



2½" GRNJ Internal Eccentric Gear Pump



Performance:

Flow rate	32 m³/h
Pressure	1 - 14 bar
Temperature	0 - 200 °C
Speed	420 d/d
Viscosity	100 - 250000 SSU

Technical Features:

- ✓ Internal eccentric gear pump
- ✓ 2½" flanged ports
- ✓ Compact design
- ✓ Reliable construction thanks to only two moving parts
- ✓ Various material options
- ✓ Available with external bypass, jacketed and blind cover
- ✓ 230v, three phase 50/60hz motors available
- ✓ Gearbox and belt pulley drive available
- ✓ Manufactured according to CE regulations

Applications:

- ✓ Fuel oil, diesel fuel and gas oil transfer
- ✓ Small scale thermal oil applications including Marlotherm, Duratherm, Paratherm, Multitherm, Mobiltherm and Dowtherm
- ✓ Lubrication applications
- ✓ Coolant transfer
- ✓ Any transfer of low to medium viscosity fluids with lubricating properties
- ✓ Not suitable for fluids containing abrasive particles

Material Options:

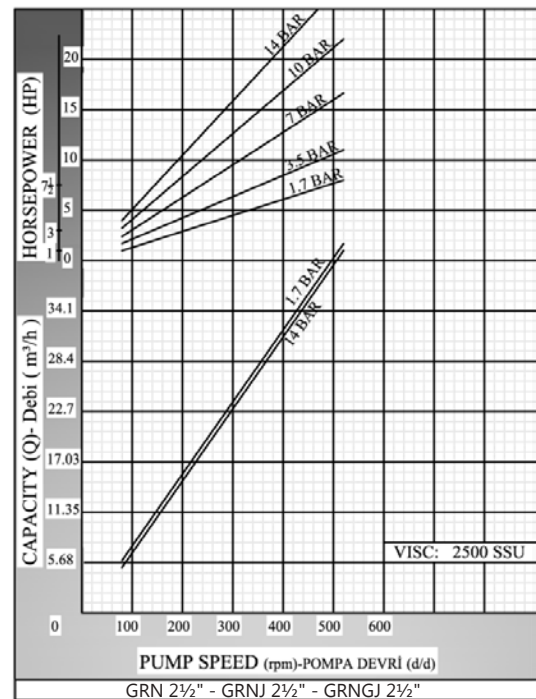
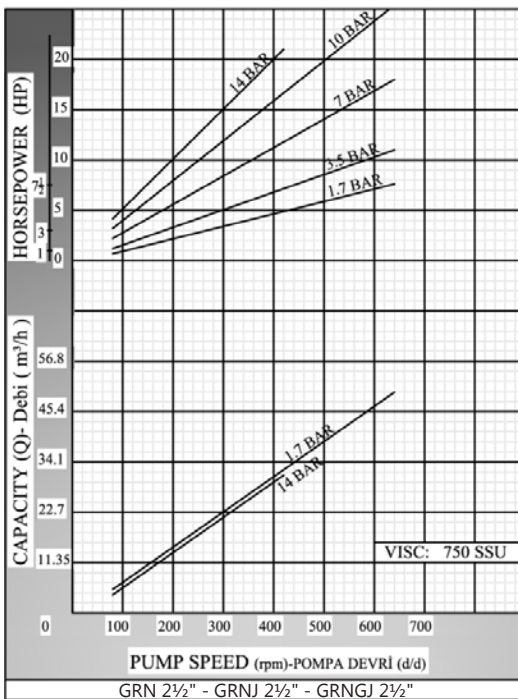
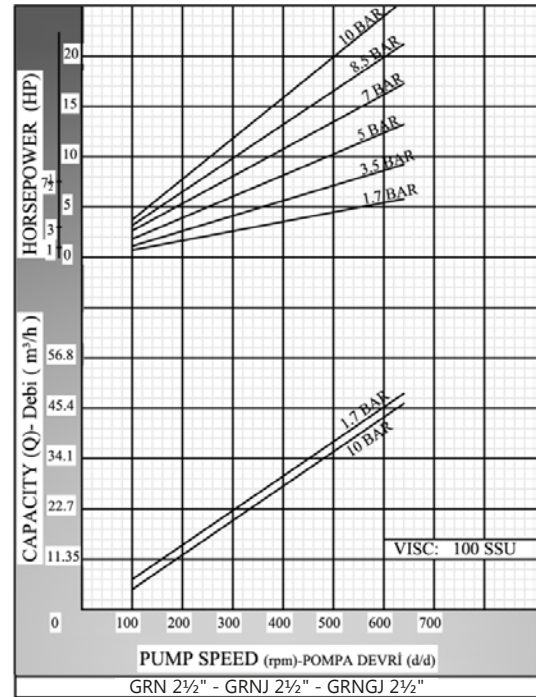
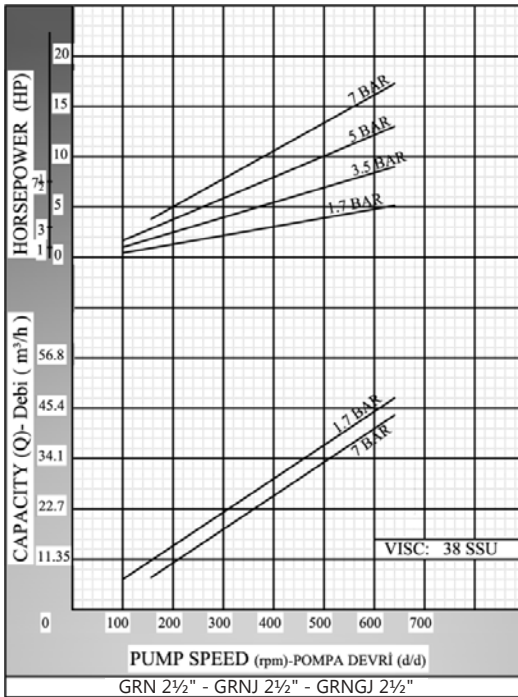
- ✓ Pump body, covers: Pig cast iron, Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
- ✓ Gears: Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
- ✓ Bearings: Snbz 12 bronze, carbon graphite, silicon carbide, hard metal coated steel, bearing
- ✓ Sealing: Soft seal or packing gland, Rotatherm seal, lip seal, mechanical seal, cartridge type mechanical seal

