

POMPE GRUPPO 2

INDICE GENERALE

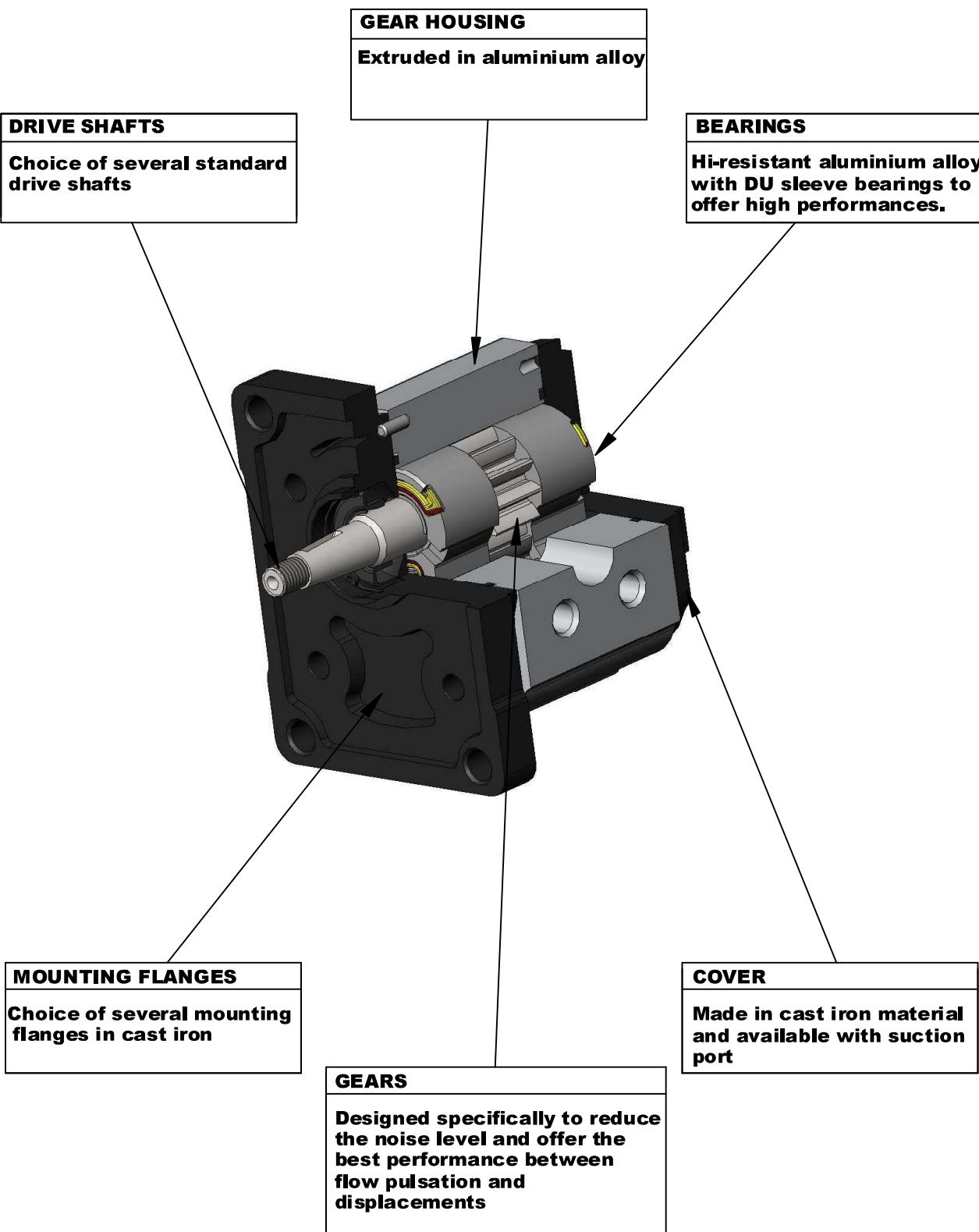
- Caratteristiche costruttive, generali e di impiego	Pag. 4 - 6 - 8 - 10
- Inversione della rotazione	Pag. 12
- Verifica della durata del cuscinetto	Pag. 14
- Curve caratteristiche - determinazione di una pompa	Pag. 16 - 18
- Pompe standard Europeo	Pag. 20 - 22
- Pompe standard Tedesco	Pag. 24 - 26 - 28 - 30 - 32 - 34
- Pompe standard Americano SAE "A"	Pag. 36 - 38 - 40 - 42 - 44 46 - 48 - 50 - 52
- Pompe con supporto	Pag. 54 - 56 - 58 - 60 - 62 - 64 66 - 68 - 70
- Pompe tandem	Pag. 72 - 74 - 76 - 78 - 80 - 82 84 - 86 - 88 - 90 - 92 - 94
- Pompe intermedie e componenti speciali	Pag. 96 - 98 - 100
- Motori unidirezionali	Pag. 102 - 104 - 106 - 108
- Pompe e motori reversibili	Pag. 110 - 112 - 114 - 116 - 118 120
- Coperchi posteriori per pompe e motori	Pag. 122 - 124 - 126

GROUP 2 PUMPS

GENERAL INDEX

- Constructive and general characteristics, installation instructions	Page 5 - 7 - 9 - 11
- Changing rotation	Page 13
- Verify of bearing duration	Page 15
- Characteristics curves - pump calculation	Page 17 - 19
- European standard pumps	Page 21 - 23
- German standard pumps	Page 25 - 27 - 29 - 31 - 33 - 35
- SAE "A" standard pumps	Page 37 - 39 - 41 - 43 - 45 47 - 49 - 51 - 53
- Pumps with front bearing	Page 55 - 57 - 59 - 61 - 63 - 65 67 - 69 - 71
- Tandem pumps	Page 73 - 75 - 77 - 79 - 81 - 83 85 - 87 - 89 - 91 - 93 - 95
- Intermediate pumps special versions	Page 97 - 99 - 101
- Unidirectional motors	Page 103 - 105 - 107 - 109
- Reversible pumps and motors	Page 111 - 113 - 115 - 117 - 119 121
- Rear cover for pumps and motors	Page 123 - 125 - 127

GROUP 2 PUMPS



GROUP 2 PUMPS

CONSTRUCTIVE CHARACTERISTICS:

PART	MATERIAL	CHARACTERISTICS
GEARS	Hardened steel UNI 7846	$Rs= 1250 \text{ N/mm}^2$ $Rm= 1450 \text{ N/mm}^2$
FLANGE AND COVER	G25 / G30 cast iron	$Rs= 300 \text{ N/mm}^2$ $Rm= 450 \text{ N/mm}^2$
BEARINGS	Avional Bearings with DU	$Rs= 350 \text{ N/mm}^2$ $Rm= 390 \text{ N/mm}^2$
BODY	Etruded in aluminium alloy Series 7020	$Rs= 350 \text{ N/mm}^2$ $Rm= 390 \text{ N/mm}^2$
O-RINGS	Buna N Viton	90 Shore, up to 90°C 80 Shore, for high temperature
ANTIEXTRUSION	Zitel	With glass fibres

Rs = Enervation load

Rm = Breaking load

GENERAL CHARACTERISTICS:

Maximum pressures up to 300 bar.

Weight : from 3.1 Kg to 4.3 kg

Maximum speed up to 4.000 rpm.

Type of shafts: Taper 1:8 and 1:5

Oldham

Slined DIN 5482 17x14.

SAE A splined-9 TEETH

SAE A cylindrical - Ø15.85 - SAE A 11 TEETH

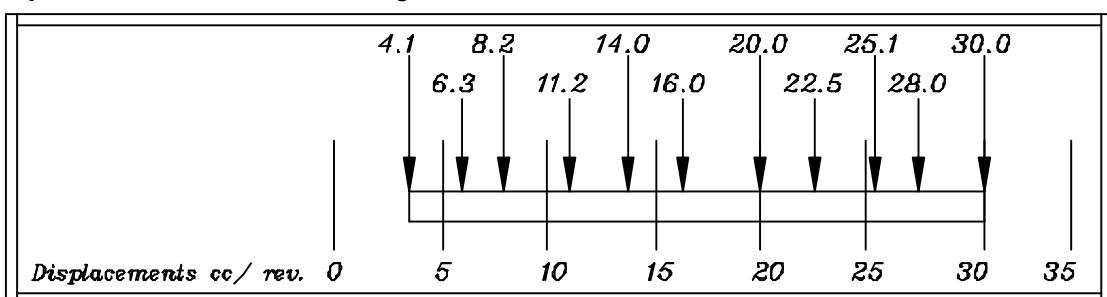
Type of flanges: European standard

German standard

SAE A standard.

Displacements from 4 cc/rev to 30cc/rev.

The displacements are available according this table:



There is also available a special version with built-in support.

DRIVE:

The connection of the pump to the motor must be done preferably with the use of a flexible coupling to avoid any radial and/or axial force on the shaft, otherwise pump efficiency will dramatically drop due to early wear of inner moving parts.

In any applications where the motion is transmitted through belts, it is necessary to use a support to avoid any radial or axial load to the pump shaft.

In any applications where are used splined shafts or Oldham couplings, it is suggested to assure a costant lubrication through grease or similar products.

GROUP 2 PUMPS

WORKING CONDITIONS- LIMIT PERFORMANCES

In normal working conditions there must be, in the suction pipe, a pressure lower than the atmospheric pressure.

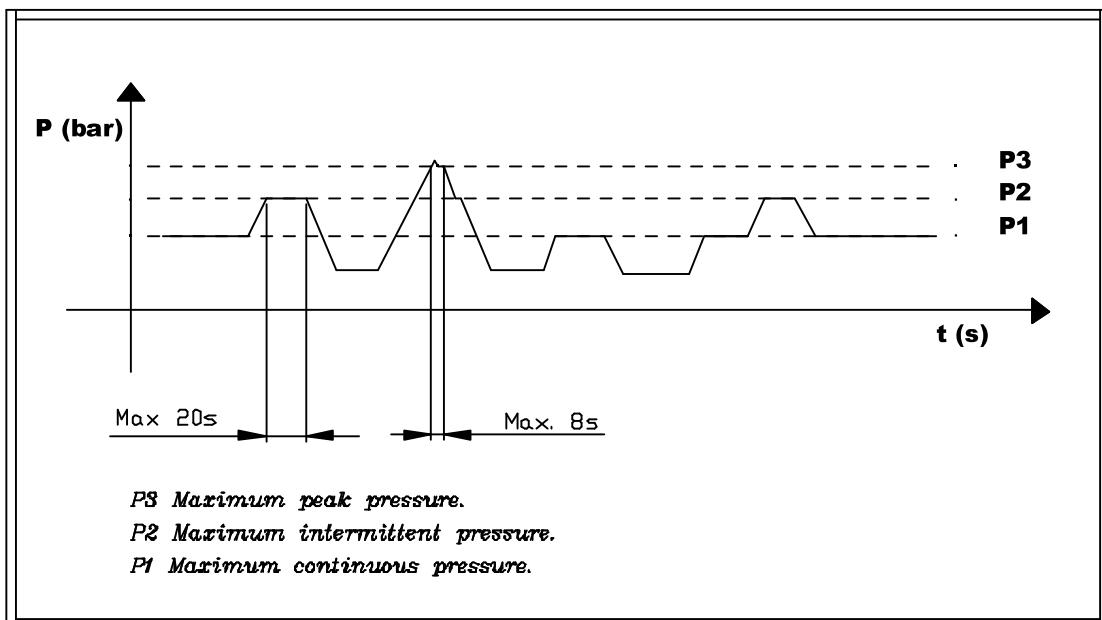
The pressure range in suction must be:

Min. 0.75 bar (absolute)

MAX 2,0 bar (absolute)

The maximum pressure values "P1" are referred to a continuous working at 1500 rpm with standard hydraulic fluids with minimum viscosity of 10 cSt.
For heavier working conditions (viscosity or high temperature) it is necessary to reduce the "P1" values.

In the following table are described the admitted pressures:

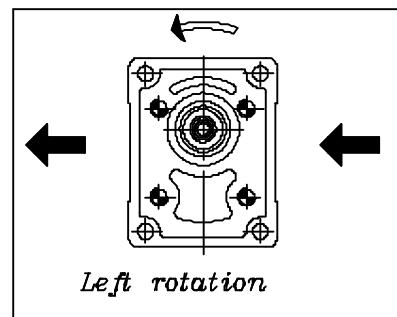
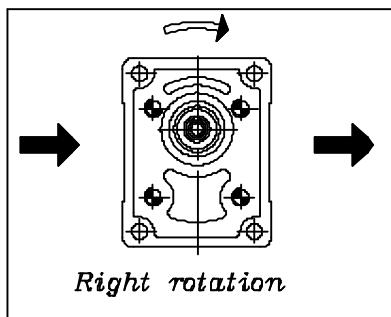


The standard working speeds (minimum and maximum) are the following:

Min. = 400 rpm

Max = (See following table)

DIRECTION OF ROTATION LOOKING AT THE SHAFT:



GROUP 2 PUMPS

FLUID FILTRATION

It is known that in many cases the premature pump performances reduction is due to a non correct filtration in the circuit.

The presence of contamination particles in the fluid usually corresponds to an irreparable wear of the pump internal parts.

It is recommended to pay attention to the plant cleaning, mainly in the starting activity.

The starting fluid contamination it must be according to the Norms ISO 4406 and it should not exceed the Class 19/16 with a filter 3x75.

Here below the technical parameters to respect:

FILTRATION IN SUCTION LINE	120 / 150 Nominal micron
FILTRATION IN PRESSURE LINE	10 / 25 absolute micron
MAXIMUM SPEED IN SUCTION	0.5 / 1.5 m/s
MAXIMUM SPEED IN OUTPUT	3.0 / 5.5 m/s

Sometime (contaminated places) it is recommended to improve the filtration in pressure line and fit also an air filter.

HYDRAULIC FLUIDS

It is recommended the use of fluids made for hydraulic circuits.

Usually they are hydraulic oils with mineral basis HLP HV (DIN 51524).

Here below the technical parameters to respect:

MINIMUM VISCOSITY	10 mm²/s
MAXIMUM VISCOSITY	100 mm²/s
SUGGESTED VISCOSITY	20 mm²/s - 100 mm²/s
SUGGESTED TEMPERATURE	30°C / 50°C
WORKING TEMPERATURE	-15°C / +80°C

For applications with water-glycol (HF-C) it is recommended to consider the following limitations: 1500 rpm maximum speed and 200 bar maximum pressure.

For applications with phosphate ester fluids, please contact our Technical department.

INSTALLATION INSTRUCTION

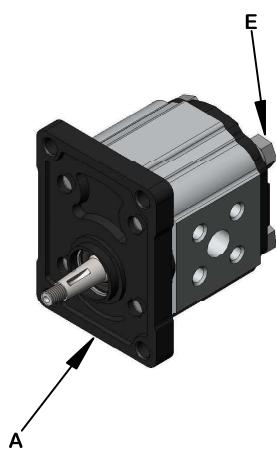
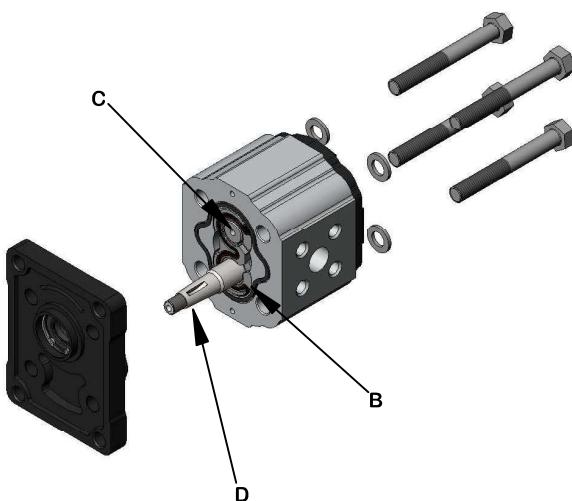
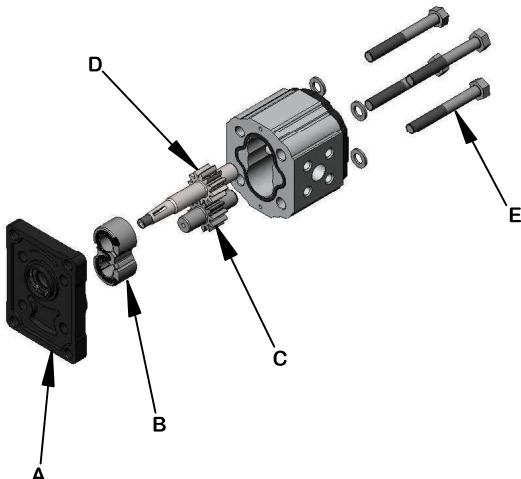
During the first starting it is recommended:

- to set the maximum pressure relief valves to a low value and gradually increase the pressure.
 - to check, with single rotation pumps, that the rotation direction it is correct.
 - to check that the connection between the motor and pump shaft is correct: without radial or axial load.
 - to avoid starting under pressure in low temperature conditions or after long period of inactivity
 - to check the fluid level in the tank
 - to disconnect the return pipe and purge any air in the circuit
 - to protect the pumpshaft seal when painting power pack
 - to use suitable systems in the return lines to tank, to avoid turbulence in the circuit and ingress of air, water or contamination
 - to check the torque that must be lower than the maximum torque admissible on the pump shaft
 - to use new oil filters with absence of water or any other emulsifying substance
 - to avoid starting with a air-oil solution
- It is important to specify an oil tank at least twice the flow from the pump.

GROUP 2 PUMPS- CHANGING ROTATION

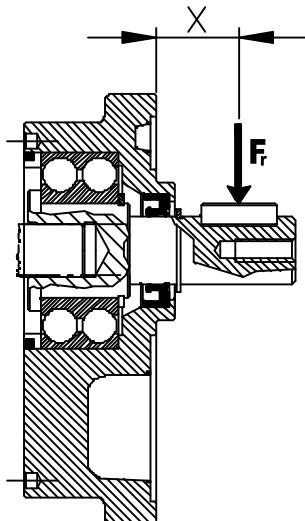
TO CHANGE ROTATION OF OT200 PUMP IT'S NECESSARY TO OPERATE IN THE FOLLOWING WAY:

1. Clean the pump externally with care.
2. Loosen, and remove, the clamp bolts (E).
3. Coat the sharp edges of the drive shaft (D) with adhesive tape and smear a layer of clean grease on the shaft end extension to avoid damaging the lip of the shaft seal when removing the mounting flange.
4. Remove the mounting flange (A), taking care to keep the flange as straight as possible during removal. Ensure that while removing the front mounting flange, the drive shaft and other components remain in position.
5. Ease the drive gear (D) up to facilitate removal of bearings (B), taking care that the precision ground surfaces do not become damaged, and removed the drive gear.
6. Remove the driven gear (D) without overturning. The rear flange has not to be removed.
7. Re-locate the driven gear (C) in the position previously occupied by the drive gear (D).
8. Re-locate the drive gear (D) in the position previously occupied by the driven gear (C).
9. Replace the front flange (A) in its original position.
10. Gently wipe the machined surface of the front flange (A) and the body with a canvas.
11. Refit the front mounting flange (A) turned by 180° from its original position.
12. Refit the clamp bolts (E). (**SCREW TIGHTENING TORQUE = 28 Nm**)
13. Check that the pump rotates freely when the drive shaft (D) is turned by hand. If not a pressure plate seal may be pinched.
14. The pump is ready for installation with the original rotation reversed.



GROUP 2 PUMPS- WITH FRONT BEARING

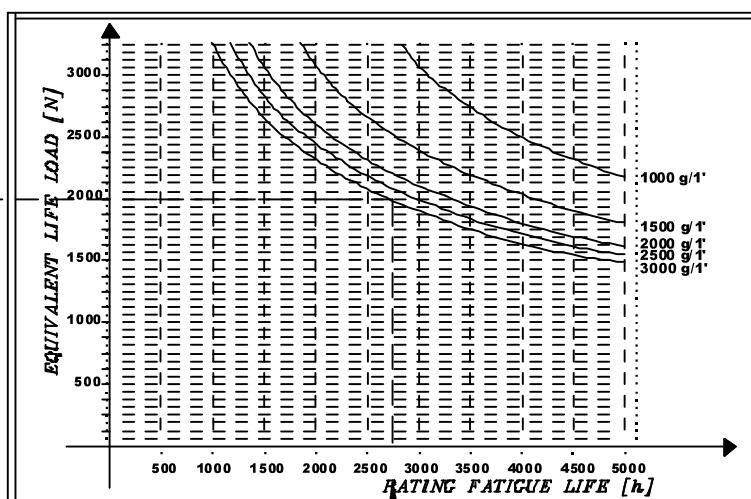
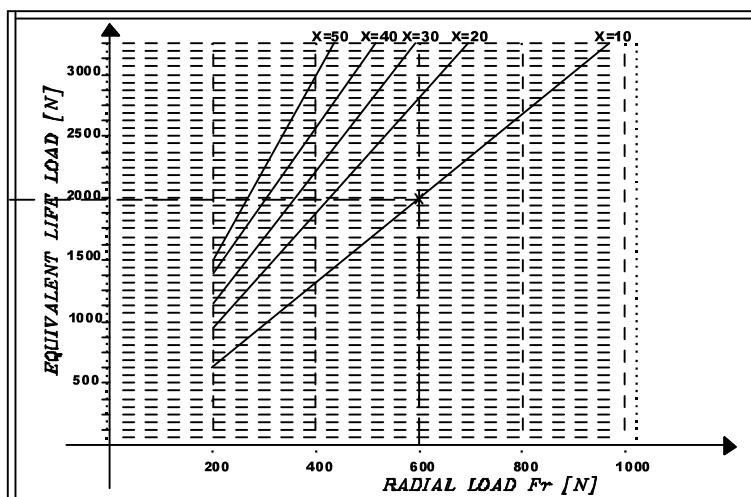
VERIFY OF BEARING LIFE



X = Distance of the radial flange result from the mounting flange

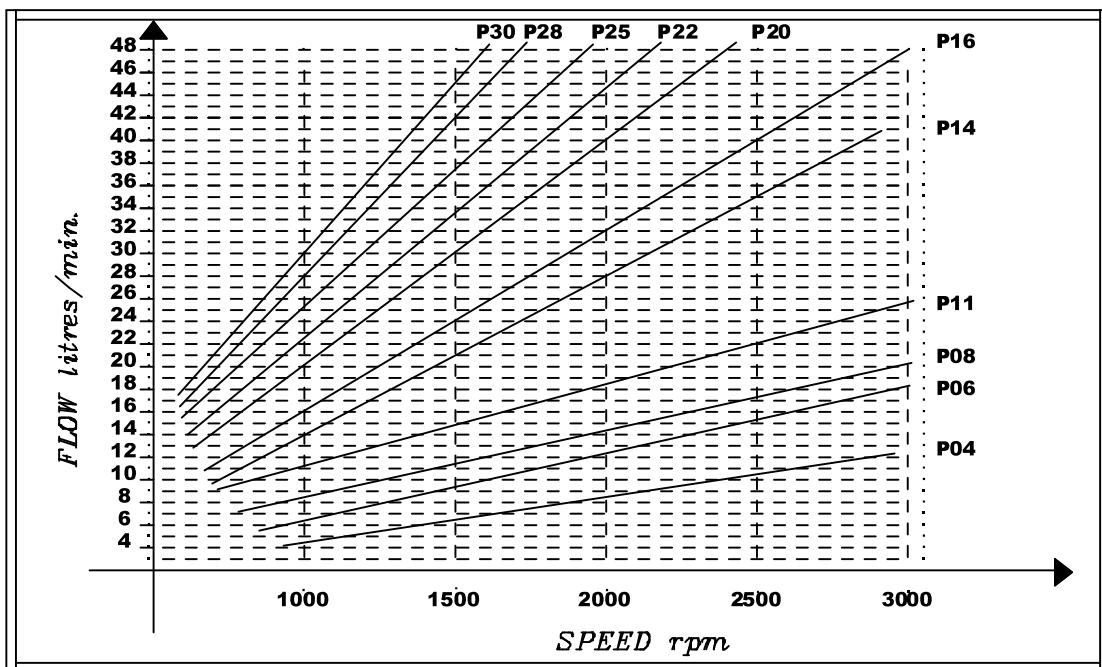
Each curve has been obtained at:
Lubricant oil ISO VG 46
Temperature 60° C (140° F)
Without or with very low axial load

Example
Fr = 600 N
X = 20 mm
Speed = 3000 rpm
Rating fatigue life ≈ 2750 h

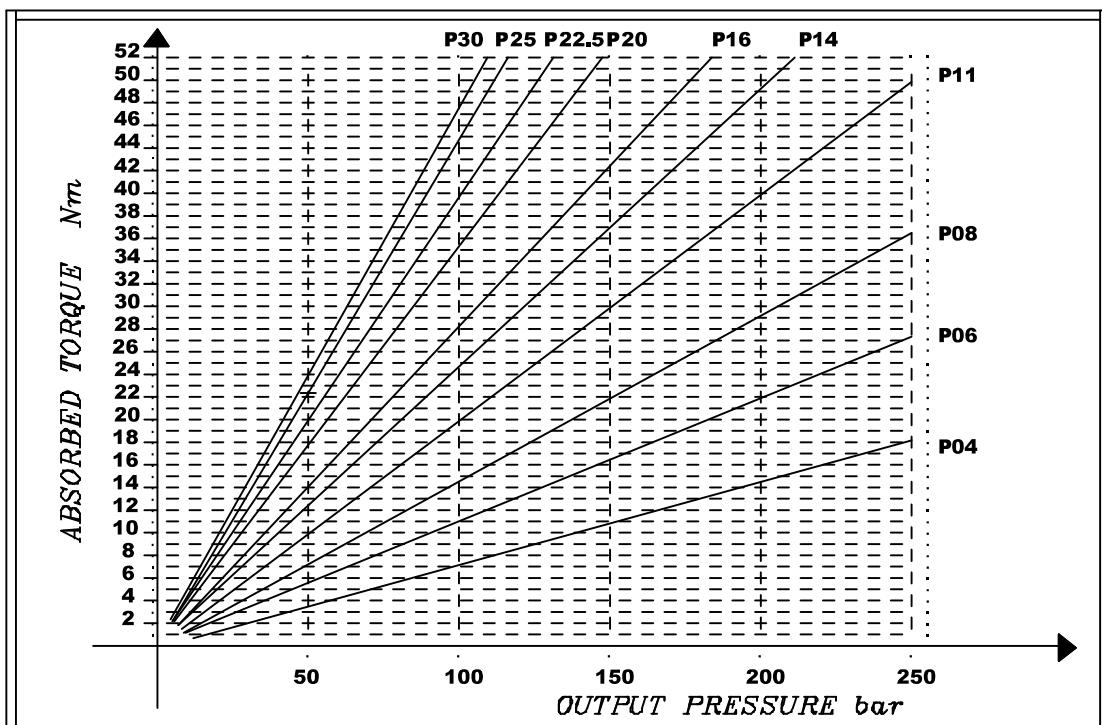


GROUP 2 PUMPS

FLOW CHARACTERISTICS CURVES



ABSORBED TORQUE



NOTE

Above flow characteristics curves have been made considering a volumetric efficiency of 95%

GROUP 2 PUMPS

PUMP CALCULATION

<i>V</i>	Displacement	cc / rev
<i>Q</i>	Flow	l/min
<i>P</i>	Power	kW
<i>C</i>	Torque	Nm
<i>N</i>	Speed	rpm
ΔP	Pressure	bar
n_v	Volumetric efficiency	0.85
n_m	Mechanical efficiency	0.9
n_t	Total efficiency	0.80

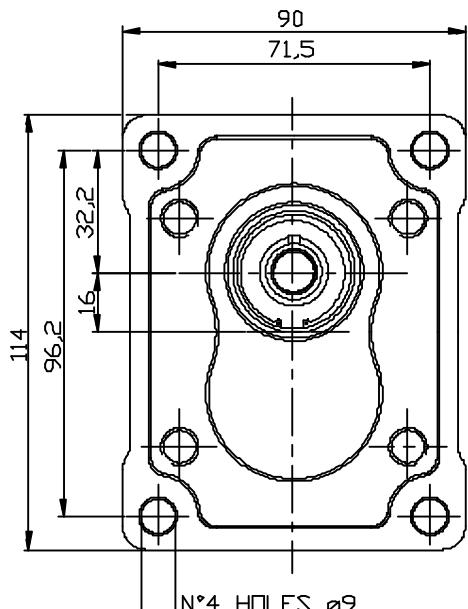
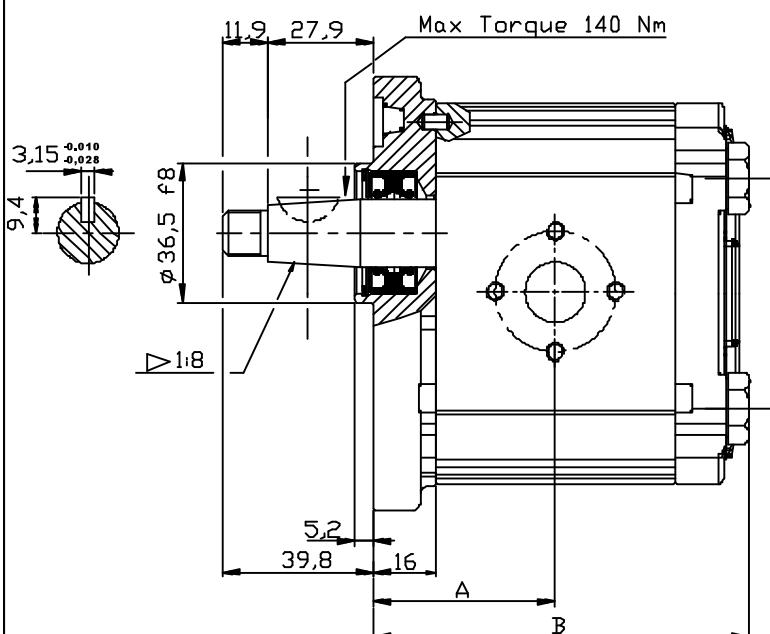
$$Q = V \cdot n_v \cdot N \cdot 10^{-3} \quad l/min$$

$$C = \frac{\Delta P \cdot V}{62.8 \cdot n_m} \quad Nm$$

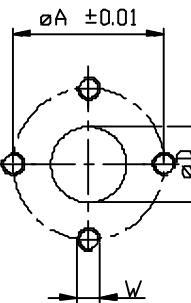
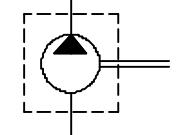
$$P = \frac{\Delta P \cdot V \cdot N}{612000 \cdot n_t} \quad kW$$

GROUP 2 PUMPS- EUROPEAN STANDARD

VERSION: P28 P2

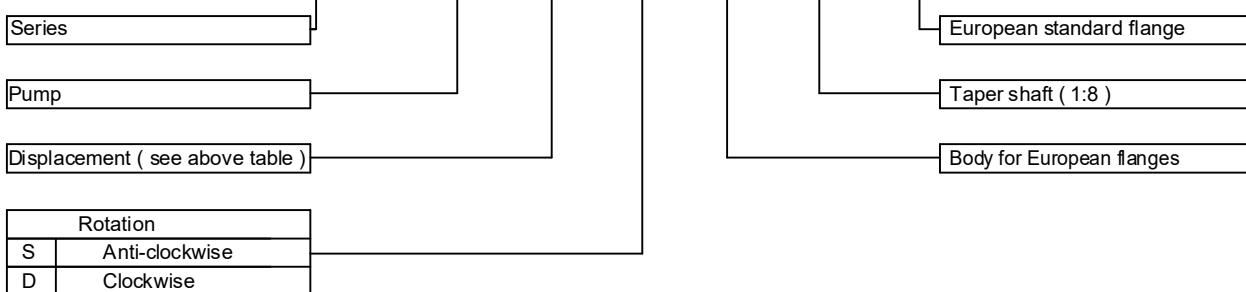


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port		Outlet port		
					(mm)	ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	40,00	83,50	13	30	M6	13	30 M6
OT 200 P06	06,20	250	300	3500	41,50	86,50	13	30	M6	13	30 M6
OT 200 P08	08,20	250	300	3500	43,00	89,50	13	30	M6	13	30 M6
OT 200 P11	11,20	250	300	3500	45,15	93,80	13	30	M6	13	30 M6
OT 200 P14	14,00	240	300	3000	47,15	97,80	20	40	M8	13	30 M6
OT 200 P16	16,00	240	300	3000	48,60	100,7	20	40	M8	13	30 M6
OT 200 P20	20,00	200	240	3000	51,50	106,5	20	40	M8	13	30 M6
OT 200 P22	22,50	170	210	2500	57,35	118,2	20	40	M8	13	30 M6
OT 200 P25	25,10	170	210	2500	59,25	122,0	20	40	M8	13	30 M6
OT 200 P28	28,00	140	180	2500	61,35	126,2	20	40	M8	13	30 M6
OT 200 P30	30,00	130	170	2000	62,75	129,0	20	40	M8	13	30 M6



