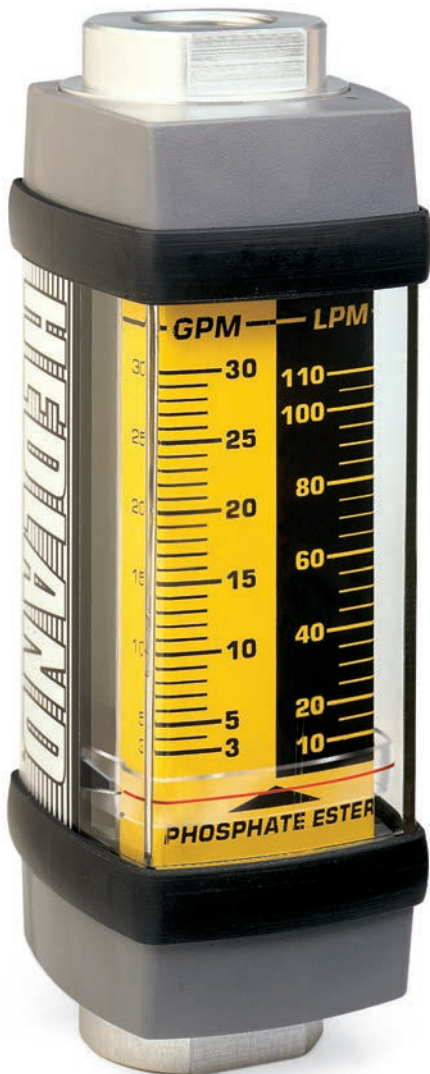


3500/6000 PSI Flow Meters

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 $\pm 2\%$ full scale
- Repeatability $\pm 1\%$
- Special scales available
- Calibrated for 1.18 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: SAE 1070/1090 Carbon Steel
Spider Plate: T316 SS **Retaining Spring:** SAE 1070/1090 Carbon Steel
Spring: T302 SS **Indicator and Internal Magnet:** PPS / Ceramic
Fasteners: T303 SS **Guard Seal / Bumper:** EPR
Pressure Seals: EPR **Scale Support:** 6063 - T6 Aluminum
Guard: Nylon **End Caps:** Nylon ST

THREADS: SAE J1926/1, NPTF ANSI B2.2, BSPP ISO1179, Code 62: SAEJ518

TEMPERATURE RANGE: -20 to +240 °F (-29 to +116 °C) for higher temp. meters, see page 23

PRESSURE RATING:

Aluminum / Brass Operating: 3,500 psi/241 bar max. with a 3:1 safety factor.

For High Cycle Applications: See page 7

Stainless Steel Operating: 6,000 psi/414 bar max. (5,000 psi/345 bar max. for ¾" to 1½" series and 4,000 psi/276 bar max. for code 62 flange) with a 3:1 safety factor.

For High Cycle Applications: See page 7

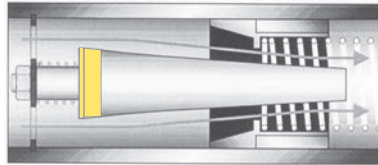
PRESSURE DROP: See Ordering Information Table, page 18.

For detailed differential pressure charts, see page 62.

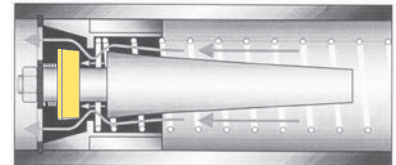
ACCURACY: $\pm 2\%$ of full scale, $\pm 7\%$ of full scale for ¼" meters **REPEATABILITY:** $\pm 1\%$

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



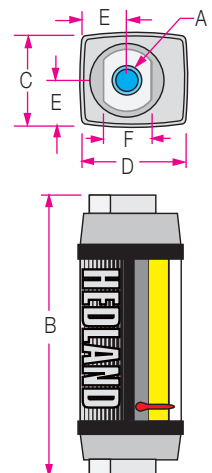
Reverse Flow By-Pass

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: Dimensions for 1-½" Code 62 can be found on page 78.

Weights for all sizes can be found on page 79.



