



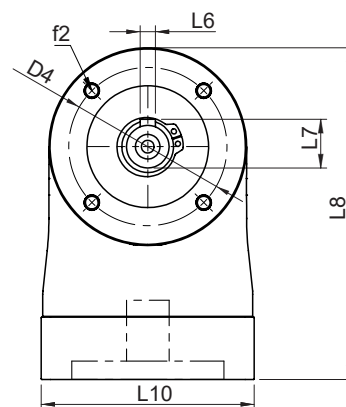
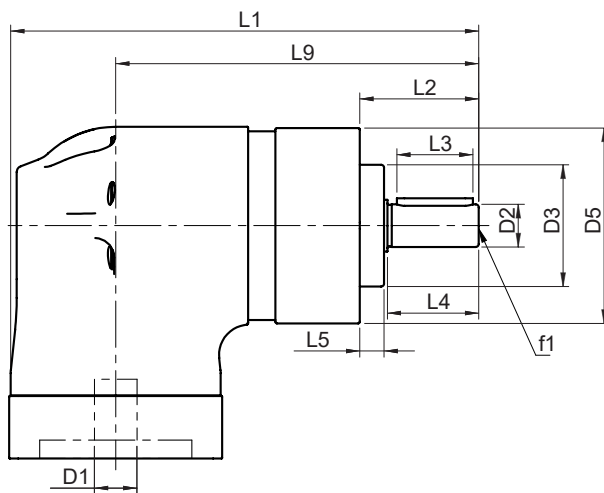
▶ EPR SERIES - EPR-W



EPR-W Series			64			84			118			
Stock Ratios			3, 5, 7, 10, 25, 50, 100 (Standard Input)									
All Ratios Available			1-Stage Planetary: 3, 4, 5, 7, 10 2-Stage Planetary: 12, 16, 20, 25, 35, 40, 50, 70, 100 3-Stage Planetary: 120, 160, 200, 250, 350, 490, 700, 1000 (Consult GAM for other ratios)									
			3:1			16 (142)			33 (292)			82 (726)
Nominal Output Torque (T _{2n})	Nm (lb-in)	4, 5, 7:1		22 (195)		45 (398)			101 (894)			
		10, 100, 1000:1		14 (124)		34 (301)			90 (797)			
		all other ratios		30 (266)		71 (628)			149 (1319)			
Max Acceleration Output Torque (T _{2B})	Nm (lb-in)	3:1		30 (266)		57 (504)			148 (1310)			
		4, 5, 7:1		37 (327)		84 (743)			168 (1487)			
		10, 100, 1000:1		21 (186)		65 (575)			155 (1372)			
		all other ratios		37 (327)		89 (788)			181 (1602)			
Emergency Output Torque (T _{2not})	Nm (lb-in)	3:1		72 (637)		160 (1416)			200 (1770)			
		4, 5, 7:1		84 (743)		216 (1912)			480 (4248)			
		10, 100, 1000:1		62 (549)		160 (1416)			410 (3629)			
		all other ratios		84 (743)		216 (1912)			480 (4248)			
Nominal Speed (n _{1n})	RPM	-		3500			3000			2500		
Max Speed (n _{1max})		-		6000			6000			5000		
Standard Output Backlash* (j)	arcmin	1-stage		≤12			≤12			≤10		
		2-stage		≤14			≤14			≤12		
		3-stage		≤15			≤15			≤12		
Allowable Radial Load (F _{rad}) ¹⁾	N (lbs)	-		1900 (427)		2800 (629)			5000 (1124)			
Allowable Axial Load (F _{axial})	N (lbs)	-		1500 (337)		2500 (562)			4500 (1012)			
Torsional Stiffness* (C _{t21})	Nm/arcmin (lb-in/arcmin)	10,100,1000		2.8 (25)		5.4 (48)			10 (89)			
		7,70,700		3.2 (28)		6.8 (60)			16 (142)			
		all other ratios		3.9 (35)		9.1 (81)			19 (168)			
Weight (m)	kg (lbs)	1-stage		3.0 (6.6)		5.6 (12)			15 (33)			
		2-stage		3.3 (7.3)		6.4 (14)			17 (37)			
		3-stage		3.6 (7.9)		7.2 (16)			19 (42)			
Noise Level (L _{pA})	dB(A)	-		≤75			≤78			≤78		
Mass Moment of Inertia (J ₁)	kg cm ² (lb-in ²)	3:1		0.95 (0.32)		5.4 (1.8)			22 (7.5)			
		4:1, 12:1, 16:1		0.88 (0.30)		5.1 (1.7)			20 (6.8)			
		5:1, 20:1, 25:1		0.86 (0.29)		5.1 (1.7)			20 (6.8)			
		7:1, 35:1		0.85 (0.29)		5.0 (1.7)			19 (6.5)			
		10:1, 40:1 - 100:1		0.84 (0.29)		4.9 (1.7)			19 (6.5)			
		120:1 - 1000:1		0.84 (0.29)		4.9 (1.7)			19 (6.5)			
Efficiency at Load		1-stage: 92% 2-stage: 90% 3-stage: 88%										
Service Life		> 30,000 hours										
Lubrication		Mineral Grease EP0										
Protection Rating		IP 64										
Operating Temperature Range		-20°C to 90°C										

