Flow dividers type TQ and TV

The flow dividers type TQ divide (collect) total flow entering (exiting) at port C. The distribution is independent of working pressure at ports A and B, and may be divided equally or unequally in predetermined portions.

The flow divider type TV features priority division, i.e. variable flow entering port C is divided where partial flow Q_A, through port A, is kept constant and the residual flow Q_B, exits port B. As soon as one actuator's movement is stopped the flow to the other is either reduced to a minimal flow (type TQ) or completely reduced to leakage flow (type TV). It is possible to overcome this design feature by creating flow via a pressure limiting valve.

These valves are used for applications where one pump is required to supply two unevenly loaded consumers, which must be driven simultaneously and independently (type TQ) or if one actuator requires priority flow (type TV) .

Nomenclature:	Flow dividers with or without priority division
Design:	Individual valve for pipe mounting or manifold mounting
Adjustability:	Non-adjustable
p_{max}:	300 ... 350 bar
Q_{max}:	7.5 ... 200 lpm (nom. total flow)

Basic types and general parameters

Basic type and size	Flow Q_{max} (lpm)	Oper. pressure p_{max} (bar)	Tapped ports (BSPP) [1] A	B	C	Symbol Pipe mounting	Manifold mounting
TQ 2..	7.5 ... 70	350	G 1/4, G 3/8	G 1/4, G 3/8	G 3/8	**TQ**	**TQ.P**
TQ 3..	7.5 ... 70	350	G 3/8, G 1/2	G 3/8, G 1/2	G 1/2		
TQ 3P	7.5 ... 70	350	---	---	--		
TQ 4..	80 ...120	350	G 1/2	G 1/2	G 3/4		
TQ 4P	80 ... 120	350	---	---	---		
TQ 5..	140 ... 200	350	G 3/4	G 3/4	G 1		
TQ 5P	140 ... 200	350	---	---	---		
TV 3..	60	300	G 3/8	G 1/2	G 1/2	**TV**	**TV.P**
TV 3P	60	300	---	---	---		

[1] For pipe mounting versions only

Additional versions

- Flow divider type TQ without return flow feature
- Flow divider type TQ with by-pass check valves enabling return flow
- Flow divider type TQ with unequal division

Order examples

TQ 32 - A3

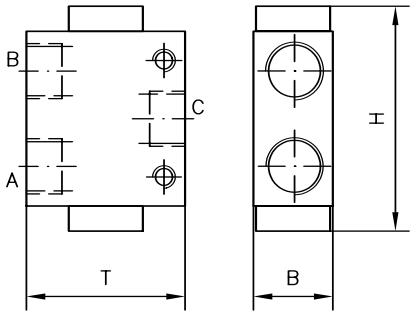
Flow divider type TQ, size 3, tapped port size 2 (C = G 1/2; A,B = G 3/8), version A (dividing or collecting), with a nominal total flow Q_{CN} = 45 lpm (coding 3)

TV 3 - 2,5

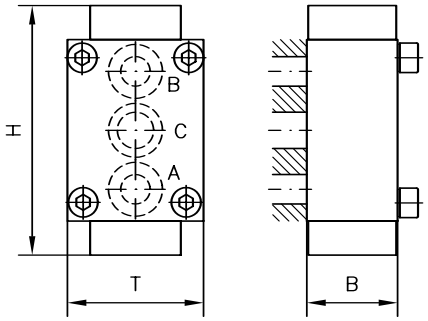
Flow divider with priority division type TV, size 3, flow coding 2.5 (Q_A = 5.8 lpm)

Dimensions

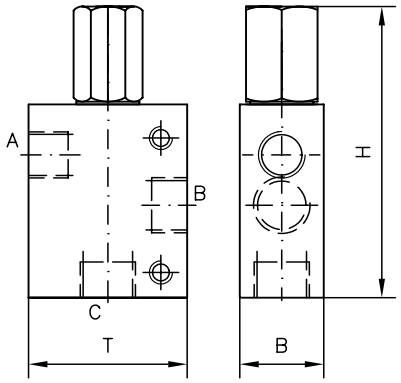
Type TQ...



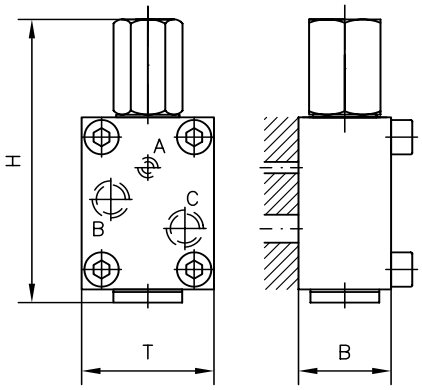
Type TQ.P



Type TV3..



Type TV3P



All dimensions are in mm, and subject to change without notice !

Basic type	H	B	T	m (kg)
TQ 2..	79	30	50	0.6
TQ 3..	85	30	60	0.6 ... 0.7
TQ 3P	79	30	50	0.7
TQ 4..	110	40	60	1.5
TQ 4P	110	40	60	1.6
TQ 5..	134	50	80	3
TQ 5P	134	50	80	3.1
TV 3	109	30	60	1.0
TV 3P	106	35	50	1.0

Further information

- Flow divider (flow distributor) type TQ D 7381
- Flow divider type TV D 7394

For page and section of the devices additionally listed, see type index