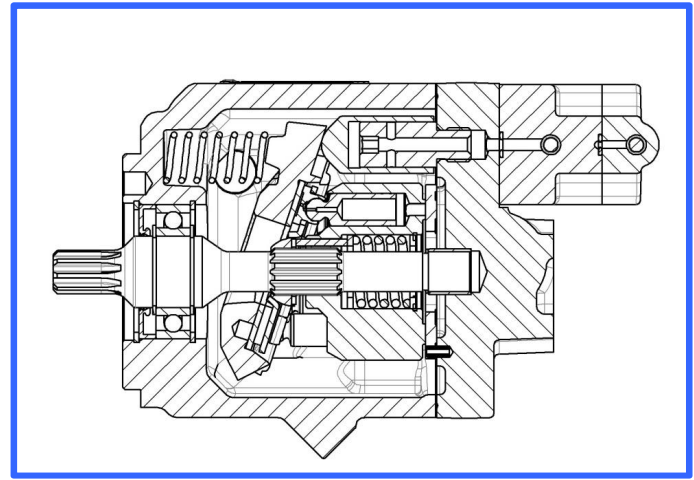
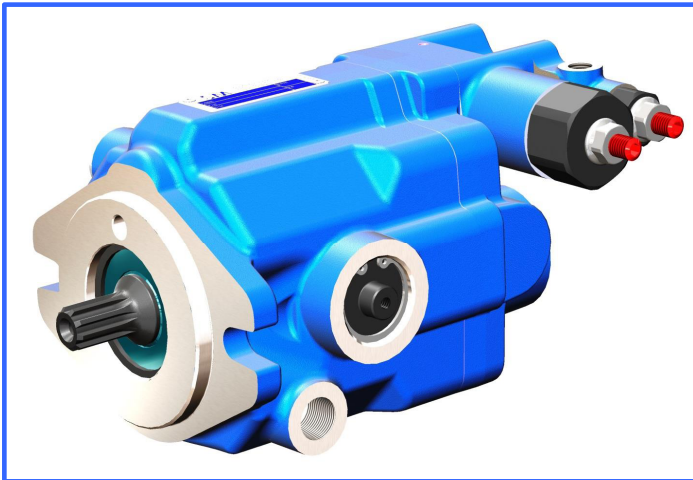


SMA0 Series



Axial Piston Pumps Variable Displacement



Axial piston pumps series SM A0 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 until 250 bar and until 315 bar for peak pressure. Control types allow a load-sensing or a constant pressure control over the pump.

GROUP	NOMINAL DISPLACEMENT		CONTINUOUS		INTERMITTENT		PEAK		SPEED		WEIGHT	
	cm ³	in ³	bar	psi	bar	psi	bar	psi	MAX min ⁻¹	MIN min ⁻¹	kg	lbs
SMA0	5	0.31	250	3625	280	4060	315	4568	3300	500	8.2	18.1
	10	0.61										
	14	0.85										

CONTINUOUS PRESSURE: average pressure of the normal operating pressure range.

INTERMITTENT PRESSURE: pressure that can be maintained for short periods (for about 10% of the work cycle).

PEAK PRESSURE: maximum allowable pressure regulated by maximum relief valves (max 1-2% of the work cycle).

