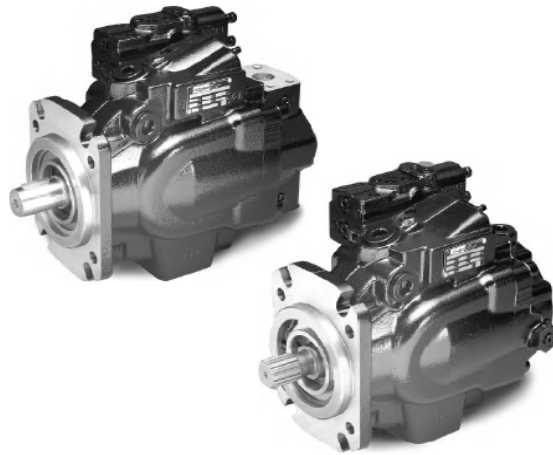


Literature

Ref. Catalogue [HY28-1559-01/PT](#)



P2/P3 Series Piston Pumps Variable Displacement

Catalog: HY28-1559-01/PT
Supercedes All Previous Versions

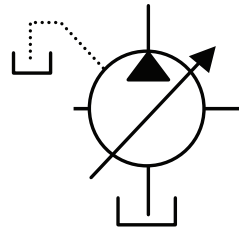
aerospace
climate control
electromechanical
filtration
fluid & gas handling
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process control
sealing & shielding



ENGINEERING YOUR SUCCESS.

Characteristics

- Continuous Pressure – up to 350 bar
- Through shaft Capability
- Low Outlet Flow Pulsation
- 7 Standard Control Options



Feature

- Low noise levels
- Fast response
- Compact design
- Service friendly
- High self priming speed
- Through drive for 100% of nominal
- Modular controls

	PV016/020/023/028	PV032/040/046	PV063/080/092	PV140/180	PV270	PV360
Max. Displacement	16/20/23 cc/rev	32/40/46 cc/rev	63/80/92 cc/rev	140/180 cc/rev	270 cc/rev	360 cc/rev
Speed Rating:	3000 RPM	2800 RPM	2800/2500/ 2300 RPM	2400/2200 RPM	1800 RPM	1750 RPM
Cont. Outlet Press:	350 bar	350 bar	350 bar	350 bar	350 bar	350 bar
Min. Inlet Press.	0.8 bar	0.8 bar	0.8 bar	0.8 bar	0.8 bar	0.8 bar
Max. Inlet Press.	16 bar	16 bar	16 bar	16 bar	16 bar	16 bar
Input Power*:	15.5/19.5/ 22.5/ 27.5 kW	31/39/45 kW	6.1/78/7804 kW	138/175 kW	263 kW	350 kW

* 1500 RPM and 350 bar.

Model	Description	
PV016R1K1T1NMMC	16cc/rev, RH press. Comp. Keyed shaft metric flang	Can be Converted from PV028
PV020R1K1T1NMMC	20cc/rev, RH press. Comp. Keyed shaft metric flang	Can be Converted from PV028
PV023R1K1T1NMMC	23cc/rev, RH press. Comp. Keyed shaft metric flang	Can be Converted from PV028
PV028R1K1T1NMMC	28cc/rev, RH press. Comp. Keyed shaft metric flang	
PV032R1K1T1NMMC	32cc/rev, RH press. Comp. Keyed shaft metric flang	Can be Converted from PV046
PV040R1K1T1NMMC	40cc/rev, RH press. Comp. Keyed shaft metric flang	Can be Converted from PV046
PV046R1K1T1NMMC	46cc/rev, RH press. Comp. Keyed shaft metric flang	
PV063R1K1T1NMMC	63cc/rev, RH press. Comp. Keyed shaft metric flang	Can be Converted from PV092
PV080R1K1T1NMMC	80cc/rev, RH press. Comp. Keyed shaft metric flang	Can be Converted from PV092
PV092R1K1T1NMMC	92cc/rev, RH press. Comp. Keyed shaft metric flang	
PV140R1K1T1NMMC	140cc/rev, RH press. Comp. Keyed shaft metric flang	Can be Converted from PV180
PV180R1K1T1NMMC	180cc/rev, RH press. Comp. Keyed shaft metric flang	
PV270R1K1T1NMMC	270cc/rev, RH press. Comp. Keyed shaft metric flang	

