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).

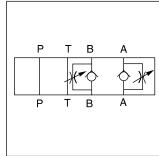
### **Features**

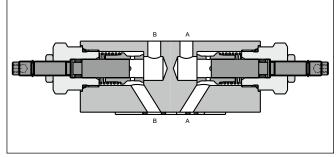
- The metering needle design allows a very wide range of flows to be suitable for all applications, from very sensitive adjustments of low flow up to maximum flow.
- · Large bypass check valves allow high flow at low pressure drop.

• NG06 - FM2 (CETOP 03) NG10 - FM3 (CETOP 05) NG16 - FM4 (CETOP 07) NG25 - FM6 (CETOP 08)

www: e-mail: shop/sklep:

FM3





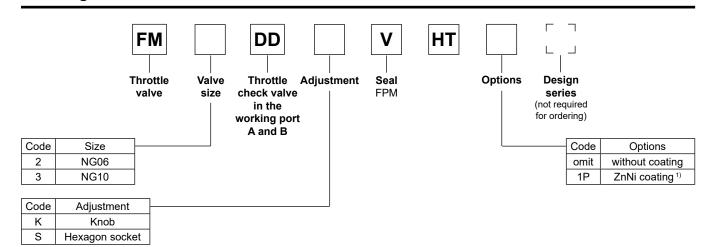
www.salushydraulics.pl pl@salushydraulics.pl www.salushydraulics.pl/sklep/

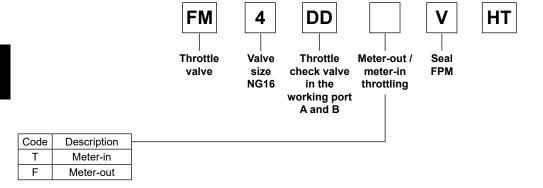
FM2DDSVHT

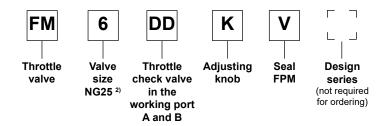
### **Technical data**

General					
Series		FM2	FM3	FM4	FM6
Size		NG06	NG10	NG16	NG25
Mounting interface		NFPA D03	NFPA D05	NFPA D07	NFPA D08
		CETOP 03	CETOP 05	CETOP07	CETOP 08
Mounting position		unrestricted			
Ambient temperature	[°C]	-20+70			
MTTF <sub>D</sub> 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]	20400			
recommended	[cSt] / [mm²/s]	3080			
Filtration		ISO 4406; 18/16/13			









FM UK.indd 03.05.23

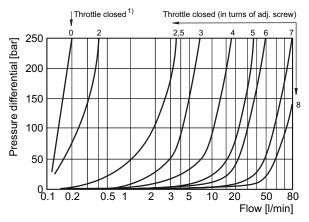


<sup>1)</sup> On request.

<sup>2)</sup> Only meter-out available.

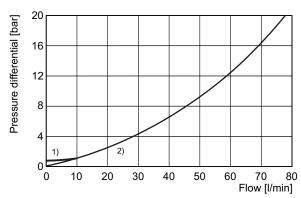
# **Performance Curves**

### FM2 standard needle



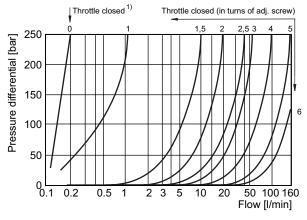
1)Leakage 0.1 ... 0.2 I/min

### FM2 flow, check valve



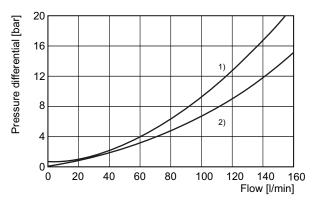
1) through check valve: throttle cosed 2) through check valve: throttle open

### FM3 standard needle



1) Leakage 0.1 ... 0.2 I/min

### FM3 flow, check valve



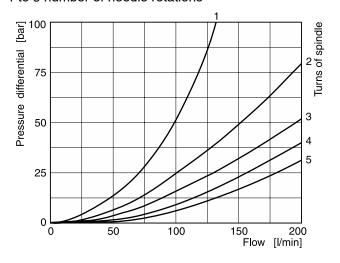
1)through check valve: throttle cosed
2)through check valve: throttle open

All characteristic curves measured with HLP46 at 50  $^{\circ}\text{C}.$ 

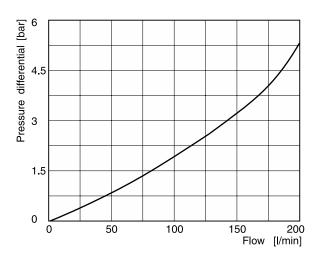


### FM4 with standard needle

1 to 5 number of needle rotations

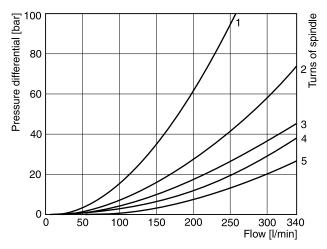


### FM4 flow, check valve

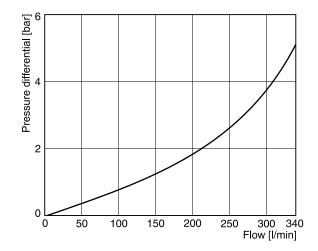


### FM6 with standard needle

1 to 5 number of needle rotations



# FM6 flow, check valve

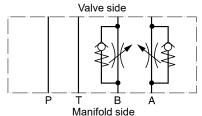


All characteristic curves measured with HLP46 at 50 °C.

