



## FLOW CONTROL VALVE TVTP-...-P-...

- NG 6, 10
- Up to 210 Bar [3046 PSI]
- Up to 90 l/min [23,8 GPM]
- Three-way pressure compensated.
- Operating element: proportional solenoid.
- Control electronics: Amplifier P/N: 1659574.
- For independent fitting into a block.
- Plug-in connector for solenoids to ISO 4400.
- Protection of solenoid IP 54 to EN 60529 / IEC 60529 (IP 65 on request).



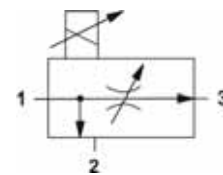
TVTP-...-P-...

### Operation

TVTP three-way flow regulators are used to regulate the priority flow in outlet 3 to a maximum adjustable level largely independent of the load and pressure conditions. The surplus flow is diverted to the bypass port 2. The bypass flow may be used for a secondary circuit.

Whether the pressure in secondary circuit is higher than the regulated pressure the valve works as two-way regulator.

### Hydraulic symbol

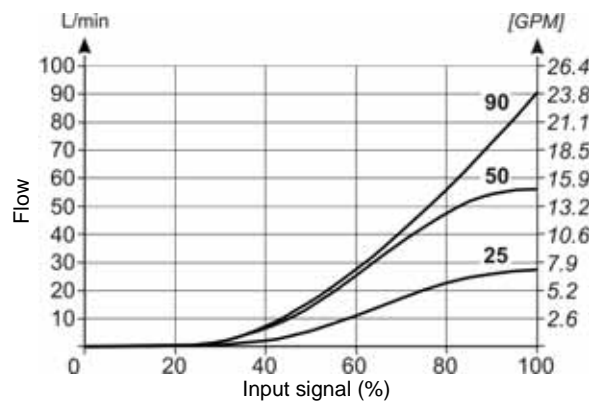


### Features

Type		TVTP-25	TVTP-50	TVTP-90
Rated flow 3	l/min [GPM]	25 [6,6]	50 [13,2]	90 [23,8]
Flow rate 1 max.	l/min [GPM]	60 [15,9]	90 [23,8]	150 [39,6]
Operating pressure max.	Bar [PSI]	210 [3045,8]		
Hysteresis	%	<5		
Flow constant according to load pressure	%	<±2		
Oil temperature range	°C [°F]	-20 to +70 [-4 to +158]		
Viscosity range	mm <sup>2</sup> /s [SUS]	15 to 380 [69,5 to 1761]		
Filtration		NAS 1638 7		
Mass	kg [lbs]	1 [2,2] (TVTP-..)		1,6 [3,5] (TVTP-..)
		1,2 [2,6] (TVTP-..G)		2 [4,4] (TVTP-..G)
Power	W	17,4		20,8
Voltage	V	12 and 24 DC		
Rated current at 12 V	A	1,25		1,79
Rated current at 24 V	A	0,68		0,81
Coil resistance at 12 V; 20 °C [68 °F]	Ohm	7,2		4,3
Coil resistance at 24 V; 20 °C [68 °F]	Ohm	24,6		21
Rating ED	%	100		

### Solenoid current / flow curves

Measured at 50°C [122°F] and viscosity of 32 mm<sup>2</sup>/s [148 SUS].



