KFR
ACRYLIC FLOWMETER

KFR - Acrylic Flowmeter

Features

- Easy to Read Scales
- Water Range: 0.003 to 20 GPM
- Air range: 0.002 to 100 SCFM
- Durable One-Piece Construction
- Low Cost
- Metric Scales on Request

The KFR line of flowmeters offers the perfect balance between low-cost, accuracy and range availability. Bridging the micro-flow and large flow ranges, this meter can provide an effective solution to many industrial applications.

The KFR has a one-piece acrylic body with PVC or metal fittings for durability. To take the guesswork out of reading the flow, large lettering and extra hash marks make the scale clearly visible. Further enhancing readability, the low flow meters offer an inherently stable float design, while the larger meters feature a float stabilization mechanism. In the larger flow ranges, the stabilization mechanism allows KOBOLD to offer you a smaller installation footprint and a correspondingly lower price.

To further increase the value of the KFR product line, the low volume flowmeters (models KFR-1000 through KFR-4000) are available with integral needle valves.

Accuracy, value, low cost. Three not-so-mutually-exclusive attributes made possible by the KOBOLD KFR.

KOBOLD KFR Flowmeter Line

Specifications

Accuracy
Model 1000/2000: ±5% of full scale

Fittings:	Female NPT
Max Pressure:	100 PSIG
Max Temperature:	150°F

Wetted Parts

Body:	Clear Acrylic
Fittings:	Brass, PVC or SS
Seals	
Brass Fittings:	Buna-N
PVC Fittings:	Buna-N
SS Fittings:	Viton
Float:	Glass or SS (See ordering tables)

Applications

- Air sampling equipment
- Chromatography systems
- Desalinization equipment
- Gas analyzers
- Medical systems
- Photoprocessing equipment
- Water treatment and distribution systems

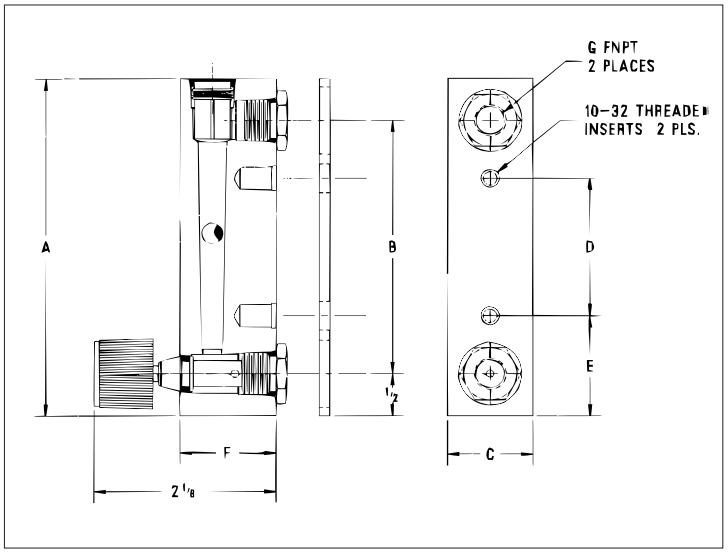
KFR - Ordering Information

Model KFR-1000/2000

Water				Air			
Range GPH	Float Material	Fitting Material		Range SCFH	Float Material	Fitting Material	
		Brass	SS			Brass	SS
0.2 - 2	Glass	KFR-1118	KFR-1218	0.1 - 1	Glass	KFR-2100	KFR-2200
0.4 - 5	SS	KFR-1119	KFR-1219	0.2 - 2	SS	KFR-2101	KFR-2201
1 - 10	Glass	KFR-1120	KFR-1220	0.4 - 5	Glass	KFR-2102	KFR-2202
2 - 20	SS	KFR-1121	KFR-1221	0.5 - 10	Glass	KFR-2103	KFR-2203
4 - 40	SS	KFR-1122	KFR-1222	2 - 20	SS	KFR-2104	KFR-2204
Options			Order Suffix	3 - 30	SS	KFR-2105	KFR-2205
Brass Inlet Needle Valve			- V1	4 - 50	Glass	KFR-2106	KFR-2206
Stainless Steel Inlet Needle Valve			- V2	10 - 100	SS	KFR-2107	KFR-2207
Hose Barb Adapters 1/4”			- S	20 - 200	SS	KFR-2108	KFR-2208

KFR - Dimensions

KFR-1000 through KFR-4000



Dimensions in Inches							
Model	A	B	C	D	E	F	G
1000/ 2000	4	3	1	1-5/8	1-3/16	1-1/8	1/8
3000/ 4000	6-1/2	5-1/2	1-3/8	3-1/2	1-1/2	1-1/8	1/8