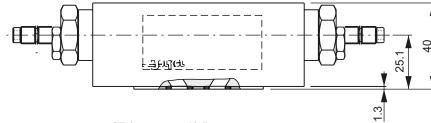


### FM2

### **Meter-out**



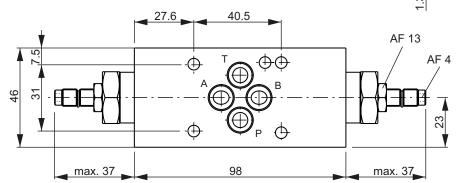
# Adjustment code S



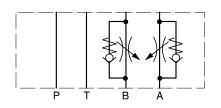
### Meter-in or meter-out

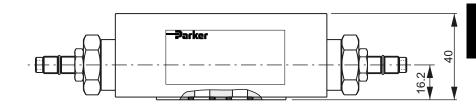
A functional change is achieved by rotating the mounting position of the valve  $180^\circ$  about the longitudinal axis (A-B).





### Meter-in



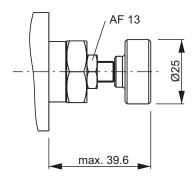


# Seal kit FM2 Seal Order code V SK-FM2-V-20

### 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.

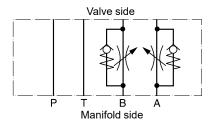
### Adjustment code K







# Meter-out

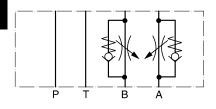


### Meter-in or meter-out

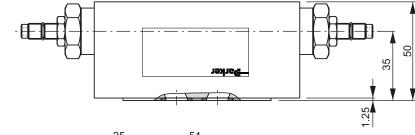
A functional change is achieved by rotating the mounting position of the valve 180° about the transverse axis (P).

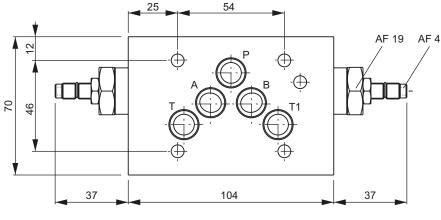


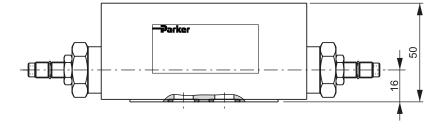
### Meter-in



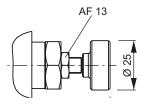
# Adjustment code S







### Adjustment code K



Seal kit FM3				
Seal	Order code			
V	SK-FM3-V-51			

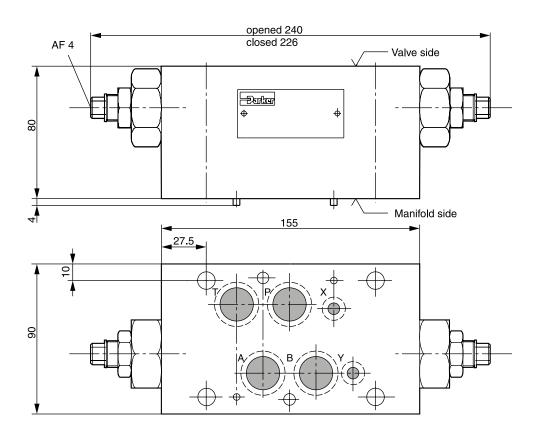
### Note:

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.

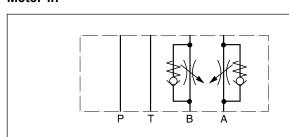
FM UK.indd 03.05.23



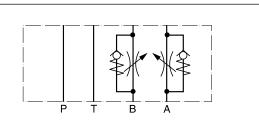
# FM4



### Meter-in



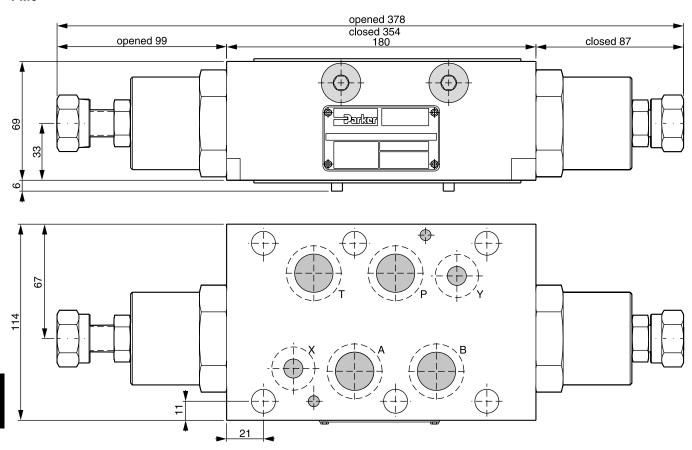
# **Meter-out**



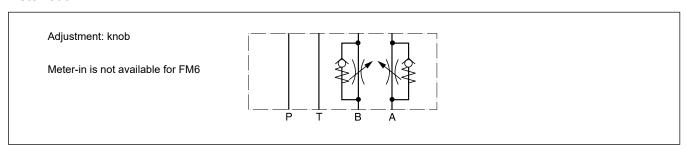
Seal kit FM4				
Seal	Order code			
V	SK-FM4VHT			



### FM6



### **Meter-out**



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

