



JACOBY-TARBOX®

A Product Line of The Clark-Reliance Corporation

Over 80 years of Quality!

Full-View Sight Flow Indicator Flanged Bulls-Eye Models 150 ASME Class

Section: T100
Bulletin: T100.20
Date: 8/03
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Jacoby-Tarbox's full ASME rated line of flanged bulls-eye sight flows have been engineered per the design criteria of the ASME B31.1 & 31.3 Power & Chemical Piping Codes, incorporating all ASTM listed materials for the pressure retaining components: bodies, fasteners, and retainers. This standard-setting group of features include full ASME code compliance with regards to yield criteria, materials, and pressure/temperature ratings.

STANDARD FEATURES

- Connections per ASME B16.5, B16.24, and B16.1
- Standard fasteners per ASTM A354 and ASTM A194 complying with most piping specifications.
- Tempered borosilicate glass
- Units are machined and assembled in an ISO-9001 fully automated facility.
- Wetted components meet NACE MR-01-75 requirements
- Stainless steel engraved identification faceplate

FULL-VIEW VISIBILITY

Pipeline view is maximized, in most cases with a diameter that is equal to the nominal pipe size, allowing 100% unobstructed process observation of gases, solids, solutions, and slurries.

CAPACITY

Non-Rotor models offer minimized pressure drops with their non-restricting, smooth, full-bore construction.

APPLICATIONS

Jacoby-Tarbox ASME flanged units are ideal for piping, process, and mechanical engineers that wish to maintain full ASME compliance within their pipelines. Refining, chemical, power, and pharmaceutical industries are just a few areas of Jacoby Tarbox's successful code applications. O.E.M.'s specify this series when maximum reliability in harsh operating service is desired.

INDICATOR OPTIONS:

Plain: These units are bi-directional and may be placed in any orientation. Used primarily in processes where spot indication is desired to detect presence of media, or to inspect color, clarity, turbidity, or other critical characteristics.

Drip Tube: Low, intermittent flows are easily detected with this uni-directional style in the horizontal or vertically downwards direction. The drip tube forces the process to collect on the lower lip of the 316 SS tube, allowing it to visibly drip downward.

Flapper: This unit employs a 316 SS hinged weighted flapper to indicate flow of media. The velocity of the flow is indicated by the position of the flapper. Uni-directional, these units are optimal for horizontal or vertically upward flows.

Flutter: The TFE flutter allows for easy uni-directional indication of low flowing gases and liquids. The thin, ribbon type flutter curls into the pipeline, vibrating at the slightest presence of gas or liquid movement. The flow of the media is indicated by the intensity of the fluttering against the window of the unit.

Rotor: The TFE rotor allows for easy bi-directional, multi-orientational flow indication. The speed of the rotor indicates the relative velocity of the media. Ideal for opaque liquids or heavy gases for an easily contrasting detection at far viewing distances. Extra durable stainless rotors are available as an option.



