

**Digital Pressure Gauge with
LCD Display**
battery-operated or 24 Vdc



measuring
•
monitoring
•
analyzing

DSD



- 4-digit LCD Rotatable Display
- Battery Operated or 24 VDC Powered
- Ranges: 0...30" Hg Vac to 0...20,000 PSIG
- Accuracy: $\pm 0.5\%$ of Full Scale
- MIN/MAX Peak Memory Values
- Optional Output: 0-2 VDC, 4-20 mA, or Relay
- Auto Shut-off Times for Battery Powered Models



KOBOLD Instruments, Inc.



Digital Pressure Gauge Model DSD

Description

The DSD features a ceramic pressure sensing element which provides superior stability and exceptionally long cycle life for pressure ranges up to 8700 PSI. Ranges above 8700 PSI utilize a stainless steel pressure sensing element. The DSD is available in battery powered or 24VDC powered versions which feature a 4 digit LCD rotatable display. Zero (tare), peak hold, relay, and analog output features are controlled by push-button access to the programming menu which has a password protection capability. The optional relay output switching point is fully adjustable along with the hysteresis. The analog output signal options, available for remote transmission of the measured values, have adjustable start and end points and are also adjustable via the front key panel.

Specifications

Measuring Ranges: 0...30" Hg Vacuum up to 0...20,000 PSIG
Overpressure Ratings
up to 500 PSIG: 3x Full Scale
500 to 2000 PSIG: 2x Full Scale
above 2000 PSIG*: 1.5x Full Scale
***8700 PSIG model only:** 1.3x Full Scale
Accuracy: ±0.5% of Full Scale
Temperature Coefficient
Zero Point: ±0.2% of full scale/10k
Range: ±0.1% of full scale/10k
Display: 4-digit LCD, 0.5" Digits
Housing: Polyester, 74 mm
Fitting: 1/4" NPT (Models up to 8700 PSIG)
 1/2" NPT (Models 14,500 & 20,000 PSIG)

Wetted Materials

Sensing Element: Ceramic ranges up to 8700 PSIG
 Stainless Steel for 14,500 & 20,000 PSIG
Connection: 316 SS
O-Ring: NBR; Others on Request

Temperature Range

Storage: -20...176 °F
Process: -20...185 °F
Ambient: -4...140 °F
Battery Type (DSD-5..): 9 Volt Lithium (Included)

Battery Life

Alkaline: 2000 hours continuous operation
 7300 hours switched off
Lithium: 5200 hours continuous operation
 17300 hours switched off

Supply Voltage (DSD-6..): 24 VDC ±20%

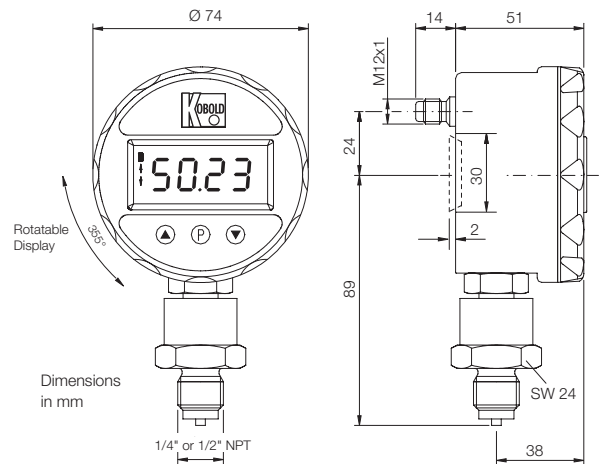
Accessory Connecting Cable Pin Assignments

Pin	Cable Color	DSD-5...R	DSD-5...A2	DSD-6...	DSD-6...R	DSD-6...A4
1	Brown	-	-	24 VDC	24 VDC	24 VDC
2	White	N/O Contact	-	-	N/O Contact	-
3	Blue	-	Ground	Ground	Ground	Ground
4	Black	-	Analog Output 0-2 VDC	-	-	Analog Output 4-20 mA
5	Grey	N/O Contact	-	-	N/O Contact	-

