



axial piston pump  
 variable displacement  
 high pressure  
 version

size and displacement

rotation

variation

mounting interface

threads code

thru drive code

coupling code

seals

compensator

see next page →

Code	Displacement	Size
063	63 cm <sup>3</sup> /rev	3
080	80 cm <sup>3</sup> /rev	3
<b>092</b>	<b>92 cm<sup>3</sup>/rev</b>	<b>3</b>

Code	Seals	Shaft seal
<b>N</b>	<b>NBR</b>	<b>FKM</b>
V	FKM	FKM
W	NBR	PTFE

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

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

Code	Variation
<b>1</b>	<b>Standard</b>
2	Electronic displacement sensor <sup>2)</sup>
9	Special adjustment <sup>3)</sup>

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

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

Code	Coupling for thru drive	as single part <sup>8)</sup>
<b>1</b>	<b>Single pump, no coupling</b>	
H	with coupling 25 x 1.5 x 15, DIN 5480	MK-PVBG3K01
J	with coupling 32 x 1.5 x 20, DIN 5480	MK-PVBG3K02
K	with coupling 40 x 1.5 x 25, DIN 5480	MK-PVBG3K03
Y	with coupling SAE A 9T-16/32 DP	MK-PVBG3K11
A	with coupling SAE - 11T-16/32 DP	MK-PVBG3K12
B	with coupling SAE B 13T-16/32 DP	MK-PVBG3K13
C	with coupling SAE B-B 15T-16/32 DP	MK-PVBG3K14
D	with coupling SAE C 14T-12/24 DP	MK-PVBG3K15
E	with coupling SAE C-C 17T-12/24 DP	MK-PVBG3K16
F	with coupling SAE D, E 13T-8/16 DP	MK-PVBG3K17

Code	Mounting interface	Shaft
<b>K</b>	<b>metr. ISO 4-hole flange Ø160 mm</b>	<b>Cylindric, key</b>
<b>L</b>	<b>3019/2 4-hole flange Ø160 mm</b>	<b>Splined, DIN 5480</b>
D	SAE ISO 4-hole flange SAE D	Cylindric, key
E	3019/1 4-hole flange SAE D	Splined, SAE

Code	Thru drive option	
	No adaptor for 2nd pump	
<b>T</b>	<b>Single pump prepared for thru drive</b>	
	with adaptor for 2nd pump as single part <sup>8)</sup>	
A	SAE A, Ø 82.55 mm	MK-PVBG3Axx
B	SAE B, Ø 101.6 mm	MK-PVBG3Bxx
C	SAE C, Ø 127 mm	MK-PVBG3Cxx
D	SAE D, Ø 152.4 mm	MK-PVBG3Dxx
H	metric, Ø 80 mm	MK-PVBG3Hxx
J	metric, Ø 100 mm	MK-PVBG3Jxx
K	metric, Ø 125 mm	MK-PVBG3Kxx
L	metric, Ø 160 mm	MK-PVBG3Lxx

Code	Port <sup>4)</sup>	Threads <sup>5)</sup>
<b>1</b>	<b>BSPP</b>	<b>metric</b>
3	UNF	UNC
4 <sup>6)</sup>	BSPP	metr. M14
8 <sup>7)</sup>	ISO 6149	metric

See dimensions for details

<sup>8)</sup> to be ordered separately as single part see page 61.

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

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

<sup>6)</sup> For PV063-PV092 only: pressure port 1 1/4" with 4 x M14 instead of 4 x M12

<sup>7)</sup> for mounting interface K and L only

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
		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	MT1 with mounted pilot valve PVAC1P <sup>2)</sup>

1) not for MT & \*Z  
2) only for MT  
3) not for MT & MM

Horse power / Torque control			
Code			
		Nominal HP at 1.500 rpm	Nominal torque
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
T		37 kW	240 Nm
U		45 kW	290 Nm
W		55 kW	355 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>

4) 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

5) further info in HY30-3254

Technical Data

		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]	15.5	19.5	22.5	27.5	31	39	45
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> ]	0.0017	0.0017	0.0017	0.0017	0.0043	0.0043	0.0043
Weight	[kg]	19	19	19	19	30	30	30

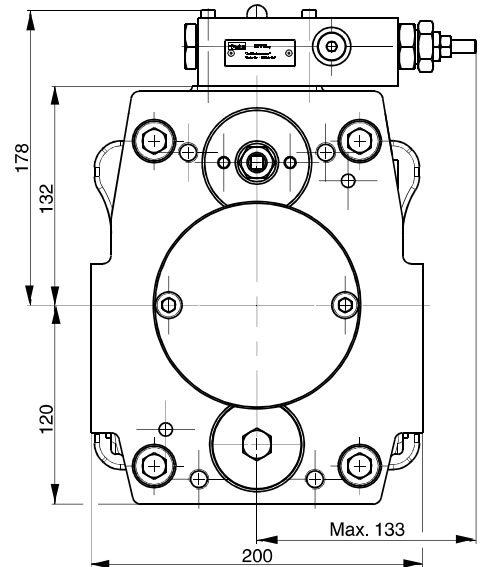
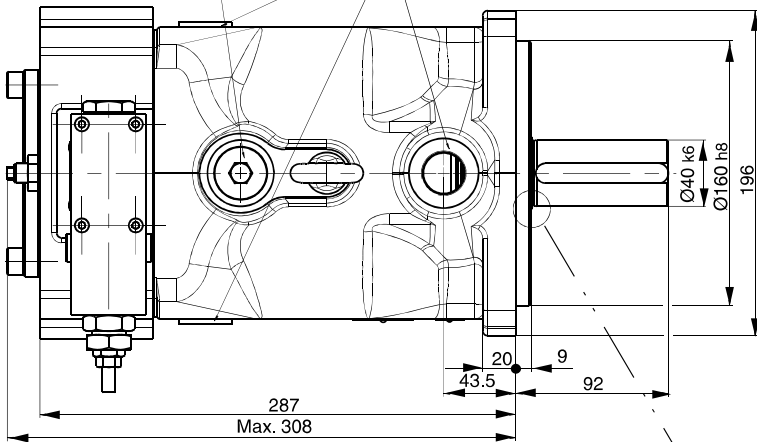
		PV063	PV080	PV092	PV140	PV180	PV270	PV360
Frame size		3	3	3	4	4	5	6
Max. Displacement	[cm <sup>3</sup> /rev.]	63	80	92	140	180	270	360
Output flow at 1500 rpm	[l/min]	94.5	120	138	210	270	405	540
Nominal pressure pN	[bar]	350	350	350	350	350	350	350
Min. outlet pressure	[bar]	15	15	15	15	15	15	15
Max. 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]	61.5	78	89.5	136	175	263	350
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

