

GROUP2 MOTORS

OT200 SINGLE ROTATION MOTORS GENERAL DATA

MOTOR TYPE	DISPLACEMENT	MAX. PRESSURE			MAX. SPEED	MIN. SPEED
		P1	P2	P3		
	cc / rev	bar			rpm	rpm
OT200 M04	4.1	230	260	280	4000	600
OT200 M06	6.2	250	280	300		
OT200 M08	8.2					
OT200 M11	11.2				3500	
OT200 M14	14.0					
OT200 M16	16.0	3000				
OT200 M20	20.0		200	220	240	
OT200 M22	22.5		170	190	210	2500
OT200 M25	25.1					
OT200 M28	28.0	130	150	170	2000	
OT200 M30	30.0					

P1= Max. continuous pressure

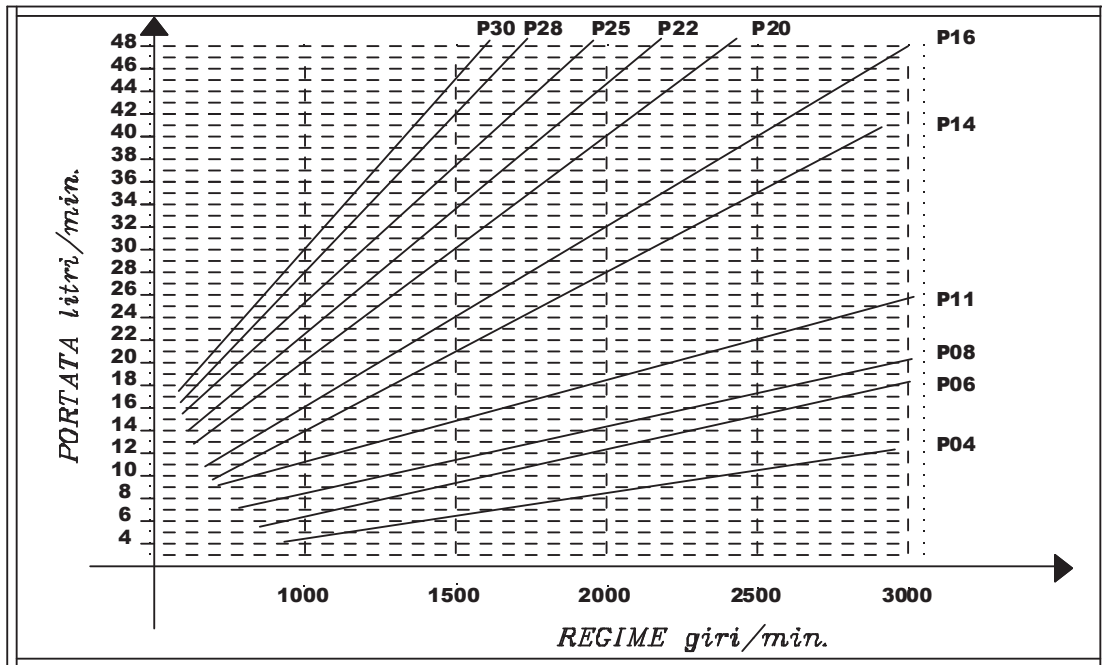
P2= Max. intermittent pressure

P3= Max. peak pressure

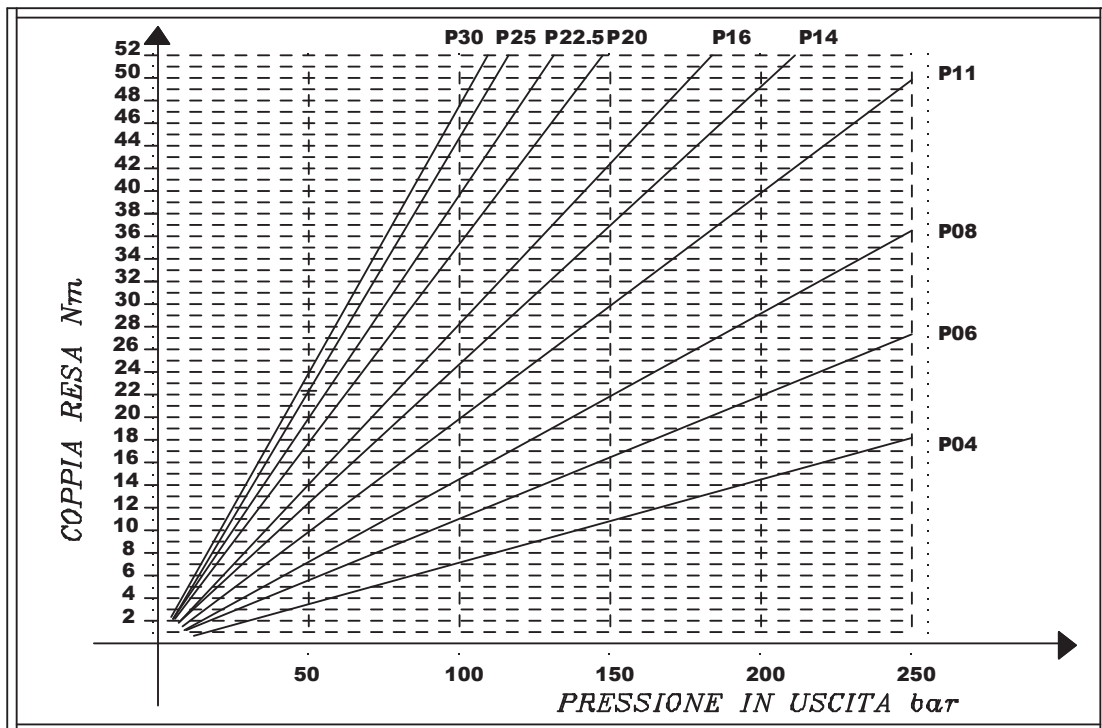
**FOR DIMENSION PLEASE CHECK
RELATIVE SINGLE PUMP TABLES**

MOTORI GRUPPO 2

CURVE CARATTERISTICHE DI PORTATA



COPPIA RESA

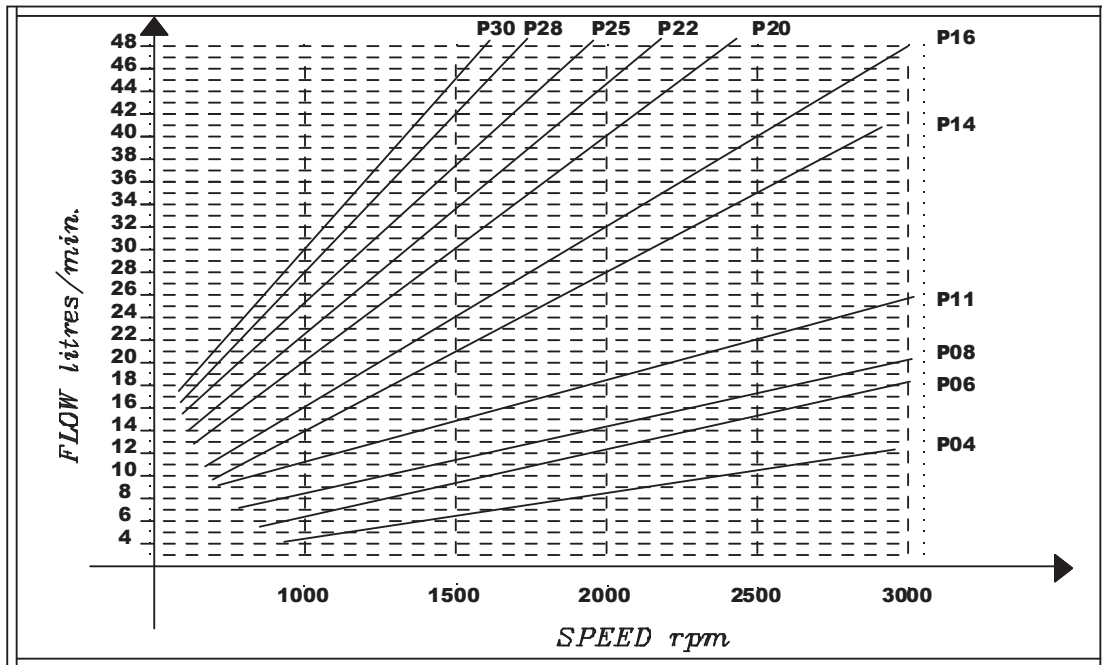


NOTE

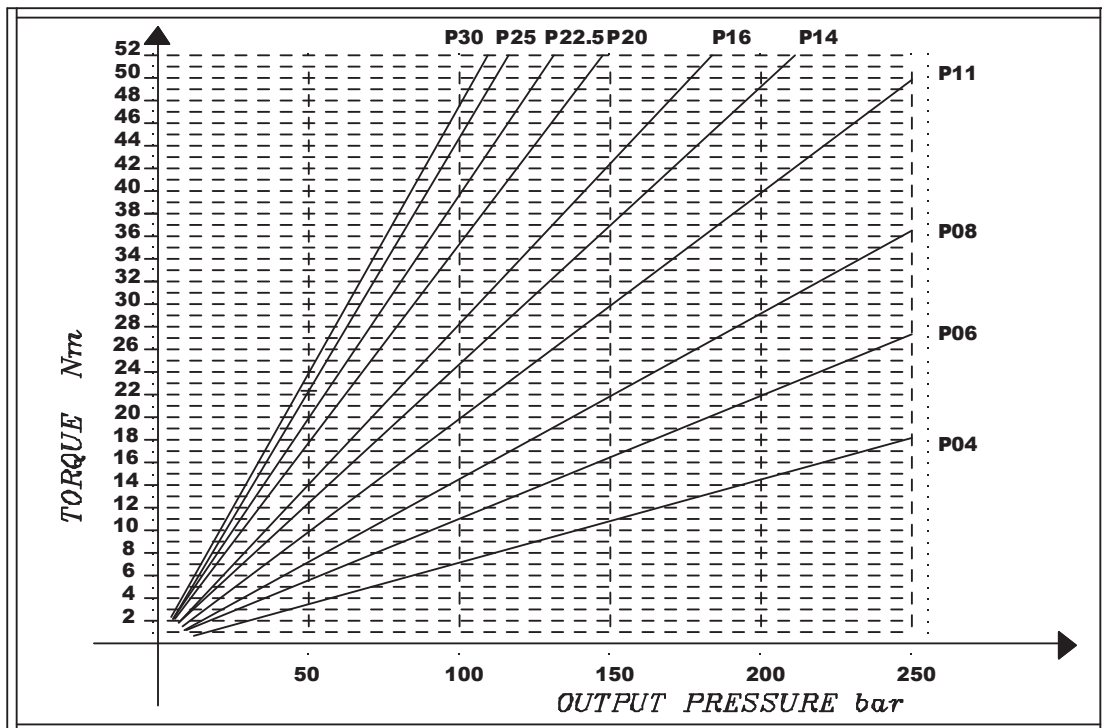
Le curve caratteristiche di portata sono state tracciate alla pressione P1

GROUP2 MOTORS

FLOW CHARACTERISTICS CURVES



ABSORBED TORQUE

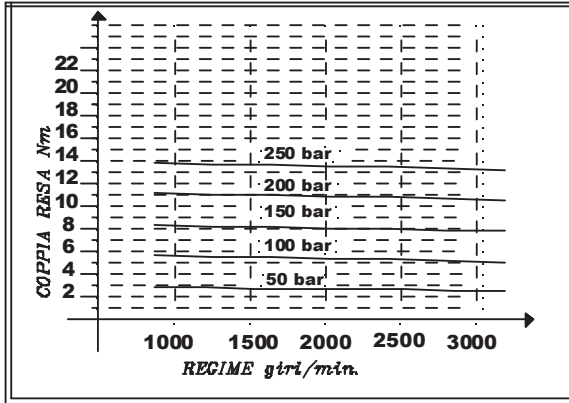


NOTE

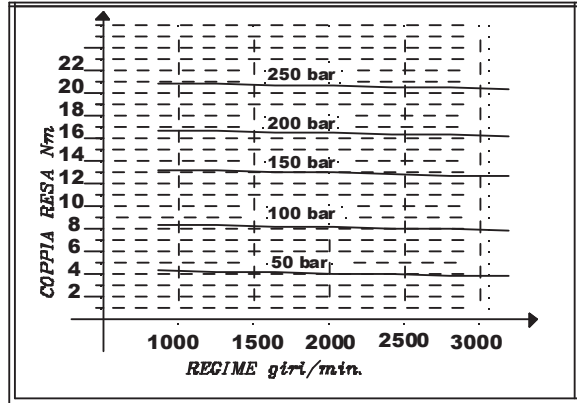
The flow characteristics curves have been made at P1 pressure.

