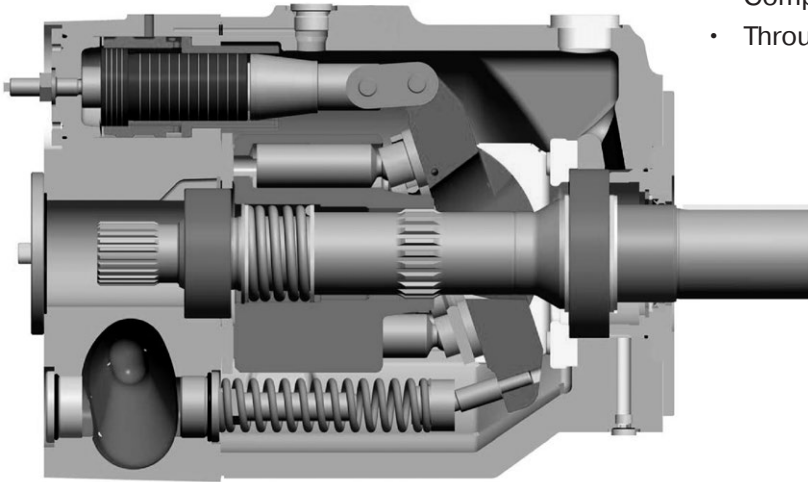


## With through drive for single and multiple pumps

Swash plate type for open circuit



## Technical Features

- Low noise level
- Fast response
- Service-friendly
- High self-priming speed
- Compact design
- Through drive for 100 % nominal torque

## General Information

### Fluid recommendations

Premium quality hydraulic mineral fluid is recommended, like HLP oils to DIN 51524 (part 2 & 3) or ISO6743/4 (HM & HV). Bruggen-value recommended to be 30 N/mm<sup>2</sup> minimum for general application and 50 N/mm<sup>2</sup> for heavily loaded hydraulic equipment and fast cycling machines and/or high dynamic loads, measured in accordance with DIN 51 347-2. See also Document MSG30-3248/UK Parker Hydraulic Fluids.

### Viscosity

The normal operating viscosity should range between 16 and 100 mm<sup>2</sup>/s (cSt). Max. start-up viscosity is 1000 mm<sup>2</sup>/s (cSt).

### Filtration

For maximum pump and system component functionality and life, the system should be protected from contamination by effective filtration.

Fluid cleanliness should be in accordance with ISO classification ISO 4406:1999. The quality of filter elements should be in accordance with ISO standards.

General hydraulic systems for satisfactory operation: Class 20/18/15, according to ISO 4406:1999

Recommended cleanliness for maximum component life and functionality: Class 18/16/13, according to ISO 4406:1999

### Seals

Check hydraulic fluid specification for chemical resistance of seal material.

Check temperature range of seal material and compare with max. system and ambient temperature.

N – Nitrile (FKM shaft seal)	-25...+ 90 °C
V – FKM (FKM shaft seal)	-25...+115 °C
W – Nitrile (PTFE shaft seal)	-30...+ 90 °C

**Note:** The highest fluid temperature will be at the drain port of the pump, up to 25 °C higher than in the reservoir.

		PV016	PV020	PV023	PV028	PV032	PV040	PV046
Frame size		1	1	1	1	2	2	2
Max. displacement	[cm <sup>3</sup> /rev.]	16	20	23	28	32	40	46
Output flow at 1500 rpm	[l/min]	24	30	34,5	42	48	60	69
Nominal pressure pN	[bar]	350	350	350	350	350	350	350
Min. outlet pressure	[bar]	15	15	15	15	15	15	15
Max. pressure pmax at 20 % working cycle <sup>1)</sup>	[bar]	420	420	420	420	420	420	420
Case drain pressure, continuous	[bar]	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Case drain pressure, max. peak	[bar]	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Min. inlet pressure, abs.	[bar]	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Max. inlet pressure	[bar]	16	16	16	16	16	16	16
Input power at 1500 rpm and 350 bar	[kW]	15.9	19.7	22.4	26.9	31.1	38.5	43.8
Max. input torque at 350 bar	[Nm]	94.5	118.1	135.9	165.4	184.3	230.4	265.0
Max speed at 1 bar, abs, inlet pressure	[rpm]	3000	3000	3000	3000	2800	2800	2800
Min. speed	[rpm]	50	50	50	50	50	50	50
Moment of inertia	[kgm <sup>2</sup> ]	0.0016	0.0016	0.0016	0.0016	0.0047	0.0047	0.0047
Weight	[kg]	19	19	19	19	30	30	30

