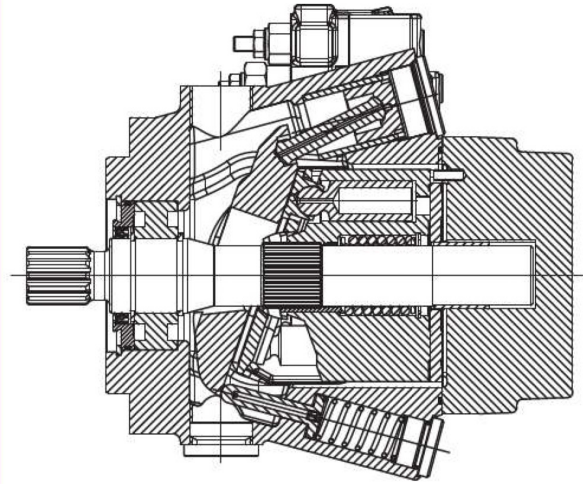


HPA6 Series



Axial Piston Pumps Variable Displacement



The HP A6 series axial piston pumps have been designed to operate in an open circuit. Control systems now available are making it easy to use these pumps in any application for industrial and mobile fields. Development of rotating groups, specifically designed, united to an accurate study of oil passage sections into the pumps, allow high speed rotation, like required by modern diesel engines, giving extreme reliability for working continuous pressure unitl 280 bar and until 350 bar for peak pressure. Control types shown in this section allow a load-sensing or a constant pressure control over the pump. It is possible to couple tandem versions for both pump types, by means of correct coupling flanges.

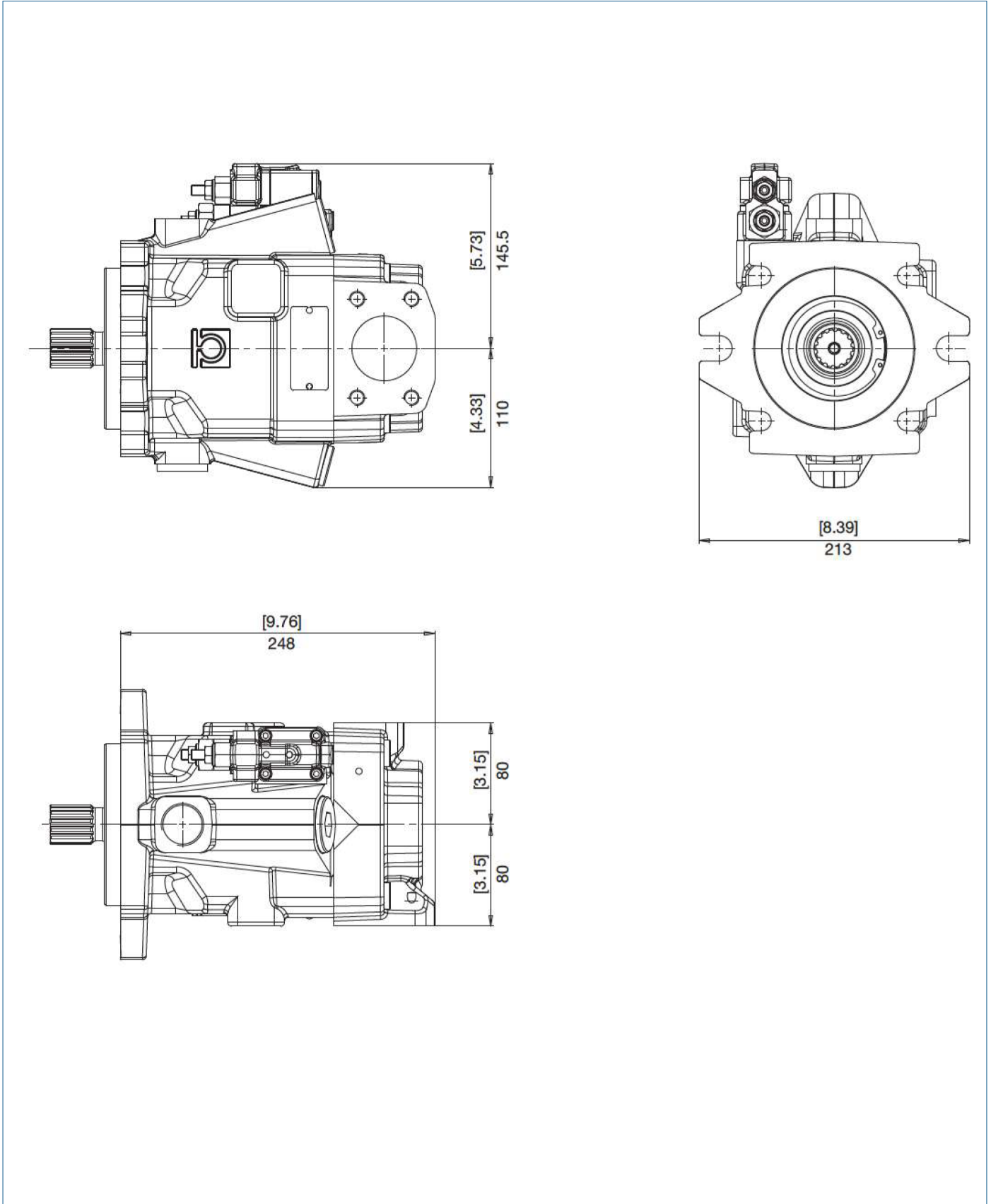
GROUP	NOMINAL DISPLACEMENT		SWASH PLATE °	CONTINUOUS		INTERMITTENT		PEAK		SPEED		WEIGHT	
	cm ³	in ³		bar	psi	bar	psi	bar	psi	MAX	MIN	kg	lbs
										min ⁻¹	min ⁻¹		
HP A6	70	4.28	19	280	4060	320	4640	350	5075	2500	500	33	76
	80	4.89	15	250	3625	300	4350	320	4640	2400	500	33	76
	90	5.50	17	250	3625	280	4060	300	4350	2300	500	33	76

