



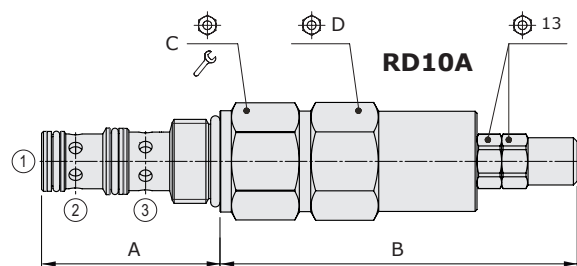
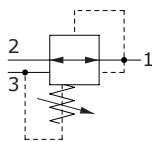
## RD..A type pressure reducing valves - 3 way

- Direct acting
- With relieving
- Spool type
- From SAE08 to SAE10 cavities

Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C (104°F) temperature.

|  |                                  | RD08A   | RD10A  |
|--|----------------------------------|---|--|
| Nominal flow                               |                                  | 8 l/min (2.1 US gpm)  | 30 l/min (7.9 US gpm)                                  |
| Max. pressure                              |                                  |   | line 1=150 bar (2175 psi)<br>line 2=350 bar (5100 psi) |
| Oil leakage                                | at 100 bar (1450 psi)            | 10 cm <sup>3</sup> /min (0.61 in <sup>3</sup> /min)                     | 40 cm <sup>3</sup> /min (2.44 in <sup>3</sup> /min)    |
| Fluid                                      |                                  | mineral based oil   |  |
| Viscosity                                  |                                  | 10-200 cSt  |  |
| Max level of contamination                 |                                  | 20/18/14 ISO4406  |  |
| Fluid temperature                          | with NBR seals<br>with FPM seals | from -20°C (-4°F) to 80°C (176°F)<br>from -20°C (-4°F) to 100°C (212°F) |  |
| Environmental temp. for working conditions |                                  | from -20°C (-4°F) to 50°C (122°F)                                       |  |
| Cavity                                     |                                  | SAE 08/3  | SAE 10/3   |
| Weight                                     |                                  | 0.240 kg (0.53 lb)  | 0.360 kg (0.79 lb)                                     |

NOTE - For different conditions, please contact Walvoil Sales Dpt.

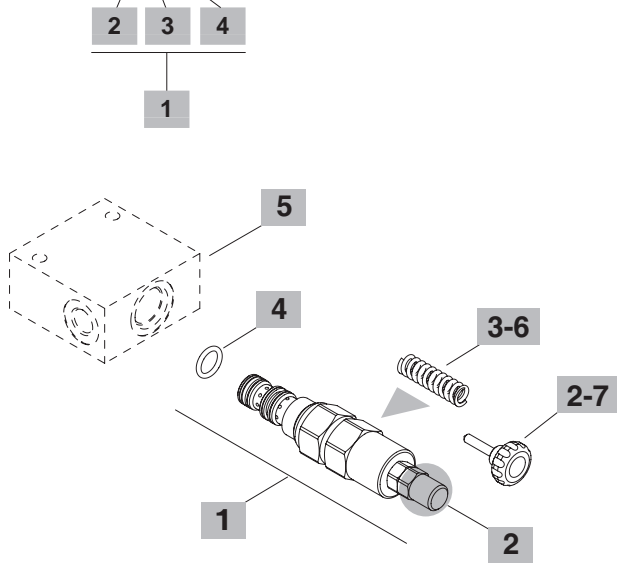


| Valve type | A    |      | B    |      | C  | D  | Nm | lbft |
|------------|------|------|------|------|----|----|----|------|
|            | mm   | in   | mm   | in   |    |    |    |      |
| RD08A/OS   | 40.8 | 1.60 | 79.5 | 3.13 | 24 | 24 | 30 | 22   |
| RD10A/OS   | 47.2 | 1.86 | 94.5 | 3.72 | 27 | 27 | 50 | 37   |

