Canadian Registered Products

Hedland®
Variable Area Flow Meters

Variable Area Flow Meters and Flow Switches

Badger Meter

CANADIAN REGISTRATION NUMBERS BY PROVINCE					
PROVINCE	REGISTRATION NUMBER	PROVINCE	REGISTRATION NUMBER	PROVINCE	REGISTRATION NUMBER
Alberta	0F12298.2	Northwest Territories	0F14981.5T	Quebec	0F14981.56
British Columbia	0F14981.51	Nova Scotia	0F14981.58	Saskatchewan	0F14981.53
Manitoba	0F14981.54	Nunavut	0F14981.5N	Yukon	0F14981.5Y
New Brunswick	0F14981.57	Ontario	0F14981.5		
Newfoundland	0F14981.50	Prince Edward Island	0F14981.59		

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Mail to: Hedland Flow Meters
Badger Meter Inc.
P.O. Box 081580
Racine, WI 53408-1580 USA

Ship to: Hedland Flow Meters
Badger Meter Inc.
8635 Washington Avenue
Racine, WI 53406-3738 USA

Customers within the United States, Canada and U.S. possessions:
Call Toll-Free: 1-877-243-1010
Fax Toll-Free: 1-800-245-3569

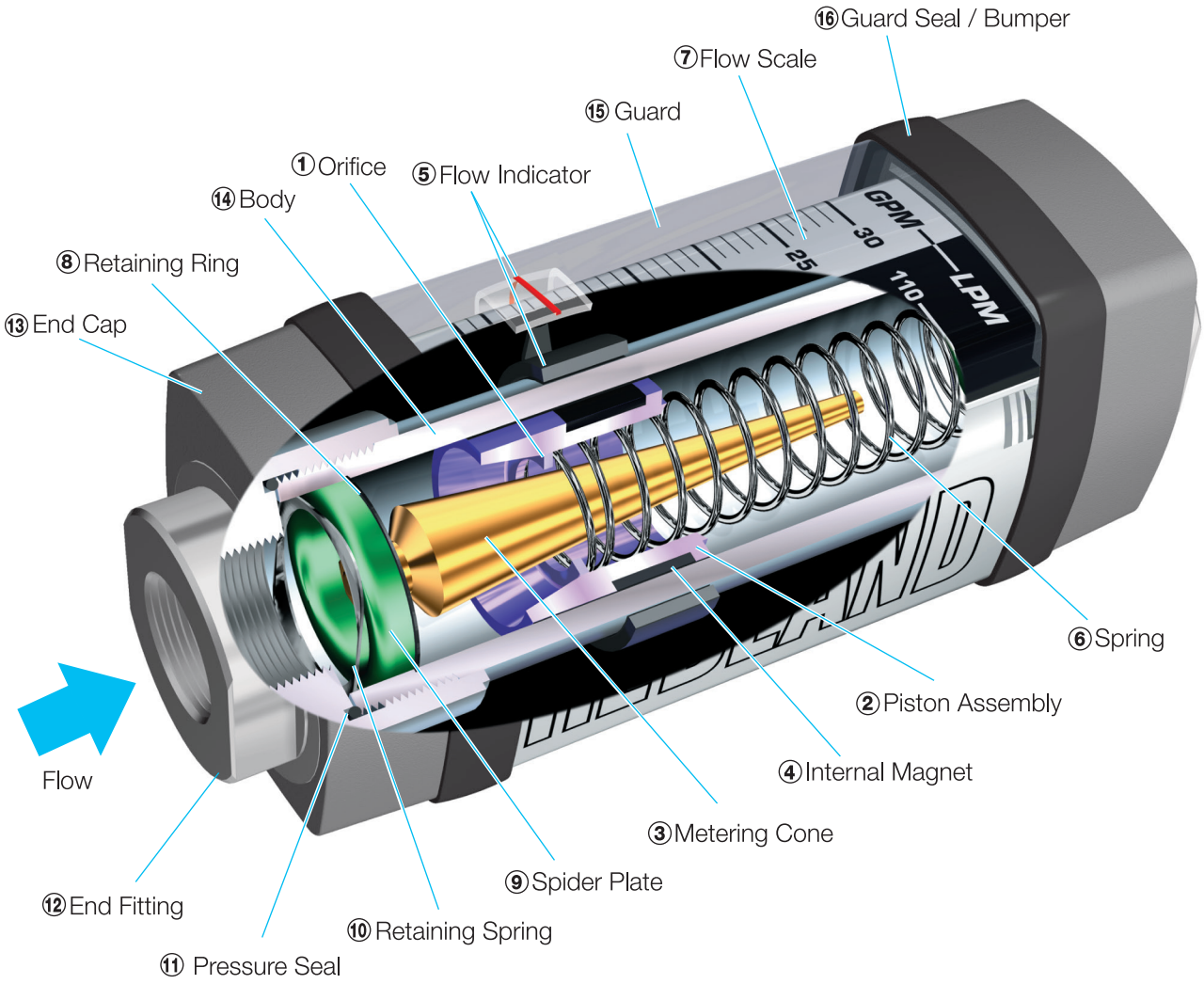
International Customers:
Phone: 1-262-639-6770
Fax: 1-262-639-2267

Monday - Friday from 8 a.m. to 5 p.m. CST

E-mail: indorders@badgermeter.com

Website: www.badgermeter.com

General Design Features



OPERATING PRINCIPLE

The Hedland flow meter is a variable area instrument. A precision machined, sharp-edged Orifice ① located within the Piston Assembly ②, forms an annular opening with the contoured Metering Cone ③. The Piston Assembly carries a cylindrical PPS/ Ceramic Magnet ④ that is magnetically coupled to an external Flow Indicator ⑤ that moves precisely, in direct response to movement of the Piston. A calibrated Spring ⑥ opposes flow in the forward direction. This spring decreases viscosity sensitivity and allows the flow meter to be used in any position, including inverted.

Bi-directional flow capability: If required, a reverse flow by-pass option is available and is depicted on individual product pages. Note that flow is measured in the forward direction only.

Operates in any position: The Hedland in-line flow meter's unique spring-loaded variable area design allows meters to be installed in any position without affecting accuracy. An optional inverted flow scale is also available.

Easier to read linear scale: This flow meter is the most readable product in its class. Brightly colored indicators move over the graduated, linear Flow Scale ⑦ which contains bold, easy-to-read numerals and gauge marks. This enhanced resolution virtually eliminates parallax problems associated with competitive, direct reading flow meters.

360° Rotatable guard/scale: Hedland's unique design allows the meter to be installed in any orientation without regard to scale direction. Once the meter is permanently installed, the guard/scale can be rotated 360° to optimize readability.

Rugged construction: Flow meters are available in anodized aluminum, brass, T303 and T316 stainless steel, with SAE, NPTF, BSPP, and Code 61 and Code 62 4-bolt flanged ports. This easy-to-read flow meter is a reliable and trouble-free flow rate indicator, monitoring a variety of liquids and gases (including aggressive chemicals), under a wide range of pressures, temperatures and rigorous conditions encountered in industrial applications.

No flow straighteners or special piping: The Hedland 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 to provide greatest system design flexibility, while saving installation time and money.

Relatively insensitive to shock and vibration: This unique design is inherently less sensitive to shock and vibration than other variable area flow meters. The new, improved coupling forces between the internal and external magnets greatly reduce the chance of decoupling the flow indicator under high flow and pressure transients. The magnetic coupling also eliminates the need for mechanical linkages that wear, loosen and leak over the functional life of competitive meters.

Canadian Registration Flow Meters

For Petroleum Fluids

- Direct reading
- Install in any position
- 360° rotatable guard/scale
- Easier-to-read linear scale
- No flow straighteners or special piping required
- Relatively insensitive to shock and vibration
- Good viscosity stability
- Temperature up to 240 °F
- Accuracy ±2% full scale
- Repeatability ±1%
- Special scales available
- Calibrated for .876 S.G.

SPECIFICATIONS:

MATERIALS:

T316 Stainless body, 2024 - T351 Anodized aluminum piston and cone

COMMON PARTS:

Spider Plate: T316 SS
Spring: T302 SS
Fasteners: T303 SS
Pressure Seals: Viton®
Guard: Polycarbonate
Retaining Ring: SAE 1070/1090 Carbon Steel
Retaining Spring: SAE 1070/1090 Carbon Steel
Indicator and Internal Magnet: PPS / Ceramic
Guard Seal / Bumper: Buna N
Scale Support: 6063 - T6 Aluminum
End Caps: Nylon ST

THREADS: SAE J1926/1, **NPTF** ANSI B2.2, **BSPP** ISO1179

TEMPERATURE RANGE: -20 to +240 °F (-29 to +116 °C) for higher temp. meters, see page 6

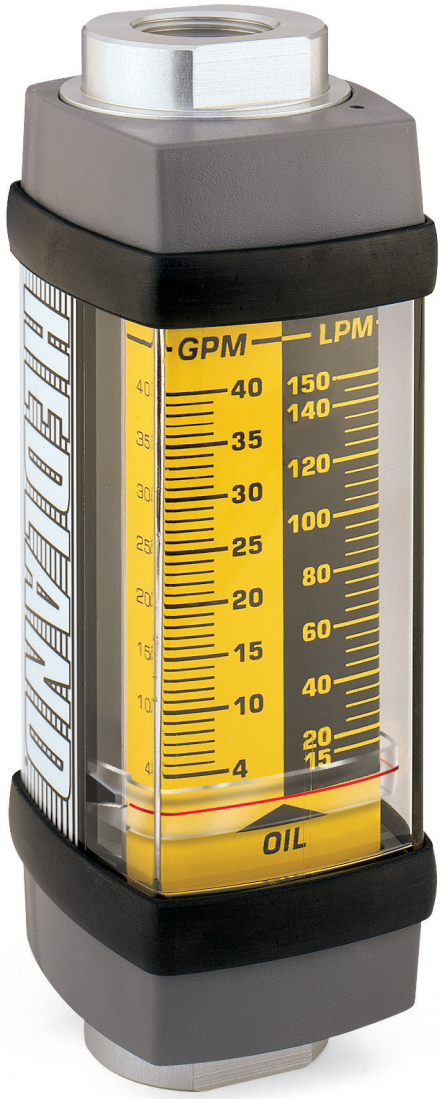
PRESSURE RATING:

See Ordering Information Table.

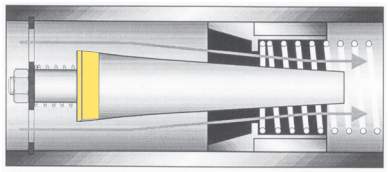
PRESSURE DROP: See Ordering Information Table.

For detailed differential pressure charts, see Hedland full-line catalog.

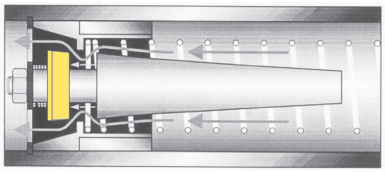
ACCURACY: ±2% of full scale, ±7% of full scale for ¼" meters **REPEATABILITY:** ±1%



REVERSE FLOW BY-PASS OPTION: Features a two-piece cone that responds to flow in the primary flow direction in the same manner as the standard design. Flow in the reverse direction causes the lower cone shuttle to shift, moving it below the sharp-edged piston orifice. This shift creates a gap which allows the fluid to flow freely in the reverse direction.



Normal Flow Direction

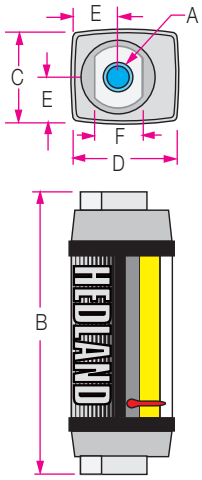


Reverse Flow By-Pass

DIMENSIONS:

A	B	C	D	E	F
NOMINAL PORT SIZE	LENGTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	FLATS in (mm)
¼ (SAE 6)	4.8 (122)	1.68 (43)	1.90 (48)	.84 (21)	.88 (22)
½ (SAE 10)	6.6 (168)	2.07 (53)	2.40 (61)	1.04 (26)	1.25 (32)
¾ (SAE 12)	7.2 (183)	2.48 (63)	2.85 (72)	1.24 (32)	1.50 (38)
1 (SAE 16)	7.2 (183)	2.48 (63)	2.85 (72)	1.24 (32)	1.75 (44)
1¼ (SAE 20)	12.2 (310)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)
1½ (SAE 24)	12.2 (310)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)

NOTE: Weights for all sizes can be found on page 40.



Viton is a registered trademark of DuPont Dow Elastomers

Hedland®

Canadian Registration Flow Meters

For Petroleum Fluids

ORDERING INFORMATION:

NOMINAL PORT SIZE②	FLOW RANGE		PRESSURE DROP			MODEL NUMBER (see example below)		PRESSURE	OPTIONS
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	REVERSE 100% FLOW PSI (BAR)	SAE	NPTF	RATING	REVERSE FLOW
¼" SAE 6	.02 - 0.2	0.1 - 0.75	3.5 (.24)	4.0 (.28)		H200 C - 002	H201 C - 002	5000 PSI	Not Available
	.05 - 0.5	0.2 - 1.9	3.0 (.21)	5.0 (.35)		H200 C - 005	H201 C - 005		
	0.1 - 1.0	0.5 - 3.75	4.0 (.28)	9.0 (.62)		H200 C - 010	H201 C - 010		
	0.2 - 2.0	1 - 7.5	6.0 (.41)	13 (.90)		H200 C - 020	H201 C - 020		
½" SAE 10	0.1 - 1.0	0.5 - 3.75	2.0 (.14)	2.75 (.19)	5.2 (.36)	H600 C - 001 - †	H601 C - 001 - †	3000 PSI	RF
	0.2 - 2.0	1 - 7.5	2.0 (.14)	3.0 (.21)	9.6 (.66)	H600 C - 002 - †	H601 C - 002 - †		
	0.5 - 5.0	2 - 19	3.0 (.21)	6.0 (.41)	4.8 (.33)	H600 C - 005 - †	H601 C - 005 - †		
	1 - 10	5 - 38	4.0 (.28)	9.5 (.66)	23.0 (1.6)	H600 C - 010 - †	H601 C - 010 - †		
	1 - 15	4 - 56	6.5 (.45)	18.5 (1.3)	55.2 (3.8)	H600 C - 015 - †	H601 C - 015 - †		
¾" SAE 12	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H700 C - 002 - †	H701 C - 002 - †	2500 PSI	RF
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H700 C - 005 - †	H701 C - 005 - †		
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H700 C - 010 - †	H701 C - 010 - †		
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H700 C - 020 - †	H701 C - 020 - †		
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H700 C - 030 - †	H701 C - 030 - †		
1" SAE 16	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H760 C - 002 - †	H761 C - 002 - †	2500 PSI	RF
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H760 C - 005 - †	H761 C - 005 - †		
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H760 C - 010 - †	H761 C - 010 - †		
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H760 C - 020 - †	H761 C - 020 - †		
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H760 C - 030 - †	H761 C - 030 - †		
	4 - 40	15 - 150	9.0 (.62)	24 (1.7)	87.5 (6.04)	H760 C - 040 - †	H761 C - 040 - †		
	5 - 50	20 - 190	12.5 (.86)	34 (2.3)	150 (10.4)	H760 C - 050 - †	H761 C - 050 - †		
1¼" SAE 20	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H800 C - 030 - †	H801 C - 030 - †	2450 PSI	RF
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H800 C - 050 - †	H801 C - 050 - †		
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H800 C - 075 - †	H801 C - 075 - †		
	10 - 100	50 - 380	6.5 (.45)	15 (1.0)	39.0 (2.7)	H800 C - 100 - †	H801 C - 100 - †		
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H800 C - 150 - †	H801 C - 150 - †		
1½" SAE 24	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H860 C - 030 - †	H861 C - 030 - †	2450 PSI	RF
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H860 C - 050 - †	H861 C - 050 - †		
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H860 C - 075 - †	H861 C - 075 - †		
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H860 C - 100 - †	H861 C - 100 - †		
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H860 C - 150 - †	H861 C - 150 - †		

② Fractional sizes apply to NPTF.

(example) **H 701 C - 030 - RF**

Canadian Registered High Temperature

Flow Meters For Petroleum Fluids

- Direct reading
- Install in any position
- 360° rotatable guard/scale
- Easier-to-read linear scale
- No flow straighteners or special piping required
- Relatively insensitive to shock and vibration
- Good viscosity stability
- Temperature up to 500 °F
- Accuracy ±2% full scale
- Repeatability ±1%
- Special scales available
- Calibrated for .876 S.G.

SPECIFICATIONS:

MATERIALS:
T316 Stainless body, 2024 - T351 Anodized aluminum piston and cone

COMMON PARTS:
Spider Plate: T316 SS
Spring: T302 SS
Fasteners: T303 SS
Seals: Viton®
Scale Support: T316 SS
Scale: Polymide
Retaining Ring: SAE 1070/1090 Carbon Steel
Retaining Spring: SAE 1070/1090 Carbon Steel
Indicator: Nickel-plated Carbon Steel
Internal Magnet: Teflon® Coated Alnico 8
Bumper: 2011 - T3 Anodized Aluminum
Guard: Cylindrical Pyrex® Glass
End Caps: 2011 - T3 Anodized Aluminum

THREADS: SAE J1926/1, **NPTF** ANSI B2.2

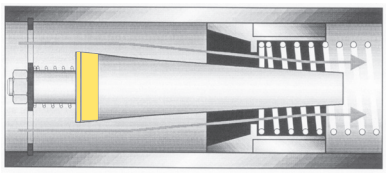
TEMPERATURE RANGE: -20 to +400 °F (-29 to +205 °C) Continuous

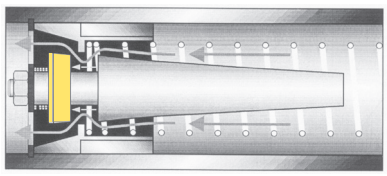
PRESSURE RATING:
See Ordering Information Table.

PRESSURE DROP: See Ordering Information Table.
For detailed differential pressure charts, see the Hedland full-line catalog.

ACCURACY: ±2% of full scale **REPEATABILITY:** ±1%

REVERSE FLOW BY-PASS OPTION: Features a two-piece cone that responds to flow in the primary flow direction in the same manner as the standard design. Flow in the reverse direction causes the lower cone shuttle to shift, moving it below the sharp-edged piston orifice, which allows the fluid to flow freely in the reverse direction.

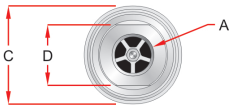

Normal Flow Direction

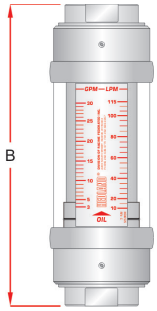

Reverse Flow By-Pass

DIMENSIONS:

A	B	C	D
NOMINAL PORT SIZE	LENGTH in (mm)	WIDTH in (mm)	FLATS in (mm)
¼ (SAE 6)	6.60 (168)	2.01 (51)	1.25 (32)
½ (SAE 10)	6.60 (168)	2.01 (51)	1.25 (32)
¾ (SAE 12)	7.20 (183)	2.48 (63)	1.50 (38)
1 (SAE 16)	7.20 (183)	2.48 (63)	1.75 (44)
1¼ (SAE 20)	12.20 (310)	4.20 (107)	2.75 (70)
1½ (SAE 24)	12.20 (310)	4.20 (107)	2.75 (70)

NOTE: Weights for all sizes can be found on page 40.