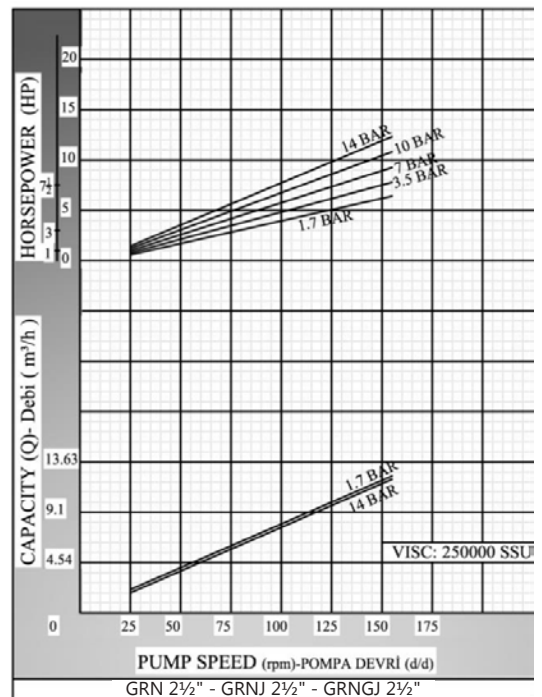
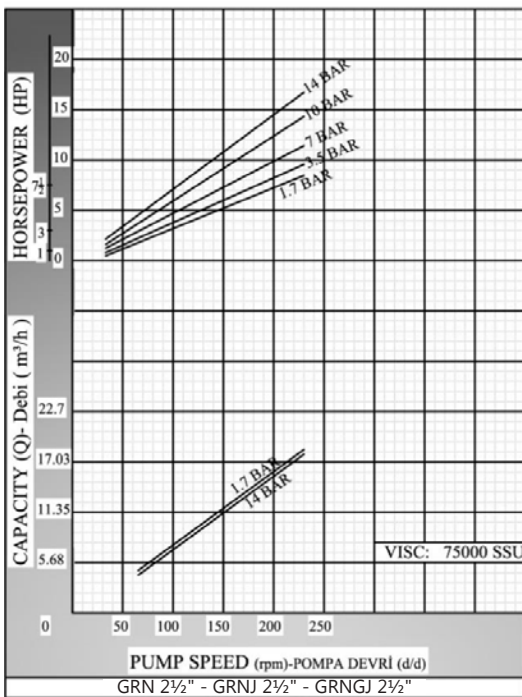
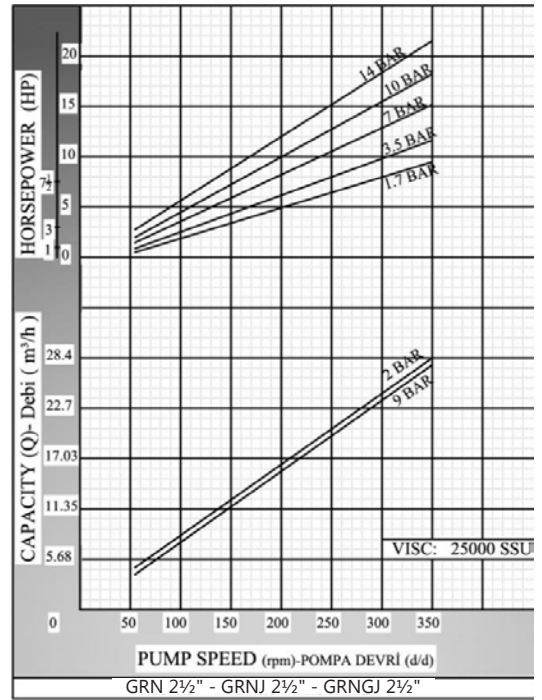
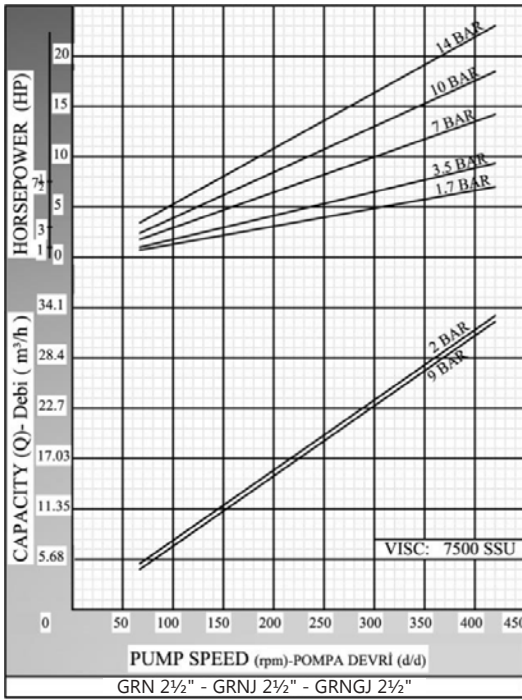
Capacity & Power Table						
Capacity (Q)	Speed (rpm)	Pressure				Viscosity
		2.5 Bar	5 Bar	7.5 Bar	10 Bar	
4	60	3 HP	4 HP	5.5 HP	5.5 HP	75000 SSU
5	80	4 HP	5.5 HP	5.5 HP	5.5 HP	25000 SSU
6	100	4 HP	5.5 HP	5.5 HP	7.5 HP	25000 SSU
16	200	7.5 HP	10 HP	10 HP	15 HP	75000 SSU
22	280	7.5 HP	10 HP	15 HP	15 HP	25000 SSU
27	350	7.5 HP	10 HP	15 HP	20 HP	7500 SSU
32	400	7.5 HP	10 HP	15 HP	20 HP	2500 SSU