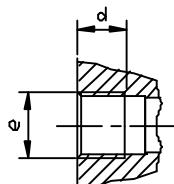
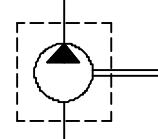
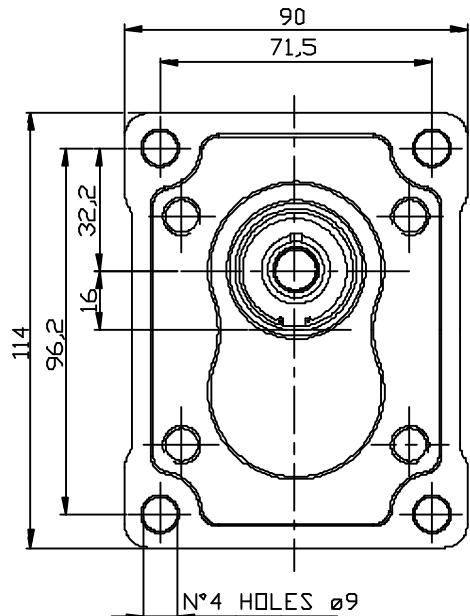
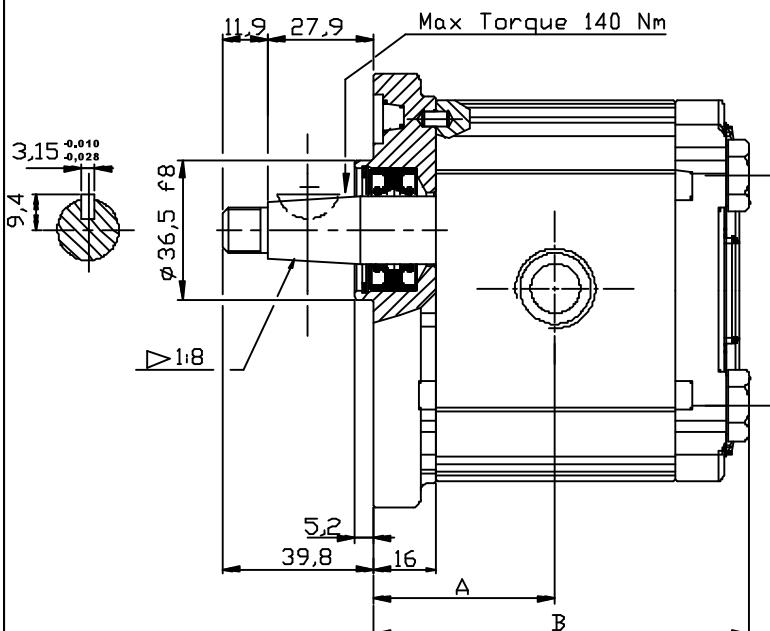
EXAMPLE OF ORDERING CODE

OT200 P 08 S / P 28 P2



GROUP 2 PUMPS - EUROPEAN STANDARD

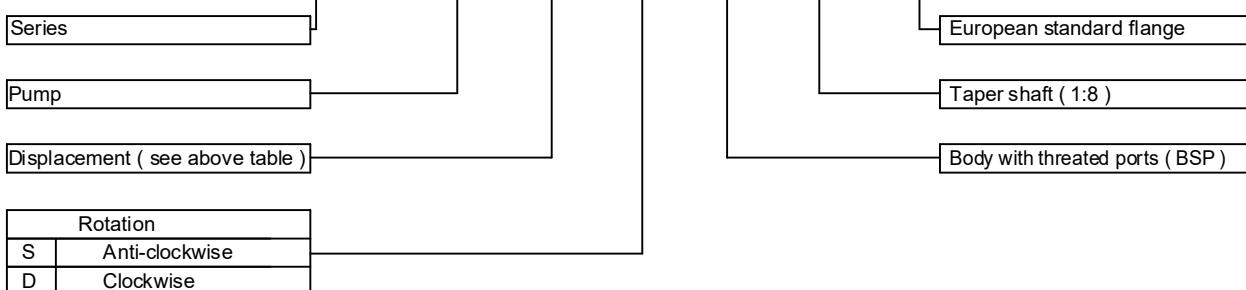
VERSION: G28 P2



Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension B		Inlet port		Outlet port	
					(mm)	e	d	e	d	
OT 200 P04	04,10	250	300	4000	40,00	83,50	G1/2	14	G1/2	14
OT 200 P06	06,20	250	300	3500	41,50	86,50	G1/2	14	G1/2	14
OT 200 P08	08,20	250	300	3500	43,00	89,50	G1/2	14	G1/2	14
OT 200 P11	11,20	250	300	3500	45,15	93,80	G1/2	14	G1/2	14
OT 200 P14	14,00	240	300	3000	47,15	97,80	G3/4	16	G1/2	14
OT 200 P16	16,00	240	300	3000	48,60	100,7	G3/4	16	G1/2	14
OT 200 P20	20,00	200	240	3000	51,50	106,5	G3/4	16	G1/2	14
OT 200 P22	22,50	170	210	2500	57,35	118,2	G3/4	16	G1/2	14
OT 200 P25	25,10	170	210	2500	59,25	122,0	G3/4	16	G1/2	14
OT 200 P28	28,00	140	180	2500	61,35	126,2	G3/4	16	G1/2	14
OT 200 P30	30,00	130	170	2000	62,75	129,0	G3/4	16	G1/2	14

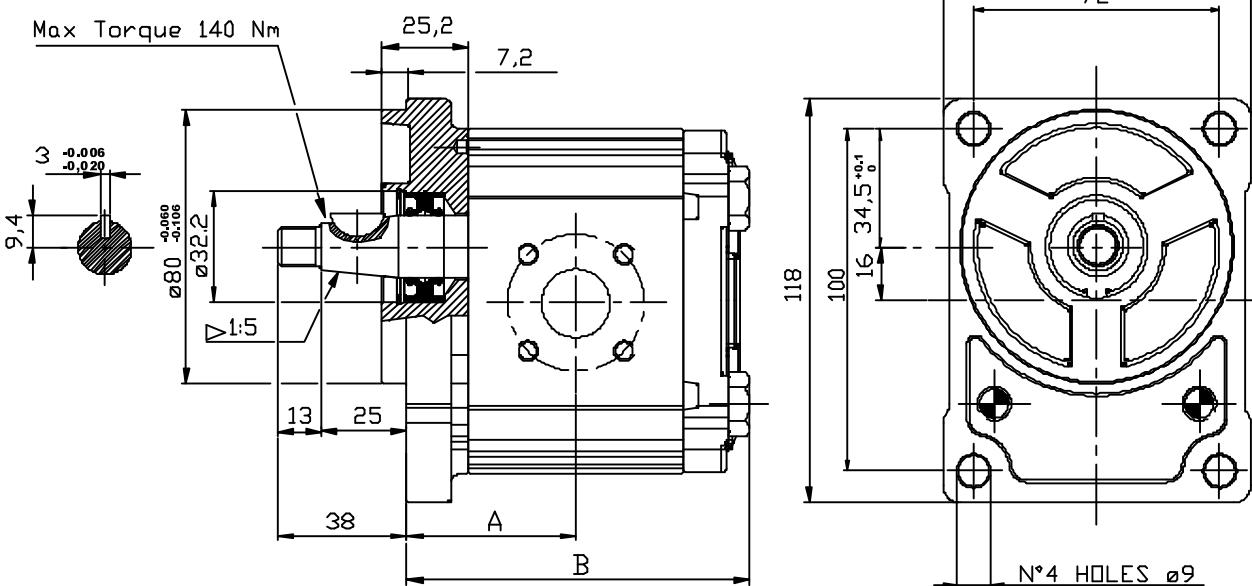
EXAMPLE OF ORDERING CODE

OT200 P 08 S / G 28 P2

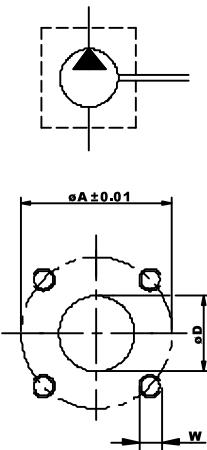


GROUP 2 PUMPS - GERMAN STANDARD

VERSION: B25 B2

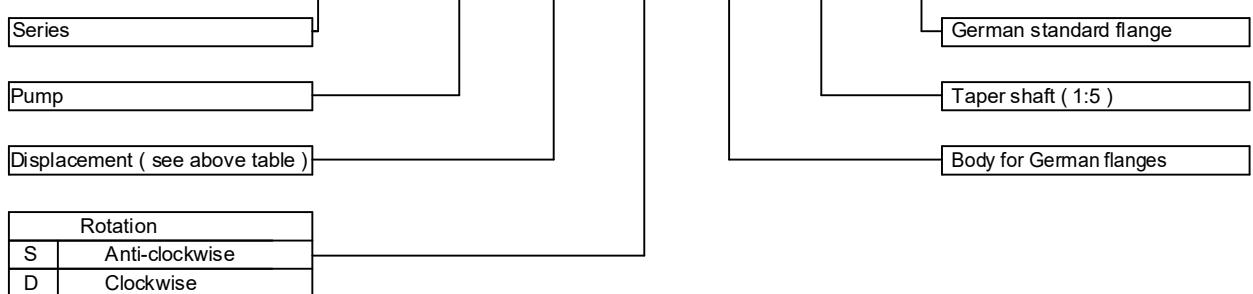


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port		Outlet port			
					B	(mm)	ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	42,00	85,50	20	40	M6	15	35	M6
OT 200 P06	06,20	250	300	3500	43,50	88,50	20	40	M6	15	35	M6
OT 200 P08	08,20	250	300	3500	45,00	91,50	20	40	M6	15	35	M6
OT 200 P11	11,20	250	300	3500	47,15	95,80	20	40	M6	15	35	M6
OT 200 P14	14,00	240	300	3000	49,15	99,80	20	40	M6	15	35	M6
OT 200 P16	16,00	240	300	3000	50,60	102,7	20	40	M6	15	35	M6
OT 200 P20	20,00	200	240	3000	53,50	108,5	20	40	M6	15	35	M6
OT 200 P22	22,50	170	210	2500	59,35	120,2	20	40	M6	15	35	M6
OT 200 P25	25,10	170	210	2500	61,25	124,0	20	40	M6	15	35	M6
OT 200 P28	28,00	140	180	2500	63,35	128,2	20	40	M6	15	35	M6
OT 200 P30	30,00	130	170	2000	64,75	131,0	20	40	M6	15	35	M6



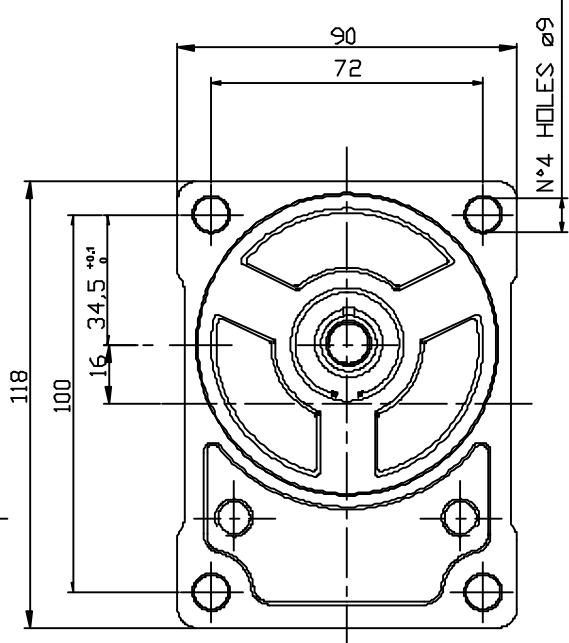
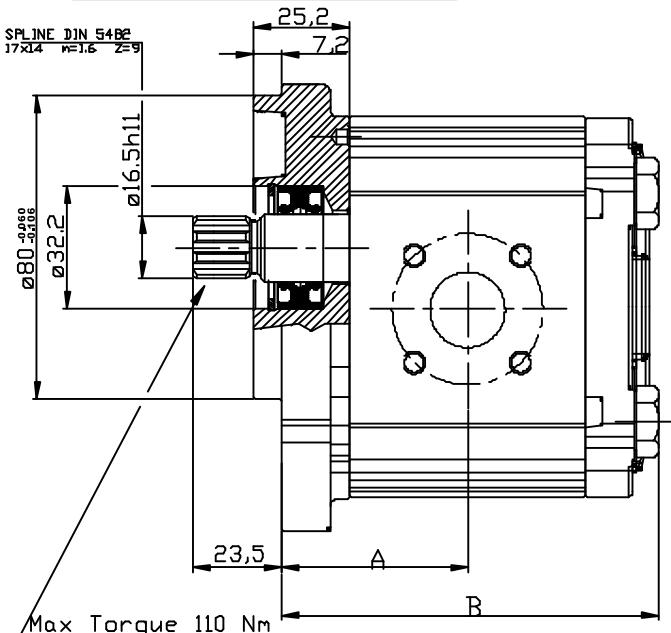
EXAMPLE OF ORDERING CODE

OT200 P 08 S / B 25 B2

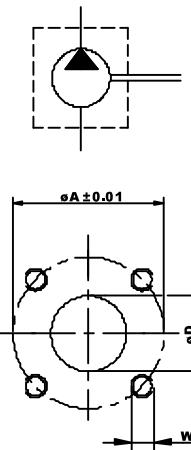


GROUP 2 PUMPS- GERMAN STANDARD

VERSION: B23 B2



Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension		Inlet port		Outlet port			
					A (mm)	B (mm)	ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	42,00	85,50	20	40	M6	15	35	M6
OT 200 P06	06,20	250	300	3500	43,50	88,50	20	40	M6	15	35	M6
OT 200 P08	08,20	250	300	3500	45,00	91,50	20	40	M6	15	35	M6
OT 200 P11	11,20	250	300	3500	47,15	95,80	20	40	M6	15	35	M6
OT 200 P14	14,00	240	300	3000	49,15	99,80	20	40	M6	15	35	M6
OT 200 P16	16,00	240	300	3000	50,60	102,7	20	40	M6	15	35	M6
OT 200 P20	20,00	200	240	3000	53,50	108,5	20	40	M6	15	35	M6
OT 200 P22	22,50	170	210	2500	59,35	120,2	20	40	M6	15	35	M6
OT 200 P25	25,10	170	210	2500	61,25	124,0	20	40	M6	15	35	M6
OT 200 P28	28,00	140	180	2500	63,35	128,2	20	40	M6	15	35	M6
OT 200 P30	30,00	130	170	2000	64,75	131,0	20	40	M6	15	35	M6



EXAMPLE OF ORDERING CODE

OT200 P 08 S / B 23 B2

Series

Pump

Displacement (see above table)

Rotation	
S	Anti-clockwise
D	Clockwise

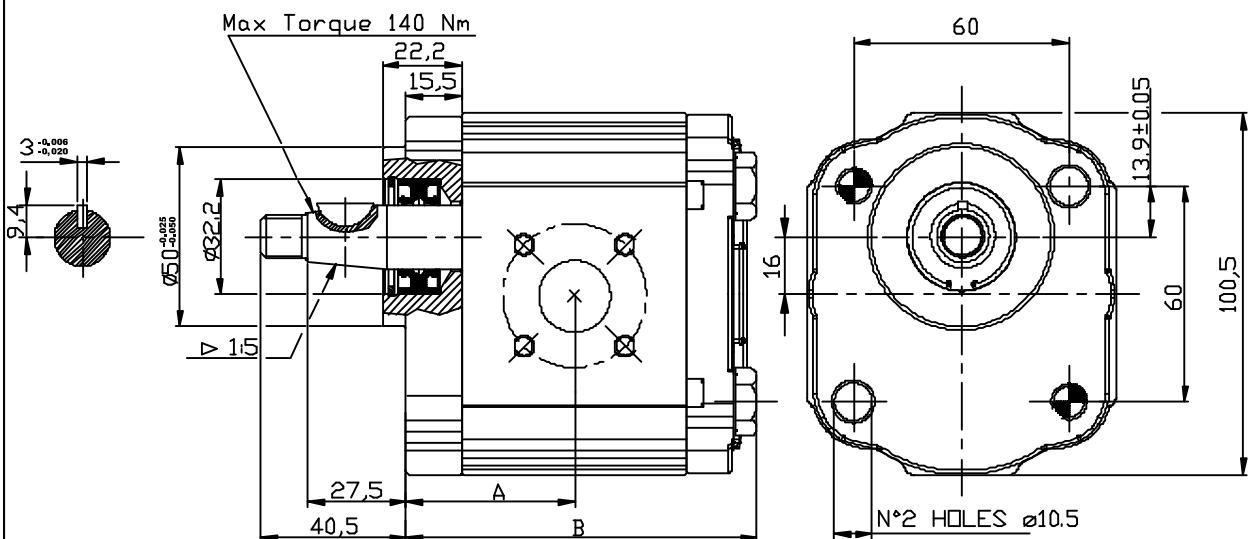
German standard flange

DIN 5482 B 17x14 shaft

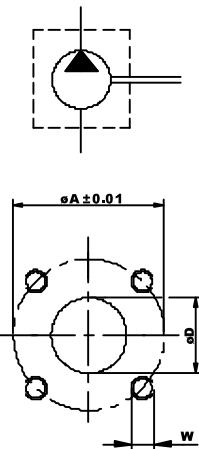
Body for German flanges

GROUP 2 PUMPS- GERMAN STANDARD

VERSION: B25 B4

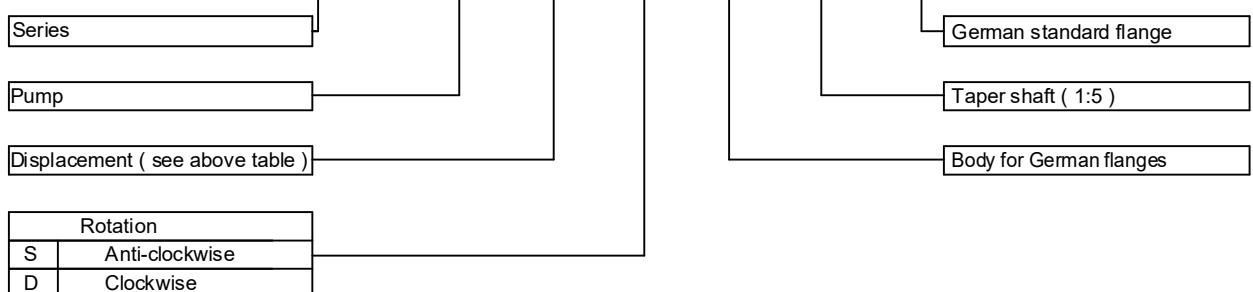


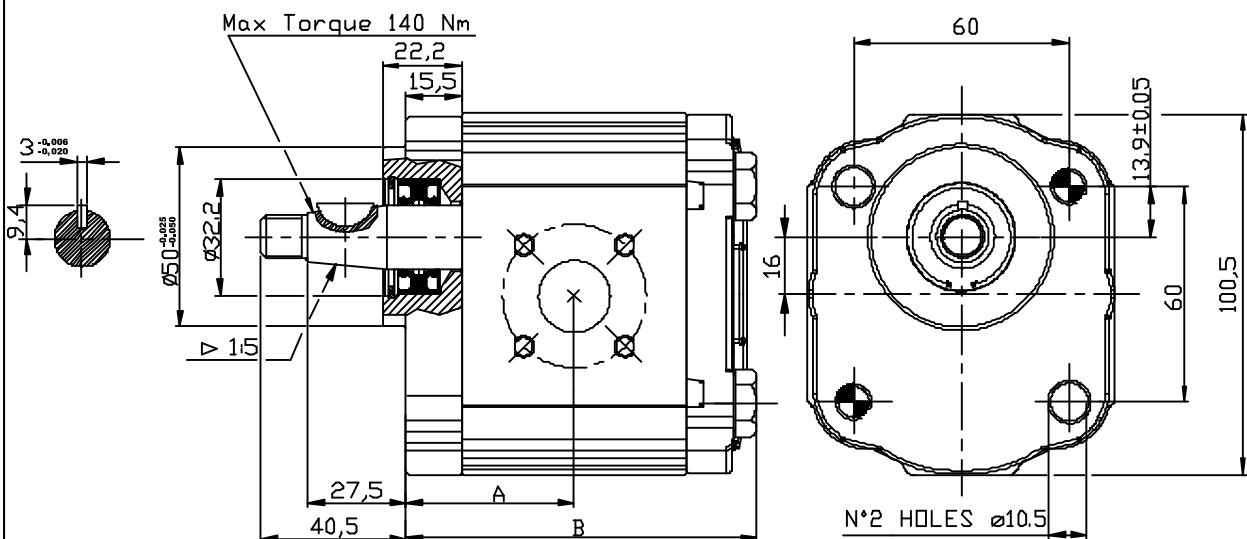
Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A B		Inlet port		Outlet port			
					(mm)	ØD	ØA	W	ØD	ØA	W	
OT 200 P04	04,10	250	300	4000	39.50	83,00	20	40	M6	15	35	M6
OT 200 P06	06,20	250	300	3500	41.00	86,00	20	40	M6	15	35	M6
OT 200 P08	08,20	250	300	3500	42.50	89,00	20	40	M6	15	35	M6
OT 200 P11	11,20	250	300	3500	45.65	93,30	20	40	M6	15	35	M6
OT 200 P14	14,00	240	300	3000	46.65	97,30	20	40	M6	15	35	M6
OT 200 P16	16,00	240	300	3000	48.10	100,2	20	40	M6	15	35	M6
OT 200 P20	20,00	200	240	3000	51.00	103,5	20	40	M6	15	35	M6
OT 200 P22	22,50	170	210	2500	56,85	117,7	20	40	M6	15	35	M6
OT 200 P25	25,10	170	210	2500	58,75	121,5	20	40	M6	15	35	M6
OT 200 P28	28,00	140	180	2500	60,85	125,7	20	40	M6	15	35	M6
OT 200 P30	30,00	130	170	2000	62,25	128,5	20	40	M6	15	35	M6



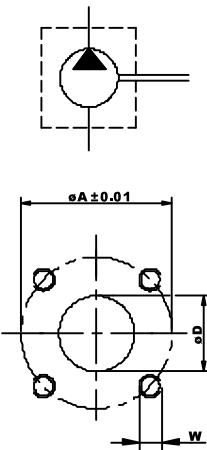
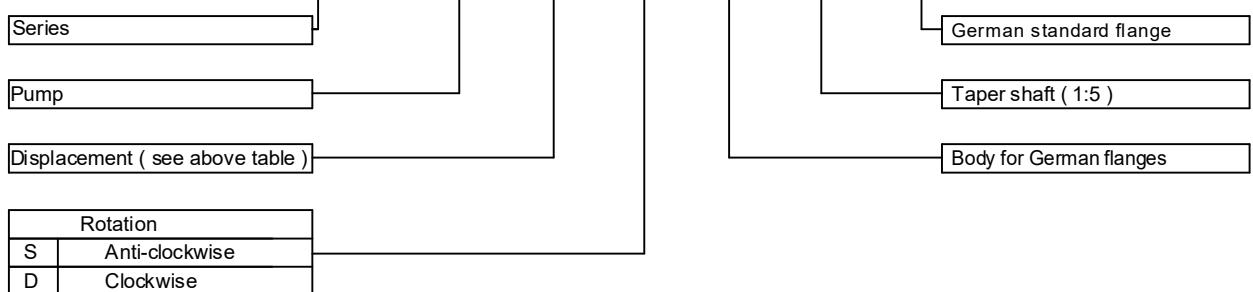
EXAMPLE OF ORDERING CODE

OT200 P 08 S / B 25 B4



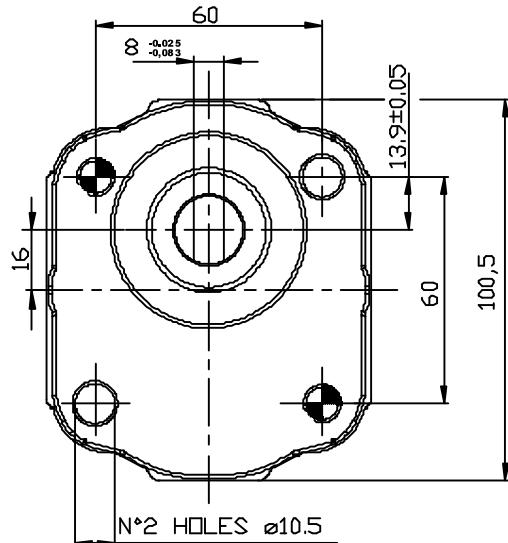
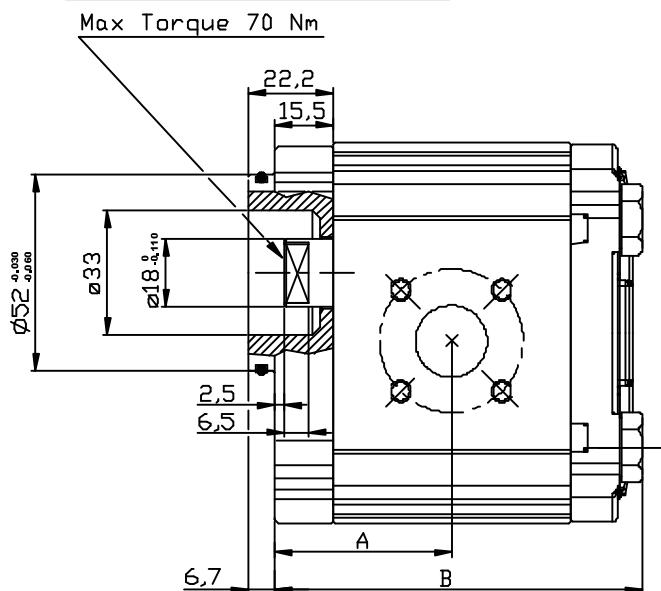
GROUP 2 PUMPS- GERMAN STANDARD
VERSION: B25 B5


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port		Outlet port			
					B	(mm)	ØD	ØA	W	ØD	ØA	W
OT 200 P04	04.10	250	300	4000	39.50	83.00	20	40	M6	15	35	M6
OT 200 P06	06.20	250	300	3500	41.00	86.00	20	40	M6	15	35	M6
OT 200 P08	08.20	250	300	3500	42.50	89.00	20	40	M6	15	35	M6
OT 200 P11	11.20	250	300	3500	45.65	93.30	20	40	M6	15	35	M6
OT 200 P14	14.00	240	300	3000	46.65	97.30	20	40	M6	15	35	M6
OT 200 P16	16.00	240	300	3000	48.10	100.2	20	40	M6	15	35	M6
OT 200 P20	20.00	200	240	3000	51.00	103.5	20	40	M6	15	35	M6
OT 200 P22	22.50	170	210	2500	56.85	117.7	20	40	M6	15	35	M6
OT 200 P25	25.10	170	210	2500	58.75	121.5	20	40	M6	15	35	M6
OT 200 P28	28.00	140	180	2500	60.85	125.7	20	40	M6	15	35	M6
OT 200 P30	30.00	130	170	2000	62.25	128.5	20	40	M6	15	35	M6

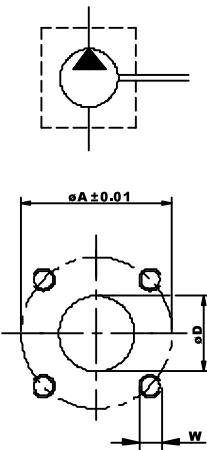

EXAMPLE OF ORDERING CODE
OT200 P 08 S / B 25 B5


GROUP 2 PUMPS- GERMAN STANDARD

VERSION: B24 B6

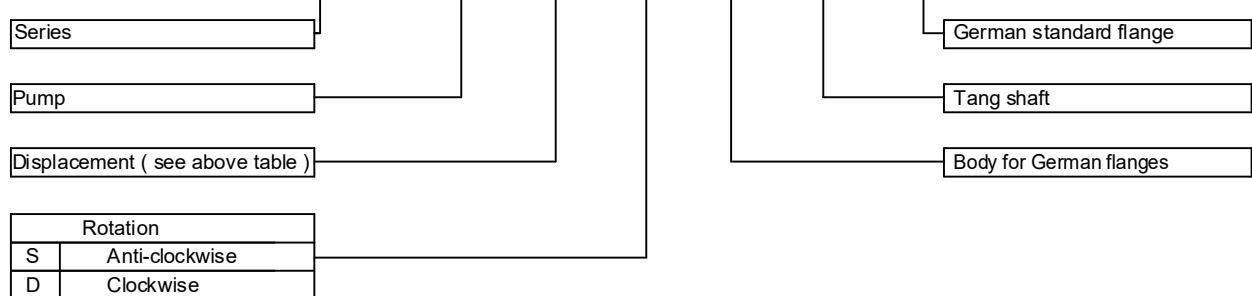


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A B		Inlet port		Outlet port			
					(mm)	ØD	ØA	W	ØD	ØA	W	
OT 200 P04	04,10	250	300	4000	39.50	83,00	20	40	M6	15	35	M6
OT 200 P06	06,20	250	300	3500	41.00	86,00	20	40	M6	15	35	M6
OT 200 P08	08,20	250	300	3500	42.50	89,00	20	40	M6	15	35	M6
OT 200 P11	11,20	250	300	3500	45.65	93,30	20	40	M6	15	35	M6
OT 200 P14	14,00	240	300	3000	46.65	97,30	20	40	M6	15	35	M6
OT 200 P16	16,00	240	300	3000	48.10	100,2	20	40	M6	15	35	M6
OT 200 P20	20,00	200	240	3000	51.00	103,5	20	40	M6	15	35	M6
OT 200 P22	22,50	170	210	2500	56.85	117,7	20	40	M6	15	35	M6
OT 200 P25	25,10	170	210	2500	58.75	121,5	20	40	M6	15	35	M6
OT 200 P28	28,00	140	180	2500	60.85	125,7	20	40	M6	15	35	M6
OT 200 P30	30,00	130	170	2000	62.25	128,5	20	40	M6	15	35	M6



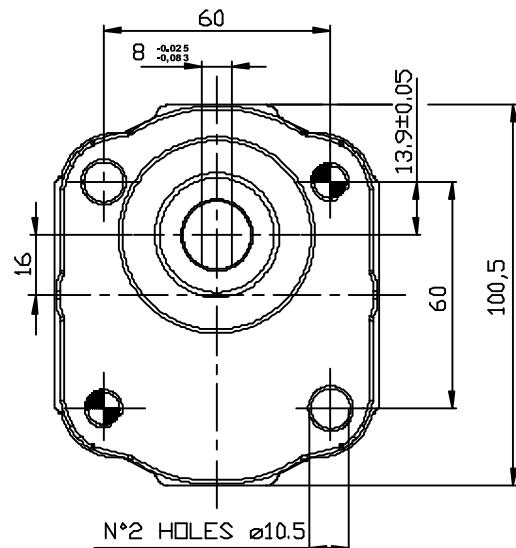
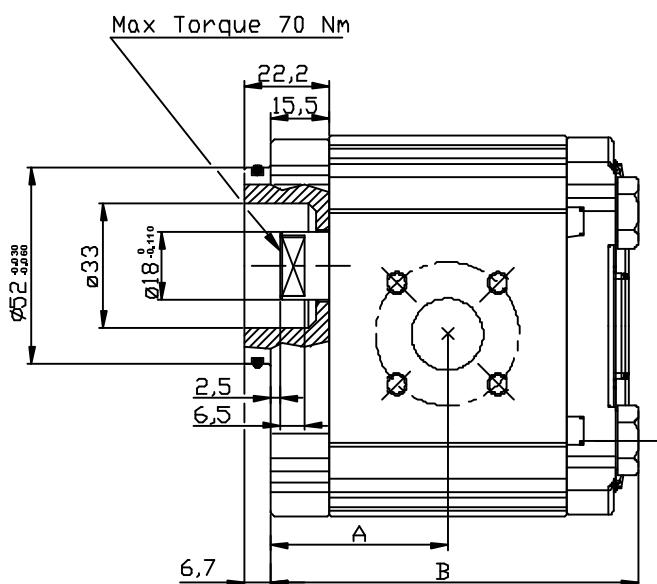
EXAMPLE OF ORDERING CODE

OT200 P 08 S / B 24 B6

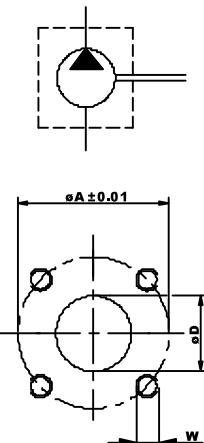


GROUP 2 PUMPS- GERMAN STANDARD

VERSION: B24 B7

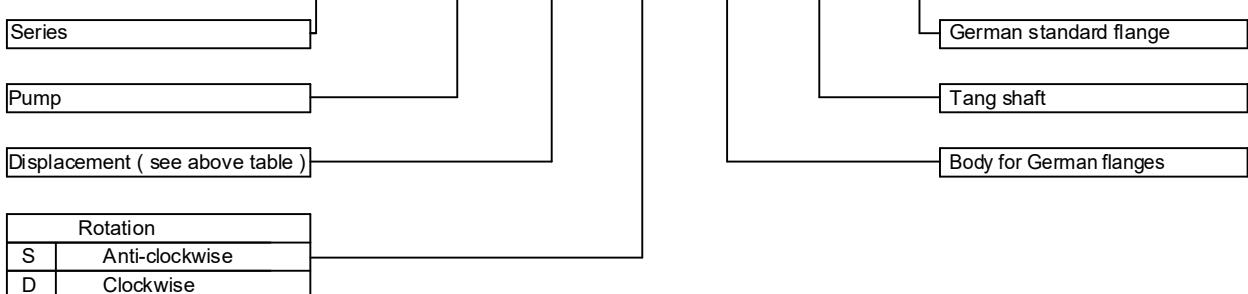


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A B		Inlet port		Outlet port			
					(mm)	ØD	ØA	W	ØD	ØA	W	
OT 200 P04	04,10	250	300	4000	39.50	83,00	20	40	M6	15	35	M6
OT 200 P06	06,20	250	300	3500	41.00	86,00	20	40	M6	15	35	M6
OT 200 P08	08,20	250	300	3500	42.50	89,00	20	40	M6	15	35	M6
OT 200 P11	11,20	250	300	3500	45,65	93,30	20	40	M6	15	35	M6
OT 200 P14	14,00	240	300	3000	46,65	97,30	20	40	M6	15	35	M6
OT 200 P16	16,00	240	300	3000	48,10	100,2	20	40	M6	15	35	M6
OT 200 P20	20,00	200	240	3000	51,00	103,5	20	40	M6	15	35	M6
OT 200 P22	22,50	170	210	2500	56,85	117,7	20	40	M6	15	35	M6
OT 200 P25	25,10	170	210	2500	58,75	121,5	20	40	M6	15	35	M6
OT 200 P28	28,00	140	180	2500	60,85	125,7	20	40	M6	15	35	M6
OT 200 P30	30,00	130	170	2000	62,25	128,5	20	40	M6	15	35	M6



