Pressure Sensors: Type IPS

Continuous pressure measurement with high accuracy ensures high process and system reliability. Maximum precision, robustness and long service life prove their value in practice, even under demanding operating conditions.



Precise pressure measurement of liquids and gases

Features

- Precise: Accurate measurement results even under demanding operating conditions.
- Durable: Robust design manufactured to the highest quality standards.
- Easy integration: Quick installation and removal.
- Safe: High measurement accuracy and reliable signal evaluation for secure process control and monitoring.
- Flexible: Push-in or threaded process connection.
- Customisable: Variants and customer-specific solutions available.

Pressure sensors, IPS PPSU natural



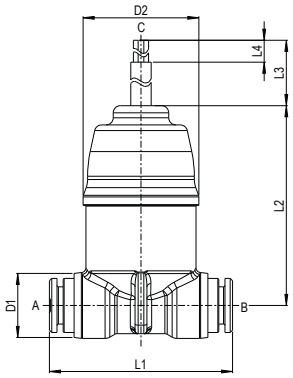
Parameters

Constructional design	Ceramic pressure measuring cell
Nominal diameter	DN 2.5 | DN 4 | DN 6
Connection sizes metric	Push-in: 4 | 6 | 8
Materials	Body: PPSU natural Seal material: FKM Pressure measuring cell: Ceramic Al_2O_2 Sleeve: Brass, electro nickel-plated Grip ring: 1.4310 (AISI 301) Release ring: PPSU natural
Note PPSU	PPSU should not be used in contact with aromatic hydrocarbons, oxidising acids, acetone, chlorinated hydrocarbons, ethers or ketones. Also, PPSU should not be placed directly in contact with anaerobic adhesives.
Media	Neutral gases and liquids which do not corrode the materials specified
Medium temperature	0 °C – 140 °C
Ambient temperature	0 °C – 60 °C
Pressure range	-0,8–16 bar
Electrical connection	3-pole screened cable, 0.75 m (LiYCY 3 × AWG 26), strand ends pre-tinned
Supply voltage	7–36 V DC
Voltage output	0.5–4.5 V DC
Protection class according to EN 60529	IP65
Accuracy	4 bar: ± 1.5% F.S. (0 °C – 60 °C); ± 3.0% F.S. (60 °C – 140 °C) 16 bar: ± 2.0% F.S. (0 °C – 20 °C); ± 1.5% F.S. (20 °C – 60 °C); ± 3.0% F.S. (60 °C – 140 °C)
Response time	< 25 ms
Price group	730
Special versions	Further variants on request

Pressure sensors, IPS PPSU natural

Standard





Dimensions

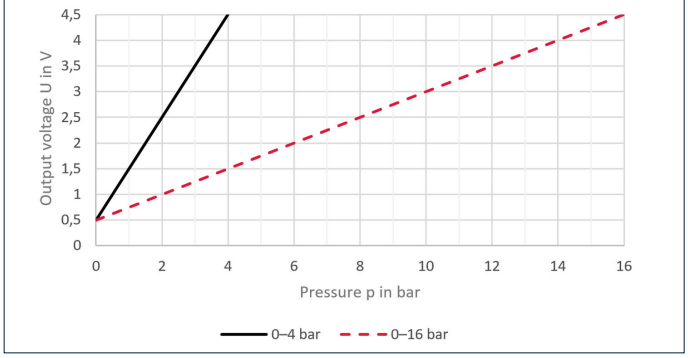
A	B	DN	D1 mm	D2 mm	L1 mm	L2 mm	L3 mm	L4 mm
4 mm	4 mm	2.5	13.5	24.4	37.8	42.1	750.0	20.0
6 mm	6 mm	4	13.5	24.4	38.6	42.1	750.0	20.0
8 mm	8 mm	6	17.2	24.4	44.8	42.8	750.0	20.0