HPA6 Series

Axial Piston Pumps Variable Displacement



DIMENSIONS



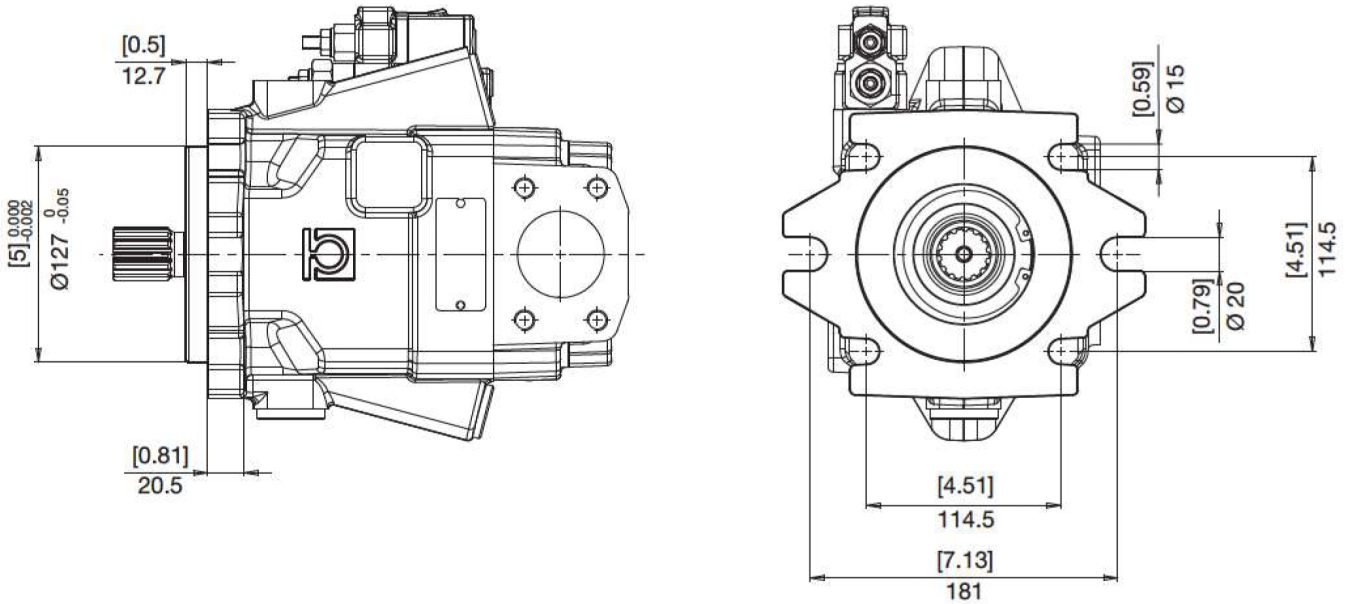
HPA6 Series

Axial Piston Pumps Variable Displacement



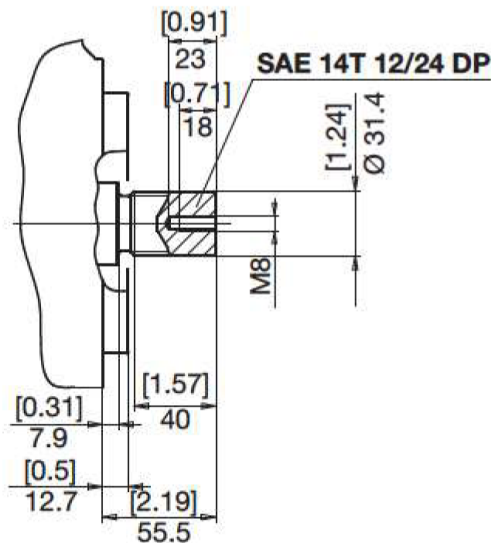
FLANGES

E SAE C (2 and 4 Holes)



SPLINE SHAFTS

3 Max Torque 850 Nm



HPA6 Series