MOTORI GRUPPO 2 CURVE CARATTERISTICHE COPPIA

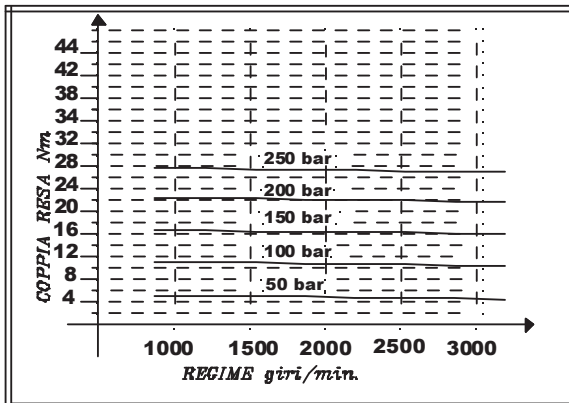
MOTORI OT200 M04



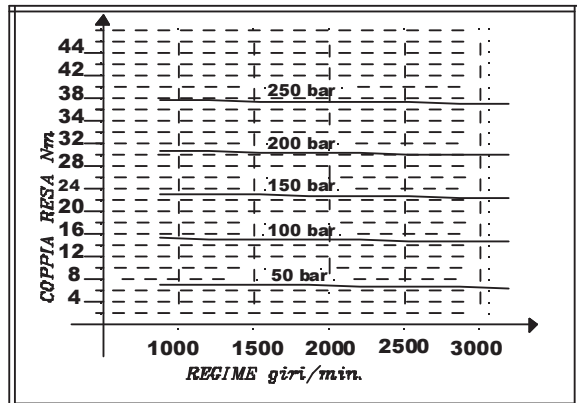
MOTORI OT200 M06



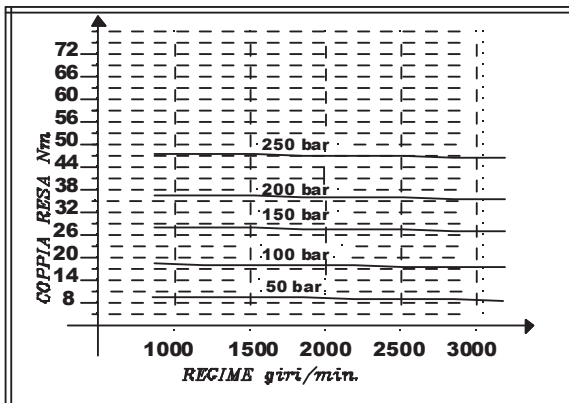
MOTORI OT200 M08



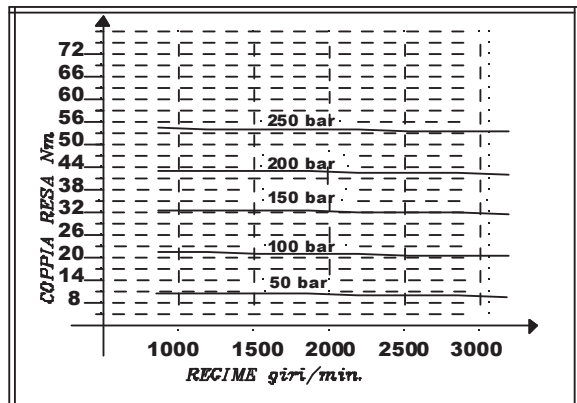
MOTORI OT200 M11



MOTORI OT200 M14

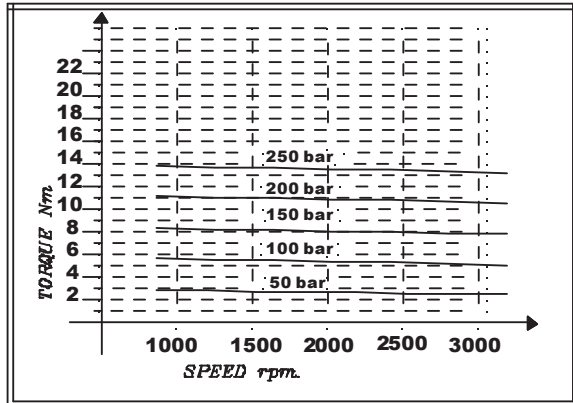


MOTORI OT200 M16

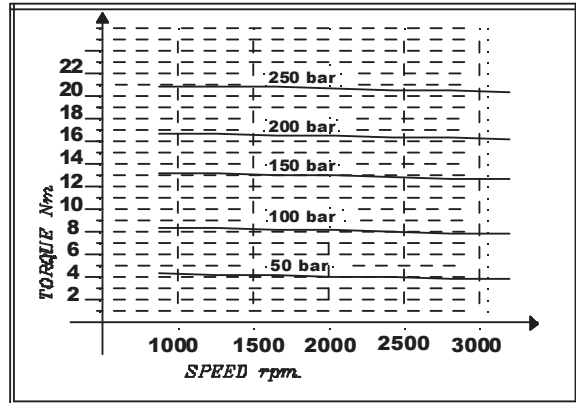


GROUP2 MOTORS - TORQUE CHARACTERISTICS CURVES

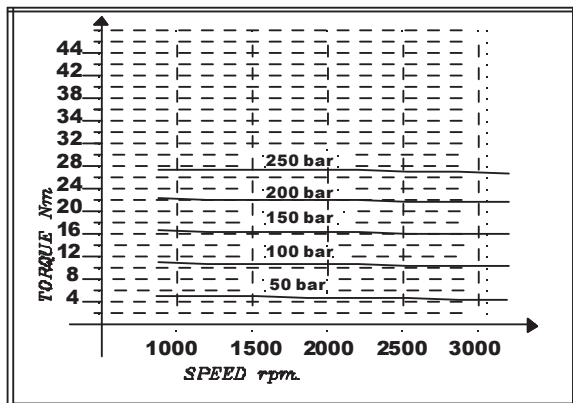
MOTORS OT200 M04



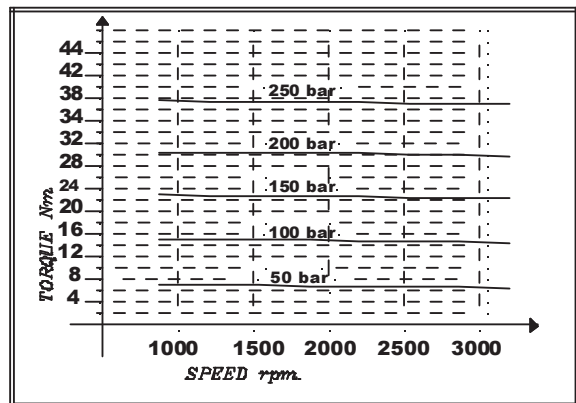
MOTORS OT200 M06



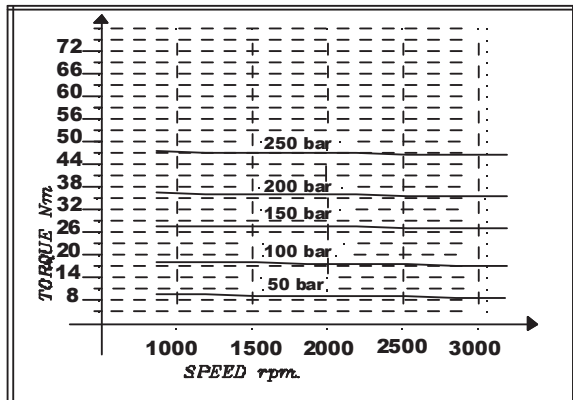
MOTORS OT200 M08



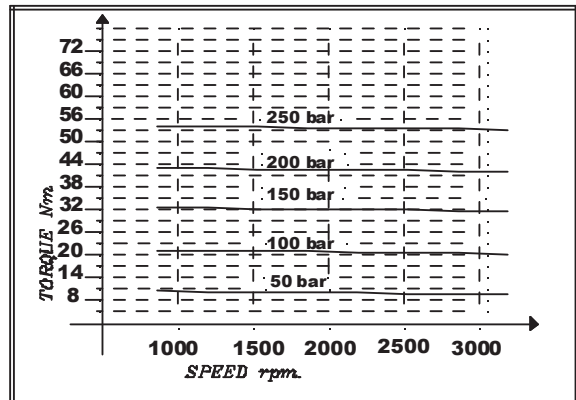
MOTORS OT200 M11



MOTORS OT200 M14

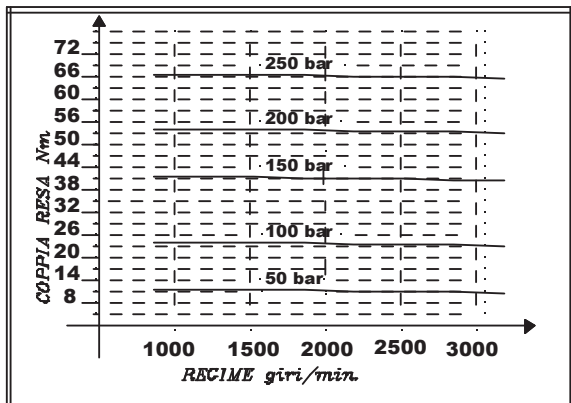


MOTORS OT200 M16

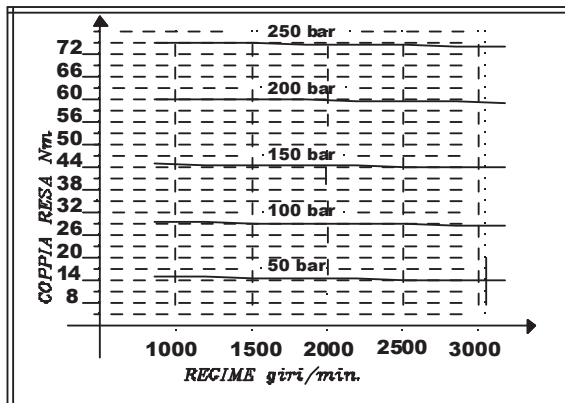


MOTORI GRUPPO 2 CURVE CARATTERISTICHE COPPIA

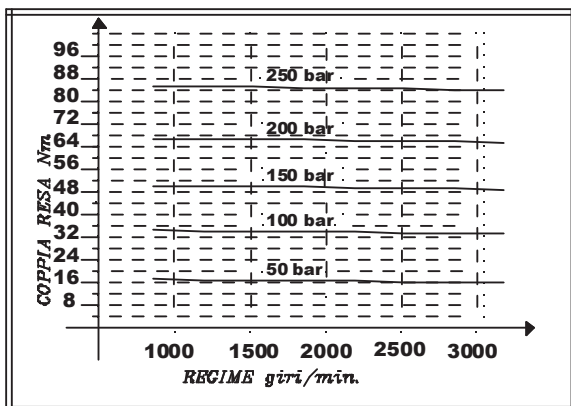
MOTORI OT200 M20



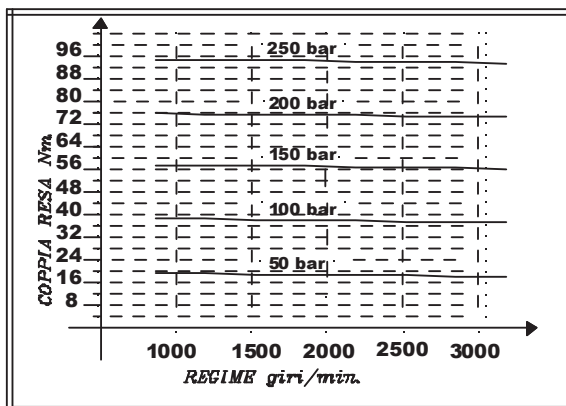
MOTORI OT200 M22



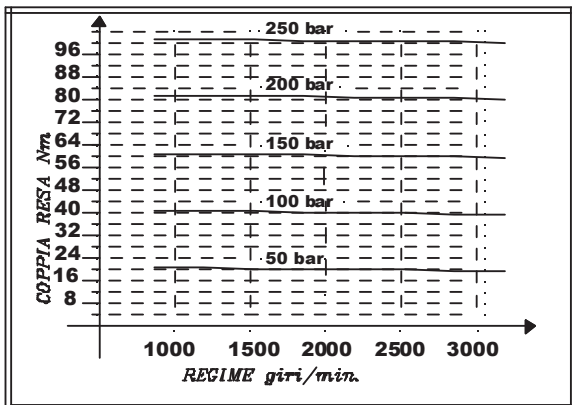
MOTORI OT200 M25



MOTORI OT200 M28

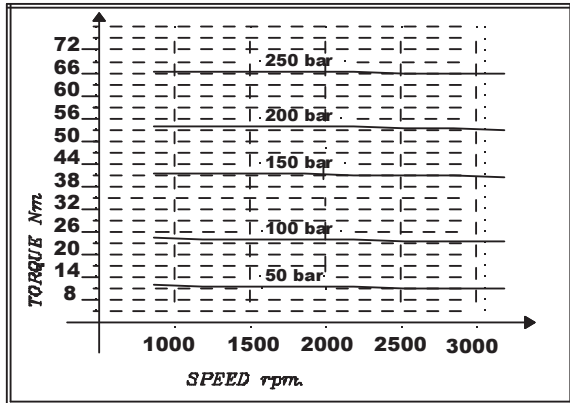


MOTORI OT200 M30

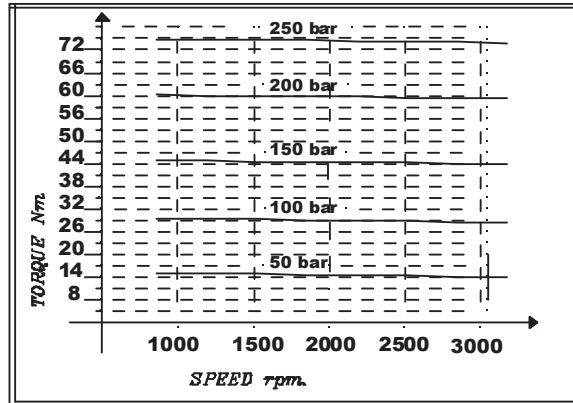


GROUP2 MOTORS - TORQUE CHARACTERISTICS CURVE

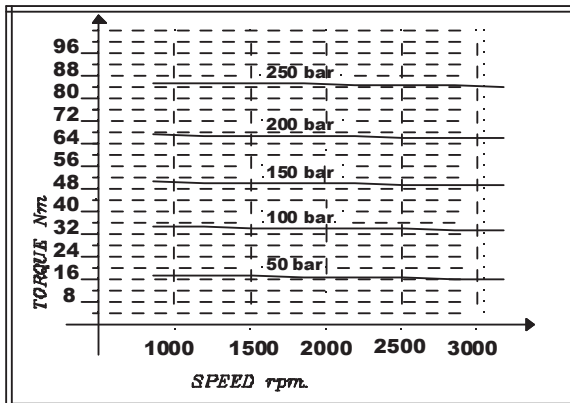
MOTORS OT200 M20



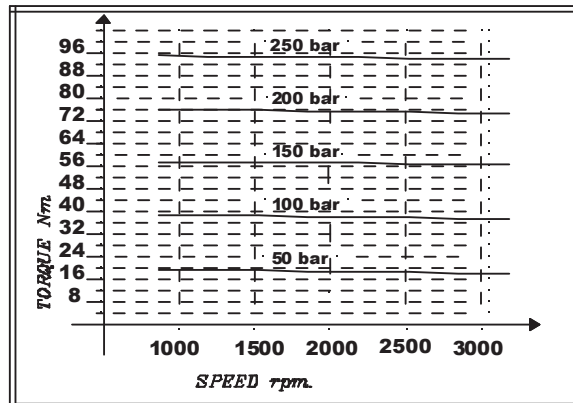
MOTORS OT200 M22



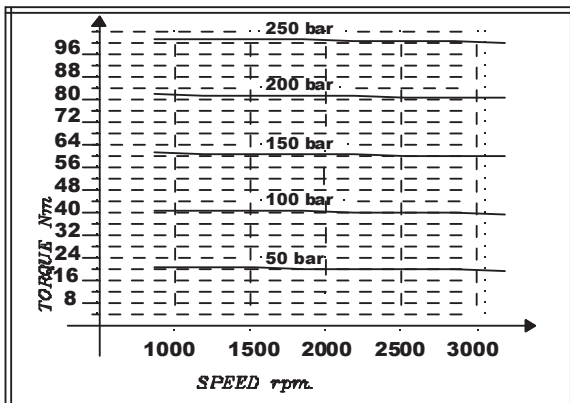
MOTORS OT200 M25



MOTORS OT200 M28



MOTORS OT200 M30



POMPE E MOTORI REVERSIBILI GRUPPO 2

DATI GENERALI

	Cilindrata (cc/giro)	Pressione massima continua P1 (bar)	Pressione di punta P3 (bar)	Velocita' massima (giri/min.)	Dimensione	
					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

