



Variable area flow meters

and flow switches



Great versatility with low cost alternatives

Hedland® variable area flow meters (rotameters) are the industry benchmark. This product line has grown to over 15.000 flow meters constructed of aluminium, brass or stainless steel with variable measuring area for liquids, oil, water, compressed air and many other fluids and gases. Hedland® meters are recommended for use in machine cooling and lubrication, packaging, semiconductor production, high pressure and hose applications, automotive and aviation industry as well as in the mining industry.

EZ-View®

Low cost meters for oil, water and other liquids:

- Rugged construction
- Installation in any position
- Shock and vibration resistant
- Instantaneous direct reading

Standard meters

- Variable area in-line flow meters.
- Rugged, durable construction in aluminium, brass or stainless steel
- Installation in any position
- Available from 1/4" to 2" and 3"
- Direct reading
- 360° rotatable guard scale

MR Transmitter and Flow-Alert

For fluids, air and compressed gases

- Mounting in any position
- Electronic signal output
- Digital display (MR only)
- IP 52 and 54 housings (NEMA 12/13)



Measuring principle

The variable area (rotameter) flow measurement method allows fluids (liquids and gases) volume streams to be determined. A moving sharp-edged orifice is located within the piston assembly, forming an annular opening with the contoured metering cone. The piston assembly carries a cylindrical PPS/ceramic magnet that is magnetically coupled to an external flow indicator that moves precisely in direct response to movement for the piston therefore providing a visual display for the flow rate.



EZ-View® flow meters

General design features

Operating principle

The EZ-View® flow meter is a variable area instrument. A precision molded, sharp-edged orifice^① located within the piston assembly^②, forms an annular opening with the metering cone^③. Flow through the meter creates a pressure differential across the sharp-edged orifice, moving the piston against the spring^④. The piston moves precisely, in direct proportion to the rate of flow. The calibrated spring opposes flow in the forward direction. This spring decreases viscosity sensitivity and allows the flow meters to be used in any position, including inverted. The indicated flow rate is measured by viewing the red flow indicator^⑤ line on the piston relative to the precalibrated numerical scale, mounted on the outer surface of the transparent flow meter body.

Note: The piston assembly carries a cylindrical magnet on all EZ-View® Flow-Alert models. This magnet is necessary to activate the AC, DC or reed switch modules when flow conditions are too high or too low.

Operates in any position

The in-line flow meter's unique spring loaded variable area design allows meters to be installed in any position without effecting accuracy. It can be installed into horizontal or vertical lines, or with an optional inverted flow scale, this meter can monitor flow in a downward flowing (i.e. gravity feed) line.

Easy-to-read scale

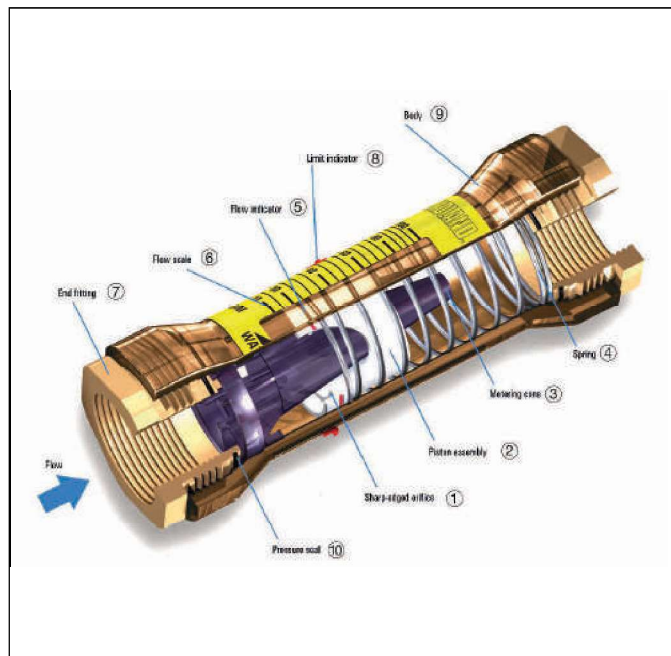
This flow meter is the most readable product in its class. A brightly colored flow scale^⑥ contains bold, easy-to-read numerals and gauge marks. This enhanced resolution virtually eliminates parallax problems associated with competitive, direct reading flow meters.

Accuracy within ±5% full scale

The EZ-View® flow meter accuracy is within ±5% of full scale while monitoring liquids with viscosity and specific gravity similar to factory calibrated fluids.

Repeatability

This is particularly important in cyclical applications, which require consistent readings.



Operating temperature

Maximum operating temperature is 121 °C (250 °F).

Operating pressure

Maximum operating pressure is 325 psi/22.4 bar.

Rugged construction

Flow meters are available in brass, stainless, and PVC fittings, with NPT or BSP ports (see ordering information tables). Constructed of high-impact polysulfone plastic, this simple variable area flow meter contains a minimum number of moving parts, offering a reliable, trouble-free flow rate indicator to monitor a wide range of liquids and gases.

Note: Inlet and outlet

EZ-View[®] flow meters

General design features

No flow straighteners or special piping

The design does not require special plumbing or accessories to stabilize turbulent flow. Flow meters can be installed immediately adjacent to 90-degree elbows or other components providing system design flexibility.

Filtration

The flow meters are more contamination tolerant than most fluid system components, 200 mesh (74 micron) or better filtration is required to assure reliable performance.

Standard flow scales

Standard flow scales are calibrated in gallons per minute (gpm) and liters per minute (lpm) at 0.876 specific gravity for petroleum-based fluids, 1.0 specific gravity for water and water-based emulsions.

Special flow scales

Special scales are available in any measurement unit and/or specific gravity.

Viscosity effect (SUS/cSt)

The design utilizes a precision-molded, sharp-edged orifice and biasing calibration spring that ensures operating stability and accuracy over the wide viscosity range common to many fluids. Generally, high flow models provide good accuracy over a viscosity range of 40 to 500 SUS (4.2 to 108 cSt).

Density effect (specific gravity)

Any fluid density change from stated standards has a square-root effect on meter accuracy. Special scales can be supplied if actual specific gravity decreases accuracy beyond application limits.

Corrections for more or less dense fluids can be made to standard scales using correction equations. Refer to pages 5-7.

Fluid selection chart

Fluid	Specific gravity	Correction factor of standard scale		Internal components				Fittings		
				Polysulfone	T300 stainless spring	Buna N	PH15 7 MO stainless retaining ring	C360 brass	PVC - type 1	T303 stainless
		Oil	Water							
Acetic acid (air free)	1.06	0.909	0.971	R	R	C	R	N	R	R
Acetone	0.79	1.053	1.125	N	R	N	R	R	N	R
Alcohol butyl (Butanol)	0.83	1.027	1.098	R	R	R	R	C	R	R
Alcohol ethyl (Ethanol)	0.83	1.027	1.098	R	R	N	R	C	R	R
Ammonia	0.89	0.992	1.060	R	R	C	R	C	R	R
Benzene	0.69	1.127	1.204	N	N	N	N	R	N	N
Carbon disulphide	1.26	0.834	0.891	N	R	N	R	N	N	R
Castor oil	0.97	0.950	1.015	C	C	R	C	R	C	C
Cotton seed oil	0.93	0.970	1.037	R	R	R	R	R	N	R
Ethylene glycol 50/50	1.12	0.884	0.945	R	R	R	R	R	R	R
Freon II	1.46	0.774	0.828	N	R	N	R	R	N	R
Gasoline	0.70	1.119	1.195	R	R	R	R	R	C	R
Glycerin	1.26	0.834	0.891	R	R	R	R	R	R	R
Kerosene	0.82	1.033	1.104	R	R	R	R	R	R	R
Liquid propane (LPG)	0.51	1.310	1.400	N	R	R	R	R	R	R
Mineral oil	0.92	0.976	1.042	R	R	R	R	R	R	R
Naphtha	0.76	1.074	1.147	N	R	R	R	N	N	R
Perchloroethylene	1.62	0.735	0.786	N	R	R	R	N	N	R
Petroleum oil	0.876	1.000	1.068	R	R	R	R	R	R	R
Phosphate ester	1.18	0.862	0.921	N	R	N	R	R	N	R
Phosphate ester base	1.26	0.833	0.891	N	R	N	R	R	N	R
Phosphoric acid (air free)	1.78	0.701	0.749	R	N	C	N	N	R	N
Sea water	1.03	0.922	0.985	R	N	R	N	N	R	N
Synthetic petroleum base	1.00	0.936	1.000	R	R	R	R	C	R	R
Water	1.00	0.936	1.000	R	R	R	R	R	R	R
Water glycol 50/50	1.07	0.905	0.967	R	R	R	R	R	R	R
Water-in-oil	0.93	0.970	1.037	R	R	R	R	R	R	R

