



SERIES 3000MR/3000MRS | PHOTOHELIC® SWITCH/GAGE

FEATURES/BENEFITS

- Gage reading unaffected by switch operation and will continue to read pressure even during power loss
- Zero and range adjustments outside of gage means no disassembly in normal service
- Solid state design allows for switching in high cycle rate applications without degradation
- Optional stainless steel bezel is the same installation diameter as Magnehelic® gage and simplifies field upgrade to Photohelic® switch/gage

APPLICATIONS

- Pneumatic conveying
- Air conditioning systems
- Clean rooms

DESCRIPTION

Using solid state technology, the **SERIES 3000MR & 3000 MRS** Photohelic® Switches/Gages combine the functions of a precise, highly repeatable differential pressure switch with a large easy-to-read analog pressure gage employing the durable, time-proven Magnehelic® gage design. Switch setting is easy to adjust with large external knobs on the gage face. Gage reading is unaffected by the switch operation will indicate accurately even if power is interrupted. Solid state design now results in greatly reduced size and weight. Units can be flush mounted or surface mounted with hardware supplied. 3000MR models employ versatile electromechanical relays with gold over silver contacts – ideal for dry circuits. For applications requiring high cycle rates, choose 3000MRS models with SPST (N.O.) solid state relays. All models provide both low and high limit control and include 18-inch (45 cm) cable assemblies for electrical connections. Compatible with air and other non-combustible, non-corrosive gases, they can be used in systems with pressures to 25 psig (1.725 bar). Optional construction is available for use to either 35 psig (2.42 bar) or 80 psig (5.51 bar).



Note: Shown with optional -SS bezel.
Backward compatible with Magnehelic® gage.



dwyer-inst.com

DWYER INSTRUMENTS, INC.

T: 219-879-8000 | F: 219-872-9057 | info@dwyermail.com
800-872-9141



GAGE SPECIFICATIONS

Service	Air and non-combustible, compatible gases.
Wetted Materials	Consult factory.
Accuracy	$\pm 2\%$ of FS (3000-0 $\pm 3\%$ of FS). (3000-00 $\pm 4\%$ of FS).
Pressure Limit	-20" Hg to 35 psig (-0.677 bar to 1.72 bar). MP option: 35 psig (2.41 bar), HP option: 80 psig (5.52 bar).
Temperature Limits	20 to 120°F (-6.67 to 48.9°C).
Process Connections	1/8" female NPT (duplicated side and back).
Size	4" (101.6 mm) dial face, 5" (127 mm) OD x 3-1/8" (79.38 mm); -SS Bezel: 4-3/4" (120.7 mm) OD x 2-21/32" (67.5 mm).
Weight	1.8 lb (816 g).

3000 MR SWITCH SPECIFICATIONS

Switch Type	Each set point has 1 form C relays (SPDT)
Relay Contacts	(Resistive load) 1 form C rated 1.0 A @ 30 VDC, 0.3 A @ 110 VDC or 0.5 A @ 125 VAC. Gold over clad silver – suitable for dry circuits.
Electrical Connections	18" (46 cm) cable assembly with 8 conductors. Optional lengths to 100' (30.5 m).
Power Requirements	24 VDC, regulated 10%.
Mounting Orientation	Diaphragm in vertical position. Consult factory for other position orientations.
Set Point Adjustment	Adjustable knobs on face.
Agency Approvals	CE.

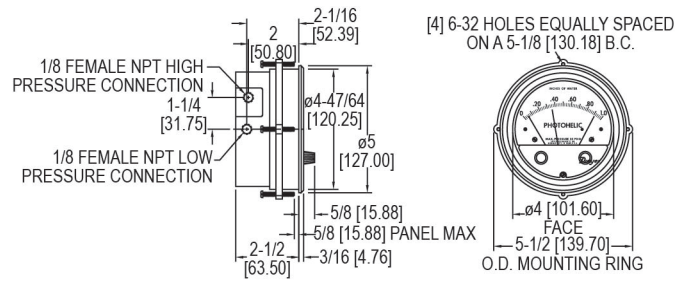
3000MRS SPECIFICATIONS

Switch Type	Each set point has a solid state relay.
Switching Voltage	20 to 280 VAC (47 to 63 Hz).
Switching Current	1.0 A (AC) max., 0.01 mA (AC) min., (2) SPST NO.
Electrical Connections	18" (46 cm) cable assembly with 6 conductors, optional lengths to 100' (30.5 m).
Power Requirements	24 VDC, regulated $\pm 10\%$.
Mounting Orientation	Diaphragm in vertical position. Consult factory for other position orientations.
Set Point Adjustment	Adjustable knobs on face.
Agency Approvals	CE.

