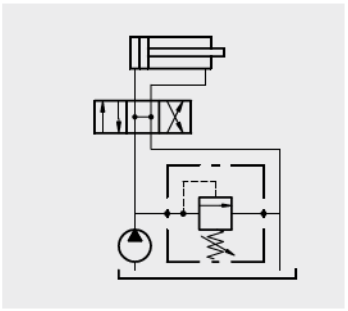
Operation

Allows oil flow from P (1) to T (2) when pressure in P (1) reaches the setting of the spring.



Performance

Body Valves

Type VMP	Maximum flow		Maximum pressure		Application range with standard spring*	Hysteresis	Oil leaks from P to T	Weight		Cavities and tools
	l/min	*US gpm*	bar	*psi*				kg	*lb*	
VMP 02	5	*1.32*	350	*5100*	**TV)** 5÷80 bar - *72.5÷1150 psi* **TS)** 50÷220 bar - *725÷ 3200 psi* **TR)** 180÷350 bar - *2600÷5100 psi*	90% of the setting value for flow capacity 1 l/min. *(0,26 US gpm)*	disregar-dable	0,05	*0.11*	Cavity VSE/ P/2/150 see page 113
VMP 5	35	*9.2*			**TB)** 5÷40 bar - *72.5÷580 psi* **TV)** 20÷80 bar - *290÷1150 psi* **TS)** 50÷220 bar - *725÷ 3200 psi* **TR)** 180÷350 bar - *2600÷5100 psi*	85% of the setting value for flow capacity 1 l/min. *(0,26 US gpm)*		0,14	*0.31*	Cavity VMP 5 see page 114
VMP 5Y					**TB)** 5÷80 bar - *72.5÷1150 psi* **TV)** 40÷150 bar - *580÷2200 psi* **TS)** 140÷190 bar - *2050÷2750 psi* **TR)** 180÷350 bar - *2600÷5100 psi*					
VMP 5J					**TV)** 40÷80 bar - *580÷1150 psi* **TS)** 63÷200 bar - *910÷2900 psi* **TR)** 160÷315 bar - *2300÷4600 psi*					
VMP 10	60	*16*			See VMP 5			0,25	*0.55*	Cavity VMP 10 see page 115
VMP 10Y	100	*26*	315	*4600*	**TV)** 100÷160 bar - *1450÷2400 psi* **TS)** 125÷250 bar - *1800÷3600 psi* **TR)** 200÷315 bar - *2900÷4600 psi*					
VMP 20	100	*26*	400	*5800*	See VMP 5			0,45	*0.99*	Cavity VMP 20 see page 116
VMP 20Y	160	*42*	315	*4600*	See VMP 10Y					
VMP 12	35	9.2	300	*4350*	5÷40 bar - *72.5÷580 psi* (test setting: 30 bar - *430 psi* at 5 l/min. *-1.32 US gpm)* 20÷100 bar - *290÷1450 psi* (test setting: 70 bar - *1010 psi* at 5 l/min. - *1.32 US gpm)* 50÷200 bar - *725÷2900 psi* (test setting: 140 bar - *2050 psi* at 5 l/min. - *1.32 US gpm)*** 100÷300 bar - *1450÷4350 psi* (test setting: 210 bar - *3050 psi* at 5 l/min. - *1.32 US gpm)***			0,20	*0.44*	Cavity VMP 12 see page 120
VMP 34	80	*21*						0,33	*0.73*	Cavity VMP 34 see page 121

***To perform setting of the valve see the pressure drop/ flow diagram**

****(Only for VMP34) when the valve is ordered by itself max adjustable pressure is 150 bar *(2200 psi)*. Cartridge may be set higher than 150 bar *(2200 psi)* when installed in the machine or into a proper body**

