

QPress Pressure Transmitter - QDP-DIFF 2800 Series

OEM differential pressure transducer, 0–35 kPa ... 3.5 MPa DP, mV bridge output, IP65.

Certifications

Quality Lab Solutions data sheet R4



Applications

- Industrial process control
- Flow measurement
- Medical devices
- Aerodynamics testing
- Liquid and gas differential pressure monitoring.

Special Features

- OEM differential pressure transducer with stainless-steel diaphragm
- Millivolt bridge output (≥ 60 mV at 1.5 mA excitation)
- Constant-current excitation 1.5 mA; compensation 0...+50 °C
- Accuracy ± 0.25 %FS typ. (± 0.5 %FS max.)
- Static pressure rating ≤ 200 bar; protection class IP65
- G1/4 female ports for positive and negative cavities; cable connection



QDP-DIFF 2800

Description

Compact piezoresistive differential pressure transducer for OEM applications. A stainless-steel 316L diaphragm in a full-welded housing delivers a stable millivolt bridge output under constant 1.5 mA excitation. Differential ranges span from 0–35 kPa to 3.5 MPa, with a static pressure capability to 200 bar. Cable connection is standard. Accuracy is ± 0.25 %FS typical (± 0.5 %FS maximum).

Specifications

TECHNICAL SPECIFICATIONS	
Differential Pressure range	0–0.35 bar; 0–0.7 bar; 0–1 bar; 0–2 bar; 0–3.5 bar; 0–7 bar; 0–10 bar; 0–20 bar; 0–35 bar (differential)
Pressure reference	DP
Accuracy	±0.25 %FS (typ.); ±0.5 %FS (max.)
Max Static pressure	200bar
Temp. drift	Zero drift < ±0.02 mV/°C; Span drift ≤ ±0.02 %FS/°C
Response time	+ HP < 3 kHz; – LP < 2 kHz
Static Pressure effect	≤0.05mV/1bar
Operation temp.	–10 to +70 °C
Compensation temp.	0-50°C
Storage temp.	–20 to +85 °C
Insulation resistance	100 MΩ, 100 V DC
Protection	IP65
Wetted Parts	Diaphragm: Stainless steel 316L
Approvals/Certification	UKCA; CE; RoHS
Electrical Outputs	Millivolt bridge output (≥ 60 mV at 1.5 mA)
Process connections	G1/4 female
Overpressure/Burst Pressure	+ HP side ≤ 200 %FS; – LP side ≤ 100 %FS or 10 bar (min applies)
Housing Material	Stainless steel 1Cr18Ni9Ti
Electrical connections	Cable
Power Supply	Constant current 1.5 mA
Longterm Stability	±0.3 %FS/year (typ.); ±0.5 %FS/year (max.)

Measuring Range (Differential Pressure)

Range Code	Measuring Range	Overpressure	Accuracy
1	0-0.35 bar	200%FS / 100%FS(-)	±0.25%FS / ±0.5%FS
2	0-0.7 bar	200%FS / 100%FS(-)	±0.25%FS / ±0.5%FS
3	0-1 bar	200%FS / 100%FS(-)	±0.25%FS / ±0.5%FS
4	0-2 bar	200%FS / 100%FS(-)	±0.25%FS / ±0.5%FS
5	0-3.5 bar	200%FS / 100%FS(-)	±0.25%FS / ±0.5%FS
6	0-7 bar	200%FS / 100%FS(-)	±0.25%FS / ±0.5%FS
7	0-10 bar	200%FS / 100%FS(-)	±0.25%FS / ±0.5%FS
8	0-20 bar	200%FS / 50%FS(-)	±0.25%FS / ±0.5%FS
9	0-35 bar	200%FS / 29%FS(-)	±0.25%FS / ±0.5%FS

Output Signals

Code	Output	Power Supply	Load
MV	mV bridge (piezoresistive)	1.5 mA DC constant current (@25 °C)	Signal ≥60 mVDC

Electrical Connections

Code	Description	Pinout
E1	Cable outlet — Variant group: mV bridge (MV)	Black: +IN; Yellow: -IN; White: -IN; Red: +OUT; Blue: -OUT



E1 – Cable outlet

Power Supply

Code	Supply
PS1	1.5 mA DC constant current

Construction Materials

Code	Diaphragm	Pressure Port	Housing
22	SS 316L	SS 304 (1Cr18Ni9Ti)	SS 304 (1Cr18Ni9Ti)

Cable Material

Code	Description
P1	PVC cable, $\phi 7.2$ mm

Accuracy options

Code	Accuracy
AC1	±0.25%FS (typ.)
AC2	±0.5%FS (max.)

