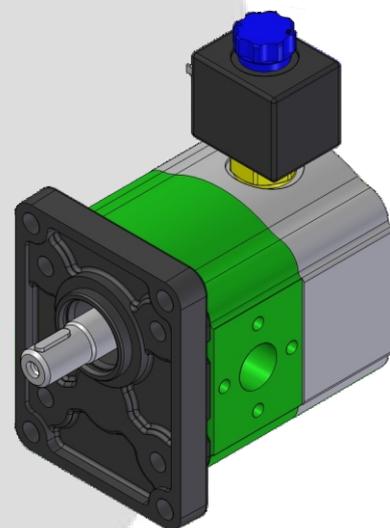
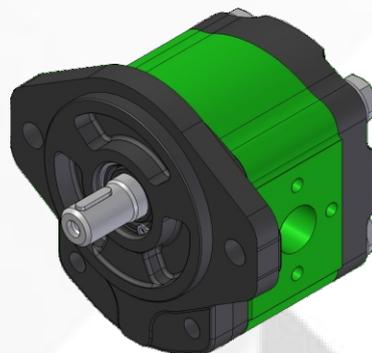
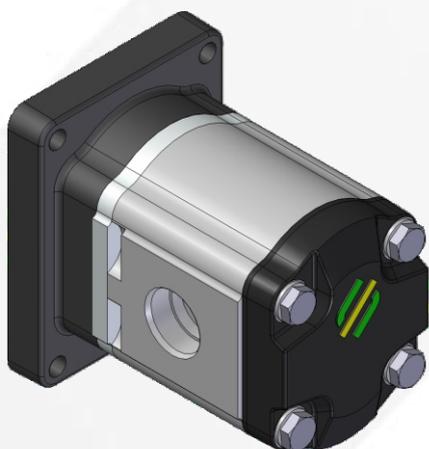


# GEAR MOTORS “E” SERIES - GROUP 2

Technical catalogue



E0.37.0409.02.00

COMPANY  
WITH QUALITY SYSTEM  
CERTIFIED BY DNV  
=ISO 9001/2000=

**salam** ™



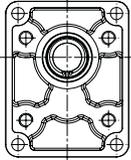
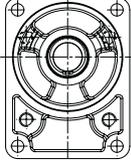
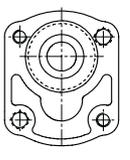
**E0.37.0911.02.01**

The data in this catalogue refers to the standard product.

The policy of Salami S.p.A. consists of a continuous improvement of its products. It reserves the right to change the specifications of the different products whenever necessary and without giving prior information.

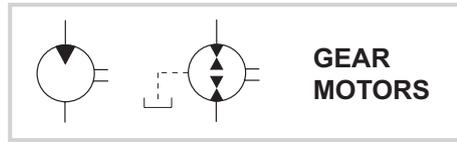
If any doubts, please get in touch with our sales department.

COMBINATION WITH TYPES OF FLANGES AND DRIVES SHAFTS AVAILABLE

<b>2ME</b>	 P1	 B1	 B4 B5	 B2 B3	 S2 S6
 25		25 B1	25 B4-B5		
 28	28 P1				
 62	62 P1	62 B1	62 B4-B5	60 B2-60B3	
 03				03 B2-03 B3	
 52					52 S2
 54					54 S2
 85					85 S2
 82	82 P1				82 S2

Note: other versions available, see shafts and flanges information.

Displacements up to 1.58 cu.in./rev  
Pressure up to 4300 psi



Displacements up to 25.8 cm<sup>3</sup>/rev  
Pressure up to 300 bar

## ASSEMBLING DIMENSIONS AND WEIGHT

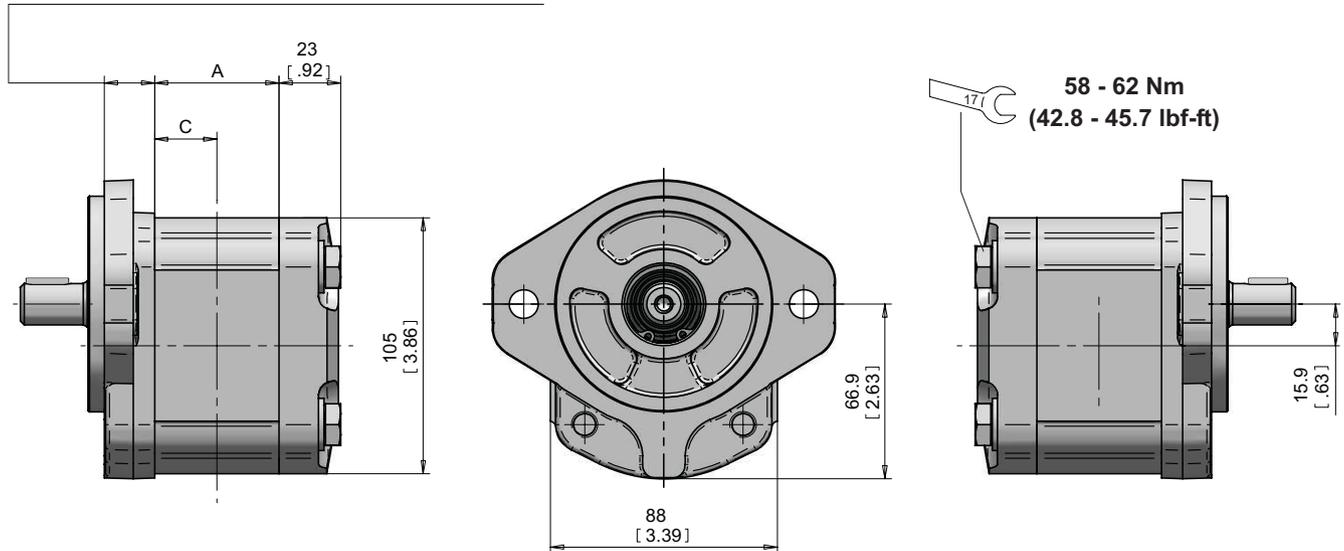
Type		4.5	6.5	8.3	10.5*	11.3	12.5*	13.8	16	19	22.5	26
Displacement	cm <sup>3</sup> /rev	4.6	6.5	8.2	10.6	11.5	12.7	13.8	16.6	19.4	22.9	25.8
	cu.in./rev	0.27	0.40	0.50	0.65	0.68	0.77	0.84	1.01	1.15	1.37	1.58
Dimension A	mm	47.1	49.95	52.8	56.3	59.7		63.5	67.5	75.6	81	86.8
	in	1.83	1.97	2.07	2.22	2.35		2.5	2.65	2.97	3.19	3.42
Dimension C	mm	23.55	25	26.4	28.15	29.8		31.75	33.75	37.80	40.5	43.4
	in	0.93	0.98	1.04	1.11	1.17		1.25	1.33	1.49	1.59	1.71
Weight	kg	2.1		2.13	2.25	2.37		2.4	2.5	2.8	2.95	3.1
	lbs	4.6		4.7	5.0	5.2		5.3	5.5	6.2	6.5	6.8

\*Available for quantity.

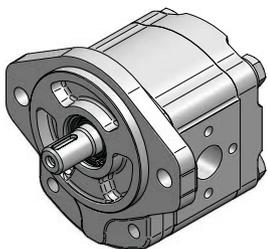
For flanges code:

P1 - B1 - S2 - S6, this dimension is 19 mm (0.75 in.)

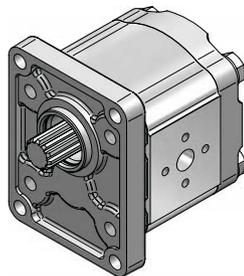
B2 - B3 - B4 - B5, this dimension is 16.5 mm (0.65 in.)



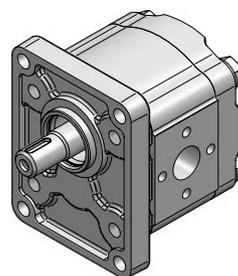
## ASSEMBLING EXAMPLES



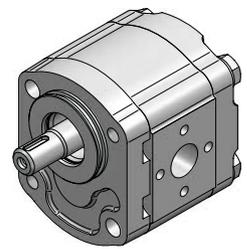
2ME - P82S2



2ME - P54P1



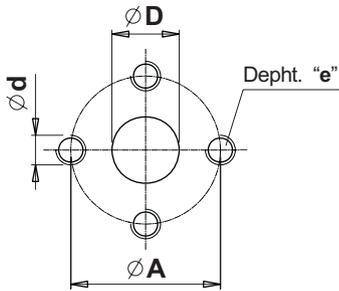
2ME - P82P1



2ME - P82B3

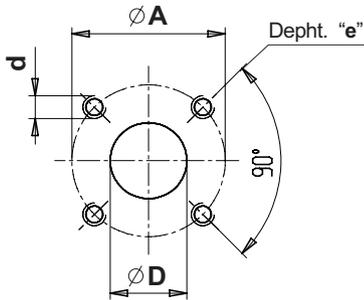


**FLANGED PORTS**



**code P**

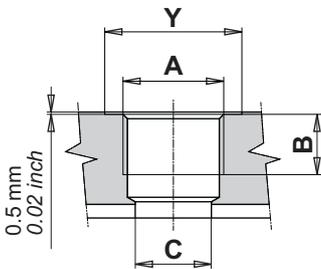
	Type	OUTLET				INLET			
		ØD	ØA	d	e	ØD	ØA	d	e
	From 4.5 to 8.3	13 (0.51")	30 (1.18")	M6	13 (0.51")	13 (0.51")	30 (1.18")	M6	13 (0.51")
	From 11.3 to 22.5	20 (0.78")	40 (1.56")	M8					
	26	25 (0.97")							
	From 4.5 to 16	13 (0.51")	30 (1.18")	M6	13 (0.51")	30 (1.18")	M6	13 (0.51")	
	From 19 to 26	20 (0.78")	40 (1.56")	M8	13 (0.51")	20 (0.78")	40 (1.56")	M8	13 (0.51")



**code B**

	Type	OUTLET				INLET			
		ØD	ØA	d	e	ØD	ØA	d	e
	From 4.5 to 8.3	20 (0.78")	40 (1.56")	M6	13 (0.51")	15 (0.59")	35 (1.38")	M6	13 (0.51")
	26	22 (0.87")							
	From 4.5 to 16	15 (0.59")	35 (1.38")	M6	13 (0.51")	15 (0.59")	35 (1.38")	M6	13 (0.51")
	From 19 to 26	20 (0.78")	40 (1.56")	M6	13 (0.51")	20 (0.78")	40 (1.56")	M6	13 (0.51")

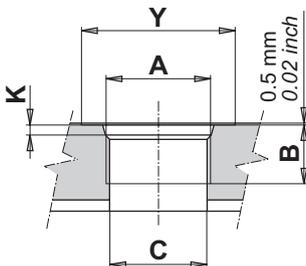
**THREADED PORTS**



**code G**

Available for quantity (contact our sales dept.). British standard pipe parallel (BSPP)

