

1000/1500 PSI 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 $\pm 2\%$ full scale
- Repeatability $\pm 1\%$
- Special scales available
- Calibrated for 1.0 S.G.

SPECIFICATIONS:

MATERIALS:

2024 - T351 Anodized aluminum body, piston and cone

C360 Brass body, piston and cone[Ⓟ]

T303 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 and Internal Magnet: PPS / Ceramic
Fasteners: T303 SS	Guard Seal / Bumper: Buna N
Pressure Seals: Viton [®]	Scale Support: 6063 - T6 Aluminum
Guard: Polycarbonate	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 temperatures, consult factory

PRESSURE RATING:

Aluminum / Brass Operating: 1,000 psi/69 bar max. (250 psi/17 bar max. for 3" series) with a 10:1 safety factor.

For High Cycle Applications: See page 7

Stainless Steel Operating: 1,500 psi/103 bar max. with a 10:1 safety factor.

For High Cycle Applications: See page 7

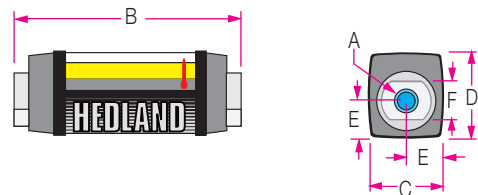
PRESSURE DROP: See Ordering Information Table, page 42.

For detailed differential pressure charts, see page 66.

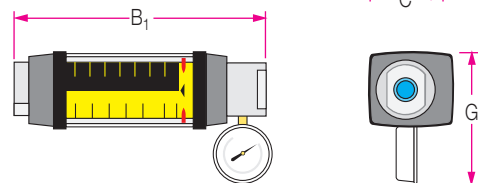
ACCURACY: $\pm 2\%$ of full scale, $\pm 7\%$ of full scale for 1/4" meters **REPEATABILITY:** $\pm 1\%$



STANDARD PRODUCT



STANDARD PRODUCT WITH EP & EG OPTION



DIMENSIONS:

A	B	B ₁	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)
1/4 (SAE 6)	4.8 (122)	6.12 (155)	1.68 (43)	1.90 (48)	.84 (21)	.88 (22)	5.0 (127)
1/2 (SAE 10)	6.6 (168)	8.00 (203)	2.07 (53)	2.40 (61)	1.04 (26)	1.25 (32)	5.4 (137)
3/4 (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)
1 1/4 (SAE 20)	12.2 (310)	13.8 (351)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)	7.2 (183)
1 1/2 (SAE 24)	12.2 (310)	13.8 (351)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)	7.2 (183)

NOTE: Dimensions for 3" meters can be found on page 78.

Weights for all sizes can be found on page 79.

[Ⓟ]3 inch models have Celcon[®] piston/piston ring

Celcon is a registered trademark of Hoechst Celanese Corp.
Viton is a registered trademark of DuPont Dow Elastomers

Flow-Alert™ Flow Switches and Flow Transmitters

For Air / Compressed Gases

ORDERING INFORMATION:

NOMINAL PORT SIZE ^①	FLOW RANGE		MODEL NUMBER (see example below)			MATERIAL			OPTIONS		
	SCFM	L/SEC	SAE	NPTF	BSPP	ALUMINUM 1000 PSI	BRASS 1000 PSI	STAINLESS 1500 PSI	Flow-Alert 1 SWITCH / 2 SWITCH	Flow-Alert REED SWITCH	MULTIPLE OUTPUT SENSOR
¼" SAE 6	0.5 - 5	0.2 - 2.2	H270 * - 005 - †	H271 * - 005 - †	H272 * - 005 - †	A	B	S	Not Available	SEE OPTIONS BELOW	Not Available
	1 - 10	0.5 - 4.75	H270 * - 010 - †	H271 * - 010 - †	H272 * - 010 - †						
	2 - 20	1 - 9	H270 * - 020 - †	H271 * - 020 - †	H272 * - 020 - †						
	3 - 30	1.5 - 14	H270 * - 030 - †	H271 * - 030 - †	H272 * - 030 - †						
¼" SAE 6	3 - 25	2 - 12	H270 * - 025 - †	H271 * - 025 - †	H272 * - 025 - †	A	B	S	F1/F2	SEE OPTIONS BELOW	MR
	5 - 50	3 - 22	H270 * - 050 - †	H271 * - 050 - †	H272 * - 050 - †						
½" SAE 10	3 - 25	2 - 12	H670 * - 025 - †	H671 * - 025 - †	H672 * - 025 - †	A	B	S	F1/F2	SEE OPTIONS BELOW	MR
	5 - 50	3 - 22	H670 * - 050 - †	H671 * - 050 - †	H672 * - 050 - †						
	10 - 100	5 - 47	H670 * - 100 - †	H671 * - 100 - †	H672 * - 100 - †						
	15 - 150	7 - 70	H670 * - 150 - †	H671 * - 150 - †	H672 * - 150 - †						
¾" SAE 12	3 - 25	1.5 - 11.5	H770 * - 025 - †	H771 * - 025 - †	H772 * - 025 - †	A	B	S	F1/F2	SEE OPTIONS BELOW	MR
	5 - 50	2 - 23	H770 * - 050 - †	H771 * - 050 - †	H772 * - 050 - †						
	10 - 100	5 - 47.5	H770 * - 100 - †	H771 * - 100 - †	H772 * - 100 - †						
	15 - 150	7 - 70	H770 * - 150 - †	H771 * - 150 - †	H772 * - 150 - †						
	25 - 250	10 - 118	H770 * - 250 - †	H771 * - 250 - †	H772 * - 250 - †						
1" SAE 16	3 - 25	1.5 - 11.5	H790 * - 025 - †	H791 * - 025 - †	H792 * - 025 - †	A	B	S	F1/F2	SEE OPTIONS BELOW	MR
	5 - 50	2 - 23	H790 * - 050 - †	H791 * - 050 - †	H792 * - 050 - †						
	10 - 100	5 - 47.5	H790 * - 100 - †	H791 * - 100 - †	H792 * - 100 - †						
	15 - 150	7 - 70	H790 * - 150 - †	H791 * - 150 - †	H792 * - 150 - †						
	25 - 250	10 - 118	H790 * - 250 - †	H791 * - 250 - †	H792 * - 250 - †						
1¼" SAE 20	20 - 200	10 - 95	H870 * - 200 - †	H871 * - 200 - †	H872 * - 200 - †	A	B	S	F1/F2	SEE OPTIONS BELOW	MR
	40 - 400	20 - 180	H870 * - 400 - †	H871 * - 400 - †	H872 * - 400 - †						
	60 - 600	30 - 280	H870 * - 600 - †	H871 * - 600 - †	H872 * - 600 - †						
	80 - 800	50 - 350	H870 * - 800 - †	H871 * - 800 - †	H872 * - 800 - †						
	100 - 1000	50 - 475	H870 * - 999 - †	H871 * - 999 - †	H872 * - 999 - †						
1½" SAE 24	20 - 200	10 - 95	H890 * - 200 - †	H891 * - 200 - †	H892 * - 200 - †	A	B	S	F1/F2	SEE OPTIONS BELOW	MR
	40 - 400	20 - 180	H890 * - 400 - †	H891 * - 400 - †	H892 * - 400 - †						
	60 - 600	30 - 280	H890 * - 600 - †	H891 * - 600 - †	H892 * - 600 - †						
	80 - 800	50 - 350	H890 * - 800 - †	H891 * - 800 - †	H892 * - 800 - †						
	100 - 1000	50 - 475	H890 * - 999 - †	H891 * - 999 - †	H892 * - 999 - †						

