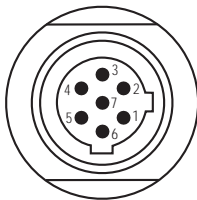


WIRING - ANALOG OUTPUTS

CONNECTORS

RG Connector:

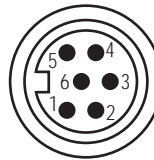
Pin No.	Wire Color	Function
1	Gray	Output #1 (Displacement) * 0 to 10 Vdc, 10 to 0 Vdc 4 to 20 mA, 20 to 4 mA, 0 to 20 mA or 20 to 0 mA
2	Pink	Return for Pin 1
3	Yellow	Output #2 (Displacement or Velocity) * 0 to 10 Vdc, 10 to 0 Vdc 4 to 20 mA, 20 to 4 mA, 0 to 20 mA or 20 to 0 mA
4	Green	Return for Pin 3
5	Red or Brown	+ 24 Vdc (+20%, -15%), Customer Supplied
6	White	DC Ground
7	-	No Connection



RG Connector
(Molded Mating Extension Cable Required)
View as seen from end of sensor

D6 Connector:

Pin No.	Wire Color	Function
1	Gray	Output #1 (Displacement) * 0 to 10 Vdc, 10 to 0 Vdc 4 to 20 mA, 20 to 4 mA, 0 to 20 mA or 20 to 0 mA
2	Pink	Return for Pin 1
3	Yellow	Output #2 (Displacement or Velocity) * 0 to 10 Vdc, 10 to 0 Vdc 4 to 20 mA, 20 to 4 mA, 0 to 20 mA or 20 to 0 mA
4	Green	Return for Pin 3
5	Red or Brown	Customer Supplied Power (+24 Vdc)
6	White	DC Ground



Pin outs for 6-Pin D6 90°
and Straight-exit Connector
View as seen from end of sensor

NOTE:

* When using dual outputs, outputs #1 and #2 must have the same output scale (i.e., voltage or current) and the same orientation (i.e., forward or reverse acting).

INTEGRAL CABLE

R Cable:

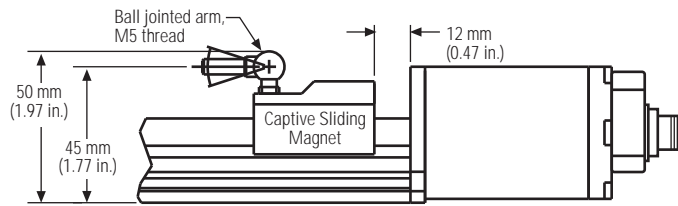
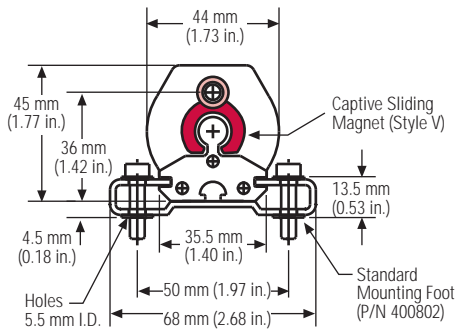
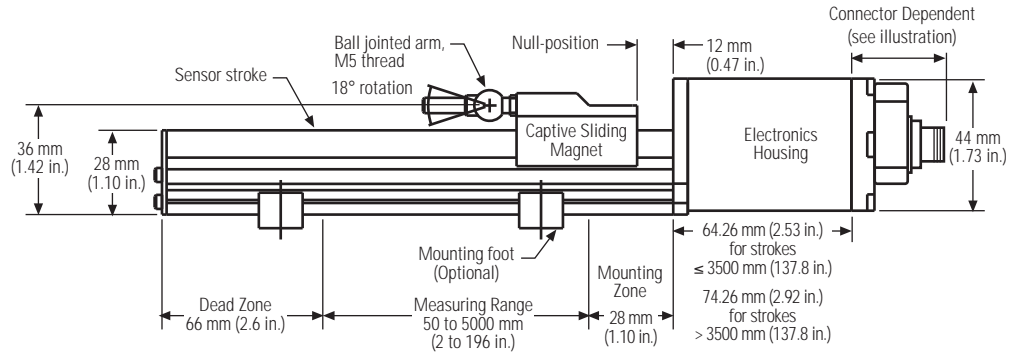
Wire Color	Function
Gray	Output #1 (Displacement) * 0 to 10 Vdc, 10 to 0 Vdc 4 to 20 mA, 20 to 4 mA, 0 to 20 mA or 20 to 0 mA
Pink	Displacement Output Return for Gray Wire
Yellow	Output #2 (Displacement or Velocity) * 0 to 10 Vdc, 10 to 0 Vdc 4 to 20 mA, 20 to 4 mA, 0 to 20 mA or 20 to 0 mA
Green	Displacement Output Return for Yellow Wire
Red or Brown	+ 24 Vdc (+20%, -15%), Customer Supplied
White	DC Ground

CAUTION!