KPG
HIGH PRECISION PRESSURE TRANSDUCER

- Advanced thin film or piezoresistive sensing technology
- Variety of output signals
- CE EMI compliant
- Absolute or Gauge measuring ranges
- High overpressure protection
- Fast response time
- Stainless steel construction
- Pressures to 60,000 PSIG
- Easy-to-use Hirschmann connectors standard

KOBOLD KPG series transducers are intended for heavy duty, high accuracy applications. Utilizing either thin film or piezoresistive technologies, the KPG can achieve accuracies of ±0.12% at pressures up to 60,000 PSIG while offering shock resistance, extreme long term sensor stability and excellent noise immunity (CE compliance.) Along with these features, the KPG offers "snafu" protection against common installation problems such as reverse polarity wiring, overvoltage and short circuiting.

As with all sensors in the KP line, KPG sensors undergo 100% inspection and testing to ensure a trouble-free installation process.

KOBOLD KPG Pressure Transducer

Specifications

Accuracy
- **Standard:** ±0.25% of full scale
- **Optional:** ±0.12% of full scale
- **Included Components**
  - **Repeatability:** ±0.05% of full scale
  - **Hysteresis:** ±0.1% of full scale

Fittings: ¼", ½" male NPT or 9/16-18 aminco

Materials of Construction
- **Wetted Parts:** 316 SS
- **Case:** 304 SS

Temperature Information
- **Compensation:** 32°F to 175°F
- **Drift:** ±0.02%/50°F
- **Medium:** -22°F to 212°F
- **Ambient:** 14°F to 175°F
- **Storage:** -40°F to 212°F

Shock Sensitivity: < ±0.05% full scale @100g for 20 ms

Vibration Sensitivity: < ±0.01% full scale @20g & 0-2000 Hz

Pressure Limitations
- **Vacuum & 15-7,500 PSI Ranges**
  - **Proof Pressure:** 2 x range
  - **Burst Pressure:** 4 x range
- **10,000-60,000 PSI Ranges**
  - **Proof Pressure:** 1.2 x range
  - **Burst Pressure:** 2 x range

Electrical Data
- **Output:** -See ordering table
  - **Adjustability:** ±5% of span
- **Input Power**
  - **Current Output:** 12-30 VDC
  - **Voltage Output:** 14-30 VDC
- **Response Time:** < 1 ms, 10-90% FS
- **Frequency Limit:** 150 Hz
- **Protection**
  - **Environmental:** NEMA 4X
  - **Fault:** Reverse polarity, overvoltage, short circuit

Applications

- Hydraulic & pneumatic systems
- Industrial machinery & machine tools
- Injection molding machines
- Stamping & forming presses
- Pumps & compressors
- Laboratory & test equipment
- Railroad equipment
- HVAC systems
- Refrigeration equipment
- Marine
- Power generation
- Construction
- Petrochemical
- Water management

KPG - Ordering Information

KPG Ordering Information

KPG = High Precision, Heavy Duty Pressure Transducer

Range = Pressure Range Abbreviation

Available Measuring Ranges

0030V = 0 to 30" Hg	**00002** = 2 PSIG	**00100** = 100 PSIG	**01000** = 1000 PSIG	**15000** = 15000 PSIG
30/15 = - 30" Hg to 15 PSIG	**00003** = 3 PSIG	**00150** = 150 PSIG	**02000** = 2000 PSIG	**20000** = 20000 PSIG
30/30 = - 30" Hg to 30 PSIG	**00005** = 5 PSIG	**00200** = 200 PSIG	**03000** = 3000 PSIG	**30000** = 30000 PSIG
30/45 = - 30" Hg to 45 PSIG	**00010** = 10 PSIG	**00300** = 300 PSIG	**05000** = 5000 PSIG	**40000** = 40000 PSIG
30/60 = - 30" Hg to 60 PSIG	**00015** = 15 PSIG	**00500** = 500 PSIG	**07500** = 7500 PSIG	**50000** = 50000 PSIG
	00030 = 30 PSIG	**00750** = 750 PSIG	**10000** = 10000 PSIG	**60000** = 60000 PSIG
	00060 = 60 PSIG			

Accuracy

- **1** = ± 0.25% of full scale (standard)
- **2** = ± 0.12% of full scale

Output Signal

- **1** = 4-20 mA, 2-wire (standard)
- **2** = 0-5 VDC, 3-wire
- **3** = 1-5 VDC, 3-wire
- **5** = 0-10 VDC, 3-wire

Fittings

- **2** = ¼" NPT (20,000 PSIG max.)
- **6** = 9/16 - 18 aminco female (standard on 30,000 to 60,000 PSI versions)
- **8** = ½" NPT male (standard)

Electrical Connections

- **1** = 36" cable with Hirschmann connector
- **3** = 6 pin Bendix (Ni-plated aluminum)
- **6** = ½" NPT male conduit with 36" cable (polyurethane cladding)
- **8** = Hirschmann with mating connector (standard)

