

INDUSTRIAL PRESSURE TRANSMITTER

TA with Hirschmann
(DIN 43650 Form A)

TA with M12 4-Pin

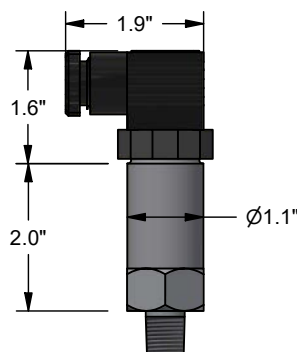
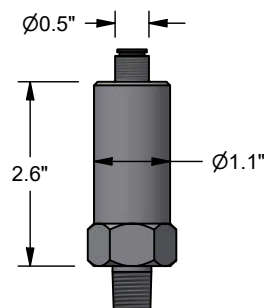
Diaphragm Seal
Compatible

FEATURES / BENEFITS

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

SPECIFICATIONS

Output Signal	4-20mA, 2-Wire 0-5V, 0-10V, 1-5V, 1-6V, 0.5-4.5V, 0.5-2.5V (3-Wire) Additional Outputs Upon Request
Measuring Principle	High-Stability Silicon Piezoresistive
Pressure Ranges	Vacuum, Compound, Absolute, Pressure to 10,000psi
Over Pressure	2X Full Scale (Vac to 3,000 psi) 1.25X Full Scale (>3,000 psi to 10,000 psi)
Burst Pressure	4X Full Scale or 15,000 psi (Whichever is Lower)
Accuracy NLH at 77°F (BSL)	±0.25% of span (Optional ± 0.5%)
Input	11-28 VDC (4-20mA, 0-5V, 1-5V, 1-6V) 15-28 VDC (0-10V) Additional inputs, See Specifications Below.
Temperature	Effect: ±0.02% FS/°F (>1 Bar), ±0.03% FS/°F (≤1 Bar) Media: -40 to 257°F Storage: -40 to 176°F (Hirschmann DIN A, M12) -4 to 176°F (Cable Type - PE)
Weight	≤ 9.5 oz
Environmental Rating	IP65 (Hirschmann, M12) IP68 (Cable)
Threaded Flush Face Process Connections (Optional)	See Series DSTF specifications for details.

Hirschmann
(DIN 43650 Form A)

M12 4-Pin

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: TA1P182AB004-TS

TA1	P18	2	A	B00	4	-TS
MODEL	RANGE	ACCURACY	OUTPUT SIGNAL	ELECTRICAL CONNECTION	PROCESS CONNECTION	OPTIONS
TA1 = Industrial Pressure Transmitter	See Transmitter Technical Reference on pg. 277	2 = $\pm 0.25\%$ FS 1 = $\pm 0.5\%$ FS Note: Low Pressure Ranges with Total Span ≤ 3 psi Must be $\pm 0.5\%$ Contact Factory for Higher Accuracy Requirements.	A = 4-20mA B = 0-5 VDC E = 0-10 VDC C = 1-5 VDC D = 1-6 VDC H = 0.5-2.5 VDC Ratiometric (5V supply) J = 0.5-2.5V Ratiometric (3.3V supply) K = 0.5-4.5 VDC Ratiometric	Hirschmann (DIN Form A) B00 = Hirschmann, Field Wireable BPVC05 = Hirschmann w/ 5ft. PVC Shielded Cable BPVC10 = Hirschmann w/ 10ft. PVC Shielded Cable BPVC16 = Hirschmann w/ 16ft. PVC Shielded Cable BPVC33 = Hirschmann w/ 33ft. PVC Shielded Cable BPE?? = Hirschmann (?? ft. of PVC Shielded Cable) M12 x 1 (4-Pin) M00 = M12 x 1 (4-Pin) w/ Field Wireable Mating Connector MPVC03 = M12 x 1 (4-Pin) Female w/ 3ft. PVC Shielded Cable MPVC10 = M12 x 1 (4-Pin) Female w/ 10ft. PVC Shielded Cable MPVC33 = M12 x 1 (4-Pin) Female w/ 33ft. PVC Shielded Cable MPE?? = M12 x 1 (4-Pin) Female w/ ??ft. PVC Shielded Cable Cable Out CGPE01 = 1.6ft. PE Shielded Cable CGPE03 = 3.2ft. PE Shielded Cable CGPE06 = 6.5ft. PE Shielded Cable CGPE?? = ?? ft. PE Shielded Cable 1/2" NPT Conduit with Cable JPE03 = 1/2" Conduit w/3ft. PE Cable JPE06 = 1/2" Conduit w/6ft. PE Cable JPE10 = 1/2" Conduit w/10ft PE Cable JPE20 = 1/2" Conduit w/20ft. PE Cable JPE?? = 1/2" Conduit w/??ft. PE Cable Contact Factory for Additional Electrical Connections.	4 = 1/4" NPT Male (std) 8 = 1/8" NPT Male 2 = 1/2" NPT Male 5 = 1/4" FNPT Female B = G1/2 (1/2 BSPP) C = G1/4 (1/4 BSPP) M = 1/4" Tube Stub N = 3/8" Tube Stub O = 1/2" Tube Stub S = 1/2" BSPP Male Flush Face DS-silicone DC 200 Fill (60 psi Minimum) T = 1/2" NPT Male Flush Face DS-silicone DC 200 Fill (60 psi Minimum) U = 3/4" NPT Male Flush Face DS-silicone DC 200 Fill (60 psi Minimum) H = 1" NPT Male Flush Sensor (Methyl Silicone Fill)	-TS = Stainless Steel Tag (1-10 Characters) -PM = Positive Material Identification Report -C1 = 1pt. Calibration Certificate -C3 = 3pt. Calibration Certificate -C5 = 5pt. Calibration Certificate Optional Assembly to Diaphragm Seal Available

