



OPF**L**B01***

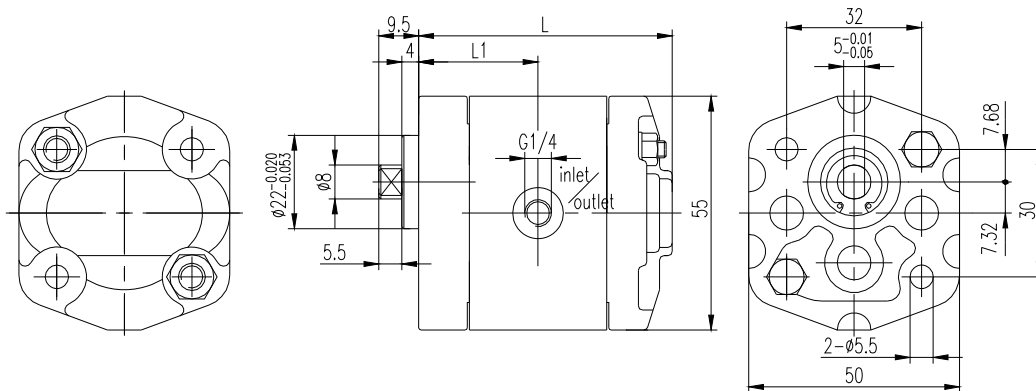
OPF

Specifications -

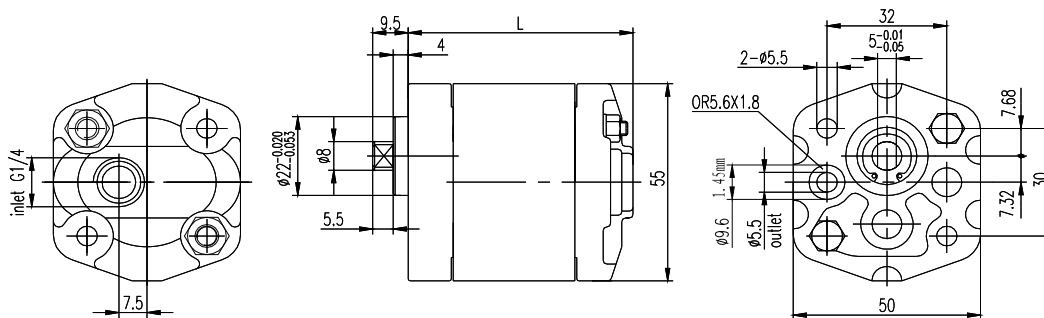
Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	SS L1(mm)	Inlet (mm)
		Rated	Peak	Rated	Max	Min			
OPF0.16L07B01***	0.16	200	250	2000	6000	800	58.2	30.8	G1/4
OPF0.25L07B01***	0.25	200	250	2000	6000	800	59	31.3	
OPF0.38L07B01***	0.38	200	250	2000	6000	800	60.3	31.9	
OPF0.50L07B01***	0.50	200	250	2000	6000	800	61	32.3	
OPF0.75L07B01***	0.75	200	250	2000	6000	800	63.5	33.5	
OPF1.00L07B01***	1.00	200	250	2000	6000	800	66	34.8	
OPF1.25L07B01***	1.25	200	250	2000	5000	800	68.5	36	
OPF1.50L07B01***	1.50	200	250	2000	4500	800	70	37	
OPF1.75L07B01***	1.75	200	250	2000	4000	800	73	38.3	
OPF2.00L07B01***	2.00	160	200	2000	3500	800	75.5	39.5	

Dimension -

OPF**L06B01LSS



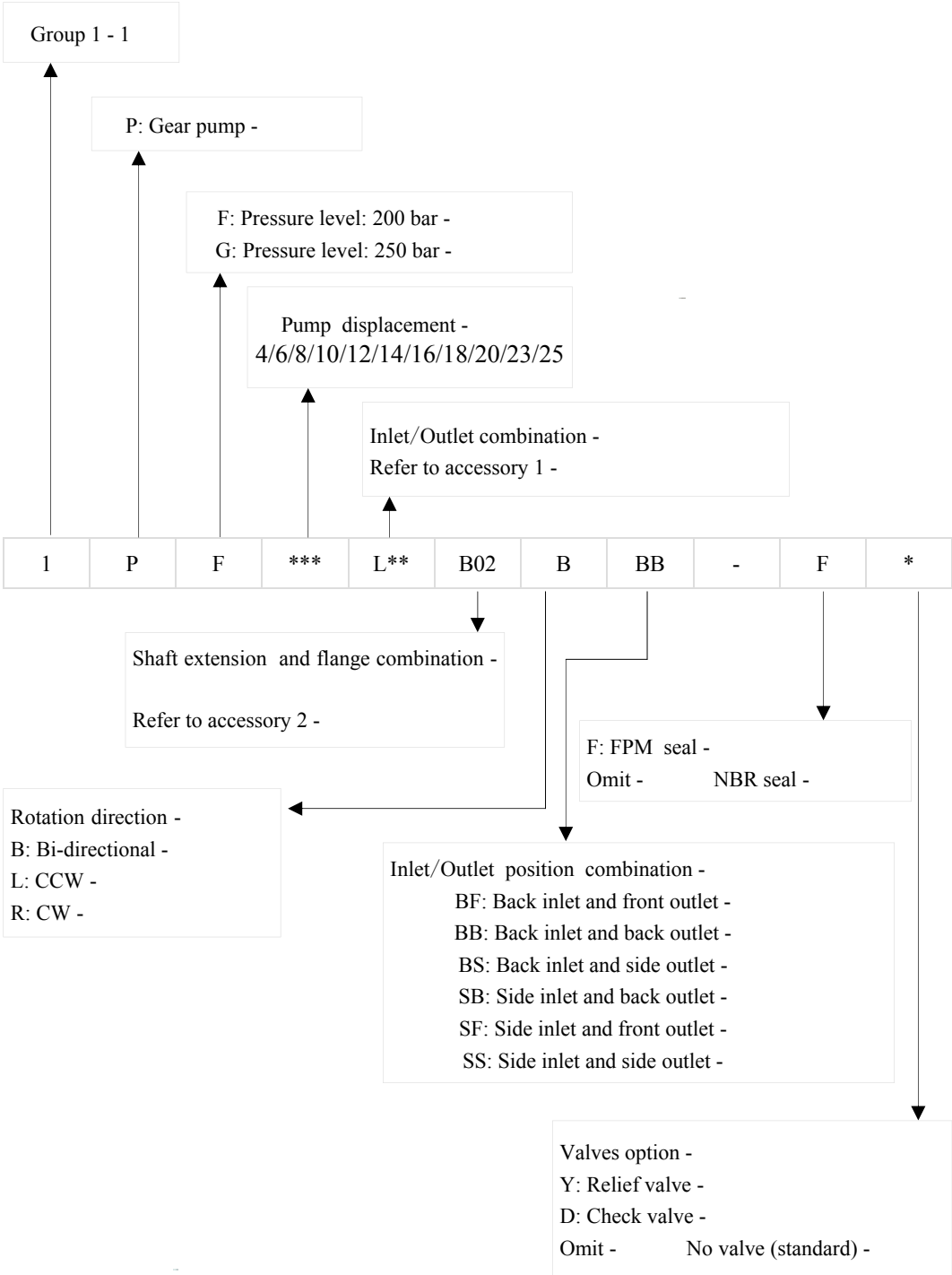
OPF**L07B01LBF



OPF**L**B01***

1PFL**B02*****
 Ordering Code -

1PF



1PFL**B02*****



1PF**L**B02***

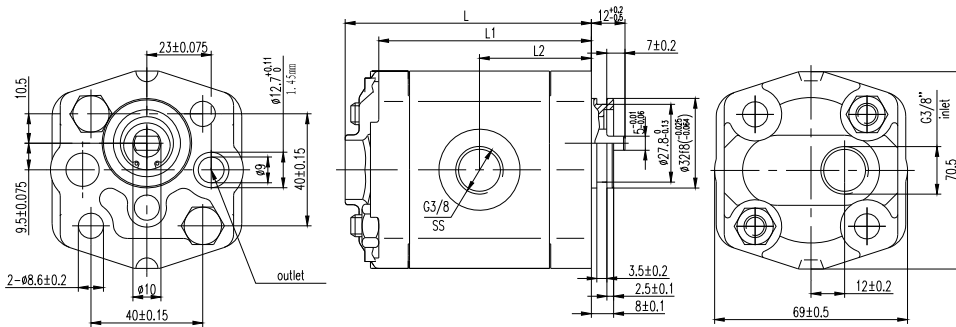
Specifications -

Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	SS L2 (mm)	Inlet (mm)
		Rated	Peak	Rated	Max	Min				
1PF1.1L01B02***	1.1	200	250	2000	6000	600	74	63	33	G3/8
1PF1.3L01B02***	1.3	200	250	2000	6000	600	75	64	33.5	
1PF1.6L01B02***	1.6	200	250	2000	6000	600	76	65	34	
1PF1.8L01B02***	1.8	200	250	2000	6000	600	77	66	34.5	
1PF2.1L01B02***	2.1	200	250	2000	6000	600	78	67	35	
1PF2.7L01B02***	2.7	200	250	2000	6000	600	80	69	36	
1PF3.2L01B02***	3.2	200	250	2000	5000	600	82	71	37	
1PF3.7L01B02***	3.7	200	250	2000	4500	600	84	73	38	
1PF4.2L01B02***	4.2	200	250	2000	4000	600	86	75	39	
1PF4.8L01B02***	4.8	160	200	2000	3500	600	88	77	40	
1PF5.8L01B02***	5.8	160	200	2000	2900	600	92	81	42	
1PF8.0L01B02***	8.0	160	200	2000	2100	600	100	89	46	

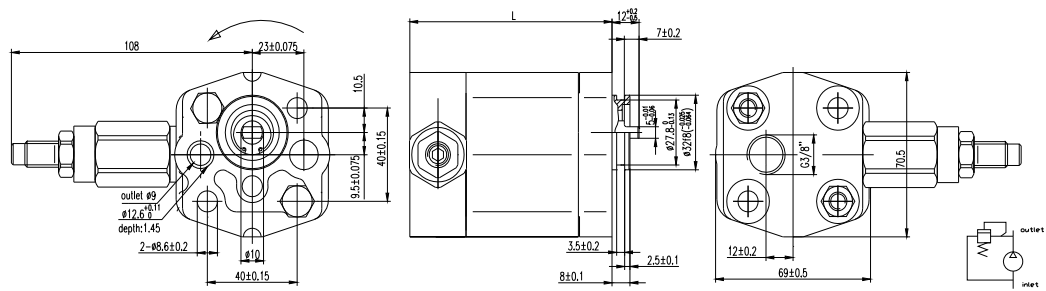


Dimension -

1PF***L01B02 With Relief Valves - 1PF***L01B02



Adjusted Pressure of Relief Valves - 50 Bar To 250 Bar

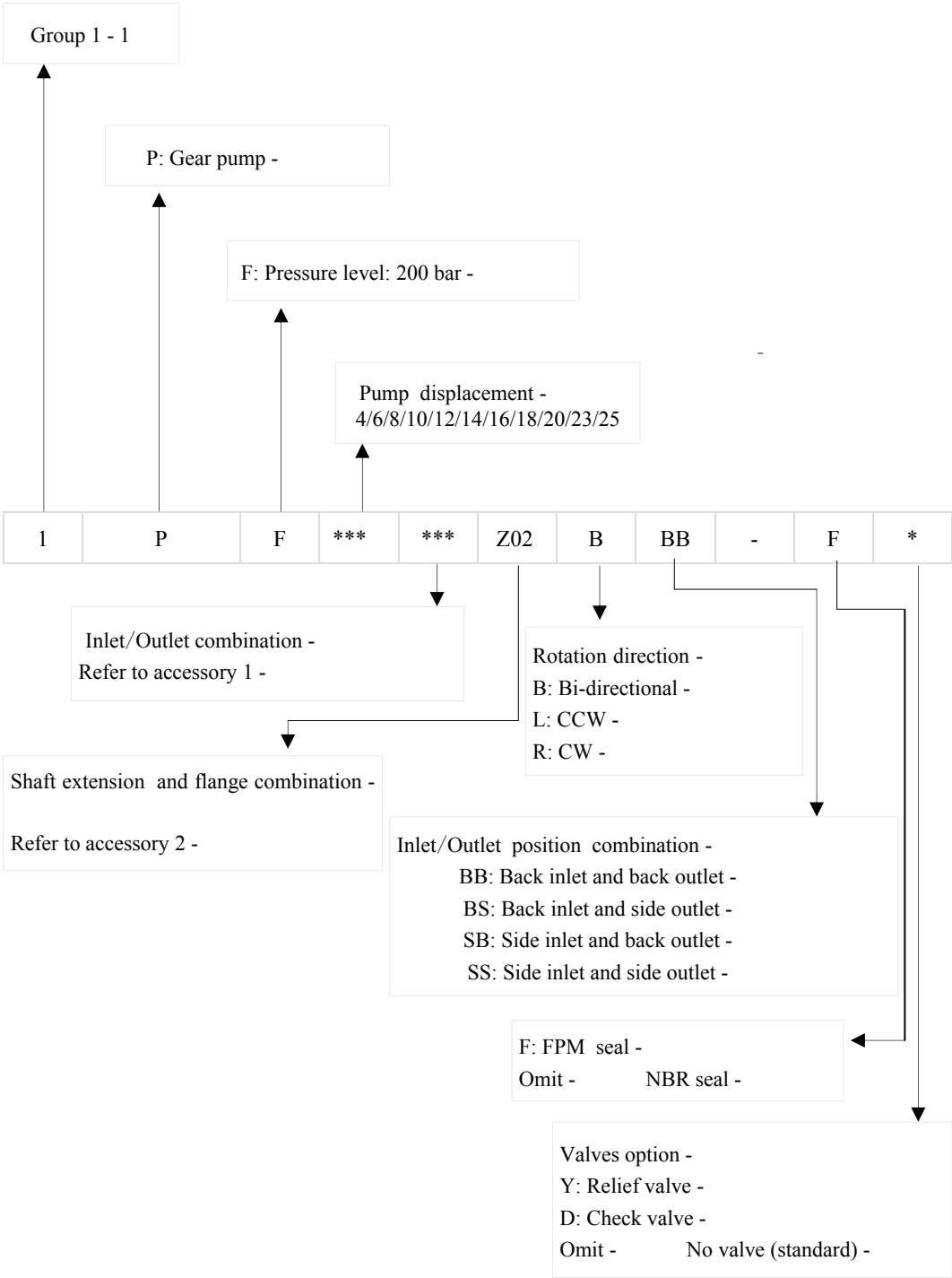


1PF**L**B02***

1PF***Z02**

Ordering Code -

1PF



1PF***Z02**

 **1DPF**/****

Ordering Code -

Group 1 - 1 Group 1+Group1 double pump - 1

1PF

DP: Double pump -

F: Pressure level: 200 bar -
G: Pressure level: 250 bar -

Front pump displacement -
4/6/8/10/12/14/16/18/20/23/25

1	DP	F	**/**	DF02	Z02	R	-	F
---	----	---	-------	------	-----	---	---	---

Rear pump displacement -
4/6/8/10/12/14/16/18/20/23/25

Inlet/Outlet combination -
Refer to accessory 1 -

Rotation direction -
L: CCW -
R: CW -

Shaft extension and flange combination -
Refer to accessory 2 -

F: FPM seal -
Omit - NBR seal -

1DPF/****



1PF*****Z02

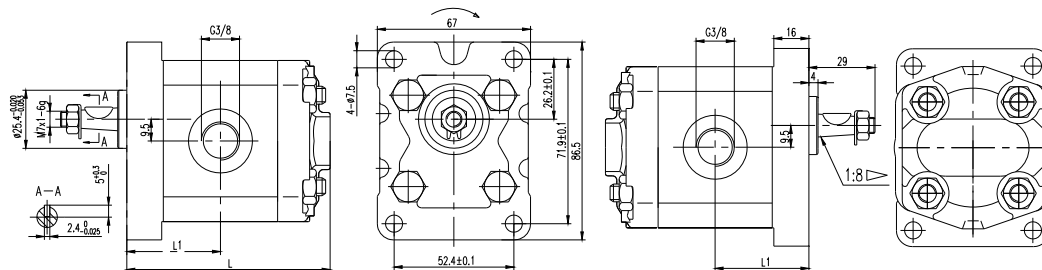
Specifications -

1PF

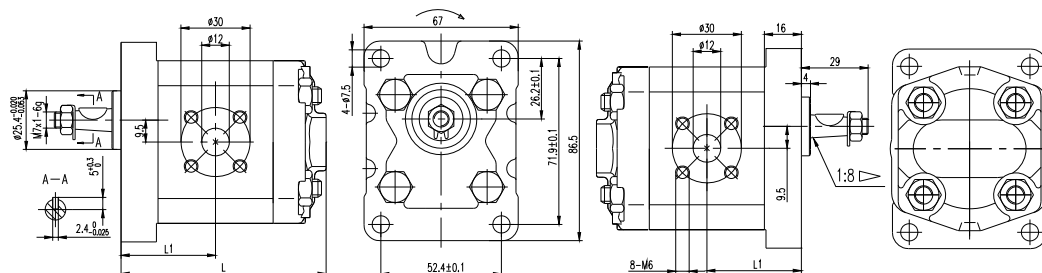
Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)
		Rated	Peak	Rated	Max	Min		
1PF1.1*****Z02**	1.1	200	250	2000	6000	600	75	33
1PF1.3*****Z02**	1.3	200	250	2000	6000	600	76	34
1PF1.6*****Z02**	1.6	200	250	2000	6000	600	78	35
1PF1.8*****Z02**	1.8	200	250	2000	6000	600	78.5	35.5
1PF2.1*****Z02**	2.1	200	250	2000	6000	600	79	36
1PF2.7*****Z02**	2.7	200	250	2000	6000	600	81	37
1PF3.2*****Z02**	3.2	200	250	2000	5000	600	83	38
1PF3.7*****Z02**	3.7	200	250	2000	4500	600	85	39
1PF4.2*****Z02**	4.2	200	250	2000	4000	600	87	40
1PF4.8*****Z02**	4.8	160	200	2000	3500	600	89	41
1PF5.8*****Z02**	5.8	160	200	2000	2900	600	93	43
1PF8.0*****Z02**	8.0	160	200	2000	2100	600	101	47