Options

- **D** = Surge damping orifice

Sample KPG Specification

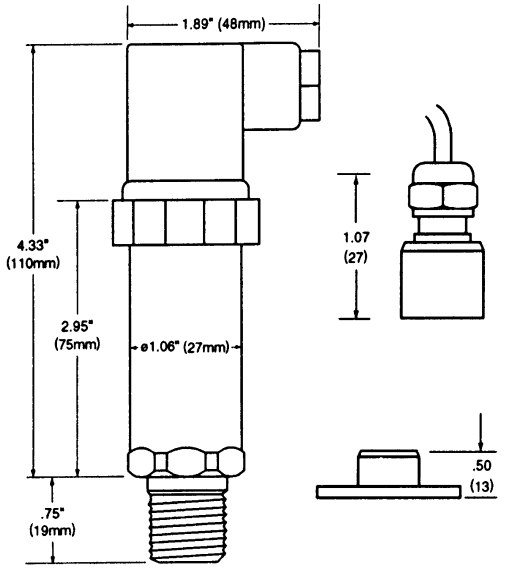
KPG -00500 -1 -2 -8 -8 -D

Diaphragm Seals *

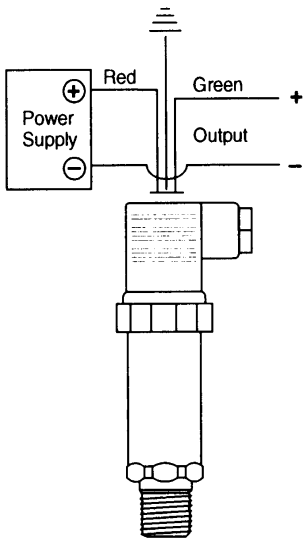
KP-1240	1½"	Tri clamp® diaphragm Seal with glycerine fill
KP-1250	2"	Tri clamp® diaphragm Seal with glycerine fill
KP-2002 SSG	¾"	NPT 316 SS Flush diaphragm Seal with glycerine fill
KP-2002 HB2H	¾"	NPT Hastelloy B2 Flush diaphragm Seal with halocarbon fill

* Diaphragm Seals -usable on ranges 0-60 PSIG and higher.

Dimensions



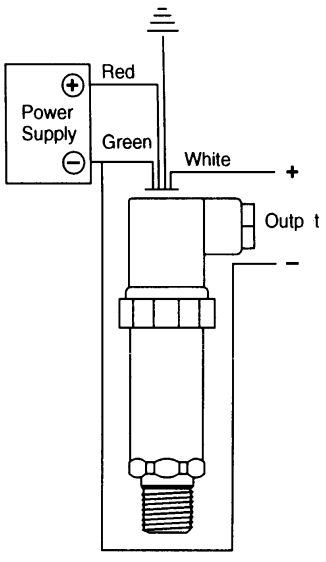
Wiring Diagrams and Electrical Connections



2 WIRE WIRING DIAGRAM EXAMPLE

4-20 mA 2-Wire Current Loop

Signa l	DIN 43650	Wire Color
Supply + (12-30VDC)	Pin 1,A	RED/BROWN
Signal – (4-20mA)	Pin 2,B	GREEN

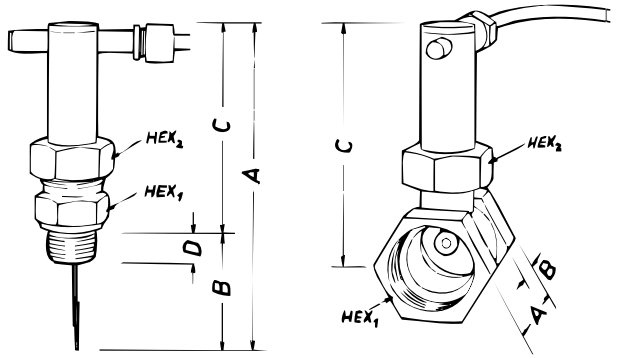


3 WIRE WIRING DIAGRAM EXAMPLE

3-Wire Voltage Output

	DIN 43650	Wire Color
	Pin 1,A	RED/BROWN
	Pin 2,C	GREEN
	Pin 3,B	WHITE

PSR/PS PADDLE TYPE SWITCH



PS PSR

KOBOLD paddle type flow switches can be used wherever a simple economic yet reliable monitoring instrument is required for flow switching applications.

The device operates as follows: The flowing medium presses against the paddle of the KOBOLDflow switch. The paddle is fitted to one end of a balance arm which is in direct contact with a pre-stressed leaf spring. At the other end of the balance arm is a permanent magnet. This magnet actuates a reed contact located within a moveable housing outside the media.