① Fractional sizes apply to NPTF and BSPP.

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



(example) H 771 A - 250 - MR



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)

Multiple Output Flow Sensor

3 Standard field selectable outputs

0-5 VDC } Flow Transmitter is factory-calibrated to provide 4 mA (0 VDC) at zero flow
0-10 VDC } and 20 mA (5/10 VDC) at full flow. Optional 5-point calibration certificate available
4-20 mA } (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 40. For detailed flow/pressure drop charts, see page 66.

1000/1500 PSI Flow Meters

For Air and Other Compressed Gases

ORDERING INFORMATION:

NOMINAL PORT SIZE ^②	FLOW RANGE		PRESSURE DROP		MODEL NUMBER (see example below)			MATERIAL			OPTIONS	
	③ SCFM	④ L/SEC	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	SAE	NPTF	BSPP ^⑤	ALUMINUM 1000 PSI	BRASS 1000 PSI	STAINLESS 1500 PSI	EXTENDED CAP PLUGGED ^⑥	EXTENDED CAP W/GAUGE ^⑥
¼" SAE 6	0.5 - 5	0.2 - 2.2	2.51 (0.17)	4.45 (0.31)	H270 * - 005 - †	H271 * - 005 - †	H272 * - 005 - †	A	B	S	EP	EG
	1 - 10	0.5 - 4.75	9.29 (0.64)	16.46 (1.13)	H270 * - 010 - †	H271 * - 010 - †	H272 * - 010 - †					
	2 - 20	1 - 9	10.15 (0.70)	18.71 (1.29)	H270 * - 020 - †	H271 * - 020 - †	H272 * - 020 - †					
	3 - 30	1.5 - 14	13.75 (0.95)	26.23 (1.81)	H270 * - 030 - †	H271 * - 030 - †	H272 * - 030 - †					
½" SAE 10	3 - 25	2 - 12	3.73 (0.26)	6.10 (0.42)	H670 * - 025 - †	H671 * - 025 - †	H672 * - 025 - †	A	B	S	EP	EG
	5 - 50	3 - 22	6.04 (0.42)	10.35 (0.71)	H670 * - 050 - †	H671 * - 050 - †	H672 * - 050 - †					
	10 - 100	5 - 47	7.18 (0.50)	13.85 (0.95)	H670 * - 100 - †	H671 * - 100 - †	H672 * - 100 - †					
	15 - 150	7 - 70	8.06 (0.56)	18.49 (1.27)	H670 * - 150 - †	H671 * - 150 - †	H672 * - 150 - †					
¾" SAE 12	3 - 25	1.5 - 11.5	2.99 (0.21)	5.90 (0.41)	H770 * - 025 - †	H771 * - 025 - †	H772 * - 025 - †	A	B	S	EP	EG
	5 - 50	2 - 23	2.00 (0.14)	3.58 (0.25)	H770 * - 050 - †	H771 * - 050 - †	H772 * - 050 - †					
	10 - 100	5 - 47.5	7.19 (0.50)	12.87 (0.89)	H770 * - 100 - †	H771 * - 100 - †	H772 * - 100 - †					
	15 - 150	7 - 70	4.44 (0.31)	9.52 (0.66)	H770 * - 150 - †	H771 * - 150 - †	H772 * - 150 - †					
1" SAE 16	3 - 25	1.5 - 11.5	2.99 (0.21)	5.90 (0.41)	H790 * - 025 - †	H791 * - 025 - †	H792 * - 025 - †	A	B	S	EP	EG
	5 - 50	2 - 23	2.00 (0.14)	3.58 (0.25)	H790 * - 050 - †	H791 * - 050 - †	H792 * - 050 - †					
	10 - 100	5 - 47.5	7.19 (0.50)	12.87 (0.89)	H790 * - 100 - †	H791 * - 100 - †	H792 * - 100 - †					
	15 - 150	7 - 70	4.44 (0.31)	9.52 (0.66)	H790 * - 150 - †	H791 * - 150 - †	H792 * - 150 - †					
1¼" SAE 20	20 - 200	10 - 95	1.89 (0.13)	3.16 (0.22)	H870 * - 200 - †	H871 * - 200 - †	H872 * - 200 - †	A	B	S	EP	EG
	40 - 400	20 - 180	2.53 (0.17)	5.49 (0.38)	H870 * - 400 - †	H871 * - 400 - †	H872 * - 400 - †					
	60 - 600	30 - 280	4.47 (0.31)	10.71 (0.74)	H870 * - 600 - †	H871 * - 600 - †	H872 * - 600 - †					
	80 - 800	50 - 350	6.13 (0.42)	17.14 (1.18)	H870 * - 800 - †	H871 * - 800 - †	H872 * - 800 - †					
1½" SAE 24	20 - 200	10 - 95	1.89 (0.13)	3.16 (0.22)	H890 * - 200 - †	H891 * - 200 - †	H892 * - 200 - †	A	B	S	EP	EG
	40 - 400	20 - 180	2.53 (0.17)	5.49 (0.38)	H890 * - 400 - †	H891 * - 400 - †	H892 * - 400 - †					
	60 - 600	30 - 280	4.47 (0.31)	10.71 (0.74)	H890 * - 600 - †	H891 * - 600 - †	H892 * - 600 - †					
	80 - 800	50 - 350	6.13 (0.42)	17.14 (1.18)	H890 * - 800 - †	H891 * - 800 - †	H892 * - 800 - †					
3"	100 - 1400	75 - 750	10.0 (0.69)	16.0 (1.10)	Not Available	H971 * - 140 - †	H972 * - 140 - †	250 PSI		Not Available		
	200 - 2200	75 - 1130	10.0 (0.69)	16.0 (1.10)		H971 * - 220 - †	H972 * - 220 - †	A	B			