Pyrex is a registered trademark of Corning, Inc.
Teflon is a registered trademark of E.I. DuPont de Nemours & Co.
Viton is a registered trademark of DuPont Dow Elastomers

Canadian Registration High Temperature

Flow Meters For Petroleum Fluids

ORDERING INFORMATION:

NOMINAL PORT SIZE①	FLOW RANGE		PRESSURE DROP			MODEL NUMBER (see example below)		PRESSURE	OPTIONS
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	REVERSE 100% FLOW PSI (BAR)	SAE	NPTF	RATING	REVERSE FLOW
¼" SAE 6	0.1 - 1.0	0.5 - 3.75	4.0 (.28)	9.0 (.62)		H200 C - 010 - HT	H201 C - 010 - HT	3000 PSI	Not Available
	0.2 - 2.0	1.0 - 7.5	6.0 (.41)	13 (.90)		H200 C - 020 - HT	H201 C - 020 - HT		
½" SAE 10	0.1 - 1.0	0.5 - 3.75	2.0 (.14)	2.75 (.19)	5.2 (.36)	H600 C - 001 - HT	H601 C - 001 - HT	3000 PSI	HR
	0.2 - 2.0	1.0 - 7.5	2.0 (.14)	3.0 (.21)	9.6 (.66)	H600 C - 002 - HT	H601 C - 002 - HT		
	0.5 - 5.0	2 - 19	3.0 (.21)	6.0 (.41)	4.8 (.33)	H600 C - 005 - HT	H601 C - 005 - HT		
	1 - 10	5 - 38	4.0 (.28)	9.5 (.66)	23.0 (1.6)	H600 C - 010 - HT	H601 C - 010 - HT		
	1 - 15	4 - 56	6.5 (.45)	18.5 (1.3)	55.2 (3.8)	H600 C - 015 - HT	H601 C - 015 - HT		
¾" SAE 12	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H700 C - 002 - HT	H701 C - 002 - HT	2350 PSI	HR
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5(.24)	5.3 (.37)	H700 C - 005 - HT	H701 C - 005 - HT		
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H700 C - 010 - HT	H701 C - 010 - HT		
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H700 C - 020 - HT	H701 C - 020 - HT		
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H700 C - 030 - HT	H701 C - 030 - HT		
1" SAE 16	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H760 C - 002 - HT	H761 C - 002 - HT	2350 PSI	HR
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5(.24)	5.3 (.37)	H760 C - 005 - HT	H761 C - 005 - HT		
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H760 C - 010 - HT	H761 C - 010 - HT		
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H760 C - 020 - HT	H761 C - 020 - HT		
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H760 C - 030 - HT	H761 C - 030 - HT		
	4 - 40	15 - 150	9.0 (.62)	24.0 (1.7)	87.5 (6.04)	H760 C - 040 - HT	H761 C - 040 - HT		
	5 - 50	20 - 190	12.5 (.86)	34.0 (2.3)	150 (10.4)	H760 C - 050 - HT	H761 C - 050 - HT		
1¼" SAE 20	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H800 C - 030 - HT	H801 C - 030 - HT	2175 PSI	HR
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H800 C - 050 - HT	H801 C - 050 - HT		
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H800 C - 075 - HT	H801 C - 075 - HT		
	10 - 100	50 - 380	6.5 (.45)	15 (1.0)	39.0 (2.7)	H800 C - 100 - HT	H801 C - 100 - HT		
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H800 C - 150 - HT	H801 C - 150 - HT		
1½" SAE 24	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H860 C - 030 - HT	H861 C - 030 - HT	2175 PSI	HR
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H860 C - 050 - HT	H861 C - 050 - HT		
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H860 C - 075 - HT	H861 C - 075 - HT		
	10 - 100	50 - 380	6.5 (.45)	15 (1.0)	39.0 (2.7)	H860 C - 100 - HT	H861 C - 100 - HT		
	10 - 150	50 - 560	10.5 (.72	27.5 (1.9)	110 (7.6)	H860 C - 150 - HT	H861 C - 150 - HT		

①Fractional sizes apply to NPTF.

(example) **H 701 C - 030 - HR**

NOTE: HT suffix represents standard high temperature configuration. For reverse flow high temperature, replace HT with HR suffix.

Canadian Registration Flow Meters

For Phosphate Ester Fluids

- Direct reading
- Install in any position
- 360° rotatable guard/scale
- Easier-to-read linear scale
- No flow straighteners or special piping required
- Relatively insensitive to shock and vibration
- Good viscosity stability
- Temperature up to 240 °F
- Accuracy ±2% full scale
- Repeatability ±1%
- Special scales available
- Calibrated for 1.18 S.G.

SPECIFICATIONS:

MATERIALS:
T316 Stainless body, 2024 - T351 Anodized aluminum piston and cone

COMMON PARTS:
Spider Plate: T316 SS
Spring: T302 SS
Fasteners: T303 SS
Pressure Seals: EPR
Guard: Nylon
Retaining Ring: SAE 1070/1090 Carbon Steel
Retaining Spring: SAE 1070/1090 Carbon Steel
Indicator and Internal Magnet: PPS / Ceramic
Guard Seal / Bumper: EPR
Scale Support: 6063 - T6 Aluminum
End Caps: Nylon ST

THREADS: SAE J1926/1, **NPTF** ANSI B2.2

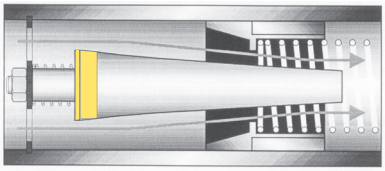
TEMPERATURE RANGE: -20 to +240 °F (-29 to +116 °C) for higher temp. meters, see page 10.

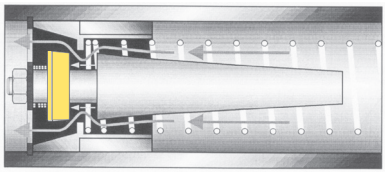
PRESSURE RATING:
See Ordering Information Table.

PRESSURE DROP: See Ordering Information Table.
For detailed differential pressure charts, see the Hedland full-line catalog.

ACCURACY: ±2% of full scale, ±7% of full scale for ¼" meters **REPEATABILITY:** ±1%

REVERSE FLOW BY-PASS OPTION: Features a two-piece cone that responds to flow in the primary flow direction in the same manner as the standard design. Flow in the reverse direction causes the lower cone shuttle to shift, moving it below the sharp-edged piston orifice. This shift creates a gap which allows the fluid to flow freely in the reverse direction.

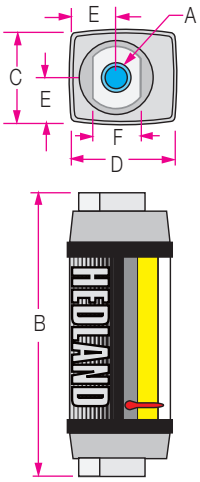

Normal Flow Direction


Reverse Flow By-Pass

DIMENSIONS:

A	B	C	D	E	F
NOMINAL PORT SIZE	LENGTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	FLATS in (mm)
¼ (SAE 6)	4.8 (122)	1.68 (43)	1.90 (48)	.84 (21)	.88 (22)
½ (SAE 10)	6.6 (168)	2.07 (53)	2.40 (61)	1.04 (26)	1.25 (32)
¾ (SAE 12)	7.2 (183)	2.48 (63)	2.85 (72)	1.24 (32)	1.50 (38)
1 (SAE 16)	7.2 (183)	2.48 (63)	2.85 (72)	1.24 (32)	1.75 (44)
1¼ (SAE 20)	12.2 (310)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)
1½ (SAE 24)	12.2 (310)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)

NOTE: Weights for all sizes can be found on page 40.



Canadian Registration Flow Meters

For Phosphate Ester Fluids

ORDERING INFORMATION:

NOMINAL PORT SIZE①	FLOW RANGE		PRESSURE DROP			MODEL NUMBER (see example below)		PRESSURE	OPTIONS
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	REVERSE 100% FLOW PSI (BAR)	SAE	NPTF	RATING	REVERSE FLOW
¼" SAE 6	.02 - 0.2	0.1 - 0.75	3.5 (.24)	4.0 (.28)		H294 C - 002	H295 C - 002	5000 PSI	Not Available
	.05 - 0.5	0.2 - 1.9	3.0 (.21)	5.0 (.35)		H294 C - 005	H295 C - 005		
	0.1 - 1.0	0.5 - 3.75	4.0 (.28)	9.0 (.62)		H294 C - 010	H295 C - 010		
	0.2 - 2.0	1.0 - 7.5	6.0 (.41)	13 (.90)		H294 C - 020	H295 C - 020		
½" SAE 10	0.1 - 1.0	0.5 - 3.75	2.0 (.14)	2.75 (.19)	5.2 (.36)	H694 C - 001 - †	H695 C - 001 - †	3000 PSI	RF
	0.2 - 2.0	1 - 7.5	2.0 (.14)	3.0 (.21)	9.6 (.66)	H694 C - 002 - †	H695 C - 002 - †		
	0.5 - 5.0	2 - 19	3.0 (.21)	6.0 (.41)	4.8 (.33)	H694 C - 005 - †	H695 C - 005 - †		
	1 - 10	5 - 38	4.0 (.28)	9.5 (.66)	23.0 (1.6)	H694 C - 010 - †	H695 C - 010 - †		
	1 - 15	4 - 56	6.5 (.45)	18.5 (1.3)	55.2 (3.8)	H694 C - 015 - †	H695 C - 015 - †		
¾" SAE 12	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H794 C - 002 - †	H795 C - 002 - †	2500 PSI	RF
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H794 C - 005 - †	H795 C - 005 - †		
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H794 C - 010 - †	H795 C - 010 - †		
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H794 C - 020 - †	H795 C - 020 - †		
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H794 C - 030 - †	H795 C - 030 - †		
1" SAE 16	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H764 C - 002 - †	H765 C - 002 - †	2500 PSI	RF
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H764 C - 005 - †	H765 C - 005 - †		
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H764 C - 010 - †	H765 C - 010 - †		
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H764 C - 020 - †	H765 C - 020 - †		
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H764 C - 030 - †	H765 C - 030 - †		
	4 - 40	15 - 150	9.0 (.62)	24.0 (1.7)	87.5 (6.04)	H764 C - 040 - †	H765 C - 040 - †		
	5 - 50	20 - 190	12.5 (.86)	34.0 (2.3)	150 (10.4)	H764 C - 050 - †	H765 C - 050 - †		
1¼" SAE 20	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H894 C - 030 - †	H895 C - 030 - †	2450 PSI	RF
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H894 C - 050 - †	H895 C - 050 - †		
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H894 C - 075 - †	H895 C - 075 - †		
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H894 C - 100 - †	H895 C - 100 - †		
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H894 C - 150 - †	H895 C - 150 - †		
1½" SAE 24	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H864 C - 030 - †	H865 C - 030 - †	2450 PSI	RF
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H864 C - 050 - †	H865 C - 050 - †		
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H864 C - 075 - †	H865 C - 075 - †		
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H864 C - 100 - †	H865 C - 100 - †		
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H864 C - 150 - †	H865 C - 150 - †		

①Fractional sizes apply to NPTF.

(example) **H 795 C - 030 - RF**

Canadian Registration High Temperature

Flow Meters For Phosphate Ester Fluids

- Direct reading
- Install in any position
- 360° rotatable guard/scale
- Easier-to-read linear scale
- No flow straighteners or special piping required
- Relatively insensitive to shock and vibration
- Good viscosity stability
- Temperature up to 500 °F
- Accuracy ±2% full scale
- Repeatability ±1%
- Special scales available
- Calibrated for 1.18 S.G.

SPECIFICATIONS:

MATERIALS:
T316 Stainless body, 2024 - T351 Anodized aluminum piston and cone

COMMON PARTS:
Spider Plate: T316 SS
Spring: T302 SS
Fasteners: T303 SS
Seals: EPR
Scale Support: T316 SS
Scale: Polymide
Retaining Ring: SAE 1070/1090 Carbon Steel
Retaining Spring: SAE 1070/1090 Carbon Steel
Indicator: Nickel-plated Carbon Steel
Internal Magnet: Teflon® Coated Alnico 8
Bumper: 2011 - T3 Anodized Aluminum
Guard: Cylindrical Pyrex® Glass
End Caps: 2011 - T3 Anodized Aluminum

THREADS: SAE J1926/1, **NPTF** ANSI B2.2

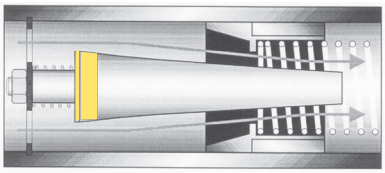
TEMPERATURE RANGE: -20 to +400 °F (-29 to +205 °C) Continuous

PRESSURE RATING:
See Ordering Information Table.

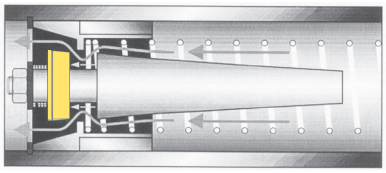
PRESSURE DROP: See Ordering Information Table.
For detailed differential pressure charts, see the Hedland full-line catalog.

ACCURACY: ±2% of full scale **REPEATABILITY:** ±1%

REVERSE FLOW BY-PASS OPTION: Features a two-piece cone that responds to flow in the primary flow direction in the same manner as the standard design. Flow in the reverse direction causes the lower cone shuttle to shift, moving it below the sharp-edged piston orifice, which allows the fluid to flow freely in the reverse direction.



Normal Flow Direction

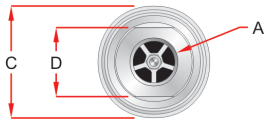


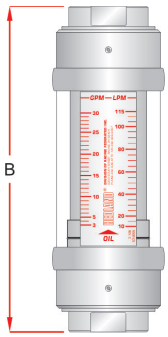
Reverse Flow By-Pass

DIMENSIONS:

A	B	C	D
NOMINAL PORT SIZE	LENGTH in (mm)	WIDTH in (mm)	FLATS in (mm)
¼ (SAE 6)	6.60 (168)	2.01 (51)	1.25 (32)
½ (SAE 10)	6.60 (168)	2.01 (51)	1.25 (32)
¾ (SAE 12)	7.20 (183)	2.48 (63)	1.50 (38)
1 (SAE 16)	7.20 (183)	2.48 (63)	1.75 (44)
1¼ (SAE 20)	12.20 (310)	4.20 (107)	2.75 (70)
1½ (SAE 24)	12.20 (310)	4.20 (107)	2.75 (70)

NOTE: Weights for all sizes can be found on page 40.





Pyrex is a registered trademark of Corning, Inc.
Teflon is a registered trademark of E.I. DuPont de Nemours & Co.

Canadian Registration High Temperature

Flow Meters For Phosphate Ester Fluids

ORDERING INFORMATION:

NOMINAL PORT SIZE①	FLOW RANGE		PRESSURE DROP			MODEL NUMBER (see example below)		PRESSURE	OPTIONS
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	REVERSE 100% FLOW PSI (BAR)	SAE	NPTF	RATING	REVERSE FLOW
¼" SAE 6	0.1 - 1.0	0.5 - 3.75	4.0 (.28)	9.0 (.62)		H294 C - 010 - HT	H295 C - 010 - HT	3000 PSI	Not Available
	0.2 - 2.0	1.0 - 7.5	6.0 (.41)	13 (.90)		H294 C - 020 - HT	H295 C - 020 - HT		
½" SAE 10	0.1 - 1.0	0.5 - 3.75	2.0 (.14)	2.75 (.19)	5.2 (.36)	H694 C - 001 - HT	H695 C - 001 - HT	3000 PSI	HR
	0.2 - 2.0	1 - 7.5	2.0 (.14)	3.0 (.21)	9.6 (.66)	H694 C - 002 - HT	H695 C - 002 - HT		
	0.5 - 5.0	2 - 19	3.0 (.21)	6.0 (.41)	4.8 (.33)	H694 C - 005 - HT	H695 C - 005 - HT		
	1 - 10	5 - 38	4.0 (.28)	9.5 (.66)	23.0 (1.6)	H694 C - 010 - HT	H695 C - 010 - HT		
	1 - 15	4 - 56	6.5 (.45)	18.5 (1.3)	55.2 (3.8)	H694 C - 015 - HT	H695 C - 015 - HT		
¾" SAE 12	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H794 C - 002 - HT	H795 C - 002 - HT	2350 PSI	HR
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H794 C - 005 - HT	H795 C - 005 - HT		
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H794 C - 010 - HT	H795 C - 010 - HT		
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H794 C - 020 - HT	H795 C - 020 - HT		
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H794 C - 030 - HT	H795 C - 030 - HT		
1" SAE 16	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H764 C - 002 - HT	H765 C - 002 - HT	2350 PSI	HR
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H764 C - 005 - HT	H765 C - 005 - HT		
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H764 C - 010 - HT	H765 C - 010 - HT		
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H764 C - 020 - HT	H765 C - 020 - HT		
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H764 C - 030 - HT	H765 C - 030 - HT		
	4 - 40	15 - 150	9.0 (.62)	24.0 (1.7)	87.5 (6.04)	H764 C - 040 - HT	H765 C - 040 - HT		
	5 - 50	20 - 190	12.5 (.86)	34.0 (2.3)	150 (10.4)	H764 C - 050 - HT	H765 C - 050 - HT		
1¼" SAE 20	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H894 C - 030 - HT	H895 C - 030 - HT	2175 PSI	HR
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H894 C - 050 - HT	H895 C - 050 - HT		
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H894 C - 075 - HT	H895 C - 075 - HT		
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H894 C - 100 - HT	H895 C - 100 - HT		
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H894 C - 150 - HT	H895 C - 150 - HT		
1½" SAE 24	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H864 C - 030 - HT	H865 C - 030 - HT	2175 PSI	HR
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H864 C - 050 - HT	H865 C - 050 - HT		
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H864 C - 075 - HT	H865 C - 075 - HT		
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H864 C - 100 - HT	H865 C - 100 - HT		
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H864 C - 150 - HT	H865 C - 150 - HT		

①Fractional sizes apply to NPTF and BSPP.

(example) **H 795 C - 030 - HR**

NOTE: HT suffix represents standard high temperature configuration. For reverse flow high temperature, replace HT with HR suffix.

Canadian Registration Flow Meters

For Water-based Fluids (Water/Oil Emulsions)

- Direct reading
- Install in any position
- 360° rotatable guard/scale
- Easier-to-read linear scale
- No flow straighteners or special piping required
- Relatively insensitive to shock and vibration
- Good viscosity stability
- Temperature up to 240 °F
- Accuracy ±2% full scale
- Repeatability ±1%
- Special scales available
- Calibrated for 1.0 S.G.
- For 80/20 and other water/oil emulsions

SPECIFICATIONS:

MATERIALS:

T316 Stainless body, 2024 - T351 Anodized aluminum piston and cone

COMMON PARTS:
Spider Plate: T316 SS
Spring: T302 SS
Fasteners: T303 SS
Pressure Seals: Viton®
Guard: Polycarbonate
Retaining Ring: T316 SS
Retaining Spring: T316 SS
Indicator and Internal Magnet: PPS / Ceramic
Guard Seal / Bumper: Buna N
Scale Support: 6063 - T6 Aluminum
End Caps: Nylon ST

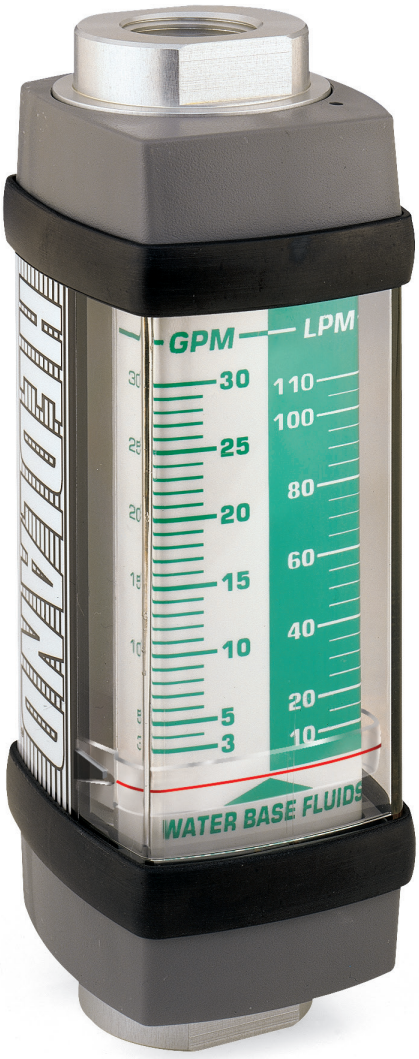
THREADS: SAE J1926/1, **NPTF** ANSI B2.2

TEMPERATURE RANGE: -20 to +240 °F (-29 to +116 °C) for higher temp. meters, see page 14.

