

# YK 1" Internal Eccentric Gear Pump



Performance:	
Flow rate	3 m³/h
Pressure	1 - 14 bar
Temperature	0 - 200 °C
Speed	1400 d/d
Viscosity	100 - 250000 SSU

#### **Technical Features:**

- ✓ Internal eccentric gear pump
- ✓ 1" threaded ports
- ✓ Compact design
- ✓ Reliable construction thanks to only two moving parts
- ✓ Various material options
- ✓ Available with external bypass, jacketed and blind cover
- $\checkmark$  230v, three phase 50/60hz motors available
- ✓ Motor and gearbox 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:**

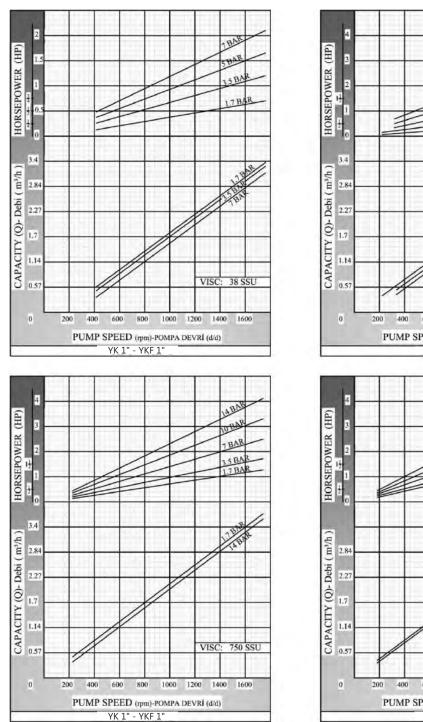
$\checkmark$	Pump body, covers:	Pig cast iron, Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
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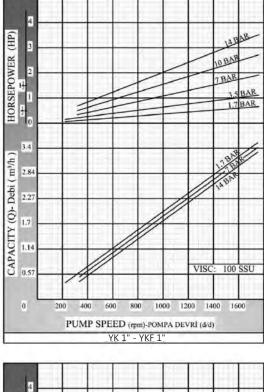
- Gears: Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
- Bearings: Snbz 12 bronze, carbon graphite, slicon carbide, hard metal coated steel, bearing
- Sealing: Soft seal or packing gland, Rotatherm seal, lip seal, mechanical seal, cartridge type mechanical seal

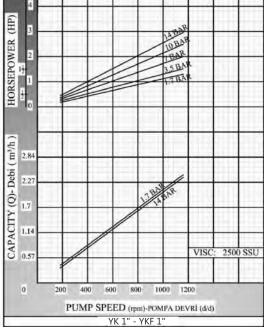
					Capaci	ty & Power Tal	ole			
Capacity (Q)		Speed (m	1 (			Pressure		Viscosity		
		Speed (rpm)			2.5 Bar	5 Bar	7.	5 Bar	10 Bar	viscosity
0.100	)	60			0.5 HP	0.5 HP	0.7	'5 HP	0.75 HP	75000 SSU
0.150	)	80			0.5 HP	0.75 HP	1	HP	1 HP	25000 SSU
0.180	)	100			0.75 HP	0.75 HP	1	HP	1 HP	25000 SSU
1.8		900	(		0.75 HP	1 HP	1.	1.5 HP 2 HP		750 SSU
3		1400			1 HP	1.5 HP	2	HP	3 HP	100 SSU
Ма	tor Pov	vers			Motor Powers				Mo	tor Powers
1 HP	1400	d/d (rpm)			1 HP 900 d/d (rp		om)	1	1.5 HP	750 d/d (rpm)
0.75 HP	900	d/d (rpm)			1.5 HP	900 d/d (r	900 d/d (rpm)		2 HP	900 d/d (rpm)
М	otor Bo	dy			1.5 HP	1400 d/d (r	pm)		3 HP	1400 d/d (rpm)
80					2 HP 1400 d/d (rpm)		1400 d/d (rpm) N		otor Body	
				Motor Body					100	
					90					

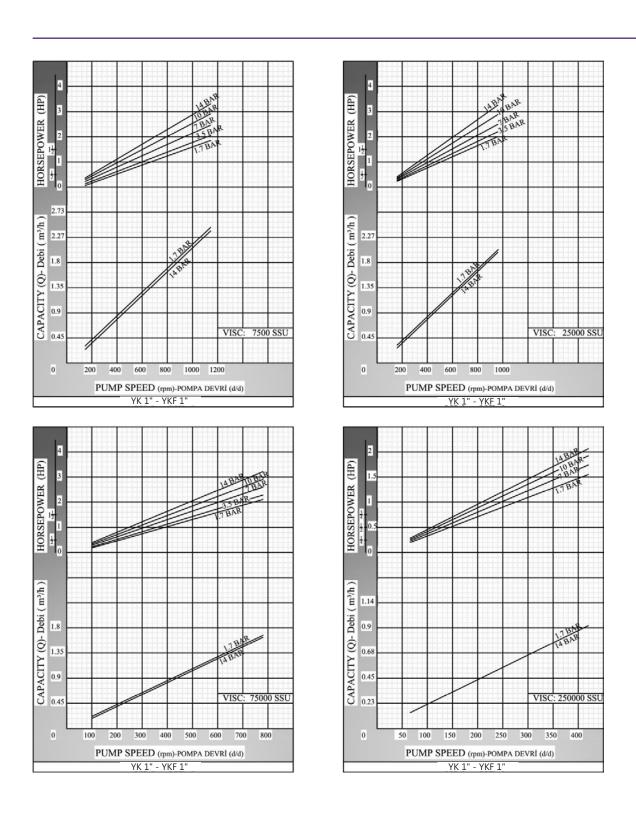


Pump Dimensions - Capacity Graphs:

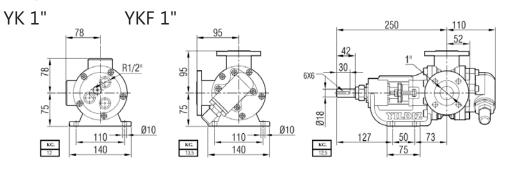




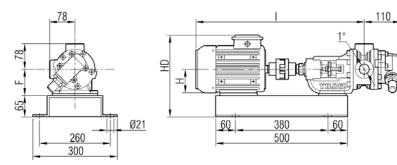




#### Pump Dimensions:

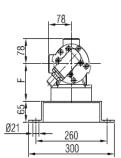


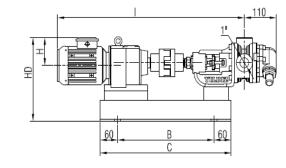
# Coupling Dimensions - Motor drive:



Motor Power & Speed	I	HD	н	F	K	g			
0.5-0.75 hp / 0.37-0.55 kw	900 d/d (rpm) MOTOR		542	263	80	80	31	32	
0.75-1 hp / 0.55-0.75 kw	1400 d/d (rpm)	80	80 542	205	80	80	30	31	
1 hp / 0.75 kw	900 d/d (rpm)	MOTOR	575				3	37	
1.5 hp / 1.1 kw	1400 d/d (rpm)	ı) 90S		281	90	90	38		
1.5 hp / 1.1 kw	900 d/d (rpm)	00 d/d (rpm) MOTOR					4	0	
2 hp / 1.5 kw	1400 d/d (rpm)	90L	0L 627				40		
1.5 hp / 1.1 kw	750 d/d (rpm)						4	5	
2 hp / 1.5 kw	900 d/d (rpm)	MOTOR 100L	681	300	100	100	45		
3-4 hp / 2.2-3 kw	1400 d/d (rpm)	1002					43	47	

# Dimensions - Gearbox drive:





Motor Power 8	Ι	HD	Н	В	C	F	Kg		
1 hp / 0.75 kw	90/400 d/d (rpm)	IRAM42/80M	681	254	118	300	420	75	39
1.5 hp / 1.1 kw	200/400 d/d (rpm)	IRAM42/90S	700	268	132	500	420	/5	43
1 hp / 0.75 kw	40/240 d/d (rpm)	IRAM53/80M	714	208	118	380	500	90	46
1.5 hp / 1.1 kw	60/382 d/d (rpm)	IRAM53/90S	733	282	132	380	500	90	49



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



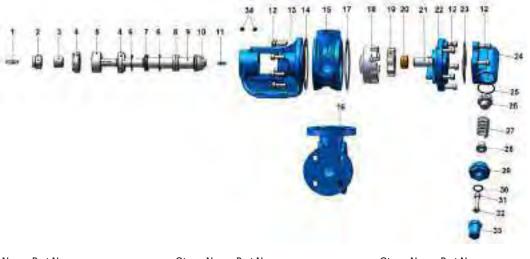
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 6x6x30 AB	1	13	Bracket Gasket	1	25	Valve	1
2	Lock Nut	1	14	Casing (w /90° Threaded Ports)	1	26	Spring	1
3	Spacer	1	15	Casing (w/ 90° Flanged Ports)	1	27	Washer	1
4	Adjusting Nut	2	16	Cover Gasket	1	28	Bypass Cover	1
5	Ball Bearing (3204-2RS)	1	17	Rotor Gear	1	29	Cap O-Ring	1
6	Shaft	1	18	Idler Gear	1	30	Nut M8	3
7	Packing Press	1	19	Idler Gear Bushing	1	31	Adjusting Screw M8x55	1
8	Soft Seal / Packing Gland	1 TK	20	Cover Pin	1	32	Сар	1
9	Bracket Bushing	1	21	Cover (w/ Bypass Inlets)	1	33	Hex Bolt M8x50	2
10	Rotor Key 6x6x20 A	1	22	Bypass Gasket	1	34	Grub Screw M8x16	4
11	Inbus Bolt M8x25	17	23	Pressure Relief Valve - Bypass	1			
12	Bracket	1	24	Bypass O-Ring	1			

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



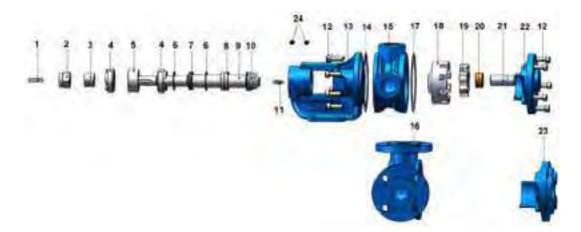
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 6x6x30 AB	1	10	Rotor Key 6x6x20 A	1	19	Idler Gear Bushing	1
2	Lock Nut	1	11	Inbus Bolt M8x25	13	20	Cover Pin	1
				Inbus Bolt M8x30 For Cover w/Heating Jacket	5			
3	Spacer	1	12	Bracket	1	21	Blind Cover	1
4	Adjusting Nut	2	13	Bracket Gasket	1	22	Cover (w/ Heating Jacket)	1
5	Ball Bearing (3204-2RS)	1	14	Casing (w/ 90° Threaded Ports)	1	23	Hex Bolt M8x50	2
6	Shaft	1	15	Casing (w/ 90° Flanged Ports)	1	24	Nut M8	2
7	Packing Press	1	16	Cover Gasket	1	25	Grub Screw M8x16	4
8	Soft Seal / Packing Gland	1 TK	17	Rotor Gear	1			
9	Bracket Bushing	1	18	Idler 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 6x6x30 AB	1	13	Bracket	1	25	Bypass O-Ring	1
2	Lock Nut	1	14	Bracket Gasket	1	26	Valve	1
3	Spacer	1	15	Casing (w /90° Threaded Ports)	1	27	Spring	1
4	Adjusting Nut	2	16	Casing (w/ 90° Flanged Ports)	1	28	Washer	1
5	Ball Bearing (3204-2RS)	1	17	Cover Gasket	1	29	Bypass Cover	1
6	Internal Circlip (ø37)	2	18	Rotor Gear	1	30	Cap O-Ring	1
7	Lip Seal ø25xø37x7	1	19	Idler Gear	1	31	Nut M8	1
8	Ball Bearing (61805T-2RS)	2	20	Idler Gear Bushing	1	32	Adjusting Screw M8x55	1
9	Shaft	1	21	Cover Pin	1	33	Сар	1
10	Mechanical Seal Ø25	1	22	Cover (w/ Bypass Inlets)	1	34	Grub Screw M8x16	4
11	Rotor Key 6x6x20 A	1	23	Bypass Gasket	1			
12	Inbus Bolt M8x25	17	24	Pressure Relief Valve - Bypass	1			

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 6x6x30 AB	1	9	Shaft	1	17	Cover Gasket	1
2	Lock Nut	1	10	Mechanical Seal Ø25	1	18	Rotor Gear	1
3	Spacer	1	11	Rotor Key 6x6x20 A	1	19	Idler Gear	1
4	Adjusting Nut	2	12	Hex Socket M8x25	13	20	Idler Bushing	1
				Hex Socket M8x30 For Cover w/ Heating Jacket	5			
5	Ball Bearing (3204-2RS)	1	13	Bracket	1	21	Cover Pin	1
6	Internal Circlip (ø37)	2	14	Bracket Gasket	1	22	Blind Cover	1
7	Lip Seal ø25xø37x7	1	15	Casing (w/ 90° Threaded Ports)	1	23	Cover (w/ Heating Jacket)	1
8	Ball Bearing (61805T-2RS)	2	16	Casing (w/ 90° Flanged Ports)	1	24	Grub Screw M8x16	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 6x6x30 AB	1	9	Shaft	1	17	Rotor Gear	1
2	Lock Nut	1	10	Rotor Key 6x6x20 A	1	18	Idler Gear	1
3	Spacer	1	11	Inbus Bolt M8x25	13	19	Idler Bushing	1
				Inbus Bolt M8x30 For Cover w/ Heating Jacket	5			
4	Adjusting Nut	2	12	Bracket	1	20	Cover Pin	1
5	Ball Bearing (3204-2RS)	1	13	Bracket Gasket	1	21	Blind Cover	1
6	Internal Circlip (ø37)	1	14	Casing (w/ 90° Threaded Ports)	1	22	Cover (w/ Heating Jacket)	1
7	Lip Seal ø25xø37x7	2	15	Casing (w/ 90° Flanged Ports)	1	23	Grub Screw M8x16	4
8	Bracket Bushing	1	16	Cover Gasket	1			



# YK 1<sup>1</sup>/<sub>2</sub>" Internal Eccentric Gear Pump



Performance:	
Flow rate	5.7 m³/h
Pressure	1 - 14 bar
Temperature	0 - 200 °C
Speed	1400 d/d
Viscosity	100 - 250000 SSU

#### **Technical Features:**

- ✓ Internal eccentric gear pump
- $\sqrt{11/2}$  threaded ports
- Compact design
- $\checkmark$  Reliable construction thanks to only two moving parts
- ✓ Various material options
- Available with external bypass, jacketed and blind cover
- $\checkmark$  230v, three phase 50/60hz motors available
- ✓ Motor and gearbox 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:**

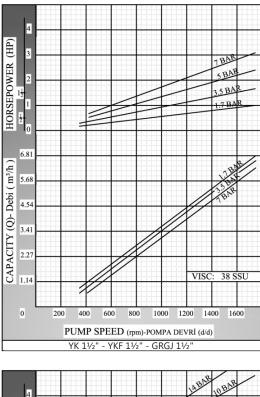
$\checkmark$	Pump body, covers:	Pig cast iron, Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
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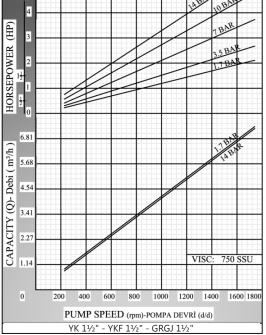
- Gears: Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
- Bearings: Snbz 12 bronze, carbon graphite, slicon carbide, hard metal coated steel, bearing
- Sealing: Soft seal or packing gland, Rotatherm seal, lip seal, mechanical seal, cartridge type mechanical seal

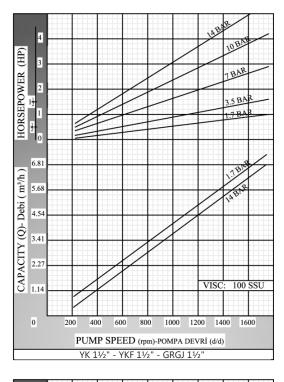
					Capaci	ty & Power Tal	ole			
Capacity		Speed (rp	Pressure						Viscosity	
Capacity	(Q)	Sheen (it	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		3 Bar	6 Bar	9	Bar	12 Bar	VISCOSITy
0.200	)	60			0.5 HP	0.5 HP	0.7	75 HP	0.75 HP	75000 SSU
0.250	)	80			0.5 HP	0.75 HP	1	HP	1 HP	25000 SSU
0.300	)	100		(	0.75 HP	1 HP	1	. HP	1 HP	25000 SSU
3.7		900		1.5 HP		2 HP	3 HP		4 HP	750 SSU
5.7		1400		2 HP		3 HP	4	HP	5.5 HP	100 SSU
Мо	tor Pov	vers			M	Notor Powers			M	otor Powers
1 HP	900	d/d (rpm)			1.5 HP	750 d/d (rp	om)	]	2 HP	750 d/d (rpm)
1.5 HP	900	d/d (rpm)			2 HP	900 d/d (r	om)	]	3 HP	900 d/d (rpm)
1.5 HP	1400	d/d (rpm)			3 HP	1400 d/d (r	1400 d/d (rpm)		5.5 HP	1400 d/d (rpm)
2 HP	2 HP 1400 d/d (rpm)			4 HP	1400 d/d (r	1400 d/d (rpm) M		Aotor Body		
М	Motor Body			Motor Body					112	
	90					100				

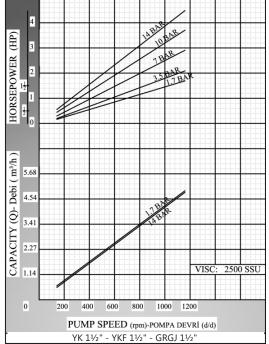


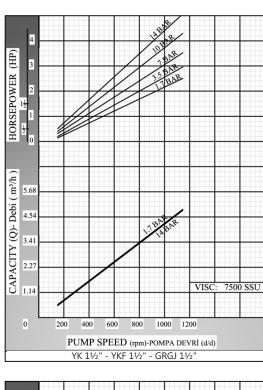
#### Pump Dimensions - Capacity Graphs:

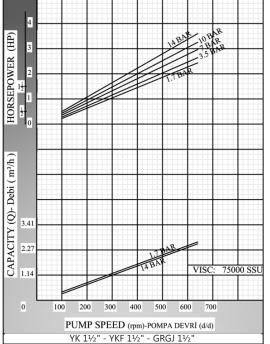


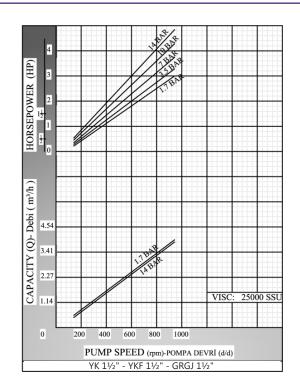






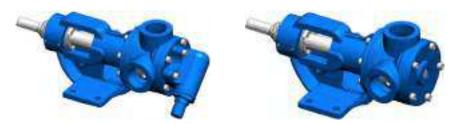


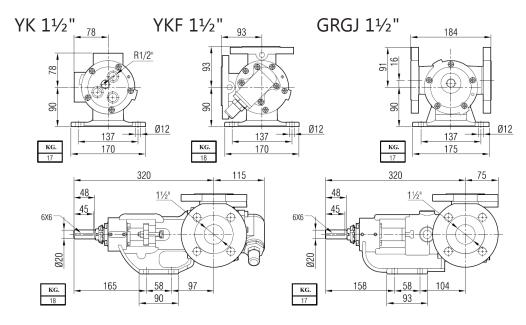




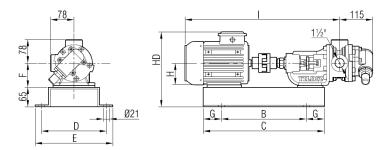
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### Pump Dimensions:





# Coupling Dimensions - Motor drive:

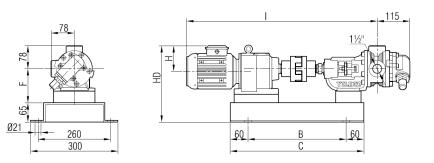


Motor Power &	Speed		Ι	HD	н	В	С	D	Е	F	G	Kg	3
1 hp / 0.75 kw	900 d/d (rpm)	MOTOR	648									37	7
1.5 hp / 1.1 kw	1400 d/d (rpm)	90S	040	281	90	380	500			90		37	7
1.5 hp / 1.1 kw	900 d/d (rpm)	MOTOR	700	201	90	560	500			90		39	)
2 hp / 1.5 kw	1400 d/d (rpm)	90L	700					260	300		60	39	)
1.5 hp / 1.1 kw	750 d/d (rpm)											47	7
2 hp / 1.5 kw	900 d/d (rpm)	MOTOR 100L	746	300	100	430	550			100		47	7
3-4 hp / 2.2-3 kw	1400 d/d (rpm)	1002										46	50
2 hp / 1.5 kw	750 d/d (rpm)											64	1
3 hp / 2.2 kw	900 d/d (rpm)	MOTOR 112M	761	323	112	420	620	310	350	112	100	64	1
5.5 hp / 4 kw	1400 d/d (rpm)	**2101										65	5





# Dimensions - Gearbox drive:

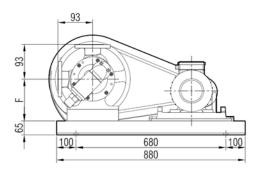


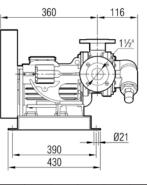
Motor Power &	Ι	HD	Н	В	С	F	к	g		
1 hp / 0.75 kw	90/400 d/d (rpm)	IRAM42/80M	761	269	118	250	470		4	2
1.5 hp / 1.1 kw	200/400 d/d (rpm)	IRAM42/90S	780	283	132	350	470		4	6
1 hp / 0.75 kw	40/240 d/d (rpm)	IRAM53/80M	788	267	118				5	1
1.5 hp / 1.1 kw	60/382 d/d (rpm)	IRAM53/90S	806	282	132	380	500	90	5	4
2 hp / 1.5 kw	87/540 d/d (rpm)	IRAM52/90L	831	282	132	380	500	90	5	5
3-4 hp / 2.2-3 kw	300/540 d/d (rpm)	IRAM52/100L	860	291	141	1			59	62
5.5 hp / 4 kw	87/540 d/d (rpm)	IRAM62/112M	953	318	149	430	550	115	8	0





# Belt Pulley Coupling Pump Dimensions:





Motor Power & Speed		Pum	o Spee	ds		F <sub>(1)</sub>	F <sub>(2)</sub>	F <sub>(3)</sub>	F <sub>(4)</sub>	Kg
		м1	м2	м3	N4					
		d/d	d/d	d/d	d/d					
3 hp / 2.2 kw	MOTOR 100L									90
4 hp / 3 kw	MOTOR 100L	]								95
5.5 hp / 4 kw	MOTOR 112M	450	400	350	310	150	190	200	200	105
7.5 hp / 5.5 kw	MOTOR 132S									115
10 hp / 7.5 kw	MOTOR 132M									125



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

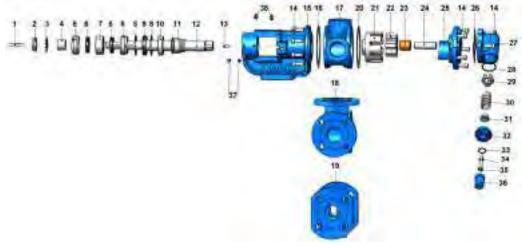


No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 6x6x45 AB	1	14	Bracket	1	27	Bypass O-Ring	1
2	Lock Nut	1	15	Bracket Gasket	1	28	Valve	1
3	Lock Washer	1	16	Casing (w/ 90° Threaded Points)	1	29	Spring	1
4	Spacer	1	17	Casing (w/ 90° Flanged Points)	1	30	Washer	1
5	Adjusting Nut	2	18	Casing (w/ 180° Flanged Points)	1	31	Bypass Cover	1
6			19	Cover Gasket	1	32	Cap O-Ring	1
7	Ball Bearing (3205-2RS)	1	20	Rotor Gear	1	33	Nut M8	3
8	Packing Press	1	21	Idler Gear	1	34	Adjusting Screw M8x55	1
9	Soft Seal / Packing Gland	1 TK	22	Idler Bushing	1	35	Сар	1
10	Bracket Bushing	1	23	Cover Pin	1	36	Hex Bolt M8x50	2
11	Shaft	1	24	Cover (w/ Bypass Inlets)	1	37	Grub Screw M8x16	4
12	Rotor Gear 6x6x20 A	1	25	Bypass Gasket	1			
13	Inbus Bolt M8x25	17	26	Pressure Relief Valve - Bypass	1			

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



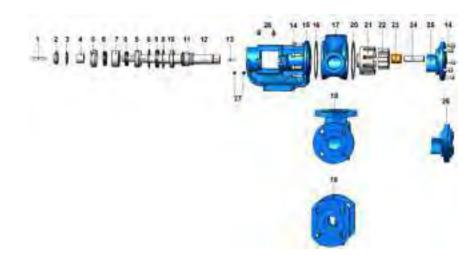
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 6x6x45 AB	1	11	Shaft	1	21	Idler Gear	1
2	Lock Nut	1	12	Rotor Gear 6x6x20 A	1	22	Idler Bushing	1
3	Lock Washer	1	13	Inbus Bolt M8x25	13	23	Cover Pin	1
				Hex Socket M8x30 For Cover w/ Heating Jacket	5			
4	Spacer	1	14	Bracket	1	24	Blind Cover	1
5	Adjusting Nut	2	15	Bracket Gasket	1	25	Cover (w/ Heating Jackets)	1
6			16	Casing (w/ 90° Threaded Ports)	1	26	Hex Bolt M8x50	2
7	Ball Bearing (3205-2RS)	1	17	Casing (w/ 90° Flanged Ports)	1	27	Nut M8	2
8	Packing Press	1	18	Casing (w/ 180° Flanged Ports)	1	28	Grub screw M8x16	4
9	Soft Seal / Packing Gland	1 TK	19	Cover Gasket	1			
10	Bracket Bushing	1	20	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 6x6x45 AB	1	14	Inbus Bolt M8x25	17	27	Pressure Relief Valve - Bypass	1
2	Lock Nut	1	15	Bracket	1	28	Bypass O-Ring	1
3	Lock Washer	1	16	Bracket Gasket	1	29	Valve	1
4	Spacer	1	17	Casing (w/ 90° Threaded Points)	1	30	Spring	1
5	Adjusting Nut	2	18	Casing (w/ 90° Flanged Points)	1	31	Washer	1
6			19	Casing (w/ 180° Flanged Points)	1	32	Bypass Cover	1
7	Ball Bearing (3205-2RS)	1	20	Cover Gasket	1	33	Cap O-Ring	1
8	Internal Circlip (ø55)	2	21	Rotor Gear	1	34	Nut M8	1
9	Lip Seal ø30xø55x10	1	22	Idler Gear	1	35	Adjusting Screw M8x55	1
10	Ball Bearing (6006)	1	23	Idler Bushing	1	36	Сар	1
11	Mechanical Seal Ø30	1	24	Cover Pin	1	37	Grub Screw M8x16	4
12	Shaft	1	25	Cover (w/ Bypass Inlets)	1			
13	Rotor Key 6x6x20 A	1	26	Bypass Gasket	1			

# 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 6x6x45 AB	1	11	Mechanical Seal Ø30	1	21	Rotor Gear	1
2	Lock Nut	1	12	Shaft	1	22	Idler Gear	1
3	Lock Washer	1	13	Rotor Key 6x6x20 A	1	23	Idler Bushing	1
4	Spacer	1	14	Inbus Bolt M8x25	13	24	Cover Pin	1
				Inbus Bolt M8x30 For Cover w/ Heating Jacket	5			
5	Adjusting Nut	2	15	Bracket	1	25	Blind Cover	1
6			16	Bracket Gasket	1	26	Cover (w/ Heating Jacket)	1
7	Bearing (3205-2RS)	1	17	Casing (w/ 90° Threaded Ports)	1	27	Grub Screw M8x16	4
8	Internal Circlip (ø55)	2	18	Casing (w/ 90° Flanged Ports)	1			
9	Lip Seal ø30xø55x10	1	19	Casing (w/ 180° Flanged Ports)	1			
10	Ball Bearing (6006)	1	20	Cover Gasket	1			
5 6 7 8 9	Adjusting Nut Bearing (3205-2RS) Internal Circlip (ø55) Lip Seal ø30xø55x10	2 1 2 1	15 16 17 18 19	Inbus Bolt M8x30 For Cover w/ Heating Jacket Bracket Bracket Gasket Casing (w/ 90° Threaded Ports) Casing (w/ 90° Flanged Ports) Casing (w/ 180° Flanged Ports)	5 1 1 1 1	25 26	Blind Cover Cover (w/ Heating Jacket)	



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 6x6x45 AB	1	11	Shaft	1	21	Idler Gear	1
2	Lock Nut	1	12	Rotor Key 6x6x20 A	1	22	Idler Bushing	1
3	Lock Washer	1	13	Inbus Bolt M8x25	13	23	Cover Pin	1
				Inbus Bolt M8x30 For Cover w/ Heating Jacket	5			
4	Spacer	1	14	Bracket	1	24	Blind Cover	1
5	Adjusting Nut	2	15	Bracket Gasket	1	25	Cover (w/ Heating Jacket)	1
6			16	Casing (w/ 90° Threaded Ports)	1	26		
7	Bearing (3205-2RS)	1	17	Casing (w/ 90° Flanged Ports)	1	27	Grub Screw M8x16	4
8	Internal Circlip (ø42)	1	18	Casing (w/ 180° Flanged Ports)	1			
9	Lip Seal ø30xø42x7	2	19	Cover Gasket	1			
10	Bracket Bushing	1	20	Rotor Gear	1			

Spare Parts List - Double jacketed, and sealed with lip seal:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 6x6x45 AB	1	11	Shaft	1	21	Idler Gear	1
2	Lock Nut	1	12	Rotor Key 6x6x20 A	1	22	Idler Bushing	1
3	Lock Washer	1	13	Inbus Bolt M8x25	13	23	Cover Pin	1
				Inbus Bolt M8x30 For Cover w/ Heating Jacket	5			
4	Spacer	1	14	Bracket Jacketed	1	24	Blind Cover	1
5	Adjusting Nut	2	15	Bracket Gasket	1	25	Cover (w/ Heating Jacket)	1
6			16	Casing (w/ 90° Threaded Ports)	1	26		
7	Bearing (3205-2RS)	1	17	Casing (w/ 90° Flanged Ports)	1	27	Grub Screw M8x16	4
8	Internal Circlip (ø42)	1	18	Casing (w/ 180° Flanged Ports)	1			
9	Lip Seal ø30xø42x7	2	19	Cover Gasket	1			
10	Bracket Bushing	1	20	Rotor Gear	1			

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



# YKF 2" Internal Eccentric Gear Pump



Performance:	
Flow rate	15 m³/h
Pressure	1 - 14 bar
Temperature	0 - 200 °C
Speed	500 d/d
Viscosity	100 - 250000 SSU

#### **Technical Features:**

- ✓ Internal eccentric gear pump
- $\checkmark$  2" flanged threaded connections
- ✓ 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:**

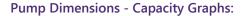
- Fuel oil, diesel fuel and gas oil transfer
- ✓ Small scale thermal oil applications including Marlotherm, Duratherm, Paratherm, Multitherm, Mobiltherm and Dowtherm
- Lubrication applications
- / Coolant transfer
- Any transfer of low to medium viscosity fluids with lubricating properties
- Not suitable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

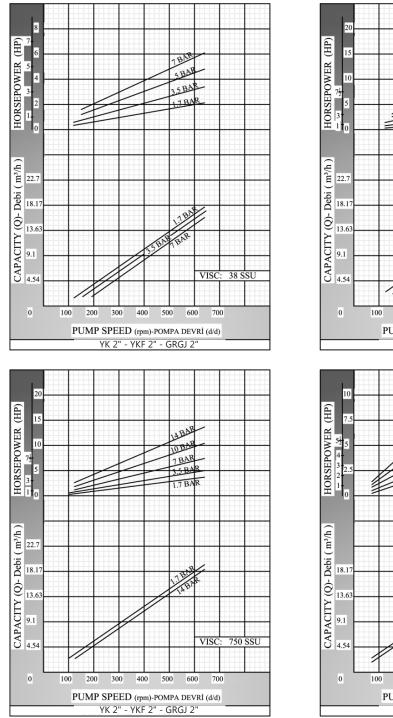
#### **Material Options:**

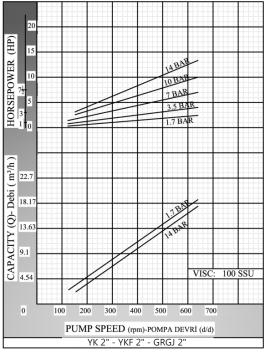
- ✓ Pump body, covers: Pig cast iron, Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
  - Gears: Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
  - Bearings: Snbz 12 bronze, carbon graphite, slicon carbide, hard metal coated steel, bearing
  - Sealing: Soft seal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

