

# PR Series

Relative pressure sensor - 0 to 1000 bar

Ref : 2548 Industrial

Rev : B




## DESCRIPTION

These pressure sensors are based on thick-film technology. The measuring cell is welded to the pressure connection and does not require a gasket.

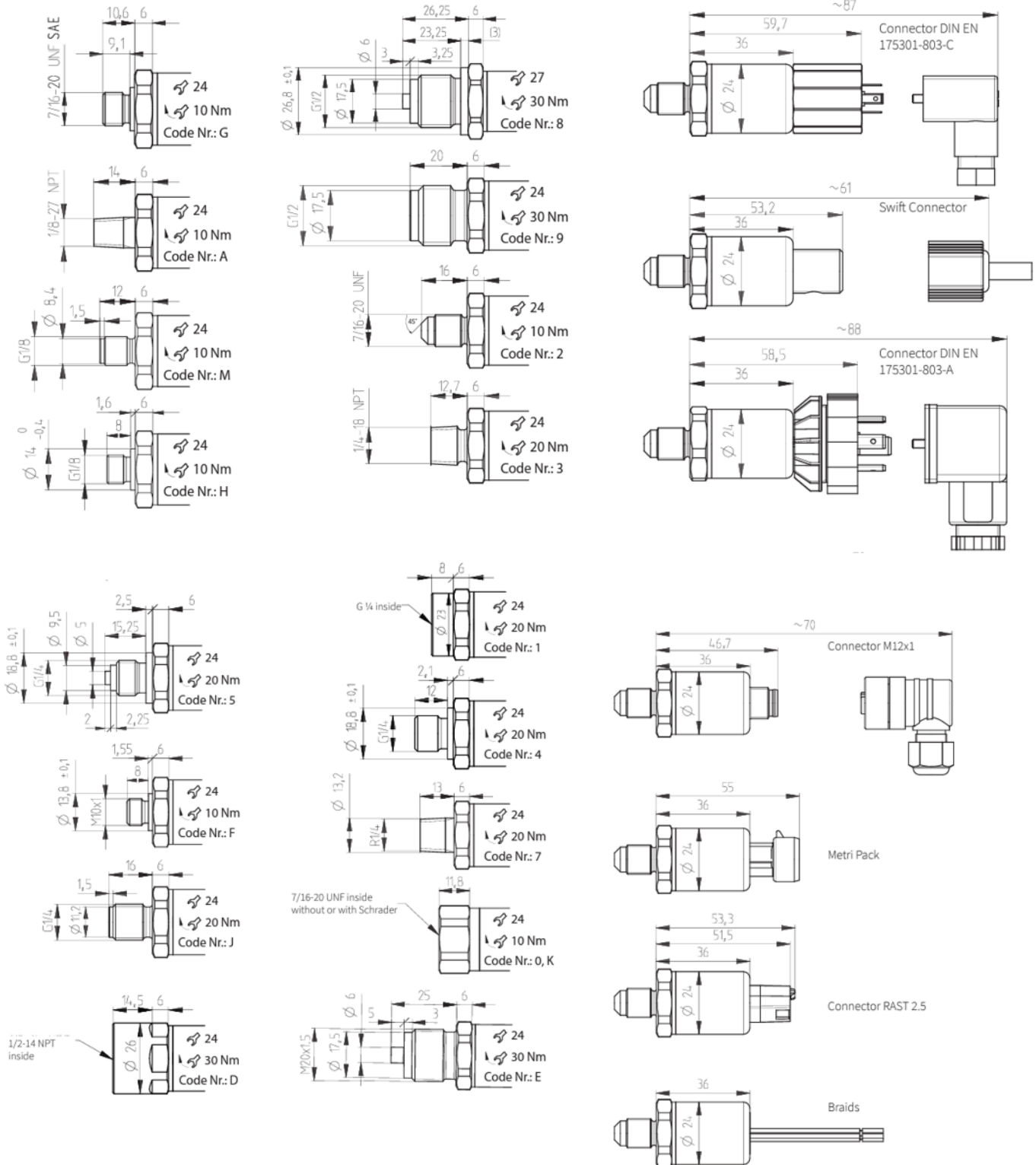
Designed for highly operational applications, these sensors are suitable for use with refrigerants including ammonia. *MESUREX is a sensor manufacturer. We can adapt most sensors to your needs. Please [contact us](#).*