RENDIMENTI

$\eta_v = \eta_v (V, \Delta p, n)$ **Minimo rendimento volumetrico** ≈ 0.85

$\eta_m = \eta_m (V, \Delta p, n)$ **Rendimento meccanico** ≈ 0.9

$\eta_t = \eta_v \times \eta_m$ **Rendimento totale** ≈ 0.8

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

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

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

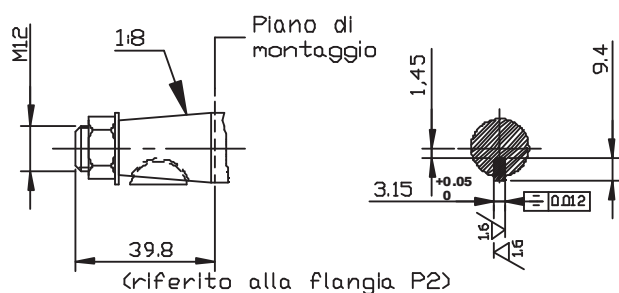
$\eta = \eta_v \times \eta_m$ **Overall efficiency** ≈ 0.8

POMPE E MOTORI REVERSIBILI GRUPPO 2

ALBERI CONDUTTORI

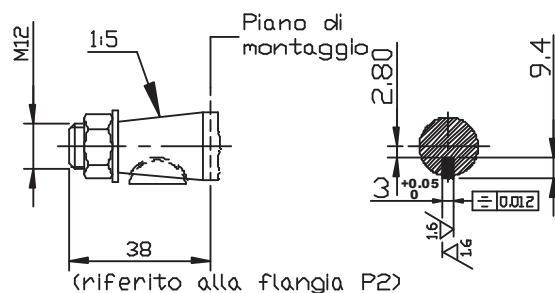
ALBERO COD. 28

Coppia max. 140 Nm



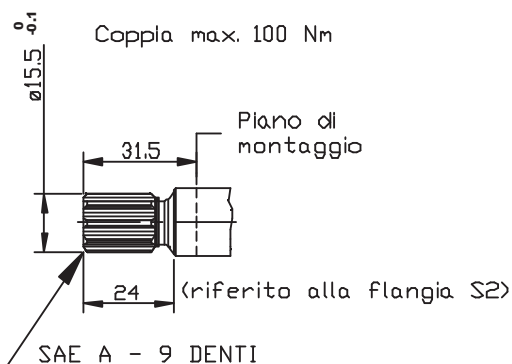
ALBERO COD. 25

Coppia max. 140 Nm



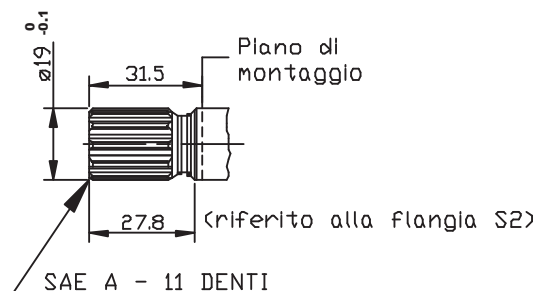
ALBERO COD. 21

Coppia max. 100 Nm



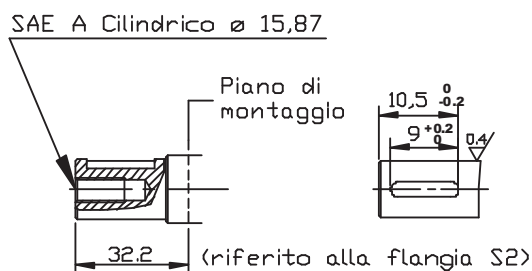
ALBERO COD. 20

Coppia max. 170 Nm



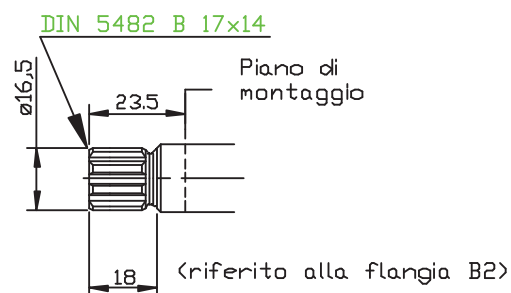
ALBERO COD. 31

Coppia max. 70 Nm



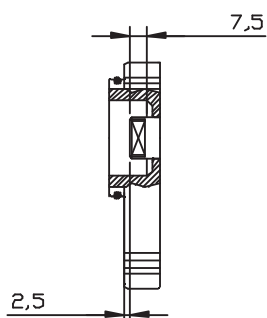
ALBERO COD. 23

Coppia max. 110 Nm



ALBERO COD. 24

Coppia max. 70 Nm

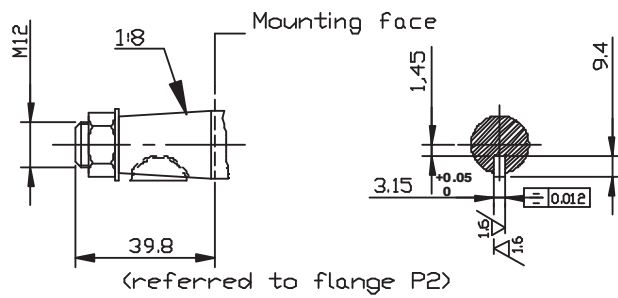


GROUP 2 REVERSIBLE PUMPS AND MOTORS

DRIVE SHAFTS

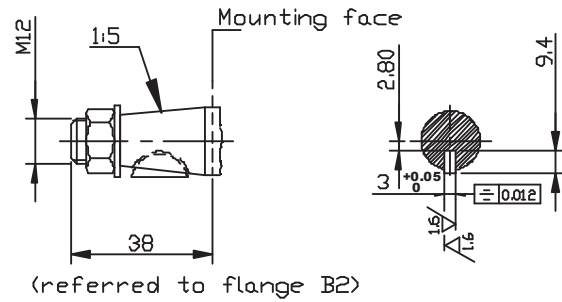
SHAFT CODE 28

Max torque 140 Nm



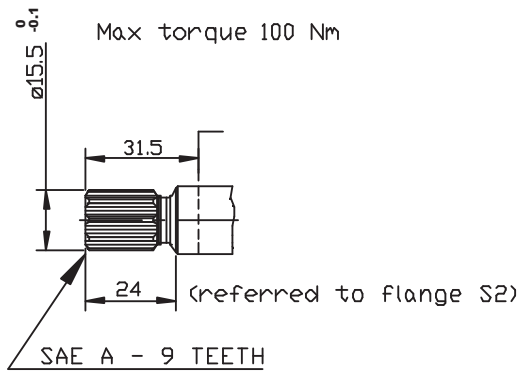
SHAFT CODE 25

Max torque 140 Nm



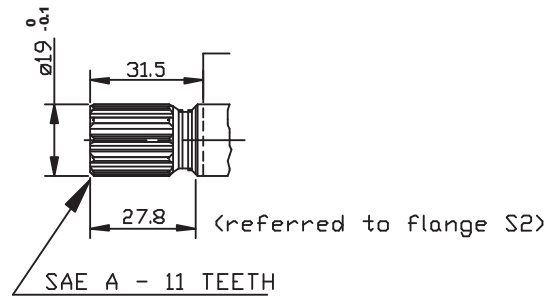
SHAFT CODE 21

Max torque 100 Nm



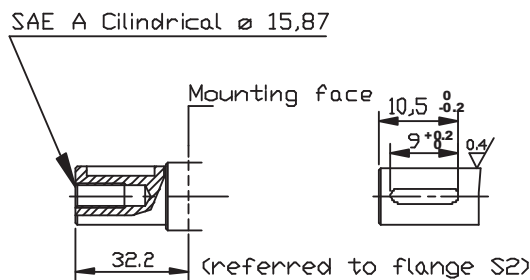
SHAFT CODE 20

Max torque 170 Nm



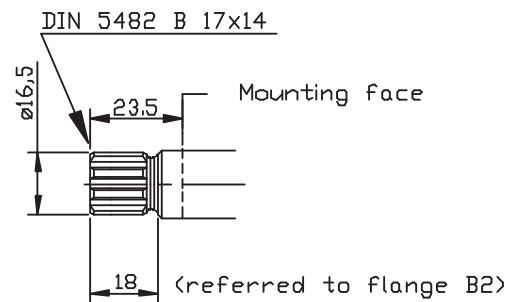
SHAFT CODE 31

Max torque 70 Nm



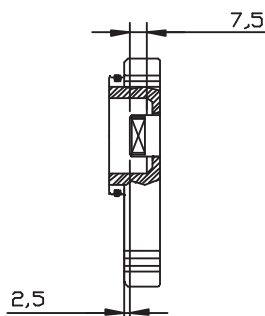
SHAFT CODE 23

Max Torque 110 Nm



SHAFT CODE 24

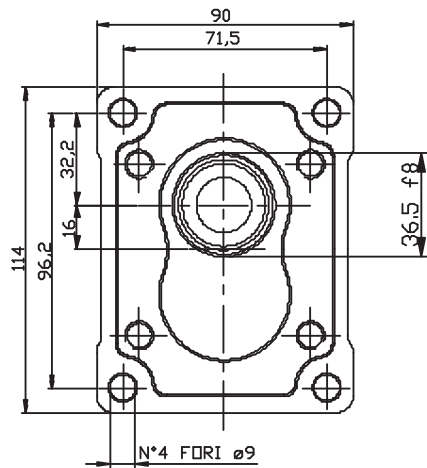
Max torque 70 Nm



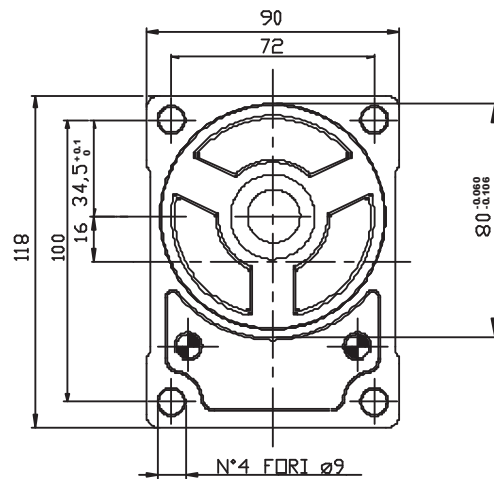
POMPE E MOTORI REVERSIBILI GRUPPO 2

FLANGE

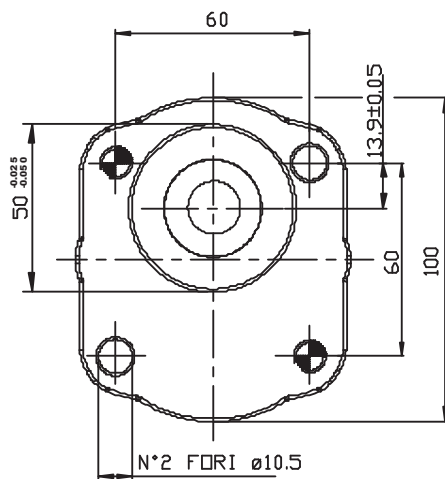
STANDARD EUROPEO COD. P2



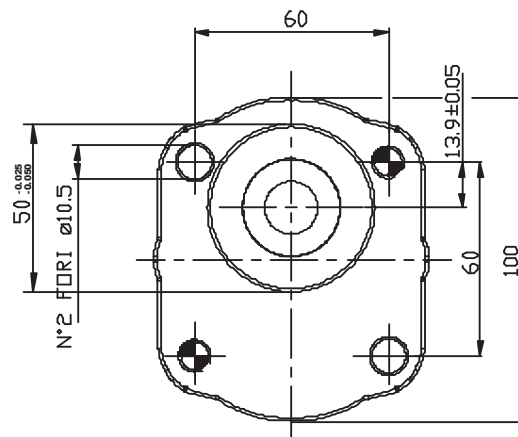
UNIFICAZIONE TEDESCA COD. B2



