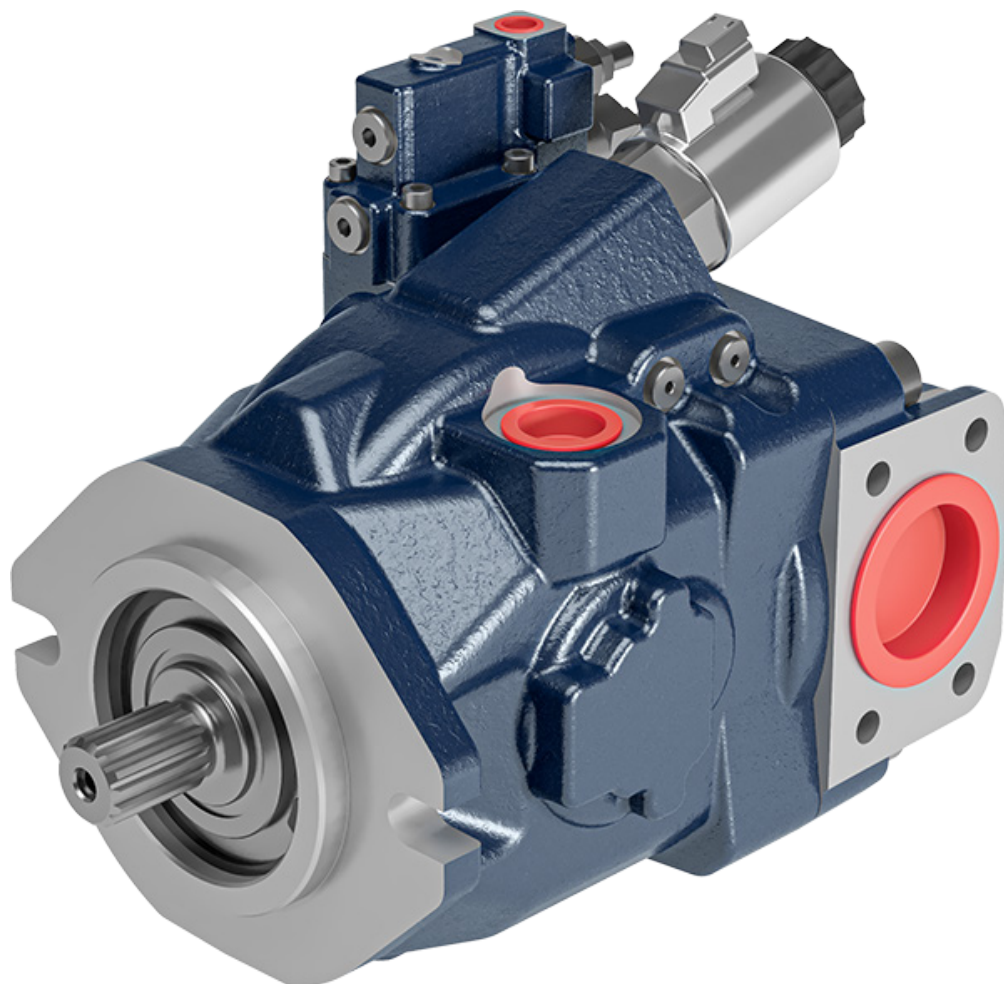
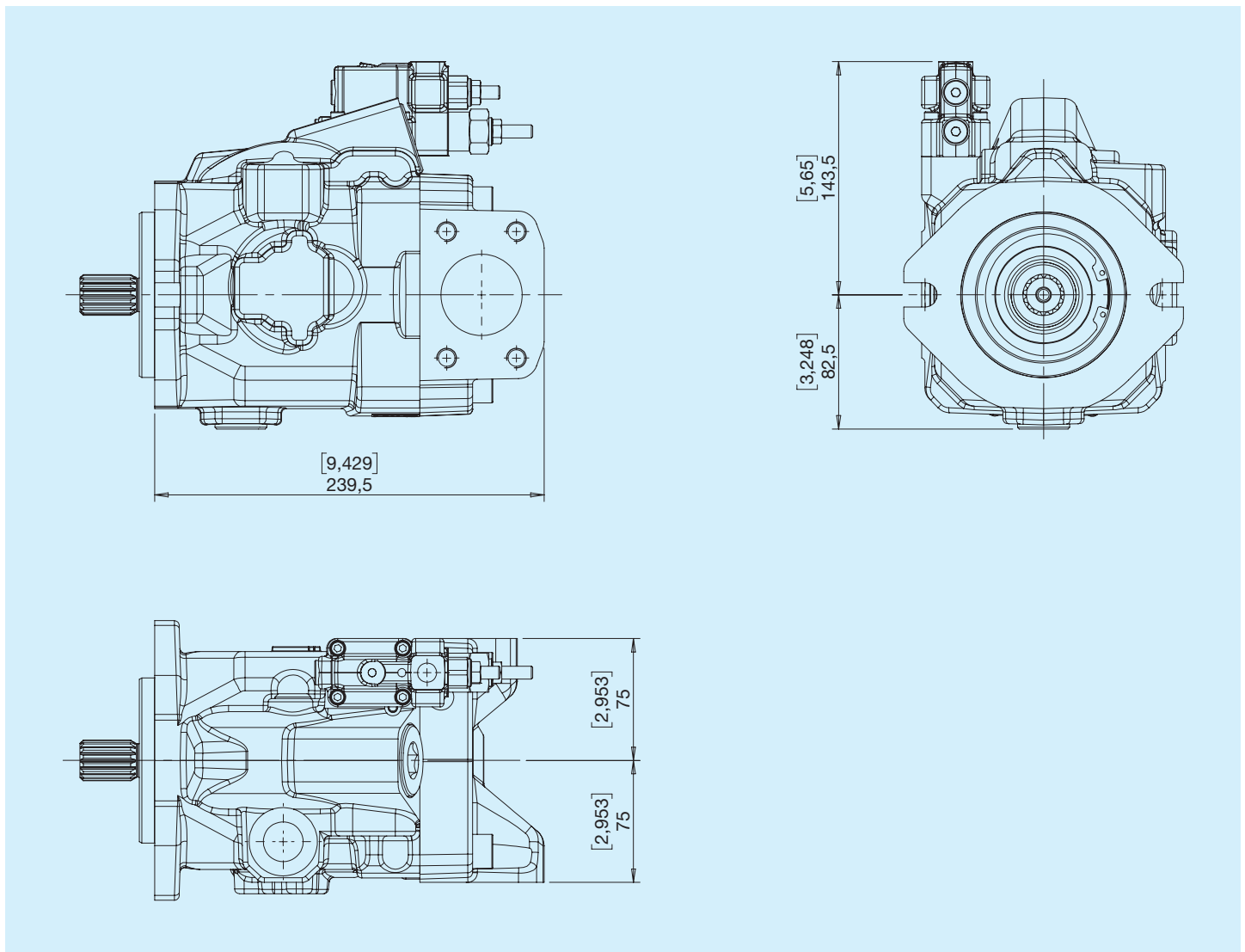


