

# TAE LCO

## Sensors for Military and Naval Applications...



*Builds the future!*

# MPS-EP Series

## Miniature Pressure Switch



### Description

The MPS-EP series, developed by TAE LCO, is engineered for aerospace and military mission-critical applications. These include demanding uses such as missile combustion chamber actuation, rocket launch activation, and high-pressure fuel tank monitoring systems.

Designed to operate reliably in challenging environments, the MPS-EP series offers complete immunity to electromagnetic interference (E3) due to its inherently fully mechanical design.



### MPS-EP Series Specifications

Functional Specifications	
Switch Type	SPST/Normally Open
Sealing	Hermetically sealed
Media	Liquid, Gas, Exhaust
Actuation Value	600 ± 150 psi
Proof Pressure	3000 psi

Environmental Specifications	
Low Temp (Storage)	-55 °C DO-160G Section 4.5.1
Low Temp (Operating)	-55 °C DO-160G Section 4.5.2
High Temp (Storage)	+125 °C IEC 60068-2-2
High Temp (Operating)	+125 °C IEC 60068-2-2
Shock	100ms 45G (longitudinal axis, see Dimensions and Interfaces)
Vibration	Random: 15 to 2000 Hz @ approx. 50G (peak) MIL-STD-810G, Method 514.6
Altitude (Storage)	45000 feet per MIL-STD-810G CHG-1, Method 500.6-P.I
Altitude (Operating)	45000 feet per MIL-STD-810G CHG-1, Method 500.6-P.II
Salt Fog	MIL-STD-810G CHG-1, Method 509.6
Sealing	IP67, IEC-60529

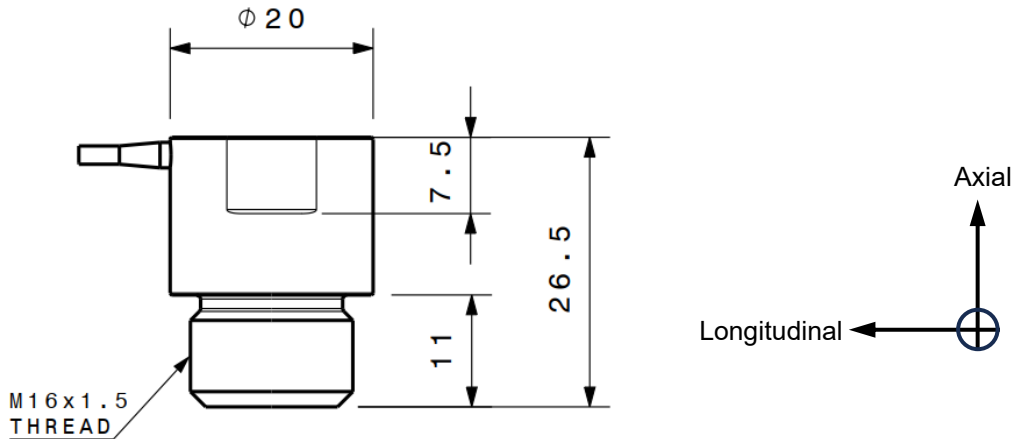
Electrical Specifications	
Resistive Load	2A (@ 28VDC or 115VAC, 60Hz)
Inductive Load	0.5A (@ 28VDC or 115VAC, 60Hz)
DWV	1000 Vrms
Electrical interface	2 x lead wire (26AWG, M27500 spec.)

Mechanical Specifications	
Material	303 Stainless Steel
Weight	40g (max.)
Mounting Torque	5.0Nm
Diameter	20.0mm
Length	26.5mm
Thread Length	11.0mm
Thread	M16x1.5
Warranty	24 months



## Dimensions and Interfaces

### Housing & Pressure Interface



## Ordering Information

	MPS	-	O	-	P600	-	M16	-	EP	-	03
<b>Series</b>	MPS										
<b>Switch Type</b>	Normally Open		O								
	Normally Closed:		C								
<b>Pressure Unit</b>	psi		P								
	bar:		B								
<b>Pressure Range</b>	Enter setting pressure										
<b>Mechanical Interface</b>	M16x1.5		M16								
<b>Grade</b>	Enhanced:		EP								
<b>Material</b>	316 SS		16								
	304 SS		04								
	303 SS		03								