Model 910-FA (NF) Plain

INDICATOR OPTIONS



• Model 608-FA Drip



• Model 910-FA Flapper



• Model 910-FA-FLTR Flutter



• Model 935-FA Rotor

DIMENSIONAL DATA

| 608-FA, 910-FA, 910-FA(NF), 910-FA-FLTR, 935-FA | | | | | | | | | |
|---|-----|-------|-----|-------|-----|-------|-----|-------------|-------|
| NOM. SIZE | | A | | B | | C | | APPROX. WT. | |
| IN | DN | IN | mm | IN | mm | IN | mm | LBS. | KGS. |
| 1/2 | 15 | 4.62 | 118 | 1.12 | 28 | 4.25 | 108 | 6 | 2.7 |
| 3/4 | 20 | 4.62 | 118 | 1.12 | 28 | 4.25 | 108 | 6 | 2.7 |
| 1 | 25 | 5.62 | 143 | 1.25 | 32 | 4.50 | 114 | 8 | 3.6 |
| 1-1/2 | 40 | 6.50 | 165 | 2.00 | 51 | 6.06 | 154 | 15 | 6.8 |
| 2 | 50 | 7.88 | 200 | 2.00 | 51 | 6.31 | 160 | 22 | 10.0 |
| 2-1/2 | 65 | 9.38 | 238 | 3.19 | 81 | 8.44 | 214 | 44 | 20.0 |
| 3 | 80 | 9.38 | 238 | 3.19 | 81 | 8.44 | 214 | 44 | 20.0 |
| 4 | 100 | 11.00 | 279 | 4.38 | 111 | 10.75 | 273 | 67 | 30.4 |
| 6 | 150 | 14.25 | 362 | 6.88 | 175 | 14.25 | 362 | 120 | 54.4 |
| 8 | 200 | 16.12 | 410 | 8.25 | 210 | 17.50 | 444 | 230 | 104.3 |
| 10 | 250 | 24.75 | 630 | 11.00 | 279 | 22.75 | 578 | 405 | 183.7 |
| 12 | 300 | 25.75 | 654 | 11.00 | 279 | 22.75 | 578 | 460 | 208.7 |
| 14 | 350 | 26.75 | 679 | 11.00 | 279 | 26.00 | 660 | 505 | 229.0 |
| 16 | 400 | 26.75 | 679 | 11.00 | 279 | 26.00 | 660 | 555 | 251.7 |

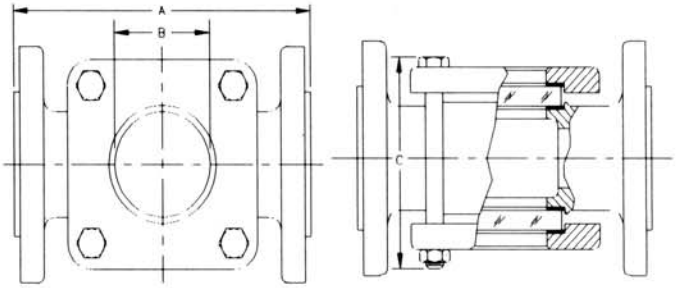
| 960-FA | | | | | | | | | |
|-----------|-----|-------|-----|------|-----|-------|-----|-------------|-------|
| NOM. SIZE | | A | | B | | C | | APPROX. WT. | |
| IN | DN | IN | mm | IN | mm | IN | mm | LBS. | KGS. |
| 1/2 | 15 | 4.62 | 118 | 1.12 | 28 | 4.25 | 108 | 6 | 2.7 |
| 3/4 | 20 | 4.62 | 118 | 1.12 | 28 | 4.25 | 108 | 6 | 2.7 |
| 1 | 25 | 5.50 | 140 | 1.25 | 32 | 4.50 | 114 | 10 | 4.5 |
| 1-1/2 | 40 | 6.88 | 175 | 2.00 | 51 | 6.06 | 154 | 18 | 8.1 |
| 2 | 50 | 8.12 | 206 | 2.50 | 64 | 7.06 | 179 | 28 | 12.7 |
| 2-1/2 | 65 | 10.00 | 254 | 3.19 | 81 | 9.19 | 233 | 62 | 25.4 |
| 3 | 80 | 10.00 | 254 | 3.19 | 81 | 9.19 | 233 | 62 | 25.4 |
| 4 | 100 | 11.75 | 298 | 4.38 | 111 | 11.75 | 299 | 94 | 42.6 |
| 6 | 150 | 15.00 | 381 | 6.88 | 175 | 15.00 | 381 | 160 | 72.5 |
| 8 | 200 | 21.38 | 543 | 6.50 | 165 | 17.00 | 432 | 314 | 142.7 |

