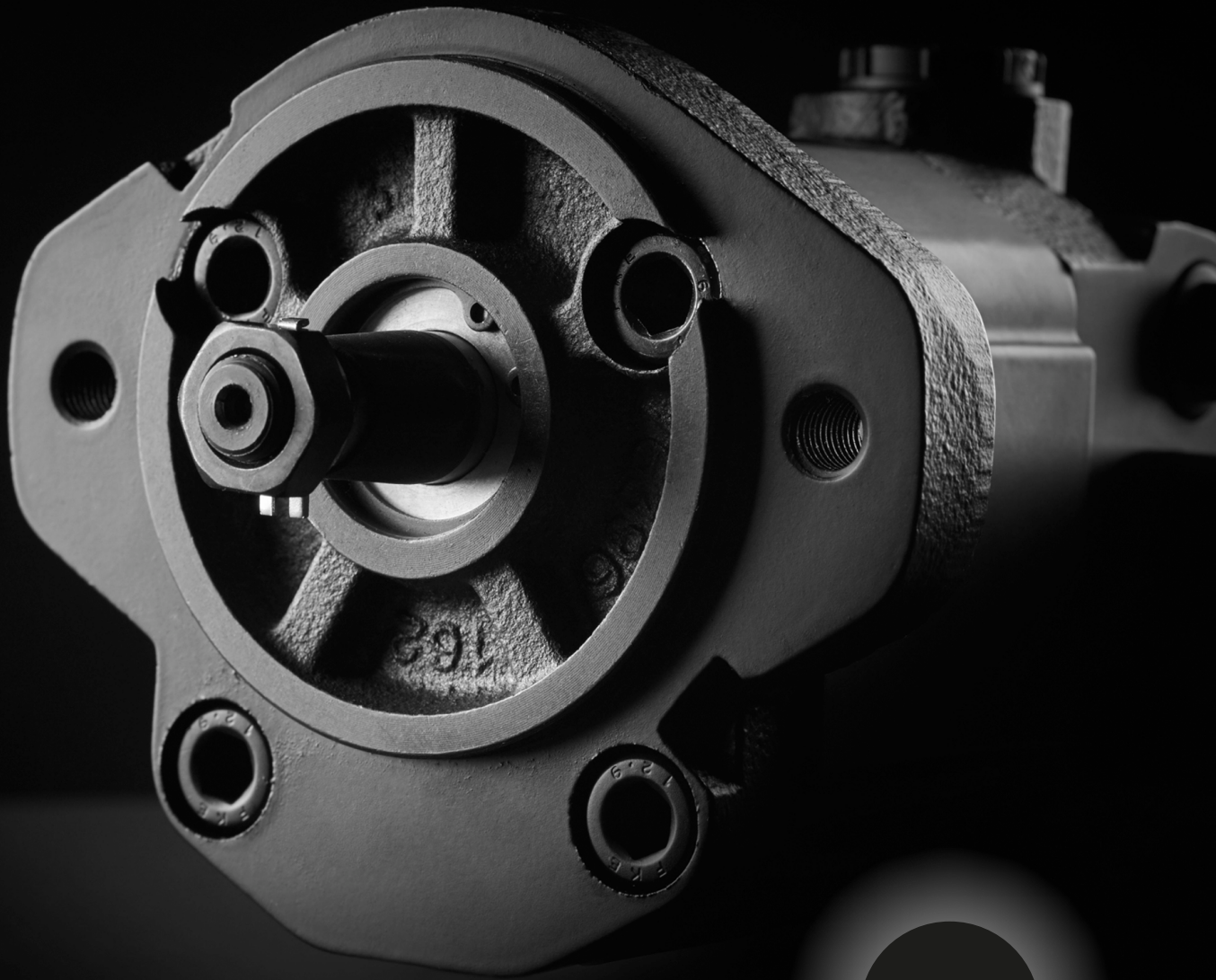



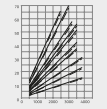




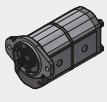
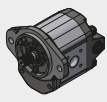
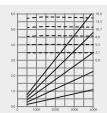
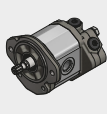
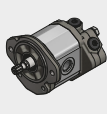
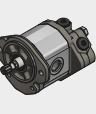
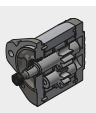
GLA Series

Group 3 gear pumps and motors



New

Roquet
making moves

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Features

Roquet gear pumps offer:

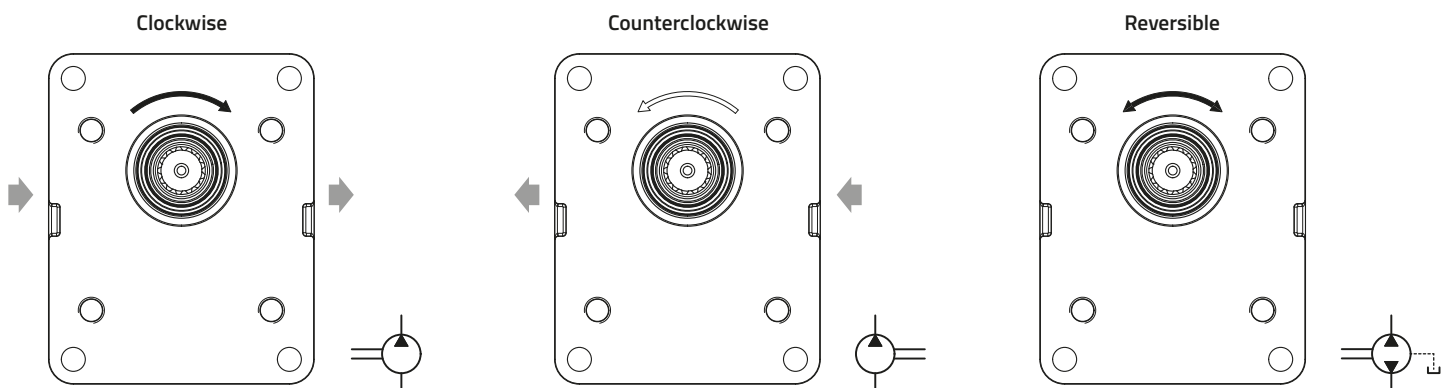
- High efficiency due to specialized production processes.
- Axial compensation through floating bearings.
- High quality bushings for gear pumps.
- Aluminium or cast iron body.
- Front flange and back cover made of cast iron.
- NBR seals in the standard version.
- FKM seals available for high temperature applications.
- 100% of delivered pumps are tested.
- Option to create multiple pumps by combining different Roquet pump models.
- Different multiple pumps: connected inlets, common inlet & separate stages.
- Back covers with integrated valves.

Technical information

Displacement range	18 – 56 cm ³ /rev
Shafts, flanges and ports	According to European, German and American standards
Direction of rotation	Clockwise, counterclockwise and reversible
Inlet port pressure range	0,7 – 1,5 bar (absolute pressure)
Fluid	Recommended Mineral oil - ISO 6743 type HM, HV or HG
Viscosity	Recommended viscosity at work 20-80 cSt (mm ² /s) Maximum viscosity allowed at start 800 cSt (mm ² /s)
Oil working temperature	Recommended temperature 50 °C – Material NBR (-30/+80 °C) FKM (-20/+110 °C)
Cleanliness	ISO 4406 22/19/16

Direction of rotation

The direction of rotation is always defined looking at the pump from the front flange.



Common formulas

$$v = \frac{Q}{6 \cdot A} \quad [\text{m/s}]$$

$$Q = \frac{V \cdot n \cdot \eta_{\text{vol}}}{1000} \quad [\text{l/min}]$$

$$M = \frac{V \cdot \Delta p}{62,8 \cdot \eta_{\text{hm}}} \quad [\text{N} \cdot \text{m}]$$

$$P = \frac{Q \cdot \Delta p}{600 \cdot \eta_t} \quad [\text{kW}]$$

v = fluid speed [m/s]

Q = pump flow [l/min]

A = tube section [cm²]

V = pump displacement [cm³/rev]

n = rotation speed [rev/min]

Δp = pressure difference [bar]

M = necessary driving torque [N · m]

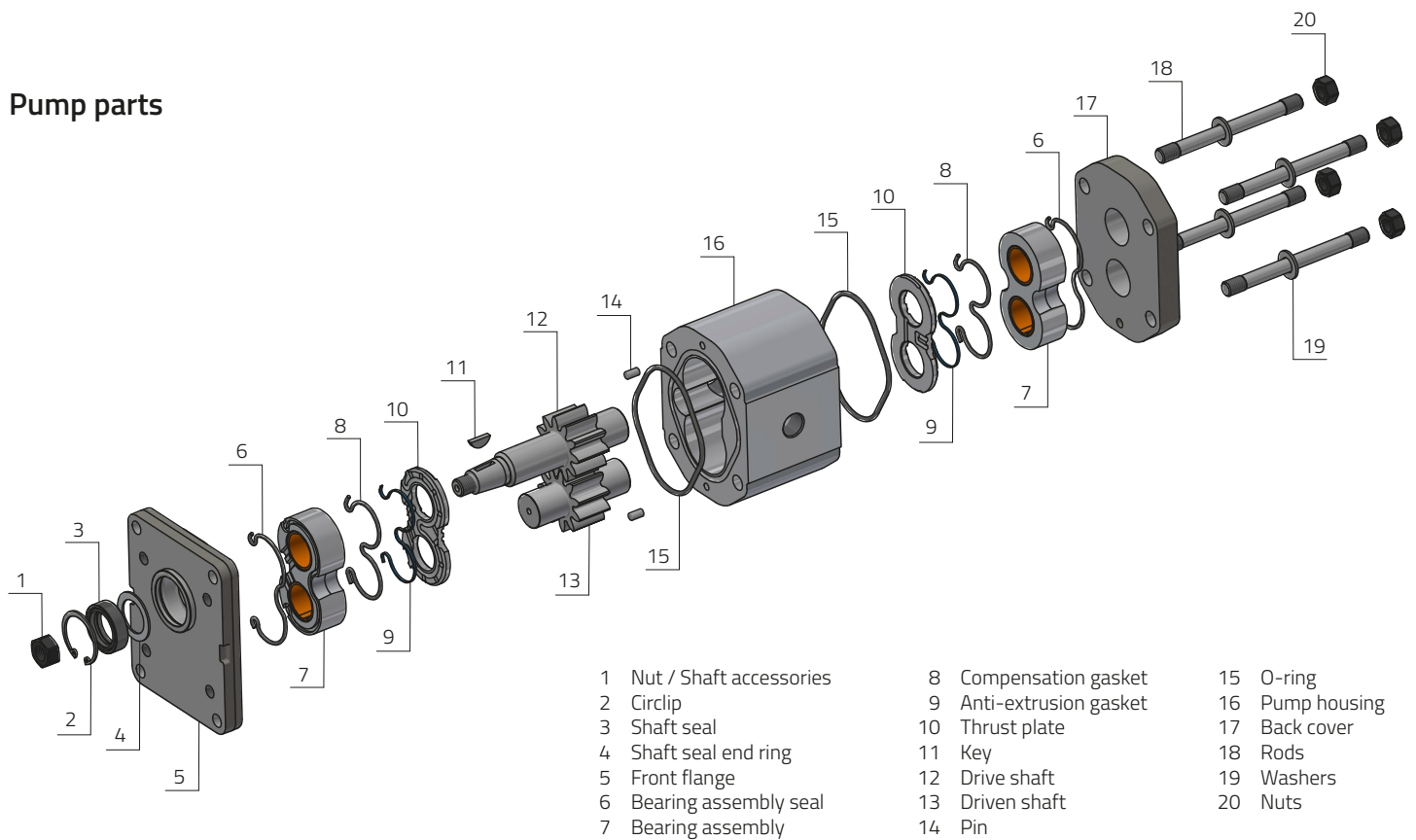
P = necessary driving power [kW]

η_{vol} = volumetric efficiency ($\approx 0,95$) [%]

η_{hm} = hydromechanical efficiency ($\approx 0,89$) [%]

η_t = total efficiency ($\approx 0,85$) [%]

Pump parts



- 1 Nut / Shaft accessories
- 2 Circlip
- 3 Shaft seal
- 4 Shaft seal end ring
- 5 Front flange
- 6 Bearing assembly seal
- 7 Bearing assembly

- 8 Compensation gasket
- 9 Anti-extrusion gasket
- 10 Thrust plate
- 11 Key
- 12 Drive shaft
- 13 Driven shaft
- 14 Pin

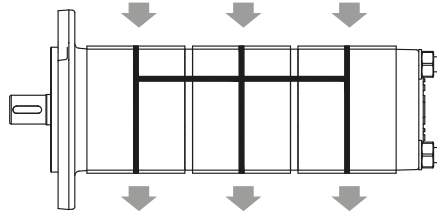
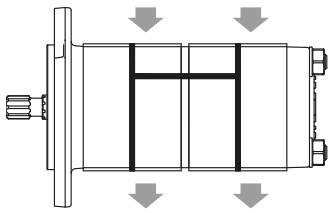
- 15 O-ring
- 16 Pump housing
- 17 Back cover
- 18 Rods
- 19 Washers
- 20 Nuts

Installation recommendations

- Avoid radial and axial forces on the pump shaft for a longer pump lifetime.
- The shafts of the pump have to be well aligned to avoid these forces.
- Elastic couplings are highly recommended.
- Avoid rotation speeds lower than those shown in the "TECHNICAL DATA" section.
- Avoid pump starts under load at low temperatures.
- When starting, clean the whole installation before first run of the system.
- Submerged installation recommended.
- If the pump shall be painted, protect the seal area and the drive shaft to avoid possible oil leaks.
- In reversible pumps, if possible, connect the drain to tank.

Versions

Standard version (Connected inlets)

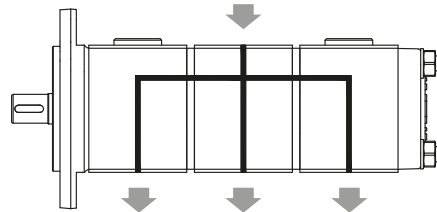
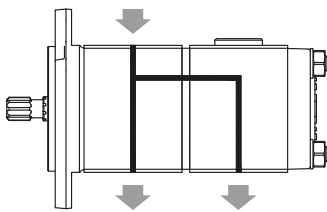


The oil can pass between sections.

Reference

· (Without code).

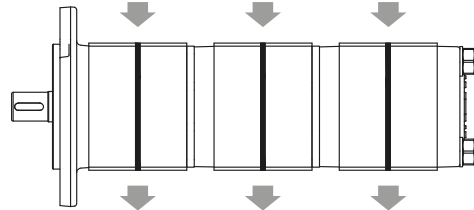
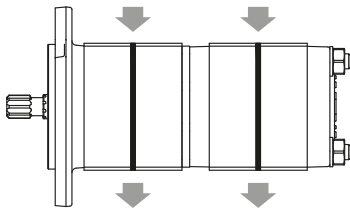
Common inlet



- CI1 (Common inlet, body 1 inlet port).
- CI2 (Common inlet, body 2 inlet port).

Designed to use less inlets than outlets.

Separate stages version



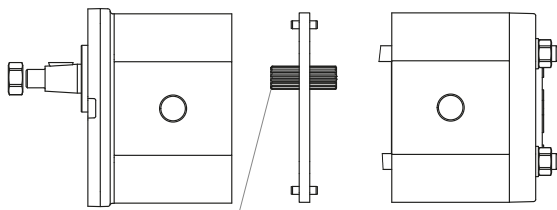
SS (Separate stages).

Note: The pump length and the intermediate flanges are different than the above ones.

Driving torques

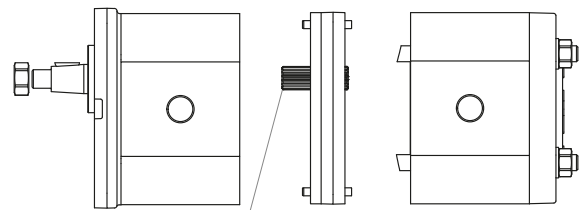
Driving torques between pumps

GLA+GLA - Standard & common inlet



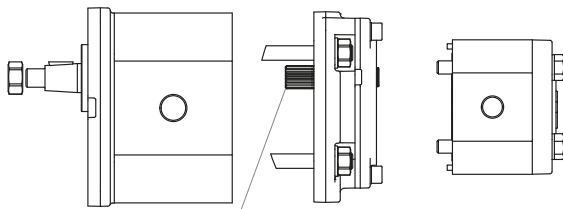
Max. 280 Nm

GLA+GLA - Separate stages



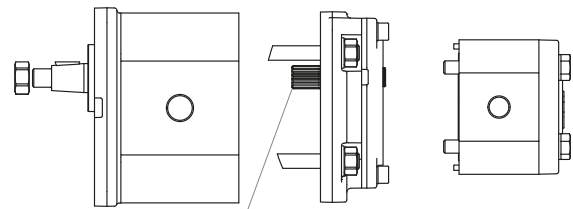
Max. 280 Nm

GLA+G - Standard & common inlet

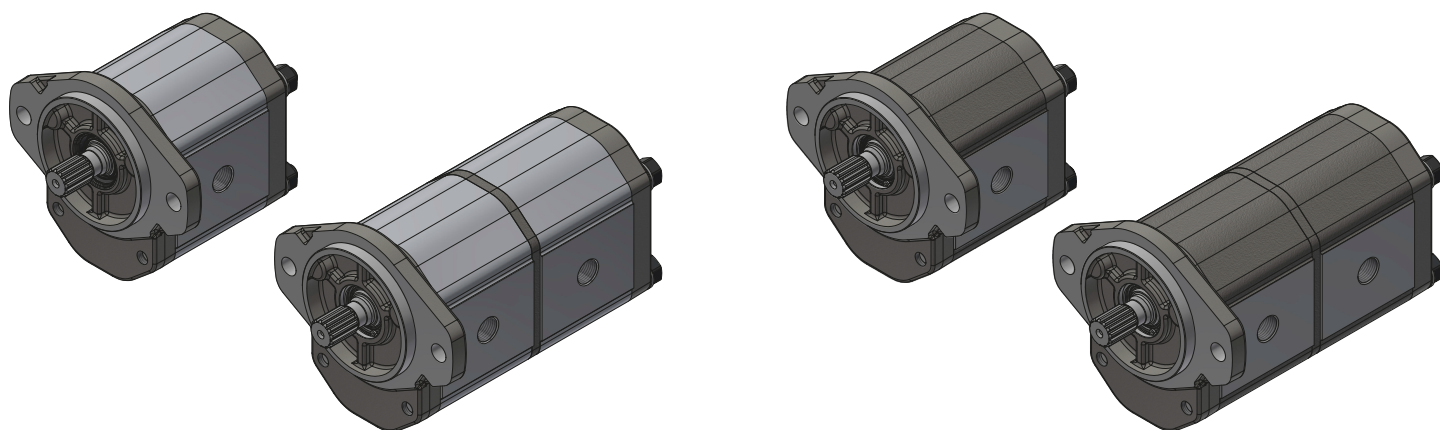


Max. 100 Nm

GLA+G - Separate stages



Max. 100 Nm



GLA Pump technical data (Aluminium body)

Displacement	cm ³ /v-cc/rev (in ³ /rev)	18 (1,10)	24 (1,46)	30 (1,83)	36 (2,20)	44 (2,69)	50 (3,05)	56 (3,42)
Cont. max. pressure	bar (PSI)	250		225		200	185	175
Intermittent max. pressure	bar (PSI)	275		250		225	210	200
Maximum peak pressure	bar (PSI)	285		260		235	220	210
R.P.M. at cont. pressure		2500		2300		2200		
Max. R.P.M		3000		2800		2600		
Min. R.P.M. at given pressures	100 bar (1450 PSI)	500						
	175 bar (2540 PSI)	800		700		600		
	250 bar (3625 PSI)	1500		900		-		-

Note: Pressures obtained with flanged bodies.