Piston Pump Options

Description	Through Drive Kit*	Coupling*
PV016-028 to SAE A Pilot & Coupling 9T	MK-PVBG1AMN42	MK-PVBG1K1142
PV016-028 to SAE B Pilot & Coupling 13T	MK-PVBG1BMN42	MK-PVBG1K1342
PV016-028 to PV016-028	MK-PVBG1JMN42	MK-PVBG1K0142
PV032-046 to SAE A Pilot & Coupling 9T	MK-PVBG2AMN40	MK-PVBG2K1140
PV032-046 to SAE B Pilot & Coupling 13T	MK-PVBG2BMN42	MK-PVBG2K1340
PV032-046 to PV016-028	MK-PVBG2JMN40	MK-PVBG2K0140
PV032-046 to PV032-046	MK-PVBG2KMN40	MK-PVBG2K0240
PV063-092 to SAE A Pilot & Coupling 9T	MK-PVBG3AMN41	MK-PVBG3K1141
PV063-092 to SAE B Pilot & Coupling 13T	MK-PVBG3BMN41	MK-PVBG3K1341
PV063-092 to SAE C Pilot & Coupling 14T	MK-PVBG3CMN41	MK-PVBG3K1541
PV063-092 to PV016-023	MK-PVBG3JMN41	MK-PVBG3K0141
PV063-092 to PV032-046	MK-PVBG3KMN41	MK-PVBG3K0241
PV063-092 to PV063-092	MK-PVBG3LMN41	MK-PVBG3K0341
PV140-180 to SAE A Pilot & Coupling 9T	MK-PVBG4AMN40	MK-PVBG4K1140
PV140-180 to SAE B Pilot & Coupling 13T	MK-PVBG4BMN40	MK-PVBG4K1340
PV140-180 to SAE C Pilot & Coupling 14T	MK-PVBG4CMN40	MK-PVBG4K1540
PV140-180 TO PV016-028	MK-PVBG4JMN40	MK-PVBG4K0140
PV140-180 TO PV032-046	MK-PVBG4KMN40	MK-PVBG4K0240
PV140-180 TO PV063-092	MK-PVBG4LMN40	MK-PVBG4K0340
PV140-180 TO PV140-180	MK-PVBG4LMN40	MK-PVBG4K0440
PV270 to PV032-046	MK-PVBG5KMN40	MK-PVBG5K0240
PV270 to PV063-092	MK-PVBG5LMN40	MK-PVBG5K0340
PV270 to PV140-180	MK-PVBG5LMN40	MK-PVBG5K0440
PV270 to PV270	MK-PVBG5MMN40	MK-PVBG5K0540

Compensator Options* Series 45 and up only

	PV016-046	PV063-092	PV140-360
Pressure Compensated – MMC	PVCMAMCN1	PVCMCMCN1	PVCMEMCN1
Pressure & Flow Comp. – MFC	PVCMAFCN1	PVCMCFCN1	PVCMFCFN1
Pressure & Flow Comp. c/w Top Interface NG6/D03 – MF1	PVCMAF1N1	PVCMCF1N1	PVCMFC1N1
Remote Press Comp. – MRC	PVCMARCN1	PVCMCRCN1	PVCMERCN1
Remote Press Comp. cc/w Top Interface NG6/D03 – MR1	PVCMAR1N1	PVCMCR1N1	PVCMER1N1

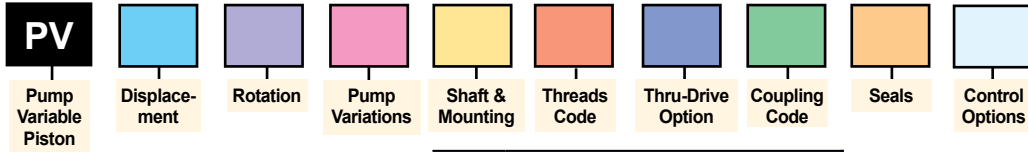
* More Compensator Options Available on Request. Contact Parker.

