

FLUSH MOUNT PRESSURE and TEMPERATURE SENSOR

MPT 40 – CONSTANT VOLTAGE EXCITED

GENERAL

- **Flush mountable, miniature, low cost** pressure and temperature transducer
- Made of **corrosive resistant titanium** (6AL4V) – excellent performance with most corrosive media
- **Absolute** or **sealed reference** options
- **Long term stability** versions
- **High vibrations** options
- **Coating options** for liquids and bio-fluids (PTFE or nanostructured surface)
- Compatible with Micron's pressure fittings and calibration adaptors



MECHANICAL

Standard pressure ranges	2	3.5	7	15	20	35	70	140	200	350	500	bar
	25	50	100	200	300	500	1000	2000	3000	5000	7000	psi
Non-standard pressure ranges						0.35	0.7	1	1.5	2	3.5	bar
						5	10	15	20	30	50	psi

Other possible ranges	Consult Factory
Over Pressure (No change out of spec.)	2 x Range
Usable Pressure (Small change in balance)	3 x Range
Burst Pressure	6 x Range

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PERFORMANCE (PRESSURE)

Performance Option	OPTIONS (ALL VALUES MAXIMUM)				
	A (STD)	B	C	D	
Balance (Zero)	± 3.00	± 2.00	± 2.00	± 2.00	mV
Full Scale Sensitivity	20 ± 2.00	20 ± 2.00	20 ± 2.00	20 ± 2.00	mV/V
Static Error Band	± 0.5	± 0.25	± 0.25	± 0.25	% FS (BFSL)
Thermal Balance (Zero) Shift	± 0.036	± 0.036	± 0.018	± 0.009	% FS/°C
Thermal Sensitivity Shift	± 0.036	± 0.036	± 0.018	± 0.009	% FS/°C
Long Term Stability (std)	$< \pm 2$	$< \pm 2$	$< \pm 2$	$< \pm 2$	% FS/yr
Long Term Stability Options	L10 $< \pm 1$	L5 $< \pm 0.5$	L2 $< \pm 0.2$	L1 $< \pm 0.1$	% FS/yr

PERFORMANCE (TEMPERATURE)

Balance @ 0°C	± 2.00	mV
Sensitivity (5.0 V DC excitation)	8.6 ± 0.9	mV/°C
Temperature Accuracy	± 0.27	°C
Input Resistance	6.5 ± 0.8	kΩ
Output Resistance	5.0 ± 0.8	kΩ

ENVIRONMENTAL

Storage and Operating Temperature	-45°C to +80° C
Compensated Temperature Range (Consult factory for other ranges)	0°C to +55°C
Extended Temperature Range	-54°C to + 95°C
Acceleration (Consult factory for high vibration options)	100g's any axis
Media Compatibility (wetted surface)	Titanium 6AL4V

ELECTRICAL

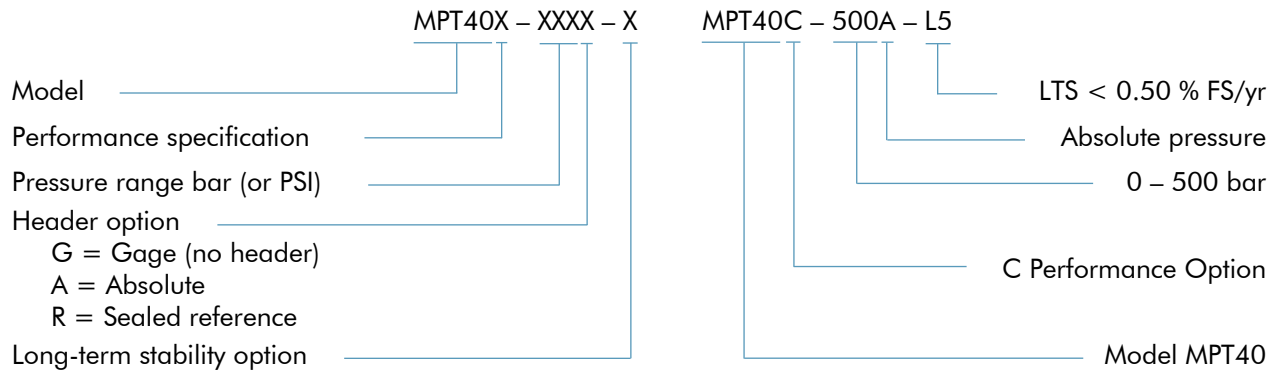
Input Constant Voltage Excited [V DC or AC]	5
Maximum Voltage (for short periods) [V]	30
Input Resistance [Ω]	1500 ± 500
Output Resistance [Ω]	850 ± 200
Insulation Resistance Minimum @50 VDC [MΩ]	50

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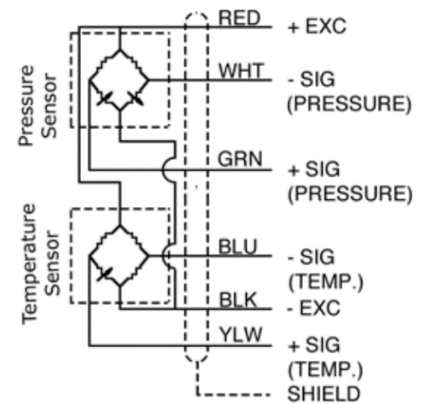
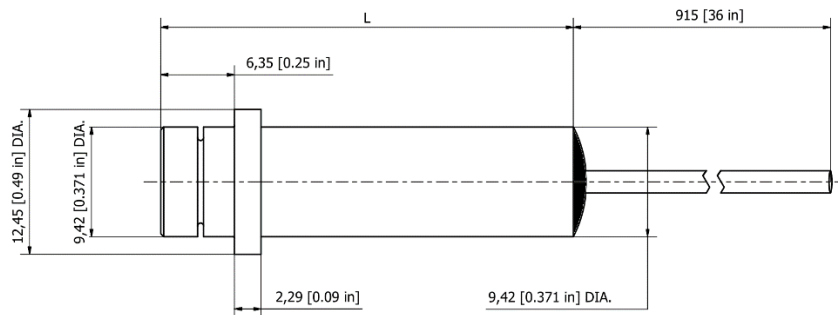
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FLUSH MOUNT PRESSURE and TEMPERATURE SENSOR

ORDERING FORMAT EXAMPLE



OUTLINE



Unit type	Transducer length L
Gage	35,56 mm [1.4 in]
Absolute, sealed reference	43,18 mm [1.7 in]

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