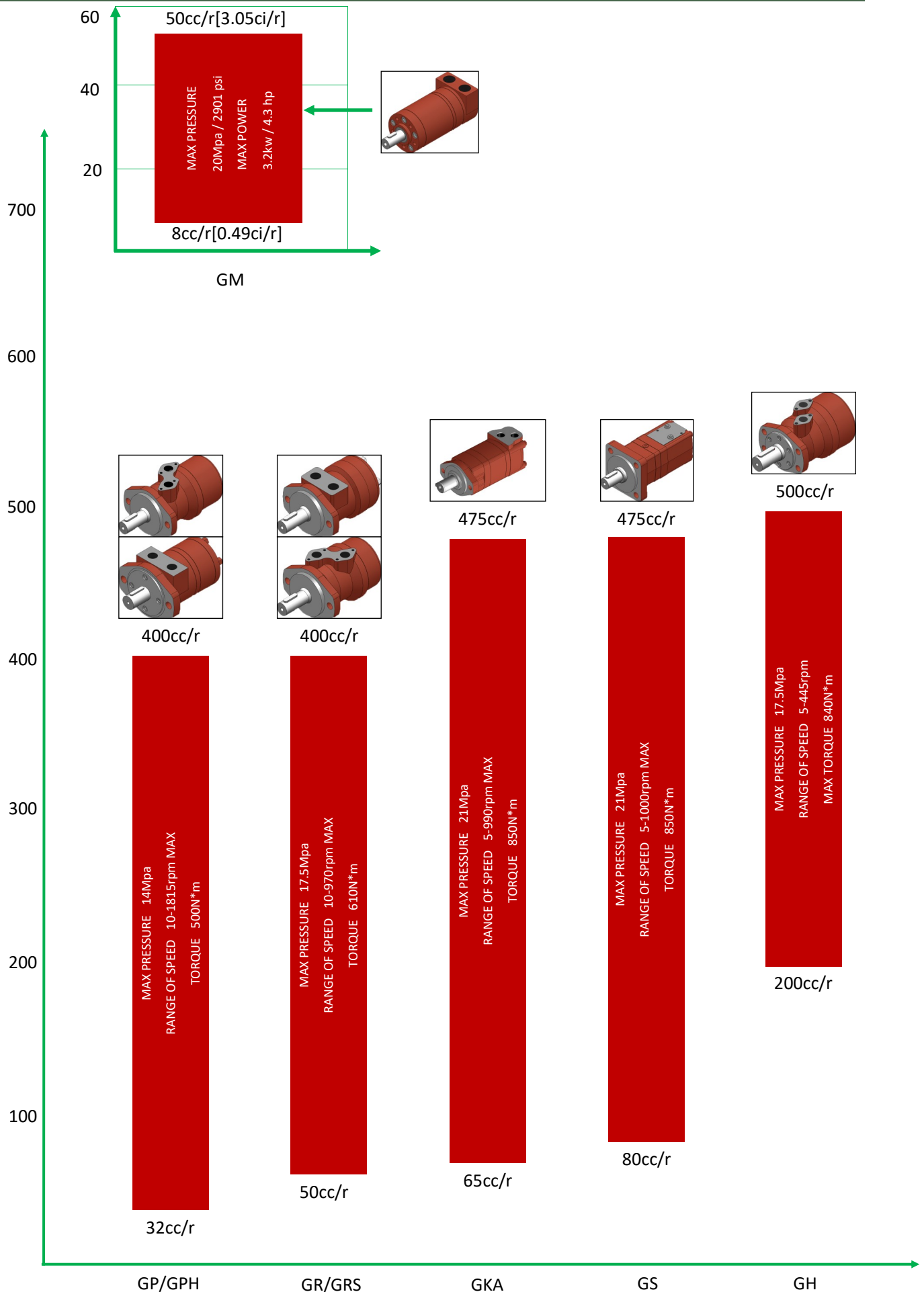


GRH Hydraulic Motor Series

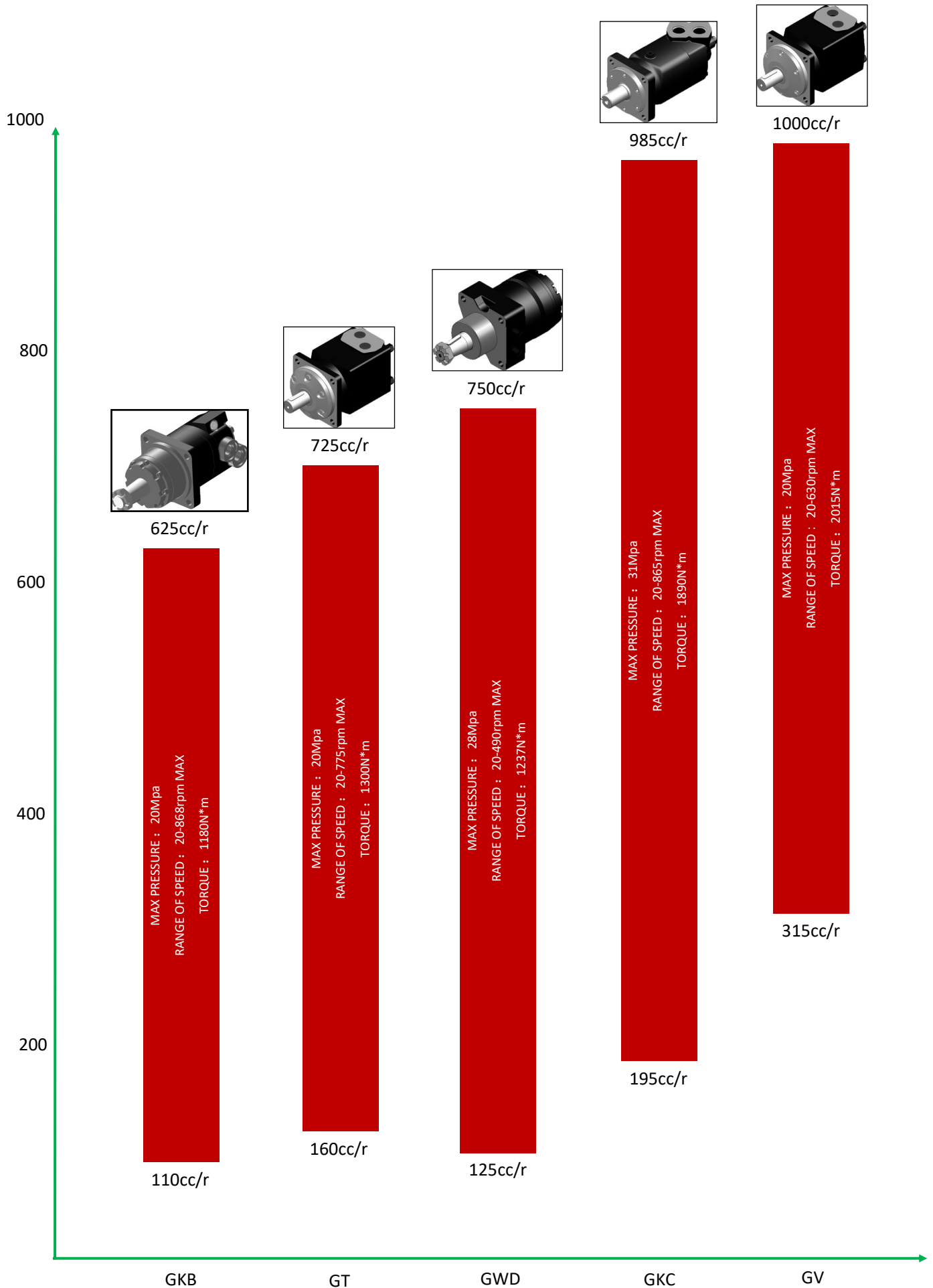
Guide for orbit motors

1: GM Series Dimensions, Data, Function Diagrams and Order Information Competitive models: 129 J, BMM, OMM	4-9
2: GP Series Dimensions, Data, Function Diagrams and Order Information Competitive models: OMP	10-20
3: GPH Series Dimensions, Data, Function Diagrams and Order Information Competitive models: 101 H, BMPH, DH, TB, RS200	21-31
4: GR Series Dimensions, Data, Function Diagrams and Order Information Competitive models: OMR	32-41
5: GRS Series Dimensions, Data, Function Diagrams and Order Information Competitive models: 103 S, 158 T, BMRS, DS, TE, WR255	42-52
6: GKA Series Dimensions, Data, Function Diagrams and Order Information Competitive models: 104, 105, 106 2K, BMSY, OMS, TF, WS350	53-64
7: GH Series Dimensions, Data, Function Diagrams and Order Information Competitive models: OMH	65-72
8: GS Series Dimensions, Data, Function Diagrams and Order Information Competitive models: BMSY, OMS, Alt for 104, 105, 106 2K	73-81
9: GKB Series Dimensions, Data, Function Diagrams and Order Information Competitive models: 109, 110, 111 4K, BMK4	82-93
10: GT Series Dimensions, Data, Function Diagrams and Order Information Competitive models: OMT, Alt for 6K	94-102
11: GWD Series Dimensions, Data, Function Diagrams and Order Information Competitive models: 162 W, 184 Delta, TF, RE500, 520, 530	103-114
12: GV Series Dimensions, Data, Function Diagrams and Order Information Competitive models: OMV, Alt for 119, 120, 121 10K	115-122
13: GKC Series Dimensions, Data, Function Diagrams and Order Information Competitive models: 112, 113, 114 6K, BMK6	123-130
14: GBD Brake Dimensions, Data and Order Information	131-133

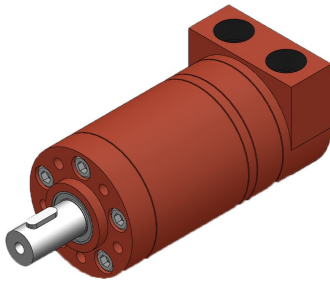
CONTENTS



CONTENTS



General

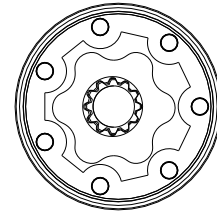


APPLICATION

- ◇ Conveyors
- ◇ Feeding machinery of robots and manipulators
- ◇ Metal working machines
- ◇ Textile machines
- ◇ Agricultural machines
- ◇ Food industries
- ◇ Lawn mower

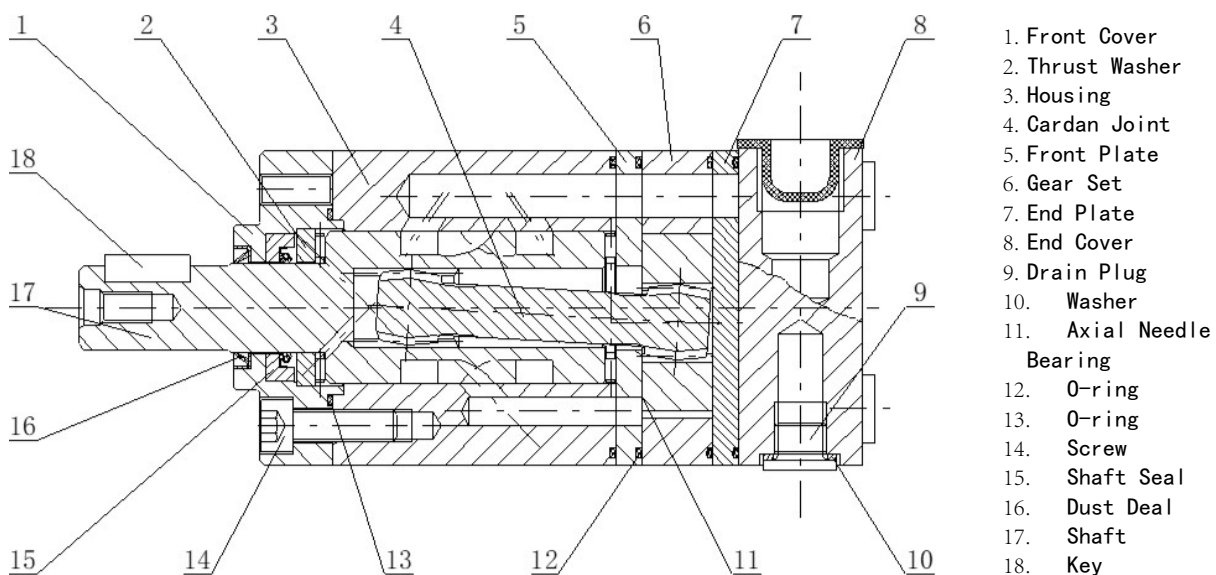
OPTIONS

- ◇ Flange connection
- ◇ Motor with needle bearing
- ◇ Side and rear ports
- ◇ Shafts—straight, splined and tapered
- ◇ Shaft seal for high and low pressure
- ◇ Metric and BSPP ports
- ◇ Speed sensing



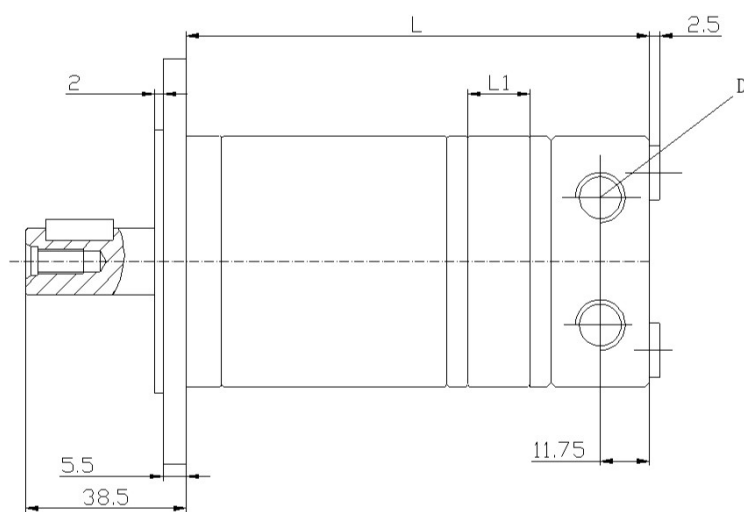
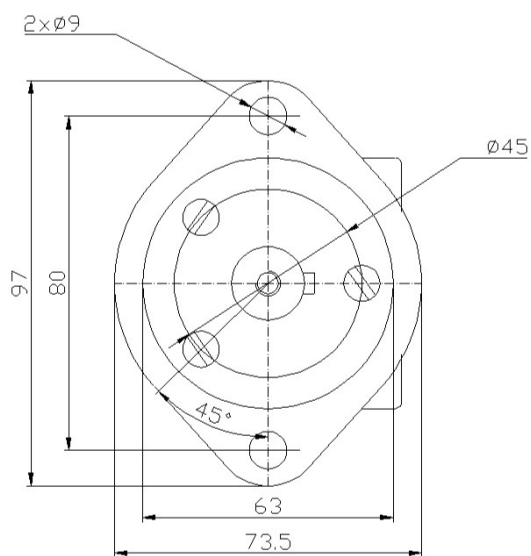
- ◇ Shaft distribution flow

Model		GM8	GM12.5	GM20	GM32	GM40	GM50
Disp.	in ³ /rev	0.5	0.76	1.21	1.93	2.43	3.07
	cm ³ /rev	8.2	12.9	19.9	31.6	39.8	50.3
Max Speed rpm	cont.	1950	1550	1000	630	500	400
	int.	2450	1940	1250	800	630	500
Max Torque N m [lb-in]	cont.	11 [97]	16 [141]	25 [221]	40 [354]	45 [398]	46 [407]
	int.	15 [132]	23 [203]	35 [310]	57 [504]	70 [620]	88 [779]
Max Dif. bar [psi]	cont.	102 [1450]	102 [1450]	102 [1450]	102 [1450]	86 [1233]	71 [1015]
	int.	142 [2030]	142 [2030]	142 [2030]	142 [2030]	122 [1740]	102 [1450]
Max Flow l/min [gpm]	cont.	15 [3.96]	20 [5.28]	20 [5.28]	20 [5.28]	20 [5.28]	20 [5.28]
	int.	20 [5.28]	25 [6.6]	25 [6.6]	25 [6.6]	25 [6.6]	25 [6.6]
Weight kg [lbs]		1.94 [4.3]	2.03 [4.5]	2.12 [4.72]	2.23 [4.95]	2.25 [5]	2.30 [5.1]

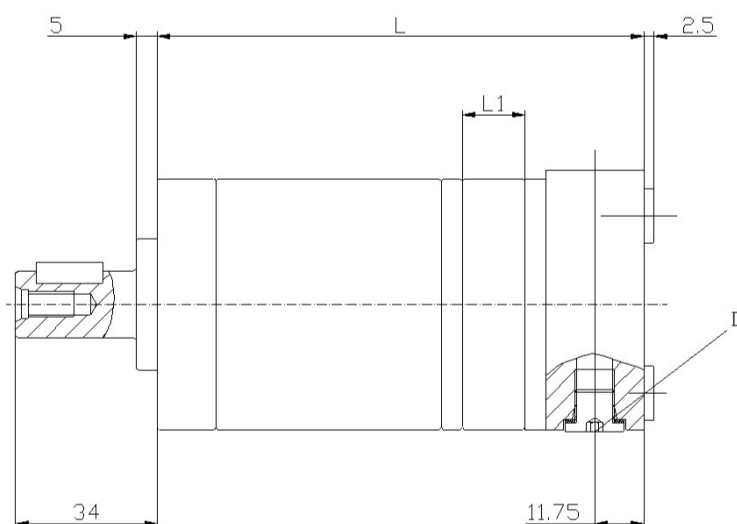
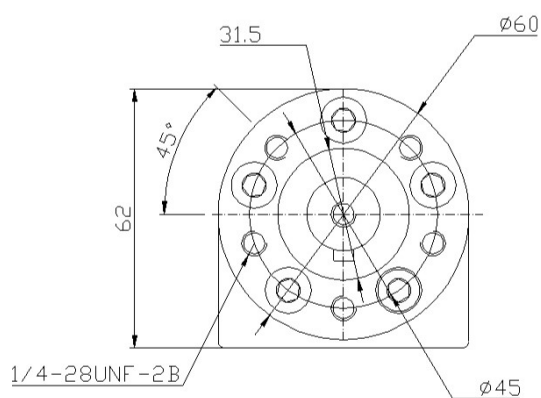


Dimensions and Mounting Data

法兰 Flange AD



Flange B5

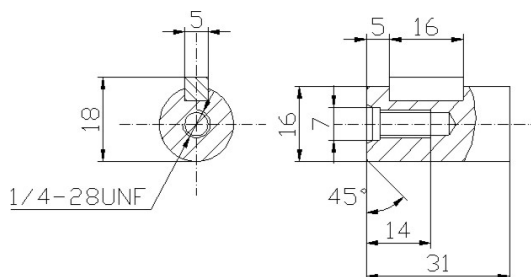


Model	A		B	
	L	L1	L	L1
GM8	109	3	105	3
GM12.5	111	5	107	5
GM20	114	8	110	8
GM32	119	13.5	115	13.5
GM40	122	17	118	17
GM50	127	21	123	21

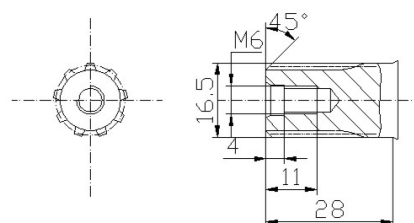
Ports	A	B
D	9/16-18SAE	9/16-18SAE
T	3/8-24SAE	3/8-24SAE

GM Shaft Extension Dimensions Data

Shaft SS : Cylindrical shaft $\varnothing 16$
Parallel key 5x5x16



Shaft RK : Splined B17x14 DIN5482



	Model	Displacement	Flange	Drive shaft	Ports	Other functions
Ordering Example:	GM	8	B4	SS	GA	ACA
Model	Disp.	Flange	Drive shaft	Ports		
GM	8	B4=3-M6 circle flange $\varnothing 45$, pilot $\varnothing 31.5 \times 5$	SS=Shaft $\varnothing 16$, parallel key 5x5x16	GA=G3/8, G1/8 U8=9/16-18 UNF, 3/8-24 UNF		
	12.5					
	20	B5=3-1/4-28 UNF circle flange $\varnothing 45$, pilot $\varnothing 31.5 \times 5$	ST=Shaft $\varnothing 15.875$, parallel key 4.8x4.8x19.05			
	32					
	40	AD=2- $\varnothing 9$ rhomb flange $\varnothing 80$, pilot $\varnothing 63 \times 2$	RK=Shaft $\varnothing 16.5$, splined B17x14 DIN5482			
	50					

Rotation direction	Paint	Standard Options
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature

Hydraulic Orbit Motors GM



Flow Data

GM8	8.2cm³/rev(0.50in³/rev)				Max Cont.		Max Int.	
Pressure bar [psi→]		35.7 [510]	50.8 [725]	71.1 [1015]	101.5 [1450]	122.5 [1750]	142.1 [2030]	
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	2 [0.52]	3 [27]	5 [44]	8 [71]	10 [89]	12 [106]	14 [124]	
		228rpm	218rpm	206rpm	156rpm	111rpm	58rpm	
	4 [1.05]	3 [27]	5 [44]	7 [62]	11 [97]	13 [115]	15 [133]	
		474rpm	471rpm	463rpm	426rpm	391rpm	331rpm	
	8 [2.1]	3 [27]	5 [44]	7 [62]	11 [97]	13 [115]	15 [133]	
		953rpm	946rpm	926rpm	884rpm	855rpm	816rpm	
	12 [3.15]	2 [18]	5 [44]	7 [62]	10 [89]	13 [115]	15 [133]	
		1444rpm	1426rpm	1402rpm	1360rpm	1324rpm	1288rpm	
	15 [3.95]		4 [35]	7 [62]	10 [89]	12 [106]	14 [124]	
Max Cont.			1912rpm	1900rpm	1861rpm	1833rpm	1780rpm	
20 [5.25]				6 [53]	10 [89]	11 [97]	14 [124]	
Max Int.				2395rpm	2350rpm	2328rpm	2281rpm	
GM12.5	12.9cm³/rev(0.76in³/rev)				Max Cont.		Max Int.	
Pressure bar [psi→]		35.7 [510]	50.8 [725]	71.1 [1015]	101.5 [1450]	122.5 [1750]	142.1 [2030]	
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	2 [0.52]	6 [53]	8 [71]	11 [97]	16 [142]	19 [168]		
		140rpm	136rpm	119rpm	68rpm	35rpm		
	4 [1.05]	6 [53]	8 [71]	12 [106]	17 [150]	19 [168]	23 [204]	
		296rpm	289rpm	274rpm	229rpm	200rpm	145rpm	
	8 [2.1]	5 [44]	8 [71]	12 [106]	17 [150]	20 [177]	24 [212]	
		605rpm	596rpm	583rpm	543rpm	514rpm	469rpm	
	12 [3.15]	5 [44]	8 [71]	11 [97]	16 [142]	20 [177]	24 [212]	
		912rpm	905rpm	895rpm	859rpm	834rpm	784rpm	
	15 [3.95]	5 [44]	7 [62]	11 [97]	16 [142]	19 [168]	23 [204]	
		1152rpm	1144rpm	1136rpm	1102rpm	1078rpm	1036rpm	
	20 [5.25]	3 [27]	7 [62]	10 [89]	15 [133]	19 [168]	22 [195]	
		1542rpm	1532rpm	1521rpm	1500rpm	1482rpm	1437rpm	
25 [6.57]	2 [18]	6 [53]	9 [80]	14 [124]	18 [159]	22 [195]		
Max Int.		1910rpm	1891rpm	1878rpm	1848rpm	1828rpm	1788rpm	
GM20	19.9cm³/rev(1.21in³/rev)				Max Cont.		Max Int.	
Pressure bar [psi→]		17.2 [246]	35.7 [510]	50.8 [725]	71.1 [1015]	101.5 [1450]	122.5 [1750]	142.1 [2030]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	2 [0.52]	3 [27]	9 [80]	14 [124]	19 [168]	26 [230]	30 [266]	
		99rpm	96rpm	89rpm	74rpm	42rpm	21rpm	
	4 [1.05]	4 [35]	9 [80]	14 [124]	19 [168]	26 [230]	31 [274]	36 [319]
		197rpm	191rpm	182rpm	178rpm	134rpm	112rpm	74rpm
	8 [2.1]	4 [35]	9 [80]	13 [115]	19 [168]	27 [239]	31 [274]	36 [319]
		398rpm	395rpm	391rpm	377rpm	340rpm	319rpm	288rpm
	12 [3.15]	3 [27]	8 [71]	13 [115]	18 [159]	26 [230]	31 [274]	37 [327]
		596rpm	594rpm	588rpm	579rpm	545rpm	523rpm	493rpm
	15 [3.95]	3 [27]	8 [71]	12 [106]	17 [150]	25 [221]	30 [266]	36 [319]
		745rpm	741rpm	738rpm	728rpm	695rpm	684rpm	660rpm
	20 [5.25]	1 [9]	6 [53]	11 [97]	19 [168]	24 [212]	29 [257]	35 [310]
		998rpm	995rpm	991rpm	985rpm	962rpm	916rpm	885rpm
25 [6.57]		4 [35]	9 [80]	14 [124]	23 [204]	28 [248]	33 [292]	
Max Int.			1247rpm	1245rpm	1242rpm	1189rpm	1176rpm	

Hydraulic Orbit Motors GM



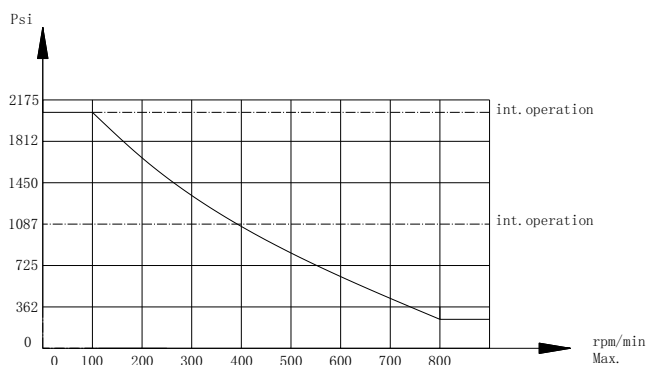
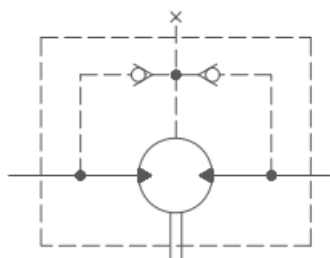
Flow Data

GM32		31.6cm ³ /rev (1.90in ³ /rev)				Max Cont.		Max Int.
Pressure bar [psi→]		20.3 [290]	35.7 [510]	50.8 [725]	71.1 [1015]	101.5 [1450]	122.5 [1750]	142.1 [2030]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	2 [0.52]	7 [62]	15 [133]	21 [186]	28 [248]	40 [354]		
		61rpm	57rpm	52rpm	47rpm	16rpm		
	4 [1.05]	7 [62]	15 [133]	21 [186]	29 [257]	41 [363]	48 [425]	57 [504]
		126rpm	121rpm	114rpm	106rpm	82rpm	67rpm	49rpm
	8 [2.1]	7 [62]	15 [133]	21 [186]	29 [257]	41 [363]	49 [434]	58 [513]
		250rpm	244rpm	239rpm	231rpm	207rpm	194rpm	167rpm
	12 [3.15]	6 [53]	13 [115]	20 [177]	28 [248]	40 [354]	48 [425]	58 [513]
		378rpm	374rpm	369rpm	362rpm	338rpm	322rpm	297rpm
	15 [3.95]	4 [35]	12 [106]	18 [159]	27 [238]	39 [345]	47 [416]	57 [504]
		476rpm	472rpm	468rpm	462rpm	441rpm	429rpm	406rpm
	20 [5.25]	3 [27]	10 [89]	17 [150]	25 [221]	37 [327]	46 [407]	55 [487]
	Max Cont.	633rpm	630rpm	627rpm	619rpm	601rpm	585rpm	566rpm
	25 [6.57]	1 [9]	8 [71]	15 [133]	23 [204]	35 [310]	43 [381]	52 [460]
	Max Int.	791rpm	789rpm	787rpm	783rpm	766rpm	753rpm	732rpm
GM40		39.8cm ³ /rev (2.39in ³ /rev)				Max Cont.		Max Int.
Pressure bar [psi→]		35.7 [510]	50.8 [725]	71.1 [1015]	86.3 [1233]	101.5 [1450]	122.5 [1750]	
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	2 [0.52]	16 [142]	27 [239]	36 [319]	44 [389]	51 [451]		
		45rpm	40rpm	34rpm	28rpm	17rpm		
	4 [1.05]	16 [142]	27 [239]	37 [327]	44 [389]	52 [460]	62 [549]	
		96rpm	93rpm	85rpm	79rpm	65rpm	52rpm	
	8 [2.1]	15 [133]	26 [230]	36 [319]	44 [389]	52 [460]	63 [558]	
		197rpm	195rpm	182rpm	176rpm	166rpm	154rpm	
	12 [3.15]	14 [124]	25 [221]	35 [310]	43 [381]	51 [451]	62 [549]	
		293rpm	287rpm	282rpm	277rpm	268rpm	257rpm	
	15 [3.95]	13 [115]	24 [212]	34 [301]	42 [372]	50 [443]	62 [549]	
		371rpm	365rpm	360rpm	355rpm	347rpm	338rpm	
	20 [5.25]	10 [89]	21 [186]	31 [274]	39 [345]	48 [425]	59 [522]	
	Max Cont.	497rpm	492rpm	487rpm	480rpm	472rpm	463rpm	
	25 [6.57]	7 [62]	19 [168]	29 [257]	37 [327]	44 [389]	56 [496]	
	Max Int.	622rpm	617rpm	612rpm	607rpm	600rpm	591rpm	
GM50		50.3cm ³ /rev (3.02in ³ /rev)				Max Cont.		Max Int.
Pressure bar [psi→]		15.3 [218]	35.7 [510]	50.8 [725]	71.1 [1015]	101.5 [1450]		
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	2 [0.52]	11 [97]	23 [204]	36 [319]	50 [443]			
		37rpm	33rpm	27rpm	22rpm			
	4 [1.05]	11 [97]	22 [195]	36 [319]	50 [443]	70 [620]		
		76rpm	73rpm	68rpm	63rpm	55rpm		
	8 [2.1]	11 [97]	21 [186]	35 [310]	50 [443]	71 [628]		
		157rpm	154rpm	149rpm	145rpm	137rpm		
	12 [3.15]	11 [97]	20 [177]	33 [292]	49 [434]	71 [628]		
		237rpm	234rpm	231rpm	226rpm	218rpm		
	15 [3.95]	10 [89]	18 [159]	32 [283]	47 [415]	69 [611]		
		296rpm	295rpm	294rpm	288rpm	282rpm		
	20 [5.25]	8 [71]	14 [124]	29 [257]	44 [389]	64 [566]		
	Max Cont.	395rpm	395rpm	393rpm	390rpm	381rpm		
	25 [6.57]	4 [35]	10 [89]	25 [221]	40 [354]	59 [522]		
	Max Int.	498rpm	496rpm	494rpm	490rpm	484rpm		

Technical Data 技术数据

Hydraulic orbit Motors GPH

Permissible shaft seal pressure



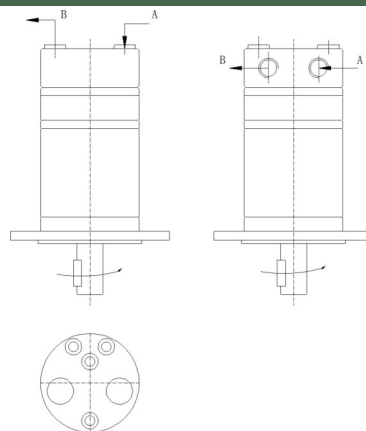
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Case Drain

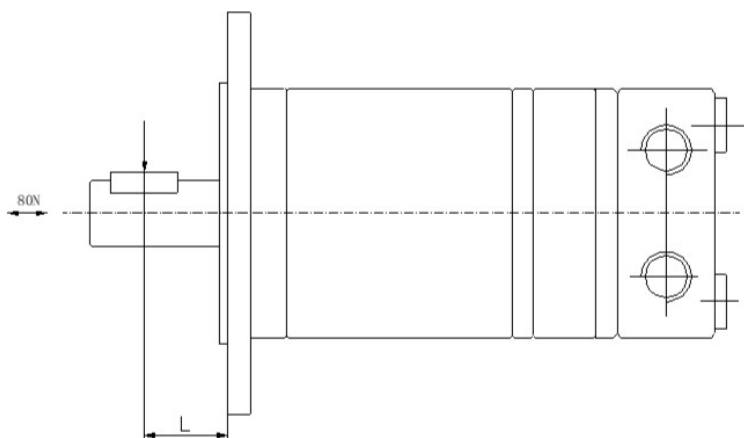
In applications without a motor drain line, the pressure exerted on the shaft seal is marginally in excess of the return line pressure. When the Drain line is used, the pressure exerted on the shaft seal is equal to the return line pressure.

Standard direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate: Clock-wise when port "A" is pressurized. Counter-clockwise port "B" is pressurized.



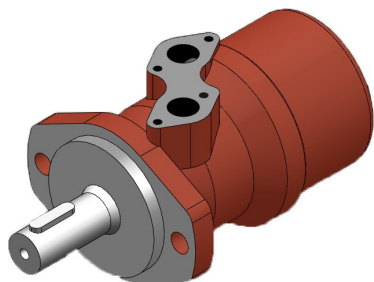
Axial and Radial force



$$Fr = \frac{130400}{61.5 + L} n$$

Fr = Radial Force (daN)
 L = Distance (mm)
 n = Speed (rpm)
 Rhomb-flange L=15mm
 Square-flange L=20mm

General

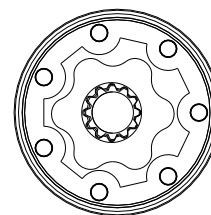


APPLICATION

- ◇ Conveyors
- ◇ Feeding machinery of robots and manipulators
- ◇ Metal working machines
- ◇ Textile machines
- ◇ Agricultural machines
- ◇ Food industries
- ◇ Lawn mower

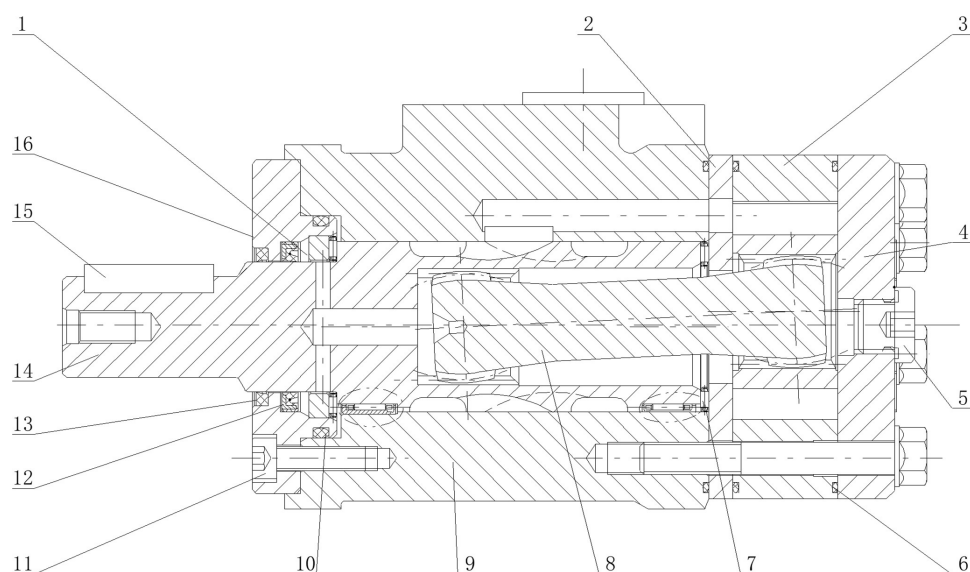
OPTIONS

- ◇ Flange mount
- ◇ Motor with needle roller bearing
- ◇ Speed sensing
- ◇ Side and bottom ports
- ◇ Shaft seal for high and low pressure
- ◇ Shafts-straight, splined and tapered
- ◇ Metric and BSPP ports
- ◇ Other special features



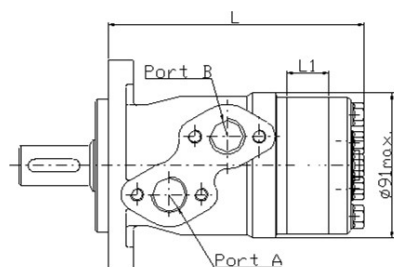
- ◇ Shaft distribution flow

Model		GP40	GP50	GP80	GP100	GP125	GP160	GP200	GP250	GP315	GP400
Disp.	in ³ /rev	2.44	3.02	4.83	6.04	7.55	9.66	12.1	15.1	19.3	24.16
	cm ³ /rev	40	49.5	79.2	99	123.8	158.4	198	247.5	316.8	396
Max Speed rpm	连续 cont.	1500	1210	755	605	486	378	303	242	190	150
	断续 int.	1750	1515	945	755	605	472	378	303	236	189
Max Torque N m [lb-in]	连续 cont.	62 [550]	94 [835]	151 [1340]	193 [1710]	237 [2100]	313 [2770]	366 [3240]	380 [3360]	380 [3360]	360 [3190]
	断续 int.	82 [730]	119 [1050]	195 [1725]	237 [2100]	298 [2640]	378 [3345]	456 [4035]	583 [5160]	560 [4960]	590 [5240]
Max Dif. bar [psi]	连续 cont.	120 [1750]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	110 [1600]	90 [1300]	70 [1015]
	断续 int.	155 [2550]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	140 [2030]	115 [1655]
Max Flow l/min [gpm]	连续 cont.	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]
	断续 int.	70 [18.5]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]
Weight kg [lbs]		5.7 [12.6]	5.8 [12.8]	5.9 [13.2]	6.1 [13.5]	6.2 [13.7]	6.4 [14.1]	6.6 [14.6]	6.8 [15]	7.1 [15.6]	7.6 [16.8]

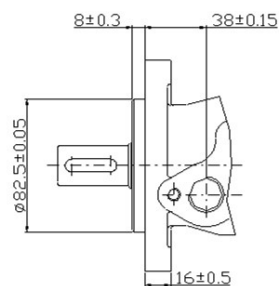
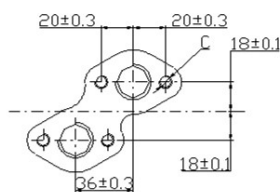


1. Thrust Washer
2. Wear Plate
3. Gear Set
4. End Cover
5. Case Drain Plug
6. O-ring
7. Axial Needle Bearing
8. Cardan Joint
9. Housing
10. O-ring
11. Bolt
12. Shaft Seal
13. Dust Seal
14. Output Shaft
15. Key
16. Front Cover

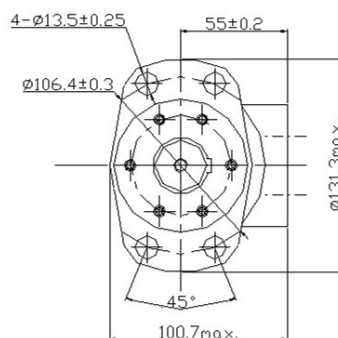
Dimensions and Mounting Data



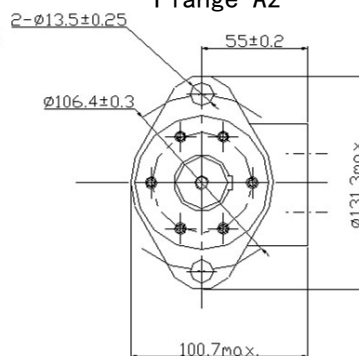
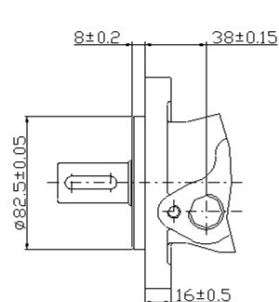
Port 油口



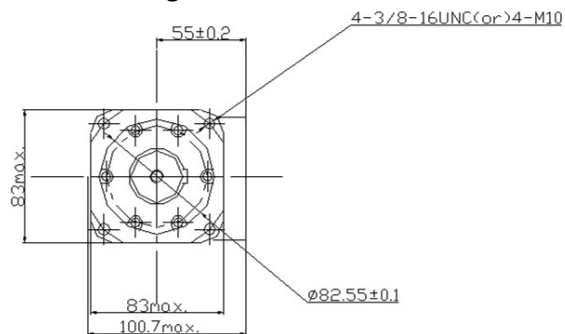
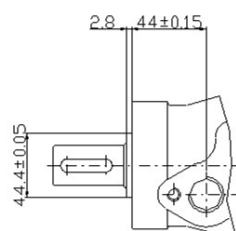
Flange A4



Flange A2



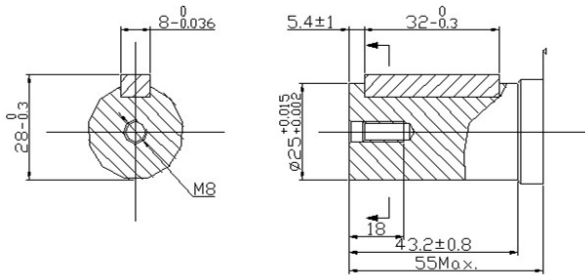
Flange H4/H5



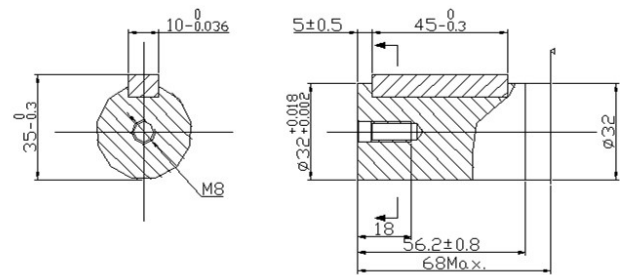
Model	L	L1
GP36	141	7
GP50	141	7
GP80	144.5	10.5
GP100	147	13
GP125	150	16
GP160	155	21
GP200	160	26
GP250	166	32
GP315	176	42
GP400	186	52

Port	G1 (Depth)	M1 (Depth)	U2 (Depth)	U1 (Depth)	G2 (Depth)
P(A,B)	G1/2 (15)	M22x1.5 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT (RC) 1/2 (15)
T	G1/4 (12)	M14x1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT (RC) 1/4 (9.7)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC (13)	4-5/16-18UNC (13)	4-M8 (13)

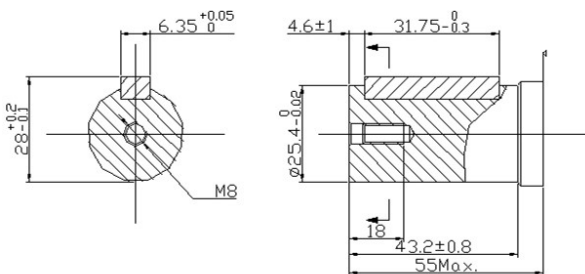
GP Shaft Extension Dimensions Data



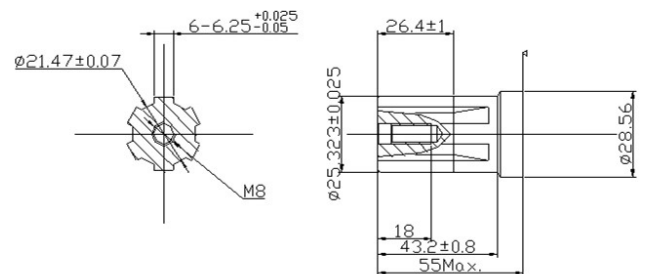
Shaft S1: Cylindrical shaft $\varnothing 25$
Parallel key 8x7x32



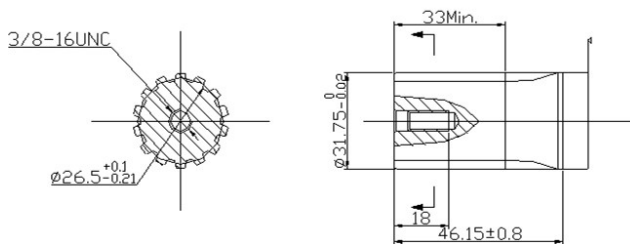
Shaft S4: Cylindrical shaft $\varnothing 32$
Parallel key 10x8x45



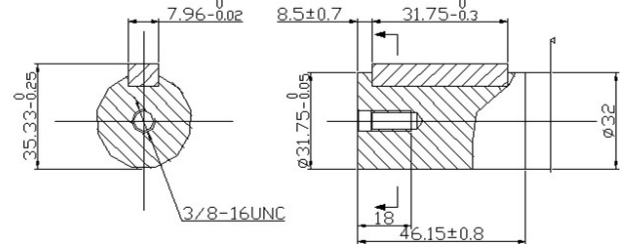
Shaft S2: Cylindrical shaft $\varnothing 25.4$
Parallel key 6.35x6.35x31.75



Shaft R1: Splined SAE 6B

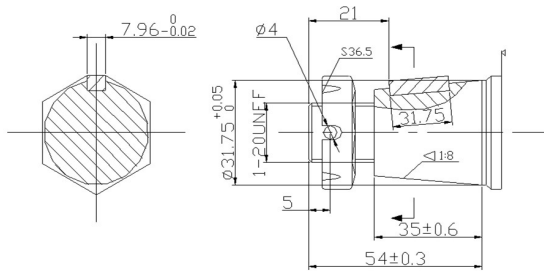


Shaft R2: Splined 14-DP12/24

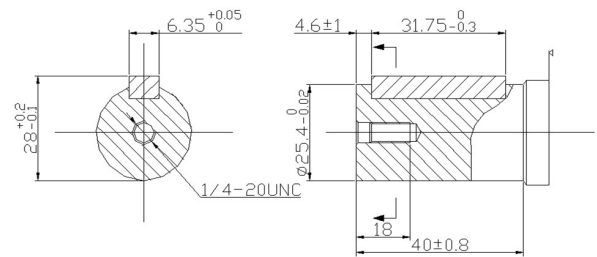


Shaft S5: Cylindrical shaft $\varnothing 31.75$
Parallel key 7.96x7.96x31.75

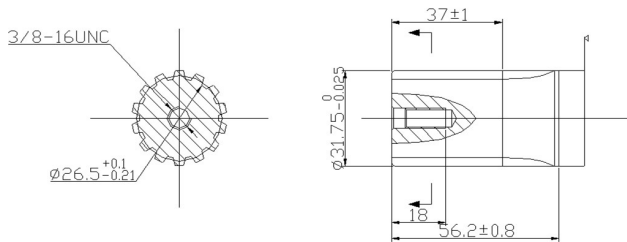
GP Shaft Extension Dimensions Data



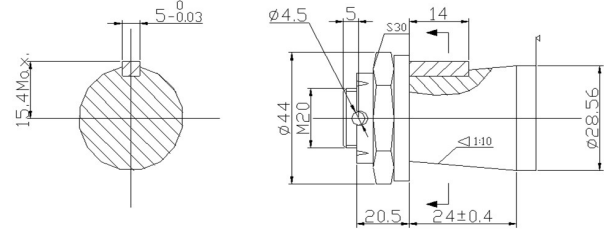
Shaft T2: Tapered shaft $\varnothing 31.75$
Parallel key 7.96x7.96x31.75
Tightening torque: 200 ± 10 Nm



Shaft S3: Cylindrical shaft $\varnothing 25.4$
Parallel key 6.35x6.35x31.75



Shaft R3: Splined 14-DP12/24



Shaft T1: Tapered shaft $\varnothing 28.56$
Parallel key B5x5x14
Tightening torque: 100 ± 10 Nm

GP - How To Order

		Model	Displacement	Flange	Drive shaft	Ports	Other functions
Ordering Example:		GP	40	A2	S1	G1	ACA
Model	Disp.	Flange		Drive shaft		Ports	
GP	40			S1=Shaft $\varnothing$ 25, parallel key 8x7x32			
	50	A2 =2-Hole SAE A Flange, Pilot $\varnothing$ 82.5x8		S2=Shaft $\varnothing$ 25.4, parallel key 6.35x6.35x31.75			
	80	A4 =4-Hole SAE A Flange, Pilot $\varnothing$ 82.5x8		R1=Shaft $\varnothing$ 25.4, splined tooth SAE 6B			
	100	H4 =4-3/8-16 Hole Square Flange, Pilot $\varnothing$ 44.4x2.8		S3=Short shaft $\varnothing$ 25.4, parallel key 6.35x6.35x31.75			
	125	H5 =4-M10 Hole Square Flange, Pilot $\varnothing$ 44.4x2.8		S4=Shaft $\varnothing$ 32, parallel key 10x8x45			
	160			R2=Shaft $\varnothing$ 31.75, Splined tooth 14-DP12/24			
	200			R3=Long shaft $\varnothing$ 31.75, Splined tooth 14-DP12/24			
	250			S5=Shaft $\varnothing$ 31.75, parallel key 7.96x7.96x31.75			
	315			T1=Tapered shaft $\varnothing$ 28.56, parallel key B5x5x14			
	400			T2=Tapered shaft $\varnothing$ 31.75, parallel key 7.96x7.96x25.4			

Rotation direction	Paint	Standard Options	Seal Options	Relief Options	Speed Sensor Option
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature	Blank= None HPS=High Pressure Seal SG=Seal Guard HPS-SG= High Pressure Seal & Seal Guard	Blank=None R=Valve Cavity Only R12=Bi-directional relief max 125 bar R-20= Bi-directional relief max 207 bar	Blank= None SS= Speed Sensor, 4-pin, M12 male connector

Hydraulic Orbit Motors GP



Flow Data

GP40		40cm ³ /rev (2.44in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	71.1 [1015]	81.2 [1160]	101.5 [1450]	111.7 [1595]	126.9 [1813]	167.5 [2393]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification							
	8 [2.11]	13 [115]	25 [221]	29 [257]	34 [301]	43 [381]	48 [425]		
		214rpm	205rpm	200rpm	194rpm	187rpm	179rpm		
	15 [3.96]	13 [115]	25 [221]	29 [257]	34 [301]	43 [381]	48 [425]	56 [496]	75 [664]
		406rpm	398rpm	391rpm	383rpm	374rpm	366rpm	353rpm	324rpm
	20 [5.28]	13 [115]	24 [212]	29 [257]	34 [301]	43 [381]	48 [425]	56 [496]	76 [673]
		541rpm	534rpm	528rpm	521rpm	513rpm	500rpm	486rpm	458rpm
	30 [7.93]	12 [106]	24 [212]	29 [257]	34 [301]	43 [381]	48 [425]	56 [496]	76 [673]
		814rpm	804rpm	792rpm	778rpm	763rpm	749rpm	726rpm	701rpm
	35 [9.25]	12 [106]	23 [204]	28 [248]	34 [301]	43 [381]	48 [425]	56 [496]	76 [673]
		952rpm	944rpm	930rpm	913rpm	897rpm	879rpm	858rpm	833rpm
	40 [10.57]	12 [106]	23 [204]	28 [248]	32 [283]	41 [363]	47 [416]	55 [487]	75 [664]
		1090rpm	1078rpm	1064rpm	1048rpm	1024rpm	998rpm	977rpm	943rpm
	45 [11.89]	11 [97]	22 [195]	26 [230]	32 [283]	41 [363]	46 [407]	54 [478]	74 [655]
		1232rpm	1218rpm	1196rpm	1175rpm	1149rpm	1118rpm	1080rpm	1044rpm
	55 [14.53]	6 [53]	15 [133]	22 [195]	28 [248]	37 [327]	44 [389]	52 [460]	71 [628]
	Max Cont.	1505rpm	1494rpm	1480rpm	1466rpm	1438rpm	1406rpm	1367rpm	1309rpm
	60 [15.85]	3 [27]	11 [97]	18 [159]	20 [177]	30 [266]	38 [336]	49 [434]	67 [593]
	Max Int.	1650rpm	1640rpm	1626rpm	1603rpm	1571rpm	1536rpm	1502rpm	1446rpm

GP50		49.5cm ³ /rev (3.02in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification							
	8 [2.11]	20 [177]	41 [363]	56 [496]	69 [611]	89 [788]	95 [841]		
		151rpm	134rpm	115rpm	90rpm	56rpm	42rpm		
	15 [3.96]	19 [168]	40 [354]	56 [496]	71 [628]	91 [805]	100 [885]	112 [991]	120 [1062]
		286rpm	274rpm	261rpm	243rpm	204rpm	182rpm	139rpm	102rpm
	20 [5.28]	18 [159]	39 [345]	55 [487]	71 [628]	92 [814]	101 [894]	117 [1036]	128 [1133]
		382rpm	373rpm	361rpm	348rpm	318rpm	309rpm	287rpm	251rpm
	30 [7.93]	17 [150]	38 [336]	55 [487]	71 [628]	91 [805]	98 [867]	116 [1027]	124 [1097]
		573rpm	568rpm	558rpm	535rpm	503rpm	488rpm	462rpm	440rpm
	35 [9.25]	17 [150]	38 [336]	54 [478]	69 [611]	89 [788]	98 [867]	117 [1036]	124 [1097]
		670rpm	661rpm	652rpm	640rpm	606rpm	589rpm	562rpm	548rpm
	45 [11.89]	14 [124]	36 [319]	53 [469]	67 [593]	88 [779]	98 [867]	114 [1009]	123 [1089]
		863rpm	858rpm	849rpm	837rpm	807rpm	788rpm	764rpm	746rpm
	55 [14.53]	12 [106]	33 [292]	50 [443]	65 [575]	85 [752]	96 [850]	111 [982]	121 [1071]
		1055rpm	1042rpm	1028rpm	1010rpm	979rpm	963rpm	947rpm	920rpm
	60 [15.85]	10 [89]	32 [283]	47 [416]	64 [566]	83 [735]	94 [832]	108 [956]	119 [1053]
	Max Cont.	1150rpm	1143rpm	1126rpm	1111rpm	1079rpm	1065rpm	1043rpm	1015rpm
	75 [19.82]	6 [53]	25 [221]	42 [372]	56 [496]	76 [673]	87 [770]	101 [894]	112 [991]
	Max Int.		1430rpm	1416rpm	1395rpm	1367rpm	1351rpm	1335rpm	1312rpm

Hydraulic orbit Motors GP



Flow Data

GP80		79.2cm ³ /rev (4.83in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification							
	8 [2.11]	32 [283]	62 [549]	85 [752]	104 [920]	129 [1142]	144 [1275]		
		97rpm	87rpm	74rpm	55rpm	33rpm	22rpm		
	15 [3.96]	32 [283]	63 [558]	84 [743]	107 [947]	126 [1115]	144 [1275]	165 [1460]	
		186rpm	181rpm	170rpm	154rpm	132rpm	118rpm	86rpm	
	20 [5.28]	31 [274]	63 [558]	84 [743]	107 [947]	132 [1168]	146 [1292]	168 [1487]	185 [1637]
		251rpm	243rpm	236rpm	225rpm	207rpm	196rpm	178rpm	155rpm
	30 [7.93]	31 [274]	62 [549]	83 [735]	106 [938]	131 [1159]	146 [1292]	168 [1487]	186 [1646]
		381rpm	379rpm	368rpm	355rpm	332rpm	316rpm	285rpm	263rpm
	35 [9.25]	30 [266]	59 [522]	81 [717]	102 [903]	130 [1151]	144 [1275]	167 [1478]	185 [1637]
		443rpm	435rpm	426rpm	415rpm	397rpm	383rpm	361rpm	342rpm
	45 [11.89]	25 [221]	58 [513]	79 [699]	100 [885]	126 [1115]	142 [1257]	165 [1460]	182 [1611]
		570rpm	564rpm	554rpm	543rpm	526rpm	509rpm	483rpm	458rpm
	55 [14.53]	23 [204]	57 [504]	78 [690]	97 [859]	124 [1097]	140 [1239]	161 [1425]	179 [1584]
		696rpm	685rpm	672rpm	656rpm	643rpm	630rpm	602rpm	579rpm
	60 [15.85]	20 [177]	53 [469]	75 [664]	94 [832]	120 [1062]	137 [1213]	160 [1416]	177 [1567]
		761rpm	753rpm	744rpm	736rpm	720rpm	706rpm	681rpm	660rpm
	Max Cont.								
	75 [19.82]	14 [124]	44 [389]	67 [593]	87 [770]	112 [991]	151 [1336]	169 [1496]	169 [1496]
	Max Int.								
		948rpm	940rpm	931rpm	920rpm	906rpm	890rpm	871rpm	854rpm

GP100		99cm ³ /rev (6.04in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	8 [2.11]	40 [354]	77 [682]	105 [929]	130 [1151]	161 [1425]	180 [1593]		
		81rpm	75rpm	69rpm	57rpm	36rpm	24rpm		
	15 [3.96]	39 [345]	77 [682]	106 [938]	130 [1151]	160 [1416]	180 [1593]	208 [1841]	
		152rpm	149rpm	145rpm	140rpm	122rpm	103rpm	81rpm	
	20 [5.28]	36 [319]	74 [655]	104 [920]	128 [1133]	161 [1425]	179 [1584]	208 [1814]	227 [2009]
		204rpm	200rpm	195rpm	190rpm	177rpm	166rpm	148rpm	133rpm
	30 [7.93]	33 [292]	72 [637]	103 [912]	125 [1106]	160 [1416]	177 [1567]	203 [1797]	225 [1991]
		308rpm	304rpm	298rpm	290rpm	280rpm	268rpm	255rpm	231rpm
	35 [9.25]	30 [266]	70 [620]	98 [867]	122 [1080]	159 [1407]	176 [1558]	202 [1788]	224 [1983]
		360rpm	352rpm	343rpm	331rpm	320rpm	306rpm	294rpm	275rpm
	45 [11.89]	29 [257]	67 [593]	95 [841]	118 [1044]	155 [1372]	174 [1540]	200 [1770]	220 [1947]
		462rpm	458rpm	451rpm	443rpm	433rpm	419rpm	402rpm	383rpm
	55 [14.53]	25 [221]	64 [566]	93 [823]	116 [1027]	152 [1345]	170 [1505]	198 [1752]	217 [1921]
		566rpm	558rpm	549rpm	540rpm	529rpm	515rpm	498rpm	478rpm
	60 [15.85]	22 [195]	60 [531]	91 [805]	114 [1009]	149 [1319]	167 [1478]	194 [1717]	213 [1885]
		618rpm	611rpm	601rpm	589rpm	580rpm	570rpm	558rpm	540rpm
	Max Cont.								
	75 [19.82]	15 [133]	54 [478]	83 [735]	106 [938]	141 [1248]	160 [1416]	186 [1646]	205 [1814]
	Max Int.								
		771rpm	763rpm	755rpm	744rpm	735rpm	724rpm	708rpm	693rpm

Hydraulic Orbit Motors GP



Flow Data

GP125		123.8cm ³ /rev(7.55in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	8 [2.11]	51 [451]	98 [867]	137 [1213]	168 [1487]	208 [1841]	236 [2089]		
		63rpm	60rpm	55rpm	47rpm	28rpm	15rpm		
	15 [3.96]	51 [451]	101 [894]	138 [1221]	168 [1487]	209 [1850]	236 [2089]	267 [2363]	
		121rpm	116rpm	110rpm	102rpm	89rpm	73rpm	48rpm	
	20 [5.28]	48 [425]	98 [867]	135 [1195]	167 [1478]	211 [1867]	237 [2098]	269 [2381]	290 [2567]
		162rpm	158rpm	153rpm	148rpm	137rpm	128rpm	109rpm	94rpm
	30 [7.93]	46 [407]	96 [850]	132 [1168]	164 [1452]	209 [1850]	232 [2053]	264 [2337]	287 [2540]
		243rpm	239rpm	234rpm	227rpm	216rpm	202rpm	189rpm	176rpm
	35 [9.25]	42 [372]	92 [814]	130 [1151]	160 [1416]	206 [1823]	229 [2027]	260 [2301]	284 [2514]
		284rpm	279rpm	274rpm	269rpm	259rpm	247rpm	231rpm	222rpm
	45 [11.89]	37 [327]	89 [788]	125 [1106]	157 [1390]	201 [1779]	224 [1983]	261 [2310]	281 [2487]
		370rpm	362rpm	355rpm	348rpm	340rpm	327rpm	310rpm	296rpm
	55 [14.53]	33 [292]	84 [743]	122 [1080]	152 [1345]	196 [1735]	218 [1929]	252 [2230]	275 [2434]
		452rpm	446rpm	438rpm	431rpm	420rpm	412rpm	402rpm	384rpm
	60 [15.85]	29 [257]	78 [690]	117 [1036]	146 [1292]	191 [1690]	215 [1903]	248 [2195]	272 [2407]
	Max Cont.	490rpm	482rpm	475rpm	468rpm	459rpm	448rpm	439rpm	427rpm
	75 [19.82]	18 [159]	66 [584]	107 [947]	133 [1177]	179 [1584]	202 [1788]	236 [2089]	260 [2301]
	Max Int.	615rpm	606rpm	598rpm	586rpm	575rpm	563rpm	549rpm	528rpm

GP160		158.4cm ³ /rev(9.66in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	8 [2.11]	62 [549]	120 [1062]	170 [1505]	212 [1876]	263 [2328]	290 [2567]		
		49rpm	48rpm	46rpm	42rpm	26rpm	14rpm		
	15 [3.96]	60 [531]	122 [1080]	172 [1522]	215 [1903]	264 [2337]	294 [2602]	340 [3009]	
		93rpm	91rpm	88rpm	85rpm	76rpm	68rpm	48rpm	
	20 [5.28]	57 [504]	120 [1062]	170 [1505]	214 [1894]	262 [2319]	290 [2567]	340 [3009]	371 [3284]
		125rpm	123rpm	120rpm	117rpm	110rpm	106rpm	92rpm	81rpm
	30 [7.93]	53 [469]	115 [1018]	164 [1452]	206 [1823]	259 [2292]	288 [2549]	335 [2965]	368 [3257]
		187rpm	184rpm	181rpm	178rpm	175rpm	168rpm	155rpm	139rpm
	35 [9.25]	49 [434]	110 [974]	160 [1416]	202 [1788]	255 [2257]	284 [2514]	328 [2903]	362 [3204]
		220rpm	216rpm	213rpm	209rpm	205rpm	202rpm	192rpm	176rpm
	45 [11.89]	44 [389]	102 [903]	154 [1363]	196 [1735]	248 [2195]	278 [2460]	321 [2841]	358 [3169]
		283rpm	280rpm	276rpm	272rpm	267rpm	260rpm	250rpm	238rpm
	55 [14.53]	40 [354]	99 [876]	148 [1310]	191 [1690]	243 [2151]	272 [2407]	316 [2797]	351 [3107]
		345rpm	342rpm	340rpm	336rpm	331rpm	328rpm	320rpm	303rpm
	60 [15.85]	33 [292]	94 [832]	144 [1275]	188 [1664]	236 [2089]	267 [2363]	308 [2726]	345 [3053]
	Max Cont.	377rpm	374rpm	371rpm	367rpm	363rpm	359rpm	353rpm	342rpm
	75 [19.82]	19 [168]	80 [708]	124 [1097]	170 [1505]	216 [1912]	252 [2230]	296 [2620]	325 [2876]
	Max Int.	473rpm	469rpm	465rpm	459rpm	453rpm	447rpm	440rpm	424rpm

Hydraulic orbit Motors GP



Flow Data

GP200		198cm ³ /rev(12.1in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	8 [2.11]	79 [699]	164 [1452]	207 [1832]	250 [2213]	320 [2832]	360 [3186]		
		40rpm	39rpm	38rpm	35rpm	28rpm	22rpm		
	15 [3.96]	78 [690]	162 [1434]	205 [1814]	250 [2213]	322 [2850]	361 [3195]	410 [3629]	
		76rpm	75rpm	74rpm	71rpm	66rpm	61rpm	51rpm	
	20 [5.28]	76 [673]	158 [1398]	203 [1797]	247 [2186]	320 [2832]	358 [3169]	403 [3567]	422 [3735]
		100rpm	98rpm	97rpm	95rpm	92rpm	89rpm	73rpm	57rpm
	30 [7.93]	70 [620]	153 [1354]	200 [1770]	245 [2168]	315 [2788]	350 [3098]	398 [3523]	417 [3691]
		151rpm	149rpm	147rpm	145rpm	142rpm	139rpm	131rpm	120rpm
	35 [9.25]	66 [584]	149 [1319]	194 [1717]	232 [2053]	297 [2629]	343 [3036]	386 [3416]	415 [3673]
		177rpm	175rpm	173rpm	171rpm	168rpm	166rpm	160rpm	149rpm
	45 [11.89]	63 [558]	146 [1292]	190 [1682]	230 [2036]	294 [2602]	340 [3009]	383 [3390]	410 [3629]
		228rpm	226rpm	224rpm	221rpm	218rpm	215rpm	210rpm	198rpm
	55 [14.53]	54 [478]	140 [1239]	181 [1602]	224 [1983]	286 [2531]	334 [2956]	371 [3284]	400 [3540]
		280rpm	278rpm	276rpm	274rpm	271rpm	269rpm	263rpm	250rpm
	60 [15.85]	38 [336]	127 [1124]	164 [1452]	212 [1876]	270 [2390]	325 [2876]	356 [3151]	395 [3496]
	Max Cont.	304rpm	302rpm	300rpm	297rpm	294rpm	291rpm	286rpm	272rpm
	75 [19.82]	22 [195]	96 [850]	145 [1283]	192 [1699]	235 [2080]	293 [2593]	321 [2841]	367 [3248]
	Max Int.	382rpm	378rpm	374rpm	371rpm	368rpm	364rpm	360rpm	350rpm

GP250		247.5cm ³ /rev(15.1in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	8 [2.11]	96 [850]	190 [1682]	268 [2372]	326 [2885]	403 [3567]			
		30rpm	28rpm	24rpm	21rpm	11rpm			
	15 [3.96]	98 [867]	194 [1717]	270 [2390]	327 [2894]	405 [3585]	450 [3983]	510 [4514]	
		60rpm	58rpm	54rpm	50rpm	40rpm	30rpm	12rpm	
	20 [5.28]	92 [814]	188 [1664]	267 [2363]	325 [2876]	405 [3585]	456 [4036]	514 [4549]	565 [5001]
		82rpm	80rpm	77rpm	76rpm	69rpm	64rpm	52rpm	38rpm
	30 [7.93]	85 [752]	180 [1593]	259 [2292]	320 [2832]	400 [3540]	448 [3965]	513 [4540]	561 [4965]
		123rpm	120rpm	118rpm	114rpm	106rpm	98rpm	87rpm	76rpm
	35 [9.25]	77 [682]	176 [1558]	252 [2230]	309 [2753]	389 [3443]	436 [3859]	504 [4461]	557 [4930]
		143rpm	141rpm	139rpm	135rpm	128rpm	122rpm	112rpm	101rpm
	45 [11.89]	70 [620]	168 [1487]	243 [2151]	300 [2655]	377 [3337]	428 [3788]	495 [4381]	543 [4806]
		185rpm	182rpm	178rpm	174rpm	168rpm	161rpm	152rpm	139rpm
	55 [14.53]	63 [558]	159 [1407]	237 [2098]	290 [2567]	369 [3266]	417 [3691]	483 [4275]	531 [4700]
		226rpm	223rpm	218rpm	213rpm	209rpm	202rpm	193rpm	185rpm
	60 [15.85]	60 [531]	150 [1328]	228 [2018]	280 [2478]	358 [3169]	407 [3602]	473 [4186]	520 [4602]
	Max Cont.	248rpm	246rpm	243rpm	239rpm	233rpm	226rpm	215rpm	207rpm
	75 [19.82]	34 [301]	128 [1133]	202 [1788]	264 [2337]	342 [3027]	387 [3425]	448 [3965]	488 [4319]
	Max Int.	309rpm	306rpm	302rpm	297rpm	292rpm	286rpm	278rpm	264rpm

Hydraulic Orbit Motors GP



Flow Data

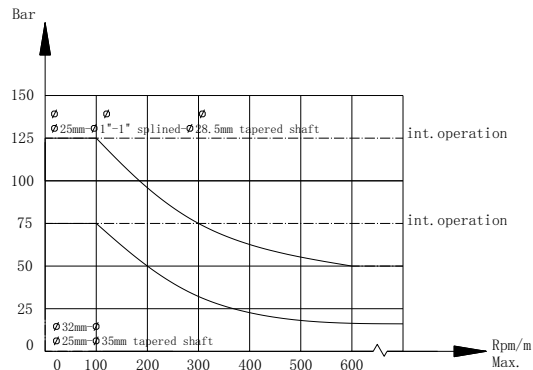
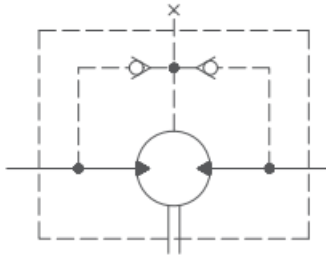
GP315		316.8cm ³ /rev(19.3in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	50.8 [725]	71.1 [1015]	91.4 [1305]	101.5 [1450]	126.9 [1813]	142.2 [2031]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification						
	8 [2.11]	123 [1089]	215 [1903]	292 [2584]	368 [3257]	405 [3585]		
		25rpm	23rpm	21rpm	17rpm	11rpm		
	15 [3.96]	118 [1044]	211 [1867]	287 [2540]	367 [3248]	404 [3576]	495 [4381]	568 [5027]
		47rpm	46rpm	44rpm	40rpm	28rpm	21rpm	10rpm
	20 [5.28]	110 [974]	205 [1814]	278 [2460]	360 [3186]	395 [3496]	494 [4372]	566 [5009]
		62rpm	61rpm	60rpm	57rpm	46rpm	40rpm	36rpm
	30 [7.93]	101 [894]	196 [1735]	271 [2399]	349 [3089]	388 [3434]	490 [4337]	565 [5001]
		94rpm	93rpm	91rpm	88rpm	76rpm	68rpm	65rpm
	35 [9.25]	96 [850]	188 [1664]	264 [2337]	341 [3018]	382 [3381]	478 [4231]	557 [4930]
		109rpm	107rpm	106rpm	104rpm	96rpm	89rpm	84rpm
	45 [11.89]	89 [788]	180 [1593]	254 [2248]	337 [2983]	372 [3292]	468 [4142]	553 [4894]
		141rpm	140rpm	138rpm	135rpm	127rpm	120rpm	115rpm
	55 [14.53]	76 [673]	166 [1469]	239 [2115]	325 [2876]	362 [3204]	457 [4045]	548 [4850]
		173rpm	172rpm	170rpm	167rpm	160rpm	152rpm	143rpm
	60 [15.85]	65 [575]	154 [1363]	227 [2009]	308 [2726]	348 [3080]	443 [3921]	529 [4682]
	Max Cont.	188rpm	186rpm	184rpm	182rpm	178rpm	172rpm	163rpm
	75 [19.82]	40 [354]	120 [1062]	201 [1779]	279 [2469]	323 [2859]	418 [3700]	497 [4399]
	Max Int.	236rpm	234rpm	232rpm	228rpm	226rpm	223rpm	214rpm

GP400		396cm ³ /rev(24.16in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	45.7 [653]	55.9 [798]	66.0 [943]	81.2 [1160]	101.5 [1450]	126.9 [1813]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification						
	8 [2.11]	166 [1469]	232 [2053]	287 [2540]	340 [3009]	418 [3700]		
		20rpm	19rpm	18rpm	16rpm	12rpm		
	15 [3.96]	165 [1460]	228 [2018]	277 [2452]	337 [2983]	417 [3691]	496 [4390]	612 [5417]
		38rpm	36rpm	35rpm	33rpm	31rpm	27rpm	21rpm
	20 [5.28]	162 [1434]	223 [1974]	273 [2416]	331 [2930]	413 [3655]	495 [4381]	608 [5381]
		50rpm	49rpm	49rpm	48rpm	45rpm	41rpm	35rpm
	30 [7.93]	154 [1363]	216 [1912]	266 [2354]	318 [2815]	405 [3585]	486 [4301]	600 [5310]
		76rpm	75rpm	74rpm	73rpm	71rpm	67rpm	60rpm
	35 [9.25]	146 [1292]	210 [1859]	256 [2266]	312 [2761]	395 [3496]	480 [4248]	588 [5204]
		88rpm	87rpm	87rpm	86rpm	83rpm	80rpm	75rpm
	45 [11.89]	132 [1168]	197 [1744]	240 [2151]	300 [2655]	383 [3390]	464 [4107]	576 [5098]
		114rpm	113rpm	112rpm	110rpm	108rpm	106rpm	99rpm
	55 [14.53]	117 [1036]	184 [1629]	227 [2009]	283 [2505]	363 [3213]	450 [3983]	552 [4886]
		139rpm	137rpm	136rpm	135rpm	135rpm	132rpm	123rpm
	60 [15.85]	102 [903]	163 [1443]	215 [1903]	272 [2407]	347 [3071]	436 [3859]	532 [4709]
	Max Cont.	153rpm	152rpm	150rpm	148rpm	146rpm	143rpm	138rpm
	75 [19.82]	53 [469]	128 [1133]	182 [1611]	234 [2071]	318 [2815]	391 [3461]	484 [4284]
	Max Int.	191rpm	189rpm	187rpm	185rpm	183rpm	180rpm	176rpm

Technical Data

Hydraulic orbit Motors GP

Permissible shaft seal pressure



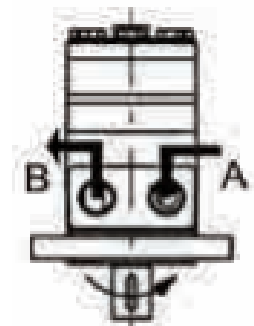
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Case Drain

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.