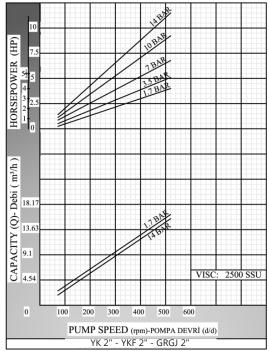
Capacity & Power Table										
$C_{\text{constraints}}(O)$			Pressure			Viceosity				
Capacity (Q)	Speed (rpm)	2.5 Bar	5 Bar	7.5 Bar	10 Bar	Viscosity				
1.2	60	1 HP	1.5 HP	2 HP	2 HP	75000 SSU				
1.5	80	1.5 HP	2 HP	3 HP	3 HP	25000 SSU				
2	100	1.5 HP	2 HP	3 HP	3 HP	25000 SSU				
8	280	3 HP	4 HP	5.5 HP	7.5 HP	25000 SSU				
10	340	3 HP	4 HP	5.5 HP	7.5 HP	7500 SSU				
12	400	4 HP	5.5 HP	5.5 HP	7.5 HP	2500 SSU				
13.5	450	4 HP	5.5 HP	7.5 HP	7.5 HP	750 SSU				



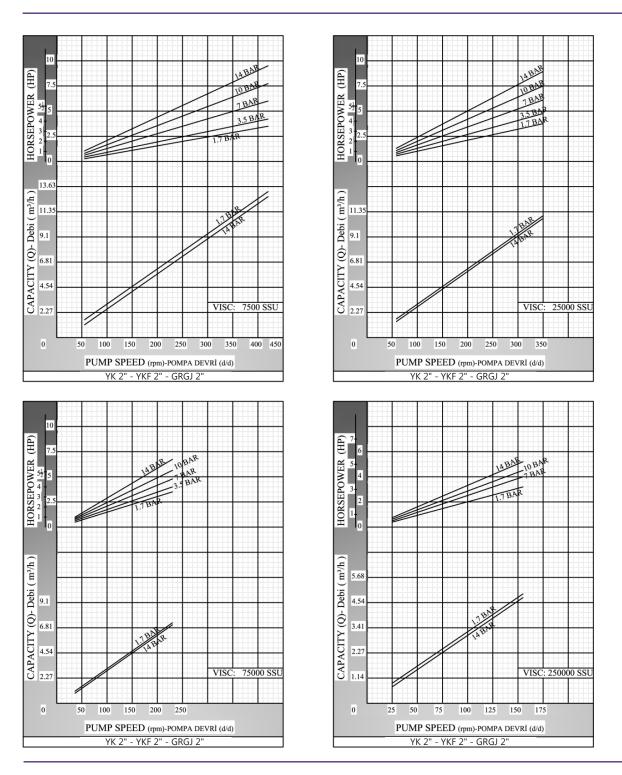




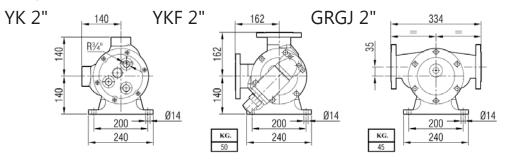




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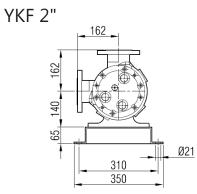


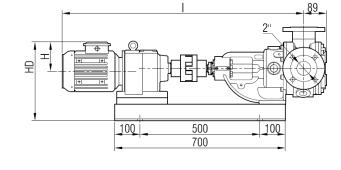
#### **Pump Dimensions:**



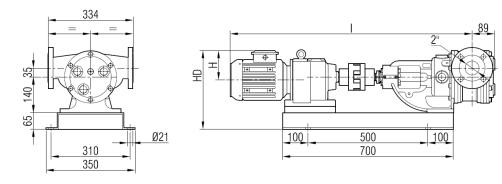


# Coupling Dimensions - Gearbox drive:



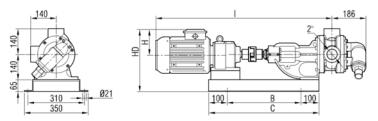


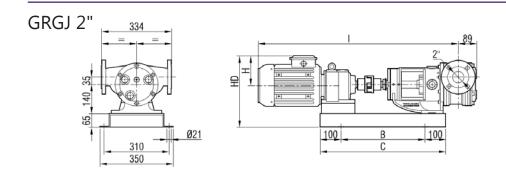
GRGJ 2"



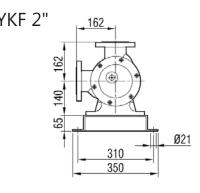
Motor Power & S	peed	I	HD	н	К	g	
1 hp / 0.7	75 kw	050	211	110	1.		YK 2"
20/55 d/d (rpm)	IRAM63/80M	950	311	118	1	15	
1.5 hp / 1	1 kw	070			1.	1.0	140
27/104 d/d (rpm)	IRAM63/90S	976	225	122		L8	
2 hp / 1.	5 kw	1001	325	132	12	20	
33/98 d/d (rpm)	IRAM63/90L	1 1001				20	
3-4 hp / 2.	2-3 kw	1042	334	1 4 1	124	127	
47/98 d/d (rpm)	IRAM63/100L	1 1042	334	141	124	127	Ø21
5.5 hp /	4 kw	1063	342	149	12	20	
104/126 d/d (rpm)	IRAM63/112M	1 1003	342	149		29	350

YK 2"

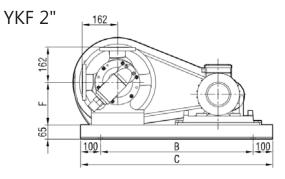


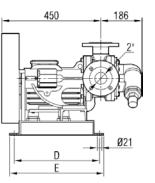


Motor Power & S	I	HD	н	В	С	К	g		
1.5 hp	918						8		
60/380 d/d (rpm)	IRAM52/90S	910	332		420	620	9	0	
2 hp /	1.5 kw	943	552	132	420	020	1(	00	
90/480 d/d (rpm)	IRAM52/90L	945		152					
3 hp /	2.2 kw	1001	325				1.	17	
50/234 d/d (rpm) IRAM62/C90L		1001	525				1.	L/	
4 hp /	' 3 kw	1045	334	141			12	25	
65/450 d/d (rpm)	IRAM62/100L	1045	334	141	500	700		25	
5.5 hp / 4 kw	7.5 hp / 5.5 kw								
87/480 d/d (rpm)	210/450 d/d (rpm)	1065	342	149			127	142	
IRAM62/112M	IRAM62/C112M								
7.5 hp / 5.5 kw		1151	371	182	600	800	1.	48	
75/210 d/d (rpm) IRAM72/132S		1121	5/1	102	000	000		+0	



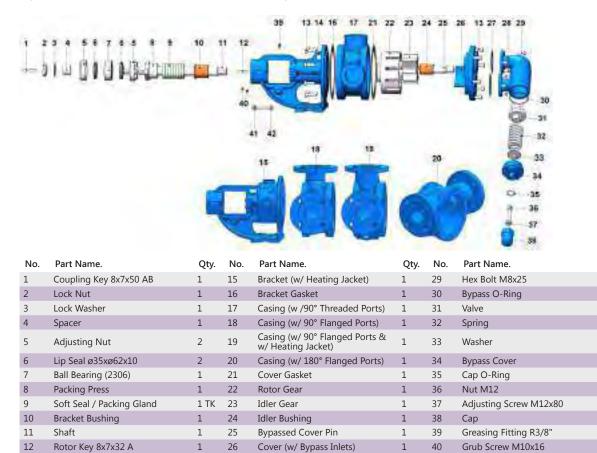
# Coupling Dimensions - Belt pulley:





Motor Power & Speed						F1	F <sup>2</sup>	F <sup>3</sup>	F <sup>4</sup>	В	С	D	E	Kg
			n2	n3	n4									
		d/d	d/d	d/d	d/d									
3 hp / 2.2 kw	MOTOR 100L													140
4 hp / 3 kw	MOTOR 100L	]												150
5.5 hp / 4 kw	MOTOR 112M	]								680	880	390	430	155
7.5 hp / 5.5 kw	MOTOR 132S	450	400	350	310	140	195	195	250					165
10 hp / 7.5 kw	MOTOR 132M	1												175
15 hp / 11 kw	MOTOR 160M	]								000	1000	490	F 20	230
20 hp / 15 kw	MOTOR 160L	]								880	1080	480	520	240



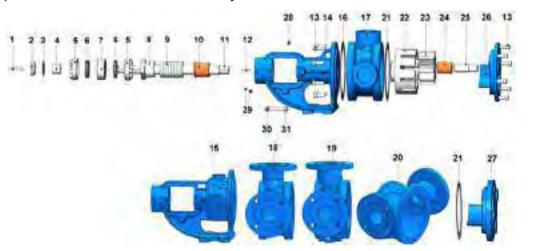


#### Spare Parts List - Sealed with soft seal, and pressure relief valve on cover:

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

Inbus Bolt M10x30

Bracket



Bypass Gasket

Pressure Relief Valve

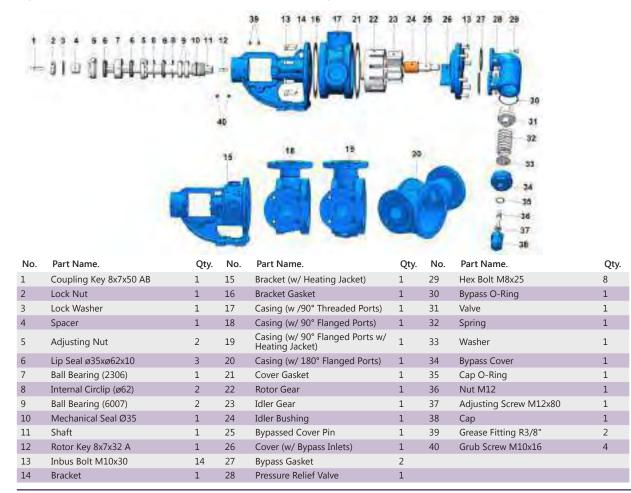
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	12	Rotor Key 8x7x32 A	1	23	Idler Gear	1
2	Lock Nut	1	13	Inbus Bolt M10x30	14	24	Idler Bushing	1
				Inbus Bolt M10x35 For Cover w/Heating Jacket	6			
3	Lock Washer	1	14	Bracket	1	25	Cover Pin	1
4	Spacer	1	15	Bracket (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 ø35xø62x10	2	17	Casing (w/ 90° Threaded Ports)	1	28	Greasing Fitting R3/8"	1
7	Ball Bearing (2306)	1	18	Casing (w/ 90° Flanged Ports)	1	29	Grub Screw 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			
				V castlanumna com I T / A	14 (0)	ו בדדו		

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Qty.

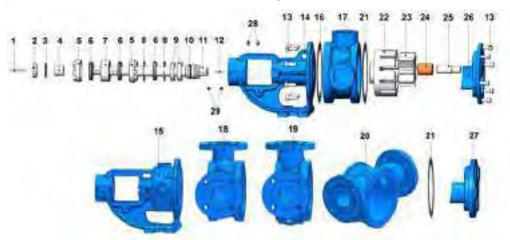
Nut M10

Square Screw M10x70



#### 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	11	Shaft	1	21	Cover Gasket	2
2	Lock Nut	1	12	Rotor Key 8x7x32 A	1	22	Rotor Gear	1
3	Lock Washer	1	13	Inbus Bolt M10x30	14	23	Idler Gear	1
				Inbus Bolt M10x35 (For Cover w/ Heating Jacket)	6			
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 ø35xø62x10	3	16	Bracket Gasket	1	26	Blind Cover	1
7	Ball Bearing (2306)	1	17	Casing (w/ 90° Threaded Ports)	1	27	Cover (w/ Heating Jacket)	1
8	Internal Circlip (ø62)	2	18	Casing (w/ 90° Flanged Ports)	1	28	Greasing Fitting R3/8"	2
9	Ball Bearing (6007)	2	19	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	29	Grub Screw M10x16	4
10	Mechanical Seal Ø35	1	20	Casing (w/ 180° Flanged Ports)	1			



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

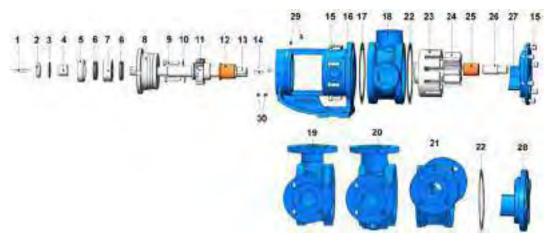
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	11	Shaft	1	21	Cover Gasket	1
2	Lock Nut	1	12	Rotor Key 8x7x32 A	1	22	Rotor Gear	1
3	Lock Washer	1	13	Inbus Bolt M10x30	14	23	Idler Gear	1
				Inbus Bolt M10x35 (For Cover w/ Heating Jacket)	6			
4	Spacer	1	14	Bracket	1	24	Idler Bushing	1
5	Adjusting Nut	2	15	Bracket (w/ Heating Jacket)	1	25	Cover Pin	1
6	Lip Seal ø35xø62x10	2	16	Bracket Gasket	1	26	Blind Cover	1
7	Ball Bearing (2306)	1	17	Casing (w/ 90° Threaded Ports)	1	27	Cover (w/ Heating Jacket)	1
8	Internal Circlip (ø56)	1	18	Casing (w/ 90° Flanged Ports)	1	28	Greasing Fitting R3/8"	1
9	Lip Seal ø35xø56x10	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:



							31	
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	15	Inbus Bolt M10x30	14	29	Pressure Relief Valve	1
2	Lock Nut	1	16	Bracket (Jacketed & w/ Cartex)	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	1	19	Casing (w/ 90° Flanged Ports)	1	33	Spring	1
6	Lip Seal ø35xø62x10	2	20	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	34	Washer	1
7	Ball Bearing (2306)	1	21	Casing (w/ 180° Flanged Ports)	1	35	Bypass Cover	1
8	Pulley	1	22	Cover Gasket	1	36	Cap O-Ring	1
9	Hex Bolt (M10x45)	2	23	Rotor Gear	1	37	Nut M12	1
10	M10 Washer	2	24	Idler Gear	1	38	Adjusting Screw M12x80	1
11	Cartex Seal Ø35	1	25	Idler Bushing	1	39	Сар	1
12	Bracket Bushing	1	26	Bypassed Cover Pin	1	40	Greasing Fitting R3/8"	2
13	Shaft	1	27	Cover (w/ Bypass Inlets)	1	41	Grub Screw M10x16	4
14	Rotor Key 8x7x32 A	1	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 8x7x50 AB	1	11	Cartex Seal Ø35	1	21	Casing (w/ 180° Flanged Ports)	1
2	Lock Nut	1	12	Bracket Bushing	1	22	Cover Gasket	1
3	Lock Washer	1	13	Shaft	1	23	Rotor Gear	1
4	Spacer	1	14	Rotor Key 8x7x32 A	1	24	Idler Gear	1
5	Adjusting Nut	1	15	Inbus Bolt M10x30 Inbus Bolt M10x35 (For Cover w/ Heating Jacket)	14 6	25	Idler Bushing	1
6	Lip Seal ø35xø62x10	2	16	Bracket (Jacketed & w/ Cartex)	1	26	Cover Pin	1
7	Ball Bearing (2306)	1	17	Bracket Gasket	1	27	Blind Cover	1
8	Pulley	1	18	Casing (w/ 90° Threaded Ports)	1	28	Cover (w/ Heating Jacket)	1
9	Hex Bolt M10x45	2	19	Casing (w/ 90° Flanged Ports)	1	29	Greasing Fitting R3/8"	2
10	M10 Washer	2	20	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	30	Grub Screw M10x16	4

#### Spare Parts List - Sealed with chesterton lip 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 Jacket)	1	33	Washer	1
6	Lip Seal ø35xø62x10	3	20	Casing (w/ 180° Flanged Ports)	1	34	Bypass Cover	1
7	Ball Bearing (2306)	1	21	Cover Gasket	1	35	Cap O-Ring	1
8	Internal Circlip (ø62)	2	22	Rotor Gear	1	36	Nut M12	1
9	Ball Bearing (6007)	2	23	Idler Gear	1	37	Adjusting Screw M12x80	1
10	Internal Circlip (ø53)	1	24	Idler Bushing	1	38	Сар	1
11	Shaft	1	25	Bypassed Cover Pin	1	39	Greasing Fitting R3/8"	2
12	Rotor Key 8x7x32 A	1	26	Cover (w/ Bypass Inlets)	1	40	Grub Screw M10x16	4
13	Inbus Bolt M10x30	14	27	Bypass Gasket	2	41	Chesterton Lip Seal ø35xø53x10	2
14	Bracket	1	28	Pressure Relief Valve	1			



# YKF 2<sup>1</sup>/<sub>2</sub>" Internal Eccentric Gear Pump



Performance:	
Flow rate	25.5 m³/h
Pressure	1 - 14 bar
Temperature	0 - 200 °C
Speed	500 d/d
Viscosity	100 - 250000 SSU

#### **Technical Features:**

- ✓ Internal eccentric gear pump
- $\checkmark$  2<sup>1</sup>/<sub>2</sub>" flanged threaded connections
- ✓ 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

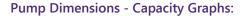
#### **Material Options:**

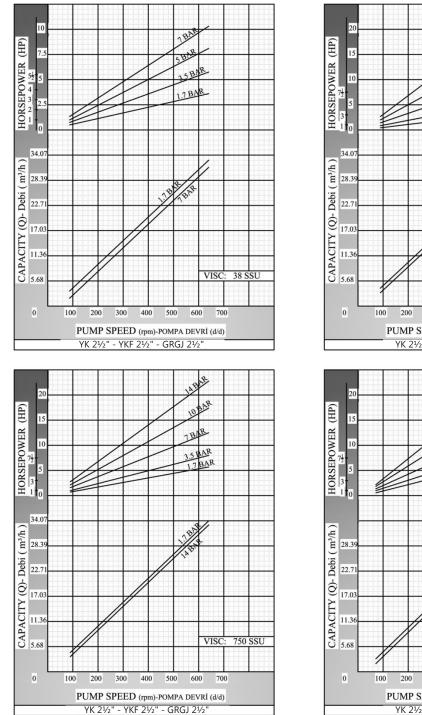
$\checkmark$	Pump body, covers:	Pig cast iron, Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
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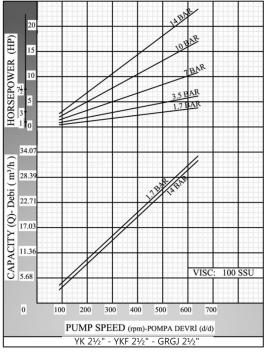
- Gears: Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
- Bearings: Snbz 12 bronze, carbon graphite, slicon carbide, hard metal coated steel, bearing
- Sealing: Soft seal or packing gland, Rotatherm seal, lip seal, mechanical seal, cartridge type mechanical seal

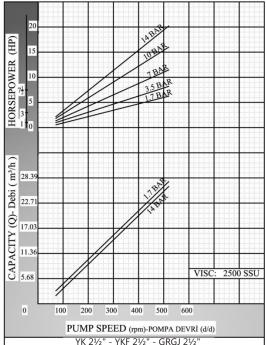
	Capacity & Power Table												
	Crossed (mana)		Pressure										
Capacity (Q)	Speed (rpm)	2.5 Bar	5 Bar	7.5 Bar	10 Bar	Viscosity							
3	60	2 HP	2 HP	3 HP	3 HP	75000 SSU							
4	80	2 HP	3 HP	4 HP	4 HP	25000 SSU							
5	100	3 HP	4 HP	5.5 HP	5.5 HP	25000 SSU							
10.5	200	5.5 HP	7.5 HP	7.5 HP	10 HP	25000 SSU							
13	250	5.5 HP	7.5 HP	7.5 HP	10 HP	7500 SSU							
18	350	5.5 HP	7.5 HP	10 HP	15 HP	2500 SSU							
23	450	5.5 HP	7.5 HP	10 HP	15 HP	750 SSU							

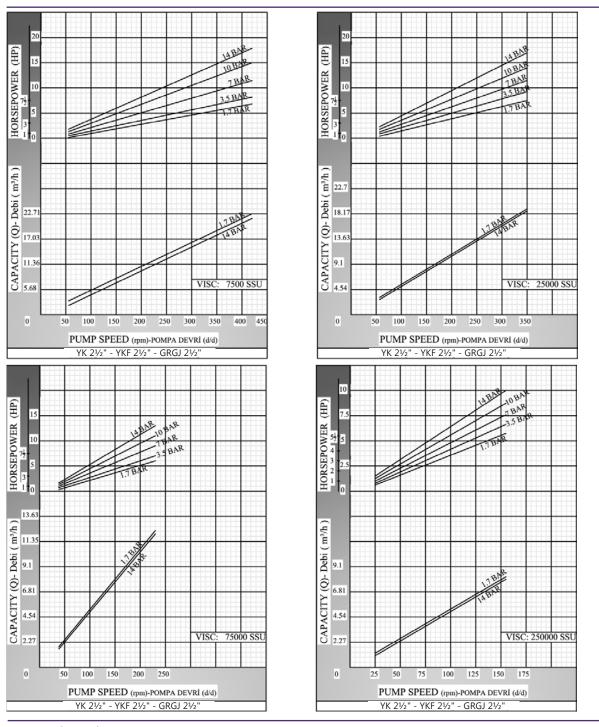




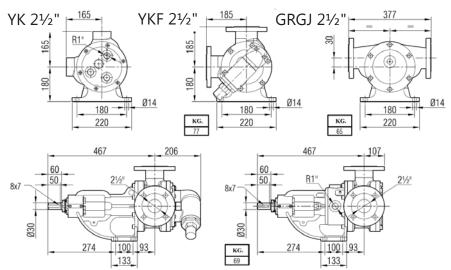






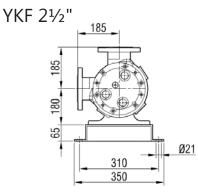


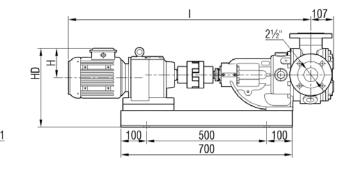




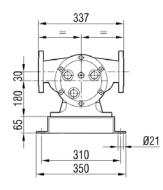


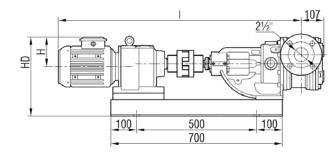
# Coupling Dimensions - Gearbox drive:



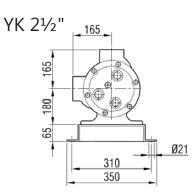


GRGJ 21/2"

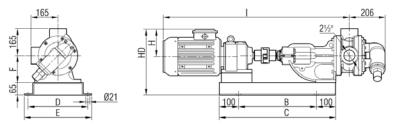


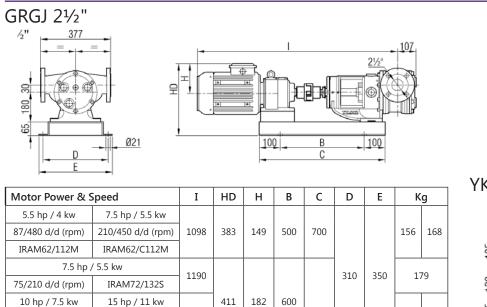


Motor Power & S	peed	Ι	HD	Н	к	g
3-4 hp / 2.2	2-3 kw	1077	375	141	150	153
47/98 d/d (rpm)	IRAM63/100L	1077	575	141	150	153
5.5 hp / 4	1 kw	1098	383	149	11	55
87/93 d/d (rpm)	1098	202	149	13	55	



YK 21/2"





800

390

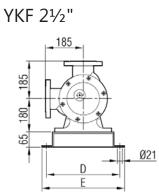
430

190 192

330

201

Ø21



### Coupling Dimensions - Belt pulley:

20 hp / 15 kw

200/450 d/d (rpm)

IRAM72/C132M

IRAM82/160L

1236

1420

457

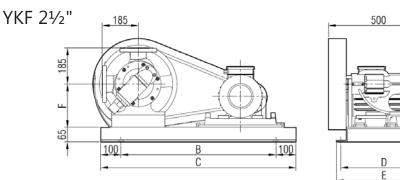
225

680

93/450 d/d (rpm)

IRAM72/132M

130/450 d/d (rpm)



Motor Power 8					F1	F <sup>2</sup>	F <sup>3</sup>	F <sup>4</sup>	В	С	D	E	Kg	
		n1	n2	n3	n4									
		d/d	d/d	d/d	d/d									
3 hp / 2.2 kw	MOTOR 100L													140
4 hp / 3 kw	MOTOR 100L													150
5.5 hp / 4 kw	MOTOR 112M									680	880	390	430	155
7.5 hp / 5.5 kw	MOTOR 132S	450	400	350	310	140	195	195	250					165
10 hp / 7.5 kw	MOTOR 132M	7												175
15 hp / 11 kw	MOTOR 160M	7								000	1000	400	520	230
20 hp / 15 kw	MOTOR 160L	7								880	1080	480	520	240



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1	8100104434		1 = 1 3 40		<b>.</b>		20 31 32	
						C		
No	Part Name	Otv	No	Part Name	Otv	No	Part Name	Otv
<b>No</b> .	Part Name.	Qty.	<b>No.</b>	Part Name.	Qty.	<b>No.</b>	Part Name. Hex Bolt M8x25	Qty. 8
1	Coupling Key 8x7x50 AB	1	15	Bracket (w/ Heating Jacket)	1	29	Hex Bolt M8x25	8
1 2			15 16	Bracket (w/ Heating Jacket) Bracket Gasket				
1	Coupling Key 8x7x50 AB Lock Nut	1	15	Bracket (w/ Heating Jacket)	1	29 30	Hex Bolt M8x25 Bypass O-Ring	8
1 2 3	Coupling Key 8x7x50 AB Lock Nut Lock Washer	1 1 1	15 16 17	Bracket (w/ Heating Jacket) Bracket Gasket Casing (w /90° Threaded Ports)	1 1 1	29 30 31	Hex Bolt M8x25 Bypass O-Ring Valve	8 1 1
1 2 3 4	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer	1 1 1 1	15 16 17 18	Bracket (w/ Heating Jacket) Bracket Gasket Casing (w /90° Threaded Ports) Casing (w/ 90° Flanged Ports) Casing (w/ 90° Flanged Ports &	1 1 1 1	29 30 31 32	Hex Bolt M8x25 Bypass O-Ring Valve Spring	8 1 1 1
1 2 3 4 5	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut	1 1 1 1 2	15 16 17 18 19	Bracket (w/ Heating Jacket) Bracket Gasket Casing (w /90° Threaded Ports) Casing (w/ 90° Flanged Ports) Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1 1 1 1 1	29 30 31 32 33	Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer	8 1 1 1 1
1 2 3 4 5 6 7 8	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Packing Press	1 1 1 1 2 2 1 1	15 16 17 18 19 20 21 22	<ul> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w /90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports &amp; w/ Heating Jacket)</li> <li>Casing (w/ 180° Flanged Ports)</li> <li>Cover Gasket</li> <li>Rotor Gear</li> </ul>	1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36	Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring Nut M12	8 1 1 1 1 1
1 2 3 4 5 6 7 8 9	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Packing Press Soft Seal / Packing Gland	1 1 1 2 2 1 1 1 1 TK	15 16 17 18 19 20 21 22 23	<ul> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w /90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports &amp; w/ Heating Jacket)</li> <li>Casing (w/ 180° Flanged Ports)</li> <li>Cover Gasket</li> <li>Rotor Gear</li> <li>Idler Gear</li> </ul>	1 1 1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36 37	Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring Nut M12 Adjusting Screw M12x80	8 1 1 1 1 1 1 1 1 1 1
1 2 3 4 5 6 7 8 9 10	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Packing Press Soft Seal / Packing Gland Bracket Bushing	1 1 1 2 2 1 1 1 1 TK 1	15 16 17 18 19 20 21 22 23 23 24	Bracket (w/ Heating Jacket) Bracket Gasket Casing (w /90° Threaded Ports) Casing (w/ 90° Flanged Ports) Casing (w/ 90° Flanged Ports & w/ Heating Jacket) Casing (w/ 180° Flanged Ports) Cover Gasket Rotor Gear Idler Gear Idler Bushing	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36 37 38	Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring Nut M12 Adjusting Screw M12x80 Cap	8 1 1 1 1 1 1 1 1 1 1 1
1 2 3 4 5 6 7 8 9 10 11	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Packing Press Soft Seal / Packing Gland Bracket Bushing Shaft	1 1 1 2 2 1 1 1 TK 1 1 1	15 16 17 18 19 20 21 22 23 24 24 25	<ul> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w /90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports &amp; w/ Heating Jacket)</li> <li>Casing (w/ 180° Flanged Ports)</li> <li>Cover Gasket</li> <li>Rotor Gear</li> <li>Idler Gear</li> <li>Idler Bushing</li> <li>Cover Pin</li> </ul>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36 37 38 39	Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring Nut M12 Adjusting Screw M12x80 Cap Greasing Fitting R3/8"	8 1 1 1 1 1 1 1 1 1 1
1 2 3 4 5 6 7 8 9 10 11 12	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Packing Press Soft Seal / Packing Gland Bracket Bushing Shaft Rotor Key 10x8x35 A	1 1 1 2 2 1 1 1 TK 1 1 1 1 1	15         16         17         18         19         20         21         22         23         24         25         26	Bracket (w/ Heating Jacket)Bracket GasketCasing (w /90° Threaded Ports)Casing (w/ 90° Flanged Ports)Casing (w/ 90° Flanged Ports & w/ Heating Jacket)Casing (w/ 180° Flanged Ports)Casing (w/ 180° Flanged Ports)Cover GasketRotor GearIdler GearIdler BushingCover PinCover (w/ Bypass Inlets)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36 37 38 39 40	Hex Bolt M8x25Bypass O-RingValveSpringWasherBypass CoverCap O-RingNut M12Adjusting Screw M12x80CapGreasing Fitting R3/8"Grub Screw M10x16	8 1 1 1 1 1 1 1 1 1 1 4
1 2 3 4 5 6 7 8 9 10 11	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Packing Press Soft Seal / Packing Gland Bracket Bushing Shaft	1 1 1 2 2 1 1 1 TK 1 1 1	15 16 17 18 19 20 21 22 23 24 24 25	<ul> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w /90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports &amp; w/ Heating Jacket)</li> <li>Casing (w/ 180° Flanged Ports)</li> <li>Cover Gasket</li> <li>Rotor Gear</li> <li>Idler Gear</li> <li>Idler Bushing</li> <li>Cover Pin</li> </ul>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36 37 38 39	Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring Nut M12 Adjusting Screw M12x80 Cap Greasing Fitting R3/8"	8 1 1 1 1 1 1 1 1 1 1 1 1

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

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

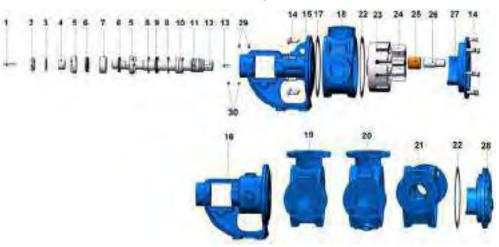


No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	12	Rotor Key 10x8x35 A	1	23	Idler Gear	1
2	Lock Nut	1	13	Inbus Bolt M12x35	15	24	Idler Bushing	1
				Inbus Bolt M12x40 For Cover w/Heating Jacket	7			
3	Lock Washer	1	14	Bracket	1	25	Cover Pin	1
4	Spacer	1	15	Bracket (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 Screw 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			
			N	N castlepumps.com   T +4	4 (0) 2	1773 5	533 283   E sales@castlepu	umps.co

