

Operation Manual
DGi Pro Pod - Digital ATEX approved Spraygun Pressure Gauge for GTIPRO Sprayguns

Important
 Read and follow all instructions and Safety Precautions before using this equipment

Description

The DGi Pro Pod Digital Pressure Gauge is an intrinsically safe device, approved to ATEX regulations 94/9/EC, protection level; II 1 G EEx ia IIC T4, Suitable for use in Zones 0, 1 and 2.

The gauge is supplied either as a retrofit kit to existing GTIPRO Sprayguns or factory installed. The Gauge is powered by a long life battery and has a life expectancy of a minimum of 2 years under normal single shift working conditions. The battery can only be replaced by returning the gauge to the factory (details on request).




Important: This gauge is suitable for use with both waterbased and solvent based coating materials and cleaners. It's Category 1 rating means in can be cleaned in an enclosed spraygun washing machine. DO NOT totally immerse this device in solvent or cleaner as it may cause blockage of the internal passageways and affect the accuracy.

Model Variants	
DGIPRO-503-BAR	Display reading in bar

Specification

Air supply connection	- Universal 1/4 BSP and NPS
Maximum static inlet pressure	- 7 bar (100 psi)
Service temperature	- 0 to 40°C
Materials of Construction	
Housing	- Die cast Aluminium, Nickel/Chrome plated
Window	- Toughened Glass
Valve parts	- Nickel/Chrome plated Brass

SAFETY WARNINGS

Fire and explosion
 Solvents and coating materials can be highly flammable or combustible when sprayed. **ALWAYS refer to the coating material suppliers instructions and COSHH sheets before using this equipment.**
 Users must comply with all local and national codes of practice and insurance company requirements governing ventilation, fire precautions, operation and house-keeping of working areas
 Static Electricity can be generated by fluid and/or air passing through hoses, by the spraying process and by cleaning non-conductive parts with cloths. To prevent ignition sources from static discharges, earth continuity must be maintained to the Gauge and spraygun. It is essential to use conductive hoses.

Misuse
 Do not attempt to dismantle the Gauge under any circumstances. **The battery is non-replaceable.** In the event of a premature failure, return the unit to your distributor.
 The fitting of non-original spares may create hazards. Use only spares and accessories as detailed in this bulletin.
 The product can be cleaned using a gun washing machine. However, this equipment should not be left inside gun washing machines for prolonged periods of time or immersed totally in solvent or cleaning material.
 Do not over pressurise the gauge beyond its maximum working pressure (see specification). This may result in a failure of the unit and possible injury to the user.
 If the plating is damaged and exposes the base metal, do not use in a hazardous (zoned) area.

Installation

Before installing this gauge ensure the spray gun is disconnected from the airline.
 1. Remove the existing Spreader Valve (13).
 2. Clean the valve bore in the spraygun with a bottle brush or similar tool.
 3. Screw the gauge assembly into the

spray gun. Position the gauge centrally and tighten with 14mm spanner.
 4. Remove air inlet adaptor (15) and push in insert (14). Replace air inlet adaptor (15).
 5. Remove any in-line gauge or regulator as these are no longer required.

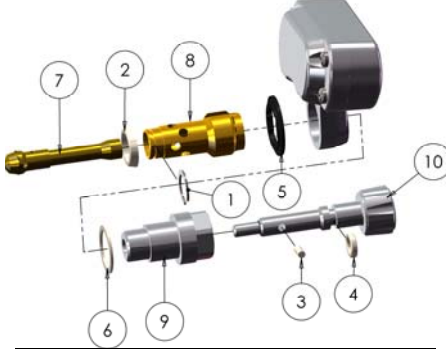
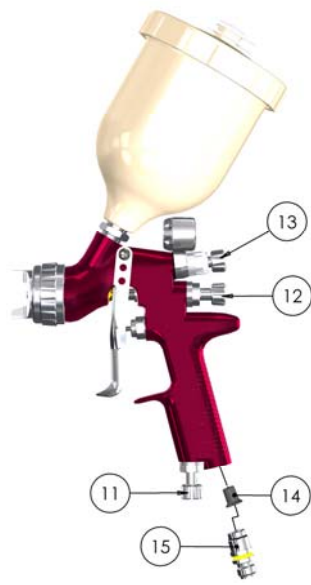
Operation

1. Turn spreader valve (13) anti-clockwise until fully wound out.
 2. Turn the air flow valve (11) at the bottom of the handle clockwise until fully wound in.
 3. With the hose connected, turn on air supply.
 4. Open the air flow valve (11) by turning anticlockwise and trigger the spraygun (air only). The gauge will show a reading in 0.05 bar increments. Adjust the flow valve until the required

pressure value is displayed.
 5. Use an air pressure of 2 bar for DeVilbiss GTI PRO compliant and HVLP Aircaps. The pressure at the Aircap will be 0.7 bar (10psi) for HVLP Aircaps.
 6. The gauge can be cleaned in a gunwash machine whilst attached to the spraygun. Do not leave in for long periods or immerse the gauge totally in solvent or cleaners. This may affect the accuracy of the gauge by clogging the internal air passages.

- Replacement of seals**
1. Disconnect the air supply to the spray gun.
 2. Remove the complete valve assembly (13) from the spray gun.
 3. Unscrew the valve head (7). Use the cross hole with an hex key or similar tool.
 4. Unscrew the Valve Stem (10).

5. Remove the circlip (1) and Seal (2).
6. Unscrew the 2 halves of the valve body (8) (use a hex key in one of the crossholes) and remove shims (5) and (6).
7. Push out the pin (3). Remove seal (4).
8. Clean all parts before re-assembly.
9. Re-assemble in reverse order. Note the seal (2) has the grooved side towards the gauge body.



Parts List			
Ref	Description	Part No	Qty
1	CIRCLIP	-	1
2	FRONT SEAL	-	1
3	PIN	-	1
4	SEAL	SN-52-K5	1
5	RETAINING SHIM	-	1
6	SHIM	-	1
7	VALVE HEAD	-	1
8	VALVE BODY	-	1
9	VALVE BODY (OUTER)	-	1
10	VALVE STEM	-	1
14	INSERT—KIT OF 5	SN-57-K5	1

ITEMS MARKED + IN SEAL KIT DGI-415-K

Patents: EP 1375013
 JP 04276001

ITW Finishing U.K.
 Binks • DeVilbiss • Gema • Ransburg

EC Declaration of Conformity

We: ITW Finishing UK
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As the manufacturer of the:


Digital Pressure Gauge Model DGi, DGiPRO and DGIPRO POD

Declare, under our sole responsibility, that the equipment to which this document relates is in conformity with the following standards or other normative documents:

EN 50014:1997
 EN 50020:2002
 EN 61000-6-3:2007
 EN 61000-6-1:2007

And thereby conform to the protection requirements of Council 94/9/EC relating to **Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres protection level, II 1 G EEx ia IIC T4** and **EMC Directive 2004/108/EC**

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Authorised by: 

Peter Loveless
 Manufacturing Engineering Manager

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