

INDUSTRIAL PRESSURE TRANSMITTER



TP1 with Mini-Hirschmann



TP1 with M12 x 1 (4-pin)



Diaphragm Seal
Compatible

FEATURES / BENEFITS

- 0.25% Accuracy
- All-stainless Welded Body and Wetted Parts
- 4-20 mA or Voltage Output
- Rugged, with Protection from Shock, Over-range, and Over-voltage
- Excellent Long-Term Stability

SPECIFICATIONS

Output Signal 4-20mA, 2-Wire (Standard)
0-5V, 0-10V, 1-6V (3-Wire)
Additional Outputs Upon Request

Measuring Principle Thin-Film-On-Steel

Pressure Ranges Vacuum, Compound, Pressure to 7,500psi

	Proof Pressure	Burst Pressure
0/30 - 0/300 psi	3 x range	10 x range
0/500 - 0/7,500 psi	2.5 x range	4 x range

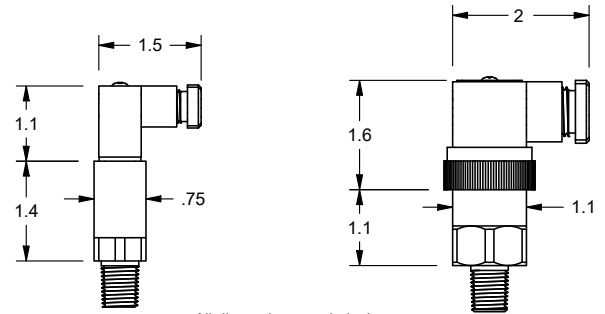
Accuracy NLH at 77°F (BSL) ±0.25% of Span

Input 9-32 Vdc (for 4-20mA, 0-5V, 1-6V)
15-32 Vdc (0-10V)

Temperature Effect: +/- .02% FS/°F (-13/185°F)
Media: -40 to 257°F
Ambient: -40 to 257°F

Weight Approximately 1.8 oz (TP1);
3.9oz (TP2)

Environmental Rating IP65, IP67, IP68
(Depending on Electrical Connection)



All dimensions are in inches.

TP1 (Mini-Hirschmann)

TP2 (Hirschmann)

Note: Dimensions are nominal and may vary.
Check with REOTEMP sales if dimensions
are critical. Other case styles available.

INDUSTRIAL PRESSURE TRANSMITTER

HOW TO ORDER: Choose options to build a part number. For example: TP1P182AA034-TS