UNIFICAZIONE TEDESCA COD. B4



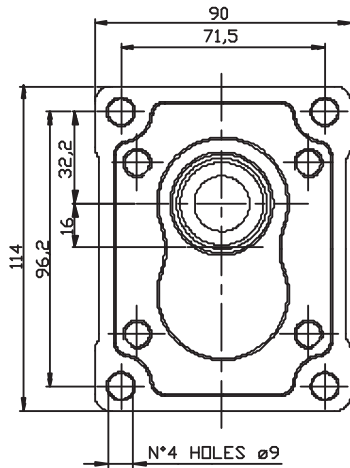
UNIFICAZIONE TEDESCA COD. B5



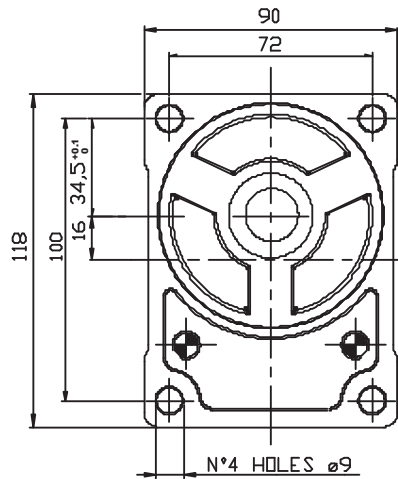
GROUP 2 REVERSIBLE PUMPS AND MOTORS

MOUNTING FLANGES

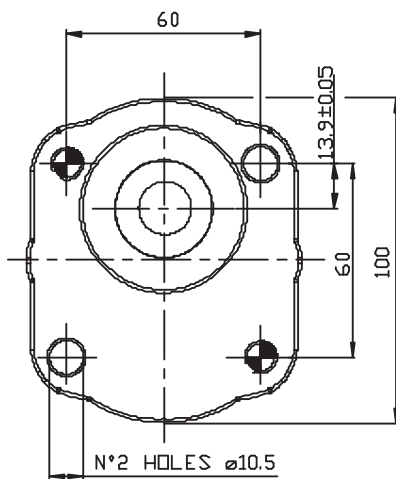
EUROPEAN STANDARD CODE P2



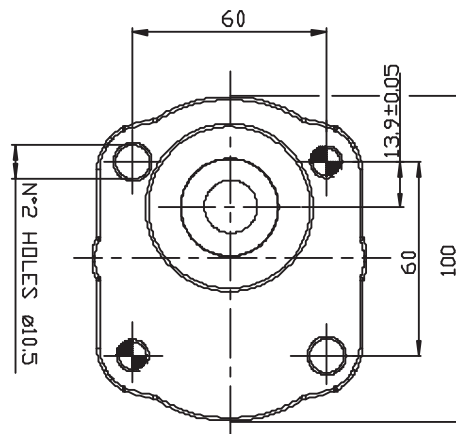
GERMAN STANDARD CODE B2



GERMAN STANDARD CODE B4



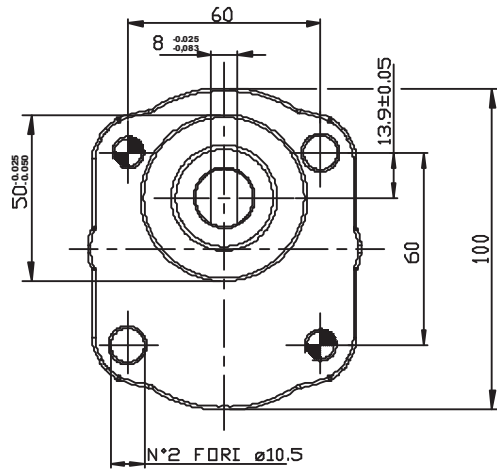
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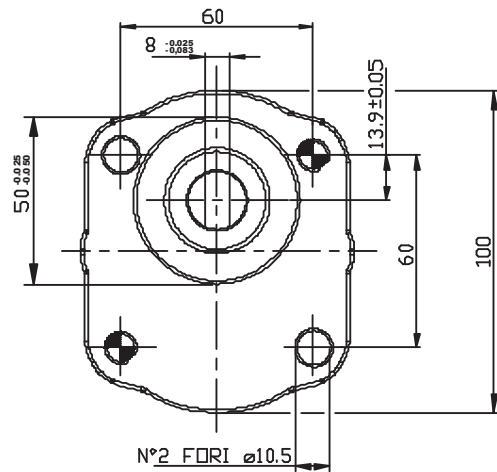
POMPE E MOTORI REVERSIBILI GRUPPO 2

FLANGE

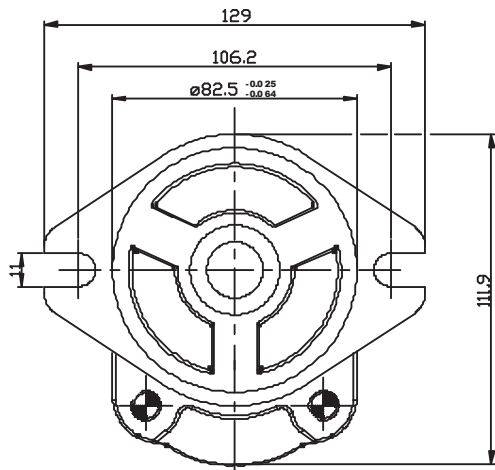
UNIFICAZIONE TEDESCA COD. B6



UNIFICAZIONE TEDESCA COD. B7



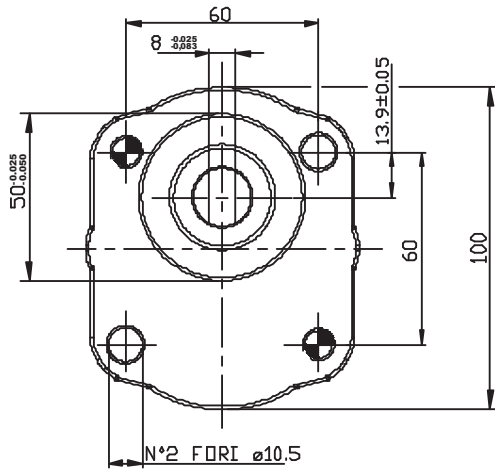
UNIFICAZIONE SAE A COD. S2



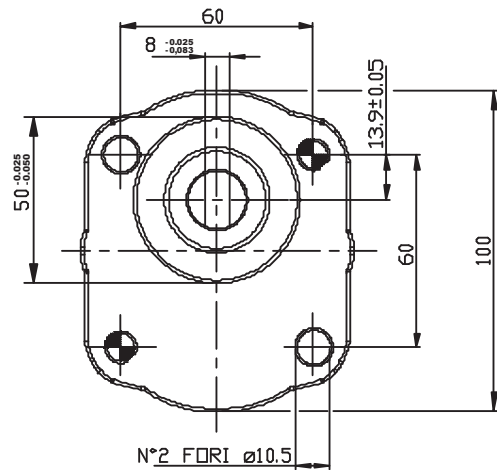
GROUP 2 REVERSIBLE PUMPS AND MOTORS

MOUNTING FLANGES

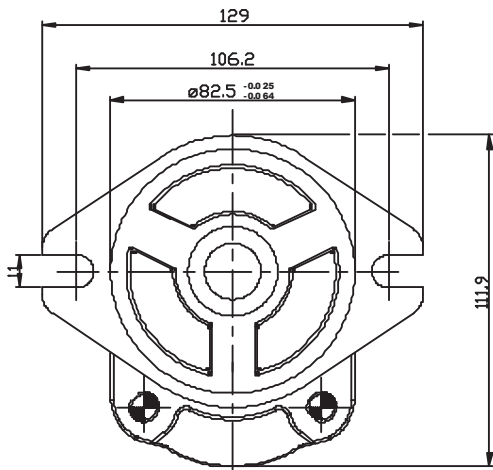
GERMAN STANDARD CODE B6



GERMAN STANDARD CODE B7



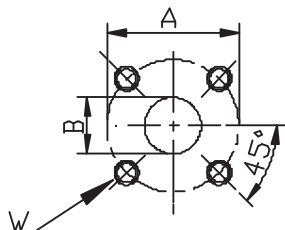
SAE A STANDARD CODE S2



POMPE E MOTORI REVERSIBILI GRUPPO 2

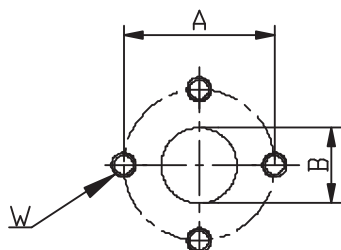
BOCCHIE

CODICE B



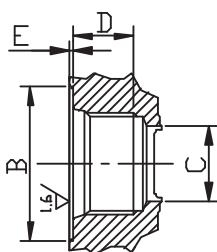
Quota	Dimensione lato sx	Dimensione parte dx
A	Ø40	Ø35
B	Ø20	
W	M6	

CODICE P



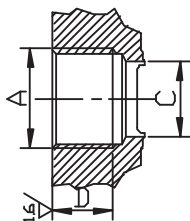
Quota	Cilindrata da 04 a 11 (mm)	Cilindrata da 14 a 30 (mm)
A	Ø30	Ø40
B	Ø13	Ø20
W	M6	M8

CODICE R



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

CODICE G

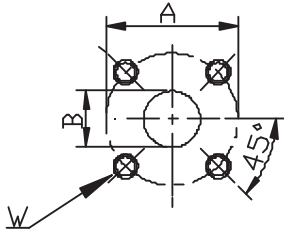


Quota	Cilindrata da 04 a 11 (mm)	Cilindrata da 14 a 30 (mm)
A	1/2"	3/4"
C	Ø13	Ø20
D	14	16

GROUP 2 REVERSIBLE PUMPS AND MOTORS

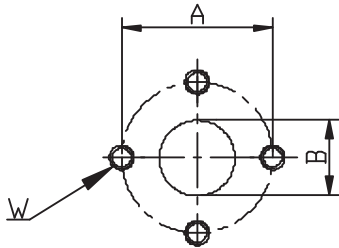
PORT SIZES

CODE B



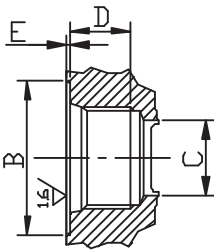
Quote	Dimension left side	Dimension right side
A	Ø40	Ø35
B	Ø20	
W	M6	

CODE P



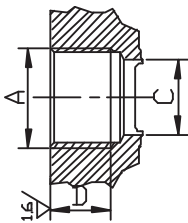
Quote	Displacement from 04 to 11 (mm)	Displacement from 14 to 30 (mm)
A	Ø30	Ø40
B	Ø13	Ø20
W	M6	M8