Pump Dimensions - Capacity Graphs:

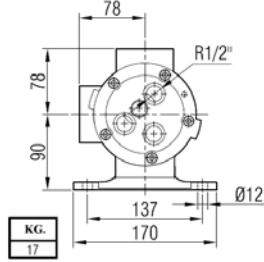




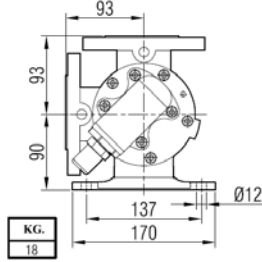


Pump Dimensions:

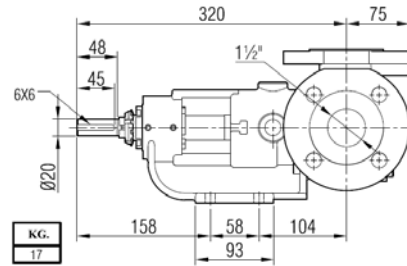
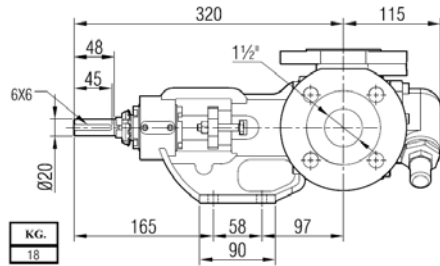
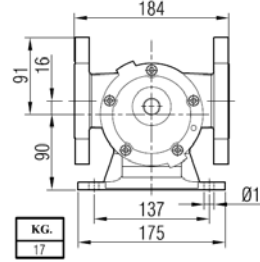
GRN1½"



GRNJ1½"

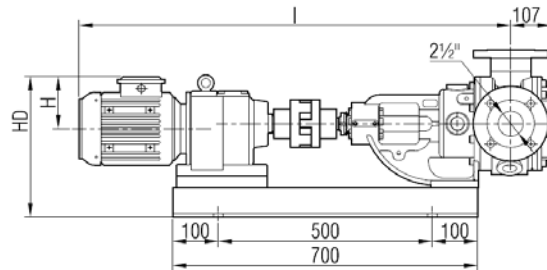
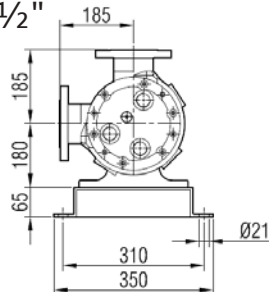


GRNGJ 1½"

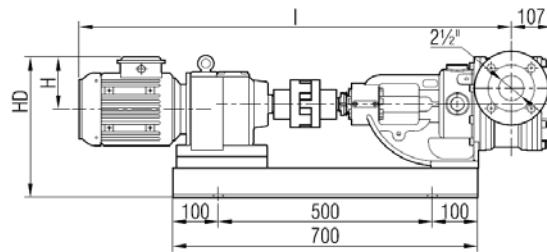
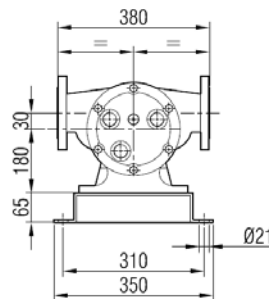


Coupling Dimensions - Gearbox drive:

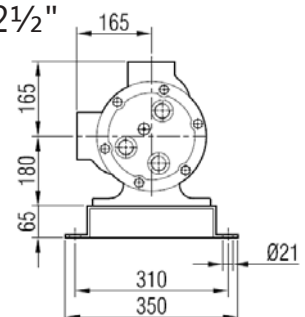
GRNJ2½"



GRNGJ2½"