R – Recommended N – Not recommended C – Consult factory

EZ-View® flow meters

For oil and water

- ½ to 1 inch ports
- EZ to install, in any position
- Polysulfone bodies for standard applications or Radel® R for more aggressive media
- No special piping or flow straighteners needed
- No electrical connections
- Direct reading indication
- Accuracy within 5% full scale
- Relatively insensitive to shock and vibration



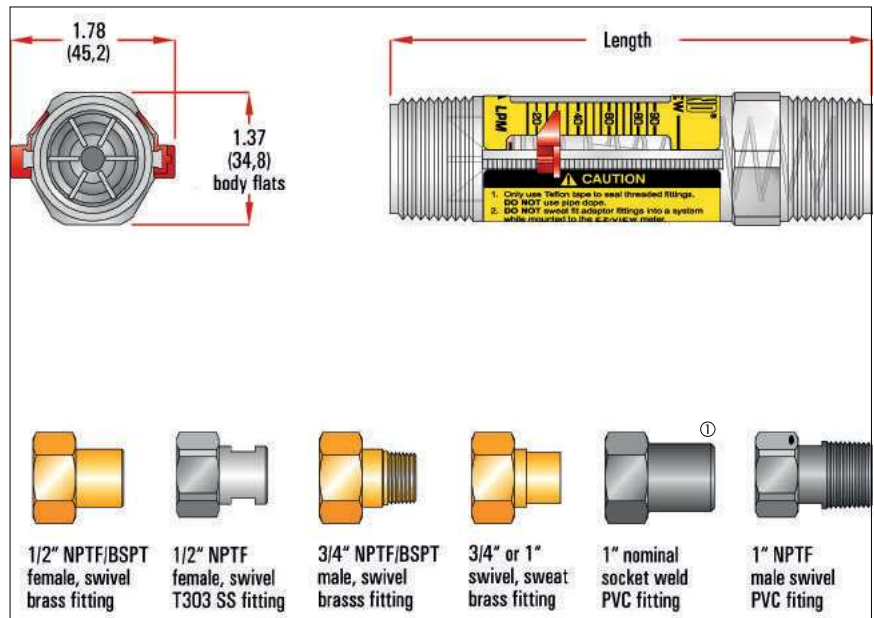
EZ-View® with Polysulfone body



EZ-View® with Radel® R body

Technical data

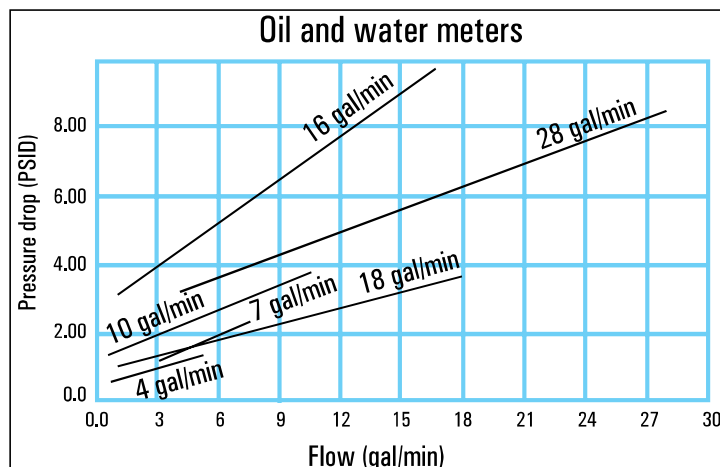
Materials	Polysulfone plastic body, piston and cone Radel® R plastic body and cone, polysulfone piston
Common parts	
Spring	T300-series stainless
Indicator ring	Buna N
Pressure seals	Buna N
Fittings	C360 brass, PVC, or T303 stainless steel
Limit indicator	Polypropylene
Retaining ring	PH15 – 7MO stainless
Optional (consult factory)	Spring + retaining ring: Teflon® coated
Fittings/ threads	NPT ANSI/ASME B1.20.1, BSPT ISOR7 See ordering information table next page.
Temperature range	0 °C to +121 °C (+32 °F to +250 °F)
Pressure rating	325 psi / 22.4 bar maximum
Pressure drop	See differential pressure charts.
Accuracy	± 5% of full scale
Repeatability	± 1%
Dimensions	See ordering information table next page.



① Meters with type 1 PVC fittings: Pressure rating psi normal PVC system specification.
Temperature range 0 °C to +60 °C (+32 °F to +140 °F)

EZ-View® flow meters

For oil and water



Ordering information

Fluid media	Flow range		½" NPTF female, swivel brass fitting	½" NPTF female, swivel T303 SS fitting	½" BSPT female, swivel brass fitting	¾" NPTF male, swivel brass fitting	¾" BSPT male, swivel brass fitting	¾" or 1" ① nominal, swivel sweat brass fitting	1" NPTF ② male, plastic polysulfone fitting	1" nominal ③ socket weld PVC fitting	1" NPTF male, swivel PVC fitting	Material	
	gal/min	l/min										Polysulfone	Radel R
Oil 0.876 s.g.	0.5 - 4	2 - 15	H624-104	H626-104	H627-104	H625-104	H630-104		H621-104	H628-104	H629-104	STD	-R
	1.0 - 7	4 - 26	H624-107	H626-107	H627-107	H625-107	H630-107		H621-107	H628-107	H629-107		
	1.0 - 10	4 - 35	H624-110	H626-110	H627-110	H625-110	H630-110		H621-110	H628-110	H629-110		
	1.0 - 16	5 - 60	H624-116	H626-116	H627-116	H625-116	H630-116		H621-116	H628-116	H629-116		
	3.0 - 18	15 - 65				H625-118	H630-118		H621-118	H628-118	H629-118		
	4.0 - 28	20 -100				H625-128	H630-128		H621-128	H628-128	H629-128		
Water 1.0 s.g.	0.5 - 4	2 - 15	H624-004	H626-004	H627-004	H625-004	H630-004	H620-004	H621-004	H628-004	H629-004	STD	-R
	1.0 - 7	4 - 26	H624-007	H626-007	H627-007	H625-007	H630-007	H620-007	H621-007	H628-007	H629-007		
	1.0 - 10	4 - 35	H624-010	H626-010	H627-010	H625-010	H630-010	H620-010	H621-010	H628-010	H629-010		
	1.0 - 16	5 - 60	H624-016	H626-016	H627-016	H625-016	H630-016	H620-016	H621-016	H628-016	H629-016		
	3.0 - 18	15 - 65				H625-018	H630-018	H620-018	H621-018	H628-018	H629-018		
	4.0 - 28	20 -100				H625-028	H630-028	H620-028	H621-028	H628-028	H629-028		
Dimensions	Length ④ in (mm)		7.75 (196.8)	7.75 (196.8)	7.75 (196.8)	8.25 (209.5)	8.25 (209.5)	7.75 (196.8)	5.25 (133.3)	8.46 (214.9)	8.86 (225.0)		
	Fitting flats in (mm)		1.50 (38.1)	1.50 (38.1)	1.50 (38.1)	1.50 (38.1)	1.50 (38.1)	1.50 (38.1)	N/A	1.54 (39.1)	1.50 (38.1)		
	Weight lb (kg)		0.95 (0.43)	0.85 (0.39)	0.95 (0.43)	0.90 (0.41)	0.90 (0.41)	0.75 (0.34)	0.20 (0.09)	0.35 (0.16)	0.55 (0.25)		