Variable-displacement pumps

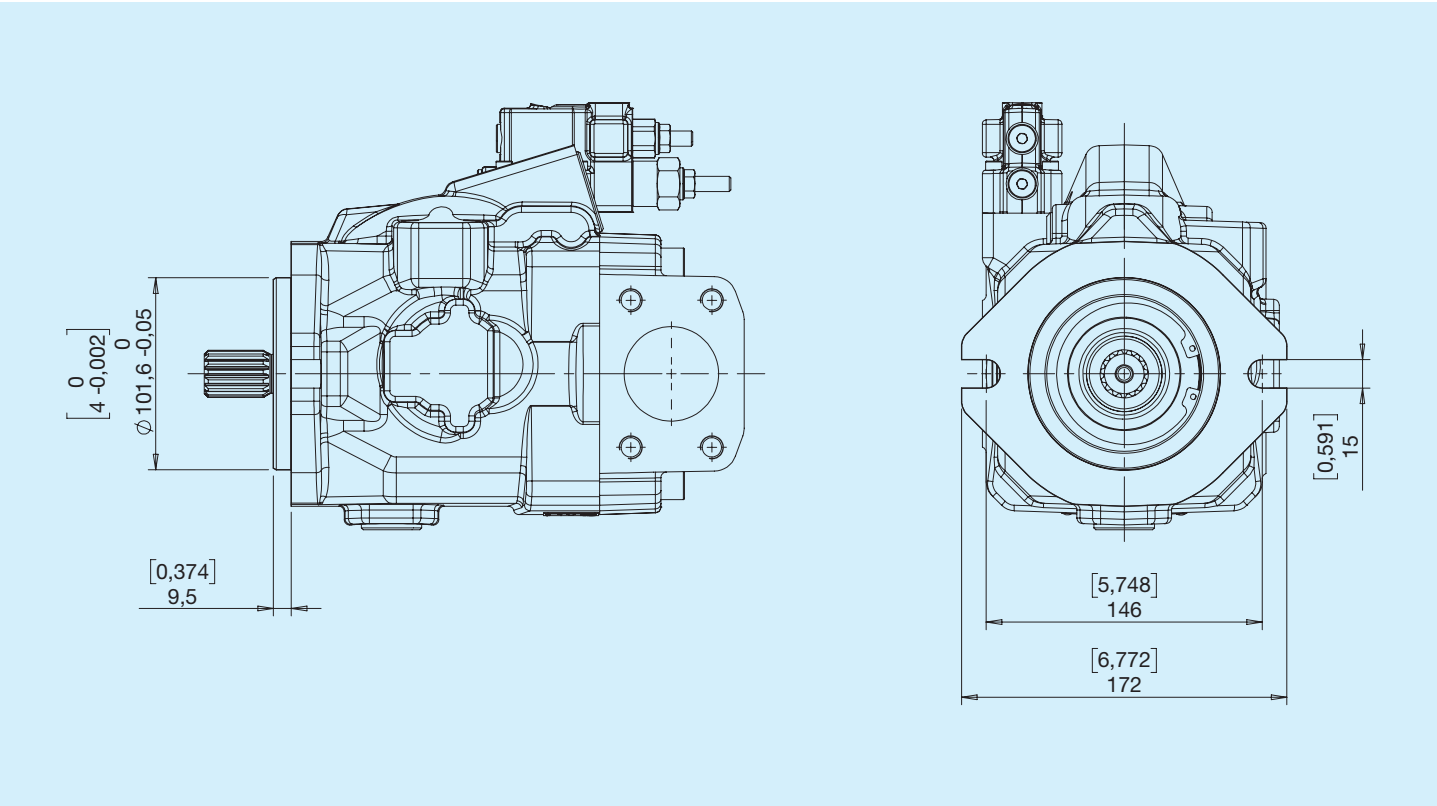


Before use, carefully read the GENERAL INSTRUCTIONS FOR USE OF OPEN CIRCUIT AXIAL PISTON PUMPS.

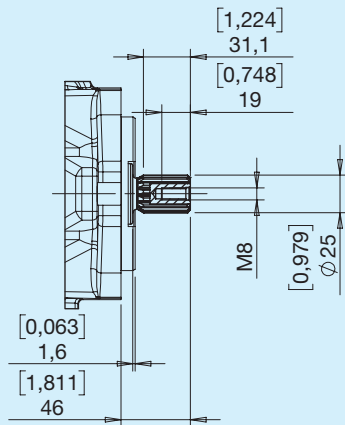


HPA5	Nominal displacement		Swash plate °	Continuous pressure		Intermittent pressure		Peak pressure		Rotational speed		Weight	
	cm ³	in ³		bar	psi	bar	psi	bar	psi	min ⁻¹	min ⁻¹	kg	lbs
72	72	4,39	19	280	4060	320	4640	350	5075	2500	500	24,5	54
80	80	4,89	15	250	3625	300	4350	320	4640	2400	500	24,5	54
90	90	5,50	17	250	3625	280	4060	300	4350	2300	500	24,5	54

B SAE B

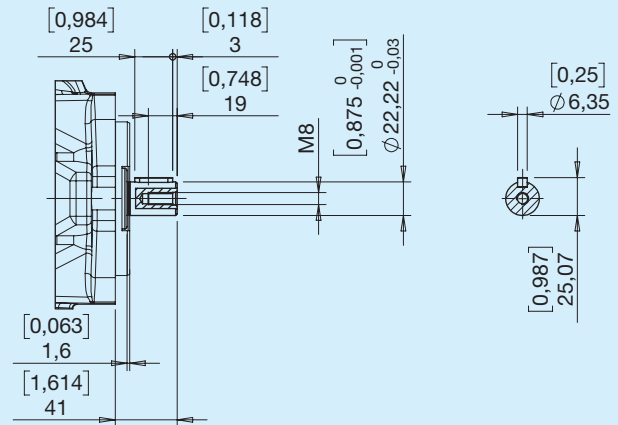


1 SAE 15T 16/32 DP



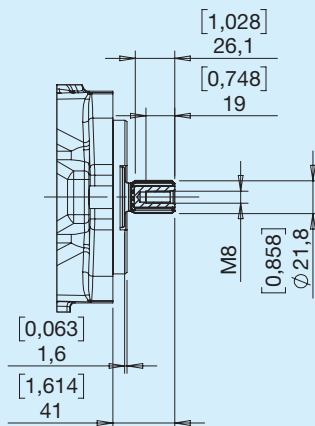
Max. torque 460 Nm

6 CYLINDRICAL D22.22



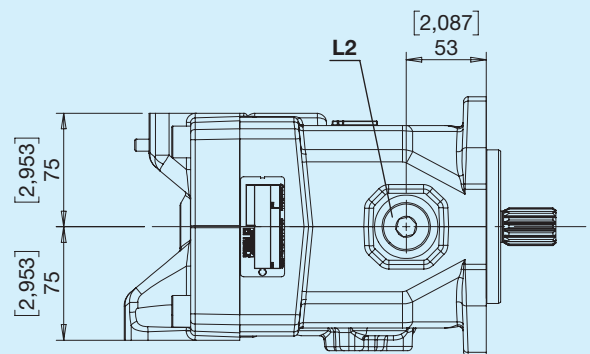
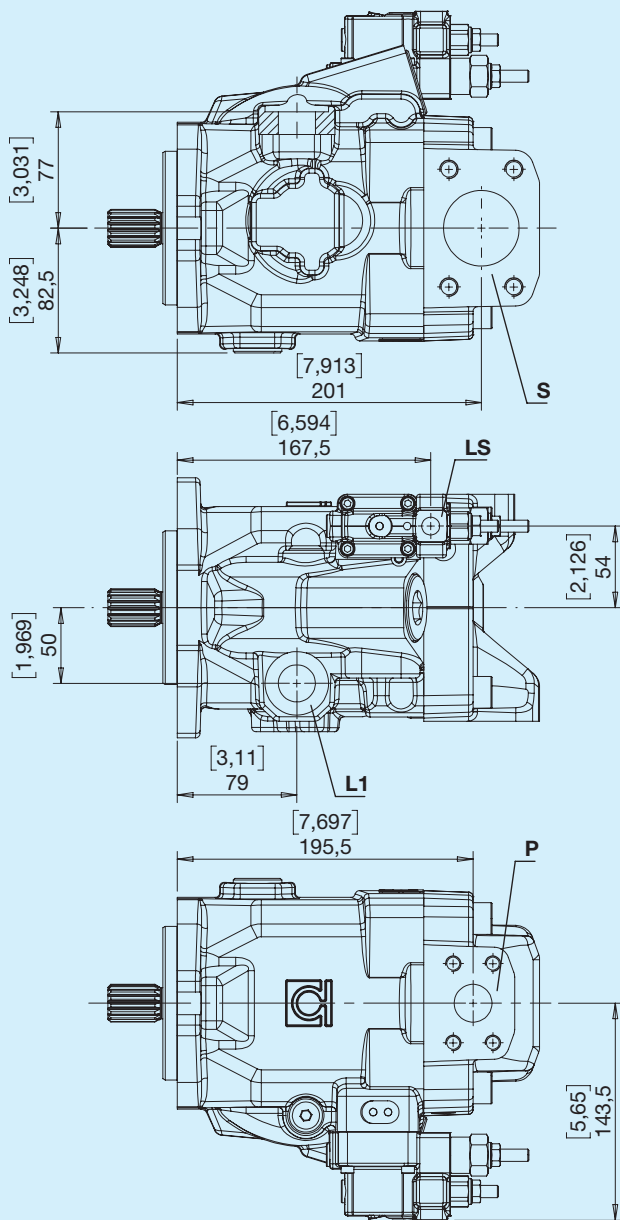
Max. torque 210 Nm