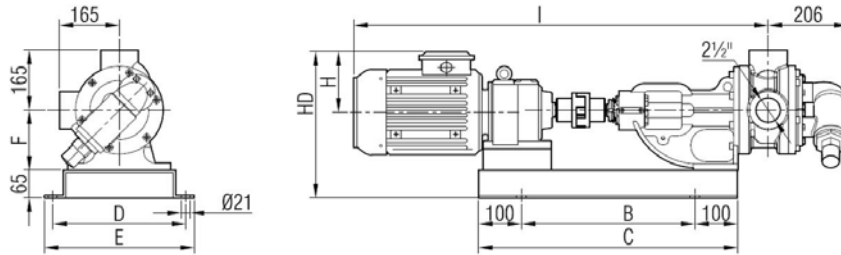
GRN2½"



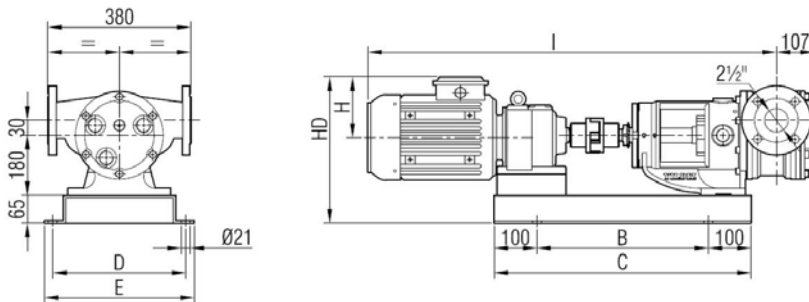
Motor Power & Speed		I	HD	H	Kg	
3-4 hp / 2.2-3 kw		1105	375	141	156	159
47/98 d/d (rpm)	IRAM63/100L					
5.5 hp / 4 kw		1125	383	149	161	
87/93 d/d (rpm)	IRAM63/112M					



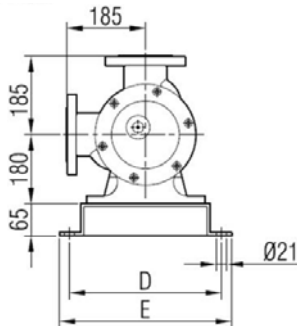
GRN 2 1/2"



GRNGJ 2 1/2"



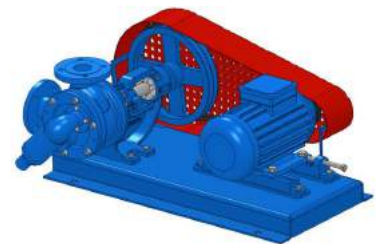
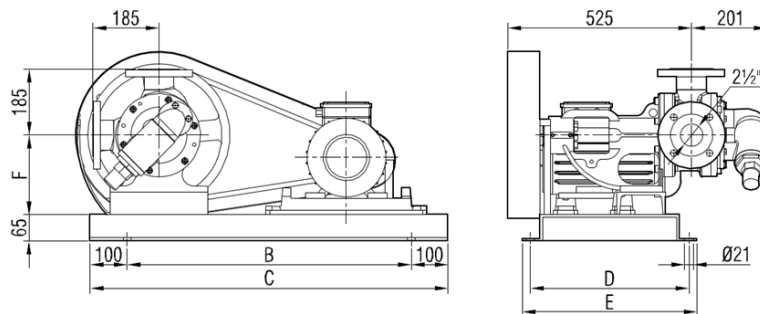
GRNJ 2 1/2"



Motor Power & Speed		I	HD	H	B	C	D	E	Kg	
5.5 hp / 4 kw	7.5 hp / 5.5 kw	1123	383	149	500	700			158	173
87/480 d/d (rpm)	210/450 d/d (rpm)									
IRAM62/112M	IRAM62/C112M									
7.5 hp / 5.5 kw		1215	411	182	600	800	310	350	184	
75/210 d/d (rpm)	IRAM72/132S									
10 hp / 7.5 kw	15 hp / 11 kw	1261							195	197
93/450 d/d (rpm)	200/450 d/d (rpm)									
IRAM72/132M	IRAM72/C132M									
20 hp / 15 kw		1446	457	225	680		390	430	335	
130/450 d/d (rpm)	IRAM82/160L									

Dimensions - Belt pulley coupling pump dimensions:

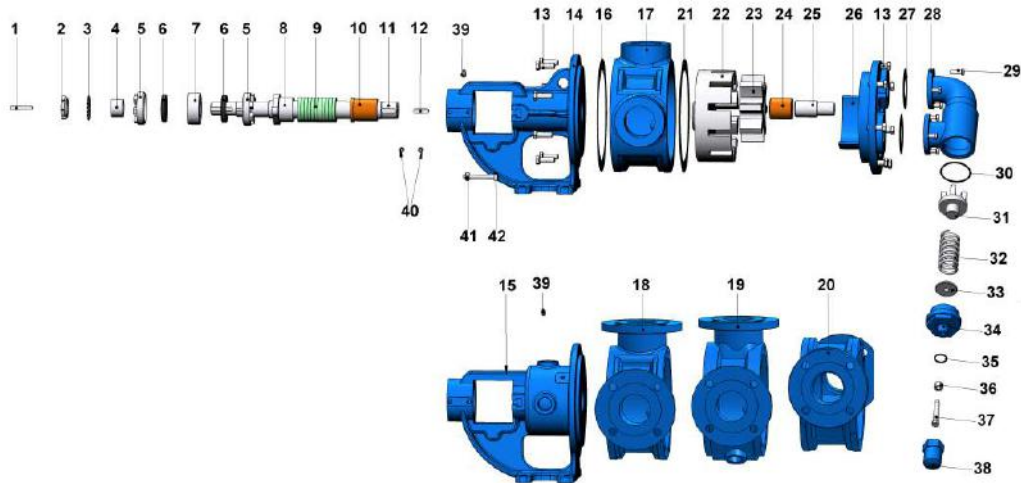
GRNJ 2 1/2"



