

Variable Area Flowmeters BULL'S EYE™ Sight Flow Indicators 10E1400

- **Complete Product Line** - wide range of materials, sizes, indicators, seals & lenses in threaded or 150 ANSI flanged models to handle most industrial fluids.
- **Radial Seals** - eliminates leaking problems with superior memory retention for shape.
- **Bolt-on Body** - eliminates the need for special torqueing sequence when fastening face plate assembly onto body.
- **Excellent Visibility** - large lenses allow positive monitoring of process fluids for safer more reliable operation.



Sight Flow Indicator
Series 10E1400

BULL'S EYE SIGHT- FLOW INDICATOR

The BULL'S EYE Sight Flow Indicators provide a quick, reliable and economical way to verify flow and monitor color and clarity in fluid lines. Several sizes, styles and materials are available for a wide range of industrial applications.

All Indicators feature dual glass for see-through visibility and are available in two series: the 10E1400 standard series and the 10E1500 series units are rated for operating pressures up to 600 PSI. The accompanying chart details the pressure and temperature ratings for all Bull's Eye Sight Flow Indicators.

UNIQUE RADIAL SEAL

Indicators feature a unique radial sealing method and bolt-on-body design that provides years of reliable service with no torquing maintenance required. It works so well, we guarantee no leaks for three years under normal use!

Technical Data

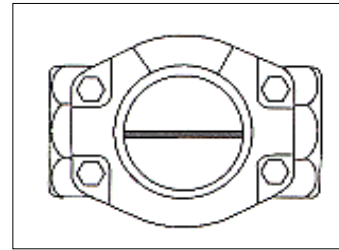
MAXIMUM PRESSURE/TEMPERATURE RATINGS FOR BULL'S EYE SIGHT FLOW INDICATORS		
	Max. ANSI Pressure	Max. Temperature ¹²
1400 Series (Threaded)	230 PSI at 100°F	250°F at 135 PSI
1500 Series (Threaded)	400 PSI at 100°F	350°F at 200 PSI ²
1400 Series (Flanged) ³	285 PSI at 100°F	225°F at 245 PSI
1500 Series (Flanged) ³	285 PSI at 100°F	350°F at 215 PSI ²

² Temperatures up to 500°F possible with High Temperature PTFE Seals.

¹² With Standard Seals

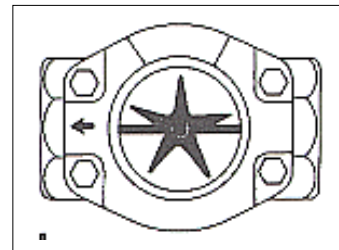
³ For Steel Units, consult factory for complete pressure information

TEMPERATURE RANGE FOR SEAL MATERIALS IN BULL'S EYE SIGHT FLOW INDICATORS		
Seal Material	Minimum	Maximum
Neoprene (Std. 1400 Series)	-20°F	250°F
Viton (Std. 1500 Series)	20°F	350°F
Buna-N	-30°F	250°F
EPT	-20°F	250°F
Teflon®	-40°F	450°F
High Temp. PTFE	0°F	500°F



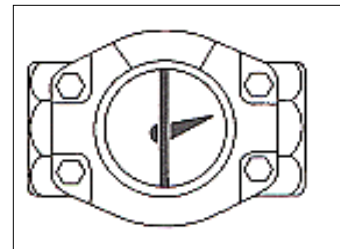
Plain

When the color and/or clarity of the liquid is of prime importance. Bidirectional.



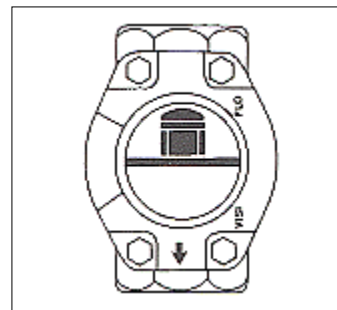
Propeller

The best way to show flow of opaque liquids. Also ideal for observations at a distance. Right to left flow is standard. Specify if left to right flow is required.



Flapper

Points in either direction to show at a glance which way the liquid is flowing. Bidirectional.



Drip Tube

Ideal for gravity, extremely low or intermittent flow. Keeps liquid from dripping on glass. For vertical lines only.