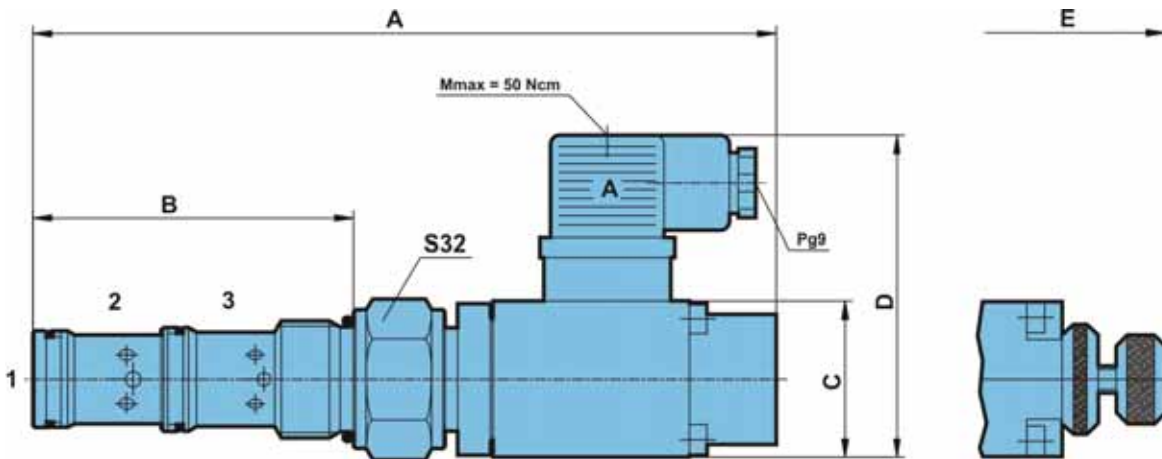
Throttle with Check valves

Flow control valves pressure compensated

Flow dividers



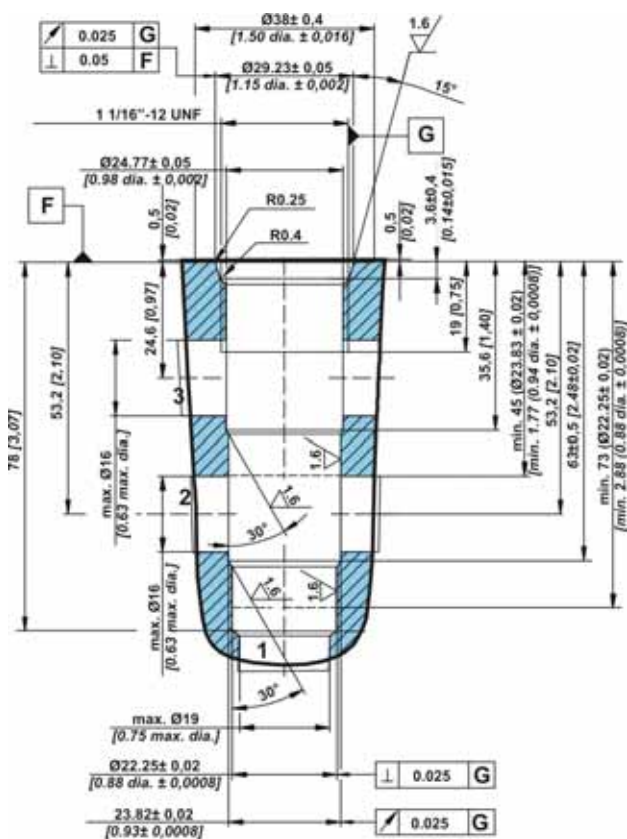
Dimensions



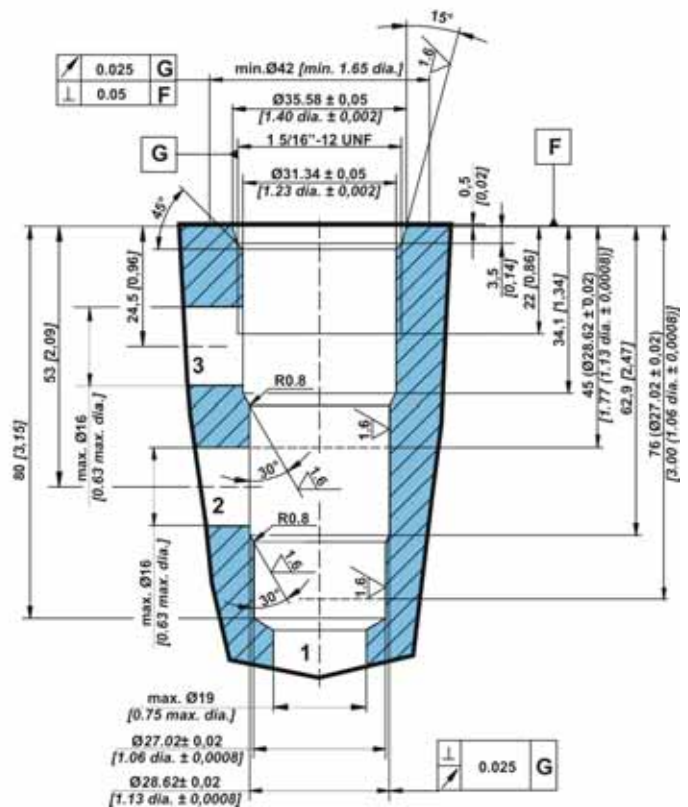
	A mm [Zoll]	B mm [Zoll]	C mm [Zoll]	D mm [Zoll]	E mm [Zoll]	S	Torque into cavity Nm [in.lbf]
TVTP-25-P	170 [6,7]	73,5 [2,9]	35 [1,4]	74 [2,9]	210 [8,3]	S32	60-65 [531-575]
TVTP-50-P	198 [7,8]	75 [3,0]	45 [1,8]	84 [3,3]	244 [9,6]	S41	70-75 [619-664]