		PV063	PV080	PV092	PV140	PV180	PV270	PV360
Frame size		3	3	3	4	4	5	6
Max. displacement	[cm <sup>3</sup> /rev.]	63	80	92	140	180	270	360
Output flow at 1500 rpm	[l/min]	94.5	120	138	210	270	405	540
Nominal pressure pN	[bar]	350	350	350	350	350	350	350
Min. outlet pressure	[bar]	15	15	15	15	15	15	15
Max. pressure pmax at 20 % working cycle <sup>1)</sup>	[bar]	420	420	420	420	420	420	420
Case drain pressure, continuous	[bar]	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Case drain pressure, max. peak	[bar]	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Min. inlet pressure, abs.	[bar]	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Max. inlet pressure	[bar]	16	16	16	16	16	16	16
Input power at 1500 rpm and 350 bar	[kW]	61.3	76.9	87.5	136.1	173.1	259.6	338.7
Max. input torque at 350 bar	[Nm]	365.2	463.7	533.3	812.4	1044.5	1550.5	2067.4
Max speed at 1 bar, abs, inlet pressure	[rpm]	2800	2500	2300	2400	2200	1800	1750
Min. speed	[rpm]	50	50	50	50	50	50	50
Moment of inertia	[kgm <sup>2</sup> ]	0.018	0.018	0.018	0.030	0.030	0.098	0.103
Weight	[kg]	59	59	59	90	90	172	180

<sup>1)</sup> Check adjustment range each compensator.

<b>P</b>	<b>V</b>				<b>R</b>	<b>1</b>	<b>K</b>	<b>1</b>	<b>T</b>	<b>1</b>	<b>N</b>			
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axial piston  
pump  
variable  
displace-  
ment

size and  
displacement

rotation

variation

mounting  
interface

threads  
code

through  
drive  
code

coupling  
code

seals

control

see next page →

Code	Displacement	Size
032	32 cm <sup>3</sup> /rev	2
040	40 cm <sup>3</sup> /rev	2
046	46 cm <sup>3</sup> /rev	2

Code	Rotation <sup>1)</sup>
R	Clockwise
L	Counter clockwise

<sup>1)</sup> When looked on shaft

Code	Variation
1	Standard
4	Electronic displacement sensor (CIP) <sup>2)</sup>
5	CIP-Sensor & Spec. adjustment <sup>3)</sup> (4 & 9)
9	Special adjustment <sup>3)</sup>

<sup>2)</sup> not for horse power control

<sup>3)</sup> requires Kxxxx number

Code	Mounting interface	Shaft
K	metr. ISO 3019/2	4-hole flange Ø125 mm Cylindric, key
L		4-hole flange Ø125 mm Splined, DIN 5480
D	SAE ISO 3019/1	4-hole flange SAE C Cylindric, key
E		4-hole flange SAE C Splined, SAE

Code	Port <sup>4)</sup>	Threads <sup>5)</sup>
1	BSPP	metric
3	UNF	UNC
8 <sup>6)</sup>	ISO 6149	metric