Dimension -

1PF***L46Z02SS



1PF***F01Z02SS



1PF*****Z02



1PF*****Z02/1DPF*****Z02

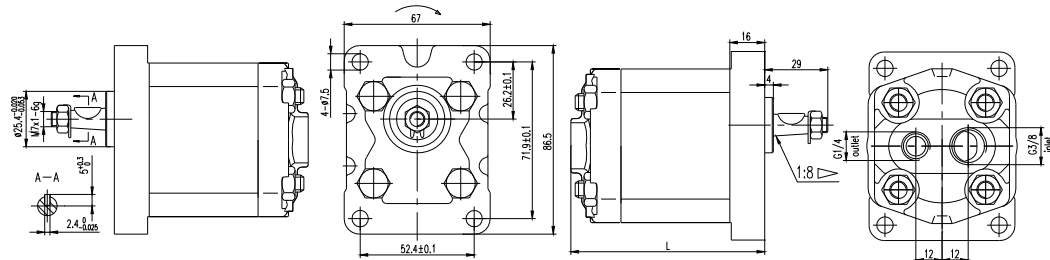
Specifications -

Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)
		Rated	Peak	Rated	Max	Min		
1PF1.1*****Z02**	1.1	200	250	2000	6000	600	75	33
1PF1.3*****Z02**	1.3	200	250	2000	6000	600	76	34
1PF1.6*****Z02**	1.6	200	250	2000	6000	600	78	35
1PF1.8*****Z02**	1.8	200	250	2000	6000	600	78.5	35.5
1PF2.1*****Z02**	2.1	200	250	2000	6000	600	79	36
1PF2.7*****Z02**	2.7	200	250	2000	6000	600	81	37
1PF3.2*****Z02**	3.2	200	250	2000	5000	600	83	38
1PF3.7*****Z02**	3.7	200	250	2000	4500	600	85	39
1PF4.2*****Z02**	4.2	200	250	2000	4000	600	87	40
1PF4.8*****Z02**	4.8	160	200	2000	3500	600	89	41
1PF5.8*****Z02**	5.8	160	200	2000	2900	600	93	43
1PF8.0*****Z02**	8.0	160	200	2000	2100	600	101	47

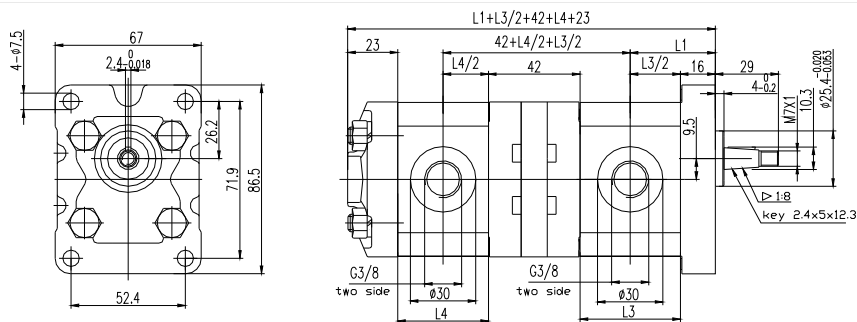
1PF

Dimension -

1PF***L44Z02BB



1DPF***DL**Z02* Double Pumps - 1DPF***DL**Z02*



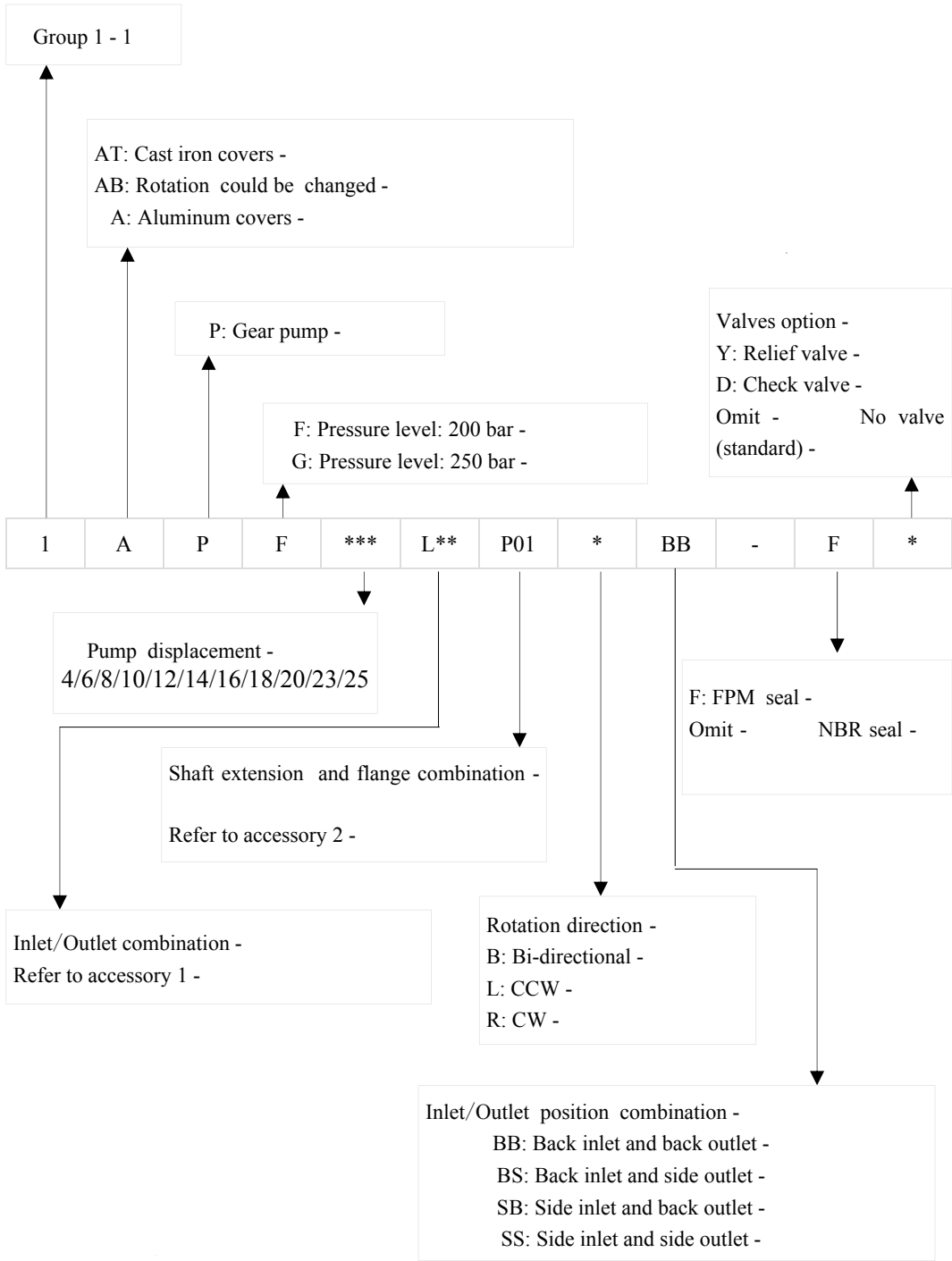
Displacement - ml(r)	1.1	1.3	1.6	2.1	2.7	3.2	3.7	4.2	4.8	5.8	8.0
L3(Front Pump) L4(Rear Pump)	36	37	38	40	42	44	46	48	50	54	62

1PF*****Z02/1DPF*****Z02

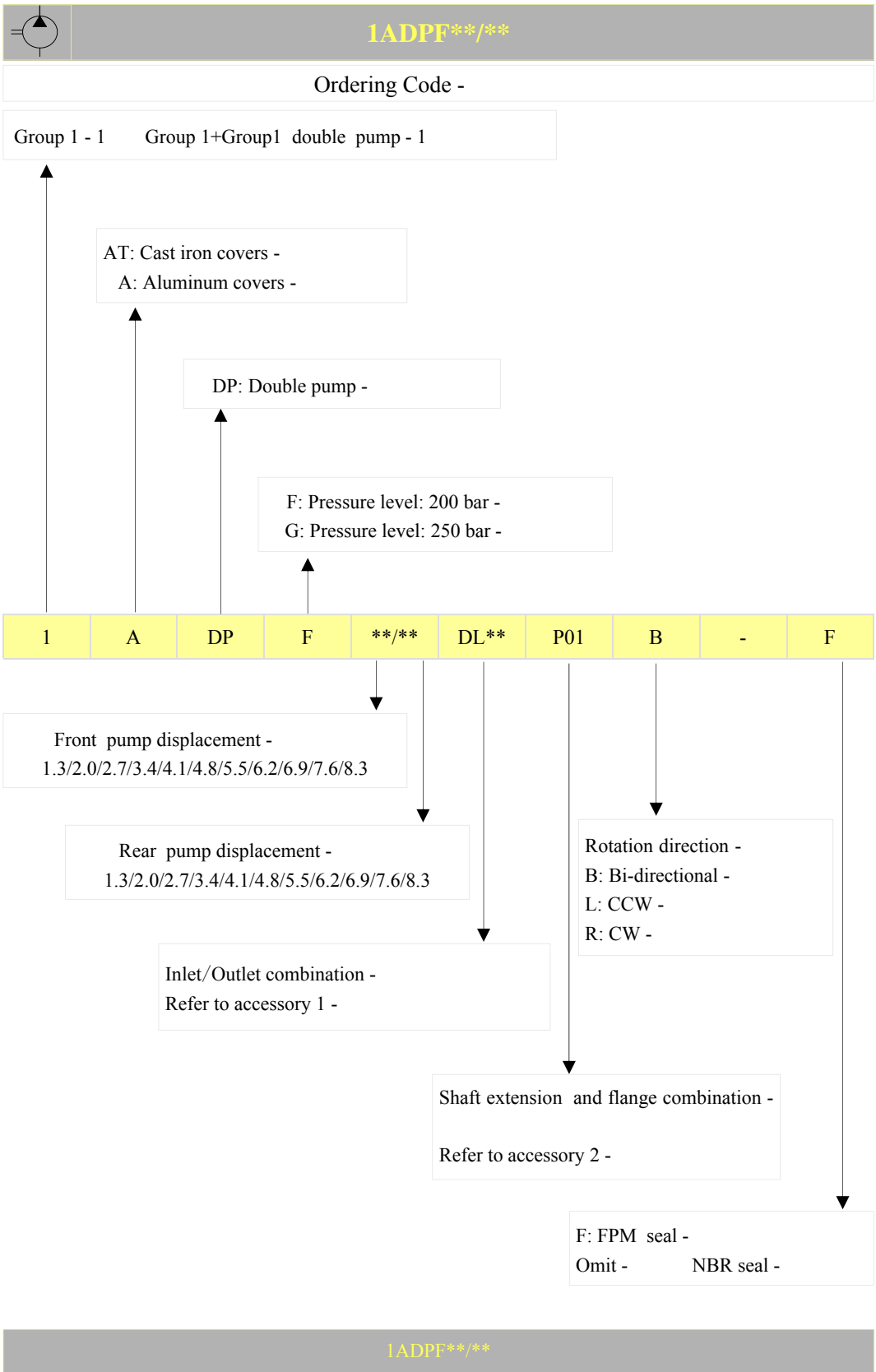
1APF*L**P01***

Ordering Code -

1PF



1APF*L**P01***



1PF



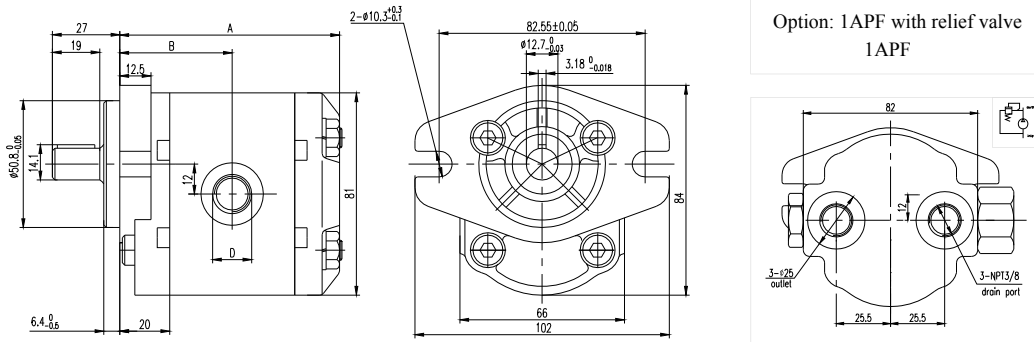
1APF***L**P01*/1ADPF***DL**P01*

Specifications -

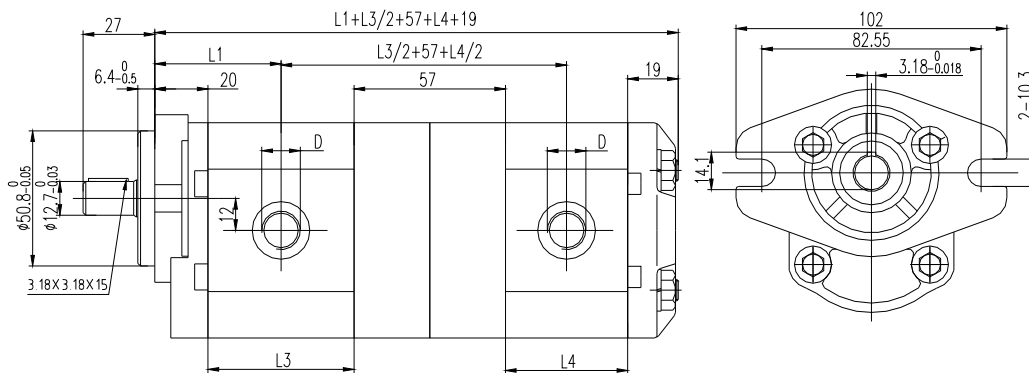
1PF

Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			A (mm)	B (mm)	D (mm)	
		Rated	Peak	Rated	Max	Min			Inlet	Outlet
1APF1.3L05P01*	1.3	200	250	2000	4500	500	82	42	G 1/2	G 3/8
1APF2.0L05P01*	2.0	200	250	2000	4500	500	84	43		
1APF2.7L05P01*	2.7	200	250	2000	4500	500	86	44		
1APF3.4L05P01*	3.4	200	250	2000	4500	500	88	45		
1APF4.1L05P01*	4.1	200	250	2000	4000	500	90	46		
1APF5.1L05P01*	5.1	200	250	2000	3200	500	93	47.5		
1APF6.1L05P01*	6.1	200	250	2000	3200	500	96	49		

Dimension -



1ADPF**/**DL**P01* Double Pumps - 1ADPF**/**DL**P01*



Displacement - ml/r	1.3	2.0	2.7	3.4	4.1	5.1	6.1
L3(Front Pump) L4(Rear Pump)	44	46	48	50	52	55	58

