

Features

- Axial Piston Pump Design
- Rotation speed up to 2200 rpm
- Pressure to 250 Bar (3625 psi)
- Wide selection of compensator options to simplify and improve circuit designs
- Maximum Volume Adjustment



Ordering Details

P	Pump																																																						
V	Variable																																																						
AP	Axial Piston																																																						
18-	CC, Centimeters ³ /rev.: 15, 18, 23, 25, 38, 42, 50, 70																																																						
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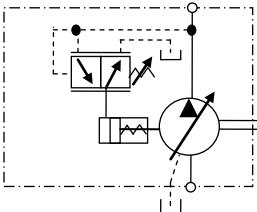
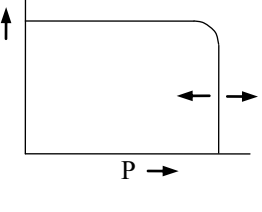
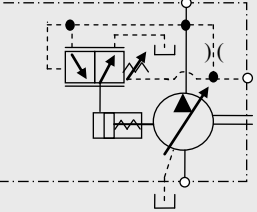
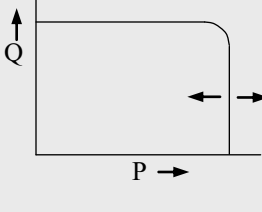
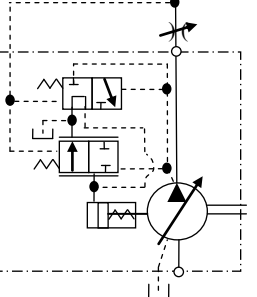
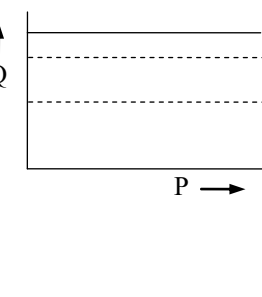
Example Part Number: PVAP18-PR-K.7-2A-O12O12S-R-2

Technical Specifications:

Displacement (at 7 bar/100PSI)	CC/rev	15	18	23	25	38	42	50	70
	in³/rev	0.90	1.09	1.40	1.52	2.31	2.56	3.14	4.25
Oil Flow at Pump rotation of 1800 rpm	LPM	27	32	41.4	45.0	68.0	76.0	92.7	125.4
	GPM	7.05	8.45	10.94	11.60	17.96	19.58	24.48	33.10

Maximum Speed (continuous)	rpm	2200	2200	2200	2200	2200	2200	2200	2200
Minimum Speed	rpm	500	500	500	500	500	500	500	500
Nominal Pressure (continuous)	bar	250	250	250	250	250	250	210	210
	psi	3625	3625	3625	3625	3625	3625	3000	3000
Peak Pressure (6sec./cycle max.)	bar	280	280	280	280	280	280	250	250
	psi	4060	4060	4060	4060	4060	4060	3625	3625

Weight	kg	13	13	22	22	26	26	55	56
	lbs.	28.6	28.6	48.4	48.4	57.2	57.2	121	123.2

Section 2 – Controllers			
PR: Standard pressure control			<ol style="list-style-type: none"> 1. When system pressure increases and reaches the preset pressure the flow decrease automatically. 2. Pressure can be adjusted manually.
PRR : Remote pressure control			<ol style="list-style-type: none"> 1. The same function as the "PR" control. 2. With remote port, pressure can be adjusted remotely by a remote control valve.
LS: Load-sensing control			<ol style="list-style-type: none"> 1. Flow is compensated based on the pressure drop across a remote orifice. 2. The flow can remain the same regardless of loading in the system.

Shaft Dimensions, in mm

Spline:

Code	9T.6	11T	13T.8	15T	14T
Pump CC/rev	15, 18	15, 18	15, 18, 23, 25, 38, 42	23, 25, 38, 42	50, 70
	9T 16/32	11T 16/32	13T 16/32	15T 16/32	14T 12/24

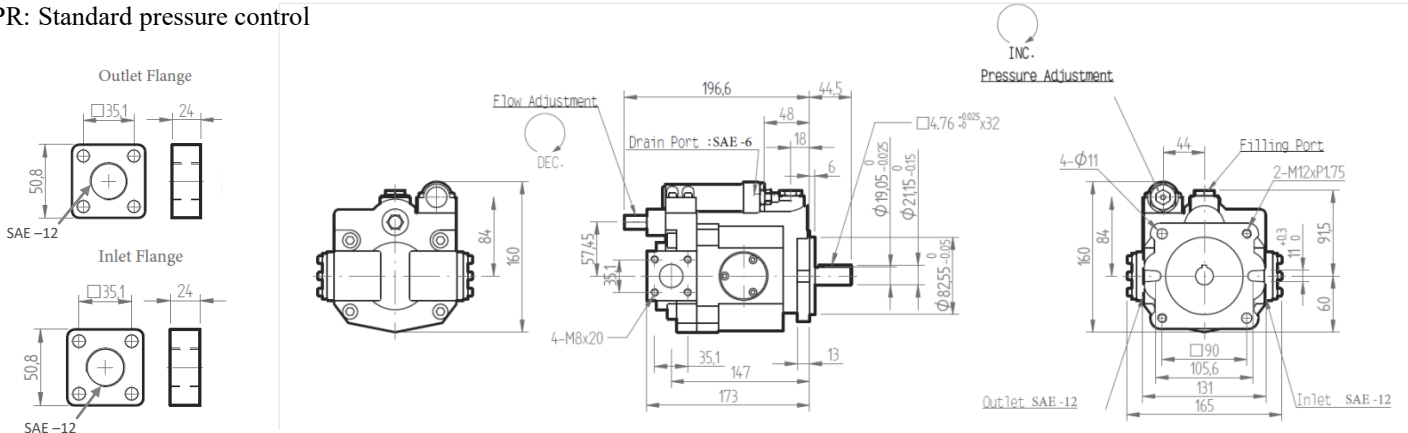
Key:

Code	K0.7	K0.8	K1.25
Pump CC/rev	15, 18	23, 25, 38, 42	50, 70

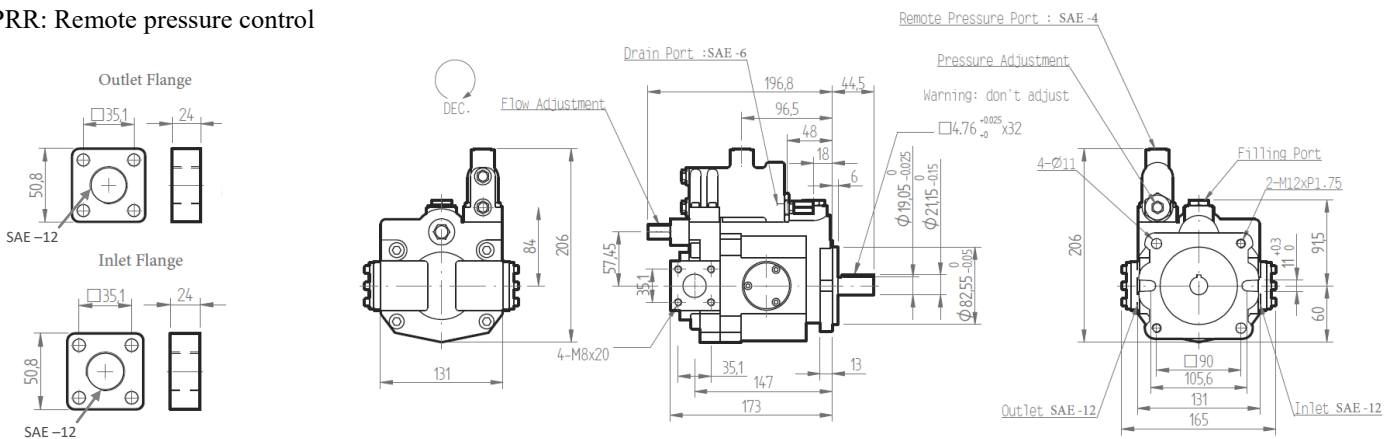
Pump Dimensions, in mm

15 and 18cc

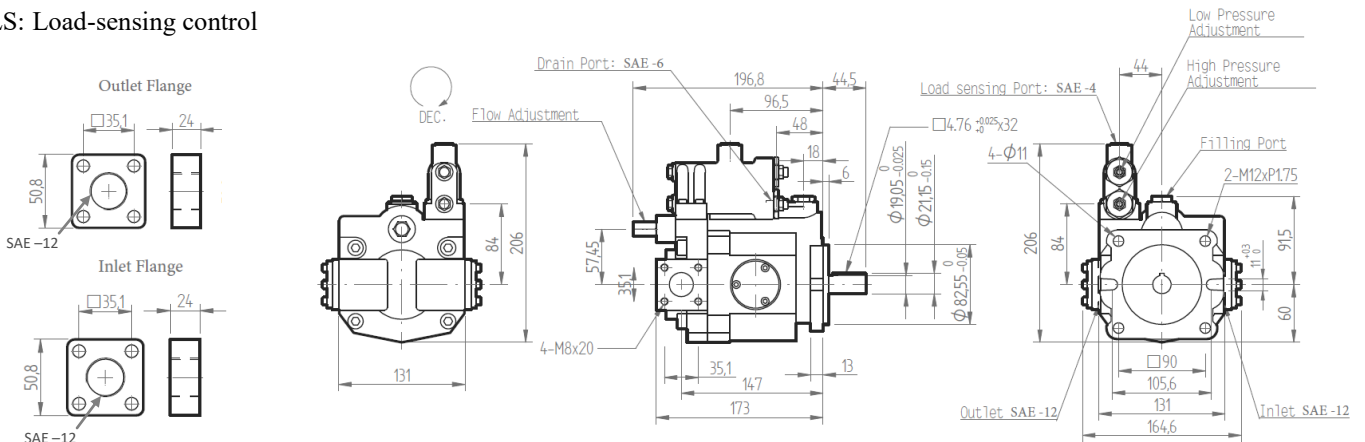
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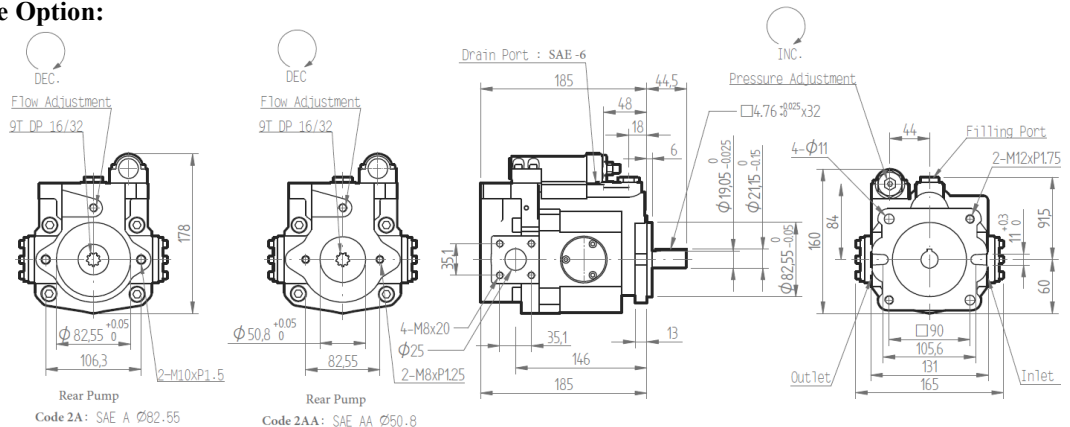
PRR: Remote pressure control