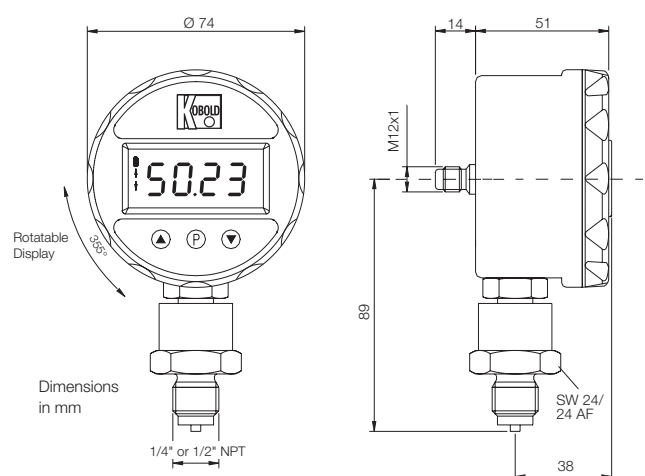
Relay Option Option R: N/O Bi-stable, 2 amps at 30V DC/AC
Analog Output Option A2: 0-2 VDC (load: 100k Ohm or higher)
Analog Output Option A4: 4-20 mA (load: 500 Ohm or less, galvanically not isolated)
Electrical Connection: 5 PIN Micro-DC, Male
Automatic Shut-off: 8 minutes standard (DSD-5.. only)
 0...64 min., factory set (DSD-5.. only)
Peak Memory Value: MIN or MAX values, reset by keypad
Protection: IP 65
Weight: 0.8 lb

Dimensions

DSD-5000 Series



DSD-6000 Series





Battery Powered Model Order Details (Example: **DSD-5005 R** with **807.007**)

Range	Model Number	Options
0...30" Hg Vacuum	DSD-5001	..A2 = 0-2 VDC Output ..B00 = No Automatic Shut-off, (standard with option A2 or R) ..B04 = Automatic Shut-off, 4 minutes (not available with option A2 or R) ..B16 = Automatic Shut-off, 16 minutes (not available with option A2 or R) ..B32 = Automatic Shut-off, 32 minutes (not available with option A2 or R) ..B64 = Automatic Shut-off, 64 minutes (not available with option A2 or R) ..R = Relay Output ..E = Special Range (Specify Range/Units)
0...20 PSIG	DSD-5002	
0...50 PSIG	DSD-5005	
0...100 PSIG	DSD-5010	
0...200 PSIG	DSD-5020	
0...500 PSIG	DSD-5050	
0...1000 PSIG	DSD-5100	
0...2000 PSIG	DSD-5200	
0...3000 PSIG	DSD-5300	
0...5000 PSIG	DSD-5500	
0...6000 PSIG	DSD-5600	
0...8700 PSIG	DSD-5800	
0...14,500 PSIG	DSD-5A00*	
0...20,000 PSIG	DSD-5B00*	

Accessory Cable Item Numbers: (Required for Options A2 or R)
807.007 = Mating 5 PIN Micro-DC Connector w/ 6 FT Cable
807.007/5M = Mating 5 PIN Micro-DC Connector w/ 16 FT Cable
807.007/10M = Mating 5 PIN Micro-DC Connector w/ 32 FT Cable

Note: * 1/2" NPT process connection

24 VDC Powered Model Order Details (Example: **DSD-6500 A4** with **807.007/5M**)

Range	Model Number	Options
0...30" Hg Vacuum	DSD-6001	..A4 = 4-20 mA Output ..R = Relay Output ..E = Special Range (Specify Range/Units)
0...20 PSIG	DSD-6002	
0...50 PSIG	DSD-6005	
0...100 PSIG	DSD-6010	
0...200 PSIG	DSD-6020	
0...500 PSIG	DSD-6050	
0...1000 PSIG	DSD-6100	
0...2000 PSIG	DSD-6200	
0...3000 PSIG	DSD-6300	
0...5000 PSIG	DSD-6500	
0...6000 PSIG	DSD-6600	
0...8700 PSIG	DSD-6800	
0...14,500 PSIG	DSD-6A00*	
0...20,000 PSIG	DSD-6B00*	

Accessory Cable Item Numbers: (Required for all DSD-6 models)
807.007 = Mating 5 PIN Micro-DC Connector w/ 6 FT Cable
807.007/5M = Mating 5 PIN Micro-DC Connector w/ 16 FT Cable
807.007/10M = Mating 5 PIN Micro-DC Connector w/ 32 FT Cable

Note: * 1/2" NPT process connection

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