Motor Power & Speed		Pump speeds				F(1)	F(2)	F(3)	F(4)	B	C	D	E	Kg
		n1 d/d	n2 d/d	n3 d/d	n4 d/d									
7.5 hp / 5.5 kw	MOTOR 132S	450	400	350	310	180	180	245	245	680	880	390	430	205
10 hp / 7.5 kw	MOTOR 132M									880	1080	480	520	215
15 hp / 11 kw	MOTOR 160M									880	1080	480	520	270

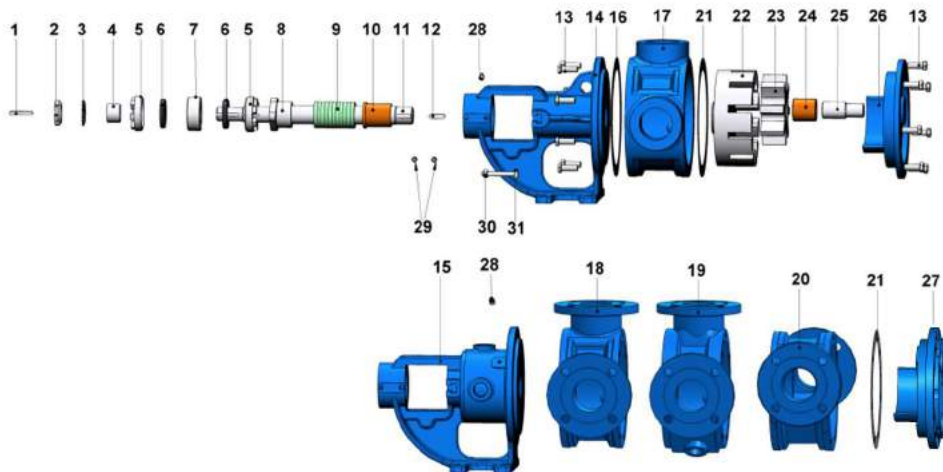


Spare Parts List - Sealed with soft seal, and pressure relief valve on cover:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	15	Bracket (w/ Heating Jacket)	1	29	Hex Bolt M8x25	8
2	Lock Nut	1	16	Bracket Gasket	1	30	Bypass O-Ring	1
3	Lock Washer	1	17	Casing (w/ 90° Threaded Ports)	1	31	Valve	1
4	Spacer	1	18	Casing (w/ 90° Flanged Ports)	1	32	Spring	1
5	Adjusting Nut	2	19	Casing (w/ 90° Flanged Ports & w/ Heating Jackets)	1	33	Washer	1
6	Lip Seal ø40xø62x10	2	20	Casing (w/ 180° Flanged Ports)	1	34	Bypass Cover	1
7	Ball Bearing (3207)	1	21	Cover Gasket	1	35	Cap O-Ring	1
8	Packing Press	1	22	Rotor Gear	1	36	Nut M12	1
9	Soft Seal / Packing Gland	1 TK	23	Idler Gear	1	37	Adjusting Screw M12x80	1
10	Bracket Bushing	1	24	Idler Bushing	1	38	Cap	1
11	Shaft	1	25	Cover Pin	1	39	Greasing Fitting R3/8"	1
12	Rotor Key 10x8x35 A	1	26	Cover (w/ Bypass Inlets)	1	40	Grub Screws M10x16	4
13	Hex Bolt M12x35	15	27	Bypass Gasket	2	41	Nut M10	2
14	Bracket	1	28	Pressure Relief Valve	1	42	Square Screw M10x70	2