	Type	OUTLET				INLET			
		A	B	C	Y	A	B	C	Y
	From 4.5 to 26	G3/4	16 (0.62")	20 (0.78")	36 (1.42")	G1/2	14 (0.54")	13 (0.51")	30 (1.18")
	From 4.5 to 16	G1/2	14 (0.54")	13 (0.51")	30 (1.18")	G1/2	14 (0.54")	13 (0.51")	30 (1.18")
	From 19 to 26	G3/4	16 (0.62")	20 (0.78")	36 (1.42")	G3/4	16 (0.62")	20 (0.78")	36 (1.42")

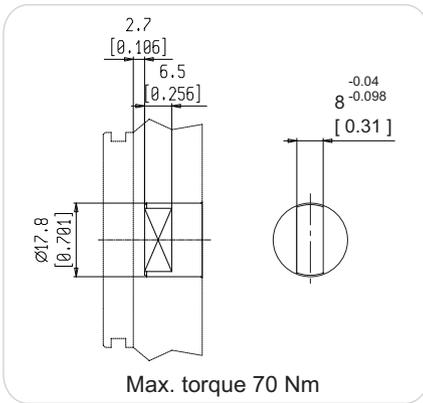


**code R**

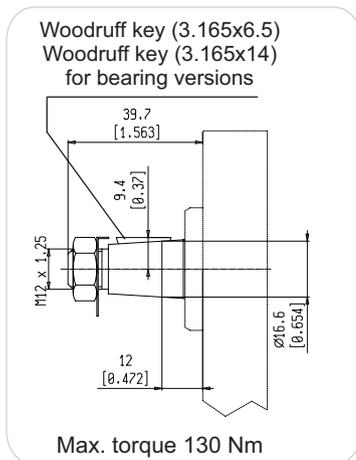
SAE threaded (ODT)

	Type	OUTLET					INLET				
		A	B	C	Y	K	A	B	C	Y	K
	From 4.5 to 26	1-1/16 12 UN (SAE 12)	16 (0.62")	20 (0.78")	41 (1.61")	3.3 (0.12")	7/8 14 UNF (SAE 10)	14 (0.54")	13 (0.51")	34 (1.32")	2.5 (0.10")
	From 4.5 to 16	7/8 14 UNF (SAE 10)	14 (0.54")	13 (0.51")	34 (1.32")	2.5 (0.10")	7/8 14 UNF (SAE 10)	14 (0.54")	13 (0.51")	34 (1.32")	2.5 (0.10")
	From 19 to 26	1-1/16 12 UN (SAE 12)	16 (0.62")	20 (0.78")	41 (1.61")	3.3 (0.12")	1-1/16 12 UN (SAE 12)	16 (0.62")	20 (0.78")	41 (1.61")	3.3 (0.12")

## DRIVE SHAFTS

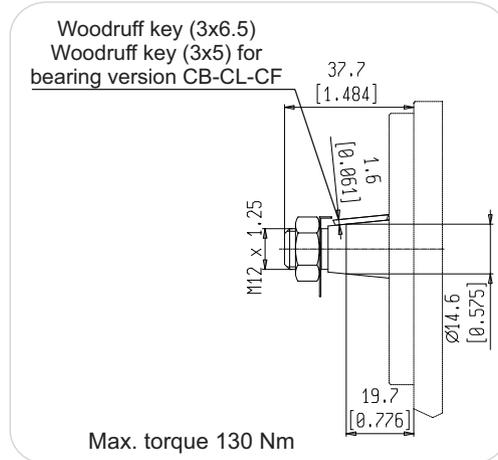


**code 03** Tang drive for electric motors without shaft seal



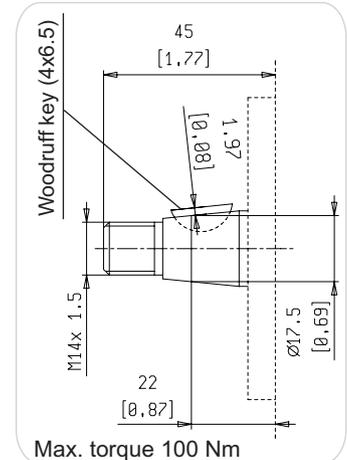
**code 28**

Tapered 1:8



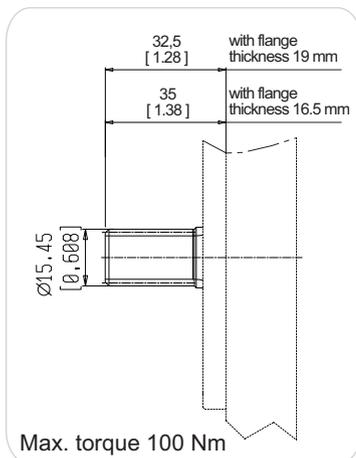
**code 25**

Tapered 1:5

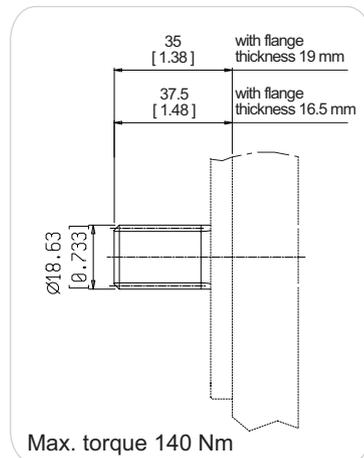


**code 26**

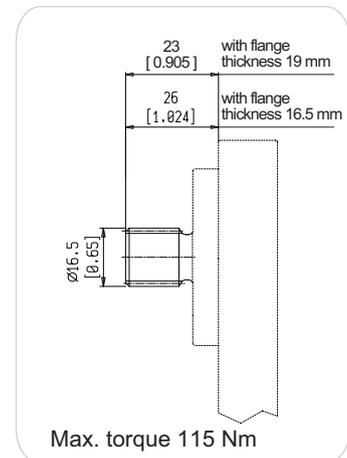
Tapered 1:5 (only for CB)