Reduce "A" dimension above by 1/8 IN (3mm) for Bronze and Iron

PRESSURE/TEMPERATURE RATINGS

| ASME CLASS PRESSURE/TEMP. RATINGS | | | | | |
|-----------------------------------|------------|-------------------------|------------|------------|------------|
| TEMP °F | TEMP °C | 150 CLASS : psig (Barg) | | | |
| | | STEEL | 316 SS | BRONZE | IRON |
| -20 TO 100 | -29 TO 38 | 285 (20.3) | 275 (18.9) | 225 (15.5) | 200 (13.8) |
| 150 | 65 | 270 (18.6) | 260 (17.9) | 225 (15.5) | 200 (13.8) |
| 200 | 93 | 260 (17.9) | 240 (16.6) | 210 (14.5) | 190 (13.1) |
| 250 | 121 | 245 (16.9) | 230 (15.9) | 195 (13.4) | 175 (12.0) |
| 300 | 149 | 230 (15.8) | 215 (14.8) | 180 (12.4) | 165 (11.4) |
| 350 | 177 | 215 (14.8) | 205 (14.1) | 165 (11.4) | 150 (10.3) |
| 400 | 204 | 200 (13.8) | 195 (13.4) | 150 (10.3) | 140 (9.7) |
| 450 | 232 | 185 (12.8) | 180 (12.4) | N/R | N/R |
| 500 | 260 | 170 (11.7) | 170 (11.7) | N/R | N/R |

| GASKET OPERATING TEMPERATURES | | |
|-------------------------------|--------------|--------------|
| MATERIAL | DEGREES F | DEGREES C |
| NEOPRENE | -20 TO 250 | -29 TO 121 |
| FIBER (NON-ASB) | -40 TO 550 | -40 TO 287 |
| VITON® A | -65 TO 350 | -52 TO 177 |
| SILICONE | -80 TO 450 | -62 TO 232 |
| GRAPHITE (OXY PRESENT) | -328 TO 932 | -200 TO 500 |
| GRAPHITE (STEAM) | -328 TO 1200 | -200 TO 648 |
| GRAPHITE (OXY FREE) | -328 TO 5432 | -200 TO 3000 |
| BUNA-N | -20 TO 250 | -29 TO 121 |
| EPDM | -20 TO 250 | -29 TO 121 |
| TFE/NEO | -20 TO 250 | -29 TO 121 |
| TFE/FIBER | -40 TO 450 | -40 TO 232 |
| TFE (GYLON®) | -325 TO 500 | -198 TO 260 |



Construction and Materials

- Body:** Steel: ASTM A216 WCB
316 SS: ASTM A351 CF8M
Bronze: ASTM B61/B62
Iron: ASTM A126 Class B
Optional Alloys: Hastelloy®, Inconel®, 304SS, Alloy 20, Monel®, "L" Grade SS, others upon request
- Retainer:** Steel: ASTM A216 WCB/A516 Gr. 70
Options: ASTM A351-CF8M/A240 (316 SS)
- Fasteners:** Steel: ASTM 354-BD/A194-2H
Options: ASTM A193 B8M CL2 (316 SS)
ASTM A194-8M (316 SS)
Special trim required above 800°F (Inquire at Factory)
- Connections:** Steel: ASME B16.5 150 RF
316 SS: ASME B16.5 150 RF
Bronze: ASME B16.24 150 RF
Iron: ASME B16.1 125 FF
Options: DIN PN 10/16 / JIS 10K / MIL-F/RTJ / FF / 125-250 Ra / <125 Ra
- Windows:** Tempered Borosilicate
Options: Quartz (above 500°F)
Shields: UniShield® Window Protection, Mica, PFA Teflon®, Kel-F®
- Seal Gasket:** Neoprene - See Table for Options
- Cushion:** Compressed Fiber (Non-Asbestos)
- Options & Accessories:**
3-Way Connections, Side FNPT Probe Taps, Steam Jackets, Epoxy and Offshore Coating Systems, Frost-Free Extensions, Spray Rings, Explosion-Proof Illuminators, Ball Type Indicator, External Impact Shields
- Linings:** Teflon®, Tefzel®, PVC, Kynar®, Rubber
- Safety Window Options (Full ANSI Rated)**
- FM® Approved Dual Borosilicate
 - UniGlas®
 - Dual UniGlas®

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JACOBY-TARBOX®

A Product Line of The Clark-Reliance® Corporation
16633 Foltz Industrial Parkway, Strongsville, OH 44149 USA
Telephone: (440) 572-1500 Fax: (440) 238-8828