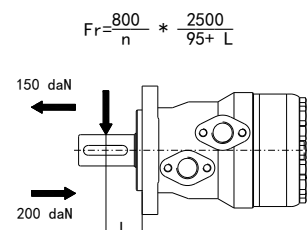
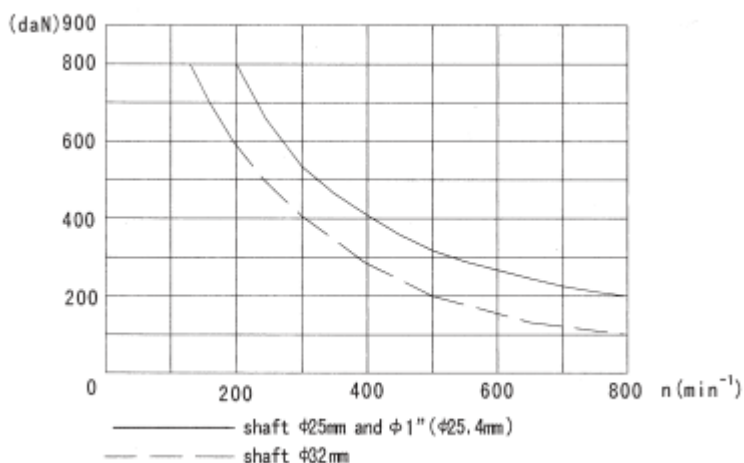
Standard direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate: Clockwise when port "A" is pressurized. Counter-clockwise port "B" is pressurized.



GPH

Axial and Radial forces



Fr =Radial Force (daN)

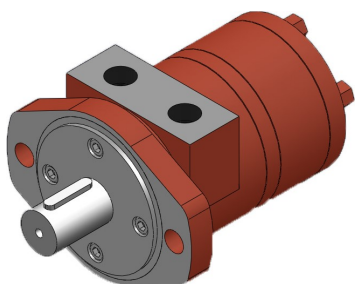
L =Distance (mm)

n =Speed (rpm)

Rhomb-flange $L=30\text{mm}$

Square-flange $L=24\text{mm}$

General

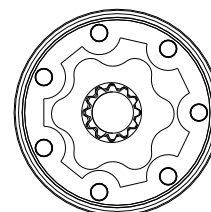


APPLICATION

- ◇ Conveyors
- ◇ Feeding machinery of robots and manipulators
- ◇ Metal working machines
- ◇ Textile machines
- ◇ Agricultural machines
- ◇ Food industries
- ◇ Lawn mower

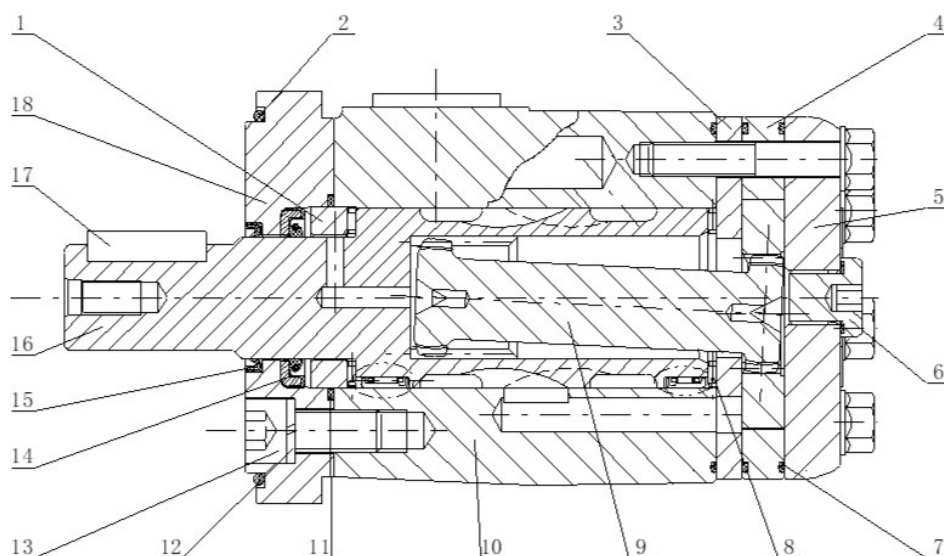
OPTIONS

- ◇ Flange mount
- ◇ Motor with needle roller bearing
- ◇ Speed sensing
- ◇ Side and bottom ports
- ◇ Shaft seal for high and low pressure
- ◇ Shafts-straight, splined and tapered
- ◇ Metric and BSPP ports
- ◇ Other special features



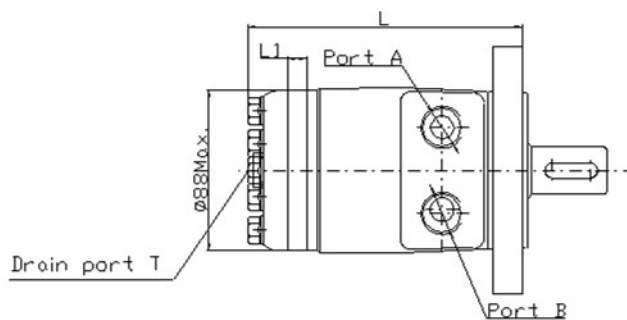
- ◇ Shaft distribution flow

Model		GPH40	GPH50	GPH80	GPH100	GPH125	GPH160	GPH200	GPH250	GPH315	GPH400
Disp.	in ³ /rev	2.44	3.02	4.83	6.04	7.55	9.66	12.1	15.1	19.3	24.16
	cm ³ /rev	40	49.5	79.2	99	123.8	158.4	198	247.5	316.8	396
Max Speed rpm	cont.	1500	1210	755	605	486	378	303	242	190	150
	int.	1750	1515	945	755	605	472	378	303	236	189
Max Torque N m [lb-in]	cont.	62 [550]	94 [835]	151 [1340]	193 [1710]	237 [2100]	313 [2770]	366 [3240]	380 [3360]	380 [3360]	360 [3190]
	int.	82 [730]	119 [1050]	195 [1725]	237 [2100]	298 [2640]	378 [3345]	456 [4035]	583 [5160]	560 [4960]	590 [5240]
Max Dif. bar [psi]	cont.	120 [1750]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	110 [1600]	90 [1300]	70 [1015]
	int.	155 [2550]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	140 [2030]	115 [1655]
Max Flow l/min [gpm]	cont.	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]
	int.	70 [18.5]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]
Weight kg [lbs]		5.7 [12.6]	5.8 [12.8]	5.9 [13.2]	6.1 [13.5]	6.2 [13.7]	6.4 [14.1]	6.6 [14.6]	6.8 [15]	7.1 [15.6]	7.6 [16.8]



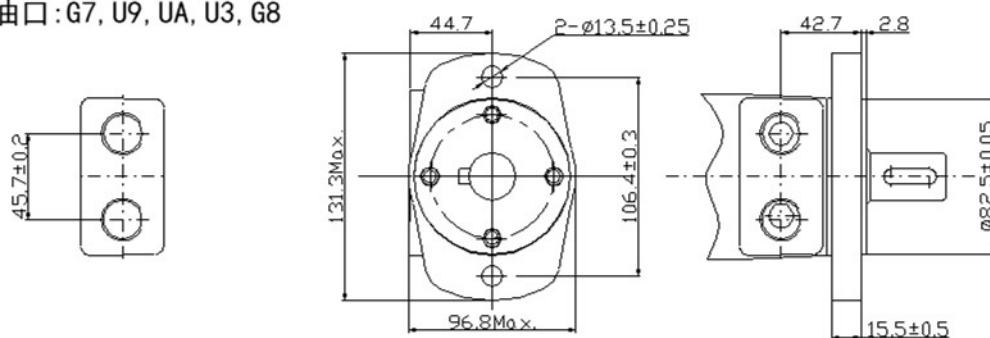
1. Thrust Washer
2. O-ring
3. Wear Plate
4. Gear Set
5. End Cover
6. Case Drain Plug
7. O-ring
8. Axial Needle Bearing
9. Cardan Joint
10. Housing
11. O-ring
12. Lock Washer
13. Bolt
14. Shaft Seal
15. Dust Seal
16. Output Shaft
17. Key
18. Front Cover

Dimensions and Mounting Data



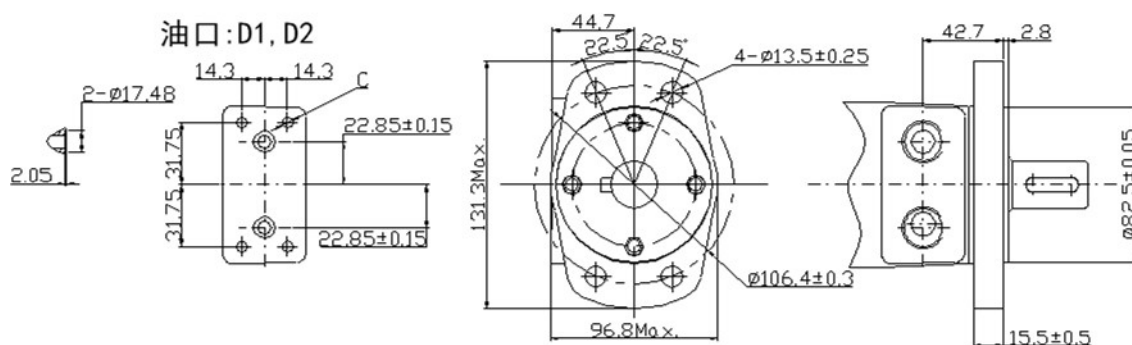
Flange A1

油口: G7, U9, UA, U3, G8



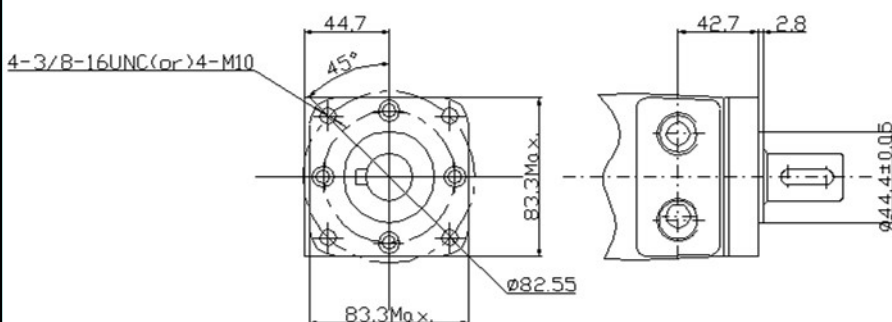
Flange A3

油口: D1, D2



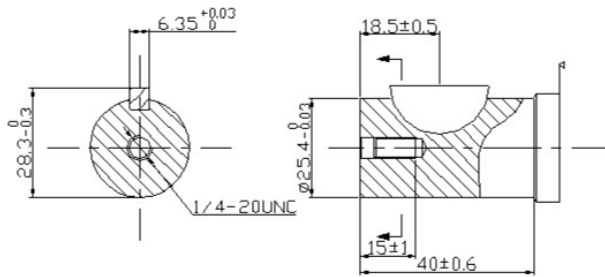
Flange H4/H5

Model	L	L1
GPH36	141	7
GPH50	141	7
GPH80	144.5	10.5
GPH100	147	13
GPH125	150	16
GPH160	155	21
GPH200	160	26
GPH250	166	32
GPH315	176	42
GPH400	186	52

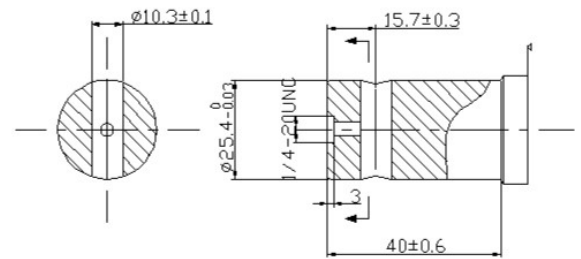


Port	G7 (Depth)	U9 (Depth)	UA (Depth)	U3 (Depth)	G8 (Depth)	D1 (Depth)	D2 (Depth)
P (A, B)	G1/2 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	3/4-16 O-ring (15)	PT (RC) 1/2 (15)	ø 10	ø 10
T	G1/4 (12)	7/16-20UNF (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT (RC) 1/4 (9.7)	7/16-20UNF (12)	G1/4 (12)
C	-	-	-	-	-	4-5/16-18UNC (13)	4-M8 (13)

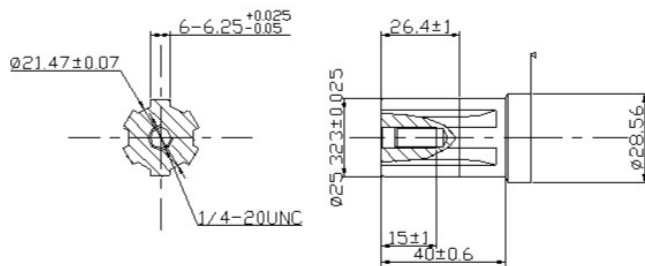
GPH Shaft Extension Dimensions Data



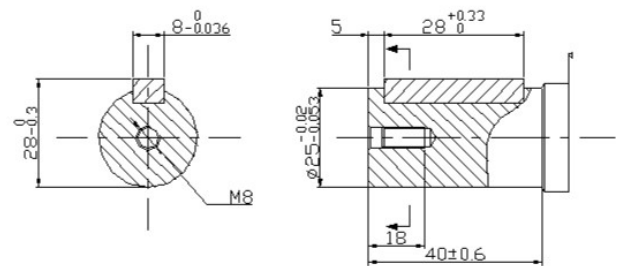
Shaft S6: Cylindrical shaft $\varnothing 25.4$
Woodruff key $\varnothing 25.4 \times 6.35$



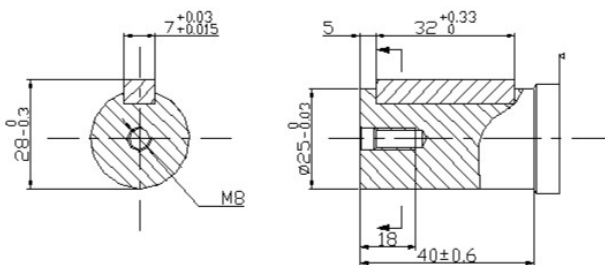
Shaft S9: Cylindrical shaft $\varnothing 25.4$
Pin hole $\varnothing 10.3$



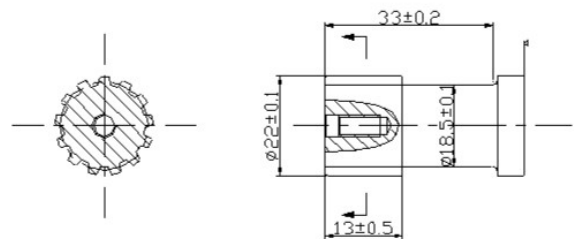
Shaft R4: Splined SAE 6B



Shaft SC: Cylindrical shaft $\varnothing 25$
Parallel key $8 \times 7 \times 28$

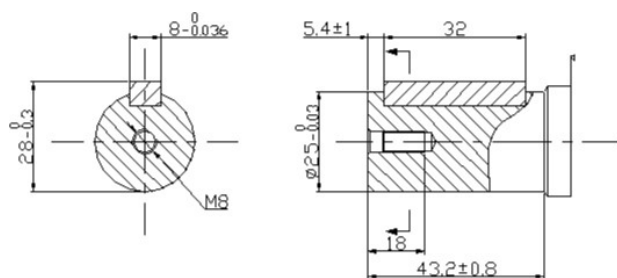


Shaft SD: Cylindrical shaft $\varnothing 25$
Parallel key $7 \times 7 \times 32$

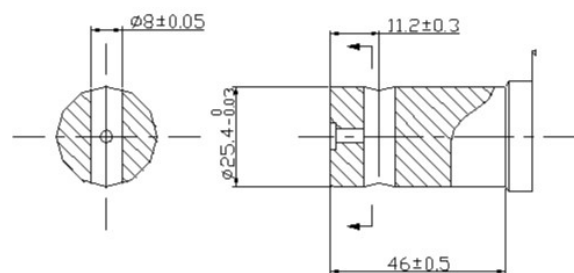


Shaft R5: Splined 13-DP16/32

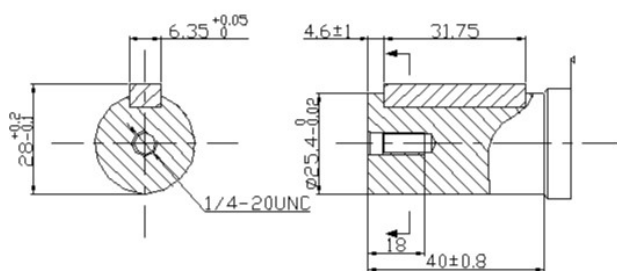
GRH Shaft Extension Dimensions Data



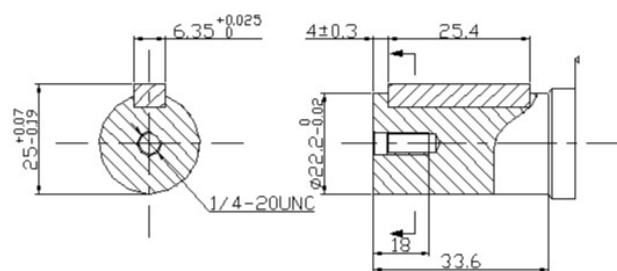
Shaft S7: Cylindrical shaft $\varnothing 25$
Parallel key 8x7x32



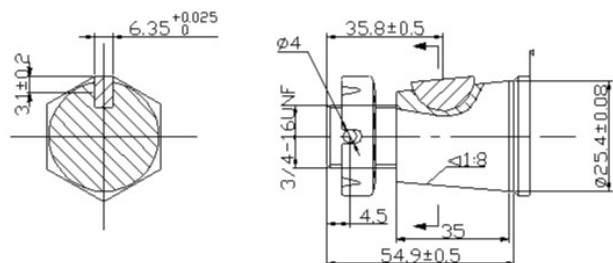
Shaft SA: Cylindrical shaft $\varnothing 25.4$
Pin hole $\varnothing 8$



Shaft S8: Cylindrical shaft $\varnothing 25.4$
Parallel key 6.35x6.35x31.75



Shaft SB: Cylindrical shaft $\varnothing 22.22$
Parallel key 6.35x6.35x25.4



Shaft T3: Tapered shaft $\varnothing 25.4$
Parallel key $\varnothing 25.4$ x6.35
Tightening torque: 200 ± 10 Nm

GPH - How To Order

		Model	Displacement	Flange	Drive shaft	Ports	Other functions
Ordering Example:		GPH	40	A2	S6	G7	ACA
Model	Disp.	Flange		Drive shaft		Ports	
GPH	40			S6=Shaft $\varnothing$ 25.4, woodruff key $\varnothing$ 25.4x6.35			
	50	H4=4-3/8-16 Hole Square Flange,		S7=Shaft $\varnothing$ 25, parallel key 8x7x32		G7=G1/2, G1/4	
	80	Pilot $\varnothing$ 44.4x2.8		S8=Shaft $\varnothing$ 25.4, parallel key 6.35x6.35x31.75		G8=PT (Rc) 1/2, PT (Rc) 1/4	
	100	H5=4-M10 Hole Square Flange,		S9=Shaft $\varnothing$ 25.4, pin hole $\varnothing$ 10.3		D1= $\varnothing$ 10 O-ring manifold	
	125	Pilot $\varnothing$ 44.4x2.8		SA=Shaft $\varnothing$ 25.4, pin hole $\varnothing$ 8		4x5/16-18UNC, 7/16-20UNF	
	160	A1=2-Hole SAE A Flange, Pilot $\varnothing$ 82.5x2.8		SB=Shaft $\varnothing$ 22.22, parallel key 6.35x6.35x25.4		D2= $\varnothing$ 10 O-ring manifold 4xM8, G1/4	
	200			SC=Shaft $\varnothing$ 25, parallel key 8x7x28		U3=3/4-16 O-ring, 7/16-20UNF	
	250	A3=4-Hole SAE A Flange, Pilot $\varnothing$ 82.5x2.8		SD=Shaft $\varnothing$ 25, parallel key 8x7x32		U9=7/8-14UNF O-ring, 7/16-20UNF	
	315			R4=Shaft $\varnothing$ 25.4, splined tooth SAE 6B		UA=1/2-14NPTF, 7/16-20UNF	
	400			R5=Shaft $\varnothing$ 22.22, splined tooth 13-DP16/32			
				T3=Tapered shaft $\varnothing$ 25.4, woodruff key $\varnothing$ 25.4x6.35			

Rotation direction	Paint	Standard Options	Seal Options	Relief Options	Speed Sensor Option
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature	Blank= None HPS=High Pressure Seal SG=Seal Guard HPS-SG= High Pressure Seal & Seal Guard	Blank=None R=Valve Cavity Only R12=Bi-directional relief max 125 bar R-20= Bi-directional relief max 207 bar	Blank= None SS= Speed Sensor, 4-pin, M12 male connector

Hydraulic Orbit Motors GPH



Flow Data

GPH40		40cm ³ /rev (2.44in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	71.1 [1015]	81.2 [1160]	101.5 [1450]	111.7 [1595]	126.9 [1813]	167.5 [2393]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification							
	8 [2.11]	13 [115]	25 [221]	29 [257]	34 [301]	43 [381]	48 [425]		
		214rpm	205rpm	200rpm	194rpm	187rpm	179rpm		
	15 [3.96]	13 [115]	25 [221]	29 [257]	34 [301]	43 [381]	48 [425]	56 [496]	75 [664]
		406rpm	398rpm	391rpm	383rpm	374rpm	366rpm	353rpm	324rpm
	20 [5.28]	13 [115]	24 [212]	29 [257]	34 [301]	43 [381]	48 [425]	56 [496]	76 [673]
		541rpm	534rpm	528rpm	521rpm	513rpm	500rpm	486rpm	458rpm
	30 [7.93]	12 [106]	24 [212]	29 [257]	34 [301]	43 [381]	48 [425]	56 [496]	76 [673]
		814rpm	804rpm	792rpm	778rpm	763rpm	749rpm	726rpm	701rpm
	35 [9.25]	12 [106]	23 [204]	28 [248]	34 [301]	43 [381]	48 [425]	56 [496]	76 [673]
		952rpm	944rpm	930rpm	913rpm	897rpm	879rpm	858rpm	833rpm
	40 [10.57]	12 [106]	23 [204]	28 [248]	32 [283]	41 [363]	47 [416]	55 [487]	75 [664]
		1090rpm	1078rpm	1064rpm	1048rpm	1024rpm	998rpm	977rpm	943rpm
	45 [11.89]	11 [97]	22 [195]	26 [230]	32 [283]	41 [363]	46 [407]	54 [478]	74 [655]
		1232rpm	1218rpm	1196rpm	1175rpm	1149rpm	1118rpm	1080rpm	1044rpm
	55 [14.53]	6 [53]	15 [133]	22 [195]	28 [248]	37 [327]	44 [389]	52 [460]	71 [628]
	Max Cont.	1505rpm	1494rpm	1480rpm	1466rpm	1438rpm	1406rpm	1367rpm	1309rpm
	60 [15.85]	3 [27]	11 [97]	18 [159]	20 [177]	30 [266]	38 [336]	49 [434]	67 [593]
	Max Int.	1650rpm	1640rpm	1626rpm	1603rpm	1571rpm	1536rpm	1502rpm	1446rpm

GPH50		49.5cm ³ /rev (3.02in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification							
	8 [2.11]	20 [177]	41 [363]	56 [496]	69 [611]	89 [788]	95 [841]		
		151rpm	134rpm	115rpm	90rpm	56rpm	42rpm		
	15 [3.96]	19 [168]	40 [354]	56 [496]	71 [628]	91 [805]	100 [885]	112 [991]	120 [1062]
		286rpm	274rpm	261rpm	243rpm	204rpm	182rpm	139rpm	102rpm
	20 [5.28]	18 [159]	39 [345]	55 [487]	71 [628]	92 [814]	101 [894]	117 [1036]	128 [1133]
		382rpm	373rpm	361rpm	348rpm	318rpm	309rpm	287rpm	251rpm
	30 [7.93]	17 [150]	38 [336]	55 [487]	71 [628]	91 [805]	98 [867]	116 [1027]	124 [1097]
		573rpm	568rpm	558rpm	535rpm	503rpm	488rpm	462rpm	440rpm
	35 [9.25]	17 [150]	38 [336]	54 [478]	69 [611]	89 [788]	98 [867]	117 [1036]	124 [1097]
		670rpm	661rpm	652rpm	640rpm	606rpm	589rpm	562rpm	548rpm
	45 [11.89]	14 [124]	36 [319]	53 [469]	67 [593]	88 [779]	98 [867]	114 [1009]	123 [1089]
		863rpm	858rpm	849rpm	837rpm	807rpm	788rpm	764rpm	746rpm
	55 [14.53]	12 [106]	33 [292]	50 [443]	65 [575]	85 [752]	96 [850]	111 [982]	121 [1071]
		1055rpm	1042rpm	1028rpm	1010rpm	979rpm	963rpm	947rpm	920rpm
	60 [15.85]	10 [89]	32 [283]	47 [416]	64 [566]	83 [735]	94 [832]	108 [956]	119 [1053]
	Max Cont.	1150rpm	1143rpm	1126rpm	1111rpm	1079rpm	1065rpm	1043rpm	1015rpm
	75 [19.82]	6 [53]	25 [221]	42 [372]	56 [496]	76 [673]	87 [770]	101 [894]	112 [991]
	Max Int.		1430rpm	1416rpm	1395rpm	1367rpm	1351rpm	1335rpm	1312rpm

Hydraulic Orbit Motors GPH



Flow Data

GPH80		79.2cm ³ /rev (4.83in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification							
	8 [2.11]	32 [283]	62 [549]	85 [752]	104 [920]	129 [1142]	144 [1275]		
		97rpm	87rpm	74rpm	55rpm	33rpm	22rpm		
	15 [3.96]	32 [283]	63 [558]	84 [743]	107 [947]	126 [1115]	144 [1275]	165 [1460]	
		186rpm	181rpm	170rpm	154rpm	132rpm	118rpm	86rpm	
	20 [5.28]	31 [274]	63 [558]	84 [743]	107 [947]	132 [1168]	146 [1292]	168 [1487]	185 [1637]
		251rpm	243rpm	236rpm	225rpm	207rpm	196rpm	178rpm	155rpm
	30 [7.93]	31 [274]	62 [549]	83 [735]	106 [938]	131 [1159]	146 [1292]	168 [1487]	186 [1646]
		381rpm	379rpm	368rpm	355rpm	332rpm	316rpm	285rpm	263rpm
	35 [9.25]	30 [266]	59 [522]	81 [717]	102 [903]	130 [1151]	144 [1275]	167 [1478]	185 [1637]
		443rpm	435rpm	426rpm	415rpm	397rpm	383rpm	361rpm	342rpm
	45 [11.89]	25 [221]	58 [513]	79 [699]	100 [885]	126 [1115]	142 [1257]	165 [1460]	182 [1611]
		570rpm	564rpm	554rpm	543rpm	526rpm	509rpm	483rpm	458rpm
	55 [14.53]	23 [204]	57 [504]	78 [690]	97 [859]	124 [1097]	140 [1239]	161 [1425]	179 [1584]
		696rpm	685rpm	672rpm	656rpm	643rpm	630rpm	602rpm	579rpm
	60 [15.85]	20 [177]	53 [469]	75 [664]	94 [832]	120 [1062]	137 [1213]	160 [1416]	177 [1567]
		761rpm	753rpm	744rpm	736rpm	720rpm	706rpm	681rpm	660rpm
	75 [19.82]	14 [124]	44 [389]	67 [593]	87 [770]	112 [991]	151 [1336]	169 [1496]	169 [1496]
	Max Int.	948rpm	940rpm	931rpm	920rpm	906rpm	890rpm	871rpm	854rpm

GPH100		99cm ³ /rev (6.04in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification							
	8 [2.11]	40 [354]	77 [682]	105 [929]	130 [1151]	161 [1425]	180 [1593]		
		81rpm	75rpm	69rpm	57rpm	36rpm	24rpm		
	15 [3.96]	39 [345]	77 [682]	106 [938]	130 [1151]	160 [1416]	180 [1593]	208 [1841]	
		152rpm	149rpm	145rpm	140rpm	122rpm	103rpm	81rpm	
	20 [5.28]	36 [319]	74 [655]	104 [920]	128 [1133]	161 [1425]	179 [1584]	208 [1814]	227 [2009]
		204rpm	200rpm	195rpm	190rpm	177rpm	166rpm	148rpm	133rpm
	30 [7.93]	33 [292]	72 [637]	103 [912]	125 [1106]	160 [1416]	177 [1567]	203 [1797]	225 [1991]
		308rpm	304rpm	298rpm	290rpm	280rpm	268rpm	255rpm	231rpm
	35 [9.25]	30 [266]	70 [620]	98 [867]	122 [1080]	159 [1407]	176 [1558]	202 [1788]	224 [1983]
		360rpm	352rpm	343rpm	331rpm	320rpm	306rpm	294rpm	275rpm
	45 [11.89]	29 [257]	67 [593]	95 [841]	118 [1044]	155 [1372]	174 [1540]	200 [1770]	220 [1947]
		462rpm	458rpm	451rpm	443rpm	433rpm	419rpm	402rpm	383rpm
	55 [14.53]	25 [221]	64 [566]	93 [823]	116 [1027]	152 [1345]	170 [1505]	198 [1752]	217 [1921]
		566rpm	558rpm	549rpm	540rpm	529rpm	515rpm	498rpm	478rpm
	60 [15.85]	22 [195]	60 [531]	91 [805]	114 [1009]	149 [1319]	167 [1478]	194 [1717]	213 [1885]
		618rpm	611rpm	601rpm	589rpm	580rpm	570rpm	558rpm	540rpm
	75 [19.82]	15 [133]	54 [478]	83 [735]	106 [938]	141 [1248]	160 [1416]	186 [1646]	205 [1814]
	Max Int.	771rpm	763rpm	755rpm	744rpm	735rpm	724rpm	708rpm	693rpm

Hydraulic Orbit Motors GPH



Flow Data

GPH125		123.8cm ³ /rev(7.55in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	8 [2.11]	51 [451]	98 [867]	137 [1213]	168 [1487]	208 [1841]	236 [2089]		
		63rpm	60rpm	55rpm	47rpm	28rpm	15rpm		
	15 [3.96]	51 [451]	101 [894]	138 [1221]	168 [1487]	209 [1850]	236 [2089]	267 [2363]	
		121rpm	116rpm	110rpm	102rpm	89rpm	73rpm	48rpm	
	20 [5.28]	48 [425]	98 [867]	135 [1195]	167 [1478]	211 [1867]	237 [2098]	269 [2381]	290 [2567]
		162rpm	158rpm	153rpm	148rpm	137rpm	128rpm	109rpm	94rpm
	30 [7.93]	46 [407]	96 [850]	132 [1168]	164 [1452]	209 [1850]	232 [2053]	264 [2337]	287 [2540]
		243rpm	239rpm	234rpm	227rpm	216rpm	202rpm	189rpm	176rpm
	35 [9.25]	42 [372]	92 [814]	130 [1151]	160 [1416]	206 [1823]	229 [2027]	260 [2301]	284 [2514]
		284rpm	279rpm	274rpm	269rpm	259rpm	247rpm	231rpm	222rpm
	45 [11.89]	37 [327]	89 [788]	125 [1106]	157 [1390]	201 [1779]	224 [1983]	261 [2310]	281 [2487]
		370rpm	362rpm	355rpm	348rpm	340rpm	327rpm	310rpm	296rpm
	55 [14.53]	33 [292]	84 [743]	122 [1080]	152 [1345]	196 [1735]	218 [1929]	252 [2230]	275 [2434]
		452rpm	446rpm	438rpm	431rpm	420rpm	412rpm	402rpm	384rpm
	60 [15.85]	29 [257]	78 [690]	117 [1036]	146 [1292]	191 [1690]	215 [1903]	248 [2195]	272 [2407]
	Max Cont.	490rpm	482rpm	475rpm	468rpm	459rpm	448rpm	439rpm	427rpm
	75 [19.82]	18 [159]	66 [584]	107 [947]	133 [1177]	179 [1584]	202 [1788]	236 [2089]	260 [2301]
	Max Int.	615rpm	606rpm	598rpm	586rpm	575rpm	563rpm	549rpm	528rpm

GPH160		158.4cm ³ /rev(9.66in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	8 [2.11]	62 [549]	120 [1062]	170 [1505]	212 [1876]	263 [2328]	290 [2567]		
		49rpm	48rpm	46rpm	42rpm	26rpm	14rpm		
	15 [3.96]	60 [531]	122 [1080]	172 [1522]	215 [1903]	264 [2337]	294 [2602]	340 [3009]	
		93rpm	91rpm	88rpm	85rpm	76rpm	68rpm	48rpm	
	20 [5.28]	57 [504]	120 [1062]	170 [1505]	214 [1894]	262 [2319]	290 [2567]	340 [3009]	371 [3284]
		125rpm	123rpm	120rpm	117rpm	110rpm	106rpm	92rpm	81rpm
	30 [7.93]	53 [469]	115 [1018]	164 [1452]	206 [1823]	259 [2292]	288 [2549]	335 [2965]	368 [3257]
		187rpm	184rpm	181rpm	178rpm	175rpm	168rpm	155rpm	139rpm
	35 [9.25]	49 [434]	110 [974]	160 [1416]	202 [1788]	255 [2257]	284 [2514]	328 [2903]	362 [3204]
		220rpm	216rpm	213rpm	209rpm	205rpm	202rpm	192rpm	176rpm
	45 [11.89]	44 [389]	102 [903]	154 [1363]	196 [1735]	248 [2195]	278 [2460]	321 [2841]	358 [3169]
		283rpm	280rpm	276rpm	272rpm	267rpm	260rpm	250rpm	238rpm
	55 [14.53]	40 [354]	99 [876]	148 [1310]	191 [1690]	243 [2151]	272 [2407]	316 [2797]	351 [3107]
		345rpm	342rpm	340rpm	336rpm	331rpm	328rpm	320rpm	303rpm
	60 [15.85]	33 [292]	94 [832]	144 [1275]	188 [1664]	236 [2089]	267 [2363]	308 [2726]	345 [3053]
	Max Cont.	377rpm	374rpm	371rpm	367rpm	363rpm	359rpm	353rpm	342rpm
	75 [19.82]	19 [168]	80 [708]	124 [1097]	170 [1505]	216 [1912]	252 [2230]	296 [2620]	325 [2876]
	Max Int.	473rpm	469rpm	465rpm	459rpm	453rpm	447rpm	440rpm	424rpm

Hydraulic Orbit Motors GPH



Flow Data

GPH200		198cm ³ /rev(12.1in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	8 [2.11]	79 [699]	164 [1452]	207 [1832]	250 [2213]	320 [2832]	360 [3186]		
		40rpm	39rpm	38rpm	35rpm	28rpm	22rpm		
	15 [3.96]	78 [690]	162 [1434]	205 [1814]	250 [2213]	322 [2850]	361 [3195]	410 [3629]	
		76rpm	75rpm	74rpm	71rpm	66rpm	61rpm	51rpm	
	20 [5.28]	76 [673]	158 [1398]	203 [1797]	247 [2186]	320 [2832]	358 [3169]	403 [3567]	422 [3735]
		100rpm	98rpm	97rpm	95rpm	92rpm	89rpm	73rpm	57rpm
	30 [7.93]	70 [620]	153 [1354]	200 [1770]	245 [2168]	315 [2788]	350 [3098]	398 [3523]	417 [3691]
		151rpm	149rpm	147rpm	145rpm	142rpm	139rpm	131rpm	120rpm
	35 [9.25]	66 [584]	149 [1319]	194 [1717]	232 [2053]	297 [2629]	343 [3036]	386 [3416]	415 [3673]
		177rpm	175rpm	173rpm	171rpm	168rpm	166rpm	160rpm	149rpm
	45 [11.89]	63 [558]	146 [1292]	190 [1682]	230 [2036]	294 [2602]	340 [3009]	383 [3390]	410 [3629]
		228rpm	226rpm	224rpm	221rpm	218rpm	215rpm	210rpm	198rpm
	55 [14.53]	54 [478]	140 [1239]	181 [1602]	224 [1983]	286 [2531]	334 [2956]	371 [3284]	400 [3540]
		280rpm	278rpm	276rpm	274rpm	271rpm	269rpm	263rpm	250rpm
	60 [15.85]	38 [336]	127 [1124]	164 [1452]	212 [1876]	270 [2390]	325 [2876]	356 [3151]	395 [3496]
	Max Cont.	304rpm	302rpm	300rpm	297rpm	294rpm	291rpm	286rpm	272rpm
	75 [19.82]	22 [195]	96 [850]	145 [1283]	192 [1699]	235 [2080]	293 [2593]	321 [2841]	367 [3248]
	Max Int.	382rpm	378rpm	374rpm	371rpm	368rpm	364rpm	360rpm	350rpm

GPH250		247.5cm ³ /rev(15.1in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	60.9 [870]	81.2 [1160]	101.5 [1450]	126.9 [1813]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	8 [2.11]	96 [850]	190 [1682]	268 [2372]	326 [2885]	403 [3567]			
		30rpm	28rpm	24rpm	21rpm	11rpm			
	15 [3.96]	98 [867]	194 [1717]	270 [2390]	327 [2894]	405 [3585]	450 [3983]	510 [4514]	
		60rpm	58rpm	54rpm	50rpm	40rpm	30rpm	12rpm	
	20 [5.28]	92 [814]	188 [1664]	267 [2363]	325 [2876]	405 [3585]	456 [4036]	514 [4549]	565 [5001]
		82rpm	80rpm	77rpm	76rpm	69rpm	64rpm	52rpm	38rpm
	30 [7.93]	85 [752]	180 [1593]	259 [2292]	320 [2832]	400 [3540]	448 [3965]	513 [4540]	561 [4965]
		123rpm	120rpm	118rpm	114rpm	106rpm	98rpm	87rpm	76rpm
	35 [9.25]	77 [682]	176 [1558]	252 [2230]	309 [2753]	389 [3443]	436 [3859]	504 [4461]	557 [4930]
		143rpm	141rpm	139rpm	135rpm	128rpm	122rpm	112rpm	101rpm
	45 [11.89]	70 [620]	168 [1487]	243 [2151]	300 [2655]	377 [3337]	428 [3788]	495 [4381]	543 [4806]
		185rpm	182rpm	178rpm	174rpm	168rpm	161rpm	152rpm	139rpm
	55 [14.53]	63 [558]	159 [1407]	237 [2098]	290 [2567]	369 [3266]	417 [3691]	483 [4275]	531 [4700]
		226rpm	223rpm	218rpm	213rpm	209rpm	202rpm	193rpm	185rpm
	60 [15.85]	60 [531]	150 [1328]	228 [2018]	280 [2478]	358 [3169]	407 [3602]	473 [4186]	520 [4602]
	Max Cont.	248rpm	246rpm	243rpm	239rpm	233rpm	226rpm	215rpm	207rpm
	75 [19.82]	34 [301]	128 [1133]	202 [1788]	264 [2337]	342 [3027]	387 [3425]	448 [3965]	488 [4319]
	Max Int.	309rpm	306rpm	302rpm	297rpm	292rpm	286rpm	278rpm	264rpm

Hydraulic Orbit Motors GPH



Flow Data

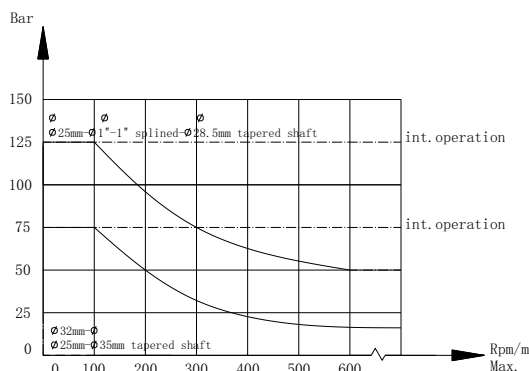
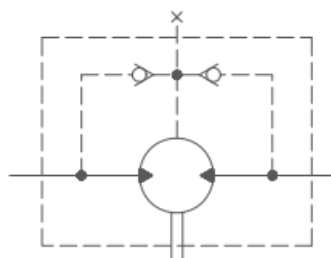
GPH315		316.8cm ³ /rev(19.3in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	50.8 [725]	71.1 [1015]	91.4 [1305]	101.5 [1450]	126.9 [1813]	142.2 [2031]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification						
	8 [2.11]	123 [1089]	215 [1903]	292 [2584]	368 [3257]	405 [3585]		
		25rpm	23rpm	21rpm	17rpm	11rpm		
	15 [3.96]	118 [1044]	211 [1867]	287 [2540]	367 [3248]	404 [3576]	495 [4381]	568 [5027]
		47rpm	46rpm	44rpm	40rpm	28rpm	21rpm	10rpm
	20 [5.28]	110 [974]	205 [1814]	278 [2460]	360 [3186]	395 [3496]	494 [4372]	566 [5009]
		62rpm	61rpm	60rpm	57rpm	46rpm	40rpm	36rpm
	30 [7.93]	101 [894]	196 [1735]	271 [2399]	349 [3089]	388 [3434]	490 [4337]	565 [5001]
		94rpm	93rpm	91rpm	88rpm	76rpm	68rpm	65rpm
	35 [9.25]	96 [850]	188 [1664]	264 [2337]	341 [3018]	382 [3381]	478 [4231]	557 [4930]
		109rpm	107rpm	106rpm	104rpm	96rpm	89rpm	84rpm
	45 [11.89]	89 [788]	180 [1593]	254 [2248]	337 [2983]	372 [3292]	468 [4142]	553 [4894]
		141rpm	140rpm	138rpm	135rpm	127rpm	120rpm	115rpm
	55 [14.53]	76 [673]	166 [1469]	239 [2115]	325 [2876]	362 [3204]	457 [4045]	548 [4850]
		173rpm	172rpm	170rpm	167rpm	160rpm	152rpm	143rpm
	60 [15.85]	65 [575]	154 [1363]	227 [2009]	308 [2726]	348 [3080]	443 [3921]	529 [4682]
	Max Cont.	188rpm	186rpm	184rpm	182rpm	178rpm	172rpm	163rpm
	75 [19.82]	40 [354]	120 [1062]	201 [1779]	279 [2469]	323 [2859]	418 [3700]	497 [4399]
	Max Int.	236rpm	234rpm	232rpm	228rpm	226rpm	223rpm	214rpm

GPH400		396cm ³ /rev(24.16in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		30.5 [435]	45.7 [653]	55.9 [798]	66.0 [943]	81.2 [1160]	101.5 [1450]	126.9 [1813]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification						
	8 [2.11]	166 [1469]	232 [2053]	287 [2540]	340 [3009]	418 [3700]		
		20rpm	19rpm	18rpm	16rpm	12rpm		
	15 [3.96]	165 [1460]	228 [2018]	277 [2452]	337 [2983]	417 [3691]	496 [4390]	612 [5417]
		38rpm	36rpm	35rpm	33rpm	31rpm	27rpm	21rpm
	20 [5.28]	162 [1434]	223 [1974]	273 [2416]	331 [2930]	413 [3655]	495 [4381]	608 [5381]
		50rpm	49rpm	49rpm	48rpm	45rpm	41rpm	35rpm
	30 [7.93]	154 [1363]	216 [1912]	266 [2354]	318 [2815]	405 [3585]	486 [4301]	600 [5310]
		76rpm	75rpm	74rpm	73rpm	71rpm	67rpm	60rpm
	35 [9.25]	146 [1292]	210 [1859]	256 [2266]	312 [2761]	395 [3496]	480 [4248]	588 [5204]
		88rpm	87rpm	87rpm	86rpm	83rpm	80rpm	75rpm
	45 [11.89]	132 [1168]	197 [1744]	240 [2151]	300 [2655]	383 [3390]	464 [4107]	576 [5098]
		114rpm	113rpm	112rpm	110rpm	108rpm	106rpm	99rpm
	55 [14.53]	117 [1036]	184 [1629]	227 [2009]	283 [2505]	363 [3213]	450 [3983]	552 [4886]
		139rpm	137rpm	136rpm	135rpm	135rpm	132rpm	123rpm
	60 [15.85]	102 [903]	163 [1443]	215 [1903]	272 [2407]	347 [3071]	436 [3859]	532 [4709]
	Max Cont.	153rpm	152rpm	150rpm	148rpm	146rpm	143rpm	138rpm
	75 [19.82]	53 [469]	128 [1133]	182 [1611]	234 [2071]	318 [2815]	391 [3461]	484 [4284]
	Max Int.	191rpm	189rpm	187rpm	185rpm	183rpm	180rpm	176rpm

Technical Data

Hydraulic orbit Motors GPH

Permissible shaft seal pressure



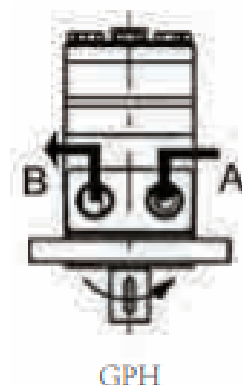
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Case Drain

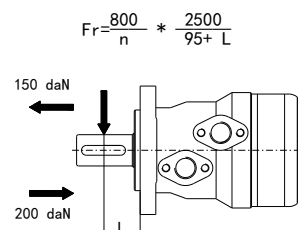
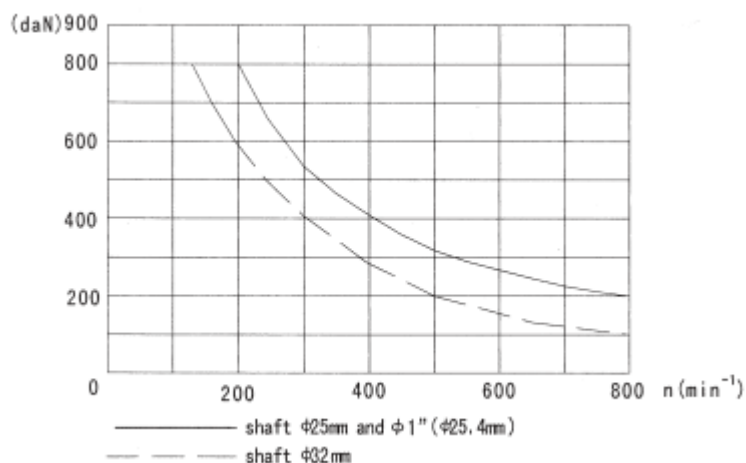
In applications without a motor drain line, the pressure exerted on the shaft seal is marginally in excess of the return line pressure. When the Drain line is used, the pressure exerted on the shaft seal is equal to the return line pressure.

Standard direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate: Clock-wise when port "A" is pressurized. Counter-clockwise port "B" is pressurized.

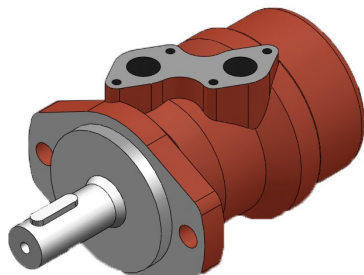


Axial and Radial forces



Fr =Radial Force (daN)
 L =Distance (mm)
 n =Speed (rpm)
 Rhomb-flange L=30mm
 Square-flange L=24mm

General

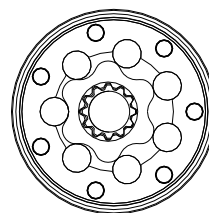


APPLICATION

- ◇ Conveyors
- ◇ Feeding machinery of robots and manipulators
- ◇ Metal working machines
- ◇ Textile machines
- ◇ Agricultural machines
- ◇ Food industries
- ◇ Lawn mower

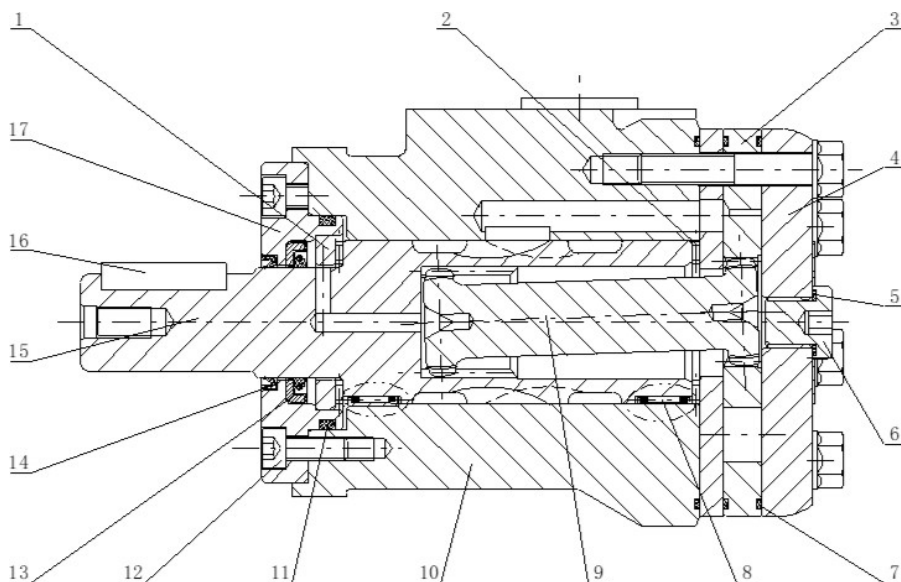
OPTIONS

- ◇ Flange connection
- ◇ Motor with needle bearing
- ◇ Side and rear ports
- ◇ Shafts—straight, splined and tapered
- ◇ Shaft seal for high and low pressure
- ◇ Metric and BSPP ports
- ◇ Speed sensing
- ◇ Other special features



- ◇ Shaft distribution flow

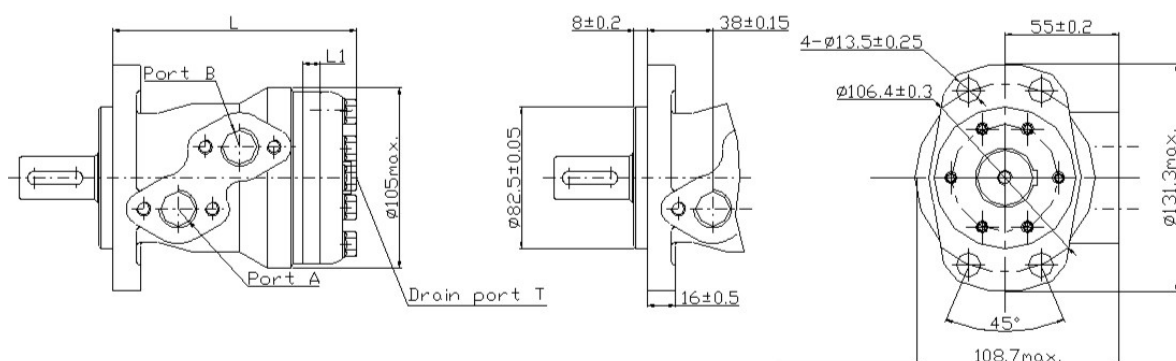
Model		GR50	GR80	GR100	GR125	GR160	GR200	GR250	GR315	GR400
Disp.	in ³ /rev	3.14	4.90	6.09	7.67	9.74	12.19	15.26	19.26	24.4
	cm ³ /rev	51.5	80.3	99.8	125.7	159.6	199.8	250.1	315.7	397
Max Speed rpm	cont.	775	750	600	475	375	300	240	190	150
	int.	970	940	750	600	470	375	300	240	190
Max Torque N m [lb-in]	cont.	100 [900]	200 [1770]	240 [2125]	300 [2665]	390 [3450]	385 [3410]	390 [3450]	360 [3185]	380 [3360]
	int.	130 [1150]	220 [1947]	280 [2480]	340 [3010]	430 [3805]	460 [4070]	470 [4160]	470 [4160]	470 [4160]
Max Dif. bar [psi]	cont.	140 [2030]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	140 [2030]	110 [1600]	85 [1230]	65 [940]
	int.	175 [2540]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	175 [2540]	140 [2030]	115 [1670]	90 [1300]
Max Flow l/min [gpm]	cont.	40 [10.5]	60 [15.8]	60 [15.8]	60 [15.8]	60 [15.8]	60 [15.8]	60 [15.8]	60 [15.8]	60 [15.8]
	int.	50 [13.2]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]
Weight kg [lbs]		6.9 [15.2]	7 [15.4]	7.3 [16.1]	7.4 [16.3]	7.6 [15.4]	8.1 [17.6]	8.5 [18.5]	9.2 [20.3]	9.9 [21.8]



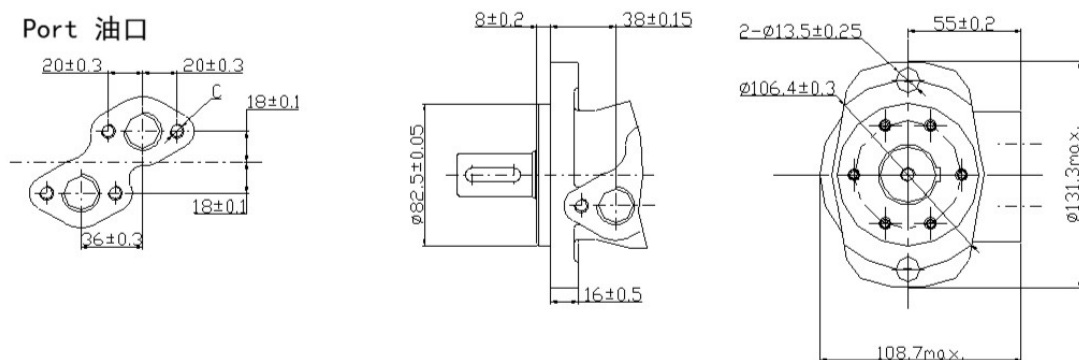
1. Thrust Washer
2. Axial Needle Bearing
3. Gear Set
4. End Cover
5. Seal
6. Case Drain Plug
7. O-ring
8. Radial Needle Bearing
9. Cardan Joint
10. Housing
11. O-ring
12. Bolt
13. Shaft Seal
14. Dust Seal
15. Output Shaft
16. Key
17. Front Cover

Dimensions and Mounting Data

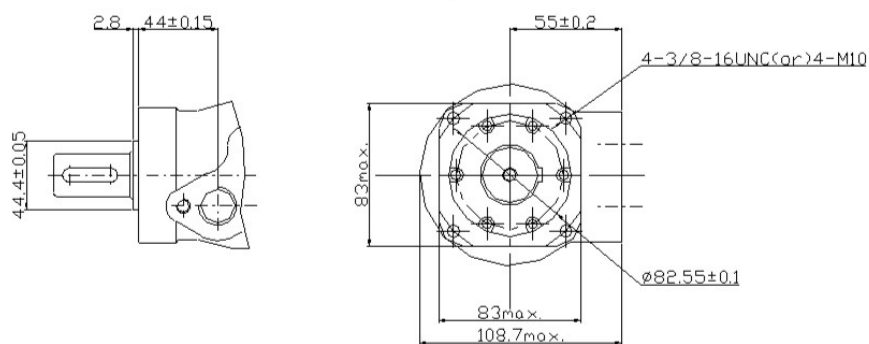
Flange A4



Flange A2



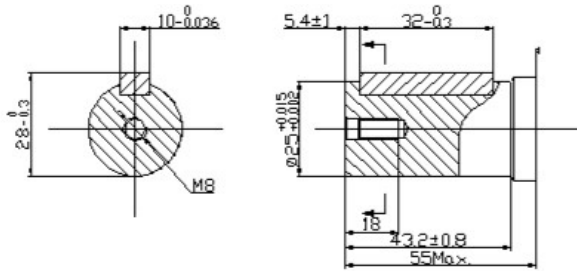
Flange H4/H5



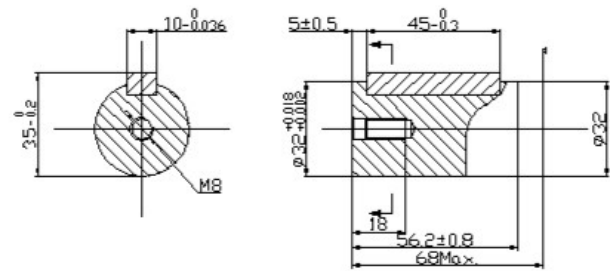
Model	L	L1
GR50	140	10
GR80	146	16
GR100	150	20
GR125	155	25
GR160	161.5	30.5
GR200	170	38.1
GR250	180	50
GR315	192	62
GR400	207	76

Port	G1 (Depth)	M1 (Depth)	U2 (Depth)	U1 (Depth)	G2 (Depth)
P(A,B)	G1/2 (15)	M22x1.5 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT (RC) 1/2 (15)
T	G1/4 (12)	M14x1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT (RC) 1/4 (9.7)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC (13)	4-5/16-18UNC (13)	4-M8 (13)

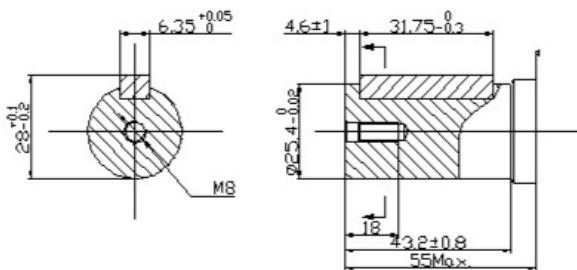
GR Shaft Extension Dimensions Data



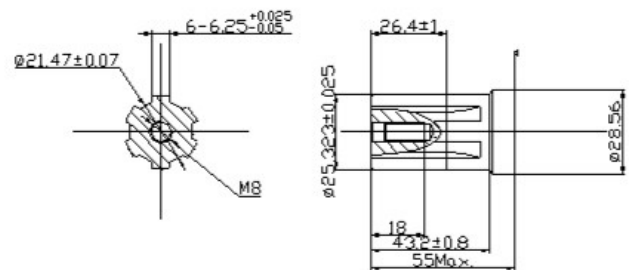
Shaft S1: Cylindrical shaft $\varnothing 25$
Parallel key 8x7x32



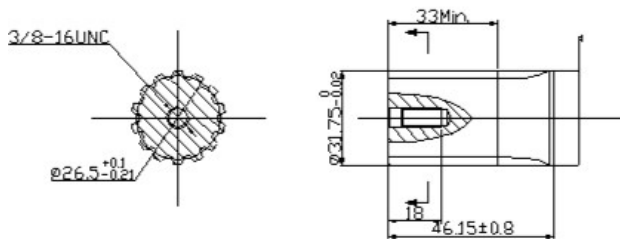
Shaft S4: Cylindrical shaft $\varnothing 32$
Parallel key 10x8x45



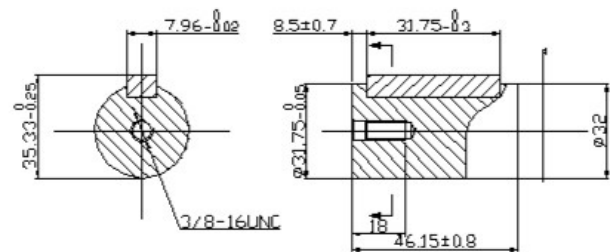
Shaft S2: Cylindrical shaft
 $\varnothing 25.4$ Parallel key
6.35x6.35x31.75



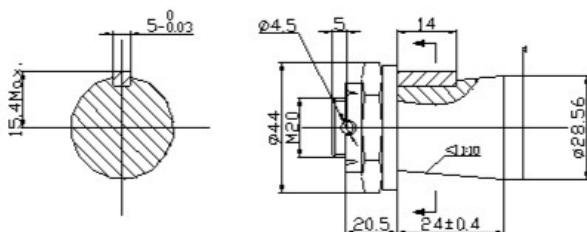
Shaft R1: Splined SAE 6B



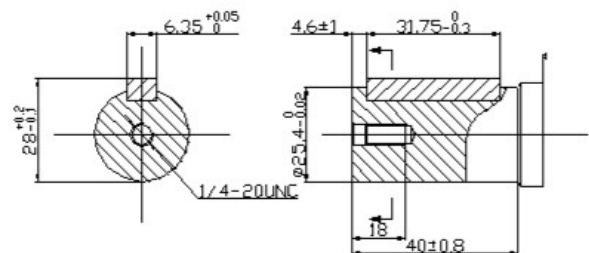
Shaft R2: Splined 14-DP12/24



Shaft S5: Cylindrical shaft $\varnothing 31.75$
Parallel key 7.96x7.96x31.75



Shaft T1: Tapered shaft $\varnothing 28.56$
Parallel key B5x5x14
Tightening torque: 100 ± 10 Nm



Shaft S3: Cylindrical shaft $\varnothing 25.4$
Parallel key 6.35x6.35x31.75

GR - How To Order

Ordering Example:		Model	Displacement	Flange	Drive shaft	Ports	Other functions
		GR	50	A2	S1	G1	ACA
Model	Brake Opt	Disp.	Flange	Drive shaft	Ports		
GR	None= blank Brake= GBD	50	A2=2-Hole SAE A Flange, Pilot $\varnothing$ 82.5x8	S1=Shaft $\varnothing$ 25, parallel key 8x7x32 S2=Shaft $\varnothing$ 25.4, parallel key 6.35x6.35x31.75	G1=G1/2 manifold mount 4xM8, G1/4 G2=PT(Rc)1/2 manifold 4xM8, PT(Rc)1/4 U1=1/2-14NPTF manifold 4x5/16-18UNC, 7/16-20UNF U2=7/8-14UNF O-ring manifold 4x5/16-18UNC, 7/16-20UNF M1=M22x1.5 manifold mount 4xM8, M14X1.5		
		80		S3=Short Shaft $\varnothing$ 25.4, parallel key 6.35x6.35x31.75			
		100	A4=4-Hole SAE A Flange, Pilot $\varnothing$ 82.5x8	S4=Shaft $\varnothing$ 32, parallel key 10x8x45			
		125		S5=Shaft $\varnothing$ 31.75, parallel key 7.96x7.96x31.75			
		160	H4=4-3/8-16 Hole Square Flange, Pilot $\varnothing$ 44.4x2.8 H5=4-	R1=Shaft $\varnothing$ 25.4, splined tooth SAE 6B R2=Shaft $\varnothing$ 31.75, splined tooth 14-			
		200	M10 Hole Square Flange, Pilot $\varnothing$ 44.4x2.8	DP12/24 T1=Tapered shaft $\varnothing$ 28.56, parallel key B5x5x14			
		250					
		315					
		400					

Rotation direction	Paint	Standard Options	Seal Options	Relief Options	Speed Sensor Option
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature	Blank= None HPS=High Pressure Seal SG=Seal Guard HPS-SG= High Pressure Seal & Seal Guard	Blank=None R=Valve Cavity Only R12=Bi-directional relief max 125 bar R-20= Bi-directional relief max 207 bar	Blank= None SS= Speed Sensor, 4-pin, M12 male connector

Hydraulic Orbit Motors GR



Flow Data

GR50		51.5cm ³ /rev (3.14in ³ /rev)					Max Cont.		Max Int.
Pressure bar [psi→]		50.8 [725]	71.1 [1015]	91.4 [1305]	101.5 [1450]	121.8 [1740]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min [gpm ↓]	Torque N m [lb-in] Speed Specification							
	5 [1.32]	35 [310]	45 [398]	61 [540]	67 [593]	77 [682]	88 [779]		
		93rpm	84rpm	76rpm	73rpm	69rpm	46rpm		
	10 [2.64]	36 [319]	46 [407]	62 [549]	69 [611]	80 [708]	95 [841]	108 [956]	120 [1062]
		186rpm	178rpm	166rpm	162rpm	153rpm	136rpm	118rpm	97rpm
	15 [3.96]	35 [310]	49 [434]	63 [558]	73 [646]	88 [779]	100 [885]	109 [965]	123 [1089]
		283rpm	277rpm	269rpm	261rpm	250rpm	230rpm	211rpm	185rpm
	20 [5.28]	34 [305]	47 [416]	61 [540]	69 [611]	83 [735]	96 [850]	109 [965]	126 [1115]
		377rpm	375rpm	365rpm	361rpm	346rpm	330rpm	302rpm	270rpm
	30 [7.93]	33 [292]	44 [389]	60 [531]	67 [593]	80 [708]	95 [841]	108 [956]	126 [1115]
		576rpm	569rpm	561rpm	554rpm	542rpm	531rpm	500rpm	465rpm
	40 [10.57]	30 [266]	41 [363]	58 [513]	66 [584]	79 [699]	92 [814]	106 [938]	122 [1080]
		760rpm	758rpm	753rpm	750rpm	738rpm	724rpm	700rpm	670rpm
	45 [11.89]	29 [261]	40 [354]	57 [504]	65 [575]	78 [690]	90 [797]	105 [929]	121 [1071]
		856rpm	853rpm	849rpm	845rpm	835rpm	815rpm	796rpm	770rpm
	50 [13.21]	26 [230]	37 [327]	53 [469]	60 [531]	73 [646]	85 [752]	99 [876]	114 [1009]
	Max Cont.	950rpm	940rpm	925rpm	906rpm	880rpm	852rpm	832rpm	801rpm
	60 [15.85]	20 [177]	33 [292]	48 [425]	56 [496]	69 [611]	81 [717]	95 [841]	109 [965]
	Max Int.	1138rpm	1124rpm	1100rpm	1075rpm	1056rpm	1028rpm	1006rpm	970rpm