**code 52** SAE A 9T-16/32DP  
Ansi B92 1a 1976

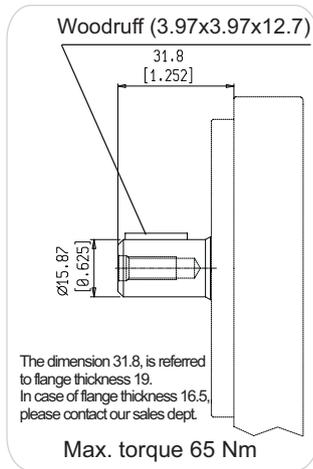


**code 54** SAE A 11T-16/32DP  
Ansi B92 1a 1976



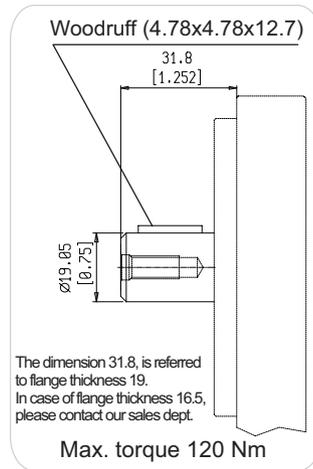
**code 62**

9 teeth DIN 5482 splined



**code 82**

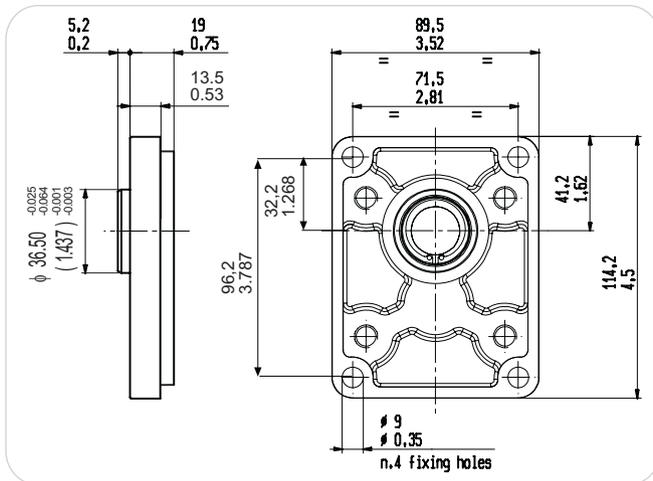
5/8" SAE A parallel



**code 85**

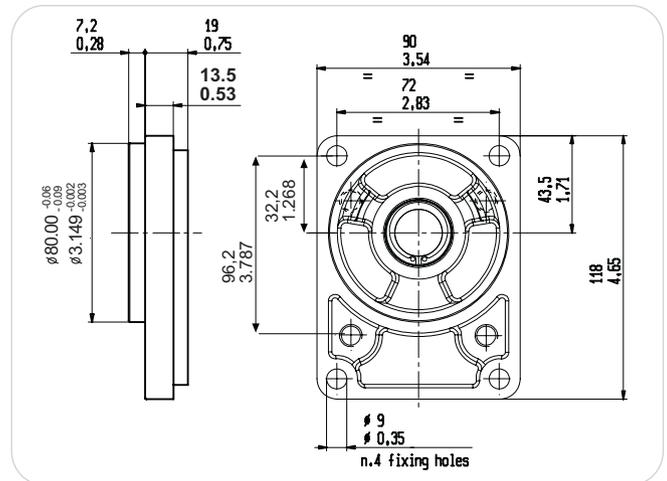
3/4" SAE A parallel

## MOUNTING FLANGES



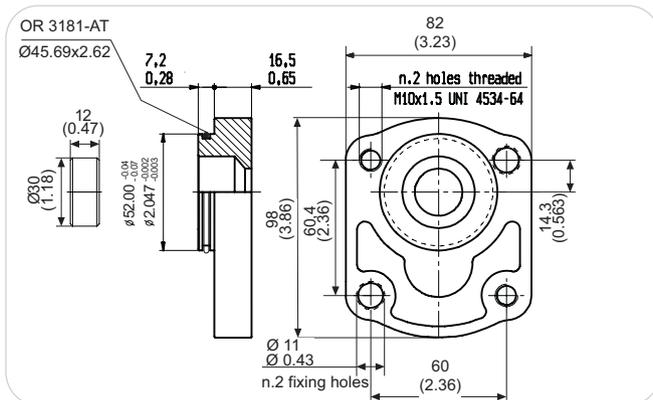
**code P1**

With shaft code 28 - 62 - 82 - 85



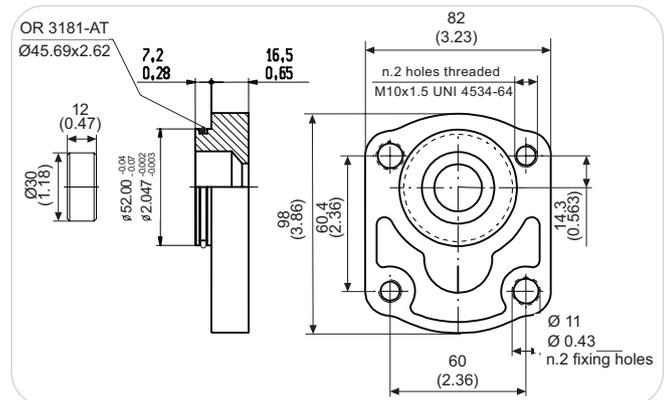
**code B1**

With shaft code 25-62



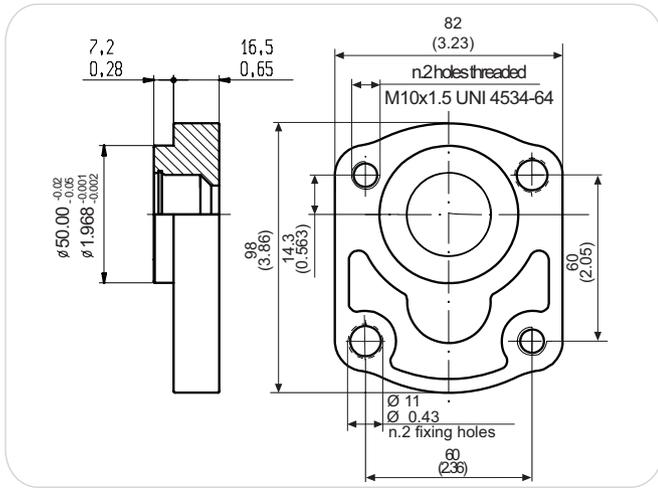
**code B2**

With shaft code 03

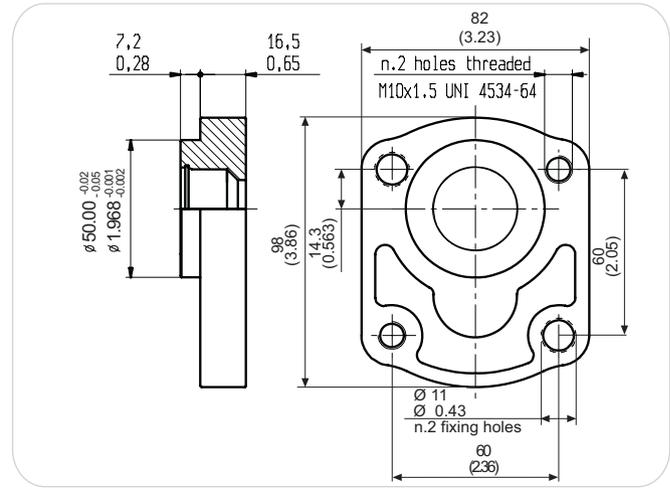


**code B3**

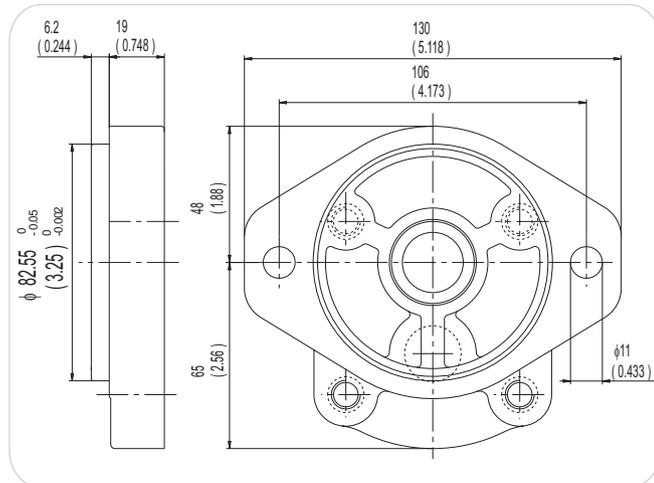
With shaft code 03



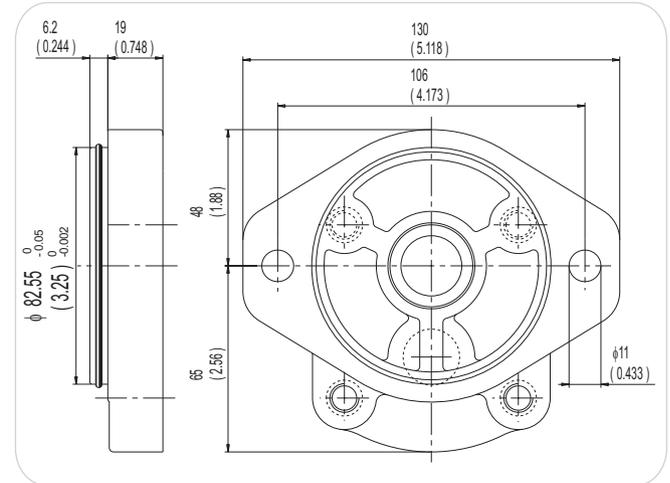
**code B4** With shaft code 25-62



**code B5** With shaft code 25-62

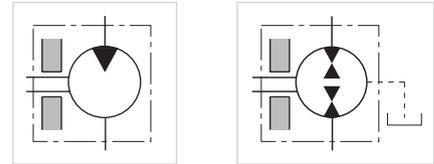
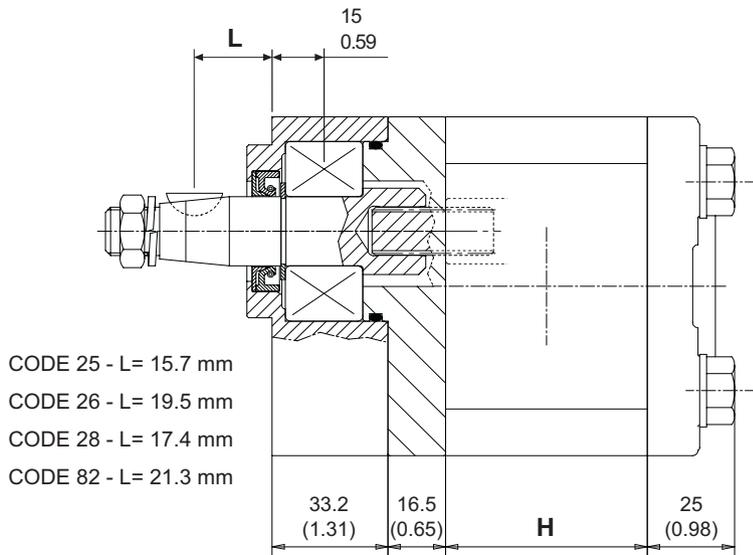


**code S2** With shaft code 52-54-82-85.



**code S6** With shaft code 52-54-82-85

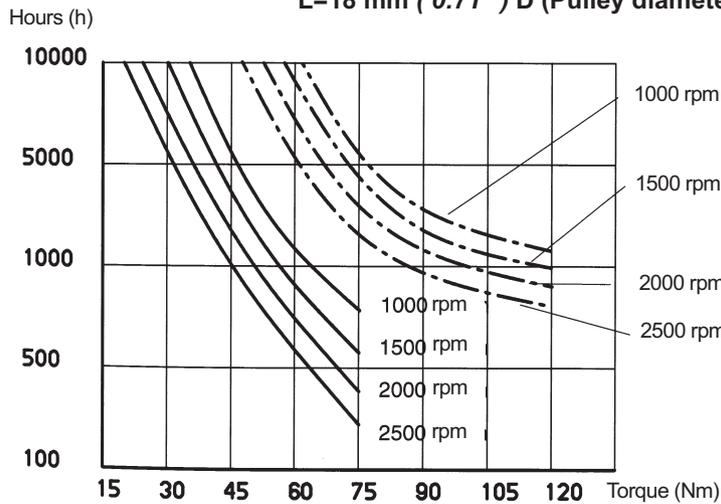
**OUTRIGGER BEARING**



Type	H
4.5	47.1 (1.83")
6.5	49.95 (1.97")
8.3	52.8 (2.08")
10.5	56.3 (2.22")
11.3 - 12.5	59.6 (2.35")
13.8	63.5 (2.5")
16	67.5 (2.66")
19	75.6 (2.97")
22.5	81 (3.19")
26	86.6 (3.42")

Order example pump 2ME with bearing: **2ME16D - B25 B4 - CL**

**Life of bearing under following condition:  
 L=18 mm ( 0.71" ) D (Pulley diameter)=90 mm ( 3.54" )**



To calculate the absorbed pump or motor torque, please use the following formula:

$$C \text{ (Nm)} = \frac{C_y \Delta p}{62.8 \eta_m}$$

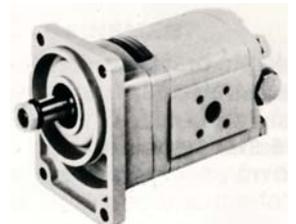
$C_y$  = Displacement ( cm<sup>3</sup>/rev )

$\Delta p$  = Pressure ( bar )

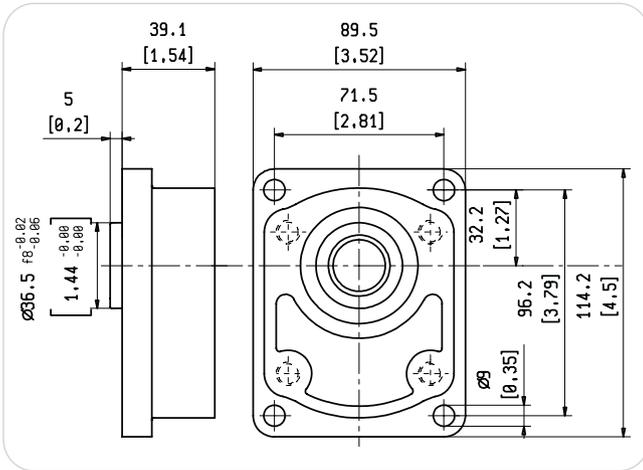
For Code CP-CB-CL-CS

For Code CF

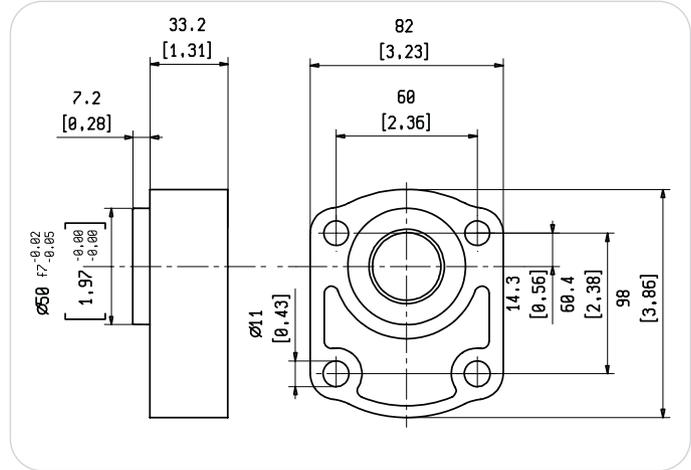
\*Available for quantity, please contact our sales department.