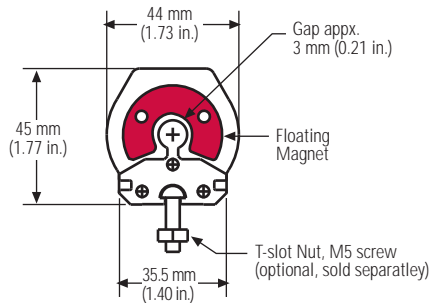
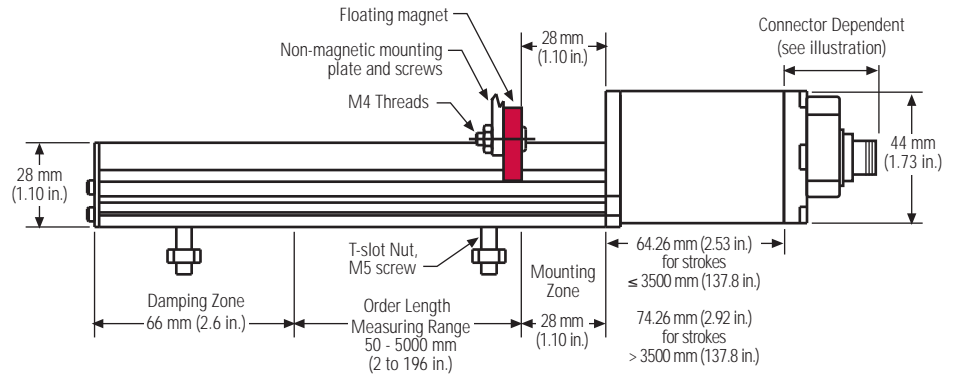
When wiring Temposonics III sensors, **DO NOT** connect DC ground to the cable shield or drain wire.