GR80	80.3cm³/rev (4.90in³/rev)							Max Cont.		Max Int.
Pressure bar [psi→]		50.8 [725]	71.1 [1015]	91.4 [1305]	101.5 [1450]	121.8 [1740]	142.2 [2031]	162.5 [2321]	177.7 [2538]	203.1 [2901]
Flow	l/min [gpm↓]	Torque (lb-in) Speed Specification								
	5 [1.32]	50 [443]	64 [566]	88 [779]	108 [956]	133 [1177]				
		59rpm	56rpm	50rpm	44rpm	38rpm				
	10 [2.64]	54 [478]	77 [682]	99 [876]	108 [956]	129 [1142]	150 [1328]	173 [1531]		
		118rpm	113rpm	106rpm	97rpm	86rpm	79rpm	56rpm		
	20 [5.28]	57 [504]	78 [690]	102 [903]	111 [982]	134 [1186]	155 [1372]	177 [1567]	196 [1735]	225 [1991]
		238rpm	234rpm	227rpm	216rpm	203rpm	190rpm	178rpm	154rpm	135rpm
	30 [7.93]	54 [478]	75 [664]	100 [885]	108 [956]	131 [1159]	152 [1345]	176 [1558]	195 [1726]	223 [1974]
		360rpm	352rpm	340rpm	332rpm	316rpm	302rpm	290rpm	274rpm	250rpm
	40 [10.57]	48 [425]	73 [646]	96 [850]	105 [929]	127 [1124]	148 [1310]	172 [1522]	190 [1682]	220 [1947]
		480rpm	470rpm	458rpm	445rpm	430rpm	418rpm	403rpm	388rpm	359rpm
	50 [13.21]	42 [372]	70 [620]	93 [823]	102 [903]	124 [1097]	147 [1301]	170 [1505]	188 [1664]	218 [1929]
		604rpm	595rpm	582rpm	570rpm	556rpm	540rpm	521rpm	504rpm	487rpm
	60 [15.85]	37 [327]	66 [584]	89 [788]	99 [876]	121 [1071]	144 [1275]	166 [1469]	184 [1629]	213 [1885]
		Max Cont.	726rpm	715rpm	704rpm	692rpm	678rpm	663rpm	647rpm	622rpm
	70 [18.49]	32 [283]	60 [531]	83 [735]	95 [841]	116 [1027]	140 [1239]	160 [1416]	177 [1567]	208 [1841]
		845rpm	834rpm	820rpm	802rpm	789rpm	767rpm	754rpm	730rpm	705rpm
	75 [19.82]	21 [186]	50 [443]	78 [690]	90 [797]	111 [982]	135 [1195]	154 [1363]	171 [1513]	200 [1770]
		Max Int.	910rpm	895rpm	881rpm	867rpm	852rpm	830rpm	806rpm	787rpm

Hydraulic Orbit Motors GR



Flow Data

GR100		99.8cm ³ /rev (6.09in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		50.8 [725]	71.1[1015]	91.4[1305]	101.5[1450]	121.8[1740]	142.2[2031]	162.5[2321]	177.7[2538]	203.1[2901]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification								
	5 [1.32]	66 [584] 45rpm	92 [814] 42rpm	120 [1062] 38rpm	135 [1195] 34rpm	156 [1381] 27rpm				
	10 [2.64]	68 [602] 93rpm	96 [850] 90rpm	125 [1106] 86rpm	138 [1221] 81rpm	159 [1407] 74rpm	188 [1664] 57rpm	212 [1876] 42rpm		
	20 [5.28]	65 [575] 189rpm	94 [832] 185rpm	123 [1089] 180rpm	137 [1213] 173rpm	155 [1372] 165rpm	186 [1646] 158rpm	210 [1859] 150rpm	238 [2106] 139rpm	274 [2425] 118rpm
	30 [7.93]	63 [558] 286rpm	92 [814] 281rpm	120 [1062] 275rpm	133 [1177] 266rpm	153 [1354] 257rpm	185 [1637] 246rpm	209 [1850] 237rpm	235 [2080] 225rpm	270 [2390] 207rpm
	40 [10.57]	57 [504] 385rpm	88 [779] 378rpm	117 [1036] 365rpm	130 [1151] 355rpm	152 [1345] 345rpm	185 [1637] 332rpm	208 [1841] 320rpm	233 [2062] 314rpm	267 [2363] 297rpm
	50 [13.21]	48 [425] 482rpm	79 [699] 477rpm	110 [974] 470rpm	123 [1089] 460rpm	150 [1328] 448rpm	183 [1620] 435rpm	204 [1806] 420rpm	228 [2018] 405rpm	260 [2301] 389rpm
	60 [15.85] Max Cont.	38 [336] 580rpm	70 [620] 572rpm	105 [929] 560rpm	120 [1062] 548rpm	144 [1275] 535rpm	178 [1575] 523rpm	200 [1770] 510rpm	220 [1947] 500rpm	252 [2230] 478rpm
	70 [18.49]	32 [283] 678rpm	65 [575] 670rpm	100 [885] 660rpm	118 [1044] 648rpm	141 [1248] 638rpm	176 [1558] 626rpm	197 [1744] 615rpm	215 [1903] 606rpm	246 [2177] 580rpm
	75 [19.82] Max Int.	23 [204] 728rpm	59 [522] 720rpm	93 [823] 710rpm	111 [982] 695rpm	136 [1204] 681rpm	170 [1505] 667rpm	192 [1699] 650rpm	210 [1859] 634rpm	240 [2124] 618rpm

GR125		125.7cm ³ /rev (7.67in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		50.8[725]	71.1[1015]	91.4 [1305]	101.5 [1450]	121.8 [1740]	142.2 [2031]	162.5 [2321]	177.7 [2538]	203.1 [2901]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification								
	5 [1.32]	76 [673] 36rpm	110 [974] 31rpm	145 [1283] 25rpm	167 [1478] 19rpm	189 [1673] 13rpm				
	10 [2.64]	84 [743] 73rpm	118 [1044] 70rpm	155 [1372] 60rpm	176 [1558] 48rpm	202 [1788] 36rpm	228 [2018] 25rpm	253 [2239] 19rpm		
	20 [5.28]	82 [726] 153rpm	117 [1036] 151rpm	153 [1354] 148rpm	174 [1540] 144rpm	200 [1770] 138rpm	230 [2036] 128rpm	259 [2292] 117rpm	294 [2602] 104rpm	332 [2938] 73rpm
	30 [7.93]	79 [699] 231rpm	116 [1027] 228rpm	151 [1336] 224rpm	171 [1513] 218rpm	198 [1752] 210rpm	228 [2018] 201rpm	257 [2275] 183rpm	292 [2584] 168rpm	329 [2912] 137rpm
	40 [10.57]	72 [637] 309rpm	114 [1009] 307rpm	148 [1310] 303rpm	168 [1487] 298rpm	196 [1735] 292rpm	226 [2000] 280rpm	256 [2266] 270rpm	290 [2567] 252rpm	327 [2894] 218rpm
	50 [13.21]	62 [549] 389rpm	105 [929] 386rpm	143 [1266] 382rpm	165 [1460] 378rpm	195 [1726] 370rpm	223 [1974] 360rpm	254 [2248] 344rpm	287 [2540] 328rpm	323 [2859] 292rpm
	60 [15.85] Max Cont.	52 [460] 467rpm	98 [867] 463rpm	136 [1204] 459rpm	160 [1416] 456rpm	191 [1690] 448rpm	220 [1947] 427rpm	250 [2213] 410rpm	282 [2496] 399rpm	319 [2823] 352rpm
	70 [18.49]	41 [363] 545rpm	90 [797] 542rpm	130 [1151] 538rpm	156 [1381] 534rpm	187 [1655] 529rpm	215 [1903] 520rpm	242 [2142] 508rpm	278 [2460] 486rpm	313 [2770] 430rpm
	75 [19.82] Max Int.	32 [283] 586rpm	79 [699] 583rpm	126 [1115] 578rpm	148 [1310] 570rpm	180 [1593] 560rpm	208 [1841] 546rpm	234 [2071] 532rpm	262 [2319] 520rpm	300 [2655] 480rpm

Hydraulic Orbit Motors GR



Flow Data

GR160		159.6cm ³ /rev(9.74in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		50.8[725]	71.1[1015]	91.4[1305]	101.5[1450]	121.8[1740]	142.2[2031]	162.5[2321]	177.7[2538]	203.1[2901]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification								
	5 [1.32]	104 [920]	146 [1292]	190 [1682]	210 [1859]	245 [2168]				
		26rpm	23rpm	20rpm	16rpm	10rpm				
	10 [2.64]	107 [947]	150 [1328]	195 [1726]	216 [1912]	250 [2213]	290 [2567]	335 [2965]		
		59rpm	56rpm	50rpm	45rpm	37rpm	30rpm	22rpm		
	20 [5.28]	102 [903]	151 [1336]	198 [1752]	220 [1947]	257 [2275]	298 [2638]	342 [3027]	370 [3275]	420 [3717]
		121rpm	118rpm	115rpm	113rpm	108rpm	102rpm	97rpm	90rpm	78rpm
	30 [7.93]	97 [859]	146 [1292]	190 [1682]	217 [1921]	256 [2266]	295 [2611]	340 [3009]	368 [3257]	416 [3682]
		184rpm	178rpm	173rpm	170rpm	164rpm	155rpm	143rpm	128rpm	103rpm
	40 [10.57]	89 [788]	140 [1239]	185 [1637]	210 [1859]	252 [2230]	290 [2567]	335 [2965]	363 [3213]	412 [3646]
		246rpm	241rpm	235rpm	228rpm	220rpm	210rpm	194rpm	177rpm	150rpm
	50 [13.21]	72 [637]	128 [1133]	179 [1584]	202 [1788]	244 [2160]	284 [2514]	327 [2894]	358 [3169]	409 [3620]
		310rpm	307rpm	300rpm	295rpm	287rpm	278rpm	262rpm	247rpm	210rpm
	60 [15.85]	60 [531]	116 [1027]	170 [1505]	198 [1752]	240 [2124]	279 [2469]	321 [2841]	352 [3115]	400 [3540]
	Max Cont.	374rpm	367rpm	359rpm	354rpm	346rpm	338rpm	323rpm	306rpm	265rpm
	70 [18.49]	49 [434]	107 [947]	164 [1452]	193 [1708]	233 [2062]	271 [2399]	309 [2735]	344 [3045]	390 [3452]
		437rpm	430rpm	421rpm	415rpm	403rpm	393rpm	381rpm	365rpm	318rpm
	75 [19.82]	36 [319]	109 [867]	152 [1345]	185 [1637]	226 [2000]	265 [2345]	300 [2655]	334 [2956]	379 [3354]
	Max Int.	472rpm	463rpm	450rpm	441rpm	431rpm	420rpm	405rpm	389rpm	365rpm

GR200		199.8cm ³ /rev(12.19in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		50.8[725]	71.1[1015]	91.4[1305]	101.5[1450]	121.8[1740]	142.2[2031]	162.5[2321]	177.7[2538]	203.1[2901]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification								
	5 [1.32]	132 [1168]	181 [1602]	238 [2106]	262 [2319]	310 [2744]				
		24rpm	22rpm	18rpm	13rpm	10rpm				
	10 [2.64]	135 [1195]	186 [1646]	240 [2124]	264 [2337]	315 [2788]	356 [3151]	403 [3567]		
		49rpm	47rpm	45rpm	43rpm	38rpm	33rpm	24rpm		
	20 [5.28]	131 [1159]	183 [1620]	238 [2106]	260 [2301]	314 [2779]	358 [3169]	404 [3576]	438 [3877]	498 [4408]
		99rpm	97rpm	94rpm	92rpm	88rpm	83rpm	74rpm	64rpm	56rpm
	30 [7.93]	126 [1115]	178 [1575]	233 [2062]	254 [2248]	311 [2753]	355 [3142]	402 [3558]	431 [3815]	486 [4301]
		149rpm	147rpm	144rpm	141rpm	135rpm	126rpm	113rpm	105rpm	91rpm
	40 [10.57]	112 [991]	169 [1496]	228 [2018]	250 [2213]	307 [2717]	352 [3115]	400 [3540]	426 [3770]	477 [4222]
		200rpm	197rpm	194rpm	191rpm	185rpm	174rpm	160rpm	151rpm	127rpm
	50 [13.21]	95 [841]	156 [1381]	221 [1956]	246 [2177]	300 [2655]	350 [3098]	398 [3523]	421 [3726]	470 [4160]
		252rpm	249rpm	246rpm	243rpm	238rpm	228rpm	212rpm	194rpm	161rpm
	60 [15.85]	78 [690]	145 [1283]	213 [1885]	238 [2106]	289 [2558]	342 [3027]	386 [3416]	412 [3646]	459 [4062]
	Max Cont.	304rpm	301rpm	298rpm	294rpm	286rpm	276rpm	262rpm	243rpm	218rpm
	70 [18.49]	67 [593]	135 [1195]	206 [1823]	228 [2018]	277 [2452]	336 [2974]	375 [3319]	408 [3611]	453 [4009]
		355rpm	353rpm	349rpm	340rpm	329rpm	316rpm	300rpm	288rpm	257rpm
	75 [19.82]	58 [513]	125 [1106]	197 [1744]	220 [1947]	270 [2390]	321 [2841]	360 [3186]	398 [3523]	442 [3912]
	Max Int.	382rpm	379rpm	373rpm	362rpm	350rpm	337rpm	322rpm	312rpm	278rpm

Hydraulic orbit Motors GR



Flow Data

GR250		15. 26in ³ /rev (250. 1cm ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		50. 8[725]	71. 1[1015]	91. 4[1305]	101. 5[1450]	121. 8[1740]	142. 2[2031]	162. 5[2321]	177. 7[2538]	203. 1[2901]
Flow	(gpm↓)	Torque N m [lb-in] Speed Specification								
	5 [1. 32]	175 [1549]	240 [2125]	304 [2691]	342 [3027]	407 [3602]				
		17rpm	16rpm	14rpm	12rpm	10rpm				
	10 [2. 64]	178 [1575]	246 [2177]	310 [2744]	344 [3045]	409 [3620]	465 [4116]	525 [4647]		
		37rpm	35rpm	31rpm	28rpm	23rpm	18rpm	11rpm		
	20 [5. 28]	175 [1549]	244 [2160]	308 [2726]	340 [3009]	408 [3611]	463 [4098]	520 [4602]	558 [4939]	686 [5629]
		75rpm	73rpm	72rpm	70rpm	66rpm	58rpm	53rpm	50rpm	42rpm
	30 [7. 93]	162 [1434]	235 [2080]	304 [2691]	332 [2938]	400 [3540]	455 [4027]	516 [4567]	550 [4868]	621 [5496]
		114rpm	111rpm	108rpm	106rpm	100rpm	92rpm	83rpm	77rpm	65rpm
	40 [10. 57]	143 [1266]	223 [1974]	300 [2655]	329 [2912]	396 [3505]	447 [3956]	512 [4532]	546 [4832]	617 [5461]
		154rpm	152rpm	150rpm	147rpm	143rpm	132rpm	120rpm	110rpm	90rpm
	50 [13. 21]	124 [1097]	208 [1841]	289 [2558]	323 [2859]	384 [3399]	440 [3894]	503 [4452]	535 [4735]	600 [5310]
		193rpm	190rpm	187rpm	174rpm	168rpm	160rpm	149rpm	140rpm	116rpm
	60 [15. 85]	103 [912]	192 [1699]	280 [2478]	314 [2779]	371 [3284]	381 [3370]	489 [4328]	514 [4549]	578 [5116]
	Max Cont.	233rpm	230rpm	227rpm	224rpm	218rpm	205rpm	190rpm	181rpm	155rpm
	70 [18. 49]	88 [779]	178 [1575]	264 [2337]	301 [2664]	356 [3151]	418 [3700]	479 [4239]	498 [4408]	560 [4956]
		273rpm	270rpm	267rpm	263rpm	252rpm	242rpm	226rpm	209rpm	173rpm
	75 [19. 82]	62 [549]	165 [1460]	256 [2266]	288 [2549]	347 [3071]	412 [3646]	474 [4195]	486 [4301]	542 [4797]
	Max Int.	294rpm	291rpm	287rpm	283rpm	274rpm	263rpm	249rpm	236rpm	211rpm

GR315		19. 26in ³ /rev (315. 7cm ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		50. 8[725]	71. 1[1015]	91. 4[1305]	101. 5[1450]	121. 8[1740]	142. 2[2031]	162. 5[2321]	177. 7[2538]	
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification								
	5 [1. 32]	215 [1903]	302 [2673]							
		13rpm	11rpm							
	10 [2. 64]	218 [1929]	305 [2699]	383 [3390]	422 [3735]	488 [4319]	551 [4877]	622 [5505]		
		28rpm	27rpm	25rpm	24rpm	21rpm	18rpm	13rpm		
	20 [5. 28]	215 [1903]	303 [2682]	380 [3363]	418 [3700]	485 [4293]	549 [4859]	620 [5487]	660 [5841]	
		60rpm	59rpm	57rpm	55rpm	52rpm	49rpm	45rpm	42rpm	
	30 [7. 93]	204 [1806]	296 [2620]	375 [3319]	413 [3655]	480 [4248]	542 [4797]	613 [5425]	654 [5788]	
		91rpm	89rpm	86rpm	84rpm	81rpm	78rpm	72rpm	67rpm	
	40 [10. 57]	196 [1735]	287 [2540]	368 [3257]	410 [3629]	477 [4222]	539 [4771]	609 [5390]	650 [5753]	
		122rpm	120rpm	117rpm	112rpm	106rpm	100rpm	94rpm	85rpm	
	50 [13. 21]	176 [1558]	270 [2390]	356 [3151]	393 [3478]	461 [4080]	526 [4655]	597 [5284]	645 [5709]	
		154rpm	151rpm	147rpm	140rpm	131rpm	120rpm	109rpm	100rpm	
	60 [15. 85]	162 [1434]	246 [2177]	339 [3000]	374 [3310]	446 [3947]	511 [4523]	586 [5187]	628 [5558]	
	Max Cont.	185rpm	182rpm	177rpm	172rpm	163rpm	152rpm	140rpm	134rpm	
	70 [18. 49]	143 [1266]	235 [2080]	324 [2868]	358 [3169]	430 [3806]	493 [4363]	562 [4974]	614 [5434]	
		217rpm	213rpm	208rpm	201rpm	190rpm	178rpm	166rpm	158rpm	
	75 [19. 82]	145 [1106]	212 [1876]	303 [2682]	339 [3000]	417 [3691]	481 [4257]	543 [4806]	582 [5151]	
	Max Int.	232rpm	228rpm	222rpm	216rpm	208rpm	200rpm	183rpm	171rpm	

Hydraulic Orbit Motors GR



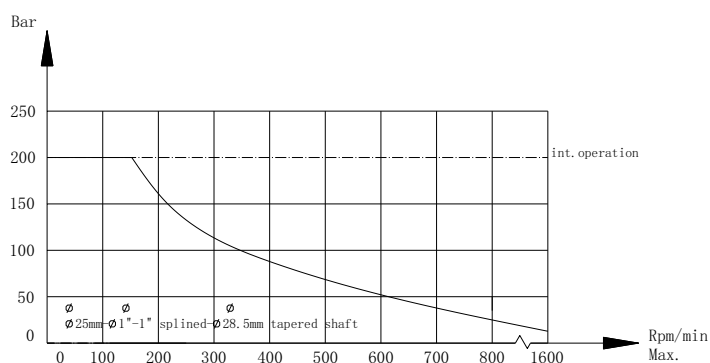
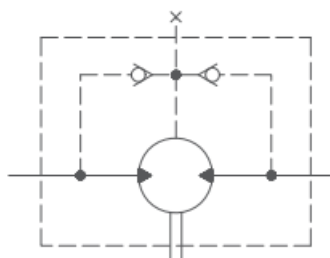
Flow Data

GR400		397cm ³ /rev (24.4in ³ /rev)					Max Cont.		Max Int.
Pressure bar [psi→]		50.8 [725]	71.1 [1015]	91.4 [1305]	101.5 [1450]	121.8 [1740]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min (gpm ↓)	Torque N m [lb-in] Speed Specification							
	5 [1.32]	153 [1354]	232 [2053]						
		12rpm	10rpm						
	10 [2.64]	157 [1390]	236 [2089]	284 [2514]	337 [2983]	406 [3593]	497 [4399]	612 [5417]	668 [5912]
		24rpm	23rpm	22rpm	21rpm	19rpm	17rpm	15rpm	12rpm
	20 [5.28]	150 [1328]	232 [2053]	280 [2478]	332 [2938]	401 [3549]	490 [4337]	606 [5364]	649 [5841]
		49rpm	48rpm	47rpm	46rpm	44rpm	41rpm	38rpm	32rpm
	30 [7.93]	142 [1257]	215 [1903]	274 [2425]	327 [2894]	398 [3523]	483 [4275]	603 [5337]	652 [5771]
		76rpm	75rpm	74rpm	73rpm	71rpm	67rpm	63rpm	50rpm
	40 [10.57]	126 [1115]	212 [1876]	268 [2372]	320 [2832]	393 [3478]	477 [4222]	593 [5248]	635 [5620]
		103rpm	101rpm	99rpm	97rpm	95rpm	92rpm	88rpm	70rpm
	50 [13.21]	105 [929]	187 [1655]	242 [2142]	302 [2673]	376 [3328]	455 [4027]	583 [5160]	608 [5381]
		128rpm	126rpm	124rpm	121rpm	118rpm	115rpm	111rpm	96rpm
	60 [15.85]	90 [797]	167 [1478]	229 [2027]	281 [2487]	362 [3204]	444 [3930]	566 [5009]	600 [5310]
	Max Cont.	154rpm	152rpm	150rpm	148rpm	145rpm	138rpm	130rpm	121rpm
	70 [18.49]	90 [797]	149 [1319]	200 [1770]	258 [2283]	341 [3018]	425 [3762]	546 [4832]	580 [5133]
		180rpm	179rpm	178rpm	176rpm	173rpm	168rpm	160rpm	148rpm
	75 [19.82]	56 [496]	125 [1106]	182 [1611]	241 [2133]	320 [2832]	408 [3611]	524 [4638]	565 [5001]
	Max Int.	195rpm	194rpm	193rpm	191rpm	189rpm	185rpm	178rpm	170rpm

Technical Data

Hydraulic orbit Motors GR

Permissible shaft seal pressure



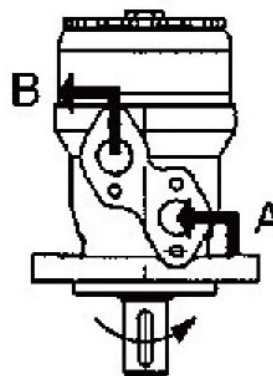
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Case Drain

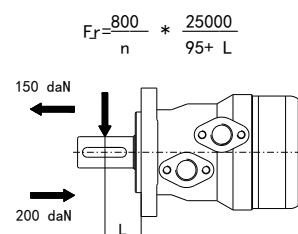
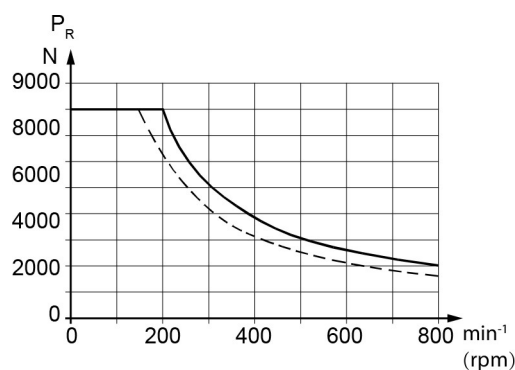
In applications without a motor drain line, the pressure exerted on the shaft seal is marginally in excess of the return line pressure. When the Drain line is used, the pressure exerted on the shaft seal is equal to the return line pressure.

Standard direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate: Clock-wise when port "A" is pressurized. Counter-clockwise port "B" is pressurized.



Axial and Radial forces



F_r =Radial Force (daN)

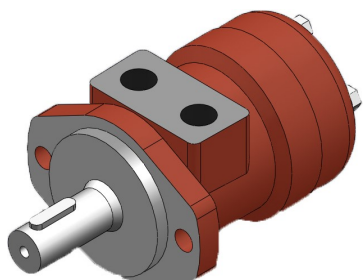
L =Distance (mm)

n =Speed (rpm)

Rhomb-flange $L=30\text{mm}$

Square-flange $L=24\text{mm}$

General

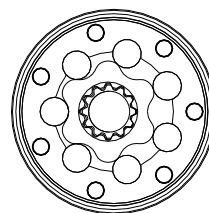


APPLICATION

- ◇ Conveyors
- ◇ Feeding machinery of robots and manipulators
- ◇ Metal working machines
- ◇ Textile machines
- ◇ Agricultural machines
- ◇ Food industries
- ◇ Lawn mower

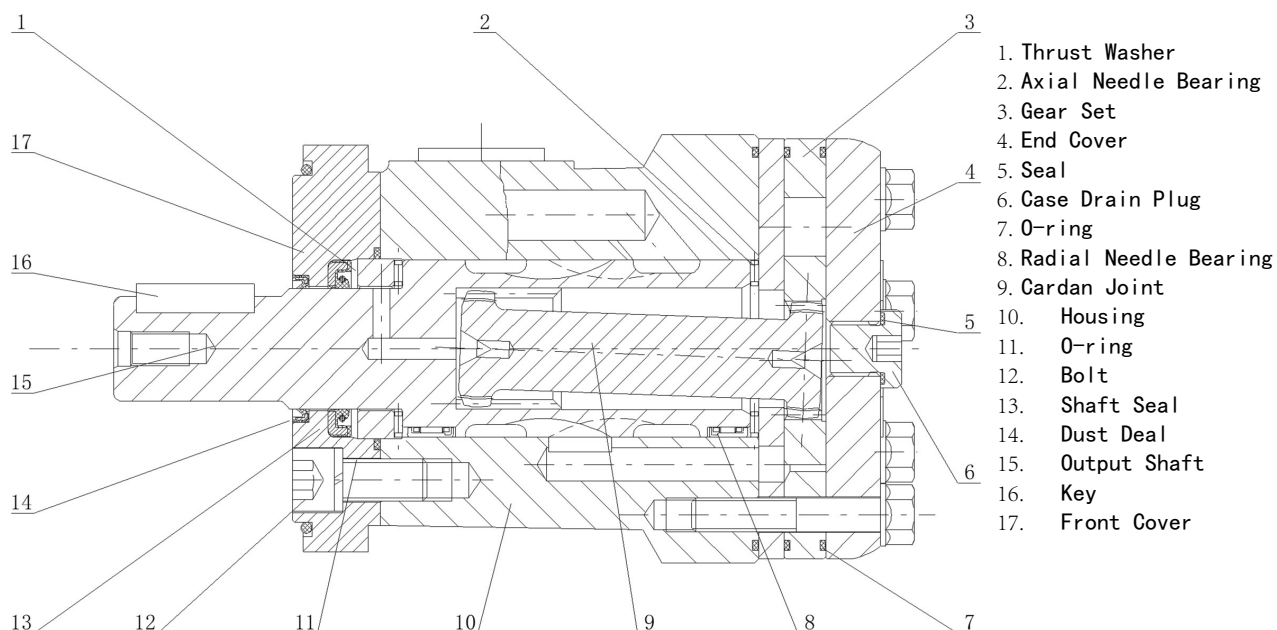
OPTIONS

- ◇ Flange connection
- ◇ Motor with needle bearing
- ◇ Side and rear ports
- ◇ Shafts—straight, splined and tapered
- ◇ Shaft seal for high and low pressure
- ◇ Metric and BSPP ports
- ◇ Speed sensing
- ◇ Other special features

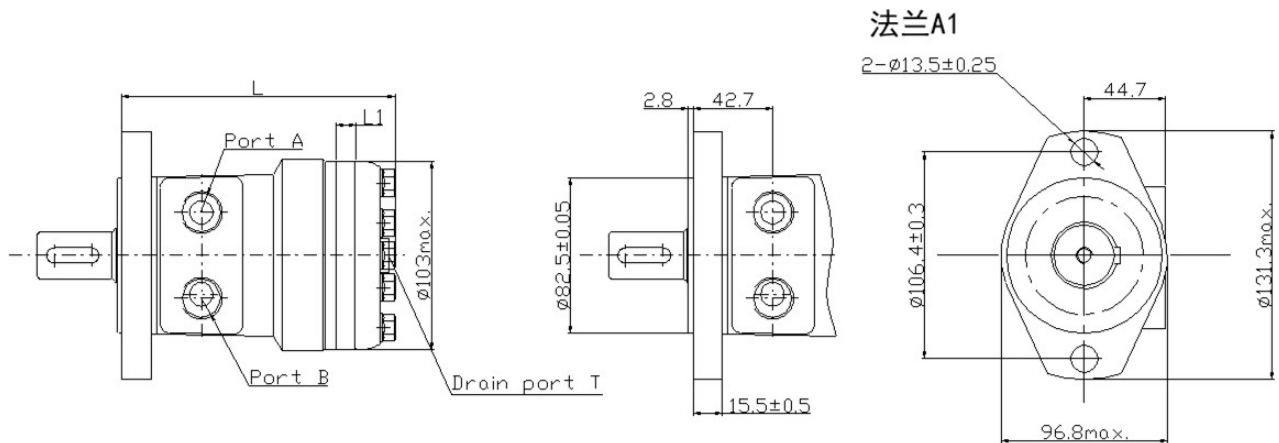


- ◇ Shaft distribution flow

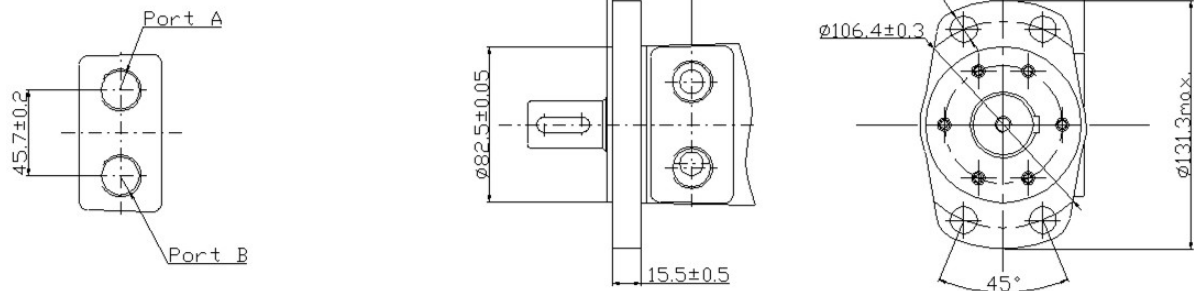
Model		GRS50	GRS80	GRS100	GRS125	GRS160	GRS200	GRS250	GRS315	GRS400
Disp.	in ³ /rev	3.14	4.90	6.09	7.67	9.74	12.19	15.26	19.26	24.4
	cm ³ /rev	51.5	80.3	99.8	125.7	159.6	199.8	250.1	315.7	397
Max Speed rpm	连续 cont.	775	750	600	475	375	300	240	190	150
	断续 int.	970	940	750	600	470	375	300	240	190
Max Torque N m [lb-in]	连续 cont.	100 [900]	200 [1770]	240 [2125]	300 [2665]	390 [3450]	385 [3410]	390 [3450]	360 [3185]	380 [3360]
	断续 int.	130 [1150]	220 [1947]	280 [2480]	340 [3010]	430 [3805]	460 [4070]	470 [4160]	470 [4160]	470 [4160]
Max Dif. bar [psi]	连续 cont.	140 [2030]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	140 [2030]	110 [1600]	85 [1230]	65 [940]
	断续 int.	175 [2540]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	175 [2540]	140 [2030]	115 [1670]	90 [1300]
Max Flow l/min [gpm]	连续 cont.	40 [10.5]	60 [15.8]	60 [15.8]	60 [15.8]	60 [15.8]	60 [15.8]	60 [15.8]	60 [15.8]	60 [15.8]
	断续 int.	50 [13.2]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]
Weight kg [lbs]		6.9 [15.2]	7 [15.4]	7.3 [16.1]	7.4 [16.3]	7.6 [15.4]	8.1 [17.6]	8.5 [18.5]	9.2 [20.3]	9.9 [21.8]



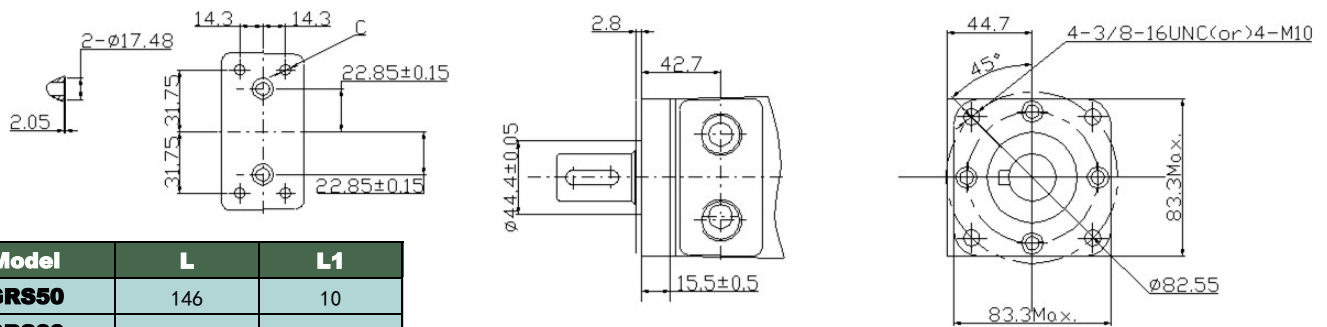
Dimensions and Mounting Data



Port 油口: G, S, P, R, M1, M2, M3



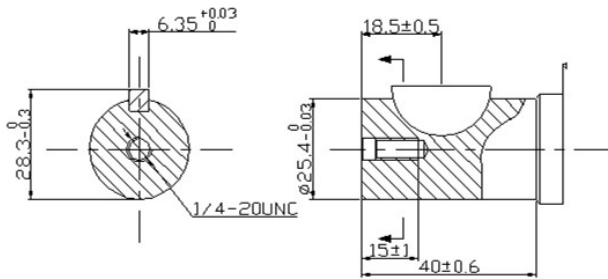
Port 油口: D1, D2



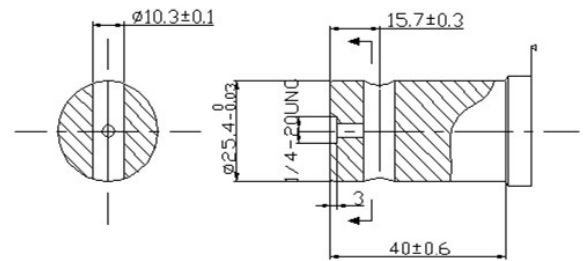
Model	L	L1
GRS50	146	10
GRS80	152	16
GRS100	156	20
GRS125	161	25
GRS160	166.5	30.5
GRS200	174	38.1
GRS250	186	50
GRS315	198	62
GRS400	213	76

Port	G7 (Depth)	U9 (Depth)	UA (Depth)	G8 (Depth)	M2 (Depth)	M3 (Depth)	M4 (Depth)	D1 (Depth)	D2 (Depth)
P(A,B)	G1/2 (15)	7/8-14 O-ring (17)	1/2-14NPTF (15)	PT (RC) 1/2 (15)	M18x1.5 (15)	M20x1.5 (15)	M22x1.5 (15)	10	10
T	G1/4 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT (RC) 1/4 (9.7)	M10x1 (12)	M10x1 (12)	M10x1 (12)	7/16-20UNF (12)	G1/4 (12)
C	-	-	-	-	-	-	-	4-5/16-18UNC (13)	4-M8 (13)

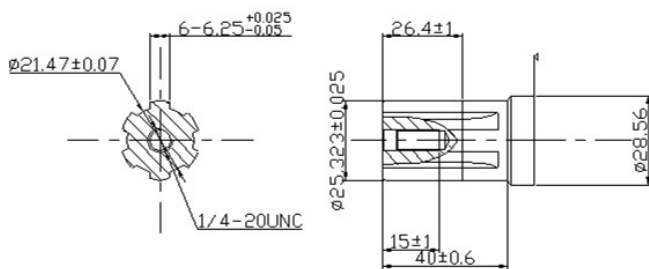
GRS Shaft Extension Dimensions Data



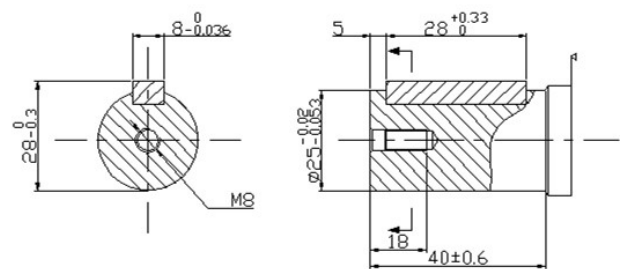
Shaft S6: Cylindrical shaft $\varnothing 25.4$
Woodruff key $\varnothing 25.4 \times 6.35$



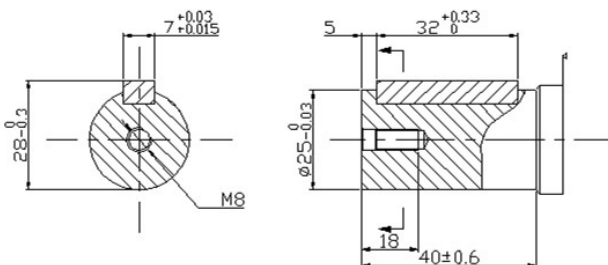
Shaft S9: Cylindrical shaft $\varnothing 25.4$
Pin hole $\varnothing 10.3$



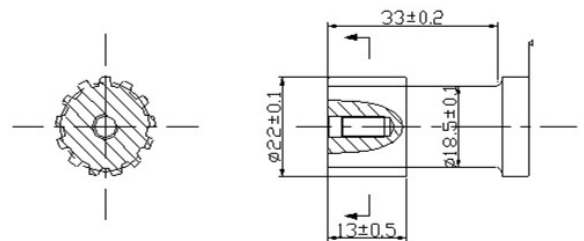
Shaft R4: Splined SAE 6B



Shaft SC: Cylindrical shaft $\varnothing 25$
Parallel key $8 \times 7 \times 8$

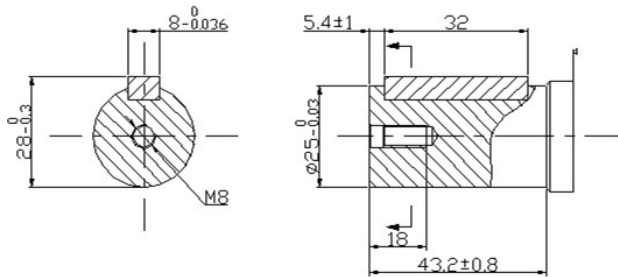


Shaft SD: Cylindrical shaft $\varnothing 25$
Parallel key $7 \times 7 \times 32$

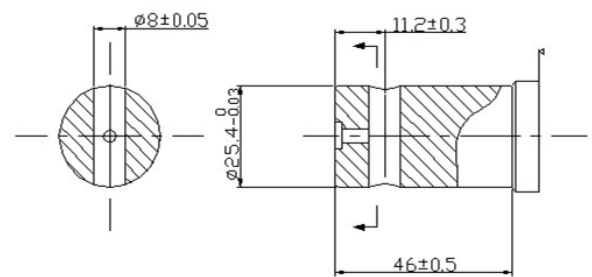


Shaft R5: Splined 13-DP16/32

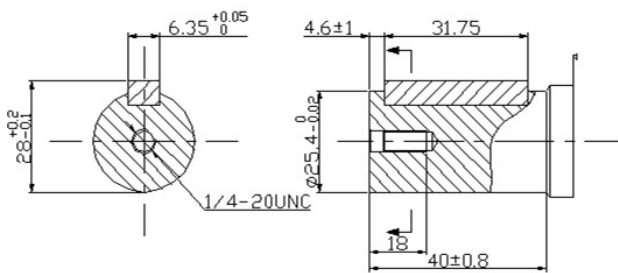
GRS Shaft Extension Dimensions Data



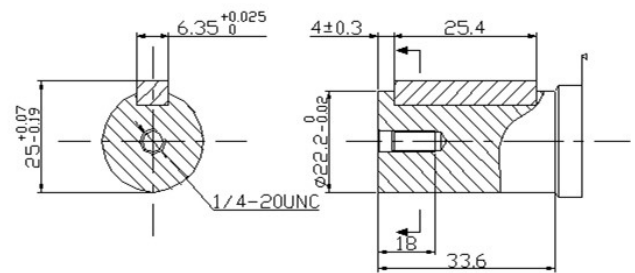
Shaft S7: Cylindrical shaft $\varnothing 25$
Parallel key 8x7x32



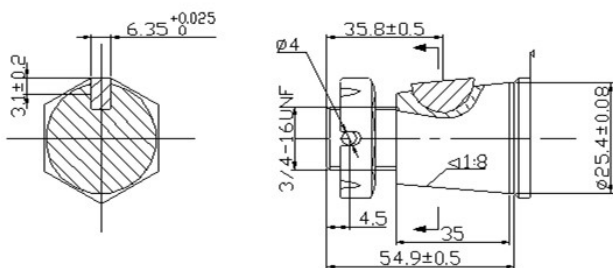
Shaft SA: Cylindrical shaft $\varnothing 25.4$
Pin hole $\varnothing 8$



Shaft S8: Cylindrical shaft $\varnothing 25.4$
Parallel key 6.35x6.35x31.75



Shaft SB: Cylindrical shaft $\varnothing 22.22$
Parallel key 6.35x6.35x25.4



Shaft T3: Tapered shaft $\varnothing 25.4$
Woodruff key $\varnothing 25.4$ x6.35
Tightening torque: 200 ± 10 Nm

GRS - How To Order

Ordering Example:		Model	Displacement	Flange	Drive shaft	Ports	Other functions
		GRS	50	A1	S6	G7	ACA
Model	Brake Opt	Disp.	Flange	Drive shaft		Ports	
GRS	None= blank Brake= GBD	50	A1=2-Hole SAE A	S6=Shaft $\varnothing$ 25.4, woodruff key $\varnothing$ 25.4x6.35		G7=G1/2, G1/4	
		80	Flange, Pilot $\varnothing$ 82.5x8	R4=Shaft $\varnothing$ 25.4, spline SAE 6B S7=Shaft $\varnothing$ 25, parallel key 8x7x32		U9=7/8-14 O-ring, 7/16-20UNF	
		100	A2=4-Hole SAE A	S8=Shaft $\varnothing$ 25.4, parallel key 6.35x6.35x31.75		UA=1/2-14NPTF, 7/16-20UNF	
		125	Flange, Pilot $\varnothing$ 82.5x8	S9=Shaft $\varnothing$ 25.4, Pin hole $\varnothing$ 10.3		G8=PT(Rc)1/2, PT(Rc)1/4	
		160	H4=4-3/8-16 Hole	SA=Shaft $\varnothing$ 25.4, Pin hole $\varnothing$ 8 SB=Shaft $\varnothing$ 22.22, parallel key 6.35x6.35x25.4		D1= $\varnothing$ 10 O-ring Plate 4x5/16-18UNC, 7/16-20UNF	
		200	Square Flange, Pilot $\varnothing$ 44.4x2.8	R5=Shaft $\varnothing$ 22.22, spline 13-DP16/32		D2= $\varnothing$ 10 O-ring Plate 4xM8, G1/4	
		250	H5=4-M10 Hole Square	T3=Tapered shaft $\varnothing$ 25.4, wood-ruff key $\varnothing$ 25.4x6.35		M2=M18x1.5, M10x1	
		315	Flange, Pilot $\varnothing$ 44.4x2.8	SD=Shaft $\varnothing$ 25, parallel key 7x7x32		M3=M20x1.5, M10x1	
		400		SC=Shaft $\varnothing$ 25, parallel key 8x7x28		M4=M22x1.5, M10x1	

Rotation direction	Paint	Standard Options	Seal Options	Relief Options	Speed Sensor Option
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature	Blank= None HPS=High Pressure Seal SG=Seal Guard HPS-SG= High Pressure Seal & Seal Guard	Blank=None R=Valve Cavity Only R12=Bi-directional relief max 125 bar R-20= Bi-directional relief max 207 bar	Blank= None SS= Speed Sensor, 4-pin, M12 male connector

Hydraulic Orbit Motors GRS



Flow Data

GRS50		51.5cm ³ /rev (3.14in ³ /rev)					Max Cont.		Max Int.
Pressure bar [psi→]		50.8[725]	71.1[1015]	91.4[1305]	101.5[1450]	121.8[1740]	142.2[2031]	162.5[2321]	177.7[2538]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification							
	5 [1.32]	35 [310]	45 [398]	61 [540]	67 [593]	77 [682]	88 [779]		
		93rpm	84rpm	76rpm	73rpm	69rpm	46rpm		
	10 [2.64]	36 [319]	46 [407]	62 [549]	69 [611]	80 [708]	95 [841]	108 [956]	120 [1062]
		186rpm	178rpm	166rpm	162rpm	153rpm	136rpm	118rpm	97rpm
	15 [3.96]	35 [310]	49 [434]	63 [558]	73 [646]	88 [779]	100 [885]	109 [965]	123 [1089]
		283rpm	277rpm	269rpm	261rpm	250rpm	230rpm	211rpm	185rpm
	20 [5.28]	34 [305]	47 [416]	61 [540]	69 [611]	83 [735]	96 [850]	109 [965]	126 [1115]
		377rpm	375rpm	365rpm	361rpm	346rpm	330rpm	302rpm	270rpm
	30 [7.93]	33 [292]	44 [389]	60 [531]	67 [593]	80 [708]	95 [841]	108 [956]	126 [1115]
		576rpm	569rpm	561rpm	554rpm	542rpm	531rpm	500rpm	465rpm
	40 [10.57]	30 [266]	41 [363]	58 [513]	66 [584]	79 [699]	92 [814]	106 [938]	122 [1080]
		760rpm	758rpm	753rpm	750rpm	738rpm	724rpm	700rpm	670rpm
	45 [11.89]	29 [261]	40 [354]	57 [504]	65 [575]	78 [690]	90 [797]	105 [929]	121 [1071]
		856rpm	853rpm	849rpm	845rpm	835rpm	815rpm	796rpm	770rpm
	50 [13.21]	26 [230]	37 [327]	53 [469]	60 [531]	73 [646]	85 [752]	99 [876]	114 [1009]
	Max Cont.	950rpm	940rpm	925rpm	906rpm	880rpm	852rpm	832rpm	801rpm
	60 [15.85]	20 [177]	33 [292]	48 [425]	56 [496]	69 [611]	81 [717]	95 [841]	109 [965]
	Max Int.	1138rpm	1124rpm	1100rpm	1075rpm	1056rpm	1028rpm	1006rpm	970rpm

GRS80	80. 3cm^3/rev (4. 90in^3/rev)							Max Cont.		Max Int.
Pressure bar [psi→]		50. 8[725]	71. 1[1015]	91. 4[1305]	101. 5[1450]	121. 8[1740]	142. 2[2031]	162. 5[2321]	177. 7[2538]	203. 1[2901]
Flow	l/min[gpm↓]	Torque (lb-in) Speed Specification								
	5 [1. 32]	50 [443]	64 [566]	88 [779]	108 [956]	133 [1177]				
		59rpm	56rpm	50rpm	44rpm	38rpm				
	10 [2. 64]	54 [478]	77 [682]	99 [876]	108 [956]	129 [1142]	150 [1328]	173 [1531]		
		118rpm	113rpm	106rpm	97rpm	86rpm	79rpm	56rpm		
	20 [5. 28]	57 [504]	78 [690]	102 [903]	111 [982]	134 [1186]	155 [1372]	177 [1567]	196 [1735]	225 [1991]
		238rpm	234rpm	227rpm	216rpm	203rpm	190rpm	178rpm	154rpm	135rpm
	30 [7. 93]	54 [478]	75 [664]	100 [885]	108 [956]	131 [1159]	152 [1345]	176 [1558]	195 [1726]	223 [1974]
		360rpm	352rpm	340rpm	332rpm	316rpm	302rpm	290rpm	274rpm	250rpm
	40 [10. 57]	48 [425]	73 [646]	96 [850]	105 [929]	127 [1124]	148 [1310]	172 [1522]	190 [1682]	220 [1947]
		480rpm	470rpm	458rpm	445rpm	430rpm	418rpm	403rpm	388rpm	359rpm
	50 [13. 21]	42 [372]	70 [620]	93 [823]	102 [903]	124 [1097]	147 [1301]	170 [1505]	188 [1664]	218 [1929]
		604rpm	595rpm	582rpm	570rpm	556rpm	540rpm	521rpm	504rpm	487rpm
	60 [15. 85]	37 [327]	66 [584]	89 [788]	99 [876]	121 [1071]	144 [1275]	166 [1469]	184 [1629]	213 [1885]
		Max Cont.	726rpm	715rpm	704rpm	692rpm	678rpm	663rpm	647rpm	622rpm
	70 [18. 49]	32 [283]	60 [531]	83 [735]	95 [841]	116 [1027]	140 [1239]	160 [1416]	177 [1567]	208 [1841]
		845rpm	834rpm	820rpm	802rpm	789rpm	767rpm	754rpm	730rpm	705rpm
	75 [19. 82]	21 [186]	50 [443]	78 [690]	90 [797]	111 [982]	135 [1195]	154 [1363]	171 [1513]	200 [1770]
		Max Int.	910rpm	895rpm	881rpm	867rpm	852rpm	830rpm	806rpm	787rpm

Hydraulic Orbit Motors GRS



Flow Data

GRS100		99.8cm ³ /rev (6.09in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		50.8 [725]	71.1[1015]	91.4[1305]	101.5[1450]	121.8[1740]	142.2[2031]	162.5[2321]	177.7[2538]	203.1[2901]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification								
	5 [1.32]	66 [584] 45rpm	92 [814] 42rpm	120 [1062] 38rpm	135 [1195] 34rpm	156 [1381] 27rpm				
	10 [2.64]	68 [602] 93rpm	96 [850] 90rpm	125 [1106] 86rpm	138 [1221] 81rpm	159 [1407] 74rpm	188 [1664] 57rpm	212 [1876] 42rpm		
	20 [5.28]	65 [575] 189rpm	94 [832] 185rpm	123 [1089] 180rpm	137 [1213] 173rpm	155 [1372] 165rpm	186 [1646] 158rpm	210 [1859] 150rpm	238 [2106] 139rpm	274 [2425] 118rpm
	30 [7.93]	63 [558] 286rpm	92 [814] 281rpm	120 [1062] 275rpm	133 [1177] 266rpm	153 [1354] 257rpm	185 [1637] 246rpm	209 [1850] 237rpm	235 [2080] 225rpm	270 [2390] 207rpm
	40 [10.57]	57 [504] 385rpm	88 [779] 378rpm	117 [1036] 365rpm	130 [1151] 355rpm	152 [1345] 345rpm	185 [1637] 332rpm	208 [1841] 320rpm	233 [2062] 314rpm	267 [2363] 297rpm
	50 [13.21]	48 [425] 482rpm	79 [699] 477rpm	110 [974] 470rpm	123 [1089] 460rpm	150 [1328] 448rpm	183 [1620] 435rpm	204 [1806] 420rpm	228 [2018] 405rpm	260 [2301] 389rpm
	60 [15.85] Max Cont.	38 [336] 580rpm	70 [620] 572rpm	105 [929] 560rpm	120 [1062] 548rpm	144 [1275] 535rpm	178 [1575] 523rpm	200 [1770] 510rpm	220 [1947] 500rpm	252 [2230] 478rpm
	70 [18.49]	32 [283] 678rpm	65 [575] 670rpm	100 [885] 660rpm	118 [1044] 648rpm	141 [1248] 638rpm	176 [1558] 626rpm	197 [1744] 615rpm	215 [1903] 606rpm	246 [2177] 580rpm
	75 [19.82] Max Int.	23 [204] 728rpm	59 [522] 720rpm	93 [823] 710rpm	111 [982] 695rpm	136 [1204] 681rpm	170 [1505] 667rpm	192 [1699] 650rpm	210 [1859] 634rpm	240 [2124] 618rpm

GRS125		125.7cm ³ /rev (7.67in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		50.8[725]	71.1[1015]	91.4 [1305]	101.5 [1450]	121.8 [1740]	142.2 [2031]	162.5 [2321]	177.7 [2538]	203.1 [2901]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification								
	5 [1.32]	76 [673] 36rpm	110 [974] 31rpm	145 [1283] 25rpm	167 [1478] 19rpm	189 [1673] 13rpm				
	10 [2.64]	84 [743] 73rpm	118 [1044] 70rpm	155 [1372] 60rpm	176 [1558] 48rpm	202 [1788] 36rpm	228 [2018] 25rpm	253 [2239] 19rpm		
	20 [5.28]	82 [726] 153rpm	117 [1036] 151rpm	153 [1354] 148rpm	174 [1540] 144rpm	200 [1770] 138rpm	230 [2036] 128rpm	259 [2292] 117rpm	294 [2602] 104rpm	332 [2938] 73rpm
	30 [7.93]	79 [699] 231rpm	116 [1027] 228rpm	151 [1336] 224rpm	171 [1513] 218rpm	198 [1752] 210rpm	228 [2018] 201rpm	257 [2275] 183rpm	292 [2584] 168rpm	329 [2912] 137rpm
	40 [10.57]	72 [637] 309rpm	114 [1009] 307rpm	148 [1310] 303rpm	168 [1487] 298rpm	196 [1735] 292rpm	226 [2000] 280rpm	256 [2266] 270rpm	290 [2567] 252rpm	327 [2894] 218rpm
	50 [13.21]	62 [549] 389rpm	105 [929] 386rpm	143 [1266] 382rpm	165 [1460] 378rpm	195 [1726] 370rpm	223 [1974] 360rpm	254 [2248] 344rpm	287 [2540] 328rpm	323 [2859] 292rpm
	60 [15.85] Max Cont.	52 [460] 467rpm	98 [867] 463rpm	136 [1204] 459rpm	160 [1416] 456rpm	191 [1690] 448rpm	220 [1947] 427rpm	250 [2213] 410rpm	282 [2496] 399rpm	319 [2823] 352rpm
	70 [18.49]	41 [363] 545rpm	90 [797] 542rpm	130 [1151] 538rpm	156 [1381] 534rpm	187 [1655] 529rpm	215 [1903] 520rpm	242 [2142] 508rpm	278 [2460] 486rpm	313 [2770] 430rpm
	75 [19.82] Max Int.	32 [283] 586rpm	79 [699] 583rpm	126 [1115] 578rpm	148 [1310] 570rpm	180 [1593] 560rpm	208 [1841] 546rpm	234 [2071] 532rpm	262 [2319] 520rpm	300 [2655] 480rpm

Hydraulic Orbit Motors GRS



Flow Data

GRS160		159.6cm ³ /rev(9.74in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		50.8[725]	71.1[1015]	91.4[1305]	101.5[1450]	121.8[1740]	142.2[2031]	162.5[2321]	177.7[2538]	203.1[2901]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification								
	5 [1.32]	104 [920]	146 [1292]	190 [1682]	210 [1859]	245 [2168]				
		26rpm	23rpm	20rpm	16rpm	10rpm				
	10 [2.64]	107 [947]	150 [1328]	195 [1726]	216 [1912]	250 [2213]	290 [2567]	335 [2965]		
		59rpm	56rpm	50rpm	45rpm	37rpm	30rpm	22rpm		
	20 [5.28]	102 [903]	151 [1336]	198 [1752]	220 [1947]	257 [2275]	298 [2638]	342 [3027]	370 [3275]	420 [3717]
		121rpm	118rpm	115rpm	113rpm	108rpm	102rpm	97rpm	90rpm	78rpm
	30 [7.93]	97 [859]	146 [1292]	190 [1682]	217 [1921]	256 [2266]	295 [2611]	340 [3009]	368 [3257]	416 [3682]
		184rpm	178rpm	173rpm	170rpm	164rpm	155rpm	143rpm	128rpm	103rpm
	40 [10.57]	89 [788]	140 [1239]	185 [1637]	210 [1859]	252 [2230]	290 [2567]	335 [2965]	363 [3213]	412 [3646]
		246rpm	241rpm	235rpm	228rpm	220rpm	210rpm	194rpm	177rpm	150rpm
	50 [13.21]	72 [637]	128 [1133]	179 [1584]	202 [1788]	244 [2160]	284 [2514]	327 [2894]	358 [3169]	409 [3620]
		310rpm	307rpm	300rpm	295rpm	287rpm	278rpm	262rpm	247rpm	210rpm
	60 [15.85]	60 [531]	116 [1027]	170 [1505]	198 [1752]	240 [2124]	279 [2469]	321 [2841]	352 [3115]	400 [3540]
	Max Cont.	374rpm	367rpm	359rpm	354rpm	346rpm	338rpm	323rpm	306rpm	265rpm
	70 [18.49]	49 [434]	107 [947]	164 [1452]	193 [1708]	233 [2062]	271 [2399]	309 [2735]	344 [3045]	390 [3452]
		437rpm	430rpm	421rpm	415rpm	403rpm	393rpm	381rpm	365rpm	318rpm
	75 [19.82]	36 [319]	109 [867]	152 [1345]	185 [1637]	226 [2000]	265 [2345]	300 [2655]	334 [2956]	379 [3354]
	Max Int.	472rpm	463rpm	450rpm	441rpm	431rpm	420rpm	405rpm	389rpm	365rpm

GRS200		199.8cm ³ /rev(12.19in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		50.8[725]	71.1[1015]	91.4[1305]	101.5[1450]	121.8[1740]	142.2[2031]	162.5[2321]	177.7[2538]	203.1[2901]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification								
	5 [1.32]	132 [1168]	181 [1602]	238 [2106]	262 [2319]	310 [2744]				
		24rpm	22rpm	18rpm	13rpm	10rpm				
	10 [2.64]	135 [1195]	186 [1646]	240 [2124]	264 [2337]	315 [2788]	356 [3151]	403 [3567]		
		49rpm	47rpm	45rpm	43rpm	38rpm	33rpm	24rpm		
	20 [5.28]	131 [1159]	183 [1620]	238 [2106]	260 [2301]	314 [2779]	358 [3169]	404 [3576]	438 [3877]	498 [4408]
		99rpm	97rpm	94rpm	92rpm	88rpm	83rpm	74rpm	64rpm	56rpm
	30 [7.93]	126 [1115]	178 [1575]	233 [2062]	254 [2248]	311 [2753]	355 [3142]	402 [3558]	431 [3815]	486 [4301]
		149rpm	147rpm	144rpm	141rpm	135rpm	126rpm	113rpm	105rpm	91rpm
	40 [10.57]	112 [991]	169 [1496]	228 [2018]	250 [2213]	307 [2717]	352 [3115]	400 [3540]	426 [3770]	477 [4222]
		200rpm	197rpm	194rpm	191rpm	185rpm	174rpm	160rpm	151rpm	127rpm
	50 [13.21]	95 [841]	156 [1381]	221 [1956]	246 [2177]	300 [2655]	350 [3098]	398 [3523]	421 [3726]	470 [4160]
		252rpm	249rpm	246rpm	243rpm	238rpm	228rpm	212rpm	194rpm	161rpm
	60 [15.85]	78 [690]	145 [1283]	213 [1885]	238 [2106]	289 [2558]	342 [3027]	386 [3416]	412 [3646]	459 [4062]
	Max Cont.	304rpm	301rpm	298rpm	294rpm	286rpm	276rpm	262rpm	243rpm	218rpm
	70 [18.49]	67 [593]	135 [1195]	206 [1823]	228 [2018]	277 [2452]	336 [2974]	375 [3319]	408 [3611]	453 [4009]
		355rpm	353rpm	349rpm	340rpm	329rpm	316rpm	300rpm	288rpm	257rpm
	75 [19.82]	58 [513]	125 [1106]	197 [1744]	220 [1947]	270 [2390]	321 [2841]	360 [3186]	398 [3523]	442 [3912]
	Max Int.	382rpm	379rpm	373rpm	362rpm	350rpm	337rpm	322rpm	312rpm	278rpm

Hydraulic Orbit Motors GRS



Flow Data

GRS250		250.1cm ³ /rev(15.26in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		50.8[725]	71.1[1015]	91.4[1305]	101.5[1450]	121.8[1740]	142.2[2031]	162.5[2321]	177.7[2538]	203.1[2901]
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification								
	5 [1.32]	175 [1549]	240 [2125]	304 [2691]	342 [3027]	407 [3602]				
		17rpm	16rpm	14rpm	12rpm	10rpm				
	10 [2.64]	178 [1575]	246 [2177]	310 [2744]	344 [3045]	409 [3620]	465 [4116]	525 [4647]		
		37rpm	35rpm	31rpm	28rpm	23rpm	18rpm	11rpm		
	20 [5.28]	175 [1549]	244 [2160]	308 [2726]	340 [3009]	408 [3611]	463 [4098]	520 [4602]	558 [4939]	686 [5629]
		75rpm	73rpm	72rpm	70rpm	66rpm	58rpm	53rpm	50rpm	42rpm
	30 [7.93]	162 [1434]	235 [2080]	304 [2691]	332 [2938]	400 [3540]	455 [4027]	516 [4567]	550 [4868]	621 [5496]
		114rpm	111rpm	108rpm	106rpm	100rpm	92rpm	83rpm	77rpm	65rpm
	40 [10.57]	143 [1266]	223 [1974]	300 [2655]	329 [2912]	396 [3505]	447 [3956]	512 [4532]	546 [4832]	617 [5461]
		154rpm	152rpm	150rpm	147rpm	143rpm	132rpm	120rpm	110rpm	90rpm
	50 [13.21]	124 [1097]	208 [1841]	289 [2558]	323 [2859]	384 [3399]	440 [3894]	503 [4452]	535 [4735]	600 [5310]
		193rpm	190rpm	187rpm	174rpm	168rpm	160rpm	149rpm	140rpm	116rpm
	60 [15.85]	103 [912]	192 [1699]	280 [2478]	314 [2779]	371 [3284]	381 [3370]	489 [4328]	514 [4549]	578 [5116]
	Max Cont.	233rpm	230rpm	227rpm	224rpm	218rpm	205rpm	190rpm	181rpm	155rpm
	70 [18.49]	88 [779]	178 [1575]	264 [2337]	301 [2664]	356 [3151]	418 [3700]	479 [4239]	498 [4408]	560 [4956]
		273rpm	270rpm	267rpm	263rpm	252rpm	242rpm	226rpm	209rpm	173rpm
	75 [19.82]	62 [549]	165 [1460]	256 [2266]	288 [2549]	347 [3071]	412 [3646]	474 [4195]	486 [4301]	542 [4797]
	Max Int.	294rpm	291rpm	287rpm	283rpm	274rpm	263rpm	249rpm	236rpm	211rpm

GRS315		315.7cm ³ /rev(19.26in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		50.8[725]	71.1[1015]	91.4[1305]	101.5[1450]	121.8[1740]	142.2[2031]	162.5[2321]	177.7[2538]	
Flow	l/min[gpm↓]	Torque N m [lb-in] Speed Specification								
	5 [1.32]	215 [1903]	302 [2673]							
		13rpm	11rpm							
	10 [2.64]	218 [1929]	305 [2699]	383 [3390]	422 [3735]	488 [4319]	551 [4877]	622 [5505]		
		28rpm	27rpm	25rpm	24rpm	21rpm	18rpm	13rpm		
	20 [5.28]	215 [1903]	303 [2682]	380 [3363]	418 [3700]	485 [4293]	549 [4859]	620 [5487]	660 [5841]	
		60rpm	59rpm	57rpm	55rpm	52rpm	49rpm	45rpm	42rpm	
	30 [7.93]	204 [1806]	296 [2620]	375 [3319]	413 [3655]	480 [4248]	542 [4797]	613 [5425]	654 [5788]	
		91rpm	89rpm	86rpm	84rpm	81rpm	78rpm	72rpm	67rpm	
	40 [10.57]	196 [1735]	287 [2540]	368 [3257]	410 [3629]	477 [4222]	539 [4771]	609 [5390]	650 [5753]	
		122rpm	120rpm	117rpm	112rpm	106rpm	100rpm	94rpm	85rpm	
	50 [13.21]	176 [1558]	270 [2390]	356 [3151]	393 [3478]	461 [4080]	526 [4655]	597 [5284]	645 [5709]	
		154rpm	151rpm	147rpm	140rpm	131rpm	120rpm	109rpm	100rpm	
	60 [15.85]	162 [1434]	246 [2177]	339 [3000]	374 [3310]	446 [3947]	511 [4523]	586 [5187]	628 [5558]	
	Max Cont.	185rpm	182rpm	177rpm	172rpm	163rpm	152rpm	140rpm	134rpm	
	70 [18.49]	143 [1266]	235 [2080]	324 [2868]	358 [3169]	430 [3806]	493 [4363]	562 [4974]	614 [5434]	
		217rpm	213rpm	208rpm	201rpm	190rpm	178rpm	166rpm	158rpm	
	75 [19.82]	145 [1106]	212 [1876]	303 [2682]	339 [3000]	417 [3691]	481 [4257]	543 [4806]	582 [5151]	
	Max Int.	232rpm	228rpm	222rpm	216rpm	208rpm	200rpm	183rpm	171rpm	

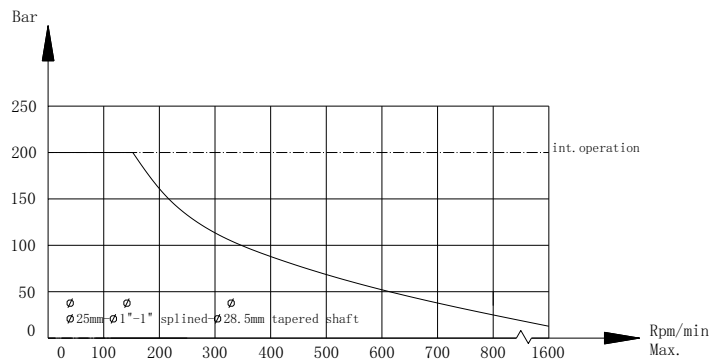
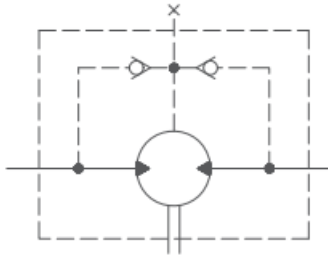
Flow Data

GRS400		397cm ³ /rev (24.4in ³ /rev)					Max Cont.		Max Int.
Pressure bar [psi→]		50.8 [725]	71.1 [1015]	91.4 [1305]	101.5 [1450]	121.8 [1740]	142.2 [2031]	162.5 [2321]	177.7 [2538]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification							
	5 [1.32]	153 [1354]	232 [2053]						
		12rpm	10rpm						
	10 [2.64]	157 [1390]	236 [2089]	284 [2514]	337 [2983]	406 [3593]	497 [4399]	612 [5417]	668 [5912]
		24rpm	23rpm	22rpm	21rpm	19rpm	17rpm	15rpm	12rpm
	20 [5.28]	150 [1328]	232 [2053]	280 [2478]	332 [2938]	401 [3549]	490 [4337]	606 [5364]	649 [5841]
		49rpm	48rpm	47rpm	46rpm	44rpm	41rpm	38rpm	32rpm
	30 [7.93]	142 [1257]	215 [1903]	274 [2425]	327 [2894]	398 [3523]	483 [4275]	603 [5337]	652 [5771]
		76rpm	75rpm	74rpm	73rpm	71rpm	67rpm	63rpm	50rpm
	40 [10.57]	126 [1115]	212 [1876]	268 [2372]	320 [2832]	393 [3478]	477 [4222]	593 [5248]	635 [5620]
		103rpm	101rpm	99rpm	97rpm	95rpm	92rpm	88rpm	70rpm
	50 [13.21]	105 [929]	187 [1655]	242 [2142]	302 [2673]	376 [3328]	455 [4027]	583 [5160]	608 [5381]
		128rpm	126rpm	124rpm	121rpm	118rpm	115rpm	111rpm	96rpm
	60 [15.85]	90 [797]	167 [1478]	229 [2027]	281 [2487]	362 [3204]	444 [3930]	566 [5009]	600 [5310]
	Max Cont.	154rpm	152rpm	150rpm	148rpm	145rpm	138rpm	130rpm	121rpm
	70 [18.49]	90 [797]	149 [1319]	200 [1770]	258 [2283]	341 [3018]	425 [3762]	546 [4832]	580 [5133]
		180rpm	179rpm	178rpm	176rpm	173rpm	168rpm	160rpm	148rpm
	75 [19.82]	56 [496]	125 [1106]	182 [1611]	241 [2133]	320 [2832]	408 [3611]	524 [4638]	565 [5001]
	Max Int.	195rpm	194rpm	193rpm	191rpm	189rpm	185rpm	178rpm	170rpm

Technical Data

Hydraulic orbit Motors GRS

Permissible shaft seal pressure



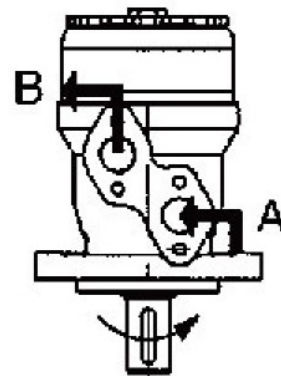
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Case Drain

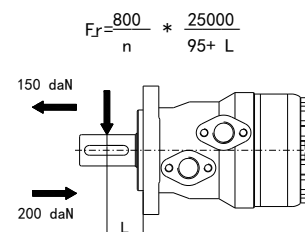
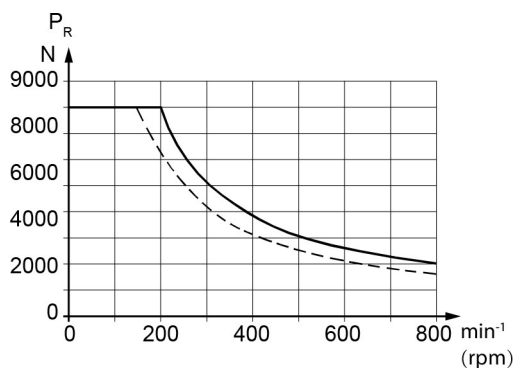
In applications without a motor drain line, the pressure exerted on the shaft seal is marginally in excess of the return line pressure. When the Drain line is used, the pressure exerted on the shaft seal is equal to the return line pressure.

Standard direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate: Clock-wise when port "A" is pressurized. Counter-clockwise port "B" is pressurized.



