

GFA Series Hydraulic Motors

Options

- Flange connection
- Motor with needle roller bearing
- Speed sensing
- Side and rear ports
- Shaft seal for high and low pressure
- Straight, splined and tapered shafts
- Metric and BSPP ports
- Other special features

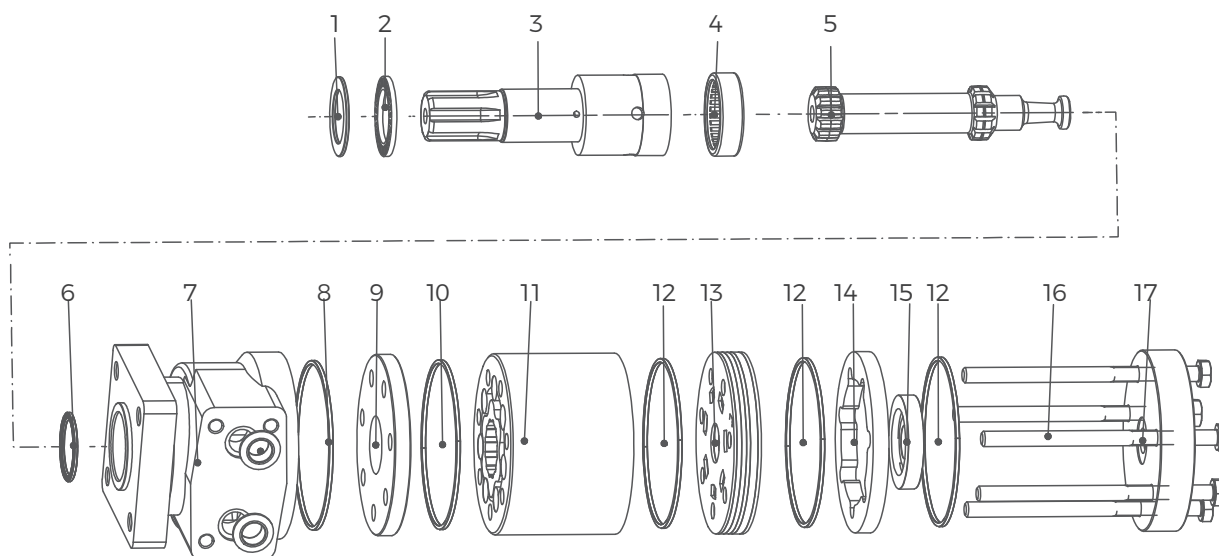
Applications

- Conveyors
- Feeding machiners
- Metal working machines
- Textile machines
- Agricultural machines
- Food industries
- Lawn mower



General

Max. Displacement	cm ³ /rev [in ³ /rev]	392 [24.0]
Max. Speed	RPM	1141
Max. Torque	daNm [lb-in]	cont.:44,5 [3935] int.:62,8 [5562]
Max. Output	kW [HP]	12.5 [16.8]
Max. Pressure Drop	bar [PSI]	cont.: 140 [2030] int.: 190 [2750]
Max. Oil Flow	lpm [GPM]	75 [20.0]
Pressure fluid		Mineral based- HLP (DIN 51524) or HM (ISO 6743/4)
Temperature Range	°C [°F]	-40÷140 [-40÷284]
Optimal Viscosity range	mm ² /s [SUS]	20÷75 [98÷347]
Filtration		ISO code 20/16 (Min. recommended fluid filtration of 25 microns)



- | | | | |
|-------------------------------------|------------------|-----------------------|---------------|
| 1 Bearing retainer | 6 Anti-dust ring | 11 Rotor and stator | 16 Screw |
| 2 Flat bearing | 7 Housing | 12 O-ring | 17 Rear cover |
| 3 Output shaft | 8 O-ring | 13 Distribution plate | |
| 4 Cylindrical needle roller bearing | 9 Spacer | 14 Spacer | |
| 5 Transmission shaft | 10 O-ring | 15 Distribution ring | |