MODEL	RANGE	ACCURACY	OUTPUT SIGNAL	ELECTRICAL CONNECTION
<p>TP1 = General Purpose Transmitter (Mini-Hirschmann DIN C, and others)</p> <p>TP2 = General Purpose Transmitter (Hirschmann DIN A, and others)</p>	<p>See <i>Transmitter Technical Reference</i> on pg. 226</p>	<p>2 = ±0.25% Full Scale</p>	<p>A = 4-20mA (2-Wire) (standard)</p> <p>B = 0-5Vdc (3-Wire)</p> <p>D = 1-6Vdc (3-Wire)</p> <p>E = 0-10Vdc (3-Wire)</p>	<p>A03</p> <p><i>TP1 Only</i></p> <p>*A00 = Mini-Hirschmann, No Cable (DIN 43650C, Form C)</p> <p>*APVC03 = Mini-Hirschmann, w/ 3ft. (1 Meter) PVC Shielded Cable</p> <p>*APVC20 = Mini-Hirschmann, w/ 20ft. (6 Meter) PVC Shielded Cable</p> <p>*APVC?? = Mini-Hirschmann (?? = ft. of PVC Cable)</p> <p>*M00 = M12 x 1 (4-pin) w/ Mating Connector</p> <p>*MPVC03 = M12 x 1 (4-pin) Female w/ 3ft (1 Meter) PVC Shielded Cable</p> <p>*MPVC10 = M12 x 1 (4-pin) Female w/ 10ft (3 Meter) PVC Shielded Cable</p> <p>*MPVC33 = M12 x 1 (4-pin) Female w/ 33ft (10 Meter) PVC Shielded Cable</p> <p><i>TP2 Only</i></p> <p>**B00 = Hirschmann, No Cable (DIN EN 175301-803 Form A)</p> <p>**BPVC05 = Hirschmann w/ 5ft (1.5 Meter) PVC Shielded Cable</p> <p>**BPVC10 = Hirschmann w/ 10ft (3 Meter) PVC Shielded Cable</p> <p>**BPVC16 = Hirschmann w/ 16ft (5 Meter) PVC shielded cable</p> <p>**BPVC33 = Hirschmann w/ 33ft (10 Meter) PVC Shielded Cable</p> <p>**BPVC?? = Hirschmann (?? = ft. of PVC Cable)</p> <p>**M500 = M12 x 1 (5-pin) w/ Mating Connector</p> <p>**M5PVC03 = M12 x 1 (5-pin) Female w/ 3ft (1 Meter) PVC Shielded Cable</p> <p>**M5PVC10 = M12 x 1 (5-pin) Female w/ 10ft (3 Meter) PVC Shielded Cable</p> <p>**M5PVC33 = M12 x 1 (5-pin) female w/ 33ft (10 Meter) PVC Shielded Cable</p> <p>**M5PUR05 = M12x1 Female (5-pin) w/ 5ft (1.5 Meter) PUR Shielded Cable</p> <p>**M5PUR?? = M12x1 Female (5-pin) w/ ?? feet PUR Shielded Cable</p> <p><i>TP1 or TP2</i></p> <p>CGPUR?? = Cable PUR (Shielded, Screwed Cable Gland) -40/158°F (TP2 = -4/158°F)</p> <p>CGPVC?? = Cable PVC (Shielded, Screwed Cable Gland) 23/140°F</p> <p><i>Additional Electrical Connections Upon Request. Contact Factory.</i></p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: auto; margin-right: auto;"> <p>* TP1 Model Only ** TP2 Model Only</p> </div>
<p>4</p>	<p>-TS</p>			
PROCESS CONNECTION	OPTIONS			
<p>4 = 1/4" NPT Male</p> <p>*8 = 1/8" NPT Male</p> <p>**2 = 1/2" NPT Male</p> <p>F = 1/2" NPT Male Flush Face Diaphragm Seal (60 psi Minimum)</p>	<p>-AD = Adapter 1/2" NPT Male x 1/4" NPT Female 316SS, Rated to 3,000 psi. (PXAD24SS)</p> <p>-RS = Threaded Restrictor Screw</p> <p>-TS = Stainless Steel Tag (1-10 Characters)</p> <p>-MC = M12 Mating Connector, Field Wireable</p> <p><i>Optional Assembly to Diaphragm Seal Available</i></p>			

