

**DUAL OVERCENTER VALVES,  
FACE MOUNTING**

**Operation**

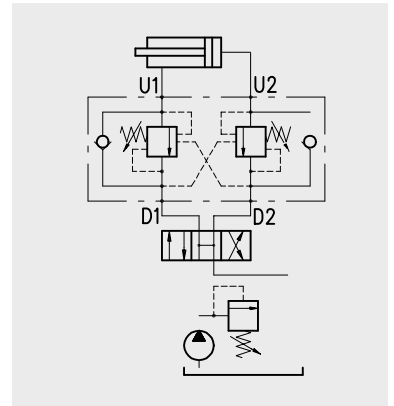
The oil flow is allowed from D1 (D2) to U1 (U2) and is stopped in the opposite way from U1 (U2) to D1 D(2) up to the spring setting value. Free oil flow from U1 (U2) to D1 D(2) is strictly possible when the pilot pressure in D2 and U2 (D1 and U1) is strong enough to pilot the valve poppet.

Use the following formula to assert the applicable pilot pressure:

$$\text{(valve setting - load pressure)} \div \text{pilot ratio} = \text{pilot pressure}$$

For example:

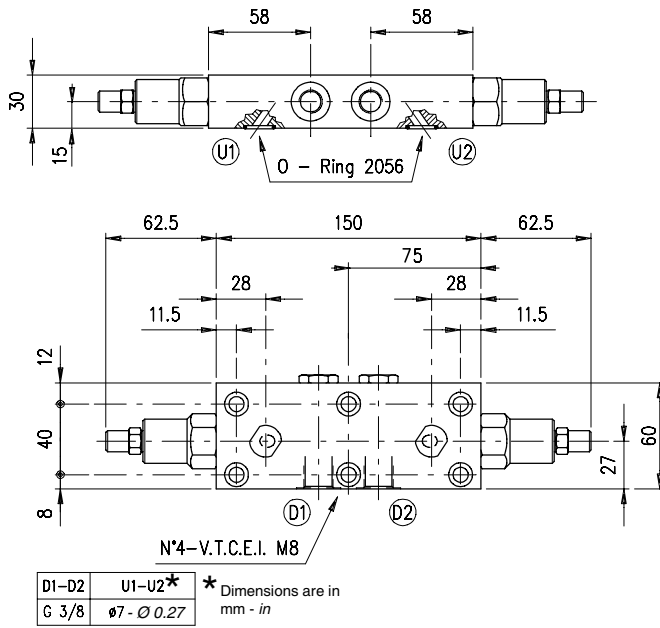
If your pilot ratio is 1:4, your setting pressure is 250 bar (3600 psi) and your load pressure is 130 bar (1900 psi) then you will need 30 bar (430 psi) pilot pressure in order to displace the load  $[(250 \text{ bar} - 3600 \text{ psi} - 130 \text{ bar} - 1900 \text{ psi}) \div 4 = 30 \text{ bar} - 430 \text{ psi}]$ . Should counterpressure arise in D1 (D2), the pilot pressure (1:1 ratio) be negatively affected. Lack of overcenter stability and troublesome motion even after complete valve assembly, will suggest that the valve application may require a PG version. Please contact our technical service for action..



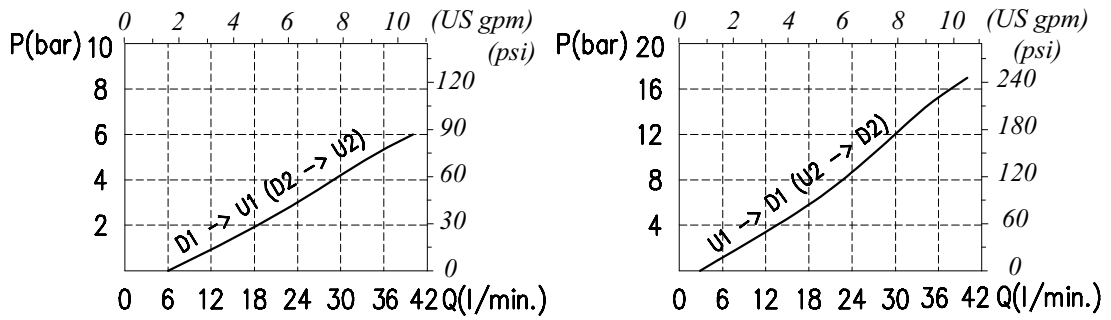
**Performance**

**Body valves**

Type	Maximum flow		Maximum pressure		Application range with standard springs	Oil leakage from U1 (U2) to D1 (D2)	Pilot ratio	Weight	
	l/min	US gpm	bar	psi				kg	lb
VODL/SC/F 38	40	11	210 (alum.)	3050 (alum.)	5÷210 bar-72.5÷3050 psi (test setting:170 bar-2500 psi at 5 l/min.-1.3 US gpm)	0,25 cm <sup>3</sup> /min -15x10 <sup>-3</sup> in <sup>3</sup> /min (5 drops) at 210 bar -3050 psi and 80% of the spring setting value with oil viscosity of 46 cSt.	1:4 (standard type) 1:3 (on request only)	1,13	2.49
					50÷350 bar-725÷5100 psi (test setting: 280 bar-4060 psi at 5 l/min.-1.3 US gpm)			aluminium	2,16
VODL/SC/F 12	75	20	350 (steel)	5100 (steel)	100÷700 bar-1450÷10150 psi (test setting 350 bar -5100 psi at 5 l/min.-1.3 US gpm)		1:7 (standard type) 1:3 (on request only)	1,47	3.24
					50÷350 bar-725÷5100 psi (test setting 280 bar -4060 psi at 5 l/min.-1.3 US gpm)			aluminium	2,89
					100÷700 bar-1450÷10150 psi (test setting 350 bar -5100 psi at 5 l/min.-1.3 US gpm)			steel	



Rating diagrams



Order code

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