1	2 3 4 5 6 7 8 5 8 9 8	10 11	12.13	40 14 15 17 18 22 23	3 24 2	5 25	27 14 2829	
4	a i ağı () <del>körtet</del>		16		21		а	
		Ę	2		6	2	→ 35 + 37 → 38	
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
1 2	Coupling Key 8x7x50 AB Lock Nut	1	15 16	Bracket Bracket (w/ Heating Jacket)	1	29 30	Pressure Relief Valve - Bypass Hex Bolt M8x25	1 8
1 2 3	Coupling Key 8x7x50 AB Lock Nut Lock Washer	1 1 1	15 16 17	Bracket Bracket (w/ Heating Jacket) Bracket Gasket	1 1 1	29 30 31	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring	1 8 1
1 2 3 4	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer	1 1 1 1	15 16 17 18	Bracket Bracket (w/ Heating Jacket) Bracket Gasket Casing (w /90° Threaded Ports)	1 1 1 1	29 30 31 32	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve	1 8 1 1
1 2 3	Coupling Key 8x7x50 AB Lock Nut Lock Washer	1 1 1	15 16 17	Bracket Bracket (w/ Heating Jacket) Bracket Gasket	1 1 1	29 30 31	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring	1 8 1
1 2 3 4 5	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut	1 1 1 1 2	15 16 17 18 19	Bracket Bracket (w/ Heating Jacket) Bracket Gasket Casing (w /90° Threaded Ports) Casing (w/ 90° Flanged Ports) Casing (w/ 90° Flanged Ports w/	1 1 1 1 1	29 30 31 32 33	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring	1 8 1 1 1
1 2 3 4 5 6	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10	1 1 1 1 2 2	15 16 17 18 19 20	<ul> <li>Bracket</li> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w /90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports)</li> <li>Casing (w/ 90° Flanged Ports w/ Heating Jacket)</li> </ul>	1 1 1 1 1 1 1	29 30 31 32 33 34	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer	1 8 1 1 1 1
1 2 3 4 5 6 7	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207)	1 1 1 1 2 2 1	15 16 17 18 19 20 21	<ul> <li>Bracket</li> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w /90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports)</li> <li>Casing (w/ 90° Flanged Ports w/ Heating Jacket)</li> <li>Casing (w/ 180° Flanged Ports)</li> </ul>	1 1 1 1 1 1 1 1	29 30 31 32 33 34 35	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover	1 8 1 1 1 1 1
1 2 3 4 5 6 7 8	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Internal Circlip (ø68)	1 1 1 1 2 2 1 2	15 16 17 18 19 20 21 21 22	<ul> <li>Bracket</li> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w /90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports)</li> <li>Casing (w/ 90° Flanged Ports w/ Heating Jacket)</li> <li>Casing (w/ 180° Flanged Ports)</li> <li>Cover Gasket</li> </ul>	1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring	1 8 1 1 1 1 1 1
1 2 3 4 5 6 7 8 9	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Internal Circlip (ø68) Lip Seal ø40xø68x10	1 1 1 1 2 2 1 2 1 2	15 16 17 18 19 20 21 22 23	<ul> <li>Bracket</li> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w /90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports)</li> <li>Casing (w/ 90° Flanged Ports w/ Heating Jacket)</li> <li>Casing (w/ 180° Flanged Ports)</li> <li>Cover Gasket</li> <li>Rotor Gear</li> </ul>	1 1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36 37	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring Nut M12	1 8 1 1 1 1 1 1 1 1 1
1 2 3 4 5 6 7 8 9 10	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Internal Circlip (ø68) Lip Seal ø40xø68x10 Ball Bearing (6008)	1 1 1 1 2 2 1 2 1 2 1 2	15 16 17 18 19 20 21 22 23 24	<ul> <li>Bracket</li> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w /90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports)</li> <li>Casing (w/ 90° Flanged Ports w/ Heating Jacket)</li> <li>Casing (w/ 180° Flanged Ports)</li> <li>Cover Gasket</li> <li>Rotor Gear</li> <li>Idler Gear</li> </ul>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36 37 38	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring Nut M12 Adjusting Screw M12x80	1 8 1 1 1 1 1 1 1 1 1 1
1 2 3 4 5 6 7 8 9 10 11	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Internal Circlip (ø68) Lip Seal ø40xø68x10 Ball Bearing (6008) Mechanical Seal Ø40	1 1 1 1 2 2 1 2 1 2 1 2 1 1 2 1	15 16 17 18 19 20 21 22 23 24 25	<ul> <li>Bracket</li> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w /90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports)</li> <li>Casing (w/ 90° Flanged Ports w/ Heating Jacket)</li> <li>Coser Gasket</li> <li>Rotor Gear</li> <li>Idler Gear</li> <li>Idler Bushing</li> </ul>	1 1 1 1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36 37 38 39	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring Nut M12 Adjusting Screw M12x80 Cap	1 8 1 1 1 1 1 1 1 1 1 1 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	11	Mechanical Seal Ø40	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	Inbus Bolt M12x35	15	24	Idler Gear	1
				Inbus Bolt M12x40 (For Cover w/ Heating Jacket)	7			
5	Adjusting Nut	2	15	Bracket	1	25	Idler Bushing	1
6	Lip Seal ø40xø62x10	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 (ø68)	2	18	Casing (w/ 90° Threaded Ports)	1	28	Cover (w/ Heating Jacket)	1
9	Lip Seal ø40xø68x10	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 Jacket)	1	30	Grub Screw M10x16	4

1	2				17 2	20	23 24 25 24 13	
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	Inbus Bolt M12x35 Inbus Bolt M12x40 (For Cover w/ Heating Jacket)	15 7	23	Idler Gear	1
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 ø40xø62x10	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 (ø56)	1	18	Casing (w/ 90° Flanged Ports)	1	28	Greasing Fitting R3/8"	1
9	Lip Seal ø40xø56x10	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 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	15	Hex Socket M12x35	15	29	Pressure Relief Valve - Bypass	1
2	Lock Nut	1	16	Bracket	1	30	Adjusting Screw 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	Pulley Cover	1	19	Casing (w/ 90° Flanged Ports)	1	33	Spring	1
6	Lip Seal ø40xø62x10	2	20	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	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 Ø40	1	25	Idler Bushing	1	39	Сар	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 Screw M10x16	2
14	Rotor Key 10x8x35 A	1	28	Bypass Gasket	2			

1	2	9 10	11 12		20		24 25 28 27 15	
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 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 Hex Bolt M12x40 (For Cover w/ Heating Jacket)	15 7	25	Idler Bushing	1
6	Lip Seal ø40xø62x10	2	16	Bracket (w/ Cartex, Jacket & Mechanical Seal)	1	26	Cover Pin	1
7	Ball Bearing (3207)	1	17	Bracket Gasket	1	27	Blind Cover	1
8	Stay Bolt M8x16	4	18	Casing (w/ 90° Threaded Ports)	1	28	Cover (w/ Heating Jacket)	1
9	Pulley	1	19	Casing (w/ 90° Flanged Ports)	1	29	Greasing Fitting R3/8"	1
10	Hex Socket (M10x45)	2	20	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	30	Grub Screw M10x16	2

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



# YKF 3" 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
- $\checkmark$  3" flanged threaded connections
- ✓ 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:**

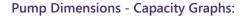
- ✓ Fuel oil, diesel fuel and gas oil transfer
- ✓ Small scale thermal oil applications including Marlotherm, Duratherm, Paratherm, Multitherm, Mobiltherm and Dowtherm
- Lubrication applications
- / Coolant transfer
- Any transfer of low to medium viscosity fluids with lubricating properties
- Not suitable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

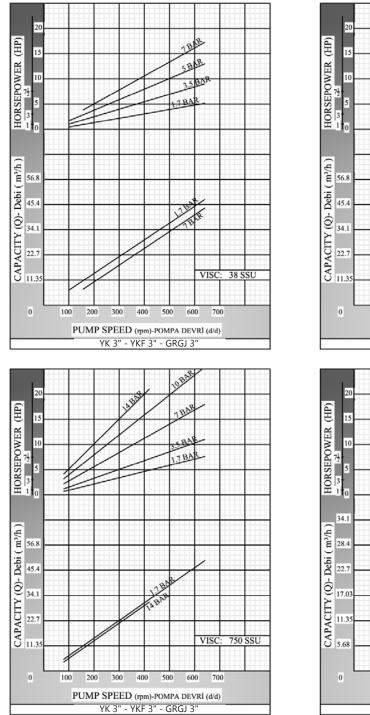
#### **Material Options:**

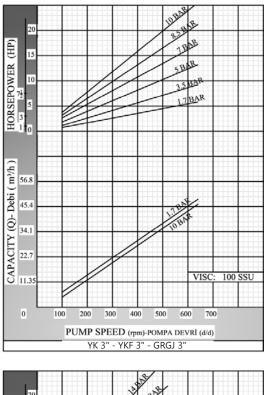
- V Pump body, covers: Pig cast iron, Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
  - Gears: Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
  - Bearings: Snbz 12 bronze, carbon graphite, slicon carbide, hard metal coated steel, bearing
  - Sealing:
     Soft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

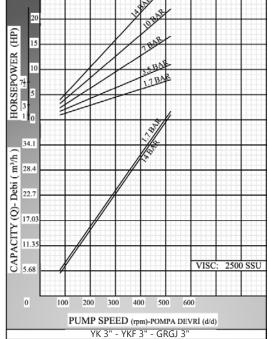
	Capacity & Power Table												
Conseits (O)	Pressure												
Capacity (Q)	Speed (rpm)	2.5 Bar	5 Bar	7.5 Bar	10 Bar	Viscosity							
4	60	3 HP	4 HP	5.5 HP	5.5 HP	75000 SSU							
5	80	4 HP	5.5 HP	5.5 HP	5.5 HP	25000 SSU							
6	100	4 HP	5.5 HP	5.5 HP	7.5 HP	25000 SSU							
16	200	7.5 HP	10 HP	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							



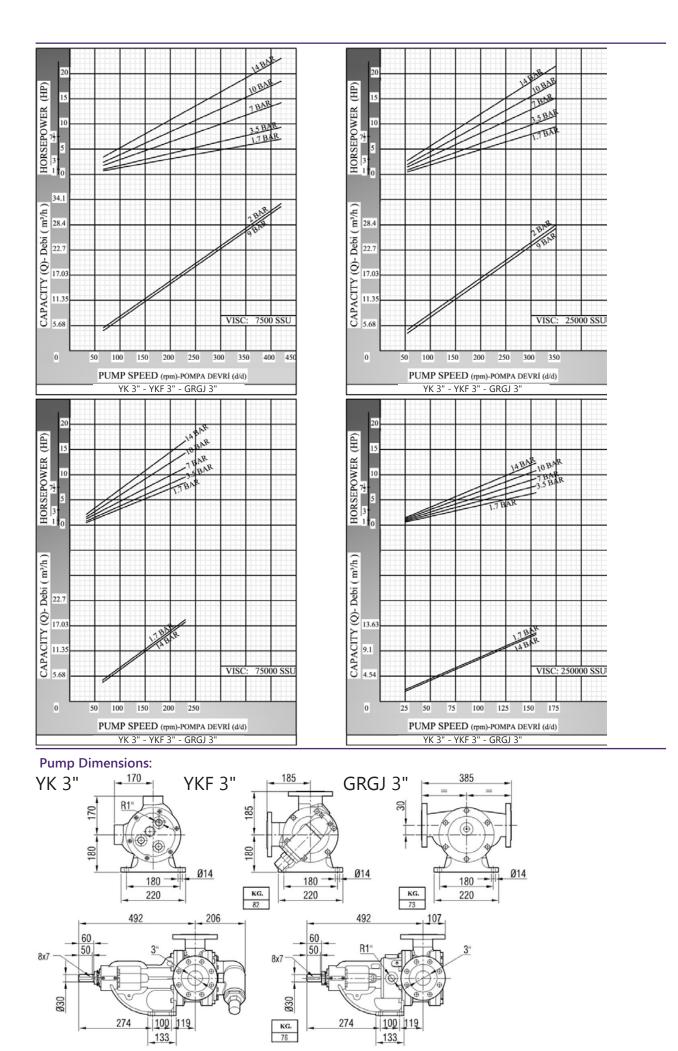








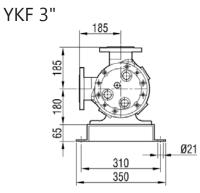
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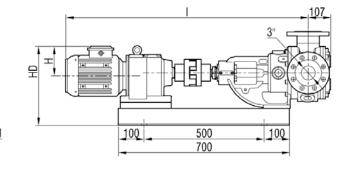


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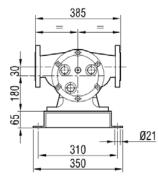


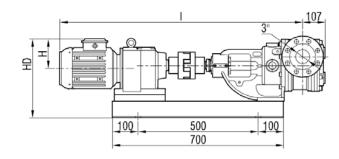
# Coupling Dimensions - Gearbox drive:



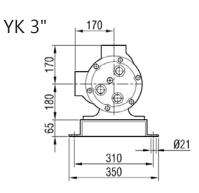


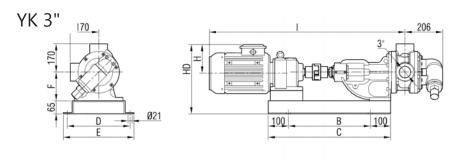
GRGJ 3"

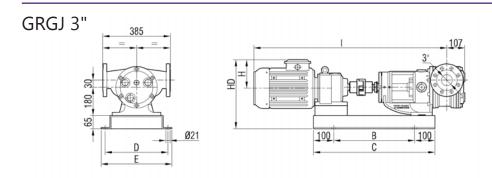




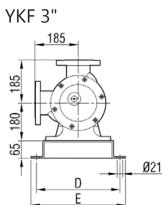
Motor Power & S	I	HD	Н	к	g	
3-4 hp / 2.2	1105	375	141	157	160	
47/98 d/d (rpm)	IRAM63/100L	1105	575	141	157	160
5.5 hp / 4	1 kw	1125	383	149	1/	52
87/93 d/d (rpm)	IRAM63/112M	1122	202	149		)2



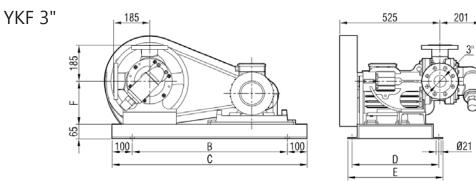




Motor Power & S	peed	Ι	HD	Н	В	С	D	Е	К	g
5.5 hp / 4 kw	7.5 hp / 5.5 kw									
87/480 d/d (rpm)	210/450 d/d (rpm)	1123	383	149	500	700			159	174
IRAM62/112M	IRAM62/C112M									
7.5 hp / 5.5 kw		1215					310	350	10	85
75/210 d/d (rpm)	IRAM72/132S	1215					310	350	10	55
10 hp / 7.5 kw	15 hp / 11 kw		411	182	600					
93/450 d/d (rpm)	200/450 d/d (rpm)	1261				800			196	198
IRAM72/132M	IRAM72/C132M									
20 hp / 15 kw		1440	457	225	680	1	390	420	2.	36
130/450 d/d (rpm)	IRAM82/C160L	1446	45/	225	080		390	430	3:	50



# Coupling Dimensions - Belt pulley:



Motor Power &					F1	F <sup>2</sup>	F <sup>3</sup>	F <sup>4</sup>	В	С	D	E	Kg	
		n1	n2	n3	n4									
		d/d	d/d	d/d	d/d									
7.5 hp / 5.5 kw	MOTOR 132S									680	880	390	430	205
10 hp / 7.5 kw	MOTOR 132M	450	400	350	310	180	180	245	245	680	880	390	430	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 Jacket)	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	Сар	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 Screw M10x16	4
13	Hex Bolt M12x35	15	27	Bypass Gasket	2	41	Nut M10	2
14	Bracket	1	28	Pressure Relief Valve - Bypass	1	42	Square Screw M10x70	2

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



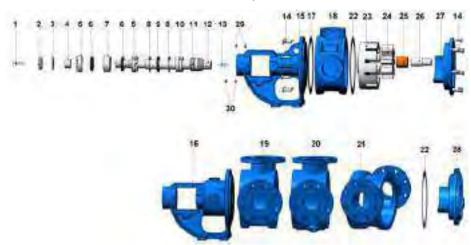
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	12	Rotor Key 10x8x35 A	1	23	Idler Gear	1
2	Lock Nut	1	13	Inbus Bolt M12x35	15	24	Idler Bushing	1
				Inbus Bolt M12x40 For Cover w/Heating Jacket	7			
3	Lock Washer	1	14	Bracket	1	25	Cover Pin	1
4	Spacer	1	15	Bracket (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 Screw 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			

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		4				0	07 3% 9 37 1 38	
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
1 2	Coupling Key 8x7x50 AB Lock Nut		15 16	Bracket Bracket (w/ Heating Jacket)	1	29 30	Pressure Relief Valve - Bypass Hex Bolt M8x25	
1 2 3	Coupling Key 8x7x50 AB Lock Nut Lock Washer	1	15 16 17	Bracket Bracket (w/ Heating Jacket) Bracket Gasket	1	29	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring	1 8
<b>No.</b> 1 2 3 4 5	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer	1 1 1	15 16	Bracket Bracket (w/ Heating Jacket)	1 1 1	29 30 31	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve	1 8 1
1 2 3 4	Coupling Key 8x7x50 AB Lock Nut Lock Washer	1 1 1 1	15 16 17 18	Bracket Bracket (w/ Heating Jacket) Bracket Gasket Casing (w /90° Threaded Ports)	1 1 1 1	29 30 31 32	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring	1 8 1 1
1 2 3 4 5	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut	1 1 1 1 2	15 16 17 18 19	Bracket Bracket (w/ Heating Jacket) Bracket Gasket Casing (w /90° Threaded Ports) Casing (w/ 90° Flanged Ports) Casing (w/ 90° Flanged Ports w/	1 1 1 1 1	29 30 31 32 33	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring	1 8 1 1 1
1 2 3 4 5 6	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10	1 1 1 1 2 2	15 16 17 18 19 20	Bracket Bracket (w/ Heating Jacket) Bracket Gasket Casing (w /90° Threaded Ports) Casing (w/ 90° Flanged Ports) Casing (w/ 90° Flanged Ports w/ Heating Jacket)	1 1 1 1 1 1	29 30 31 32 33 34	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer	1 8 1 1 1 1
1 2 3 4 5 6 7	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207)	1 1 1 2 2 1	15 16 17 18 19 20 21	Bracket Bracket (w/ Heating Jacket) Bracket Gasket Casing (w /90° Threaded Ports) Casing (w/ 90° Flanged Ports) Casing (w/ 90° Flanged Ports w/ Heating Jacket) Casing (w/ 180° Flanged Ports)	1 1 1 1 1 1 1 1	29 30 31 32 33 34 35	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover	1 8 1 1 1 1
1 2 3 4 5 6 7 8	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Internal Circlip (ø68)	1 1 1 2 2 1 2	15 16 17 18 19 20 21 21 22	Bracket Bracket (w/ Heating Jacket) Bracket Gasket Casing (w /90° Threaded Ports) Casing (w/ 90° Flanged Ports) Casing (w/ 90° Flanged Ports w/ Heating Jacket) Casing (w/ 180° Flanged Ports) Cover Gasket	1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring	1 8 1 1 1 1 1 1
1 2 3 4 5 6 7 8 9	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Internal Circlip (ø68) Lip Seal ø40xø68x10	1 1 1 2 2 1 2 1 2	15 16 17 18 19 20 21 21 22 23	<ul> <li>Bracket</li> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w/90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports)</li> <li>Casing (w/ 90° Flanged Ports w/ Heating Jacket)</li> <li>Casing (w/ 180° Flanged Ports)</li> <li>Cover Gasket</li> <li>Rotor Gear</li> </ul>	1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36 37	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring Nut M12	1 8 1 1 1 1 1 1 1
1 2 3 4 5 6 7 8 9 10 11	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Internal Circlip (ø68) Lip Seal ø40xø68x10 Ball Bearing (6008)	1 1 1 2 2 1 2 1 2 2	15 16 17 18 19 20 21 22 23 23 24	<ul> <li>Bracket</li> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w/90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports)</li> <li>Casing (w/ 90° Flanged Ports w/ Heating Jacket)</li> <li>Casing (w/ 180° Flanged Ports)</li> <li>Cover Gasket</li> <li>Rotor Gear</li> <li>Idler Gear</li> </ul>	1 1 1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36 37 38	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring Nut M12 Adjusting Screw M12x80	1 8 1 1 1 1 1 1 1 1 1
1 2 3 4 5 6 7 8 9 10	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Internal Circlip (ø68) Lip Seal ø40xø68x10 Ball Bearing (6008) Mechanical Seal ø40	1 1 1 2 2 1 2 1 2 1 2 1	15 16 17 18 19 20 21 22 23 24 25	<ul> <li>Bracket</li> <li>Bracket (w/ Heating Jacket)</li> <li>Bracket Gasket</li> <li>Casing (w /90° Threaded Ports)</li> <li>Casing (w/ 90° Flanged Ports)</li> <li>Casing (w/ 90° Flanged Ports w/ Heating Jacket)</li> <li>Casing (w/ 180° Flanged Ports)</li> <li>Cover Gasket</li> <li>Rotor Gear</li> <li>Idler Gear</li> <li>Idler Bushing</li> </ul>	1 1 1 1 1 1 1 1 1 1 1 1 1 1	29 30 31 32 33 34 35 36 37 38 39	Pressure Relief Valve - Bypass Hex Bolt M8x25 Bypass O-Ring Valve Spring Washer Bypass Cover Cap O-Ring Nut M12 Adjusting Screw M12x80 Cap	1 8 1 1 1 1 1 1 1 1 1 1 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	11	Mechanical Seal Ø40	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
				Inbus Bolt M12x40 (For Cover w/ Heating Jacket)	7			
5	Adjusting Nut	2	15	Bracket	1	25	Idler Bushing	1
6	Lip Seal ø40xø62x10	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 (ø68)	2	18	Casing (w/ 90° Threaded Ports)	1	28	Cover (w/ Heating Jacket)	1
9	Lip Seal ø40xø68x10	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 Jacket)	1	30	Grub Screw M10x16	4

	- 11-01010				7 21		24 25 26 13 21 27 21 27	
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	Inbus Bolt M12x35	15	23	Idler Gear	1
				Inbus 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 ø40xø62x10	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 (ø56)	1	18	Casing (w/ 90° Flanged Ports)	1	28	Greasing Fitting R3/8"	1
9	Lip Seal ø40xø56x10	3	19	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	29	Grub Screw 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	15	Hex Socket M12x35	15	29	Pressure Relief Valve - Bypass	1
2	Lock Nut	1	16	Bracket	1	30	Adjusting Screw 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	Pulley Cover	1	19	Casing (w/ 90° Flanged Ports)	1	33	Spring	1
6	Lip Seal ø40xø62x10	2	20	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	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 Ø40	1	25	Idler Bushing	1	39	Сар	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 Screw M10x16	2
14	Rotor Key 10x8x35 A	1	28	Bypass Gasket	2			

1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10 11	12 13				24 25 26 27 15	
No.	Part Name.	Otv	No.	19 20 To the second sec		No.	Part Name.	Otri
No. 1		Qty.	NO.	Part Name. Cartex Seal Ø40	Qty.	NO. 21		Qty.
2	Coupling Key 8x7x50 AB Lock Nut	1	11	Bracket Bushing	1	21	Casing (w/ 180° Flanged Ports) Cover Gasket	1
2	Lock Washer	1	12	Shaft	1	22	Rotor Gear	1
4	Spacer	1	14	Rotor Key 10x8x35 A	1	24	Idler Gear	1
5	Pulley Cover	1	15	Hex Bolt M12x35 Hex Bolt M12x40 (For Cover w/ Heating Jacket)	15 7	25	Idler Bushing	1
6	Lip Seal ø40xø62x10	2	16	Bracket (w/ Cartex, Jacket & Mechanical Seal)	1	26	Cover Pin	1
7	Ball Bearing (3207)	1	17	Bracket Gasket	1	27	Blind Cover	1
8	Stay Bolt M8x16	4	18	Casing (w/ 90° Threaded Ports)	1	28	Cover (w/ Heating Jacket)	1
9	Pulley	1	19	Casing (w/ 90° Flanged Ports)	1	29	Greasing Fitting R3/8"	1
10	Hex Socket M10x45	2	20	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	30	Grub Screw M10x16	2

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



# YKF 4" Internal Eccentric Gear Pump



Performance:	
Flow rate	55 m³/h
Pressure	1 - 14 bar
Temperature	0 - 200 °C
Speed	400 d/d
Viscosity	100 - 250000 SSU

#### **Technical Features:**

- Internal eccentric gear pump
- $\checkmark$  4" flanged threaded connections
- ✓ 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:**

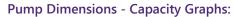
- Fuel oil, diesel fuel and gas oil transfer
- 🗸 Small scale thermal oil applications including Marlotherm, Duratherm, Paratherm, Multitherm, Mobiltherm and Dowtherm
- Lubrication applications
- / Coolant transfer
- Any transfer of low to medium viscosity fluids with lubricating properties
- Not suitable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

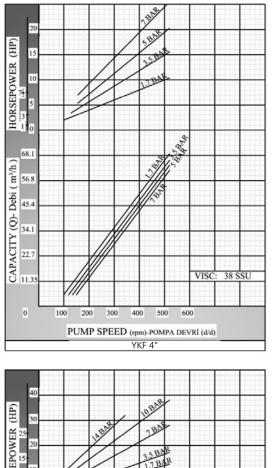
#### **Material Options:**

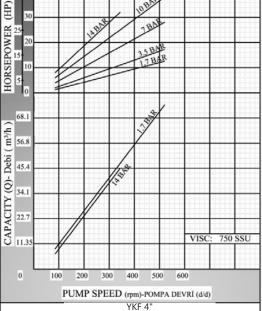
- ✓ Pump body, covers: Pig cast iron, Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
  - Gears: Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
  - Bearings: Snbz 12 bronze, carbon graphite, slicon carbide, hard metal coated steel, bearing
  - Sealing: Soft seal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

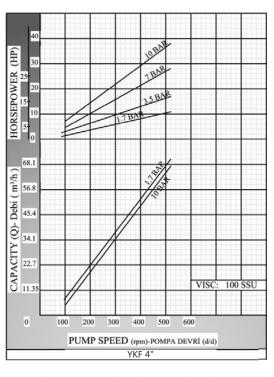
		Capaci	ty & Power Tal	ole		
Compaint (O)	Crossed (mana)		Pressure			Viceosity
Capacity (Q)	Speed (rpm)	2.5 Bar	5 Bar	7.5 Bar	10 Bar	Viscosity
8	60	5.5 HP	5.5 HP	7.5 HP	7.5 HP	75000 SSU
10	80	7.5 HP	7.5 HP	10 HP	10 HP	25000 SSU
12	100	7.5 HP	10 HP	10 HP	10 HP	25000 SSU
34	250	15 HP	20 HP	25 HP	30 HP	25000 SSU
42	300	15 HP	20 HP	25 HP	30 HP	7500 SSU
50	350	15 HP	20 HP	25 HP	30 HP	2500 SSU
55	400	15 HP	20 HP	25 HP	30 HP	750 SSU

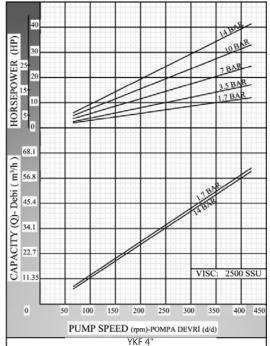




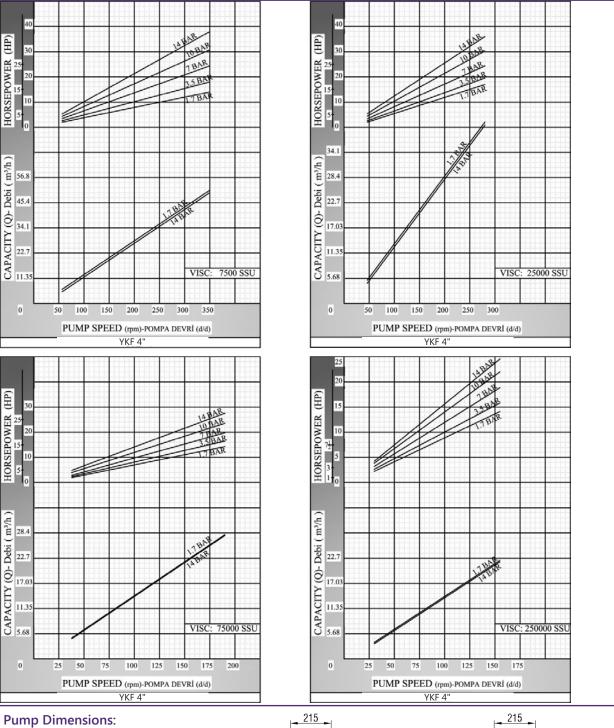




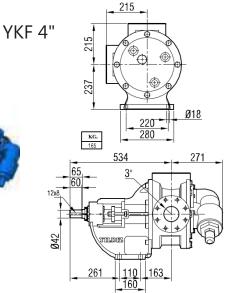


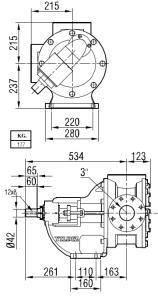


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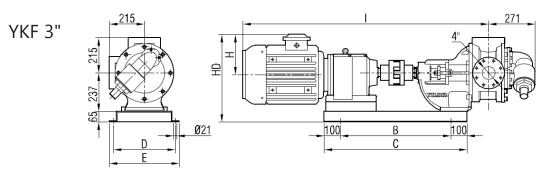




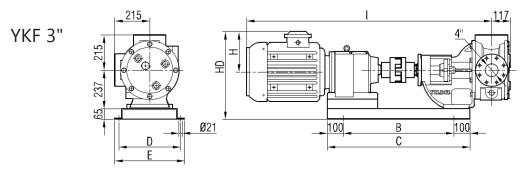


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## Coupling Dimensions - Gearbox drive:

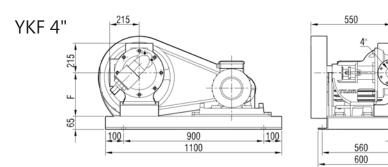


Motor Power &	I	HD	н	В	С	D	Е	Kg		
15 hp / 11 kw	200/400 d/d (rpm)	IRAM72/C132M	1295	468	182	580	780	380	420	340
20 hp / 15 kw	130/400 d/d (rpm)	IRAM82/160L	1500	513	225	680	880	390	430	400
25 hp / 18.5 kw	159/400 d/d (rpm)	IRAM82/180M	1512	538	248	000	000	590	450	415
30 hp / 22 kw	55/400 d/d (rpm)	IRAM102/180L	1705	542	248	880	1080	480	520	670



Motor Power &	Speed	I	HD	Н	В	С	D	E	Kg	
5.5 hp / 4 kw	55/95 d/d (rpm)	IRAM73/C100L	1202	427	141					290
7.5 hp / 5.5 kw	75/95 d/d (rpm)	IRAM73/C112M	1222	435	149	580	780	380	420	295
10 hp / 7.5 kw	93/104 d/d (rpm)	IRAM72/132M	1315	468	182					315
10 hp / 7.5 kw	57/91 d/d (rpm)	IRAM83/132M	1390	460	182	680	880	390	430	350
15 hp / 11 kw	40/57 d/d (rpm)	IRAM93/160M	1542	505	225	830	1030	420	460	460

## Coupling Dimensions - Belt Pulley:



Motor Power & Speed		Pump Speeds				F1	F <sup>2</sup>	F³	F <sup>4</sup>	Kg
		₀¹ d/d	n2 d/d	<sup>n3</sup> d∕d	₀₄ d/d					
15 hp / 11 kw	MOTOR 160M									375
20 hp / 15 kw	MOTOR 160L	450	400	350	310	237	237	237	237	385
25 hp / 18.5 kw	MOTOR 180M	450	400	350	310	237	237	237	237	410
30 hp / 22 kw	MOTOR 180L									425

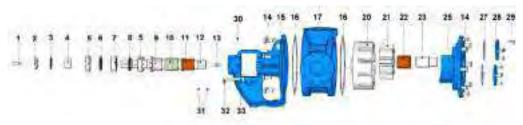
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# 

No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 12x8x60 AB	1	15	Bracket	1	29	Valve	1
2	Lock Nut	1	16	Bracket & Cover Gasket	2	30	Spring	1
3	Lock Washer	1	17	Casing (w /90° Flanged Ports)	1	31	Washer	1
4	Spacer	1	18	Casing (w/ 90° Flanged & w/ Heating Jacket	1	32	Bypass Cover	1
5	Adjusting Nut	2	19			33	Cap O-Ring	1
6	Lip Seal ø55xø72x10	1	20	Rotor Gear	1	34	Nut M16	1
7	Ball Bearing (3209)	1	21	Idler Gear	1	35	Adjusting Screw M16x90	1
8	Lip Seal ø50xø72x10	1	22	Idler Bushing	1	36	Сар	1
9	Packing Press	1	23	Cover Pin	1	37	Greasing Fitting R3/8"	1
10	Soft Seal / Packing Gland	1 TK	24	Cover	1	38	Grub Screw M12x90	4
11	Bracket Bushing	1	25	Bypass Gasket	2	39	Nut M14	2
12	Shaft	1	26	Pressure Relief Valve - Bypass	1	40	Square Screw M14x90	2
13	Rotor Key 12x8x45 A	1	27	Hex Bolt M10x30	8	41	Bracket (w/ Heating Jacket)	1
14	Hex Bolt M16x40	16	28	Bypass O-Ring	1			

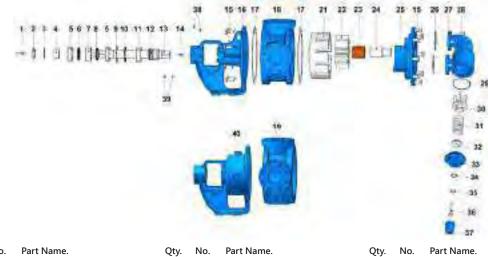
# Spare Parts List - Sealed with soft seal, jacketed, and with blind cover:





