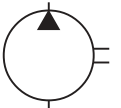
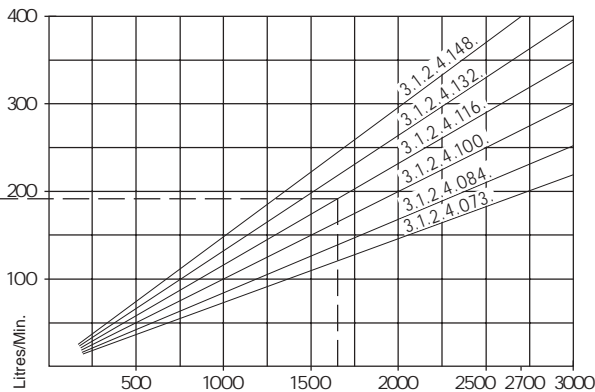
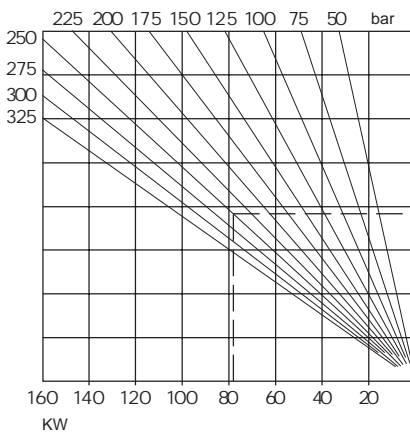


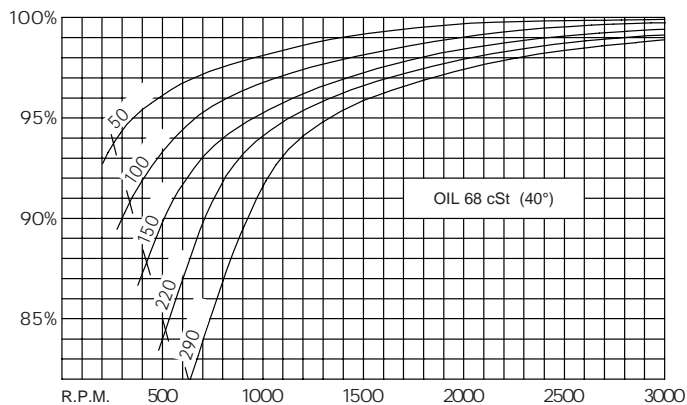
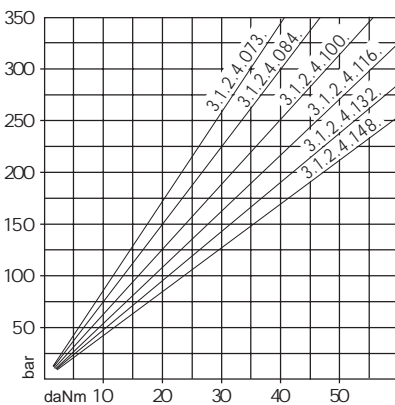
# GEAR PUMP **3.1.2.4.** SERIES **XP**



CODE	DESCR.	DISPLACEMENT		Max PRESSURE		Max SPEED R.P.M.	WEIGHT Kg.
		cm <sup>3</sup> /rev.	GMP (IMP)	Bar	PSI		
3.1.2.4. <b>073</b> .X.0.X	XP 73	73	16,1	290/320	4200/4650	2700	17,3
3.1.2.4. <b>084</b> .X.0.X	XP 84	84	18,5	270/310	3900/4500	2700	17,9
3.1.2.4. <b>100</b> .X.0.X	XP 100	100	22	260/290	3750/4200	2700	18,8
3.1.2.4. <b>116</b> .X.0.X	XP 116	116	25,5	250/280	3650/4050	2700	19,7
3.1.2.4. <b>132</b> .X.0.X	XP 132	132	29	230/270	3350/3900	2700	20,6
3.1.2.4. <b>148</b> .X.0.X	XP 148	148	32,5	190/230	2750/3350	2700	21,5