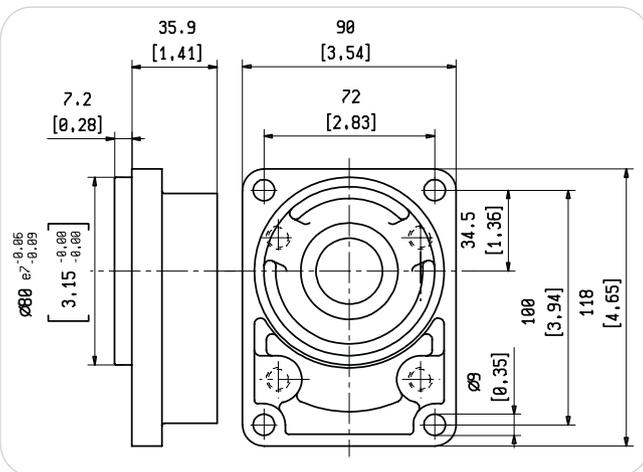
## MOUNTING FLANGES WITH BEARING SUPPORT



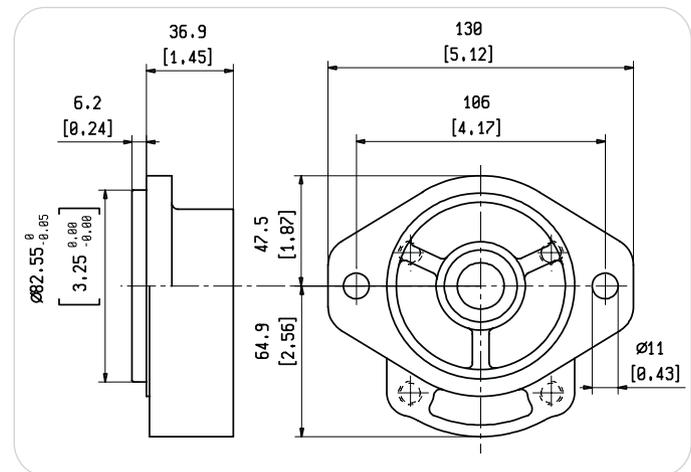
**code CP** With shaft code 28



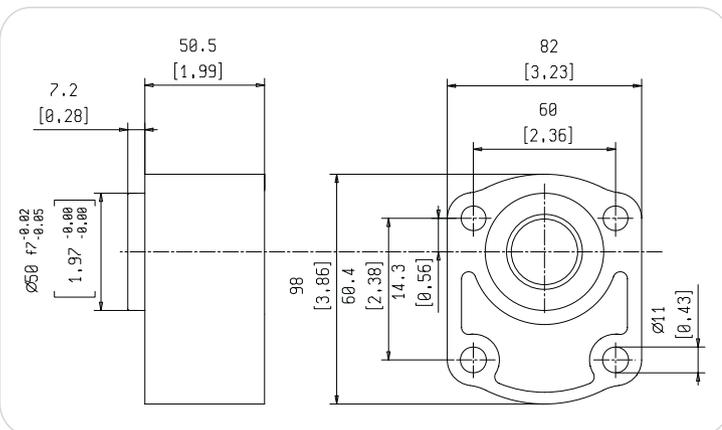
**code CL** With shaft code 25, 26



**code CB** With shaft codes 25-26

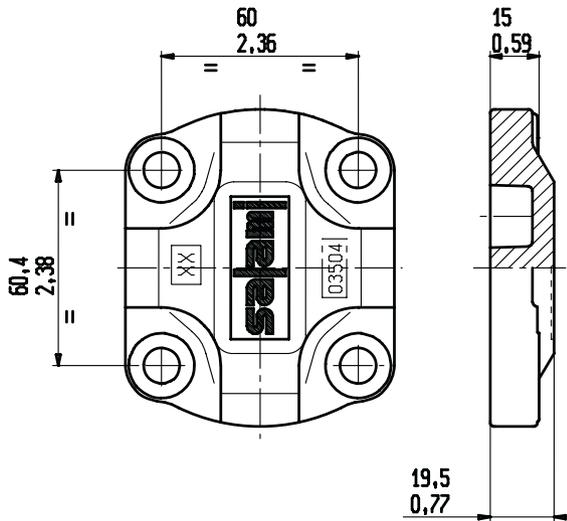


**code CS** SAE A with shaft codes 52-54-82

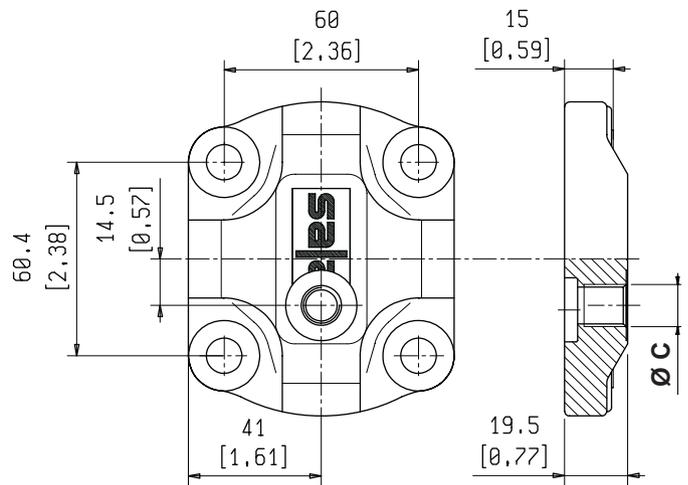


**code CF** SAE A with shaft codes 25-26

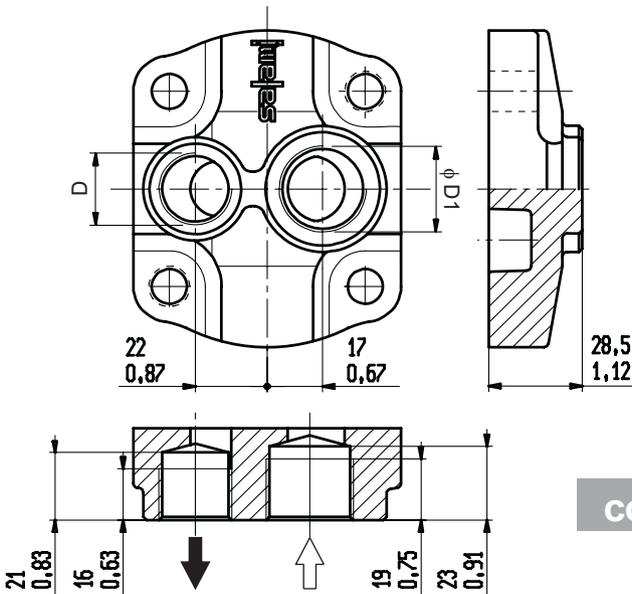
**REAR COVERS**



Standard rear cover for unidirectional motors



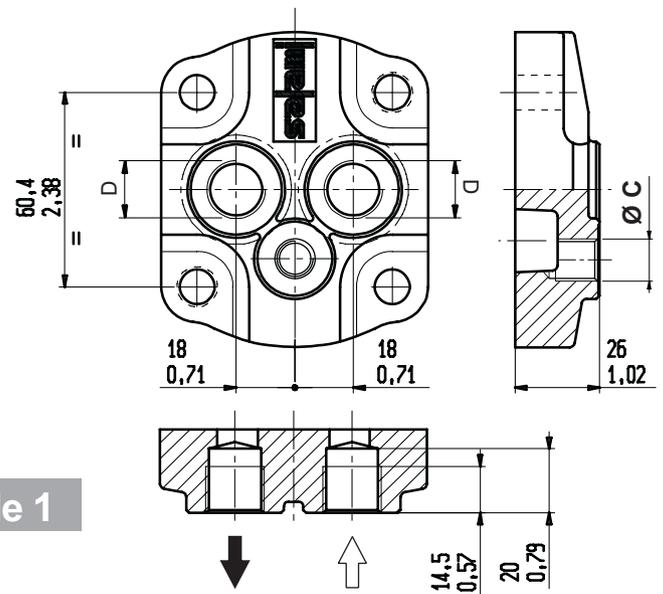
Standard cover for reversible pumps and motors, with external drain  $\Phi C$ .  
For the dimension  $\Phi C$  please see the table here below.



**UNIDIRECTIONAL MOTORS**  
On request outlet port only.

D	D1
M 18x1.5	M 26x1.5
7/8-14 UNF-2B (SAE 10)	1-1/16-12 UN-2B (SAE 12)
G 1/2	G 3/4

code 1



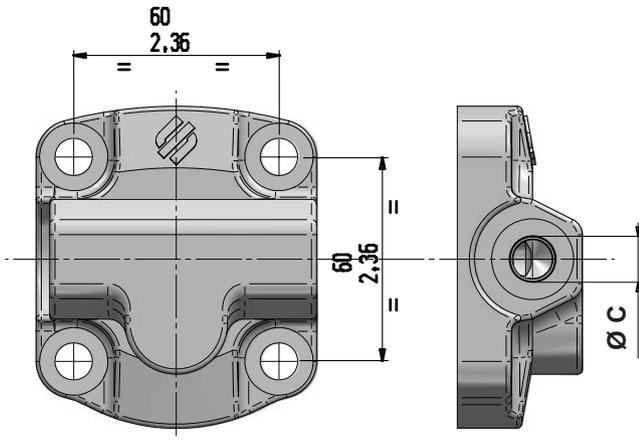
**BIDIRECTIONAL MOTORS**  
For motors with threaded rear ports until 22 l/min delivery.

D	C
M 18x1.5	G 1/4
7/8-14 UNF-2B (SAE 10)	7/16-20 UNF-2B (SAE 4)
G 1/2	G 1/4

For rear ports if requested please advise type using note.

