

Industrial High Pressure Transducers & Transmitters

HT-SMH Series

- High accuracy & reliability
- Ranges > 1000 bar to 5000 bar
- 2/3 wire 4-20mA & voltage
- Wide choice of connectors
- Temperature -40°C + 125°C
- Compact and rugged design



The HT-SMH series provides a high pressure version of the popular HT-SML Pressure Transducers and Transmitters for general industrial applications, featuring all stainless steel wetted materials. The thin film silicon stainless steel diaphragm provides a perfect solution for demanding hydraulic measurements.

Plant Engineering
Industrial machinery
Refrigeration & HVAC
Hydraulics & Pneumatics
Automotive

Industrial High Pressure Transducers & Transmitters HT-SMH Series

TECHNICAL SPECIFICATIONS

Standard pressure ranges & signal outputs

Measuring range* (bar)	1600	2000	3000	4000	5000
Overload pressure	2400	2400	3600	4800	6000
Burst pressure	3000	3000	4500	6000	7000

* All ranges are sealed gauge reference

Electrical	2 wire / 3 wire	3 wire	3 wire	ratiometric
Output signal	4-20mA	0-10Vdc	1-5Vdc	0.5-4.5Vdc
Supply voltage	9-32Vdc	12-32Vdc	8-32Vdc	5Vdc \pm 10%

- Media temperature range: -40°C to +125°C
- Compensated temperature range: -20°C to +85°C
- Ambient temperature range: -40°C to +105°C

- Ingress protection: IP65 (for connector versions with their mating plug fitted)

Options

- Improved accuracy <0.25% FS (<0.15% BFSL)
 - additional cable (specify length)
- For further options or customised products please contact us.

Performance

- Accuracy: Non-linearity, hysteresis and non-repeatability at room temperature according to IEC 61298-2 (or BS Best Fit Straight Line)
 - <0.5% FS range (<0.25% BFSL)
 - Optional <0.25% FS (<0.15% BFSL)
- Temperature effects: Zero/Span typical thermal coefficients <0.15% FS range/10°C
- Total Error Band: Maximum 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: 20g (according to IEC 68-2-6 and IEC 68-2-36)
- Shock resistance: 1000g (according to IEC to 68-2-32)

Related products

Hydrotechnik manufactures a wide range of sensors, test and measurement equipment.

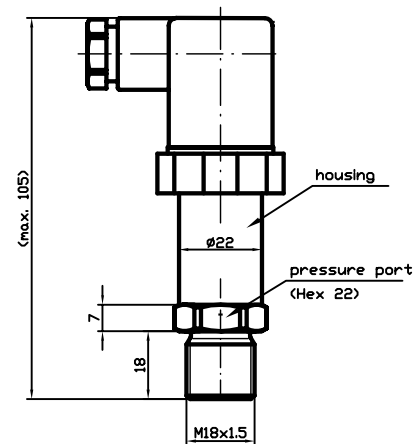
Contact us for further information or visit www.hydrotechnik.co.uk
Continuing development can necessitate specification changes without notice

Physical

- Material: body - stainless steel, pressure inlet port - stainless steel
- Process connection: M18 x 1.5, M16 x 1.5 Female, M18x1.5/K, 9/16-18 UNF-2A /IK 60°
Other connections available on request
- Electrical connection: integral cable (1metre), M12 x 1 male socket, DIN plug/socket, mini DIN plug socket (DIN EN 175301-803)
Other connections available on request
- Weight: approximately 120g - 150g (dependent upon configuration)

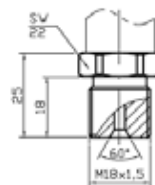
Dimensions

HT-SMH with MVS / Form A DIN EN 17503-803

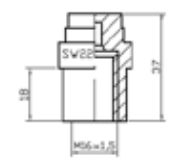


Mechanical Connections

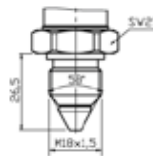
M18 x 1.5



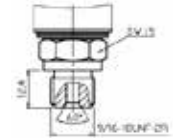
M16 x 1.5 female



M18 x 1.5/K

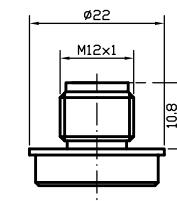


9/16-18 UNF-2A /IK 60°

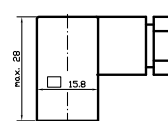


Electrical Connections

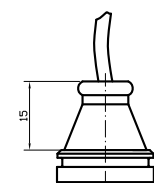
Male socket
M12 x 1 (S763)



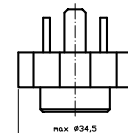
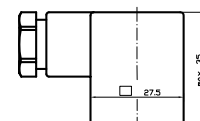
MVS/C DIN plug EN
175301-803



Moulded flying lead



MVS/A DIN plug EN
175301-803



HT-SMH Series ORDER CODES

Series	Output Signal	Pressure Range	Unit	Pressure Type	Process Connection	HEX	Electrical Connection	Extras
HT-SMH	20.0	200000	BAR	(sr)	M18M	22	M12	SCO

4...20 mA / 2 wires	10.0
0...20 mA / 3 wires	10.1
4...20 mA / 3 wires	10.2
0...10 V	20.0
1...5 V	20.1
0...6 V	20.20
0...5 V	20.4
0.5...4.5 V ration	37.0
0.5...4.5 V not ration	40.0
CANopen 2.0A	60.0
Others	AA

bar	BAR
kPa	KPA
MPa	MPA
PSI	PSI
kg/cm2	KGC
others	CCC

Absolute Pressure	(a)
Relative Pressure	(g)
Sealed Reference	(sr)

M 16 x 1.5 female	M16F	22
M 18 x 1.5 male	M18M	22
9/16 - 18 UNF-2B	U98F	22
Others	DDDD	EE

0 ... 1600	0160000
0 ... 2000	0200000
0 ... 3000	0300000
0 ... 4000	0400000
0 ... 5000	0500000
others	BBB

MVC/A	MVA
MVC/C	MVC
Hirschmann Mini	HIM
LEMO EWB IS	LMS
IS9 Industrial Socket	IS9
Packard	PAI
Male Socket M 12 / S763	M12
Male Socket M 16 / S723	M16
Male Socket M 18 / S714	M18
Junior Timer	JTI
Bajonet DIN 72585	BJD
2 RMD Rund	RMB
Super Seal	SUS
Deutsch 3-poles	D03
Deutsch 4-poles	D04
QUICK ON	QON
Flying Leads 1.0*	FLI
Cable Gland Plastic	CPI
Cable Steel 1.0*	KSI
Cable Plastic 1.0*	KPI
Others	FFF

* e.g. with cable length 1 metre

Total Error 0.5%	F50
Total Error other	FXX
Cleaned for Oxygen Use	O2C
Metal Cone	SCO
Schrader Opener 2.9	S29
Others (see below).	SCO