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

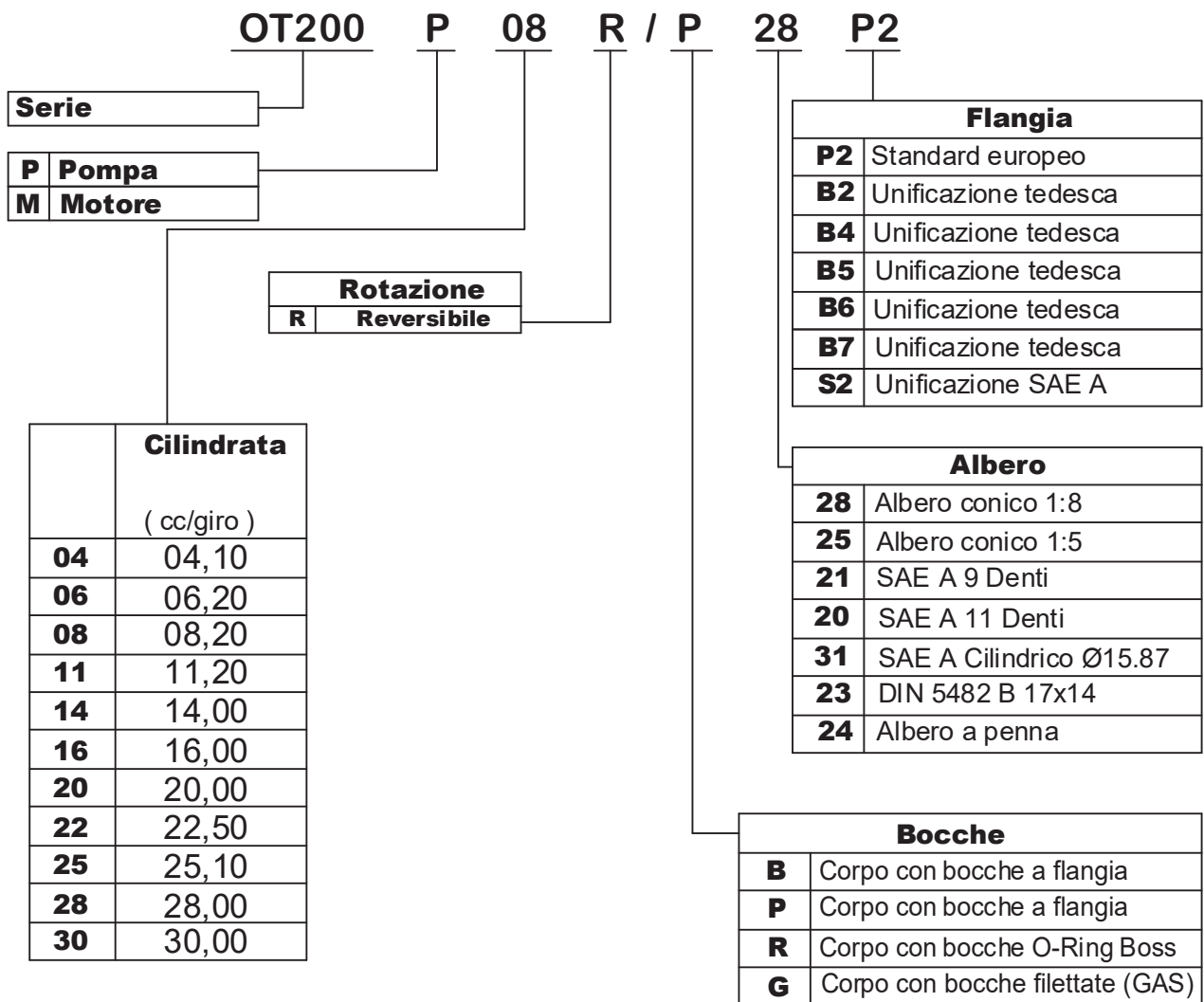
CODE G



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

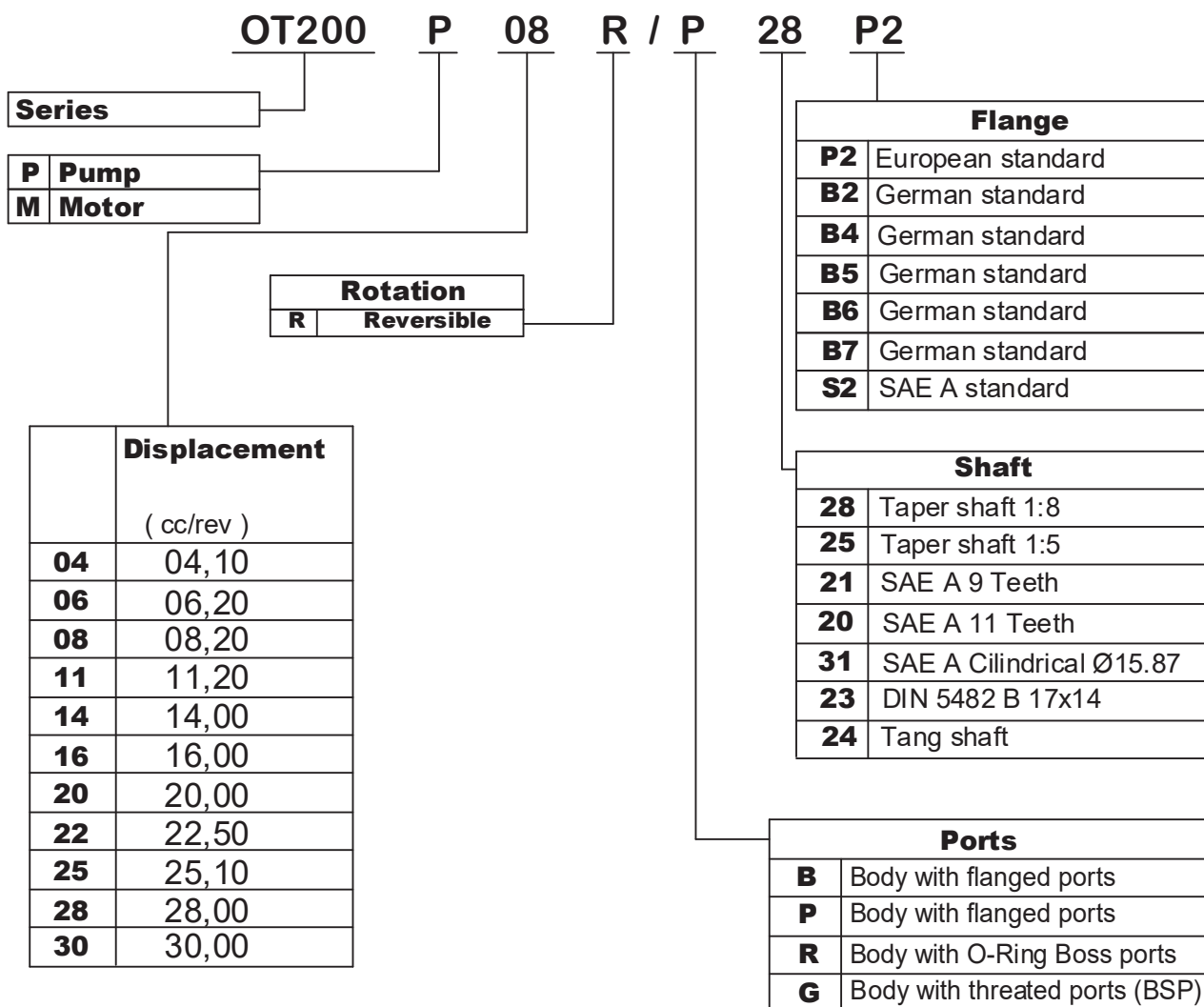
POMPE E MOTORI REVERSIBILI GRUPPO 2

ESEMPIO DI CODICE DI ORDINAZIONE



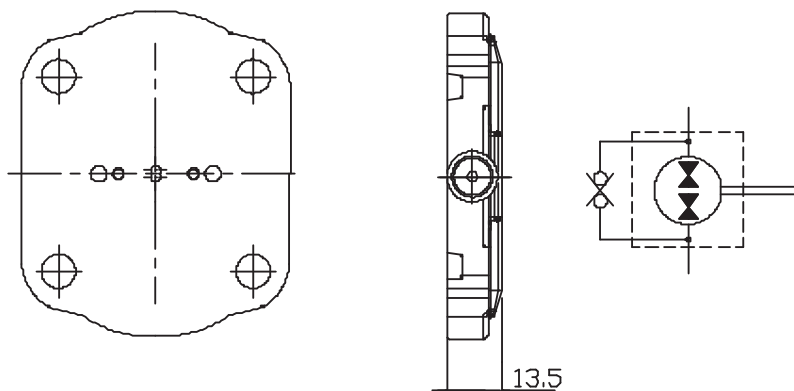
GROUP 2 REVERSIBLE PUMPS AND MOTORS

EXAMPLE OF ORDERING CODE



COPERCHI POSTERIORI PER POMPE E MOTORI GRUPPO 2

COPERCHIO PER POMPE E MOTORI CON DRENAGGIO INTERNO



NOTE : Massima contropressione in scarico 5 - 7 [bar]

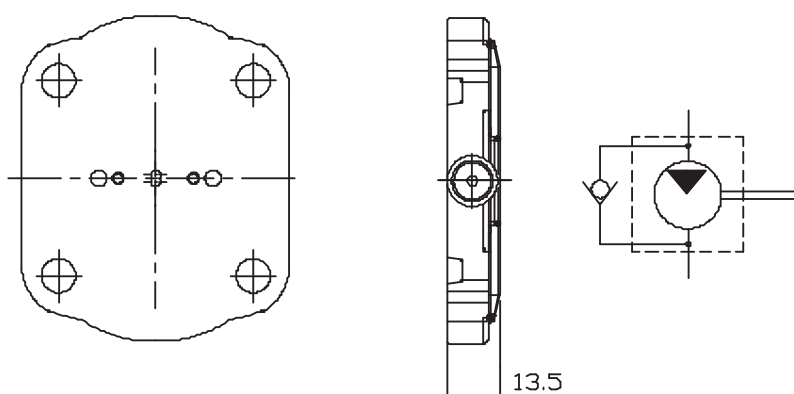
ESEMPIO DI CODICE D'ORDINAZIONE

OT200 M 08 R / G 28 P2 - DI

Vedi tabelle tecniche di corrispondenti pompe o motori reversibili

Corperchio per DRENAGGIO INTERNO

COPERCHIO CON VALVOLA ANTICAVITAZIONE



NOTE : Massima contropressione in scarico 5 - 7 [bar]

ESEMPIO DI CODICE D'ORDINAZIONE

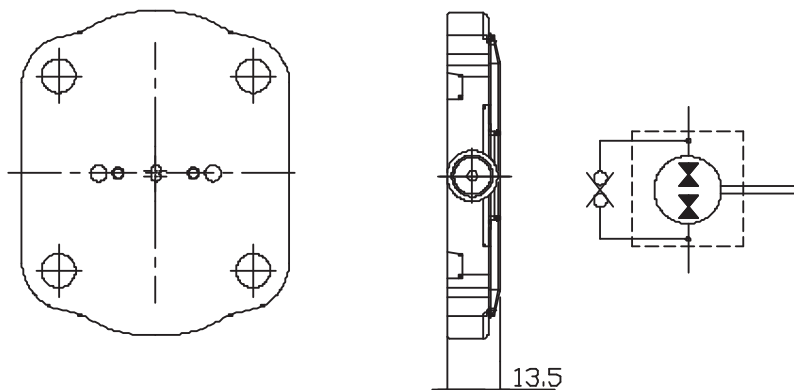
OT200 M 08 D / G 28 P2 - VA

Vedi tabelle tecniche di corrispondenti motori UNIDIREZIONALI

Coperchio con VALVOLA ANTICAVITAZIONE

REAR COVERS FOR GROUP2 PUMPS AND MOTORS

INTERNAL DRAIN REAR COVER FOR PUMPS AND MOTORS



NOTE : Max back pressure 5 - 7 [bar]

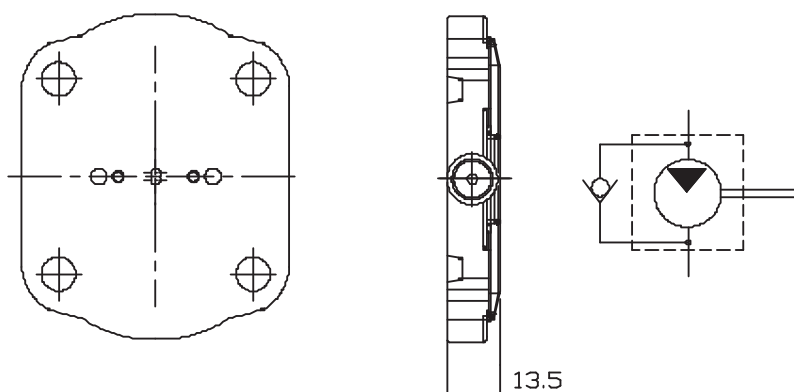
EXAMPLE OF ORDERING CODE

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

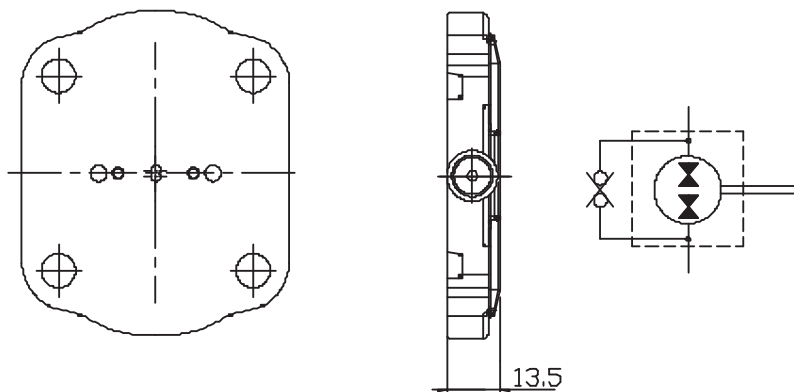
OT200 M 08 D / G 28 P2 - VA

See correspondent UNIDIRECTIONAL motor tables

Rear cover with ANTICAVITATION VALVE

REAR COVERS FOR GROUP2 PUMPS AND MOTORS

INTERNAL DRAIN REAR COVER FOR PUMPS AND MOTORS



NOTE : Max back pressure 5 - 7 [bar]

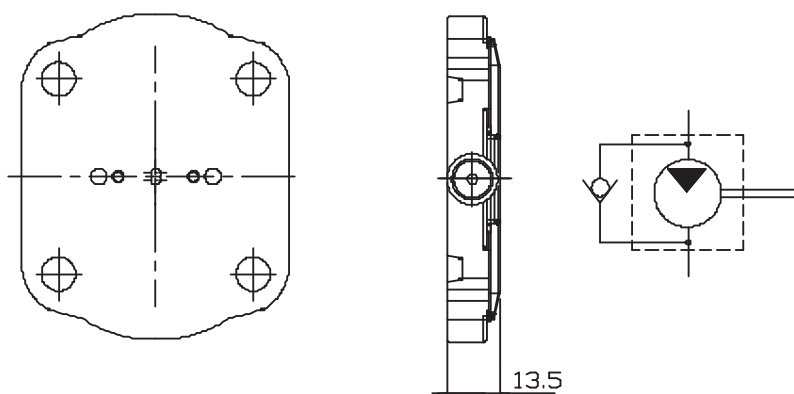
EXAMPLE OF ORDERING CODE

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

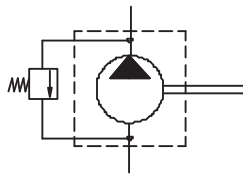
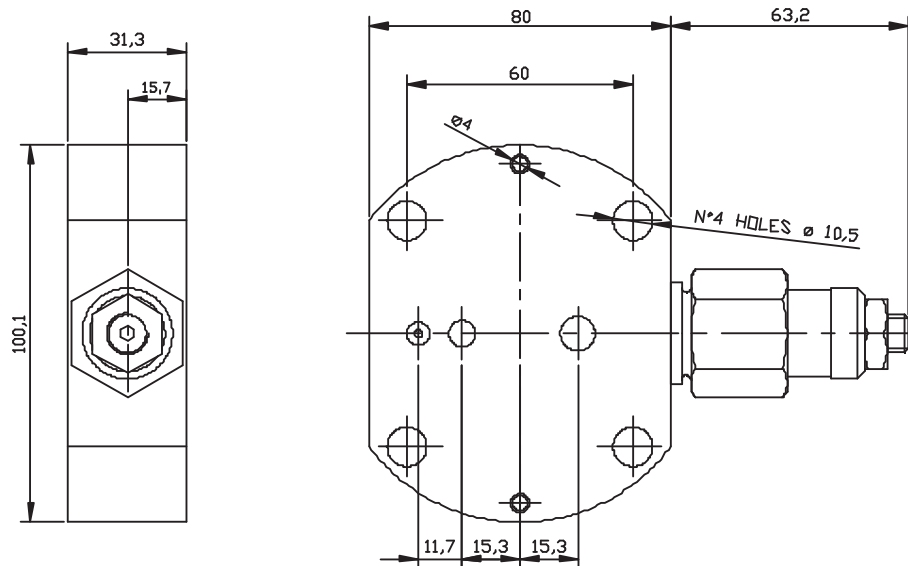
OT200 M 08 D / G 28 P2 - VA

