

Model 218D

Differential Pressure Transducers

Model 218D differential transducers are built with piezoresistive pressure sensor 101B-a19D. These transducers are made of 316L stainless steel (SS) with a laser welded construction. 218D transducers are low profile transducers with thread type process interface for easy installation.

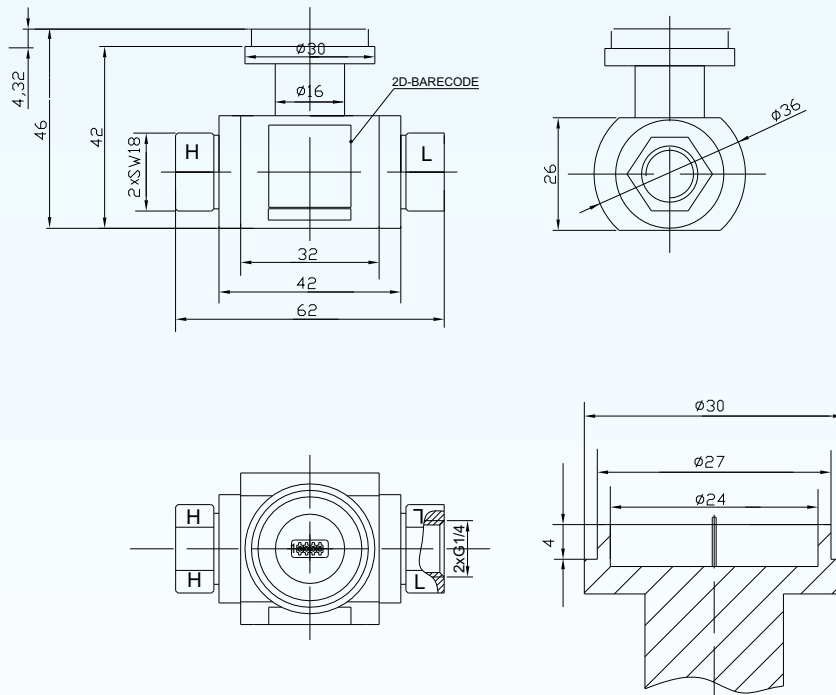
218D transducers are designed to measure the differential pressure of gases or dilute liquids. The measuring differential pressure ranges of 218D span from 0~0.1 bar to 0~35 bar. The output signal is millivolts signal. The measuring accuracy is up to 0.25 %fso (fso = full scale output).



Features:

- differential pressure ranges: 0~0.1 barD, ..., 0~35 barD
- full range output: > 30 mV (for diff. pressure ≤ 0.35 bar)
> 70 mV (for diff. pressure ≥ 0.7 bar)
- measuring accuracy: 0.25 %fso, 0.5 %fso (standard), 1 %fso
- compensated temperature ranges: 0~80°C
- materials: 316L SS (pressure membrane), 316 SS (housing)
- construction: laser welded construction, rigid and robust

Dimensions:



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Specifications:

parameters	units	specifications
pressure medium		gases or dilute-liquids, compatible to the 316L stainless steel
differential pressure ranges	barD	0~0.1, ~0.2, ~0.35, ~0.7, ~1, ~2, ~3.5, ~7, ~10, ~20, ~35
pressure type		differential (D)
overload pressure	%FS	1000 (max. 100 bar)
system pressure	%FS	1000 (max. 100 bar)
full scale output	mV@1 mA	> 30 (≤ 0.35 bar), > 70 (≥ 0.7 bar)
excitation	mA (recommended)	0.5, ..., 2.0
	Vdc	2.5, ..., 10
zero offset	%FSO	max. ± 1
accuracy	%FSO	0.25, 0.5 (standard), 1
non-linearity	%FSO	± 0.25
hysteresis	%FSO	± 0.2
repeatability	%FSO	± 0.1
long-term stability of zero	% FSO/year	max. ± 0.25
input/output resistance	k Ω	4.6 (typical), max. 6
insulation resistance	M Ω	> 500 @ 500 Vdc
temperature coefficient of ZERO*	% FSO/ $^{\circ}$ C	± 0.03
temperature coefficient of SPAN*	% FSO/ $^{\circ}$ C	± 0.03
compensated temperature range	$^{\circ}$ C	0 ~ 80 (other range available on request)
operating temperature range	$^{\circ}$ C	-40~+125
storage temperature range	$^{\circ}$ C	-40~+135
pressure interface		G1/4 female (standard), 1/4NPT male, other threads available on request
electrical interface		4-flying color wires, 120 mm long other types are available on request
material of pressure membrane		316L stainless steel (SS)
housing material		316 SS
net weight	g	~238

The listed specifications and dimensions are subject to change without prior notice.

Reference test conditions: excitation = 1 mA, temperature = 25 $^{\circ}$ C, humidity = 40 %RH

*: Measured over the compensated temperature range (0~80 $^{\circ}$ C).

How to order:

model-diff.range-system pressure-output-accuracy-pressure interface-electrical interface-customer requests (if any)

ordering code example: 218D-0/0.35barD-35bar-50mV-0.25%fso-G1/4(female)-4flyingcolorwires120mm



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