



# Coding system model L

301....799	-	1	L	12	C	E	10	F	V	2	B
***		*	*	*	*	*	*	*	*	*	*

***	*	*	*	*	*	*	*	*	*	*	*
Code	Type	Model	Pump flow rate at 1500 RPM at 0 bar	Rotation sense	Shaft form	Fixinge flange	Port connection form	Alternatives with valves	Relief valve pressure	Tank capacity	



301....799	Code
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1	Without pulley
2	With pulley
5	Pump with back-up bearing and floating shaft

L	Single	
LM	Multiple -banked	L+L
LS	Multiple -banked	L+LO

L	6-7.5-9-10-12-14-16-18 -22-25-27-32-35-40-46-52
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C	Clockwise
CC	Counterclockwise
R	Reversible

L	A-B-C-D-E-F-G-H-I-J-K-N-R-S-T V-W-Y-Z
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Pulley type	
L	P-R-S-T

L	01-02-03-04-05-07-08-09-10-11-12
	13-14-15-16-17-18-19-21-22-23-24-25
	27-28-30-32-33-36-37-38-39-40-41
	42-45-46-47-50-51-52-53-55-85-86

L	A	Sin . . . .
	B	1.5
	C	2.5
	D	3.8

L	pre-set	1	5 to 80bar
		2	80 to 175bar
		3	175 to 250bar
	Adjustable	11	5 to 80bar
		12	80 to 175bar
		13	175 to 250bar

L	V	Relief valve
	VD	R.valve and tank
	VC	Flow control valve with rel. valve
	VCD	Flow control valve with rel. valve and tank
	Rc	Priority flow valve

L	T-R-F-B-Etc.
	T R F B



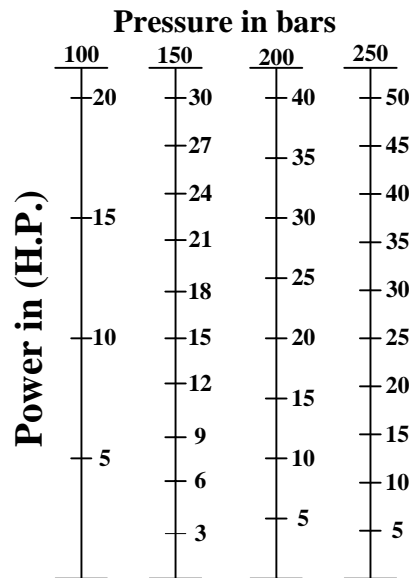
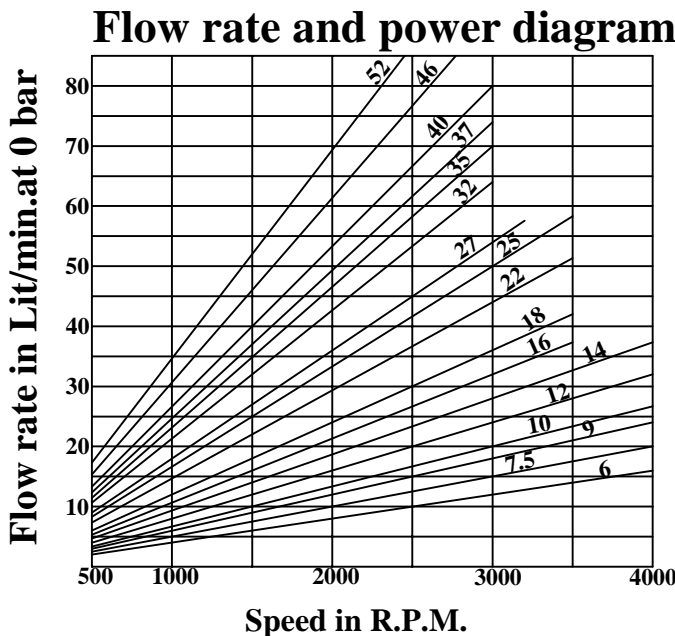
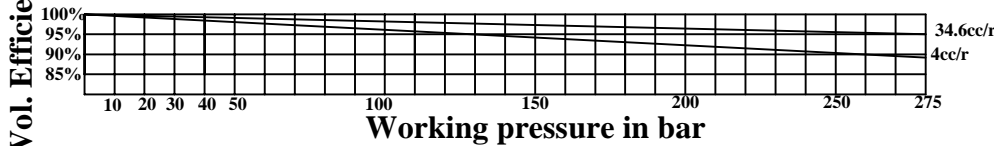
**General specification model L**

**Hydraulic technical data**

**Gear Pump Type-L**

Pump Flow RATE (L/Min) at 1500 R.P.M		6	7.5	9	10	12	14	16	18	22	25	27	32	35	37	40	46	52		
DISPLACEMENT (CC/rev)		4	5	6	6.6	8	9.3	10.6	12	14.6	16.6	18	21.3	23.3	24.6	26.6	30.6	34.6		
Cont .MAX.PRESSURE (bar)		275						250			225	175			145	135	120			
INTERMITENT MAX. PRESSURE (bar)		300						275			250	190			160	150	140			
R.P.M AT CONT.PRESSURE		3500				3000			2500		2300	2000			2000					
MAX. R.P.M		4000				3500			3200		3000			3000						
MIN. R.P.M AT GIVEN PRESSURES	100bar	500																		
	175bar	1200			1100			1100		850		850		750			750			
	250bar	1400				1300			1200		1100		1100			1000				
	300bar	1750				1500			+	+	+	+	+	+	+	+	+	+	+	

**Volumetric efficiencies diagram at 1500 R.P.M**



**NOTE :** The results have been obtained with 4.5° E viscosity oil and at 50° C



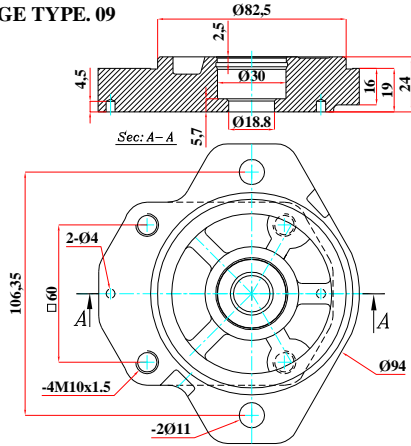
*General specification model L*

<b>Pump flow rate at 1500 RPM at 0 bar</b>	<b>Max. Pressure (bar)</b>	<b>Max. Speed (RPM)</b>	<b>Min. Speed (RPM)</b>
<b>1L 6</b>	300	4000	500
<b>1L 7.5</b>	300	4000	500
<b>1L 9</b>	300	4000	500
<b>1L 10.5</b>	300	4000	500
<b>1L 12</b>	300	4000	500
<b>1L 14</b>	300	4000	500
<b>1L 16</b>	300	3500	500
<b>1L 18</b>	300	3500	500
<b>1L 22</b>	250	2500	500
<b>1L 25</b>	250	3200	500
<b>1L 27</b>	250	3200	500
<b>1L 32</b>	190	3000	500
<b>1L 35</b>	190	3000	500
<b>1L 40</b>	160	3000	500
<b>1L 46</b>	150	3000	500
<b>1L 52</b>	140	3000	500

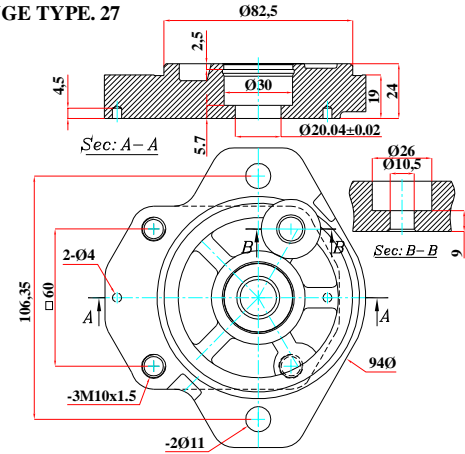


Flange type model L

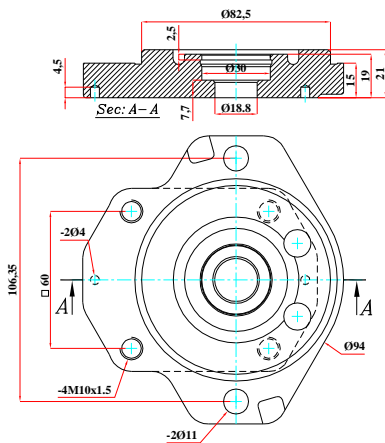
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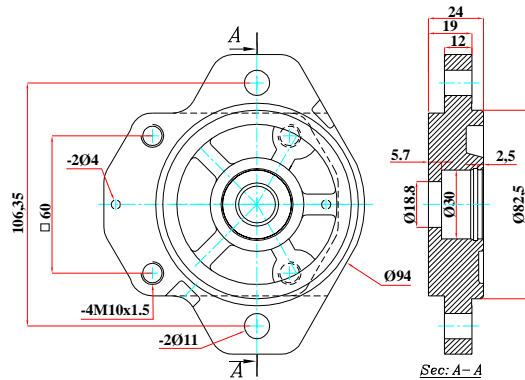
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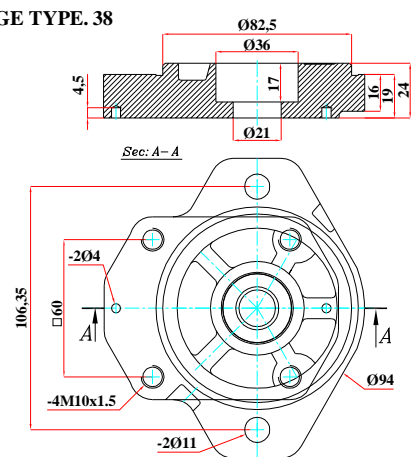
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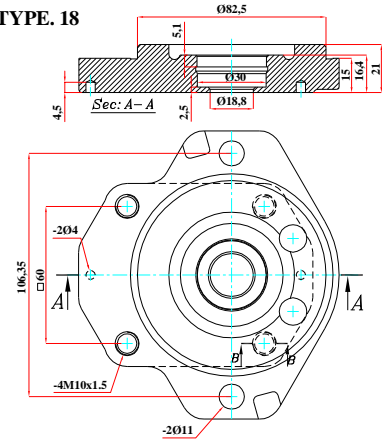
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FLANGE TYPE. 38



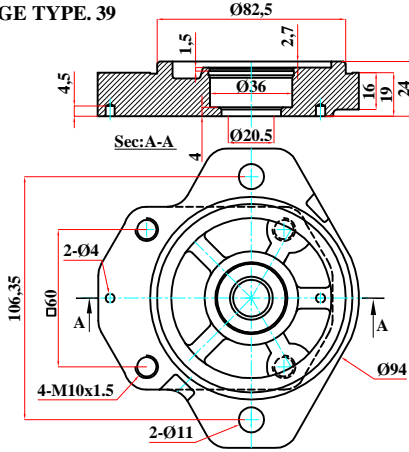
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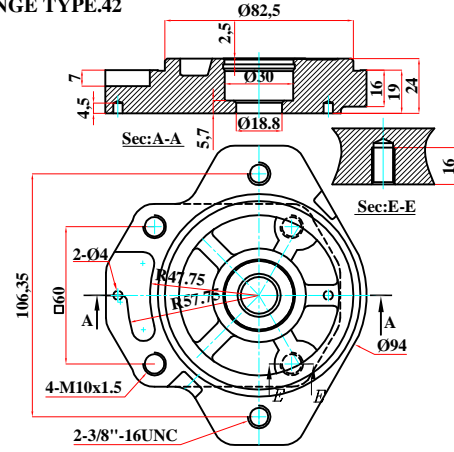


Flange type model L

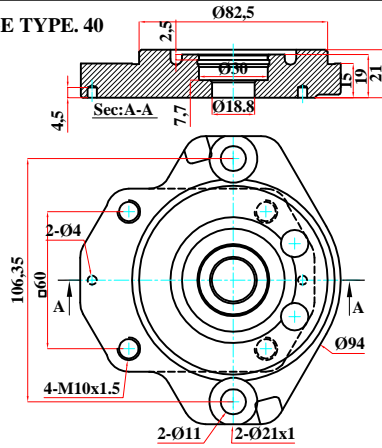
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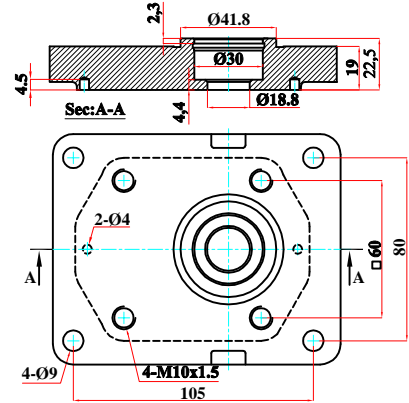
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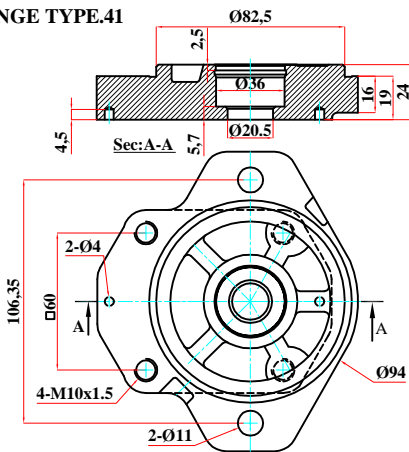
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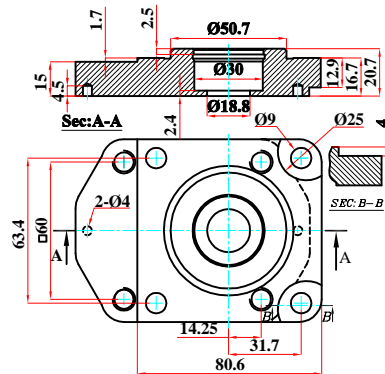
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FLANGE TYPE.41