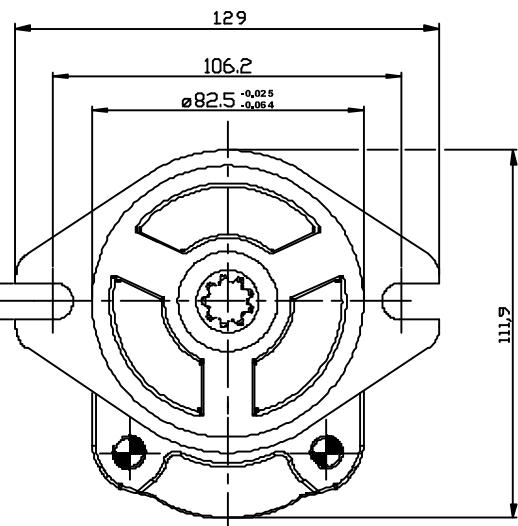
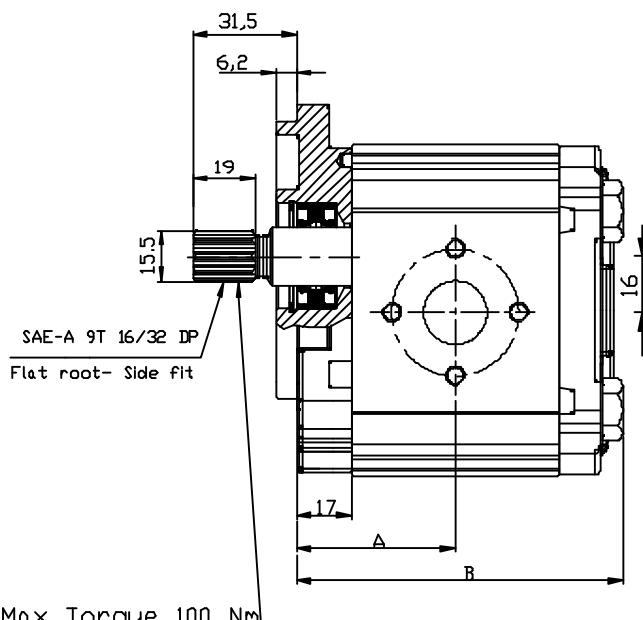
EXAMPLE OF ORDERING CODE

OT200 P 08 S / B 24 B7

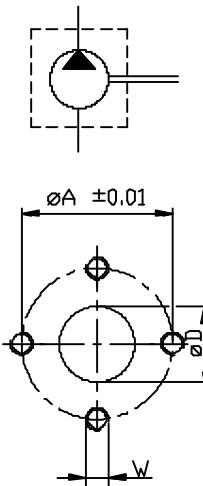


GROUP 2 PUMPS - SAE "A" STANDARD

VERSION: P21 S2

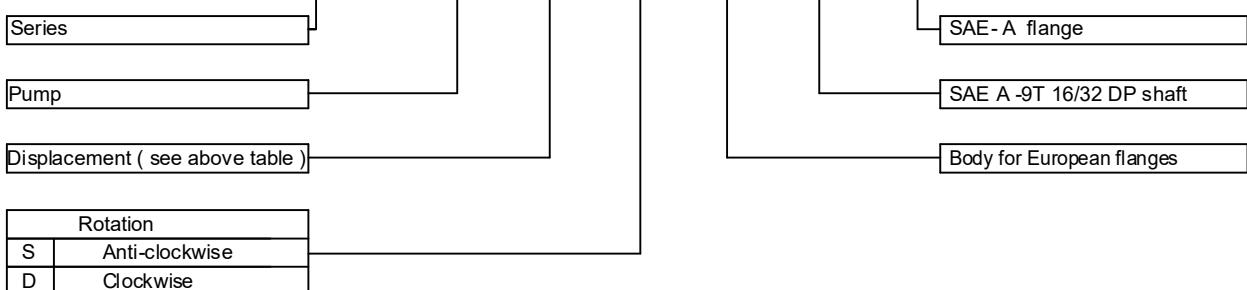


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port			Outlet port		
					B	(mm)	ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	41,00	84,50	13	30	M6	13	30	M6
OT 200 P06	06,20	250	300	3500	42,50	87,50	13	30	M6	13	30	M6
OT 200 P08	08,20	250	300	3500	44,00	90,50	13	30	M6	13	30	M6
OT 200 P11	11,20	250	300	3500	46,15	94,80	13	30	M6	13	30	M6
OT 200 P14	14,00	240	300	3000	48,15	98,80	20	40	M8	13	30	M6
OT 200 P16	16,00	240	300	3000	49,60	101,7	20	40	M8	13	30	M6
OT 200 P20	20,00	200	240	3000	52,50	107,5	20	40	M8	13	30	M6
OT 200 P22	22,50	170	210	2500	58,35	119,2	20	40	M8	13	30	M6
OT 200 P25	25,10	170	210	2500	60,25	123,0	20	40	M8	13	30	M6
OT 200 P28	28,00	140	180	2500	62,35	127,2	20	40	M8	13	30	M6
OT 200 P30	30,00	130	170	2000	63,75	130,0	20	40	M8	13	30	M6



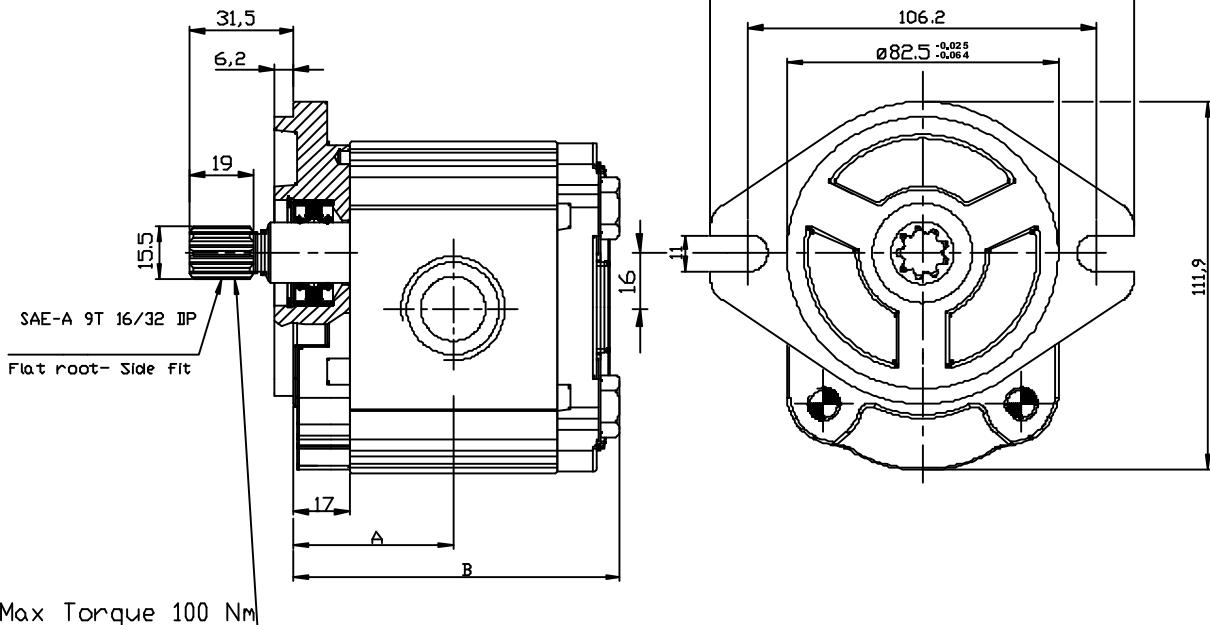
EXAMPLE OF ORDERING CODE

OT200 P 08 S / P 21 S2

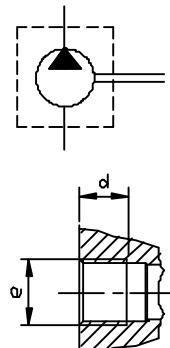


GROUP 2 PUMPS - SAE "A" STANDARD

VERSION: G21 S2

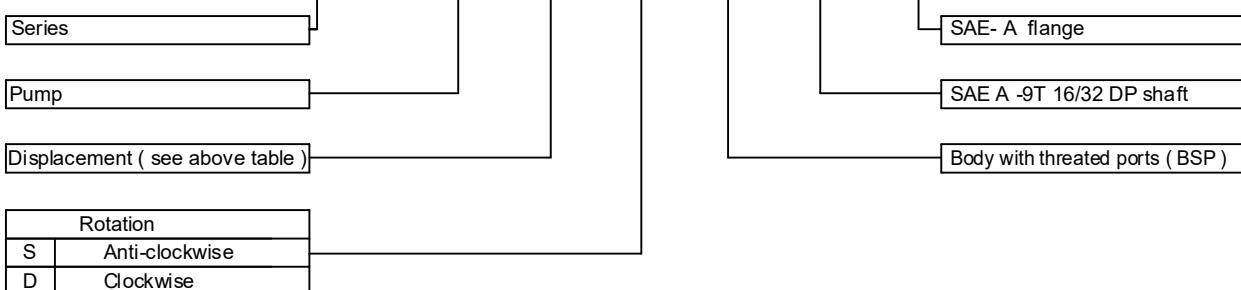


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m.)	Dimension A B		Inlet port		Outlet port	
					(mm)		e	d	e	d
OT 200 P04	04,10	250	300	4000	41,00	84,50	G1/2	14	G1/2	14
OT 200 P06	06,20	250	300	3500	42,50	87,50	G1/2	14	G1/2	14
OT 200 P08	08,20	250	300	3500	44,00	90,50	G1/2	14	G1/2	14
OT 200 P11	11,20	250	300	3500	46,15	94,80	G1/2	14	G1/2	14
OT 200 P14	14,00	240	300	3000	48,15	98,80	G3/4	16	G1/2	14
OT 200 P16	16,00	240	300	3000	49,60	101,7	G3/4	16	G1/2	14
OT 200 P20	20,00	200	240	3000	52,50	107,5	G3/4	16	G1/2	14
OT 200 P22	22,50	170	210	2500	58,35	119,2	G3/4	16	G1/2	14
OT 200 P25	25,10	170	210	2500	60,25	123,0	G3/4	16	G1/2	14
OT 200 P28	28,00	140	180	2500	62,35	127,2	G3/4	16	G1/2	14
OT 200 P30	30,00	130	170	2000	63,75	130,0	G3/4	16	G1/2	14



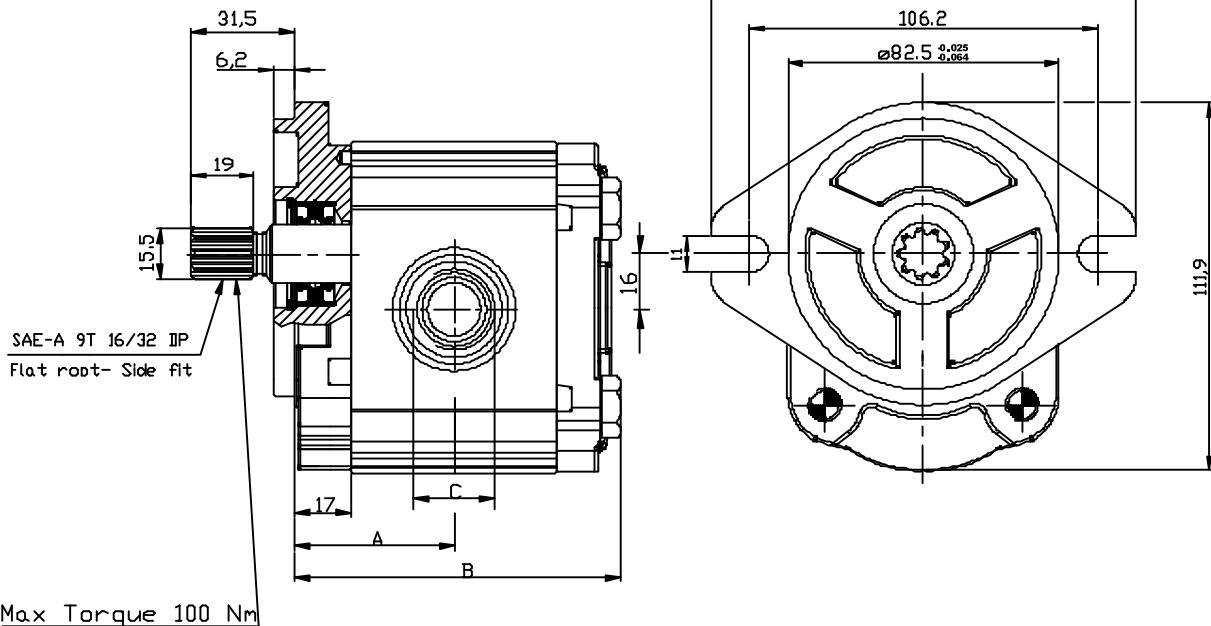
EXAMPLE OF ORDERING CODE

OT200 P 08 S / G 21 S2



GROUP 2 PUMPS- SAE "A" STANDARD

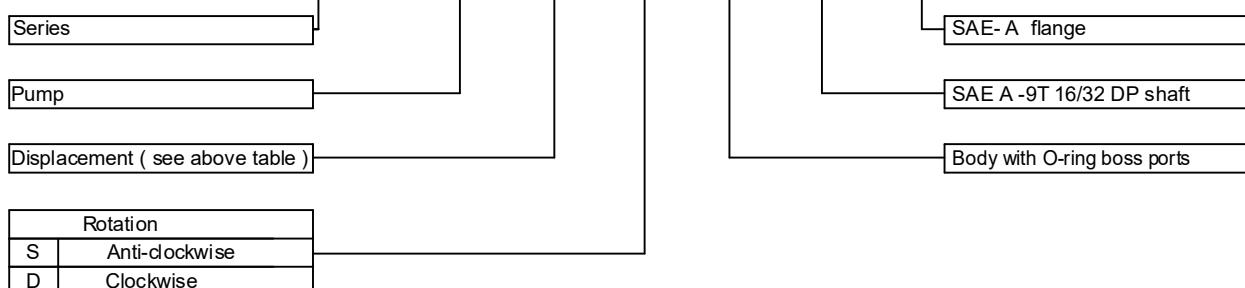
VERSION: R21 S2



Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A B		Inlet port	Outlet port
					(mm)			
OT 200 P04	04,10	250	300	4000	41,00	84,50		
OT 200 P06	06,20	250	300	3500	42,50	87,50		
OT 200 P08	08,20	250	300	3500	44,00	90,50		
OT 200 P11	11,20	250	300	3500	46,15	94,80		
OT 200 P14	14,00	240	300	3000	48,15	98,80		
OT 200 P16	16,00	240	300	3000	49,60	101,7		
OT 200 P20	20,00	200	240	3000	52,50	107,5		
OT 200 P22	22,50	170	210	2500	58,35	119,2		
OT 200 P25	25,10	170	210	2500	60,25	123,0		
OT 200 P28	28,00	140	180	2500	62,35	127,2		
OT 200 P30	30,00	130	170	2000	63,75	130,0		

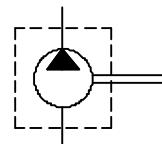
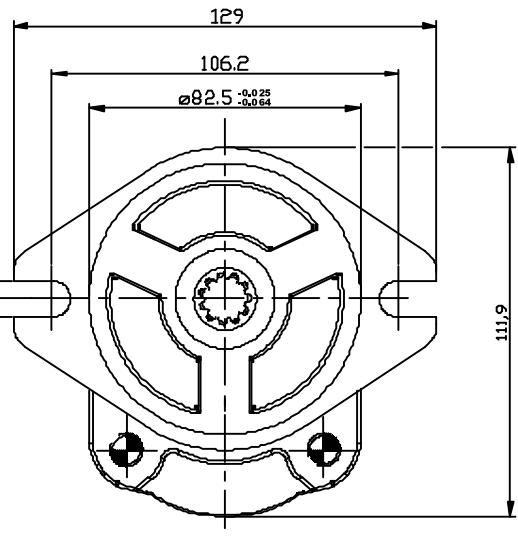
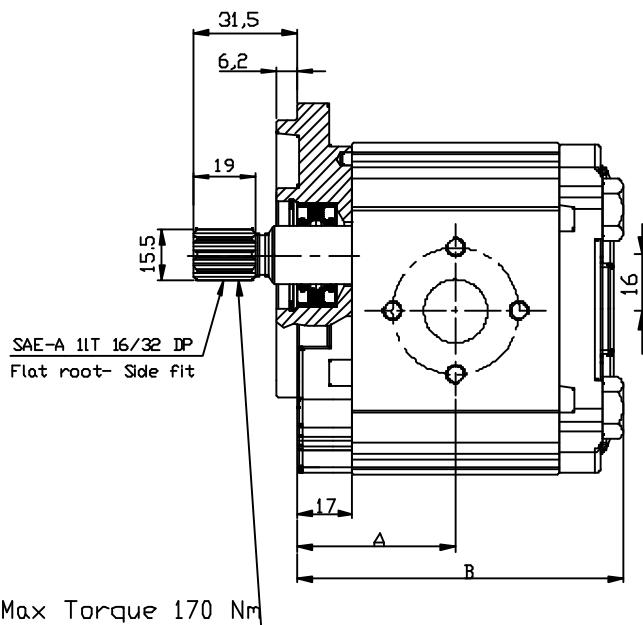
EXAMPLE OF ORDERING CODE

OT200 P 08 S / R 21 S2

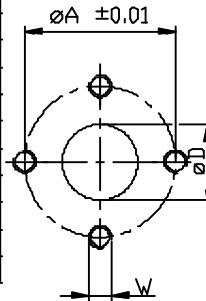


GROUP 2 PUMPS - SAE "A" STANDARD

VERSION: P20 S2



Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port		Outlet port			
					B	(mm)	ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	41,00	84,50	13	30	M6	13	30	M6
OT 200 P06	06,20	250	300	3500	42,50	87,50	13	30	M6	13	30	M6
OT 200 P08	08,20	250	300	3500	44,00	90,50	13	30	M6	13	30	M6
OT 200 P11	11,20	250	300	3500	46,15	94,80	13	30	M6	13	30	M6
OT 200 P14	14,00	240	300	3000	48,15	98,80	20	40	M8	13	30	M6
OT 200 P16	16,00	240	300	3000	49,60	101,7	20	40	M8	13	30	M6
OT 200 P20	20,00	200	240	3000	52,50	107,5	20	40	M8	13	30	M6
OT 200 P22	22,50	170	210	2500	58,35	119,2	20	40	M8	13	30	M6
OT 200 P25	25,10	170	210	2500	60,25	123,0	20	40	M8	13	30	M6
OT 200 P28	28,00	140	180	2500	62,35	127,2	20	40	M8	13	30	M6
OT 200 P30	30,00	130	170	2000	63,75	130,0	20	40	M8	13	30	M6



EXAMPLE OF ORDERING CODE

OT200 P 08 S / P 20 S2

Series

Pump

Displacement (see above table)

Rotation	
S	Anti-clockwise
D	Clockwise

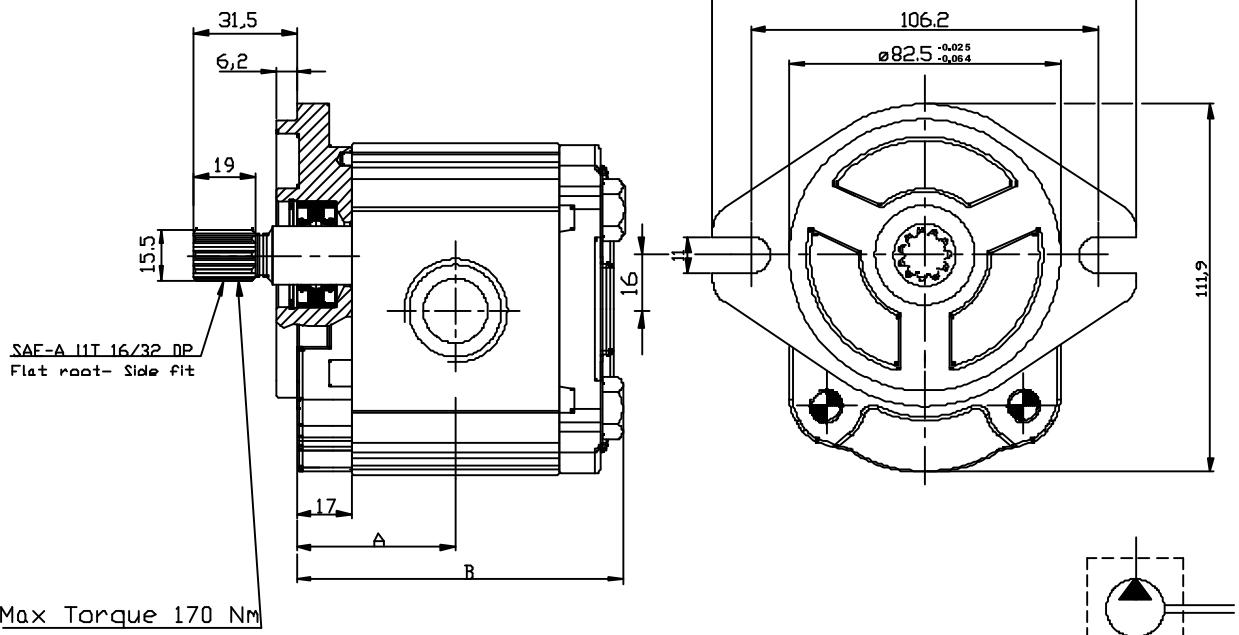
SAE - A flange

SAE A -11T 16/32 DP shaft

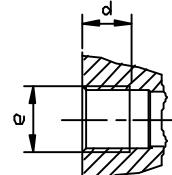
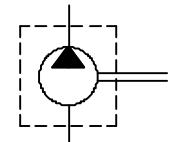
Body for European flanges

GROUP 2 PUMPS - SAE "A" STANDARD

VERSION: G20 S2

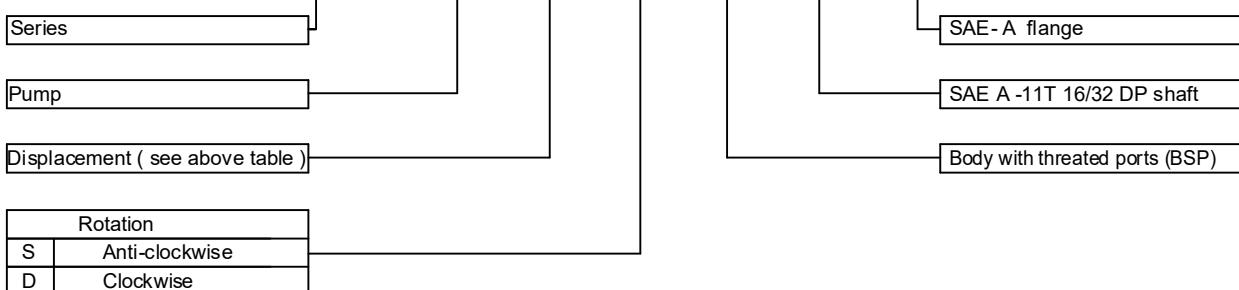


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port		Outlet port	
					B	(mm)	e	d	e	d
OT 200 P04	04,10	250	300	4000	41,00	84,50	G1/2	14	G1/2	14
OT 200 P06	06,20	250	300	3500	42,50	87,50	G1/2	14	G1/2	14
OT 200 P08	08,20	250	300	3500	44,00	90,50	G1/2	14	G1/2	14
OT 200 P11	11,20	250	300	3500	46,15	94,80	G1/2	14	G1/2	14
OT 200 P14	14,00	240	300	3000	48,15	98,80	G3/4	16	G1/2	14
OT 200 P16	16,00	240	300	3000	49,60	101,7	G3/4	16	G1/2	14
OT 200 P20	20,00	200	240	3000	52,50	107,5	G3/4	16	G1/2	14
OT 200 P22	22,50	170	210	2500	58,35	119,2	G3/4	16	G1/2	14
OT 200 P25	25,10	170	210	2500	60,25	123,0	G3/4	16	G1/2	14
OT 200 P28	28,00	140	180	2500	62,35	127,2	G3/4	16	G1/2	14
OT 200 P30	30,00	130	170	2000	63,75	130,0	G3/4	16	G1/2	14



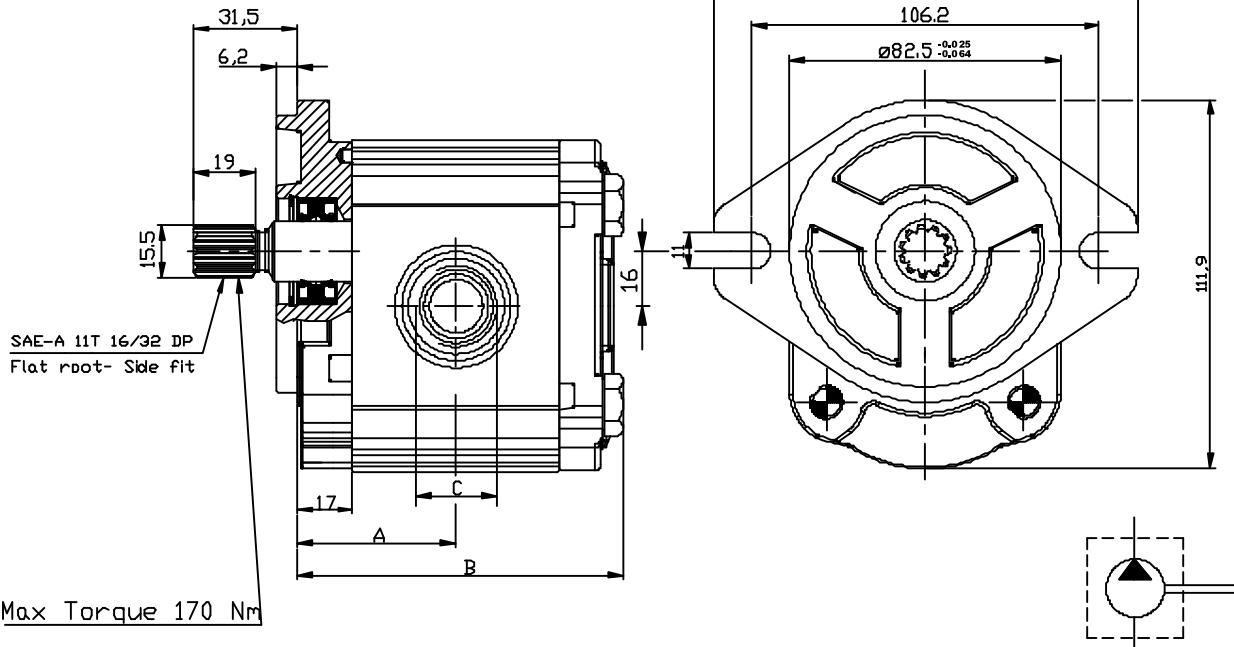
EXAMPLE OF ORDERING CODE

OT200 P 08 S / G 20 S2



GROUP 2 PUMPS - SAE "A" STANDARD

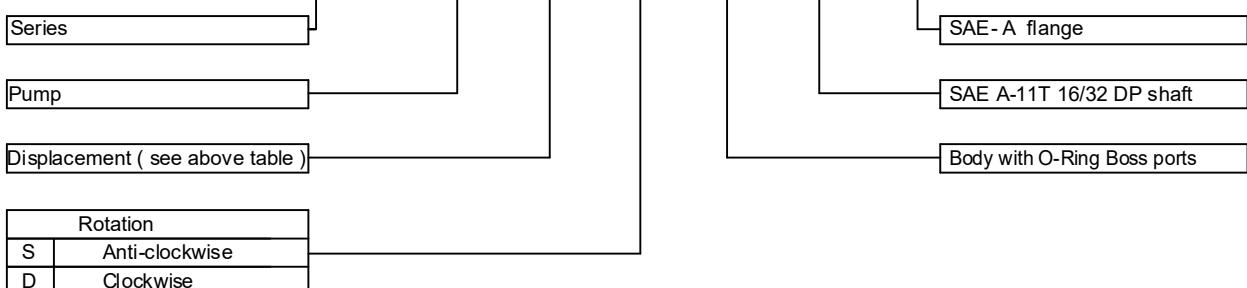
VERSION: R20 S2



Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A B		Inlet port	Outlet port
					(mm)	C		
OT 200 P04	04,10	250	300	4000	41,00	84,50		
OT 200 P06	06,20	250	300	3500	42,50	87,50		
OT 200 P08	08,20	250	300	3500	44,00	90,50		
OT 200 P11	11,20	250	300	3500	46,15	94,80		
OT 200 P14	14,00	240	300	3000	48,15	98,80		
OT 200 P16	16,00	240	300	3000	49,60	101,7		
OT 200 P20	20,00	200	240	3000	52,50	107,5		
OT 200 P22	22,50	170	210	2500	58,35	119,2		
OT 200 P25	25,10	170	210	2500	60,25	123,0		
OT 200 P28	28,00	140	180	2500	62,35	127,2		
OT 200 P30	30,00	130	170	2000	63,75	130,0		

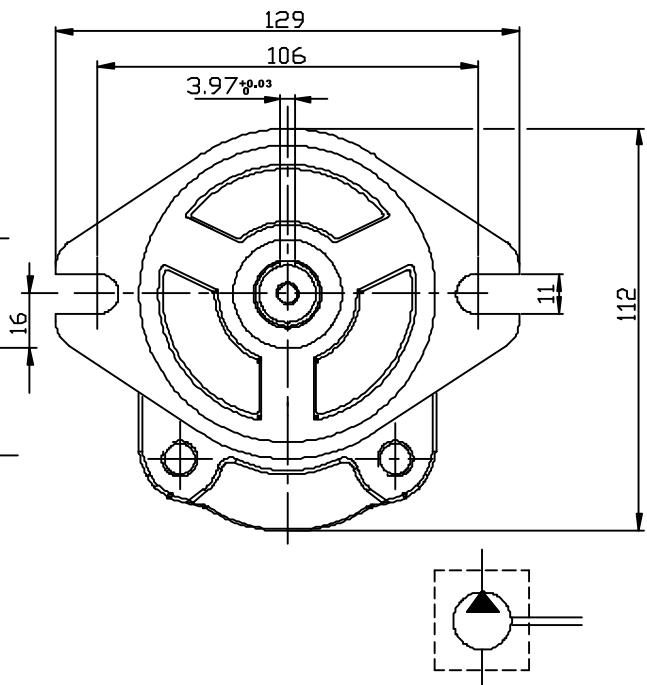
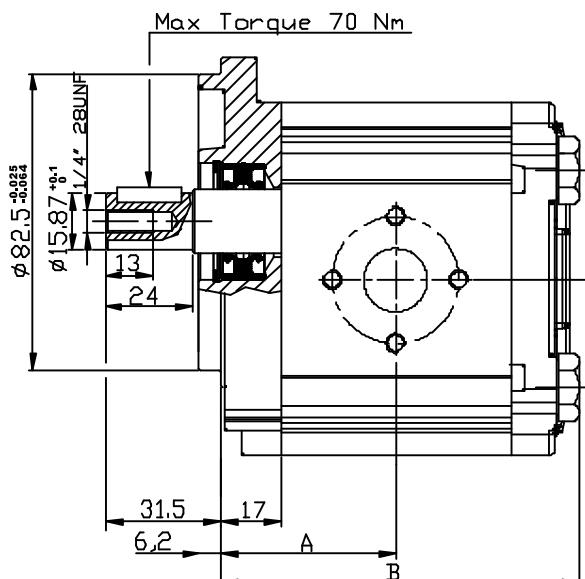
EXAMPLE OF ORDERING CODE

OT200 P 08 S / R 20 S2

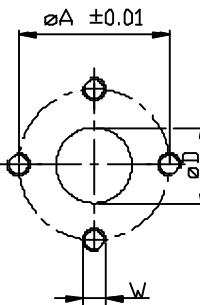


GROUP 2 PUMPS- SAE "A" STANDARD

VERSION: P31 S2

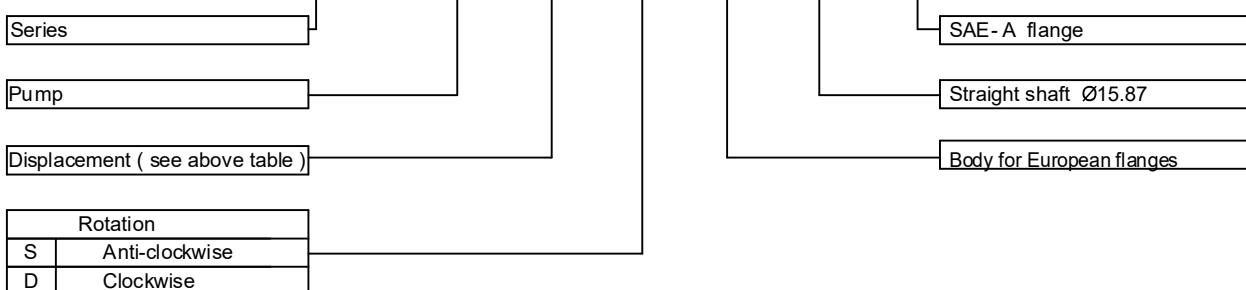


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port		Outlet port			
					(mm)	ØD	ØA	W	ØD	ØA	W	
OT 200 P04	04,10	250	300	4000	41,00	84,50	13	30	M6	13	30	M6
OT 200 P06	06,20	250	300	3500	42,50	87,50	13	30	M6	13	30	M6
OT 200 P08	08,20	250	300	3500	44,00	90,50	13	30	M6	13	30	M6
OT 200 P11	11,20	250	300	3500	46,15	94,80	13	30	M6	13	30	M6
OT 200 P14	14,00	240	300	3000	48,15	98,80	20	40	M8	13	30	M6
OT 200 P16	16,00	240	300	3000	49,60	101,7	20	40	M8	13	30	M6
OT 200 P20	20,00	200	240	3000	52,50	107,5	20	40	M8	13	30	M6
OT 200 P22	22,50	170	210	2500	58,35	119,2	20	40	M8	13	30	M6
OT 200 P25	25,10	170	210	2500	60,25	123,0	20	40	M8	13	30	M6
OT 200 P28	28,00	140	180	2500	62,35	127,2	20	40	M8	13	30	M6
OT 200 P30	30,00	130	170	2000	63,75	130,0	20	40	M8	13	30	M6