### DELIVERY



### VOLUMETRIC EFFICIENCY

### 3.1.2.4.XXX.X.0.X

BASIC SERIAL NUMBER

SPECIAL OPTIONS

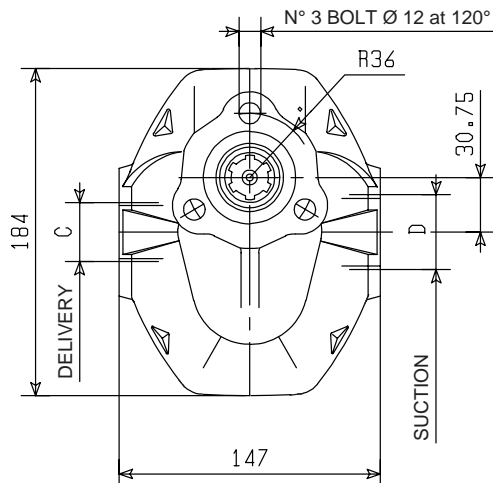
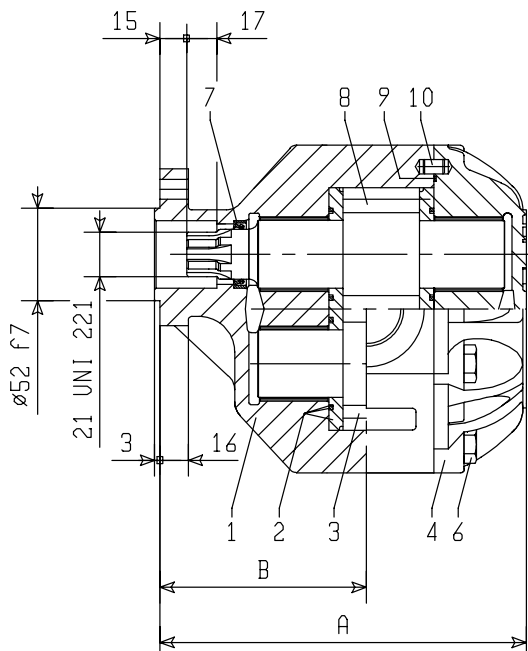
**0** = STANDARD OPTION

**1** = TANDEM FITTING

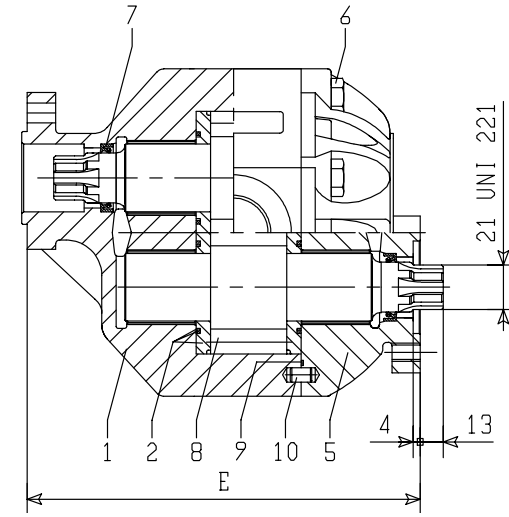
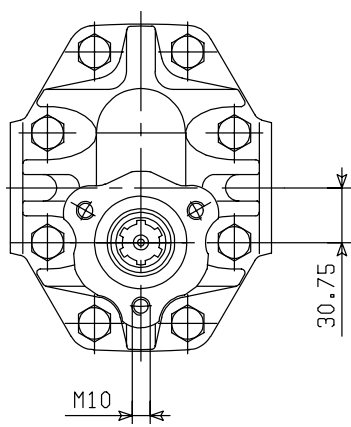
ROTATION

**1** = ANTICLOCKWISE

**2** = CLOCKWISE



CODE	DESCR.	DIMENSIONS			
		A	B	C	D
3.1.2.4.073.X.0.X	XP 73	190	106	G 3/4"	G 1"
3.1.2.4.084.X.0.X	XP 84	194	107	G 1"	G 1 1/4"
3.1.2.4.100.X.0.X	XP 100	200	111	G 1"	G 1 1/4"
3.1.2.4.116.X.0.X	XP 116	206	116	G 1"	G 1 1/4"
3.1.2.4.132.X.0.X	XP 132	212	119,5	G 1"	G 1 1/2"
3.1.2.4.148.X.0.X	XP 148	218	119,5	G 1"	G 1 1/2"