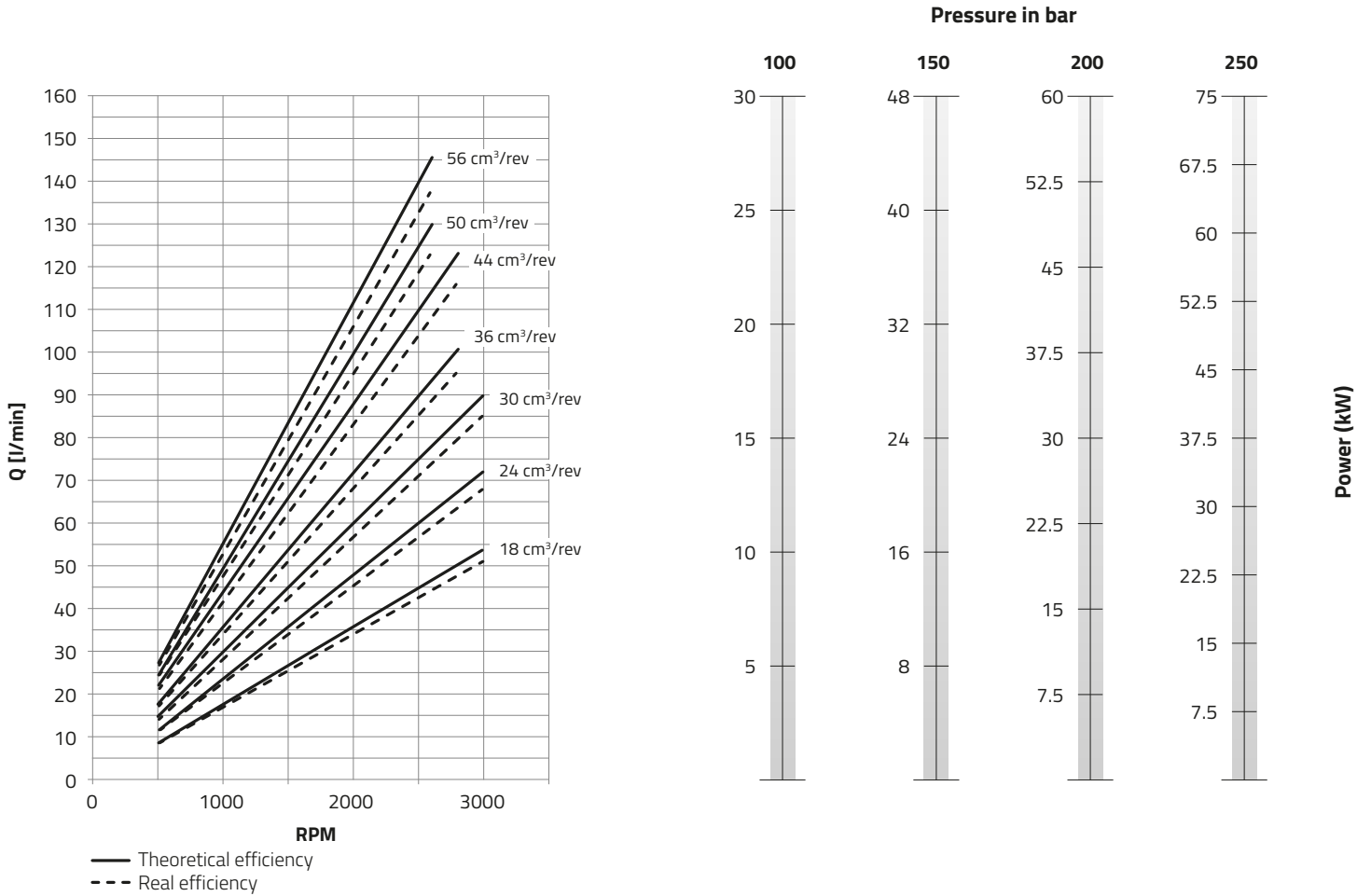
GLAN Pump technical data (Cast iron body)

Displacement	cm ³ /v-cc/rev (in ³ /rev)	18 (1,10)	24 (1,46)	30 (1,83)	36 (2,20)	44 (2,69)	50 (3,05)	56 (3,42)
Cont. max. pressure	bar (PSI)	300		275		250	230	215
Intermittent max. pressure	bar (PSI)	325		300		275	255	240
Maximum peak pressure	bar (PSI)	335		310		285	265	250
R.P.M. at cont. pressure		2500		2300		2200		
Max. R.P.M		3000		2800		2600		
Min. R.P.M. at given pressures	100 bar (1450 PSI)	500						
	175 bar (2540 PSI)	800		700		600		
	250 bar (3625 PSI)	1500		900		-		-

Note: For all reversible pumps (GLA and GLAN), the maximum pressure is 250 bar (3600 psi), except for those values where the pressure is lower.

Note: The definition of the pressure ranges is shown on page 7.

Flow, performance and power chart according to displacement

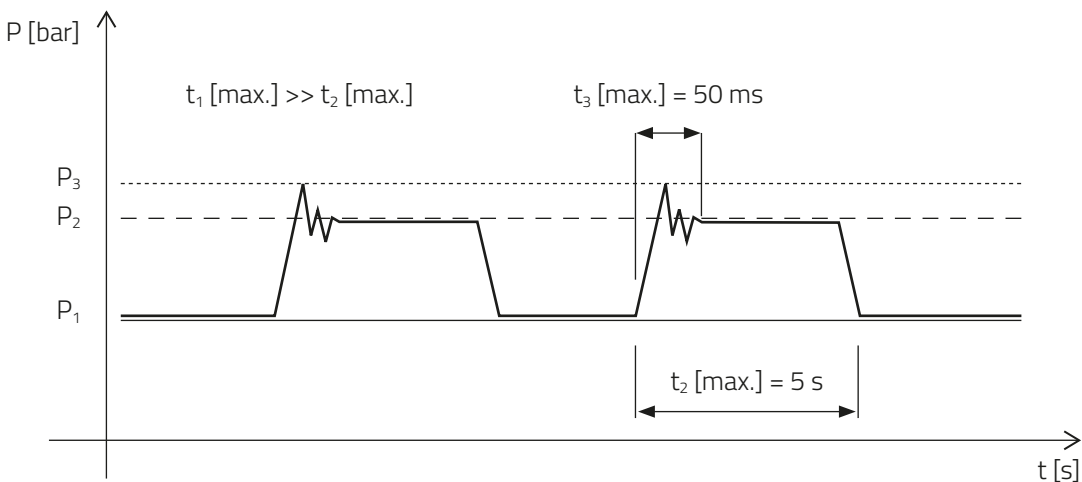


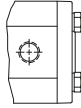
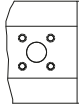
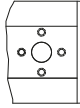
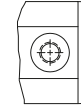
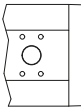
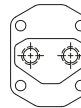
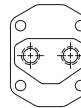
NOTE: The values shown in the above diagram have been obtained using 32cSt Kinematic viscosity oil.

Pressure definition

Technical data tables show 3 levels of maximum pressure at which a pump can be used:

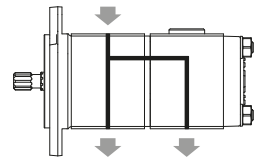
- P₁, t₁ – Maximum continuous pressure ———
- P₂, t₂ – Maximum intermittent pressure - - - -
- P₃, t₃ – Maximum peak pressure (dotted)



Coding System								Optional			
1	GLA	36C	D	E	10	R	/	V	42	T***	-***
Type								Code			
1	Without pulley							V	FKM seals and shafts seals (Viton)		
2	With pulley							RV	Only FKM shaft seal (Viton)		
6	Pump with DIN 5462 spline shaft for ZF assembly with bearing assembly and shaft seal							ID	Internal drain		
12	Pump with DIN 5462 spline shaft, double shaft seal and external leak							Alternatives with valves			
Model								VA	Check valve		
GLA	Single – Aluminium body							V@	Relief valve		
GLAN	Single – Cast iron body							VBP@	Low pressure relief valve		
GLL	Multiple (GLA+GLA)							Chamber type			
GLLN	Multiple (GLAN+GLAN)							CI@	Standard		
GLD	Multiple (GLA+G)							SS	Common inlet		
GLDN	Multiple (GLAN+GN)							Separate stages			
Pump displacement [cm³/rev] & [in³/rev]											
18C	18,0	1,10									
24C	27,0	1,65									
30C	30,0	1,83									
36C	36,0	2,20									
44C	44,0	2,69									
50C	50,0	3,05									
56C	56,0	3,42									
Rotation direction											
D	Clockwise										
I	Counterclockwise										
R	Reversible										
Drive Shaft Form											
C	Ø24 straight										
D	DIN 5463 - 6 teeth										
E	European tapered 1:8										
G	SAE B - 13 teeth										
H	SAE B - Ø22,22 straight										
J	German tapered 1:5										
W	Tang Ø27										
X	DIN 5462 - 8 teeth										
Q	Multiple pumps - (SS)										
Z	Multiple pumps - (CI)										
Port Connection Forms											
											
R BSP thread			F German standard			B European standard			S SAE thread		
											
M SAE J518 Standard			T Rear ports - BSP			U Rear ports - SAE					
Front Flange											
09	SAE B - 2 bolts										
10	European standard										
19	2 bolts (without shaft seal)										
23	German standard										
90	SAE A - 2 bolts										
00	Multiple pumps										

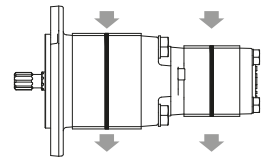
Part number example GLL Pump

1	GLL	36C	-	24C	D	G	09	R	-	CI1
Without pulley								Common inlet (Body 1)		
GLL Pump (GLA+GLA)								Connection type: R		
Displacement of the Pump GLA-1 [cm ³ /rev]								Front flange type: 09		
Displacement of the Pump GLA-2 [cm ³ /rev]								Shaft form: G		
Clockwise rotation										



Part number example GLD Pump

1	GLD	36C	-	15C	D	G	09	R	-	SS
Without pulley								Separated stages		
GLD Pump (GLA+G)								Connection type: R		
Displacement of the Pump GLA [cm ³ /rev]								Front flange type: 09		
Displacement of the Pump G [cm ³ /rev]								Shaft form: G		
Clockwise rotation										



Pumps and motors codification with integrated valves

Please contact our Sales Department for other configurations.

Relief valve

Tamper-proof sealable model and standard set pressure

Pressure range

V11	Set at 80 bar (5-80 bar)
V12	Set at 160 bar (85-175 bar)
V13	Set at 200 bar (180-250 bar)

Tamper-proof sealed model and specific set pressure

Pressure range

V41T***	5-80 bar
V42T***	85-175 bar
V43T***	180-250 bar

In the relief valve with tamper-proof cap, the signs *** have to be replaced by the set pressure (3 numbers) of the valve.

Please check the minimum set pressure curve (on page 31).

Example 1: 1GLA24CDE10R/V12

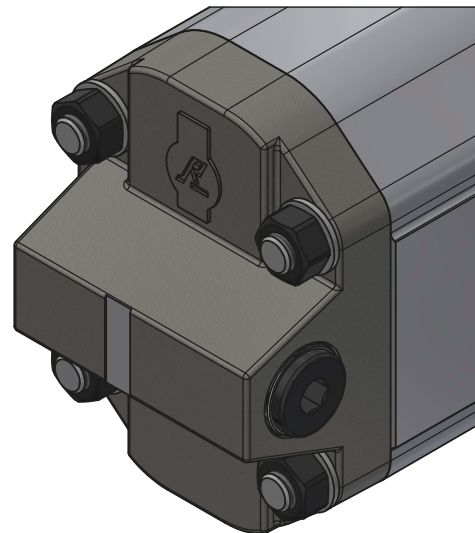
Example 2: 1GLA36CDE10R/V41T060

Check valve

VA

Please check pressure diagram - flow (page 32).

Example: 1GLA24CDE10R/VA

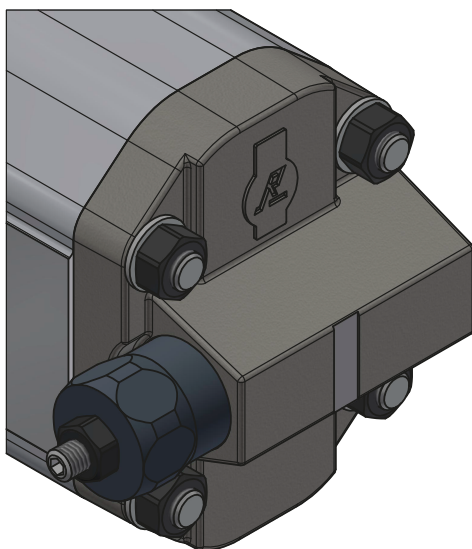


Low pressure relief valve

VBPT**

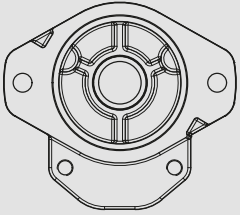
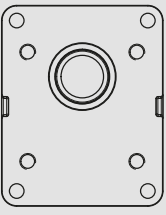
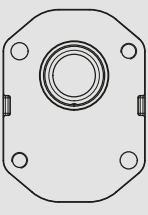
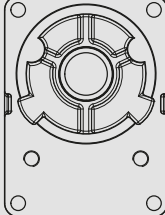
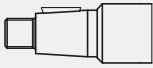
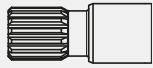
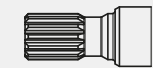



The signs ** have to be replaced by the set pressure (2 numbers). Please check the minimum set pressure curve (on page 30).

Example: 1GLA24CDE10R/VBPT14



Drive shaft-front flange common combinations

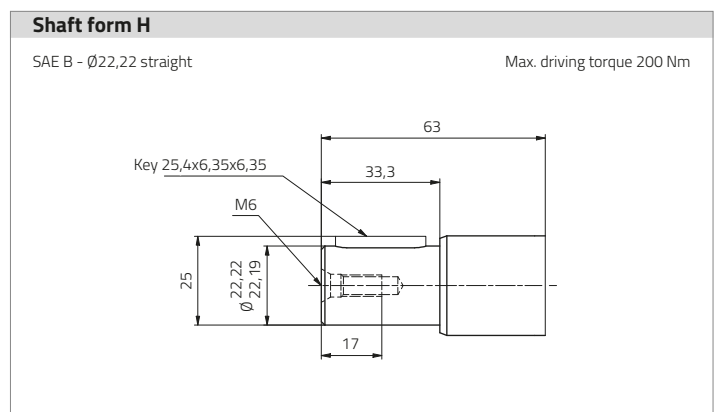
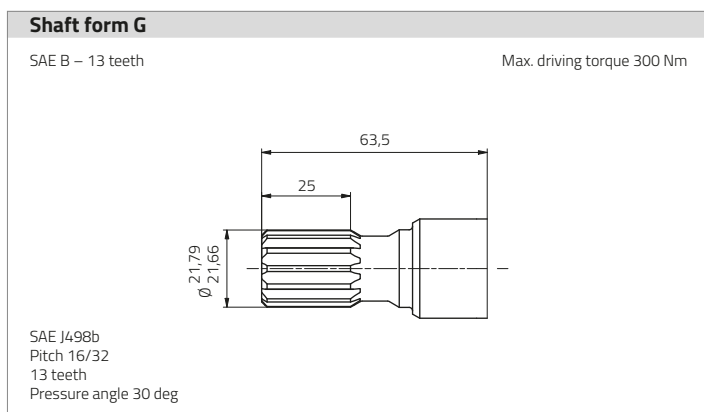
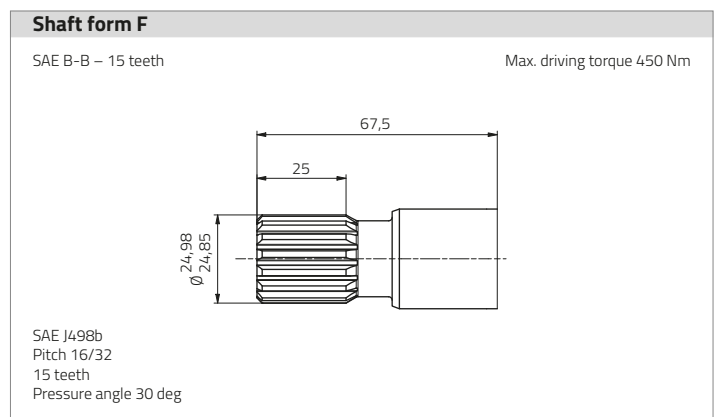
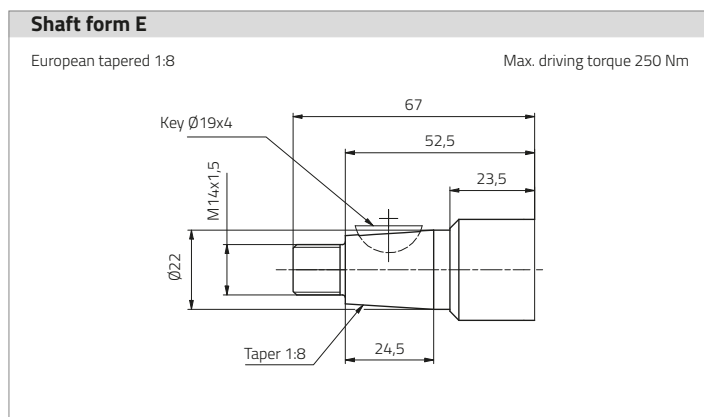
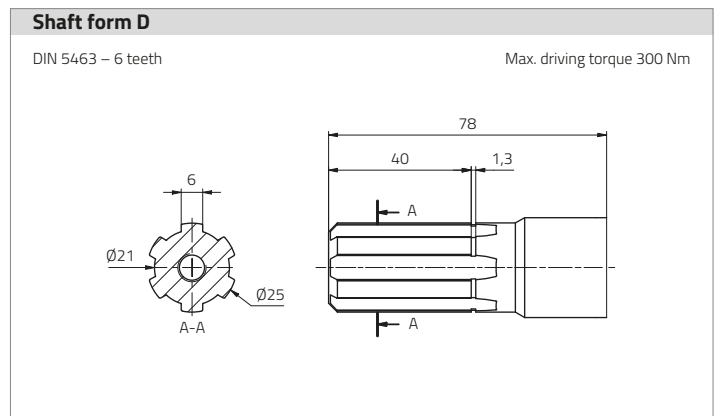
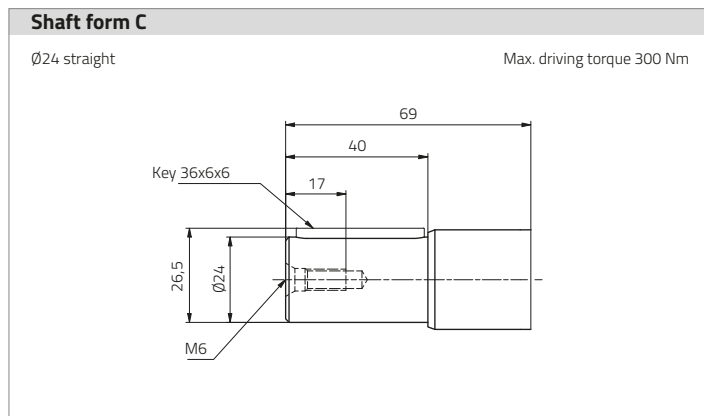
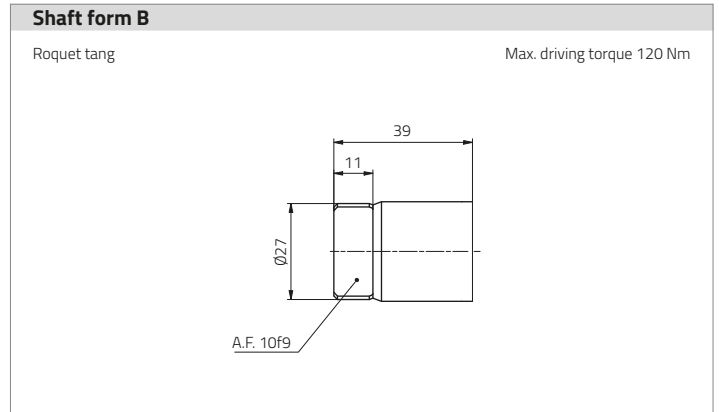
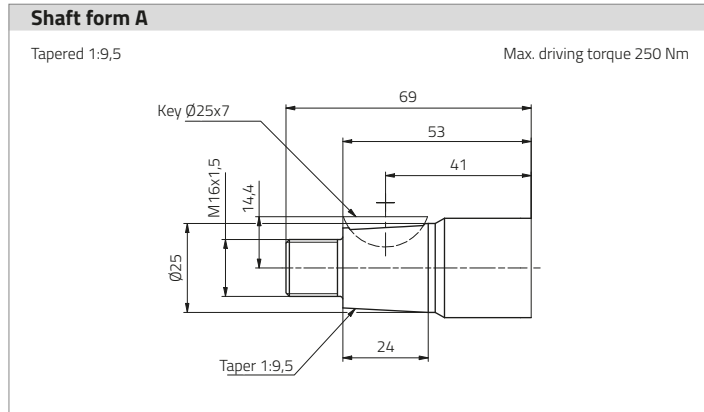
The table below only contains the most common combinations. Please contact our Sales Department for other combinations.

