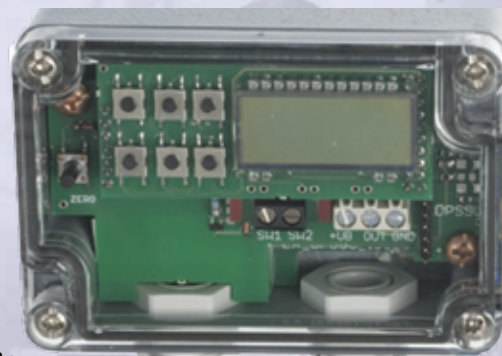


Intrinsically Safe Pressure Switch Transmitter with electrical output

HT-DPSX9



- High accuracy & reliability
- Ranges 5 mbar to 2,000 barg
- 3 wire voltage or 4-20mA output
- Switch signal 2 x PNP transistor
- Temperature -40°C + 100°C
- Compact and rugged design

The HT-DPSX9 series is a compact and rugged industrial pressure switch/transmitter ATEX approved for use in Zone 0 and Zone I hazardous area applications. The system comprises a remote sensor for mounting within the hazardous area and separate signal conditioning enclosure for safe area operation.

Industrial
Environmental
Plant Engineering
Refridgeration & HVAC
Automotive

**Intrinsically Safe
Pressure Switch Transmitter -
with electrical output**

HT-DPSX9 Series

TECHNICAL SPECIFICATIONS

Standard pressure ranges & signal outputs

Measuring range *(mbar)	10	16	20	25	40	60	100
Overload pressure	300	300	300	300	300	300	300
Burst pressure	500	500	500	500	500	500	500
Measuring range (mbar)	160	200	250	400			
Overload pressure	300	300	2000	2000			
Burst pressure	500	500	3000	3000			
Measuring range (bar)	0.6	1	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	600	1000	1600	2000
Overload pressure	400	750	750	840	1200	2400	2400
Burst pressure	600	1000	1000	1050	1500	3000	3000

Note: Measuring range adjustable up to 4:1

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

Electrical	3 wire	pnp switch x 2 (Individually adjustable)
Output signal	4-20mA or 0-10Vdc	normally open (NO) or normally closed (NC)
Supply voltage	14-32Vdc	14-32 Vdc, 100mA max

- Media temperature -40°C to +100°C
- Compensated range -20°C to +85°C
- Ambient temperature -40°C to +85°C
(Control terminal -40°C to +70°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 (<0.25% BFSL)
Optional <0.25% FS range (<0.15% BFSL)
Note: <1% FS for ranges <1 bar
- 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: <100ms (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)
- Intrinsically safe approvals: (ATEX directive)
Sensor: II ID Ex ia DT135°C (IBExU09ATEX I 106) or II IG Ex ia IIC T4
Terminal: II (1) D Ex ia DT (IBExU09ATEX I 106) or II (1) G (EX ia) IIC

Physical

- Material: body - stainless steel, pressure inlet port - stainless steel (+silicon for ranges <1 bar)
- Process connection: G 1/4 A, 1/4NPT, G 1/2B. Other connections available on request
- Electrical connection: integral cable gland
- Weight: sensor approximately 200g (dependent upon configuration)
- Ingress protection: IP65 (for connector versions with their mating plug fitted)

Options

- (1) Improved accuracy <0.25% FS
Note: <1% FS for ranges <1 bar
 - (2) additional cable (specify length)
- For further options or customised products please contact us.