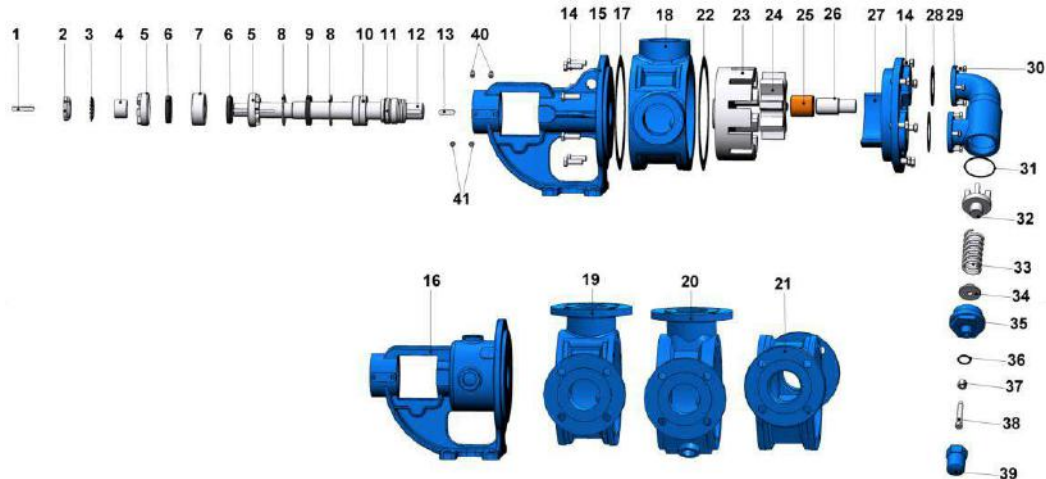
Spare Parts List - Sealed with soft seal, jacketed and with blind cover:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	12	Rotor Key 10x8x35 A	1	23	Idler Gear	1
2	Lock Nut	1	13	Hex Bolt M12x35	15	24	Idler Bushing	1
				Hex Bolt M12x40 For Cover w/ Heating Jacket	7			
3	Lock Washer	1	14	Bracket	1	25	Cover Pin	1
4	Spacer	1	15	Bracket (w/ Heating Jacket)	1	26	Blind Cover	1
5	Adjusting Nut	2	16	Bracket Gasket	1	27	Cover (w/ Heating Jacket)	1
6	Lip Seal ø40xø62x10	2	17	Casing (w/ 90° Threaded Ports)	1	28	Greasing Fitting R3/8"	1
7	Ball Bearing (3207)	1	18	Casing (w/ 90° Flanged Ports)	1	29	Grub Screws M10x16	4
8	Packing Press	1	19	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	30	Nut M10	2
9	Soft Seal / Packing Gland	1 TK	20	Casing (w/ 180° Flanged Ports)	1	31	Square Screw M10x70	2
10	Bracket Bushing	1	21	Cover Gasket	2			
11	Shaft	1	22	Rotor Gear	1			

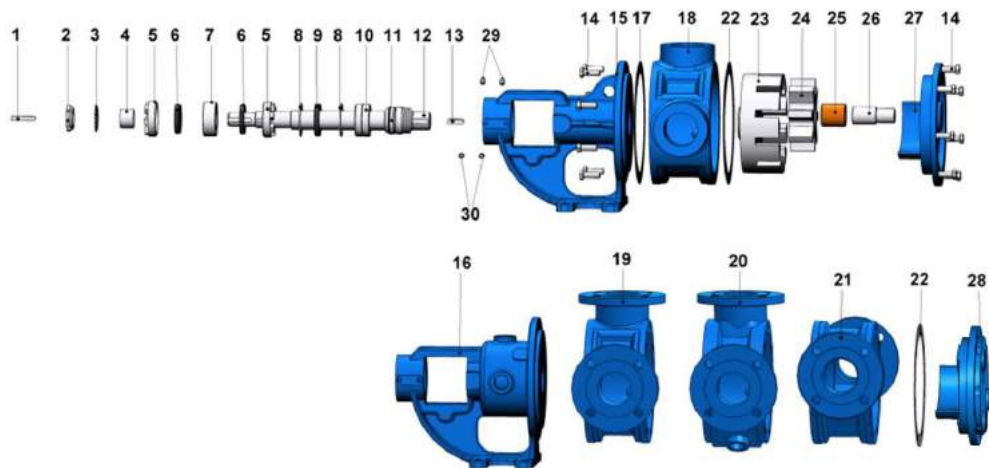


Spare Parts List - Sealed with mechanical seal, and pressure relief valve on cover:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	15	Bracket	1	29	Pressure Relief Valve - Bypass	1
2	Lock Nut	1	16	Bracket (w/ Heating Jacket)	1	30	Hex Bolt M8x25	8
3	Lock Washer	1	17	Bracket Gasket	1	31	Bypass O-Ring	1
4	Spacer	1	18	Casing (w/ 90° Threaded Ports)	1	32	Valve	1
5	Adjusting Nut	2	19	Casing (w/ 90° Flanged Ports)	1	33	Spring	1
6	Lip Seal $\phi 40 \times \phi 62 \times 10$	2	20	Casing (w/ 90° Flanged Ports & w/ Heating Jackets)	1	34	Washer	1
7	Ball Bearing (3207)	1	21	Casing (w/ 180° Flanged Ports)	1	35	Bypass Cover	1
8	Internal Circlip ($\phi 68$)	2	22	Cover Gasket	1	36	Cap O-Ring	1
9	Lip Seal $\phi 40 \times \phi 68 \times 10$	1	23	Rotor Gear	1	37	Nut M12	1
10	Ball Bearing	2	24	Idler Gear	1	38	Adjusting Screw M12x80	1
11	Mechanical Seal $\phi 40$	1	25	Idler Bushing	1	39	Cap	1
12	Shaft	1	26	Cover Pin	1	40	Greasing Fitting R3/8"	2
13	Rotor Key 10x8x35 A	1	27	Cover (w/ Bypass Inlets)	1	41	Grub Screws M10x16	4
14	Hex Bolt M12x35	15	28	Bypass Gasket	2	42		