3500/6000 PSI Flow Meters

For Phosphate Ester Fluids

ORDERING INFORMATION:

NOMINAL PORT SIZE ^①	FLOW RANGE		PRESSURE DROP			MODEL NUMBER (see example below)			MATERIAL			OPTIONS
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	REVERSE 100% FLOW PSI (BAR)	SAE	NPTF	BSPP	ALUMINUM 3500 PSI	BRASS 3500 PSI	STAINLESS	REVERSE FLOW
¼" SAE 6	.02 - 0.2	0.1 - 0.75	3.5 (.24)	4.0 (.28)		H294 * - 002 - †	H295 * - 002 - †	H296 * - 002 - †	A	B	S	6000 PSI Not Available
	.05 - 0.5	0.2 - 1.9	3.0 (.21)	5.0 (.35)		H294 * - 005 - †	H295 * - 005 - †	H296 * - 005 - †				
	0.1 - 1.0	0.5 - 3.75	4.0 (.28)	9.0 (.62)		H294 * - 010 - †	H295 * - 010 - †	H296 * - 010 - †				
	0.2 - 2.0	1.0 - 7.5	6.0 (.41)	13 (.90)		H294 * - 020 - †	H295 * - 020 - †	H296 * - 020 - †				
½" SAE 10	0.1 - 1.0	0.5 - 3.75	2.0 (.14)	2.75 (.19)	5.2 (.36)	H694 * - 001 - †	H695 * - 001 - †	H696 * - 001 - †	A	B	S	6000 PSI RF
	0.2 - 2.0	1 - 7.5	2.0 (.14)	3.0 (.21)	9.6 (.66)	H694 * - 002 - †	H695 * - 002 - †	H696 * - 002 - †				
	0.5 - 5.0	2 - 19	3.0 (.21)	6.0 (.41)	4.8 (.33)	H694 * - 005 - †	H695 * - 005 - †	H696 * - 005 - †				
	1 - 10	5 - 38	4.0 (.28)	9.5 (.66)	23.0 (1.6)	H694 * - 010 - †	H695 * - 010 - †	H696 * - 010 - †				
	1 - 15	4 - 56	6.5 (.45)	18.5 (1.3)	55.2 (3.8)	H694 * - 015 - †	H695 * - 015 - †	H696 * - 015 - †				
¾" SAE 12	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H794 * - 002 - †	H795 * - 002 - †	H796 * - 002 - †	A	B	S	5000 PSI RF
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H794 * - 005 - †	H795 * - 005 - †	H796 * - 005 - †				
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H794 * - 010 - †	H795 * - 010 - †	H796 * - 010 - †				
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H794 * - 020 - †	H795 * - 020 - †	H796 * - 020 - †				
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H794 * - 030 - †	H795 * - 030 - †	H796 * - 030 - †				
1" SAE 16	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H764 * - 002 - †	H765 * - 002 - †	H766 * - 002 - †	A	B	S	5000 PSI RF
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H764 * - 005 - †	H765 * - 005 - †	H766 * - 005 - †				
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H764 * - 010 - †	H765 * - 010 - †	H766 * - 010 - †				
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H764 * - 020 - †	H765 * - 020 - †	H766 * - 020 - †				
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H764 * - 030 - †	H765 * - 030 - †	H766 * - 030 - †				
	4 - 40	15 - 150	9.0 (.62)	24.0 (1.7)	87.5 (6.04)	H764 * - 040 - †	H765 * - 040 - †	H766 * - 040 - †				
	5 - 50	20 - 190	12.5 (.86)	34.0 (2.3)	150 (10.4)	H764 * - 050 - †	H765 * - 050 - †	H766 * - 050 - †				
1¼" SAE 20	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H894 * - 030 - †	H895 * - 030 - †	H896 * - 030 - †	A	B	S	5000 PSI RF
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H894 * - 050 - †	H895 * - 050 - †	H896 * - 050 - †				
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H894 * - 075 - †	H895 * - 075 - †	H896 * - 075 - †				
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H894 * - 100 - †	H895 * - 100 - †	H896 * - 100 - †				
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H894 * - 150 - †	H895 * - 150 - †	H896 * - 150 - †				
1½" SAE 24	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H864 * - 030 - †	H865 * - 030 - †	H866 * - 030 - †	A	B	S	5000 PSI RF
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H864 * - 050 - †	H865 * - 050 - †	H866 * - 050 - †				
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H864 * - 075 - †	H865 * - 075 - †	H866 * - 075 - †				
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H864 * - 100 - †	H865 * - 100 - †	H866 * - 100 - †				
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H864 * - 150 - †	H865 * - 150 - †	H866 * - 150 - †				
1½" Code 62	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H898 * - 030 - †			A	B	S	4000 PSI RF
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H898 * - 050 - †						
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H898 * - 075 - †						
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H898 * - 100 - †						
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H898 * - 150 - †						

①Fractional sizes apply to NPTF and BSPP.