The reed contact switches on or off depending on the position of the permanent magnet and the switch housing. The status of the switch may then be used to electrically control the fluid flow. The movable reed switch on the Kobold PSR/PS allows the contacts to be set either normally open (N/O) or normally closed (N/C).

Specifications
Maximum Temperature: 230°F
Maximum Pressure: 1450 PSIG
for brass units, 3600 PSIG for SS units
Materials:
Paddle: SS 304
Leaf Spring: SS 301
Beam: SS301
Locking Plate: brass or SS 304
Contact Housing: Polyamid, glass reinforced, NEMA 4
Cable: PVC
O-Ring: Buna-N for brass units; Viton for SSunits
Contact: Reed-switch SPST, N/O or N/C
Maximum Contact Ratings: 50 VA, (50 Watt, 250 VAC, 1.5A)
Standard Cable Length: 5ft
Orientation: Horizontal Pipes
Max Flow: 5x switching range increasing

Order Numbers and Dimensions

Order Number	Dimensions					
	A	B	C	D	HEX_1	HEX_2
PS-..49	3.66"	1.32"	1.34"	0.78"	0.87"	-
PS-..52	5.05"	2.22"	3.03"	0.75"	1.06"	1.18"
PS-..14	7.55"	4.52"	3.03"	0.75"	1.06"	1.18"
PSR-..05	1.97"	0.39"	3.15“	–	1.06"	1.18"
PSR-..10	1.97"	0.39"	3.15“	–	1.06"	1.18"
PSR-..15	1.97"	0.39"	3.15“	–	1.06"	1.18"
PSR-..20	2.05"	0.59"	3.21“	–	1.25"	1.18"
PSR-..25	2.20"	0.59"	3.31“	–	1.54"	1.18"
PSR-..32	2.60“	–	3.50“	–	1.97"	1.18"
PSR-..40	2.60“	–	3.62“	–	2.36"	1.18"
U. S. Patent Number 4,82 7,092						

Order Numbers for standard types

Stand. conn. NPT	Switching ranges		Flow switch Model PSR	
	Increasing GPM water	Decreasing GPM water	Brass	SS
1/4"	0.9– 1.3	0.6– 1.2	PSR 510 5	PSR 520 5
3/8"	1.0– 1.6	0.7– 1.5	PSR 511 0	PSR 521 0
1/2"	1.3– 2.1	1.0– 2.0	PSR 511 5	PSR 521 5
3/4"	3.0– 4.0	2.2– 3.0	PSR 512 0	PSR 522 0
1"	3.2– 5.0	2.4– 4.5	PSR 512 5	PSR 522 5
1 1/4"	4.9– 8.5	3.8– 7.8	PSR 513 2	PSR 523 2
1 1/2"	9.2–15.0	7.9–14.3	PSR 514 0	PSR 524 0
Optional SPDT Reed Switch add Suffix “-u”				

Order Numbers for standard types

Pipe Size	Switching ranges increasing	Switching ranges decreasing	Stand. conn.	Flow switch Model PS Material	
	GPM Water	GPM Water	NPT	Brass	SS
2”	18– 24	16– 22	1/2	PS-5149	PS-5249
3”	48– 66	45– 62	1/2		
4”	84–106	79–101	1/2		
6”	185–242	176–237	1/2		
2”	13– 16	11– 15	1/2	PS-5152	PS-5252
3”	41– 48	38– 44	1/2		
4”	57– 70	53– 66	1/2		
6”	147–159	137–156	1/2		
4”	24– 30	19– 27	1/2	PS-5114	PS-5214
6”	53– 75	44– 62	1/2		
8”	101–141	88–123	1/2		
Optional SPDT Reed Switch add Suffix “-u”					

VKM- Viscosity Compensated Flowmeter and Switch

VKM 61...

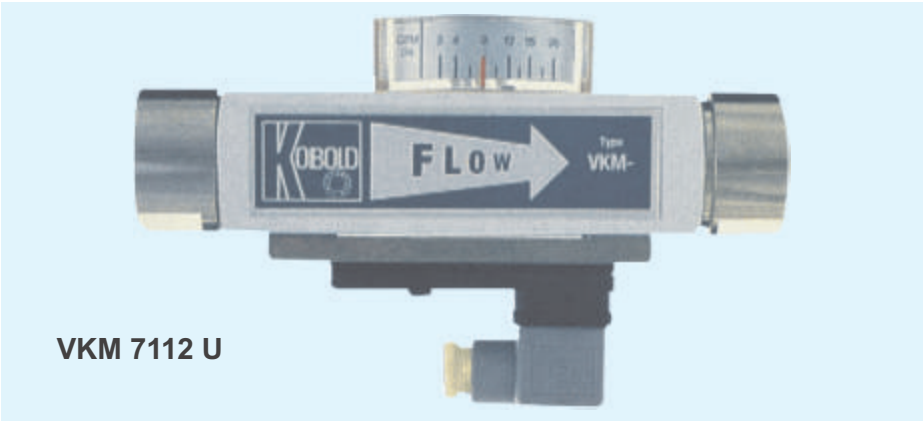
The KOBOLD VKM flowmeters and switches fill an important gap in the high viscosity media measurement regime. Using KOBOLD's patented viscosity compensation system, these instruments are insensitive to viscosity and density changes during operation. This development in flow and measurement control technology has resulted in an extremely versatile instrument usable in almost all imaginable applications.