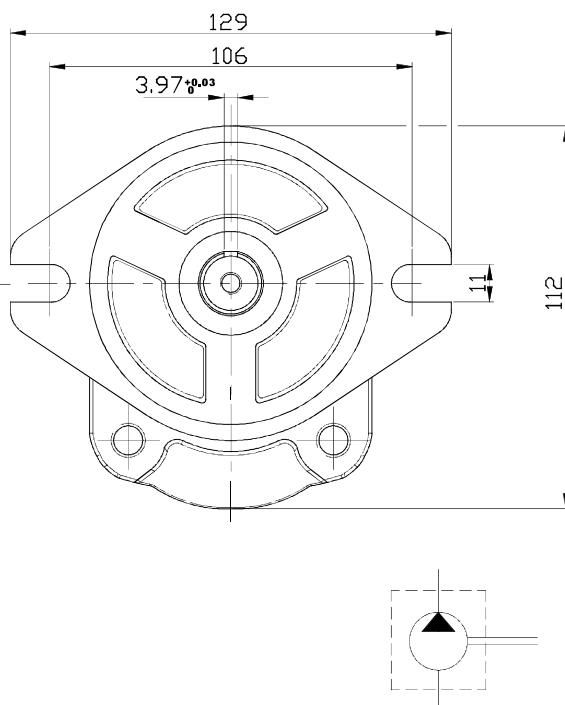
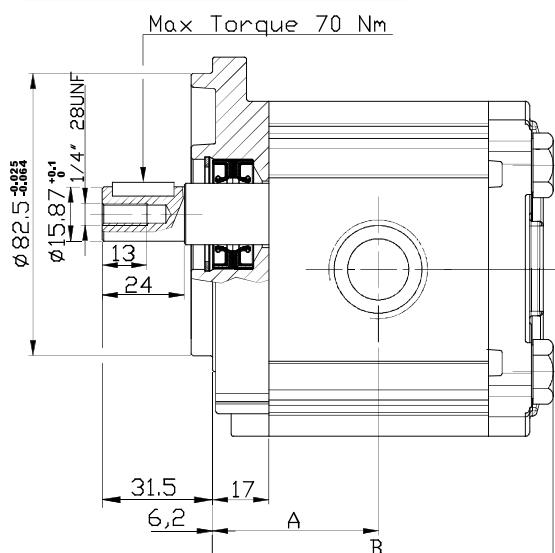
EXAMPLE OF ORDERING CODE

OT200 P 08 S / P 31 S2

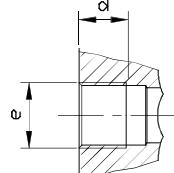


GROUP 2 PUMPS- SAE "A" STANDARD

VERSION: G31 S2

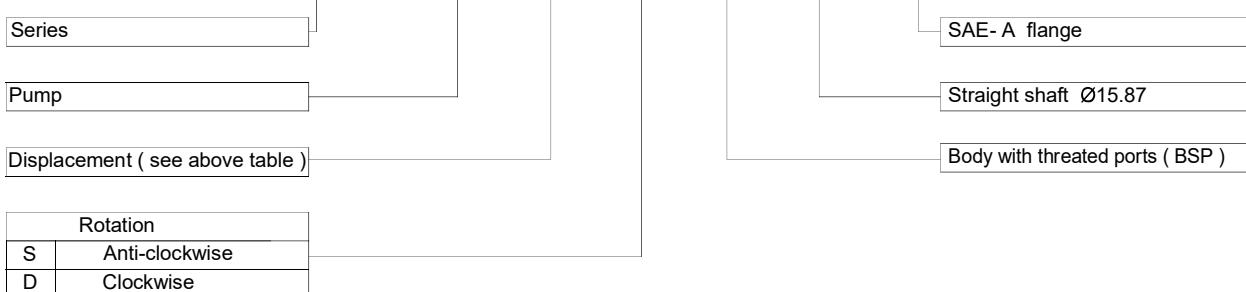


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A B		Inlet port		Outlet port	
					(mm)	e	d	e	d	
OT 200 P04	04,10	250	300	4000	41,00	84,50	G1/2	14	G1/2	14
OT 200 P06	06,20	250	300	3500	42,50	87,50	G1/2	14	G1/2	14
OT 200 P08	08,20	250	300	3500	44,00	90,50	G1/2	14	G1/2	14
OT 200 P11	11,20	250	300	3500	46,15	94,80	G1/2	14	G1/2	14
OT 200 P14	14,00	240	300	3000	48,15	98,80	G3/4	16	G1/2	14
OT 200 P16	16,00	240	300	3000	49,60	101,7	G3/4	16	G1/2	14
OT 200 P20	20,00	200	240	3000	52,50	107,5	G3/4	16	G1/2	14
OT 200 P22	22,50	170	210	2500	58,35	119,2	G3/4	16	G1/2	14
OT 200 P25	25,10	170	210	2500	60,25	123,0	G3/4	16	G1/2	14
OT 200 P28	28,00	140	180	2500	62,35	127,2	G3/4	16	G1/2	14
OT 200 P30	30,00	130	170	2000	63,75	130,0	G3/4	16	G1/2	14



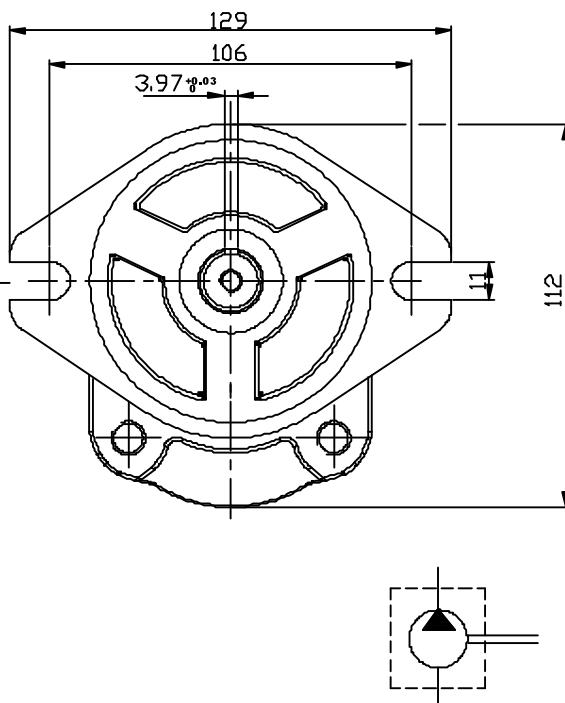
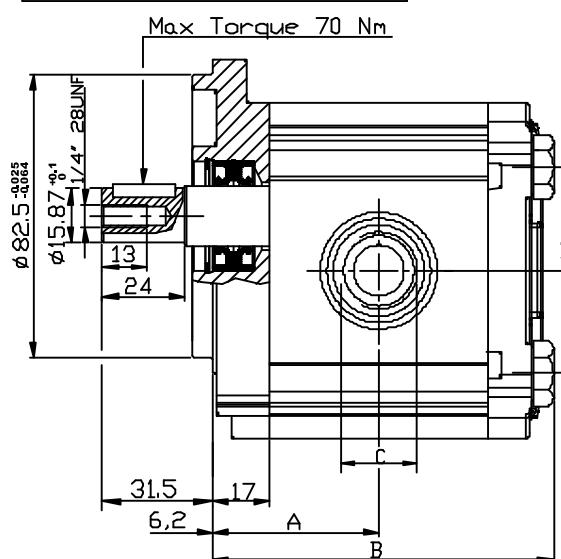
EXAMPLE OF ORDERING CODE

OT200 P 08 S / G 31 S2



GROUP 2 PUMPS- SAE "A" STANDARD

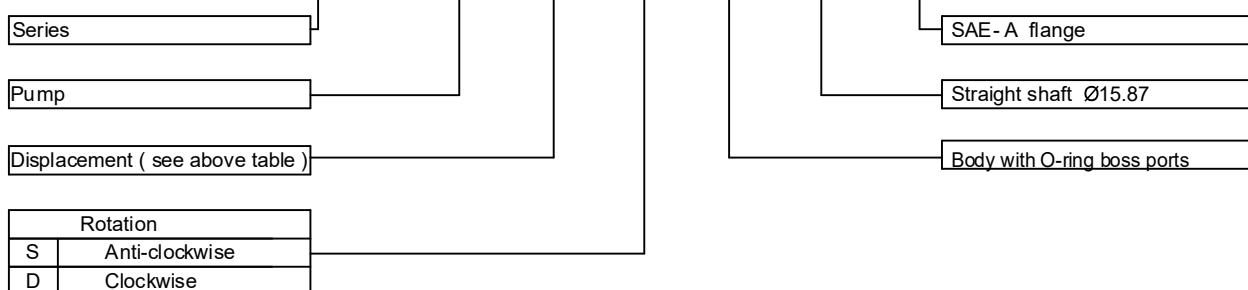
VERSION: R31 S2



Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A B		Inlet port	Outlet port
					(mm)			
OT 200 P04	04,10	250	300	4000	41,00	84,50		
OT 200 P06	06,20	250	300	3500	42,50	87,50	7/8-14UNF-2B	7/8-14UNF-2B
OT 200 P08	08,20	250	300	3500	44,00	90,50		
OT 200 P11	11,20	250	300	3500	46,15	94,80		
OT 200 P14	14,00	240	300	3000	48,15	98,80		
OT 200 P16	16,00	240	300	3000	49,60	101,7		
OT 200 P20	20,00	200	240	3000	52,50	107,5	1-1/16-12UN-2B	
OT 200 P22	22,50	170	210	2500	58,35	119,2		
OT 200 P25	25,10	170	210	2500	60,25	123,0		
OT 200 P28	28,00	140	180	2500	62,35	127,2		
OT 200 P30	30,00	130	170	2000	63,75	130,0		

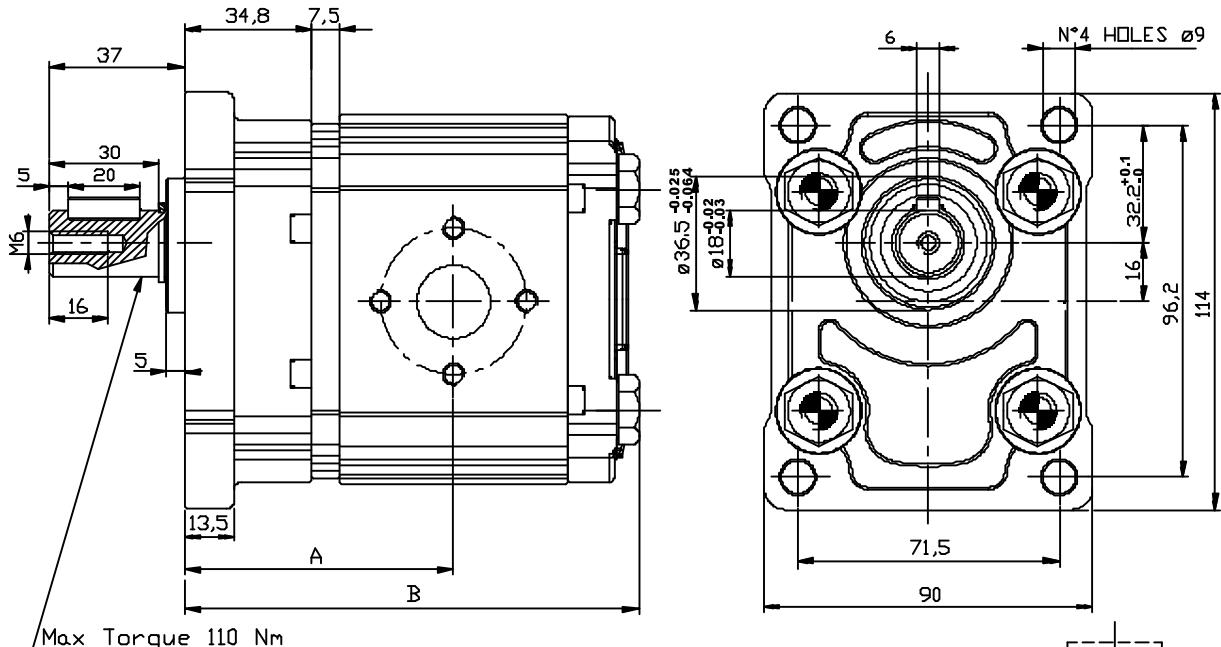
EXAMPLE OF ORDERING CODE

OT200 P 08 S / R 31 S2

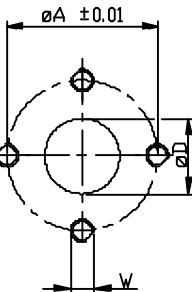
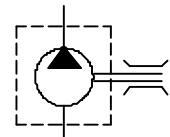


GROUP 2 PUMPS- WITH FRONT BEARING

VERSION: P T 22 P2



Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension		Inlet port			Outlet port		
					A	B	ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	66.30	109.80	13	30	M6	13	30	M6
OT 200 P06	06,20	250	300	3500	67.80	112.80	13	30	M6	13	30	M6
OT 200 P08	08,20	250	300	3500	69.30	115.80	13	30	M6	13	30	M6
OT 200 P11	11,20	250	300	3500	71.45	120.10	13	30	M6	13	30	M6
OT 200 P14	14,00	240	300	3000	73.45	124.10	20	40	M8	13	30	M6
OT 200 P16	16,00	240	300	3000	74.90	127.00	20	40	M8	13	30	M6
OT 200 P20	20,00	200	240	3000	77.80	132.80	20	40	M8	13	30	M6
OT 200 P22	22,50	170	210	2500	82.65	144.50	20	40	M8	13	30	M6
OT 200 P25	25,10	170	210	2500	85.55	148.30	20	40	M8	13	30	M6
OT 200 P28	28,00	140	180	2500	87.65	152.50	20	40	M8	13	30	M6
OT 200 P30	30,00	130	170	2000	89.05	155.30	20	40	M8	13	30	M6



EXAMPLE OF ORDERING CODE

OT200 P 08 S / P / T 22 P2

Series

Pump

Displacement (see above table)

Rotation

D Clockwise

Digitized by srujanika@gmail.com

European standard flange

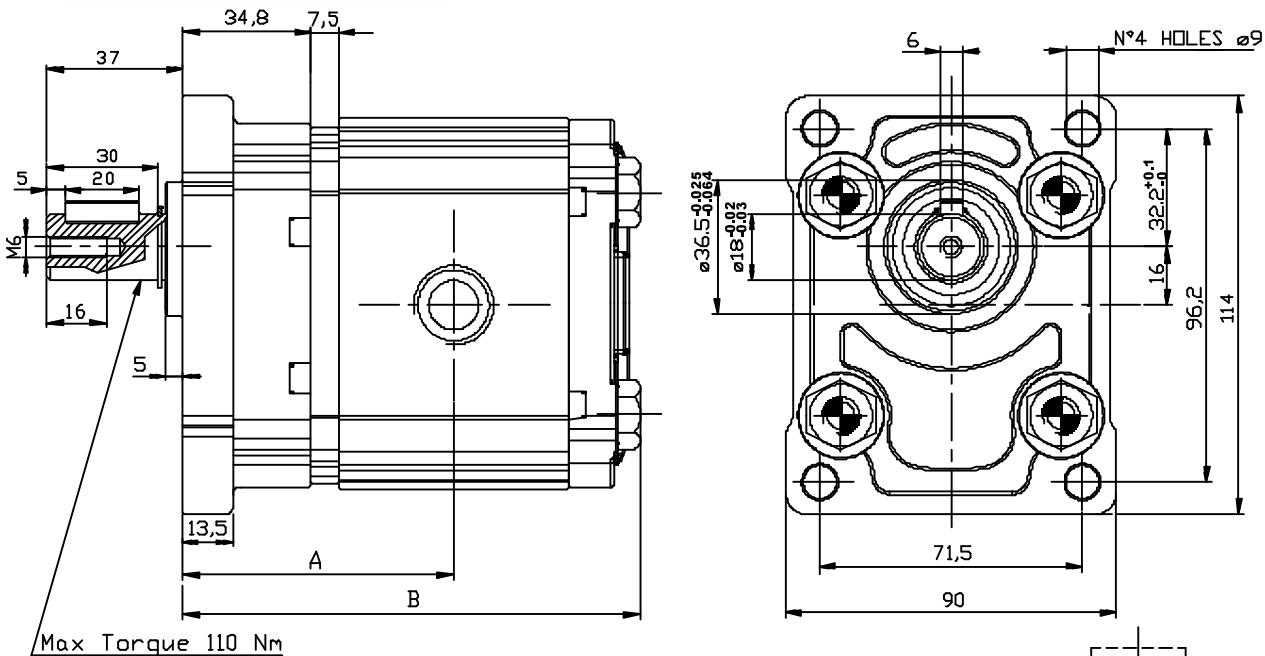
Straight shaft Ø18

Front beam

Body for Europe

GROUP 2 PUMPS- WITH FRONT BEARING

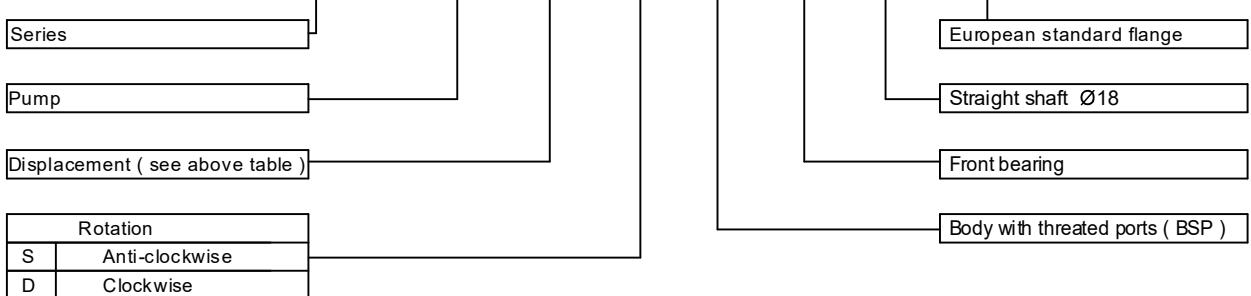
VERSION: G T 22 P2



Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port		Outlet port	
					B	(mm)	e	d	e	d
OT 200 P04	04,10	250	300	4000	66.30	109.80	G1/2	14	G1/2	14
OT 200 P06	06,20	250	300	3500	67.80	112.80	G1/2	14	G1/2	14
OT 200 P08	08,20	250	300	3500	69.30	115.80	G1/2	14	G1/2	14
OT 200 P11	11,20	250	300	3500	71.45	120.10	G1/2	14	G1/2	14
OT 200 P14	14,00	240	300	3000	73.45	124.10	G3/4	16	G1/2	14
OT 200 P16	16,00	240	300	3000	74.90	127.00	G3/4	16	G1/2	14
OT 200 P20	20,00	200	240	3000	77.80	132.80	G3/4	16	G1/2	14
OT 200 P22	22,50	170	210	2500	82.65	144.50	G3/4	16	G1/2	14
OT 200 P25	25,10	170	210	2500	85.55	148.30	G3/4	16	G1/2	14
OT 200 P28	28,00	140	180	2500	87.65	152.50	G3/4	16	G1/2	14
OT 200 P30	30,00	130	170	2000	89.05	155.30	G3/4	16	G1/2	14

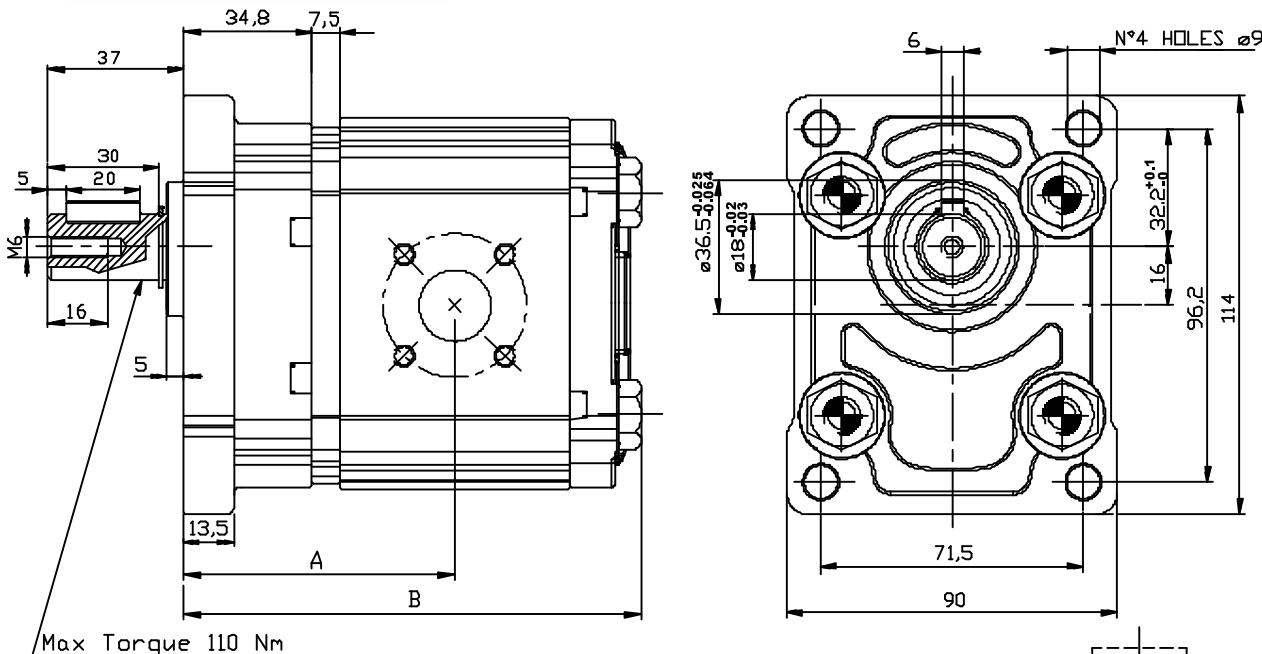
EXAMPLE OF ORDERING CODE

OT200 P 08 S / G / T 22 P2

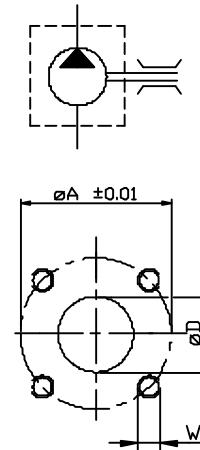


GROUP 2 PUMPS- WITH FRONT BEARING

VERSION: B T 22 P2

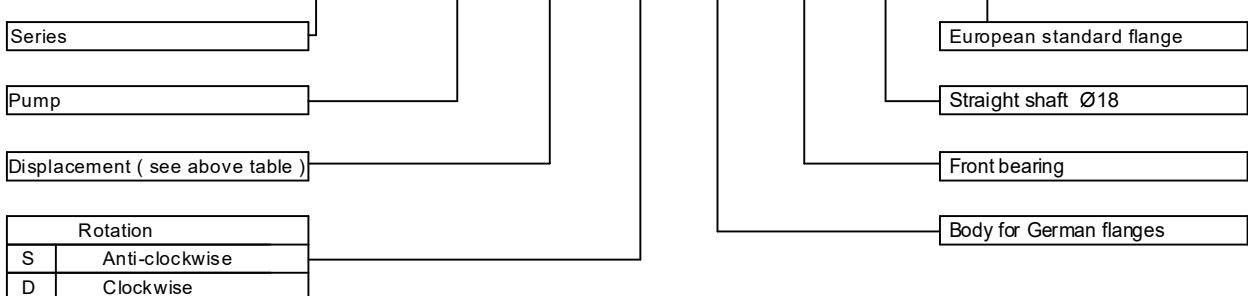


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port		Outlet port			
					B	(mm)	ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	66.30	109.80	20	40	M6	15	35	M6
OT 200 P06	06,20	250	300	3500	67.80	112.80	20	40	M6	15	35	M6
OT 200 P08	08,20	250	300	3500	69.30	115.80	20	40	M6	15	35	M6
OT 200 P11	11,20	250	300	3500	71.45	120.10	20	40	M6	15	35	M6
OT 200 P14	14,00	240	300	3000	73.45	124.10	20	40	M6	15	35	M6
OT 200 P16	16,00	240	300	3000	74.90	127.00	20	40	M6	15	35	M6
OT 200 P20	20,00	200	240	3000	77.80	123.80	20	40	M6	15	35	M6
OT 200 P22	22,50	170	210	2500	82.65	144.50	20	40	M6	15	35	M6
OT 200 P25	25,10	170	210	2500	85.55	148.30	20	40	M6	15	35	M6
OT 200 P28	28,00	140	180	2500	87.65	152.50	20	40	M6	15	35	M6
OT 200 P30	30,00	130	170	2000	89.05	155.30	20	40	M6	15	35	M6



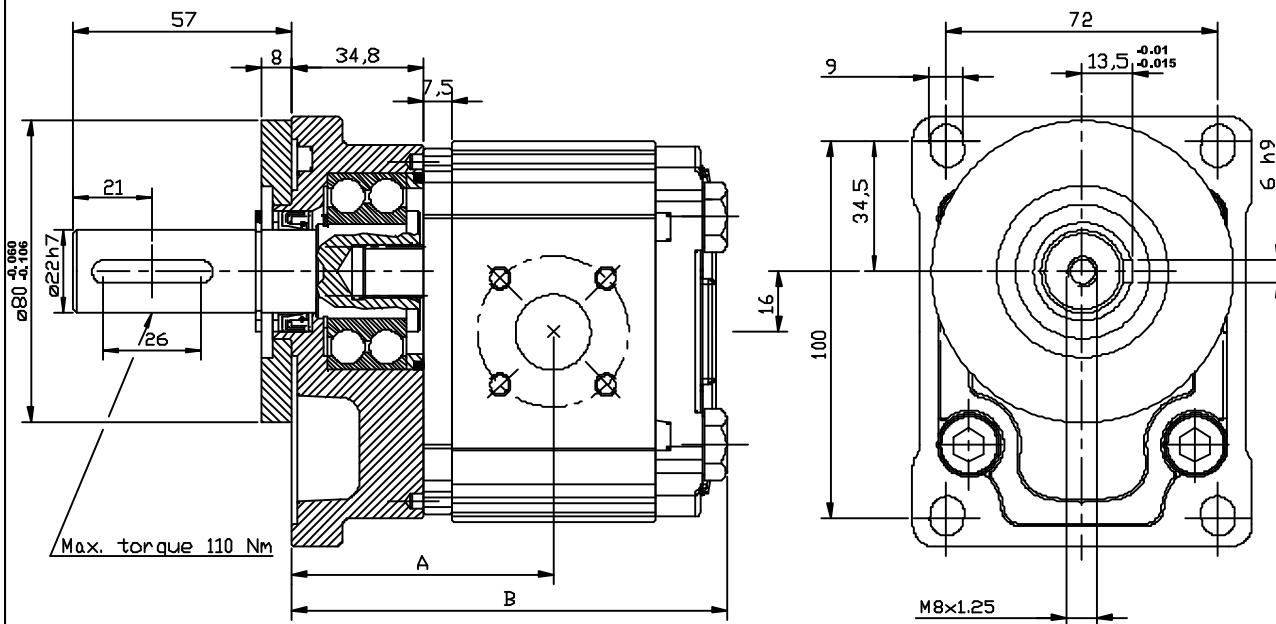
EXAMPLE OF ORDERING CODE

OT200 P 08 S / B / T 22 P2

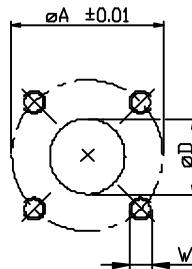


GROUP 2 PUMPS- WITH FRONT BEARING

VERSION: B T 29 B2

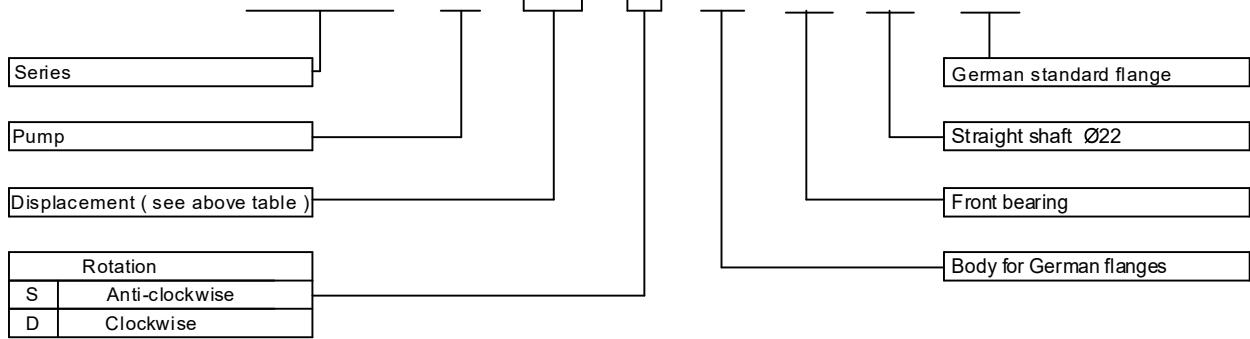


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension		Inlet port		Outlet port			
					A	B	(mm)	ØD	ØA	W	ØD	ØA
OT 200 P04	04,10	250	300	4000	66.30	109.80	20	40	M6	15	35	M6
OT 200 P06	06,20	250	300	3500	67.80	112.80	20	40	M6	15	35	M6
OT 200 P08	08,20	250	300	3500	69.30	115.80	20	40	M6	15	35	M6
OT 200 P11	11,20	250	300	3500	71.45	120.10	20	40	M6	15	35	M6
OT 200 P14	14,00	240	300	3000	73.45	124.10	20	40	M6	15	35	M6
OT 200 P16	16,00	240	300	3000	74.90	127.00	20	40	M6	15	35	M6
OT 200 P20	20,00	200	240	3000	77.80	132.80	20	40	M6	15	35	M6
OT 200 P22	22,50	170	210	2500	82.65	144.50	20	40	M6	15	35	M6
OT 200 P25	25,10	170	210	2500	85.55	148.30	20	40	M6	15	35	M6
OT 200 P28	28,00	140	180	2500	87.65	152.50	20	40	M6	15	35	M6
OT 200 P30	30,00	130	170	2000	89.05	155.30	20	40	M6	15	35	M6



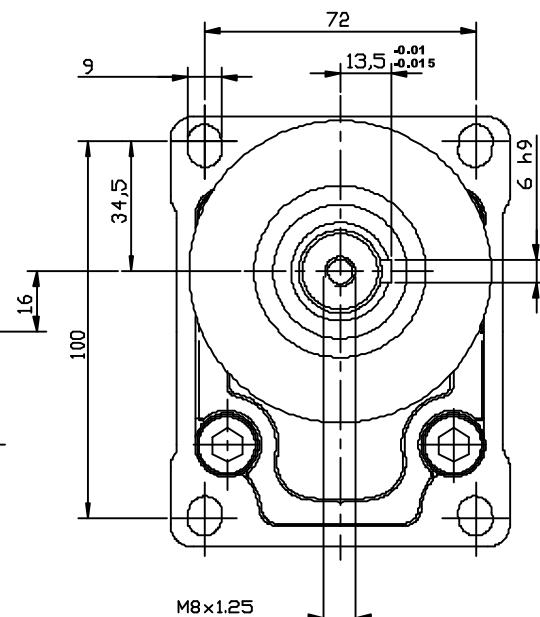
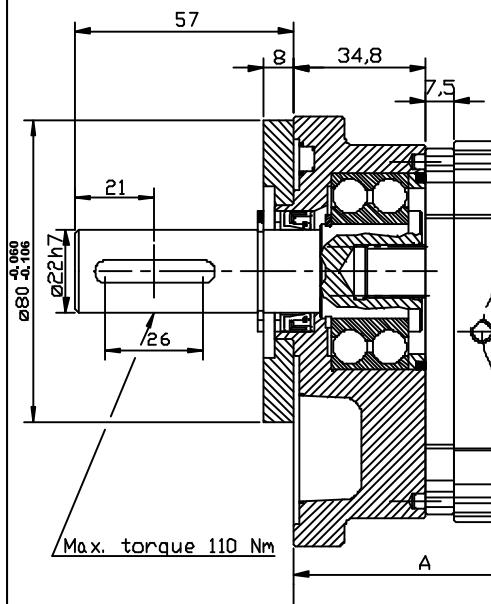
EXAMPLE OF ORDERING CODE

OT200 P 08 S / B / T 29 B2

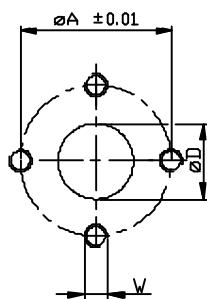


GROUP 2 PUMPS- WITH FRONT BEARING

VERSION: PT 29 B2

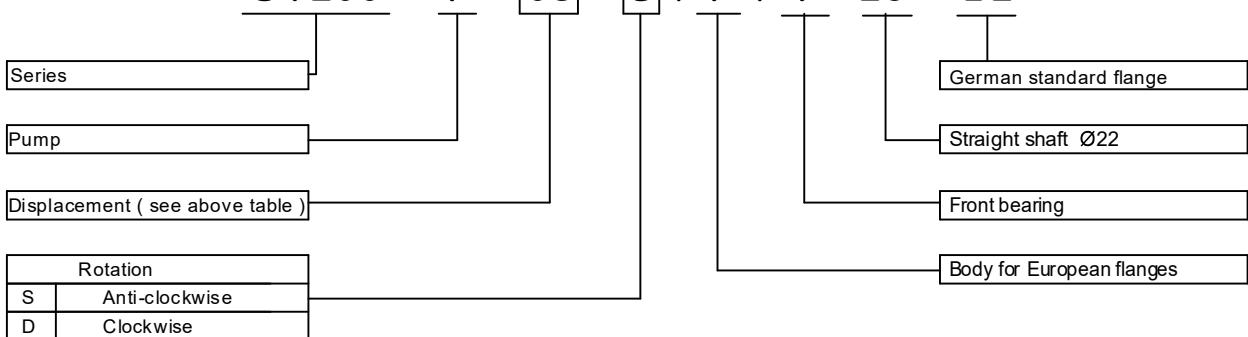


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension		Inlet port		Outlet port			
					A	B	ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	66.30	109.80	20	40	M6	15	35	M6
OT 200 P06	06,20	250	300	3500	67.80	112.80	20	40	M6	15	35	M6
OT 200 P08	08,20	250	300	3500	69.30	115.80	20	40	M6	15	35	M6
OT 200 P11	11,20	250	300	3500	71.45	120.10	20	40	M6	15	35	M6
OT 200 P14	14,00	240	300	3000	73.45	124.10	20	40	M6	15	35	M6
OT 200 P16	16,00	240	300	3000	74.90	127.00	20	40	M6	15	35	M6
OT 200 P20	20,00	200	240	3000	77.80	132.80	20	40	M6	15	35	M6
OT 200 P22	22,50	170	210	2500	82.65	144.50	20	40	M6	15	35	M6
OT 200 P25	25,10	170	210	2500	85.55	148.30	20	40	M6	15	35	M6
OT 200 P28	28,00	140	180	2500	87.65	152.50	20	40	M6	15	35	M6
OT 200 P30	30,00	130	170	2000	89.05	155.30	20	40	M6	15	35	M6



