

## GKC Series Hydraulic Motors

### OPTIONS

- Flange connection
- Straight, splined and tapered shaft
- Metric and BSPP ports
- Other special features

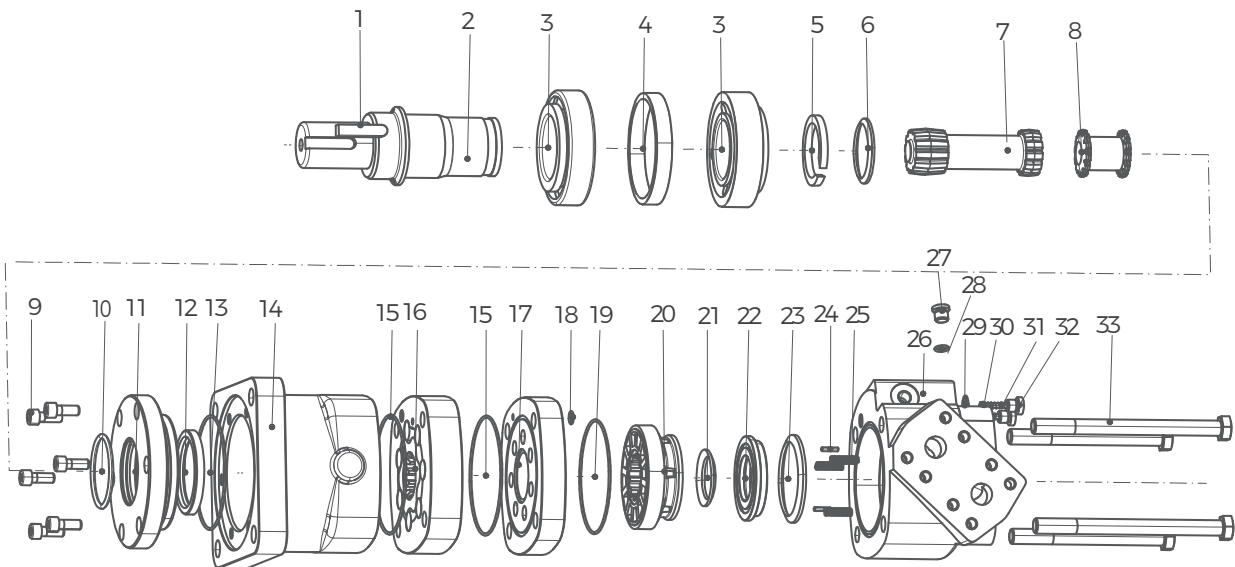
### APPLICATION

- Conveyors
- Feeding machinery
- Metal working machines
- Textile machines
- Agricultural machines
- Food industries
- Mining machines



### General

Max. Displacement	cm <sup>3</sup> /rev [in <sup>3</sup> /rev]	985 [60.0]
Max. Speed	RPM	866
Max. Torque	daNm [lb-in]	cont.:168,5 [14920] int.:187,5 [16580]
Max. Pressure Drop	bar [PSI]	cont.:205 [3000] int.:300 [4500]
Max. Oil Flow	lpm [GPM]	225 [60]
Pressure fluid		Mineral based- HLP (DIN 51524) or HM (ISO 6743/4)
Temperature Range	°C [°F]	-40÷140 [-40÷284]
Optimal Viscosity range	mm <sup>2</sup> /s [SUS]	20÷75 [98÷347]
Filtration		ISO code 20/16 (Min. recommended fluid filtration of 25 microns)