Specifications

Accuracy: ±5% full scale
Flow Media: e.g. mineral oil, water and other liquids
Mounting: universal, without recalibration
Measuring Principle: with float, spring-loaded
Max. Temperature: 240°F
Max. Pressure: 3600 PSIG for Brass units 5000 PSIG for SSunits
Viscosity-compensated: up to v=540 cSt with same scale
Density-compensated: up to p=30 lb/ft^3 with same scale

Housing: Nickel-plated Brass or SS 304
Fittings: Nickel-plated Brass or SS 304
Float: Brass or SS 304
Orifice: SS 301
Spring: SS 301
Seals: Buna-N for Brass units, Viton for SS units
Electr. Switch Housing: Plastic
Magnetically Operated Pointer Indicator: Nickel-plated Brass, Polycarbonate
Mode of Electr. Protection: NEMA 4
Reed Contact:
N/O: AC: 1.5A, 240 VAC,, 50 VA
DC: 1.0 A, 200 VDC, 50 W
SPDT:AC: 0.8 A, 240 VAC, 30 VA

Compact Electronic Option C34P
Power Requirement: 24VDC ±20%
Display: 3 digit LED
Output: 4-20mA, 3-wire RLoop<500 ohms
Switch: PNP, 300 mA Max.
Electrical Connection: Micro-DC plug, 4-Pin male
Electrical Protection: NEMA 4X/IP65



VKM 7112 U

Order Numbers for standard types

Range oil GPM	Stand. conn. NPT	Press. drop max. PSI	Flow Switch 1 N/O contact, oil scale Material Brass	Flow Switch 1 N/O contact, oil scale Material SS	Flowmeter oil scale Material Brass	Flowmeter oil scale Material SS	Flowmeter and scale 1 N/O contact, oil scale Material Brass	Flowmeter and scale 1 N/O contact, oil scale Material SS
0.03–0.12	1/4	11. 6	VKM 5102	VKM 5202	VKM 6102	VKM 6202	VKM 7102	VKM 7202
0.05–0.3	1/4	16. 0	VKM 5103	VKM 5203	VKM 6103	VKM 6203	VKM 7103	VKM 7203
0.15–0.5	1/4	17. 4	VKM 5104	VKM 5204	VKM 6104	VKM 6204	VKM 7104	VKM 7204
0.2–0.9	1/4	13. 1	VKM 5105	VKM 5205	VKM 6105	VKM 6205	VKM 7105	VKM 7205
0.5–2.5	1/4	11. 6	VKM 5106	VKM 5206	VKM 6106	VKM 6206	VKM 7106	VKM 7206
1 –3.5	1/2	16. 0	VKM 5107	VKM 5207	VKM 6107	VKM 6207	VKM 7107	VKM 7207
1.5–5.0	1/2	16. 0	VKM 5108	VKM 5208	VKM 6108	VKM 6208	VKM 7108	VKM 7208
1–11	3/4	5. 8	VKM 5109	VKM 5209	VKM 6109	VKM 6209	VKM 7109	VKM 7209
1–14	3/4	16. 0	VKM 5110	VKM 5210	VKM 6110	VKM 6210	VKM 7110	VKM 7210
2–18	3/4	16. 0	VKM 5111	VKM 5211	VKM 6111	VKM 6211	VKM 7111	VKM 7211
2–20	1	16. 0	VKM 5112	VKM 5212	VKM 6112	VKM 6212	VKM 7112	VKM 7212
Part Number: 807.007 Mating 5-Pin Micro-DC Plug w/ 6 Ft. Cable for Option C34P								

Options
(add suffix to Order Number)

Special connection NPT Sufix "B"	Special contact
–	**Suffix "U"** = SPDT Contact **Suffix "R"** = Additional Contact **C34P** = Compact Electronic Display
1/2	
1/2	
1/2	
1/2	
3/4	
3/4	
1	
1	
1	
-	

