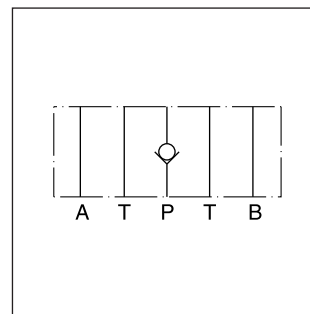


Direct operated check valves series ZRV have a cartridge type insert to provide zero leakage and high life time.

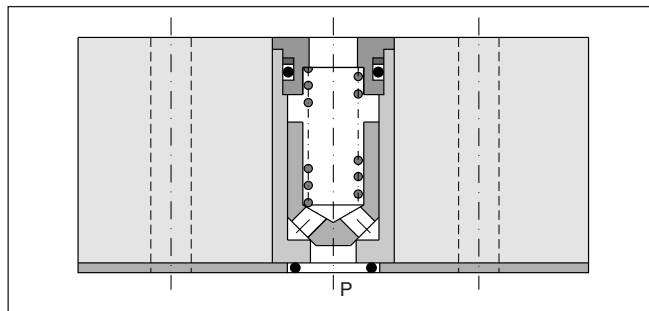
The check function can be located in the P- or in the T-port.



ZRV-P02



ZRV-P02



ZRV-P02

Features

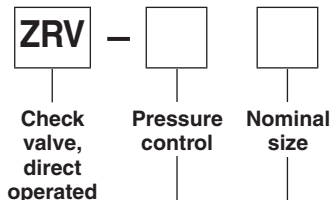
- Leakage-free seat
- High life time
- Opening pressure 0.5 bar
- Sizes
 - ZRV01 - NG06 / CETOP3
 - ZRV02 - NG10 / CETOP5

Technical data

General		06		10	
		Size	DIN 24340 A6 ISO 4401 NFA D03		DIN 24340 A10 ISO 4401 NFA D05
Mounting interface		CETOP RP 121 unrestricted			
Mounting position		unrestricted			
Ambient temperature		[°C] -20...+50			
Weight		[kg] 0.7	2.0		
Hydraulic		Max. operating pressure		[bar] 350 / 315	
		Nominal flow		[l/min] 40 / 100	
Opening pressure		[bar] 0.5 / 0.5			
Fluid		Hydraulic oil as per DIN 51524...525			
Fluid temperature		[°C] -20...+80			
Viscosity permitted		[mm²/s] 10...650			
Viscosity recommended		[mm²/s] 30			
Filtration		ISO 4406 (1999) 18/16/13 (acc. NAS 1638: 7)			

7

Ordering code

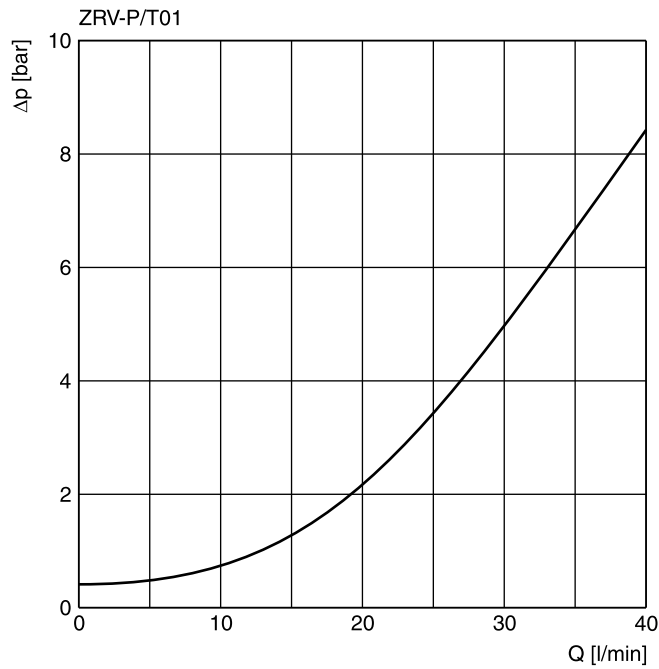


Code	Press. control
P	Blocked in P
T	Blocked in T

Code	Nominal size
01	NG06
02	NG10

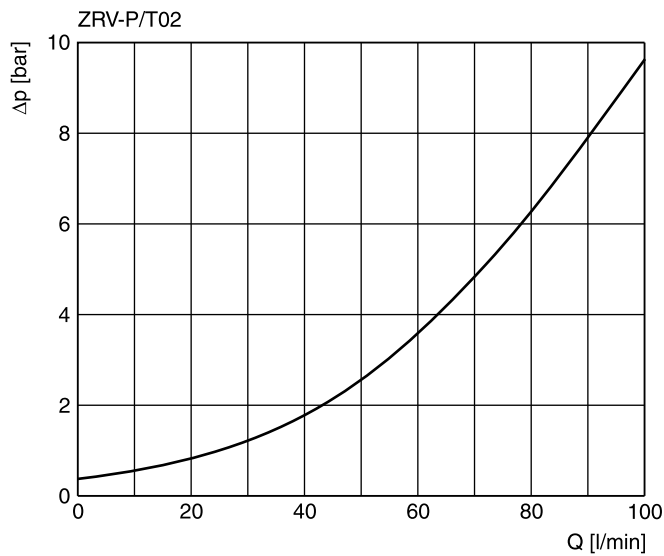
Ordering code details see end of chapter.