NOTE: Consult factory for other options.

② Fractional sizes apply to NPTF and BSPP.

③ SCFM/PSI multipressure scales are standard.

④ L/sec/bar multipressure

scales are available at no extra charge.

⑤ 3 inch models have BSPT (BS21) threads

⑥ EP and EG options are only available with NPTF and BSPP models.

(example) H 771 A - 030 - EP



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

(example) H771 A - 250 - S1 or H771 A - 250 - EG - S1

600 PSI Test Kits

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 $\pm 2\%$ full scale
- Repeatability $\pm 1\%$
- Special scales available



SPECIFICATIONS:

MATERIALS:

2024 - T351 Anodized aluminum body, piston and cone

C360 Brass body, piston and cone

T303 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 and Internal Magnet: PPS / Ceramic
 Fasteners: T303 SS Guard Seal / Bumper: Buna N
 Pressure Seals: Viton® Scale Support: 6063 - T6 Aluminum
 Guard: Polycarbonate End Caps: Nylon ST

THREADS: NPTF ANSI B2.2, BSPP ISO1179

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

PRESSURE RATING:

Aluminum / Brass Operating: 600 psi/41 bar max. with a 10:1 safety factor.

For High Cycle Applications: See page 7

Stainless Steel Operating: 600 psi/41 bar max. with a 10:1 safety factor.

For High Cycle Applications: See page 7

PRESSURE DROP: See Ordering Information Table, page 44.

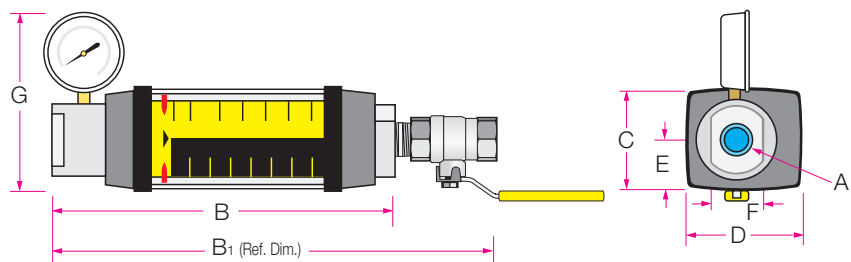
For detailed differential pressure charts, see page 66.

ACCURACY: $\pm 2\%$ of full scale, $\pm 7\%$ of full scale for $\frac{1}{4}$ " meters **REPEATABILITY:** $\pm 1\%$

PRESSURE GAUGE: Glycerin dampened, 0 - 160 psi / 0 - 10 bar pressure range available on all test kits.

LOAD VALVE: $\frac{1}{2}$ " to $1\frac{1}{2}$ " nickel-plated brass ball valve with chrome-plated brass ball and Teflon® seals.

SILENCER (optional) : Brass body with 40 micron porous sintered bronze filter.