9 SAE 13T 16/32 DP

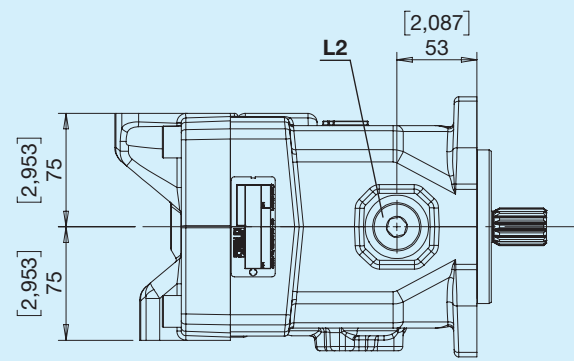
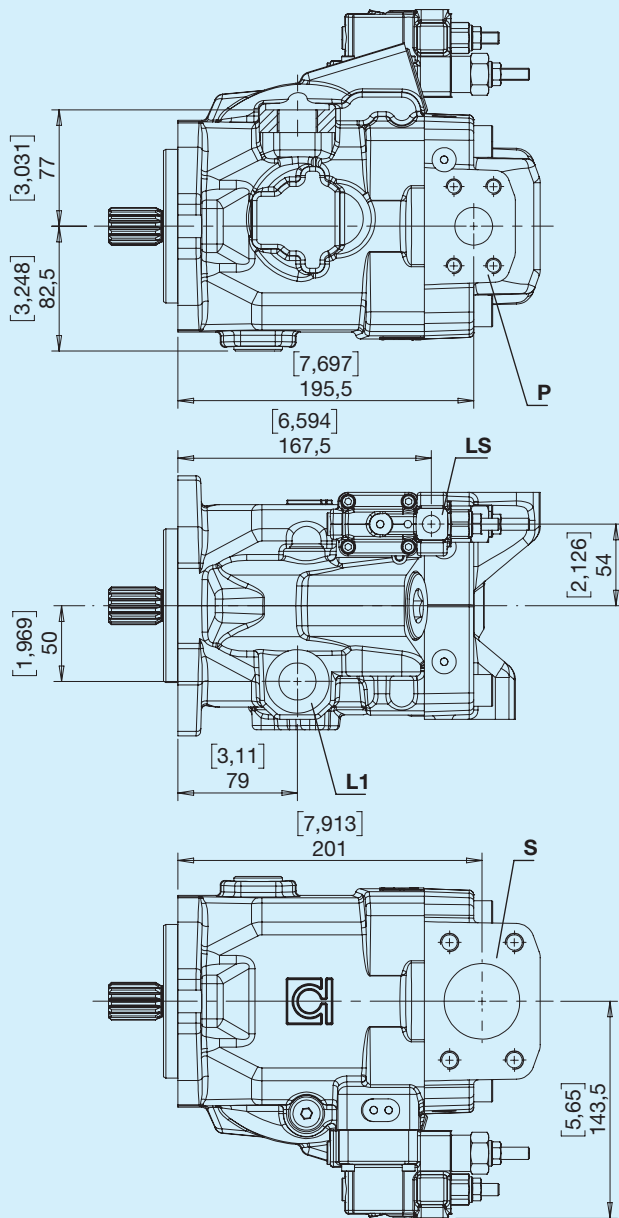


Max. torque 310 Nm

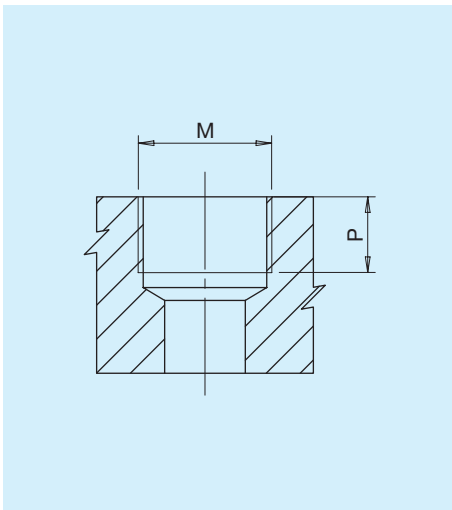
S **N** Side right rotation



S **N** Side left rotation

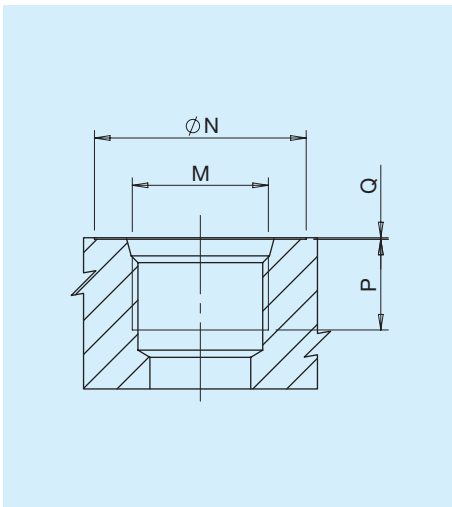


Type G



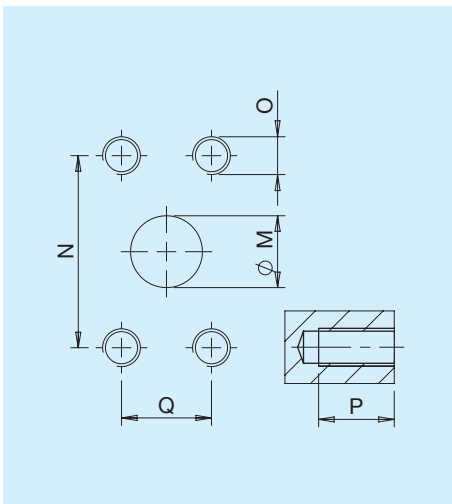
Type	M		P	
		Nm	mm	in
G2	Port ISO 1179-1 - G 1/4	17	14	0,55
G6	Port ISO 1179-1 - G 3/4	90	23	0,91

Type U



Type	Dim.	N		P		Q		M	
		mm	in	mm	in	mm	in		Nm
U2	1/4"	17	0,67	12	0,47	0,3	0,01	Port ISO 11926-1-7/16-20	17
U6	3/4"	42	1,65	20	0,79	0,3	0,01	Port ISO 11926-1-1 1/16-12	90

Type N

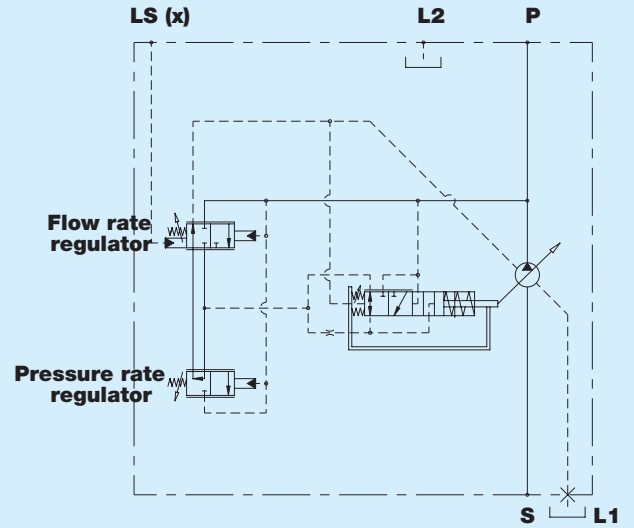
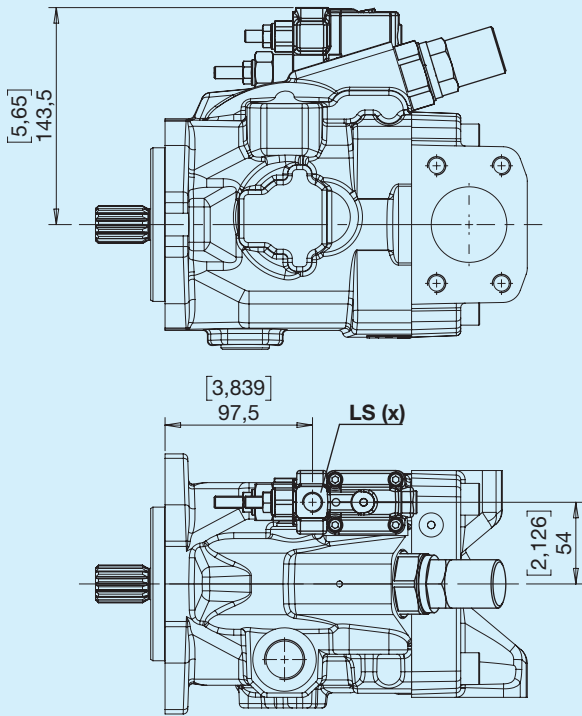


Type	M		N		Q		P		O	
	mm	in	mm	in	mm	in	mm	in		Nm
N7	25	0,98	52,4	2,06	26,2	1,03	20	0,79	M10	38
N0	50	1,97	77,8	3,06	42,9	1,69	20	0,79	M12	70