① Fits ¾" copper tube types K, L, M; 1" copper tube type M only

② DO NOT use pipe dope. Use Teflon® tape only. Use with plastic fittings only.

③ Fits 1" Sch 40/80 PVC, CPVC pipe. Requires 1" pipe coupling.

④ Length includes end fittings.

Example: Polysulfone model = H 624 - 104 Radel® R model = H 624 - 104-R

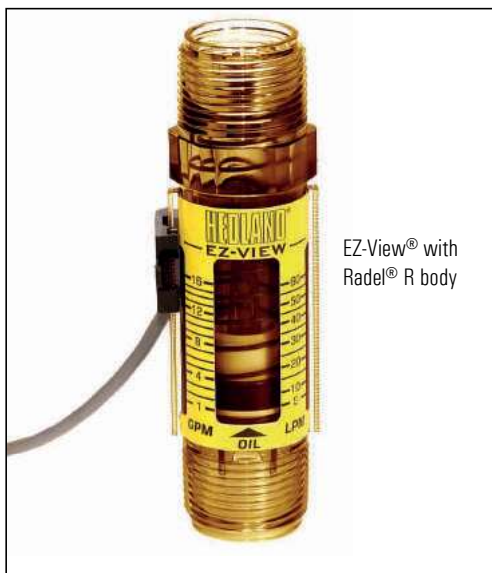
EZ-View® flow meters

With Flow-Alert flow switch

- Reeds switch and latching models
- Automatically signals alarm if flow is too high or too low
- Models available for AC or DC power supply
- Latching models include Hirschmann type electrical connector
- Polysulfone bodies for standard applications or Radel® R for more aggressive media
- Easy to install
- Easy flow limit adjustment
- Operates in any position
- Relatively insensitive to shock and vibration
- Repeatability within $\pm 1\%$
- Low cost



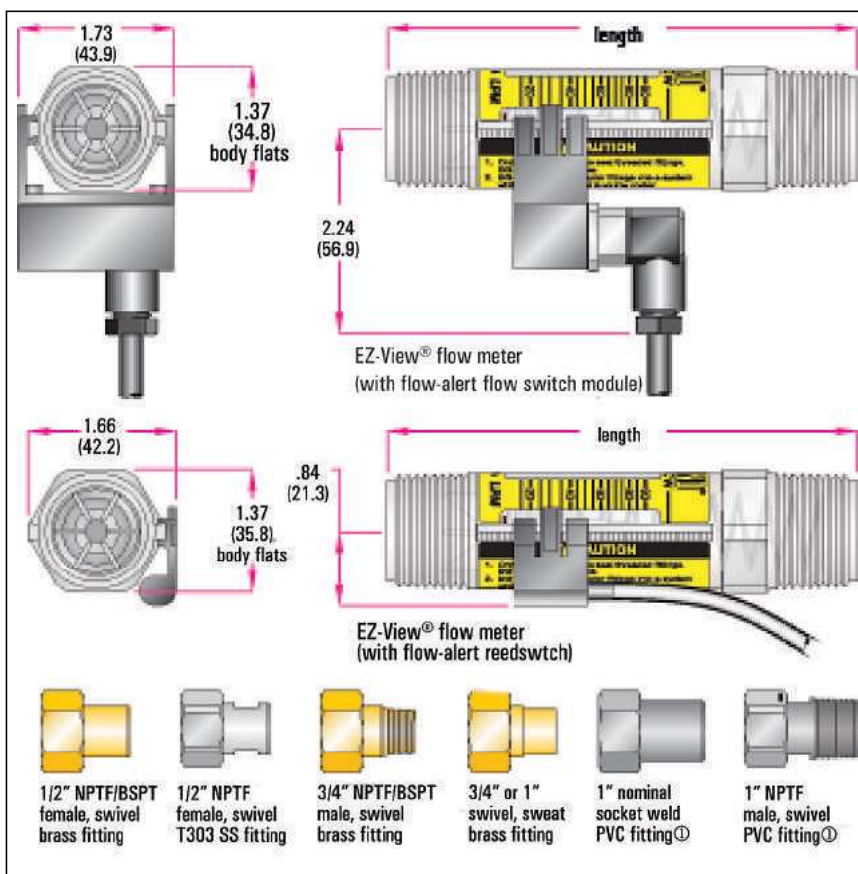
EZ-View® with Polysulfone body



EZ-View® with Radel® R body

Technical data

Material	Polysulfone plastic body, piston and cone Radel® R plastic body and cone, polysulfone piston
Common parts	
Spring	T300-series stainless
Indicator ring	Buna N
Pressure seals	Buna N
Fittings	C360 Brass, PVC, or T303 stainless steel
Limit indicators	Polypropylene
Magnet	Strontium ferrite
Retaining ring	PH15 – 7MO stainless
Fittings/ threads	NPT ANSI/ASME B1.20.1, BSPT ISOR7 See ordering information table next page.
Temperature range	0 °C to +121 °C (+32 °F to +250 °F)
Pressure rating	325 psi / 22.4 bar maximum
Pressure drop	See differential pressure chart
Accuracy	$\pm 5\%$ of full scale
Repeatability	$\pm 1\%$
Dimensions	See ordering information table next page.



^① Meters with type 1 PVC fittings: Pressure rating per normal PVC system specifications.
Temperature range 0 °C to +60 °C (+32 °F to +140 °F)

EZ-View[®] flow meters

With Flow-Alert flow switch

Flow switch options and specifications:

The AC and DC powered flow-alert flow switch modules consist of a latching relay circuit housed in a sealed polypropylene enclosure. The modules have a normally open dry relay contact that can be used to directly control alarms, warning lights, relays or be used to interface to a PLC. The relay will be latched on as the magnet inside the flow meter passes by the module, and remain latched on until the magnet passes in the other direction or power is interrupted. The set point is adjustable from 0 to 100% of full scale.

The reed switch Flow-Alert modules are housed in a sealed polypropylene enclosure. The reed switch module does not provide the latching function like the AC and DC powered units. When the magnet inside the flow meter comes within proximity of the module, the reed switch will change state. The set point is adjustable from 0 to 100% full scale. Two reed switches providing low flow and high flow set points may be installed on a single flow meter.