**SPECIAL OPTIONS**

DESCRIPTION	CODE
Adapter for double pump	1

CODE	DESCR.	DIMENSIONS
		E
3.1.2.4.073.X.0.1	XP 73 X	205
3.1.2.4.084.X.0.1	XP 84 X	209
3.1.2.4.100.X.0.1	XP 100 X	215
3.1.2.4.116.X.0.1	XP 116 X	221
3.1.2.4.132.X.0.1	XP 132 X	227
3.1.2.4.148.X.0.1	XP 148 X	233

REF.	CODE	DESCRIPTION	QT.	REF.	CODE	DESCRIPTION	QT.			
1	2.11.095.0000	Pump body (for 3.1.2.4.073 Anticlockwise)	1	5	2.12.028.0000	Tandem pump cover (for Anticlockwise rotating pump)	1			
	2.11.096.0000	Pump body (for 3.1.2.4.073 Clockwise)			2.12.026.0000	Tandem pump cover (for Clockwise rot. pump)				
	2.11.087.0000	Pump body (for 3.1.2.4.084 Anticlockwise)		6	0.01.01.066.00	Hex screw TE M12x35 UNI 5739 10,9	8			
	2.11.094.0000	Pump body (for 3.1.2.4.084 Clockwise)			7	0.08.01.011.00		Seal 28x38x7	1	
	2.11.089.0000	Pump body (for 3.1.2.4.100 Anticlockwise)		0.08.01.011.00		Seal 28x38x7 (only for tandem pump)	2			
	2.11.097.0000	Pump body (for 3.1.2.4.100 Clockwise)		8	1.12.01.105.00	Drive gear (for 3.1.2.4.073.X.0.0)		1		
	2.11.090.0000	Pump body (for 3.1.2.4.116 Anticlockwise)			1.12.01.105.00	Drive gear (for 3.1.2.4.073.X.0.1)	2			
	2.11.098.0000	Pump body (for 3.1.2.4.116 Clockwise)		1	1.12.01.019.00	Drive gear (for 3.1.2.4.084.X.0.0)		1		
	2.11.091.0000	Pump body (for 3.1.2.4.132 Anticlockwise)			1.12.01.019.00	Drive gear (for 3.1.2.4.084.X.0.1)	2			
	2.11.099.0000	Pump body (for 3.1.2.4.132 Clockwise)		1	1.12.01.020.00	Drive gear (for 3.1.2.4.100.X.0.0)		1		
	2.11.092.0000	Pump body (for 3.1.2.4.148 Anticlockwise)			1.12.01.020.00	Drive gear (for 3.1.2.4.100.X.0.1)	2			
2.11.100.0000	Pump body (for 3.1.2.4.148 Clockwise)	1	1.12.01.021.00	Drive gear (for 3.1.2.4.116.X.0.0)	1					
2	2.06.002.0000		Thrust plate	2		1.12.01.021.00	Drive gear (for 3.1.2.4.116.X.0.1)	2		
	3	1.12.02.059.00	Driven gear (for 3.1.2.4.073)		1	1.12.01.022.00	Drive gear (for 3.1.2.4.132.X.0.0)		1	
		1.12.02.017.00	Driven gear (for 3.1.2.4.084)			1.12.01.022.00	Drive gear (for 3.1.2.4.132.X.0.1)			2
		1.12.02.018.00	Driven gear (for 3.1.2.4.100)			1.12.01.023.00	Drive gear (for 3.1.2.4.148.X.0.0)			
		1.12.02.019.00	Driven gear (for 3.1.2.4.116)			1.12.01.023.00	Drive gear (for 3.1.2.4.148.X.0.1)			2
		1.12.02.020.00	Driven gear (for 3.1.2.4.132)			9	0.08.02.130.00			
1.12.02.021.00		Driven gear (for 3.1.2.4.148)	0.11.02.001.00	Dowel 8x12			2			
4		2.12.025.0000	Pump cover	1						