**p/Q performance curves
ZRV*01**



7

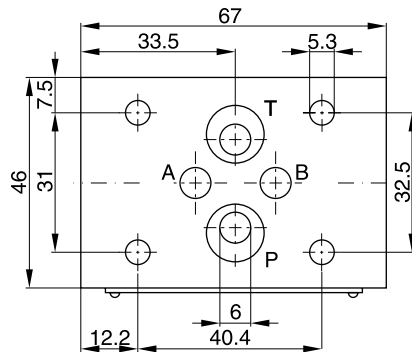
ZRV*02



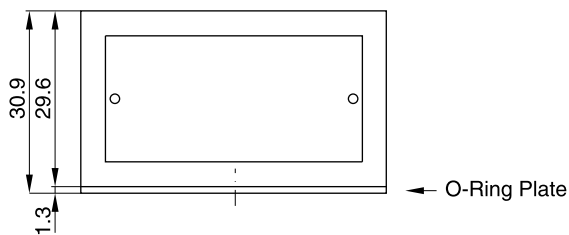
All characteristic curves measured with HLP46 at 50°C.

Dimensions

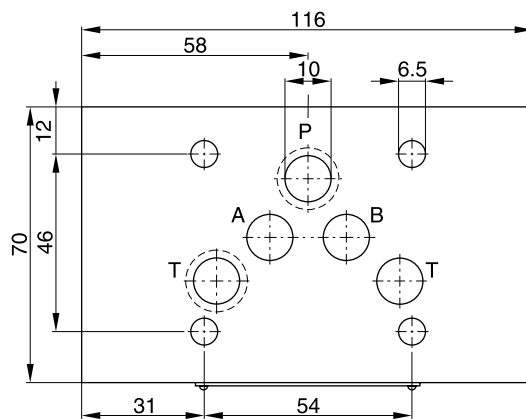
ZRV01



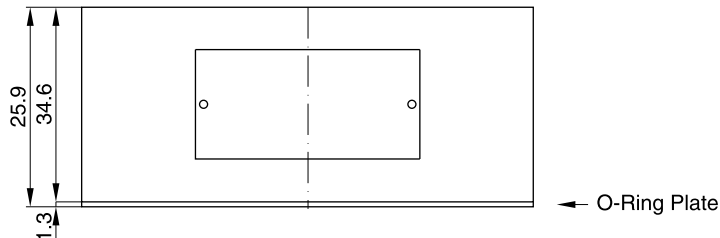
Seal kit	
Seal	Order code
NBR	SK-CM2-10
FPM	SK-CM2-V-10



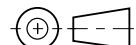
ZRV02



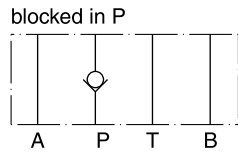
Seal kit	
Seal	Order code
NBR	SK-CM3-10
FPM	SK-CM3-V-50



7

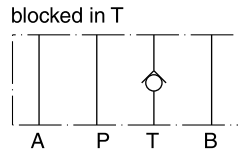


ZRV01



Series
ZRV-P01

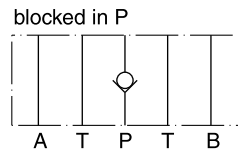
Order No.
098-90025-0



Series
ZRV-T01

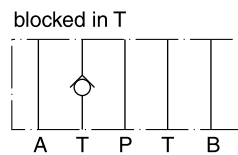
Order No.
098-90026-0

ZRV02



Series
ZRV-P02

Order No.
098-90043-0



Series
ZRV-T02

Order No.
098-90044-0

Characteristics

Pilot Operated Check Valve Series CPOM

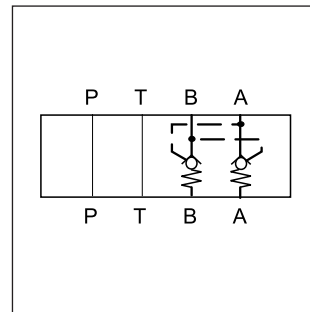
Pilot operated check valves from the Parker Manapak series CPOM are in sandwich design for easy configuration of stack systems. Depending on the function required, one or two pilot operated check valves are arranged in the ports A and/or B. The free flow direction is always from the valve side to the manifold side.

Function

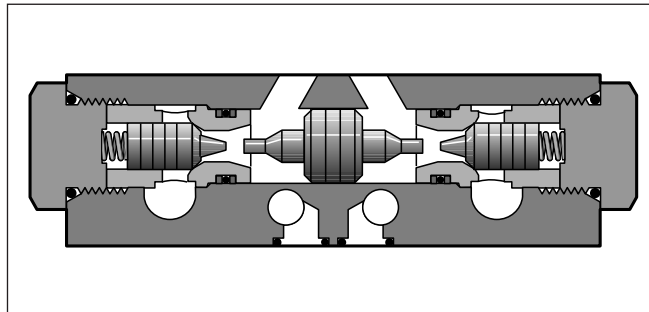
The check valves open when flowing to the consumer side, where the opposing check valve is hydraulically-mechanically pilot operated simultaneously by a control spool, and thus the return flow is enabled from other consumer sides.

Features

- The valve bodies of the Parker Manapak valve series CPOM are made of steel.
- The valve poppet is precisely guided into the steel sleeve and ensures a good seal on the seat.
- When the valve poppet is open, the large cross-section allows high flow rates at low differential pressure.
- Different control ratios can be chosen with the NG6 and NG10 valves.
- Pre-opening for CPOM*HT to achieve smooth opening.