	AC latching	DC latching	Reed switch form-A normally open (NO)	Reed switch form-B normally closed (NC)	Reed switch form-C
Operating voltage	115 VAC ±10%	10-30 VDC	-	-	-
Operating current	25 mA maximum	25 mA maximum	-	-	-
Contact rating	1A @ 30 VDC 0.5A @ 125 VAC Resistive load	1A @ 30 VDC 0.5A @ 125 VAC Resistive load	1A max 200 VDC max 15 watts max Resistive load	0.25A max 175 VDC max 5 watts max Resistive load	0.25A max 175 VDC max 5 watts max Resistive load
Operating temperature	+32 to +158 °F (0 to +70 °C)	+32 to +158 °F (0 to +70 °C)	+32 to +250 °F (0 to +121 °C)	+32 to +250 °F (0 to +121 °C)	+32 to +250 °F (0 to +121 °C)
Connector	4-pin connector (protection class IP65)	4-pin connector (protection class IP65)	-	-	-
Cable	Not included	Not included	3 foot, 2-wire #24 AWG black PVC Jacketed pig-tail	3 foot, 2-wire #20 AWG grey PVC Jacketed pig-tail	3 foot, 3-wire #24 AWG grey PVC Jacketed pig-tail
Rating	NEMA 12 & 13 (IP65)	NEMA 12 & 13 (IP65)	NEMA 12 & 13 (IP65)	NEMA 12 & 13 (IP65)	NEMA 12 & 13 (IP65)
Certification	N/A	EMC directive 89/336/EEC	EMC directive 89/336/EEC	EMC directive 89/336/EEC	EMC directive 89/336/EEC
Model number	H526-003	H526-005	H526-008-NO	H526-008-NC	H526-008

Note: Flow switches and flow meters sold separately

Ordering information

Fluid media	Flow range		½" NPTF female, swivel brass fitting	½" NPTF female, swivel T303 SS fitting	½" BSPT female, swivel brass fitting	¾" NPTF male, swivel brass fitting	¾" BSPT male, swivel brass fitting	¾" or 1" ① nominal, swivel sweat brass fitting	1" NPTF ② male, plastic polysulfone fitting	1" nominal ③ socket weld PVC fitting	1" NPTF male, swivel PVC fitting	Material	
	gal/min	l/min										Polysulfone	Radel® R
Oil 0.876 s.g.	0.5 - 4	2 - 15				H625-704	H630-704		H621-704	H628-704	H629-704	STD	-R
	1.0 - 7	4 - 26	H624-704	H626-704	H627-704	H625-707	H630-707		H621-707	H628-707	H629-707		
	1.0 - 10	4 - 35	H624-707	H626-707	H627-707	H625-710	H630-710		H621-710	H628-710	H629-710		
	1.0 - 16	5 - 60	H624-710	H626-710	H627-710	H625-716	H630-716		H621-716	H628-716	H629-716		
	3.0 - 18	15 - 65	H624-716	H626-716	H627-716	H625-718	H630-718		H621-718	H628-718	H629-718		
	4.0 - 28	20 -100				H625-728	H630-728		H621-728	H628-728	H629-728		
Water 1.0 s.g.	0.5 - 4	2 - 15				H625-604	H630-604	H620-604	H621-604	H628-604	H629-604	STD	-R
	1.0 - 7	4 - 26	H624-604	H626-604	H627-604	H625-607	H630-607	H620-607	H621-607	H628-607	H629-607		
	1.0 - 10	4 - 35	H624-607	H626-607	H627-607	H625-610	H630-610	H620-610	H621-610	H628-610	H629-610		
	1.0 - 16	5 - 60	H624-610	H626-610	H627-610	H625-616	H630-616	H620-616	H621-616	H628-616	H629-616		
	3.0 - 18	15 - 65	H624-616	H626-616	H627-616	H625-618	H630-618	H620-618	H621-618	H628-618	H629-618		
	4.0 - 28	20 -100				H625-628	H630-628	H620-628	H621-628	H628-628	H629-628		
Dimensions:	Length④ in (mm)		7.75 (196.8)	7.75 (196.8)	7.75 (196.8)	8.25 (209.5)	8.25 (209.5)	7.75 (196.8)	5.25 (133.3)	8.46 (214.9)	8.86 (225.0)		
	Fitting flats in (mm)		1.50 (38.1)	1.50 (38.1)	1.50 (38.1)	1.50 (38.1)	1.50 (38.1)	1.50 (38.1)	N/A	1.54 (39.1)	1.50 (38.1)		
	Weight lb (kg)		0.95 (0.43)	0.85 (0.39)	0.95 (0.43)	0.90 (0.41)	0.90 (0.41)	0.75 (0.34)	0.20 (0.09)	0.35 (0.16)	0.55 (0.25)		

① Fits ¾" copper tube types K, L, M; 1" copper tube type M only

② Do not use pipe dope. Use Teflon[®] tape only. Use with plastic fittings only.

③ Fits 1" Sch 40/80 PVC, CPVC pipe. Requires 1" pipe coupling.

④ Length includes end fittings.

Example: Polysulfone model = H 624 - 704 Radel[®] R model = H 624 - 704 -R

EZ-View® flow meters

For oil and water

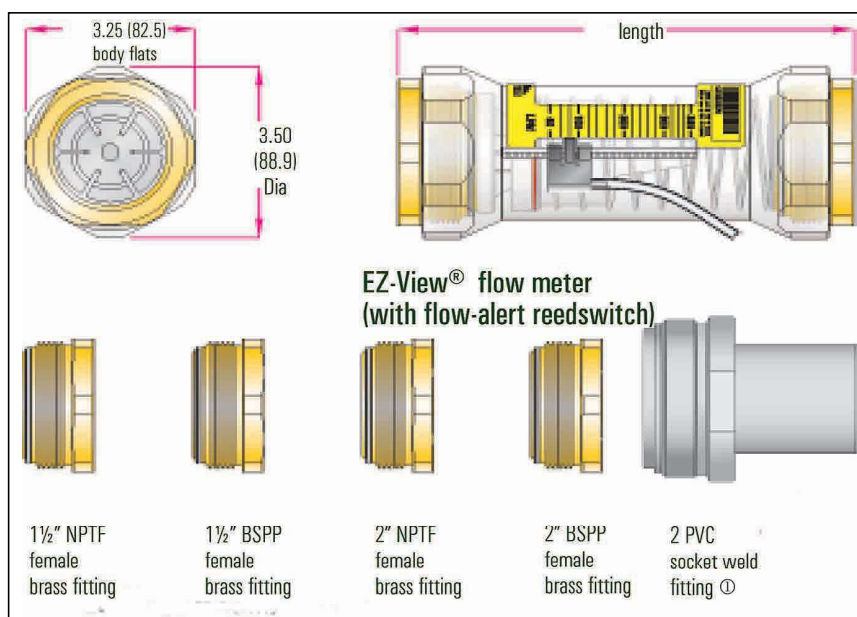
- 1½ to 2 inch ports
- No special piping or flow straighteners needed
- EZ to install, in any position
- No electrical connections
- Direct reading indication
- Accuracy within $\pm 5\%$ full scale
- Relatively insensitive to shock and vibration

Technical data

Materials	Radel® R plastic body; polysulfone piston and cone T300-series stainless spring Buna N flow indicator ring and pressure seals 360 Brass or PVC fittings Polypropylene limit indicators
Fittings / threads	NPT ANSI/ASME B1.20.1, BSPP ISO228 See ordering information table next page.
Temperature range	0 °C to +121 °C (+32 °F to +250 °F)
Pressure rating	325 psi / 22.4 bar maximum
Pressure drop	See differential pressure chart
Accuracy	$\pm 5\%$ of full scale
Repeatability	$\pm 1\%$
Dimensions	See ordering information table next page.