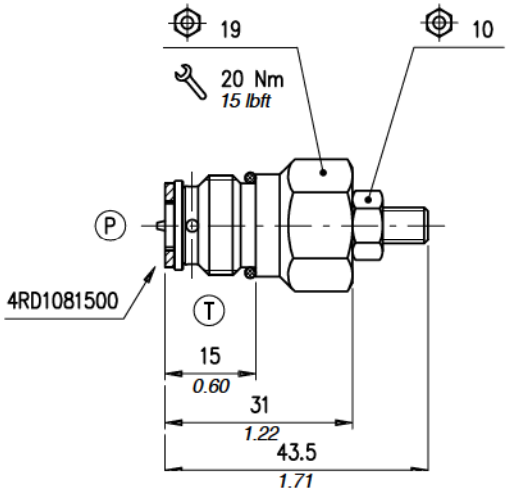
Cartridges

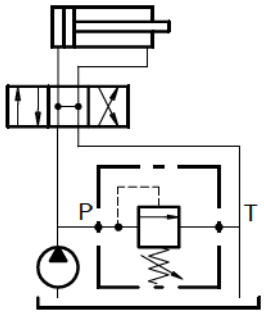
Type MC	Maximum flow		Max. pres		Application range with standard spring*	Hysteresis	Oil leaks from 1 to 2	Weight		Cavities and tools
	l/min	*US gpm*	bar	*psi*				kg	*lb*	
MC08A	10	*2.6*	350	*5100*	**1)** 5÷50 bar - *72.5÷725 psi* (test setting 30 bar - *435 psi* at 5 l/min.- *1.32 US gpm*) pressure increase by steps 11,5 bar -*165 psi* per screw turn **2)** 50÷200 bar - *725÷2900 psi* (test setting 150 bar - *2200 psi* at 5 l/min.-*1.32 US gpm*-) pressure increase by steps 31,5 bar - *450 psi* per screw turn **3)** 150÷350 bar - *2175÷5100 psi* (test setting 250 bar-*3600 psi* at 5 l/min.-*1.32 US gpm*-) pressure increase by steps 74 bar -*1070 psi* per screw turn	90% of the setting value for flow capacity 1 l/min. *-0.26 US gpm-*	disregardable	0,19	*0.42*	● see cavity SAE 8-2 page 112
MC08D	20	*5.3*			**1)** 20÷80 bar - *290÷1150 psi* (test setting 50 bar -*725 psi* at 5 l/min.-*1.32 US gpm*-) pressure increase by steps 26,6 bar - *380 psi* per screw turn **2)** 50÷200 bar - *725÷2900 psi* (test setting 150 bar - *2200 psi* at 5 l/min.-*1.32 US gpm*) pressure increase 60,3 bar - *870 psi* per screw turn **3)** 150÷350 bar - *2200÷5100 psi* (test setting 250 bar- *3600 psi* at 5 l/min.-*1.32 US gpm*) pressure increase 121,2 bar -*1750 psi* per screw turn **5)** 5÷50 bar - *72.5÷725 psi* (test setting 30 bar - *435 psi* at 5 l/min.- *1.32 US gpm*) pressure increase 11,3 bar - *160 psi* per screw turn	85% of the setting value for flow capacity 1 l/min. *-0.26 US gpm-*		0,13	*0.29*	● see cavity SAE 8-2 page 112
MC10A	40	*10.5*			**1)** 20÷100 bar - *290÷1450 psi* (test setting 50 bar - *725 psi* at 5 l/min.-*1.32 US gpm*) pressure increase 7 bar -*100 psi* per screw turn **2)** 50÷200 bar - *725÷2900 psi* (test setting 150 bar - *2200 psi* at 5 l/min.- *1.32 US gpm*) pressure increase 24 bar - *345 psi* per screw turn **3)** 150÷350 bar - *2200÷5100 psi* (test setting 250 bar - *3600 psi* at 5 l/min.- *1.32 US gpm*) pressure increase 72 bar -*1040 psi* per screw turn	90% of the setting value for flow capacity 1 l/min. *-0.26 US gpm-*		0,33	*0.73*	● see cavity SAE 10-2 page 112
MC12A	100	*26*			**1)** 20 ÷ 100 bar - *290÷1450 psi* (test setting 50 bar -*725 psi* at 5 l/min.-*1.32 US gpm*) pressure increase 5,7 bar - *80 psi* per screw turn **2)** 50 ÷ 200 bar - *725÷2900 psi* (test setting 150 bar - *2200 psi* at 5 l/min.- *1.32 US gpm*) pressure increase 26,5 bar - *380 psi* per screw turn **3)** 150 ÷ 350 bar - *2200÷5100 psi* (test setting 250 bar - *3600 psi* at 5 l/min.-*1.32 US gpm*) pressure increase 35 bar - *505 psi* per screw turn	95% of the setting value for flow capacity 1 l/min. *-0.26 US gpm-*		0,86	*1.89*	● see cavity SAE 12-2 page 112

***To perform setting of the valve see the pressure drop/ flow diagram**

●The cavity have to report also the features of variation "A" see page 112

Dimensions and hydraulic circuit





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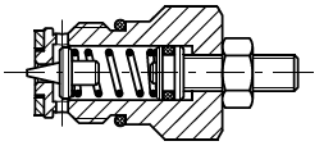
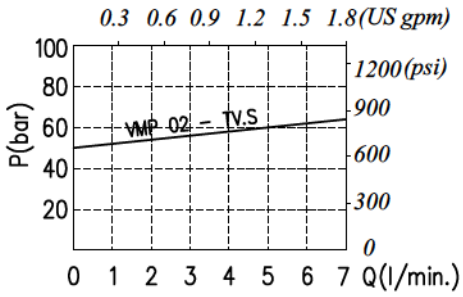
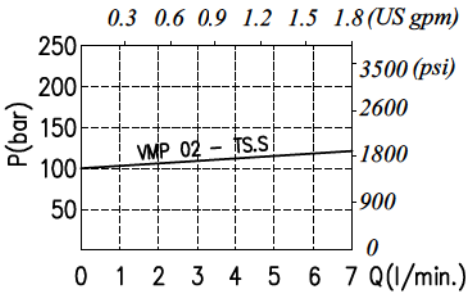