1APF***L**P01*/1ADPF***DL**P01*/

 **1.5PF**F50P04***

Ordering Code -

Group 1.5

P: Gear pump -

F: Pressure level: 200 bar -
G: Pressure level: 250 bar -

Pump displacement -
4/6/8/10/12/14/16/18/20/23/25

Inlet/Outlet combination -
Refer to accessory 1 -

1.5 P F ** F50 P04 * - F *

Shaft extension and flange combination -
Refer to accessory 2 -

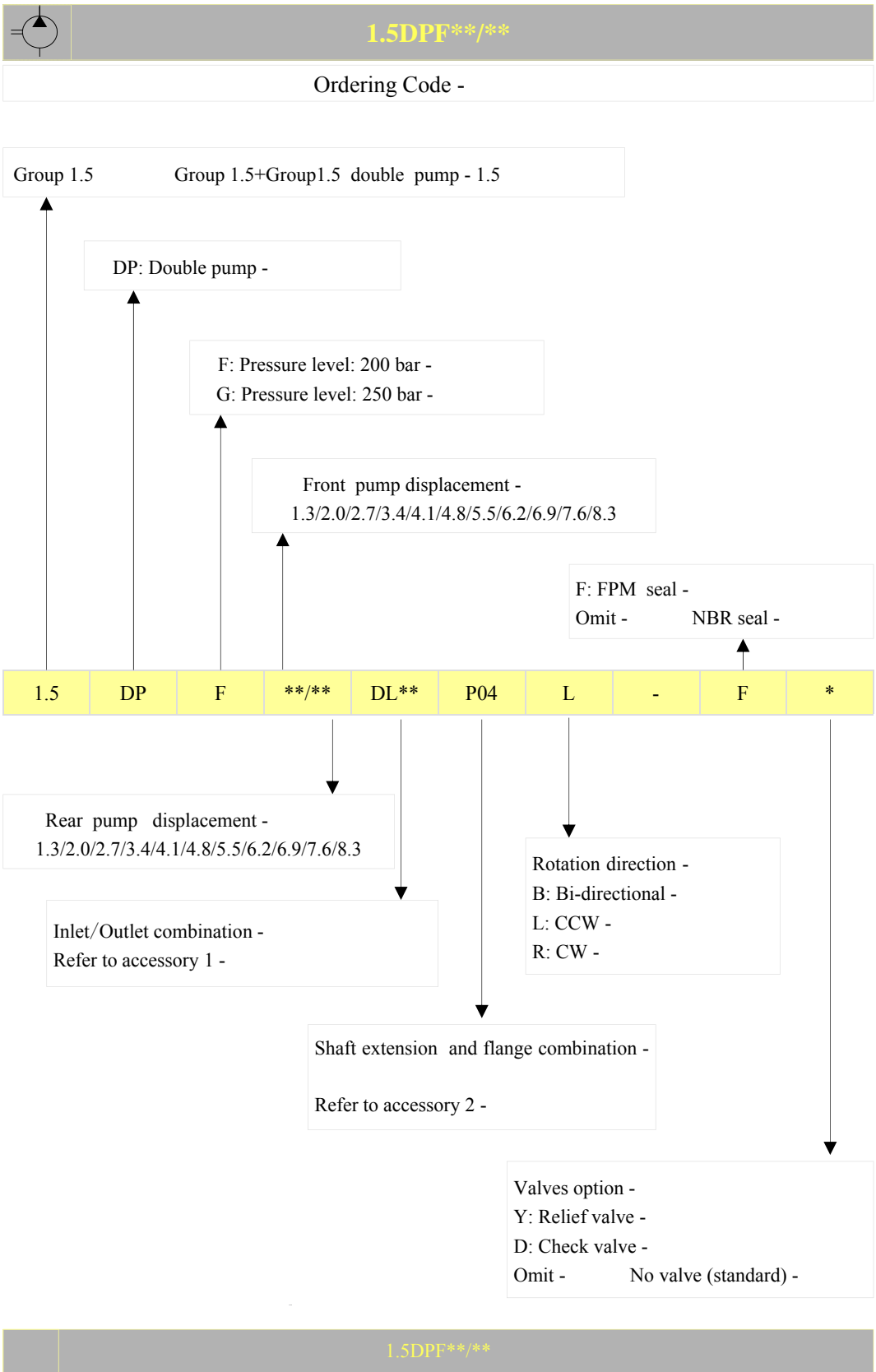
Rotation direction -
L: CCW -
R: CW -

F: FPM seal -
Omit - NBR seal -

Valves option -
Y: Relief valve -
D: Check valve -
Omit - No valve (standard) -

1.5PF

1.5PFF50P04***



1.5PF



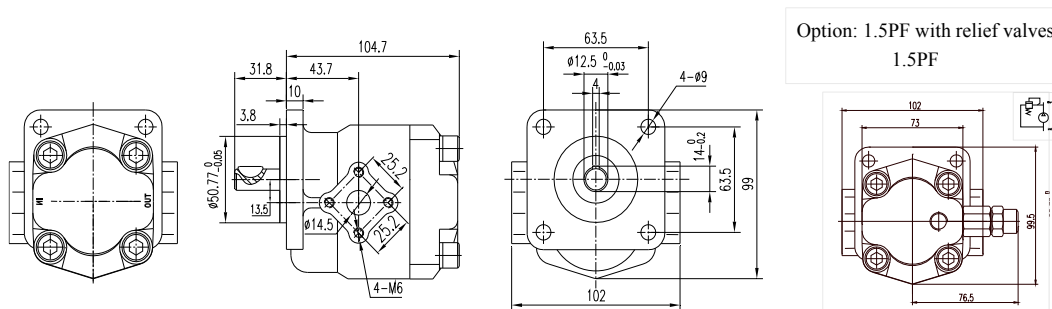
1.5PF**F50P04*/1.5DPF**F50P04*

Specifications -

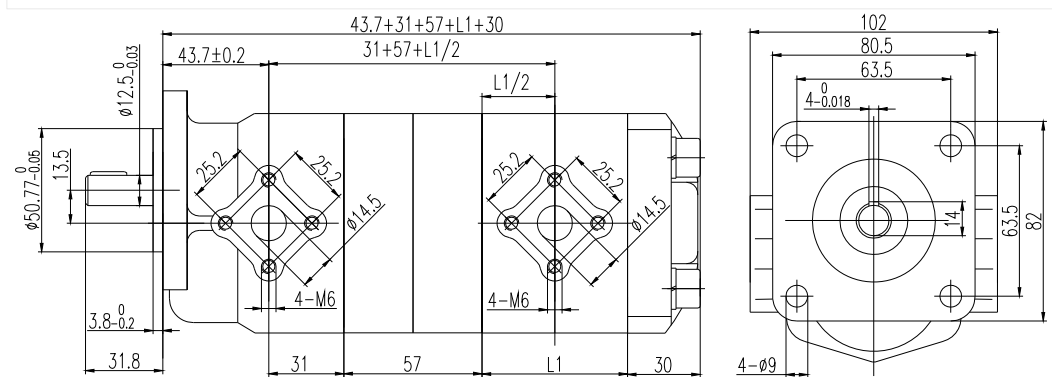
Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)		
		Rated	Peak	Rated	Max	Min
1.5PF2F50P04*	2	210	250	3500	3500	500
1.5PF3F50P04*	3	210	250	3500	3500	500
1.5PF4F50P04*	4	210	250	3500	3500	500
1.5PF5F50P04*	5	210	250	3500	3500	500
1.5PF6F50P04*	6	210	250	3500	3500	500
1.5PF8F50P04*	8	210	250	3500	3500	500
1.5PF9F50P04*	9	175	210	1500	2000	500
1.5PF11F50P04*	11	175	210	1500	2000	500
1.5PF12F50P04*	12	175	210	1500	2000	500

1.5PF

Dimension -



1.5DPF**F50P04* Double Pumps - 1.5DPF**F50P04*



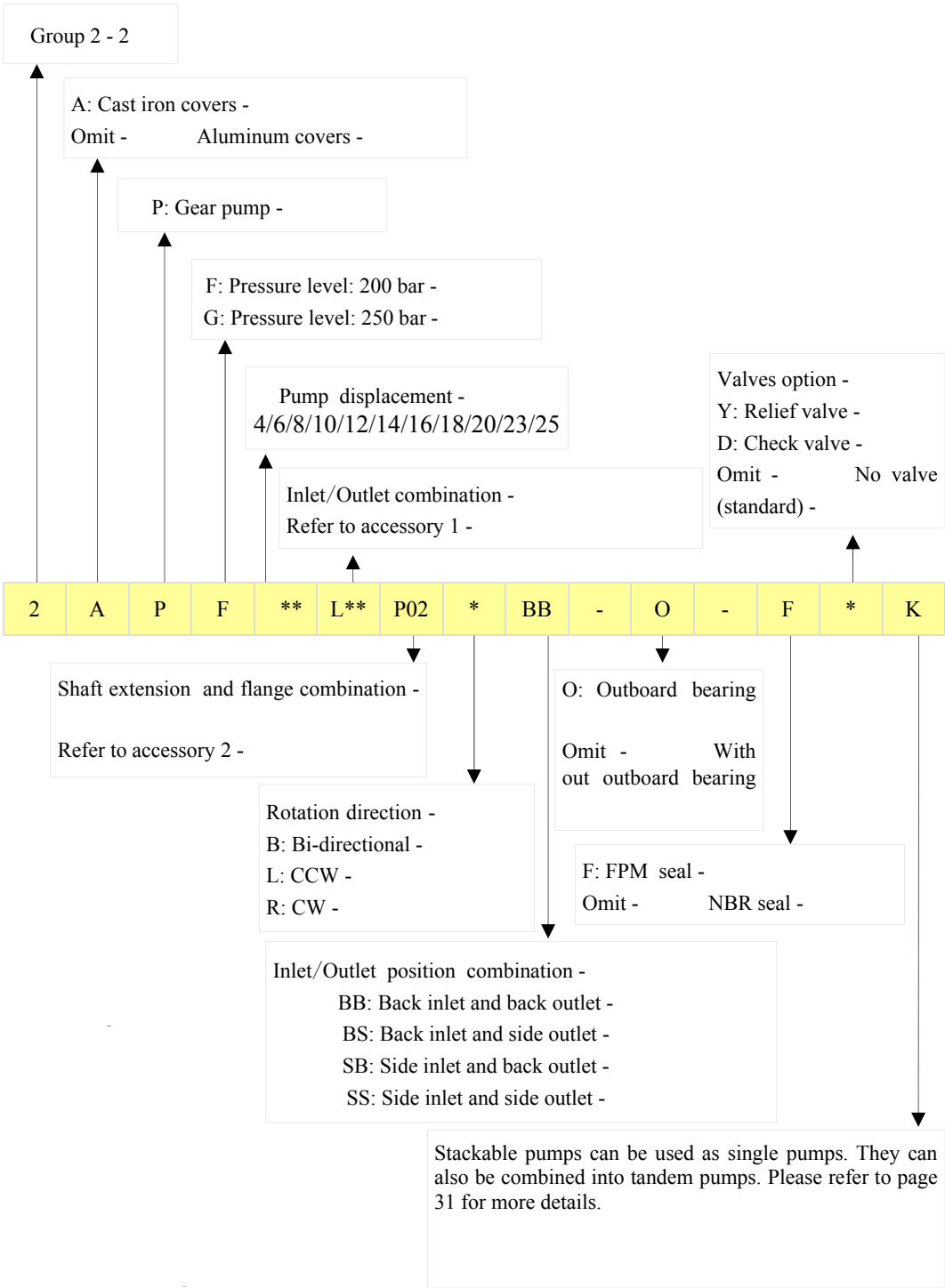
Displacement - ml/r)	2	3	4	5	6	7	8	9	10	11	12
L1 (mm)	42	44	46	48	50	52	54	56	58	60	62

1.5PF**F50P04*/1.5DPF**F50P04*

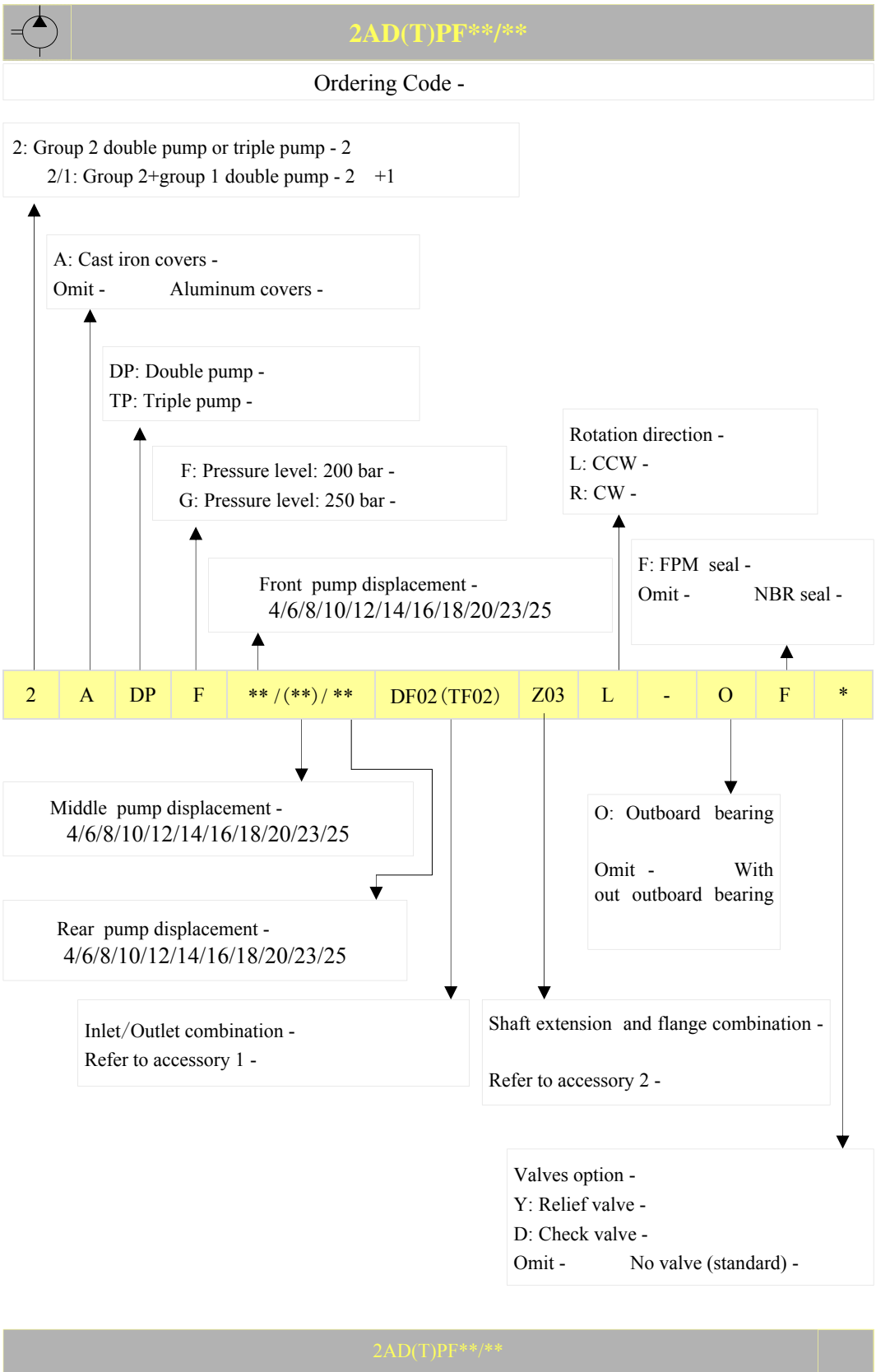
2PFL**P02***

Ordering Code -

2PF



2PFL**P02***





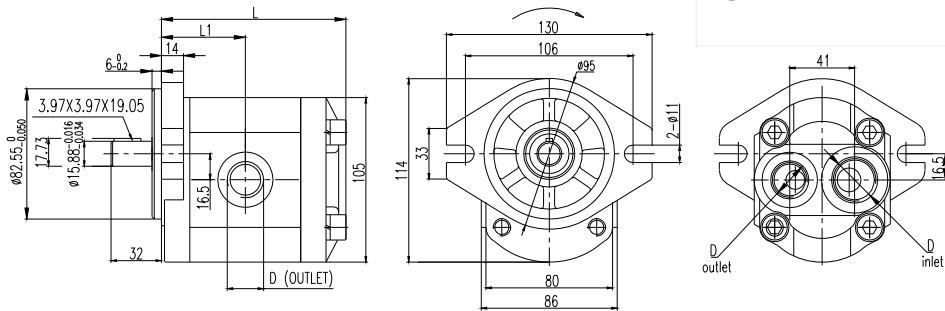
2PF**L**P02*

Specifications -

Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	D (mm)	
		Rated	Peak	Rated	Max	Min			Inlet	Outlet
2PF4L09P02*	4	200(250)	250(300)	2000	3500	500	96	43.3	PT 1/2	PT 1/2
2PF6L09P02*	6	200(250)	250(300)	2000	3500	500	98	45		
2PF8L09P02*	8	200(250)	250(300)	2000	3500	500	102	46.5		
2PF10L09P02*	10	200(250)	250(300)	2000	3500	500	104	48		
2PF12L10P02*	12	200(250)	250(300)	2000	3500	500	108	50	PT 3/4	PT 1/2
2PF14L10P02*	14	200(250)	250(300)	2000	3500	500	110	51		
2PF16L10P02*	16	200(250)	250(280)	2000	3500	500	114	53		
2PF18L10P02*	18	200(250)	250(280)	2000	3500	500	117	55		
2PF20L10P02*	20	200(250)	250(280)	2000	3500	500	120	56		
2PF23L10P02*	23	200	250	2000	3000	500	123	58		
2PF25L10P02*	25	200	250	2000	3000	500	128	60		
2PF28L10P02*	28	160	200	2000	3000	500	133	63		
2PF30L10P02*	30	160	200	2000	3000	500	136	64		

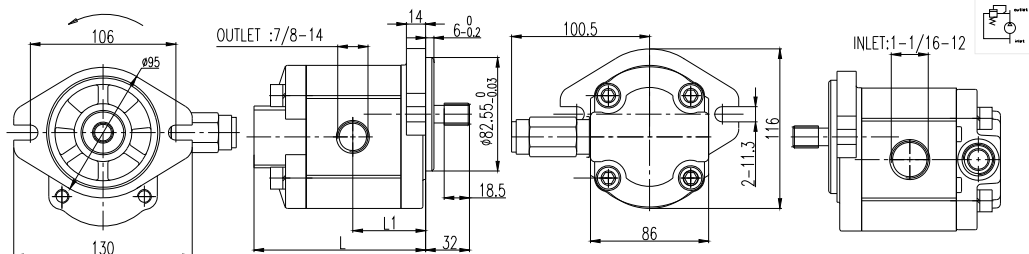
2PF

Dimension -



Option: 2APF Rear Oil Port

2PF**L**S03-Y With Relief Valves - 2PF**L**S03-Y



Adjusted Pressure of Relief Valves -

50 Bar to 250 Bar

2PF**L**P02*



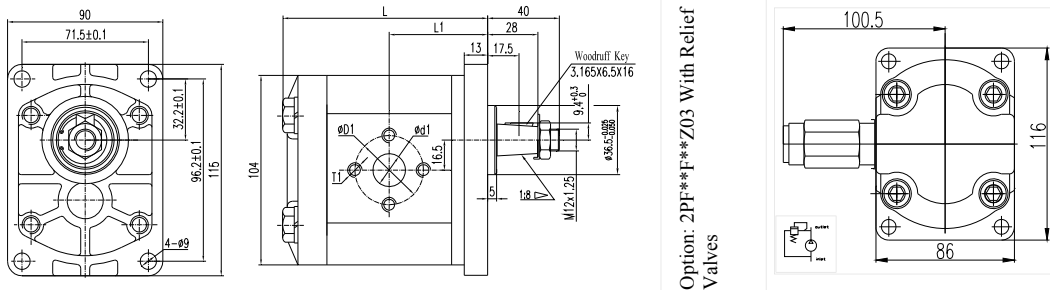
2PF**F**Z03*/2ADPF**DF02Z03

Specifications -

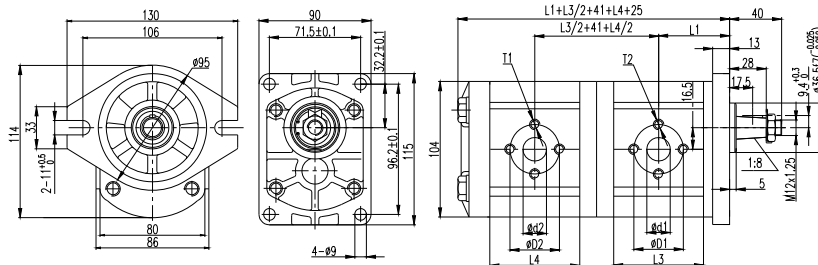
Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	Inlet (mm)			Outlet (mm)		
		Rated	Peak	Rated	Max	Min			øD1	ød1	T1	øD2	ød2	T2
2PF4F02Z03*	4	200(250)	250(300)	2000	3500	500	95.5	43.3	30	13	M6	30	13	M6
2PF6F02Z03*	6	200(250)	250(300)	2000	3500	500	99	45						
2PF8F02Z03*	8	200(250)	250(300)	2000	3500	500	102	46.5						
2PF10F06Z03*	10	200(250)	250(300)	2000	3500	500	105	48						
2PF12F06Z03*	12	200(250)	250(300)	2000	3500	500	108	49.5						
2PF14F06Z03*	14	200(250)	250(300)	2000	3500	500	111	51						
2PF16F06Z03*	16	200(250)	250(280)	2000	3500	500	114	52.5						
2PF18F06Z03*	18	200(250)	250(280)	2000	3500	500	117.5	54.3						
2PF20F06Z03*	20	200(250)	250(280)	2000	3500	500	121	56						
2PF23F06Z03*	23	200	250	2000	3000	500	125.5	58.3						
2PF25F06Z03*	25	200	250	2000	3000	500	128	59.5						
2PF28F06Z03*	28	160	200	2000	3000	500	133	62						
2PF30F06Z03*	30	160	200	2000	3000	500	136	63.5						