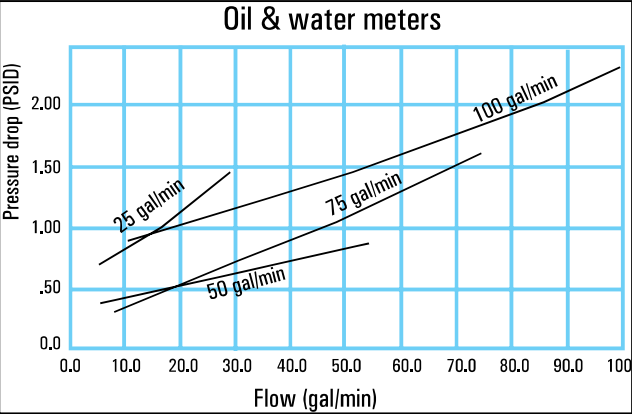
EZ-View® with Radel® R body



① Meters with type 1 PVC fittings: Pressure rating per normal PVC system specifications.
Temperature range 0 °C to +60 °C (+32 °F to +140 °F)

EZ-View[®] flow meters

For oil and water



Ordering information

Fluid media	Flow range		1½" NPTF female, brass fitting	1½" BSPP female, brass fitting	2" NPTF female, brass fitting	2" BSPP female, brass fitting	2" PVC socket weld fitting ^①
	gal/min	l/min					
Oil 0.876 s.g.	2 – 25	10 – 95	H615-125-R	H616-125-R	H617-125-R	H618-125-R	
	5 – 50	20 – 190	H615-150-R	H616-150-R	H617-150-R	H618-150-R	
	7 – 75	30 – 280	H615-175-R	H616-175-R	H617-175-R	H618-175-R	
	10 – 100	40 – 380	H615-110-R	H616-110-R	H617-110-R	H618-110-R	
Water 1.0 s.g.	2 – 25	10 – 95	H615-025-R	H616-025-R	H617-025-R	H618-025-R	H619-025-R
	5 – 50	20 – 190	H615-050-R	H616-050-R	H617-050-R	H618-050-R	H619-050-R
	7 – 75	30 – 280	H615-075-R	H616-075-R	H617-075-R	H618-075-R	H619-075-R
	10 – 100	40 – 380	H615-010-R	H616-010-R	H617-010-R	H618-010-R	H619-010-R
Dimensions	Length ^② in (mm)		8.72 (221.5)	8.72 (221.5)	8.72 (221.5)	8.72 (221.5)	11.48 (291.6)
	Fitting Flats in (mm)		3.00 (76.2)	3.00 (76.2)	3.00 (76.2)	3.00 (76.2)	N/A
	Weight lb (kg)		4.10 (1.86)	4.10 (1.86)	3.10 (1.41)	3.10 (1.41)	1.70 (0.77)

① Fits 2" Sch 40/80 PVC, CPVC pipe.

② Length includes end fitting.

EZ-View® flow meters

With Flow-Alert flow switch

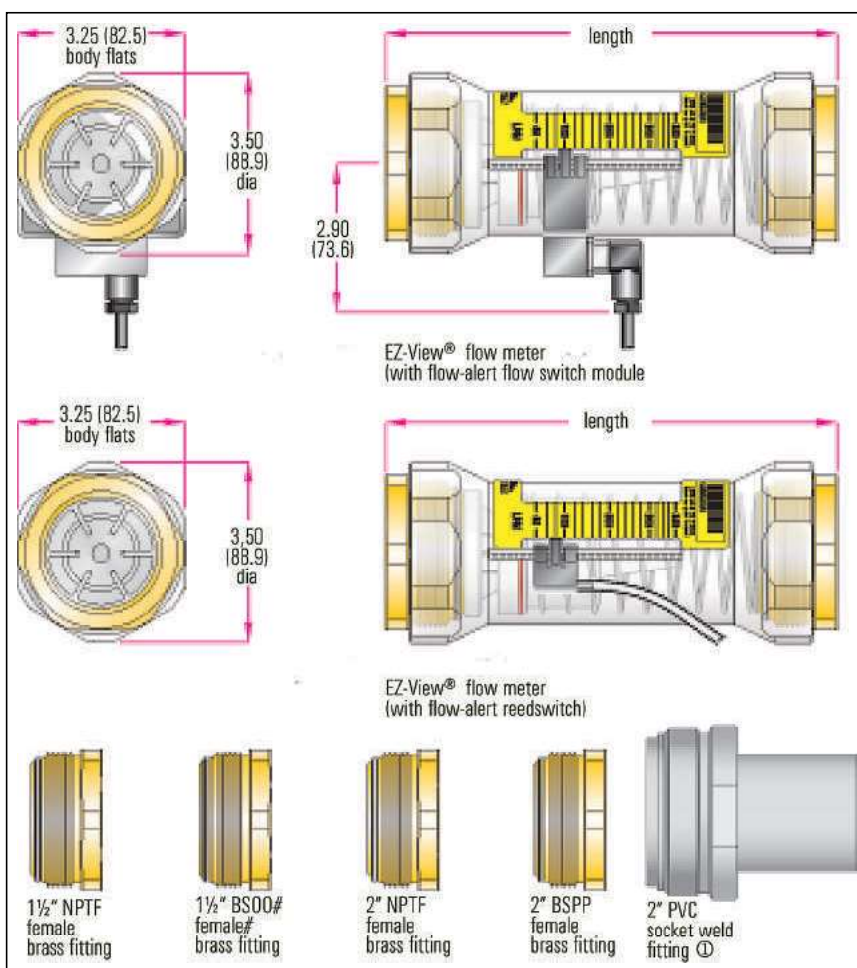
- Reed switch and latching models
- Automatically signals alarm, if flow is too high or too low
- Models available for AC or DC power supply
- Latching model includes Hirschmann type electrical connector
- Easy to install
- Easy flow limit adjustment
- Operates in any position
- Relatively insensitive to shock and vibration
- Repeatability within $\pm 1\%$
- Low cost

Technical data

Materials	Radel® R plastic body; polysulfone piston and cone T300-series stainless spring Buna N flow indicator ring and pressure seals C360 brass or PVC fittings Polypropylene limit indicators Strontium ferrite magnet
Fittings / threads	NPT ANSI/ASME B1.20.1, BSPP ISO228 See ordering information table next page.
Temperature range	0 °C to +121 °C (+32 °F to +250 °F)
Pressure rating	325 psi / 22.4 bar maximum
Pressure drop	See differential pressure chart, page 62.
Accuracy	$\pm 5\%$ of full scale
Repeatability	$\pm 1\%$
Dimensions	See ordering information table next page.



EZ-View® with Radel® R body



① Meters with type 1 PVC fittings: Pressure rating per normal PVC system specifications.
Temperature range 0 °C to +60 °C (+32 °F to +140 °F)

EZ-View[®] flow meters

With Flow-Alert flow switch

Flow switch options and specifications

The AC and DC powered Flow-Alert flow switch modules consist of a latching relay circuit housed in a sealed polypropylene enclosure. The modules have a normally open dry relay contact that can be used to directly control alarms, warning lights, relays or be used to interface to a PLC. The relay will be latched on as the magnet inside the flow meter passes by the module, and remain latched on until the magnet passes in the other direction or power is interrupted. The set point is adjustable from 0 to 100 % of full scale.

The reed switch Flow-Alert modules are housed in a sealed polypropylene enclosure. The reed switch module does not provide the latching function like the AC and DC powered units. When the magnet inside the flow meter comes within proximity of the module, the reed switch will change state. The set point is adjustable from 0 to 100 % full scale. Two reed switches providing low flow and high flow set points may be installed on a single flow meter.