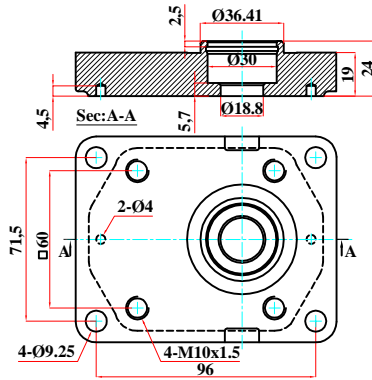
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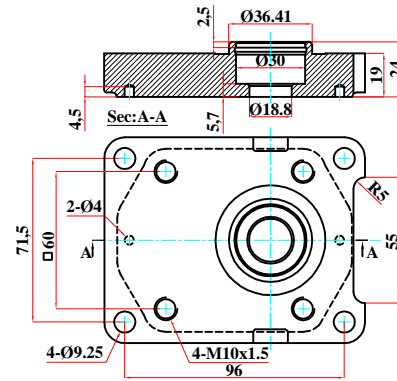


Flange type model L

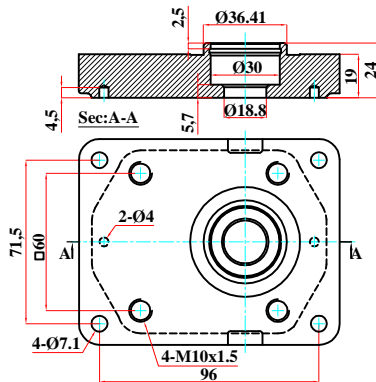
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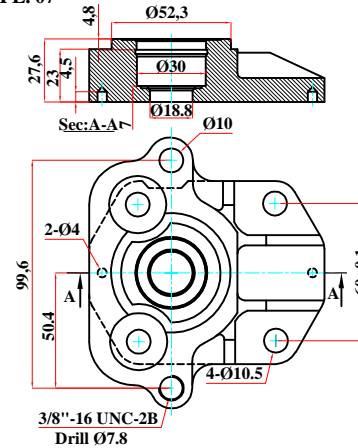
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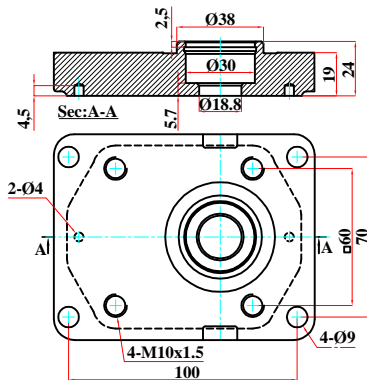
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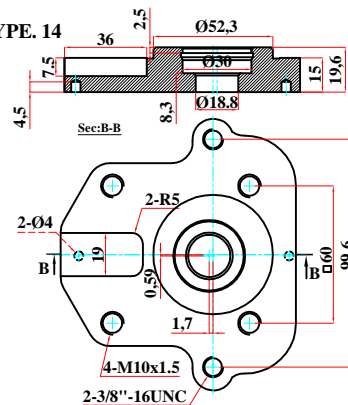
FLANGE TYPE. 07



FLANGE TYPE. 16



FLANGE TYPE. 14

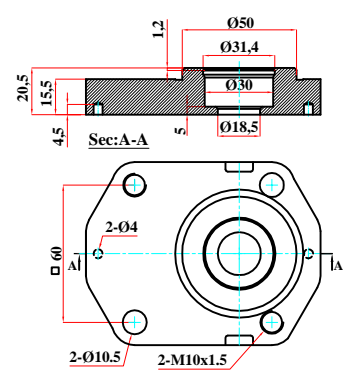


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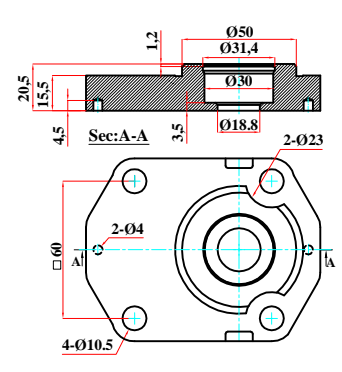
ARAFAN NAEIN CO.  
Precision, Speed, Quality in Producing Hydraulic Gear Pump  
Flange type model L



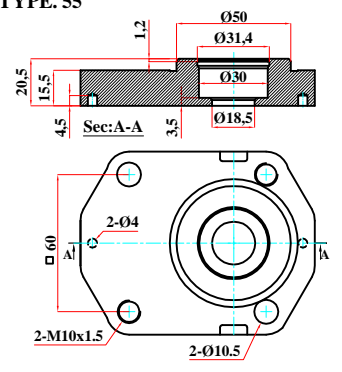
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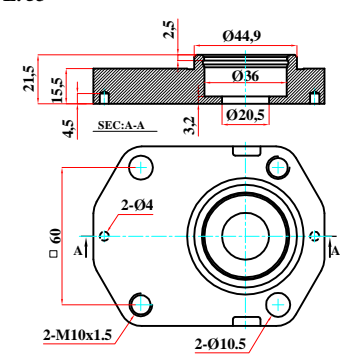
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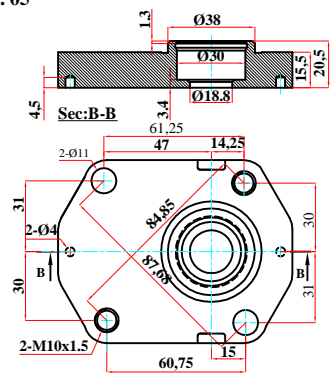
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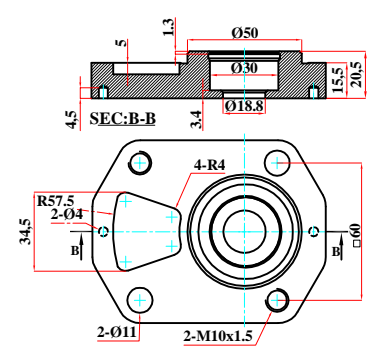
FLANGE TYPE. 53



FLANGE TYPE. 05



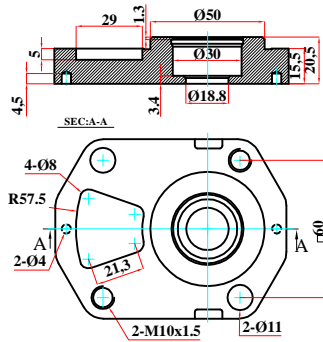
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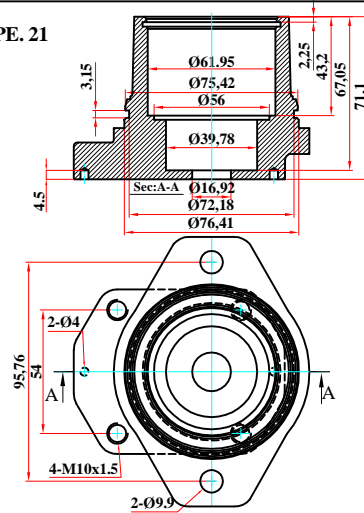


Flange type model L

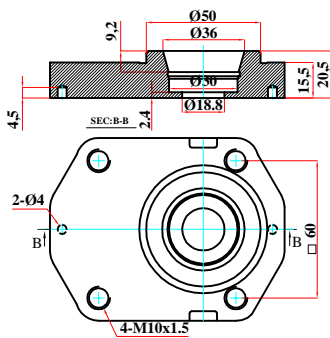
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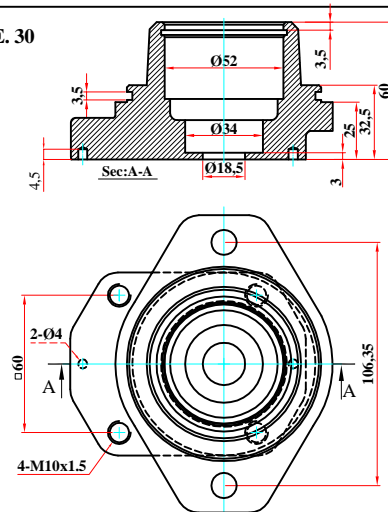
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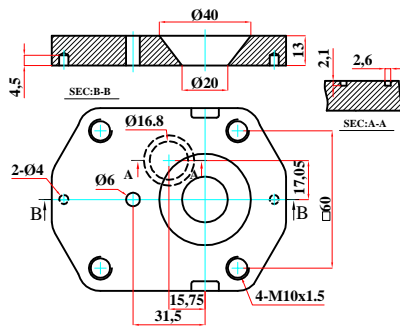
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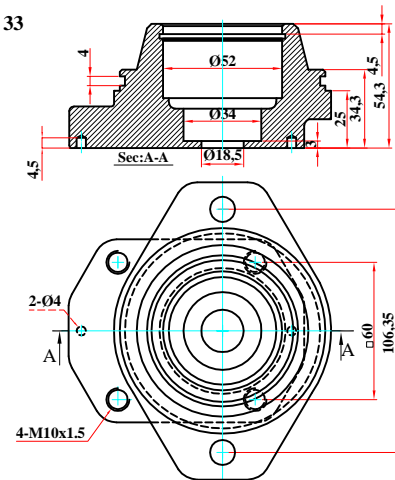
FLANGE TYPE. 30



FLANGE TYPE. 17



FLANGE TYPE. 33

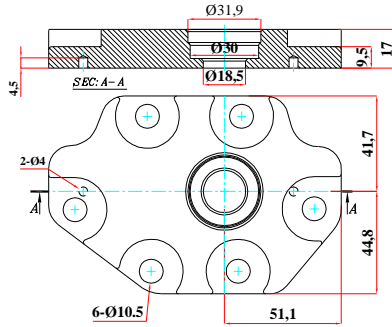




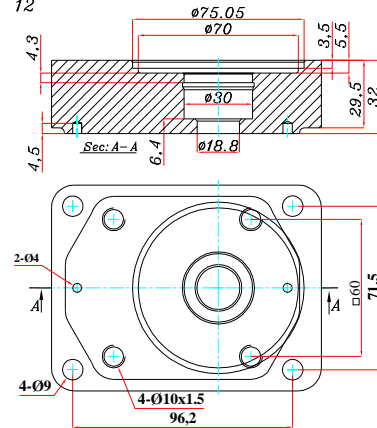


Flange type model L

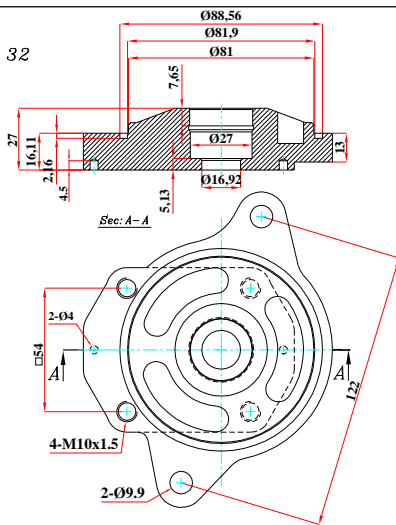
FLANGE TYPE. 28



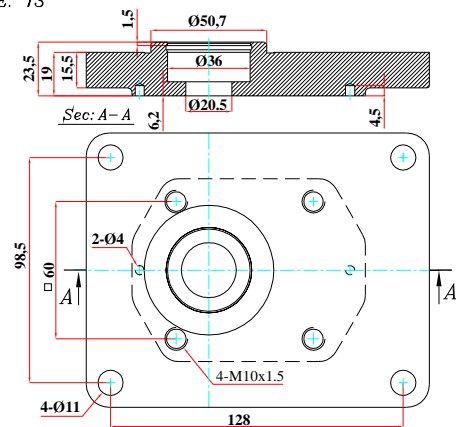
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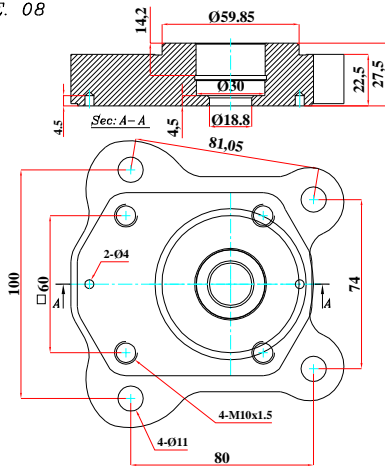
FLANGE TYPE. 32



FLANGE TYPE. 13



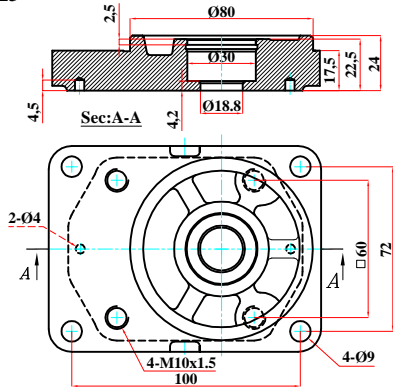
FLANGE TYPE. 08



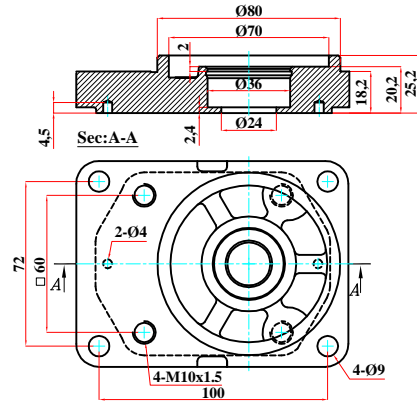


Flange type model L

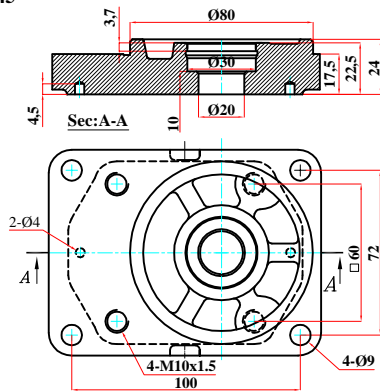
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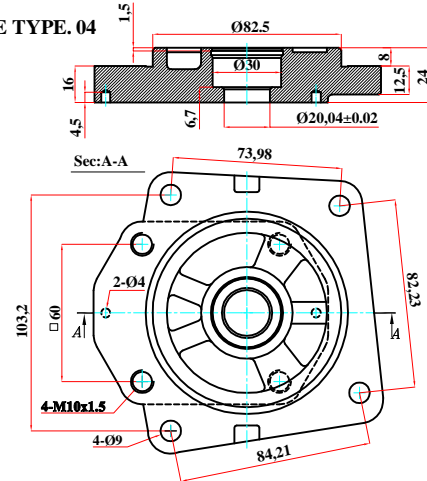
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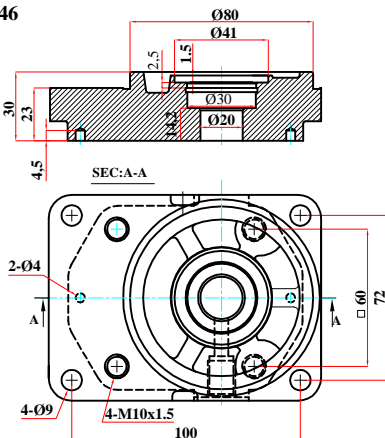
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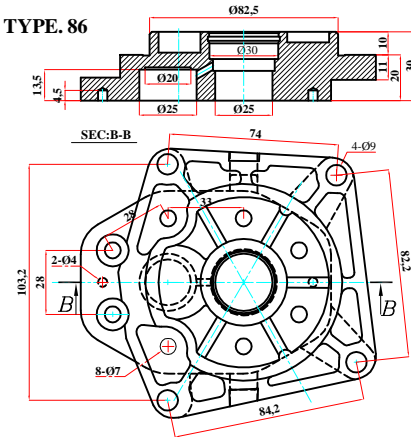
FLANGE TYPE. 04