Rating diagrams

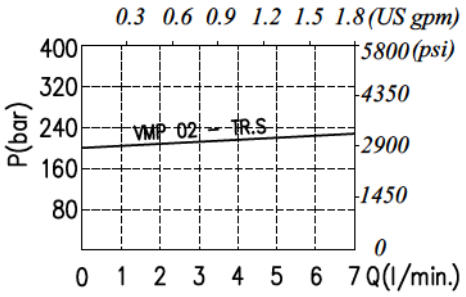
Typical pressure drop vs. flow characteristic



Typical pressure drop vs. flow characteristic



Typical pressure drop vs. flow characteristic



Order code

VMP02 / □□ . □

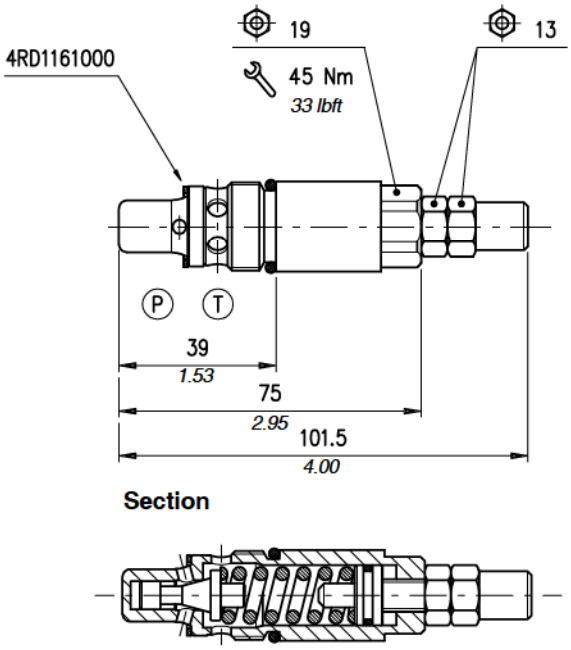
Pressure settings

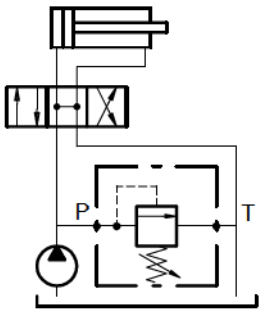
TV) 5÷80 bar *(72.5÷1150 psi)*
TS) 50÷220 bar *(725÷3200 psi)*
TR) 180÷350 bar *(2600÷5100 psi)*
TB) 0÷50 bar *(0÷725 psi)*

Adjustment
(see page 105)

S (screw)
V (handknob)

