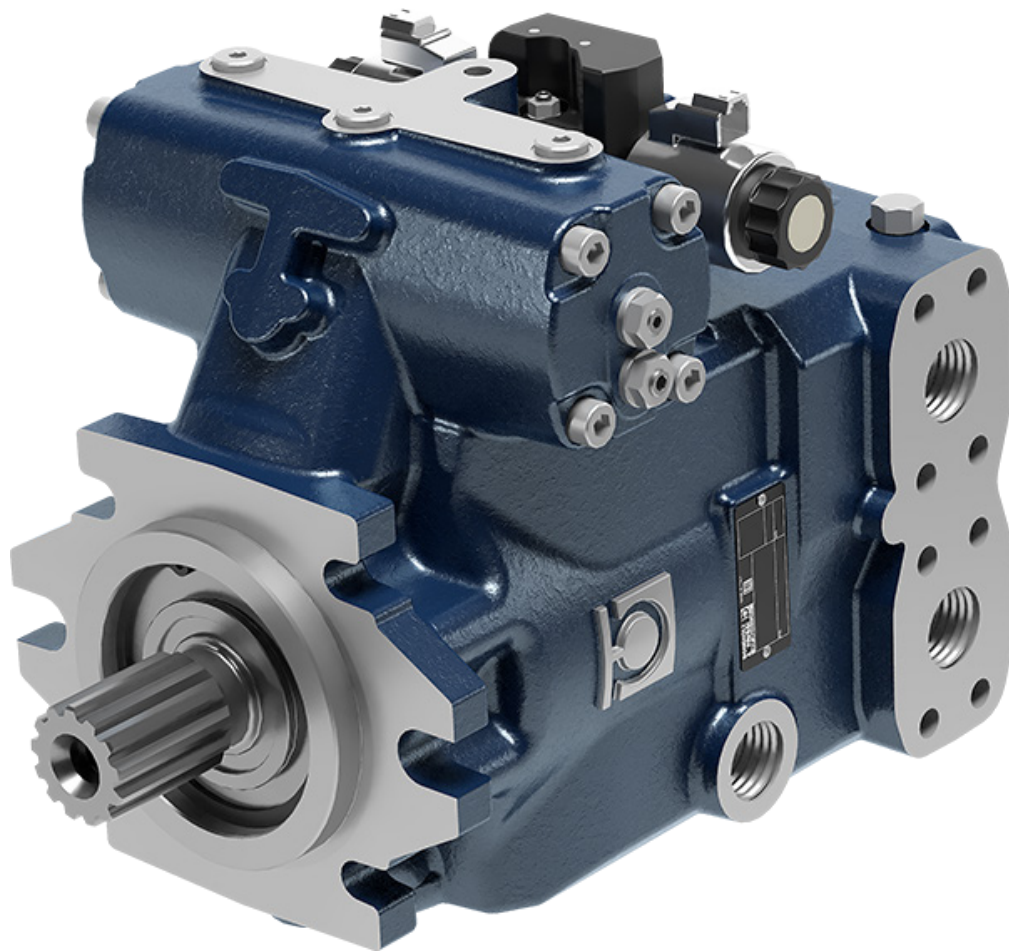
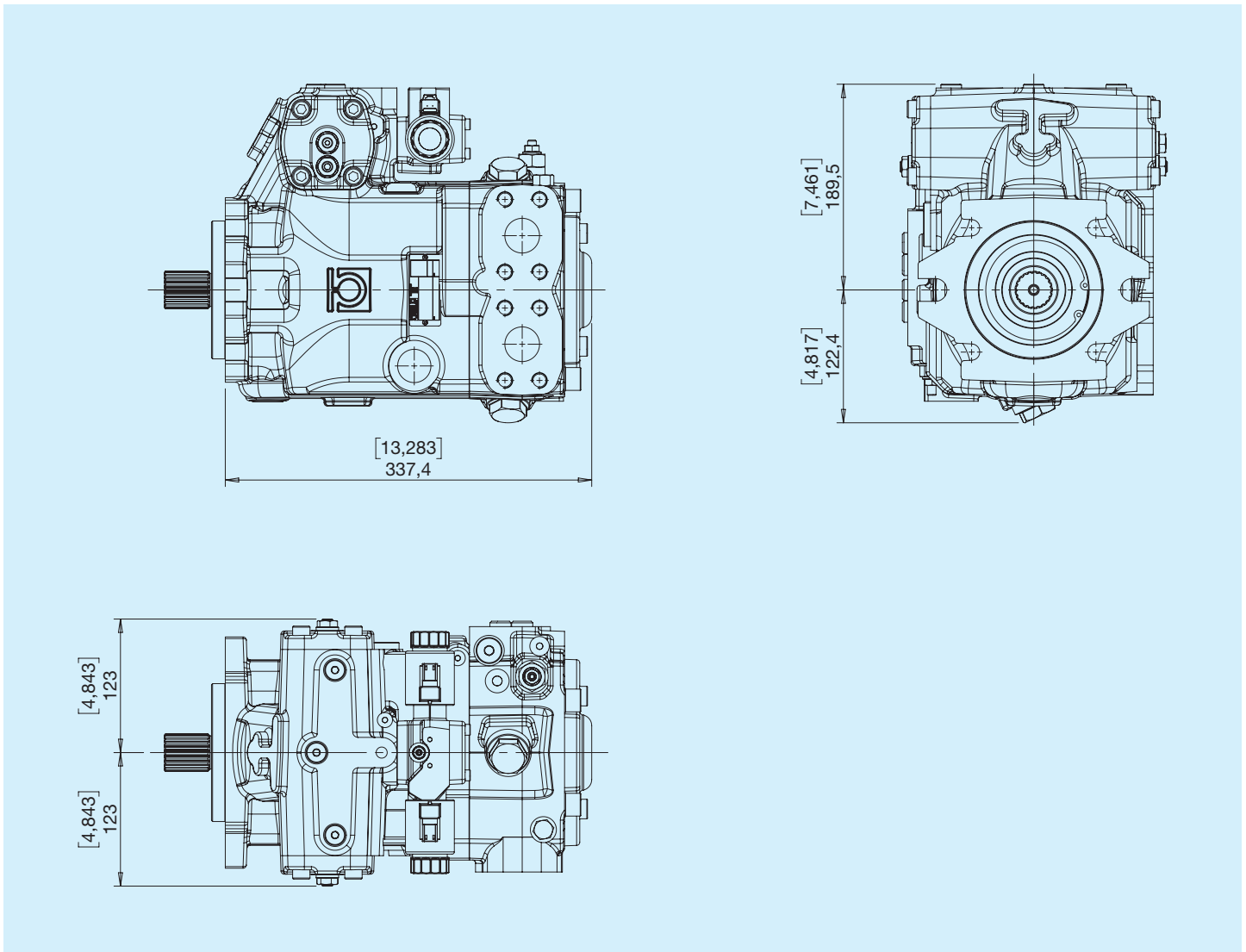


Variable-displacement pumps



Before use, carefully read the GENERAL INSTRUCTIONS FOR USE OF CLOSED CIRCUIT AXIAL PISTON PUMPS AND MOTORS.

