

PS300 Programmable Pressure Sensors

- Great for Hydraulic and Pneumatic Applications
- IP69K
- Dual Switch Point or Analog Current and One Switch Point Output



Part Number	Operating Range		Overpressure Rating		Set Point Range	Reset Point Range	Fluid Connection	Drawing #
	Bar	PSI	Bar	PSI	PSI	PSI		
PS01VR-303-LI2UPN8X-H1141	-1 to 0	-14.5 to 0	5.5	79.7	-0.15 to -14.5	-0.07 to -14.4	1/4"-18 NPT Male	1
PS001R-303-LI2UPN8X-H1141	0 to 1	0 to 14.5	5.5	79.7	0.15 to 14.5	0.07 to 14.43	1/4"-18 NPT Male	1
PS001V-303-LI2UPN8X-H1141	-1 to 1	-14.5 to 14.5	5.5	79.7	-14.21 to 14.5	-14.36 to 14.43	1/4"-18 NPT Male	1
PS003V-303-LI2UPN8X-H1141	-1 to 2.5	-14.5 to 36.25	12	101.5	-13.99 to 36.25	-14.14 to 36.07	1/4"-18 NPT Male	1
PS010V-303-LI2UPN8X-H1141	-1 to 10	-14.5 to 145	50	362.5	-12.91 to 145	-13.05 to 144.28	1/4"-18 NPT Male	1
PS016V-303-LI2UPN8X-H1141	-1 to 16	-14.5 to 232	80	580	-12.04 to 232	-12.18 to 230.84	1/4"-18 NPT Male	1
PS025V-303-LI2UPN8X-H1141	-1 to 25	-14.5 to 362.5	120	942.5	-10.73 to 362.5	-10.88 to 360.69	1/4"-18 NPT Male	1
PS040V-303-LI2UPN8X-H1141	-1 to 40	-14.5 to 580	200	1,450	-8.55 to 580	-8.70 to 577.1	1/4"-18 NPT Male	1
PS100R-303-LI2UPN8X-H1141	0 to 100	0 to 1,450	450	3,625	14.5 to 1,450	7.25 to 1,442.75	1/4"-18 NPT Male	1
PS250R-303-LI2UPN8X-H1141	0 to 250	0 to 3,625	800	9,062.5	36.25 to 3,625	18.13 to 3,606	1/4"-18 NPT Male	1
PS400R-303-LI2UPN8X-H1141	0 to 400	0 to 5,800	900	13,050	58 to 5,800	29 to 5,771	1/4"-18 NPT Male	1
PS600R-303-LI2UPN8X-H1141	0 to 600	0 to 8,700	900	13,050	87 to 8,700	43.5 to 8,656.5	1/4"-18 NPT Male	1
PS01VR-301-LI2UPN8X-H1141	-1 to 0	-14.5 to 0	5.5	79.7	-0.15 to -14.5	-0.07 to -14.4	G1/4" Female	2
PS001R-301-LI2UPN8X-H1141	0 to 1	0 to 14.5	5.5	79.7	0.15 to 14.5	0.07 to 14.43	G1/4" Female	2
PS001V-301-LI2UPN8X-H1141	-1 to 1	-14.5 to 14.5	5.5	79.7	-14.21 to 14.5	-14.36 to 14.43	G1/4" Female	2
PS003V-301-LI2UPN8X-H1141	-1 to 2.5	-14.5 to 36.25	12	101.5	-13.99 to 36.25	-14.14 to 36.07	G1/4" Female	2
PS010V-301-LI2UPN8X-H1141	-1 to 10	-14.5 to 145	50	362.5	-12.91 to 145	-13.05 to 144.28	G1/4" Female	2
PS016V-301-LI2UPN8X-H1141	-1 to 16	-14.5 to 232	80	580	-12.04 to 232	-12.18 to 230.84	G1/4" Female	2
PS025V-301-LI2UPN8X-H1141	-1 to 25	-14.5 to 362.5	120	942.5	-10.73 to 362.5	-10.88 to 360.69	G1/4" Female	2
PS040V-301-LI2UPN8X-H1141	-1 to 40	-14.5 to 580	200	1,450	-8.55 to 580	-8.70 to 577.1	G1/4" Female	2
PS100R-301-LI2UPN8X-H1141	0 to 100	0 to 1,450	450	3,625	14.5 to 1,450	7.25 to 1,442.75	G1/4" Female	2
PS250R-301-LI2UPN8X-H1141	0 to 250	0 to 3,625	800	9,062.5	36.25 to 3,625	18.13 to 3,606	G1/4" Female	2
PS400R-301-LI2UPN8X-H1141	0 to 400	0 to 5,800	900	13,050	58 to 5,800	29 to 5,771	G1/4" Female	2
PS600R-301-LI2UPN8X-H1141	0 to 600	0 to 8,700	900	13,050	87 to 8,700	43.5 to 8,656.5	G1/4" Female	2

