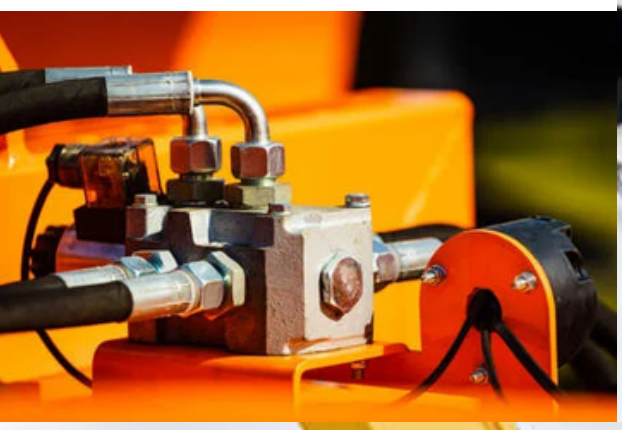


HYDRAULIC VALVES

TRIDENT PRECISION INTERNATIONAL

151, SECTOR-06,IMT MANESAR, GURGAON,HARYANA

122050

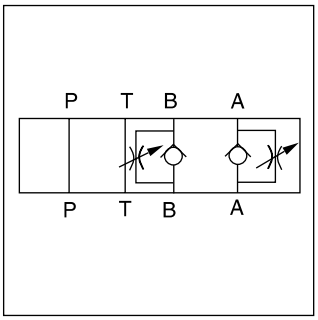
0124-4101151 WWW.TRIDENTPRECISION.IN sales@tridentprecision.in

Double-throttle check valves from the Parker series FM are in sandwich design for easy configuration of stack systems. Throttle and check valves are located in ports A and B.

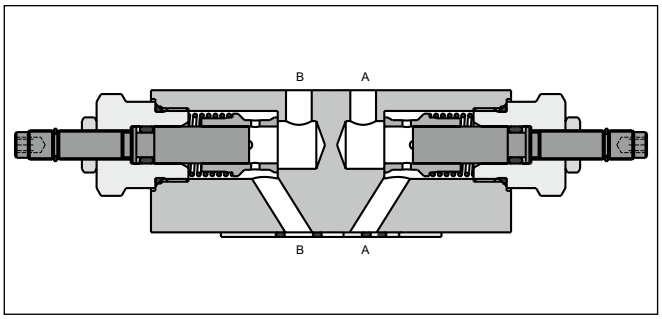
FM2 and FM3 can be used as meter-in or meter-out throttle by changing the mounting position.

FM4 can be selected by ordering code as meter-in or meter-out throttle. FM6 is only available as meter-out control.

The throttle check valve can also be used to influence the switching time of pilot operated directional valves. In this case, the valve is positioned between the pilot stage (CETOP 03, NG06) and the main stage (CETOP 05, NG10 up to CETOP 10, NG32).