GFA Specifications

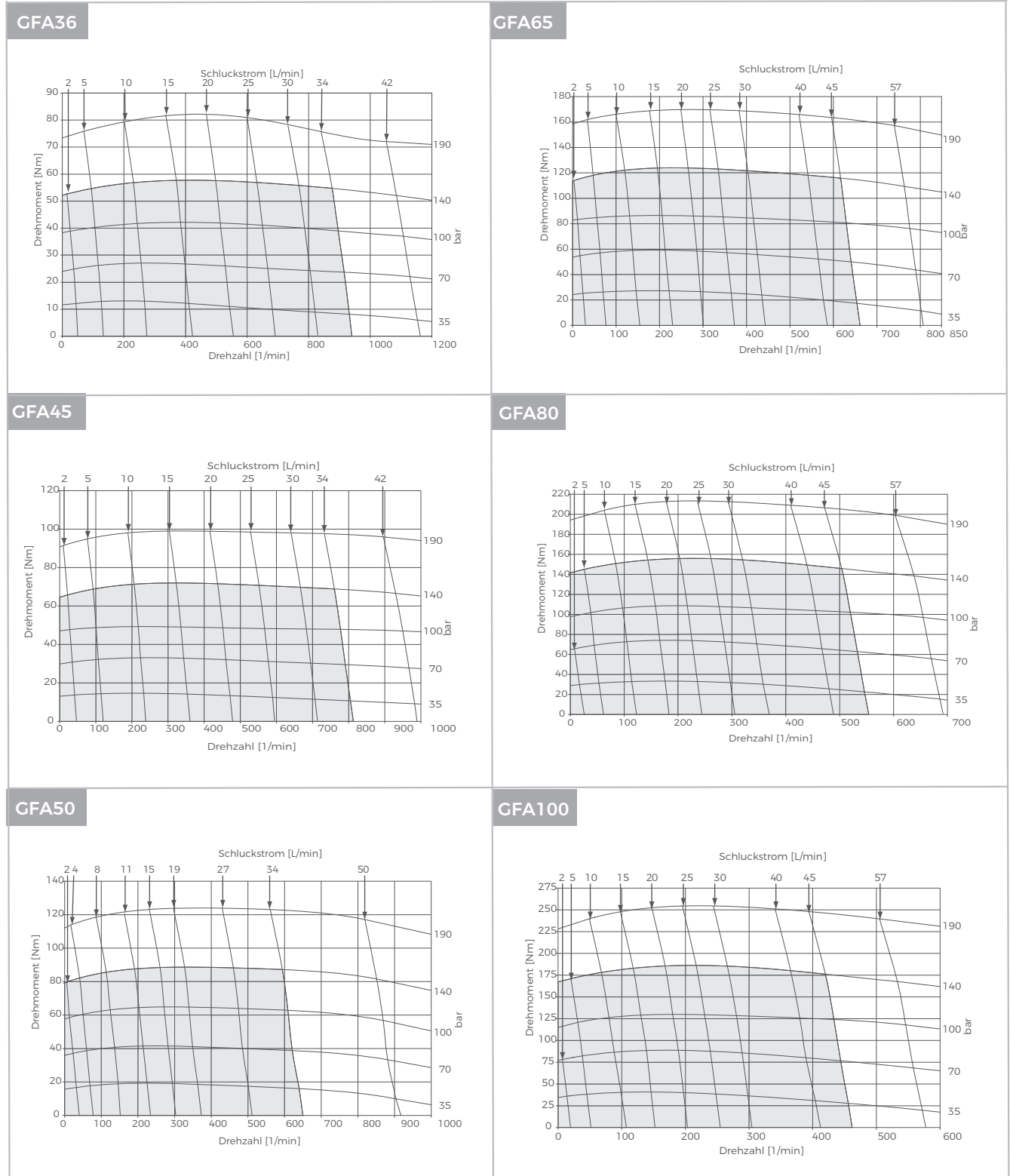
Type		GFA36	GFA45	GFA50	GFA65	GFA80
Displacement cm ³ /rev [in ³ /rev]		36[2.2]	41[2.5]	49[3.0]	65[4.0]	82[5.0]
Max. Speed RPM	Int.	1141	1024	1020	877	695
Max. Oil Flow	Cont.	34[9]	34[9]	34[9]	45[12]	45[12]
lpm [GPM]	Int.	42[11]	42[11]	50[13]	57[15]	57[15]
Max. Differential Pressure	Cont.	140[2030]	140[2030]	140[2030]	140[2030]	140[2030]
bar [PSI]	Int.	190[2750]	190[2750]	190[2750]	190[2750]	190[2750]
Max. Supply Pressure bar [PSI]		200[2900]	200[2900]	200[2900]	200[2900]	200[2900]
Max. Torque	cont.	5,46[483]	7,1[624]	9,0[796]	12,5[1106]	16,0[1416]
daNm [lb-in]	int.	7,11[60]	9,9[876]	12,7[1120]	17,6[1558]	22,0[1947]
Max. Performance kW [HP]		8,5[11.4]	10,4[13.9]	12,8[17.2]	14,7[19.8]	17,3[23.2]
Min. Starting Torque	cont.	4,4[389]	4,4[1111]	7,2[637]	10,0[885]	12,8[1133]
daNm[lb-in]	int.	5,2[460]	6,4[565]	9,8[871]	13,7[1211]	17,1[1515]
Weight, kg [lb]		5,93[13.07]	6,03[13.3]	6,12[13.5]	6,26[13.8]	6,35[14.0]

