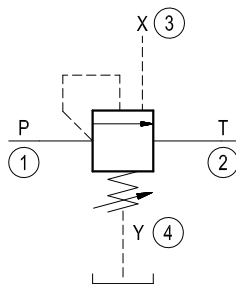
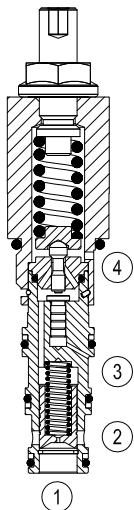


# Priority unloading pilot operated

Special cavity, 308

VMSP-78

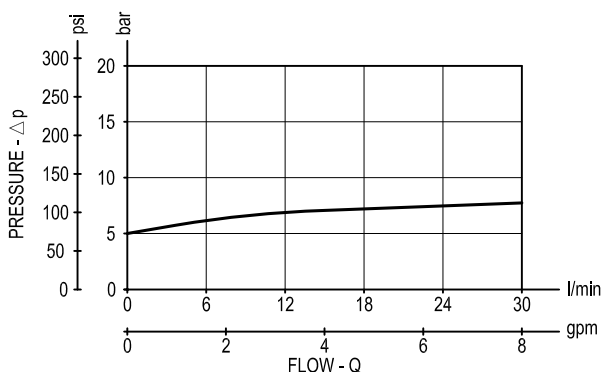
04.75.10 - X - 99 - Z



## Description

Flow is blocked from 1 to 2 until pressure increases to meet the selected valve setting, lifting the small, pilot-stage poppet from its seat. This action exhausts oil above the main-stage piston (spool type), allowing it to shift fully and unload flow from 1 through 2 with minimal pressure drop. Similarly, when remote pilot pressure at 3 exceeds the pressure setting, a secondary piston lifts the pilot-stage poppet from its seat, again exhausting fluid from 1 through 2. The spring chamber is drained to tank at 4. Any pressure at 4 will be additive to the valve setting.

## Performance



## Technical data

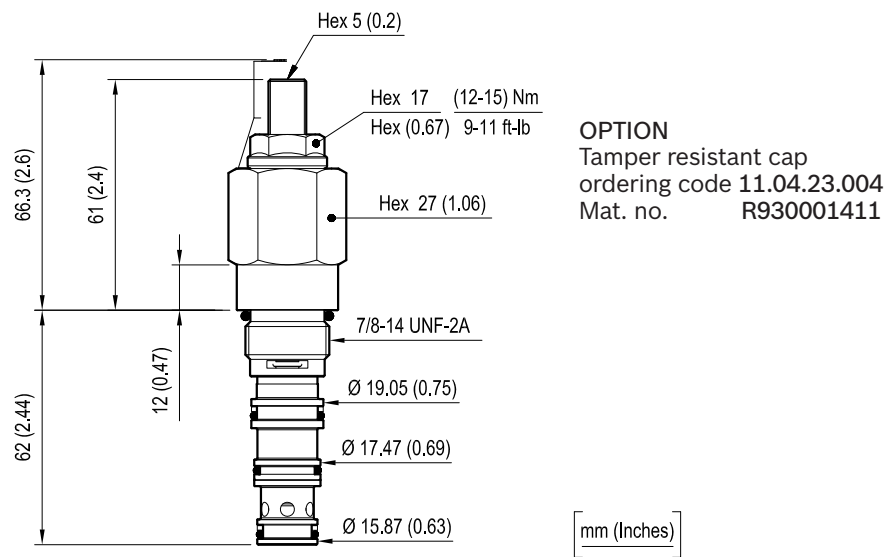
|                                  |                                     |                                                                                                              |
|----------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Max. operating pressure port 1-3 | bar (psi)                           | 350 (5000)                                                                                                   |
| Max. pressure admitted port 2    | bar (psi)                           | 210 (3000)                                                                                                   |
| Flow range                       | l/min. (gpm)                        | 5-30 (1.3-8)                                                                                                 |
| Max. internal leakage (*)        | cm <sup>3</sup> /min. (cu.in./min.) | 25 (1.5)                                                                                                     |
| Fluid temperature range          | °C (°F)                             | -30 to 100 (-22 to 212)                                                                                      |
| Installation torque              | Nm (ft-lbs)                         | 41-47 (30-35)                                                                                                |
| Weight                           | kg (lbs)                            | 0.28 (0.62)                                                                                                  |
| Special cavity                   |                                     | 308<br>see data sheet RE 18325-75                                                                            |
| Seal kit (**)                    | code material no.                   | RG0308010520100<br>R930005801                                                                                |
| Fluids                           |                                     | Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm <sup>2</sup> /s (cSt) |
| Filtration                       |                                     | Nominal value max. 10µm (NAS 8)<br>ISO 4406 19/17/14                                                         |
| Installation                     |                                     | No restrictions                                                                                              |
| Other general technical data     |                                     | See data sheet RE 18350-50                                                                                   |

(\*) Measured at 200 bar (2900 psi)

(\*\*) Only external seals for 10 valves

Setting is performed pressurizing "X" port.

Dimensions



Ordering code

|          |   |    |   |    |   |
|----------|---|----|---|----|---|
| 04.75.10 | X | 99 | Z | 00 | * |
|----------|---|----|---|----|---|

Priority unloading, pilot operated

Differential unload / reload  
= 03 Re-seat at (85 ± 2.5) % of pressure setting

Special cavity, 308  
(old code cartridge style)

Series 0/A to L  
unchanged performances and dimensions

Version and options standard

| SPRINGS |                                |                                           |                                        |
|---------|--------------------------------|-------------------------------------------|----------------------------------------|
|         | Adj. press. range<br>bar (psi) | Press. increase<br>bar/turn<br>(psi/turn) | Std. setting<br>bar (psi)<br>Q=5 l/min |
| = 10    | 7-105 (100-1500)               | 26 (377)                                  | 70 (1000)                              |
| = 20    | 90-210 (1300-3000)             | 31 (450)                                  | 120 (1750)                             |
| = 35    | 150-350 (2200-5000)            | 105 (1523)                                | 200 (2900)                             |

**Note:** Special settings available. Contact factory  
authorized representative for ordering code

| Type            | Material number |
|-----------------|-----------------|
| 04751003991000D | R930005772      |
| 04751003992000D | R930005779      |
| 04751003993500C | R930005780      |
|                 |                 |
|                 |                 |

| Type | Material number |
|------|-----------------|
|      |                 |
|      |                 |
|      |                 |
|      |                 |