

Data Sheet

ZT12 High Purity Transmitter

FEATURES

- 316L Stainless steel wetted parts
- 7 µin Ra Surface finish option
- 1/16-18 UNF Male/Female fixed, swivel and flow through process connections (compatible with 1/4 VCR® fitting)
- 100% Helium leak tested
- Class 100 cleanroom packaged and double bagged
- Available in Gauge and Compound ranges

TYPICAL USES

- High purity gas delivery systems
- Gas sticks
- Process gas analyzers



ZT12 Transmitter

Standard
Gauge Pressure



PERFORMANCE SPECIFICATIONS

Static Accuracy: ±0.25% of span @ 73.4 °F (23 °C)
Accuracy includes the effects of linearity, hysteresis and repeatability

Stability: <0.25% of span/Yr

Temperature Effect: ±0.02% of span/°C (Zero & Span) in operating temperature range

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: -4 °F to 158 °F (-20 °C to 70 °C)

Storage Temperature: -22 °F to 176 °F (-30 °C to 80 °C)

Humidity: 35% to 85% RH

FUNCTIONAL SPECIFICATIONS

Ranges: Compound: Vacuum & 45 psi to Vacuum & 3000 psi

Gauge: 0-45 psi to 0-3000 psi

Response Time: ≤ 5 mSec (10% to 90%)

Leakage Test: < 5 x 10⁻¹¹ atm cc/s

Proof Pressure: 150% of F.S.

ELECTRICAL SPECIFICATIONS

Output Signal: 4-20 mA (2 Wire)

Supply Voltage: 10-30 Vdc

Load Resistance: R max (Ω) = 50 (V supply) - 500 (see line load chart)

Insulation Resistance: > 100MΩ at 50 Vdc

EMC/EMI: EN61326-1: 2013, EN61326-2-3: 2013

KEY BENEFITS

- Ultra-compact size ideal for high density mounting
- Ultraclean design & packaging
- 316L SS Wetted parts for protection against corrosion

PHYSICAL SPECIFICATIONS

Ingress Rating: IP67

Case Material: 304 Stainless steel, PBT

Pressure Connection: 1/16-18UNF (compatible with 1/4 VCR®) swivel Male or Female, or Male fixed or Male flow through

Surface Finish: 20 µin or 7 µin Ra (0.5 µm or 0.18 µm Ra)

Unit Weight: Appx 70g

WETTED MATERIALS

Pressure Sensor: 316L Stainless steel

APPROVALS

CE, UKCA, RoHS

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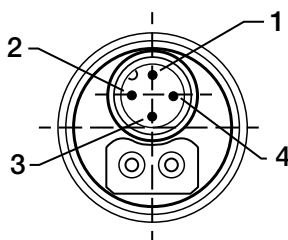
ORDERING CODE Example:	ZT12	3	MVS	42	E4	1	3000#	G	-X1N
Model									
ZT12	ZT12								
Accuracy									
3 - ±0.25% of span		3							
Pressure Connection									
MVF - 1/16-18 UNF (compatible with 1/4 VCR®) Male fixed									
MVS - 1/16-18 UNF (compatible with 1/4 VCR®) Male swivel			MVS						
FVS - 1/16-18 UNF (compatible with 1/4 VCR®) Female swivel									
MVT - 1/16-18 UNF (compatible with 1/4 VCR®) Male flow through									
Output									
42 - 4 to 20 mA (2 Wire)				42					
Electrical Termination									
E4 - M12 Connector (4 Pin) w mating connector & 9 foot (3 meter) cable					E4				
Surface Finish / Cleaning Grade									
0 - GP Grade 20 µin (0.5µm) Ra & grease free cleaned									
1 - EP Grade 7 µin (0.18µm) Ra & cleaned with no particles 0.1µm or greater						1			
Pressure Range									
V/45#									
V/75#									
V/150#									
V/250#									
V/300#									
V/500#									
V/750#									
V/1500#									
V/3000#									
45#									
75#									
150#									
250#									
300#									
500#									
750#									
1500#									
3000# (See range table for all standard ranges)							3000#		
Pressure Type									
G - Gauge and Compound								G	
Options (If indicating an option, must include an "X" (-X...))									X
1N - Material Test Report/ Traceability Certificate									1N

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STANDARD RANGES

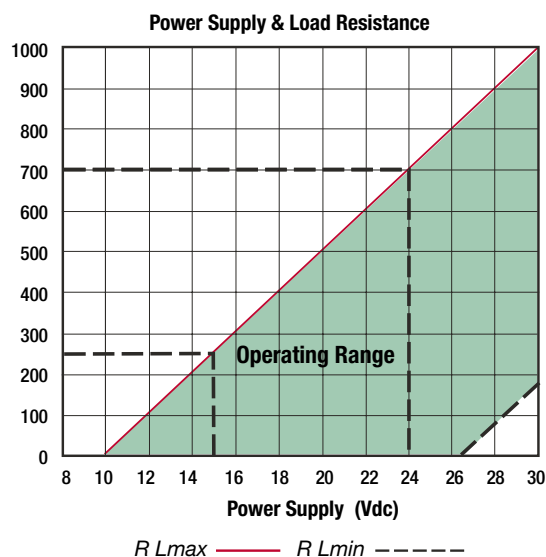
psi	bar	mPa
V/45#	N1/3BR	NP1/P3MP
V/75#	N1/5BR	NP1/P5MP
V/150#	N1/10BR	NP1/1MP
V/250#		
V/300#	N1/20BR	NP1/2MP
V/500#	N1/35BR	NP1/3P5MP
V/750#	N1/50BR	NP1/5MP
V/1500#	N1/100BR	NP1/10MP
V/3000#	N1/200BR	NP1/20MP
45#	3BR	P3MP
75#	5BR	P5MP
150#	10BR	1MP
250#	17BR	1P7MP
300#	20BR	2MP
500#	35BR	3P5MP
750#	50BR	5MP
1500#	100BR	10MP
3000#	200BR	20MP