Type		GFA100	GFA0130	GFA165	GFA195	GFA230
Displacement cm ³ /rev [in ³ /rev]		98[6.0]	130[8.0]	163[10.0]	195[11.9]	228[13.9]
Max. Speed RPM	Int.	582	438	348	292	328
Max. Oil Flow	Cont.	45[12]	45[12]	45[12]	45[12]	57[15]
lpm [GPM]	Int.	57[15]	57[15]	57[15]	57[15]	75[20]
Max. Differential Pressure	Cont.	140[2030]	140[2030]	140[2030]	140[2030]	120[1740]
bar [PSI]	Int.	190[2750]	190[2750]	190[2750]	190[2750]	165[2400]
Max. Supply Pressure bar [PSI]		200[2900]	200[2900]	200[2900]	200[2900]	200[2900]
Max. Torque	cont.	19,0[1682]	25,5[2257]	31,0[2744]	39,0[3452]	38,0[3363]
daNm [lb-in]	int.	26,4[2337]	35,2[3116]	43,6[3846]	52,8[4673]	51,4[4554]
Max. Performance kW [HP]		17,4[23.4]	17,3[23.2]	17,0[22.8]	17,4[23.4]	17,7[23.8]
Min. Starting Torque	cont.	15,2[1345]	20,4[1806]	24,8[2195]	31,2[2762]	30,4[2691]
daNm [lb-in]	int.	20,5[1819]	27,4[2423]	33,8[2992]	41,1[3637]	41,1[3637]
Weight, kg [lb]		6,49[14.3]	6,76[14.9]	7,03[15.5]	7,35[16.2]	7,58[16.7]

Specifications

Type		GFA260	GFA295	GFA330	GFA365	GFA390
Displacement cm ³ /rev [in ³ /rev]		260[15.9]	293[17.9]	328[20.0]	370[22.6]	392[24.0]
Max. Speed RPM	Int.	287	256	228	203	191
Max. Oil Flow	Cont.	57[15]	57[15]	57[15]	57[15]	57[15]
lpm [GPM]	Int.	75[20]	75[20]	75[20]	75[20]	75[20]
Max. Differential Pressure	Cont.	110[1595]	100[1450]	100[1450]	95[1378]	85[1233]
bar [PSI]	Int.	155[2250]	145[2100]	135[1950]	125[1825]	120[1740]
Max. Supply Pressure bar [PSI]		200[2900]	200[2900]	200[2900]	200[2900]	200[2900]
Max. Torque	Cont.	40,0[3540]	42,8[3784]	44,3[3926]	46,7[4133]	44,5[3935]
daNm [lb-in]	Int.	55,0[4870]	58,2[5180]	60,0[5312]	64,8[5728]	62,8[5562]
Max. Performance kW [HP]		16,7[22.4]	15,7[21.0]	14,8[19.8]	13,6[18.2]	12,5[16.8]
Min. Starting Torque	Cont.	32,0[2832]	32,8[2903]	33,4[3045]	37,3[3301]	34,8[3080]
daNm [lb-in]	Int.	44,9[3977]	44,5[3939]	45,3[4014]	47,7[4223]	46,2[4090]
Weight, kg [lb]		7.80[17.2]	8.07[17.8]	8.35[18.4]	8.66[19.1]	8.80[19.4]

