 bar). 3/4 npt (f/b).
- 102646 Maximum working pressure: 3000 psi**
(20.7 MPa, 207 bar). 1 npt (f/b).
- 169236 Hydraulic Oil**
5 gal (18.9 l) size.
- 236714 Mounting Plate Kit**
For mounting a Viscount I+ hydraulic motor and reciprocator to a Mid-Range High-Flo displacement pump.
- 236054 Siphon Tube, Carbon Steel**
Use to siphon fluid from a 55 gal (200 l) drum. Includes nylon suction hose 109105, 3/4 in ID, 6 ft (1.8 m) long, 1-1/2 in npt(m) outlet fitting.
- 239869 Throat Cartridge Conversion Kit**
Converts Series A Mid-Range High-Flo pump designs to a throat cartridge design. Includes stainless steel pump housing, throat cartridge and PTFE o-ring.
- 239867 Intake Seat Conversion Kit**
Converts series A Mid-Range High-Flo pump designs to intake seat design with relief valve. Includes intake seat with relief valve, stainless intake housing, intake seat without relief valve, gaskets, washers and cap screws.
- 221159 Pump Mounting Adapter Kit, Viscount I+**
Provides adapter plate and tie rods for mounting Viscount I+ motor/reciprocator to a Mid-Range High-Flo displacement pump.

Viscount II

- 218742 Pump Floor Stand**
For mounting High-Flo pump to the floor.
- 196321 Pump Adapter Fitting**
Use to convert a BSPP thread High-Flo Plus pump to a npt thread, 2 in BSPP(m) x 2 in npt(f).
- 193424 Pump Adapter Fitting Seal**
Seal used with pump adapter fitting (196321).
- 169236 Hydraulic Fluid**
5 gal (18.9 l) size.
- 237744 Intake Valve Seat, with Internal Pressure Relief Valve**
- 180529 Intake Valve Seat, without Relief Valve**
- 243948 Coupling Kit with Displacement Rod, PlasmaCoat**
Includes coupling collars, coupling nut and 196228 SST/PlasmaCoat displacement rod.
- 222649 Coupling Kit with Displacement Rod, Chrome**
Includes coupling collars, coupling nut and 185197 SST/Chrome displacement rod.
- 220385 Seat Puller Kit**
Tool to make removal of the seats from the manifolds easier.
- High-Flo Plus Throat Conversion Kits**
Converts High-Flo pump designs to a throat cartridge.
- 243667 Cartridge Wet Cup**
Includes wet cup only.
- 243763 Throat Cartridge Kit**
Includes wet cup and UHMWPE/Leather throat packing kit.
- 243764 Throat Cartridge Kit**
Includes wet cup and PTFE/Leather throat packing kit.
- 243765 Throat Cartridge Kit**
Includes wet cup and UHMWPE Triple Lip™ throat kit.
- High-Flo Plus Piston Conversion Kits**
Converts High-Flo pump designs to the new High-Flo Plus piston plates and piston seal.
- 243707 High-Flo Plus 300**
Includes High-Flo Plus piston, jam nut, o-rings and piston seal kit. For Viscount II 300 pumps.
- 243706 High-Flo Plus 400**
Includes High-Flo Plus piston, jam nut, o-rings and piston seal kit. For Viscount II 400 pumps.
- 243705 High-Flo Plus 600**
Includes High-Flo Plus piston, jam nut, o-rings and piston seal kit. For Viscount II 600 pumps.

Hydraulic Shutoff Valves

- 512150 Maximum working pressure: 2000 psi**
(13.8 MPa, 138 bar). 1/2 npt (f/b).
- 102644 Maximum working pressure: 3000 psi**
(20.7 MPa, 207 bar). 3/4 npt (f/b).
- 102646 Maximum working pressure: 3000 psi**
(20.7 MPa, 207 bar). 1 npt (f/b).

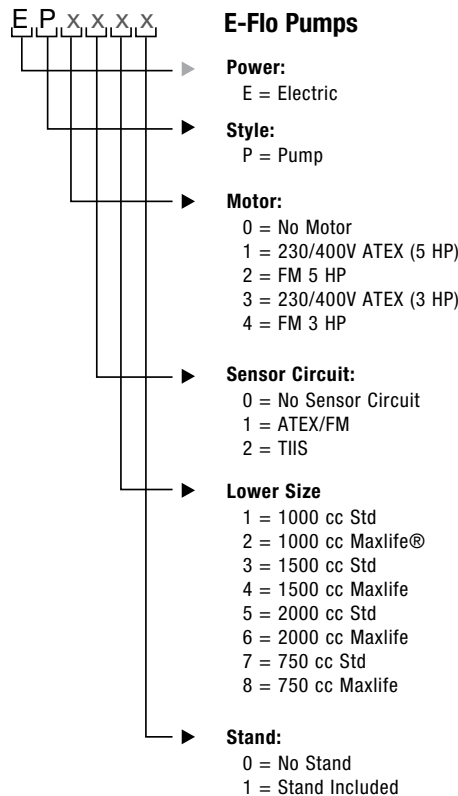
Technical Specifications and Ordering Information



		1500	2000	3000	4000
PUMP SPECIFICATIONS	Output per cycle	1500 cc	2000 cc	3000 cc	4000 cc
	Electric AC motor size	3 HP	5 HP	5 HP	5 HP
	Max Working Pressure psi (bar, MPa)	460 (32, 3.2)	460 (32, 3.2)	330 (23, 2.3)	250 (17, 1.7)
	Output at 20 CPM gpm (lpm)	8.1 (31)	12 (45)	16.2 (61)	22.6 (85.5)
INLET/OUTLET	Inlet size	1-1/2 in Tri-Clamp	2 in Tri-Clamp	2 in Tri-Clamp	2 in Tri-Clamp
	Outlet size	1-1/2 in Tri-Clamp	2 in Tri-Clamp	2 in Tri-Clamp	2 in Tri-Clamp
MANUALS	Pump manual	311593	311593	311593	311593
	Lower manual	311690	311690	311690	311690
	Motor manual	311593	311593	311593	311593

Use the Smart Numbering System!*

The six-digit Smart Numbering System can help you order quickly and accurately. Simply follow the diagram for the part you want and build your order.



E-Flo

Electric Circulating Pumps

Ordering Information (continued)

MOTOR TYPE	SENSOR CIRCUIT	LOWER	STAND	1500	2000	3000	4000
0	0	C	0	EP0070	EP0010	EP0020	EP0030
0	0	C	1	EP0071	EP0011	EP0021	EP0031
0	0	M	0	EP0080	EP0040	EP0050	EP0060
0	0	M	1	EP0081	EP0041	EP0051	EP0061
0	1	C	0	EP0170	EP0110	EP0120	EP0130
0	1	C	1	EP0171	EP0111	EP0121	EP0131
0	1	M	0	EP0180	EP0140	EP0150	EP0160
0	1	M	1	EP0181	EP0141	EP0151	EP0161
0	2	C	0	EP0270	EP0210	EP0220	EP0230
0	2	C	1	EP0271	EP0211	EP0221	EP0231
0	2	M	0	EP0280	EP0240	EP0250	EP0260
0	2	M	1	EP0281	EP0241	EP0251	EP0261
1	0	C	0		EP1010	EP1020	EP1030
1	0	C	1		EP1011	EP1021	EP1031
1	0	M	0		EP1040	EP1050	EP1060
1	0	M	1		EP1041	EP1051	EP1061
1	1	C	0		EP1110	EP1120	EP1130
1	1	C	1		EP1111	EP1121	EP1131
1	1	M	0		EP1140	EP1150	EP1160
1	1	M	1		EP1141	EP1151	EP1161
2	0	C	0		EP2010	EP2020	EP2030
2	0	C	1		EP2011	EP2021	EP2031
2	0	M	0		EP2040	EP2050	EP2060
2	0	M	1		EP2041	EP2051	EP2061
2	1	C	0		EP2110	EP2120	EP2130
2	1	C	1		EP2111	EP2121	EP2131
2	1	M	0		EP2140	EP2150	EP2160
2	1	M	1		EP2141	EP2151	EP2161
3	0	C	0	EP3070			
3	0	C	1	EP3071			
3	1	C	0	EP3170			
3	1	C	1	EP3171			
3	0	M	0	EP3080			
3	0	M	1	EP3081			
3	1	M	0	EP3180			
3	1	M	1	EP3181			
4	0	C	0	EP4070			
4	0	C	1	EP4071			
4	1	C	0	EP4170			
4	1	C	1	EP4171			
4	0	M	0	EP4080			
4	0	M	1	EP4081			
4	1	M	0	EP4180			
4	1	M	1	EP4181			

Merkur™ Bellows

Bellows Piston Pumps

Technical Specifications and Ordering Information

Model		5:1	12:1	15:1	15:1	23:1	24:1	25:1	35:1
PUMP SPECIFICATIONS	Pump Volume per Cycle	150 cc	100 cc	50 cc	150 cc	100 cc	150 cc	50 cc	100 cc
	Air Motor Displacement	400 cc	700 cc	400 cc	1200 cc	1200 cc	1800 cc	700 cc	1800 cc
	Maximum Fluid Outlet Pressure psi (bar, MPa)	500 (35, 3.5)	1200 (83, 8.3)	1500 (103, 10.3)	1500 (103, 10.3)	2300 (158, 15.8)	2400 (165, 16.5)	2500 (172, 17.2)	3500 (241, 24.1)
	Maximum Air Inlet Pressure psi (bar, MPa)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)
	Fluid Flow @ 60 CPM gpm (lpm)	2.4 (9.0)	1.6 (6.0)	0.8 (3.0)	2.4 (9.0)	1.6 (6.0)	2.4 (9.0)	0.8 (3.0)	1.6 (6.0)
	Air Consumption @ 100 psi (7 bar) @ 20 cpm	6 scfm (0.17 m3/min)	9 scfm (0.17 m3/min)	6 scfm (0.17 m3/min)	17 scfm (0.48 m3/min)	17 scfm (0.48 m3/min)	26 scfm (0.74 m3/min)	9 scfm (0.17 m3/min)	26 scfm (0.74 m3/min)
INLET/OUTLET	Fluid Inlet Size	1" npt(m)	3/4" npt(m)	3/4" npt(m)	1" npt(m)	3/4" npt(m)	1" npt(m)	3/4" npt(m)	3/4" npt(m)
	Fluid Outlet Size	3/4" npt(m)	3/8" npt(m)	3/8" npt(m)	3/4" npt(m)	3/8" npt(m)	3/4" npt(m)	3/8" npt(m)	3/8" npt(m)
	Air Inlet (Air Controls)	3/8" npt(f)	3/8" npt(f)	3/8" npt(f)	3/8" npt(f)	3/8" npt(f)	3/8" npt(f)	3/8" npt(f)	3/8" npt(f)

Seal	Mount	Package	Drain Valves	Fluid Filter	DataTrak									
V-Packing	Wall	Pump		•		G05B01	G12B01	G15B01	G15B51	G23B01	G24B01	G25B01	G35B01	
				•	•	G05B02	G12B02	G15B02	G15B52	G23B02	G24B02	G25B02	G35B02	
						G05B05	G12B05	G15B09	G15B59	G23B09	G24B09	G25B09	G35B09	
		AA			•		G05B06	G12B06	G15B10	G15B60	G23B10	G24B10	G25B10	G35B10
				•	•			G15B03	G15B53	G23B03	G24B03	G25B03	G35B03	
				•	•	•		G15B04	G15B54	G23B04	G24B04	G25B04	G35B04	
	Cart	Pump		•	•			G15B11	G15B61	G23B11	G24B11	G25B11	G35B11	
								G15B12	G15B62	G23B12	G24B12	G25B12	G35B12	
					•		G05B03	G12B03	G15B05	G15B55	G23B05	G24B05	G25B05	G35B05
					•	•	G05B04	G12B04	G15B06	G15B56	G23B06	G24B06	G25B06	G35B06
		AA			•	•			G15B07	G15B57	G23B07	G24B07	G25B07	G35B07
					•	•			G15B08	G15B58	G23B08	G24B08	G25B08	G35B08
									G15B15	G15B65	G23B15	G24B15	G25B15	G35B15
						•			G15B16	G15B66	G23B16	G24B16	G25B16	G35B16
		AL			•	•				G23B35	G24B35	G25B33	G35B35	
					•	•				G23B36	G24B36	G25B34	G35B36	
					•	•				G15B83	G23B33	G24B33	G35B33	
					•	•				G15B84	G23B34	G24B34	G35B34	
	U-Cup	Wall	Pump		•		G05B09	G12B09	G15B17	G15B67	G23B17	G24B17	G25B17	G35B17
					•	•	G05B10	G12B10	G15B18	G15B68	G23B18	G24B18	G25B18	G35B18
							G05B13	G12B13	G15B25	G15B75	G23B25	G24B25	G25B25	G35B25
			AA			•		G05B14	G15B26	G15B76	G23B26	G24B26	G25B26	G35B26
					•	•			G15B19	G15B69	G23B19	G24B19	G25B19	G35B19
					•	•	•		G15B20	G15B70	G23B20	G24B20	G25B20	G35B20
Cart		Pump						G15B27	G15B77	G23B27	G24B27	G25B27	G35B27	
								G15B28	G15B78	G23B28	G24B28	G25B28	G35B28	
					•		G05B11	G12B11	G15B21	G15B71	G23B21	G24B21	G25B21	G35B21
					•	•	G05B12	G12B12	G15B22	G15B72	G23B22	G24B22	G25B22	G35B22
		AA				•	G05B15	G12B15	G15B29	G15B79	G23B29	G24B29	G25B29	G35B29
						•	G05B16	G12B16	G15B30	G15B80	G23B30	G24B30	G25B30	G35B30
				•	•			G15B23	G15B73	G23B23	G24B23	G25B23	G35B23	
				•	•	•		G15B24	G15B74	G23B24	G24B24	G25B24	G35B24	
							G15B31	G15B81	G23B31	G24B31	G25B31	G35B31		
					•		G15B32	G15B82	G23B32	G24B32	G25B32	G35B32		

Note: Graco recommends 20 cpm or less for intermittent pumping applications and 12 cpm or less for continuous pumping applications.



Merkur Bellows

Bellows Piston Pumps

2

Accessories

Spray Guns

Refer to the spray gun brochure for additional model numbers. All guns include tip of choice.

- 24C853 G15 Carbide Air-Assisted Spray Gun
- 24C855 G40 Air-Assisted Spray Gun
- 24C857 G40 RAC Air-Assisted Spray Gun
- XTR501 XTR-5 Airless Spray Gun
- 244573 PRO Xs AA Smart Electrostatic Spray Gun

Accessories

- 238926 Back Pressure Regulator
- 102397 Fluid Gauge
3000 psi (206 bar, 20.6 MPa)
- 238890 Fluid Regulator
- 243340 Pail Cover with Agitator
Use to agitate material in a 5 gal (18.9 l) pail
- 222121 Fluid Regulator, Stainless Steel
Maximum working pressure: 1500 psi (103 bar, 10.3 MPa)
Regulator range: 150-1200 psi (10-28 bar, 1-8.2 MPa)
- 24A587 Pump Outlet Fluid Filter, Stainless Steel
60 mesh (250 micron), 5000 psi (350 bar, 25 MPa)
- 256425 Fluid Filter Drain Valve, Stainless Steel
5000 psi (350 bar, 35 MPa)
- 224458 Replacement Filter Screen Element
3-pack elements, 30 mesh, SST
- 224459 Replacement Filter Screen Element
3-pack elements, 60 mesh, SST
- 24A540 Air Control Gauge Covers
5 sheets of 10 covers
- 24B187 Second AA Gun Kit
Includes air regulator and gauge
- 239850 Heater
120 (v)

DataTrak

- 24A575 Upgrade Kit for 400 cc Air Motors
- 24A576 Upgrade Kit for 700 cc, 1200 cc and 1800 cc Air Motors
- 24A592 Upgrade Kit for DataTrak with Cycle Count Only

Suction Hoses

- 24A954 55 gal (208 l) Drum Suction Hose and Strainer, 3/4 in fluid inlet
- 24B598 55 gal (208 l) Drum Suction Hose and Strainer, 1 in fluid inlet
- 24B424 PTFE Lined Suction Hose for 5 gal (19 l) Pails and Strainer, 3/4 in inlet
- 24B425 PTFE Lined Suction Hose for 5 gal (19 l) Pails and Strainer, 1 in inlet

Gun Hoses

- 256390 25 ft Air Hose
- 241812 25 ft Fluid Hose: 3300 psig (228 bar)
- 24A955 50 ft Bundled Air and Fluid Hose: 3300 psig (228 bar)
- 256389 50 ft Air Hose
- 24B562 50 ft Fluid Hose: 3300 psig (228 bar)
- 24A588 Hose Clips: Pack of 10

Instruction and Parts Manuals

- [312799](#) Merkur Bellows AA and Airless Spray Package
- [312798](#) Merkur Electrostatic Spray Package
- [312795](#) Merkur Bellows Pump Assembly
- [312793](#) Merkur Bellows Displacement Pump
- [312796](#) Merkur Air Motor

Glutton®

Dual Piston Pumps

Technical Specifications and Ordering Information



Model		Glutton 4:1	Glutton 12:1	Glutton 25:1	
PUMP SPECIFICATIONS	Output per cycle	355 cc	128 cc	58 cc	
	Max working pressure - psi (bar, MPa)	400 (28, 2.8)	1200 (82, 8.2)	2500 (170, 17.0)	
	Max air input pressure - psi (bar, MPa)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	
	Output at 20 cpm - gpm (lpm)	5.6 (21.2)	2 (7.5)	0.9 (3.4)	
INLET/OUTLET	Pump inlet size	1.25 npt(f)	1.25 npt(f)	1.25 npt(f)	
	Pump outlet size	1 npt(f)	1 npt(f)	3/4 npt(f)	
Pump manual		307843	307843	307843	
Seals		Glutton 4:1	Glutton 12:1	Glutton 25:1	
PUMP CONSTRUCTION	CARBON STEEL	Nylon	237008	237009	237010
		UHMWPE	220663	220664	220665
	STAINLESS STEEL	Nylon	237011	237012	237013
		UHMWPE	220666	220667	220668

Replacement Parts Index S = Standard • = Optional

Part No	Description	Pump Part No	220663	220666	237008	237011	220664	220667	237009	237012	220665	220668	237010	237013
220656	Air Valve and pilot valve repair kit		•	•	•	•	S	S	S	S	S	S	S	S
24C134	Piston Seals and Bellows kit - HMWPE		S	S	•	•								
24C135	Piston Seals and Bellows kit - Nylon		•	•	S	S								
221136	Piston Seals And Bellows Kit - UHMWPE						S	S	•	•				
237017	Piston Seals And Bellows Kit - Nylon						•	•	S	S				
220950	Piston Seals And Bellows Kit - UHMWPE										S	S	•	•
237016	Piston Seals And Bellows Kit - Nylon										•	•	S	S
220658	Piston seal kit - Urethane		•	•	•	•								
220660	Piston Seal Kit - Urethane										•	•	•	•
221134	Carbide ball and seat kit (2 each)		S	S	S	S	•	•	•	•				
221135	Carbide Ball And Seat Kit (qty: 2 each)										•	•	•	•
189432	Fluid piston - SST		S	S	S	S								
686499	Fluid piston - Ceramic		•	•	•	•								
189433	Fluid Piston - SST						S	S	S	S				
189434	Fluid Piston - SST										S	S	S	S

Accessories

206221 Wall Bracket

For mounting Glutton pump on wall.

102969 Loctite® High Strength Sealant

To secure piston shafts to the piston stud.

223319 Return Tube Kit

Use to return circulated fluid back to a 55 gal (200 l) drum through a drum cover. Includes SST return tube, SST bushing and SST elbow.

208259 55 Gallon (200 Liter) Suction Kit

Suction hose (3/4 in ID x 6 ft (1.8 m)), elbow, bung adapter, riser tube, 3/4 in npt(f) outlet fitting.

237949 Stainless Steel Drum Cover Kit

For 55 gal (200 l) drum applications to siphon directly from a drum. Includes SST drum cover, agitator gasket, access hole plug and fasteners.

204385 Elevator with Fixed Mounting

Use with drum cover kit (237949) and air control kit (237579) to raise and lower pump when changing drums.

237579 Air Control Kit

Use with elevator 204385 to raise and lower drum cover.

Technical Specifications and Ordering Information

2



Model		Triton 1:1 150 Series	Triton 3:1 150 Series	Triton 3:1 350 Series	
PUMP SPECIFICATIONS	Output per cycle	150 cc	150 cc	350cc	
	Max working pressure psi (bar, MPa)	115 (8, 0.8)	300 (21, 2.1)	260 (18, 1.8)	
	Max air input pressure psi (bar, MPa)	115 (8, 0.8)	100 (7, 0.7)	88 (6, 0.6)	
	Output at 20 CPM gpm (lpm)	0.8 (3.2)	0.8 (3.2)	1.85 (7)	
INLET/ OUTLET	Air motor inlet size	1/4 npt(f) or 1/4 BSPP	1/4 npt(f) or 3/8 BSPP(f)	1/2 npt(f) or 1/2 BSPP(f)	
	Pump inlet size	3/4 npt(f) or M26 x 1.5 BSPP	3/4 npt(f) or M26 x 1.5(f)	1 npt(f) or 1 BSPP(f)	
	Pump outlet size	3/8 npt(f) or 3/8 BSPP	3/8 npt(f) or BSPP(f)	1 npt(f) or 1 BSPP(f)	
	Pump manual	309303	311688	311689	
Fittings		Triton 1:1 150 Series	Triton 3:1 150 Series	Triton 3:1 350 Series	
PUMP CONSTRUCTION	SST	NPT	233501	253705	253708
		BSPP	233777	253704	253707
	Aluminum	NPT	233500		
		BSPP	233776		

Replacement Parts Index

S = Standard • = Optional

Part No	Description	Pump Part No							
		233500	233501	233776	233777	253704	253705	253707	253708
245065	PTFE diaphragm repair kit	S	S	S	S				
245066	Air valve repair kit	S	S	S	S	S	S		
245067	Acetal ball and SST seat kit	S	S	S	S	S	S		
245068	Diaphragm shaft kit	S	S	S	S				
246011	PTFE diaphragm repair kit					S	S		
15J647	Bearing Kit					S	S		
233541	Shaft Repair Kit					S	S		
243152	PTFE diaphragm repair kit							S	S
243153	Air valve repair kitS	S						S	S
243154	Acetal balls and stainless seats kit (qty: 4 ea)							S	S
243155	Pneumatic cylinder seal repair kit							S	S
243156	Fluid manifold seal kit							S	S
261696	Bearing Kit							S	S

Triton

Low Pressure Pneumatic Pumps

Accessories

- 245874 Floor Stand, 4-legged**
Includes stand frame and hardware for mounting the Triton 3D 350 pump on the floor. Does not include pump.
- 197426 Triton 1:1 Wall Bracket**
Used to mount a TRITON pump to a wall.
- 245875 Wall Bracket**
Includes wall bracket and hardware for mounting the Triton 3D 350 pump on wall. Does not include pump.
- 246495 Wall Bracket**
Includes wall bracket and hardware for mounting the Triton 3D 150 pump on wall. Does not include pump.
- 208920 Siphon Kit, Aluminum**
Use to siphon fluid from a 5 gal (18.9 l) pail. Includes nylon suction hose 170706, 1" ID, 4 ft (1.2 m) long, 3/4 npt(f) swivel.
- 238909 Grounding Wire and Clamp**
10 gauge, 25 ft (7.6 m) wire
- 224040 Pump Runaway Valve**
Use to prevent pump from running dry and running at high cycle rates. Maximum working pressure: 120 psi (0.8 MPa, 8.4 bar). Inlet and outlet: 3/4 npt(f).
- 261695 Diaphragm Assembly**
Use to assist in the installation of diaphragm
- 245082 Suction Hose, Aluminum**
Used to siphon material out of a 5 gal (18.9 l) pail. Includes 4 ft (1.2 m) hose, aluminum siphon tube, and inlet strainer. Hose outlet fitting: 3/8 npsm(f).
- 245083 Suction Hose, Stainless**
Used to siphon material out of a 5 gal (18.9 l) pail. Includes 4 ft (1.2 m) hose, stainless siphon tube and inlet strainer. Hose outlet fitting: 3/8 JIC(f) (9/16-18 unf).
- 245084 Suction Hose Kit, Aluminum, 55 Gallon Drum**
Used to siphon material out of a 55 gal (200 l) drum. Includes 6 ft (1.8 m) hose, aluminum siphon tube, acetal bung adapter and inlet strainer. Hose outlet fitting: 3/8 npsm(f).
- 245085 Suction Hose Kit, Stainless, 55 Gallon Drum**
Used to siphon material out of a 55 gal (200 l) drum. Includes 6 ft (1.8 m) hose, stainless siphon tube, acetal bung adapter and inlet strainer. Hose outlet fitting: 3/8 JIC(f) (9/16-18 unf).
- 112100 Adapter Fitting, Stainless**
Use with bushing 116350 to connect 245083 and 245085 suction hose kits to Triton 3D 150 fluid inlet. 3/8 JIC(m) (9/16-18 unf) x 3/8 npt(m).
- 116350 Pipe Bushing, Stainless**
Use with adapter fitting 112100 to connect 245083 and 245085 suction hose kits to Triton 3D 150 fluid inlet. 3/4 npt(m) x 3/8 npt(f).
- 238909 Grounding Wire and Clamp**
10 gauge, 25 ft (7.6 m) wire
- 224040 Pump Runaway Valve**
Use to prevent pump from running dry and running at high cycle rates. Maximum working pressure: 120 psi (0.8 MPa, 8.4 bar). Inlet and outlet: 3/4 npt(f).

Imperial®

Electric Centrifugal Pumps

Technical Specifications and Ordering Information

2



How to Order:

Use the following 5-step ordering process:

- 1 Select the number of stages
- 2 Determine the fluid horsepower required
- 3 Select material viscosity and correct your fluid horsepower
- 4 Select the fluid section
- 5 Select the motor

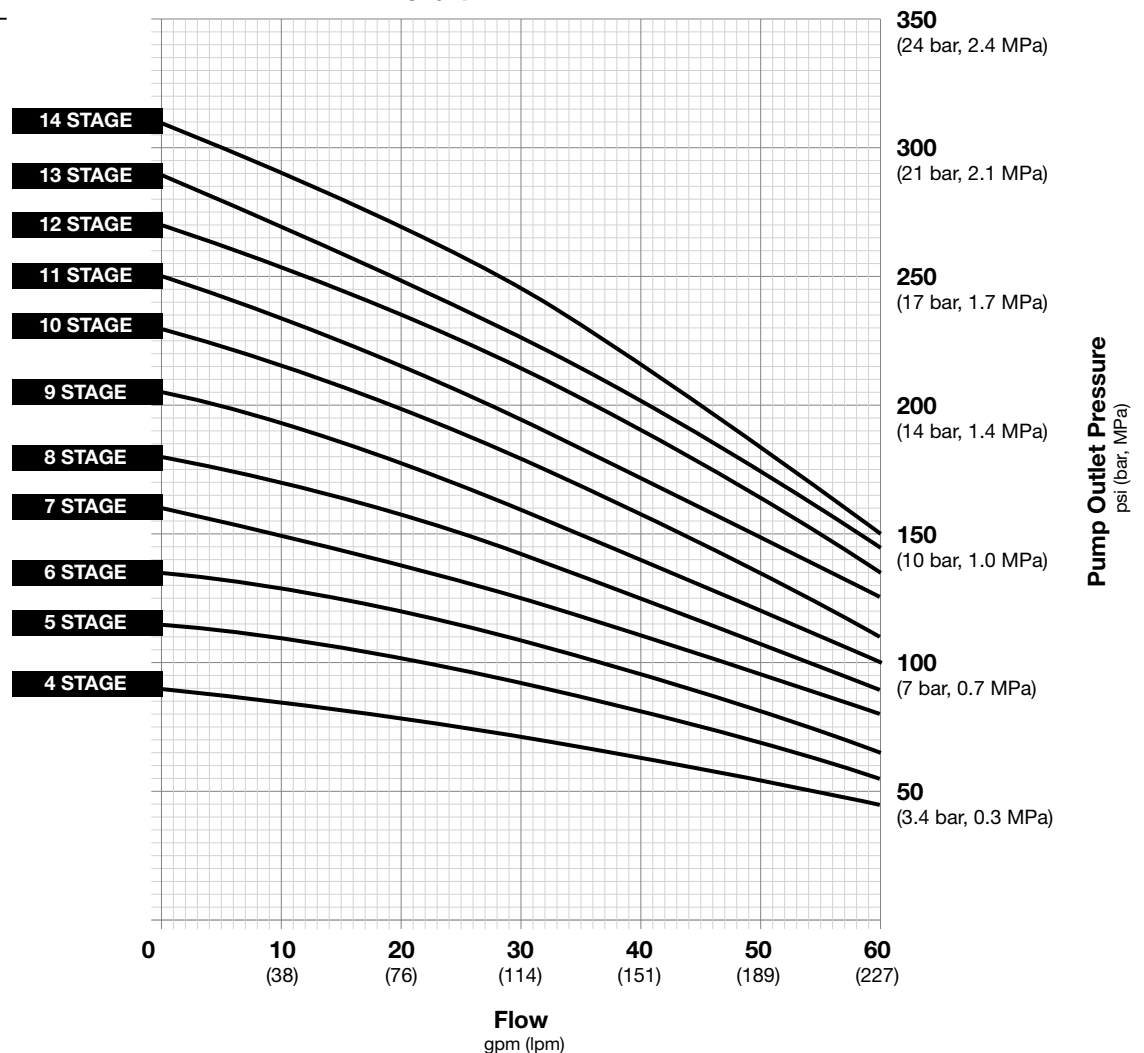
This information is meant as a guide for general pump selection. It is typical to add or remove a stage once a centrifugal pump is installed to supply the desired pressure and flow rate. Factors like shear characteristics, specific gravity along with viscosity of the material pumped play a part in the flow and pressure output of an impeller pump. Make sure that the pump selected has the flexibility to add or remove a stage, and the horsepower necessary to support the addition of a stage, if needed.

Step 1: Select Stages

Using chart 1, select the desired flow and outlet pressure for the pump. Choose the next stage above the intersection point for the correct stage number.

A _____

Chart 1



Imperial

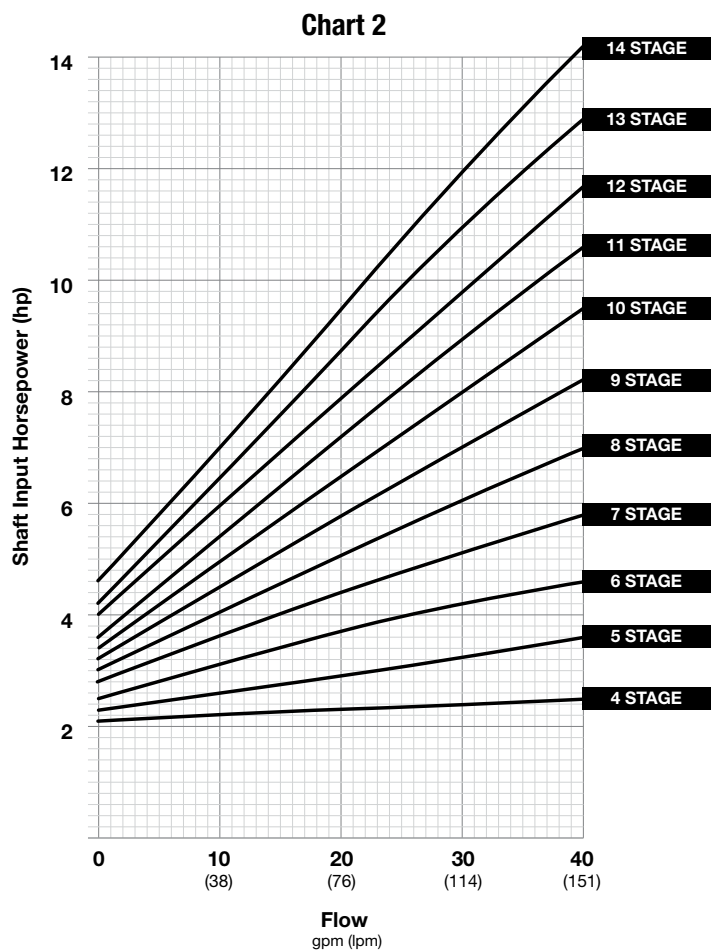
Electric Centrifugal Pumps

Technical Specifications and Ordering Information

Step 2: Determine Fluid Horsepower

Using chart 2, select the desired flow and cross reference with the number of stages (A) to determine the fluid horsepower.

B _____

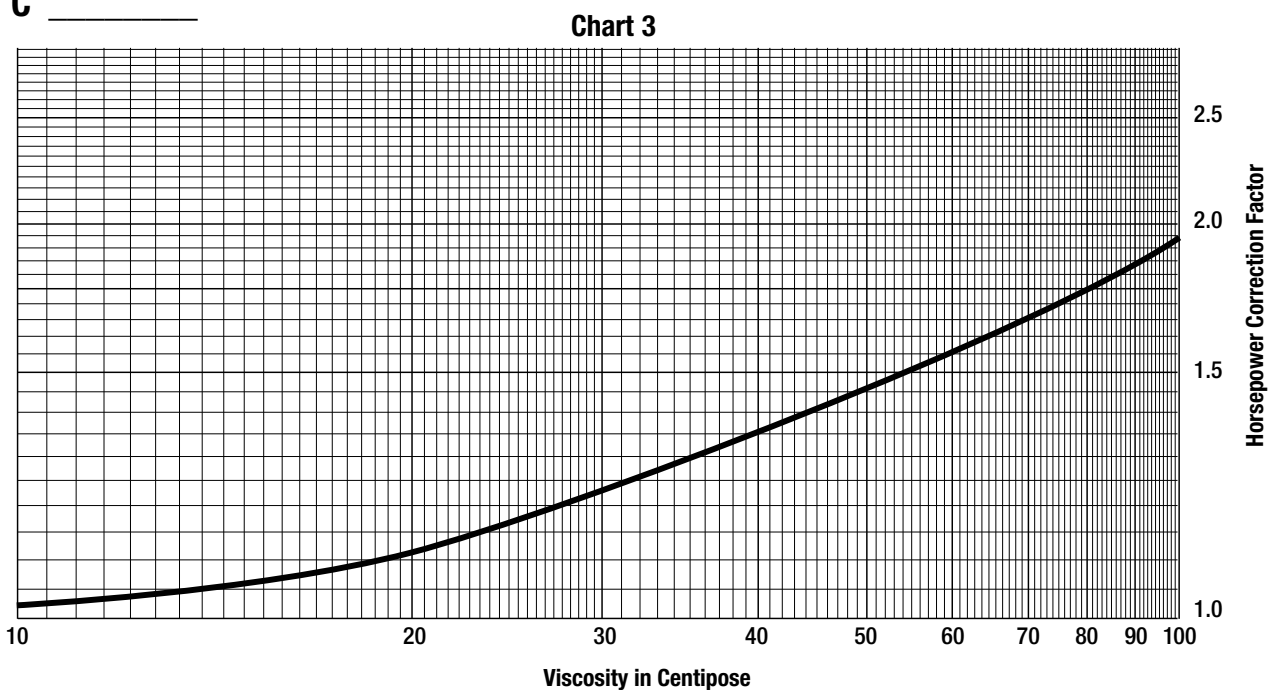


Step 3: Correction Factor

Using chart 3, determine the viscosity of the desired material and take the intersecting line to find your correction factor.

$$HP \text{ (fluid)} = HP \text{ (water)} \times \text{Correction Factor}$$

C _____



Imperial

Electric Centrifugal Pumps

Technical Specifications and Ordering Information

Step 4: Select the fluid section

Use the number of stages (A), select the model number.

Number of Stages	Corrosion Resistant Standard size for 60 in (152 cm) max. tank height	Waterborne Standard size for 60 in (152 cm) max. tank height
	Model No.	Model No.
6	223806	223706
7	223807	223707
8	223808	223708
9	223809	223709
10	223810	223710
11	223811	223711
12	223812	223712
13	223813	223713
14	223814	223714
15	None	237015

Step 5: Select motor

Select the correct motor size based on the horsepower requirement as well as the proper frame size, voltage and rating (B x C)

Electric U-Frame Motors

Motor	H.P.	Voltage	Rating
521470	3	230/460	Standard
521469	5	230/460	Standard
521468	7.5	230/460	Standard
521467	10	230/460	Standard
521466	15	230/460	Standard
521888	20	230/460	Standard
521455	7.5	600	Standard
51A649	3	CSA 575	Standard
51A650	5	CSA 575	Standard
51A651	7.5	CSA 575	Standard
51A652	10	CSA 575	Standard
51A653	15	CSA 575	Standard
51A654	20	CSA 575	Standard
516821	3	230/460	Premium
512732	5	230/460	Premium
516824	7.5	230/460	Premium
516825	10	230/460	Premium
516731	15	230/460	Premium
516827	20	230/460	Premium

Motor	H.P.	Voltage	Rating
51B297	3	CSA 575	Premium
51B298	5	CSA 575	Premium
51B299	7.5	CSA 575	Premium
51B300	10	CSA 575	Premium
51B301	15	CSA 575	Premium
51B302	20	CSA 575	Premium
114937	10	575	Inverter Duty
51B157	15	230/460	Inverter Duty
51B778	10	230/460	Inverter Duty
116228	10	380	Inverter Duty
51B673	7.5	380V/50Hz	Standard
51B674	10	380V/50Hz	Standard
51B675	15	380V/50Hz	Standard
51B676	20	380V/50Hz	Standard
51B677	7.5	380V/50Hz	Premium
51B678	10	380V/50Hz	Premium
51B679	15	380V/50Hz	Premium
51B680	20	380V/50Hz	Premium

Imperial

Electric Centrifugal Pumps

Technical Specifications and Ordering Information

Step 5: Select motor (continued)

Select the correct motor size based on the horsepower requirement as well as the proper frame size, voltage and rating (B x C)

Electric T-Frame Motors

Motor	H.P.	Voltage	Rating
521441	3	230/460	Standard
521429	5	230/460	Standard
51B296	7.5	230/460	Standard
516826	10	230/460	Standard
521456	15	230/460	Standard
521454	20	230/460	Standard
516822	3	230/460	Premium
516823	5	230/460	Premium
516774	7.5	230/460	Premium
516775	10	230/460	Premium
516776	15	230/460	Premium
516828	20	230/460	Premium
51B681	7.5	380V/50Hz	Premium
51B682	10	380V/50Hz	Premium
51B683	15	380V/50Hz	Premium
51B684	20	380V/50Hz	Premium

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Industrial Customer Service

Hours: Monday-Friday 7:30 AM - 5:30 PM Central Time
Phone: 800-328-0211
Fax: 877-340-6427

Merkur

Fine Finish Spray Packages

Technical Specifications

Pump Ratio	Merkur 10:1	Merkur 15:1	Merkur 15:1	Merkur 15:1	Merkur 18:1	Merkur 23:1	Merkur 24:1
Fluid Flow @ 60 cpm	1.2 gpm (4.5 lpm)	0.4 gpm (1.5 lpm)	0.8 gpm (3.0 lpm)	2.4 gpm (9.0 lpm)	2.0 gpm (7.5 lpm)	1.6 gpm (6.0 lpm)	2.4 gpm (9.0 lpm)
Pump Volume per Cycle	2.5 oz (75 cc)	0.8 oz (25 cc)	1.7 oz (50 cc)	5 oz (150 cc)	4.2 oz (125 cc)	3.4 oz (100 cc)	5 oz (150 cc)
Maximum Fluid Outlet Pressure psi (bar, MPa)	1000 (69, 6.9)	1500 (103, 10.3)	1500 (103, 10.3)	1500 (103, 10.3)	1800 (124, 12.4)	2300 (158, 15.8)	2400 (165, 16.5)
Maximum Air Inlet Pressure psi (bar, MPa)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)	100 (7, 0.7)
Air Motor Displacement (cc per stroke)	400 cc	200 cc	400 cc	1200 cc	1200 cc	1200 cc	1800 cc
Air Consumption @ 100 psi (7 bar, 0.7 MPa) @ 20 cpm	6 scfm (0.17 m ³ /min)	3 scfm (0.08 m ³ /min)	6 scfm (0.17 m ³ /min)	17 scfm (0.48 m ³ /min)	17 scfm (0.48 m ³ /min)	17 scfm (0.48 m ³ /min)	26 scfm (0.74 m ³ /min)
Fluid Inlet Size	3/4 npt(m)	1/2 npt(m)	3/4 npt(m)	1 npt(m)	1 npt(m)	3/4 npt(m)	1 npt(m)
Fluid Outlet Size	3/8 npt(m)	3/8 npt(m)	3/8 npt(m)	3/4 npt(m)	1/2 npt(m)	3/8 npt(m)	3/4 npt(m)
Air Inlet (motor)	1/4 npt(f)	1/4 npt(f)	1/4 npt(f)	1/2 npt(f)	1/2 npt(f)	1/2 npt(f)	1/2 npt(f)
Instruction Manuals							
Merkur AA and Airless Spray Pkg	312797	312797	312797	312797	312797	312797	312797
Merkur Electrostatic Spray Pkg	312798	312798	312798	312798	312798	312798	312798
Merkur AA and Airless Heated Pkg	313255	313255	313255	313255	313255	313255	313255
Merkur Pumps	312794	312794	312794	312794	312794	312794	312794
Merkur Displacement Lower	312792	312792	312792	312792	312792	312792	312792
Merkur Air Motor	312796	312796	312796	312796	312796	312796	312796
Sales Literature	340004	340004	340004	340004	340004	340004	340004

Pump Ratio	Merkur 28:1	Merkur 30:1	Merkur 30:1	Merkur 36:1	Merkur 45:1	Merkur 48:1
Fluid Flow @ 60 cpm	2.0 gpm (7.5 lpm)	0.4 gpm (1.5 lpm)	1.2 gpm (4.5 lpm)	1.6 gpm (6.0 lpm)	0.8 gpm (3.0 lpm)	1.2 gpm (4.5 lpm)
Pump Volume per Cycle	4.2 oz (125 cc)	0.8 oz (25 cc)	2.5 oz (75 cc)	3.4 oz (100 cc)	1.7 oz (50 cc)	2.5 oz (75 cc)
Maximum Fluid Outlet Pressure	2800 psi (192 bar)	3000 psi (206 bar)	3000 psi (206 bar)	3600 psi (248 bar)	4000 psi (275 bar)	4000 psi (275 bar)
Maximum Air Inlet Pressure	100 psi (7 bar)	100 psi (7 bar)	100 psi (7 bar)	100 psi (7 bar)	90 psi (6.2 bar)	85 psi (5.8 bar)
Air Motor Displacement (cc per stroke)	1800 cc	400 cc	1200 cc	1800 cc	1200 cc	1800 cc
Air Consumption @ 100 psi (7 bar, 0.7 MPa) @ 20 cpm	26 scfm (0.74 m ³ /min)	6 scfm (0.17 m ³ /min)	17 scfm (0.48 m ³ /min)	26 scfm (0.74 m ³ /min)	17 scfm (0.48 m ³ /min)	26 scfm (0.74 m ³ /min)
Fluid Inlet Size	1 npt(m)	1/2 npt(m)	3/4 npt(m)	3/4 npt(m)	3/4 npt(m)	3/4 npt(m)
Fluid Outlet Size	1/2 npt(m)	3/8 npt(m)	3/8 npt(m)	3/8 npt(m)	3/8 npt(m)	3/8 npt(m)
Air Inlet (motor)	1/2 npt(f)	1/4 npt(f)	1/2 npt(f)	1/2 npt(f)	1/2 npt(f)	1/2 npt(f)
Instruction Manuals						
Merkur AA and Airless Spray Pkg	312797	312797	312797	312797	312797	312797
Merkur Electrostatic Spray Pkg	312798	312798	312798	312798	312798	312798
Merkur AA and Airless Heated Pkg	313255	313255	313255	313255	313255	313255
Merkur Pumps	312794	312794	312794	312794	312794	312794
Merkur Displacement Lower	312792	312792	312792	312792	312792	312792
Merkur Air Motor	312796	312796	312796	312796	312796	312796
Sales Literature	340004	340004	340004	340004	340004	340004

Merkur

Fine Finish Spray Packages

Ordering Information



Air-Assisted Packages (includes a 25 ft (7.5 m) fluid and air hose)

Assembly Part Number	Pump Ratio	Fluid Flow at 60 cpm (lpm)	Wall Mount	Cart Mount	Stand Mount	DataTrak	DataTrak (Cycle Count Only)	G15 Gun Carbide Seat	Fluid Filter	Suction Hose	Hopper (1.5 gal)
Merkur 10:1 1.2 gpm (4.5 lpm)											
G10W05	10:1	1.2 (4.5)	•					•		•	
G10W06	10:1	1.2 (4.5)	•			•		•		•	
G10W07	10:1	1.2 (4.5)	•					•	•	•	
G10W08	10:1	1.2 (4.5)	•			•		•	•	•	
G10C07	10:1	1.2 (4.5)		•				•		•	
G10C08	10:1	1.2 (4.5)		•		•		•		•	
G10C09	10:1	1.2 (4.5)		•				•	•	•	
G10C10	10:1	1.2 (4.5)		•		•		•	•	•	
G10C11	10:1	1.2 (4.5)		•				•			•
G10C13	10:1	1.2 (4.5)		•				•	•		•
Merkur 15:1 0.4 gpm (1.5 lpm)											
G15W05	15:1	0.4 (1.5)	•					•		•	
G15W06	15:1	0.4 (1.5)	•				•	•		•	
G15W07	15:1	0.4 (1.5)	•					•	•	•	
G15W08	15:1	0.4 (1.5)	•				•	•	•	•	
G15C07	15:1	0.4 (1.5)		•				•		•	
G15C08	15:1	0.4 (1.5)		•			•	•		•	
G15C09	15:1	0.4 (1.5)		•				•	•	•	
G15C10	15:1	0.4 (1.5)		•			•	•	•	•	
G15C11	15:1	0.4 (1.5)		•				•			•
G15C12	15:1	0.4 (1.5)		•			•	•			•
G15C13	15:1	0.4 (1.5)		•				•	•		•
G15C14	15:1	0.4 (1.5)		•			•	•	•		•
G15T03	15:1	0.4 (1.5)			•			•		•	
G15T04	15:1	0.4 (1.5)			•		•	•		•	
G15T05	15:1	0.4 (1.5)			•			•			•
Merkur 15:1 0.8 gpm											
G15W25	15:1	0.8 (3.0)	•					•		•	
G15W26	15:1	0.8 (3.0)	•			•		•		•	
G15W27	15:1	0.8 (3.0)	•					•	•	•	
G15W28	15:1	0.8 (3.0)	•			•		•	•	•	
G15C27	15:1	0.8 (3.0)		•				•		•	
G15C28	15:1	0.8 (3.0)		•		•		•		•	
G15C29	15:1	0.8 (3.0)		•				•	•	•	
G15C30	15:1	0.8 (3.0)		•		•		•	•	•	
G15C31	15:1	0.8 (3.0)		•				•			•
G15C33	15:1	0.8 (3.0)		•				•	•		•
G15T13	15:1	0.8 (3.0)			•			•		•	
G15T14	15:1	0.8 (3.0)			•	•		•		•	
G15T15	15:1	0.8 (3.0)			•			•			•
Merkur 15:1 2.4 gpm (9.0 lpm)											
G15W55	15:1	2.4 (9.0)	•					•	•	•	
G15W56	15:1	2.4 (9.0)	•			•		•	•	•	
G15C83	15:1	2.4 (9.0)		•				•	•	•	
G15C84	15:1	2.4 (9.0)		•		•		•	•	•	

Merkur

Fine Finish Spray Packages

Ordering Information



Air-Assisted Packages (includes a 25 ft (7.5 m) fluid and air hose)

Assembly Part Number	Pump Ratio	Fluid Flow at 60 cpm gpm (lpm)	Wall Mount	Cart Mount	DataTrak	G40 Gun	G40 RAC Gun	Fluid Filter	Suction Hose	Hopper	Heated Package	Heater Voltage
Merkur 18:1 2.0 gpm (7.5 lpm)												
G18W07	18:1	2.0 (7.5)	•			•		•	•			
G18W08	18:1	2.0 (7.5)	•		•	•		•	•			
G18W09	18:1	2.0 (7.5)	•				•	•	•			
G18W10	18:1	2.0 (7.5)	•		•		•	•	•			
G18C05	18:1	2.0 (7.5)		•		•		•	•			
G18C06	18:1	2.0 (7.5)		•	•	•		•	•			
G18C07	18:1	2.0 (7.5)		•			•	•	•			
G18C08	18:1	2.0 (7.5)		•	•		•	•	•			
Merkur 23:1 1.6 gpm (6.0 lpm)												
G23W09	23:1	1.6 (6.0)	•			•		•	•			
G23W10	23:1	1.6 (6.0)	•		•	•		•	•			
G23W11	23:1	1.6 (6.0)	•				•	•	•			
G23W12	23:1	1.6 (6.0)	•		•		•	•	•			
G23C07	23:1	1.6 (6.0)		•		•				•		
G23C11	23:1	1.6 (6.0)		•		•		•		•		
G23C09	23:1	1.6 (6.0)		•		•		•	•			
G23C12	23:1	1.6 (6.0)		•	•	•		•	•			
G23C13	23:1	1.6 (6.0)		•			•	•	•			
G23C14	23:1	1.6 (6.0)		•	•		•	•	•			
Merkur 24:1 2.4 gpm (9.0 lpm)												
G24W07	24:1	2.4 (9.0)	•			•		•	•			
G24W08	24:1	2.4 (9.0)	•		•	•		•	•			
G24W09	24:1	2.4 (9.0)	•				•	•	•			
G24W10	24:1	2.4 (9.0)	•		•		•	•	•			
G24C09	24:1	2.4 (9.0)		•		•		•	•			
G24C10	24:1	2.4 (9.0)		•	•	•		•	•			
G24C11	24:1	2.4 (9.0)		•			•	•	•			
G24C12	24:1	2.4 (9.0)		•	•		•	•	•			
Merkur 28:1 2.0 gpm (7.5 lpm)												
G28W11	28:1	2.0 (7.5)	•			•		•	•			
G28W12	28:1	2.0 (7.5)	•		•	•		•	•			
G28W13	28:1	2.0 (7.5)	•				•	•	•			
G28W14	28:1	2.0 (7.5)	•		•		•	•	•			
G28W17	28:1	2.0 (7.5)	•			•		•	•		•	120
G28W18	28:1	2.0 (7.5)	•		•	•		•	•		•	120
G28C09	28:1	2.0 (7.5)		•		•		•	•			
G28C10	28:1	2.0 (7.5)		•	•	•		•	•			
G28C11	28:1	2.0 (7.5)		•			•	•	•			
G28C12	28:1	2.0 (7.5)		•	•		•	•	•			
G28C15	28:1	2.0 (7.5)		•		•		•	•		•	120
G28C16	28:1	2.0 (7.5)		•	•	•		•	•		•	120