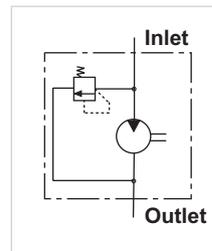
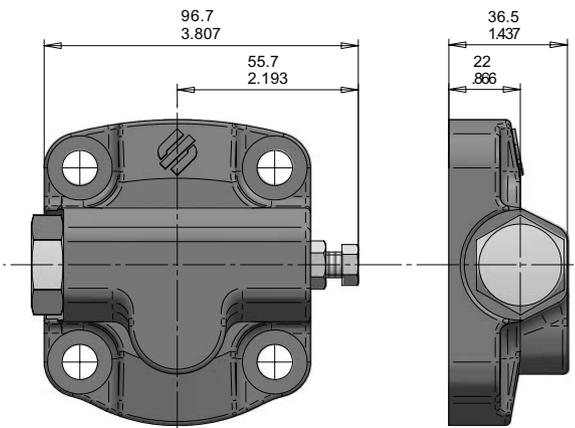
## REAR COVER WITH LATERAL DRAIN

For bidirectional motor



Ø C
G 1/4
7/16-20 UNF-2B (SAE 4)
G 1/4

## REAR COVERS WITH MAIN RELIEF VALVES

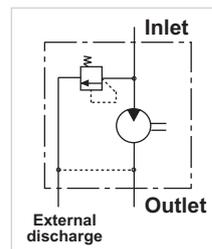
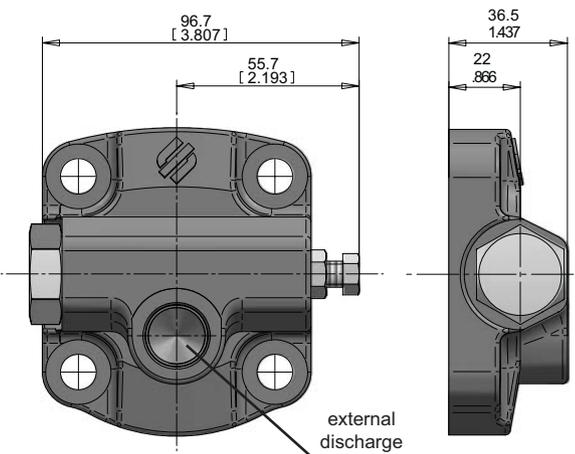


For this main relief valve you can choice four setting ranges:

- ( 20 - 50 bar )
- ( 51 - 75 bar )
- ( 76 - 150 bar )
- ( 151 - 220 bar )

### code VS

With main relief valve with internal exhaust gallery



### code VSE

**D** (external discharge)

M 18 x 1.5 (METRIC)

3/4-16 UNF-2B (SAE 8)

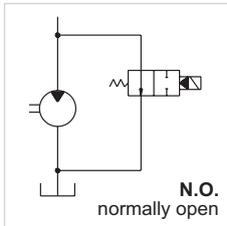
G 3/8 (BSPP)

**REAR COVERS WITH ELECTRIC UNLOADING VALVE**

**code EV**

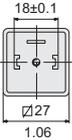
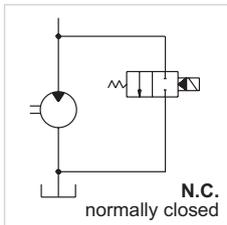
**EV1 - 12 Vcc**

**EV2 - 24 Vcc**

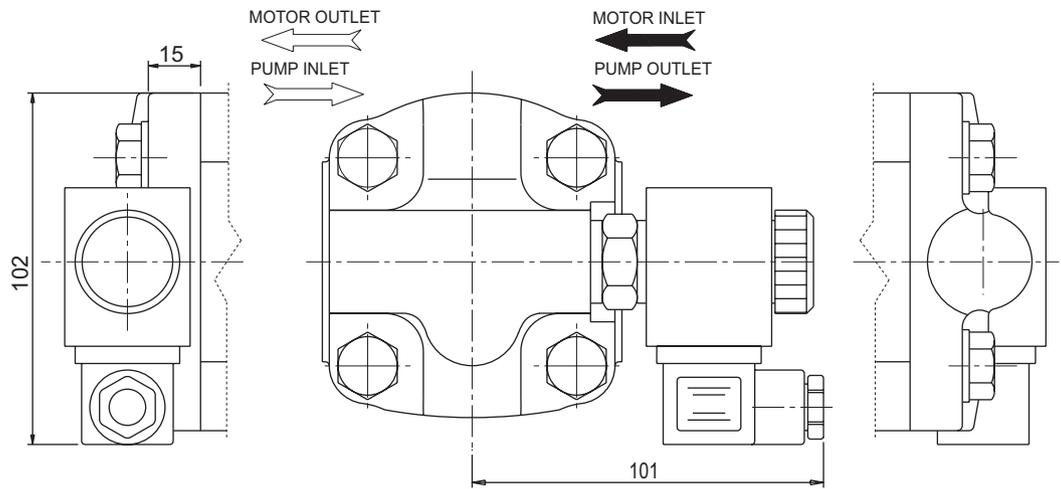
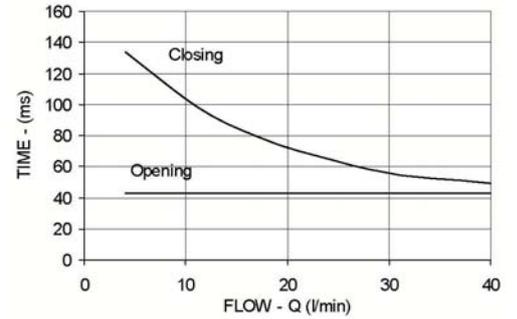
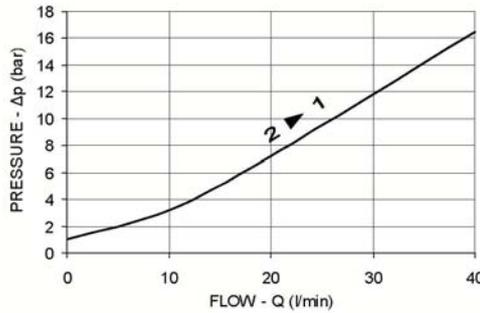


**EV3 - 12 Vcc**

**EV4 - 24 Vcc**



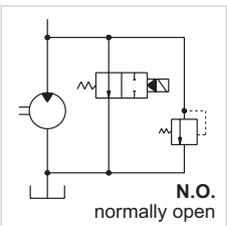
**CONNECTOR**  
**DIN 43650**  
**A/ISO 4400**



**code EVS**

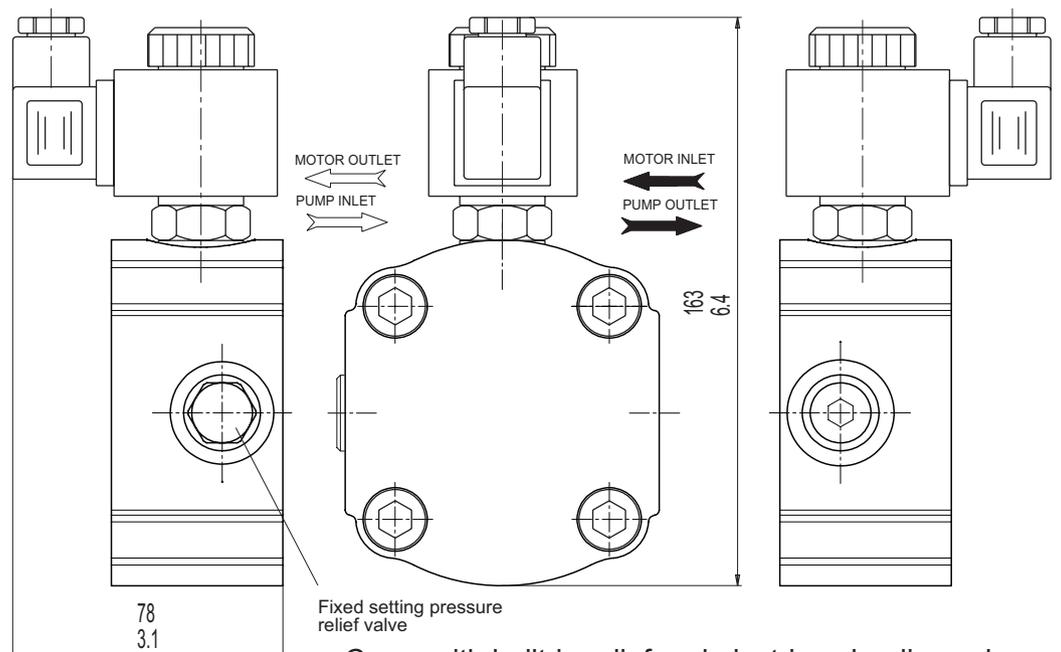
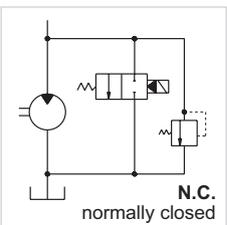
**EVS1 - 12 Vcc**

**EVS2 - 24 Vcc**



**EVS3 - 12 Vcc**

**EVS4 - 24 Vcc**



**Cover with built-in relief and electric unloading valve**

## REAR COVER WITH VENTING VALVE FOR DOUBLE STEP OF SPEED

### code EPV

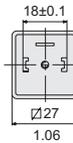
Electric Relief Valve 2- way with filter features:  
 VEI-8I-2A-06-NA-S1-F-NSS  
 Coil 12V  
 Termination DIN 43650  
 Rated flow 30 L/min  
 Maximum operating pressure 210 Bar

With this valve, we are able to fix a first step of speed (thanks to a calibrated orifice) when the electric venting valve is normally opened.

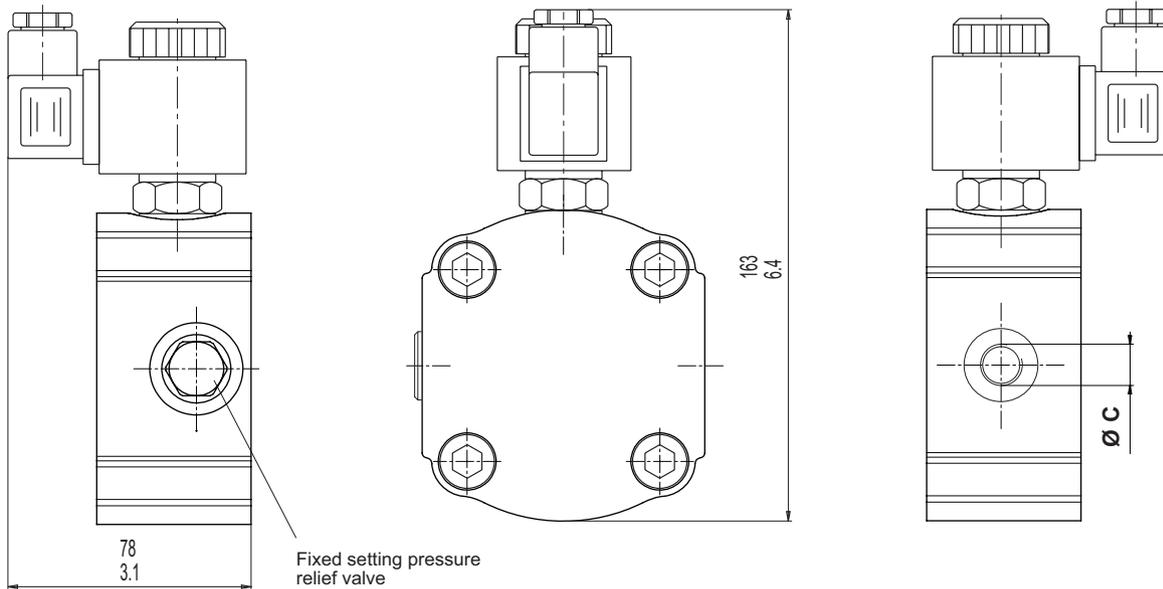
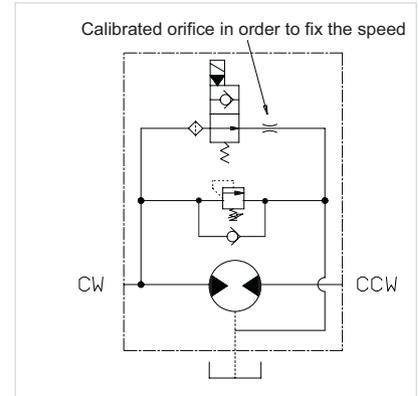
energizing the valve you will have the full speed, in addition an overload and anti-cavitation valve protects the motor from peak of pressure and from reverse rotation caused by inertia.