Axial and Radial force



F_r =Radial Force (daN)

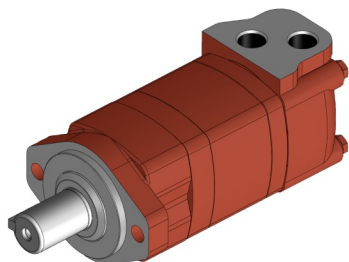
L =Distance (mm)

n =Speed (rpm)

Rhomb-flange $L=30\text{mm}$

Square-flange $L=24\text{mm}$

General

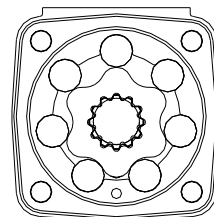


APPLICATION

- ◇ Conveyors
- ◇ Road building machines
- ◇ Metal working machines
- ◇ Special vehicles etc.
- ◇ Agricultural machines
- ◇ Food industries
- ◇ Mining machines

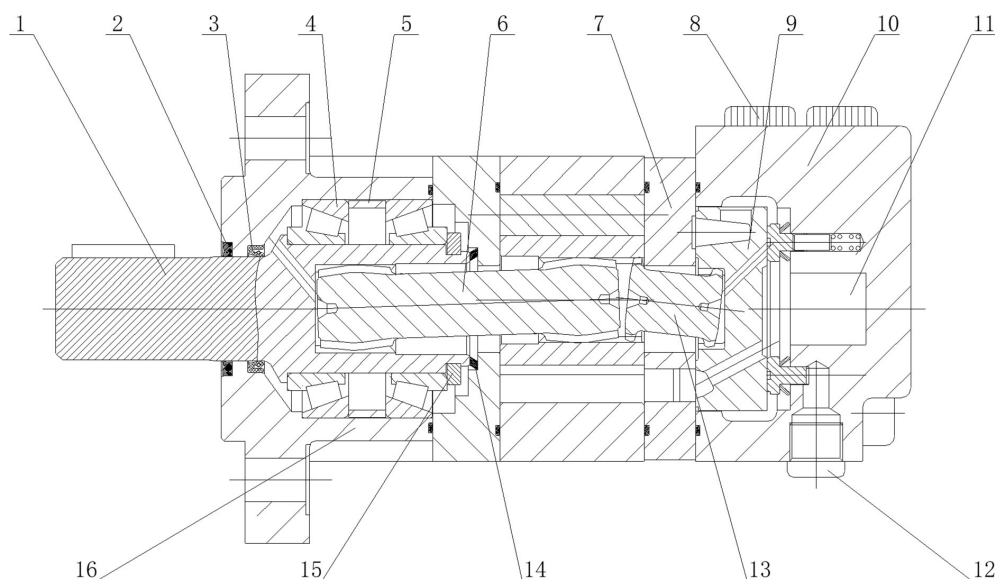
OPTIONS

- ◇ Flange and wheel mount
- ◇ Short motor
- ◇ Motor with drum brake
- ◇ Tachometer connection
- ◇ Speed sensing
- ◇ Side and rear ports
- ◇ Shafts-straight, splined and tapered
- ◇ Shaft seal for high and low pressure
- ◇ Metric and BSPP ports
- ◇ Other special features



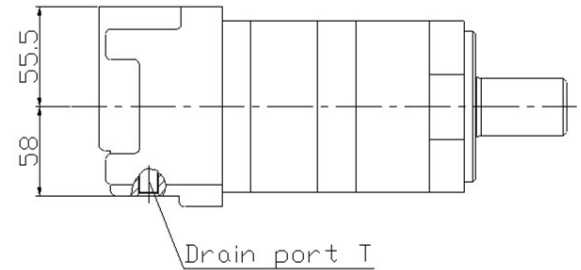
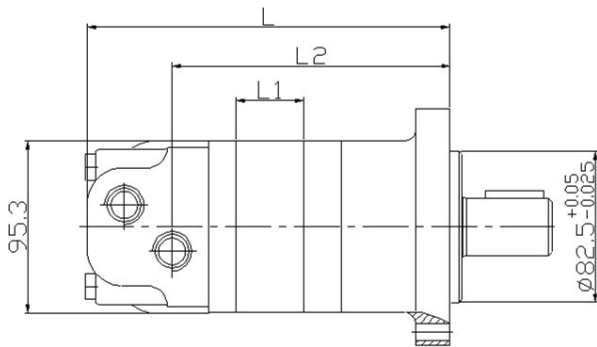
- ◇ Disc distribution flow

Model		GKA65	GKA80	GKA100	GKA125	GKA160	GKA200	GKA250	GKA315	GKA395	GKA475
Disp.	in ³ /rev	3.97	4.88	6.15	7.92	9.56	11.80	14.79	18.56	23.84	29.59
	cm ³ /rev	65	80	100.9	129.8	156.8	193.4	242.5	304.4	390.8	485
Max Speed rpm	cont.	835	800	742	576	477	385	308	246	191	153
	int.	990	980	924	720	713	577	462	365	287	230
Max Torque N m [lb-in]	cont.	185 [1637]	235 [2080]	295 [2611]	385 [3407]	445 [3938]	540 [4779]	660 [5841]	765 [6770]	775 [6859]	845 [7478]
	int.	245 [2168]	345 [3053]	445 [3938]	560 [4956]	570 [5045]	665 [5885]	820 [7257]	885 [7832]	925 [8186]	930 [8231]
Max Dif. bar [psi]	cont.	205 [2932]	210 [3003]	210 [3003]	210 [3003]	205 [2932]	205 [2932]	205 [2932]	205 [2932]	155 [2217]	120 [1716]
	int.	275 [3933]	310 [4433]	310 [4433]	310 [4433]	260 [3718]	260 [3718]	260 [3718]	240 [3432]	170 [2431]	140 [2002]
Max Flow l/min [gpm]	cont.	55 [14.52]	65 [17.16]	75 [19.80]	75 [19.80]	75 [19.80]	75 [19.80]	75 [19.80]	75 [19.80]	75 [19.80]	75 [19.80]
	int.	65 [17.16]	80 [21.12]	95 [25.08]	95 [25.08]	115 [30.36]	115 [30.36]	115 [30.36]	115 [30.36]	115 [30.36]	115 [30.36]
Weight kg [lbs]		9.2 [20]	9.4 [21]	9.7 [21]	10 [22]	10.2 [22]	10.5 [23]	11 [24]	11.5 [25]	12 [26]	12.4 [27]

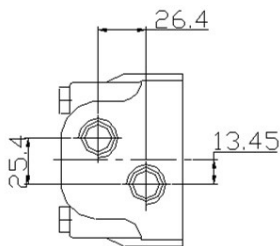


1. Output Shaft
2. Dust Seal
3. Shaft Seal
4. Roller Bearing
5. Bearing Spacer
6. Cardan Joint
7. Timing Plate
8. Shipping Plug
9. Distributor Plate
10. Rear Housing
11. Spacer
12. Case Drain Plug
13. Distributor Drive Link
14. Oil Control Ring
15. Bearing Nut
16. Front Housing
22. Drain Manifold

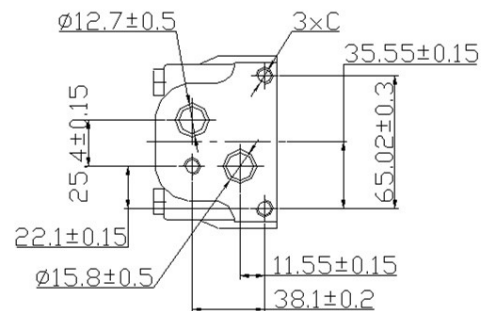
Dimensions and Mounting Data



Port: G7, DU, U9, SB, M4



Port: MU, MM

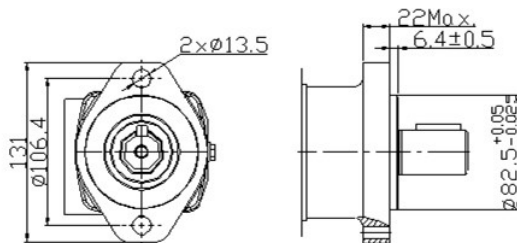


Model	L	L1	L2
GKA65	182	14.5	133.5
GKA80	185	17.8	136.5
GKA100	189.5	22.5	141.5
GKA125	196	28.9	148
GKA160	196	28.9	148
GKA200	202.5	35.6	154.5
GKA250	211.5	44.6	163.5
GKA315	223	56	175
GKA400	235.3	72	188.3
GKA475	256.5	89.3	208.5

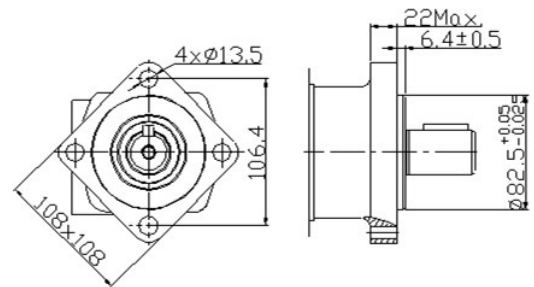
Port	G7 (Depth)	DU (Depth)	U9 (Depth)	SB (Depth)	M4 (Depth)	MU (Depth)	MM (Depth)
P(A,B)	G1/2 (15)	G1/2 (15)	7/8-14 O-ring (17)	7/8-14 O-ring (17)	M22x1.5 (15)	12.7, 15.8	12.7, 15.8
T	G1/4 (12)	7/16-20UNF (12)	7/16-20UNF (12)	G1/4 (12)	M14x1.5 (12)	7/16-20UNF (12)	G1/4 (12)
C	-	-	-	-	-	3/8-16UNC (15)	M10x1 (15)

Dimensions and Mounting Data

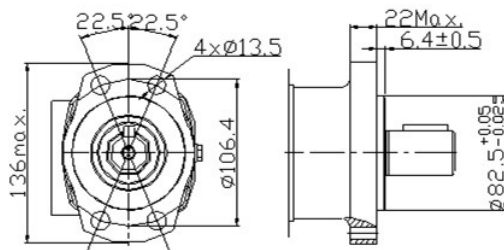
Flange A7



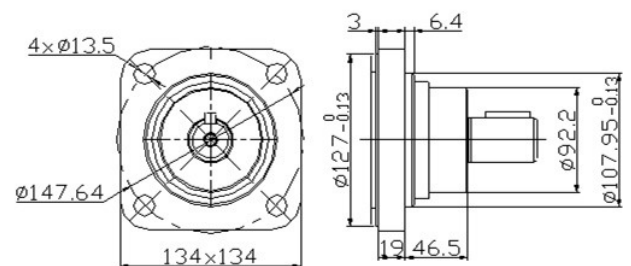
Flange H3



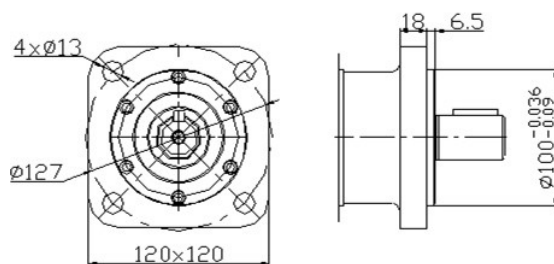
Flange A9



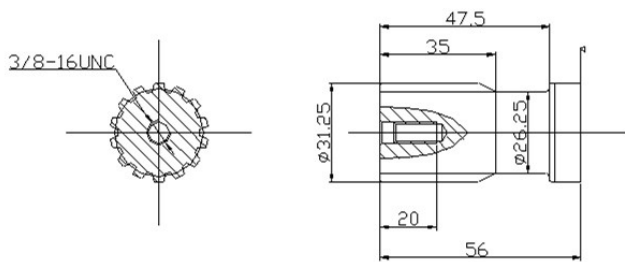
Flange W1



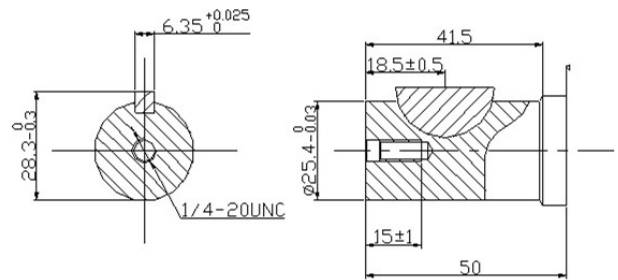
Flange W2



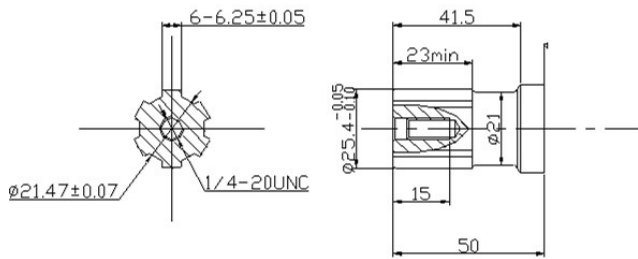
GKA Shaft Extension Dimensions Data



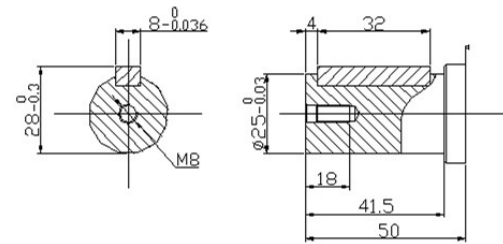
Shaft R6: Splined 14-DP12/24



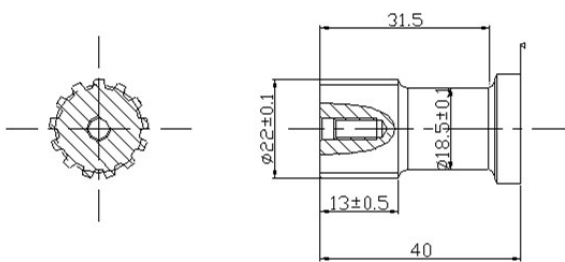
Shaft S6: Cylindrical shaft $\varnothing 25.4$
Woodruff key $\varnothing 25.4 \times 6.35$



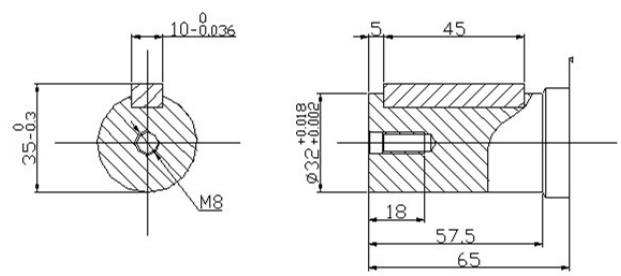
Shaft R8: 25.4 Splined SAE 6B



Shaft S1: Cylindrical shaft $\varnothing 25$
Parallel key $8 \times 7 \times 32$

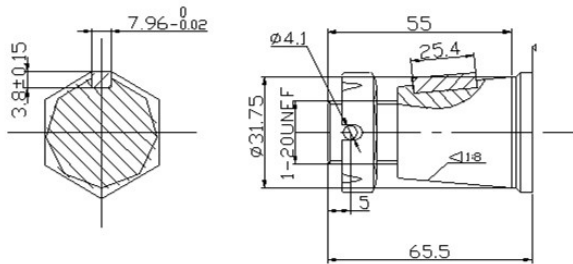


Shaft R5: Splined 13-DP16/32

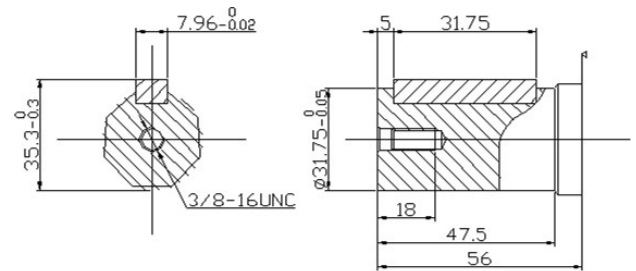


Shaft S4: Cylindrical shaft $\varnothing 32$
Parallel key $10 \times 8 \times 45$

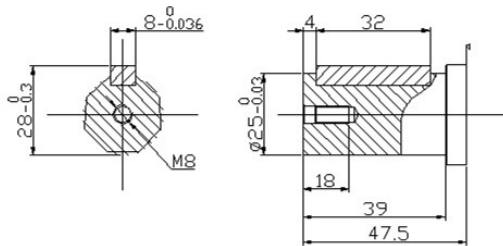
GKA Shaft Extension Dimensions Data



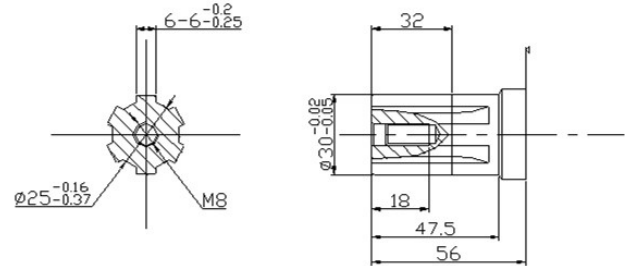
Shaft T2: Tapered shaft $\varnothing 31.75$
Parallel key 7.96x7.96x25.4
Tightening torque: 200±10Nm



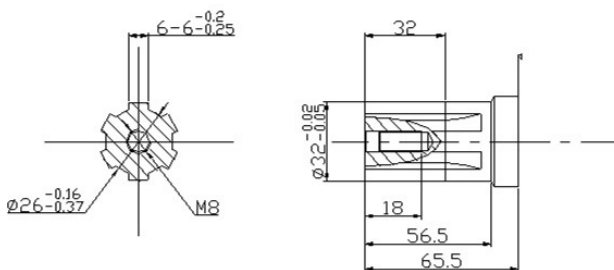
Shaft SG: Cylindrical shaft $\varnothing 31.75$
Parallel key 7.96x7.96x31.75



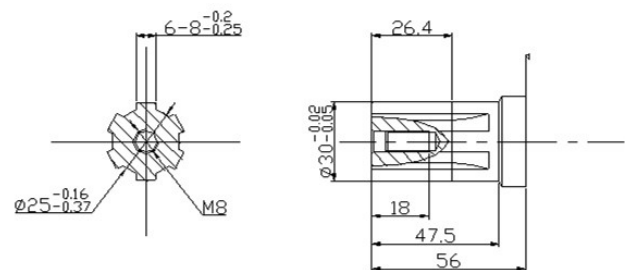
Shaft A1: Cylindrical shaft $\varnothing 25$
Parallel key 8x7x32



Shaft N: Splined 6-30x25x6



Shaft Z: Splined 6-32x26x6



Shaft J: Splined 6-30x25x8

GKA - How To Order

		Model	Displacement	Flange	Drive shaft	Ports	Other functions
Ordering Example:		GKA	65	A7	R6	G7	ACA
Model	Disp.	Flange	Drive shaft		Ports		
GKA	65	A7=2-Hole SAE A Flange, Pilot	R6=Splined 14-DP12/24		G7=G1/2, G1/4		
	80	Ø82.5x6.4	S6=Shaft Ø25.4, woodruff key		DU=G1/2, 7/16-20UNF		
	100	H3=4-Ø13.5 Hole Square Flange,	R8=Shaft Ø25.4, splined SAE 6B		U9=7/8-14 0-ring, 7/16-20UNF		
	125	Pilot Ø82.5x6.4	S1=Shaft Ø25, parallel key 8x7x32		UE = 1-1/16"-12UNF 180 side ports,		
	160	A9=4-Hole SAE A Flange, Pilot	R5=Splined 13-DP16/32		7/16"-20UNF		
	200	Ø82.5x6.4	S4=Shaft Ø32, parallel key 10x8x45		SB=7/8-14 0-ring, G1/4		
	250	W1=4-Ø13.5 Hole Square Flange,	T2=Tapered shaft Ø31.75, parallel		M4=M22x1.5, M14x1.5		
	315	Pilot Ø107.95x46.5	key 7.96x7.96x25.4		MU=Ø12.7, Ø15.8 manifold		
	395	W2=4-Ø13 Hole Square Flange,	SG=Shaft Ø31.75, parallel key		3x3/8-16UNC, 7/16-20UNF		
	475	Pilot Ø100x6.5	7.96x7.96x31.75		MM=Ø12.7, Ø15.8 manifold 3xM10x1,		
			A1=Shaft Ø25, parallel key 8x7x32		G1/4		
			N=Splined 6-30x25x6				
			Z=Splined 6-32x26x6				
			J=Splined 6-30x25x8				

Rotation direction	Paint	Standard Options	Seal Options	Relief Options	Speed Sensor Option
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature	Blank= None HPS=High Pressure Seal SG=Seal Guard HPS-SG= High Pressure Seal & Seal Guard	Blank=None R=Valve Cavity Only R12=Bi-directional relief max 125 bar R-20= Bi-directional relief max 207 bar	Blank= None SS= Speed Sensor, 4-pin, M12 male connector

Hydraulic Orbit Motors GKA



Flow Data

GKA65	65cm ³ /rev (3.97in ³ /rev)					Max Cont.	Max Int.		Peak
Pressure bar [psi→]	35 [500]	70 [1000]	105 [1500]	140 [2000]	175 [2503]	205 [2929]	240 [3429]	275 [3929]	310 [4429]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification							
	2 [0.53]	28[248]	54[478]	80[708]					
		22rpm	12rpm	6rpm					
	4 [1.06]	30[266]	58[513]	88[779]	115[1018]	146[1292]	165[1460]	195[1726]	
		52rpm	47rpm	43rpm	35rpm	30rpm	24rpm	16rpm	
	8 [2.11]	31[274]	60[531]	92[814]	120[1062]	150[1328]	170[1505]	200[1770]	225[1991]
		107rpm	98rpm	92rpm	85rpm	70rpm	55rpm	40rpm	30rpm
	15 [3.96]	32[283]	62[549]	94[832]	124[1097]	155[1372]	175[1549]	205[1814]	230[2036]
		214rpm	208rpm	200rpm	193rpm	185rpm	174rpm	160rpm	145rpm
	22 [5.81]	32[283]	65[575]	95[841]	125[1106]	157[1389]	178[1575]	206[1823]	232[2053]
		320rpm	315rpm	308rpm	296rpm	286rpm	275rpm	260rpm	242rpm
	30 [7.92]	30[266]	65[575]	95[841]	128[1133]	160[1416]	180[1593]	210[1859]	235[2080]
		445rpm	440rpm	430rpm	420rpm	408rpm	395rpm	380rpm	360rpm
	38 [10.03]	28[248]	62[549]	95[841]	130[1151]	165[1460]	185[1637]	216[1912]	240[2124]
		565rpm	560rpm	550rpm	540rpm	526rpm	512rpm	495rpm	470rpm
	45 [11.88]	26[230]	60[531]	92[814]	125[1106]	160[1416]	180[1593]	215[1903]	245[2168]
		675rpm	670rpm	660rpm	648rpm	632rpm	615rpm	600rpm	580rpm
	55 [14.52]	23[204]	55[487]	88[779]	120[1062]	155[1372]	175[1549]	210[1859]	235[2080]
		835rpm	825rpm	810rpm	790rpm	770rpm	745rpm	720rpm	690rpm
	Max Cont.	835rpm	825rpm	810rpm	790rpm	770rpm	745rpm	720rpm	690rpm
	65 [17.16]	20[177]	50[443]	84[743]	112[991]	150[1328]	170[1505]	205[1814]	230[2036]
	Max Int.	990rpm	980rpm	965rpm	945rpm	935rpm	910rpm	880rpm	860rpm

GKA80	80cm ³ /rev (4.88in ³ /rev)					Max Cont.	Max Int.		Peak
Pressure bar [psi→]	35 [500]	70 [1000]	105 [1500]	140 [2000]	175 [2503]	205 [2929]	240 [3429]	275 [3929]	310 [4429]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification							
	2 [0.53]	29[257]	54[478]	86[761]					
		18rpm	9rpm	3rpm					
	4 [1.06]	35[310]	75[664]	112[991]	145[1283]	172[1522]	208[1841]	218[1929]	236[2089]
		45rpm	41rpm	38rpm	35rpm	28rpm	22rpm	14rpm	3rpm
	8 [2.11]	35[310]	75[664]	114[1009]	148[1310]	175[1549]	212[1876]	230[2036]	260[2301]
		90rpm	85rpm	80rpm	76rpm	72rpm	64rpm	55rpm	46rpm
	15 [3.96]	38[336]	78[690]	116[1027]	152[1345]	184[1628]	215[1903]	245[2168]	275[2434]
		180rpm	175rpm	170rpm	166rpm	160rpm	153rpm	140rpm	126rpm
	22 [5.81]	36[319]	75[664]	114[1009]	150[1328]	185[1637]	220[1947]	250[2213]	285[2522]
		265rpm	260rpm	255rpm	250rpm	242rpm	234rpm	220rpm	205rpm
	30 [7.92]	35[310]	75[664]	115[1018]	150[1328]	185[1637]	225[1991]	260[2301]	295[2611]
		363rpm	355rpm	350rpm	342rpm	334rpm	322rpm	302rpm	280rpm
	38 [10.03]	34[301]	72[637]	112[991]	155[1372]	190[1682]	230[2036]	265[2345]	300[2655]
		460rpm	452rpm	442rpm	430rpm	418rpm	405rpm	385rpm	360rpm
	45 [11.88]	32[283]	70[620]	110[974]	150[1328]	190[1682]	230[2036]	265[2345]	305[2699]
		545rpm	535rpm	528rpm	515rpm	505rpm	495rpm	465rpm	440rpm
	55 [14.52]	30[266]	68[602]	110[974]	150[1328]	190[1682]	230[2036]	270[2390]	305[2699]
		670rpm	660rpm	650rpm	635rpm	620rpm	605rpm	575rpm	540rpm
	65 [17.16]	25[221]	65[575]	105[929]	145[1283]	180[1593]	225[1991]	260[2301]	295[2611]
		800rpm	790rpm	778rpm	755rpm	740rpm	728rpm	690rpm	650rpm
	Max Cont.	800rpm	790rpm	778rpm	755rpm	740rpm	728rpm	690rpm	650rpm
	75 [19.80]	22[195]	63[558]	102[903]	145[1283]	180[1593]	225[1991]	260[2301]	290[2567]
		910rpm	900rpm	880rpm	860rpm	850rpm	830rpm	790rpm	750rpm
	80 [21.12]	20[177]	60[531]	100[885]	140[1239]	175[1549]	220[1947]	250[2213]	
		980rpm	970rpm	955rpm	920rpm	900rpm	875rpm	840rpm	
	Max Int.	980rpm	970rpm	955rpm	920rpm	900rpm	875rpm	840rpm	

Hydraulic Orbit Motors GKA



Flow Data

GKA100		100.9cm ³ /rev (6.15in ³ /rev)						Max Cont.	Max Int.	Peak	
Pressure bar [psi→]		17.5 [250]	35 [500]	70 [1000]	105 [1500]	140 [2000]	175 [2503]	205 [2929]	240 [3429]	275 [3929]	310 [4429]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification									
	2 [0.53]	15[133]	32[283]	68[602]							
		14rpm	10rpm	5rpm							
	4 [1.06]	18[159]	42[372]	92[814]	130[1151]	170[1505]	205[1814]	230[2036]			
		36rpm	34rpm	32rpm	28rpm	22rpm	14rpm	5rpm			
	8 [2.11]	20[177]	45[398]	90[797]	135[1195]	180[1593]	210[1589]	240[2124]	280[2478]	310[2744]	
		74rpm	73rpm	70rpm	66rpm	60rpm	52rpm	42rpm	26rpm	15rpm	
	15 [3.96]	20[177]	45[398]	90[797]	135[1195]	185[1637]	220[1947]	260[2301]	305[2699]	345[3053]	390[3452]
		142rpm	140rpm	137rpm	134rpm	129rpm	120rpm	105rpm	92rpm	78rpm	65rpm
	22 [5.81]	18[159]	45[398]	90[797]	140[1239]	190[1682]	230[2036]	275[2434]	315[2788]	360[3186]	405[3584]
		210rpm	207rpm	201rpm	195rpm	188rpm	179rpm	160rpm	150rpm	138rpm	125rpm
	30 [7.92]	16[142]	42[372]	88[779]	142[1257]	195[1726]	240[2124]	285[2522]	330[2921]	375[3319]	425[3761]
		290rpm	288rpm	282rpm	276rpm	268rpm	258rpm	242rpm	230rpm	212rpm	195rpm
	38 [10.03]	15[133]	40[354]	88[779]	140[1239]	190[1682]	240[2124]	285[2522]	335[2965]	380[3363]	430[3806]
		370rpm	365rpm	360rpm	352rpm	340rpm	326rpm	310rpm	295rpm	275rpm	255rpm
	45 [11.88]	15[133]	40[354]	86[761]	140[1239]	190[1682]	240[2124]	285[2522]	340[3009]	385[3407]	440[3894]
		440rpm	435rpm	430rpm	422rpm	410rpm	395rpm	380rpm	365rpm	345rpm	320rpm
	55 [14.52]	12[106]	36[319]	85[752]	135[1195]	190[1682]	240[2124]	285[2522]	340[3009]	385[3407]	440[3894]
		540rpm	534rpm	528rpm	520rpm	510rpm	500rpm	485rpm	465rpm	440rpm	405rpm
	65 [17.16]	10[89]	35[310]	80[708]	130[1151]	185[1637]	235[2080]	280[2478]	335[2965]	380[3363]	440[3894]
		640rpm	635rpm	630rpm	622rpm	605rpm	590rpm	575rpm	550rpm	525rpm	500rpm
	75 [19.80]	5[44]	30[266]	75[664]	125[1106]	175[1549]	225[1991]	275[2434]	320[2832]	370[3275]	
	Max Cont.	738rpm	735rpm	728rpm	715rpm	700rpm	680rpm	655rpm	635rpm	610rpm	
	85 [22.44]	3[27]	25[221]	75[664]	125[1106]	175[1549]	225[1991]	270[2390]	320[2832]	370[3275]	
		838rpm	835rpm	830rpm	820rpm	805rpm	785rpm	760rpm	730rpm	690rpm	
	95 [25.08]		23[204]	70[620]	120[1062]	170[1505]	220[1947]	260[2301]	310[2744]		
	Max Int.		925rpm	918rpm	905rpm	890rpm	870rpm	840rpm	810rpm		

GKA125		129.8cm ³ /rev (7.92in ³ /rev)						Max Cont.	Max Int.	Peak	
Pressure bar [psi→]		17.5 [250]	35 [500]	70 [1000]	105 [1500]	140 [2000]	175 [2503]	205 [2929]	240 [3429]	275 [3929]	310 [4429]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification									
	2 [0.53]	25[221]	40[354]								
		12rpm	7rpm								
	4 [1.06]	28[248]	55[487]	110[974]	175[1549]	220[1947]	280[2478]	325[2876]			
		27rpm	26rpm	22rpm	18rpm	14rpm	11rpm	8rpm			
	8 [2.11]	28[248]	60[531]	115[1018]	175[1549]	230[2036]	290[2567]	330[2921]	375[3319]	400[3540]	
		57rpm	56rpm	53rpm	48rpm	42rpm	38rpm	34rpm	26rpm	20rpm	
	15 [3.96]	28[248]	60[531]	120[1062]	180[1593]	240[2124]	295[2611]	340[3009]	390[3452]	440[3894]	485[4292]
		113rpm	112rpm	110rpm	105rpm	98rpm	92rpm	86rpm	80rpm	72rpm	65rpm
	22 [5.81]	28[248]	55[487]	120[1062]	180[1593]	245[2168]	305[2699]	360[3186]	415[3673]	470[4160]	530[4691]
		165rpm	163rpm	160rpm	155rpm	150rpm	144rpm	138rpm	130rpm	115rpm	100rpm
	30 [7.92]	25[221]	52[460]	120[1062]	185[1637]	245[2168]	310[2744]	365[3230]	425[3761]	480[4248]	545[4823]
		228rpm	224rpm	222rpm	210rpm	212rpm	206rpm	198rpm	188rpm	178rpm	165rpm
	38 [10.03]	25[221]	50[443]	120[1062]	180[1593]	245[2168]	315[2788]	370[3275]	430[3806]	495[4381]	550[4868]
		288rpm	285rpm	282rpm	275rpm	268rpm	260rpm	252rpm	242rpm	230rpm	215rpm
	45 [11.88]	22[195]	50[443]	120[1062]	180[1593]	245[2168]	315[2788]	370[3275]	430[3806]	490[4337]	550[4868]
		345rpm	343rpm	338rpm	332rpm	325rpm	315rpm	305rpm	292rpm	280rpm	265rpm
	55 [14.52]	20[177]	46[407]	115[1018]	175[1549]	245[2168]	330[2921]	375[3319]	430[3806]	490[4337]	
		420rpm	418rpm	414rpm	408rpm	400rpm	390rpm	378rpm	365rpm	346rpm	
	65 [17.16]	15[133]	43[381]	110[974]	170[1505]	240[2124]	320[2832]	370[3275]	425[3761]	485[4292]	
		498rpm	496rpm	492rpm	486rpm	480rpm	465rpm	458rpm	440rpm	425rpm	
	75 [19.80]	12[106]	42[372]	108[956]	170[1505]	235[2080]	310[2744]	365[3230]	425[3761]		
	Max Cont.	575rpm	574rpm	568rpm	560rpm	550rpm	548rpm	525rpm	502rpm		
	85 [22.44]	8[71]	40[354]	105[929]	165[1460]	230[2036]	310[2744]	360[3186]	420[3717]		
		653rpm	652rpm	645rpm	636rpm	625rpm	616rpm	600rpm	578rpm		
	95 [25.08]		40[354]	100[885]	160[1416]	225[1991]	290[2567]	355[3142]	415[3673]		
	Max Int.		722rpm	715rpm	702rpm	690rpm	680rpm	670rpm	655rpm		

Hydraulic Orbit Motors GKA



Flow Data

GKA160		156.8cm ³ /rev (9.56in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		17.5 [250]	35 [500]	70 [1000]	105 [1500]	140 [2000]	175 [2503]	205 [2929]	240 [3429]	260 [3718]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification								
	2 [0.53]	28[248]	55[487]	110[974]	175[1549]					
		9rpm	7rpm	5rpm	3rpm					
	4 [1.06]	32[283]	63[558]	125[1106]	190[1682]	250[2213]	315[2788]	370[3275]		
		22rpm	21rpm	19rpm	17rpm	13rpm	8rpm	3rpm		
	8 [2.11]	37[327]	68[602]	130[1151]	200[1770]	260[2301]	325[2876]	390[3452]	450[3983]	480[4248]
		47rpm	45rpm	42rpm	39rpm	36rpm	34rpm	32rpm	27rpm	22rpm
	15 [3.96]	35[310]	68[602]	135[1195]	210[1859]	275[2434]	370[3275]	420[3717]	500[4425]	530[4691]
		93rpm	92rpm	89rpm	85rpm	80rpm	76rpm	70rpm	60rpm	45rpm
	22 [5.81]	35[310]	75[664]	140[1239]	215[1903]	285[2522]	370[3275]	440[3894]	515[4558]	550[4868]
		138rpm	136rpm	133rpm	128rpm	122rpm	116rpm	110rpm	102rpm	95rpm
	30 [7.92]	35[310]	75[664]	145[1283]	220[1947]	290[2567]	370[3275]	440[3894]	520[4602]	560[4956]
		190rpm	187rpm	184rpm	178rpm	172rpm	167rpm	164rpm	154rpm	142rpm
	38 [10.03]	37[327]	70[620]	150[1328]	225[1991]	310[2744]	380[3363]	450[3983]	525[4646]	565[5000]
		240rpm	237rpm	234rpm	230rpm	225rpm	218rpm	202rpm	193rpm	185rpm
	45 [11.88]	32[283]	70[620]	150[1328]	225[1991]	310[2744]	380[3363]	450[3983]	525[4646]	565[5000]
		285rpm	283rpm	280rpm	275rpm	268rpm	259rpm	247rpm	236rpm	225rpm
	55 [14.52]	28[248]	66[584]	145[1283]	220[1947]	305[2699]	375[3319]	450[3983]	525[4646]	
		348rpm	346rpm	342rpm	338rpm	332rpm	324rpm	314rpm	300rpm	
	65 [17.16]	25[221]	63[558]	140[1239]	220[1947]	300[2655]	375[3319]	445[3938]		
		412rpm	410rpm	406rpm	400rpm	393rpm	383rpm	370rpm		
	75 [19.80]	22[195]	60[531]	135[1195]	215[1903]	295[2611]	370[3275]	440[3894]		
	Max Cont.	476rpm	474rpm	470rpm	464rpm	454rpm	445rpm	435rpm		
	85 [22.44]	18[159]	55[487]	130[1151]	210[1859]	290[2567]	365[3230]	435[3850]		
		540rpm	536rpm	532rpm	524rpm	514rpm	502rpm	485rpm		
	95 [25.08]	15[133]	50[443]	125[1106]	205[1814]	285[2522]	360[3186]	430[3806]		
	Max Int.	600rpm	595rpm	590rpm	580rpm	565rpm	555rpm	545rpm		
	115 [30.36]		40[354]	115[1018]	200[1770]	280[2478]	350[3098]	425[3761]		
			715rpm	705rpm	695rpm	685rpm	670rpm	655rpm		

GKA200		193.4cm ³ /rev (11.80in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		17.5 [250]	35 [500]	70 [1000]	105 [1500]	140 [2000]	175 [2503]	205 [2929]	240 [3429]	260 [3718]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification								
	2 [0.53]	32[283]	68[602]	110[974]	145[1283]					
		9rpm	7rpm	5rpm	3rpm					
	4 [1.06]	40[354]	75[664]	150[1328]	195[1726]	300[2655]	360[3186]			
		18rpm	16rpm	14rpm	11rpm	7rpm	4rpm			
	8 [2.11]	45[398]	80[708]	160[1416]	240[2124]	315[2788]	405[3584]	500[4425]	570[5045]	600[5310]
		37rpm	36rpm	34rpm	30rpm	26rpm	21rpm	17rpm	13rpm	11rpm
	15 [3.96]	48[425]	90[797]	170[1505]	255[2257]	335[2965]	425[3761]	510[4514]	590[5222]	620[5487]
		75rpm	74rpm	72rpm	68rpm	64rpm	60rpm	56rpm	50rpm	42rpm
	22 [5.81]	46[407]	90[797]	175[1549]	265[2345]	350[3098]	440[3894]	520[4602]	605[5354]	645[5708]
		112rpm	110rpm	108rpm	105rpm	101rpm	97rpm	91rpm	86rpm	80rpm
	30 [7.92]	45[398]	90[797]	180[1593]	270[2390]	360[3186]	450[3983]	530[4691]	615[5443]	655[5797]
		153rpm	151rpm	148rpm	145rpm	141rpm	135rpm	128rpm	122rpm	116rpm
	38 [10.03]	45[398]	90[797]	180[1593]	275[2434]	370[3275]	455[4027]	540[4779]	625[5531]	
		193rpm	191rpm	188rpm	184rpm	178rpm	172rpm	166rpm	158rpm	
	45 [11.88]	40[354]	85[752]	180[1593]	275[2434]	370[3275]	460[4071]	545[4823]		
		230rpm	228rpm	226rpm	222rpm	218rpm	210rpm	202rpm		
	55 [14.52]	38[336]	82[726]	180[1593]	275[2434]	375[3319]	465[4115]	550[4868]		
		280rpm	278rpm	275rpm	270rpm	264rpm	255rpm	248rpm		
	65 [17.16]	35[310]	80[708]	175[1549]	270[2390]	370[3275]	465[4115]	545[4823]		
		332rpm	330rpm	328rpm	322rpm	315rpm	306rpm	295rpm		
	75 [19.80]	30[266]	72[637]	170[1505]	265[2345]	360[3186]	455[4027]	540[4779]		
	Max Cont.	384rpm	382rpm	378rpm	370rpm	365rpm	356rpm	346rpm		
	85 [22.44]	25[221]	70[620]	165[1460]	260[2301]	355[3142]	450[3983]	540[4779]		
		436rpm	434rpm	430rpm	420rpm	410rpm	400rpm	390rpm		
	95 [25.08]	20[177]	60[531]	155[1372]	255[2257]	350[3098]	445[3938]	530[4691]		
	Max Int.	488rpm	485rpm	478rpm	470rpm	458rpm	448rpm	438rpm		
	115 [30.36]		50[443]	140[1239]	240[2124]	330[2921]	440[3894]	520[4602]		
			580rpm	572rpm	562rpm	550rpm	538rpm	520rpm		

Hydraulic Orbit Motors GKA



Flow Data

GKA250		242.5cm ³ /rev (14.79in ³ /rev)						Max Cont.		Max Int.
Pressure bar [psi→]		17.5 [250]	35 [500]	70 [1000]	105 [1500]	140 [2000]	175 [2503]	205 [2929]	240 [3429]	260 [3718]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification								
	2 [0.53]	45[398]	95[841]							
		4rpm	2rpm							
	4 [1.06]	50[443]	100[885]	210[1859]	310[2744]	410[3629]	510[4514]	610[5399]		
		14rpm	13rpm	11rpm	9rpm	6rpm	4rpm	3rpm		
	8 [2.11]	55[487]	105[929]	215[1903]	320[2832]	420[3717]	530[4691]	620[5487]	730[6461]	780[6903]
		29rpm	28rpm	26rpm	23rpm	20rpm	17rpm	14rpm	11rpm	9rpm
	15 [3.96]	55[487]	110[974]	220[1947]	330[2921]	440[3894]	550[4868]	650[5753]	755[6682]	810[7169]
		59rpm	58rpm	56rpm	53rpm	50rpm	47rpm	45rpm	43rpm	40rpm
	22 [5.81]	50[443]	115[1018]	225[1991]	340[3009]	455[4027]	560[4956]	665[5885]	770[6815]	
		88rpm	87rpm	85rpm	82rpm	78rpm	74rpm	69rpm	65rpm	
	30 [7.92]	50[443]	115[1018]	230[2036]	350[3098]	465[4115]	570[5046]	680[6018]	785[6947]	
		122rpm	121rpm	118rpm	113rpm	109rpm	104rpm	100rpm	92rpm	
	38 [10.03]	48[425]	112[991]	235[2080]	355[3142]	475[4204]	580[5133]	695[6151]	795[7036]	
		154rpm	152rpm	149rpm	145rpm	140rpm	135rpm	130rpm	122rpm	
	45 [11.88]	45[398]	110[974]	230[2036]	350[3098]	470[4160]	590[5222]	700[6195]		
		183rpm	182rpm	180rpm	176rpm	170rpm	165rpm	158rpm		
	55 [14.52]	42[372]	105[929]	230[2036]	345[3053]	470[4160]	580[5133]			
		224rpm	223rpm	221rpm	218rpm	212rpm	205rpm			
	65 [17.16]	35[310]	100[885]	220[1947]	340[3009]	460[4071]	565[5000]			
		266rpm	265rpm	263rpm	258rpm	252rpm	242rpm			
	75 [19.80]	32[283]	95[841]	210[1859]	330[2921]	455[4027]	560[4956]			
	Max Cont.	307rpm	306rpm	303rpm	298rpm	290rpm	280rpm			
	85 [22.44]	30[266]	85[752]	200[1770]	320[2832]	450[3983]	555[4912]			
		348rpm	346rpm	342rpm	336rpm	330rpm	320rpm			
	95 [25.08]	25[221]	70[620]	190[1682]	315[2788]	440[3894]	540[4779]			
	Max Int.	386rpm	384rpm	378rpm	372rpm	365rpm	355rpm			
	115 [30.36]		65[575]	180[1593]	300[2655]	430[3806]				
			465rpm	458rpm	450rpm	442rpm				

GKA315	304.3cm³/rev(18.56in³/rev)							Max Cont.	Max Int.
Pressure bar [psi→]		17.5 [250]	35 [500]	70 [1000]	105 [1500]	140 [2000]	175 [2503]	205 [2929]	240 [3429]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification							
	2 [0.53]	45[398]	95[841]						
		4rpm	2rpm						
	4 [1.06]	65[575]	130[1151]	250[2213]	380[3363]	490[4337]			
		12rpm	11rpm	10rpm	8rpm	6rpm			
	8 [2.11]	70[620]	135[1195]	260[2301]	390[3452]	510[4514]	630[5576]	760[6726]	875[7735]
		24rpm	23rpm	22rpm	20rpm	18rpm	15rpm	10rpm	6rpm
	15 [3.96]	75[664]	140[1239]	275[2434]	410[3629]	535[4735]	670[5930]	800[7080]	920[8142]
		48rpm	48rpm	47rpm	45rpm	42rpm	38rpm	34rpm	30rpm
	22 [5.81]	70[620]	140[1239]	285[2522]	425[3761]	555[4912]	685[6062]	810[7169]	940[8319]
		71rpm	70rpm	69rpm	66rpm	62rpm	56rpm	50rpm	42rpm
	30 [7.92]	70[620]	145[1283]	290[2567]	430[3806]	565[5000]	695[6151]	820[7257]	
		97rpm	97rpm	96rpm	93rpm	88rpm	80rpm	70rpm	
	38 [10.03]	66[584]	140[1239]	290[2567]	435[3850]	570[5045]	715[6328]	835[7390]	
		123rpm	122rpm	120rpm	117rpm	112rpm	102rpm	90rpm	
	45 [11.88]	62[549]	135[1195]	290[2567]	435[3850]	575[5089]	720[6372]	840[7434]	
		147rpm	146rpm	144rpm	142rpm	135rpm	125rpm	118rpm	
	55 [14.52]	58[513]	130[1151]	285[2522]	430[3806]	575[5089]	720[6372]		
		180rpm	179rpm	176rpm	172rpm	165rpm	155rpm		
	65 [17.16]	52[460]	120[1062]	275[2434]	425[3761]	570[5045]	715[6328]		
		213rpm	212rpm	210rpm	205rpm	200rpm	190rpm		
	75 [19.80]	40[354]	110[974]	260[2301]	415[3673]	560[4956]	710[6284]		
	Max Cont.	246rpm	245rpm	242rpm	236rpm	225rpm	212rpm		
	85 [22.44]	30[266]	100[885]	250[2213]	405[3584]	540[4779]			
		278rpm	277rpm	274rpm	270rpm	260rpm			
	95 [25.08]	20[177]	90[797]	245[2168]	380[3363]	515[4558]			
	Max Int.	311rpm	310rpm	307rpm	303rpm	296rpm			
	115 [30.36]		80[708]	225[1991]	350[3098]				
			365rpm	361rpm	355rpm				

Hydraulic Orbit Motors GKA



Flow Data

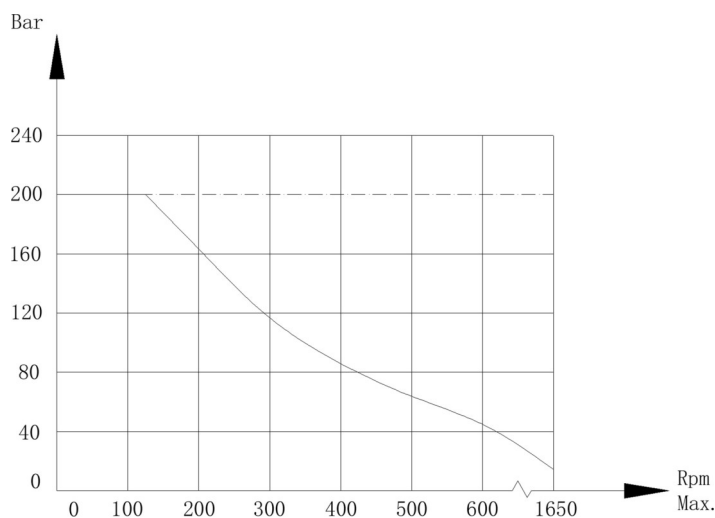
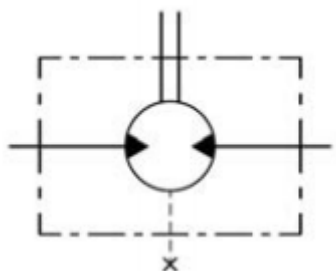
GKA395		390.8cm ³ /rev (23.84in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		17.5 [250]	35 [500]	70 [1000]	105 [1500]	140 [2000]	155 [2217]	175 [2503]	190 [2717]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification							
	2 [0.53]	70[620]	145[1283]						
		4rpm	2rpm						
	4 [1.06]	80[708]	170[1505]	345[3053]	500[4425]	660[5841]	740[6549]		
		9rpm	9rpm	8rpm	7rpm	6rpm	5rpm		
	8 [2.11]	85[752]	175[1549]	355[3142]	520[4602]	680[6018]	765[6770]	830[7346]	910[8054]
		19rpm	18rpm	17rpm	16rpm	14rpm	13rpm	12rpm	10rpm
	15 [3.96]	90[797]	185[1637]	370[3275]	550[4868]	720[6372]	810[7169]	880[7788]	
		37rpm	37rpm	36rpm	35rpm	32rpm	30rpm	28rpm	
	22 [5.81]	95[841]	190[1682]	380[3363]	565[5000]	750[6638]	830[7346]	900[7965]	
		55rpm	55rpm	54rpm	52rpm	48rpm	46rpm	44rpm	
	30 [7.92]	92[814]	188[1664]	385[3407]	570[5045]	760[6726]	835[7390]	905[8009]	
		76rpm	75rpm	73rpm	71rpm	68rpm	65rpm	62rpm	
	38 [10.03]	90[797]	185[1637]	385[3407]	575[5089]	765[6770]	840[7434]	930[8231]	
		96rpm	94rpm	92rpm	90rpm	86rpm	84rpm	80rpm	
	45 [11.88]	85[752]	180[1593]	380[3363]	570[5045]	760[6726]			
		114rpm	113rpm	111rpm	108rpm	102rpm			
	55 [14.52]	80[708]	175[1549]	380[3363]	570[5045]	760[6726]			
		140rpm	139rpm	137rpm	133rpm	127rpm			
	65 [17.16]	75[664]	170[1505]	370[3275]	560[4956]	750[6638]			
		165rpm	164rpm	163rpm	160rpm	155rpm			
	75 [19.80]	68[602]	160[1416]	360[3186]	555[4912]	740[6549]			
		191rpm	190rpm	188rpm	184rpm	178rpm			
	85 [22.44]	65[575]	150[1328]	355[310]	550[4868]	730[6461]			
		214rpm	212rpm	210rpm	206rpm	200rpm			
	95 [25.08]	50[443]	135[1195]	340[3009]	530[4691]	710[6284]			
		242rpm	240rpm	237rpm	233rpm	228rpm			
	115 [30.36]		125[1106]	310[2744]	510[4514]				
			286rpm	282rpm	275rpm				

GKA475		485cm ³ /rev (29.59in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		17.5 [250]	35 [500]	70 [1000]	105 [1500]	120 [1716]	140 [2000]		
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification							
	2 [0.53]	75[664]	175[1549]						
		2rpm	1rpm						
	4 [1.06]	110[974]	220[1947]	430[3806]	540[4779]				
		7rpm	6rpm	4rpm	1rpm				
	8 [2.11]	110[974]	225[1991]	450[3983]	700[6195]				
		14rpm	13rpm	11rpm	7rpm				
	15 [3.96]	105[929]	235[2080]	470[4160]	710[6284]	825[7285]	895[7921]		
		29rpm	28rpm	26rpm	24rpm	22rpm	19rpm		
	22 [5.81]	105[929]	240[2124]	480[4248]	720[6372]	835[7390]	915[8098]		
		44rpm	43rpm	42rpm	40rpm	37rpm	34rpm		
	30 [7.92]	110[974]	240[2124]	485[4292]	725[6416]	840[7434]	935[8275]		
		61rpm	60rpm	58rpm	55rpm	52rpm	48rpm		
	38 [10.03]	110[974]	235[2080]	480[4248]	720[6372]	840[7434]	930[8231]		
		77rpm	75rpm	73rpm	70rpm	68rpm	65rpm		
	45 [11.88]	100[885]	220[1947]	470[4160]	715[6328]	825[7301]			
		91rpm	91rpm	89rpm	85rpm	83rpm			
	55 [14.52]	95[841]	210[1859]	460[4071]	710[6284]	820[7257]			
		112rpm	110rpm	108rpm	104rpm	100rpm			
	65 [17.16]	85[752]	200[1770]	445[3938]	700[6195]	810[7169]			
		132rpm	131rpm	128rpm	125rpm	120rpm			
	75 [19.80]	70[620]	185[1637]	440[3894]	690[531]	800[7080]			
		153rpm	152rpm	149rpm	145rpm	140rpm			
	85 [22.44]	60[531]	175[1549]	430[3806]	680[6018]	785[6947]			
		173rpm	172rpm	169rpm	165rpm	160rpm			
	95 [25.08]	40[354]	150[1328]	405[3584]	655[5797]				
		195rpm	193rpm	190rpm	185rpm				
	115 [30.36]		130[1151]	380[3363]	625[5531]				
			230rpm	226rpm	220rpm				

Technical Data

Hydraulic orbit Motors GKA

Permissible shaft seal pressure

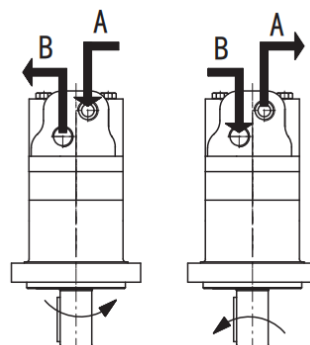


Case Drain :

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.

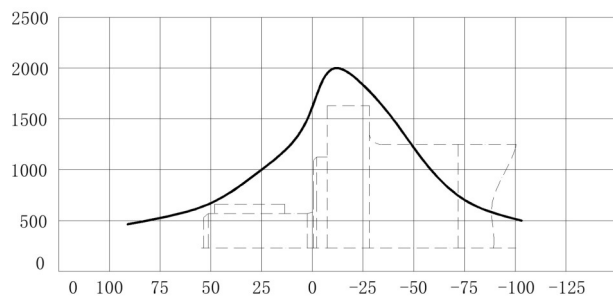
Standard direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate: Clockwise when port "A" is pressurized. Counter-clockwise port "B" is pressurized.



Axial and Radial forces

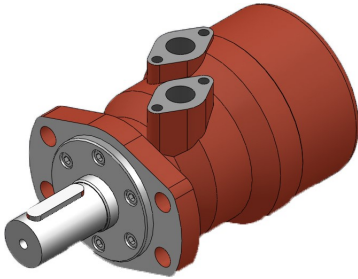
Radial force(daN)



The distance between the force point and the flange surface(mm)

This radial force curve is obtained under the rated torque to ensure the bearing life B10 allowable load (2000 hours or 12×10^6 revolutions at 150rpm), and must be multiplied by a certain coefficient under other speed conditions.

General

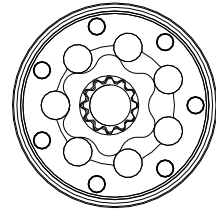


APPLICATION

- ◇ Conveyors
- ◇ Feeding machinery of robots and manipulators
- ◇ Metal working machines
- ◇ Textile machines
- ◇ Agricultural machines
- ◇ Food industries
- ◇ Mining machines

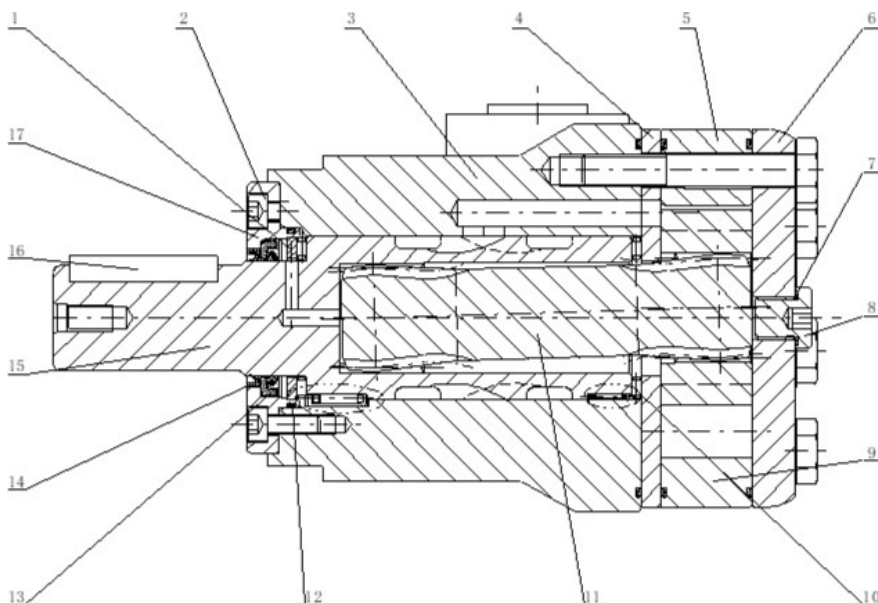
OPTIONS

- ◇ Flange connection
- ◇ Shafts—straight, splined and tapered
- ◇ Metric and BSPP ports
- ◇ Other special features



- ◇ Shaft distribution flow

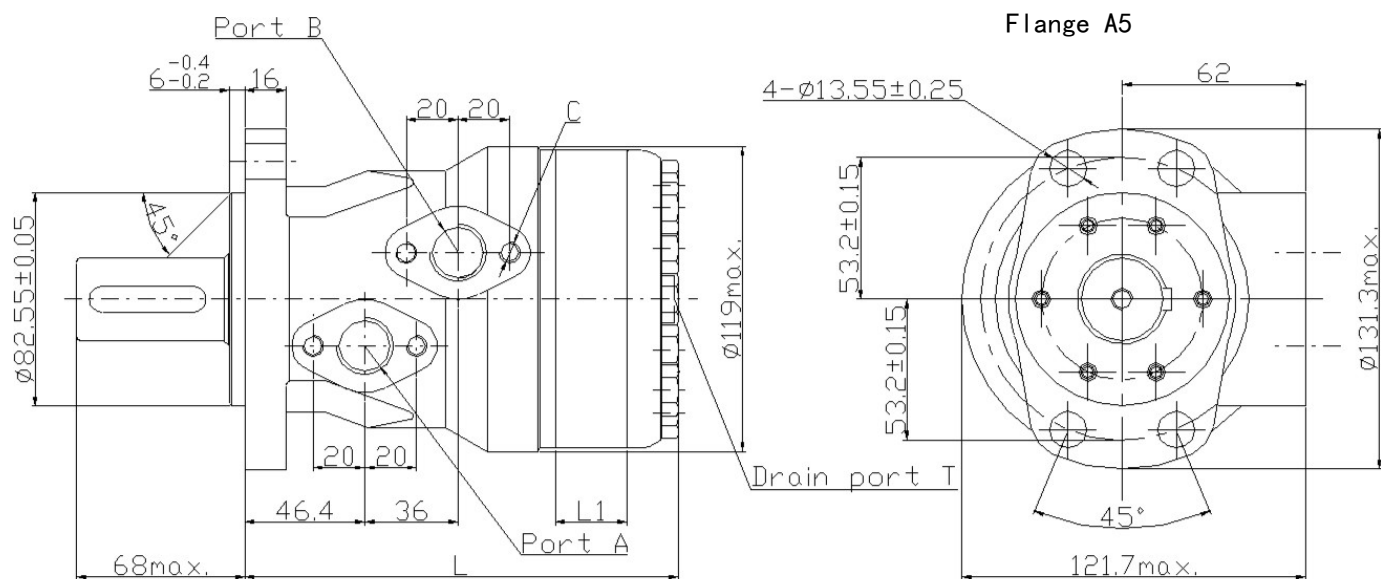
Model		GH200	GH250	GH315	GH400	GH500
Disp.	in ³ /rev	12.3	15.4	19.2	24.2	30.7
	cm ³ /rev	201.3	252	314.9	396.8	502.4
Max Speed rpm	cont.	370	295	235	185	150
	int.	445	350	285	225	180
Max Torque N m [lb-in]	cont.	510 [4510]	610 [5398]	740 [6548]	840 [7434]	820 [7257]
	int.	580 [5130]	700 [6195]	820 [7257]	980 [8673]	1040 [9204]
Max Dif. bar [psi]	cont.	175 [2540]	175 [2540]	175 [2540]	155 [2240]	125 [1810]
	int.	200 [2900]	200 [2900]	200 [2900]	190 [2750]	160 [2320]
Max Flow l/min [gpm]	cont.	75 [19.81]	75 [19.81]	75 [19.81]	75 [19.81]	75 [19.81]
	int.	90 [23.78]	90 [23.78]	90 [23.78]	90 [23.78]	90 [23.78]
Weight kg [lbs]		10.5 [23.2]	11 [24.3]	11.5 [25.4]	12.3 [27.1]	13 [28.7]



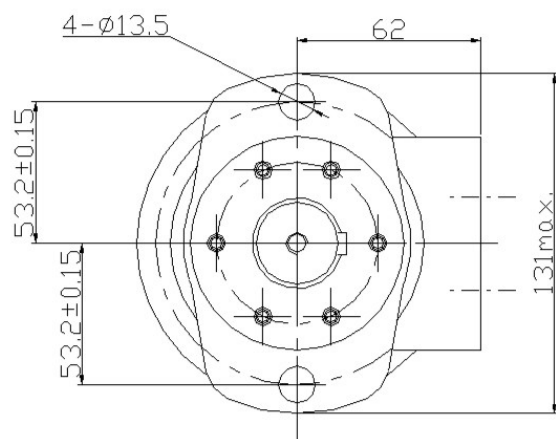
1. Thrust Washer
2. Screw
3. Housing
4. Wear Plate
5. Set
6. End Cover
7. Seal
8. Case Drain Plug
9. O-ring
10. Axial Needle Bearing
11. Cardan Joint
12. O-ring
13. Shaft Seal
14. Dust Seal
15. Output Shaft
16. Key
17. Front Cover

Hydraulic Orbit Motors GH

Dimensions and Mounting Data 尺寸和安装参数



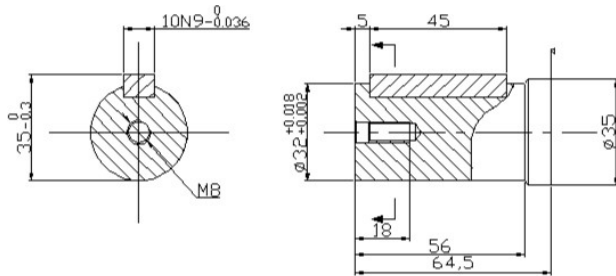
Flange A6



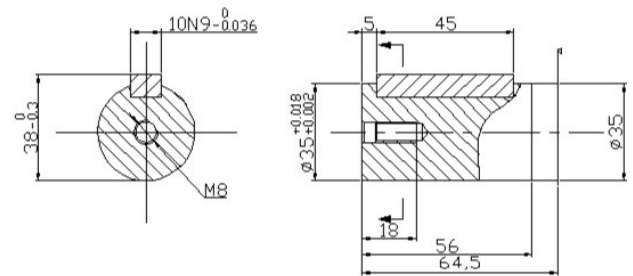
Model	L	L1
GH 200	168	27
GH 250	175	34
GH 315	184	42
GH 400	195	54
GH 500	206	65

Port	G1 (Depth)	M1 (Depth)	U2 (Depth)	U1 (Depth)	G2 (Depth)
P(A,B)	G1/2 (15)	M22x1.5 (15)	7/8-14 O-ring (15)	1/2-14NPTF (15)	PT (RC) 1/2 (15)
C	4-M8 (13)	4-M8 (13)	4-5/16-18UNC (13)	4-5/16-18UNC (13)	4-M8 (13)
T	G1/4 (12)	M14x1.5 (12)	7/16-20UNF (12)	7/16-20UNF (12)	PT (RC) 1/4 (12)

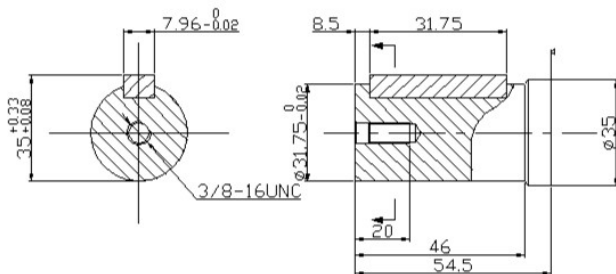
GH Shaft Extension Dimensions Data



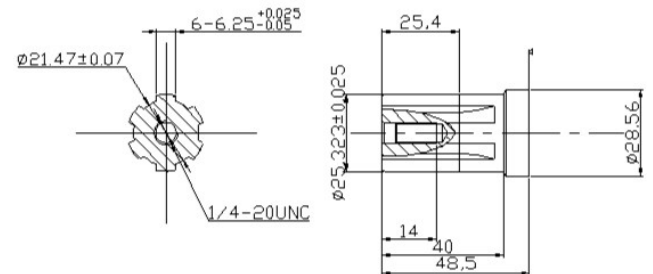
Shaft S4: Cylindrical shaft Ø32
Parallel key 10x8x45



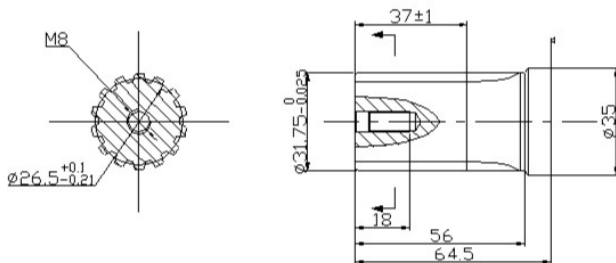
Shaft SF: Cylindrical shaft Ø35
Parallel key 10x8x45



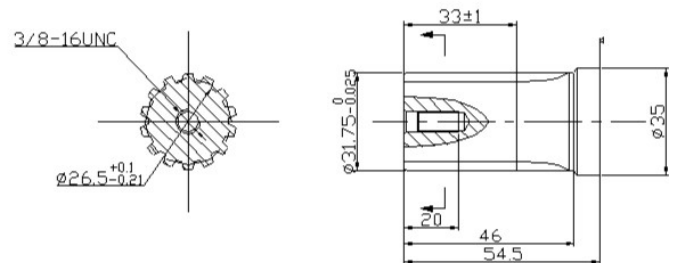
Shaft SG: Cylindrical shaft Ø31.75
Parallel key 7.96x7.96x31.75



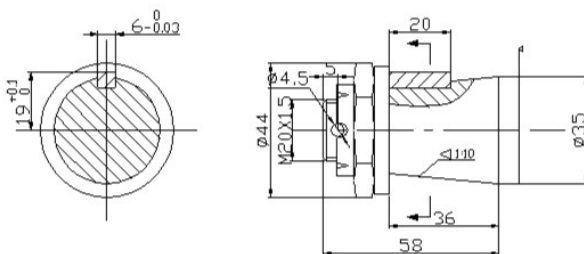
Shaft R4: Splined SAE 6B



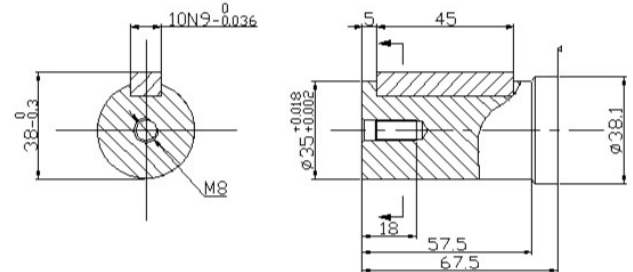
Shaft R3: Splined 14-DP12/24



Shaft Splined R6: 14-DP12/24



Shaft T4: Tapered shaft Ø35
Parallel key 6x6x20
Tightening torque: 200±10Nm



Shaft SH: Cylindrical shaft Ø35
Parallel key 10x8x45

GH - How To Order

		Model	Displacement	Flange	Drive shaft	Ports	Other functions
Ordering Example:		GH	200	A5	S4	G1	ACA
Model	Disp.	Flange		Drive shaft		Ports	
GH	200	A5=2-Ø13.5 SAE A flange, pilot Ø82.5x6		S4=Shaft Ø32, parallel key 10x8x45		G1=G1/2 manifold mount 4xM8, G1/4 G2=PT (Rc) 1/2 manifold mount 4xM8, PT (Rc) 1/4 U1=1/2-14NPTF manifold mount 4x5/16-18UNC, 7/16-20UNF	
	250			SF=Shaft Ø35, parallel key 10x8x45			
	315			SG=Shaft Ø31.75, parallel key 7.96x7.96x31.75			
	400	A6=4-Ø13.5 SAE A flange, pilot Ø82.5x6		SH=ShaftØ35, parallel key 10x8x45			
	500			R3=ShaftØ31.75, splined tooth 14-DP12/24 R6=Long shaft Ø31.75, splined tooth 14-DP12/24 T4=Tapered shaft Ø35, paral- lel key B6x6x20 R4=Shaft Ø25.4, parallel key SAE 6B			

Rotation direction	Paint	Standard Options	Seal Options	Relief Options	Speed Sensor Option
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature	Blank= None HPS=High Pressure Seal SG=Seal Guard HPS-SG= High Pressure Seal & Seal Guard	Blank=None R=Valve Cavity Only R12=Bi-directional relief max 125 bar R-20= Bi-directional relief max 207 bar	Blank= None SS= Speed Sensor, 4-pin, M12 male connector