2PF

Dimension -



2ADPF**DF02Z03* Double Pumps - 2ADPF**DF02Z03*



Displacement - ml/r)	4	6	8	10	12	14	16	18	20	23	25	28	30
L3(Front Pump) L4(Rear Pump)	50.5	54	57	60	63	66	69	72.5	76	80.5	83	88	91

2PF**F**Z03*/2ADPF**DF02Z03



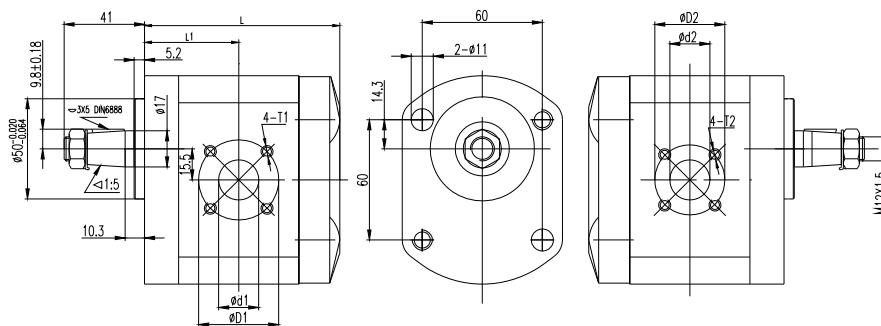
2APF**F**Z11*/2ADPF**F52D01*

Specifications -

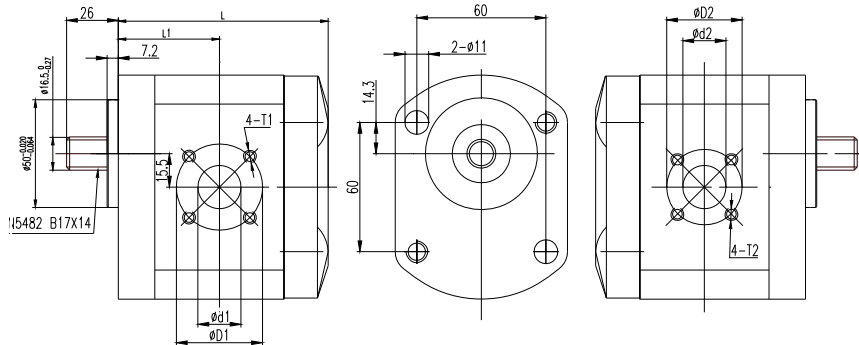
Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	Inlet (mm)			Outlet (mm)		
		Rated	Peak	Rated	Max	Min			εD1	εd1	T1	εD2	εd2	T2
2APF4F60Z11*	4	200(250)	250(300)	2000	3500	500	95.5	43.3	40	15	M6	35	15	M6
2APF6F60Z11*	6	200(250)	250(300)	2000	3500	500	99	45						
2APF8F52Z11*	8	200(250)	250(300)	2000	3500	500	102	46.5						
2APF10F52Z11*	10	200(250)	250(300)	2000	3500	500	105	48						
2APF12F52Z11*	12	200(250)	250(300)	2000	3500	500	108	49.5						
2APF14F52Z11*	14	200(250)	250(300)	2000	3500	500	111	51						
2APF16F52Z11*	16	200(250)	250(280)	2000	3500	500	114	52.5						
2APF18F52Z11*	18	200(250)	250(280)	2000	3500	500	117.5	54.3						
2APF20F52Z11*	20	200(250)	250(280)	2000	3500	500	121	56						
2APF23F52Z11*	23	200	250	2000	3000	500	125.5	58.3						
2APF25F52Z11*	25	200	250	2000	3000	500	128	59.5						
2APF28F52Z11*	28	160	200	2000	3000	500	133	62						
2APF30F52Z11*	30	160	200	2000	3000	500	136	63.5						

2PF

Dimension -



2ADPF**F52D01* Gear Pumps - 2ADPF**F52D01*



2APF**F**Z11*/2ADPF**F52D01*



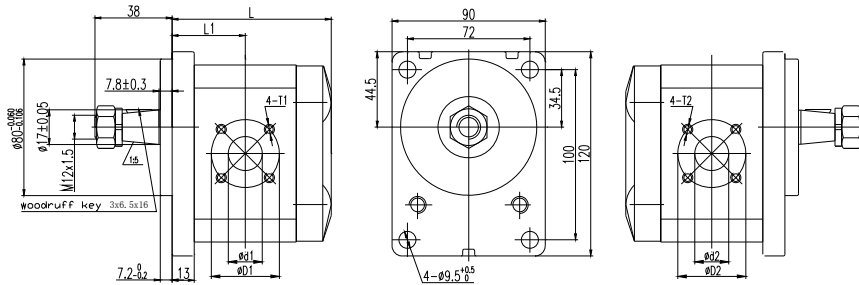
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Specifications -

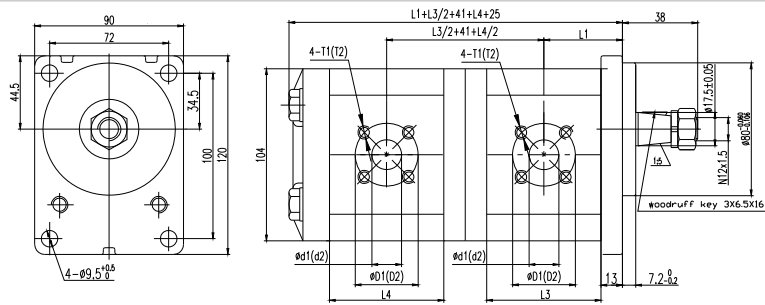
Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	Inlet (mm)			Outlet (mm)		
		Rated	Peak	Rated	Max	Min			εD1	εd1	T1	εD2	εd2	T2
2APF4F60Z17*	4	200(250)	250(300)	2000	3500	500	95.5	43.3	40	15	M6	35	15	M6
2APF6F60Z17*	6	200(250)	250(300)	2000	3500	500	99	45						
2APF8F52Z17*	8	200(250)	250(300)	2000	3500	500	102	46.5						
2APF10F52Z17*	10	200(250)	250(300)	2000	3500	500	105	48						
2APF12F52Z17*	12	200(250)	250(300)	2000	3500	500	108	49.5						
2APF14F52Z17*	14	200(250)	250(300)	2000	3500	500	111	51						
2APF16F52Z17*	16	200(250)	250(280)	2000	3500	500	114	52.5						
2APF18F52Z17*	18	200(250)	250(280)	2000	3500	500	117.5	54.3						
2APF20F52Z17*	20	200(250)	250(280)	2000	3500	500	121	56						
2APF23F52Z17*	23	200	250	2000	3000	500	125.5	58.3						
2APF25F52Z17*	25	200	250	2000	3000	500	128	59.5						
2APF28F52Z17*	28	160	200	2000	3000	500	133	62						
2APF30F52Z17*	30	160	200	2000	3000	500	136	63.5						

2PF

Dimension -



2ADPF/**DF05Z17* Double Pumps - 2ADPF**/**DF05Z17***



Displacement - ml/r	4	6	8	10	12	14	16	18	20	23	25	28	30
L3(Front Pump) L4(Rear Pump)	50.5	54	57	60	63	66	69	72.5	76	80.5	83	88	91

2APFF**Z17*/2ADPF**DF05Z17***



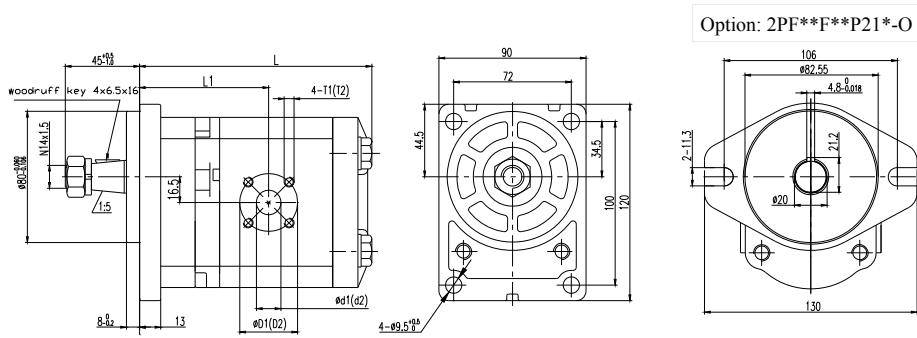
2PF**F**Z18*-O/2ADPF**DF05Z18*

Specifications -

Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	Inlet (mm)			Outlet (mm)		
		Rated	Peak	Rated	Max	Min			εD1	εd1	T1	εD2	εd2	T2
2PF4F60Z18*-O	4	200(250)	250(300)	2000	3500	500	123	73	40	15	M6			
2PF6F60Z18*-O	6	200(250)	250(300)	2000	3500	500	124	74						
2PF8F52Z18*-O	8	200(250)	250(300)	2000	3500	500	127	75						
2PF10F52Z18*-O	10	200(250)	250(300)	2000	3500	500	130	77						
2PF12F52Z18*-O	12	200(250)	250(300)	2000	3500	500	133	79				35	15	M6
2PF14F52Z18*-O	14	200(250)	250(300)	2000	3500	500	137	80						
2PF16F52Z18*-O	16	200(250)	250(280)	2000	3500	500	141	82	40	20	M6			
2PF18F52Z18*-O	18	200(250)	250(280)	2000	3500	500	143	83						
2PF20F52Z18*-O	20	200(250)	250(280)	2000	3500	500	147	86						
2PF23F52Z18*-O	23	200	250	2000	3000	500	153	89						
2PF25F52Z18*-O	25	200	250	2000	3000	500	157	92						

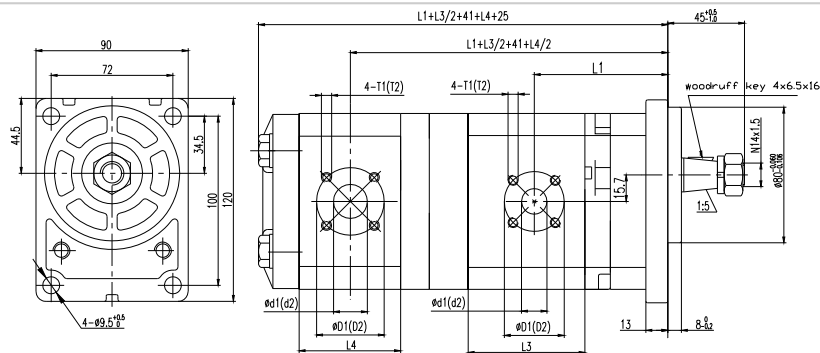
2PF

Dimension -



Option: 2PF**F**P21*-O

2ADPF**DF05Z18* Double Pumps - 2ADPF**DF05Z18*



Displacement -	ml/r)	4	6	8	10	12	14	16	18	20	23	25	28	30
L3(Front Pump) L4(Rear Pump)		50.5	54	57	60	63	66	69	72.5	76	80.5	83	88	91

2PF**F**Z18*-O/2ADPF**DF05Z18*



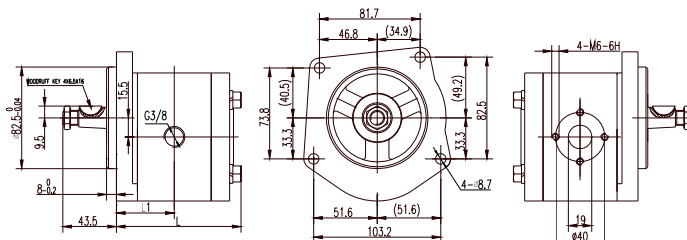
2PFF**Z12*/2ADPF**DL**Z12***

Specifications -

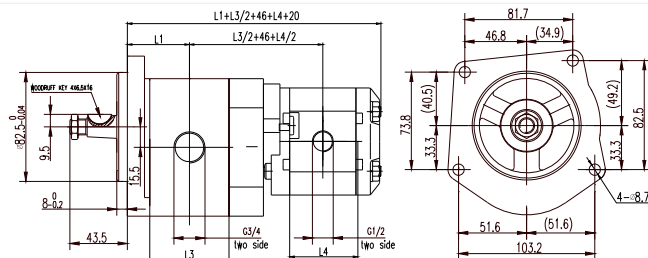
Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	Inlet (mm)			Outlet (mm)
		Rated	Peak	Rated	Max	Min			ϕD1	ϕd1	T1	
2PF4LF5Z12*	4	200(250)	250(300)	2000	3500	500	91.5	42.3	40	19	M6	G3/8
2PF6LF5Z12*	6	200(250)	250(300)	2000	3500	500	95	44				
2PF8LF5Z12*	8	200(250)	250(300)	2000	3500	500	98	45.5				
2PF10LF5Z12*	10	200(250)	250(300)	2000	3500	500	101	47				
2PF12LF5Z12*	12	200(250)	250(300)	2000	3500	500	104.5	48.8				
2PF14LF5Z12*	14	200(250)	250(300)	2000	3500	500	107.5	50				
2PF16LF5Z12*	16	200(250)	250(280)	2000	3500	500	111	52				
2PF18LF5Z12*	18	200(250)	250(280)	2000	3500	500	114	54				
2PF20LF5Z12*	20	200(250)	250(280)	2000	3500	500	118	55				
2PF23LF5Z12*	23	200	250	2000	3500	500	122	58				
2PF25LF5Z12*	25	200	250	2000	3500	500	125	59				
2PF28LF5Z12*	28	160	200	2000	3500	500	130	61				
2PF30LF5Z12*	30	160	200	2000	3500	500	133	63				

2PF

Dimension -



2ADPF/**DL**Z12* Double Pumps - 2ADPF**/**DL**Z12***



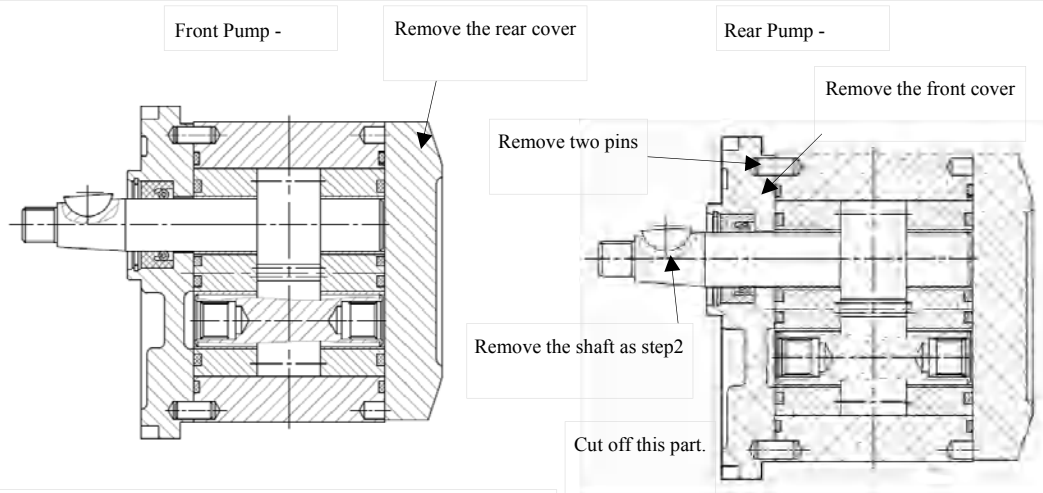
Front Displacement ml/r)	4	6	8	10	12	14	16	18	20	23	25	28	30
L3(Front Pump)	50.5	54	57	60	63	66	69	72.5	76	80.5	83	88	91
Rear Displacement ml/r)	1.3	2.0	2.7	3.4	4.1	5.1	6.1	/	/	/	/	/	/
L4(Rear Pump)	44	46	48	50	52	55	58	/	/	/	/	/	/

2PFF**Z12*/2ADPF**DL**Z12***



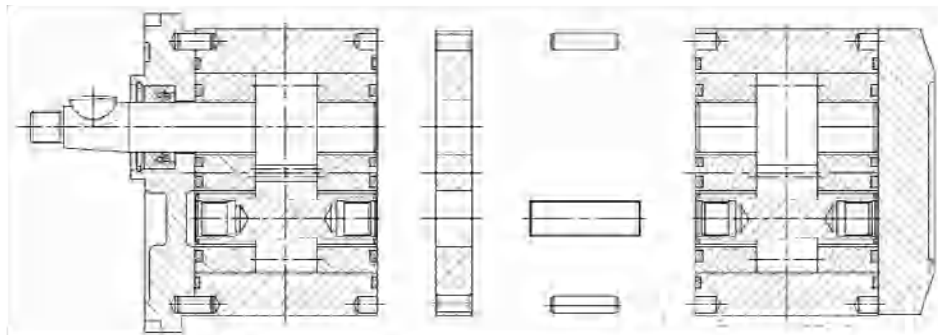
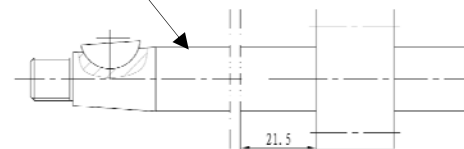
2PF+2PF STACKABLE PUMP ASSEMBLING MANUAL

Step1: Remove rear cover from the front pump. Also remove front cover and pins from the rear pump.