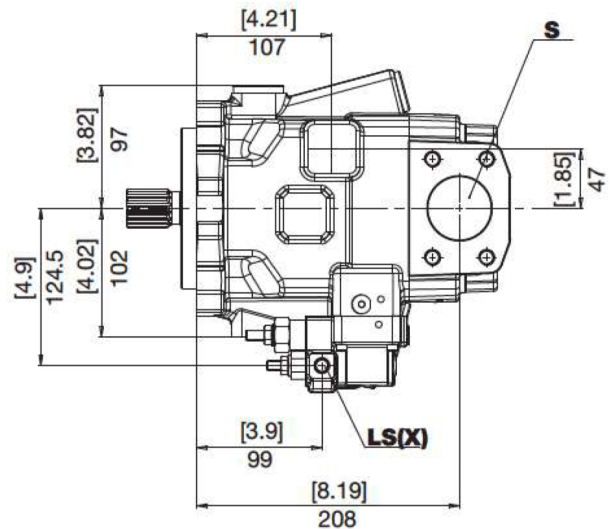
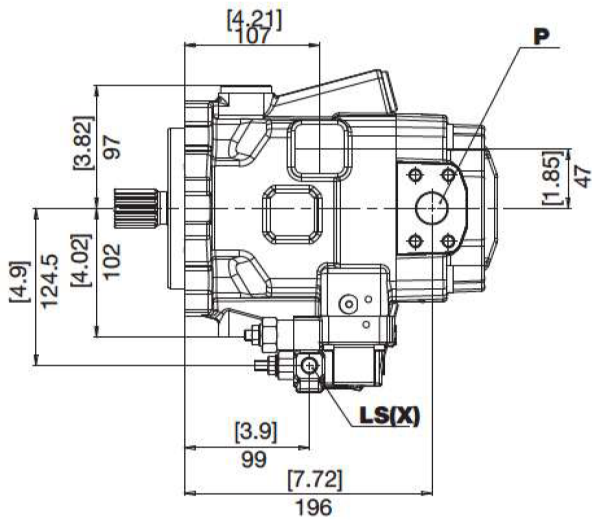
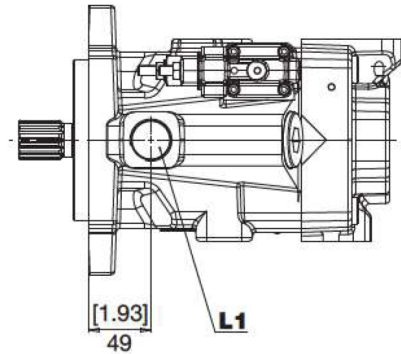
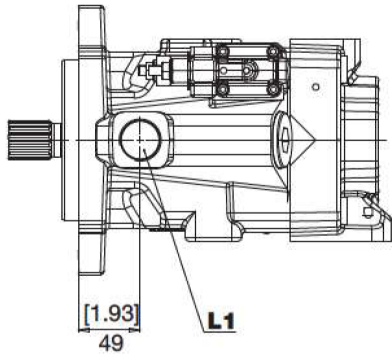
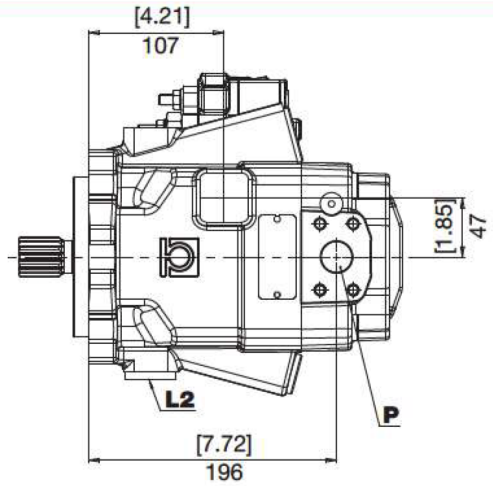
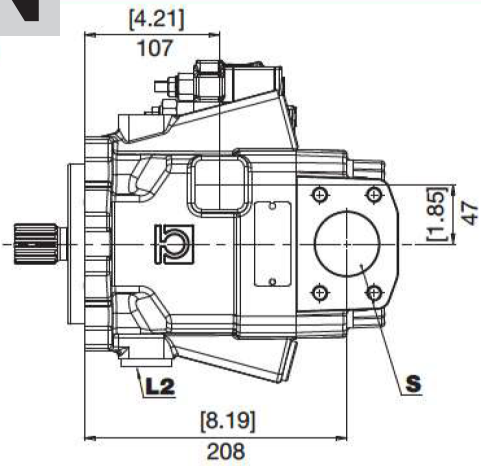
Axial Piston Pumps Variable Displacement