FLANGE TYPE.46



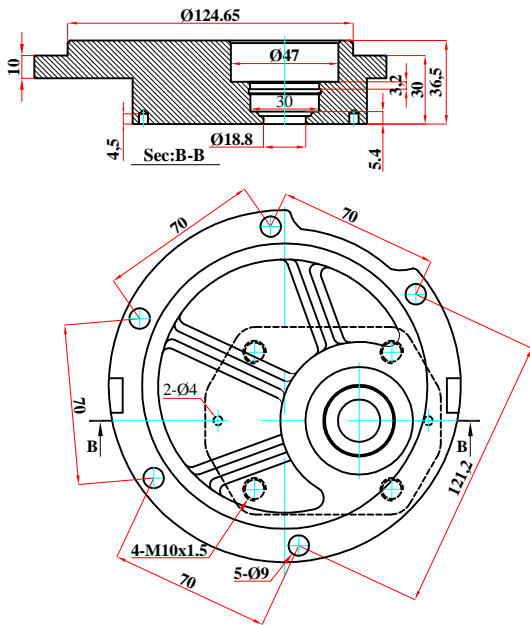
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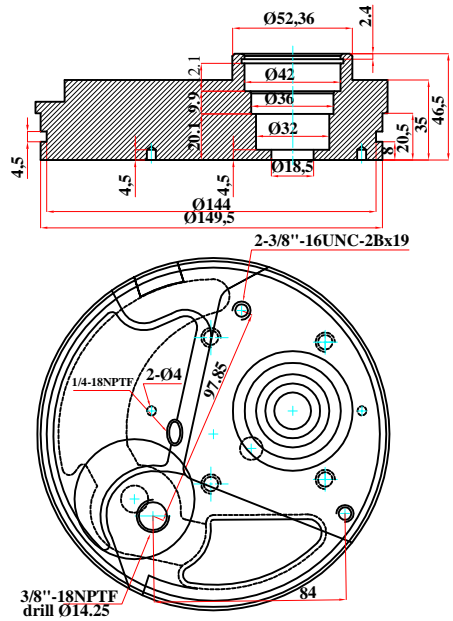


Flange type model L

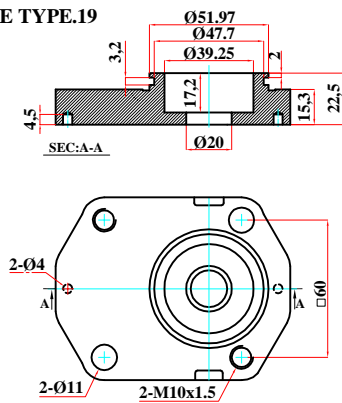
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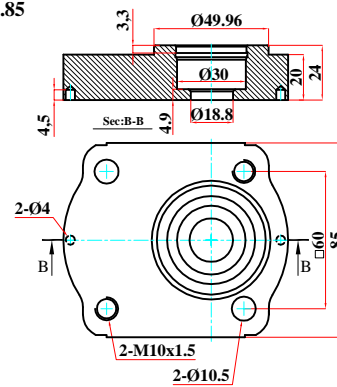
FLANGE TYPE. 03



FLANGE TYPE.19



FLANGE TYPE.85







Outlet & inlet type model L

**Model: B**

**BT315-317**

**BT318**

**B331**

**B331**

52	46	40	35	32	27	25	22	18	16	14	12	9	7.5	6	L/min	Parameter
															d	
20	20	20	20	20	20	20	20	20	20	20	20	13.5	13.5	13.5	D	d
40	40	40	40	40	40	40	40	40	40	40	40	30	30	30	D	d'
15	15	15	15	15	15	15	15	15	15	15	15	13.5	13.5	13.5	D'	d'
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	D'	d'
16	16	16	16	16	16	16	16	16	16	13	13	13	13	13	e	e

**B316**

**BF343**

**Model: F**

**FR338**

**FT364**

**F365**

52	46	40	35	32	27	25	22	18	16	14	12	9	7.5	6	L/min	Parameter
															d	
20	20	20	20	20	20	20	20	20	20	20	20	15	15	15	D	d
40	40	40	40	40	40	40	40	40	40	40	40	35	35	35	D	d'
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	D'	d'
35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	D'	d'

**Model: R**

**RT362**

**R339**

**R313**

**R325**

**R355**

**R350**

**RT344**

**BR311**

**BR311**

**R302**

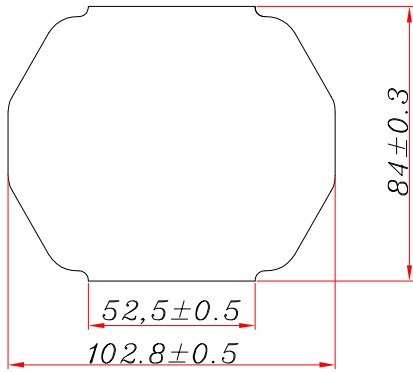
**Model: A**

**Model: C**

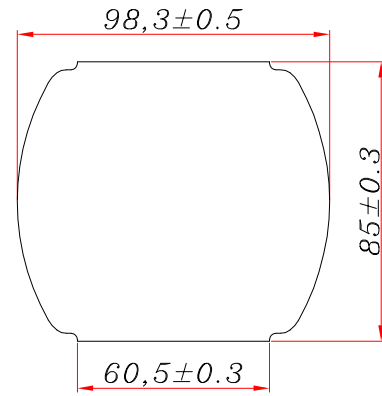
52	46	40	35	32	27	25	22	18	16	14	12	9	7.5	6	L/min	Parameter
															e	
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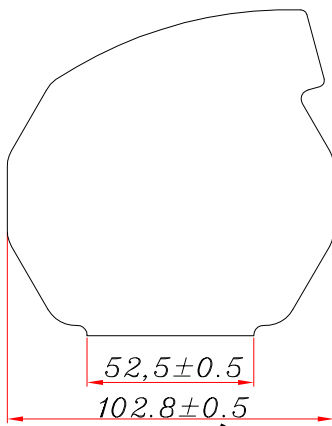
*Body form model L*



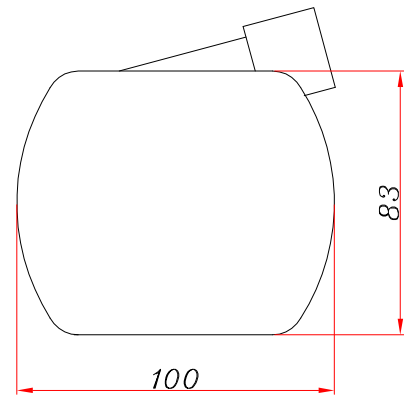
**01**



**03**



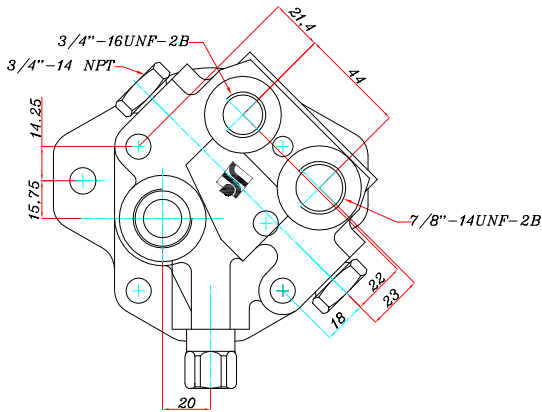
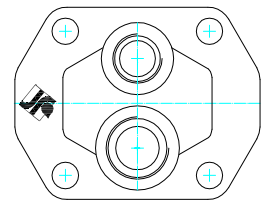
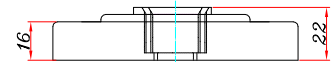
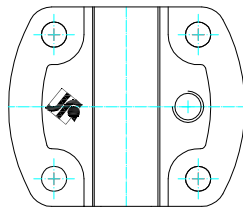
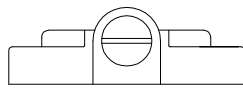
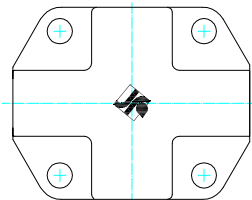
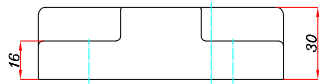
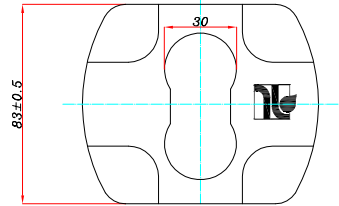
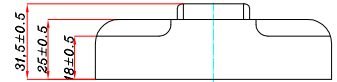
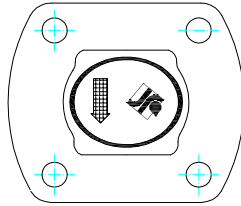
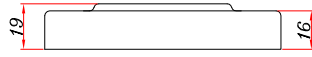
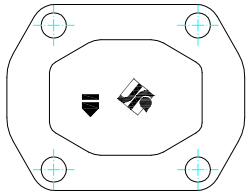
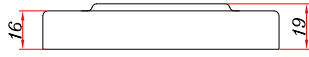
**02/1**



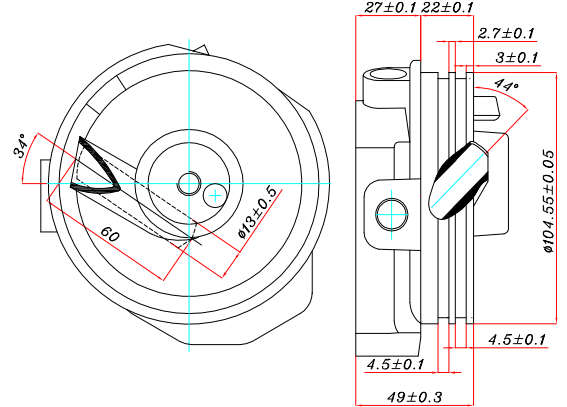
**02/2**



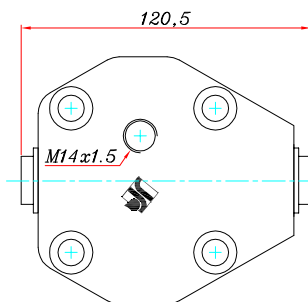
BACK COVER MODEL L



JOHN-DEERE

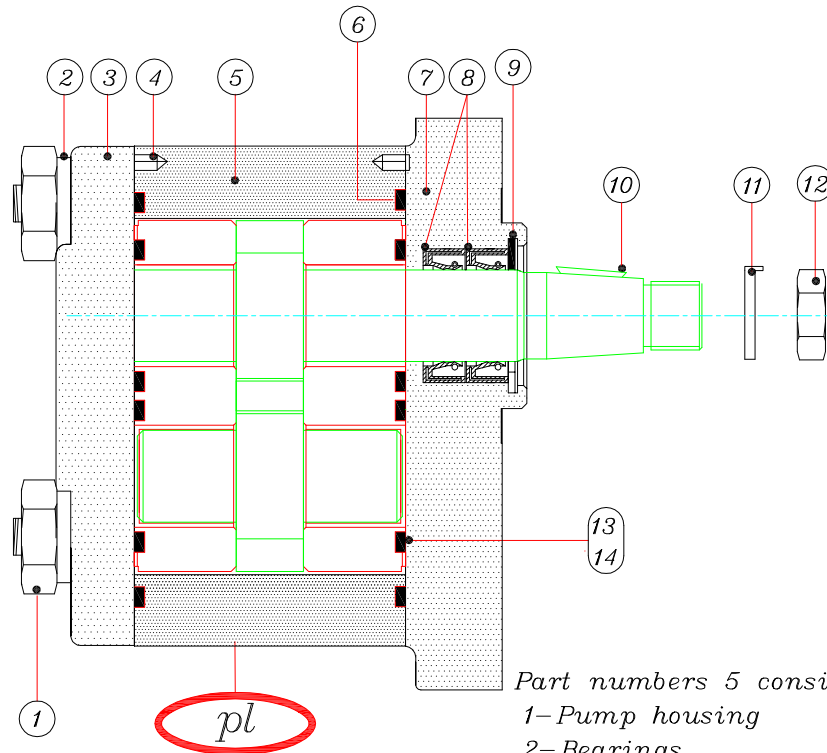


MF 285





Assembly pump model L



Part numbers 5 consists of:

- 1- Pump housing
- 2- Bearings
- 3- Driving gear
- 4- Driven gear

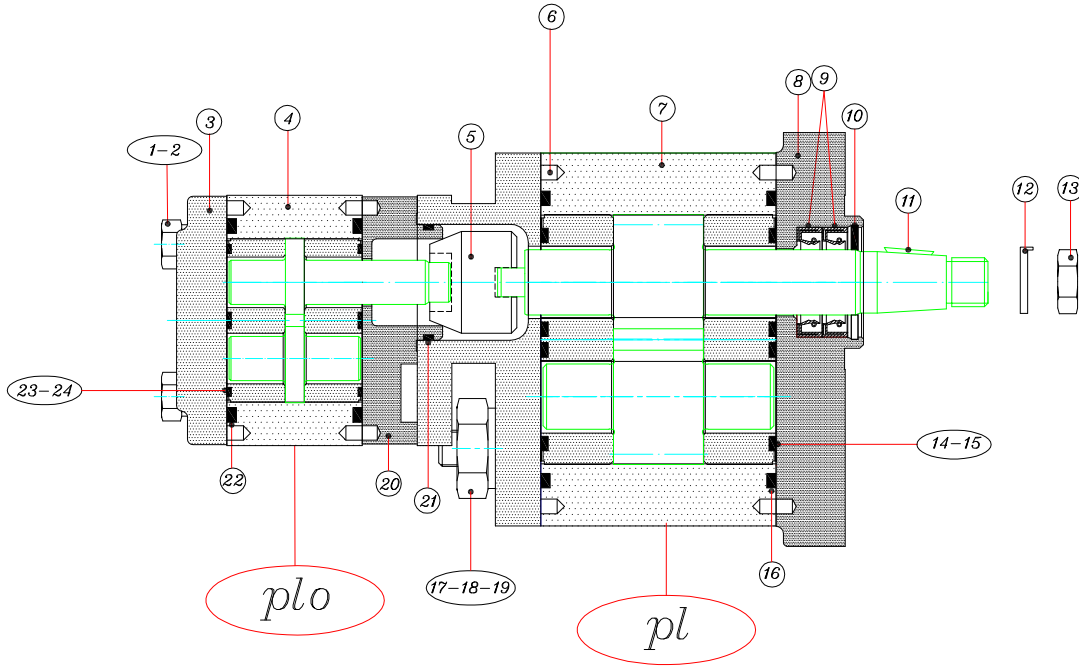
No.	Description	Qty
1	Screw M10	4
2	Washer $\phi 10$ DIN6797	4
3	Back cover	1
4	Elastic pin DIN-1481 $\phi 4 \times 8$	2
5	Pump housing sub-assembly	1
6	Gasket	2
7	Flange	1
8	Oil seal	2
9	Circlip	1
10	Key	1
11	Safety washer	1
12	Shaft nut	1
13	Gasket	2
14	Anti-extrusion gasket	2







Double pump model LS



Part numbers 4-7 consists of:

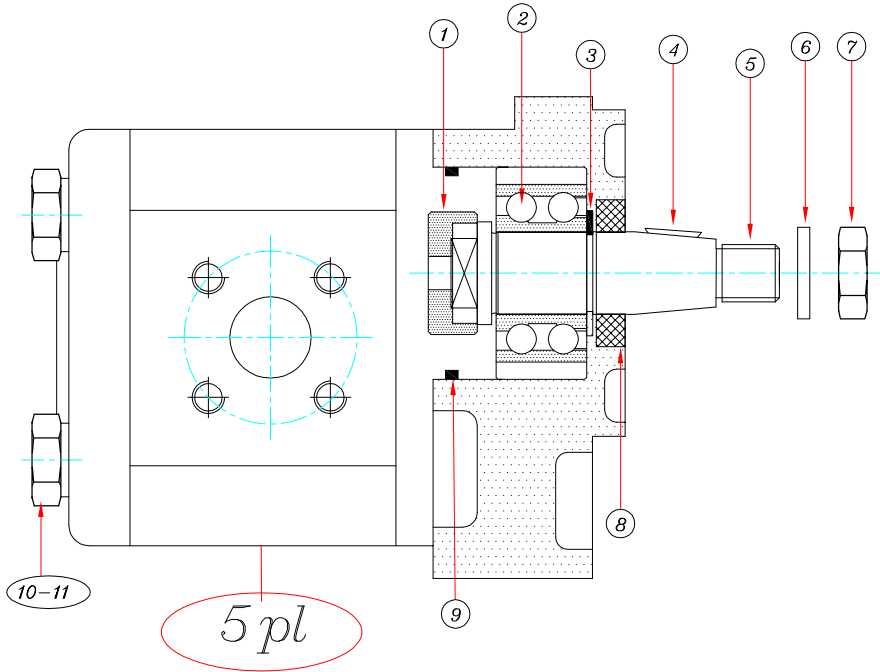
- 1- Pump housing
- 2- Bearings
- 3- Driving gear
- 4- Driven

No.	Description	Qty
1	Screw M8	4
2	Washer DIN679708	4
3	Back cover	1
4	Pump housing sub-assembly	1
5	Coupling	1
6	Elastic pin	6
7	Pump housing sub-assembly	1
8	Flange	1
9	Oil seal	2
10	Circlip	1
11	Key	1
12	Safety washer	1
13	Shaft nut	1
14	Gasket	2
15	Anti-extrusion gasket	2

No.	Description	Qty
16	Gasket	2
17	Screws	4
18	Nut	4
19	Washer DIN679708	4
20	Double pump flange	1
21	Oring 028*2	1
22	Gasket	2
23	Gasket	2
24	Anti-extrusion gasket	2



Assembly pump model 5L



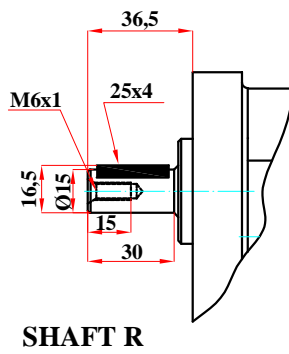
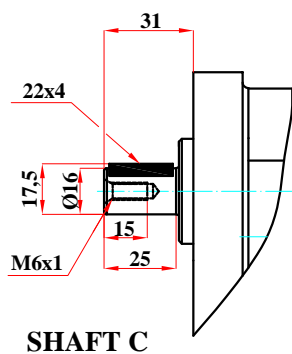
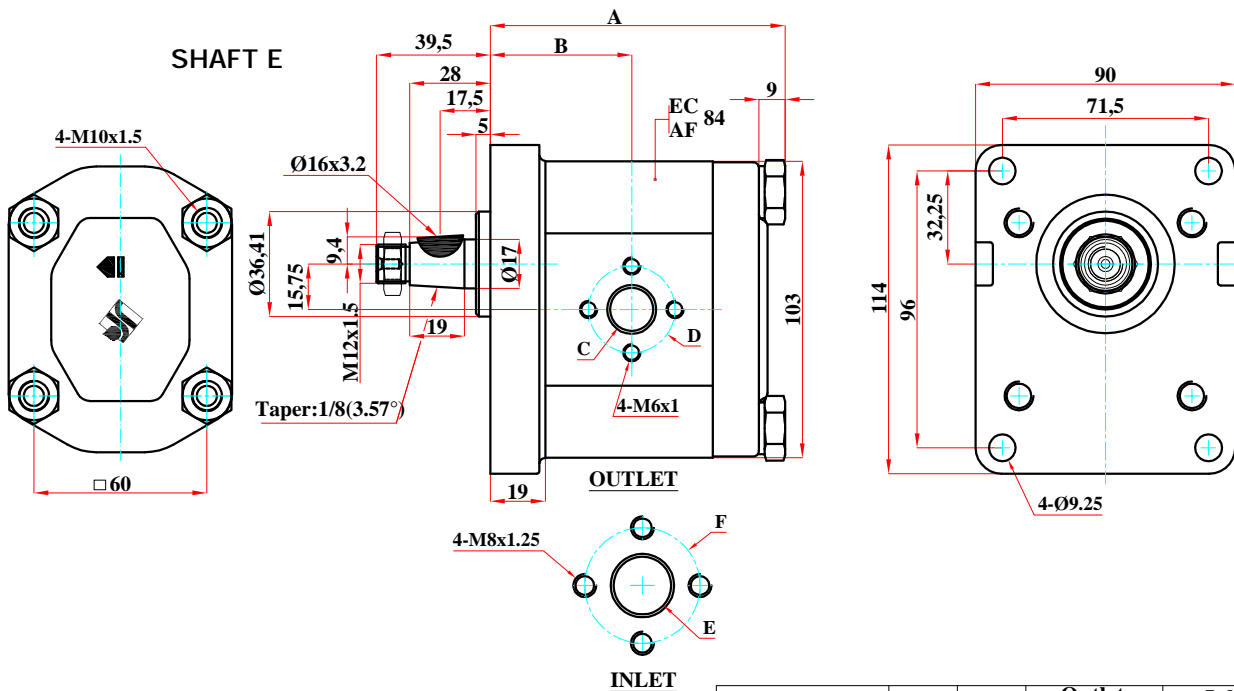
No.	Descripcion	Qut
1	Coupling	1
2	Ball bearing	1
3	CirclipDIN-471	1
4	Key	1
5	Driving shaft	1
6	WasherDIN-7980 $\phi 14$	1
7	Shaft nut	1
8	Oil seal	1
9	Oring $\phi 46 \times 2.5$	1
10	Screw	4
11	WasherDIN-6797 $\phi 10$	4



**Pump with flange type 10  
Model L**

**301-1L....(C/CC)E10B**

SHAFT E&C&R(01)  
OUTLET & INLET B  
FLANGE 10



Model	A	B	Outlet		Inlet		Weight
			C	D	E	F	
301-1L6C▲ 10B	91	40	13.5	30	13.5	30	
301-1L7.5C▲ 10B	92.7	40	13.5	30	13.5	30	
301-1L9C▲ 10B	94.4	42.5	13.5	30	13.5	30	
301-1L12C▲ 10B	97.6	44.6	15	30	20	40	
301-1L14C▲ 10B	99.8	44.6	15	30	20	40	
301-1L16C▲ 10B	102.1	49	15	30	20	40	
301-1L18C▲ 10B	104.3	49	15	30	20	40	
301-1L22C▲ 10B	108.9	49	15	30	20	40	
301-1L25C▲ 10B	112.3	49	15	30	20	40	
301-1L27C▲ 10B	114.6	49	15	30	20	40	
301-1L32C▲ 10B	120.7	54.7	15	30	20	40	
301-1L35C▲ 10B	123.6	56.5	15	30	20	40	
301-1L40C▲ 10B	129.8	59.3	15	30	20	40	
301-1L46C▲ 10B	136.1	62	15	30	20	40	
301-1L52C▲ 10B	143	66.2	15	30	20	40	

In the reversible pumps , threaded ports available R only .both ports same dimension that corresponds to the suction dimension

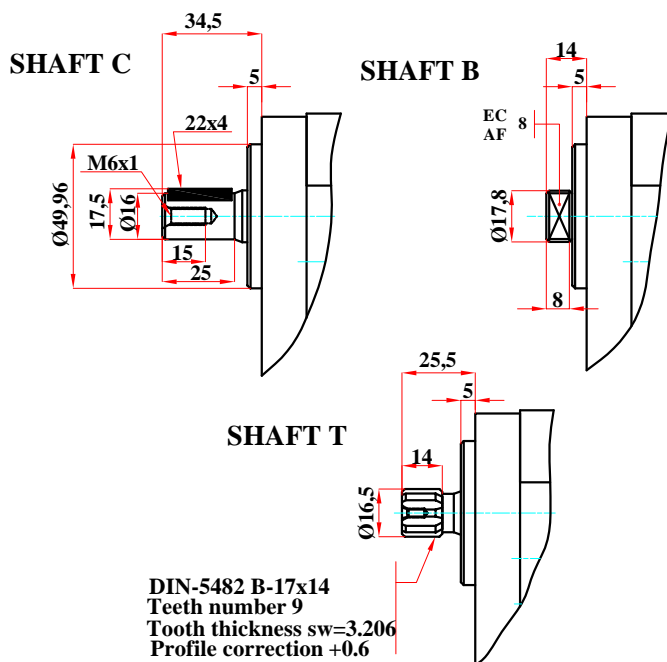
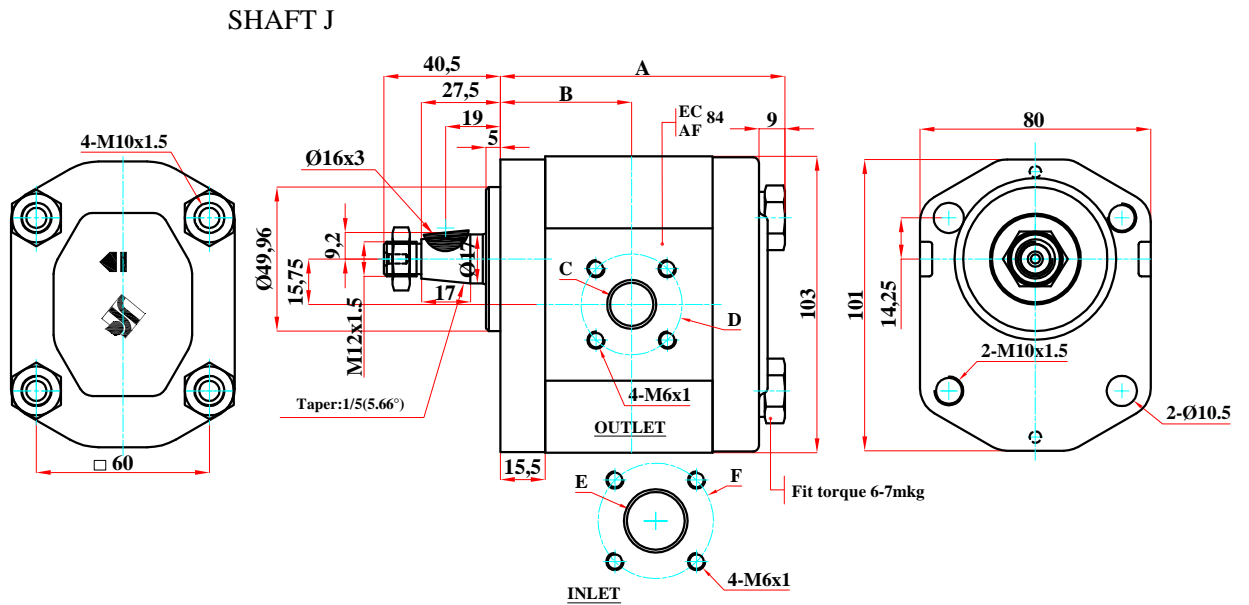
The drawing above shows a pump turning clockwise .For anti -clockwise rotation sense ;replace C by CC in which case suction and pressure ports shall be inverted