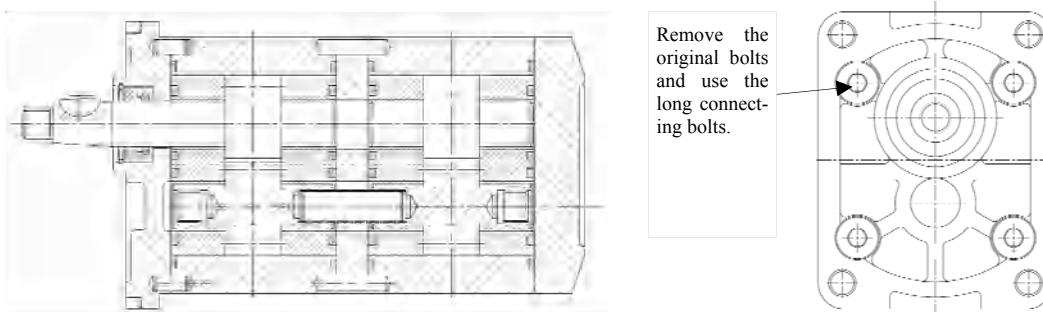


Step2: Cut the shaft of rear pump.

Step3: Assemble the pumps with coupling kit (connecting shaft, bearing carrier and connecting bolts).



Step: Screw 4 pcs of long connecting bolts.



2PF+2PF STACKABLE PUMP ASSEMBLING MANUAL



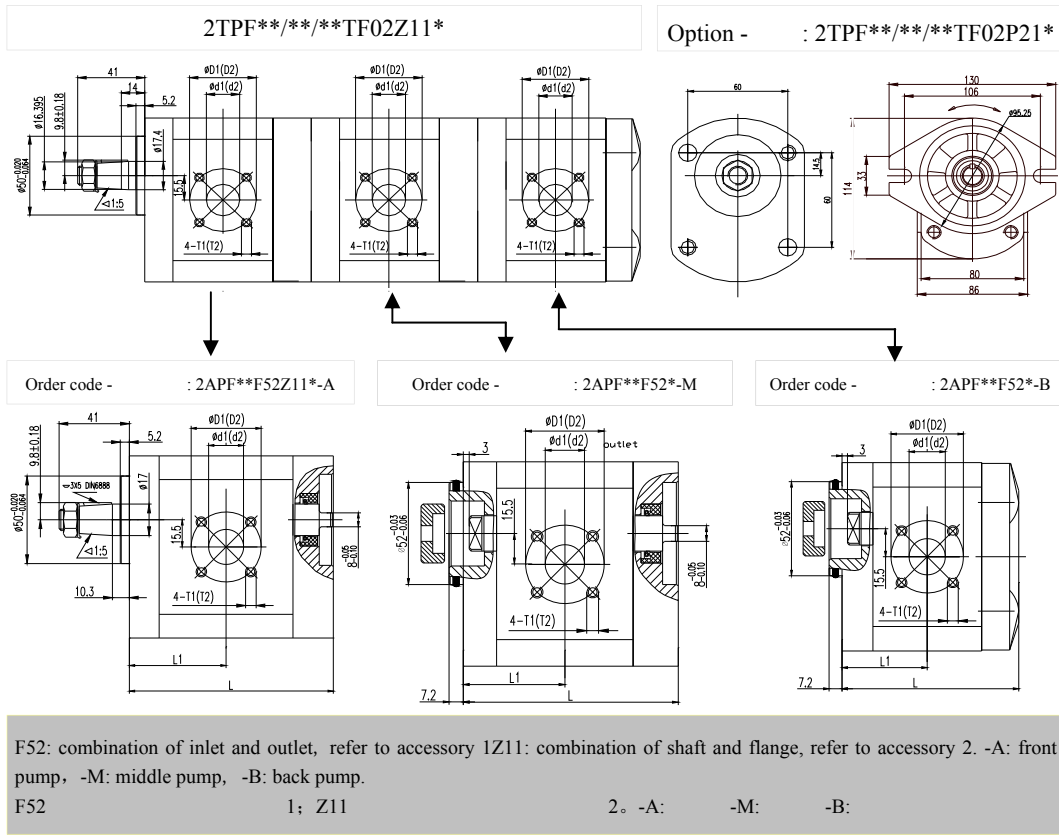
2(A)D(T)PF**/**

Specifications -

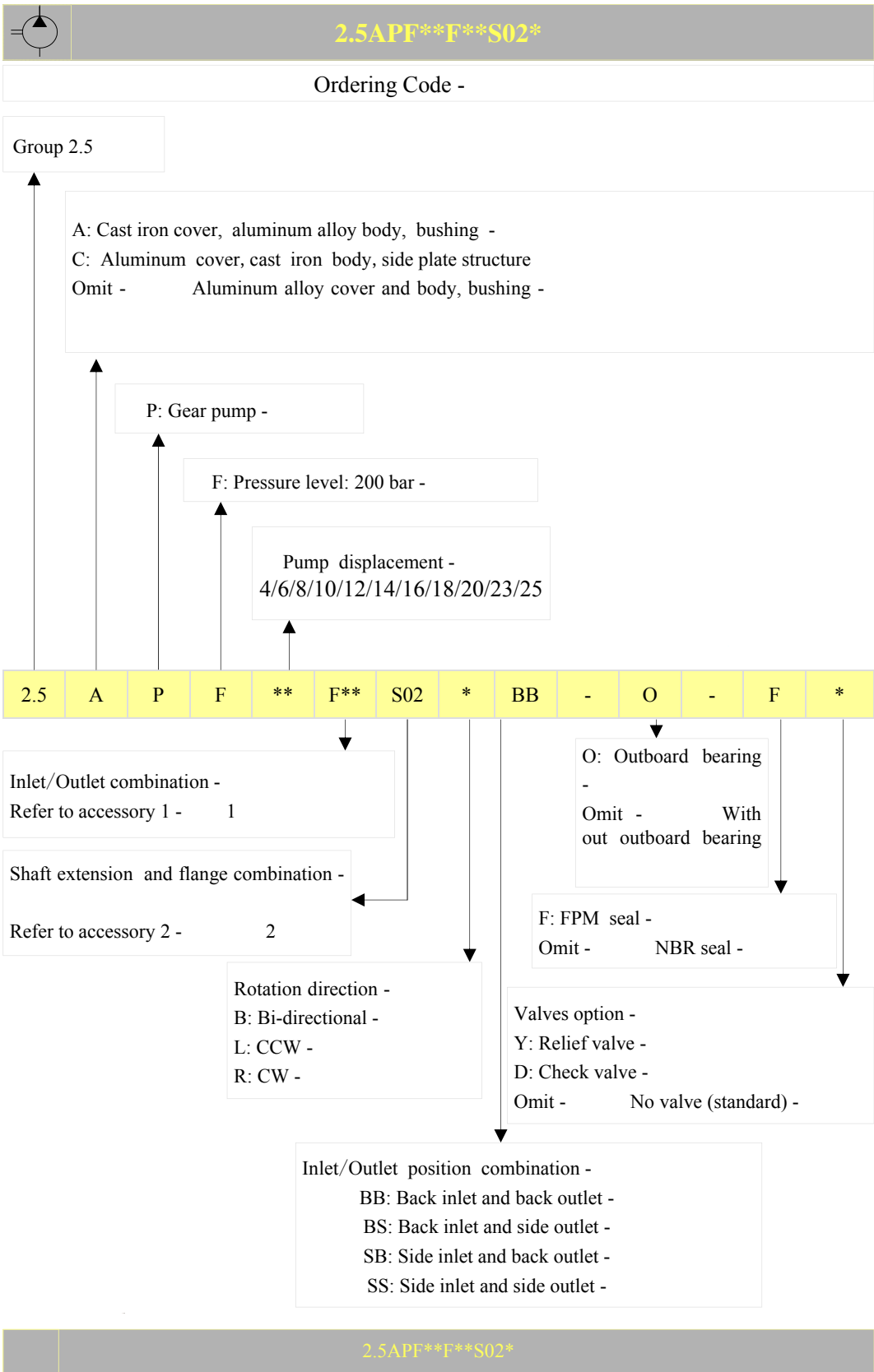
Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	Inlet (mm)			Outlet (mm)		
		Rated	Peak	Rated	Max	Min			ϕ D1	ϕ d1	T1	ϕ D2	ϕ d2	T2
2APF04F60*	4	200(250)	250(300)	2000	3000	500	87.9	42.2	40	15	M6	35	15	M6
2APF06F60*	6	200(250)	250(300)	2000	3000	500	91.1	43.8						
2APF08F52*	8	200(250)	250(300)	2000	3000	500	94.3	45.4						
2APF10F52*	10	200(250)	250(300)	2000	3000	500	97.5	47.0						
2APF12F52*	12	200(250)	250(300)	2000	3000	500	110.7	48.6	40	20	M6	35	15	M6
2APF14F52*	14	200(250)	250(300)	2000	3000	500	114.0	50.2						
2APF16F52*	16	200(250)	250(280)	2000	3000	500	109.5	51.2						
2APF18F52*	18	200(250)	250(280)	2000	3000	500	113.0	52.8						
2APF20F52*	20	200(250)	250(280)	2000	3000	500	116.5	55.3						
2APF23F52*	23	200	250	2000	3000	500	121.5	56.9						
2APF25F52*	25	200	250	2000	3000	500	124.7	58.5						

2PF

Dimension -



2(A)D(T)PF**/**



2.5APF



2.5APF**F77S02*

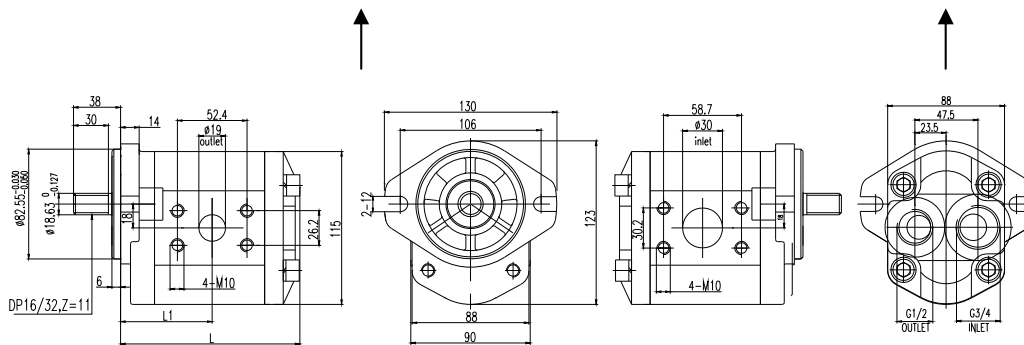
Specifications -

Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	Inlet (mm)	Outlet (mm)
		Rated	Peak	Rated	Max	Min				
2.5APF20F77S02*	20	200	250	2500	3000	500	124.5	61.5	Φ25	Φ19
2.5APF25F77S02*	25	200	250	2500	3000	500	130.5	64.5		
2.5APF27F77S02*	27	200	250	2500	3000	500	133	65.8		
2.5APF30F77S02*	30	200	250	2500	3000	500	136.5	67.5		
2.5APF32F77S02*	32	200	230	2500	3000	500	139	68.8		
2.5APF36F77S02*	36	200	230	2500	3000	500	143.5	71		
2.5APF40F77S02*	40	160	200	2500	3000	500	148.5	73.5		

Dimension -

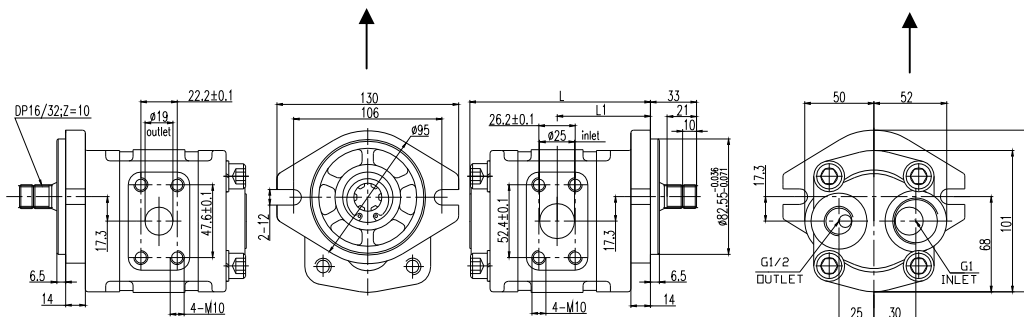
2TPF**/**/**TF02Z11*

Option -
2.5APF**LJ02S02*BB



Option: 2.5CPF**F30S24*

Option: 2.5CPF**LJ02S24*BB



2.5APF**F77S02*

2.5APF

 **3APF**F**Z05***

Ordering Code -

Group 3

A: Cast iron covers -
 B: Side plate structure -
 Omit - Aluminum covers -
 E: Cast iron covers +Side plate structure -

P: Gear pump -
 DP: Double pump -

Stackable pumps can be used as single pumps. They can also be combined into tandem pumps. Please refer to page 31 for more details.

F: Pressure level: 200 bar -

Pump displacement -
 4/6/8/10/12/14/16/18/20/23/25

F: FPM seal -
 Omit - NBR seal -

3 A P F ** F** Z05 * BB - O - F * K

Inlet/Outlet combination -
 Refer to accessory 1 -

Shaft extension and flange combination -
 Refer to accessory 2 -

O: Outboard bearing
 Omit - With out outboard bearing

Rotation direction -
 B: Bi-directional -
 L: CCW -
 R: CW -

Valves option -
 Y: Relief valve -
 D: Check valve -
 Omit - No valve (standard) -

Inlet/Outlet position combination -
 BB: Back inlet and back outlet -
 BS: Back inlet and side outlet -
 SB: Side inlet and back outlet -
 SS: Side inlet and side outlet -

3APFF**Z05***

3PF

 **3EPF**F**S69***

Ordering Code -

Group 3 - 3

E: Cast iron covers +Side plate structure -

P: Gear pump -
DP: Double pump -

Stackable pumps can be used as single pumps. They can also be combined into tandem pumps. Please refer to page 31 for more details.

F: Pressure level: 200 bar -
Pump displacement -
4/6/8/10/12/14/16/18/20/23/25

F: FPM seal -
Omit - NBR seal -

3 E P F ** F** S69 * BB - O - F * K

Inlet/Outlet combination -
Refer to accessory 1 -

Shaft extension and flange combination -
Refer to accessory 2 -

O: Outboard bearing
Omit - With out outboard bearing

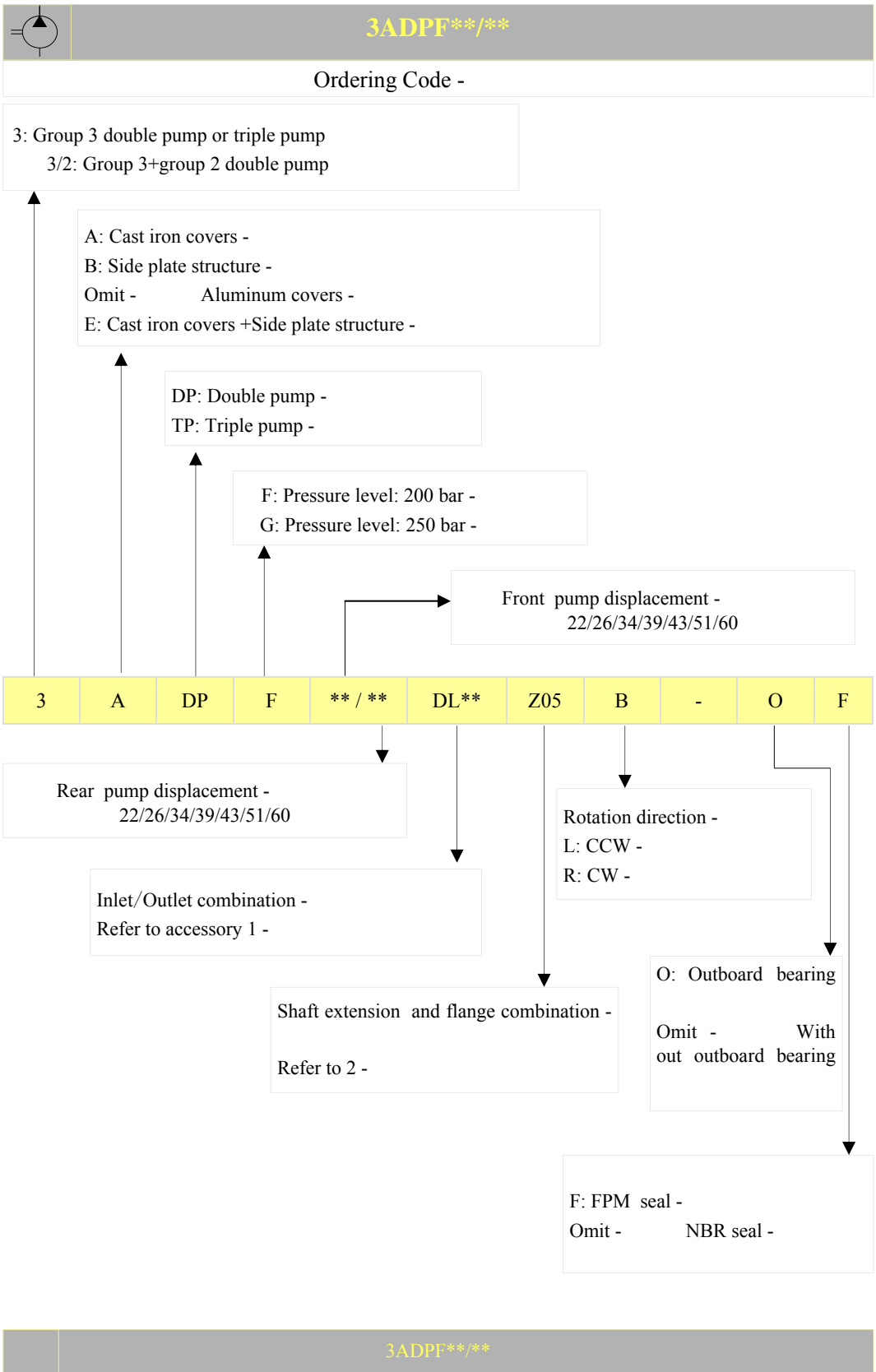
Rotation direction -
B: Bi-directional -
L: CCW -
R: CW -

Valves option -
Y: Relief valve -
D: Check valve -
Omit - No valve (standard) -

Inlet/Outlet position combination -
BB: Back inlet and back outlet -
BS: Back inlet and side outlet -
SB: Side inlet and back outlet -
SS: Side inlet and side outlet -

