

Transducer

OEM Transducer

Series 623, 624, 625, 626, 627

Features

- ▶ UL and cUL approved
- ▶ Compact size
- ▶ Stainless steel construction
- ▶ Ceramic sensor technology
- ▶ Current and voltage outputs
- ▶ 0.5% accuracy

Applications

- ▶ Water irrigation systems
- ▶ Medical gas systems
- ▶ HVAC systems
- ▶ Pumps and compressors
- ▶ Machine tools
- ▶ Hydraulic and pneumatic applications
- ▶ Mobile hydraulics
- ▶ General industrial applications

General Specifications*



Accuracy (LH & R):	±0.5% FSO at 75°F (24°C), typical
Typical Life Cycle:	100 million cycles
Proof Pressure:	2 times rated pressure, except -16 and -18 pressure ranges
Input/Excitation Voltage:	
625 (2-wire):	9 to 28 VDC
623 (3-wire):	9 to 30 VDC
624 (3-wire):	5 VDC (fixed)
626 (3-wire):	14 to 30 VDC
627 (3-wire):	14 to 30 VDC
Output:	
625:	Output: 4 to 20 mA Full scale output: 16 mA ± 1% Zero output: 4 mA ± 2%
623:	Output: 0.5 to 5.5 VDC Full scale output: 5.0 VDC ± 1% Zero output: 0.5 VDC ± 2%
624:	Output: 0.5 to 4.5 VDC ratiometric Full scale output: 4.0 VDC ± 2% Zero output: 0.5 VDC ± 2%
626:	Output: 1 to 11 VDC Full scale output: 10 VDC ± 1% Zero output: 1.0 VDC ± 2%
627:	Output: 0 to 10 VDC Full scale output: 10 VDC ± 1% Zero output: 0 VDC ± 2%
Supply Current:	15 mA maximum (no load)
Wetted Parts:	316 stainless steel, ceramic and Viton® O-ring (standard)
Enclosure**:	NEMA 4X (IP 65)

Pressure Connection:	1/4" NPT standard. Other options available.
Electrical Connection:	PVC jacketed cable standard. Other options available.
Temperature Ranges:	
Operating:	-40°F to +185°F (-40°C to +85°C)
Compensated:	30°F to +130°F (-1°C to +54°C)
Storage:	-40°F to +185°F (-40°C to +85°C)
Temperature Shift:	±0.06% FS/K over operating temperature range
Zero and Span:	
Vibration:	15 g's, 10-2000 Hz, MIL-STD 202
Approval¹:	UL US UL File E302981, to UL 508, as Industrial Control Equipment (NMTR, NMTR7), and to UL 61010-1, as Process Control Equipment (QUYX, QUYX7).
Shock:	50 g's, 11 ms, MIL-STD 202 Method 213, Cond. G.
Weight:	5.1 oz (145 grams) (typical)
Warranty:	1 year

1. Conditions of Use: Class 2 power source, Type 4X indoor, 122°F (50°C) max. ambient.

Wiring Code

Electrical Termination		Voltage Output	Current Output	Current Output
H3	H4 / T4 / T5	Series 623/624/626/627	Series 625	Series 625-H4 (-Q21)
Red	1	+ Excitation	+ Excitation	Common
Black	2	Common	- Excitation	Not used
White	3	+ Output	Not used	+ Excitation
Drain	4	Case Ground	Case Ground	Case Ground

Pin Out Diagram



* See product configurator for additional options.