Typical ordering example: Normally open, 600 PSI pressure, M16x1.5 mechanical interface, Enhanced Grade, 303 SS material, 10cm lead wire as standard: **MPS-O-P600-M16-EP-03**

For stock and price inquiry please contact us at: [sales@taelco.com](mailto:sales@taelco.com) or [www.taelco.com/en/contact-us/](http://www.taelco.com/en/contact-us/)

Shipping, customs fees etc. are not included in the price quotation. TAE LCO is not responsible for customs clearance.

Revision History

Revision	Reasons for Revision	Issue Date
REV A	<ul style="list-style-type: none"><li>First revision.</li></ul>	10.09.2025

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# PTSC-M Series

## Combined Pressure Temperature Transducers

# TAE LCO

### Description

The PTSC-M series is a combined pressure temperature sensor used for industrial applications. The PTSC-M series is available with various pressure ranges, absolute and gauge pressure options, supply voltages, output signals, electrical and mechanical interfaces to make it easy to adopt and to reduce the workload on the engineer. For enhanced version see PTSC-EP Series sensor.

The PTSC-M series has been designed, tested and proven to withstand the harshest requirements of the industry. The PTSC-M includes EMI/RFI protection and is operational under extreme vibration and mechanical shock, and temperatures as low as -40 °C and up to +125 °C.



### PTSC-M Series Specifications

#### Performance

##### Pressure

Accuracy	$\leq \pm 0.5\%$ at RT
Non linearity	$\leq 0.15\%$ FS
Lifetime Drift (1000h, +125 °C)	$\leq 0.5\%$ FS
TEB (-40 °C to +125 °C)	$\leq 2.5\%$ FS
TEB (0 °C to +85 °C)	$\leq 1.0\%$ FS
Proof pressure	2 x FS pressure
Burst pressure	3 x FS pressure
Pressure response	< 1ms

##### Temperature

RTD operating temp. range	-200 +600 °C
RTD compensated temp. range	-50 +600 °C
Accuracy	PT100 / PT1000 Class B
Temp response time	< 20s
RTD max current	PT100 : 1.4mA
	PT1000 : 0.4mA

#### Environmental Specifications

Temperature (Operating)	-40 +125 °C
Temperature (Storage)	-40 +125 °C
Shock	40G 11ms Half Sine 3-axis per MIL-STD-810G, Method 516.6
Vibration	Random Vibration: 15 to 2000 Hz @ approx. 50G (peak) per MIL-STD-810G, Method 514.6
Salt Fog	MIL-STD-810G CHG-1, Method 509.6
Sealing	IP67 per IEC-60529

#### Electrical Specifications

Supply voltage <sup>1)</sup>	0.5-4.5V Output, 9-32VDC 2-10V Output, 12-32VDC
Output temperature <sup>1)</sup>	PT100 / PT1000
Current consumption	< 10mA
Reverse voltage protection	Yes
Electrical interface	PT02A12-8P
Bonding	see details <sup>2)</sup>