	AC latching	DC latching
Operating voltage	115 VAC \pm 10%	10-30 VDC
Operating current	25 mA maximum	25 mA maximum
Contact rating	1A @ 30 VDC 0.5A @ 125 VAC Resistive load	1A @ 30 VDC 0.5A @ 125 VAC Resistive load
Operating temperature	+32 to +158 °F (0 to +70 °C)	+32 to +158 °F (0 to +70 °C)
Connector	4-pin connector (protection class IP65)	4-pin connector (protection class IP65)
Cable	Not included	Not included
Rating	NEMA 12 & 13 (IP65)	NEMA 12 & 13 (IP65)
Certification	N/A	EMC directive 89/336/EEC
Model number	H526-004	H526-006

Reed switch form-A normally open (NO)	Reed switch form-B normally closed (NC)	Reed switch form-C
-	-	-
-	-	-
1A max 200 VDC max 15 watts max Resistive load	0.25A max 175 VDC max 5 Watts max Resistive load	0.25A max 175 VDC max 5 watts max Resistive load
+32 to +250 °F (0 to +121 °C)	+32 to +250 °F (0 to +121 °C)	+32 to +250 °F (0 to +121 °C)
-	-	-
3 foot, 2-wire #24 AWG black PVC Jacketed pig-tail	3 foot, 2-wire #20 AWG grey PVC Jacketed pig-tail	3 foot, 3-wire #24 AWG grey PVC Jacketed pig-tail
NEMA 12 & 13 (IP65)	NEMA 12 & 13 (IP65)	NEMA 12 & 13 (IP65)
EMC directive 89/336/EEC	EMC directive 89/336/EEC	EMC directive 89/336/EEC
H526-008-NO	H526-008-NC	H526-008

Note: Flow switches and flow meters sold separately

Ordering information

Fluid media	Flow range		1½" NPTF female, brass fitting	1½" BSPP female, brass fitting	2" NPTF female, brass fitting	2" BSPP female, brass fitting	2" PVC socket weld fitting ^①
	gal/min	l/min					
Oil 0.876 s.g.	2 – 25	10 – 95	H615-725-R	H616-725-R	H617-725-R	H618-725-R	
	5 – 50	20 – 190	H615-750-R	H616-750-R	H617-750-R	H618-750-R	
	7 – 75	30 – 280	H615-775-R	H616-775-R	H617-775-R	H618-775-R	
	10 – 100	40 – 380	H615-710-R	H616-710-R	H617-710-R	H618-710-R	
Water 1.0 s.g.	2 – 25	10 – 95	H615-625-R	H616-625-R	H617-625-R	H618-625-R	H619-625-R
	5 – 50	20 – 190	H615-650-R	H616-650-R	H617-650-R	H618-650-R	H619-650-R
	7 – 75	30 – 280	H615-675-R	H616-675-R	H617-675-R	H618-675-R	H619-675-R
	10 – 100	40 – 380	H615-610-R	H616-610-R	H617-610-R	H618-610-R	H619-610-R
Dimensions	Length ^② in (mm)		8.72 (221.5)	8.72 (221.5)	8.72 (221.5)	8.72 (221.5)	11.48 (291.6)
	Fitting Flats in (mm)		3.00 (76.2)	3.00 (76.2)	3.00 (76.2)	3.00 (76.2)	N/A
	Weight lbs (kg)		4.10 (1.86)	4.10 (1.86)	3.10 (1.41)	3.10 (1.41)	1.70 (0.77)

① Fits 2" Sch 40/80 PVC, CPVC pipe.

② Length includes end fitting.

Note: Flow switches and flow meters sold separately

EZ-View® flow meters

In-Line test kits

- Simultaneously monitors in-line flow & pressure
- Compact & self-contained
- Mounts in any position
- Easily carried in tool kit

Here is a convenient, low-cost diagnostic tool to help you check flow and pressure simultaneously. The EZ-View® in-line test kits were designed to measure flow from 0.5 to 28 GPM (2 to 106 l/min), and operating pressures up to 160 psi (11 bar).

This compact, self-contained unit is easy to install, and can be used as a permanent monitoring indicator, or as a temporary troubleshooting tool to help: Check pump leakage under load, verify proper flow, pressure or control settings, locate line restrictions, verify pressure drops and balance multi-line systems.



EZ-View® with Polysulfone body



EZ-View® with Radel® R body

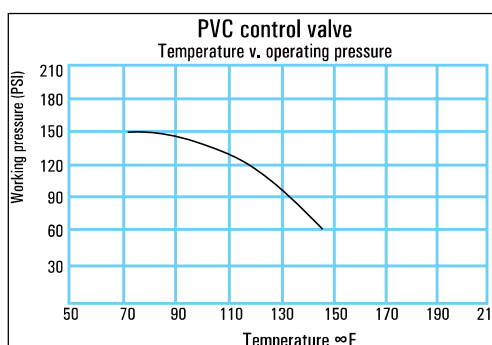
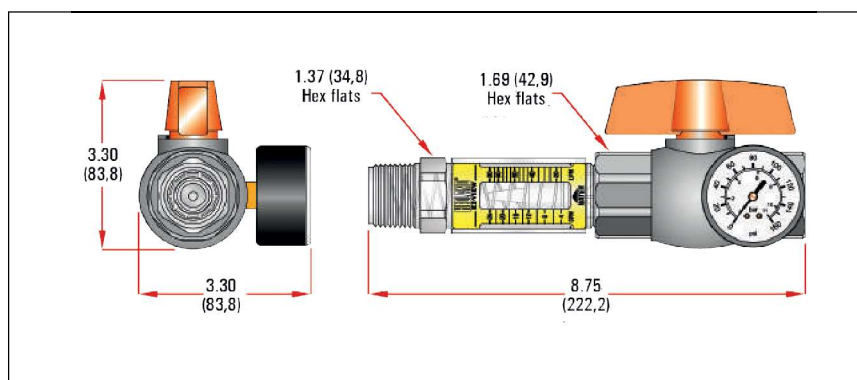
Ordering information

Fluid media	Flow range		1" NPTF male/female fitting	
	gal/min	l/min	Polysulfone	Radel® R
Oil 0.876 s.g.	0.5 - 4	3 - 13	H623-104	H623-104-R
	1.0 - 7	2 - 26	H623-107	H623-107-R
	1.0 - 10	5 - 40	H623-110	H623-110-R
	1.0 - 16	5 - 60	H623-116	H623-116-R
	3.0 - 18	10 - 70	H623-118	H623-118-R
Water 1.0 s.g.	4.0 - 28	20 - 100	H623-128	H623-128-R
	0.5 - 4	3 - 16	H623-004	H623-004-R
	2.0 - 7	4 - 26	H623-007	H623-007-R
	2.0 - 10	5 - 35	H623-010	H623-010-R
	6.0 - 16	5 - 60	H623-016	H623-016-R
	4.0 - 18	15 - 65	H623-018	H623-018-R
	4.0 - 28	20 - 100	H623-028	H623-028-R

Weight lbs (kg) 0.80 (0.36)