	09	10	19	23
	 <p>SAE B – 2 bolts</p>	 <p>European</p>	 <p>German - 2 bolts</p>	 <p>German</p>
<p>E</p>  <p>European tapered 1:8</p>		E10		
<p>F</p>  <p>SAE B-B – 15 teeth</p>	F09			
<p>G</p>  <p>SAE B – 13 teeth</p>	G09			
<p>H</p>  <p>SAE B – Ø22,22 straight</p>	H09			
<p>J</p>  <p>German tapered 1:5</p>				J23
<p>W</p>  <p>Tang</p>			W19	

Drive shafts

Please contact our Sales Department for other combinations.

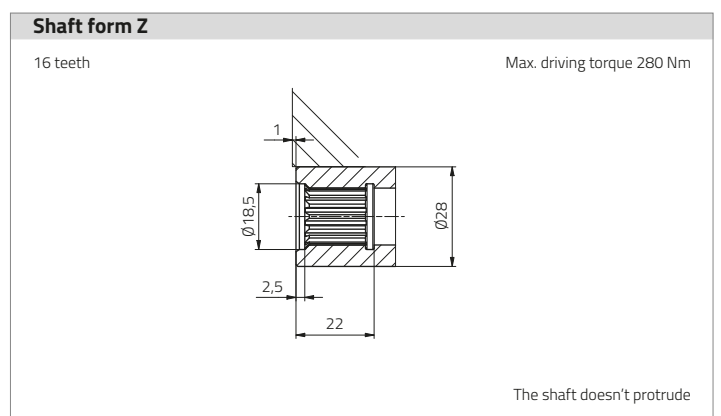
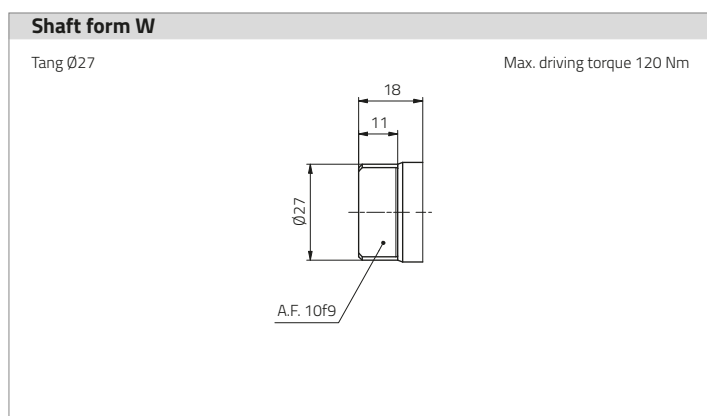
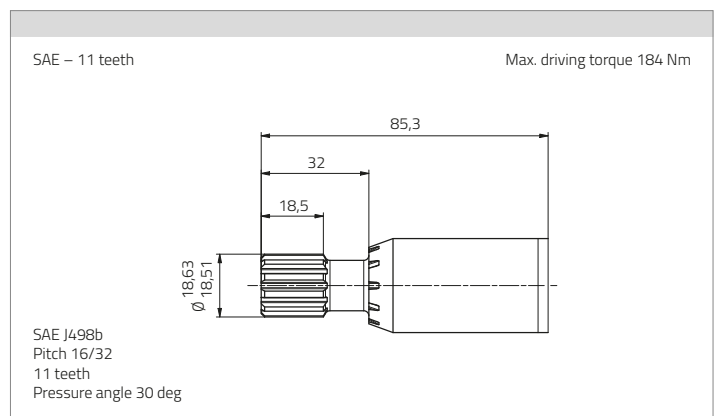
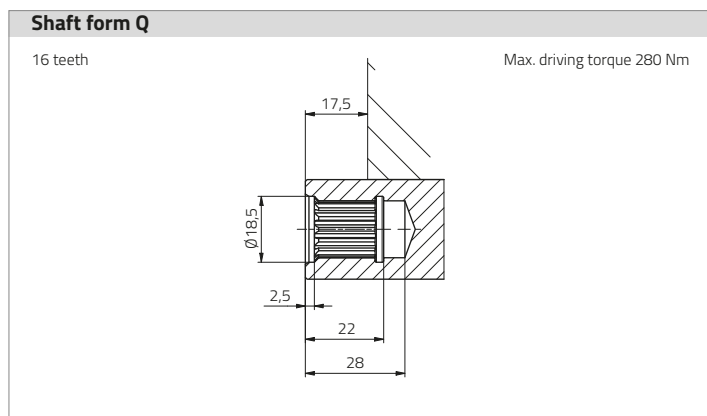
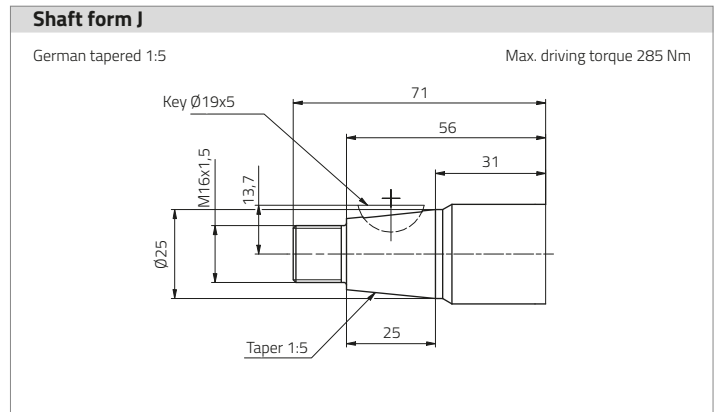
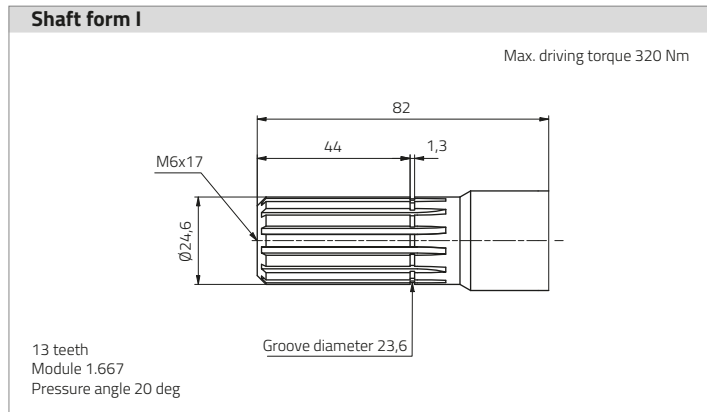
NOTE: The drive shaft length is given from the side A of the front flanges (please check pages 14 and 15).



Drive shafts

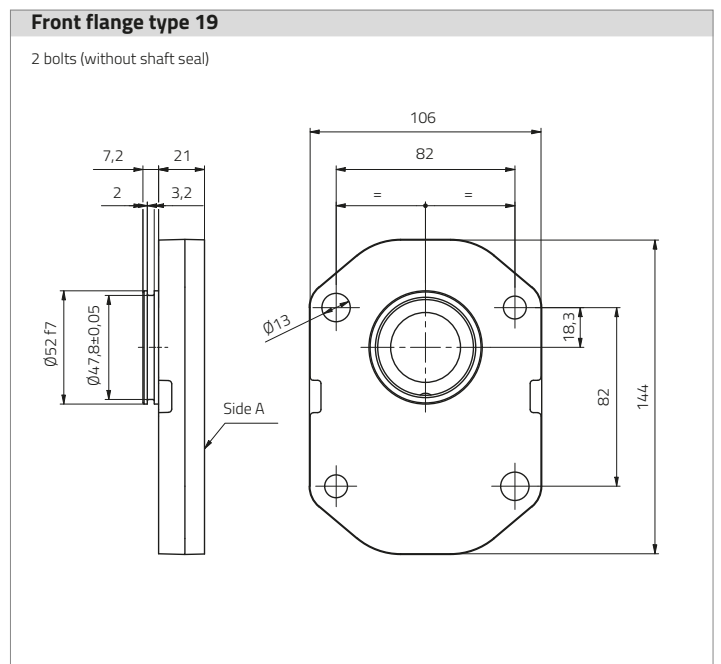
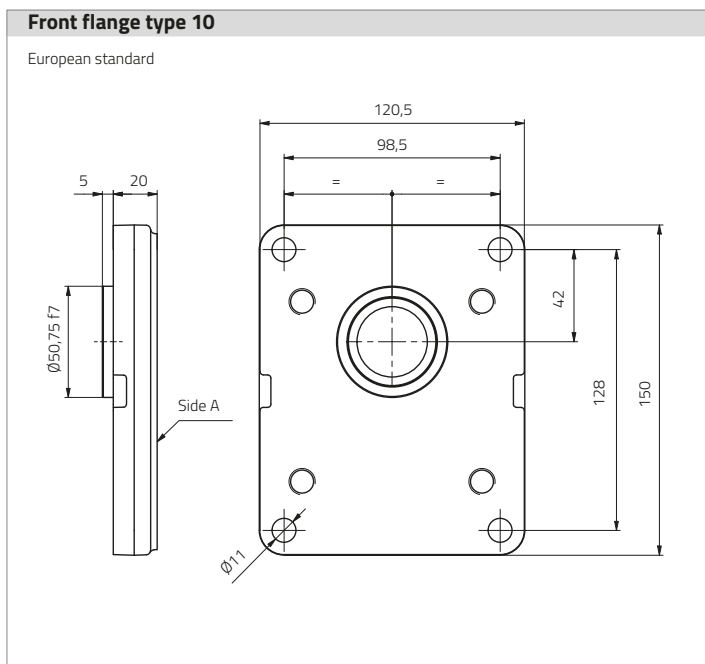
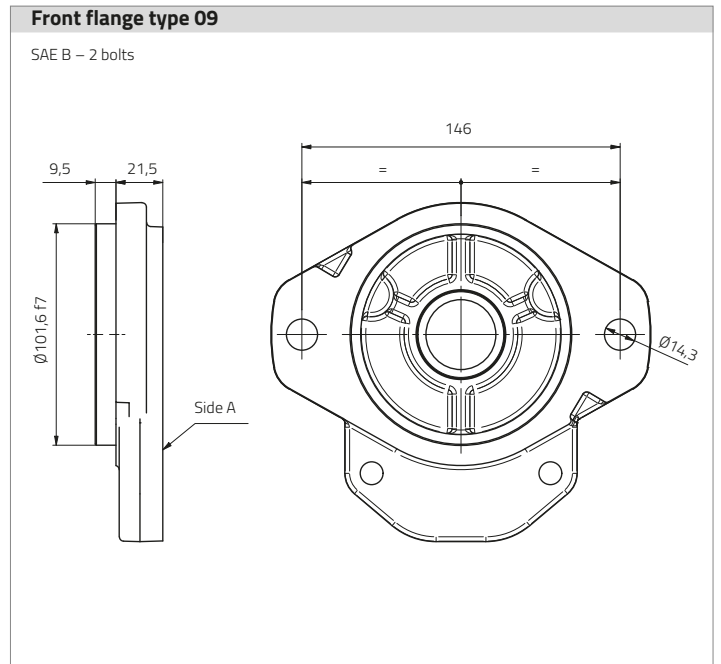
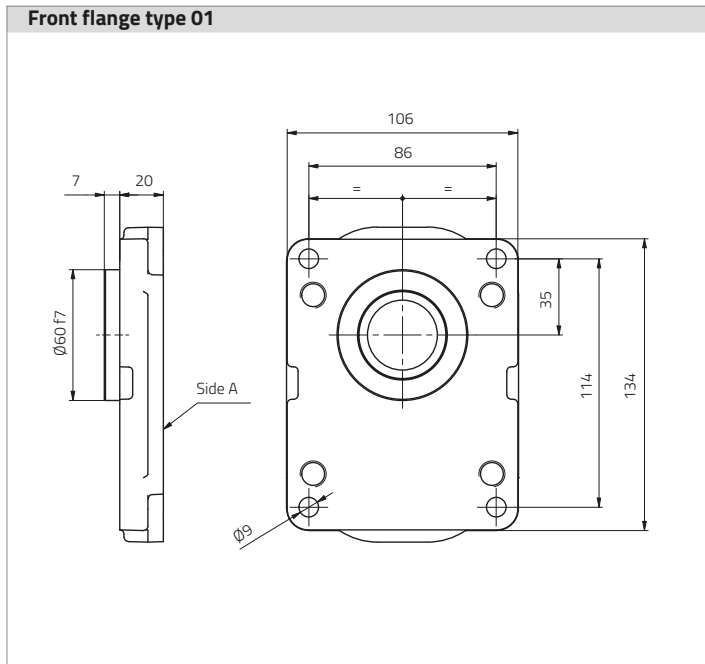
Please contact our Sales Department for other combinations.

NOTE: The drive shaft length is given from the side A of the front flanges (please check pages 14 and 15).