CPOM3

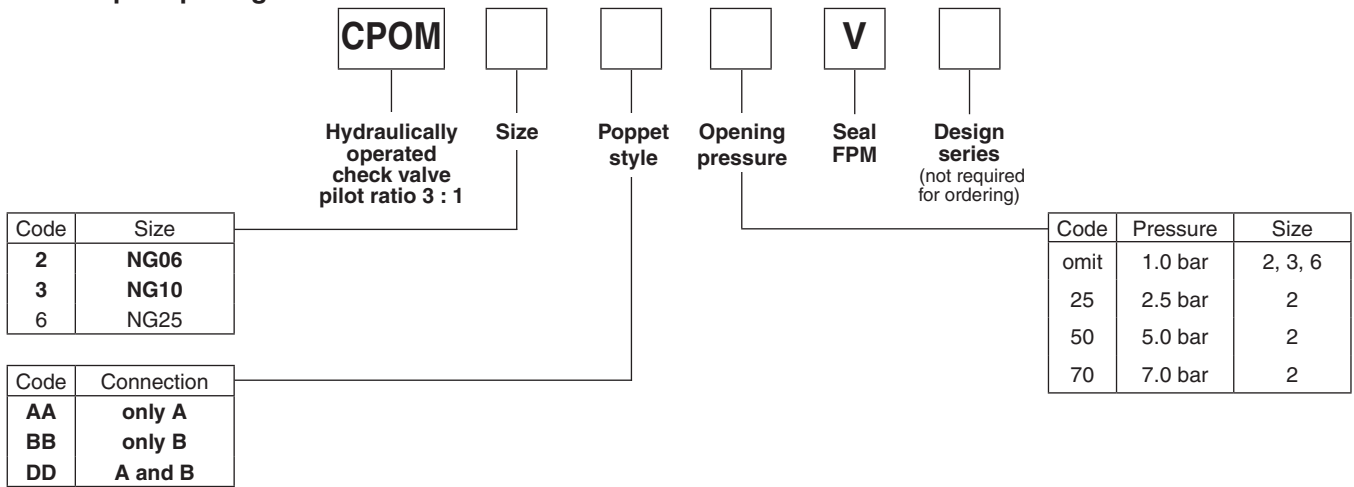


Technical data

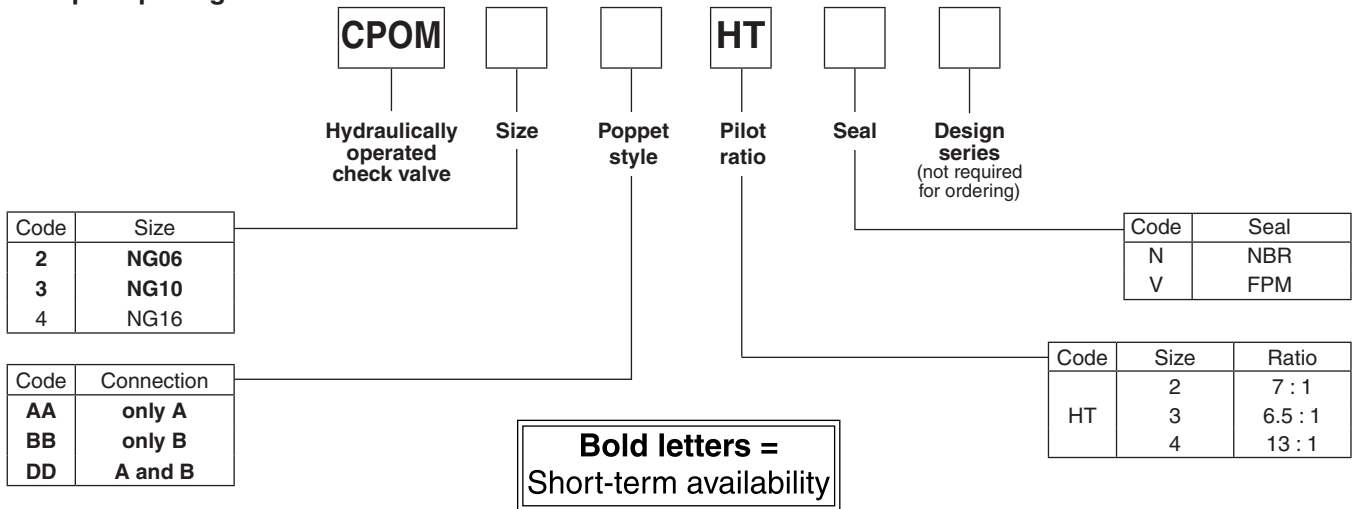
General		CPOM2	CPOM3	CPOM4	CPOM6
Series		06	10	16	25
Nominal size		06	10	16	25
Mounting pattern		ISO 4401			
Ambient temperature	[°C]	-20...+50			
MTTF _D value	[years]	150			
Weight	[kg]	1.8	4.0	7.65	9.5
Hydraulic					
Max. operating pressure	[bar]	350	350	350	210
Opening pressure	[bar]	1.0	0.8	2.0	0.4
Opening ratio		1 : 3 or 1 : 7	1 : 3 or 1 : 6,5	1 : 13	1 : 3
Leakage		on request			
Fluid		Hydraulic oil acc. to DIN 51524...525			
Fluid temperature	[°C]	-20...+80			
Viscosity range,	perm.	[cSt][mm ² /s]	10...650		
	rec.				
Filtration		ISO 4406: 18/16/13 (acc. to NAS 1638: 7)			