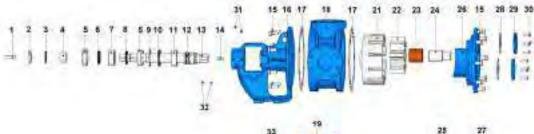


No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 12x8x60 AB	1	13	Rotor Key 12x8x45 A	1	25	Cover	1
2	Lock Nut	1	14	Inbus Bolt M16x40	16	26	Jacketed Cover	1
3	Lock Washer	1	15	Bracket	1	27	Bypass Gasket	2
4	Spacer	1	16	Bracket & Cover Gasket	2	28	Bypass Inlets Cover	2
5	Adjusting Nut	2	17	Casing (w/ 90° Flanged Ports)	1	29	Hex Bolt M10x30	8
6	Lip Seal ø55xø72x10	1	18	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	30	Greasing Fitting R3/8"	1
7	Ball Bearing (3209)	1	19			31	Grub Screw M12x16	4
8	Lip Seal ø50xø72x10	1	20	Rotor Gear	1	32	Nut M14	2
9	Packing Press	1	21	Idler Gear	1	33	Square Screw M14x90	2
10	Soft Seal / Packing Gland	1 TK	22	Idler Bushing	1	34	Bracket (w/ Heating Jacket)	1
11	Bracket Bushing	1	23	Cover Pin	1			
12	Shaft	1	24	Jacketed Cover Pin	1			



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 12x8x60 AB	1	15	Hex Bolt M16x40	16	29	Bypass O-Ring	1
2	Lock Nut	1	16	Bracket (w/ Adjusting Nut & Mechanical Seal)	1	30	Valve	1
3	Lock Washer	1	17	Bracket & Cover Gasket	2	31	Spring	1
4	Spacer	1	18	Casing	1	32	Washer	1
5	Adjusting Nut	2	19	Casing (90° Flanged w/ Heating Jacket)	1	33	Bypass Cover	1
6	Lip Seal ø55xø72x10	1	20			34	Cap O-Ring	1
7	Ball Bearing (3209)	1	21	Rotor Gear	1	35	Nut M16	1
8	Lip Seal ø50xø72x10	1	22	Idler Gear	1	36	Adjusting Screw M16x90	1
9	Internal Circlip (ø90)	1	23	Idler Bushing	1	37	Сар	1
10	Lip Seal ø50xø90x10	1	24	Cover Pin	1	38	Grease Fitting R3/8"	2
11	Bearing (3210)	1	25	Cover	1	39	Grub Screw M12x16	4
12	Mechanical Seal Ø50	1	26	Bypass Gasket	2	40	Bracket (w/ Heating Jacket)	1
13	Shaft	1	27	Pressure Relief Valve - Bypass	1			
14	Rotor Key 12x8x45 A	1	28	Hex Bolt M10x30	8			

#### 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 12x8x60 AB	1	12	Mechanical Seal Ø50	1	23	Idler Bushing	1
2	Lock Nut	1	13	Shaft	1	24	Cover Pin	1
3	Lock Washer	1	14	Rotor Key 12x8x45 A	1	25	Jacketed Cover Pin	1
4	Spacer	1	15	Hex Bolt M16x40	16	26	Cover	1
5	Adjusting Nut	2	16	Bracket	1	27	Jacketed Cover	1
6	Lip Seal ø55xø72x10	1	17	Bracket & Cover Gasket	2	28	Bypass Gasket	2
7	Ball Bearing (3209)	1	18	Casing (w/ 90° Flanged Ports)	1	29	Bypass Inlets Cover	2
8	Lip Seal ø50xø72x10	1	19	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	30	Hex Bolt M10x30	8
9	Internal Circlip (ø90)	1	20			31	Greasing Fitting R3/8"	2
10	Lip Seal ø50xø90x10	1	21	Rotor Gear	1	32	Grub Screw M12x16	4
11	Bearing (3210)	1	22	Idler Gear	1	33	Bracket (w/ Heating Jacket)	1

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

	0 11 1	2 13		5 21	22 2	3 23 14 27 28 29	
s i a a i deletti		1				THE IS	
			32 14		3	24 25	
			8				
Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
	Qty.	<b>No.</b>	Part Name.	Qty.	<b>No.</b> 23	Part Name. Cover Pin	Qty. 1
Part Name. Coupling Key 12x8x60 AB Lock Nut				-			-
Coupling Key 12x8x60 AB	1	12	Shaft	1	23	Cover Pin	1
Coupling Key 12x8x60 AB Lock Nut	1	12 13	Shaft Rotor Key 12x8x45 A	1	23 24	Cover Pin Jacketed Cover Pin	1
Coupling Key 12x8x60 AB Lock Nut Lock Washer	1 1 1	12 13 14	Shaft Rotor Key 12x8x45 A Hex Bolt M16x40	1 1 16	23 24 25	Cover Pin Jacketed Cover Pin Cover	1 1 1
Coupling Key 12x8x60 AB Lock Nut Lock Washer Spacer	1 1 1 1	12 13 14 15	Shaft Rotor Key 12x8x45 A Hex Bolt M16x40 Bracket	1 1 16 1	23 24 25 26	Cover Pin Jacketed Cover Pin Cover Jacketed Cover	1 1 1 1
Coupling Key 12x8x60 AB Lock Nut Lock Washer Spacer Adjusting Nut	1 1 1 1 2	12 13 14 15 16	Shaft Rotor Key 12x8x45 A Hex Bolt M16x40 Bracket Bracket & Cover Gasket	1 1 16 1 2	23 24 25 26 27	Cover Pin Jacketed Cover Pin Cover Jacketed Cover Bypass Gasket	1 1 1 1 2
Coupling Key 12x8x60 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø55xø72x10	1 1 1 1 2 1	12 13 14 15 16 17	Shaft Rotor Key 12x8x45 A Hex Bolt M16x40 Bracket Bracket & Cover Gasket Casing (w/ 90° Flanged Ports) Casing (w/ 90° Flanged Ports &	1 1 16 1 2	23 24 25 26 27 28	Cover Pin Jacketed Cover Pin Cover Jacketed Cover Bypass Gasket Bypass Inlets Cover	1 1 1 1 2 2
Coupling Key 12x8x60 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø55xø72x10 Ball Bearing (3209)	1 1 1 2 1 1	12 13 14 15 16 17 18	Shaft Rotor Key 12x8x45 A Hex Bolt M16x40 Bracket Bracket & Cover Gasket Casing (w/ 90° Flanged Ports) Casing (w/ 90° Flanged Ports &	1 1 16 1 2	23 24 25 26 27 28 29	Cover Pin Jacketed Cover Pin Cover Jacketed Cover Bypass Gasket Bypass Inlets Cover Hex Bolt M10x30	1 1 1 2 2 8
	, , , , , , , , , , , , , , , , , , ,	2 3 4 567 85910 117 9 1 3 8 8 1 0 €©⊂1111 1 9 1 3 8 1 0 €©⊂1111 1 9					

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



Idler Bushing

1

22

1

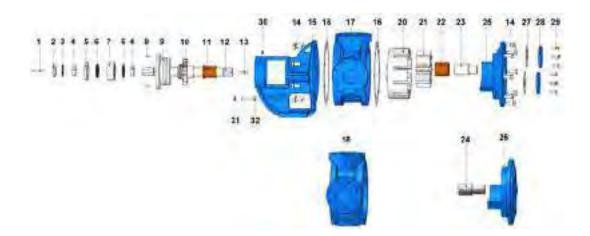
11

Bracket Bushing



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 12x8x60 AB	1	14	Hex Socket M16x40	16	27	Hex Bolt M10x30	8
2	Lock Nut	1	15	Bracket (w/ Cartex Mech. Seal)	1	28	Bypass O-Ring	1
3	Lock Washer	1	16	Bracket & Cover Gasket	2	29	Valve	1
4	Spacer	2	17	Casing (w /90° Flanged Ports)	1	30	Spring	1
5	Pulley Cover	1	18	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	31	Washer	1
6	Lip Seal ø55xø72x10	2	19			32	Bypass Cover	1
7	Ball Bearing (3209)	1	20	Rotor Gear	1	33	Cap O-Ring	1
8	Grub Screw M8x20	4	21	Idler Gear	1	34	Nut M16	1
9	Pulley	1	22	Idler Bushing	1	35	Adjusting Screw M16x90	1
10	Cartex Mechanical Seal Ø50	1	23	Cover Pin	1	36	Сар	1
11	Bracket Bushing	1	24	Cover	1	37	Greasing Fitting R3/8"	1
12	Shaft	1	25	Bypass Gasket	2	38	Nut M14	2
13	Rotor Key 12x8x45 A	1	26	Pressure Relief Valve - Bypass	1	39	Square Screw M14x90	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 12x8x60 AB	1	12	Shaft	1	23	Cover Pin	1
2	Lock Nut	1	13	Rotor Key 12x8x45 A	1	24	Jacketed Cover Pin	1
3	Lock Washer	1	14	Hex Bolt M16x40	16	25	Cover	1
4	Spacer	2	15	Bracket (w/ Cartex Mech. Seal)	1	26	Jacketed Cover	1
5	Pulley Cover	1	16	Bracket & Cover Gasket	2	27	Bypass Gasket	2
6	Lip Seal ø55xø72x10	2	17	Casing (w/ 90° Flanged Ports)	1	28	Bypass Inlets Cover	2
7	Ball Bearing (3209)	1	18	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	29	Hex Bolt M10x30	8
8	Grub Screw M8x20	4	19			30	Greasing Fitting R3/8"	1
9	Pulley	1	20	Rotor Gear	1	31	Nut M14	2
10	Cartex Mechanical Seal Ø50	1	21	Idler Gear	1	32	Square Screw M14x90	2
11	Bracket Bushing	1	22	Idler Bushing	1			



# YKF 5" Internal Eccentric Gear Pump



#### Performance:

Flow rate	110 m³/h
Pressure	1 - 10 bar
Temperature	0 - 200 °C
Speed	350 d/d
Viscosity	100 - 250000 SSU

#### **Technical Features:**

- ✓ Internal eccentric gear pump
- ✓ 5" flanged ports
- Compact design
- $\checkmark$  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 drive
- 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 casings: 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, ball bearing, carbon graphite, silicon carbide, hard metal coated steel
  - Sealing: Soft seal or packing gland, Rotatherm seal, lip seal, mechanical seal, cartridge type mechanical seal

Capacity & Power Table								
Conscitu (O)	Speed (rpm)		Pressure			Viccosity		
Capacity (Q)	Speed (rpm)	3 Bar	5 Bar	7 Bar	9 Bar	Viscosity		
68	175	30 HP	40 HP	40 HP	50 HP	25000 SSU		
90	225	30 HP	40 HP	40 HP	50 HP	7500 SSU		
105	275	30 HP	40 HP	50 HP	60 HP	2500 SSU		
135	350	30 HP	40 HP	50 HP	60 HP	750 SSU		



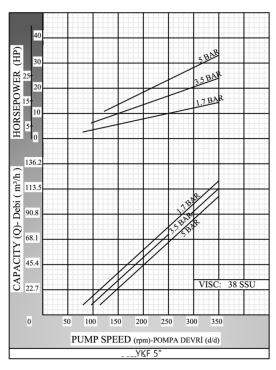


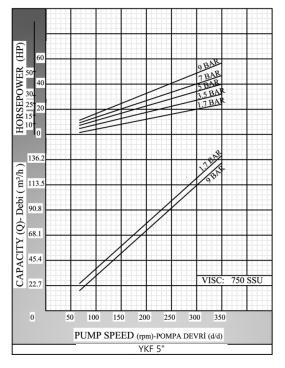


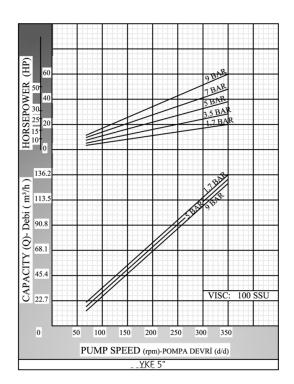


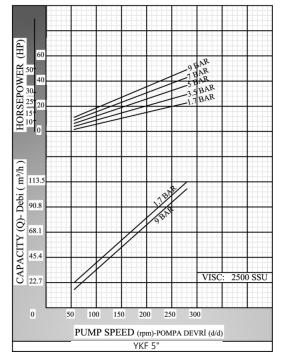


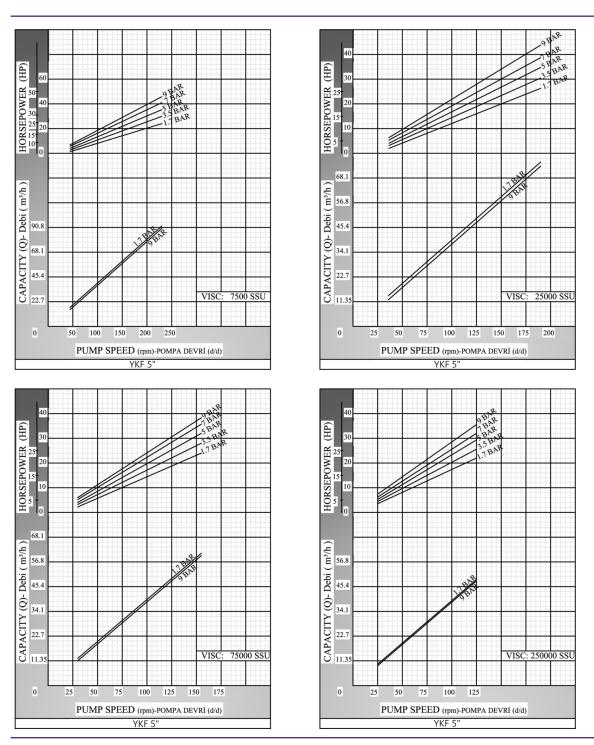
#### Pump Dimensions - Capacity Graphs:



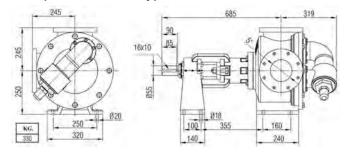






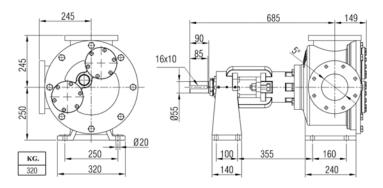


#### Pump Dimensions - Bypassed:

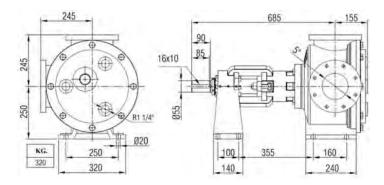




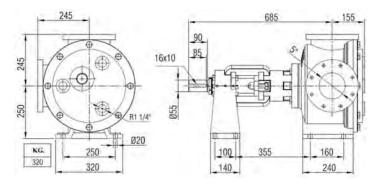
### Pump Dimensions - Blind covered:



## Pump Dimensions - with jacket:

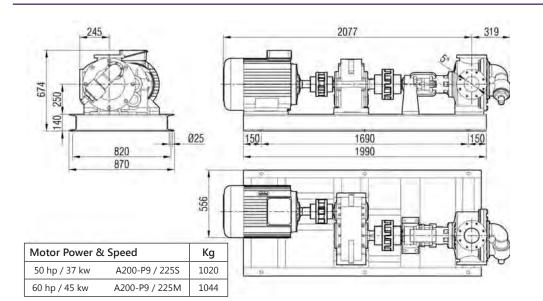


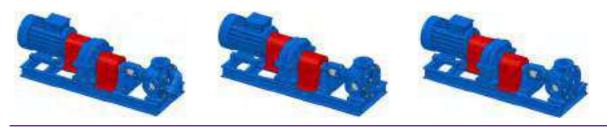
### Pump Dimensions - Gearbox drive:



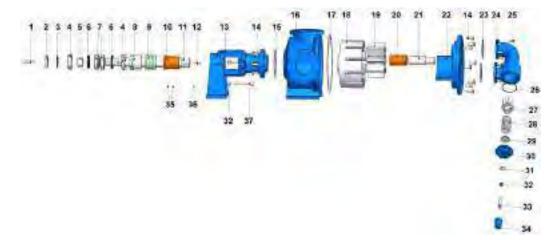
Motor Power &	Motor Power & Speed					В	С	D	E	Kg
25 hp / 18.5 kw	145/350 d/d (rpm)	IRAM82/180M	1665	626	240	1040	1240			600
30 hp / 22 kw	105/350 d/d (rpm)	IRAM92/180L	1783	617	248	1110	1310	430	480	720
40 hp / 30 kw	204/350 d/d (rpm)	IRAM92/200L	1822	644	275	1110	1310			755
50 hp / 37 kw	89/350 d/d (rpm)	IRAM102/225S	1913	654 285		1200	1400	520	570	900
60 hp / 45 kw	113/350 d/d (rpm)	IRAM102/225M	1942	034	265	1200	1400	520	570	1005





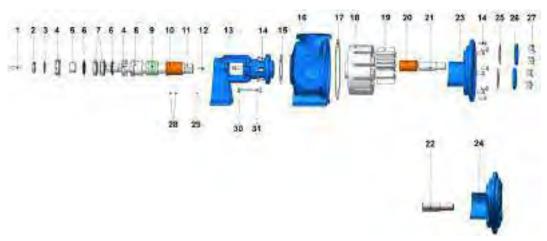


#### Spare Parts List - Sealed with soft seal, and bypassed with pressure relief valve:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 16x10x85 AB	x85 AB 1 14 Hex Bolt M16x40		Hex Bolt M16x40	14	27	Valve	1
2	Lock Nut	1	15	Bracket Gasket	1	28	Spring	1
3	Lock Washer	1	16	Casing (w/ 90° Flanged Ports)	1	29	Washer	1
4	Adjusting Nut	2	17	Bracket Gasket	1	30	Bypass Cover	1
5	Spacer (Adjusting Nut)	1	18	Rotor Gear	1	31	Cap O-Ring	1
6	Lip Seal ø70xø95x10	2	19	Idler Gear	1	32	Nut M16	3
7	Ball Bearing (32212) 2		20	Idler Bushing	1	33	Adjusting Screw M16x90	1
8	Packing Press	1	21	Cover Pin	1	34	Сар	1
9	Soft Seal Packing Gland	1 TK	22	Cover	1	35	Grub Screw M12x20	4
10	Bracket Bushing	1	23	Bypass Gasket	2	36	Greasing Fitting R3/8"	1
11	Shaft	1	24	Pressure Relief Valve - Bypass	1	37	Square Screw M16x120	2
12	Rotor Key 12x8x55 A	1	25	Hex Bolt M10x30	12			
13	Bracket	1	26	Bypass O-Ring	1			

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



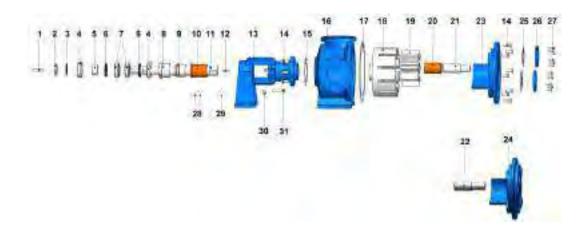
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 16x10x85 AB	1	12	Rotor Key 12x8x55 A	1	23	Cover	1
2	Lock Nut	1	13	Bracket	1	24	Jacketed Cover	1
3	Lock Washer	1	14	Hex Bolt M16x40	14	25	Bypass Gasket	2
4			15	Bracket Gasket	1	26	Pressure Relief Valve - Bypass	2
5			Casing (w/ 90° Flanged Ports)	1	27	Hex Bolt M10x30	12	
6	Lip Seal ø70xø95x10	2	17	Bracket Gasket	1	28	Grub Screw M12x20	4
7	Ball Bearing (32212)	2	18	Rotor Gear	1	29	Greasing Fitting R3/8"	1
8	Packing Press	1	19	Idler Gear	1	30	Nut M16	2
9	Soft Seal / Packing Gland	1 TK	20	Idler Bushing	1	31	Square Screw M16x120	2
10	Bracket Bushing	1	21	Cover Pin	1			
11	Shaft	1	22	Jacketed Cover Pin	1			

## Spare Parts List - Sealed with mechanical seal, and bypassed with pressure relief valve:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 16x10x85 AB	1	14	Hex Bolt M16x40	14	27	Valve	1
2	Lock Nut	1	15	Bracket Gasket	1	28	Spring	1
3	Lock Washer	1	16	Casing (w/ 90° Flanged Ports)	1	29	Washer	1
4	4 Adjusting Nut		17	Bracket Gasket	1	30	Bypass Cover	1
5	Spacer (Adjusting Nut)	1	18	Rotor Gear	1	31	Cap O-Ring	1
6	Lip Seal ø70xø95x10	2	19	Idler Gear	1	32	Nut M16	3
7	Ball Bearing (32212)	2	20	Idler Bushing	1	33	Adjusting Screw M16x90	1
8	Packing Press (For Mech. Seal)	1	21	Cover Pin	1	34	Сар	1
9	Mechanical Seal Ø70	1	22	Cover	1	35	Grub Screw M12x20	4
10	Bracket Bushing	1	23	Bypass Gasket	2	36	Greasing Fitting R3/8"	1
11	Shaft	1	24	Pressure Relief Valve - Bypass	1	37	Square Screw M16x70	2
12	Rotor Key 12x8x55 A	1	25	Hex Bolt M10x30	12			
13	Bracket	1	26	Bypass O-Ring	1			

# 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 16x10x85 AB	1	12	Rotor Key 12x8x55 A	1	23	Cover	1
2	Lock Nut	1	13	Bracket	1	24	Jacketed Cover	1
3	Lock Washer	1	14	Hex Bolt M16x40	14	25	Bypass Gasket	2
4	4 Adjusting Nut		15	Bracket Gasket	1	26	Pressure Relief Valve - Bypass	2
5	Spacer (Adjusting Nut)	1 16 Casing (w/ 90° Flanged Ports) 1		1	27	Hex Bolt M10x30	12	
6	Lip Seal ø70xø95x10	2	17	Bracket Gasket	1	28	Grub Screw M12x20	4
7	Ball Bearing (32212)	2	18	Rotor Gear	1	29	Greasing Fitting R3/8"	1
8	Packing Press (For Mech. Seal)	1	19	Idler Gear	1	30	Nut M16	2
9	Mechanical Seal Ø70 1		20	Idler Bushing	1	31	Square Screw M16x70	2
10	Bracket Bushing	1	21	Cover Pin	1			
11	Shaft	1	22	Jacketed Cover Pin	1			
11	11 Shaft		22	Jacketed Cover Pin	1			

# 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 12x8x60 AB	1	12	Shaft	1	23	Cover Pin	1
2	Lock Nut	1	13	Rotor Key 12x8x45 A	1	24	Jacketed Cover Pin	1
3	Lock Washer	1	14	Hex Bolt M16x40	16	25	Cover	1
4	Spacer	2	15	Bracket (w/ Cartex Mech. Seal)	1	26	Jacketed Cover	1
5	Pulley Cover	1	16	Bracket & Cover Gasket	2	27	Bypass Gasket	2
6	Lip Seal ø55xø72x10	2	17	Casing (w/ 90° Flanged Ports)	1	28	Bypass Inlets Cover	2
7	Ball Bearing (3209) 1		18	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	29	Hex Bolt M10x30	8
8	Grub Screw M8x20	4	19			30	Greasing Fitting R3/8"	1
9	Pulley	1	20	Rotor Gear	1	31	Nut M14	2
10	Cartex Mechanical Seal Ø50	1	21	Idler Gear	1	32	Square Screw M14x90	2
11	Bracket Bushing	1	22	Idler Bushing	1			



# YKF 6" Internal Eccentric Gear Pump



#### Performance:

Flow rate	135 m³/h	
Pressure	1 - 10 bar	
Temperature	0 - 200 °C	
Speed	350 d/d	
Viscosity	100 - 250000 SSU	

#### **Technical Features:**

- ✓ Internal eccentric gear pump
- ✓ 6" flanged threaded connections
- ✓ 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 drive
- ✓ Manufactured according to CE regulations

#### **Applications:**

- $\checkmark$   $\,$  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:**

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





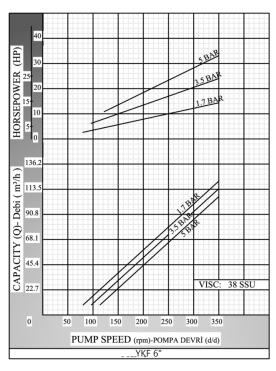


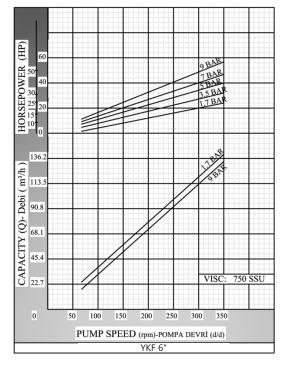
Conscitu (O)	Speed (rom)		Pressure		Viccosity	
Capacity (Q)	Speed (rpm)	3 Bar	5 Bar	7 Bar	9 Bar	Viscosity
46	125	25 HP	30 HP	40 HP	40 HP	250000 SSU
58	150	30 HP	40 HP	40 HP	40 HP	75000 SSU
68	175	30 HP	40 HP	40 HP	50 HP	25000 SSU
90	225	30 HP	40 HP	50 HP	50 HP	7500 SSU

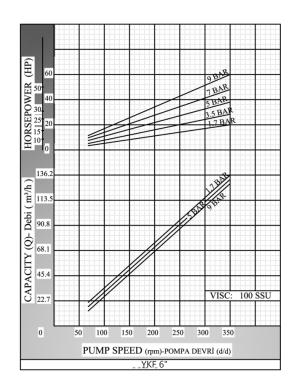


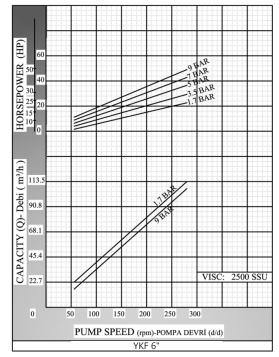


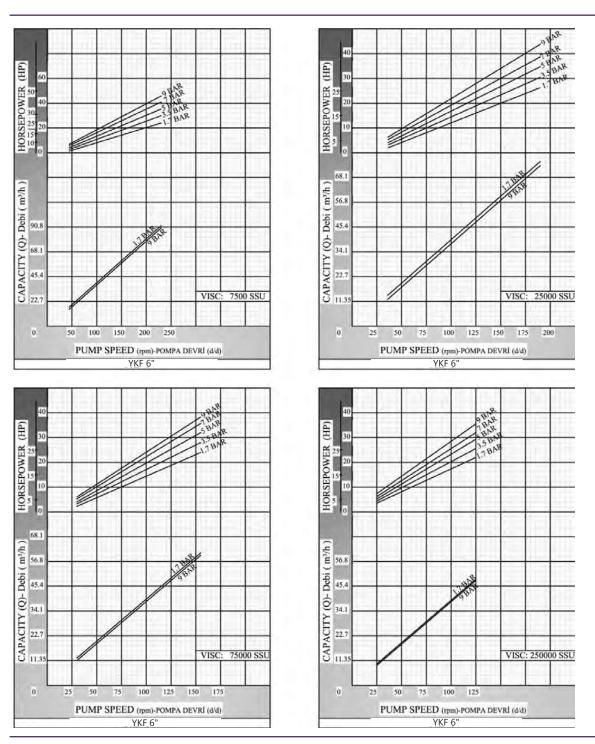
# Pump Dimensions - Capacity Graphs:



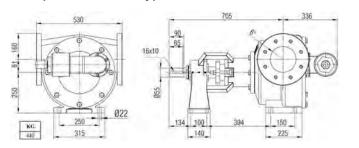






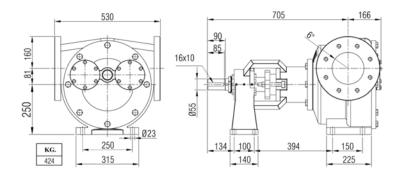


## Pump Dimensions - Bypassed:

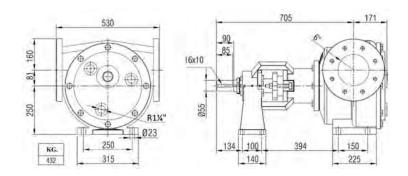




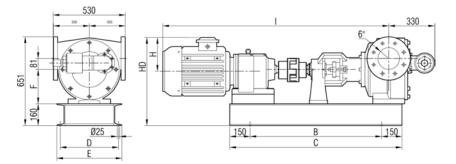
### Pump Dimensions - Blind covered:



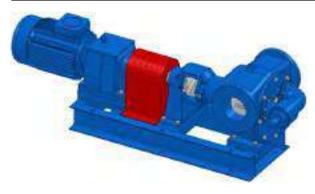
## Pump Dimensions - with jacket:

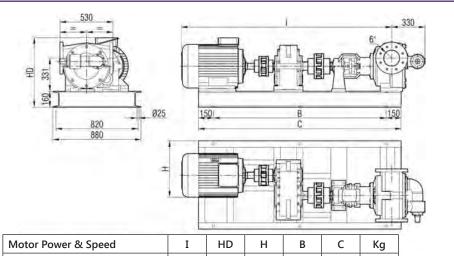


## Pump Dimensions - Gearbox drive:

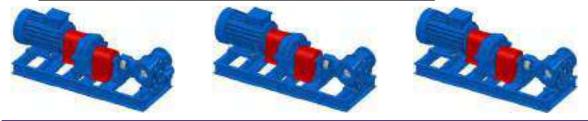


Motor Power &	I	HD	н	В	С	D	E	F	Kg		
25 hp / 18.5 kw	145/350 d/d (rpm)	IRAM82/180M	1679	646	240	970	1270		490 2 580		700
30 hp / 22 kw	105/350 d/d (rpm)	IRAM92/180L	1796	637	248	1050	1350	430			810
40 hp / 30 kw	204/350 d/d (rpm)	IRAM92/200L	1835	664	275	1050	1330			250	850
50 hp / 37 kw	89/350 d/d (rpm)	IRAM102/225S	1926	C74	574 285	1120	1420	520		1	1005
60 hp / 45 kw	113/350 d/d (rpm)	IRAM102/225M	1950	0/4		285 1130	1430	520			1106





	50 hp / 37 kw	A200-P9 / 225S	2096	694	561	1725	2025	1135	
Į	60 hp / 45 kw	A200-P9 / 225M	2090	094	201	1/25	2025	1159	
	75 hp / 55 kw	A200-P9 / 250M	2196	731	596	1785	2085	1265	

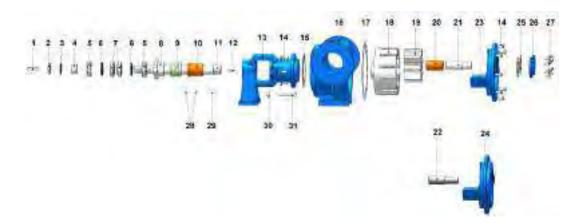


## Spare Parts List - Sealed with soft seal, and bypassed with pressure relief valve:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 16x10x85 AB	1	14	Hex Bolt M16x40	14	27	Valve	1
2	Lock Nut	1	15	Bracket Gasket	1	28	Spring	1
3	Lock Washer	1	16	Casing	1	29	Washer	1
4	Spacer	1	17	Bracket Gasket	1	30	Bypass Cover	1
5	(Adjusting Nut)	2	18	Rotor Gear	1	31	Cap O-Ring	1
6	Lip Seal ø70xø95x10	2	19	Idler Gear	1	32	Nut M16	3
7	Ball Bearing (32212)	2	20	Idler Bushing	1	33	Adjusting Screw M16x90	1
8	Packing Press	1	21	Cover Pin	1	34	Сар	1
9	Soft Seal / Packing Gland	1 TK	22	Cover	1	35	Grub Screw M12x20	4
10	Bracket Bushing	1	23	Bypass Gasket	2	36	Greasing Fitting R3/8"	1
11	Shaft	1	24	Pressure Relief Valve - Bypass	1	37	Square Screw M16x120	2
12	Rotor Key 12x8x55 A	1	25	Hex Bolt M10x30	12			
13	Bracket	1	26	Bypass O-Ring	1			





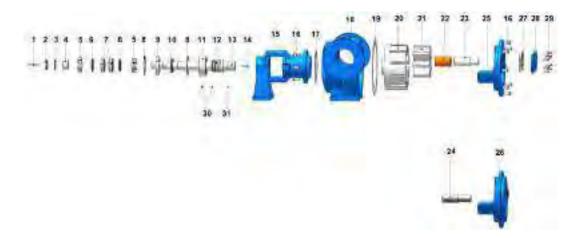
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 16x10x85 AB	1	12	Rotor Key 12x8x55 A	1	23	Cover	1
2	Lock Nut	1	13	Bracket	1	24	Jacketed Cover	1
3	Lock Washer	1	14	Hex Bolt M16x40	14	25	Bypass Gasket	2
4	Spacer	1	15	Bracket Gasket	1	26	Bypass Inlets Cover	2
5	Adjusting Nut	2	16	Casing	1	27	Hex Bolt M10x30	12
6	Lip Seal ø70xø95x10	2	17	Bracket Gasket	1	28	Grub Screw M12x20	4
7	Ball Bearing (32212)	2	18	Rotor Gear	1	29	Greasing Fitting R3/8"	1
8	Packing Press	1	19	Idler Gear	1	30	Nut M16	2
9	Soft Seal / Packing Gland	1 TK	20	Idler Bushing	1	31	Square Screw M16x120	2
10	Bracket Bushing	1	21	Cover Pin	1			
11	Shaft	1	22	Jacketed Cover Pin	1			