Changing the calibrated orifice we are able to evaluate different cases in order to reach the customer's need.

Ø C
G 1/4
7/16-20 UNF-2B (SAE 4)
G 1/4

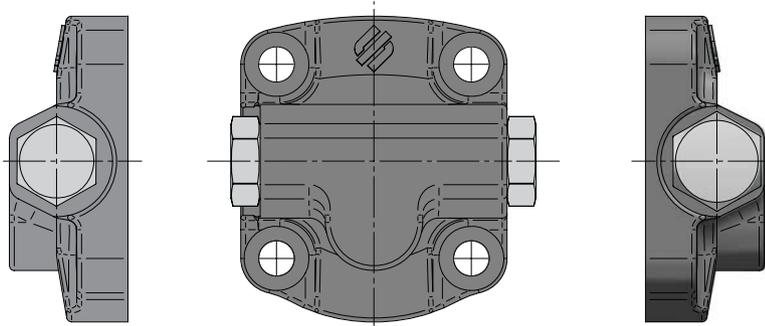
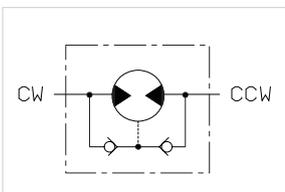


CONNECTOR  
 DIN 43650  
 A/ISO 4400



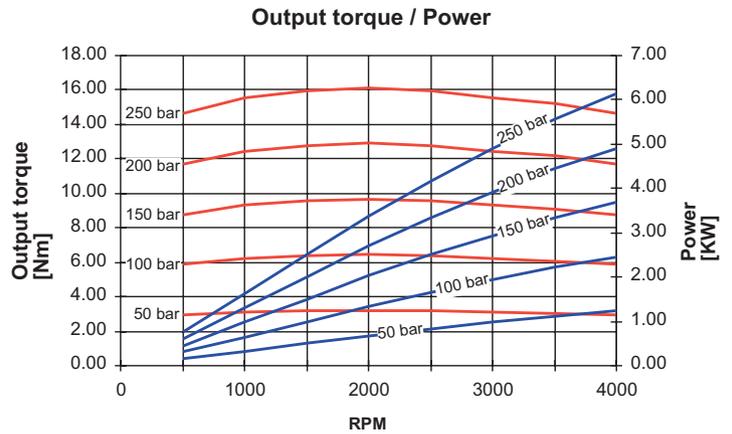
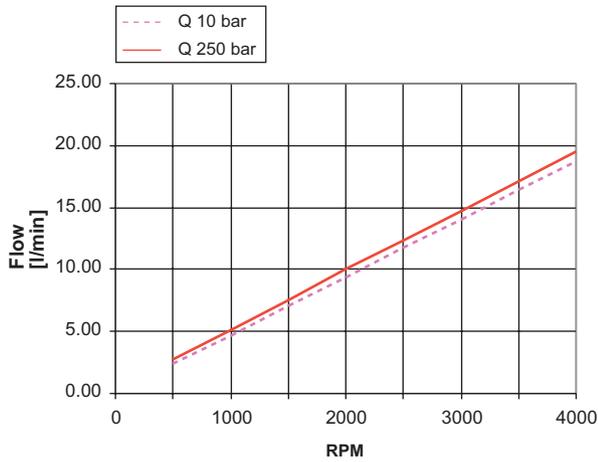
## REAR COVER FOR INTERNAL DRAIN

### code IDV

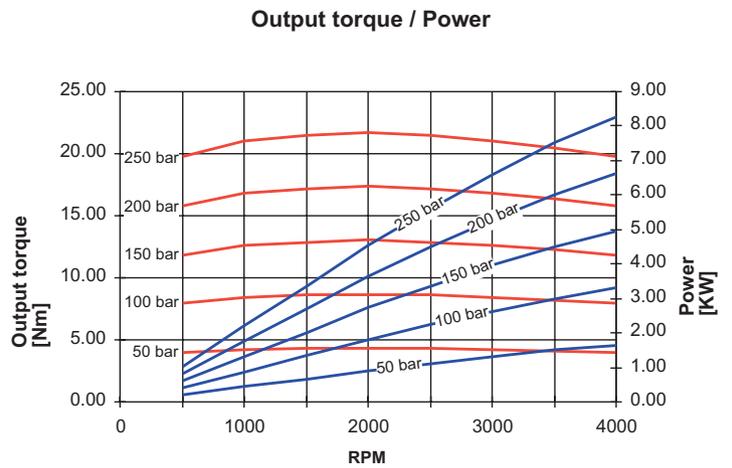
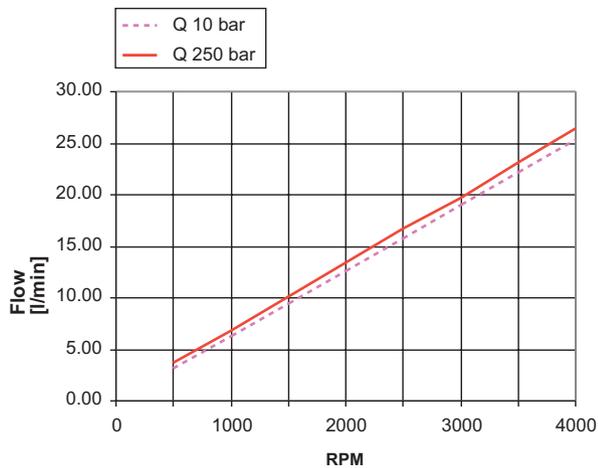


Performance curves carried out with oil viscosity at 21 cSt and oil temperature at 50°C

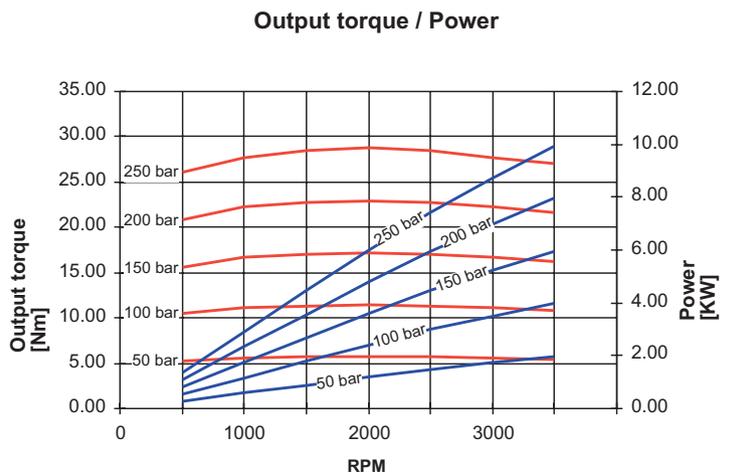
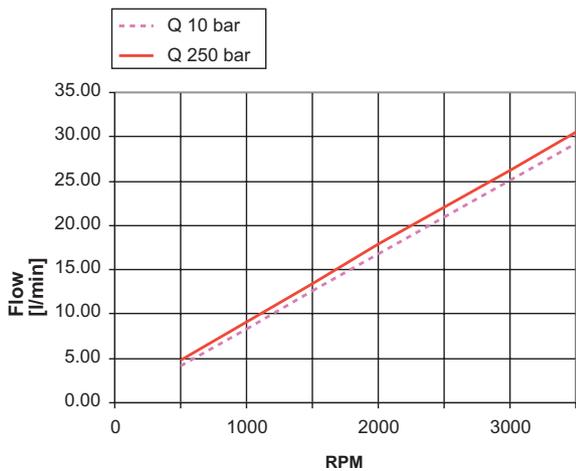
## 2ME 4.5



## 2ME 6.5

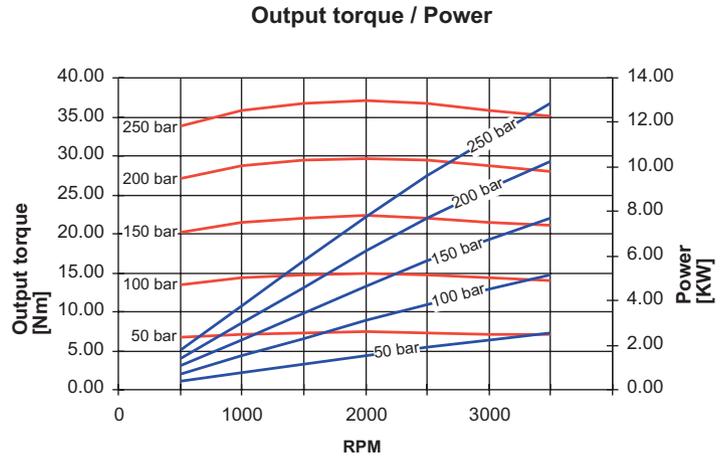
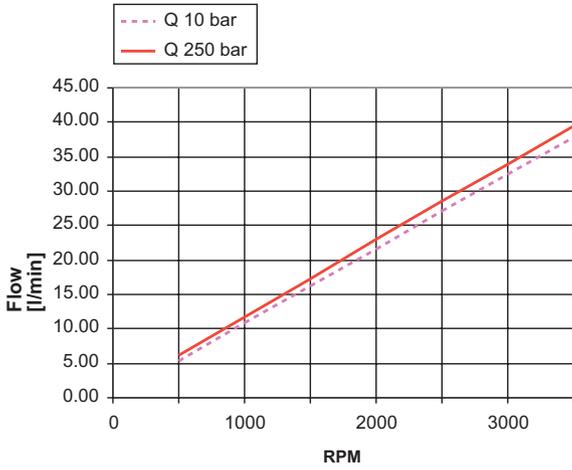


