



FLOW CONTROL VALVE TVTC

- NG 6
- Up to 350 Bar [5076 PSI]
- Up to 50 l/min [13,21 GPM]
- Three-way pressure compensator.
- Operating element: rotary knob.
- Without built - in relief valve and non return valve.
- With built - in relief valve.
- With built-in non return valve.
- Threaded connections to ISO 1179 (BSPP/Gas), ISO 11926 (UNF).



TVTC-..

Operation

3-way compensated flow control valve enables setting of constant fluid flow on port A irrespective of the pressure variations. The excessive flow rate is discharged to port B and can be used as a secondary working port or return port to a tank.

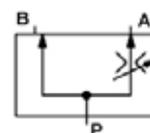
When the port B is used as a secondary working port the pressure must not exceed the pressure on port A.

A pressure relief valve in valve type TVTC-..-VV limits the pressure in port A on the set valve. The excessive flow rate is discharged over port R to a tank.

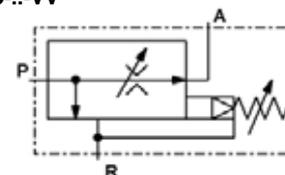
The non return valve in valve type TVTC -..-NV provides a free flow of the hydraulic fluid in the direction from A to P.

Hydraulic symbol

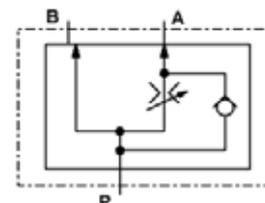
TVTC-..



TVTC-..-VV



TVTC-..-NV



Features

Type		TVTC-12-...	TVTC-25-...	TVTC-50-...
Flow rate A	l/min [GPM]	1 to 12 [0,26 to 13,17]	1 to 25 [0,26 to 6,60]	1 to 50 [0,26 to 13,21]
Max. flow rate A	l/min [GPM]	32 [8,45]	65 [17,17]	
Operating pressure	Bar [PSI]	5 to 350 [72,52 to 5076,32]		
Differential pressure	Bar [PSI]	5,5		
Cracking pressure for non return valve	Bar [PSI]	0,5		
Flow stability (5 to 350 Bar)	%	±5 (Q)		
Oil temperature range	°C [°F]	-20 to +70 [-4 to +158]		
Viscosity range	mm ² /s [SUS]	15 to 380 [69,5 to 1760]		
Filtration	NAS 1638	8		
Mass	kg [lbs]	TVTC		
		TVTC-..-NV	2 [4,41]	
		TVTC-..-VV	3 [6,61]	