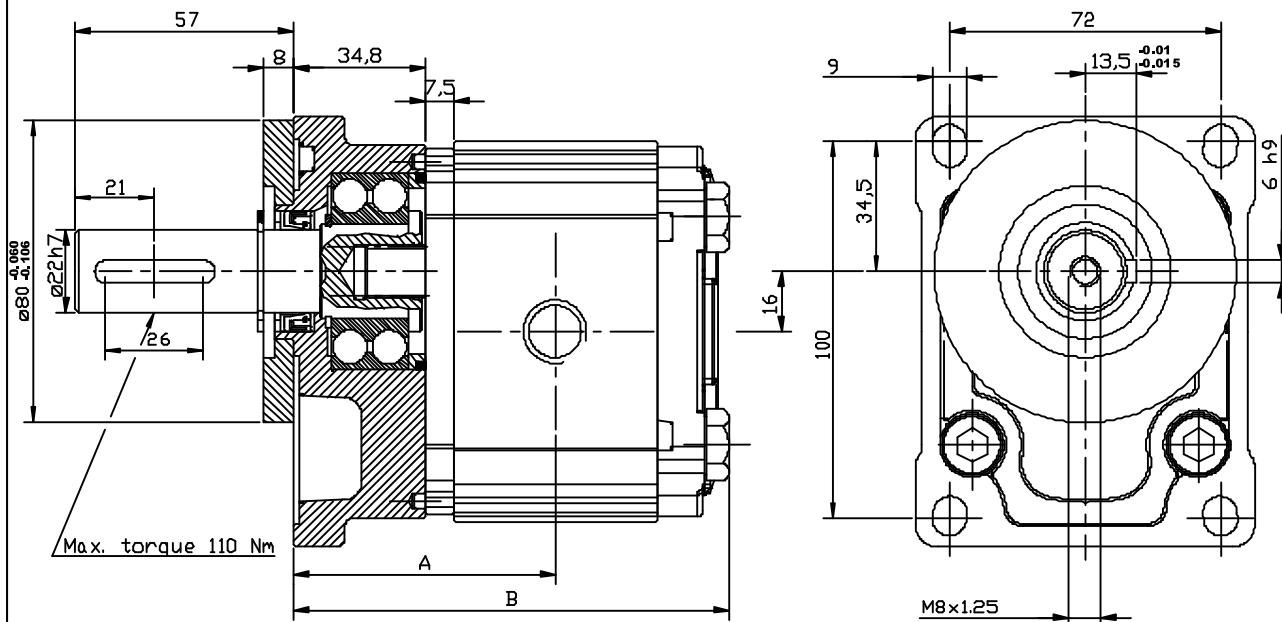
EXAMPLE OF ORDERING CODE

OT200 P 08 S / P / T 29 B2

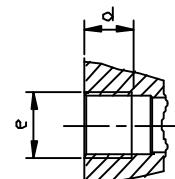


GROUP 2 PUMPS- WITH FRONT BEARING

VERSION: GT29B2

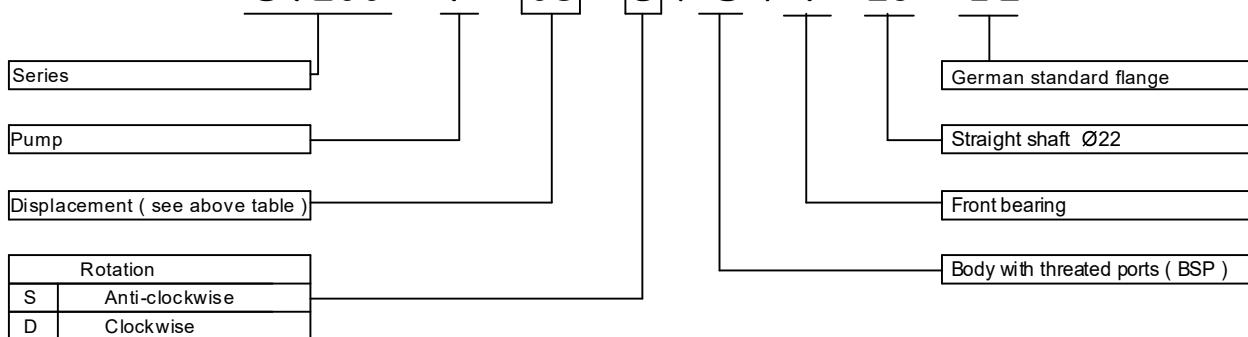


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension		Inlet port		Outlet port	
					A	B	e	d	e	d
OT 200 P04	04,10	250	300	4000	66.30	109.80	G1/2	14	G1/2	14
OT 200 P06	06,20	250	300	3500	67.80	112.80	G1/2	14	G1/2	14
OT 200 P08	08,20	250	300	3500	69.30	115.80	G1/2	14	G1/2	14
OT 200 P11	11,20	250	300	3500	71.45	120.10	G1/2	14	G1/2	14
OT 200 P14	14,00	240	300	3000	73.45	124.10	G3/4	16	G3/4	16
OT 200 P16	16,00	240	300	3000	74.90	127.00	G3/4	16	G3/4	16
OT 200 P20	20,00	200	240	3000	77.80	132.80	G3/4	16	G3/4	16
OT 200 P22	22,50	170	210	2500	82.65	144.50	G3/4	16	G3/4	16
OT 200 P25	25,10	170	210	2500	85.55	148.30	G3/4	16	G3/4	16
OT 200 P28	28,00	140	180	2500	87.65	152.50	G3/4	16	G3/4	16
OT 200 P30	30,00	130	170	2000	89.05	155.30	G3/4	16	G3/4	16



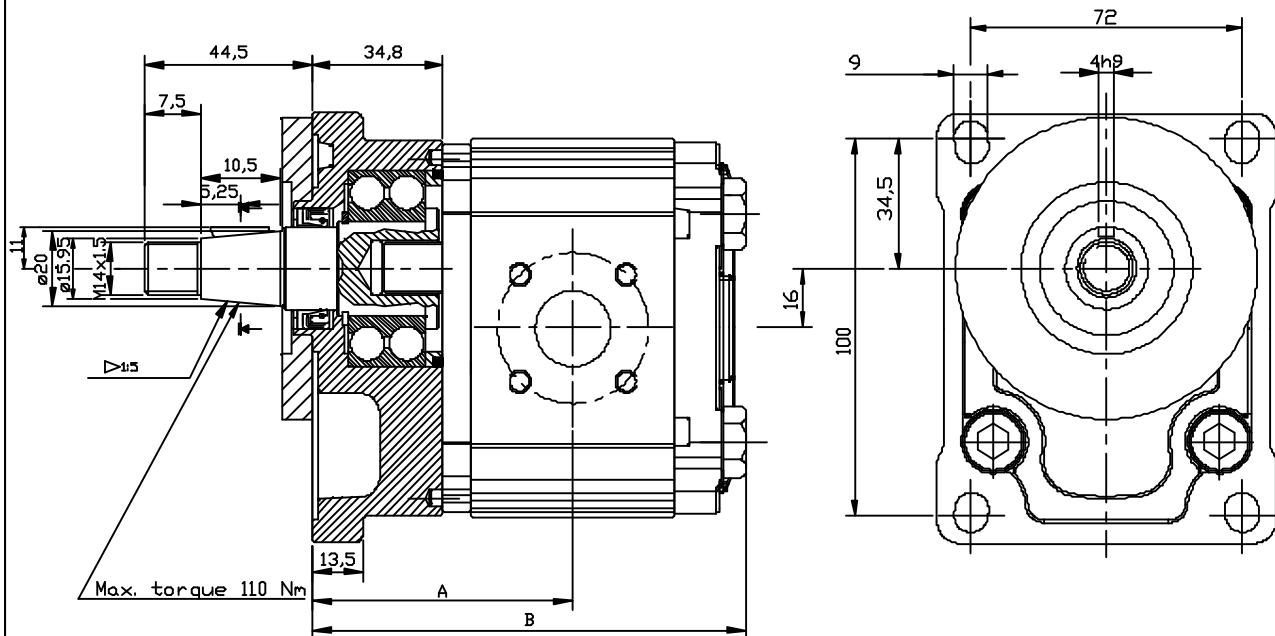
EXAMPLE OF ORDERING CODE

OT200 P 08 S / G / T 29 B2

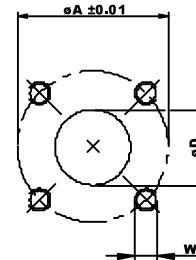


GROUP 2 PUMPS- WITH FRONT BEARING

VERSION: B T 27 B2

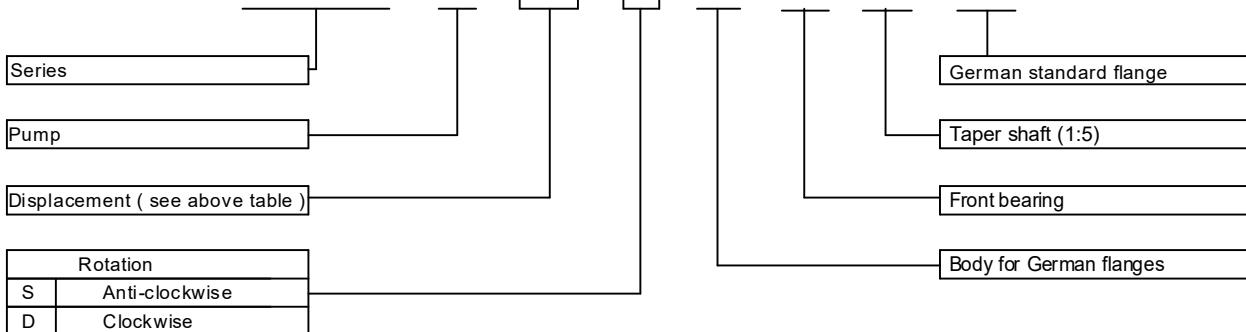


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port		Outlet port			
					(mm)		ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	66.30	109.80	20	40	M6	15	35	M6
OT 200 P06	06,20	250	300	3500	67.80	112.80	20	40	M6	15	35	M6
OT 200 P08	08,20	250	300	3500	69.30	115.80	20	40	M6	15	35	M6
OT 200 P11	11,20	250	300	3500	71.45	120.10	20	40	M6	15	35	M6
OT 200 P14	14,00	240	300	3000	73.45	124.10	20	40	M6	15	35	M6
OT 200 P16	16,00	240	300	3000	74.90	127.00	20	40	M6	15	35	M6
OT 200 P20	20,00	200	240	3000	77.80	132.80	20	40	M6	15	35	M6
OT 200 P22	22,50	170	210	2500	82.65	144.50	20	40	M6	15	35	M6
OT 200 P25	25,10	170	210	2500	85.55	148.30	20	40	M6	15	35	M6
OT 200 P28	28,00	140	180	2500	87.65	152.50	20	40	M6	15	35	M6
OT 200 P30	30,00	130	170	2000	89.05	155.30	20	40	M6	15	35	M6



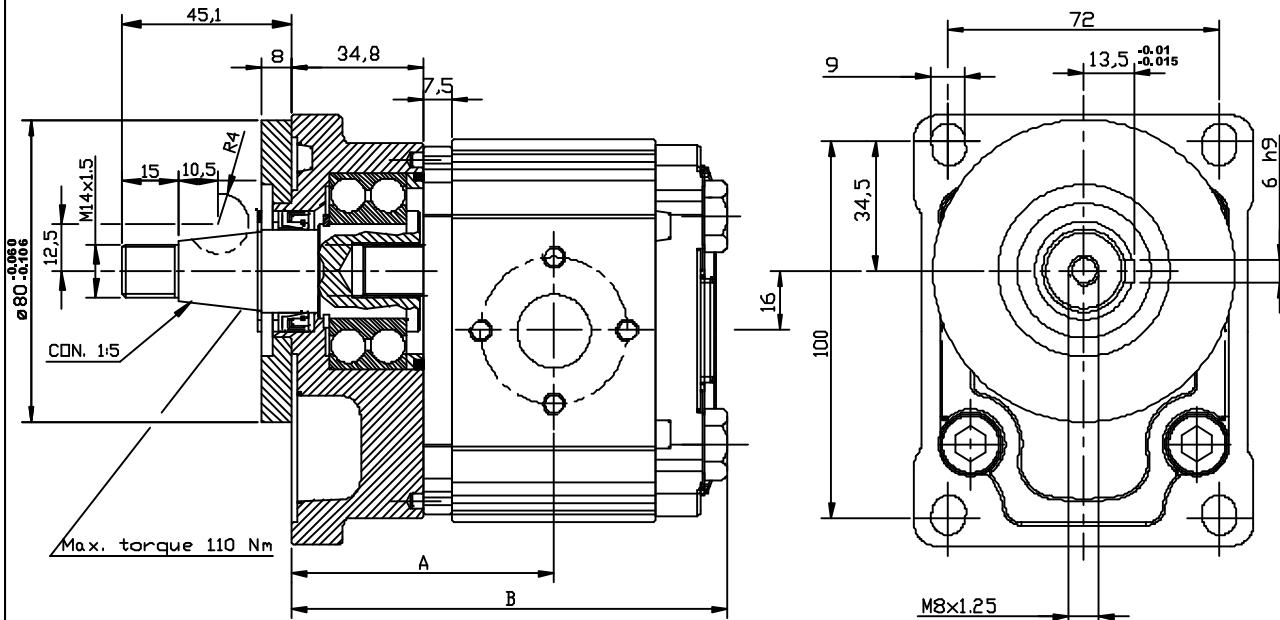
EXAMPLE OF ORDERING CODE

OT200 P 08 S / B / T 27 B2

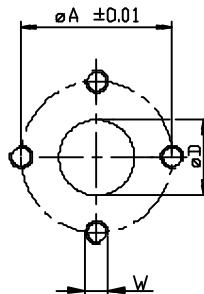


GROUP 2 PUMPS- WITH FRONT BEARING

VERSION: PT 27 B2

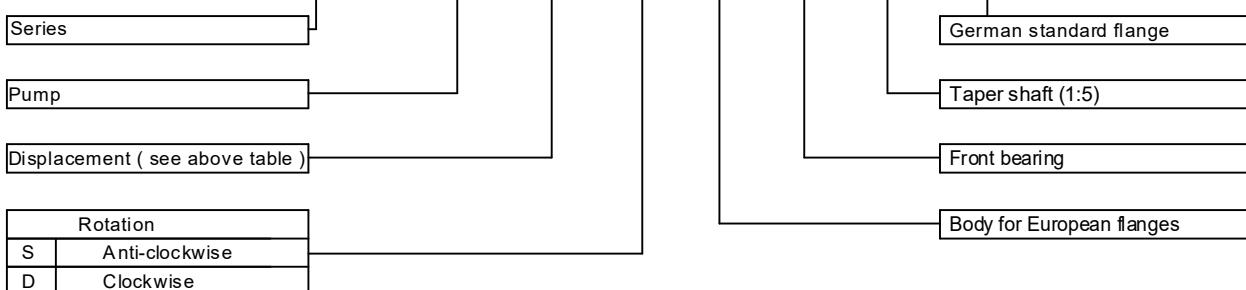


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port		Outlet port			
					(mm)	ØD	ØA	W	ØD	ØA	W	
OT 200 P04	04,10	250	300	4000	66.30	109.80	20	40	M6	15	35	M6
OT 200 P06	06,20	250	300	3500	67.80	112.80	20	40	M6	15	35	M6
OT 200 P08	08,20	250	300	3500	69.30	115.80	20	40	M6	15	35	M6
OT 200 P11	11,20	250	300	3500	71.45	120.10	20	40	M6	15	35	M6
OT 200 P14	14,00	240	300	3000	73.45	124.10	20	40	M6	15	35	M6
OT 200 P16	16,00	240	300	3000	74.90	127.00	20	40	M6	15	35	M6
OT 200 P20	20,00	200	240	3000	77.80	132.80	20	40	M6	15	35	M6
OT 200 P22	22,50	170	210	2500	82.65	144.50	20	40	M6	15	35	M6
OT 200 P25	25,10	170	210	2500	85.55	148.30	20	40	M6	15	35	M6
OT 200 P28	28,00	140	180	2500	87.65	152.50	20	40	M6	15	35	M6
OT 200 P30	30,00	130	170	2000	89.05	155.30	20	40	M6	15	35	M6



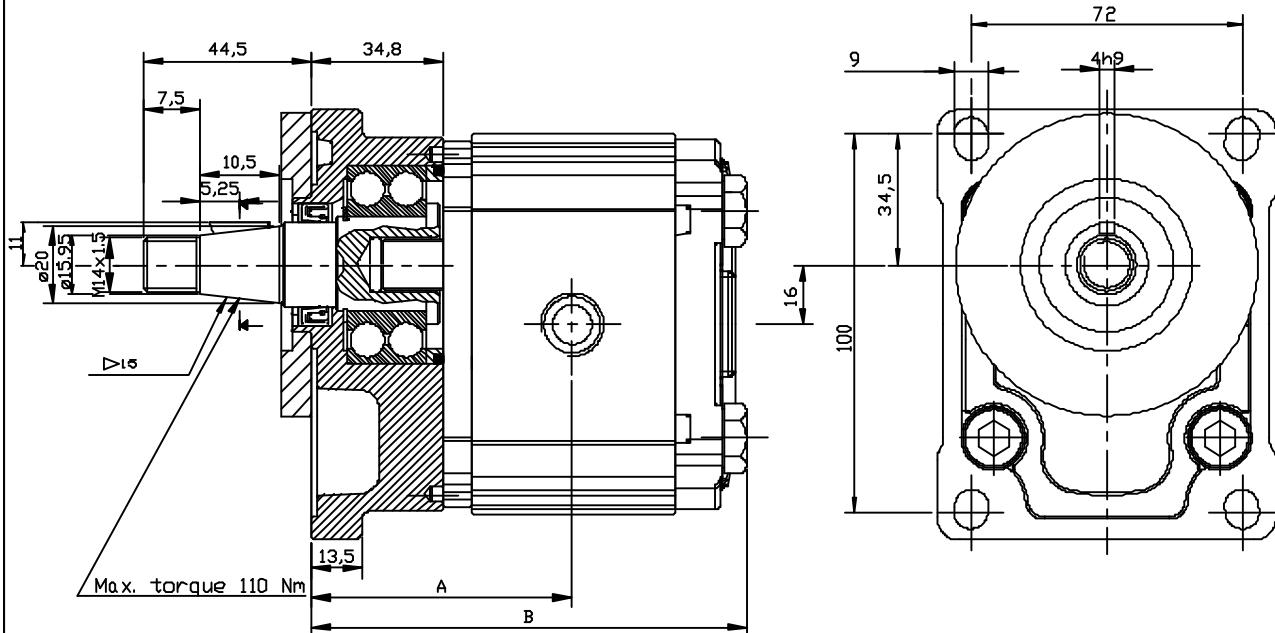
EXAMPLE OF ORDERING CODE

OT200 P 08 S / P / T 27 B2

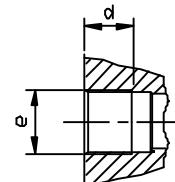


GROUP 2 PUMPS- WITH FRONT BEARING

VERSION: G T 27 B2

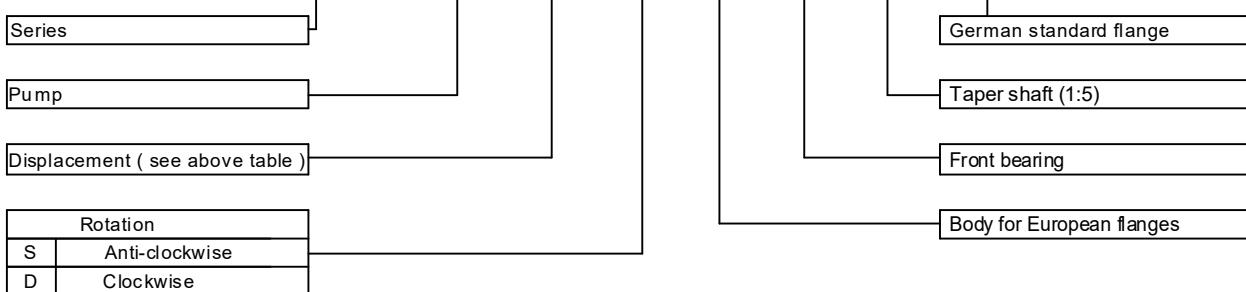


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m.)	Dimension A		Inlet port		Outlet port	
					B	(mm)	e	d	e	d
OT 200 P04	04,10	250	300	4000	66.30	109.80	G1/2	14	G1/2	14
OT 200 P06	06,20	250	300	3500	67.80	112.80	G1/2	14	G1/2	14
OT 200 P08	08,20	250	300	3500	69.30	115.80	G1/2	14	G1/2	14
OT 200 P11	11,20	250	300	3500	71.45	120.10	G1/2	14	G1/2	14
OT 200 P14	14,00	240	300	3000	73.45	124.10	G3/4	16	G1/2	14
OT 200 P16	16,00	240	300	3000	74.90	127.00	G3/4	16	G1/2	14
OT 200 P20	20,00	200	240	3000	77.80	132.80	G3/4	16	G1/2	14
OT 200 P22	22,50	170	210	2500	82.65	144.50	G3/4	16	G1/2	14
OT 200 P25	25,10	170	210	2500	85.55	148.30	G3/4	16	G1/2	14
OT 200 P28	28,00	140	180	2500	87.65	152.50	G3/4	16	G1/2	14
OT 200 P30	30,00	130	170	2000	89.05	155.30	G3/4	16	G1/2	14



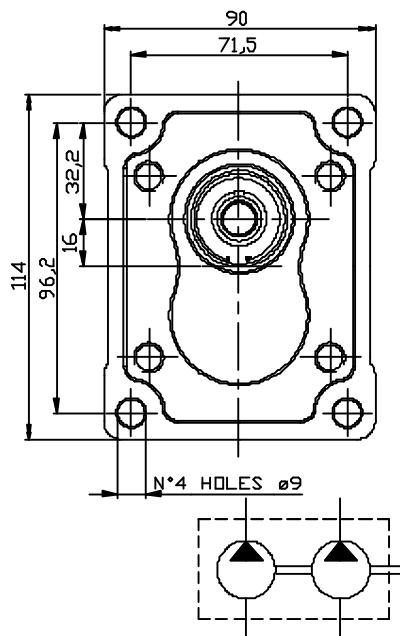
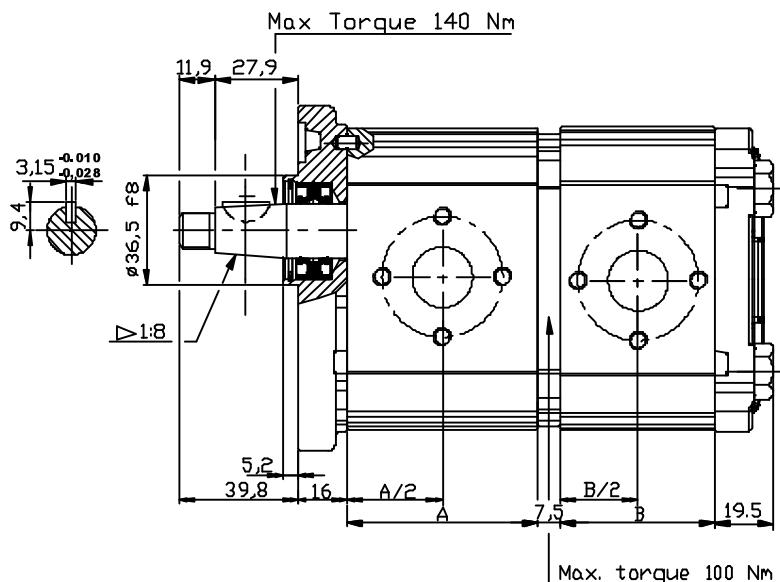
EXAMPLE OF ORDERING CODE

OT200 P 08 S / G / T 27 B2



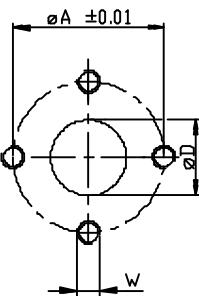
GROUP 2 PUMPS- TANDEM

VERSION: P28 P2



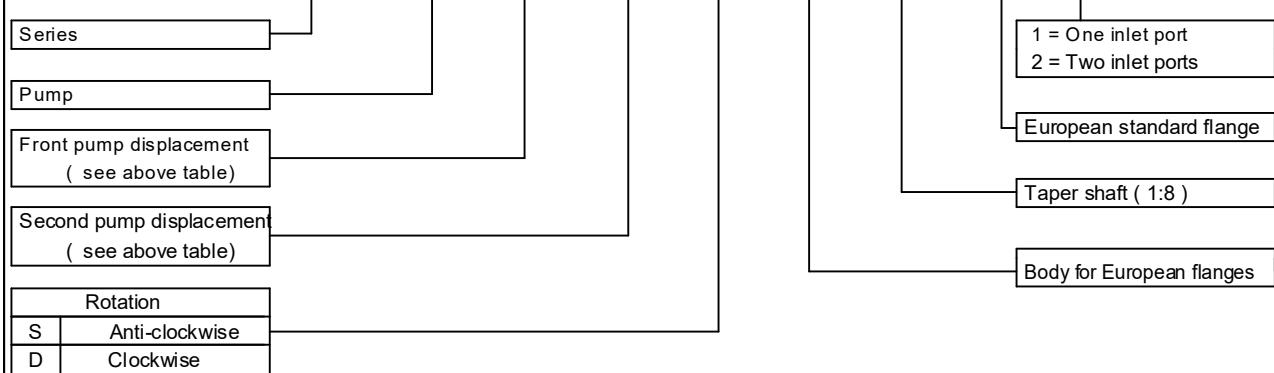
NOTE: The biggest displacement pump must be in the front position

Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A B		Inlet port		Outlet port		
					(mm)	ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	48.00	48.00	13	30	M6	13	30 M6
OT 200 P06	06,20	250	300	3500	51.00	51.00	13	30	M6	13	30 M6
OT 200 P08	08,20	250	300	3500	54.00	54.00	13	30	M6	13	30 M6
OT 200 P11	11,20	250	300	3500	58.30	58.30	13	30	M6	13	30 M6
OT 200 P14	14,00	240	300	3000	62.30	62.30	20	40	M8	13	30 M6
OT 200 P16	16,00	240	300	3000	65.20	65.20	20	40	M8	13	30 M6
OT 200 P20	20,00	200	240	3000	71.00	71.00	20	40	M8	13	30 M6
OT 200 P22	22,50	170	210	2500	82.70	82.70	20	40	M8	13	30 M6
OT 200 P25	25,10	170	210	2500	86.50	86.50	20	40	M8	13	30 M6
OT 200 P28	28,00	140	180	2500	90.70	90.70	20	40	M8	13	30 M6
OT 200 P30	30,00	130	170	2000	93.50	93.50	20	40	M8	13	30 M6



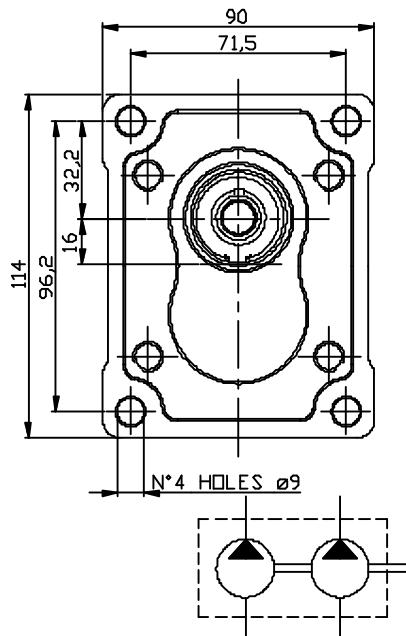
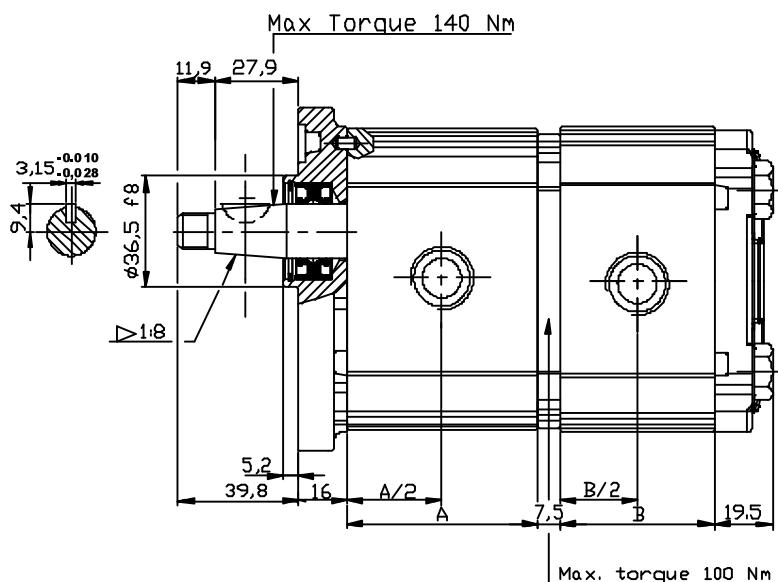
EXAMPLE OF ORDERING CODE

OT200 P 16 / 06 S / P 28 P2 / 2



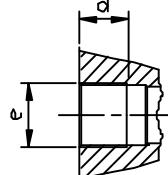
GROUP 2 PUMPS- TANDEM

VERSION: G28 P2



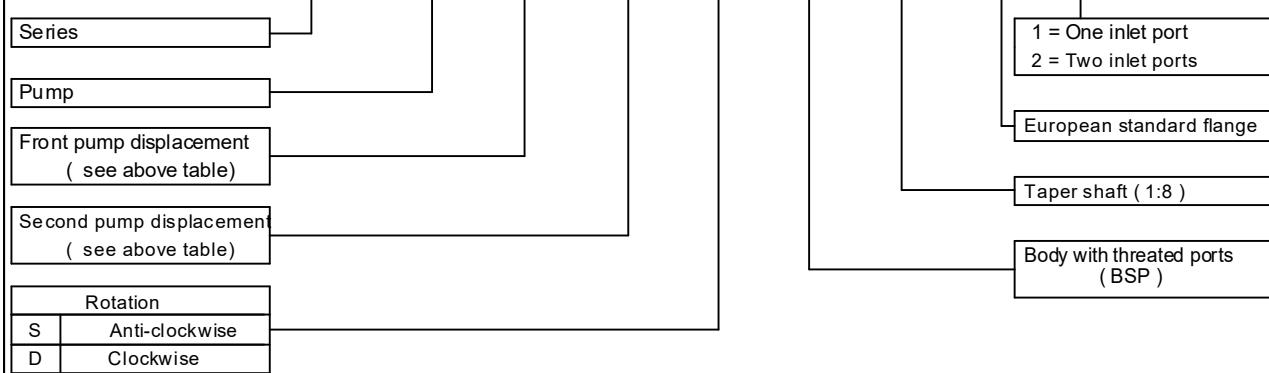
NOTE: Preferibilmente la pompa posteriore dovrebbe essere di cilindrata inferiore

Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A B (mm)		Inlet port		Outlet port	
					A	B	e	d	e	d
OT 200 P04	04,10	250	300	4000	48.00	48.00	G1/2	14	G1/2	14
OT 200 P06	06,20	250	300	3500	51.00	51.00	G1/2	14	G1/2	14
OT 200 P08	08,20	250	300	3500	54.00	54.00	G1/2	14	G1/2	14
OT 200 P11	11,20	250	300	3500	58.30	58.30	G1/2	14	G1/2	14
OT 200 P14	14,00	240	300	3000	62.30	62.30	G3/4	16	G1/2	14
OT 200 P16	16,00	240	300	3000	65.20	65.20	G3/4	16	G1/2	14
OT 200 P20	20,00	200	240	3000	71.00	71.00	G3/4	16	G1/2	14
OT 200 P22	22,50	170	210	2500	82.70	82.70	G3/4	16	G1/2	14
OT 200 P25	25,10	170	210	2500	86.50	86.50	G3/4	16	G1/2	14
OT 200 P28	28,00	140	180	2500	90.70	90.70	G3/4	16	G1/2	14
OT 200 P30	30,00	130	170	2000	93.50	93.50	G3/4	16	G1/2	14