See correspondent UNIDIRECTIONAL motor tables

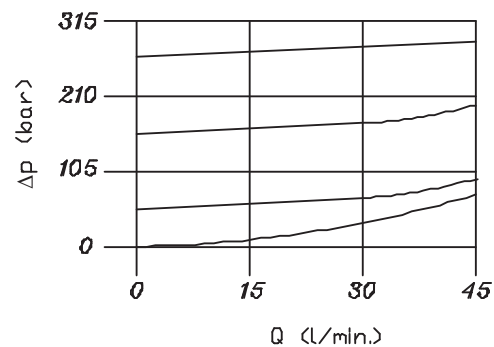
Rear cover with ANTICAVITATION VALVE

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

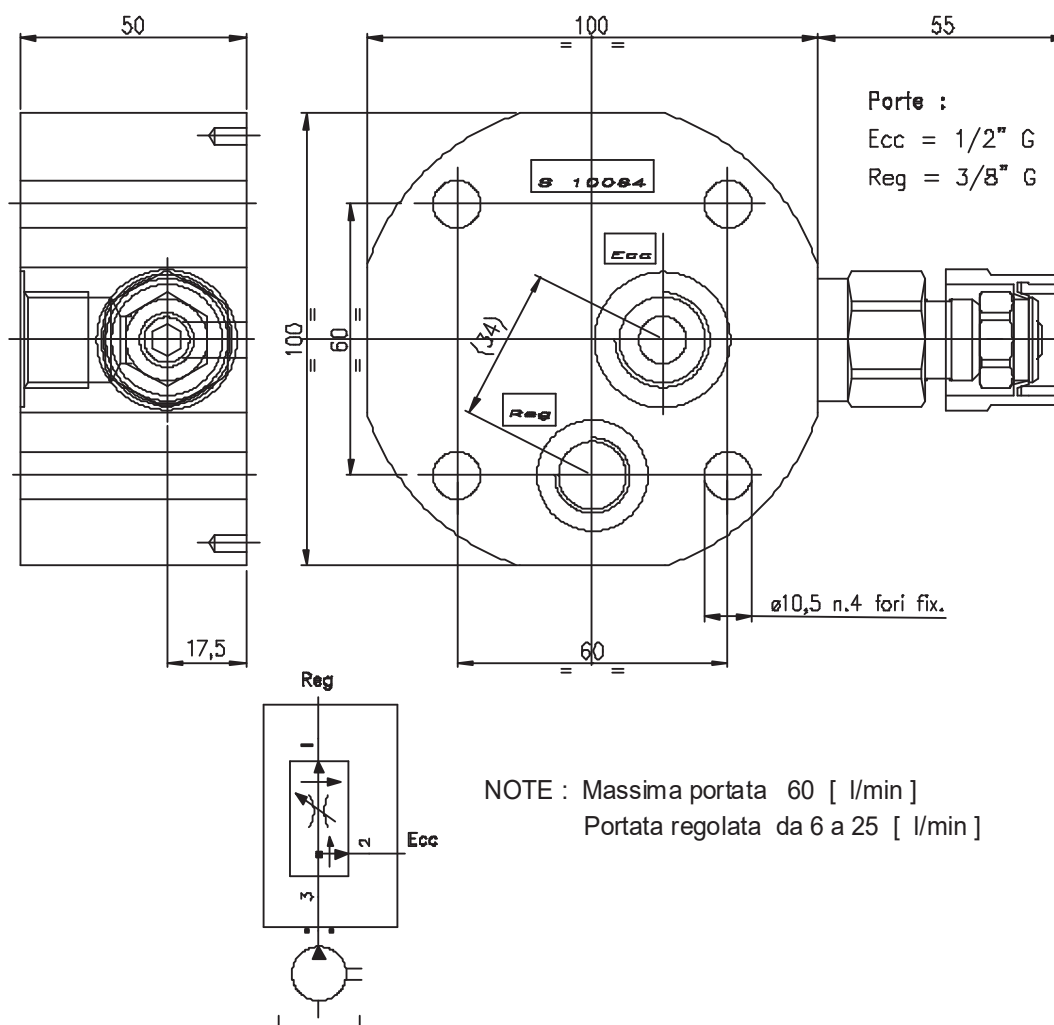
See correspondent UNIDIRECTIONAL pumps tables

Rear cover with max. press. valve

Adjustable setting PRESSURE

COPERCHI POSTERIORI PER POMPE E MOTORI GRUPPO 2

COPERCHIO PER POMPE CON VALVOLA PRIORITARIA



ESEMPIO DI CODICE D'ORDINAZIONE

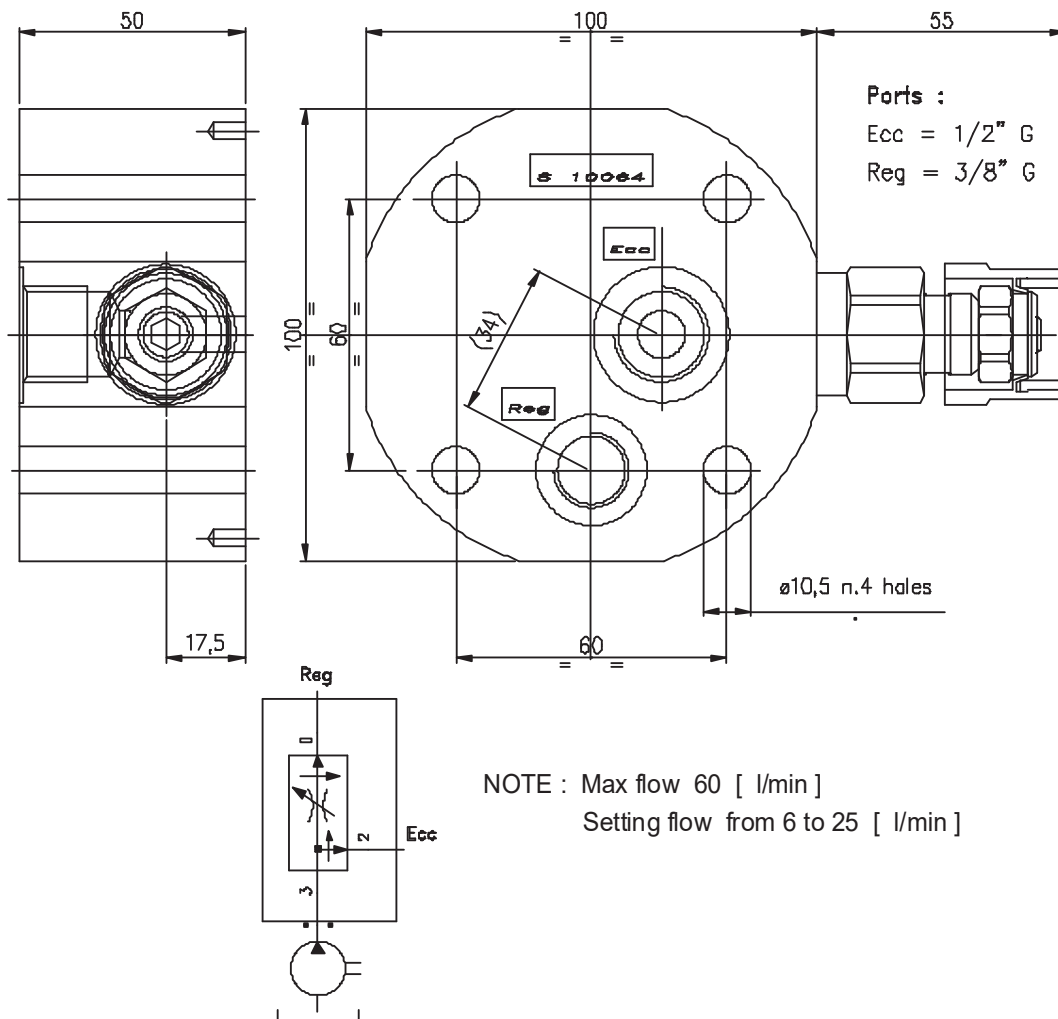
OT200 P 08 D / G 28 P2 - VP6

Vedi tabelle tecniche di corrispondenti pompe unidirezionali

Coperchio con VALVOLA PRIORITARIA

REAR COVERS FOR GROUP2 PUMPS AND MOTORS

REAR COVER WITH PRIORITY VALVE



EXAMPLE OF ORDERING CODE

OT200 P 08 D / G 28 P2 - VP6

See correspondent UNIDIRECTIONAL pumps tables

Rear cover with PRIORITY valve

GROUP3 MOTORS

OT300 SINGLE ROTATION MOTORS GENERAL DATA

<i>MOTOR TYPE</i>	<i>DISPLACEMENT</i>	<i>MAX. PRESSURE</i>			<i>MAX. SPEED</i>	<i>MIN. SPEED</i>
		<i>P1</i>	<i>P2</i>	<i>P3</i>		
	<i>cc / rev</i>	<i>bar</i>			<i>rev⁻¹</i>	<i>rev⁻¹</i>
<i>OT300 M22</i>	22	250	280	300	4000	600
<i>OT300 M28</i>	28					
<i>OT300 M32</i>	32					
<i>OT300 M38</i>	38	240	260	280	3500	500
<i>OT300 M42</i>	42					
<i>OT300 M48</i>	48					
<i>OT300 M53</i>	53	190	210	250	3000	500
<i>OT300 M63</i>	63	190	210	240	2500	
<i>OT300 M73</i>	73					
<i>OT300 M82</i>	82	150	170	200	2000	
<i>OT300 M90</i>	90	130	150	180		