## Spare Parts List - Sealed with mechanical seal, and bypassed with pressure relief valve:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 16x10x85 AB	1	14	Rotor Key 12x8x55 A	14	27	Hex Bolt M10x30	1
2	Lock Nut	1	15	Bracket	1	28	Bypass O-Ring	1
3	Lock Washer	1	16	Hex Bolt M16x40	1	29	Valve	1
4	Spacer	2	17	Bracket Gasket	1	30	Spring	1
5	Adjusting Nut	1	18	Casing	1	31	Washer	1
6	Lip Seal ø70xø95x10	2	19	Bracket Gasket	1	32	Bypass Cover	3
7	Ball Bearing (32212)	2	20	Rotor Gear	1	33	Cap O-Ring	1
8	Internal Circlip (ø150)	1	21	Idler Gear	1	34	Nut M16	1
9	Bushing For Mechanical Seal	1	22	Idler Bushing	1	35	Adjusting Screw M16x90	4
10	Lip Seal ø70xø110x13	1	23	Cover Pin	2	36	Сар	1
11	Ball Bearing (2314)	1	24	Cover	1	37	Grub Screw M12x20	2
12	Mechanical Seal Ø70	1	25	Bypass Gasket	12	38	Greasing Fitting R3/8"	
13	Shaft	1	26	Pressure Relief Valve - Bypass	1			

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



Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
Coupling Key 16x10x85 AB	1	12	Mechanical Seal Ø70	1	23	Cover Pin	1
Lock Nut	1	13	Shaft	1	24	Cover Pin (For Jacket)	1
Lock Washer	1	14	Rotor Key 12x8x55 A	14	25	Cover	2
Spacer	2	15	Bracket	1	26	Jacketed Cover	2
Adjusting Nut	1	16	Hex Bolt M16x40	1	27	Bypass Gasket	12
Lip Seal ø70xø95x10	2	17	Bracket Gasket	1	28	Bypass Inlets Cover	4
Ball Bearing (32212)	2	18	Casing	1	29	Hex Bolt M10x30	1
Internal Circlip (ø150)	1	19	Bracket Gasket	1	30	Grub Screw M12x20	2
Bushing For Mechanical Seal	1	20	Rotor Gear	1	31	Greasing Fitting R3/8"	2
Lip Seal ø70xø110x13	1	21	Idler Gear	1			
Ball Bearing (2314)	1	22	Idler Bushing	1			
	Coupling Key 16x10x85 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø70xø95x10 Ball Bearing (32212) Internal Circlip (ø150) Bushing For Mechanical Seal Lip Seal ø70xø110x13	Coupling Key 16x10x85 AB1Lock Nut1Lock Washer1Spacer2Adjusting Nut1Lip Seal Ø70xØ95x102Ball Bearing (32212)2Internal Circlip (Ø150)1Bushing For Mechanical Seal1Lip Seal Ø70xØ110x131	Coupling Key 16x10x85 AB         1         12           Lock Nut         1         13           Lock Washer         1         14           Spacer         2         15           Adjusting Nut         1         16           Lip Seal Ø70xØ95x10         2         17           Ball Bearing (32212)         2         18           Internal Circlip (ø150)         1         19           Bushing For Mechanical Seal         1         20           Lip Seal Ø70xø110x13         1         21	Coupling Key 16x10x85 AB112Mechanical Seal Ø70Lock Nut113ShaftLock Washer114Rotor Key 12x8x55 ASpacer215BracketAdjusting Nut116Hex Bolt M16x40Lip Seal Ø70xØ95x10217Bracket GasketBall Bearing (32212)218CasingInternal Circlip (ø150)119Bracket GasketBushing For Mechanical Seal120Rotor GearLip Seal Ø70xØ110x13121Idler Gear	Coupling Key 16x10x85 AB         1         12         Mechanical Seal Ø70         1           Lock Nut         1         13         Shaft         1           Lock Nut         1         13         Shaft         1           Lock Washer         1         14         Rotor Key 12x8x55 A         14           Spacer         2         15         Bracket         1           Adjusting Nut         1         16         Hex Bolt M16x40         1           Lip Seal Ø70xØ95x10         2         17         Bracket Gasket         1           Ball Bearing (32212)         2         18         Casing         1           Internal Circlip (Ø150)         1         19         Bracket Gasket         1           Bushing For Mechanical Seal         1         20         Rotor Gear         1           Lip Seal Ø70xØ110x13         1         21         Idler Gear         1	Coupling Key 16x10x85 AB         1         12         Mechanical Seal Ø70         1         23           Lock Nut         1         13         Shaft         1         24           Lock Washer         1         14         Rotor Key 12x8x55 A         14         25           Spacer         2         15         Bracket         1         26           Adjusting Nut         1         16         Hex Bolt M16x40         1         27           Lip Seal Ø70xØ95x10         2         17         Bracket Gasket         1         28           Ball Bearing (32212)         2         18         Casing         1         29           Internal Circlip (Ø150)         1         19         Bracket Gasket         1         30           Bushing For Mechanical Seal         1         20         Rotor Gear         1         31           Lip Seal Ø70xø110x13         1         21         Idler Gear         1         31	Coupling Key 16x10x85 AB112Mechanical Seal Ø70123Cover PinLock Nut113Shaft124Cover Pin (For Jacket)Lock Washer114Rotor Key 12x8x55 A1425CoverSpacer215Bracket126Jacketed CoverAdjusting Nut116Hex Bolt M16x40127Bypass GasketLip Seal Ø70xØ95x10217Bracket Gasket128Bypass Inlets CoverBall Bearing (32212)218Casing129Hex Bolt M10x30Internal Circlip (Ø150)119Bracket Gasket130Grub Screw M12x20Bushing For Mechanical Seal120Rotor Gear131Greasing Fitting R3/8"Lip Seal Ø70xØ110x13121Idler Gear1111

# 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 12x8x60 AB	1	12	Shaft	1	23	Cover Pin	1
2	Lock Nut	1	13	Rotor Key 12x8x45 A	1	24	Jacketed Cover Pin	1
3	Lock Washer	1	14	Hex Bolt M16x40	16	25	Cover	1
4	Spacer	2	15	Bracket (w/ Cartex Mech. Seal)	1	26	Jacketed Cover	1
5	Pulley Cover	1	16	Bracket & Cover Gasket	2	27	Bypass Gasket	2
6	Lip Seal ø55xø72x10	2	17	Casing (w/ 90° Flanged Ports)	1	28	Bypass Inlets Cover	2
7	Ball Bearing (3209)	1	18	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	29	Hex Bolt M10x30	8
8	Grub Screw M8x20	4	19			30	Greasing Fitting R3/8"	1
9	Pulley	1	20	Rotor Gear	1	31	Nut M14	2
10	Cartex Mechanical Seal Ø50	1	21	Idler Gear	1	32	Square Screw M14x90	2
11	Bracket Bushing	1	22	Idler Bushing	1			



# YKF 8" Internal Eccentric Gear Pump



#### Performance:

Flow rate	200 m³/h
Pressure	1 - 10 bar
Temperature	0 - 200 °C
Speed	220 d/d
Viscosity	100 - 250000 SSU

#### **Technical Features:**

- ✓ Internal eccentric gear pump
- $\checkmark$  8" flanged threaded connections
- ✓ 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 drive
- ✓ Manufactured according to CE regulations

#### **Applications:**

- $\checkmark$  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:**

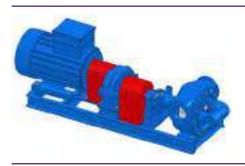
$\checkmark$	Pump casings:	Pig cast iron, Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
$\checkmark$	Gears:	Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
$\checkmark$	Bearings:	Snbz 12 bronze, ball bearing, carbon graphite, silicon carbide, hard metal coated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



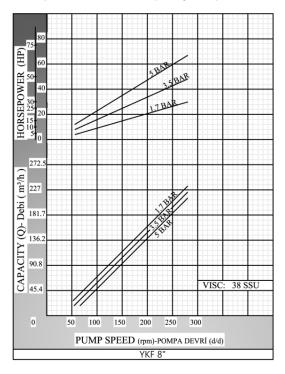


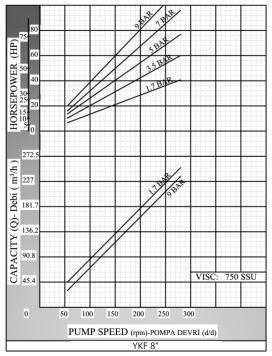


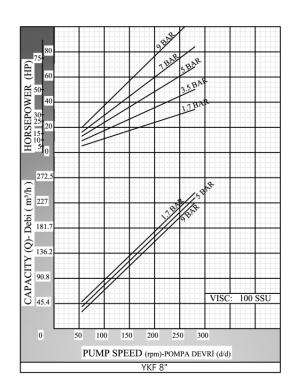
Capacity & Power Table												
Conscitu (O)	Speed (rom)		Pressure			Viccosity						
Capacity (Q)	Speed (rpm)	3 Bar	5 Bar	7 Bar	9 Bar	Viscosity						
80	84	40 HP	50 HP	50 HP	60 HP	250000 SSU						
114	125	50 HP	60 HP	75 HP	75 HP	75000 SSU						
140	155	50 HP	75 HP	75 HP	100 HP	25000 SSU						
174	190	60 HP	75 HP	75 HP	100 HP	7500 SSU						

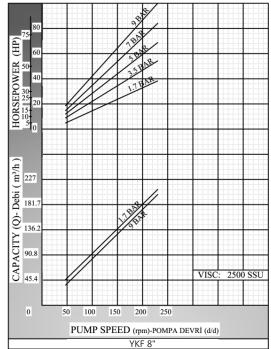


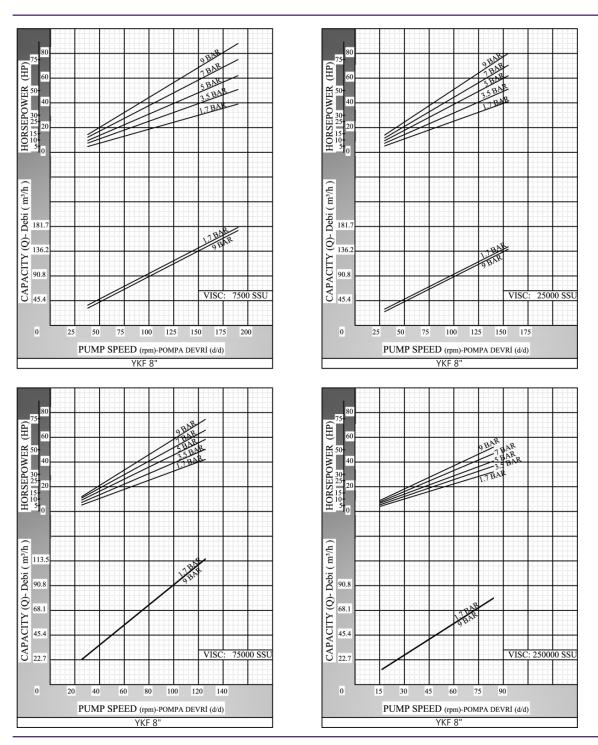
Pump Dimensions - Capacity Graphs:



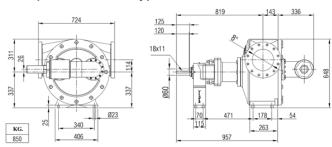




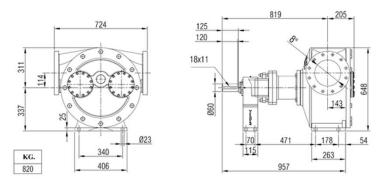




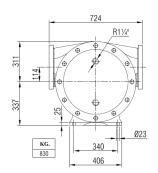
## Pump Dimensions - Bypassed:

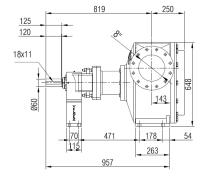


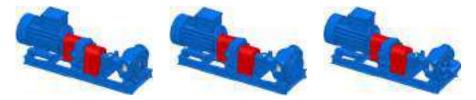
### Pump Dimensions - Blind covered:



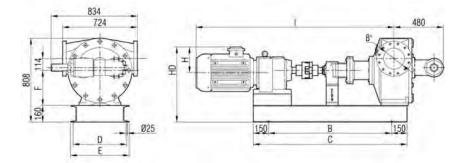
## Pump Dimensions - with jacket:



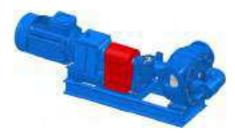


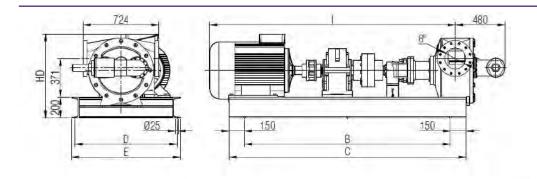


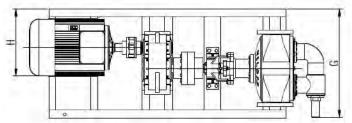
## Pump Dimensions - Gearbox drive:



Motor Power &	Ι	HD	н	В	С	D	E	F	Kg		
30 hp / 22 kw	105/350 d/d (rpm)	IRAM92/180L	1918	724	248	1190	1490				1295
40 hp / 30 kw	204/350 d/d (rpm)	IRAM92/200L	1957	751	275	1190	1490	520	580	337	1325
50 hp / 37 kw	89/350 d/d (rpm)	IRAM102/225S	2044	761	285	1280	1580	520	580	337	1540
60 hp / 45 kw	113/350 d/d (rpm)	IRAM102/225M	2069	761	285	1280	1580				1570







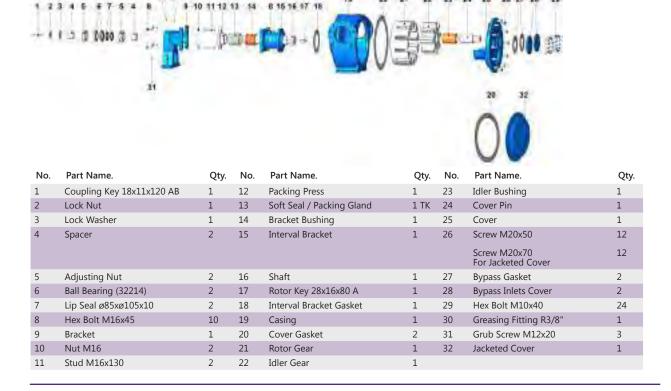
Motor Power &	Speed		I	HD	Н	В	С	D	E	G	Kg
50 hp / 37 kw	A200-P9 / 225S		2200	741	F.0.1	1840	2140			1044	1676
60 hp / 45 kw	A200-P9 / 225M		2200	/41	591	1840	2140		1050		1700
75 hp / 55 kw	A200-P9 / 250M	]	2300	778	614	1900	2200	980			1803
100 hp / 75 kw	A200-P9 / 280S	DN200	2363	53 806	647	1980	980 2280				1931
120 hp / 90 kw	A200-P9 / 280M	]	2303		047						1985
150 hp / 110 kw	A200-P9 / 315S	]	2550	966	836	2080	2380	1080	1150	1201	2168
175 hp / 132 kw	A200-P9 / 315M		2559	900	830	2080	2380	1080	1120	1201	2250

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



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 18x11x120 AB	1	15	Interval Bracket	1	29	Hex Bolt M10x40	24
2	Lock Nut	1	16	Shaft	1	30	Bypass O-Ring	1
3	Lock Washer	1	17	Rotor Key 28x16x80 A	1	31	Valve	1
4	Spacer	2	18	Interval Bracket Gasket	1	32	Spring	1
5	Adjusting Nut	2	19	Casing	1	33	Washer	1
6	Ball Bearing (32214)	2	20	Cover Gasket	1	34	Bypass Cover	1
7	Lip Seal ø85xø105x10	2	21	Rotor Gear	1	35	Cap O-Ring	1
8	Hex Bolt M16x45	10	22	Idler Gear	1	36	Nut M20	1
9	Bracket	1	23	Idler Bushing	1	37	Adjusting Screw M20x200	1
10	Nut M16	2	24	Cover Pin	1	38	Сар	1
11	Stud M16x130	2	25	Cover	1	39	Greasing Fitting R3/8"	1
12	Packing Press	1	26	Hex Bolt M20x50	12	40	Grub Screw M12x20	3
13	Soft Seal / Packing Gland	1 TK	27	Bypass Gasket	2			
14	Bracket Bushing	1	28	Pressure Relief Valve - Bypass	1			

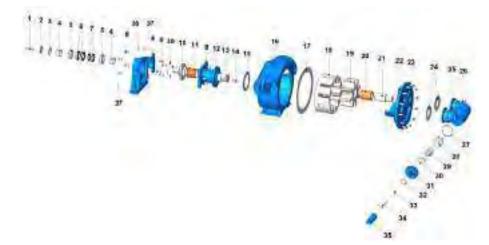




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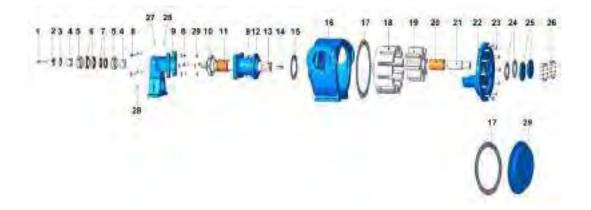
26 27 28 25

#### Spare Parts List - Sealed with mechanical seal, and bypassed with pressure relief valve:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 18x11x120 AB	1	14	Rotor Key 28x16x80 A	1	27	Bypass O-Ring	1
2	Lock Nut	1	15	Interval Bracket Gasket	1	28	Valve	1
3	Lock Washer	1	16	Casing	1	29	Spring	1
4	Spacer	2	17	Cover Gasket	1	30	Washer	1
5	Adjusting Nut	2	18	Rotor Gear	1	31	Bypass Cover	1
6	Ball Bearing (32214)	2	19	Idler Gear	1	32	Cap O-Ring	1
7	Lip Seal ø85xø105x10	2	20	Idler Bushing	1	33	Nut M20	1
8	Hex Bolt M16x45	14	21	Cover Pin	1	34	Adjusting Screw M20x200	1
9	Bracket	1	22	Cover	1	35	Сар	1
10	Cartex Mechanical Seal Ø100	1	23	Hex Bolt M20x50	12	36	Greasing Fitting R3/8"	1
11	Bracket Bushing	1	24	Bypass Gasket	2	37	Grub Screw M12x20	3
12	Interval Bracket	1	25	Pressure Relief Valve - Bypass	1	38	Washer	4
13	Shaft	1	26	Hex Socket M10x40	24			





1     Coupling Key 18x11x120 AB     11     Bracket Bushing     21     Cover Pin       2     Lock Nut     12     Interval Bracket     22     Cover	1
2 Lock Nut 12 Interval Bracket 22 Cover	-
	1
3 Lock Washer 13 Shaft 23 Screw M20x50	12
Screw M20x70 For Jacketed Cover	12
4 Spacer 14 Rotor Key 28x16x80 A 24 Bypass Gasket	2
5 Adjusting Nut 15 Interval Bracket Gasket 25 Bypass Inlets Cover	2
6 Ball Bearing (32214) 16 Casing 26 Hex Bolt M10x40	24
7 Lip Seal ø85xø105x10 17 Cover Gasket 27 Greasing Fitting R3/	/8" 1
8         Hex Bolt M16x45         18         Rotor Gear         28         Grub Screw M12x20	) 3
9 Bracket 19 Idler Gear 29 Washer	1
10     Cartex Mechanical Seal Ø100     20     Idler Bushing     30     Jacketed Cover	

# 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 12x8x60 AB	1	12	Shaft	1	23	Cover Pin	1
2	Lock Nut	1	13	Rotor Key 12x8x45 A	1	24	Jacketed Cover Pin	1
3	Lock Washer	1	14	Hex Bolt M16x40	16	25	Cover	1
4	Spacer	2	15	Bracket (w/ Cartex Mech. Seal)	1	26	Jacketed Cover	1
5	Pulley Cover	1	16	Bracket & Cover Gasket	2	27	Bypass Gasket	2
6	Lip Seal ø55xø72x10	2	17	Casing (w/ 90° Flanged Ports)	1	28	Bypass Inlets Cover	2
7	Ball Bearing (3209)	1	18	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	29	Hex Bolt M10x30	8
8	Grub Screw M8x20	4	19			30	Greasing Fitting R3/8"	1
9	Pulley	1	20	Rotor Gear	1	31	Nut M14	2
10	Cartex Mechanical Seal Ø50	1	21	Idler Gear	1	32	Square Screw M14x90	2
11	Bracket Bushing	1	22	Idler Bushing	1			



# YKF 200" YKF Internal Eccentric Gear Pump



Performance:	
Flow rate	15 m³/h
Pressure	1 - 14 bar
Temperature	0 - 200 °C
Speed	900 d/d
Viscosity	100 - 250000 SSU

### **Technical Features:**

- ✓ Internal eccentric gear pump
- ✓ 200" flanged threaded connections
- ✓ Compact design
- $\checkmark$  Reliable construction thanks to only two moving parts
- $\checkmark$  Various material options
- ✓ Available with external bypass, jacketed and blind cover
- ✓ 230v, three phase 50/60hz motors available
- ✓ Motor, 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

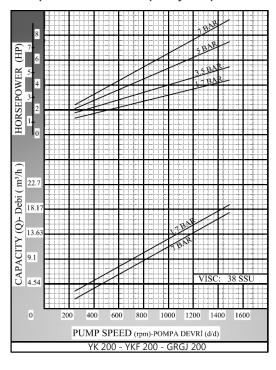
### **Material Options:**

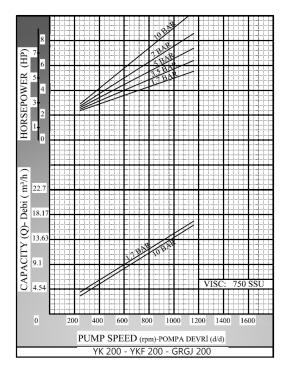
- Pump casings: Pig cast iron, Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
  - Gears: Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
- Mearings: Snbz 12 bronze, ball bearing, carbon graphite, silicon carbide, hard metal coated steel
- ✓ Sealing: Soft seal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

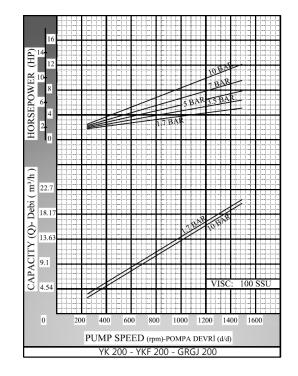
				Capaci	ty & Power Ta	ble			
Canacit		Snood	(*****		Pressure				Viscosity
Capacit	uy (Q)	Speed	(ipin)	3 Bar	6 Bar	9 Bar		12 Bar	viscosity
0.6	5	4(	)	0.55 HP	0.55 HP 0.75 HP		>	1 HP	75000 SSU
0.8	0.8 60		)	0.55 HP	0.75 HP	1 HP		1 HP	25000 SSU
1.5 100		0	1 HP	1.5 HP	1.5 HP		2 HP	25000 SSU	
3.7	3.7 250		1.5 HP	2 HP	3 HP		4 HP	7500 SSU	
5	5 350		2 HP	3 HP	4 HP		5.5 HP	2500 SSU	
5.5	5.5 450		0	2 HP	3 HP	4 HP		5.5 HP	750 SSU
13	;	90	0	4 HP	5.5 HP	10 HP		10 HP	750 SSU
21		140	00	5.5 HP	10	15 HP		15 HP	100 SSU
Mc	otor Pow	ers		N	lotor Powers			Mo	otor Powers
5.5 HP	1400 d	/d (rpm()		4 HP	900 d/	'd (rpm()		10 HP	900 d/d (rpm()
М	otor Boo	ły		5.5 HP	900 d/	'd (rpm()		M	lotor Body
	112			10 HP	1400 d	/d (rpm()			160
			15 HP	1400 d	/d (rpm()				
				I	Motor Body				
					132				

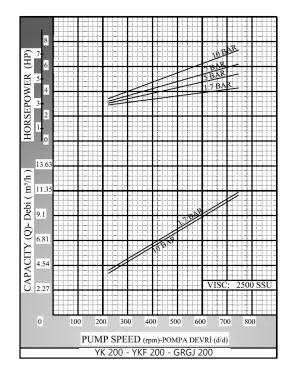


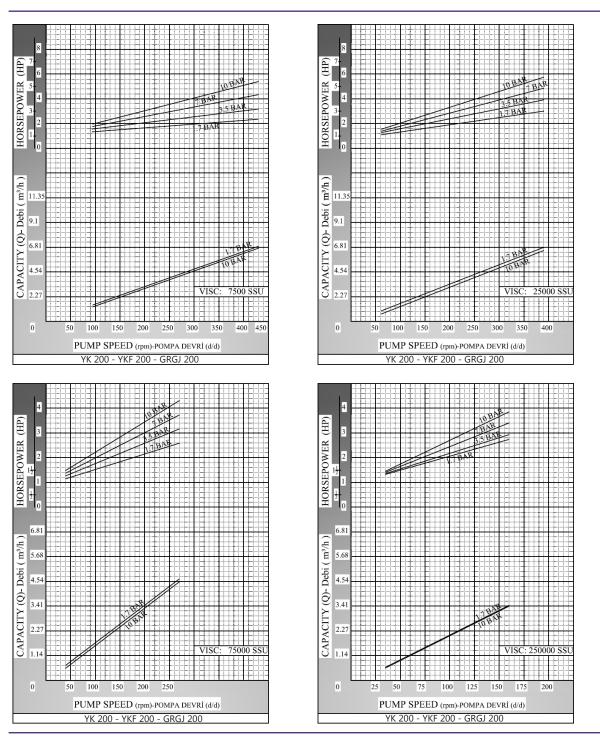
### Pump Dimensions - Capacity Graphs:



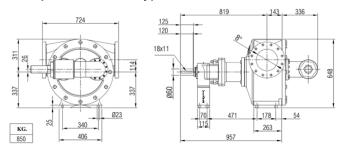




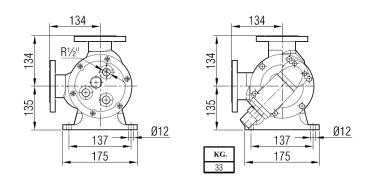


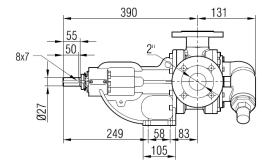


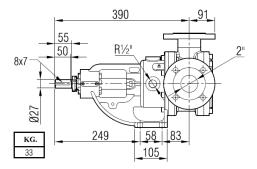




# Pump Dimensions:

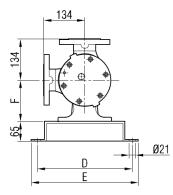


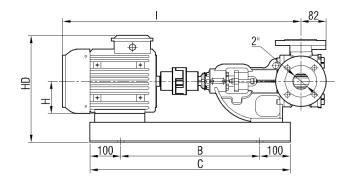






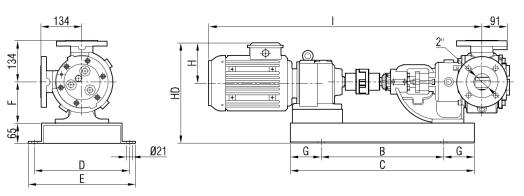
# Coupling Dimensions - Motor drive:





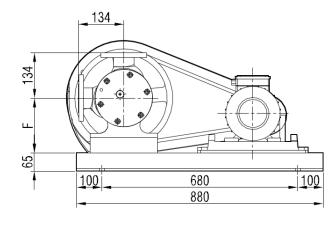
Motor Power &	Speed		I	HD	н	В	С	D	E	F	Kg
2 hp / 1.5 kw	750 d/d (rpm)	MOTOR 112M	804	344	112	500	700	310	350		83
3 hp / 2.2 kw	900 d/d (rpm)	MOTOR 112M	004	544	112		700	210	350	Ī	83
3 hp / 2.2 kw	750 d/d (rpm)	MOTOR 132S	865		132	580	780		420	135	92
4 hp / 3 kw	900 d/d (rpm)	WIDTOR 1525		367				380		122	93
4 hp / 3 kw	750 d/d (rpm)	MOTOR 132M	903	307			/80	380			100
5.5 hp / 4 kw	900 d/d (rpm)	MOTOR 132M	903								104

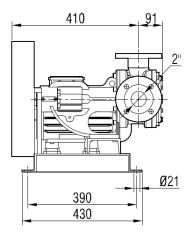
# Coupling Dimensions - Gearbox drive:



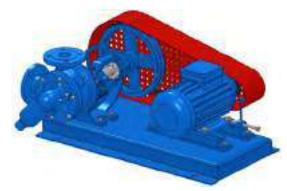
Motor Power	& Speed		I	HD	Н	В	С	D	Е	F	G	К	g
1 hp / 0.75 kw	90/400 d/d (rpm)	)/400 d/d (rpm) IRAM42/80		314	118	430	550	260	300	-	60	6	64
2 hp / 1.5 kw	105/450 d/d (rpm)	IRAM52/90L	901	327			620					8	3
4 hp / 1.5 kw	280/600 d/d (rpm)	IRAM52/100L	930	336		420	620			135		9	0
3 hp / 2.2 kw -	50/234 - 65/570	IRAM62/100L	994	330	141			310	350	122	100	101	109
4 hp / 3 kw	d/d (rpm)	IRAIVI02/100L	994	330		500	700					101	109
5.5 hp / 4 kw	87/570 d/d (rpm)	IRAM62/112M	1015	338	149							1	11

# Coupling Pump Dimensions - Belt Pulley:





					5					
Motor Power &	n1 d/d	n2 d/d	n3 d/d	n4 d/d	F <sub>(1)</sub>	F <sub>(2)</sub>	F <sub>(3)</sub>	F <sub>(4)</sub>	Kg	
3 hp / 2.2 kw	MOTOR 100L									120
4 hp / 3 kw	MOTOR 100L				310			190	245	130
5.5 hp / 4 kw	MOTOR 112M	450	400	350		135	190			135
7.5 hp / 5.5 kw	MOTOR 132S									145
10 hp / 7.5 kw	MOTOR 132M									155

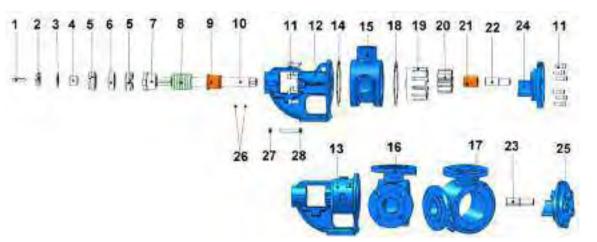


#### 11 12 14 15 18 19 20 21 22 23 11 24 25 26 i ten 33

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

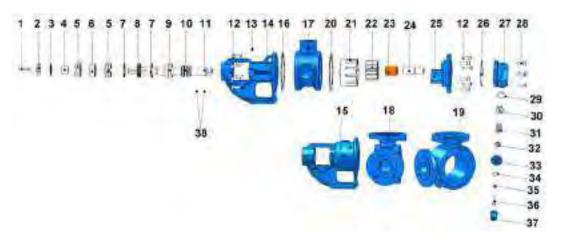
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	14	Bracket Gasket	1	27	Bypass O-Ring	1
2	Lock Nut	1	15	Casing (90° Threaded Ports	1	28	Valve	1
3	Lock Washer	1	16	Casing (90° Flanged Ports)	1	29	Spring	1
4	Spacer	1	17	Casing (90° Flanged Ports & w/ Heating Jacket)	1	30	Washer	1
5	Adjusting Nut	2	18	Cover Gasket	1	31	Bypass Cover	1
6	Ball Bearing (2206-2RS)	1	19	Rotor Gear	1	32	Cap O-Ring	1
7	Packing Press	1	20	Idler Gear	1	33	Nut M8	1
8	Soft Seal / Packing Gland	1 TK	21	Idler Bushing	1	34	Adjusting Screw M8x45	1
9	Bracket Bushing	1	22	Bypassed Cover Pin	1	35	Сар	1
10	Shaft	1	23	Cover (w/ Bypass Inlets)	1	36	Grub Screw M8x16	4
11	Inbus Bolt M10x30	14	24	Bypass Gasket	1	37	Nut M10	2
12	Bracket	1	25	Pressure Relief Valve	1	38	Square Screw M10x70	2
13	Bracket (w/ Heating Jacket)	1	26	Inbus Bolt M8x25	4			