#### Mechanical Specifications

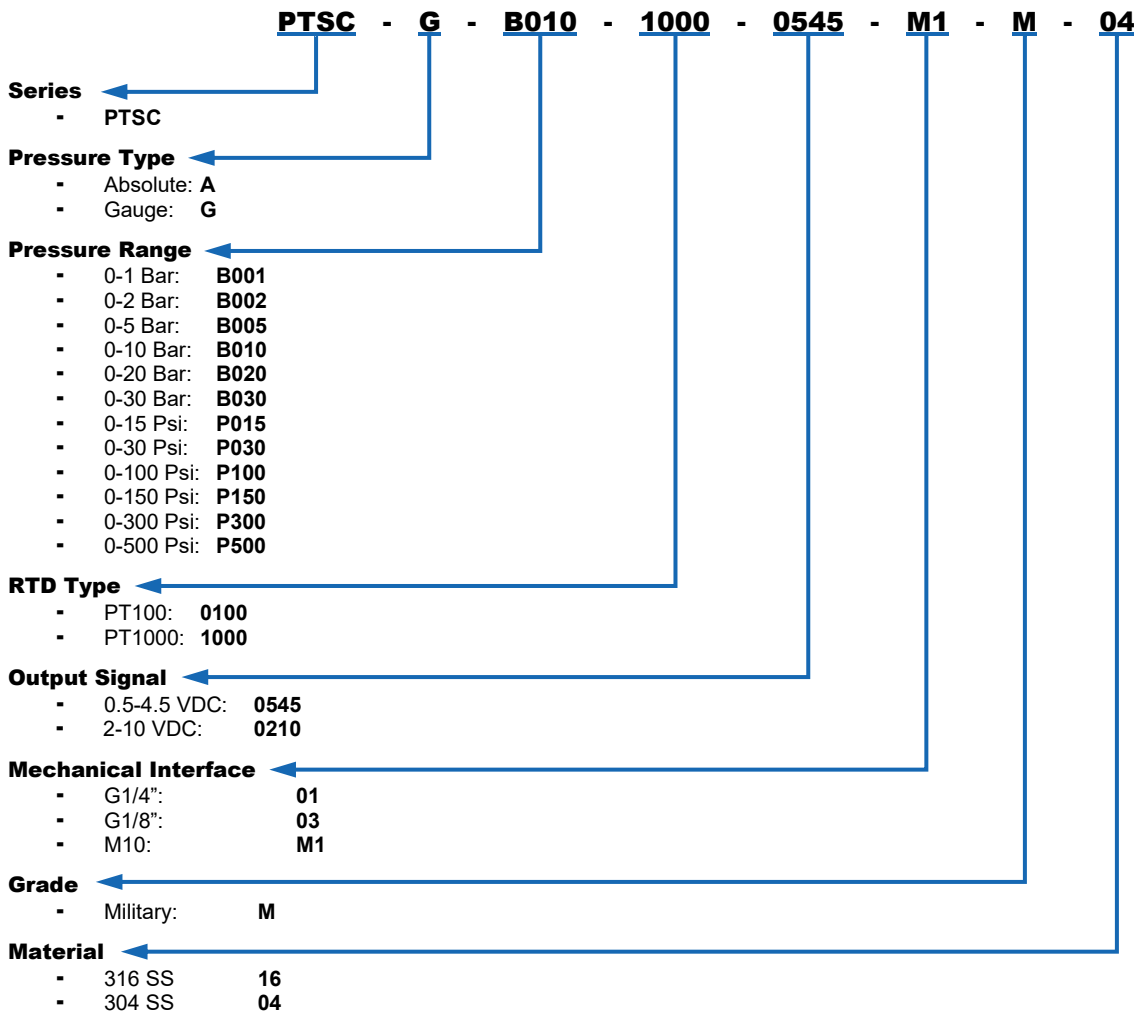
Material <sup>3)</sup>	304 Stainless Steel
Sealing	PTFE
Pressure port	See ordering information
Weight	75g (Dependent on configuration)
Mounting Torque	7.5Nm

1) Please contact us for custom solutions.

2) Enclosure and cable offers full and continuous protection EMI/RFI effects.

3) Production in 316L Stainless Steel is available.