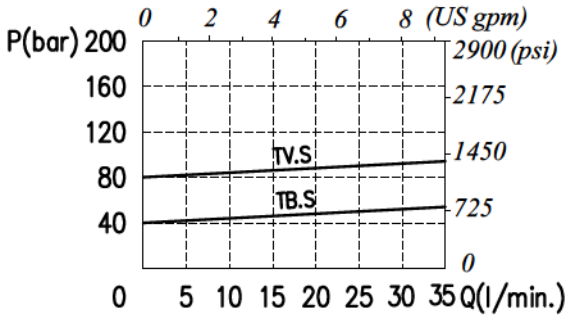
Dimensions and hydraulic circuit



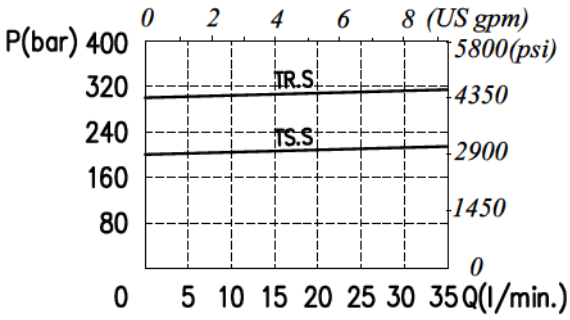


Rating diagrams

Typical pressure drop vs. flow characteristic



Typical pressure drop vs. flow characteristic



Order code

VMP5 / □ . □

Pressure settings

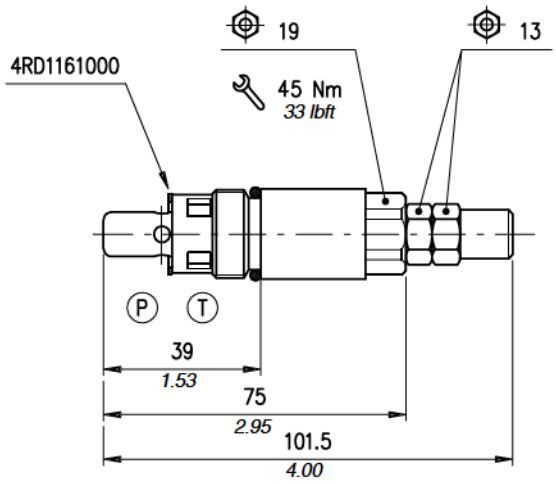
TB) 5÷40 bar *(72.5÷580 psi)*
TV) 20÷80 bar *(290÷1150 psi)*
TS) 50÷220 bar *(725÷3200 psi)*
TR) 180÷350 bar *(2600÷5100 psi)*

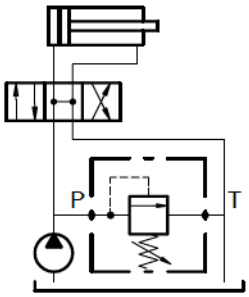
Adjustment

(see page 105)

S (screw)
V (handknob)
W (capped adjustement)
P (panel mount)
PV (panel mount+handknob)

Dimensions and hydraulic circuit





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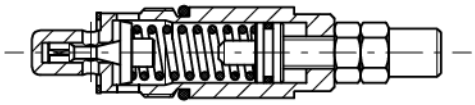
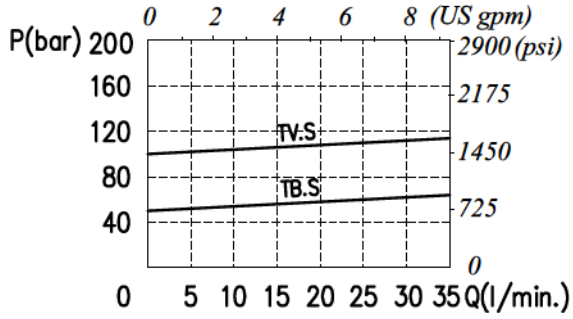
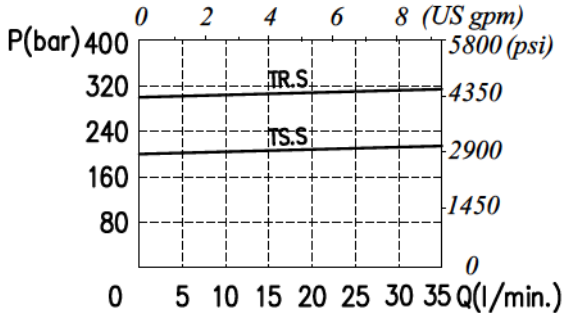


Rating diagrams

Typical pressure drop vs. flow characteristic



Typical pressure drop vs. flow characteristic



Order code

VMP5Y / □□ . □

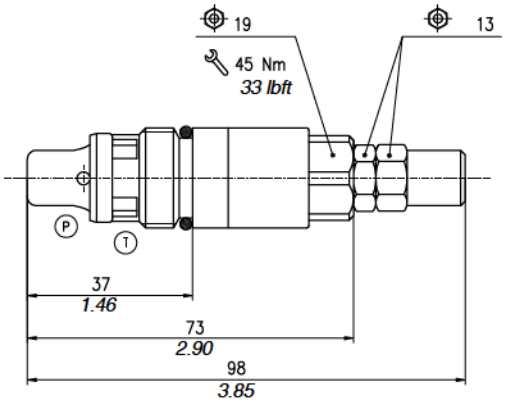
Pressure settings

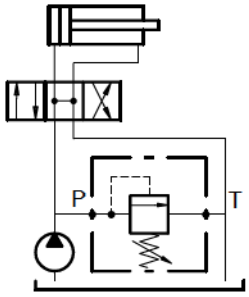
TB) 5÷80 bar *(72.5÷1150 psi)*
TV) 40÷150 bar *(580÷2200 psi)*
TS) 140÷190 bar *(2050÷2750 psi)*
TR) 180÷350 bar *(2600÷5100 psi)*

Adjustment
(see page 105)

S (screw)
V (handknob)
W (capped adjustement)
P (panel mount)
PV (panel mount+handknob)