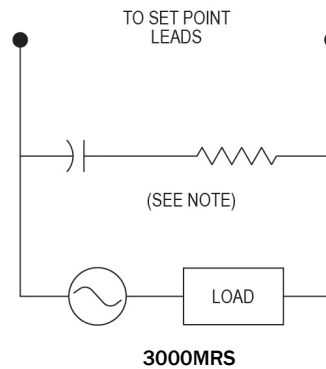
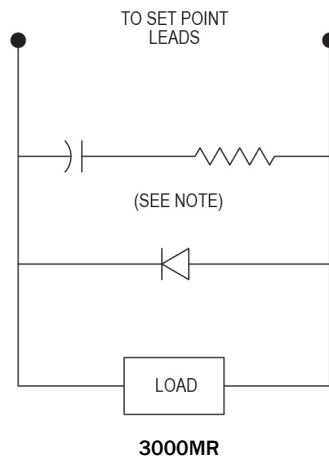




DIMENSIONS



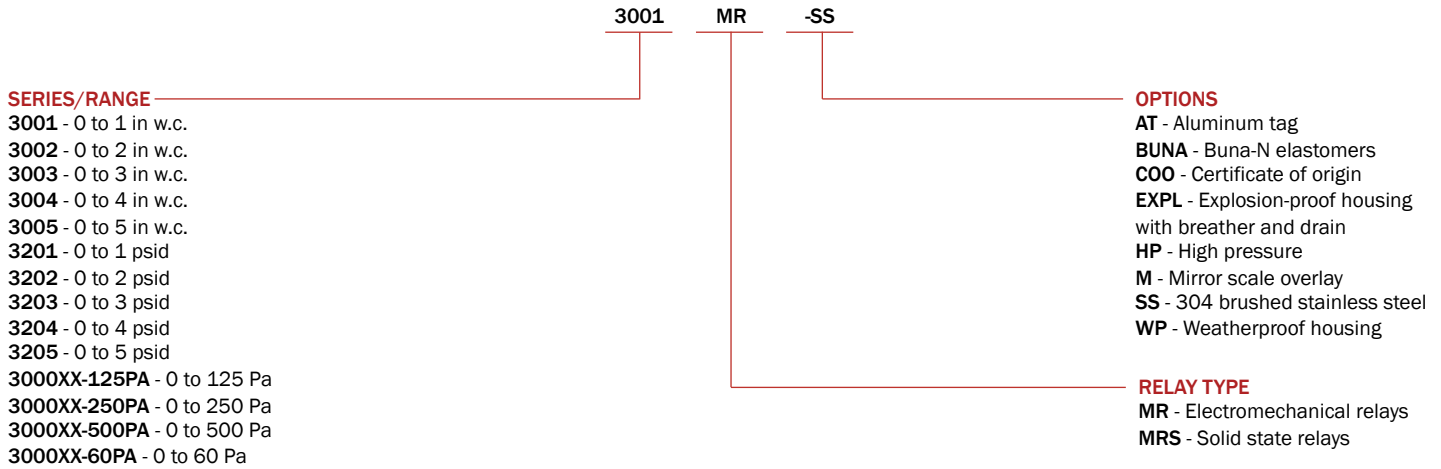
WIRING DIAGRAM





HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code



ACCESSORIES

Model	Description
A-298	Flat aluminum bracket for flush mounting Photohelic® and Capsuhelic® gages, 603A, 605, and 3000MR
A-320-B	Enclosure for 3000MR/MRS Photohelic® Switch/Gage, 605 Magnehelic® DP Transmitter, DH3 DigiHelic® Pressure Controller, 2000 Magnehelic® Gage with medium and high pressure options, 4-13/16" (122.24 mm)
A-370	Flush mount bracket used with: Photohelic® 3000MR/MRS, Capsuhelic®, 631B Transmitter, EDA. Bracket is then surface mounted. Steel with gray hammertone epoxy finish
A-600	R/C snubber (recommended for inductive loads like a solenoid or contactor)

Important Notice: Dwyer Instruments, Inc. reserves the right to make changes to or discontinue any product or service identified in this publication without notice. Dwyer advises its customers to obtain the latest version of the relevant information to verify, before placing any orders, that the information being relied upon is current.



dwyer-inst.com

DWYER INSTRUMENTS, INC.