Merkur

Fine Finish Spray Packages

Ordering Information



Air-Assisted Packages (includes a 25 ft (7.5 m) fluid and air hose)

Assembly Part Number	Pump Ratio	Fluid Flow at 60 cpm gpm (lpm)	Wall Mount	Cart Mount	Stand Mount	DataTrak	G40 Gun	G40 RAC Gun	Fluid Filter	Suction Hose	Hopper	Heated Package	Heater Voltage
Merkur 30:1 0.4 gpm (1.5 lpm)													
G30W13	30:1	0.4 (1.5)	•				•			•			
G30W14	30:1	0.4 (1.5)	•			•	•			•			
G30W15	30:1	0.4 (1.5)	•				•		•	•			
G30W16	30:1	0.4 (1.5)	•			•	•		•	•			
G30W17	30:1	0.4 (1.5)	•					•	•	•			
G30W18	30:1	0.4 (1.5)	•			•		•	•	•			
G30C21	30:1	0.4 (1.5)		•			•			•			
G30C22	30:1	0.4 (1.5)		•		•	•			•			
G30C23	30:1	0.4 (1.5)		•			•				•		
G30C27	30:1	0.4 (1.5)		•			•		•		•		
G30C25	30:1	0.4 (1.5)		•			•		•	•			
G30C26	30:1	0.4 (1.5)		•		•	•		•	•			
G30C29	30:1	0.4 (1.5)		•				•		•			
G30C30	30:1	0.4 (1.5)		•		•		•		•			
G30C31	30:1	0.4 (1.5)		•				•			•		
G30C35	30:1	0.4 (1.5)		•				•	•		•		
G30C33	30:1	0.4 (1.5)		•				•	•	•			
G30C34	30:1	0.4 (1.5)		•		•		•	•	•			
G30T03	30:1	0.4 (1.5)			•		•			•			
G30T04	30:1	0.4 (1.5)			•	•	•			•			
G30T05	30:1	0.4 (1.5)			•		•		•	•			
G30T06	30:1	0.4 (1.5)			•	•	•		•	•			
G30T09	30:1	0.4 (1.5)			•		•				•		
G30T07	30:1	0.4 (1.5)			•			•		•			
G30T08	30:1	0.4 (1.5)			•	•		•		•			
G30T11	30:1	0.4 (1.5)			•			•	•	•			
G30T12	30:1	0.4 (1.5)			•	•		•	•	•			

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Merkur

Fine Finish Spray Packages

Ordering Information



Air-Assisted Packages (includes a 25 ft (7.5 m) fluid and air hose)

Assembly Part Number	Pump Ratio	Fluid Flow at 60 cpm gpm (lpm)	Wall Mount	Cart Mount	Stand Mount	DataTrak	G40 Gun	G40 RAC Gun	Fluid Filter	Suction Hose	Hopper	Heated Package	Heater Voltage
Merkur 30:1 1.2 gpm (4.5 lpm)													
G30W73	30:1	1.2 (4.5)	•				•		•	•			
G30W74	30:1	1.2 (4.5)	•			•	•		•	•			
G30W75	30:1	1.2 (4.5)	•					•	•	•			
G30W76	30:1	1.2 (4.5)	•			•		•	•	•			
G30W79	30:1	1.2 (4.5)	•				•		•	•		•	120
G30W80	30:1	1.2 (4.5)	•			•	•		•	•		•	120
G30C65	30:1	1.2 (4.5)		•			•				•		
G30C67	30:1	1.2 (4.5)		•			•		•	•			
G30C68	30:1	1.2 (4.5)		•		•	•		•	•			
G30C71	30:1	1.2 (4.5)		•				•			•		
G30C73	30:1	1.2 (4.5)		•				•	•	•			
G30C74	30:1	1.2 (4.5)		•		•		•	•	•			
G30C77	30:1	1.2 (4.5)		•			•		•	•		•	120
G30C78	30:1	1.2 (4.5)		•		•	•		•	•		•	120
Merkur 36:1 1.6 gpm (6.0 lpm)													
G36W13	36:1	1.6 (6.0)	•				•		•	•			
G36W14	36:1	1.6 (6.0)	•			•	•		•	•			
G36W15	36:1	1.6 (6.0)	•					•	•	•			
G36W16	36:1	1.6 (6.0)	•			•		•	•	•			
G36C09	36:1	1.6 (6.0)		•			•		•	•			
G36C10	36:1	1.6 (6.0)		•		•	•		•	•			
G36C11	36:1	1.6 (6.0)		•				•	•	•			
G36C12	36:1	1.6 (6.0)		•		•		•	•	•			
Merkur 45:1 0.8 gpm (3.0 lpm)													
G45W13	45:1	0.8 (3.0)	•				•		•	•			
G45W14	45:1	0.8 (3.0)	•			•	•		•	•			
G45W15	45:1	0.8 (3.0)	•					•	•	•			
G45W16	45:1	0.8 (3.0)	•			•		•	•	•			
G45C15	45:1	0.8 (3.0)		•			•		•	•			
G45C16	45:1	0.8 (3.0)		•		•	•		•	•			
G45C17	45:1	0.8 (3.0)		•				•	•	•			
G45C18	45:1	0.8 (3.0)		•		•		•	•	•			
Merkur 48:1 1.2 gpm (4.5 lpm)													
G48W13	48:1	1.2 (4.5)	•				•		•	•			
G48W14	48:1	1.2 (4.5)	•			•	•		•	•			
G48W15	48:1	1.2 (4.5)	•					•	•	•			
G48W16	48:1	1.2 (4.5)	•			•		•	•	•			
G48C11	48:1	1.2 (4.5)		•			•		•	•			
G48C12	48:1	1.2 (4.5)		•		•	•		•	•			
G48C13	48:1	1.2 (4.5)		•				•	•	•			
G48C14	48:1	1.2 (4.5)		•		•		•	•	•			

Merkur

Fine Finish Spray Packages

Ordering Information



Airless Packages (includes a 25 ft (7.5 m) fluid and air hose)

Assembly Part Number	Pump Ratio	Fluid Flow at 60 cpm gpm (lpm)	Wall Mount	Cart Mount	DataTrak	XTR Gun	Fluid Filter	Suction Hose	Hopper	Heated Package	Heater Voltage
Merkur 23:1 1.6 gpm (6.0 lpm)											
G23W07	23:1	1.6 (6.0)	•			•	•	•			
G23W08	23:1	1.6 (6.0)	•		•	•	•	•			
G23C03	23:1	1.6 (6.0)		•		•	•	•			
G23C04	23:1	1.6 (6.0)		•	•	•	•	•			
Merkur 24:1 2.4 gpm (9.0 lpm)											
G24W05	24:1	2.4 (9.0)	•			•	•	•			
G24W06	24:1	2.4 (9.0)	•		•	•	•	•			
G24C03	24:1	2.4 (9.0)		•		•	•	•			
G24C04	24:1	2.4 (9.0)		•	•	•	•	•			
Merkur 28:1 2.0 gpm (7.5 lpm)											
G28W05	28:1	2.0 (7.5)	•			•	•	•			
G28W06	28:1	2.0 (7.5)	•		•	•	•	•		•	120
G28W07	28:1	2.0 (7.5)	•			•	•	•		•	120
G28W08	28:1	2.0 (7.5)	•		•	•	•	•			
G28C03	28:1	2.0 (7.5)		•		•	•	•			
G28C04	28:1	2.0 (7.5)		•	•	•	•	•			
G28C05	28:1	2.0 (7.5)		•		•	•	•		•	120
G28C06	28:1	2.0 (7.5)		•	•	•	•	•		•	120
Merkur 30:1 0.4 gpm (1.5 lpm)											
G30W07	30:1	0.4 (1.5)	•			•	•	•			
G30W08	30:1	0.4 (1.5)	•		•	•	•	•			
G30C07	30:1	0.4 (1.5)		•		•		•			
G30C08	30:1	0.4 (1.5)		•	•	•		•			
G30C09	30:1	0.4 (1.5)		•		•	•	•			
G30C10	30:1	0.4 (1.5)		•	•	•	•	•			
G30C11	30:1	0.4 (1.5)		•		•			•		
G30C15	30:1	0.4 (1.5)		•		•	•		•		
Merkur 30:1 1.2 gpm (4.5 lpm)											
G30W57	30:1	1.2 (4.5)	•			•		•			
G30W58	30:1	1.2 (4.5)	•		•	•		•			
G30W59	30:1	1.2 (4.5)	•			•	•	•			
G30W60	30:1	1.2 (4.5)	•		•	•	•	•			
G30W67	30:1	1.2 (4.5)	•			•	•	•		•	120
G30W68	30:1	1.2 (4.5)	•		•	•	•	•		•	120
G30C55	30:1	1.2 (4.5)		•		•	•	•			
G30C56	30:1	1.2 (4.5)		•	•	•	•	•			
G30C59	30:1	1.2 (4.5)		•		•	•	•		•	120
G30C60	30:1	1.2 (4.5)		•	•	•	•	•		•	120

Merkur

Fine Finish Spray Packages

Ordering Information

Electrostatic Packages (includes a 25 ft (7.5 m) grounded electrostatic fluid and air hose)

Assembly Part Number	Pump Ratio	Fluid Flow at 60 cpm gpm (lpm)	Wall Mount	Cart Mount	DataTrak	Pro Xs4 AA Gun	Fluid Filter	Suction Hose	Heated Package	Heater Voltage
Merkur 15:1 2.4 gpm (9.0 lpm)										
G15W57	15:1	2.4 (9.0)	•			•	•	•		
G15W58	15:1	2.4 (9.0)	•		•	•	•	•		
G15C85	15:1	2.4 (9.0)		•		•	•	•		
G15C86	15:1	2.4 (9.0)		•	•	•	•	•		
Merkur 18:1 2.0 gpm (7.5 lpm)										
G18W11	18:1	2.0 (7.5)	•			•	•	•		
G18W12	18:1	2.0 (7.5)	•		•	•	•	•		
G18W13	28:1	2.0 (7.5)	•			•	•	•	•	120
G18W14	28:1	2.0 (7.5)	•		•	•	•	•	•	120
G18C09	18:1	2.0 (7.5)		•		•	•	•		
G18C10	18:1	2.0 (7.5)		•	•	•	•	•		
Merkur 23:1 1.6 gpm (6.0 lpm)										
G23W13	23:1	1.6 (6.0)	•			•	•	•		
G23W14	23:1	1.6 (6.0)	•		•	•	•	•		
G23C15	23:1	1.6 (6.0)		•		•	•	•		
G23C16	23:1	1.6 (6.0)		•	•	•	•	•		
Merkur 24:1 2.4 gpm (9.0 lpm)										
G24W11	24:1	2.4 (9.0)	•			•	•	•		
G24W12	24:1	2.4 (9.0)	•		•	•	•	•		
G24C13	24:1	2.4 (9.0)		•		•	•	•		
G24C14	24:1	2.4 (9.0)		•	•	•	•	•		
Merkur 28:1 2.0 gpm (7.5 lpm)										
G28W15	28:1	2.0 (7.5)	•			•	•	•		
G28W16	28:1	2.0 (7.5)	•		•	•	•	•		
G28W21	28:1	2.0 (7.5)	•			•	•	•	•	120
G28W22	28:1	2.0 (7.5)	•		•	•	•	•	•	120
G28C13	28:1	2.0 (7.5)		•		•	•	•		
G28C14	28:1	2.0 (7.5)		•	•	•	•	•		
G28C19	28:1	2.0 (7.5)		•		•	•	•	•	120
G28C20	28:1	2.0 (7.5)		•	•	•	•	•	•	120
Merkur 30:1 1.2 gpm (4.5 lpm)										
G30W77	30:1	1.2 (4.5)	•			•	•	•		
G30W78	30:1	1.2 (4.5)	•		•	•	•	•		
G30W83	30:1	1.2 (4.5)	•			•	•	•	•	120
G30W84	30:1	1.2 (4.5)	•		•	•	•	•	•	120
G30C75	30:1	1.2 (4.5)		•		•	•	•		
G30C76	30:1	1.2 (4.5)		•	•	•	•	•		
G30C81	30:1	1.2 (4.5)		•		•	•	•	•	120
G30C82	30:1	1.2 (4.5)		•	•	•	•	•	•	120

Merkur

Fine Finish Spray Packages

Ordering Information

Packages with No Gun

Assembly Part Number	Pump Ratio	Fluid Flow at 60 cpm gpm (lpm)	Wall Mount	Cart Mount	Stand Mount	DataTrak	Pump Only Air Control	Pump & Gun Air Control	Siphon Hose	Fluid Filter	Gun Hose
Merkur 10:1 1.2 gpm (4.5 lpm)											
G10W01	10:1	1.2 (4.5)	•					•			
G10W03	10:1	1.2 (4.5)	•					•	•		
G10W09	10:1	1.2 (4.5)	•								
G10C01	10:1	1.2 (4.5)		•				•			
G10C03	10:1	1.2 (4.5)		•				•	•		
Merkur 15:1 0.4 gpm (1.5 lpm)											
G15W01	15:1	0.4 (1.5)	•					•			
G15W03	15:1	0.4 (1.5)	•					•	•		
G15W09	15:1	0.4 (1.5)	•								
G15C01	15:1	0.4 (1.5)		•				•			
G15C03	15:1	0.4 (1.5)		•				•	•		
G15T01	15:1	0.4 (1.5)			•			•			
Merkur 15:1 0.8 gpm (3.0 lpm)											
G15W19	15:1	0.8 (3.0)	•								
G15W21	15:1	0.8 (3.0)	•					•			
G15W23	15:1	0.8 (3.0)	•					•	•		
G15C21	15:1	0.8 (3.0)		•				•			
G15C23	15:1	0.8 (3.0)		•				•	•		
G15C25	15:1	0.8 (3.0)		•				•	•		•
G15T11	15:1	0.8 (3.0)			•			•	•		•
G15T12	15:1	0.8 (3.0)			•	•		•	•		•
Merkur 15:1 2.4 gpm (9.0 lpm)											
G15W51	15:1	2.4 (9.0)	•								
G15W52	15:1	2.4 (9.0)	•			•					
G15W53	15:1	2.4 (9.0)	•				•		•	•	
G15W54	15:1	2.4 (9.0)	•			•	•		•	•	
G15C75	15:1	2.4 (9.0)		•							
G15C77	15:1	2.4 (9.0)		•			•				
G15C78	15:1	2.4 (9.0)		•		•	•				
G15C79	15:1	2.4 (9.0)		•			•		•	•	
G15C80	15:1	2.4 (9.0)		•		•	•		•	•	
G15C81	15:1	2.4 (9.0)		•				•	•		
Merkur 18:1 2.0 gpm (7.5 lpm)											
G18W01	18:1	2.0 (7.5)	•								
G18W03	18:1	2.0 (7.5)	•				•				
G18W04	18:1	2.0 (7.5)	•			•	•				
G18W05	18:1	2.0 (7.5)	•				•		•	•	
G18W06	18:1	2.0 (7.5)	•			•	•		•	•	
G18C01	18:1	2.0 (7.5)		•			•		•	•	
G18C02	18:1	2.0 (7.5)		•		•	•		•	•	
G18C03	18:1	2.0 (7.5)		•				•	•		

Merkur

Fine Finish Spray Packages

Ordering Information

Packages with No Gun

Assembly Part Number	Pump Ratio	Fluid Flow at 60 cpm gpm (lpm)	Wall Mount	Cart Mount	Stand Mount	DataTrak	Pump Only Air Control	Pump & Gun Air Control	Siphon Hose	Fluid Filter	Gun Hose
Merkur 23:1 1.6 gpm (6.0 lpm)											
G23W01	23:1	1.6 (6.0)	•								
G23W03	23:1	1.6 (6.0)	•				•				
G23W04	23:1	1.6 (6.0)	•			•	•				
G23W05	23:1	1.6 (6.0)	•				•		•	•	
G23W06	23:1	1.6 (6.0)	•			•	•		•	•	
G23C01	23:1	1.6 (6.0)		•			•		•		
G23C02	23:1	1.6 (6.0)		•		•	•		•		
G23C05	23:1	1.6 (6.0)		•				•	•		
Merkur 24:1 2.4 gpm (9.0 lpm)											
G24W01	24:1	2.4 (9.0)	•				•				
G24W02	24:1	2.4 (9.0)	•			•	•				
G24W03	24:1	2.4 (9.0)	•				•		•	•	
G24W04	24:1	2.4 (9.0)	•			•	•		•	•	
G24C01	24:1	2.4 (9.0)		•			•		•	•	
G24C02	24:1	2.4 (9.0)		•		•	•		•	•	
Merkur 28:1 2.0 gpm (7.5 lpm)											
G28W01	28:1	2.0 (7.5)	•								
G24W02	28:1	2.0 (7.5)	•			•	•				
G24W03	28:1	2.0 (7.5)	•				•		•	•	
G28W04	28:1	2.0 (7.5)	•			•	•		•	•	
C28C01	28:1	2.0 (7.5)		•			•		•	•	
C28C02	28:1	2.0 (7.5)		•		•	•		•	•	
Merkur 30:1 0.4 gpm (1.5 lpm)											
G30W01	30:1	0.4 (1.5)	•				•				
G30W03	30:1	0.4 (1.5)	•				•		•		
G30W05	30:1	0.4 (1.5)	•				•		•	•	
G30W09	30:1	0.4 (1.5)	•					•			
G30W11	30:1	0.4 (1.5)	•					•	•		
G30W12	30:1	0.4 (1.5)	•			•		•	•		
G30W19	30:1	0.4 (1.5)	•								
G30C01	30:1	0.4 (1.5)		•			•				
G30C03	30:1	0.4 (1.5)		•			•		•		
G30C05	30:1	0.4 (1.5)		•			•		•	•	
G30C17	30:1	0.4 (1.5)		•				•			
G30C19	30:1	0.4 (1.5)		•				•	•		
G30T01	30:1	0.4 (1.5)			•			•	•		•
G30T02	30:1	0.4 (1.5)			•	•		•	•		•

Ordering Information

Packages with No Gun

Assembly Part Number	Pump Ratio	Fluid Flow at 60 cpm gpm (lpm)	Wall Mount	Cart Mount	Stand Mount	DataTrak	Pump Only Air Control	Pump & Gun Air Control	Siphon Hose	Fluid Filter	Gun Hose
Merkur 30:1 1.2 gpm (4.5 lpm)											
G30W51	30:1	1.2 (4.5)	•								
G30W53	30:1	1.2 (4.5)	•				•				
G30W55	30:1	1.2 (4.5)	•				•		•	•	
G30W56	30:1	1.2 (4.5)	•			•	•		•	•	
G30W71	30:1	1.2 (4.5)	•					•			
G30C51	30:1	1.2 (4.5)		•			•		•		
G30C53	30:1	1.2 (4.5)		•			•		•	•	
G30C54	30:1	1.2 (4.5)		•		•	•		•	•	
G30C63	30:1	1.2 (4.5)		•				•	•		
Merkur 36:1 1.6 gpm (6.0 lpm)											
G36W01	36:1	1.6 (6.0)	•								
G36W03	36:1	1.6 (6.0)	•				•				
G36W04	36:1	1.6 (6.0)	•			•	•				
G36W05	36:1	1.6 (6.0)	•				•		•	•	
G36W06	36:1	1.6 (6.0)	•			•	•		•	•	
G36C01	36:1	1.6 (6.0)		•			•		•	•	
G36C02	36:1	1.6 (6.0)		•		•	•		•	•	
Merkur 45:1 0.8 gpm (3.0 lpm)											
G45W01	45:1	0.8 (3.0)	•								
G45W03	45:1	0.8 (3.0)	•				•				
G45W04	45:1	0.8 (3.0)	•			•	•		•	•	•
G45W11	45:1	0.8 (3.0)	•					•			
G45C01	45:1	0.8 (3.0)		•			•		•		
G45C11	45:1	0.8 (3.0)		•				•	•		
Merkur 48:1 1.2 gpm (4.5 lpm)											
G48W01	48:1	1.2 (4.5)	•								
G48W03	48:1	1.2 (4.5)	•				•		•	•	
G48W04	48:1	1.2 (4.5)	•			•	•		•	•	
G48W11	48:1	1.2 (4.5)	•					•			
G48C01	48:1	1.2 (4.5)		•			•		•	•	
G48C02	48:1	1.2 (4.5)		•		•	•		•	•	



Merkur

Fine Finish Spray Packages

Spray Guns

All guns include tip of choice.

- 287926 G15 Carbide Air-Assisted Spray Gun
- 249242 G40 Air-Assisted Spray Gun
- 249238 G40 RAC Air-Assisted Spray Gun
- XTR501 XTR-5 Airless Spray Gun
- 244573 PRO Xs AA Smart Electrostatic Spray Gun

Accessories

- 256410 Hopper 1.5 gal (5 l) polyethylene
- 243340 Pail Cover with Agitator
Use to agitate material in a 5 gal (18.9 l) pail
- 222121 Fluid Regulator, Stainless Steel
Maximum working pressure: 1500 psi (103 bar, 10.3 MPa)
Regulator range: 150-1200 psi (10-28 bar, 1-8.2 MPa)
- 24A587 Pump Outlet Fluid Filter, Stainless Steel
60 mesh (250 micron), 5000 psi (350 bar, 25 MPa)
- 256425 Fluid Filter Drain Valve, Stainless Steel
5000 psi (350 bar, 35 MPa)
- 224458 Replacement Filter Screen Element
3-pack elements, 30 mesh, SST
- 224459 Replacement Filter Screen Element
3-pack elements, 60 mesh, SST
- 24A540 Air Control Gauge Covers
5 sheets of 10 covers
- 24B187 Second AA Gun Kit
Includes air regulator and gauge

DataTrak

- 24A575 Upgrade Kit for 200 cc and 400 cc Air Motors
- 24A576 Upgrade Kit for 1200 cc and 1800 cc Air Motors
- 24A592 Upgrade Kit for DataTrak with Cycle Count Only

Suction Hoses

- 24A954 55 gal (208 l) Drum Suction Hose and Strainer, 3/4 in fluid inlet
- 24B598 55 gal (208 l) Drum Suction Hose and Strainer, 1 in fluid inlet
- 24B337 PTFE lined suction hose for cart fluid mount pump, 3/4 in inlet
- 24B338 PTFE lined suction hose for cart fluid mount pump, 1 in inlet
- 24B424 PTFE lined suction hose for wall fluid mount pump, 3/4 in inlet
- 24B425 PTFE lined suction hose for wall fluid mount pump, 1 in inlet

Gun Hoses

- 256390 25 ft (7.6 m) Air Hose
- 241812 25 ft (7.6 m) Fluid Hose
3300 psig (228 bar)
- 24A955 50 ft (15.2 m) Bundled Air and Fluid Hose
3300 psig (228 bar)
- 256389 50 ft (15.2 m) Air Hose
- 24B562 50 ft (15.2 m) Fluid Hose
3300 psig (228 bar)
- 24A588 Hose Clips
Pack of 10

Instruction and Parts Manuals

- [312797](#) Merkur AA and Airless Spray Package
- [312798](#) Merkur Electrostatic Spray Package
- [313255](#) Merkur AA and Airless Heated Package
- [312794](#) Merkur Pumps
- [312792](#) Merkur Displacement Lower
- [312796](#) Merkur Air Motor

Technical Specifications



Cart Mount



Stand Mount



Pail Mount



Wall Mount

Siphon tube and pail ordered separately

Triton	
Maximum fluid working pressure	100 psi (0.7 MPa, 7 bar, 0.7 MPa)
Maximum air input pressure	100 psi (0.7 MPa, 7 bar, 0.7 MPa)
Maximum fluid flow (pump at 212 cpm)	8.5 gpm (32 lpm)
Pump displacement	5 oz/cycle (160 cc/cycle)
Air inlet fitting	1/4 npt(f)
Acetal fluid regulator outlet fitting	3/8 npt(m)
Stainless steel fluid regulator outlet fitting	3/8 npsm(m)
Pump inlet	3/4 npt(f)
Pump outlet	3/8 npt(f)
Fluid outlet fitting	3/8 npt(m)

Average Air Consumption

Conventional		Compliant		HVLP		Electrostatic	
Gun:	14.0 scfm	Gun:	12.0 scfm	Gun:	15.0 scfm	Gun:	20.0 scfm
Pump:	1.5 scfm	Pump:	1.5 scfm	Pump:	1.5 scfm	Pump:	1.5 scfm
Total:	15.5 scfm	Total:	13.5 scfm	Total:	16.5 scfm	Total:	21.5 scfm

Sound data*

Sound pressure level at 40 psi (2.8 bar, 0.28 MPa)	69 dBa
Sound power level at 40 psi (2.8 bar, 0.28 MPa)	81 dBa

*Sound pressure measured one meter from unit. Sound power measured per ISO standard 3744.
Sound data is for TRITON pump only, without spray gun. Refer to the spray gun instruction manual for gun sound data.

Weight

5 gal (18.9 l) pail package (Alum/SST)	22 lb (10 kg)/28 lb (12.7 kg)
Stand package (Alum/SST)	20 lb (9.1 kg)/27 lb (12.3 kg)
Cart package (Alum/SST)	30 lb (13.6 kg)/36 lb (16.4 kg)
Wall mount package (Alum/SST)	19 lb (8.6 kg)/24 lb (10.9 kg)

Manuals

Pump instruction and part manual	309303
Spray package instruction and parts manual	309304
Spray package operation manual	309305
Agitator kit instruction manual	309306

Sales Literature

Triton Brochure	300541
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Triton

Air-Operated Double Diaphragm Pumps

Technical Specifications and Ordering Information

TRITON Spray Finishing Package Selection Guide

1. Select gun type
2. Select configuration
3. Select aluminum or stainless steel package
4. Select AirPro spray technology

Triton Package Part Number	Aluminum	Stainless Steel	5 Gallon Pail Mount	4 Legged Stand Mount	2 Wheel Cart Mount	Wall Mount	Fluid Regulator**	Suction Hose	Air Hose (25 ft, 7.6 m)	Fluid Hose (25 ft, 7.6 m)	Applicator Part Number	Applicator Description
AirPro Wood Application Packages												
289645	•		•				60	•	•	•	289110	AirPro HVLP Gun .040 in (1.0 mm) nozzle
289642		•	•				100	•	•	•	289110	AirPro HVLP Gun .040 in (1.0 mm) nozzle
289646	•		•				60	•	•	•	289111	AirPro Compliant Gun .040 in (1.0 mm) nozzle
289643		•	•				100	•	•	•	289111	AirPro Compliant Gun .040 in (1.0 mm) nozzle
289647	•		•					•	•	•	289109	AirPro Conventional Gun .040 in (1.0 mm) nozzle
289644		•	•					•	•	•	289109	AirPro Conventional Gun .040 in (1.0 mm) nozzle
289638	•				•		60	•	•	•	289110	AirPro HVLP Gun .040 in (1.0 mm) nozzle
289635		•			•		100	•	•	•	289110	AirPro HVLP Gun .040 in (1.0 mm) nozzle
289639	•				•		60	•	•	•	289111	AirPro Compliant Gun .040 in (1.0 mm) nozzle
289636		•			•		100	•	•	•	289110	AirPro Compliant Gun .040 in (1.0 mm) nozzle
289640	•				•			•	•	•	289109	AirPro Conventional Gun .040 in (1.0 mm) nozzle
289637		•			•			•	•	•	289109	AirPro Conventional Gun .040 in (1.0 mm) nozzle
289628	•					•	60		•	•	289110	AirPro HVLP Gun .040 in (1.0 mm) nozzle
289625		•				•	100		•	•	289110	AirPro HVLP Gun .040 in (1.0 mm) nozzle
289629	•					•	60		•	•	289111	AirPro Compliant Gun .040 in (1.0 mm) nozzle
289626		•				•	100		•	•	289111	AirPro Compliant Gun .040 in (1.0 mm) nozzle
289630	•					•			•	•	289109	AirPro Conventional Gun .040 in (1.0 mm) nozzle
289627		•				•			•	•	289109	AirPro Conventional Gun .040 in (1.0 mm) nozzle
AirPro General Metal Application Packages												
233468	•		•					•	•	•	288931	AirPro Conventional Gun .055 in (1.4 mm) nozzle
233469		•	•					•	•	•	288931	AirPro Conventional Gun .055 in (1.4 mm) nozzle
233470	•		•				60	•	•	•	288938	AirPro HVLP Gun .055 in (1.4 mm) nozzle
233471		•	•				100	•	•	•	288938	AirPro HVLP Gun .055 in (1.4 mm) nozzle
234911	•		•				60	•	•	•	288945	AirPro Compliant Gun .055 in (1.4 mm) nozzle
234912		•	•				100	•	•	•	288945	AirPro Compliant Gun .055 in (1.4 mm) nozzle
233475	•			•				•	•	•	288931	AirPro Conventional Gun .055 in (1.4 mm) nozzle
233476		•		•				•	•	•	288931	AirPro Conventional Gun .055 in (1.4 mm) nozzle
233477	•			•			60	•	•	•	288938	AirPro HVLP Gun .055 in (1.4 mm) nozzle
233478		•		•			100	•	•	•	288938	AirPro HVLP Gun .055 in (1.4 mm) nozzle
234913	•			•			60	•	•	•	288945	AirPro Compliant Gun .055 in (1.4 mm) nozzle
234914		•		•			100	•	•	•	288945	AirPro Compliant Gun .055 in (1.4 mm) nozzle
233482	•				•			•	•	•	288931	AirPro Conventional Gun .055 in (1.4 mm) nozzle
233483		•			•			•	•	•	288931	AirPro Conventional Gun .055 in (1.4 mm) nozzle
233484	•				•		60	•	•	•	288938	AirPro HVLP Gun .055 in (1.4 mm) nozzle
233485		•			•		100	•	•	•	288938	AirPro HVLP Gun .055 in (1.4 mm) nozzle
234915	•				•		60	•	•	•	288945	AirPro Compliant Gun .055 in (1.4 mm) nozzle
234916		•			•		100	•	•	•	288945	AirPro Compliant Gun .055 in (1.4 mm) nozzle
233489	•					•		•	•	•	288931	AirPro Conventional Gun .055 in (1.4 mm) nozzle
233490		•				•		•	•	•	288931	AirPro Conventional Gun .055 in (1.4 mm) nozzle
233491	•					•	60	•	•	•	288938	AirPro HVLP Gun .055 in (1.4 mm) nozzle
233492		•				•	100	•	•	•	288938	AirPro HVLP Gun .055 in (1.4 mm) nozzle
234917	•					•	60	•	•	•	288945	AirPro Compliant Gun .055 in (1.4 mm) nozzle
234918		•				•	100	•	•	•	288945	AirPro Compliant Gun .055 in (1.4 mm) nozzle

**HVLP, Compliant, PRO Xs2, Xs3 and Xs4 packages include fluid regulator:
 — Aluminum packages use 60 psi (0.4 MPa, 4 bar) acetel fluid regulator.
 — Stainless steel packages use 100 psi (0.7 MPa, 7 bar) stainless steel fluid regulator.

Technical Specifications and Ordering Information

Triton Package Part Number	Aluminum	Stainless Steel	5 Gallon Pail Mount	4 Legged Stand Mount	2 Wheel Cart Mount	Wall Mount	Fluid Regulator**	Suction Hose	Air Hose (25 ft, 7.6 m)	Fluid Hose (25 ft, 7.6 m)	Applicator Part Number	Applicator Description
AirPro Waterborne Application Packages												
289632		•			•		100	•	•	•	288969	AirPro HVLP Gun .055 in (1.4 mm) nozzle
289633		•			•		100	•	•	•	288972	AirPro Compliant Gun .055 in (1.4 mm) nozzle
289634		•			•			•	•	•	288966	AirPro Conventional Gun .055 in (1.4 mm) nozzle
289622		•				•	100		•	•	288969	AirPro HVLP Gun .055 in (1.4 mm) nozzle
289623		•				•	100		•	•	288972	AirPro Compliant Gun .055 in (1.4 mm) nozzle
289624		•				•			•	•	288966	AirPro Conventional Gun .055 in (1.4 mm) nozzle
Pro Xs Packages												
233741	•		•				60	•	•	•	244399	PRO Xs2 Electrostatic Gun .055 in (1.4 mm) nozzle
233742	•		•				60	•	•	•	244400	PRO Xs3 Standard Electrostatic Gun .055 in (1.4 mm) nozzle
289648	•		•				60	•	•	•	244401	PRO Xs4 Standard Electrostatic Gun .055 in (1.4 mm) nozzle
233743	•			•			60	•	•	•	244399	PRO Xs2 Electrostatic Gun .055 in (1.4 mm) nozzle
233744	•			•			60	•	•	•	244400	PRO Xs3 Standard Electrostatic Gun .055 in (1.4 mm) nozzle
289649	•			•			60	•	•	•	244401	PRO Xs4 Standard Electrostatic Gun .055 in (1.4 mm) nozzle
233746	•				•		60	•	•	•	244399	PRO Xs2 Electrostatic Gun .055 in (1.4 mm) nozzle
233747	•				•		60	•	•	•	244400	PRO Xs3 Standard Electrostatic Gun .055 in (1.4 mm) nozzle
289641	•				•		60	•	•	•	244401	PRO Xs4 Standard Electrostatic Gun .055 in (1.4 mm) nozzle
233748	•					•	60		•	•	244399	PRO Xs2 Electrostatic Gun .055 in (1.4 mm) nozzle
233749	•					•	60		•	•	244400	PRO Xs3 Standard Electrostatic Gun .055 in (1.4 mm) nozzle
289631	•					•	60		•	•	244401	PRO Xs4 Standard Electrostatic Gun .055 in (1.4 mm) nozzle
Bare Packages												
233466	•		•					•				None
233467		•	•					•				None
233473	•			•				•				None
233474		•		•				•				None
233480	•				•			•				None
233481		•			•			•				None
233487	•					•						None
233488		•				•						None

*Bare packages do not include hose and gun.

**HVLP, Compliant, PRO Xs2, Xs3 and Xs4 packages include fluid regulator:

— Aluminum packages use 60 psi (0.4 MPa, 4 bar) acetel fluid regulator.

— Stainless steel packages use 100 psi (0.7 MPa, 7 bar) stainless steel fluid regulator.



Triton

Air-Operated Double Diaphragm Pumps

Accessories

Bare Triton Pumps

233500 Triton Pump, Aluminum

233501 Triton Pump, Stainless Steel

Spray Guns

Refer to the Applicators section for additional AirPro and ProXs Electrostatic part numbers.

Accessory Air Bundled Hoses

For hose extensions or replacement (includes air and fluid hoses, bundled together).

233498 Air/Fluid Hose, 25 ft (7.6 m) Nickel Plated Steel Couplings, fits AirPro Spray guns

233499 Air/Fluid Hose, 25 ft (7.6 m) Stainless Steel Couplings, fits AirPro Spray guns

240425 Air/Fluid Hose, 25 ft (7.6 m), fits PRO Xs2, Xs3 and Xs4 guns

Air and Fluid Hoses

For hose extensions or replacement (separate air and fluid hoses)

244448 Air Hose, 25 ft (7.6 m), fits AirPro Spray guns

215638 Air Hose, 50 ft (15.2 m), fits AirPro Spray guns

223070 Air Hose, 25 ft (7.6 m) Grounded, fits PRO Xs2, Xs3 and Xs4 guns

244447 Fluid Hose, 25 ft (7.6 m) Nickel Plated Steel Couplings, fits AirPro Spray guns

235339 Fluid Hose, 25 ft (7.6 m) Stainless Steel Couplings, fits AirPro Spray guns

210868 Fluid Hose, 50 ft (15.2 m), fits AirPro Spray guns

215637 Fluid Hose, 25 ft (7.6 m), fits PRO Xs2, Xs3 and Xs4 guns

Suction Hoses

Order a suction hose (5 gal/18.9 l or 55 gal/200 l) for wall-mount applications.

245082 Aluminum, 4 ft (1.2 m), for 5 gal (18.9 l) pail

245083 Stainless Steel, 4 ft (1.2 m), for 5 gal (18.9 l) pail

245084 Aluminum, 6 ft (1.8 m), with acetal bung adapter for 55 gal (200 l) drum

245085 Stainless Steel, 6 ft (1.8 m), with acetal bung adapter for 55 gal (200 l) drum

Fluid Regulators

Use in HVLP applications and where required fluid pressure to spray gun is less than 20 psi (1.4 bar, 0.14 MPa).

241976 Fluid Regulator, Acetal, 0-60 psi (0-4 bar, 0-0.4 MPa)

236450 Fluid Regulator, Acetal, 20-100 psi (1.4-7 bar, 0.14-0.7 MPa)

214706 Fluid Regulator, Stainless Steel, 5-100 psi (0.3-7 bar, 0.03-0.7 MPa)

Pump Outlet Fluid Filters

Filters attach to the outlet of the Triton pump.

114361 Fluid Filter, Nylon, 80 mesh, 3/8 npt(fbe), 150 psi (10 bar, 1 MPa)

223160 Fluid Filter, Stainless Steel, 60 mesh (250 micron), 3/8 npt(f) inlet x 1/4 npt(m) outlet, 5000 psi (350 bar, 35 MPa)

Agitators

245081 SST Pail Agitator for Triton Packages

WB 100

Waterborne Isolation System

Technical Specifications and Ordering Information



Part Number	Description
245897	WB100 Isolation System, Standard System includes WB100 unit, 25 ft (7.6 m) fluid and air hoses, PRO Xs3WB, standard gun
245898	WB100 Isolation System, Smart System includes WB100 unit, 25 ft (7.6 m) fluid and air hoses, PRO Xs3WB, Smart gun
233825	WB100 Isolation Unit only. Hoses and gun must be purchased separately

WB 100	
Maximum working fluid pressure	100 psi (7 bar, 0.7 MPa)
Maximum working air pressure	100 psi (7 bar, 0.7 MPa)
Maximum air pressure at gun inlet	40 psi (2.8 bar, 0.28 MPa)
Maximum fluid working temperature	120° F (48.8° C)
Short circuit current output	125 microamperes
Voltage limit	60 Kilovolts
Isolation system weight	125 lb (56.3 kg)
Isolation system dimensions	44 in H x 24 in W x 29 in D (1118 mm x 610 mm x 737 mm)
Isolation enclosure air inlet	1/4 npt
Isolation enclosure fluid inlet	3/8 in 9.5 mm OD tube fitting
Wetted parts:	
Gun:	Stainless Steel; Nylon, Acetal, Ultra-High Molecular Weight Polyethylene, Fluoroelastomer, PEEK, Tungsten Wire, Polyethylene
Waterborne Fluid Hose:	PTFE
Suction Tube	Polyethylene, Stainless Steel
Instruction manual	
WB 100	309293
Triton Pump	309303

For use when electrostatically spraying conductive, waterborne fluids that meet at least one of the following conditions for non-flammability:

- The fluid has a flash point above 140°F (60°C) and a maximum organic solvent concentration of 20%, by weight, per ASTM Standard D93
- The fluid does not sustain burning when tested per ASTM Standard D4206 Sustained Burn Test.

WB 100

Waterborne Isolation System

Accessories

244581 PRO Xs 3WB, Standard

Includes 1.5 mm nozzle and 197477 air cap. Waterborne fluid hose must be ordered separately (includes fluid tube and gun fittings). Grounded air hose must be ordered separately.

244582 PRO Xs 3WB, Smart

Includes Smart display showing voltage and current at the gun, adjustable voltage, 1.5 mm nozzle and 197477 air cap. Waterborne fluid hose must be ordered separately (includes fluid tube and gun fittings). Grounded air hose must be ordered separately.

245301 Waterborne PRO Xs3 Gun Kit, Standard

Includes 25 ft (7.6 m) waterborne fluid hose. Grounded air hose must be ordered separately.

245305 Waterborne PRO Xs3 Gun Kit, Smart

Includes 25 ft (7.6 m) waterborne fluid hose. Grounded air hose must be ordered separately.

235070 Grounded Air Hose (required for use)

Max. working pressure: 100 psi (7 bar, 0.7 MPa)
25 ft (7.6 m) length; red cover with conductive stainless steel wire braid for grounding.

245252 Waterborne Fluid Hose

Max. working pressure: 100 psi (7 bar, 0.7 MPa)
FM Approved; PTFE; 0.24 in (6 mm) ID x 25 ft (7.6 m).
Includes fluid tube and gun fittings.

Air Caps

Part No.	Type	Pattern Width
197477	Round End	15-17 in (381-432 mm)
197478	Low Flow	14-16 in (356-406 mm)
197479	Tapered End	17.5-19.5 in (445-495 mm)
197480	Large Pattern	16-18 in (406-457 mm)
197481	2.0 nozzle only	16-18 in (406-457 mm)

185105 Non-Swivel Air Inlet Fitting

Replaces standard swivel. Left-hand thread.

245895 Agitator Accessory Kit

SST Agitator and pail cover for 5 gal (19 l) pail.

245944 Fluid Regulator Accessory Kit

Air piloted fluid regulator kit that mounts directly to the unit.

Gun Repair Kits

244781 Air Seal Repair Kit

244911 Fluid Seal Repair Kit

Round Pattern Kits

Consists of fluid tip, diffuser and air cap.

245217 4-6 in (102-152 mm) diameter

245219 8-10 in (203-254 mm) diameter

244912 Push/Pull Valve

For quick change of fan size.

Select Comfort Grips™

Snap-on grips; increases handle size to reduce operator fatigue.

245263 Medium Grip Kit

245264 Large Grip Kit

111265 Gun Valve Lubricant

4 oz (113 g) tube of sanitary (non-silicone) lubricant for fluid seals and wear areas.

244915 Gun Covers (box of 10)

For PRO Xs3 and PRO Xs4 guns.

223688 Turbine Alternator Bearing Repair Kit

105749 Cleaning Brush

241079 Megohmmeter

500 Volt output; 0.01-2000 megohms.
Not for use in hazardous areas.

186118 Safety Warning Sign

English warning sign. FM Approved.
Available at no charge from Graco.

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Industrial Customer Service

Hours: Monday-Friday 7:30 AM - 5:30 PM Central Time

Phone: 800-328-0211

Fax: 877-340-6427

Plural Component

Product Selection Guide

Graco's plural component proportioners are completely integrated, modular designs that are ready to meet the needs of your growing business. Because our products provide exceptional ratio assurance, you can virtually eliminate rework and issues caused by off-ratio errors. Choose the product that best suits your needs from the selector below.