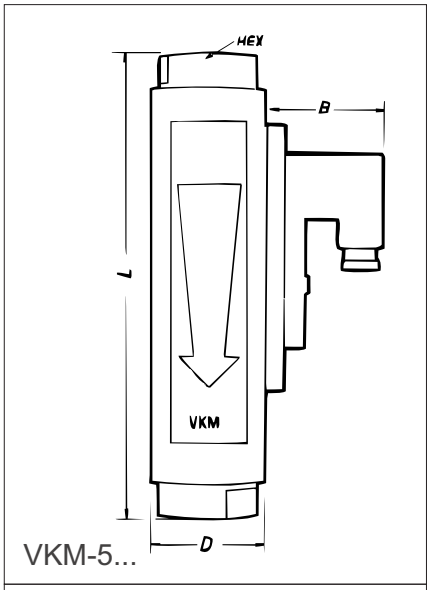
Web Site: www.controlfr.com E-mail: ventas@controlfr.com

VKM - Viscosity Compensated Flowmeter and Switch

Dimensions:

VISCOSITY COMPENSATED ALL-METAL FLOW SWITCH WITH 1 N/O CONTACT

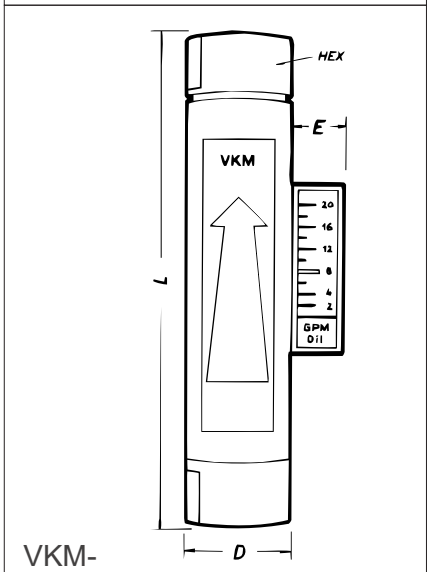
Order Number (Brass)	Order Number (SS)	Dimensions HEXAGONAL Stand.	HEXAGONAL Suffix "B"	D	L Stand.	L Suffix "B"	B	E	Weight approx. lbs
VKM 5102 to VKM 5107	VKM 5202 to VKM 5207	1.42"	–	1.57"	6.38"	6.38"	2.09"	–	3.75
VKM 5108	VKM 5208	1.42"	–	1.57"	6.38"	7.34"	2.09"	–	3.50
VKM 5109	VKM 5209	1.42"	1.61"	1.57"	6.38"	7.34"	2.09"	–	3.50
VKM 5110 to VKM 5111	VKM 5210 to VKM 5211	1.42"	1.61"	1.57"	6.38"	7.34"	2.09"	–	3.70
VKM 5112	VKM 5212	1.61"	–	1.57"	7.34"	–	2.09"	–	3.75
U.S. Patent Number 4,573,361									



VKM-5...

VISCOSITY COMPENSATED ALL-METAL FLOWMETER

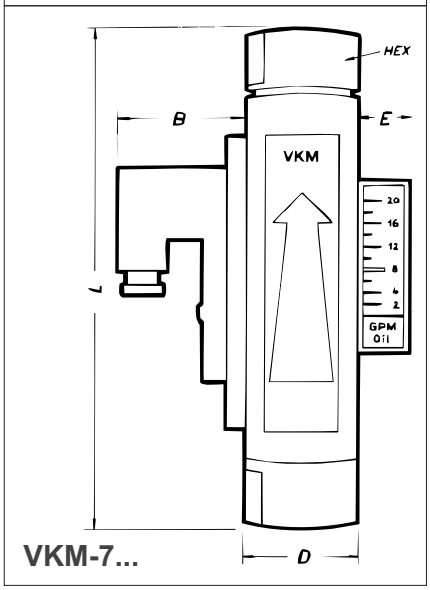
Order Number (Brass)	Order Number (SS)	Dimensions HEXAGONAL Stand.	HEXAGONAL Suffix "B"	D	L Stand.	L Suffix "B"	B	E	Weight approx. lbs
VKM 6102 to VKM 6107	VKM 6202 to VKM 6207	1.42"	–	1.57"	6.38"	6.38"	–	0.87"	3.75
VKM 6108	VKM 6208	1.42"	–	1.57"	6.38"	7.34"	–	0.87"	3.50
VKM 6109	VKM 6209	1.42"	1.61"	1.57"	6.38"	7.34"	–	0.87"	3.50
VKM 6110 to VKM 6111	VKM 6210 to VKM 6211	1.42"	1.61"	1.57"	6.38"	7.34"	–	0.87"	3.70
VKM 6112	VKM 6212	1.61"	–	1.57"	7.34"	–	–	0.87"	3.75
U.S. Patent Number 4,573,361									



