



# USMANI

TUBES & VALVES CO. PVT. LTD



FS GATE VALVES API 600  
Class 800 / 150 / 300 / 600



FS GATE VALVES API 602  
800 SCREWED END  
SOCKET WELD  
FLANGED END

True Definition of Safety & Reliability

Manufacturers Of Industrial Valves

[www.usmanivalve.com](http://www.usmanivalve.com)

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## FORGED GATE VALVE CLASS 800/150/300/600 SCREWED / SOCKET WELD / FLANGED

### MATERIAL SPECIFICATIONS

| NO. | Part Name               | Material                                      |                 |       |
|-----|-------------------------|-----------------------------------------------|-----------------|-------|
| 1.  | Body                    | A 105                                         | F 304           | F 316 |
| 2.  | Bonnet                  | A 105                                         | F 304           | F 316 |
| 3.  | Wedge                   | 13%Cr                                         | T304            | T316  |
| 4.  | Seat                    | 13%Cr                                         | T304            | T316  |
| 5.  | Spindle                 | T410                                          | T304            | T316  |
| 6.  | Gland Bush              | T410                                          | T304            | T316  |
| 7.  | Gland Flange            | A 105                                         | F 304           |       |
| 8.  | Yoke Nut                | ASTM A 439 Gr.D2/ AL- BRONZE                  |                 |       |
| 9.  | Hand Wheel              | CAST STEEL                                    |                 |       |
| 10. | Hand Wheel Nut          | Gr. 2H                                        |                 |       |
| 11. | Collar Bolt/ Stud & Nut | B7/ 2H                                        | B8/ 8 OR B7/ 2H |       |
| 12. | Eye Bolt & Nut          | B7/ 2H                                        | B8 / 8          |       |
| 13. | Gasket                  | SPW S.S 304/316 WITH CAF/GRAFOIL              |                 |       |
| 14. | Gland Packing           | GRAPHITE ASBESTOS INHIB. & INCONEL WIRE REIN. |                 |       |
| 15. | Screw / Rivet & Washer  | STEEL                                         |                 |       |
| 16. | Bearing Washer          | HARDENED STEEL                                | T304            | T316  |
| 17. | Name Plate              | ALUMINUM /SS                                  |                 |       |