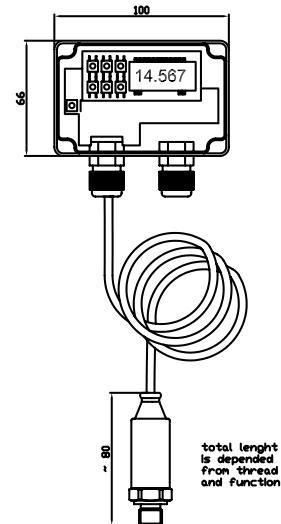
Related products

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

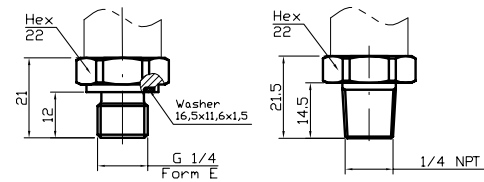
Dimensions

DPSX9 with housing

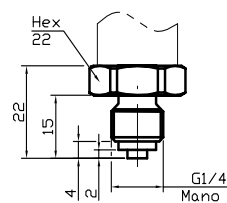


Mechanical Connections

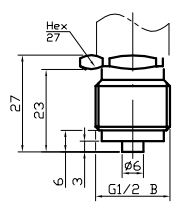
G 1/4 A; DIN 3852; Form E 1/4 NPT



G 1/4 B



G 1/2 B



HT-DPSX9 Series ORDER CODES

Series	Output Signal	Pressure Range	Unit	Pressure Type	Process Connection	HEX	Electr. Connection	Extras
HT-DPSX9	I	000400	MPa	(g)	I4NP	22	KLE	F50

0...20 mA / 3 wires	I
0...10 V	U

bar	BAR
kPa	KPA
MPa	MPA
PSI	PSI
kg/cm ²	KGC
others	CCC

Relative Pressure	(g)
Sealed Reference	(sr)

-I ... 0	9000100	0.... 10	0001000
-I....+I	9000900	0 ... 16	0001600
		0 ... 20	0002000
0 ... 0.060	0000006	0 ... 25	0002500
0 ... 0.100	0000010	0 ... 40	0004000
0 ... 0.160	0000016	0 ... 60	0006000
0 ... 0.200	0000020		
0 ... 0.250	0000025	0 ... 100	0010000
0 ... 0.400	0000040	0 ... 160	0016000
		0 ... 250	0025000
0 ... 1.0	0000100	0 ... 400	0040000
0 ... 1.6	0000160	0 ... 600	0060000
0 ... 2.0	0000200		
0 ... 2.5	0000250	0 ... 1000	0100000
0 ... 4	0000400	0 ... 1600	0160000
0... 6	0000600	0 ... 2000	0200000
-0.060 0	9000006		
-0.100 0	9000010		
-0.200 0	9000020		
-0.250 0	9000025		
0.400 0	9000040		
0.600 ... 0	9000060		
		others	BBB

G 1/8 A Shape A	G18A	22
G 1/4 A Shape A	G14A	22
G 1/4 A Shape E	G14E	22
G 1/4 B (Manom.)	G14B	22
G 1/2 B (Manom.)	G12B	27
G 1/2 A Shape E	G12E	27
1/8 NPT	I8NP	22
1/4 NPT	I4NP	22
9/16-18 UNF-2A	U98M	22
7/16-20 UNF-2A/C	U72C	22
7/16-20 UNF-2B	U72F	22
3/8-24 UNF-2A	U38M	22
3/8-24 UNF-2A/C	U38C	22
1/2-20 UNF-2A	U12M	22
M 8x1 male	M08M	22
M 10x1 Shape A	M10A	22
M 12x1 Shape E	M12E	22
M 12x1 konical	M12C	22
M 12x1,5 Ct-Ring	M12S	22
M 14x1,5 Shape A	M14A	22
M 14x1,5 Shape E	M14E	22
M 14x1,5 ISO	M14O	22
M 16x1,5 Shape A	M16A	22
M 16x1,5 female	M16F	22
M 18x1,5 male	M18M	22
M 20x1,5 Manom	M20B	22
R 1/4 male	R14M	22
Others	DDDD	EE

Screw Terminal	KLE
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Restrictor 0.6 mm	R06
Restrictors others	RXX
Total Error 0.5%	F50
Total Error 0.25%	F25
Total Error other	FXX
Special Calibration	FSP
Additional Switched Output	ZSA
Metal Cone	SCO