Process Connections/Drawings

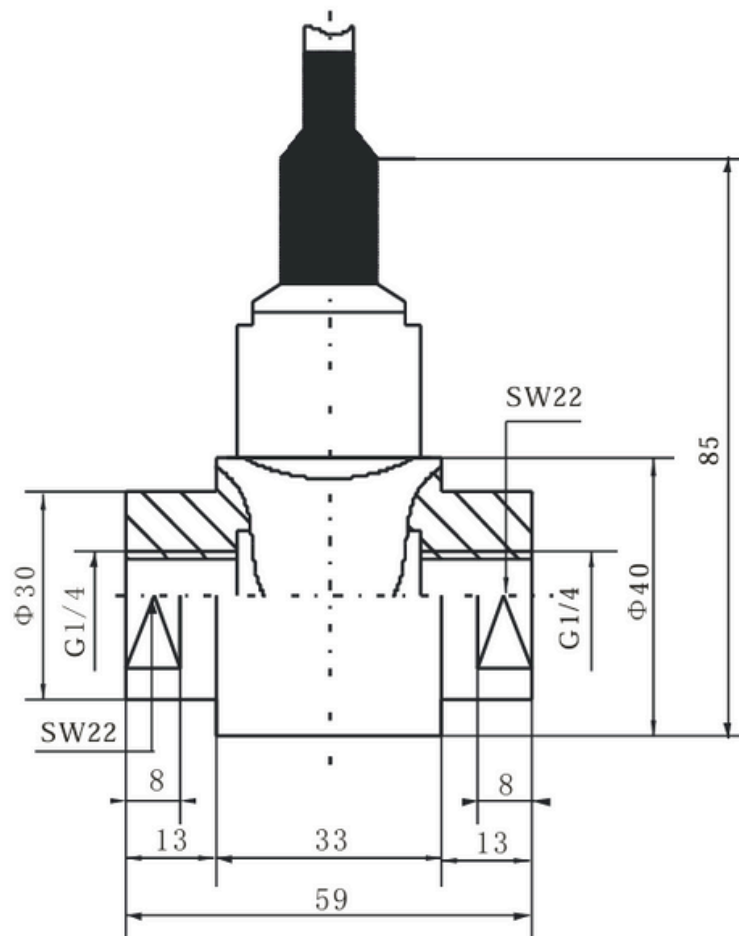
Code	Thread / Port
P01	G1/4 female (both cavities)

Cable Length

Code	Length
N	None
L001	1 m
L1D5	1.5 m
L002	2 m
L003	3 m
L004	4 m
L005	5 m
L006	6 m
L007	7 m
L008	8 m
L009	9 m
L010	10 m

Certification

Code	Description
NA	None stated
CE	EMC/CE
RO	RoHS
UK	UKCA



Order Guide

Segment	Your Code	Options
Product family	QDP-DIFF 2800	QDP-DIFF 2800
Pressure Reference	DP	DP (differential pressure)
Range	01....NN	See Measuring range
Accuracy	AC1 / AC2	±0.25%FS (typ.) / ±0.5%FS (max.)
Output	MV	mV bridge
Power Supply	PS1	1.5 mA DC
Construction Materials	22	316L diaphragm; 304 port & housing
Process Connection	P01	G1/4 female
Electrical Connection	E1	Cable outlet
Cable Material	P1	PVC φ7.2 mm
Cable Length	L001....L010	See cable length
Certification	NA / CE / RO / UK	See Certifications

Ordering Example DP 0-1 bar (code 3), ±0.5%FS, mV bridge (1.5 mA excitation), 316L diaphragm/304 body, G1/4 female (both cavities), cable outlet, PVC cable 1.5 m, CE

Family	Ref	Range	Accuracy	Output	Power Supply	Construction Materials	Process Connection	Electrical Connection	Cable Material (E1 only)	Cable Length (E1 only)	Certification
QDP-DIFF 2800	DP	3	AC2	MV	PS1	22	P01	E1	P1	L1D5	CE

Notes

Ensure media compatibility with wetted parts. Torque depends on gasket, mating material and lubrication.