Feature	ProMix Easy	ProMix 2KS	ProMix 3KS
Number of Components	2	2	3
Ratio Range	0:1 to 30:1*	0:1 to 50:1*	0:1 to 50:1*
Ratio Assurance	1 - 5%	1 - 5%	1 - 5%
Flow Rate Range	20 – 3800 cc/min	20 – 3800 cc/min	20 – 3800 cc/min
Number of Colors	1	30	30
Number of Catalyst	1	4	4
Number of Recipes	1	60	60
Pot Life Monitor	Yes	Yes	Yes
Flow Control	No	Yes	Yes
Flow Control Range	NA	20 – 1200 cc/min	20 – 1200 cc/min
Gun Flush Box	No	Yes	Yes
Automation Integration	No	Yes	Yes
Reporting	Printer/Graco Shell	Basic and Advanced Web Interface	Basic and Advanced Web Interface
RoboMix	No	Yes	No

*Flow rate and configuration dependent

ProMix Easy

Electronic Proportioners

Technical Specifications



ProMix Easy	
Ambient temperature range	
Operating	32-104° F (0-40° C)
Storage	0.30-160° F (-1-71° C)
Approved for Hazardous Locations:	FM for the United States; Class 1, Div. 1 CSA Canada; Class 1, Division 1 ATEX for Europe; Class 1 Zone 1
External Power Supply Requirements	93-250 Vac, 50/60 Hz, 1.2 amps maximum draw 15 amp maximum circuit breaker required 14 AWG power supply wire gauge
Environmental Conditions Rating	Indoor/outdoor Altitude up to 4000 meters Maximum relative humidity to 99% up to 40° C Pollution degree (1) Installation category (2)
Sound pressure	98 dBA at 100 psi (7 bar, 0.7 MPa)
Wetted parts	
Pumps	See manual 310662
Dispense Valves	See manual 310655
Mix Manifold	See manual 310654
Meters	See manual 308778
PC Communications	RS-232
Sales Literature	
ProMix Easy Brochure	336137
Plural Component Brochure	337415
ProMix Easy Testimonial	320560

	2.5:1 UltraMix	24:1 HydraMix	34:1 HydraMix	47:1 HydraMix	Meter-based systems
Mix ratio range	0.1:1-10:1* (in 0.1 increments)	0.1:1-10:1* (in 0.1 increments)	0.1:1-10:1* (in 0.1 increments)	0.1:1-10:1* (in 0.1 increments)	0.1:1-30:1* (in 0.1 increments)
Ratio tolerance range	up to +/- 1%	up to +/- 1%	up to +/- 1%	up to +/- 1%	up to +/- 1%
Flow rates					
Minimum	0.02 qt/min (0.02 lpm)*	0.02 qt/min (0.02 lpm)*	0.02 qt/min (0.02 lpm)*	0.02 qt/min (0.02 lpm)*	0.1 qt/min (0.1 lpm)*
Maximum	1 gpm (3.8 lpm)	1 gpm (3.8 lpm)	1 gpm (3.8 lpm)	1 gpm (3.8 lpm)	1 gpm (3.8 lpm)
Pump size	0.54 cc/cycle	0.54 cc/cycle	92 cc/cycle	92 cc/cycle	
Pump cycle length (one cycle = one upstroke and one downstroke)	0.6 in (152 mm)/cycle	0.6 in (152 mm)/cycle	7.6 in (193 mm)/cycle	7.6 in (193 mm)/cycle	
Fluid viscosity range	50-20,000 cps	50-20,000 cps	50-20,000 cps	50-20,000 cps	50-20,000 cps
(heavier viscosities can be mixed with use of optional heaters, heated hoses, and hardware)					
Fluid filtration	60 mesh (238 micron) standard	60 mesh (238 micron) standard	60 mesh (238 micron) standard	60 mesh (238 micron) standard	60 mesh (238 micron) standard
Maximum fluid working pressure	250 psi (17 bar, 1.7 MPa)	2400 psi (166 bar, 16 MPa)	3400 psi (234 bar, 23 MPa)	4700 psi (324 bar, 32 MPa)	4000 psi (280 bar, 28 MPa)
Air supply pressure range	60-110 psi (4.2-8 bar, 420-800 kPa)	60-110 psi (4.2-8 bar, 420-800 kPa)	60-110 psi (4.2-8 bar, 420-800 kPa)	60-110 psi (4.2-8 bar, 420-800 kPa)	60-110 psi (4.2-8 bar, 420-800 kPa)
Maximum air consumption at 100 psi (7 bar, 0.7 MPa)	10.8 scfm at 1 gpm (0.30 m3/min at 3.8 lpm)	40.5 scfm at 1 gpm (1.13 m3/min at 3.8 lpm)	54.7 scfm at 1 gpm (1.53 m3/min at 3.8 lpm)	63.0 scfm at 1 gpm (1.76 m3/min at 3.8 lpm)	

ProMix Easy

Electronic Proportioners

Ordering Information

Proportioners Used in Air Spray Applications

Approved for Hazardous Locations

- 234596 Cart Mount, Ultra-Mix™ Carbon Steel Pumps, 25 ft Hose and HVLPAir Spray Gun, 250 psi (17 bar, 1.7 MPa)
- 234618 Wall Mount, G3000 Meter, Carbon Steel Mix Manifold 4000 psi (275 bar, 27.5 bar)
- 234619 Wall Mount, G3000 Meter, Stainless Steel Mix Manifold 4000 psi (275 bar, 27.5 bar)
- 234599 Wall Mount, Ultra-Mix Carbon Steel Pumps 250 psi (17 bar, 1.7 MPa)
- 234601 Wall Mount, Ultra-Mix Stainless Steel Pumps 250 psi (17 bar, 1.7 MPa)
- 234597 Wall Mount, Ultra-Mix Carbon Steel Pump/G3000 Meter 250 psi (17 bar, 1.7 MPa)
- 234598 Wall Mount, Ultra-Mix Stainless Steel Pump/G3000 Meter 250 psi (17 bar, 1.7 MPa)

Proportioners Used in Air Assist Applications

Approved for Hazardous Locations

- 234606 Wall Mount, HydraMix 500 Carbon Steel Pumps 2400 psi (165 bar, 16.5 MPa)
- 234608 Wall Mount, HydraMix 500 Stainless Steel Pumps 2400 psi (165 bar, 16.5 MPa)
- 234603 Wall Mount, HydraMix 500 SST Pump/G3000 Meter 2400 psi (165 bar, 16.5 MPa)
- 234602 Wall Mount, HydraMix 500 Carbon Steel Pump/G3000 Meter 2400 psi (165 bar, 16.5 MPa)
- 234609 Wall Mount, HydraMix 600 Carbon Steel Pumps 3400 psi (234 bar, 23 MPa)
- 234611 Wall Mount, HydraMix 600 Stainless Steel Pumps 3400 psi (234 bar, 23 MPa)
- 234604 Wall Mount, HydraMix 600 Carbon Steel Pump/G3000 Meter 3400 psi (234 bar, 23 MPa)
- 234605 Wall Mount, HydraMix 600 SST Pump/G3000 Meter 3400 psi (234 bar, 23 MPa)
- 234618 Wall Mount, G3000 Meter, Carbon Steel Mix Manifold 4000 (275 bar, 27.5 MPa)
- 234619 Wall Mount, G3000 Meter, Stainless Steel Mix Manifold 4000 (275 bar, 27.5 MPa)

Proportioners Used in Airless Applications

Approved for Hazardous Locations

- 234612 Wall Mount, HydraMix 700 Carbon Steel Pumps 4700 (324 bar, 32 MPa)
- 234613 Wall Mount, HydraMix 700 Stainless Steel Pumps 4700 (324 bar, 32 MPa)

Approved for Non-Hazardous Location

- 234600 Wall Mount, Ultra-Mix Carbon Steel Pumps 250 psi (17 bar, 1.7 MPa)
- 234825 Wall Mount, Ultra-Mix Stainless Steel Pumps 250 psi (17 bar, 1.7 MPa)
- 234607 Wall Mount, HydraMix 500 Carbon Steel Pumps 2400 psi (165 bar, 16.5 MPa)
- 234826 Wall Mount, HydraMix 500 Stainless Steel Pumps 2400 psi (165 bar, 16.5 MPa)
- 234610 Wall Mount, HydraMix 600 Carbon Steel Pumps 3400 psi (234 bar, 23 MPa)
- 234827 Wall Mount, HydraMix 600 Stainless Steel Pumps 3400 psi (234 bar, 23 MPa)

Key System Components

- 207484 Siphon Hose Assembly for Ultra-Mix and HydraMix Pumps
- 158555 1 inch to 3/4 inch Reducing Nipple
- 158383 1 inch Union Swivel
- 248587 Gun Air Regulator Kit, Meter Air Spray System
- 248588 Gun Air Regulator Kit, Pump Air Spray System
- 214706 Spring Operator Stainless Steel Fluid Regulator with Gauge
- 222121 Spring Operator Stainless Steel Fluid Regulator
- 238782 Stainless Steel Fluid Filter
- 248652 Circulation Kit, Stainless Steel, Solenoid and Tubing for A or B pump
- 248400 Stand Kit
- 248401 Caster Kit
- 248403 Reporting Kit IS Software and cable
- 248404 Reporting Kit Non IS Software and cable
- 248224 2.5 Gal (9.4 l) ISO Supply Kit, Sealant
- 248225 5 Gal (18.9 l) ISO Supply Kit Sealant
- 248432 Pressure Feed Kit for ISO Supply Hose
- 248427 TSL Pump Kit HydraMix
- 248583 TSL Pump Kit Ultra-Mix
- 248398 Non IS-AC Power Supply Kit
- 234026 Gun Manifold for two guns

Repair Kit

- 223688 Turbine Bearing Repair Kit
- 248397 Remote Manifold Kit
- 248444 Stainless Steel Fluid Manifold O-Ring Kit
- 248445 Carbon Steel Fluid Manifold O-Ring Kit
- 245145 O-Ring Repair Kit
- 248429 Dose Valve Repair Kit
- 248431 Integrator Packings Kit
- 248430 Fluid Manifold Repair Kit
- 118822 Static Mixer (two elements required)
- 248441 Tuff Stack Packings for HydraMix 500, 600 and 700 Pumps
- 248442 Tuff Stack Repair Kit for HydraMix 500, 600 and 700 Pumps
- 248437 Ultra-Mix Packing Kit
- 248438 HydraMix Packing Kit
- 248570 Ultra-Mix Carbon Steel Pump Kit with Sensor
- 248571 Ultra-Mix Stainless Steel Pump Kit with Sensor
- 248572 HydraMix 500 Carbon Steel Pump Kit with Sensor
- 248573 HydraMix 500 Stainless Steel Pump Kit with Sensor
- 248574 HydraMix 600 Carbon Steel Pump Kit with Sensor
- 248575 HydraMix 600 Stainless Steel Pump Kit with Sensor
- 248576 HydraMix 700 Carbon Steel Pump Kit with Sensor
- 248577 HydraMix 700 Stainless Steel Pump Kit with Sensor

ProMix 2KS

Electronic Proportioners

Technical Specifications

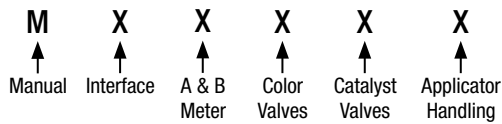


ProMix 2KS				
Maximum working air pressure	100 psig (7 bar, 0.7 MPa)			
Air supply	70 to 100 psig (5 to 7 bar, 0.5 to 0.7 MPa)			
Air filtration				
Air logic (Graco supplied)	5 micron			
Air purge (user supplied)	30 micron clean/dry			
Air for atomizing (user supplied)	minimum of 30 micron clean/dry			
Mix ratio range				
Sequential dosing	0.1:1 to 50:1			
Dynamic dosing	0.1:1 to 50:1			
Ratio accuracy	up to ±1% minimum (user selectable)			
Fluids handled	one or two component: solvent and waterborne paints; polyurethanes; epoxies; acid catalyzed varnishes; moisture sensitive isocyanates			
Fluid filtration	100 mesh min			
Flow meters				
METER	TYPE	MAX PRESSURE	FLOW RANGE	VISCOSITY
G250	Spur Gear	250 psi (17.2 bar)	75-3800 cc/min	20-3000 cps
G250HR	Spur Gear	250 psi (17.2 bar)	38-1900 cc/min	20-3000 cps
G3000	Spur Gear	4000 psi (275 bar)	75-3800 cc/min	20-3000 cps
G3000HR	Spur Gear	4000 psi (275 bar)	38-1900 cc/min	20-3000 cps
HG6000	Helical Gear	6000 psi (413 bar)	50-7500 cc/min	30-100,000 cps
1/8" Coriolis	Single Tube	2300 psi (158 bar)	20-3800 cc/min*	0.1-3000 cps
3/8" Coriolis	Single Tube	2300 psi (158 bar)	50-3800 cc/min	0.1-3000 cps
S3000 (Solvent Meter)	Spur Gear	3000 psi (206 bar)	50-2000 cc/min	0.5-1000 cps**
*Ratio and K-factor dependent				
**No filled materials				
Component working pressure				
Wall fluid panel (no meters)	4000 psig (275 bar, 27.5 MPa)			
RoboMix fluid panel (G250 meters)	250 psig (17.2 bar, 1.7 MPa)			
Flow control regulator	200 psig (13 bar, 1.3 MPa)			
Low pressure color change valves	300 psig (20.6 bar, 2.0 MPa)			
High pressure color change valves	3000 psig (206.7 bar, 20.6 MPa)			
External power supply requirements	85-250 Vac, 50/60 Hz, 2 amps maximum draw, 15 amp maximum circuit breaker required, 8 to 14 AWG power supply wire gauge			
Operating temperature range	41 to 122°F (5 to 50°C)			
Noise level				
Sound pressure level	below 70 dBA			
Sound power level	below 85 dBA			
Wetted parts	303 SST, 17-4 SST, PTFE, perfluoroelastomer, tungsten carbide with nickle binder			
Weight				
EasyKey display	21.75 lb (9.8 kg)			
Remote operator station	0.95 lb (0.43 kg)			
Wall fluid panel (no meters)	50 lb (22.7 kg)			
RoboMix fluid panel (G250 meters included)	31.6 lb (14.3 kg)			
Flow control regulator	4 lb (18.6 kg)			
Approved for hazardous locations	US and Canada - class 1 Div 1 Group D T3 Europe - Zone 1 2A T3/ATEX 22 GT3			
Environmental condition rating	indoor use, pollution degree (2), installation category II			
Sales Literature				
ProMix 2KS and 3KS Brochure	339996			

ProMix 2KS

Electronic Proportioners

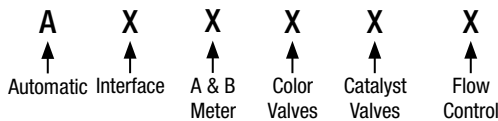
Manual Wall Panel



	Interface	A & B Meter	Color Valves*	Catalyst Valves	Applicator Handling
M	D = EasyKey with LCD Display	0 = No Meter 1 = G3000 A & B 2 = G3000HR A & B 3 = 1/8" Coriolis A & G3000 B 4 = G3000 A & 1/8" Coriolis B 5 = 1/8" Coriolis A & G3000HR B 6 = G3000HR A & 1/8" Coriolis B 7 = 1/8" Coriolis A & 1/8" Coriolis B	0 = No Valves (Single Color) 1 = 2 Colors LP 2 = 4 Colors LP 3 = 7 Colors LP 4 = 12 Colors LP 5 = 2 Colors HP 6 = 4 Colors HP	0 = No Valves (Single Catalyst) 1 = 2 Catalysts LP 2 = 4 Catalysts LP 3 = 2 Catalysts HP	1 = 1 AFS 2 = 2 AFS 3 = 1 AFS with 1 GFB 4 = 2 AFS with 2 GFB

*Order additional low pressure valves or other high pressure valve configurations as kits (see accessories)

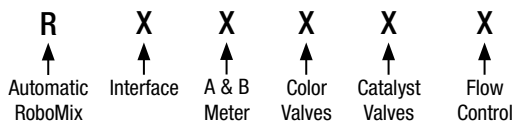
Automatic Wall Panel



	Interface	A & B Meter	Color Valves*	Catalyst Valves	Flow Control
A	D = EasyKey with LCD Display	0 = No Meter 1 = G3000 A & B 2 = G3000HR A & B 3 = 1/8" Coriolis A & G3000 B 4 = G3000 A & 1/8" Coriolis B 5 = 1/8" Coriolis A & G3000HR B 6 = G3000HR A & 1/8" Coriolis B 7 = 1/8" Coriolis A & 1/8" Coriolis B	0 = No Valves (Single Color) 1 = 2 Colors LP 2 = 4 Colors LP 3 = 7 Colors LP 4 = 12 Colors LP	0 = No Valves (Single Catalyst) 1 = 2 Catalysts LP 2 = 4 Catalysts LP	N = No Y = Yes

*Order additional low pressure valves or other high pressure valve configurations as kits (see accessories)

Automatic RoboMix Panel



	Interface	A & B Meter	Color Valves*	Catalyst Valves	Flow Control
R	D = EasyKey with LCD Display	0 = No Meter 1 = G250 A & B 2 = G250HR A & B	0 = No Valves (Single Color) 1 = 2 Colors LP 2 = 4 Colors LP 3 = 7 Colors LP 4 = 12 Colors LP	0 = No Valves (Single Catalyst) 1 = 2 Catalysts LP 2 = 4 Catalysts LP	N = No Y = Yes

*Order additional low pressure valves as kits (see accessories)

LP = low pressure; HP = high pressure; AFS = air flow switch; GFB = gun flush box

ProMix 2KS

Electronic Proportioners

Ordering Information

Meter Kits

Contains one flow meter, cable, and hardware

- 15V804 G3000 Flow Meter
- 15V827 G3000HR Flow Meter
- 15V820 HG6000 Flow Meter
- 15V806 1/8" Coriolis Flow Meter
- 258151 3/8" Coriolis Flow Meter
- 16D329 S3000 (Solvent) Flow Meter

Low Pressure Color Change Kits

Contains color valves and solenoid control module.

Order pump valves and dump valves separately.

- 256581 2 Color
- 256582 4 Color
- 256583 7 Color
- 256584 12 Color
- 256585 2 Color and 2 Catalyst*
- 256586 4 Color and 2 Catalyst*
- 256587 4 Color and 4 Catalyst*
- 256588 7 Color and 2 Catalyst*
- 256589 7 Color and 4 Catalyst*
- 256590 12 Color and 2 Catalyst*
- 256591 12 Color and 4 Catalyst*
- 256592 13-18 Colors
- 256593 13-24 Colors
- 256594 13-30 Colors
- 256595 0 Colors and 2 Catalysts

High Pressure Color Change Kits

Contains color valves and solenoid control module.

Order pump valves and dump valves separately.

- 256596 2 Color
- 256597 4 Color
- 256598 7 Color
- 256599 12 Color
- 256600 2 Color and 2 Catalyst*
- 256601 4 Color and 2 Catalyst*
- 256602 4 Color and 4 Catalyst*
- 256603 7 Color and 2 Catalyst*
- 256604 7 Color and 4 Catalyst*
- 256605 12 Color and 2 Catalyst*
- 256606 12 Color and 4 Catalyst*
- 256607 13-18 Colors
- 256608 13-24 Colors
- 256609 13-30 Colors
- 256610 0 Colors and 2 Catalysts

Valve Kits

Contains valve, solenoid, and hardware

- 15V821 Wall Panel Dump Valve
- 15V354 Wall Panel 3rd Flush Valve
- 15V822 RoboMix Panel Dump Valve
- 15V202 RoboMix Panel 3rd Flush Valve
- 15V077 Stainless Steel Needle
High Pressure Valve
- 15V737 Lubrication Cup
High and Low Pressure Valve
Supplies lubrication to the valve
needle and seal
- 15U932 Carbide Seat
High Pressure Valve

Dosing Kits

Contains fluid manifold hardware

- 15V034 10 cc Sequential Dosing
- 15V033 25 cc Sequential Dosing
- 15V021 50 cc Sequential Dosing
- 24B618 100 cc Sequential Dosing
- 15U955 0 cc Dynamic Dosing

RoboMix Panel Kits

Used to interface up to two air flow switches and two gun flush boxes to a RoboMix Panel. Order air flow switch or gun flush box kits separately.

- 15V267 RoboMix Panel Ratio Check Kit
- 15V534 Manual Gun Interface Kit

Communication Kits

15W825 Discrete I/O Integration Board

Contains inputs and outputs for controlling automatic integration and special output functionality

15V331 Ethernet IP Gateway Assembly

15V963 DeviceNet Gateway Assembly

15V964 Profibus Gateway Assembly

Network communication assembly for automatic integration. Contains gateway module, power supply, and enclosure.

15X492 Ethernet IP Gateway Module

15V966 DeviceNet Gateway Module

15V965 Profibus Gateway Module

Network communication module for automatic integration. Contains gateway module only.

15W023 Communication + I/O Harness Kit

15V337 Advanced Web Interface with Eight Port Hub

Contains web server module, power supply, eight port hub, and enclosure

15V336 Eight Port Ethernet Hub

Contains eight port hub, power supply, and enclosure

- 121998 25 ft (7.6 m) CAT V Cable
- 121999 50 ft (15.2 m) CAT V Cable
- 15V842 100 ft (30.4 m) CAT V Cable
- 15V843 200 ft (60.9 m) CAT V Cable

Cables

- 15V213 100 ft (30.4 m) Power Cable
- 15G710 100 ft (30.4 m) Fiber Optic Cable
- 15U977 40 ft (12.1 m) Flow Control Extension Cable
- 15U532 3 ft (0.9 m) CAN Cable
- 15V205 6 ft (1.8 m) CAN Cable
- 15V206 10 ft (3.0 m) CAN Cable
- 15V207 15 ft (4.5 m) CAN Cable
- 15V208 25 ft (7.6 m) CAN Cable
- 15U533 50 ft (15.2 m) CAN Cable

Miscellaneous Kits

15V826 Gun Flush Box Kit

Contains guns flush box and control hardware

570123 Gun Flush Box Wall Mount Kit

15V823 Gun Air Shutoff Kit

Used to automatically shut off gun atomizing air during flush and fill sequences without a gun flush box

15T632 Air Flow Switch Kit

15V350 Remote Operator Station Kit

15V256 Manual to Automatic Conversion Kit

15X247 Auto Dump Kit

Used to incorporate an auto dump feature without a gun flush box. Contains a dump valve, solenoid, and hardware

949122 Clear Plastic Static Mixer

15V536 Solvent Flow Switch

Used to detect solvent flow during flush sequences

15W034 Alarm Light for Manual Systems

122193 Alarm Light for Automatic Systems

15V950 Floor Stand

Contains provisions for mounting a wall fluid panel, EasyKey display, and color change module.

197902 EasyKey Paint Shields

Includes 10 disposable clear plastic shields to cover the EasyKey display and shield it from paint overspray

15M483 Remote Operator Station Paint Shields

Includes 10 disposable clear plastic shields to cover the remote operator station display and shield it from paint overspray

15W600 Wall Panel Fluid Manifold Cover

Gun Flush Box Gun Holders

- 198787 Graco Pro Xs2
- 198405 Graco Pro Xs3, Pro Xs4
- 196768 Graco PRO 3500, 3500hc, 4500
- 15T646 Graco AirPro Air Spray
- 196769 Graco Delta Air Spray
- 196770 Graco Alpha
- 196771 Graco Alpha Plus, Alpha Plus RAC
- 15G093 Graco G15
- 15G346 Graco G40, G40 RAC

* Dump Valve Kit Required (15V821 Wall Valve Kit or 15V822 RoboMix Valve Kit)

ProMix 3KS

Electronic Proportioners

Technical Specifications

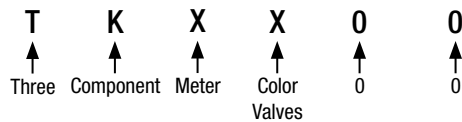


ProMix 3KS			
Mix ratio range*	1st stage:	2nd Stage:	
	Sequential dosing	0.1:1 to 50:1	0.1:1 to 50:1
	Dynamic dosing	0.1:1 to 30:1	0.1:1 to 30:1
Ratio accuracy	up to ±1% minimum (user selectable)		
External power supply requirements	85-250Vac, 50/60 Hz. 2 amps max draw, 15 amp circuit breaker required, 8 to 14 AWG power supply wire gauge		
Operating temperature range	41 to 122°F (5 to 50°C)		
Noise level	Sound pressure level	below 70 dBA	
	Sound power level	below 85 dBA	
Wetted parts	303 SST, 17-4 SST, PTFE, perfluoroelastomer, tungsten carbide with nickel binder		
Weight	3KS Wall fluid panel	32.6 lb (14.8 kg)	
	Power/Barrier Assembly	15.2 lb (6.9 kg)	
Sales Literature	ProMix 2KS and 3KS Brochure 339996 ProMix 3KS Flyer 344807		

*Ratio ranges are dependent on flow rate, dose size and meter resolution

4

ProMix 3KS Module



T	K	Meter	Color Valves	0	0
T	K	0 = No Meter	0 = No Valves (single color)	0	0
		1 = G3000	1 = 2 Color LP		
		2 = G3000 HR	2 = 4 Color LP		
		3 = 1/8" Coriolis	3 = 2 Color HP		
		4 = S3000	4 = 4 Color HP		

Ordering Information

Cables

123277	6 ft (1.8 m) Yellow Color Change/Booth Control
123280	50 ft (15.2 m) Yellow Color Change/Booth Control
123273	10 ft (3.0 m) Green CAN Cable
123274	25 ft (7.6 m) Green CAN Cable
123271	50 ft (15.2 m) Red Power Cable
123272	100 ft (30.4 m) Red Power Cable

Miscellaneous Kits

16A732	3K Floor Stand Extension
	Extends 15V950 2KS floor stand for 3KS use

ProControl

Electronic Flow Control System

Technical Specifications



ProControl	
Maximum working air pressure	125 psi (7 bar, 0.7 MPa)
Air supply	75–100 psi (5.2–7 bar, 0.5–0.7 MPa)
Air filtration	5 micron (minimum) filtration required
Fluids handled	one component: solvent and waterborne paints, polyurethanes, epoxies, acid catalyzed varnishes, moisture sensitive isocyanates
Maximum fluid working pressure	200 psi (14 bar, 0.14 MPa)
Viscosity range of fluid	20–5000 cps*
Fluid filtration	100 mesh minimum
Fluid flow rate range*	
G250 Meter	75–1500 cc/min (0.02–0.79 gal/min)
G250HR Meter	38–1500 cc/min (0.01–0.40 gal/min)
Coriolis Meter	20–1500 cc/min (0.005–1.00 gal/min)
External power supply requirements	85–250 Vac, 50/60 Hz, 2 amps maximum draw 15 amp maximum circuit breaker required 8 to 14 AWG power supply wire gauge
Operating temperature range	41–122° F (5–50° C)
Environmental conditions rating	Indoor use, Pollution degree (2) Installation category II
Noise level	
Sound pressure level	below 70 dBA
Sound power level	below 85 dBA
Wetted parts	303, 304 SST, 17–4 SST, Tungsten carbide (with nickel binder), perfluoroelastomer, PTFE, CV75
Weight	
Base System	31 lbs (14.1 kg)
EasyKey Display	22.2 lbs (10.0 kg)
Flow Control Module	6 lbs (2.8 kg)
Fluid Regulator Module	3 lbs (1.4 kg)
Manual	311190
Sales Literature	
ProControl Flyer	337418

* Material and application dependent

Ordering Information

- 249959 ProControl with No Meter
- 249871 ProControl with G250HR Meter
- 249958 ProControl with G250 Meter
- 249968 ProControl with Coriolis Meter

Accessories

- 234447 Display Interface Replacement Kit
- 117818 Key, EasyKey Controller
- 150979 Fuse, 0.4 Amp, Quick Acting
- 223547 Ground Wire
- 114228 Air Filter Element, 5 micron
- 197902 EasyKey Display Paint Shield
- 114788 Fuse, 2.0 Amp, Time Lag
- 156614 40 ft (12.1 m) Flow Control Extension Cable
- 156711 100 ft (30.4 m) Power Extension Cable
- 156710 100 ft (30.4 m) Fiber Cable
- 234563 Coriolis Meter Kit
- 156634 Modbus/TCP Converter with Cables
- 156843 Flow Control Regulator Service Parts Kit



ProBatch

Meters and Controls

Technical Specifications



Power Requirements	
Electrical	85-265 VAC .25 amp maximum, 50 or 60 Hz
Pneumatic	85-120 psi (5.9-8.3 bar, 0.5-0.8 MPa) @ 1/4 cfm maximum, filtered to 10 micron
Material Requirements	
Number of Fluids (Total of 99 fluids):	
Automatic Dispense:	6 fluids maximum and 6 steps maximum
Manual Dispense:	93 fluids
Specific Gravity	0.5 to 2.0
Viscosity	0.5 to 2000 cps
Dispense Ranges	
Amount	4 oz (118 g) to 5 gallons (18.94 l)
Tolerance	± 1% to 3%
Flow Rates	1/8 to 2 gpm (0.47 to 7.5 lpm)
Scale Data	
Capacity	50 lb (22.7 k) or 5 gal (20 l)
Deck Size	12 in (30.5 cm) x 12 in (30.5 cm)
Container Sizes	
Height maximum	18 in (45.7 cm)
Diameter maximum	12 in (30.5 cm)
Diameter minimum	2.5 in (6.35 cm) for multi-valve dispenses
Recipes	
Quantity	250
Pause times	0.1 to 99 minutes
Pause steps	3 maximum
System	
Weight	125 lb (56.7 kg)
Height (fully extended)	44.5 in (113 cm)
Width	22.2 in (56.4 cm)
Depth	26.1 in (66.3 cm)
Fluid working pressure	250 psi (17.3 bar, 1.7 MPa)
Porting	
Fluid	3/8 in (0.95 cm) npsm(f)
Pneumatic	1/4 in (0.635 cm) npt
Fluid Valves	
3 valve system	(1) 1/8 in (0.32 cm), (2) 1/4 in (0.635 cm)
6 valve system	(2) 1/8 in (0.32 cm), (4) 1/4 in (0.635 cm)
Approvals	ETLul, ETLc, ETLis, EX, CE
Manual	309300
Sales Literature	
ProBatch Brochure	300549

ProBatch

Meters and Controls

Ordering Information

1. Select a ProBatch Unit

- 244440 ProBatch 3-Fluid
Three valves for up to three fluids.
One 1/8 in (3 mm) valve and two 1/4 in (6.3 mm) valves.
- 244441 ProBatch 6-Fluid
Six valves for up to six fluids
Two 1/8 in (3 mm) valves and four 1/4 in (6.3 mm) valves.

2. Accessories

PrecisionView AMR 2.0

- 243377 Single station license
243378 Up to 5 station license
243379 Up to 31 station license

244534 ProBatch Barrier Kit with AMR 2.0

For use in hazardous areas.

244384 1/4" corrosion resistant valve assembly

- 115769 500 ft (152 m) Belden 9841 Network Cable
115770 1,000 ft (304 m) Belden 9841 Network Cable

116542 25 lb (11.3 kg) Calibration Weight
Official weight for calibration of the scale.

197502 Control Box Adapter

Allows the operator to view the screen at a 45° angle.

239873 Printer Kit

Includes 113774 printer and 192491
25 ft (7.6 m) power cable.

514037 Printer Paper

244509 Printer Barrier Kit

For use when ProBatch is in a hazardous area.

197902 Paint Shield Membrane

This clear membrane comes in a pack of 10 and
protects the screen from fluids.

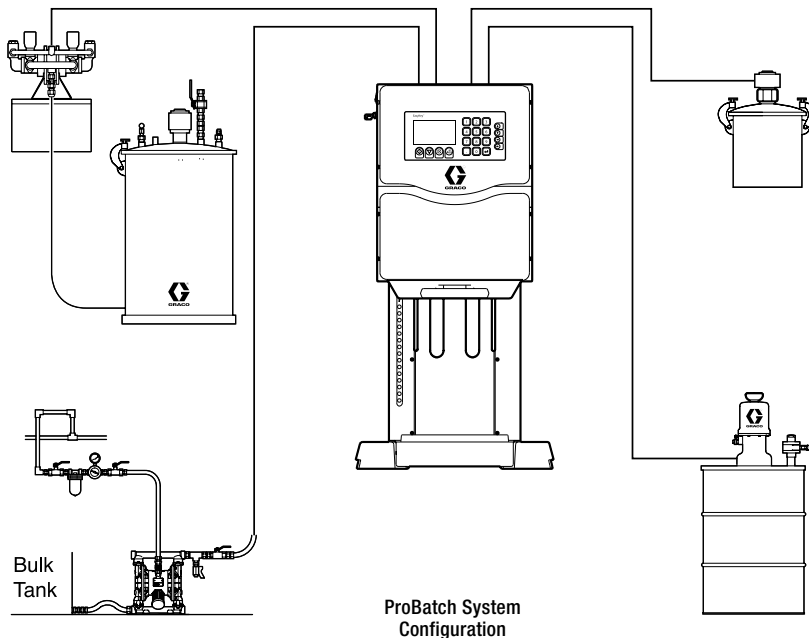
3. Upgrade Kits

- 244382 1/8 in (3 mm) Valve Needle and Nozzle
244383 1/4 in (6.3 mm) Valve Needle and Nozzle
244384 Stainless Steel Valve Needle and Nozzle
244792 Dispense Valve Assembly Kit/Less Valves
Regulator, mounting hardware, tubing, fittings.
244985 High Viscosity Material Kit

4. Repair Kit

- 244385 Needle Nozzle Kit Accessory: 1/8 in (3 mm)
244386 Needle Nozzle Kit Accessory: 1/4 in (6.3 mm)
244387 Needle Nozzle Kit Accessory: Stainless Steel

Note: For fluids with viscosity greater than 2,000 cps, the ProBatch regulators can be bypassed and feed systems connected directly to the valves.



ProDispense

Meters and Controls

Technical Specifications



Power Requirements	
Electrical	85-265 VAC .25 amp maximum, 50 or 60 Hz
Material Requirements	
Number of Fluids	1-3 fluids
Totalizers	
Last dispense	All 3 materials
Resettable	All 3 materials
Grand	All 3 materials
Recipes	250
Dimensions (controller only)	
Weight	12.5 lb (5.67 kg)
Height	12 in (30.5 cm)
Width	22.2 in (56.4 cm)
Depth	10 in (25.4 cm)
Display size	2.40 in (6.1 m) x 4.40 in (11.1 m), 128 x 240 pixels
Fluid Stations	
Cable lengths (for all fluid panels)	
Meter signal	50 ft (15.24 m)
Solenoid signal	50 ft (15.24 m)
Remote operator station	10 ft (3.05 m)
Oil	
Flow rate	0.25-4 gpm (0.95-15 lpm)
Viscosity range	10 weight oil
Accuracy	± 1/2 % on dispenses over one gallon
Resolution	4.73 cc/pulse
Working pressure	1500 psi (103 bar, 10.3 MPa)
Porting sizes (inlet)	1/2 in npt(f)
Porting sizes (outlet)	1/2 in npt(f)
Grease	
Flow rate	0.2-1 gpm (0.76-3.8 lpm)
Viscosity range	20 – 5000 cps
Accuracy	± 3% on dispenses over 12 cc
Resolution	0.119 cc/pulse
Working pressure	3000 psi (207 bar, 20.7 MPa)
Porting sizes (inlet)	1/4 npt(f)
Porting sizes (outlet)	3/8 npt(m)
Air inlet	1/4 npt (f)
Water, Antifreeze	
Flow rate	0.25-4 gpm (0.95-15 lpm)
Viscosity range	1 – 20 cps
Accuracy	± 3% on dispenses over one gallon
Resolution	25 cc/pulse
Working pressure	250 psi (17 bar, 1.7 MPa)
Porting sizes (inlet)	1/2 npt(m)
Porting sizes (outlet)	1/2 npt(m)
Approvals	ETL, CE, CAN/CSA
Manual	309301
Sales Literature	
ProDispense Brochure	300543

ProDispense

Meters and Controls

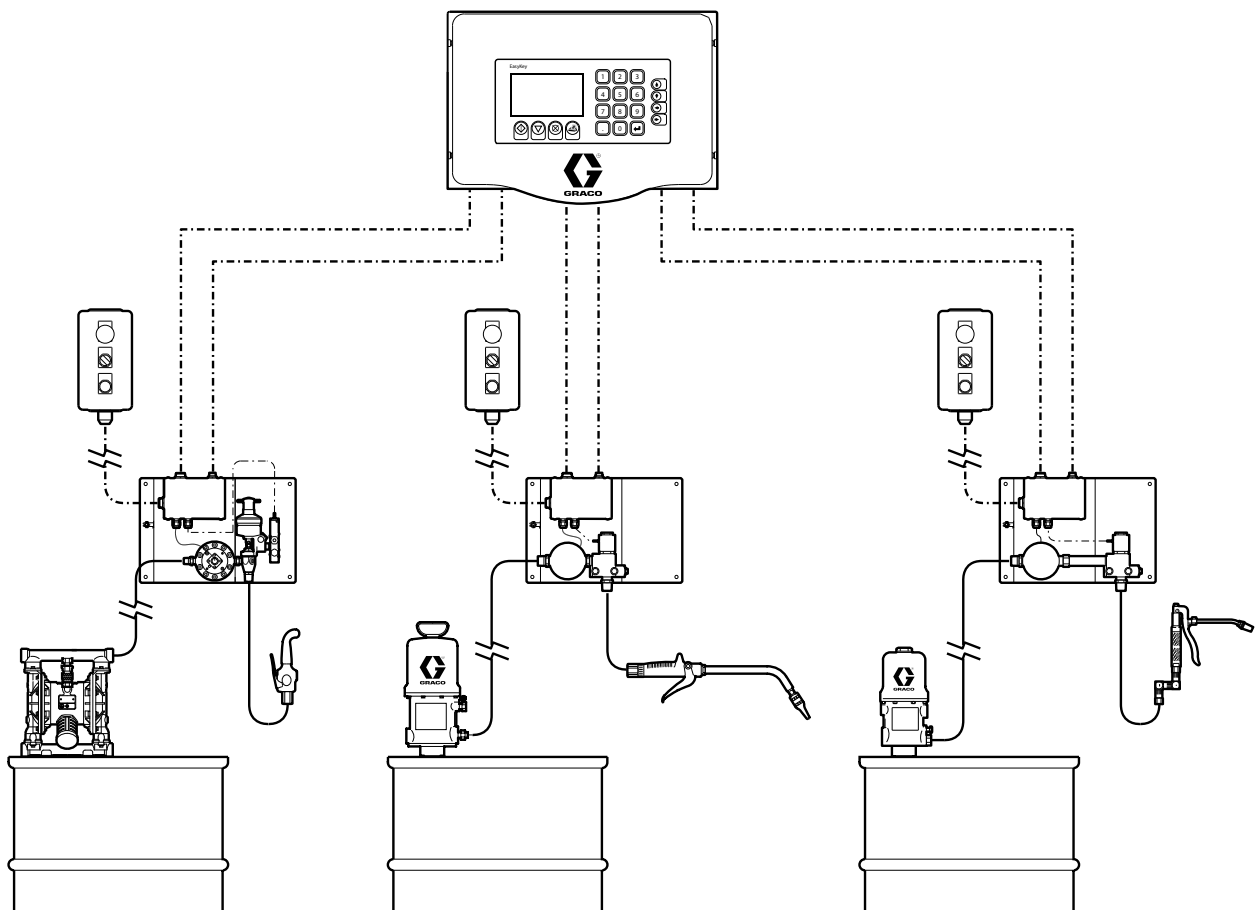
Ordering Information

- 244561 ProDispense FloSync™ Controller
Choose one to three fluid panels.
Order feed equipment separately.
- 244599 Oil Fluid Panel
- 244600 Water Fluid Panel
- 244601 Grease Fluid Panel
- 246839 Helical Meter
- 246837 G3000 HR Meter Panel
- 246838 No Meter Panel

Accessories

- 239873 Printer Kit
Includes 113774 printer and 25 ft (7.6 m)
192491 power cable.
- 514037 Printer Paper
- 244292 G3000HR Meter
0.01 to 0.5 gpm (38 to 1900 cc/min)
Replaces G3000 on grease fluid panel.

Example of
ProDispense Installation



Informer

Meters and Controls

Technical Specifications



Informer	
Controller Specifications	see manual 309102
Power Requirements	9 VDC internal battery at 2 mA, or 12-24 VDC external power supply @10 mA
Pulse Input	8 VDC at 2.5 mA to 24 VDC @ 16 mA current sinking or sourcing, 1000 pulses/sec. max, 50% duty cycle, max. K-Factor is 0.99 cc/pulse
Control Inputs and Outputs	Optically isolated, replaceable fuse, reverse polarity, and over-voltage protected
Batch reset input	8 VDC @ 2.5 mA to 24 VDC @ 16 mA current sinking or sourcing, 50 mS pulse width minimum
Batch alarm output	24 VDC, 150 mA max, current sinking or sourcing
User alarm output	24 VDC, 150 mA max, current sinking or sourcing
Maximum network cable lengths	1200 ft (366 m)
Operating temperature	32° to 140°F (0° to 60°C)
Storage temperature	-67° to 140°F (-55° to 60°C)
Humidity	0 to 95%, non-condensing
Housing meets NEMA 12 requirements. Components are solvent resistant.	
Intrinsically safe (Class I, Div. I, Group D) when battery powered, or externally powered through an Intrinsically Safe Barrier and all communication and I/O connections are passed through Intrinsically Safe Barriers. ETL, cETL, Ex. and CE compliant.	
Display weight	1.1 lb (0.5 kg)
Display and G3000 meter weight	6.3 lb (2.86 kg)
Meter Specifications (G3000/G3000HR - see manual 308778)	
Maximum Working Fluid Pressure	4000 psi (276 bar, 27.6 MPa)
Flow Range	0.02 to 1.0 gal/min (75 to 3800 cc/min)
Fluid Temperature Range	40 to 180° F (4 to 80° C)
Maximum Ambient Temperature	180° F (80° C)
Fluid Viscosity Range	20 to 3000 cps
Maximum Cable Length	200 ft (61 m)
Flow Meter Inlet/Outlet	1/4 npt(f)
Resolution	~ 0.119 cc/pulse
Accuracy	± 0.5%*
Supply Voltage	10 to 30 Vdc
Intrinsic Safety	Class I; Div 1; Group D V max. = 30 V, I max. = 15 mA, Ci = 0.2 f, Li = 0mH
Wetted Parts	303 Stainless Steel, Tungsten Carbide, PTFE

Instruction manual [309219](#) (PrecisionView AMR Specifications)

* For most commonly used coatings, the flow meter reading will be accurate to within ± 0.5%. Accuracy will diminish at low viscosities and low flow rates.

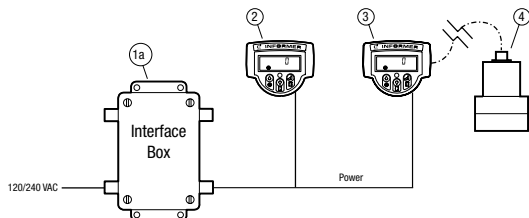
Informer

Meters and Controls

Ordering Information

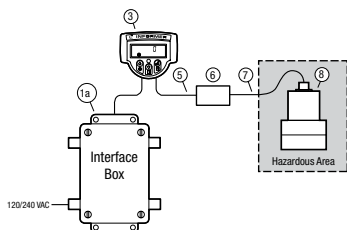
Without AMR

Informer with remote power in a non-hazardous area



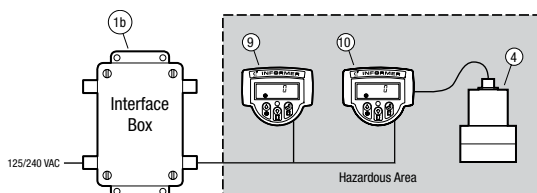
Maximum 10 Informers per Interface Box

Informer with remote power. Informer in a non-hazardous area and meter in hazardous area



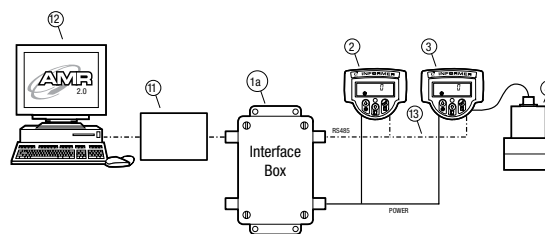
Maximum 10 Informers per Interface Box

Informer with remote power in a hazardous area

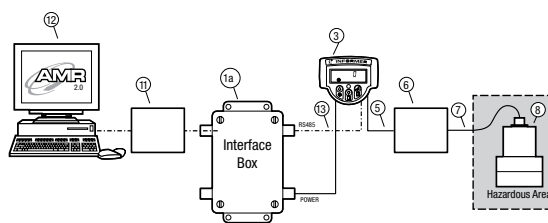


Maximum 2 Informers per Interface Box

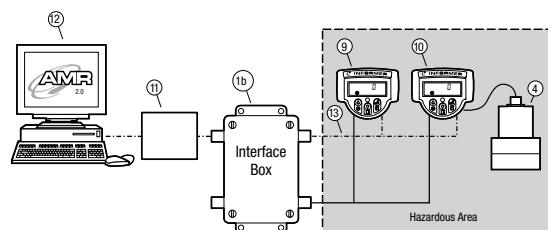
Without AMR



Maximum 10 Informers per Interface Box



Maximum 10 Informers per Interface Box



Maximum 2 Informers per Interface Box

Ordering Information

- 1a 244773 Informer interface box for non-hazardous area - power supply included
- 1b 244775 Informer interface box for hazardous area - power supply included
- 2 288665 Informer with G3000 Flow Meter
- 288717 Informer with G3000HR Flow Meter
- 3 Remote Informer
 - 288666 Remote Informer display with 1/2 in (12.27 mm) pipe mounting hardware
 - 288667 Remote Informer display with 3/4 in (19 mm) pipe mounting hardware
 - 288668 Remote Informer display with 1 in (25.4 mm) pipe mounting hardware
 - 288669 Remote Informer display with wall mounting hardware
 - 288670 Remote Informer display with DIN rail mounting hardware
- 4 Flow Meter with Cable
 - 243554 G3000 Flow Meter
 - 234106 G3000HR Flow Meter
- 5 513652 Cable
- 6 111985 IS barrier
- 7 948928 Cable

- 8 Flow Meter
 - 239716 G3000 Flow Meter
 - 244292 G3000HR Flow Meter
- 9 243312 Informer with G3000 Flow Meter
- 234105 Informer with G3000HR Flow Meter
- 10 Remote Informer
 - 243313 Display with 1/2 in (12.7 mm) pipe mount
 - 243314 Display with 3/4 in (19 mm) pipe mount
 - 243315 Display with 1 in (25.4 mm) pipe mount
 - 243316 Display with wall mount
 - 243317 Display with DIN rail mount
- 11 244778 RS232 to RS485 converter (Ethernet to RS485, contact Graco)
- 12 Precision View AMR
 - 244107 Single station license
 - 244108 Up to 5 station license
 - 244109 Up to 31 station license
- 13 Network Cable-Belden 9841
 - 115769 500 ft (15.2m)
 - 115770 1000 ft (30.4m)

Flow Meters

For Proportioning Equipment

Technical Specifications

G250, G250HR and G3000, G3000HR Gear Flow Meters

	G250	G250HR	G3000	G3000HR	S3000
Part number	249426	249427	239716 289813 (90° Sensor)	244292 289814 (90° Sensor)	258718
Maximum working fluid pressure	250 psi (17 bar, 1.7 MPa)	250 psi (17 bar, 1.7 MPa)	4000 psi (276 bar, 28 MPa)	4000 psi (276 bar, 28 MPa)	3000 psi (207 bar, 20 MPa)
Flow range	75 - 3,800 cc/min	38 - 1,900 cc/min	75 - 3,800 cc/min	38 - 1,900 cc/min	50 - 2,000 cc/min
Viscosity range	20 - 3,000 cps	20 - 3,000 cps	20 - 3,000 cps	20 - 3,000 cps	0.5 - 1,000 cps
Resolution	0.119 cc/pulse	0.061 cc/pulse	0.119 cc/pulse	0.061 cc/pulse	0.021 cc/pulse
Material compatibility	Solventborne paints and resins (low solids), oil and catalysts	Solventborne paints and resins (low solids), oil and catalysts	Solventborne paints and resins (low solids), oil and catalysts	Solventborne paints and resins (low solids), oil and catalysts	Solvents, solventborne paints (no filled materials), oil and catalysts
Wetted parts	303 SST, tungsten carbide and PTFE	303 SST, tungsten carbide and PTFE	303 SST, tungsten carbide and PTFE	303 SST, tungsten carbide and PTFE	303 SST and PTFE
Recommended uses	Most commonly used flow meter in finishing applications. Uses include solventborne polyurethanes and epoxies	Low flow version of G3000. Flow rates as low as 50 cc/min	Most commonly used flow meter in finishing applications. Uses include solventborne polyurethanes and epoxies	Low flow version of G3000. Flow rates as low as 50 cc/min	Solvent tracking and metering of low viscosity materials
Instruction manuals	308778	308778	308778	308778	308778

HG6000, HG6000HR and CORIOLIS Mass Flow Meters

	HG6000	HG6000HR	Coriolis Mass Flow	Coriolis Mass Flow
Part number	280560	246652	15T633* (1/8" ID)	15T634** (3/8" ID)
Maximum working fluid pressure	6000 psi (410 bar, 41 MPa)	6000 psi (410 bar, 41 MPa)	2300 psi (158 bar, 16 MPa)	2300 psi (158 bar, 16 MPa)
Flow range	50 - 22,700 cc/min	25 - 7,571 cc/min	20 - 4,000 cc/min	20 - 8,000 cc/min
Viscosity range	30 - 1,000,000 cps	30 - 1,000,000 cps	0.1 - 3,000 cps	0.1 - 3,000 cps
Resolution	0.286 cc/pulse	0.143 cc/pulse	0.061 cc/pulse, adjustable	0.061 cc/pulse, adjustable
Material compatibility	Solventborne and waterborne paints and resins, oil and catalysts	Solventborne paints and resins, oil and catalysts	Solventborne and waterborne materials, catalyzed varnishes and oil	Solventborne and waterborne materials, catalyzed varnishes and oil
Wetted parts	303 SST, tungsten carbide, and PTFE	303 SST, tungsten carbide, and PTFE	303 and 440 SST and PTFE	303 and 440 SST and PTFE
Recommended uses	Use with viscosities up to 100,000 cps and when flow rates exceed 4000 cc/min	Low flow version of G3000. Flow rates as low as 50 cc/min	Use with virtually any material and flow rate. Non intrusive design. Common uses include waterborne and acid-based materials	High flow version of 15D135
Instruction manuals	309834	309834	310696	310696

*ProMix 2KS meter kit part number 15V806

**ProMix 2KS meter kit part number 258151



G250
G250 HR



G3000
G3000 HR



S3000



HG6000



Coriolis Flow Meter

Gun Flush Box

Automated Flushing System

Technical Specifications



Gun Flush Box	
Wetted parts	Stainless steel, nylon, Delrin
Waste container port	2 npt(f)
Weight	22 lb (9.6 kg)
Dimensions (L x W x H)	
Door closed	11 in x 7 in 16 in (22 cm x 19 cm x 47 cm)
Door open	11 in x 7 in 23 in (33 cm x 19 cm x 68 cm)
Instruction manual	308783

Ordering Information

Gun Holder

- 198405 PRO™ Xs3, PRO Xs4
- 198787 PRO Xs2
- 196768 PRO 3500, 3500hc, 4500
- 196769 Delta Spray® Gun
- 15G093 G15 AA Series Gun
- 15G346 G40 AA Series Gun
- 196767 Devilbiss JGA/MSA

244169 Gun Holder Conversion Kit

Allows mounting of new gun holder in older style gun flush box (part no. 570046). Requires purchase of appropriate gun holder.

244373 Gun Switch/Yoke Conversion Kit

Converts older style gun flush box (part no. 570046) to new style upper gun switch/yoke assembly.

570123 Wall Mount Kit

For mounting the Gun Flush Box to the spray booth wall.

Gun Flush Box Retrofit Kits for PrecisionMix II

241389 One Gun

241394 Two Guns

234588 Gun Flush Box for ProMix II

Used to add a Gun Flush Box to a ProMix II unit. Contains Gun Flush Box and all necessary control hardware.

244105 Gun Flush Box Module

Stand alone Gun Flush Box without atomizing air shutoff kit, solenoid box or pressure switch.

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Industrial Customer Service

Hours: Monday-Friday 7:30 AM - 5:30 PM Central Time

Phone: 800-328-0211

Fax: 877-340-6427

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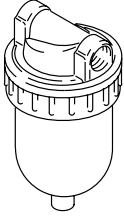


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Air Supply Controls

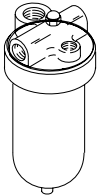
Air Filters

Centrifugal action and 20-40 micron elements remove water and foreign particles from plant air supply. Protects valuable air-powered pumps from corrosive damage.



106148,
106149,
106150

Part No.	Inlet/Outlet npt	Max WPR			Max CFM at 100 psi (m ³ /min)	Micron Element	Material	Size (w x h x l) in (cm)	Inst. Manual
		psi	bar	MPa					
106148	3/8(fxf)	250	17.2	1.72	77 (2.2)	20	Zinc-plated	2.5 x 6.0 x 3.1 (6.4 x 41 x 7.9)	308169
106149	1/2(fxf)	250	17.2	1.72	106 (3.0)	20	Zinc-plated	3.3 x 6.8 x 6.3 (8.3 x 17 x 16)	308169
106150	3/4(fxf)	250	17.2	1.72	250 (7.0)	40	Zinc-plated	4.0 x 8.8 x 7.8 (10 x 22 x 20)	308169
112859	1(fxf)	250	17.2	1.72	350 (10.0)	40	Zinc-plated	4.5 x 8.8 x 7.9 (12 x 22 x 20)	308169

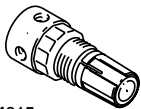


217074

217074	1/2(fxf)	250	17.2	1.72	106 (3.0)	40	Zinc-plated	3.0 x 7.5 x 6.6 (7.6 x 19 x 17)	308169
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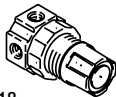
Low Volume Air Regulators

Precision control of outlet air pressure. Feedback principle allows constant pressure to pump regardless of air demand rate and fluctuation in supply pressure. Maximum working pressure 300 psi (21 bar, 2.1 MPa).