FM3



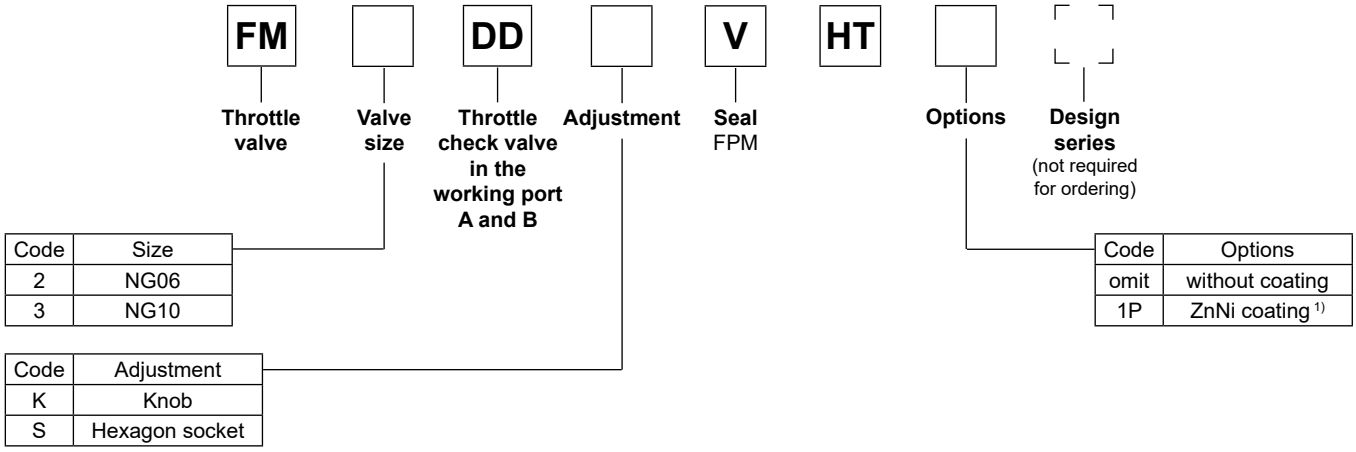
Features

- The metering needle design allows a very wide range of flows to be suitable for all applications, from very sensitive adjustments of low flow up to maximum flow.
- Large bypass check valves allow high flow at low pressure drop.
- NG06 - FM2 (CETOP 03)
  NG10 - FM3 (CETOP 05)
  NG16 - FM4 (CETOP 07)
  NG25 - FM6 (CETOP 08)

7

Technical data

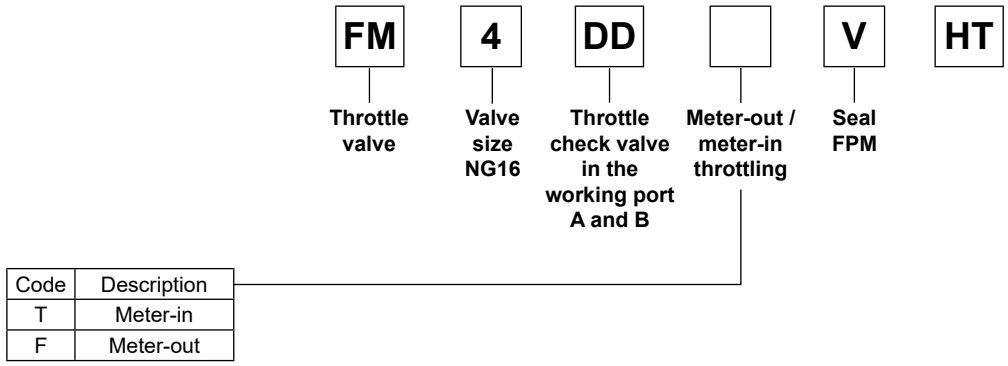
General					
Series		**FM2**	**FM3**	**FM4**	**FM6**
Size		**NG06**	**NG10**	**NG16**	**NG25**
Mounting interface		NFPA D03 CETOP 03	NFPA D05 CETOP 05	NFPA D07 CETOP07	NFPA D08 CETOP 08
Mounting position		unrestricted			
Ambient temperature	[°C]	-20...+70			
$MTTF_D$ value	[years]	150			
Weight	[kg]	1.3	2.9	5.4	7.9
Hydraulic					
Max. operating pressure	[bar]	350	350	350	210
Max. Flow	[l/min]	80	160	200	341
Opening pressure	[bar]	0.5	0.5	0.3	0.3
Meter-in throttle		•	•	•	—
Meter-out throttle		•	•	•	•
Fluid		Hydraulic oil according to DIN 51524			
Fluid temperature	[°C]	-20...+70			
Viscosity permitted	[cSt] / [mm²/s]	20...400			
Viscosity recommended	[cSt] / [mm²/s]	30...80			
Filtration		ISO 4406; 18/16/13			