Dimensions and hydraulic circuit





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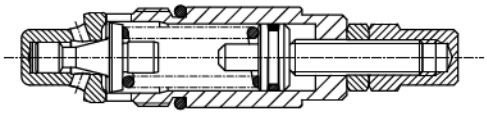
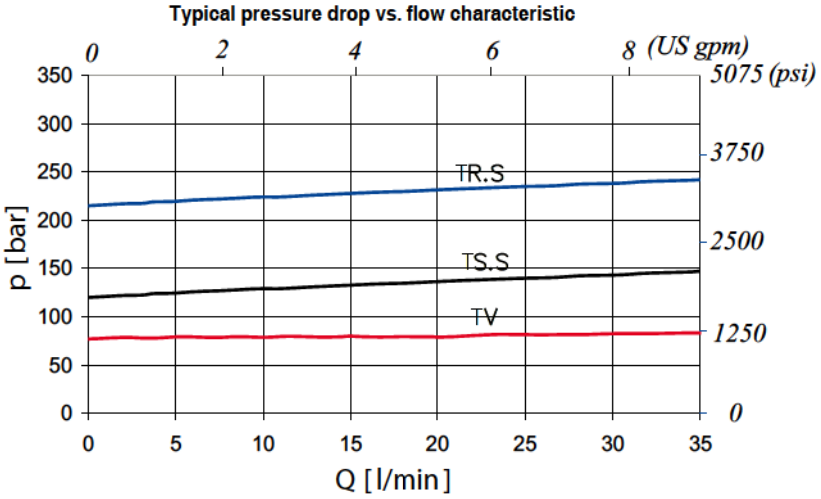


Rating diagrams



Order code

VMP5J / □□ . □

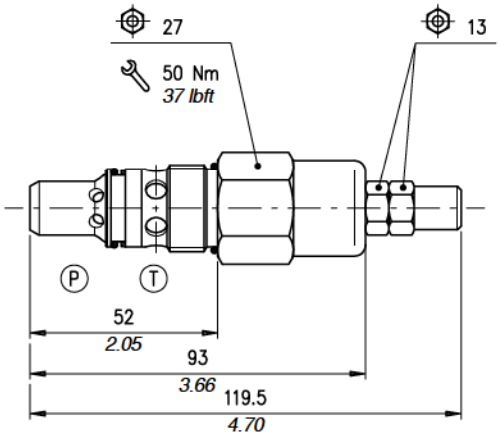
Pressure settings

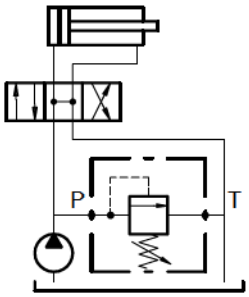
TV) 40÷80 bar *(580÷1150 psi)*
TS) 63÷200 bar *(910÷2900 psi)*
TR) 160÷315 bar *(2300÷4600 psi)*

Adjustment
(see page 105)

S (screw)
V (handknob)
W (capped adjustement)
P (panel mount)
PV (panel mount+handknob)

Dimensions and hydraulic circuit





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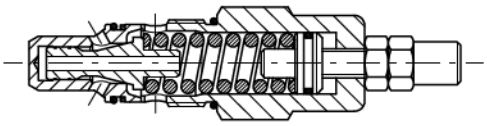
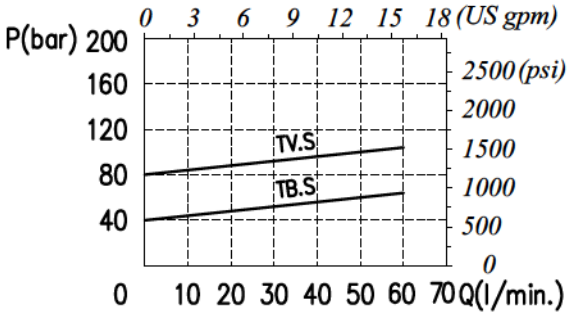
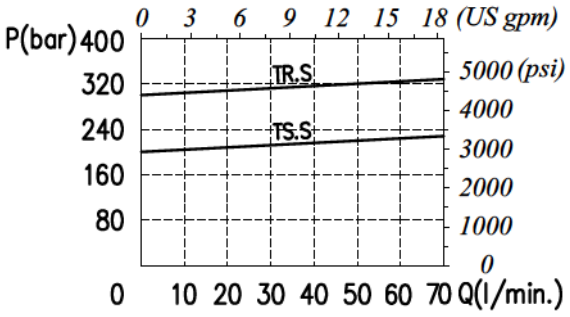