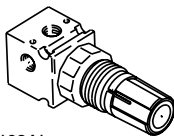
104815

Bare Part No	Assy. Part No*	Inlet/Outlet npt	Gauge Ports npt	Regulated Pressure			Max CFM at 100 psi (m ³ /min)	Material	Inst. Manual
				psi	bar	MPa			
104815		1/8(f)	1/8(f)	0-60	0-4.1	0-0.41	15 (0.4)	Zinc-plated	308167



110318

110318		1/4(f)	1/8(f)	0-180	0-12.4	0-1.24	15 (0.4)	Zinc-plated	308167
	110147	1/4(f)							



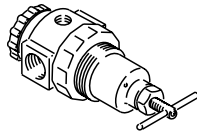
110341,
111804

110341		1/8(f)	1/8(f)	0-125	0-8.6	0-0.86	39 (1.1)	Zinc-plated	308167
111804		1/4(f)	1/8(f)	0-125	0-8.6	0-0.86	39 (1.1)	Zinc-plated	308167

*Assemblies include gauge

Air Supply Controls

Low Volume Air Regulators (continued)



110234,
104266,
104267,
171937

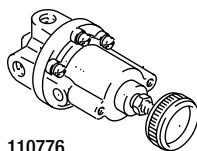
Bare Part No	Assy. Part No*	Inlet/Outlet npt	Gauge Ports npt	Regulated Pressure			Max CFM at 100 psi (m³/min)	Material	Inst. Manual
				psi	bar	MPa			
110234		3/8(f)	1/4(f)	0-250	0-17.2	0-1.72	90 (2.5)	Zinc-plated	308167
	109075	3/8(f)							
	224512	3/8 x 3/8 ball valve(m)							
	224024	1/4 QD x 3/8(f)							
104266		1/2(f)	1/4(f)	0-250	0-17.2	0-1.72	90 (2.5)	Zinc-plated	308167
	203716	1/2 90° swivel(f) x 3/8(m)							
	202858	1/2 swivel(f) x 3/8(f)							
	202156	1/2 x 3/8 bushing, gauge							
	223815	1/2 swivel, ball valve, gauge (also order nipple 162505)							
104267		1/2(f)	1/4(f)	0-125	0-8.6	0-0.86	90 (2.5)	Zinc-plated	308167
	206237	1/2 npsm(f) x 3/8 ball valve(m)							
171937		1/2(f)	1/4(f)	0-125	0-8.6	0-0.86	90 (2.5)	Zinc-plated	308167

*Assemblies include gauge

Low Pressure Air Regulators

Part Number	Description	Inlet	Outlet	Handle	Maximum Inlet Pressure	Max. CFM	Inst. Manual
234389	Air regulator with gauge, self-relieving	1/4" npt (m)	1/4" npt (f)	Knob	160 psi (1.1 MPa, 11 bar)	22 CFM at 50 psi (0.3 MPa, 3.5 bar)	309924
234390	Mini-air regulator	1/4" npt (f)	1/4" npt (f)	Knob	160 psi (1.1 MPa, 11 bar)	22 CFM at 50 psi (0.3 MPa, 3.5 bar)	309924
234391	Air regulator, 2 regulated outlets and 1 non-regulated outlet	3/8" npt (f)	1/4" npt (f)	Tee	175 psi (1.2 MPa, 12 bar)	50 CFM at 100 psi (0.7 MPa, 7 bar)	309924
234392	Air regulator, 3 regulated outlets	3/8" npt (f)	1/4" npt (f)	Tee	175 psi (1.2 MPa, 12 bar)	50 CFM at 100 psi (0.7 MPa, 7 bar)	309924
234393	Air regulator 234391 with gauge & shut-off valve, 1 regulated outlet and 1 non-regulated outlet, 0-160 psi (0-1.1MPa, 0-11 bar) gauge	3/8" npt (m)	1/4" npt (f)	Tee	160 psi (1.1 MPa, 11 bar)	50 CFM at 100 psi (0.7 MPa, 7 bar)	309924
234394	Air regulator 234392 with gauge & shut-off valve, 2 regulated outlets, 0-160 psi (0-1.1 MPa, 0-11 bar) gauge	3/8" npt (m)	1/4" npt (f)	Tee	160 psi (1.1 MPa, 11 bar)	50 CFM at 100 psi (0.7 MPa, 7 bar)	309924

HVLP Air Regulator



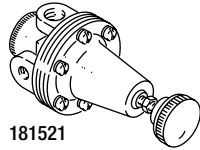
110776

Bare Part No	Inlet/Outlet npt	Regulated Pressure			Max. Working Pressure			Inst. Manual
		psi	bar	MPa	psi	bar	MPa	
110776	1/4(fxf)	0-10	0-0.7	0-0.07	100	7	0.7	308024

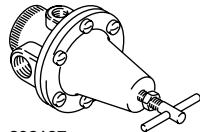
Air Supply Controls

High Volume Air Regulators

Precision control of outlet air pressure. For use in systems requiring up to a maximum 380 scfm (10.6 m³/min.). Maximum working pressure 300 psi (20.7 bar, 2.0 MPa).



181521



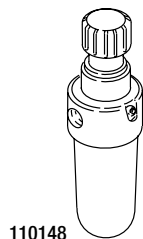
206197,
207755

Bare Part No	Assy. Part No*	Inlet/Outlet npt	Gauge Ports npt	Regulated Pressure			Max CFM at 100 psi (m ³ /min)	Material	Size (w x h) in (cm)	Inst. Manual
				psi	bar	MPa				
181521		1/2(f)	1/4(f)	0-75	0-5	0-0.5	200 (5.6)	Zinc/Alum.	3.25 x 7.1 (8.3 x 18)	308168
206197		1/2(f)	1/4(f)	0-125	0-9	0-0.9	200 (5.6)	Zinc/Alum.	3.25 x 7.1 (8.3 x 18)	308168
207755	205712	3/4 swivel(f) x 3/4(m) hose	1/4(f)	0-125	0-9	0-0.9	380 (10.6)	Zinc	4.25 x 7.9 (11 x 20)	308168
207755	207651	3/4 swivel(f) x 3/4(m) hose	1/4(f)	0-125	0-9	0-0.9	380 (10.6)	Zinc	4.25 x 7.9 (11 x 20)	308168
180187		3/4(f)	1/4(f)	0-80	0-6	0-0.6	380 (10.6)	Zinc	4.25 x 7.9 (11 x 20)	308168
	218315	3/4 swivel(f) x 3/4(m) hose	1/4(f)	0-125	0-9	0-0.9	380 (10.6)	Zinc	4.4 x 10.4 (11.2 x 26)	308168
112728		1(f)	1/4(f)	0-125	0-9	0-0.9	380 (10.6)	Zinc	4.4 x 10.4 (11.2 x 26)	308168

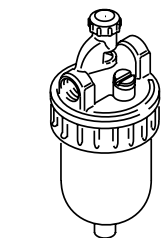
*Assemblies include gauge, air manifold and bleed valve

Air Lubricators

Extends life of pump and smoothes pump movement by applying measured lubricant to all moving parts within the pump air motor. Control knob and sight window allow adjustment of lubricant dispensed.



110148



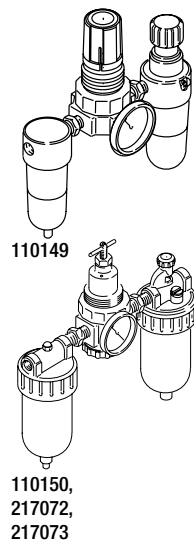
214847,
214848,
214849

Part No.	Inlet/Outlet npt	Max WPR			Material	Size (w x h) in (cm)	Bowl Capacity	Ins. Manual
		psi	bar	MPa				
110148	1/4(f)	300	21	2.1	Zinc/ Alum.	1.5 x 5.0 (3.9 x 12.6)	1 oz (0.03 l)	308169
214847	3/8(f)	250	17.2	1.72	Zinc	2.5 x 7.2 (6.4 x 18.2)	5 oz (0.15 l)	308169
214848	1/2(f)	250	17.2	1.72	Zinc	3.3 x 7.9 (8.3 x 20)	8 oz (0.24 l)	308169
214849	3/4(f)	250	17.2	1.72	Zinc	4.0 x 9.9 (10.3 x 25.1)	16 oz (0.5 l)	308169
237212	1(f)	250	17.2	1.72	Zinc/ Alum.	4.0 x 9.9 (10.3 x 25.1)	16 oz (0.5 l)	308169

Air Supply Controls

Air Filter-Regulator-Lubricator (FRL) Kits

Easy-to-install combination packaged units include air filter, regulator, pressure gauge, lubricator, mounting bracket(s) and connection fittings.

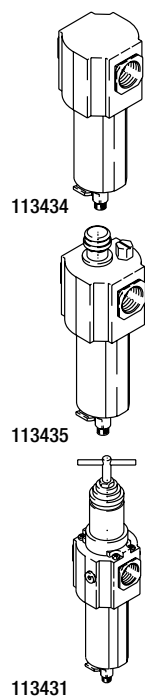


Part No.	Inlet/Outlet npt	Max WPR			Material	Size (w x h) in (cm)	Inst. Manual
		psi	bar	MPa			
110149	1/4(f)	300	21	2.1	Zinc	5.1 x 5.1 x 1.6 (13 x 13 x 4.0)	308167 308169
110150	3/8(f)	250	17.2	1.72	Zinc	8.8 x 9.6 x 4.1 (22 x 24 x 10.5)	308167 308169
217072	1/2(f)	250	17.2	1.72	Zinc	8.1 x 10.4 x 4.0 (21 x 26 x 10.5)	308167 308169
217073	3/4(f)	250	17.2	1.72	Zinc	15.8 x 13 x 5.0 (40 x 33 x 12.7)	308167 308169
222345*	1/2(f)	250	17.2	1.72	Zinc	15.8 x 13 x 5.0 (40 x 33 x 12.7)	308167 308169

*Note: includes valve 107142, coupled hose, brackets, gauge, union swivel adapter

Modular Style Air Controls

Compact, easy to install and service.

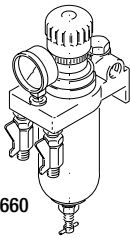


Part No.	Inlet/Outlet npt	Max WPR			Material	Size (w x h) in (cm)	Inst. Manual
		psi	bar	MPa			
113434	3/4(f)	250	17	1.7	Aluminum	3.15 x 9.3 (8 x 23)	308722
113435	3/4(f)	250	17	1.7	Aluminum	3.15 x 14 (8 x 35.5)	308722
113494	3/4(f)	250	17	1.7	Aluminum	3.15 x 13 (8 x 33)	308722
113431	N/A	250	17	1.7	Aluminum		308722

Air Supply Controls

Air Transformers

Use for air spray gun supply. Filters, regulates and maintains pressure for spray painting and other applications.

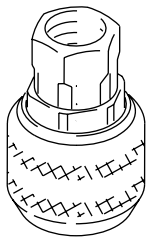


202660

Part No.	Inlet npt	Outlet npt(m)	Inst. Manual
202660	1/2(f)	Two 1/4 regulated	306273 307476
217075	1/2(f)	Two 1/4 regulated or Two 1/4 unregulated	306273 307476

Quick-Connect Air Supply Couplers

Fast, convenient air hose attachment. Female thread allows easy attachment to Graco air hoses. Use with nipples below.

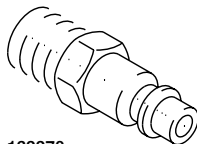


208536

Part No.	Inlet npt	QD	Max WPR			Material
			psi	bar	MPa	
208536	1/4(f)	1/4	300	21	2.1	Brass
110198	3/8(f)	3/8	300	21	2.1	Brass
110199	1/2(f)	1/2	300	21	2.1	Brass
110200	3/4(f)	3/4	300	21	2.1	Brass

Quick-Connect Air Supply Nipples (Pin)

Easy attachment to air motor inlet. Male fitting allows threading directly into Graco air motors.



169970

Part No.	Inlet npt	QD	Max WPR			Material
			psi	bar	MPa	
169967	1/4(f)	1/4	300	21	2.1	Steel
169970	1/4(f)	1/4	300	21	2.1	Steel
169971	3/8(f)	3/8	300	21	2.1	Steel
110196	1/2(f)	1/2	300	21	2.1	Steel
110197	3/4(f)	3/4	300	21	2.1	Steel

Air Supply Hoses

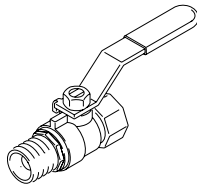
Available in both fabric-reinforced and self-storing coil styles for general purpose use. Full selection of standard hose lengths. See Hose section beginning on page 171.

Air Supply Controls

Air Shut-Off Valves – Bleed Type

Closes air inlet to pump or accessory and relieves trapped air pressure. Recommended for each drop line.

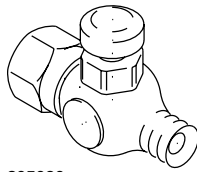
Part No.	Inlet/Outlet npt	Max WPR			Material
		psi	bar	MPa	
110223	1/4(fxf)	250	17.2	1.7	Brass
110224	3/8(fxf)	250	17.2	1.7	Brass
110225	1/2(fxf)	250	17.2	1.7	Brass
110226	3/4(fxf)	250	17.2	1.7	Brass
113163	1(fxf)	250	17.2	1.7	Brass
107142	1/2(mxf)	250	17.2	1.7	Brass
107141	3/4(mxf)	250	17.2	1.7	Brass



107141

Air Needle Valve

Regulates air flow by rotating tapered stem in or out of the valve orifice.

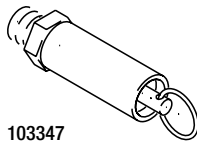


205090

Part No.	Inlet npt	Outlet npt	Max WPR		
			psi	bar	MPa
205090	1/4(m)	1/4(m)	250	17.2	1.7
206264	1/4(m)	1/8(f)	250	17.2	1.7
205528	1/8(f)	1/8(m)	250	17.2	1.7
206264	1/8(f)	1/4(m)	250	17.2	1.7

Air Pressure Relief Valve

Relief valve opens at a pre-set maximum air pressure to prevent pump from operating beyond the recommended working pressure.



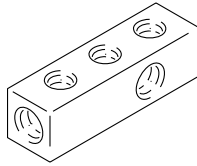
103347

Part No.	Inlet npt	Max WPR			Material
		psi	bar	MPa	
103347	1/4(m)	100	7	0.7	Brass
108124	1/4(m)	75	5.2	0.52	Brass
110065	1/4(m)	60	4	0.4	Brass
214691	1/8(m)	50	3.5	0.35	Alum.
112059	1/8(m)	20	1.4	0.14	Brass
106492	1/4(m)	2.5-5.5	0.2-0.4	0.02-0.04	Brass

Air Supply Controls

Manifolds

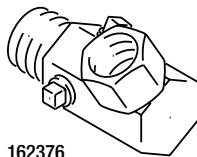
Supply several pumps from a common air supply line. Air inlet port is larger than delivery ports to ensure adequate air flow to all pumps (excluding 177117)



158990

Part No.	Inlet npt	Outlet npt	Max WPR			Material
			psi	bar	MPa	
158990	Two 1/2(f)	Four 3/8	250	17.2	1.7	CS
601950	Two 3/4(f)	Three 1/2	180	12.4	1.2	CS
177117	One 1/2(f)	Five 1/2	180	12.4	1.2	CS

90° Air Manifolds

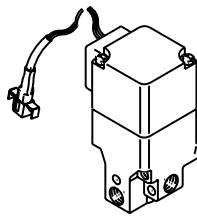


162376

Part No.	Inlet/Outlet npt	Port	Max WPR			Material
			psi	bar	MPa	
162376	1/2 npt(mx f)	1/4 npt(f)	300	20.6	2.0	CS
161262	1/2 npt(m) x 1/2 npsm(f)	1/4 npt(f)	300	20.6	2.0	CS
206205	3/4 npsm(f) x 1/2 npt(m) (threaded studs)	One 1/4 npt(f) and one 1/8 npt(f)	300	20.6	2.0	CS
207675	3/4 npt(f) x 3/4 npt(m) (threaded studs)	One 1/4 npt(f) and one 1/8 npt(f)	300	20.6	2.0	CS

3-Way Solenoid Valve

3-way configuration allows valve to be used normally when opened or closed with downstream bleed for pressure relief. Operates on 24 VDC or 115 VAC, 60 Hz or 115 VAC, 50 Hz.

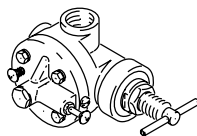


215407

Part No.	Inlet npt	Material	Max WPR		
			psi	bar	MPa
215407	1/2(f)	CS with Zinc plating, Alum., SST	42 scfm	20.6	2.0
105474	1/4(f)	Alum., Brass	14 scfm		

AirGard Runaway Valve

Senses runaway conditions due to empty barrel or hose leak. Automatically stops air supply to the pump. Protects pump from damage due to a runaway condition.



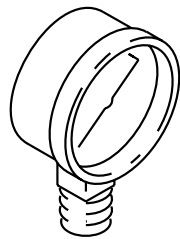
224040

Part No.	Inlet/ Outlet npt	Max WPR			Max CFM at 100 psi (m³/min)	Material	Size (l x w x h) in (mm)	Inst. Manual
		psi	bar	MPa				
224040	3/4(fx f)	120	8.3	0.83	5-250 (0.14-7.0)	Alum. Alloy	6.5 x 4.9 x 3.6 (16.5 x 12.5 x 9.1)	308201

Air Supply Controls

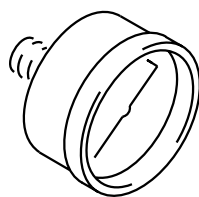
Air Pressure Gauges

Allow visual check of air pressure being supplied to pump. Rated to 200 psi (14 bar, 1.4 MPa).



100960

Part No.	Inlet npt	Max WPR			Ring Description	Dial Diameter in (mm)	Mount Style
		psi	bar	MPa			
160430	1/4(m)	100	7	0.7	black	2.0 (51)	bottom
100960	1/4(m)	200	14	1.4	black	2.0 (51)	bottom
101180*	1/4(m)	200	14	1.4	chrome	2.0 (51)	bottom
104655	1/8(m)	60	4	0.4	black	1.5 (38)	bottom
110319	1/8(m)	200	14	1.4	black	1.5 (38)	bottom
185350*	1/4(m)	15	1.1	0.11	black	3.5 (89)	bottom
111598	1/8(m)	160	11	0.11	black	1.5 (38)	bottom
101689	1/4(m)	200	14	1.4	chrome	2.0 (51)	back
102730	1/8(m)	15	1.1	0.11	black	2.0 (51)	back
111500	1/8(m)	15	1.1	0.11	black	1.5 (38)	back
108190*	1/8(m)	100	7	0.7	black	1.5 (38)	back



108190

*Also can be used as a fluid gauge
Note: 102019 replacement glass, 2 in (51 mm). Note: refer to page 89 for fluid gauges.

Protective Vinyl Lens Covers

Peel and stick clear vinyl gauge lens glass covers. Easy to replace to remove dirt and overspray. Sold by sheet with 12 stickers each.

Part No.	Description
193199	For 2 in (51 mm) lens

Air Line Desiccant Dryer

Dries compressed air. Removes corrosive moisture that will damage air motors. Protects drum contents from moisture.

Part No.	Description	Air Inlet	Air Outlet	Air Flow Capacity	Max Operating Pressure	Inst. Manual
217341	Air Line Desiccant Dryer	1/2" npt(f)	1/2" npt(f)	15 CFM	150 psi (17.5 bar, 1.7 MPa)	307548
106493	Desiccant air dryer					307548

Note: 106498 desiccant replacement, 1 qt (0.95 l). Approximately 250 55 gal (205 l) drums.

Air Supply Controls

Desiccant Air Drying System

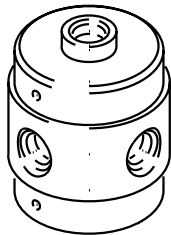
Part No.	Description	Air Inlet	Air Outlet	Air Flow Capacity	Max Operating Pressure	Inst. Manual
234401	3 stage systems includes 234402, 234403 and 234404					309921
234402	Stage 1 – Air filter with auto drain, removes water and contaminants down to 5 microns	1/2" npt(f)	1/2" npt(f)	108 CFM	175 psi (1.2 MPa, 12 bar)	309921
234403	Stage 2 – Coalescer with auto drain, removes oil and sub-micronic particles down to .01 microns	1/2" npt(f)	1/2" npt(f)	35 CFM	175 psi (1.2 MPa, 12 bar)	309921
234404	Stage 3 – Desiccant housing, removes uncondensed moisture	3/4" Reduced to 1/2" npt(f)	3/4" Reduced to 3/8" npt(f)	30 CFM	175 psi (1.2 MPa, 12 bar)	309921
U06765	Replacement Desiccant 4-pack (1 gallon each)					309921

Membrane Air Drying System

Part No.	Description	Air Inlet	Air Outlet	Air Flow Capacity	Max Operating Pressure	Inst. Manual
234418	3 stage systems includes 234406, 234397 and 118560					309920
234406	Stage 1 – Air filter with auto drain, removes water and contaminants down to 5 microns	1/2" npt(f)	1/2" npt(f)	108 CFM	175 psi (1.2 MPa, 12 bar)	309920
234397	Stage 2 – Coalescer with auto drain, removes oil and sub-micronic particles down to .01 microns	1/2" npt(f)	1/2" npt(f)	70 CFM	175 psi (1.2 MPa, 12 bar)	309920
118560	Stage 3 – Membrane air dryer, removes uncondensed moisture	1/2" npt(f)	1/2" npt(f)	30 CFM	175 psi (1.2 MPa, 12 bar)	309920
234394	Self-relieving air regulator	3/8" npt(f)	1/4" npt(f)	100 CFM	160 psi (1.2 MPa, 11 bar)	309920
U22695	Shut off valve					309920

Air Pilot Valve

Uses signal air pressure to open the main air supply for Monark and Fire-Ball pumps.



104633

Part No.	Pilot npt	Port npt	Material
104633	One 1/8(f)	Three 1/4(f)	Steel, Brass, SST
212097			
104632	One 1/8(f)	Three 1/2(f)	Alum.
212098			

Air Supply Controls

Quick Exhaust

Provides fast venting of pump air motor exhaust.

Part No.	Inlet/Outlet npt	Exhaust npt	Material
104661	1/8(f)	1/4(f)	Alum.

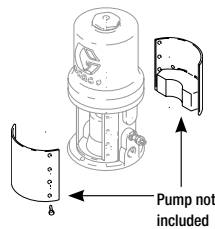
Air Start Switches

Air start switch allows hands free activation or shut-off of compressed air supply to pumps and other repetitive air operation dispense valves.

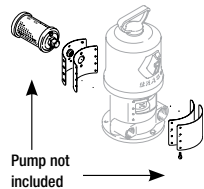
Part No.	Description	Tube Fittings npt	Material
104631	Foot-activated	1/4 npt(f) x tube	Steel
212099	Installation kit includes 104631 and tube fitting		
104165	Fitting	1/4(m) x 1/4 OD tube	Brass
104172	Fitting	1/8(m) x 1/4(m) tube	Brass

Air Motor Mufflers

Air start switch allows hands free activation or shut-off of compressed air supply to pumps and other repetitive air operation dispense valves.



241953



243801

Part No.	Air Motor	Material	Inst. Manual	dBa
241953	Monark	CS, Foam	406443	96
243801	President Remote Exhaust	CS, Foam	309152	–
222559	Fire-Ball	CS, Foam	307942	–
243421	President	CS, Foam	309094	75
214766	Bulldog	CS, Brass wool	307342	–
208804	Bulldog, King	CS, Brass wool	307104	80

Air Supply Controls

In-Line Air Filters and Air Filter/Regulator Systems

Part No.	Description	Max. Air Inlet Pressure	Weight	Max. CFM	Inst. Manual
234398	Air control unit, filtered main air outlet, two regulated outlets (Filter 234396)	160 psi (1.1 MPa, 11 bar)	5 lb 12 oz (2.6 kg)	120 CFM— Filter 50 CFM— Air Regulator	309923
234399	Air control unit, filtered main air outlet with gauge, two regulated outlets (Filter 234396)	160 psi (1.1 MPa, 11 bar)	6 lb 4 oz (2.8 kg)	120 CFM— Filter 50 CFM— Air Regulator	309923
234400	Air control unit, filtered main air outlet with gauge, three regulated outlets (Filter 234396)	160 psi (1.1 MPa, 11 bar)	7 lb 13 oz (3.5 kg)	120 CFM— Filter 50 CFM— Air Regulator	309923
234411	Air control unit, filtered main air outlet, two regulated outlets (Filter 234410)	160 psi (1.1 MPa, 11 bar)	4 lb 13 oz (2.2 kg)	75 CFM — Filter 50 CFM— Air Regulator	309923

Air Filters with 5 Micron Filtration

Part No.	Description	Inlet	Outlet	Max. Air Inlet Pressure	Weight	Max. CFM	Inst. Manual
234396	Air filter, bare	1/2" npt (f)	3/8" npt (f)	175 psi (1.2 MPa, 12 bar)	3 lb 10 oz (1.6 kg)	120 CFM	309923
234412	Air filter, quick coupler	1/4" npt (f)	1/4" npt (f) 1/4" npt (f) plugged	175 psi (1.2 MPa, 12 bar)	3 lb 2 oz (1.4 kg)	75 CFM	309923
234392	Air regulator					50 CFM	309923

In-Line Air Filters and Coalescers

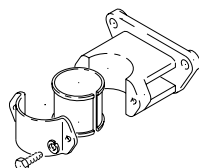
Part No.	Description	Air Inlet	Air Outlet	Air Flow Capacity	Maximum Inlet Pressure	Inst. Manual
234405	Air filter/coalescer assembly (both with auto drain)	1/2" npt (f)	1/2" npt (f)	70 CFM	175 psi (1.2 MPa, 12 bar)	309919
234406	Stage 1 - Air filter with auto drain removes contaminants to 5 microns	1/2" npt (f)	1/2" npt (f)	108 CFM	175 psi (1.2 MPa, 12 bar)	309919
234407	Stage 2 - Coalescer with auto drain removes particles to 0.01 microns	1/2" npt (f)	1/2" npt (f)	70 CFM	175 psi (1.2 MPa, 12 bar)	309919
234408	Air filter with auto drain removes contaminants to 5 microns	3/4" npt (f)	3/4" npt (f)	300 CFM	175 psi (1.2 MPa, 12 bar)	309919
234409	Coalescer with auto drain removes particles to 0.01 microns	3/4" npt (f)	3/4" npt (f)	115 CFM	175 psi (1.2 MPa, 12 bar)	309919



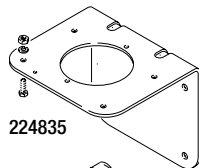
Pump Mounting Hardware

Wall Brackets & Plates

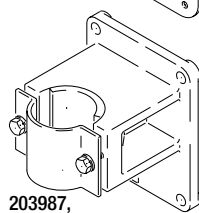
Quality-made wall shelf brackets support pumps and free-up floor space.



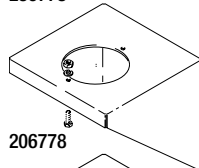
210881



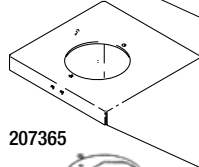
224835



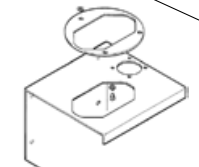
203987,
236778



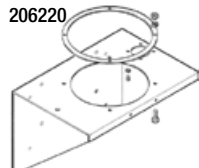
206778



207365



206220



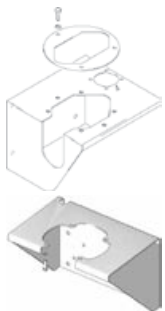
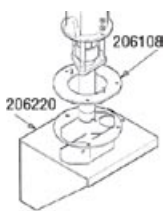
206221

Part No.	Graco Pump Support	Features	Material	Inst. Manual
210881	Fast-Flo	Sturdy, compact.	Cast iron	307427
224835	Husky 307, 515, 716	Wall mount, pump mounting holes.	Painted steel	—
203987	Fast-Flo 1:1 Fire-Ball 5:1 Dyna-Star™ 1:1 Eagle™ 3:1 President 10:1	Mounts pumps with 2-1/8 in (54 mm) diameter riser tubes. Steel strap for securing pump to cast iron V-Block.	Steel, cast iron	306508
236778	Dyna-Star 1/4:1 Power-Star™ 1:1 President 3:1	Mounts pumps with 4 in (102 mm) dia. riser tubes. Steel strap for securing pump to cast iron V-Block.	Steel, cast iron	308394
206778	Monark, President, Viscount in-line and 3-tie-rod divorced stubby pumps	Includes all screws, washers and nuts for fastening pump to bracket	Painted steel	306783
207365	Monark, President, Viscount in-line and 3-tie-rod divorced stubby pumps	Includes all screws, washers and nuts for fastening pump to bracket	Painted steel	306783
206220	Monark, President and Viscount II stanchion tube divorced pumps	Includes all fittings for mounting pumps and paint filter. Order 206108 adapter plate separately to mount 3-tie-rod divorced stubby pumps.	Painted steel	306783
206221	Husky 1040, Senator, Bulldog, King, Viscount II, 3-tie-rod divorced stubby pumps, Glutton and mid-range High-Flo™	Includes gasket, screws, washers and nuts for fastening pump to bracket.	Painted steel	306783

Pump Mounting Hardware

Wall Brackets & Plates (continued)

Quality-made wall shelf brackets support pumps and free-up floor space.



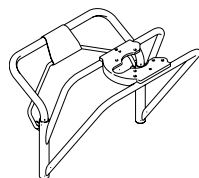
Part No.	Graco Pump Support	Features	Material	Inst. Manual
206108	Monark and Viscount I	Adapts Monark 3-tie-rod divorced stubby pump to fit 206220 bracket or 207373 drum cover.	Painted steel	306783
205740	Dual stanchion tube for Monark, President and Viscount to either stand 205640 or 205700	Provision for mounting paint filter/outlet manifold.	Steel	—
184140	Check-Mate™ pumps	Used with 222781 ram.	Painted steel	308026
162225	Monark and President pumps	Used with 206450 ram.	Painted steel	—
244688	Wall mount bracket for stanchion tube, Monark or President with tee on one stanchion tube	Has outlet manifold mounting hole	Painted steel	306783
255143	Wall mount bracket for NXT	—	Painted Steel	311619
247312	3400 and NXT 6500 Plate Add-on to 255143 wall mount bracket for mounting NXT 2200	—	Painted Steel	311619

Elevators, Tubes and Controls

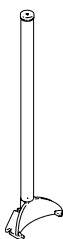
Provides pump support when pump is raised and lowered to change pails or drums.

10 Gallon (38 Liter) Pail Elevators

Part No.	Graco Pump Support	Features	Material	Inst. Manual
205332	Use with 10 gal (38 l) cover 207704	Air fitting for quick coupler and restrictor valve	Steel	306466
203664	10 gal (38 l) pail elevator not good for divorced units (will not clear tierods)	Order pail truck 203650 separately to use with Fire-Ball, Monark and President pumps	Steel	306472
204124	Fast-Flo, Fire-Ball	Includes cover 204123 and elevator 205332	Painted steel	306522



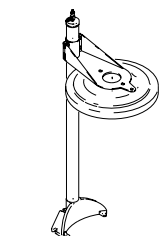
203664



204124

16 Gallon (61 Liter) Drum Elevators

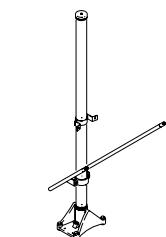
Part No.	Graco Pump Support	Features	Material	Inst. Manual
204121	Fire-Ball	Use with 204123 cover to mount Fire-Ball pumps to 120 lb (54.4 kg) drum	Steel	306522



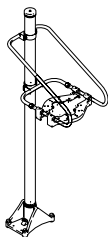
204121

Pump Mounting Hardware

55 Gallon (210 Liter) Drum Elevators



237746,
237902

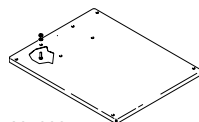


204352

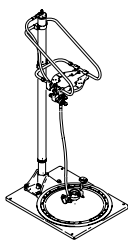
Part No.	Graco Pump Support	Features	Material	Inst. Manual
237747	Fire-Ball, Monark, President	Includes elevator 206231, pump support 237578, and air control kit 237579.	Steel	306287
237746	Fire-Ball, Monark, President cover-mounted pumps	Includes elevator 204385, air control valve 237579, floor mount base and drum cover support 237578.	Steel	306287
237902	Bulldog, King Drum Cover Mount	Includes elevator 207408, pump support 237578, and air control kit 237579.	Steel	306287
204352	Fire-Ball, Monark, President in-line and divorced design pumps without drum cover or bung adapter	Includes elevator 204385 and bracket 204510.	Steel	306568
204385	Fire-Ball, Monark, President	Elevator only with stationary base.	Steel	306287
237525	Elevator Retrofit Kit	Designed to adapt elevators with old support ring to fit new SST drum covers 237306 thru 237310, 190206, 238008 and others. Drum support not included.	Steel	308467

5

55 Gallon (210 Liter) Drum Elevator Base Plates



205339



204490

Part No.	Features	Material	Inst. Manual
205339	Provides stable surface if floor is too irregular for proper operation. Use with 207408 and 204385.	Steel	306556
Part No.	Features	Material	Inst. Manual
204490	Monark (224350) and President (224348). Includes elevator, inductor plate, pump bracket, up/down control, air hose and steel base. Requires pump adapter 161251. Also requires flange (160754).	Steel	306556
207039	Bulldog 5:1, 33:1 and King 45:1. Features same as 204490.	Steel	306882
Part No.	Features	Material	Inst. Manual
204405	Fits collar 2.22 in ID.	Steel, Rubber	—

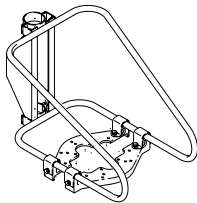
Pump Mounting Hardware

55 Gallon (210 Liter) Drum Cover Lift Support

Part No.	Features	Material	Inst. Manual
237578	For drum cover-mounted pumps. Requires support arms to attach cover to elevator. Fits 204385, 237902 and 237747.	Painted steel	306287

55 Gallon (210 Liter) Drum Wishbone Frame Support

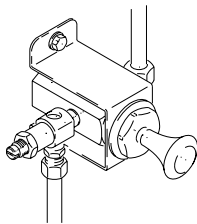
Part No.	Graco Pump Support	Features	Material	Inst. Manual
204510	Fire-Ball, Monark, President in-line pump	Wishbone support and controls for up/down.	—	306568
206232	Bulldog, King	Adjustable bracket attaches to elevator tube 207408.	Zinc-plated steel	306287



206232

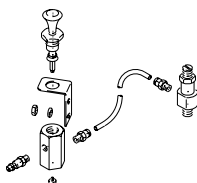
55 Gallon (210 Liter) Air Control Kits

Part No.	Graco Pump Support	Features	Inst. Manual
206276	Bulldog or King pump mounted on a heavy-duty elevator	Includes air regulator with gauge restrictor valve, push-pull valve, air-assist valve, hose and fitting for directing air to pump, elevator and inductor plate.	—



207561

207561	—	Elevator up/down control.	306287
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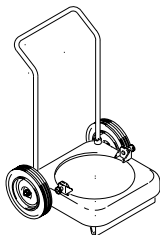
237579

237579	—	Air control kit similar to 206276; plus includes air tube and mounting bracket to locate push-pull control on front edge of stainless steel drum cover.	306287
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Pump Mounting Hardware

Pail Carts

For job site mobility, Graco offers compact, stable carts and dollies. Available with various frame and tire sizes.



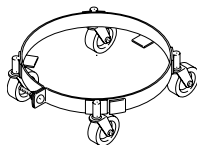
203650

Portable Carts

Part No.	Graco Pump Support	Features	Material	Inst. Manual
203650	5 and 10 gallon (19 and 38 liter) pails	Two wheel cart with handle. Holds pail with pump. Use with 203664.	Painted steel, rubber wheels	306436
238938	Monark, President, Viscount II with 3-tie-rod design and displacement pump length less than 20.5 in (52 cm)	Compact, stable cart with pneumatic tires, double grip handle, heavy-duty support pads. Handle supports large hose coil.	Painted steel, rubber wheels	308136
240223	Monark Stubby, Husky 307	Light duty cart features single handle, hose hook pump/air control bracket.	Painted steel, rubber wheels	308762

Band Dolly

Part No.	Graco Pump Support	Features	Material	Inst. Manual
205054	5 gallon (19 liter) pails	Attaches to pail base. Large swivel wheels.	Painted steel, rubber wheels	—
204144	10 and 16 gallon (38 and 61 liter) drums. Also 5, 10, 15 gallon (19, 38, 56.8 liters) pressure pots.	Attaches to pail base. Large swivel wheels.	Painted steel, rubber wheels	307879

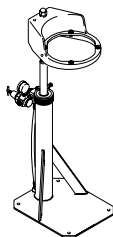


204144

Pump Mounting Hardware

Pump Rams

Stable, secure ram designs hold pumps in place during operation or above container while changing containers. Available in pail and drum styles. Puts pressure on high viscosity fluid surface to force material into pump inlet.



206450

5 Gallon (19 Liter) Single Post Pail Ram

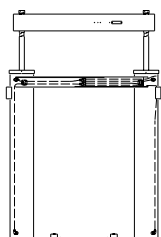
Part No.	Graco Pump Support	Features	Material	Inst. Manual
206450	Senator, Bulldog, King. Use adapter plate 162225 to support Monark and President.	Supports pump on pneumatic post. Pump bracket, air regulator, 5 gallon (19 liters) pail ram, welded floor plate and ram wiper plate.	CS	306838
237636	Bulldog Mount	Narrow tie rod	CS	306838
237561	Bulldog Mount	Wide tie rod	CS	306838

5 Gallon (19 Liter) Two Post Pail Ram

Part No.	Graco Pump Support	Features	Material	Inst. Manual
918495	Bulldog, King, Viscount II	Extra sturdy design. Dual pneumatic posts for extra pressure needed for viscous fluid evacuation through pump inlet. Air controls included. (Order air regulator and ram follower plate separately.)	Painted steel	310525

5 Gallon (19 Liter) Plate Shields

Part No.	Features	Material
223689	Ten disposable shields for 5 gallon (19 liter) pails.	Polyethylene



233087

55 Gallon (210 Liter) Two Post Ram

Part No.	Graco Pump Support	Features	Material	Inst. Manual
233087	34:1, 39:1, 45:1, 80:1 Premier; 24:1, 50:1, 65:1 King; 12:1, 31:1 Bulldog; 19:1 Senator; Viscount Hydraulic	Dual pneumatic 6.5 in (165 mm) posts. 125 psi (8.6 bar, 0.8 MPa) max. inbound air pressure. (Order air controls, ram plates, cross-overkit separately.)	CS	310523

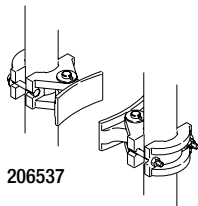


Pump Mounting Hardware

Pump Rams (continued)

236726	Wiper Ring Replacement Kit. Easy to install. Superior wiping performance. Kit for 207279 ram plate includes two wiper rings and four retainer bands.	Supports pump on pneumatic post. Pump bracket, air regulator, 5 gallon (19 liters) pail ram, welded floor plate and ram wiper plate.	CS	306838
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55 Gallon (210 Liter) Drum Clamps



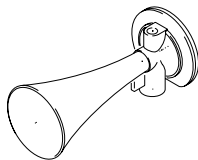
206537

Part No.	Features	Material
206537	Sturdy clamps hold drum centered on base plate in alignment with ram for proper operation. Clamps hold empty drum down while ram is being lifted out. 206537 is a set of 2 clamps.	Grey iron casting

55 Gallon (210 Liter) Double Ram Changeover

Part No.	Features
918468	Pneumatic control automatically switches air supply from one pump to a second pump when supply container empties. Allows uninterrupted supply.

55 Gallon (210 Liter) Low Level Cut-Off Alarm



511270

Part No.	Features
511270	Horn.

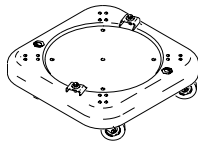
55 Gallon (210 Liter) Plate Shields

Part No.	Features	Material
222792	Ten disposable shields for 55 gallon (210 liter) drums.	Polyethylene

Pump Mounting Hardware

Stands and Bases

Pump support in a wide variety of sizes to match your installation requirements.



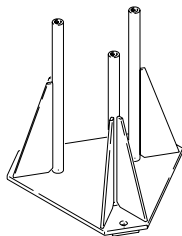
203622

Bases

Part No.	Graco Pump Support	Features	Material	Inst. Manual
203622	Fits 5, 10, 16 gallon (19, 38, 61 liters) containers	Four swivel wheels support sturdy platform. Hold-down clamps and secure pail to platform.	Painted steel	306409

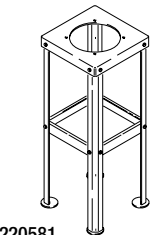
Stands

Part No.	Graco Pump Support	Features	Material	Inst. Manual
205640	Pumps with threaded intake and fluid displacement cylinder length less than 22 in (150 mm)	Sturdy, wide stance pump support. Need adapter 206108 to fit Monark and President pumps.	Cast iron, steel	306720
205700	Pumps with threaded intake and fluid displacement cylinder length of 22 to 33 in (550 to 840 mm)	Sturdy, wide stance pump support. Need adapter 206108 to fit Monark and President pumps.	Cast iron, steel	306720



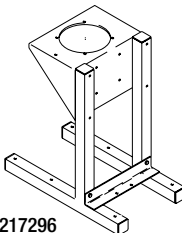
218742

218742	High-Flo with high volume and high flow surge tanks	Extra sturdy floor stand.	Cast iron, steel	306720
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220581

220581	High Flo mid-range with 220xxx part no.	Extra sturdy floor stand.	Painted steel	307837
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217296

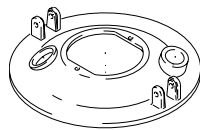
217296	Foam-Cat proportioning pump and heater	Sturdy and stable design.	Steel	307551
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256193	All Wall Brackets	Floor Stand Frame	Painted Steel	311619
253692	NXT Floor Stand	Floor Stand ASM	Painted Steel	311619

Pump Mounting Hardware

Pail & Drum Covers

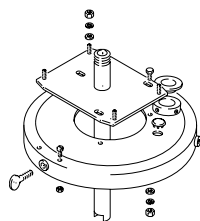
Graco sturdy covers support a wide array of pumps. Choose from pail or drum covers.



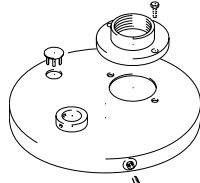
164725

5 Gallon (19 Liter) Pail Covers

Part No.	Graco Pump Support	Features	Material	Inst. Manual
164725	Monark 23:1, Standard 2:1	Agitator mounting port and fill-port. Secure cover to pail with latch hooks 204534, latch handles 204535, pivot pins 161395, washers 158223, and cotter pins 100063. (Order separately.)	Alum.	306700
205786	Monark 23:1	Agitator mounting port. Secure cover and adjust pump height with thumbscrews 100220 (3) and spacer 165094 (1). (Order separately.)	Painted steel	—
206522	Fire-Ball 15:1	Secure cover and pump to pail with lock washers 100016, cap screws 100022, and thumbscrews 100220 (3). (Order separately.)	Painted steel	—
222058	Fire-Ball 15:1	Same as 206522. Includes all fasteners.	Painted steel	—
240212	Husky 307		SST	
604477	President 30:1	Use with 607115 spacer		



221095

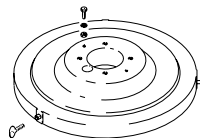


224302

221095	Husky 515/716	Agitator mounting port, suction tube and mounting hardware.	Painted steel	307857
• 224302	Standard 2:1	Kit includes SST cover 224265, pail flange 186558, screws, plastic 1 in (25.4 mm) plug and thumb screw.	Painted steel	307857
197216	Triton	SST pail cover for Triton		
235654	Husky 307	SST pail cover for Husky 307 with suction tube		
240212	Husky 307	Bare SST cover		
205786		CS pail cover - 5" BHP with agitator mount		
224004	2:1 Standard	SST pail cover		
243337		Used in kit 243340		

• *Waterborne compatible*

10 Gallon (38 Liter) Pail Covers



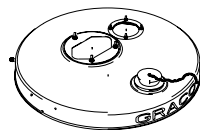
204574

Part No.	Graco Pump Support	Features	Material	Inst. Manual
204574	Fire-Ball 50:1	Thumbscrews and rubber gasket.	Painted Steel	306345

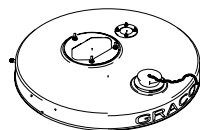
Pump Mounting Hardware

Pail & Drum Covers (continued)

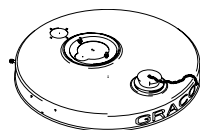
55 Gallon (210 Liter) Drum Covers for Paint Pumps & Agitators



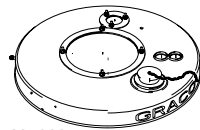
237306



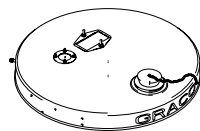
237307



237308



237309



237310

Part No.	Graco Pump Support	Features	Bolt Hole Pattern Size	Material	Inst. Manual
• 237306	President, Monark, Standard and Fast-Flo	Includes inspection port plug, bolts, nuts, and gaskets. Fits agitator 206758 and siphon tube 206266. Bung requires drum flange 206258 or 237571 with three bolt holes.	4.12 in	304 SST	308466
• 237307	President and Monark	Includes inspection port plug, bolts, nuts, and gaskets. Fits agitators 204995 and 203711.	2.5 in	304 SST	308466
• 237308	President (two bolt mounting)	Includes inspection port plug, bolts, nuts, and gaskets. Fits agitators 204995, 206219 and filter 214724.	2.5 in	304 SST	308466
• 237309	King, Bulldog, Senator, and President	Includes inspection port plug, bolts, nuts, and gaskets. Fits agitator 205715 and air regulator 207651 (King), and air regulator 205712 (Bulldog).	—	304 SST	308466
• 237310	Standard	Includes inspection port plug, bolts, nuts, and gaskets. Fits agitators 204995, 206219 and filter 214724.	2.5 in	304 SST	308466
• 237949	Glutton	Features inspection port plug, agitator port; return tube ports, Glutton bolt holes and siphon tube port.	—	304 SST	308466
• 238008	Most Graco pumps except Premier	Features only inspection port with plug. No other holes. Additional holes cut to fit particular application.	—	304 SST	308466
• 190206	Most Graco pumps except Premier and Merkur	Blank cover with no holes. Heavy duty 12 gauge SST. Not passivated.	—	304 SST	308466
• 238283	Fits agitator 238157	Includes inspection port, return port and mounting holes for agitator.	—	304 SST	308609

• Waterborne compatible

Drum Cover Accessories

Part No.	Graco Pump Support	Features
• 237524	Optional Handle Kit	Includes two SST handles and fasteners.
• 112924	Drum Lip Gasket	Disposable "snap-fit" gasket provides seal between top of drum and underside of drum cover to minimize evaporation.

Note: See elevators and drum cover support accessories on pages 21-23. For bung adapter flanges see page 31.

• Waterborne compatible

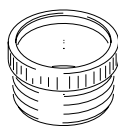
Pump Mounting Hardware

Drum Bung Adapters & Flanges

Graco adapters allow pumps to be threaded into 2 in npt bung openings. Supports a wide array of Graco pumps.

Drum Bung Adapters

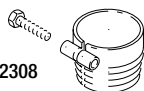
Part No.	Graco Pump Support	Features	Material	Inst. Manual
204076	Mount lightweight lever pumps with 2-1/8 in (54 mm) diameter riser tubes	Use with Sturdi-Clamp 204095. Includes O-ring seal.	Steel	—
205573	Stainless steel pumps with 2-1/8 in (54 mm) diameter riser tubes	Includes thumbscrew to secure pump riser tube at adjusted height. (Order non-corrosive Sturdi-Clamp 204858 to mount pump on side of open head drum or tank separately.)	Steel	—
239966	Fits Fire-Ball 15:1, 50:1 and 80:1			
224579	Same as 204706 except 224579 is air tight.	—	Steel	—
172405	Carbon steel pumps with 2 in diameter.	2 in npt(m) thread. Use with Sturdi-Clamp 204858 to mount pumps on open head drum or tank. (Order separately.)	Carbon steel	307427
222308	Carbon steel pumps with 2 in diameter.	2 in npt(m) thread. Use with Sturdi-Clamp 204858 to mount pumps on open head drum or tank. (Order separately.)	Carbon steel	307427
214583	Carbon steel pumps with 2 in diameter.	Assembly - Includes 172405 and 222308 2 in npt(m) thread. Use with Sturdi-Clamp 204858 to mount pumps on open head drum or tank. (Order separately.)	Carbon steel	307427
222308	Fits Fast-Ball, Eagle, Fire-Ball, President	Includes bolt. 2.15" diameter	Steel	—
217359	Fits Fast-Flo 1:1	Air tight, includes O-ring, 2" diameter	Steel	—



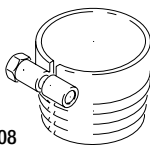
224579



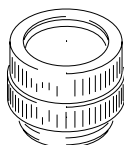
172405



222308



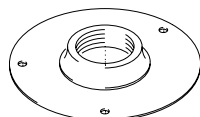
222308



217359

Drum Flange

Part No.	Graco Pump Support	Features	Material	Inst. Manual
160754	Mounting for bung adapter equipped with carbon steel pumps on open head drum when used with drum covers 204574 or 200326 (order separately).	2 in npt(f) opening for bung adapter. Four bolt holes.	Aluminum	306538
206258	Use with drum cover 237306 and 237307	Three bolt holes	Cast iron	308466
• 237571	Use with drum cover 237306 and 237307	Three bolt holes	304 SST	308466
186558	4-hole flange. Use with pail mount assemblies 223967, 224302 and 224570	Four bolt holes (Two 0.312 mounting holes on a 4 in bolt hole pattern)	304 SST	405976

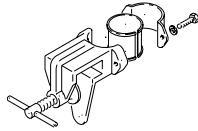


237571

Pump Mounting Hardware

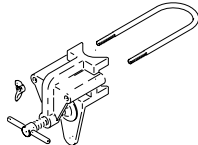
Sturdi-Clamps

Graco clamps hold pumps secure and upright in drum or tanks.