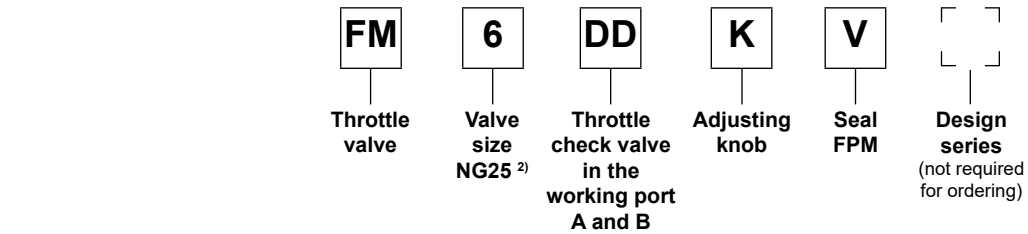
Code	Size
2	NG06
3	NG10

Code	Adjustment
K	Knob
S	Hexagon socket

Code	Options
omit	without coating
1P	ZnNi coating [1]



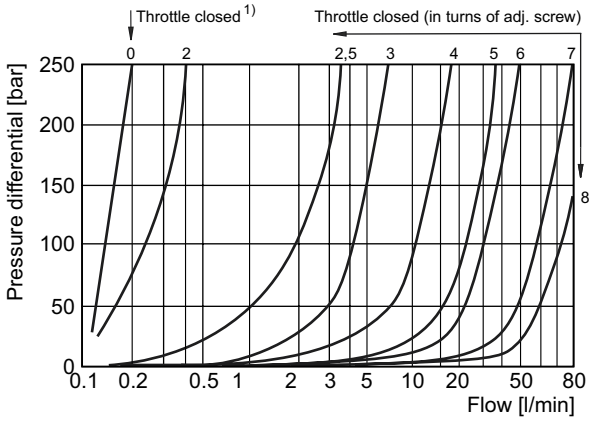
Code	Description
T	Meter-in
F	Meter-out



[1] On request.

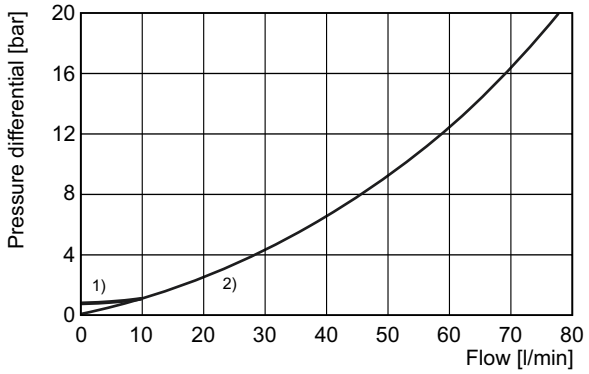
[2] Only meter-out available.

FM2 standard needle



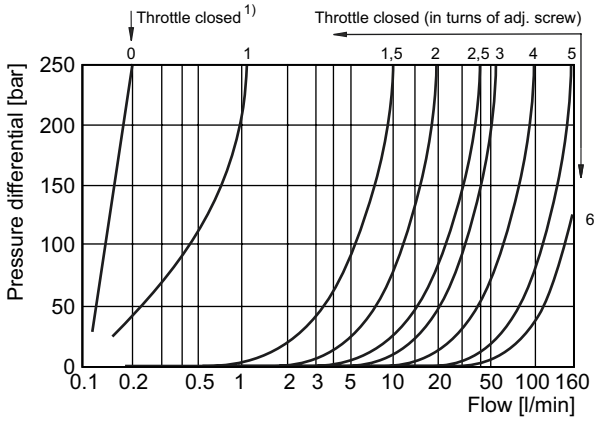
1)Leakage 0.1 ... 0.2 l/min

FM2 flow, check valve



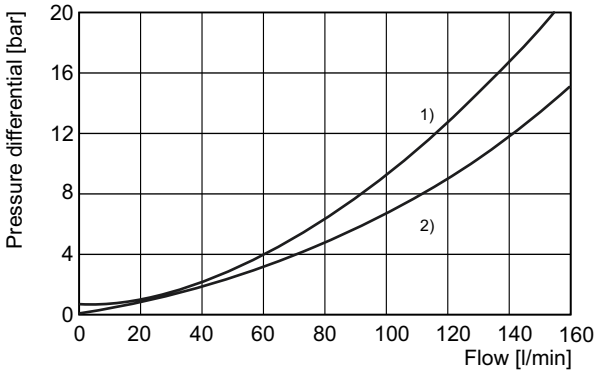
1)through check valve: throttle cosed
2)through check valve: throttle open