<sup>4)</sup> Drain, gage and flushing ports

<sup>5)</sup> All mounting and connecting threads

<sup>6)</sup> Mounting interface, code K and L only

Code	Seals	Shaft seal
N	NBR	FKM
V	FKM	FKM
W	NBR	PTFE

Code	Coupling for through drive	as single part <sup>7)</sup>
1	Single pump, no coupling	
H	with coupling 25 x 1.5 x 15, DIN 5480	MK-PVBG2K01
J	with coupling 32 x 1.5 x 20, DIN 5480	MK-PVBG2K02
Y	with coupling SAE A 9T-16/32 DP	MK-PVBG2K11
A	with coupling SAE 11T-16/32 DP	MK-PVBG2K12
B	with coupling SAE B 13T-16/32 DP	MK-PVBG2K13
C	with coupling SAE B-B 15T-16/32 DP	MK-PVBG2K14
D	with coupling SAE C 14T-12/24 DP	MK-PVBG2K15

Code	Through drive option	
	No adaptor for 2nd pump	
T	Single pump prepared for through drive	
	with adaptor for 2nd pump	as single part <sup>7)</sup>
A	SAE A-2, Ø 82.55 mm	MK-PVBG2Axx
B	SAE B-2/4, Ø 101.6 mm	MK-PVBG2Bxx
C	SAE C-4, Ø 127 mm	MK-PVBG2Cxx
J	metric, Ø 100 mm	MK-PVBG2Jxx
K	metric. Ø 125 mm	MK-PVBG2Kxx

See dimensions for details

<sup>7)</sup> to be ordered separately as single part  
see page 63.

Standard pump is not painted. Black painted pump and ATEX (excludes electronic components) certification (Zone 2) is available as special option. For additional informations please contact Parker Hannifin.

Code			Control options
0	0	1	No control
1	0	0	With cover plate, no control function (fixed displacement pump)
M	M		Standard pressure control
M	R		Remote pressure control
M	F		Load Sensing (flow) control
M	T		Two spool LS control
			Control variation
		C	Standard version, integrated pilot valve <sup>1)</sup>
		1	NG6 interface top side for pilot valves <sup>1)</sup>
		2	Remote pressure port int. supply , NG6 interface <sup>2)</sup>
		3	Remote pressure port ext. supply <sup>2)</sup>
		W	With unloading function, 24VDC solenoid <sup>1)</sup>
		K	Prop.-pilot valve type PVACRE...K35 mounted
		Z	Without integrated pilot valve, NG6 interface, for mounting of accessory code PVAC*
		B	Without integrated pilot valve, without NG6 interface <sup>3)</sup>
		P	MTZ with mounted pilot valve PVAC1P <sup>2)</sup>

<sup>1)</sup> not for MT & \*Z  
<sup>2)</sup> only for MT & \*Z  
<sup>3)</sup> not for MT & MM

Horse power / Torque control				
Code				
			Nominal HP at 1.500 rpm	Nominal torque
D			5.5 kW	35 Nm
E			7.5 kW	50 Nm
G			11 kW	71 Nm
H			15 kW	97 Nm
K			18.5 kW	120 Nm
M			22 kW	142 Nm
S			30 kW	195 Nm
Function				
	L		Horse power control with pressure control <sup>4)</sup>	
	C		Horse power control with load sensing (single spool)	
	Z		Horse power control with two spool LS control	
Control variation				
		C	Standard version, integrated pilot valve <sup>1)</sup>	
		1	NG 6 interface top side	
		W	With unloading function, 24 VDC solenoid	
		K	Prop.-pilot valve type PVACRE...K35 mounted	
		Z	Without integrated pilot valve, NG6 interface, for mounting of accessory code PVAC* <sup>4)</sup>	
		B	Without integrated pilot valve, without NG6 interface <sup>1), 4)</sup>	
		P	*ZZ with mounted pilot valve PVAC1P <sup>2)</sup>	

<sup>4)</sup> control variation Z and B without pressure pilot

Code			Control option
Electro hydraulic control <sup>5)</sup>			
F	D	V	Proportional displacement control, no pressure compensation
U	D		Proportional displacement control, with pressure compensation
Control variation			
		R	pilot operated pressure control, open NG6 interface
		K	pilot operated pressure control, proportional pilot valve type PVACRE...K35 mounted
		M	pilot operated pressure control, pressure sensor and proportional pilot valve type PVACRE...K35 mounted for pressure control and/or power control

<sup>5)</sup> further info in MSG30-3254