

## DRH PADDLE WHEEL FLOW SENSOR



Flow  
Pressure  
Level  
Temperature  
measurement  
monitoring  
control



- **Compact Size**
- **Seven Material Combinations**
- **Flow Ranges 0.05-0.2 GPM to 0.66-13.2 GPM**
- **Frequency, 4-20 mA Transmitters or Compact Electronics**
- **Operating Pressures to 580 PSIG**



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Model:  
DRH



**Features**

- Compact size
- Seven material combinations
- Flow Ranges 0.05-0.2 GPM to 0.66-13.2 GPM
- Frequency, 4-20 mA transmitters or compact electronics
- Operating pressures to 580 PSIG

The KOBOLD DRH series paddle flow sensor offers the variety of seven material combinations, allowing the DRH to stand up to virtually any liquid or aggressive chemical. The DRH is a compact flow sensor which employs permanent magnets embedded in a rotating paddle wheel. A Hall effect sensor detects the magnet passing and provides an output which is proportional to flowrate. The DRH can be supplied with a frequency output, 4-20 mA output, or a versatile compact electronics package providing an LED display, 4-20mA output, or programmable setpoint switches. The compact size, variety of material combinations and economical price make the DRH a perfect flow sensor for industrial or OEM applications.



**KOBOLD DRH Series Paddle Flow Sensor**

**Specifications**

**Accuracy:** ±2.5% of full scale  
**Output:**  
**Frequency:** PNP, 25 mA max. 14-28 VDC  
**Analog:** 4-20 mA, 2-wire or 3-wire, 24 VDC power RL<500 ohms  
**Electrical Protection:** NEMA 4X  
**Electrical Connection:** Micro-DC plug, 4-pin male or DIN 43650 plug  
**Sensor Press.Drop:** 14.5 PSI @ 100% rated flow

**Compact Electronics (optional)**

**Programmable Functions:** Lockout code, dampening, transmitter span, switch setpoint  
**Output Types:** 4-20 mA, 3-wire flow transmitter and PNP flow switch or 2 PNP flow switches depending on model code  
**Switch Type:** Adjustable, PNP open collector, 300 mA Max. short circuit protected, programmable as either a flow switch or frequency transmitter  
**Display:** LED 3-digit  
**Electrical Protection:** NEMA 4X  
**Electrical Connection:** Micro-DC plug, 5-pin male

Material Combinations							
	DRH-11	DRH-12	DRH-14	DRH-15	DRH-17	DRH-18	DRH-19
<b>Housing</b>	Brass	Brass	316L SS	316L SS	Delrin	Delrin	PVDF
<b>Housing Cover</b>	Acrylic	Bronze	Acrylic	316L SS	Acrylic	Delrin	PVDF
<b>O-ring</b>	Buna-N	Buna-N	Viton	Viton	Buna-N	Buna-N	Viton
<b>Paddle</b>	Teflon	Teflon	Teflon	Teflon	Teflon	Teflon	Teflon
<b>Axle</b>	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic
<b>Axle Support</b>	Teflon	Teflon	Teflon	Teflon	Teflon	Teflon	Teflon
<b>Max. Temp.</b>	176°F	212°F	176°F	212°F	176°F	176°F	176°F
<b>Max. Press.</b>	230 PSIG	580 PSIG	230 PSIG	580 PSIG	230 PSIG	230 PSIG	230 PSIG

