

Miniature Pressure Transducers & Transmitters

HT-SME Series

- High accuracy & reliability
- Ranges 1 bar to 400 bar
- Voltage/ratiometric outputs
- Choice of cables/connectors
- Temperature -40°C + 125°C
- Compact and rugged design



A high reliability solution for confined spaces, this miniature (14/12mm diameter) and lightweight (20g typical) pressure sensor is available with low or high pressure ranges and media temperatures up to 125°C. The silicon sensing technology is a perfect choice for accurate measurements in a very small package.

Plant Engineering
Industrial Machinery
Hydraulics
Pneumatics
Automotive

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TECHNICAL SPECIFICATIONS

Standard pressure ranges & signal outputs

Measuring range *(bar)	1	1.6	2	2.5	4	6	10
Overload pressure	6	6	6	6	10	20	20
Burst pressure	9	9	9	9	15	30	30
Measuring range (bar)	16	20	25	40	60	100	160
Overload pressure	40	40	100	100	200	200	400
Burst pressure	60	60	150	150	300	300	600
Measuring range (bar)	200	250	400				
Overload pressure	400	750	750				
Burst pressure	600	1000	1000				

* Gauge ranges shown - vacuum and absolute ranges available on request

Electrical	3 wire	ratiometric
Output signal	0-5Vdc	0.5-4.5Vdc
Supply voltage	8-32Vdc	5 ± 10%

- Media temperature range:
-40°C to +125°C
- Compensated temperature range:
-20°C to +85°C
- Ambient temperature range:
-40°C to +85°C

Performance

- Accuracy: Non-linearity, hysteresis and non-repeatability at room temperature according to IEC 61298-2 (or BSFL/ Best Fit Straight Line):
<0.5% FS range (<0.35% BFSL)
Optional <0.25% FS range (<0.15% BFSL)
- Temperature effects: Zero/Span typical thermal coefficients <0.15% FS range/ 10°C
- Total Error Band: 2% FS from room temperature to -40°C or +105°C
- Long term stability: <0.1% FS range/ year
- Response time: < 1mS (from 10% to 90% FS range)
- Vibration resistance: 5g (according to IEC 68-2-6 and IEC 68-2-36)
- Shock resistance: 1000g (according to IEC to 68-2-32)

Physical

- Material: body - stainless steel, pressure inlet port - stainless steel
- Process connection: M8 x 1, M10 x 1
Other connections available on request
- Electrical connection: 1m integral cable, M5 x 0.5 male socket
Other connectors available on request
- Weight: approximately 20g (dependent upon configuration)
- Ingress protection: IP65 (for connector versions with their mating plug fitted)

Options

- (1) Improved accuracy <0.25% FS (<0.15% BFSL)
- (2) additional cable (per metre/ specify length)

For further options or customised products please contact us.

Related products

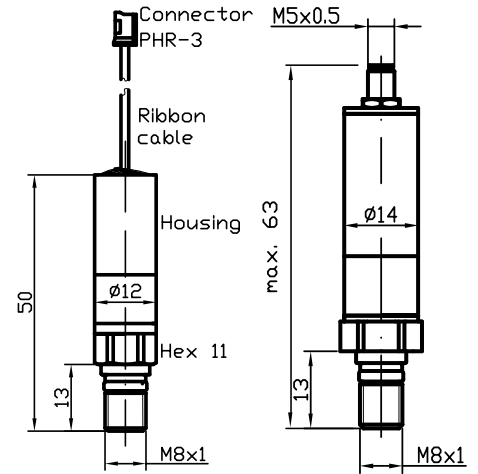
Hydrotechnik manufactures a wide range of sensors, test and measurement equipment. Contact us for further information or visit www.hydrotechnik.co.uk

Continuing development can necessitate specification changes without notice

Dimensions

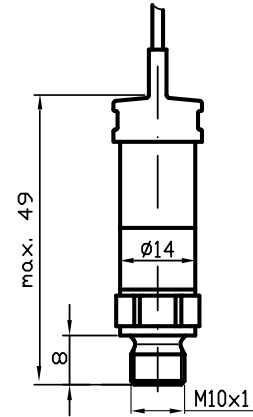
SME M8x1 with
PHR-3 Connection

M5x0.5 - S707

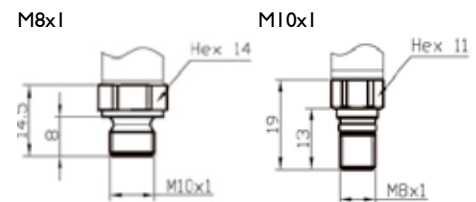


Note: Body diameter 12mm
(14mm for ranges <25 bar)

Cable output



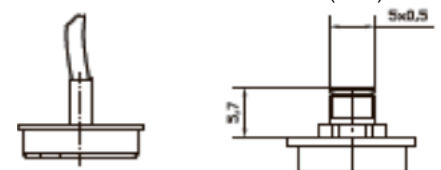
Mechanical Connections



Electrical Connections

Cable output steel

Male socket
M5x0.5 (S707)



HT-SME Series ORDER CODES

Series	Output Signal	Pressure Range	Unit	Pressure Type	Process Connection	HEX	Electrical Connection	Extras
HT-SME	20.4	040000	BAR	(sr)	M08M	11	FLI	R06

4...20 mA / 2 wires	10.0
0...10 V	20.0
0...5 V	20.4
0.5...4.5 V ration	37.0
0.5...4.5 V not ration	40.0
Others	AA

bar	BAR
kPa	KPA
MPa	MPA
PSI	PSI
kg/cm2	KGC
m WC	MWS
in WC	IWS
others	CCC

Relative Pressure	(g)
Sealed Reference	(sr)

M 8x1 Mini	M08E	11
Others	DDDD	EE

Male Socket M 5 / S707	M05
Cable with Shrink Hose 1.0	KSM
Flying Leads 1.0*	FLI
Others	FFF

* e.g. with cable length 1 metre

-1 ... 0	9000100		
-1 ... +1	9000900		
0 ... 1.0	00001000	0 ... 10	0001000
0 ... 1.6	0000160	0 ... 16	0001600
0 ... 2.0	0000200	0 ... 20	0002000
0 ... 2.5	0000250	0 ... 25	0002500
0 ... 4	0000400	0 ... 40	0004000
		0 ... 100	0010000
		0 ... 160	0016000
		0 ... 200	0020000
		0 ... 250	0025000
		0 ... 400	0040000
		0 ... 600	0060000
		others	BBB

Restrictor 0.6 mm	RO6
Cleaned for Oxygen Use	O2C
Others (see below)	GGG