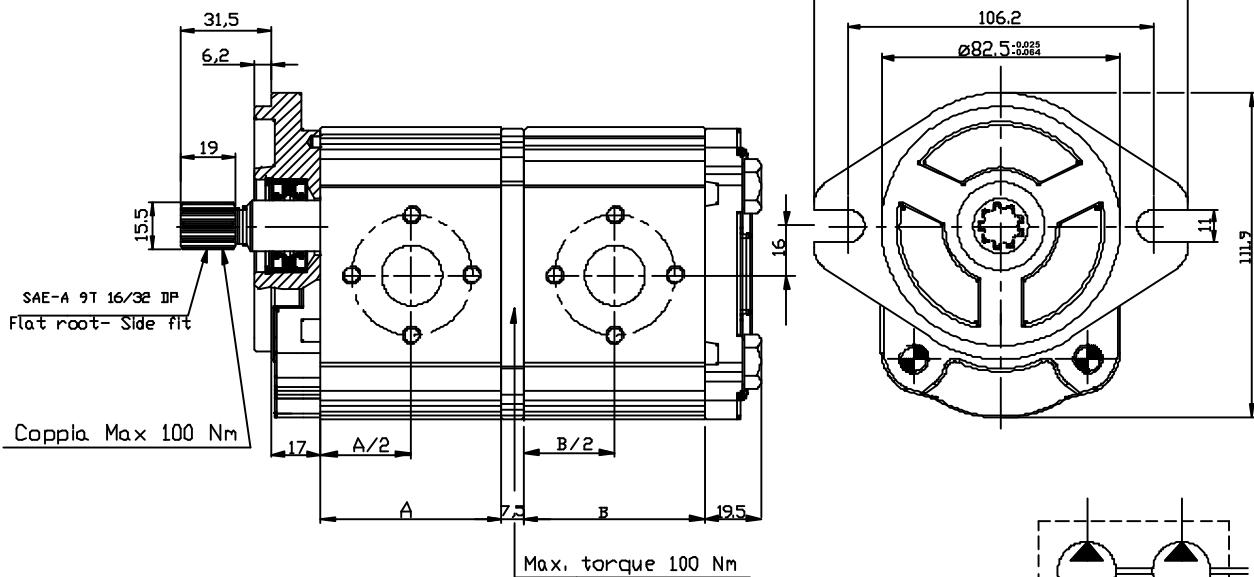
EXAMPLE OF ORDERING CODE

OT200 P 16 / 06 S / G 28 P2 / 2



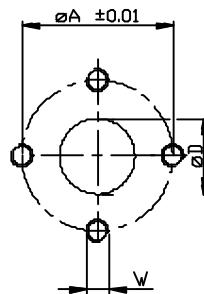
GROUP 2 PUMPS- TANDEM SAE "A" STANDARD

VERSION: P21 S2



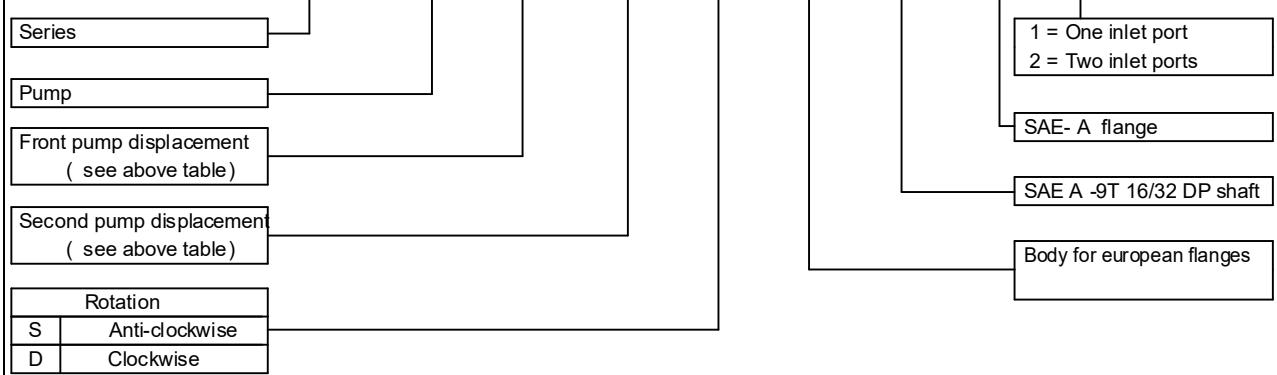
NOTE: Preferibilmente la pompa posteriore dovrebbe essere di cilindrata inferiore

Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port		Outlet port			
					(mm)	B	ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	48.00	48.00	13	30	M6	13	30	M6
OT 200 P06	06,20	250	300	3500	51.00	51.00	13	30	M6	13	30	M6
OT 200 P08	08,20	250	300	3500	54.00	54.00	13	30	M6	13	30	M6
OT 200 P11	11,20	250	300	3500	58.30	58.30	13	30	M6	13	30	M6
OT 200 P14	14,00	240	300	3000	62.30	62.30	20	40	M8	13	30	M6
OT 200 P16	16,00	240	300	3000	65.20	65.20	20	40	M8	13	30	M6
OT 200 P20	20,00	200	240	3000	71.00	71.00	20	40	M8	13	30	M6
OT 200 P22	22,50	170	210	2500	82.70	82.70	20	40	M8	13	30	M6
OT 200 P25	25,10	170	210	2500	86.50	86.50	20	40	M8	13	30	M6
OT 200 P28	28,00	140	180	2500	90.70	90.70	20	40	M8	13	30	M6
OT 200 P30	30,00	130	170	2000	93.50	93.50	20	40	M8	13	30	M6



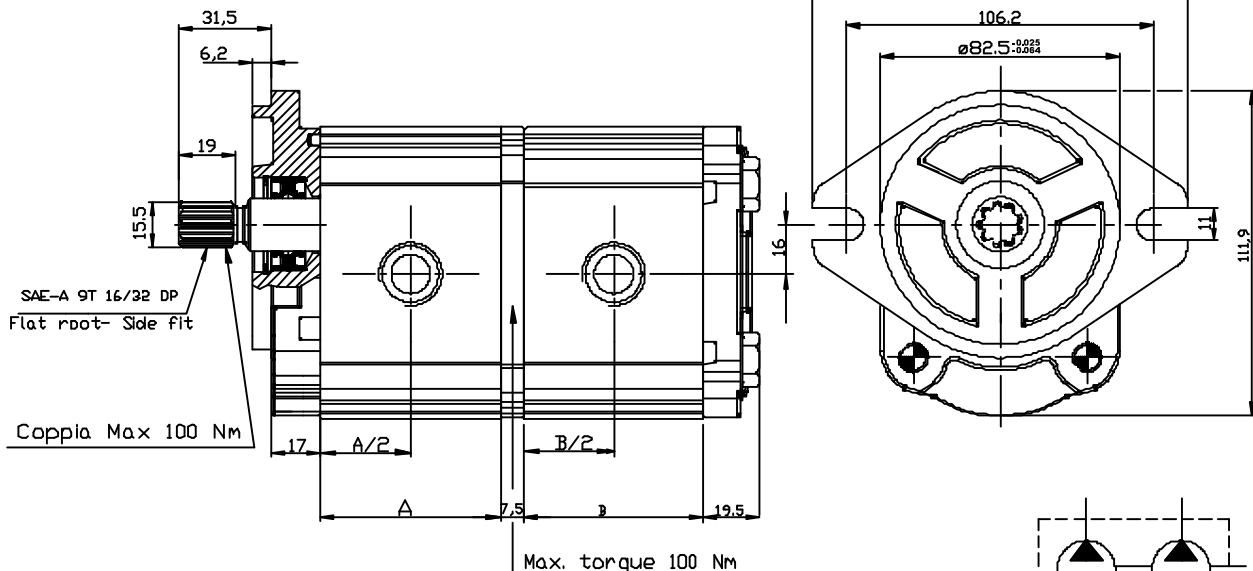
EXAMPLE OF ORDERING CODE

OT200 P 16 / 06 S / P 21 S2 / 2



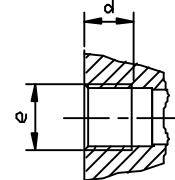
GROUP 2 PUMPS- TANDEM SAE "A" STANDARD

VERSION: G21 S2



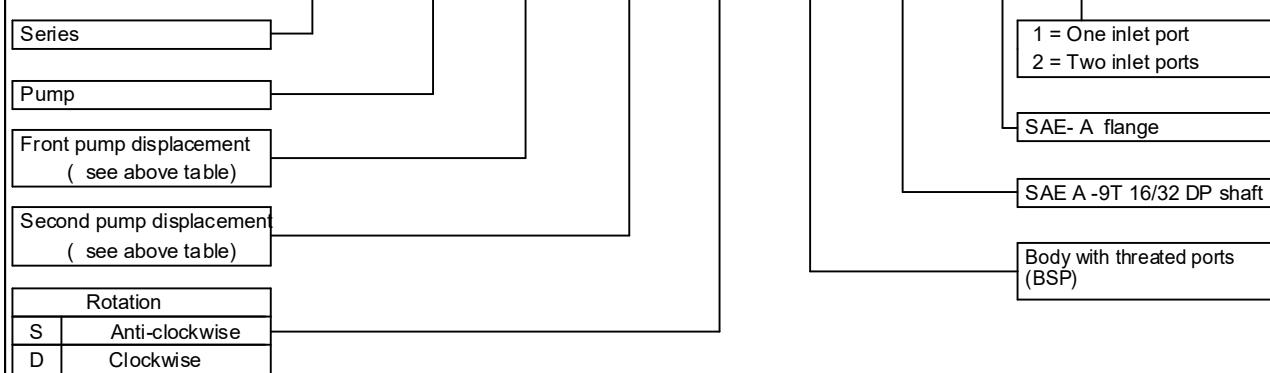
NOTE: Preferibilmente la pompa posteriore dovrebbe essere di cilindrata inferiore

Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port		Outlet port	
					B	(mm)	e	d	e	d
OT 200 P04	04,10	250	300	4000	48.00	48.00	G1/2	14	G1/2	14
OT 200 P06	06,20	250	300	3500	51.00	51.00	G1/2	14	G1/2	14
OT 200 P08	08,20	250	300	3500	54.00	54.00	G1/2	14	G1/2	14
OT 200 P11	11,20	250	300	3500	58.30	58.30	G1/2	14	G1/2	14
OT 200 P14	14,00	240	300	3000	62.30	62.30	G3/4	16	G1/2	14
OT 200 P16	16,00	240	300	3000	65.20	65.20	G3/4	16	G1/2	14
OT 200 P20	20,00	200	240	3000	71.00	71.00	G3/4	16	G1/2	14
OT 200 P22	22,50	170	210	2500	82.70	82.70	G3/4	16	G1/2	14
OT 200 P25	25,10	170	210	2500	86.50	86.50	G3/4	16	G1/2	14
OT 200 P28	28,00	140	180	2500	90.70	90.70	G3/4	16	G1/2	14
OT 200 P30	30,00	130	170	2000	93.50	93.50	G3/4	16	G1/2	14



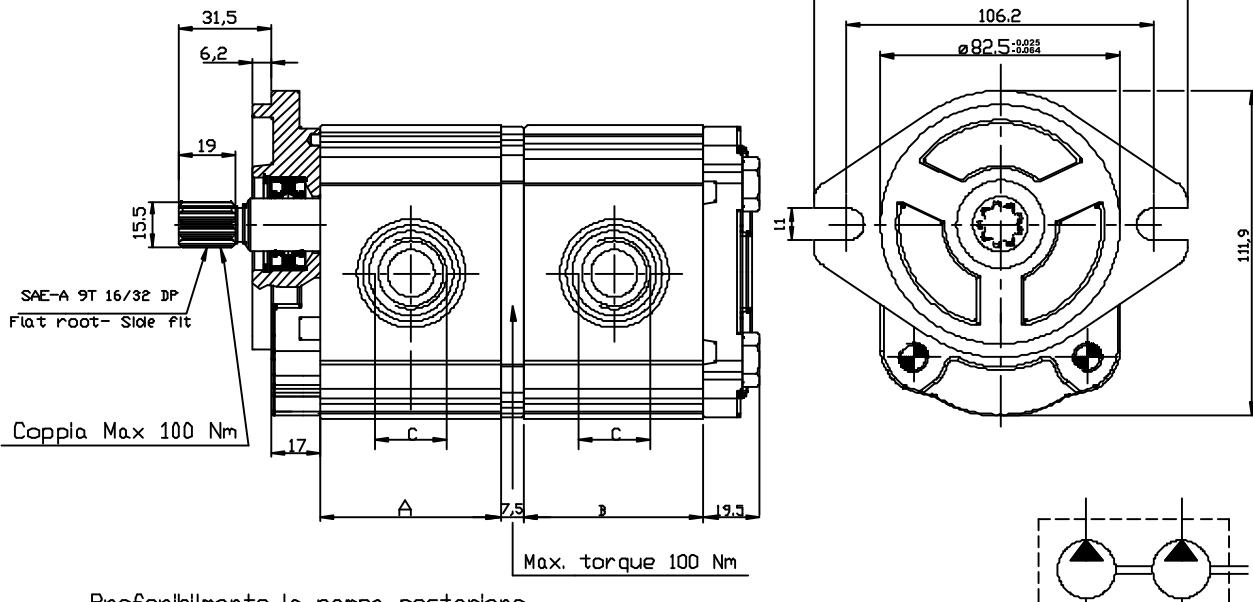
EXAMPLE OF ORDERING CODE

OT200 P 16 / 06 S / G 21 S2 / 2



GROUP 2 PUMPS- TANDEM SAE "A" STANDARD

VERSION: R21 S2

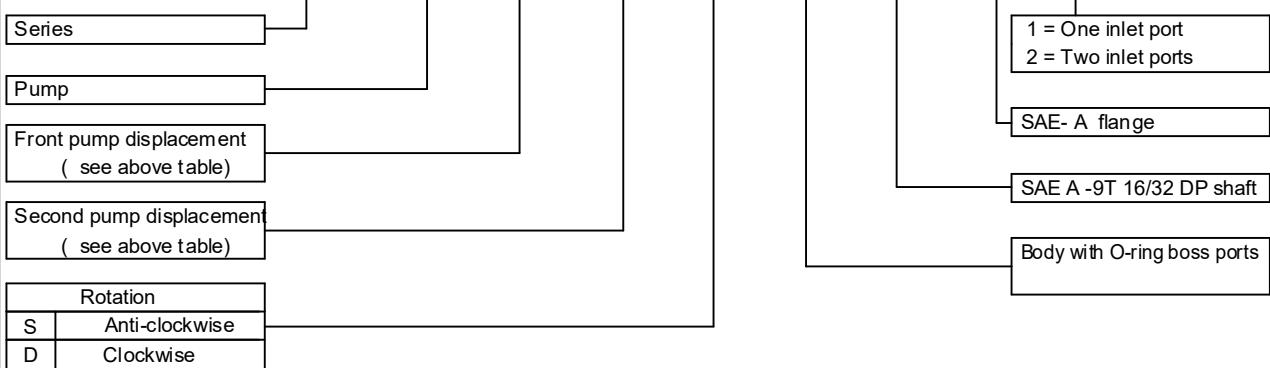


NOTE: Preferibilmente la pompa posteriore dovrebbe essere di cilindrata inferiore

Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A B		Inlet port	Outlet port
					(mm)			
OT 200 P04	04,10	250	300	4000	48.00	48.00		
OT 200 P06	06,20	250	300	3500	51.00	51.00		
OT 200 P08	08,20	250	300	3500	54.00	54.00		
OT 200 P11	11,20	250	300	3500	58.30	58.30		
OT 200 P14	14,00	240	300	3000	62.30	62.30		
OT 200 P16	16,00	240	300	3000	65.20	65.20		
OT 200 P20	20,00	200	240	3000	71.00	71.00		
OT 200 P22	22,50	170	210	2500	82.70	82.70		
OT 200 P25	25,10	170	210	2500	86.50	86.50		
OT 200 P28	28,00	140	180	2500	90.70	90.70		
OT 200 P30	30,00	130	170	2000	93.50	93.50		

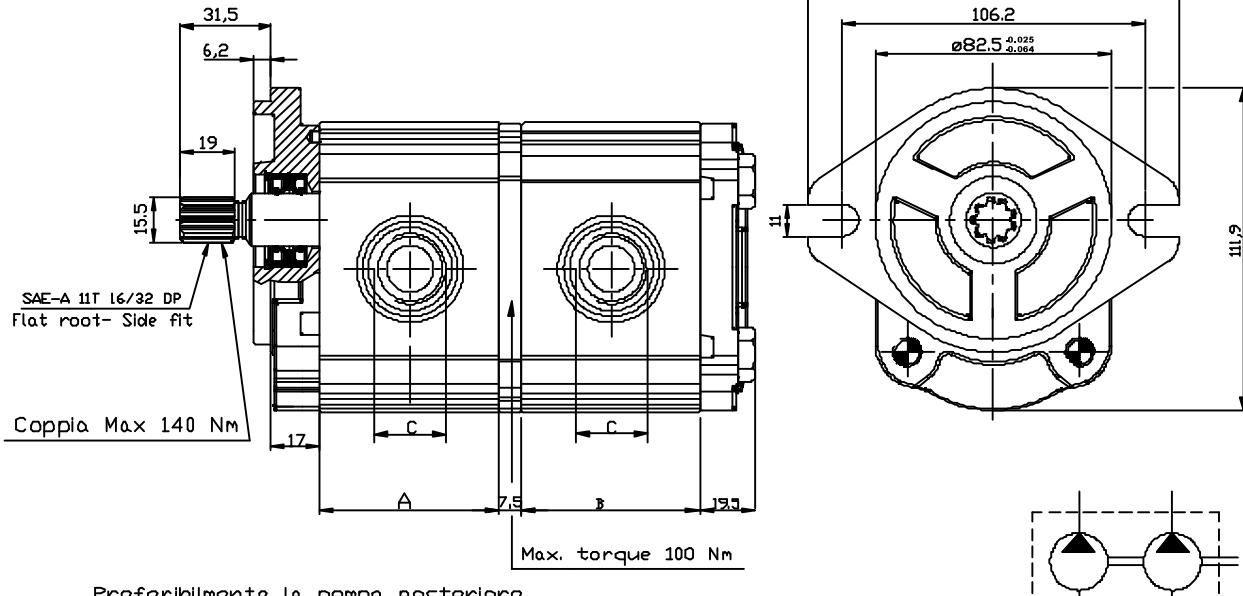
EXAMPLE OF ORDERING CODE

OT200 P 16 / 06 S / R 21 S2 / 2



GROUP 2 PUMPS- TANDEM SAE "A" STANDARD

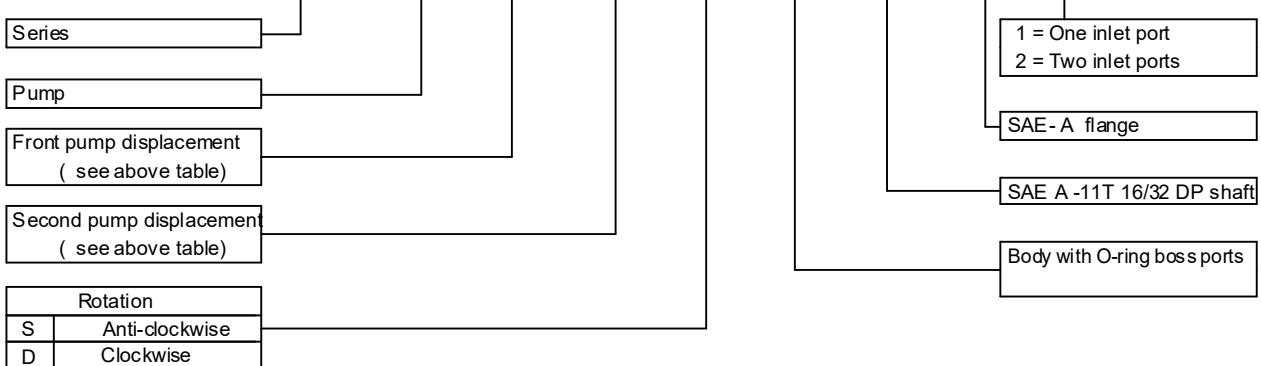
VERSION: R20 S2



Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A		Inlet port	Outlet port
					B	(mm)		
OT 200 P04	04,10	250	300	4000	48.00	48.00	7/8-14UNF-2B	7/8-14UNF-2B
OT 200 P06	06,20	250	300	3500	51.00	51.00		
OT 200 P08	08,20	250	300	3500	54.00	54.00		
OT 200 P11	11,20	250	300	3500	58.30	58.30		
OT 200 P14	14,00	240	300	3000	62.30	62.30	1-1/16-12UN-2B	1-1/16-12UN-2B
OT 200 P16	16,00	240	300	3000	65.20	65.20		
OT 200 P20	20,00	200	240	3000	71.00	71.00		
OT 200 P22	22,50	170	210	2500	82.70	82.70		
OT 200 P25	25,10	170	210	2500	86.50	86.50		
OT 200 P28	28,00	140	180	2500	90.70	90.70		
OT 200 P30	30,00	130	170	2000	93.50	93.50		

EXAMPLE OF ORDERING CODE

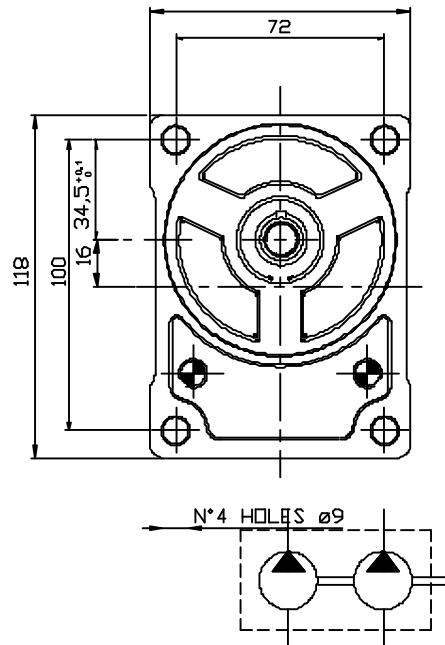
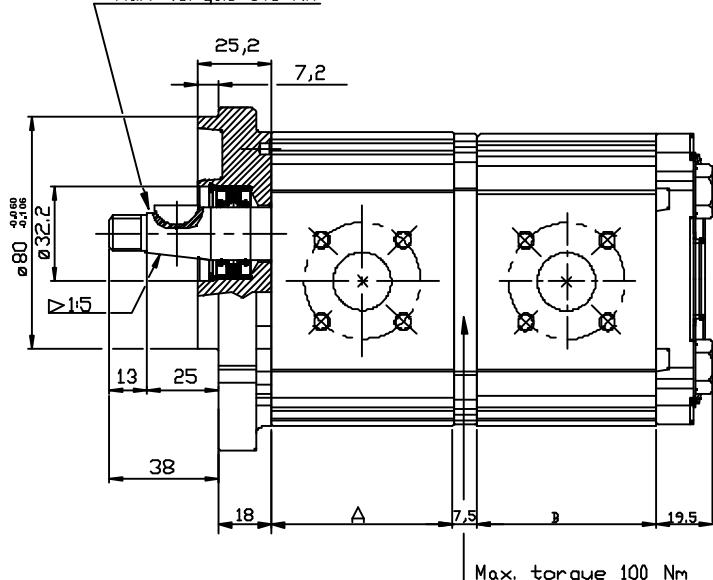
OT200 P 16 / 06 S / R 20 S2 / 2



GROUP 2 PUMPS- TANDEM GERMAN STANDARD

VERSION: B25 B2

Max torque 140 Nm



NOTE: Preferibilmente la pompa posteriore dovrebbe essere di cilindrata inferiore

Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m.)	Dimension		Inlet port		Outlet port			
					A	B	ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	48.00	48.00	20	40	M6	15	35	M6
OT 200 P06	06,20	250	300	3500	51.00	51.00	20	40	M6	15	35	M6
OT 200 P08	08,20	250	300	3500	54.00	54.00	20	40	M6	15	35	M6
OT 200 P11	11,20	250	300	3500	58.30	58.30	20	40	M6	15	35	M6
OT 200 P14	14,00	240	300	3000	62.30	62.30	20	40	M6	15	35	M6
OT 200 P16	16,00	240	300	3000	65.20	65.20	20	40	M6	15	35	M6
OT 200 P20	20,00	200	240	3000	71.00	71.00	20	40	M6	15	35	M6
OT 200 P22	22,50	170	210	2500	82.70	82.70	20	40	M6	15	35	M6
OT 200 P25	25,10	170	210	2500	86.50	86.50	20	40	M6	15	35	M6
OT 200 P28	28,00	140	180	2500	90.70	90.70	20	40	M6	15	35	M6
OT 200 P30	30,00	130	170	2000	93.50	93.50	20	40	M6	15	35	M6

EXAMPLE OF ORDERING CODE

OT200

P

16

/ 0

6

S /

25

B2 / 2

Series

Pump

Front pump displacement
(see above table)

Second pump displacement
(see above table)

Rotation	
S	Anti-clockwise
D	Clockwise

1 = One inlet port
2 = Two inlet ports

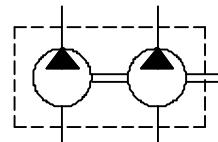
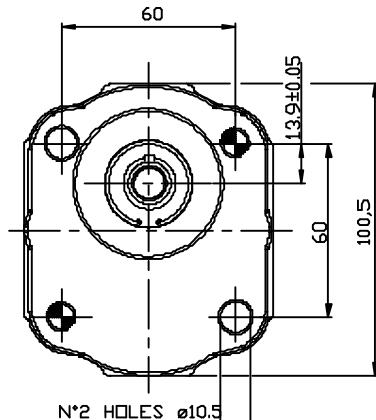
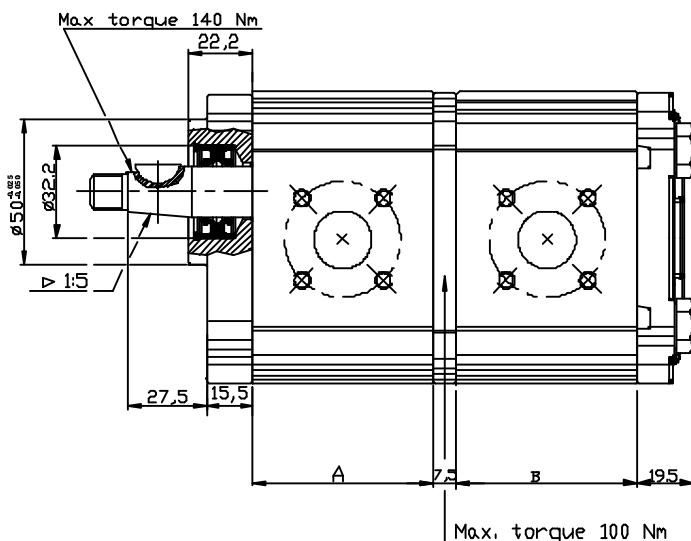
German standard flange

Taper shaft (1:5)

Body for German flanges

GROUP 2 PUMPS- TANDEM GERMAN STANDARD

VERSION: B25 B5

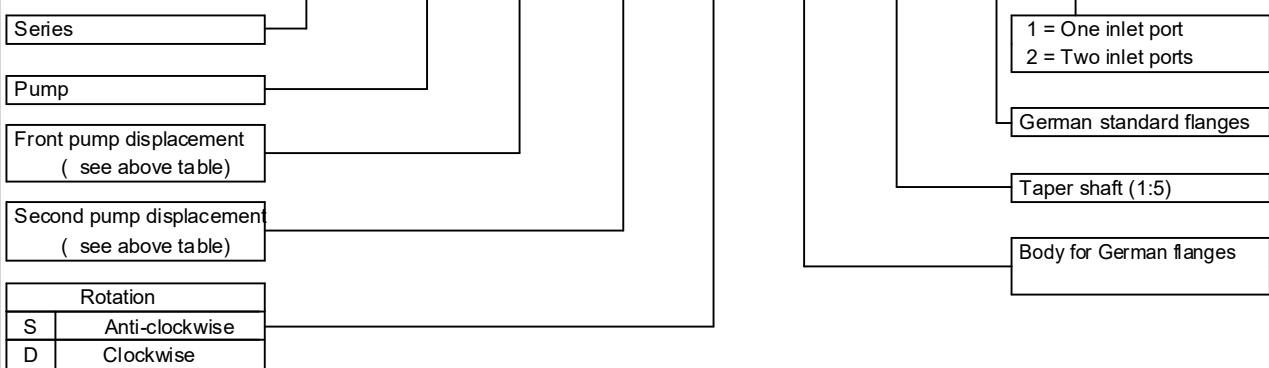


NOTE: Preferibilmente la pompa posteriore dovrebbe essere di cilindrata inferiore

Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension A (mm)	Inlet port			Outlet port		
						ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	250	300	4000	48.00	48.00	20	40	M6	15	35
OT 200 P06	06,20	250	300	3500	51.00	51.00	20	40	M6	15	35
OT 200 P08	08,20	250	300	3500	54.00	54.00	20	40	M6	15	35
OT 200 P11	11,20	250	300	3500	58.30	58.30	20	40	M6	15	35
OT 200 P14	14,00	240	300	3000	62.30	62.30	20	40	M6	15	35
OT 200 P16	16,00	240	300	3000	65.20	65.20	20	40	M6	15	35
OT 200 P20	20,00	200	240	3000	71.00	71.00	20	40	M6	15	35
OT 200 P22	22,50	170	210	2500	82.70	82.70	20	40	M6	15	35
OT 200 P25	25,10	170	210	2500	86.50	86.50	20	40	M6	15	35
OT 200 P28	28,00	140	180	2500	90.70	90.70	20	40	M6	15	35
OT 200 P30	30,00	130	170	2000	93.50	93.50	20	40	M6	15	35

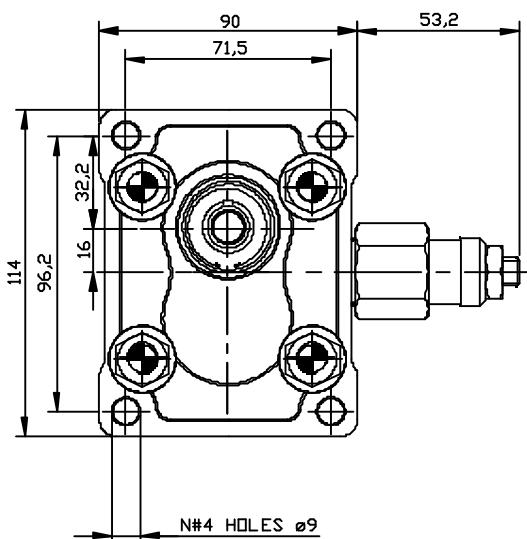
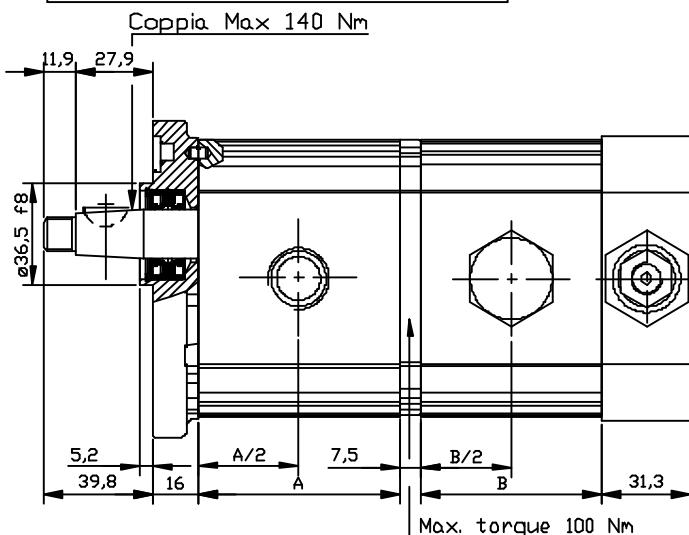
EXAMPLE OF ORDERING CODE

OT200 P 16 / 06 S / B 25 B5 / 2



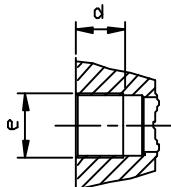
GROUP 2 PUMPS- TANDEM WITH SEQUENCE VALVE HI-LOW

VERSION: G28 P2-SV

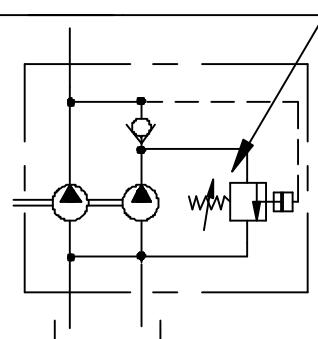


FIRST PUMP				Cy	SECOND PUMP				
TYPE	P1	P3	A		TYPE	P1	P3	B	
OT 200 P04	250	300	48.00	4.10	OT 200 P06	250	300	51.00	6.20
OT 200 P06	250	300	51.00	6.20	OT 200 P08	250	300	54.00	8.20
OT 200 P08	250	300	54.00	8.20	OT 200 P11	250	300	58.30	11.20
OT 200 P11	250	300	58.30	11.20	OT 200 P14	240	300	62.30	14.00
OT 200 P14	240	300	62.30	14.00	OT 200 P16	240	300	65.20	16.00
OT 200 P16	240	300	65.20	16.00	OT 200 P20	200	240	71.00	20.00
OT 200 P20	200	240	71.00	20.00	OT 200 P22	170	210	82.70	22.50
OT 200 P22	170	210	82.70	22.50	OT 200 P25	170	210	86.50	25.10
OT 200 P25	170	210	86.50	25.10					

