



Pressure transmitter

## OEM relative pressure transmitter

### Type 506

Type 506 pressure transmitters are suitable for different applications in the field of industrial refrigeration due to its application specific pressure connections.

Partially automated manufacturing allows the efficient production of large quantities, resulting in an excellent price / performance ratio.



## Pressure range

**-0.5 ... 7 bar /**

**0 ... 10 – 60 bar**

- + Compact construction
- + Automated manufacture in large quantities for ideal price / performance ratio
- + Robust ceramic sensor technology
- + High resistance to extreme temperatures
- + No mechanical creepage

## Technical overview

<b>Pressure range</b>				
Relative		-0.5 ... 7 bar / 0 ... 10 – 60 bar		
<b>Operating conditions</b>				
Medium		Refrigerants		
Temperature		Medium / ambient	-40 ... +80 °C	
		Storage	-40 ... +80 °C	
Tolerable overload			2 x fs (max. 80 bar)	
Rupture pressure			3 x fs (max. 90 bar)	
<b>Materials</b>				
Case		PA6, red		
Materials in contact with the medium		Sensor	Ceramic Al <sub>2</sub> O <sub>3</sub> (96%)	
		Pressure connection	Stainless steel 1.4305 / AISI 303	
		Sealing material	CR (chlorine caoutchouc)	
<b>Electrical overview</b>				
	Output	Power supply	Load	Current consumption <sup>1)</sup>
2 wire	4 ... 20 mA	8.0 ... 33 VDC	$< \frac{\text{supply voltage} - 8V}{0.02 A}$ [Ohm]	< 20 mA
	4 ... 20 mA	10.0 ... 33 VDC	$< \frac{\text{supply voltage} - 10V}{0.02 A}$ [Ohm]	< 20 mA
3 wire	0 ... 5 V	9.0 ... 33 VDC	> 10 kOhm / < 100 nF	< 5 mA
	1 ... 6 V	10.4 ... 33 VDC	> 10 kOhm / < 100 nF	< 5 mA
	0 ... 10 V	16.2 ... 33 VDC	> 10 kOhm / < 100 nF	< 6 mA
	ration. 10 ... 90%	5 VDC ±5%	> 10 kOhm / < 100 nF	< 3 mA
Polarity reversal protection		Short circuit proof and protected against polarity reversal. Each connection is protected against crossover up to max. supply voltage.		
<b>Dynamic response</b>				
Response time		< 5 ms		
Load cycle		< 50 Hz		
<b>Protection standard</b>				
IP 65				
<b>Electrical connection</b>				
Cable 1.5 m		IP 65		
Connector DIN EN 175301-803-A		IP 65		
Connector DIN EN 175301-803-C (industrial standard 9.4 mm)		IP 65		
Connector M12x1 (pastic)		IP 65		
<b>Pressure connection</b>				
Inside thread		7/16 - 20 UNF Schrader		
Outside thread		7/16 - 20 UNF 1/4 -18 NPT		
<b>Installation arrangement</b>				
Recommended: Pressure connection downwards				
<b>Tests / Admissions</b>				
Electromagnetic compatibility		CE conformity acc. EN 61326-2-3		
<b>Weight</b>				
With inside thread		~ 95 g		
With outside thread		~ 110 g		
With cable 1.5 m additional		~ 40 g		
<b>Packaging (Please state on order)</b>				
Single packaging in cardboard				
Multiple packaging in cardboard per 25 pcs.				

## Accuracy

Parameter		Einheit	0 ... 10 bar	> 10 ... 60bar
Tolerance zero point	max.	% fs	± 1.0	± 1.0
Tolerance full scale	max.	% fs	± 1.0	± 1.0
Resolution		% fs	0.1	0.1
Total of linearity, hysteresis and repeatability	max.	% fs	± 1.0	± 0.5
Long term stability acc. to DIN EN 60770		% fs	± 1.0	± 1.0
TC zero point <sup>2)</sup>	max.	% fs/10K	± 0.4	± 0.4
TC sensitivity <sup>2)</sup>	typ.	% fs/10K	- 0.15	- 0.15
TC sensitivity <sup>2)</sup>	max.	% fs/10K	- 0.3	- 0.3