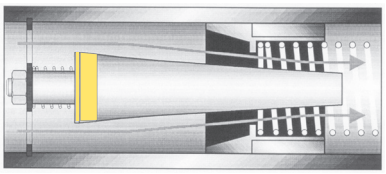
PRESSURE RATING:
See Ordering Information Table.

PRESSURE DROP: See Ordering Information Table, page 13.
For detailed differential pressure charts, see the Hedland full-line catalog.

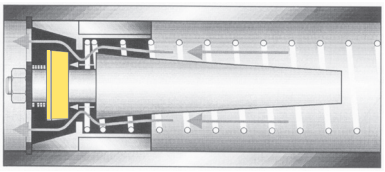
ACCURACY: ±2% of full scale, ±7% of full scale for ¼" meters **REPEATABILITY:** ±1%



REVERSE FLOW BY-PASS OPTION: Features a two-piece cone that responds to flow in the primary flow direction in the same manner as the standard design. Flow in the reverse direction causes the lower cone shuttle to shift, moving it below the sharp-edged piston orifice. This shift creates a gap which allows the fluid to flow freely in the reverse direction.



Normal Flow Direction

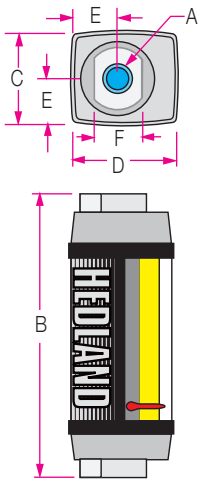


Reverse Flow By-Pass

DIMENSIONS:

A	B	C	D	E	F
NOMINAL PORT SIZE	LENGTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	FLATS in (mm)
¼ (SAE 6)	4.8 (122)	1.68 (43)	1.90 (48)	.84 (21)	.88 (22)
½ (SAE 10)	6.6 (168)	2.07 (53)	2.40 (61)	1.04 (26)	1.25 (32)
¾ (SAE 12)	7.2 (183)	2.48 (63)	2.85 (72)	1.24 (32)	1.50 (38)
1 (SAE 16)	7.2 (183)	2.48 (63)	2.85 (72)	1.24 (32)	1.75 (44)
1¼ (SAE 20)	12.2 (310)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)
1½ (SAE 24)	12.2 (310)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)

NOTE: Weights for all sizes can be found on page 40.



Viton is a registered trademark of DuPont Dow Elastomers

Canadian Registration Flow Meters

For Water-based Fluids (Water/Oil Emulsions)

ORDERING INFORMATION:

NOMINAL PORT SIZE②	FLOW RANGE		PRESSURE DROP			MODEL NUMBER (see example below)		PRESSURE	OPTIONS
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	REVERSE 100% FLOW PSI (BAR)	SAE	NPTF	RATING	REVERSE FLOW
¼" SAE 6	.02 - 0.2	0.1 - 0.75	3.5 (.24)	4.0 (.28)		H212 C - 002	H213 C - 002	5000 PSI	Not Available
	.05 - 0.5	0.2 - 1.9	3.0 (.21)	5.0 (.35)		H212 C - 005	H213 C - 005		
	0.1 - 1.0	0.5 - 3.75	4.0 (.28)	9.0 (.62)		H212 C - 010	H213 C - 010		
	0.2 - 2.0	1 - 7.5	6.0 (.41)	13 (.90)		H212 C - 020	H213 C - 020		
½" SAE 10	0.1 - 1.0	0.5 - 3.75	2.0 (.14)	2.75 (.19)	5.2 (.36)	H612 C - 001 - †	H613 C - 001 - †	3000 PSI	RF
	0.2 - 2.0	1 - 7.5	2.0 (.14)	3.0 (.21)	9.6 (.66)	H612 C - 002 - †	H613 C - 002 - †		
	0.5 - 5.0	2 - 19	3.0 (.21)	6.0 (.41)	4.8 (.33)	H612 C - 005 - †	H613 C - 005 - †		
	1 - 10	5 - 38	4.0 (.28)	9.5 (.66)	23.0 (1.6)	H612 C - 010 - †	H613 C - 010 - †		
	1 - 15	4 - 56	6.5 (.45)	18.5 (1.3)	55.2 (3.8)	H612 C - 015 - †	H613 C - 015 - †		
¾" SAE 12	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H712 C - 002 - †	H713 C - 002 - †	2500 PSI	RF
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H712 C - 005 - †	H713 C - 005 - †		
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H712 C - 010 - †	H713 C - 010 - †		
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H712 C - 020 - †	H713 C - 020 - †		
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H712 C - 030 - †	H713 C - 030 - †		
1" SAE 16	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H782 C - 002 - †	H783 C - 002 - †	2500 PSI	RF
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H782 C - 005 - †	H783 C - 005 - †		
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H782 C - 010 - †	H783 C - 010 - †		
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H782 C - 020 - †	H783 C - 020 - †		
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H785 C - 030 - †	H783 C - 030 - †		
	4 - 40	15 - 150	9.0 (.62)	24 (1.7)	87.5 (6.04)	H782 C - 040 - †	H783 C - 040 - †		
	5 - 50	20 - 190	12.5 (.86)	34 (2.3)	150 (10.4)	H782 C - 050 - †	H783 C - 050 - †		
1¼" SAE 20	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H812 C - 030 - †	H813 C - 030 - †	2450 PSI	RF
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H812 C - 050 - †	H813 C - 050 - †		
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H812 C - 075 - †	H813 C - 075 - †		
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H812 C - 100 - †	H813 C - 100 - †		
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H812 C - 150 - †	H813 C - 150 - †		
1½" SAE 24	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H882 C - 030 - †	H883 C - 030 - †	2450 PSI	RF
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H882 C - 050 - †	H883 C - 050 - †		
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H882 C - 075 - †	H883 C - 075 - †		
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H882 C - 100 - †	H883 C - 100 - †		
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H882 C - 150 - †	H883 C - 150 - †		

②Fractional sizes apply to NPTF.

(example) **H 713 C - 030 - RF**

Canadian Registered High Temperature

Flow Meters For Water-based Fluids (Water/Oil Emulsions)

- Direct reading
- Install in any position
- 360° rotatable guard/scale
- Easier-to-read linear scale
- No flow straighteners or special piping required
- Relatively insensitive to shock and vibration
- Good viscosity stability
- Temperature up to 500 °F
- Accuracy ±2% full scale
- Repeatability ±1%
- Special scales available
- Calibrated for 1.0 S.G.
- For 80/20 and other water/oil emulsions

SPECIFICATIONS:

MATERIALS:
T316 Stainless body, 2024 - T351 Anodized aluminum piston and cone

COMMON PARTS:	**Retaining Ring:** T316 SS
Spider Plate: T316 SS	**Retaining Spring:** T316 SS
Spring: T302 SS	**Indicator:** Nickel-plated Carbon Steel
Fasteners: T303 SS	**Internal Magnet:** Teflon® Coated Alnico 8
Seals: Viton®	**Bumper:** 2011 - T3 Anodized Aluminum
Scale Support: T316 SS	**Guard:** Cylindrical Pyrex® Glass
Scale: Polymide	**End Caps:** 2011 - T3 Anodized Aluminum

THREADS: SAE J1926/1, **NPTF** ANSI B2.2

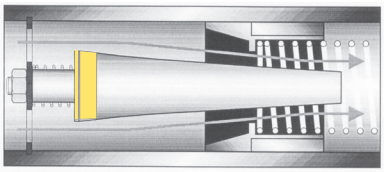
TEMPERATURE RANGE: -20 to +400 °F (-29 to +205 °C) Continuous

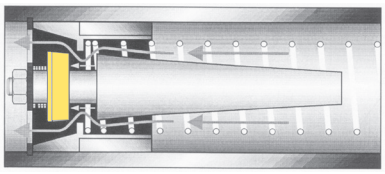
PRESSURE RATING:
See Ordering Information Table.

PRESSURE DROP: See Ordering Information Table.
For detailed differential pressure charts, see the Hedland full-line catalog.

ACCURACY: ±2% of full scale **REPEATABILITY:** ±1%

REVERSE FLOW BY-PASS OPTION: Features a two-piece cone that responds to flow in the primary flow direction in the same manner as the standard design. Flow in the reverse direction causes the lower cone shuttle to shift, moving it below the sharp-edged piston orifice, which allows the fluid to flow freely in the reverse direction.

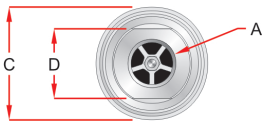

Normal Flow Direction

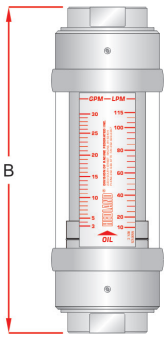

Reverse Flow By-Pass

DIMENSIONS:

A	B	C	D
NOMINAL PORT SIZE	LENGTH in (mm)	WIDTH in (mm)	FLATS in (mm)
¼ (SAE 6)	6.60 (168)	2.01 (51)	1.25 (32)
½ (SAE 10)	6.60 (168)	2.01 (51)	1.25 (32)
¾ (SAE 12)	7.20 (183)	2.48 (63)	1.50 (38)
1 (SAE 16)	7.20 (183)	2.48 (63)	1.75 (44)
1¼ (SAE 20)	12.20 (310)	4.20 (107)	2.75 (70)
1½ (SAE 24)	12.20 (310)	4.20 (107)	2.75 (70)

NOTE: Weights for all sizes can be found on page 40.





Pyrex is a registered trademark of Corning, Inc.
Teflon is a registered trademark of E.I. DuPont de Nemours & Co.
Viton is a registered trademark of DuPont Dow Elastomers

Canadian Registration High Temperature

Flow Meters For Water-based Fluids (Water/Oil Emulsions)

ORDERING INFORMATION:

NOMINAL PORT SIZE①	FLOW RANGE		PRESSURE DROP			MODEL NUMBER (see example below)		PRESSURE	OPTIONS
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	REVERSE 100% FLOW PSI (BAR)	SAE	NPTF	RATING	REVERSE FLOW
¼" SAE 6	0.1 - 1.0	0.5 - 3.75	4.0 (.28)	9.0 (.62)		H212 C - 010 - HT	H213 C - 010 - HT	3000 PSI	Not Available
	0.2 - 2.0	1.0 - 7.5	6.0 (.41)	13.0 (.90)		H212 C - 020 - HT	H213 C - 020 - HT		
½" SAE 10	0.1 - 1.0	0.5 - 3.75	2.0 (.14)	2.75 (.19)	5.2 (.36)	H612 C - 001 - HT	H613 C - 001 - HT	3000 PSI	HR
	0.2 - 2.0	1 - 7.5	2.0 (.14)	3.0 (.21)	9.6 (.66)	H612 C - 002 - HT	H613 C - 002 - HT		
	0.5 - 5.0	2 - 19	3.0 (.21)	6.0 (.41)	4.8 (.33)	H612 C - 005 - HT	H613 C - 005 - HT		
	1 - 10	5 - 38	4.0 (.28)	9.5 (.66)	23.0 (1.6)	H612 C - 010 - HT	H613 C - 010 - HT		
	1 - 15	4 - 56	6.5 (.45)	18.5 (1.3)	55.2 (3.8)	H612 C - 015 - HT	H613 C - 015 - HT		
¾" SAE 12	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H712 C - 002 - HT	H713 C - 002 - HT	2350 PSI	HR
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H712 C - 005 - HT	H713 C - 005 - HT		
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H712 C - 010 - HT	H713 C - 010 - HT		
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H712 C - 020 - HT	H713 C - 020 - HT		
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H712 C - 030 - HT	H713 C - 030 - HT		
1" SAE 16	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H782 C - 002 - HT	H783 C - 002 - HT	2350 PSI	HR
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H782 C - 005 - HT	H783 C - 005 - HT		
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H782 C - 010 - HT	H783 C - 010 - HT		
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H782 C - 020 - HT	H783 C - 020 - HT		
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H782 C - 030 - HT	H783 C - 030 - HT		
	4 - 40	15 - 150	9.0 (.62)	24.0 (1.7)	87.5 (6.04)	H782 C - 040 - HT	H783 C - 040 - HT		
	5 - 50	20 - 190	12.5 (.86)	34.0 (2.3)	150 (10.4)	H782 C - 050 - HT	H783 C - 050 - HT		
1¼" SAE 20	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H812 C - 030 - HT	H813 C - 030 - HT	2175 PSI	HR
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H812 C - 050 - HT	H813 C - 050 - HT		
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H812 C - 075 - HT	H813 C - 075 - HT		
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H812 C - 100 - HT	H813 C - 100 - HT		
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H812 C - 150 - HT	H813 C - 150 - HT		
1½" SAE 24	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H882 C - 030 - HT	H883 C - 030 - HT	2175 PSI	HR
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H882 C - 050 - HT	H883 C - 050 - HT		
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H882 C - 075 - HT	H883 C - 075 - HT		
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H882 C - 100 - HT	H883 C - 100 - HT		
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H882 C - 150 - HT	H883 C - 150 - HT		

①Fractional sizes apply to NPTF.

(example) **H 713 C - 030 - HR**

NOTE: HT suffix represents standard high temperature configuration.
For reverse flow high temperature, replace HT with HR suffix.

Canadian Registration Flow Meters

For Water and Other Liquids

- Direct reading
- Install in any position
- 360° rotatable guard/scale
- Easier-to-read linear scale
- No flow straighteners or special piping required
- Relatively insensitive to shock and vibration
- Good viscosity stability
- Temperature up to 240 °F
- Accuracy ±2% full scale
- Repeatability ±1%
- Special scales available
- Calibrated for 1.0 S.G.

SPECIFICATIONS:

MATERIALS:
T316 Stainless body, C360 Brass piston and cone

COMMON PARTS:
Spider Plate: T316 SS
Spring: T302 SS
Fasteners: T303 SS
Pressure Seals: Viton®
Guard: Polycarbonate
Retaining Ring: T316 SS
Retaining Spring: T316 SS
Indicator and Internal Magnet: PPS / Ceramic
Guard Seal / Bumper: Buna N
Scale Support: 6063 - T6 Aluminum
End Caps: Nylon ST

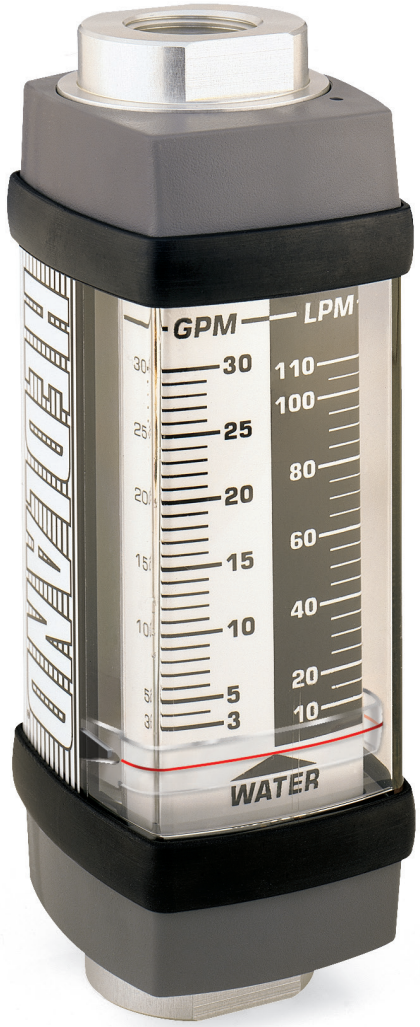
THREADS: SAE J1926/1, **NPTF** ANSI B2.2

TEMPERATURE RANGE: -20 to +240 °F (-29 to +116 °C) for higher temp. meters, see page 18.

PRESSURE RATING:
See Order Information Table.

PRESSURE DROP: See Ordering Information Table.
For detailed differential pressure charts, see the Hedland full-line catalog.

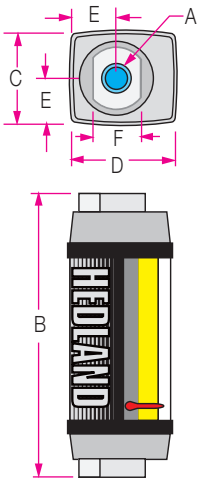
ACCURACY: ±2% of full scale, ±7% of full scale for ¼" meters **REPEATABILITY:** ±1%



DIMENSIONS:

A	B	C	D	E	F
NOMINAL PORT SIZE	LENGTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	FLATS in (mm)
¼ (SAE 6)	4.8 (122)	1.68 (43)	1.90 (48)	.84 (21)	.88 (22)
½ (SAE 10)	6.6 (168)	2.07 (53)	2.40 (61)	1.04 (26)	1.25 (32)
¾ (SAE 12)	7.2 (183)	2.48 (63)	2.85 (72)	1.24 (32)	1.50 (38)
1 (SAE 16)	7.2 (183)	2.48 (63)	2.85 (72)	1.24 (32)	1.75 (44)
1¼ (SAE 20)	12.2 (310)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)
1½ (SAE 24)	12.2 (310)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)

NOTE: Weights for all sizes can be found on page 40.



Viton is a registered trademark of DuPont Dow Elastomers

Canadian Registration Flow Meters

For Water and Other Liquids

ORDERING INFORMATION:

NOMINAL PORT SIZE②	FLOW RANGE		PRESSURE DROP		MODEL NUMBER (see example below)		PRESSURE
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	SAE	NPTF	RATING
¼" SAE 6	.02 - 0.2	0.1 - 0.75	3.5 (.24)	4.0 (.28)	H204 **C** - 002	H205 **C** - 002	5000 PSI
	.05 - 0.5	0.2 - 1.9	3.0 (.21)	5.0 (.35)	H204 **C** - 005	H205 **C** - 005	
	0.1 - 1.0	0.5 - 3.75	4.0 (.28)	9.0 (.62)	H204 **C** - 010	H205 **C** - 010	
	0.2 - 2.0	1 - 7.5	6.0 (.41)	13 (.90)	H204 **C** - 020	H205 **C** - 020	
½" SAE 10	0.1 - 1.0	0.5 - 3.75	2.0 (.14)	2.75 (.19)	H604 **C** - 001	H605 **C** - 001	3000 PSI
	0.2 - 2.0	1 - 7.5	2.0 (.14)	3.0 (.21)	H604 **C** - 002	H605 **C** - 002	
	0.5 - 5.0	2 - 19	3.0 (.21)	6.0 (.41)	H604 **C** - 005	H605 **C** - 005	
	1 - 10	5 - 38	4.0 (.28)	9.5 (.66)	H604 **C** - 010	H605 **C** - 010	
	1 - 15	4 - 56	6.5 (.45)	18.5 (1.3)	H604 **C** - 015	H605 **C** - 015	
¾" SAE 12	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	H704 **C** - 002	H705 **C** - 002	2500 PSI
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	H704 **C** - 005	H705 **C** - 005	
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	H704 **C** - 010	H705 **C** - 010	
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	H704 **C** - 020	H705 **C** - 020	
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	H704 **C** - 030	H705 **C** - 030	
1" SAE 16	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	H754 **C** - 002	H755 **C** - 002	2500 PSI
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	H754 **C** - 005	H755 **C** - 005	
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	H754 **C** - 010	H755 **C** - 010	
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	H754 **C** - 020	H755 **C** - 020	
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	H754 **C** - 030	H755 **C** - 030	
	4 - 40	15 - 150	9.0 (.62)	24 (1.7)	H754 **C** - 040	H755 **C** - 040	
	5 - 50	20 - 190	12.5 (.86)	34 (2.3)	H754 **C** - 050	H755 **C** - 050	
1¼" SAE 20	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	H804 **C** - 030	H805 **C** - 030	2450 PSI
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	H804 **C** - 050	H805 **C** - 050	
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	H804 **C** - 075	H805 **C** - 075	
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	H804 **C** - 100	H805 **C** - 100	
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	H804 **C** - 150	H805 **C** - 150	
1½" SAE 24	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	H854 **C** - 030	H855 **C** - 030	2450 PSI
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	H854 **C** - 050	H855 **C** - 050	
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	H854 **C** - 075	H855 **C** - 075	
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	H854 **C** - 100	H855 **C** - 100	
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	H854 **C** - 150	H855 **C** - 150	

② Fractional sizes apply to NPTF.