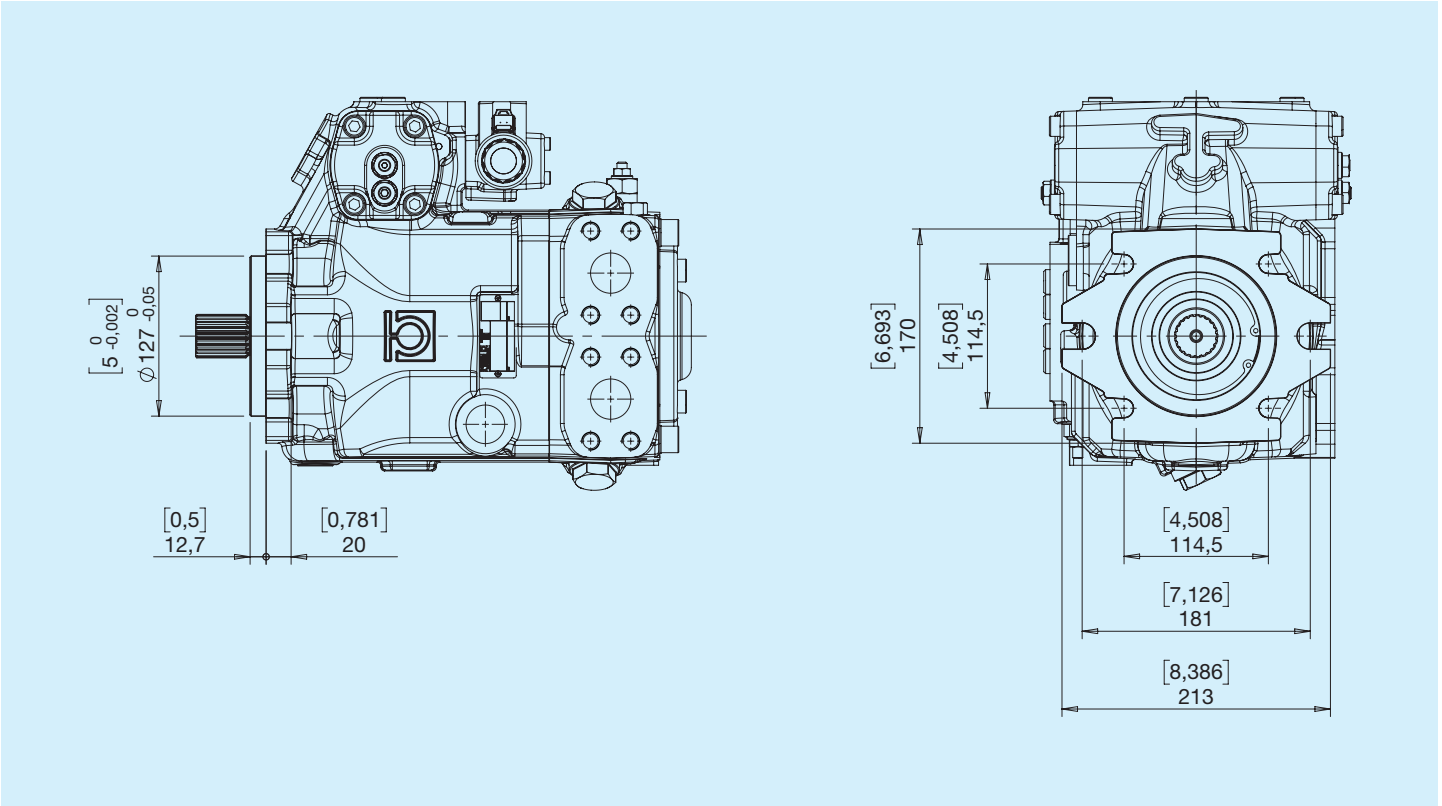


HPP8A	Nominal displacement		Swash plate	Continuous pressure		Intermittent pressure		Peak pressure		Rotational speed		Weight	
	cm ³	in ³	°	bar	psi	bar	psi	bar	psi	MAX min ⁻¹	MIN min ⁻¹	kg	lbs
145	130	8.93	20	450	6525	480	6960	500	7250	3300	500	75	165.4

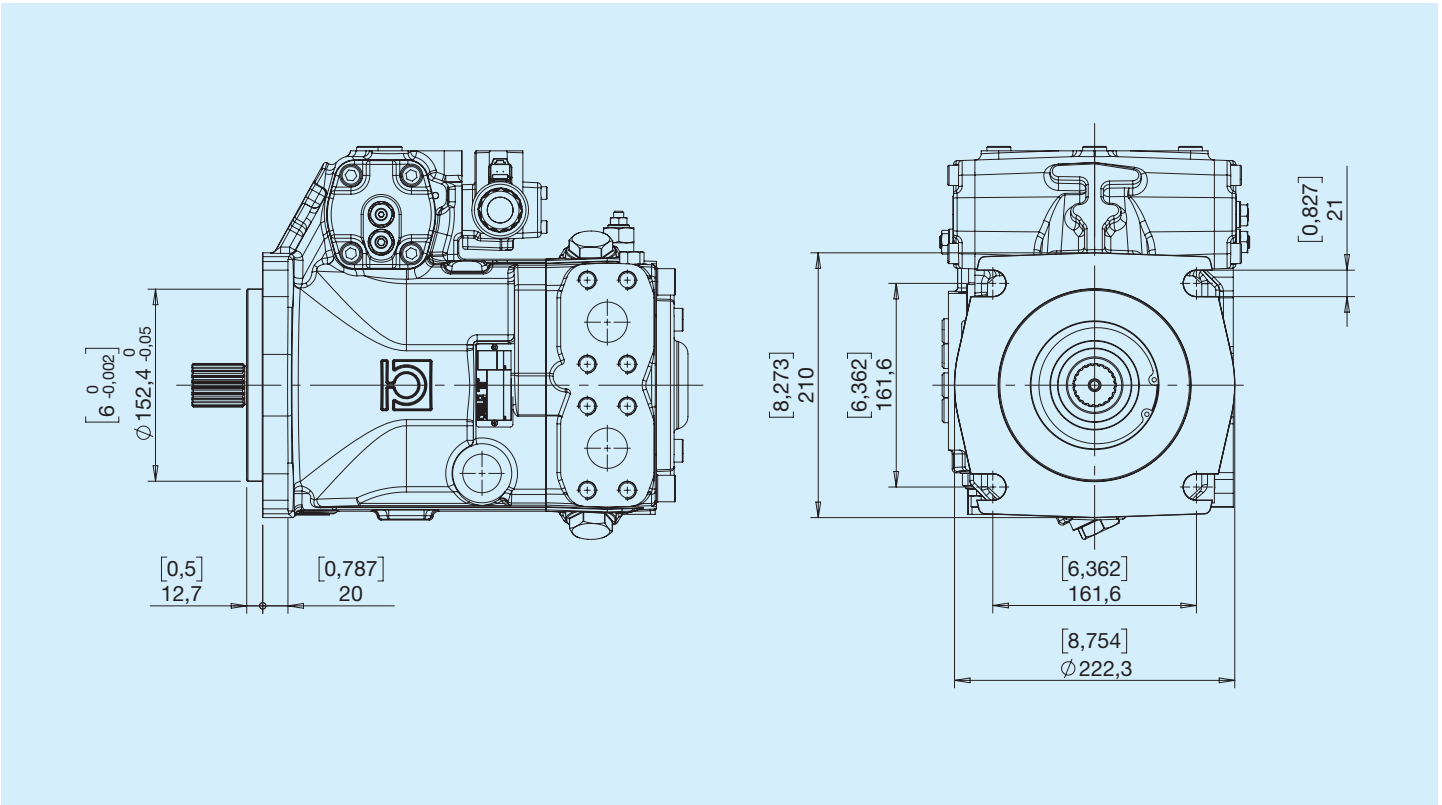
Feed pump

Type	Feed pump displacement		Pressure	
	cm ³	in ³	bar	psi
HPP9	27	1.65	25	363

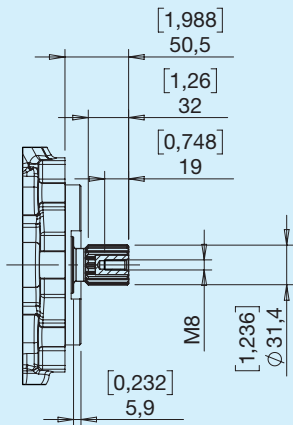
E SAE C (2+4 holes)