VKM-

VISCOSITY COMPENSATED ALL-METAL FLOWMETER AND SWITCH WITH 1 N/O CONTACT

Order Number (Brass)	Order Number (SS)	Dimensions HEXAGONAL Stand.	HEXAGONAL Suffix "B"	D	L Stand.	L Suffix "B"	B	E	Weight approx. lbs
VKM 7102 to VKM 7107	VKM 7202 to VKM 7207	1.42"	–	1.57"	6.38"	6.38"	2.09"	0.87"	3.75
VKM 7108	VKM 7208	1.42"	–	1.57"	6.38"	7.34"	2.09"	0.87"	3.50
VKM 7109	VKM 7209	1.42"	1.61"	1.57"	6.38"	7.34"	2.09"	0.87"	3.50
VKM 7110 to VKM 7111	VKM 7210 to VKM 7211	1.42"	1.61"	1.57"	6.38"	7.34"	2.09"	0.87"	3.70
VKM 7112	VKM 7212	1.61"	–	1.57"	7.34"	–	2.09"	0.87"	3.75
U.S. Patent Number 4,573,361									



VKM-7...

NEO
Echoking Ultrasonic Level Transmitter

KOBOLD

KOBOLD EchoKing¨ Level Transmitter

Features

- Capable of monitoring tanks and bins up to 24.5 feet deep
- Compact and easily installed
- Automatic temperature compensation
- Non-contact sensor
- Compatible with viscous, sticky or chemically aggressive media
- Provides a 4–20 mA transmitter capable of operating in a two wire or three wire mode
- On-board LED display for easy calibration
- SPDT relay which can be configured as a level alarm or for auto tank fill/empty
- All the above are STANDARD!

The KOBOLD EchoKing ultrasonic transmitter is a full featured level sensing system suitable for monitoring levels of liquids and some dry-bulk materials. The unit's sophisticated signal processing delivers an accuracy and dependability not possible with older technology.

The EchoKing's enhanced abilities are made possible by a powerful internal microprocessor. The system uses a form of artificial intelligence to learn about its surroundings. An on-going learning process is used to help the EchoKing distinguish between real echos, reflections and just plain old background noise. At the same time, the sensor constantly adapts to changes in the on-site conditions. In air environments, the NEO adjusts for temperature variations through use of an internal thermal sensor and compensating table.

A built-in relay may be used to control tank fill/empty operations, as an alarm for level detection, or for fault detection. Span, setpoint limits and all necessary information is stored digitally in the EchoKing's non-volatile memory – there are no sensitive analog potentiometers to adjust.

Despite its technical complexity, the system is easily programmable via an on-board touch-pad. All process parameters can be easily entered into the system at the installation site.

Specifications

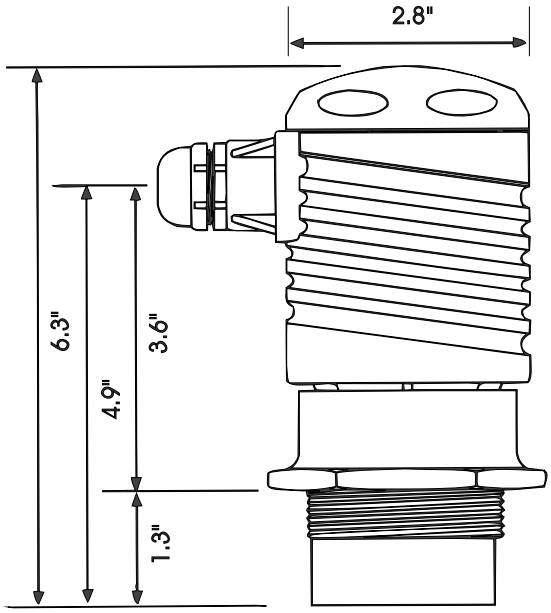
Range:	24.5 feet from sensor face
Dead Band:	0.5 feet (6 inches)
Span:	24 feet
Accuracy:	±0.25% of F.S.
Repeatability:	±0.125"
Fitting:	2"NPT
Materials of Construction	
Probe:	PVDF
Enclosure:	PP (UL 94VO)
Max. Temp. Range:	–40 to 140°F
Pressure Rating:	30 PSI @ 75°F
Beam Angle:	±8°off vertical
Sensor Frequency:	50 KHz
Supply Voltage:	14 to 36 VDC
Current Draw:	200 mA max.
Signal Output:	4-20 mA DC into 350 ohms max.
Relay:	SPDT 12 amps @ 240 VAC/120 VDC
Protection:	NEMA 4X