- |                               |                  |                       |                               |                  |
|-------------------------------|------------------|-----------------------|-------------------------------|------------------|
| 1 Paralled key                | 8 Coupling shaft | 15 O-ring             | 22 Distributor pressure plate | 29 Washer        |
| 2 Output shaft                | 9 Screw          | 16 Rotor and stator   | 23 Special shape ring         | 30 Steel Ball    |
| 3 Tapered roller bearing      | 10 O-ring        | 17 Balance plate      | 24 Positioning pins           | 31 Spring        |
| 4 Bearing outer retainer ring | 11 Front cover   | 18 O-ring seal        | 25 Spring                     | 32 Hexagon plugs |
| 5 Washers                     | 12 Shaft seal    | 19 O-ring seal        | 26 Rear housing               | 33 Screw         |
| 6 Special shape ring          | 13 O-ring        | 20 Distribution plate | 27 Plug                       |                  |
| 7 Transmission shaft          | 14 Housing       | 21 Special shape ring | 28 O-ring                     |                  |

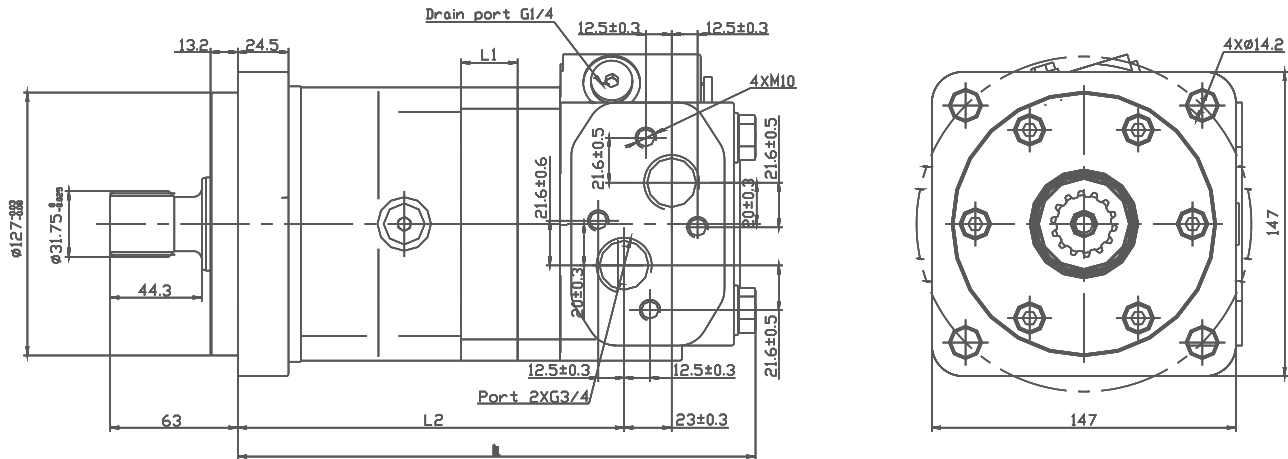


## Specifications

Type		GKC195	GKC245	GKC310	GKC390	GKC490
Displacement cm <sup>3</sup> /rev [in <sup>3</sup> /rev]		195[11.9]	245[15.0]	310[19.0]	390[23.9]	490[30.0]
Max. Speed	Cont.	775	615	485	387	307
RPM	Int.*	866	834	698	570	454
Max. Oil Flow	Cont.	150[40]	150[40]	150[40]	150[40]	150[40]
lpm [GPM]	Int.*	170[45]	210[55]	225[60]	225[60]	225[60]
Max. Torque	Cont.	57,5[5100]	73,5[6510]	93,0[8230]	115,5[10230]	144,5[12800]
daNm [lb - in]	Int.*	86,0[7620]	110,0[9740]	135,5[11990]	163,5[14490]	188,5[16670]
Max. Inter Pressure	Cont.	205[3000]	205[3000]	205[3000]	205[3000]	205[3000]
bar [PSI]	Int.*	310[4500]	310[4500]	310[4500]	310[4500]	275[4000]
	Peak**	310[4500]	310[4500]	310[4500]	310[4500]	310[4500]
Weight, kg [lb]	Standard or Wheel mount	24,9[55.0]	25,2[55.5]	25,6[56.5]	26,3[58.0]	27,0[59.5]
	Bearingless	20,2[44.5]	20,4[45.0]	20,9[46.0]	21,5[47.5]	22,2[49.0]