LATERAL PORTS

S

N



DIRECTION RIGHT

DIRECTION LEFT

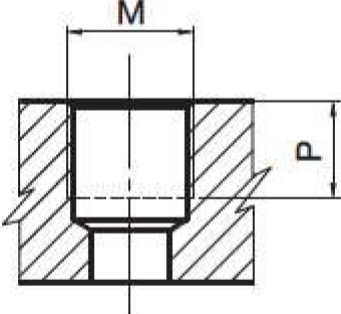
S	Feeding Pump Inlet	P	Output
L1	Drain	LS(X)	Pilot
L2			

HPA6 Series

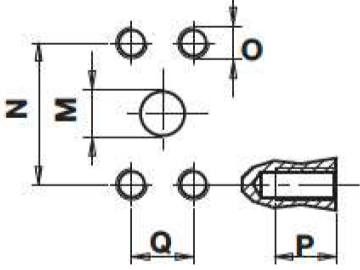
Axial Piston Pumps Variable Displacement



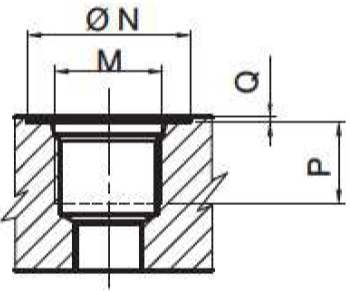
PORTS



TYPE	M		P	
		Nm	mm	in
G2	1/4" GAS BSPP	17	12	0.47
G7	1" GAS BSPP	160	18	0.70



TYPE	M		N		P		Q		O	
	mm	in	mm	in	mm	in	mm	in		Nm
N7	25	1	52.4	2.06	18	0.71	26.2	1.03	M10	38
N0	51	2	77.8	3.06	20	0.79	42.9	1.69	M12	70



TYPE	SIZE	N		P		Q		M	
		mm	in	mm	in	mm	in		Nm
U2	1/4"	21	0.83	12	0.47	0.3	0.01	7/16-20 UNF	17
U7	1"	49	1.93	18	0.70	0.3	0.01	1-5/16-12 UNF	160

