

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, Compound and Absolute ranges

TYPICAL USES

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

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

Absolute: 0-45 psi to 0-3000 psf

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



ZT12 Transmitter
Standard
Absolute Pressure

ZT12 Transmitter
Standard
Gauge Pressure



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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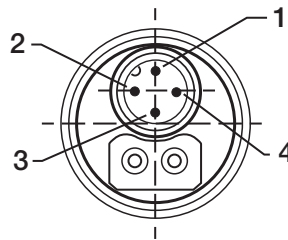
ORDERING CODE Example:	ZT12	3	MVS	42	E4	1	3000#	G	-X1N
Model	ZT12								
Accuracy	3 - ±0.25% of span	3							
Pressure Connection	MVF - 1/16-18 UNF (compatible with 1/4 VCR®) Male fixed								
	MVS - 1/16-18 UNF (compatible with 1/4 VCR®) Male swivel		MVS						
	FVS - 1/16-18 UNF (compatible with 1/4 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	
	A - Absolute								
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



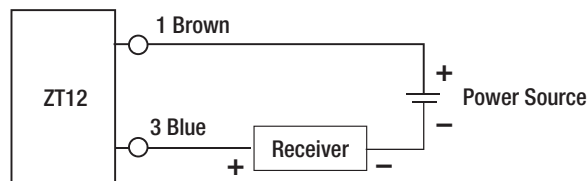
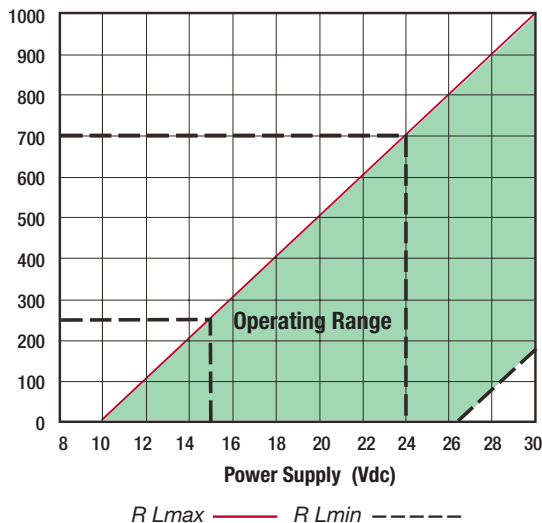
CONNECTOR & WIRING

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

Power Supply & Load Resistance



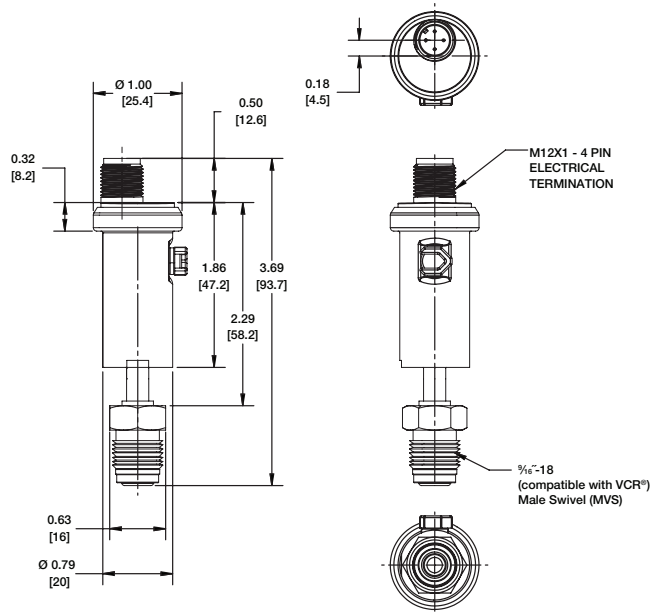
1- Brown: Power source (+)
3- Blue: Power source (-)

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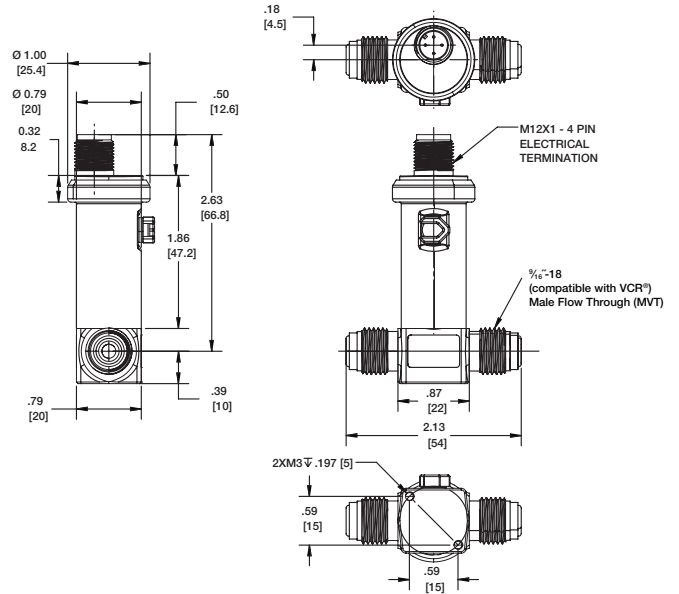
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DIMENSIONS Inches [mm]

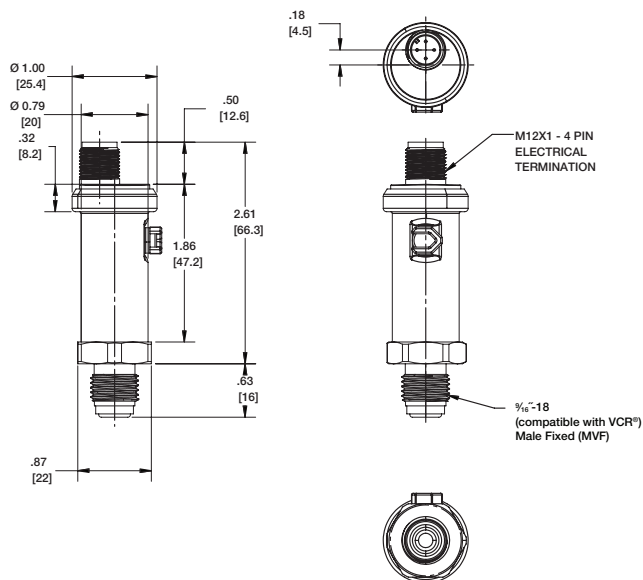
MVS - 1/16"-18 UNF (compatible with 1/4 VCR®) Male Swivel



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