DIMENSIONS:

A	B	B ₁	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)
$\frac{1}{4}$	6.12 (155)	8.38 (213)	1.68 (43)	1.90 (48)	.84 (21)	.88 (22)	5.0 (127)
$\frac{1}{2}$	8.00 (203)	11.0 (279)	2.07 (53)	2.40 (61)	1.04 (26)	1.25 (32)	5.4 (137)
$\frac{3}{4}$	8.90 (226)	12.38 (315)	2.48 (63)	2.85 (72)	1.24 (32)	1.50 (38)	5.9 (150)
1	8.90 (226)	12.38 (315)	2.48 (63)	2.85 (72)	1.24 (32)	1.75 (44)	5.9 (150)
$1\frac{1}{4}$	13.80 (351)	18.39 (465)	4.12 (105)	4.72 (120)	2.06 (52)	2.75 (70)	7.2 (183)
$1\frac{1}{2}$	13.80 (351)	18.39 (465)	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 79.

BSPP Test Kits include outlet adapter.

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

Viton is a registered trademark of DuPont Dow Elastomers

600 PSI Test Kits

For Air and Other Compressed Gases

ORDERING INFORMATION:

NOMINAL PORT SIZE	FLOW RANGE		PRESSURE DROP		MODEL NUMBER (see example below)		MATERIAL		
	① SCFM	② L/SEC	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	NPTF	BSPF	ALUMINUM 600 PSI	BRASS 600 PSI	STAINLESS 600 PSI
¼"	0.5 - 5	0.2 - 2.2	3.38 (0.23)	5.32 (0.37)	H271 * - 005 - TK	H272 * - 005 - TK	A	B	S
	1 - 10	0.5 - 4.75	8.08 (0.56)	17.33 (1.19)	H271 * - 010 - TK	H272 * - 010 - TK			
	2 - 20	1 - 9	11.02 (0.76)	19.64 (1.35)	H271 * - 020 - TK	H272 * - 020 - TK			
	3 - 30	1.5 - 14	14.62 (1.01)	27.10 (1.87)	H271 * - 030 - TK	H272 * - 030 - TK			
½"	3 - 25	2 - 12	4.60 (0.32)	6.97 (0.48)	H671 * - 025 - TK	H672 * - 025 - TK	A	B	S
	5 - 50	3 - 22	6.91 (0.48)	11.22 (0.77)	H671 * - 050 - TK	H672 * - 050 - TK			
	10 - 100	5 - 47	8.67 (0.60)	14.72 (1.01)	H671 * - 100 - TK	H672 * - 100 - TK			
	15 - 150	7 - 70	8.93 (0.62)	19.36 (1.33)	H671 * - 150 - TK	H672 * - 150 - TK			
¾"	3 - 25	1.5 - 11.5	3.86 (0.27)	6.77 (0.47)	H771 * - 025 - TK	H772 * - 025 - TK	A	B	S
	5 - 50	2 - 23	2.87 (0.20)	4.45 (0.31)	H771 * - 050 - TK	H772 * - 050 - TK			
	10 - 100	5 - 47.5	8.06 (0.56)	13.74 (0.95)	H771 * - 100 - TK	H772 * - 100 - TK			
	15 - 150	7 - 70	5.31 (0.37)	10.39 (0.72)	H771 * - 150 - TK	H772 * - 150 - TK			
1"	3 - 25	1.5 - 15	3.86 (0.27)	6.77 (0.47)	H791 * - 025 - TK	H792 * - 025 - TK	A	B	S
	5 - 50	2 - 23	2.87 (0.20)	4.45 (0.31)	H791 * - 050 - TK	H792 * - 050 - TK			
	10 - 100	5 - 47.5	8.06 (0.56)	13.74 (0.95)	H791 * - 100 - TK	H792 * - 100 - TK			
	15 - 150	7 - 70	5.31 (0.37)	10.39 (0.72)	H791 * - 150 - TK	H792 * - 150 - TK			
1¼"	20 - 200	10 - 95	2.76 (0.19)	4.03 (0.28)	H871 * - 200 - TK	H872 * - 200 - TK	A	B	S
	40 - 400	20 - 180	3.40 (0.23)	6.36 (0.44)	H871 * - 400 - TK	H872 * - 400 - TK			
	60 - 600	30 - 280	5.34 (0.37)	11.58 (0.80)	H871 * - 600 - TK	H872 * - 600 - TK			
	80 - 800	50 - 350	7.00 (0.48)	18.01 (1.24)	H871 * - 800 - TK	H872 * - 800 - TK			
1½"	20 - 200	10 - 95	2.76 (0.19)	4.03 (0.28)	H891 * - 200 - TK	H892 * - 200 - TK	A	B	S
	40 - 400	20 - 180	3.40 (0.23)	6.36 (0.44)	H891 * - 400 - TK	H892 * - 400 - TK			
	60 - 600	30 - 280	5.34 (0.37)	11.58 (0.80)	H891 * - 600 - TK	H892 * - 600 - TK			
	80 - 800	50 - 350	7.00 (0.48)	18.01 (1.24)	H891 * - 800 - TK	H892 * - 800 - TK			
100 - 1000	50 - 475	10.71 (0.74)	29.32 (2.02)	H891 * - 999 - TK	H892 * - 999 - TK				

NOTE: Consult factory for other options.

①SCFM/PSI multipressure scales are standard.

②L/sec-bar multipressure scales are available at no extra charge.