Ordering Code

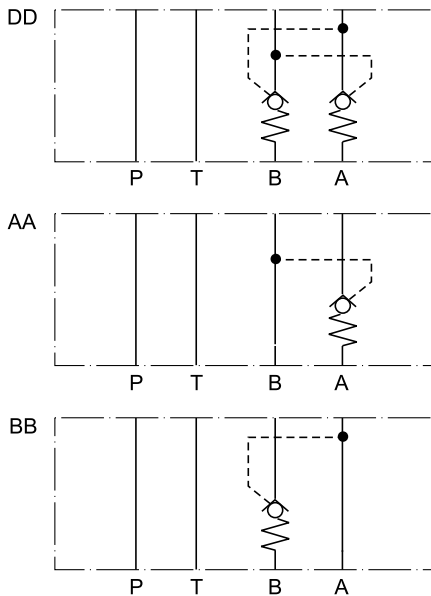
Without pre-opening



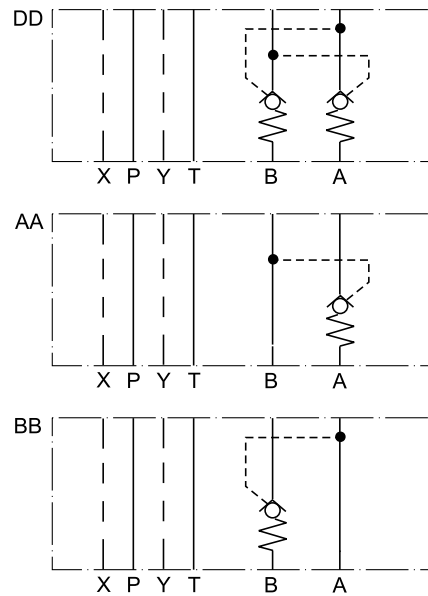
With pre-opening



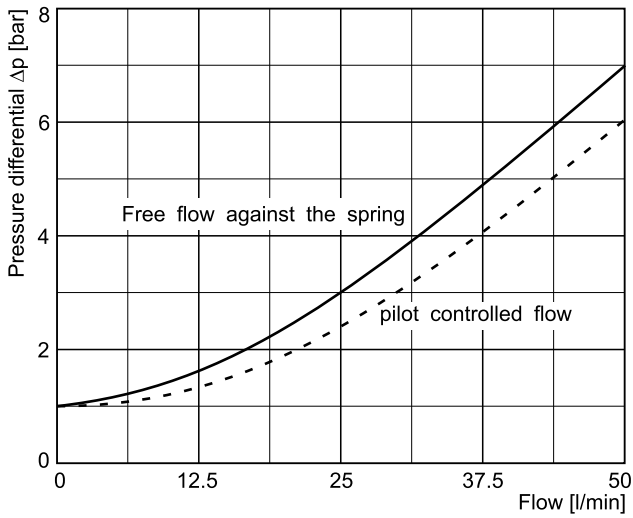
CPOM2 / CPOM3



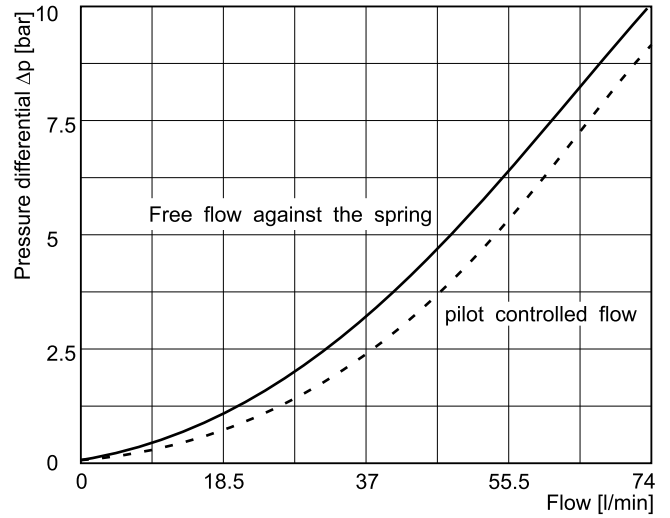
CPOM4 / CPOM6



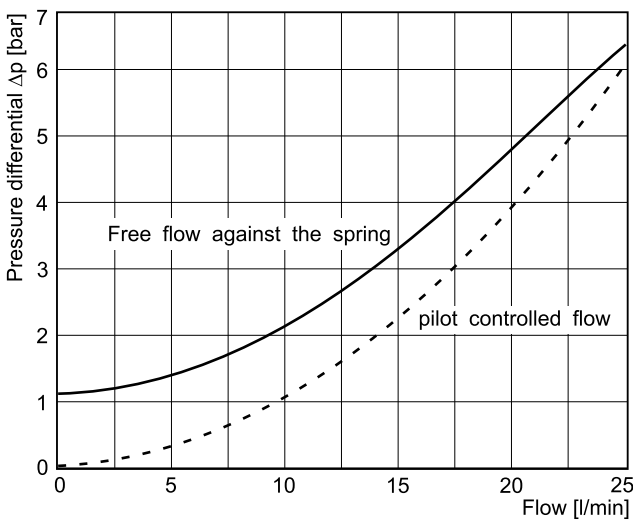
$\Delta p/Q$ performance curves
CPOM2



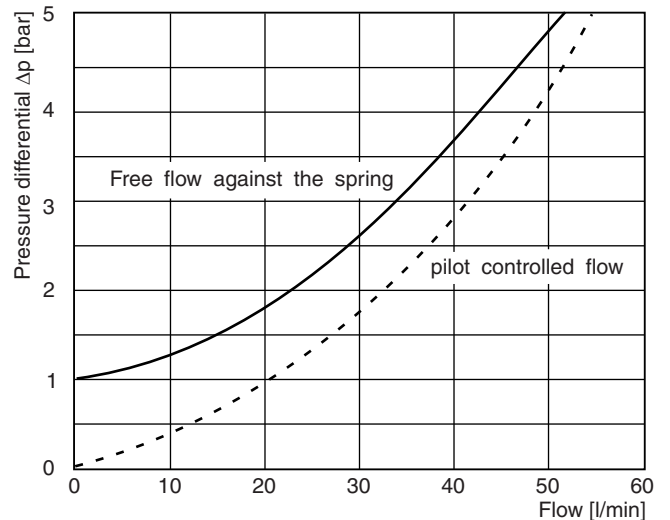
CPOM3



CPOM2 (type HT)

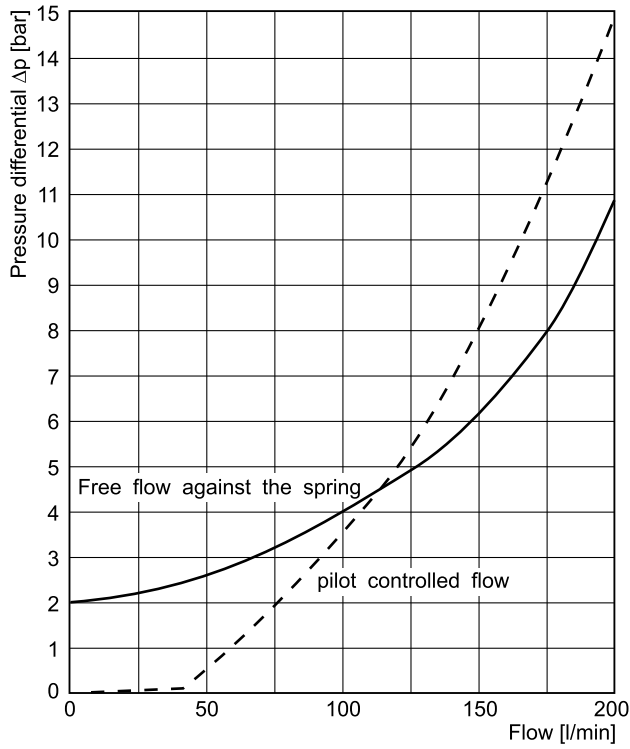


CPOM3 (type HT)