D SAE D

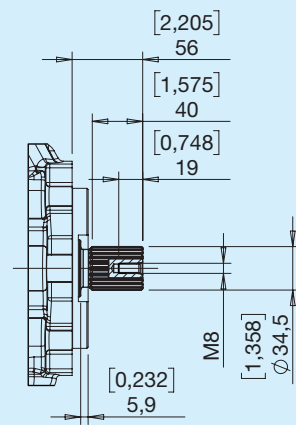


3 SAE 14T 12/24 DP



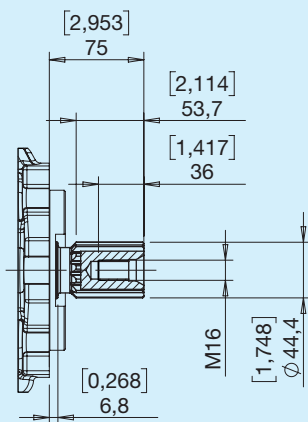
Max. torque 700 Nm

7 SAE 21T 16/32 DP

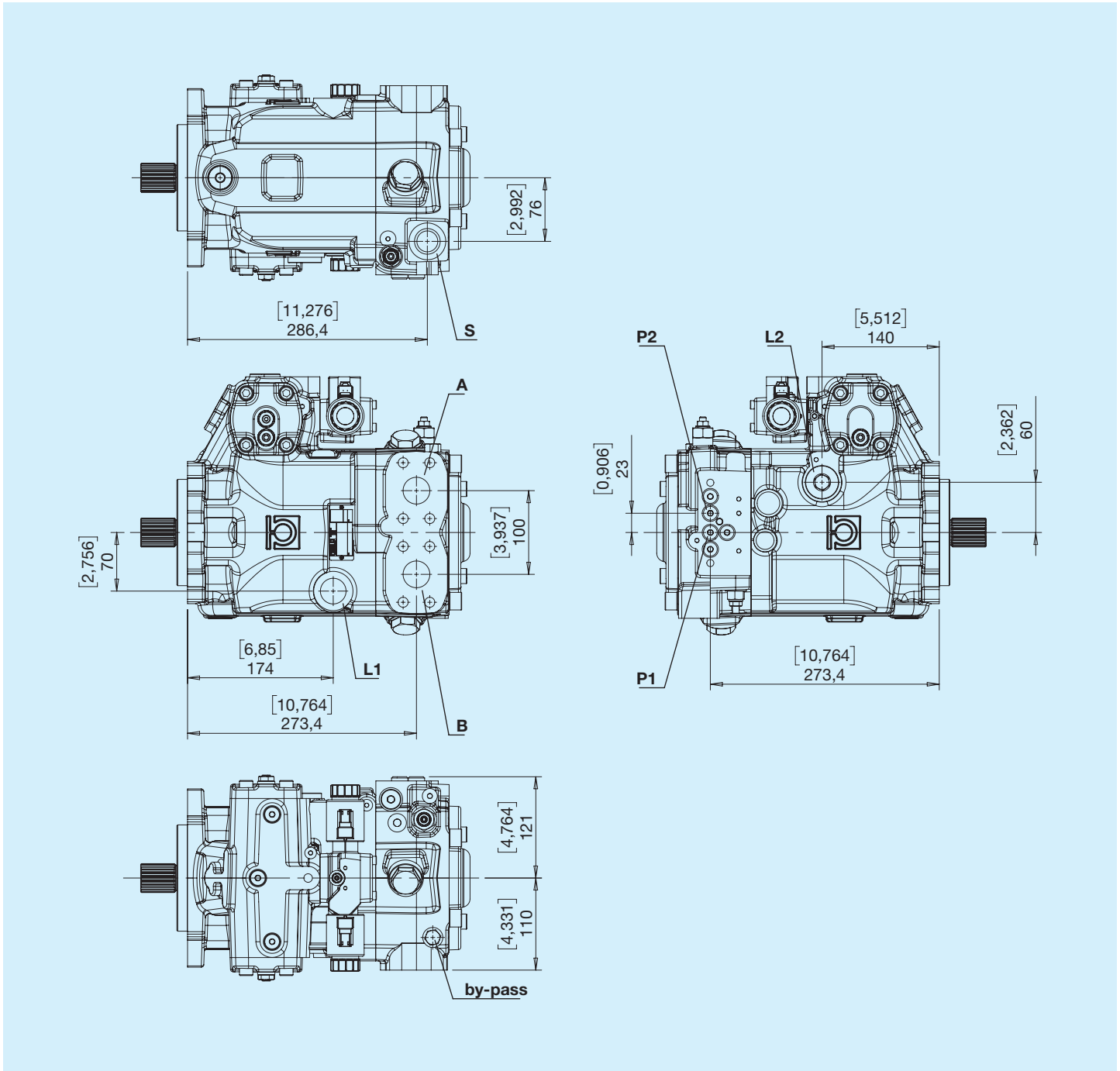


Max. torque 1100 Nm

9 SAE 13T 8/16 DP

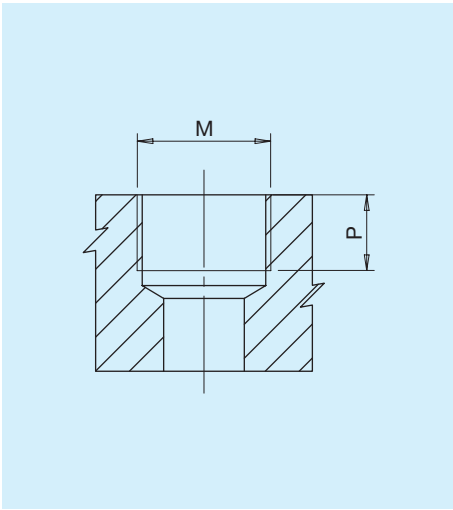


Max. torque 2400 Nm



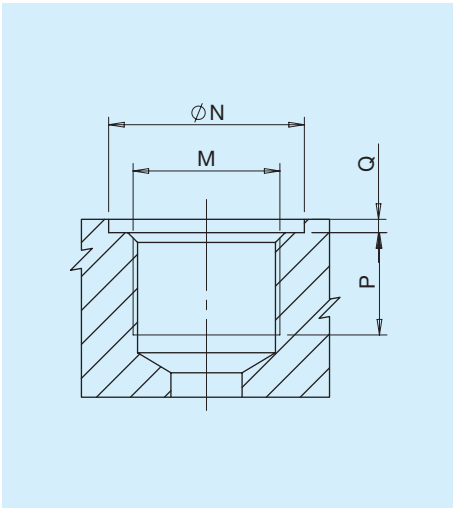
- A,B - Use
- L1, L2 - Drain port
- S - Inlet
- P - Pressure intake

Type G



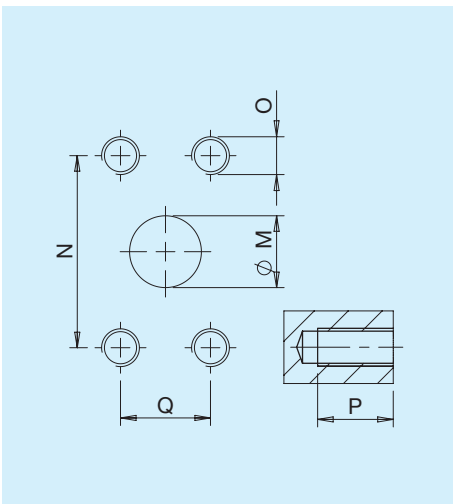
Type	M	Nm	P	
			mm	in
G2	Port ISO 1179-1 - G 1/4	17	12	0.47
G7	Port ISO 1179-1 - G 1	160	20	0.79

Type M



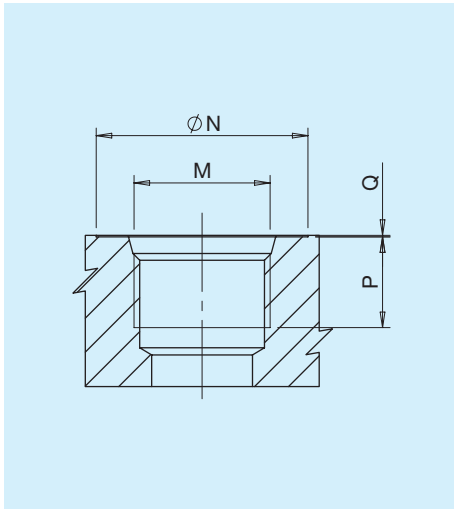
Type	M	Nm	N		P		Q	
			mm	in	mm	in	mm	in
mA	Port ISO 6149 - 1 - M33x2	160	44	1.73	20	0.79	0.3	0.01

Type N



Type	M		N		Q		P		O	Nm
	mm	in	mm	in	mm	in	mm	in		
N8	32	1.26	66.7	2.63	31.8	1.25	22	0.87	M14	120

Type U

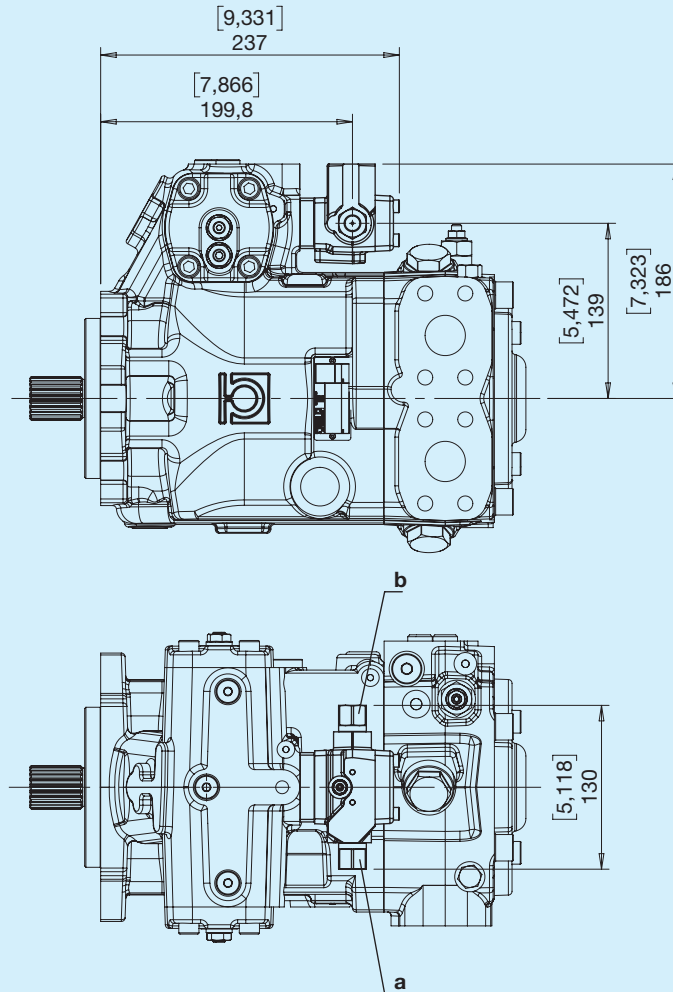


Type	Dim.	N		P		Q		M	Nm
		mm	in	mm	in	mm	in		
U7	1'	49	1.93	20	0.79	0.3	0.01	Port ISO 11926-1-1 5/16-12	160