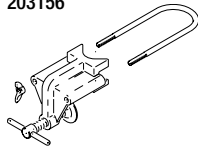
210880

Part No.	Graco Pump Support	Features	Material	Inst. Manual
210880	Fast-Flo 1:1	For 2 in (50.8 mm) tube, in-line only.	CS	307427



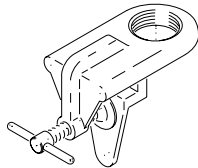
203156

203156	Carbon steel pumps with 2-1/8 in (54 mm) dia. riser tubes. For in-line pumps only.	U-bolt to clamp pump at proper depth.	CS	306305
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204095

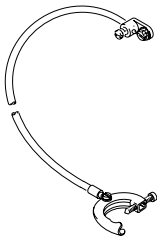
204095	Carbon steel pumps with 2-1/8 in (54 mm) dia. riser tubes in bung hole of closed head drums when used with bung adapter 204076.	U-bolt to clamp pump at proper depth. In-line pumps only.	CS	306521
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204858

204858	Stainless steel pumps using SST bung adapter 205573.	2 in npt(f) opening for open head drums.	Cast iron, nickel-plated, CS	—
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Grounding Clamp

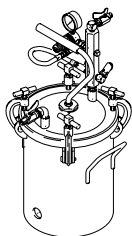


222011

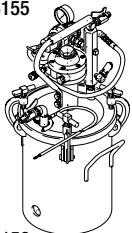
Part No.	Graco Pump Support	Features
222011	Grounding wire and clamp	7.6 m (25 ft), 1.5 mm ² (10 gauge)

Pressure Tanks and Cups

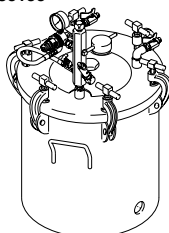
Stainless Steel ASME Pressure Tank Models



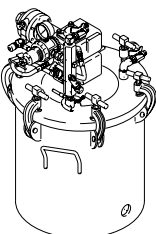
236155



236156



236143



236152

Capacity	Height in (cm)	Weight lb (kg)	Models with Agitators		Models without Agitators	
			Low Pressure (HVLV) Regulated to 15 psi (1.05 bar, 0.105 MPa)	High Pressure Regulated to 100 psi (7 bar, 0.7 MPa)	Low Pressure (HVLV) Regulated to 15 psi (1.05 bar, 0.105 MPa)	High Pressure Regulated to 100 psi (7 bar, 0.7 MPa)
2 Gallon (8 liter)	26.0 (66.0)	38 (17)	236155	236157	–	–
	25.4 (64.5)	30 (14)	–	–	236156	236158
5 Gallon (19 liter)	30.5 (77.5)	74 (34)	236146	236152	–	–
	30.5 (77.5)	65 (30)	–	–	236143	236149
10 Gallon (38 liter)	33.9 (88.0)	85 (39)	236147	236153	–	–
	33.9 (88.0)	76 (35)	–	–	236144	236150
	44.6 (113.2)	101 (46)	236148	236154	–	–
15 Gallon (57 liter)	44.6 (113.2)	92 (42)	–	–	236145	236151

New optional Gun Air Regulator Kit (235042) can be added to all the tanks above.

All 5, 10 and 15 gal (19, 38, 57 l) pressure tanks with agitators feature heavy-duty back-gearred models.

2 gal (8 l) tank has a direct-drive blade high-speed agitator.

Pressure Tank Liners - Polyethylene

Part No.	Description
15D058	20 count, 2 gal (9 l) pressure tank liners
15D059	20 count, 5 gal (19 l) pressure tank liners
15D060	20 count, 10 gal (45 l) pressure tank liners
112077	5 count, 2.5 gal (11 l) pressure tank liners
112078	25 count, 2.5 gal (11 l) pressure tank liners

Pressure Tanks and Cups

Stainless Steel Pressure Tanks

Specifications

Air Inlet	Fluid Outlet	Agitator Air Consumption 5, 10, 15 gal (19, 38, 57 l)		Wetted Parts		Inst. Manual
		Continuous Duty at 60 rpm	2 gal (8 l) Direct Drive	With Agitator	Without Agitator	
1/4 - 18 npt(m)	3/8 - 18 npsm(m)	15 scfm / 0.42 m3/ min. @ 80 psi (5.5 bar, 0.55 MPa)	1/2 HP, 3000 RPM	304, 316 electropol- ished stainless steel, Santoprene, Zytel, Mylar	304, 316 electropol- ished stainless steel, Santoprene, Zytel, PTFE, Bronze, Mylar	2 gal (8 l) - 308370 5, 10, 15 gal (19, 38, 57 l) - 308369

Aluminum Non-ASME Pressure Tank

Specifications

Part No.	Description	Tank Capacity	Max. Working Pressure	Relief Valve Setting	Fluid Inlet	Fluid Outlet	Wetted Parts	Air Inlet	Size (H x W) in (cm)	Weight	Inst. Manual
171226	Pressure Pot	2.5 gal (9.5 l)	50 psi (3.5 bar, 0.35 MPa)	50 psi 3.5 bar, 0.35 MPa)	1/4 npt(m)	3/8 npsm(m)	Aluminum, brass, steel, buna-N	1/4 npt(m)	21 x 11-1/4 (53 x 286)	11 lb (5 kg)	307133
223833	Pressure Pot with Dual Regulators	2.5 gal (9.5 l)	50 psi (3.5 bar, 0.35 MPa)	50 psi 3.5 bar, 0.35 MPa)	1/4 npt(m)	3/8 npsm(m)	Aluminum, brass, steel, buna-N	1/4 npt(m)	21 x 11-1/4 (53 x 286)	11 lb (5 kg)	307133

Aluminum PTFE Coated Non-ASME Pressure Tank

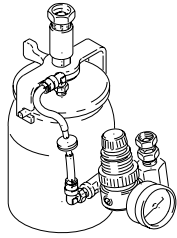
Aluminum Non-ASME pressure tanks feature a sight tube, desiccant dryer and fill port.

Specifications

Part No.	Description	Max. Working Pressure	Air Inlet	Fluid Outlet	Inst. Manual
248224	2-1/2 Gallon Tank Kit	50 psi (3.5 bar, 0.35 MPa)	1/4 OD	3/8 npt	309192
248225	5 Gallon Tank Kit	50 psi (3.5 bar, 0.35 MPa)	1/4 OD	3/8 npt	309192

Pressure Tanks and Cups

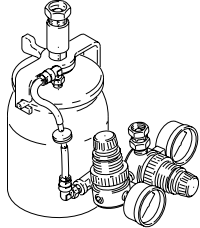
Pressure Cups



239802

Part No.	qt. (l)	Inlet npsm(f)	Wetted Parts	Inst. Manual
• 239802	1 (0.95)	3/8	304 SST	308791

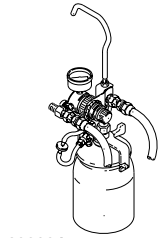
Note: Single regulator assembly.



239803

• 239803	1 (0.95)	3/8	304 SST	308791
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Note: Double regulator assembly.



239804

• 239804	1 (0.95)	3/8	304 SST	308791
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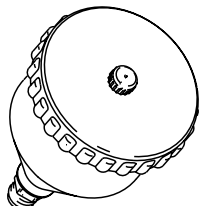
Note: Double regulator assembly.

• 239801	Pressure Cup Only			
214627	Remote 2 qt			
235117	Remote 2 qt, 15 psi			
287301	2 qt remote dual regulator			

• *Waterborne compatible*

5

Gravity Cups



239714

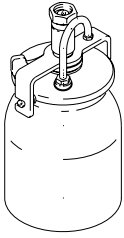
Part No.	Capacity fl. oz. (cc)	Fittings bsp(f)	Wetted Parts	Inst. Manual
• 239714	16 (473)	3/8 bottom entry	Nylon Cup SST Fitting	308792

• 239715	8 (236)	3/8 bottom entry	Nylon Cup SST Fitting	308792
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• *Waterborne compatible*

Pressure Tanks and Cups

Siphon Cups



239582

Part No.	Capacity fl. oz. (cc)	Fittings bsp(f)	Wetted Parts	Inst. Manual
• 239582	32 (946)	3/8	SST	308792
• 239584	16 (236)	3/8	SST	308792

• *Waterborne compatible*

3M™ PPS™ Cup System

Description	6 oz.	25 oz.	32 oz.	Inst. Manual
Cup and Collar (box of 8)	234941	234771	234937	310693
Lid and Liner (box of 50)	234940	234772	234938	310693
Measurement Insert (box of 100)	234942	15F531	234939	310693

- 234837 **Gravity Kit (25 oz)**
One each: cup, collar, lid, liner and adapter
- 234773 **Siphon Kit (25 oz)**
One each: cup, collar, lid, liner and adapter
- 15E470 3M™ PPS™ Lid Dispenser
15E469 3M™ PPS™ Liner Dispenser
15E467 3M™ PPS™ Gun Tray
15D684 3M™ PPS™ Siphon Feed Adapter
15C464 3M™ PPS™ Gravity Feed Adapter

Instruction Manual [310693](#)

Agitators

Heavy-Duty In-Drum Back-Geared Agitators



24C821

Part Number	Description	Gear Reducer Ratio	Max. Air Input psi (bar)	Max. Speed Recommended	Wetted Parts
24C821	Base assembly does not include adapters. ATEX approval for hazardous olcations, oil-free gear box, interchangeable adapters and couplers, simple screw-in installation	24:1	100 (7)	100 rpm	303 SST

Bung Adapters	Shaft Adapter			
	3/8 in	7/16 in	1/2 in	5/8 in
1-1/2 in	24C519	24C293	24C520	24C521
2 in	24C523	24C522	24C524	24C525

	Size	Part Number
Bung Adapters	1-1/2 in	16A521
	2 in	16A754
Shaft Adapters	3/8 in	16A751
	7/16 in	16A520
	1/2 in	16A752
	5/8 in	16A753

24D588 Adapter Kit

Includes bung adapters (16A521 & 16A754) and shaft adapters (16A751, 16A520, 16A752 & 16A753).

Expanding Blade Agitators

5



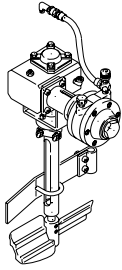
24C728,
24C729

Part Number	Description	Drive	HP	Max. Air Input psi (bar)	Max. Speed Recommended	Wetted Parts
24C728	Low Viscosity air driven expanding blade bung-mounted agitator	Air	1	100 (7)	500 rpm	303, 18-8 and 304 SST
24C729	High Viscosity air driven expanding blade bung-mounted agitator	Air	1.75	100 (7)	500 rpm	303, 18-8 and 304 SST

*Tested in water to ISO 9614-2.

Agitators

Agitators for Pressure Tanks - Heavy Duty*

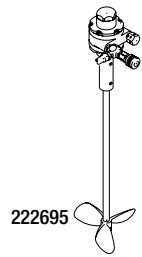


236661

Part Number	Description	Drive	HP	Length in (cm)	Material	Inst. Manual
• 236661	5 gallon (19 liter), gear reduced	Air	1/2	15 (38)	304/316 SST	308371
• 236662	10 gallon (38 liter), gear reduced	Air	1/2	20.75 (53)	304/316 SST	308371
• 236663	15 gallon (57 liter), gear reduced	Air	1/2	31 (79)	304/316 SST	308371

- Waterborne compatible
- *Only use on Graco's 5, 10 and 15 gal ASME pressure tanks.

Agitators for 5 Gallon (19 Liter) Pails

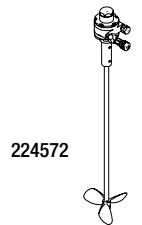


222695

Part Number	Description	Drive	HP	Length in (cm)	Material	Inst. Manual	Notes
• 222695	Round prop (3 blade)	Air	1/4	13.25 (33.6)	SST	306565	224571 Agitator and hose
• 204536	Round prop (3 blade)	Air	1/4	13.25 (33.6)	SST	306565	224571 Agitator and metal tube
226086	Pail cover, round prop	Air	1/4	13.25 (33.6)	CS	306670	224571 Agitator and CS pail cover
243340	SST pail cover with SST agitator for Falcon and Falcon II AA packages	Air	1/4	13.25 (33.6)	SST	406488	224571 Agitator and SST pail cover
245081	SST pail agitator kit for Triton pkgs	Air	1/2	13.25 (33.6)	SST	309306	
245895	CS pail cover with SST agitator	Air	1/4	13.25 (33.6)	CS	306565	

- Waterborne compatible

Agitator for 10 Gallon (38 Liter) Pail

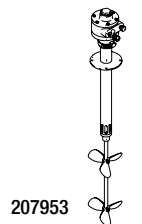


224572

Part Number	Description	Drive	HP	Length in (cm)	Material	Inst. Manual
• 224572	Single round prop (3 blade)	Air	1/4	17.25 (43.8)	SST	306565

- Waterborne compatible

Agitators for 15 Gallon (57 Liter) Mix Tanks



207953

Part Number	Description	Drive	HP	Length in (cm)	Material	Inst. Manual
207953	Dual round prop (3 blade each)	Air	3/4	29 (73.6)	CS	306840
• 210067	Sawblade prop	Air	3/4	20.87 (53)	SST	307154

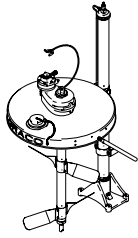
- Waterborne compatible

Agitator Air Motors

Part Number	HP	Repair Kit
101140 and 162425	3/4	207335
101388	1	207336
101687	1/4	207337

Agitators

Agitators for 55 Gallon (210 Liter) Drum and 30 Gallon (114 Liter) Mix Tanks



231414

Part Number	Description	Drive	HP	LENGTH (IN (CM))	Material	Inst. Manual
• 231414	Heavy-duty back-gear agitator with elevator, drum cover and siphon kit	Air	1/2	32 (81.25)	SST	308609
• 231413	Same as 231414 except without siphon capability	Air	1/2	32 (81.25)	SST	308609
• 231418	Same as 231414 plus Husky 715, hose and dispense gun	Air	1/2	32 (81.25)	SST	308666
• 231419	Same as 231418 without hose and gun	Air	1/2	32 (81.25)	SST	308666

• 238157	Heavy-duty back-gear agitator	Air	1/2	32 (81.25)	SST	308609
• 240209	Same as 238157 with siphon kit	Air	1/2	32 (81.25)	SST	308609
• 238250	Siphon Tube Kit; fits 238157 agitator.			43 (109)	SST	308609
• 191920	Shaft extension; fits 238157 agitator. Do not use with siphon kit 238250			7 (17.8)	SST	308609
• 191606	Shaft extension; fits 238157 agitator. Do not use with siphon kit 238250			16 (40.6)	SST	308609



206758

206758	Dual round prop; mounts on cover	Air	1/2	31.25 (79.3)	CS	306840
207199	Includes 206758 and 55 gallon (210 liter) cover	Air	1/2	31.25 (79.3)	CS (SST cover)	306938
203711	Mounts on 237307 SST cover; agitator supports mount to suction tube or pump cylinder	Air	1/2	31.25 (79.3)	CS	306459
204995	Mounts on 237307 cover; mounts to suction tube or pump cylinder	Air	1/2	31.25 (79.3)	CS	306459
206219	Mounts on 237308 cover	Air	1/2	31.25 (79.3)	CS (SST cover)	306459
204482	Mounts on 237310 cover	Air	1/2	31.25 (79.3)	CS	306459

5

Mastics



210068



225831

Part Number	Description	Drive	HP	LENGTH (IN (CM))	Material	Inst. Manual
205715	For mastics	Air	2-1/2	33.50 (85)	CS	307277
• 210068	With sawblade prop	Air	3/4	33.87 (86)	SST	307154
214853	Includes dual round prop	Hydr.	1/2	34 (86.4)	CS, Alum.	307331
214906	Includes cover 237306	Hydr.	1/2	34 (86.4)	CS, Alum.	307331
• 222698	Includes single round prop	Air	1/2	31.25 (79.3)	SST	306840
225883	Includes dual round prop; open drum	Air	2-1/2	41.5 (105.4)	CS, Alum. Iron	306426
225831	Includes dual round prop; open drum	Air	1	41.5 (105.4)	CS, Alum. Ductile Iron Bronze	306358
245081						

• Waterborne compatible

Agitators

Twistork™ Agitators



236629

Part Number	Description	Drive	HP	Length in (cm)	Material	Inst. Manual
• 236629*	Twistork, standard siphon model	Air	3/4	47.5* (121)	304 SST	308345

*Adjustable depth models for drums 31-1/2 in to 35-1/2 in (80 cm to 90.1 cm) deep. Siphon tube designed to rest on drum bottom.

• 238859	Twistork, siphon with polypropylene/PTFE Husky 515 pump	Air	3/4	61.0 (155)	304 SST	308656
• 238860	Twistork, siphon with Acetal/PTFE Husky 515 pump	Air	3/4	61.0 (155)	304 SST	308656



224854,
235534

• 224854	Twistork, non-siphon	Air	1-1/2	37.25 (95)	CS	308175
• 235534	Twistork, non-siphon	Air	1-1/2	37.25 (95)	304 SST	308175

Agitator for 60 Gallon (228 Liter) Mix Tanks

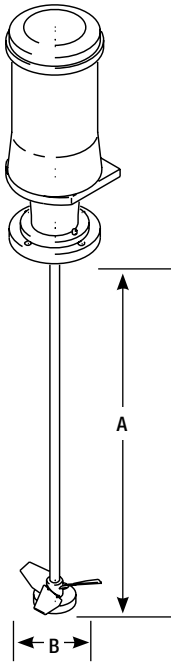


206760

Part Number	Description	Drive	HP	Length in (cm)	Material	Inst. Manual
206760	Dual round prop	Air	1.5	33.25 (84.4)	CS, Alum.	306840

Agitators

LSA-200 Agitators*



Agitator Part Number	Drive	A. Shaft Length in (mm)	B. Impeller Diameter in (mm)	HP	Output RPM	Mounting Plate on 6.25 in (158.75 mm) BHP	Inst. Manual
922198	Air	29 (737)	8.8 (224)	.25	0-350	4 holes	310500
922003	Air	29 (737)	8.8 (224)	.25	0-350	4 holes	310500
922010	Electric	31 (787)	8.8 (224)	.25	350	4 holes	310500
922013	Air	31 (787)	8.8 (224)	.25	0-350	4 holes	310500
962686	Electric	33 (838)	8.8 (224)	.25	350	4 holes	310500
962684	Air	33 (838)	8.8 (224)	.25	0-350	4 holes	310500
922208	Electric	34 (864)	8.8 (224)	.25	350	4 holes	310500
962601	Air	34 (864)	8.8 (224)	.25	0-350	4 holes	310500
922029	Electric	35 (889)	8.8 (224)	.25	350	4 holes	310500
922031	Air	35 (889)	8.8 (224)	.25	0-350	4 holes	310500
922032	Electric	36 (914)	7.6 (193)	.25	350	4 holes	310500
922033	Electric	36 (914)	8.8 (224)	.25	350	4 holes	310500
922211	Air	36 (914)	7.6 (193)	.25	0-350	4 holes	310500
922034	Air	36 (914)	8.8 (224)	.25	0-350	4 holes	310500

* All LSA-200 agitators have 0.25 HP, 1750 rpm motor speed and 350 rpm maximum shaft output.

Agitator Shaft Replacement

Agitator Shaft Part Number	Shaft Length in (mm)	Agitator Shaft Part Number	Shaft Length in (mm)
516900	19 (483)	516909	28 (711)
516901	20 (508)	516910	29 (737)
516902	21 (533)	516911	30 (762)
516903	22 (559)	516912	31 (787)
516904	23 (584)	516913	32 (813)
516905	24 (610)	516914	33 (838)
516906	25 (635)	516915	34 (864)
516907	26 (660)	516917	36 (914)
516908	27 (686)	516918	37 (940)

LSA Drive Units

LSA Drive Units Part Number	Drive
516552*	Air Drive Unit
516556	Electric Drive Unit
516560	Hydraulic Drive Unit

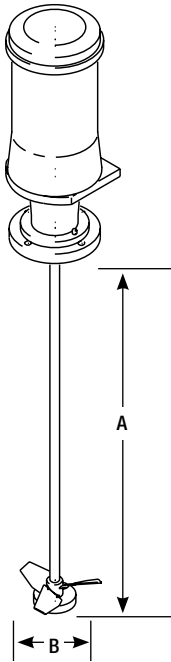
Requires 96A498 Filter Kit (5 micron)
51B373 Filter Element (5 micron)
Note: LSA-200 Agitator shaft diameter is 16 mm.

Impeller Replacement

Impeller Part Number	Impeller Diameter in (mm)	Impeller gpm (lpm)	Shaft Lengths Allowed in (mm)
515770	7.6 (193)	371 (1404)	0-37 (0-940)
515771	8.8 (224)	574 (2173)	0-36 (0-914)
515772	10 (254)	844 (3196)	0-35 (0-889)
515773	11.2 (284)	1187 (4493)	0-32 (0-813)

Agitators

LSA-220 Agitators*



Agitator Part Number	Drive	A. Shaft Length in (mm)	B. Impeller Diameter in (mm)	HP	Output RPM	Mounting Plate on 6.25 in (158.75 mm) BHP	Inst. Manual
922036	Electric	29 (737)	10.0 (254)	.25	280	4 holes	310500
922040	Air	29 (737)	10.0 (254)	.25	0-280	4 holes	310500
962613	Air	29 (737)	11.2 (284)	.25	0-280	4 holes	310500
962553	Electric	30 (762)	10.0 (254)	.25	280	4 holes	310500
962552	Air	30 (762)	10.0 (254)	.25	0-280	4 holes	310500
922231	Electric	32 (813)	10.0 (254)	.25	280	4 holes	310500
922045	Air	30 (762)	11.2 (284)	.25	0-280	4 holes	310500
922055	Air	32 (813)	10.0 (254)	.25	0-280	4 holes	310500
922238	Electric	33 (838)	11.8 (300)	.25	280	4 holes	310500
922241	Air	33 (838)	11.8 (300)	.25	0-280	4 holes	310500
962764	Electric	34 (864)	10.0 (254)	.25	280	4 holes	310500
922253	Electric	36 (914)	10.0 (254)	.25	280	4 holes	310500
962642	Electric	36 (914)	11.2 (284)	.25	280	4 holes	310500
962732	Air	36 (914)	11.2 (284)	.25	0-280	4 holes	310500
962824	Air	36 (914)	11.8 (300)	.25	0-280	4 holes	310500

* All LSA-220 agitators have 0.25 HP, 1750 rpm motor speed and 280 rpm maximum shaft output.

Agitator Shaft Replacement

Agitator Shaft Part Number	Shaft Length in (mm)	Agitator Shaft Part Number	Shaft Length in (mm)
516901	20 (508)	516910	29 (737)
516902	21 (533)	516911	30 (762)
516903	22 (559)	516912	31 (787)
516904	23 (584)	516913	32 (813)
516905	24 (610)	516914	33 (838)
516906	25 (635)	516915	34 (864)
516907	26 (660)	516917	36 (914)
516908	27 (686)	516918	37 (940)
516909	28 (711)	516919	38 (965)

Impeller Replacement

Impeller Part Number	Impeller Diameter in (mm)	Impeller gpm (lpm)	Shaft Lengths Allowed in (mm)
515770	7.6 (193)	297 (1124)	0-38 (0-965)
515771	8.8 (224)	459 (1737)	0-38 (0-965)
515772	10 (254)	675 (2555)	0-38 (0-965)
515773	11.2 (284)	949 (3591)	0-37 (0-940)
515774	11.8 (300)	1112 (4209)	0-36 (0-914)
515775	12.8 (325)	1417 (5363)	0-34 (0-864)
515776	13.6 (345)	1700 (6435)	0-32 (0-812)

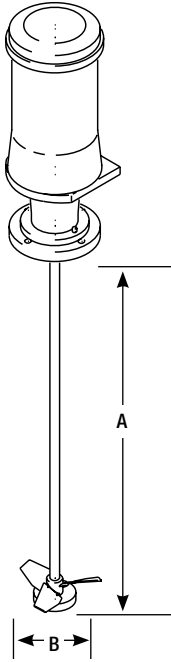
LSA Drive Units

LSA Drive Units Part Number	Drive
516553*	Air Drive Unit
516557	Electric Drive Unit
516561	Hydraulic Drive Unit

*Requires 96A498 Filter Kit (5 micron)
51B373 Filter Element (5 micron)
Note: LSA-220 Agitator shaft diameter is 16 mm.

Agitators

LSA-300 Agitators*



Agitator Part Number	Drive	A. Shaft Length in. (mm)	B. Impeller Diameter in. (mm)	HP	Output RPM	Mounting Plate on 6.25 in (158.75 mm) BHP	Inst. Manual
922084	Electric	34 (864)	19.0 (483)	.25	145	4 holes	310500
922089	Air	34 (864)	19.0 (483)	.25	0-145	4 holes	310500
962742	Electric	36 (914)	15.1 (384)	.25	145	4 holes	310500
922103	Air	36 (914)	15.1 (384)	.25	0-145	4 holes	310500
922110	Electric	37 (940)	19.0 (483)	.25	145	4 holes	310500
922115	Air	37 (940)	19.0 (483)	.25	0-145	4 holes	310500
922138	Electric	40 (1016)	18.0 (457)	.25	145	4 holes	310500
922143	Air	40 (1016)	18.0 (457)	.25	0-145	4 holes	310500
962730	Electric	42 (1067)	15.6 (396)	.25	145	4 holes	310500
922158	Air	42 (1067)	15.6 (396)	.25	0-145	4 holes	310500
922170	Electric	44 (1118)	15.6 (396)	.25	145	4 holes	310500
922175	Air	44 (1118)	15.6 (396)	.25	0-145	4 holes	310500
962828	Electric	46 (1168)	15.1 (384)	.25	145	4 holes	310500
922193	Air	46 (1168)	15.1 (384)	.25	0-145	4 holes	310500
962824	Air	36 (914)	11.8 (300)	.25	0-145	4 holes	310500

* All LSA-300 agitators have 0.25 HP, 900 rpm motor speed and 140 rpm maximum shaft output.

Agitator Shaft Replacement

Agitator Shaft Part Number	Shaft Length in (mm)	Agitator Shaft Part Number	Shaft Length in (mm)
516920	36 (914)	516932	48 (1219)
516921	37 (940)	516933	49 (1245)
516922	38 (965)	516934	50 (1270)
516923	39 (991)	516935	51 (1295)
516924	40 (1016)	516936	52 (1321)
516925	41 (1041)	516937	53 (1346)
516926	42 (1067)	516938	54 (1372)
516927	43 (1092)	516939	55 (1397)
516928	44 (1118)	516940	56 (1422)
516929	45 (1143)	516941	57 (1448)
516930	46 (1168)	516943	58 (1473)
516931	47 (1194)	516944	59 (1499)
516931	47 (1194)	516945	60 (1524)

Impeller Replacement

Impeller Part Number	Impeller Diameter in (mm)	Impeller gpm (lpm)	Shaft Lengths Allowed in (mm)
51A018	15.1 (384)	1163 (4402)	0-60 (0-1524)
515777	15.6 (396)	1268 (4799)	0-59 (0-1499)
515778	17 (432)	1652 (6253)	0-57 (0-1448)
515779	18 (457)	1960 (7419)	0-55 (0-1397)
515780	19 (483)	2310 (8743)	0-54 (0-1372)

LSA Drive Units

LSA Drive Units Part Number	Drive
516554*	Air Drive Unit
516558	Electric Drive Unit
516562	Hydraulic Drive Unit

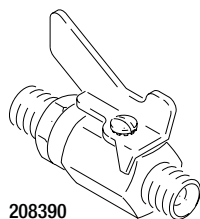
*Requires 96A498 Filter Kit (5 micron)
51B373 Filter Element (5 micron)
Note: LSA-300 Agitator shaft diameter is 20 mm.

In-Line Fluid Valves and Swivels

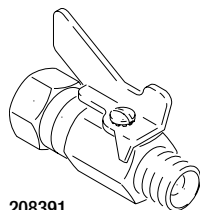
Ball Valves

Use for on/off fluid control. Allows safer system operation by permitting relief of fluid pressure or isolation of components from pressure during maintenance. Be sure to use Ball Valves in the fully open or closed position. Do not throttle the valve; it could cause premature seal failure.

Low Pressure Ball Valves

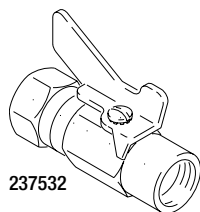


208390

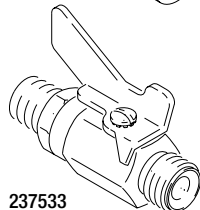


208391

Part No.	Inlet/Outlet npt	Maximum WPR			Packings	Wetted Parts	Inst. Manual
		psi	bar	MPa			
208390	1/4 x 1/4 (mbe)	500	35	3.5	PTFE	Steel*	307068
208391	3/8 x 3/8 (mxf)	500	35	3.5	PTFE	Steel*	307068
208393	3/8 x 3/8 (mbe)	500	35	3.5	PTFE	Steel*	307068
218109	3/8 (m) x 3/8 npsm(m)	500	35	3.5	PTFE	Steel*	307068
208392	3/8 x 1/4 (fxm)	500	35	3.5	PTFE	Steel*	307068
208475	3/8 (f) x 1/4 npsm(m)	500	35	3.5	PTFE	Steel*	307068
208476	3/8 (f) x 3/8 npsm(m)	500	35	3.5	PTFE	Steel*	307068
208630	3/8 (f) x 1/2 npt(m)	500	35	3.5	PTFE	Steel*	307068
• 237528	1/4 npt(m) x 1/4 npt(m)	500	35	3.5	PTFE	316 SST	307628
• 237529	1/4 npt(m) x 3/8 npsm(m)	500	35	3.5	PTFE	316 SST	307628
• 237530	3/8 npt(m) x 1/4 npt(m)	500	35	3.5	PTFE	316 SST	307628
• 237531	3/8 npt(m) x 3/8 npt(m)	500	35	3.5	PTFE	316 SST	307628



237532



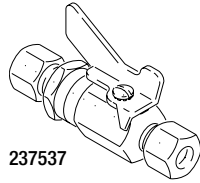
237533

• 237532	3/8 npt(f) x 3/8 npt(f)	500	35	3.5	PTFE	316 SST	307628
• 237533	3/8 npsm(m) x 3/8 npt(m)	500	35	3.5	PTFE	316 SST	307628
• 237534	3/8 npt(f) x 3/8 npt(m)	500	35	3.5	PTFE	316 SST	307628
• 237535	3/8 npt(f) x 3/8 npsm(m)	500	35	3.5	PTFE	316 SST	307628
• 237536	3/8 OD tube stub x 3/8 npsm(m)	500	35	3.5	PTFE	316 SST	307628

- * Nickel-plated steel
- Waterborne compatible

In-Line Fluid Valves and Swivels

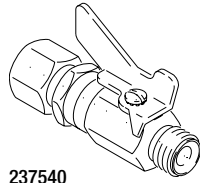
Ball Valves



237537

Low Pressure Ball Valves (continued)

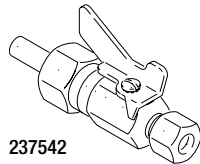
Part No.	Inlet/Outlet npt	Maximum WPR			Packings	Wetted Parts	Inst. Manual
		psi	bar	MPa			
• 237537	3/8 OD tube x 3/8 OD tube	500	35	3.5	PTFE	316 SST	307628
• 237538	3/8 OD tube x 3/8 npt(m)	500	35	3.5	PTFE	316 SST	307628
• 237539	3/8 OD tube x 3/8 npsm(m)	500	35	3.5	PTFE	316 SST	307628



237540

• 237540	1/2 OD tube x 3/8 npsm(m)	500	35	3.5	PTFE	316 SST	307628
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• 237541	1/2 OD tube x 3/8 npsm(m) Bulkhead style	500	35	3.5	PTFE	316 SST	307628
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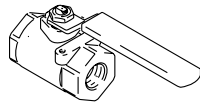
237542

• 237542	3/8 OD tube stub x 3/8 OD tube	500	35	3.5	PTFE	316 SST	307628
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- Waterborne compatible

Medium Pressure Ball Valves

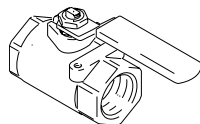
Part No.	Inlet/Outlet (fbs)	Maximum WPR			Packings	Wetted Parts	Inst. Manual
		psi	bar	MPa			
512148	1/4	2000	138	13.8	PTFE	CS	
512149	3/8	2000	138	13.8	PTFE	CS	
512150	1/2	2000	138	13.8	PTFE	CS	
512151	3/4	2000	138	13.8	PTFE	CS	
512152	1	2000	138	13.8	PTFE	CS	
512212	1-1/2	1500	104	10.4	PTFE	CS	
512213	2	1500	104	10.4	PTFE	CS	
• 512482	1/4	2000	138	13.8	PTFE	SST	



512483

• 512483	3/8	2000	138	13.8	PTFE	SST	307628
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• 512484	1/2	2000	138	13.8	PTFE	SST	307628
• 512485	3/4	2000	138	13.8	PTFE	SST	



512486

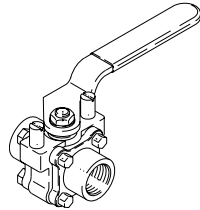
• 512486	1	2000	138	13.8	PTFE	SST	307628
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- Waterborne compatible

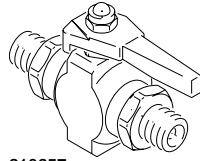
In-Line Fluid Valves and Swivels

Ball Valves

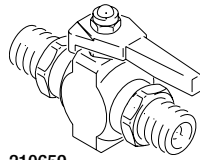
High Pressure Ball Valves



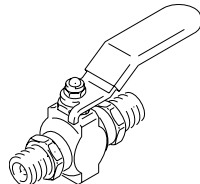
102644



210657



210659



237303

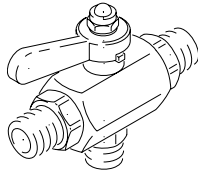
Part No.	Inlet/Outlet npt	Maximum WPR			Packings	Wetted Parts	Inst. Manual
		psi	bar	MPa			
102644	3/4 (f) 3/4 (f)	3000	207	20.7	Nylon	CS	—
102646	1/2 (f) 1/2 (f)	3000	207	20.7	Nylon	CS	—
210657	1/4 (m) 1/4 (m)	5000	345	34.5	Viton	CS	306861
214037	1/4 (m) 1/4 (m)	5000	345	34.5	PTFE	CS	306861
210659	3/8 (m) 1/4 (m)	5000	345	34.5	Viton	CS	306861
• 235992	3/8 (m) 1/4 (m)	5000	345	34.5	PTFE	SST, Passivated	306861
• 240410	3/8 (m) 3/8 (m)	5000	345	34.5	PTFE	SST, Carbide, PEEK	306861
210658	3/8 (m) 3/8 (m)	5000	345	34.5	Viton®	CS	306861
218901	1/4 18 npsm(m)	5000	345	34.5	PTFE	CS	306861
223522	1/4 (m) 1/4 (m)	5000	345	34.5	Viton	CS, Carbide seat	—
223960	3/8 (m) 3/8 (m)	5000	345	34.5	PTFE	CS	306861
223959	3/8 (m) 1/4 (m)	5000	345	34.5	PTFE	CS	306861
237303	1/4 (m) 1/4 (m)	7400	510	51.0	PTFE	CS, PEEK seat	306861
237304	3/8 (m) 3/8 (m)	7400	510	51.0	PTFE	CS, PEEK seat	306861
239018	1/4(m) 1/4(m)	5000	345	34.5	PTFE	SST	306861

• Waterborne compatible

In-Line Fluid Valves and Swivels

Two-Way Director Valve

Used to direct fluid flow from inlet to either of two outlets.

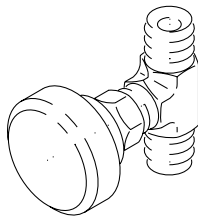


214711

Part No.	Inlet/Outlet npt	Maximum WPR			Packings	Wetted Parts	Inst. Manual
		psi	bar	MPa			
214711	1/4 1/4	5000	345	34.5	Viton	CS	306861

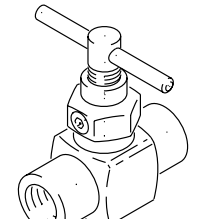
Needle Valves

Used to restrict fluid flow. Adjusts fluid delivery, establishes back pressure, and relieves fluid pressure.



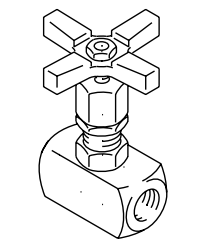
108233

Part No.	Inlet/Outlet npt	Maximum WPR			Packings	Wetted Parts	Inst. Manual
		psi	bar	MPa			
108233	1/4 x 1/4 (mbe)	5000	345	34.5	PTFE	Steel-plated	306861



202869

114451	1/4 x 1/4 (fxm)	5000	345	34.5	Buna-N	Steel-plated	
202869	1/2 x 1/2 (fbe)	5000	345	34.5	Leather	Steel-plated	



102926

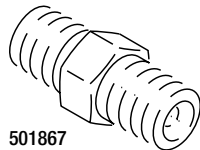
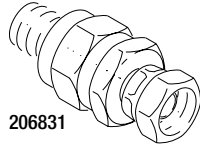
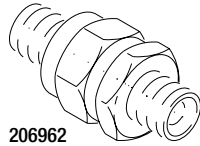
• 102926	3/8 x 3/8 (fbe)	5000	345	34.5	PTFE	SST	
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• *Waterborne compatible*

In-Line Fluid Valves and Swivels

Check Valves

Used to prevent fluid back flow when fluid supply pressure is discontinued. Improves pump performance while reducing pulsation.



Part No.	Inlet/Outlet npt	Maximum WPR			Packings	Wetted Parts
		psi	bar	MPa		
206962	3/8 x 3/8 npt(m)	3000	207	20.7	Buna-N	Zinc-plated steel, SST
206831	3/8 x 3/8 npsm(f)	3000	207	20.7	Buna-N	Zinc-plated steel, SST
• 501867*	1/4 x 1/4 npt(mbe)	3000	207	20.7	PTFE	303 SST
• 501684*	3/8 x 3/8 npt(mbe)	3000	207	20.7	PTFE	303 SST
• 501603*	1/2 x 1/2 npt(fbe)	3000	207	20.7	PTFE	303 SST
220179	3/4 x 3/4 npt(fbe)	4000	276	27.6	Thiokol	CS
217286	1 x 1 npt(fbe)	5000	345	34.5	Buna-N	CS

*501867, 501684 and 501603 are poppet style
 • Waterborne compatible

Pressure Relief Valves

Relieves residual fluid pressure when fluid supply pump is shut off or pressure maximum is exceeded.

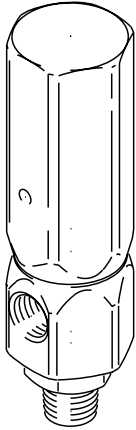
Relax-A-Valve

Part No.	Inlet/Outlet npt	Maximum WPR			Packings	Wetted Parts	Inst. Manual
		psi	bar	MPa			
202844	1/2 npt	175	12	1.2	Buna-N	Aluminum cast	306479
EvenFlo	3/8 nps (m)						

In-Line Fluid Valves and Swivels

Pressure Relief Valves

Automatic Pressure Relief Valve



Part No.	Inlet/ Outlet npt	Relief Port	Maximum WPR			Relief "Cracking" Pressure			Wetted Packings	Instruction Parts	Inst. Manual
			psi	bar	MPa	psi	bar	MPa			
• 237060	1/2 (f)	1/2 npt(m)	475-	33-	3.3-	750	52	5.2	PTFE	304 SST, tungsten carbide	308547
	1/2 (m)		575	40	4.0						
• 237061	1/2 (f)	1/2 npt(m)	950-	66-	6.6-	1500	103	10.3	PTFE	304 SST, tungsten carbide	308547
	1/2 (m)		1150	79	7.9						
• 237112	1/2 (f)	1/2 npt(m)	1400-	97-	9.7-	2250	155	15.5	PTFE	304 SST, tungsten carbide	308547
	1/2 (m)		1800	124	12.4						
• 237062	1/2 (f)	1/2 npt(m)	1800-	124-	12.4-	3000	207	20.7	PTFE	304 SST, tungsten carbide	308547
	1/2 (m)		2300	159	15.9						
• 237073	1/2 (f)	1/2 npt(m)	2300-	159-	15.9-	3750	259	25.9	PTFE	304 SST, tungsten carbide	308547
	1/2 (m)		2900	200	20.0						
• 237063	1/2 (f)	1/2 npt(m)	2900-	200-	20.0-	4500	310	31.0	PTFE	304 SST, tungsten carbide	308547
	1/2 (m)		3600	248	24.8						
• 237074	1/2 (f)	1/2 npt(m)	3600-	248-	24.8-	6000	414	41.4	PTFE	304 SST, tungsten carbide	308547
	1/2 (m)		5000	345	34.5						

• Waterborne compatible

Manual Pressure Relief Valve



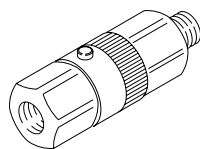
224775

Part No.	Description	Inlet/Outlet npt	Maximum WPR			Packings	Wetted Parts
			psi	bar	MPa		
224775	Bare Drain Valve	1/4 (m) 7/32 (f)	5000	345	34.5	Viton	CS, tungsten carbide
221077	Relief Valve	1/4 (m) 3/8 (f)	7400	510	51.0	Viton	CS, tungsten carbide

In-Line Fluid Valves and Swivels

High Pressure Swivels

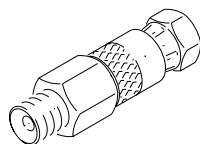
Used to provide free movement of hose sections without kinking or pressure bleeding from valves or spray guns.



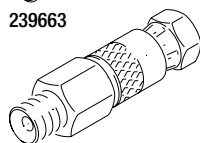
204083

Part No.	Inlet/Outlet npt	Maximum WPR			Packings	Wetted Parts	Inst. Manual	Service Kit
		psi	bar	MPa				
204083	1/4 npt(m) 1/8 npt(f)	8000	551	55.1	Leather	Steel-plated	306708	—
204084	1/4 npt(m) 1/4 npt(f)	8000	551	55.1	Leather	Steel-plated	306708	—
214925	1/4 npsm(f) 3/8 npt(f)	5000	345	34.5	Leather	Steel-plated	306861	—
207946	1/2 npsm(f) 3/8 npt(f)	6000	413	41.3	Polyurethane	Steel-plated	307005	—
207947	1/2 npt(f) 1/2 npt(m)	6000	413	41.3	Polyurethane	Steel-plated	307005	—
239663	1/4 npt(m) 1/4 npsm(f)	3600	248	24.8	Leather	Steel-plated	306861	207839
223341	1/4 npt(m) 1/4 npsm(f) Same as 239663 except PTFE packed.	3600	248	24.8	PTFE	Steel-plated	306861	223342
214926	1/2 npsm(f) 3/8 npt(f)	5000	345	34.5	Leather	Steel-plated	306861	—
• 236987	1/4 npsm(f) 1/4 npt(f)	7400	510	51.0	Filled	SST	306861	—
224457	1/4 npt(m) 1/4 npsm(f) Same as 239663 except card mounted.	3000	207	20.7	—	—	—	—
• 239394	1/4 npsm(m) 1/4 npsm(f) Includes: filter chamber and 100 mesh tip filter (205264).	5800	400	40.0	PTFE	SST	—	—
• 189018	Same as 239394 except without filter chamber and tip filter.							
115898	1/4 npsm 1/4 npsm	5800	400	40.0	PTFE	SST	—	—

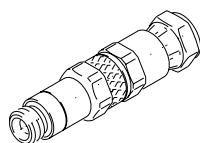
• Waterborne compatible



239663



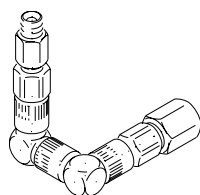
223341



239394

High Pressure, 3-Way, Z-Type Swivels

Used to allow free movement of dispense valves and prevent hose tangles.



202579,
202577,
223340

Part No.	Inlet/Outlet npt	Maximum WPR			Packings	Wetted Parts	Inst. Manual	Service Kit
		psi	bar	MPa				
202579	1/8 (m) 1/4 (f)	6500	448	44.8	Leather	Steel-plated	306708	
202577	1/4 (m) 1/4 (f)	6500	448	44.8	Leather	Steel-plated	306708	
223340	1/4 (m) 1/4 (f)	6500	448	44.8	PTFE	Steel-plated	—	
207948	1/2 (m) 1/2 (f)	6000	413	41.3	Polyurethane	Steel-plated	307005	

Caution: Z-swivels to be used with non-abrasive fluids only.

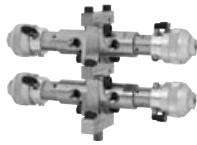
Color Change Valves

Technical Specifications

	Maximum Fluid WPR			Max Air Operating PR			Air Inlet	Fluid Inlet	Fluid Outlet (circulation port)	Wetted Parts
	psi	bar	MPa	psi	bar	MPa				
Low Pressure	300	20.7	2.0	125	8.6	0.86	5/32 in (4 mm)	1/4 npt (f)	1/4 npt (f)	303 SST, 17-4 SST, UHMWPE
High Pressure	3000	207	20.7	125	8.6	0.86	5/32 in (4 mm)	1/4 npt (f)	1/4 npt (f)	303 SST, tungsten carbide w/nickel binder

Sales Literature: Color Change Flyer [312783](#)

Ordering Information



Color Valve and Manifold Assemblies



Number of Valves	Low Pressure Part Number	High Pressure Part Number
2	256994	256995
3	15V812	15V816
4	256290	256339
5	15V813	15V817
6	256292	256341
7	256293	256342
8	15V814	256343
9	256295	256344
10	256296	256345
11	256297	256346
12	256298	256347
13	15V815	256348
14	256300	256349
15	256301	256350
16	256302	256351
17	256303	256352
18	256304	256353
19	256305	256354
20	256306	256355
21	256307	256356
22	256308	256357
23	256309	256358
24	256310	256359
25	256311	256360
26	256312	256361
27	256313	256362
28	256314	256363
29	256315	256364
30	256316	256365
31	256372	256371

Accessories

- 15V077 Stainless Steel Needle, High Pressure Valve
- 15U932 Carbide Seat, High Pressure Valve
- 15V737 Lubrication Cup, Low and High Pressure Valve
- 262028 Seal Insertion Tool

Fluid Filters, Assemblies and Screens

Filter Selection Guide

When choosing a fluid filter:

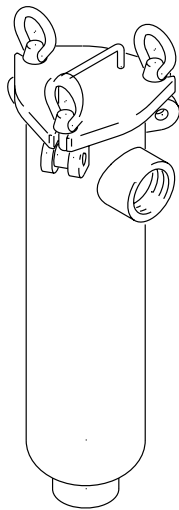
1. Determine maximum fluid pressure requirements.
2. Select aluminum, carbon steel or stainless steel (SST).
3. Choose the micron or screen mesh size.

	Typical Application	Max. Flow gpm (lpm)	1. Max. Pressure psi (bar, MPa)	2. Material of Construction	3. Filter Screen Mesh	Page
Bag Filter	Automotive	15 and 30 (57 and 114)	300 (21, 2.1)	SST	5-300 micron	67
Red Alert Low Pressure System Filter	Industrial	6 and 20 (23 and 76)	300 (21, 2.1)	Aluminum	30-200 mesh	68
Drop-line Filter	Filter for each gun drop	per gun	500 (35, 3.5)	SST	25-150 micron	69
Circulation Module Filter	Mid-range High Flow Pumps	10 (38)	300 (21, 2.1)	SST	30-200 mesh	70
Gun Inlet Filter	Fine Finish	per gun demand	500 (35, 3.5)	SST	60, 100 mesh	71
Siphon Tube/Pump Inlet Filter	Universal	per gun demand	–	Steel	60 mesh	71
Y-Strainer	Industrial	–	400 and 1480 (28, 2.8) and (102, 10.2)	Steel	20 mesh	72
Red Alert High Pressure System Filter	Industrial	6 and 20 (23 and 76)	3000 (210, 21)	Steel	30-200 mesh and stab-point	73
Pump Outlet High Pressure Filters	Protective Coatings	0.6-3.0 (2.3-11.4)	3000-7000 (207-510, 20.7-51)	Steel, Aluminum	30-200 mesh	74
Corrosion Resistant Pump Outlet High Pressure Filters	Protective Coatings	1.0 (3.8)	5000 (345, 34.5)	SST	30-200 mesh	75
Whiphose Filter	Protective Coatings	per gun demand	3000 (210, 21)	SST	60, 100, 200 mesh	75
Gun Inlet Filters	Protective Coatings	per gun demand	3600 and 5000 (249, 24.9) and (345, 34.5)	SST	50, 60, 100 mesh	76
Swivel/Filter	Protective Coatings	per gun demand	5800 (401, 40.1)	SST	60, 100 mesh	76
Spray Tip Filters	Protective Coatings	per gun demand	5000 (345, 34.5)	SST	60, 100 mesh	76

Fluid Filters, Assemblies and Screens

Low Pressure Fluid Filters

Supply Line or Return Line Bag Filters



915515

The Graco Model 6 and Model 12 bag filters process large volumes of industrial paints and other industrial fluids. Model 6 up to 15 gpm (57 lpm) and Model 12 up to 30 gpm (114 lpm). Maximum flow depends on bag micron size. The standard filter assembly includes housing, cover, cover O-ring and unlined stainless steel basket. Order filter bags separately.