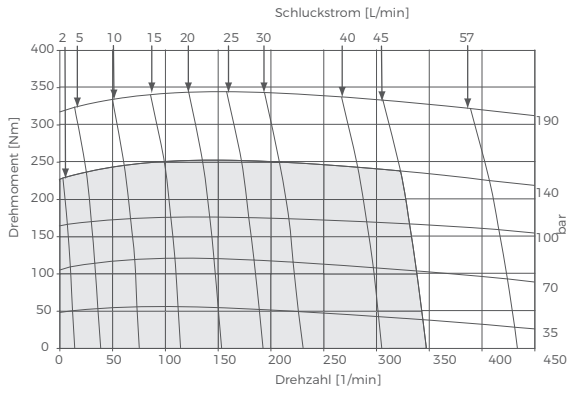
Function Diagrams



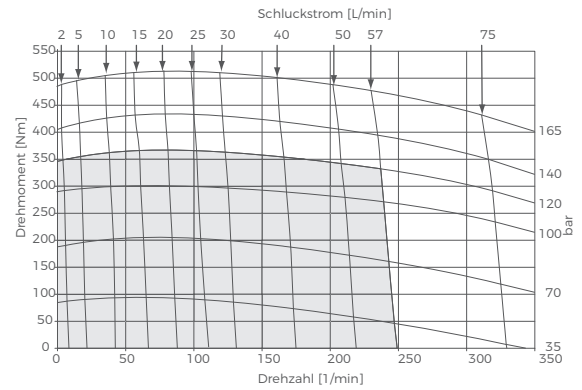
The function diagrams data is for average performance of randomly selected motors at backpressure. 5÷10 bar [72.5÷145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