(example) H 771 A - 250 - TK



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

(example) H771 A - 250 - TK - S1

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:

2024 - T351 Anodized aluminum body, piston and cone
 C360 Brass body, piston and cone
 T303 Stainless body, 2024 - T351 Anodized aluminum piston and cone (Oil, PE, WBF, & Air Meters)
 T303 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 and Internal Magnet:** PPS / Ceramic
Pressure Seals: Viton® **Enclosure Seal:** Silicone gasket
Lens: Polycarbonate **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 and Internal Magnet:** PPS / Ceramic
Pressure Seals: EPR **Enclosure Seal:** Silicone gasket
Lens: Polycarbonate **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 and Internal Magnet:** PPS / Ceramic
Pressure Seals: Viton® **Enclosure Seal:** Silicone gasket
Lens: Polycarbonate **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 and Internal Magnet:** PPS / Ceramic
Pressure Seals: Viton® **Enclosure Seal:** Silicone gasket
Lens: Polycarbonate **Scale Support:** 6063 - T6 Aluminum

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

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

PRESSURE RATING:

Aluminum / Brass Operating:

Liquids - 3,500 psi/241 bar max. with a 3:1 safety factor.
Gases - 1,000 psi/69 bar max. with a 10:1 safety factor.
For High Cycle Applications: See page 7

Stainless Steel Operating:

Liquids - 6,000 psi/414 bar max. with a 3:1 safety factor.
Gases - 1,500 psi/103 bar max. with a 10:1 safety factor.
For High Cycle Applications: See page 7

ACCURACY: ±2% of full scale

REPEATABILITY: ±1%

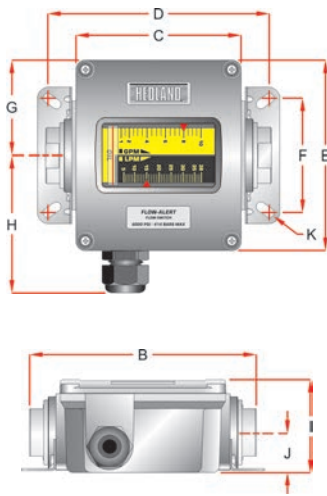
PRESSURE DROP REFERENCE TABLE:

	FLUID TYPE							
	Oil	PE	WBF	Water	API Oil	Caustic & Corrosive Liquids	Air/Caustic & Corrosive Gases	Air
50% / 100% Pressure Drop	p. 10	p. 18	p. 26	p. 34	p. 38	p. 38	p. 40	p. 42
Pressure Drop Chart	p. 61	p. 62	p. 63	p. 64	p. 65	p. 64	p. 65	p. 66

Viton is a registered trademark of DuPont Dow Elastomers

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)	6.41 (163)	6.00 (152)	3.23 (82)	3.00 (76)	4.20 (107)	2.94 (75)	1.51 (38)	.31 (8)
½ (SAE 10)	6.6 (168)	5.27 (134)	6.41 (163)	6.00 (152)	3.23 (82)	3.00 (76)	4.20 (107)	2.94 (75)	1.51 (38)	.31 (8)
¾ (SAE 12)	7.2 (183)	5.27 (134)	7.04 (179)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.27 (32)	.31 (8)
1 (SAE 16)	7.2 (183)	5.27 (134)	7.04 (179)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.27 (32)	.31 (8)
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)	.31 (8)
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)	.31 (8)

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.

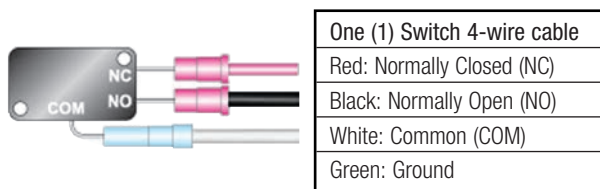
10A @ 250 VAC maximum, 0.5A @ 125 VDC maximum.

All Flow-Alert sizes (¼ to 1½ inch series) are offered in single (1) switch or double (2) switch models.

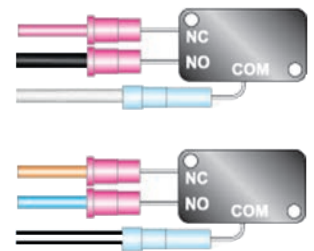
The single switch model is supplied with a 34" length of 4-wire #18 AWG jacketed cable.

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.



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 79.

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:

2024 - T351 Anodized aluminum body, piston and cone
 C360 Brass body, piston and cone
 T303 Stainless body, 2024 - T351 Anodized aluminum piston and cone (Oil, PE, WBF, & Air meters)
 T303 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, BSPP ISO1179

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

PRESSURE RATING:

Aluminum / Brass Operating:

Liquids - 3,500 psi/241 bar max. with a 3:1 safety factor.

Gases - 1,000 psi/69 bar max. with a 10:1 safety factor.

For High Cycle Applications: See page 7

Stainless Steel Operating:

Liquids - 6,000 psi/414 bar max. with a 3:1 safety factor.

Gases - 1,500 psi/103 bar max. with a 10:1 safety factor.