Hydraulic Orbit Motors GH



Flow Data

GH200		201.3cm ³ /rev(12.3in ³ /rev)				Max Cont.	Max Int.
Pressure bar [psi→]		36.1 [515]	72.1 [1030]	108.2 [1546]	144.2 [2060]	180.3 [2576]	206.5 [2950]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification					
	5 [1.32]	98 [867]	194 [1717]	284 [2513]			
		25rpm	25rpm	22rpm			
	10 [2.65]	101 [894]	204 [1805]	301 [2664]	391 [3460]	482 [4266]	
		43rpm	41rpm	36rpm	29rpm	14rpm	
	20 [5.26]	99 [876]	201 [1779]	304 [2690]	402 [3558]	509 [4505]	576 [5098]
		100rpm	97rpm	93rpm	85rpm	69rpm	56rpm
	30 [7.9]	97 [858]	197 [1743]	300 [2655]	402 [3558]	510 [4513]	579 [5124]
		145rpm	143rpm	139rpm	130rpm	114rpm	101rpm
	40 [10.5]	90 [797]	190 [1681]	292 [2584]	399 [3531]	507 [4487]	578 [5115]
		200rpm	200rpm	200rpm	188rpm	168rpm	153rpm
	50 [13.15]	82 [726]	183 [1619]	284 [2513]	392 [3469]	500 [4425]	571 [5053]
		248rpm	246rpm	244rpm	235rpm	213rpm	199rpm
	60 [15.8]	73 [646]	174 [1540]	274 [2425]	384 [3398]	493 [4363]	563 [4982]
		292rpm	290rpm	287rpm	279rpm	260rpm	244rpm
	70 [18.4]	63 [557]	163 [1442]	264 [2336]	374 [3309]	481 [4256]	554 [4903]
		352rpm	350rpm	349rpm	338rpm	318rpm	301rpm
	75 [19.75]	59 [522]	158 [1389]	259 [2292]	366 [3239]	475 [4204]	547 [4841]
		366rpm	365rpm	363rpm	355rpm	335rpm	319rpm
	80 [21.05]	53 [469]	150 [1328]	253 [2239]	358 [3168]	466 [4124]	538 [4761]
	Max Cont.	381rpm	381rpm	380rpm	371rpm	352rpm	338rpm
	90 [23.68]	39 [345]	140 [1239]	241 [2133]	348 [3080]	456 [4036]	526 [4655]
	Max Int.	443rpm	437rpm	434rpm	426rpm	407rpm	392rpm

GH250		252cm ³ /rev(15.4in ³ /rev)				Max Cont.	Max Int.
Pressure bar [psi→]		36.1 [515]	72.1 [1030]	92.3 [1328]	123.6 [1766]	149.7 [2139]	180.3 [2576]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification					
	5 [1.32]	115 [1071]	246 [2177]	318 [2814]	398 [3522]		
		19rpm	19rpm	18rpm	14rpm		
	10 [2.65]	130 [1150]	258 [2283]	331 [2929]	425 [3761]	515 [4558]	595 [5266]
		34rpm	33rpm	31rpm	29rpm	23rpm	12rpm
	20 [5.26]	130 [1150]	258 [2283]	332 [2938]	432 [3823]	520 [4602]	621 [5496]
		78rpm	77rpm	76rpm	73rpm	65rpm	53rpm
	30 [7.9]	122 [1080]	251 [2221]	327 [2894]	429 [3797]	520 [4602]	621 [5496]
		115rpm	113rpm	111rpm	105rpm	96rpm	84rpm
	40 [10.5]	115 [1017]	240 [2124]	323 [2858]	422 [3735]	513 [4540]	616 [5452]
		157rpm	157rpm	156rpm	150rpm	139rpm	127rpm
	50 [13.15]	105 [929]	232 [2053]	315 [2779]	411 [3637]	505 [4469]	606 [5363]
		196rpm	195rpm	192rpm	185rpm	173rpm	159rpm
	60 [15.8]	94 [831]	220 [1947]	302 [2673]	401 [3549]	496 [4390]	596 [5275]
		232rpm	230rpm	226rpm	218rpm	206rpm	192rpm
	70 [18.4]	81 [720]	209 [1850]	288 [2550]	389 [3442]	484 [4283]	582 [5150]
		274rpm	274rpm	274rpm	266rpm	252rpm	238rpm
	75 [19.75]	72 [637]	203 [1796]	280 [2478]	381 [3372]	475 [4204]	574 [5080]
		290rpm	289rpm	287rpm	279rpm	266rpm	251rpm
	80 [21.05]	66 [584]	194 [1717]	273 [2416]	371 [3283]	467 [4133]	566 [5009]
	Max Cont.	303rpm	302rpm	298rpm	290rpm	279rpm	264rpm
	90 [23.68]	49 [433]	178 [1575]	256 [2266]	355 [3142]	453 [4009]	552 [4885]
	Max Int.	348rpm	347rpm	345rpm	337rpm	325rpm	309rpm

Hydraulic Orbit Motors GH



Flow Data

GH315		314.9cm ³ /rev(19.2in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		36.1 [515]	77.4 [1105]	102.9 [1470]	139.1 [1987]	160.0 [2286]	180.3 [2576]	206.5 [2950]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	5 [1.32]	155 [1372]	325 [2876]					
		16rpm	13rpm					
	10 [2.65]	163 [1442]	342 [3026]	454 [4018]	556 [4921]			
		27rpm	24rpm	18rpm	14rpm			
	20 [5.26]	169 [1496]	349 [3089]	469 [4151]	582 [5150]	664 [5876]	733 [6487]	809 [7160]
		63rpm	61rpm	55rpm	48rpm	40rpm	32rpm	19rpm
	30 [7.9]	165 [1460]	344 [3044]	470 [4159]	580 [5133]	669 [5921]	740 [6549]	824 [7292]
		93rpm	89rpm	82rpm	77rpm	67rpm	59rpm	46rpm
	40 [10.5]	154 [1363]	337 [2982]	465 [4115]	577 [5106]	663 [5867]	737 [6522]	827 [7319]
		126rpm	126rpm	119rpm	111rpm	99rpm	88rpm	73rpm
	50 [13.15]	141 [1248]	325 [2876]	455 [4027]	568 [5027]	656 [5806]	728 [6443]	824 [7292]
		159rpm	155rpm	148rpm	139rpm	126rpm	115rpm	98rpm
	60 [15.8]	121 [1071]	312 [2761]	440 [3894]	555 [4912]	643 [5690]	715 [6328]	812 [7186]
		187rpm	186rpm	179rpm	169rpm	154rpm	143rpm	124rpm
	70 [18.4]	103 [911]	298 [2637]	425 [3761]	541 [4788]	631 [5584]	703 [6221]	800 [7080]
		222rpm	222rpm	215rpm	205rpm	187rpm	176rpm	157rpm
	75 [19.75]	94 [831]	287 [2540]	417 [3690]	529 [4682]	623 [5514]	696 [6160]	792 [7009]
		236rpm	233rpm	224rpm	215rpm	196rpm	184rpm	166rpm
	80 [21.05]	82 [726]	277 [2451]	406 [3593]	518 [4584]	611 [5407]	688 [6089]	784 [6938]
	Max Cont.	246rpm	244rpm	236rpm	228rpm	210rpm	197rpm	174rpm
	90 [23.68]	62 [549]	256 [2266]	386 [3416]	496 [4390]	593 [5248]	669 [5921]	767 [6788]
	Max Int.	282rpm	280rpm	275rpm	266rpm	248rpm	234rpm	209rpm

GH400		396.8cm ³ /rev(24.2in ³ /rev)					Max Cont.
Pressure bar [psi→]		36.1 [515]	77.4 [1105]	102.9 [1470]	139.1 [1987]	160.0 [2286]	196.1 [2802]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification					
	5 [1.32]	196 [1735]	348 [3080]	516 [4566]			
		13rpm	13rpm	10rpm			
	10 [2.65]	205 [1814]	363 [3212]	546 [4832]	702 [6213]	859 [7602]	
		22rpm	21rpm	21rpm	17rpm	11rpm	
	20 [5.26]	209 [1850]	366 [3239]	543 [4805]	708 [6266]	874 [7735]	988 [8744]
		50rpm	49rpm	46rpm	41rpm	36rpm	31rpm
	30 [7.9]	201 [1779]	357 [3159]	542 [4797]	706 [6248]	864 [7646]	984 [8708]
		73rpm	72rpm	70rpm	63rpm	56rpm	51rpm
	40 [10.5]	195 [1726]	346 [3062]	532 [4708]	701 [6204]	858 [7593]	973 [8611]
		99rpm	98rpm	96rpm	86rpm	77rpm	71rpm
	50 [13.15]	173 [1531]	332 [2938]	518 [4584]	687 [6080]	848 [7504]	958 [8478]
		123rpm	122rpm	118rpm	107rpm	97rpm	90rpm
	60 [15.8]	154 [1363]	319 [2823]	501 [4434]	668 [5912]	833 [7372]	944 [8354]
		146rpm	144rpm	141rpm	128rpm	115rpm	106rpm
	70 [18.4]	138 [1221]	305 [2699]	480 [4248]	649 [5744]	814 [7204]	925 [8186]
		174rpm	173rpm	169rpm	156rpm	141rpm	130rpm
	75 [19.75]	128 [1133]	294 [2602]	466 [4124]	637 [5637]	802 [7098]	911 [8062]
		183rpm	181rpm	177rpm	163rpm	149rpm	138rpm
	80 [21.05]	113 [1000]	277 [2451]	451 [3991]	621 [5496]	786 [6956]	899 [7956]
	Max Cont.	192rpm	191rpm	188rpm	174rpm	158rpm	144rpm
	90 [23.68]	90 [796]	256 [2266]	433 [3832]	595 [5266]	767 [6788]	881 [7797]
	Max Int.	220rpm	220rpm	215rpm	202rpm	183rpm	165rpm

Hydraulic Orbit Motors GH



Flow Data

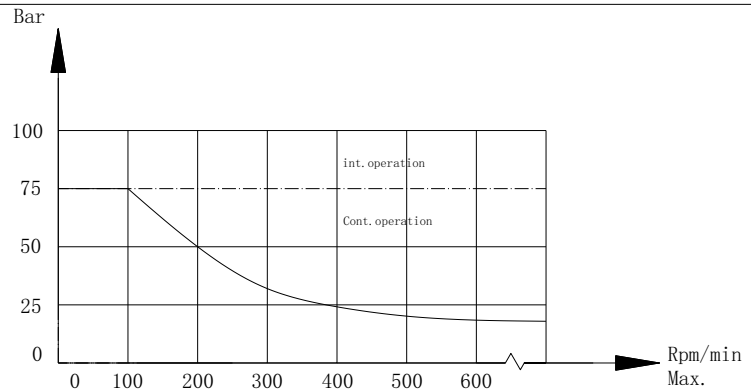
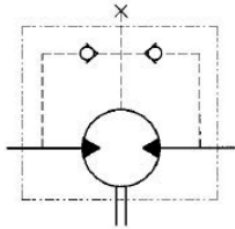
GH500		502.4cm ³ /rev(30.7in ³ /rev)				Max Cont.	Max Int.
Pressure bar [psi→]		25.8 [368]	51.7 [738]	87.8 [1254]	102.9 [1470]	128.8 [1840]	164.9 [2355]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification					
	5 [1.32]	165 [1460]	317 [2805]	516 [4567]			
		11rpm	11rpm	8rpm			
	10 [2.65]	178 [1575]	335 [2965]	555 [4912]	669 [5921]	791 [7000]	969 [8576]
		20rpm	19rpm	17rpm	15rpm	13rpm	9rpm
	20 [5.26]	177 [1566]	331 [2929]	559 [4947]	673 [5956]	779 [6894]	988 [8744]
		42rpm	42rpm	41rpm	38rpm	36rpm	29rpm
	30 [7.9]	172 [1522]	320 [2832]	553 [4894]	663 [5867]	792 [7009]	983 [8699]
		64rpm	63rpm	61rpm	57rpm	53rpm	47rpm
	40 [10.5]	163 [1443]	309 [2735]	541 [4788]	654 [5788]	783 [6930]	971 [8593]
		85rpm	85rpm	83rpm	79rpm	75rpm	67rpm
	50 [13.15]	146 [1292]	240 [2120]	523 [4628]	635 [5620]	768 [6797]	954 [8443]
		103rpm	103rpm	103rpm	97rpm	93rpm	85rpm
	60 [15.8]	121 [1071]	275 [2434]	502 [4443]	614 [5434]	747 [6611]	934 [8266]
		124rpm	124rpm	123rpm	117rpm	113rpm	103rpm
	70 [18.4]	97 [858]	256 [2266]	482 [4266]	597 [5283]	729 [6452]	917 [8115]
		148rpm	148rpm	148rpm	140rpm	134rpm	122rpm
	75 [19.75]	79 [699]	240 [2124]	469 [4151]	582 [5151]	714 [6319]	902 [7983]
		155rpm	155rpm	155rpm	152rpm	144rpm	130rpm
	80 [21.05]	60 [531]	226 [2000]	453 [4009]	570 [5044]	701 [6204]	884 [7823]
		Max Cont.	166rpm	166rpm	166rpm	159rpm	153rpm
	90 [23.68]	34 [301]	201 [1779]	421 [3726]	550 [4868]	673 [5956]	869 [7691]
		Max Int.	166rpm	165rpm	164rpm	157rpm	156rpm
						155rpm	

Hydraulic Orbit Motors GH

Technical Data

Hydraulic orbit Motors GH

Permissible shaft seal pressure



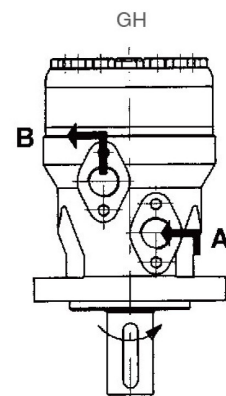
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Case Drain :

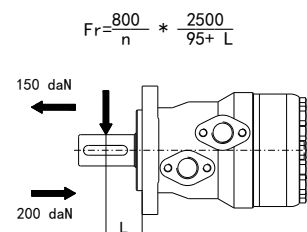
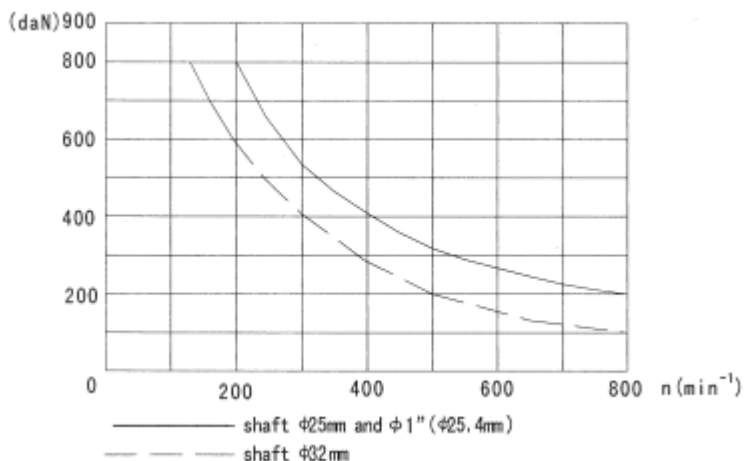
In applications without a motor drain line, the pressure exerted on the shaft seal is marginally in excess of the return line pressure. When the Drain line is used, the pressure exerted on the shaft seal is equal to the return line pressure.

Standard direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate: Clock-wise when port "A" is pressurized. Counter-clockwise port "B" is pressurized.



Axial and Radial forces



Fr =Radial Force (daN)

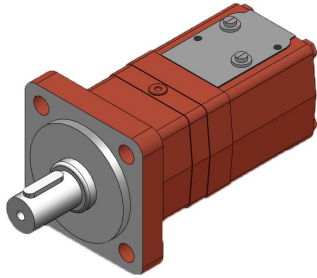
L =Distance (mm)

n =Speed (rpm)

Rhomb-flange L=30mm

Square-flange L=24mm

General

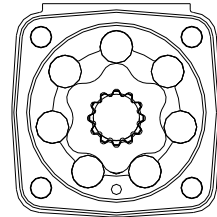


APPLICATION

- ◇ Conveyors
- ◇ Road building machines
- ◇ Metal working machines
- ◇ Special vehicle etc.
- ◇ Agricultural machines
- ◇ Food industries
- ◇ Mining machines

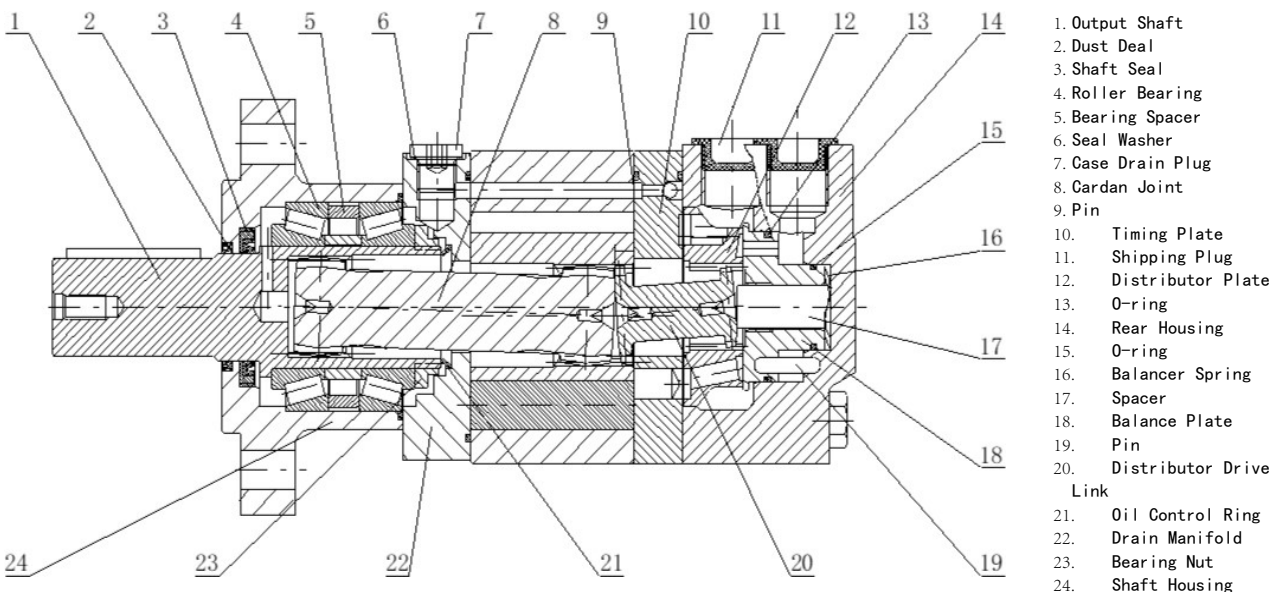
OPTIONS

- ◇ Flange and wheel mount
- ◇ Short motor
- ◇ Motor with drum brake
- ◇ Tachometer connection
- ◇ Speed sensing
- ◇ Side and rear ports
- ◇ Shafts-straight, splined and tapered
- ◇ Shaft seal for high and low pressure
- ◇ Metric and BSPP ports
- ◇ Other special features



- ◇ Disc distribution flow

Model		GS80	GS100	GS125	GS160	GS200	GS250	GS315	GS400	GS475
Disp.	in ³ /rev	4.91	6.1	7.67	9.74	12.2	15.25	19.21	24.22	28.95
	cm ³ /rev	80.5	100	125.7	159.7	200	250	314.9	397	474.6
Max Speed rpm	cont.	810	750	600	470	375	300	240	190	160
	int.	1000	900	720	560	450	360	290	230	190
Max Torque N m [lb-in]	cont.	225 [1991]	290 [2566]	365 [3230]	485 [4292]	586 [5185]	708 [6265]	880 [7787]	880 [7786]	910 [8053]
	int.	250 [2212]	320 [2832]	400 [3540]	540 [4778]	645 [5707]	807 [7142]	960 [8495]	960 [8495]	960 [8495]
Max Dif. bar [psi]	cont.	208 [2973]	208 [2973]	208 [2973]	213 [3045]	213 [3045]	203 [2900]	203 [2900]	162 [2320]	142 [2030]
	int.	229 [3265]	229 [3265]	229 [3265]	229 [3265]	229 [3265]	229 [3265]	229 [3265]	179 [2563]	152 [2175]
Max Flow l/min [gpm]	cont.	65 [17.1]	75 [19.81]	75 [19.81]	75 [19.81]	75 [19.81]	75 [19.81]	75 [19.81]	75 [19.81]	75 [19.81]
	int.	80 [21.13]	90 [23.77]	90 [23.77]	90 [23.77]	90 [23.77]	90 [23.77]	90 [23.77]	90 [23.77]	90 [23.77]
Weight kg [lbs]		10.7 [23.7]	10.8 [24.1]	11.1 [24.8]	11.3 [25]	10.4 [26.2]	12.3 [27.4]	13.0 [29.0]	13.9 [31.0]	14.8 [32.8]



Technical drawing of a mechanical part showing front and side views with dimensions:

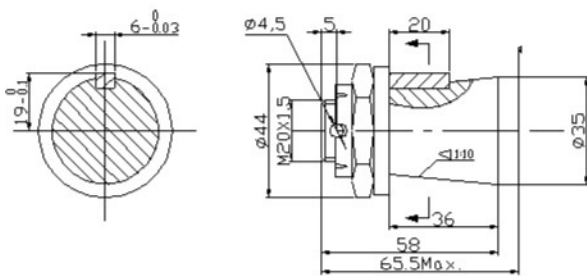
- Front View (Left):**
 - Overall width: 28.2 ± 0.02
 - Top feature width: 6.35 ± 0.025
 - Thread specification: $1/4-20\text{UNC}$
- Side View (Right):**
 - Overall height: 6 ± 0.2
 - Top feature height: 25.4 ± 0.39
 - Internal hole diameter: $\phi 25.4 \pm 0.02$
 - Internal hole depth: 14.2
 - Bottom feature width: 41.8
 - Overall length: 49.5 Mo x
 - Right side width: 6.35

Technical drawing of a 1/4-20 UNC plug. The drawing shows a cross-section of the plug with the following dimensions:

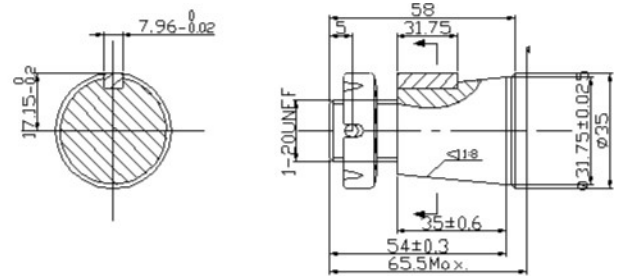
- Overall length: $6-6.25 \pm 0.05$
- Threaded section length: 41.8
- Threaded section diameter: $\phi 21.4 \pm 0.05$
- Threaded section diameter tolerance: 0.05
- Threaded section diameter: $\phi 21.47 \pm 0.07$
- Threaded section diameter tolerance: 0.07
- Threaded section diameter: $1/4-20 \text{ UNC}$
- Threaded section diameter: 64.5
- Threaded section diameter: 2.3 Min
- Threaded section diameter: 1.2
- Threaded section diameter: 0.35

GRH Series Orbit Motor

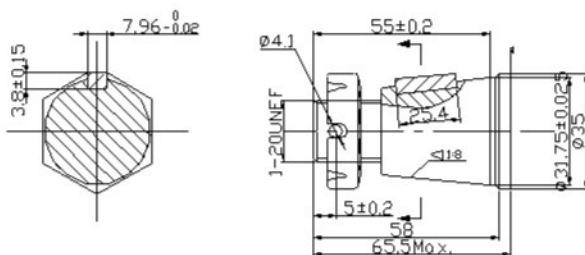
GS Shaft Extension Dimensions Data



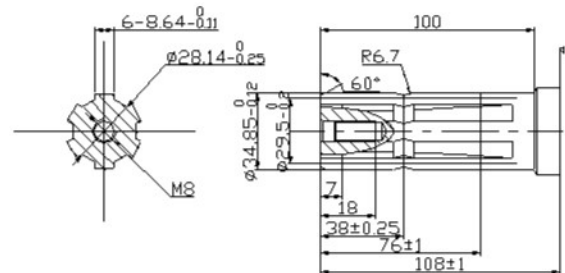
Shaft T4: Tapered shaft $\varnothing 35$
Parallel key B6x6x20



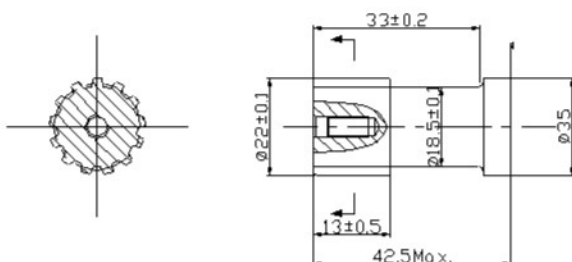
Shaft T5: Tapered shaft $\varnothing 31.75$
Parallel key 7.96x7.96x31.75
Tightening torque: $200 \pm 10 \text{ Nm}$



Shaft T2: Tapered shaft $\varnothing 31.75$
Parallel key 7.96x7.96x25.4
Tightening torque: $200 \pm 10 \text{ Nm}$



Shaft R7: Splined 6-34.85x28.14x8.64



Shaft R5: Splined 13-DP16/32

GS Shaft Extension Dimensions Data

		Model	Displacement	Flange	Drive shaft	Ports	Other functions
Ordering Example:		GS	80	A7	C1	G9	ACA
Model	Disp.	Flange		Drive shaft		Ports	
GS	80	A7=2-∅13.5 rhomb flange ∅106.4, pilot ∅82.5x6.3		C1=Cardan shaft 12-DP12/24 S4=Shaft ∅32, parallel key 10x8x45		G9=G1/2 manifold mount 2xM10, G1/4 M8=M22x1.5 manifold mount 2xM10, M14x1.5 UB=7/8-14UNF 0-ring manifold 2x3/8-16UNC, 7/16-20UNF UC=1/2-14NPTF manifold 2x3/8-16UNC, 7/16-20UNF UE = 1-1/16"-12UNF 180 side ports, 7/16"-20UNF	
	100	A9=6-∅13.5 rhomb flange ∅106.4, pilot ∅82.5x2.6		S8=Shaft ∅25.4, parallel key 6.35x6.35x25.4			
	125	AA=2-∅14.3 rhomb flange ∅146.05, pilot ∅101.6x9.4		SG=Shaft ∅31.75, parallel key 7.96x7.96x31.75			
	160	B1=4-∅11 circle flange ∅125, pilot ∅100x6		R2=Shaft ∅31.75, splined tooth 14-DP12/24			
	200	H3=4-∅13.5 square flange ∅106.4, pilot ∅82.5x6.3		R3=Long Shaft ∅31.75, splined tooth 14-DP12/25			
	250	H1=4-∅11.5 square flange ∅106.4, pilot ∅82.5x6.3		R7=Shaft ∅34.85, splined tooth 6-34.85x28.14x8.64			
	315	H2=2-∅13.5 rhomb flange ∅127, pilot ∅101.6x6.3		T4=Tapered Shaft ∅35, parallel key B6x6x20			
	400	W1=2-∅13.5 wheel flange ∅160, pilot ∅125x8		T5=Tapered Shaft ∅31.75, parallel key 7.96x7.96x31.75			
	475			R8=Shaft ∅25.4, parallel key SAE 6B			
				R5=Shaft ∅22, splined tooth 13-DP16/32			

Rotation direction	Paint	Standard Options	Seal Options	Relief Options	Speed Sensor Option
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature	Blank= None HPS=High Pressure Seal SG=Seal Guard HPS-SG= High Pressure Seal & Seal Guard	Blank=None R=Valve Cavity Only R12=Bi-directional relief max 125 bar R-20= Bi-directional relief max 207 bar	Blank= None SS= Speed Sensor, 4-pin, M12 male connector

Hydraulic Orbit Motors GS



Flow Data

GS80		80.6cm ³ /rev (4.92in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		36.1 [515]	72.1 [1030]	108.2 [1546]	144.2 [2060]	180.3 [2576]	208.1 [2973]	231.6 [3308]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	15 [3.96]	35 [310]	80 [708]	120 [1062]	158 [1398]	195 [1726]	228 [2017]	249 [2204]
		180rpm	174rpm	168rpm	164rpm	158rpm	151rpm	143rpm
	30 [7.93]	35 [310]	80 [708]	120 [1062]	158 [1398]	195 [1726]	232 [2053]	260 [2301]
		362rpm	352rpm	346rpm	338rpm	330rpm	322rpm	310rpm
	40 [10.57]	35 [310]	79 [699]	119 [1053]	155 [1372]	193 [1708]	227 [2009]	250 [2213]
		487rpm	480rpm	468rpm	457rpm	446rpm	438rpm	425rpm
	50 [13.21]	30 [266]	77 [681]	117 [1035]	153 [1354]	192 [1699]	224 [1982]	248 [2195]
		612rpm	603rpm	592rpm	581rpm	572rpm	558rpm	542rpm
	60 [15.85]	28 [248]	77 [681]	117 [1035]	153 [1354]	192 [1699]	224 [1982]	243 [2150]
		735rpm	726rpm	718rpm	703rpm	687rpm	673rpm	646rpm
	65 [17.17]	26 [230]	75 [664]	116 [1026]	151 [1336]	188 [1663]	217 [1920]	236 [2088]
	Max Cont.	794rpm	786rpm	773rpm	760rpm	744rpm	722rpm	706rpm
	80 [21.13]	25 [217]	72 [637]	109 [964]	142 [1256]	176 [1557]	206 [1823]	227 [2009]
	Max Int.	981rpm	968rpm	955rpm	925rpm	893rpm	870rpm	832rpm
GS100		100.8cm ³ /rev (6.15in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		36.1 [515]	72.1 [1030]	108.2 [1546]	144.2 [2060]	180.3 [2576]	208.1 [2973]	231.6 [3308]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	15 [3.96]	48 [425]	95 [841]	150 [1328]	200 [1770]	250 [2213]	282 [2495]	310 [2744]
		146rpm	144rpm	139rpm	135rpm	130rpm	120rpm	105rpm
	30 [7.93]	45 [398]	94 [832]	146 [1292]	198 [1752]	250 [2213]	290 [2566]	317 [2805]
		291rpm	289rpm	278rpm	274rpm	269rpm	258rpm	242rpm
	40 [10.57]	43 [381]	89 [788]	169 [1492]	196 [1735]	248 [2195]	288 [2549]	316 [2797]
		387rpm	384rpm	374rpm	359rpm	350rpm	335rpm	320rpm
	50 [13.21]	40 [354]	88 [779]	135 [1195]	194 [1717]	247 [2186]	286 [2531]	315 [2788]
		486rpm	483rpm	473rpm	462rpm	450rpm	430rpm	420rpm
	60 [15.85]	37 [327]	88 [779]	132 [1168]	187 [1657]	244 [2159]	283 [2504]	312 [2761]
		588rpm	584rpm	574rpm	562rpm	550rpm	538rpm	520rpm
	75 [19.81]	35 [310]	80 [708]	130 [1151]	180 [1593]	240 [2124]	279 [2469]	310 [2744]
	Max Cont.	740rpm	735rpm	720rpm	705rpm	696rpm	676rpm	653rpm
	90 [23.77]	30 [266]	75 [664]	124 [1097]	170 [1505]	236 [2089]	271 [2398]	303 [2682]
	Max Int.	850rpm	840rpm	810rpm	787rpm	770rpm	750rpm	747rpm
GS125		125cm ³ /rev (7.63in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		36.1 [515]	72.1 [1030]	108.2 [1546]	144.2 [2060]	180.3 [2576]	208.1 [2973]	231.6 [3308]
Flow	l/min [gpm↓]	Torque (lb-in) Speed Specification						
	15 [3.96]	55 [487]	120 [1062]	176 [1558]	245 [2168]	309 [2735]	345 [3053]	375 [3319]
		115rpm	113rpm	110rpm	104rpm	98rpm	90rpm	84rpm
	30 [7.93]	55 [487]	120 [1062]	175 [1549]	250 [2213]	315 [2787]	364 [3221]	404 [3575]
		231rpm	228rpm	223rpm	214rpm	202rpm	188rpm	172rpm
	40 [10.57]	53 [469]	118 [1044]	178 [1575]	250 [2213]	315 [2787]	364 [3221]	403 [3566]
		312rpm	299rpm	290rpm	289rpm	278rpm	262rpm	235rpm
	50 [13.21]	50 [443]	115 [1020]	176 [1558]	248 [2195]	315 [2787]	362 [3203]	397 [3513]
		391rpm	386rpm	378rpm	365rpm	352rpm	339rpm	308rpm
	60 [15.85]	45 [398]	113 [1000]	171 [1513]	241 [2133]	308 [2726]	358 [3168]	397 [3513]
		469rpm	461rpm	450rpm	437rpm	425rpm	400rpm	372rpm
	75 [19.81]	45 [398]	110 [974]	167 [1478]	308 [2724]	306 [2708]	352 [3115]	389 [3442]
	Max Cont.	588rpm	574rpm	560rpm	544rpm	526rpm	505rpm	481rpm
	90 [23.77]	40 [354]	106 [938]	162 [1434]	237 [2097]	301 [2664]	343 [3035]	378 [3345]
	Max Int.	710rpm	696rpm	680rpm	661rpm	646rpm	628rpm	610rpm

Hydraulic Orbit Motors GS



Flow Data

GS160		154cm ³ /rev (9.39in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		36.1 [515]	72.1 [1030]	108.2 [1546]	144.2 [2060]	180.3 [2576]	213.2 [3045]	231.6 [3308]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	15 [3.96]	70 [620]	142 [1257]	213 [1904]	298 [2639]	372 [3295]	435 [3852]	476 [4216]
		93rpm	91rpm	89rpm	85rpm	80rpm	76rpm	58rpm
	30 [7.93]	73 [646]	151 [1337]	225 [1992]	312 [2763]	382 [3383]	456 [4038]	494 [4357]
		189rpm	187rpm	181rpm	176rpm	170rpm	162rpm	153rpm
	40 [10.57]	75 [664]	152 [1346]	228 [2019]	314 [2781]	383 [3392]	454 [4021]	488 [4322]
		252rpm	250rpm	246rpm	239rpm	234rpm	228rpm	212rpm
	50 [13.21]	70 [620]	148 [1310]	225 [1992]	305 [2701]	372 [3294]	445 [3941]	480 [4251]
		313rpm	310rpm	306rpm	298rpm	293rpm	285rpm	272rpm
	60 [15.85]	65 [575]	143 [1266]	218 [1930]	296 [2621]	370 [3277]	442 [3914]	480 [4251]
		378rpm	376rpm	370rpm	362rpm	353rpm	346rpm	332rpm
	75 [19.81]	62 [549]	140 [1239]	211 [1868]	291 [2577]	365 [3232]	439 [3888]	475 [4207]
	Max Cont.	475rpm	469rpm	461rpm	450rpm	441rpm	432rpm	414rpm
	90 [23.77]	59 [522]	131 [1160]	202 [1789]	286 [2533]	357 [3159]	425 [3764]	460 [4074]
	Max Int.	567rpm	561rpm	554rpm	543rpm	532rpm	520rpm	509rpm
GS200		194cm ³ /rev (11.8in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		36.1 [515]	72.1 [1030]	108.2 [1546]	144.2 [2060]	180.3 [2576]	213.2 [3045]	231.6 [3308]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	15 [3.96]	87 [771]	179 [1585]	309 [2737]	371 [3286]	471 [4171]	562 [4977]	611 [5403]
		74rpm	73rpm	71rpm	68rpm	64rpm	60rpm	48rpm
	30 [7.93]	91 [806]	190 [1682]	288 [2550]	386 [3418]	489 [4331]	572 [5066]	618 [5473]
		150rpm	148rpm	143rpm	140rpm	134rpm	128rpm	119rpm
	40 [10.57]	94 [832]	193 [1709]	296 [2621]	394 [3489]	498 [4410]	584 [5172]	645 [5712]
		198rpm	195rpm	192rpm	188rpm	183rpm	178rpm	167rpm
	50 [13.21]	90 [797]	191 [1691]	292 [2586]	389 [3445]	493 [4366]	580 [5137]	634 [5615]
		248rpm	246rpm	241rpm	236rpm	230rpm	223rpm	212rpm
	60 [15.85]	85 [752]	185 [1638]	279 [2471]	382 [3383]	483 [4277]	575 [5092]	623 [5509]
		300rpm	295rpm	288rpm	281rpm	273rpm	263rpm	251rpm
	75 [19.81]	78 [690]	176 [1558]	271 [2400]	370 [3277]	472 [4180]	561 [4968]	610 [5402]
	Max Cont.	374rpm	370rpm	364rpm	360rpm	352rpm	340rpm	331rpm
	90 [23.77]	68 [602]	163 [1443]	265 [2347]	361 [3197]	456 [4038]	545 [4827]	599 [5305]
	Max Int.	443rpm	440rpm	435rpm	428rpm	424rpm	413rpm	400rpm
GS250		243cm ³ /rev (14.8in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		36.1 [515]	72.1 [1030]	108.2 [1546]	144.2 [2060]	180.3 [2576]	203.0 [2900]	231.6 [3308]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	15 [3.96]	110 [974]	231 [2045]	351 [3108]	462 [4091]	585 [5181]	682 [6031]	779 [6890]
		59rpm	58rpm	56rpm	53rpm	50rpm	46rpm	35rpm
	30 [7.93]	116 [1027]	236 [2090]	359 [3179]	475 [4207]	597 [5287]	700 [6199]	791 [6997]
		119rpm	117rpm	114rpm	108rpm	102rpm	92rpm	80rpm
	40 [10.57]	118 [1045]	241 [2134]	363 [3215]	480 [4251]	599 [5305]	707 [6253]	797 [7050]
		162rpm	159rpm	156rpm	150rpm	143rpm	134rpm	121rpm
	50 [13.21]	111 [983]	234 [2072]	352 [3117]	472 [4180]	591 [5234]	693 [6137]	789 [6979]
		203rpm	201rpm	197rpm	191rpm	182rpm	173rpm	158rpm
	60 [15.85]	105 [929]	220 [1947]	345 [3055]	462 [4091]	582 [5154]	686 [6067]	773 [6837]
		244rpm	242rpm	237rpm	230rpm	220rpm	208rpm	194rpm
	75 [19.81]	95 [841]	214 [1895]	340 [3011]	454 [4021]	570 [5048]	671 [5934]	761 [6731]
	Max Cont.	303rpm	299rpm	294rpm	285rpm	272rpm	260rpm	244rpm
	90 [23.77]	90 [797]	209 [1851]	335 [2967]	447 [3959]	559 [4951]	658 [5819]	750 [6633]
	Max Int.	363rpm	359rpm	354rpm	348rpm	340rpm	328rpm	303rpm

Hydraulic Orbit Motors GS



Flow Data

GS315		311cm ³ /rev(18.9in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		36.1 [515]	72.1 [1030]	108.2 [1546]	144.2 [2060]	177.7 [2538]	203 [2900]	231.6 [3308]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	15 [3.96]	150 [1310]	304 [2692]	456 [4038]	613 [5429]	763 [6749]	880 [7785]	979 [8662]
		48rpm	47rpm	45rpm	43rpm	41rpm	39rpm	27rpm
	30 [7.93]	155 [1372]	314 [2781]	465 [4118]	636 [5624]	779 [6890]	885 [7829]	989 [8750]
		95rpm	93rpm	91rpm	89rpm	86rpm	82rpm	67rpm
	40 [10.57]	160 [1417]	310 [2843]	479 [4242]	651 [5757]	797 [7050]	907 [8024]	998 [8830]
		127rpm	125rpm	121rpm	117rpm	115rpm	109rpm	91rpm
	50 [13.21]	155 [1372]	314 [2781]	465 [4118]	638 [5650]	781 [6908]	887 [7847]	989 [8750]
		159rpm	157rpm	153rpm	149rpm	145rpm	142rpm	128rpm
	60 [15.85]	151 [1337]	306 [2710]	453 [4012]	620 [5491]	757 [6695]	887 [7847]	977 [8644]
		187rpm	185rpm	181rpm	176rpm	169rpm	157rpm	143rpm
	75 [19.81]	146 [1293]	300 [2657]	445 [3941]	613 [5429]	755 [6681]	875 [7743]	966 [8549]
	Max Cont.	238rpm	236rpm	232rpm	227rpm	224rpm	220rpm	196rpm
	90 [23.77]	135 [1194]	284 [2513]	436 [3858]	601 [5318]	740 [6549]	863 [7637]	952 [8425]
	Max Int.	286rpm	283rpm	278rpm	272rpm	265rpm	257rpm	232rpm

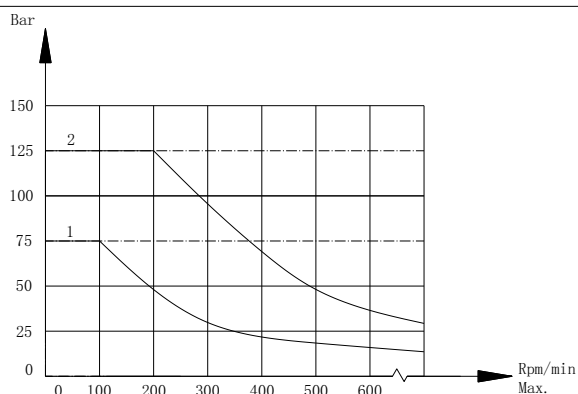
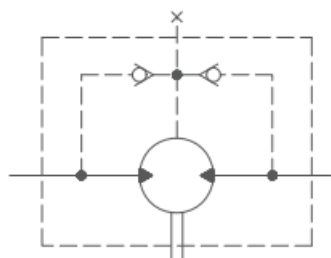
GS400		394cm ³ /rev(24.04in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		36.1 [515]	72.1 [1030]	108.2 [1546]	144.2 [2060]	164.8 [2354]	180.3 [2576]	
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	15 [3.96]	186 [1646]	379 [3354]	578 [5115]	779 [6894]	896 [7930]	986 [8726]	
		37rpm	36rpm	35rpm	33rpm	31rpm	29rpm	
	30 [7.93]	190 [1681]	388 [3433]	590 [5221]	791 [7000]	905 [8009]	991 [8770]	
		75rpm	73rpm	71rpm	68rpm	65rpm	61rpm	
	40 [10.57]	195 [1725]	394 [3486]	569 [5035]	797 [7053]	912 [8071]	998 [8832]	
		99rpm	97rpm	95rpm	93rpm	90rpm	85rpm	
	50 [13.21]	191 [1690]	388 [3433]	587 [5194]	785 [6947]	904 [8000]	983 [8699]	
		125rpm	123rpm	118rpm	114rpm	109rpm	102rpm	
	60 [15.85]	186 [1646]	388 [3433]	587 [5194]	785 [6947]	904 [8000]	983 [8699]	
		149rpm	146rpm	142rpm	137rpm	131rpm	122rpm	
	75 [19.81]	181 [1601]	372 [3292]	576 [5097]	770 [6814]	891 [7885]	973 [8611]	
	Max Cont.	187rpm	183rpm	177rpm	171rpm	164rpm	153rpm	
	90 [23.77]	176 [1557]	367 [3247]	571 [5053]	766 [6779]	883 [7814]	965 [8540]	
	Max Int.	226rpm	221rpm	214rpm	208rpm	199rpm	183rpm	

GS475		475cm ³ /rev(28.9in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		36.1 [515]	72.1 [1030]	108.2 [1546]	144.2 [2060]	154.5 [2207]		
Flow	(gpm↓)	Torque N m [lb-in] Speed Specification						
	15 [3.96]	218 [1929]	439 [3885]	661 [5849]	892 [7894]	995 [8805]		
		30rpm	29rpm	28rpm	27rpm	25rpm		
	30 [7.93]	223 [1973]	450 [3982]	676 [5982]	910 [8053]	1002 [8867]		
		61rpm	60rpm	58rpm	56rpm	53rpm		
	40 [10.57]	228 [2017]	461 [4079]	689 [6097]	927 [8203]	1017 [9000]		
		82rpm	80rpm	77rpm	74rpm	68rpm		
	50 [13.21]	224 [1982]	456 [4035]	682 [6035]	920 [8142]	1008 [8920]		
		103rpm	101rpm	97rpm	92rpm	86rpm		
	60 [15.85]	220 [1947]	451 [3991]	677 [5991]	913 [8080]	998 [8832]		
		123rpm	121rpm	118rpm	112rpm	105rpm		
	75 [19.81]	212 [1876]	443 [3920]	664 [5876]	901 [7973]	980 [8673]		
	Max Cont.	155rpm	153rpm	147rpm	140rpm	132rpm		
	90 [23.77]	196 [1734]	421 [3725]	609 [5690]	877 [7761]	959 [8487]		
	Max Int.	186rpm	184rpm	178rpm	170rpm	157rpm		

Technical Data

Hydraulic orbit Motors GS

Permissible shaft seal pressure



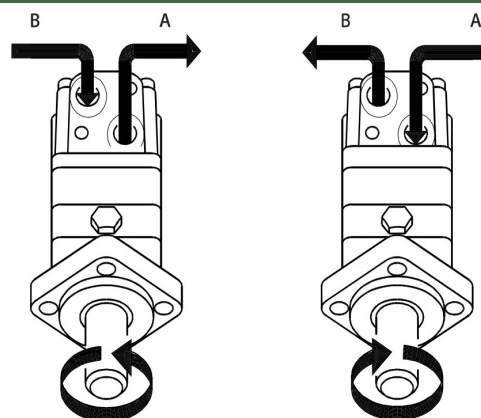
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Case Drain :

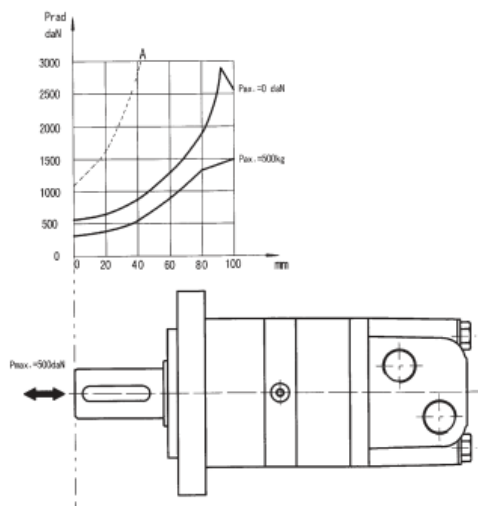
In applications without a motor drain line, the pressure exerted on the shaft seal is marginally in excess of the return line pressure. When the Drain line is used, the pressure exerted on the shaft seal is equal to the return line pressure.

Standard direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate: Clockwise when port "A" is pressurized. Counter-clockwise port "B" is pressurized.

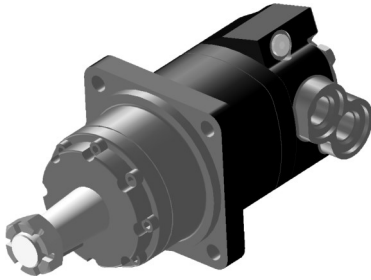


Axial and Radial forces



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.

General

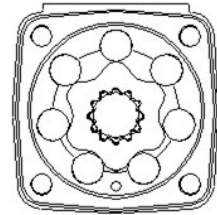


APPLICATION

- ◇ Metal working machines
- ◇ Agricultural machines
- ◇ Road building machines
- ◇ Mining machinery
- ◇ Food industries
- ◇ Special vehicles etc.
- ◇ Injection molding machines
- ◇ Conveyors

OPTIONS

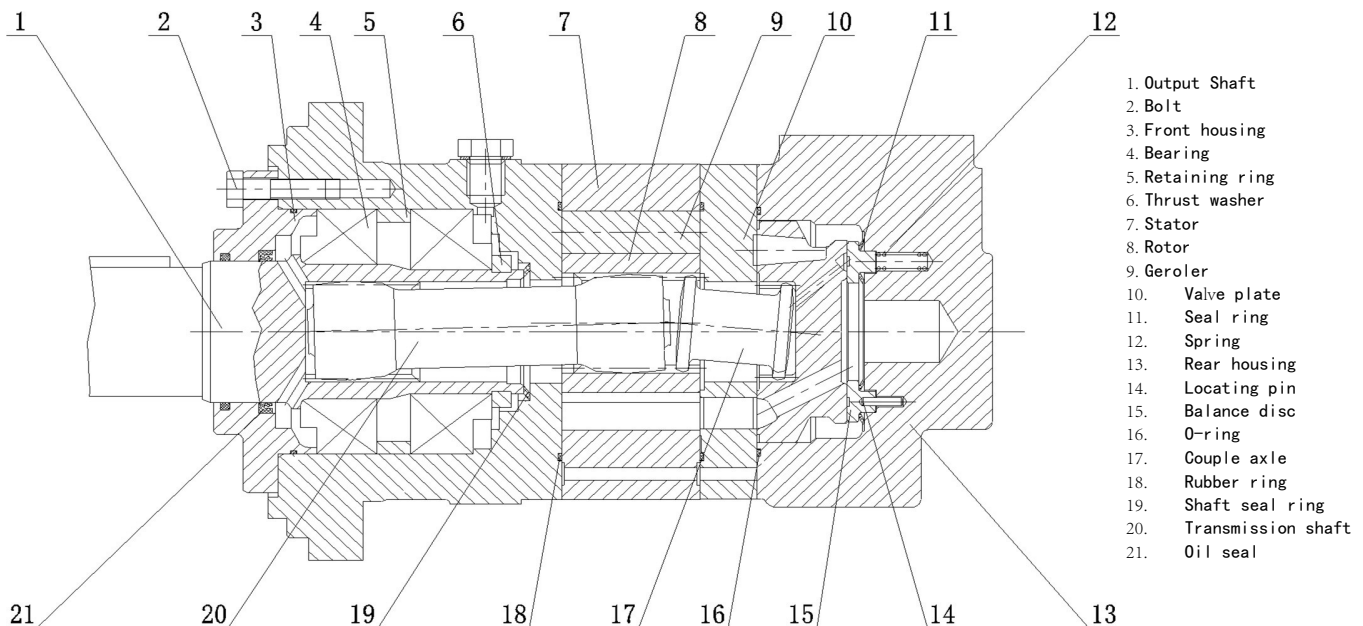
- ◇ Flange and wheel mount
- ◇ Short motor
- ◇ Speed sensing
- ◇ Shafts—straight, splined and tapered
- ◇ Metric and BSPP ports
- ◇ Other special features



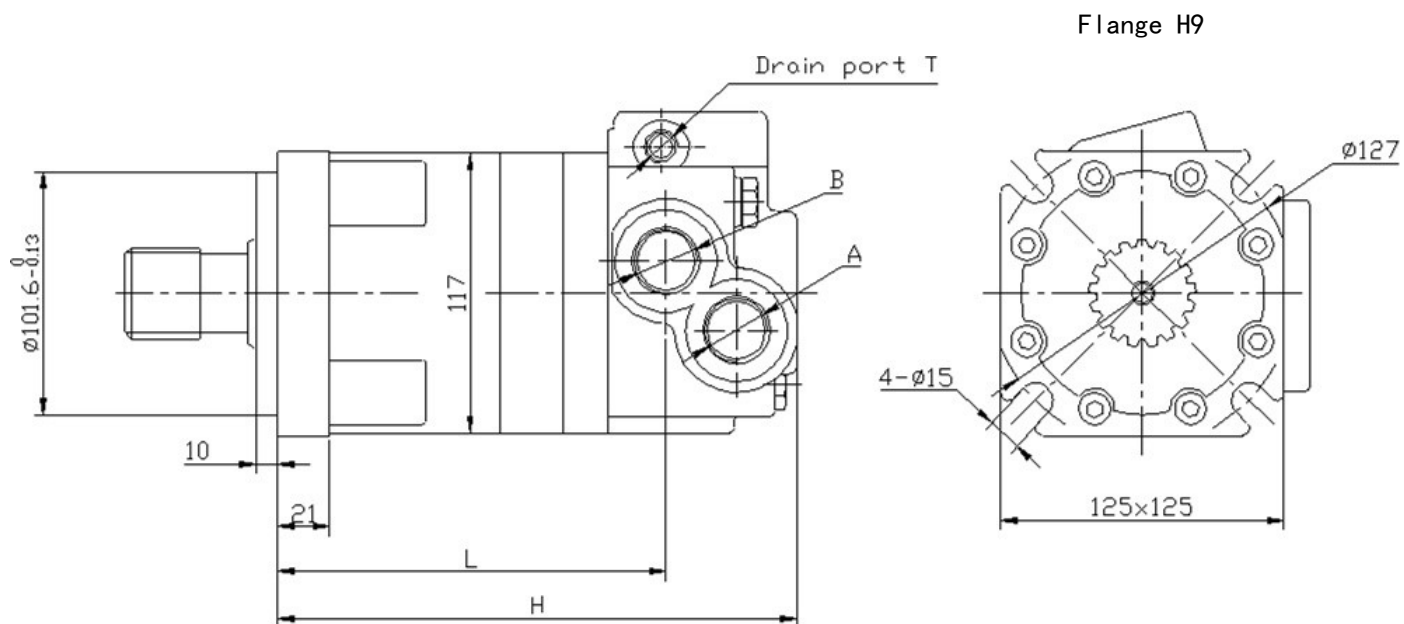
- ◇ Disc distribution flow

SPECIFICATION

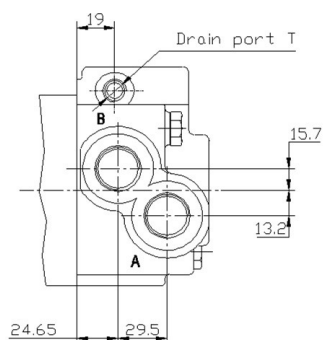
Model		GKB110	GKB130	GKB160	GKB205	GKB245	GKB310	GKB395	GKB495	GKB625
Disp.	in ³ /rev	6.7	7.9	9.9	12.5	15.0	19.0	24.0	30.0	38.0
	cm ³ /rev	110	130	160	205	245	310	395	495	625
Max Speed rpm	cont.	697	722	582	459	383	303	239	191	151
	int.	868	862	693	546	532	422	376	305	241
Max Torque N m [lb-in]	cont.	320 [2850]	375 [3330]	485 [4290]	600 [5300]	705 [6240]	850 [7530]	930 [8240]	945 [8375]	970 [8605]
	int.	470 [4160]	560 [4940]	705 [6240]	800 [7100]	845 [7470]	1065 [9420]	1185 [10470]	1170 [10350]	1180 [10450]
Max Dif. bar [psi]	cont.	205 [3000]	205 [3000]	205 [3000]	205 [3000]	205 [3000]	205 [3000]	190 [2750]	140 [2000]	115 [1700]
	int.	310 [4500]	310 [4500]	310 [4500]	310 [4500]	260 [3750]	260 [3750]	240 [3500]	170 [2500]	140 [2000]
Max Flow l/min [gpm]	cont.	75 [20]	95 [25]	95 [25]	95 [25]	95 [25]	95 [25]	95 [25]	95 [25]	95 [25]
	int.	95 [25]	115 [30]	115 [30]	115 [30]	130 [35]	130 [35]	150 [40]	150 [40]	150 [40]



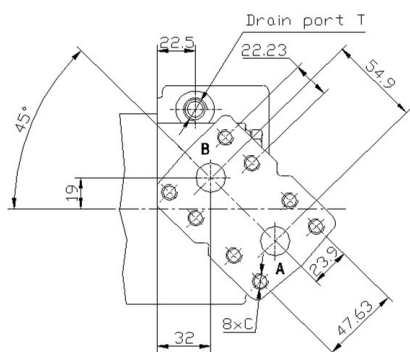
Dimensions and Mounting Data



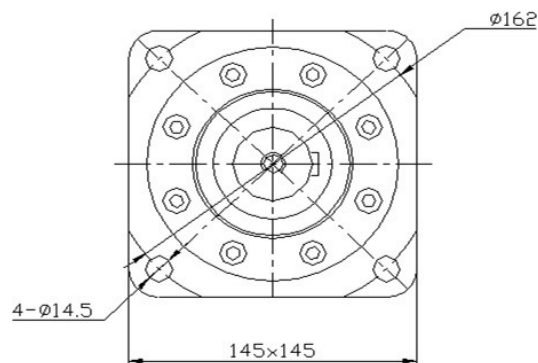
Port: U5, UK, MD



Port: UL



Flange HL

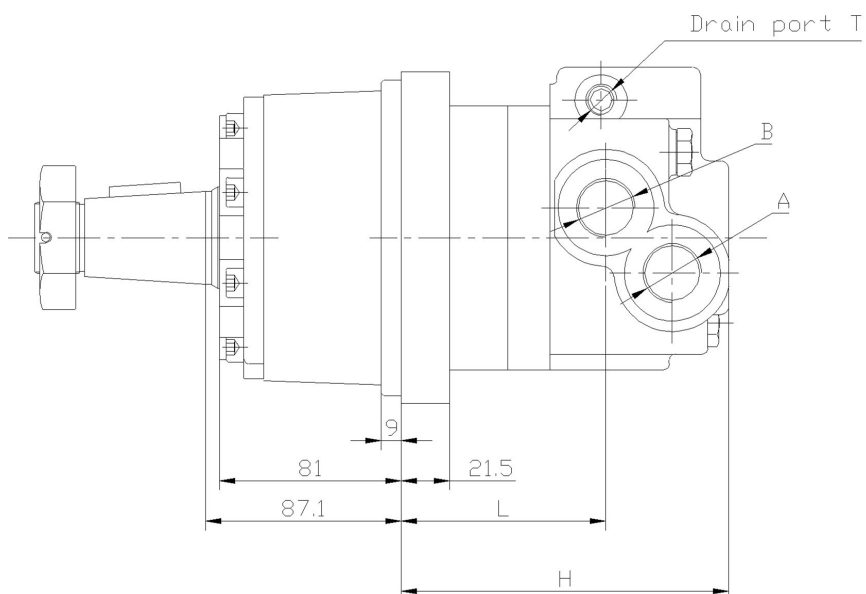


Model	1-1/16-12 or G3/4 Ports		3/4 In Split flange oil port	
	H	L	H	L
GKB110	214.4	158.3	246.3	166.7
GKB130	218.4	162.3	250.4	170.8
GKB160	224.7	168.7	256.7	177.1
GKB205	233.2	177.2	265.2	185.6
GKB245	224.7	168.7	256.7	177.1
GKB310	233.2	177.2	265.2	185.6
GKB395	243.9	187.9	275.9	196.3
GKB495	256.8	200.7	288.8	209.2
GKB625	273.9	217.8	305.9	226.2

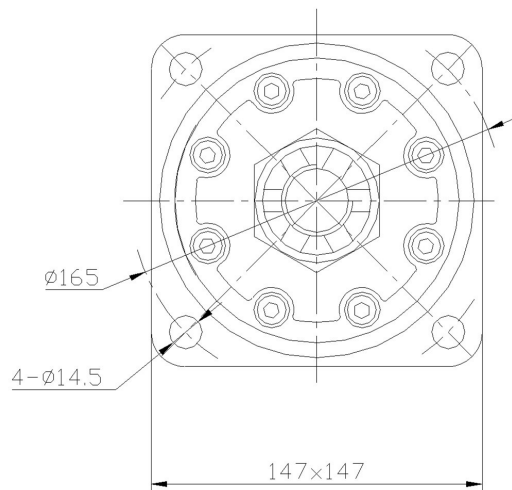
Port	U5 (Depth)	UK (Depth)	MD (Depth)	UL (Depth)
P(A,B)	1-1/16-12 O-ring	7/8-14UNF O-ring	M22x1.5	Code 61-12
T	7/16-20 O-ring	9/16-18UNF O-ring	M12x1.5	7/16-20UNF
C	-	-	-	M10

Dimensions and Mounting Data

GKB Wheel motor



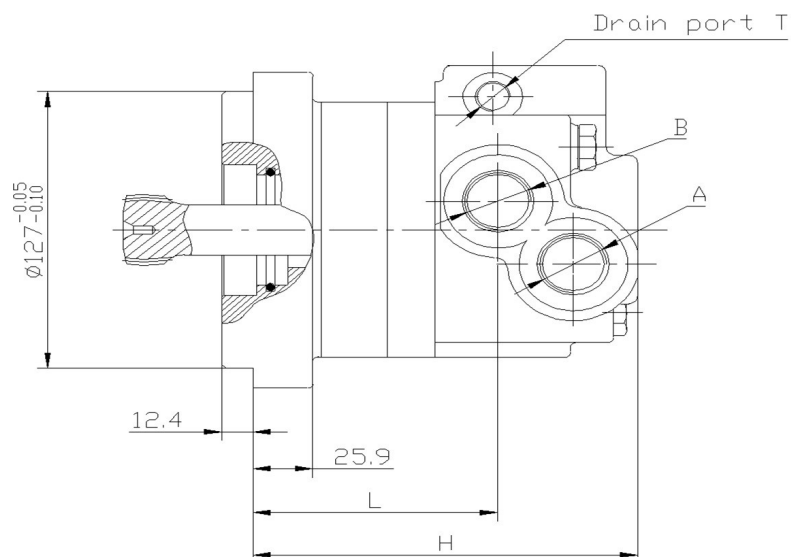
Flange W7



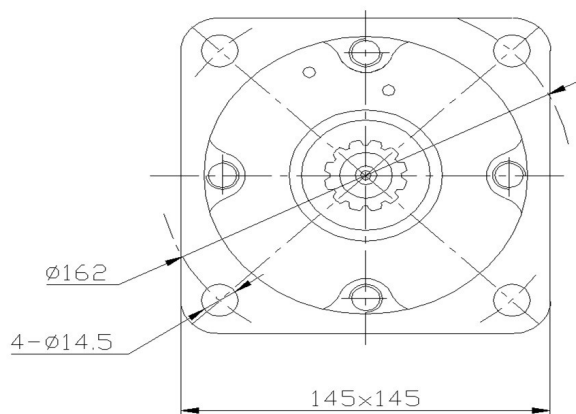
Model	1-1/16-12 or G3/4		3/4 In Split flange oil	
	H	L	H	L
GKB110	143.3	87.4	174.5	95.1
GKB130	147.3	91.5	178.5	99.1
GKB160	153.6	97.8	184.9	105.5
GKB205	162.2	106.3	193.4	114.0
GKB245	153.6	97.8	184.9	105.5
GKB310	162.2	106.3	193.4	114.0
GKB395	172.8	117.0	204.1	124.7
GKB495	185.8	129.9	217.0	137.6
GKB625	202.8	147.0	234.0	154.6

Model	1-1/16-12 or G3/4		3/4 In Split flange oil	
	H	L	H	L
GKBS110	146.8	91.0	178.7	99.4
GKBS130	150.8	95.1	182.8	103.5
GKBS160	157.1	101.4	189.1	109.8
GKBS205	165.7	109.9	197.6	118.3
GKBS245	157.1	101.4	189.1	109.8
GKBS310	165.7	109.9	197.6	118.3
GKBS395	176.3	120.6	208.3	129.0
GKBS495	189.2	133.5	221.2	141.9
GKBS625	206.3	150.5	238.3	159.0

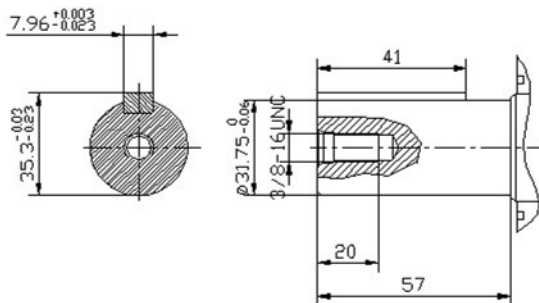
GKBS Short motor



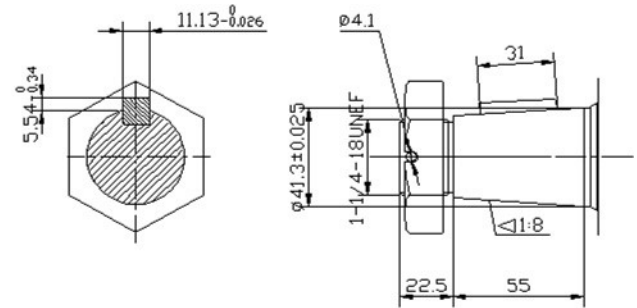
Flange HM



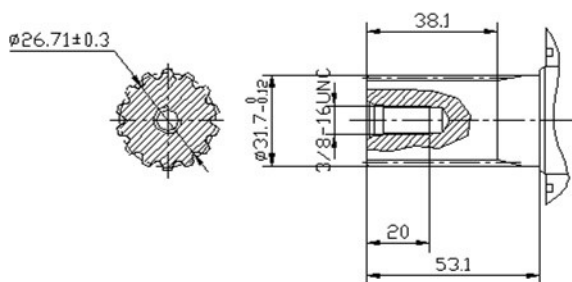
GKB Shaft Extension Dimensions Data



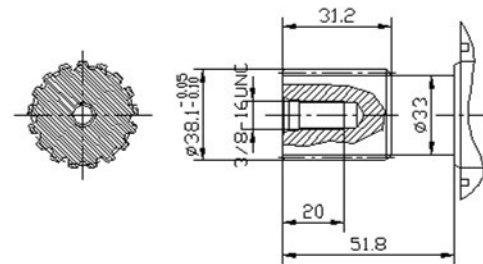
Shaft SM: Cylindrical shaft $\varnothing 31.75$
Parallel key 7.96x7.96x41



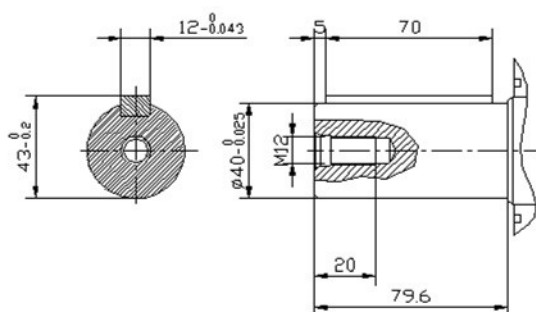
Shaft TE: Tapered shaft $\varnothing 41.3$
Parallel key B11.13x11.13x31
Tightening torque: 500 ± 10 Nm



Shaft RT: Splined 14-DP12/24



Shaft RV: Splined 17-DP12/24



Shaft SA1: Cylindrical shaft
 $\varnothing 40$ Parallel key 12x8x70

GKB Shaft Extension Dimensions Data

Ordering Example:						
Model		Displacement	Flange	Drive shaft	Ports	Other function
GKB		110	H9	SM	UL	ACA
Model	Disp.	Flange	Drive shaft	Ports		
GKB GKBS	110	<u>H9</u> =4- $\varnothing$ 15 square flange, pilot	<u>SM</u> =Shaft $\varnothing$ 31.75, parallel	<u>U5</u> =1-1/16-12 O-ring, 7/16-20UNF <u>UK</u> =7/8-14 O-ring, 9/16-18UN <u>MD</u> =M22x1.5, M14x1.5 <u>UL</u> =Code 61-12, 7/16-20UNF		
	130	$\varnothing$ 101.6x9	key 7.96x7.96x41			
	160	<u>HL</u> =4- $\varnothing$ 14.5 square flange,	<u>RT</u> =Splined 14-DP12/24			
	205	pilot $\varnothing$ 127x12.3	<u>SA1</u> =Shaft $\varnothing$ 40, parallel			
	245	<u>W7</u> =4- $\varnothing$ 14.5 wheel flange, pi-	key 12x8x70			
	310	lot $\varnothing$ 139.6	<u>RV</u> =Splined 17-DP12/24			
	395	<u>HM</u> =4- $\varnothing$ 15 bolt flange	<u>TE</u> =Tapered shaft $\varnothing$ 41.25,			
	495	(bearingless), pilot	parallel key			
	625	$\varnothing$ 127x12.4	11.13x11.13x31.4			

Rotation direction	Paint	Standard Options	Seal Options	Relief Options	Speed Sensor Option
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature	Blank= None HPS=High Pressure Seal SG=Seal Guard HPS-SG= High Pressure Seal & Seal Guard	Blank=None R=Valve Cavity Only R12=Bi-directional relief max 125 bar R-20= Bi-directional relief max 207 bar	Blank= None SS= Speed Sensor, 4-pin, M12 male connector

Hydraulic Orbit Motors GKB



Flow Data

GKB110		6.7in ³ /rev(110cm ³ /rev)									Max Int.
Pressure bar [psi→]		15[250]	35[500]	70[1000]	105[1500]	140[2000]	170[2500]	205[3000]	240[3500]	275[4000]	310[4500]
Flow	l/min(gpm↓)	N m [lb-in] Torque N m [lb-in] Speed Specification									
	1.9 [0.50]	15 [150] 14rpm	45 [300] 10rpm	95 [850] 5rpm	145 [1290] 2rpm						
	3.8 [1.00]	20 [170] 34rpm	50 [440] 33rpm	100 [900] 31rpm	155 [1380] 28rpm	210 [1860] 25rpm	255 [2270] 22rpm	305 [2680] 18rpm	350 [3110] 11rpm		
	7.5 [2.00]	20 [180] 68rpm	50 [450] 67rpm	105 [910] 62rpm	155 [1390] 56rpm	210 [1860] 50rpm	260 [2280] 44rpm	305 [2700] 36rpm	355 [3120] 28rpm	390 [3450] 18rpm	
	15 [4.00]	20 [190] 138rpm	50 [460] 136rpm	105 [940] 123rpm	160 [1400] 110rpm	210 [1870] 97rpm	260 [2310] 84rpm	310 [2730] 70rpm	355 [3140] 56rpm	400 [3560] 42rpm	440 [3880] 28rpm
	23 [6.00]	25 [200] 207rpm	55 [470] 204rpm	110 [960] 200rpm	160 [1420] 193rpm	210 [1880] 184rpm	260 [2320] 174rpm	310 [2760] 163rpm	360 [3200] 150rpm	410 [3640] 136rpm	455 [3950] 121rpm
	30 [8.00]	20 [190] 277rpm	50 [460] 274rpm	105 [950] 270rpm	160 [1420] 262rpm	210 [1880] 253rpm	265 [2340] 241rpm	315 [2790] 228rpm	365 [3230] 213rpm	415 [3670] 196rpm	455 [4010] 179rpm
	38 [10.00]	20 [180] 347rpm	50 [460] 344rpm	105 [950] 340rpm	160 [1420] 331rpm	215 [1890] 322rpm	265 [2350] 308rpm	320 [2820] 292rpm	370 [3260] 274rpm	420 [3700] 255rpm	460 [4070] 236rpm
	45 [12.00]	20 [160] 417rpm	50 [450] 414rpm	105 [940] 410rpm	160 [1420] 400rpm	210 [1880] 390rpm	265 [2350] 374rpm	320 [2820] 355rpm	370 [3260] 335rpm	420 [3710] 313rpm	460 [4080] 292rpm
	53 [14.00]	15 [140] 487rpm	50 [440] 484rpm	105 [930] 480rpm	160 [1420] 469rpm	210 [1880] 458rpm	265 [2350] 440rpm	320 [2830] 419rpm	370 [3280] 446rpm	420 [3730] 471rpm	465 [4110] 348rpm
	61 [16.00]	15 [130] 556rpm	50 [440] 553rpm	105 [920] 549rpm	160 [1410] 537rpm	210 [1870] 525rpm	265 [2350] 505rpm	320 [2840] 482rpm	375 [3300] 455rpm	425 [3750] 428rpm	465 [4120] 404rpm
	68 [18.00]	10 [100] 626rpm	50 [440] 622rpm	105 [910] 618rpm	160 [1400] 606rpm	210 [1870] 593rpm	265 [2350] 570rpm	320 [2840] 545rpm	375 [3300] 516rpm	425 [3770] 485rpm	465 [4140] 460rpm
	76 [20.00]	10 [80] 697rpm	50 [430] 694rpm	100 [900] 690rpm	155 [1370] 677rpm	210 [1860] 664rpm	265 [2350] 638rpm	320 [2850] 611rpm	375 [3320] 579rpm	430 [3790] 545rpm	470 [4160] 518rpm
	95 [25.00]		45 [400] 868rpm	95 [860] 861rpm	155 [1350] 838rpm	210 [1850] 816rpm	260 [2320] 792rpm	320 [2830] 767rpm	375 [3300] 729rpm	425 [3780] 690rpm	