Function Diagrams

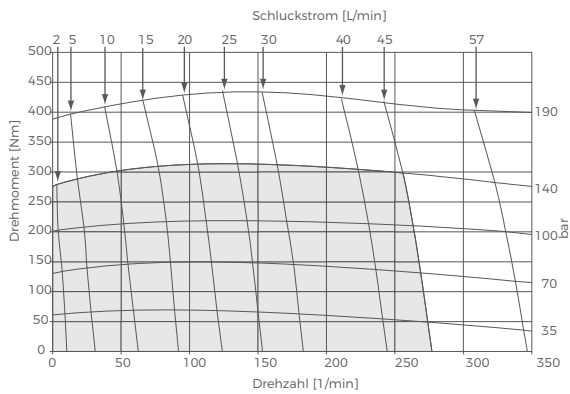
GFA130



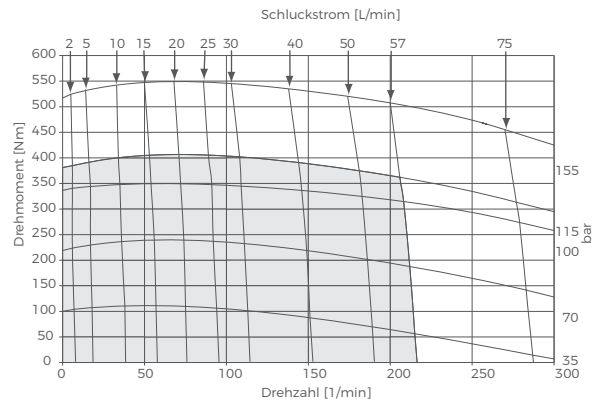
GFA230



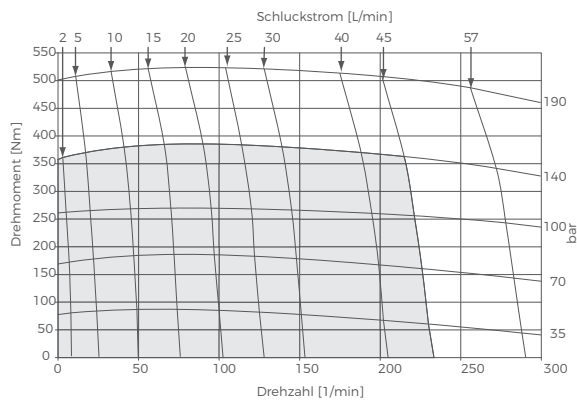
GFA165



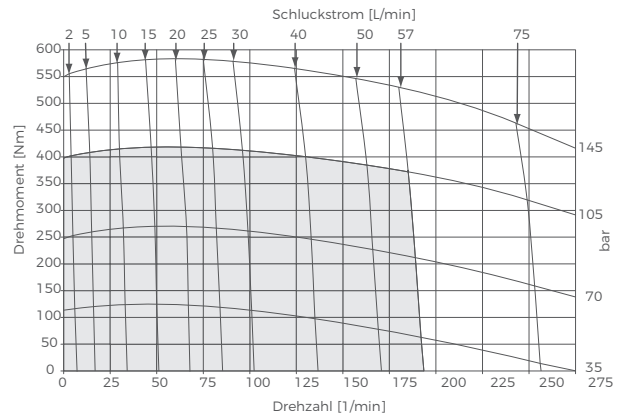
GFA260



GFA195



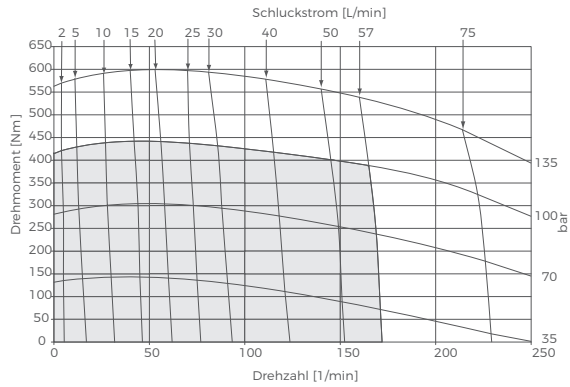
GFA295



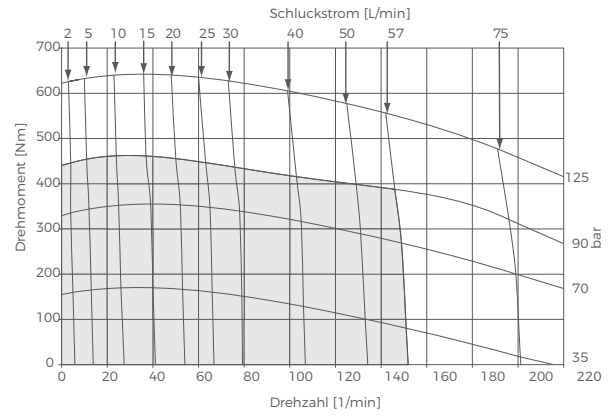
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Function Diagrams