Combinations

Type	Inlet S	Outlet A-B	Drain port L1-L2	Pressure intake P1-P2
G	G7	N8	G7	G2
U	U7	N8	U7	G2
M	mA	N8	mA	G2

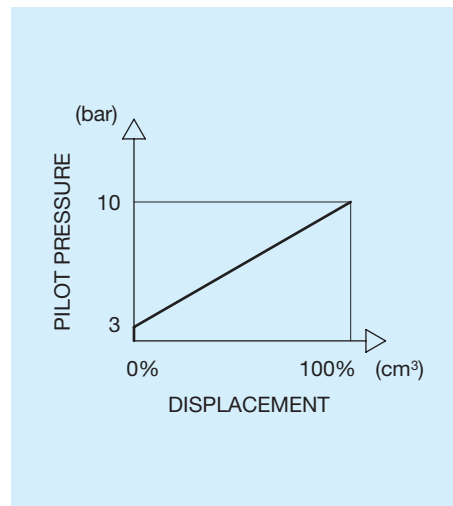
G Feedback hydraulic



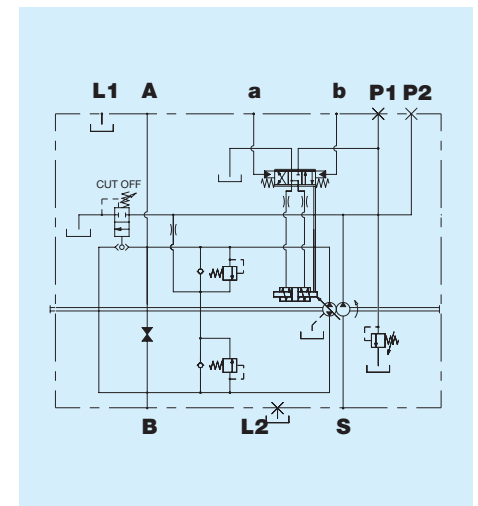
Outlet

Rotation	Pilot	Outlet
Right	b	B
Right	a	A
Left	b	A
Left	a	B

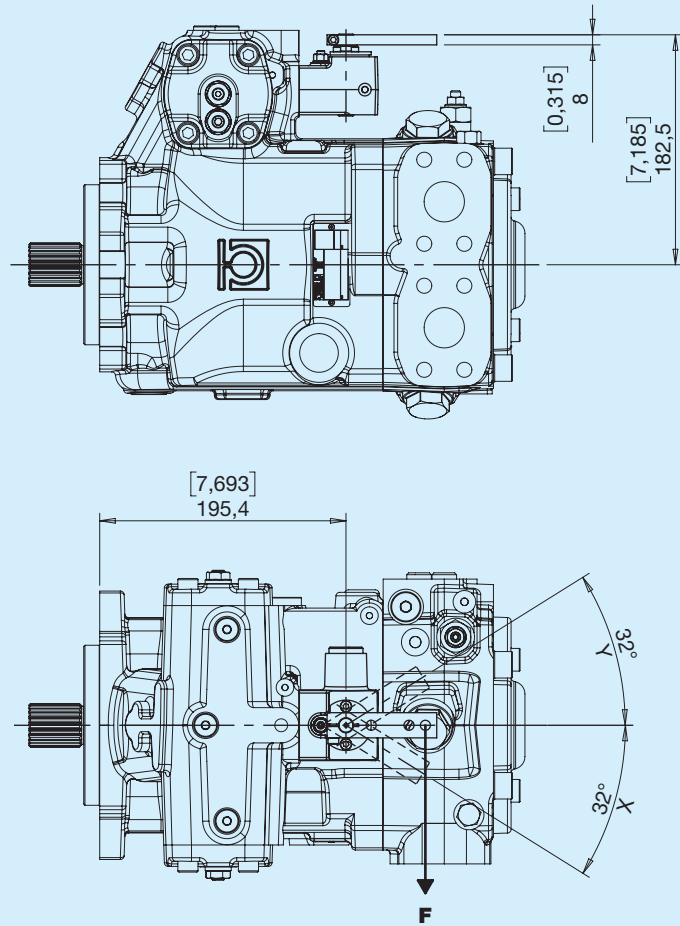
Pilot



Hydraulic diagram



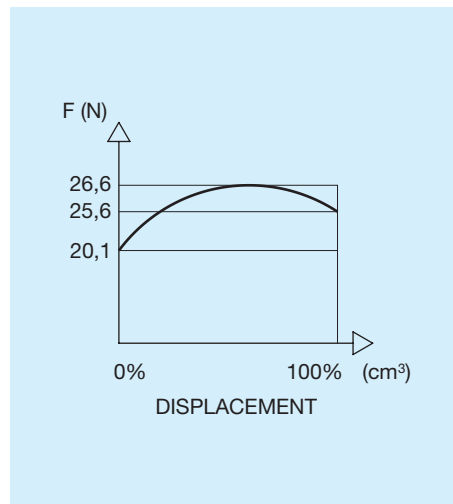
I Lever-operated hydraulic



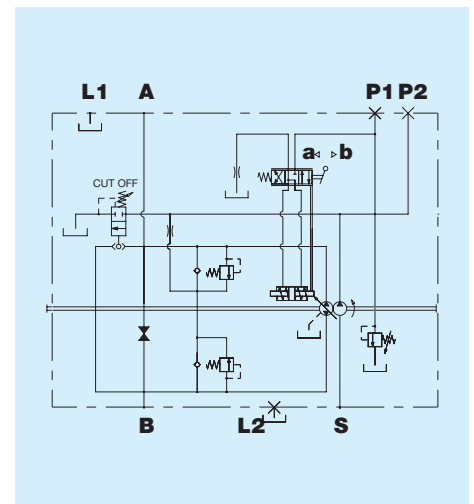
Outlet

Rotation	Control lever	Outlet
Right	Y	B
Right	X	A
Left	Y	A
Left	X	B

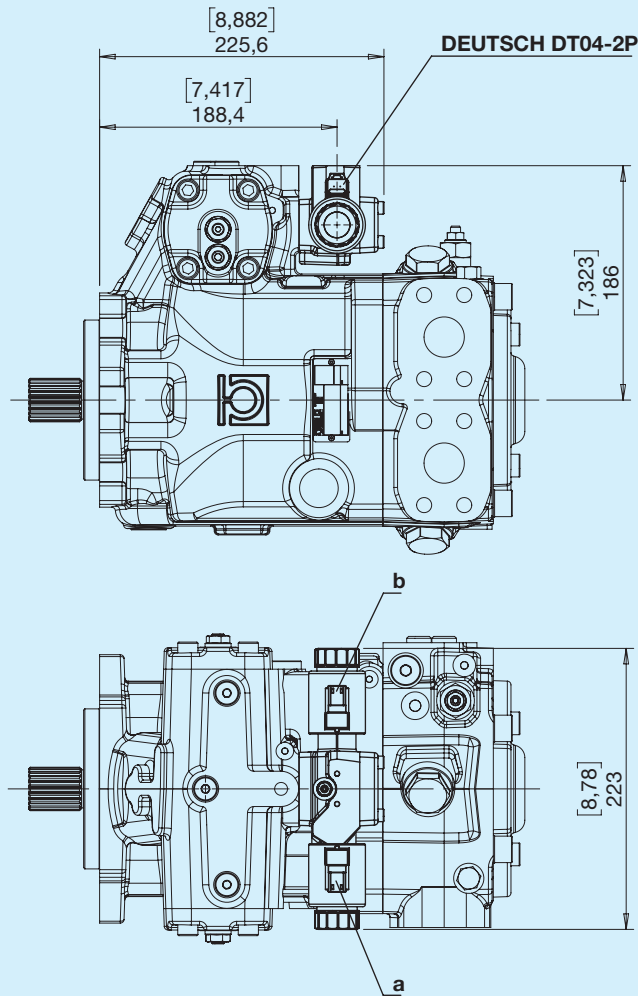
Pilot



Hydraulic diagram



Electronic proportional feedback control 12V



Available on request with DIN 43650 connectors