**HYDRAULIC SYSTEM**

**OIL**

Use exclusively good quality hydraulic oil with anti-foam, anti-emulsion and anti-wear additives. The following viscosities are recommended:

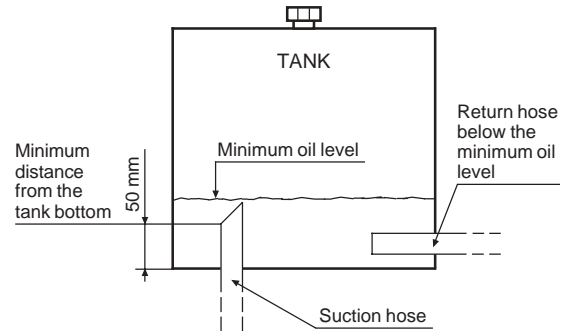
- very cold climate 22 cSt
- cold climate 46 cSt
- temperate climate 68 cSt
- hot climate 100 cSt

**FILTRATION**

Suction filters should be avoided. We recommend using a proper return line filter (25 micron for example).

**TANK**

The suction line should be approximately 50 mm above the tank floor and cut at an angle to increase the inlet section. The return line should enter the tank well below the minimum oil level.



**CLEANING THE HYDRAULIC CIRCUIT**

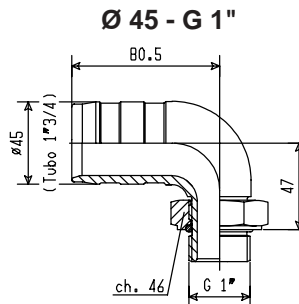
We recommend that flushing of the system be carried out before operating a new system or after repairs.

**OPERATING TEMPERATURE**

Oil temperature should be kept above -20°C and below 80°C.

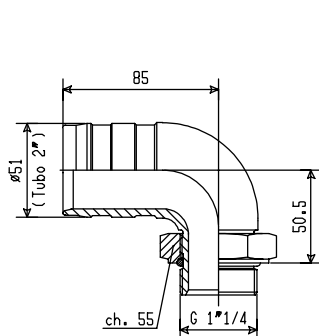
**SUCTION FITTINGS AND HOSES**

PZB low restriction suction fittings, as listed below, are recommended for easy installation. Properly sized suction hose and clips are available on request.

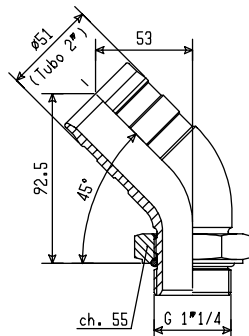


**Code 2.17.008.0000**

**Ø 51 - G 1"1/4**

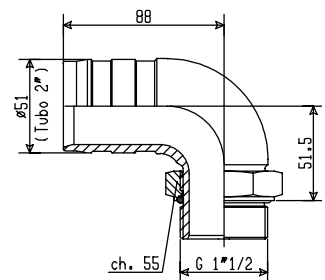


**Code 2.17.009.0000**



**Code 2.17.015.0000**

**Ø 51 - G 1"1/2**



**Code 2.17.010.0000**

**CALCULATING THE TORQUE**

$$M \text{ (torque, kgm)} = \frac{P \text{ (working pressure, Bar)} \times V \text{ (pump displacement, litres/min at 1000 rpm)}}{628}$$

Example pump 3.1.2.4.084 :  $\frac{200 \text{ Bar (P)} \times 84 \text{ lt. (V)}}{628} = 26,7 \text{ kgm (M)}$

Caution: the calculated torque M shall not exceed the rated torque of the PTO.

**CALCULATING THE POWER**

$$N \text{ (power, HP)} = \frac{Q \text{ (flow, litres/min.)} \times P \text{ (working pressure, Bar)}}{450}$$