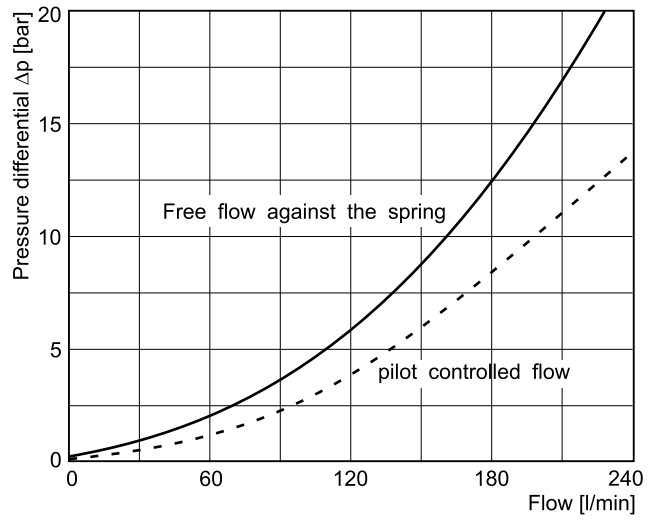


All characteristic curves measured with HLP46 at 50°C.

**$\Delta p/Q$ performance curves
 CPOM4 (type HT)**



CPOM6

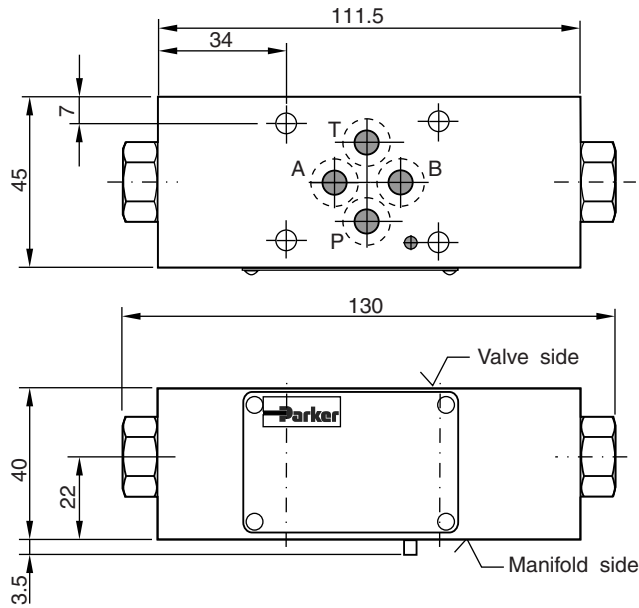


All characteristic curves measured with HLP46 at 50°C.

7

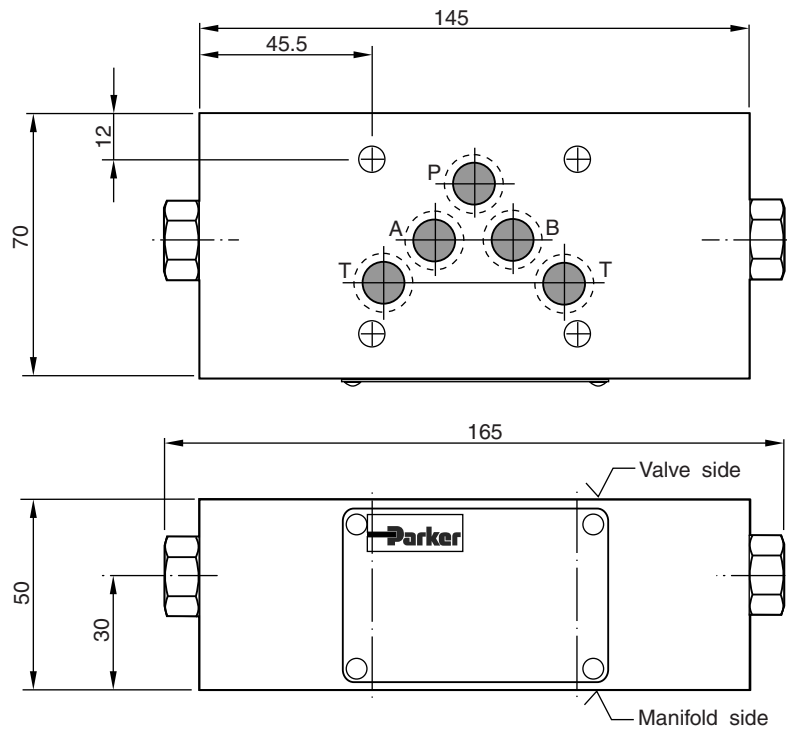
Dimensions

CPOM2



Seal kit CPOM2	
Seal	Order code
V	SK-CPOM2-V-11

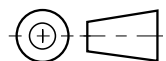
CPOM3



Seal kit CPOM3	
Seal	Order code
V	SK-CPOM3-V-11

Note:

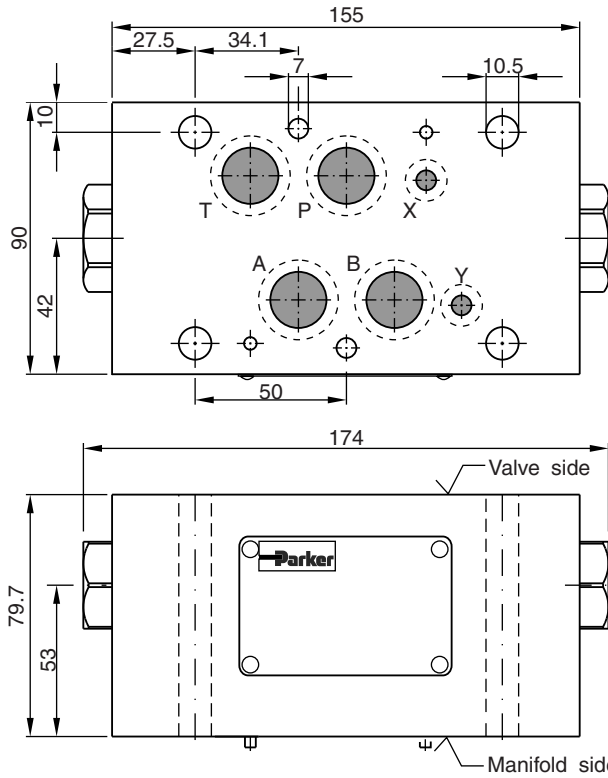
The O-ring plate for sealing the connecting surface of the manifold side is included. The O-ring plate and the positioning pin are always mounted on the manifold side.



7

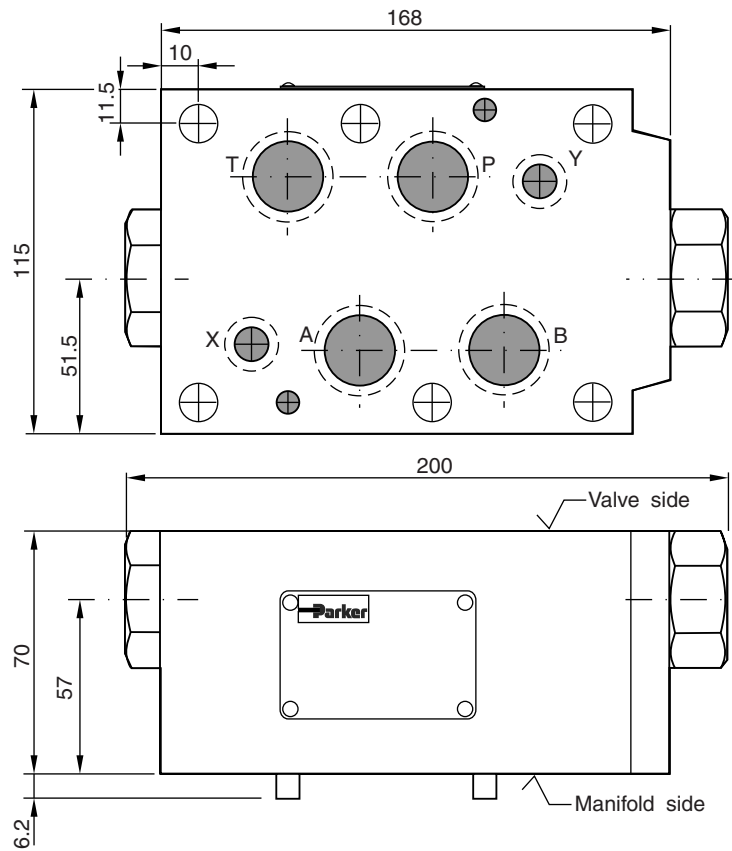
Dimensions

CPOM4



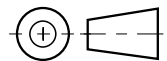
Seal kit CPOM4	
Seal	Order code
V	SK-CPOM4HTV

CPOM6



Seal kit CPOM6	
Seal	Order code
V	SK-CPOM6-V-20

Note:
The O-ring plate for sealing the connecting surface of the manifold side is included. The O-ring plate and the positioning pin are always mounted on the manifold side.



Pilot Operated Check Valve Series ZRE (Denison)

Characteristics

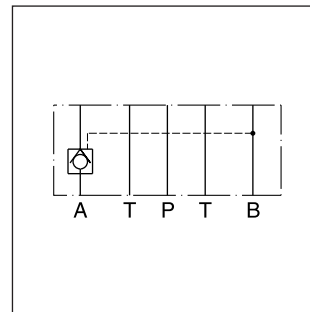
Pilot operated check valves series ZRE are designed for maximum flow rates and long life time.

The valves are typically used in combination with spool type directional control valves to ensure nearly leak free positioning of the actuator.

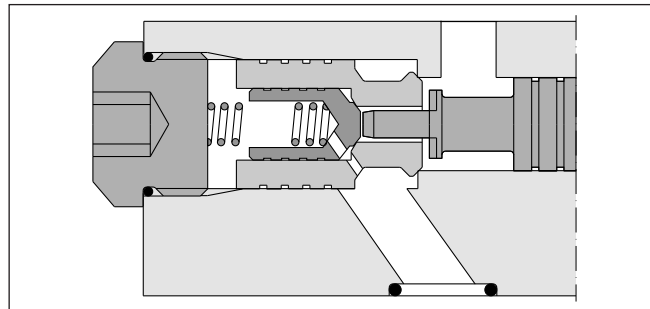
The inlet flow is free while the outlet flow is blocked. Pressure in the inlet line opens the check valve and allows free outlet flow.