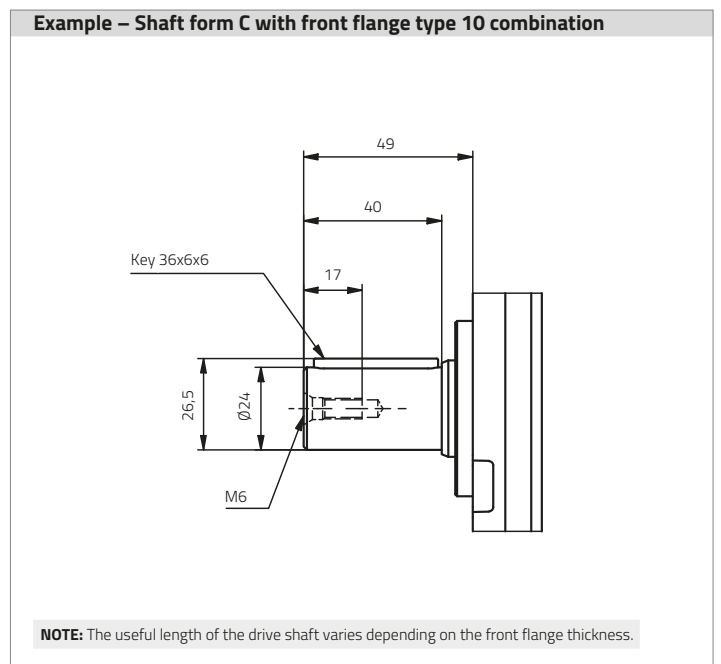
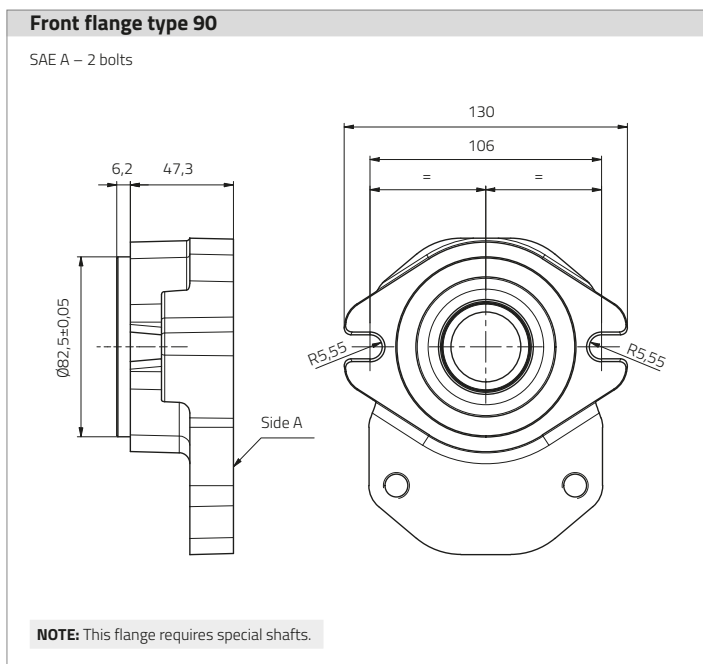
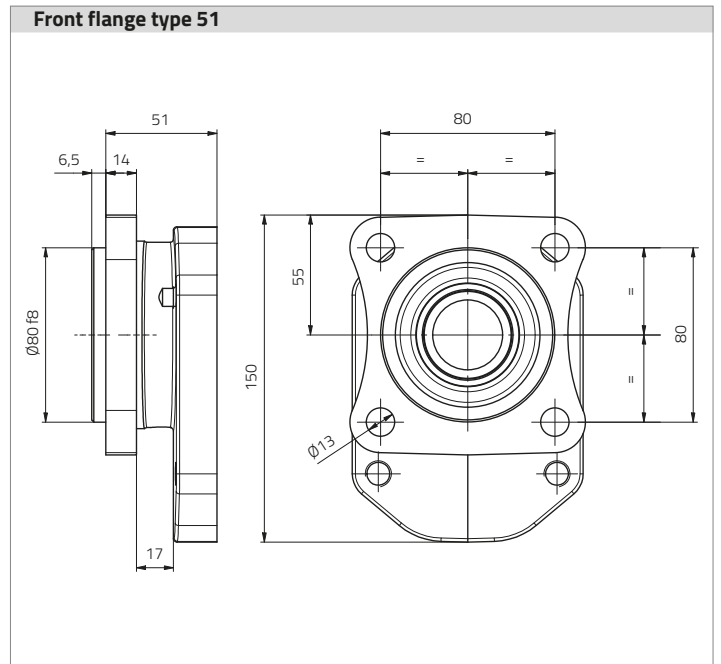
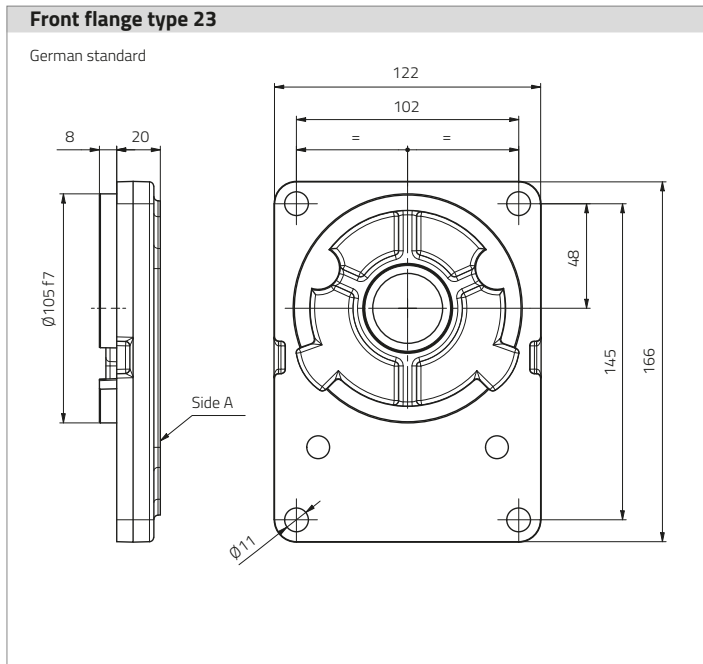
Front flanges

Please contact our Sales Department for other combinations.

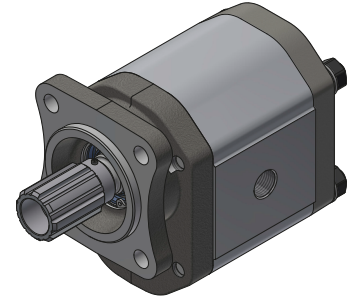
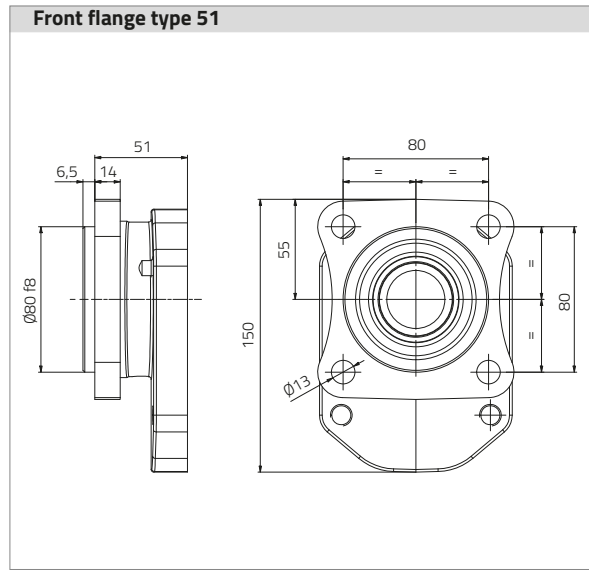
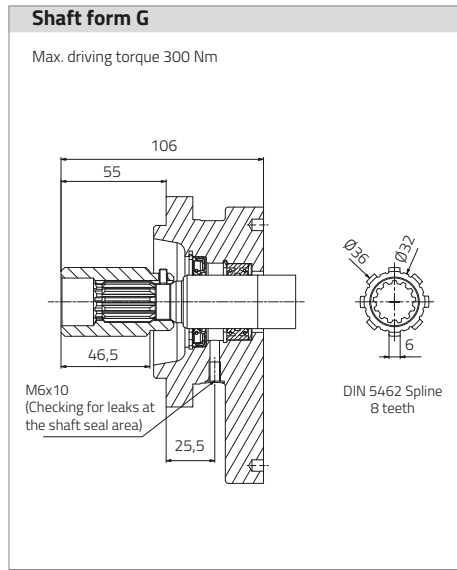


Front flanges

Please contact our Sales Department for other combinations.

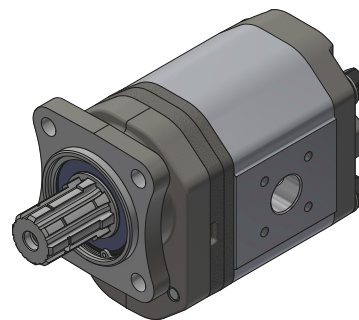
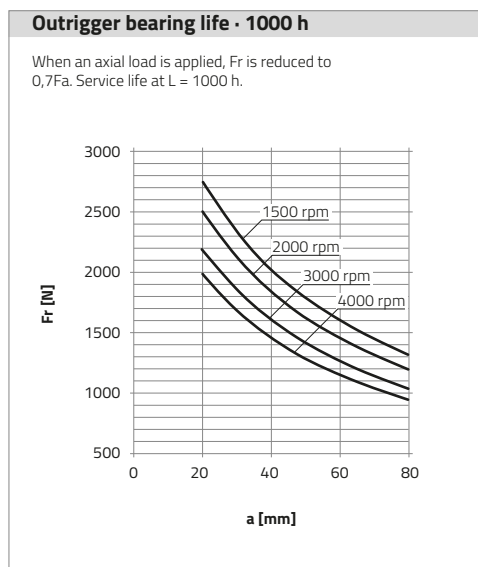
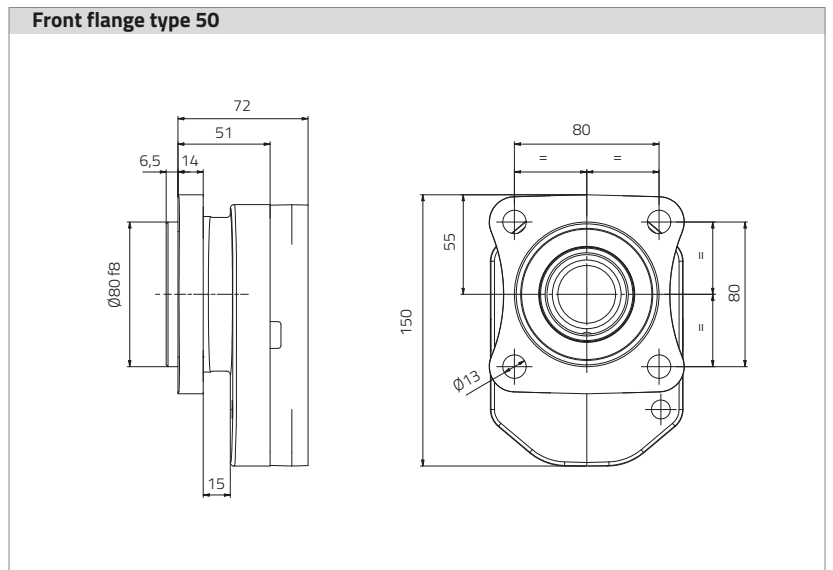
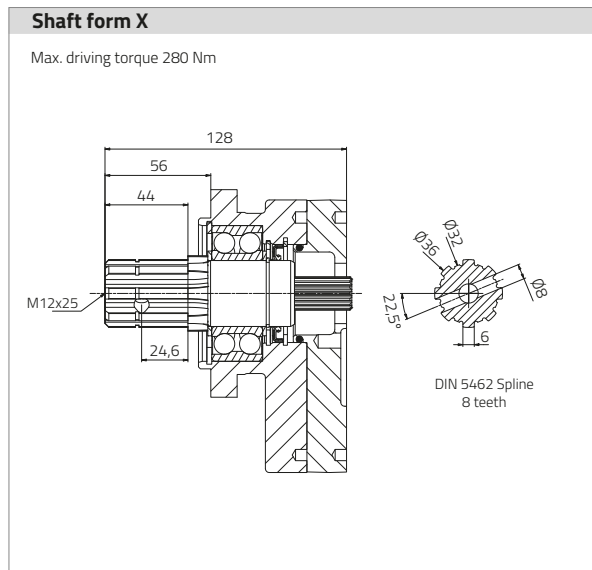


Front flange and shaft with 12GLA configuration



Front flange and shaft with 6GLA configuration

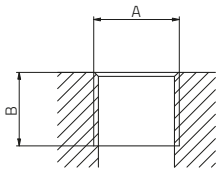
Maximum radial load 275 daN – Maximum axial load 275 daN



NOTE: The length "a" refers to the distance between the mating face and the equivalent force Fr applied.

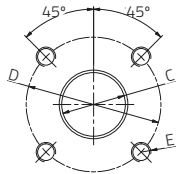
Ports

Side ports



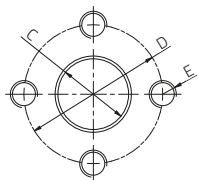
R Ports	1 rotation direction				Reversible	
	Suction		Pressure			
	A	B	A	B	A	B
Displacement [cm ³ /rev]						
18 ... 36	3/4" BSP	18	1/2" BSP	16	3/4" BSP	18
44 ... 56	1" BSP	18,5	3/4" BSP	18	1" BSP	18,5

Dimensions according to ISO 1179-1



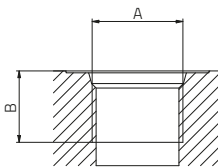
F Ports	1 rotation direction						Reversible		
	Suction			Pressure					
	C	D	E	C	D	E	C	D	E
Displacement [cm ³ /rev]									
18 ... 56	26	55	M8	19	55	M8	26	55	M8

Flanged ports - German standard



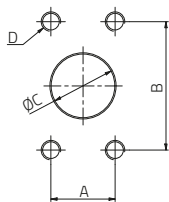
B Ports	1 rotation direction						Reversible		
	Suction			Pressure					
	C	D	E	C	D	E	C	D	E
Displacement [cm ³ /rev]									
18	19	40	M8	19	40	M8	19	40	M8
24 ... 56	26	51	M10	19	40	M8	26	51	M10

Flanged ports - European standard



S Ports	1 rotation direction				Reversible	
	Suction		Pressure			
	A	B	A	B	A	B
Displacement [cm ³ /rev]						
18 ... 44	1 5/8"-12 UN	19	1 5/16"-12 UN	19	1 5/16"-12 UN	19
50 ... 56	1 7/8"-12 UN	19	1 5/8"-12 UN	19	1 5/8"-12 UN	19

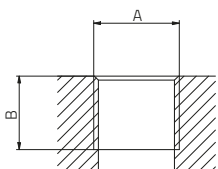
Dimensions according to ISO 11926-1



M Ports	1 rotation direction								Reversible			
	Suction				Pressure							
	A	B	C	D	A	B	C	D	A	B	C	D
Displacement [cm ³ /rev]												
18 ... 30	30,2	58,7	32	M10	22,2	47,6	19	M10	26,2	52,4	26	M10
36 ... 56					26,2	52,4	26	M10				

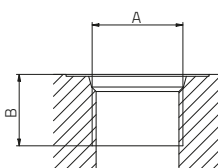
J518 SAE Standard

Rear ports



T Ports	1 rotation direction + Reversible				Drain	
	Suction		Pressure			
	A	B	A	B	A	B
Displacement [cm ³ /rev]						
18 ... 56	3/4" BSP	18	3/4" BSP	18	3/8" BSP	14

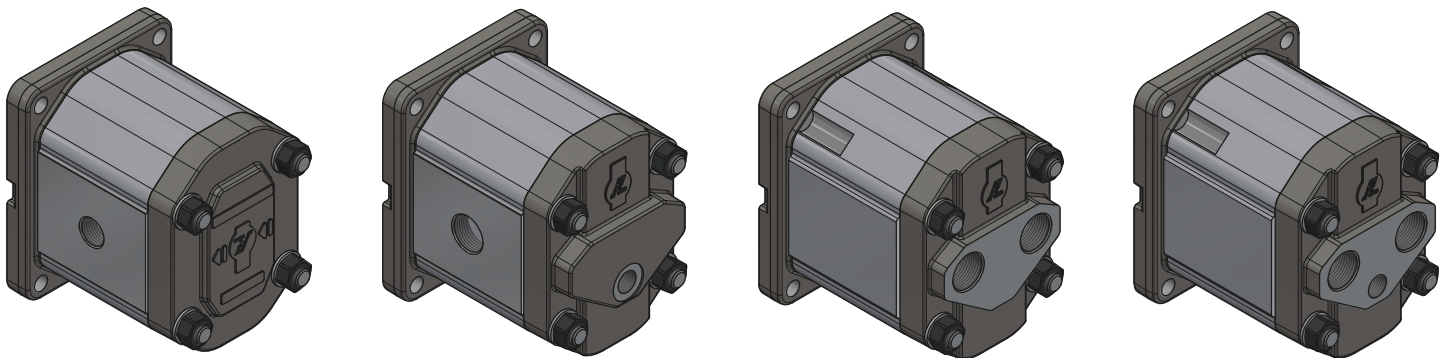
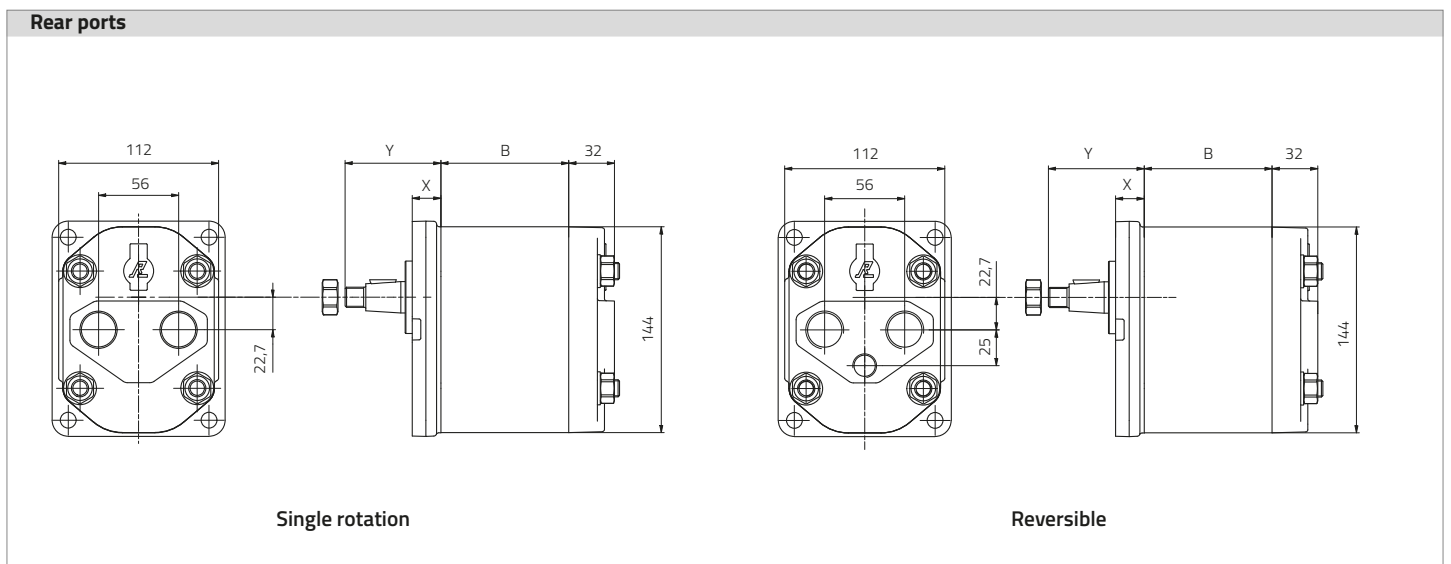
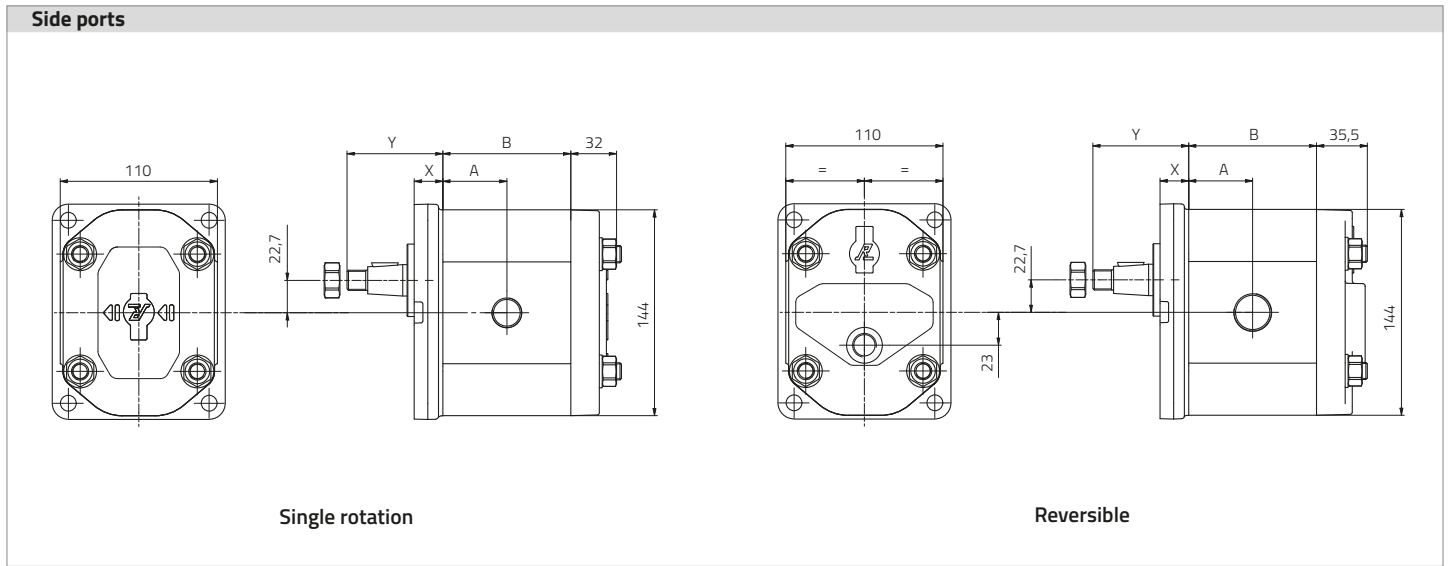
Dimensions according to ISO 1179-1