TYPE	S INLET	P OUTLET	L1 - L2 DRAIN	LS(X) PILOT
S	N0	N7	G6	G2
N	N0	N7	U7	U2

HPA6 Series

Axial Piston Pumps Variable Displacement

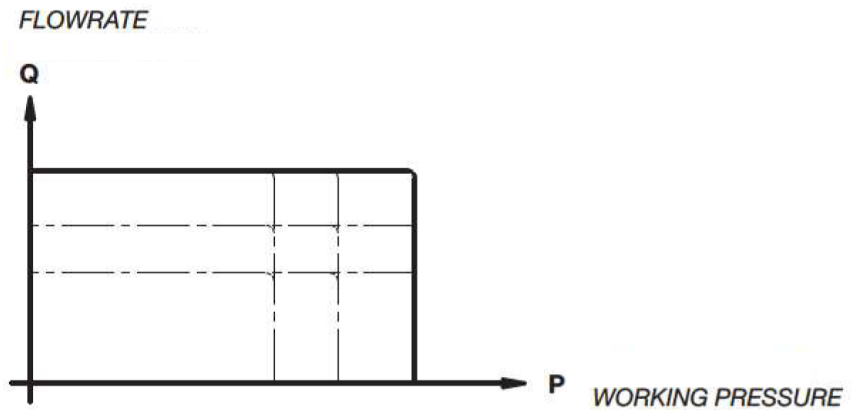
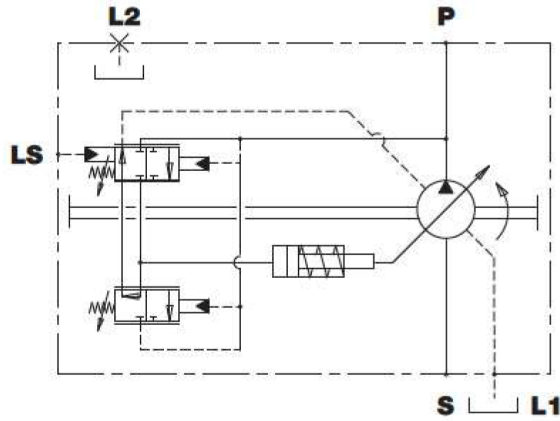


CONTROL SYSTEMS

L

Pressure/Flow Rate Regulator

FLOW RATE REGULATOR
PRESSURE RATE REGULATOR



CONTROL SYSTEM SET

WORKING PRESSURE		PRESSURE DIFFERENTIAL ΔP		
bar	psi	14 bar - 203 psi	21 bar - 305 psi	25 bar - 363 psi
180	2610	A	B	C
210	3045	E	F	G
250	3625	I	L	M
280	4060	O	P	Q
320	4640	S	T	U
350	5075	Z	X	Y

An external relief valve set at 10% above the pump pressure regulator must always be provided.

HPA6 Series

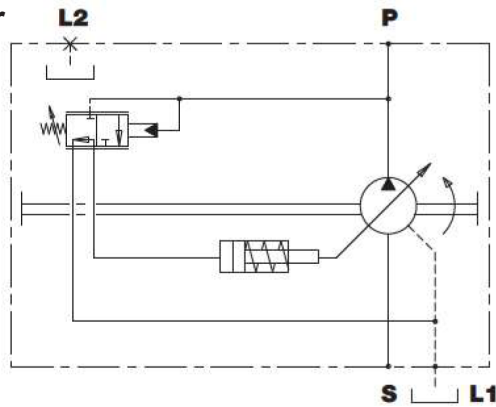
Axial Piston Pumps Variable Displacement