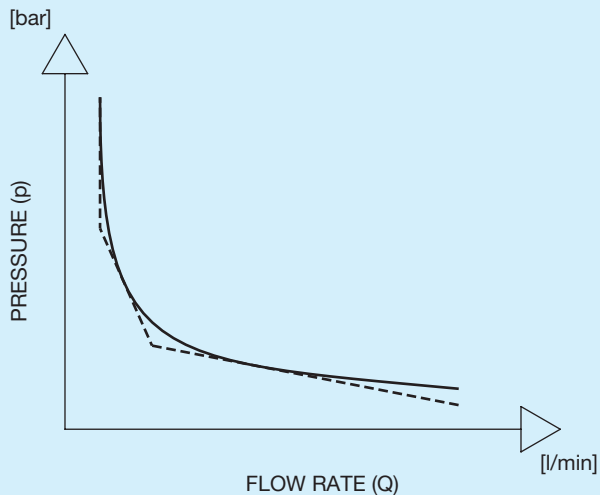
Combinations

Type	Inlet S	Outlet A-B	Drain port L1-L2	Pilot pressure LS (x)
G	N0	N7	G6	G2
U	N0	N7	U6	G2

C Constant torque control

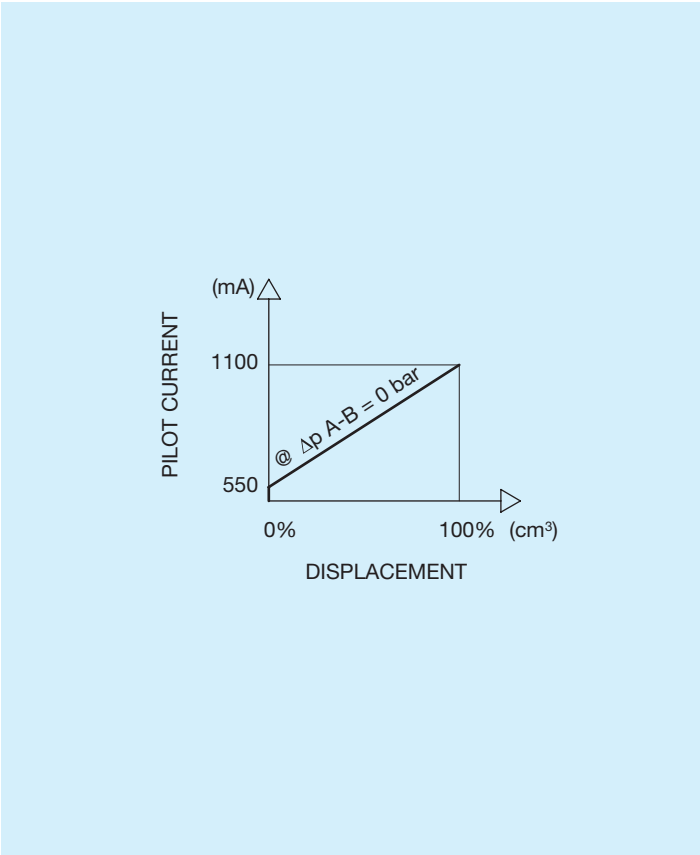
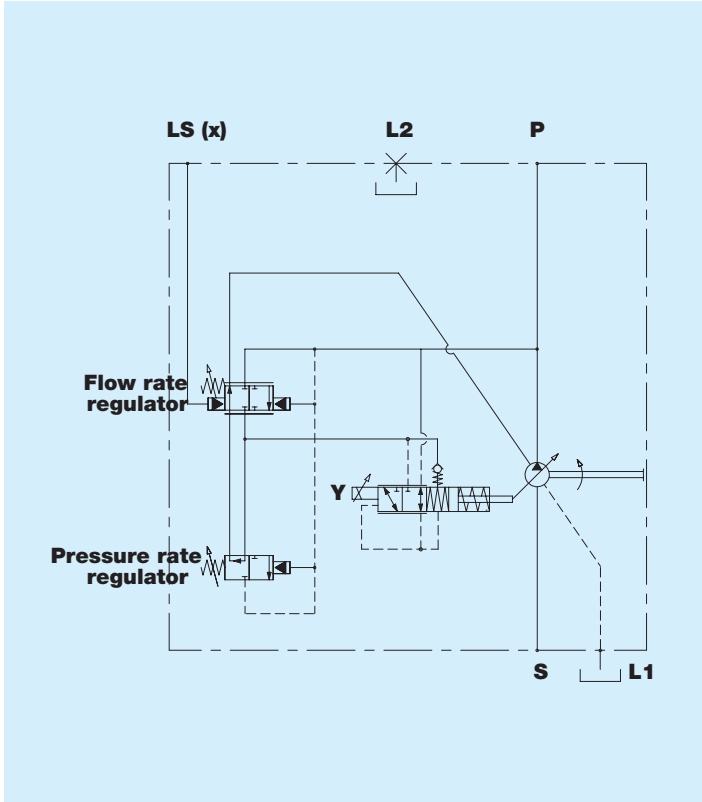
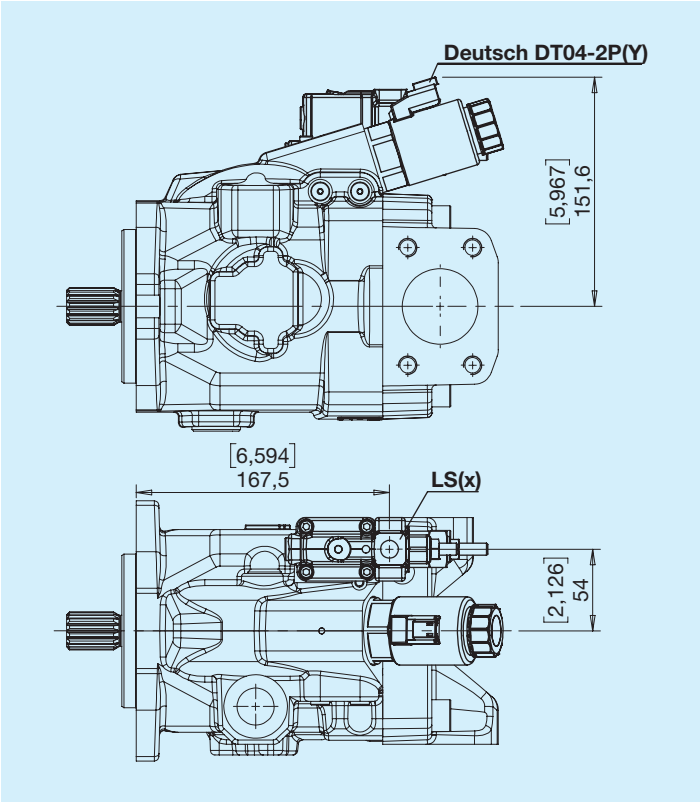


For torque regulator setting (Nm), contact Technical Sales.



Working pressure bar - psi	Differential pressure		
	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