FM3 standard needle



1)Leakage 0.1 ... 0.2 l/min

FM3 flow, check valve

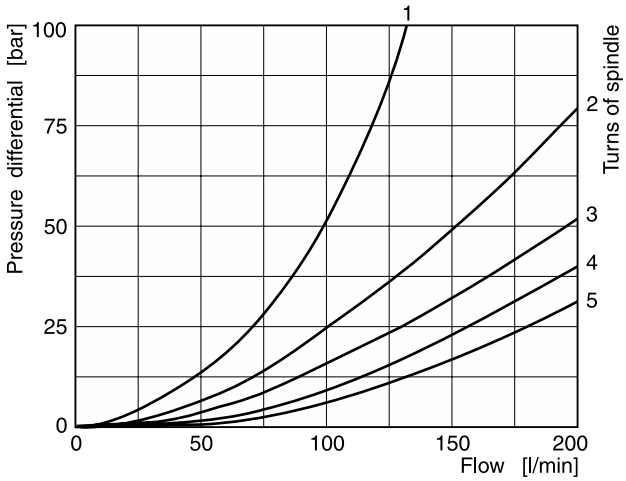


1)through check valve: throttle cosed
2)through check valve: throttle open

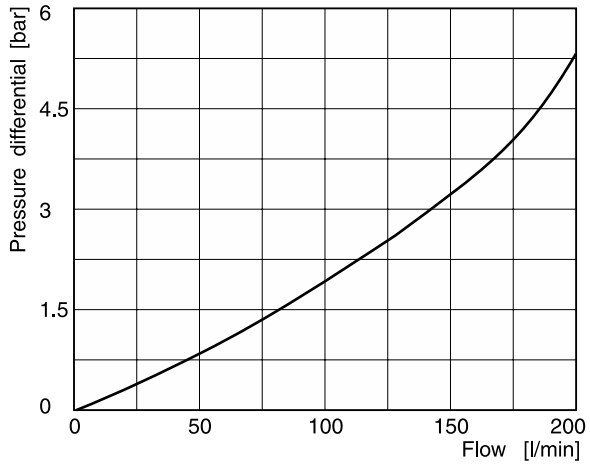
All characteristic curves measured with HLP46 at 50 °C.