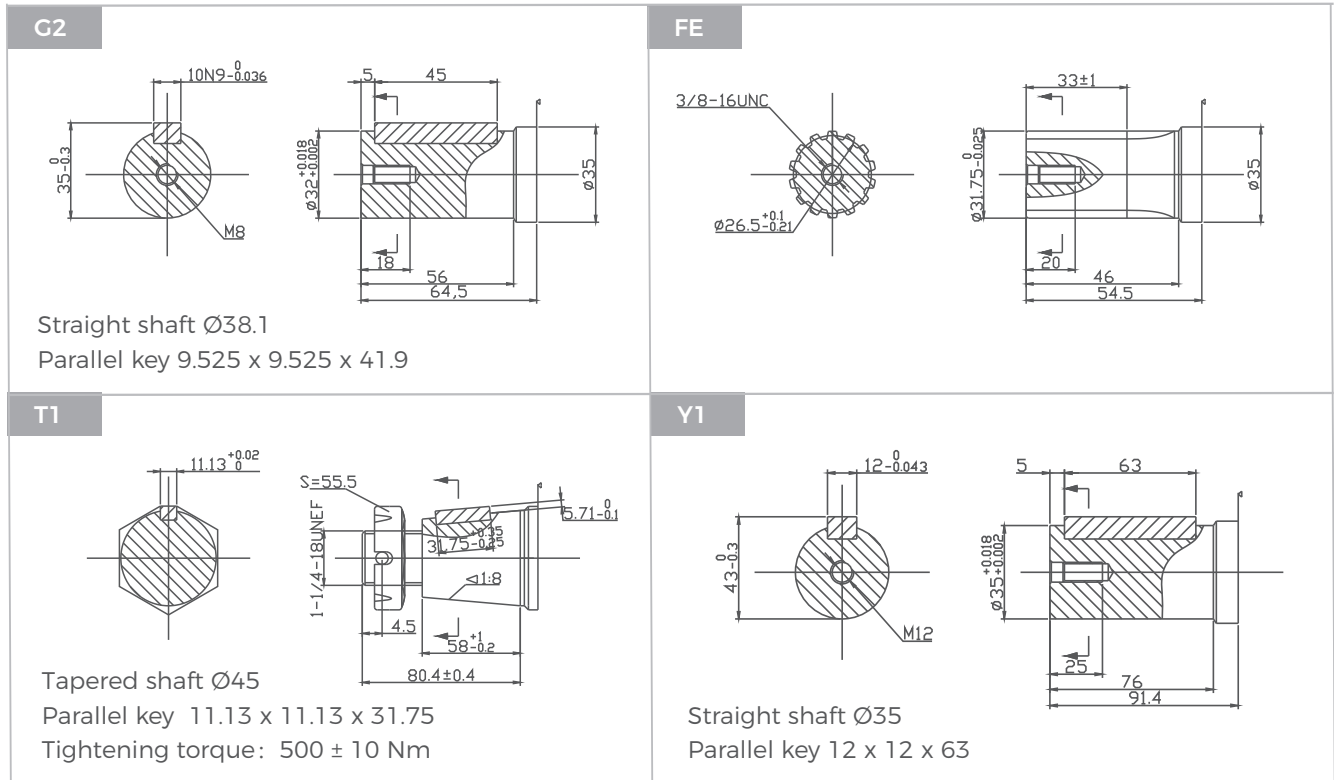
Type		GKC625	GKC735	GKC805	GKC985
Displacement cm <sup>3</sup> /rev [in <sup>3</sup> /rev]		625[38.0]	735[45.0]	805[49.0]	985[60.0]
Max. Speed	Cont.	241	203	187	153
RPM	Int.*	353	303	280	230
Max. Oil Flow	Cont.	150[40]	150[40]	150[40]	150[40]
lpm [GPM]	Int.*	225[60]	225[60]	225[60]	225[60]
Max. Torque	Cont.	148,0[13100]	137,8[12192]	158,2[14004]	168,5[14920]
daNm [lb - in]	Int.*	189,8[16800]	169,9[15040]	185,0[16377]	187,5[16580]
Max. Inter Pressure	Cont.	170[2500]	140[2000]	140[2000]	140[2000]
bar [PSI]	Int.*	221[3200]	170[2500]	170[2500]	140[2000]
	Peak**	240[3500]	205[3000]	170[2500]	170[2500]
Weight, kg [lb]	Standard or Wheel mount	27,9[61.5]	28,6[63.0]	29[64.0]	30,4[67.0]
	Bearingless	23,1[51.0]	23,8[52.5]	24,3[53.5]	25,6[56.5]