LS: Load-sensing control



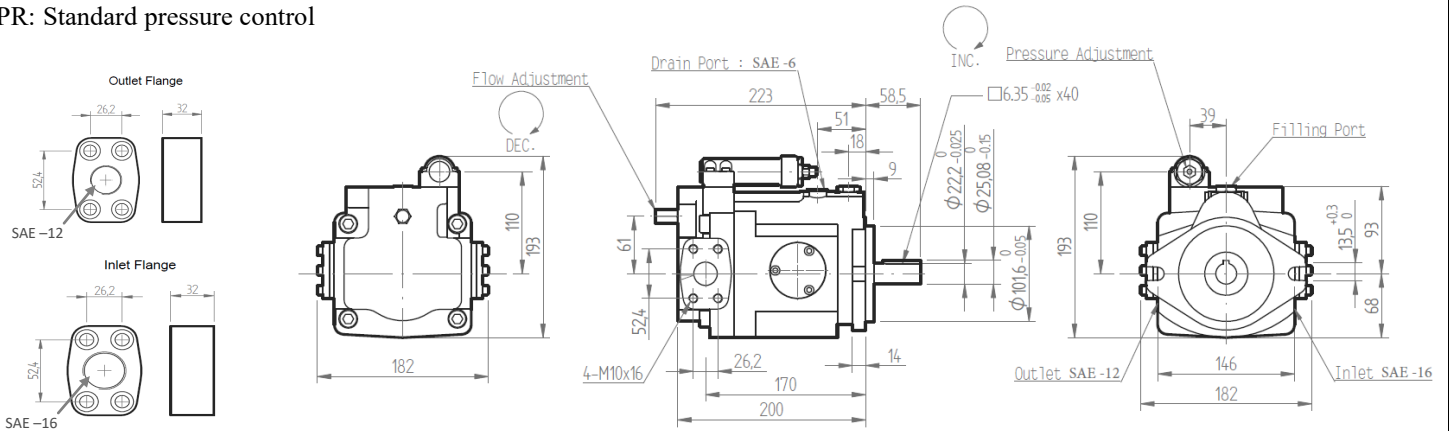
2AA and 2A: Through drive Option:



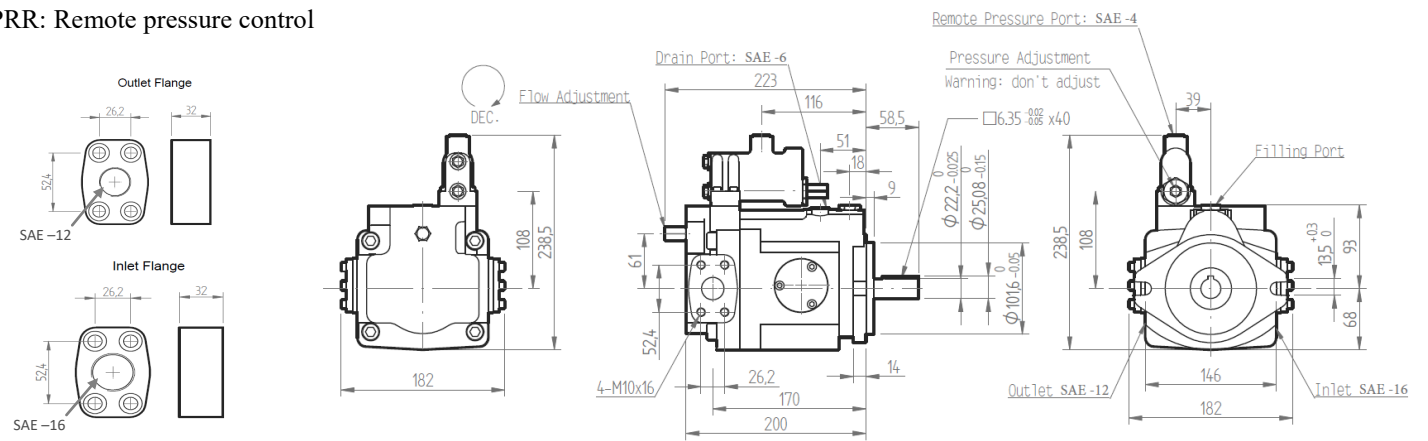
Pump Dimensions, in mm

23 and 25cc

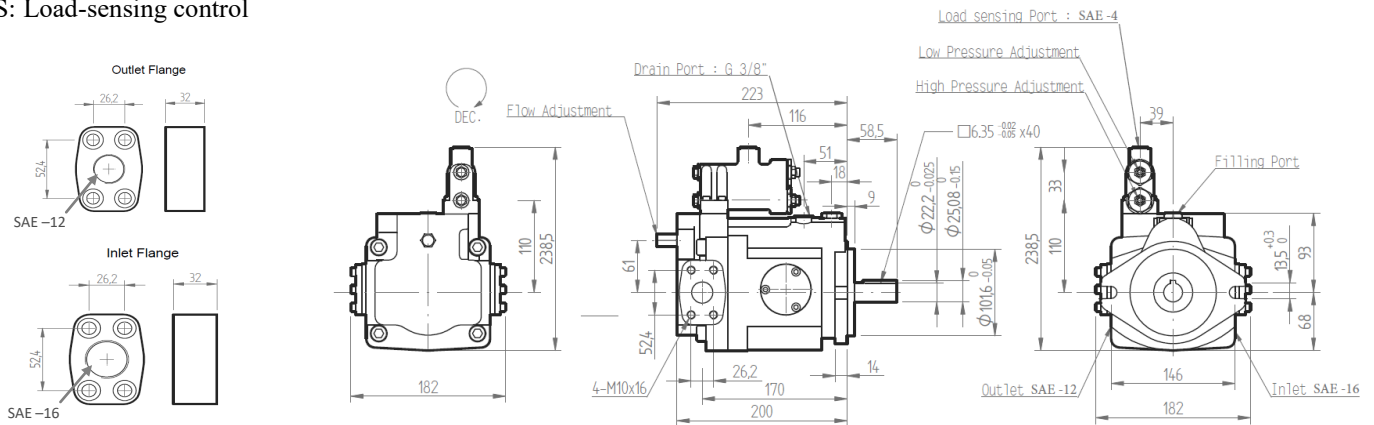
PR: Standard pressure control



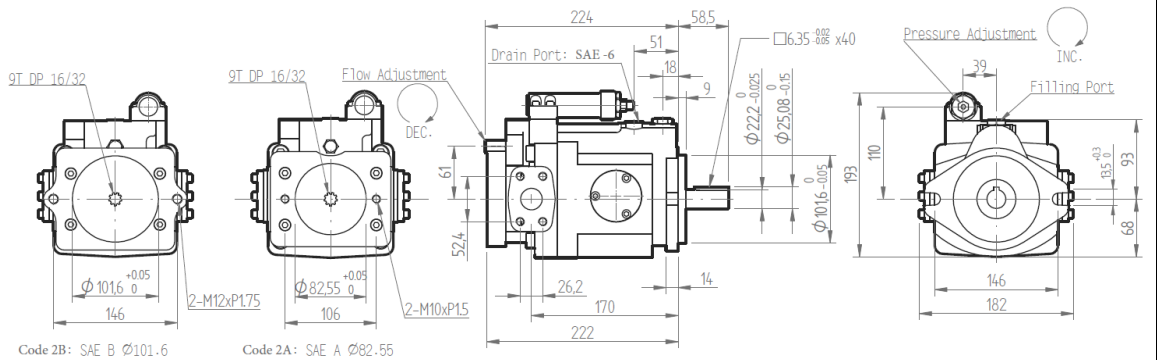
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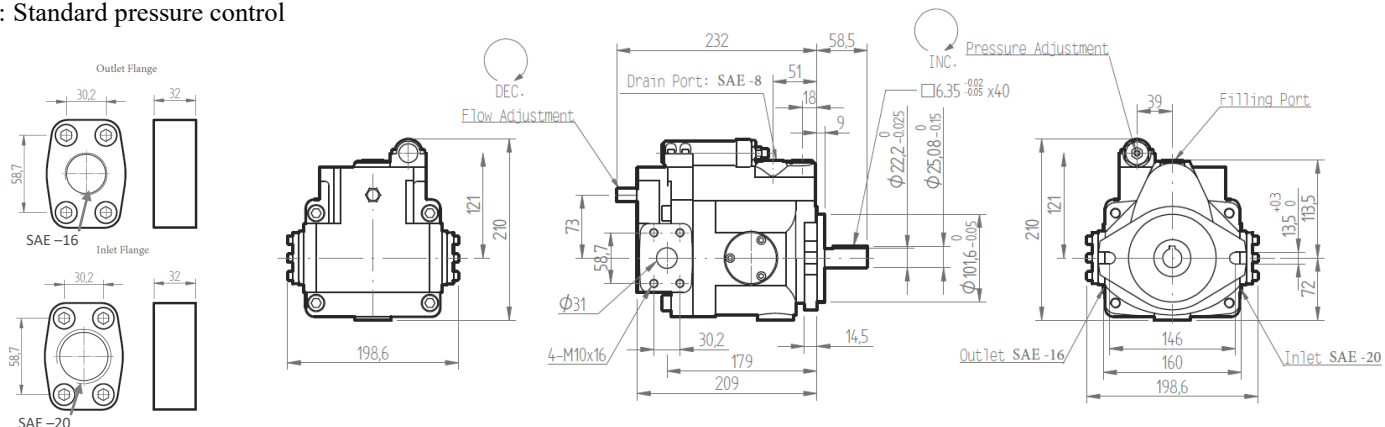
2A and 2B: Through drive Option:



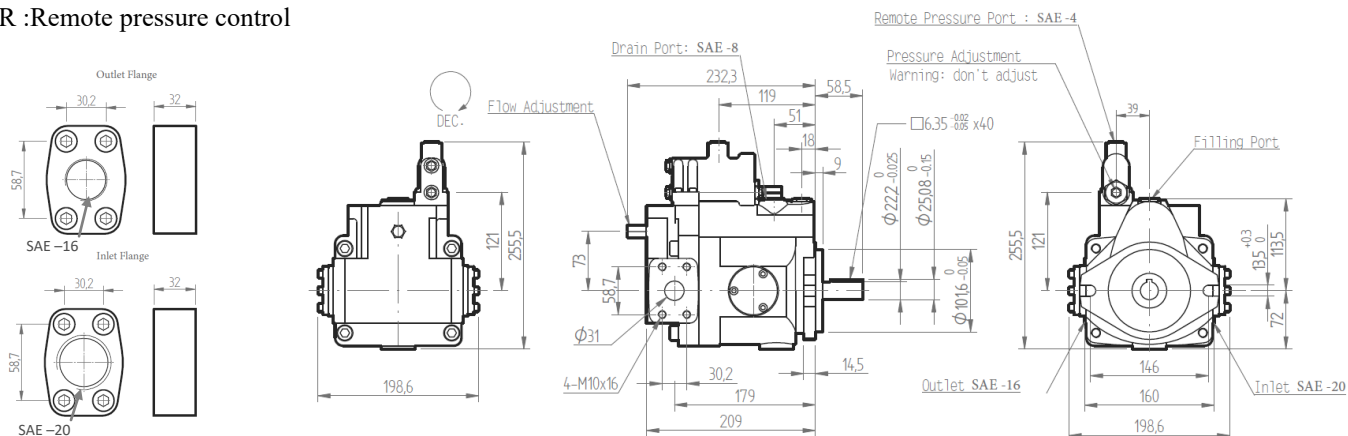
Pump Dimensions, in mm

38 and 42cc

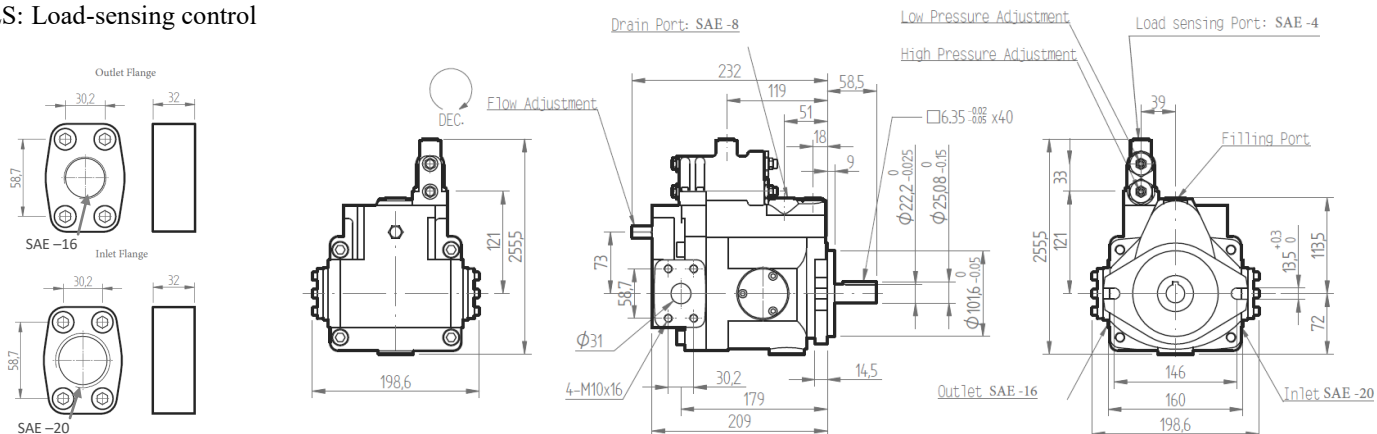
PR: Standard pressure control



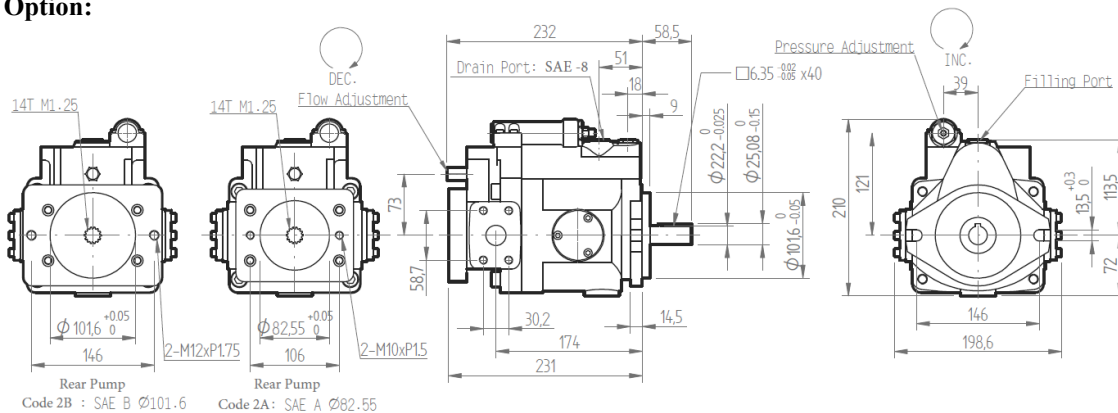
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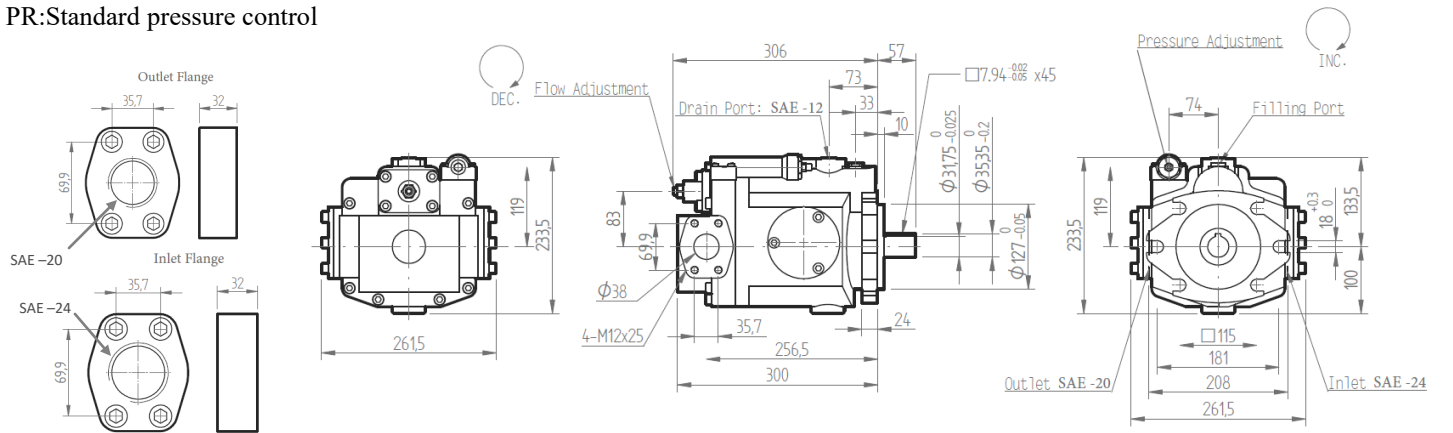
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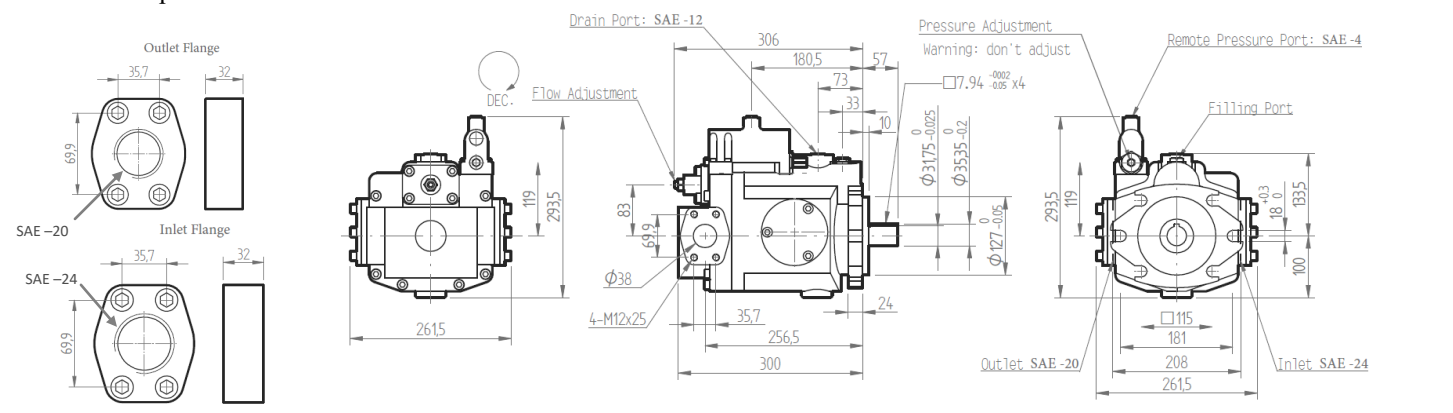
Pump Dimensions, in mm