FM4 with standard needle

1 to 5 number of needle rotations

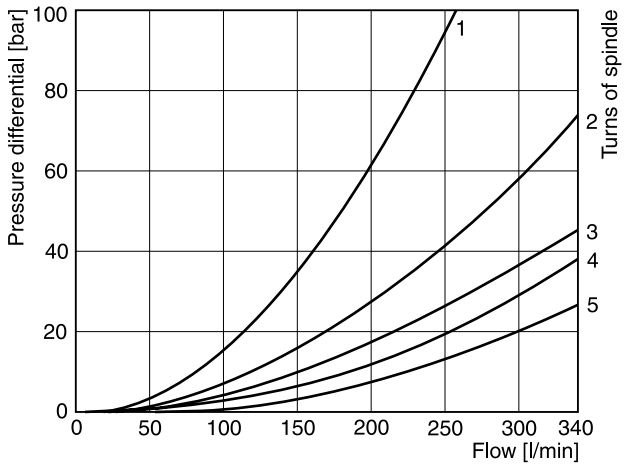


FM4 flow, check valve

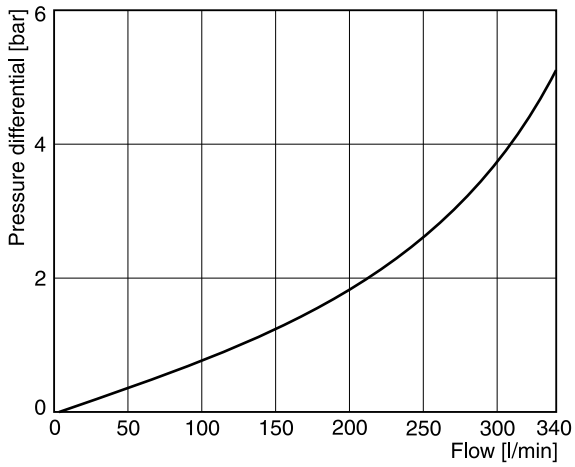


FM6 with standard needle

1 to 5 number of needle rotations



FM6 flow, check valve

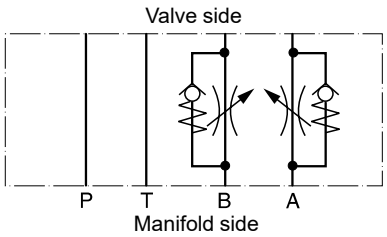


7

All characteristic curves measured with HLP46 at 50 °C.

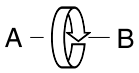
FM2

Meter-out

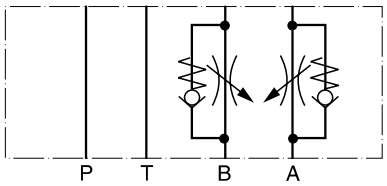


Meter-in or meter-out

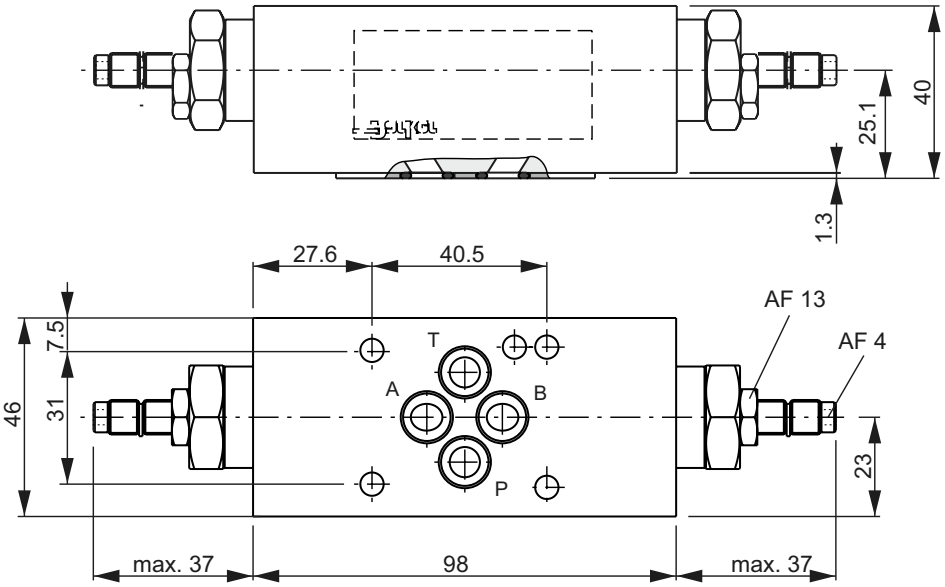
A functional change is achieved by rotating the mounting position of the valve 180° about the longitudinal axis (A-B).