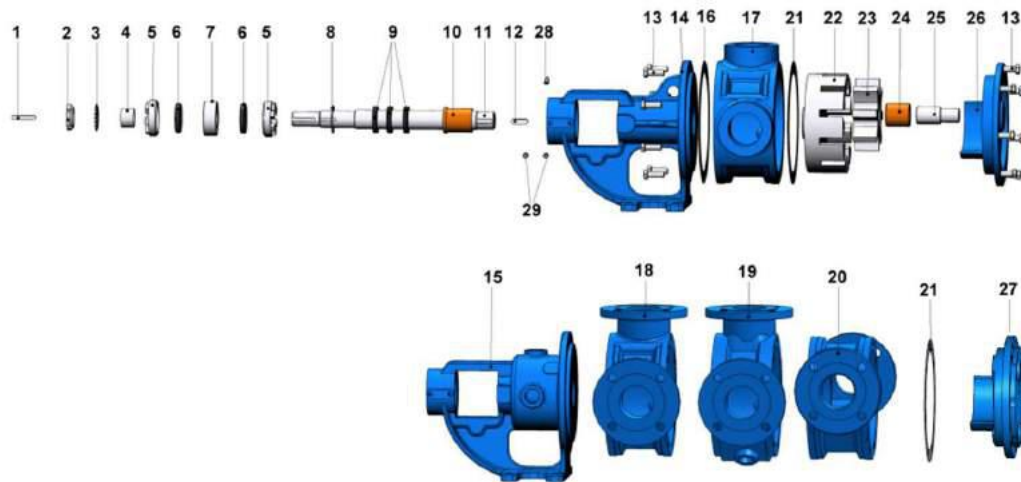
Spare Parts List - Sealed with mechanical seal, jacketed, and with blind cover:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x70x50 AB	1	11	Mechanical Seal $\phi 40$	1	21	Casing (w/ 180° Flanged Ports)	1
2	Lock Nut	1	12	Shaft	1	22	Cover Gasket	2
3	Lock Washer	1	13	Rotor Key 10x8x35 A	1	23	Rotor Gear	1
4	Spacer	1	14	Hex Bolt M12x35	15	24	Idler Gear	1
				Hex Bolt M12x40 For Cover w/ Heating Jacket	7			
5	Adjusting Nut	2	15	Bracket	1	25	Idler Bushing	1
6	Lip Seal $\phi 40 \times \phi 68 \times 10$	2	16	Bracket (w/ Heating Jacket)	1	26	Cover Pin	1
7	Ball Bearing (3207)	1	17	Bracket Gasket	1	27	Blind Cover	1
8	Internal Circlip ($\phi 68$)	2	18	Casing (w/ 90° Threaded Ports)	1	28	Cover (w/ Heating Jacket)	1
9	Lip Seal $\phi 40 \times \phi 68 \times 10$	1	19	Casing (w/ 90° Flanged Ports)	1	29	Greasing Fitting R3/8"	2
10	Ball Bearing (6008)	2	20	Casing (w/ 90° Flanged Ports & w/ Heating Jackets)	1	30	Grub Screws M10x16	4

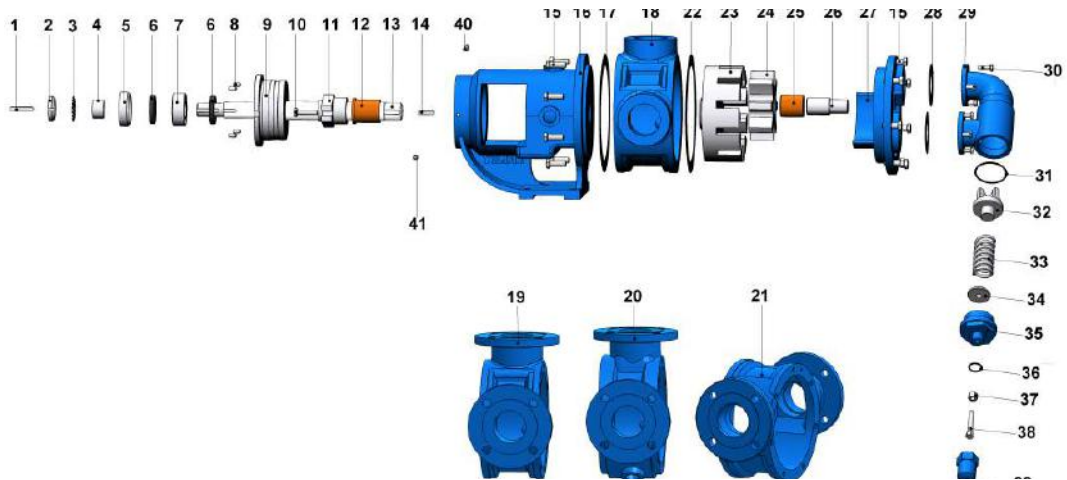


Spare Parts List - Sealed with lip seal, jacketed and with blind cover:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	11	Shaft	1	21	Cover Gasket	2
2	Lock Nut	1	12	Rotor Key 10x8x35 A	1	22	Rotor Gear	1
3	Lock Washer	1	13	Hex Bolt M12x35	15	23	Idler Gear	1
				Hex Bolt M12x40 For Cover w/ Heating Jacket	7			
4	Spacer	1	14	Bracket	1	24	Idler Bushing	1
5	Adjusting Nut	2	15	Bracket (w/ Heating Jacket)	1	25	Cover Pin	1
6	Lip Seal $\varnothing 40 \times \varnothing 62 \times 10$	2	16	Bracket Gasket	1	26	Blind Cover	1
7	Ball Bearing (3207)	1	17	Casing (w/ 90° Threaded Ports)	1	27	Cover (w/ Heating Jacket)	1
8	Internal Circlip ($\varnothing 56$)	1	18	Casing (w/ 90° Flanged Ports)	1	28	Greasing Fitting R3/8"	1
9	Lip Seal $\varnothing 40 \times \varnothing 56 \times 10$	3	19	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	29	Grub Screw M10x16	4
10	Bracket Bushing	1	20	Casing (w/ 180° Flanged Ports)	1			