## TECHNICAL DATA

MODEL		Current output - mA	Current output - EX <sup>Ⓢ</sup>	Amplified output – 5V	Amplified output – 10V
<b>INPUT</b>	BAR	-1 – 9   0 – 2.5 / 4 / 6 / 10 / 16 / 25 / 40 / 60 / 100 / 160 / 250 / 400 / 600 / 1000			
Pressure range	PSI	-15 – 130   0 – 30 / 60 / 100 / 200 / 300 / 500 / 750 / 1000 / 2000 / 3000 / 5000 / 7500 / 14500			
Type of pressure		Relative			
Permissible overload		≤ 6 bar 5 x FSO / > 6 bar 3 x FSO (max. 1500 bar)			
Burst pressure		≤ 6 bar 10 x FSO / > 6 bar 6 x FSO (max. 2500 bar)			
Medium		Liquids, gases and refrigerants (including ammonia)			
Current absorbed		< 23 mA	< 23 mA	< 7 mA	< 7 mA
Power supply		7 – 33 Vdc	10 – 30 Vdc	8 – 33 Vdc	12 – 33 Vdc
<b>OUTPUT</b>					
Full scale output		20 mA	20 mA	5 V	10 V
Charge		$< \frac{\text{Supply voltage}-7V}{0.02 A} \Omega$	$< \frac{\text{Supply voltage}-10V}{0.02 A} \Omega$	> 10 kΩ / < 100 nF	> 10 kΩ / < 100 nF
Offset at 20°C		4 mA	4 mA	0 V	0 V
Precision		≤ ± 0.5% FSO (includes offset, full-scale output, linearity, hysteresis and reproducibility)			
Insulation		> 100 MΩ @ 500 Vdc			
Response time		< 2 ms typ. 1 ms			
Pressure cycles		< 100 Hz			
<b>ENVIRONMENT</b>					
Room temperature		-40°C to 85°C			
Fluid temperature		-40°C to 135°C			
Compensation temperatures		-15°C to 85°C			
Temperature behaviour		≤ ± 0.2% ME / 10 °C			
<b>PHYSICAL CONNECTION</b>					
Pressure connection	Tapping	7/16 – 20 UNF	Without or with Schrader		
		1/2 – 14 NPT	(≤ 60 bar)		
Male connector		G 1/4	with O-ring FPM		
		7/16 – 20 UNF	Sealing cone		
		1/4 – 18 NPT			
		7/16 – 20 UNF	SAE 4 sealed at back with FPM O-ring		
		G 1/4	DIN 3852-E sealed at back with FPM profile seal		
		G 1/4	Sealed at back and pressure gauge with FPM profile seal (≤ 60 bar)		
		R 1/4	EN 10226		
		G 1/2	Sealed at back and pressure gauge with FPM profile seal		
		1/8 – 27 NPT	(≤ 60 bar)		
		G 1/8	Sealed at front		
Electrical connections		G 1/8	Sealed at back DIN 3852-E with FPM profile seal (> 60 bar)		
		M10x1	Sealed at back DIN 3852-E with FPM profile seal (≤ 60 bar)		
		M20x1.5	Sealed at front and pressure gauge		
		G 1/2, 1/4	Sealed at front		
		Quick coupling for cable with or without cable 1.5 / 2 / 3 / 5 m (PVC)	IP67	Class III	
		DIN EN 175301-803-A or C connector (industry standard 9.4 mm)	IP65	Class III	
Metri Pack 150 P2S series	IP67	Class III			
M12x1 connector	IP67	Class III			
Wire output (80 / 290 / 480 / 730 mm ± 10 mm)	IP65	Class III			
RAST 2.5 connector (except for current output)	IP00	Class III			

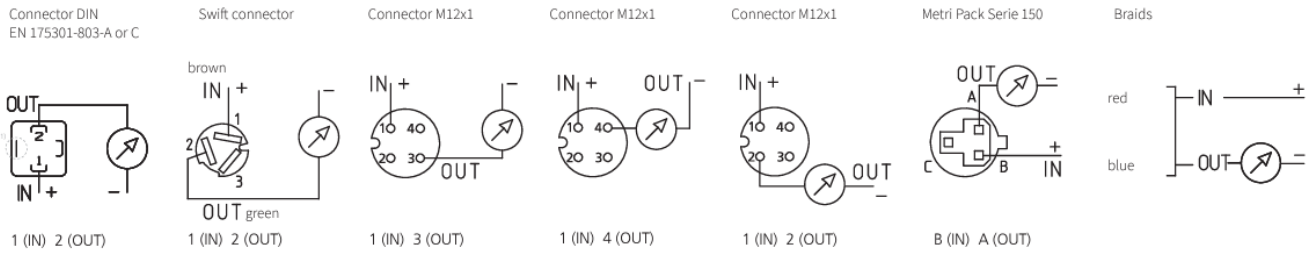
<b>INTRINSIC SECURITY</b> 	Ex II 1/2 G Ex ia IIC T4 Ga/Gb Ex II 1/2 D Ex ia IIIC T125°C Da/Db
Intrinsic safety "i" Type examination certificate	SEV 10 ATEX 0145
Connection to certified intrinsic ohmic sources with the following maximum values	Ui ≤ 30 Vdc ; Ii ≤ 100 mA ; Pi ≤ 750 mW
Active internal inductivity and capacity for versions with EN 175301-803-A and M12x1 connector	Li = 0 nH ; Ci = 0 nF
IECEX	SEV 16.0007