INDUSTRIAL PRESSURE TRANSMITTER

SPECIFICATIONS

Electrical Data	Output / Supply voltage	4 - 20 mA: 11...28 VDC (24 VDC) 0 - 5 VDC: 11...28 VDC (24 VDC) 1 - 5 VDC: 11...28 VDC (24 VDC) 1 - 6 VDC: 11...28 VDC (24 VDC) 0 - 10 VDC: 15...28 VDC (24 VDC) 0.5-2.5V Ratiometric (H): 5V+/-0.1VDC 0.5-2.5V Ratiometric (J): 3.3V+/-0.1VDC 0.5-4.5V Ratiometric: 5V+/-0.1VDC
	Reverse Polarity Protection	Yes
	Media Temperature	-40°F to 257°F
	Storage Temperature	-40 to 176°F (Hirschmann DIN A, M12) -4 to 176°F (Cable Type - PE)
	Protection	IP65 (Hirschmann, M12), IP68 (Cable)
	Vibration	10g (55Hz ~ 2,000 Hz)
	Shock	100g / 11ms
	Isolated Diaphragm (Wetted Part)	Stainless Steel 316L/ Other Alloys Available. Contact Factory
Mechanical Data	Pressure Port (Wetted Part)	Stainless Steel 316L/ Other Alloys Available. Contact Factory
	Sealing	FKM
	Housing	Stainless Steel 304/316L
	Weight	≤ 9.5 oz
	Mounting Torque	18.5 in-lbs

ACCURACY

Pressure Type	Range	Accuracy
Gauge	0/50 INWC to 0/3 psi	±.5% FS
	0/5 to 0/10,000 psi	±0.25% FS (or ±0.5% FS if Selected)
Absolute A	0/15 psia to 0/300 psia	±0.25% FS (or ±0.5% FS if Selected)
Compound (Negative & Positive Pressure)	-14.7/0/14.7 to -14.7/0/500 psi	±0.25% FS (or ±0.5% FS if Selected)

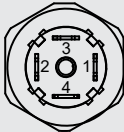
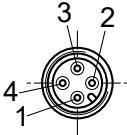
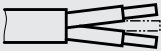
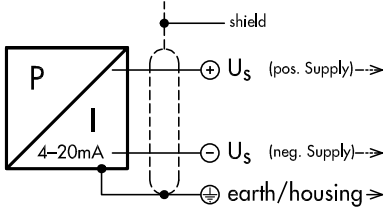
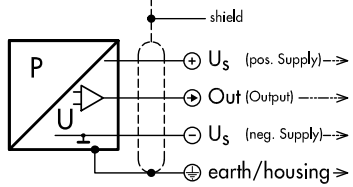
Test Conditions:
 Environment Temperature: 20°C ±5°C
 Relative Humidity: 45% ~ 75%
 Note: Ranges Above 500psi are Sealed Gauge Transmitters with a Fixed Reference Pressure.