**Pump with flange type 22  
Model L**

**301-1L...(C/CC)J22F**

**SHAFT J&C&B&T(01)  
OUTLET & INLET F  
FLANGE 22**



Model	A	B	OUTLET		INLET		Weight
			C	D	E	F	
301-1L6CA22F	87.5	36.5	15	35	15	40	
301-1L7.5CA22F	89.2	36.5	15	35	15	40	
301-1L9CA22F	90.9	39	15	35	15	40	
301-1L12CA22F	94.1	41.1	15	35	20	40	
301-1L14CA22F	96.3	41.1	15	35	20	40	
301-1L16CA22F	98.6	45.5	15	35	20	40	
301-1L18CA22F	100.8	45.5	15	35	20	40	
301-1L22CA22F	105.4	45.5	15	35	20	40	
301-1L25CA22F	108.8	45.5	15	35	20	40	
301-1L27CA22F	111.1	45.5	15	35	20	40	
301-1L32CA22F	117.2	51.2	15	35	20	40	
301-1L35CA22F	120.1	53	15	35	20	40	
301-1L40CA22F	126.3	55.8	15	35	20	40	
301-1L46CA22F	132.6	58.5	15	35	20	40	
301-1L52CA22F	139.5	62.7	15	35	20	40	

In the reversible pumps, threaded ports available R only. both ports same dimension that corresponds to the suction dimension  
The drawing above shows a pump turning clockwise. For anti-clockwise rotation sense; replace C by CC in which case suction and pressure ports shall be inverted

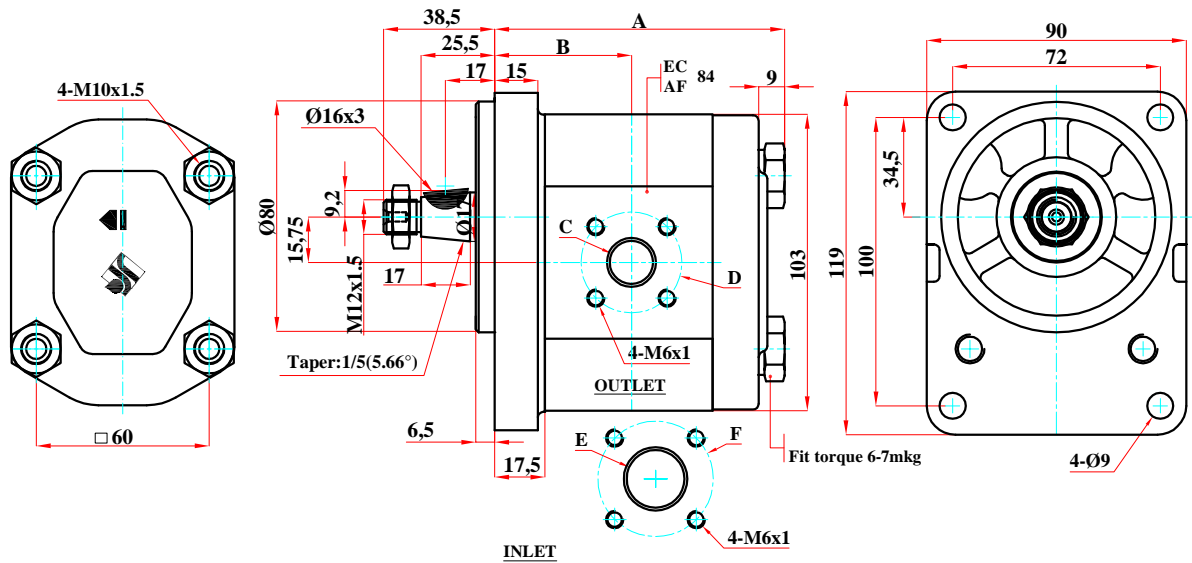


**Pump with flange type 23  
Model L**

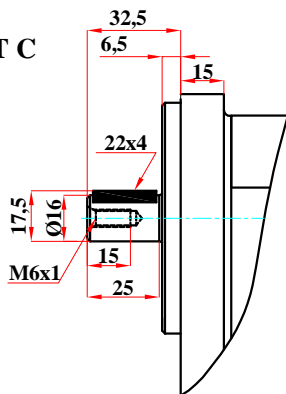
**301-1L....(C/CC)J23F**

**SHAFT J&C&B&T(01)  
OUTLET & INLET F  
FLANGE 23**

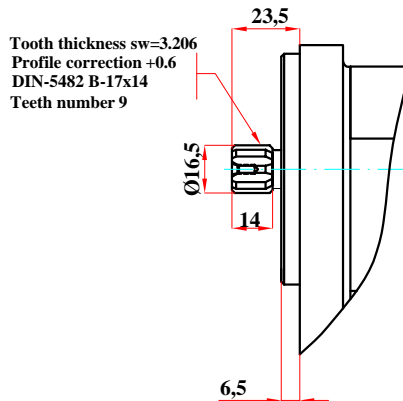
**SHAFT J**



**SHAFT C**



**SHAFT T**



Model	A	B	OUTLET		INLET		Weight
			C	D	E	F	
301-1L6C▲23F	89.5	38.5	15	35	15	40	
301-1L7.5C▲23F	91.2	38.5	15	35	15	40	
301-1L9C▲23F	92.9	41	15	35	15	40	
301-1L12C▲23F	96.1	43.1	15	35	20	40	
301-1L14C▲23F	98.3	43.1	15	35	20	40	
301-1L16C▲23F	100.6	47.5	15	35	20	40	
301-1L18C▲23F	102.8	47.5	15	35	20	40	
301-1L22C▲23F	107.4	47.5	15	35	20	40	
301-1L25C▲23F	110.8	47.5	15	35	20	40	
301-1L27C▲23F	113.1	47.5	15	35	20	40	
301-1L32C▲23F	119.2	53.2	15	35	20	40	
301-1L35C▲23F	122.1	55	15	35	20	40	
301-1L40C▲23F	128.3	57.8	15	35	20	40	
301-1L46C▲23F	134.6	60.5	15	35	20	40	
301-1L52C▲23F	141.5	64.7	15	35	20	40	

In the reversible pumps, threaded ports available R only. Both ports same dimension that corresponds to the suction dimension. The drawing above shows a pump turning clockwise. For anti-clockwise rotation sense, replace C by CC in which case suction and pressure ports shall be inverted.

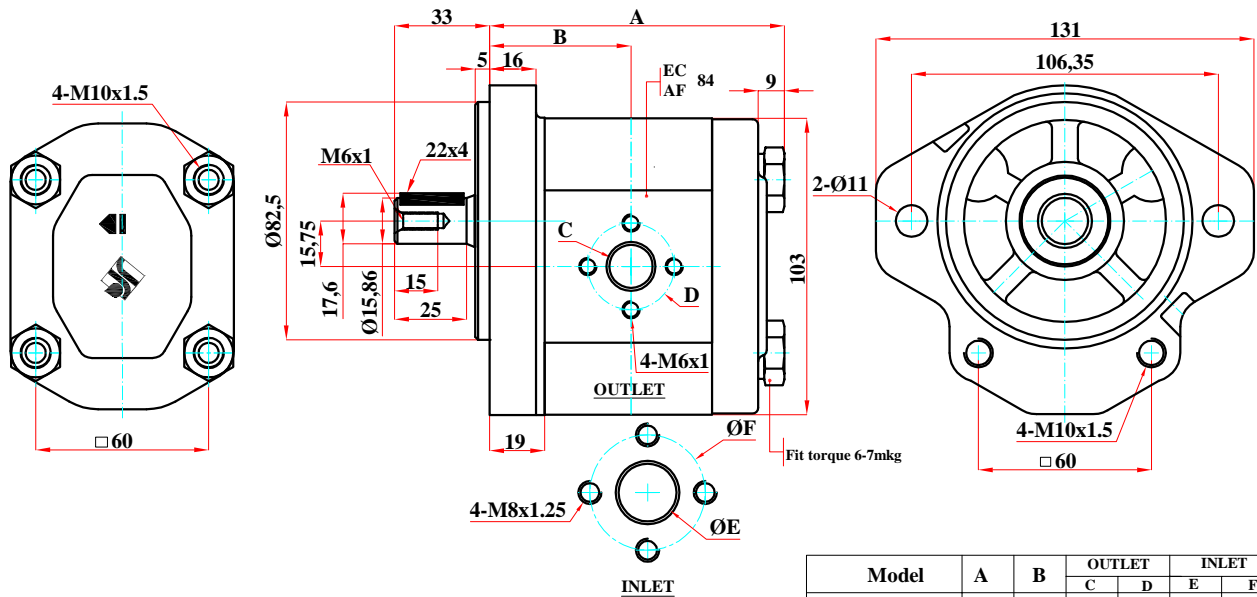


**Pump with flange type 09  
Model L**

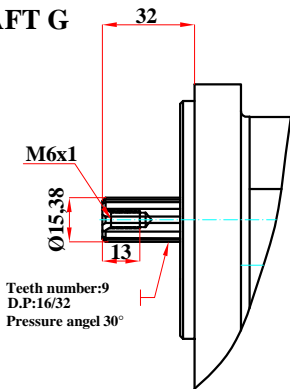
**301-1L....(C/CC)H09B**

**SHAFT H&G&K(01)  
OUTLET & INLET B  
FLANGE 09**

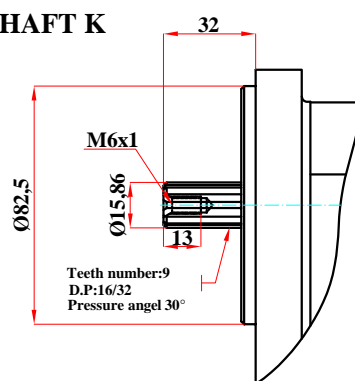
**SHAFT H**



**SHAFT G**



**SHAFT K**



Model	A	B	OUTLET		INLET		Weight
			C	D	E	F	
301-1L6CA09B	91	40	13.5	30	13.5	30	
301-1L7.5CA09B	92.7	40	13.5	30	13.5	30	
301-1L9CA09B	94.4	42.5	13.5	30	13.5	30	
301-1L12CA09B	97.6	44.6	15	30	20	40	
301-1L14CA09B	99.8	44.6	15	30	20	40	
301-1L16CA09B	102.1	49	15	30	20	40	
301-1L18CA09B	104.3	49	15	30	20	40	
301-1L22CA09B	108.9	49	15	30	20	40	
301-1L25CA09B	112.3	49	15	30	20	40	
301-1L27CA09B	114.6	49	15	30	20	40	
301-1L32CA09B	120.7	54.7	15	30	20	40	
301-1L35CA09B	123.6	56.5	15	30	20	40	
301-1L40CA09B	129.8	59.3	15	30	20	40	
301-1L46CA09B	136.1	62	15	30	20	40	
301-1L52CA09B	143	66.2	15	30	20	40	

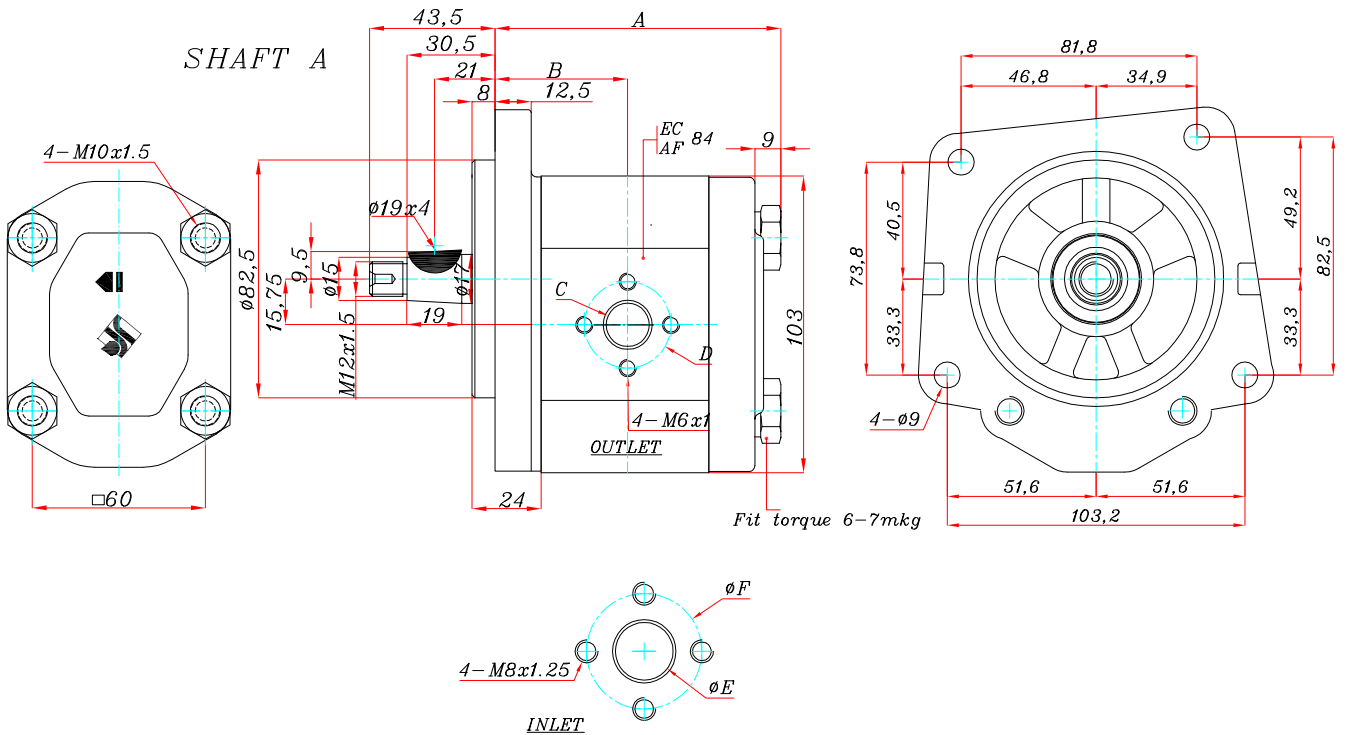
In the reversible pumps , threaded ports available R only .both ports same dimension that corresponds to the suction dimension  
The drawing above shows a pump turning clockwise .For anti -clockwise rotation sense ;replace C by CC in which case suction and pressure ports shall be inverted