For dimensions with different type of adjustment see page 212

### Ordering codes and description composition

#### RD08A/OS2B



#### 1 Cartridges

| TYPE                   | CODE        | DESCRIPTION                        |
|------------------------|-------------|------------------------------------|
| <b>SAE cavity 08/3</b> |             |                                    |
| RD08A/OS1B             | ORD08002003 | Screw adjustment, pressure range 1 |
| RD08A/OS2B             | ORD08002005 | Screw adjustment, pressure range 2 |
| RD08A/OS3B             | ORD08002000 | Screw adjustment, pressure range 3 |
| <b>SAE cavity 10/3</b> |             |                                    |
| RD10A/OS1B             | ORD10002003 | Screw adjustment, pressure range 1 |
| RD10A/OS2B             | ORD10002001 | Screw adjustment, pressure range 2 |
| RD10A/OS3B             | ORD10002000 | Screw adjustment, pressure range 3 |

#### 2 Adjustments

| TYPE | DESCRIPTION                |
|------|----------------------------|
| S    | Screw                      |
| V    | With handwheel see point 7 |

#### 3 Pressure range

Standard setting is referred to at 5 l/min (1.32 US gpm) flow

| TYPE | DESCRIPTION  |
|------|--|
| 1    | Pressure range 5÷50 bar (72.5÷725 psi);<br>Std. setting 30 bar (435 psi)     |
| 2    | Pressure range 20÷100 bar (290÷1450 psi);<br>Std. setting 50 bar (725 psi)   |
| 3    | Pressure range 50÷150 bar (725÷2175 psi);<br>Std. setting 100 bar (1450 psi) |

#### 4 Seals

| TYPE | DESCRIPTION  |
|------|--|
| B    | <b>NBR (Buna)</b> o-ring seals, std configuration    |
| V    | <b>FPM (Viton)</b> o-ring seals, contact Sales Dept. |

#### 5 Valve body

| TYPE                  | CODE       | DESCRIPTION   |
|-----------------------|------------|---|
| <b>SAE 08/3-G 1/4</b> | 3CC0830B11 | Aluminium body for cavity 08 valve,<br>G 1/4 std thread |
| <b>SAE 10/3-G 3/8</b> | 3CC1030C11 | Aluminium body for cavity 10 valve,<br>G 3/8 std thread |

Note: aluminium body can stand up to 210 bar (3050 psi)  
For steel bodies or different threading see page 217

#### 6 Springs

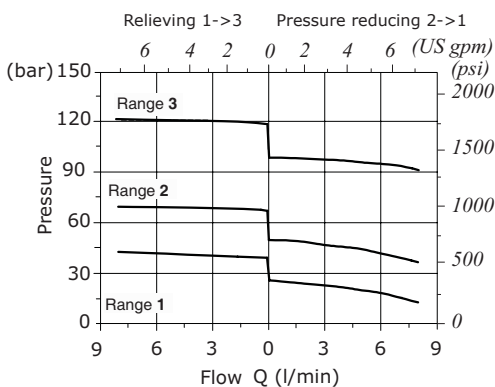
| TYPE                   | CODE       | DESCRIPTION                   |
|------------------------|------------|-------------------------------|
| <b>SAE cavity 08/3</b> |            |                               |
| 1                      | 3ML1103600 | Pressure range 1 - no band    |
| 2                      | 3ML1103601 | Pressure range 2 - no band    |
| 3                      | 3ML1104000 | Pressure range 3 - no band    |
| <b>SAE cavity 10/3</b> |            |                               |
| 1                      | 3ML1144601 | Pressure range 1 - green band |
| 2                      | 3ML1144602 | Pressure range 2 - blue band  |
| 3                      | 3ML1144603 | Pressure range 3 - red band   |

#### 7 Accessories

| TYPE | CODE       | DESCRIPTION |
|------|------------|-------------|
| -    | 4VL2407100 | handwheel   |

### Rating diagrams

RD08A reducing/relieving pressure vs. flow



RD10A reducing/relieving pressure vs. flow