Technical data

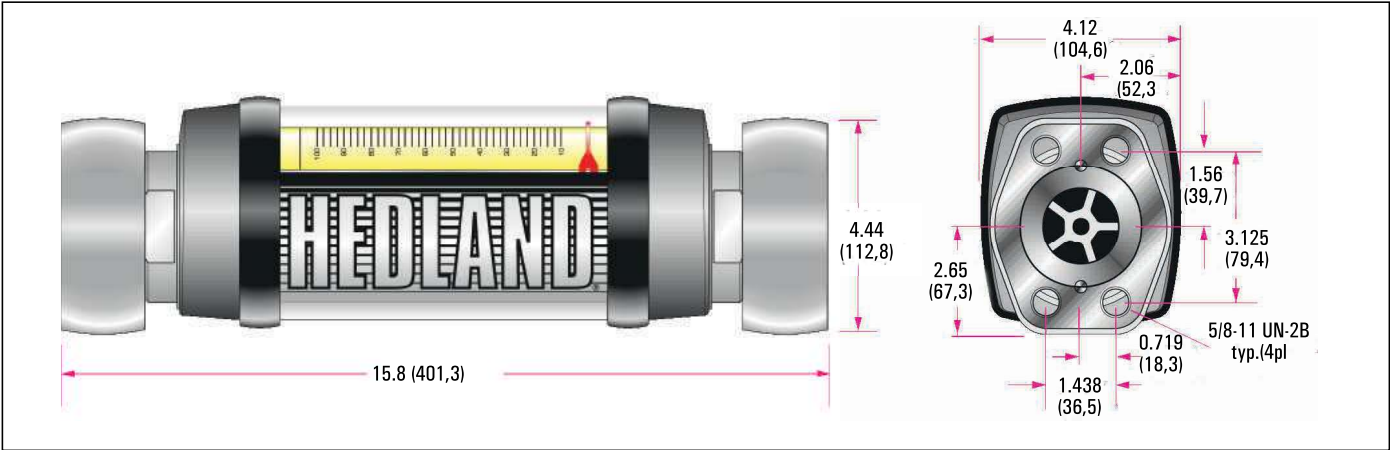
Materials	Polysulfone plastic body, piston and cone Radel® R plastic body and cone, polysulfone piston
Common parts	
Spring	T300-series stainless
Indicator ring	Buna N
Pressure seals	Buna N
Fittings	C360 brass, PVC, or T303 stainless steel
Limit indicators	Polypropylene
Retaining ring	PH15 - 7MO stainless
Optional (consult factory)	
Spring and retaining ring	Teflon® coated
Load valve	Polyvinyl chloride (PVC) - 1 body Polypropylene ball Teflon® ball seat Ethylene propylene (EPDM) O-ring
Fittings / threads	
Flow meter	NPT - 1 inch male / ANSI/ASME B1.20.1
Load valve:	NPT - 1 inch female / ANSI/ASME B1.20.1
Temperature range	0 °C to +65 °C (+32 °F to +150 °F)
Pressure rating	325 psi / 22.4 bar maximum
Pressure gauge	0 to 160 psi (0 to 11.0 bar) with internal shock damp
Pressure drop	See differential pressure chart, page 62.
Accuracy	± 5% of full scale
Repeatability	± 1%



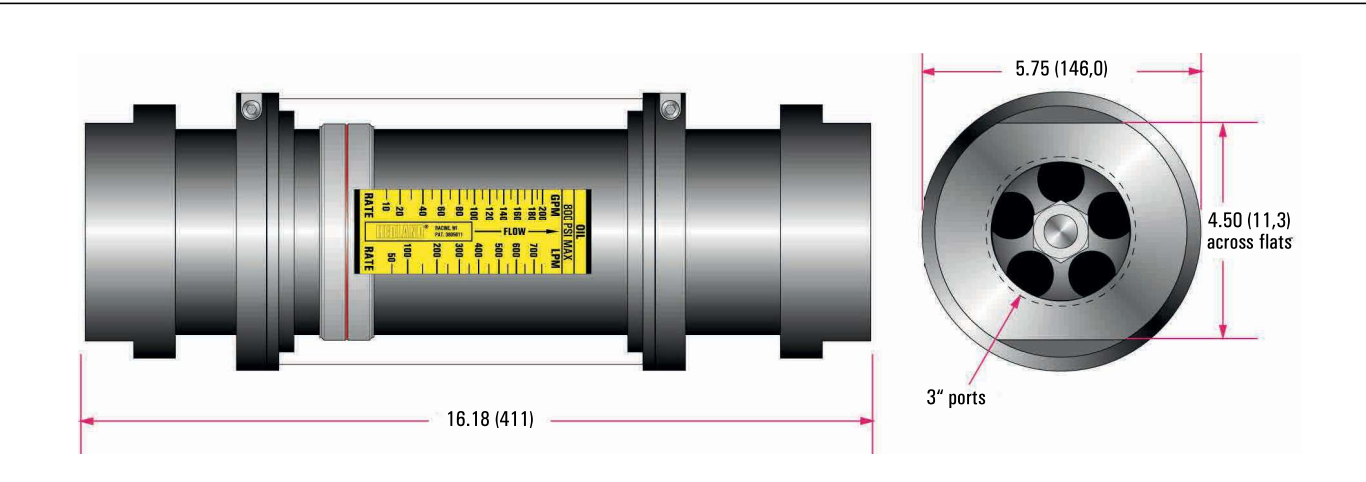
Dimensional information

For standard 1½ inch C62, 3 inch; SAE, NPTF, BSPP and 3 inch C61

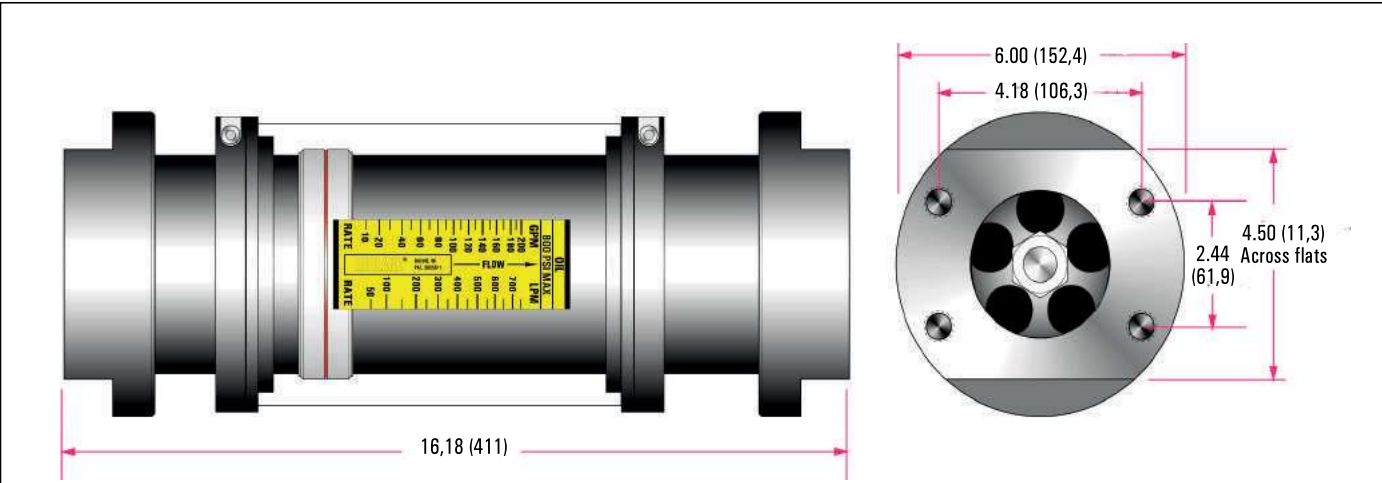
1½ inch; C62 flange - Inches (mm)



3 inch; NPTF, BSPP - Inches (mm)



3 inch; C61 flange - Inches (mm)