GKB130		7.9in ³ /rev(130cm ³ /rev)									Max Int.
Pressure bar [psi→]		15[250]	35[500]	70[1000]	105[1500]	140[2000]	170[2500]	205[3000]	240[3500]	275[4000]	310[4500]
Flow	l/min(gpm↓)	N m [lb-in] Torque N m [lb-in] Speed Specification									
	1.9 [0.50]	35 [310] 12rpm	60 [510] 9rpm	120 [1060] 5rpm	180 [1590] 2rpm						
	3.8 [1.00]	35 [290] 30rpm	60 [530] 28rpm	120 [1080] 25rpm	180 [1600] 19rpm	240 [2110] 14rpm	300 [2640] 13rpm	345 [3060] 12rpm	390 [3450] 4rpm		
	7.5 [2.00]	30 [280] 57rpm	60 [530] 56rpm	125 [1100] 53rpm	185 [1620] 47rpm	240 [2140] 42rpm	300 [2660] 40rpm	360 [3180] 38rpm	405 [3600] 29rpm	455 [4020] 20rpm	460 [4080] 12rpm
	15 [4.00]	30 [250] 116rpm	60 [520] 114rpm	125 [1100] 111rpm	185 [1650] 105rpm	250 [2200] 100rpm	305 [2700] 95rpm	365 [3210] 90rpm	415 [3660] 70rpm	465 [4100] 50rpm	515 [4560] 37rpm
	23 [6.00]	25 [240] 173rpm	60 [510] 170rpm	125 [1100] 167rpm	185 [1650] 161rpm	250 [2200] 156rpm	305 [2720] 149rpm	365 [3240] 142rpm	420 [3710] 123rpm	470 [4180] 104rpm	525 [4660] 91rpm
	30 [8.00]	25 [230] 228rpm	60 [510] 225rpm	120 [1080] 222rpm	185 [1640] 216rpm	250 [2210] 210rpm	310 [2740] 202rpm	370 [3270] 194rpm	425 [3770] 176rpm	480 [4270] 158rpm	535 [4750] 145rpm
	38 [10.00]	25 [210] 283rpm	60 [510] 281rpm	120 [1080] 278rpm	185 [1640] 272rpm	250 [2210] 266rpm	310 [2750] 256rpm	375 [3300] 246rpm	430 [3820] 229rpm	490 [4350] 212rpm	545 [4850] 189rpm
	45 [12.00]	25 [200] 341rpm	55 [500] 338rpm	120 [1070] 335rpm	185 [1640] 329rpm	250 [2220] 323rpm	310 [2750] 312rpm	375 [3300] 300rpm	435 [3840] 282rpm	495 [4370] 263rpm	550 [4870] 237rpm
	53 [14.00]	20 [180] 400rpm	55 [490] 396rpm	120 [1060] 392rpm	185 [1640] 386rpm	250 [2220] 380rpm	310 [2750] 368rpm	375 [3310] 355rpm	435 [3860] 335rpm	495 [4390] 315rpm	550 [4890] 286rpm
	61 [16.00]	20 [160] 457rpm	55 [490] 453rpm	120 [1050] 449rpm	185 [1630] 443rpm	250 [2220] 437rpm	310 [2760] 424rpm	375 [3310] 410rpm	435 [3860] 388rpm	495 [4400] 366rpm	555 [4920] 335rpm
	68 [18.00]	15 [130] 516rpm	55 [480] 511rpm	120 [1050] 506rpm	185 [1630] 500rpm	250 [2220] 494rpm	310 [2760] 480rpm	375 [3320] 465rpm	435 [3870] 442rpm	500 [4420] 418rpm	560 [4940] 384rpm
	76 [20.00]	10 [110] 574rpm	55 [470] 569rpm	120 [1040] 564rpm	185 [1620] 559rpm	250 [2210] 551rpm	310 [2760] 536rpm	375 [3330] 520rpm	440 [3890] 495rpm	500 [4440] 470rpm	
	83 [22.00]	10 [70] 633rpm	55 [450] 628rpm	115 [1020] 624rpm	185 [1610] 615rpm	245 [2190] 606rpm	310 [2750] 590rpm	375 [3320] 573rpm	440 [3880] 547rpm	500 [4440] 520rpm	
	95 [25.00]	5 [50] 722rpm	50 [430] 718rpm	115 [1000] 714rpm	180 [1580] 702rpm	245 [2160] 690rpm	305 [2720] 672rpm	375 [3300] 653rpm	435 [3860] 625rpm	500 [4430] 595rpm	
	114 [30.00]		45 [400] 862rpm	105 [940] 855rpm	170 [1500] 842rpm	235 [2080] 827rpm	300 [2670] 806rpm	360 [3200] 783rpm	425 [3740] 749rpm		

Hydraulic Orbit Motors GKB



Flow Data

GKB160	7.9in ³ /rev(130cm ³ /rev)										Max Int.
Pressure bar [psi→]		15[250]	35[500]	70[1000]	105[1500]	140[2000]	170[2500]	205[3000]	240[3500]	275[4000]	310[4500]
Flow	l/min(gpm↓)	N m [lb-in] Torque N m [lb-in] Speed Specification									
	1.9 [0.50]	35 [300]	75 [680]	150 [1320]	230 [2050]	310 [2750]					
		8rpm	7rpm	5rpm	3rpm	1rpm					
	3.8 [1.00]	35 [320]	80 [700]	155 [1350]	235 [2070]	315 [2780]	375 [3300]	445 [3940]	500 [4410]	560 [4950]	
		23rpm	22rpm	20rpm	19rpm	18rpm	16rpm	15rpm	8rpm	2rpm	
	7.5 [2.00]	35 [330]	80 [700]	155 [1360]	235 [2080]	315 [2790]	375 [3340]	450 [3970]	510 [4530]	575 [5090]	630 [5590]
		46rpm	45rpm	41rpm	40rpm	37rpm	32rpm	29rpm	27rpm	25rpm	13rpm
	15 [4.00]	35 [320]	80 [710]	160 [1400]	240 [2100]	320 [2820]	385 [3420]	455 [4020]	520 [4620]	590 [5220]	645 [5730]
		93rpm	92rpm	90rpm	88rpm	84rpm	76rpm	73rpm	62rpm	51rpm	35rpm
	23 [6.00]	35 [300]	80 [710]	160 [1420]	240 [2140]	320 [2850]	395 [3510]	470 [4180]	540 [4760]	605 [5340]	665 [5870]
		137rpm	135rpm	134rpm	131rpm	126rpm	120rpm	114rpm	90rpm	75rpm	57rpm
	30 [8.00]	30 [280]	80 [720]	165 [1450]	245 [2180]	330 [2900]	400 [3560]	480 [4230]	550 [4850]	620 [5470]	680 [6010]
		184rpm	182rpm	180rpm	176rpm	171rpm	163rpm	154rpm	138rpm	122rpm	100rpm
	38 [10.00]	30 [260]	80 [720]	165 [1480]	250 [2220]	335 [2950]	410 [3610]	485 [4290]	555 [4920]	630 [5560]	695 [6160]
		232rpm	229rpm	226rpm	221rpm	216rpm	206rpm	194rpm	182rpm	169rpm	142rpm
	45 [12.00]	25 [240]	80 [700]	165 [1450]	245 [2190]	330 [2920]	405 [3590]	485 [4280]	555 [4920]	630 [5570]	700 [6180]
		277rpm	274rpm	272rpm	266rpm	260rpm	250rpm	238rpm	224rpm	209rpm	182rpm
	53 [14.00]	25 [220]	75 [680]	160 [1420]	245 [2160]	325 [2890]	405 [3570]	480 [4270]	555 [4920]	630 [5580]	700 [6200]
		321rpm	319rpm	318rpm	311rpm	304rpm	294rpm	282rpm	266rpm	249rpm	222rpm
	61 [16.00]	25 [200]	75 [670]	160 [1400]	240 [2130]	325 [2860]	400 [3550]	480 [4260]	555 [4920]	630 [5590]	705 [6220]
		366rpm	364rpm	362rpm	356rpm	348rpm	338rpm	326rpm	308rpm	289rpm	262rpm
	68 [18.00]	20 [180]	75 [650]	155 [1360]	235 [2100]	320 [2830]	400 [3530]	480 [4250]	555 [4910]	635 [5600]	705 [6240]
		410rpm	409rpm	407rpm	401rpm	392rpm	382rpm	370rpm	350rpm	329rpm	302rpm
	76 [20.00]	15 [150]	70 [630]	150 [1340]	235 [2070]	315 [2800]	395 [3510]	480 [4240]	555 [4910]	635 [5610]	
		460rpm	458rpm	456rpm	448rpm	440rpm	429rpm	417rpm	396rpm	373rpm	
	83 [22.00]	15 [120]	70 [620]	150 [1330]	235 [2060]	315 [2790]	395 [3500]	475 [4220]	555 [4910]	635 [5600]	
		509rpm	506rpm	502rpm	494rpm	484rpm	473rpm	461rpm	438rpm	413rpm	
	95 [25.00]	10 [70]	70 [600]	150 [1320]	230 [2050]	315 [2780]	395 [3480]	475 [4210]	555 [4900]	630 [5590]	
		582rpm	578rpm	573rpm	563rpm	552rpm	540rpm	526rpm	501rpm	474rpm	
	114 [30.00]		65 [560]	145 [1280]	225 [1990]	305 [2700]	390 [3430]	450 [3970]	525 [4640]		
			693rpm	687rpm	675rpm	661rpm	647rpm	630rpm	600rpm		

GKB205	12.5in ³ /rev(205cm ³ /rev)										Max Int.
Pressure bar [psi→]		15[250]	35[500]	70[1000]	105[1500]	140[2000]	170[2500]	205[3000]	240[3500]	275[4000]	310[4500]
Flow	l/min(gpm↓)	N m [lb-in] Torque N m [lb-in] Speed Specification									
	1.9 [0.50]	45 [400]	90 [810]	170 [1500]							
		8rpm	5rpm	1rpm							
	3.8 [1.00]	45 [410]	95 [830]	180 [1590]	250 [2220]	325 [2860]	435 [3860]	515 [4560]	610 [5390]	625 [5510]	
		17rpm	17rpm	16rpm	15rpm	14rpm	12rpm	11rpm	9rpm	3rpm	
	7.5 [2.00]	45 [420]	95 [850]	190 [1680]	270 [2410]	355 [3140]	460 [4060]	540 [4800]	610 [5420]	680 [6000]	700 [6210]
		36rpm	35rpm	34rpm	32rpm	29rpm	27rpm	25rpm	22rpm	16rpm	8rpm
	15 [4.00]	50 [430]	100 [870]	200 [1770]	295 [2590]	385 [3410]	480 [4260]	570 [5040]	645 [5730]	715 [6340]	760 [6740]
		73rpm	73rpm	71rpm	70rpm	68rpm	61rpm	57rpm	45rpm	35rpm	23rpm
	23 [6.00]	50 [430]	100 [880]	205 [1800]	295 [2620]	400 [3530]	495 [4370]	585 [5170]	665 [5900]	745 [6590]	800 [7100]
		107rpm	106rpm	105rpm	103rpm	101rpm	98rpm	90rpm	81rpm	74rpm	65rpm
	30 [8.00]	45 [410]	100 [870]	205 [1820]	300 [2660]	400 [3560]	500 [4410]	590 [5240]	680 [6020]	765 [6770]	
		144rpm	143rpm	142rpm	138rpm	136rpm	132rpm	125rpm	116rpm	109rpm	
	38 [10.00]	45 [390]	95 [860]	205 [1820]	305 [2700]	405 [3580]	505 [4460]	600 [5300]	690 [6110]	780 [6890]	
		182rpm	180rpm	179rpm	174rpm	170rpm	166rpm	160rpm	152rpm	143rpm	
	45 [12.00]	40 [350]	95 [850]	205 [1810]	305 [2690]	405 [3570]	500 [4440]	600 [5300]	690 [6120]		
		217rpm	216rpm	215rpm	211rpm	202rpm	200rpm	194rpm	185rpm		
	53 [14.00]	35 [330]	95 [840]	200 [1790]	300 [2670]	400 [3560]	500 [4430]	600 [5290]	690 [6120]		
		256rpm	254rpm	252rpm	248rpm	243rpm	237rpm	229rpm	219rpm		
	61 [16.00]	35 [290]	95 [820]	200 [1770]	300 [2650]	400 [3540]	500 [4410]	595 [5280]	690 [6120]		
		291rpm	290rpm	289rpm	284rpm	280rpm	272rpm	264rpm	253rpm		
	68 [18.00]	30 [270]	90 [810]	200 [1750]	300 [2640]	400 [3520]	495 [4400]	595 [5270]	690 [6120]		
		329rpm	327rpm	325rpm	321rpm	316rpm	308rpm	298rpm	287rpm		
	76 [20.00]	25 [230]	90 [800]	195 [1730]	295 [2620]	395 [3510]	495 [4380]	595 [5270]	690 [6120]		
		366rpm	364rpm	362rpm	358rpm	353rpm	345rpm	334rpm	321rpm		
	83 [22.00]	25 [190]	90 [780]	190 [1690]	295 [2600]	395 [3500]	495 [4370]	595 [5260]			
		402rpm	400rpm	398rpm	394rpm	389rpm	380rpm	368rpm			
	95 [25.00]	15 [150]	85 [750]	185 [1640]	290 [2560]	395 [3480]	495 [4360]	590 [5240]			
		459rpm	456rpm	453rpm	448rpm	442rpm	434rpm	421rpm			
	114 [30.00]		85 [750]	185 [1640]	290 [2560]	395 [3480]	495 [4360]	590 [5240]			
			546rpm	542rpm	537rpm	529rpm	520rpm	504rpm			

Hydraulic Orbit Motors GKB



Flow Data 流量参数

GKB245	15.0in ³ /rev(245cm ³ /rev)															Max Int.
Pressure bar [psi→]		15[250]	35[500]	50[750]	70[1000]	85[1250]	105[1500]	120[1750]	140[2000]	155[2250]	170[2500]	190[2750]	205[3000]	225[3250]	240[3500]	260[3750]
Flow	l/min(gpm ↓)	N m [lb-in] Torque N m [lb-in] Speed Specification														
	1.9 [0.50]	50	110													
		5rpm	2rpm													
	3.8 [1.00]	55 [480]	110 [990]	170 [1490]	225 [1990]	280 [2480]	335 [2970]	385 [3400]	435 [3830]	480 [4250]	530 [4680]	565 [5020]				
		14rpm	14rpm	14rpm	13rpm	13rpm	12rpm	12rpm	11rpm	11rpm	10rpm	4rpm				
	7.5 [2.00]	55 [500]	115 [1000]	170 [1520]	230 [2040]	285 [2540]	345 [3050]	385 [3420]	445 [3930]	500 [4440]	555 [4900]	600 [5320]	650 [5740]	695 [6160]	750 [6640]	810 [7150]
		30rpm	30rpm	29rpm	29rpm	28rpm	27rpm	26rpm	24rpm	23rpm	22rpm	20rpm	18rpm	16rpm	14rpm	11rpm
	15 [4.00]	60 [510]	115 [1030]	175 [1560]	235 [2080]	295 [2600]	355 [3130]	410 [3630]	465 [4130]	525 [4630]	580 [5120]	630 [5570]	680 [6030]	730 [6480]	775 [6870]	830 [7340]
		61rpm	61rpm	60rpm	60rpm	59rpm	59rpm	58rpm	56rpm	53rpm	49rpm	47rpm	44rpm	42rpm	39rpm	36rpm
	23 [6.00]	60 [510]	120 [1040]	175 [1570]	235 [2100]	295 [2620]	355 [3160]	415 [3660]	475 [4200]	530 [4710]	590 [5220]	645 [5690]	695 [6150]	750 [6620]	795 [7050]	840 [7430]
		91rpm	90rpm	90rpm	89rpm	88rpm	88rpm	86rpm	83rpm	80rpm	75rpm	72rpm	70rpm	67rpm	63rpm	59rpm
	30 [8.00]	55 [500]	115 [1020]	175 [1560]	240 [2110]	295 [2630]	355 [3150]	415 [3680]	475 [4210]	535 [4740]	595 [5250]	645 [5720]	700 [6200]	755 [6670]	800 [7090]	845 [7470]
		121rpm	121rpm	120rpm	119rpm	118rpm	117rpm	115rpm	113rpm	111rpm	106rpm	103rpm	99rpm	96rpm	91rpm	87rpm
	38 [10.00]	55 [470]	115 [1000]	175 [1540]	235 [2100]	295 [2620]	355 [3150]	415 [3690]	480 [4230]	540 [4770]	600 [5290]	650 [5760]	705 [6240]	760 [6710]	805 [7140]	
		152rpm	151rpm	150rpm	148rpm	148rpm	147rpm	145rpm	143rpm	141rpm	137rpm	133rpm	129rpm	125rpm	120rpm	
	45 [12.00]	55 [450]	110 [980]	175 [1530]	235 [2080]	295 [2610]	355 [3140]	415 [3680]	475 [4220]	540 [4760]	595 [5280]	650 [5750]	705 [6230]	760 [6700]		
		183rpm	182rpm	180rpm	179rpm	178rpm	178rpm	176rpm	173rpm	170rpm	166rpm	161rpm	157rpm	152rpm		
	53 [14.00]	45 [420]	110 [960]	170 [1520]	235 [2060]	295 [2600]	355 [3130]	415 [3670]	475 [4200]	535 [4740]	595 [5260]	650 [5740]	705 [6220]			
		213rpm	212rpm	211rpm	210rpm	209rpm	208rpm	206rpm	203rpm	200rpm	195rpm	190rpm	185rpm			
	61 [16.00]	45 [400]	105 [950]	170 [1500]	230 [2040]	290 [2580]	355 [3120]	415 [3660]	475 [4190]	535 [4730]	595 [5250]	650 [5730]	700 [6210]			
		244rpm	243rpm	242rpm	241rpm	240rpm	239rpm	236rpm	232rpm	229rpm	225rpm	219rpm	213rpm			
	68 [18.00]	45 [380]	105 [930]	165 [1480]	230 [2020]	290 [2560]	350 [3110]	415 [3650]	470 [4180]	530 [4710]	590 [5230]	645 [5720]	700 [6200]			
		275rpm	274rpm	273rpm	272rpm	270rpm	269rpm	266rpm	262rpm	259rpm	254rpm	248rpm	241rpm			
	76 [20.00]	45 [350]	105 [910]	165 [1460]	225 [2000]	290 [2550]	350 [3100]	410 [3640]	470 [4170]	530 [4700]	590 [5220]	645 [5710]				
		305rpm	305rpm	304rpm	303rpm	302rpm	300rpm	296rpm	292rpm	288rpm	283rpm	276rpm				
	83 [22.00]	35 [310]	100 [870]	160 [1420]	225 [1970]	280 [2500]	345 [3050]	405 [3590]	465 [4140]	530 [4680]	590 [5200]	640 [5680]				
		337rpm	336rpm	335rpm	334rpm	332rpm	330rpm	326rpm	323rpm	319rpm	313rpm	306rpm				
	95 [25.00]	30 [260]	95 [820]	155 [1380]	220 [1930]	280 [2460]	335 [2980]	400 [3540]	460 [4090]	525 [4640]	585 [5180]					
		383rpm	382rpm	381rpm	380rpm	378rpm	376rpm	372rpm	369rpm	365rpm	357rpm					
	114 [30.00]		75 [680]	140 [1250]	210 [1860]	270 [2390]	330 [2900]	390 [3430]	445 [3960]	505 [4460]	560 [4950]					
			457rpm	456rpm	455rpm	453rpm	450rpm	445rpm	442rpm	437rpm	427rpm					
	132 [35.00]			125 [1110]	195 [1740]	255 [2270]	315 [2790]	375 [3340]	440 [3910]	495 [4400]						
				532rpm	531rpm	528rpm	525rpm	519rpm	515rpm	509rpm						

Hydraulic Orbit Motors GKB



Flow Data

GKB310		19.0in ³ /rev(310cm ³ /rev)														最高断续 Max Int.
Pressure bar [psi→]		15[250]	35[500]	50[750]	70[1000]	85[1250]	105[1500]	120[1750]	140[2000]	155[2250]	170[2500]	190[2750]	205[3000]	225[3250]	240[3500]	260[3750]
Flow	l/min(gpm ↓)	N m [lb-in] Torque N m [lb-in] Speed Specification														
		70	130													
1.9 [0.50]	4rpm	2rpm														
3.8 [1.00]	70	145	215	290	360	425	485	555	620	685	755	820	890	960	1025	
	[620]	[1270]	[1920]	[2560]	[3170]	[3780]	[4290]	[4900]	[5490]	[6080]	[6670]	[7270]	[7880]	[8480]	[9080]	
7.5 [2.00]	11rpm	11rpm	11rpm	10rpm	10rpm	10rpm	9rpm	9rpm	9rpm	8rpm	8rpm	7rpm	7rpm	6rpm	5rpm	
15 [4.00]	70	145	220	295	365	435	505	575	640	710	780	850	920	995	1065	
	[630]	[1280]	[1940]	[2590]	[3230]	[3830]	[4450]	[5070]	[5680]	[6300]	[6910]	[7530]	[8160]	[8790]	[9420]	
23 [6.00]	23rpm	23rpm	22rpm	22rpm	21rpm	21rpm	20rpm	20rpm	19rpm	18rpm	18rpm	17rpm	17rpm	16rpm	15rpm	
30 [8.00]	70	145	220	300	370	445	520	590	665	735	810	880	955	1030		
	[640]	[1290]	[1960]	[2640]	[3290]	[3940]	[4600]	[5240]	[5880]	[6510]	[7150]	[7790]	[8450]	[9100]		
38 [10.00]	47rpm	47rpm	46rpm	46rpm	45rpm	45rpm	44rpm	44rpm	43rpm	42rpm	42rpm	41rpm	41rpm	40rpm		
45 [12.00]	75	145	225	300	375	450	530	600	675	750	825	895				
	[650]	[1300]	[1970]	[2660]	[3320]	[4000]	[4680]	[5330]	[5980]	[6630]	[7280]	[7940]				
53 [14.00]	71rpm	71rpm	70rpm	70rpm	69rpm	69rpm	68rpm	67rpm	66rpm	64rpm	64rpm	63rpm				
61 [16.00]	70	145	225	300	380	455	530	605	680	755	825					
	[640]	[1300]	[1980]	[2670]	[3350]	[4030]	[4710]	[5360]	[6020]	[6670]	[7320]					
68 [18.00]	96rpm	96rpm	95rpm	95rpm	94rpm	94rpm	93rpm	92rpm	91rpm	89rpm	88rpm					
76 [20.00]	70	145	225	300	375	460	535	610	685	760	835					
	[620]	[1280]	[1970]	[2680]	[3340]	[4070]	[4740]	[5390]	[6050]	[6710]	[7370]					
83 [22.00]	121rpm	120rpm	120rpm	119rpm	119rpm	118rpm	117rpm	116rpm	115rpm	112rpm	109rpm					
95 [25.00]	70	140	220	295	375	455	535	610	685	760						
	[600]	[1260]	[1940]	[2630]	[3340]	[4040]	[4730]	[5390]	[6060]	[6720]						
103 [28.00]	145rpm	144rpm	144rpm	143rpm	142rpm	142rpm	141rpm	140rpm	139rpm	135rpm						
114 [30.00]	65	140	215	295	375	450	530	610	685	760						
	[570]	[1240]	[1920]	[2600]	[3310]	[4000]	[4710]	[5380]	[6060]	[6730]						
122 [33.00]	169rpm	169rpm	168rpm	168rpm	167rpm	167rpm	165rpm	164rpm	163rpm	159rpm						
132 [35.00]	60	140	215	290	370	450	530	610	685							
	[540]	[1230]	[1900]	[2580]	[3280]	[3970]	[4700]	[5380]	[6050]							
140 [38.00]	193rpm	193rpm	192rpm	192rpm	190rpm	189rpm	188rpm	187rpm	185rpm							
150 [40.00]	55	135	210	290	365	445	530	605	680							
	[490]	[1210]	[1880]	[2550]	[3240]	[3930]	[4680]	[5370]	[6040]							
160 [43.00]	217rpm	217rpm	216rpm	216rpm	214rpm	213rpm	211rpm	208rpm	207rpm							
170 [46.00]	50	135	210	285	365	440	530	605	680							
	[450]	[1190]	[1860]	[2520]	[3210]	[3900]	[4670]	[5360]	[6030]							
180 [49.00]	242rpm	242rpm	242rpm	241rpm	240rpm	238rpm	236rpm	234rpm	232rpm							
190 [52.00]	45	130	205	285	360	440	525	600								
	[420]	[1130]	[1820]	[2520]	[3180]	[3870]	[4640]	[5320]								
200 [55.00]	267rpm	266rpm	266rpm	265rpm	264rpm	262rpm	260rpm	258rpm								
210 [58.00]	40	120	200	285	355	430	520	595								
	[340]	[1050]	[1780]	[2510]	[3160]	[3820]	[4590]	[5280]								
220 [61.00]	303rpm	303rpm	302rpm	301rpm	300rpm	299rpm	296rpm	293rpm								
230 [64.00]		115	190	275	350	420	510	580								
		[1010]	[1700]	[2420]	[3100]	[3720]	[4500]	[5140]								
240 [67.00]		363rpm	362rpm	360rpm	359rpm	358rpm	354rpm	351rpm								
250 [70.00]			180	265	335	400	495									
			[1580]	[2360]	[2950]	[3540]	[4390]									
260 [73.00]			422rpm	420rpm	419rpm	418rpm	413rpm									

Hydraulic Orbit Motors GKB



Flow Data

GKB395		19.0in ³ /rev(310cm ³ /rev)													Max Int.
Pressure bar [psi→]		15[250]	35[500]	50[750]	70[1000]	85[1250]	105[1500]	120[1750]	140[2000]	155[2250]	170[2500]	190[2750]	205[3000]	225[3250]	240[3500]
Flow	l/min(gpm ↓)	N m [lb-in] Torque N m [lb-in] Speed Specification													
1.9 [0.50]		80	150												
	4rpm	2rpm													
3.8 [1.00]		85 [750]	160 [1430]	240 [2110]	315 [2770]	390 [3460]	470 [4170]	550 [4890]	635 [5610]	715 [6310]	790 [7010]	870 [7700]			
	9rpm	9rpm	8rpm	8rpm	8rpm	7rpm	7rpm	7rpm	5rpm	4rpm	2rpm				
7.5 [2.00]		90 [800]	170 [1500]	260 [2290]	340 [3030]	435 [3850]	520 [4620]	600 [5310]	680 [6000]	765 [6750]	845 [7490]	930 [8240]	1015 [8990]	1100 [9730]	1185 [10470]
	18rpm	18rpm	17rpm	16rpm	16rpm	15rpm	15rpm	14rpm	13rpm	13rpm	12rpm	11rpm	10rpm	8rpm	
15 [4.00]		95 [860]	185 [1630]	280 [2470]	375 [3310]	465 [4120]	555 [4900]	635 [5640]	720 [6390]	810 [7190]	890 [7890]	990 [8780]			
	38rpm	38rpm	37rpm	36rpm	36rpm	35rpm	35rpm	34rpm	34rpm	33rpm	32rpm				
23 [6.00]		95 [860]	190 [1690]	285 [2540]	385 [3410]	470 [4180]	565 [4980]	655 [5780]	745 [6580]	835 [7400]	930 [8220]				
	57rpm	57rpm	56rpm	55rpm	54rpm	53rpm	52rpm	50rpm	49rpm	47rpm					
30 [8.00]		95 [840]	190 [1680]	290 [2550]	385 [3400]	480 [4260]	575 [5090]	665 [5870]	750 [6650]	845 [7480]					
	76rpm	76rpm	75rpm	74rpm	73rpm	72rpm	70rpm	68rpm	66rpm						
38 [10.00]		90 [800]	190 [1680]	290 [2550]	385 [3400]	480 [4260]	575 [5100]	670 [5920]	760 [6730]	855 [7560]					
	95rpm	95rpm	94rpm	93rpm	92rpm	91rpm	89rpm	86rpm	84rpm						
45 [12.00]		85 [760]	190 [1660]	285 [2520]	380 [3380]	480 [4270]	575 [5110]	665 [5900]	755 [6690]						
	114rpm	114rpm	113rpm	112rpm	111rpm	110rpm	108rpm	105rpm							
53 [14.00]		85 [740]	185 [1640]	280 [2490]	380 [3370]	480 [4260]	575 [5100]	665 [5880]	750 [6650]						
	133rpm	133rpm	132rpm	131rpm	130rpm	129rpm	127rpm	124rpm							
61 [16.00]		80 [710]	185 [1620]	280 [2460]	380 [3350]	480 [4240]	575 [5080]	660 [5840]							
	153rpm	153rpm	152rpm	151rpm	149rpm	147rpm	145rpm								
68 [18.00]		75 [680]	180 [1600]	275 [2430]	375 [3340]	475 [4220]	570 [5060]	655 [5810]							
	172rpm	172rpm	171rpm	170rpm	168rpm	166rpm	164rpm								
76 [20.00]		70 [610]	180 [1580]	270 [2400]	375 [3320]	475 [4210]	570 [5040]	655 [5780]							
	192rpm	191rpm	190rpm	189rpm	187rpm	185rpm	183rpm								
83 [22.00]		65 [570]	170 [1490]	265 [2340]	365 [3220]	470 [4160]	565 [5010]	650 [5740]							
	211rpm	210rpm	209rpm	208rpm	206rpm	204rpm	201rpm								
95 [25.00]		55 [490]	155 [1350]	255 [2250]	350 [3080]	460 [4070]	560 [4960]	645 [5700]							
	239rpm	238rpm	237rpm	236rpm	235rpm	233rpm	230rpm								
114 [30.00]			120 [1080]	185 [1650]	255 [2270]	340 [3020]	435 [3850]								
			285rpm	284rpm	282rpm	281rpm	279rpm								
132 [35.00]				170	240	325	425								
				331rpm	330rpm	328rpm	325rpm								
151 [40.00]					230 [2050]	315 [2790]	410 [3620]								
					376rpm	374rpm	371rpm								

Hydraulic Orbit Motors GKB



Flow Data

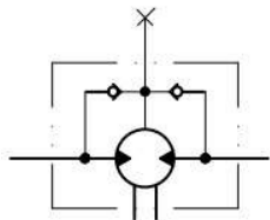
GKB495		30.0in ³ /rev(495cm ³ /rev)									最高断续 Max Int.
Pressure bar [psi→]		15[250]	35[500]	50[750]	70[1000]	85[1250]	105[1500]	120[1750]	140[2000]	155[2250]	170[2500]
Flow	1/min(gpm ↓)	N m [lb-in] Torque N m [lb-in] Speed Specification									
	1.9 [0.50]	90 [800]	200 [1750]								
		3rpm	1rpm								
	3.8 [1.00]	100 [880]	210 [1875]	325 [2875]	430 [3825]	540 [4775]	645 [5720]	755 [6670]	860 [7600]		
		7rpm	6rpm	6rpm	5rpm	4rpm	3rpm	2rpm	1rpm		
	7.5 [2.00]	100 [905]	220 [1940]	335 [2975]	450 [3990]	565 [5010]	680 [6010]	790 [7010]	905 [8000]	1015 [8980]	
		18rpm	17rpm	17rpm	16rpm	15rpm	12rpm	11rpm	10rpm	8rpm	
	15 [4.00]	105 [935]	225 [2005]	345 [3075]	470 [4160]	595 [5245]	710 [6300]	830 [7355]	945 [8375]	1060 [9400]	1170[10350]
		30rpm	29rpm	28rpm	27rpm	26rpm	23rpm	21rpm	19rpm	17rpm	14rpm
	23 [6.00]	105 [920]	225 [2010]	350 [3100]	475 [4185]	595 [5265]	715 [6345]	840 [7420]	955 [8445]	1070 [9465]	
		45rpm	44rpm	43rpm	42rpm	40rpm	37rpm	35rpm	32rpm	30rpm	
	30 [8.00]	100 [905]	230 [2015]	355 [3125]	475 [4205]	600 [5290]	720 [6385]	845 [7485]	960 [8510]		
		61rpm	60rpm	59rpm	57rpm	55rpm	52rpm	49rpm	46rpm		
	38 [10.00]	100 [880]	225 [1995]	350 [3095]	475 [4205]	600 [5295]	720 [6390]	845 [7480]	960 [8525]		
		76rpm	75rpm	74rpm	72rpm	70rpm	66rpm	63rpm	59rpm		
	45 [12.00]	95 [860]	225 [1975]	350 [3095]	475 [4200]	600 [5305]	720 [6390]	845 [7475]			
		91rpm	90rpm	89rpm	87rpm	85rpm	81rpm	77rpm			
	53 [14.00]	95 [830]	220 [1945]	345 [3055]	470 [4165]	595 [5275]	720 [6360]	840 [7445]			
		106rpm	105rpm	104rpm	102rpm	100rpm	96rpm	92rpm			
	61 [16.00]	95 [805]	215 [1910]	340 [3020]	465 [4130]	595 [5245]	715 [6330]	840 [7420]			
		122rpm	120rpm	119rpm	117rpm	115rpm	111rpm	107rpm			
	68 [18.00]	85 [740]	210 [1860]	335 [2980]	465 [4105]	590 [5235]	715 [6305]	835 [7380]			
		137rpm	136rpm	134rpm	132rpm	130rpm	125rpm	121rpm			
	76 [20.00]	75 [680]	205 [1810]	330 [2940]	460 [4085]	590 [5225]	710 [6285]				
		153rpm	152rpm	150rpm	147rpm	146rpm	140rpm				
	95 [25.00]	65 [570]	190 [1665]	315 [2800]	455 [4005]	590 [5210]	695 [6135]				
		191rpm	189rpm	187rpm	184rpm	182rpm	177rpm				
	114 [30.00]		190 [1665]	315 [2800]	455 [4005]	590 [5210]	695 [6135]				
			228rpm			223rpm	215rpm				
	132 [35.00]			270 [2400]	395 [3510]						
				265rpm	263rpm						
	151 [40.00]			245 [2155]	370 [3260]						
				305rpm	303rpm						

GKB625		38.0in ³ /rev(625cm ³ /rev)									Max Int.
Pressure bar [psi→]		15[250]	35[500]	50[750]	70[1000]	85[1250]	105[1500]	110[1600]	115[1700]	125[1800]	140[2000]
Flow	1/min(gpm ↓)	N m [lb-in] Torque N m [lb-in] Speed Specification									
	1.9 [0.50]	115 [1000]									
		2rpm									
	3.8 [1.00]	120 [1080]	265 [2340]	405 [3600]	550 [4850]	690 [6100]	830 [7350]	885 [7820]	935 [8290]	990 [8760]	
		5rpm	5rpm	5rpm	4rpm	4rpm	3rpm	3rpm	2rpm	2rpm	
	7.5 [2.00]	125 [1085]	270 [2380]	415 [3675]	565 [5010]	715 [6350]	860 [7625]	915 [8115]	970 [8605]	1030 [9095]	1140[10075]
		14rpm	14rpm	14rpm	13rpm	12rpm	11rpm	10rpm	9rpm	8rpm	7rpm
	15 [4.00]	125 [1090]	275 [2420]	425 [3750]	585 [5175]	745 [6600]	895 [7900]	950 [8410]	1015 [9000]	1085 [9590]	1180[10450]
		23rpm	23rpm	23rpm	22rpm	21rpm	19rpm	18rpm	17rpm	16rpm	14rpm
	23 [6.00]	125 [1095]	280 [2460]	430 [3825]	590 [5220]	750 [6620]	900 [7950]	950 [8430]	1005 [8910]	1070 [9490]	
		35rpm	35rpm	35rpm	34rpm	33rpm	31rpm	30rpm	29rpm	28rpm	
	30 [8.00]	125 [1100]	280 [2500]	440 [3900]	595 [5270]	750 [6640]	905 [7990]	955 [8460]	1010 [8925]		
		48rpm	48rpm	47rpm	46rpm	45rpm	43rpm	43rpm	42rpm		
	38 [10.00]	130 [1130]	290 [2550]	450 [3975]	600 [5320]	755 [6670]	910 [8045]	970 [8595]	1035 [9150]		
		60rpm	60rpm	59rpm	58rpm	57rpm	54rpm	53rpm	52rpm		
	45 [12.00]	130 [1160]	295 [2600]	460 [4050]	605 [5375]	755 [6700]	915 [8100]	980 [8660]			
		72rpm	72rpm	71rpm	70rpm	69rpm	65rpm	64rpm			
	53 [14.00]	125 [1105]	285 [2535]	450 [3965]	600 [5325]	755 [6685]	910 [8065]	975 [8620]			
		84rpm	84rpm	83rpm	82rpm	81rpm	77rpm	76rpm			
	61 [16.00]	120 [1050]	280 [2465]	440 [3880]	595 [5275]	755 [6670]	910 [8035]	970 [8580]			
		96rpm	95rpm	95rpm	94rpm	93rpm	89rpm	88rpm			
	68 [18.00]	110 [990]	270 [2405]	430 [3825]	590 [5240]	750 [6655]	830 [7345]				
		108rpm	107rpm	107rpm	105rpm	104rpm	100rpm				
	76 [20.00]	105 [930]	265 [2350]	425 [3770]	590 [5205]	750 [6640]					
		121rpm	120rpm	120rpm	118rpm	116rpm					
	95 [25.00]	85 [750]	245 [2175]	405 [3600]	565 [5000]	725 [6400]					
		151rpm	150rpm	149rpm	147rpm	146rpm					
	114 [30.00]	60 [550]	225 [1975]	385 [3400]	530 [4800]	700 [6200]					
		181rpm	180rpm	179rpm	177rpm	176rpm					
	132 [35.00]			355 [3125]	515 [4545]						
				210rpm	208rpm						
	151 [40.00]			320 [2850]	485 [4295]						
				210rpm	208rpm						

Technical Data

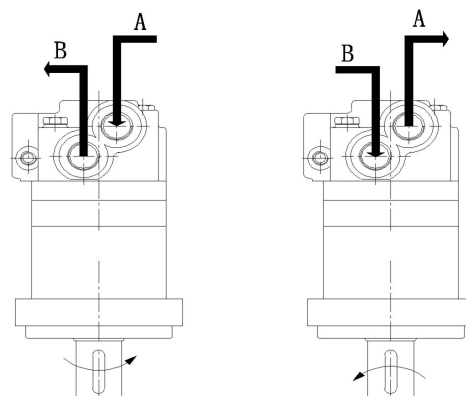
Hydraulic orbit Motors GKB

Standard direction of shaft rotation: Standard



When facing shaft end of motor, shaft to rotate: Clock-wise when port "A" is pressurized. Counter-clockwise port "B" is pressurized.

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.



Axial and Radial forces

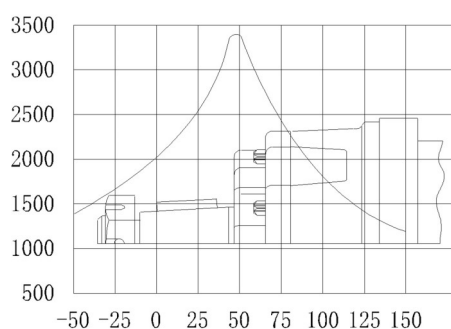
The following curves represent the load capacity at different positions along the radial direction of the motor output shaft. The curve is obtained based on the lifespan of B10 bearings at rated output torque. (2000 hours or 12000000 revolutions at 100 RPM). To determine the radial load at speeds other than 100 RPM, please multiply the load values on the bearing curve by the coefficients given in the table below.

RPM	Coefficients
50	1.23
100	1.00
200	0.81
300	0.72
400	0.66
500	0.62
600	0.58
700	0.56
800	0.54

52% increase in load capacity at 3000000 rpm or 500 hours.

Wheel motor with tapered shaft

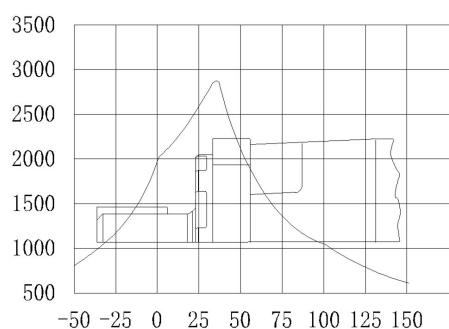
Radial force(daN)



The distance between the force point and the flange surface(mm)

Standard motor with cylindrical shaft

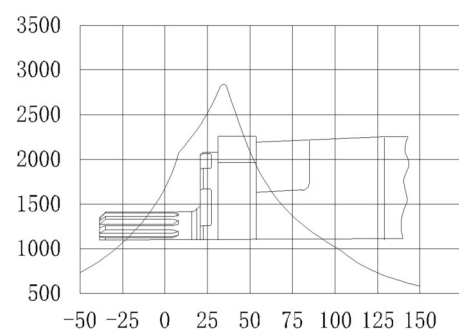
Radial force(daN)



The distance between the force point and the flange surface(mm)

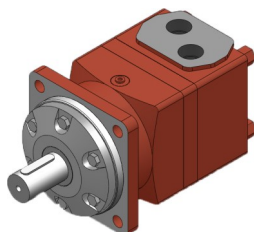
Standard motor with spline shaft

Radial force(daN)



The distance between the force point and the flange surface(mm)

General

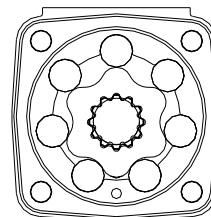


APPLICATION

- ◇ Metal working machines
- ◇ Agricultural machines
- ◇ Road building machines
- ◇ Mining machinery
- ◇ Food industries
- ◇ Special vehicles etc.
- ◇ Injection molding machines
- ◇ Conveyors

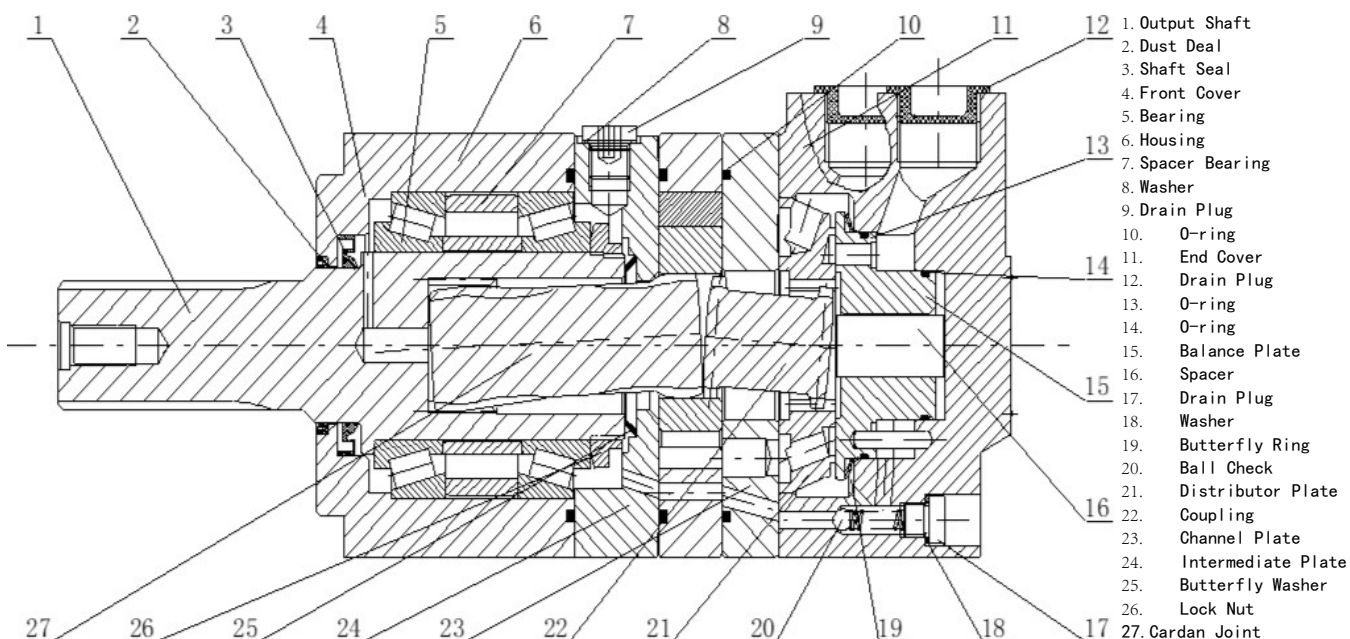
OPTIONS

- ◇ Flange and wheel mount
- ◇ Short motor
- ◇ Motor with drum brake
- ◇ Tachometer connection
- ◇ Speed sensing
- ◇ Side and rear ports
- ◇ Shafts-straight, splined and tapered
- ◇ Metric and BSPP ports
- ◇ Other special features

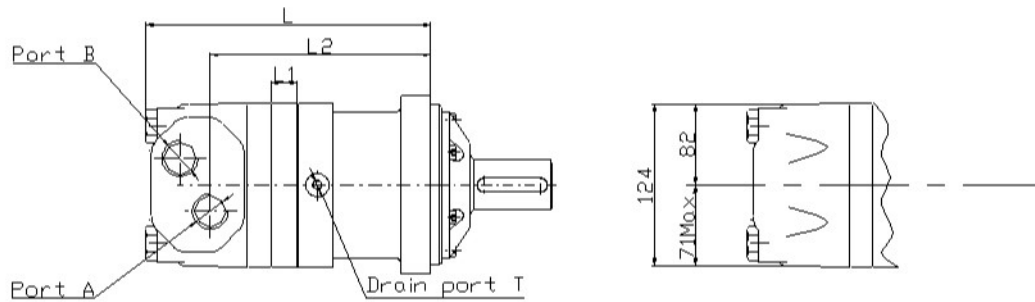


- ◇ Disc distribution flow

Model		GT160	GT200	GT250	GT315	GT400	GT500	GT630	GT725
Disp.	in ³ /rev	9.83	12.29	15.36	19.9	25.06	31.95	38.52	44.2
	cm ³ /rev	161.1	201.4	251.8	326.3	410.9	523.6	631.2	724.3
Max Speed rpm	cont.	622	620	496	382	304	238	197	172
	int.	775	752	601	461	368	289	234	209
Max Torque N m [lb-in]	cont.	470 [4160]	590 [5220]	730 [6460]	950 [8410]	1080 [9560]	1220 [10800]	1300 [11500]	1270 [11240]
	int.	560 [4960]	710 [6285]	880 [7790]	1140 [10090]	1260 [11150]	1370 [12125]	1480 [13100]	1470 [13010]
Max Dif. bar [psi]	cont.	200 [2900]	200 [2900]	200 [2900]	200 [2900]	180 [2610]	160 [2320]	140 [2010]	120 [1740]
	int.	240 [3480]	240 [3480]	240 [3480]	240 [3480]	210 [3050]	180 [2610]	160 [2320]	140 [2010]
Max Flow l/min [gpm]	cont.	100 [26]	125 [33]	125 [33]	125 [33]	125 [33]	125 [33]	125 [33]	125 [33]
	int.	125 [33]	150 [39.6]	150 [39.6]	150 [39.6]	150 [39.6]	150 [39.6]	150 [39.6]	150 [39.6]
Weight kg [lbs]		20 [44.1]	21.5 [47.4]	21 [46.3]	22 [48.5]	23 [50.7]	24 [52.9]	23.5 [51.8]	24.5 [54.0]

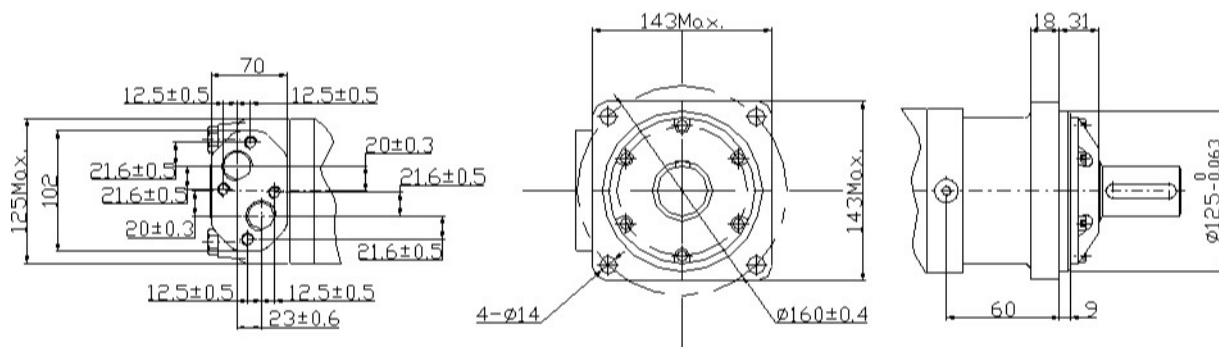


Dimensions and Mounting Data



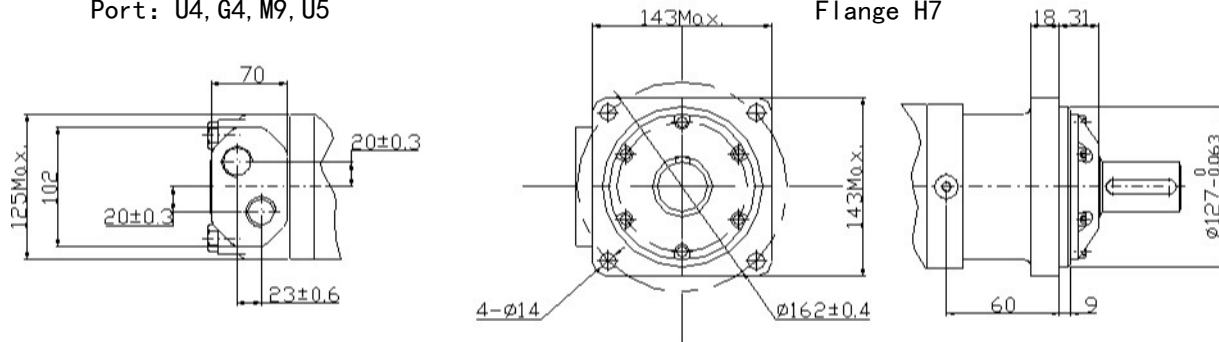
Port: G3, M5

Flange H6

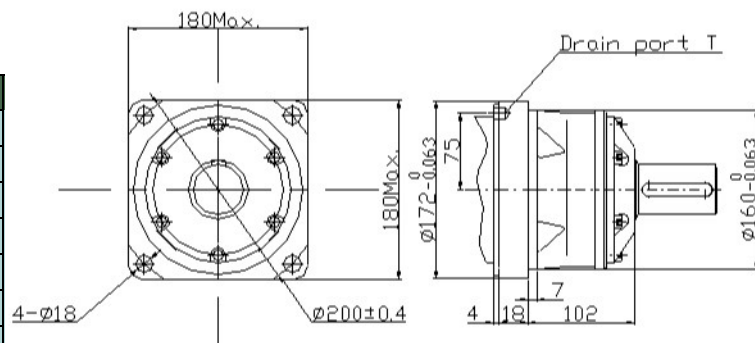


Port: U4, G4, M9, U5

Flange H7



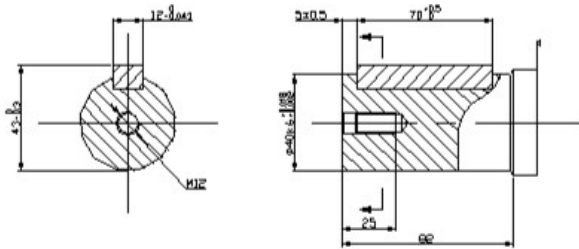
Flange W2



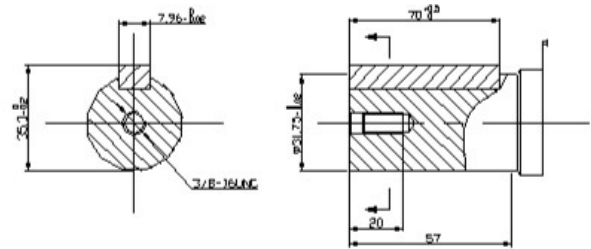
Model	L	L1	L2
GT160	193	17	142.5
GT200	197	21	146.5
GT250	204	14	152.5
GT315	210	20	158.5
GT400	217	27	165.5
GT500	225	35	173.5
GT630	237	47	185.5
GT725	248	58	196.5

Port	G3 (Depth)	M5 (Depth)	U4 (Depth)	G4 (Depth)	M9 (Depth)	U5 (Depth)
P(A,B)	G3/4 (18)	M27x2 (18)	1-1/16-12UN (18)	G3/4 (18)	M27x2 (18)	1-1/16-12UN (18)
T	G1/4 (12)	M14x1.5 (12)	9/16-18UNF (12)	G1/4 (12)	M14x1.5 (12)	7/16-20UNF (12)
C	4-M10 (10)	4-M10 (10)	-	-	-	-

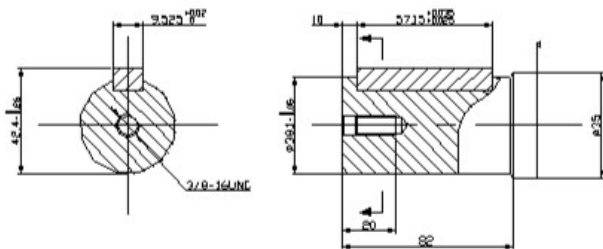
GT Shaft Extension Dimensions Data



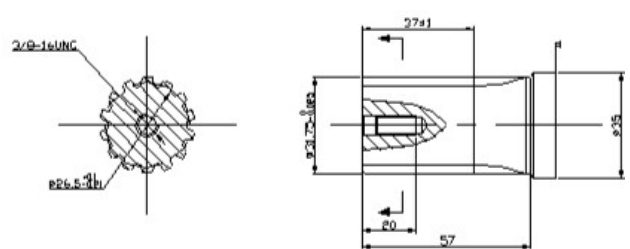
Shaft SK: Cylindrical shaft $\varnothing 40$
Parallel key 12x8x70



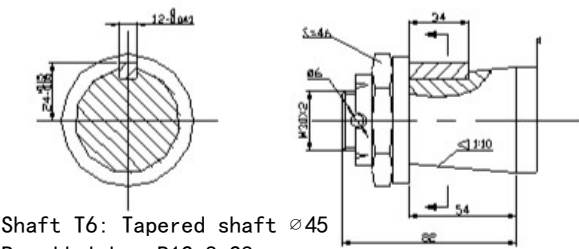
Shaft SM: Cylindrical shaft $\varnothing 31.75$
Parallel key 7.96x7.96x40



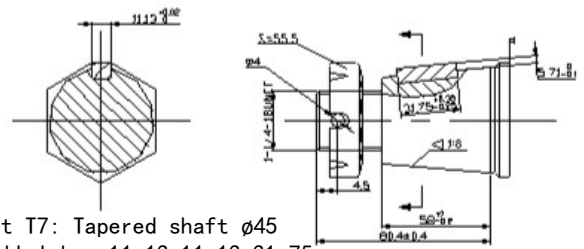
Shaft SL: Cylindrical shaft $\varnothing 38.1$
Parallel key 9.525x9.525x57.15



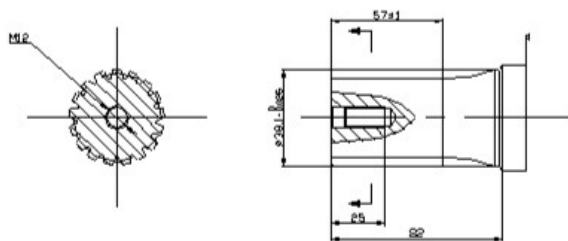
Shaft R3: Splined 14-DP12/24



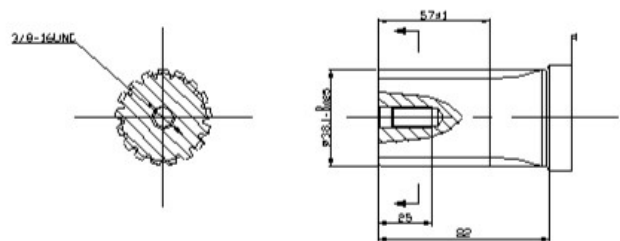
Shaft T6: Tapered shaft $\varnothing 45$
Parallel key B12x8x28
Tightening torque: 500 ± 10 Nm



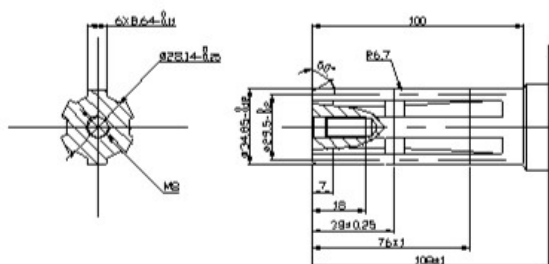
Shaft T7: Tapered shaft $\varnothing 45$
Parallel key 11.13x11.13x31.75
Tightening torque: 500 ± 10 Nm



Shaft RA: Splined 17-DP12/24



Shaft R9: Splined 17-DP12/24



Shaft R7: Splined 6-34.85x28.14x8.64

GT - How To Order

		Model	Displacement	Flange	Drive shaft	Ports	Other functions
Ordering Example:		GT	160	H6	C2	G3	ACA
Model	Disp.	Flange		Drive shaft		Ports	
GT	160	H6=4- $\varnothing$ 14 square flange $\varnothing$ 160, pilot $\varnothing$ 125x9		C2=Cardan shaft 16-DP12/24 SK=Shaft $\varnothing$ 40, parallel key 12x8x70 SL=Shaft $\varnothing$ 38.1, parallel key 9.53x9.53x57.15		G3=G3/4 manifold mount 4xM10, G1/4 M5=M27x2 manifold mount 4xM10, M14x1.5 U4=1-1/16-12UN 0-ring, 9/16-18UNF U5=1-1/16-12UN 0-ring, 7/16-20UNF G4=G3/4, G1/4 M9=M27x2, M14x1.5	
	200	H7=4- $\varnothing$ 14.5 square flange $\varnothing$ 162, pilot $\varnothing$ 127x9		R9=Shaft $\varnothing$ 38.1, splined tooth 17-DP12/24			
	250	W2=4- $\varnothing$ 18 wheel flange $\varnothing$ 200, pilot $\varnothing$ 160x7		RA=Shaft $\varnothing$ 38.1, splined tooth 17-DP12/25			
	315	B2=4- $\varnothing$ 14 circle flange $\varnothing$ 160, pilot $\varnothing$ 125x8		T6=Tapered shaft 1:10 $\varnothing$ 45, parallel key B12x8x28			
	400	H8=4- $\varnothing$ 14.5 square flange $\varnothing$ 162, pilot $\varnothing$ 127x10		T7=Tapered shaft 1:8 $\varnothing$ 45, parallel key 11.13x11.13x31.75			
	500			SM=Shaft $\varnothing$ 31.75, parallel key 7.96x7.96x40			
	630						
	725						

Rotation direction	Paint	Standard Options	Seal Options	Relief Options	Speed Sensor Option
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature	Blank= None HPS=High Pressure Seal SG=Seal Guard HPS-SG= High Pressure Seal & Seal Guard	Blank=None R=Valve Cavity Only R12=Bi-directional relief max 125 bar R-20= Bi-directional relief max 207 bar	Blank= None SS= Speed Sensor, 4-pin, M12 male connector

Hydraulic Orbit Motors GT



Flow Data

GT160		161.1cm ³ /rev(9.83in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		41.2 [588]	82.3 [1175]	102.9 [1470]	123.6 [1766]	164.9 [2355]	206.5 [2950]	247.5 [3535]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	10 [2.64]	88 [780]	176 [1558]	235 [2081]	275 [2434]	361 [3195]	447 [3956]	535 [4735]
		60rpm	59rpm	58rpm	56rpm	54rpm	50rpm	44rpm
	20 [5.28]	89 [788]	181 [1602]	234 [2071]	277 [2451]	372 [3292]	459 [4062]	557 [4929]
		121rpm	120rpm	117rpm	114rpm	109rpm	103rpm	95rpm
	40 [10.57]	91 [805]	180 [1593]	235 [2080]	277 [2451]	381 [3372]	471 [4168]	573 [5071]
		249rpm	246rpm	243rpm	236rpm	230rpm	223rpm	212rpm
	60 [15.85]	82 [726]	178 [1575]	235 [2080]	277 [2451]	381 [3372]	470 [4160]	572 [5063]
		371rpm	367rpm	362rpm	356rpm	349rpm	340rpm	330rpm
	80 [21.13]	78 [690]	173 [1531]	229 [2027]	276 [2443]	379 [3356]	466 [4124]	567 [5018]
		492rpm	489rpm	485rpm	478rpm	470rpm	462rpm	447rpm
	100 [26.42]	70 [620]	160 [1416]	218 [1929]	269 [2380]	370 [3275]	455 [4026]	558 [4938]
	Max Cont.	614rpm	611rpm	606rpm	598rpm	590rpm	582rpm	570rpm
	125 [33.02]	58 [513]	148 [1309]	211 [1867]	261 [2310]	359 [3177]	448 [3965]	552 [4885]
	Max Int.	770rpm	764rpm	758rpm	750rpm	741rpm	731rpm	715rpm

GT200		201.4cm ³ /rev(12.29in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		41.2 [588]	82.3 [1175]	102.9 [1470]	123.6 [1766]	164.9 [2355]	206.5 [2950]	247.5 [3535]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	10 [2.64]	124 [1097]	233 [2062]	289 [2558]	340 [3007]	454 [4015]	560 [4953]	669 [5917]
		47rpm	46rpm	45rpm	42rpm	39rpm	37rpm	33rpm
	20 [5.28]	125 [1106]	307 [2715]	298 [2637]	347 [3069]	468 [4139]	576 [5094]	696 [6155]
		95rpm	94rpm	92rpm	90rpm	87rpm	84rpm	75rpm
	40 [10.57]	120 [1062]	241 [2133]	296 [2620]	352 [3113]	475 [4201]	589 [5210]	716 [6332]
		195rpm	193rpm	191rpm	187rpm	183rpm	178rpm	167rpm
	60 [15.85]	116 [1027]	237 [2097]	295 [2611]	352 [3113]	478 [4227]	589 [5209]	718 [6350]
		297rpm	295rpm	292rpm	287rpm	282rpm	276rpm	263rpm
	80 [21.13]	108 [956]	231 [2044]	289 [2558]	350 [3095]	474 [4192]	586 [5183]	716 [6332]
		395rpm	393rpm	389rpm	384rpm	377rpm	370rpm	259rpm
	100 [26.42]	98 [871]	227 [2009]	286 [2531]	344 [3042]	471 [4166]	580 [5130]	712 [6297]
		493rpm	490rpm	486rpm	482rpm	475rpm	467rpm	460rpm
	125 [33.02]	84 [743]	208 [1841]	276 [2443]	333 [2945]	459 [4059]	566 [5006]	697 [6164]
	Max Cont.	615rpm	611rpm	607rpm	602rpm	595rpm	588rpm	572rpm
	150 [39.63]	70 [620]	194 [1717]	260 [2301]	324 [2865]	447 [3953]	554 [4900]	682 [6032]
	Max Int.	743rpm	740rpm	735rpm	727rpm	717rpm	706rpm	682rpm

Hydraulic Orbit Motors GT



Flow Data

GT250	251.8cm ³ /rev(15.36in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]	41.2 [588]	82.3 [1175]	102.9 [1470]	123.6 [1766]	164.9 [2355]	206.5 [2950]	247.5 [3535]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification					
	10 [2.64]	138 [1221]	286 [2531]	355 [3142]	419 [3708]	559 [4947]	689 [6098]
		38rpm	38rpm	37rpm	36rpm	34rpm	32rpm
	20 [5.28]	143 [1266]	296 [2620]	364 [3221]	432 [3823]	580 [5133]	708 [6266]
		76rpm	75rpm	74rpm	72rpm	70rpm	67rpm
	40 [10.57]	139 [1230]	301 [2664]	373 [3297]	440 [3894]	593 [5248]	723 [6400]
		156rpm	154rpm	152rpm	149rpm	146rpm	142rpm
	60 [15.85]	132 [1168]	294 [2602]	372 [3292]	441 [3903]	592 [5239]	727 [6434]
		237rpm	236rpm	233rpm	229rpm	224rpm	219rpm
	80 [21.13]	128 [1133]	283 [2505]	364 [3221]	433 [3832]	587 [5195]	721 [6381]
		317rpm	316rpm	314rpm	308rpm	303rpm	299rpm
	100 [26.42]	126 [1115]	282 [2496]	355 [3142]	427 [3779]	582 [5151]	716 [6337]
		396rpm	394rpm	391rpm	387rpm	381rpm	373rpm
	125 [33.02]	116 [1027]	260 [2301]	340 [3010]	414 [3665]	568 [5027]	703 [6222]
	Max Cont.	485rpm	492rpm	488rpm	483rpm	476rpm	469rpm
	150 [39.63]	88 [779]	242 [2142]	320 [2832]	397 [3513]	552 [4885]	686 [6071]
	Max Int.	592rpm	589rpm	585rpm	580rpm	572rpm	565rpm

GT315	326.3cm ³ /rev(19.91in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]	41.2 [588]	82.3 [1175]	102.9 [1470]	123.6 [1766]	164.9 [2355]	206.5 [2950]	247.5 [3535]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification					
	10 [2.64]	184 [1628]	363 [3213]	453 [4009]	545 [4823]	734 [6496]	891 [7885]
		30rpm	29rpm	28rpm	27rpm	26rpm	25rpm
	20 [5.28]	189 [1673]	380 [3363]	472 [4177]	562 [4975]	757 [6700]	917 [8115]
		60rpm	59rpm	58rpm	56rpm	54rpm	52rpm
	40 [10.57]	191 [1690]	381 [3372]	484 [4283]	570 [5045]	774 [6850]	954 [8445]
		121rpm	120rpm	118rpm	115rpm	112rpm	109rpm
	60 [15.85]	189 [1673]	376 [3328]	493 [4363]	573 [5070]	772 [6832]	962 [8514]
		183rpm	181rpm	179rpm	175rpm	172rpm	168rpm
	80 [21.13]	179 [1584]	369 [3266]	479 [4240]	565 [5000]	768 [6797]	954 [8443]
		244rpm	242rpm	239rpm	236rpm	231rpm	227rpm
	100 [26.42]	169 [1496]	357 [3160]	467 [4133]	562 [4975]	758 [6708]	944 [8357]
		305rpm	304rpm	301rpm	298rpm	294rpm	289rpm
	125 [33.02]	147 [1301]	336 [2975]	447 [3955]	544 [4815]	745 [6595]	920 [8145]
	Max Cont.	380rpm	378rpm	375rpm	371rpm	367rpm	362rpm
	150 [39.63]	119 [1053]	318 [2812]	432 [3825]	526 [4655]	713 [6310]	894 [7912]
	Max Int.	458rpm	456rpm	453rpm	449rpm	444rpm	431rpm

Hydraulic Orbit Motors GT



Flow Data

GT400	410.9cm ³ /rev (25.06in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]	30.8 [440]	61.6 [880]	92.8 [1325]	123.6 [1766]	154.6 [2208]	185.6 [2652]	216.3 [3090]	
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	10 [2.64]	176 [1558]	367 [3248]	560 [4956]	715 [6328]	885 [7833]	1050 [9293]	1209 [10701]
		24rpm	23rpm	22rpm	21rpm	20rpm	19rpm	18rpm
	20 [5.28]	179 [1584]	370 [3275]	565 [5001]	726 [6426]	899 [7957]	1071 [9479]	1236 [10940]
		49rpm	48rpm	47rpm	44rpm	42rpm	40rpm	38rpm
	40 [10.57]	176 [1558]	370 [3275]	567 [5018]	733 [6488]	919 [8134]	1091 [9656]	1263 [11178]
		96rpm	95rpm	93rpm	90rpm	87rpm	83rpm	79rpm
	60 [15.85]	174 [1540]	361 [3195]	563 [4983]	729 [6452]	920 [8143]	1095 [9692]	1269 [11232]
		145rpm	143rpm	139rpm	135rpm	131rpm	127rpm	121rpm
	80 [21.13]	166 [1469]	353 [3124]	553 [4894]	719 [6364]	912 [8072]	1084 [9594]	1263 [11178]
		193rpm	191rpm	188rpm	184rpm	180rpm	176rpm	170rpm
	100 [26.42]	150 [1328]	339 [3000]	538 [4762]	708 [6266]	896 [7930]	1067 [9444]	1252 [11081]
		242rpm	240rpm	238rpm	234rpm	228rpm	224rpm	218rpm
	125 [33.02]	135 [1195]	309 [2735]	524 [4638]	688 [6089]	873 [7727]	1045 [9249]	1221 [10807]
	Max Cont.	302rpm	300rpm	298rpm	294rpm	289rpm	285rpm	178rpm
	150 [39.63]	126 [1115]	292 [2584]	508 [4496]	666 [5895]	852 [7541]	1020 [9028]	1197 [10594]
	Max Int.	364rpm	362rpm	358rpm	354rpm	350rpm	346rpm	339rpm

GT500	523.6cm ³ /rev (31.95in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]	30.8 [440]	61.6 [880]	92.8 [1325]	123.6 [1766]	144.2 [2060]	164.9 [2355]	185.6 [2652]	
Flow	l/min [gpm↓]	Torque (lb-in) Speed Specification						
	10 [2.64]	222 [1965]	451 [3992]	692 [6125]	892 [7895]	1050 [9293]	1193 [10559]	1340 [11860]
		18rpm	18rpm	18rpm	17rpm	16rpm	15rpm	13rpm
	20 [5.28]	231 [2045]	464 [4107]	714 [6319]	918 [8125]	1070 [9470]	1220 [10798]	1377 [12187]
		37rpm	36rpm	35rpm	34rpm	33rpm	32rpm	30rpm
	40 [10.57]	230 [2036]	466 [4124]	727 [6434]	941 [8329]	1094 [9683]	1244 [11010]	1422 [12586]
		75rpm	74rpm	73rpm	72rpm	70rpm	68rpm	64rpm
	60 [15.85]	225 [1991]	457 [4045]	714 [6319]	941 [8329]	1088 [9630]	1245 [11019]	1409 [12471]
		113rpm	112rpm	111rpm	109rpm	107rpm	105rpm	101rpm
	80 [21.13]	213 [1885]	431 [3815]	696 [6160]	927 [8205]	1076 [9523]	1244 [11010]	1401 [12400]
		151rpm	150rpm	149rpm	147rpm	145rpm	143rpm	138rpm
	100 [26.42]	194 [1717]	420 [3717]	680 [6019]	902 [7978]	1063 [9408]	1224 [10833]	1383 [12241]
		189rpm	188rpm	187rpm	185rpm	183rpm	181rpm	177rpm
	125 [33.02]	182 [1611]	398 [3523]	641 [5673]	877 [7762]	1024 [9063]	1199 [10612]	1352 [11966]
	Max Cont.	237rpm	236rpm	235rpm	233rpm	231rpm	229rpm	225rpm
	150 [39.63]	147 [1301]	369 [3266]	618 [5470]	853 [7550]	1004 [8886]	1157 [10239]	1325 [11727]
	Max Int.	284rpm	283rpm	282rpm	280rpm	278rpm	276rpm	272rpm

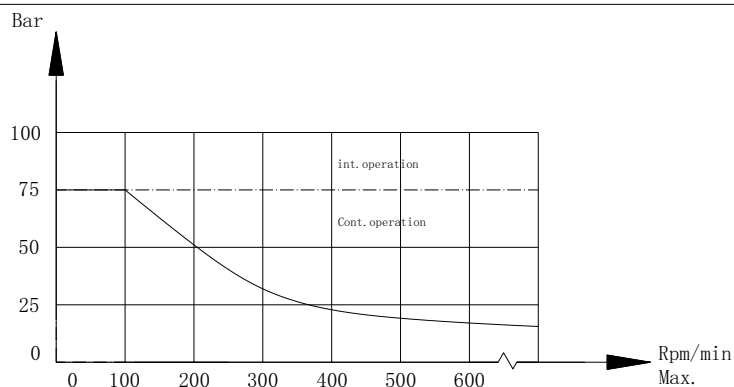
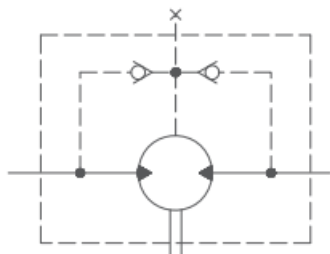
Flow Data

GT630		631.2cm ³ /rev (38.52in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		30.8 [440]	61.6 [880]	92.8 [1325]	108.2 [1546]	123.6 [1766]	144.2 [2060]	164.9 [2355]
Flow	(gpm↓)	Torque N m [lb-in] Speed Specification						
	10 [2.64]	233 [2062]	520 [4602]	795 [7036]	902 [7983]	1074 [9505]	1194 [10567]	1363 [12063]
		14rpm	14rpm	13rpm	13rpm	13rpm	11rpm	11rpm
	20 [5.28]	237 [2097]	554 [4903]	837 [7407]	953 [8434]	1117 [9885]	1239 [10965]	1407 [12452]
		28rpm	27rpm	27rpm	26rpm	26rpm	24rpm	22rpm
	40 [10.57]	239 [2115]	553 [4894]	860 [7611]	987 [8735]	1171 [10364]	1308 [11576]	1483 [13125]
		62rpm	62rpm	61rpm	60rpm	59rpm	56rpm	54rpm
	60 [15.85]	223 [1974]	544 [4814]	863 [7638]	978 [8655]	1172 [10372]	1318 [11664]	1498 [13257]
		94rpm	94rpm	92rpm	91rpm	90rpm	86rpm	82rpm
	80 [21.13]	220 [1947]	573 [5071]	854 [7558]	965 [8540]	1172 [10372]	1314 [11629]	1497 [13248]
		123rpm	123rpm	121rpm	119rpm	118rpm	114rpm	110rpm
	100 [26.42]	208 [1841]	522 [4620]	832 [7363]	945 [8363]	1156 [10231]	1156 [10231]	1488 [13169]
		156rpm	155rpm	153rpm	152rpm	150rpm	147rpm	142rpm
	125 [33.02]	201 [1779]	499 [4416]	810 [7169]	931 [8239]	1137 [10062]	1292 [11435]	1472 [13028]
	Max Cont.	196rpm	196rpm	194rpm	192rpm	191rpm	187rpm	183rpm
	150 [39.63]	174 [1540]	492 [4354]	785 [6947]	921 [8151]	1120 [9912]	1277 [11301]	1454 [12868]
	Max Int.	233rpm	232rpm	231rpm	230rpm	227rpm	223rpm	217rpm

Technical Data

Hydraulic orbit Motors GT

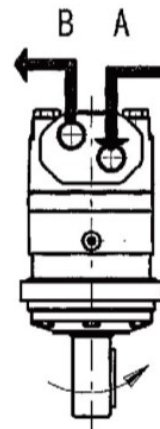
Permissible shaft seal pressure



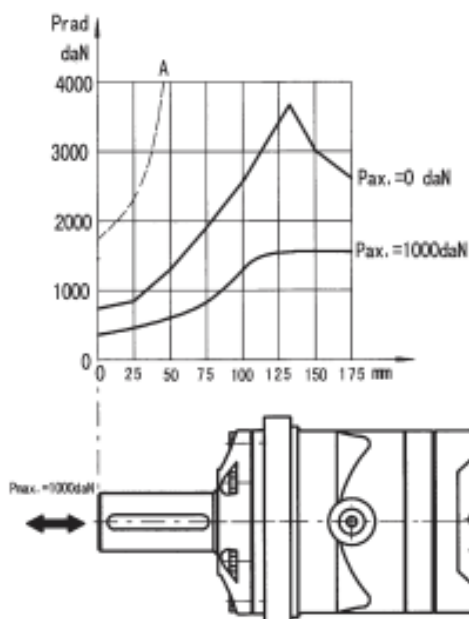
In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Standard direction of shaft rotation: Standard

When facing shaft end of motor, shaft to rotate: Clock-wise when port "A" is pressurized. Counter-clockwise port "B" is pressurized.