Threaded Ends

Material	1/4"	3/8"	1/4"	3/4"	1"	1-1/4"	1-1/2"	2"
Bronze	●	●	●	●	●	●	●	●
316 Stainless Steel	●	●	●	●	●	●	●	●
Carbon Steel	●	●	●	●	●	●	●	●
Ductile Iron	●	●	●	●	●	●	●	●

Flanged Ends

Material	1"	1-1/2"	2"	3"	4"	6"	8"	10"	12"
316 Stainless Steel	●	●	●	●	●	●	●	●	●
Carbon Steel	●	●	●	●	●	●	●	●	●
Ductile Iron				●	●				

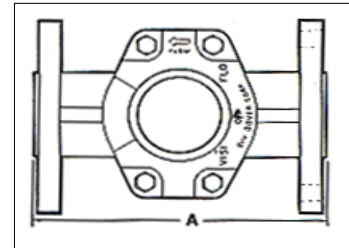
"FJP" FLANGES

The "FJP" flanged BULL'S EYE Sight Flow Indicators feature end-to-end dimensions that match Jacoby-Tarbox, Penberthy and other manufacturers' units. These other brands can now be replaced quickly and easily with BULL'S EYE with no modifications to existing piping!

"FJP" flanged indicators are available in carbon steel and 316 stainless steel in 2", 3" and 4" sizes in both 1400 Series and 1500 Series models. These units feature the same high quality construction and design found in all BULL'S EYE Sight Flow Indicators.

A convenient cross-reference chart is shown below

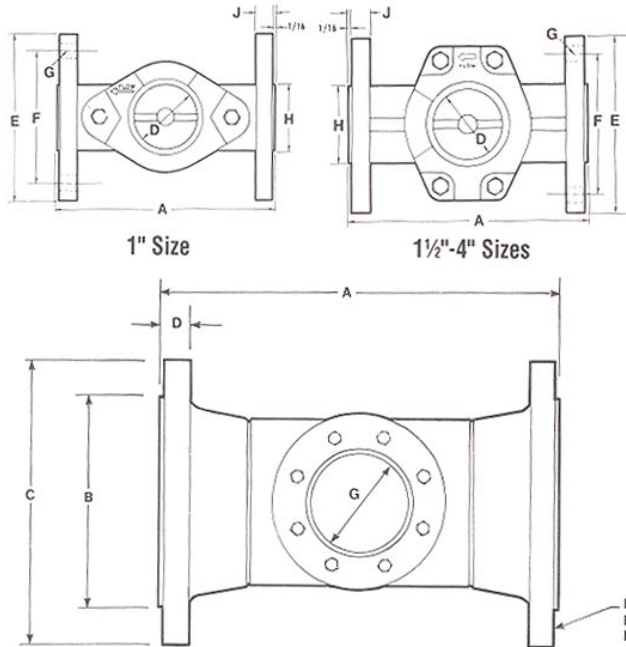
Dimensions	A
2"	7-7/8"
3"	9-3/8"
4"	11"



Type	STEEL		STAINLESS STEEL			
	1400 Series	1500 Series	1400 Series	1500 Series	Jacoby-Tarbox	Penberthy
Plain	1420FJP	1520FJP	1470FJP	1570FJP	910-F(NF)	SF-F
Propeller	1421FJP	1521FJP	1471FJP	1571FJP	960-F	SFR-F
Flapper	1422FJP	1522FJP	1472FJP	1572FJP	910-F	SFF-F
Drip Tube	1423FJP	1523FJP	1473FJP	1573FJP	608-F	SFD-F

Flanged BULL'S EYE

Flanged models conform to standard ANSI mounting dimensions. All models have 150lb. raised-face flanges. Sizes range from 1" to 12".



General Dimensions for Flanged Ends (1" to 4")

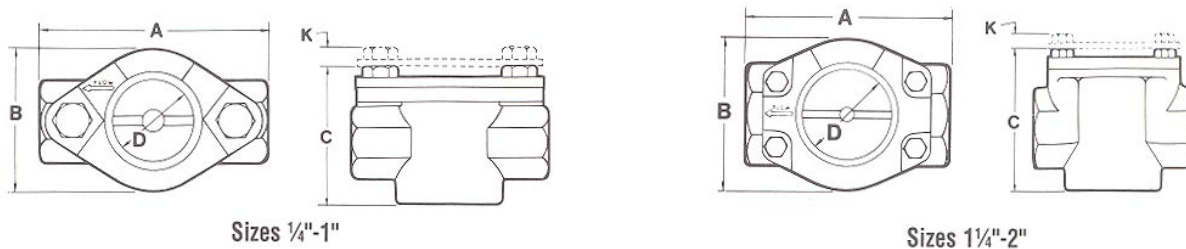
Size of BULL'S EYE	1"	1-1/2"	2"	3"	4"
A Overall Length	5"	6-1/2"	7"	8"	9"
D Dia. Of Sight Opening	1-1/2"	2"	2"	3"	3"
E Flange Diameter	4-1/4"	5"	6"	7-1/2"	9"
F Bolt Circle Dia.	3-1/3"	3-7/8"	4-3/4"	6"	7-1/2"
G No. Bolt Holes & Size	(4) 5/8"	(4) 5/8"	(4) 3/4"	(4) 3/4"	(8) 3/4"
H Dia. Of Raised Face	2"	2-7/8"	3-5/8"	5"	6-3/16"
J Thickness of Flange	15/32"	19/32"	11/16"	13/16"	1"
Total Weight	5.4 lbs	11.1 lbs	15 lbs	29.3 lbs	35 lbs