PV Plus Piston Pump Spares

Seal Kits A

	PV016-023	PV032-046	PV063-092	PV140-180	PV270
Seal Kit Buna N	SK-PVBG1N145	SK-PVBG2N145	SK-PVBG3N143	SK-PVBG4N144	SK-PVBG5N146
Seal Kit Viton	SK-PVBG1V145	SK-PVBG2V145	SK-PVBG2V143	SK-PVBG4V144	SK-PVBG5V146

PVplus 016-046cc Model Ordering Code



Code	Displacement in ³ /rev (cc/rev)
016	.98 (16)
020	1.2 (20)
023	1.4 (23)
028	1.7 (28)
032	1.9 (32)
040	2.4 (40)
046	2.8 (46)

Code	Rotation*
R	CW
L	CCW

*As viewed from shaft end.

Code	Pump Variations
1	Standard
9*	Customized Displacement and/or Pressure Setting

*Specify in cc/rev and/or bar.

Code	Shaft & Mounting			
	PV016/020/023		PV032/040/046	
	Shaft	Pilot	Shaft	Pilot
D	1" Keyed (SAE BB)	4 Bolt SAE B	1 1/4" Keyed (SAE C)	4 Bolt SAE C
E	15T Spline (SAE BB)	4 Bolt SAE B	14T Spline (SAE C)	4 Bolt SAE C
K	25mm Keyed	4 Bolt 100mm	32mm Keyed	4 Bolt 125mm
L	W25 x 1.5 x 15 x 8f Spline DIN 5480	4-Bolt 100mm	W32 x 1.5 x 20 x 8f Spline DIN 5480	4 Bolt 125mm

Code	Threads Code	
	Port*	Threads**
1	BSPP	Metric
3	UNF	UNC
7	ISO 6149	UNC
8	ISO 6149	Metric

*Drain, gage, and flushing ports.

** Mounting and connecting threads

Code	Thru-Drive Option (1st Digit)
T	Single Pump Prepared for Thru-Drive With Adapter for Second Pump
Y ¹	SAE AA, Ø2.00in (Ø50.8mm)
A	SAE A, Ø3.25in (Ø82.55mm)
B	SAE B, Ø4.00in (Ø101.6mm)
C ²	SAE C, Ø5.00in (Ø127mm)
G	Metric, Ø2.48in (Ø63mm)
H	Metric, Ø3.15in (Ø80mm)
J	Metric, Ø3.94in (Ø100mm)
K ²	Metric, Ø4.92in (Ø125mm)

¹ Only for PV016 thru PV023

² Only for PV032 and larger

* Only for PV032 and larger

Code	Coupling Code
1	Single pump, no coupling
H	with coupling 25 x 1.5 x 15, DIN 5480
J	with coupling 32 x 1.5 x 20, DIN 5480
Y	with coupling SAE A 9T-16/32 DP
A	with coupling SAE - 11T-16/32 DP
B	with coupling SAE B 13T-16/32 DP
C	with coupling SAE B-B 15T-16/32 DP
D	with coupling SAE C 14T-12/24 DP

Code	Seals
N	Nitrile
V	Fluorocarbon
W	Nitrile w/PTFE Shaft Seal
P	FPM w/PTFE Shaft Seal