Part No.	Description	Inlet/ Outlet npt(f)	Maximum WPR			Max Delivery		Material	Inst. Manual
			psi	bar	MPa	gpm	lpm		
915515	Model 6 (0.5 sq ft filter area)	1-1/4	300	21	2.1	15	57	CS	311775
• 915516	Model 6 (0.5 sq ft filter area)	1-1/4	300	21	2.1	15	57	SST	311775
915517	Model 12 (1.0 sq ft filter area)	1-1/2	300	21	2.1	30	114	CS	311775
• 915518	Model 12 (1.0 sq ft filter area)	1-1/2	300	21	2.1	30	114	SST	311775
916367	Model 12 (sanitary with Poly Lok)	1-1/2	500	35	3.5	30	114	SST	311775

Note: 521691 Replacement O-ring, 916100 Filter Vibrate Kit
• Waterborne compatible

Replacement Filter Bags

15 gpm Model 6 Part No.	30 gpm Model 12 Part No.	Material	Micron Size
521311	—	Glazed polyester felt without cover	5
521177	521183	Glazed polyester felt encased in spun bonded nylon cover	5
521180	521184		10
	521189		25
	521342	Glazed polyester felt encased in nylon mono-filament mesh cover.	10
521335	521344		25
521336			50
521337	521347		75
			100
521226	521254	Nylon mono-filament mesh.	5
521227	521255		10
521228	521256		25
521229	521257		50
521230	521258		75
521231	521259		100
521232	521260		125
521233	521261		150
521234	521262		200
521235	521263		250
521236	521264	300	

Strainer Baskets (perforated SST)

Model 6 Part No.	Model 12 Part No.	Material
521268	521276	Perforated only
521273	521280	Perforated with 100 mesh liner

Replacement Parts

Model 6 Part No.	Model 12 Part No.	Material
521306	521306	Eye-bolt and nut
521691	521691	Extra O-ring

Accessories

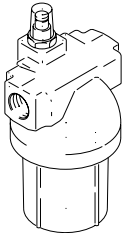
(same part numbers apply to Model 6 and Model 12)

Pressure gauge package				
2 1/2 in dial bourdon tube pressure gauge (range: 0-200 psi, 0-14 bar, 0-1.4 MPa), pulsation dampener and diaphragm seal. Includes:				
CS		206171	1/4 npt(f)	bottom inlet
SST		208855	1/4 npt(m)	bottom inlet
Ball valve for drain or air blowdown			316 SST	PSI
CS	1/4 x 1/4 npt(m)	208390	m x m	500
CS	3/8 x 3/8 npt(m)	208393	m x m	500
SST	3/8 x 3/8 npt(m)	237534	m x f	500

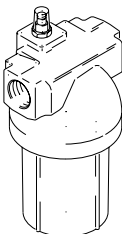
Fluid Filters, Assemblies and Screens

Red Alert Low Pressure Supply Line Filters

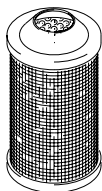
Unique red pop-up indicator reveals when fluid filter element requires replacement. Visible 360°. Built-in bypass valving directs continuous flow through separate passage when filter clogs, preventing downtime. Red Alert filter assembly material of construction: aluminum, glass sight, Viton O-ring.



213057, 213058,
213059, 213060,
213061



213062, 213063,
213064, 213065,
213066



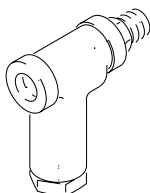
Part No.	Assembly	Area/sq.			Inlet/ Outlet npt	Maximum WPR			Max Delivery		Material	Inst. Manual
		in	cm	Mesh		psi	bar	MPa	gpm	lpm		
213057	Complete	36	232	30	3/4	300	21	2.1	6	22	Alum.	307282
213058	Complete	36	232	60	3/4	300	21	2.1	6	22	Alum.	307282
213059	Complete	36	232	100	3/4	300	21	2.1	6	22	Alum.	307282
213060	Complete	36	232	150	3/4	300	21	2.1	6	22	Alum.	307282
213061	Complete	36	232	200	3/4	300	21	2.1	6	22	Alum.	307282
213062	Complete	225	1451	30	1-1/4	300	21	2.1	20	76	Alum.	307283
213063	Complete	225	1451	60	1-1/4	300	21	2.1	20	76	Alum.	307283
213064	Complete	225	1451	100	1-1/4	300	21	2.1	20	76	Alum.	307283
213065	Complete	225	1451	150	1-1/4	300	21	2.1	20	76	Alum.	307283
213066	Complete	225	1451	200	1-1/4	300	21	2.1	20	76	Alum.	307283

Replacement Screen Elements for Red Alert Filter Assemblies

Part No.	Area/sq.			Material
	in	cm	Mesh	
• 108106	36	232	30	SST
• 108107	36	232	60	SST
• 108108	36	232	100	SST
• 108109	36	232	150	SST
108110	36	232	200	SST
• 108111	225	1451	30	SST
• 108112	225	1451	60	SST
• 108113	225	1451	100	SST
• 108114	225	1451	200	SST
• 108115	225	1451	150	SST

In-Line Strainer

Low volume in-line strainer.

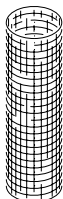


240418

Part No.	Description	Mesh	Inlet/Outlet npt	Maximum WPR			Max Delivery		Material
				psi	bar	MPa	gpm	lpm	
240418	Filter assembly	60	3/8 (f) 3/8 (m)	1500	104	10.4	1	3.8	Alum.
240417	Filter assembly	60	1/2 npsm(f) 1/2 (m)	1500	104	10.4	1	3.8	Alum.

Replacement Screen Elements

Each package contains 3 screens.



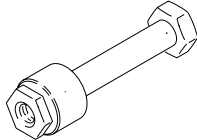
156967

Part No.	Mesh	Material	Screen
• 238433	40	SST	157332
• 238431	60	SST	156967
• 238429	100	SST	156939
• 915921	Air spray gun inlet filter assembly		

Fluid Filters, Assemblies and Screens

Gun Station Drop-Line Filter

Point-of-use filter that installs at individual paint drop lines. Easy to service. No tools required to replace dirty filter element. No elbows or internal turns to reduce pressure of flow. Housing assembly includes filter body, hex cap and PTFE encapsulated Viton O-ring. Order filter elements separately.



915700

Part No.	Description	Inlet/Outlet npt	Maximum WPR			Max Delivery		Material
			psi	bar	MPa	gpm	lpm	
• 915700	Drop-Line Filter assembly	3/8	500	35	3.5	3	11.4	SST (304)

Replacement Screen Elements

Part No.	Mesh	Material	Mesh	Thousands
• 521898	25 micron	SST	600	.001
• 521899	50 micron	SST	300	.002
• 521900	75 micron	SST	200	.003
• 521901	100 micron	SST	140	.004
• 521902	125 micron	SST	120	.005
• 521903	150 micron	SST	100	.006

Optional Drop-Line Filter Fittings

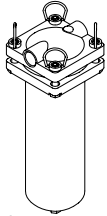
Part No.	Drop-Line Filter Elements	Inlet/Outlet npt	Material
• 235207	Swivel fitting inlet	3/8 npsm(f) 3/8 npt(m)	SST (316)
155665	Swivel fitting inlet	3/8 npsm(f) 3/8 npt(m)	CS
• 168686	Rigid fitting outlet	1/2-27 uns (mxm)	CS
521897	O-ring	—	PTFE, Encapsulated Viton (for 915700 Filter)

• *Waterborne compatible*

Fluid Filters, Assemblies and Screens

Circulation Module Low Pressure SST Fluid Filter

Meets a variety of pumping station applications up to 10 gpm (38 lpm). New low pressure SST fluid filter. Large, 26 sq in (167 cm) SST surface area provides extended service intervals and excellent corrosion resistance.



244053

Part No.	Assembly	Seals	Mesh	Inlet/ Outlet npt	Maximum WPR			Material	Inst. Manual
					psi	bar	MPa		
244053	Complete	PTFE Encapsulated Viton®	60	3/4	300	21	2.1	SST	308918

SST Fluid Filter Elements

Part No.	Area/sq.		Mesh	Micron	Material
	in	cm			
• 116178	26	167	30	540	SST
• 116179*	26	167	60	230	SST
• 116180	26	167	100	140	SST
• 116181	26	167	200	74	SST

*Standard with SST President 3:1 circulation modules 232089, 232081, 232090 and Husky 1040 circulation modules 232092 and 232082.

Note: When ordering replacement filter elements, it is recommended to order two PTFE Gaskets (part #116188).

- Waterborne compatible

Accessories

116188 PTFE Filter Element Gasket

Used to seal filter element and filter bowl.

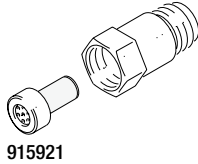
116183 PTFE Encapsulated Viton® O-Ring

Used to seal filter housing cover and filter bowl.

Fluid Filters, Assemblies and Screens

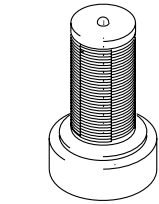
Air Spray Gun Inlet Filter

For use with all air spray guns. Straight fitting with disposable 100 mesh filter element. Attaches between hose and gun inlet to prevent particles from damaging gun mechanism or contaminating sprayed surface.

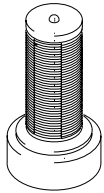


Part No.	Description	Mesh	Inlet/ Outlet npsm(mxf)	Maximum WPR			Material
				psi	bar	MPa	
915921	Air Spray Gun Inlet Filter Assembly	100	3/8	500	35	3.5	SST
191386	Housing only	—	3/8	500	35	3.5	SST

Replacement Screen Elements



238564

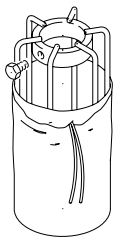


238562

25-Count Carton Part No.	3-Pack Part No.	3-Pack Part No.	Mesh	Material
238564	238563	224454	60	SST
238562	238561	224453	100	SST

Siphon Tube Inlet Filter

Attaches to siphon tube. Coarse screen filter prevents larger foreign objects from entering and possibly damaging pump. Rags, sweeping debris, metal fillings, etc., can cause serious pump wear and downtime if not filtered at the pump or siphon tube inlet.



210726

Part No.	Description	Mesh	Material
210726	Assembly Cage and nylon bag; fits 3/4 in siphon tube	60	Plated steel

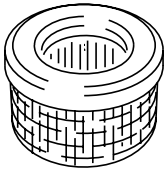
Replacement Screen Elements

Part No.	Mesh	QTY	Material
238769	60	25 count	Nylon

Fluid Filters, Assemblies and Screens

Pump/Suction Inlet Paint Strainers

Attaches to inlet of pumps.

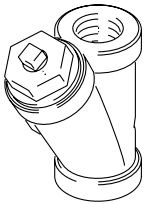


181072

Strainer in Packaging	Thread Size	Wetted Parts	Mesh Inner/Outer	O.D
218798	1/2 npt(f)	304 SST	16	1.73 in (44 mm)
189920	1 npsm-f	304 SST	8	2.22 in (56 mm)
237840	1-1/4 npt(f)	304 SST	8	2.68 in (68 mm)
115965	3/8 npt(f)	304 SST, Nylon	12	1.63 in (41 mm)
181073	1/2 npsm(f)	304 SST	8/16	2.22 in (56 mm)
181072	1 npsm(f)	304 SST	8/16	2.22 in (56 mm)
183770	3/4 npsm(f)	304 SST	8/16	2.22 in (56 mm)
235004	3/4 unf(f)	304 SST, Nylon	12	1.65 in (42 mm)
237675	1/2 npsm(f)	304 SST, Nylon	12	1.6 in (41 mm)
187119	1-1/2 npsm(f)	CS	NA	5.0 in (127 mm)
237820	no threads	304 SST, Nylon	12	1.6 in (41 mm)
191635	1 npt(f)	304 SST	10	1.75 in (44 mm)

Strainer Y-Types

Strainer Y-types are used to filter material before entering proportioning pumps.



101078

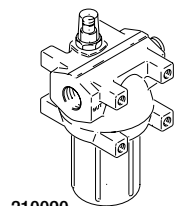
Part No.	Description	Inlet/Outlet npt	Maximum WPR			Material	Replacement Screen
			psi	bar	MPa		
110877	20 mesh screen	1/2	400	28	2.8	Steel	110906
101078	20 mesh screen	3/4	400	28	2.8	Steel	180199
110878	20 mesh screen	1	400	28	2.8	Steel	110907

Fluid Filters, Assemblies and Screens

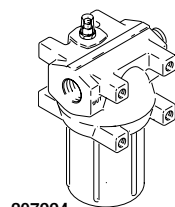
High Pressure Fluid Filters

Red Alert High Pressure Supply Line Filters

Unique red pop-up indicator reveals when fluid filter element requires replacement. Visible from 360° built-in by-pass valving directs continuous flow through separate passage when filter clogs preventing downtime. Materials of construction: carbon steel, glass sight and Viton O-rings. Use stab point style replacement element for high viscosity adhesive, sealants and mastics.



210090



207994

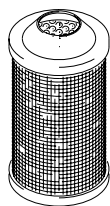
Part No.	Area/sq.		Mesh	Inlet/Outlet npt	Maximum WPR			Max Delivery		Material	Inst. Manual
	in	cm			psi	bar	MPa	gpm	lpm		
210090	36	232	60	3/4	3000	207	20.7	10	38	CS	307252
210091	36	232	100	3/4	3000	207	20.7	10	38	CS	307252
210092	36	232	200	3/4	3000	207	20.7	10	38	CS	307252
207994	225	1451	30	1-1/4	3000	207	20.7	20	75	CS	306987
207995	225	1451	60	1-1/4	3000	207	20.7	20	75	CS	306987
207996	225	1451	100	1-1/4	3000	207	20.7	20	75	CS	306987
207997	225	1451	150	1-1/4	3000	207	20.7	20	75	CS	306987
207998	225	1451	200	1-1/4	3000	207	20.7	20	75	CS	306987
207999	225	1451	.040 stab pt.*	1-1/4	3000	207	20.7	20	75	CS	306987
208000	225	1451	.050 stab pt.*	1-1/4	3000	207	20.7	20	75	CS	306987
Adapter for connection of Drain Valves to Red Alert Bowl:											
105276				3/4 - 16 unf x 1/4 (f)	3000	207	20.7			CS	306987

*Use stab point filter for high viscosity or filled materials.

Drain Valves

Part No.	Inlet/Outlet npt	Maximum WPR			Material	Inst. Manual
		psi	bar	MPa		
210657	1/4 (mbe)	5000	345	34.5	Viton, CS	307252
214037	1/4 (mbe)	5000	345	34.5	PTFE, CS	307252
210658	3/8 (mbe)	5000	345	34.5	PTFE, CS	307252
Adapter for connection of Drain Valves to 3000 psi (207 bar, 20.7 MPa) Red Alert Bowl:						
105276	3/4 - 16 unf x 1/4 (f)	3000	207	20.7	CS	307252

Replacement Screen Elements for Red Alert Filter Assemblies



Part No.	Area/sq.		Mesh	Material
	in	cm		
• 108111	225	1451	30	SST
• 108112	225	1451	60	SST
• 108113	225	1451	100	SST
• 108115	225	1451	150	SST
• 108114	225	1451	200	SST
• 108116	36	232	60	SST
• 108117	36	232	100	SST
• 108118	36	232	200	SST
108119	225	1451	.040 stab pt.*	CS
108120	225	1451	.050 stab pt.*	CS

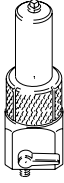
*Use stab point filter for high viscosity or filled materials.

• Waterborne compatible

Fluid Filters, Assemblies and Screens

Pump Outlet Filters

Filter assembly mounts directly on pump at outlet or on nearby wall to capture impurities exiting the pump. Contains 18 in² (4.6 cm²) filter element for long filter life with high volume pumps. Multiple filter outlets provide installation and bypass or pressure relief flexibility.



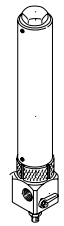
214624



214570



218029

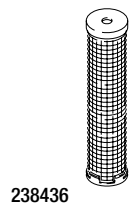


214726

Part No.	Description	Area/sq in (cm)	Mesh	Inlet/ Outlet npt	Maximum WPR			Max Delivery		Material	Inst. Manual
					psi	bar	MPa	gpm	lpm		
214624	Filter assembly for wall or cart mount pumps with surge tanks	18 (116)	60	3/4 1/2	5000	345	34.5	3	11	Steel	307296
214570	Filter assembly	18 (116)	60	3/8 1/4	3000	207	20.7	1	4	Alum.	307273
218029	Filter assembly	18 (116)	60	3/8 1/4	5000	345	34.5	1	4	Steel	307273
214726	Filter assembly for drum cover mount pumps with surge tank	18 (116)	60	3/4 3/4	5000	345	34.5	3	11	Steel	307296
238620	Filter assembly for wall or cart mount pumps	18 (116)	60	3/4 3/8	5000	345	34.5	3	11	Steel	307296
214724	Filter assembly for drum cover mount pumps	18 (116)	60	3/4 3/4	5000	345	34.5	3	11	Steel	307296
235677	Filter assembly for 495st	7 (45)	60	1/4	3000	207	20.7	0.6	2.3	Alum/ Steel	308249
237069	Filter assembly	18 (116)	60	3/4 1/4	7252	500	50	3	11	Steel	307296
239425	Fluid outlet filter with tall aluminum bowl,			1/4	3000	207	20.7				308249
239758	polyethylene support and reverse outlet			1/4							
235677	Fluid outlet filter with short aluminum bowl,			1/4	3000	207	20.7				308249
239759	polyethylene support and reverse outlet			1/4							
239447	Fluid outlet filter with short aluminum bowl,			1/4	3000	207	20.7				308249
	polyethylene support and reverse outlet			1/4							

Fluid Filters, Assemblies and Screens

Pump Outlet Filters (continued)



238436



238444

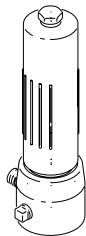
Replacement Screen Elements

25-Count Carton Part No.	3 Pack Part No.	Area/sq.		Mesh	Material
		in	cm		
• 238436	238435	18	116	30	SST
• 238438	238437	18	116	60	SST
• 238440	238439	18	116	100	SST
• 238442	238441	18	116	200	SST
• 238444	238443	7	45	30	SST
• 238446	238445	7	45	60	SST
• 238448	238447	7	45	100	SST
• 238450	238449	7	45	200	SST

• Waterborne compatible

Corrosion Resistant Fluid Filters

All stainless steel construction (except PTFE O-ring and polyethylene screen support). Resists corrosion from waterborne materials, catalyzed varnishes and other fluids not compatible with carbon steel or aluminum. Polyethylene screen support prevents screen collapse for maximum performance.



223160

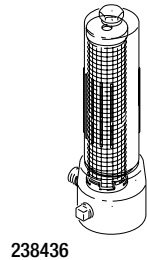
Part No.	Description	Area/sq.		Mesh	Inlet/Outlet npt	Maximum WPR			Material	Inst. Manual
		in	cm			psi	bar	MPa		
• 223160	Filter assembly	18	116	60	3/8(f) 1/4(m)	5000	345	34.5	304, 316 SST	307273
• 239800	Filter assembly	18	116	100	3/8(f) 1/4(m)	5000	345	34.5	304, 316 SST	307273
• 238782	Filter assembly for high solids material	18	116	30	3/8(f) outlets: 3/8, 1/4, 1/4, bottom: 1/4	5000	345	34.5	340, 316	308611
240183		18	116	60	1/2(f) x 1/2(f)	5000	345	34.5	304 SST	307273
240038	Fluid outlet filter with short aluminum bowl, polyethylene support and reverse outlet				1/4	5000	345	34.5		308249
240711					1/4					

*Use stab point filter for high viscosity or filled materials.

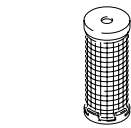
Fluid Filters, Assemblies and Screens

Corrosion Resistant Fluid Filters

All stainless steel construction (except PTFE O-ring and polyethylene screen support). Resists corrosion from waterborne materials, catalyzed varnishes and other fluids not compatible with carbon steel or aluminum. Polyethylene screen support prevents screen collapse for maximum performance.



238436



238444

Replacement Screen Elements

25-Count Carton Part No.	3 Pack Part No.	Area/sq.		Mesh	Material
		in	cm		
• 238436	238435	18	116	30	SST
• 238438	238437	18	116	60	SST
• 238440	238439	18	116	100	SST
• 238442	238441	18	116	200	SST
• 238444	238443	7	45	30	SST
• 238446	238445	7	45	60	SST
• 238448	238447	7	45	100	SST
• 238450	238449	7	45	200	SST

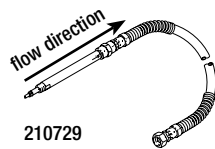
• Waterborne compatible

Optional Filter Support

179801 Zinc-plated steel

Whiphose Filters (Inline)

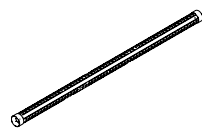
Includes 60 mesh filter element, housing and 3 ft (91 cm) x 3/16 in whiphose with spring guard and permanent fittings.



210729

Part No.	Description	Mesh	Inlet/Outlet npt	Maximum WPR			Material	Inst. Manual
				psi	bar	MPa		
210729	Housing with whiphose	60	1/4 1/4	3000	207	20.7	CS	307245
213068	Housing without whiphose	60	1/4 1/4	3000	207	20.7	CS	307245

Replacement Screen Elements



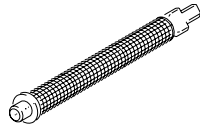
172057

Part No.	Mesh	Qty	Material	Part No.	Mesh	Qty	Material
• 210731	60	3 pack	SST	• 210732	100	3 pack	SST
• 172057	60	single	SST	• 172058	100	single	SST
• Waterborne compatible				• 210733	200	3 pack	SST
				• 172059	200	single	SST

Fluid Filters, Assemblies and Screens

Gun Inlet Filters for Contractor Guns

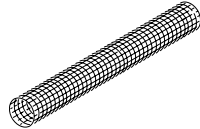
Filter assembly which fits into Contractor gun handle. Large filter area to last longer between element replacement.



218131

Part No.	Description	Mesh	Maximum WPR			Inst. Manual
			psi	bar	MPa	
218131	Inlet filter	50	3600	249	24.9	307614
218133	Inlet filter	100	3600	249	24.9	307614

Contractor Gun Replacement Screen Elements

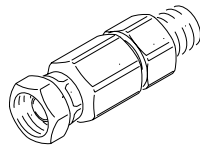


179731

Part No.	Mesh	Material
• 179731	50	304 SST
• 179732	100	304 SST

Gun Inlet Filter Housing

Swivel fitting with disposable 100 mesh filter element attaches between hose and gun inlet to prevent particles from damaging gun mechanism or passing through onto spray surface.

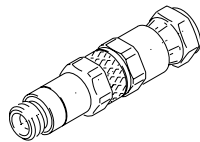


210500

Part No.	Description	Mesh	Inlet/Outlet npt	Maximum WPR		
				psi	bar	MPa
210500	Housing	100	1/4 npsm(f) 1/4 npt(m)	6150	423	42.3

High Pressure Swivel/Filter Assembly

Enhances gun movement and provides integral filter.

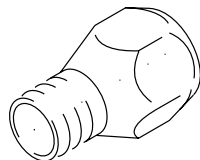


239394

Part No.	Description	Inlet/Outlet npt	Maximum WPR			Material
			psi	bar	MPa	
239394	Swivel-Filter	1/4 npt(m) 1/4 npsm(f)	5800	401	40.1	303,430 SST

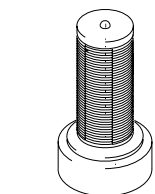
Spray Tip Filters

Final filter to prevent foreign particles from ruining sprayed surface smoothness. Reduces refinishing expense.



164120

Part No.	Description	Spacing
164120	Tip filter housing	Tip retainer for manual airless gun



238562

25-Count Carton Part No.	3 Pack Part No.	Description	Spacing
• 238562	238561	Tip filter	0.005 in (equivalent to 100 mesh screen)
• 238564	238563	Tip filter	0.009 in (equivalent to 60 mesh screen)

• Waterborne compatible

Fluid Pressure Regulation

Fluid Pressure Regulator Chart

When choosing a fluid regulator:

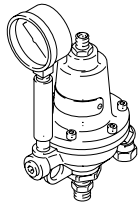
1. Pick material of construction.
2. Choose low pressure or high pressure.
3. Select model.

1.	2.	3. Models					
Material of Construction	Pressure	Air Operated Downstream Fluid Regulator	Spring Operated Downstream Fluid Regulator	Back Pressure Regulators	Gun Mounted Regulators/ Restrictors	Fluid Gauges	Surge Suppressors
Aluminum	Low Pressure	Page 162		Page 165			Page 170
Carbon Steel	Low Pressure			Page 165			Page 170
	High Pressure	Page 164	Page 163	Page 166			
SST	Low Pressure	Page 162		Page 165	Page 167	Page 169	Page 170
	High Pressure	Page 164	Page 163	Page 166			
Composite	Low Pressure	Page 162					
Brass						Page 169	

Fluid Regulators

Fluid Regulators for Low Pressure

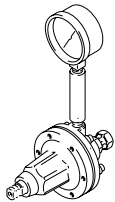
Air Operated Fluid Regulators.



206200

Part No.	Max Pressure psi (bar)	Regulated Pressure psi (bar)	Max Delivery gpm (lpm)	Max Viscosity in CPS	Wetted Parts	Type	Inlet/Outlet	Gauge Port	Gauge Included
204500	250 (17.5)	0-15 (0-1)	0.75 (2.8)	500	Alum	Spring	3/8 F 3/8 M	1/4 F	Yes
206200	250 (17.5)	0-30 (0-2)	0.75 (2.8)	500	Alum	Air	3/8 F 3/8 M	1/4 F	Yes
203831	250 (17.5)	0-60 (0-4)	3.0 (11.3)	1000	Alum	Spring	3/8 F 3/8 M	1/4 F	Yes
205425	250 (17.5)	0-60 (0-4)	3.0 (11.3)	1000	Alum	Spring	3/8 F 3/8 M	1/4 F	Yes
209030	250 (17.5)	5-100 (0-7)	2.0 (7.5)	1000	SST	Spring	3/8 F 3/8 M	1/4 F	Yes
204501	250 (17.5)	20-160 (1-11)	3.0 (11)	1000	Alum	Spring	3/8 F 3/8 M	1/4 F	Yes

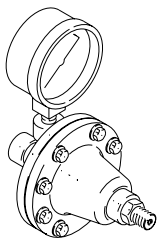
Instruction manual [306563](#).



214980

214980	250 (17.5)	0-30 (0-2)	3.0 (11.3)	1000	SST	Air	3/8 F 3/8 F	1/4 F	Yes
222115	250 (17.5)	20-160 (1-11)	3.0 (11.3)	300	SST	Spring	3/8 F 3/8 F	1/4 F	Yes
214895	250 (17.5)	5-100 (0-7)	3.0 (11.3)	1000	SST	Spring	3/8 F 3/8 F	1/4 F	No
214706	250 (17.5)	5-100 (0-7)	3.0 (11.3)	1000	SST	Spring	3/8 F 3/8 F	1/4 F	Yes
217314	250 (17.5)	20-160 (1-11)	3.0 (11.3)	1000	SST	Spring	3/8 F 3/8 F	1/4 F	Yes
221118	250 (17.5)	20-160 (1-11)	3.0 (11.3)	1000	SST	Spring	3/8 F 3/8 F	1/4 F	No

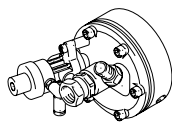
Instruction manual [307212](#).



236281

236449	100 (7)	3-30 (0.2-2)	0.5 (1.9)	1000	Acetal	Spring	1/4 F 1/4 F	1/4 F	Yes
241976	100 (7)	3-30 (0.2-2)	0.5 (1.9)	1000	Acetal	Air	1/4 F 1/4 F	1/4 F	No
236281	100 (7)	3-100 (0.2-7)	0.5 (1.9)	1000	Acetal	Spring	1/4 F 1/4 M	1/4 F	Yes
236216	100 (7)	20-100 (1-7)	0.5 (1.9)	1000	Acetal	Spring	1/4 F 1/4 F	1/4 F	No
236450	100 (7)	20-100 (1-7)	0.5 (1.9)	1000	Acetal	Spring	1/4 F 1/4 F	1/4 F	Yes

Composite construction. Instruction manual [308325](#).



830351

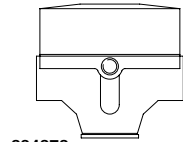
830351	250 (17)	3-100 (0.2-7)	3.0 (11.3)	1000	SST	Air	3/8 F 1/4 F	None	No
830352	250 (17)	3-100 (0.2-7)	3.0 (11.3)	1000	SST	Air	3/8 F 1/4 F	None	No
830353	250 (17)	3-100 (0.2-7)	3.0 (11.3)	1000	SST	Air	3/8 F 1/4 F	None	No

830351 includes integrated dump valve. Quick flush design. Instruction manual [308292](#).

Fluid Regulators

Fluid Regulators for Low Pressure (continued)

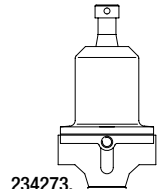
Pneumatically Adjustable Fluid Regulators



234272,
234256

Part No.	Max Pressure psi (bar)	Regulated Pressure psi (bar)	Max Delivery gpm (lpm)	Max Viscosity in CPS	Wetted Parts	Type	Inlet/Outlet	Gauge Port	Gauge Included
234272	580 (40)	6-145 (0-10)	7.0 (26.5)	1000	SST	Air	3/8 F 3/8 F	1/8 bspp	No
234256	580 (40)	6-145 (0-10)	7.0 (26.5)	1000	SST	Air	3/8 F 3/8 F	1/8 bspp	No

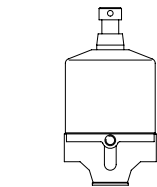
Air controlled solvent/water based systems. Instruction manual [309474](#).



234273,
234263

Mechanically Adjustable Fluid Regulators

234273	580 (40)	15-145 (1-10)	7.0 (26.5)	1000	SST	Spring	3/8 F 3/8 F	1/8 bspp	No
234263	580 (40)	20-160 (1-11)	7.0 (26.5)	1000	SST	Spring	3/8 F 3/8 F	1/8 bspp	No



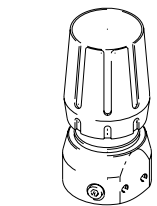
234267

234267	1015 (70)	145-725 (10-50)	9.8 (37)	1000	SST	Spring	3/8 F 3/8 F	1/8 bspp	No
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Mechanical solvent/water based systems. Instruction manual [309474](#).

Fluid Regulators for High Pressure

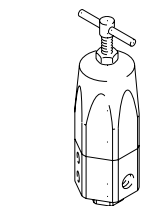
Spring Operated Fluid Regulators



206819

Part No.	Max Pressure psi (bar)	Regulated Pressure psi (bar)	Max Delivery gpm (lpm)	Max Viscosity in CPS	Wetted Parts	Type	Inlet/Outlet	Gauge Port	Gauge Included
217576	3000 (206)	200-1000 (13-69)	3.5 (13.2)	500	CS	Spring	3/8 F 1/4 F	1/4 F	Yes
206661	3000 (206)	1000-3000 (69-206)	3.5 (13.2)	500	CS	Spring	3/8 F 1/4 F	1/4 F	Yes

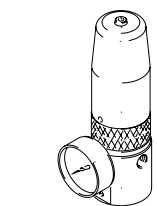
Airless, solvent based systems. Instruction manual [306878](#).



222121

222121	1500 (103)	150-1200 (10-83)	1.0 (3.7)	500	SST	Spring	1/4 F 1/4 F	—	No
240197	1500 (103)	150-1200 (10-83)	1.0 (3.7)	500	SST	Spring	1/4 F 1/4 F	1/4 F	Yes
240198	1500 (103)	150-1200 (10-83)	1.0 (3.7)	500	SST	Spring	1/4 F 1/4 F	1/4 F	Yes

Unique bottom replaceable cartridge. Instruction manual [307886](#).



238890

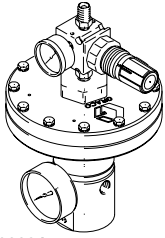
238889	6000 (413)	500-3000 (34-206)	1.0 (3.7)	15000	SST	Spring	3/8 F 3/8 F	1/4 F	No
238890	6000 (413)	500-3000 (34-206)	1.0 (3.7)	15000	SST	Spring	3/8 F 3/8 F	1/4 F	Yes
238891	6000 (413)	3000-5000 (206-344)	1.0 (3.7)	15000	SST	Spring	3/8 F 3/8 F	1/4 F	No
238892	6000 (413)	3000-5000 (206-344)	1.0 (3.7)	15000	SST	Spring	3/8 F 3/8 F	1/4 F	Yes

Easy flush plug available. Instruction manual [308647](#).

Fluid Regulators

Fluid Regulators for High Pressure (continued)

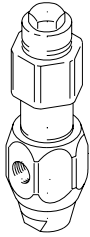
Air Operated Fluid Regulators



238894

Part No.	Max Pressure psi (bar)	Regulated Pressure psi (bar)	Max Delivery gpm (lpm)	Max Viscosity in CPS	Wetted Parts	Type	Inlet/ Outlet	Gauge Port	Gauge Included
238893	6000 (413)	500-4000 (34-275)	1.0 (3.7)	15,000	SST	Air	3/8 F 3/8 F	1/4 F	No
238894	6000 (413)	500-4000 (34-275)	1.0 (3.7)	15,000	SST	Air	3/8 F 3/8 F	1/4 F	Yes

Easy flush plug available. Instruction manual [308647](#).

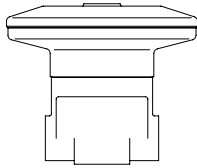


903958

961635	5000 (345)	250-4500 (17-310)	1.5 (5.6)	1,000,000	CS	Air	3/4 F 3/4 F	3/4 F	Yes
903958	5000 (345)	1000-4500 (69-310)	1.5 (5.6)	1,000,000	CS	Spring	3/4 F 3/4 F	3/4 F	Yes

Mastic fluid regulator. Instruction manual [307517](#).

Pneumatically Adjustable Fluid Regulators



234266

234266	5000 (345)	70-900 (5-62)	11.3 (42.7)	–	SST	Air	3/4 F 3/4 F	1/4 bspp	No
234270	5000 (345)	300-2000 (20-138)	11.7 (44.2)	–	SST	Air	3/4 F 3/4 F	1/4 bspp	No
234271	5000 (345)	600-4600 (41-317)	12.3 (46.5)	–	SST	Air	3/4 F 3/4 F	1/4 bspp	No

Air controlled, high flow system. Instruction manual 309475

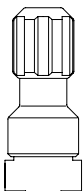


234259

234259	5000 (345)	600-3600 (41-248)	10.6 (40.1)	–	SST	Air	3/8 F 3/8 F	–	No
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Air controlled system. Instruction manual [309475](#).

Mechanically Adjustable Fluid Regulators



234260,
234264,
234265

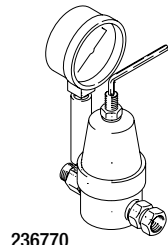
234260	2600 (179)	600-1500 (41-103)	8.1 (30.6)	–	SST	Spring	3/8 F 3/8 F	–	No
234264	5000 (345)	1300-3000 (89-206)	8.2 (31.0)	–	SST	Spring	3/8 F 3/8 F	–	No
234265	5000 (345)	1300-4000 (89-275)	9.2 (34.8)	–	SST	Spring	3/8 F 3/8 F	–	No

Water/solvent based. Instruction manual [309475](#).

Back Pressure Regulators

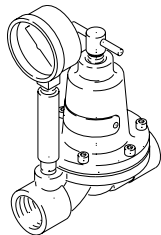
Back Pressure Fluid Regulators for Low Pressure

Spring Operated Back Pressure Regulators



236770

Part No.	Max Pressure psi (bar)	Regulated Pressure psi (bar)	Max Delivery gpm (lpm)	Max Viscosity in CPS	Wetted Parts	Type	Inlet/Outlet	Gauge Port	Gauge Included
205122	180 (12)	0-180 (0-12)	2.0 (7.5)	1000	CS	Spring	3/8 M 3/8 F	1/4 F	Yes
237503	180 (12)	5-180 (0-12)	4.3 (16.2)	1000	SST	Spring	3/8 M 3/8 F	1/4 F	No
236770	180 (12)	5-180 (0-12)	4.3 (16.2)	1000	SST	Spring	3/8 M 3/8 F	1/4 F	Yes

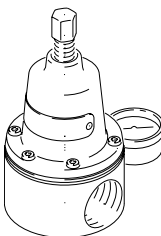


206019

Paint system. Instruction manual [308401](#).

206019	180 (12)	0-180 (0-12)	15.0 (56.7)	1000	Alum	Spring	1 F 1 F	1/4 F	Yes
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High flow system. Instruction manual [306770](#).



208997

208997	180 (12)	0-180 (0-12)	15.0 (56.7)	1000	SST	Spring	1-1/4 F 1-1/4 F	1/4 F	Yes
916154	180 (12)	0-180 (0-12)	15.0 (56.7)	1000	SST, Carbide	Spring	1-1/4 F 1-1/4 F	1/4 F	Yes
903508	180 (12)	0-180 (0-12)	15.0 (56.7)	1000	SST	Spring	1 F 1-1/4 F	1/4 F	Yes

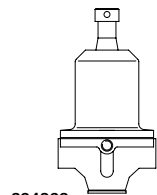
High flow system. Instruction manual [307107](#).

Conversion kit 15J498 - converts a 208997 spring operated back pressure regulator to a pneumatic back pressure regulator.

Repair kit 15J820 - diaphragm repair kit with standard stainless steel seat.

Repair kit 15J822 - carbide repair kit for back pressure regulator.

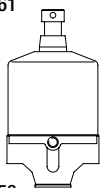
Mechanically Adjustable Back Pressure Regulators



234262,
234261

234262	145 (10)	15-145 (1-10)	4.6 (17.34)	1000	SST	Spring	3/8 F 3/8 F	1/8 bspp	No
234261	290 (20)	15-290 (1-20)	5.7 (21.5)	1000	SST	Spring	3/8 F 3/8 F	1/8 bspp	No
234255	290 (20)	29-290 (2-20)	7.8 (29.5)	1000	SST	Spring	3/8 F 3/8 F	1/8 bspp	No

Solvent/water based system. Instruction manual [309474](#).

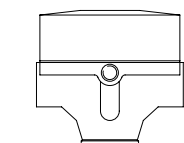


234258

234258	725 (50)	73-725 (5-50)	11.5 (43.5)	1000	SST	Spring	3/8 F 3/8 F	1/8 bspp	No
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Mechanical, mid range system. Instruction manual [309474](#).

Pneumatically Adjustable Back Pressure Regulators



234257

234257	145 (10)	15-145 (1-10)	4.6 (17.4)	1000	SST	Air	3/8 F 3/8 F	1/8 bspp	No
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Air controlled, low pressure system. Instruction manual [309474](#).

Back Pressure Regulators

Low Shear Pneumatic Back Pressure Regulators

Part No.	Max Pressure psi (bar)	Regulated Pressure psi (bar)	Max Delivery gpm (lpm)	Max Viscosity in CPS	Wetted Parts	Type	Inlet/Outlet	Gauge Port	Gauge Included
288117	300 (20.7)	25-250 (1.7-17)	20 (75)	1000	SST, Acetal and PTFE	Air	1-1/4 F	1/4 npt(f)	Yes
288311	300 (20.7)	25-250 (1.7-17)	20 (75)	1000	SST, Acetal and PTFE	Air	1-1/4 F	1/4 npt(f)	Yes
288262	300 (20.7)	25-250 (1.7-17)	20 (75)	1000	SST, Acetal and PTFE	Air	1-1/4 F	1/4 npt(f)	Yes

Repair kit 15J821 - stainless steel repair kit for back pressure regulator.

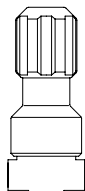
Back Pressure Fluid Regulators for High Pressure



206819

Part No.	Max Pressure psi (bar)	Regulated Pressure psi (bar)	Max Delivery gpm (lpm)	Max Viscosity in CPS	Wetted Parts	Type	Inlet/Outlet	Gauge Port	Gauge Included
222405	3000 (207)	0-1000 (0-69)	3.5 (13.3)	500	CS	Spring	1/4 F 1/4 F	1/4 F	No
206819	3000 (207)	5-180 (0-12)	3.5 (13.3)	500	CS	Spring	1/4 F 1/4 F	1/4 F	No
238926	3000 (207)	5-180 (0-12)	3.5 (13.3)	500	SST	Spring	1/4 F 1/4 F	1/4 F	No

High pressure, solvent coatings. Instruction manual [306860](#).



234268,
234269

234268	2500 (172)	600-1500 (41-103)	10.2 (38.6)	–	SST	Spring	3/8 F 3/8 F	–	No
234269	3400 (234)	1300-3000 (89-207)	13.1 (49.5)	–	SST	Spring	3/8 F 3/8 F	–	No

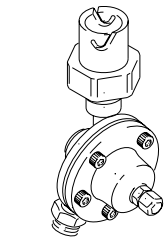
Solvent/water based. Instruction manual [306770](#).

For information on gun mounted fluid regulators, please reference instruction manual [307016](#).

Gun Regulators

Gun-Mounted Stainless Steel Fluid Regulators

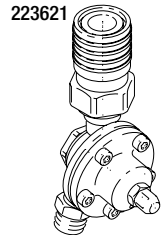
For use with air spray guns at low pressures.



223621

Part No.	Inlet/ Outlet	Max. Inbound Fluid			Regulated Pressure			Wetted Parts	Inst. Manual
		psi	bar	MPa	psi	bar	MPa		
• 223621	3/8 twistlock	200	14	1.4	5-35	0.3-2.4	0.03-0.24	SST	307016

Note: Regulator to gun fitting 223627 twistlock.

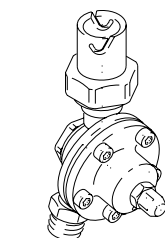


208082

• 208082	1/4 npsm(m)	200	14	1.4	5-35	0.3-2.4	0.03-0.24	SST	307016
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Note: 208085 regulator to gun fitting. Circulating spring-mounted gun mount. Viscosity range up to 500 cps.

Note: To convert from standard Buna-N diaphragm to PTFE, order 185028 PTFE diaphragm and 168880 Mylar backing diaphragm to replace standard Buna-N and nylon diaphragm.



223623

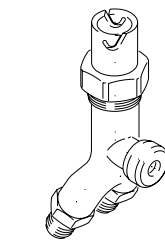
• 223622	3/8 npsm(f)	200	14	1.4	5-35	0.3-2.4	0.03-0.24	SST	307016
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Note: Regulator to gun fitting 223628 twistlock. Direct to gun fitting.

• 223623	3/8 twistlock	200	14	1.4	5-35	0.3-2.4	0.03-0.24	SST	307016
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Note: Regulator to gun fitting 223628 twistlock

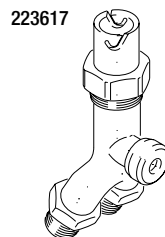
Circulating Stainless Steel Y Restrictor Valves



223617

Part No.	Inlet/ Outlet	Max. Inbound Fluid			Regulated Pressure			Max Delivery		Wetted Parts	Inst. Manual
		psi	bar	MPa	psi	bar	MPa	gpm	lpm		
• 223617	1/4 npsm(m)	300	21	2.1	0-300	0-21	0-2.1	1	3.8	SST	307751

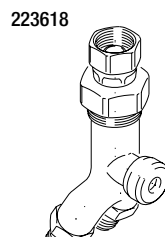
Note: 3/8 twistlock outlet to gun. Regulator to gun fitting 223628 twistlock. Regulator type: adjustable restrictor.



223618

• 223618	3/8 npsm(m)	300	21	2.1	0-300	0-21	0-2.1	1	3.8	SST	307751
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Note: up to 1000 cps viscosity.



223619

• 223619	1/4 npsm(m)	300	21	2.1	0-300	0-21	0-2.1	1	3.8	SST	307751
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Note: 3/8 npsm(f) swivel.

• 223620	3/8 npsm(m)	300	21	2.1	0-300	0-21	0-2.1	1	3.8	SST	307751
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Note: 3/8 npsm(f) coupler.

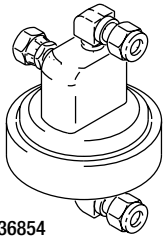
Note: restrictor valves require tool 220102 to adjust.

• Waterborne compatible

Gun Regulators

PRO Auto Xs™ Gun Fluid Regulator

For use with air spray guns at low pressures.

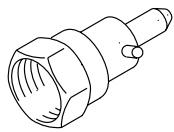


236854

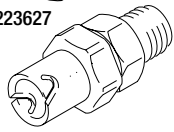
Part No.	Description	Inst. Manual
236854	Air piloted fluid regulator mounts at manifold for precise fluid control.	308098

Stainless Steel Gun Fittings

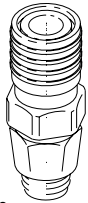
Spring Operated Stainless Steel Regulators (continued)



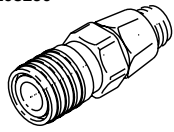
223627



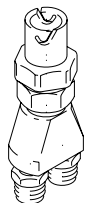
223624



208250



223625



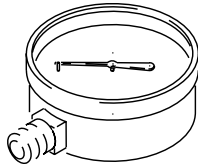
223626

Part No.	Inlet/ Outlet	Max. WPR			Inlet & Return Ports	Outlet	Material	Inst. Manual
		psi	bar	MPa				
• 223627	Coupler Stem	200	14	1.4	Twistlock(m)	3/8 npsm(f)	SST	307016
• 223624	Straight Adapter	200	14	1.4	3/8 npsm(m)	Twistlock(f)	SST	307016
• 208250	Straight Adapter	200	14	1.4	3/8 npsm(m,)	Ring Coupler	SST	307016
• 223625	Straight Adapter	300	20.7	2.07	3/8 npsm(m)	Twistlock(f)	SST	307016
• 223628	Coupler Stem	300	20.7	2.07	Twistlock(m)	3/8 npsm (f)	SST	307016
• 223626	Circulating Adapter	200	14	1.4	1/4 npsm(m)	Twistlock(f)	SST	307016
• 214019	Circulating Adapter	200	14	1.4	1/4 npsm(m)	Twistlock(f)	SST	307016
• 239864	High Pressure Circulating Fitting	5000	340	3.4	1/4 npsm(m)	npt(m)	SST	NA

Fluid Pressure Gauges

Fluid Pressure Gauges

Stainless Steel Gauges

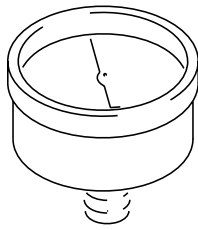


187874
(bottom mount)

Part No.	Inlet	Max.WPR			Wetted Parts	Case Descripton	Case & Dial Diameter in (mm)	Mount Style
		psi	bar	MPa				
• 187875	1/4 npt(m)	30	2.1	0.21	316 SST	SST	2.5 (64)	bottom
• 187874	1/4 npt(m)	100	7	0.7	316 SST	SST	2.5 (64)	bottom
• 187873	1/4 npt(m)	200	14	1.4	316 SST	SST	2.5 (64)	bottom
• 187876	1/4 npt(m)	300	21	2.1	316 SST	black	2.5 (64)	bottom
• 110182	1/4 npt(f)	2000	138	13.8	316 SST, phosphor bronze	SST with damperer	2.5 (64)	bottom
• 113641	1/4 npt(m)	3000	207	20.7	SST	SST liquid filled	2.5 (64)	back
• 113654	1/4 npt(m)	5000	345	34.5	SST	SST liquid filled	2.5 (64)	back
101176	1/4 npt(m)	60	4.1	.41	brass	chrome	2.0 (51)	bottom
105770	1/4 npt(m)	1000	69	6.9	brass	SST liquid filled	2.5 (64)	bottom

Note: Air pressure gauges can be found in Section 1, Air Supply Controls, page 14
• Waterborne compatible

Brass Gauges



102397
(back mount)

Part No.	Inlet	Max.WPR			Wetted Parts	Case Descripton	Case & Dial Diameter in (mm)	Mount Style
		psi	bar	MPa				
101176	1/4 npt(m)	60	4.1	.41	brass	chrome	2.0 (51)	bottom
206171	1/4 npt(f)	200	14	1.4	brass, bronze, chrome	black damperer	2.0 (51)	bottom
208855	1/4 npt(m)	300	21	2.1	brass, copper alloy, chrome	SST liquid filled	2.5 (64)	bottom
101696	1/4 npt(m)	1000	70	7.0	brass, phosphor bronze	black	2.0 (51)	bottom
105770	1/4 npt(m)	1000	69	6.9	brass	SST liquid filled	2.5 (64)	bottom
802072	1/4 npt(m)	1500	104	10.4	brass	black	2.5 (64)	bottom
102397	1/4 npt(m)	3000	207	20.7	brass	black	2.0 (51)	back
102814*	1/4 npt(m)	5000	345	34.5	brass, phosphor bronze	SST liquid filled	2.5 (64)	bottom
118338	1/8 BSPP	300	21	2.1	brass	black	2.0 (51)	back
118339	1/8 BSPP	1000	69	6.9	brass	black	2.0 (51)	back
118340	1/4 BSPP	1000	69	6.9	brass	black	2.0 (51)	back
118341	1/4 BSPP	5000	345	34.5	brass	—	2.0 (51)	back

* Can also be used as an air gauge

Protective Vinyl Lens Cover

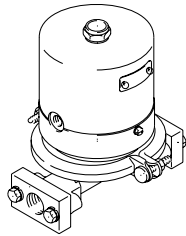
Peel and stick vinyl gauge lens glass covers. Easy to replace to remove dirt and overspray. Sold by sheet with 12 stickers each.

Part No.	Description
193199	For 2 in (51 mm) lens

Note: For material viscosities less than 5 centipoise, regulator should be tested by customer before making multiple regulator installations. Very low viscosities regulation at low pressure may not be possible.