**Ordering Information**

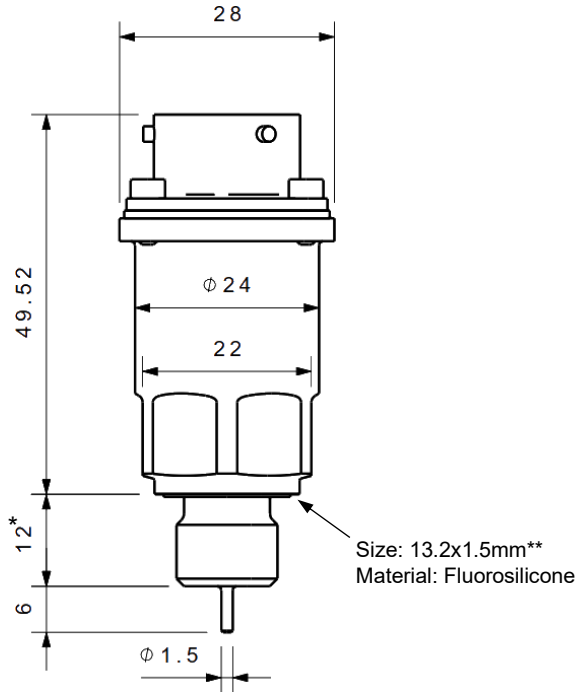


Typical ordering example: Gauge, 10 bar pressure, PT1000 RTD, 0.5-4.5 output signal, M10 mechanical interface, Military grade, SS 304 material: **PTSC-G-B010-1000-0545-M1-M-04**

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## Dimensions and Interfaces

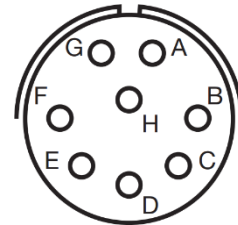
### Housing & Pressure Interface



### Electrical Interface (I/F)

The electrical I/F is a PT02A12-8P compatible circular connector.

Connector Pin Out	
Supply +	A
Pressure Signal	B
GND	C
Temp Signal 1	D
Temp Signal 2	E
No Connect (NC)	F
No Connect (NC)	G
No Connect (NC)	H



\*) For G1/4" thread interface. Please contact us about details for different thread interfaces.  
\*\*) In accordance with ISO 1179-2.

Revision History

Revision	Reasons for Revision	Issue Date
REV A	<ul style="list-style-type: none"><li>• First revision.</li></ul>	24.12.2024
REV B	<ul style="list-style-type: none"><li>• Second revision.</li><li>• Changed product picture.</li><li>• Changed mechanical interface dimensions.</li><li>• Added o-ring dimention information.</li><li>• Changed o-ring material.</li></ul>	01.08.2025

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### PSC-M Series Specifications

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#### Environmental Specifications

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Temperature (Storage)	-40 +125 °C
Shock	40G 11ms Half Sine 3-axis per MIL-STD-810G, Method 516.6
Vibration	Random Vibration: 15 to 2000 Hz @ approx. 50G (peak) per MIL-STD-810G, Method 514.6
Salt Fog	MIL-STD-810G CHG-1, Method 509.6
Sealing	IP67 per IEC-60529

#### Electrical Specifications

Supply voltage <sup>1)</sup>	0.5-4.5V Output, 9-32VDC 2-10V Output, 12-32VDC
Output temperature <sup>1)</sup>	PT100 / PT1000
Current consumption	< 10mA
Reverse voltage protection	Yes
Electrical interface	PT02A12-8P
Bonding	see details <sup>2)</sup>