INDUSTRIAL PRESSURE TRANSMITTER

OUTPUT SIGNALS

Output Signal	Power Supply	Output Format	Load Resistance
4mA ~ 20mA DC	11V ~ 28V DC	2-Wire	$\leq (U-11)/0.02(\Omega)$
0V ~ 5V DC		3-Wire	$\leq 10k(\Omega)$
1V ~ 5V DC			
1V ~ 6V DC			
0V ~ 10V DC	15V ~ 28V DC		
0.5-2.5 VDC Ratiometric (H)	5V+/-0.1VDC		
0.5-2.5 VDC Ratiometric (J)	3.3V+/-0.1VDC		
0.5-4.5 VDC Ratiometric	5V+/-0.1VDC		

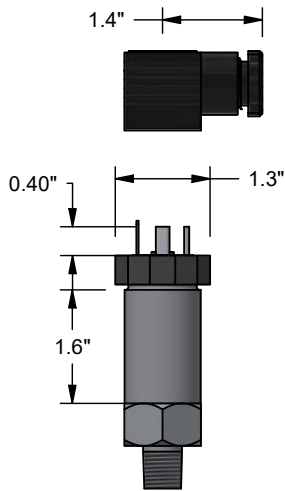
TA Electrical Connection

Protection / Electrical Connection			
Output Signal	IP65	IP65	IP68
	Hirschmann DIN A	M12x1 4-pole	Cable Out 1/2" NPT Conduit
			
	1	(1) Brown	Red
	2	(3) Blue	Black
	4	(4) Black	Green/Yellow
 4-20mA	1	(1) Brown	Red
	2	(2) White	White
	3	(3) Blue	Black
	4	(4) Black	Green/Yellow
 0/5 VDC, 1/5 VDC, 1/6 VDC, 0/10VDC, 0.5-2.5 VDC Ratiometric, 0.5-4.5 VDC Ratiometric	1	(1) Brown	Red
	2	(2) White	White
	3	(3) Blue	Black
	4	(4) Black	Green/Yellow

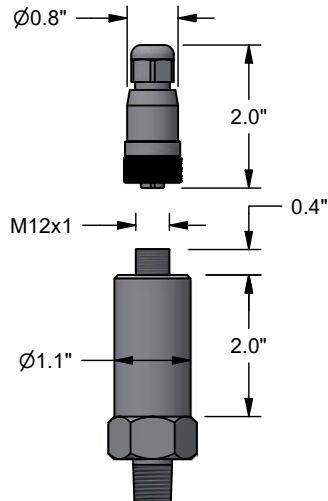
TRANSMITTERS

INDUSTRIAL PRESSURE TRANSMITTER

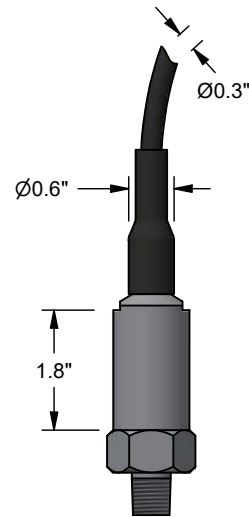
TA Dimension



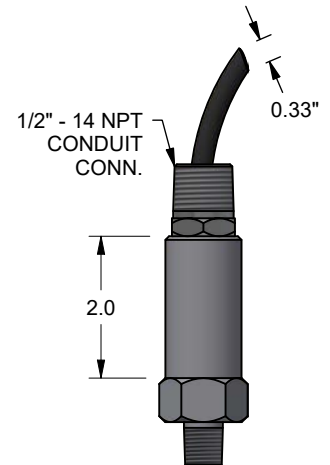
Standard Hirschmann
(DIN 43650 Form A)



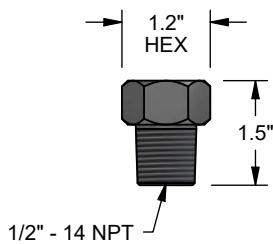
M12 x 1 (4-Pin)



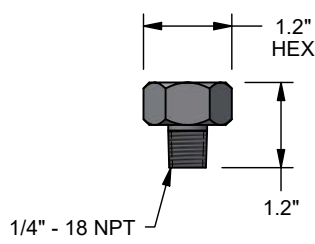
Cable Out



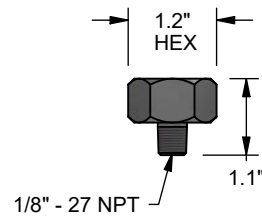
1/2" Conduit w/ Cable



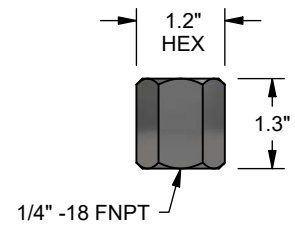
1/2" NPT



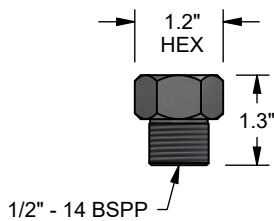
1/4" NPT



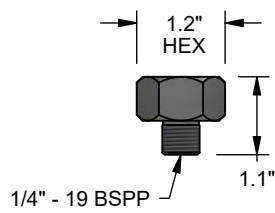
1/8" NPT



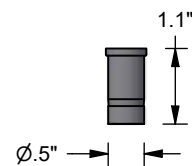
1/4" FNPT



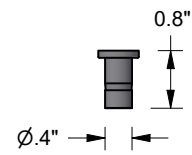
G1/2 (1/2" BSPP)