DIMENSIONS

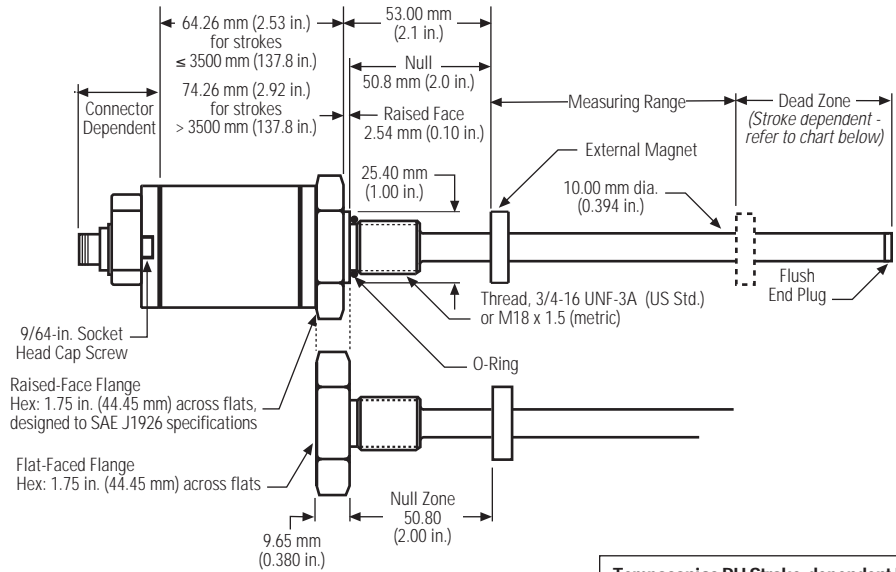
MODEL PB w/Captive Sliding Magnet



MODEL PB w/Floating Magnet

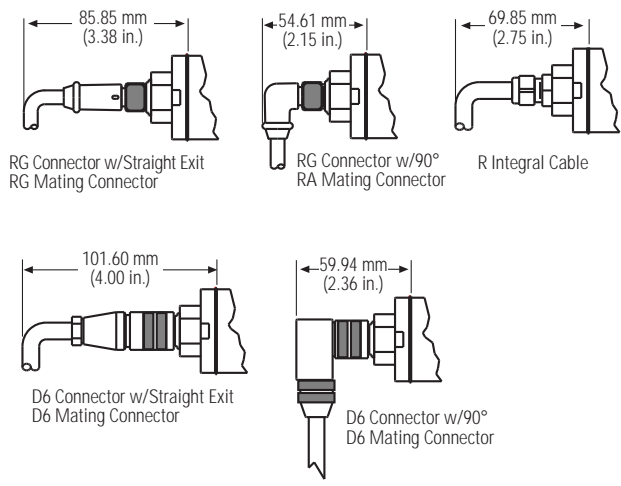


MODEL RH



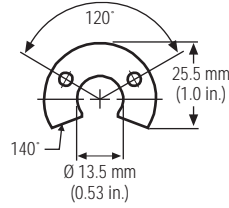
Temposonics RH Stroke-dependent Dead Zones	
<u>Stroke Length</u>	<u>Dead Zone</u>
50 - 5000 mm (2 - 197 in.)	63.5 mm (2.5 in.)
5001 - 7625 mm (197.1 - 300 in.)	66 mm (2.6 in.)

CONNECTORS



MAGNETS & MAGNET ACCESSORIES

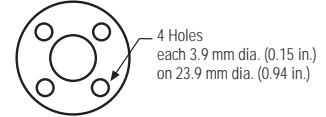
Part No. 251416



ID: 13.5 mm (0.53 in.)
OD: 25.5 mm (1.0 in.)
Thickness: 7.9 mm (0.312 in.)

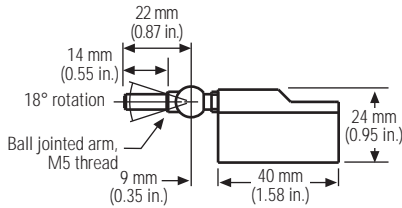
**For use with Temposonics
PB & RH sensors**

Part No. 201542

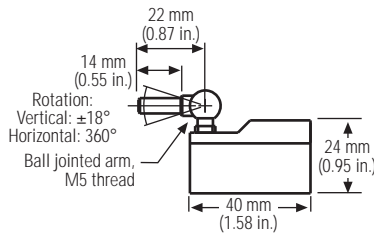


ID: 13.5 mm (0.53 in.)
OD: 23.9 mm (0.94 in.)
Thickness: 7.9 mm (0.312 in.)

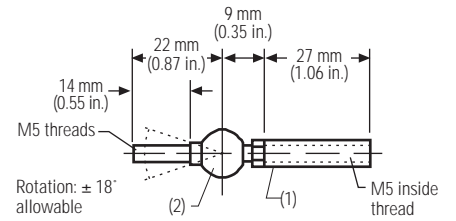
For use with Temposonics RH sensors



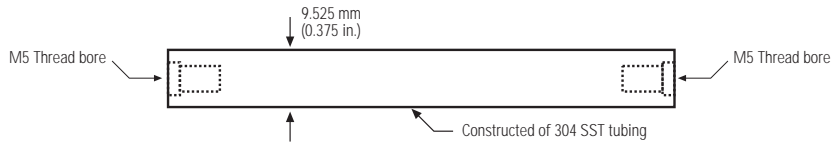
Captive Sliding Magnet, Style V
Part No. 252111-1
For use with Temposonics PB sensors



Captive Sliding Magnet, Style S
Part No. 252110-1
For use with Temposonics PB sensors