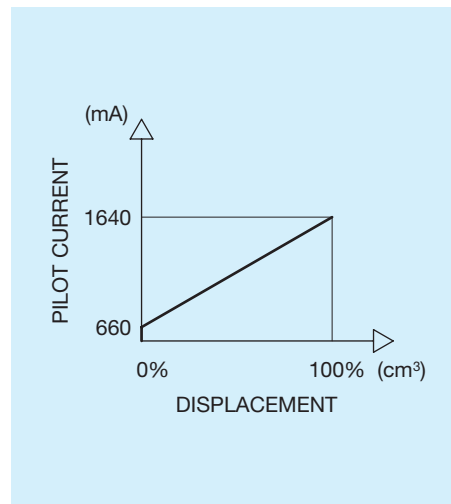
Outlet

Rotation	Excited solenoid	Outlet
Right	a	A
Right	b	B
Left	a	B
Left	b	A

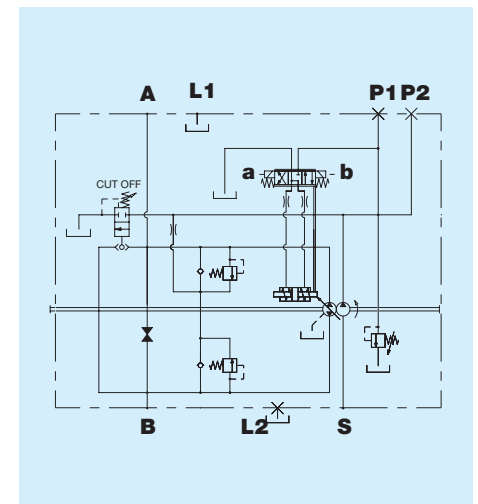
Control

Rated voltage	12	V
Min. current (I1)	700	mA
Max. current (I2)	2000	mA
PWM frequency	100	Hz

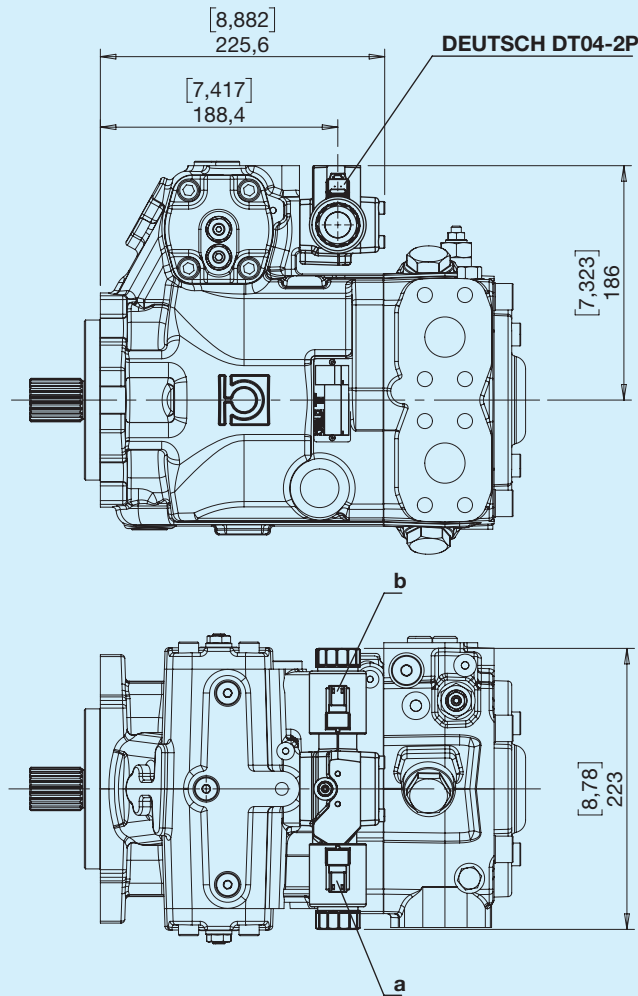
Pilot



Hydraulic diagram



V Electronic proportional feedback control 24V



Available on request with DIN 43650 connectors

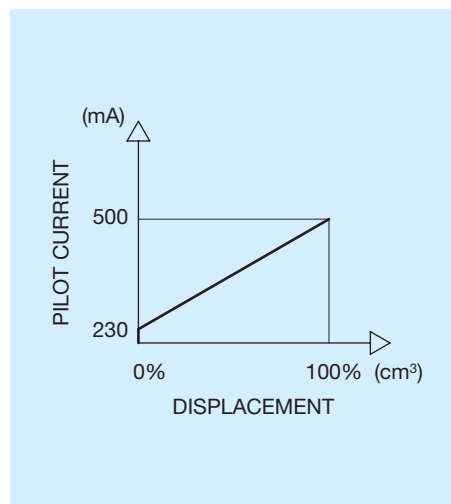
Outlet

Rotation	Excited solenoid	Outlet
Right	a	A
Right	b	B
Left	a	B
Left	b	A

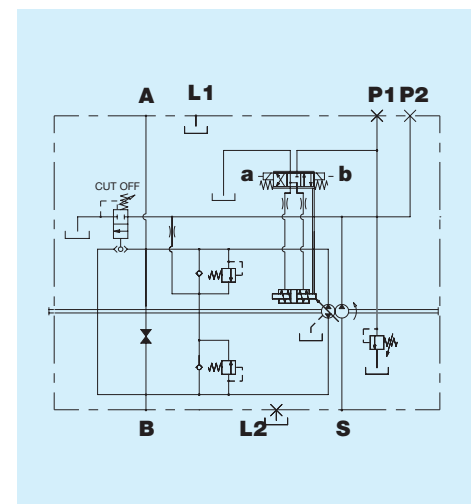
Control

Rated voltage	24	V
Min. current (I1)	350	mA
Max. current (I2)	1000	mA
PWM frequency	100	Hz