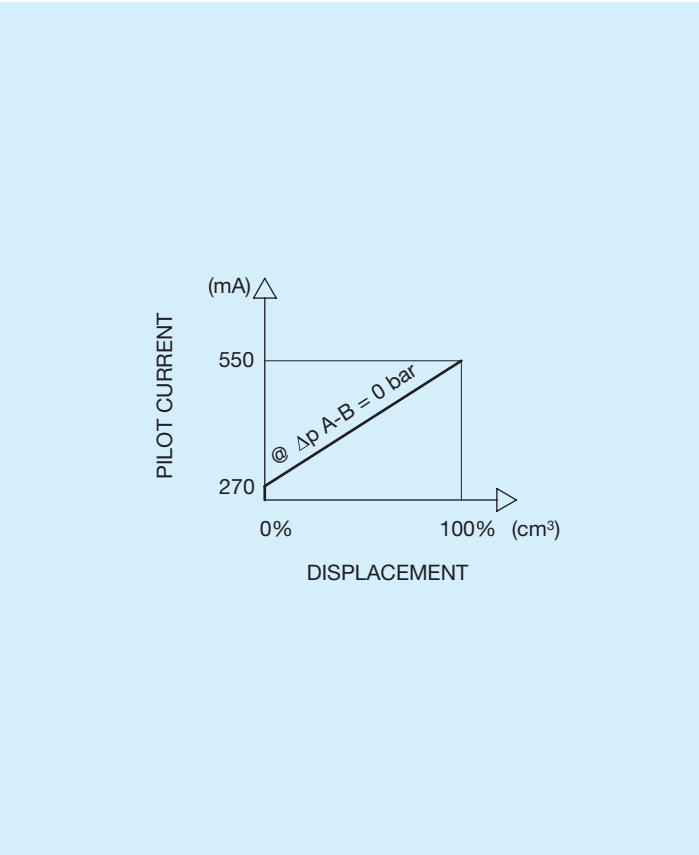
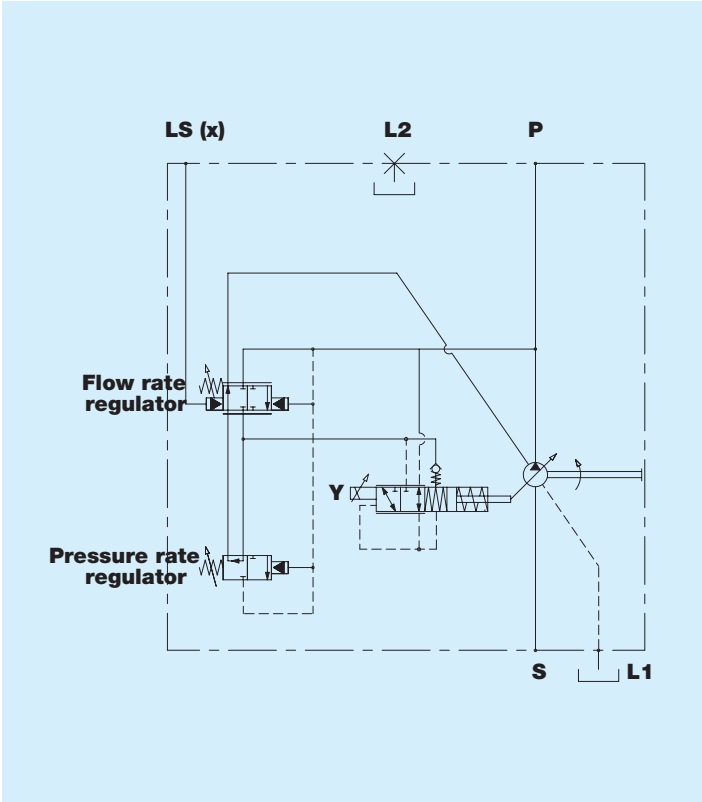
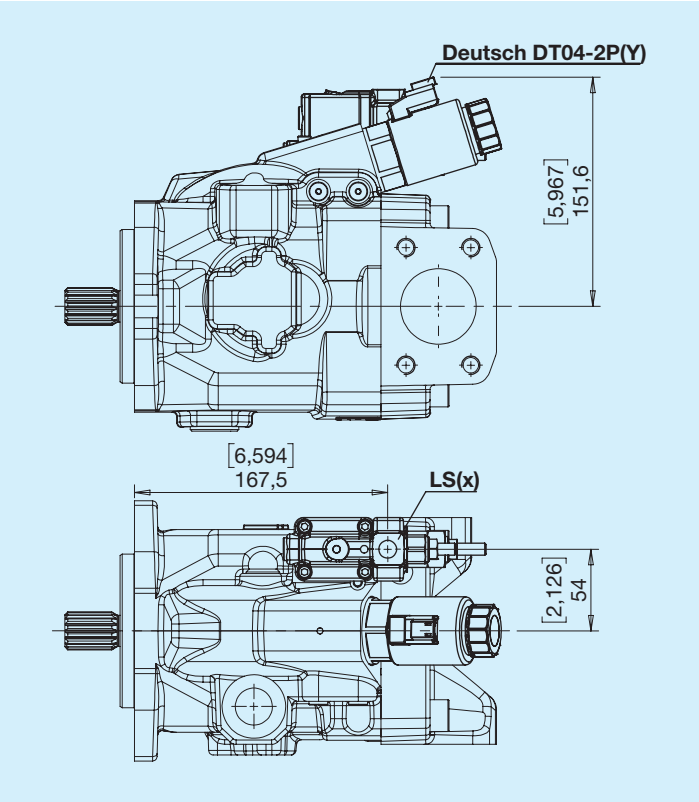
E Electro-proportional 12 V + hydraulic



Working pressure bar - psi	Differential pressure		
	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

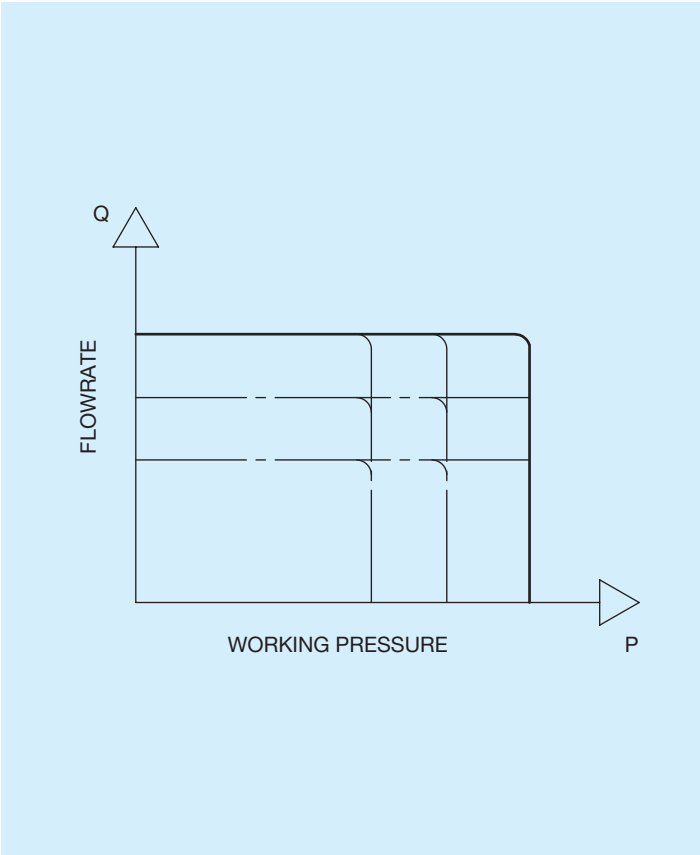
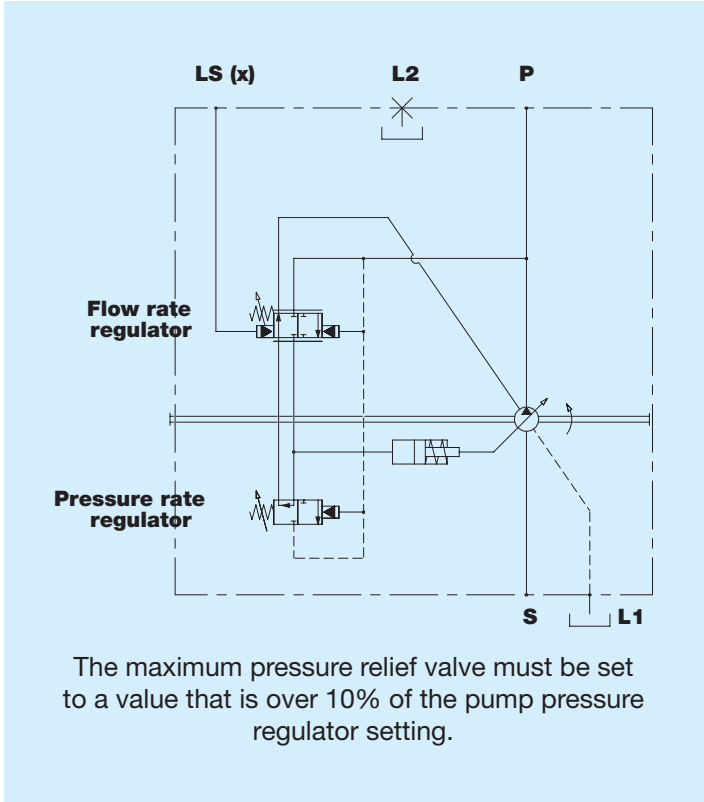
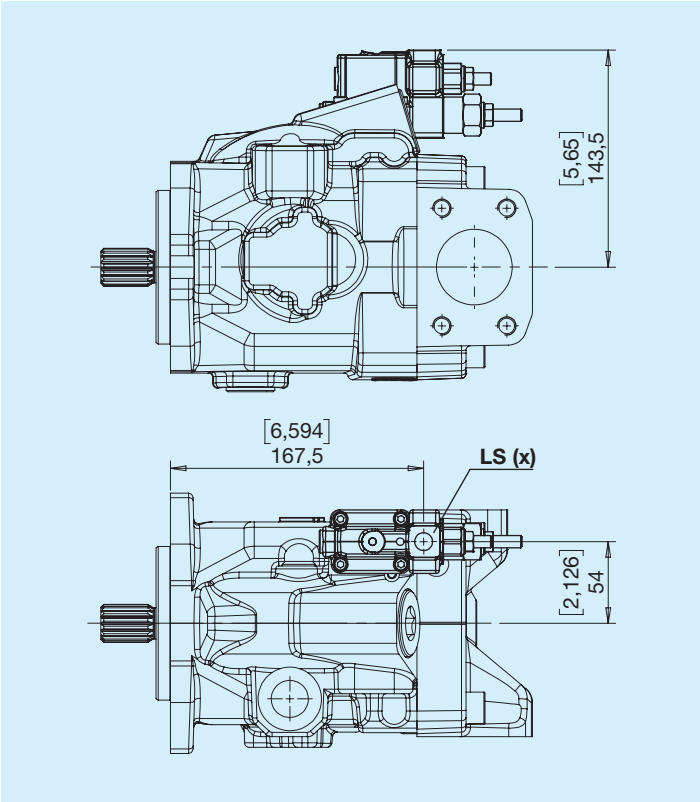
F