INDUSTRIAL PRESSURE TRANSMITTER

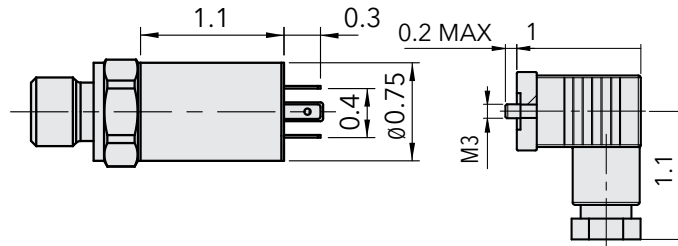
SPECIFICATIONS

Electrical Data	Output / supply voltage	4 ... 20 mA: 24 (9...32) VDC 0 ... 5 VDC: 24 (9...32) VDC 1 ... 6 VDC: 24 (9...32) VDC 0 ... 10 VDC: 24 (15...32) VDC
	Rise Time	Typ. 1 ms / 10 ... 90 % nominal pressure
	Inverse-polarity protection, short-circuit strength @77°F during 5 min	4-20mA: to U _s = 32 VDC 0-5 VDC, 1-6 VDC, 0-10 VDC: to U _s = 28VDC
Environmental Conditions	Media Temp	-40 to 257°F
	Ambient Temp	-40 to 257°F (Cable PVC 23/140°F) (Cable PUR: TP1 = -40/158°F, TP2 = -4/158°F)
	Protection	IP65, IP67, IP68 (depending on electrical connection)
	Humidity	Max. 95% relative
	Vibration	15g RMS (20-2000 Hz)(EN60068-2-64) 25 g sin (80-2000 Hz), 1 oct./min. (1x @ 77°F) (EN60068-2-6)
	Shock(TP1)	50 g / 11 ms 100 g / 6 ms Male electrical plug M12x1 (EN60068-2-27)
EMC Protection	Shock(TP2)	500 g/1ms (EN 60068-2-27)
	Emission	EN/IEC 61000-6-3
Mechanical Data	Immunity	EN/IEC 61000-6-2
	Sensor (wetted parts)	1.4542 (AISI630)
	Pressure connection (wetted parts)	1.4542 (AISI630)
	Housing	TP1: 1.4301 (AISI304) TP2: 1.4542 (AISI630) or 1.4404 (AISI 316L)
	Sealing	FPM/EPDM/NBR
	Male Electrical Plug	See ordering information
	Weight (TP1)	appr. 1.8 oz
	Weight (TP2)	appr. 2.8 to 3.9 oz
Mounting torque		18.5 in-lbs
Accuracy	NLH @ 77°F (BSL)	[% FS typ.] +/- 0.25
	TEB @ -13 to 185°F	[% FS typ.] +/- 1.75
	TC zero point and span	[%FS/K typ.] +/- 0.02
	Long term stability 1 year	[%FS/K typ.] +/- 0.06

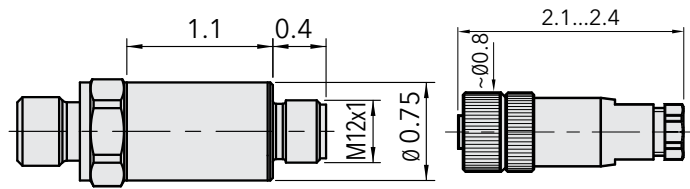
INDUSTRIAL PRESSURE TRANSMITTER

TP1 Dimension

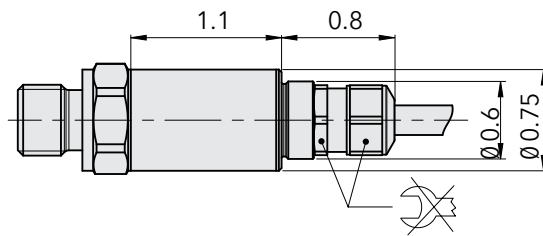
All dimensions are in inches.



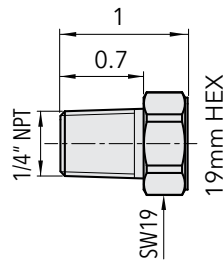
Mini-Hirschmann DIN Form C



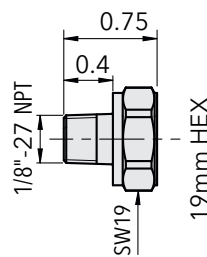
M12 (4-pin)



Cable Out (PVC or PUR)



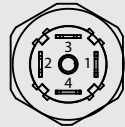
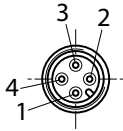

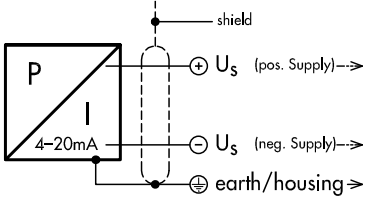
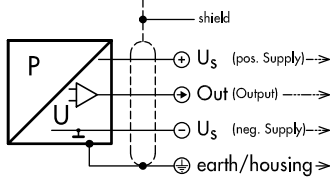
1/4" NPT



1/8" NPT

INDUSTRIAL PRESSURE TRANSMITTER

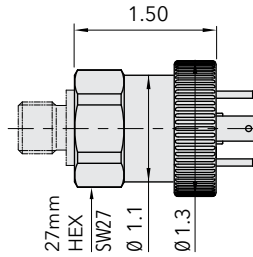
TP1 Electrical Connection

		Protection / electrical connection		
		IP65 ^{1) 2)}	IP67 ^{1) 2)}	IP67, IP68 ³⁾
		Mini - Hirschmann DIN C	M12x1 4-pole	Cable
				