NOTE: RF option is not available with standard brass flow meters.

(example) H 795 A - 030 - RF



3500/6000 PSI Test Kits

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 $\pm 2\%$ full scale
- Repeatability $\pm 1\%$
- Special scales available
- Calibrated for 1.18 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:
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, BSPP ISO1179

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

PRESSURE RATING:

Aluminum / Brass Operating: 3,500 psi/241 bar max. with a 3:1 safety factor.

For High Cycle Applications: See page 7

Stainless Steel Operating: 6,000 psi/414 bar max. (5,000 psi/345 bar max. for 3/4" series) with a 3:1 safety factor.

For High Cycle Applications: See page 7

PRESSURE DROP: See Ordering Information Table, page 20.

For detailed differential pressure charts, see page 62.

ACCURACY: $\pm 2\%$ of full scale

REPEATABILITY: $\pm 1\%$

PRESSURE GAUGE: Glycerin dampened, 0 - 3,500 psi / 0 - 240 bar pressure range available on aluminum and brass test kits.

Glycerin dampened, 0 - 6,000 psi / 0 - 400 bar pressure range available on stainless steel test kits.

LOAD VALVE: 1/2", 3/4" and 1" series - needle valve;

Produce ΔP up to 3,500 psi/241 bar PSID and 6,000 psi/414 bar PSID.

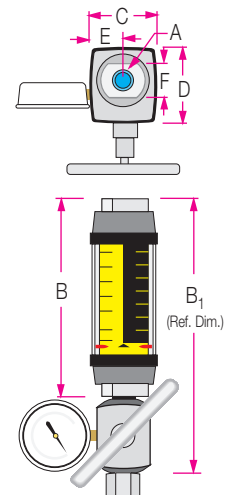


DIMENSIONS:

A	B	B ₁	C	D	E	F
NOMINAL PORT SIZE	LENGTH in (mm)	LENGTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	FLATS in (mm)
1/2 (SAE 10)	6.6 (168)	10.3 (262)	2.07 (53)	2.40 (61)	1.04 (26)	1.25 (32)
3/4 (SAE 12)	7.2 (183)	11.3 (287)	2.48 (63)	2.85 (72)	1.24 (32)	1.50 (38)
1 (SAE 16)	7.2 (183)	11.3 (287)	2.48 (63)	2.85 (72)	1.24 (32)	1.75 (44)

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

SAE and BSPP Test Kits include inlet adapter.



3500/6000 PSI Test Kits

For Phosphate Ester Fluids

ORDERING INFORMATION:

NOMINAL PORT SIZE ^①	FLOW RANGE		PRESSURE DROP			MODEL NUMBER (see example below)			MATERIAL			OPTIONS
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	REVERSE 100% FLOW PSI (BAR)	SAE	NPTF	BSPP	ALUMINUM 3500 PSI	BRASS 3500 PSI	STAINLESS	REVERSE FLOW
½" SAE 10	0.1 - 1.0	0.5 - 3.75	3.0 (.21)	4.75 (.33)	7.2 (.50)	H694 * - 001 - TK	H695 * - 001 - TK	H696 * - 001 - TK	A	B	S	RT
	0.2 - 2.0	1 - 7.5	5.0 (.34)	9.0 (.62)	15.6 (1.1)	H694 * - 002 - TK	H695 * - 002 - TK	H696 * - 002 - TK				
	0.5 - 5.0	2 - 19	10.0 (.69)	26.0 (1.8)	24.8 (1.7)	H694 * - 005 - TK	H695 * - 005 - TK	H696 * - 005 - TK				
	1 - 10	5 - 38	24.0 (1.7)	71.5 (4.9)	85.0 (5.9)	H694 * - 010 - TK	H695 * - 010 - TK	H696 * - 010 - TK				
	1 - 15	4 - 56	39.0 (2.7)	155 (10.7)	210 (14.5)	H694 * - 015 - TK	H695 * - 015 - TK	H696 * - 015 - TK				
¾" SAE 12	0.2 - 2.0	1 - 7.5	1.5 (.10)	3.0 (.21)	3.9 (.27)	H794 * - 002 - TK	H795 * - 002 - TK	H796 * - 002 - TK	A	B	S	RT
	0.5 - 5.0	2 - 19	4.0 (.28)	6.5 (.45)	8.3 (.57)	H794 * - 005 - TK	H795 * - 005 - TK	H796 * - 005 - TK				
	1 - 10	5 - 38	6.5 (.45)	16.0 (1.1)	15.8 (1.1)	H794 * - 010 - TK	H795 * - 010 - TK	H796 * - 010 - TK				
	2 - 20	10 - 76	11.0 (.76)	26.0 (1.8)	35.0 (2.4)	H794 * - 020 - TK	H795 * - 020 - TK	H796 * - 020 - TK				
	3 - 30	10 - 115	18.0 (1.2)	47.5 (3.3)	76.1 (5.2)	H794 * - 030 - TK	H795 * - 030 - TK	H796 * - 030 - TK				
1" SAE 16	0.2 - 2.0	1 - 7.5	1.5 (.10)	3.0 (.21)	3.9 (.27)	H764 * - 002 - TK	H765 * - 002 - TK	H766 * - 002 - TK	A	B	S	RT
	0.5 - 5.0	2 - 19	4.0 (.28)	6.5 (.45)	8.3 (.57)	H764 * - 005 - TK	H765 * - 005 - TK	H766 * - 005 - TK				
	1 - 10	5 - 38	6.5 (.45)	16.0 (1.1)	15.8 (1.1)	H764 * - 010 - TK	H765 * - 010 - TK	H766 * - 010 - TK				
	2 - 20	10 - 76	11.0 (.76)	26.0 (1.8)	35.0 (2.4)	H764 * - 020 - TK	H765 * - 020 - TK	H766 * - 020 - TK				
	3 - 30	10 - 115	18.0 (1.2)	47.5 (3.3)	76.1 (5.2)	H764 * - 030 - TK	H765 * - 030 - TK	H766 * - 030 - TK				
	4 - 40	15 - 150	26.0 (1.8)	75.0 (5.2)	139 (9.6)	H764 * - 040 - TK	H765 * - 040 - TK	H766 * - 040 - TK				
	5 - 50	20 - 190	63.5 (4.4)	114 (7.9)	230 (15.9)	H764 * - 050 - TK	H765 * - 050 - TK	H766 * - 050 - TK				

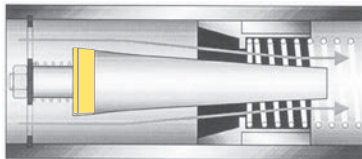
①Fractional sizes apply to NPTF and BSPP.

(example) H 795 **A** - 030 - **RT**

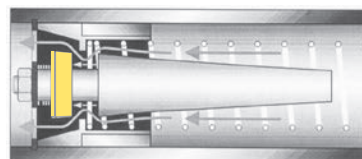
NOTE: TK suffix represents standard test kit configuration. For reverse flow by-pass test kit, replace TK suffix with RT suffix.

NOTE: RT option is not available with standard brass flow meters.

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

3500/5000 PSI Test Kits

For Phosphate Ester Fluids (1-1/4" and 1-1/2")

- 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 $\pm 2\%$ full scale
- Repeatability $\pm 1\%$
- Special scales available
- Calibrated for 1.18 S.G.



SPECIFICATIONS:

MATERIALS:

2024 - T351 Anodized aluminum body, piston and cone

T303 Stainless body, 2024 - T351 Anodized aluminum piston and cone

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

THREADS: NPT

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

PRESSURE RATING:

Aluminum Operating: 3,500 psi/241 bar max. with a 3:1 safety factor.

For High Cycle Applications: See page 7

Stainless Steel Operating: 5,000 psi/345 bar max. with a 3:1 safety factor.

For High Cycle Applications: See page 7

PRESSURE DROP: See Ordering Information Table, page 22.

For detailed differential pressure charts, see page 62.