For High Cycle Applications: See page 7

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

REPEATABILITY: ±1%

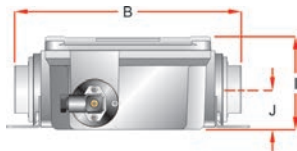
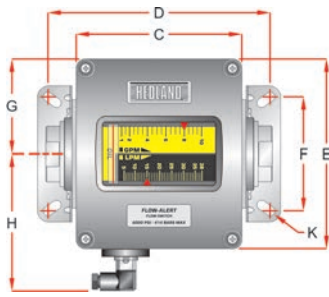
PRESSURE DROP REFERENCE TABLE:

	FLUID TYPE							
	Oil	PE	WBF	Water	API Oil	Caustic & Corrosive Liquids	Air/Caustic & Corrosive Gases	Air
50% / 100% Pressure Drop	p. 10	p. 18	p. 26	p. 34	p. 38	p. 38	p. 40	p. 42
Pressure Drop Chart	p. 61	p. 62	p. 63	p. 64	p. 65	p. 64	p. 65	p. 66

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

Flow-Alert™ Flow Switches (Reed Switch)

For Liquids / Air and Other Compressed Gases

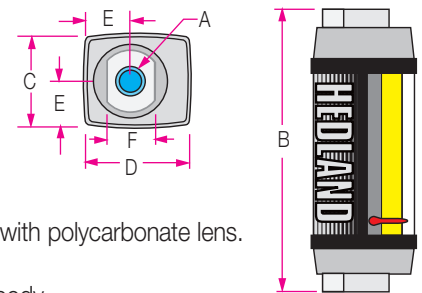


DIMENSIONS:

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)	6.41 (163)	6.00 (152)	3.23 (82)	3.00 (76)	4.20 (107)	2.94 (75)	1.51 (38)	.31 (8)
½ (SAE 10)	6.6 (168)	5.27 (134)	6.41 (163)	6.00 (152)	3.23 (82)	3.00 (76)	4.20 (107)	2.94 (75)	1.51 (38)	.31 (8)
¾ (SAE 12)	7.2 (183)	5.27 (134)	7.04 (179)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.27 (32)	.31 (8)
1 (SAE 16)	7.2 (183)	5.27 (134)	7.04 (179)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.27 (32)	.31 (8)
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)	.31 (8)
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)	.31 (8)

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 (IP 52/54)

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)

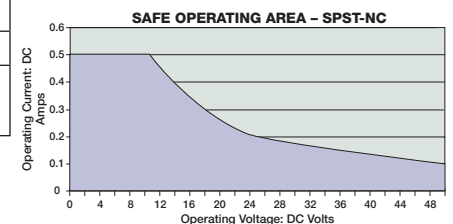
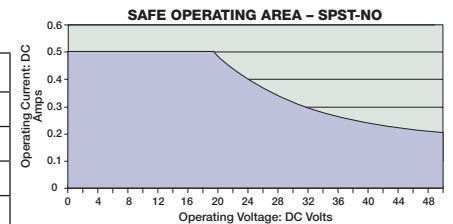


Figure 1

② Black
③ Green
① Red
④ White

Electrical Circuitry:
The flow 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.

NOTE: Weights for all sizes can be found on page 79.

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:

2024 - T351 Anodized aluminum body, piston and cone

C360 Brass body, piston and cone

T303 Stainless body, 2024 - T351 Anodized aluminum piston and cone (Oil, PE, WBF, & Air meters)

T303 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

Internal Magnet: Teflon® Coated Alnico 8

Enclosure Seal: Silicone gasket

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

Internal Magnet: Teflon® Coated Alnico 8

Enclosure Seal: Silicone gasket

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

Internal Magnet: Teflon® Coated Alnico 8

Enclosure Seal: Silicone gasket

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

Internal Magnet: Teflon® Coated Alnico 8

Enclosure Seal: Silicone gasket

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

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

PRESSURE RATING:

Aluminum / Brass Operating:

Liquids - 3,500 psi/241 bar maximum with a 3:1 safety factor.

Gases - 1,000 psi/69 bar maximum with a 10:1 safety factor.

For High Cycle Applications: See page 7

Stainless Steel Operating:

Liquids - (1/4" to 1/2") - 6,000 psi/414 bar maximum with a 3:1 safety factor

Liquids - (3/4" to 1 1/2") - 5,000 psi/345 bar maximum with a 3:1 safety factor

Gases - 1,500 psi/103 bar maximum with a 10:1 safety factor.

For High Cycle Applications: See page 7

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. 10	p. 18	p. 26	p. 34	p. 38	p. 38	p. 40	p. 42
Pressure Drop Chart	p. 61	p. 62	p. 63	p. 64	p. 65	p. 64	p. 65	p. 66

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

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
Inherently isolated from the piping system
- Isolation:**
- 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

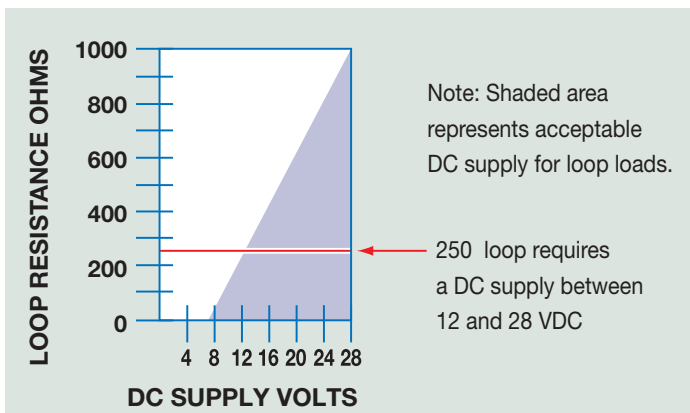
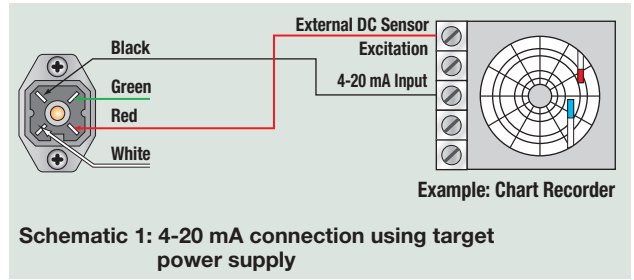