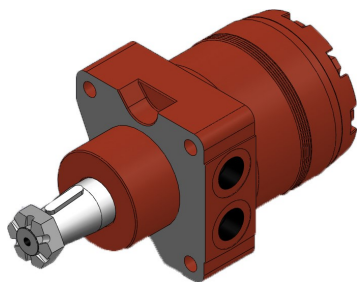
Axial and Radial forces



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.

General

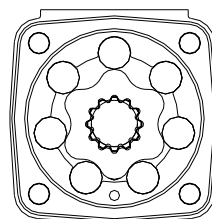
APPLICATION



- ◇ Aerial work platform
- ◇ Material handling and lifting machinery
- ◇ Agricultural machines
- ◇ Marine machinery
- ◇ Road machinery
- ◇ Garden machinery
- ◇ Lawn and turf machinery

OPTIONS

- ◇ Rotor flow distribution, pin-tooth stator pair
- ◇ Flange connection
- ◇ Motor with needle bearing
- ◇ Align the ports on the side
- ◇ Shafts—straight and tapered
- ◇ High pressure oil seal
- ◇ Metric, American and BSPP ports

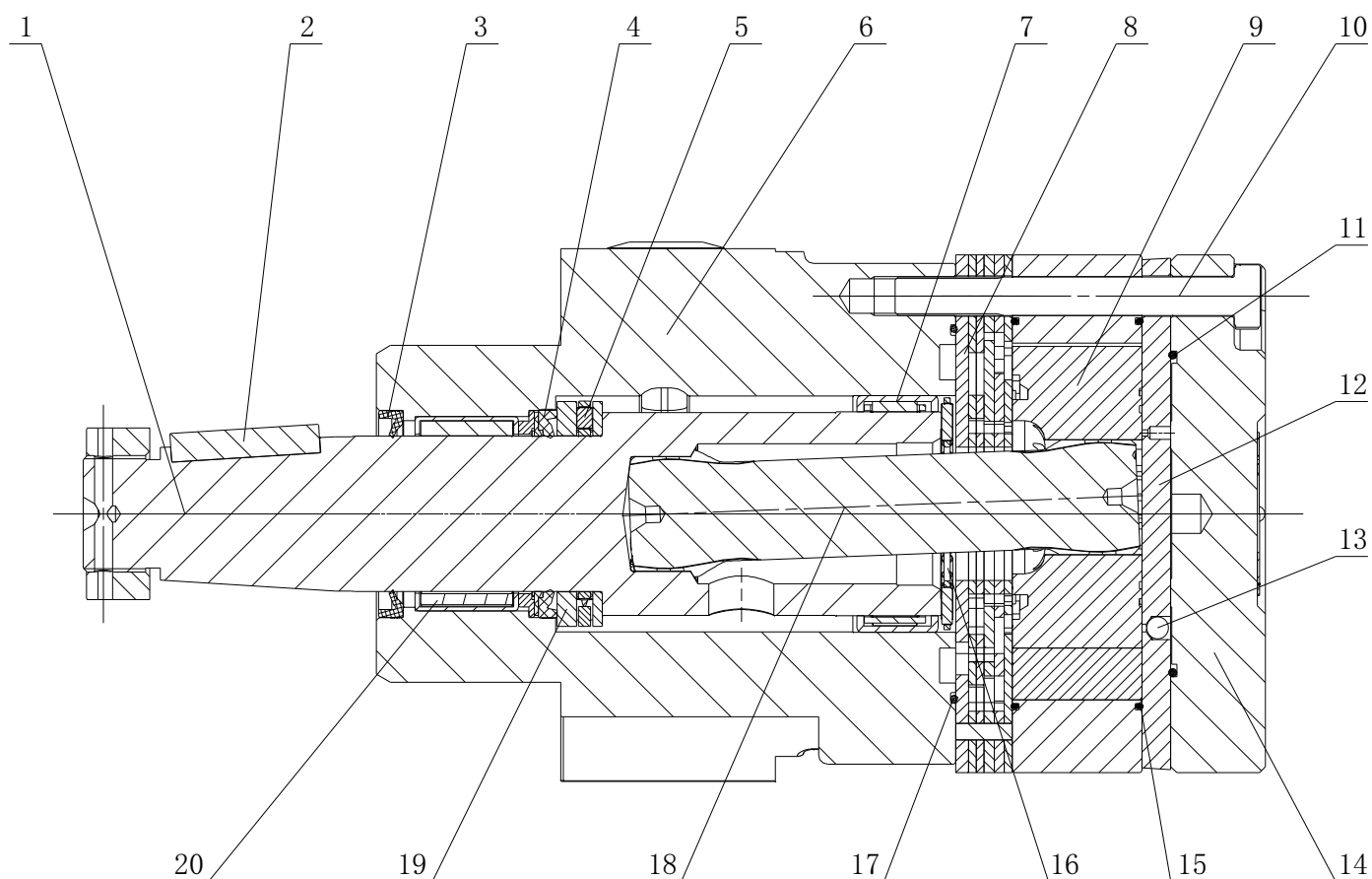


- ◇ Disc distribution flow

Model		GWD120	GWD160	GWD200	GWD230	GWD260	GWD300
Disp.	in ³ /rev	7.4	9.9	12.4	14.2	15.9	18.3
	cm ³ /rev	121	162	204	232	261	300
Max Speed rpm	cont.	360	370	300	260	260	250
	int.	490	470	370	320	350	320
Max Torque N m [lb-in]	cont.	327 [2900]	475 [4200]	542 [4800]	611 [5400]	712 [6300]	825 [7300]
	int.	383 [3400]	542 [4800]	633 [5600]	712 [6300]	791 [7000]	938 [8300]
Max Dif. bar [psi]	cont.	207 [3000]	207 [3000]	207 [3000]	207 [3000]	207 [3000]	207 [3000]
	int.	241 [3500]	241 [3500]	241 [3500]	241 [3500]	241 [3500]	241 [3500]
Max Flow l/min [gpm]	cont.	45 [12]	61 [16]	68 [18]	68 [18]	76 [19.8]	76 [19.8]
	int.	61 [16]	76 [20]	83 [22]	83 [22]	91 [23.8]	95 [25]
Weight kg [lbs]		13.3 [29.4]	13.3 [29.4]	13.7 [30.2]	13.8 [30.4]	14.1 [31.0]	14.4 [31.8]

Model		GWD350	GWD375	GWD470	GWD540	GWD620	GWD750
Disp.	in ³ /rev	21.2	22.8	28.3	32.7	38.5	45.6
	cm ³ /rev	348	363	465	536	631	748
Max Speed rpm	cont.	220	200	160	140	120	100
	int.	270	250	200	170	150	130
Max Torque N m [lb-in]	cont.	921 [8150]	1006 [8900]	1096 [9700]	983 [8700]	1014 [8976]	1062 [9400]
	int.	1045 [9250]	1158 [10250]	1184 [10475]	1243 [11000]	1291 [11421]	1237 [10950]
Max Dif. bar [psi]	cont.	207 [3000]	207 [3000]	172 [2500]	138 [2000]	121 [1750]	103 [1500]
	int.	241 [3500]	241 [3500]	189 [2750]	173 [2500]	155 [2250]	121 [1750]
Max Flow l/min [gpm]	cont.	76 [19.8]	76 [20]	76 [20]	76 [20]	76 [20]	76 [20]
	int.	95 [25]	91 [24]	91 [24]	91 [24]	91 [24]	91 [24]
Weight kg [lbs]		15.5 [34.2]	15.0 [33.0]	15.5 [34.2]	16.1 [35.4]	16.8 [36.9]	17.5 [38.5]

General



1. Output Shaft
2. Key
3. Dust Seal
4. Shaft Seal
5. Axial Needle Bearing
6. Housing
7. Radial Needle Bearing
8. Timing Plate
9. Gear Set
10. Bolt

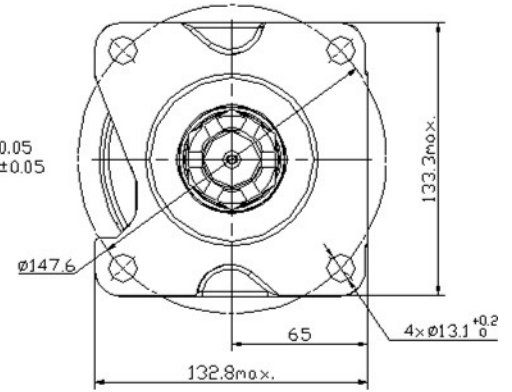
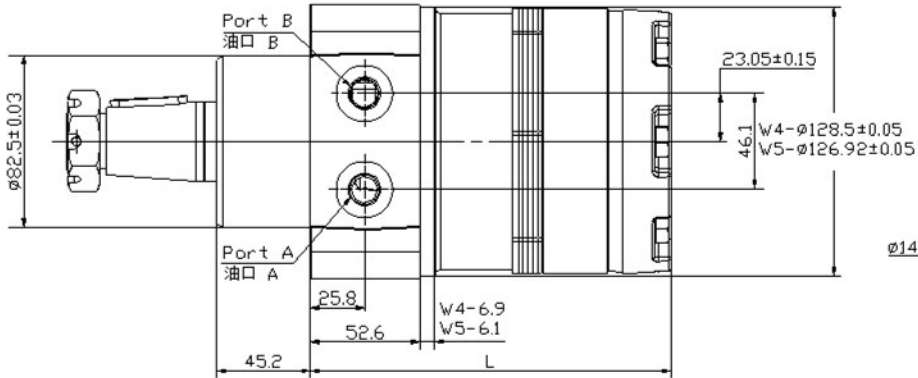
11. O-Ring
12. Balance Plate
13. Ball
14. End Cover
15. O-Ring
16. Axial Needle Bearing
17. O-Ring
18. Drive Shaft
19. Thrust Washer
20. Radial Needle Bearing

Dimensions and Mounting Data

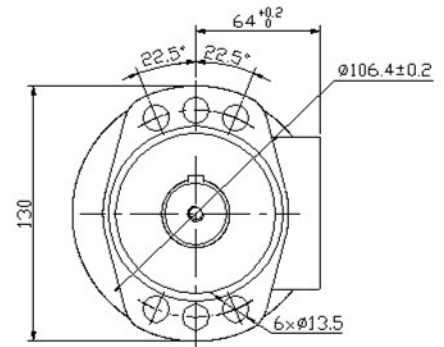
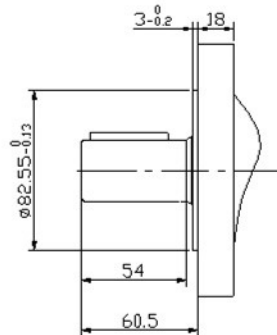
UD: 9/16-18UNF GC:G1/2

UF: 7/8-14UNF MC:M22X1.5

W4 & W5 Wheel Mount

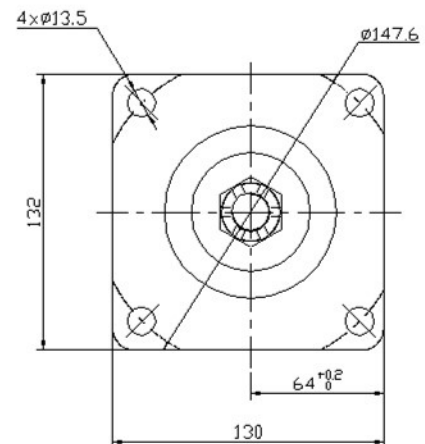
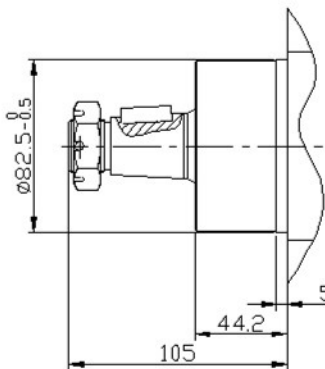


Flange: A9

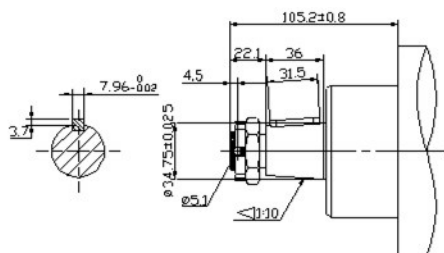


Model	L	Weight
	mm [In]	kg [lb]
GWD120	156 [6.14]	13.3 [29.4]
GWD160	156 [6.14]	13.3 [29.4]
GWD200	159 [6.26]	13.7 [30.2]
GWD230	162 [6.38]	13.8 [30.4]
GWD260	165 [6.50]	14.1 [31.0]
GWD300	168 [6.61]	14.4 [31.8]
GWD350	182 [7.17]	15.5 [34.2]
GWD375	174 [6.85]	15.0 [33.0]
GWD470	182 [7.17]	15.5 [34.2]
GWD540	188 [7.40]	16.1 [35.4]
GWD620	196 [7.72]	16.8 [36.9]
GWD750	206 [8.11]	17.5 [38.5]

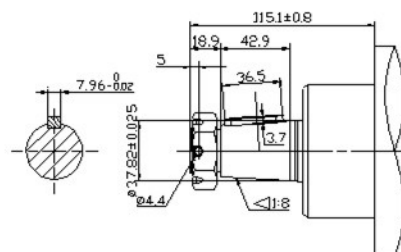
Flange: W6



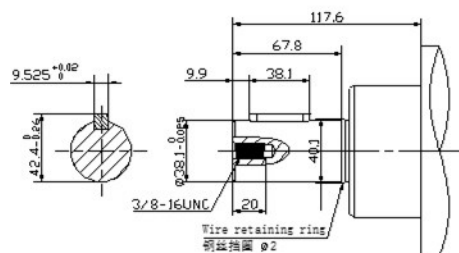
GWD Shaft Extension Dimensions Data



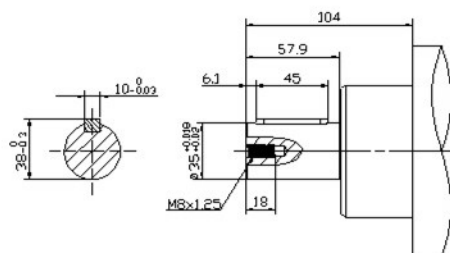
Shaft TB: Tapered shaft $\varnothing 35$
Parallel key 7.96x7x31.5
Tightening torque: 325Nm



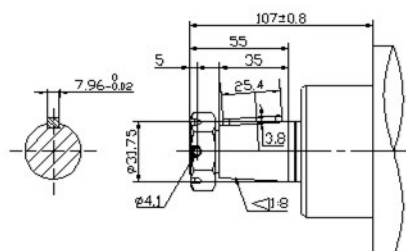
Shaft TA: Tapered shaft $\varnothing 38.1$
Parallel key 7.96x7x36.5
Tightening torque: 410-540Nm



Shaft SL : Cylindrical shaft $\varnothing 38.1$
Parallel key 9.5x9.5x38.1



Shaft SH : Cylindrical shaft $\varnothing 35$
Parallel key 10x8x45



Shaft T2: Tapered shaft $\varnothing 31.75$
Parallel key 7.96x7.96x25.4
Tightening torque: 200±10Nm

GWD - How To Order

Ordering Example:					
Model	Displacement	Flange	Drive shaft	Ports	Other functions
GWD	120	W4	SH	UD	ACA
Model	Disp.	Flange	Drive shaft	Ports	
GWD	120	W4=4-Hole wheel flange, front pilot $\varnothing$ 82.5x45 back pilot $\varnothing$ 128.5x7	SG=Shaft $\varnothing$ 31.75, parallel key 7.96 x 7.96 x 40	UD=9/16-18 UNF UF=7/8-14 UNF GC=G1/2 MC=M22X1.5	
	160		SH=Shaft $\varnothing$ 35, parallel key 10x8x45		
	200		TB=Tapered shaft $\varnothing$ 35, parallel key 7.96x7x31.5		
	230		SL=Shaft $\varnothing$ 38.1, parallel key 9.5x9.5x38.1		
	260	W5=4-Hole wheel flange, front pilot $\varnothing$ 82.5x45 back pilot $\varnothing$ 127x6	TA=Tapered shaft $\varnothing$ 38.1, parallel key 7.96x7x36.5		
	300		T2=Tapered shaft $\varnothing$ 31.75, parallel key 7.96x7.96x25.4		
	350				
	375				
	470	A9=6 Hole SAE A Flange, Pilot 82.5 x 6.4			
	540				
	620				
	750				

Rotation direction	Paint	Standard Options	Seal Options	Relief Options	Speed Sensor Option
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature	Blank= HPS Standard SG=Seal Guard	Blank=None R=Valve Cavity Only R12=Bi-directional relief max 125 bar R-20= Bi-directional relief max 207 bar	Blank= None SS= Speed Sensor, 4-pin, M12 male connector

Hydraulic Orbit Motors GWD



Flow Data

GWD125		121cm ³ /rev (7.4in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		17[247]	35[508]	69[1001]	104[1508]	138[2001]	173[2509]	207[3002]	241[3495]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	2 [0.53]	20 [177]	49 [434]	95 [842]	138 [1223]				
		13rpm	12rpm	10rpm	7rpm				
	4 [1.06]	23 [204]	52 [461]	109 [966]	159 [1409]	203 [1799]			
		26rpm	24rpm	24rpm	19rpm	12rpm			
	8 [2.11]		56 [496]	116 [1028]	175 [1551]	225 [1994]	268 [2374]	299 [2649]	338 [2995]
			56rpm	51rpm	49rpm	42rpm	39rpm	35rpm	26rpm
	15 [3.96]		53 [470]	114 [1010]	185 [1639]	235 [2082]	274 [2428]	332 [2942]	351 [3110]
			109rpm	104rpm	94rpm	91rpm	87rpm	83rpm	77rpm
	23 [6.07]		48 [425]	114 [1010]	167 [1480]	229 [2029]	274 [2428]	323 [2942]	356 [3154]
			172rpm	165rpm	153rpm	148rpm	141rpm	137rpm	135rpm
	30 [7.92]			109 [966]	167 [1480]	221 [1958]	280 [2481]	321 [2844]	383 [3393]
				290rpm	275rpm	229rpm	224rpm	220rpm	186rpm
	38 [10.03]			102 [904]	164 [1453]	216 [1914]	270 [2392]	324 [2871]	381 [3376]
				291rpm	279rpm	266rpm	258rpm	248rpm	239rpm
	45 [11.88]			97 [859]	159 [1409]	215 [1905]	274 [2428]	318 [2817]	381 [3376]
				355rpm	341rpm	329rpm	323rpm	318rpm	302rpm
	53 [14.00]			90 [797]	154 [1364]	206 [1825]	265 [2348]	336 [2977]	
	Max Cont.			412rpm	410rpm	395rpm	388rpm	366rpm	
	61 [16.10]			83 [735]	144 [1276]	210 [1861]	270 [2392]	324 [2871]	
				483rpm	474rpm	455rpm	445rpm	425rpm	

GWD160		162cm ³ /rev (9.9in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		17[247]	35[508]	69[1001]	104[1508]	138[2001]	173[2509]	207[3002]	241[3495]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	2 [0.53]	36 [319]	76 [763]	147 [1302]	221 [1958]	308 [2729]	345 [3057]		
		6rpm	3rpm	3rpm	2rpm	2rpm	1rpm		
	4 [1.06]	29 [257]	78 [691]	162 [1435]	241 [2135]	320 [2835]	375 [3323]	439 [3890]	
		20rpm	17rpm	17rpm	15rpm	14rpm	9rpm	8rpm	
	8 [2.11]	35 [310]	80 [709]	159 [1409]	238 [2109]	314 [2782]	378 [3349]	481 [4262]	548 [4855]
		43rpm	42rpm	40rpm	39rpm	36rpm	34rpm	31rpm	27rpm
	15 [3.96]	38 [337]	75 [665]	168 [1488]	251 [2224]	319 [2826]	375 [3323]	445 [3943]	512 [4536]
		90rpm	88rpm	84rpm	83rpm	81rpm	78rpm	74rpm	71rpm
	23 [6.07]		68 [602]	155 [1373]	234 [2073]	314 [2782]	385 [3411]	455 [4031]	514 [4554]
			135rpm	131rpm	129rpm	125rpm	121rpm	120rpm	116rpm
	30 [7.92]		66 [585]	162 [1435]	235 [2082]	309 [2738]	384 [3402]	452 [4005]	508 [4501]
			185rpm	179rpm	175rpm	171rpm	168rpm	166rpm	161rpm
	38 [10.03]		72 [638]	148 [1311]	231 [2047]	306 [2711]	373 [3305]	452 [4005]	519 [4598]
			232rpm	229rpm	226rpm	219rpm	218rpm	212rpm	206rpm
	45 [11.88]		66 [585]	142 [1258]	224 [1985]	302 [2676]	367 [3252]	438 [3881]	495 [4386]
			279rpm	277rpm	269rpm	268rpm	262rpm	252rpm	245rpm
	53 [14.00]			134 [1187]	227 [2011]	309 [2738]	374 [3314]	453 [4014]	535 [4740]
				326rpm	322rpm	316rpm	310rpm	303rpm	298rpm
	61 [16.10]			122 [1081]	212 [1878]	297 [2631]	366 [3243]	433 [3836]	499 [4421]
				371rpm	368rpm	361rpm	359rpm	355rpm	348rpm
	68 [17.95]			107 [948]	198 [1754]	281 [2490]	360 [3190]	416 [3686]	
	Max Int.			418rpm	416rpm	414rpm	405rpm	339rpm	
	76 [20.06]			104 [921]	194 [1719]	279 [2472]	348 [3083]	450 [3987]	
				465rpm	464rpm	460rpm	451rpm	440rpm	

Hydraulic Orbit Motors GWD



Flow Data

GWD200		204cm ³ /rev (12.4in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		17[247]	35[508]	69[1001]	104[1508]	138[2001]	173[2509]	207[3002]	241[3495]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	2 [0.53]	39 [346] 6rpm	90 [797] 5rpm	132 [1170] 4rpm	292 [2587] 3rpm	375 [3323] 3rpm			
	4 [1.06]	42 [372] 15rpm	84 [744] 12rpm	198 [1754] 12rpm	274 [2428] 11rpm	370 [3278] 9rpm	439 [3890] 8rpm	523 [4634] 6rpm	
	8 [2.11]	43 [381] 33rpm	92 [815] 30rpm	193 [1710] 28rpm	297 [2631] 26rpm	372 [3596] 26rpm	458 [4058] 24rpm	540 [4784] 22rpm	613 [5431] 19rpm
	15 [3.96]	38 [337] 71rpm	93 [824] 68rpm	196 [1737] 65rpm	303 [2685] 61rpm	399 [3535] 59rpm	474 [4200] 56rpm	541 [4793] 53rpm	623 [5520] 49rpm
	23 [6.60]		81 [718] 109rpm	190 [1683] 106rpm	282 [2499] 105rpm	387 [3429] 101rpm	461 [4084] 99rpm	550 [4873] 97rpm	632 [5600] 88rpm
	30 [7.92]		79 [700] 147rpm	187 [1657] 143rpm	283 [2507] 139rpm	400 [3544] 133rpm	456 [4040] 131rpm	540 [4784] 128rpm	624 [5529] 122rpm
	38 [10.03]		65 [576] 184rpm	179 [1586] 180rpm	273 [2419] 175rpm	361 [3198] 171rpm	455 [4031] 168rpm	532 [4714] 162rpm	612 [5422] 158rpm
	45 [11.88]			164 [1453] 220rpm	260 [2304] 212rpm	360 [3190] 208rpm	447 [3960] 204rpm	532 [4714] 195rpm	615 [5449] 193rpm
	53 [14.00]			148 [1311] 256rpm	271 [2401] 255rpm	365 [3234] 245rpm	446 [3952] 241rpm	555 [4917] 239rpm	599 [5307] 232rpm
	61 [16.10]			133 [1178] 295rpm	252 [2234] 290rpm	331 [2933] 282rpm	432 [3828] 275rpm	521 [4616] 270rpm	595 [5272] 265rpm
	68 [17.95] Max Cont.			120 [1063] 331rpm	231 [2047] 328rpm	337 [2986] 325rpm	414 [3668] 316rpm	509 [4510] 309rpm	596 [5281] 305rpm
	76 [20.06] Max Int.			108 [957] 371rpm	204 [1807] 369rpm	306 [2711] 366rpm	399 [3535] 355rpm	504 [4465] 349rpm	
	83 [21.91]				190 [1683] 405rpm	282 [2499] 401rpm	375 [3323] 393rpm	482 [4271] 386rpm	

GWD230		232cm ³ /rev (14.2in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		17[247]	35[508]	69[1001]	104[1508]	138[2001]	173[2509]	207[3002]	241[3495]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	2 [0.53]	44 [390] 5rpm	90 [797] 4rpm	182 [1613] 3rpm	290 [2569] 2rpm	372 [3296] 1rpm			
	4 [1.06]	47 [416] 13rpm	99 [877] 12rpm	221 [1958] 11rpm	312 [2764] 10rpm	411 [3641] 8rpm	488 [4324] 6rpm	556 [4926] 4rpm	
	8 [2.11]	49 [434] 29rpm	103 [913] 27rpm	213 [1887] 25rpm	327 [2897] 24rpm	422 [3739] 21rpm	519 [4598] 18rpm	614 [5440] 16rpm	705 [6246] 11rpm
	15 [3.96]	42 [372] 63rpm	106 [939] 58rpm	208 [1843] 55rpm	326 [2888] 54rpm	432 [3828] 51rpm	537 [4758] 45rpm	653 [5786] 41rpm	716 [6344] 38rpm
	23 [6.60]		101 [895] 91rpm	213 [1887] 88rpm	336 [2977] 84rpm	425 [3766] 81rpm	536 [4749] 76rpm	627 [5555] 72rpm	716 [6344] 69rpm
	30 [7.92]		89 [789] 126rpm	205 [1816] 121rpm	315 [2791] 120rpm	425 [3766] 112rpm	519 [4598] 108rpm	637 [5644] 105rpm	714 [6326] 97rpm
	38 [10.03]		77 [682] 159rpm	195 [1728] 155rpm	309 [2738] 149rpm	433 [3836] 146rpm	524 [4643] 141rpm	608 [5387] 138rpm	696 [6167] 130rpm
	45 [11.88]			188 [1666] 188rpm	294 [2605] 184rpm	423 [3748] 180rpm	506 [4483] 174rpm	596 [5281] 168rpm	685 [6069] 162rpm
	53 [14.00]			175 [1311] 223rpm	291 [2401] 215rpm	385 [3234] 213rpm	494 [3952] 206rpm	585 [4917] 203rpm	675 [5307] 196rpm
	61 [16.10]			148 [1311] 256rpm	270 [2392] 254rpm	395 [3500] 248rpm	484 [4288] 244rpm	571 [5059] 234rpm	666 [5901] 224rpm
	68 [17.95] Max Cont.			141 [1249] 292rpm	263 [2330] 285rpm	354 [3136] 281rpm	492 [4359] 274rpm	568 [5032] 273rpm	652 [5777] 255rpm
	76 [20.06] Max Int.			121 [1072] 322rpm	234 [2073] 318rpm	342 [3030] 314rpm	452 [4005] 306rpm	568 [5032] 303rpm	
	83 [21.91]				209 [1852] 356rpm	336 [2977] 348rpm	464 [4111] 343rpm	545 [4829] 337rpm	

Hydraulic Orbit Motors GWD



Flow Data

GWD260		261cm ³ /rev (15.9in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		17[247]	35[508]	69[1001]	104[1508]	138[2001]	173[2509]	207[3002]	241[3495]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	2 [0.53]	48 [425] 4rpm	110 [975] 2rpm						
	4 [1.06]	52 [461] 11rpm	112 [992] 11rpm	240 [2126] 10rpm	363 [3216] 8rpm	474 [4200] 7rpm	575 [5095] 7rpm	645 [5715] 5rpm	
	8 [2.11]	53 [470] 26rpm	114 [1010] 24rpm	246 [2180] 23rpm	366 [3243] 22rpm	486 [4306] 20rpm	588 [5210] 18rpm	701 [6211] 15rpm	
	15 [3.96]	48 [425] 56rpm	113 [1001] 54rpm	260 [2304] 50rpm	361 [3198] 50rpm	484 [4288] 46rpm	592 [5245] 44rpm	694 [6149] 41rpm	804 [7123] 37rpm
	23 [6.07]	44 [390] 85rpm	114 [1010] 81rpm	235 [2082] 78rpm	363 [3216] 76rpm	495 [4386] 74rpm	588 [5210] 68rpm	719 [6370] 66rpm	799 [7079] 61rpm
	30 [7.92]		93 [824] 113rpm	225 [1994] 108rpm	345 [3057] 107rpm	475 [4209] 103rpm	588 [5210] 99rpm	689 [6105] 94rpm	792 [7017] 86rpm
	38 [10.03]		84 [744] 144rpm	230 [2038] 142rpm	338 [2995] 139rpm	468 [4146] 136rpm	582 [5157] 131rpm	682 [6043] 125rpm	793 [7026] 117rpm
	45 [11.88]		77 [682] 172rpm	216 [1914] 172rpm	353 [3128] 166rpm	462 [4093] 164rpm	565 [5006] 159rpm	669 [5927] 151rpm	798 [7070] 142rpm
	53 [14.00]		63 [558] 201rpm	197 [1745] 200rpm	324 [2871] 198rpm	442 [3916] 194rpm	566 [5015] 182rpm	665 [5892] 178rpm	762 [6751] 174rpm
	61 [16.10]			181 [1604] 229rpm	298 [2640] 226rpm	447 [3960] 219rpm	550 [4873] 217rpm	649 [5750] 214rpm	748 [6627] 206rpm
	68 [17.95]			159 [1409] 260rpm	303 [2685] 259rpm	416 [3686] 255rpm	548 [4855] 245rpm	640 [5670] 237rpm	735 [6512] 230rpm
	76 [20.06]			135 [1196] 289rpm	277 [2454] 288rpm	388 [3438] 282rpm	519 [4598] 275rpm	633 [5608] 272rpm	732 [6486] 260rpm
	Max Cont.			289rpm	288rpm	282rpm	275rpm	272rpm	260rpm
	83 [21.91]			131 [1161] 318rpm	262 [2321] 317rpm	372 [3296] 312rpm	510 [4519] 308rpm	612 [5422] 299rpm	
	Max Int.			318rpm	317rpm	312rpm	308rpm	299rpm	
	91 [24.02]			81 [718] 347rpm	226 [2002] 345rpm	361 [3198] 343rpm	494 [4377] 338rpm		

GWD300		300cm ³ /rev (18.3in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		17[247]	35[508]	69[1001]	104[1508]	138[2001]	173[2509]	207[3002]	241[3495]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	2 [0.53]	50 [443] 3rpm	94 [833] 1rpm						
	4 [1.06]	62 [549] 10rpm	144 [1276] 10rpm	300 [2658] 8rpm	431 [3819] 7rpm	507 [4492] 7rpm	624 [5529] 4rpm		
	8 [2.11]	60 [532] 21rpm	156 [1382] 18rpm	306 [2711] 16rpm	435 [3854] 16rpm	568 [5032] 14rpm	674 [5972] 11rpm	765 [6778] 8rpm	825 [7310] 5rpm
	15 [3.96]	64 [567] 47rpm	143 [1267] 46rpm	314 [2782] 42rpm	428 [3792] 41rpm	574 [5086] 35rpm	677 [5998] 31rpm	817 [7239] 26rpm	905 [8018] 20rpm
	23 [6.07]	57 [505] 75rpm	138 [1223] 74rpm	288 [2552] 71rpm	422 [3739] 66rpm	543 [4811] 63rpm	687 [6087] 55rpm	799 [7079] 48rpm	942 [8346] 39rpm
	30 [7.92]	44 [425] 100rpm	126 [1116] 99rpm	303 [2685] 97rpm	388 [3438] 94rpm	568 [5032] 85rpm	695 [6158] 80rpm	822 [7283] 69rpm	925 [8196] 60rpm
	38 [10.03]		109 [966] 125rpm	280 [2481] 123rpm	407 [3606] 120rpm	501 [4439] 114rpm	681 [6034] 104rpm	792 [7017] 97rpm	917 [8125] 86rpm
	45 [11.88]		90 [797] 149rpm	259 [2295] 148rpm	386 [3420] 145rpm	470 [4164] 141rpm	638 [5653] 130rpm	779 [6902] 120rpm	878 [7779] 112rpm
	53 [14.00]		75 [665] 176rpm	242 [2144] 175rpm	388 [3438] 174rpm	528 [4678] 171rpm	659 [5839] 161rpm	805 [7132] 149rpm	947 [8390] 136rpm
	61 [16.10]		61 [540] 201rpm	223 [1976] 200rpm	363 [3216] 198rpm	505 [4474] 190rpm	629 [5564] 185rpm	791 [7008] 171rpm	912 [8080] 161rpm
	68 [17.95]			198 [1754] 225rpm	336 [2977] 224rpm	464 [4111] 221rpm	663 [5874] 209rpm	801 [7097] 197rpm	894 [7921] 192rpm
	76 [20.06]			168 [1488] 251rpm	326 [2888] 249rpm	476 [4217] 245rpm	608 [5387] 238rpm	742 [6574] 231rpm	904 [8009] 214rpm
	83 [21.91]			142 [1258] 276rpm	319 [2826] 274rpm	464 [4111] 266rpm	573 [5077] 261rpm	729 [6459] 252rpm	
	Max Cont.			276rpm	274rpm	266rpm	261rpm	252rpm	
	91 [24.02]			118 [1045] 302rpm	280 [2481] 301rpm	432 [3828] 299rpm	556 [4926] 289rpm	699 [6193] 278rpm	
	Max Int.			302rpm	301rpm	299rpm	289rpm	278rpm	
	95 [25.08]			103 [913] 314rpm	260 [2304] 313rpm	431 [3819] 309rpm	550 [4873] 305rpm	704 [6237] 292rpm	

Hydraulic Orbit Motors GWD



Flow Data

GWD350		348cm ³ /rev (21.2in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		17[247]	35[508]	69[1001]	104[1508]	138[2001]	173[2509]	207[3002]	241[3495]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	2 [0.53]	63 [558]	132 [1170]	271 [2401]	395 [3500]				
		4rpm	3rpm	3rpm	2rpm				
	4 [1.06]	62 [549]	132 [1170]	293 [2596]	434 [3845]				
		9rpm	8rpm	8rpm	7rpm				
	8 [2.11]	67 [594]	142 [1258]	309 [2738]	459 [4067]	598 [5298]	739 [6548]	852 [7549]	
		21rpm	19rpm	18rpm	17rpm	17rpm	16rpm	13rpm	
	15 [3.96]	69 [611]	149 [1320]	313 [2773]	468 [4146]	627 [5555]	768 [6804]	885 [7841]	987 [8745]
		41rpm	41rpm	39rpm	38rpm	36rpm	34rpm	33rpm	27rpm
	23 [6.07]	60 [532]	149 [1320]	312 [2764]	471 [4173]	627 [5555]	766 [6787]	921 [8160]	1028 [9108]
		63rpm	61rpm	60rpm	58rpm	55rpm	52rpm	49rpm	44rpm
	30 [7.92]	52 [461]	137 [1214]	305 [2702]	456 [4040]	623 [5520]	765 [6778]	924 [8187]	1046 [9268]
		85rpm	83rpm	82rpm	80rpm	77rpm	74rpm	68rpm	64rpm
	38 [10.03]		111 [983]	297 [2631]	428 [3792]	598 [5298]	742 [6574]	907 [8036]	1058 [9374]
			108rpm	107rpm	106rpm	99rpm	98rpm	91rpm	86rpm
	45 [11.88]		97 [859]	264 [2339]	443 [3925]	578 [5121]	737 [6530]	887 [7859]	1038 [9197]
			130rpm	129rpm	128rpm	123rpm	115rpm	107rpm	102rpm
	53 [14.00]		84 [744]	249 [2206]	420 [3721]	568 [5032]	720 [6379]	879 [7788]	1028 [9108]
			151rpm	150rpm	149rpm	145rpm	137rpm	131rpm	118rpm
	61 [16.10]		61 [540]	232 [2056]	407 [3606]	547 [4846]	718 [6361]	848 [7513]	1009 [8940]
			172rpm	171rpm	169rpm	168rpm	161rpm	153rpm	145rpm
	68 [17.95]			218 [1931]	392 [3473]	569 [5041]	694 [6149]	835 [7398]	981 [8692]
				194rpm	192rpm	188rpm	185rpm	172rpm	162rpm
	76 [20.06]			205 [1816]	372 [3296]	510 [4519]	680 [6025]	831 [7363]	971 [8603]
				216rpm	214rpm	213rpm	211rpm	193rpm	186rpm
	83 [21.91]			177 [1568]	349 [3092]	551 [4882]	682 [6043]	809 [7168]	953 [8444]
	Max Cont.			239rpm	238rpm	236rpm	231rpm	218rpm	213rpm
	91 [24.02]			170 [1506]	357 [3163]	531 [4705]	663 [5874]		
	Max Int.			260rpm	259rpm	257rpm	254rpm		
	95 [25.08]				366 [3243]	527 [4669]	645 [5715]		
					269rpm	268rpm	263rpm		

GWD375		375cm ³ /rev (22.8in ³ /rev)						Max Cont.	Max Int.
Pressure bar [psi→]		17[247]	35[508]	69[1001]	104[1508]	138[2001]	173[2509]	207[3002]	241[3495]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification							
	2 [0.53]	75 [665]							
		3rpm							
	4 [1.06]	82 [727]	160 [1418]	327 [2897]	488 [4324]	638 [5653]	759 [6725]		
		7rpm	6rpm	6rpm	5rpm	5rpm	3rpm		
	8 [2.11]	80 [709]	169 [1497]	358 [3172]	534 [4731]	685 [6069]	831 [7363]	948 [8399]	
		18rpm	17rpm	16rpm	15rpm	13rpm	11rpm	9rpm	
	15 [3.96]	74 [656]	161 [1426]	355 [3145]	534 [4731]	692 [6131]	855 [7575]	983 [8709]	1116 [9888]
		38rpm	37rpm	36rpm	34rpm	31rpm	28rpm	24rpm	19rpm
	23 [6.07]	66 [585]	156 [1382]	352 [3119]	525 [4652]	692 [6131]	861 [7628]	1008 [8931]	1162 [10295]
		59rpm	58rpm	56rpm	55rpm	49rpm	45rpm	38rpm	35rpm
	30 [7.92]	55 [487]	147 [1302]	337 [2986]	507 [4492]	692 [6131]	844 [7478]	1004 [8895]	1152 [10207]
		80rpm	79rpm	76rpm	75rpm	69rpm	62rpm	58rpm	49rpm
	38 [10.03]		131 [1161]	319 [2826]	492 [4359]	678 [6007]	832 [7372]	1003 [8887]	1152 [10207]
			100rpm	98rpm	95rpm	91rpm	85rpm	78rpm	68rpm
	45 [11.88]		112 [992]	298 [2640]	478 [4235]	642 [5688]	806 [7141]	975 [8639]	1136 [10065]
			120rpm	119rpm	117rpm	111rpm	106rpm	96rpm	90rpm
	53 [14.00]		91 [806]	278 [2463]	475 [4209]	631 [5591]	792 [7017]	946 [8382]	1114 [9870]
			141rpm	139rpm	137rpm	133rpm	126rpm	117rpm	103rpm
	61 [16.10]		72 [638]	259 [2295]	427 [3783]	596 [5281]	768 [6804]	931 [8249]	1086 [9622]
			161rpm	160rpm	159rpm	154rpm	149rpm	139rpm	128rpm
	68 [17.95]			234 [2073]	432 [3828]	595 [5272]	762 [6751]	905 [8018]	1082 [9587]
				180rpm	179rpm	175rpm	166rpm	159rpm	149rpm
	76 [20.06]			207 [1834]	382 [3385]	559 [4953]	738 [6539]	874 [7744]	1023 [9064]
	Max Cont.			201rpm	200rpm	196rpm	188rpm	181rpm	166rpm
	83 [21.91]			176 [1559]	371 [3287]	527 [4669]	696 [6167]	835 [7398]	
	Max Int.			222rpm	220rpm	216rpm	211rpm	203rpm	
	91 [24.02]			138 [1223]	316 [2800]	507 [4492]	658 [5830]		
				240rpm	238rpm	237rpm	231rpm		

Hydraulic Orbit Motors GWD



Flow Data

GWD470		465cm ³ /rev (28.3in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		17[247]	35[508]	69[1001]	104[1508]	138[2001]	173[2509]	207[3002]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification						
	2 [0.53]	91 [806]	184 [1630]					
		2rpm	1rpm					
	4 [1.06]	95 [842]	199 [1763]	406 [3597]	607 [5378]	811 [7185]		
		6rpm	5rpm	5rpm	4rpm	4rpm		
	8 [2.11]	95 [842]	206 [1825]	432 [3828]	652 [5777]	852 [7849]	1022 [9055]	1194 [10579]
		14rpm	14rpm	12rpm	12rpm	11rpm	10rpm	8rpm
	15 [3.96]	81 [718]	197 [1745]	441 [3907]	656 [5812]	883 [7823]	1062 [9409]	1245 [11031]
		30rpm	27rpm	26rpm	26rpm	23rpm	21rpm	20rpm
	23 [6.07]	83 [735]	191 [1692]	436 [3863]	671 [5945]	870 [7708]	1068 [9462]	1255 [11119]
		47rpm	46rpm	43rpm	42rpm	39rpm	36rpm	31rpm
	30 [7.92]	71 [629]	177 [1568]	424 [3757]	661 [5856]	852 [7549]	1094 [9693]	1274 [11288]
		63rpm	62rpm	60rpm	59rpm	55rpm	48rpm	42rpm
	38 [10.03]	50 [443]	162 [1435]	405 [3588]	625 [5538]	848 [7513]	1064 [9427]	1271 [11261]
		81rpm	80rpm	78rpm	77rpm	74rpm	67rpm	60rpm
	45 [11.88]		138 [1223]	377 [3340]	625 [5538]	828 [7336]	1064 [9427]	1269 [11243]
			96rpm	94rpm	92rpm	88rpm	81rpm	74rpm
	53 [14.00]		111 [983]	348 [3083]	576 [5103]	796 [7053]	1008 [8931]	1218 [10791]
			113rpm	109rpm	108rpm	106rpm	101rpm	92rpm
	61 [16.10]		81 [718]	319 [2826]	542 [4802]	793 [7026]	962 [8523]	1185 [10499]
			130rpm	127rpm	125rpm	121rpm	117rpm	112rpm
	68 [17.95]		54 [478]	272 [2410]	523 [4634]	736 [6521]	953 [8444]	1162 [10295]
			146rpm	145rpm	144rpm	139rpm	136rpm	126rpm
	76 [20.06]			232 [2056]	477 [4226]	703 [6229]	915 [8107]	1117 [9897]
	Max Cont.			162rpm	161rpm	156rpm	152rpm	141rpm
	83 [21.91]			199 [1763]	458 [4058]	667 [5910]	879 [7788]	
	Max Int.			179rpm	176rpm	174rpm	169rpm	
	91 [24.02]			156 [1382]	382 [3385]	615 [5449]	839 [7434]	
				195rpm	193rpm	188rpm	184rpm	

GWD540		536cm ³ /rev (32.7in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		17[247]	35[508]	69[1001]	104[1508]	138[2001]	173[2509]	
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification						
	2 [0.53]	102 [904]	196 [1737]					
		2rpm	1rpm					
	4 [1.06]	124 [1099]	227 [2011]	465 [4120]	696 [6167]	935 [8284]	1142 [10118]	
		6rpm	6rpm	5rpm	5rpm	4rpm	4rpm	
	8 [2.11]	132 [1170]	238 [2109]	497 [4403]	752 [6663]	972 [8612]	1181 [10464]	
		13rpm	12rpm	12rpm	11rpm	11rpm	9rpm	
	15 [3.96]	118 [1045]	229 [2029]	507 [4492]	756 [6698]	986 [8736]	1218 [10791]	
		27rpm	27rpm	26rpm	25rpm	23rpm	22rpm	
	23 [6.07]	94 [833]	221 [1958]	502 [4448]	780 [6911]	990 [8771]	1220 [10809]	
		41rpm	40rpm	40rpm	39rpm	37rpm	33rpm	
	30 [7.92]	76 [673]	209 [1852]	481 [4262]	748 [6627]	981 [8692]	1249 [11066]	
		56rpm	55rpm	54rpm	53rpm	51rpm	47rpm	
	38 [10.03]	57 [505]	188 [1666]	452 [4005]	726 [6432]	957 [8479]	1241 [10995]	
		70rpm	69rpm	69rpm	68rpm	66rpm	61rpm	
	45 [11.88]		174 [1542]	436 [3863]	705 [6246]	941 [8337]	1198 [10614]	
			84rpm	82rpm	81rpm	79rpm	76rpm	
	53 [14.00]		136 [1205]	415 [3677]	681 [6034]	948 [8399]	1178 [10437]	
			98rpm	96rpm	95rpm	93rpm	90rpm	
	61 [16.10]		106 [939]	382 [3385]	662 [5865]	896 [7939]	1159 [10269]	
			112rpm	112rpm	110rpm	109rpm	104rpm	
	68 [17.95]		83 [735]	354 [3136]	608 [5387]	863 [7646]	1113 [9861]	
			126rpm	125rpm	124rpm	123rpm	122rpm	
	76 [20.06]			321 [2844]	601 [5325]	826 [7318]	1104 [9781]	
	Max Cont.			140rpm	138rpm	137rpm	132rpm	
	83 [21.91]			295 [2614]	535 [4740]	788 [6982]		
	Max Int.			154rpm	151rpm	149rpm		
	91 [24.02]			214 [1896]	488 [4324]	747 [6618]		
				169rpm	167rpm	167rpm		

Hydraulic Orbit Motors GWD



Flow Data

GWD620		631cm ³ /rev (38.5in ³ /rev)				Max Cont.	Max Int.
Pressure bar [psi→]		17[247]	35[508]	69[1001]	104[1508]	121[1755]	155[2248]
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification					
	2 [0.53]	117 [1037]	224 [1985]				
		2rpm	1rpm				
	4 [1.06]	134 [1187]	262 [2321]	535 [4740]	793 [7026]	932 [8258]	
		5rpm	5rpm	4rpm	4rpm	3rpm	
	8 [2.11]	139 [1232]	273 [2419]	569 [5032]	848 [7513]	982 [8701]	1251 [11084]
		11rpm	10rpm	10rpm	9rpm	8rpm	6rpm
	15 [3.96]	129 [1143]	268 [2374]	578 [5121]	865 [7664]	1003 [8887]	1275 [11297]
		23rpm	22rpm	22rpm	21rpm	20rpm	16rpm
	23 [6.07]	108 [957]	258 [2286]	572 [5068]	881 [7806]	1008 [8931]	1279 [11332]
		35rpm	34rpm	33rpm	32rpm	31rpm	28rpm
	30 [7.92]	88 [780]	244 [2162]	552 [4891]	852 [7549]	997 [8833]	1287 [11403]
		47rpm	46rpm	46rpm	44rpm	43rpm	39rpm
	38 [10.03]	65 [576]	218 [1931]	524 [4643]	831 [7363]	968 [8576]	1266 [11217]
		58rpm	58rpm	57rpm	57rpm	55rpm	51rpm
	45 [11.88]		201 [1781]	449 [3978]	812 [7194]	953 [8444]	1238 [10969]
			70rpm	69rpm	69rpm	68rpm	64rpm
	53 [14.00]		157 [1391]	473 [4191]	775 [6867]	925 [8196]	1221 [10818]
			82rpm	79rpm	78rpm	77rpm	76rpm
	61 [16.10]		125 [1108]	438 [3881]	749 [6636]	891 [7894]	1185 [10499]
			94rpm	93rpm	91rpm	90rpm	88rpm
	68 [17.95]		90 [797]	407 [3606]	699 [6193]	849 [7522]	1142 [10118]
			107rpm	105rpm	104rpm	103rpm	102rpm
	76 [20.06]			357 [3163]	673 [5963]	812 [7194]	1098 [9728]
	Max Cont.			119rpm	117rpm	114rpm	113rpm
	83 [21.91]			328 [2906]	615 [5449]	755 [6689]	
	Max Int.			131rpm	130rpm	128rpm	
	91 [24.02]			245 [2171]	557 [4935]	704 [6237]	
				141rpm	140rpm	134rpm	

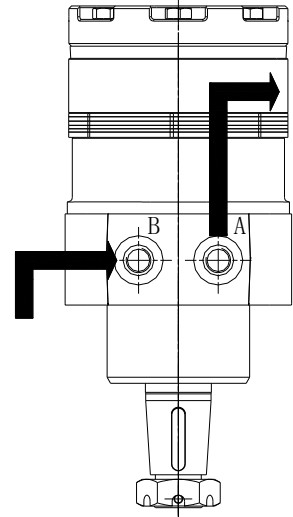
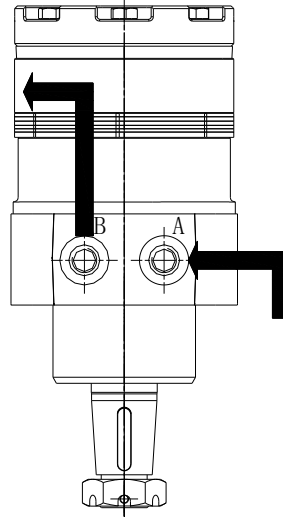
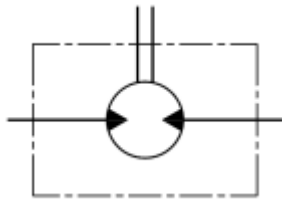
GWD750		748cm ³ /rev (45.6in ³ /rev)				Max Cont.	Max Int.
Pressure bar [psi→]		17[247]	35[508]	69[1001]	104[1508]	138[2001]	
Flow	l/min(gpm↓)	Torque N m [lb-in] Speed Specification					
	2 [0.53]	144 [1276]	279 [2472]				
		2rpm	1rpm				
	4 [1.06]	153 [1356]	319 [2817]	648 [5741]	963 [8532]	1302 [11536]	
		4rpm	4rpm	3rpm	3rpm	3rpm	
	8 [2.11]	155 [1373]	337 [2986]	690 [6113]	1024 [9073]	1355 [12005]	
		9rpm	8rpm	8rpm	7rpm	7rpm	
	15 [3.96]	151 [1338]	330 [2924]	702 [6220]	1062 [9409]	1413 [12519]	
		19rpm	18rpm	17rpm	17rpm	15rpm	
	23 [6.07]	132 [1170]	317 [2809]	694 [6149]	1055 [9347]	1405 [12448]	
		29rpm	28rpm	27rpm	27rpm	25rpm	
	30 [7.92]	112 [992]	301 [2667]	675 [5981]	1036 [9179]	1418 [12563]	
		40rpm	39rpm	38rpm	36rpm	32rpm	
	38 [10.03]	79 [700]	268 [2374]	648 [5741]	1011 [8957]	1368 [12120]	
		49rpm	48rpm	48rpm	47rpm	46rpm	
	45 [11.88]	52 [461]	247 [2188]	614 [5440]	980 [8683]	1341 [11881]	
		60rpm	59rpm	58rpm	58rpm	55rpm	
	53 [14.00]		195 [1728]	574 [5086]	943 [8355]	1307 [11580]	
			69rpm	68rpm	67rpm	66rpm	
	61 [16.10]		147 [1302]	531 [4705]	902 [7992]	1265 [11208]	
			79rpm	78rpm	76rpm	74rpm	
	68 [17.95]		102 [904]	491 [4350]	855 [7575]	1224 [10845]	
			90rpm	88rpm	88rpm	87rpm	
	76 [20.06]		60 [532]	421 [3730]	802 [7106]	1168 [10348]	
	Max Cont.		99rpm	99rpm	98rpm	97rpm	
	83 [21.91]			382 [3385]	745 [6601]		
	Max Int.			110rpm	109rpm		
	91 [24.02]			299 [2454]	665 [5892]		
				120rpm	118rpm		

Technical Data

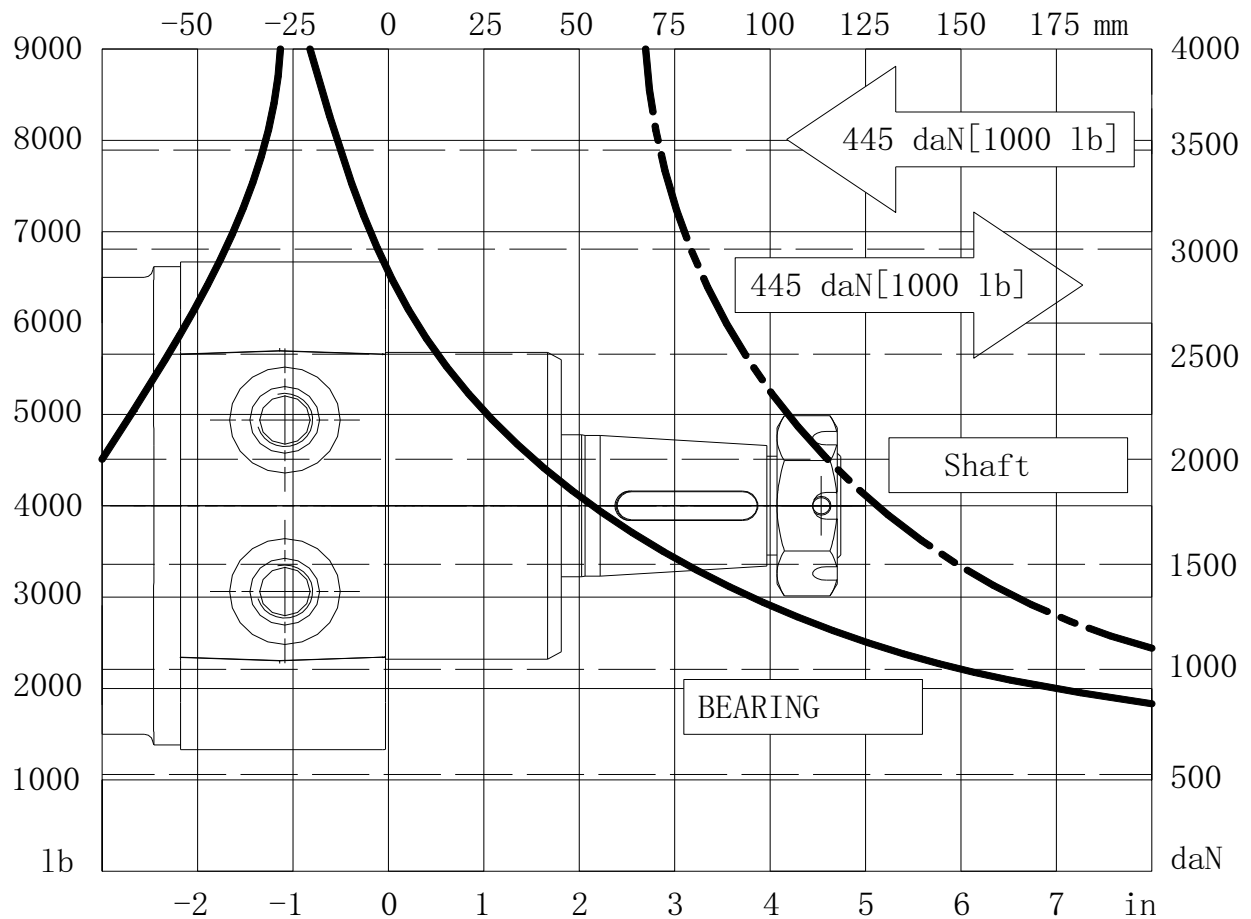
Shaft Rotation Direction: Standard

When looking at the shaft end of motor, shaft will rotate:

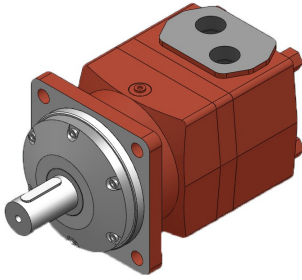
- Clockwise when port "B" is pressurized.
- Counter-clockwise when port "A" is pressurized.



