



SERIES AT2DH3 | ATEX/IECEX APPROVED DH3 DIFFERENTIAL PRESSURE CONTROLLER



FEATURES/BENEFITS

- 3-in-1 ATEX/IECEX approved instrument allows the reduction of several instruments with one product, saving inventory, installation time and money
- Flame-proof enclosure with optional glass window and aluminum housing protects the device in hazardous areas while giving local visibility to process pressure and set point status

APPLICATIONS

- Hazardous area pressure measurement and switching

DESCRIPTION

The **Series AT2DH3 ATEX/IECEX Approved DH3 Differential Pressure Controller** is a 3-in-1 instrument possessing a digital display gage, control relay switches, and a transmitter with current output. Combining these three features allows the reduction of several instruments with one product, saving inventory, installation time and money. The ATEX/IECEX approved Digihelic® controller is the ideal instrument for hazardous area pressure, velocity and flow applications by allowing for the selection of pressure, velocity or volumetric flow operation in several commonly used engineering units. Two SPDT control relays with adjustable dead bands are provided along with a scalable 4-20 mA process output. In velocity or flow modes, a square root output is provided on the 4-20 mA signal to coincide with the actual flow curve. Flame-proof enclosures are available in aluminum and can include a glass window for viewing process information and set point status on digital display.

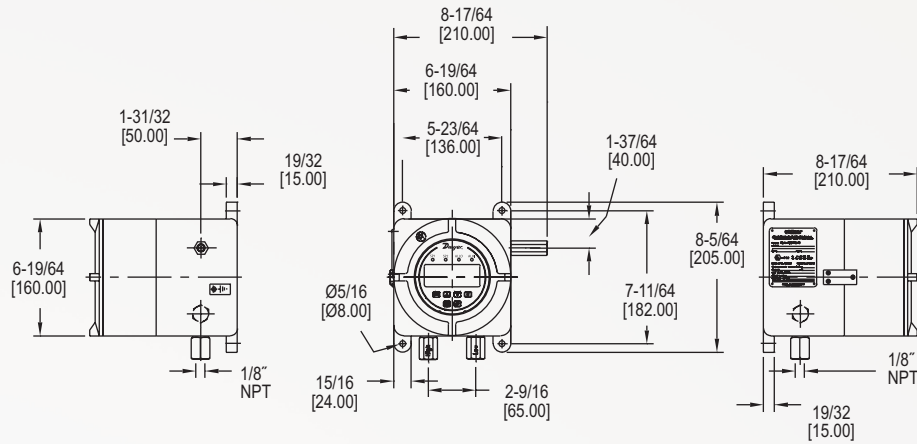
SPECIFICATIONS

Service	Air and non-combustible, compatible gases.
Wetted Materials	Consult factory.
Housing Material	Die cast aluminum case and bezel.
Accuracy	< 5 in w.c. (except ± 2.5 in w.c.): $\pm 1\%$; All other ranges: $\pm 0.5\%$ at 77°F (25°C) including hysteresis and repeatability (after 1 hour warm-up).
Stability	< $\pm 1\%$ per year.
Pressure Limits	Ranges ≤ 2.5 in w.c.: 25 psi; ± 2.5 " 5 in w.c.: 5 psi; 10 in w.c.: 5 psi; 25 in w.c.: 5 psi; 50 in w.c.: 5 psi; 100 in w.c.: 9 psi.
Temperature Limits	32 to 140°F (0 to 60°C) (Note: Product temperature limits differ from case).
Compensated Temperature Limits	32 to 140°F (0 to 60°C).
Thermal Effect	0.020%/°F (0.036/°C) from 77°F (25°C).
Power Requirements	12 to 28 VDC, 12 to 28 VAC 50 to 400 Hz.
Power Consumption	3 VA max.
Output Signal	4 to 20 mA DC into 900 Ω max.
Zero & Span Adjustments	Accessible via menus in safe zone only.
Response Time	250 ms (damping set to 1).
Display	Backlit 4 digit LCD 0.4" height LED indicators for set point and alarm status.
Electrical Wiring	Screw terminal.
Mounting Orientation	Mount unit in vertical plane.
Dial Size	5" (127 mm) OD x 3-1/8" (79.38 mm).
Enclosure Rating	(IP66). IP65 with option OPV, overpressure relief valve.
Housing Material	Aluminum.
Finishing	Texture epoxy coat RAL7038.
Pressure Connections	1/8" NPT female brass (SS optional). In presence of acetylene it is necessary to use SS.
Electrical Connections	Two 1/2" FNPT. Cable gland not included.
Weight	12.3 lb (5.6 kg).
ATEX Certificate	BVI 14ATEX0072.
Agency Approvals	ATEX Compliant C ϵ 1370 \oplus II 2G Ex d IIC T6 Gb / II 2D Ex tb IIIC T85°C Db, -60°C \leq Tamb \leq +60°C IECEx Compliant: Ex d IIC T6 Gb / Ex tb IIIC T85°C Db

SWITCH SPECIFICATIONS

Switch Type	2 SPDT relays.
Electrical Rating	1 A @ 30 VAC/VDC.
Set Point Adjustment	Adjustable via keypad on face in safe zone only.

DIMENSIONS



HOW TO ORDER

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

	AT2DH3	-002	-A	B	1	X	T2	
SERIES							TAG	
AT2DH3:	DH3 with enclosure						T2:	Stainless steel tag
RANGE							OVERPRESSURE PLUG	
-002:	0.25 in w.c.						X:	Standard without overpressure relief valve
-003:	0.5 in w.c.						OPV:	Overpressure relief valve
-004:	1 in w.c.						PRESSURE CONNECTION	
-005:	2.5 in w.c.						1:	1/8" Female NPT brass pressure ports
-006:	5 in w.c.						2:	1/8" Female NPT SS pressure ports
-007:	10 in w.c.							
-009:	25 in w.c.							
-010:	50 in w.c.							
HOUSING MATERIAL								
-A:	Aluminum							
COVER								
B:	Blind top cover							
O:	Glass top cover							