## 2ME 8.3

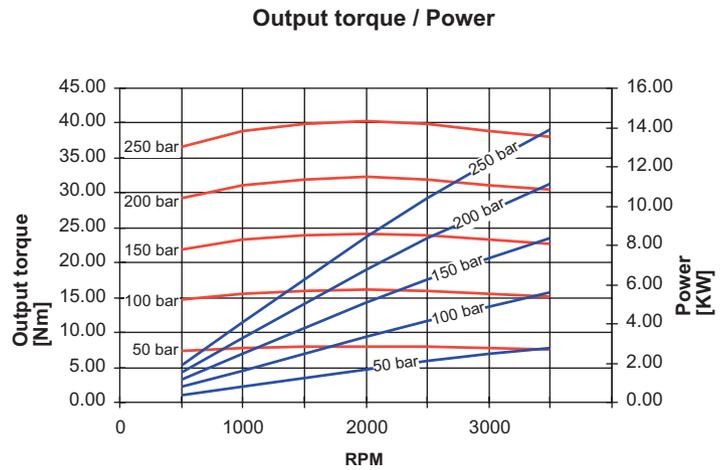
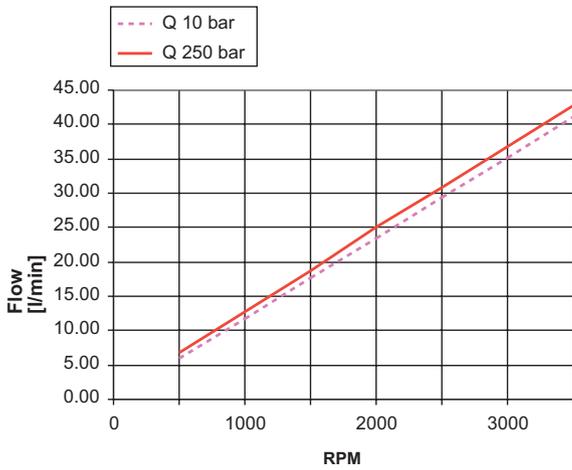


Performance curves carried out with oil viscosity at 21 cSt and oil temperature at 50°C

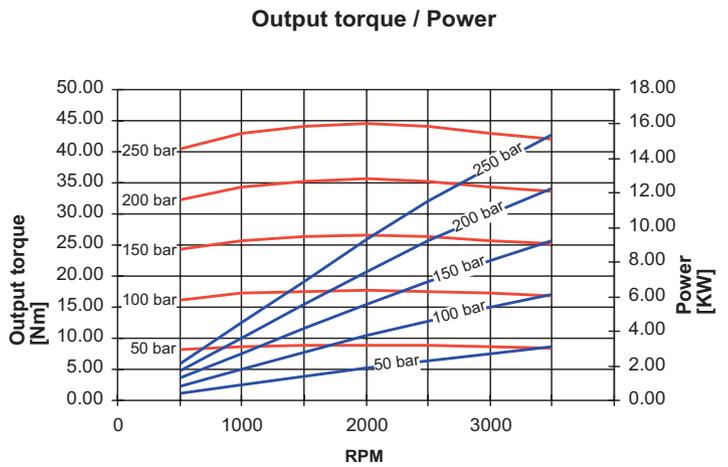
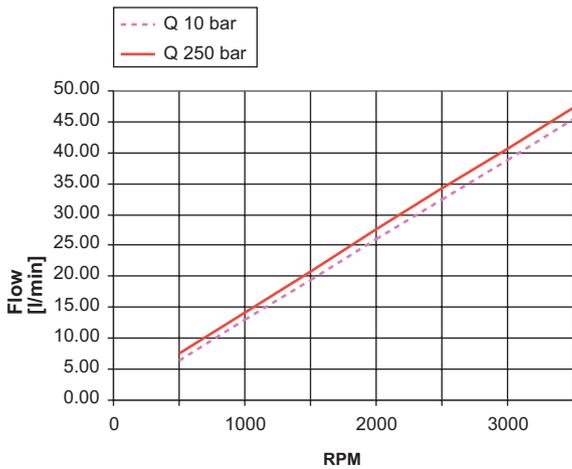
## 2ME 10.5



## 2ME 11.3

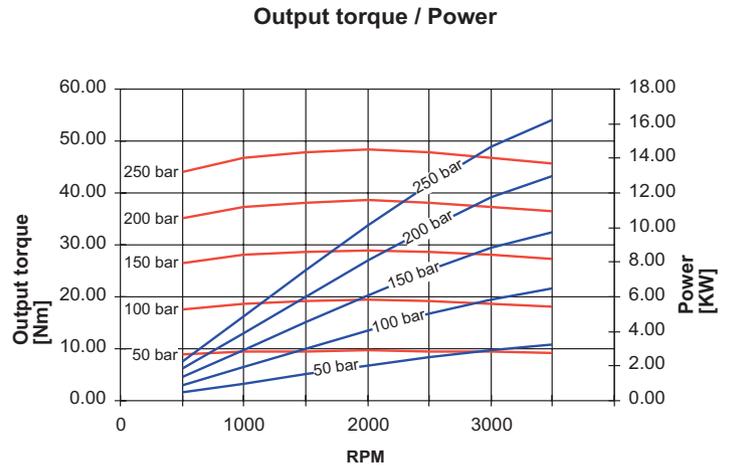
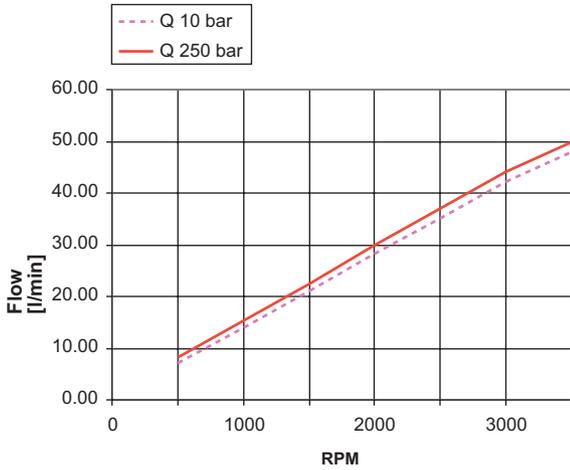


## 2ME 12.5

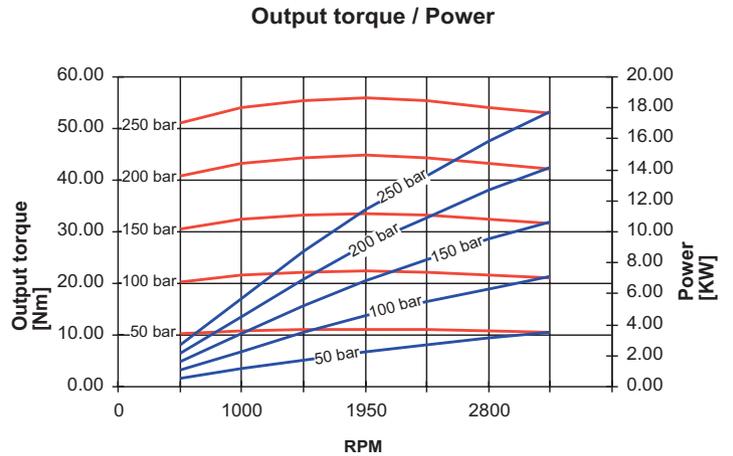
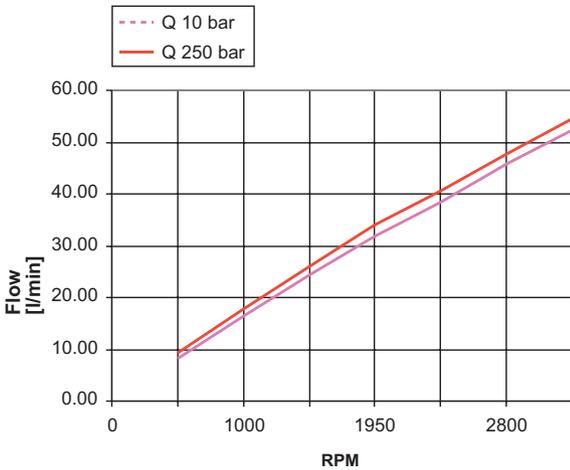


Performance curves carried out with oil viscosity at 21 cSt and oil temperature at 50°C

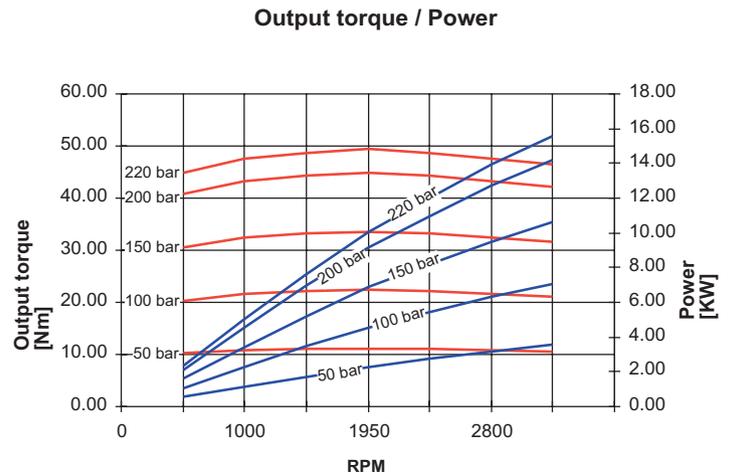
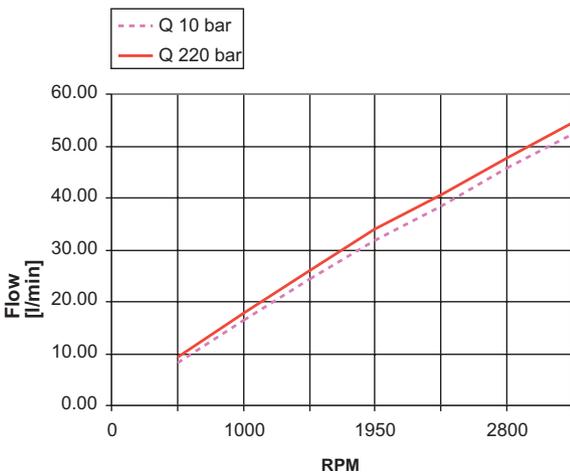
## 2ME 13.8