3EPFF**S69***

3PF



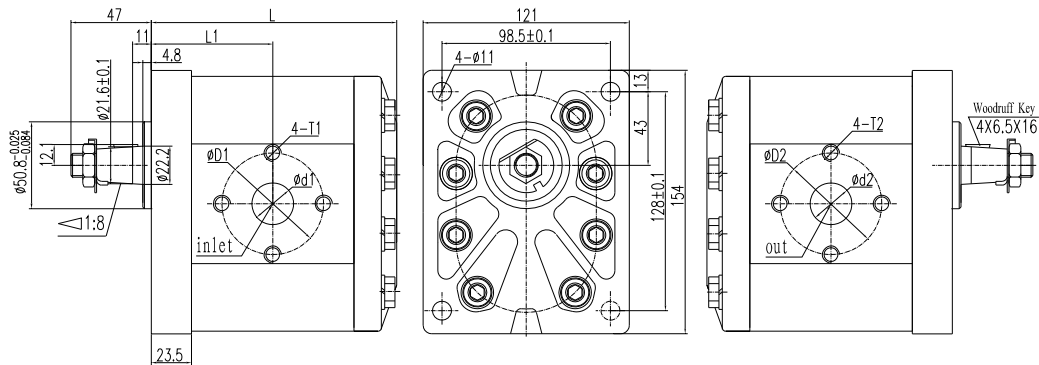


3APF**F**Z05*

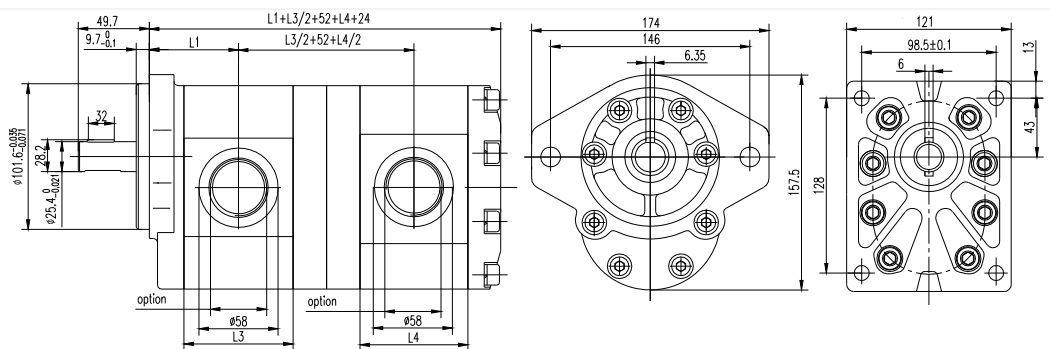
Specifications -

Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	ϕD1 (mm)	ϕd1 (mm)	T1 (mm)	ϕD2 (mm)	ϕd2 (mm)	T2 (mm)	
		Rated	Peak	Rated	Max	Min									
3APF22F10	22	200(250)	250(300)	2000	3000	400	128.5	65.5	56	27	M10	56	19	M10	
3APF26F10	26	200(250)	250(300)	2000	3000	400	131.5	67							
3APF34F10	34	200(250)	250(300)	2000	3000	400	137	69.8							
3APF39F10	39	200(250)	250(300)	2000	3000	400	141	71.8							
3APF43F09	43	200(250)	250(300)	2000	2800	400	143.5	73	51	27	M10	51	27	M10	
3APF51F11	51	200(250)	250(300)	2000	2400	400	149.5	76	56	27		56	27		
3APF60F12	60	180(200)	230(250)	1500	2800	400	156	79.3	62	33	M10	51	27	M10	
3APF70F12	70	180(200)	200(230)	1500	2500	400	163	82.8							
3APF78F12	78	160(200)	200(230)	1500	2300	400									
3APF89F12	89	140(180)	180(200)	1500	2000	400									

Dimension -



3APF**/**DL**P88* DOUBLE PUMPS - 3APF**/**DL**Z05(S05)*



Displacement -	ml/r)	22	26	34	39	43	51	60	70
L3(Front Pump) L4(Rear Pump)		80	83	88.5	92.5	95	101	107.5	114.5

3APF**F**Z05*



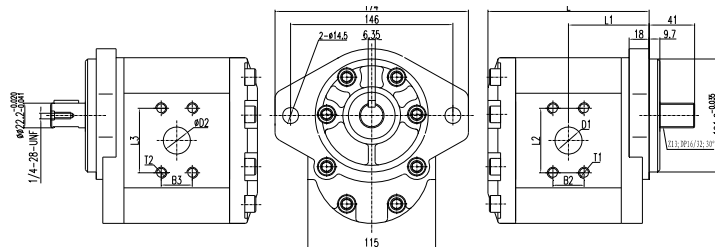
3APF**

Specifications -

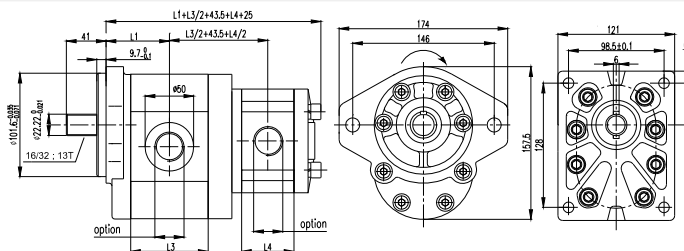
Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	L2 (mm)	B2 (mm)	ϕD1 (mm)	T1 (mm)	L3 (mm)	B3 (mm)	ϕD2 (mm)	T2 (mm)
		Rated	Peak	Rated	Max	Min										
3APF22F32	22	200 (250)	250 (300)	2000	3000	400	130.3	65.3	52.4	26.2	27	3/8 16UN C-2B	26.2	47.6	19	3/8 16UN C-2B
3APF26F32	26	200 (250)	250 (300)	2000	3000	400	133.3	66.8								
3APF34F32	34	200 (250)	250 (300)	2000	3000	400	138.8	69.6								
3APF39F32	39	200 (250)	250 (300)	2000	3000	400	142.8	71.6								
3APF43F32	43	200 (250)	250 (300)	2000	2800	400	145.3	72.8								
3APF51F32	51	200 (250)	250 (300)	2000	2400	400	151.3	75.8								
3APF60F36	60	180 (200)	230 (250)	1500	2800	400	157.8	79.1	58.7	28.4	33	7/16 14UN C-2B	26.2	52.4	27	
3APF70F36	70	180 (200)	200 (230)	1500	2500	400	164.8	82.5								
3APF78F36	78	160 (200)	200 (230)	1500	2300	400	171	85								
3APF89F36	89	140 (180)	180 (200)	1500	2000	400	176	88								

3PF

Dimension -



3/2APF**/**DL**Z05(S05)* DOUBLE PUMPS - 3/2APF**/**DL**Z05(S05)*



Displacement - ml/r)	22	26	34	39	43	51	60	70	/	/	/	/	/
L3(Front Pump)	80	83	88.5	92.5	95	101	107.5	114.5	/	/	/	/	/
Displacement - ml/r)	4	6	8	10	12	14	16	18	20	23	25	28	30
L4(Rear Pump)	50.5	54	57	60	63	66	69	72.5	76	80.5	83	88	91

3APF**

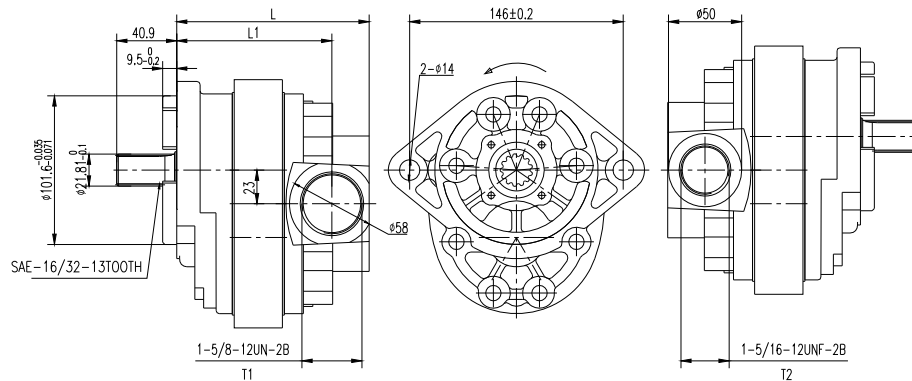


3BPF**LJ53S05*

Specifications -

Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	T1 (mm)	T2 (mm)
		Rated	Peak	Rated	Max	Min				
3BPF22LJ53S05*	22	200	250	2000	3000	400	111.6	85.6	1-5/8-12UNC-2B	1-5/16-12UNC-2B
3BPF26LJ53S05*	26	200	250	2000	3000	400	114.5	88.5		
3BPF34LJ53S05*	34	200	250	2000	3000	400	120.2	94.2		
3BPF39LJ53S05*	39	200	250	2000	3000	400	123.8	97.8		
3BPF43LJ53S05*	43	200	250	2000	2800	400	126.5	100.5		
3BPF50LJ53S05*	50	200	250	2000	2400	400	131.5	105.5		
3BPF60LJ53S05*	60	180	230	1500	2800	400	138.5	112.5		
3BPF63LJ53S05*	63	180	200	1500	2500	400	140.8	114.8		

Dimension -



3PF

Ordering Code

3	B	P	F	**	LJ53	S05	/L
Group Number	Structure Improve Number	Function Code	Pressure Level Code	Displacement	Inlet/Outlet Combination	Shaft Extension Combination	Rotation
3 Group	Second Improve	Gear Pump	F:18-25 MPa	Refer to Above Table	LJ53, etc Refer to Accessory1	P16, S05,etc Refer to accessory 2	L-left Omit-Right

3BPF**LJ53S05

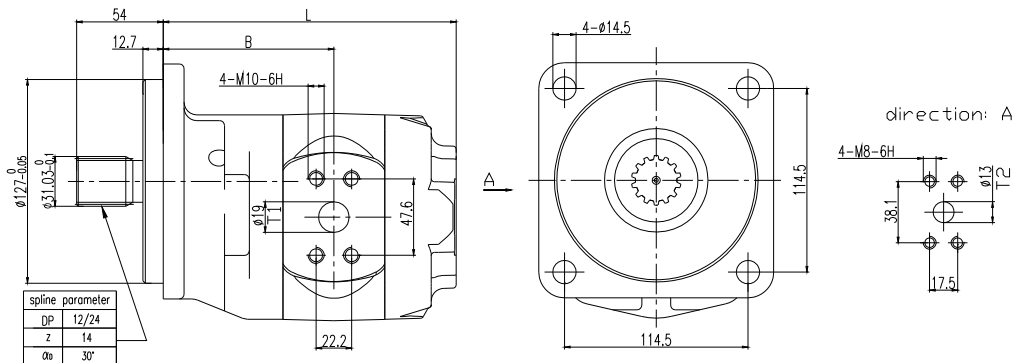


3EPF**F**S69*

Specifications -

Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)		L (mm)	B (mm)	T1 (mm)	T2 (mm)
		Rated	Peak	Max	Min				
3EPF16.4	16.4	218	250	2400	600	151	90.6	∅19	∅13
3EPF24.6	24.6	218	250	2400	600	157.4	93.8		
3EPF32.8	32.8	218	250	2400	600	163.7	97		
3EPF41	41	218	250	2400	600	170	100		
3EPF49.2	49.2	218	250	2400	600	176.4	103.3		
3EPF57.3	57.3	180	210	2400	600	182.8	106.5		
3EPF65.5	65.5	180	210	2400	600	189	109.7		

Dimension -



Ordering Code

3	E	P	F	**	F22	S69	/L
Group Number	Structure Improve Number	Function Code	Pressure Level Code	Displacement	Inlet/Outlet Combination	Shaft Extension Combination	Rotation
3 Group	Second Improve	Gear Pump	18-25 MPa	Refer to Above Table	LJ53, etc Refer to Accessory1	P16, S05, etc Refer to accessory 2	L-left Omit-Right

3BPF**F**S69

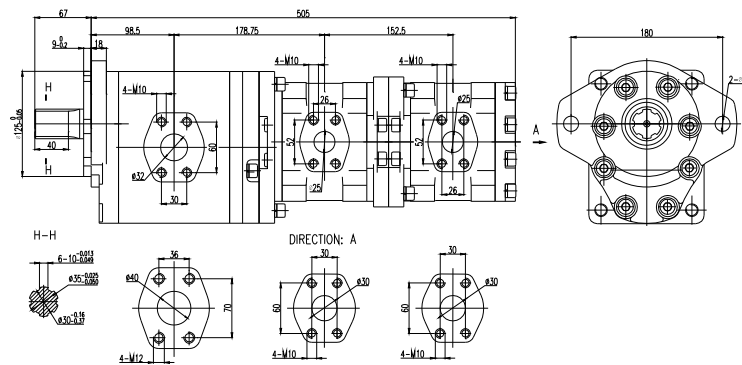


3CBY3100/Y240/Y240/TF03H18 TRIPLE GEAR PUMP -

Specifications -

Front Pump Displacement (cc/r)	Middle Pump Displacement (cc/r)	Rear Pump Displacement (cc/r)	Pressure (bar)		Speed (r/min)			Rotation
			Rated	Peak	Rated	Max	Min	
100	40	40	200	250	2000	3000	600	Clockwise

Dimension -

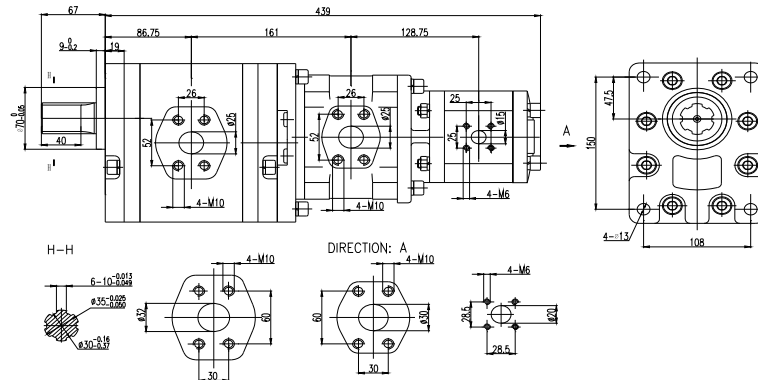


3CBY350/Y232/2PF16TF04H19 TRIPLE GEAR PUMP -

Specifications -

Front Pump Displacement (cc/r)	Middle Pump Displacement (cc/r)	Rear Pump Displacement (cc/r)	Pressure (bar)		Speed (r/min)			Rotation
			Rated	Peak	Rated	Max	Min	
50	32	16	200	250	2000	3000	600	Clockwise

Dimension -



TRIPLE GEAR PUMP -

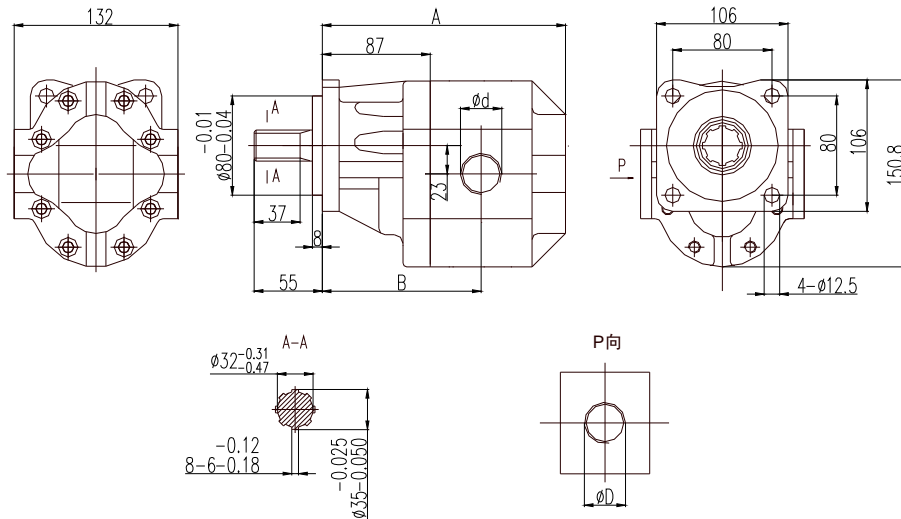


3CPF**L**H27

Specifications -

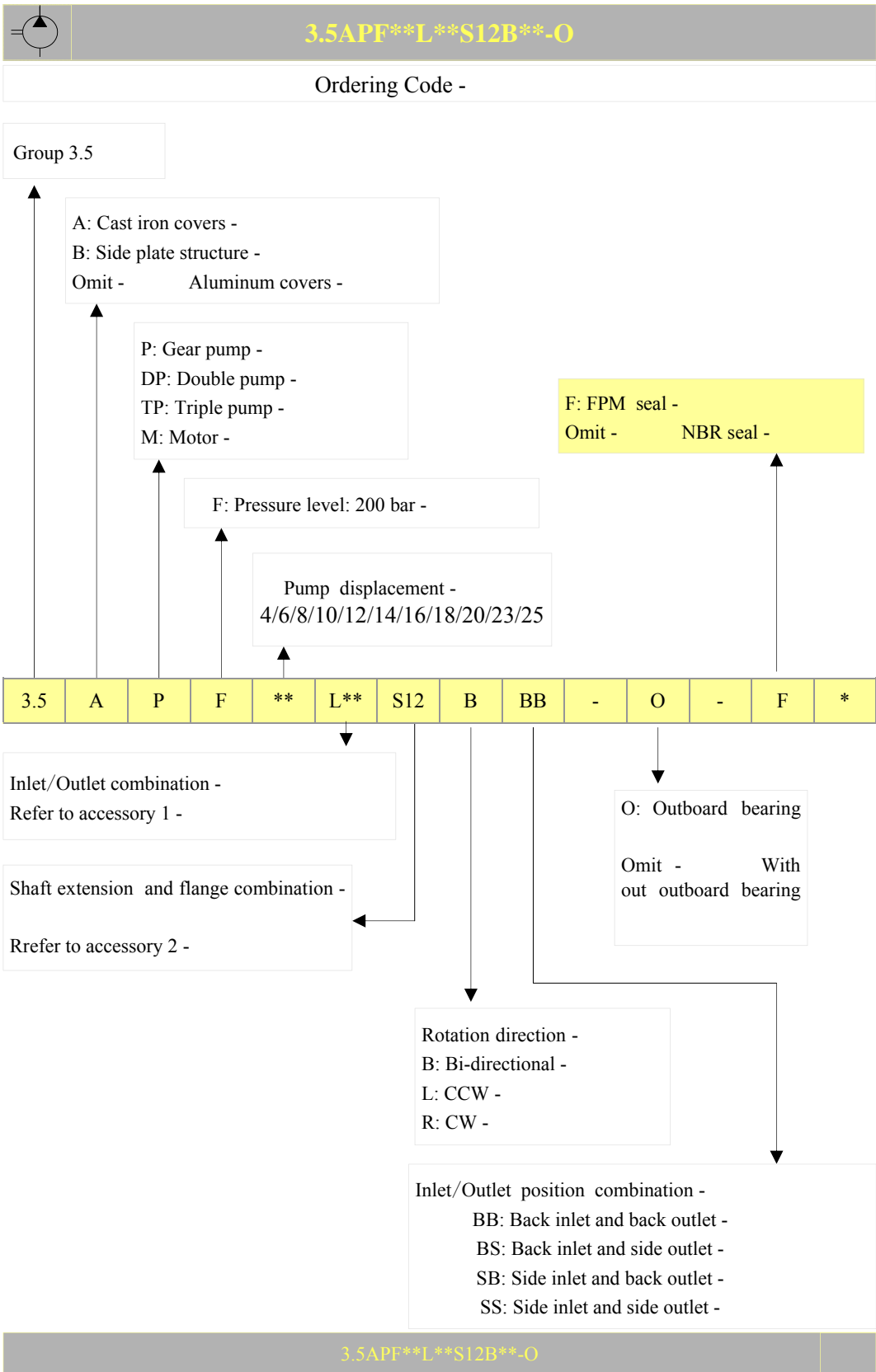
Model	Displacement ml/r	Pressure bar		Speed r/min			A (mm)	B (mm)	D (mm)	d (mm)	(kg)
		Rated	Peak	Rated	Max	Min					
3CPF43L03H27	43	210	300	2000	3000	300	171	115.5	G1	G3/4	12.8
3CPF51L00H27	51	210	300	2000	3000	300	177	118.5	G1	G1	13.2
3CPF61L00H27	61	210	300	2000	3000	300	183.6	121.8	G1	G1	13.6
3CPF82L11H27	82	210	300	2000	3000	300	196	128	G1-1/4	G1	14.1

