

Overview

- OEM applications
- Excellent price/performance ratio
- Measurement of vacuum, absolute or gauge pressure
- 2 threshold outputs: PNP transistors
- Compact and robust stainless steel housing
- External programming of zero point and span with FlexProgrammer 9701



Technical data

Performance characteristics

Measuring range	0... 60 bar , absolute -1 ... 600 bar , relative (gauged)
Min. measuring span	1 bar
Max. measuring span	601 bar
Pressure type	Absolute Relative (gauged)
Standard error of measurement (BFSL)	± 0.5 % FSR Including non-linearity, hysteresis and non-repeatability according BFSL
Max. measuring error	± 1.3 % FSR Including zero-point and span error, non-linearity (by terminal base line), hysteresis and non-repeatability (EN 61298-2)
Temperature coefficient	≤ 0.25 % FSR/10 K , measuring span @ -20 ... 60 °C
Repeatability	± 0.2 % FSR
Rise time (10 ... 90 %)	≤ 50 ms
Threshold setting range	2 ... 98 % FSR

Process conditions

Maximum media temperature	-20 ... 100 °C
Process pressure	Refer to section "Operating conditions"

Process connection

Connection variants	Refer to section "Dimensional drawings"
Wetted parts material, gasket	NBR
Wetted parts material, membrane	Ceramic, 96% AL2O3
Wetted parts material, process connection	AISI 316L (1.4404)

Ambient conditions

Free fall (EN 60068-2-32)	25 falls from 1 m onto concrete floor
Vibration (sinusoidal) (EN 60068-2-6)	1.5 mm p-p (10 ... 58 Hz), 20 g (58 Hz ... 2 kHz)
Degree of protection (EN 60529)	IP 65 , with connector DIN EN 175301-803 A (DIN 43650 A), 4-pin IP 67 , with connector M12-A, 5-pin
Operating temperature range	-20 ... 80 °C
Storage temperature range	-30 ... 85 °C

Output signal

Output signal	Switching output
Response time	< 50 ms , typ.
Switching capacity	400 mA , max., with M12-A, 4-pin 800 mA , max., with DIN EN 175301-803 A (DIN 43650 A), 4-pin
Short circuit protection	Yes

Housing

Overall size	Refer to section "Dimensional drawings"
Style	Compact transmitter
Weight	140 g , with M12-A, 4-pin 150 g , with DIN EN 175301-803 A (DIN 43650 A), 4-pin
Material	AISI 304 (1.4301)

Electrical connection

Connector	DIN EN 175301-803 A (DIN 43650 A), 4-pin M12-A, 5-pin
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Power supply

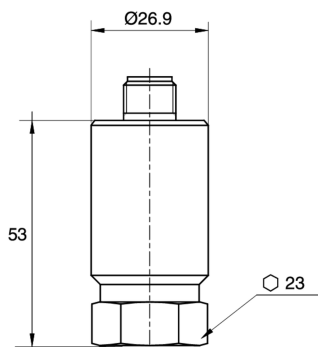
Voltage supply range	11 ... 40 V DC
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Operating conditions

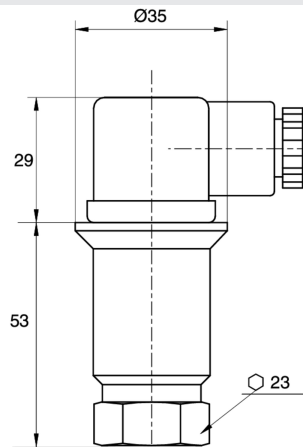
Measuring range (bar)		Proof pressure (bar)	Burst Pressure (bar)
-1 ... 0	-1 ... 0,6 0 ... 1	3	6
-1 ... 1,5	0 ... 2,5	4	7
-1 ... 3	0 ... 4	8	12
-1 ... 5	0 ... 6	12	18
-1 ... 9	0 ... 10	20	30
-1 ... 15	0 ... 16	32	48
-1 ... 24	0 ... 25	50	75
-1 ... 39	0 ... 40	80	120
	0 ... 60	120	180
	0 ... 100	200	300
	0 ... 160	320	480
	0 ... 250	500	600
	0 ... 400	600	800
	0 ... 600	800	1000

Dimensional drawings

Housing

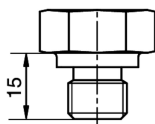


Housing with connector M12-A, 4-pin

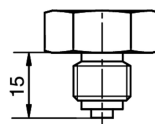


Housing with connector DIN EN 175301-803 A (DIN 43650 A), 4-pin

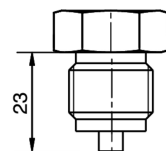
Process connection



G50-B
G 1/4 A DIN 3852-E (BCID: G50)

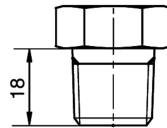
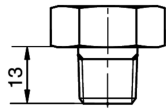


G30-2
G 1/4 B EN 837-1 (BCID: G30)



G31-3
G 1/2 B EN 837-1 (BCID: G31)

Process connection

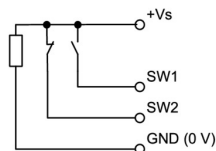


N01-5
1/4-18 NPT (BCID: N01)

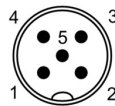
N02-6
1/2-14 NPT (BCID: N02)

Electrical connection

Equivalent circuit



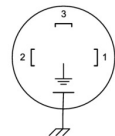
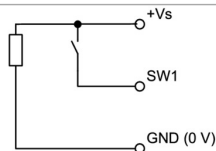
Electrical connection