## 2ME 16

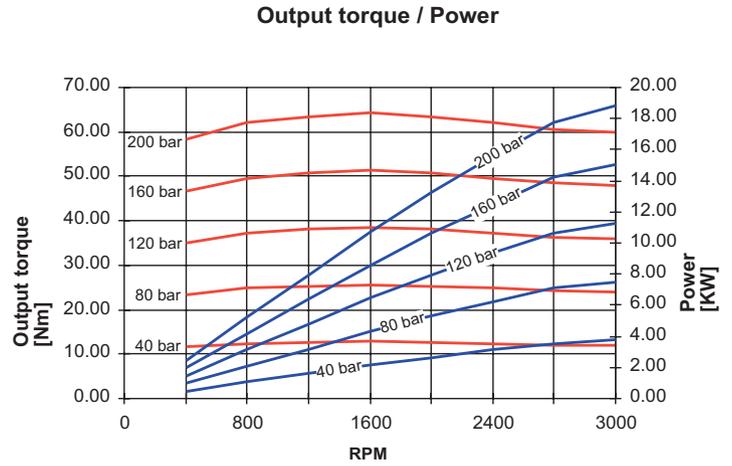
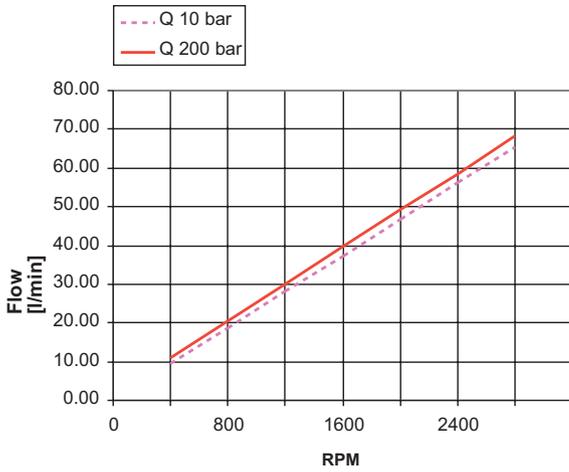


## 2ME 19

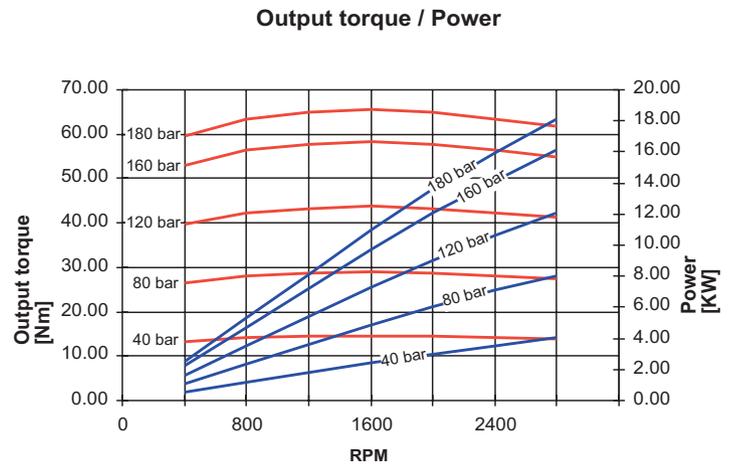
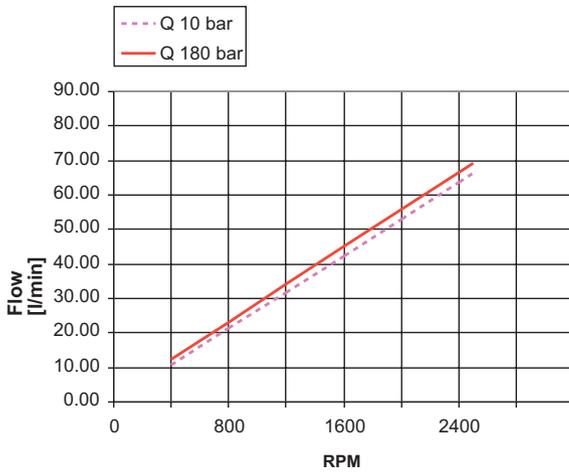


Performance curves carried out with oil viscosity at 21 cSt and oil temperature at 50°C

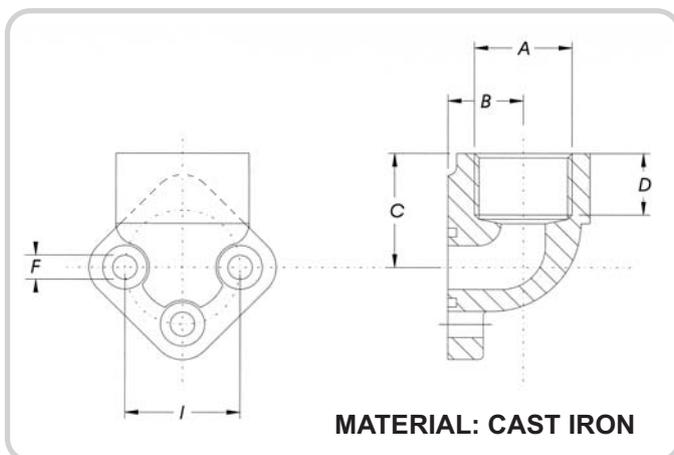
## 2ME 22.5



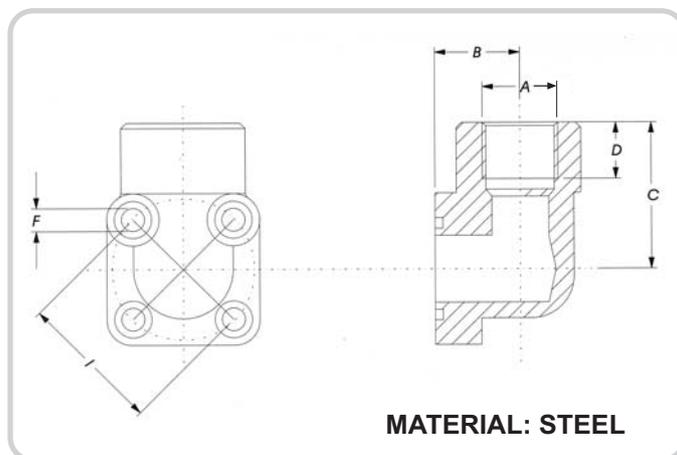
## 2ME 26



**PORT CONNECTORS**



**Type G**



**Type GB**

**AVAILABLE CONNECTORS - DIMENSIONS AND CODE**

Type	C	B	I	D	Ø F	Ø A	ORDERING CODE COMPLETE OF SCREW - SPRING WASHER - O RING
1 G/1	26	17.5	30	14	6.5	M18x1.5	4352 7004 0
1 G/2	26	17.5	30	14	6.5	G 3/8	4352 7005 0
1 G/3	26	17.5	30	14	6.5	G 1/2	4352 7006 0
2 G	36	21	40	16	8.5	G 3/4	4352 7011 0
1 GB/1	40	18	35	16	6.5	M18x1.5	4352 7008 1
1 GB/2	40	18	35	16	6.5	G 3/8	4352 7009 1
1 GB/3	40	18	35	16	6.5	G 1/2	4352 7010 1
2 GB	41.5	24	40	16	6.5	G 3/4	4352 7012 1

### SINGLE MOTORS

2 M E 16 D - P 28 P1 - V 1 - CP - VS / .....

#### DIMENSION

FUNCTION	CODE
Motor	M

#### SERIES

TYPE	DISPLACEMENTS	
4.5	4.6 cm <sup>3</sup> /rev.	0,27 cu.in/rev.
6.5	6.5 cm <sup>3</sup> /rev.	0,40 cu.in/rev.
8.3	8.2 cm <sup>3</sup> /rev.	0,50 cu.in/rev.
10.5	10.6 cm <sup>3</sup> /rev.	0,65 cu.in/rev.
11.3	11.5 cm <sup>3</sup> /rev.	0,68 cu.in/rev.
12.5	12.5 cm <sup>3</sup> /rev.	0,77 cu.in/rev.
13.8	13.8 cm <sup>3</sup> /rev.	0,84 cu.in/rev.
16	16.6 cm <sup>3</sup> /rev.	1,01 cu.in/rev.
19	19.4 cm <sup>3</sup> /rev.	1,15 cu.in/rev.
22.5	22.9 cm <sup>3</sup> /rev.	1,37 cu.in/rev.
26	25.8 cm <sup>3</sup> /rev.	1,58 cu.in/rev.

ROTATION	CODES
Clockwise	D
Anti-clockwise	S
Reversible	R

PORTS (pag. 9)	CODES
Flanged ports european standard	P
Flanged ports german standard	B
GAS threaded ports (BSPP)	G
SAE Threaded ports (ODT)	R

DRIVE SHAFTS (pag. 10 - 11)	CODES
Tang drive	03
Tapered 1:5	25
Tapered 1:5 (only for CB)	26
Tapered 1:8	28
SAE A splined 9 T	52
SAE A splined 11 T	54
DIN 5482 splined shaft	62
SAE A parallel shaft Ø 15,87	82
SAE A parallel shaft Ø 19,05	85

Setting main relief valve (bar)

Adjusted flow l/min

VALVES IN THE COVER	CODES
Adjustable main relief valve (pag.15)	VS
Like VS with external discharge (pag.15)	VSE
Electric unloading valve (12 V) (pag.16)	EV1
Electric unloading valve (24 V) (pag.16)	EV2
Main relief and electric unloading valves (12V) (pag.16)	EVS1
Main relief and electric unloading valves (24 V) (pag.16)	EVS2
Rear cover with valve for double step of speed (pag. 17)	EPV
Rear cover with valves for internal drain (pag. 17)	IDV

OUTRIGGER BEARINGS (pag. 13 - 14)	CODES
European standard	CP
German standard	CB
For engine endothermic motors	CL
SAE A	CS

PORTS POSITION	CODE
Lateral ports standard	
Rear ports (pag. 17)	1

SEAL	CODE
Buna Standard	
Viton	V

MOUNTING FLANGES (pag. 11 - 12)	CODES
European standard	P1
German standard Ø 80	B1
German standard Ø 52	B2-B3
German standard Ø 50	B4-B5
SAE A 2 bolts	S2
SAE A 2 bolts (with O-ring on the centering collar)	S6
4 bolts for Perkins Motor	K1

**Order example:**  
Pump 2ME 19D, ports SAE (R), drive shaft (52), mounting flange (S2) with valve in the cover (VS) pressure relief valve setting 180 bar: 2ME 19D-R52 S2-VS180

## WARRANTY

- We warrant products sold by us to be free from defects in material and workmanship.
- Our sole obligation to buyer under this warranty is the repair or replacement, at our option, of any products or parts thereof which, under normal use and proper maintenance, have proven defective in material or workmanship, this warranty does not cover ordinary wear and tear, abuse, misuse, overloading, alteration.
- No claims under this warranty will be valid unless buyer notifies SALAMI in writing within a reasonable time of the buyer's discovery of such defects, but in no event later than twelve (12) months from date of shipment to buyer.
- Our obligation under this warranty shall not include any transportation charges or cost of installation, replacement, field repair, or other charges related to returning products to us; or any liability for direct, indirect or consequential damage or delay. If requested by us, products or parts for which a warranty claim is made are to be returned transportation prepaid to our factory. The risk of loss of any products or parts thereof returned to SALAMI will be on buyer.
- No employee or representative is authorized to change any warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of SALAMI.