Rating diagrams

Typical pressure drop vs. flow characteristic



Typical pressure drop vs. flow characteristic



Order code

VMP 10 / □ . □

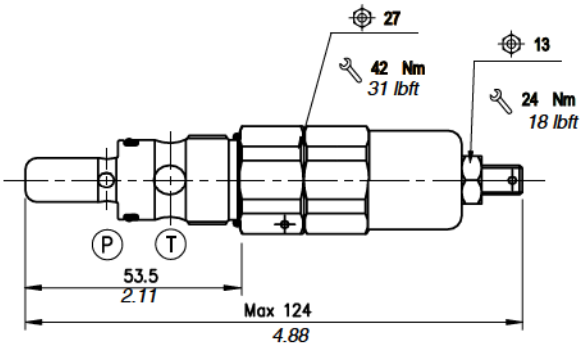
Pressure settings (bar)

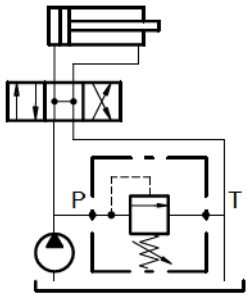
TB) 5÷40 *(72.5÷580 psi)*
TV) 20÷80 *(290÷1150 psi)*
TS) 50÷220 *(725÷3200 psi)*
TR) 180÷350 *(2600÷5100 psi)*

Adjustment
(see page 105)

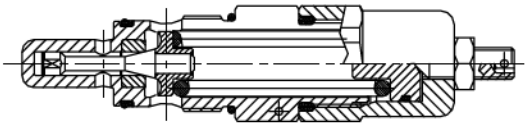
S (screw)
V (handknob)
W (capped adjustement)
P (panel mount)
PV (panel mount+handknob)

Dimensions and hydraulic circuit

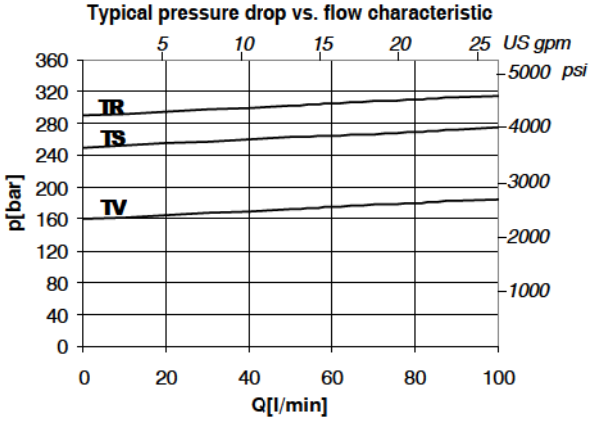




Section



Rating diagrams



Order code

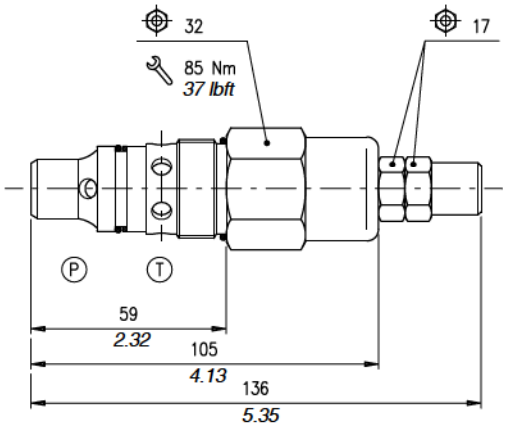
VMP 10Y / □ . □

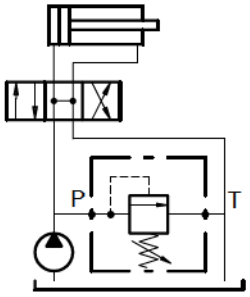
Pressure settings (bar)

Adjustment
(see page 105)

TV) 100÷160 *(1450÷2320 psi)* **W** (capped adjustement)
TS) 125÷250 *(1800÷3600 psi)*
TR) 200÷315 *(2900÷4600 psi)*

Dimensions and hydraulic circuit





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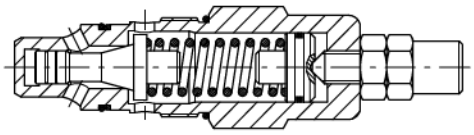
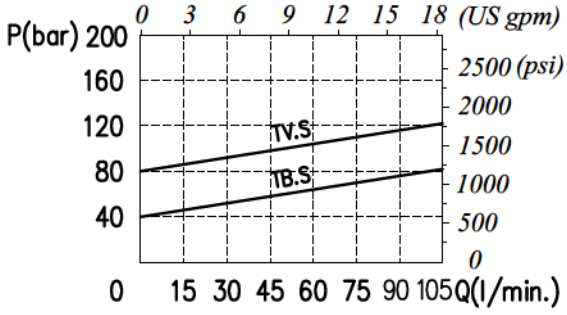
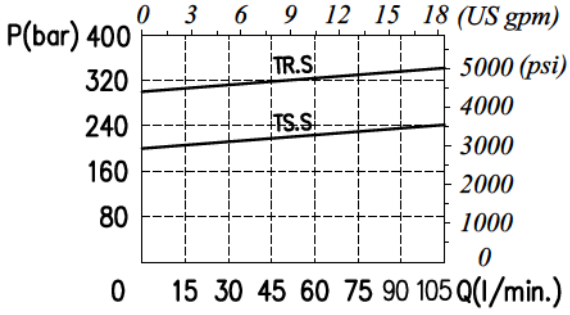