W4 & W5 Wheel Mounts



General

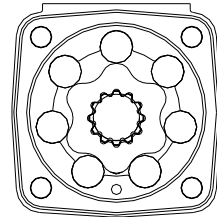


APPLICATION

- ◇ Conveyors
- ◇ Metal working machines
- ◇ Agricultural machines
- ◇ Road building machines
- ◇ Mining machinery
- ◇ Food industries
- ◇ Special vehicles etc.
- ◇ Injection molding machines

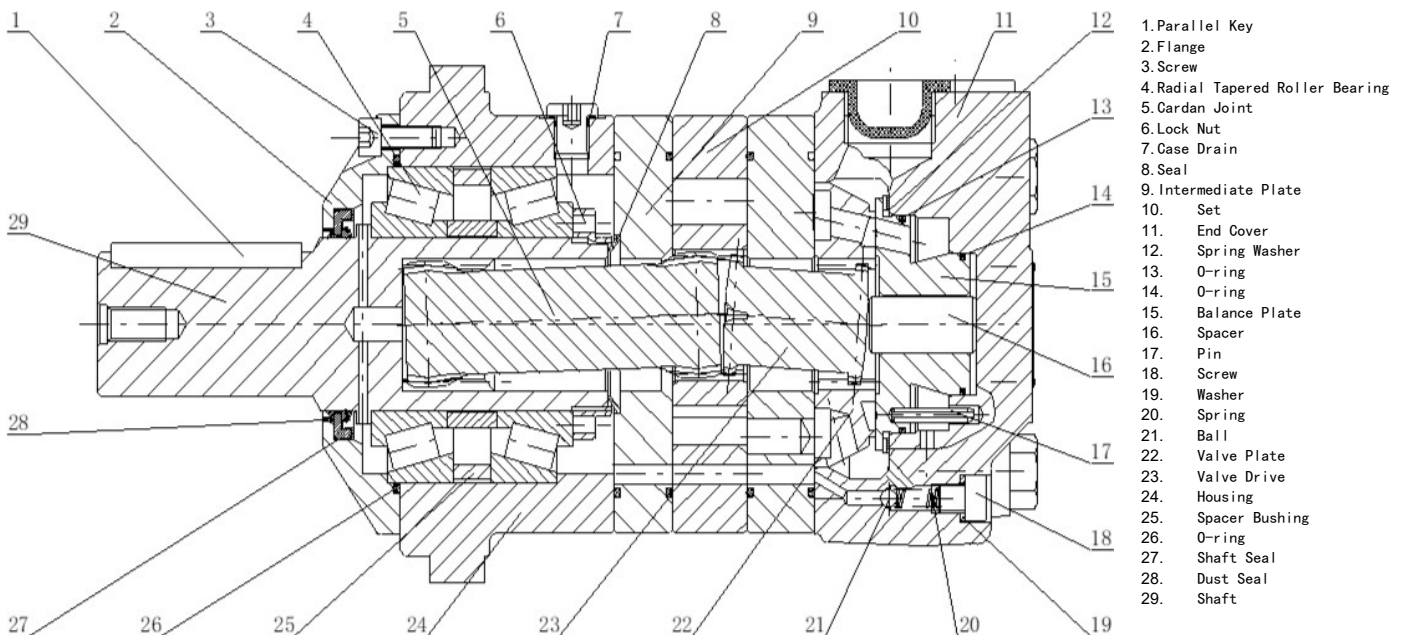
OPTIONS

- ◇ Flange mount
- ◇ Short motor
- ◇ Tachometer connection
- ◇ Side ports
- ◇ Shafts—straight, splined and tapered
- ◇ Metric and BSPP ports
- ◇ Other special features

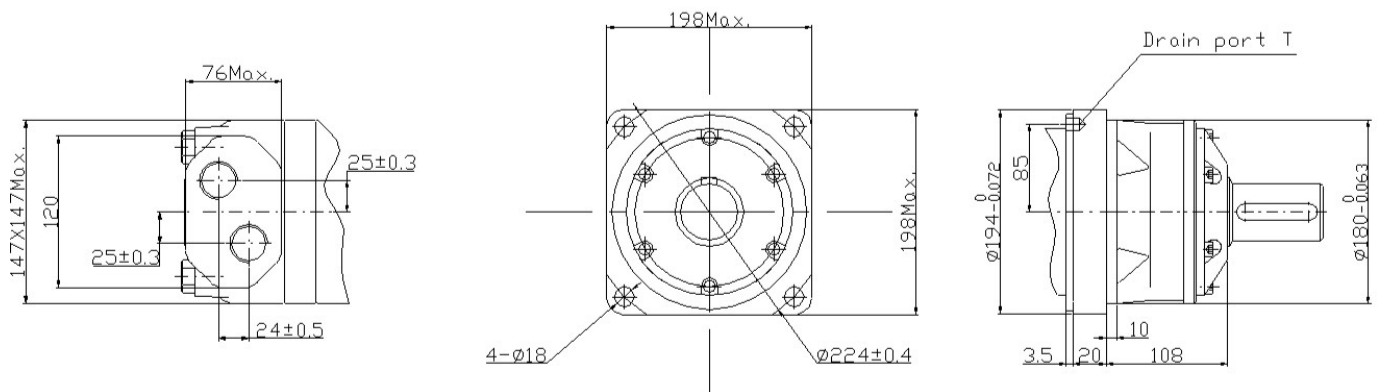
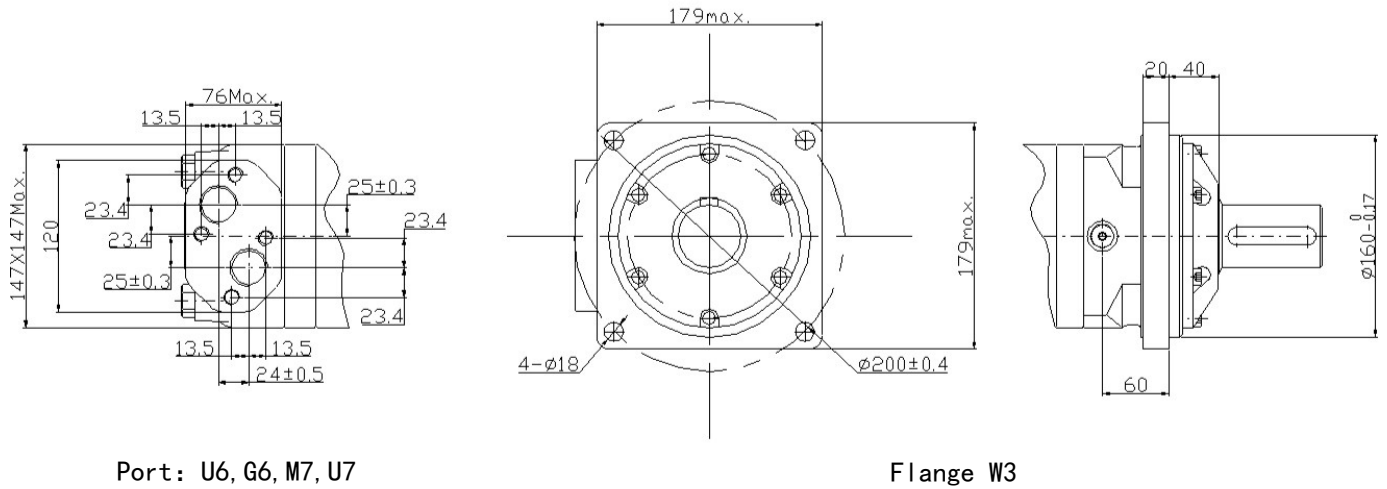
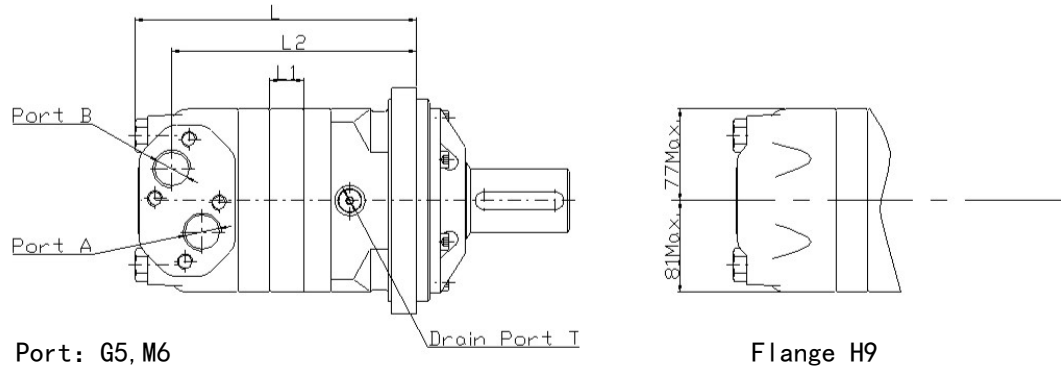


- ◇ Disc distribution flow

Model		GV315	GV400	GV500	GV630	GV800
Disp.	in ³ /rev	19.18	24.45	30.48	38.38	48.91
	cm ³ /rev	314.5	400.9	499.6	629.1	801.8
Max Speed rpm	cont.	510	500	400	320	250
	int.	630	600	480	380	300
Max Torque N m [lb-in]	cont.	920 [8150]	1180 [10450]	1460 [12950]	1660 [14700]	1880 [16650]
	int.	1110 [9800]	1410 [12500]	1760 [15550]	1940 [17150]	2110 [18650]
Max Dif. bar [psi]	cont.	200 [2900]	200 [2900]	200 [2900]	180 [2610]	160 [2320]
	int.	240 [3480]	240 [3480]	240 [3480]	210 [3050]	180 [2610]
Max Flow l/min [gpm]	cont.	160 [42.3]	200 [52.8]	200 [52.8]	200 [52.8]	200 [52.8]
	int.	200 [52.8]	240 [63.4]	240 [63.4]	240 [63.4]	240 [63.4]
Weight kg [lbs]		31.8 [70.1]	32.6 [71.9]	33.5 [73.8]	34.9 [76.9]	36.5 [80.5]



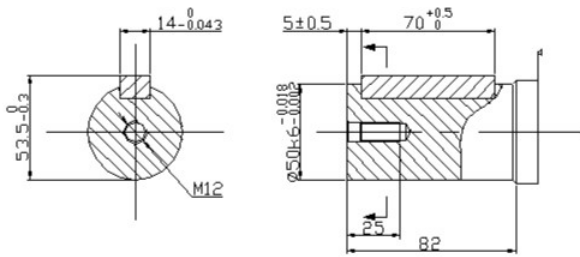
Dimensions and Mounting Data



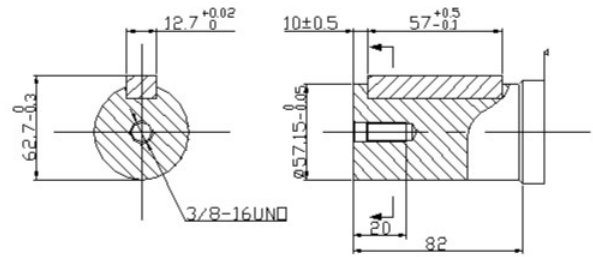
Model	L	L1	L2
GV315	217	20	161.5
GV400	224	27	168.5
GV500	232	35	176.5
GV630	244	47	188.5
GV800	255	58	199.5

Port	G5 (Depth)	M6 (Depth)	U6 (Depth)	G6 (Depth)	M7 (Depth)	U7 (Depth)
P(A,B)	G1 (18)	M33x2 (18)	1-5/16-12UN (18)	G1 (18)	M33x2 (18)	1-5/16-12UN (18)
T	G1/4 (12)	M14x1.5 (12)	9/16-18UNF (12)	G1/4 (12)	M14x1.5 (12)	7/16-20UNF (12)
C	4-M12 (12)	4-M12 (12)				

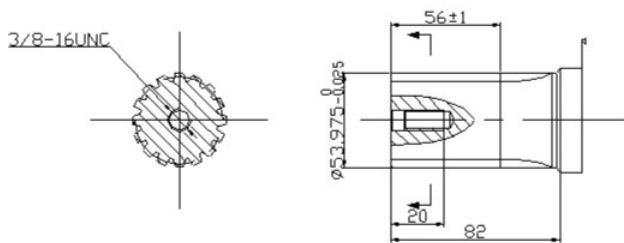
GV Shaft Extension Dimensions Data



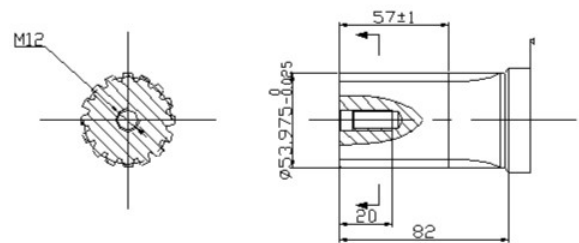
Shaft SN: Cylindrical shaft $\varnothing 50$
Parallel key 14x9x70



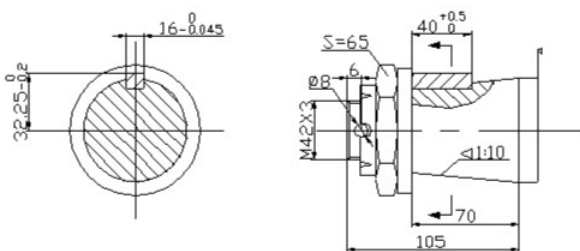
Shaft SP: Cylindrical shaft $\varnothing 57.15$
Parallel key 12.7x12.7x57



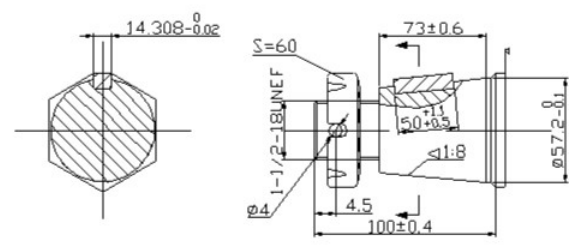
Shaft RB: Splined key 16-DP8/16



Shaft RC: Splined key 16-DP8/16



Shaft T8: Tapered shaft $\varnothing 60$
Parallel key 16x10x32
Tightening torque: $750 \pm 50 \text{ Nm}$



Shaft T9: Tapered shaft $\varnothing 57.2$
Parallel key 14.308x14.308x50
Tightening torque: $750 \pm 50 \text{ Nm}$

GV - How To Order

		Model	Displacement	Flange	Drive shaft	Ports	Other functions
Ordering Example:		GV	315	H9	C3	G5	ACA
Model	Disp.	Flange		Drive Shaft		Ports	
GV	315	H9=4- $\varnothing$ 18 square flange $\varnothing$ 200, pilot $\varnothing$ 160x11 W3=4- $\varnothing$ 18 wheel flange $\varnothing$ 224, pilot $\varnothing$ 180x10 B3=4- $\varnothing$ 14 circle flange $\varnothing$ 180, pilot $\varnothing$ 140x8 HF=4- 9/16", square SAE C flange, 5" pilot, 6.375 bolt circle		C3=Cardan shaft 16-DP10/20 SN=Shaft $\varnothing$ 50, parallel key 14x9x70 RB=Shaft $\varnothing$ 53.975, splined tooth 16-DP8/16 RC=Shaft $\varnothing$ 53.975, splined tooth 16-DP8/16 SP=Shaft $\varnothing$ 57.15, parallel key 12.7x12.7x57.15 T8=Tapered shaft $\varnothing$ 60, parallel key 16x10x32 T9=Tapered shaft $\varnothing$ 60, parallel key 14.308x14.308x50.8		G5=G1 manifold 4xM12, G1/4 M6=M33x2 manifold 4xM12, M14x1.5 U6=1-5/16-12UN 0-ring, 9/16-18UNF G6=G1, G1/4 M7=M33x2, M14x1.5 U7=1-5/16-12UN 0-ring, 7/16-20UNF	
	400						
	500						
	630						
	800						
	1000						

Rotation direction	Paint	Standard Options	Seal Options	Relief Options	Speed Sensor Option
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature	Blank= None HPS=High Pressure Seal SG=Seal Guard HPS-SG= High Pressure Seal & Seal Guard	Blank=None R=Valve Cavity Only R12=Bi-directional relief max 125 bar R-20= Bi-directional relief max 207 bar	Blank= None SS= Speed Sensor, 4-pin, M12 male connector

Hydraulic Orbit Motors GV



Flow Data

GV315		314.5cm ³ /rev (19.18in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		35.5 [507]	71.1 [1015]	101.5 [1450]	142.1 [2030]	182.7 [2610]	203 [2900]	243.6 [3480]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	10 [2.64]	140 [1239]	294 [2602]	440 [3894]	610 [5398]	731 [6467]	845 [7478]	1000 [8850]
		26rpm	24rpm	23rpm	22rpm	20rpm	17rpm	14rpm
	20 [5.28]	153 [1354]	314 [2779]	466 [4124]	636 [5629]	787 [6965]	895 [7921]	1070 [9470]
		55rpm	54rpm	53rpm	52rpm	51rpm	48rpm	44rpm
	50 [13.21]	149 [1318]	312 [2761]	465 [4115]	654 [5788]	815 [7213]	935 [8275]	1112 [9842]
		145rpm	144rpm	142rpm	140rpm	137rpm	133rpm	127rpm
	75 [19.81]	143 [1265]	304 [2690]	459 [4058]	642 [5682]	816 [7222]	940 [8319]	1119 [9903]
		220rpm	218rpm	215rpm	211rpm	207rpm	202rpm	195rpm
	100 [26.42]	136 [1203]	297 [2628]	452 [4000]	636 [5629]	810 [7169]	936 [8284]	1108 [9806]
		294rpm	292rpm	290rpm	287rpm	283rpm	278rpm	270rpm
	125 [33.02]	123 [1088]	286 [2531]	442 [3912]	626 [5540]	799 [7071]	921 [8151]	1093 [9673]
		368rpm	366rpm	364rpm	361rpm	357rpm	352rpm	345rpm
	150 [39.63]	114 [1008]	275 [2433]	435 [3850]	615 [5443]	788 [6974]	906 [8018]	1078 [9541]
		445rpm	443rpm	441rpm	437rpm	430rpm	422rpm	410rpm
	160 [42.27]	107 [947]	268 [2371]	430 [3805]	608 [5381]	780 [6903]	895 [7921]	1070 [9470]
		475rpm	473rpm	470rpm	466rpm	460rpm	452rpm	439rpm
	200 [52.83]	82 [725]	249 [2203]	412 [3646]	593 [5248]	758 [6708]	871 [7708]	1047 [9266]
		596rpm	594rpm	590rpm	584rpm	576rpm	565rpm	544rpm

GV400		400.9cm ³ /rev (24.45in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		35.5 [507]	71.1 [1015]	101.5 [1450]	142.1 [2030]	182.7 [2610]	203 [2900]	243.6 [3480]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	10 [2.64]	183 [1619]	385 [3407]	568 [5027]	776 [6868]	968 [8567]	1101 [9744]	1292 [11435]
		20rpm	20rpm	19rpm	18rpm	17rpm	16rpm	14rpm
	20 [5.28]	196 [1734]	398 [3522]	590 [5221]	815 [7213]	1010 [8939]	1152 [10196]	1346 [11913]
		44rpm	44rpm	43rpm	42rpm	40rpm	39rpm	37rpm
	50 [13.21]	200 [1770]	402 [3557]	603 [5336]	842 [7452]	927 [9204]	1186 [10496]	1430 [12656]
		114rpm	113rpm	113rpm	112rpm	110rpm	108rpm	103rpm
	75 [19.81]	195 [1725]	394 [3487]	596 [5275]	838 [7416]	1043 [9231]	1188 [10514]	1432 [12674]
		175rpm	173rpm	170rpm	166rpm	163rpm	157rpm	152rpm
	100 [26.42]	172 [1522]	385 [3407]	593 [5248]	827 [7319]	1036 [9169]	1184 [10479]	1425 [12612]
		236rpm	235rpm	233rpm	231rpm	227rpm	223rpm	215rpm
	125 [33.02]	167 [1478]	374 [3310]	583 [5159]	816 [7222]	1021 [9036]	1177 [10417]	1413 [12506]
		296rpm	294rpm	291rpm	288rpm	282rpm	275rpm	268rpm
	150 [39.63]	158 [1398]	361 [3195]	559 [4947]	801 [7089]	1008 [8921]	1167 [10311]	1390 [12302]
		355rpm	354rpm	352rpm	349rpm	344rpm	335rpm	324rpm
	175 [46.23]	143 [1265]	346 [3062]	553 [4894]	784 [6938]	989 [8753]	1145 [10134]	1377 [12187]
		416rpm	414rpm	411rpm	407rpm	403rpm	396rpm	388rpm
	200 [52.83]	118 [1044]	331 [2929]	536 [4743]	770 [6815]	969 [8576]	1128 [9983]	1356 [12001]
		475rpm	473rpm	469rpm	463rpm	455rpm	448rpm	439rpm
	240 [63.4]	82 [725]	301 [2664]	506 [4478]	740 [6549]	943 [8346]	1104 [9771]	1332 [11789]
		571rpm	569rpm	565rpm	548rpm	539rpm	530rpm	520rpm

Hydraulic Orbit Motors GV



Flow Data

GV500		499.6cm ³ /rev (30.48in ³ /rev)					Max Cont.	Max Int.
Pressure (psi→)		507	1015	1450	2030	2610	2900	3480
Flow	(gpm↓)	Torque N m [lb-in] Speed Specification						
	2.64	242 [2141]	468 [4142]	696 [6160]	959 [8487]	1190 [10532]	1353 [11975]	1607 [14223]
		17rpm	17rpm	16rpm	16rpm	15rpm	13rpm	11rpm
	5.28	245 [2169]	501 [4434]	738 [6531]	1003 [8877]	1232 [10904]	1394 [12337]	1658 [14674]
		36rpm	35rpm	35rpm	34rpm	33rpm	32rpm	29rpm
	13.21	240 [2124]	500 [4425]	758 [6708]	1025 [9072]	1270 [11240]	1449 [12824]	1743 [15426]
		93rpm	92rpm	91rpm	90rpm	88rpm	85rpm	80rpm
	19.81	233 [2062]	498 [4407]	752 [6655]	1030 [9116]	1288 [11399]	1475 [13054]	1766 [15630]
		140rpm	139rpm	137rpm	135rpm	132rpm	127rpm	120rpm
	26.42	228 [2017]	491 [4345]	748 [6620]	1026 [9080]	1289 [11408]	1472 [13028]	1760 [15577]
		189rpm	187rpm	185rpm	182rpm	178rpm	173rpm	166rpm
	33.02	220 [1947]	483 [4274]	742 [6567]	1014 [8974]	1280 [11328]	1460 [12922]	1745 [15444]
		237rpm	236rpm	234rpm	231rpm	227rpm	223rpm	216rpm
	39.63	201 [1778]	465 [4115]	723 [6399]	1008 [8921]	1250 [11063]	1429 [12647]	1736 [15364]
		287rpm	286rpm	284rpm	281rpm	276rpm	270rpm	260rpm
	46.23	182 [1610]	446 [3947]	711 [6292]	997 [8824]	1238 [10957]	1406 [12444]	1715 [15179]
		335rpm	334rpm	332rpm	329rpm	325rpm	320rpm	310rpm
	52.83	161 [1424]	423 [3743]	776 [6868]	974 [8620]	1218 [10780]	1385 [12258]	1697 [15019]
	Max Cont.	384rpm	383rpm	381rpm	378rpm	374rpm	366rpm	354rpm
	63.4	120 [1062]	378 [3345]	722 [6390]	921 [8151]	1172 [10373]	1340 [11859]	1650 [14603]
	Max Int.	461rpm	459rpm	457rpm	454rpm	450rpm	444rpm	432rpm

GV630		629.1cm ³ /rev (38.38in ³ /rev)					Max Cont.	Max Int.
Pressure (psi→)		507	870	1305	1740	2175	2610	3045
Flow	(gpm↓)	Torque N m [lb-in] Speed Specification						
	2.64	280 [2478]	522 [4620]	812 [7186]	1100 [9735]	1268 [11222]	1549 [13709]	1784 [15789]
		14rpm	13rpm	13rpm	12rpm	12rpm	11rpm	10rpm
	5.28	288 [2549]	552 [4885]	839 [7425]	1101 [9744]	1315 [11638]	1607 [14223]	1864 [16497]
		28rpm	28rpm	27rpm	27rpm	26rpm	24rpm	22rpm
	13.21	289 [2557]	555 [4912]	868 [7682]	1137 [10063]	1364 [12072]	1682 [14886]	1956 [17312]
		72rpm	72rpm	71rpm	69rpm	68rpm	66rpm	62rpm
	19.81	270 [2389]	548 [4850]	863 [7638]	1120 [9912]	1352 [11966]	1680 [14869]	1964 [17382]
		109rpm	108rpm	106rpm	104rpm	102rpm	99rpm	94rpm
	26.42	264 [2336]	538 [4761]	856 [7576]	1083 [9585]	1350 [11948]	1674 [14816]	1965 [17391]
		146rpm	145rpm	143rpm	141rpm	138rpm	135rpm	130rpm
	33.02	251 [2221]	516 [4566]	837 [7408]	1071 [9479]	1336 [11824]	1659 [14683]	1950 [17258]
		184rpm	183rpm	181rpm	179rpm	177rpm	173rpm	168rpm
	39.63	240 [2124]	495 [4381]	817 [7231]	1063 [9408]	1330 [11771]	1650 [14603]	1928 [17064]
		221rpm	220rpm	219rpm	217rpm	215rpm	212rpm	205rpm
	46.23	210 [1858]	485 [4292]	796 [7045]	1052 [9310]	1300 [11505]	1636 [14479]	1908 [16887]
		259rpm	258rpm	257rpm	254rpm	250rpm	246rpm	241rpm
	52.83	182 [1610]	469 [4150]	751 [6646]	1018 [9010]	1280 [11328]	1611 [14258]	1883 [16665]
	Max Cont.	297rpm	297rpm	295rpm	293rpm	290rpm	284rpm	273rpm
	63.4	130 [1150]	146 [3681]	712 [6301]	978 [8656]	1237 [10948]	1563 [13833]	1835 [16241]
	Max Int.	358rpm	357rpm	355rpm	351rpm	346rpm	340rpm	332rpm

Hydraulic Orbit Motors GV



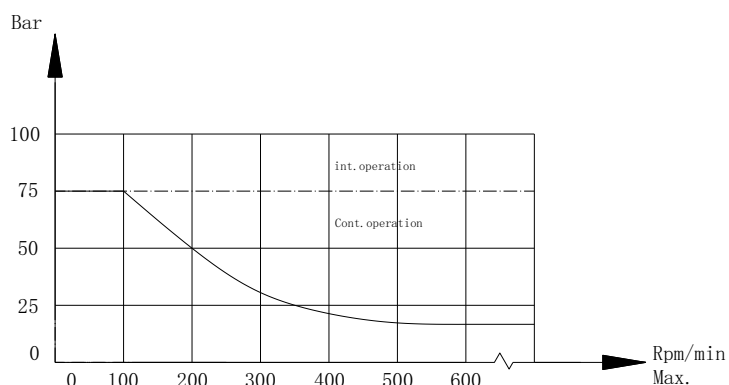
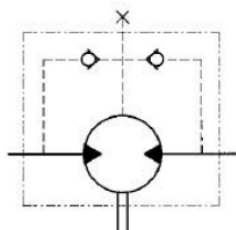
Flow Data

GV800		801.8cm ³ /rev (48.91in ³ /rev)					Max Cont.	Max Int.
Pressure bar [psi→]		18.3 [262]	50.8 [725]	81.2 [1160]	101.5 [1450]	132.0 [1885]	162.4 [2320]	182.7 [2610]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	10 [2.64]	278 [2460]	565 [5000]	830 [7346]	1095 [9691]	1405 [12435]	1712 [15152]	1915 [16949]
		11rpm	10rpm	10rpm	9rpm	8rpm	8rpm	7rpm
	20 [5.28]	282 [2495]	571 [5053]	845 [7478]	1150 [10178]	1456 [12886]	1783 [15780]	1994 [17648]
		23rpm	22rpm	22rpm	21rpm	20rpm	18rpm	16rpm
	50 [13.21]	288 [2549]	582 [5151]	856 [7576]	1162 [10284]	1463 [12948]	1790 [15842]	2001 [17710]
		60rpm	59rpm	57rpm	56rpm	54rpm	52rpm	48rpm
	75 [19.81]	269 [2380]	580 [5133]	855 [7567]	1167 [10331]	1465 [12966]	1786 [15807]	1993 [17639]
		91rpm	90rpm	89rpm	87rpm	84rpm	81rpm	77rpm
	100 [26.42]	251 [2221]	566 [5009]	840 [7434]	1140 [10089]	1448 [12815]	1767 [15639]	1985 [17568]
		122rpm	121rpm	120rpm	118rpm	115rpm	111rpm	105rpm
	125 [33.02]	242 [2141]	535 [4735]	824 [7293]	1118 [9895]	1427 [12630]	1739 [15391]	1976 [17489]
		153rpm	152rpm	150rpm	147rpm	143rpm	139rpm	133rpm
	150 [39.63]	236 [2088]	526 [4655]	808 [7151]	1102 [9753]	1401 [12399]	1714 [15170]	1959 [17338]
		185rpm	183rpm	181rpm	178rpm	174rpm	169rpm	163rpm
	175 [46.23]	215 [1902]	504 [4460]	793 [7018]	1079 [9549]	1377 [12187]	1698 [15028]	1936 [17135]
		216rpm	214rpm	212rpm	209rpm	206rpm	203rpm	196rpm
	200 [52.83]	197 [1743]	468 [4142]	765 [6770]	1063 [9408]	1362 [12054]	1681 [14878]	1913 [16931]
	Max Cont.	247rpm	245rpm	243rpm	240rpm	237rpm	232rpm	225rpm
	240 [63.4]	118 [1044]	388 [3434]	713 [6310]	1020 [9027]	1318 [11665]	1637 [14488]	1838 [16267]
	Max Int.	297rpm	296rpm	295rpm	293rpm	288rpm	283rpm	277rpm

Technical Data

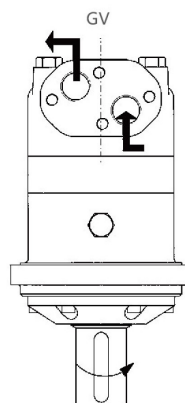
Hydraulic orbit Motors GV

Permissible shaft seal pressure

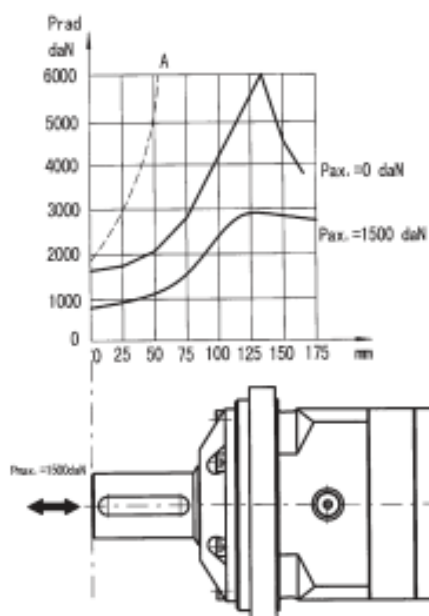


In applications without drain line, output shaft seal exceeds a bit of the pressure in the return line. When applications use the drain line, the pressure of output shaft seal equals the pressure in drain line.

Standard direction of shaft rotation: Standard

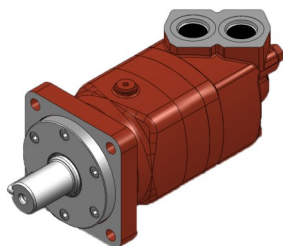


Axial and Radial forces



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM.

General

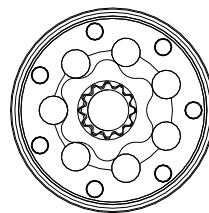


APPLICATION

- ◇ Conveyors
- ◇ Feeding machinery of robots and manipulators
- ◇ Metal working machines
- ◇ Textile machines
- ◇ Agricultural machines
- ◇ Food industries
- ◇ Mining machines

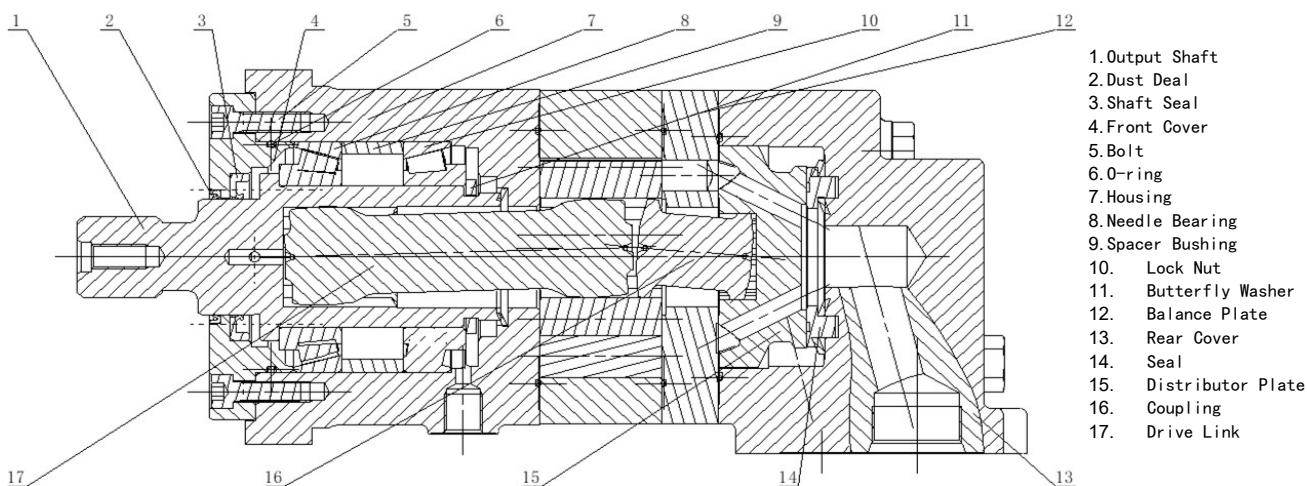
OPTIONS

- ◇ Flange connection
- ◇ Shafts—straight, splined and tapered
- ◇ Metric and BSPP ports
- ◇ Other special features

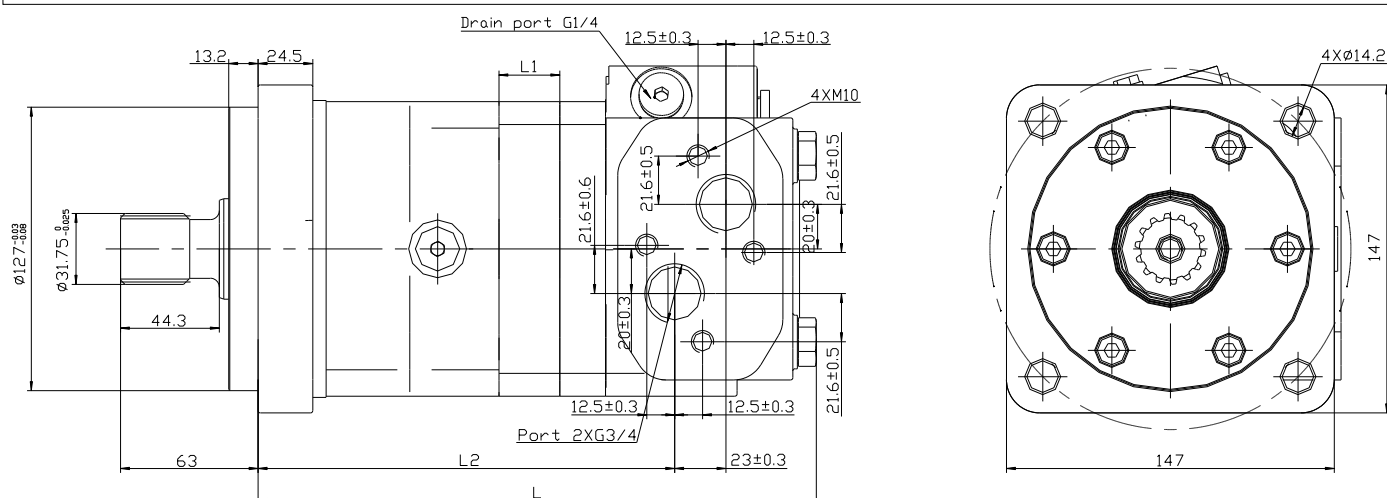


- ◇ Disc distribution flow

Model		GKC195	GKC245	GKC310	GKC395	GKC490	GKC625	GKC800	GKC985
Disp.	in ³ /rev	11.93	15.01	19.01	23.87	29.95	38.01	48.96	59.90
	cm ³ /rev	195.6	246.1	311.6	391.3	490.8	623	802.4	981.6
Max Speed rpm	cont.	765	610	480	382	304	240	186	152
	int.	865	830	690	570	455	360	280	230
Max Torque N m [lb-in]	cont.	565 [5000]	710 [6284]	920 [8142]	1160 [10266]	1445 [12789]	1480 [13099]	1580 [13984]	1675 [14824]
	int.	840 [7434]	1080 [9558]	1325 [11727]	1625 [14382]	1880 [16639]	1890 [16726]	1880 [16639]	1860 [16462]
Max Dif. bar [psi]	cont.	203 [2900]	203 [2900]	203 [2900]	203 [2900]	203 [2900]	178 [2538]	142 [2031]	142 [2031]
	int.	305 [4351]	305 [4351]	305 [4351]	305 [4351]	279 [3988]	228 [3263]	178 [2538]	142 [2031]
Max Flow l/min [gpm]	cont.	150 [39.62]	150 [39.62]	150 [39.62]	150 [39.62]	150 [39.62]	150 [39.62]	150 [39.62]	150 [39.62]
	int.	170 [44.90]	205 [54.15]	225 [59.43]	225 [59.43]	225 [59.43]	225 [59.43]	225 [59.43]	225 [59.43]
Weight kg [lbs]		25.2 [56]	25.7 [57]	26.6 [59]	27.0 [60]	28.4 [63]	29.7 [66]	31.5 [70]	33.3 [74]



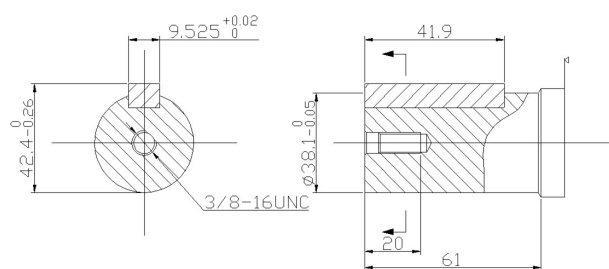
Dimensions and Mounting Data



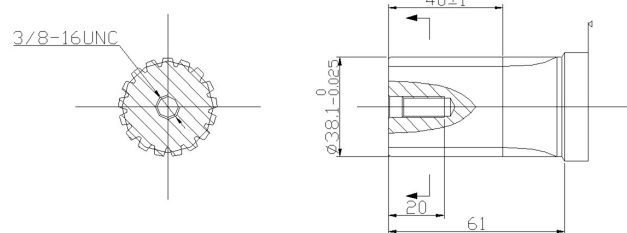
Flange CC

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
GKC800	333	88.9	255
GKC985	353	109	274.6

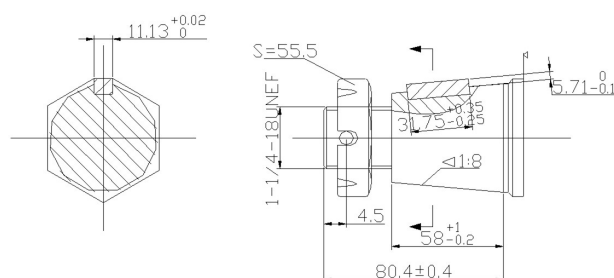
GKC Shaft Extension Dimensions Data



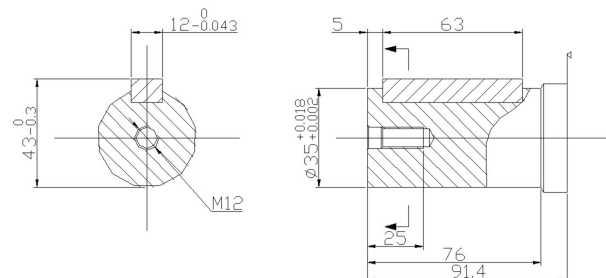
Shaft G2: Cylindrical shaft $\phi 38.1$
Parallel key 9.525x9.525x41.9



Shaft FE: Splined 17-DP12/24



Shaft T1: Tapered shaft $\phi 45$
Parallel key 11.13x11.13x31.75
Tightening torque: 500 $\pm$ 10Nm



Shaft Y1: Cylindrical shaft $\phi 35$
Parallel key 12x12x63

GKC - How To Order

		Model	Displacement	Flange	Drive shaft	Ports	Other functions
Ordering Example:		GKC	195	CC	G2	G3	ACA
Model	Disp.	Flange		Drive shaft		Ports	
GKC	195	CC=4- $\varnothing$ 14.2 square flange $\varnothing$ 162, pilot $\varnothing$ 127x13.2		Y1=Shaft $\varnothing$ 35, parallel key		G3=G3/4 manifold mount 4xM10, G1/4 SF5=1-5/16-12UN 0-ring, 7/16-20UNF SF7=G1, G1/4	
	245			12x12x63			
	310			G2=Shaft $\varnothing$ 38.1, parallel key			
	395			9. 53x9. 53x41. 9			
	490			FE=Shaft $\varnothing$ 38.1, splined tooth			
	625			17-DP12/24			
	800			T1=Tapered shaft 1:8 $\varnothing$ 45,			
	985			parallel key 11. 13x11. 13x31. 75			

Rotation direction	Paint	Standard Options	Seal Options	Relief Options	Speed Sensor Option
A=Standard R=Opposite	A=No paint B=Blue C=Black S=Silver grey	A=Standard N=Big radial force D=No case drain F=Free running L=Low speed V=High temperature S=Low temperature	Blank= None HPS=High Pressure Seal SG=Seal Guard HPS-SG= High Pressure Seal & Seal Guard	Blank=None R=Valve Cavity Only R12=Bi-directional relief max 125 bar R-20= Bi-directional relief max 207 bar	Blank= None SS= Speed Sensor, 4-pin, M12 male connector

Hydraulic Orbit Motors GKC



Flow Data

GKC195		195.6cm ³ /rev (11.93in ³ /rev)					Max Cont.		Max Int.	Peak
Pressure bar [psi→]		35 [500]	70 [1000]	105 [1500]	140 [2000]	170 [2429]	210 [3000]	240 [3429]	275 [3929]	310 [4429]
Flow	l/min [gpm↓]	Torque N m [lb-in]					Speed Specification			
	15 [4.0]	80 [708]	175 [1549]	271 [2398]	366 [3239]	454 [4018]	521 [4611]	589 [5212]	654 [5788]	
		76rpm	74rpm	71rpm	65rpm	62rpm	45rpm	32rpm	18rpm	
	30 [7.9]	86 [761]	179 [1584]	274 [2425]	371 [3283]	464 [4106]	545 [4823]	626 [5540]	704 [6230]	779 [6894]
		153rpm	148rpm	144rpm	130rpm	119rpm	116rpm	99rpm	82rpm	65rpm
	45 [11.9]	85 [752]	180 [1593]	279 [2469]	374 [3310]	476 [4212]	565 [5000]	654 [5788]	751 [6646]	825 [7301]
		230rpm	226rpm	221rpm	212rpm	202rpm	186rpm	168rpm	148rpm	118rpm
	61 [16.1]	79 [699]	179 [1584]	280 [2478]	376 [3327]	475 [4204]	574 [5080]	664 [5876]	760 [6726]	845 [7478]
		307rpm	303rpm	300rpm	290rpm	283rpm	258rpm	236rpm	214rpm	181rpm
	76 [20.1]	80 [708]	179 [1584]	281 [2487]	380 [3363]	480 [4248]	574 [5080]	671 [5938]	769 [6805]	860 [7611]
		385rpm	379rpm	373rpm	365rpm	255rpm	332rpm	305rpm	280rpm	246rpm
	91 [24.0]	80 [708]	174 [1540]	274 [2425]	375 [3319]	474 [4195]	575 [5088]	669 [5920]	770 [6814]	
		462rpm	456rpm	450rpm	439rpm	430rpm	412rpm	388rpm	363rpm	
	106 [28.0]	74 [655]	176 [1558]	271 [2398]	375 [3319]	474 [4195]	570 [5044]	669 [5920]	770 [6814]	
		539rpm	532rpm	525rpm	516rpm	502rpm	475rpm	448rpm	420rpm	
	121 [32.0]	70 [619]	169 [1496]	269 [2381]	369 [3265]	470 [4159]	570 [5044]	670 [5929]	763 [6752]	
		617rpm	609rpm	602rpm	590rpm	575rpm	541rpm	510rpm	480rpm	
	136 [35.9]	70 [619]	163 [1442]	264 [2336]	364 [3221]	465 [4115]	565 [5000]	664 [5876]	763 [6752]	
		692rpm	684rpm	674rpm	660rpm	645rpm	600rpm	564rpm	527rpm	
	151 [39.9]	70 [619]	164 [1451]	364 [3221]	466 [4124]	559 [4947]	660 [5841]			
	Max Cont.	770rpm	759rpm	745rpm	733rpm	717rpm	666rpm	624rpm		
	170 [44.9]	65 [575]	161 [1425]	259 [2292]	360 [3186]	461 [4080]	555 [4912]	655 [5796]		
		866rpm	854rpm	844rpm	825rpm	808rpm	749rpm	702rpm		
	Max Int.									

GKC245		246.1cm ³ /rev (15.01in ³ /rev)					Max Cont.		Max Int.	Peak
Pressure bar [psi→]		35 [500]	70 [1000]	105 [1500]	140 [2000]	170 [2429]	205 [2929]	240 [3429]	275 [3929]	310 [4429]
Flow	l/min [gpm↓]	Torque N m [lb-in]					Speed Specification			
	15 [4.0]	106 [938]	227 [2009]	346 [3062]	461 [4080]	577 [5106]	643 [5690]	751 [6646]	853 [7549]	960 [8496]
		60rpm	56rpm	54rpm	48rpm	42rpm	39rpm	30rpm	12rpm	6rpm
	30 [7.9]	110 [973]	237 [2097]	354 [3133]	475 [4204]	596 [5274]	701 [6204]	800 [7080]	905 [8009]	1018 [9009]
		120rpm	116rpm	113rpm	104rpm	95rpm	81rpm	67rpm	48rpm	35rpm
	45 [11.9]	110 [973]	235 [2080]	360 [3186]	482 [4265]	607 [5372]	721 [6381]	840 [7434]	955 [8451]	1075 [9513]
		182rpm	179rpm	175rpm	165rpm	157rpm	141rpm	123rpm	107rpm	90rpm
	61 [16.1]	112 [991]	236 [2088]	360 [3186]	487 [4310]	611 [5407]	730 [6460]	844 [7469]	960 [8496]	1181 [10451]
		244rpm	240rpm	236rpm	228rpm	221rpm	202rpm	184rpm	163rpm	144rpm
	76 [20.1]	105 [929]	232 [2053]	354 [3133]	485 [4292]	614 [5434]	735 [6504]	823 [7283]	980 [8673]	1100 [9735]
		306rpm	301rpm	297rpm	287rpm	277rpm	256rpm	238rpm	217rpm	197rpm
	91 [24.0]	104 [920]	231 [2044]	356 [3150]	482 [4265]	612 [5416]	735 [6504]	961 [8504]	979 [8664]	
		365rpm	361rpm	357rpm	348rpm	338rpm	314rpm	290rpm	270rpm	
	106 [28.0]	102 [903]	227 [2009]	352 [3115]	483 [4274]	611 [5407]	733 [6487]	855 [7566]	980 [8673]	
		426rpm	421rpm	416rpm	403rpm	375rpm	355rpm	335rpm	320rpm	
	121 [32.0]	91 [805]	216 [1912]	346 [3062]	470 [4159]	600 [5310]	725 [6416]	850 [7522]	975 [8628]	
		489rpm	481rpm	474rpm	461rpm	447rpm	422rpm	395rpm	370rpm	
	136 [35.9]	80 [708]	210 [1858]	334 [2956]	460 [4071]	580 [5133]	710 [6283]	840 [7434]		
		550rpm	544rpm	537rpm	524rpm	510rpm	480rpm	454		
	151 [39.9]	80 [708]	202 [1788]	330 [2920]	456 [4035]	580 [5133]	700 [6195]	800 [7080]		
	Max Cont.	612rpm	606rpm	600rpm	585rpm	570rpm	538rpm	507rpm		
	170 [44.9]	66 [584]	202 [1788]	326 [2885]	446 [3947]	575 [5088]	685 [6062]	755 [6681]		
		688rpm	682rpm	674rpm	685rpm	640rpm	606rpm	571rpm		
	189 [49.9]		195 [1726]	316 [2796]	441 [3903]	555 [4912]	670 [5929]			
			758rpm	749rpm	731rpm	710rpm	675rpm			
	208 [54.9]		191 [1690]	311 [2752]	431 [3814]	551 [4876]	665 [5885]			
	Max Int.		834rpm	824rpm	804rpm	783rpm	742rpm			

Hydraulic Orbit Motors GKC



Flow Data

GKC310		311.6cm ³ /rev (19.02in ³ /rev)					Max Cont.		Max Int.	Peak
Pressure bar [psi→]		35 [500]	70 [1000]	105 [1500]	140 [2000]	170 [2429]	210 [3000]	240 [3429]	275 [3929]	310 [4429]
Flow	l/min [gpm↓]	Torque N m [lb-in]					Speed Specification			
	15 [4.0]	136[1204] 47rpm	292[2584] 45rpm	431[3814] 42rpm	573[5071] 38rpm	684[6053] 32rpm	801[7088] 24rpm	934[8265] 17rpm	1020[9027] 10rpm	1070[9469] 3rpm
	30 [7.9]	140[1239] 95rpm	300[2655] 92rpm	451[3991] 87rpm	596[5274] 81rpm	732[6478] 73rpm	870[7699] 63rpm	985[8717] 54rpm	1100[9735] 44rpm	1235[10929] 32rpm
	45 [11.9]	140[1239] 143rpm	306[2708] 140rpm	461[4080] 135rpm	612[5416] 129rpm	760[6726] 120rpm	909[8044] 110rpm	1045[9248] 99rpm	1180[10442] 88rpm	1330[11770] 75rpm
	61 [16.1]	140[1239] 192rpm	302[2673] 188rpm	462[4088] 184rpm	615[5442] 178rpm	771[6823] 167rpm	920[8142] 154rpm	1060[9381] 140rpm	1200[10619] 124rpm	1350[11947] 109rpm
	76 [20.1]	135[1195] 241rpm	296[2619] 236rpm	457[4044] 232rpm	617[5460] 226rpm	772[6832] 216rpm	925[8186] 200rpm	1075[9513] 182rpm	1220[10796] 165rpm	
	91 [24.0]	130[1150] 289rpm	296[2619] 282rpm	456[4035] 278rpm	614[5434] 273rpm	774[6850] 260rpm	929[8221] 248rpm	1078[9540] 232rpm	1226[10850] 215rpm	
	106 [28.0]	130[1150] 336rpm	290[2566] 333rpm	450[3982] 327rpm	609[5389] 320rpm	768[6796] 308rpm	928[8212] 295rpm	1073[9496] 276rpm	1220[10796] 257rpm	
	121 [32.0]	125[1106] 384rpm	285[2522] 381rpm	444[3929] 375rpm	600[5310] 367rpm	763[6752] 354rpm	918[8124] 341rpm	1060[9381] 320rpm		
	136 [35.9]	120[1062] 430rpm	276[2442] 421rpm	434[3841] 416rpm	590[5221] 410rpm	748[6619] 396rpm	912[8071] 383rpm	1050[9292] 360rpm		
	151 [39.9]	115[1018] 478rpm	271[2398] 466rpm	424[3752] 461rpm	578[5115] 456rpm	743[6575] 441rpm	902[7982] 427rpm	1035[9159] 403rpm		
	Max Cont.									
	189 [44.9]	110[973] 597rpm	245[2168] 582rpm	384[3398] 576rpm	523[4628] 570rpm	682[6035] 551rpm	836[7398] 534rpm			
	227 [60.0]		220[1947] 698rpm	364[3221] 691rpm	513[4540] 684rpm	647[5726] 661rpm	796[7044] 641rpm			
	Max Int.									

GKC395		391.3cm ³ /rev (23.87in ³ /rev)					Max Cont.		Max Int.	Peak
Pressure bar [psi→]		35 [500]	70 [1000]	105 [1500]	140 [2000]	170 [2429]	205 [2929]	240 [3429]	275 [3929]	310 [4429]
Flow	l/min [gpm↓]	Torque N m [lb-in]					Speed Specification			
	15 [4.0]	188[1664] 37rpm	378[3345] 36rpm	563[4982] 34rpm	743[6575] 32rpm	923[8168] 28rpm	1083[9584] 21rpm	1276[11292] 13rpm	1371[12133] 5rpm	1635[14469] 1rpm
	30 [7.9]	188[1664] 75rpm	383[3389] 73rpm	578[5115] 71rpm	763[6752] 67rpm	953[8434] 64rpm	1137[10062] 54rpm	1316[11646] 44rpm	1456[12885] 32rpm	1635[14469] 20rpm
	45 [11.9]	188[1664] 114rpm	388[3434] 111rpm	583[5159] 108rpm	773[6841] 104rpm	968[8566] 99rpm	1152[10195] 90rpm	1341[11867] 80rpm	1540[13628] 78rpm	
	61 [16.1]	183[1619] 153rpm	383[3389] 150rpm	583[5159] 146rpm	773[6841] 143rpm	968[8566] 131rpm	1156[10230] 125rpm	1345[11903] 115rpm		
	76 [20.1]	183[1619] 192rpm	383[3389] 188rpm	583[5159] 186rpm	778[6885] 181rpm	973[8611] 174rpm	1161[10274] 161rpm	1356[12000] 151rpm		
	91 [24.0]	173[1531] 228rpm	373[3301] 228rpm	573[5071] 224rpm	768[6796] 219rpm	968[8566] 211rpm	1156[10230] 203rpm			
	106 [28.0]	168[1487] 267rpm	368[3257] 265rpm	568[5027] 260rpm	763[6752] 254rpm	963[8522] 247rpm	1151[10186] 235rpm			
	121 [32.0]	163[1442] 305rpm	358[3168] 303rpm	558[4938] 298rpm	753[6664] 291rpm	947[8381] 281rpm	1146[10142] 268rpm			
	136 [35.9]	158[1398] 345rpm	343[3035] 339rpm	548[4850] 335rpm	733[6487] 328rpm	933[6487] 316rpm	1131[10009] 300rpm			
	151 [39.9]	153[1354] 385rpm	328[2903] 379rpm	538[4761] 374rpm	733[6487] 367rpm	917[8115] 358rpm				
	Max Cont.									
	189 [49.9]	133[1177] 481rpm	303[2681] 474rpm	518[4584] 468rpm	733[6487] 459rpm	913[8080] 448rpm				
	227 [60.0]		283[2504] 569rpm	502[4442] 561rpm	721[6381] 551rpm	891[7885] 537rpm				
	Max Int.									

Hydraulic Orbit Motors GKC



Flow Data

GKC490		490.8cm ³ /rev (29.95in ³ /rev)					Max Cont.	Max Int.	Peak
Pressure bar [psi→]		35 [500]	70 [1000]	105 [1500]	140 [2000]	170 [2429]	205 [2929]	240 [3429]	275 [3929]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification							
	15 [4.0]	235[2080] 30rpm	486[4301] 29rpm	725[6416] 28rpm	962[8513] 27rpm	1195[10575] 25rpm	1408[12460] 21rpm	1643[14540] 17rpm	1880[16637] 12rpm
	30 [7.9]	235[2080] 60rpm	486[4301] 59rpm	734[6513] 57rpm	973[8611] 54rpm	1213[10735] 51rpm	1442[12761] 45rpm	1680[14867] 38rpm	
	45 [11.9]	235[2080] 91rpm	485[4292] 89rpm	733[6487] 87rpm	974[8619] 84rpm	1218[10779] 79rpm	1450[12832] 71rpm		
	61 [16.1]	234[2071] 122rpm	480[4248] 121rpm	728[6442] 118rpm	973[8611] 114rpm	1217[10770] 109rpm	1456[12885] 100rpm		
	76 [20.1]	225[1991] 152rpm	470[4159] 150rpm	723[6398] 147rpm	972[8602] 144rpm	1217[10770] 139rpm			
	91 [24.0]	220[1947] 184rpm	469[4150] 181rpm	719[6363] 180rpm	968[8558] 176rpm	121[1071] 171rpm			
	106 [28.0]	209[1850] 214rpm	459[4062] 211rpm	708[6265] 208rpm	957[8469] 204rpm	1205[10664] 198rpm			
	121 [32.0]	194[1717] 244rpm	448[3965] 241rpm	700[6195] 237rpm	947[8381] 232rpm	1200[10619] 226rpm			
	136 [35.9]	175[1549] 275rpm	433[3832] 272rpm	683[6044] 265rpm	937[8292] 260rpm	1170[10354] 255rpm			
	151 [39.9]	160[1416] 306rpm	423[3743] 303rpm	673[5956] 295rpm	917[8115] 290rpm	1145[10133] 284rpm			
	Max Cont.								
	189 [44.9]	130[1150] 382rpm	364[3221] 379rpm	588[5204] 365rpm	857[7584] 362rpm				
	227 [60.0]		323[2858] 454rpm	546[4832] 442rpm	800[7080] 435rpm				
	Max Int.								

GKC625		623.0cm ³ /rev (38.01in ³ /rev)					Max Cont.	Max Int.	Peak
Pressure bar [psi→]		35 [500]	50 [714]	70 [1000]	85 [1214]	105 [1500]	120 [1714]	140 [2000]	170 [2429]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification							
	15 [4.0]	275[2434] 24rpm	425[3761] 24rpm	570[5044] 23rpm	709[6274] 22rpm	849[7513] 21rpm	954[8442] 18rpm	1063[9407] 16rpm	1190[10531] 15rpm
	30 [7.9]	295[2611] 45rpm	450[3982] 44rpm	604[5345] 44rpm	754[6673] 43rpm	923[8168] 42rpm	1093[9673] 39rpm	1267[11212] 37rpm	1355[11991] 36rpm
	45 [11.9]	295[2611] 72rpm	448[3965] 71rpm	609[5389] 71rpm	764[6761] 70rpm	918[8124] 68rpm	1123[9938] 66rpm	1327[11743] 64rpm	1375[12168] 63rpm
	61 [16.1]	285[2522] 94rpm	445[3938] 93rpm	604[5345] 92rpm	759[6717] 91rpm	914[8088] 89rpm	1118[9894] 87rpm	1323[11708] 85rpm	1370[12124] 83rpm
	76 [20.1]	280[2478] 119rpm	439[3885] 118rpm	594[5257] 117rpm	754[6673] 116rpm	914[8088] 115rpm	1118[9894] 112rpm	1324[11717] 110rpm	1372[12142] 107rpm
	91 [24.0]	264[2336] 143rpm	429[3796] 142rpm	585[5177] 140rpm	744[6584] 139rpm	904[8000] 138rpm	1108[9805] 135rpm	1317[11655] 132rpm	1365[12080] 130rpm
	106 [28.0]	255[2257] 168rpm	414[3664] 166rpm	574[5080] 165rpm	734[6496] 164rpm	893[7903] 162rpm	1103[9761] 159rpm	1312[11611] 156rpm	1360[12035] 153rpm
	121 [32.0]	240[2124] 192rpm	400[3540] 190rpm	559[4947] 188rpm	719[6363] 187rpm	878[7770] 185rpm	1088[9628] 182rpm	1297[11478] 179rpm	1343[11885] 176rpm
	136 [35.9]	220[1947] 216rpm	379[3354] 214rpm	539[4770] 213rpm	698[6177] 212rpm	853[7549] 210rpm	1047[9265] 207rpm		
	151 [39.9]	200[1770] 240rpm	360[3186] 239rpm	519[4593] 238rpm	679[6009] 237rpm	833[7372] 236rpm	1012[8956] 233rpm		
	Max Cont.								
	189 [49.9]		310[2743] 298rpm	469[4150] 296rpm	629[5566] 294rpm	788[6973] 290rpm			
	227 [60.0]		254[2248] 355rpm	430[3805] 353rpm	588[5204] 350rpm	742[6566] 345rpm			
	Max Int.								

Hydraulic Orbit Motors GKC



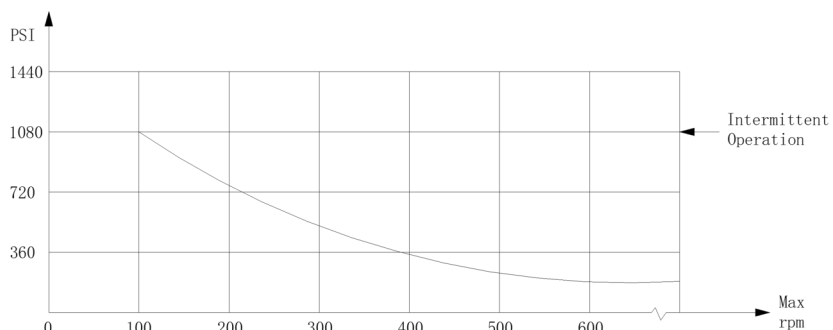
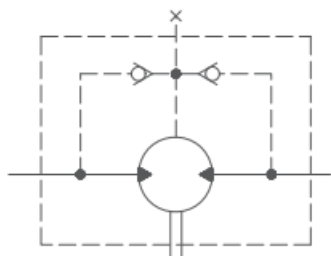
Flow Data

GKC800		802. 4cm ³ /rev (48. 96in ³ /rev)						Max Cont.
Pressure bar [psi→]		35 [500]	50 [714]	70 [1000]	85 [1214]	105 [1500]	120 [1714]	140 [2000]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	15 [4. 0]	434[3841] 18rpm	607[5372] 17rpm	838[7416] 17rpm	1018[9009] 16rpm	1238[10956] 15rpm	1377[12186] 14rpm	1646[14566] 13rpm
	30 [7. 9]	419[3708] 36rpm	395[3496] 35rpm	828[7327] 35rpm	1003[8876] 34rpm	1238[10956] 33rpm	1412[12496] 31rpm	1606[14212] 29rpm
	45 [11. 9]	379[3354] 55rpm	564[4991] 55rpm	794[7027] 54rpm	970[8584] 54rpm	1187[10504] 53rpm	1358[12018] 51rpm	
	61 [16. 1]	339[3000] 75rpm	519[4593] 74rpm	758[6708] 72rpm	937[8292] 71rpm	1167[10327] 70rpm		
	76 [20. 1]	324[2867] 93rpm	498[4407] 92rpm	728[6442] 90rpm	897[7938] 89rpm	1135[10044] 87rpm		
	91 [24. 0]	314[2779] 111rpm	468[4142] 110rpm	698[6177] 109rpm	857[7584] 108rpm	1076[9522] 105rpm		
	106 [28. 0]	309[2734] 129rpm	448[3965] 128rpm	648[5735] 127rpm	797[7053] 125rpm	1016[8991] 123rpm		
	121 [32. 0]	279[2469] 148rpm	419[3708] 146rpm	608[5381] 145rpm	746[6602] 143rpm			
	136 [35. 9]	269[2381] 166rpm	398[3522] 165rpm	547[4841] 165rpm	695[6150] 164rpm			
	151 [39. 9] Max Cont.	249[2204] 184rpm	348[2195] 183rpm	497[4398] 182rpm	631[5584] 180rpm			
	189 [44. 9]		299[2646] 230rpm	438[3876] 228rpm	576[5097] 225rpm			
	227 [60. 0] Max Int.			378[3345] 276rpm	516[4566] 273rpm			

GKC985		981. 6cm ³ /rev (59. 90in ³ /rev)						Max Cont.
Pressure bar [psi→]		35 [500]	50 [714]	70 [1000]	85 [1214]	105 [1500]	120 [1714]	140 [2000]
Flow	l/min [gpm↓]	Torque N m [lb-in] Speed Specification						
	15 [4. 0]	484[4283] 15rpm	774[6850] 15rpm	964[8531] 14rpm	1203[10646] 14rpm	1443[12770] 13rpm	1567[13867] 13rpm	1786[15805] 12rpm
	30 [7. 9]	494[4372] 30rpm	749[6628] 30rpm	994[8796] 29rpm	1233[10912] 28rpm	1477[13071] 27rpm	1637[14487] 26rpm	1871[16558] 25rpm
	45 [11. 9]	494[4372] 45rpm	749[6628] 45rpm	1000[8850] 44rpm	1248[11044] 43rpm	1492[13204] 42rpm	1696[15009] 41rpm	
	61 [16. 1]	489[4327] 61rpm	739[6540] 61rpm	995[8805] 60rpm	1243[11000] 59rpm	1497[11478] 58rpm		
	76 [20. 1]	475[4204] 77rpm	730[6460] 76rpm	983[8699] 76rpm	1233[10912] 75rpm	1481[13106] 74rpm		
	91 [24. 0]	460[4071] 92rpm	704[6230] 92rpm	959[8487] 91rpm	1217[10770] 90rpm	1466[12973] 89rpm		
	106 [28. 0]	444[3929] 107rpm	700[6195] 107rpm	949[8398] 106rpm	1197[10593] 105rpm	1446[12976] 103rpm		
	121 [32. 0]	425[3761] 123rpm	674[5965] 122rpm	923[8168] 121rpm	1156[10230] 120rpm			
	136 [35. 9]	394[3487] 138rpm	645[5708] 138rpm	893[7903] 137rpm	1120[9912] 135rpm			
	151 [39. 9] Max Cont.	365[3230] 153rpm	609[5389] 152rpm	964[8531] 151rpm	1080[9558] 150rpm			
	189 [49. 9]	325[2876] 191rpm	858[7593] 190rpm	829[7336] 189rpm	1047[9265] 188rpm			
	227 [60. 0] Max Int.		525[4646] 230rpm	809[7159] 229rpm	1020[9027] 226rpm			

Technical Data

Shaft Seal Rated Pressure

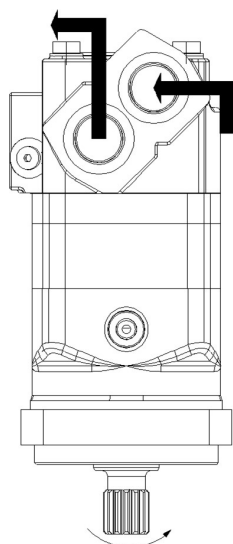


Case Drain :

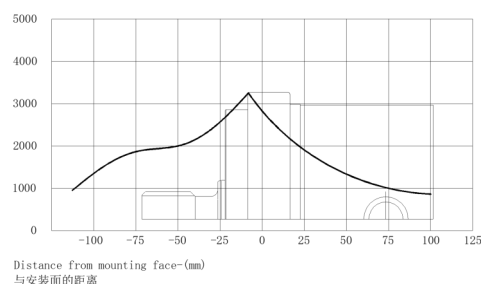
In applications without a motor drain line, the pressure exerted on the shaft seal is marginally in excess of the return line pressure. When the Drain line is used, the pressure exerted on the shaft seal is equal to the return line pressure.

Shaft Rotation Direction

GKC for CC Mounting Radial forces



Radial forces-(daN)
径向力



The bearing curve represents allowable bearing loads for an B10 bearing life(2000 hours or 12x10⁶ 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.

General



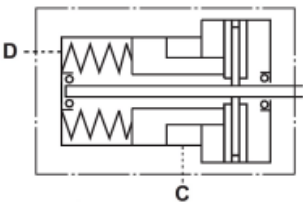
APPLICATION

- ◇ Aerial work platform
- ◇ Wheel drive
- ◇ Swing drive
- ◇ Transmission

CHARACTERISTIC 特点

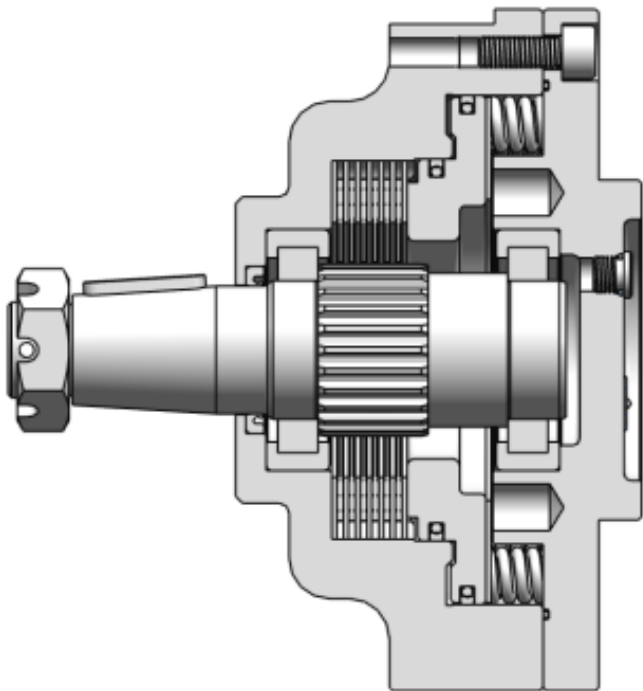
- ◇ Double heavy-duty roller bearings
- ◇ Double release ports
- ◇ Wet braking, spring loaded
- ◇ Smaller axial installation size
- ◇ Low noise, long service life

HYDRAULIC SCHEMATIC DIAGRAM



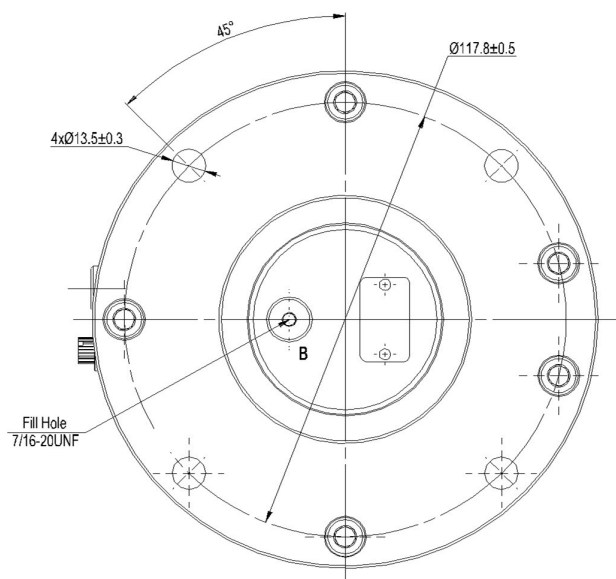
技术指标 SPECIFICATION

Model		GBD10	GBD15
Minimum static torque	Nm	1150	1500
Brake release pressure	MPa	2.8	
Maximum release pressure	MPa	27.6	
Minimum oil quantity for brake release	cm ³	11.5	
Maximum speed	rpm	250	
Brake chamber lubricating oil volume	cm ³	100-120	
Maximum operating oil temperature	°C	82	
Weight	Kg	18	20

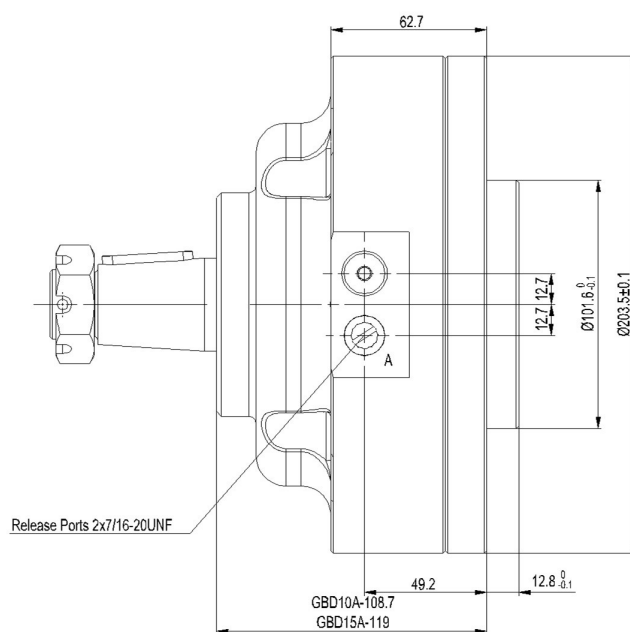


Dimensions and Mounting Data

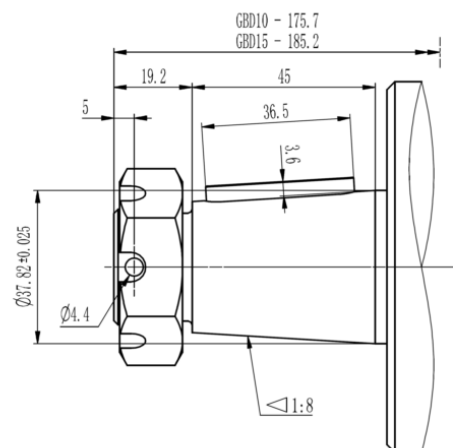
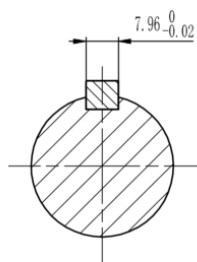
Flange B6



Port 7/16-20UNF



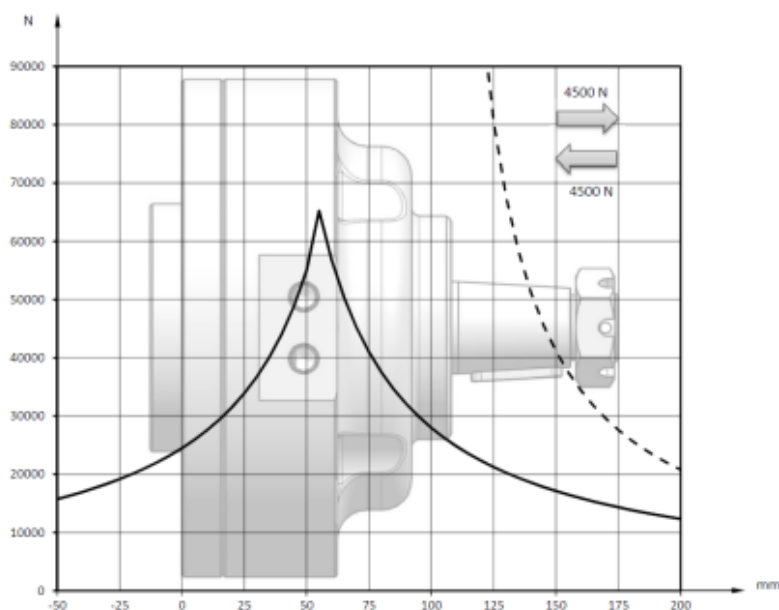
Shaft TA: Tapered shaft $\varnothing 38.1$
 Parallel key 7.96x7x36.5
 Tightening torque: 410-540Nm
 Maximum torque: 1200Nm



Technical Data

Hydraulic orbit Motors brake GBD

Allowable shaft load/Bearing curve



As shown in the figure, when the axial load is ON, the radial allowable load of the output shaft is related to the distance between the flange mounting surface and the load application point.

The solid line shows the allowable radial load of the bearing. This curve is established based on the use of hydraulic oil containing anti-wear additives, with continuous output torque and motor speed of 100rpm, and bearing L10 with a service life of 2000 hours.

The dashed line shows the maximum radial load of the shaft. If the shaft extension load exceeds this value, the motor will be damaged.

Ordering Example:						
Model	Min. static torque	Flange	Drive Shaft	Ports	Paint	Special function
GBD	10=1150Nm 15=1500Nm	B6=4x $\varnothing$ 13.1 circle flange, rear pilot $\varnothing$ 101.6x12.8	TA=Tapered shaft $\varnothing$ 38.1, parallel key 7.96x7x36.5	UG=7/16-20UNF	A=No paint B=Blue C=Black S=Sliver gray	A=Slotted nut B=Locking nut