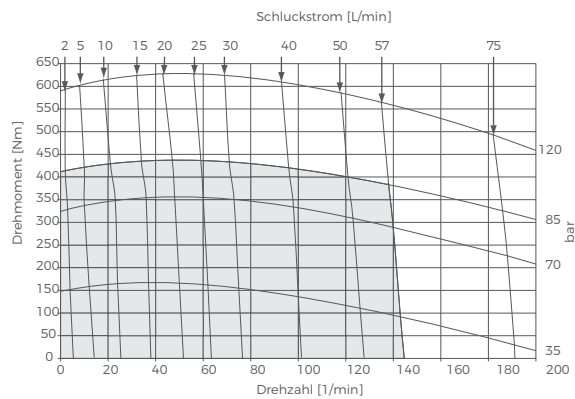
CFA330



CFA365

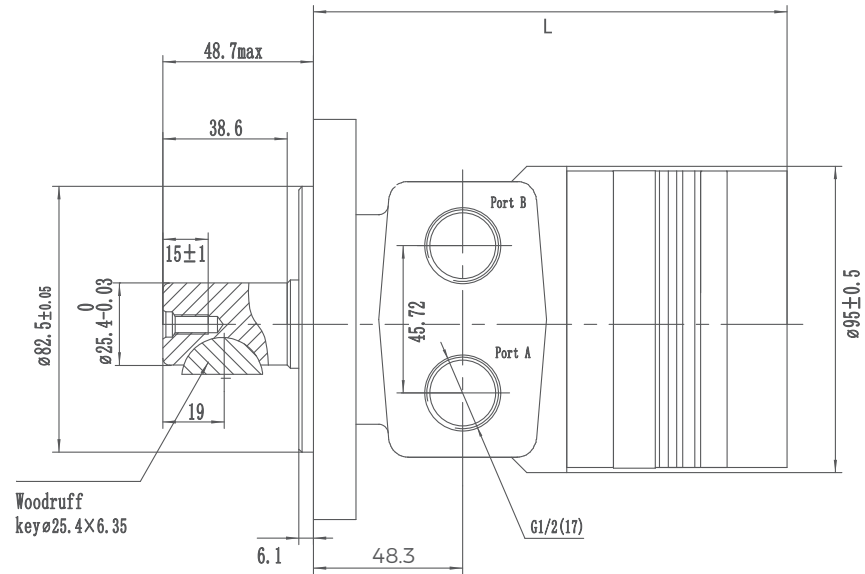


CFA390

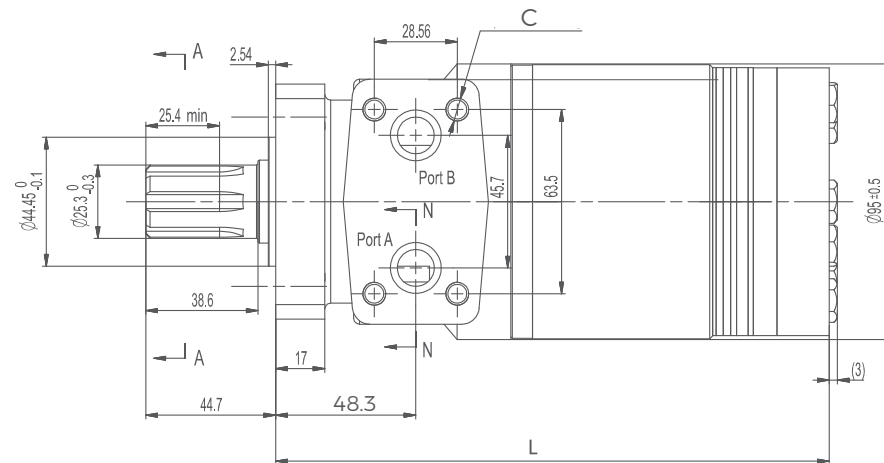


The function diagrams data is for average performance of randomly selected motors at backpressure. 5÷10 bar [72.5÷145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

