

**Overview**

- All market typical hygienic connections available
- Resistant to all common CIP cleaning media
- Condensate-proof measuring cell
- Optionally available with IO-Link (in parallel to 4 ... 20 mA)
- Space-saving installations from DN 25 on
- Absolute pressure, relative pressure and vacuum measurement



**Technical data**

**Performance characteristics**

Pressure type	Absolute Relative (gauged)
Compensated temperature range	-20 ... 125 °C
Long term stability	≤ 0.2 % FSR/a
Max. measuring error	± 0.5 % FSR ± 1.0 % FSR , 0 ... 0.4 bar Including zero-point and span error, non-linearity (by terminal base line), hysteresis and non-repeatability (EN 61298-2)
Max. measuring span	40 bar
Measuring range	-1 ... 40 bar
Standard error of measurement (BFSL)	± 0.2 % FSR ± 0.5 % FSR , 0 ... 0.4 bar Including non-linearity, hysteresis and non-repeatability according BFSL
Min. measuring span	0.4 bar
Rise time (10 ... 90 %)	≤ 20 ms
Temperature coefficient	≤ 0.2 % FSR/10 K , measuring span ≤ 0.2 % FSR/10 K , zero point

**Process conditions**

Process temperature	-20 ... 125 °C
Process pressure	Refer to section "Operating conditions"
SIP/CIP compatibility	< 35 min, in general @ medium temperature up to 150 °C < 60 min, in general @ medium temperature up to 135 °C < 60 min, with process connection G 1/2 A hygienic @ medium temperature up to 135 °C

**Process connection**

Connection variants	Refer to section "Dimensional drawings"
Wetted parts material	AISI 316L (1.4404)
Wetted parts material, membrane	AISI 316L (1.4435)

**Surface roughness (in contact with medium)**

Process connection	Ra ≤ 0.8 μm
<b>Ambient conditions</b>	
Operating temperature range	-20 ... 85 °C
Storage temperature range	-40 ... 85 °C
Degree of protection (EN 60529)	IP 67 , without connector M12-A, 4-pin IP 69 , with appropriate cable
Insulation resistance	> 100 MΩ , 500 V DC
Bump (EN 60068-2-27)	100 g / 2 ms, 4000 impulses per axis and direction
Cold (EN 60068-2-1)	Ab: -40 °C, 2 h (not in operation)
Damp heat, cyclic (EN 60068-2-30)	Db: 55°C, Variant 1, 2 cycles (2 · 24 h)
Dry heat (EN 60068-2-2)	Be: 85 °C, 6 h (in operation)
Shock (EN 60068-2-27)	50 g / 11 ms, 100 g / 6 ms, 10 impulses per axis and direction
Vibration (sinusoidal) (EN 60068-2-6)	1.5 mm p-p (10 ... 58 Hz), 10 g (58 Hz ... 2 kHz), 10 cycles (2.5 h) per axis
Vibration, broad-band random (EN 60068-2-64)	0.1 g <sup>2</sup> / Hz, > 10 gRMS (20 Hz ... 1 kHz), 30 min. per axis

**Output signal**

Current output	4 ... 20 mA , 2-wire
Short circuit protection	Yes
Shunt resistance	Rs ≤ (Vs - 8 V)/0.02 A

**Housing**

Style	Compact transmitter
Overall size	Refer to section "Dimensional drawings"
Material	AISI 316L (1.4404)

**Electrical connection**

Connector	M12-A, 4-pin, stainless steel, 4 ... 20 mA output M12-A, 5-pin, stainless steel, IO-Link output
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# PP20H

Fully welded pressure sensor with hygienic connection

PP20H-2.#####.A114.##202#.000

## Technical data

### Power supply

Voltage supply range 11 ... 30 V DC , with 4 ... 20 mA output signal  
18 ... 30 V DC , with IO-Link