1) Load applied at center of output shaft @100 RPM

* See page 224 for definitions



EPR-W Series		64		84		118	
		mm	(in)	mm	(in)	mm	(in)
D1 _{max standard}	motor shaft diameter	14	(0.551)	19	(0.748)	24	(0.945)
D2 _{k6}	output shaft diameter	14	(0.551)	20	(0.787)	25	(0.984)
D3 _{h7}	pilot diameter	40	(1.575)	55	(2.165)	80	(3.15)
D4	bolt circle	52	(2.047)	70	(2.756)	100	(3.937)
D5	housing diameter	64	(2.52)	84	(3.307)	118	(4.646)
f1	shaft thread	M5x12		M6x16		M10x22	
f2	mounting holes	M5x12		M6x14		M8x18	
L1 (1-stage)*	gearbox length	154	(6.063)	217.5	(8.563)	276.5	(10.886)
L1 (2-stage)*		176	(6.929)	250.5	(9.862)	316.5	(12.461)
L1 (3-stage)*		198	(7.795)	283.5	(11.161)	357.5	(14.075)
L2	shaft length	39	(1.535)	54	(2.126)	61	(2.402)
L3	key length	25	(0.984)	36	(1.417)	45	(1.772)
L4	usable shaft length	30	(1.181)	45	(1.772)	50	(1.969)
L5	pilot height	8	(0.315)	8	(0.315)	10	(0.394)
L6	key width	5	(0.197)	6	(0.236)	8	(0.315)
L7	key height	16	(0.63)	22.5	(0.886)	28	(1.102)
L8**	gearbox height	108.6	(4.276)	153	(6.024)	183.5	(7.224)
L9 (1-stage)	length to input centerline	119.3	(4.697)	171	(6.732)	216.5	(8.524)
L9 (2-stage)		141.3	(5.563)	204	(8.031)	256.5	(10.098)
L9 (3-stage)		163.3	(6.429)	237	(9.331)	297.5	(11.713)
L10**	adapter size	70	(2.756)	90	(3.543)	120	(4.724)

* depending on the motor, value can vary

TYPE CODES FOR EPR SERIES (EPR-W)

Example: EPR - W - 084 - 005 G - M0000 - H0000 - C0000

Gearbox Series EPR	Configuration Code Assigned by GAM
Gearbox Style W = Metric output shaft	Output Code Assigned by GAM
Gearbox Size 064, 084, 118	Motor Code Assigned by GAM
Ratio 3, 4, 5, 7, 10, 12, 16, 20, 25, 35, 40, 50, 70, 100, 120, 160, 200, 250, 350, 490, 700, 000=1000	Options Available for This Product G = Key on output shaft per DIN6885

Shaft (Outer Diameter) Tolerances (mm)			
Over	To (incl.)	h7	k6
6	10	0 -0.015	+0.010 +0.001
10	18	0 -0.018	+0.012 +0.001
18	30	0 -0.021	+0.015 +0.002
30	50	0 -0.025	+0.018 +0.002
50	80	0 -0.030	+0.021 +0.002
80	120	0 -0.035	+0.025 +0.003
120	180	0 -0.040	+0.028 +0.003