

ZX12 High Purity Pressure Transmitter with Increased Safety Approval for Hazardous Locations

FEATURES

- ATEX and IECEx increased safety hazardous approval
- Can be used without safety barriers
- 316L Stainless steel wetted parts
- 7 pin Ra Surface finish option
- $\frac{1}{16}$ -18 UNF Male/Female, fixed, swivel and flow through process connections (compatible with $\frac{1}{4}$ VCR® fitting)
- 100% Helium leak tested
- Class 100 cleanroom packaged and double bagged
- Available in Gauge and Compound ranges



ZX12 Transmitter

 Increased Safety
 Gauge Pressure

TYPICAL USES

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

PERFORMANCE SPECIFICATIONS

Static Accuracy:	$\pm 0.25\%$ of span @ 73.4 °F (23 °C) Accuracy includes the effects of linearity, hysteresis and repeatability
Stability:	<0.25% of span/Yr
Temperature Effect:	$\pm 0.02\%$ of span/°C (Zero & Span) in operating temperature range

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:	-4 °F to 158 °F (-20 °C to 70 °C) T4/T5: -4 °F to 158 °F (-20 °C to 70 °C) T6: -4 °F to 86 °F (-20 °C to 30 °C)
Storage Temperature:	-22 °F to 176 °F (-30 °C to 80 °C)

FUNCTIONAL SPECIFICATIONS

Ranges:	Compound: Vacuum & 45 psi to Vacuum & 3000 psi Gauge: 0-45 psi to 0-3000 psi
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Response Time:	≤ 5 mSec (10% to 90%)
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Leakage Test:	$< 5 \times 10^{-11}$ atm cc/s
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Proof Pressure:	150% of F.S.
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ELECTRICAL SPECIFICATIONS

Output Signal:	4-20 mA (2 Wire)
Supply Voltage	12-24 Vdc
Load Resistance:	R max (Ω) = 50 (V supply) - 500 (see line load chart)
Insulation Resistance:	> 100M Ω 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:	IP65
Case Material:	304 Stainless steel, PBT
Pressure Connection:	$\frac{1}{16}$ -18UNF (compatible with $\frac{1}{4}$ VCR®) swivel Male or Female, or Male fixed or Male flow through
Surface Finish:	20 μ m or 7 μ m Ra (0.5 μ m or 0.18 μ m Ra)
Unit Weight:	Appx 70g

WETTED MATERIALS

Pressure Sensor:	316L Stainless steel
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APPROVALS

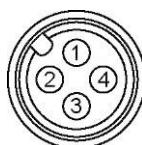
 CML 22ATEX4294X	IECEx CML 22.0033X
Ex ec II C T4/T5/T6 Gc $-20^{\circ}\text{C} \leq ta \leq 70/70/30^{\circ}\text{C}$	

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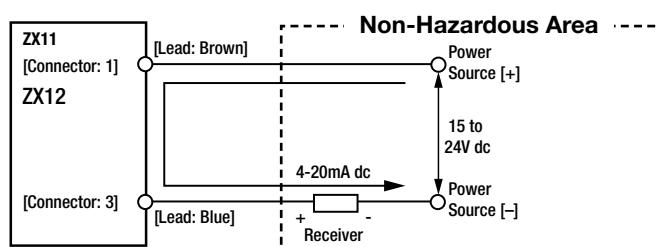
ORDERING CODE Example:	ZX12	3	MVS	42	E4	1	3000#	G	-X1N
Model	ZX12	ZX12							
Accuracy	3 - ±0.25% of span		3						
Pressure Connection	MVF - $\frac{3}{16}$ -18 UNF (compatible with 1/4 VCR®) Male Fixed								
	MVS - $\frac{3}{16}$ -18 UNF (compatible with 1/4 VCR®) Male Swivel			MVS					
	FVS - $\frac{3}{16}$ -18 UNF (compatible with 1/4 VCR®) Female Swivel								
	MVT - $\frac{3}{16}$ -18 UNF (compatible with 1/4 VCR®) Male Flow Through								
Output	42 - 4 to 20 mA (2 Wire)		42						
Electrical Termination (Note: Unit must be purchased with Ashcroft supplied cable assembly)	E4 - M12 Connector (4 Pin) w mating connector & 9 foot (3 meter) cable				E4				
Surface Finish / Cleaning Grade	0 - GP Grade 20 μ in (0.5 μ m) Ra & grease free cleaned								
	1 - EP Grade 7 μ in (0.18 μ m) Ra & cleaned with no particles 0.1 μ m 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

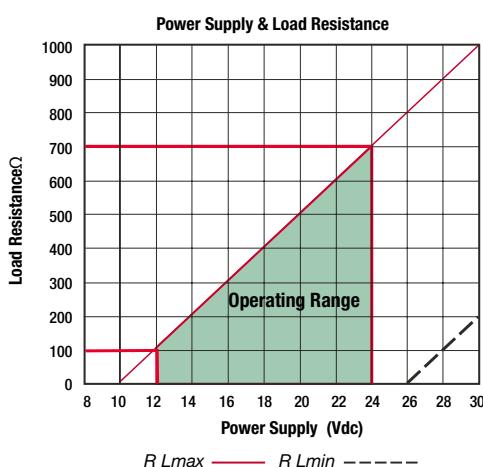
CONNECTOR TERMINAL ARRAY

CONNECTOR & WIRING

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

WIRING SCHEMATIC


1 - Brown: Power source (+)