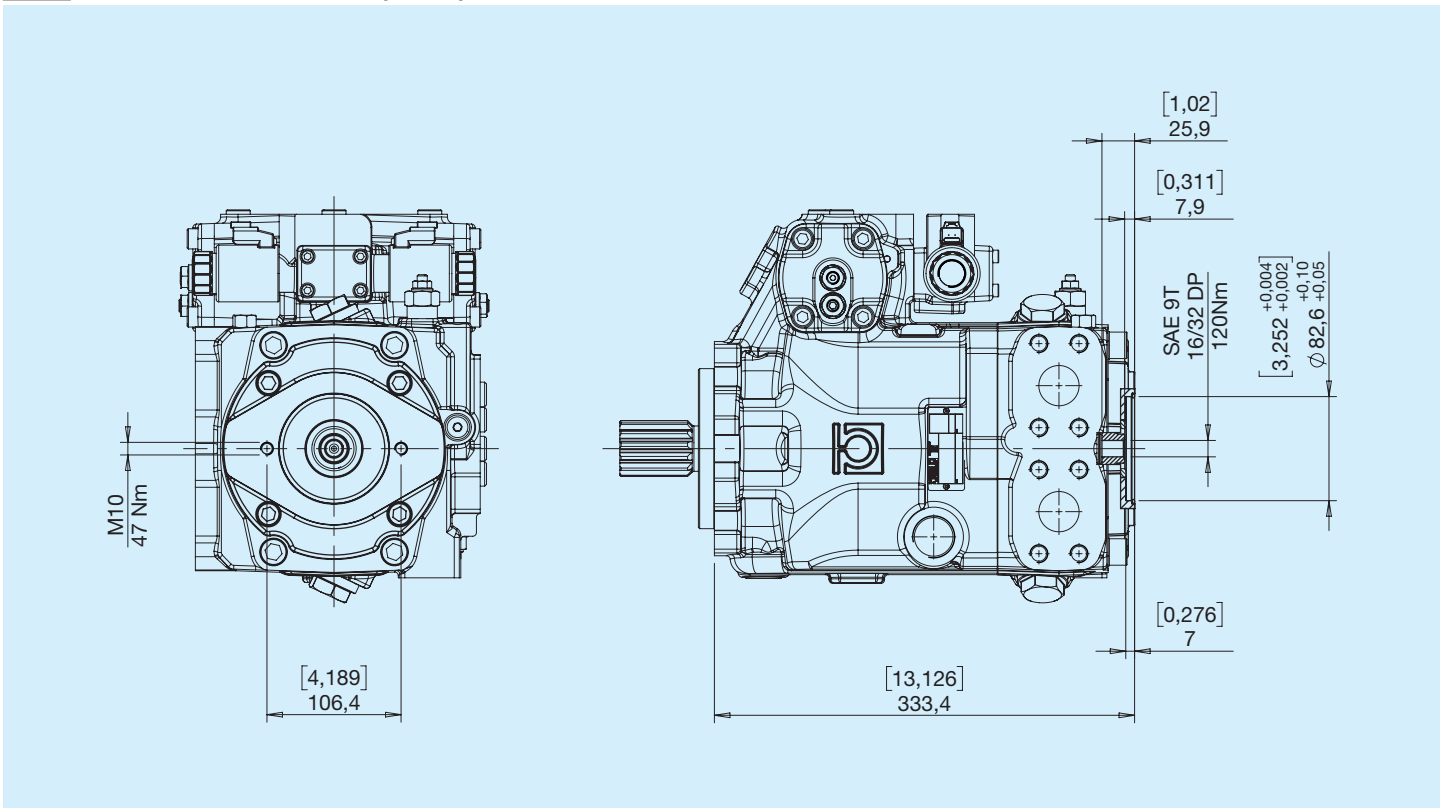
Pilot



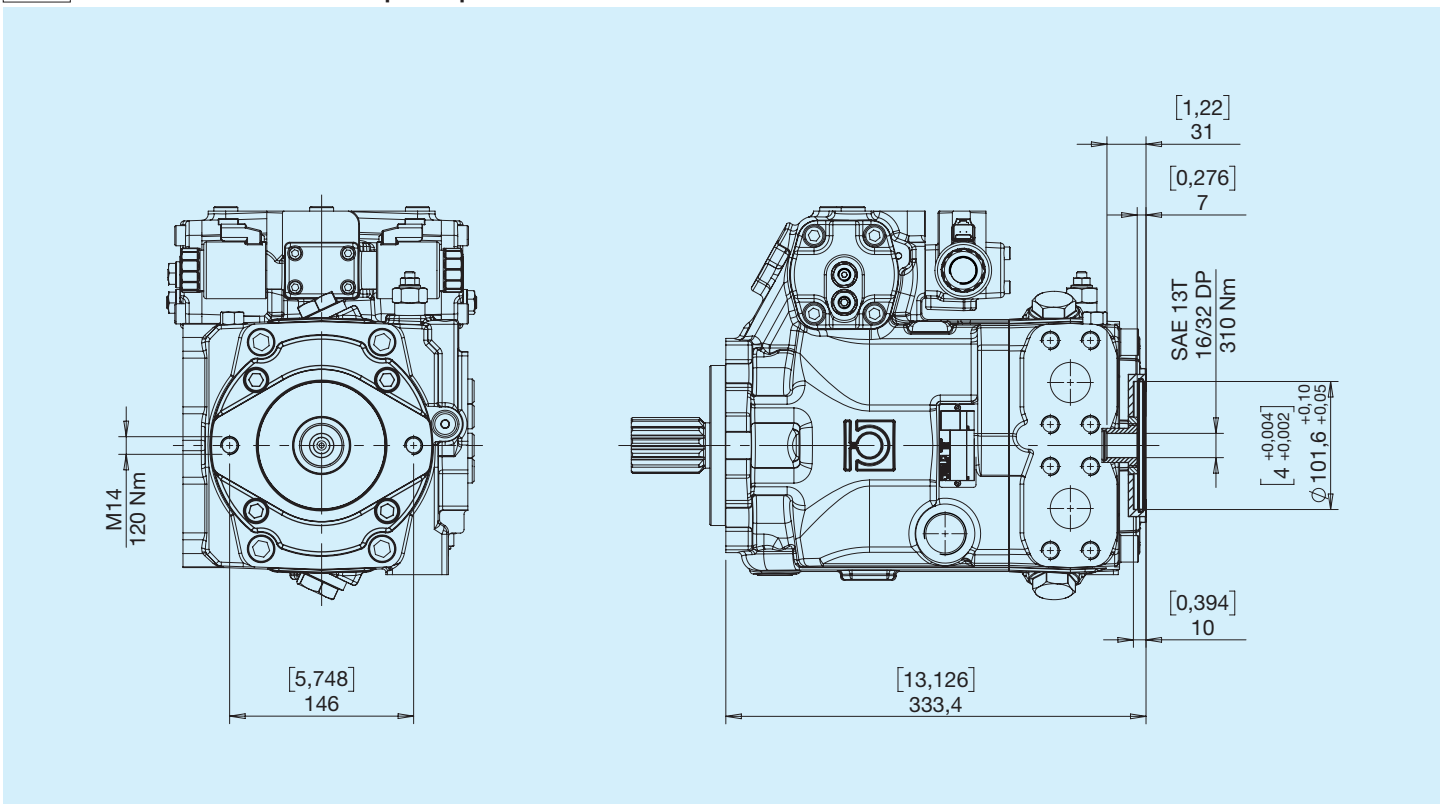
Hydraulic diagram



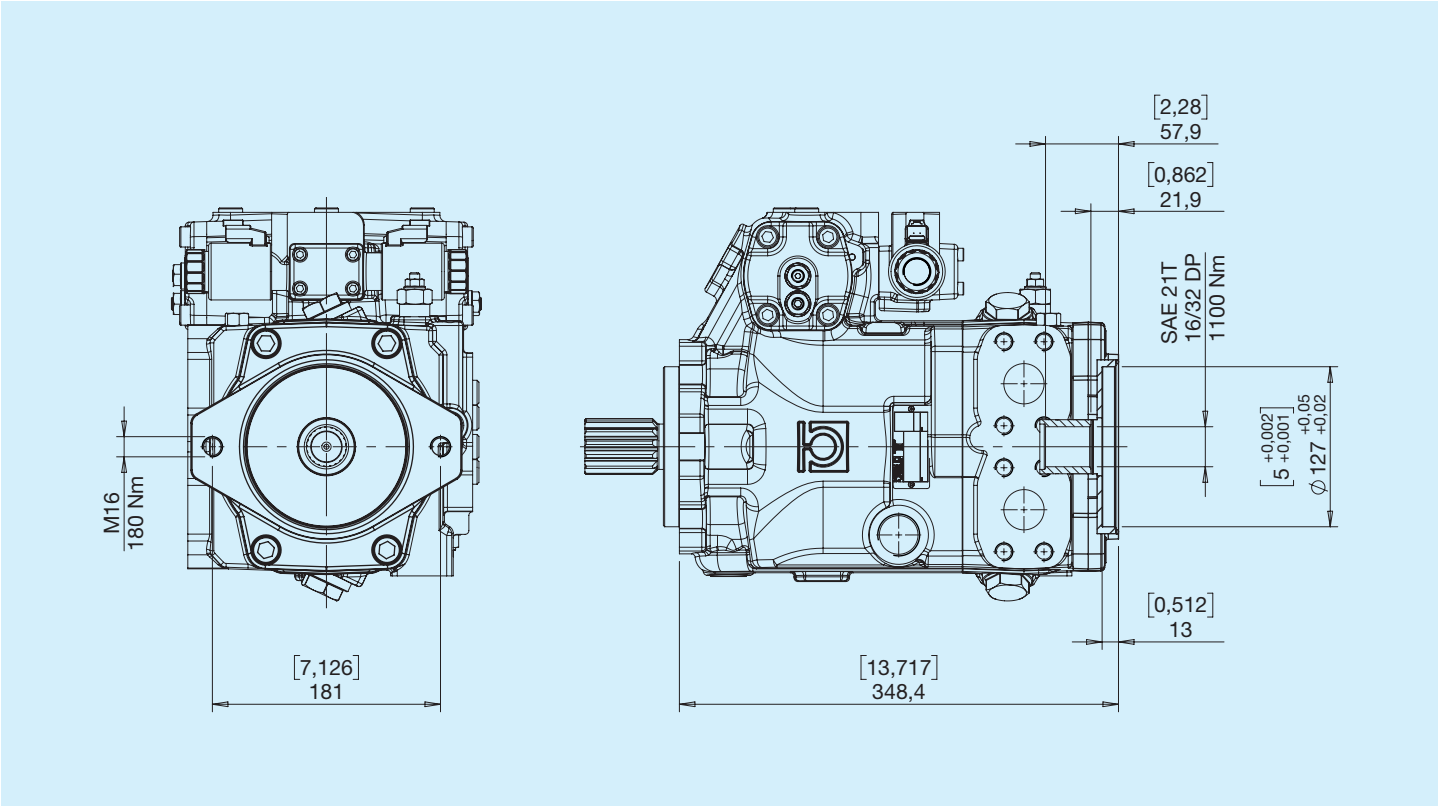
2 SAE A with boost pump



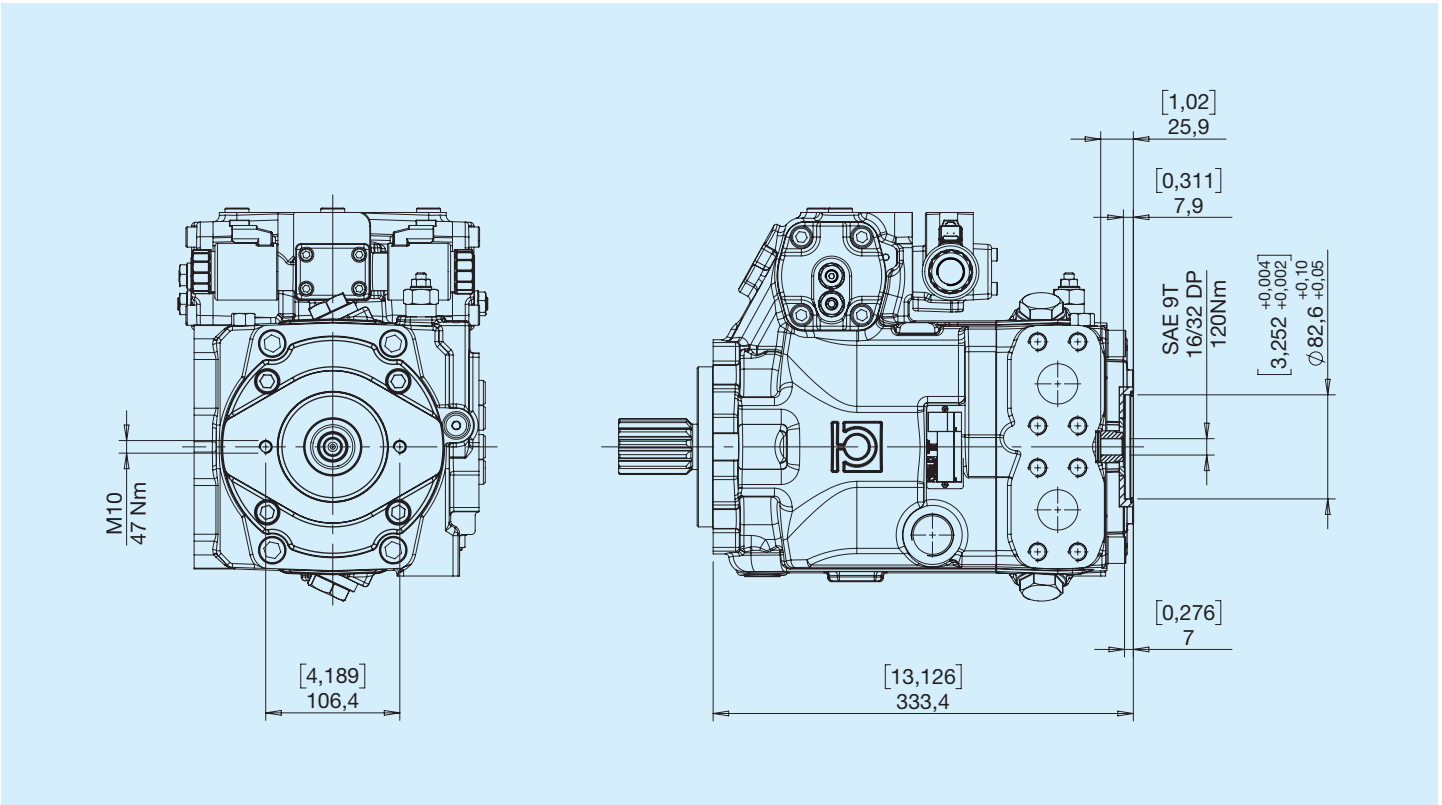
3 SAE B with boost pump



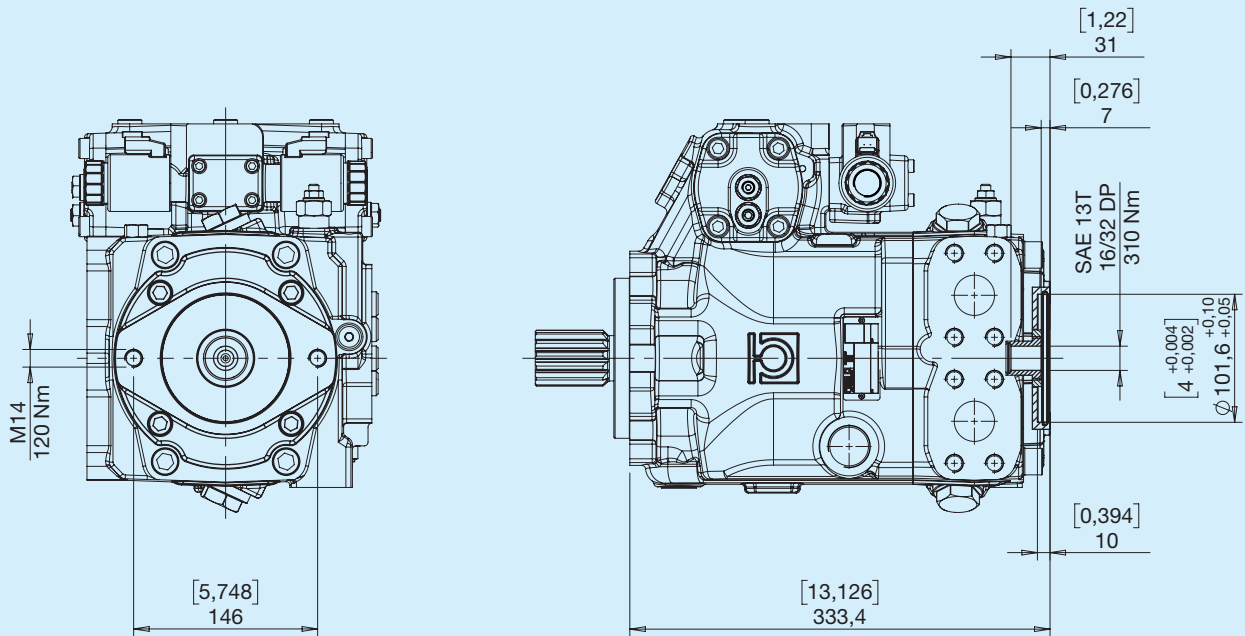
4 SAE C with boost pump



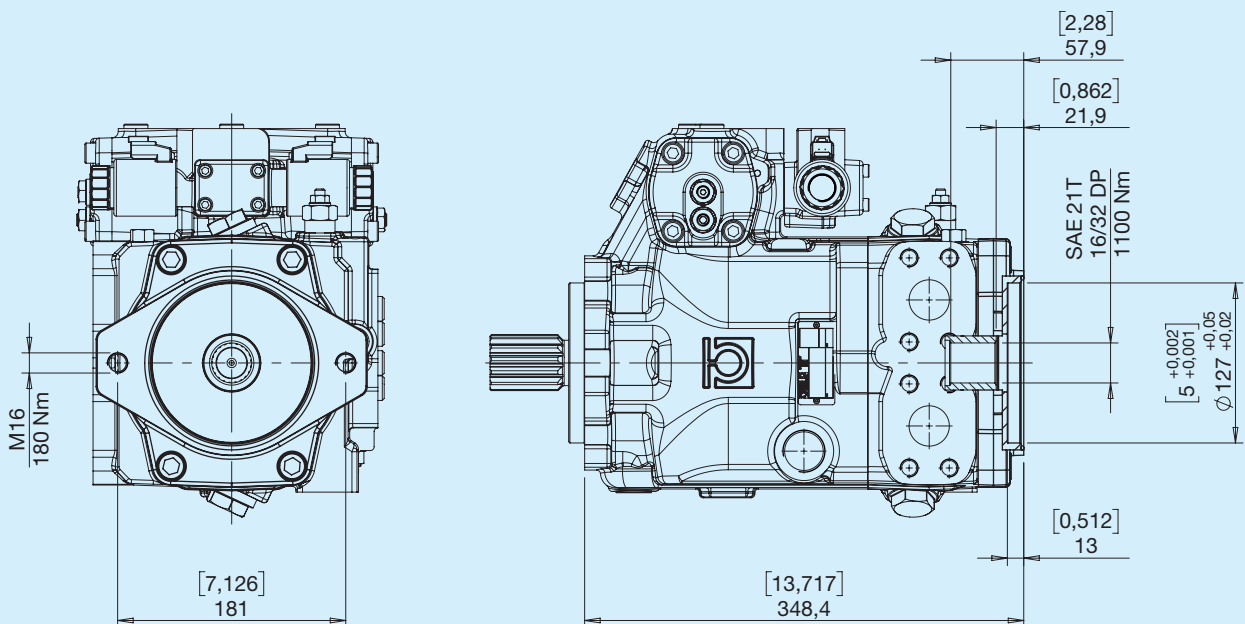
5 SAE A without boost pump



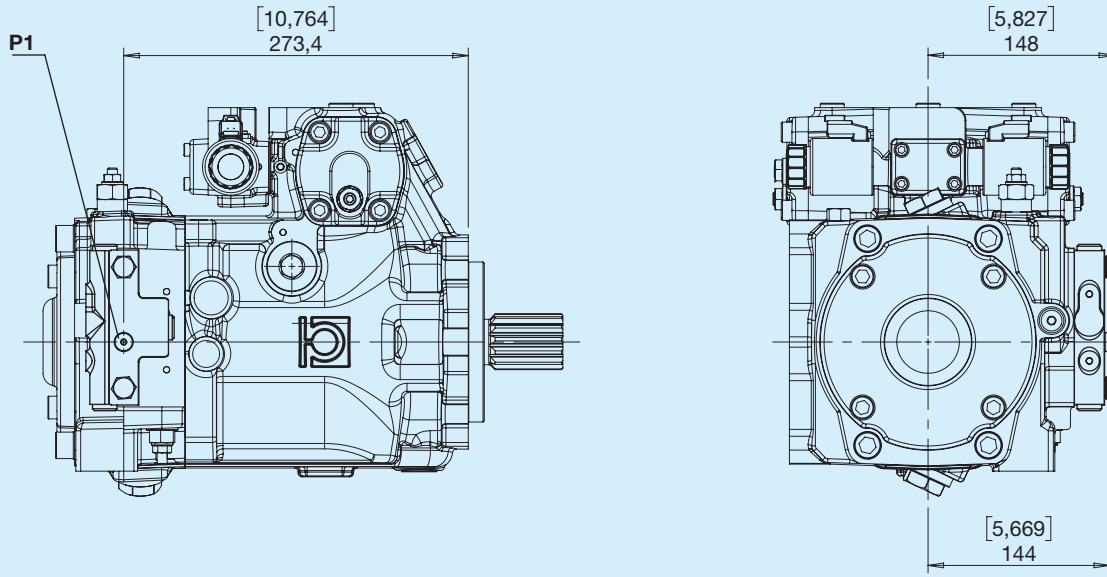
6 SAE B without boost pump



7 SAE C without boost pump

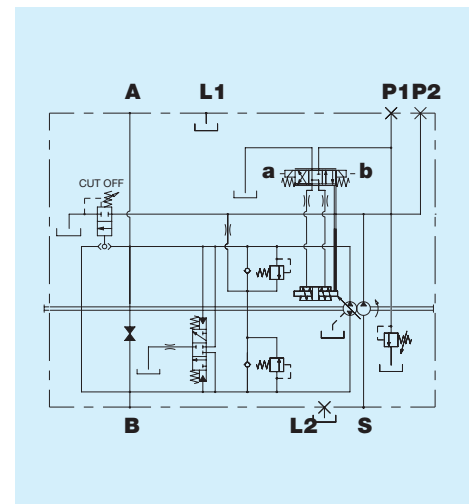


V Flushing valve (10-12 l/min)

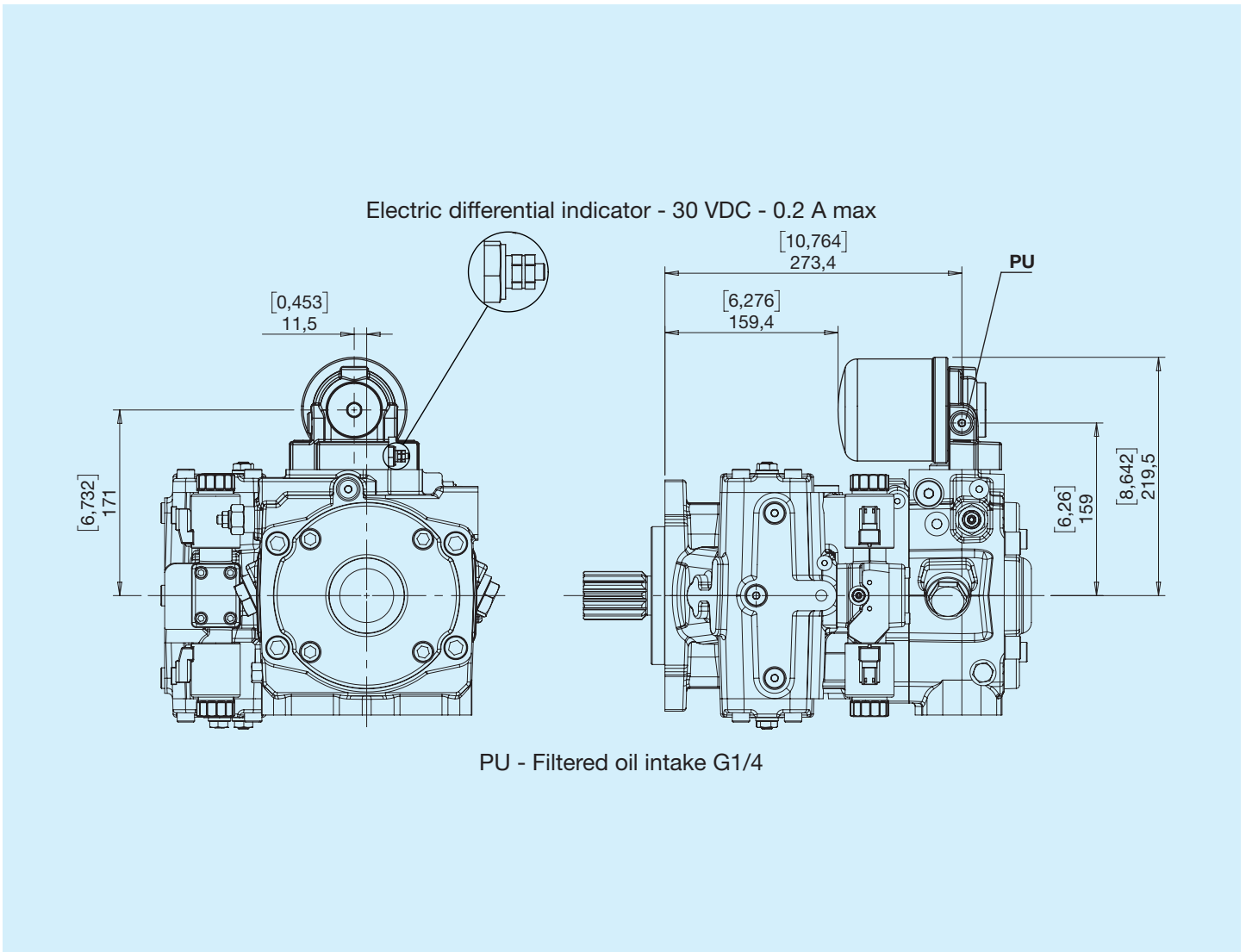


P1 - Pressure intake G1/8

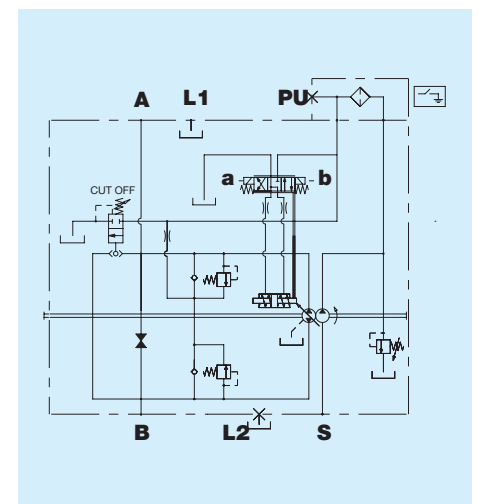