GFA Dimensions and Mountings

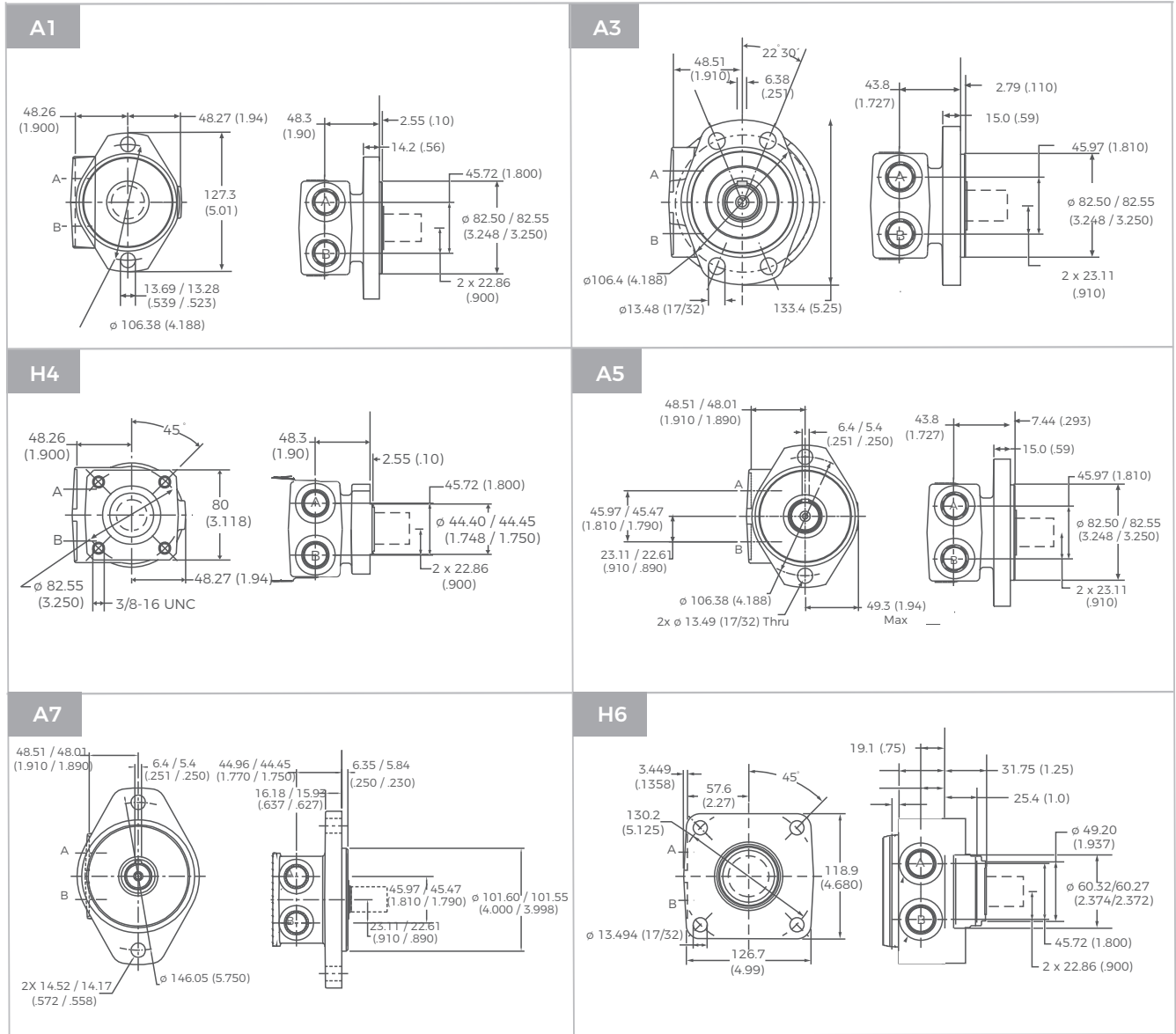


Model	L
GFA36	135
GFA45	136
GFA50	138
GFA65	141
GFA80	144
GFA100	147
GFA130	154
GFA165	160
GFA195	166
GFA230	173
GFA260	179
GFA295	185
GFA330	192
GFA365	200
GFA390	205



Mounting	G7 (depth)	U9 (depth)	UA (depth)	U3 (depth)	G8 (depth)	D1 (depth)	D2 (depth)
P(A, B)	G1/2(15)	7/8-14 O-ring(17)	1/2-14NPTF(15)	3/4-16 O-ring(15)	PT(RC)1/2(15)	Ø10	Ø10
T	G1/4(12)	7/16-20UNF(12)	7/16-20UNF(12)	7/16-20UNF(12)	PT(RC)1/4(9.7)	7/16-20UNF(12)	G1/4(12)
C	—	—	—	—	—	4-5/16-18UNC(13)	4-M8(13)

GFA Flange Covers Dimensions



GFA Shafts Dimensions

<p>S6</p> <p>Straight shaft $\varnothing 25.4$ Woodruff key $\varnothing 25.4 \times 6.35$</p>	<p>S9</p> <p>Straight shaft $\varnothing 25.4$ Pin hole $\varnothing 10.3$</p>
<p>R4</p> <p>Splined shaft SAE 6B</p>	<p>SC</p> <p>Straight shaft $\varnothing 25$ Parallel key $8 \times 7 \times 28$</p>
<p>SD</p> <p>Straight shaft $\varnothing 25$ Parallel key $7 \times 7 \times 32$</p>	<p>R5</p> <p>Splined shaft tooth 13-DP 16/32</p>
<p>S7</p> <p>Straight shaft $\varnothing 25$ Parallel key $8 \times 7 \times 32$</p>	<p>SA</p> <p>Straight shaft $\varnothing 25.4$ Pin hole $\varnothing 8$</p>

GFA Shafts Dimensions