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



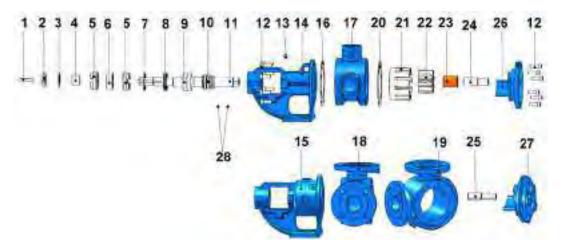
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	11	Inbus Bolt M10x30	14	21	Idler Bushing	1
2	Lock Nut	1	12	Bracket	1	22	Bypassed Cover Pin	1
3	Lock Washer	1	13	Bracket (w/ Heating Jacket)	1	23	Jacketed Cover Pin	1
4	Spacer	1	14	Bracket Gasket	1	24	Blind Cover	1
5	Adjusting Nut	2	15	Casing (90° Threaded Ports)	1	25	Cover (w/ Heating Jacket)	1
6	Ball Bearing (2206-2RS)	1	16	Casing (90° Flanged Ports)	1	26	Grub Screw M10x16	4
7	Packing Press	1	17	Casing (90° Flanged Ports & w/ Heating Jacket)	1	27	Nut M10	2
8	Soft Seal / Packing Gland	1 TK	18	Cover Gasket	1	28	Square Screw M10x70	2
9	Bracket Bushing	1	19	Rotor Gear	1			
10	Shaft	1	20	Idler Gear	1			

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

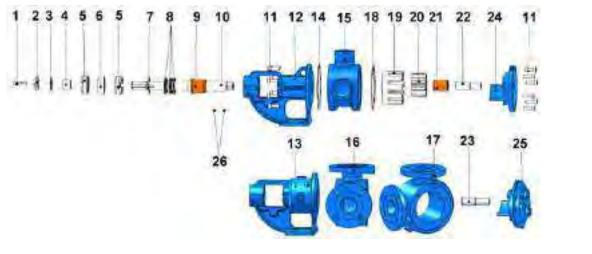


No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	14	Bracket	1	27	Pressure Relief Valve	1
2	Lock Nut	1	15	Bracket (w/ Heating Jacket)	1	28	Inbus Bolt M8x25	4
3	Lock Washer	1	16	Bracket Gasket	1	29	Bypass O-Ring	1
4	Spacer	1	17	Casing (90° Threaded Ports	1	30	Valve	1
5	Adjusting Nut	2	18	Casing (90° Flanged Ports)	1	31	Spring	1
6	Ball Bearing (2206-2RS)	1	19	Casing (90° Flanged Ports & w/ Heating Jacket)	1	32	Washer	1
7	Internal Circlip (ø62)	2	20	Cover Gasket	1	33	Bypass Cover	1
8	Lip Seal ø35xø62x10	1	21	Rotor Gear	1	34	Cap O-Ring	1
9	Ball Bearing (6007)	2	22	Idler Gear	1	35	Nut M8	1
10	Mechanical Seal Ø35	1	23	Idler Bushing	1	36	Adjusting Screw M8x45	1
11	Shaft	1	24	Bypassed Cover Pin	1	37	Сар	1
12	Inbus Bolt M10x30	14	25	Cover (w/ Bypass Inlets)	1	38	Grub Screw M10x16	4
13	Greasing Fitting R3/8"	1	26	Bypass Gasket	1			

### 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 8x7x50 AB	1	11	Shaft	1	21	Rotor Gear	1
2	Lock Nut	1	12	Inbus Bolt M10x30	14	22	Idler Gear	1
3	Lock Washer	1	13	Greasing Fitting R3/8"	1	23	Idler Bushing	1
4	Spacer	1	14	Bracket	1	24	Bypassed Cover Pin	1
5	Adjusting Nut	2	15	Bracket (w/ Heating Jacket)	1	25	Jacketed Cover Pin	1
6	Ball Bearing (2206-2RS)	1	16	Bracket Gasket	1	26	Blind Cover	1
7	Internal Circlip (ø62)	2	17	Casing (90° Threaded Ports)	1	27	Cover (w/ Heating Jacket)	4
8	Lip Seal ø35xø62x10	1	18	Casing (90° Flanged Ports)	1	28	Grub Screw M10x16	1
9	Ball Bearing (6007)	2	19	Casing (90° Flanged Ports & w/ Heating Jacket)	1			
10	Mechanical Seal Ø35	1	20	Cover Gasket	1			



# 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	Inbus Bolt M10x30	14	21	Idler Bushing	1
2	Lock Nut	1	12	Bracket	1	22	Cover Pin	1
3	Lock Washer	1	13	Bracket (w/ Heating Jacket)	1	23	Jacketed Cover Pin	1
4	Spacer	1	14	Bracket Gasket	1	24	Blind Cover	1
5	Adjusting Nut	2	15	Casing (90° Threaded Ports)	1	25	Cover (w/ Heating Jacket)	1
6	Ball Bearing (2206-2RS)	1	16	Casing (90° Flanged Ports)	1	26	Grub Screw M8x16	4
7	Internal Circlip (ø56)	1	17	Casing (90° Flanged Ports & w/ Heating Jacket)	1			
8	Lip Seal ø35xø62x10	3	18	Cover Gasket	1			
9	Bracket Bushing	1	19	Rotor Gear	1			
10	Shaft	1	20	Idler Gear	1			



# YKU 1<sup>1</sup>/<sub>2</sub>" Internal Eccentric Gear Pump



	Performance:	
	Flow rate	6.7 m³/h
	Pressure	1 - 14 bar
	Temperature	0 - 200 °C
	Speed	1400 d/d
	Viscosity	100 - 250000 SSU

#### **Technical Features:**

- ✓ Internal eccentric gear pump
- $\sqrt{11/2}$  threaded ports
- Compact design
- $\checkmark$  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
- Motor, 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
- $\checkmark$  Not suitable for fluids containing abrasive particles

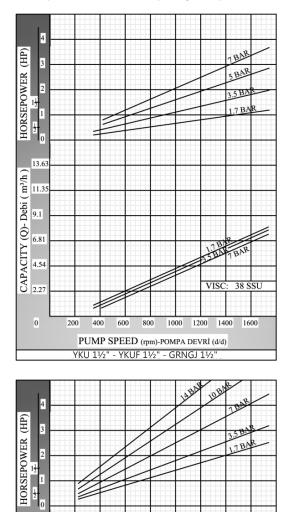
### **Material Options:**

- / 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, slicon 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									
Conscitu (O)	Speed (rpm)			Viscosity						
Capacity (Q)	Speed (rpm)	3 Bar	6 Bar	9 Bar	12 Bar	Viscosity				
0.24	60	0.5 HP	0.5 HP	0.75 HP	0.75 HP	75000 SSU				
0.30	0.30 80 0.5 HP			1 HP	1 HP	25000 SSU				
0.35	0.35 100		1 HP	1 HP	1 HP	25000 SSU				
4.5 900		2 HP	3 HP	3 HP	4 HP	750 SSU				
6.7	1400	2 HP	3 HP	4 HP	5.5 HP	100 SSU				



### **Pump Dimensions - Capacity Graphs:**



VISC

800 1000 1200 1400 1600 1800

750 SSU

13.63

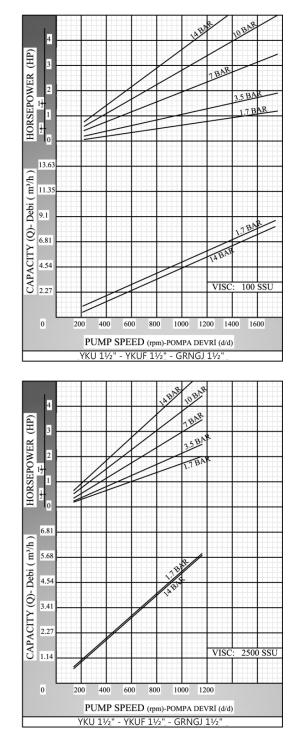
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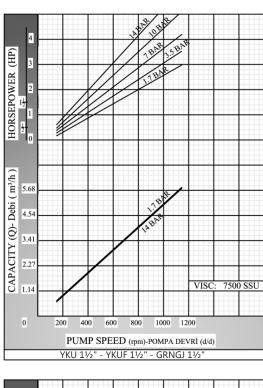
200 400

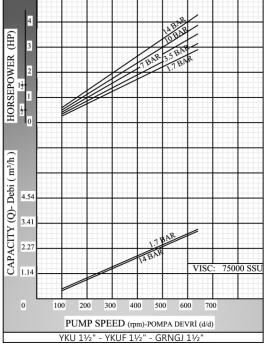
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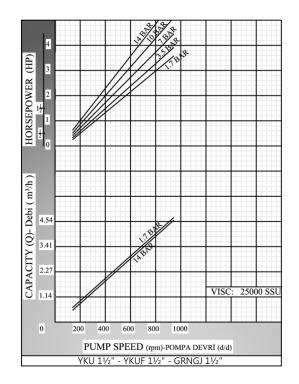
PUMP SPEED (rpm)-POMPA DEVRİ (d/d)

YKU 1½" - YKUF 1½" - GRNGJ 1½





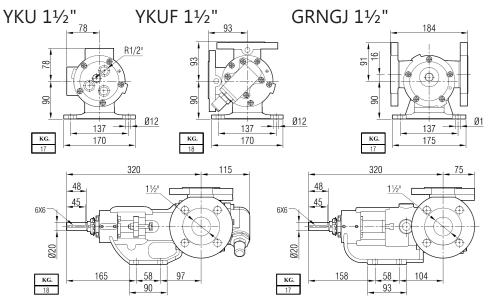








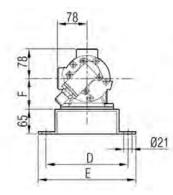


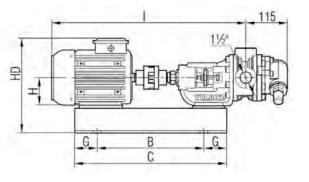






# **Coupling Dimensions - Motor drive:**



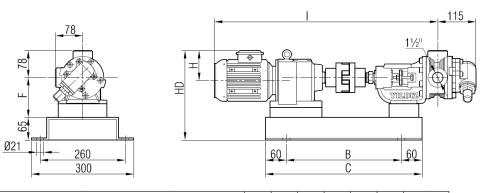


Motor Power &	Motor Power & Speed						С	D	E	F	G	Kg
1 hp / 0.75 kw	900 d/d (rpm)	MOTOR	649									42
1.5 hp / 1.1 kw	1400 d/d (rpm)	905	648 S	281	90	380	500			90		42
1.5 hp / 1.1 kw	900 d/d (rpm)	MOTOR	MOTOR 700		90	380	500			90		45
2 hp / 1.5 kw	1400 d/d (rpm)	90L	700					260	300		60	45
1.5 hp / 1.1 kw	750 d/d (rpm)											
2 hp / 1.5 kw	900 d/d (rpm)	MOTOR 100L	746	300	100	430	550			100		53
3-4 hp / 2.2-3 kw	1400 d/d (rpm)	IUUL										
2 hp / 1.5 kw	750 d/d (rpm)											
3 hp / 2.2 kw	900 d/d (rpm)	MOTOR	761	323	112	420	620	310 350	350	112	100	65
5.5 hp / 4 kw	1400 d/d (rpm)	1 112101	112M									





# Coupling Dimensions - Gearbox drive:

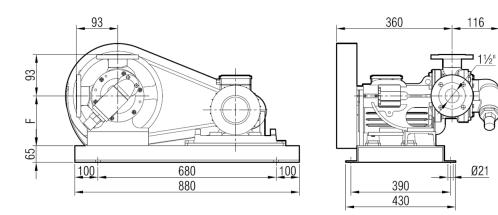


Motor Power &	Speed		I	HD	н	В	С	F	К	g
1 hp / 0.75 kw	90/400 d/d (rpm)	IRAM42/80M	761	269	118	350	470		4	2
1.5 hp / 1.1 kw	200/400 d/d (rpm)	IRAM42/90S	780	283	132	550	470		4	6
1 hp / 0.75 kw	40/240 d/d (rpm)	IRAM53/80M	788	267	118				5	1
1.5 hp / 1.1 kw	60/382 d/d (rpm)	IRAM53/90S	806	282	132	380	500	90	5	4
2 hp / 1.5 kw	87/540 d/d (rpm)	IRAM52/90L	831	282	132	380	500	90	5	5
3-4 hp / 2.2-3 kw	300/540 d/d (rpm)	IRAM52/100L	860	291	141				59	62
5.5 hp / 4 kw	87/540 d/d (rpm)	IRAM62/112M	953	318	149	430	550	115	8	0

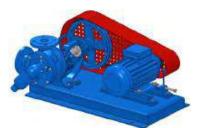




# Dimensions - Belt pulley coupling pump:



Motor Power &		Pump	speeds	5						
					n4	F(1)	F(2)	F(3)	F(4)	Kg
		d/d	d/d	d/d	d/d					
3 hp / 2.2 kw	MOTOR 100L									90
4 hp / 3 kw	MOTOR 100L	1								95
5.5 hp / 4 kw	MOTOR 112M	450	400	350	310	150	190	200	200	105
7.5 hp / 5.5 kw	MOTOR 132S	1								115
10 hp / 7.5 kw	MOTOR 132M	]								125



Ø21

# 

No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 6x6x45 AB		14	Bracket		27	Bypass O-Ring	
2	Lock Nut		15	Bracket Gasket		28	Valve	
3	Lock Washer		16	Casing (w/ 90° Threaded Ports)		29	Spring	
4	Spacer		17	Casing (w/ 90° Flanged Ports)		30	Washer	
5	Adjusting Nut		18	Casing (w/ 180° Flanged Ports)		31	Bypass Cover	
6			19	Cover Gasket		32	Cap O-Ring	
7	Ball Bearing (3205-2RS)		20	Rotor Gear		33	Nut M8	
8	Packing Press		21	Idler Gear		34	Adjusting Screw M8x55	
9	Soft Seal / Packing Gland		22	Idler Bushing		35	Сар	
10	Bracket bushing		23	Cover Pin		36	Hex Bolt M8x50	
11	Shaft		24	Cover (w/ Bypass Inlets)		37	Grub Screw M8x16	
12	Rotor Gear 6x6x20 A		25	Bypass Gasket				
13	Inbus Bolt M8x25		26	Pressure Relief Valve - Bypass				

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

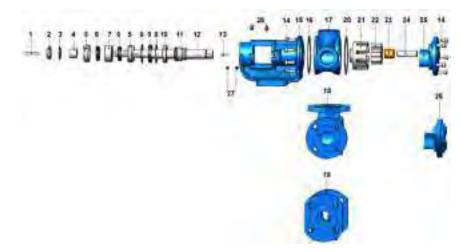
Spare Parts List - Sealed with soft seal, jacketed, and with blind cover:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 6x6x45 AB	1	11	Shaft	1	21	Idler Gear	1
2	Lock Nut	1	12	Rotor Key 6x6x20 A	1	22	Idler Bushing	1
3	Lock Washer	1	13	Inbus Bolt M8x25	13	23	Cover Pin	1
				Hex Socket M8x30 For Cover w/ Heating Jacket	5			
4	Spacer	1	14	Bracket	1	24	Blind Cover	1
5	Adjusting Nut	2	15	Bracket Gasket	1	25	Cover (w/ Heating Jackets)	1
6			16	Casing (w/ 90° Threaded Ports)	1	26	Hex Bolt M8x50	2
7	Ball Bearing (3205-2RS)	1	17	Casing (w/ 90° Flanged Ports)	1	27	Nut M8	2
8	Packing Press	1	18	Casing (w/ 180° Flanged Ports)	1	28	Grub Screw M8x16	4
9	Soft Seal / Packing Gland	1 TK	19	Cover Gasket	1			
10	Bracket Bushing	1	20	Rotor Gear	1			

No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 6x6x45 AB	1	14	Inbus Bolt M8x25	1	27	Pressure Relief Valve - Bypass	1
2	Lock Nut	1	15	Bracket	1	28	Bypass O-Ring	1
3	Lock Washer	1	16	Bracket Gasket	1	29	Valve	1
4	Spacer	1	17	Casing (w/ 90° Threaded Ports)	1	30	Spring	1
5	Adjusting Nut	2	18	Casing (w/ 90° Flanged Ports)	1	31	Washer	1
6			19	Casing (w/ 180° Flanged)	1	32	Bypass Cover	1
7	Ball Bearing (3205-2RS)	1	20	Cover Gasket	1	33	Cap O-Ring	1
8	Internal Circlip (ø55)	2	21	Rotor Gear	1	34	Nut M8	1
9	Lip Seal ø30xø55x10	1	22	Idler Gear	1	35	Adjusting Screw M8x55	1
10	Ball Bearing (6006)	1	23	Idler Bushing	1	36	Сар	1
11	Mechanical Seal Ø30	1	24	Cover Pin	1	37	Grub Screw M8x16	4
12	Shaft	1	25	Cover (w/ Bypass Inlets)	1			
13	Rotor Key 6x6x20 A	17	26	Bypass Gasket	1			

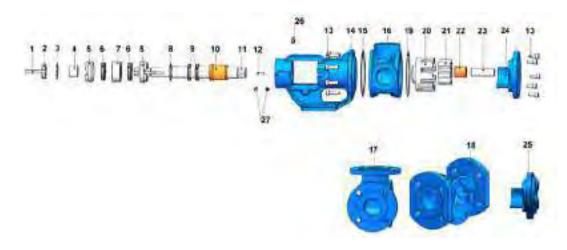
# Spare Parts List - Sealed with mechanical seal, jacketed, and with blind cover:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 6x6x45 AB	1	10	Ball Bearing (6006)	1	19	Casing (w/ 180° Flanged Ports)	1
2	Lock Nut	1	11	Mechanical Seal Ø30	1	20	Cover Gasket	1
3	Lock Washer	1	12	Shaft	1	21	Rotor Gear	1
4	Spacer	1	13	Rotor Key 6x6x20 A	1	22	Idler Gear	1
5	Adjusting Nut	2	14	Inbus Bolt M8x25 Inbus Bolt M8x30 For Cover w/ Heating Jacket	13 5	23	Idler Bushing	1
6			15	Bracket	1	24	Cover Pin	1
7	Bearing (3205-2RS)	1	16	Bracket Gasket	1	25	Blind Cover	1
8	Internal Circlip (ø55)	2	17	Casing (w/ 90° Threaded Ports)	1	26	Cover (w/ Heating Jacket)	1
9	Lip Seal ø30xø55x10	1	18	Casing (w/ 90° Flanged Ports)	1	27	Grub Screw M8x16	4

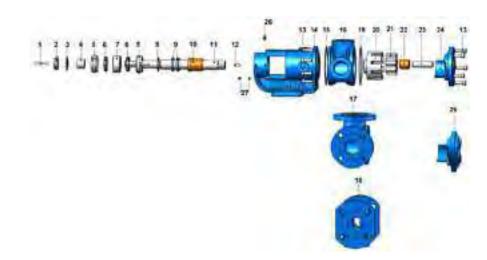
# Spare Parts List - Sealed with mechanical seal, and pressure relief valve on cover:





No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 6x6x45 AB	1	10	Bracket Bushing	1	19	Cover Gasket	1
2	Lock Nut	1	11	Shaft	1	20	Rotor Gear	1
3	Lock Washer	1	12	Rotor Key 6x6x20 A	1	21	Idler Gear	1
4	Spacer	1	13	Inbus Bolt M8x25	13	22	Idler Bushing	1
				Inbus Bolt M8x30 For Cover w/ Heating Jacket	5			
5	Adjusting Nut	2	14	Bracket	1	23	Cover Pin	1
6			15	Bracket Gasket	1	24	Blind Cover	1
7	Ball Bearing (3205-2RS)	1	16	Casing (w/ 90° Threaded Ports)	1	25	Cover (w/ Heating Jacket)	1
8	Internal Circlip (ø42)	1	17	Casing (w/ 90° Flanged Ports)	1	26		
9	Lip Seal ø30xø42x7	2	18	Casing (w/ 180° Flanged Ports)	1	27	Grub Screw M8x16	4

# Spare Parts List - Double jacketed and sealed with lip seal:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 6x6x45 AB	1	10	Bracket Bushing	1	19	Cover Gasket	1
2	Lock Nut	1	11	Shaft	1	20	Rotor Gear	1
3	Lock Washer	1	12	Rotor Key 6x6x20 A	1	21	Idler Gear	1
4	Spacer	1	13	Inbus Bolt M8x25	13	22	Idler Bushing	1
				Inbus Bolt M8x30 For Cover w/ Heating Jacket	5			
5	Adjusting Nut	2	14	Bracket Jacketed	1	23	Cover Pin	1
6			15	Bracket Gasket	1	24	Blind Cover	1
7	Ball Bearing (3205-2RS)	1	16	Casing (w/ 90° Threaded Ports)	1	25	Cover (w/ Heating Jacket)	1
8	Internal Circlip (ø42)	1	17	Casing (w/ 90° Flanged Ports)	1	26		
9	Lip Seal ø30xø42x7	2	18	Casing (w/ 180° Flanged Ports)	1	27	Grub Screw M8x16	4



# YKUF 2<sup>1</sup>/<sub>2</sub>" 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
- ✓ 2<sup>1</sup>⁄<sub>2</sub>″ flanged ports
- Compact design
- $\checkmark$  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
- $\checkmark$  Not suitable for fluids containing abrasive particles

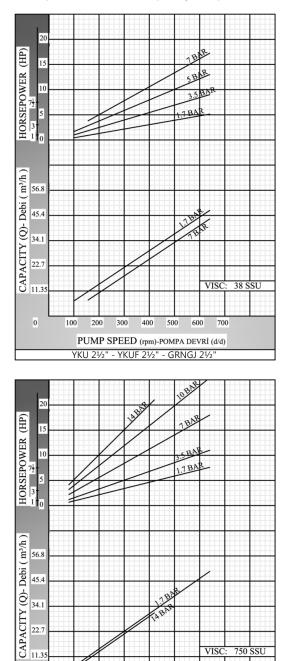
### **Material Options:**

- / 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, slicon 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										
Conscitu (O)	Speed (rpm)		Pressure			Viccosity					
Capacity (Q)	Speed (rpm)	2.5 Bar	5 Bar	7.5 Bar	10 Bar	Viscosity					
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:**



750 SSU

VISC

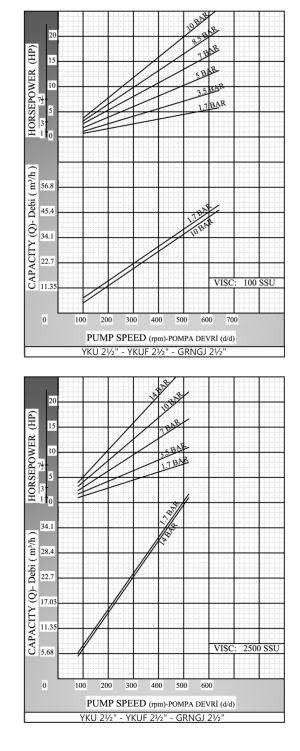
300 400 500 600 700

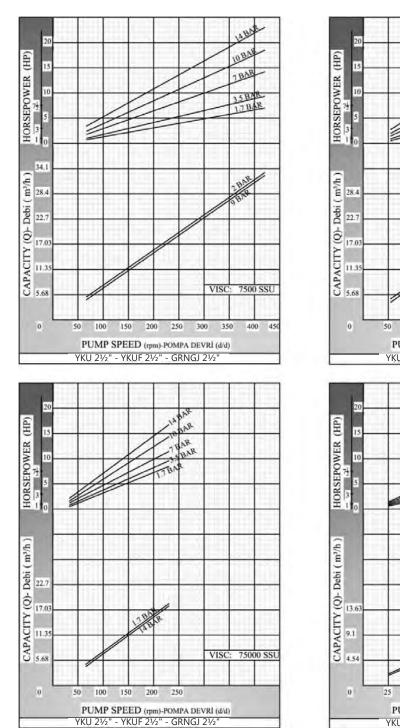
PUMP SPEED (rpm)-POMPA DEVRİ (d/d)

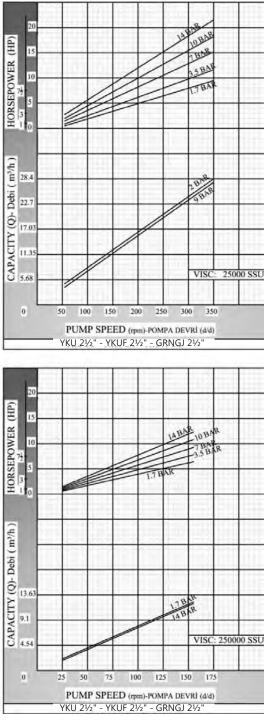
YKU 21/2" - YKUF 21/2" - GRNGJ 21/2"

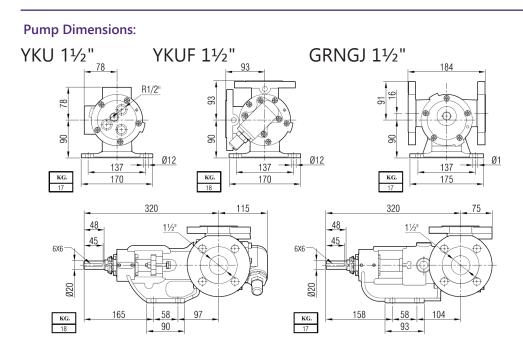
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100 200







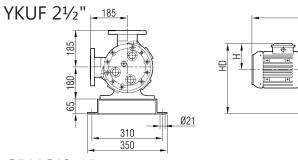


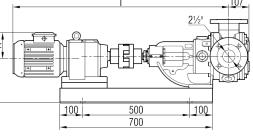




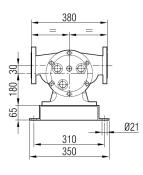


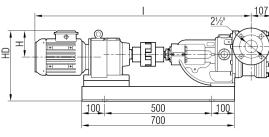
Coupling Dimensions - Gearbox drive:



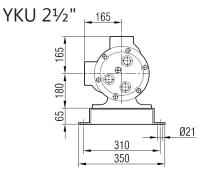


GRNGJ2<sup>1</sup>/<sub>2</sub>"

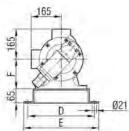


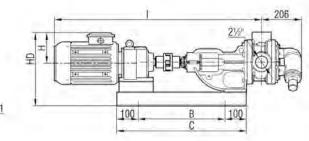


Motor Power &	Speed	I	HD	н	К	g
3-4 hp / 2	1105	375	141	156	159	
47/98 d/d (rpm)	IRAM63/100L	1105	575	141	130	139
5.5 hp /	/ 4 kw	1125	383	149	16	1
87/93 d/d (rpm)	IRAM63/112M	1122	565	149		)T

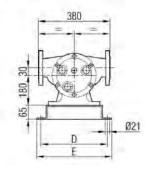


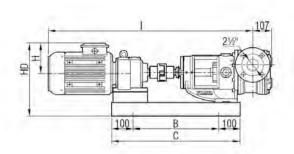
# YKU 21/2"





# GRNGJ 21/2"



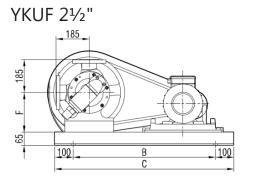


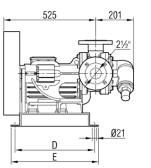
YKUF 2½"

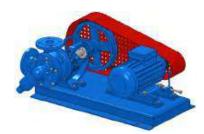
DF

Motor Power & S	Speed	I	HD	Н	В	С	D	E	К	g
5.5 hp / 4 kw	7.5 hp / 5.5 kw									
87/480 d/d (rpm)	210/450 d/d (rpm)	1123	383	149	500	700			158	173
IRAM62/112M	IRAM62/C112M									
7.5 hp ,	/ 5.5 kw	1215					310	350	10	34
75/210 d/d (rpm)	IRAM72/132S	1215					510	550	10	54
10 hp / 7.5 kw	15 hp / 11 kw		411	182	600					
93/450 d/d (rpm)	200/450 d/d (rpm)	1261				800			195	197
IRAM72/132M	IRAM72/C132M									
20 hp ,	/ 15 kw	1440	457	225	680		390	420	2.	
130/450 d/d (rpm)	IRAM82/160L	1446	457	225	080		390	430	33	35

# Dimensions - Belt pulley coupling pump dimensions:







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

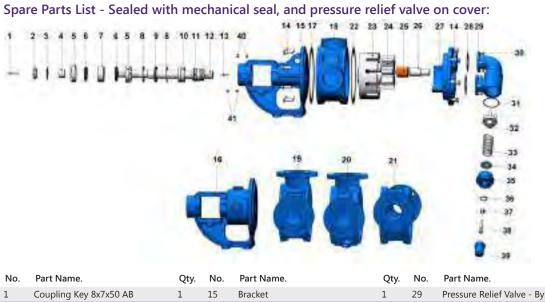


No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	15	Bracket (w/ Heating Jacket)	1	29	Hex Bolt M8x25	8
2	Lock Nut	1	16	Bracket Gasket	1	30	Bypass O-Ring	1
3	Lock Washer	1	17	Casing (w/ 90° Threaded Ports)	1	31	Valve	1
4	Spacer	1	18	Casing (w/ 90° Flanged Ports)	1	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	Сар	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:



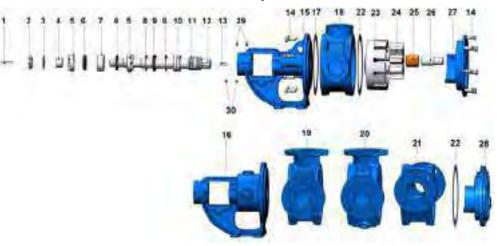
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	12	Rotor Key 10x8x35 A	1	23	Idler Gear	1
2	Lock Nut	1	13	Hex Bolt M12x35	15	~ ~		1
				Hex Bolt M12x40 For Cover w/ Heating Jacket	7	24	Idler Bushing	
3	Lock Washer	1	14	Bracket	1	25	Cover Pin	1
4	Spacer	1	15	Bracket (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 Potrs)	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			



				~ /			
Coupling Key 8x7x50 AB	1	15	Bracket	1	29	Pressure Relief Valve - Bypass	1
Lock Nut	1	16	Bracket (w/ Heating Jacket)	1	30	Hex Bolt M8x25	8
Lock Washer	1	17	Bracket Gasket	1	31	Bypass O-Ring	1
Spacer	1	18	Casing (w/ 90° Threaded Ports)	1	32	Valve	1
Adjusting Nut	2	19	Casing (w/ 90° Flanged Ports)	1	33	Spring	1
Lip Seal ø40xø62x10	2	20	Casing (w/ 90° Flanged Ports & w/ Heating Jackets)	1	34	Washer	1
Ball Bearing (3207)	1	21	Casing (w/ 180° Flanged Ports)	1	35	Bypass Cover	1
Internal Circlip (ø68)	2	22	Cover Gasket	1	36	Cap O-Ring	1
Lip Seal ø40xø68x10	1	23	Rotor Gear	1	37	Nut M12	1
Ball Bearing	2	24	Idler Gear	1	38	Adjusting Screw M12x80	1
Mechanical Seal Ø40	1	25	Idler Bushing	1	39	Сар	1
Shaft	1	26	Cover Pin	1	40	Greasing Fitting R3/8"	2
Rotor Key 10x8x35 A	1	27	Cover (w/ Bypass Inlets)	1	41	Grub Screws M10x16	4
Hex Bolt M12x35	15	28	Bypass Gasket	2	42		
	Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Internal Circlip (ø68) Lip Seal ø40xø68x10 Ball Bearing Mechanical Seal Ø40 Shaft Rotor Key 10x8x35 A	Coupling Key 8x7x50 AB1Lock Nut1Lock Washer1Spacer1Adjusting Nut2Lip Seal ø40xø62x102Ball Bearing (3207)1Internal Circlip (ø68)2Lip Seal ø40xø68x101Ball Bearing2Mechanical Seal Ø401Shaft1Rotor Key 10x8x35 A1	Coupling Key 8x7x50 AB       1       15         Lock Nut       1       16         Lock Washer       1       17         Spacer       1       18         Adjusting Nut       2       19         Lip Seal ø40xø62x10       2       22         Ball Bearing (3207)       1       21         Internal Circlip (ø68)       2       22         Lip Seal ø40xø68x10       1       23         Ball Bearing       2       24         Mechanical Seal Ø40       1       25         Shaft       1       26         Rotor Key 10x8x35 A       1       27	Coupling Key 8x7x50 AB115BracketLock Nut116Bracket (w/ Heating Jacket)Lock Washer117Bracket GasketSpacer118Casing (w/ 90° Threaded Ports)Adjusting Nut219Casing (w/ 90° Flanged Ports)Lip Seal ø40xø62x10220Casing (w/ 90° Flanged Ports & w/ Heating Jackets)Ball Bearing (3207)121Casing (w/ 180° Flanged Ports)Internal Circlip (ø68)222Cover GasketLip Seal ø40xø68x10123Rotor GearBall Bearing224Idler GearMechanical Seal Ø40125Idler BushingShaft126Cover PinRotor Key 10x8x35 A127Cover (w/ Bypass Inlets)	Coupling Key 8x7x50 AB115Bracket1Lock Nut116Bracket (w/ Heating Jacket)1Lock Washer117Bracket Gasket1Spacer118Casing (w/ 90° Threaded Ports)1Adjusting Nut219Casing (w/ 90° Flanged Ports)1Lip Seal ø40xø62x10220Casing (w/ 90° Flanged Ports)1Ball Bearing (3207)121Casing (w/ 180° Flanged Ports)1Internal Circlip (ø68)222Cover Gasket1Lip Seal ø40xø68x10123Rotor Gear1Ball Bearing224Idler Gear1Ball Bearing125Idler Bushing1Shaft126Cover Pin1Rotor Key 10x8x35 A127Cover (w/ Bypass Inlets)1	Coupling Key 8x7x50 AB         1         15         Bracket         1         29           Lock Nut         1         16         Bracket (w/ Heating Jacket)         1         30           Lock Washer         1         17         Bracket Gasket         1         31           Spacer         1         18         Casing (w/ 90° Threaded Ports)         1         32           Adjusting Nut         2         19         Casing (w/ 90° Flanged Ports)         1         33           Lip Seal ø40xø62x10         2         20         Casing (w/ 90° Flanged Ports)         1         35           Ball Bearing (3207)         1         21         Casing (w/ 180° Flanged Ports)         1         36           Lip Seal ø40xø68x10         1         23         Rotor Gear         1         37           Ball Bearing         2         24         Idler Gear         1         38           Mechanical Seal Ø40         1         25         Idler Bushing         1         39           Shaft         1         26         Cover Pin         1         40           Rotor Key 10x8x35 A         1         27         Cover (w/ Bypass Inlets)         1         41	Coupling Key 8x7x50 AB115Bracket129Pressure Relief Valve - BypassLock Nut116Bracket (w/ Heating Jacket)130Hex Bolt M8x25Lock Washer117Bracket Gasket131Bypass O-RingSpacer118Casing (w/ 90° Threaded Ports)132ValveAdjusting Nut219Casing (w/ 90° Flanged Ports)133SpringLip Seal ø40xø62x10220Casing (w/ 90° Flanged Ports & W Heating Jackets)135Bypass CoverBall Bearing (3207)121Casing (w/ 180° Flanged Ports)136Cap O-RingInternal Circlip (ø68)222Cover Gasket136Cap O-RingLip Seal ø40xø68x10123Rotor Gear138Adjusting Screw M12x80Ball Bearing224Idler Gear139CapMechanical Seal Ø40126Cover Pin140Greasing Fitting R3/8"Rotor Key 10x8x35 A127Cover (w/ Bypass Inlets)141Grub Screws M10x16

Qty.