Hydraulic diagram



X Filter with clogging indicator



Hydraulic diagram



HPP8A	1	2	3	4	5	4	7	8	9	10	11	12	13	14	
1 2 3	Displacement														
130															
4	Direction of rotation														
R Right					L Left										
5	Flanges														
E SAE C (2+4 holes)					D SAE D										
4	Shaft profile														
3 SAE 14T 12/24 DP					7 SAE 21T 16/32 DP				9 SAE 13T 8/16 DP						
7	Type of ports														
G Gas					U Unf					M Metric					
8	Controls														
G Feedback hydraulic					I Lever-operated hydraulic				O Electronic proportional feedback control 12V			V Electronic proportional feedback control 24V			
9	Valve calibration														
I 280 bar					O 350 bar				Q 420 bar			Y 500 bar			
L 300 bar					P 400 bar				R 450 bar						
10	Versions														
0 No special fittings, without boost pump					2 SAE A with boost pump				4 SAE C with boost pump			6 SAE B without boost pump			
1 No special fittings, with boost pump					3 SAE B with boost pump				5 SAE A without boost pump			7 SAE C without boost pump			
11	Accessories														
0 No option					V Flushing valve				Y Filter without electric clogging indicator						
P Painting					X Filter with electric clogging indicator				S Multiple accessories						
12 13 14	Special versions														
...															