Dimension -



3PF

3CPF**L**H27



3.5APF

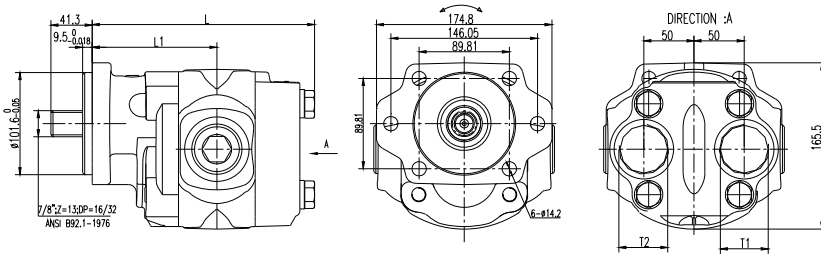


3.5APF**L**S12B**-O

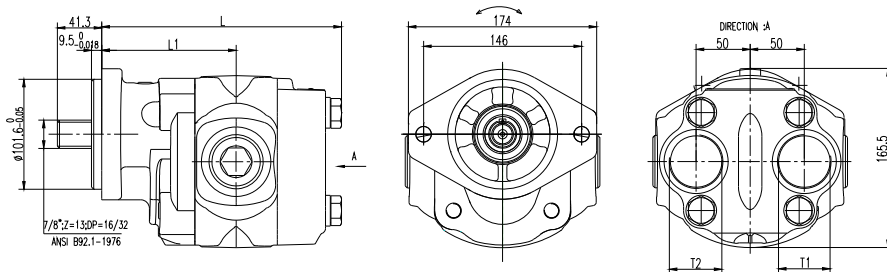
Specifications -

Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			L (mm)	L1 (mm)	T1 (mm)	T2 (mm)
		Rated	Peak	Rated	Max	Min				
3.5APF52	52	170	210	1500	3600	600	181.0	206.5	1°	1-1/4°
3.5APF63	63	170	210	1500	3600	600	187.5	216.0	1°	1-1/4°
3.5APF73	73	170	210	1500	3600	600	193.5	225.3	1-1/4°	1-1/4°
3.5APF85	85	150	180	1500	3600	600	200.5	235.5	1-1/4°	1-1/4°
3.5APF93	93	150	180	1500	3600	600	206.5	244.5	1-1/2°	1-1/4°
3.5APF104	104	150	180	1500	3600	600	213.0	254.5	1-1/2°	1-1/4°
3.5APF115	115	120	140	1500	3600	600	219.0	263.5	1-1/2°	1-1/4°

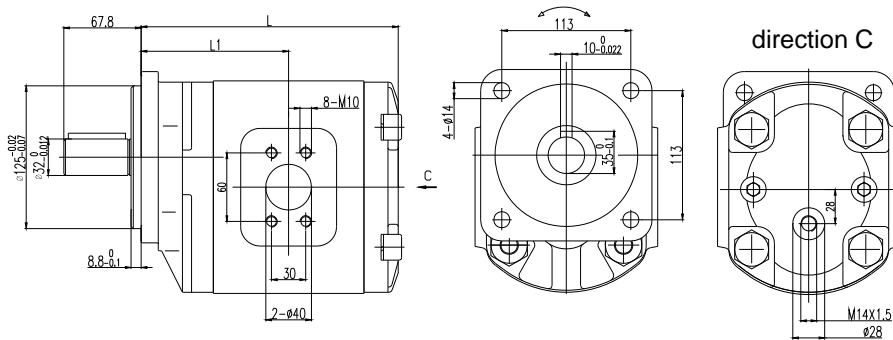
Dimension -



3.5APF**L**S05B-O



3.5BPF**F108P64B-O



3.5APF**L**S12B**-O

3.5APF

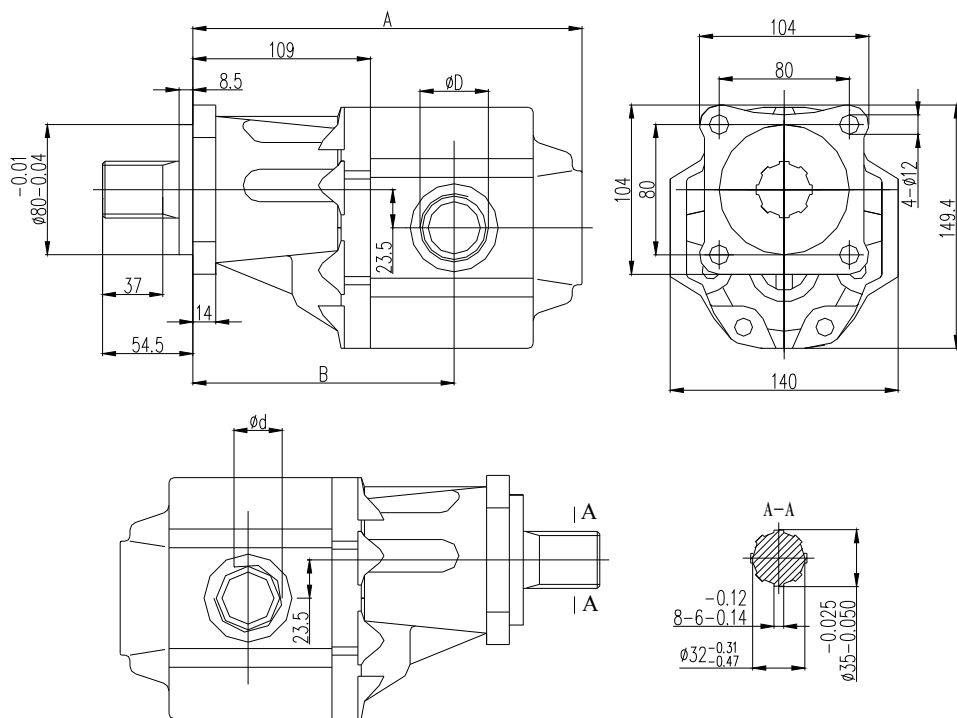


3.5EPF**L**H27B

Specifications -

Model	Displacement ml/r	Pressure bar		Speed r/min			A (mm)	B (mm)	D (mm)	d (mm)
		Rated	Peak	Rated	Max	Min				
3.5EPF82L00H27B	82	210	300	2000	3000	300	233	157.5	G1	G1
3.5EPF95L99H27B	95	210	300	2000	3000	300	239	160.5	G1-1/4	G1-1/4

Dimension -



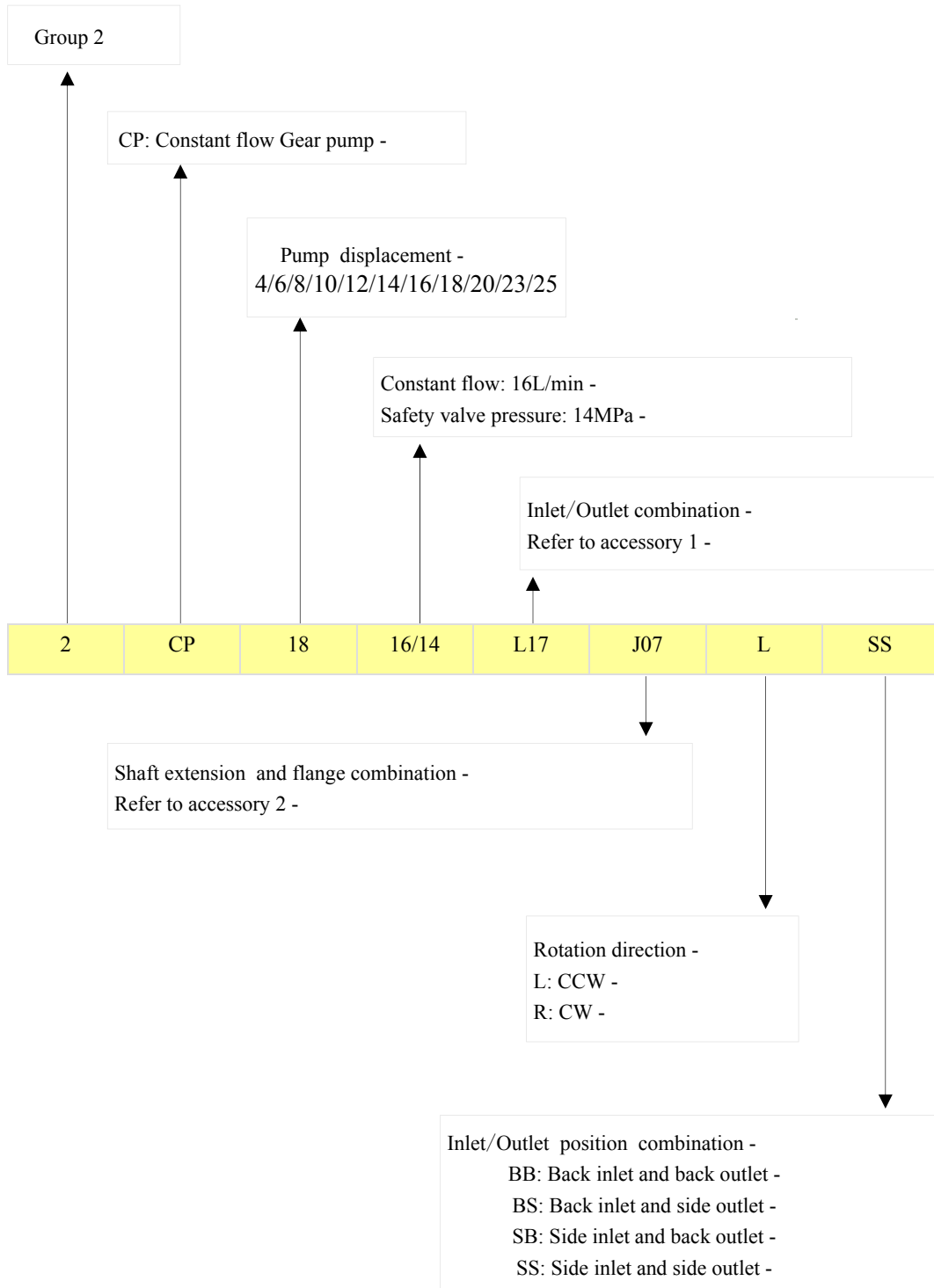
3.5EPF**L**H27B

3.5APF

3.5EPF**L**H27B



2[C]P18 CONSTANT FLOW GEAR PUMP -



Constant Flow
Gear Pumps

2[C]P18 CONSTANT FLOW GEAR PUMP -



2[C]P18 CONSTANT FLOW GEAR PUMP -

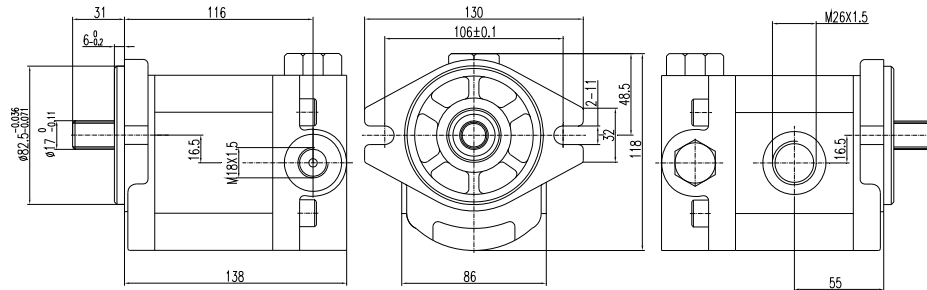
Specifications -

Model	Displacement (ml/r)	Constant flow (L/min)	Max Pressure (bar)	Speed (r/min)
2CP18 16/14L17J07SS	18	16	140	500-3200

Involute Spline Parameter -

M	Z	Pressure Angle	Precision
1	16	30°	5h

Dimension -



Ordering Code

2	[C]P	18	16/14	L17	J07	/L	SS
Number	Function Code	Displacement	Constant Flow Safety Valve Pressure	Inlet/Outlet Combination	Shaft Extension Combination	Rotate Direction	Inlet/Out Position Combination
2group	Constant Flow Gear Pump	18ml/r	Constant flow:16L/min Safety Valve Pressure:14MPa	L17, etc Refer to Accessory 1	J07,etc Refer to Accessory 2	L-left Omit-Right	SS, etc Reference Below Table

Constant Flow Gear Pumps

Inlet/Out Position Combination -

BB: Back Inlet and Back Outlet
 BS: Back Inlet and Side Outlet
 SB: Side Inlet and Back Outlet
 SS: Side inlet and side outlet

We can offer different constant flow options than the 2P type. Call your sales representation for more information.

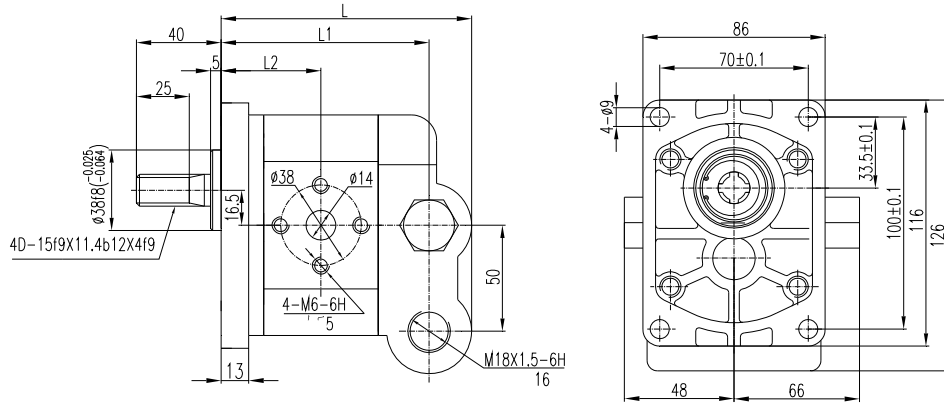
2[C]P18 CONSTANT FLOW GEAR PUMP -



2[C]P18 CONSTANT FLOW GEAR PUMP -

Specifications -

Model	Displacement (ml/r)	Constant Flow (L/min)	Max Pressure (bar)	Speed (r/min)	L	L1	L2
2[C]P6 6/12.5LF01H16LSS	6	6	125	500-3200	47	98	120
2[C]P10 6/12.5LF01H16LSS	10	6	125	500-3200	49.75	103.5	125.5
2[C]P14 10/12.5LF01H16LSS	14	10	125	500-3200	52.85	109.5	131.7



Ordering Code

2	[C]P	*	* /12.5	LF01	H16	/L	SS
Number	Function Code	Displacement	Constant Flow Safety Valve Pressure	Inlet/Outlet Combination	Shaft Extension Combination	Rotate Direction	Inlet/Out Position Combination
2group	Constant Flow Gear Pump	6/10/14 ml/r	Constant flow: 6-10 L/min Safety Valve Pressure: 14 MPa	LF1, etc Refer to Accessory1	H16,etc Refer to Accessory2	L-left Omit-Right	SS, etc Reference Below Table

Constant Flow
Gear Pumps

BB: Back Inlet and Back Outlet
 BS: Back Inlet and Side Outlet
 SB: Side Inlet and Back Outlet
 SS: Side inlet and side outlet

We can offer different constant flow options than the 2P type. Call your sales representation for more information.