P1= Max. continuous pressure

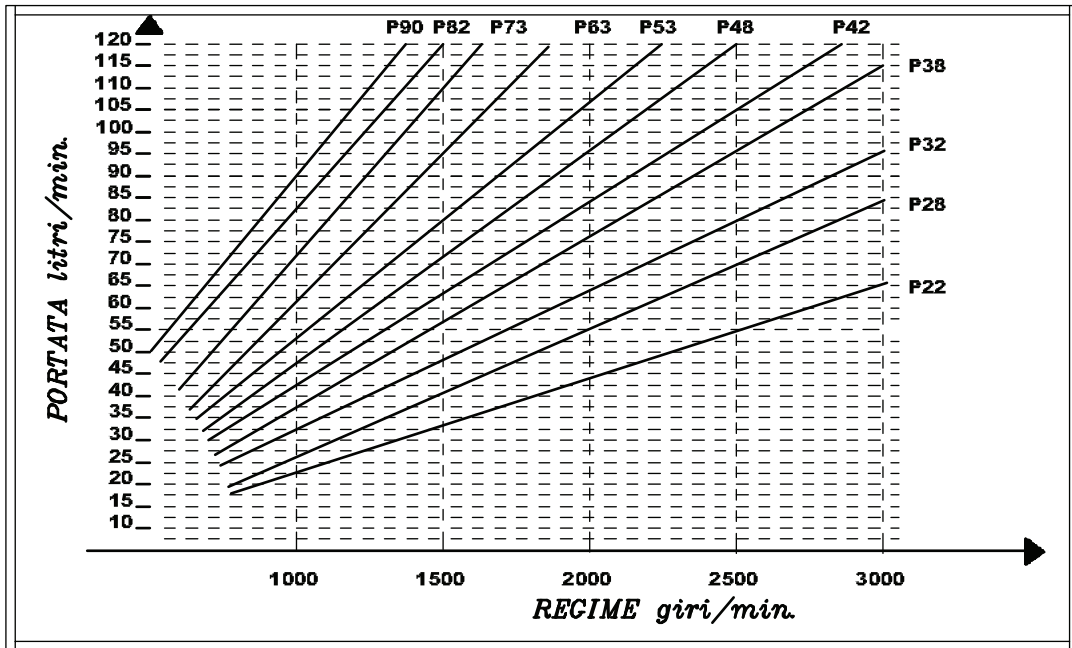
P2= Max. intermittent pressure

P3= Max. peak pressure

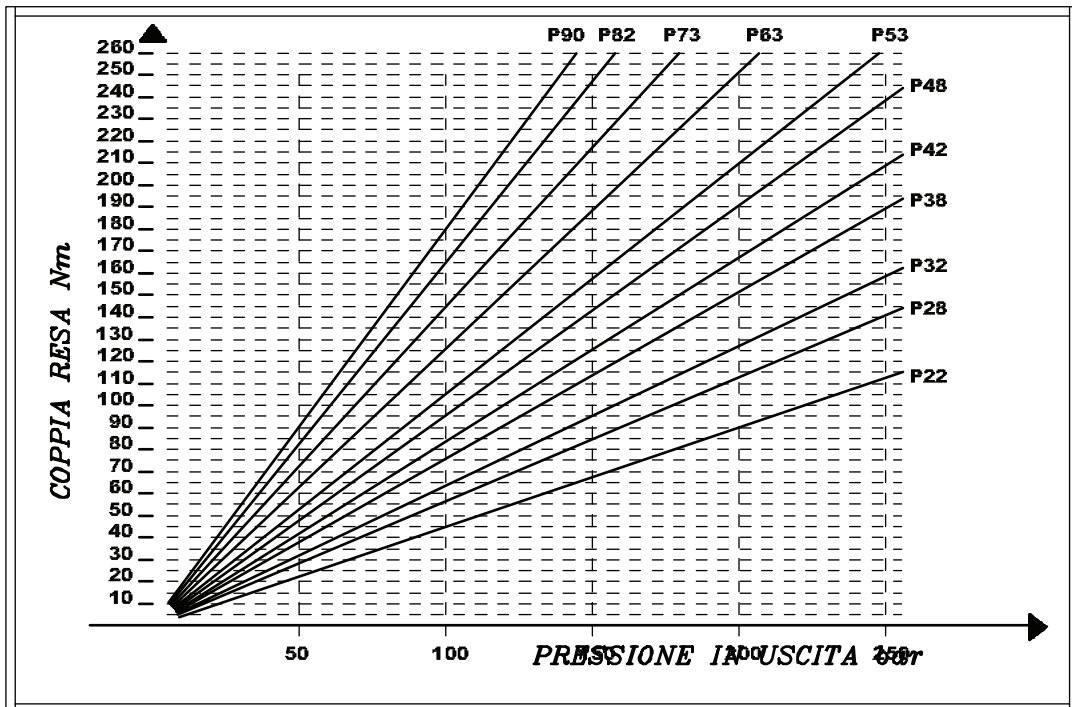
**FOR DIMENSION PLEASE CHECK
RELATIVE SINGLE PUMP TABLES**

MOTORI GRUPPO 3

CURVE CARATTERISTICHE DI PORTATA



COPPIA RESA

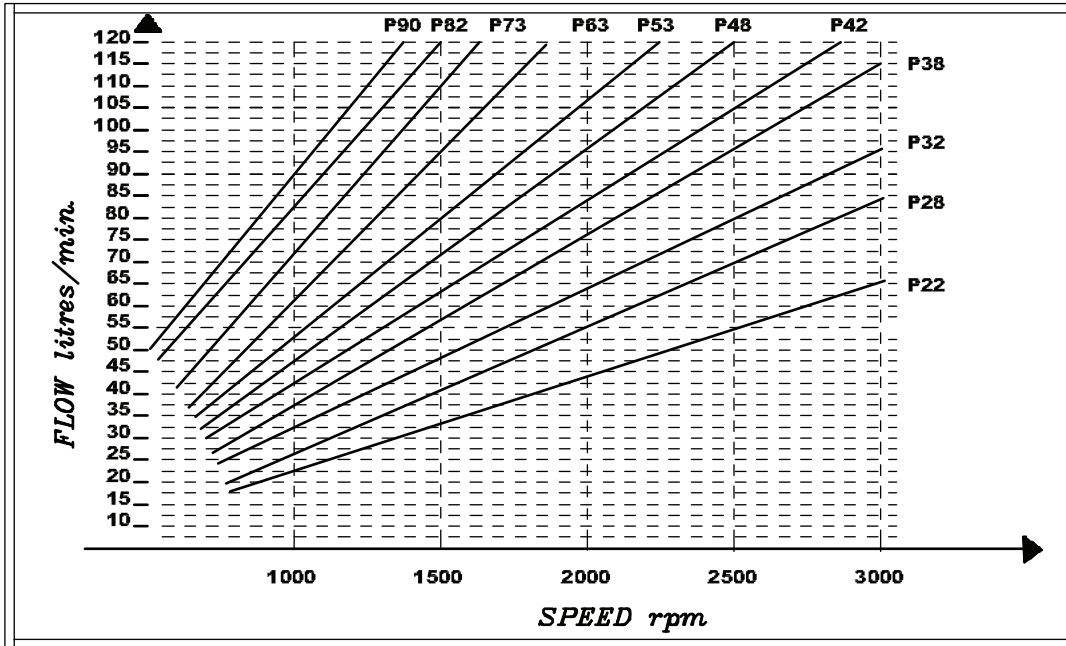


NOTE

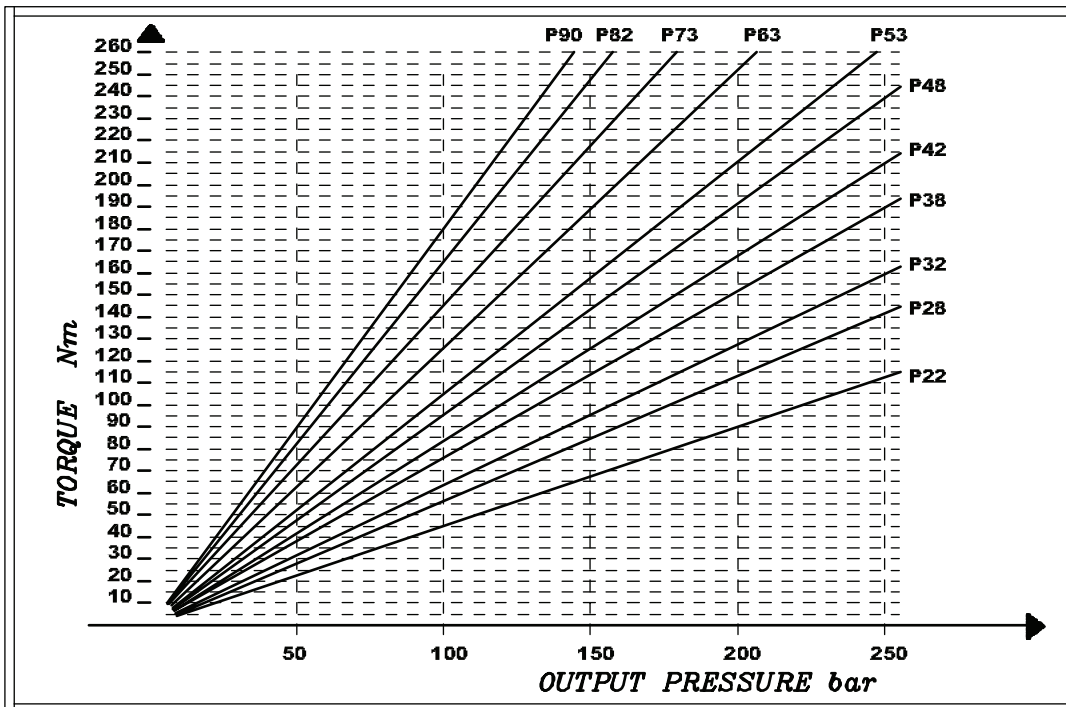
Le curve caratteristiche di portata sono state tracciate alla pressione P1

GROUP3 MOTORS

FLOW CHARACTERISTICS CURVES



ABSORBED TORQUE



NOTE

The flow characteristics curves have been made at P1 pressure.

MOTORI GRUPPO 3

DETERMINAZIONE DI UN MOTORE

V	Cilindrata	cm^3/giro
Q	Portata	l/min
P	Potenza	kW
C	Coppia	$\text{N} \cdot \text{m}$
N	Velocità	$-15^\circ\text{C} / +80^\circ\text{C}$
ΔP	Pressione	bar
η_v	Rendimento volumetrico	0.95
η_m	Rendimento meccanico	0.85
η_t	Rendimento totale	0.81

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

$$C = \frac{\Delta P \cdot V \cdot \eta_m}{62.8} \quad \text{N} \cdot \text{m}$$

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

GROUP3 MOTORS

MOTOR CALCULATION

V	Displacement	CC / REV
Q	Flow	l/min
P	Power	kW
C	Torque	N · m
N	Speed	-15°C / +80°C
ΔP	Pressure	bar
n_v	Volumetric efficiency	0.95
n_m	Mechanical efficiency	0.85
n_t	Total efficiency	0.81

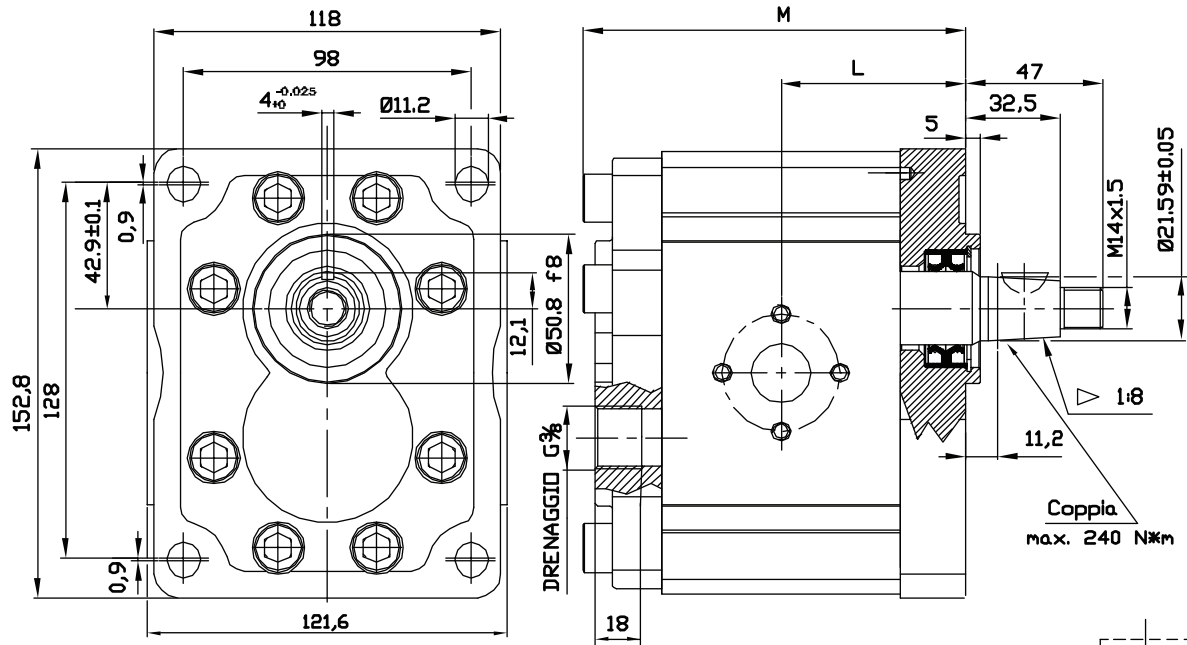
$$Q = \frac{V \cdot N}{n_v} \cdot 10^{-3} \quad l/min$$

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

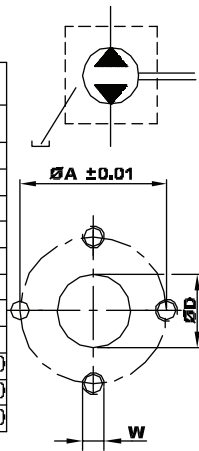
$$P = \frac{\Delta P \cdot V \cdot N \cdot n_t}{612000} \quad kW$$

MOTORI REVERSIBILI GRUPPO 3- STANDARD EUROPEO

VERSIONE: P38 P3

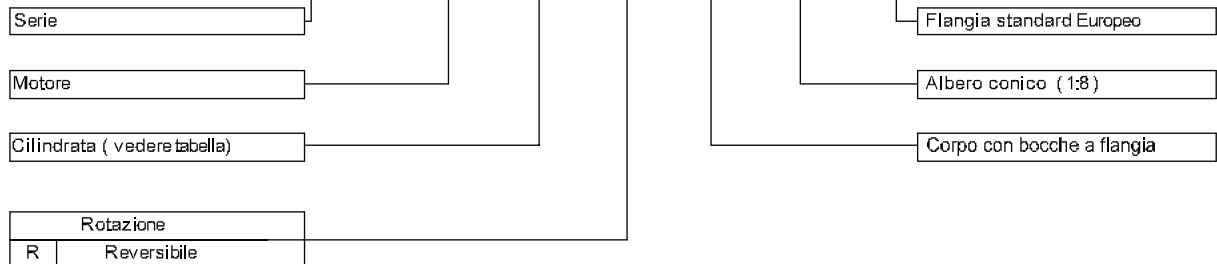


Tipo	Cilindrata (cc/giro)	Pressione massima continua P1 (bar)	Pressione di punta P3 (bar)	Velocità massima (giri/min.)	Dimensione		Bocca di aspirazione			Bocca di mandata		
					L	M	ØD	ØA	W	ØD	ØA	W
OT 300 P22	22	220	250	3000	57,4	119,3	27	51	M10	19	40	M8
OT 300 P28	28	220	250	3000	59,7	123,7	27	51	M10	19	40	M8
OT 300 P32	32	220	250	3000	61,2	126,9	27	51	M10	19	40	M8
OT 300 P38	38	200	230	3000	63,5	131,5	27	51	M10	19	40	M8
OT 300 P42	42	200	230	3000	65,0	134,5	27	51	M10	19	40	M8
OT 300 P48	48	200	230	3000	72,3	149,1	27	51	M10	19	40	M8
OT 300 P53	53	180	200	3000	74,2	152,9	27	51	M10	19	40	M8
OT 300 P63	63	180	200	2100	78,0	160,5	27	51	M10	19	40	M8
OT 300 P73	73	160	180	2100	81,9	168,2	36	62	M12	27	51	M10
OT 300 P82	82	160	180	2100	85,3	175,1	36	62	M12	27	51	M10
OT 300 P90	90	130	150	2100	88,3	181,1	36	62	M12	27	51	M10