(example) **H 705 C - 030**

Canadian Registered High Temperature

Flow Meters For Water and Other Liquids

- Direct reading
- Install in any position
- 360° rotatable guard/scale
- Easier-to-read linear scale
- No flow straighteners or special piping required
- Relatively insensitive to shock and vibration
- Good viscosity stability
- Temperature up to 500 °F
- Accuracy ±2% full scale
- Repeatability ±1%
- Special scales available
- Calibrated for 1.0 S.G.

SPECIFICATIONS:

MATERIALS:
T316 Stainless body, C360 Brass piston and cone

COMMON PARTS:
Spider Plate: T316 SS
Spring: T302 SS
Fasteners: T303 SS
Seals: Viton®
Scale Support: T316 SS
Scale: Polymide
Retaining Ring: T316 SS
Retaining Spring: T316 SS
Indicator: Nickel-plated Carbon Steel
Internal Magnet: Teflon® Coated Alnico 8
Bumper: 2011 - T3 Anodized Aluminum
Guard: Cylindrical Pyrex® Glass
End Caps: 2011 - T3 Anodized Aluminum

THREADS: SAE J1926/1, **NPTF** ANSI B2.2

TEMPERATURE RANGE: -20 to +400 °F (-29 to +205 °C) Continuous

PRESSURE RATING:
See Ordering Information Table.

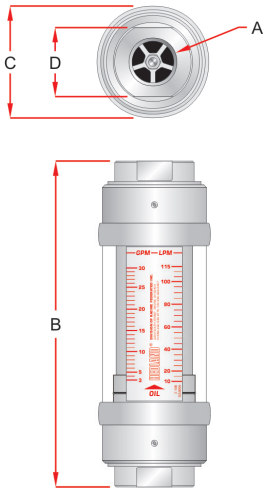
PRESSURE DROP: See Ordering Information Table.
For detailed differential pressure charts, see the Hedland full-line catalog.

ACCURACY: ±2% of full scale **REPEATABILITY:** ±1%

DIMENSIONS:

A	B	C	D
NOMINAL PORT SIZE	LENGTH in (mm)	WIDTH in (mm)	FLATS in (mm)
¼ (SAE 6)	6.60 (168)	2.01 (51)	1.25 (32)
½ (SAE 10)	6.60 (168)	2.01 (51)	1.25 (32)
¾ (SAE 12)	7.20 (183)	2.48 (63)	1.50 (38)
1 (SAE 16)	7.20 (183)	2.48 (63)	1.75 (44)
1¼ (SAE 20)	12.20 (310)	4.20 (107)	2.75 (70)
1½ (SAE 24)	12.20 (310)	4.20 (107)	2.75 (70)

NOTE: Weights for all sizes can be found on page 40.



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Viton is a registered trademark of DuPont Dow Elastomers

Canadian Registration High Temperature

Flow Meters For Water and Other Liquids

ORDERING INFORMATION:

NOMINAL PORT SIZE②	FLOW RANGE		PRESSURE DROP		MODEL NUMBER (see example below)		PRESSURE
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	SAE	NPTF	RATING
¼" SAE 6	0.1 - 1.0	0.5 - 3.75	4.0 (.28)	9.0 (.62)	H204 C - 010 - HT	H205 C - 010 - HT	3000 PSI
	0.2 - 2.0	1.0 - 7.5	6.0 (.41)	13.0 (.90)	H204 C - 020 - HT	H205 C - 020 - HT	
½" SAE 10	0.1 - 1.0	0.5 - 3.75	2.0 (.14)	2.75 (.19)	H604 C - 001 - HT	H605 C - 001 - HT	3000 PSI
	0.2 - 2.0	1.0 - 7.5	2.0 (.14)	3.0 (.21)	H604 C - 002 - HT	H605 C - 002 - HT	
	0.5 - 5.0	2 - 19	3.0 (.21)	6.0 (.41)	H604 C - 005 - HT	H605 C - 005 - HT	
	1 - 10	5 - 38	4.0 (.28)	9.5 (.66)	H604 C - 010 - HT	H605 C - 010 - HT	
	1 - 15	4 - 56	6.5 (.45)	18.5 (1.3)	H604 C - 015 - HT	H605 C - 015 - HT	
¾" SAE 12	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	H704 C - 002 - HT	H705 C - 002 - HT	2350 PSI
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	H704 C - 005 - HT	H705 C - 005 - HT	
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	H704 C - 010 - HT	H705 C - 010 - HT	
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	H704 C - 020 - HT	H705 C - 020 - HT	
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	H704 C - 030 - HT	H705 C - 030 - HT	
1" SAE 16	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	H754 C - 002 - HT	H755 C - 002 - HT	2350 PSI
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	H754 C - 005 - HT	H755 C - 005 - HT	
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	H754 C - 010 - HT	H755 C - 010 - HT	
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	H754 C - 020 - HT	H755 C - 020 - HT	
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	H754 C - 030 - HT	H755 C - 030 - HT	
	4 - 40	15 - 150	9.0 (.62)	24.0 (1.7)	H754 C - 040 - HT	H755 C - 040 - HT	
	5 - 50	20 - 190	12.5 (.86)	34.0 (2.3)	H754 C - 050 - HT	H755 C - 050 - HT	
1¼" SAE 20	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	H804 C - 030 - HT	H805 C - 030 - HT	2175 PSI
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	H804 C - 050 - HT	H805 C - 050 - HT	
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	H804 C - 075 - HT	H805 C - 075 - HT	
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	H804 C - 100 - HT	H805 C - 100 - HT	
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	H804 C - 150 - HT	H805 C - 150 - HT	
1½" SAE 24	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	H854 C - 030 - HT	H855 C - 030 - HT	2175 PSI
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	H854 C - 050 - HT	H855 C - 050 - HT	
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	H854 C - 075 - HT	H855 C - 075 - HT	
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	H854 C - 100 - HT	H855 C - 100 - HT	
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	H854 C - 150 - HT	H855 C - 150 - HT	

①Fractional sizes apply to NPTF.

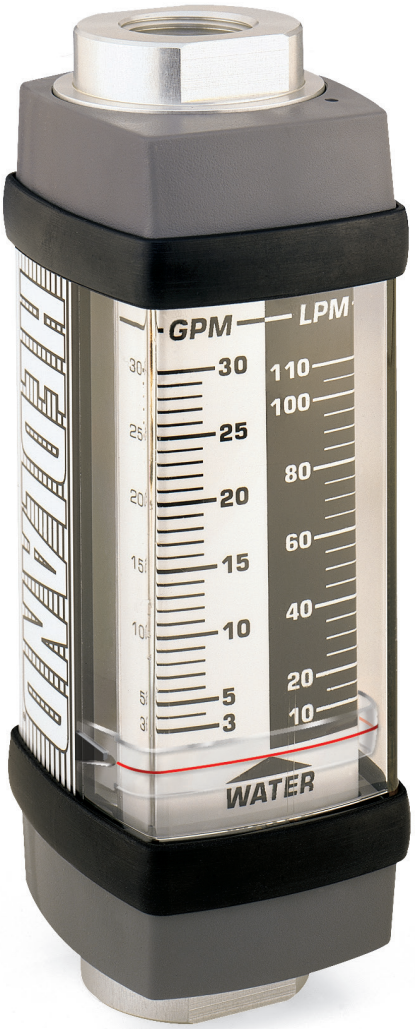
(example) **H 705 C - 030 - HT**

NOTE: HT suffix represents standard high temperature configuration.

Canadian Registration Flow Meters

For A.P.I. Oil / Caustic and Corrosive Liquids

- Direct reading
- Install in any position
- 360° rotatable guard/scale
- Easier-to-read linear scale
- No flow straighteners or special piping required
- Relatively insensitive to shock and vibration
- Good viscosity stability
- Temperature up to 240 °F
- Accuracy ±2% full scale
- Repeatability ±1%
- Special scales available



SPECIFICATIONS:

MATERIALS:
T316 Stainless body, piston and cone

COMMON PARTS:
Spider Plate: T316 SS
Spring: T316 SS
Fasteners: T316 SS
Pressure Seals: Viton®
Guard: Polycarbonate
Retaining Ring: T316 SS
Retaining Spring: T316 SS
Indicator and Internal Magnet: PPS / Ceramic
Guard Seal / Bumper: Buna N
Scale Support: 6063 - T6 Aluminum
End Caps: Nylon ST

THREADS: NPTF ANSI B2.2

TEMPERATURE RANGE: -20 to +240 °F (-29 to +116 °C) for higher temperatures consult factory

PRESSURE RATING:
Oil/Liquids Operating: See Ordering Information Table.

PRESSURE DROP: See Ordering Information Table.
For detailed differential pressure charts, see the Hedland full-line catalog.

ACCURACY: ±2% of full scale, ±7% of full scale for ¼" meters **REPEATABILITY:** ±1%

HOSTILE ENVIRONMENT OPTION SPECIFICATIONS:

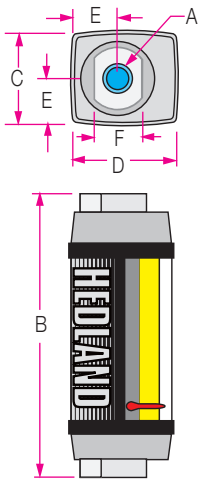
MATERIALS:
T316 Stainless body, piston and cone

COMMON PARTS:
Spider Plate: T316 SS
Spring: T316 SS
Fasteners: T316 SS
Seals: Viton®
End Caps: T316 SS
Internal Magnet: Teflon® Coated Alnico 8
Retaining Ring: T316 SS
Retaining Spring: T316 SS
Indicator: T416 SS
Bumper: T316 SS
Scale Support: T316 SS
Guard: Cylindrical Pyrex® glass

TEMPERATURE RANGE: -20 to +400 °F (-29 to +205 °C) Continuous
+400 to +500 °F (+205 to +260 °C) Intermittent

DIMENSIONS:

A	B	C	D	E	F
NOMINAL PORT SIZE	LENGTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	FLATS in (mm)
¼	4.8 (122)	1.68 (43)	1.90 (48)	.84 (21)	.88 (22)
½	6.6 (168)	2.07 (53)	2.40 (61)	1.04 (26)	1.25 (32)
¾	7.2 (183)	2.48 (63)	2.85 (72)	1.24 (32)	1.50 (38)
1	7.2 (183)	2.48 (63)	2.85 (72)	1.24 (32)	1.75 (44)
1¼	12.2 (310)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)
1½	12.2 (310)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)



NOTE: Weights for all sizes can be found on page 40.

Pyrex is a registered trademark of Corning, Inc.
Teflon is a registered trademark of E.I. DuPont de Nemours & Co.
Viton is a registered trademark of DuPont Dow Elastomers

Canadian Registration Flow Meters

For A.P.I. Oil / Caustic and Corrosive Liquids

ORDERING INFORMATION:

NOMINAL PORT SIZE	FLOW RANGE		PRESSURE DROP		MODEL NUMBER (see example below)		HOSTILE ENVIRONMENT OPTION
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	API - OIL .876 (S.G.) NPTF	LIQUIDS 1.0 (S.G.) NPTF	
¼"					3000 PSI	3000 PSI	3000 PSI HE
	0.1 - 1.0	0.5 - 3.75	4.0 (.28)	9.0 (.62)	H231C - 010 - †	H234C - 010 - †	
	0.2 - 2.0	1 - 7.5	6.0 (.41)	13.0 (.90)	H231C - 020 - †	H234C - 020 - †	
½"					3000 PSI	3000 PSI	3000 PSI HE
	0.2 - 2.0	1 - 7.5	2.0 (.14)	3.0 (.21)	H631C - 002 - †	H634C - 002 - †	
	0.5 - 5.0	2 - 19	3.0 (.21)	6.0 (.41)	H631C - 005 - †	H634C - 005 - †	
	1 - 10	5 - 38	4.0 (.28)	9.5 (.66)	H631C - 010 - †	H634C - 010 - †	
	1 - 15	4 - 56	6.5 (.45)	18.5 (1.3)	H631C - 015 - †	H634C - 015 - †	
¾"					2500 PSI	2500 PSI	2350 PSI HE
	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	H731C - 002 - †	H734C - 002 - †	
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	H731C - 005 - †	H734C - 005 - †	
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	H731C - 010 - †	H734C - 010 - †	
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	H731C - 020 - †	H734C - 020 - †	
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	H731C - 030 - †	H734C - 030 - †	
1"					2500 PSI	2500 PSI	2350 PSI HE
	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	H741C - 002 - †	H744C - 002 - †	
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	H741C - 005 - †	H744C - 005 - †	
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	H741C - 010 - †	H744C - 010 - †	
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	H741C - 020 - †	H744C - 020 - †	
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	H741C - 030 - †	H744C - 030 - †	
	4 - 40	15 - 150	9.0 (.62)	24.0 (1.7)	H741C - 040 - †	H744C - 040 - †	
1¼"					2450 PSI	2450 PSI	2175 PSI HE
	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	H831C - 030 - †	H834C - 030 - †	
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	H831C - 050 - †	H834C - 050 - †	
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	H831C - 075 - †	H834C - 075 - †	
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	H831C - 100 - †	H834C - 100 - †	
1½"					2450 PSI	2450 PSI	2175 PSI HE
	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	H841C - 030 - †	H844C - 030 - †	
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	H841C - 050 - †	H844C - 050 - †	
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	H841C - 075 - †	H844C - 075 - †	
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	H841C - 100 - †	H844C - 100 - †	

NOTE: Consult factory for availability.

(example) **H731C - 030 - HE**

Canadian Registration Flow Meters

For Air / Caustic and Corrosive Gases

- Direct reading
- Install in any position
- 360° rotatable guard/scale
- Easier-to-read linear scale
- No flow straighteners or special piping required
- Relatively insensitive to shock and vibration
- Temperature up to 240 °F
- Accuracy ±2% full scale
- Repeatability ±1%
- Special scales available

SPECIFICATIONS:

MATERIALS:
T316 Stainless body, piston and cone

COMMON PARTS:
Spider Plate: T316 SS
Spring: T316 SS
Fasteners: T316 SS
Pressure Seals: Viton®
Guard: Polycarbonate
Retaining Ring: T316 SS
Retaining Spring: T316 SS
Indicator and Internal Magnet: PPS / Ceramic
Guard Seal/Bumper: Buna N
Scale Support: 6063 - T6 Aluminum
End Caps: Nylon ST

THREADS: NPTF ANSI B2.2

TEMPERATURE RANGE: -20 to +240 °F (-29 to +116 °C)

PRESSURE RATING:
Air / Gases Operating: 1,500 psi/103 bar max.

PRESSURE DROP: See Ordering Information Table.
For detailed differential pressure charts, see the Hedland full-line catalog.

ACCURACY: ±2% of full scale, ±7% of full scale for ¼" meters **REPEATABILITY:** ±1%

HOSTILE ENVIRONMENT OPTION SPECIFICATIONS:

MATERIALS:
T316 Stainless body, piston and cone

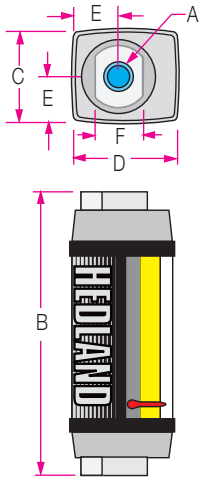
COMMON PARTS:
Spider Plate: T316 SS
Spring: T316 SS
Fasteners: T316 SS
Seals: Viton®
End Caps: T316 SS
Internal Magnet: Teflon® Coated Alnico 8
Retaining Ring: T316 SS
Retaining Spring: T316 SS
Indicator: T416 SS
Bumper: T316 SS
Scale Support: T316 SS
Guard: Cylindrical Pyrex® glass

TEMPERATURE RANGE: -20 to +400 °F (-29 to +205 °C) Continuous
+400 to +500 °F (+205 to +260 °C) Intermittent

DIMENSIONS:

A	B	C	D	E	F
NOMINAL PORT SIZE	LENGTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	FLATS in (mm)
¼	4.8 (122)	1.68 (43)	1.90 (48)	.84 (21)	.88 (22)
½	6.6 (168)	2.07 (53)	2.40 (61)	1.04 (26)	1.25 (32)
¾	7.2 (183)	2.48 (63)	2.85 (72)	1.24 (32)	1.50 (38)
1	7.2 (183)	2.48 (63)	2.85 (72)	1.24 (32)	1.75 (44)
1¼	12.2 (310)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)
1½	12.2 (310)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)

NOTE: Weights for all sizes can be found on page 40.



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Teflon is a registered trademark of E.I. DuPont de Nemours & Co.
Viton is a registered trademark of DuPont Dow Elastomers

Canadian Registration Flow Meters

For Air / Caustic and Corrosive Gases

ORDERING INFORMATION:

NOMINAL PORT SIZE	FLOW RANGE		PRESSURE DROP		MODEL NUMBER (see example below)	HOSTILE ENVIRONMENT OPTION
	① SCFM	② L/SEC	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	GASES 1.0 (S.G.) NPTF	
¼"	2 - 20 3 - 30	1 - 9 1.5 - 14	10.15 (0.70) 13.75 (0.95)	18.71 (1.29) 26.23 (1.81)	H237C - 020 H237C - 030	Not Available
½"	3 - 25 5 - 50 10 - 100 15 - 150	2 - 12 3 - 22 5 - 47 7 - 70	3.73 (0.26) 6.04 (0.42) 7.18 (0.50) 8.06 (0.56)	6.10 (0.42) 10.35 (0.71) 13.85 (0.95) 18.49 (1.27)	H637C - 025 - † H637C - 050 - † H637C - 100 - † H637C - 150 - †	HE
¾"	3 - 25 5 - 50 10 - 100 15 - 150 25 - 250	1.5 - 11.5 2 - 23 5 - 47.5 7 - 70 10 - 118	2.99 (0.21) 2.00 (0.14) 7.19 (0.50) 4.44 (0.31) 6.27 (0.43)	5.90 (0.41) 3.58 (0.25) 12.87 (0.89) 9.52 (0.66) 15.38 (1.06)	H737C - 025 - † H737C - 050 - † H737C - 100 - † H737C - 150 - † H737C - 250 - †	HE
1"	3 - 25 5 - 50 10 - 100 15 - 150 25 - 250	1.5 - 11.5 2 - 23 5 - 47.5 7 - 70 10 - 118	2.99 (0.21) 2.00 (0.14) 7.19 (0.50) 4.44 (0.31) 6.27(0.43)	5.90 (0.41) 3.58 (0.25) 12.87 (0.89) 9.52 (0.66) 15.38 (1.06)	H747C - 025 - † H747C - 050 - † H747C - 100 - † H747C - 150 - † H747C - 250 - †	HE
1¼"	20 - 200 40 - 400 60 - 600 80 - 800	10 - 95 20 - 180 30 - 280 50 - 350	1.89 (0.13) 2.53 (0.17) 4.47 (0.31) 6.13 (0.42)	3.16 (0.22) 5.49 (0.38) 10.71 (0.74) 17.14 (1.18)	H837C - 200 - † H837C - 400 - † H837C - 600 - † H837C - 800 - †	HE
1½"	20 - 200 40 - 400 60 - 600 80 - 800	10 - 95 20 - 180 30 - 280 50 - 350	1.89 (0.13) 2.53 (0.17) 4.47 (0.31) 6.13 (0.42)	3.16 (0.22) 5.49 (0.38) 10.71 (0.74) 17.14 (1.18)	H847C - 200 - † H847C - 400 - † H847C - 600 - † H847C - 800 - †	HE

(example) **H 737C - 250 - HE**

NOTE: Consult factory for availability.
① SCFM/PSI multipressure scales are standard.
② L/sec/bar multipressure scales are available at no extra charge. Consult factory for other options.