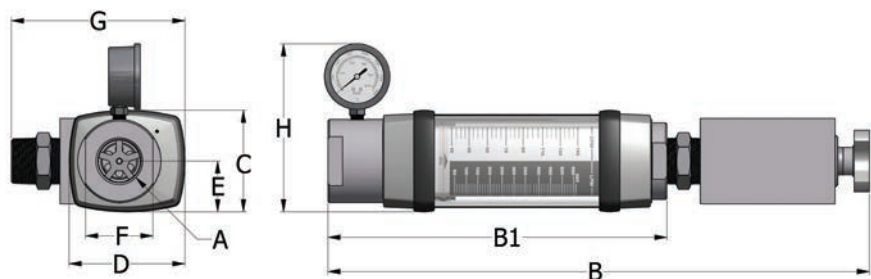
ACCURACY: $\pm 2\%$ of full scale

REPEATABILITY: $\pm 1\%$

PRESSURE GAUGE: Glycerin dampened, 0 - 3,500 psi / 0 - 240 bar pressure range available on aluminum test kits.

Glycerin dampened, 0 - 6,000 psi / 0 - 400 bar pressure range available on stainless steel test kits.

LOAD VALVE: Produce ΔP up to 3,500 psi/241 bar PSID and 5,000 psi/345 bar PSID.



DIMENSIONS:

A	B	B ₁	C	D	E	F	G	H
NOMINAL PORT SIZE	LENGTH in (mm)	LENGTH in (mm)	WIDTH in (mm)	DEPTH in (mm)	OFFSET in (mm)	FLATS in (mm)	DEPTH in (mm)	WIDTH in (mm)
1-1/4	22.1 (561)	13.9 (353)	4.15 (105)	4.75 (121)	2.08 (53)	2.75 (70)	7.1 (180)	6.9 (175)
1-1/2	22.1 (561)	13.9 (353)	4.15 (105)	4.75 (121)	2.08 (53)	2.75 (70)	7.1 (180)	6.9 (175)

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

Pressures above 7500 PSI will pop the rupture disc allowing fluid flow to continue. This is a fail safe mechanism.

3500/5000 PSI Test Kits

For Phosphate Ester Fluids

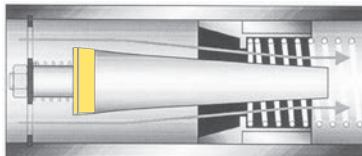
ORDERING INFORMATION:

NOMINAL PORT SIZE	FLOW RANGE		PRESSURE DROP			MODEL NUMBER (see example below)	MATERIAL		OPTIONS
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	REVERSE 100% FLOW PSI (BAR)	NPT	ALUMINUM 3500 PSI	STAINLESS 5000 PSI	REVERSE FLOW
1¼"	3 - 30	10 - 110	3.4 (.23)	7.8 (.54)	5.6 (.39)	H TK 895 * - 030	A	S	RT
	5 - 50	20 - 190	4.3 (.30)	8.8 (6.1)	14.3 (.99)	H TK 895 * - 050			
	10 - 75	40 - 280	6.3 (.43)	14.3 (9.9)	35.7 (2.5)	H TK 895 * - 075			
	10 - 100	50 - 380	8.3 (.57)	21.3 (1.5)	45.3 (3.1)	H TK 895 * - 100			
	10 - 150	50 - 560	14.3 (.99)	41.3 (2.8)	124 (8.6)	H TK 895 * - 150			
	10 - 150	50 - 560	14.3 (.99)	41.3 (2.8)	124 (8.6)	H TK 895 * - 150			
1½"	3 - 30	10 - 110	3.4 (.23)	7.8 (.54)	5.6 (.39)	H TK 865 * - 030	A	S	RT
	5 - 50	20 - 190	4.3 (.30)	8.8 (6.1)	14.3 (.99)	H TK 865 * - 050			
	10 - 75	40 - 280	6.3 (.43)	14.3 (9.9)	35.7 (2.5)	H TK 865 * - 075			
	10 - 100	50 - 380	8.3 (.57)	21.3 (1.5)	45.3 (3.1)	H TK 865 * - 100			
	10 - 150	50 - 560	14.3 (.99)	41.3 (2.8)	124 (8.6)	H TK 865 * - 150			
	10 - 150	50 - 560	14.3 (.99)	41.3 (2.8)	124 (8.6)	H TK 865 * - 150			

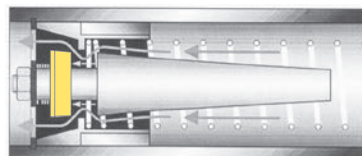
(example) H RT 895 A - 030

NOTE: TK suffix represents standard test kit configuration. For reverse flow by-pass test kit, replace TK suffix with RT suffix.