Rating diagrams

Typical pressure drop vs. flow characteristic



Typical pressure drop vs. flow characteristic



Order code

VMP 20 / ☐ . ☐

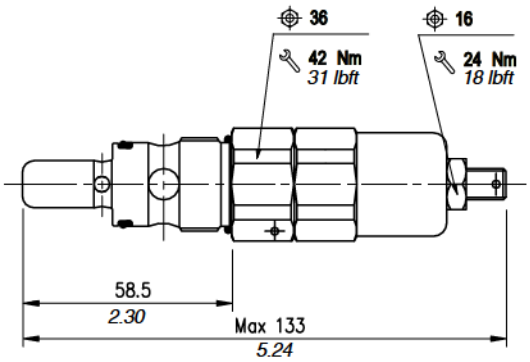
Pressure settings (bar)

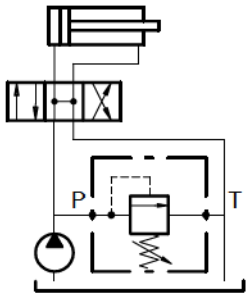
TB) 5÷40 *(72.5÷580 psi)*
TV) 20÷80 *(290÷1150 psi)*
TS) 50÷220 *(725÷3200 psi)*
TR) 180÷350 *(2600÷5100 psi)*

Adjustment
(see page 105)

S (screw)
V (handknob)
W (capped adjustement)
P (panel mount)
PV (panel mount+handknob)

Dimensions and hydraulic circuit





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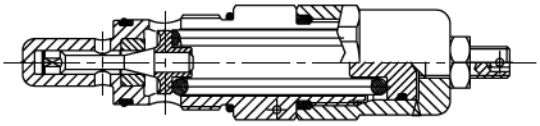
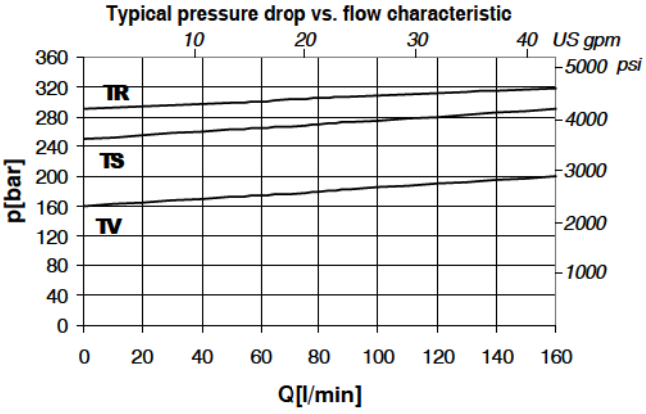


Rating diagrams



Order code

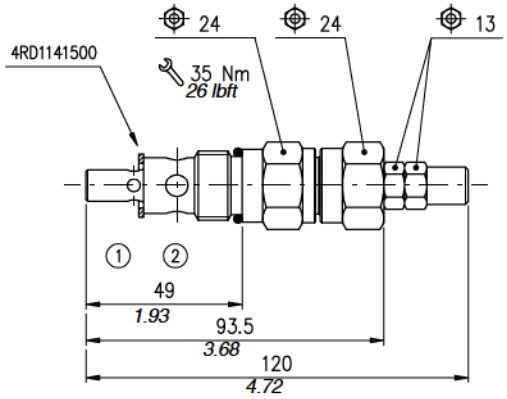
VMP 20Y / ☐ . ☐

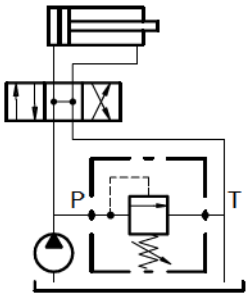
Pressure settings (bar)

Adjustment
(see page 105)

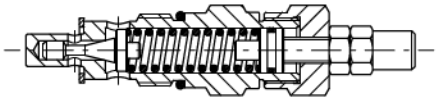
TV) 100÷160 *(1450÷2320 psi)* **W** (capped adjustement)
TS) 125÷250 *(1800÷3600 psi)*
TR) 200÷315 *(2900÷4600 psi)*