ESEMPIO DI CODICE D'ORDINAZIONE

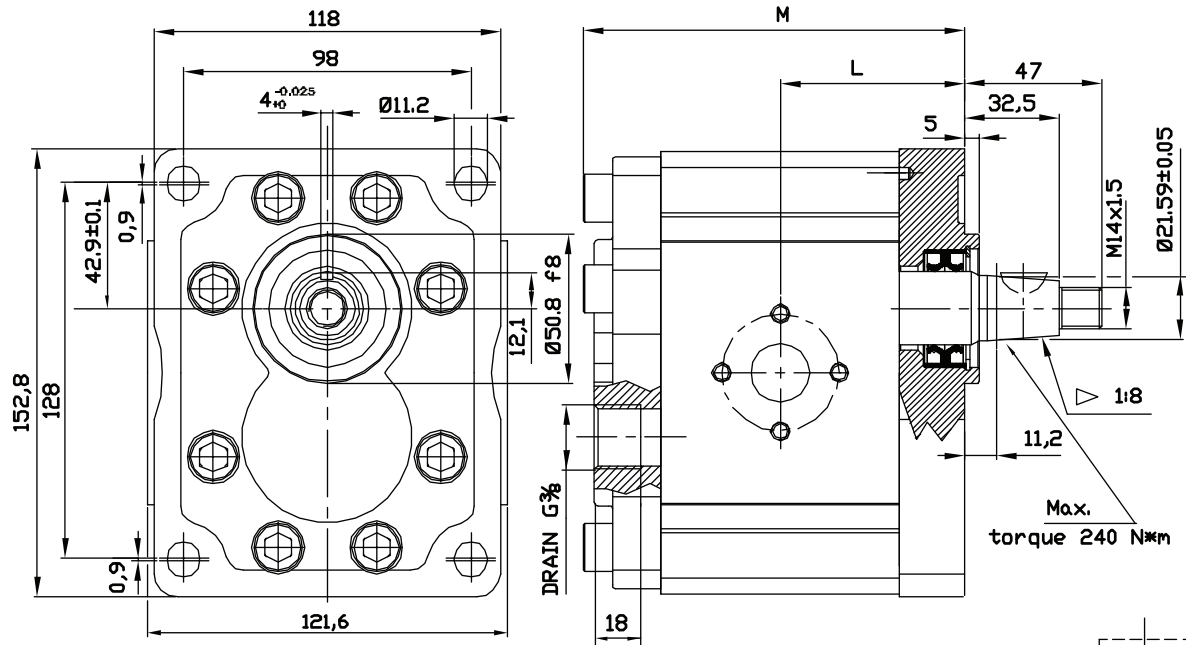
OT300 M 28 R / P 38 P3



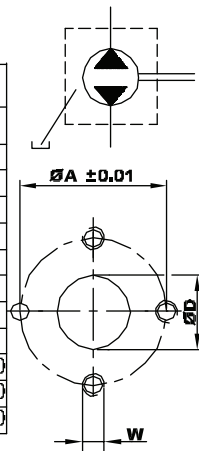
DISPONIBILE PER QUANTITA'

GROUP3 REVERSIBLE MOTORS- EUROPEAN STANDARD

VERSION: P38 P3

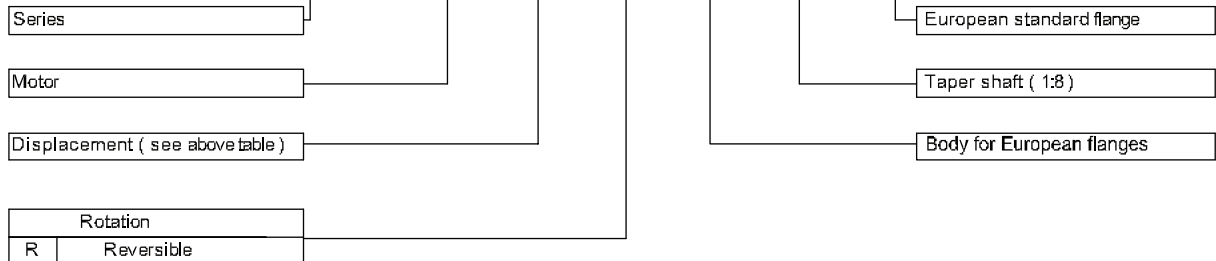


Type	Displacement (cc/rev)	Max working pressure P1 (bar)	Peak pressure P3 (bar)	Max speed (r.p.m)	Dimension		Inlet port			Outlet port		
					L	M	ØD	ØA	W	ØD	ØA	W
OT 300 P22	22	220	250	3000	57,4	119,3	27	51	M10	19	40	M8
OT 300 P28	28	220	250	3000	59,7	123,7	27	51	M10	19	40	M8
OT 300 P32	32	220	250	3000	61,2	126,9	27	51	M10	19	40	M8
OT 300 P38	38	200	230	3000	63,5	131,5	27	51	M10	19	40	M8
OT 300 P42	42	200	230	3000	65,0	134,5	27	51	M10	19	40	M8
OT 300 P48	48	200	230	3000	72,3	149,1	27	51	M10	19	40	M8
OT 300 P53	53	180	200	3000	74,2	152,9	27	51	M10	19	40	M8
OT 300 P63	63	180	200	2100	78,0	160,5	27	51	M10	19	40	M8
OT 300 P73	73	160	180	2100	81,9	168,2	36	62	M12	27	51	M10
OT 300 P82	82	160	180	2100	85,3	175,1	36	62	M12	27	51	M10
OT 300 P90	90	130	150	2100	88,3	181,1	36	62	M12	27	51	M10



EXAMPLE OF ORDERING CODE

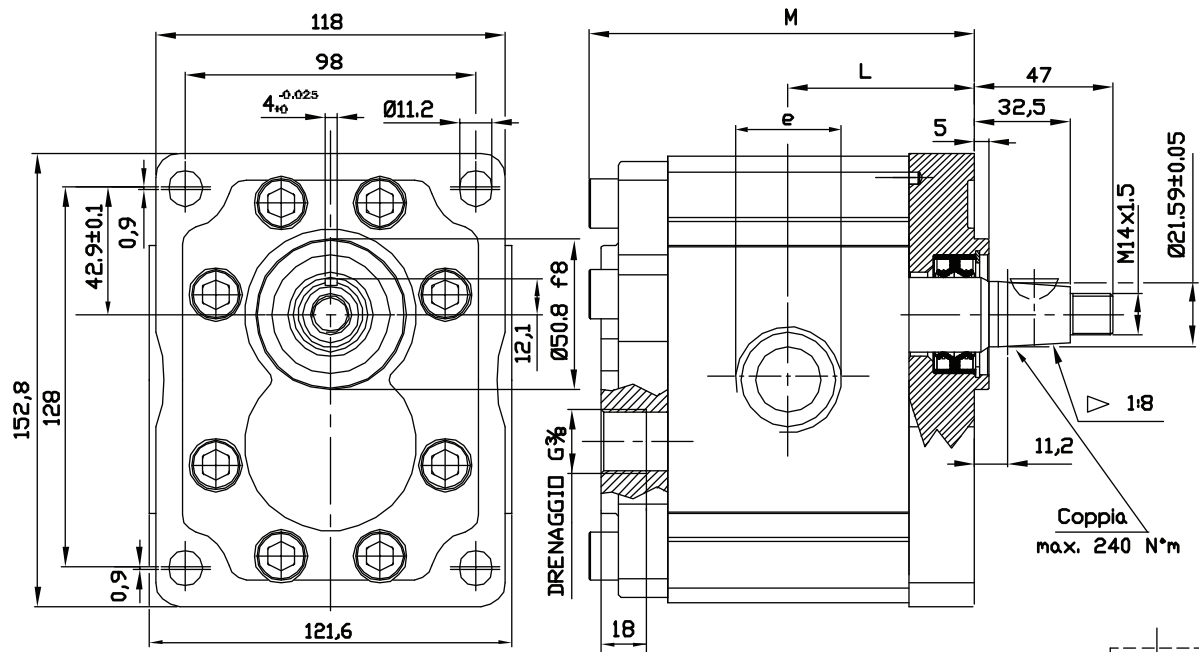
OT300 M 28 R / P 38 P3



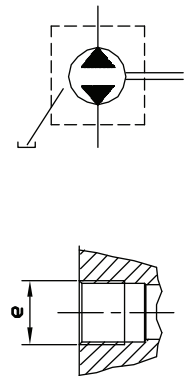
AVAILABLE FOR QUANTITIES

MOTORI REVERSILI GRUPPO 3- STANDARD EUROPEO

VERSIONE: G38 P3



Tipo	Cilindrata (cc/giro)	Pressione massima continua P1 (bar)	Pressione di punta P3 (bar)	Velocità massima (giri/min.)	Dimensione		Bocca di aspirazione e	Bocca di mandata e
					L	M		
OT 300 P22	22	220	250	3000	57,4	119,3	G 1	G 1
OT 300 P28	28	220	250	3000	59,7	123,7	G 1	G 1
OT 300 P32	32	220	250	3000	61,2	126,9	G 1	G 1
OT 300 P38	38	200	230	3000	63,5	131,5	G 1	G 1
OT 300 P42	42	200	230	3000	65,0	134,5	G 1	G 1
OT 300 P48	48	200	230	3000	72,3	149,1	G 1	G 1
OT 300 P53	53	180	200	3000	74,2	152,9	G 1	G 1
OT 300 P63	63	180	200	2100	78,0	160,5	G 1+1/4	G 1+1/4
OT 300 P73	73	160	180	2100	81,9	168,2	G 1+1/4	G 1+1/4
OT 300 P82	82	160	180	2100	85,3	175,1	G 1+1/4	G 1+1/4
OT 300 P90	90	130	150	2100	88,3	181,1	G 1+1/4	G 1+1/4



ESEMPIO DI CODICE D'ORDINAZIONE

OT300 M 28 R / G 38 P3

Serie

Motore

Cilindrata (vedere tabella)

Rotazione

R Reversibile

Flangia standard Europeo

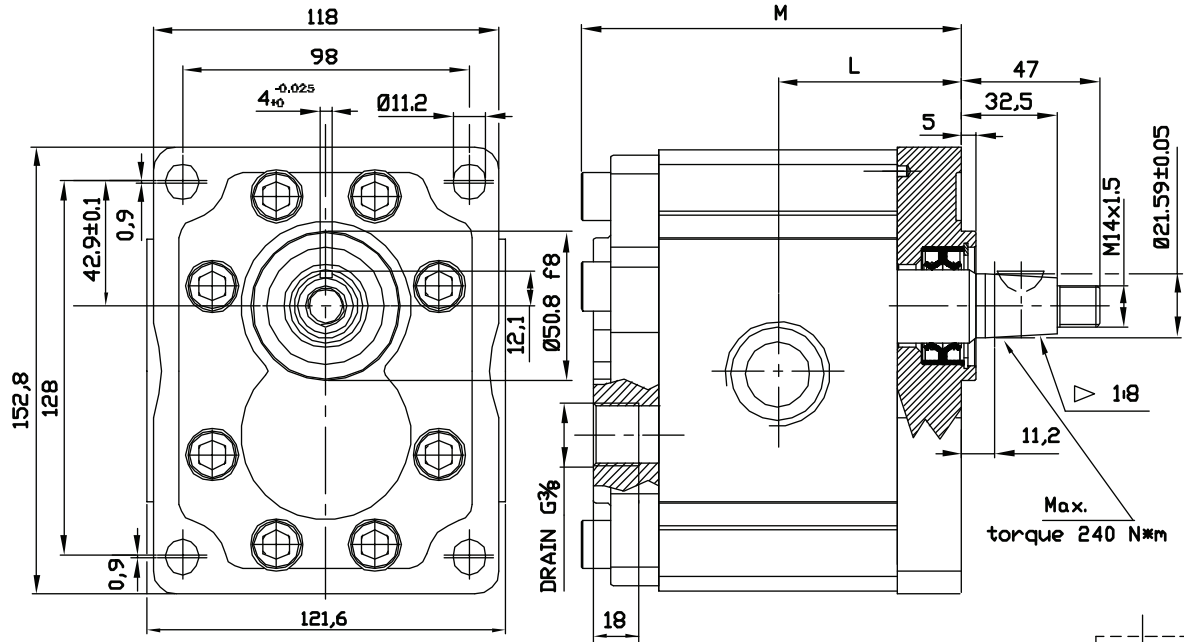
Albero conico (1:8)

Corpo con bocche a filettate (GAS)

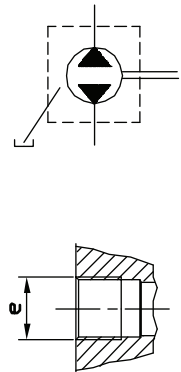
DISPONIBILE PER QUANTITA'

GROUP 3 REVERSIBLE MOTORS- EUROPEAN STANDARD

VERSION: G38 P3



OT 300 P22	22	220	250	3000	57,4	119,3	G 1	G 1
OT 300 P28	28	220	250	3000	59,7	123,7	G 1	G 1
OT 300 P32	32	220	250	3000	61,2	126,9	G 1	G 1
OT 300 P38	38	200	230	3000	63,5	131,5	G 1	G 1
OT 300 P42	42	200	230	3000	65,0	134,5	G 1	G 1
OT 300 P48	48	200	230	3000	72,3	149,1	G 1	G 1
OT 300 P53	53	180	200	3000	74,2	152,9	G 1	G 1
OT 300 P63	63	180	200	2100	78,0	160,5	G 1+1/4	G 1+1/4
OT 300 P73	73	160	180	2100	81,9	168,2	G 1+1/4	G 1+1/4
OT 300 P82	82	160	180	2100	85,3	175,1	G 1+1/4	G 1+1/4
OT 300 P90	90	130	150	2100	88,3	181,1	G 1+1/4	G 1+1/4



EXAMPLE OF ORDERING CODE

OT300 M 28 R / G 38 P3

Series

Motor

Displacement (see above table)

Rotation

R Reversible

European standard flange

Taper shaft (1:8)

Body with threaded ports (BSP)

AVAILABLE FOR QUANTITIES