NOTE: When ordering a L/sec/bar scale add "S1" suffix to part number

(example) H737 X - 250 - S1 or H737 X - 250 - HE - S1

Canadian Registration Flow Meters

For Air and Other Compressed Gases

- Direct reading
- Install in any position
- 360° rotatable guard/scale
- Easier-to-read linear scale
- No flow straighteners or special piping required
- Relatively insensitive to shock and vibration
- Temperature up to 240 °F
- Accuracy ±2% full scale
- Repeatability ±1%
- Special scales available
- Calibrated for 1.0 S.G.

SPECIFICATIONS:

MATERIALS:

T316 Stainless body, 2024 - T351 Anodized aluminum piston and cone

COMMON PARTS:

Spider Plate: T316 SS
Spring: T302 SS
Fasteners: T303 SS
Pressure Seals: Viton®
Guard: Polycarbonate
Retaining Ring: T316 SS
Retaining Spring: T316 SS
Indicator and Internal Magnet: PPS / Ceramic
Guard Seal / Bumper: Buna N
Scale Support: 6063 - T6 Aluminum
End Caps: Nylon ST

THREADS: SAE J1926/1, **NPTF** ANSI B2.2

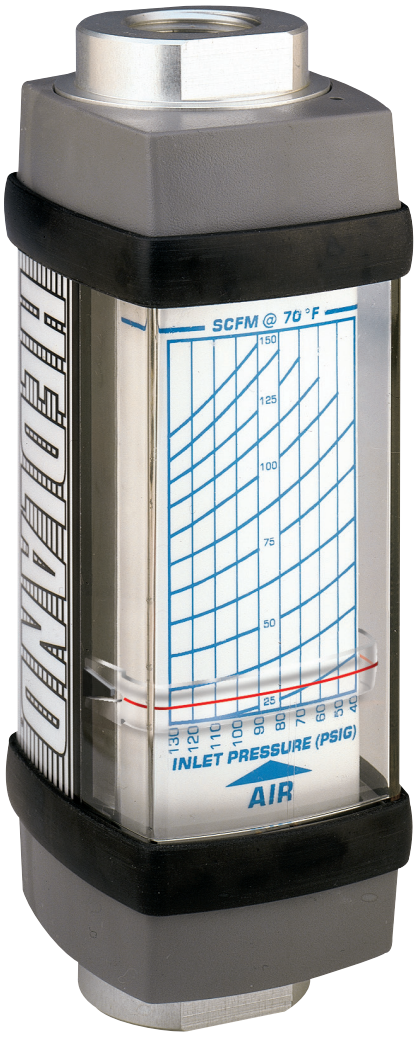
TEMPERATURE RANGE: -20 to +240 °F (-29 to +116 °C)

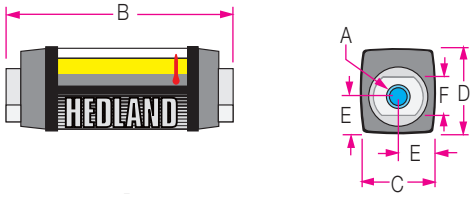
PRESSURE RATING:

Stainless Steel Operating: 1,500 psi/103 bar max.

PRESSURE DROP: See Ordering Information Table.
For detailed differential pressure charts, see the Hedland full-line catalog.

ACCURACY: ±2% of full scale, ±7% of full scale for ¼" meters **REPEATABILITY:** ±1%





DIMENSIONS:

A	B	B1	C	D	E	F	G
NOMINAL PORT SIZE	LENGTH in (mm)	LENGTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	FLATS in (mm)	HEIGHT in (mm)
¼ (SAE 6)	4.8 (122)	6.12 (155)	1.68 (43)	1.90 (48)	.84 (21)	.88 (22)	5.0 (127)
½ (SAE 10)	6.6 (168)	8.00 (203)	2.07 (53)	2.40 (61)	1.04 (26)	1.25 (32)	5.4 (137)
¾ (SAE 12)	7.2 (183)	8.9 (226)	2.48 (63)	2.85 (72)	1.24 (32)	1.50 (38)	5.9 (150)
1 (SAE 16)	7.2 (183)	8.9 (226)	2.48 (63)	2.85 (72)	1.24 (32)	1.75 (44)	5.9 (150)
1¼ (SAE 20)	12.2 (310)	13.8 (351)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)	7.2 (183)
1½ (SAE 24)	12.2 (310)	13.8 (351)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)	7.2 (183)

NOTE: Weights for all sizes can be found on page 40.

Viton is a registered trademark of DuPont Dow Elastomers

Canadian Registration Flow Meters

For Air and Other Compressed Gases

ORDERING INFORMATION:

NOMINAL PORT SIZE②	FLOW RANGE		PRESSURE DROP		MODEL NUMBER (see example below)	
	③ SCFM	④ L/SEC	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	SAE	NPTF
¼" SAE 6	0.5 - 5	0.2 - 2.2	2.51 (0.17)	4.45 (0.31)	H270 C - 005 - †	H271 C - 005 - †
	1 - 10	0.5 - 4.75	9.29 (0.64)	16.46 (1.13)	H270 C - 010 - †	H271 C - 010 - †
	2 - 20	1 - 9	10.15 (0.70)	18.71 (1.29)	H270 C - 020 - †	H271 C - 020 - †
	3 - 30	1.5 - 14	13.75 (0.95)	26.23 (1.81)	H270 C - 030 - †	H271 C - 030 - †
½" SAE 10	3 - 25	2 - 12	3.73 (0.26)	6.10 (0.42)	H670 C - 025 - †	H671 C - 025 - †
	5 - 50	3 - 22	6.04 (0.42)	10.35 (0.71)	H670 C - 050 - †	H671 C - 050 - †
	10 - 100	5 - 47	7.18 (0.50)	13.85 (0.95)	H670 C - 100 - †	H671 C - 100 - †
	15 - 150	7 - 70	8.06 (0.56)	18.49 (1.27)	H670 C - 150 - †	H671 C - 150 - †
¾" SAE 12	3 - 25	1.5 - 11.5	2.99 (0.21)	5.90 (0.41)	H770 C - 025 - †	H771 C - 025 - †
	5 - 50	2 - 23	2.00 (0.14)	3.58 (0.25)	H770 C - 050 - †	H771 C - 050 - †
	10 - 100	5 - 47.5	7.19 (0.50)	12.87 (0.89)	H770 C - 100 - †	H771 C - 100 - †
	15 - 150	7 - 70	4.44 (0.31)	9.52 (0.66)	H770 C - 150 - †	H771 C - 150 - †
	25 - 250	10 - 118	6.27 (0.43)	15.38 (1.06)	H770 C - 250 - †	H771 C - 250 - †
1" SAE 16	3 - 25	1.5 - 11.5	2.99 (0.21)	5.90 (0.41)	H790 C - 025 - †	H791 C - 025 - †
	5 - 50	2 - 23	2.00 (0.14)	3.58 (0.25)	H790 C - 050 - †	H791 C - 050 - †
	10 - 100	5 - 47.5	7.19 (0.50)	12.87 (0.89)	H790 C - 100 - †	H791 C - 100 - †
	15 - 150	7 - 70	4.44 (0.31)	9.52 (0.66)	H790 C - 150 - †	H791 C - 150 - †
	25 - 250	10 - 118	6.27 (0.43)	15.38 (1.06)	H790 C - 250 - †	H791 C - 250 - †
1¼" SAE 20	20 - 200	10 - 95	1.89 (0.13)	3.16 (0.22)	H870 C - 200 - †	H871 C - 200 - †
	40 - 400	20 - 180	2.53 (0.17)	5.49 (0.38)	H870 C - 400 - †	H871 C - 400 - †
	60 - 600	30 - 280	4.47 (0.31)	10.71 (0.74)	H870 C - 600 - †	H871 C - 600 - †
	80 - 800	50 - 350	6.13 (0.42)	17.14 (1.18)	H870 C - 800 - †	H871 C - 800 - †
	100 - 1000	50 - 475	9.84 (0.68)	28.45 (1.96)	H870 C - 999 - †	H871 C - 999 - †
1½" SAE 24	20 - 200	10 - 95	1.89 (0.13)	3.16 (0.22)	H890 C - 200 - †	H891 C - 200 - †
	40 - 400	20 - 180	2.53 (0.17)	5.49 (0.38)	H890 C - 400 - †	H891 C - 400 - †
	60 - 600	30 - 280	4.47 (0.31)	10.71 (0.74)	H890 C - 600 - †	H891 C - 600 - †
	80 - 800	50 - 350	6.13 (0.42)	17.14 (1.18)	H890 C - 800 - †	H891 C - 800 - †
	100 - 1000	50 - 475	9.84 (0.68)	28.45 (1.96)	H890 C - 999 - †	H891 C - 999 - †

NOTE: Consult factory for other options.
② Fractional sizes apply to NPTF.
③ SCFM/PSI multipressure scales are standard.
④ L/sec/bar multipressure scales are available at no extra charge.

(example) **H 771 C - 050**

NOTE: When ordering a L/sec/bar scale add "S1" suffix to part number

(example) H771 A - 250 - S1

Canadian Registration Flow-Alert™ Flow Switches (Micro Switch)

For Liquids / Air and Other Compressed Gases

- Automatically signals alarm if flow is too high or too low
- Automatically opens or closes electrical circuits
- Triggers warning lights, buzzers and other devices
- Shuts down pumps and/or other equipment to protect your operation against permanent damage
- Available from ¼" to 1½" sizes in aluminum, brass and stainless
- Installs in any position
- Easier-to-read linear scale
- No flow straighteners or special piping requirements
- Relatively insensitive to shock and vibration
- Special scales available

SPECIFICATIONS:

MATERIALS:

T316 Stainless body, 2024 - T351 Anodized aluminum piston and cone (Oil, PE, WBF, & Air Meters)
T316 Stainless body, C360 Brass piston and cone (Water meters)
T316 Stainless body, piston and cone

PETROLEUM (Oil) COMMON PARTS:

Spider Plate: T316 SS
Spring: T302 SS
Fasteners: T303 SS
Pressure Seals: Viton®
Lens: Polycarbonate
Retaining Ring: SAE 1070/1090 Carbon Steel
Retaining Spring: SAE 1070/1090 Carbon Steel
Indicator and Internal Magnet: PPS / Ceramic
Enclosure Seal: Silicone gasket
Scale Support: 6063 - T6 Aluminum

PHOSPHATE ESTER (PE) COMMON PARTS:

Spider Plate: T316 SS
Spring: T302 SS
Fasteners: T303 SS
Pressure Seals: EPR
Lens: Polycarbonate
Retaining Ring: SAE 1070/1090 Carbon Steel
Retaining Spring: SAE 1070/1090 Carbon Steel
Indicator and Internal Magnet: PPS / Ceramic
Enclosure Seal: Silicone gasket
Scale Support: 6063 - T6 Aluminum

WATER-BASED (WBF), WATER, AIR COMMON PARTS:

Spider Plate: T316 SS
Spring: T302 SS
Fasteners: T303 SS
Pressure Seals: Viton®
Lens: Polycarbonate
Retaining Ring: T316 SS
Retaining Spring: T316 SS
Indicator and Internal Magnet: PPS / Ceramic
Enclosure Seal: Silicone gasket
Scale Support: 6063 - T6 Aluminum

API OIL / AIR / CAUSTIC and CORROSIVE LIQUIDS and GASES:

Spider Plate: T316 SS
Spring: T316 SS
Fasteners: T316 SS
Pressure Seals: Viton®
Lens: Polycarbonate
Retaining Ring: T316 SS
Retaining Spring: T316 SS
Indicator and Internal Magnet: PPS / Ceramic
Enclosure Seal: Silicone gasket
Scale Support: 6063 - T6 Aluminum

THREADS: SAE J1926/1, **NPTF** ANSI B2.2

TEMPERATURE RANGE: -20 to +240 °F (-29 to +116 °C)

PRESSURE RATING:

See Ordering Information Tables pages 33-39.

ACCURACY: ±2% of full scale **REPEATABILITY:** ±1%

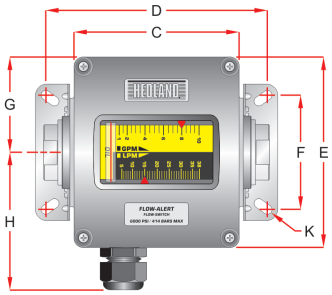
PRESSURE DROP REFERENCE TABLE:

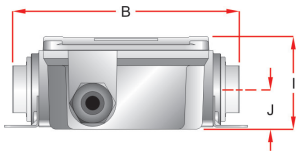
	FLUID TYPE							
	Oil	PE	WBF	Water	API Oil	Caustic & Corrosive Liquids	Air/Caustic & Corrosive Gases	Air
50% / 100% Pressure Drop	p. 5	p. 9	p. 13	p. 17	p. 21	p. 21	p. 23	p. 25
Pressure Drop Charts	See Hedland full-line catalog							

Viton is a registered trademark of DuPont Dow Elastomers

Canadian Registration Flow-Alert™ Flow Switches (Micro Switch)

For Liquids / Air and Other Compressed Gases





DIMENSIONS:

A	B	C	D	E	F	G	H	I	J	K
NOMINAL PORT SIZE	LENGTH in (mm)	LENGTH in (mm)	LENGTH in (mm)	WIDTH in (mm)	WIDTH in (mm)	WIDTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	HOLE DIA. in (mm)
¼ (SAE 6)	6.6 (168)	5.27 (134)	6.92 (176)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.46 (37)	.28 (7)
½ (SAE 10)	6.6 (168)	5.27 (134)	6.92 (176)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.46 (37)	.28 (7)
¾ (SAE 12)	7.2 (183)	5.27 (134)	6.92 (176)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.46 (37)	.28 (7)
1 (SAE 16)	7.2 (183)	5.27 (134)	6.92 (176)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.46 (37)	.28 (7)
1¼ (SAE 20)	12.2 (310)	10.68 (271)	11.65 (296)	7.63 (194)	4.84 (123)	3.82 (97)	5.02 (128)	4.50 (114)	2.20 (56)	.28 (7)
1½ (SAE 24)	12.2 (310)	10.68 (271)	11.65 (296)	7.63 (194)	4.84 (123)	3.82 (97)	5.02 (128)	4.50 (114)	2.20 (56)	.28 (7)

ENCLOSURE:

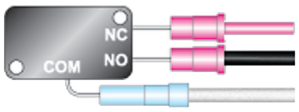
Material: Anodized and epoxy powder-coated aluminum with polycarbonate lens.
Seals: Silicone gasket between enclosure and lens.
Viton® O-rings between enclosure and flow meter body.
Connection: Pig-tail conductor (standard) with water-tight strain relief.
Other connections, including quick-disconnect, are available – consult factory for details.
Fastener: T303 SS
Rating: NEMA 12 & 13 (IP52/54)

ELECTRICAL CIRCUITRY:

Adjustable Flow-Alert™ signal: single (1) or double (2) switch, pre-wired single-pole, double-throw (SPDT) with high or low flow limit setting, adjustable over the entire flow measuring range. Other switches are available – consult factory for details.

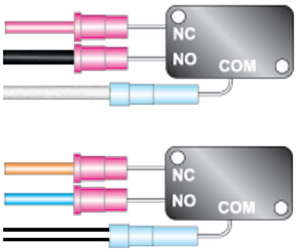
10A @ 250 VAC maximum, 0.5A @ 125 VDC maximum.

All Flow-Alert sizes (¼ to 1½ inch series) are offered in single (1) switch or double (2) switch models.
The single switch model is supplied with a 34" length of 4-wire #18 AWG jacketed cable.
The double switch model is supplied with an 18" length of 7-wire #16 AWG jacketed cable.
Optional 8 ft. cables are available – consult factory for details.



One (1) Switch 4-wire cable
Red: Normally Closed (NC)
Black: Normally Open (NO)
White: Common (COM)
Green: Ground

Two (2) Switch 7-wire cable
Switch #1
Red: Normally Closed (NC)
Black: Normally Open (NO)
White: Common (COM)
Switch #2
Orange: Normally Closed (NC)
Blue: Normally Open (NO)
White/Black: Common (COM)
Green: Ground



NOTE: Weights for all sizes can be found on page 40.

Canadian Registration Flow-Alert™ Flow Switches (Reed Switch)

For Liquids / Air and Other Compressed Gases

- No mechanical linkage
- Automatically signals alarm if flow is too high or too low
- Available from ¼" to 1½" sizes in aluminum, brass and stainless
- Installs in any position
- Easier-to-read linear scale
- No flow straighteners or special piping requirements
- Relatively insensitive to shock and vibration
- Special scales available

SPECIFICATIONS:

MATERIALS:

T316 Stainless body, 2024 - T351 Anodized aluminum piston and cone (Oil, PE, WBF, & Air meters)
T316 Stainless body, C360 Brass piston and cone (Water meters)
T316 Stainless body, piston and cone

PETROLEUM (Oil) COMMON PARTS:

Spider Plate: T316 SS **Retaining Ring:** SAE 1070/1090 Carbon Steel
Spring: T302 SS **Retaining Spring:** SAE 1070/1090 Carbon Steel
Fasteners: T303 SS **Indicator:** T400 Series Stainless
Pressure Seals: Viton® **Internal Magnet:** Teflon® Coated Alnico 8
Lens: Polycarbonate **Switch Carrier:** Aluminum
Enclosure Seal: Silicone gasket **Scale Support:** 6063 - T6 Aluminum

PHOSPHATE ESTER (PE) COMMON PARTS:

Spider Plate: T316 SS **Retaining Ring:** SAE 1070/1090 Carbon Steel
Spring: T302 SS **Retaining Spring:** SAE 1070/1090 Carbon Steel
Fasteners: T303 SS **Indicator:** T400 Series Stainless
Pressure Seals: EPR **Internal Magnet:** Teflon® Coated Alnico 8
Lens: Polycarbonate **Switch Carrier:** Aluminum
Enclosure Seal: Silicone gasket **Scale Support:** 6063 - T6 Aluminum

WATER-BASED (WBF), WATER, AIR COMMON PARTS:

Spider Plate: T316 SS **Retaining Ring:** T316 SS
Spring: T302 SS **Retaining Spring:** T316 SS
Fasteners: T303 SS **Indicator:** T400 Series Stainless
Pressure Seals: Viton® **Internal Magnet:** Teflon® Coated Alnico 8
Lens: Polycarbonate **Switch Carrier:** Aluminum
Enclosure Seal: Silicone gasket **Scale Support:** 6063 - T6 Aluminum

API OIL / AIR / CAUSTIC and CORROSIVE LIQUIDS and GASES:

Spider Plate: T316 SS **Retaining Ring:** T316 SS
Spring: T316 SS **Retaining Spring:** T316 SS
Fasteners: T316 SS **Indicator:** T400 Series Stainless
Pressure Seals: Viton® **Internal Magnet:** Teflon® Coated Alnico 8
Lens: Polycarbonate **Switch Carrier:** Aluminum
Enclosure Seal: Silicone gasket **Scale Support:** 6063 - T6 Aluminum

THREADS: SAE J1926/1, **NPTF** ANSI B2.2

TEMPERATURE RANGE: -20 to +240 °F (-20 to +116 °C)

PRESSURE RATING:

See Ordering Information Tables pages 33-39.