50 and 70cc

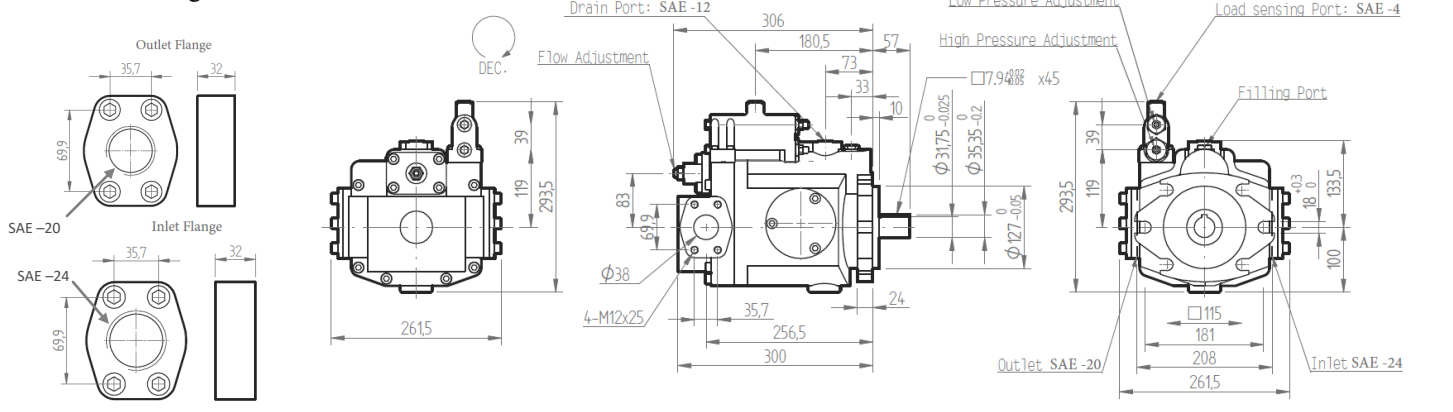
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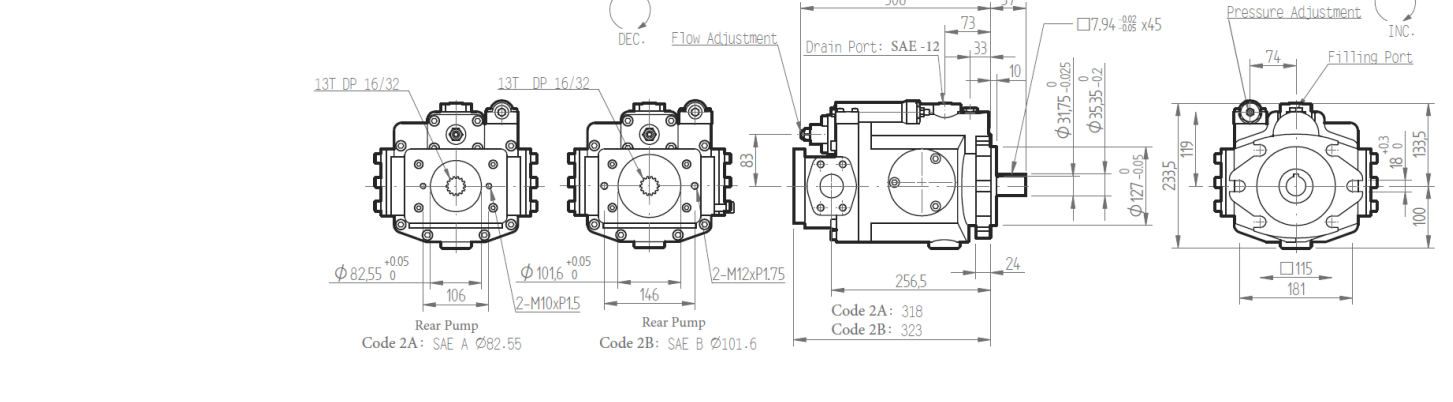
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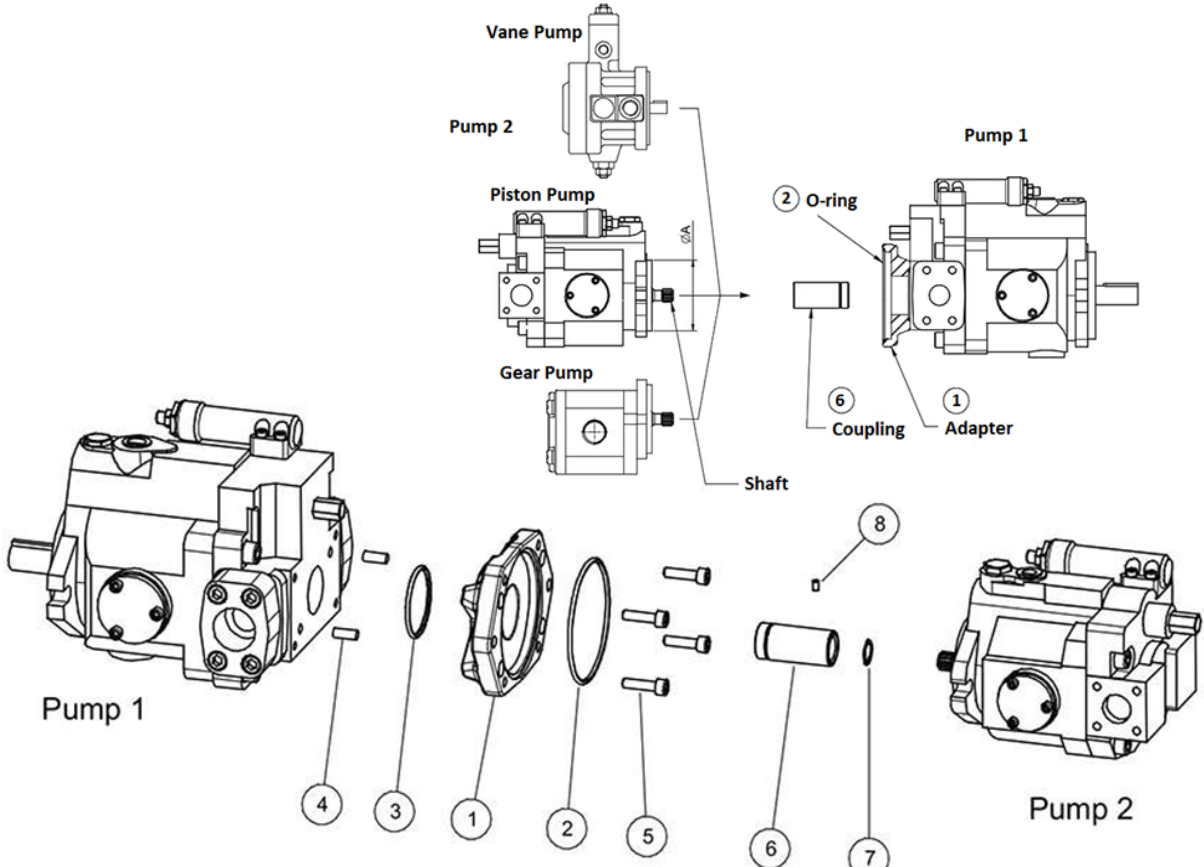
LS: Load-sensing control