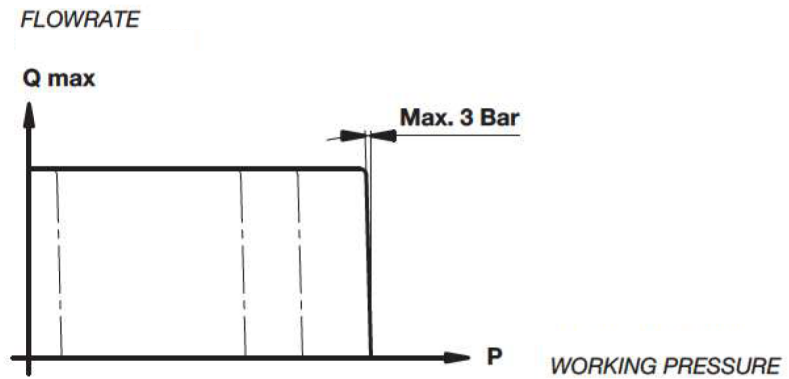
CONTROL SYSTEMS

P Pressure Rate Regulator

PRESSURE RATE REGULATOR



CHARACTERISTIC CURVE OF THE PUMP WITH PRESSURE REGULATOR



CONTROL SYSTEM SET

CODE	WORKING PRESSURE	
	bar	psi
D	180	2610
H	210	3045
N	250	3625
R	280	4060
V	320	4640
W	350	5075

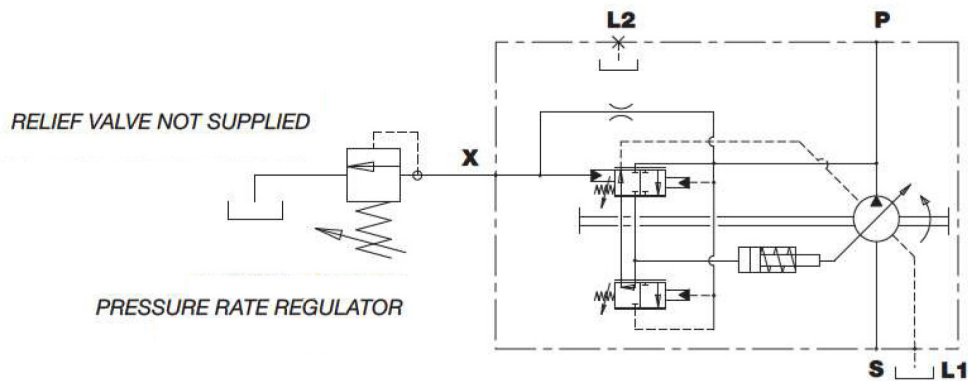
HPA6 Series

Axial Piston Pumps Variable Displacement

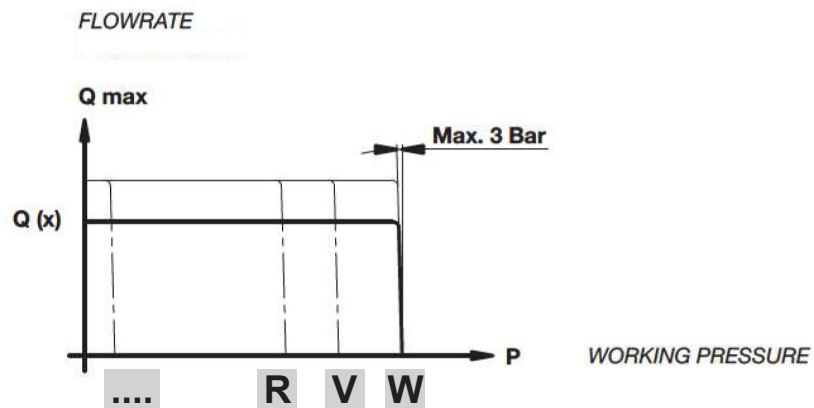


CONTROL SYSTEMS

R Pressure Flow/Rate Regulator Remote Controlled



CHARACTERISTIC CURVE OF THE PUMP WITH PRESSURE REGULATOR



CONTROL SYSTEM SET

CODE	WORKING PRESSURE	
	bar	psi
D	180	2610
H	210	3045
N	250	3625
R	280	4060
V	320	4640
W	350	5075

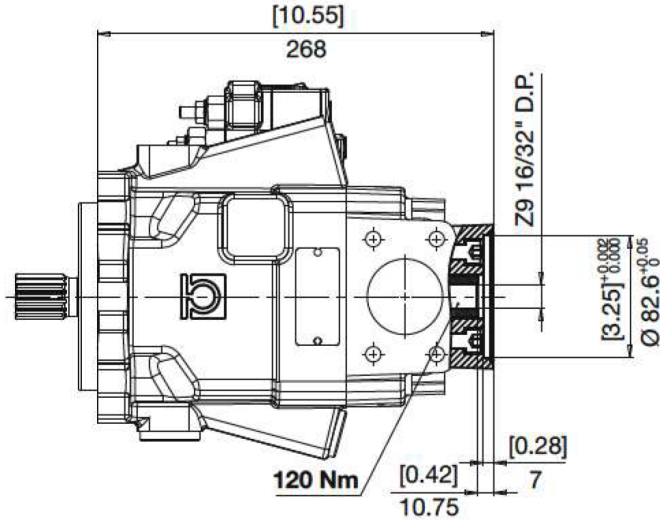
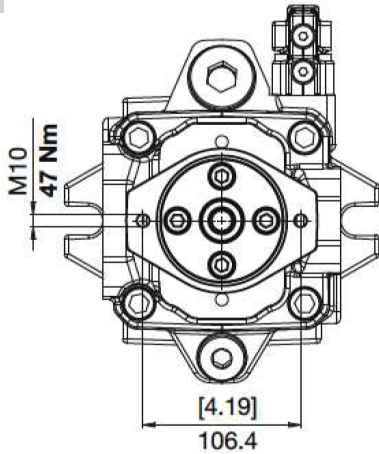
HPA6 Series