Dimensions and hydraulic circuit



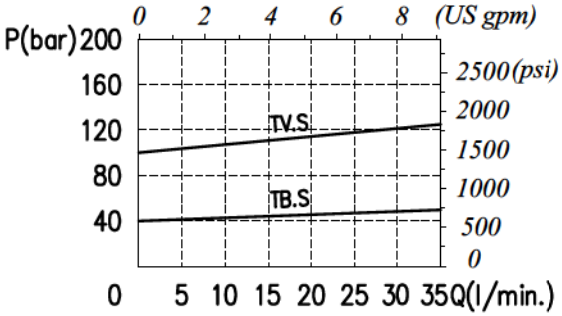


Section

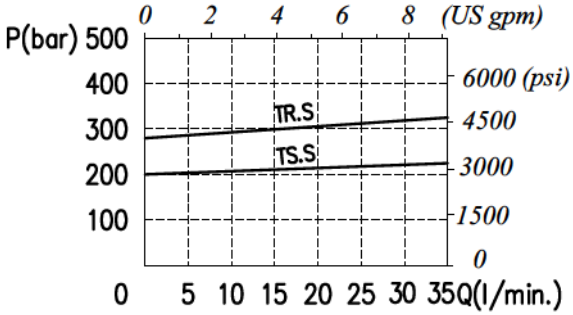


Rating diagrams

Typical pressure drop vs. flow characteristic



Typical pressure drop vs. flow characteristic



Order code

VMP 12 / □□ . □

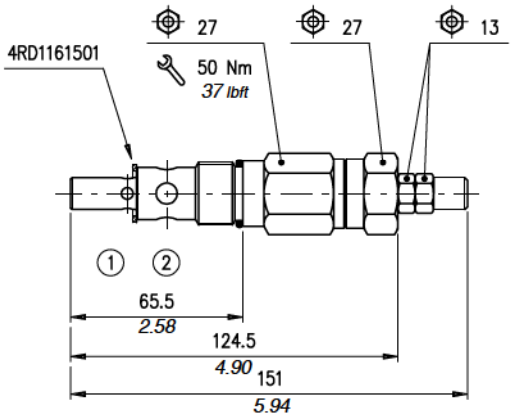
Pressure settings

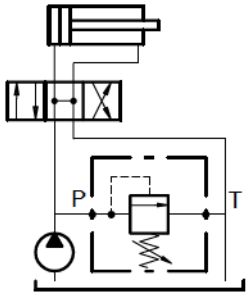
TB) 5÷40 bar *(72.5÷580 psi)*
TV) 20÷100 bar *(290÷1450 psi)*
TS) 50÷200 bar *(725÷2900 psi)*
TR) 100÷300 bar *(1450÷4350 psi)*

Adjustment

(see page 105)
S (screw)
V (handknob)
P (panel mount)
PV (panel mount+handknob)

Dimensions and hydraulic circuit

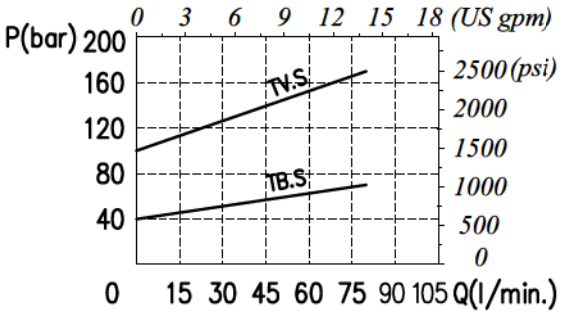




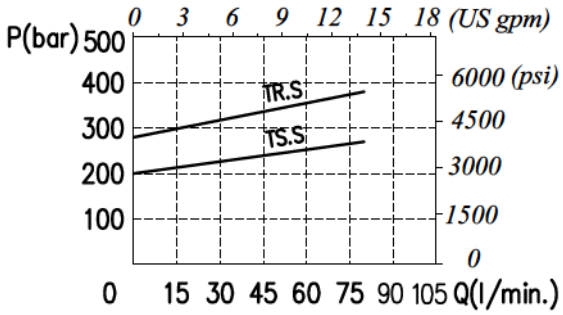
Section

Rating diagrams

Typical pressure drop vs. flow characteristic



Typical pressure drop vs. flow characteristic



Order code

VMP 34 / □□ . □

Pressure settings

TB) 5÷40 bar *(72.5÷580 psi)*
TV) 20÷100 bar *(290÷1450 psi)*
TS) 50÷200 bar ✱ *(725÷2900 psi)*
TR) 100÷300 bar ✱ *(1450÷4350 psi)*

Adjustment
(see page 105)

S (screw)
V (handknob)
P (panel mount)
PV (panel mount+handknob)

✱ when the valve is ordered by itself max adjustable pressure is 150 bar - *2200 psi.*
Cartridge may be set higher than 150 bar - *2200 psi* when instelled in the machine or into a proper body