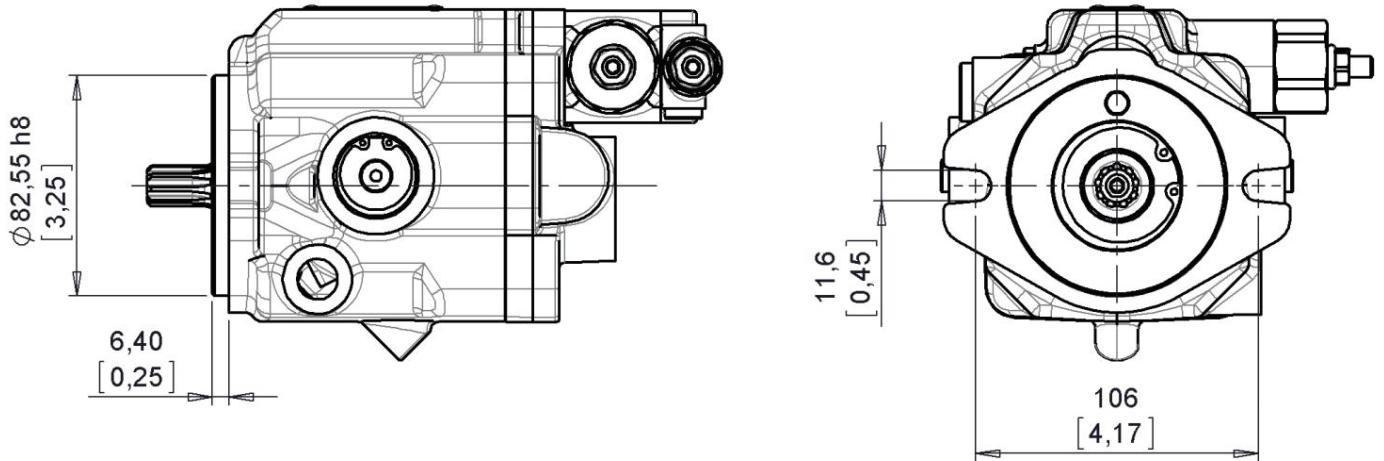
SMA0 Series

Axial Piston Pumps Variable Displacement



FLANGES

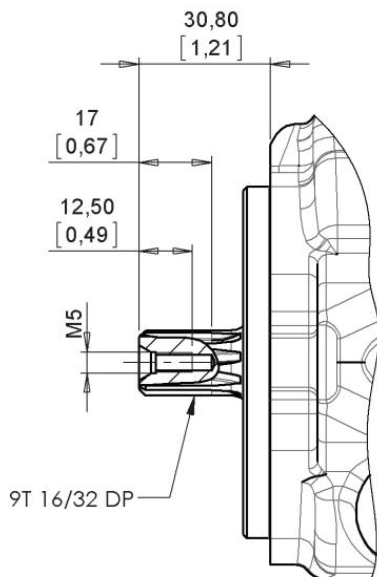
SAE A - 2 Holes



SPLINE SHAFTS

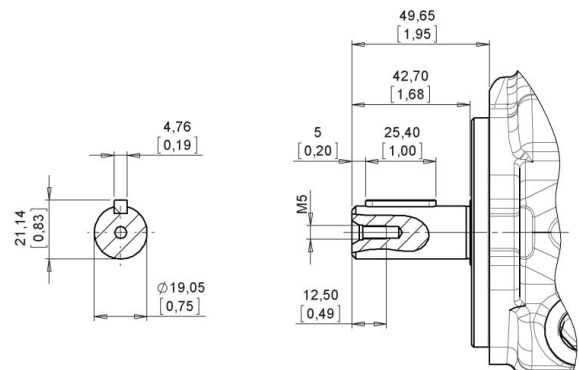
V

Max Torque 120 Nm



E

Max Torque 55 Nm



SMA0 Series

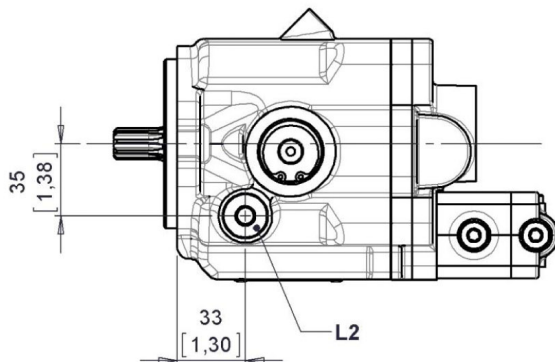
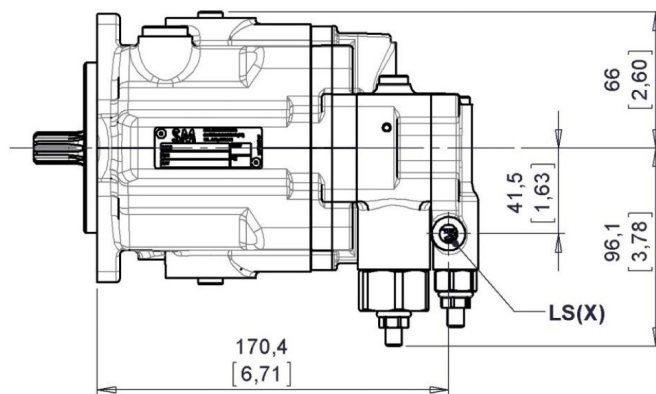
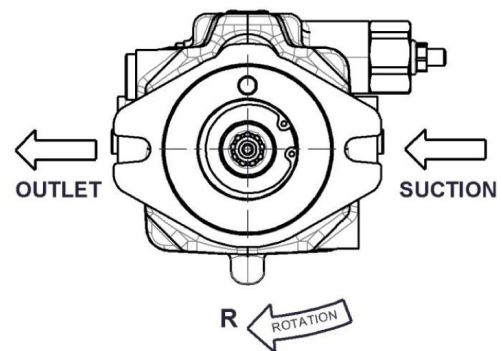
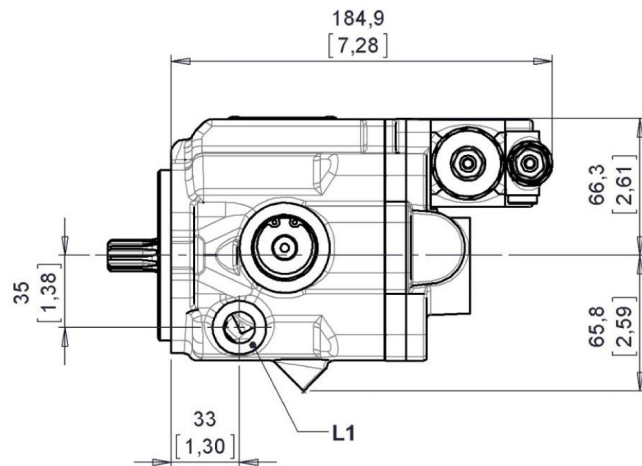
Axial Piston Pumps Variable Displacement