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

3500/6000 PSI 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:

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:

Spider Plate: T316 SS

Spring: T302 SS

Fasteners: T303 SS

Seals: EPR

Scale Support: T316 SS

Scale: Polyimide

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, BSPP ISO1179, **Code 62:** SAEJ518

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

+400 to +500 °F (+205 to +260 °C) Intermittent

For detailed "Pressure vs. Temperature" correlation information, see page 20.

PRESSURE RATING:

Aluminum / Brass Operating: 3,500 psi/241 bar max. with a 3:1 safety factor.

For High Cycle Applications: See page 7

Stainless Steel Operating: 6,000 psi/414 bar max. (5,000 psi/345 bar max.

for ¾" to 1½" series) with a 3:1 safety factor.

For High Cycle Applications: See page 7

PRESSURE DROP: See Ordering Information Table, page 24

For detailed differential pressure charts, see page 62.

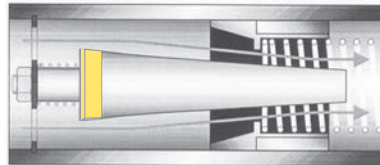
ACCURACY: ±2% of full scale

REPEATABILITY: ±1%

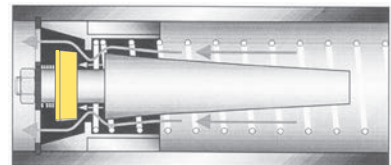
REVERSE FLOW BY-PASS OPTION:

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



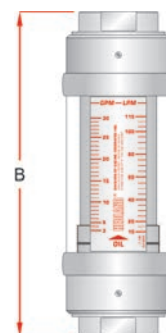
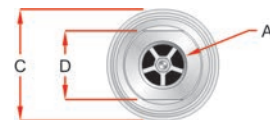
Reverse Flow By-Pass

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 (53)	1.25 (32)
½ (SAE 10)	6.60 (168)	2.01 (53)	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 (105)	2.75 (70)
1½ (SAE 24)	12.20 (310)	4.20 (105)	2.75 (70)

NOTE: Dimensions for 1½" Code 62 can be found on page 78.

Weights for all sizes can be found on page 79.



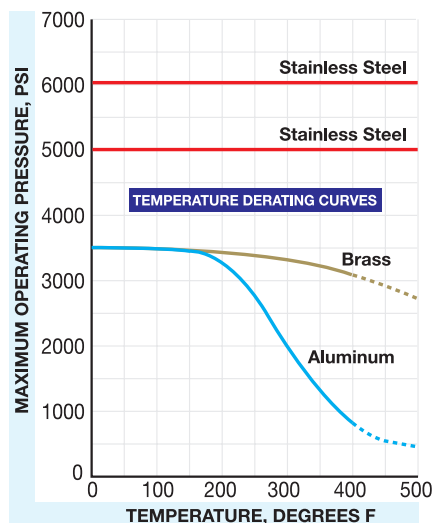
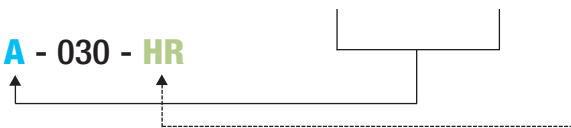
3500/6000 PSI High Temperature Flow Meters For Phosphate Ester Fluids

ORDERING INFORMATION:

NOMINAL PORT SIZE ^①	FLOW RANGE		PRESSURE DROP			MODEL NUMBER (see example below)			MATERIAL			OPTIONS
	GPM	LPM	50% FLOW PSI (BAR)	100% FLOW PSI (BAR)	REVERSE 100% FLOW PSI (BAR)	SAE	NPTF	BSPP	ALUMINUM 3500 PSI	BRASS 3500 PSI	STAINLESS	REVERSE FLOW
¼" SAE 6	0.1 - 1.0	0.5 - 3.75	4.0 (.28)	9.0 (.62)		H294 * - 010 - HT	H295 * - 010 - HT	H296 * - 010 - HT	A	B	6000 PSI S	Not Available
	0.2 - 2.0	1.0 - 7.5	6.0 (.41)	13 (.90)		H294 * - 020 - HT	H295 * - 020 - HT	H296 * - 020 - HT				
½" SAE 10	0.1 - 1.0	0.5 - 3.75	2.0 (.14)	2.75 (.19)	5.2 (.36)	H694 * - 001 - HT	H695 * - 001 - HT	H696 * - 001 - HT	A	B	6000 PSI S	HR
	0.2 - 2.0	1 - 7.5	2.0 (.14)	3.0 (.21)	9.6 (.66)	H694 * - 002 - HT	H695 * - 002 - HT	H696 * - 002 - HT				
	0.5 - 5.0	2 - 19	3.0 (.21)	6.0 (.41)	4.8 (.33)	H694 * - 005 - HT	H695 * - 005 - HT	H696 * - 005 - HT				
	1 - 10	5 - 38	4.0 (.28)	9.5 (.66)	23.0 (1.6)	H694 * - 010 - HT	H695 * - 010 - HT	H696 * - 010 - HT				
	1 - 15	4 - 56	6.5 (.45)	18.5 (1.3)	55.2 (3.8)	H694 * - 015 - HT	H695 * - 015 - HT	H696 * - 015 - HT				
¾" SAE 12	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H794 * - 002 - HT	H795 * - 002 - HT	H796 * - 002 - HT	A	B	5000 PSI S	HR
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H794 * - 005 - HT	H795 * - 005 - HT	H796 * - 005 - HT				
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H794 * - 010 - HT	H795 * - 010 - HT	H796 * - 010 - HT				
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H794 * - 020 - HT	H795 * - 020 - HT	H796 * - 020 - HT				
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H794 * - 030 - HT	H795 * - 030 - HT	H796 * - 030 - HT				
1" SAE 16	0.2 - 2.0	1 - 7.5	1.0 (.07)	2.0 (.14)	2.9 (.20)	H764 * - 002 - HT	H765 * - 002 - HT	H766 * - 002 - HT	A	B	5000 PSI S	HR
	0.5 - 5.0	2 - 19	2.5 (.17)	3.5 (.24)	5.3 (.37)	H764 * - 005 - HT	H765 * - 005 - HT	H766 * - 005 - HT				
	1 - 10	5 - 38	3.5 (.24)	9.0 (.62)	8.8 (.61)	H764 * - 010 - HT	H765 * - 010 - HT	H766 * - 010 - HT				
	2 - 20	10 - 76	4.0 (.28)	9.0 (.62)	18.0 (1.24)	H764 * - 020 - HT	H765 * - 020 - HT	H766 * - 020 - HT				
	3 - 30	10 - 115	7.0 (.48)	16.5 (1.1)	45.1 (3.11)	H764 * - 030 - HT	H765 * - 030 - HT	H766 * - 030 - HT				
1¼" SAE 20	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H894 * - 030 - HT	H895 * - 030 - HT	H896 * - 030 - HT	A	B	5000 PSI S	HR
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H894 * - 050 - HT	H895 * - 050 - HT	H896 * - 050 - HT				
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H894 * - 075 - HT	H895 * - 075 - HT	H896 * - 075 - HT				
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H894 * - 100 - HT	H895 * - 100 - HT	H896 * - 100 - HT				
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H894 * - 150 - HT	H895 * - 150 - HT	H896 * - 150 - HT				
1½" SAE 24	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H864 * - 030 - HT	H865 * - 030 - HT	H866 * - 030 - HT	A	B	5000 PSI S	HR
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H864 * - 050 - HT	H865 * - 050 - HT	H866 * - 050 - HT				
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H864 * - 075 - HT	H865 * - 075 - HT	H866 * - 075 - HT				
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H864 * - 100 - HT	H865 * - 100 - HT	H866 * - 100 - HT				
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H864 * - 150 - HT	H865 * - 150 - HT	H866 * - 150 - HT				
1½" Code 62	3 - 30	10 - 110	3.0 (.21)	4.0 (.28)	4.8 (.33)	H898 * - 030 - HT			A	B	4000 PSI S	HR
	5 - 50	20 - 190	3.5 (.24)	7.0 (.48)	12.5 (.86)	H898 * - 050 - HT						
	10 - 75	40 - 280	5.0 (.35)	10.5 (.72)	31.9 (2.2)	H898 * - 075 - HT						
	10 - 100	50 - 380	6.5 (.45)	15.0 (1.0)	39.0 (2.7)	H898 * - 100 - HT						
	10 - 150	50 - 560	10.5 (.72)	27.5 (1.9)	110 (7.6)	H898 * - 150 - HT						

① Fractional sizes apply to NPTF and BSPP.

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



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

NOTE: HR option is not available with brass flow meters.