Reverse polarity protection Yes

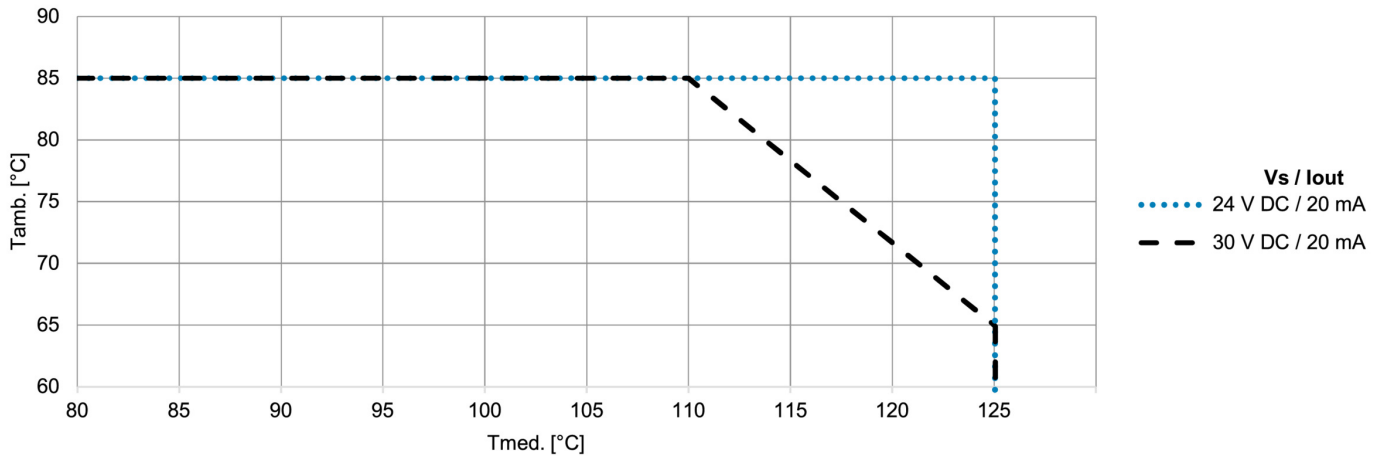
### Compliance and approvals

EMC EN 61000-6-2  
EN 61000-6-3  
EN 61326-2-3

## Operating conditions

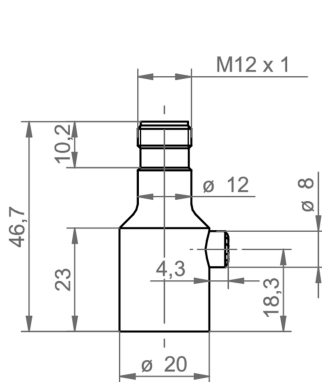
Measuring range (bar)				Proof pressure (bar)	Burst Pressure (bar)
-1 ... 0	-1 ... 1	0 ... 0.4	0 ... 1	5	10
-1 ... 3	-1 ... 5	0 ... 2.5	0 ... 4	10	20
	-1 ... 9	0 ... 6	0 ... 10	20	40
	0 ... 25			50	100
	0 ... 40			80	160

## Maximum operating conditions in subject to temperature

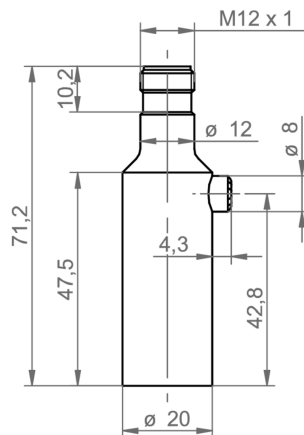


## Dimensional drawings

### Housing



Short housing with connector M12-A



Long Housing with connector M12-A

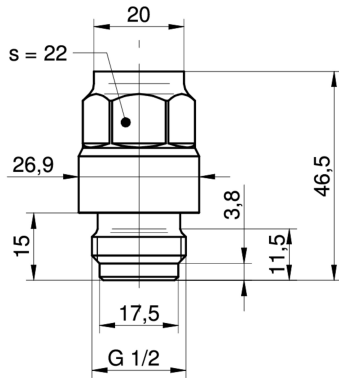
# PP20H

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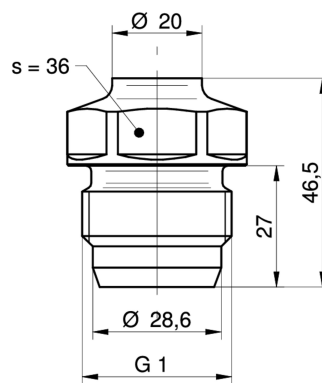
PP20H-2.#####.A114.##202#.000

## Dimensional drawings

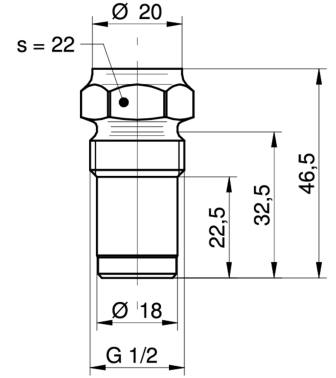
### Process connection



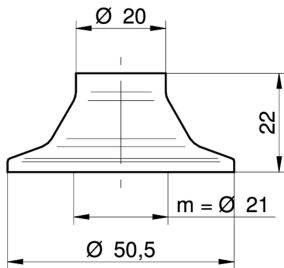
G51-41  
G 1/2 A DIN 3852-E (BCID: G51)