DIMENSIONS



Pressure/Flow Rate Regulator



		Gas Version		UNF Version	
		Thread	Depth	Thread	Depth
L1	Drain	G 3/8" BSPP	12mm 0.47 in	3/4 - 16 UNF	18mm 0.71 in
L2					
LS(X)	Pilot	G 1/8" BSPP	8mm 0.31 in	7/16 - 20 UNF	12mm 0.47 in

NB: IN LEFT HAND VERSION THE REGULATOR IS ASSEMBLED 180° ROTATED POSITION

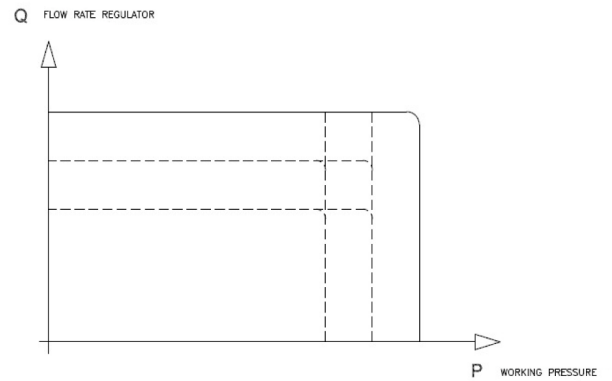
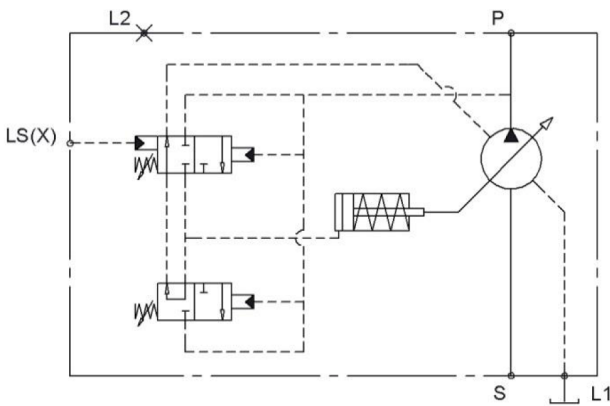
SMA0 Series

Axial Piston Pumps Variable Displacement



CONTROL SYSTEMS

L Pressure/Flow 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
315	4568	S	T	U