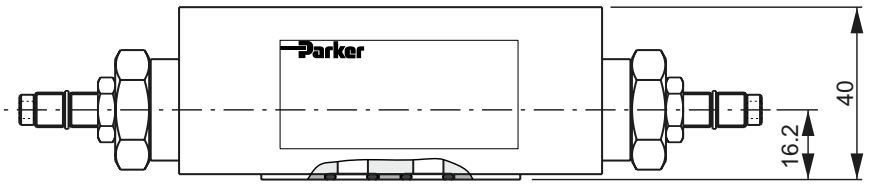


Meter-in

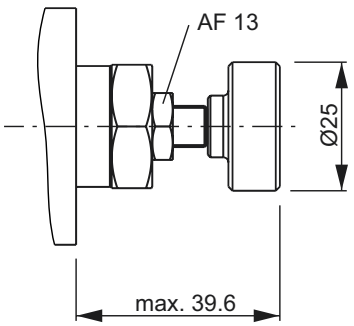


Adjustment code S





Adjustment code K



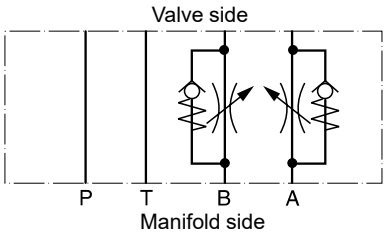
Seal kit FM2	
Seal	**Order code**
V	SK-FM2-V-20

Note:

The O-ring plate (with O-rings) for sealing the connecting surface of the manifold side is included. The O-ring plate is always mounted on the manifold side.

FM3

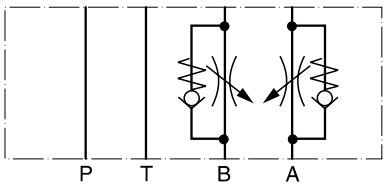
Meter-out



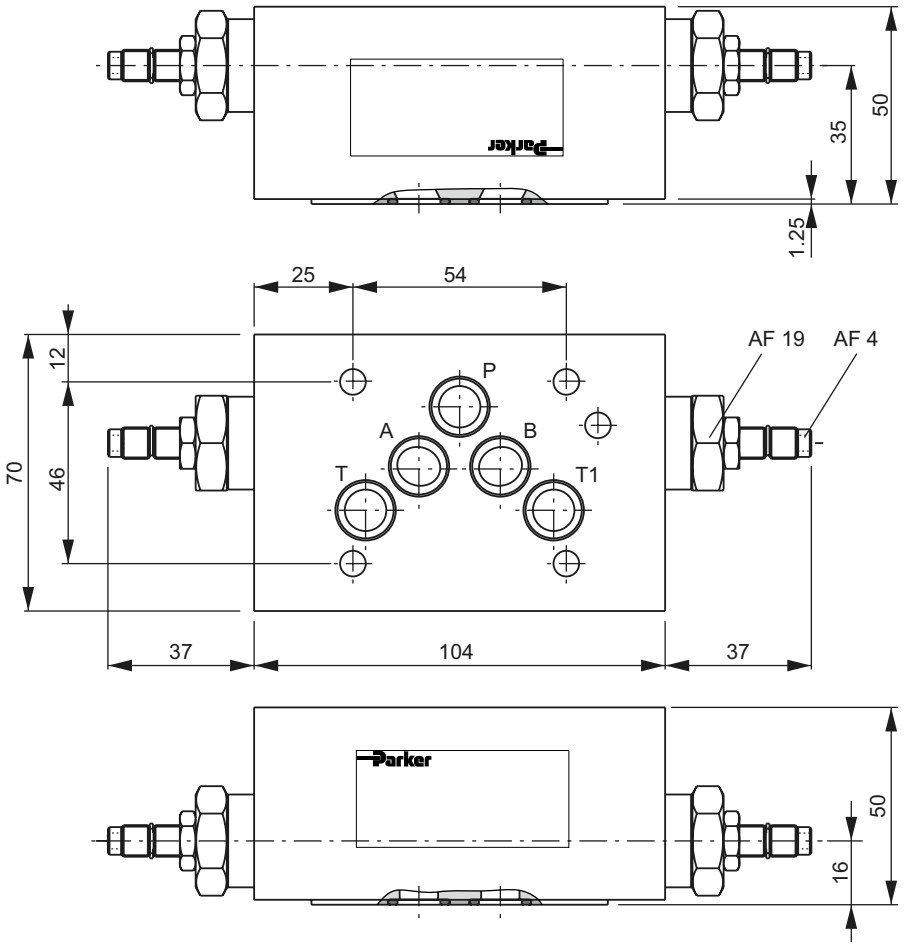
Meter-in or meter-out

A functional change is achieved by rotating the mounting position of the valve 180° about the transverse axis (P).