1) Check adjustment range each compensator.

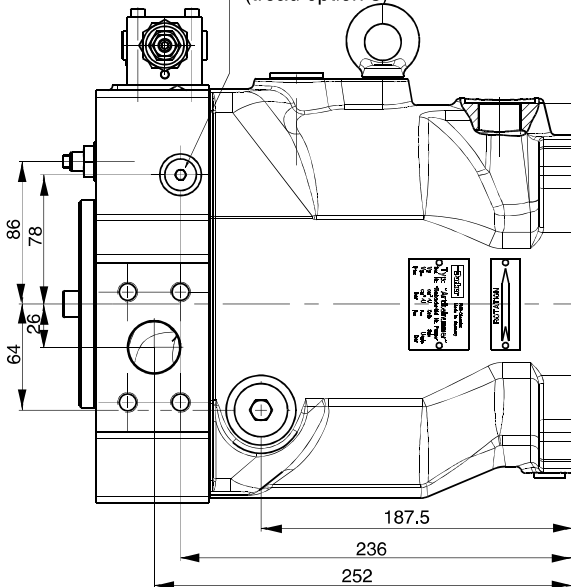
**PV 063 - 092 Metric**

Mounting interface for horse power pilot or LVDT for displacement feedback

Drain ports L1, L2 and L3; G3/4" optional M27 x 2; ISO 6149-1 (thread option 8) or 1 1/16" - 12 UNF (thread option 3)

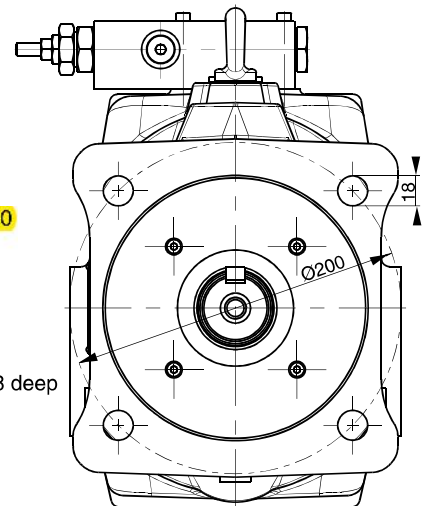


Gage port M; G1/4", optional M12 x 1.5; ISO 6149-1 (thread option 8) or 7/16" - 20 UNF (thread option 3)

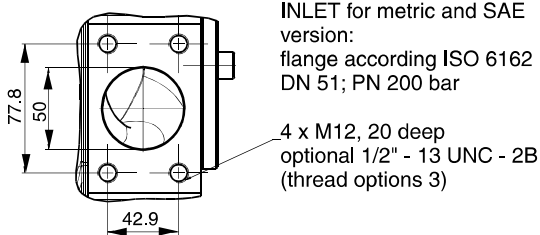


Key 12 x 8 x 80  
 DIN 6885

Thread  
 M12 - 28 deep

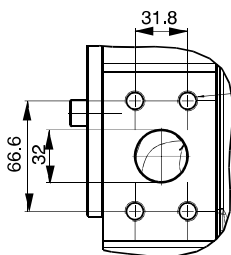


The pump shown above has **Mounting option K** and thru drive variation **T** (prepared for thru drive)



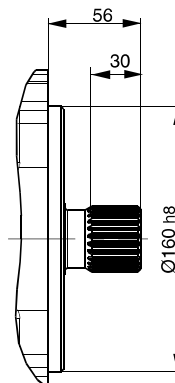
**INLET** for metric and SAE version:  
 flange according ISO 6162  
 DN 51; PN 200 bar

4 x M12, 20 deep  
 optional 1/2" - 13 UNC - 2B  
 (thread options 3)



4 x M12, 20 deep  
 optional 1/2" - 13 UNC - 2B  
 (thread options 3)  
 or thread options 4:  
 4 x M14, 20 deep

**OUTLET** for metric and SAE version:  
 flange according ISO 6162  
 DN 32; PN 400 bar



**Mounting option L**, splined shaft  
 W40 x 1.5 x 25 x 8f DIN 5480

Shown is a clockwise rotating pump with standard pressure compensator. Counter clockwise rotating pumps have inlet, outlet and gage port reversed.