Ordering Information

Output Type	Order Number
Sourcing	NEO-5003

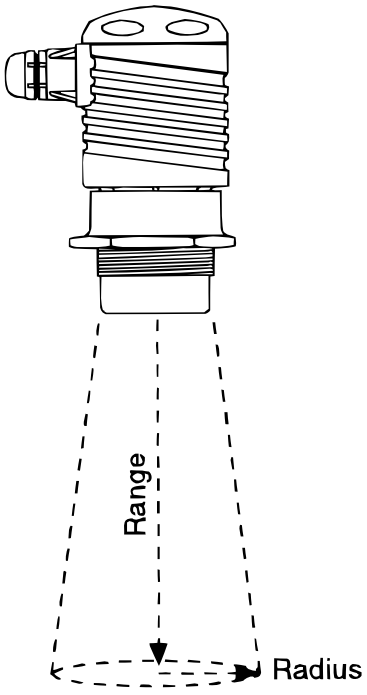
NEO Dimensions

Standard 2” NPT Fittings



NEO Beam Divergence

Range (feet)	Radius (inches)	Range (feet)	Radius (inches)
1	2.6	13	21.5
2	4.2	14	23.1
3	5.7	15	24.7
4	7.3	16	26.3
5	8.9	17	27.8
6	10.5	18	29.4
7	12.1	19	31.0
8	13.6	20	32.6
9	15.2	21	34.2
10	16.8	22	35.7
11	18.4	23	37.3
12	20.0	24	38.8
		25	40.5



NES
Conductive Level Limit Switches
for Conductive Liquids

Description

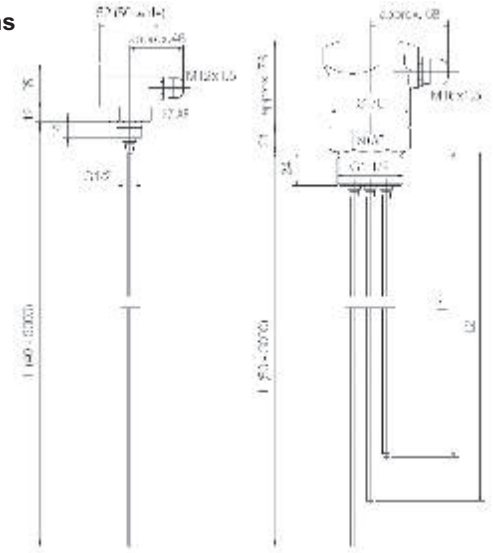
KOBOLD limit switches of model NES are used for level monitoring and pump control of conductive liquids. The design without any moving parts allows service whit critical media with. for example, solid content, negligible density or high viscosity. The instruments operate on the conductive principle. A low a.c. voltage is applied between the conductive wall of the tank or the earth electrode (longest electrode) and a switching point electrode. if the conductive medium touches the electrode relay. The relay amplifies the alternating current and operates an relay or a pump controller. An electrode relay of type NE-104 is required per switch point for signalling. For min./max. control two switching point electrodes must be connected to be the relay. Relay NE-304 operates as two singles relays (NE-104)

Technical Details .

Housing:.....	Polidimide or Aluminium
Connections:.....	polypropilene, PTFE or Stainless steel 1.4571 G ½ (single electrode) G 1 ½ (2-6-fold electrode)
Electrodes:.....	Stainless steel 1.4571 Hastelloy or titanium
Max. length of electrodes:.....	3000 mm
Electrode coating:.....	Polyolefine, complete coating
No. of electrodes:.....	1 - 6
Max. temperature.....	90ºC (Polyolefine coating) 150ºC (PTFE coating)
Max. pressure:.....	6 bar (PTFE connection) 15 bar (Polyprolylene connection) 30 bar (Stainless steel connection)
Min. conductivity:.....	approximately 20 µS/cm
protection:.....	IP 65

Electrode relay
For technical details please refer to pp. 33-36
(Electrode relay model NE)

Dimensions



Order Details for electrode relay

Description of electrode relay	SUPPLY Order no. 24 V_{AC}	Order no. 230 V_{AC}	Order no. 110 V_{AC}
1 limit signal or 1 min./max control	NE-1042	NE-1040	NE-1041
2 limit signals or 2 min./max controllers	NE-3042	NE-3040	NE-3041

Order Details
(Example: **NES-REAP1**)

Mode	Description	Housing	Electrode material	Electrode coating	Screwed fiting	Number of electrodes
NES	Conductive Limit Switches	**R**= Polyamide **L**= Aluminium	**E**= Stainless steel **H**= Hastelloy C* **T**= Titanium*	**A**= Polyolefine complete coating **T**= PTFE partial coating (300 mm) **V**= PTFE complete coating	**P**= Polypropylene** **E**= Stainless steel **F**= PTFE*	**1**= 1 electrodes **2**= 2 electrodes **3**= 3 electrodes **4**= 4 electrodes **5**= 5 electrodes **6**= 6 electrodes

*with PTFE coating only (option T or V) **with stainless steel electrode and polylefine coating only Please show the length of electrodes in clear text.

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