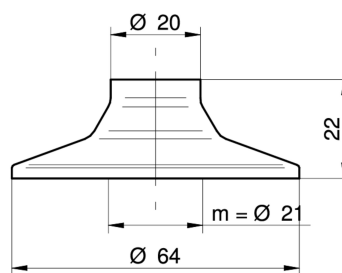
A04-44  
G 1 A hygienic (BCID: A04)



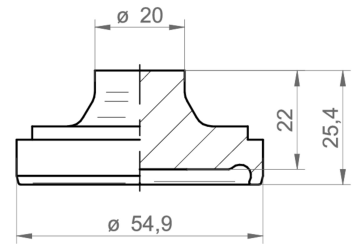
A03-48  
G 1/2 A hygienic (BCID: A03)



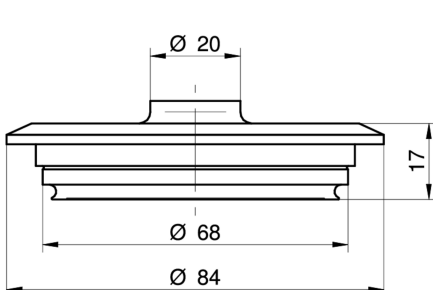
C03-53  
Tri-Clamp  $\text{\O} 50.5$  (BCID: C03)



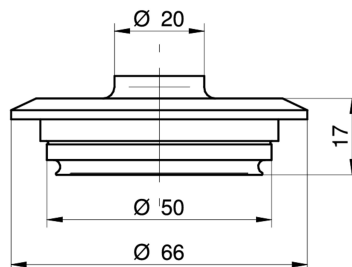
C05-54  
Tri-Clamp  $\text{\O} 64.0$  (BCID: C05)



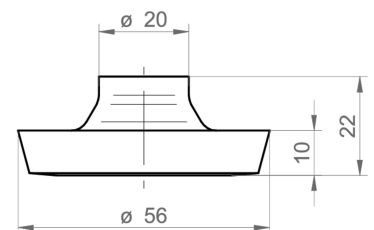
H03-59  
DIN 11864-1-A (aseptic screwed union), DN 40  
(BCID: H03)



V02-61  
Varivent $\text{\O}$  DN 32 ... 125; 1 1/2" ... 6" (Type N),  
 $\text{\O} 68$  (BCID: V02)



V01-62  
Varivent $\text{\O}$  DN 25; 1" (Type F),  $\text{\O} 50$  (BCID:  
V01)



D03-65  
DIN 11851 (dairy pipe connection), DN 40  
(BCID: D03)



## PP20H

Fully welded pressure sensor with hygienic connection

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### Ordering information

**Ordering key - Configuration possibilities see website**

	PP20H	-	2	.	#	###	#	.	A1	14	.	##	2	0	2	0	.	0	0	0
-1...3 bar (EN)							B76													
-1...5 bar (EN)							B77													
-1...9 bar (EN)							B79													
0...5 bar (EN)							B98													
<b>Kind of pressure</b>																				
Relative (gauged)																				R
Absolute																				A
<b>Output signal</b>																				
4...20 mA										A1										
<b>Output Connection</b>																				
M12-A, 4-pin																				14
<b>Process connection</b>																				
G 1/2 A DIN 3852-E (G51)																				41
G 1 A hygienic (A04)																				44
G 1/2 A hygienic (A03)																				48
ISO 2852 (Tri-Clamp), DN 25, Ø 50.5 (C03)																				53
ISO 2852 (Tri-Clamp), DN 40; 51, Ø 64.0 (C05)																				54
Varivent® DN 32 ... 125; 1 1/2 ... 6 (Type N), Ø 68 (V02)																				61
Varivent® DN 25; 1 (Type F), Ø 50 (V01)																				62
DIN 11864-1-A (aseptic screwed union), DN 50 (H04)																				68
DIN 11864-1-A (aseptic screwed union), DN 40 (H03)																				59
DIN 11851 (dairy pipe connection), DN 40 (D03)																				65
DIN 11851 (dairy pipe connection), DN 50 (D04)																				66
<b>Process connection material</b>																				
Stainless steel 1.4404 AISI 316L																				2
<b>Seal</b>																				
None																				0
<b>Oil filling</b>																				
NSF H1 listed (FDA approved)																				2
<b>Display</b>																				
Without display																				0
<b>ATEX</b>																				
Standard safety																				0
<b>Approvals</b>																				
Standard approvals																				0
<b>Turn down PP20H</b>																				
Without Turn-Down																				0

### ООО "РусАвтоматизация"