Pump with flange type 04  
Model L

301-1L....(C/CC)A04B

SHAFT A(01)  
OUTLET & INLET B  
FLANGE 04



Model	A	B	Outlet		Inlet		Weight
			C	D	E	F	
301-1L6CA04B	91	40	13.5	30	13.5	30	
301-1L7.5CA04B	92.7	40	13.5	30	13.5	30	
301-1L9CA04B	94.4	42.5	13.5	30	13.5	30	
301-1L12CA04B	97.6	44.6	15	30	20	40	
301-1L14CA04B	99.8	44.6	15	30	20	40	
301-1L16CA04B	102.1	49	15	30	20	40	
301-1L18CA04B	104.3	49	15	30	20	40	
301-1L22CA04B	108.9	49	15	30	20	40	
301-1L25CA04B	112.3	49	15	30	20	40	
301-1L27CA04B	114.6	49	15	30	20	40	
301-1L32CA04B	120.7	54.7	15	30	20	40	
301-1L35CA04B	123.6	56.5	15	30	20	40	
301-1L40CA04B	129.8	59.3	15	30	20	40	
301-1L46CA04B	136.1	62	15	30	20	40	
301-1L52CA04B	143	66.2	15	30	20	40	

In the reversible pumps , threaded ports available R only .both ports same dimension that corresponds to the suction dimension  
The drawing above shows a pump turning clockwise .For anti -clockwise rotation sense ;replace C by CC in which case suction and pressure ports shall be inverted

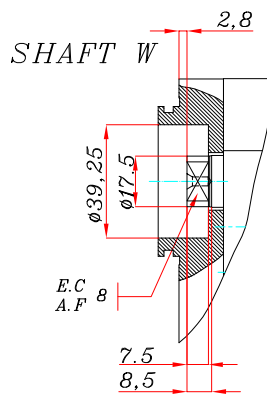
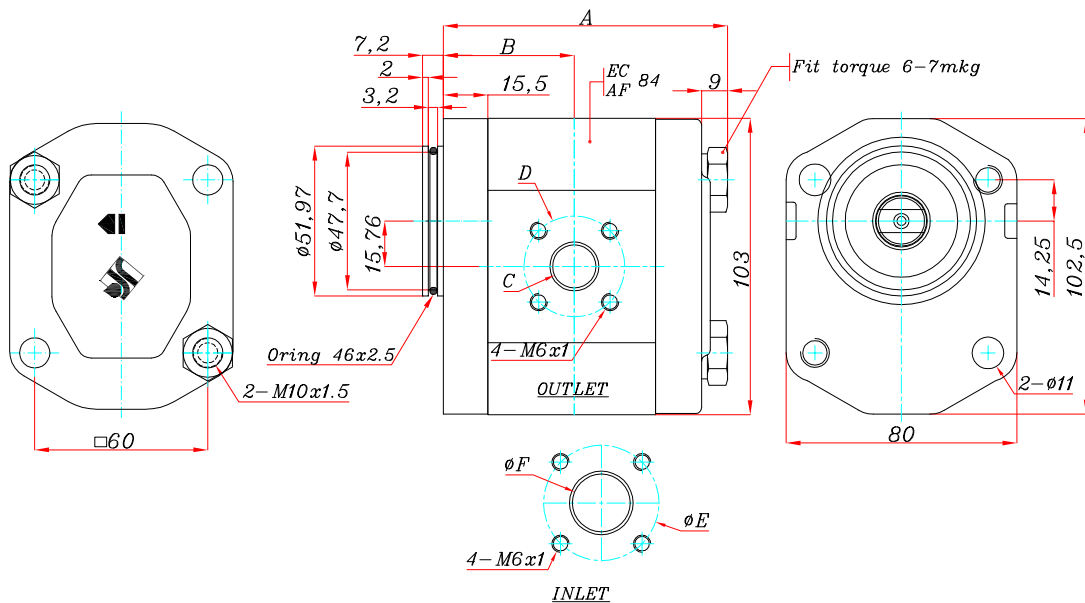




Pump with flange type 19  
Model L

301-1L...(C/CC)W19F

SHAFT W(01)  
OUTLET & INLET F  
FLANGE 19



Model	A	B	Outlet		Inlet		Weight
			C	D	E	F	
301-1L6CW19F	87.5	36.5	15	35	15	40	
301-1L7.5CW19F	89.2	36.5	15	35	15	40	
301-1L9CW19F	90.9	39	15	35	15	40	
301-1L12CW19F	94.1	41.1	15	35	20	40	
301-1L14CW19F	96.3	41.1	15	35	20	40	
301-1L16CW19F	98.6	45.5	15	35	20	40	
301-1L18CW19F	100.8	45.5	15	35	20	40	
301-1L22CW19F	105.4	45.5	15	35	20	40	
301-1L25CW19F	108.8	45.5	15	35	20	40	
301-1L27CW19F	111.1	45.5	15	35	20	40	
301-1L32CW19F	117.2	51.2	15	35	20	40	
301-1L35CW19F	120.1	53	15	35	20	40	
301-1L40CW19F	126.3	55.8	15	35	20	40	
301-1L46CW19F	132.6	58.5	15	35	20	40	
301-1L52CW19F	139.5	62.7	15	35	20	40	

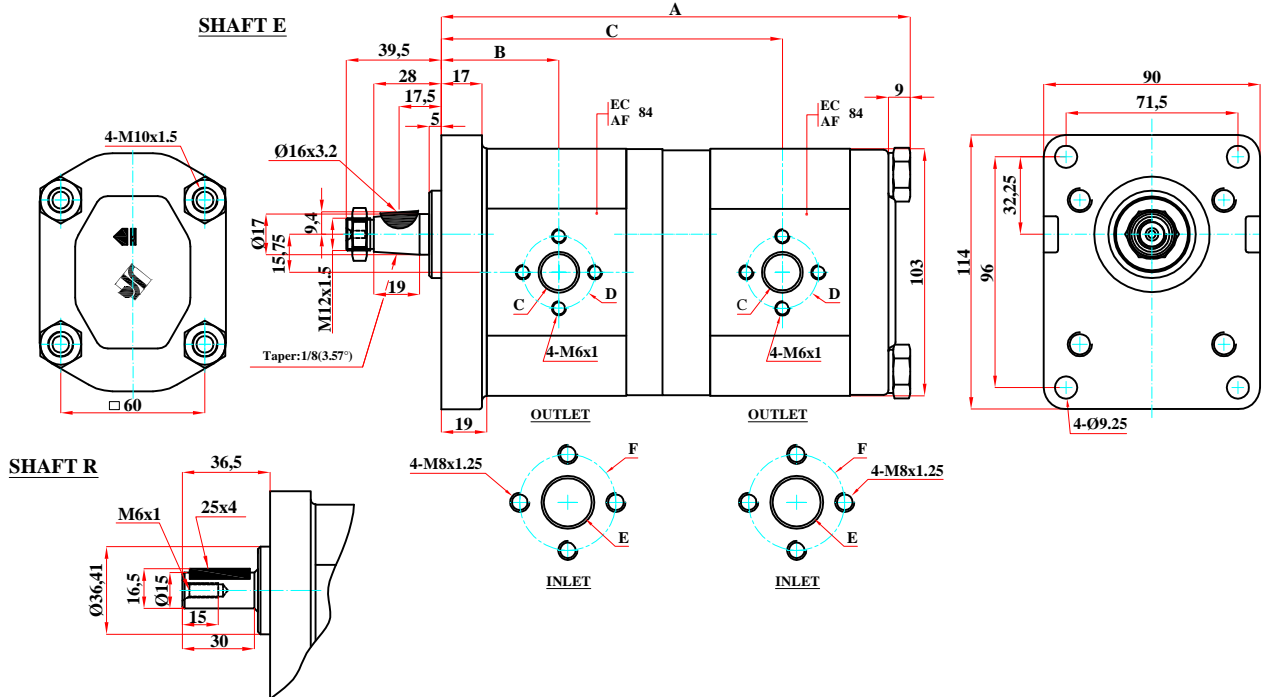
In the reversible pumps, threaded ports available R only. both ports same dimension that corresponds to the suction dimension. The drawing above shows a pump turning clockwise. For anti-clockwise rotation sense; replace C by CC in which case suction and pressure ports shall be inverted.



Double pump with flange type 10  
Model LM

301-1LM...(C/CC)E10B

SHAFT E&R (01)  
OUTLET & INLET B  
FLANGE 10



Model	A	B	C	Model	A	B	C	OUTLET		INLET		Model	A	B	C	Model	A	B	C	OUTLET		INLET	
								C	D	E	F									C	D	E	F
301-1LM6-6CA10B	172.9	40	121.9	301-1LM22-9CA10B	194.2	49	142.3					301-1LM32-16CA10B	213.7		160.6	301-1LM40-40CA10B	250.5	59.3	180				
301-1LM7.5-6CA10B	174.6		123.6	301-1LM22-12CA10B	197.4		144.4	15	30	20	40	301-1LM32-18CA10B	215.9			301-1LM46-6CA10B	218	62	167	15	30	20	40
301-1LM7.5-7.5CA10B	176.3			301-1LM22-14CA10B	199.6			*		*	*	301-1LM32-22CA10B	220.5			301-1LM46-7.5CA10B	219.7			*		*	*
301-1LM9-6CA10B	176.3		125.3	301-1LM22-16CA10B	201.9		148.8					301-1LM32-25CA10B	223.9			301-1LM46-9CA10B	221.4						
301-1LM9-7.5CA10B	178			301-1LM22-18CA10B	204.1							301-1LM32-27CA10B	226.2			301-1LM46-12CA10B	224.6						
301-1LM9-9CA10B	179.7		127.8	301-1LM22-22CA10B	208.7		143.2					301-1LM32-32CA10B	232.3	166.3		301-1LM46-14CA10B	226.8						
301-1LM12-6CA10B	179.5			301-1LM25-6CA10B	194.2		143.2					301-1LM35-6CA10B	205.5	154.5		301-1LM46-16CA10B	229.1						
301-1LM12-7.5CA10B	181.2		128.5	301-1LM25-7.5CA10B	195.9		143.2					301-1LM35-7.5CA10B	207.2			301-1LM46-18CA10B	231.3						
301-1LM12-9CA10B	182.9		131	301-1LM25-9CA10B	197.6		145.7					301-1LM35-9CA10B	208.9	157		301-1LM46-22CA10B	235.9						
301-1LM12-12CA10B	186.1		133.1	301-1LM25-12CA10B	200.8		147.8					301-1LM35-12CA10B	212.1			301-1LM46-25CA10B	239.3						
301-1LM14-6CA10B	181.7		130.7	301-1LM25-14CA10B	203		147.8					301-1LM35-14CA10B	214.3	159.1		301-1LM46-27CA10B	241.6						
301-1LM14-7.5CA10B	183.4			301-1LM25-16CA10B	205.3		152.2					301-1LM35-16CA10B	216.6			301-1LM46-32CA10B	247.7						
301-1LM14-9CA10B	185.1		133.2	301-1LM25-18CA10B	207.5		152.2					301-1LM35-18CA10B	218.8	163.5		301-1LM46-35CA10B	250.6						
301-1LM14-12CA10B	188.3		135.3	301-1LM25-22CA10B	212.1							301-1LM35-22CA10B	223.4			301-1LM46-40CA10B	256.8						
301-1LM14-14CA10B	190.5			301-1LM25-25CA10B	215.5							301-1LM35-25CA10B	226.8			301-1LM46-46CA10B	263.1						
301-1LM16-6CA10B	184		133	301-1LM27-6CA10B	196.5		145.5					301-1LM35-27CA10B	229.1	169.2		301-1LM46-48CA10B	263.1	66.2	173.9				
301-1LM16-7.5CA10B	185.7			301-1LM27-7.5CA10B	198.2							301-1LM35-32CA10B	235.2	171		301-1LM52-6CA10B	224.9						
301-1LM16-9CA10B	187.4		135.5	301-1LM27-9CA10B	199.9		148					301-1LM35-35CA10B	238.1	169.2		301-1LM52-7.5CA10B	226.6						
301-1LM16-12CA10B	190.6			301-1LM27-12CA10B	203.1		150.1					301-1LM40-6CA10B	211.7	171		301-1LM52-9CA10B	228.3						
301-1LM16-14CA10B	192.8		137.6	301-1LM27-14CA10B	205.3		150.1					301-1LM40-7.5CA10B	213.4	160.7		301-1LM52-12CA10B	231.5						
301-1LM16-16CA10B	195.1		142	301-1LM27-16CA10B	207.6		154.5					301-1LM40-9CA10B	215.1	163.2		301-1LM52-14CA10B	233.7						
301-1LM18-6CA10B	186.2		135.2	301-1LM27-18CA10B	209.8							301-1LM40-12CA10B	218.3	165.3		301-1LM52-16CA10B	236						
301-1LM18-7.5CA10B	187.9			301-1LM27-22CA10B	214.4							301-1LM40-14CA10B	220.5	169.7		301-1LM52-18CA10B	238.2						
301-1LM18-9CA10B	189.6		137.7	301-1LM27-25CA10B	217.8							301-1LM40-16CA10B	222.8			301-1LM52-22CA10B	242.8						
301-1LM18-12CA10B	192.8		139.8	301-1LM27-27CA10B	220.1		151.6					301-1LM40-18CA10B	225	169.7		301-1LM52-25CA10B	246.2						
301-1LM18-14CA10B	195			301-1LM32-6CA10B	202.6	54.7						301-1LM40-22CA10B	229.6			301-1LM52-27CA10B	248.5						
301-1LM18-16CA10B	197.3		144.2	301-1LM32-7.5CA10B	204.3		151.6					301-1LM40-25CA10B	233	175.4		301-1LM52-32CA10B	254.6						
301-1LM18-18CA10B	199.5			301-1LM32-9CA10B	206		154.1					301-1LM40-27CA10B	235.3			301-1LM52-35CA10B	257.5						
301-1LM22-6CA10B	190.8	49	139.8	301-1LM32-12CA10B	209.2		156.2					301-1LM40-32CA10B	241.4	177.2		301-1LM52-40CA10B	263.7						
301-1LM22-7.5CA10B	192.5			301-1LM32-14CA10B	211.4							301-1LM40-35CA10B	244.3			301-1LM52-46CA10B	270						

In the reversible pumps , threaded ports available R only .both ports same dimension that corresponds to the suction dimension