ACCURACY: ±2% of full scale, ±7% of full scale for 4.8" (122 mm) length ¼" meters

REPEATABILITY: ±1%

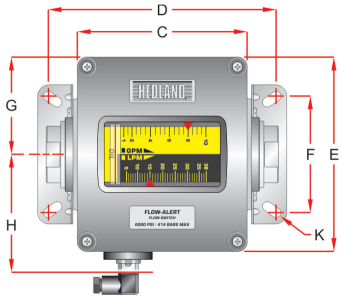
PRESSURE DROP REFERENCE TABLE:

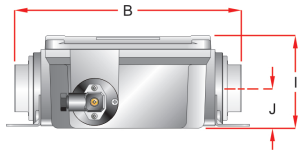
	FLUID TYPE							
	Oil	PE	WBF	Water	API Oil	Caustic & Corrosive Liquids	Air/Caustic & Corrosive Gases	Air
50% / 100% Pressure Drop	p. 5	p. 9	p. 13	p. 17	p. 21	p. 21	p. 23	p. 25
Pressure Drop Charts	See Hedland full-line catalog							

Teflon is a registered trademark of E.I. du Pont de Nemours and Co.
Viton is a registered trademark of DuPont Dow Elastomers

Canadian Registration Flow-Alert™ Flow Switches (Reed Switch)

For Liquids / Air and Other Compressed Gases



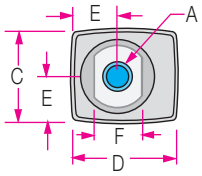


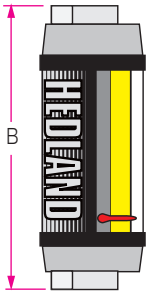
DIMENSIONS:

A	B	C	D	E	F	G	H	I	J	K
NOMINAL PORT SIZE	LENGTH in (mm)	LENGTH in (mm)	LENGTH in (mm)	WIDTH in (mm)	WIDTH in (mm)	WIDTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	HOLE DIA. in (mm)
¼ (SAE 6)	6.6 (168)	5.27 (134)	6.92 (176)	6.00 (152)	3.60 (91)	3.00 (76)	3.60 (91)	2.94 (75)	1.46 (37)	.28 (7)
½ (SAE 10)	6.6 (168)	5.27 (134)	6.92 (176)	6.00 (152)	3.60 (91)	3.00 (76)	3.60 (91)	2.94 (75)	1.46 (37)	.28 (7)
¾ (SAE 12)	7.2 (183)	5.27 (134)	6.92 (176)	6.00 (152)	3.60 (91)	3.00 (76)	3.60 (91)	2.94 (75)	1.46 (37)	.28 (7)
1 (SAE 16)	7.2 (183)	5.27 (134)	6.92 (176)	6.00 (152)	3.60 (91)	3.00 (76)	3.60 (91)	2.94 (75)	1.46 (37)	.28 (7)
1¼ (SAE 20)	12.2 (310)	10.68 (271)	11.65 (296)	7.63 (194)	4.84 (123)	3.82 (97)	4.20 (107)	4.50 (114)	2.20 (56)	.28 (7)
1½ (SAE 24)	12.2 (310)	10.68 (271)	11.65 (296)	7.63 (194)	4.84 (123)	3.82 (97)	4.20 (107)	4.50 (114)	2.20 (56)	.28 (7)

DIMENSIONS:

A	B	C	D	E	F
NOMINAL PORT SIZE	LENGTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	FLATS in (mm)
¼ (SAE 6)	4.8 (122)	1.68 (43)	1.90 (48)	.84 (21)	.88 (22)

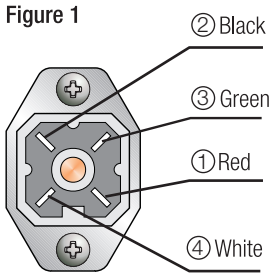




ENCLOSURE:

Material: Anodized and epoxy powder-coated aluminum with polycarbonate lens.
Seals: Silicone gasket between enclosure and lens.
Viton® O-rings between enclosure and flow meter body.
Connection: 4-pin (Protection Class IP65)
Fastener: T303 SS
Rating: NEMA 12 & 13 (IP52/54)

Figure 1



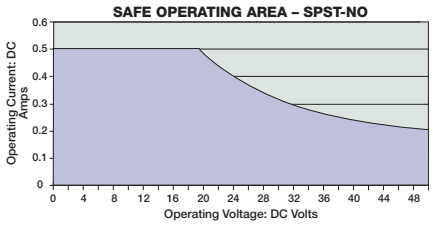
Electrical Circuitry:

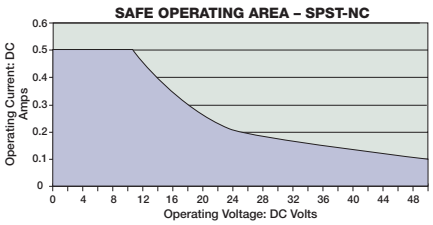
The ow switch is supplied with 15 feet of shielded, 4-wire #22 AWG PVC jacketed cable, color coded as follows: ① Red, ② Black for single (1) Reed Switch, and ③ Green, ④ White for double (2) Reed Switch.

ELECTRICAL SPECIFICATIONS:

Adjustable Flow-Alert™ signal: single (1) or double (2) reed switch, pre-wired single-pole, single-throw (SPST-NO) normally open; or single-pole, single-throw (SPST-NC) normally closed, with high or low flow limit setting, adjustable over the entire flow measuring range.

Contact Form	SPST-NO	SPST-NC
ELECTRICAL SPECIFICATIONS		
Contact Rating	10 Watts Max	5 Watts Max
Voltage, Switching	50 VDC Max	50 VDC Max
Current (resistive), Switching	0.500 A Max	0.500 A Max
OPERATING SPECIFICATIONS		
Contact Resistance, Initial	0.100 Ω Max	0.100 Ω Max
Operating Temperature	20 to +240 °F (-20 to +116 °C)	-20 to +240 °F (-20 to +116 °C)





NOTE: Weights for all sizes can be found on page 40.

Canadian Registration MR Flow Transmitters

For Liquids / Air and Other Compressed Gases

- Full line of multi-functional remote flow indicators and transmitters
- Operate as part of a totally integrated electronic process control/data acquisition system
- Non-contact sensor electronics
- Electronic signal conditioning circuit
- Digital flow rate and total flow indication
- Proportional analog output
- In-field compensation for- Specific gravity of all fluids Viscosity of petroleum-based fluids Specific gravity, pressure,and temperature of pneumatic systems
- CE compliant- exceeds US and meets European standards for EMI/EMC
- US Patent 7,130,750

SPECIFICATIONS:

MATERIALS:

T316 Stainless body, 2024 - T351 Anodized aluminum piston and cone (Oil, PE, WBF, & Air meters)
T316 Stainless body, C360 Brass piston and cone (Water meters)
T316 Stainless body, piston and cone

PETROLEUM (Oil) COMMON PARTS:

Spider Plate: T316 SS **Retaining Ring:** SAE 1070/1090 Carbon Steel
Spring: T302 SS **Retaining Spring:** SAE 1070/1090 Carbon Steel
Fasteners: T303 SS **Internal Magnet:** Teflon® Coated Alnico 8
Pressure Seals: Viton® **Enclosure Seal:** Silicone gasket
Lens: Polycarbonate

PHOSPHATE ESTER (PE) COMMON PARTS:

Spider Plate: T316 SS **Retaining Ring:** SAE 1070/1090 Carbon Steel
Spring: T302 SS **Retaining Spring:** SAE 1070/1090 Carbon Steel
Fasteners: T303 SS **Internal Magnet:** Teflon® Coated Alnico 8
Pressure Seals: EPR **Enclosure Seal:** Silicone gasket
Lens: Polycarbonate

WATER-BASED (WBF), WATER, AIR COMMON PARTS:

Spider Plate: T316 SS **Retaining Ring:** T316 SS
Spring: T302 SS **Retaining Spring:** T316 SS
Fasteners: T303 SS **Internal Magnet:** Teflon® Coated Alnico 8
Pressure Seals: Viton® **Enclosure Seal:** Silicone gasket
Lens: Polycarbonate

API OIL / AIR / CAUSTIC and CORROSIVE LIQUIDS and GASES:

Spider Plate: T316 SS **Retaining Ring:** T316 SS
Spring: T316 SS **Retaining Spring:** T316 SS
Fasteners: T316 SS **Internal Magnet:** Teflon® Coated Alnico 8
Pressure Seals: Viton® **Enclosure Seal:** Silicone gasket
Lens: Polycarbonate

THREADS: SAE J1926/1, **NPTF** ANSI B2.2

TEMPERATURE RANGE: -20 to +240 °F (-29 to +116 °C)

PRESSURE RATING:

See Ordering Information Tables pages 33-39.

ACCURACY: ±2% of full scale **REPEATABILITY:** ±1%

PRESSURE DROP REFERENCE TABLE:

	FLUID TYPE							
	Oil	PE	WBF	Water	API Oil	Caustic & Corrosive Liquids	Air/Caustic & Corrosive Gases	Air
50% / 100% Pressure Drop	p. 5	p. 9	p. 13	p. 17	p. 21	p. 21	p. 23	p. 25
Pressure Drop Charts	See Hedland full-line catalog							

Viton is a registered trademark of DuPont Dow Elastomers
Teflon is a registered trademark of E.I. DuPont de Nemours & Co.

Canadian Registration MR Flow Transmitters

For Liquids / Air and Other Compressed Gases

ENCLOSURE:

Material: Anodized and epoxy powder-coated aluminum with polycarbonate lens

Seals: Silicone gaskets between enclosure and lens
Viton® O-rings between enclosure and flow meter body

Connection: 4-pin (Protection Class IP65) standard, see Figure 2
Other connections available - consult factory for details

Fasteners: T303 SS

Rating: NEMA 12 & 13 (IP 52/54)

ELECTRICAL SPECIFICATIONS:

Power Requirement: 0-5 VDC Output: 10-30 VDC @ 0.75W maximum
0-10 VDC Output: 12-30 VDC @ 0.75W maximum
4-20 mA Output: loop-powered, 30 VDC maximum

Power Consumption: 25 mA maximum

Analog Outputs: 0-5 VDC and 0-10 VDC into 10,000 Ohms minimum
4-20 mA into 1000 Ohms maximum, see Figure 1

Circuit Protection: Reverse polarity and current limiting

Transmission Distance: 4-20 mA limited by cable resistance
0-5 VDC and 0-10 VDC 1000 feet (300 m) maximum

Isolation: Inherently isolated from the piping system

Display: Fixed or toggle modes of operation for rate and totalizer display
8 digit, 0.70" high numeric display for rate and total
8 digit, 0.35" high alphanumeric display for units and setup

Temperature Drift: 50 ppm / °C (max)

Analog Output: Resolution - 1:4000

Transient Over-Voltages: Category 3, in accordance with IEC 664

Pollution Degree: Category 2, in accordance with IEC 664

Approvals: EMC Directive 89/336/EEC

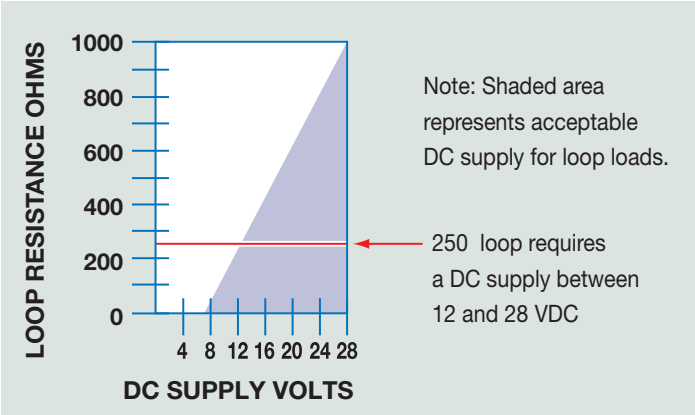
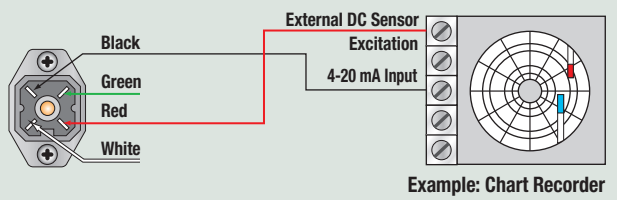


Figure 1. Load Limitations (4-20 mA Output Only)

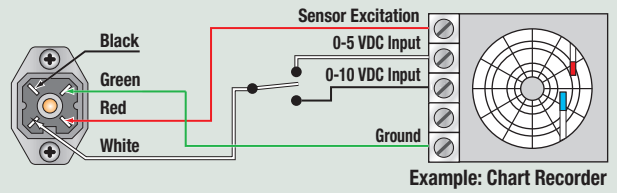
SCHEMATICS:

The transmitter can be wired in various configurations to allow interface with many different types of data collection and control instrumentation.

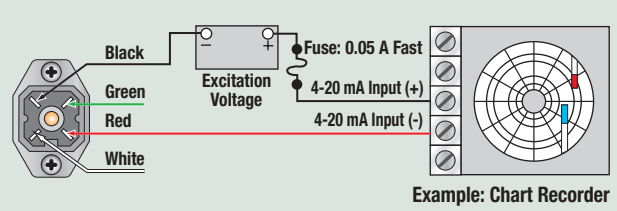
Schematics 1 & 2 represent typical wiring for a target powered by either AC power or DC supply. Schematics 3 & 4 will be utilized when the flow transmitter is operated with loop-powered process indicators or data loggers that do not have external sensor excitation available.



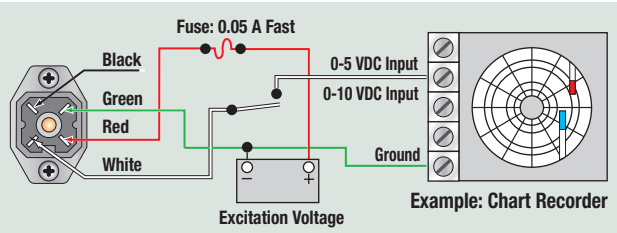
Schematic 1: 4-20 mA connection using target power supply



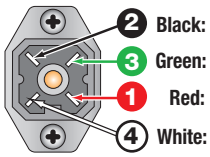
Schematic 2: 0-5 Vdc or 0-10 Vdc connection using target power supply



Schematic 3: 4-20 mA connection using target external power supply



Schematic 4: 0-5 Vdc or 0-10 Vdc connection using target external power supply



	DC Output Connection	Loop Power Connection
Black:	No Connection	(-) 4-20 mA Out
Green:	0 VDC	No Connection
Red:	(+) DC Power	(+) 4-20 mA In
White:	0-5 VDC or 0-10 VDC Output	No Connection

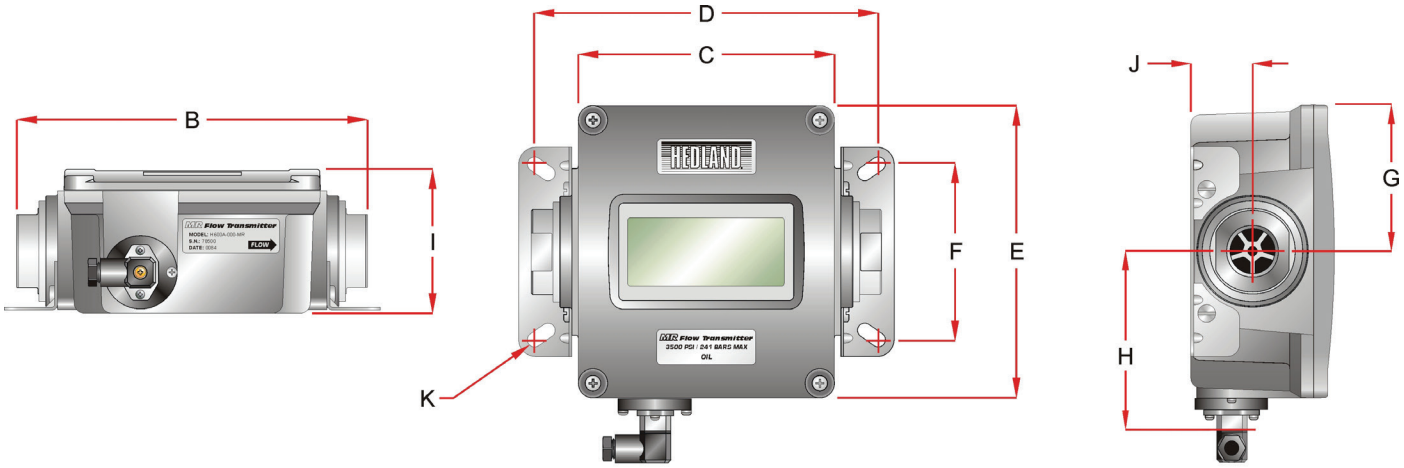
Figure 2. Electrical 4-Pin Connection

Canadian Registration MR Flow Transmitters

For Liquids / Air and Other Compressed Gases

Dimensions:

A	B	C	D	E	F	G	H	I	J	K
NOMINAL PORT SIZE	LENGTH in (mm)	LENGTH in (mm)	LENGTH in (mm)	WIDTH in (mm)	WIDTH in (mm)	WIDTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	HOLE DIA. in (mm)
¼ (SAE 6)	6.60 (168)	5.27 (134)	6.92 (176)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.46 (37)	.28 (7)
½ (SAE 10)	6.60 (168)	5.27 (134)	6.92 (176)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.46 (37)	.28 (7)
¾ (SAE 12)	7.20 (183)	5.27 (134)	6.92 (176)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.46 (37)	.28 (7)
1 (SAE 16)	7.20 (183)	5.27 (134)	6.92 (176)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.46 (37)	.28 (7)
1¼ (SAE 20)	12.20 (310)	10.68 (271)	11.65 (296)	7.63 (194)	4.84 (123)	3.82 (97)	5.02 (128)	4.50 (114)	2.20 (56)	.28 (7)
1½ (SAE 24)	12.20 (310)	10.68 (271)	11.65 (296)	7.63 (194)	4.84 (123)	3.82 (97)	5.02 (128)	4.50 (114)	2.20 (56)	.28 (7)



Canadian Registration Flow-Alert™ Flow Switches and Flow Transmitters

For Petroleum Fluids

ORDERING INFORMATION:

NOMINAL PORT SIZE①	FLOW RANGE		MODEL NUMBER (see example below)		PRESSURE	OPTIONS		
	GPM	LPM	SAE	NPTF	RATING	Flow-Alert 1 SWITCH / 2 SWITCH	Flow-Alert REED SWITCH	MULTIPLE OUTPUT SENSOR
¼" SAE 6	.02 - 0.2 .05 - 0.5	0.1 - 0.75 0.2 - 1.9	H200 C - 002 - † H200 C - 005 - †	H201 C - 002 - † H201 C - 005 - †	5000 PSI	Not Available	SEE OPTIONS BELOW	Not Available
¼" SAE 6	0.1 - 1.0 0.2 - 2.0	0.5 - 3.75 1.0 - 7.5	H200 C - 010 - † H200 C - 020 - †	H201 C - 010 - † H201 C - 020 - †	3000 PSI	F1/F2		MR
½" SAE 10	0.1 - 1.0 0.2 - 2.0 0.5 - 5.0 1 - 10 1 - 15	0.5 - 3.75 1 - 7.5 2 - 19 5 - 38 4 - 56	H600 C - 001 - † H600 C - 002 - † H600 C - 005 - † H600 C - 010 - † H600 C - 015 - †	H601 C - 001 - † H601 C - 002 - † H601 C - 005 - † H601 C - 010 - † H601 C - 015 - †	3000 PSI	F1/F2		MR
¾" SAE 12	0.2 - 2.0 0.5 - 5.0 1 - 10 2 - 20 3 - 30	1 - 7.5 2 - 19 5 - 38 10 - 76 10 - 115	H700 C - 002 - † H700 C - 005 - † H700 C - 010 - † H700 C - 020 - † H700 C - 030 - †	H701 C - 002 - † H701 C - 005 - † H701 C - 010 - † H701 C - 020 - † H701 C - 030 - †	2500 PSI	F1/F2		MR
1" SAE 16	0.2 - 2.0 0.5 - 5.0 1 - 10 2 - 20 3 - 30 4 - 40 5 - 50	1 - 7.5 2 - 19 5 - 38 10 - 76 10 - 115 15 - 150 20 - 190	H760 C - 002 - † H760 C - 005 - † H760 C - 010 - † H760 C - 020 - † H760 C - 030 - † H760 C - 040 - † H760 C - 050 - †	H761 C - 002 - † H761 C - 005 - † H761 C - 010 - † H761 C - 020 - † H761 C - 030 - † H761 C - 040 - † H761 C - 050 - †	2500 PSI	F1/F2		MR
1¼" SAE 20	3 - 30 5 - 50 10 - 75 10 - 100 10 - 150	10 - 110 20 - 190 40 - 280 50 - 380 50 - 560	H800 C - 030 - † H800 C - 050 - † H800 C - 075 - † H800 C - 100 - † H800 C - 150 - †	H801 C - 030 - † H801 C - 050 - † H801 C - 075 - † H801 C - 100 - † H801 C - 150 - †	2450 PSI	F1/F2		MR
1½" SAE 24	3 - 30 5 - 50 10 - 75 10 - 100 10 - 150	10 - 110 20 - 190 40 - 280 50 - 380 50 - 560	H860 C - 030 - † H860 C - 050 - † H860 C - 075 - † H860 C - 100 - † H860 C - 150 - †	H861 C - 030 - † H861 C - 050 - † H861 C - 075 - † H861 C - 100 - † H861 C - 150 - †	2450 PSI	F1/F2		MR

①Fractional sizes apply to NPTF.

(example) H 701 C - 030 - F1 or F2

Flow-Alert Flow Switches

F1 = Single Switch
F2 = Double Switch

(example) H 701 A - 030 - RS1NO

Flow-Alert Reed Switches

Options:

RS1NO (reed switch one (1) normally open)
RS2NO (reed switch two (2) normally open)
RS1NC (reed switch one (1) normally closed)
RS2NC (reed switch two (2) normally closed)

(example) H 701 A - 030 - MR

Multiple Output Flow Sensor

3 Standard field selectable outputs

0-5 VDC
0-10 VDC
4-20 mA

Flow Transmitter is factory-calibrated to provide 4 mA (0 VDC) at zero flow and 20 mA (5/10 VDC) at full flow. Optional 5-point calibration certificate available (see Price and Availability Digest for details).

NOTE: ¼" liquid meters for .02-0.2 and .05-0.5 GPM ranges available in strap-on design for RS1NO and RS1NC only.

NOTE: For 50% and 100% flow/pressure drop information, see page 5. For detailed flow/pressure drop charts, see Hedland full-line catalog.

Canadian Registration Flow-Alert™ Flow Switches and Flow Transmitters

For Phosphate Ester Fluids

ORDERING INFORMATION:

NOMINAL PORT SIZE①	FLOW RANGE		MODEL NUMBER (see example below)		PRESSURE	OPTIONS		
	GPM	LPM	SAE	NPTF	RATING	Flow-Alert 1 SWITCH / 2 SWITCH	Flow-Alert REED SWITCH	MULTIPLE OUTPUT SENSOR
¼" SAE 6	.02 - 0.2 .05 - 0.5	0.1 - 0.75 0.2 - 1.9	H294 C - 002 - † H294 C - 005 - †	H295 C - 002 - † H295 C - 005 - †	5000 PSI	Not Available	SEE OPTIONS BELOW	Not Available
¼" SAE 6	0.1 - 1.0 0.2 - 2.0	0.5 - 3.75 1.0 - 7.5	H294 C - 010 - † H294 C - 020 - †	H295 C - 010 - † H295 C - 020 - †	3000 PSI	F1/F2		MR
½" SAE 10	0.1 - 1.0 0.2 - 2.0 0.5 - 5.0 1 - 10 1 - 15	0.5 - 3.75 1 - 7.5 2 - 19 5 - 38 4 - 56	H694 C - 001 - † H694 C - 002 - † H694 C - 005 - † H694 C - 010 - † H694 C - 015 - †	H695 C - 001 - † H695 C - 002 - † H695 C - 005 - † H695 C - 010 - † H695 C - 015 - †	3000 PSI	F1/F2		MR
¾" SAE 12	0.2 - 2.0 0.5 - 5.0 1 - 10 2 - 20 3 - 30	1 - 7.5 2 - 19 5 - 38 10 - 76 10 - 115	H794 C - 002 - † H794 C - 005 - † H794 C - 010 - † H794 C - 020 - † H794 C - 030 - †	H795 C - 002 - † H795 C - 005 - † H795 C - 010 - † H795 C - 020 - † H795 C - 030 - †	2500 PSI	F1/F2		MR
1" SAE 16	0.2 - 2.0 0.5 - 5.0 1 - 10 2 - 20 3 - 30 4 - 40 5 - 50	1 - 7.5 2 - 19 5 - 38 10 - 76 10 - 115 15 - 150 20 - 190	H764 C - 002 - † H764 C - 005 - † H764 C - 010 - † H764 C - 020 - † H764 C - 030 - † H764 C - 040 - † H764 C - 050 - †	H765 C - 002 - † H765 C - 005 - † H765 C - 010 - † H765 C - 020 - † H765 C - 030 - † H765 C - 040 - † H765 C - 050 - †	2500 PSI	F1/F2		MR
1¼" SAE 20	3 - 30 5 - 50 10 - 75 10 - 100 10 - 150	10 - 110 20 - 190 40 - 280 50 - 380 50 - 560	H894 C - 030 - † H894 C - 050 - † H894 C - 075 - † H894 C - 100 - † H894 C - 150 - †	H895 C - 030 - † H895 C - 050 - † H895 C - 075 - † H895 C - 100 - † H895 C - 150 - †	2450 PSI	F1/F2		MR
1½" SAE 24	3 - 30 5 - 50 10 - 75 10 - 100 10 - 150	10 - 110 20 - 190 40 - 280 50 - 380 50 - 560	H864 C - 030 - † H864 C - 050 - † H864 C - 075 - † H864 C - 100 - † H864 C - 150 - †	H865 C - 030 - † H865 C - 050 - † H865 C - 075 - † H865 C - 100 - † H865 C - 150 - †	2450 PSI	F1/F2		MR

① Fractional sizes apply to NPTF.

(example) H 795 C - 030 - F1 or F2

Flow-Alert Flow Switches

F1 = Single Switch
F2 = Double Switch

(example) H 701 C - 030 - RS1NO

Flow-Alert Reed Switches

Options:
RS1NO (reed switch one (1) normally open)
RS2NO (reed switch two (2) normally open)
RS1NC (reed switch one (1) normally closed)
RS2NC (reed switch two (2) normally closed)

(example) H 795 C - 030 - MR

Multiple Output Flow Sensor

3 Standard field selectable outputs
0-5 VDC
0-10 VDC
4-20 mA

Flow Transmitter is factory-calibrated to provide 4 mA (0 VDC) at zero flow and 20 mA (5/10 VDC) at full flow. Optional 5-point calibration certificate available (see Price and Availability Digest for details).

NOTE: ¼" liquid meters for .02-0.2 and .05-0.5 GPM ranges available in strap-on design for RS1NO and RS1NC only.

NOTE: For 50% and 100% flow/pressure drop information, see page 9. For detailed flow/pressure drop charts, see Hedland full-line catalog.

Canadian Registration Flow-Alert™ Flow Switches and Flow Transmitters

For Water-based Fluids (Water/Oil Emulsions)

ORDERING INFORMATION:

NOMINAL PORT SIZE①	FLOW RANGE		MODEL NUMBER (see example below)		PRESSURE	OPTIONS		
	GPM	LPM	SAE	NPTF	RATING	Flow-Alert 1 SWITCH / 2 SWITCH	Flow-Alert REED SWITCH	MULTIPLE OUTPUT SENSOR
¼" SAE 6	.02 - 0.2 .05 - 0.5	0.1 - 0.75 0.2 - 1.9	H212 C - 002 - † H212 C - 005 - †	H213 C - 002 - † H213 C - 005 - †	5000 PSI	Not Available	SEE OPTIONS BELOW	Not Available
¼" SAE 6	0.1 - 1.0 0.2 - 2.0	0.5 - 3.75 1.0 - 7.5	H212 C - 010 - † H212 C - 020 - †	H213 C - 010 - † H213 C - 020 - †	3000 PSI	F1/F2		MR
½" SAE 10	0.1 - 1.0 0.2 - 2.0 0.5 - 5.0 1 - 10 1 - 15	0.5 - 3.75 1 - 7.5 2 - 19 5 - 38 4 - 56	H612 C - 001 - † H612 C - 002 - † H612 C - 005 - † H612 C - 010 - † H612 C - 015 - †	H613 C - 001 - † H613 C - 002 - † H613 C - 005 - † H613 C - 010 - † H613 C - 015 - †	3000 PSI	F1/F2		MR
¾" SAE 12	0.2 - 2.0 0.5 - 5.0 1 - 10 2 - 20 3 - 30	1 - 7.5 2 - 19 5 - 38 10 - 76 10 - 115	H712 C - 002 - † H712 C - 005 - † H712 C - 010 - † H712 C - 020 - † H712 C - 030 - †	H713 C - 002 - † H713 C - 005 - † H713 C - 010 - † H713 C - 020 - † H713 C - 030 - †	2500 PSI	F1/F2		MR
1" SAE 16	0.2 - 2.0 0.5 - 5.0 1 - 10 2 - 20 3 - 30 4 - 40 5 - 50	1 - 7.5 2 - 19 5 - 38 10 - 76 10 - 115 15 - 150 20 - 190	H782 C - 002 - † H782 C - 005 - † H782 C - 010 - † H782 C - 020 - † H782 C - 030 - † H782 C - 040 - † H782 C - 050 - †	H783 C - 002 - † H783 C - 005 - † H783 C - 010 - † H783 C - 020 - † H783 C - 030 - † H783 C - 040 - † H783 C - 050 - †	2500 PSI	F1/F2		MR
1¼" SAE 20	3 - 30 5 - 50 10 - 75 10 - 100 10 - 150	10 - 110 20 - 190 40 - 280 50 - 380 50 - 560	H812 C - 030 - † H812 C - 050 - † H812 C - 075 - † H812 C - 100 - † H812 C - 150 - †	H813 C - 030 - † H813 C - 050 - † H813 C - 075 - † H813 C - 100 - † H813 C - 150 - †	2450 PSI	F1/F2		MR
1½" SAE 24	3 - 30 5 - 50 10 - 75 10 - 100 10 - 150	10 - 110 20 - 190 40 - 280 50 - 380 50 - 560	H882 C - 030 - † H882 C - 050 - † H882 C - 075 - † H882 C - 100 - † H882 C - 150 - †	H883 C - 030 - † H883 C - 050 - † H883 C - 075 - † H883 C - 100 - † H883 C - 150 - †	2450 PSI	F1/F2		MR

①Fractional sizes apply to NPTF.

(example) H 713 C - 030 - F1 or F2

Flow-Alert Flow Switches

F1 = Single Switch
F2 = Double Switch

(example) H 701 C - 030 - RS1NO

Flow-Alert Reed Switches

Options:
RS1NO (reed switch one (1) normally open)
RS2NO (reed switch two (2) normally open)
RS1NC (reed switch one (1) normally closed)
RS2NC (reed switch two (2) normally closed)

(example) H 713 C - 030 - MR

Multiple Output Flow Sensor

3 Standard field selectable outputs
0-5 VDC
0-10 VDC
4-20 mA

Flow Transmitter is factory-calibrated to provide 4 mA (0 VDC) at zero flow and 20 mA (5/10 VDC) at full flow. Optional 5-point calibration certificate available (see Price and Availability Digest for details).

NOTE: ¼" liquid meters for .02-0.2 and .05-0.5 GPM ranges available in strap-on design for RS1NO and RS1NC only.

NOTE: For 50% and 100% flow/pressure drop information, see page 13. For detailed flow/pressure drop charts, see Hedland full-line catalog.

Canadian Registration Flow-Alert™ Flow Switches and Flow Transmitters

For Water Fluids

ORDERING INFORMATION:

NOMINAL PORT SIZE①	FLOW RANGE		MODEL NUMBER (see example below)		PRESSURE	OPTIONS		
	GPM	LPM	SAE	NPTF	RATING	Flow-Alert 1 SWITCH / 2 SWITCH	Flow-Alert REED SWITCH	MULTIPLE OUTPUT SENSOR
¼" SAE 6	.02 - 0.2 .05 - 0.5	0.1 - 0.75 0.2 - 1.9	H204 C - 002 - † H204 C - 005 - †	H205 C - 002 - † H205 C - 005 - †	5000 PSI	Not Available	SEE OPTIONS BELOW	Not Available
¼" SAE 6	0.1 - 1.0 0.2 - 2.0	0.5 - 3.75 1.0 - 7.5	H204 C - 010 - † H204 C - 020 - †	H205 C - 010 - † H205 C - 020 - †	3000 PSI	F1/F2		MR
½" SAE 10	0.1 - 1.0 0.2 - 2.0 0.5 - 5.0 1 - 10 1 - 15	0.5 - 3.75 1 - 7.5 2 - 19 5 - 38 4 - 56	H604 C - 001 - † H604 C - 002 - † H604 C - 005 - † H604 C - 010 - † H604 C - 015 - †	H605 C - 001 - † H605 C - 002 - † H605 C - 005 - † H605 C - 010 - † H605 C - 015 - †	3000 PSI	F1/F2		MR
¾" SAE 12	0.2 - 2.0 0.5 - 5.0 1 - 10 2 - 20 3 - 30	1 - 7.5 2 - 19 5 - 38 10 - 76 10 - 115	H704 C - 002 - † H704 C - 005 - † H704 C - 010 - † H704 C - 020 - † H704 C - 030 - †	H705 C - 002 - † H705 C - 005 - † H705 C - 010 - † H705 C - 020 - † H705 C - 030 - †	2500 PSI	F1/F2		MR
1" SAE 16	0.2 - 2.0 0.5 - 5.0 1 - 10 2 - 20 3 - 30 4 - 40 5 - 50	1 - 7.5 2 - 19 5 - 38 10 - 76 10 - 115 15 - 150 20 - 190	H754 C - 002 - † H754 C - 005 - † H754 C - 010 - † H754 C - 020 - † H754 C - 030 - † H754 C - 040 - † H754 C - 050 - †	H755 C - 002 - † H755 C - 005 - † H755 C - 010 - † H755 C - 020 - † H755 C - 030 - † H755 C - 040 - † H755 C - 050 - †	2500 PSI	F1/F2		MR
1¼" SAE 20	3 - 30 5 - 50 10 - 75 10 - 100 10 - 150	10 - 110 20 - 190 40 - 280 50 - 380 50 - 560	H804 C - 030 - † H804 C - 050 - † H804 C - 075 - † H804 C - 100 - † H804 C - 150 - †	H805 C - 030 - † H805 C - 050 - † H805 C - 075 - † H805 C - 100 - † H805 C - 150 - †	2450 PSI	F1/F2		MR
1½" SAE 24	3 - 30 5 - 50 10 - 75 10 - 100 10 - 150	10 - 110 20 - 190 40 - 280 50 - 380 50 - 560	H854 C - 030 - † H854 C - 050 - † H854 C - 075 - † H854 C - 100 - † H854 C - 150 - †	H855 C - 030 - † H855 C - 050 - † H855 C - 075 - † H855 C - 100 - † H855 C - 150 - †	2450 PSI	F1/F2		MR

① Fractional sizes apply to NPTF.

(example) H 705 C - 030 - F1 or F2

Flow-Alert Flow Switches

F1 = Single Switch
F2 = Double Switch

(example) H 701 C - 030 - RS1NO

Flow-Alert Reed Switches

Options:
RS1NO (reed switch one (1) normally open)
RS2NO (reed switch two (2) normally open)
RS1NC (reed switch one (1) normally closed)
RS2NC (reed switch two (2) normally closed)

(example) H 705 C - 030 - MR

Multiple Output Flow Sensor

3 Standard field selectable outputs

0-5 VDC
0-10 VDC
4-20 mA

Flow Transmitter is factory-calibrated to provide 4 mA (0 VDC) at zero flow and 20 mA (5/10 VDC) at full flow. Optional 5-point calibration certificate available (see Price and Availability Digest for details).

NOTE: ¼" liquid meters for .02-0.2 and .05-0.5 GPM ranges available in strap-on design for RS1NO and RS1NC only.

NOTE: For 50% and 100% flow/pressure drop information, see page 17. For detailed flow/pressure drop charts, see Hedland full-line catalog.