Code	Control Options
Standard Pressure Compensator	
0 0 1	No Compensator
1 0 0	With Cover Plate, No Control Function
M M	Standard pressure control, integrated pilot valve
M R	Remote pressure control, integrated pilot valve
M F	Load Sensing (flow) control, integrated pilot valve
M T	Two spool LS control
Remote/Load Sense Compensator	
C	Standard version ¹
1	NG6 interface top side for pilot valves
W	With unloading function, 24VDC solenoid ¹
K	Prop.-pilot valve type PVACRE...35 mounted
Z	Without integrated pilot valve, NG6 interface, for mounting of accessory code PVAC
P	MT1 with mounted pilot valve PVAC1P ²
Horsepower Compensator Control	
Nominal Horsepower at 1500 RPM	
B	3 kW (19.5 Nm Torque)
C	4 kW (26 Nm Torque)
D	5.5 kW (36 Nm Torque)
E	7.5 kW (49 Nm Torque)
G	11 kW (71 Nm Torque)
H	15 kW (97 Nm Torque)
K	18.5 kW (120 Nm Torque)
M	22 kW (142 Nm Torque)
S	30 kW (195 Nm Torque)
Function	
L	Horsepower Compensator
C	Horsepower Compensator & Load Sensing
Variation	
C	Standard Version
1	NG 6 interface top side
W	With unloading function, 24 VDC solenoid
K	Pro-pilot valve type PVARCE...35 mounted
Z	Without integrated pilot valve, NG6 interface, for mounting of accessory code PAVC ^{2,4}
B	Without integrated pilot valve, without NG6 interface ⁴⁾
Electro Hydraulic Control Options	
F P V	Proportional displacement control, no pressure compensation
U P	Proportional displacement control, with pressure compensation

NOTES:

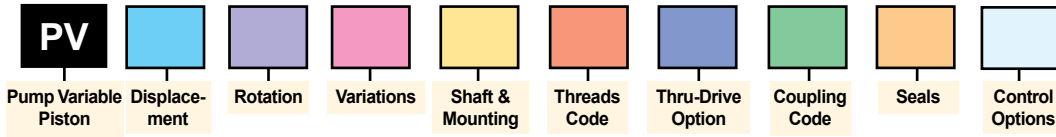
Compensator differential Δp is to be adjusted:
 Remote pressure comp., horsepower comp. 15 ± 1 bar
 Load-sensing comp. (not horsepower comp.) 10 ± 1 bar
 (Codes MF* and LS part of MT*)
 Consult catalog on CD for electrohydraulic control options.
Items in red are standard.

¹ Not for MT

² Only for MT

PV Plus Series

PVplus 063-360cc Model Ordering Code



Code	Displacement in ³ /rev (cc/rev)
063	3.8 (63)
080	4.8 (80)
092	5.6 (92)
140	8.5 (140)
180	10.9 (180)
270	16.5 (270)
360	22.0 (360)

Code	Rotation*
R	CW
L	CCW

*As viewed from shaft end.

Code	Pump Variations
1	Standard
9*	Customized Displacement and/or Pressure Setting

*Specify in cc/rev and/or bar.

Code	Shaft & Mounting					
	PV063/080/092		PV140/180		PV270	
	Shaft	Pilot	Shaft	Pilot	Shaft	Pilot
D	1 3/4" Keyed (SAE D)	4 Bolt SAE D	2" Keyed SAE F	4 Bolt SAE D	2" SAE Keyed	4 Bolt SAE E
E	13T Spline (SAE D)	4 Bolt SAE D	15T Spline SAE F	4 Bolt SAE D	15T Spline SAE F	4 Bolt SAE E
F			1 3/4" Keyed SAE D	4 Bolt SAE D		
G			13T Spline SAE D	4 Bolt SAE D		
K	40mm Keyed	4 Bolt 160 mm	50mm Keyed	4 Bolt 160 mm	65mm Keyed	4 Bolt 200 mm
L	W40 x 1.5 x 25 x8f Spline DIN 5480	4 Bolt 160 mm	W50 x 2 x 24 x 9g Spline DIN 5480	4 Bolt 160 mm	W60 x 2 x 28 x 9g Spline DIN 5480	4 Bolt 200 mm

Code	Threads Code	
	Port*	Threads**
1	BSPP	Metric
3	UNF	UNC
4***	BSPP-M14	Metric
7	ISO 6149	UNC
8	ISO 6149	Metric

* Drain, gage, and flushing ports.