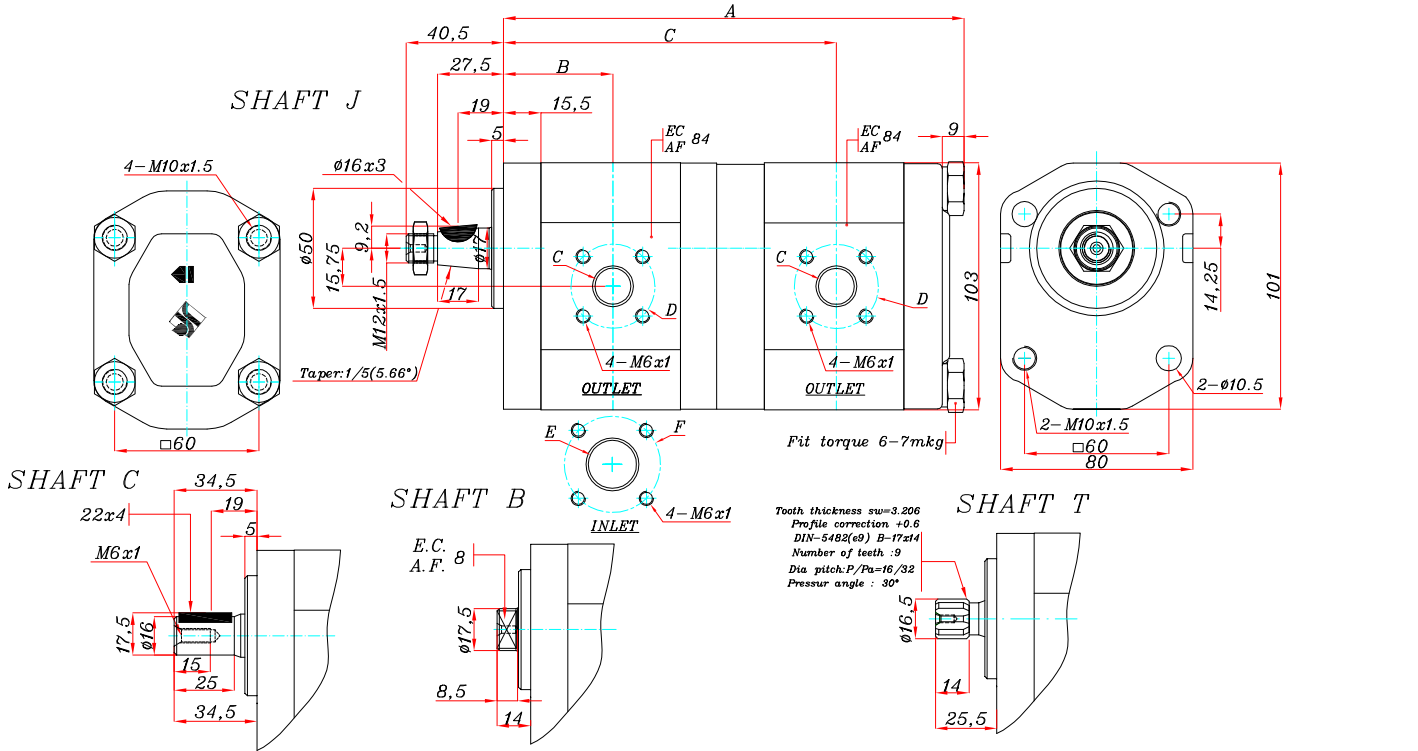
The drawing above shows a pump turning clockwise .For anti -clockwise rotation sense ;replace C by CC in which case suction and pressure ports shall be inverted



Double pump with flange type 22  
Model LM

301-1LM...(C/CC)J22F

SHAFT J&C&B&T (01)  
OUTLET & INLET F  
FLANGE 22



Model	A	B	C	Model	A	B	C	Outlet		Inlet		Model	A	B	C	Model	A	B	C	Outlet		Inlet	
								C	D	E	F									C	D	E	F
301-1LM6-6CA22F	169.4	36.5	118.4	301-1LM22-9CA22F	190.7	45.5	138.8	15	35	20	40	301-1LM32-16CA22F	210.2	53	157.1	301-1LM40-40CA22F	247	55.8	176.5	15	35	20	40
301-1LM7.5-6CA22F	171.1	39	120.1	301-1LM22-12CA22F	193.9	140.9	301-1LM32-18CA22F					212.4	301-1LM46-6CA22F			214.5	58.5	163.5					
301-1LM7.5-7.5CA22F	172.8		121.8	301-1LM22-14CA22F	196.1		145.3	301-1LM32-22CA22F	217	301-1LM46-7.5CA22F	216.2	166	168.1										
301-1LM9-6CA22F	172.8	301-1LM22-16CA22F	198.4	301-1LM32-25CA22F	220.4	162.8		301-1LM46-9CA22F	217.9														
301-1LM9-7.5CA22F	174.5	301-1LM22-18CA22F	200.6	301-1LM32-27CA22F	222.7		151	301-1LM46-12CA22F	221.1														
301-1LM9-9CA22F	176.2	124.3	301-1LM22-22CA22F	205.2	301-1LM32-32CA22F	228.8		301-1LM46-14CA22F	223.3														
301-1LM12-6CA22F	176	41.1	125	301-1LM25-6CA22F	190.7	139.7	301-1LM46-16CA22F	225.6															
301-1LM12-7.5CA22F	177.7	301-1LM25-7.5CA22F	192.4	301-1LM35-6CA22F	202		151	301-1LM46-18CA22F	227.8														
301-1LM12-9CA22F	179.4	127.5	301-1LM25-9CA22F	194.1	301-1LM35-7.5CA22F	203.7		301-1LM46-22CA22F	232.4														
301-1LM12-12CA22F	182.6	129.6	301-1LM25-12CA22F	197.3	301-1LM35-9CA22F	205.4	301-1LM46-25CA22F	235.8															
301-1LM14-6CA22F	178.2	127.2	301-1LM25-14CA22F	199.5	301-1LM35-12CA22F	208.6	301-1LM46-27CA22F	238.1															
301-1LM14-7.5CA22F	179.9	301-1LM25-16CA22F	201.8	301-1LM35-14CA22F	210.8	160	301-1LM46-32CA22F	244.2															
301-1LM14-9CA22F	181.6	129.7	301-1LM25-18CA22F	204	301-1LM35-16CA22F		213.1	301-1LM46-35CA22F	247.1														
301-1LM14-12CA22F	184.8	301-1LM25-22CA22F	208.6	301-1LM35-18CA22F	215.3	155.6	301-1LM46-40CA22F	253.3															
301-1LM14-14CA22F	187	131.8	301-1LM25-25CA22F	212	301-1LM35-22CA22F		219.9	301-1LM46-46CA22F	259.6														
301-1LM16-6CA22F	180.5	45.5	129.5	301-1LM27-6CA22F	193	301-1LM35-25CA22F	223.3	301-1LM52-6CA22F	221.4	62.7	170.4												
301-1LM16-7.5CA22F	182.2	301-1LM27-7.5CA22F	194.7	301-1LM35-27CA22F	225.6	165.7	301-1LM52-7.5CA22F	223.1															
301-1LM16-9CA22F	183.9	132	301-1LM27-9CA22F	196.4	301-1LM35-32CA22F		231.7	301-1LM52-9CA22F	224.8														
301-1LM16-12CA22F	187.1	301-1LM27-12CA22F	199.6	301-1LM35-35CA22F	234.6	55.8	301-1LM52-12CA22F	228															
301-1LM16-14CA22F	189.3	134.1	301-1LM27-14CA22F	201.8	301-1LM40-6CA22F		208.2	301-1LM52-14CA22F	230.2														
301-1LM16-16CA22F	191.6	301-1LM27-16CA22F	204.1	301-1LM40-7.5CA22F	209.9	157.2	301-1LM52-16CA22F	232.5															
301-1LM18-6CA22F	182.7	131.7	301-1LM27-18CA22F	206.3	301-1LM40-9CA22F		211.6	301-1LM52-18CA22F	234.7														
301-1LM18.7.5CA22F	184.4	301-1LM27-22CA22F	210.9	301-1LM40-12CA22F	214.8	161.8	301-1LM52-22CA22F	239.3															
301-1LM18-9CA22F	186.1	134.2	301-1LM27-25CA22F	214.3	301-1LM40-14CA22F		217	301-1LM52-25CA22F	242.7														
301-1LM18.12CA22F	189.3	301-1LM27-27CA22F	216.6	301-1LM40-16CA22F	219.3	166.2	301-1LM52-27CA22F	245															
301-1LM18-14CA22F	191.5	136.3	301-1LM32-6CA22F	199.1	301-1LM40-18CA22F		221.5	301-1LM52-32CA22F	251.1														
301-1LM18.16CA22F	193.8	140.7	301-1LM32-7.5CA22F	200.8	301-1LM40-22CA22F	226.1	301-1LM52-35CA22F	254															
301-1LM18.18CA22F	196	301-1LM32-9CA22F	202.5	301-1LM40-25CA22F	229.5	171.9	301-1LM52-40CA22F	260.2															
301-1LM22-6CA22F	187.3	45.5	136.3	301-1LM32-12CA22F	205.7		301-1LM40-27CA22F	231.8															
301-1LM22-7.5CA22F	189	301-1LM32-14CA22F	207.9	301-1LM40-32CA22F	237.9	173.7	301-1LM52-46CA22F	266.5															
				301-1LM40-35CA22F	240.8		301-1LM52-52CA22F	273.4															

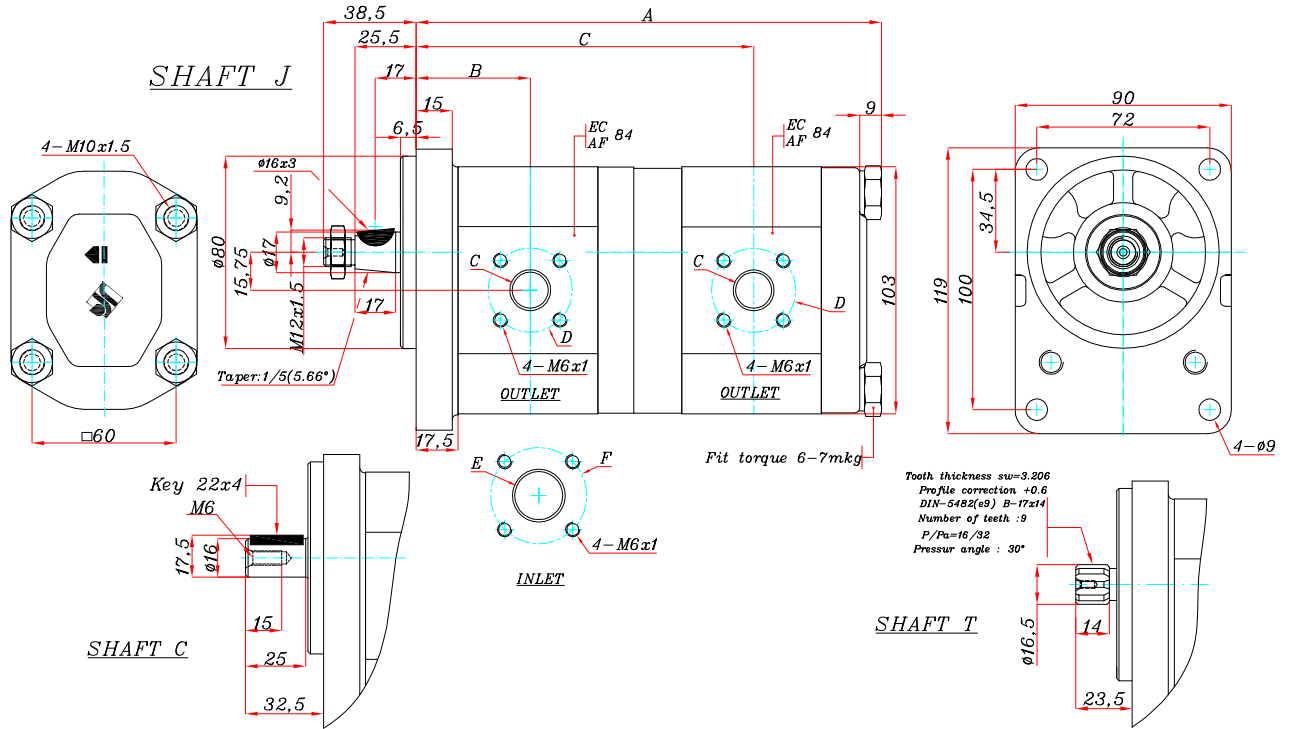
In the reversible pumps, threaded ports available R only. both ports same dimension that corresponds to the suction dimension. The drawing above shows a pump turning clockwise. For anti-clockwise rotation sense; replace C by CC in which case suction and pressure ports shall be inverted.



