

## PRESSURE REDUCING VALVE

### SPECIFICATION

Type: Pilot control valve, Working pressure: 16/25 bar.

Flanged to JIS 10/16K, BS4504 PN16/25, ANSI#150/300

- Throttles to reduce high upstream pressure to constant lower downstream pressure.
- Reducing setpoint is adjustable.

Adjustment range:

- Standard : 20 ~175 psig
- Option : 100~300 psig

### PRESSURE/TEMPERATURE RATINGS

|                    |              |
|--------------------|--------------|
| Working pressure   | 16/25 bar    |
| Testing Pressure   | 24/37.5 bar  |
| Working temperatre | -10°C ~ 80°C |

### MATERIALS

| Part           | Material            | ASTM         | BS         |
|----------------|---------------------|--------------|------------|
| Body, cover    | Ductile iron        | A536         | Gr.420/12  |
| Seat, Disc     | Staniless steel     | A240 304/410 | SUS304/410 |
| Stem, Spring   | Staniless steel     | A240 304/316 | SUS304/316 |
| Reducing valve | Brass               | B124 C37700  | 2874 CZ122 |
| Bolt/nut       | Staniless steel     | A240 304/410 | SUS304/410 |
| Fiting         | Brass               | B124 C37700  | 2874 CZ122 |
| Painting       | Epoxy power coating |              |            |

### SIZE AND FLOWER DATA

| Size(mm) | Maximum Continuous (l/s) | Maximum Intermittent (l/s) | Cv Factor (l/s) |
|----------|--------------------------|----------------------------|-----------------|
| 32       | 5.81                     | 7.26                       | 1.83            |
| 40       | 7.98                     | 9.97                       | 2.15            |
| 50       | 13.12                    | 16.41                      | 3.47            |
| 65       | 18.68                    | 23.35                      | 4.73            |
| 80       | 28.77                    | 35.97                      | 7.89            |
| 100      | 50.48                    | 63.10                      | 13.88           |
| 125      | 116.10                   | 145.13                     | 29.03           |
| 150      | 196.87                   | 246.09                     | 48.90           |
| 200      | 302.88                   | 378.60                     | 75.72           |
| 250      | 434.13                   | 542.66                     | 109.16          |
| 300      | 530.04                   | 662.55                     | 132.51          |
| 400      | 706.72                   | 883.40                     | 176.68          |

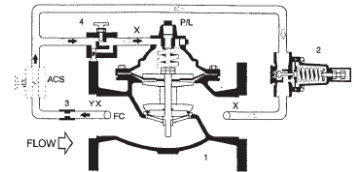
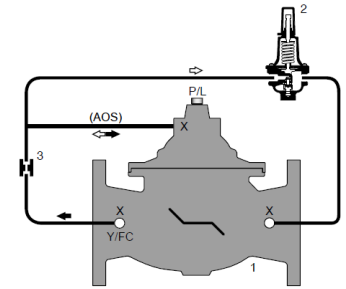
Note:

1. Maximum continuous flow based on velocity of 8.66 psi. Per second.
2. Maximum intermitent flow based on velocity of 10.82 psi. Per sesond.
3. The Cv factor of a valve is the flow rate in (l/s) at 60° F that will cause a 1psi drop in pressure.
4. The factors stated are based upon a fully open valve.
5. Cv factor can be used in the following equations to determine Flow (Q) and Pressure Drop (ΔP)
6. Pressure Drop :  $\Delta P = (Q/Cv)^2$ , Q: Flow Rate., Cv: Cv Flactor (l/s)

Fig. 10-02

PN16/25

DN 32-400



### STANDARDS COMPONENTS

1. Main valve
2. Pressure Reducing Control
3. Fixed Orifice

### OPTIONS and ACCESSORIES

- X- Isolation valve
- FC- Flo Clean Strainer
- Y- Y Strainer
- AOS- Adjustable Opening Speed
- P- Position Indicator
- L- Limit Switch