** Mating connector must be properly installed to preserve enclosure rating

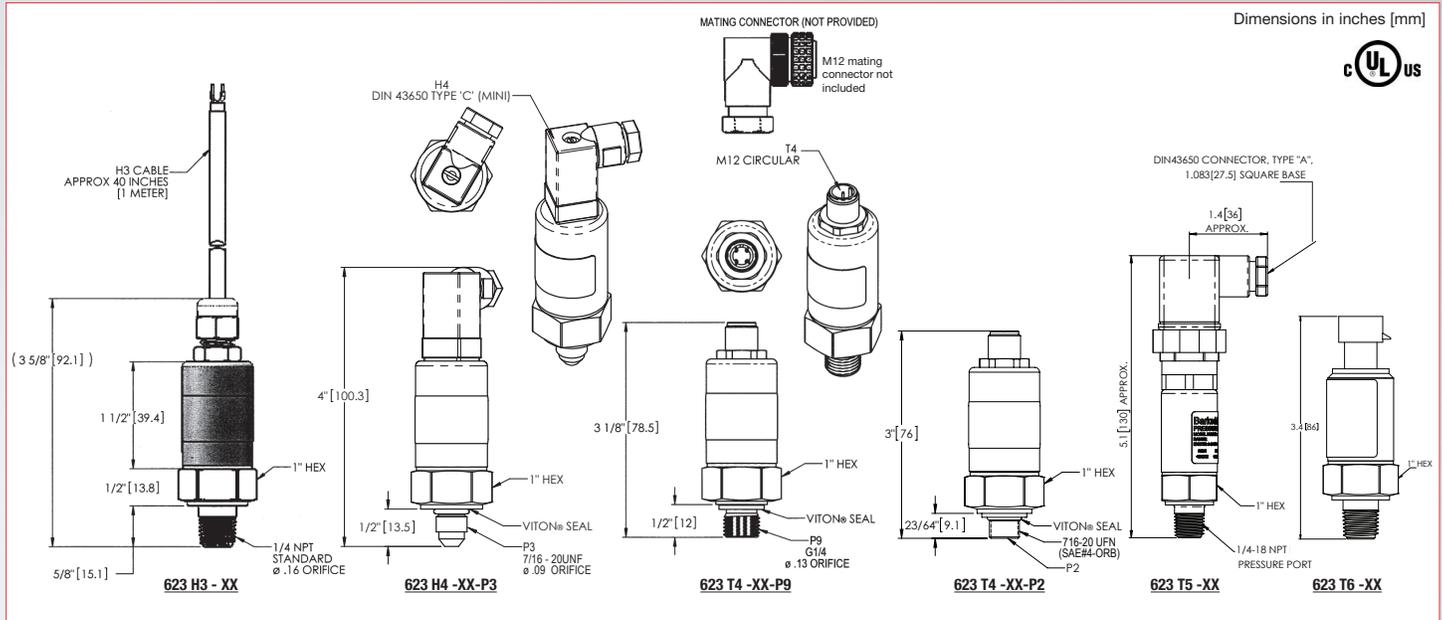
Barksdale
CONTROL PRODUCTS

Barksdale, Inc./Barksdale GmbH
A Subsidiary of Crane Co.

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Technical Drawings



Product Configurator

Example: **625** **H3** **-05**

Base Model

625	4-20 mA analog output
623	0.5-5.5 VDC analog output
624⁵	0.5-4.5 VDC ratiometric analog output (not agency approved)
626	1-11 VDC analog output
627	0-10 VDC analog output

Highlighted options represent those most frequently used. Select these common options for improved availability. (5/21)

Options

Blank	Standard
-Z1	Cleaned for oxygen service
-Z15 ⁴	Calibrated in 'bar' unit
-Z10	1 to 5 V output (only available on 623)
-Z11	1 to 6 V output (only available on 623)
-Z12	0.5 to 4.5 V output (only available on 623)
-Z19	Built in pressure surge suppressor (0.031" orifice)
-Z21	Built in pressure surge suppressor (0.011" orifice)
-Z22	Combination options: P9 + Z15 + Z19
-Z23	Combination options: P9 + Z15 + Z21
-ZXXY ^{3,7}	Special pressure ranges
-Wxxx	Specify cable length in inches (H3 option)
-Q21	Use with 625H4 only. (See Page 1 for pinout information)

Electrical Connection

H3	PVC Shielded & jacketed #22 AWG cable (1 meter)
H4	Mini-DIN 43650 Type "C" - mating connector included (Industry std-9.4mm)
T4¹	M12 connector (mating connector NOT included)
T5 ⁵	Standard DIN (43650) mating connector included (Not UL approved)
T6 ¹	Delphi Metri-Pack Series 150 (Not UL approved)

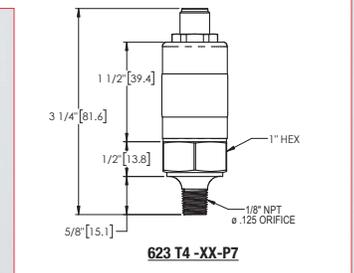
Pressure Range^{2,4}

-21	0-30 PSI (0-2.07 BAR)
-26	0-75 PSI (0-5.17 BAR)
-05	0-150 PSI (0-10.34 BAR)
-07	0-300 PSI (0-20.69 BAR)
-27	0-750 PSI (0-51.71 BAR)
-11	0-1500 PSI (0-103.42 BAR)
-13	0-3000 PSI (0-206.9 BAR)
-16⁸	0-6000 PSI (0-413.7 BAR)
-18 ^{5, 6, 7, 9}	0-8700 PSI (0-600 BAR)

Process Connection

Blank	1/4" NPT male
-P3	7/16-20 UNF male (JIC 37°)
-P9	G1/4 male (gasket seal)
-P2	7/16-20 SAE #4 ORB
-P7 ¹⁰	1/8" NPT male

- Note: 1. Mating connector not included
 2. Other ranges available with the use of -ZXXY Option. Consult factory.
 3. Add suffix ZXXY for special pressure range calibration. XX = significant digits. Y = number of trailing zeros. Example: 130 psi calibration: add -Z131.



Accessories

/A	4 pin M12 female right angle plug molded cable, 3.28 ft. (1 m)
/B	4 pin M12 female right angle plug molded cable, 6.56 ft. (2 m)
/E	4 pin M12 female right angle plug molded cable, 16.40 ft. (5 m)
/F	4 pin M12 female right angle plug molded cable, 32.81 ft. (10 m)
/G	4 pin M12 female straight plug molded cable, 3.28 ft. (1 m)
/H	4 pin M12 female straight plug molded cable, 6.56 ft. (2 m)
/K	4 pin M12 female straight plug molded cable, 16.40 ft. (5 m)
/L	4 pin M12 female straight plug molded cable, 32.81 ft. (10 m)
/M	4 pin M12 female straight connector
/P	4 pin M12 female right angle connector

4. To calibrate unit in 'BAR', select the closest pressure range then add suffix '-Z15' and 'ZXXY'. Example: 15 bar = 625H3-07-Z15-Z150
 5. No agency approvals
 6. Built with 0.011 orifice on pressure port
 7. 8,700 PSI (600 BAR) range is not available with special pressure ranges
 8. Proof pressure is 9000 PSI
 9. Proof pressure is 11,000 PSI
 10. Only up to 3,000 PSI

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