## DIMENSIONS (mm)

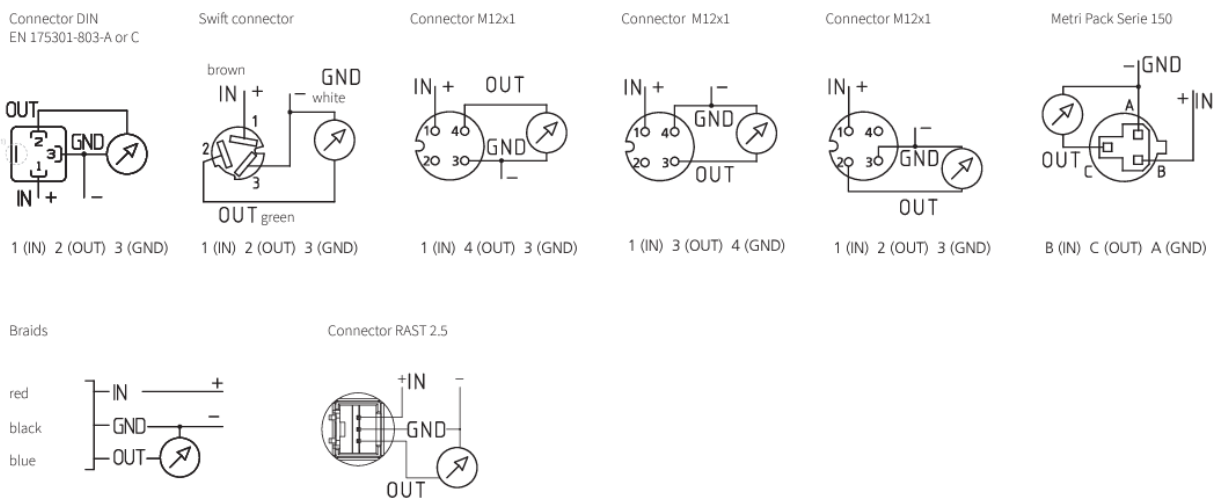


# ELECTRICAL CONNECTIONS

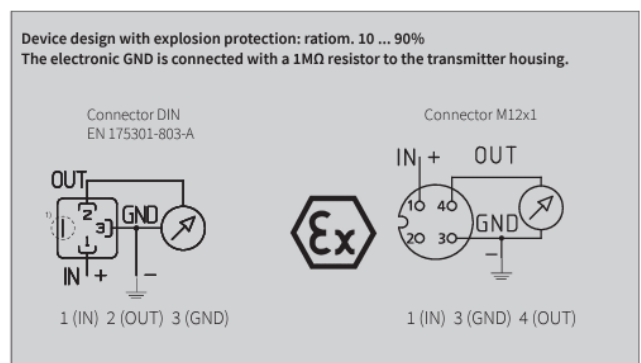
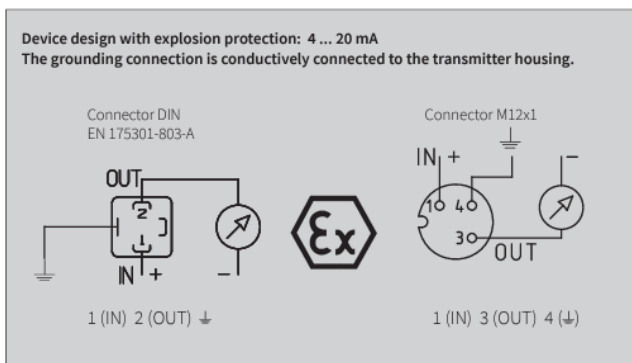
## Current output



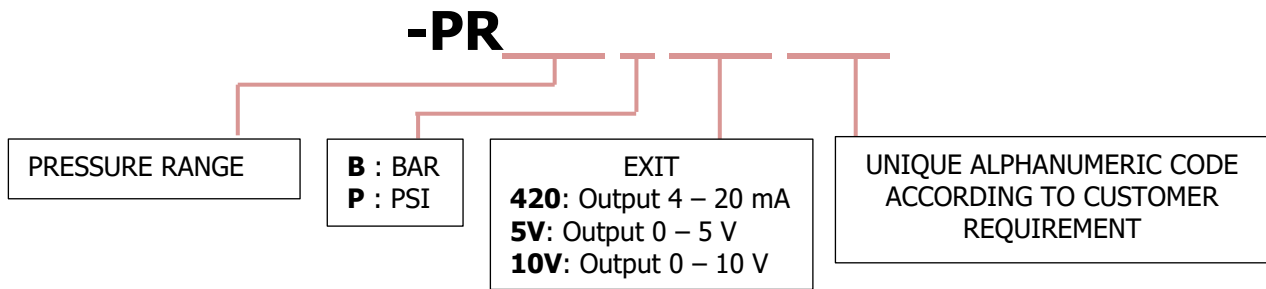
## Amplified output



## Current output $\text{Ex}$



## ORDER INFORMATION



## CONTACT

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