U Ports	1 rotation direction				Reversible		Drain	
	Suction		Pressure					
	A	B	A	B	A	B	A	B
Displacement [cm ³ /rev]								
18 ... 56	1 5/16"-12 UN	19	1 1/16"-12 UN	19	1 1/16"-12 UN	19	9/16"-18 UNF	14

Dimensions according to ISO 11926-1

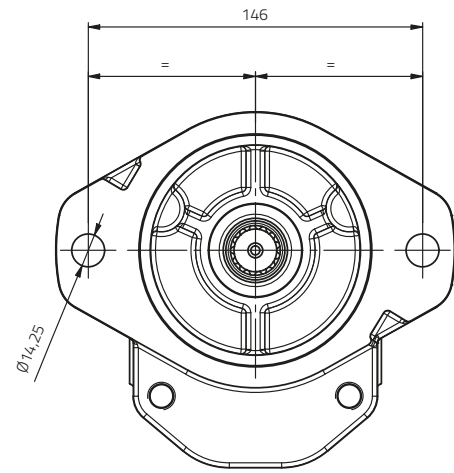
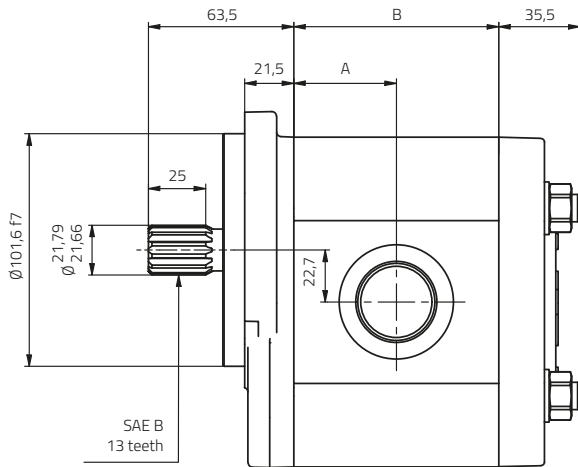
Single pumps and motors (GLA)



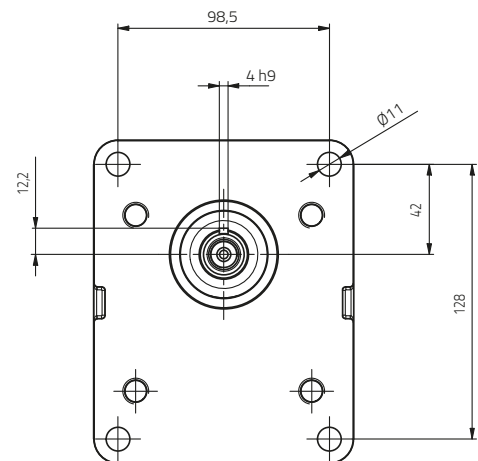
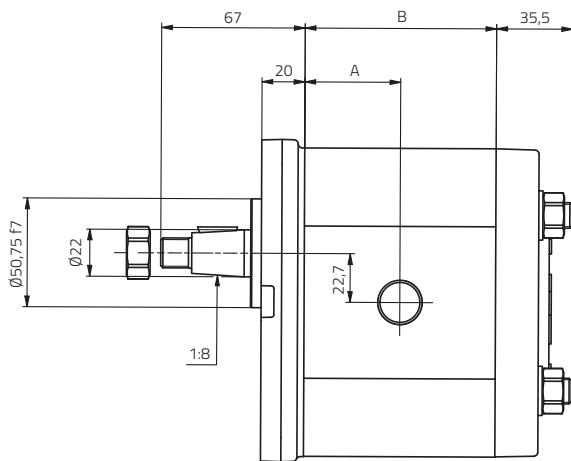
NOTE: Please check the general dimensions in the "dimensions" section (on page 22).

Configuration and dimensions examples

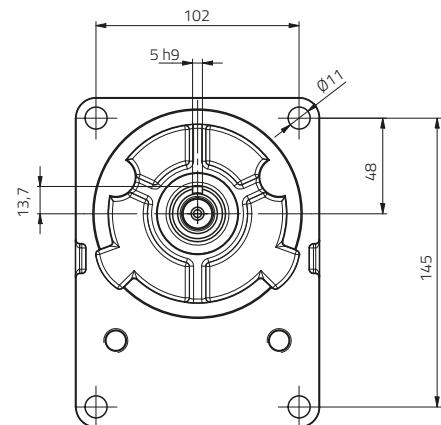
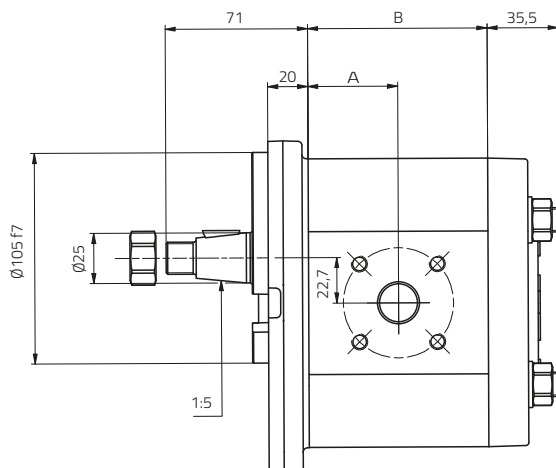
1GLA@CDG09S



1GLA@CDE10R



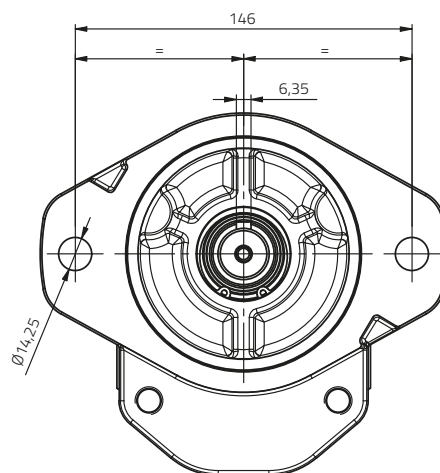
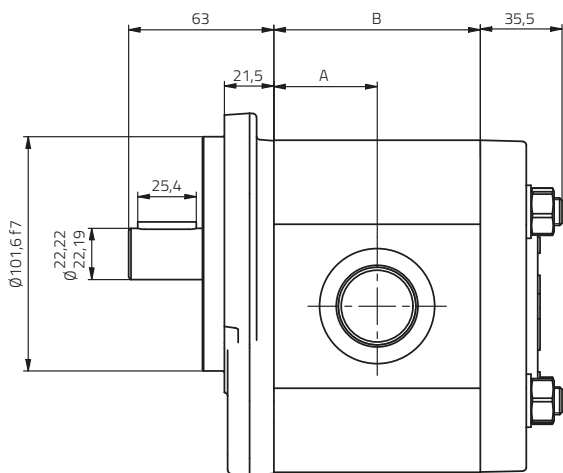
1GLA@CDJ23F



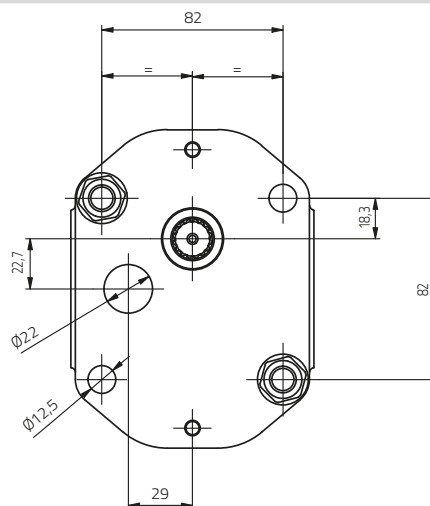
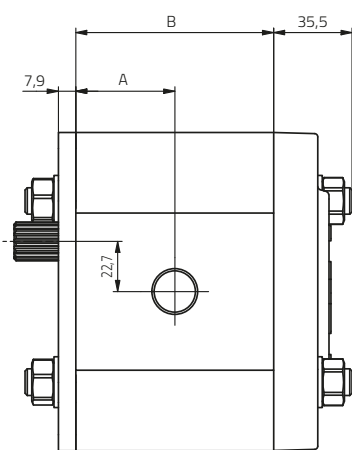
NOTE: Please check the general dimensions in the "dimensions" section (on page 22).

Configuration and dimensions examples

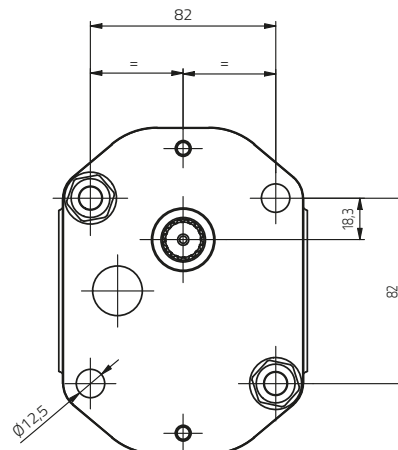
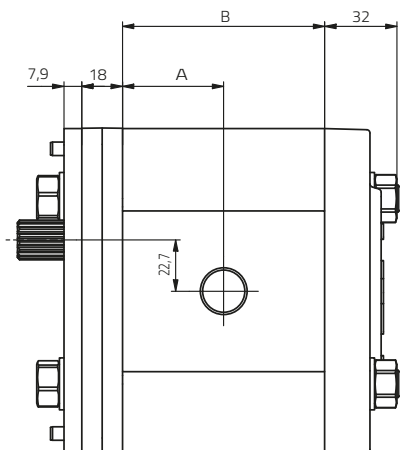
1GLA@CDH09S



1GLA@CDZ00R

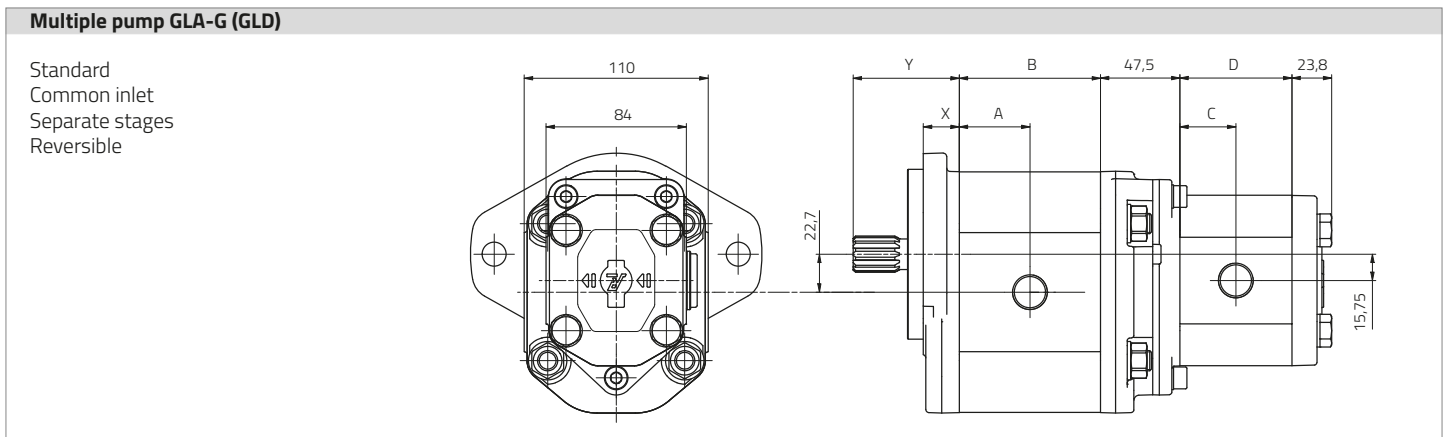
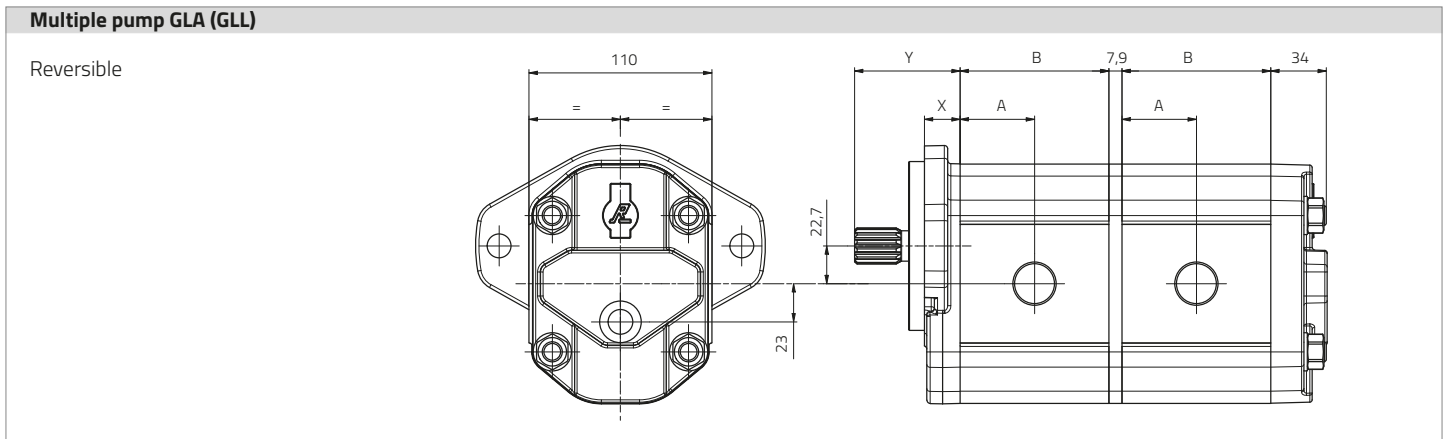
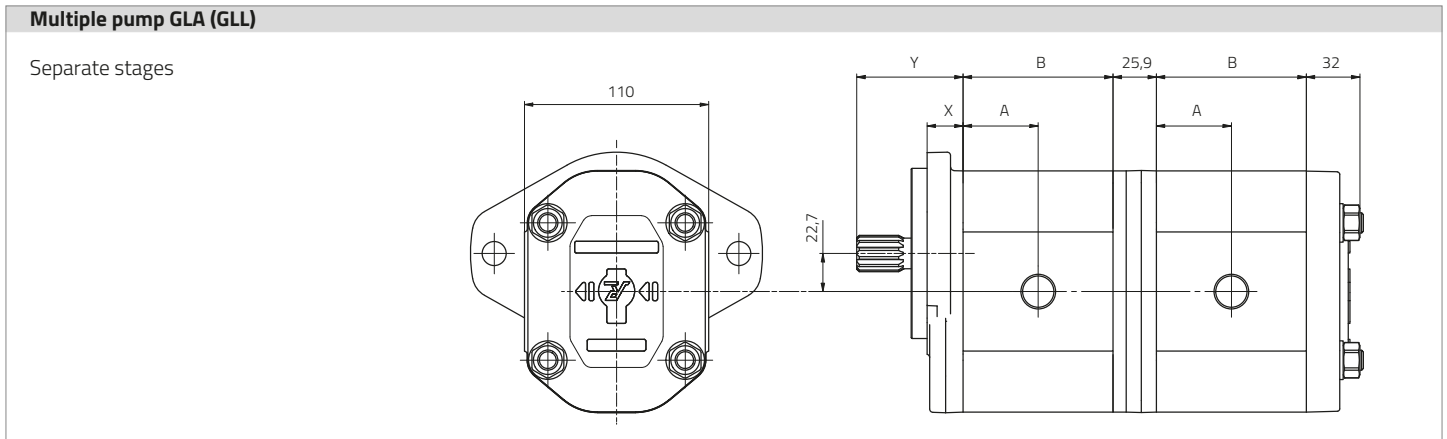
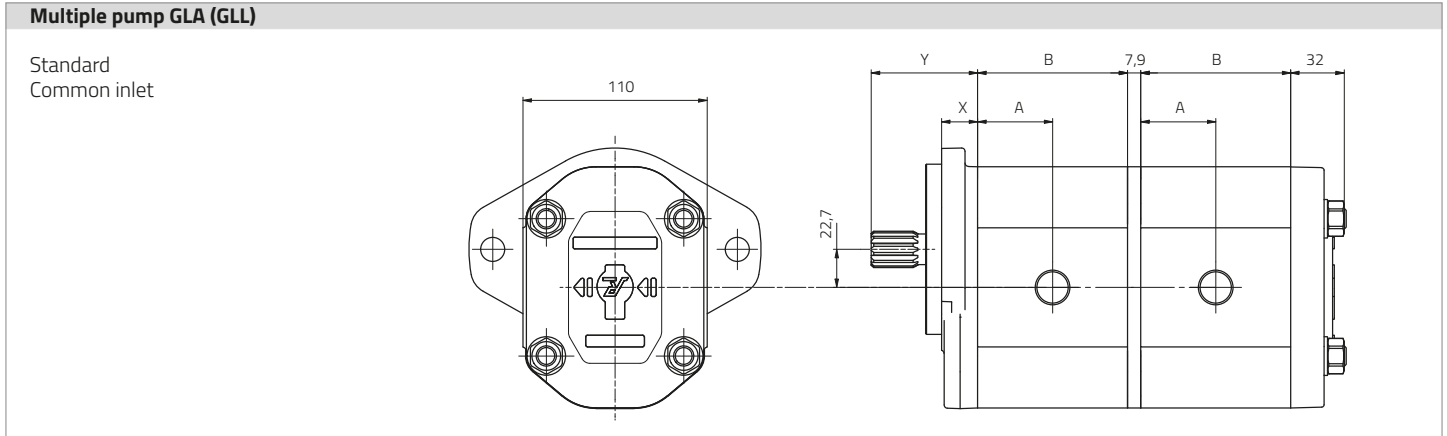


1GLA@CDQ00R



NOTE: Please check the general dimensions in the "dimensions" section (on page 22).