DRH Series Ordering Codes

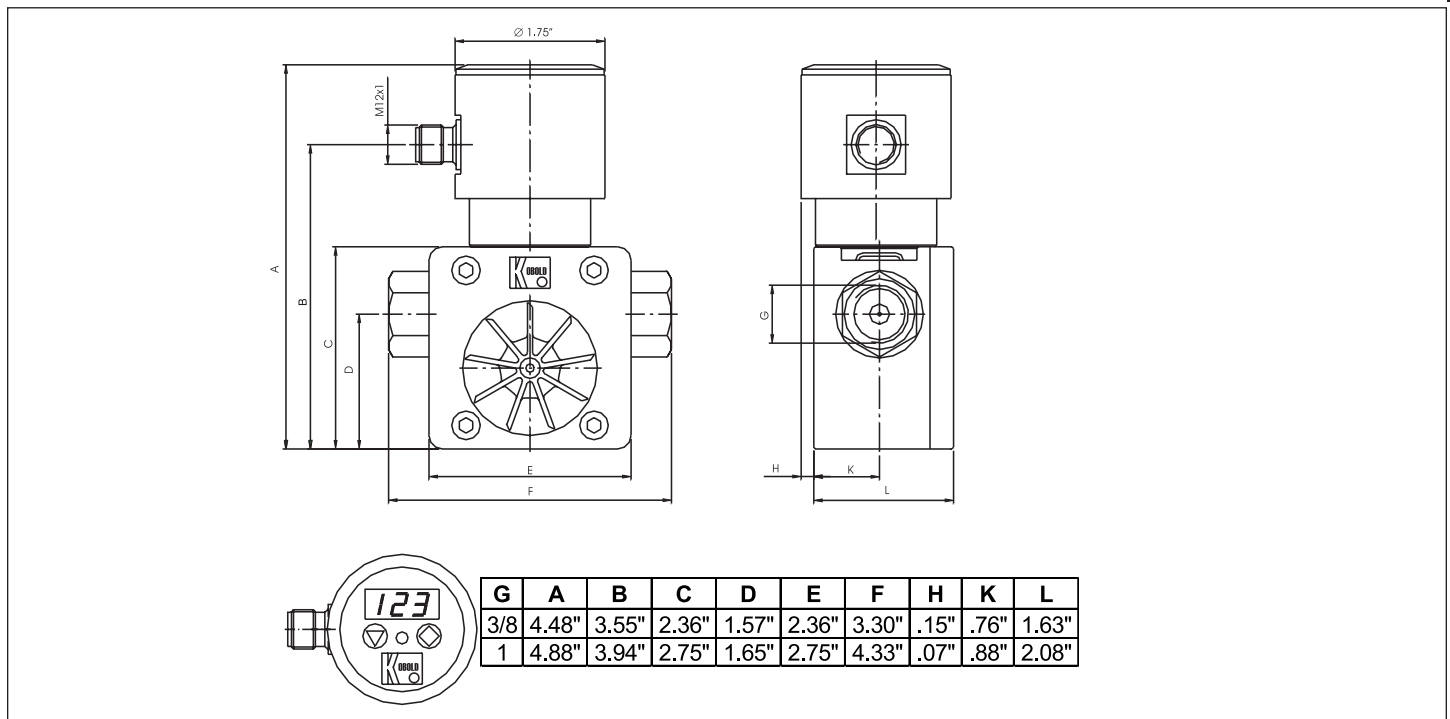
Flow Range GPM	Fitting NPT	Material Combination & Flow Range							Output
		DRH-11...	DRH-12...	DRH-14...	DRH-15...	DRH-17...	DRH-18...	DRH-19...	
0.05-0.2	3/8"	...55N3	...55N3	...55N3	...55N3	...55N3	...55N3	...55N3	F300 = Frequency w/ Micro-DC Plug  L342 = 4-20 mA, 2-wire Micro-DC Plug  L343 = 4-20 mA, 3-wire Micro-DC Plug  L442 = 4-20 mA DIN 43650 Plug  C34P = Compact Electronic 4-20mA + 1 PNP Switch  C30R = Compact Electronic 2PNP Switches  Z340 = Analog Indicator + 4-20mA. 3-wire
0.05-0.53	1"	...60N6	...60N6	...60N6	...60N6	...60N6	...60N6	...60N6	
0.08-0.75	3/8"	...65N3	...65N3	...65N3	...65N3	...65N3	...65N3	...65N3	
0.07-1.3	1"	...70N6	...70N6	...70N6	...70N6	...70N6	...70N6	...70N6	
0.13-1.6	3/8"	...75N3	...75N3	...75N3	...75N3	...75N3	...75N3	...75N3	
0.13-4.0	1"	...80N6	...80N6	...80N6	...80N6	...80N6	...80N6	...80N6	
0.26-4.2	3/8"	...85N3	...85N3	...85N3	...85N3	...85N3	...85N3	...85N3	
0.26-6.8	3/8"	...90N3	...90N3	...90N3	...90N3	...90N3	...90N3	...90N3	
0.53-9.5	1"	...95N6	...95N6	...95N6	...95N6	...95N6	...95N6	...95N6	
0.66-13.2	1"	...98N6	...98N6	...98N6	...98N6	...98N6	...98N6	...98N6	
Accessories									
Part Number 807.037 - Mating 4-PIN Micro-DC plug with 6ft. cable for output F300, L342, L343 & Z340 807.007 - Mating 5-PIN Micro-DC plug with 6ft. cable for output C34P and C30R									

Example Part Number: DRH-1155N3F300

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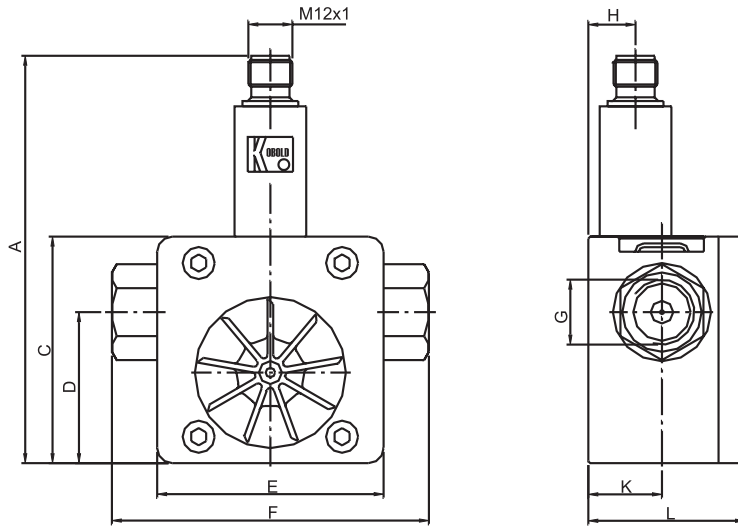
DIMENSIONS

DRH w/ Compact Electronics



DIMENSIONS

DRH w/ Micro-DC Plug



G	A	C	D	E	F	H	K	L
3/8	4.25"	2.36"	1.57"	2.36"	3.30"	.49"	.76"	1.63"
1	4.64"	2.75"	1.65"	2.75"	4.33"	.62"	.88"	2.08"