

## Kobold Pressure Sensor

### LED Display with Switch & Analog Outputs

- Full Scale Ranges from 30 to 7500 PSI
- Analog Output Switchable V or mA
- Two PNP Transistor Switch Outputs
- ±0.5% Accuracy
- Display & Connector Independently Rotatable
- Adjustable Hysteresis, Window & Delay
- Easy Button Setup
- 1/4" NPT Connection

**PSD**


### SPECIFICATIONS

Measuring Principle:	Thin film
Measuring Range:	0-30 to 0-7500 PSI, adjustable 50-100% FS
Accuracy @ 77°F:	±0.5% FS typ.
Media Temperature:	-13 to 185°F
Ambient Temperature:	-13 to 185°F, 95% RH max.
Display Units:	psi, bar, MPa, kPa, m WC, mm WC
Output/Supply Voltage:	4-20 mA or 0-10 VDC /24 (15-30) VDC
Current Consumption:	<30 mA
Analog Output:	4-20 mA or 0-10 VDC, switchable mA or V
Current Limiting:	4-20 mA: 25 mA (Overload) 0-10 V: < 40 mA (Short-circuit)
Damping (Rise Time):	0.01-3.00 s / 10-90% nominal pressure
Switching Output:	2 PNP transistors
Switchpoints:	Adjustable 0-100% FS
Switchpoint Accuracy:	±0.5% FS typ. @ 77°F
Switching Hysteresis:	≥1% FS Switchpoint > Reset Point
Switching Resistance:	≤3 ohms
Output Functions:	Hysteresis, Window; Normally Closed (NC), Normally Open (NO)
Switching Current:	≤0.5 A each switching output
Switching Frequency:	200 Hz max.
Delay Time:	0-99.99 s
Display:	4-digit, 7-segment, 180° flippable, with disable
Display Resolution:	0.1% FS
Display Range:	-3 to 103% FS
Switching Indication:	2 red LEDs
Controls:	3 buttons and menu
Wetted Parts:	1.4542 (AISI630) sensor & pressure conn.
Housing:	Steel, die cast metal galvanized
Display Housing:	Plastic
Connection:	1/4" NPT
Male Electrical Plug:	PA-plug M12x1.5-pin
Protection:	IP65

### ORDERING INFORMATION

Part Number	Range
KO/PSD-433N2P045	0 to 30 psi
KO/PSD-433N2P055	0 to 50 psi
KO/PSD-433N2P065	0 to 100 psi
KO/PSD-433N2P075	0 to 150 psi
KO/PSD-433N2P085	0 to 200 psi
KO/PSD-433N2P090	0 to 300 psi
KO/PSD-433N2P100	0 to 500 psi
KO/PSD-433N2P115	0 to 1000 psi
KO/PSD-433N2P126	0 to 1500 psi
KO/PSD-433N2P130	0 to 2000 psi
KO/PSD-433N2P140	0 to 3000 psi
KO/PSD-433N2P150	0 to 5000 psi
KO/PSD-433N2P170	0 to 7500 psi

Option: add suffix 40 to Part Number for surge damping orifice 0.4mm dia.

#### Accessories:

KO/807.007	2m (6ft) Accessory Cable
KO/807.007/5M	5m (16ft) Accessory Cable

## Kobold Low Flow Sensor

- 0.4 to 400 GPH sizes
- Square Wave Pulse, Analog, or Switch Outputs
- Resistant to Aggressive Media

The DPL Series is ideal for applications requiring accurate flow measurement of transparent liquid media. A paddle wheel turbine interrupts an internal infra-red beam to generate a frequency or analog output proportional to flow. Sapphire bearings assure long service life.

**DPL**

**No readout**
**Pointer**

**LED**


### SPECIFICATIONS

Accuracy:	±2.5% of full scale	
Linearity:	±1% of full scale	
Wetted Parts:	Polypropylene, sapphire, polysulfone	
Max. Pressure:	145 PSIG	
Temperature:	-40°F to 158°F media, -22°F to 140°F ambient	
Protection:	IP65	
Connection:	M12x1 plug connector (no connector on K000 style)	
<b>Frequency Output</b>	<b>F300 style</b>	<b>K000 style</b>
Power Supply:	24 VDC ± 20%, 40-50 mA	4.5-12 VDC, 7 mA
Pulse Output:	PNP, 20 mA max.	NPN, 10 mA max.
Signal Amplitude:	High: approx. Power Supply V, Low: < 0.2 V	
<b>Analog Output</b>		
Power Supply:	24 VDC ± 20%	
Output:	4-20 mA, 3-wire, 500Ω max. load	
<b>LED Readout</b>		
Display:	3-Digit, LED	
Analog Output:	4-20 mA, adjustable via 2 buttons, 500Ω max. load	
Switching Outputs:	1 or 2 PNP (NPN on request)	
Contact Operation:	N/C or N/O, set via 2 buttons	
Power Supply:	24 VDC ± 20%, approx. 100 mA, 3-wire	
<b>Pointer Readout</b>		
Display:	240° moving coil instrument in aluminum housing	
Power Supply:	24 VDC ± 20%	
Output:	4-20 mA, 3-wire, factory set, 250Ω max. load	

### ORDERING INFORMATION

To Order—Insert Code for Each Letter to Select Catalog Number.

 KO/DPL-  A  B  C  D Example: KO/DPL-1PU1G4F300

<b>A</b>	Gasket Material			
	1PU	NBR		
	1VU	FKM		
	1EU	EPDM		
<b>B</b>	Range	GPH	Freq at max flow	Max diff PSI
	1	0.4 - 8.0	272	11
	2	0.8 - 28	471	11
	3	3.0 - 95	528	10
	4	6.0 - 190	300	15
	5	16 - 400	399	19
<b>C</b>	Fluid Connection			
	G4	G 1/2 male		
	S4	Hose barbs, 1/2" PVC		
<b>D</b>	Electronics			
	K000	Frequency output, open collector NPN, 5 ft cable		
	F300	Frequency output, open collector PNP		
	L343	4-20 mA output		
	C30R	LED display, 2 open collector PNP		
	C34P	LED display, 4-20 mA, 1 open collector PNP		
	Z340	240° pointer, 4-20 mA		