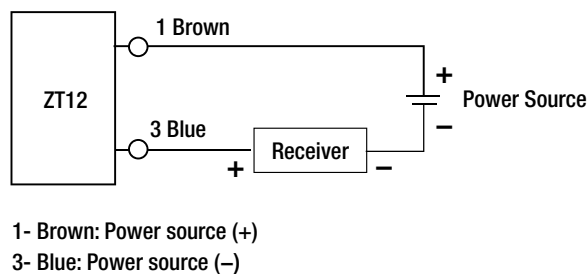
CONNECTOR & WIRING

Terminal Number	2-Wire System	Cable Color
1	Power source (+)	Brown
2	-----	White
3	Power source (-)	Blue
4	-----	Black

POWER SUPPLY & LOAD RESISTANCE



WIRING SCHEMATIC

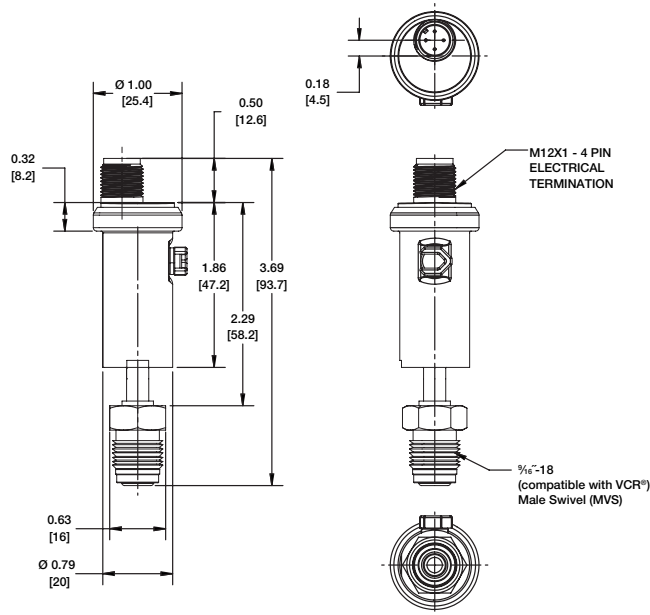


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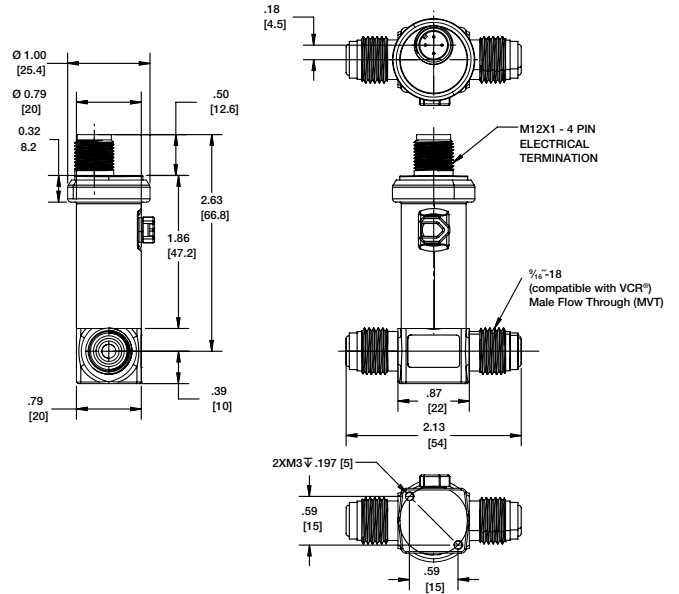
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DIMENSIONS Inches [mm]

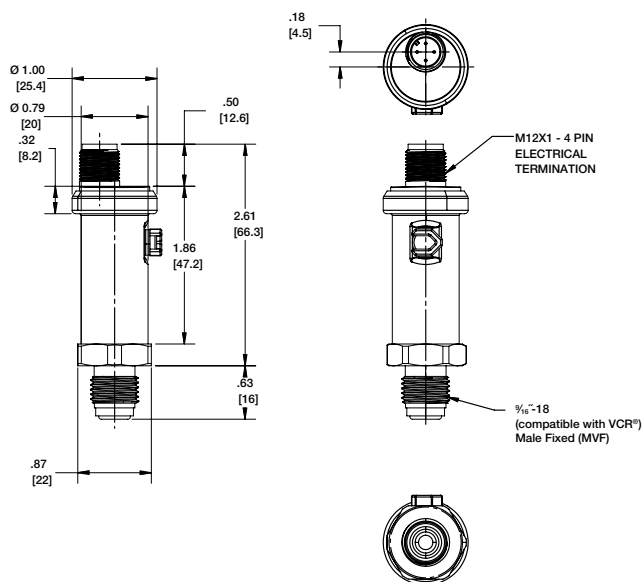
MVS - 1/16"-18 UNF (compatible with 1/4 VCR®) Male Swivel



MVT - 1/16"-18 UNF (compatible with 1/4 VCR®) Male Flow Through



MVF - 1/16"-18 UNF (compatible with 1/4 VCR®) Male Fixed



FVS - 1/16"-18 UNF (compatible with 1/4 VCR®) Female Swivel