Multiple pumps



NOTE: Please check the general dimensions in the "dimensions" section (on page 22).

Overall dimensions (GLA)

Displacement [cm ³ /rev]	A	B	Weight (Kg)	Weight (Kg)	Weight (Kg)	Weight (Kg)	Front flange type	X [mm]	Shaft form	Y [mm]
			Ex. 1GLA@C@E10@	Ex. 1GLAN@C@E10@	Ex. 1GLA@C@Z00@	Ex. 1GLAN@C@Z00@				
18	37,3	74,5	7,5	10,2	5,7	8,5	01	20	A	69
24	39,8	79,5	7,7	10,6	6,0	8,9	09	21,5	B	39
30	42,3	84,5	8,0	11,0	6,2	9,3	10	20	C	69
36	44,8	89,5	8,2	11,5	6,4	9,6	19	21	D	78
44	48,0	96,0	8,5	12,0	6,7	10,2	23	20	E	67
50	50,3	100,5	8,7	12,3	6,9	10,6	50	51	F	67,5
56	52,8	105,5	8,9	12,8	7,2	11,0	90	47,3	G	63,5
									H	63
									I	82
									J	71
									Q	17,5
									T	85,3
									W	18
									Z	1

General dimensions (G) for multiple pumps GLD

Displacement [cm ³ /rev]	C	D	Weight (Kg)	Weight (Kg)
			Ex. 1G@C@Q40@	Ex. 1GN@C@Q40@
4	23,4	46,8	2,9	3,8
6	25,2	50,3	3	4
8	26,8	53,5	3,1	4,2
10,7	29	58	3,2	4,4
12	30,3	60,5	3,3	4,5
14,7	32,4	64,8	3,4	4,7
16	33,5	67	3,5	4,8
18	35,3	70,5	3,6	5
20,7	37,5	75	3,7	5,2
23,3	39,8	79,5	3,8	5,4
26,7	41,8	83,5	3,9	5,6

Features

Roquet gear motors offer:

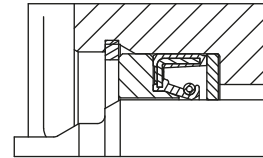
- High efficiency due to specialized production processes.
- Axial compensation through floating bearings.
- High quality bushings for gear motors.
- Aluminium or cast iron body.
- Front flange and back cover made of cast iron.
- NBR seals in the standard version.
- FKM seals available for high temperature applications.
- 100% of motors delivered are tested.
- Back covers with integrated valves for motors.

Technical information

Displacement range	18 – 56 cm ³ /rev
Shafts, flanges and ports	According to European, German and American standards
Direction of rotation	Clockwise, counterclockwise and reversible
Fluid	Recommended Mineral oil - ISO 6743 type HM, HV or HG
Viscosity	Recommended viscosity at work 20-80 cSt (mm ² /s) Maximum viscosity allowed at start 800 cSt (mm ² /s)
Oil working temperature	Recommended temperature 50°C – Material NBR (-30/+80°C) FKM (-20/+110°C)
Cleanliness	ISO 4406 22/19/16

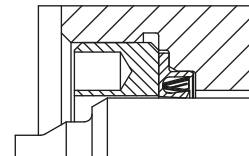
Standard motor shaft seal

Maximum drain line pressure - 5 bar (72 psi)
(Maximum pressure value at minimum R.P.M.)



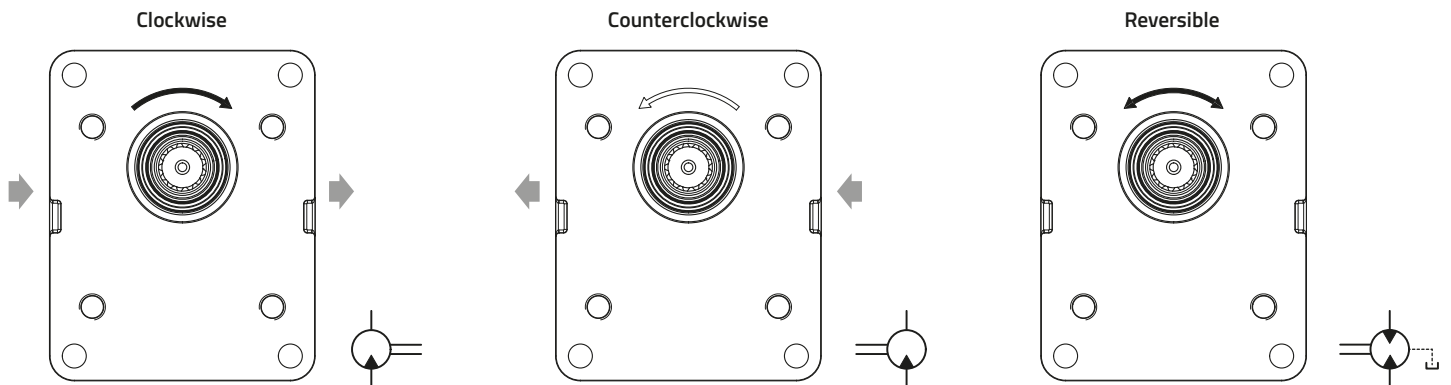
Peak pressure motor shaft seal (- LP)

Maximum drain line pressure - 20 bar (290 psi)
(Maximum pressure value at minimum R.P.M.)



Direction of rotation

The direction of rotation is always defined looking at the motor from the front flange.



Common formulas

$$v = \frac{Q}{6 \cdot A} \quad [\text{m/s}]$$

$$n = \frac{Q \cdot 1000 \cdot \eta_{\text{vol}}}{V} \quad [\text{min}^{-1}]$$

$$M = \frac{V \cdot \Delta p \cdot \eta_{\text{hm}}}{62,8} \quad [\text{N} \cdot \text{m}]$$

$$P = \frac{Q \cdot \Delta p \cdot \eta_t}{600} \quad [\text{kW}]$$

v = fluid speed [m/s]

Q = motor flow [l/min]

A = tube section [cm²]

V = motor displacement [cm³/rev]

n = rotation speed [rev/min]

Δp = pressure difference [bar]

M = Motor torque [N · m]

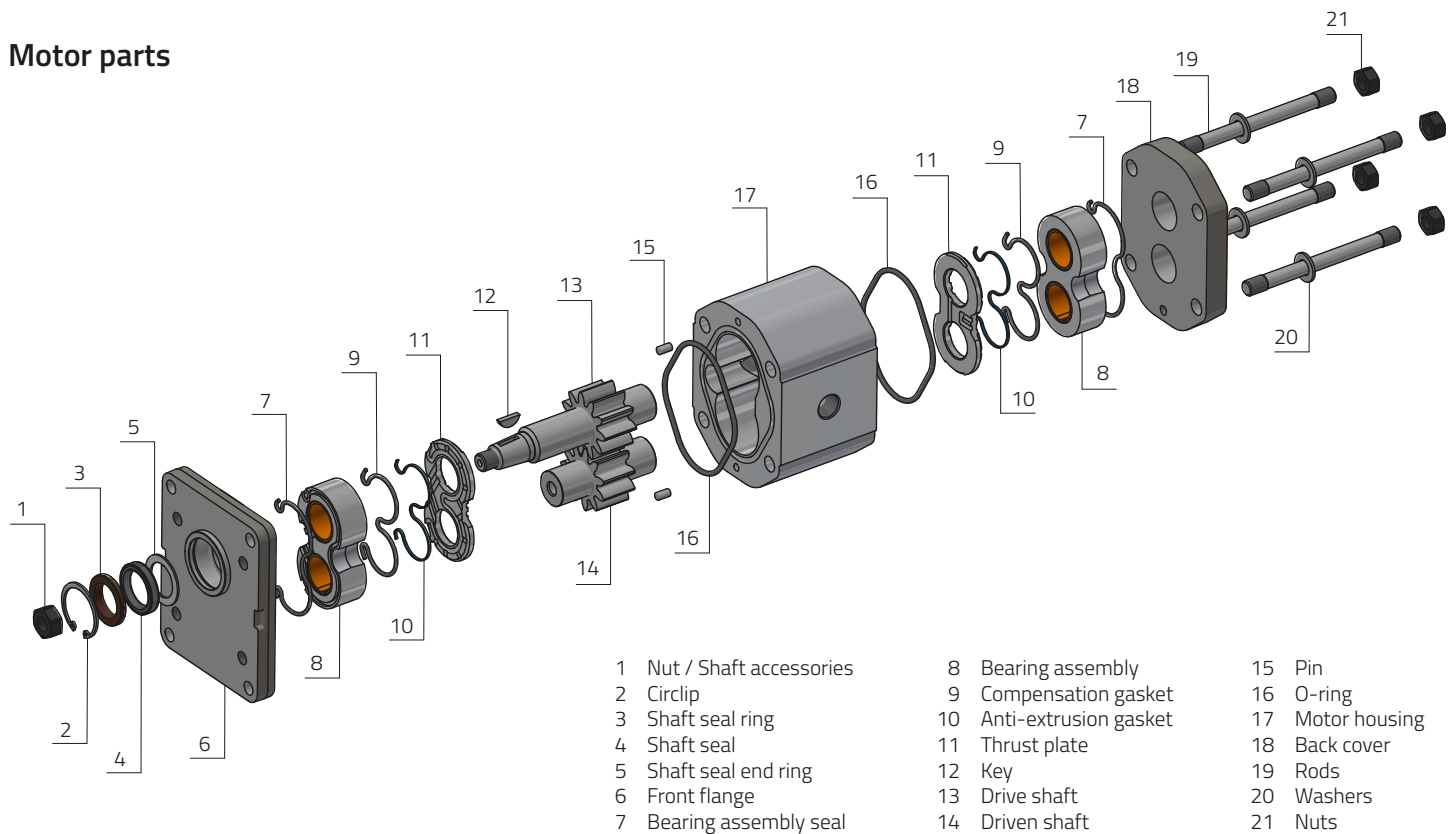
P = power supplied by the motor [kW]

η_{vol} = volumetric efficiency ($\approx 0,95$) [%]

η_{hm} = hydromechanical efficiency ($\approx 0,85$) [%]

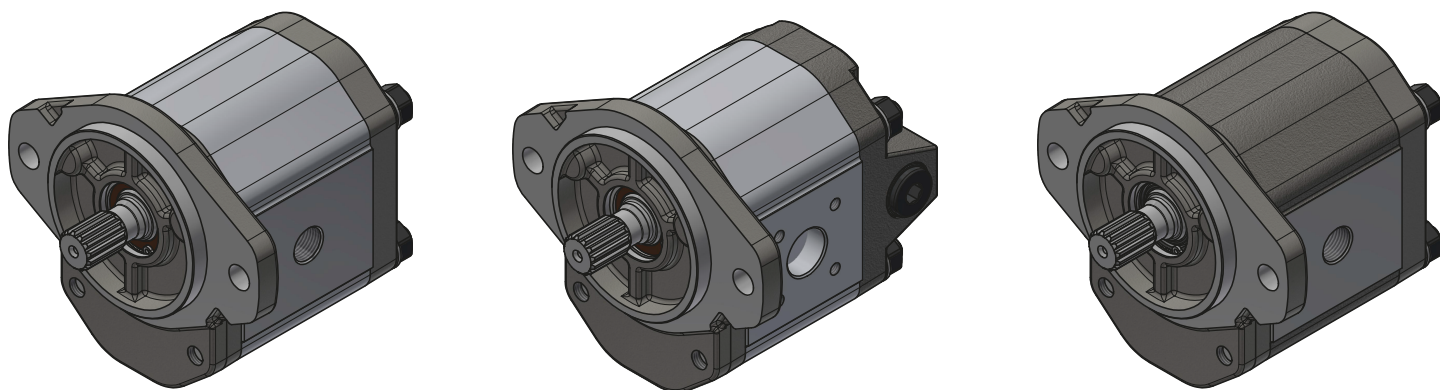
η_t = total efficiency ($\approx 0,82$) [%]

Motor parts



Installation recommendations

- Avoid radial and axial forces on the motor shaft for a longer pump lifetime.
- The shafts of the motor have to be well aligned to avoid these forces.
- Elastic couplings are highly recommended.
- Avoid rotational speeds lower than those shown in the "technical data" section.
- Avoid motor start with load at low temperatures.
- When starting, clean the whole installation before first run of the system.
- If the motor shall be painted, protect the seal area and the drive shaft to avoid possible oil leaks.
- In reversible motors, if possible, connect the drain to tank.



MGLA motor technical data (Aluminium body)

Displacement	cm ³ /v-cc/rev (in ³ /rev)	18 (1,10)	24 (1,46)	30 (1,83)	36 (2,20)	44 (2,69)	50 (3,05)	56 (3,42)
Cont. max. pressure	bar (PSI)	250			225	200	185	175
Intermittent max. pressure	bar (PSI)	275			250	225	210	200
Maximum peak pressure	bar (PSI)	285			260	235	220	210
R.P.M. at cont. pressure		2500			2300		2200	
Max. R.P.M		3000			2800		2600	
Min. R.P.M. at given pressures	100 bar (1450 PSI)				500			
	175 bar (2540 PSI)	800			700		600	
	250 bar (3625 PSI)	1500			900	-	-	

Note: Pressures obtained with flanged bodies.

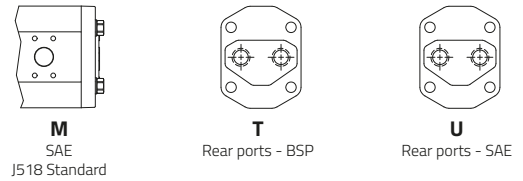
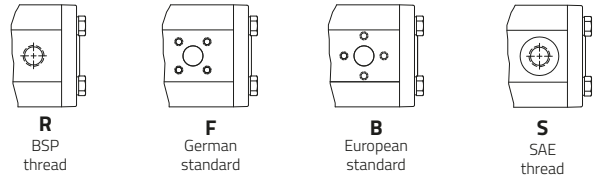
MGLAN motor technical data (Cast iron body)

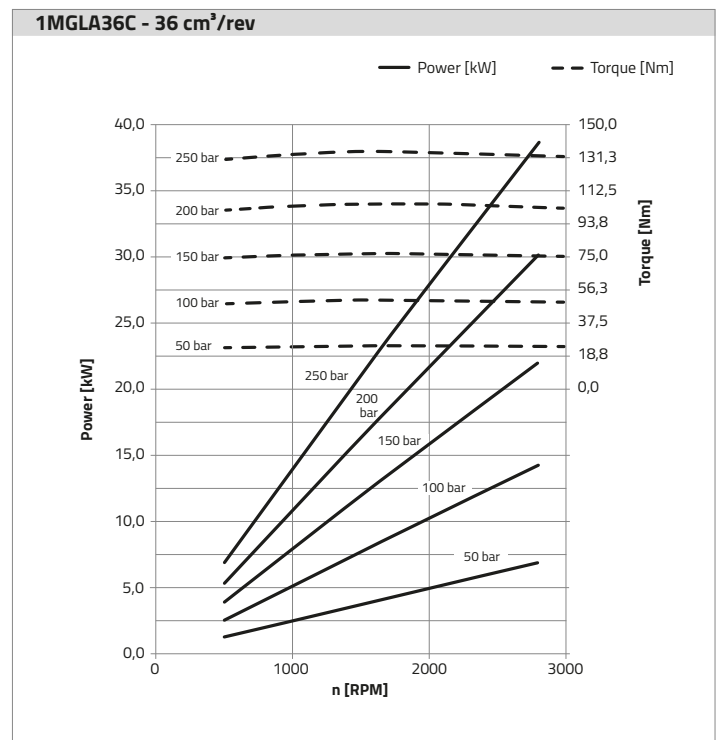
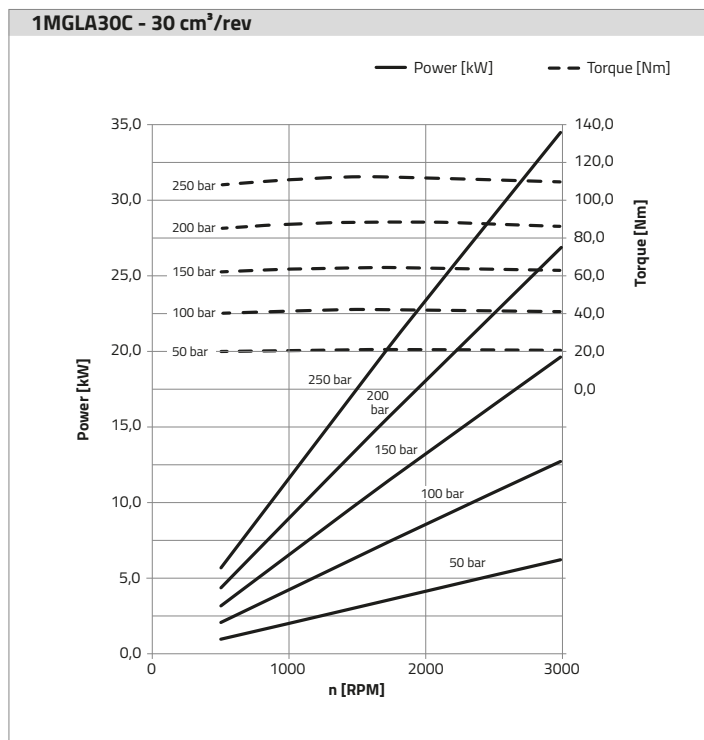
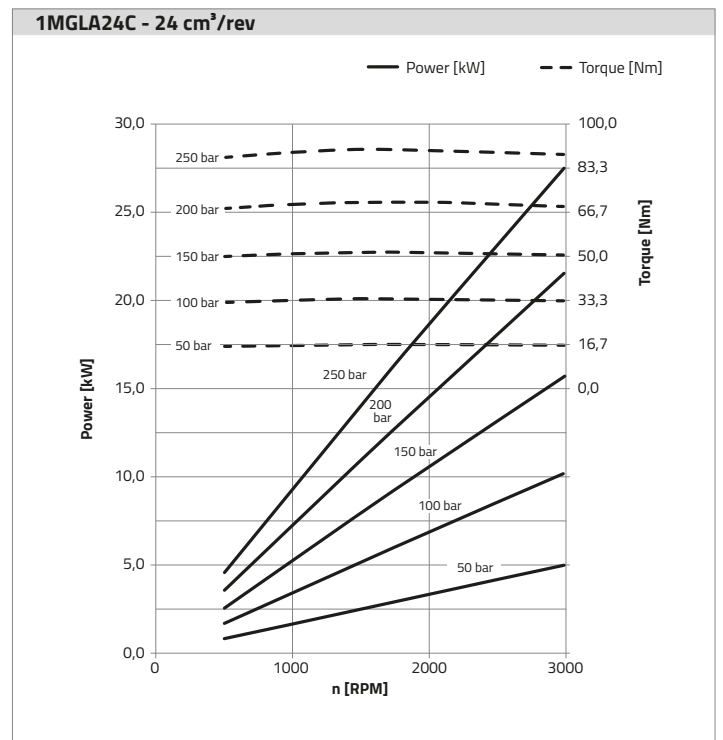
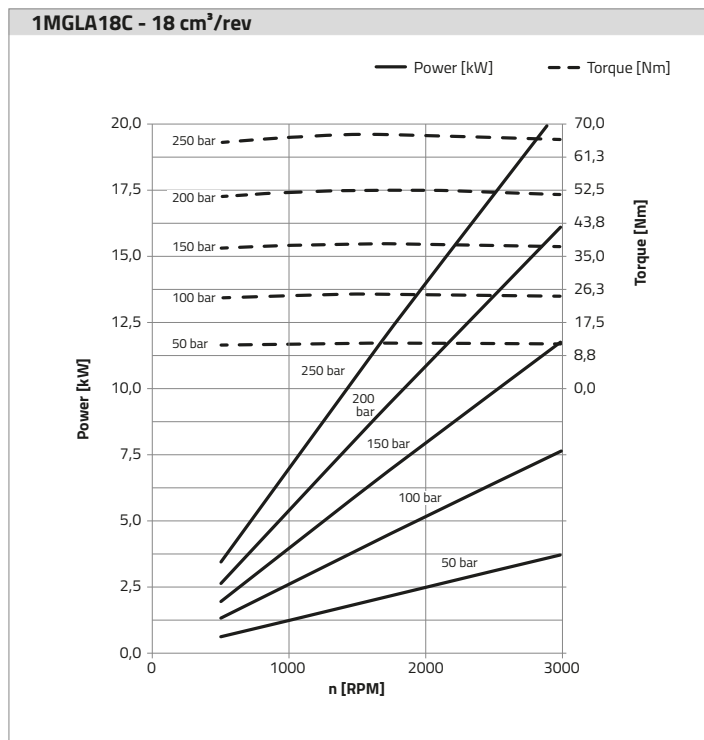
Displacement	cm ³ /v-cc/rev (in ³ /rev)	18 (1,10)	24 (1,46)	30 (1,83)	36 (2,20)	44 (2,69)	50 (3,05)	56 (3,42)
Cont. max. pressure	bar (PSI)	300			275	250	230	215
Intermittent max. pressure	bar (PSI)	325			300	275	255	240
Maximum peak pressure	bar (PSI)	335			310	285	265	250
R.P.M. at cont. pressure		2500			2300		2200	
Max. R.P.M		3000			2800		2600	
Min. R.P.M. at given pressures	100 bar (1450 PSI)				500			
	175 bar (2540 PSI)	800			700		600	
	250 bar (3625 PSI)	1500			900	-	-	