Test conditions: 25 °C, 45% RH, power supply 24 VDC  
TC z.p. / TC s. -40 ... +80 °C

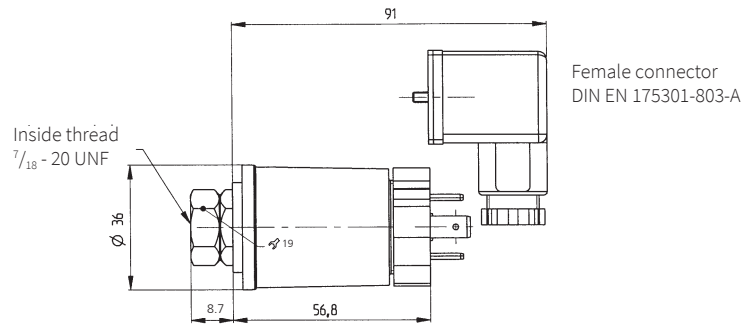
<sup>1)</sup> At nominal pressure

<sup>2)</sup> TC = Temperature coefficient

		1	2	3	4	5	6	7	8	9	10
<b>Order code selection table</b>		506. X X X X X X X X X X									
<b>Pressure range</b>	0 ... 10 bar	9	3	0							
	0 ... 16 bar	9	3	1							
	0 ... 25 bar	9	3	2							
	0 ... 40 bar	9	3	3							
	0 ... 60 bar	9	4	0							
	▲ Full scale signal at these pressures										
<b>Sealing material <sup>1)</sup></b>	CR						A				
<b>Adjustment</b>	Factory					0					
<b>Output / power supply</b>	0 ... 5 V	9.0 ... 33 VDC						1			
	1 ... 6 V	10.4 ... 33 VDC						6			
	0 ... 10 V	16.2 ... 33 VDC						2			
	4 ... 20 mA	10.0 ... 33 VDC						3			
		8.0 ... 33 VDC							8		
	ration. 10 ... 90%	5 VDC ±5%						4			
<b>Electrical connection</b>	Cable	1.5 m							0		
		DIN EN 175301-803-A							1		
	Connector <sup>2)</sup>	DIN EN 175301-803-C (industrial standard 9.4 mm)							2		
		M12x1 (plastic)							3		
<b>Pressure connection</b>	Inside thread	7/16 - 20 UNF Schrader							0	1	
	Outside thread	7/16 - 20							2		
		1/4 - 18 NPT							3		
<b>Pressure tip orifice</b>	without									1	
	with									2	
<b>Pressure range variation (optional)</b>	Indicate W and state range on order (e.g.: W0...8bar/Out1...8V)										
											W

Storage versions	Order number
------------------	--------------

Output	4 ... 20 mA	Pressure range	
Power supply	10 ... 33 VDC	-0.5 ... 7 bar	506.930A23101W-0.5...7bar
Electrical connection <sup>2)</sup>	Connector DIN EN 175301-803-A, IP 65	0 ... 25 bar	506.932A23101W0...25bar
Pressure connection	Inside thread 7/16-20 UNF		
Sealing material	CR (chlorine caoutchouc)		
Colour of cover	black		