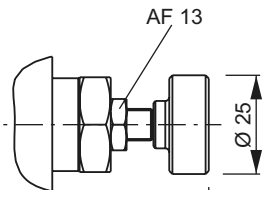
Meter-in



Adjustment code S



Adjustment code K

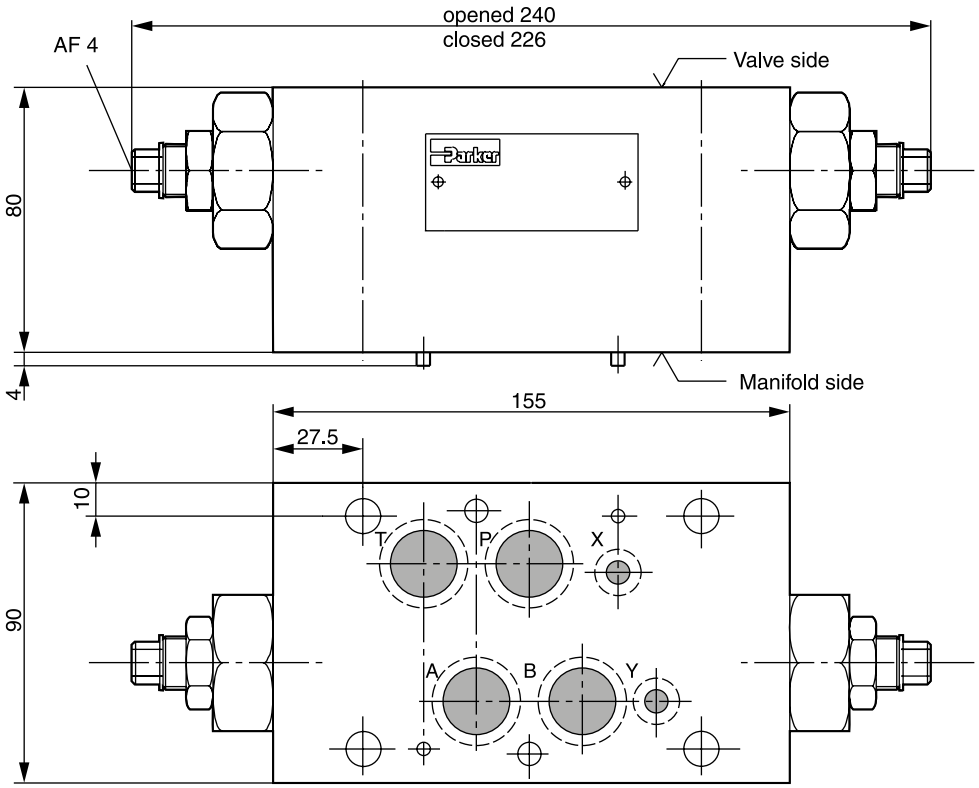


Seal kit FM3	
Seal	**Order code**
V	SK-FM3-V-20

Note:

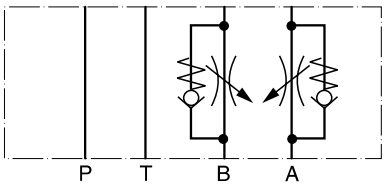
The O-ring plate (with O-rings) for sealing the connecting surface of the manifold side is included. The O-ring plate is always mounted on the manifold side.