Axial Piston Pumps Variable Displacement

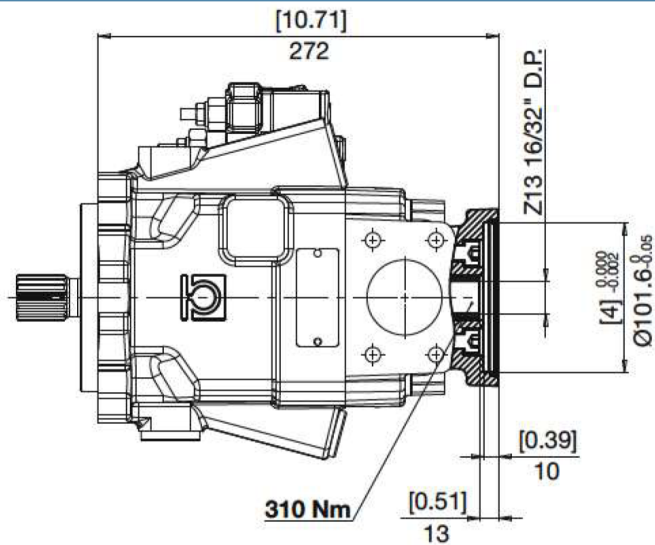
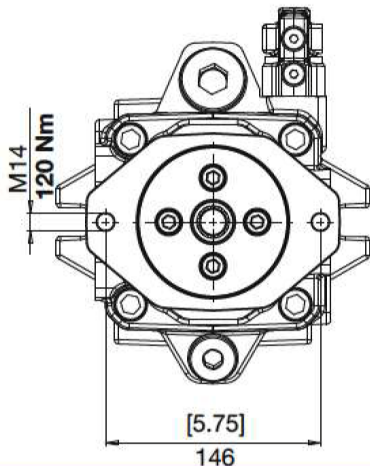


VERSION

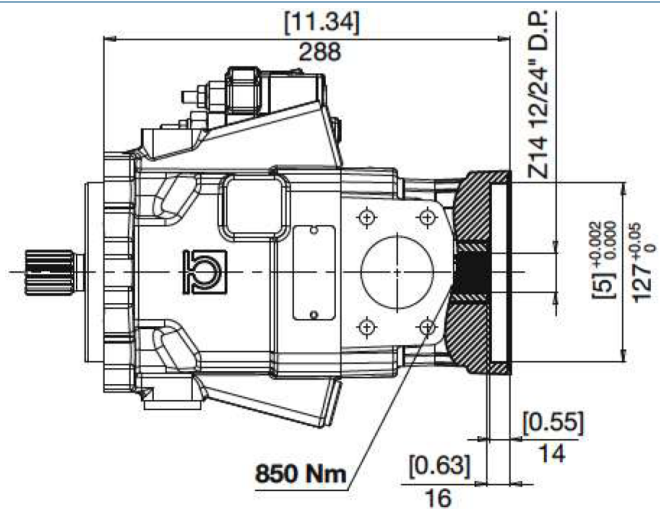
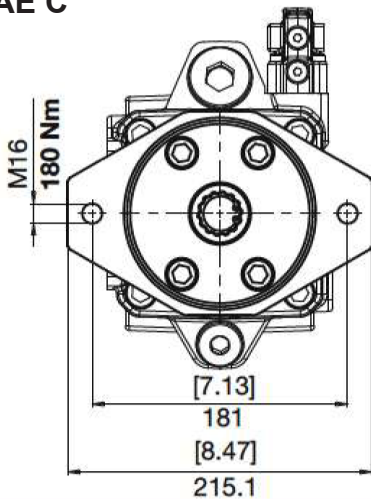
5 SAE A



6 SAE B



7 SAE C



HPA6 Series

Axial Piston Pumps Variable Displacement



HOW TO ORDER

MODEL CODE

1	2	3	4	5	6	7	8	9	10

1 - SERIES

HP A6	Variable displacement axial piston pump
--------------	---

2 - DISPLACEMENT

070	Displacement 70 cm ³ / rev (4.28 in ³ / rev)
080	Displacement 80 cm ³ / rev (4.89 in ³ / rev)
090	Displacement 90 cm ³ / rev (5.50 in ³ / rev)