2A and 2B: Through drive Option:



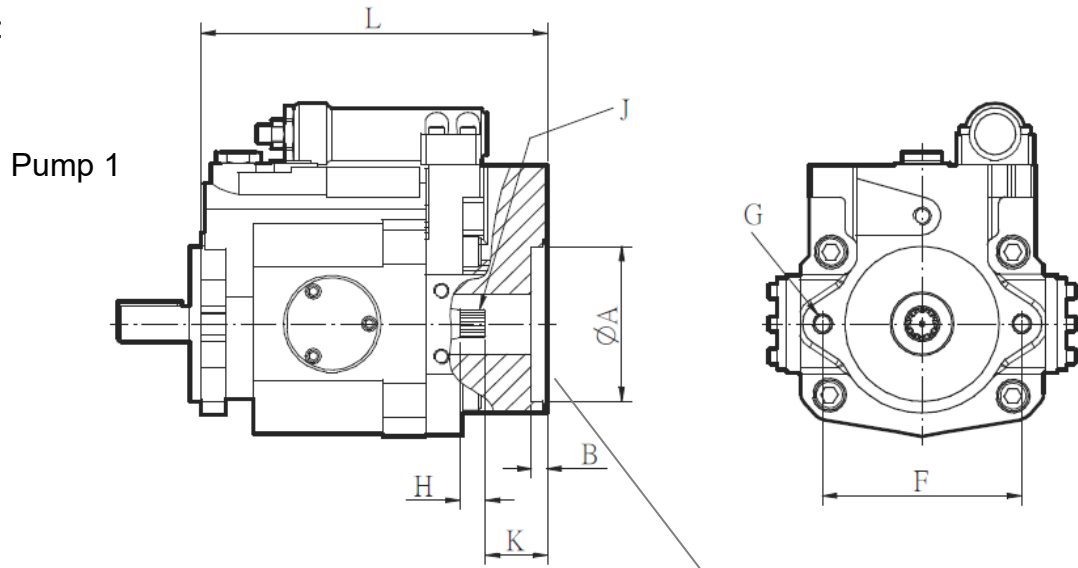
Through Drive Adapter Parts:



Pump 1		Pump 2		Adapter Parts										
CC/Rev	Trough Drive	Flange, SAE	Shaft	Adapter Part #	O-ring Part #	O-ring Part #	Pin	Screw	Coupling Part #	Snap Ring Part #	Set Screw			
15, 18	9T DP 16/32	A	9T DP 16/32, Spline	Adapter 15-1	G80				Coup 15+15	R13	-			
23, 25	9T DP 16/32	A	9T DP 16/32, Spline	Adapter 23-1	G80	G55	(2) Ø8mm x16mm	(4) M8x30	Coup 23-1	R13	-			
			13T 16/32, Spline	Adapter 23-3A					Coup 23-3	R20	-			
			Ø0.75", 0.187" key	Adapter 23-5					Coup 23-5	R20	M5 x 8			
		B	Ø0.875", 0.25" key	Adapter 23-6	G100				Coup 23-6	-	M5 x 8			
			Ø0.875", 0.187" key	Adapter 23-3B	Coup 23-3				R20	-				
			13T 16/32, Spline		Coup 38-1				R13	-				
38, 42	14T M1.25	A	9T DP 16/32, Spline	Adapter 38-1	G80				G55	(2) Ø8mm x16mm	(4) M8x30	Coup 38-3	R20	-
			13T 16/32, Spline	Adapter 38-3A								Coup 38-5	R20	M5 x 8
			Ø0.75", 0.187" key	Adapter 38-5								Coup 38-6	-	M5 x 8
		B	Ø0.875", 0.25" key	Adapter 38-6	G100							Coup 38-7	-	M5 x 8
			Ø0.875", 0.187" key	Adapter 38-7								Coup 38-3	R20	-
			Ø 1", 0.25" key	Adapter 38-3B								Coup 38-4	-	-
			13T 16/32, Spline	Adapter 38-4		Coup 70-1	R13	-						
			15T 16/32, Spline	Adapter 70-1		Coup 70-3	R20	-						
50, 70	13T DP 16/32	A	9T DP 16/32, Spline	Adapter 70-1	G80	G55	(2) Ø8mm x16mm	(4) M8x30				Coup 70-5	R20	M5 x 8
			13T 16/32, Spline	Adapter 70-3A								Coup 70-6	-	M5 x 8
			Ø0.75", 0.187" key	Adapter 70-5								Coup 70-7	-	M5 x 8
		B	Ø0.875", 0.25" key	Adapter 70-6	G100							Coup 70-3	R20	-
			Ø0.875", 0.187" key	Adapter 70-7					Coup 70-4	-	-			
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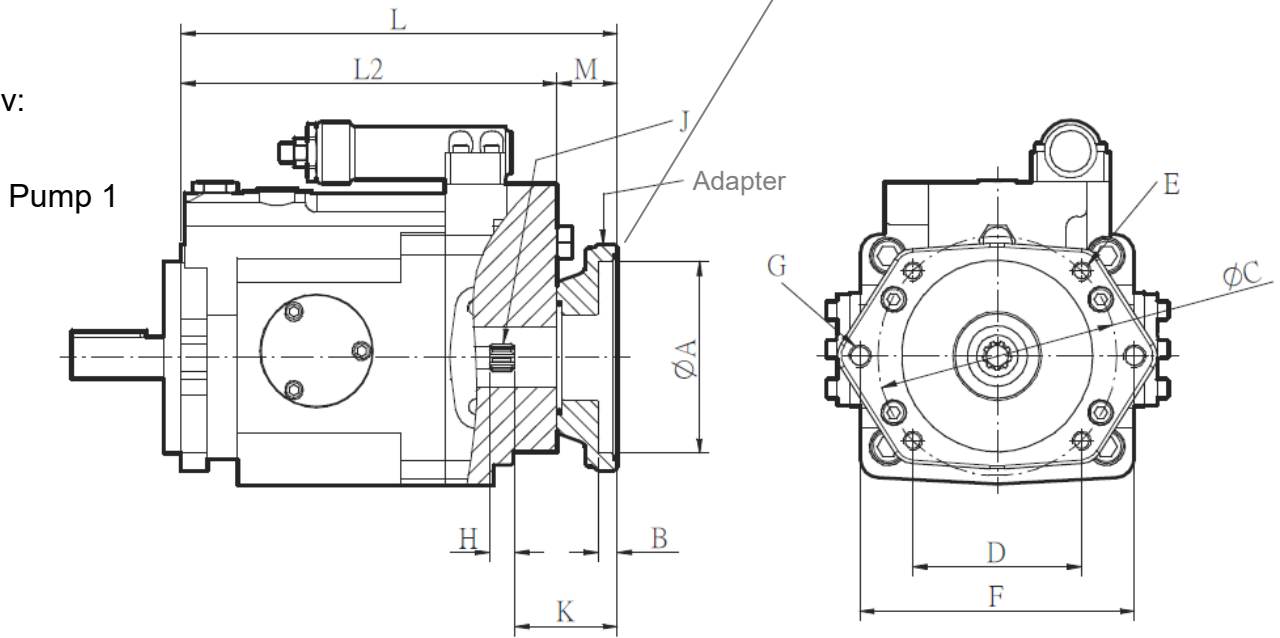
Through Drive Dimensions, Units in mm

15 and 18 cc/rev:



Rear Pump Mount

23-70 cc/rev:



Adapter

Size, cc/rev	Rear Pump	ØA	B	ØC	D	E	F	G
15, 18	SAE A	Ø82.55	8.35	—	—	—	106.3	M10XP1.5
23-70	SAE A	Ø82.55	8.35	Ø127	89.8	M10XP1.5	106.3	M10XP1.5
	SAE B	Ø101.6	10	Ø127	89.8	M10XP1.5	146	M12XP1.75

Size, cc/rev	K	H	J	M	L	L2
15, 18	33	13.5	9T 16/32 DP	-	185	-
23, 25	59	13.5	9T 16/32 DP	32	237	205
38,42	66	20	14T M1.25	32	241	209
50, 70	64.4	22	13T 16/32DP	32	332	300