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

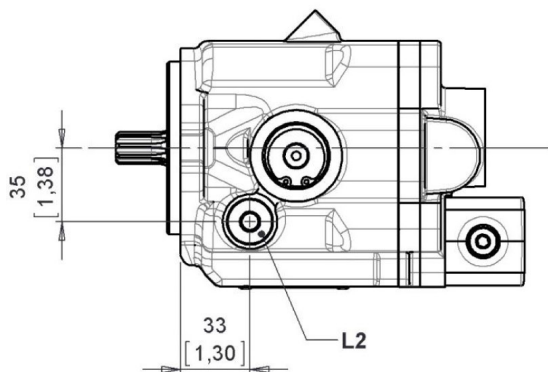
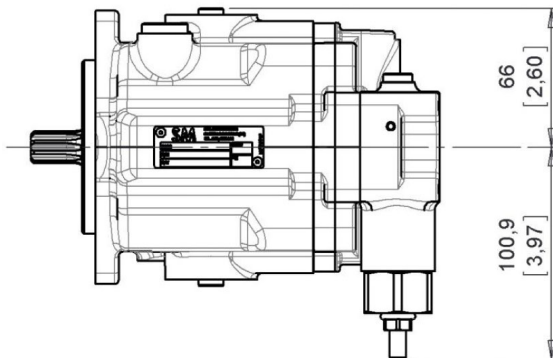
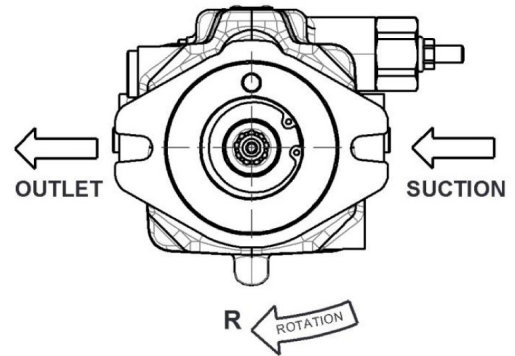
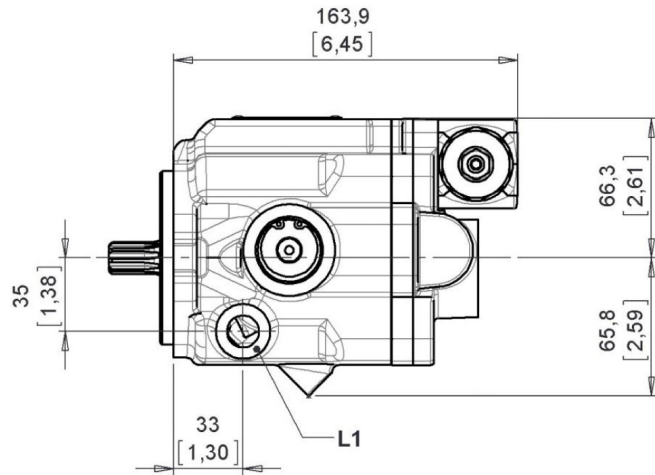
SMA0 Series

Axial Piston Pumps Variable Displacement



DIMENSIONS

P Pressure Regulator



		Gas Version		UNF Version	
		Thread	Depth	Thread	Depth
L1	Drain	G 3/8" BSPP	12mm 0.47 in	3/4 - 16 UNF	18mm 0.71 in
L2					

NB: IN LEFT HAND VERSION THE REGULATOR IS ASSEMBLED 180° ROTATED POSITION

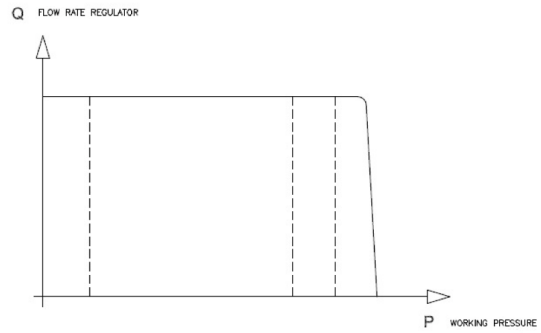
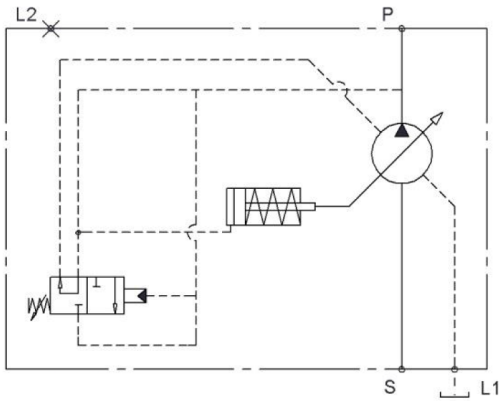
SMA0 Series

Axial Piston Pumps Variable Displacement



CONTROL SYSTEMS

P Pressure Rate Regulator



CONTROL SYSTEM SET

CODE	WORKING PRESSURE	
	bar	psi
D	180	2610
H	210	3045
N	250	3625
R	280	4060
V	315	4568