Throttle with Check valves

Flow control valves pressure compensated

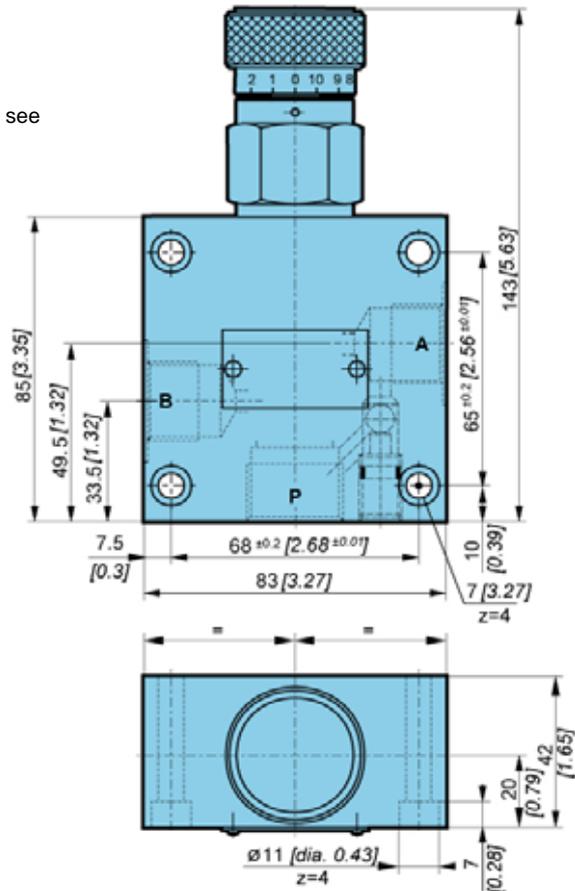
Flow dividers



Dimensions

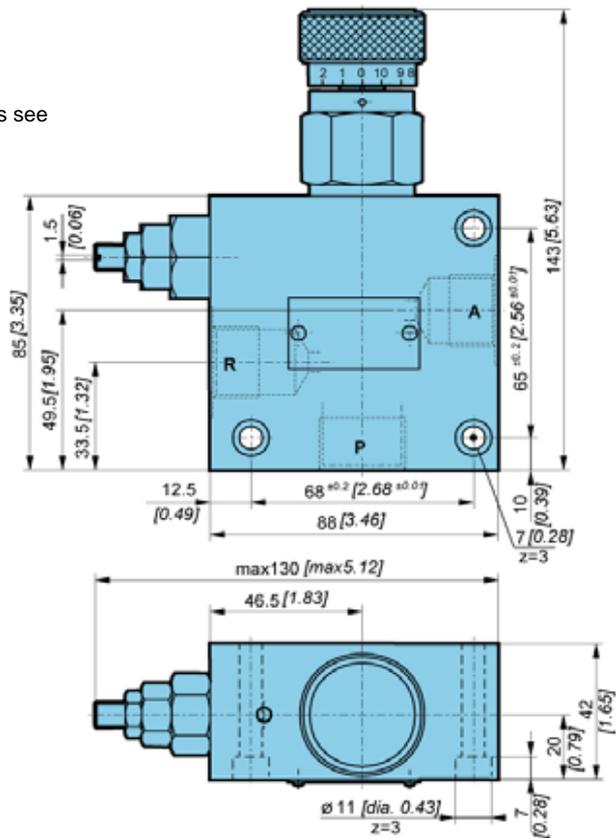
TVTC...; TVTC...-NV

Threaded connections see Model code



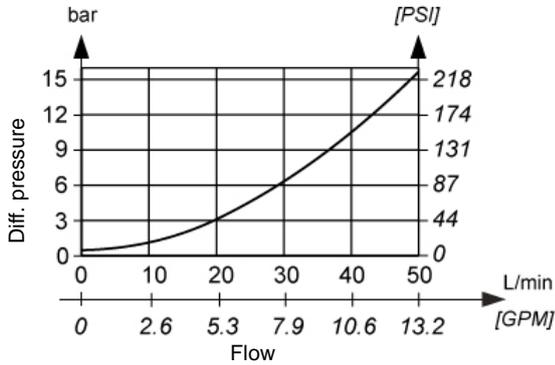
TVTC...-VV

Threaded connections see Model code

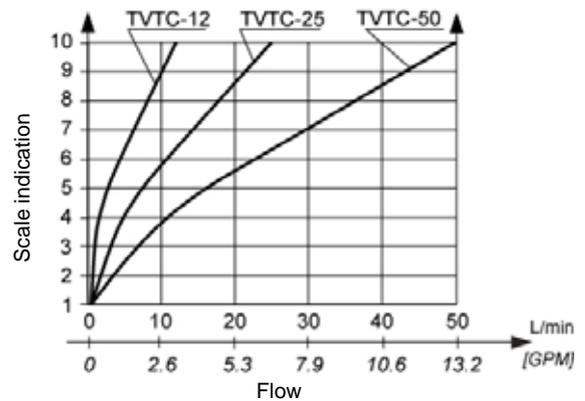




ΔP-Q Performance curves



Flow rate as a function of scale indication



Model code

T V T C - - - - - - *

Flow rate l/min [GPM]	
1 to 50 [0,26 to 13,21]	50
1 to 25 [0,26 to 6,60]	25
1 to 12 [0,26 to 3,17]	12

Pressure relief valve or non return valve Bar [PSI]	
Without relief valve	No designation
With relief valve 4 to 175 [58 to 2538]	VV17
With relief valve 10 to 350 [145 to 5076]	VV35
With non return valve	NV

Threaded connections A, B, R	
G1/2	1/2
7/8-14 UNF-2B	SAE 10

Threaded connection P	
G3/4	3/4
1 1/16-12 UNF-2B	SAE 12

Seal type	
NBR seals for mineral oil HL, HLP to DIN 51524	No designation
FPM seals for HETG, HEES, HEPG to VDMA 24568 and ISO 15380	E

Special requirements to be briefly specified

Throttle with Check valves

Flow control valves pressure compensated

Flow dividers