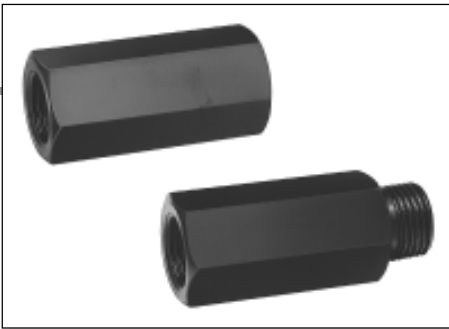


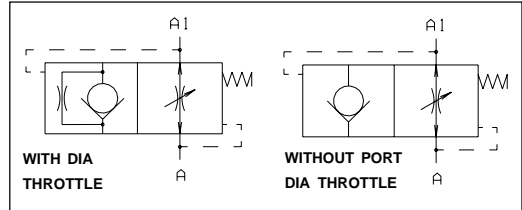
## VPF / VPM... IN LINE MOUNTING ONE-WAY CHECK VALVES



VPF... / VPM...

One-way check valves type VP.. are mounted directly onto the cylinder ports to prevent uncontrolled load drop in case of hydraulic system failure. A disc supported in the raised position by a spring allows A→A1 free flow. Under normal conditions reverse flow A1→A takes place as usual, but should the reverse (reaction) flow rate go beyond the value set for the valve, the disc will position itself in such a way as to interrupt completely or partially the A1 →A a flow. Total or partial A1 →A flow shut-off is ensured in the first case by a nearly perfect disk seal on the valve seat, which allows the load blocking in the position it happens to be at the moment of failure. In the second case, on the other hand, a choked opening provided on the disk allows for a blow-by to take place in the direction A1→A, such as to make the load drop slowly. These valves are manufactured in heat-treated steel.

Max. operating pressure	350 bar
Max. flow	150 l/min
Hydraulic fluids	Mineral oils DIN 51524
Fluid viscosity	2.8 ÷ 380 mm <sup>2</sup> /s
Fluid temperature	-30°C ÷ 80°C
Max. contamination level	class 10 in accordance with NAS 1638 with filter β <sub>25</sub> ≥ 75
Weight	See table below



### ORDERING CODE

VP\*

F = Check valve with internal thread  
M = Check valve with internal/external thread

\*\*

Size: 07 / 10 / 13 / 19

\*

Reaction flow setting (l/min) see Table 1  
Omit for setting standard (\*)  
A / B / C / D / E / F / G / H

\*\*

Ø fthrottle port dia - see Table 2  
(omit if not required)  
05 = 0.5 mm  
08 = 0.8mm  
10 = 1 mm  
15 = 1.5 mm  
20 = 2 mm

00

No variant

1

Serial No.

For the correct use it is advisable to carry out adjustment "C" so that the reaction flow is 1.5 times the flow rate of the system.

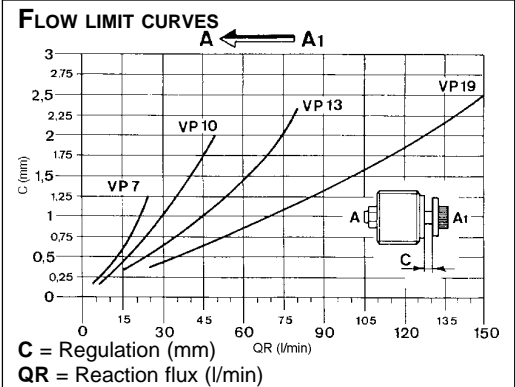


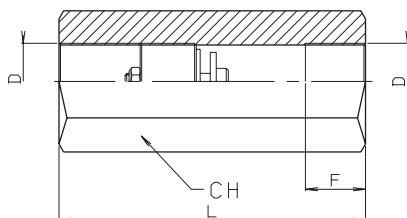
TABLE 1 - REACTION FLOW SETTINGS (l/min)

Valve type	A	B	C	D	E	F	G	H
VP*07	4	6	10	16	25*			
VP*10	6	10	16	25	40	50*		
VP*13	16	25	40	50	60	80*		
VP*19	25	40	50	60	80	100	125	150*

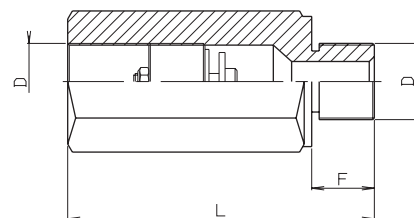
(\*)Standard setting if is omit the code

Valve type	Ø THROTTLE PORT DIA REQUEST				
	D	Ø	Ø	Ø	Ø
VP07	1/4"BSP	0.5	0.8	1	
VP10	3/8"BSP	0.5	0.8	1.2	1.5
VP13	1/2"BSP	0.5	0.8	1.2	1.5
VP19	3/4"BSP	0.5	1.2	1.5	2

### OVERALL DIMENSIONS



Valve type	L	F	D	CH	Weight (Kg)
VPF07	48	12	1/4"BSP	19	0.075
VPF10	52	12	3/8"BSP	22	0.097
VPF13	62	14	1/2"BSP	27	0.160
VPF19	72	16	3/4"BSP	36	0.350



Valve type	L	F	D	CH	Weight (Kg)
VPM07	50	12	1/4"BSP	19	0.075
VPM10	58	12	3/8"BSP	22	0.105
VPM13	70	14	1/2"BSP	27	0.185
VPM19	78	16	3/4"BSP	36	0.365