2[C]P**/12.5 CONSTANT FLOW GEAR PUMP -

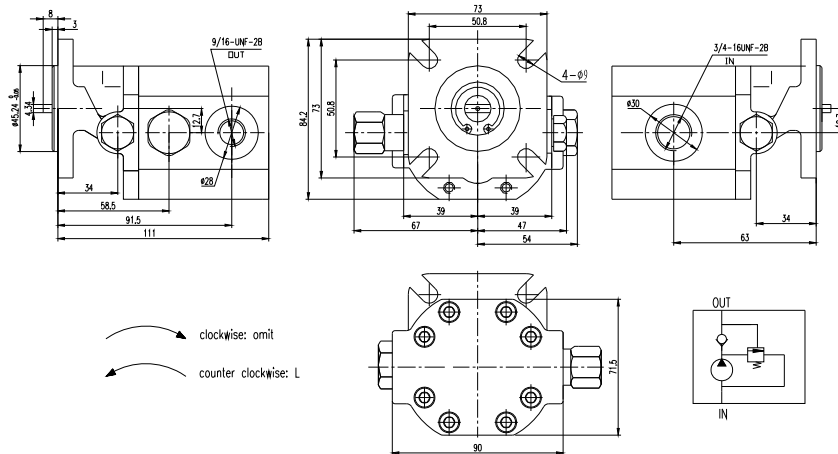


1EPFL35B06*SS-YD PUMPS WITH VALVE -**

Specifications -

Model	Displacement (cc/r)	Pressure (bar)		Speed (r/min)			Port	
		Rated	Peak	Rated	Max	Min	Inlet	Outlet
1EPF1.6L35B06SS-YD	1.6	160	200	2000	4500	500	3/4-16UNF-2B	9/16-18UNF-2B
1EPF2.7L35B06SS-YD	2.7	160	200	2000	4500	500		
1EPF4.1L35B06SS-YD	4.1	160	200	2000	4500	500		
1EPF6.1L35B06SS-YD	6.1	160	200	2000	4500	500		

Dimension -



Ordering Code

1	EP	F	**	L35	B06	/L	YD
Group Number	Function Code	Pressure Level Code	Displacement	Inlet/Outlet Combination	Shaft Extension Combination	Rotate Direction	Valves Option
1group	Gear Pump	16~25 MPa	Refer to Above Table	L35, etc Refer to Accessory1	B06,etc Refer to Accessory2	L-left Omit-Rotate	Y: Relief Valve D: Check Valve Omit: No Valve

BF: Back Inlet and Front Outlet
 BS: Back Inlet and Side Outlet
 SF: Side Inlet and Front Outlet
 FB: Front Inlet and Back Outlet
 BB: Back Inlet and Back Outlet
 SB: Side Inlet and Back Outlet
 SS: Side Inlet and Side Outlet
 FS: Front Inlet and Side Outlet

1EPFL35B06*SS-YD WITH VALVE PUMP -**

Pumps With Valve

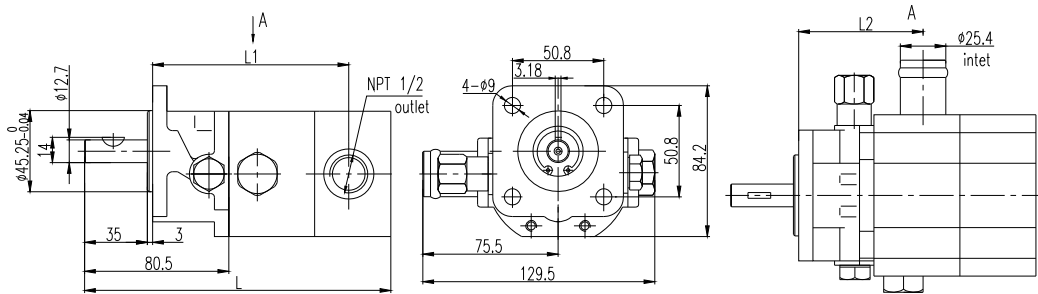


CBT-*/*/HI/LO GEAR PUMP -

Specifications -

Model	Flow (gpm) 3600r/min	Pressure (Psi)		Displacement (Cu.in/r)		Speed (rpm)	D (mm)	
		Lo	Hi	Lo	Hi		Inlet	Outlet
CBT-6.3/2.1	8	400/900	3000	0.385	0.13	3600	1 IN PIPE	1/2 NPT
CBT-6.3/3.0	8.5	400/900	3000	0.385	0.183			
CBT-6.3/3.6	9	400/900	3000	0.385	0.220			
CBT-8.8/2.1	10	400/900	3000	0.537	0.13			
CBT-8.8/3.0	10.5	400/900	3000	0.537	0.183			
CBT-8.8/3.6	11	400/900	3000	0.537	0.220			
CBT-8.8/4.2	11.5	400/900	3000	0.537	0.256			
CBT-10.9/2.1	12	400/900	3000	0.665	0.13			
CBT-10.9/3.0	12.5	400/900	3000	0.665	0.183			
CBT-10.9/3.6	13	400/900	3000	0.665	0.220			
CBT-10.9/4.2	13.5	400/900	3000	0.665	0.256			
CBT-13.0/4.2	16	400/900	3000	0.793	0.265			

Dimension -



Model	Dimension (inches)			Model	Dimension (inches)			Model	Dimension (inches)		
	L	L1	L2		L	L1	L2		L	L1	L2
CBT-6.3/2.1	6.07	3.74	2.41	CBT-8.8/3.0	6.54	4.08	2.74	CBT-10.9/3.0	6.90	4.53	3.04
CBT-6.3/3.0	6.21	3.90	2.41	CBT-8.8/3.6	6.61	4.24	2.74	CBT-10.9/3.6			
CBT-6.3/3.6	6.28	3.90	2.74	CBT-8.8/4.2	6.70	4.24	2.74	CBT-10.9/4.2			
CBT-8.8/2.1	6.41	4.08	2.74	CBT-10.9/2.1	6.70	4.37	3.04	CBT-13.0/4.2			

HI/LO Gear Pumps

CBT-*/*/HI/LO GEAR PUMP -

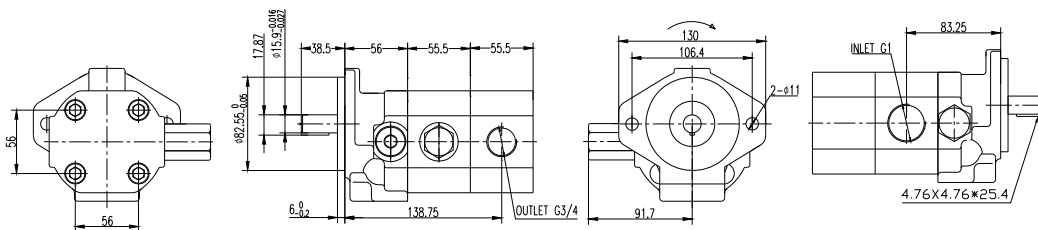


CBT-*/*/*/HI/LO GEAR PUMP -

Specifications -

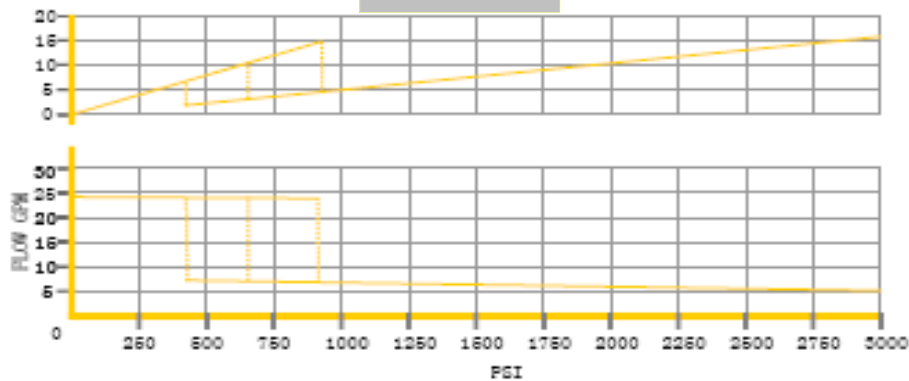
Model	Flow (gpm) 3600r/min	Pressure (Psi)		Displacement (Cu.in/r)		Speed (rpm)	D (mm)	
		Lo	Hi	Lo	Hi		Inlet	Outlet
CBT-15.2/7.6	22	400/900	3000	0.93	0.465	3600	NPTF 1	NPTF3/4
CBT-22.9/7.6	28	400/900	3000	1.395	0.465		G1	G3/4

Dimension -

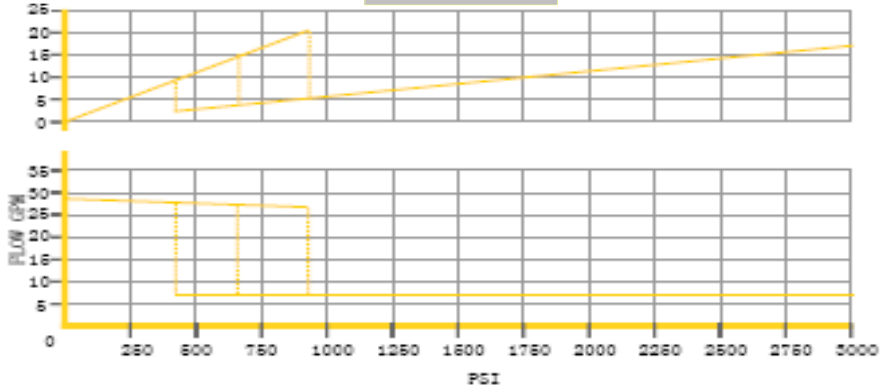


Performance Curves -

CBT-15.2/7.6



CBT-22.9/7.6



CBT-*/*/*/HI/LO GEAR PUMP -

HI/LO Gear Pumps



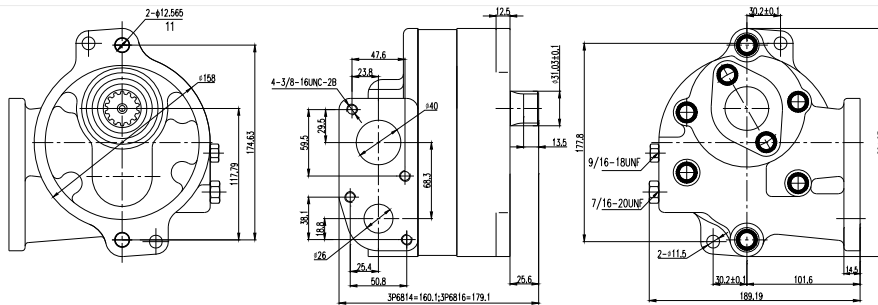
3P6816/3P6814/3P0380/2P9239 GEAR PUMPS

These pumps can be used in the hydraulic systems of bulldozer, loader, crane and other construction machineries

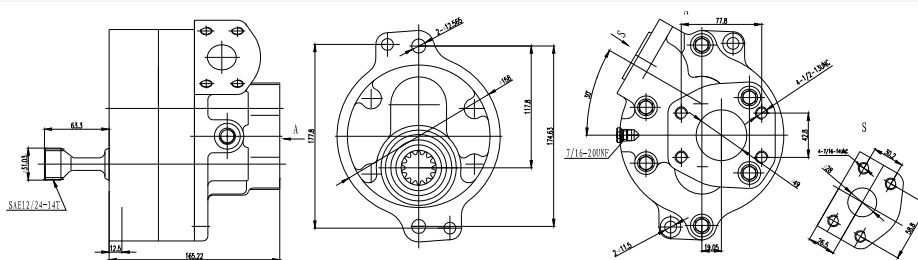
Specifications -

Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			Min flow at rated pressure and speed (L/min)	Rotation	Weight (Kg)
		Rated	Peak	Rated	Max	Min			
3P6816/3P0380	71	2.5	3.15	1800	2500	500	115	CW	19.4
3P6814	32	2.5	3.15	1800	2500	500	45	CW	18.4
2P9239	73.3	2.5	3.15	1800	2500	500	122	CW	15.5

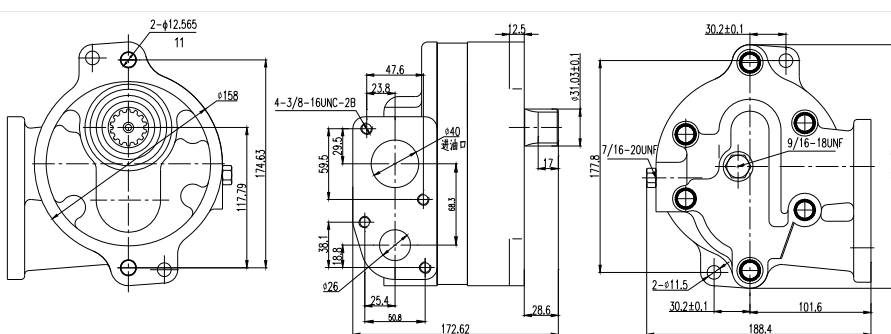
3P6816 / 3P6814 Installation Dimensions



3P0380 Installation Dimensions



2P9239 Installation Dimensions



3P6816/3P6814/3P0380/2P9239 GEAR PUMPS



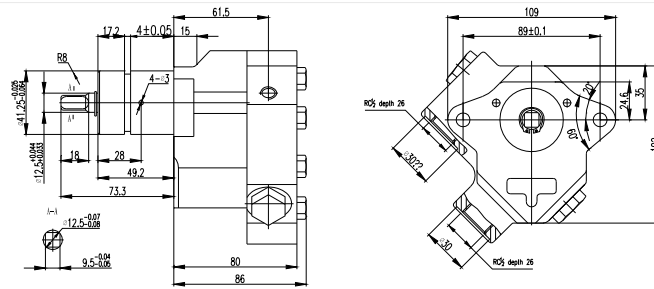
3N2078/4W5479/4W2448 GEAR PUMPS

These pumps can be used in the hydraulic systems of bulldozer, loader, crane and other construction machineries.

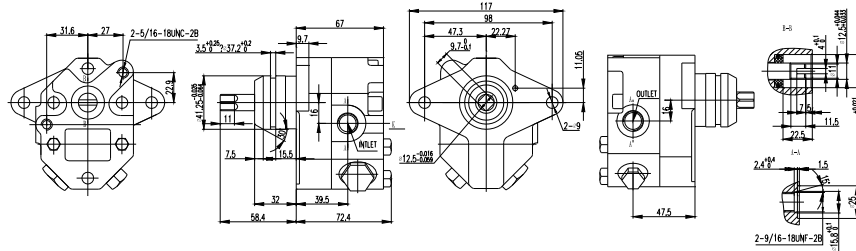
Specifications -

Model	Displacement (ml/r)	Pressure (bar)		Speed (r/min)			Min flow at rated pressure and speed (L/min)	Rotation	Weight (Kg)
		Rated	Peak	Rated	Max	Min			
3N2078	16	2	3	1500	2000	500	19	CCW	19.4
4W5479	8	0.25	0.35	1500	2000	500	10.8	CCW	18.4
4W2448	Front: 62	2	3	1500	2000	500	109	CW	25
4W2448	Rear: 48	2	3	1500	2000	500	82		25

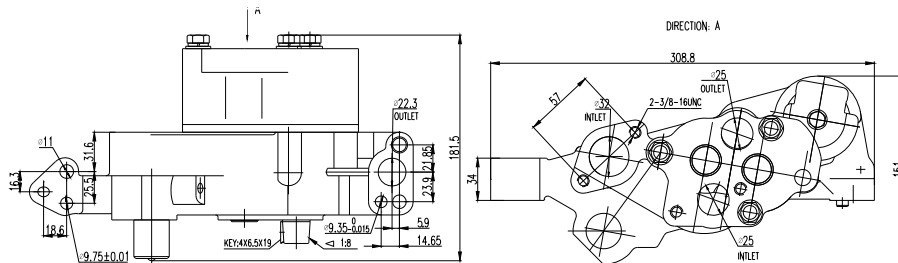
3N2078 Installation Dimensions



4W5479 Installation Dimensions



4W2448 Installation Dimensions



3N2078/4W5479/4W2448 GEAR PUMPS



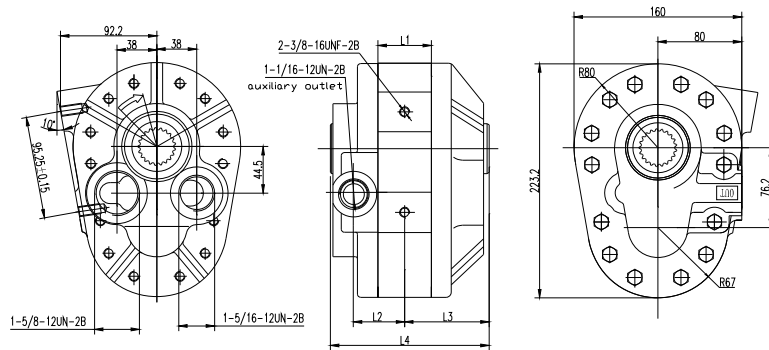
PTO GEAR PUMPS

PTO pumps can be used in the hydraulic systems of agriculture tractors PTO.

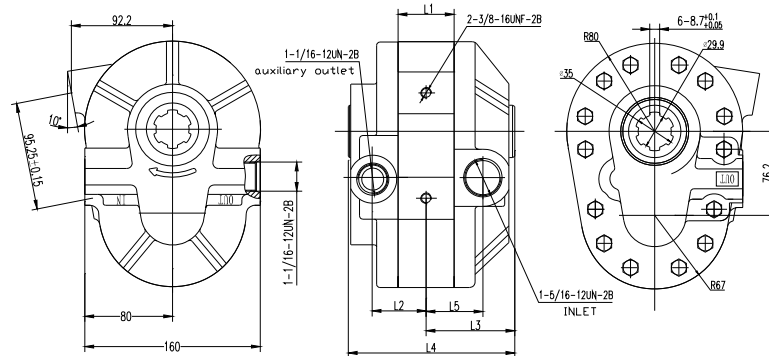
Specifications -

Model	Displacement (ml/r)	Pressure (bar)	Speed (Rpm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	L5 (mm)	
		Peak	Rated						
CB-P160LJ53S33BB	160	60(2250 psi)	1000	60.2	53	86	161	/	
CB-P125LJ53S33BB	125			50.8	50.8	81	151	/	
CB-P90LJ53S33BB	90			41.5	44	76	142	/	
CB-P56LJ53S33BB	56			32	39	71	133	/	
CB-P160LJ42H21SS	160		540	540	60.2	53	86	161	61
CB-P125LJ42H21SS	125				50.8	48	81	151	52
CB-P90LJ42H21SS	90				41.5	44	76	142	47.5
CB-P56LJ42H21SS	56				32	39	71	133	42.5

CB-P***LJ53S33BB Installation Dimensions - CB-P***LJ53S33BB



CB-P***LJ42H21SS Installation Dimensions - CB-P***LJ42H21SS



PTO GEAR PUMPS