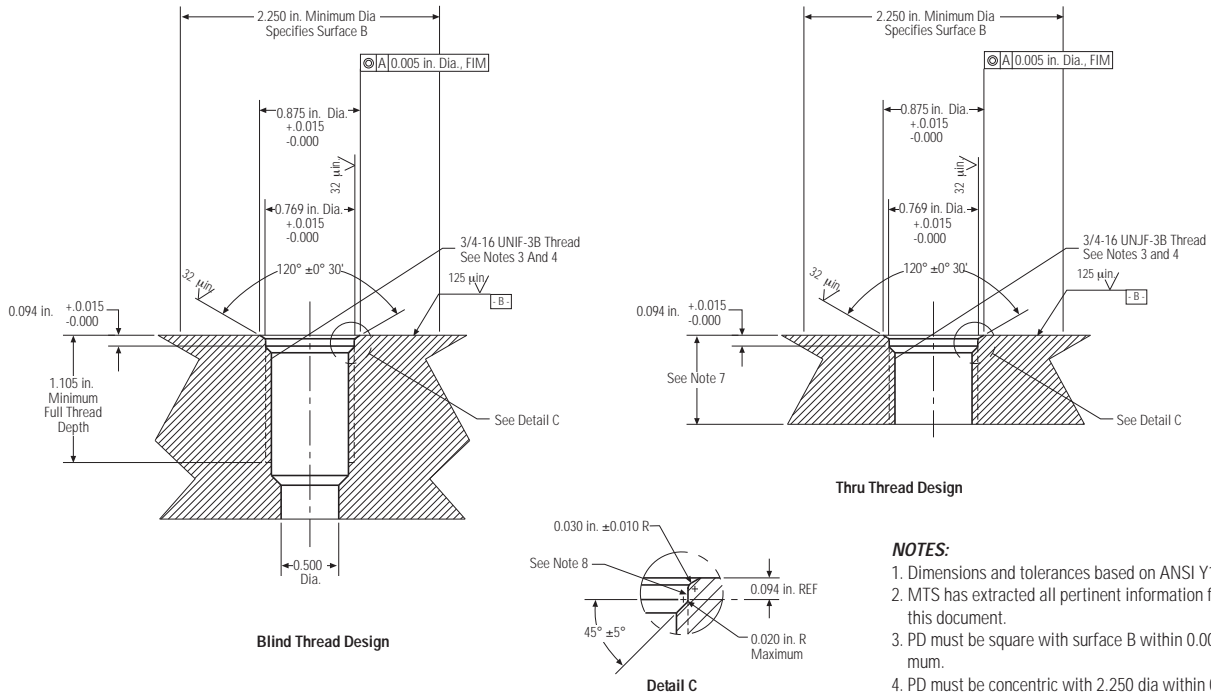
Joint Rod
(1) Sleeve, Part No. 401603
(2) Ball Jointed Arm, Part No. 401600-1
For use with Temposonics PB sensors



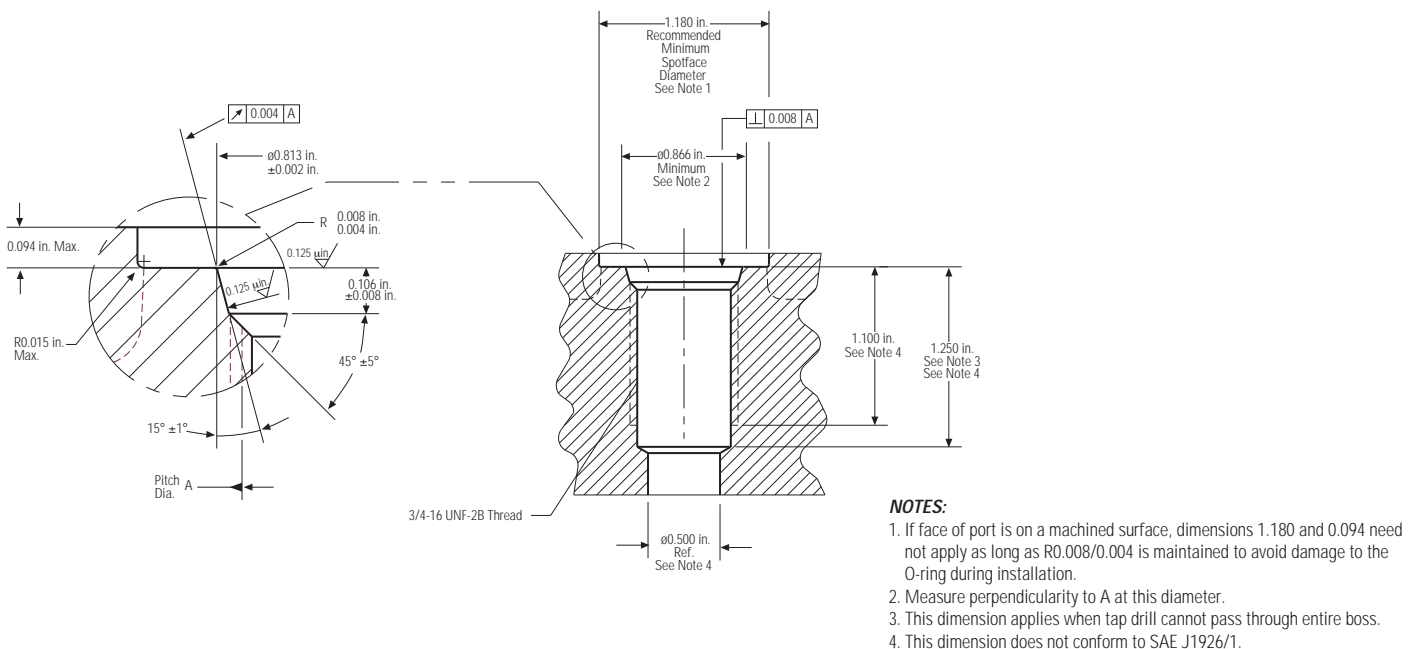
Extension Rod
Used with Captive Sliding Magnets
on Temposonics PB sensors