Figure 1. Load Limitations (4-20 mA Output Only)

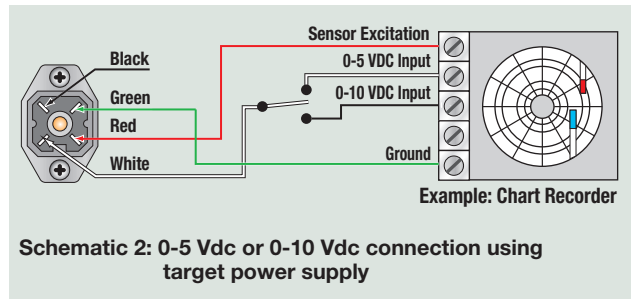
SCHEMATICS:

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

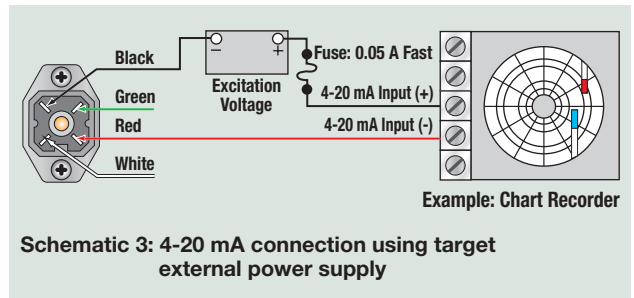
Schematics 1 & 2 represent typical wiring for a target powered by either AC power or DC supply. Schematics 3 & 4 will be utilized when the flow transmitter is operated with loop-powered process indicators or data loggers that do not have external sensor excitation available.



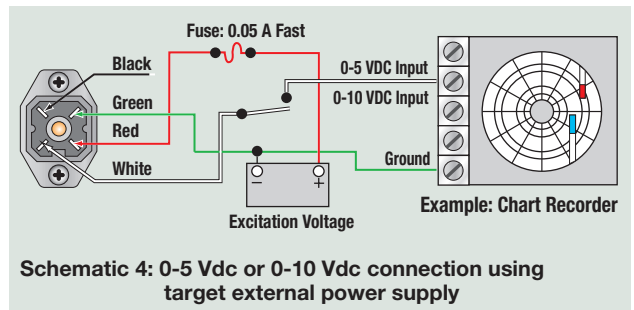
Schematic 1: 4-20 mA connection using target power supply



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

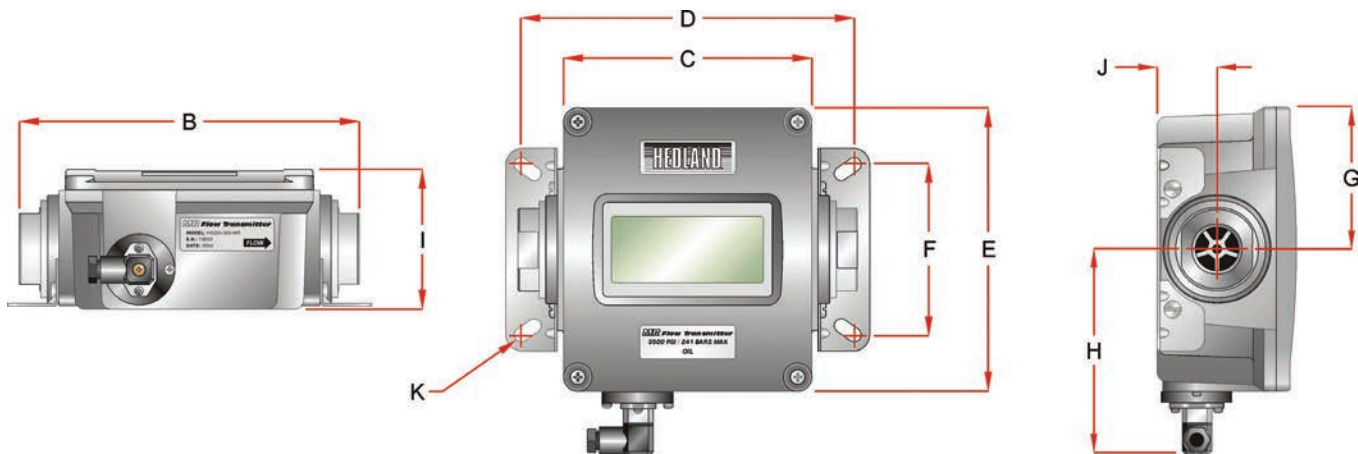
Figure 2. Electrical 4-Pin Connection

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)	6.41 (163)	6.00 (152)	3.23 (82)	3.00 (76)	4.20 (107)	2.94 (75)	1.51 (38)	.31 (8)
½ (SAE 10)	6.60 (168)	5.27 (134)	6.41 (163)	6.00 (152)	3.23 (82)	3.00 (76)	4.20 (107)	2.94 (75)	1.51 (38)	.31 (8)
¾ (SAE 12)	7.20 (183)	5.27 (134)	7.04 (179)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.27 (32)	.31 (8)
1 (SAE 16)	7.20 (183)	5.27 (134)	7.04 (179)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.27 (32)	.31 (8)
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)	.31 (8)
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)	.31 (8)



Optional Remote Display and Signal Processor:

Hedland also offers the F6700/F6750 Series Digital Display with integrated signal processor capabilities to further enhance the utility of the MR Flow Transmitters. In addition to remote flow monitoring, these units can be configured to provide alarm processing and communication options including RS232, RS485, Modbus, Profibus and DeviceNet. For complete product specifications, refer to page 59.