Dimensions of cavity

TVTP-25 and 50

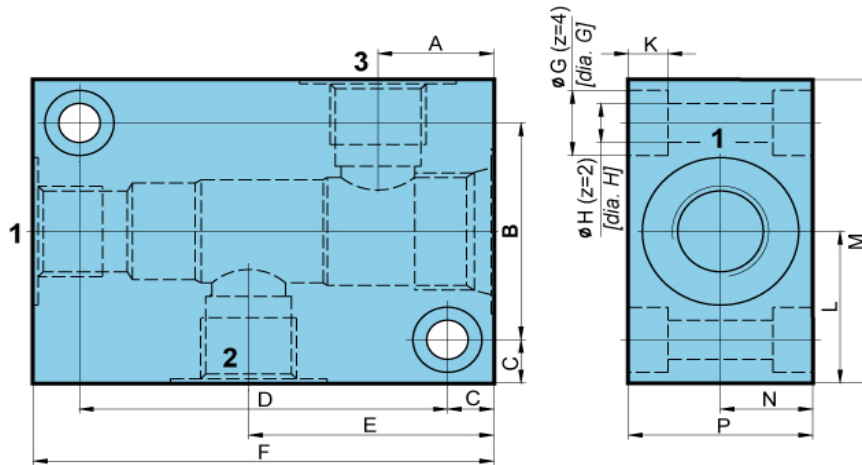


TVTP-90





**Standard ported body - steel**

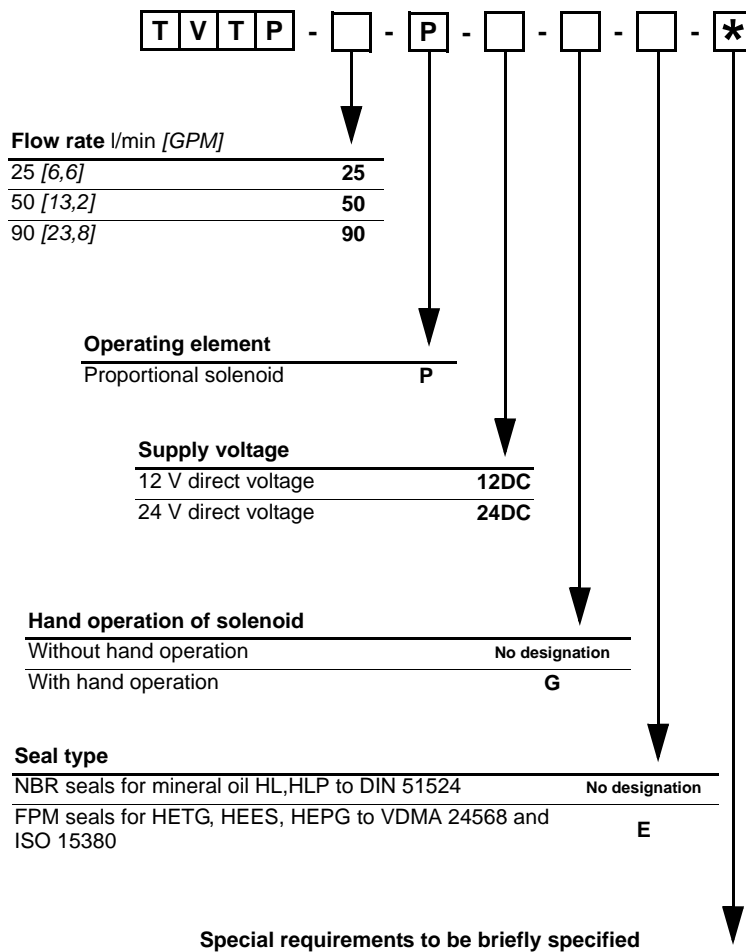


	<b>P-TVTP-50</b> mm [Zoll]	<b>P-TVTP-90</b> mm [Zoll]
A	25,1 [0,99]	25 [0,98]
B	50 [1,97]	65 [2,56]
C	10 [0,40]	15 [0,59]
D	80 [3,15]	80 [3,15]
E	53,2 [2,10]	53,5 [2,11]
F	100 [3,94]	110 [4,33]
G	15 [0,59]	17 [0,67]
H	9 [0,35]	11 [0,43]
K	8,6 [0,34]	10,6 [0,42]
L	35 [1,37]	47,5 [1,87]
M	70 [2,75]	95 [3,74]
N	20 [0,78]	26 [1,02]
P	40 [1,57]	52 [2,05]
U	G 1/2	G 1

Threaded connections to ISO 1179-1.

Throttle with Check valves

**Model code**



Flow control valves pressure compensated

Flow dividers