Parameters

A	B	Kv value water	PN	Operating pressure	OP* at 20 °C	OP* at 100 °C	OP* at 140 °C	Type	Order Number
4 mm	4 mm	3.2 l/min	4	0–4 bar	4 bar	4 bar	4 bar	IPS-V36-958P3-4FF-004-51	390900
4 mm	4 mm	3.2 l/min	16	0–16 bar	16 bar	12 bar	6 bar	IPS-V36-958P3-4FF-016-51	390901
6 mm	6 mm	12.8 l/min	4	0–4 bar	4 bar	4 bar	4 bar	IPS-V36-958P3-6FF-004-51	390580
6 mm	6 mm	12.8 l/min	16	0–16 bar	16 bar	16 bar	10 bar	IPS-V36-958P3-6FF-016-51	390581
8 mm	8 mm	26.5 l/min	4	0–4 bar	4 bar	4 bar	4 bar	IPS-V36-958P3-8FF-004-51	390906
8 mm	8 mm	26.5 l/min	16	0–16 bar	16 bar	12 bar	6 bar	IPS-V36-958P3-8FF-016-51	390584

*OP = Maximum operating pressure at the specified medium temperature

Characteristic curve



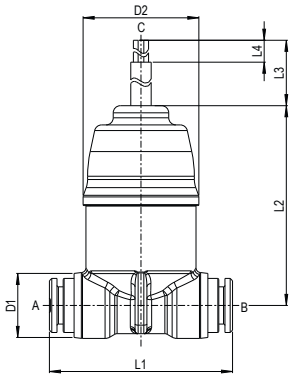
Cable assignment

Black	V_{in}
Brown	GND
Red	V_{out}

Pressure sensors, IPS PPSU natural

Vacuum





Dimensions

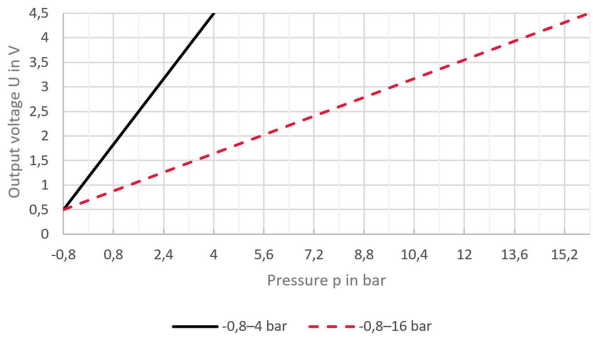
A	B	DN	D1 mm	D2 mm	L1 mm	L2 mm	L3 mm	L4 mm
4 mm	4 mm	2.5	13.5	24.4	37.8	42.1	750.0	20.0
6 mm	6 mm	4	13.5	24.4	38.6	42.1	750.0	20.0
8 mm	8 mm	6	17.2	24.4	44.8	42.8	750.0	20.0

Parameters

A	B	Kv value water	PN	Operating pressure	OP* at 20 °C	OP* at 100 °C	OP* at 140 °C	Type	Order Number
4 mm	4 mm	3.2 l/min	4	-0.8–4 bar	4 bar	4 bar	4 bar	IPS-V36-958P3-4FF-V04-51	390902
4 mm	4 mm	3.2 l/min	16	-0.8–16 bar	16 bar	12 bar	6 bar	IPS-V36-958P3-4FF-V16-51	390903
6 mm	6 mm	12.8 l/min	4	-0.8–4 bar	4 bar	4 bar	4 bar	IPS-V36-958P3-6FF-V04-51	390904
6 mm	6 mm	12.8 l/min	16	-0.8–16 bar	16 bar	16 bar	10 bar	IPS-V36-958P3-6FF-V16-51	390905
8 mm	8 mm	26.5 l/min	4	-0.8–4 bar	4 bar	4 bar	4 bar	IPS-V36-958P3-8FF-V04-51	390907
8 mm	8 mm	26.5 l/min	16	-0.8–16 bar	16 bar	12 bar	6 bar	IPS-V36-958P3-8FF-V16-51	390908

*OP = Maximum operating pressure at the specified medium temperature

Characteristic curve



Cable assignment

Black	V_{in}
Brown	GND
Red	V_{out}