3 - DIRECTION OF ROTATION

R	CW
L	CCW

4 - FLANGE

E	SAE C (2 and 4 Holes)
----------	-----------------------

5 - SHAFT PROFILE

1	Z14 12/24" DP
----------	---------------

6 - PORT

	Refer to chart
--	----------------

7 - CONTROL SYSTEMS

L	Pressure/Flow Rate Regulator
P	Pressure Rate Regulator
R	Pressure Rate Regulator Remote Controlled

8 - CONTROL SYSTEM SET

	Refer to chart
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9 - VERSION

0	No special fittings
5	SAE A
6	SAE B
7	SAE C

10 - SPECIAL VERSIONS

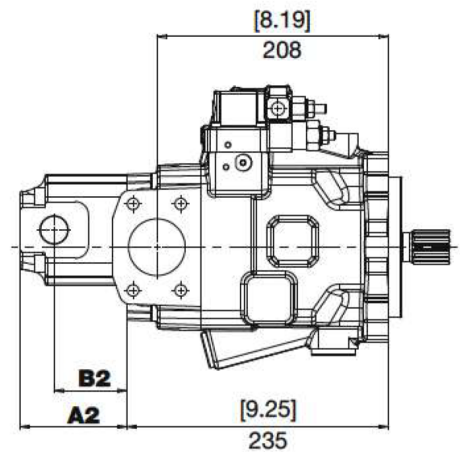
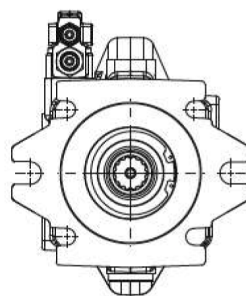
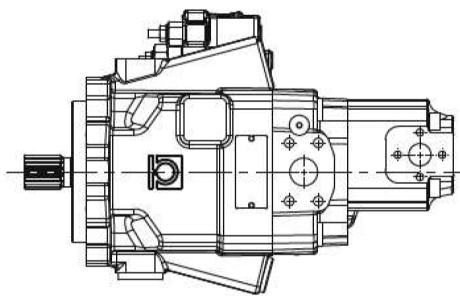
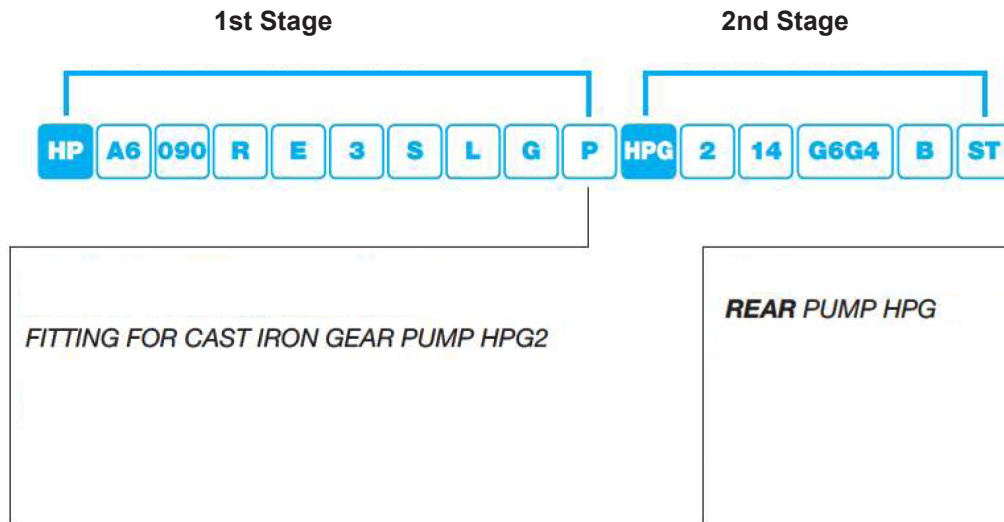
HPA6 Series

Axial Piston Pumps Variable Displacement



MULTIPLE PUMPS

To order an integrated version, duplicate the order code of the individual pumps as per example below:



TYPE	mm	in	mm	in
05	48.3	1.90	27.3	1.07
06	51.0	2.01	30.0	1.18
08	55.5	2.19	34.5	1.36
11	60.0	2.36	39.0	1.54
14	69.0	2.72	37.0	1.46
17	73.5	2.89	41.5	1.63
20	78.0	3.07	46.0	1.81
26	87.5	3.44	57.0	2.24
31	96.0	3.78	65.5	2.58