General Dimensions for Flanged Ends (6" to 12")

Size of BULL'S EYE	6"	8"	10"	12"
A Overall Length	14-1/4"	16-1/8"	16-1/8"	17-1/8"
B Dia. of Raised Face	8-1/2"	10-5/8"	12-3/4"	15"
C Dia. of Flange	11"	13-1/2"	16"	19"
D Thickness of Flange (includes raised face)	1"	1-1/8"	1-3/16"	1-1/4"
E Number of Bolts	8	8	12	12
F Size of Bolt Holes	3/4"	3/4"	7/8"	7/8"
G Dia. of Sight Opening	4"	4"	4"	4"
H Dia. of Bolt Circle	9-1/2"	11-3/4"	14-1/4"	17"
Total Weight	85 lbs	125 lbs	165 lbs	250 lbs

Threaded BULL'S EYE

Threaded-end models are offered in standard NPTF sizes for pipe from 1/4" to 2".



General Dimensions for Threaded BULL'S EYE

	Size of BULL'S EYE	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
A	Overall Length	3-1/4*	3-1/4*	3-1/4*	4-1/4**	4-1/4	5-1/4***	5-1/4***	5-1/2***
B	Overall Width	2	2	2	2-9/16	3-5/16	3-5/16	3-5/16	3-5/16
C	Overall Height (1400 Series)	2-3/8	2-3/8	2-3/8	3-1/4	3-1/4	4-5/16	4-5/16	4-5/16
	Overall Height (1500 Series)	2-9/16	2-9/16	2-9/16	3-7/16	3-7/16	A4-1/2	4-1/2	4-1/2
D	Dia. of Sight Opening	1-1/8	1-1/8	1-1/8	1-1/2	1-1/2	2	2	2
K	Added Height Due To Shield	7/16	7/16	7/16	1/2	1/2	1/2	1/2	1/2
	Total Weight	1.6 lbs	1.6 lbs	1.4 lbs	3.0 lbs	2.7 lbs	8.4 lbs	7.9 lbs	6.6 lbs

* Stainless Steel Units are 53 5/8"

** Bronze Units are 4 1/8"

*** Stainless Steel Units are 5 5/8"

MODEL NUMBER DESIGNATION

	10E	04	05	06	07	08	09
Series							
1400		14					
1500		15					
Metal							
Carbon Steel			2				
Bronze			3				
316 SS			7				
Ductile Iron (Note 2)			8				
Indicator (Note 3)							
Plain				0			
Propeller				1			
Flapper				2			
Drip Tube				3			
Connections							
Threaded					1		
Flanged					2		
FJP Flanges (Note 4 & 5)					3		
Size							
<u>Threaded</u>							
1/4"							A
3/8"							B
1/2"							C
3/4"							D
1"							E
1-1/4"							F
1-1/2"							G
2"							H
<u>Flanges (Note 1)</u>							
3/4"							D
1"							E
1-1/2"							G
2"							H
3"							J
4"							K
6"							L
8"							M
10"							N
12"							P
Seals							
Neoprene (Standard)							N
Viton							V
Teflon							T
Buna-N							B
EPT							E

Note 1: Carbon Steel & 316 SS flanged units with Propeller not available in size 6" & up.

Note 2: Ductile Iron flanged units only available in 3" & 4" sizes.

Note 3: Propeller & Flapper standard material in Delrin for all sizes except 6 to 12" flanged units --- use Teflon.

Note 4: FJP Flanges are only available in sizes 3/4, 2, 3 & 4"

Note 5: FJP Flanges only available in Carbon Steel or 316 SS.

Notes

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