## GKC Dimensions and Mountings



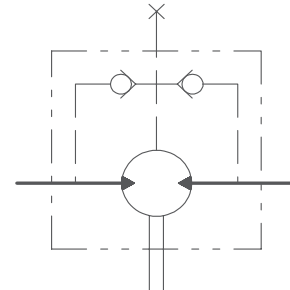
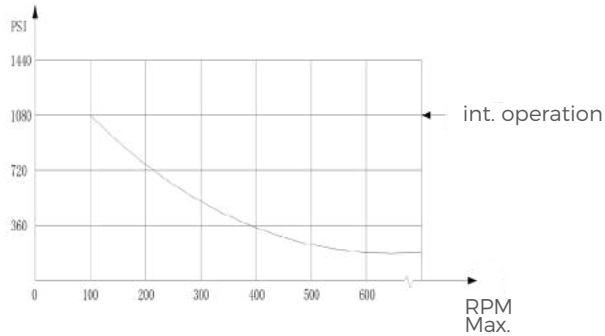
Model	L	L1	L2
GKC195	247	21.7	182
GKC245	252	27.3	187
GKC310	278	34.5	200
GKC395	287	43.4	209.5
GKC490	298	54.4	221
GKC625	313	69.1	235
GKC735	325	79.1	245
GKC805	333	88.9	255
GKC985	353	109	274.6

## GKC Shafts Dimensions



## GKC Series Hydraulic Motors

### Permissible shaft seal pressure



GKC with standard shaft seal check valves and without use of drain connection: The pressure on the shaft seal never exceeds the pressure in the return line.

GKC with standard shaft seal, check valves and with drain connection: The shaft seal pressure equals the pressure on the drain line.

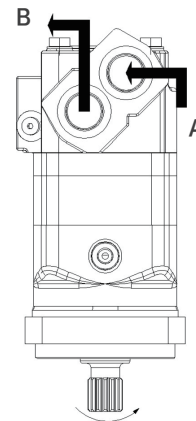
### Drain Port

In applications without a motor drain line, the pressure exerted on the shaft seal is marginally in excess of the return line pressure. When the Drain line is used, the pressure exerted on the shaft seal is equal to the return line pressure.

### Standard direction of shaft rotation: Standard

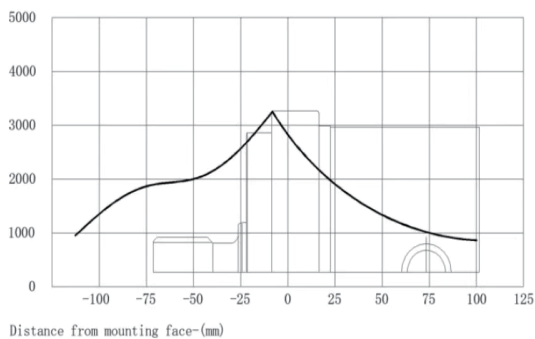
When facing the shaft end of the motor, the shaft rotates: clockwise when port "A" is pressurized.

When port "B" is pressurized, it rotates counterclockwise.



### GKC for CC Mounting Radial forces

Radial forces-(daN)



The bearing curve represents allowable bearing loads for an B10 bearing life(2000 hours or 12x10<sup>6</sup> revolutions at 100rpm) at rated output torque. Other speed load multiply a load values. The maximum load curve is defined by bearing static load capacity.

This curve should not be exceeded at any time including shock loads.