Electro-proportional 24 V + hydraulic



Working pressure bar - psi	Differential pressure		
	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

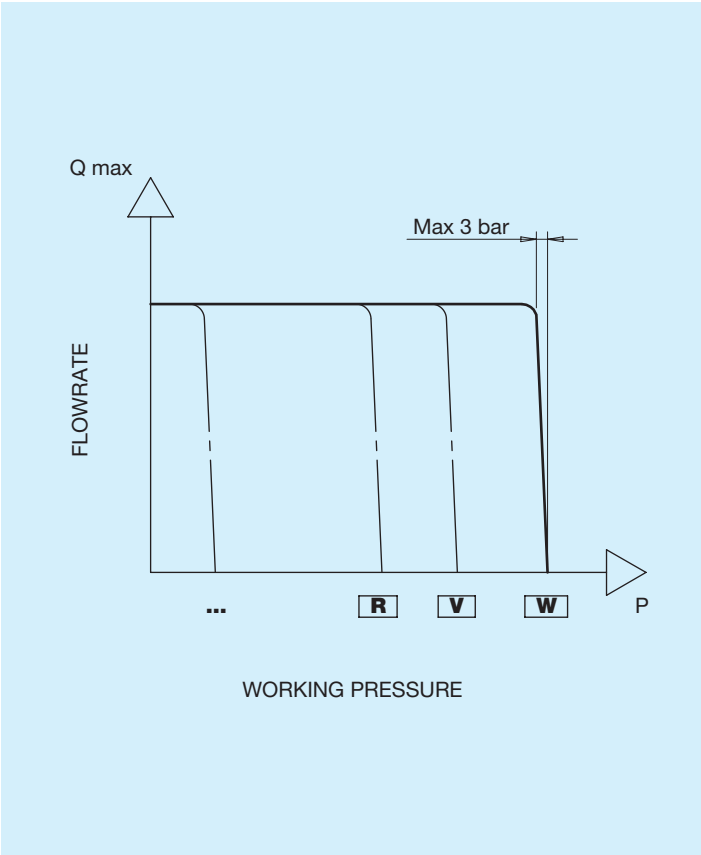
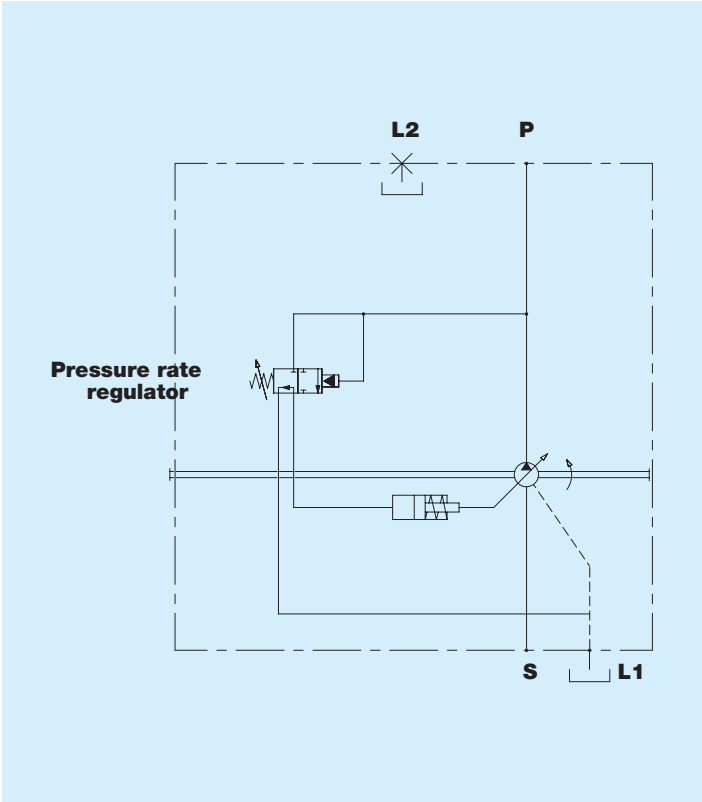
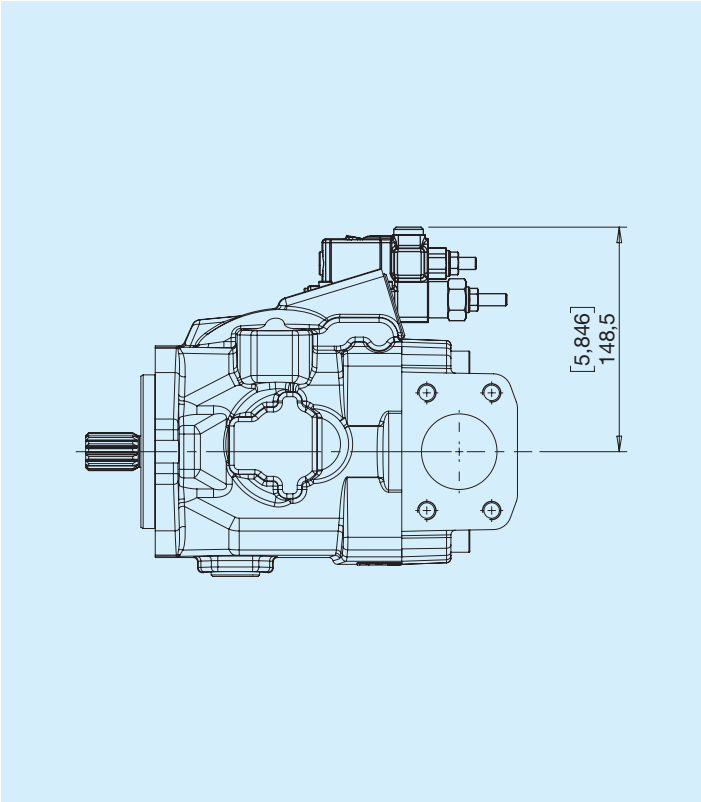
L Hydraulic LS



Working pressure bar - psi	Differential pressure		
	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