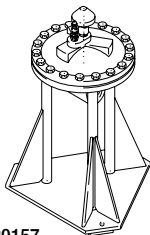
Surge Suppressors

Surge Suppressors for Husky™ Pumps



Part No.	Inlet/Outlet npt (f)	Max. Inbound Fluid			Regulated Pressure			Max Delivery		Wetted Parts	Inst. Manual
		psi	bar	MPa	psi	bar	MPa	gpm	lpm		
224892	3/4	100	7	0.07	0-100	0-7	0-0.07	16	60	Alum./PTFE	308178
224893	3/4	100	7	0.07	0-100	0-7	0-0.07	16	60	Alum./Buna-N	308178
224894	3/4	100	7	0.07	0-100	0-7	0-0.07	16	60	SST/PTFE	308178
224895	3/4	100	7	0.07	0-100	0-7	0-0.07	16	60	SST/Buna-N	308178

Surge Tank for Medium Volume Hi-Flo Pumps

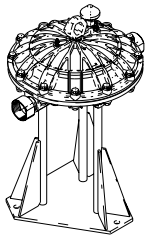


220157

Part No.	Inlet/Outlet npt (f)	Max. Inbound Fluid			Max Delivery		Wetted Parts	Inst. Manual
		psi	bar	MPa	gpm	lpm		
220157	1 x 1 1/4 npt(f)	600	42	4.2	15	57	Carbine, SST, UHMWPE, Viton, PTFE	307707

- 233736 3/4 BSPP(f) 360 25 2.5 NA NA SST, PTFE [307707](#)
- Waterborne compatible

Surge Tank for High Volume Hi-Flo Pumps



238983

Part No.	Description	Inlet/Outlet npt (f)	Max. WBR			Max Delivery		Material	Inst. Manual
			psi	bar	MPa	gpm	lpm		
238986	Surge Tank	2	300	21	2.1	20	76	SST, PTFE	307707
238987	High-Flo Surge Tank	2*	300	21	2.1	20	76	SST, PTFE	307707
238988	High-Flo Surge Tank	1-1/2*	300	21	2.1	20	76	SST, PTFE	307707
218509	High-Flo Surge Tank	2*	600	42	4.2	20	76	Carbide, SST UHMWPE, Viton PTFE	307707

*Sanitary Tri-Clamp compatible

Note: Maximum flow rates are recommended maximums for peak performance. Exceeding these values reduces the surge tanks ability to dampen pulsation.

Floor Stand

Part No.	Description
218742	Floor stand for surge tank 220157, 238983, 238984, 238985

SR200 Fluid Pressure/Surge Regulators, Air-Operated (Viscosity up to 500 cps)

For use with High-Flo pumps. Air-operated/low pressure. Install downstream from system surge tank. Compatible with both waterbase and solvent-based coatings.

Part No.	Inlet/Outlet npt (f)	Max. Inbound Fluid			Regulated Pressure			Max Delivery		Wetted Parts	Inst. Manual
		psi	bar	MPa	psi	bar	MPa	gpm	lpm		
223883	2 in sanitary clamp	300	21	2.1	0-260	0-18	0-1.8	20	76	304, 316, 316L and 17-4 PH SST, carbide, PTFE	308093
Includes air pilot port 1/4 npt(f) max., 100 psi (7 bar) (7 kg/cm ²)											
235282	1-1/2 npt(f) sanitary clamp	300	21	2.1	0-260	0-18	0-1.8	20	76	304, 316, 316L and 17-4 PH SST, carbide, PTFE	308093
Includes air pilot port 1/4 npt(f) max., 100 psi (7 bar) (0.7 MPa)											

Note: For material viscosities less than 5 centipoise, regulator should be tested by customer before making multiple regulator installations. Very low viscosities regulation at low pressure may not be possible.

Hoses for Air & Fluid Service

Material Properties and Recommended Use

The reader is cautioned that the “General Properties” described are just that, properties which have been found to be generally applicable in the experience of persons familiar with rubber chemistry. However, the reader should always follow the fluid manufacturer’s recommendation as to the use of any particular composition, especially with respect to the resistance of the composition to the fluid it is intended to carry or protect against. Failure to do so might result in failure of the product to fulfill its intended purpose, and may result in possible damage to property and serious bodily injury.

Core Tube Material	General Properties
Buna-N (NBR)	Highly resistant to petroleum products. Good abrasion resistance. Not for: brake or hydraulic fluids, keytone solvents or concentrated acids.
Buna-S (SBR)	High strength and abrasion-proof ratings. Resists non-petroleum base lubes. Not for: petroleum products, strong chemicals, ozone.
PTFE (Tetrafluoroethylene Resin)	High strength and wear resistance. Best chemical and heat resistance. Totally absorption-proof.
Neoprene (CR)	Highly resistant to weathering. Good strength and resiliency. Good resistance to heat, flame and abrasion. Not for: keytone solvents, phosphate fluids.
Nylon	Extra strong plus high resistance to heat and abrasion. Inert non-reactive to most chemicals, fast solvents or petroleum. Not for: concentrated acids or oxidizing fluids.
Nylon Type II & 6	Some properties as Nylon plus Type II, 6, provide reduced moisture absorption.
Polyethylene	Good long term resistance to UV and weathering. Excellent flame-resistant. Good low temperature impact resistance.
PVC	Good weathering, moisture and flame resistance. General resistance to alkalines and weak acids. Good abrasion resistance.
Modified Polyamide	Good abrasion, chemical and fatigue resistance. Good long term resistance to high temperature. Low gas permeation and low co-efficient of friction.
EPDM	Excellent ozone, chemical and aging characteristics. Not for: petroleum-based fluids.
Nitrile	See Buna-N
Polyester	Good flex fatigue and low temperature properties. High resistance to deformation. Good resistance to abrasion, chemicals, hydraulic fluids and aromatic fuels.
Rubber	Excellent physical properties including abrasion and low temperature resistance. Not for: petroleum-based fluids.

Cautionary Statement

All hose and fitting products sold by Graco Inc., are in the nature of commodities and they are sold by our published specifications and not for particular purposes, uses or applications. The purchasers or users of the merchandise or products shall first determine their suitability for the intended purposes, uses or applications and they shall either conduct their own engineering studies or tests, or retain qualified engineers, consultants or testing laboratories and consult with them before determining the proper use, suitability or propriety of the merchandise or products for the intended purposes, uses or applications. Graco Inc. does not guarantee the merchandise or products for any particular purpose, use or application, and the purchaser or user thereof shall assume full responsibility for the suitability, propriety, use and application of the merchandise or products. The merchandise or products, including but not limited to, hose, tubing or coupling may fail due to the use or conveyance of substances at elevated or lowered temperatures or at excessive pressures, the conveyance of abrasive, injurious, flammable, explosive or damaging substances. Hose or tubing used in bent configurations will be subjected to increased abrasion. Hose clamps or couplings may loosen after initial installation and all sections of hose and tubing, including connections, couplings and clamps, should be inspected frequently, regularly and consistently, and should be replaced, adjusted or retightened for the avoidance of leakage, for the prevention of injuries or damages, and for general safety purposes. Except as indicated in its Limited Warranty, Graco Inc. shall not be liable or responsible for direct or indirect injuries or damages caused by or attributed to the failure or malfunction of any merchandise or products sold or distributed by it. Graco Inc. recommends that the purchasers or users of the merchandise or products frequently and consistently undertake inspections and protective measures with respect to the use and application of the merchandise and products which should include the examination of tube and cover conditions of the hose or tubing and the identification, repair or replacement of sections showing cracking, blistering, separations, internal and external abrasions, leaking or slipped couplings or connections and make proper proof tests.

Hoses

Hose: Low Pressure

Air and Water Bulk Hose Specifications



Bulk Hose Reference No.	Max. WP			ID Size	Tube Material	Braid No. Material	Cover Material	Cover Color	Bend Radius		Max. Temp	
	psi	bar	MPa						in	cm	°F	°C
054138	105	7.2	0.72	1/8 in	Urethane	—	Urethane	Clear	2.0	5.1	200	93

Air Flex Bulk Hose

15E291	300	21	2.1	1/4 in	PVC	2 Spiral	PVC	Red	3.0	7.6	150	66
15E292	300	21	2.1	5/16 in	PVC	2 Spiral	PVC	Red	3.0	7.6	150	66
15E293	300	21	2.1	3/8 in	PVC	2 Spiral	PVC	Red	4.0	10	150	66
15E294	300	21	2.1	1/2 in	PVC	2 Spiral	PVC	Red	3.0	7.6	150	66



Air and Water Bulk Hose

061195	300	21	2.1	3/8 in	Nylon	1 Fabric	Synthetic Rubber	Black	2.0	5.1	225	107
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061185	500	35	3.5	3/4 in	Nylon	2 Rayon	Neoprene	Black	4.0	10	200	93
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Hoses

Hose: Low Pressure

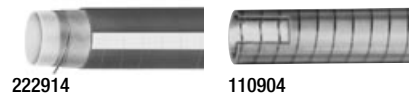
Air & Water Hose Assemblies with Couplings

Order Part No.	Coupling Size/Type	Length		Max. WP			ID Size in	Tube Material	Braid No. Material	Cover Material	Cover Color	Bend Radius		Max. Temp	
		ft	m	psi	bar	MPa						in	cm	°F	°C
186534	No fittings	4.9 in	12 cm	400	28	2.8	1/10	Nylon	–	–	Black	0.3	1		
186533	No fittings	26 in	60 cm	400	28	2.8	1/10	Nylon	–	–	Black	0.3	1		
111240	No fittings	108 in	2.74	400	28	2.8	1/10	Nylon	–	–	Black	0.3	1		
206749	1/8 x 1/4 npt(mbe)	3	91 cm	250	17	1.7	1/4	Neoprene	2 Rayon	Buna-N/PVC	Black	3.0	7.6	200	93
207348	1/8 x 1/4 npt(mbe)	4	1.2	250	17	1.7	1/4	Neoprene	2 Rayon	Buna-N/PVC	Black	3.0	7.6	200	93
202812	1/4 npt(mbe)	15 in	38 cm	250	17	1.7	1/4	Neoprene	2 Rayon	Buna-N/PVC	Black	3.0	7.6	200	93
203266	1/4 npt(mbe)	22 in	56 cm	250	17	1.7	1/4	Neoprene	2 Rayon	Buna-N/PVC	Black	3.0	7.6	200	93
200118	1/4 npt(mbe)	2, 7	81 cm	250	17	1.7	1/4	Neoprene	2 Rayon	Buna-N/PVC	Black	3.0	7.6	200	93
200115	1/4 npt(mbe)	4	1.2	250	17	1.7	1/4	Neoprene	2 Rayon	Buna-N/PVC	Black	3.0	7.6	200	93
200033	1/4 npt(mbe)	6	1.8	250	17	1.7	1/4	Neoprene	2 Rayon	Buna-N/PVC	Black	3.0	7.6	200	93
200991	1/4 npt(mbe)	10	3	250	17	1.7	1/4	Neoprene	2 Rayon	Buna-N/PVC	Black	3.0	7.6	200	93
218491	3/8 x 1/4 npt(mbe)	40	12	250	17	1.7	1/4	Neoprene	2 Rayon	Buna-N/PVC	Black	3.0	7.6	200	93
205169	3/8 npsm (fbe) swivel	3	91 cm	300	21	2.1	3/8	Nylon	1 Fabric	Synthetic Rubber	Black	2.0	5.1	225	107
205398	3/8 npsm (fbe) swivel	6	1.8	300	21	2.1	3/8	Nylon	1 Fabric	Synthetic Rubber	Black	2.0	5.1	225	107
205160	3/8 npsm (fbe) swivel	15	4.5	300	21	2.1	3/8	Nylon	1 Fabric	Synthetic Rubber	Black	2.0	5.1	225	107
205142	3/8 npsm (fbe) swivel	25	7.6	300	21	2.1	3/8	Nylon	1 Fabric	Synthetic Rubber	Black	2.0	5.1	225	107
212005	1/4 npsm(fbe)	6	1.8	300	21	2.1	1/4	Modified Vinyl	2 Spiral	Modified Rubber	Red	3.0	7.6	150	66
109123	1/4 npt(mbe) Steel	18 in	46 cm	300	21	2.1	1/4	Modified Vinyl	2 Spiral	Modified Rubber	Red	3.0	7.6	150	66
109124	1/4 npt(mbe) Steel	4	1.2	300	21	2.1	1/4	Modified Vinyl	2 Spiral	Modified Rubber	Red	3.0	7.6	150	66
109125	1/4 npt(mbe) Steel	6	1.8	300	21	2.1	1/4	Modified Vinyl	2 Spiral	Modified Rubber	Red	3.0	7.6	150	66
109126	1/4 npt(mbe) Steel	10	3	300	21	2.1	1/4	Modified Vinyl	2 Spiral	Modified Rubber	Red	3.0	7.6	150	66
109127	1/4 x 1/2 npt(mbe)	25	7.6	300	21	2.1	1/4	Modified Vinyl	2 Spiral	Modified Rubber	Red	3.0	7.6	150	66
109128	1/4 x 1/2 npt(mbe)	40	12	300	21	2.1	1/4	Modified Vinyl	2 Spiral	Modified Rubber	Red	3.0	7.6	150	66
210866	1/4 npsm(f) swivel	15	4.5	300	21	2.1	5/16	Modified Vinyl	2 Spiral	Modified Rubber	Red	3.0	7.6	150	66
210867	1/4 npsm(f) swivel	25	7.6	300	21	2.1	5/16	Modified Vinyl	2 Spiral	Modified Rubber	Red	3.0	7.6	150	66
210868	1/4 npsm(f) swivel	50	15.2	300	21	2.1	5/16	Modified Vinyl	2 Spiral	Modified Rubber	Red	3.0	7.6	150	66
214657	1/4 x 1/2 npt (fxm)	5	1.5	180	12	1.2	1/2	Modified Vinyl	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
214652	3/8 npt(mbe)	18 in	46 cm	180	12	1.2	1/2	Modified Vinyl	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
214651	3/8 npt(mbe)	17, 6	5.3	180	12	1.2	1/2	Modified Vinyl	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
214655	3/8 npt(mbe)	25	7.6	180	12	1.2	1/2	Modified Vinyl	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
214654	3/8 npt(mbe)	50	15.2	180	12	1.2	1/2	Modified Vinyl	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
214653	3/8 npt(mbe)	100	30.4	180	12	1.2	1/2	Modified Vinyl	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
218093	1/2 npt(mbe)	22 in	56 cm	180	12	1.2	1/2	Modified Vinyl	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
110046	1/2 npt(mbe)	4	1.2	180	12	1.2	1/2	Modified Vinyl	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
205418	1/2 npt(mbe)	6	1.8	180	12	1.2	1/2	Modified Vinyl	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
214656	1/2 npt(mbe)	10	3	180	12	1.2	1/2	Modified Vinyl	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
248312	1/2 npt(mbe)	25	7.6	180	12	1.2	1/2	Modified Vinyl	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
248313	1/2 npt(mbe)	50	15.2	180	12	1.2	1/2	Modified Vinyl	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
249058	1/2 npt(mbe)	50	15.2	150	10	1.0	1	Nitrile	Braided Wire	Chlorinated Polyethylene	Black	5.0	12.7	120	49

Air and Water Hose Assemblies with Couplings continues on next page.

Hoses

Hose: Low Pressure Air & Water Hose Assemblies with Couplings (continued)



Order Part No.	Coupling Size/Type	Length		Max. WP			ID Size in	Tube Material	Braid No. Material	Cover Material	Cover Color	Bend Radius		Max. Temp	
		ft	m	psi	bar	MPa						in	cm	°F	°C
214952	1/2 x 3/4 npt(mbe)	17.75	41	180	12	1.2	3/4	Buna-N (NBR)	1 Rayon	Buna-N/PVC	Red	7.0	18	200	93
214954	1/2 x 3/4 npt(mbe)	2, 8	82.5	180	12	1.2	3/4	Buna-N (NBR)	1 Rayon	Buna-N/PVC	Red	7.0	18	200	93
214950	1/2 x 3/4 npt(mbe)	6	1.8	180	12	1.2	3/4	Buna-N (NBR)	1 Rayon	Buna-N/PVC	Red	7.0	18	200	93
214951	1/2 x 3/4 npt(mbe)	25	7.62	180	12	1.2	3/4	Buna-N (NBR)	1 Rayon	Buna-N/PVC	Red	7.0	18	200	93
110047	3/4 npt(mbe)	18	46	180	12	1.2	3/4	Buna-N (NBR)	1 Rayon	Buna-N/PVC	Red	7.0	18	200	93
214956	3/4 npt(mbe)	2	0.6	180	12	1.2	3/4	Buna-N (NBR)	1 Rayon	Buna-N/PVC	Red	7.0	18	200	93
110048	3/4 npt(mbe)	4	1.2	180	12	1.2	3/4	Buna-N (NBR)	1 Rayon	Buna-N/PVC	Red	7.0	18	200	93
208610	3/4 npt(mbe)	6	1.8	180	12	1.2	3/4	Buna-N (NBR)	1 Rayon	Buna-N/PVC	Red	7.0	18	200	93
214955	3/4 npt(mbe)	10	3	180	12	1.2	3/4	Buna-N (NBR)	1 Rayon	Buna-N/PVC	Red	7.0	18	200	93
205548	3/4 npt(mbe)	15	4.5	180	12	1.2	3/4	Buna-N (NBR)	1 Rayon	Buna-N/PVC	Red	7.0	18	200	93
223068**	1/4 npsm (fbe)	6	1.8	100	7	0.7	5/16	Polyamide	—	Polyurethane	Grey	.875	2.2	—	—
223070**	1/4 npsm (fbe)	25	7.6	100	7	0.7	5/16	Polyamide	—	Polyurethane	Grey	.875	2.2	—	—
223071**	1/4 npsm (fbe)	36	11	100	7	0.7	5/16	Polyamide	—	Polyurethane	Grey	.875	2.2	—	—
223072**	1/4 npsm (fbe)	50	15.2	100	7	0.7	5/16	Polyamide	—	Polyurethane	Grey	.875	2.2	—	—
223073	1/4 npsm (fbe)	75	22.9	100	7	0.7	5/16	Polyamide	—	Polyurethane	Grey	.875	2.2	—	—
223074	1/4 npsm (fbe)	100	30.4	100	7	0.7	5/16	Polyamide	—	Polyurethane	Grey	.875	2.2	—	—
221169	1/2 x 1/4 npt(mbe)	10	3.0	175	12	1.2	3/8	Buna-N PVC	Polyester	Buna-N/PVC	—	4.0	10	200	93
110904	1/2 x 3/4 npt(mbe)	6	1.8	100	7	0.7	1/2	PVC	Spring Wire	PVC	Clear	2.0	5.1	150	66
110822	3/8 x 3/4 npt(mbe)	10	3.0	100	7	0.7	1/2	PVC	Spring Wire	PVC	Clear	2.0	5.1	150	66
164724	1/8 npt(mbe)	1	0.3	400	28	2.8	1/4	Neoprene	1 Textile	Neoprene	Black	5.0	12.7	200	93
160023	1/8 npt(mbe)	18	0.45	400	28	2.8	1/4	Neoprene	1 Textile	Neoprene	Black	5.0	12.7	200	93
165741	1/8 npt(mbe)	2	0.6	400	28	2.8	1/4	Neoprene	1 Textile	Neoprene	Black	5.0	12.7	200	93
111582	1 in gnt m x f	50	15.2	200	14	1.4	1	EPDM	4 Textile Spiral	EPDM	Black	15	38	180	82
222914	1-1/2 npt(fbe)	8	2.4	150	10.4	1.04	1 1/2	Polyethelyne	2 Textile, 1 Steel	EDPM	Green	8.0	20	150	66
235068	1/4 npsm(fbe) zinc plated brass	6	1.8	100	7	0.7	5/16	Polyurethane	1 SST	Polyurethane	Red	0.750	1.9	150	66
235069	1/4 npsm(fbe) zinc plated brass	15	4.5	100	7	0.7	5/16	Polyurethane	1 SST	Polyurethane	Red	0.750	1.9	150	66
235070	1/4 npsm(fbe) zinc plated brass	25	7.6	100	7	0.7	5/16	Polyurethane	1 SST	Polyurethane	Red	0.750	1.9	150	66
235071	1/4 npsm(fbe) zinc plated brass	36	11.0	100	7	0.7	5/16	Polyurethane	1 SST	Polyurethane	Red	0.750	1.9	150	66
235072	1/4 npsm(fbe) zinc plated brass	50	15.2	100	7	0.7	5/16	Polyurethane	1 SST	Polyurethane	Red	0.750	1.9	150	66
235073	1/4 npsm(fbe) zinc plated brass	75	22.9	100	7	0.7	5/16	Polyurethane	1 SST	Polyurethane	Red	0.750	1.9	150	66
235074	1/4 npsm(fbe)s zinc plated brass	100	30.4	100	7	0.7	5/16	Polyurethane	1 SST	Polyurethane	Red	0.750	1.9	150	66

* Note: Special hose features 1/4 fbe swivels. One end right hand thread. Other end left-hand special thread.

** Left-hand thread

Hoses

Hose: Low, Medium and High Pressure

Low, Medium and High Pressure Hose Assemblies with Couplings



218498



204561

Order Part No.	Coupling Size/Type	Length		Max. WP			ID Size in	Tube Material	Braid No. Material	Cover Material	Cover Color	Bend Radius		Max. Temp	
		ft	m	psi	bar	MPa						in	cm	°F	°C
155816	3/4 npt(mbe)	6	1.8	750	52	5.2	3/4 in	Buna-N	2 Rayon	Neoprene	Black	6.0	15	200	93
218689	3/4 npt(mbe)	50	15.2	750	52	5.2	3/4 in	Buna-N	2 Rayon	Neoprene	Black	6.0	15	200	93
218498	3/8 x 1/2 npt(mbe)	60	18	300	21	2.1	3/8 in	Neoprene	4 Textile Spiral	Buna-N/PVC	Black	4.0	10	200	93
202961	1/4 x 3/8 npt(mbe)	4	1.2	300	21	2.1	3/8 in	Neoprene	4 Textile Spiral	Buna-N/PVC	Black	4.0	10	200	93
204561	1/4 x 3/8 npt(mbe)	3	7.6 cm	180	12	1.2	3/4 in	Buna-N	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
110326	1/4 x 3/8 npt(mbe)	16	4.9	180	12	1.2	3/4 in	Buna-N	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
204560	3/8 npt(mbe)	18 in	46 cm	180	12	1.2	3/4 in	Buna-N	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
109130	3/8 npt(mbe)	4	1.2	180	12	1.2	3/4 in	Buna-N	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
208048	3/8 npt(mbe)	4	1.2	180	12	1.2	3/4 in	Buna-N	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
203320	3/8 npt(mbe)	6	1.8	180	12	1.2	3/4 in	Buna-N	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
109131	3/8 npt(mbe)	10	3	180	12	1.2	3/4 in	Buna-N	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
109132	3/8 x 1/2 npt(mbe)	25	7.6	180	12	1.2	3/4 in	Buna-N	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
109134	3/8 x 1/2 npt(mbe)	40	12	180	12	1.2	3/4 in	Buna-N	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
109135	3/8 x 1/2 npt(mbe)	60	18	180	12	1.2	3/4 in	Buna-N	1 Rayon	Buna-N/PVC	Red	4.0	10	200	93
220596	3/8 x 1/2 npt(mbe)	4	1.2	3000	207	20.7	1/2 in	Nitrile	Wire Braid	Nitrile	black	3.5	9	200	93
220600	1/2 npt(mbe)	4, 6	1.3	3000	207	20.7	1/2 in	Nitrile	Wire Braid	Nitrile	black	3.5	9	200	93
220591	1/2 npt(mbe)	6	1.8	3000	207	20.7	1/2 in	Nitrile	Wire Braid	Nitrile	black	3.5	9	200	93
220590	1/2 npt(mbe)	10	3	3000	207	20.7	1/2 in	Nitrile	Wire Braid	Nitrile	black	3.5	9	200	93
220592	1/2 npt(mbe)	16	4.9	3000	207	20.7	1/2 in	Nitrile	Wire Braid	Nitrile	black	3.5	9	200	93
220593	1/2 npt(mbe)	20	6	3000	207	20.7	1/2 in	Nitrile	Wire Braid	Nitrile	black	3.5	9	200	93
220602	1/2 npt(mbe)	50	15.2	3000	207	20.7	1/2 in	Nitrile	Wire Braid	Nitrile	black	3.5	9	200	93

Hoses



061185
061188
061195

Hose: Low and Medium Pressure

For Paints Bulk Hose by Reel

Bulk Hose Reference No.	Max. WP			ID Size in	Tube Material	Braid No. Material	Cover Material	Cover Color	Bend Radius		Max. Temp	
	psi	bar	MPa						in	cm	°F	°C
061205	500	35	3.5	1/4 in	Nylon	1 Rayon	Neoprene	Black	1.25	3.9	225	107
061132	225	16	1.6	1/4 in	Nylon	None	Nylon	Natural	2.25	5.8	150	66
061135	475	33	3.3	1/8 in	Nylon	None	Nylon	Natural	2.0	5	150	66
054123	250	17	1.7	3/16 in	Nylon II	—	Nylon II	Natural	0.875	2.2	200	93
054172	250	17	1.7	3/16 in	Nylon II	—	Nylon II	Black	0.875	2.2	200	93
061134	200	14	1.4	3/8 in	Nylon	None	Nylon	Natural	3.25	7.7	150	66
061195	300	21	2.1	3/8 in	Nylon	1 Fabric	Neoprene	Black	2.0	5	225	107
061200	500	35	3.5	1/2 in	Nylon	2 Fabric	Neoprene	Black	5.0	13	225	107
061185	500	35	3.5	3/4 in	Nylon 6	2 Rayon	Neoprene	Black	3.5	8.9	225	107
061188	500	35	3.5	1 in	Nylon 6	2 Rayon	Neoprene	Black	6.0	15	225	107
598004	175	12	1.2	3/8 in	PTFE	—	—	White	—	—	—	—
061345	100	7	0.7	3/16 in	Nylon	—	Polyurethane	Clear	2	5	150	66
597350	190	13	1.3	1/4 in	PTFE	—	—	White	1.5	4	—	—

Low Pressure Paint Hose Assemblies with Couplings

Order Part No.	Coupling Size/Type	Length		Max. WP			ID Size in	Tube Material	Braid No. Material	Cover Material	Cover Color	Bend Radius		Max. Temp	
		ft	m	psi	bar	MPa						in	cm	°F	°C
183735	No fittings	15 in	38 cm	250	17	1.7	3/16 in	Nylon II	—	Nylon II	Natural	0.875	2.2	200	93
186532	No fittings	22.5 in	57 cm	250	17	1.7	3/16 in	Nylon II	—	Nylon II	Black	0.875	2.2	200	93
181137	No fittings	38 in	96 cm	250	17	1.7	3/16 in	Nylon II	—	Nylon II	Black	0.875	2.2	200	93
215638	3/8 npsm(fbe)	49	14.9	225	16	1.6	1/4 in	Nylon	None	Nylon	Natural	2.25	5.8	150	66
205406	1/4 npsm(fbe) Swivel	25	7.6	225	16	1.6	1/4 in	Nylon	None	Nylon	Natural	2.25	5.8	150	66
206965	1/4 npsm(f) Swivel x Perm. Cpld. Bent Tube	3	91 cm	225	16	1.6	1/4 in	Nylon	None	Nylon	Natural	2.25	5.8	150	66
208112	1/2 x 3/4 npt(mbe)	2	0.6	500	35	3.5	3/4 in	Nylon 6	2 Rayon	Neoprene	Black	3.5	8.9	225	107
214960	3/4 npt(mbe)	3, 6	1.1	500	35	3.5	3/4 in	Nylon 6	2 Rayon	Neoprene	Black	3.5	8.9	225	107
214961	3/4 npt(mbe)	6	1.8	500	35	3.5	3/4 in	Nylon 6	2 Rayon	Neoprene	Black	3.5	8.9	225	107
217382	3/4 npt(mbe)	10	3	500	35	3.5	3/4 in	Nylon 6	2 Rayon	Neoprene	Black	3.5	8.9	225	107
221170	3/4 npt(mbe) SST	3	91 cm	500	35	3.5	3/4 in	Nylon 6	2 Rayon	Neoprene	Black	3.5	8.9	225	107
221171	3/4 npt(mbe) SST	6	1.8	500	35	3.5	3/4 in	Nylon 6	2 Rayon	Neoprene	Black	3.5	8.9	225	107
170706	No fittings	4	1.2	500	35	3.5	3/4 in	Nylon 6	2 Rayon	Neoprene	Black	3.5	8.9	225	107
220372	1 npt(mbe)	6	1.8	500	35	3.5	1 in	Nylon 6	2 Rayon	Neoprene	Black	6.0	15	225	107
220373	1 npt(mbe)	12	3.7	500	35	3.5	1 in	Nylon 6	2 Rayon	Neoprene	Black	6.0	15	225	107
214959	1 npt(mbe) SST	6	1.8	500	35	3.5	1 in	Nylon 6	2 Rayon	Neoprene	Black	6.0	15	225	107
205169	3/8 npsm(fbe)	3	91 cm	300	21	2.1	3/8 in	Nylon	1 Fabric	Neoprene	Black	2.0	5	225	107
205398	3/8 npsm(fbe)	6	1.8	300	21	2.1	3/8 in	Nylon	1 Fabric	Neoprene	Black	2.0	5	225	107
205142	3/8 npsm(fbe)	25	7.6	300	21	2.1	3/8 in	Nylon	1 Fabric	Neoprene	Black	2.0	5	225	107
202300	3/8 x 1/2 npt(mbe)	6	1.8	500	35	3.5	1/2 in	Nylon	2 Fabric	Neoprene	Black	5.0	13	225	107
167343	No fittings	10	3	500	35	3.5	1/2 in	Nylon	2 Fabric	Neoprene	Black	5.0	13	225	107
205375	1/4 npt(m) x 1/4 npsm(f) Swivel	6	1.8	500	35	3.5	1/4 in	Nylon	1 Rayon	Neoprene	Black	1.25	3.9	225	107
212006	3/8 npsm(fbe) Swivel	80 in	2.0	500	35	3.5	1/4 in	Nylon	1 Rayon	Neoprene	Black	1.25	3.9	225	107
239633	3/8 npsm(fbe)	15		100	7	0.7	3/16	Nylon	—	Polyurethane	Clear	2.0	5.1	150	66
212006	3/8 npsm(fbe)	25		100	7	0.7	3/16	Nylon	—	Polyurethane	Clear	2.0	5.1	150	66

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Hoses

Hose: Low and Medium Pressure Airless Spray Hose Assemblies with Couplings

Order Part No.	Coupling Size/Type	Length		Max. WP			ID Size in	Electrical Grounding	Tube Material	Braid No. Material	Cover Material	Cover Color	Bend Radius		Max. Temp	
		ft	m	psi	bar	MPa							in	cm	°F	°C
205324	1/4 npsm(fbe)	12 in	0.3	3000	210	21	1/4 in	Wire Braid	PTFE	1-Wire	SST	SST	2.0	5	200	93
206966	1/4 npsm(fbe)	19 in	0.48	3000	210	21	1/4 in	Wire Braid	PTFE	1-Wire	SST	SST	2.0	5	200	93
205099	1/4 npsm(fbe)	30 in	0.76	3000	210	21	1/4 in	Wire Braid	PTFE	1-Wire	SST	SST	2.0	5	200	93
205058	1/4 npsm(fbe)	6 ft	1.8	3000	210	21	1/4 in	Wire Braid	PTFE	1-Wire	SST	SST	2.0	5	200	93
205349	1/4 npsm(fbe)	15 ft	4.5	3000	210	21	1/4 in	Wire Braid	PTFE	1-Wire	SST	SST	2.0	5	200	93
204938	1/4 npsm(fbe)	25 ft	7.6	3000	210	21	1/4 in	Wire Braid	PTFE	1-Wire	SST	SST	2.0	5	200	93
206024	1/4 npsm(fbe)	50 ft	15.2	3000	210	21	1/4 in	Wire Braid	PTFE	1-Wire	SST	SST	2.0	5	200	93
214700	1/4 npsm(fbe) Swivel	2 ft	0.6	3000	210	21	3/16 in	Wire Braid	Nylon	1-Wire	Polyurethane	Blue	0.75	1.9	180	82
214701	1/4 npsm(fbe) Swivel	3 ft	0.9	3000	210	21	3/16 in	Wire Braid	Nylon	1-Wire	Polyurethane	Blue	0.75	1.9	180	82
214699	1/4 npsm(fbe) Swivel	6 ft	1.8	3000	210	21	3/16 in	Wire Braid	Nylon	1-Wire	Polyurethane	Blue	0.75	1.9	180	82
214981	1/4 npsm(fbe) Swivel	15 ft	4.5	3000	210	21	3/16 in	Wire Braid	Nylon	1-Wire	Polyurethane	Blue	0.75	1.9	180	82
214698	1/4 npsm(fbe) Swivel	25 ft	7.6	3000	210	21	3/16 in	Wire Braid	Nylon	1-Wire	Polyurethane	Blue	0.75	1.9	180	82
214697	1/4 npsm(fbe) Swivel	50 ft	15.2	3000	210	21	3/16 in	Wire Braid	Nylon	1-Wire	Polyurethane	Blue	0.75	1.9	180	82
214912	1/4 npsm(fbe) Swivel	3 ft	0.9	5000	350	35	1/4 in	Thermo-Plastic	Nylon	None	Urethane	Gray	2.0	5	150	66
214913	1/4 npsm(fbe) Swivel	6 ft	1.8	5000	350	35	1/4 in	Thermo-Plastic	Nylon	None	Urethane	Gray	2.0	5	150	66
214914	1/4 npsm(fbe) Swivel	25 ft	7.6	5000	350	35	1/4 in	Thermo-Plastic	Nylon	None	Urethane	Gray	2.0	5	150	66
214915	1/4 npsm(fbe) Swivel	50 ft	15.2	5000	350	35	1/4 in	Thermo-Plastic	Nylon	None	Urethane	Gray	2.0	5	150	66
215225	1/2 npt(mbe) Rigid	10 ft	3	4050	279	27	1/2 in	Thermo-Plastic	Nylon	None	Polyester	Blue	2.5	63	180	82
215226	1/2 npt(mbe) Rigid	25 ft	7.6	4050	279	27	1/2 in	Thermo-Plastic	Nylon	None	Polyester	Blue	2.5	63	180	82
215227	1/2 npt(mbe) Rigid	50 ft	15.2	4050	279	27	1/2 in	Thermo-Plastic	Nylon	None	Polyester	Blue	2.5	63	180	82
235022	1/2 npt(mbe)	3 ft	0.9	5000	345	34	1/2 in	Polymer	Nylon	2 Synthetic	Polyurethane	Gray	5.5	40	150	66
235024	1/2 npt(mbe)	25 ft	7.6	5000	345	34	1/2 in	Polymer	Nylon	2 Synthetic	Polyurethane	Gray	5.5	40	150	66
235025	1/2 npt(mbe)	50 ft	15	5000	345	34	1/2 in	Polymer	Nylon	2 Synthetic	Polyurethane	Gray	5.5	40	150	66
215247	3/8 npt(mbe) Rigid	5 ft	1.5	5000	350	35	3/8 in	Thermo-Plastic	Nylon	None	Urethane	Gray	150	66		
215244	3/8 npt(mbe) Rigid	25 ft	7.6	5000	350	35	3/8 in	Thermo-Plastic	Nylon	None	Urethane	Gray	150	66		
215245	3/8 npt(mbe) Rigid	50 ft	15.2	5000	350	35	3/8 in	Thermo-Plastic	Nylon	None	Urethane	Gray	150	66		
215246	3/8 npt(mbe) Rigid	100 ft	30.4	5000	350	35	3/8 in	Thermo-Plastic	Nylon	None	Urethane	Gray	150	66		
217378	3/8 npt(mbe)	30 in	0.76	3000	210	21	3/8 in	Thermo-Plastic	Nylon	2 Synthetic	Urethane	Blue	2.5	6.4	180	82
214920	3/8 npt(mbe) Rigid	100 ft	30.4	3000	210	21	3/8 in	Thermo-Plastic	Nylon	2 Synthetic	Urethane	Blue	2.5	6.4	180	82
214703	3/8 npt(mbe)	25 ft	7.6	3000	210	21	3/8 in	Thermo-Plastic	Nylon	2 Synthetic	Urethane	Blue	2.5	6.4	180	82

Hoses

Hose: Low and Medium Pressure

Airless Spray Hose Assemblies with Couplings (continued)

Order Part No.	Coupling Size/Type	Length		Max. WP			ID Size in	Electrical Grounding	Tube Material	Braid No. Material	Cover Material	Cover Color	Bend Radius		Max. Temp	
		ft	m	psi	bar	MPa							in	cm	°F	°C
223757	1/4 npt(mbe)	40 ft	12	3000	210	21	1/4 in	Thermo-Plastic	Nylon	4 Synthetic	Polyurethane	Blue	1.0	2	180	82
223763	1/4 npsm(f) x 1/4 npt(m)	14 in	0.35	3000	210	21	1/4 in	Thermo-Plastic	Nylon	4 Synthetic	Polyurethane	Blue	1.0	2	180	82
223767	1/4 npsm(f) x 1/4 npt(m)	21 in	0.55	3000	210	21	1/4 in	Thermo-Plastic	Nylon	4 Synthetic	Polyurethane	Blue	1.0	2	180	82
223768	1/4 npsm(f) x 1/4 npt(m)	29 in	0.76	3000	210	21	1/4 in	Thermo-Plastic	Nylon	4 Synthetic	Polyurethane	Blue	1.0	2	180	82
223761	1/4 npsm(f) x 1/4 npt(m)	3 ft	0.9	3000	210	21	1/4 in	Thermo-Plastic	Nylon	4 Synthetic	Polyurethane	Blue	1.0	2	180	82
223760	1/4 npsm(fbe)	27 in	0.69	3000	210	21	1/4 in	Thermo-Plastic	Nylon	4 Synthetic	Polyurethane	Blue	1.0	2	180	82
223766	1/4 npsm(fbe)	29 in	0.76	3000	210	21	1/4 in	Thermo-Plastic	Nylon	4 Synthetic	Polyurethane	Blue	1.0	2	180	82
223756	1/4 npsm(fbe)	15 ft	4.5	3000	210	21	1/4 in	Thermo-Plastic	Nylon	4 Synthetic	Polyurethane	Blue	1.0	2	180	82
223540	1/4 npsm(fbe)	25 ft	7.6	3000	210	21	1/4 in	Thermo-Plastic	Nylon	4 Synthetic	Polyurethane	Blue	1.0	2	180	82
223769	1/4 npsm(fbe)	32 ft	9.8	3000	210	21	1/4 in	Thermo-Plastic	Nylon	4 Synthetic	Polyurethane	Blue	1.0	2	180	82
223541	1/4 npsm(fbe)	50 ft	15.2	3000	210	21	1/4 in	Thermo-Plastic	Nylon	4 Synthetic	Polyurethane	Blue	1.0	2	180	82
237070	1/4 npsm(fbe)	6 ft	1.8	7400	510	51	1/4 in	Wire Braid	Nylon	2 Wire	Polyurethane	Black	2.75	7	180	82
237071	1/4 npsm(fbe)	50 ft	15.2	7400	510	51	1/4 in	Wire Braid	Nylon	2 Wire	Polyurethane	Black	2.75	7	180	82
237072	3/8 npsm(fbe)	50 ft	15.2	7400	510	51	3/8 in	Wire Braid	Nylon	2 Wire	Polyurethane	Black	4.75	12	180	82
237213	1/2 npsm(fbe)	50 ft	15.2	7970	550	55	1/2 in	Wire Braid	Nylon	2 Wire	Polyurethane	Black	5.9	15	212	100
238383	1/4 npsm(fbe)	6 ft	1.8	5000	345	34	1/4 in	Wire Braid	Nylon	2-Wire	Polyurethane	Blue	2.75	7	180	82
238385	1/4 npsm(fbe)	25 ft	7.6	5000	345	34	1/4 in	Wire Braid	Nylon	2-Wire	Polyurethane	Blue	2.75	7	180	82
238386	1/4 npsm(fbe)	50 ft	15.2	5000	345	34	1/4 in	Wire Braid	Nylon	2-Wire	Polyurethane	Blue	2.75	7	180	82
238387	1/4 npsm(fbe)	100 ft	30	5000	345	34	1/4 in	Wire Braid	Nylon	2-Wire	Polyurethane	Blue	2.75	7	180	82
238395	3/8 npt(m) x 3/8npsm(f)	25 ft	7.6	5000	345	34	3/8 in	Wire Braid	Nylon	1-Wire	Polyurethane	Blue	4.72	12	180	82
238396	3/8 npt(m) x 3/8npsm(f)	50 ft	15.2	5000	345	34	3/8 in	Wire Braid	Nylon	1-Wire	Polyurethane	Blue	4.72	12	180	82
238397	3/8 npt(m) x 3/8npsm(f)	100 ft	30	5000	345	34	3/8 in	Wire Braid	Nylon	1-Wire	Polyurethane	Blue	4.72	12	180	82

Hoses



215241
215441

Hose: High Pressure

Multi Purpose Hose Assemblies with Couplings

Order Part No.	Couplg Size/Type	Length		Max. WP			ID Size in	Electrical Grounding	Tube Material	Braid No. Material	Cover Material	Cover Color	Bend Radius		Max. Temp	
		ft	m	psi	bar	MPa							in	cm	°F	°C
109149	1/4 npt(mbe) Rigid	4	1.2	5000	345	34	1/4	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Black	2	5	200	93
109150	1/4 npt(mbe) Rigid	6	1.8	5000	345	34	1/4	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Black	2	5	200	93
109152	1/4 npt(mbe) Rigid	15	4.5	5000	345	34	1/4	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Black	2	5	200	93
109153	1/4 npt(mbe) Rigid	20	6.1	5000	345	34	1/4	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Black	2	5	200	93
109156	1/4 x 3/8 npt(mbe) Rigid	35	10.6	5000	345	34	1/4	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Black	2	5	200	93
109157	1/4 x 3/8 npt(mbe) Rigid	40	12.2	5000	345	34	1/4	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Black	2	5	200	93
205753	3/8 npt(mbe) Rigid SST	40	12.2	2250	155	15	3/8	Wire Braid	Buna-N (NBR)	1 Wire	Neoprene	Grey	5	13	200	93
207831	3/8 npt(mbe) Rigid SST	50	15.2	2250	155	15	3/8	Wire Braid	Buna-N (NBR)	1 Wire	Neoprene	Grey	5	13	200	93
214601	1/2 npt(mbe) Rigid	2	0.6	2000	140	14	1/2	Wire Braid or Neoprene	Buna-N (NBR)	1 Wire	Neoprene	Black	7	17.8	200	93
109161	3/8 npt(mbe) Rigid	2	0.6	4000	280	28	3/8	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Grey	2.5	6.4	200	93
109162	3/8 npt(mbe) Rigid	4	1.2	4000	280	28	3/8	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Grey	2.5	6.4	200	93
109163	3/8 npt(mbe) Rigid	6	1.8	4000	280	28	3/8	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Grey	2.5	6.4	200	93
109165	1/4 npt(mbe) Rigid	15	4.5	4000	280	28	3/8	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Grey	2.5	6.4	200	93
109167	1/4 npt(mbe) Rigid	25	7.6	4000	280	28	3/8	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Grey	2.5	6.4	200	93
109169	1/4 x 3/8 npt(mbe) Rigid	40	12.2	4000	280	28	3/8	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Grey	2.5	6.4	200	93
109170	1/4 x 3/8 npt(mbe) Rigid	50	15.2	4000	280	28	3/8	Wire Braid or Neoprene	Buna-N (NBR)	2 Wire	Buna-N PVC	Grey	2.5	6.4	200	93
205174	1/4 npt(mbe) Rigid	40	12.2	1250	86	8	1/4	Rayon Braid	Buna-N (NBR)	2 Rayon	Buna-N PVC	Black	3	8	200	93
214962	1/2 npt(mbe) Rigid	15	4.5	3500	240	24	1/2	Thermo-Plastic	Buna-N (NBR)	2 Wire	Buna-N PVC	Black	7	17.8	200	93
214964	1/2 npt(mbe) Rigid	50	15.2	3500	240	24	1/2	Thermo-Plastic	Buna-N (NBR)	2 Wire	Buna-N PVC	Black	7	17.8	200	93
215241	3/4 npt(mbe) Rigid	6	1.8	5000	345	34	3/4	Wire Braid	Neoprene	4 Wire	Neoprene	Black	7	17.8	250	121
215238	3/4 npt(mbe) Rigid	10	3	5000	345	34	3/4	Wire Braid	Neoprene	4 Wire	Neoprene	Black	7	17.8	250	121
215239	3/4 npt(mbe) Rigid	15	4.5	5000	345	34	3/4	Wire Braid	Neoprene	4 Wire	Neoprene	Black	7	17.8	250	121
215240	3/4 npt(mbe) Rigid	25	7.6	5000	345	34	3/4	Wire Braid	Neoprene	4 Wire	Neoprene	Black	7	17.8	250	121
215441	1/2 npt(mbe) Rigid	10	3	5000	345	34	1/2	Wire Braid	Buna-N (NBR)	2 Wire	Modified Nitrile	Black	6	15.2	200	93
215443	1/2 npt(mbe) Rigid	25	7	5000	345	34	1/2	Wire Braid	Buna-N (NBR)	2 Wire	Modified Nitrile	Black	6	15.2	200	93
215444	1/2 npt(mbe) Rigid	50	15.2	5000	345	34	1/2	Wire Braid	Buna-N (NBR)	2 Wire	Modified Nitrile	Black	6	15.2	200	93
215445	1/2 npt(mbe) Rigid	5	1.5	5000	345	34	1/2	Wire Braid	Buna-N (NBR)	2 Wire	Modified Nitrile	Black	6	15.2	200	93

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Hoses

Hose: Xtreme-Duty High Pressure

Xtreme-Duty 4500 psi (310 bar)

Order Part No.	Length		Diameter		Female NPSM
	ft	m	in	mm	
H42503	3	0.9	1/4	6.4	1/4
H42506	6	1.8	1/4	6.4	1/4
H42510	10	3.0	1/4	6.4	1/4
H42525	25	7.6	1/4	6.4	1/4
H42550	50	15.2	1/4	6.4	1/4
H4251X	100	30.5	1/4	6.4	1/4
H43803	3	0.9	3/8	9.5	3/8
H43806	6	1.8	3/8	9.5	3/8
H43810	10	3.0	3/8	9.5	3/8
H43825	25	7.6	3/8	9.5	3/8
H43850	50	15.2	3/8	9.5	3/8
H4381X	100	30.5	3/8	9.5	3/8
H45010	10	3.0	1/2	12.7	1/2
H45025	25	7.6	1/2	12.7	1/2
H45050	50	15.2	1/2	12.7	1/2
H4501X	100	30.5	1/2	12.7	1/2

Xtreme-Duty 7200 psi (500 bar)

Order Part No.	Length		Diameter		Female NPSM
	ft	m	in	mm	
H72503	3	0.9	1/4	6.4	1/4
H72506	6	1.8	1/4	6.4	1/4
H72510	10	3.0	1/4	6.4	1/4
H72525	25	7.6	1/4	6.4	1/4
H72550	50	15.2	1/4	6.4	1/4
H7251X	100	30.5	1/4	6.4	1/4
H73803	3	0.9	3/8	9.5	3/8
H73806	6	1.8	3/8	9.5	3/8
H73810	10	3.0	3/8	9.5	3/8
H73825	25	7.6	3/8	9.5	3/8
H73850	50	15.2	3/8	9.5	3/8
H7381X	100	30.5	3/8	9.5	3/8
H75010	10	3.0	1/2	12.7	1/2
H75025	25	7.6	1/2	12.7	1/2
H75050	50	15.2	1/2	12.7	1/2
H7501X	100	30.5	1/2	12.7	1/2

Xtreme-Duty 5600 psi (386 bar)

Order Part No.	Length		Diameter		Female NPSM
	ft	m	in	mm	
H52503	3	0.9	1/4	6.4	1/4
H52506	6	1.8	1/4	6.4	1/4
H52510	10	3.0	1/4	6.4	1/4
H52525	25	7.6	1/4	6.4	1/4
H52550	50	15.2	1/4	6.4	1/4
H5251X	100	30.5	1/4	6.4	1/4
H53803	3	0.9	3/8	9.5	3/8
H53806	6	1.8	3/8	9.5	3/8
H53810	10	3.0	3/8	9.5	3/8
H53825	25	7.6	3/8	9.5	3/8
H53850	50	15.2	3/8	9.5	3/8
H5381X	100	30.5	3/8	9.5	3/8
H55010	10	3.0	1/2	12.7	1/2
H55025	25	7.6	1/2	12.7	1/2
H55050	50	15.2	1/2	12.7	1/2
H5501X	100	30.5	1/2	12.7	1/2

Hoses

Electrostatic Air Hose

Low Pressure Air Hose Assemblies

Part No.	Max. WP			ID Size in	Tube Material	Coupling Size/Type	Length	
	psi	bar	MPa				ft	m
Whip Hose								
236130	100	7	0.7	3/16	Polyurethane	1/4 npsm(m) (mxf) swivel LH	3	0.9
236131	100	7	0.7	3/16	Polyurethane	1/4 npsm(m) (mxf) swivel LH	6	1.8
Grey Hose								
223069	100	7	0.7	5/16	Modified Polyamide	1/4 npsm(fbe) LH	15	5
223070	100	7	0.7	5/16	Modified Polyamide	1/4 npsm(fbe) LH	25	8
223071	100	7	0.7	5/16	Modified Polyamide	1/4 npsm(fbe) LH	36	11
223072	100	7	0.7	5/16	Modified Polyamide	1/4 npsm(fbe) LH	50	15
223073	100	7	0.7	5/16	Modified Polyamide	1/4 npsm(fbe) LH	75	23
223074	100	7	0.7	5/16	Modified Polyamide	1/4 npsm(fbe) LH	100	30.5
Red Hose with Metallic Ground Wire								
235069	100	7	0.7	5/16	Polyurethane	1/4 npsm(fbe) LH	15	5
235070	100	7	0.7	5/16	Polyurethane	1/4 npsm(fbe) LH	25	8
235071	100	7	0.7	5/16	Polyurethane	1/4 npsm(fbe) LH	36	11
235072	100	7	0.7	5/16	Polyurethane	1/4 npsm(fbe) LH	50	15
235073	100	7	0.7	5/16	Polyurethane	1/4 npsm(fbe) LH	75	23
235074	100	7	0.7	5/16	Polyurethane	1/4 npsm(fbe) LH	100	30.5
Grey Hose with Metallic Ground Wire								
244963	100	7	0.7	5/16	EDPM	1/4 npsm(fbe) LH	6	1.8
244964	100	7	0.7	5/16	EDPM	1/4 npsm(fbe) LH	15	5
244965	100	7	0.7	5/16	EDPM	1/4 npsm(fbe) LH	25	8
244966	100	7	0.7	5/16	EDPM	1/4 npsm(fbe) LH	36	11
244967	100	7	0.7	5/16	EDPM	1/4 npsm(fbe) LH	50	15
244968	100	7	0.7	5/16	EDPM	1/4 npsm(fbe) LH	75	23
244969	100	7	0.7	5/16	EDPM	1/4 npsm(fbe) LH	100	30.5

Hoses

Electrostatic Fluid Hose

Low Pressure – FM Approved Fluid Hose Assemblies

Part No.	Max. WP			ID Size in	Tube Material	Thread Size/Type	Length		Bulk No.
	psi	bar	MPa				US	Metric	
215637	225	14	1.4	1/4	Nylon	3/8 npsm(fbe)	25 ft	8 m	
215638	225	14	1.4	1/4	Nylon	3/8 npsm(fbe)	50 ft	15 m	061132
216076	500	35	3.5	1/4	Nylon	3/8 npsm(fbe)	25 ft	8 m	061205

High Pressure – Static Free Fluid Hose Assemblies

Part No.	Max. WP			ID Size in	Tube Material	Thread Size/Type	Length		
	psi	bar	MPa				US	Metric	
214700	3300	228	22.8	3/16	Nylon	1/4 npsm(fbe)	2 ft	610 mm	
214701	3300	228	22.8	3/16	Nylon	1/4 npt(mxf)	3 ft	914 mm	
214699	3300	228	22.8	3/16	Nylon	1/4 npsm(fbe)	6 ft	1.8 m	
214698	3300	228	22.8	3/16	Nylon	1/4 npsm(fbe)	25 ft	7.6 m	
214697	3300	228	22.8	3/16	Nylon	1/4 npsm(fbe)	50 ft	15.2 m	
223763	3000	207	20.7	1/4	Nylon	1/4 npt(fbe)	14 in	356 mm	
223760	3000	207	20.7	1/4	Nylon	1/4 npsm(fbe)	28 in	711 mm	
223761	3000	207	20.7	1/4 x 1/4 npt(m)	Nylon	1/4 npsm(f)	3 ft	914 mm	
223756	3000	207	20.7	1/4	Nylon	1/4 npsm(fbe)	15 ft	4.6 m	
223540	3000	207	20.7	1/4	Nylon	1/4 npsm(fbe)	25 ft	7.6 m	
223541	3000	207	20.7	1/4	Nylon	1/4 npsm(fbe)	50 ft	15.2 m	
Whip Hose									
236134	3000	207	20.7	1/8 x 1/4 npsm(f)	Nylon	1/4 npt(m)	3 ft	0.9 m	
236135	3000	207	20.7	1/8 x 1/4 npsm(f)	Nylon	1/4 npt(m)	6 ft	1.8 m	

Hose Sets

For Unheated & 2K Materials and Heated Paint Circulation

Hose Set No.	Hose Service	Qty	Tube Material	ID Size in	Length		Coupling Size/Type	Max. WP			Weight	
					ft	m		psi	bar	MPa	lb	kg
214695	Material**	1	Nylon	3/16	25	7.6	1/4 npsm(fbe)	3300	227	22.7	13	5.9
	Solvent**	1	Nylon	3/16	25	7.6	1/4 npsm(fbe)	3300	227	22.7	13	5.9
223759*	Material**	1	Nylon	1/4	25	7.6	1/4 npsm(fbe)	3000	210	21.0	13	5.9
	Solvent**	1	Nylon	1/4	25	7.6	1/4 npsm(fbe)	3000	210	21.0	13	5.9

* Without airline (two fluid hoses only)

** Static ground (static-free cover or wire braid cover)

Hose for Adhesive & Sealant Materials and Moisture-Sensitive Materials

Part No.	ID Size in	Length		Coupling Size/Type	Max. WP			Description
		ft	m		psi	bar	MPa	
C12039	1	10	3	1 npt(m)	250	17	1.7	Air
C12380	1/2	15	4.6	1/2 npt(m)	5875	405	40.5	Neoprene
C12383	1	10	3	1 npt(m)	5000	345	34.5	Neoprene
C12410	5/8	10	3	1-1/16 (-12) JIC	5000	345	34.5	PTFE
C12433	1-7/64	10	3	1-5/8 (-12) JIC	5000	345	34.5	PTFE

Note: Other standard lengths are available.