ZRE-B01



ZRE-A02



ZRE-A02

Features

- High flow capacity
- High life time
- Check function in A, B or A + B
- Sizes
 - ZRE01 - NG06 / CETOP3
 - ZRE02 - NG10 / CETOP5
 - ZRE03 - NG16 / CETOP7

Ordering code

ZRE																																	
Check valve pilot operated	Pressure control	Nominal size	Design series	Seal																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Code</th> <th>Press. control</th> </tr> <tr> <td>A</td> <td>Blocked in A</td> </tr> <tr> <td>B</td> <td>Blocked in B</td> </tr> <tr> <td>AB</td> <td>Blocked in A and B</td> </tr> </table>	Code	Press. control	A	Blocked in A	B	Blocked in B	AB	Blocked in A and B		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Code</th> <th>Nominal size</th> </tr> <tr> <td>01</td> <td>NG06</td> </tr> <tr> <td>02</td> <td>NG10</td> </tr> <tr> <td>03</td> <td>NG16</td> </tr> </table>	Code	Nominal size	01	NG06	02	NG10	03	NG16	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Code</th> <th>Design series</th> </tr> <tr> <td>D</td> <td>06</td> </tr> <tr> <td>E</td> <td>10/16</td> </tr> </table>	Code	Design series	D	06	E	10/16	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Code</th> <th>Seal</th> </tr> <tr> <td>1</td> <td>NBR</td> </tr> <tr> <td>5</td> <td>FPM</td> </tr> </table>	Code	Seal	1	NBR	5	FPM	
Code	Press. control																																
A	Blocked in A																																
B	Blocked in B																																
AB	Blocked in A and B																																
Code	Nominal size																																
01	NG06																																
02	NG10																																
03	NG16																																
Code	Design series																																
D	06																																
E	10/16																																
Code	Seal																																
1	NBR																																
5	FPM																																

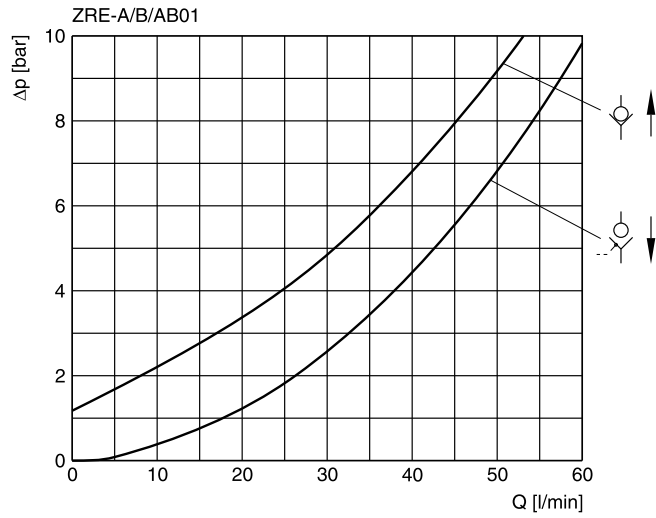
Ordering code details see end of chapter.

Technical data

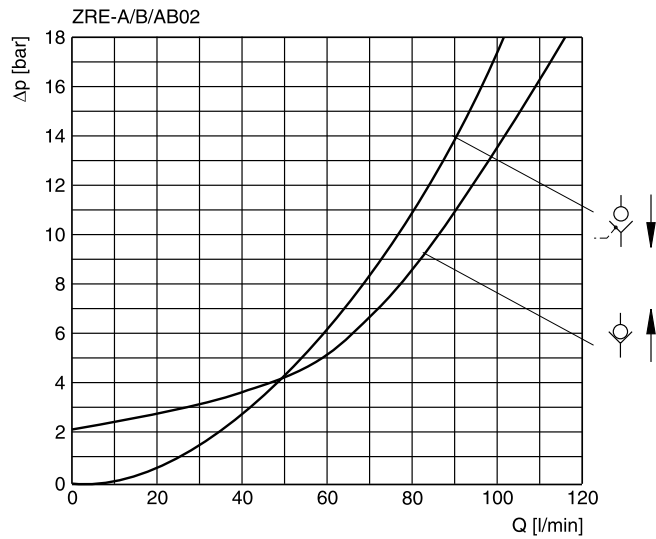
General		06	10	16
Size				
Mounting interface		DIN 24340 A6 ISO 4401 NFPA D03	DIN 24340 A10 ISO 4401 NFPA D05	DIN 24340 A16 ISO 4401 NFPA D08
Mounting position		CETOP RP 121 unrestricted		
Ambient temperature	[°C]	-20...+50		
Weight	[kg]	1.2	3.1	7.65
Hydraulic				
Max. operating pressure	[bar]	up to 350	315	350
Nominal flow	[l/min]	60	120	300
Opening ratio (pilot cone / main cone)		1:6	1:6	1:13
Opening pressure	[bar]	1.2	2.0	2.0
Leakage		on request		
Fluid		Hydraulic oil as per DIN 51524...525		
Fluid temperature	[°C]	-20...+80		
Viscosity permitted	[cSt]/[mm ² /s]	10...650		
Viscosity recommended	[cSt]/[mm ² /s]	30		
Filtration		ISO 4406 (1999) 18/16/13 (acc. NAS 1638: 7)		