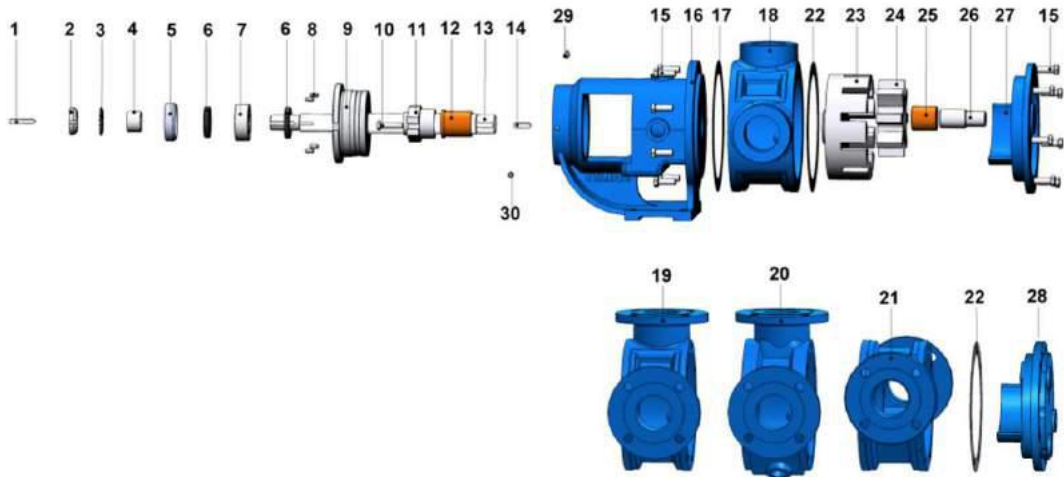
Spare Parts List - Sealed with cartex mechanical seal, and pressure relief valve on cover:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	15	Hex Socket M12x35	1	29	Pressure Relief Valve - Bypass	1
2	Lock Nut	1	16	Bracket	15	30	Adjusting Screw M8x25	8
3	Lock Washer	1	17	Bracket Gasket	1	31	Bypass O-Ring	11
4	Spacer	1	18	Casing (w/ 90° Threaded Ports)	1	32	Valve	1
5	Pulley Cover	1	19	Casing (w/ 90° Flanged Ports)	1	33	Spring	1
6	Lip Seal $\varnothing 40 \times \varnothing 62 \times 10$	2	20	Casing (w/ 90° Flanged Ports & w/ Heating Jackets)	1	34	Washer	1
7	Ball Bearing (3207)	1	21	Casing (w/ 180° Flanged Ports)	1	35	Bypass Cover	1
8	Stay Bolt M8x16	4	22	Cover Gasket	1	36	Cap O-Ring	1
9	Pulley	1	23	Rotor Gear	1	37	Nut M12	1
10	Hex Socket M10x45	2	24	Idler Gear	1	38	Adjusting Screw M12x80	1
11	Cartex Mechanical Seal $\varnothing 40$	1	25	Idler Bushing	1	39	Cap	1
12	Bracket Bushing	1	26	Cover Pin	1	40	Greasing Fitting R3/8"	1
13	Shaft	1	27	Cover (w/ Bypass Inlets)	1	41	Grub Screws M10x16	2
14	Rotor Key 10x8x35 A	15	28	Bypass Gasket	2			



Spare Parts List - Sealed with cartex mechanical seal, jacketed and with blind cover:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x70x50 AB	1	11	Cartex Mechanical Seal Ø40	1	21	Casing (w/ 180° Flanged Ports)	1
2	Lock Nut	1	12	Bracket Bushing	1	22	Cover Gasket	2
3	Lock Washer	1	13	Shaft	1	23	Rotor Gear	1
4	Spacer	1	14	Rotor Key 10x8x35 A	1	24	Idler Gear	1
5	Pulley Cover	1	15	Hex Bolt M12x35	15	25	Idler Bushing	1
6	Lip Seal ø40xø62x10	2	15	Hex Bolt M12x40 For Cover w/ Heating Jacket	7	26	Cover Pin	1
7	Ball Bearing (3207)	1	16	Bracket (w/ Cartex, Jacket & Mechanical Seal)	1	27	Blind Cover	1
8	Stay Bolt M8x16	4	17	Bracket Gasket	1	28	Cover (w/ Heating Jacket)	1
9	Pulley	1	18	Casing (w/ 90° Threaded Ports)	1	29	Greasing Fitting R3/8"	1
10	Hex Socket M10x45	2	19	Casing (w/ 90° Flanged Ports)	1	30	Grub Screws M10x16	2
			20	Casing (w/ 90° Flanged Ports & w/ Heating Jackets)	1			