Inlet port		Outlet port	
e	d	e	d
G1/2	14	G1/2	14
G3/4	16		



RANGE 25/100 bar



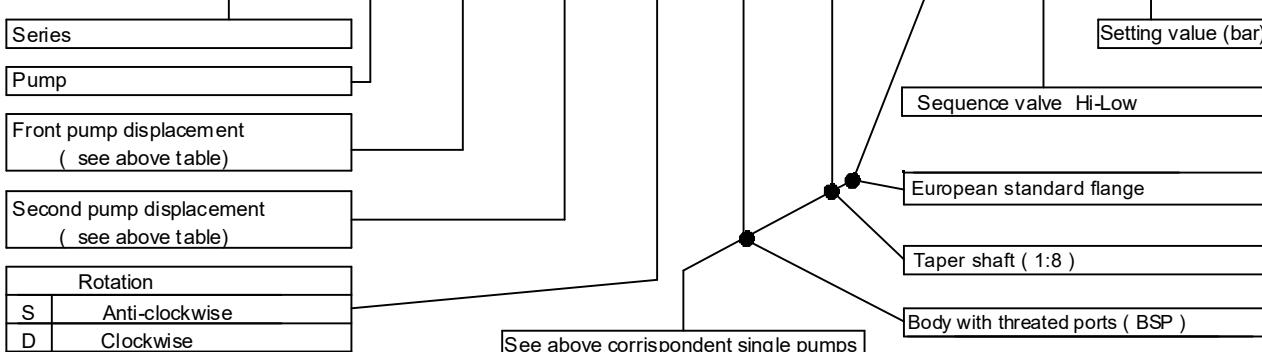
P1 = WORKING PRESSURE (bar)

P3 = PEAK PRESSURE (bar)

Cy = DISPLACEMENT (cc/rev)

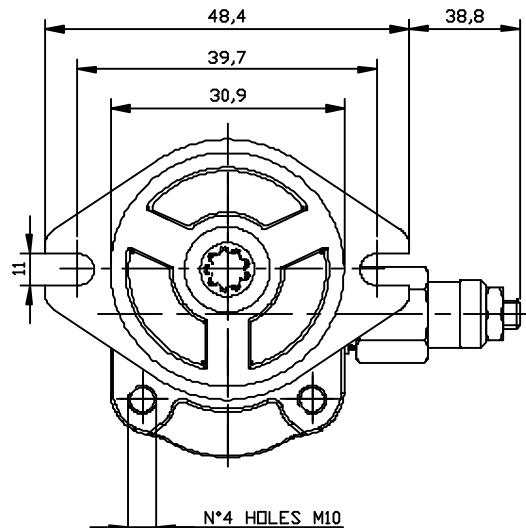
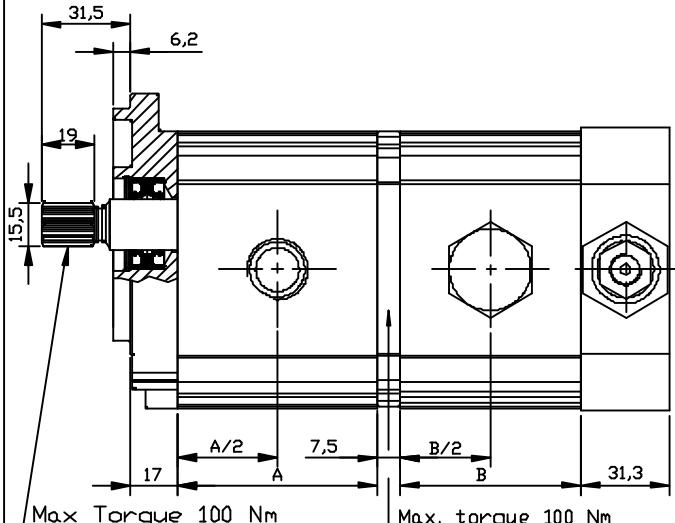
EXAMPLE OF ORDERING CODE

OT200 P 11 / 08 S / G 28 P2 - SV 40



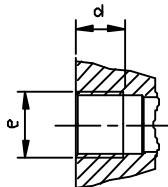
GROUP 2 PUMPS - TANDEM WITH SEQUENCE VALVE HI-LOW

VERSION: G21 S2-SV

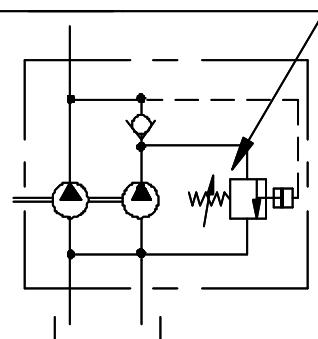


FIRST PUMP				SECOND PUMP					
TYPE	P1	P3	A	Cy	TYPE	P1	P3	B	Cy
OT 200 P04	250	300	48.00	4.10	OT 200 P06	250	300	51.00	6.20
OT 200 P06	250	300	51.00	6.20	OT 200 P08	250	300	54.00	8.20
OT 200 P08	250	300	54.00	8.20	OT 200 P11	250	300	58.30	11.20
OT 200 P11	250	300	58.30	11.20	OT 200 P14	240	300	62.30	14.00
OT 200 P14	240	300	62.30	14.00	OT 200 P16	240	300	65.20	16.00
OT 200 P16	240	300	65.20	16.00	OT 200 P20	200	240	71.00	20.00
OT 200 P20	200	240	71.00	20.00	OT 200 P22	170	210	82.70	22.50
OT 200 P22	170	210	82.70	22.50	OT 200 P25	170	210	86.50	25.10
OT 200 P25	170	210	86.50	25.10					

		e	d	e	d
P04 to P11	G1/2	14		G1/2	14
P14 to P25	G3/4	16			



RANGE 25/100 bar



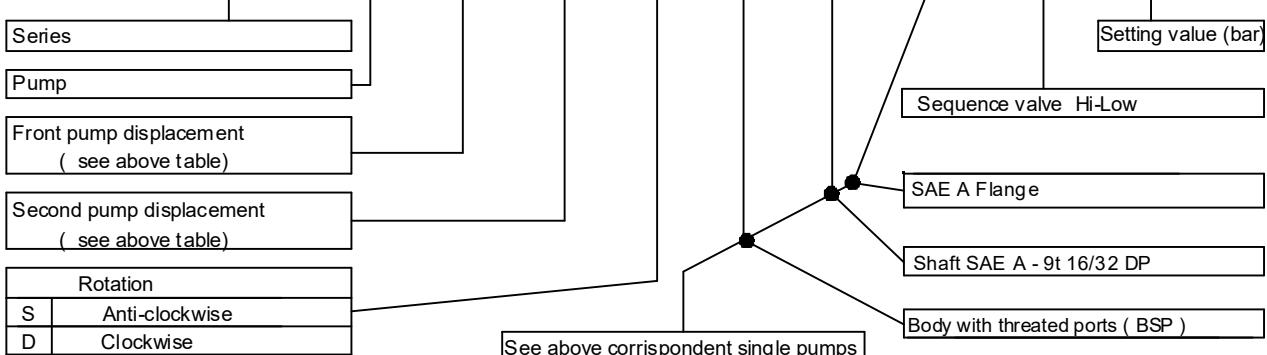
P1 = WORKING PRESSURE (bar)

P3 = PEAK PRESSURE (bar)

Cy = DISPLACEMENT (cc/rev)

EXAMPLE OF ORDERING CODE

OT200 P 11 / 08 S / G 21 S2 - SV 40



TANDEM PUMPS- OT200+ OT100

VERSION: P-B28 P2

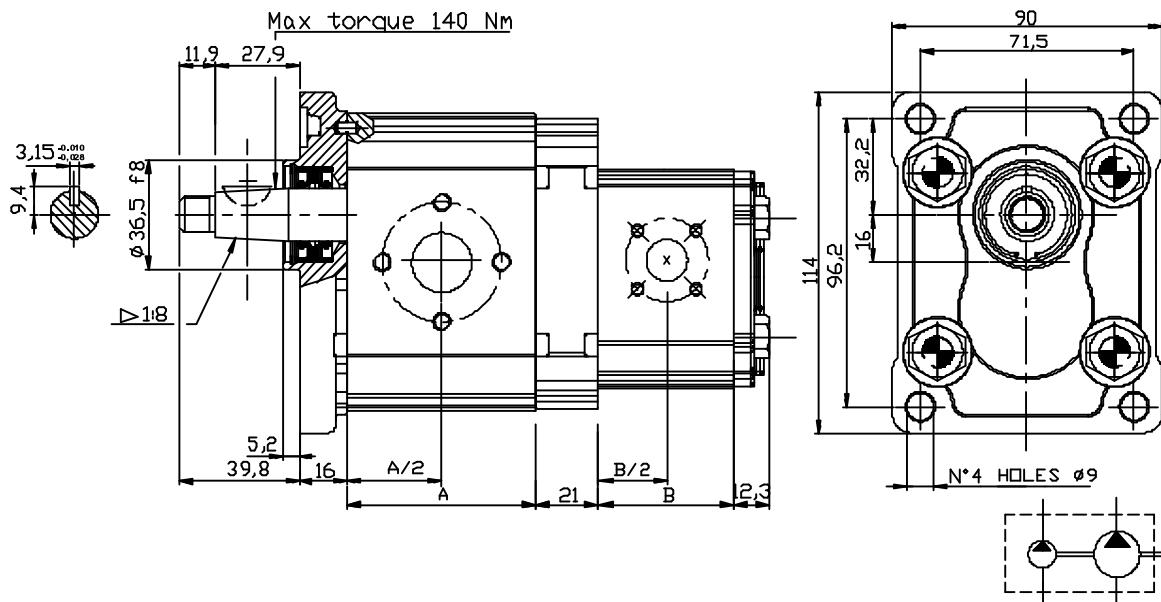


TABLE OT200

Type	Displacement (cc/rev)	Dim. A (mm)	Inlet port			Outlet port		
			ØD	ØA	W	ØD	ØA	W
OT 200 P04	04,10	48.00	13	30	M6	13	30	M6
OT 200 P06	06,20	51.00	13	30	M6	13	30	M6
OT 200 P08	08,20	54.00	13	30	M6	13	30	M6
OT 200 P11	11,20	58.30	13	30	M6	13	30	M6
OT 200 P14	14,00	62.30	20	40	M8	13	30	M6
OT 200 P16	16,00	65.20	20	40	M8	13	30	M6
OT 200 P20	20,00	71.00	20	40	M8	13	30	M6
OT 200 P22	22,50	82.70	20	40	M8	13	30	M6
OT 200 P25	25,10	86.50	20	40	M8	13	30	M6
OT 200 P28	28,00	90.70	20	40	M8	13	30	M6
OT 200 P30	30,00	93.50	20	40	M8	13	30	M6

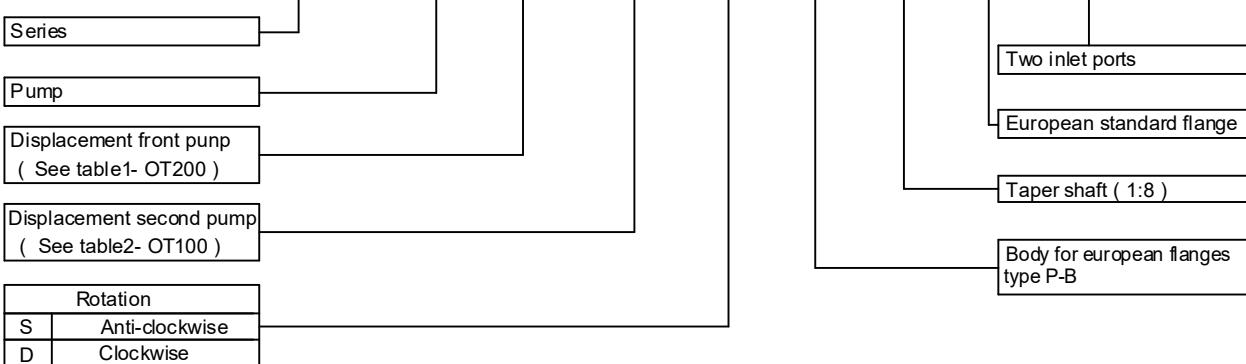
TABLE OT100

	Displacement (cc/rev)	Dim. B (mm)	Inlet port			Outlet port		
			ØD	ØA	W	ØD	ØA	W
OT 100 P07	0.73	36.7	13	30	M6	13	30	M6
OT 100 P11	1.05	37.8	13	30	M6	13	30	M6
OT 100 P16	1.55	39.5	13	30	M6	13	30	M6
OT 100 P20	1.90	40.9	13	30	M6	13	30	M6
OT 100 P25	2.50	43.0	20	40	M8	13	30	M6
OT 100 P32	3.10	45.0	20	40	M8	13	30	M6
OT 100 P40	3.80	47.8	20	40	M8	13	30	M6
OT 100 P49	4.70	50.9	20	40	M8	13	30	M6
OT 100 P58	5.55	54.0	20	40	M8	13	30	M6
OT 100 P65	6.25	56.5	20	40	M8	13	30	M6
OT 100 P79	7.60	61.2	20	40	M8	13	30	M6

NOTE: Define relative working and peak pressure consulting relative single pump table.

EXAMPLE OF ORDERING CODE

OT200/100 P 16 / 32 S / P-B 28 P2 / 2



TANDEM PUMPS- OT200+ OT100

VERSION: G28 P2

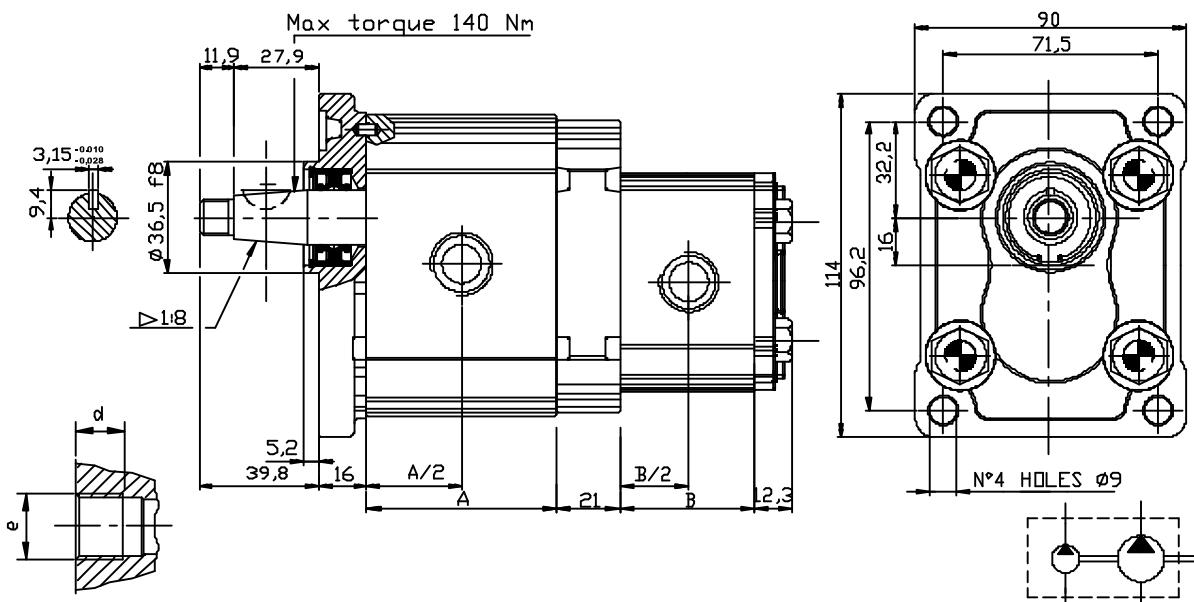


TABLE OT200

Type	Displacement (cc/rev)	Dim. A (mm)	Inlet port	Outlet port
			e	d
OT 200 P04	04,10	48.00	G1/2	14
OT 200 P06	06,20	51.00	G1/2	14
OT 200 P08	08,20	54.00	G1/2	14
OT 200 P11	11,20	58.30	G1/2	14
OT 200 P14	14,00	62.30	G3/4	16
OT 200 P16	16,00	65.20	G3/4	16
OT 200 P20	20,00	71.00	G3/4	16
OT 200 P22	22,50	82.70	G3/4	16
OT 200 P25	25,10	86.50	G3/4	16
OT 200 P28	28,00	90.70	G3/4	16
OT 200 P30	30,00	93.50	G3/4	16

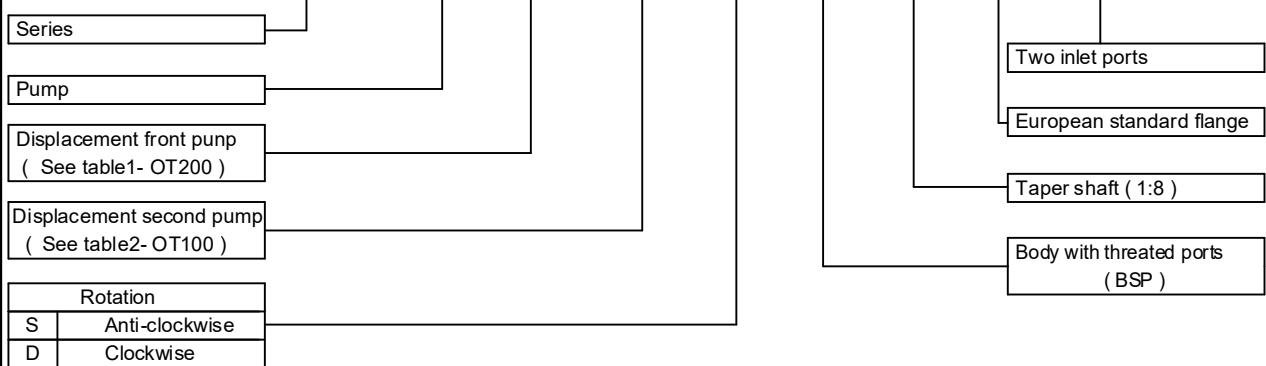
TABLE OT100

	Displacement (cc/rev)	Dim. B (mm)	Inlet port	Outlet port
			e	d
OT 100 P07	0.73	36.7	G3/8	14
OT 100 P11	1.05	37.8	G3/8	14
OT 100 P16	1.55	39.5	G3/8	14
OT 100 P20	1.90	40.9	G3/8	14
OT 100 P25	2.50	43.0	G3/8	14
OT 100 P32	3.10	45.0	G3/8	14
OT 100 P40	3.80	47.8	G3/8	14
OT 100 P49	4.70	50.9	G3/8	14
OT 100 P58	5.55	54.0	G1/2	14
OT 100 P65	6.25	56.5	G1/2	14
OT 100 P79	7.60	61.2	G1/2	14

NOTE: Define relative working and peak pressure consulting relative single pump table.

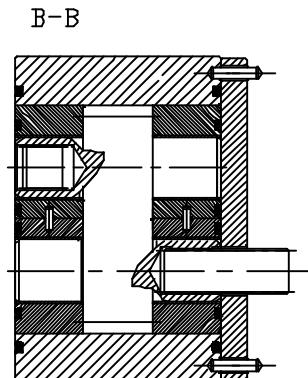
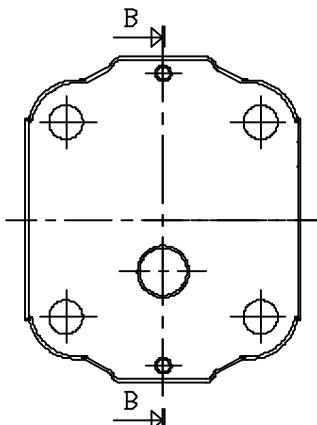
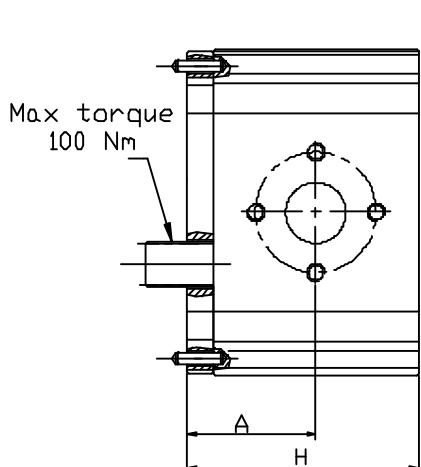
EXAMPLE OF ORDERING CODE

OT200/100 P 16 / 32 S / G 28 P2 / 2

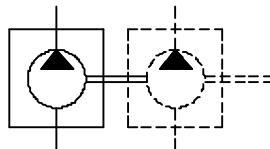


INTERMEDIATE GROUP 2 PUMPS FOR TANDEM UNITS

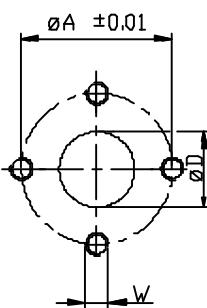
VERSION : P X X INTERMEDIATE



NOTE : Screw tightening torque 48 Nm

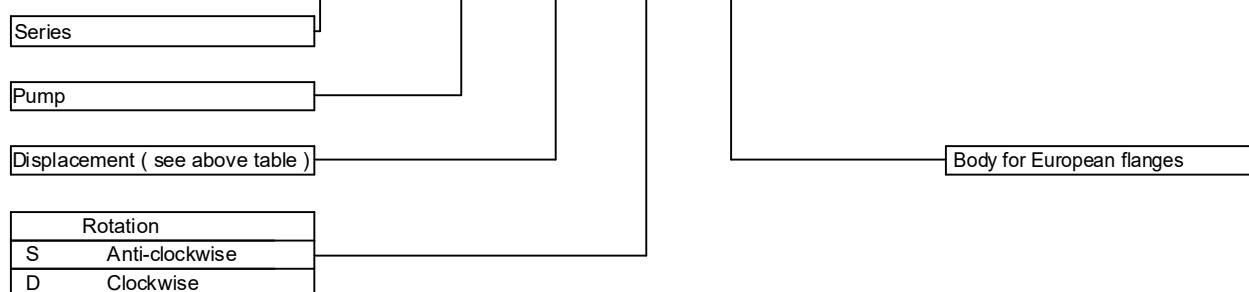


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension H		Inlet port		Outlet port			
					(mm)	ØD	ØA	W	ØD	ØA	W	
OT 200 P04	04,10	250	300	4000	55.50	31.50	13	30	M6	13	30	M6
OT 200 P06	06,20	250	300	3500	58.50	33.00	13	30	M6	13	30	M6
OT 200 P08	08,20	250	300	3500	61.50	34.50	13	30	M6	13	30	M6
OT 200 P11	11,20	250	300	3500	65.80	36.65	13	30	M6	13	30	M6
OT 200 P14	14,00	240	300	3000	69.80	36.65	20	40	M8	13	30	M6
OT 200 P16	16,00	240	300	3000	72.70	40.10	20	40	M8	13	30	M6
OT 200 P20	20,00	200	240	3000	78.50	43.00	20	40	M8	13	30	M6
OT 200 P22	22,50	170	210	2500	90.20	48.85	20	40	M8	13	30	M6
OT 200 P25	25,10	170	210	2500	94.00	50.75	20	40	M8	13	30	M6
OT 200 P28	28,00	140	180	2500	98.20	52.85	20	40	M8	13	30	M6
OT 200 P30	30,00	130	170	2000	101.00	54.25	20	40	M8	13	30	M6



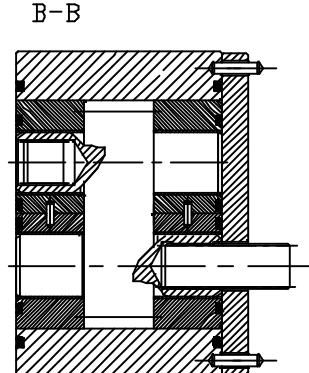
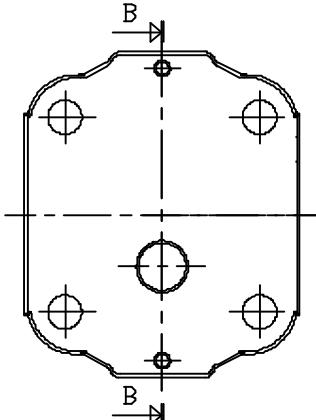
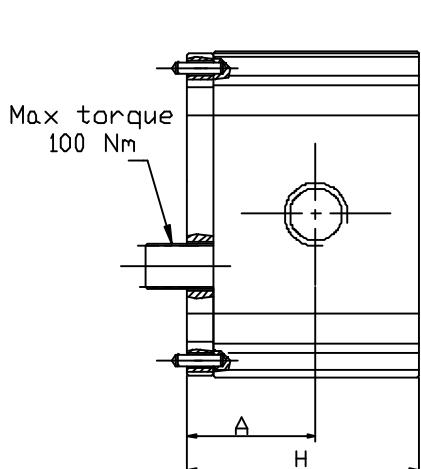
EXAMPLE OF ORDERING CODE

OT200 P 08 S / P X X INTERMEDIATE

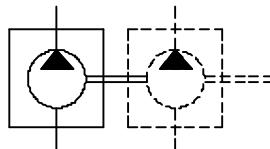


INTERMEDIATE GROUP 2 PUMPS FOR TANDEM UNITS

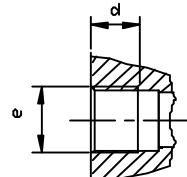
VERSION : G X X INTERMEDIATE



NOTE : Screw tightening torque 48 Nm

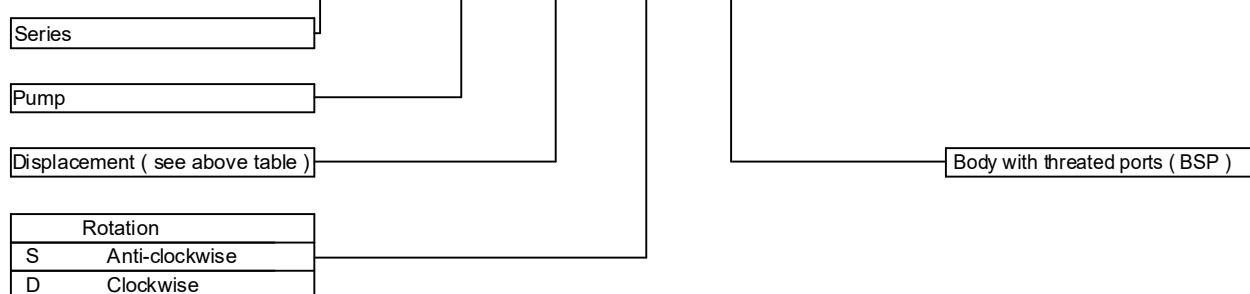


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension H		Inlet port		Outlet port	
					A	(mm)	e	d	e	d
OT 200 P04	04,10	250	300	4000	55.50	31.50	G1/2	14	G1/2	14
OT 200 P06	06,20	250	300	3500	58.50	33.00	G1/2	14	G1/2	14
OT 200 P08	08,20	250	300	3500	61.50	34.50	G1/2	14	G1/2	14
OT 200 P11	11,20	250	300	3500	65.80	36.65	G1/2	14	G1/2	14
OT 200 P14	14,00	240	300	3000	69.80	36.65	G3/4	16	G3/4	16
OT 200 P16	16,00	240	300	3000	72.70	40.10	G3/4	16	G3/4	16
OT 200 P20	20,00	200	240	3000	78.50	43.00	G3/4	16	G3/4	16
OT 200 P22	22,50	170	210	2500	90.20	48.85	G3/4	16	G3/4	16
OT 200 P25	25,10	170	210	2500	94.00	50.75	G3/4	16	G3/4	16
OT 200 P28	28,00	140	180	2500	98.20	52.85	G3/4	16	G3/4	16
OT 200 P30	30,00	130	170	2000	101.00	54.25	G3/4	16	G3/4	16



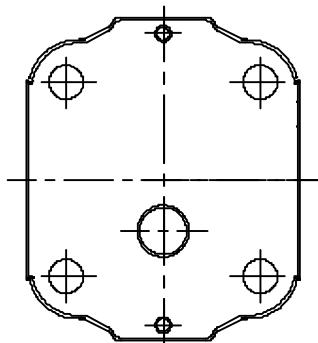
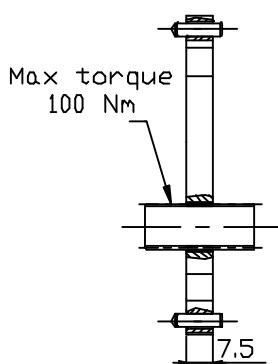
EXAMPLE OF ORDERING CODE

OT200 P 08 S / G X X INTERMEDIATE



COMPONENTS FOR GROUP2 TANDEM PUMPS

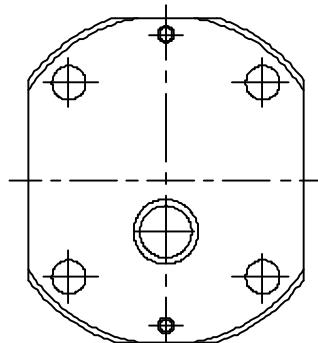
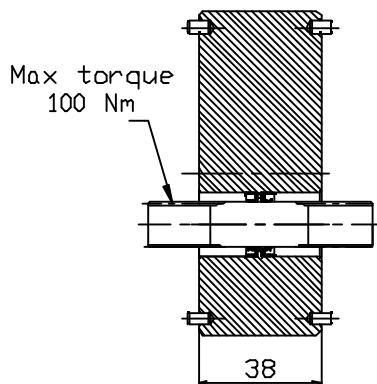
OT 200+OT200 MOUNTING KIT



NOTE : Screw tightening torque 48 Nm

ORDERING CODE: PS20370001

OT200+OT200 MOUNTING KIT FOR SEPARATE UNITS



NOTE : Screw tightening torque 48 Nm

ORDERING CODE: PS20370050

GROUP 2 MOTORS

OT200 SINGLE ROTATION MOTORS GENERAL DATA

MOTOR TYPE	DISPLACEMENT cc / rev	MAX. PRESSURE			MAX. SPEED rpm	MIN. SPEED rpm
		P1	P2	P3		
		bar				
OT200 M04	4.1	230	260	280	4000	600
OT200 M06	6.2					
OT200 M08	8.2					
OT200 M11	11.2	250	280	300		
OT200 M14	14.0					
OT200 M16	16.0					
OT200 M20	20.0	200	220	240		
OT200 M22	22.5	170	190	210		
OT200 M25	25.1					
OT200 M28	28.0	130	150	170		
OT200 M30	30.0				2000	500

P1= Max. continuous pressure

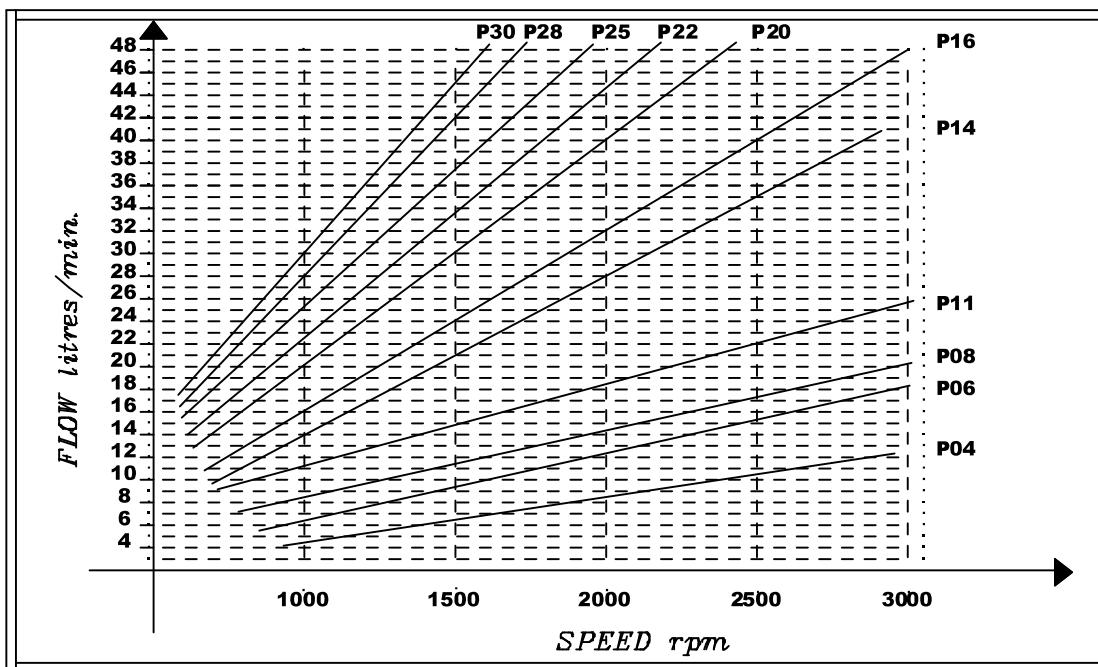
P2= Max. intermittent pressure

P3= Max. peak pressure

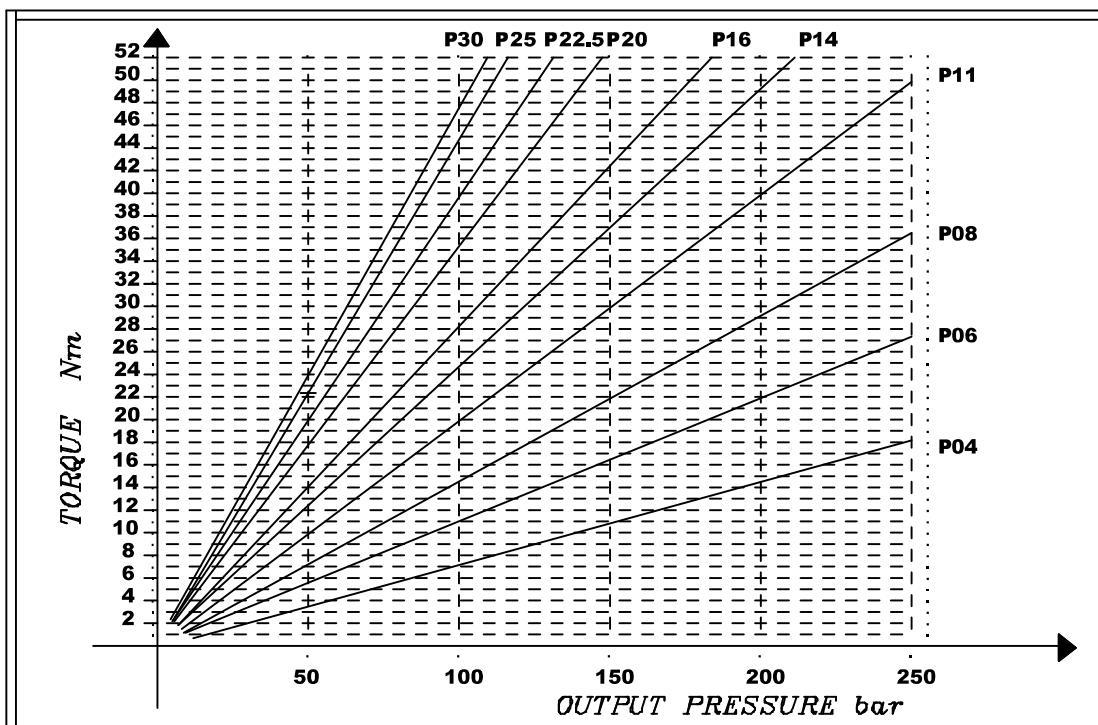
**FOR DIMENSION PLEASE CHECK
RELATIVE SINGLE PUMP TABLES**

GROUP 2 MOTORS

FLOW CHARACTERISTICS CURVES



ABSORBED TORQUE

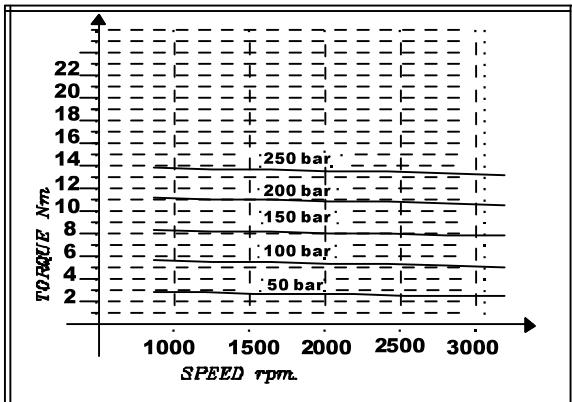


NOTE

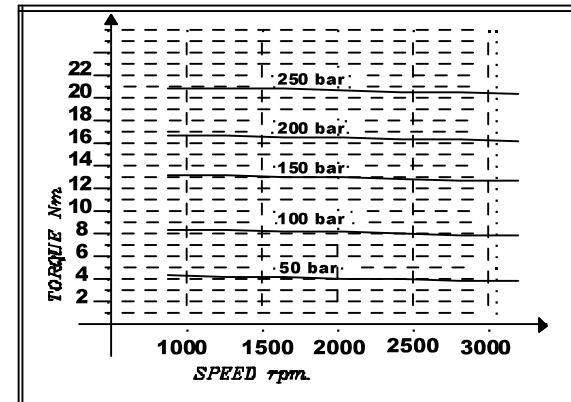
The flow characteristics curves have been made at P1 pressure.