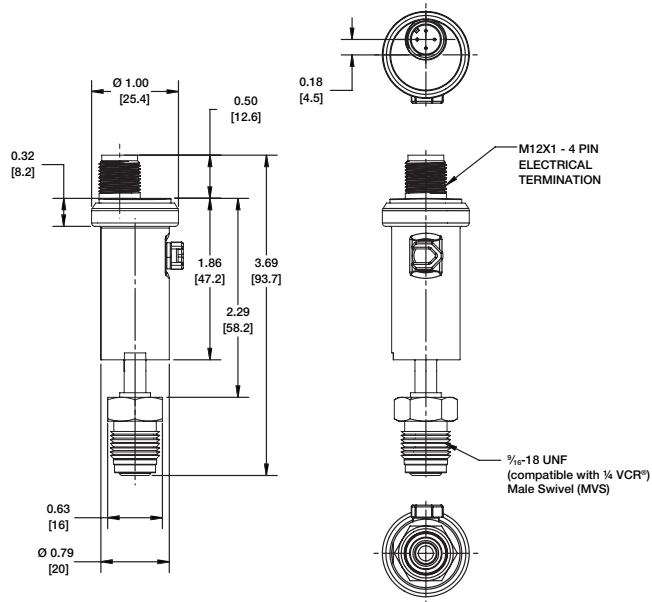
3 - Blue: Power source (-)

POWER SUPPLY & LOAD RESISTANCE


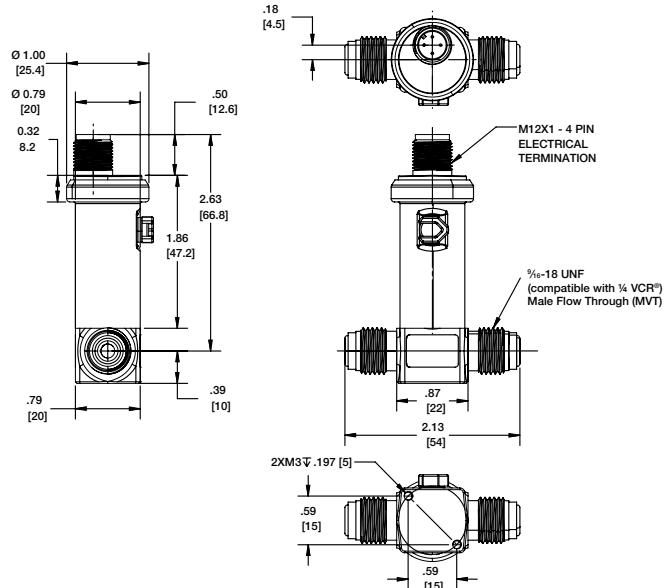
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DIMENSIONS Inches [mm]

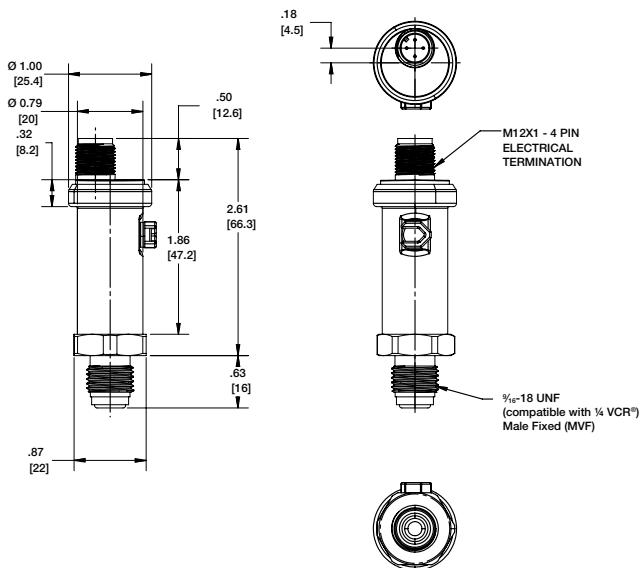
MVS - 9/16 -18 UNF (compatible with 1/4 VCR®) Male Swivel



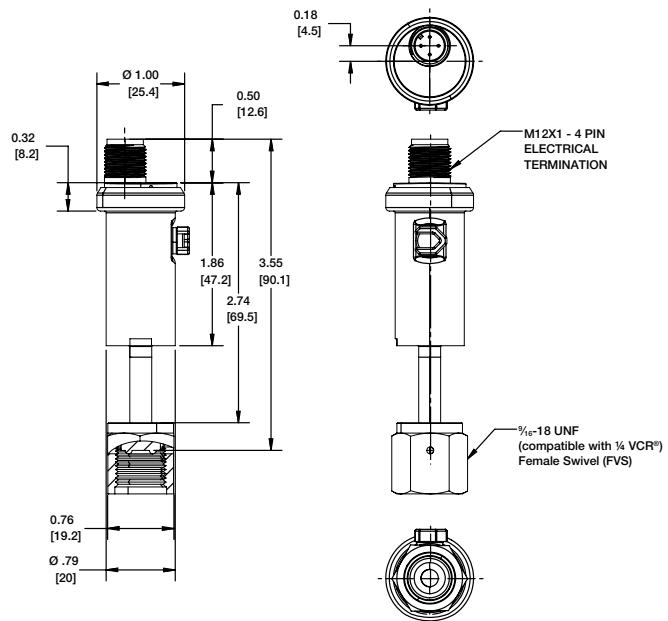
MVT - 9/16 -18 UNF (compatible with 1/4 VCR®) Male Flow Through



MVF - 9/16 -18 UNF (compatible with 1/4 VCR®) Male Fixed



FVS - 9/16 -18 UNF (compatible with 1/4 VCR®) Female Swivel



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