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 Ø40	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 ø40xø68x10	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 (ø68)	2	18	Casing (w/ 90° Threaded Ports)	1	28	Cover (w/ Heating Jacket)	1
9	Lip Seal ø40xø68x10	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

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			<b>U</b>	-	-		
Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
Coupling Key 8x7x50 AB	1	11	Shaft	1	21	Cover Gasket	2
Lock Nut	1	12	Rotor Key 10x8x35 A	1	22	Rotor Gear	1
Lock Washer	1	13	Hex Bolt M12x35	15	23	Idler Gear	1
			Hex Bolt M12x40 For Cover w/ Heating Jacket	7			
Spacer	1	14	Bracket	1	24	Idler Bushing	1
Adjusting Nut	2	15	Bracket (w/ Heating Jacket)	1	25	Cover Pin	1
Lip Seal ø40xø62x10	2	16	Bracket Gasket	1	26	Blind Cover	1
Ball Bearing (3207)	1	17	Casing (w/ 90° Threaded Ports)	1	27	Cover (w/ Heating Jacket)	1
Internal Circlip (ø56)	1	18	Casing (w/ 90° Flanged Ports)	1	28	Greasing Fitting R3/8"	1
Lip Seal ø40xø56x10	3	19	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	29	Grub Screw M10x16	4
	Coupling Key 8x7x50 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø40xø62x10 Ball Bearing (3207) Internal Circlip (ø56)	Coupling Key 8x7x50 AB 1 Lock Nut 1 Lock Washer 1 Spacer 1 Adjusting Nut 2 Lip Seal ø40xø62x10 2 Ball Bearing (3207) 1 Internal Circlip (ø56) 1	Coupling Key 8x7x50 AB         1         11           Lock Nut         1         12           Lock Washer         1         13           Spacer         1         14           Adjusting Nut         2         15           Lip Seal ø40xø62x10         2         16           Ball Bearing (3207)         1         17           Internal Circlip (ø56)         1         18	Coupling Key 8x7x50 AB111ShaftLock Nut112Rotor Key 10x8x35 ALock Washer113Hex Bolt M12x35Lock Washer113Hex Bolt M12x40 For Cover w/ Heating JacketSpacer114BracketAdjusting Nut215Bracket (w/ Heating Jacket)Lip Seal ø40xø62x10216Bracket GasketBall Bearing (3207)117Casing (w/ 90° Flanged Ports)Internal Circlip (ø56)118Casing (w/ 90° Flanged Ports)	Coupling Key 8x7x50 AB         1         11         Shaft         1           Lock Nut         1         12         Rotor Key 10x8x35 A         1           Lock Washer         1         12         Rotor Key 10x8x35 A         1           Lock Washer         1         13         Hex Bolt M12x35         15           Spacer         1         14         Bracket         1           Adjusting Nut         2         15         Bracket (w/ Heating Jacket)         1           Lip Seal ø40xø62x10         2         16         Bracket Gasket         1           Ball Bearing (3207)         1         17         Casing (w/ 90° Threaded Ports)         1           Internal Circlip (ø56)         1         18         Casing (w/ 90° Flanged Ports)         1	Coupling Key 8x7x50 AB         1         11         Shaft         1         21           Lock Nut         1         12         Rotor Key 10x8x35 A         1         22           Lock Washer         1         12         Rotor Key 10x8x35 A         1         22           Lock Washer         1         13         Hex Bolt M12x35         15         23           Spacer         1         14         Bracket         1         24           Adjusting Nut         2         15         Bracket (w/ Heating Jacket)         1         25           Lip Seal ø40xø62x10         2         16         Bracket Gasket         1         26           Ball Bearing (3207)         1         17         Casing (w/ 90° Threaded Ports)         1         27           Internal Circlip (ø56)         1         18         Casing (w/ 90° Flanged Ports)         1         28	Coupling Key 8x7x50 AB111Shaft121Cover GasketLock Nut112Rotor Key 10x8x35 A122Rotor GearLock Washer113Hex Bolt M12x351523Idler GearLock Washer114Bracket124Idler BushingSpacer114Bracket125Cover PinAdjusting Nut215Bracket Gasket126Blind CoverLip Seal ø40xø62x10216Bracket Gasket126Blind CoverBall Bearing (3207)117Casing (w/ 90° Flanged Ports)128Greasing Fitting R3/8"Lip Seal ø40x#5cr10210Casing (w/ 90° Flanged Ports)128Greasing Fitting R3/8"

Casing (w/ 180° Flanged Ports) 1

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

20

10

Bracket Bushing



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 ø40xø62x10	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 Ø40	1	25	Idler Bushing	1	39	Сар	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			

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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
5	Pulley Cover	T	15	Hex Bolt M12x40 For Cover w/ Heating Jacket	7	25	Idler busining	T
6	Lip Seal ø40xø62x10	2	16	Bracket (w/ Cartex, Jacket & Mechanical Seal)	1	26	Cover Pin	1
7	Ball Bearing (3207)	1	17	Bracket Gasket	1	27	Blind Cover	1
8	Stay Bolt M8x16	4	18	Casing (w/ 90° Threaded Ports)	1	28	Cover (w/ Heating Jacket)	1
9	Pulley	1	19	Casing (w/ 90° Flanged Ports)	1	29	Greasing Fitting R3/8"	1
10	Hex Socket M10x45	2	20	Casing (w/ 90° Flanged Ports & w/ Heating Jackets)	1	30	Grub Screws M10x16	2

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



# YKKF 2" Internal Eccentric Gear Pump



Performance:	
Flow rate	11.6 m³/h
Pressure	1 - 14 bar
Temperature	0 - 200 °C
Speed	500 d/d
Viscosity	100 - 250000 SSU

#### **Technical Features:**

- ✓ Internal eccentric gear pump
- ✓ 2" threaded ports
- Compact design
- $\checkmark$  Reliable construction thanks to only two moving parts
- $\checkmark$  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
- $\checkmark$  Not suitable for fluids containing abrasive particles

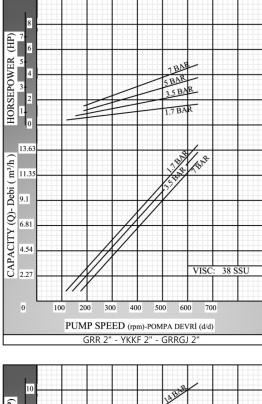
### **Material Options:**

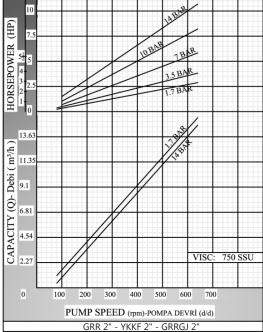
- / Pump body, covers: Pig cast iron, Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
  - Gears: Spheroidal cast iron, cast steel, AISI 304/316 CrNi Stainless Steel
    - Bearings: Snbz 12 bronze, carbon graphite, slicon carbide, hard metal coated steel, bearing
    - Sealing: Soft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

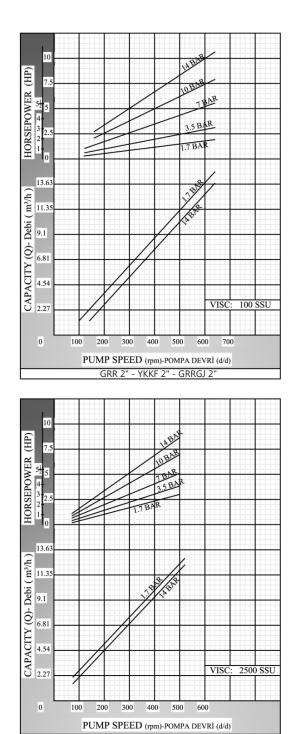
	Capacity & Power Table											
Conscient (O)	Speed (rpm)		Pressure		Viscosity							
Capacity (Q)	Speed (rpm)	3 Bar 6 Bar		9 Bar	12 Bar	Viscosity						
0.9	40	0.5 HP	0.75 HP	1 HP	1.5 HP	75000 SSU						
1.2	60	0.75 HP	1 HP	1.5 HP	2 HP	25000 SSU						
1.7	100	1 HP	1.5 HP	2 HP	2 HP	25000 SSU						
6.3	280	3 HP	3 HP	4 HP	5.5 HP	7500 SSU						
7.8	340	3 HP	4 HP	5.5 HP	5.5 HP	2500 SSU						
10.5	450	3 HP	4 HP	5.5 HP	7.5 HP	750 SSU						



### Pump Dimensions - Capacity Graphs:

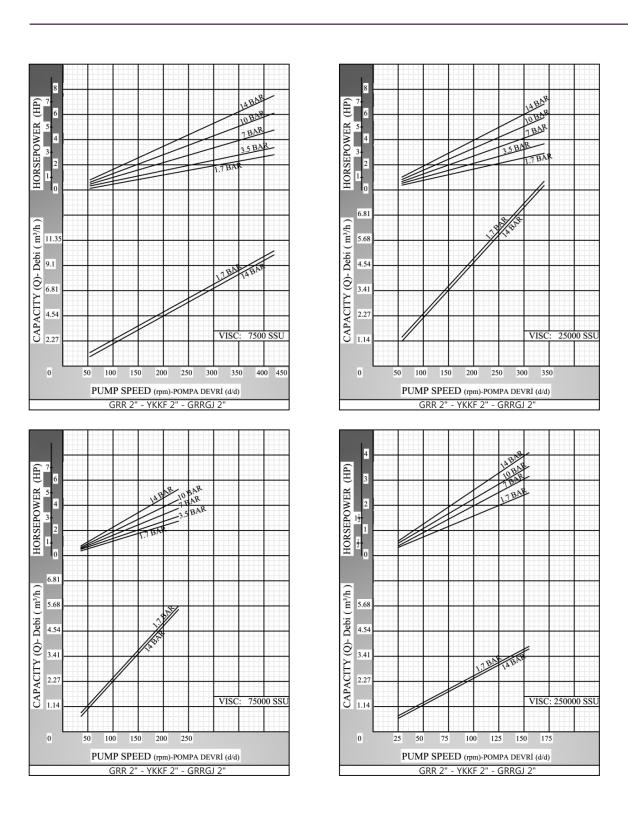




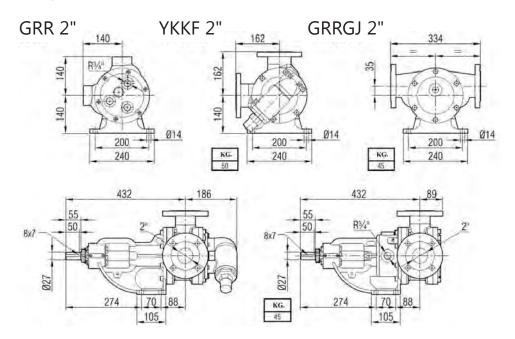


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GRR 2" - YKKF 2" - GRRGJ 2"



# Pump Dimensions:

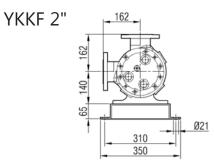


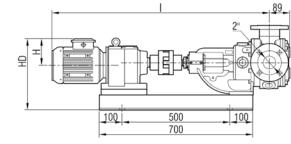


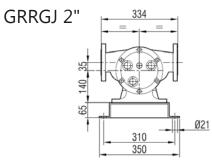


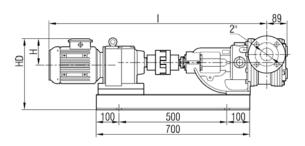


# Coupling Dimensions - Gearbox drive:

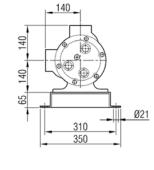




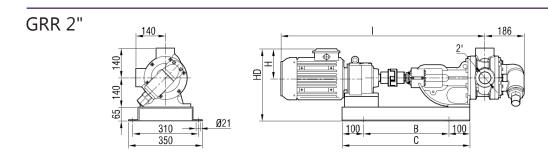




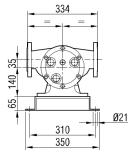
GRR 2"

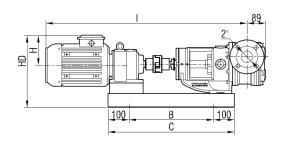


Motor Power & S	peed	Ι	HD	н	Kg				
1 hp / (	0.75 kw	950	311	118	11	15			
20/55 d/d (rpm)	IRAM63/80M	950	511	110	115				
1.5 hp ,	/ 1.1 kw	976			11	10			
27/104 d/d (rpm)	IRAM63/90S	970	325	132		LO			
2 hp /	1.5 kw	1001	525	152	120				
33/98 d/d (rpm)	IRAM63/90L	1001				20			
3 - 4 hp /	2.2 - 3 kw	1042	334	141	124	127			
47/98 d/d (rpm)	IRAM63/100L	1042	554	141	124	127			
5.5 hp	/ 4 kw	1063	342	149	12	20			
101/126 d/d (rpm)	IRAM63/112M	1003	542	149		29			

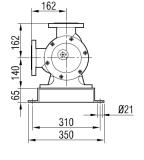


GRRGJ 2"



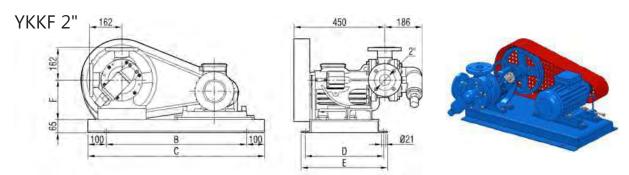


YKKF 2"



Motor Power &	Speed	I	HD	н	В	С	Kg				
1.5 hp	/ 1.1 kw	918					9	。			
60/380 d/d (rpm)	IRAM52/90S	910	332		420	620	9	0			
2 hp /	′ 1.5 kw	943	332	132	420	020	1(	00			
90/480 d/d (rpm)	IRAM52/90L	945		152							
3 hp /	′ 2.2 kw	1001	325				11	7			
50/234 d/d (rpm)	1001	525					./				
4 hp	/ 3 kw	1045	334	141			12				
65/450 d/d (rpm)	IRAM62/100L	1045	554	141	500	700	12	25			
5.5 hp / 4 kw	7.5 hp / 5.5 kw										
87/480 d/d (rpm)	210/450 d/d (rpm)	1065	342	149			127	142			
IRAM62/112M IRAM62/C112M											
7.5 hp	1151	371	182	600	800	14	10				
75/210 d/d (rpm)	1121	5/1	102	000	000		+0				

# Pump Dimensions - Belt Pulley Coupling:



Motor Power	& Speed	F	ump	Speed	s									
		n1	n2	n3	n4	F(1)	F(2)	F(3)	F(4)	В	с	D	Е	Kg
		d/d	d/d	d/d	d/d									
3 hp / 2.2 kw	MOTOR 100L													140
4 hp / 3 kw	MOTOR 100L													150
5.5 hp / 4 kw	MOTOR 112M	1								680	880	390	430	155
7.5 hp / 5.5 kw	MOTOR 132S	450	400	350	310	140	195	195	250					165
10 hp / 7.5 kw	MOTOR 132M	1												175
15 hp / 11 kw	MOTOR 160M	1								880	1080	480	520	230
20 hp / 15 kw	MOTOR 160L									880	1080	480	520	240



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

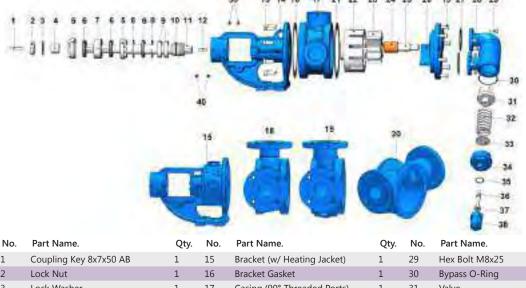
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	15	Bracket (w/ Heating Jacket)	1	29	Hex Bolt M8x25	8
2	Lock Nut	1	16	Bracket Gasket	1	30	Bypass O-Ring	1
3	Lock Washer	1	17	Casing (90° Threaded Ports)	1	31	Valve	1
4	Spacer	1	18	Casing (90° Flanged Ports)	1	32	Spring	1
5	Adjusting Nut	2	19	Casing (90° Flanged Ports & w/ Heating Jacket)	1	33	Washer	1
6	Lip Seal ø35xø62x10	2	20	Casing (180° Flanged Ports)	1	34	Bypass Cover	1
7	Ball Bearing (2306)	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	Сар	1
11	Shaft	1	25	Bypassed Cover Pin	1	39	Greasing Fitting R3/8"	1
12	Rotor Key 8x7x32 A	1	26	Cover (w/ Bypass Inlets)	1	40	Grub Screw M10x16	4
13	Inbus Bolt M10x30	14	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 8x7x32 A	1	23	Idler Gear	1
2	Lock Nut	1	13	Inbus Bolt M10x30 Inbus Bolt M10x35 (For Cover w/ Heating Jacket)	14	24	Idler Bushing	1
3	Lock Washer	1	14	Bracket	6	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 ø35xø62x10	2	17	Casing (90° Threaded Ports)	1	28	Greasing Fitting R3/8"	1
7	Ball Bearing (2306)	1	18	Casing (90° Flanged Ports)	1	29	Grub Screw M10x16	4
8	Packing Press	1	19	Casing (90° Flanged Ports & w/ Heating Jacket)	1	30	Nut M10	2
9	Soft Seal / Packing Gland	1 TK	20	Casing (180° Flanged Ports)	1	31	Square Screw M10x70	2
10	Bracket Bushing	1	21	Cover Gasket	2			
11	Shaft	1	22	Rotor Gear	1			

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### Spare Parts List - Sealed with mechanical seal, and pressure relief valve on cover: 39 13 14 16 17 21 22 23 24 25 26 13 27 28 28

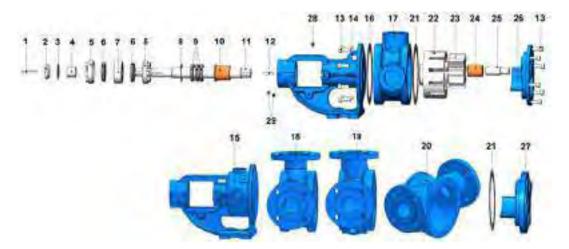
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 8x7x50 AB	1	15	Bracket (w/ Heating Jacket)	1	29	Hex Bolt M8x25	8
2	Lock Nut	1	16	Bracket Gasket	1	30	Bypass O-Ring	1
3	Lock Washer	1	17	Casing (90° Threaded Ports)	1	31	Valve	1
4	Spacer	1	18	Casing (90° Flanged Ports)	1	32	Spring	1
5	Adjusting Nut	2	19	Casing (90° Flanged Ports & w/ Heating Jacket)	1	33	Washer	1
6	Lip Seal ø35xø62x10	3	20	Casing (180° Flanged Ports)	1	34	Bypass Cover	1
7	Ball Bearing (2306)	1	21	Cover Gasket	1	35	Cap O-Ring	1
8	Internal Circlip (ø62)	2	22	Rotor Gear	1	36	Nut M12	1
9	Ball Bearing (6007)	2	23	Idler Gear	1	37	Adjusting Screw M12x80	1
10	Mechanical Seal Ø35	1	24	Idler Bushing	1	38	Сар	1
11	Shaft	1	25	Bypassed Cover Pin	1	39	Greasing Fitting R3/8"	2
12	Rotor Key 8x7x32 A	1	26	Cover (w/ Bypass Inlets)	1	40	Grub Screw M10x16	4
13	Inbus Bolt M10x30	14	27	Bypass Gasket	2			
14	Bracket	1	28	Pressure Relief Valve	1			

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	11	Shaft	1	21	Cover Gasket	2
2	Lock Nut	1	12	Rotor Key 8x7x32 A	1	22	Rotor Gear	1
3	Lock Washer	1	13	Inbus Bolt M10x30	14	23	Idler Gear	1
				Inbus Bolt M10x35 (For Cover w/ Heating Jacket)	6			
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 ø35xø62x10	3	16	Bracket Gasket	1	26	Blind Cover	1
7	Ball Bearing (2306)	1	17	Casing (90° Threaded Ports)	1	27	Cover (w/ Heating Jacket)	1
8	Internal Circlip (ø62)	2	18	Casing (90° Flanged Ports)	1	28	Greasing Fitting (R3/8")	2
9	Ball Bearing (6007)	2	19	Casing (90° Flanged Ports & w/ Heating Jacket)	1	29	Grub Screw M10x16	4
10	Mechanical Seal Ø35	1	20	Casing (180° Flanged Ports)	1			

# 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	1
2	Lock Nut	1	12	Rotor Key 8x7x32 A	1	22	Rotor Gear	1
3	Lock Washer	1	13	Inbus Bolt M10x30	14	23	Idler Gear	1
				Inbus Bolt M10x35 (For Cover w/ Heating Jacket)	6			
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 ø35xø62x10	2	16	Bracket Gasket	1	26	Blind Cover	1
7	Ball Bearing (2306)	1	17	Casing (90° Threaded Ports)	1	27	Cover (w/ Heating Jacket)	1
8	Internal Circlip (ø56)	1	18	Casing (90° Flanged Ports)	1	28	Greasing Fitting R3/8"	1
9	Lip Seal ø35xø56x10	3	19	Casing (90° Flanged Ports & w/ Heating Jacket)	1	29	Grub Screw M10x16	4
10	Bracket Bushing	1	20	Casing (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	Inbus Bolt M10x30	14	29	Pressure Relief Valve	1
2	Lock Nut	1	16	Bracket (Jacketed & w/ Cartex)	1	30	Hex Bolt M8x25	8
3	Lock Washer	1	17	Bracket Gasket	1	31	Bypass O-Ring	1
4	Spacer	1	18	Casing (90° Threaded Ports)	1	32	Valve	1
5	Adjusting Nut	1	19	Casing (90° Flanged Ports)	1	33	Spring	1
6	Lip Seal ø35xø62x10	2	20	Casing (90° Flanged Ports & w/ Heating Jacket)	1	34	Washer	1
7	Ball Bearing (2306)	1	21	Casing (180° Flanged Ports)	1	35	Bypass Cover	1
8	Pulley	1	22	Cover Gasket	1	36	Cap O-Ring	1
9	Hex Bolt M10x45	2	23	Rotor Gear	1	37	Nut M12	1
10	M10 Washer	2	24	Idler Gear	1	38	Adjusting Screw M12x80	1
11	Cartex Seal Ø35	1	25	Idler Bushing	1	39	Сар	1
12	Bracket Bushing	1	26	Bypassed Cover Pin	1	40	Greasing Fitting R3/8"	2
13	Shaft	1	27	Cover (w/ Bypass Inlets)	1	41	Grub Screw M10x16	4
14	Rotor Key 8x7x32 A	1	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 8x7x50 AB	1	11	Cartex Seal Ø35	1	21	Cover Gasket	1
2	Lock Nut	1	12	Bracket Bushing	1	22	Rotor Gear	1
3	Lock Washer	1	13	Shaft	14	23	Idler Gear	1
4	Spacer	1	14	Rotor Key 8x7x32 A	1	24	Idler Bushing	1
				Inbus Bolt M10x30				
5	Adjusting Nut	2	15	Inbus Bolt M10x35 (For Cover w/ Heating Jacket)	1	25	Cover Pin	1
6	Lip Seal ø35xø62x10	2	16	Bracket (Jacketed & w/ Cartex)	1	26	Blind Cover	1
7	Ball Bearing (2306)	1	17	Bracket Gasket	1	27	Cover (w/ Heating Jacket)	1
8	Pulley	1	18	Casing (90° Threaded Ports)	1	28	Greasing Fitting R3/8"	1
9	Hex Bolt M10x45	3	19	Casing (90	1	29	Grub Screw M10x16	4
10	M10 Washer	1	20	Casing (180° Flanged Ports)	1			



# YKBF 3" Internal Eccentric Gear Pump



Performance:	
--------------	--

Flow rate	55 m³/h
Pressure	1 - 14 bar
Temperature	0 - 200 °C
Speed	400 d/d
Viscosity	100 - 250000 SSU

#### **Technical Features:**

- ✓ Internal eccentric gear pump
- ✓ 3" flanged ports
- ✓ Compact design
- $\checkmark$  Reliable construction thanks to only two moving parts
- ✓ Various material options
- ✓ Available with external bypass, jacketed and blind cover
- $\checkmark$  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

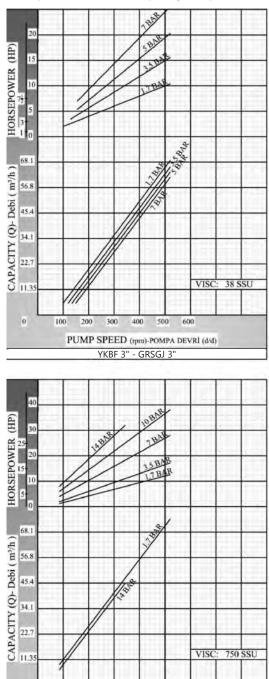
### **Material Options:**

- V 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, slicon 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													
Compainty (O)	Crossed (mana)		Pressure			Viceosity							
Capacity (Q)	Speed (rpm)	2.5 Bar	5 Bar	7.5 Bar	10 Bar	Viscosity							
8	60	5.5 HP	5.5 HP	7.5 HP	7.5 HP	75000 SSU							
10	80	7.5 HP	7.5 HP	10 HP	10 HP	25000 SSU							
12	100	7.5 HP	10 HP	10 HP	10 HP	25000 SSU							
34	250	15 HP	20 HP	25 HP	30 HP	25000 SSU							
42	300	15 HP	20 HP	25 HP	30 HP	7500 SSU							
50	350	15 HP	20 HP	25 HP	30 HP	2500 SSU							
55	400	15 HP	20 HP	25 HP	30 HP	750 SSU							



### Pump Dimensions - Capacity Graphs:



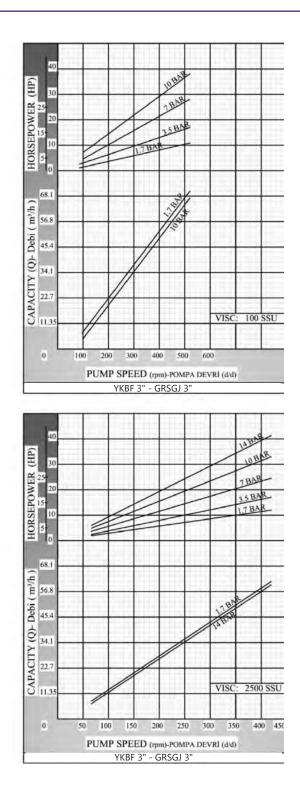
200 300 400 500 600

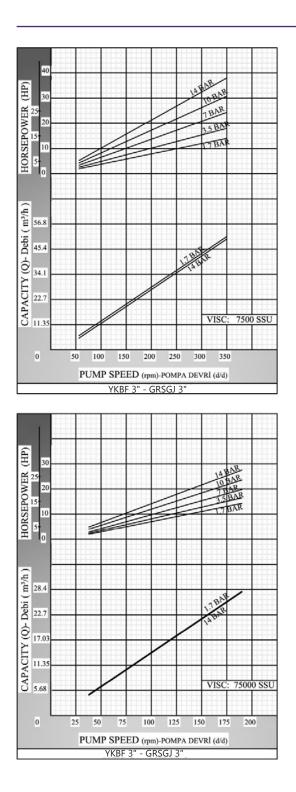
YKBF 3" - GRSGJ 3"

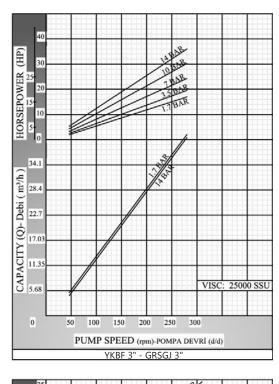
PUMP SPEED (rpm)-POMPA DEVRI (d/d)

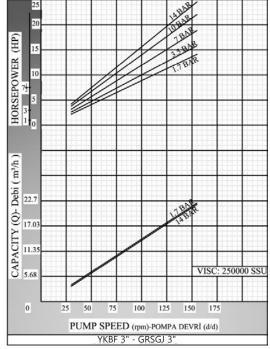
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100









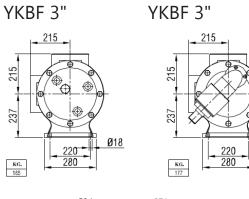
## Pump Dimensions:

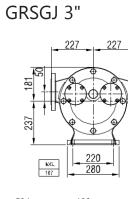
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215

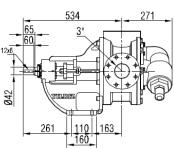
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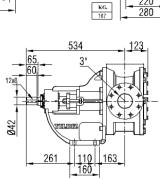
кс. 165



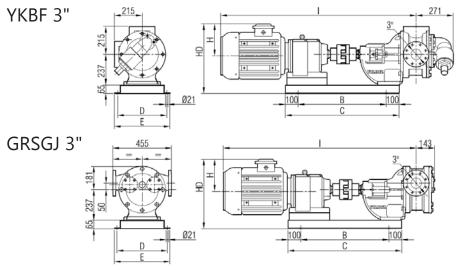




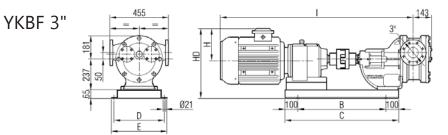




## **Coupling Dimensions - Gearbox drive:**



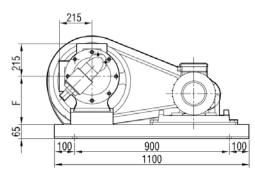
Motor Power &	Motor Power & Speed					В	С	D	Е	Kg
15 hp / 11 kw	200/400 d/d (rpm)	IRAM72/C132M	1295	468	182	580	780	380	420	340
20 hp / 15 kw	130/400 d/d (rpm)	IRAM82/160L	1500	513	225	680	880	390	430	400
25 hp / 18.5 kw	159/400 d/d (rpm)	IRAM82/180M	1512	538	248	000	000	590	450	415
30 hp / 22 kw	55/400 d/d (rpm)	IRAM102/180L	1705	542	248	880	1080	480	520	670

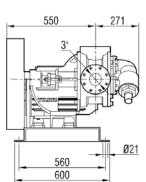


Motor Power &	I	HD	Н	В	С	D	Е	Kg		
5.5 hp / 4 kw	55/95 d/d (rpm)	IRAM73/C100L	1202	427	141					290
7.5 hp / 5.5 kw	75/95 d/d (rpm)	IRAM73/C112M	1222	435	149	580	780	380	420	295
10 hp / 7.5 kw	93/104 d/d (rpm)	IRAM72/132M	1315	468	182					315
10 hp / 7.5 kw	57/91 d/d (rpm)	IRAM83/132M	1390	460	102	680	880	390	430	350
15 hp / 11 kw 40/57 d/d (rpm)		IRAM93/160M	1542	505	225	830	1030	420	460	460

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## Belt Pulley Coupling Pump Dimensions:

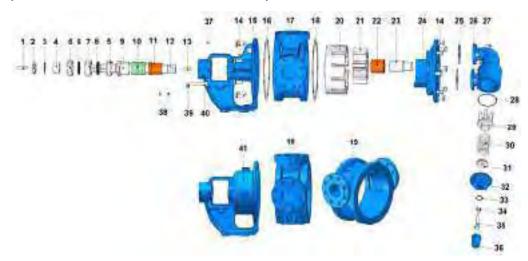






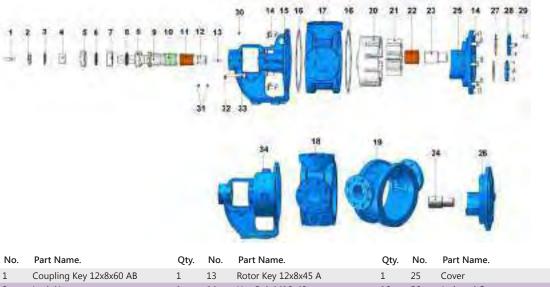
Motor Power &	Speed	Pump Speeds				F <sub>(1)</sub>	F <sub>(2)</sub>	F <sub>(3)</sub>	F <sub>(4)</sub>	Kg
		м1	м2	м3	N4					
		d/d	d/d	d/d	d/d					
15 hp / 11 kw	MOTOR 160M									375
20 hp / 15 kw	MOTOR 160L	450	400	350	310	237	237	237	237	385
25 hp / 18.5 kw	MOTOR 180M	450	400	550	510	257	257	257	257	410
30 hp / 22 kw	MOTOR 180L									425

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



Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
Coupling Key 12x8x60 AB	1	15	Bracket	1	29	Valve	1
Lock Nut	1	16	Bracket & Cover Gasket	2	30	Spring	1
Lock Washer	1	17	Casing (w/ 90° Flanged Ports)	1	31	Washer	1
Spacer	1	18	Casing (w/ 90° Flanged & w/ Heating Jacket)	1	32	Bypass Cover	1
Adjusting Nut	2	19	Casing (w/ 180° Flanged Ports)	1	33	Cap O-Ring	1
Lip Seal ø55xø72xø10	1	20	Rotor Gear	1	34	Nut M16	1
Ball Bearing (3209)	1	21	Idler Gear	1	35	Adjusting Screw M16x90	1
Lip Seal ø50xø72x10	1	22	Idler Bushing	1	36	Сар	1
Packing Press	1	23	Cover Pin	1	37	Greasing Fitting R3/8"	1
Soft Seal / Packing Gland	1 TK	24	Cover	1	38	Grub Screw M12x16	4
Bracket Bushing	1	25	Bypass Gasket	2	39	Nut M14	2
Shaft	1	26	Pressure Relief Valve - Bypass	1	40	Square Screw M14x90	2
Rotor Key 12x8x45 A	1	27	Hex Bolt M10x30	8	41	Bracket (w/ Heating Jacket)	1
Hex Bolt M16 x 40	16	28	Bypass O-Ring	1			
	Coupling Key 12x8x60 AB Lock Nut Lock Washer Spacer Adjusting Nut Lip Seal ø55xø72xø10 Ball Bearing (3209) Lip Seal ø50xø72x10 Packing Press Soft Seal / Packing Gland Bracket Bushing Shaft Rotor Key 12x8x45 A	Coupling Key 12x8x60 AB1Lock Nut1Lock Washer1Spacer1Adjusting Nut2Lip Seal ø55xø72xø101Ball Bearing (3209)1Lip Seal ø50xø72x101Packing Press1Soft Seal / Packing Gland1 TKBracket Bushing1Shaft1Rotor Key 12x8x45 A1	Coupling Key 12x8x60 AB       1       15         Lock Nut       1       16         Lock Washer       1       17         Spacer       1       18         Adjusting Nut       2       19         Lip Seal ø55xø72xø10       1       20         Ball Bearing (3209)       1       21         Lip Seal ø50xø72x10       1       22         Packing Press       1       23         Soft Seal / Packing Gland       1TK       24         Bracket Bushing       1       25         Shaft       1       26         Rotor Key 12x8x45 A       1       27	Coupling Key 12x8x60 AB115BracketLock Nut116Bracket & Cover GasketLock Washer117Casing (w/ 90° Flanged Ports)Spacer118Casing (w/ 90° Flanged & w/ Heating Jacket)Adjusting Nut219Casing (w/ 180° Flanged Ports)Lip Seal ø55xø72xø10120Rotor GearBall Bearing (3209)121Idler GearLip Seal ø50xø72x10123Cover PinSoft Seal / Packing Gland1TK24CoverBracket Bushing125Bypass GasketShaft126Pressure Relief Valve - BypassRotor Key 12x8x45 A127Hex Bolt M10x30	Coupling Key 12x8x60 AB115Bracket1Lock Nut116Bracket & Cover Gasket2Lock Washer117Casing (w/ 90° Flanged Ports)1Spacer118Casing (w/ 90° Flanged Ports)1Adjusting Nut219Casing (w/ 180° Flanged Ports)1Lip Seal ø55xø72xø10120Rotor Gear1Ball Bearing (3209)121Idler Gear1Lip Seal ø50xø72x10122Idler Bushing1Packing Press123Cover Pin1Soft Seal / Packing Gland1TK24Cover1Bracket Bushing125Bypass Gasket2Shaft126Pressure Relief Valve - Bypass1Rotor Key 12x8x45 A127Hex Bolt M10x308	Coupling Key 12x8x60 AB       1       15       Bracket & Cover Gasket       1       29         Lock Nut       1       16       Bracket & Cover Gasket       2       30         Lock Washer       1       17       Casing (w/ 90° Flanged Ports)       1       31         Spacer       1       18       Casing (w/ 90° Flanged Ports)       1       32         Adjusting Nut       2       19       Casing (w/ 180° Flanged Ports)       1       33         Lip Seal ø55xø72xø10       1       20       Rotor Gear       1       34         Ball Bearing (3209)       1       21       Idler Gear       1       36         Packing Press       1       23       Cover Pin       1       37         Soft Seal / Packing Gland       1TK       24       Cover       1       38         Bracket Bushing       1       25       Bypass Gasket       2       39         Shaft       1       26       Pressure Relief Valve - Bypass       1       40         Rotor Key 12x8x45 A       1       27       Hex Bolt M10x30       8       41	Coupling Key 12x8x60 AB115Bracket129ValveLock Nut116Bracket & Cover Gasket230SpringLock Washer117Casing (w/ 90° Flanged Ports)131WasherSpacer118Casing (w/ 90° Flanged Ports)132Bypass CoverAdjusting Nut219Casing (w/ 180° Flanged Ports)133Cap O-RingLip Seal ø55xø72xø10120Rotor Gear134Nut M16Ball Bearing (3209)121Idler Gear135Adjusting Screw M16x90Lip Seal ø50xø72x10123Cover Pin136CapPacking Press123Cover Pin138Grub Screw M12x16Bracket Bushing125Bypass Gasket239Nut M14Shaft126Pressure Relief Valve - Bypass140Square Screw M14x90Rotor Key 12x8x45 A127Hex Bolt M10x30841Bracket (w/ Heating Jacket)

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



1	Coupling Key 12x8x60 AB	1	13	Rotor Key 12x8x45 A	1	25	Cover	1
2	Lock Nut	1	14	Hex Bolt M16x40	16	26	Jacketed Cover	1
3	Lock Washer	1	15	Bracket	1	27	Bypass Gasket	2
4	Spacer	1	16	Bracket & Cover Gasket	2	28	Bypass Inlets Cover	2
5	Adjusting Nut	2	17	Casing (w/ 90° Flanged Ports)	1	29	Hex Bolt M10x30	8
6	Lip Seal ø55xø72x10	1	18	Casing (w/ 90° Flanged Ports & w/ Heating Jacket)	1	30	Greasing Fitting R3/8"	1
7	Ball Bearing (3209)	1	19	Casing (w/ 180° Flanged Ports)	1	31	Grub Screw M12x16	4
8	Lip Seal ø50xø72x10	1	20	Rotor Gear	1	32	Nut M14	2
9	Packing Press	1	21	Idler Gear	1	33	Square Screw M14x90	2
10	Soft Seal / Packing Gland	1 TK	22	Idler Bushing	1	34	Bracket (w/ Heating Jacket)	1
11	Bracket Bushing	1	23	Cover Pin	1			
12	Shaft	1	24	Jacketed Cover Pin	1			

Qty.

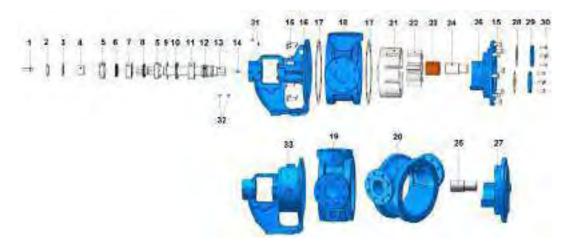
Spare Parts List - Sealed with mechanical seal, and pressure relief valve on cover:



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 12x8x60 AB	1	15	Hex Bolt M16x40	16	29	Bypass O-Ring	1
2	Lock Nut	1	16	Bracket (w/ Adjusting Nut & Mechanical Seal)	1	30	Valve	1
3	Lock Washer	1	17	Bracket & Cover Gasket	2	31	Spring	1
4	Spacer	1	18	Casing	1	32	Washer	1
5	Adjusting Nut	2	19	Casing (90° Flanged & w/ Heating Jacket)	1	33	Bypass Cover	1
6	Lip Seal ø55xø72x10	1	20	Casing (w/ 180° Flanged Ports)	1	34	Cap O-Ring	1
7	Ball Bearing (3209)	1	21	Rotor Gear	1	35	Nut M16	1
8	Lip Seal ø50xø72x10	1	22	Idler Gear	1	36	Adjusting Screw M16x90	1
9	Internal Circlip (ø90)	1	23	Idler Bushing	1	37	Сар	1
10	Lip Seal ø50xø90x10	1	24	Cover Pin	1	38	Greasing Fitting R3/8"	2
11	Bearing (3210)	1	25	Cover	1	39	Grub Screw M12x16	4
12	Mechanical Seal Ø50	1	26	Bypass Gasket	2	40	Bracket (w/ Heating Jacket)	1
13	Shaft	1	27	Pressure Relief Valve - Bypass	1			
14	Rotor Key 12x8x45 A	1	28	Hex Bolt M10x30	8			

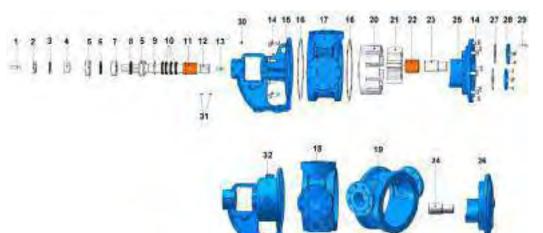
37

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

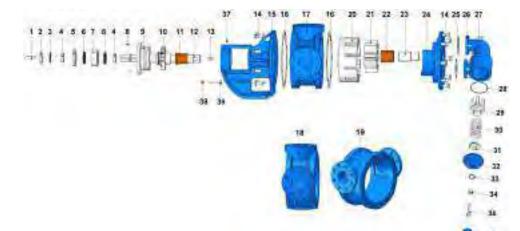


No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 12x8x60 AB	1	12	Mechanical Seal Ø50	1	23	Idler Bushing	1
2	Lock Nut	1	13	Shaft	1	24	Cover Pin	1
3	Lock Washer	1	14	Rotor Key 12x8x45 A	1	25	Jacketed Cover Pin	1
4	Spacer	1	15	Hex Bolt M16x40	16	26	Cover	1
5	Adjusting Nut	2	16	Bracket	1	27	Jacketed Cover	1
6	Lip Seal ø55xø72x10	1	17	Bracket & Cover Gasket	2	28	Bypass Gasket	2
7	Ball Bearing (3209)	1	18	Casing (w/ 90° Flanged Ports)	1	29	Bypass Inlets Cover	2
8	Lip Seal ø50xø72x10	1	19	Casing (w/ 90° Flanged & w/ Heating Jacket)	1	30	Hex Bolt M10x30	8
9	Internal Circlip (ø90)	1	20	Casing (w/ 180° Flanged Ports)	1	31	Greasing Fitting R3/8"	2
10	Lip Seal (ø50xø90x10)	1	21	Rotor Gear	1	32	Grub Screw M12x16	4
11	Bearing (3210)	1	22	Idler Gear	1	33	Bracket (w/ Heating Jacket)	1

## 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 12x8x60 AB	1	12	Shaft	1	23	Cover Pin	1
2	Lock Nut	1	13	Rotor Key 12x8x45 A	1	24	Jacketed Cover Pin	1
3	Lock Washer	1	14	Hex Bolt M16x40	16	25	Cover	1
4	Spacer	1	15	Bracket	1	26	Jacketed Cover	1
5	Adjusting Nut	2	16	Bracket & Cover Gasket	2	27	Bypass Gasket	2
6	Lip Seal ø55xø72x10	1	17	Casing (w/ 90° Flanged Ports)	1	28	Bypass Inlets Cover	2
7	Ball Bearing (3209)	1	18	Casing (w/ 90° Flanged & w/ Heating Jacket)	1	29	Hex Bolt M10x30	8
8	Lip Seal ø50xø72x10	1	19	Casing (w/ 180° Flanged Ports)	1	30	Greasing Fitting R3/8"	1
9	Internal Circlip (ø70)	1	20	Rotor Gear	1	31	Grub Screw M12x16	4
10	Lip Seal (ø50xø70x10)	4	21	Idler Gear	1	32	Bracket (w/ Heating Jacket)	1
11	Bracket Bushing	1	22	Idler Bushing	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 12x8x60 AB	1	14	Hex Bolt M16x40	16	27	Hex Bolt M10x30	8
2	Lock Nut	1	15	Bracket (w/ Cartex Mechanical Seal)	1	28	Bypass O-Ring	1
3	Lock Washer	1	16	Bracket & Cover Gasket	2	29	Valve	1
4	Spacer	2	17	Casing (w/ 90° Flanged Ports)	1	30	Spring	1
5	Pulley Cover	1	18	Casing (90° Flanged & w/ Heating Jacket)	1	31	Washer	1
6	Lip Seal ø55xø72x10	2	19		1	32	Bypass Cover	1
7	Ball Bearing (3209)	1	20	Rotor Gear	1	33	Cap O-Ring	1
8	Grub Screw M8x20	4	21	Idler Gear	1	34	Nut M16	1
9	Pulley	1	22	Idler Bushing	1	35	Adjusting Screw M16x90	1
10	Cartex Mechanical Seal Ø50	1	23	Cover Pin	1	36	Сар	1
11	Bracket Bushing	1	24	Cover	1	37	Greasing Fitting R3/8"	1
12	Shaft	1	25	Bypass Gasket	2	38	Grub Screw M14	2
13	Rotor Key 12x8x45 A	1	26	Pressure Relief Valve - Bypass	1	39	Square Screw M14x90	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 12x8x60 AB	1	12	Shaft	1	23	Cover Pin	1
2	Lock Nut	1	13	Rotor Key 12x8x45 A	1	24	Jacketed Cover Pin	1
3	Lock Washer	1	14	Hex Bolt M16x40	16	25	Cover	1
4	Spacer	2	15	Bracket (w/ Cartex Mechanical Seal)	1	26	Jacketed Cover	1
5	Pulley Cover	1	16	Bracket & Cover Gasket	2	27	Bypass Gasket	2
6	Lip Seal ø55xø72x10	2	17	Casing (w/ 90° Flanged Ports)	1	28	Bypass Inlets Cover	2
7	Ball Bearing (3209)	1	18	Casing (w/ 90° Flanged & w/ Heating Jacket)	1	29	Hex Bolt M10x30	8
8	Grub Screw M8x20	4	19	Casing (w/ 180° Flanged Ports)	1	30	Greasing Fitting R3/8"	1
9	Pulley	1	20	Rotor Gear	1	31	Nut M14	2
10	Cartex Mechanical Seal Ø50	1	21	Idler Gear	1	32	Square Screw M14x90	2
11	Bracket Bushing	1	22	Idler Bushing	1			



# YKBF 4" Internal Eccentric Gear Pump



Per	formance:	

Flow rate	90 m³/h	
Pressure	1 - 14 bar	
Temperature	0 - 200 °C	
Speed	400 d/d	
Viscosity	100 - 250000 SSU	

#### **Technical Features:**

- ✓ Internal eccentric gear pump
- ✓ 4" flanged ports
- ✓ Compact design
- $\checkmark$  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:**

- V 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, slicon carbide, hard metal coated steel, bearing
  - Sealing: Soft seal or packing gland, Rotatherm seal, lip seal, mechanical seal, cartridge type mechanical seal

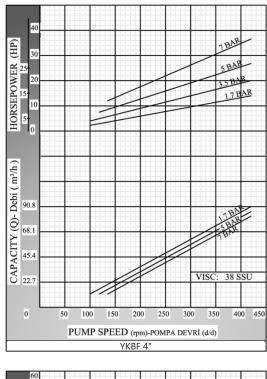
	Capacity & Power Table											
Conscitut (O)	Crossed (mana)	Pressu				Viscosity						
Capacity (Q)	Speed (rpm)	3 Bar	5 Bar	7 Bar	10 Bar	Viscosity						
46	200	20 HP	25 HP	30 HP	40 HP	25000 SSU						
57	250	20 HP	25 HP	30 HP	40 HP	7500 SSU						
68	300	25 HP	30 HP	40 HP	50 HP	2500 SSU						
80	350	25 HP	30 HP	40 HP	50 HP	750 SSU						

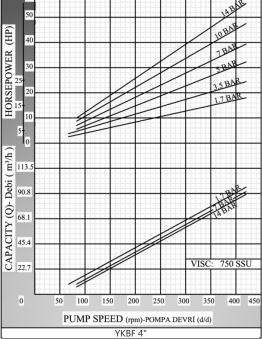


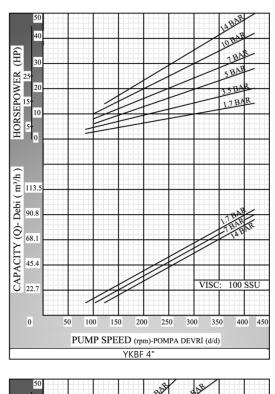


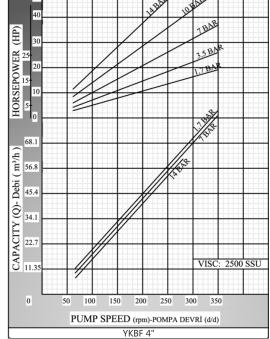


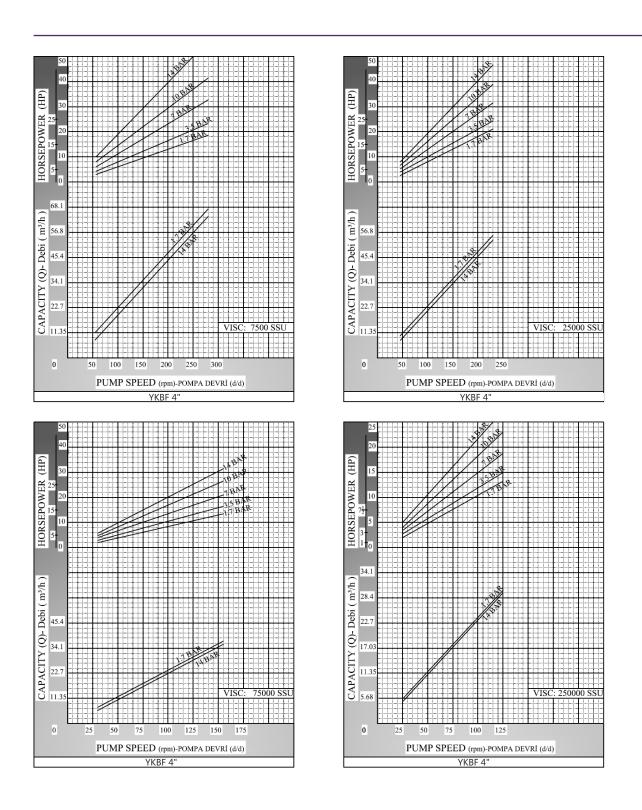
### Pump Dimensions - Capacity Graphs:



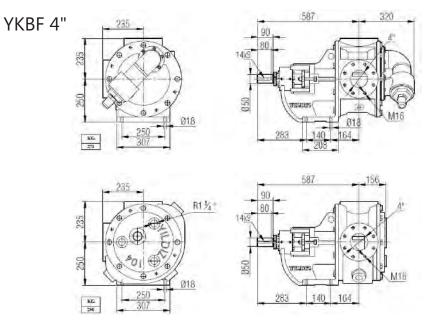


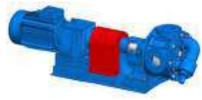






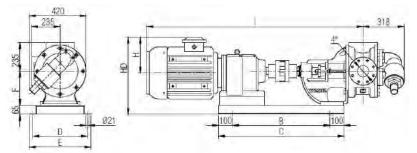
## Pump Dimensions:





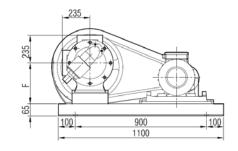
Coupling Dimensions - Gearbox drive:

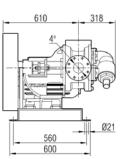
YKBF 4"



Motor Power &	Speed	Ι	HD	Н	В	С	D	E	F	Kg	
10 hp / 7.5 kw	93/400 d/d (rpm)	IRAM72/132M	1366	481	182	2 680	880				402
15 hp / 11 kw	187/400 d/d (rpm)	IRAM72/C132M	1300	401	102	080	000				404
20 hp / 15 kw	130/400 d/d (rpm)	IRAM82/160L	1551	527	225			390	430	250	537
25 hp / 18.5 kw	145/400 d/d (rpm)	IRAM82/180M	1563	550	248	750	950			250	557
30 hp / 22 kw	237/400 d/d (rpm)	IRAM82/180L	1600	550	248						582
40 hp / 30 kw	204/400 d/d (rpm)	IRAM92/200L	1725	568	275	830	1030	420	460		678

# Belt Pulley Coupling Pump Dimensions:







Motor Power &	Motor Power & Speed			Pump Speeds				F <sub>(3)</sub>	F <sub>(4)</sub>	Kg
			м2	м3	м4					
	d/d	d/d	d/d	d/d						
15 hp / 11 kw	15 hp / 11 kw MOTOR 160M									480
20 hp / 15 kw	MOTOR 160L	450	400	350	310	250	250	250	250	490
25 hp / 18.5 kw	25 hp / 18.5 kw MOTOR 180M		400	350	310	250	250	250	250	520
30 hp / 22 kw MOTOR 180L										530

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# 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 14x9 80 AB	1	14	Hex Bolt M16x40	16	27	Valve	1
2	Lock Nut	1	15	Bracket	1	28	Spring	1
3	Lock Washer	1	16	Bracket & Cover Gasket	2	29	Washer	1
4	Spacer	1	17	Casing (w/ 90° Flanged Ports)	1	30	Bypass Cover	1
5	Adjusting Nut	2	18	Rotor Gear	1	31	Cap O-Ring	1
6	Lip Seal ø68xø90x10	1	19	Idler Gear	1	32	Nut M16	1
7	Ball Bearing (3211)	1	20	Idler Bushing	1	33	Adjusting Screw M16x90	1
8	Lip Seal ø60xø90x10	1 TK	21	Cover Pin	1	34	Сар	1
9	Packing Press	1	22	Cover	1	35	Greasing Fitting R3/8"	1
10	Soft Seal / Packing Gland	1	23	Bypass Gasket	2	36	Grub Screw M8x20	4
11	Bracket Bushing	1	24	Pressure Relief Valve - Bypass	1	37	Nut M14	2
12	Shaft	1	25	Hex Bolt M10x30	12	38	Square Screw M14x90	2
13	Rotor Key 12x8x55 A	1	26	Bypass O-Ring	1	39	Casing (90° Flanged Ports & w/ Heating Jacket)	1

# 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 14x9x80 AB	1	12	Shaft	1	23	Cover	1
2	Lock Nut	1	13	Rotor Key 12x8x55 A	1	24	Jacketed Cover	1
3	Lock Washer	1	14	Hex Bolt M16x40	16	25	Bypass Gasket	2
4	Spacer	1	15	Bracket	1	26	Pressure Relief Valve - Bypass	2
5	Adjusting Nut	2	16	Bracket & Cover Gasket	2	27	Hex Bolt M10x30	12
6	Lip Seal ø68xø90x10	1	17	Casing (w/ 90° Flanged Ports)	1	28	Greasing Fitting R3/8"	1
7	Ball Bearing (3211)	1	18	Rotor Gear	1	29	Grub Screw M8x20	4
8	Lip Seal ø60xø90x10	1	19	Idler Gear	1	30	Nut M14	2
9	Packing Press	1	20	Idler Bushing	1	31	Square Screw M14x90	2
10	Soft Seal / Packing Gland	1 TK	21	Cover Pin	1	32	Casing (90° Flanged Ports & w/ Heating Jacket)	1
11	Bracket Bushing	1	22	Cover Pin	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 14x9x80 AB	1	14	Rotor Key 12x8x55 A	1	27	Bypass O-Ring	1
2	Lock Nut	1	15	Hex Bolt M16x40	16	28	Valve	1
3	Lock Washer	1	16	Bracket	1	29	Spring	1
4	Spacer	1	17	Bracket & Cover Gasket	2	30	Washer	1
5	Adjusting Nut	2	18	Casing (w/ 90° Flanged Ports)	1	31	Bypass Cover	1
6	Lip Seal ø68xø90x10	1	19	Rotor Gear	1	32	Cap O-Ring	1
7	Ball Bearing (3211)	1	20	Idler Gear	1	33	Nut M16	1
8	Lip Seal ø60xø90x10	1	21	Idler Bushing		34	Adjusting Screw M16x90	1
9	Internal Circlip (ø110)	2	22	Cover Pin	1	35	Сар	1
10	Lip Seal ø60xø110x12	1	23	Cover	1	36	Greasing Fitting R3/8"	2
11	Ball Bearing (3212)	1	24	Bypass Gasket	2	37	Grub Screw M12x16	4
12	Mechanical Seal Ø60	1	25	Pressure Relief Valve - Bypass	1	38	Casing (90° Flanged Ports & w/ Heating Jacket)	1
13	Shaft	1	26	Hex Bolt M10x30	12			

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



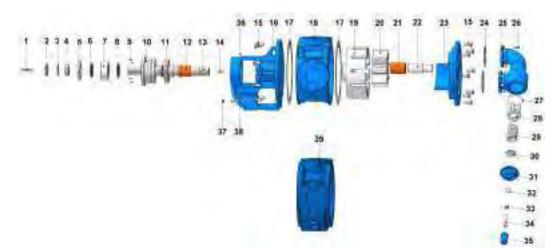
No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 14x9x80 AB	1	12	Mechanical Seal Ø60	1	23	Jacketed Cover Pin	1
2	Lock Nut	1	13	Shaft	1	24	Cover	1
3	Lock Washer	1	14	Rotor Key 12x8x55 A	1	25	Jacketed Cover	1
4	Spacer	1	15	Hex Bolt M16x40	16	26	Bypass Gasket	2
5	Adjusting Nut	2	16	Bracket	1	27	Pressure Relief Valve - Bypass	2
6	Lip Seal ø68xø90x10	1	17	Bracket & Cover Gasket	2	28	Hex Bolt M10x30	12
7	Ball Bearing (3211)	1	18	Casing (w/ 90° Flanged Ports)	1	29	Greasing Fitting R3/8"	2
8	Lip Seal ø60xø90x10	1	19	Rotor Gear	1	30	Grub Screw M8x20	4
9	Internal Circlip (ø110)	2	20	Idler Gear	1	31	Casing (90° Flanged Ports & w/ Heating Jacket)	1
10	Lip Seal ø60xø110x12	1	21	Idler Bushing	1			
11	Ball Bearing (3212)	1	22	Cover Pin	1			



## 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 14x9x80 AB	1	11	Bracket Bushing	1	21	Cover Pin	1
2	Lock Nut	1	12	Shaft	1	22	Jacketed Cover Pin	1
3	Lock Washer	1	13	Rotor Key 12x8x55 A	1	23	Cover	1
4	Spacer	1	14	Hex Bolt M16x40	16	24	Jacketed Cover	1
5	Adjusting Nut	2	15	Bracket	1	25	Bypass Gasket	2
6	Lip Seal ø68xø90x10	1	16	Bracket & Cover Gasket	2	26	Pressure Relief Valve - Bypass	2
7	Ball Bearing (3211)	1	17	Casing (w/ 90° Flanged Ports)	1	27	Hex Bolt M10x30	12
8	Lip Seal ø60xø90x10	1	18	Rotor Gear	1	28	Greasing Fitting R3/8"	1
9	Internal Circlip (ø80)	1	19	Idler Gear	1	29	Grub Screw M8x20	4
10	Lip Seal (ø60xø80x10)	4	20	Idler Bushing	1	30	Casing (90° Flanged Ports & w/ Heating Jacket)	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 14x9x80 AB	1	14	Rotor Key 12x8x55 A	1	27	Bypass O-Ring	1
2	Lock Nut	1	15	Hex Bolt M16x40	16	28	Valve	1
3	Lock Washer	1	16	Bracket (w/ Cartex Mechanical Seal)	1	29	Spring	1
4	Spacer (Cartex)	1	17	Bracket & Cover Gasket	2	30	Washer	1
5	Pulley Cover	1	18	Casing (w/ 90° Flanged Ports)	1	31	Bypass Cover	1
6	Lip Seal ø68xø90x10	1	19	Rotor Gear	1	32	Cap O-Ring	1
7	Ball Bearing (3311)	1	20	Idler Gear	1	33	Nut M16	1
8	Lip Seal ø60xø90x10	1	21	Idler Bushing	1	34	Adjusting Screw M16x90	1
9	Grub Screw M8x20	4	22	Cover Pin	1	35	Сар	1
10	Pulley	1	23	Cover	1	36	Greasing Fitting R3/8"	1
11	Cartex Mechanical Seal Ø60	1	24	Bypass Gasket	2	37	Nut M14	2
12	Bracket Bushing	1	25	Pressure Relief Valve - Bypass	1	38	Square Screw M14x70	2
13	Shaft	1	26	Hex Bolt M10x30	12	39	Casing (90° Flanged Ports & w/ Heating Jacket)	1





No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 12x9x80 AB	1	12	Bracket Bushing	1	23	Jacketed Cover Pin	1
2	Lock Nut	1	13	Shaft	1	24	Cover	1
3	Lock Washer	1	14	Rotor Key 12x8x55 A	1	25	Jacketed Cover	1
4	Spacer (Cartex)	1	15	Hex Bolt M16x40	16	26	Bypass Gasket	2
5	Pulley Cover	1	16	Bracket (w/ Cartex Mechanical Seal)	1	27	Pressure Relief Valve - Bypass	2
6	Lip Seal ø68xø90x10	1	17	Bracket & Cover Gasket	2	28	Hex Bolt M10x30	12
7	Ball Bearing (3311)	1	18	Casing (w/ 90° Flanged Ports)	1	29	Greasing Fitting R3/8"	1
8	Lip Seal ø60xø90x10	1	19	Rotor Gear	1	30	Nut M14	2
9	Grub Screw M8x20	4	20	Idler Gear	1	31	Square Screw M14x70	2
10	Pulley	1	21	Idler Bushing	1	32	Casing (90° Flanged Ports & w/ Heating Jacket)	1
11	Cartex Mechanical Seal Ø60	1	22	Cover Pin	1			

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



No.	Part Name.	Qty.	No.	Part Name.	Qty.	No.	Part Name.	Qty.
1	Coupling Key 14x9x80 AB	1	14	Rotor Key 12x8x55 A	1	27	Bypass O-Ring	1
2	Lock Nut	1	15	Hex Bolt M16x40	16	28	Valve	1
3	Lock Washer	1	16	Bracket	1	29	Spring	1
4	Spacer	1	17	Bracket & Cover Gasket	2	30	Washer	1
5	Adjusting Nut	2	18	Casing (w/ 90° Flanged Ports)	1	31	Bypass Cover	1
6	Lip Seal ø68xø90x10	1	19	Rotor Gear	1	32	Cap O-Ring	1
7	Ball Bearing (3211)	1	20	Idler Gear	1	33	Nut M16	1
8	Lip Seal ø60xø90x10	1	21	Idler Bushing	1	34	Adjusting Screw M16x90	1
9	Internal Circlip (ø110)	2	22	Cover Pin	1	35	Сар	1
10	Lip Seal ø60xø110x12	1	23	Cover	1	36	Greasing Fitting R3/8"	2
11	Ball Bearing (3212)	1	24	Bypass Gasket	2	37	Grub Screw M12x16	4
12	Chesterton Lip Seal ø35xø53x10	2	25	Pressure Relief Valve - Bypass	1	38	Internal Circlip (ø80)	1
13	Shaft	1	26	Hex Bolt M10x30	12	39	Casing (90° Flanged Ports & w/ Heating Jacket)	1