Output signal	 <p>4-20mA</p>	<p>2</p> <p>1</p> <p>4</p>	<p>1</p> <p>3</p> <p>4</p>	<p>white</p> <p>brown yellow</p>
	 <p>0/5 VDC, 1/6 VDC, 0/10VDC</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p>	<p>1</p> <p>2</p> <p>3</p> <p>4</p>	<p>white</p> <p>green</p> <p>brown yellow</p>

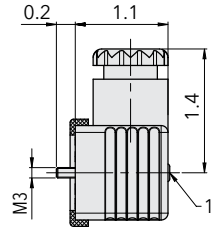
INDUSTRIAL PRESSURE TRANSMITTER

TP2 Dimensions

All dimensions are in inches.

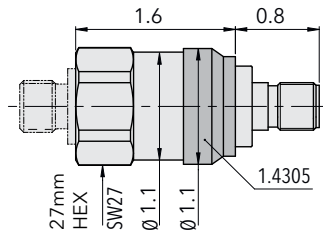


Hirschmann DIN A

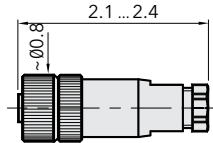


1) Tightening torque 4.4...5.3 in-lbs

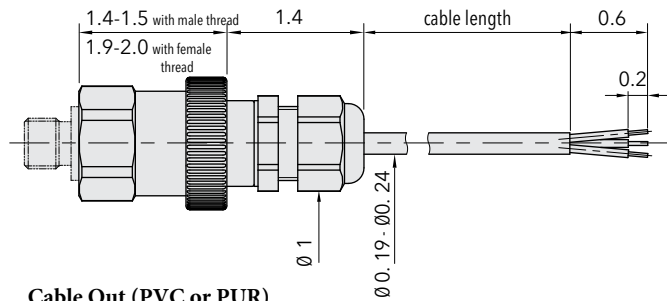
Hirschmann DIN A



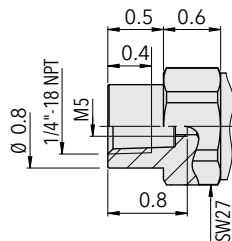
M12 (5 pin)



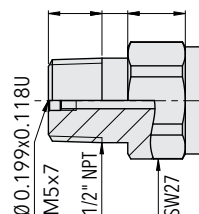
M12 mating connector



Cable Out (PVC or PUR)



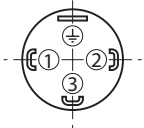
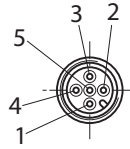
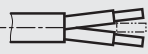
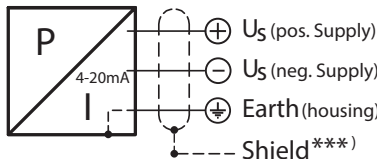
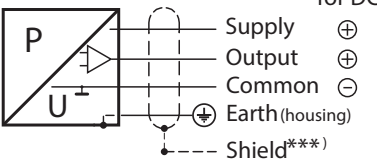
1/4"NPT



1/2"NPT

INDUSTRIAL PRESSURE TRANSMITTER

TP2 Electrical

		Protection / electrical connection		
		IP65 ^{*) **)}	IP67 ^{*) **)}	IP68 max. 3 m
		Industrial standard EN175301-803A	M12x1 5-pole	Cable ^{**)}
		Hirschmann DIN A	M12	Cable Out PVC or PUR
				
Output signal	 <p>4-20mA</p>	Standard		
	 <p>0/5 VDC, 1/6 VDC, 0/10VDC</p>	Standard		
		2 1 ⊕	4 1 5	white brown yellow
		2 3 1 ⊕	2 4 3 5	white green brown yellow

*) Provided female connector is mounted according to instructions

***) Ventilation via male electric plug/cable end

***) Only cable versions or female electrical plug with shield connection