Weights for all flow meter models	Aluminium with aluminum internals	Brass with brass internals	T303 SS with aluminum internals	T303 SS with brass internals	T316 SS with T316 SS internals	Hostile environment T316 SS with T316 internals
	lbs (kg)	lbs (kg)	lbs (kg)	lbs (kg)	lbs (kg)	lbs (kg)
¼" Standard meter	.55 (.25)	1.05 (.48)	.9 (.41)	1.05 (.48)	~	~
¼" High temperature	1.35 (.61)	2.75 (1.25)	CF	2.75 (1.25)	2.75 (1.25)	~
¼" API oil, caustic & corrosive liquids & gases	~	~	~	~	3.00 (1.36)	3.00 (1.36)
¼" Pneumatic meter with extended cap	.7 (.32)	1.6 (.73)	1.5 (.68)	~	~	~
¼" Pneumatic meter with extended cap with gauge	1.2 (.55)	2.1 (1.0)	2.0 (.91)	~	~	~
Test kit with extended cap/gauge/valve	1.6 (.73)	2.5 (1.2)	2.3 (1.1)	~	~	~
¼" Flow-Alert flow switch	4.30 (1.95)	5.65 (2.56)	5.15 (2.34)	5.50 (2.50)	5.80 (2.63)	~
¼" Flow transmitter	4.25 (1.93)	5.60 (2.54)	5.10 (2.31)	5.45 (2.47)	5.75 (2.61)	~
½" Standard meter	1.25 (.57)	2.60 (1.18)	2.1 (.95)	2.45 (1.11)	~	~
½" Liquid test kit	4.9 (2.2)	5.7 (2.6)	5.3 (2.4)	~	~	~
½" High temperature	1.35 (.61)	2.75 (1.25)	CF	2.75 (1.25)	2.75 (1.25)	~
½" API oil, caustic & corrosive liquids & gases	3.0 (1.4)	~	~	~	2.95 (1.34)	2.95 (1.34)
½" Pneumatic meter with extended cap	2.1 (1.0)	3.8 (1.7)	3.3 (1.5)	~	~	~
½" Pneumatic meter with extended cap with gauge	2.7 (1.2)	4.3 (2.0)	3.8 (1.7)	~	~	~
Test kit with extended cap/gauge/valve	3.2 (1.5)	4.8 (2.2)	4.3 (2.0)	~	~	~
½" Flow-Alert flow switch	4.30 (1.95)	5.65 (2.56)	5.15 (2.34)	5.50 (2.50)	5.80 (2.63)	~
½" Flow transmitter	4.25 (1.93)	5.60 (2.54)	5.10 (2.31)	5.45 (2.47)	5.75 (2.61)	~
¾" Standard meter	2.0 (.9)	4.0 (1.8)	3.5 (1.6)	3.9 (1.8)	~	~
¾" Liquid test kit	7.0 (3.2)	9.0 (4.1)	8.5 (3.9)	~	~	~
¾" High temperature	2.1 (1.0)	4.40 (2.00)	4.00 (1.81)	4.40 (2.00)	4.40 (2.00)	~
¾" API oil, caustic & corrosive liquids & gases	~	~	~	~	4.40 (2.00)	4.6 (2.1)
¾" Pneumatic meter with extended cap	3.0 (1.4)	6.6 (3.0)	6.2 (2.8)	~	~	~
¾" Pneumatic meter with extended cap with gauge	3.5 (1.6)	7.1 (3.2)	6.7 (3.1)	~	~	~
Test kit with extended cap/gauge/valve	4.4 (2.0)	7.9 (3.6)	7.5 (3.4)	~	~	~
¾" Flow-Alert flow switch	4.95 (2.25)	6.95 (3.15)	6.60 (3.00)	6.85 (3.11)	7.35 (3.33)	~
¾" Flow transmitter	CF	CF	CF	CF	CF	~
1" Standard meter	1.85 (.84)	3.75 (1.70)	2.7 (1.3)	3.4 (1.5)	~	~
1" Liquid test kit	6.8 (3.1)	8.7 (4.0)	7.7 (3.5)	~	~	~
1" High temperature	3.0 (1.4)	4.40 (2.00)	4.00 (1.81)	4.40 (2.00)	4.40 (2.00)	~
1" API oil, caustic & corrosive liquids & gases	~	~	~	~	4.40 (2.00)	4.60 (2.10)
1" Pneumatic meter with extended cap	2.8 (1.3)	6.3 (2.9)	5.4 (2.5)	~	~	~
1" Pneumatic meter with extended cap with gauge	3.3 (1.5)	6.8 (3.1)	5.9 (2.7)	~	~	~
Test kit with extended cap/gauge/valve	4.2 (1.9)	7.6 (3.5)	6.7 (3.1)	~	~	~
1" Flow-Alert flow switch	4.95 (2.25)	6.85 (3.11)	5.80 (2.63)	6.50 (2.95)	7.50 (3.40)	~
1" Flow transmitter	CF	CF	CF	CF	CF	~
1¼" Standard meter	7.3 (3.3)	16.8 (7.6)	14.6 (6.6)	16.8 (7.6)	~	~
1¼" Liquid test kit	18.7 (8.5)	28.2 (12.8)	26.0 (11.8)	~	~	~
1¼" High temperature	9.6 (4.4)	21.40 (9.71)	CF	21.40 (9.71)	21.40 (9.71)	~
1¼" API oil, caustic & corrosive liquids & gases	~	~	~	~	21.40 (9.71)	CF
1¼" Pneumatic meter with extended cap	9.9 (4.5)	24.3 (11.0)	21.1 (9.6)	~	~	~
1¼" Pneumatic meter with extended cap with gauge	10.4 (4.7)	24.8 (11.2)	21.7 (9.8)	~	~	~
Test kit with extended cap/gauge/valve	12.5 (5.7)	27.0 (12.3)	23.8 (10.8)	~	~	~
1¼" Flow-Alert flow switch	13.55 (6.15)	23.05 (10.46)	20.85 (9.46)	23.05 (10.46)	27.65 (12.54)	~
1¼" Flow transmitter	CF	CF	CF	CF	CF	~
1½" Standard meter	7.3 (3.3)	16.4 (7.5)	14.1 (6.4)	15.8 (7.2)	~	~
1½" Standard meter with C62 flange	19.0 (8.6)	28.2 (12.8)	25.8 (11.7)	~	~	~
1½" Liquid test kit	18.7 (8.5)	27.8 (12.6)	25.5 (11.6)	~	~	~
1½" High temperature	9.6 (4.4)	21.40 (9.71)	CF	21.40 (9.71)	21.40 (9.71)	~
1½" High temperature with C62 flange	CF	21.8 (9.9)	CF	CF	CF	~
1½" API oil, caustic & corrosive liquids & gases	~	~	~	~	21.40 (9.71)	CF
1½" Pneumatic meter with extended cap	9.9 (4.5)	23.9 (10.8)	20.6 (9.4)	~	~	~
1½" Pneumatic meter with extended cap with gauge	10.4 (4.7)	24.4 (11.1)	21.2 (9.6)	~	~	~
Test kit with extended cap/gauge/valve	12.5 (5.7)	26.6 (12.1)	23.3 (10.6)	~	~	~
1½" Flow-alert flow switch	13.55 (6.15)	22.65 (10.27)	20.35 (9.23)	22.05 (10.00)	27.65 (12.54)	~
1½" Flow transmitter	CF	CF	CF	CF	CF	~
3" Standard meter	17.5 (8.0)	52.5 (23.8)	~	~	~	~
3" Standard meter with C61 flange	20.0 (9.1)	55.0 (25.0)	~	~	~	~

~ : Not available as standard option

CF: Consult factory for weights





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