Flow-Alert™ Flow Switches and Flow Transmitters

For Air / Compressed Gases

ORDERING INFORMATION:

NOMINAL PORT SIZE ^①	FLOW RANGE		MODEL NUMBER (see example below)			MATERIAL			OPTIONS		
	SCFM	L/SEC	SAE	NPTF	BSPP	ALUMINUM 1000 PSI	BRASS 1000 PSI	STAINLESS 1500 PSI	Flow-Alert 1 SWITCH / 2 SWITCH	Flow-Alert REED SWITCH	MULTIPLE OUTPUT SENSOR
¼" SAE 6	0.5 - 5	0.2 - 2.2	H270 * - 005 - †	H271 * - 005 - †	H272 * - 005 - †	A	B	S	Not Available	SEE OPTIONS BELOW	Not Available
	1 - 10	0.5 - 4.75	H270 * - 010 - †	H271 * - 010 - †	H272 * - 010 - †						
	2 - 20	1 - 9	H270 * - 020 - †	H271 * - 020 - †	H272 * - 020 - †						
	3 - 30	1.5 - 14	H270 * - 030 - †	H271 * - 030 - †	H272 * - 030 - †						
¼" SAE 6	3 - 25	2 - 12	H270 * - 025 - †	H271 * - 025 - †	H272 * - 025 - †	A	B	S	F1/F2	SEE OPTIONS BELOW	MR
	5 - 50	3 - 22	H270 * - 050 - †	H271 * - 050 - †	H272 * - 050 - †						
½" SAE 10	3 - 25	2 - 12	H670 * - 025 - †	H671 * - 025 - †	H672 * - 025 - †	A	B	S	F1/F2	SEE OPTIONS BELOW	MR
	5 - 50	3 - 22	H670 * - 050 - †	H671 * - 050 - †	H672 * - 050 - †						
	10 - 100	5 - 47	H670 * - 100 - †	H671 * - 100 - †	H672 * - 100 - †						
	15 - 150	7 - 70	H670 * - 150 - †	H671 * - 150 - †	H672 * - 150 - †						
¾" SAE 12	3 - 25	1.5 - 11.5	H770 * - 025 - †	H771 * - 025 - †	H772 * - 025 - †	A	B	S	F1/F2	SEE OPTIONS BELOW	MR
	5 - 50	2 - 23	H770 * - 050 - †	H771 * - 050 - †	H772 * - 050 - †						
	10 - 100	5 - 47.5	H770 * - 100 - †	H771 * - 100 - †	H772 * - 100 - †						
	15 - 150	7 - 70	H770 * - 150 - †	H771 * - 150 - †	H772 * - 150 - †						
	25 - 250	10 - 118	H770 * - 250 - †	H771 * - 250 - †	H772 * - 250 - †						
1" SAE 16	3 - 25	1.5 - 11.5	H790 * - 025 - †	H791 * - 025 - †	H792 * - 025 - †	A	B	S	F1/F2	SEE OPTIONS BELOW	MR
	5 - 50	2 - 23	H790 * - 050 - †	H791 * - 050 - †	H792 * - 050 - †						
	10 - 100	5 - 47.5	H790 * - 100 - †	H791 * - 100 - †	H792 * - 100 - †						
	15 - 150	7 - 70	H790 * - 150 - †	H791 * - 150 - †	H792 * - 150 - †						
	25 - 250	10 - 118	H790 * - 250 - †	H791 * - 250 - †	H792 * - 250 - †						
1¼" SAE 20	20 - 200	10 - 95	H870 * - 200 - †	H871 * - 200 - †	H872 * - 200 - †	A	B	S	F1/F2	SEE OPTIONS BELOW	MR
	40 - 400	20 - 180	H870 * - 400 - †	H871 * - 400 - †	H872 * - 400 - †						
	60 - 600	30 - 280	H870 * - 600 - †	H871 * - 600 - †	H872 * - 600 - †						
	80 - 800	50 - 350	H870 * - 800 - †	H871 * - 800 - †	H872 * - 800 - †						
	100 - 1000	50 - 475	H870 * - 999 - †	H871 * - 999 - †	H872 * - 999 - †						
1½" SAE 24	20 - 200	10 - 95	H890 * - 200 - †	H891 * - 200 - †	H892 * - 200 - †	A	B	S	F1/F2	SEE OPTIONS BELOW	MR
	40 - 400	20 - 180	H890 * - 400 - †	H891 * - 400 - †	H892 * - 400 - †						
	60 - 600	30 - 280	H890 * - 600 - †	H891 * - 600 - †	H892 * - 600 - †						
	80 - 800	50 - 350	H890 * - 800 - †	H891 * - 800 - †	H892 * - 800 - †						
	100 - 1000	50 - 475	H890 * - 999 - †	H891 * - 999 - †	H892 * - 999 - †						

① Fractional sizes apply to NPTF and BSPP.

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



Flow-Alert Flow Switches

F1 = Single Switch
F2 = Double Switch

(example) H 771 A - 250 - MR



Multiple Output Flow Sensor

3 Standard field selectable outputs

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

(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)

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 40. For detailed flow/pressure drop charts, see page 66.