ZRE_UK.INDD RH_22.06.10

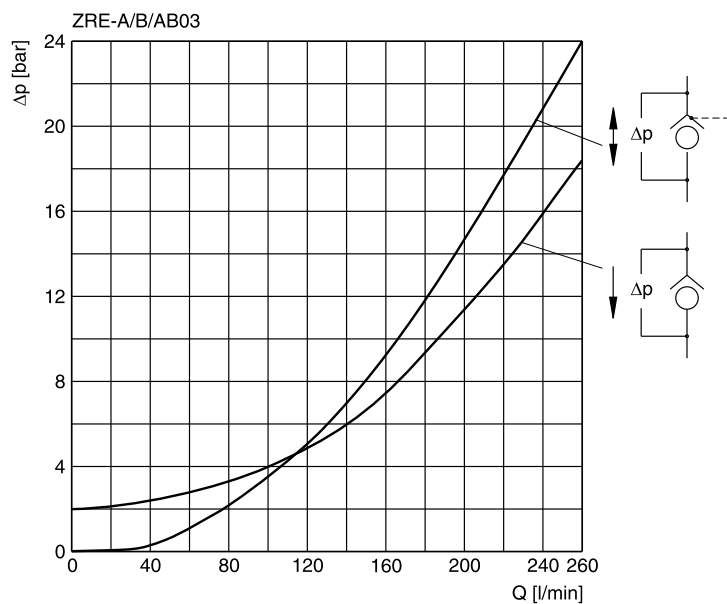
**p/Q performance curves
 ZRE*01**



ZRE*02



ZRE*03

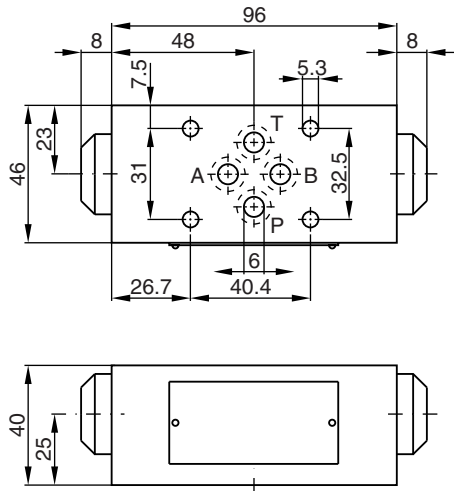


All characteristic curves measured with HLP46 at 50°C.

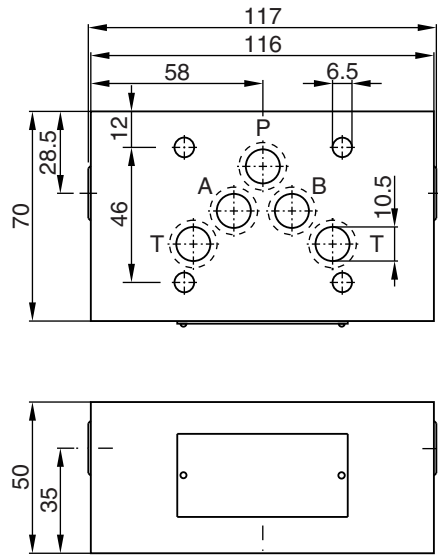
Dimensions

**Pilot Operated Check Valve
Series ZRE (Denison)**

ZRE*01



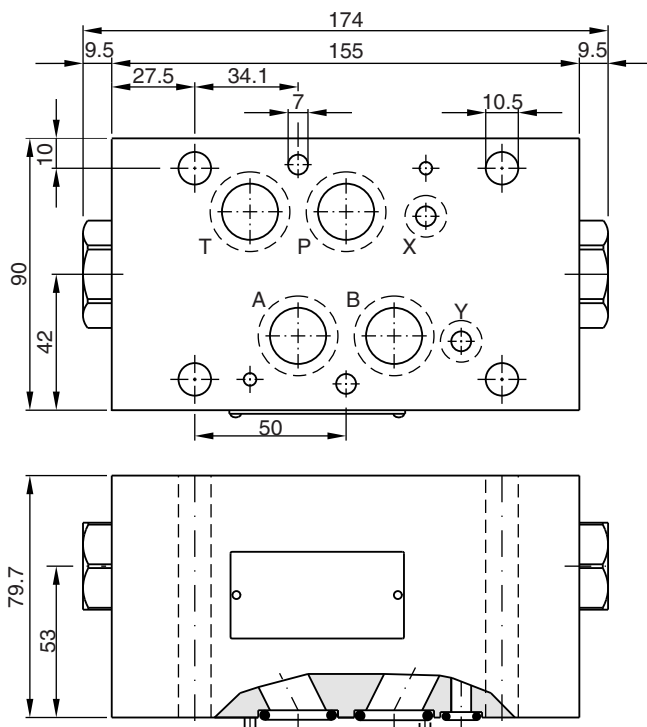
ZRE*02



Seal kit	
Seal	Order code
1	098-91088-0
5	098-91089-0

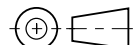
Seal kit	
Seal	Order code
1	098-91090-0
5	098-91091-0

ZRE*03

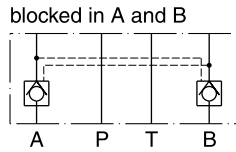


Seal kit	
Seal	Order code
1	098-91444-0
5	098-91445-0

7

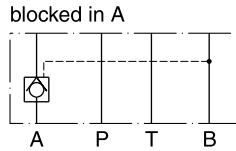


ZRE*01



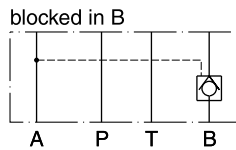
Series
 ZRE-AB01-D1

Order No.
 098-91020-0



Series
 ZRE-A01-D1

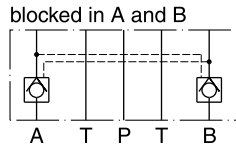
Order No.
 098-91018-0



Series
 ZRE-B01-D1

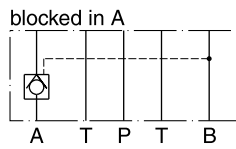
Order No.
 098-91019-0

ZRE*02



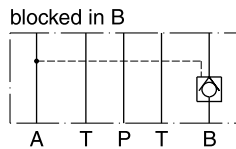
Series
 ZRE-AB02-E1

Order No.
 098-91300-0



Series
 ZRE-A02-E1

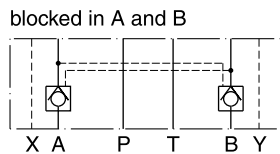
Order No.
 098-91298-0



Series
 ZRE-B02-E1

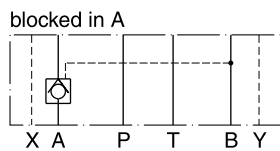
Order No.
 098-91304-0

ZRE*03



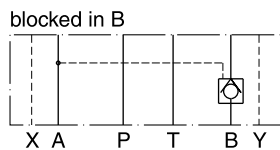
Series
 ZRE-AB03-C1

Order No.
 098-91426-0



Series
 ZRE-A03-C1

Order No.
 098-91425-0



Series
 ZRE-B03-C1

Order No.
 098-91428-0