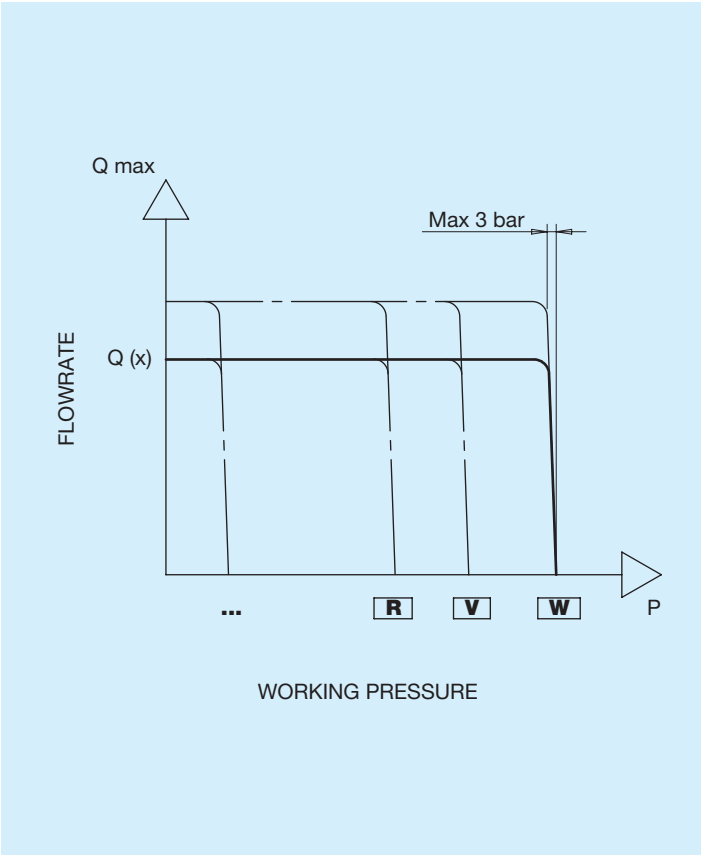
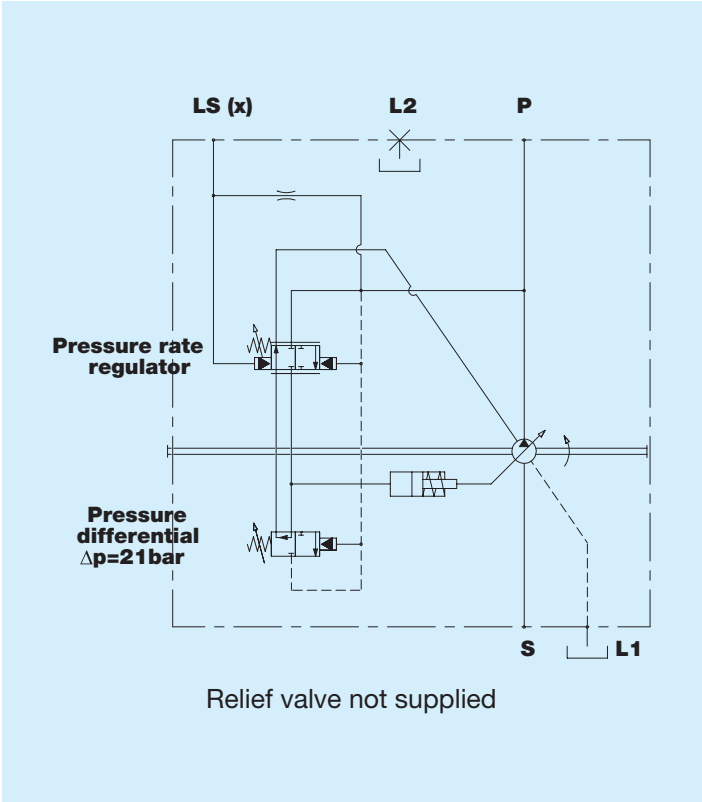
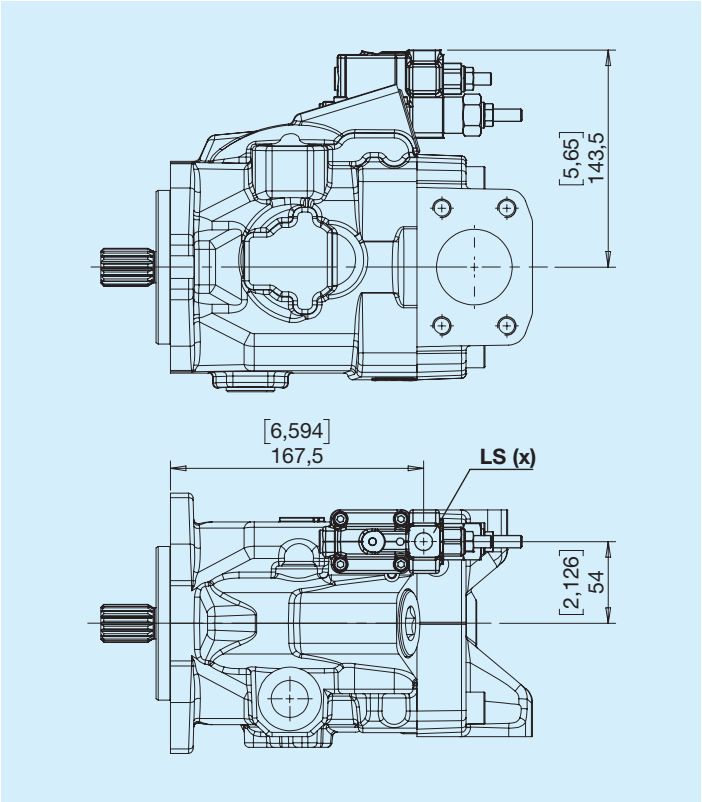
P

Constant pressure regulator



Code	Working pressure
Differential pressure 21 bar	bar - psi
D	180 - 2610
H	210 - 3045
N	250 - 3625
R	280 - 4060
V	320 - 4640
W	350 - 5075

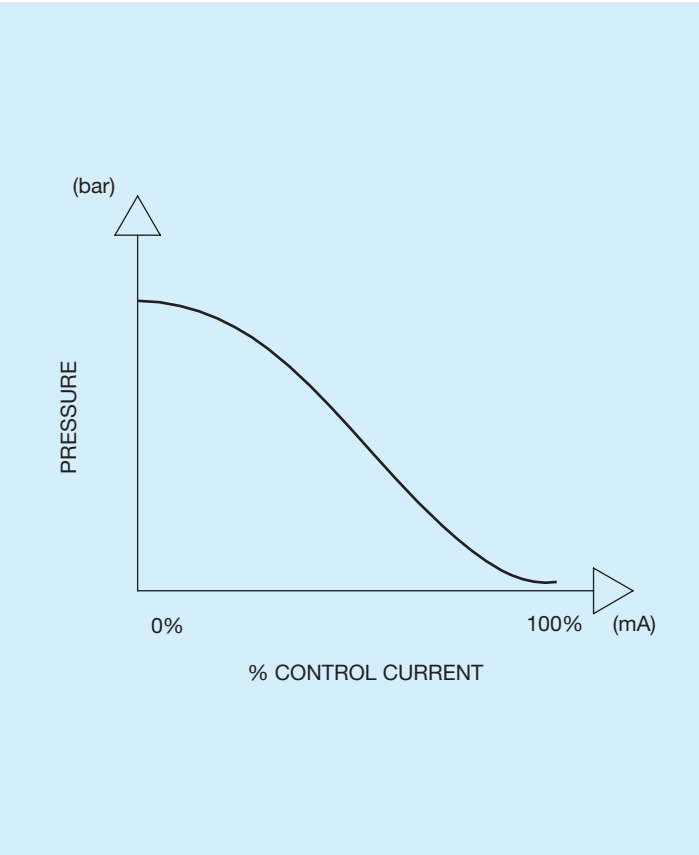
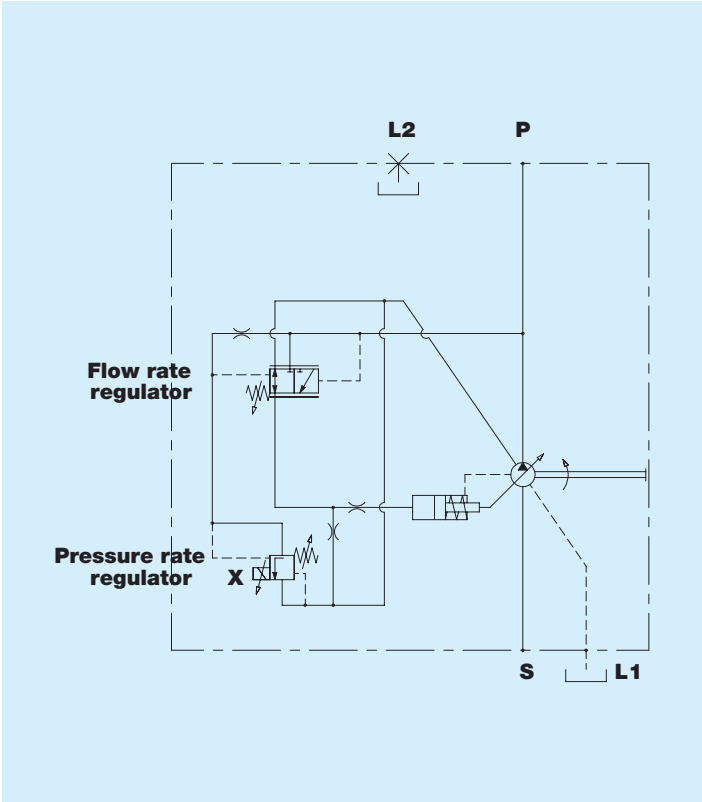
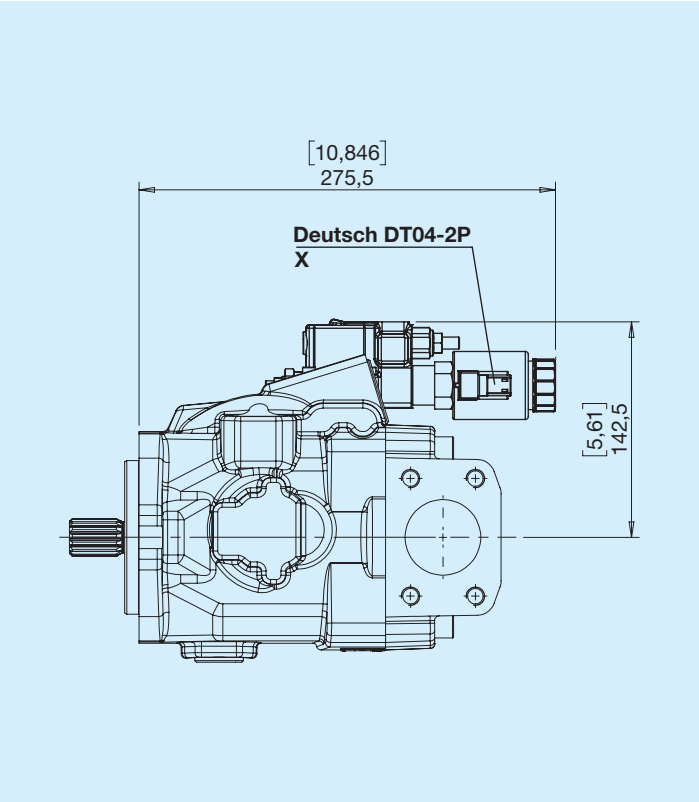
R Remote control pressure regulator