G1/4 (1/4" BSPP)



1/2" Tube Stub Fitting



3/8" Tube Stub Fitting

TRANSMITTER TECHNICAL REFERENCE

SERIES		T90	TA	TSTA	TSTD5	TDS	TE	THX	TL1
Code	Range								
P01	-30 inHg/0 psi	✓	✓	✓			✓	✓	
P01R	-14.5/0 psi								
Code	Range								
P02	-30 inHg/15psi	✓	✓	✓				✓	
P03	-30 inHg/30 psi	✓	✓	✓			✓		
P04	-30 inHg/60 psi	✓	✓	✓					
P05	-30 inHg/100 psi	✓	✓	✓			✓		
P06	-30 inHg/150 psi	✓	✓	✓				✓	
P07	-30 inHg/200 psi	✓	✓	✓			✓		
P08	-30 inHg/300 psi	✓	✓	✓					
P02R	-14.5/0/15 psi								
P03R	-14.5/0/30 psi				✓	✓			
P04R	-14.5/0/60 psi				✓	✓			
P05R	-14.5/0/100 psi				✓	✓			
P06R	-14.5/0/150 psi				✓	✓			
P07R	-14.5/0/200 psi				✓	✓			
P08R	-14.5/0/300 psi				✓	✓			
Code	Range								
IN50	0/50 inH ₂ O	✓	✓	✓					✓
IN100	0/100 inH ₂ O	✓	✓	✓					✓
IN200	0/200 inH ₂ O	✓	✓	✓					✓
L11	0/55 INWC	✓	✓	✓					
L12	0/80 INWC	✓	✓	✓					
L13	0/140 INWC	✓	✓	✓					
L14	0/280 INWC	✓	✓	✓					
P11	0/2 psi	✓	✓	✓				✓	✓
P12	0/3 psi	✓	✓	✓				✓	✓
P13	0/5 psi	✓	✓	✓				✓	✓
P14	0/10 psi	✓	✓	✓				✓	✓
P15	0/15 psi	✓	✓	✓			✓	✓	✓
P16	0/30 psi	✓	✓	✓	✓	✓	✓	✓	✓
P175	0/50psi	✓	✓	✓	✓	✓			
P17	0/60 psi	✓	✓	✓			✓	✓	✓
P18	0/100 psi	✓	✓	✓	✓	✓	✓	✓	✓
P195	0/150 psi	✓	✓	✓	✓	✓		✓	✓
P20	0/200 psi	✓	✓	✓	✓	✓	✓	✓	✓
P21	0/300 psi	✓	✓	✓	✓	✓	✓	✓	✓
P26	0/500 psi	✓	✓	✓	✓	✓	✓	✓	✓
P23	0/600 psi	✓	✓	✓					
P27	0/750 psi	✓	✓	✓			✓	✓	✓
P25	0/1000 psi	✓	✓	✓	✓	✓	✓	✓	✓
P30	0/1500 psi	✓	✓			✓			
P31	0/2000 psi	✓	✓			✓	✓		
P32	0/3000 psi	✓	✓			✓	✓		
P34	0/5000 psi	✓	✓			✓	✓	✓	
P35	0/6000 psi	✓	✓				✓		
P28	0/7500 psi	✓	✓			✓		✓	
P37	0/10000 psi	✓	✓				✓	✓	
P38	0/15000 psi						✓	✓	
P39	0/20000 psi								
P40	0/30000 psi								
P41	0/40000 psi								
P42	0/50000 psi								
P43	0/60000 psi								

Don't See the Range You Need?
Other ranges may be available, contact REOTEMP customer service for more information.

✓ Indicates that the option is available
Note: Specifications are subject to change.

TRANSMITTER TECHNICAL REFERENCE

SERIES		T90	TA	TSTA	TSTDs	TDS	TE	THX	TL1
Code	Range				ABSOLUTE RANGES				
P15A	0/15 psia		✓	✓					
P16A	0/30 psia		✓	✓					
P17A	0/60 psia		✓	✓					
P18A	0/100 psia		✓	✓					
P19A	0/150 psia		✓	✓					
P20A	0/200 psia		✓	✓					
P21A	0/300 psia		✓	✓					