Note: For all reversible motors (MGLA and MGLAN), maximum pressure is 250 bar (3600 psi), except for those values where the pressure is lower.

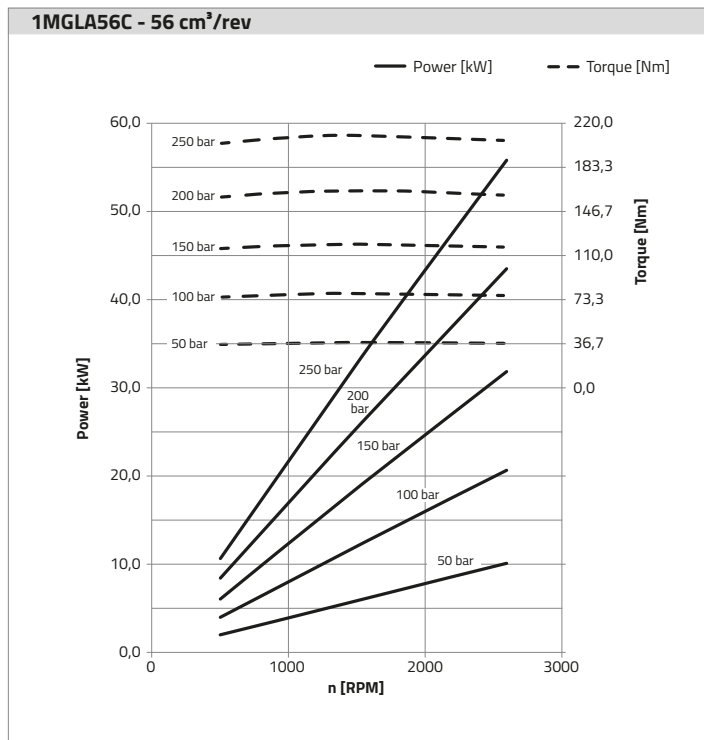
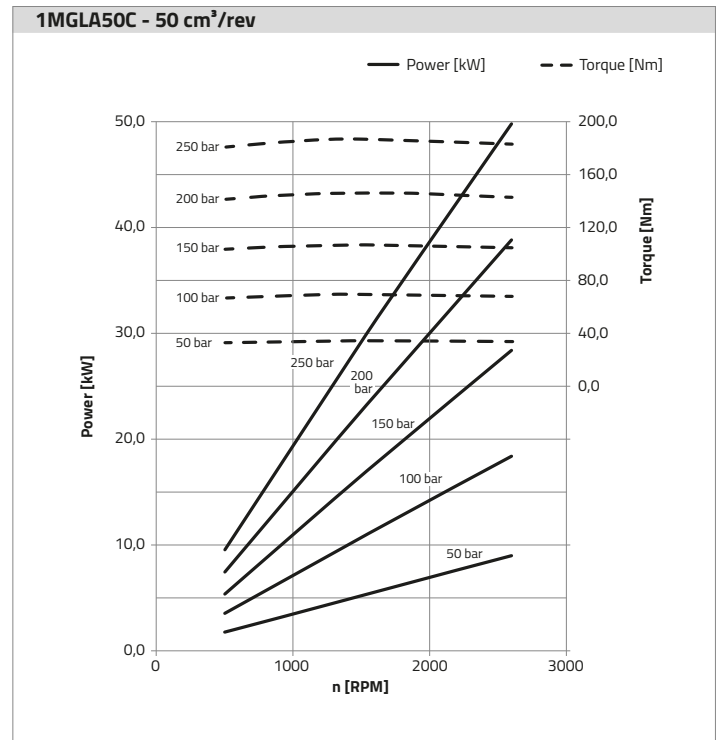
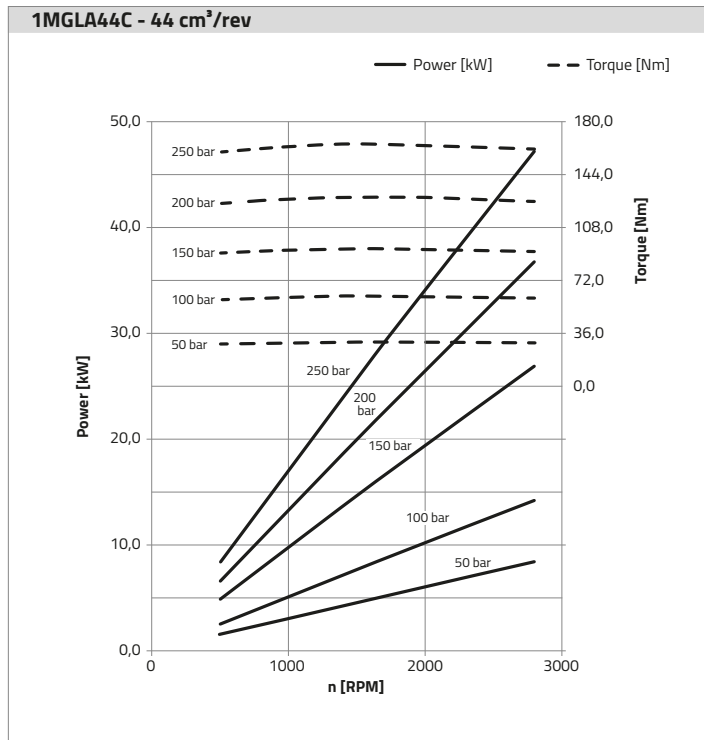
Note: The definition of the pressure ranges is shown on page 7.

Coding system										Optional			
1	MGLA	36C	D	E	10	R	/	V	42	T***	-***		
Type										Code			
1	Without pulley									V	FKM seals and shafts seals (Viton)		
2	With pulley									RV	Only FKM shaft seal (Viton)		
6	Motor with DIN 5462 spline shaft for ZF assembly with bearing assembly and shaft seal									ID	Internal drain		
12	Motor with DIN 5462 spline shaft with double shaft seal and external leak									Alternatives with valves			
Model										VA	Check valve		
MGLA	Single – Aluminium body									V@	Relief valve		
MGLAN	Single – Cast iron body									Port Connection Forms			
Motor displacement [cm³/rev] & [in³/rev]													
18C	18,0	1,10											
24C	27,0	1,65											
30C	30,0	1,83											
36C	36,0	2,20											
44C	44,0	2,69											
50C	50,0	3,05											
56C	56,0	3,42											
Rotation direction													
D	Clockwise												
I	Counterclockwise												
R	Reversible												
Drive Shaft Form													
C	Ø24 straight												
D	DIN 5463 - 6 teeth												
E	European tapered 1:8												
G	SAE B - 13 teeth												
H	SAE B - Ø22,22 straight												
J	German tapered 1:5												
W	Ø27 tang												
X	DIN 5462 - 8 teeth												
Front Flange													
09	SAE B - 2 bolts												
10	European standard												
19	2 bolts (without shaft seal)												
23	German standard												
90	SAE A - 2 bolts												





NOTE: The values shown in the above diagram have been obtained using 32cSt kinematic viscosity oil.



NOTE: The values shown in the above diagram have been obtained using 32cSt kinematic viscosity oil.

Flow, performance and power chart according to displacement

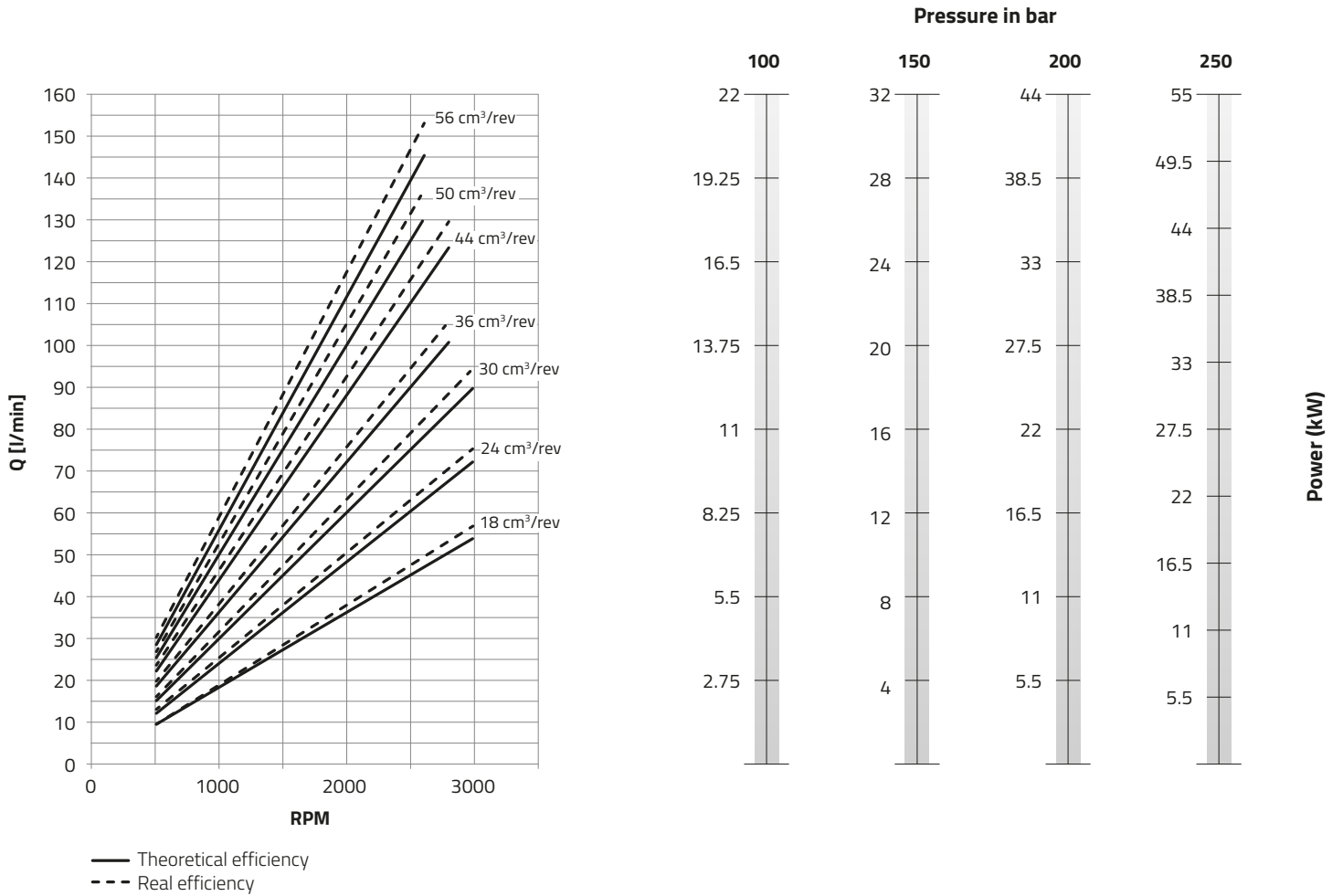
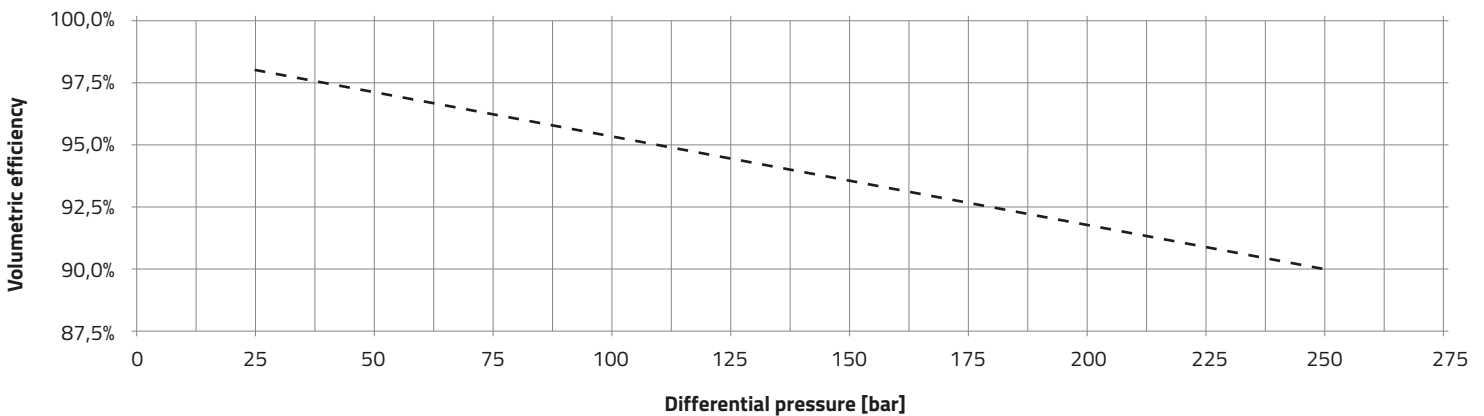


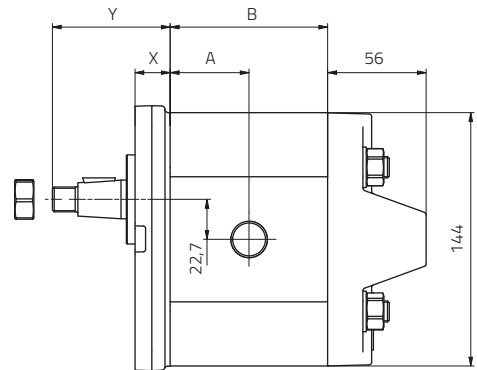
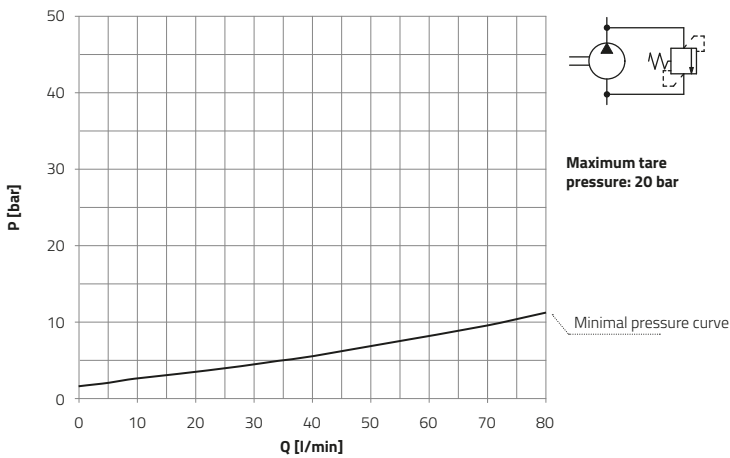
Diagram of the volumetric efficiency at 1500 R.P.M.



NOTE: The values shown in the above diagram have been obtained using 32cSt kinematic viscosity oil.

Low pressure relief valve

Minimum setting pressure diagram

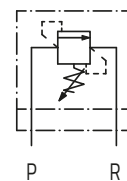
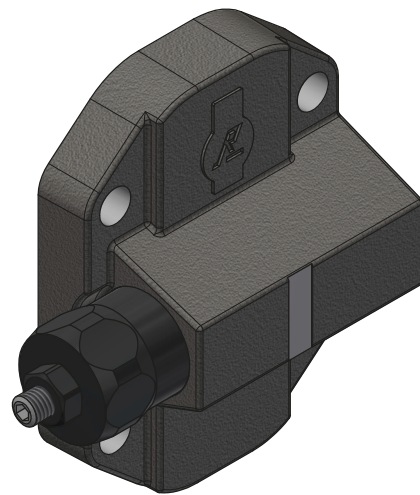


NOTE: The values shown in the above diagram have been obtained using a 32cSt kinematic viscosity oil. Please check the general dimensions in the “dimensions” section (on page 22).