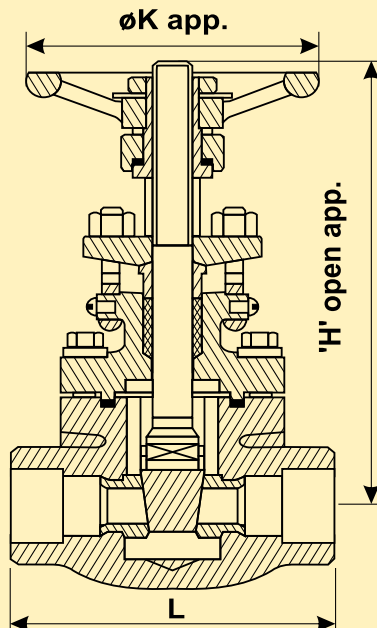


FIG:U-86FX

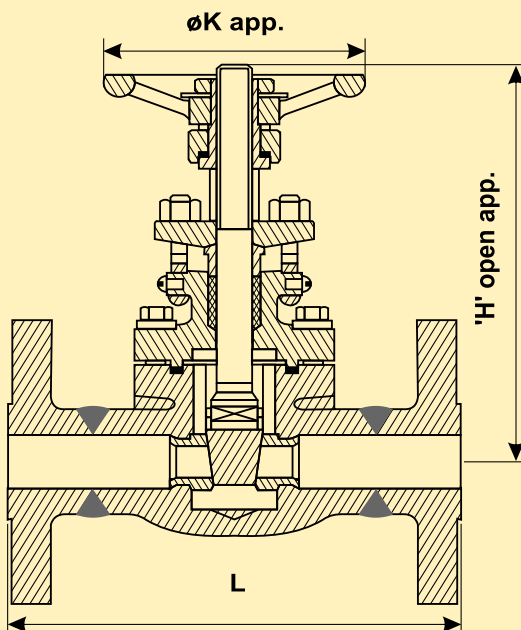


FIG:U-31NX U-33NX U-36NX

### DIMENSION TABLE - 800 CLASS - REDUCED BORE

| Valve Size in mm | 0.25 08 | 0.37 10 | 0.5 15 | 0.75 20 | 1 25  | 1.5 40 | 2 50    |
|------------------|---------|---------|--------|---------|-------|--------|---------|
| L                | 3.3 85  | 3.3 85  | 3.3 85 | 3.5 90  | 4 103 | 5 128  | 5.6 142 |
| 'H' app          | 165     | 165     | 165    | 175     | 215   | 270    | 285     |
| ØK app           | 95      | 95      | 95     | 95      | 105   | 150    | 150     |
| ØP               | 6.4     | 6.4     | 9.5    | 12.7    | 17.5  | 28.6   | 36.5    |
| Wt. kg app       | 2.0     | 2.0     | 2.0    | 2.5     | 3.5   | 7.5    | 9.0     |

### DIMENSION TABLE - 800 CLASS - FULL BORE

| Valve Size in mm | 0.25 08 | 0.37 10 | 0.5 15 | 0.75 20 | 1 25  | 1.5 40 |
|------------------|---------|---------|--------|---------|-------|--------|
| L                | 3.3 85  | 3.3 85  | 3.5 90 | 3.5 90  | 4 103 | 5 128  |
| 'H' app          | 165     | 165     | 175    | 175     | 220   | 270    |
| ØK app           | 95      | 95      | 95     | 95      | 105   | 150    |
| ØP               | 6.0     | 9.0     | 12.0   | 18.0    | 23.0  | 36.0   |
| Wt. kg app       | 2.0     | 2.0     | 2.5    | 3.5     | 7.5   | 7.5    |

### REF STANDARDS

|                                        |
|----------------------------------------|
| MFG. AND DESIGN :BS 5352/API 602       |
| FACE TO FACE : MG STD. / ASME B16.34   |
| INSPECTION AND TESTING:AP1 598/BS 6755 |

### DIMENSION TABLE 150 CLASS DIMENSION TABLE 300 CLASS DIMENSION TABLE 600 CLASS

#### TESTING DETAIL # 800

|                                 |          |
|---------------------------------|----------|
| Hydrotest {KG/CM <sup>2</sup> } |          |
| Shell                           | 141 K.g. |
| Seat and Back Seat              | 210 K.g. |
| Seat Air Test :                 | 7 K.g.   |

| Valve Size in mm | 0.5 15   | 0.75 20 | 1 25  | 1.5 40  |
|------------------|----------|---------|-------|---------|
| L                | 4.25 108 | 4.6 117 | 5 127 | 6.5 165 |
| 'H' app          | 165      | 175     | 215   | 270     |
| ØK app           | 95       | 95      | 105   | 150     |
| Wt. kg app       | 3.0      | 4.5     | 6.0   | 10.0    |

| Valve Size in mm | 0.5 15  | 0.75 20   | 1 25    | 1.5 40    |
|------------------|---------|-----------|---------|-----------|
| L                | 5.5 140 | 6.0 152.5 | 6.5 165 | 7.5 190.5 |
| 'H' app          | 165     | 175       | 215     | 270       |
| ØK app           | 95      | 95        | 105     | 150       |
| Wt. kg app       | 4.0     | 5.0       | 7.5     | 13.5      |

| Valve Size in mm | 0.5 15  | 0.75 20   | 1 25    | 1.5 40  |
|------------------|---------|-----------|---------|---------|
| L                | 6.5 165 | 7.5 190.5 | 8.5 216 | 9.5 241 |
| 'H' app          | 165     | 175       | 215     | 270     |
| ØK app           | 95      | 95        | 105     | 150     |
| Wt. kg app       | 4.5     | 5.5       | 8.5     | 17.5    |