T: 219-879-8000 | F: 219-872-9057 | info@dwyermail.com
 800-872-9141

DS-3000MR/3000MRS | 7/17



SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

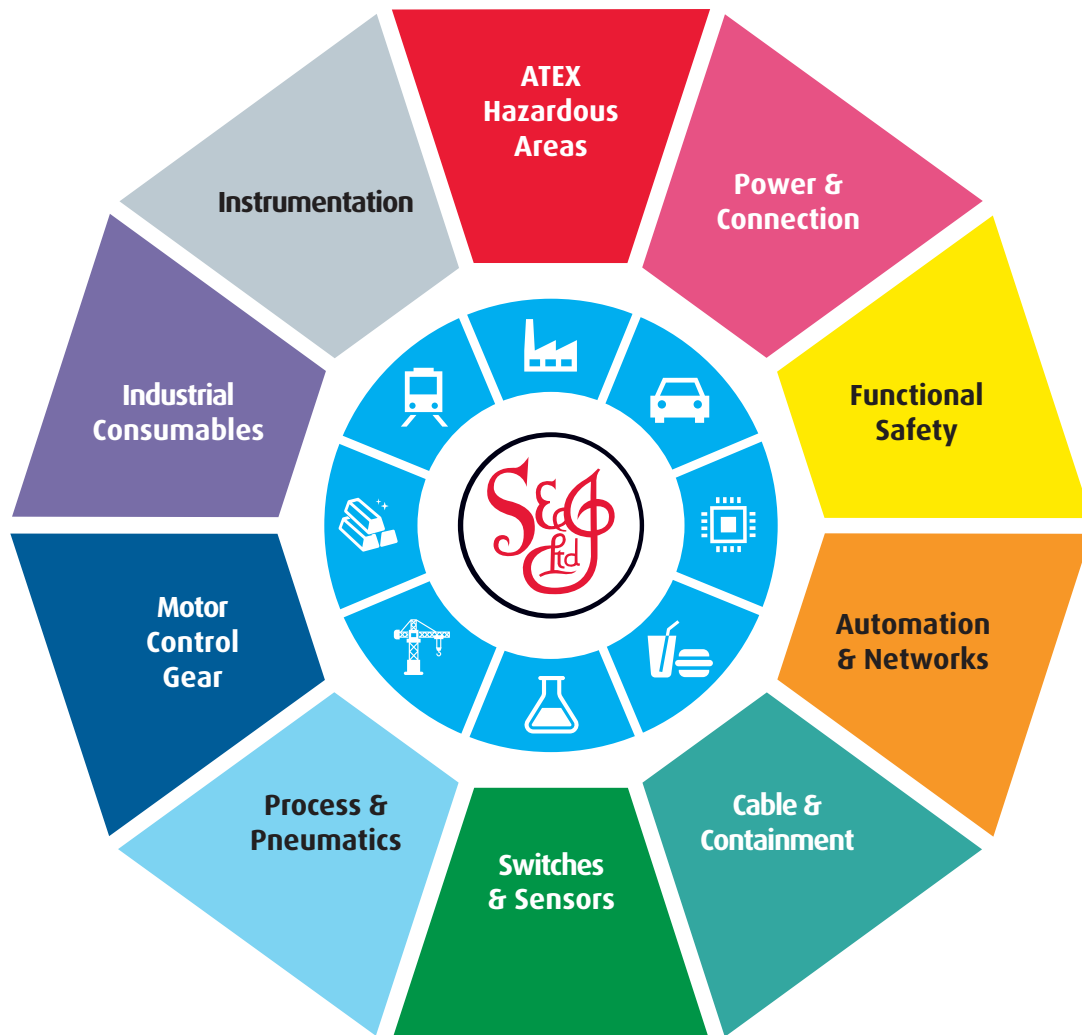
At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

www.scatts.co.uk