SMA0 Series

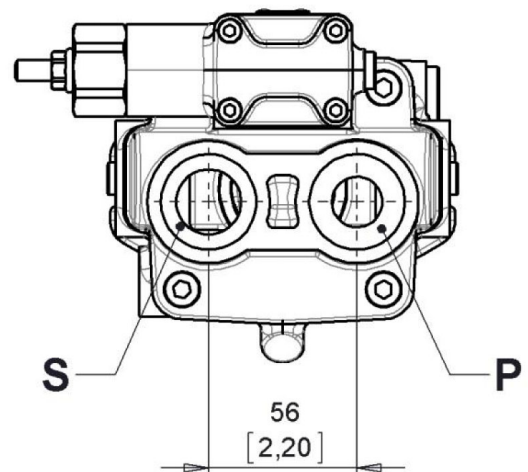
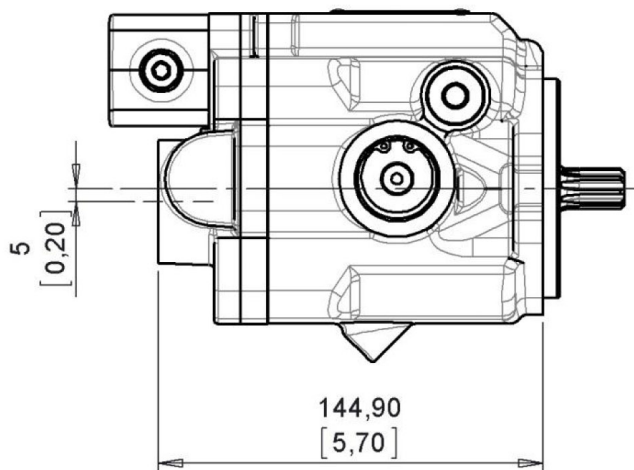
Axial Piston Pumps Variable Displacement



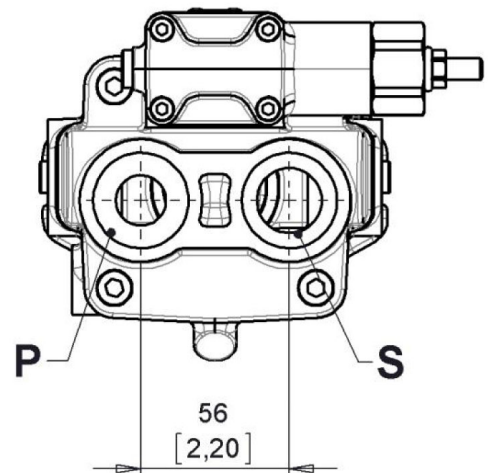
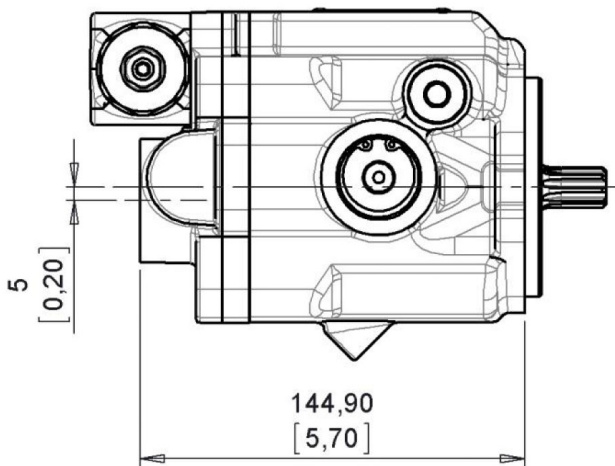
PORTS

1 Rear Ports

Rotation Right



Rotation Left



		Gas Version		UNF Version	
		Thread	Depth	Thread	Depth
S	Suction	G 3/4" BSPP	16mm 0.62 in	1-1/16 - 12 UNF	20mm 0.79 in
P	Output	G 1/2" BSPP	14mm 0.55 in	3/4 - 16 UNF	16mm 0.62 in