Function

Pin assignment

+Vs	1
SW1	4
SW2	2
GND (0 V)	3
Frame Ground	5



Function

Pin assignment

+Vs	1
SW1	3
GND (0 V)	2
Frame Ground	Grounding lug

Ordering information

Ordering key - Configuration possibilities see website

	CPX	-	X	.	#	.	#	###	#	.	0	####
Product	CPX											
Housing material												
Stainless steel, 1.4404 (AISI 316L)			X									
Process connection												
G 1/4 A DIN 3852-E (G50)											B	
G 1/4 B EN 837-1 (G30)											2	
G 1/2 B EN 837-1 (G31)											3	
1/4-18 NPT (N01)											5	
1/2-14 NPT (N02)											6	
Sealing												
NBR												3
EPDM												5
FKM (Viton®)												9
Measuring range												
0...1 bar (EN)												B15
0...1,6 bar (EN)												B16
0 ... 2.5 bar (EN)												B18
0 ... 4 bar (EN)												B19
-1...39 bar (EN)												B1L

Ordering key - Configuration possibilities see website

	CPX	-	X	.	#	.	#	###	#	.	0	####
0 ... 6 bar (EN)												B20
0 ... 10 bar (EN)												B22
0 ... 16 bar (EN)												B24
0...25 bar (EN)												B26
0...40 bar (EN)												B27
0...60 bar (EN)												B29
0...100 bar (EN)												B31
0 ... 160 bar (EN)												B33
0...250 bar (EN)												B35
0...400 bar (EN)												B38
0...600 bar (EN)												B39
-1...0 bar (EN)												B59
-1...0,6 bar (EN)												B72
-1...1,5 bar (EN)												B74
-1...3 bar (EN)												B76
-1...5 bar (EN)												B77
-1...9 bar (EN)												B79
-1...15 bar (EN)												B81
-1...24 bar (EN)												B82
0...100 kPa (EN)												D15
0...160 kPa (EN)												D16
0...250 kPa (EN)												D18
0...400 kPa (EN)												D19
-100...3900 kPa (EN)												D1L
0...600 kPa (EN)												D20
0...1000 kPa (EN)												D22
0...1600 kPa (EN)												D24
0...2500 kPa (EN)												D26
0...4000 kPa (EN)												D27
0...6000 kPa (EN)												D29
0...10000 kPa (EN)												D31
0...16000 kPa (EN)												D33
0...25000 kPa (EN)												D35
0...40000 kPa (EN)												D38
0...60000 kPa (EN)												D39
-100...0 kPa (EN)												D59
-100...60 kPa (EN)												D72
-100...150 kPa (EN)												D74
-100...300 kPa (EN)												D76
-100...500 kPa (EN)												D77
-100...900 kPa (EN)												D79
-100...1500 kPa (EN)												D81
-100...2400 kPa (EN)												D82
0...1 kg/cm2 (EN)												F15
0...1,6 kg/cm2 (EN)												F16
0...2,5 kg/cm2 (EN)												F18
0...4 kg/cm2 (EN)												F19
-1...39 kg/cm2												F1L
0...6 kg/cm2 (EN)												F20
0...10 kg/cm2 (EN)												F22

Ordering key - Configuration possibilities see website

	CPX	-	X	.	#	.	#	###	#	.	0	####
0...16 kg/cm ² (EN)								F24				
0...25 kg/cm ² (EN)								F26				
0...40 kg/cm ² (EN)								F27				
0...60 kg/cm ² (EN)								F29				
0...100 kg/cm ² (EN)								F31				
0...160 kg/cm ² (EN)								F33				
0...250 kg/cm ² (EN)								F35				
0...400 kg/cm ² (EN)								F38				
0...600 kg/cm ² (EN)								F39				
-1...0 kg/cm ² (EN)								F59				
-1...0,6 kg/cm ² (EN)								F72				
-1...1,5 kg/cm ² (EN)								F74				
-1...3 kg/cm ² (EN)								F76				
-1...5 kg/cm ² (EN)								F77				
-1...9 kg/cm ² (EN)								F79				
-1...15 kg/cm ² (EN)								F81				
-1...24 kg/cm ² (EN)								F82				
0...15 psi (ANSI)								H15				
0...30 psi (ANSI)								H17				
0...60 psi (ANSI)								H19				
0...20 psi (ANSI)								H1C				
-30Hg...600 psi (ANSI)								H1L				
0...100 psi (ANSI)								H21				
0...160 psi (ANSI)								H22				
0...200 psi (ANSI)								H23				
0...300 psi (ANSI)								H25				
0...400 psi (ANSI)								H26				
0...600 psi (ANSI)								H27				
-30HG...60 psi (ANSI)								H2C				
0...1000 psi (ANSI)								H30				
0...1500 psi (ANSI)								H31				
0...3000 psi (ANSI)								H34				
0...6000 psi (ANSI)								H38				
0...10000 psi (ANSI)								H40				
-30HG...0 psi (ANSI)								H59				
-30HG...15 psi (ANSI)								H73				
-30HG...30 psi (ANSI)								H75				
-30HG...100 psi (ANSI)								H78				
-30HG...150 psi (ANSI)								H79				
-30HG...220 psi (ANSI)								H81				
-30HG...300 psi (ANSI)								H82				
Kind of pressure												
Relative (gauged)											R	
Absolute											A	
Settings												
Without setting											0	
Electrical Connection												
M12-A, 5-pin with shielded cable, lenght: 2 m												0604
M12-A, 5-pin with shielded cable, lenght: 5 m												0605
M12-A, 5-pin with shielded cable, lenght: 10 m												0606

Ordering key - Configuration possibilities see website

CPX - X . # . # ### # . 0 ####

DIN 43650, 4-pol, spec. Wiring	2171
M12 mobil plug + cable 10 m length	2236
M12 mobil plug + cable 2 m length	2267
M12 mobil plug + cable 5 m length	2269