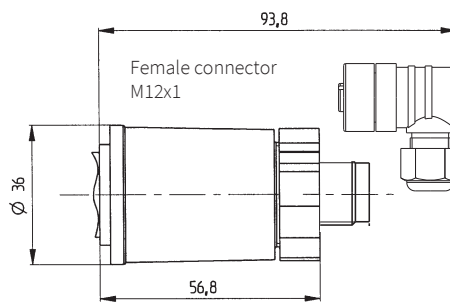
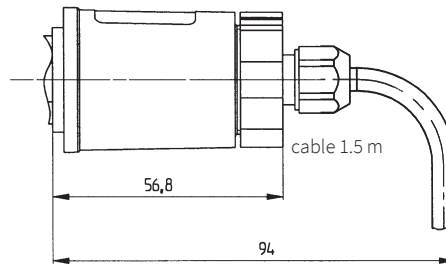
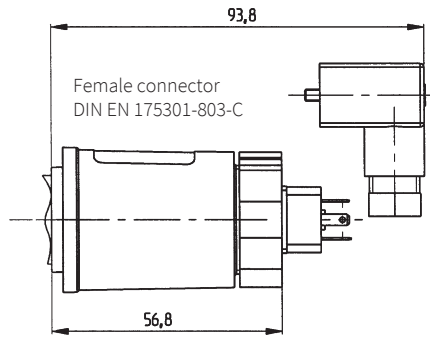
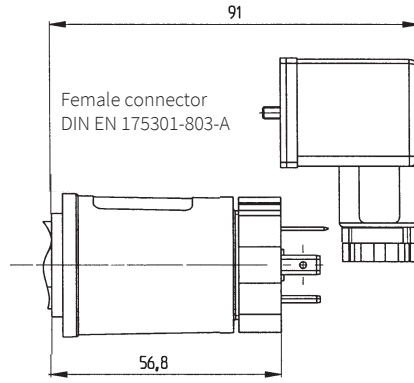
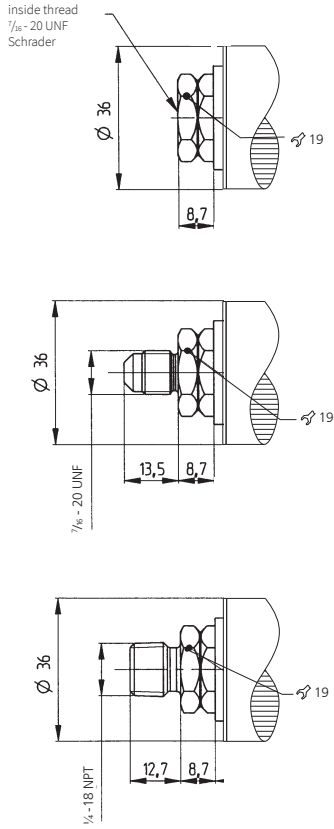


Accessories (supplied loose)	Order number
------------------------------	--------------

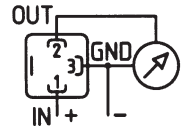
Female connector DIN EN 175301-803-A with seal (IP 65, when installed and latched)	103510
Female connector DIN EN 175301-803-C with seal (IP 65, when installed and latched)	104244
Female connector M12x1	103524
Calibration certificate	104551

<sup>1)</sup> According to ISO standard R 1629, other sealing materials on request

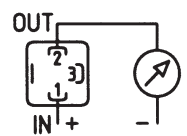
<sup>2)</sup> Without female connector



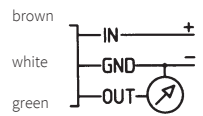
3 wire



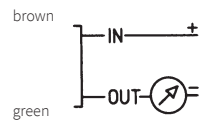
2 wire



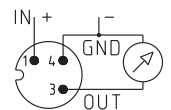
3 wire



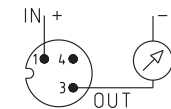
2 wire



3 wire



2 wire



**Huba Control AG**

Headquarters Schweiz  
Industriestrasse 17  
CH-5436 Würenlos  
Telefon +41 56 436 82 00  
Fax +41 56 436 82 82  
info.ch@hubacontrol.com

**Huba Control AG**

Niederlassung Deutschland  
Schlattgrabenstrasse 24  
D-72141 Walddorfhäslach  
Telefon +49 7127 2393 00  
Fax +49 7127 2393 20  
info.de@hubacontrol.com

**Huba Control AG**

Vestiging Nederland  
Hamseweg 20A  
NL-3828 AD-Hoogland  
Telefoon +31 33 433 03 66  
Telefax +31 33 433 03 77  
info.nl@hubacontrol.com

**Huba Control SA**

Succursale France  
Rue Lavoisier  
Technopôle Forbach-Sud  
F-57602 Forbach Cedex  
Téléphone +33 3 87 84 73 00  
Télécopieur +33 3 87 84 73 01  
info.fr@hubacontrol.com

**Huba Control AG**

Branch Office United Kingdom  
Unit 13 Berkshire House, County Park  
Business Centre, Shrivenham Road  
Swindon, Wiltshire SN1 2NR  
Phone +44 1993 77 66 67  
Fax +44 1993 77 66 71  
info.uk@hubacontrol.com

**[www.hubacontrol.com](http://www.hubacontrol.com)**