SMA0 Series

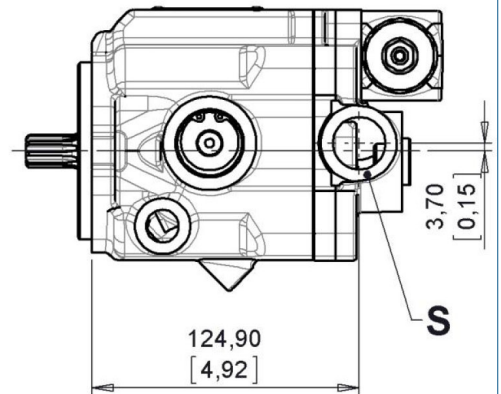
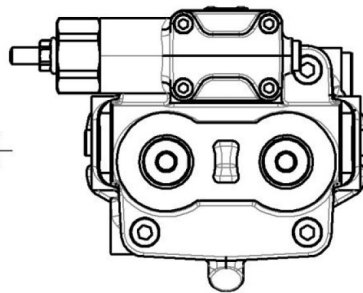
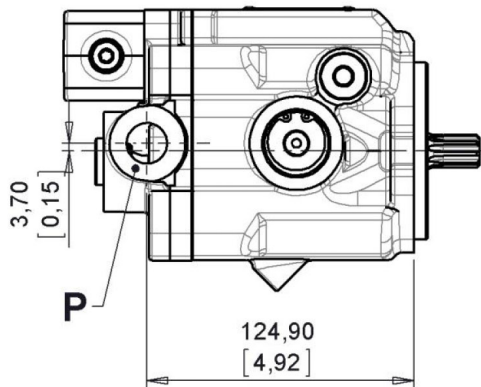
Axial Piston Pumps Variable Displacement



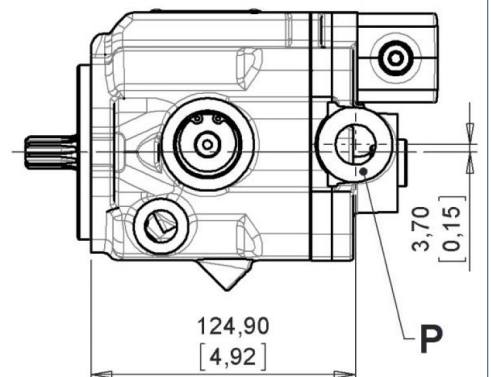
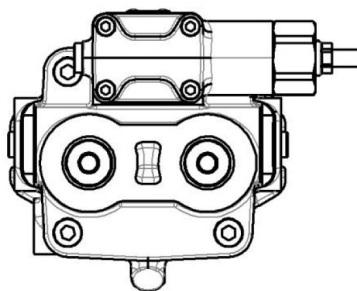
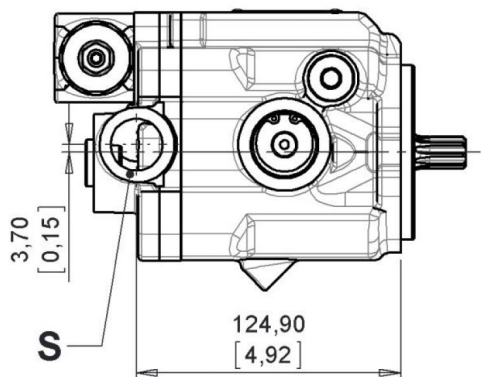
PORTS

2 Lateral Ports

Rotation Right



Rotation Left



		Gas Version		UNF Version	
		Thread	Depth	Thread	Depth
S	Suction	G 3/4" BSPP	16mm 0.62 in	1-1/16 - 12 UNF	20mm 0.79 in
P	Output	G 1/2" BSPP	14mm 0.55 in	3/4 - 16 UNF	16mm 0.62 in

SMA0 Series

Axial Piston Pumps Variable Displacement



HOW TO ORDER

MODEL CODE

1	2	3	4	5	6	7	8	9	10

1 - SERIES

SM A0	Axial piston motors, variable displacement
--------------	--------------------------------------------

2 - DISPLACEMENT

05	Displacement 5 cm ³ / rev (0.31 in ³ / rev)
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10	Displacement 10 cm ³ / rev (0.61 in ³ / rev)
-----------	--------------------------------------------------------------------

14	Displacement 14 cm ³ / rev (0.85 in ³ / rev)
-----------	--------------------------------------------------------------------

3 - DIRECTION OF ROTATION

R	Right
----------	-------

L	Left
----------	------

4 - SHAFT PROFILE

V	Z9 16/32" DP
----------	--------------

2	Round Shaft Ø 19.05
----------	---------------------

5 - PORTS

G	GAS
----------	-----

U	UNF
----------	-----

6 - POSITION OF PORT

1	Rear Ports
----------	------------

2	Lateral Ports
----------	---------------

7 - CONTROL SYSTEMS

L	Pressure/Flow Rate Regulator
----------	------------------------------

P	Pressure Rate Regulator
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8 - CONTROL SYSTEM SETTING

	See Chart
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9 - VERSION

0	No special Fittings
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10 - SPECIAL VERSIONS