Code	Working pressure
Differential pressure 21 bar	bar - psi
D	180 - 2610
H	210 - 3045
N	250 - 3625
R	280 - 4060
V	320 - 4640
W	350 - 5075

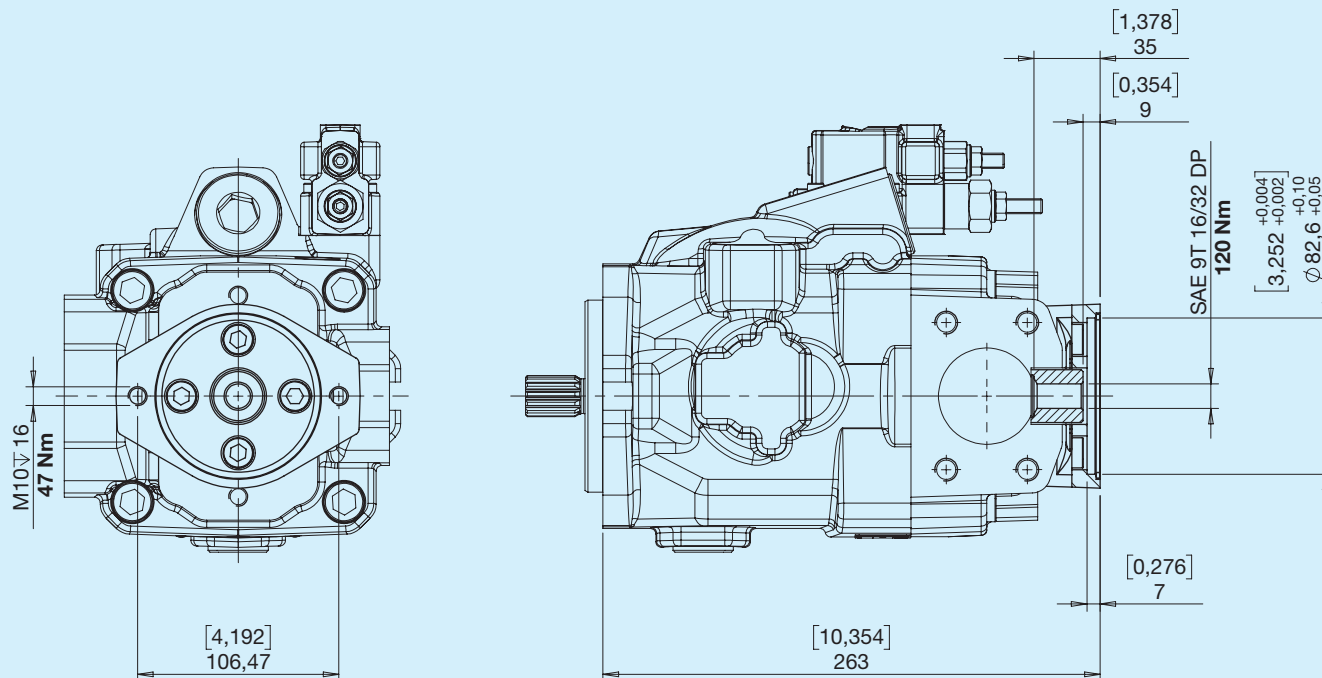
S

Fan drives

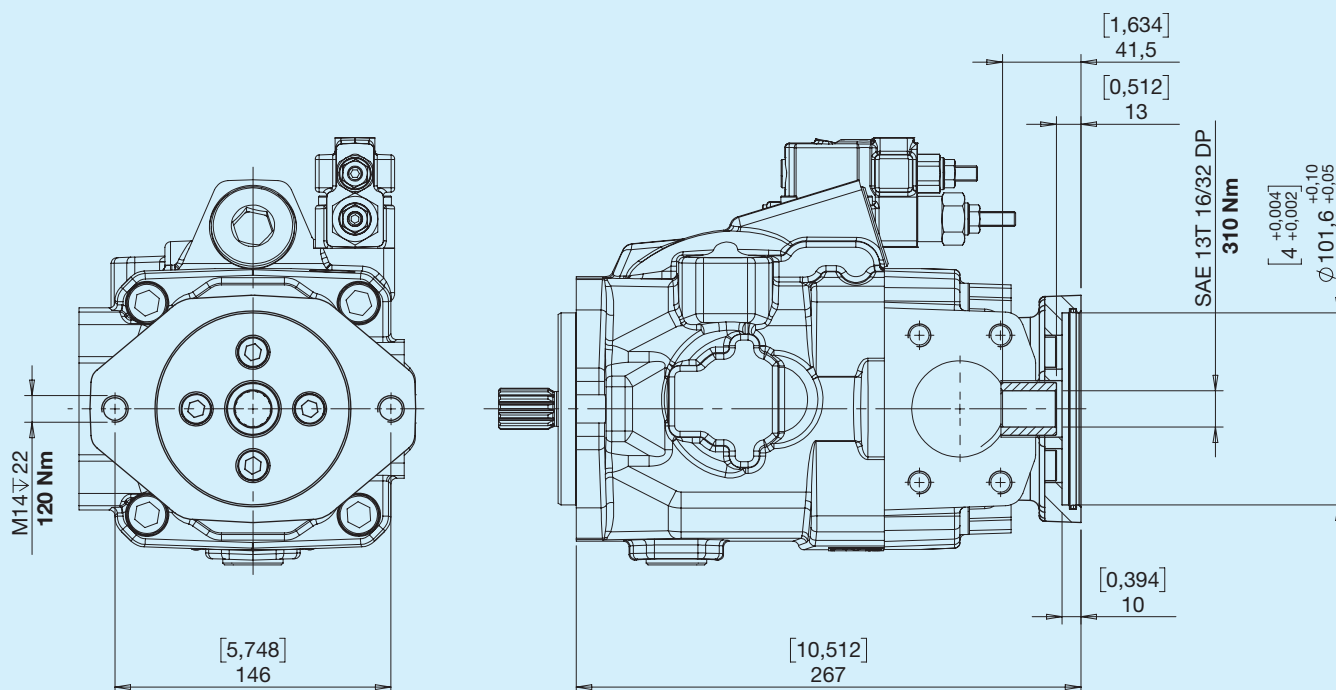


Working pressure bar - psi	Differential pressure		
	14 bar - 203 psi	21 bar - 305 psi	25 bar - 363 psi
180 - 2610	A	B	C
210 - 3045	E	F	G
250 - 3625	I	L	M
280 - 4060	O	P	Q
320 - 4640	S	T	U
350 - 5075	Z	X	Y

5 SAE A



6 SAE B



	1	2	3	4	5	6	7	8	9	10	11	12	13
HPA5													
1 2	Displacement												
	72				80				90				
3	Direction of rotation												
	R Right				L Left								
4	Flanges												
	B SAE B												
5	Shaft profile												
	1 SAE 15T 16/32 DP				6 CYLINDRICAL D22.22				9 SAE 13T 16/32 DP				
6	Type of ports												
	S Gas-Uses SAE side				N Unf-Uses SAE side								
7	Controls												
	C Constant torque control E Electro-proportional 12 V + hydraulic LS				F Electro-proportional 24 V + hydraulic LS L Pressure/flow rate regulator-hydraulic LS				P Constant pressure regulator R Remote control pressure regulator				S Fan drives
8	Command Set												
	... See pertinent tables												
9	Versions												
	0 No special fittings				5 SAE A				6 SAE B				
10	Direction of rotation												
	0 No option A Angle sensor				O Pressure sensor P Paint				S Multiple accessories				
11 12 13	Special versions												
	...												