Canadian Registration Flow-Alert™ Flow Switches and Flow Transmitters

For API Oil / Caustic and Corrosive Liquids

ORDERING INFORMATION:

NOMINAL PORT SIZE	FLOW RANGE		MODEL NUMBER (see example below)		OPTIONS		
	GPM	LPM	API - OIL .876 (S.G.) NPTF	LIQUIDS 1.0 (S.G.) NPTF	Flow-Alert 1 SWITCH / 2 SWITCH	Flow-Alert REED SWITCH	MULTIPLE OUTPUT SENSOR
¼"	0.1 - 1.0	0.5 - 3.75	5000 PSI H231C - 010 - †	5000 PSI H234C - 010 - †	Not Available	SEE OPTIONS BELOW	Not Available
¼"	0.2 - 2.0	1 - 7.5	3000 PSI H231C - 020 - †	3000 PSI H234C - 020 - †	F1/F2		MR
½"	0.2 - 2.0 0.5 - 5.0 1 - 10 1 - 15	1 - 7.5 2 - 19 5 - 38 4 - 56	3000 PSI H631C - 002 - † H631C - 005 - † H631C - 010 - † H631C - 015 - †	3000 PSI H634C - 002 - † H634C - 005 - † H634C - 010 - † H634C - 015 - †	F1/F2		MR
¾"	0.2 - 2.0 0.5 - 5.0 1 - 10 2 - 20 3 - 30	1 - 7.5 2 - 19 5 - 38 10 - 76 10 - 115	2500 PSI H731C - 002 - † H731C - 005 - † H731C - 010 - † H731C - 020 - † H731C - 030 - †	2500 PSI H734C - 002 - † H734C - 005 - † H734C - 010 - † H734C - 020 - † H734C - 030 - †	F1/F2		MR
1"	0.2 - 2.0 0.5 - 5.0 1 - 10 2 - 20 3 - 30 4 - 40	1 - 7.5 2 - 19 5 - 38 10 - 76 10 - 115 15 - 150	2500 PSI H741C - 002 - † H741C - 005 - † H741C - 010 - † H741C - 020 - † H741C - 030 - † H741C - 040 - †	2500 PSI H744C - 002 - † H744C - 005 - † H744C - 010 - † H744C - 020 - † H744C - 030 - † H744C - 040 - †	F1/F2		MR
1¼"	3 - 30 5 - 50 10 - 75 10 - 100	10 - 110 20 - 190 40 - 280 50 - 380	2450 PSI H831C - 030 - † H831C - 050 - † H831C - 075 - † H831C - 100 - †	2450 PSI H834C - 030 - † H834C - 050 - † H834C - 075 - † H834C - 100 - †	F1/F2		MR
1½"	3 - 30 5 - 50 10 - 75 10 - 100	10 - 110 20 - 190 40 - 280 50 - 380	2450 PSI H841C - 030 - † H841C - 050 - † H841C - 075 - † H841C - 100 - †	2450 PSI H844C - 030 - † H844C - 050 - † H844C - 075 - † H844C - 100 - †	F1/F2		MR

(example) **H 734 C - 030 - F1** or **F2**

Flow-Alert Flow Switches
F1 = Single Switch
F2 = Double Switch

(example) **H 734 C - 030 - RS1NO**

Flow-Alert Reed Switches
Options:
RS1NO (reed switch one (1) normally open)
RS2NO (reed switch two (2) normally open)
RS1NC (reed switch one (1) normally closed)
RS2NC (reed switch two (2) normally closed)

(example) **H 734 C - 030 - MR**

Multiple Output Flow Sensor
3 Standard field selectable outputs
0-5 VDC
0-10 VDC
4-20 mA
} Flow Transmitter is factory-calibrated to provide 4 mA (0 VDC) at zero flow and 20 mA (5/10 VDC) at full flow.
Optional 5-point calibration certificate available (see Price and Availability Digest for details).

NOTE: ¼" liquid meters for 0.1-1.0 GPM range available in strap-on design for RS1NO and RS1NC only.

NOTE: For 50% and 100% flow/pressure drop information, see page 21. For detailed pressure drop charts, see Hedland full-line catalog.

Canadian Registration Flow-Alert™ Flow Switches and Flow Transmitters

For Air / Caustic and Corrosive Gases

ORDERING INFORMATION:

NOMINAL PORT SIZE	FLOW RANGE		MODEL NUMBER (see example below)	OPTIONS		
	SCFM	L/SEC	GASES 1.0 (S.G.) NPTF	Flow-Alert 1 SWITCH / 2 SWITCH	Flow-Alert REED SWITCH	MULTIPLE OUTPUT SENSOR
¼"	2.0 - 20 3.0 - 30	1 - 9 1.5 - 14	H237C - 020 - † H237C - 030 - †	Not Available	SEE OPTIONS BELOW	Not Available
¼"	3 - 25 5 - 50	2 - 12 3 - 22	H237C - 025 - † H237C - 050 - †	F1/F2		MR
½"	3 - 25 5 - 50 10 - 100 15 - 150	2 - 12 3 - 22 5 - 47 7 - 70	H637C - 025 - † H637C - 050 - † H637C - 100 - † H637C - 150 - †	F1/F2		MR
¾"	3 - 25 5 - 50 10 - 100 15 - 150 25 - 250	1.5 - 11.5 2 - 23 5 - 47.5 7 - 70 10 - 118	H737C - 025 - † H737C - 050 - † H737C - 100 - † H737C - 150 - † H737C - 250 - †	F1/F2		MR
1"	3 - 25 5 - 50 10 - 100 15 - 150 25 - 250	1.5 - 11.5 2 - 23 5 - 47.5 7 - 70 10 - 118	H747C - 025 - † H747C - 050 - † H747C - 100 - † H747C - 150 - † H747C - 250 - †	F1/F2		MR
1¼"	20 - 200 40 - 400 60 - 600 80 - 800	10 - 95 20 - 180 30 - 280 50 - 350	H837C - 200 - † H837C - 400 - † H837C - 600 - † H837C - 800 - †	F1/F2		MR
1½"	20 - 200 40 - 400 60 - 600 80 - 800	10 - 95 20 - 180 30 - 280 50 - 350	H847C - 200 - † H847C - 400 - † H847C - 600 - † H847C - 800 - †	F1/F2		MR

Pressure Rating 1500 PSI (103 Bar)

(example) H 737 C - 250 - F1 or F2

Flow-Alert Flow Switches

F1 = Single Switch
F2 = Double Switch

(example) H 737 C - 250 - RS1NO

Flow-Alert Reed Switches

Options:

RS1NO (reed switch one (1) normally open)
RS2NO (reed switch two (2) normally open)
RS1NC (reed switch one (1) normally closed)
RS2NC (reed switch two (2) normally closed)

NOTE: ¼" air meters for 2.0-20 and 3.0-30 SCFM ranges available in strap-on design for RS1NO and RS1NC only.

(example) H 737 C - 250 - MR

Multiple Output Flow Sensor

3 Standard field selectable outputs

0-5 VDC
0-10 VDC
4-20 mA

} Flow Transmitter is factory-calibrated to provide 4 mA (0 VDC) at zero flow and 20 mA (5/10 VDC) at full flow. Optional 5-point calibration certificate available (see Price and Availability Digest for details).

⚠ **CAUTION:** High flow gas shock may decouple indicator.
NOTE: For 50% and 100% flow/pressure drop information, see page 23.
For detailed flow/pressure drop charts, see Hedland full-line catalog.

For Air / Compressed Gases

ORDERING INFORMATION:

NOMINAL PORT SIZE①	FLOW RANGE		MODEL NUMBER (see example below)		PRESSURE	OPTIONS		
	SCFM	L/SEC	SAE	NPTF	RATING	Flow-Alert 1 SWITCH / 2 SWITCH	Flow-Alert REED SWITCH	MULTIPLE OUTPUT SENSOR
¼" SAE 6	0.5 - 5 1 - 10 2 - 20 3 - 30	0.2 - 2.2 0.5 - 4.75 1 - 9 1.5 - 14	H270 C - 005 - † H270 C - 010 - † H270 C - 020 - † H270 C - 030 - †	H271 C - 005 - † H271 C - 010 - † H271 C - 020 - † H271 C - 030 - †	1500 PSI	Not Available	SEE OPTIONS BELOW	Not Available
¼" SAE 6	3 - 25 5 - 50	2 - 12 3 - 22	H270 C - 025 - † H270 C - 050 - †	H271 C - 025 - † H271 C - 050 - †	1500 PSI	F1/F2		MR
½" SAE 10	3 - 25 5 - 50 10 - 100 15 - 150	2 - 12 3 - 22 5 - 47 7 - 70	H670 C - 025 - † H670 C - 050 - † H670 C - 100 - † H670 C - 150 - †	H671 C - 025 - † H671 C - 050 - † H671 C - 100 - † H671 C - 150 - †	1500 PSI	F1/F2		MR
¾" SAE 12	3 - 25 5 - 50 10 - 100 15 - 150 25 - 250	1.5 - 11.5 2 - 23 5 - 47.5 7 - 70 10 - 118	H770 C - 025 - † H770 C - 050 - † H770 C - 100 - † H770 C - 150 - † H770 C - 250 - †	H771 C - 025 - † H771 C - 050 - † H771 C - 100 - † H771 C - 150 - † H771 C - 250 - †	1500 PSI	F1/F2		MR
1" SAE 16	3 - 25 5 - 50 10 - 100 15 - 150 25 - 250	1.5 - 11.5 2 - 23 5 - 47.5 7 - 70 10 - 118	H790 C - 025 - † H790 C - 050 - † H790 C - 100 - † H790 C - 150 - † H790 C - 250 - †	H791 C - 025 - † H791 C - 050 - † H791 C - 100 - † H791 C - 150 - † H791 C - 250 - †	1500 PSI	F1/F2		MR
1¼" SAE 20	20 - 200 40 - 400 60 - 600 80 - 800 100 - 1000	10 - 95 20 - 180 30 - 280 50 - 350 50 - 475	H870 C - 200 - † H870 C - 400 - † H870 C - 600 - † H870 C - 800 - † H870 C - 999 - †	H871 C - 200 - † H871 C - 400 - † H871 C - 600 - † H871 C - 800 - † H871 C - 999 - †	1500 PSI	F1/F2		MR
1½" SAE 24	20 - 200 40 - 400 60 - 600 80 - 800 100 - 1000	10 - 95 20 - 180 30 - 280 50 - 350 50 - 475	H890 C - 200 - † H890 C - 400 - † H890 C - 600 - † H890 C - 800 - † H890 C - 999 - †	H891 C - 200 - † H891 C - 400 - † H891 C - 600 - † H891 C - 800 - † H891 C - 999 - †	1500 PSI	F1/F2		MR

①Fractional sizes apply to NPTF.

(example) H 771 C - 250 - F1 or F2

Flow-Alert Flow Switches

F1 = Single Switch
F2 = Double Switch

(example) H 701 C - 030 - RS1NO

Flow-Alert Reed Switches

Options:
RS1NO (reed switch one (1) normally open)
RS2NO (reed switch two (2) normally open)
RS1NC (reed switch one (1) normally closed)
RS2NC (reed switch two (2) normally closed)

(example) H 771 C - 250 - MR

Multiple Output Flow Sensor

3 Standard field selectable outputs
0-5 VDC
0-10 VDC
4-20 mA

Flow Transmitter is factory-calibrated to provide 4 mA (0 VDC) at zero flow and 20 mA (5/10 VDC) at full flow. Optional 5-point calibration certificate available (see Price and Availability Digest for details).

NOTE: ¼" air meters for .05-5, 1-10, 2-20 and 3-30 SCFM ranges available in strap-on design for RS1NO and RS1NC only.

CAUTION: High flow gas shock may decouple indicator.
NOTE: For 50% and 100% flow/pressure drop information, see page 25.
For detailed flow/pressure drop charts, see Hedland full-line catalog.

WEIGHTS For all Flow Meter Models	T316 SS w/Aluminum Internals lbs. (kg)	T316 SS w/Brass Internals lbs. (kg)	T316 SS w/T316 SS Internals lbs. (kg)	HOSTILE ENVIRONMENT T316 SS w/T316 Internals lbs. (kg)
¼ Standard Meter	.9 (.41)	1.05 (.48)	~	~
¼ High Temperature	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	1.5 (.68)	~	~	~
¼ Pneumatic Meter w/ Extended Cap w/Gauge	2.0 (.91)	~	~	~
Test Kit w/Ext. Cap/Gauge/Valve	2.3 (1.1)	~	~	~
¼ Flow-Alert Flow Switch	5.15 (2.34)	5.50 (2.50)	5.80 (2.63)	~
¼ Flow Transmitter	5.10 (2.31)	5.45 (2.47)	5.75 (2.61)	~
½ Standard Meter	2.1 (.95)	2.45 (1.11)	~	~
½ Liquid Test Kit	5.3 (2.4)	~	~	~
½ High Temperature	CF	2.75 (1.25)	2.75 (1.25)	~
½ API Oil/Caustic & Corrosive Liquids & Gases	~	~	2.95 (1.34)	2.95 (1.34)
½ Pneumatic Meter with Extended Cap	3.3 (1.5)	~	~	~
½ Pneumatic Meter w/Extended Cap w/Gauge	3.8 (1.7)	~	~	~
Test Kit w/Ext. Cap/Gauge/Valve	4.3 (2.0)	~	~	~
½ Flow-Alert Flow Switch	5.15 (2.34)	5.50 (2.50)	5.80 (2.63)	~
½ Flow Transmitter	5.10 (2.31)	5.45 (2.47)	5.75 (2.61)	~
¾ Standard Meter	3.5 (1.6)	3.9 (1.8)	~	~
¾ Liquid Test Kit	8.5 (3.9)	~	~	~
¾ High Temperature	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	6.2 (2.8)	~	~	~
¾ Pneumatic Meter w/Extended Cap w/Gauge	6.7 (3.1)	~	~	~
Test Kit w/Ext. Cap/Gauge/Valve	7.5 (3.4)	~	~	~
¾ Flow-Alert Flow Switch	6.60 (3.00)	6.85 (3.11)	7.35 (3.33)	~
¾ Flow Transmitter	CF	CF	CF	~
1 Standard Meter	2.7 (1.3)	3.4 (1.5)	~	~
1 Liquid Test Kit	7.7 (3.5)	~	~	~
1 High Temperature	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	5.4 (2.5)	~	~	~
1 Pneumatic Meter w/Extended Cap w/Gauge	5.9 (2.7)	~	~	~
Test Kit w/Ext. Cap/Gauge/Valve	6.7 (3.1)	~	~	~
1 Flow-Alert Flow Switch	5.80 (2.63)	6.50 (2.95)	7.50 (3.40)	~
1 Flow Transmitter	CF	CF	CF	~
1¼ Standard Meter	14.6 (6.6)	16.8 (7.6)	~	~
1¼ Liquid Test Kit	26.0 (11.8)	~	~	~
1¼ High Temperature	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	21.1 (9.6)	~	~	~
1¼ Pneumatic Meter w/Ext. Cap w/Gauge	21.7 (9.8)	~	~	~
Test Kit w/Ext. Cap/Gauge/Valve	23.8 (10.8)	~	~	~
1¼ Flow-Alert Flow Switch	20.85 (9.46)	23.05 (10.46)	27.65 (12.54)	~
1¼ 4 Flow Transmitter	CF	CF	CF	~
1½ Standard Meter	14.1 (6.4)	15.8 (7.2)	~	~
1½ Standard Meter w/C62 Flange	25.8 (11.7)	~	~	~
1½ Liquid Test Kit	25.5 (11.6)	~	~	~
1½ High Temperature	CF	21.40 (9.71)	21.40 (9.71)	~
1½ High Temperature w/C62 Flange	CF	CF	CF	~
1½ API Oil/Caustic & Corrosive Liquids & Gases	~	~	21.40 (9.71)	CF
1½ Pneumatic Meter with Extended Cap	20.6 (9.4)	~	~	~
1½ Pneumatic Meter w/Extended Cap w/Gauge	21.2 (9.6)	~	~	~
Test Kit w/Ext. Cap/Gauge/Valve	23.3 (10.6)	~	~	~
1½ Flow-Alert Flow Switch	20.35 (9.23)	22.05 (10.00)	27.65 (12.54)	~
1½ Flow Transmitter	CF	CF	CF	~
3 Standard Meter	~	~	~	~
3 Standard Meter w/C61 Flange	~	~	~	~

~: Not available as standard option
CF: Consult factory for weights

Common Conversions

To Convert	Into…	Multiply by…
Barrel (U.S. liquid)	Gallons	31.5
Bars	Kgs/sq meter	10,200
Bars	Pounds/sq in	14.50
Centigrade	Fahrenheit	(C° x 9.5) +32
Cubic centimeters	Cu feet	.00003521
Cubic centimeters	Cu inches	0.06102
Cubic centimeters	Cu meters	.000001
Cubic centimeters	Gallons (U.S. liquid)	.0002642
Cubic centimeters	Liters	0.001
Cubic feet	Cu cms	28,320
Cubic feet	Cu inches	1,728
Cubic feet	Cu meters	0.02832
Cubic feet	Gallons (U.S. liquid)	7.48052
Cubic feet	Imperial gallons	6.23210
Cubic feet	Liters	28.317
Cubic feet/min	Cu cms/min	28,317
Cubic feet/min	Gallons/min	7.481
Cubic feet/min	Liters/min	28.32
Cubic feet/sec	Gallons/min	448.83
Cubic inches	Cu cms	16.39
Cubic inches	Cu feet	.0005787
Cubic inches	Cu meters	.00001639
Cubic inches	Gallons (U.S. liquid)	.004329
Cubic inches	Imperial gallons	.0036065
Cubic inches	Liters	0.01639
Cubic meters	Cu cms	1,000,000
Cubic meters	Cu feet	35.31
Cubic meters	Cu inches	61,023
Cubic meters	Gallons (U.S. liquid)	264.2
Cubic meters	Liters	1,000
Degree Fahrenheit	Degree Celsius	t °C = (t °F – 32)/1.8
Feet/min	Cms/sec	0.5080

To Convert	Into…	Multiply by…
Feet/min	Meters/min	0.3048
Gallons/min	Cu cms/min	3,785.412
Gallons/min	Cu feet/min	.1337
Gallons/min	Liters/min	3.785
Imperial gallons	Cu feet	.160459
Imperial gallons	Cu inches	277.274
Imperial gallons	Liters	4.54374
Imperial gallons	U.S. gallons	1.20032
Kilograms/sq cm	Pounds/sq ft	2,048
Kilograms/sq cm	Pounds/sq in	14.22
Kilograms/sq meter	Bars	.00009807
Kilograms/sq meter	Pounds/sq in	.001422
Liters	Cu cm	1,000
Liters	Cu feet	0.0353145
Liters	Cu inches	61.0234
Liters	Cu meters	0.001
Liters	Gallons (U.S. liquid)	0.264170
Liters	Imperial gallons	.220083
Liters/min	Cu cms/min	1000
Liters/min	Cu feet/min	.035
Liters/min	Gallons/min	.264
Pascal (Pa)	Bar	.00001
Pascal (Pa)	Pounds/sq in	.000145
Pounds/sq inch	Kgs/sq meter	703.1
Pounds/sq inch	Pascal (Pa)	6,895
Pounds/sq inch	Bar	.069
U.S. gallons	Imperial gallons	.83267
U.S. gallons	Cu cms	3785
U.S. gallons	Cu feet	.133681
U.S. gallons	Cu inches	231
U.S. gallons	Cu meters	.3785
U.S. gallons	Liters	3.785

Viscosity Conversion Table

	Saybolt Universal Seconds (SSU)	ISO-VG	CentiStoke	CentiPoise*	Typical Brands/Liquids at 100 °F
Standard Range	31	2	1.0	0.876	Water
	35	3	2.5	2.19	–
	40	5	4.2	3.68	–
	45	5/7	5.9	5.17	–
	50	7	7.5	6.57	Kerosene
	55	7/10	8.8	7.71	Atlantic Richfield/Duro 55 Hyd. Oil
	60	10	10.5	9.20	Monsanto/Skydrol - 500 A
	70	10/15	13.2	11.56	Mobil/Aero HFA Hydraulic Oil
	80	15	15.7	13.75	No 4 Fuel Oil
	90	22	18.2	15.94	Stauffer Chemical/Fyrquel 90
	100	22	20.6	18.05	Conoco/Syncon Synthetic AW Hyd. Oil
	150	32	32.0	28.03	Mobil/DTE 24 Hydraulic Oil
	200	46	43.2	37.84	Citco/Glycol FR-40XD (Oil in Water)
	300	68	65.0	56.94	SAE 20 Crankcase Oil
	400	68/100	86.0	75.34	Sunoco/Sunvis 41 Hydraulic Oil
Extended Range**	500	100	108	94.61	SAE 30 Crankcase Oil
	750	150	162	141.91	SAE 40 Crankcase Oil
	1000	220	216	189.22	Mobil/Paper Machine Oil - Type K
	1500	320	323	282.95	SAE 50 Crankcase Oil
	2000	460	431	377.56	Amoco/American Industrial Oil - No. 460
	3000	680	648	567.65	SAE 140 Gear Oil
	4000	1000	862	755.11	SAE 250 Gear Oil

* Centipoise are given for oil of 0.876 specific gravity. Relationship: centistokes x specific gravity = centipoise

** Meters measuring fluid within this range may require custom scales. Consult factory for details.

Notes:

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