PS300 Programmable Pressure Sensor Specifications

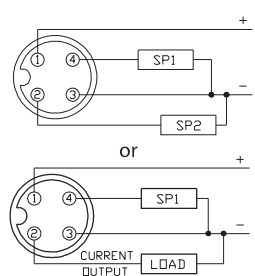
Electrical	
Operating Voltage	18-30 VDC
Current Consumption	≤50 mA
Power-On Effect	Per IEC 947-5-2
Reverse Polarity Protection	Yes
Transient Protection	EN 60947-5-2
Short-Circuit Protection	Yes
EMC Information	
EN 61000-4-2	ESD: 4 KD CK/ 8 KV AD
EN 61000-4-3	HF irradiated: 15 V/m
EN 61000-4-4	Burst: 2 KV
EN 61000-4-5	Surge: 500 V, 12 Ω
EN 61000-4-6	HF conducted: 10 V
Environmental	
Ambient Temperature	-40°to +80°C (-40°to +176°F)
Medium Temperature	-25°to +85°C (-40°to +185°F)
Enclosure Rating	IP69K
Shock	50 g per IEC 68-2-27
Vibration	20 g (10-200 Hz) per IEC 68-2-6
Burst Protection	patented media stop
Materials	
Housing	Stainless Steel 303
Wetted Parts	Stainless Steel 303, FPM o-ring Al ₂ O ₃ Ceramic transducer
Operational	
Output	Programmable Current: 0-20 mA, 4-20 mA, 20-0 mA, 20-4 mA and 1 PNP/NPN N.O./N.C. Or 2 PNP/NPN N.O./N.C.
Switching Frequency	≤180 Hz
Switching Current	≤200 mA
Analog Load	≤500 Ω

Operational continued	
Accuracy	
Set Point Accuracy	±0.5% of Full Scale
Analog Accuracy	≤±0.5% of Full Scale
Response time	<3 ms
Repeatability	≤0.5% of measuring range
Zero Shift/Span Shift	≤0.15% of measuring range/°C
Programmable Analog	
Analog Start Point	Programmable from 0-75% of measuring range
Analog End Point	Programmable from 25-100% of measuring range
Set Points	
Set Point Range	1% - 100% Range
Reset Point Range	.5% - 99.5% Range
Minimum Hysteresis	0.5% of Full Scale
Switching Delay	Switch-on and switch-off delay adjustable from 0 to 50 seconds in steps of 0.1 second
LED Function/Display	
Measuring Value	4-digit 7-segment display
Programming Status Display	LEDs indicate output status and selected measuring units
Display Reaction Time	Slow 600 ms update Normal 200 ms update Fast 50 ms update
I/O Link Parameters	
Communication	Specified according to Version 1.0
Parameterization	FDT/DTM
Transmission Physics	3-wire physics
Transmission Rate	COM2/38.4 kbps
Process Data Width	16 bit
Measured Value	14 bit
Switch Point	2 bit
Frame Type	2-3

PRESSURE

Wiring Diagram

Wiring Diagram



Mating Cordset:
 RK 4.4T-*/S618

Drawings