Hoses

Moisture-Lok Hose

Part No.	ID Size		Length		Coupling Size/Type	Max. WP		
	in	mm	ft	m		psi	bar	MPa
511387	3/4	19	25	7.6	3/4 npt(mbe)	4000	276	27.6
947233	1/4	6	3	0.9	1/4 npsm(fbe)	2750	190	19.0
947076	1/4	6	6	1.8	1/4 npsm(fbe)	2750	190	19.0
947077	1/4	6	10	3	1/4 npsm(fbe)	2750	190	19.0
947078	1/4	6	15	4.6	1/4 npsm(fbe)	2750	190	19.0
947079	1/4	6	25	7.6	1/4 npsm(fbe)	2750	190	19.0
947080	1/4	6	50	15.2	1/4 npsm(fbe)	2750	190	19.0
947475	3/8	10	2	0.6	3/8 npt(mbe)	2250	160	16.0
947081	3/8	10	6	1.8	3/8 npt(mbe)	2250	160	16.0
947082	3/8	10	10	3	3/8 npt(mbe)	2250	160	16.0
947083	3/8	10	15	4.6	3/8 npt(mbe)	2250	160	16.0
947084	3/8	10	25	7.6	3/8 npt(mbe)	2250	160	16.0
947085	3/8	10	50	15.2	3/8 npt(mbe)	2250	160	16.0
947086	1/2	13	6	1.8	1/2 npt(mbe)	2000	140	14.0
947087	1/2	13	10	3	1/2 npt(mbe)	2000	140	14.0
947089	1/2	13	25	7.6	1/2 npt(mbe)	2000	140	14.0
947091	3/4	19	6	1.8	3/4 npt(mbe)	1500	103	10.3
947092	3/4	19	10	3	3/4 npt(mbe)	1500	103	10.3
947093	3/4	19	15	4.6	3/4 npt(mbe)	1500	103	10.3
947094	3/4	19	25	7.6	3/4 npt(mbe)	1500	103	10.3
947096	1	25	6	1.8	1 npt(mbe)	1500	103	10.3

Moisture-Lok hose is designed specifically to prevent moisture permeation through the hose lining. This design is critical to protect moisture sensitive materials such as urethane from crystallization.

PTFE Hose

Part No.	ID Size	Length		Coupling Size/Type	Coupling Material	Max. WP		
		ft	m			psi	bar	MPa
685612	7/32	6	2	1/4 npt(mbe)	SST	4000	276	27.6
685614	7/32	15	4.6	1/4 npt(mbe)	SST	4000	276	27.6
205099	1/4	2.5	0.8	1/4 npsm(fbe)	CS	3000	206	20.6
205058	1/4	6	2	1/4 npsm(fbe)	CS	3000	206	20.6
205349	1/4	15	4.6	1/4 npsm(fbe)	CS	3000	206	20.6
204938	1/4	25	7.6	1/4 npsm(fbe)	CS	3000	206	20.6
206024	1/4	50	15	1/4 npsm(fbe)	CS	3000	206	20.6
685602	5/16	15	4.6	3/8 npt(mbe)	SST	4000	276	27.6
685603	5/16	25	7.6	3/8 npt(mbe)	SST	4000	276	27.6
511381	1/2	15	4.6	1/2 npt(mbe)	SST	5000	345	34.5
685605	5/8	6	2	3/4 npt(mbe)	SST	4000	276	27.6
685606	5/8	10	3	3/4 npt(mbe)	SST	4000	276	27.6
685607	5/8	15	4.6	3/4 npt(mbe)	SST	4000	276	27.6
685608	5/8	25	7.6	3/4 npt(mbe)	SST	4000	276	27.6
C12288	1/2	10	3	1/2 npt(mbe)		1500	103	10.3

Hoses

Siphon Kits, Tubes, Filters and Intake Extensions

5 Gal (19 I) Siphon Kits

Part No.	Description/ Material	Inlet Thread	Hose Tube Material	Hose ID		Hose Length		Suction Tube Material	Suction Tube Length		Suction Tube ID	Strainer Thread	Strainer	Inst. Manual
				in	mm	ft	m		in	mm				
206268	CS	3/4 npt(m)	Nylon	3/4	19	3.5	1.0	Aluminum	18	457	1/2	N/T	NA	307051
207484	CS	3/4 npsm(f)	Nylon	3/4	19	3.5	1.0	Aluminum	18	457	1/2	N/T	NA	307309
208920	CS	3/4 npsm(f)	Nylon	1.0	25	4.0	1.2	Aluminum	15	381	1.0	1 npt(m)	187147	307786
223105	SST	3/4 npt(m)	Nylon	3/4	19	6.0	1.8	Aluminum	18	457	1/2	N/T	NA	NA
237068	CS	2.0 npt(m)	Nylon	1.0	25	6.0	1.8	Aluminum	18	457	1.0	1 npt(m)	191635	308415
241634	SST	3/8 JIC	LDPE	0.37	9.4	4.0	1.2	304 SST	17	432	0.555	1/2 npt(m)	NA	308994
243832	SST	1/2 npsm(f)	LDPE	0.37	9.4	3.0	0.9	304 SST	17	432	0.555	1/2 npt(m)	NA	309106
244675	CS	3/8 npsm(f)	LDPE	0.37	9.4	4.0	1.0	Aluminum	17	432	0.555	1/2 npt(m)	NA	NA
245082	244675 w/ rock catcher	3/8 npsm(f)	LDPE	0.37	9.4	4.0	1.0	Aluminum	17	432	0.555	1/2 npt(m)	108143	NA
245083	241634 w/ rock catcher	3/8 JIC	LDPE	0.37	9.4	4.0	1.0	304 SST	17	432	.555	1/2 npt(m)	108143	NA
245176	CS*	1-1/4 npt(f)	LDPE	1.0	25	6	1.8	Aluminum	18.25	464	1.0	1 npt(m)	NA	NA
24B337	Merkur cart	3/4 NT	PTFE	0.625	15.9	4	1.2	304 SST	18	457	3/4	3/4 npt	187190	
24B338	Merkur cart	3/4 NT	PTFE	0.875	22.2	4	1.2	304 SST	18	457	3/4	3/4 npt	187190	
24B424	Merkur wall	3/4 NT	PTFE	0.625	15.9	4	1.2	304 SST	18	457	3/4	3/4 npt	187190	
24B425	Merkur wall	3/4 NT	PTFE	0.875	22.2	4	1.2	304 SST	18	457	3/4	3/4 npt	187190	

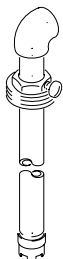
* For Xtreme pumps

55 Gal (208 I) Siphon Kits

Part No.	Description/ Material	Inlet Thread	Hose Tube Material	Hose ID		Hose Length		Suction Tube Material	Suction Tube Length		Suction Tube ID	Suction Tube OD	Bung Adapter	Inst. Manual
				in	mm	ft	m		in	mm				
203992	low level shut off/CS	1 1/2 npt(m)	Buna	3/4	19	6	1.8	CS	36	914	1.37	1.5	Y	306508
206266	w/screen filter; no hose	3/4 npt(f)	NA	NA	NA	NA	NA	CS	36	914	1.437	1.5	Y	306938
207485	w/ball check/CS	3/4 npsm(f)	Nylon	3/4	19	6	1.8	CS	36	914	1.43	1.5	Y	
208259	CS	3/4 npsm(f)	Nylon	3/4	19	6	1.8	CS	36	914	1.43	1.5	Y	
222916	CS	2 npt(m)	Polyethylene	1.5	38	8	2.4	CS	36	914	1.5	1.9	N	308081
223009	w/screen filter/CS	3/4 npt(m)	Nylon	3/4	19	6	1.8	CS	36	914	1.48	1.5	Y	NA
224442	w/big rock catcher/CS	2.5 Q.D.	Polyvinylidene	2	51	8	2.4	CS	33.5	851	1.62	2	N	308125
224834	Husky 307 drum mount kit/Acetal	3/8 npt(m)	NA	NA	NA	NA	NA	Acetal	34.75	883	0.375	0.625	Y	406128
235500	Husky 307 wall mount/ Acetal	3/8 npt(m)	Nylon	3/8	9.5	6	1.8	Acetal	38	965	0.375	0.625	Y	406132
235502	Husky 307 wall mount	3/8 npt(m)	Polypropylene	3/8	9.5	6	1.8	Polypropylene	38	965	0.375	0.625	Y	406133
236054	CS	1 1/2 npt(m)	Nitrile	3/4	19	6	1.8	CS	37.5	953	1.63	1.875	Y	308335
236951	CS	1 npt(m)	Nylon	3/4	19	6	1.8	CS	36	914	1.43	1.5	Y	NA
241321	CS	1 npsm(f)	Nylon	3/4	19	6	1.8	CS	36	914	1.43	1.5	Y	NA
245250	w/strainer CS	1 1/4 npsm(f)	Nylon	1.25	32	7	2.1	Aluminum	30.5	775	1.25	1.66	N	309379
245084	244677 w/strainer	3/8 npsm(f)	LDPE	0.37	9.4	6	1.8	Aluminum	38	965	0.555	0.625	Y	NA
245085	244676 w/strainer	3/8 JIC(f)	LDPE	0.37	9.4	6	1.8	304 SST	38	965	0.555	0.625	Y	NA
244676	Triton/SST	3/8 JIC(f)	LDPE	0.37	9.4	6	1.8	304 SST	38	965	0.555	0.625	Y	NA
244677	Triton/CS	3/8 npsm(f)	LDPE	0.37	9.4	6	1.8	Aluminum	38	965	0.555	0.625	Y	NA
685599	SST	3/4 npt(f)	Nylon	3/4	19	6	1.8	304 SST	34	864	0.75	1.05	Y	NA
24A954	Merkur drum		Nylon	0.75	19	5	1.5	304 SST	42	1067	0.625	1/2 npsm	187146	
24A598	Merkur drum		Nylon	1	25.4	5	1.5	304 SST	41	1041	0.9	1 npsm	187190	

Siphon Kits, Tubes, Filters and Intake Extensions (continued)

Siphon Tubes



206266

Part No.	Outlet Size in	Length		OD Size in	Use
		in	mm		
165767	3/4 npt(f)	18.0	450	7/8 in	Pail
206266	3/4 npt(f)	37.0	940	1-1/2 in	Drum
166630	1 npt(mbe)	30.0	762	1-5/16 in	Drum
170957	1 in dia.*	15.38	391	1-5/16 in	Pail
193257**	siphon tube from pail/cart packages				
246419	1 npt	37.0	940	1-1/2 in	Drum

* Non-threaded: 101818 hose clamp required.

** May supersede 207484/206268.

Intake Extensions

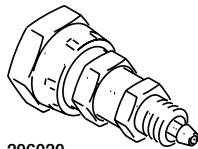
Part No.	Outlet Size in	Length		OD Size in
		in	mm	
168222	3/4 npt(f)	2.2	5.6	1-3/4 in
166047	2 npt(f)	7.0	177	2-1/4

Siphon Tube Filters

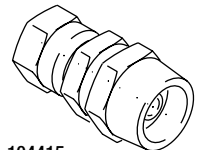
Part No.	Tube Size in	Mesh	Notes
210726	3/4 in	60	Includes support cage and one nylon filter bag.
238769 (25-pack)	1/2 in	60	12 Replacement Filter bags for filters 207241 and 210726.

Fittings

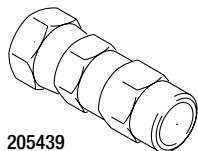
Swivel Couplings, Female Pipe Thread



206020



104415



205439

Part No.	Bulk Hose ID in	Bulk Hose Number	Thread Size	Compression Stud Material	Sleeve Material	Piece
206020	1/8	061135	1/4 npsm(f)	Brass*	Sleeveless	2
205447	1/4	061132	1/4 npsm(f)	Brass*	Nylon	2
205448	1/4	061132	3/8 npsm(f)	Brass*	Nylon	2
111913	1/4	061132	1/4 npsm(f)	SST	Spring Guard	2
111914	1/4	061132	3/8 npsm(f)	SST	Spring Guard	2
104415	1/4	15E291, 061205	1/4 npsm(f)	Brass*	Brass	3
104084	1/4	15E291, 061205	3/8 npsm(f)	Brass*	Brass	3
16A989	1/4	15E291, 061205	1/4 npsm(f)	Brass*	Brass	2
16A990	1/4	15E291, 061205	3/8 npsm(f)	Brass*	Brass	2
15K920	5/16	15E292	1/4 npsm	Brass*	Brass	2
16A997	5/16	15E292	1/4 npt(m)	Brass*	Brass	2
205439	3/8	598004, 061134	3/8 npsm(f)	Brass*	Nylon	2
104414	3/8	061195	3/8 npsm(f)	Brass*	Brass	3
16A992	3/8	15E293, 061195	1/4 npsm(f)	Brass*	Brass	2
16A993	3/8	15E293, 061195	3/8 npsm(f)	Brass*	Brass	2
15A995	1/2	15E294, 061200	1/2 npsm	Brass*	Brass	2

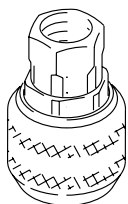
* Zinc- or nickel-plated

Swivel Couplings, Male Pipe Thread

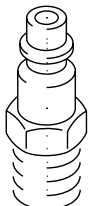
Part No.	Bulk Hose ID in	Bulk Hose No.	Hose Size	Compression Stud Material	Sleeve Material
205437	1/4	061132	1/8 npt(m)	Brass*	Aluminum
205436	1/8	061135	1/8 npsm(f)	Brass*	Aluminum
104416	1/2	061200	1/2 npsm(f)	Steel*	Steel*

* Zinc- or nickel-plated

Quick Coupler, Nipples (Pins)



208536



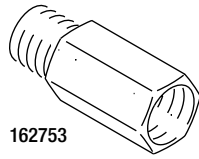
169970

Part No.	Max. WPR			Item	Body Thread Size	Body Material
	psi	bar	MPa			
208536	300	21	2.1	Coupler	1/4 npt(f)	Steel*
169967	300	21	2.1	Pin	1/4 npt(f)	Steel*
169969	300	21	2.1	Pin	1/8 npt(m)	Steel*
169970	300	21	2.1	Pin	1/4 npt(m)	Steel*
169971	300	21	2.1	Pin	3/8 npt(m)	Steel*

* Zinc-plated

Fittings

Male to Female Adapters, Rigid



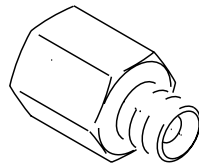
162753

Part No.	Male Thread	Female Thread	Length		Material	Internal Seat
			in	cm		
150171	1/8 npt	1/8 npt	1	2.5	Steel*	None
162753	1/4 npt	1/4 npt	1-5/8	3.8	Brass*	30°
166044	3/4 npt	3/4 npt	3	7.6	SST	None

* Zinc-plated

** Gold enamel painted

Male to Female Increase Adapters, Rigid



150287

Part No.	Max. WPR			Male Thread	Female Thread	Length		Material	Internal Seat
	psi	bar	MPa			in	cm		
150287	8000	552	55.2	1/4 npt	3/8 npt	1-5/8	4.1	Steel*	30°

Tube Fittings (Push Lock)

Part No.	Connection	Fitting Material	Tube OD	Thread
114485	Bulkhead Union	Brass, Nickle Plated	3/8"	3/8" nptf
113284	Bulkhead Union	Brass, Nickle Plated	5/32"	
114320	Female Connector	Brass, Nickle Plated	1/4"	1/8" nptf
114112	Male Connector	Brass, Nickle Plated	1/4"	1/4" nptf
114332	Male Connector	Brass, Nickle Plated	1/4"	10-32 UNF
111328	Male Connector	Brass, Nickle Plated	5/32"	10-32 UNF
114129	Male Connector	Brass, Nickle Plated	1/2"	3/8" nptf
114111	Male Connector	Brass, Nickle Plated	1/2"	1/2" nptf
114263	Male Connector	Brass, Nickle Plated	5/32"	1/8" nptf
109506	Swivel Male Elbow	Brass, Nickle Plated	1/4"	1/8" nptf
114469	Swivel Male Elbow	Brass, Nickle Plated	5/32"	1/4" nptf
112698	Swivel Male Elbow	Brass, Nickle Plated	1/4"	1/8" nptf
114109	Swivel Male Elbow	Brass, Nickle Plated	1/4"	1/4" nptf
114153	Swivel Male Elbow	Brass, Nickel Plated	1/4"	3/8" nptf
114316	Swivel Male Elbow	Brass, Nickel Plated	3/8"	3/8" nptf
114128	Swivel Male Elbow	Brass, Nickel Plated	1/2"	1/4" nptf
114114	Swivel Male Elbow	Brass, Nickel Plated	1/2"	3/8" nptf
114110	Swivel Male Elbow	Brass, Nickel Plated	1/2"	1/2" nptf
114151	Swivel Male Elbow	Brass, Nickel Plated	5/32"	1/8" nptf

Fittings

Nylon Tube Fittings (Push Lock)

Part No.	Coupling Description	Fitting Material	Diameter OD
104165	Tube to male hex socket - push to connect	Body: Brass: Outer sleeve brass or plastic	1/4
104172	Tube to male hex socket - push to connect	Body: Brass: Outer sleeve brass or plastic	1/4
598140	Male elbow - tube to male npt - push to connect	Body: Plastic: Base: Nickel plated brass	5/32
598327	Male elbow - tube to male npt - push to connect	Body: Plastic: Base: Nickel plated brass	5/32
597151	Male elbow - tube to male npt - push to connect	Body: Plastic: Base: Nickel plated brass	3/8
C19391	Male elbow - tube to male npt - push to connect	Body: Plastic: Base: Nickel plated brass	1/4
C19391	Male elbow - tube to male npt - push to connect	Body: Plastic: Base: Nickel plated brass	1/4
598728	Male elbow - tube to male npt - push to connect	Body: Plastic: Base: Nickel plated brass	1/2
598252	Male hex head and socket connector - tube to male npt	Nickel plated brass	5/32
598173	10/32 male connector - push to connect	Nickel plated brass	10/32
598447	Male hex head and socket connector - tube to male npt	Nickel plated brass	3/8
596832	Male branch tee - tube to male npt to tube	Plastic / brass with Buna-N o-rings	1/4
599246	Male branch tee - tube to male npt to tube	Body: Plastic: Base: Nickel plated brass	1/4
598141	Male branch tee - tube to male npt to tube	Body: Plastic: Base: Nickel plated brass	5/32
598251	Bulkhead union, tube to tube	Plastic	5/32
104176	Bulkhead union, 1/4 tube to 1/4 tube - push to connect	Plastic	
598449	Bulkhead union, 3/8 tube to 3/8 tube	Plastic nut with o-ring	3/8
599248	Male branch tee - tube to male npt to tube	Body: Plastic: Base: Nickel plated brass	1/2

Adapter Bushings (Screw to Screw), Straight

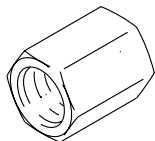


181085

Part No.	Max. WPR			Thread	Male Thread	Female Thread	Material
	psi	bar	MPa				
181085	5000	345	34.5	7/8-14 unf	1-1/16-16 unf	1	Steel*

* Nickel chrome-plated

Couplings (Pipe to Pipe), Rigid



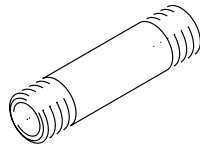
162024

Part No.	Max. WPR			Pipe Thread	Length in	Across Flats in	Material
	psi	bar	MPa				
100451	—	—	—	1/8 npt	7/8	—	Steel*
100175	—	—	—	1/4 npt	13/16	—	Steel*
113093	—	—	—	1/4 npt	11/8	.69	Steel*
162024	—	—	—	3/8 npt	11/8	.88	Steel*
158581	4000	276	27.6	1/2 npt	11/4	1.00	Steel*
100385	150	10.4	1.04	3/4 npt	13/8	—	Steel*
100474	150	10.4	1.04	1 npt	2	—	Iron*

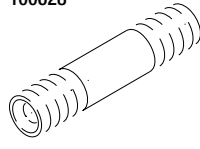
* Nickel chrome-plated

Fittings

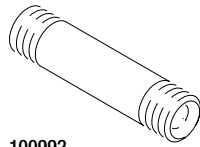
Regular Nipples (Pipe to Pipe), Rigid



100628



100124



100992

Part No.	Max. WPR			Pipe Thread	Length in	Material
	psi	bar	MPa			
100628	2140	147	14.7	1/4 npt	2 1/8	Steel*
100124	150	10.4	1.04	1/4 npt	2 1/2	Steel*
100200	—	—	—	1/4 npt	6	Steel*
100992	—	—	—	3/8 npt	2 1/2	Steel*
100195	—	—	—	3/8 npt	4	Steel*
100122	150	10.4	1.04	1/2 npt	1 1/8	Steel*
101353	1280	86	8.6	1/2 npt	4	Steel*
100627	—	—	—	3/4 npt	2	Steel*
101407	—	—	—	3/4 npt	3	Steel*
100485	—	—	—	1 npt	2	Steel*

* Nickel chrome-plated

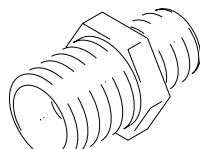
Hex Nipple (Pipe to Pipe), Rigid

Part No.	Max. WPR			Thread P1	Thread P2	Length		Material	Sealing Angle
	psi	bar	MPa			in	cm		
103656	—	—	—	1/8 npt	1/8 npt	29/32	2.5	Brass	None
162453	7500	517	51.7	1/4 npt**	1/4 npsm	13/16	3.1	Steel	30°
156971	7500	517	51.7	1/4 npt**	1/4 npt	13/8	3.3	Steel	30°
162485	5000	345	34.5	3/8 npt**	3/8 npsm	15/16	3.2	Steel	30°
156849	6000	420	42.0	3/8 npt**	3/8 npt	1 1/2	3.8	Steel*	30°
158491	7400	510	51.0	1/2 npt**	1/2 npt	15/8	4.1	Steel	30°
175013	5000	345	34.5	3/4 npt*	3/4 npt**	2 1/2	6.3	Steel**	30°

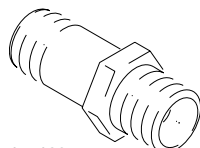
* Nickel-plated

** Zinc-plated

Hex Reducing Nipples (Pipe to Pipe), Rigid



157350

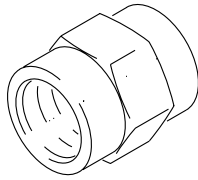


157129

Part No.	Max. WPR			Thread P1	Thread P2	Length		Material	Sealing Angle
	psi	bar	MPa			in	cm		
151519	7500	517	51.7	1/4 npt	1/8 npt	1-5/16	3.2	Steel*	30°
157350	—	—	—	3/8 npt	1/4 npt	1-5/16	3.2	Steel*	30°
164672	6000	420	42.0	3/8 npt	1/4 npsm	1-5/16	3.2	Steel*	30°
164856	8000	552	55.2	3/8 npt	1/4 npt	1-11/16	xx	Steel*	30°
165198	10000	690	69.0	3/8 npt	1/4 npt	1-3/4	4.5	Steel*	30°
162449	7400	510	51.0	1/2 npt	1/4 npt	1-5/8	4.1	Steel*	30°
159239	7400	510	51.0	1/2 npt	3/8 npt	1-5/8	4.1	Steel*	30°
158979	5500	374	37.4	1/2 npt	3/8 npt	2-3/4	7.0	Steel*	30°
161800	4000	276	27.6	3/4 npt	3/8 npsm	1-3/4	4.5	Steel*	30°
166606	7000	483	48.3	3/4 npt	3/8 npt	4-9/16	11	Steel*	30°
157191	6000	420	42.0	3/4 npt	1/2 npt	1-7/8	4.6	Steel*	30°
158555	3000	207	20.7	1 npt	3/4 npt	2-3/16	5.6	Steel*	30°
166846	6000	414	41.4	1/4 npt	1/4 npsm	1-3/16	3.1	SST	30°
157129	5000	345	34.5	3/4 npt	3/4 npt	3-1/4	8.2	Steel*	30°

* Zinc-plated

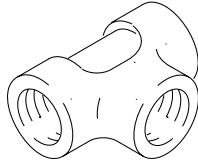
Fittings



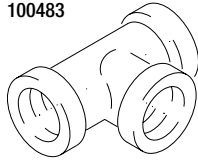
161490

Hex Reducing Couplings (Pipe to Pipe), Rigid

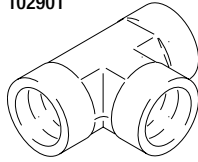
Part No.	Max. WPR			Thread P1	Thread P2	Length		Material
	psi	bar	MPa			in	cm	
161490	3000	207	20.7	3/4 npt	3/8 npt	1-1/2	3.8	Steel*



100483



102901



103475

Pipe Tees (Female), Rigid

Part No.	Max. WPR			Port Thread	Material
	psi	bar	MPa		
104984	5000	345	34.5	1/4 npt(f)	Steel*
101846	2000	138	13.8	1/2 npt(f)	Malleable Iron
100483	3000	207	20.7	3/8 npt(f)	Forged Steel*
102901	4500	310	31.0	3/8 npt(f)	SST
103475	3000	207	20.7	1/2 npt(f)	Steel

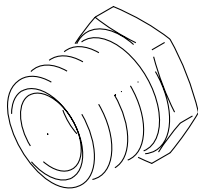
* Zinc-plated

Pipe Tees (Female Run-Male Branch), Rigid

Part No.	Max. WPR			Branch Threads	Thread	Material
	psi	bar	MPa			
164815	6000	420	42.0	1/8 npt(f)	1/8 npt(f)	Steel*

* Zinc-plated

Pipe Reducer Bushings, Rigid



158586

Part No.	Max. WPR			Male Thread	Female Thread	Material
	psi	bar	MPa			
100505	—	—	—	3/4 npt	3/8 npt	Steel*
101742	—	—	—	1 npt	3/8 npt	Iron*
101496	3000	207	20.7	1 1/2 npt	3/4 npt	Steel*
102000	—	—	—	1 1/2 npt	1 npt	Iron
102283	—	—	—	2 npt	1 npt	Brass
100081	6000	414	41.4	1/2 npt	3/8 npt	Steel*
100896	5000	345	34.5	3/4 npt	1/2 npt	Steel*
158586	6000	414	41.4	1 npt	3/4 npt	Steel*
158212	4000	276	27.6	1/2 npt	3/8 npt	Steel*

* Zinc-plated

Fittings

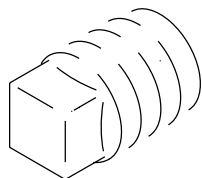


103219

Slotted Headless Pipe Plug

Part No.	Max. WPR			Pipe Thread	Material
	psi	bar	MPa		
103219	—	—	—	1/8 npt(m)	Brass*

* Zinc-plated

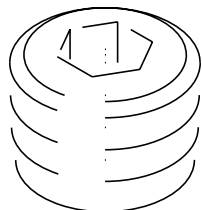


100509

Square Head Pipe Plugs

Part No.	Max. WPR			Pipe Thread	Material
	psi	bar	MPa		
100509	6000	414	41.4	1/4 npt(m)	Iron
100040	—	—	—	3/8 npt(m)	Steel
111697	—	—	—	1/4 npt(m)	SST
102042	—	—	—	2 npt(m)	Iron*

* Zinc-plated

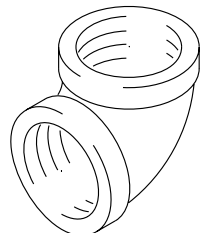


101754

Socket Headless Pipe Plugs

Part No.	Max. WPR			Pipe Thread	Material
	psi	bar	MPa		
101754	—	—	—	3/8 npt(m) SAE Short	Steel*

* Zinc-plated

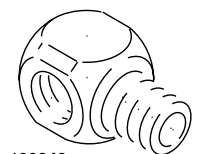


100325

90° Pipe Elbows (Female)

Part No.	Max. WPR			Pipe Thread	Material
	psi	bar	MPa		
100349	—	—	—	3/4 npt(f)	Iron*
102325	—	—	—	3/4 npt(f)	SST

* Not a conventional elbow. Steel block with ports at 90°



100840

90° Street Pipe Elbows, Rigid

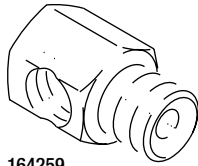
Part No.	Max. WPR			Female Thread	Male Thread	Length		Material
	psi	bar	MPa			in	cm	
100840	7500	517	51.7	1/4 npt	1/4 npt	1-11/32	3.4	Steel*
100286	—	—	—	3/8 npt	3/8 npt	1-5/8	4.1	Iron**
155699	—	—	—	3/8 npt	3/8 npt	1-3/16	3.1	Steel**
100549	150	10.4	1.04	3/4 npt	3/4 npt	2-5/8	6.6	Iron*
100467	150	10.4	1.04	1 npt	1 npt	3	7.6	Iron**
100088	150	10.4	1.04	2 npt	2 npt	4-3/4	12	Iron**
160701	6000	420	42.0	1/8 npt	1/8 npt	2	5.1	Steel**
158683	7400	510	51.0	1/2 npt	1/2 npt	2-1/16	5.2	Steel**
166242	4500	310	31.0	1/2 npt	1/2 npt	2-3/32	5.3	SST

*Zinc-plated **Chrome-plated

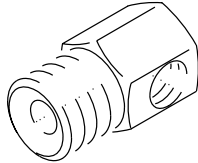


100286

Fittings



164259



166999

90° Reducing Street Pipe Elbows, Rigid

Part No.	Max. WPR			Female Thread	Male Thread	Length		Material	Internal Seat
	psi	bar	MPa			in	cm		
164259	6000	420	42.0	1/4 npt	3/8 npt	1-3/8	3.3	Steel*	30°
166999	6000	420	42.0	1/4 npt	1/2 npt	1-5/8	4.1	Steel*	30°

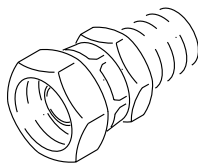
* Zinc-plated

Pipe Unions with Swivel Nut

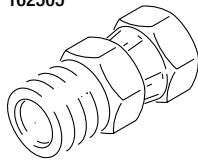
Part No.	Max. WPR			Thread P1	Swivel Nut P2	Material
	psi	bar	MPa			
155570	10000	690	69.0	1/4 npt(f)	1/4 npsm(f)	Steel*
159153	7500	517	51.7	3/8 npt(f)	1/4 npsm(f)	Steel*
156173	7400	510	51.0	3/8 npt(f)	3/8 npsm(f)	Steel*
207152	7000	483	48.3	3/8 npt(f)	3/8 npsm(f)	SST
161077	3500	240	24.0	1/2 npt(f)	3/8 npsm(f)	Steel*
155865	4500	310	31.0	1/2 npt(f)	1/2 npsm(f)	Steel*
156172	5000	345	34.5	3/4 npt(f)	3/4 npsm(f)	Steel*
202966	4000	420	42.0	3/4 npt(f)	1 npsm(f)	Steel*
158383	2000	138	13.8	1 npt(f)	1 npsm(f)	Steel*

* Zinc-plated

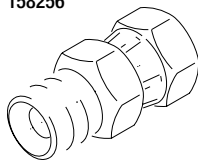
Male to Female Adapter Unions, Straight Swivel



162505



158256



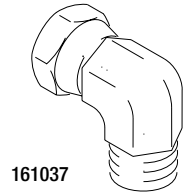
157785

Part No.	Max. WPR			Thread P1	Swivel Nut P2	Material
	psi	bar	MPa			
156823	10,000	690	69.0	1/4 npt(m)	1/4 npsm(f)	Steel*
157705	7500	517	51.7	1/4 npt(m)	3/8 npsm(f)	Steel*
155665	7500	517	51.7	3/8 npt(m)	3/8 npsm(f)	Steel*
160022	2000	138	13.8	1 npt(m)	1 npsm(f)	Steel*
103977	300	20.7	2.07	1 npt(m)	1 npsm(f)	Passivated SST
236987	7400	510	51.0	1/4 npt(m)	1/4 npsm(f)	Steel*
208434	10,000	690	69.0	1/8 npt(m)	1/4 npsm(f)	Steel*
162505	7500	517	51.7	3/8 npt(m)	1/2 npsm(f)	Steel*
158256	7500	517	51.7	1/2 npt(m)	3/8 npsm(f)	Steel*
157785	3500	240	24.0	3/4 npt(m)	3/4 npsm(f)	Steel*
202965	4500	310	31.0	1 npt(m)	3/4 npsm(f)	Steel*

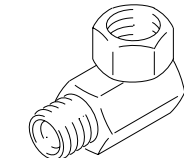
* Zinc-plated

Fittings

Male to Female Adapter Unions, 90° Swivel



161037

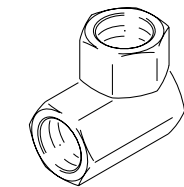


155494

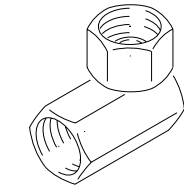
Part No.	Max. WPR			Thread P1	Swivel Nut P2	Material
	psi	bar	MPa			
161037	3500	240	24.0	1/2 npt(m)	3/8 npsm(f)	Steel*
160327	2250	203	20.3	3/4 npt(m)	3/4 npsm(f)	Steel*
155541	5850	403	40.3	1/4 npt(m)	1/4 npsm(f)	Steel*
155495	7000	483	48.3	3/8 npt(m)	1/4 npsm(f)	Steel*
155494	5000	345	34.5	3/8 npt(m)	3/8 npsm(f)	Steel*
155470	3500	240	24.0	1/2 npt(m)	1/2 npsm(f)	Steel*

* Zinc-plated

Female Adapter Unions, 90° Swivel



155677

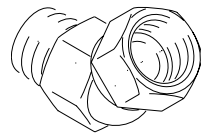


157416

Part No.	Max. WPR			Thread P1	Swivel Nut P2	Material
	psi	bar	MPa			
155677	4000	276	27.6	3/8 npt	3/8 npsm	Steel*
156589	2250	155	15.5	3/4 npt	3/4 npsm	Steel*
157676	5000	345	34.5	1/4 npt	1/4 npsm	Steel*
162803	5000	345	34.5	1/4 npt	3/8 npsm	Steel*
159801	3500	240	24.0	3/8 npt	1/2 npsm	Steel*
157416	3500	240	24.0	1/2 npt	1/2 npsm	Steel*
102806	2000	138	13.8	1 npt(m)	1 npsm(f)	Steel*

* Zinc-plated

Male to Female Adapter Unions, 45° Swivel



105281

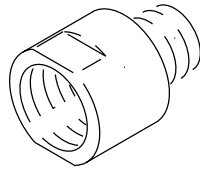
Part No.	Max. WPR			Thread P1	Swivel Nut P2	Material
	psi	bar	MPa			
105281	5000	345	35.2	3/4 npt(m)	3/4 npsm(f)	Steel*
161889	4000	276	27.6	3/8 npt(m)	3/8 npsm(f)	Steel*

* Zinc-plated

Fittings

Non-Rated Fittings

Note: Fittings on pages 114 through 116, inclusive, are not pressure rated.

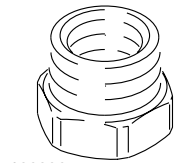


156022

Male to Female Increase Adapters, Rigid

Part No.	Male Thread	Female Thread	Length		Material	Internal Seat
			in	mm		
156580	1/8 npt	3/8 npt	1-5/16	3.2	Steel	—
159842	1/4 npt	1/2 npt	1-1/2	3.8	Steel*	30°
156022	3/8 npt	1/2 npt	1-1/2	3.8	Steel*	30°
104969	1/2 npt	3/4 npt	1-7/8	4.6	Steel*	30°
168595	1/2 npt	3/4 npt	2-7/16	6.2	Steel*	—

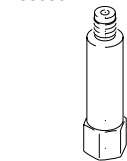
*Zinc-plated



166036

Adapter Bushings (Screw to Screw), Straight

Part No.	Thread	Male Thread	Female Thread	Material
166036	1-1/8-18 unf	5/8-11 unc	1	SS

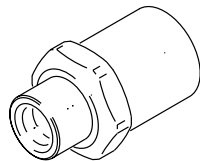


160059

Adapter Bushings (Screw to Pipe), Rigid

Part No.	Male Thread	Female Thread	Length		Material
			in	mm	
160059	3/8-24 unf	1/8 npt	2-7/16	6.2	Steel*
105276	3/4-16 unf	1/4 npt	1-1/16	2.7	Steel* w/ Viton O-Ring
158409	3/4-20 unef	3/8 npt	3-7/32	8.4	Steel*

*Zinc-plated

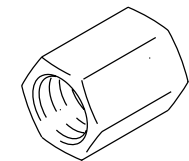


168688

Hex Adapter Coupling (Pipe to Screw), Rigid

Part No.	Pipe Thread	Straight Thread	Length		Material
			in	mm	
168688	1/2 npt(f)	1/2-27 uins(f)	1 3/4	4.5	Steel*

*Zinc-plated

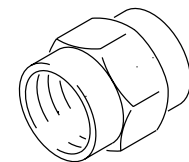


100083

Hex Reducer Couplings (Pipe to Pipe), Rigid

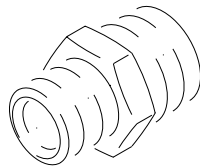
Part No.	Thread P1	Thread P2	Length		Material
			in	mm	
150278	1/4 npt	1/8 npt	1-1/16	2.7	Steel*
100083	3/8 npt	1/4 npt	1-1/8	2.9	Steel*
158556	3/4 npt	1/2 npt	1-1/2	3.8	Steel*

*Zinc-plated



158556

Fittings



171439

Hex Reducing Nipples (Pipe to Pipe), Rigid

Part No.	Thread P1	Thread P2	Length		Material	Internal Seat
			in	mm		
191872	1/4 npsm	1/8 npt	31/32	2.5	Steel*	30°
156296	3/8 npt	1/8 npt	2	5.1	Steel*	30°
157350	3/8 npt	1/4 npt	1-5/32	2.9	Brass	30°
166863	3/8 npt	1/4 npt	1-5/16	3.2	SST	30°
166443	3/4 npt	1/2 npt	1-3/4	4.5	SST	30°
171439	1 npt	3/4 npt	2-3/16	5.6	SST	30°

*Zinc-plated

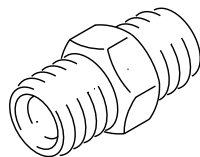
Hex Adapter Nipples (Pipe to Screw), Rigid

Part No.	Thread P1	Thread P2	Length		Material	Sealing Angle
			in	mm		
167395	1/4 npsm	3/8-24 unf	13/16	1.9	Steel**	30°
171234	1/4 npsm	3/8-24 unf	13/16	1.9	SST	30°
172682	3/8 npsm	1/2-27 uns	23/32	1.9	SST	30°
160222	3/8 npsm	9/16-18 unf	1-1/2	3.8	Brass***	30°
171279	1 npt	1-12 unf	2-1/8	5.4	SST	—

*Nickel chrome-plated

**Zinc-plated

***Nickel-plated



166469

Hex Nipple (Pipe to Pipe), Rigid

Part No.	Thread P1	Thread P2	Length		Material	Sealing Angle
			in	mm		
167702	3/8 npt*	3/8 npt	13/16	3.1	Brass*	30°
166469	3/8 npt	3/8 npt	11/2	3.8	SST	30°
166244	1/2 npt	1/2 npt	15/8	4.1	SST	30°

*Zinc-plated

Pipe Tee (Female Run-Male Branch), Rigid

Part No.	Run Threads	Branch Thread	Material
164814	1/4 npt(f)	3/8 npt(m)	Steel*

*Zinc-plated

Fittings



100030



100730



100176

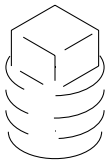


168160

Pipe Reducer Bushings, Rigid

Part No.	Male Thread	Female Thread	Material	Internal Seat
100030	1/4 npt	1/8 npt	Steel*	30°
100730	3/8 npt	1/8 npt	Steel	—
100176	3/8 npt	1/4 npt	Steel	30°
159841	3/8 npt	1/4 npt	Steel*	30°
168160	3/8 npt	1/4 npt	SST	30°
100329	1/2 npt	1/8 npt	Iron*	—
100206	1/2 npt	1/4 npt	Steel	—
102022	1/2 npt	1/4 npt	SST	—
100081	1/2 npt	3/8 npt	Steel*	—
100615	3/4 npt	1/4 npt	Steel*	—
100896	3/4 npt	1/2 npt	Steel*	—
100380	1 npt	1/2 npt	Steel*	—
158586	1 npt	3/4 npt	Steel*	30°
112839	2 npt	1 npt	Iron*	—

* Zinc-plated



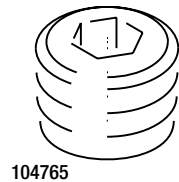
104663

Square Head Pipe Plugs

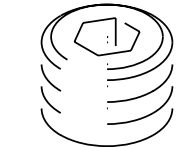
Part No.	Pipe Thread	Material
100403	1/8 npt(m)	Iron*
104813	3/8 npt(m)	Steel*
100737	1/2 npt(m)	Steel
103943	3/4 npt(m)	SST
104663	3/4 npt(m)	Steel*
100345	1 npt(m)	Iron
100346	1 1/2 npt(m)	Iron

* Zinc-plated

Fittings



104765



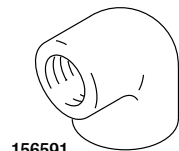
100361

Socket Headless Pipe Plugs

Part No.	Pipe Thread	Material
103147	1/16 npt(m)	Steel
104765	1/8 npt(m)	Steel**
100721	1/4 npt(m) SAE Short	Steel*
101970	1/4 npt(m) SAE Short	SST
100361	1/2 npt(m) SAE Short	Steel*
103778	1/2 npt(m) SAE Short	SST
102726	3/4 npt(m)	Steel*

*Zinc-plated

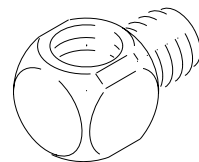
**PTFE coated



156591

90° Adapter Elbow (with O-Ring Groove)

Part No.	Pipe Thread	Straight Universal Thread	Material
156591	3/4 npt(f)	1-1/2 -24 uns(f)	Aluminum

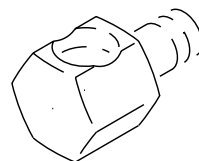


158683

90° Street Pipe Elbows, Rigid

Part No.	Female Thread	Male Thread	Length		Material	Internal Seat
			in	mm		
100839	1/8 npt	1/8 npt	1-1/8	2.9	Steel	None
103893	1/4 npt	1/4 npt	1-3/16	3.1	Brass	None
166866	1/4 npt	1/4 npt	1-11/32	3.4	SST	30°
100119	1/2 npt	1/2 npt	2-1/4	5.7	Iron*	None
158683	1/2 npt	1/2 npt	2-1/16	5.2	Steel*	None
166590	3/4 npt	3/4 npt	2-1/2	6.3	Steel*	None
176393	3/4 npt	3/4 npt	4-5/8	11.8	Steel*	30°
100088	2 npt	2 npt	—	—	Iron*	None

*Zinc-plated



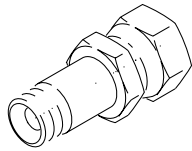
158962

90° Reducing Street Pipe Elbows, Rigid

Part No.	Female Thread	Male Thread	Length		Material	Internal Seat
			in	mm		
158962	1/4 npt	1/8 npt	1 1/2	3.8	Steel*	—
166444	3/8 npt	1 npt	2	5.1	Brass*	—
100611	3/4 npt	1/2 npt	2 5/8	6.7	Iron*	—

*Zinc-plated

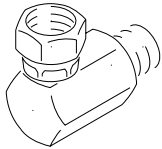
Fittings



235207

Male to Female Adapter Unions, Straight Swivel

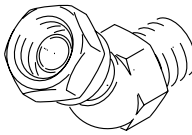
Part No.	Thread P1	Swivel Nut P2	Material
235207	3/8 npt(m)	3/8 npsm(f)	SST



207123

Male to Female Adapter Unions, 90° Swivel

Part No.	Thread P1	Swivel Nut P2	Material
207123	3/8 npt(m)	3/8 npsm(f)	SST
207648	3/4 npt(m)	3/4 npsm(f)	Steel*

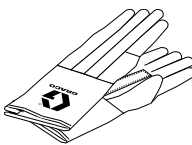


209029

Male to Female Adapter Unions, 45° Swivel

Part No.	Thread P1	Swivel Nut P2	Material
209029	3/8 npt(m)	3/8 npsm(f)	SST

* Zinc-plated



Conductive Gloves for Electrostatic Guns

Universal gloves - both left and right handed

Part No.	Description
117823	Small (box of 12 pair)
117824	Medium (box of 12 pair)
117825	Large (box of 12 pair)



Gun Cleaning Kits

Part No.	Description
15C162	HVLP (High Volume Low Pressure) Cleaning Kit
15C161	Ultimate Gun Cleaning Kit

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Industrial Customer Service

Hours: Monday-Friday 7:30 AM - 5:30 PM Central Time

Phone: 800-328-0211

Fax: 877-340-6427

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