Double pump with flange type 23  
Model LM

301-1LM...(C/CC)J23F

SHAFT J&C&T (01)  
OUTLET & INLET F  
FLANGE 23



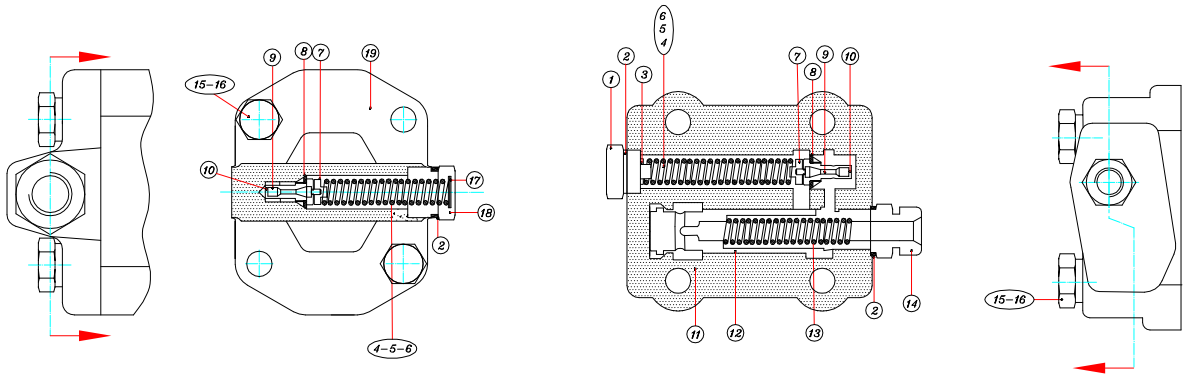
Model	A	B	C	Model	A	B	C	Outlet		Inlet		Model	A	B	C	Outlet		Inlet			
								C	D	E	F					C	D	E	F		
301-1LM6-6CA23F	171.4	38.5	120.4	301-1LM22-9CA23F	192.7	47.5	140.8					301-1LM32-16CA23F	212.2	55	159.1	249	57.8	178.5			
301-1LM7.5-6CA23F	173.1		122.1	301-1LM22-12CA23F	195.9		142.9	15	35	20	40	301-1LM32-18CA23F	214.4			246.5	60.5	165.5	15	35	
301-1LM7.5-7.5CA23F	174.8			301-1LM22-14CA23F	198.1					*		301-1LM32-22CA23F	219			248.2					
301-1LM9-6CA23F	174.8	41	123.8	301-1LM22-16CA23F	200.4		147.3					301-1LM32-25CA23F	222.4			249.9		168			
301-1LM9-7.5CA23F	176.5			301-1LM22-18CA23F	202.6							301-1LM32-27CA23F	224.7			253.1		170.1			
301-1LM9-9CA23F	178.2		126.3	301-1LM22-22CA23F	207.2							301-1LM32-32CA23F	230.8		164.8	301-1LM46-14CA23F	225.3				
301-1LM12-6CA23F	178			301-1LM25-6CA23F	192.7		141.7					301-1LM35-6CA23F	204	55	153	301-1LM46-18CA23F	227.6		174.5		
301-1LM12-7.5CA23F	179.7	43.1	127	301-1LM25-7.5CA23F	194.4							301-1LM35-7.5CA23F	205.7			301-1LM46-22CA23F	229.8				
301-1LM12-9CA23F	181.4		129.5	301-1LM25-9CA23F	196.1		144.2					301-1LM35-9CA23F	207.4		155.5	301-1LM46-25CA23F	234.4				
301-1LM12-12CA23F	184.6		131.6	301-1LM25-12CA23F	199.3		146.3					301-1LM35-12CA23F	210.6		157.6	301-1LM46-27CA23F	237.8				
301-1LM14-6CA23F	180.2		129.2	301-1LM25-14CA23F	201.5							301-1LM35-14CA23F	212.8			301-1LM46-32CA23F	240.1		180.2		
301-1LM14-7.5CA23F	181.9			301-1LM25-16CA23F	203.8		150.7					301-1LM35-16CA23F	215.1		162	301-1LM46-35CA23F	246.2		182		
301-1LM14-9CA23F	183.6		131.7	301-1LM25-18CA23F	206							301-1LM35-18CA23F	217.3			301-1LM46-40CA23F	249.1		184.8		
301-1LM14-12CA23F	186.8		133.8	301-1LM25-22CA23F	210.6							301-1LM35-22CA23F	221.9			301-1LM46-46CA23F	255.3		187.5		
301-1LM14-14CA23F	189			301-1LM25-25CA23F	214							301-1LM35-25CA23F	225.3			301-1LM52-6CA23F	261.6				
301-1LM16-6CA23F	182.5	47.5	131.5	301-1LM27-6CA23F	195		144					301-1LM35-27CA23F	227.6			301-1LM52-7.5CA23F	223.4	64.7	172.4		
301-1LM16-7.5CA23F	184.2			301-1LM27-7.5CA23F	196.7							301-1LM35-32CA23F	233.7		167.7	301-1LM52-9CA23F	225.1				
301-1LM16-9CA23F	185.9		134	301-1LM27-9CA23F	198.4		146.5					301-1LM35-35CA23F	236.6		169.5	301-1LM52-12CA23F	226.8		174.9		
301-1LM16-12CA23F	189.1		136.1	301-1LM27-12CA23F	201.6		148.6					301-1LM40-6CA23F	210.2	57.8	159.2	301-1LM52-14CA23F	230		177		
301-1LM16-14CA23F	191.3			301-1LM27-14CA23F	203.8							301-1LM40-7.5CA23F	211.9			301-1LM52-16CA23F	232.2				
301-1LM16-16CA23F	193.6		140.5	301-1LM27-16CA23F	206.1		153					301-1LM40-9CA23F	213.6		161.7	301-1LM52-18CA23F	234.5		181.4		
301-1LM18-6CA23F	184.7		133.7	301-1LM27-18CA23F	208.3							301-1LM40-12CA23F	216.8		163.8	301-1LM52-22CA23F	236.7				
301-1LM18-7.5CA23F	186.4			301-1LM27-22CA23F	212.9							301-1LM40-14CA23F	219			301-1LM52-25CA23F	241.3				
301-1LM18-9CA23F	188.1		136.2	301-1LM27-25CA23F	216.3							301-1LM40-16CA23F	221.3		168.2	301-1LM52-27CA23F	244.7				
301-1LM18-12CA23F	191.3		138.3	301-1LM27-27CA23F	218.6							301-1LM40-18CA23F	223.5			301-1LM52-32CA23F	247				
301-1LM18-14CA23F	193.5			301-1LM32-6CA23F	201.1	53.2	150.1					301-1LM40-22CA23F	228.1			301-1LM52-35CA23F	253.1		187.1		
301-1LM18-16CA23F	195.8		142.7	301-1LM32-7.5CA23F	202.8							301-1LM40-25CA23F	231.5			301-1LM52-40CA23F	256		188.9		
301-1LM18-18CA23F	198			301-1LM32-9CA23F	204.5		152.6					301-1LM40-27CA23F	233.8			301-1LM52-46CA23F	262.2		191.7		
301-1LM22-6CA23F	189.3	47.5	138.3	301-1LM32-12CA23F	207.7		154.7					301-1LM40-32CA23F	239.9		173.9	301-1LM52-52CA23F	268.5		194.4		
301-1LM22-7.5CA23F	191			301-1LM32-14CA23F	209.9							301-1LM40-35CA23F	242.8		175.7			198.6			

In the reversible pumps, threaded ports available R only, both ports same dimension that corresponds to the suction dimension. The drawing above shows a pump turning clockwise. For anti-clockwise rotation sense, replace C by CC in which case suction and pressure ports shall be inverted.





RELIEF VALVE



Pump with relief valve

No.	Description	Qty
1	Valve plug	1
2	Metal bonded gasket	2
3	Adjustment shim	-
4	Spring for 5-80bar	1
5	Spring for 80-175bar	1
6	Spring for 175-250bar	1
7	Valve head	1
8	Copper gasket	1
9	Relief valve	1
10	Valve seat assembly	1

Pump with flow control valve and relief valve

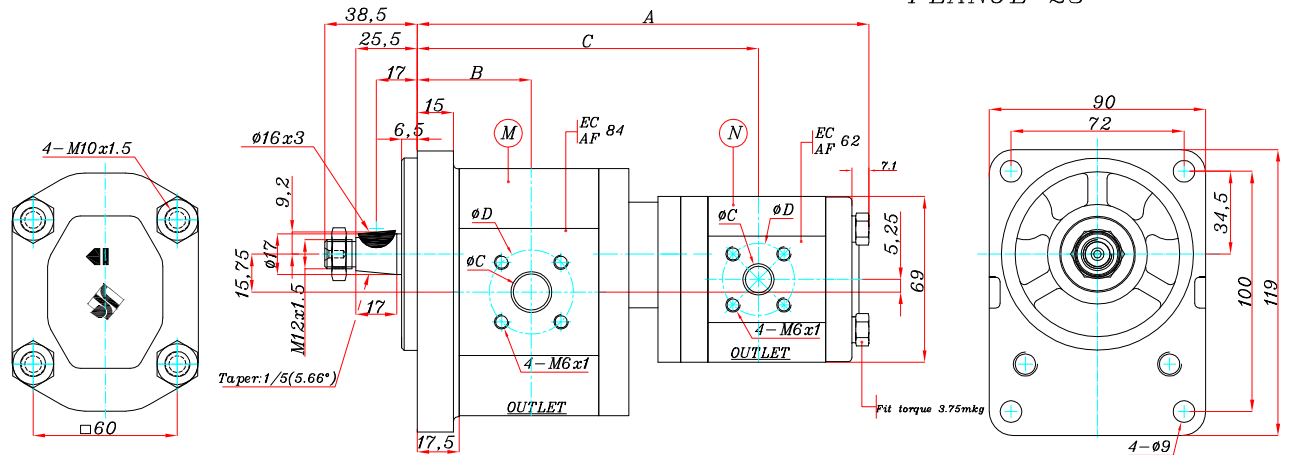
No.	Description	Qty
11	Valve housing	1
12	Flow control valve	1
13	Spring	1
14	Constant flow outlet fitting	1
15	Screws M10	4
16	Washer $\varnothing 10$ DIN-7980	4
17	Adjustment shim	-
18	Valve plug	1
19	Valve housing and back cover	1



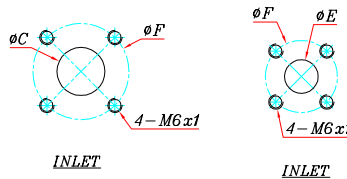
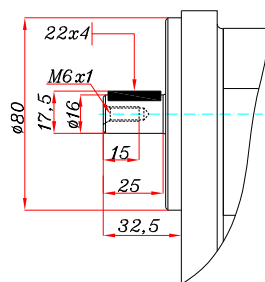
Double pump with flange type 23  
Model LS

301-1LS.....(C/CC)J23F

SHAFT J  
OUTLET & INLET F  
FLANGE 23

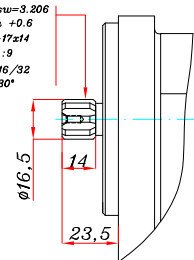


Shaft C



Shaft T

Tooth thickness sw=3.206  
Profile correction +0.6  
DIN-5482(Ø) B-17x14  
Number of teeth 3  
Dia. pitch P/Pu=16/32  
Pressur angle : 30°



Model	A	B	C	Model	A	B	C	Model	A	B	C
301-1LS6-1.5CA23F	165.1	38.5	127.4	301-1LS18-1.5CA23F	178.4	47.5	140.7	301-1LS40-1.5CA23F	203.9	67.8	166.2
301-1LS6-3CA23F	170.2			301-1LS18-3CA23F	183.5			301-1LS40-3CA23F	209		
301-1LS6-5CA23F	176.9		130.9	301-1LS18-5CA23F	190.2		144.2	301-1LS40-5CA23F	215.7		169.7
301-1LS6-7.5CA23F	185.7		133.9	301-1LS18-7.5CA23F	199		147.2	301-1LS40-7.5CA23F	224.5		172.7
301-1LS6-10CA23F	193.9		139.2	301-1LS18-10CA23F	207.2		152.5	301-1LS40-10CA23F	232.7		178
301-1LS7.5-1.5CA23F	166.8		129.1	301-1LS22-1.5CA23F	183		145.3	301-1LS46-1.5CA23F	210.2	60.5	172.5
301-1LS7.5-3CA23F	171.9			301-1LS22-3CA23F	188.1			301-1LS46-3CA23F	215.3		
301-1LS7.5-5CA23F	178.6		132.6	301-1LS22-5CA23F	194.8		148.8	301-1LS46-5CA23F	222		176
301-1LS7.5-7.5CA23F	187.4		135.6	301-1LS22-7.5CA23F	203.6		151.8	301-1LS46-7.5CA23F	230.8		179
301-1LS7.5-10CA23F	195.6		140.9	301-1LS22-10CA23F	211.8		157.1	301-1LS46-10CA23F	239		184.3
301-1LS9-1.5CA23F	168.5	41	130.8	301-1LS25-1.5CA23F	186.4		148.7	301-1LS52-1.5CA23F	217.1	64.7	179.4
301-1LS9-3CA23F	173.6			301-1LS25-3CA23F	191.5			301-1LS52-3CA23F	222.2		
301-1LS9-5CA23F	180.3		134.3	301-1LS25-5CA23F	198.2		152.2	301-1LS52-5CA23F	228.9		182.9
301-1LS9-7.5CA23F	189.1		137.3	301-1LS25-7.5CA23F	207		155.2	301-1LS52-7.5CA23F	237.7		185.9
301-1LS9-10CA23F	197.3		142.6	301-1LS25-10CA23F	215.2		160.5	301-1LS52-10CA23F	245.9		191.2
301-1LS12-1.5CA23F	171.7	43.1	134	301-1LS27-1.5CA23F	188.7		151				
301-1LS12-3CA23F	176.8			301-1LS27-3CA23F	193.8						
301-1LS12-5CA23F	183.5		137.5	301-1LS27-5CA23F	200.5		154.5				
301-1LS12-7.5CA23F	192.3		140.5	301-1LS27-7.5CA23F	209.3		157.5				
301-1LS12-10CA23F	200.5		145.8	301-1LS27-10CA23F	217.5		162.8				
301-1LS14-1.5CA23F	173.9		136.2	301-1LS32-1.5CA23F	194.8	53.2	157.1				
301-1LS14-3CA23F	179			301-1LS32-3CA23F	199.9						
301-1LS14-5CA23F	185.7		139.7	301-1LS32-5CA23F	206.6		160.6				
301-1LS14-7.5CA23F	194.5		142.7	301-1LS32-7.5CA23F	215.4		163.6				
301-1LS14-10CA23F	202.7		148	301-1LS32-10CA23F	223.6		168.9				
301-1LS16-1.5CA23F	176.2	47.5	138.5	301-1LS35-1.5CA23F	197.7	55	160				
301-1LS16-3CA23F	181.3			301-1LS35-3CA23F	202.8						
301-1LS16-5CA23F	188		142	301-1LS35-5CA23F	209.5		163.5				
301-1LS16-7.5CA23F	196.8		145	301-1LS35-7.5CA23F	218.3		166.5				
301-1LS16-10CA23F	205		150.3	301-1LS35-10CA23F	226.5		171.8				

Pump	Outlet		Inlet	
	C	D	E	F
Pump.M	15	30	20 *	40
Pump.N	11	30	14	30

Pump.N	Outlet	Inlet
1.5-3-5	1/4"	3/8"
7.5-10	3/8"	1/2"

\*. On the 6&7.5&9 lit pump " M " dimension " E " of suction side is 15 mm.

In the reversible pumps , threaded ports available R only , both ports same dimension that corresponds to the suction dimension  
The drawing above shows a pump turning clockwise .For anti -clockwise rotation sense ,replace C by CC in which case suction and pressure ports shall be inverted