CYLINDER PORT DETAIL

Port Detail for Temposonics RH Sensors with Housing Style 'S'



Port Detail (SAE J1926/1) for Temposonics RH Sensors with Housing Style 'T'



SPECIFICATIONS

PARAMETER	SPECIFICATION
Measured Variable:	Displacement, Velocity (magnitude only)
Resolution:	16 bit or 0.025 mm, whichever is greater
Non-Linearity:	$< \pm 0.02\%$ of full stroke or ± 0.05 mm, whichever is greater
Repeatability:	$< \pm 0.001\%$ of full scale or ± 0.0025 mm, whichever is greater
Hysteresis:	< 0.004 mm
Outputs:	Voltage: 0 to 10 Vdc or +10 to 0 Vdc *; Minimum load: ≥ 5 k Ω Current: 4 (0) to 20 mA, 20 to 4 (0) mA; Maximum load: ≤ 500 Ω
Measuring Range:	<i>Profile Style Sensors (PB):</i> 50 to 5000 mm (2 to 196 in.) <i>Rod Style Sensors (RH):</i> 50 to 7600 mm (2 to 300 in.)
Velocity:	Velocity output range: 0.1 to 10 m/s or 1.0 to 400.0 in/s Minimum velocity: 1.0 in/s or 0.05 x stroke length in inches, whichever is greater Maximum velocity: 400.0 in/s or 100 x stroke length in inches, whichever is less (factory calibrated)
Operating Voltage:	+24 Vdc (+ 20%, - 15%)
Power Consumption:	100 mA typical
Operating Temperature:	<i>Head Electronics:</i> - 40 to 75°C (- 40 to 167°F) <i>Sensing Element:</i> - 40 to 105°C (- 40 to 221°F)
EMC Test:	DIN IEC 801-4, Type 4, CE Qualified; DIN EN 50081-1 (Emissions), DIN EN 50082-2 (Immunity)
Shock Rating:	100 g (single hit)/IEC standard 68-2-27 (survivability)
Vibration Rating:	5 g/10-150 Hz/IEC standard 68-2-6
Adjustment of Zero & Span:	100% field adjustment of measuring range
Update Time:	≤ 1 ms typical (length dependent)

PROFILE STYLE (PB MODEL)

Electronic Head:	Aluminum die-cast housing
Sensor Stroke:	Aluminum profile
Sealing:	<i>Electronics Head:</i> IP 67 <i>Extrusion:</i> IP 65
Mounting:	Adjustable mounting feet or T-slot M5 nut in base channel
Magnet Type:	Captive sliding magnet or floating magnet

ROD STYLE (RH MODEL)

Electronic Head:	Aluminum die-cast housing
Sensor Rod with Flange:	304L stainless steel
Operating Pressure:	350 bar, 530 bar peak (5000 psi static; 10,000 psi spike)
Maximum Hex Torque:	45 nM (33.19 ft. lbs.)
Sealing:	IP 67
Mounting:	M18 x 1.5 or 3/4-16 UNF-3A
Magnet Type:	Ring magnet

* Varies with sensor model, 0.002 in. is the minimum absolute non-linearity.

** Due to single ended power supply, 0.0 V is not attainable. Typical minimum voltage is 50 mV.



SENSORS
G R O U P

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Magnetostrictive
Sensing

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