Spare parts kit

Coding system	1	GLA	VBP	-***
Type	1 Type 1			
Model	GLA GLA series			
Function	VBP Low pressure relief valve			
Code				

Reference example: **1GLAVBP**

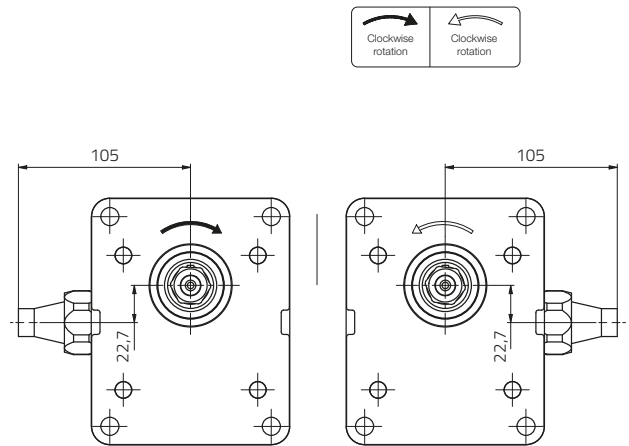
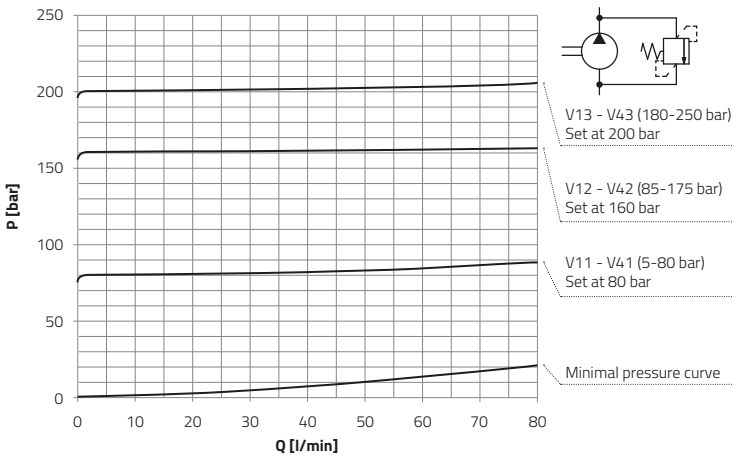


Note:

- The assembly will be delivered with the valve set at 15 bar (45 l/min with VG-22 type oil at 50°C)
- The valve can be regulated between 10 and 20 bar. For settings lower than 10 bar, consult the sales department of Roquet Hydraulics.
- The taper-proof sealing is offered unassembled. Check availability.

Relief valve

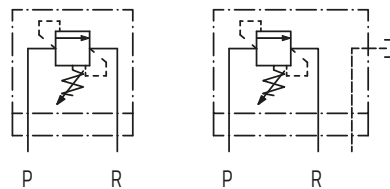
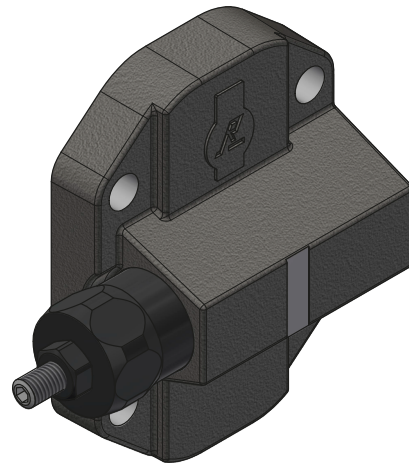
Relief valve pressure-flow diagram depending on pressure range



NOTE: The values shown in the above diagram have been obtained using a 32cSt kinematic viscosity oil. Please check the general dimensions in the “dimensions” section (on page 22).

Spare parts kit

Coding system		1	GLA	V	@	@	-***
Type							
1	Type 1						
Model							
GLA	GLA Series						
Function							
V	Relief valve						
Pressure range							
11	Set at 80 bar (5-80 bar)						
12	Set at 160 bar (85-175)						
13	Set at 200 bar (180-250)						
Drain port							
@	No						
R	Si						
Code							



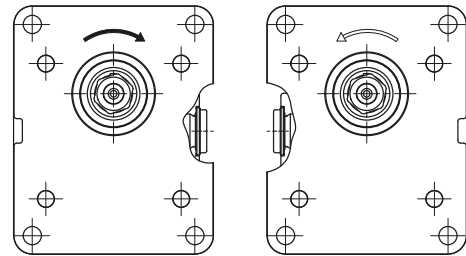
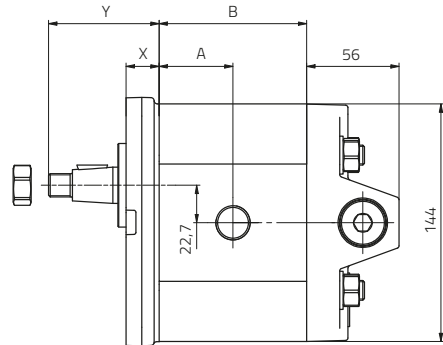
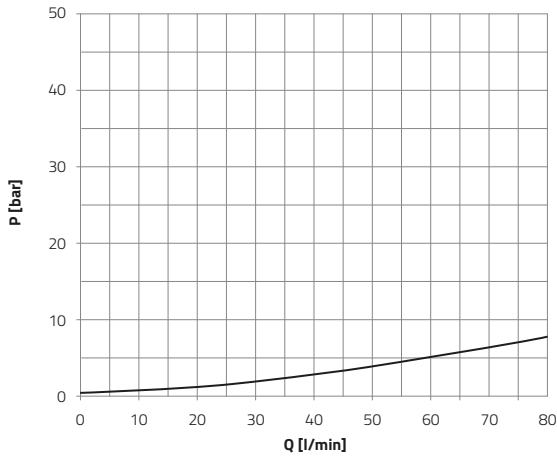
Examples of part number: **1GLAV12, 1GLAV12R**

- Notes:**
- The assembly will be delivered according to the specified setting (45 l/min with VG-22 type oil at 50°C).
 - Tamper-proof sealing is offered unassembled. Check availability.

Check valve



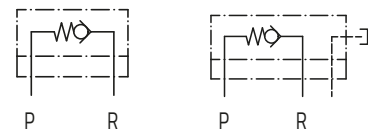
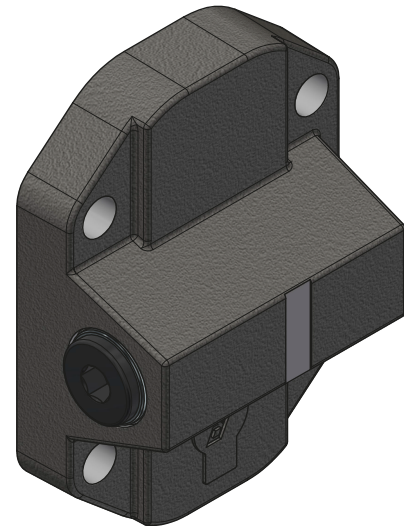
Check valve pressure-flow diagram



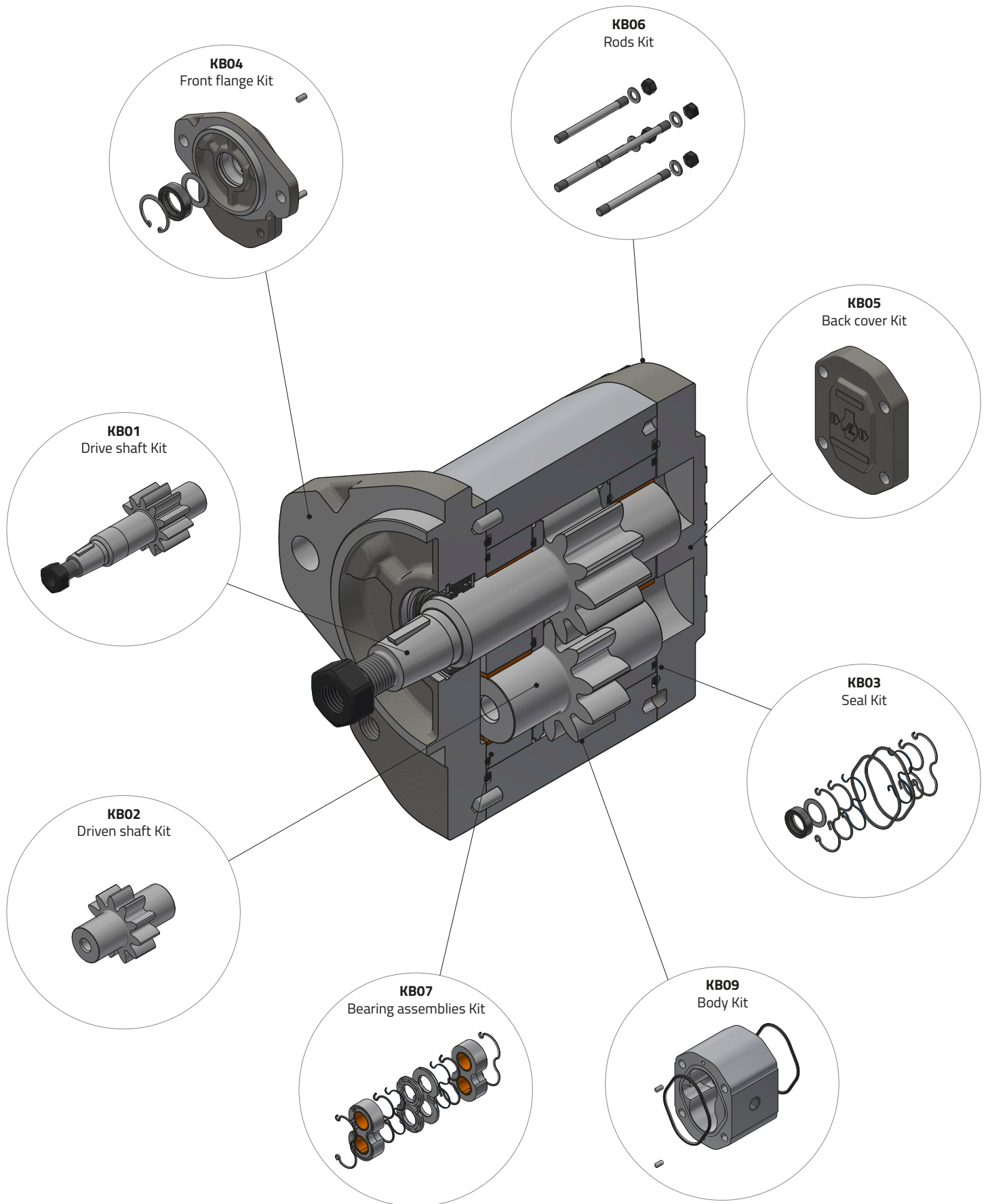
NOTE: The values shown in the above diagram have been obtained using a 32cSt kinematic viscosity oil. Please check the general dimensions in the “dimensions” section (on page 22).

Spare parts kit

Coding system		1	GLA	VA	@	-***
Type						
1	Type 1					
Model						
GLA	GLA Series					
Function						
VA	Suction valve					
Drain port						
@	No					
R	Si					
Code						

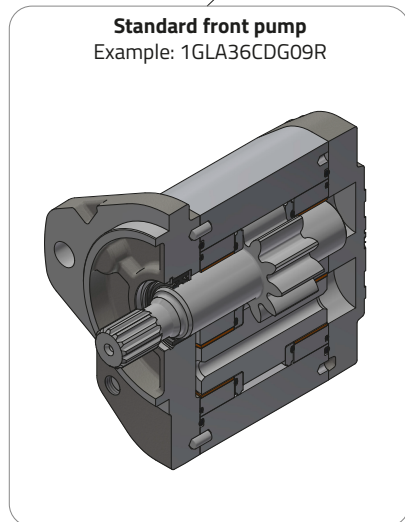
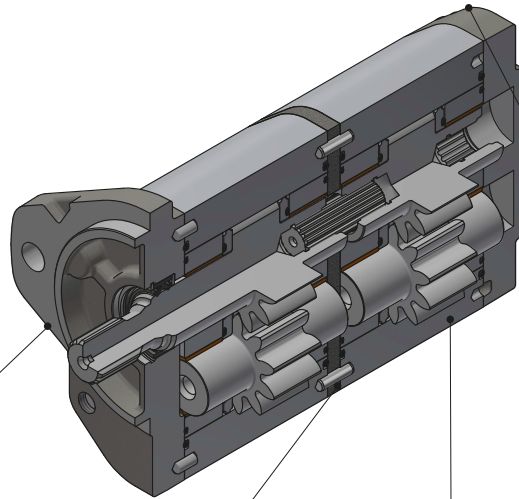


Examples of part number: **1GLAVA, 1GLAVAR**



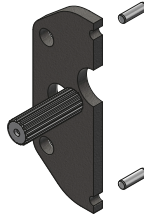
NOTE: For available reference please contact the Sales Department or check the spare parts catalogue.

Connected stages type GLL



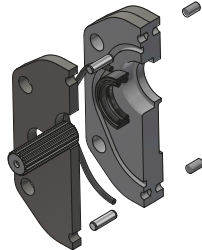
KB08
Intermediate flange kit

Example: KB08GLAGLAS00



Common inlets

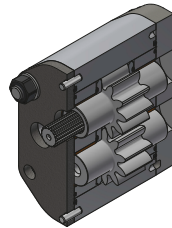
Example: KB08GLAGLAS00-SS



Separate stages

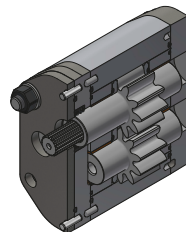
Rear standard and common inlet pump

Example: 1GLA36CDZ00R

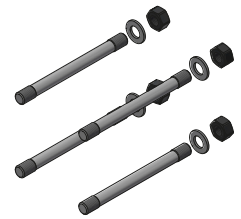


Rear separate stages pump

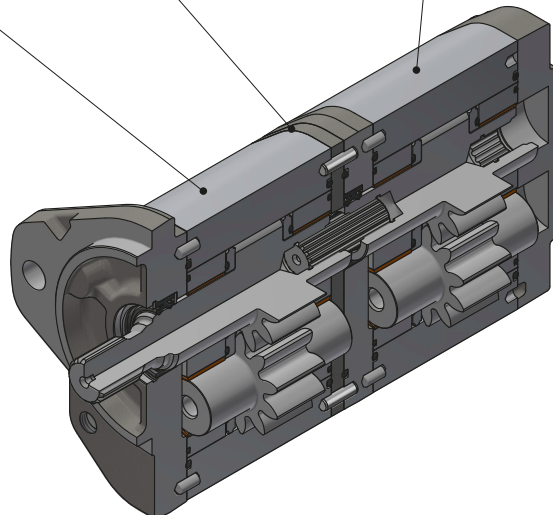
Example: 1GLA36CDQ00R



KB06
Rods Kit

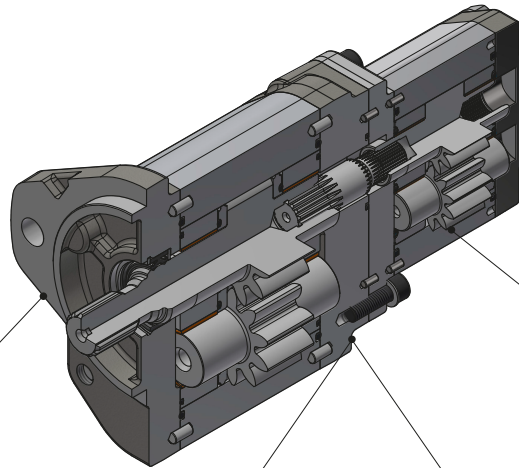


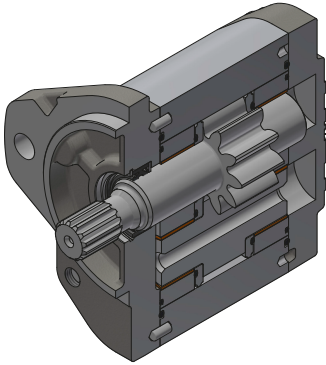
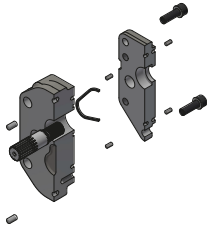
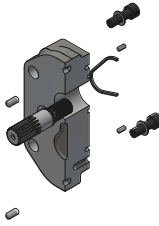
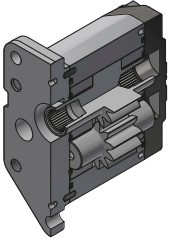
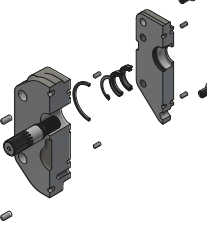
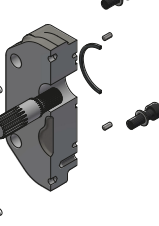
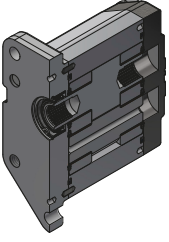
Separate stages type GLL



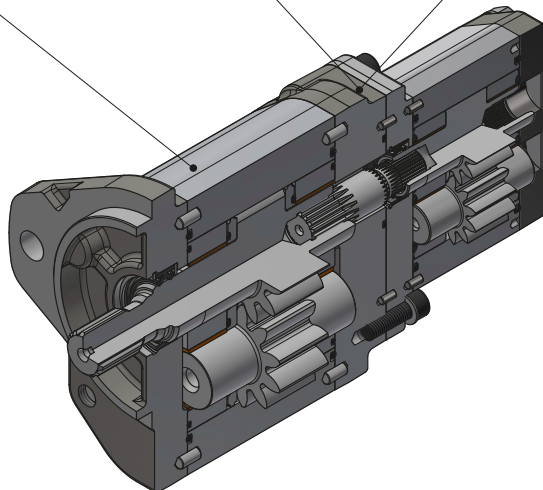
NOTE: A double GLA+GLA pump can be assembled from a pump with standard reference and a pump with Z or Q shaft form for separate stages. The Z or Q kit are offered in order to transform the pump. For available reference contact the Sales Department or check the spare parts catalogue.

Connected stages type GLD



<p>Standard front pump Example: 1GLA36CDG09R</p> 	<p>Common inlet intermediate flange kit Example: KB08GLA00GD00 Example: KB08GLA00GI00</p> 	<p>Common inlet intermediate flange kit Example: KB08GLA00GD00-001 Example: KB08GLA00GI00-001</p> 	<p>Rear standard and common inlet pump Example: 1G15CDQ40R</p> 
	<p>Separate stages intermediate flange kit Example: KB08GLA00GS00-SS</p> 	<p>Separate stages intermediate flange kit Example: KB08GLA00GS00-SS1</p> 	<p>Rear separate stages pump Example: 1G15CDQ40R-SS</p> 

Separate stages type GLD



NOTE: A GLA+G double pump can be assembled from a pump with standard reference and a pump with S shaft. We offer the full intermediate flange kit for standard with the 40 flange from pump G, common inlet or separate stages versions. For available reference contact the Sales Department or check the spare parts catalogue.

Roquet
making moves

EN.02.10.01/05.24

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