#### Mechanical Specifications

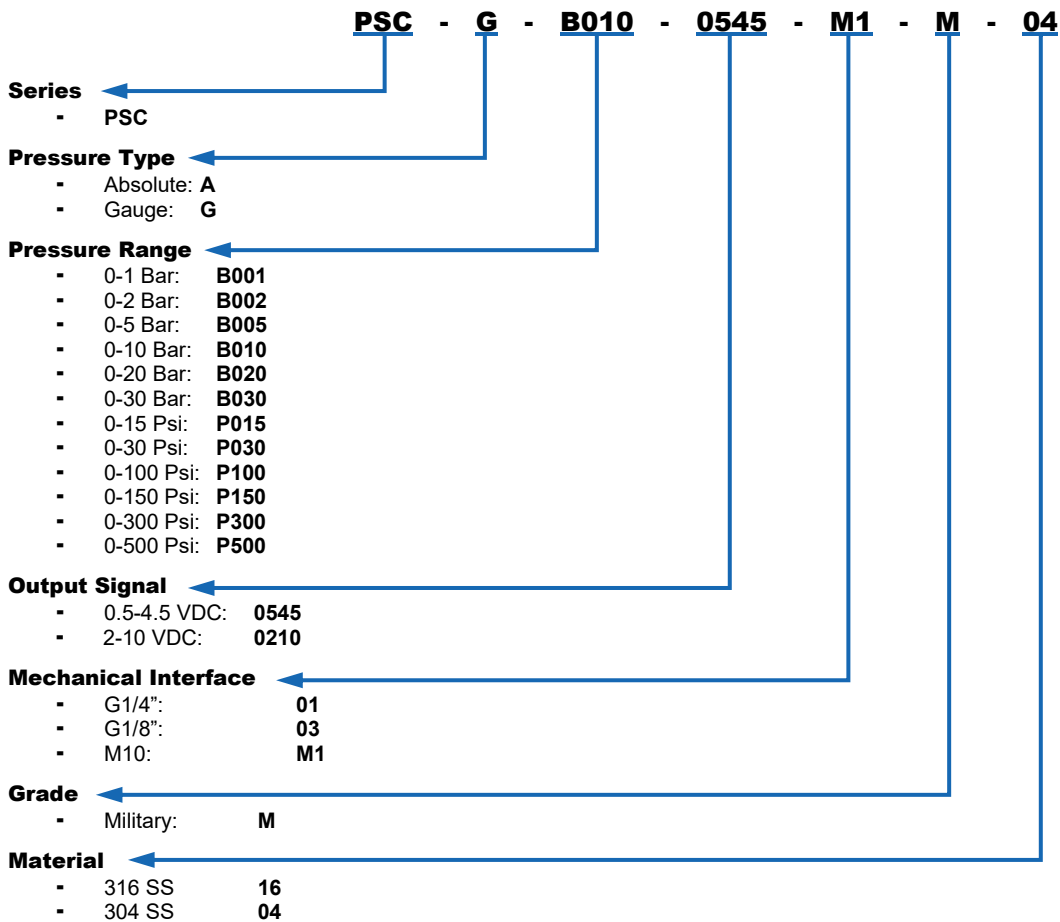
Material <sup>3)</sup>	304 Stainless Steel
Sealing <sup>1)</sup>	PTFE
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Weight	75g (Dependent on configuration)
Mounting Torque	7.5Nm

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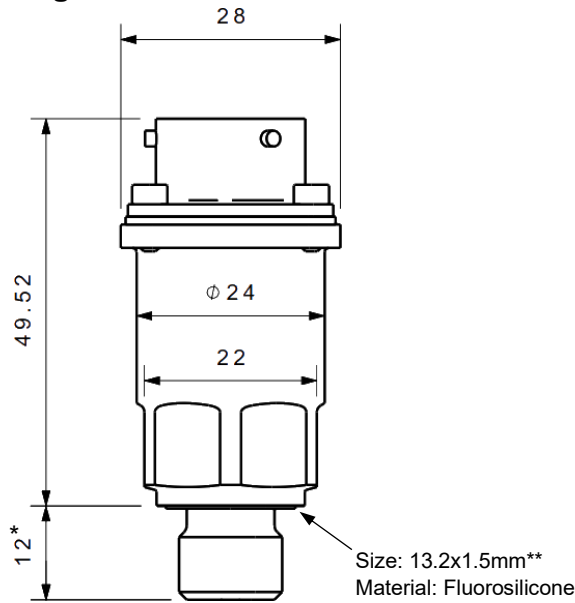


Typical ordering example: Gauge, 10 bar pressure, 0.5-4.5 output signal, M10 mechanical interface, Military grade, SS 304 material: **PSC-G-B010-0545-M1-M-04**

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Dimensions and Interfaces

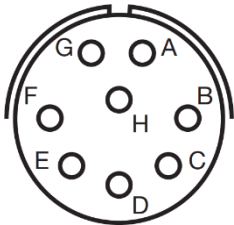
Housing & Pressure Interface



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Supply +	A
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GND	C
No Connect (NC)	D
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Revision History

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REV A	<ul style="list-style-type: none"><li>First revision.</li></ul>	25.12.2024
REV B	<ul style="list-style-type: none"><li>Second revision.</li><li>Changed product picture.</li><li>Changed mechanical interface dimensions.</li><li>Added o-ring dimention information.</li><li>Changed o-ring material.</li></ul>	01.08.2025

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