** Mounting and connecting threads

*** Only for PV063-PV180; pressure port 1 1/4" with 4xM14 instead of 4xM12

Code	Thru-Drive Option (1st Digit)
T	Single Pump Prepared for Thru-Drive With Adapter for Second Pump
A	SAE A, Ø3.25in (Ø82.55mm)
B	SAE B, Ø4.00in (Ø101.6mm)
C	SAE C, Ø5.00in (Ø127mm)
D ¹	SAE D, Ø6.00in (Ø152.4) mm
E ²	SAE E, Ø6.50in (Ø165.1mm)
G ³	Metric, Ø2.48in (Ø63mm)
H	Metric, Ø3.15in (Ø80mm)
J	Metric, Ø3.94in (Ø100mm)
K	Metric, Ø4.92in (Ø125mm)
L ¹	Metric, Ø6.30in (Ø160mm)
M ²	Metric, Ø7.87in (Ø200mm)

1 Only for PV063 and larger
2 Only for PV270
3 Only up to PV092

Code	Coupling Code
1	Single pump, no coupling
H	with coupling 25 x 1.5 x 15, DIN 5480
J	with coupling 32 x 1.5 x 20, DIN 5480
K	with coupling 40 x 1.5 x 25, DIN 5480
L	with coupling 50 x 2 x 24, DIN 5480
Y	with coupling SAE A 9T-16/32 DP
A	with coupling SAE - 11T-16/32 DP
B	with coupling SAE B 13T-16/32 DP
C	with coupling SAE B-B 15T-16/32 DP
D	with coupling SAE C 14T-12/24 DP
E	with coupling SAE C - C
F	with coupling SAE D, E
G	with coupling SAE F

Code	Seals
N	Nitrile
V	Fluorocarbon
W	Nitrile w/PTFE Shaft Seal
P	FPM w/PTFE Shaft Seal

Consult catalog on CD for electrohydraulic control options.

Code	Control Options
Standard Pressure Compensator	
0 0 1	No Compensator
1 0 0	With Coverplate, No Control Function
M M	Standard pressure control, integrated pilot valve
M R	Remote pressure control, integrated pilot valve
M F	Load Sensing (flow) control, integrated pilot valve
M T	Two spool LS control
Remote/Load Sense Compensator	
C	Standard version ¹
1	NG6 interface top side for pilot valves
W	With unloading function, 24VDC solenoid ¹
K	Prop.-pilot valve type PVACRE...35 mounted
Z	Without integrated pilot valve, NG6 interface, for mounting of accessory code PVAC
P	MT1 with mounted pilot valve PVAC1P ²
Horsepower Compensator Control	
Input Horsepower at 1500 RPM	
G	11 kW (71 Nm Torque)
H	15 kW (97 Nm Torque)
K	18.5 kW (120 Nm Torque)
M	22 kW (142 Nm Torque)
S	30 kW (195 Nm Torque)
T	37 kW (240 Nm Torque)
U	45 kW (290 Nm Torque)
W	55 kW (355 Nm Torque)
Y	75 kW (485 Nm Torque)
Z	90 kW (585 Nm Torque)
2	110 kW (715 Nm Torque)
3	132 kW (850 Nm Torque)
4	160 kW (850 Nm Torque)
5	180 kW (850 Nm Torque)
6	200 kW (850 Nm Torque)
Function	
	Horsepower Compensator
	Horsepower Compensator & Load Sensing
Variation	
C	Standard Version
1	NG 6 interface top side
W	With unloading function, 24 VDC solenoid
K	Pro-pilot valve type PVARCE...35 mounted
Z	Without integrated pilot valve, NG6 interface, for mounting of accessory code PAVC* ⁴
B	Without integrated pilot valve, without NG6 interface ⁴
Electro Hydraulic Control Options	
F D V	Proportional displacement control, no pressure
U D	Proportional displacement control, with pressure compensation

Items in red are standard.

- 1 Not for MT
- 2 Only for MT
- 3 Accessories not included. Please specify on order with full model code.
- 4 Control variation Z and B without pressure compensator