GROUP2 MOTORS - TORQUE CHARACTERISTICS CURVES

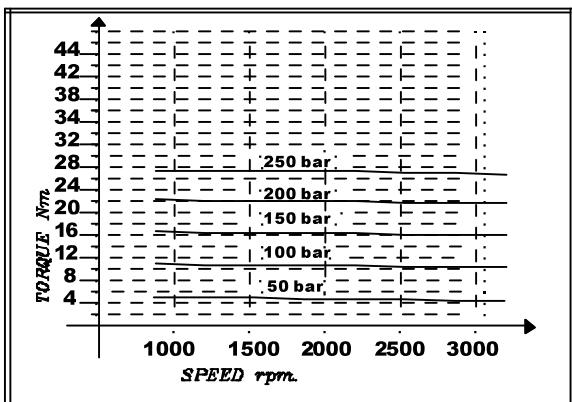
MOTORS OT200 M04



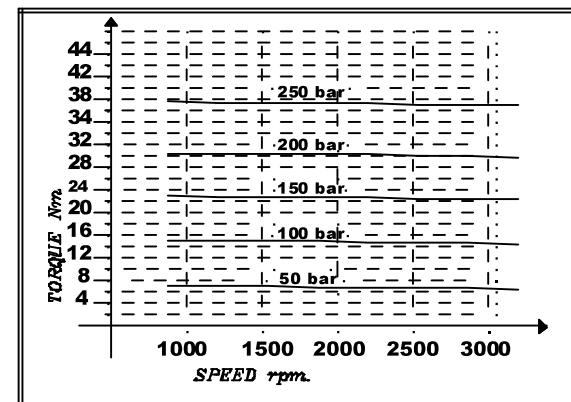
MOTORS OT200 M06



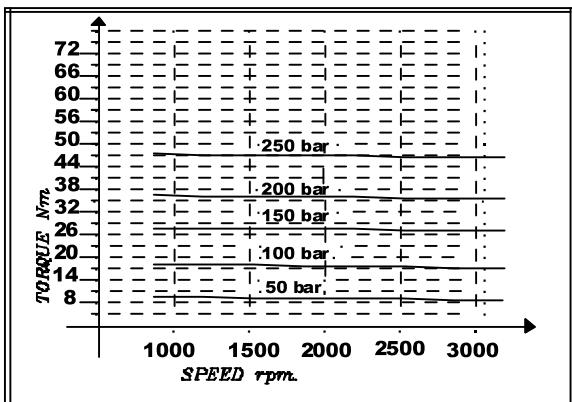
MOTORS OT200 M08



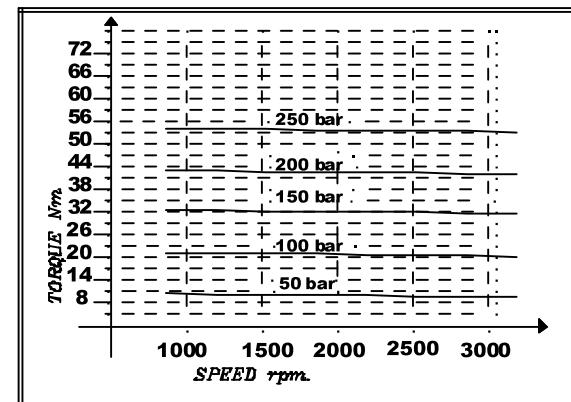
MOTORS OT200 M11



MOTORS OT200 M14

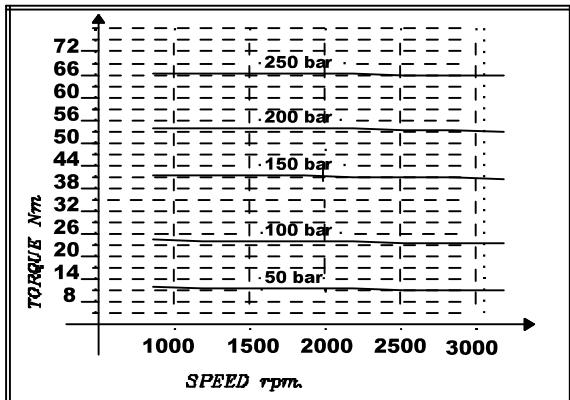


MOTORS OT200 M16

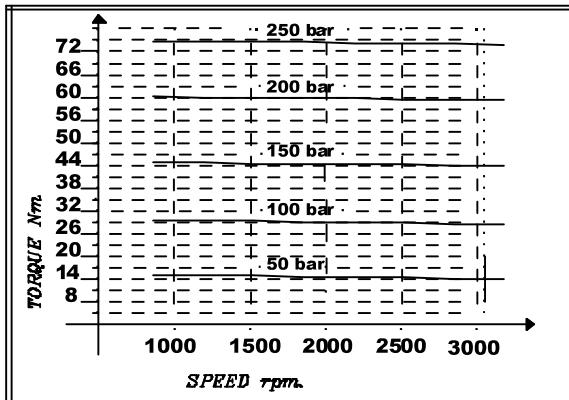


GROUP2 MOTORS - TORQUE CHARACTERISTICS CURVE

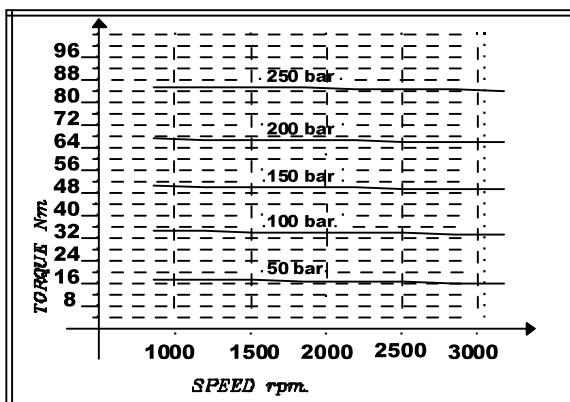
MOTORS OT200 M20



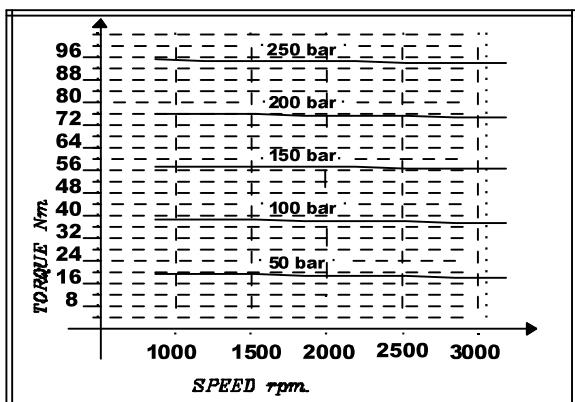
MOTORS OT200 M22



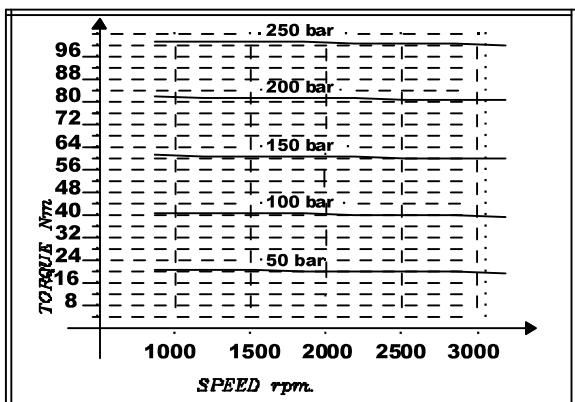
MOTORS OT200 M25



MOTORS OT200 M28



MOTORS OT200 M30



GROUP 2 REVERSIBLE PUMPS AND MOTORS

GENERAL DATA

	Displacem. (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (rpm)	Dimension A B	
					(mm)	
OT 200 P04	04,10	210	240	4000	40,00	83,50
OT 200 P06	06,20	220	255	3500	41,50	86,50
OT 200 P08	08,20	220	255	3500	43,00	89,50
OT 200 P11	11,20	220	255	3500	45,15	93,80
OT 200 P14	14,00	220	255	3000	47,15	97,80
OT 200 P16	16,00	220	255	3000	48,60	100,7
OT 200 P20	20,00	200	240	3000	51,50	106,5
OT 200 P22	22,50	170	210	2500	57,35	118,2
OT 200 P25	25,10	170	180	2500	59,25	122,0
OT 200 P28	28,00	140	180	2500	61,35	126,2
OT 200 P30	30,00	130	170	2000	62,75	129,0

EFFICIENCIES

$\eta = \eta_v$ ($V, \Delta p, n$) **Minimal volumetric efficiency** ≈ 0.85

$\eta_m = \eta_m$ ($V, \Delta p, n$) **Mechanical efficiency** ≈ 0.9

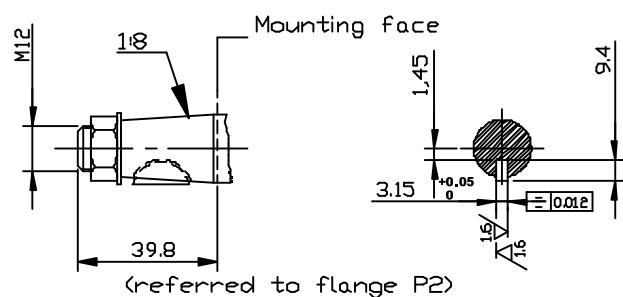
$\eta = \eta_v \times \eta_m$ **Overall efficiency** ≈ 0.8

GROUP 2 REVERSIBLE PUMPS AND MOTORS

DRIVE SHAFTS

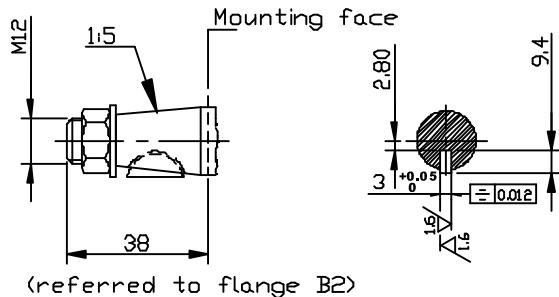
SHAFT CODE 28

Max torque 140 Nm



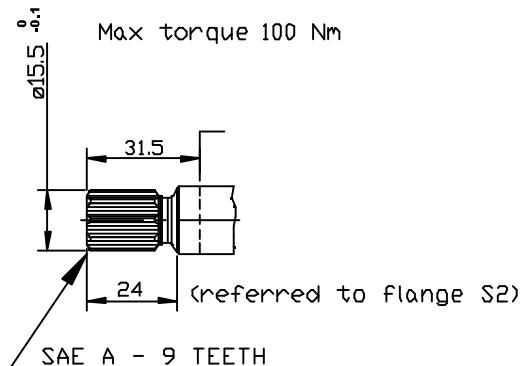
SHAFT CODE 25

Max torque 140 Nm



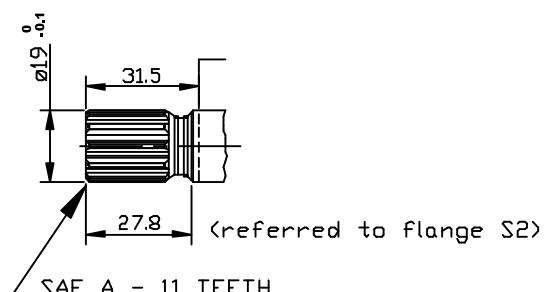
SHAFT CODE 21

Max torque 100 Nm



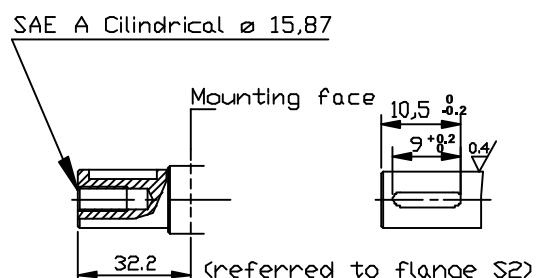
SHAFT CODE 20

Max torque 170 Nm



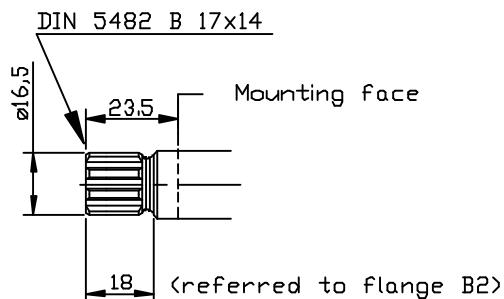
SHAFT CODE 31

Max torque 70 Nm



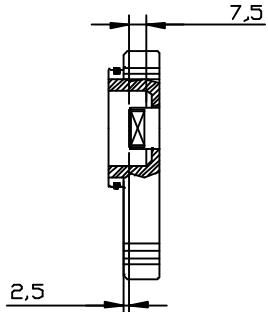
SHAFT CODE 23

Max Torque 110 Nm



SHAFT CODE 24

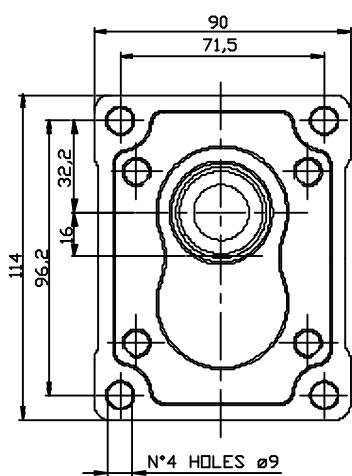
Max torque 70 Nm



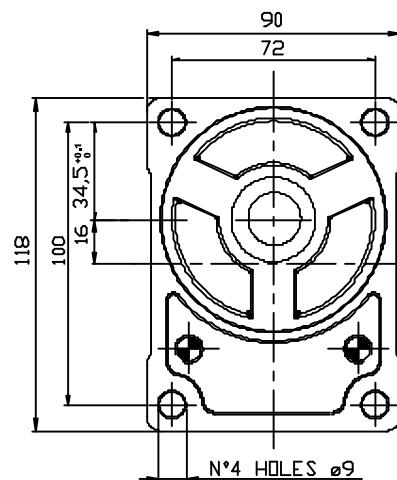
GROUP 2 REVERSIBLE PUMPS AND MOTORS

MOUNTING FLANGES

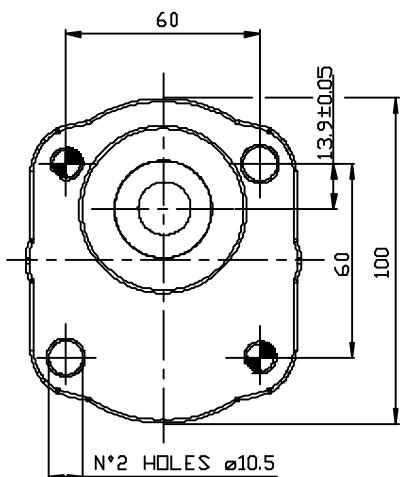
EUROPEAN STANDARD CODE P2



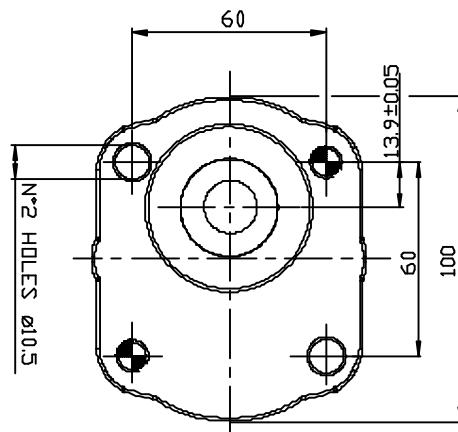
GERMAN STANDARD CODE B2



GERMAN STANDARD CODE B4



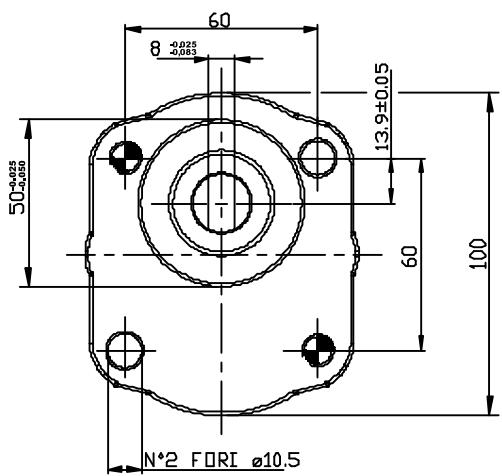
GERMAN STANDARD CODE B5



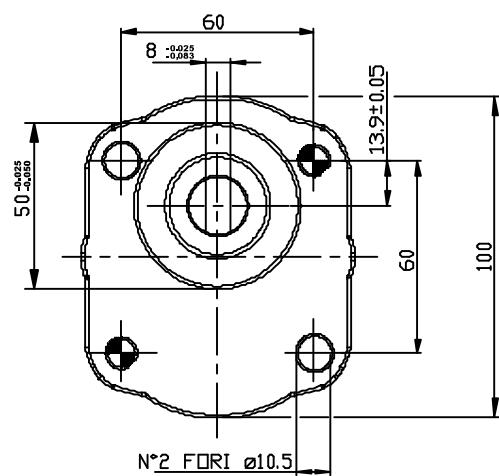
GROUP 2 REVERSIBLE PUMPS AND MOTORS

MOUNTING FLANGES

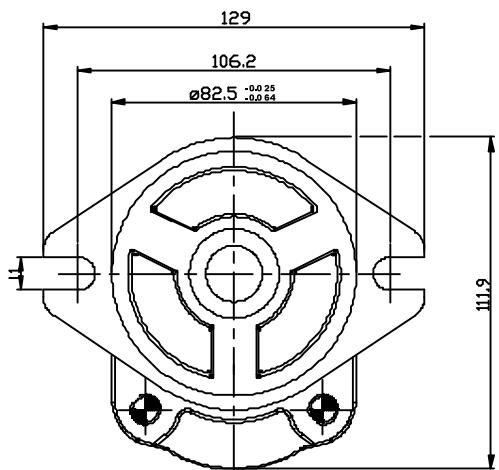
GERMAN STANDARD CODE B6



GERMAN STANDARD CODE B7



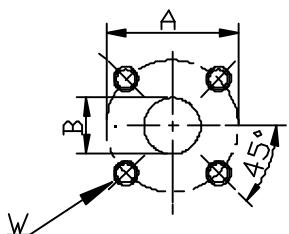
SAE A STANDARD CODE S2



GROUP 2 REVERSIBLE PUMPS AND MOTORS

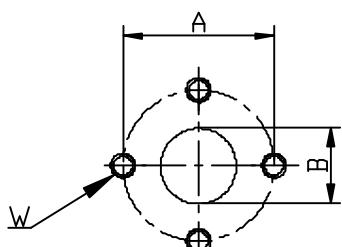
PORT SIZES

CODE B



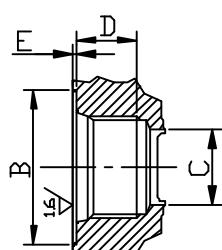
Quote	Dimension left side	Dimension right side
A	Ø40	Ø35
B		Ø20
W		M6

CODE P



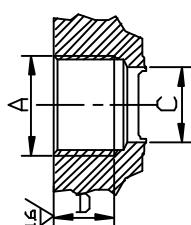
Quote	Displacement from 04 to 11 (mm)	Displacement from 14 to 30 (mm)
A	Ø30	Ø40
B	Ø13	Ø20
W	M6	M8

CODE R



Quote	SAE 10 from 04 to 11 (mm)	SAE 12 from 14 to 30 (mm)
C	Ø13	Ø20
E	0.8	0.5
D	14	16
B	7/8-14 UNF	1-1/16 UNF

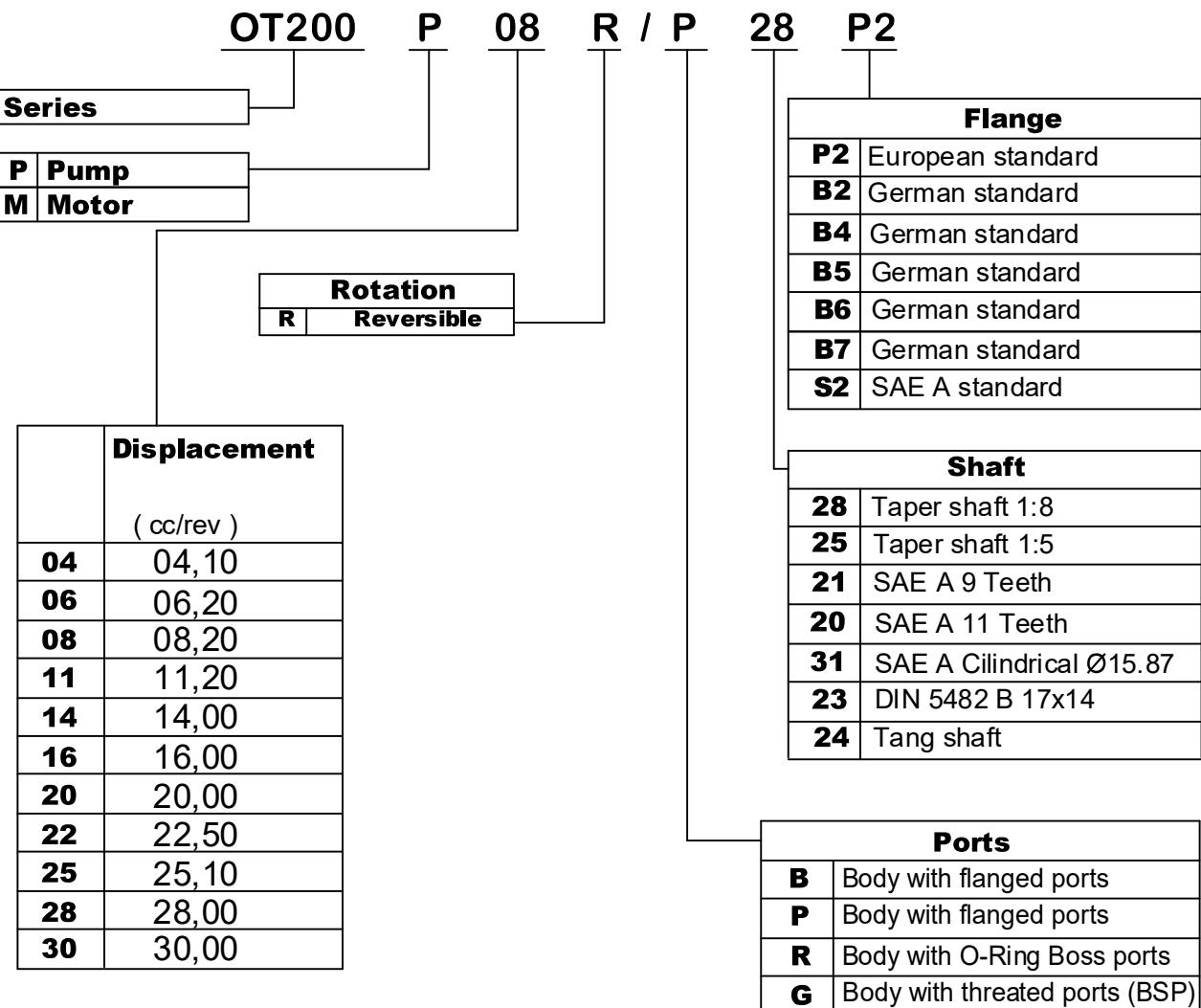
CODE G



Quote	Displacement from 04 to 11 (mm)	Displacement from 14 to 30 (mm)
A	1/2"	3/4"
C	Ø13	Ø20
D	14	16

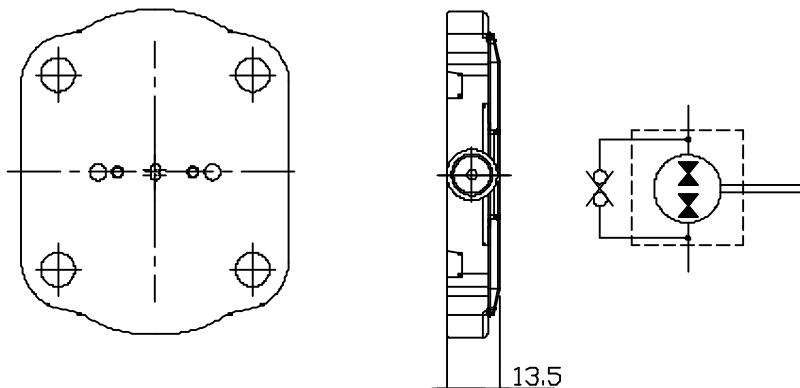
GROUP 2 REVERSIBLE PUMPS AND MOTORS

EXAMPLE OF ORDERING CODE



REAR COVERS FOR GROUP2 PUMPS AND MOTORS

INTERNAL DRAIN REAR COVER FOR PUMPS AND MOTORS



NOTE : Max back pressure 5 - 7 [bar]

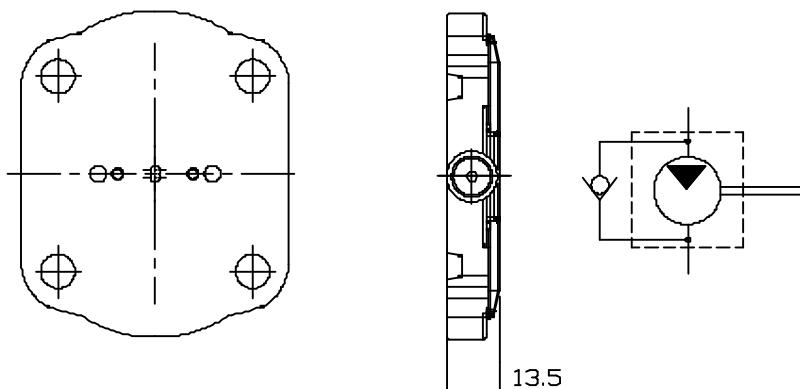
EXAMPLE OF ORDERING CODE

OT200 M 08 R / G 28 P2 - DI

See correspondent reversible motors and pumps tables

Cover for INTERNAL DRAIN

REAR COVER WITH ANTICAVITATION VALVE



NOTE : Max back pressure 5 - 7 [bar]

EXAMPLE OF ORDERING CODE

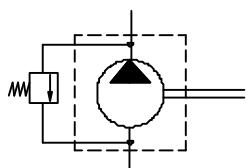
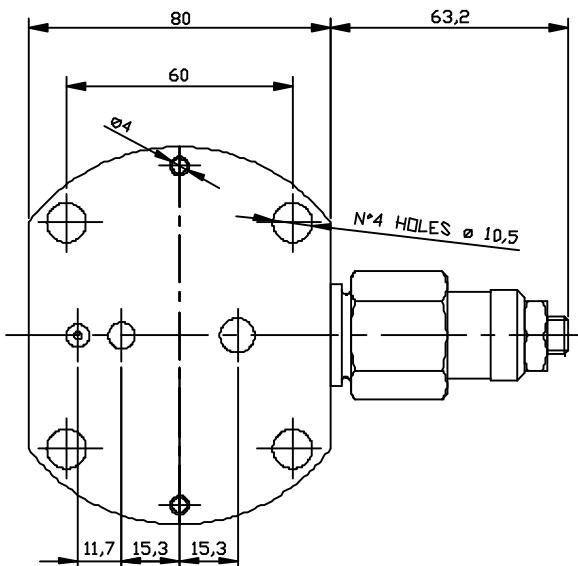
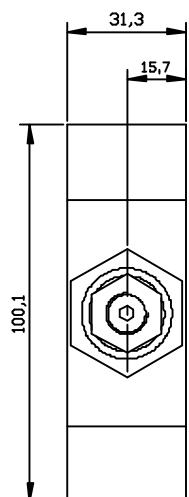
OT200 M 08 D / G 28 P2 - VA

See correspondent UNIDIRECTIONAL motor tables

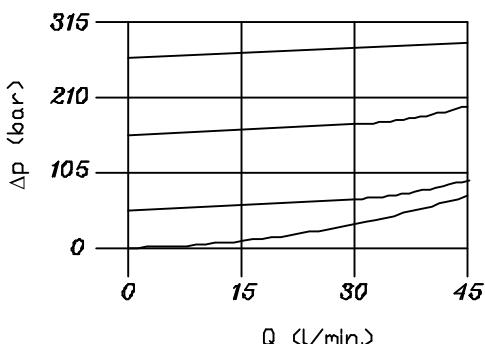
Rear cover with ANTICAVITATION VALVE

REAR COVERS FOR GROUP2 PUMPS AND MOTORS

REAR COVER WITH MAX. PRESSURE VALVE



NOTE: Max Flow 50 (l/min)
 Valve opening pressure 95% of calibration value
 Valve closing pressure 75% of calibration value



EXAMPLE OF ORDERING CODE

OT200 P 08 D / G 28 P2 - **VMI** - **180**

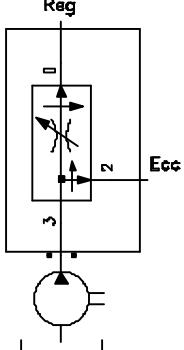
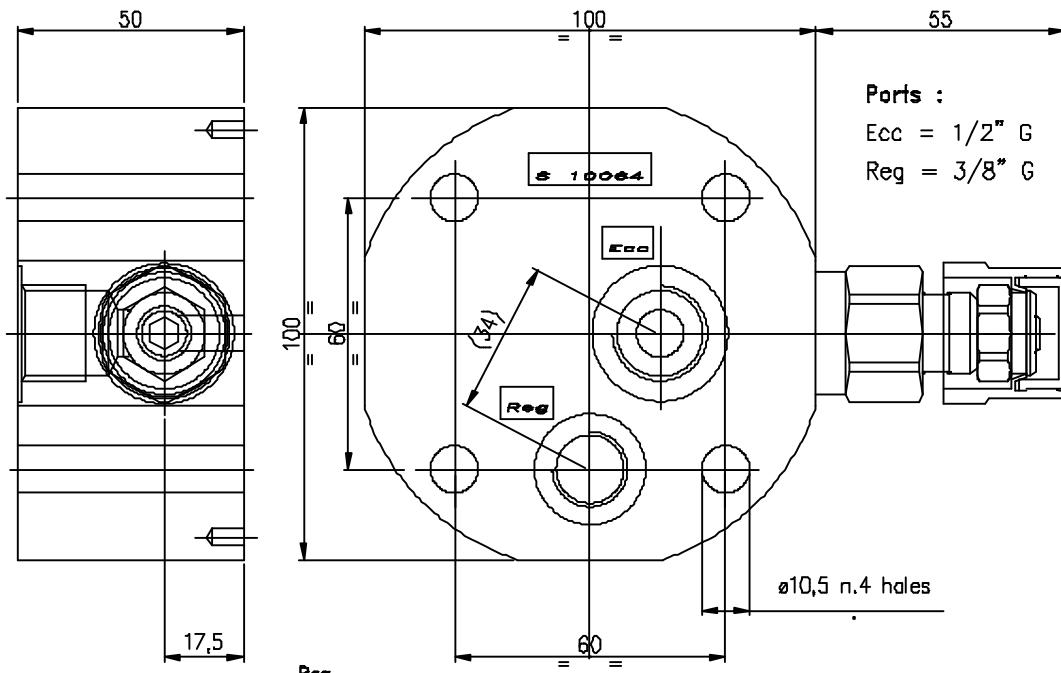
See correspondent UNIDIRECTIONAL pumps tables

Rear cover with max. press. valve

**Adjustable
setting
PRESSURE**

REAR COVERS FOR GROUP2 PUMPS AND MOTORS

REAR COVER WITH PRIORITY VALVE



NOTE : Max flow 60 [l/min]
Setting flow from 6 to 25 [l/min]

EXAMPLE OF ORDERING CODE

OT200 P 08 D / G 28 P2 - VP6

See correspondent UNIDIRECTIONAL pumps tables

Rear cover with PRIORITY valve