

# Priority unloading pilot operated

## Common cavity, Size 10

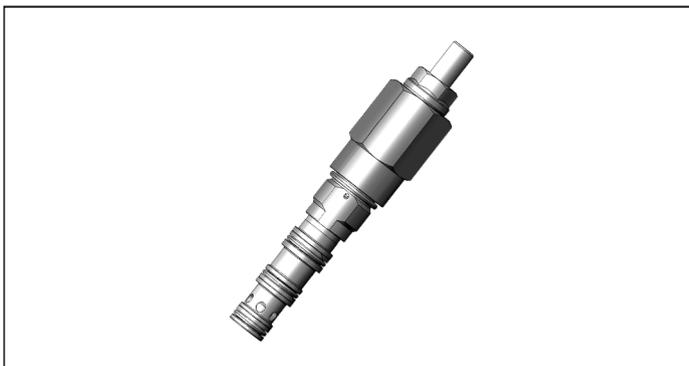
VMSP-78

04.75.10 - X - 99 - Z

**RE 18318-17**

Edition: 03.2016

Replaces: 11.2015

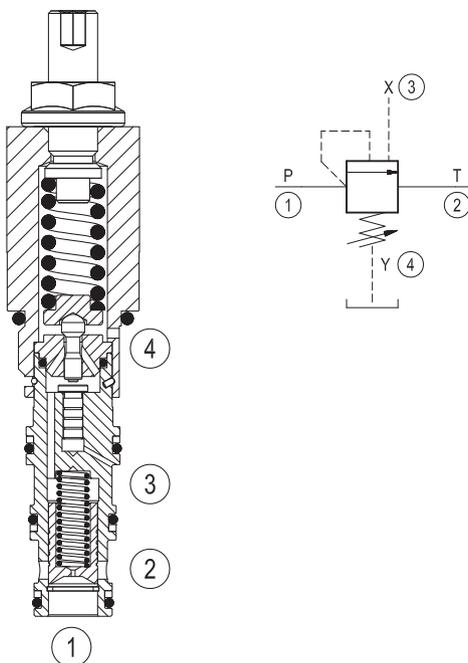


### Technical data

Max. operating pressure port 1-3	350 bar (5000 psi)
Max. pressure admitted port 2	210 bar (3000 psi)
Flow range	5 - 30 l/min (1.3 - 8 gpm)
Max. internal leakage <sup>1)</sup>	25 cm <sup>3</sup> /min. (1.5 cu.in./min.)
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	41 - 47 Nm (30 - 35 ft-lbs)
Weight	0.28 kg (0.62 lbs)
Cavity	CA-10A-4N (see data sheet 18325-70)
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit <sup>2)</sup>	Code: RG0308010520100 material no: R30005801
Fluids	Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm <sup>2</sup> /s (cSt)
Recommended degree of fluid contamination	Nominal value max. 10µm (NAS 8) / ISO 4406 19/17/14
Installation position	No restrictions
Other Technical Data	See data sheet 18350-50

### 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.

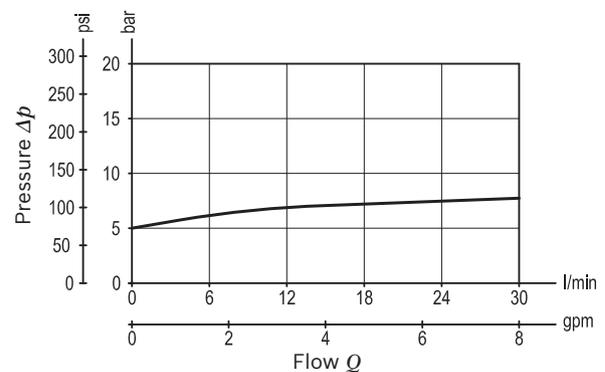


1) Measured at 200 bar (2900 psi)

2) Only external seals for 10 valves

Setting is performed pressurizing "X" port.

### Characteristic curve



**Ordering code**

<b>04.75.10</b>	<b>X</b>	<b>99</b>	<b>Z</b>	<b>00</b>	<b>*</b>
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Priority unloading pilot operated

Differential unloading / reload

**03** Re-seat at (85±2.5)% of pressure setting

**99** Common cavity, CA-10A-4N  
(old code cartridge style)

Series O/A to L  
unchanged performances and dimensions

Version and options standard

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

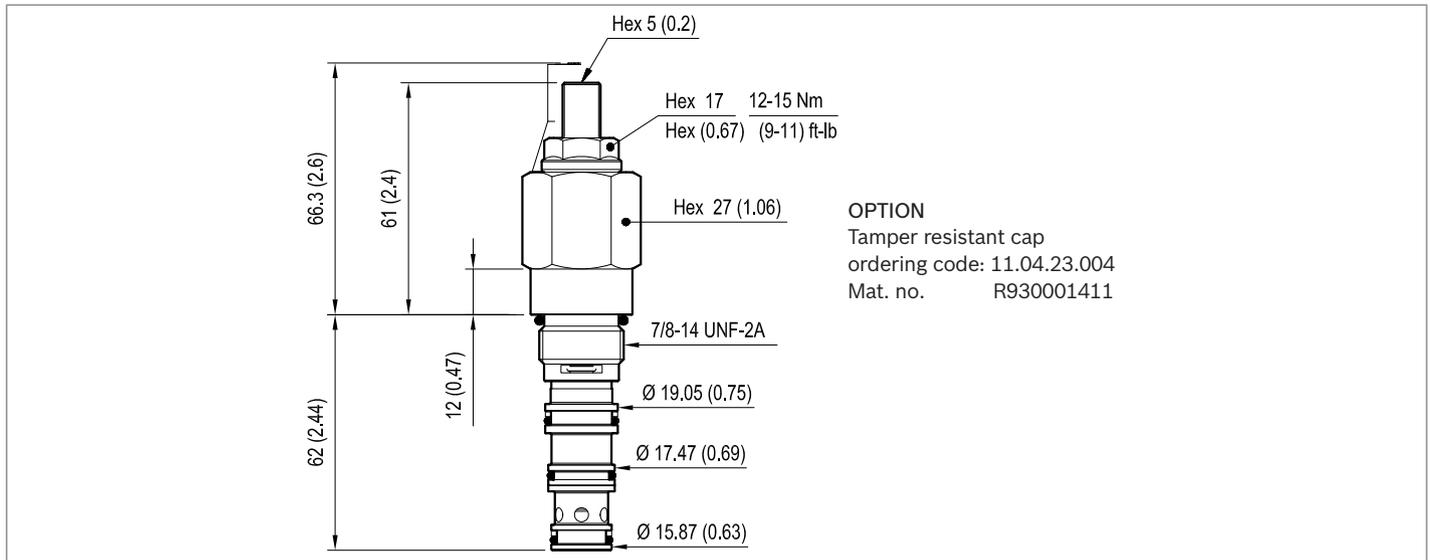
Note: Special settings available. Contact factory authorized representative for ordering code.

**Preferred types**

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

Type	Material number

**Dimensions**



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