FM4

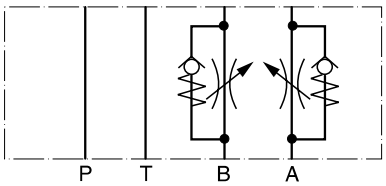


7

Meter-in

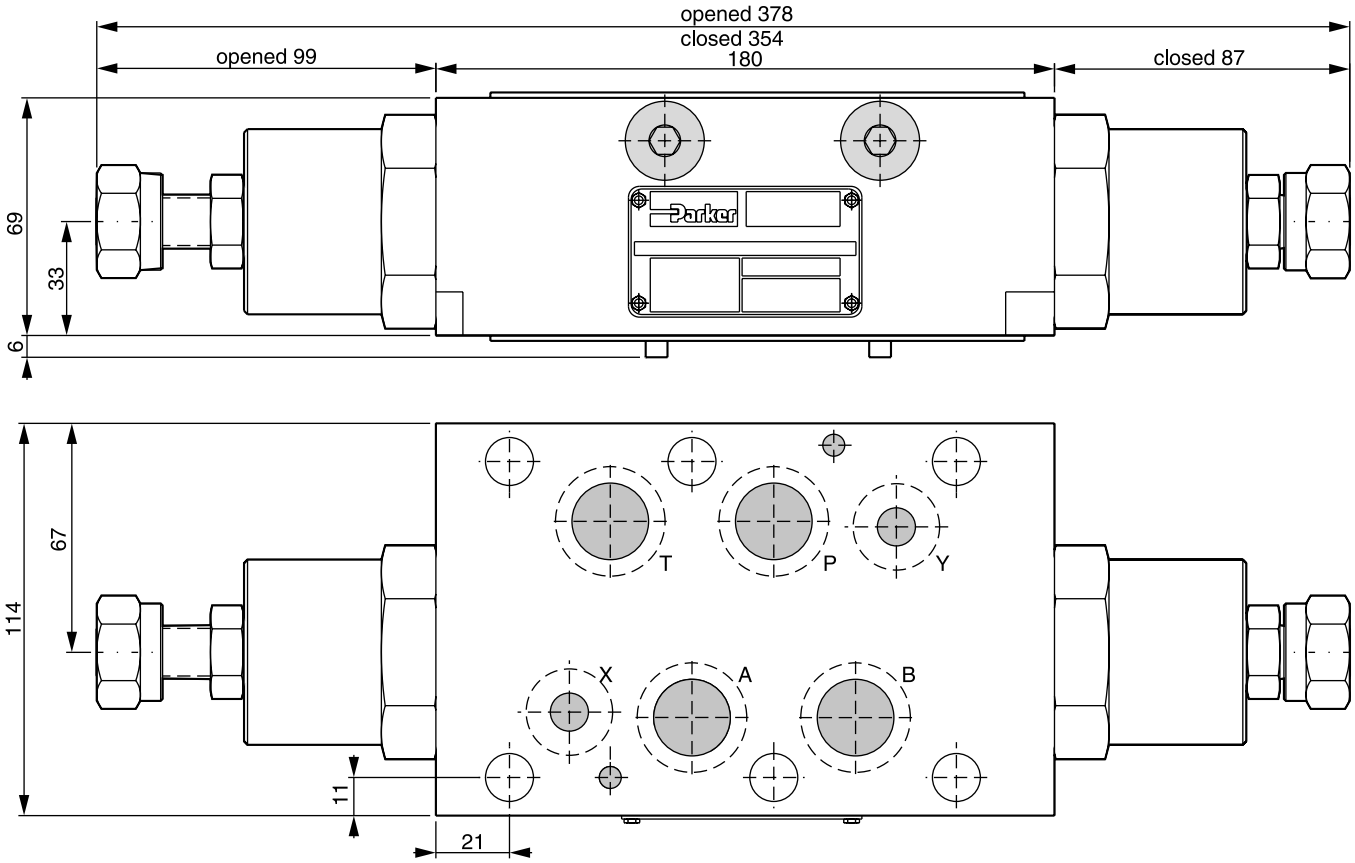


Meter-out



Seal kit FM4	
Seal	**Order code**
V	SK-FM4VHT

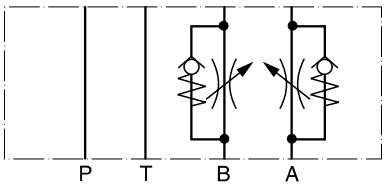
FM6



Meter-out

Adjustment: knob

Meter-in is not available for FM6



Seal kit FM6	
Seal	**Order code**
V	SK-FM6-V-12