

MZS / MZN

TECHNICAL DATA

Model / Size		Stages	60	90	120	140
Full load efficiency	%	1			≥95	
		2			≥92	
Standard Backlash	arcmin	1	≤5	≤5	≤5	≤5
		2	≤8	≤8	≤8	≤8
Precision Backlash	arcmin	1	≤3	≤3	≤3	≤3
		2	≤5	≤5	≤5	≤5
Noise ②	dB(A)		≤60	≤60	≤65	≤67
Lifetime ①	hr				20000	
Max radial load	N		1530	3250	6700	9400
Max axial load	N		630	1300	3000	4700
Nominal Input Speed	rpm		5000	4000	4000	3000
Max input speed	rpm		10000	8000	8000	6000
Torsional stiffness	Nm/arcmin		7	14	25	50
Weight	kg	1	1.35	4.25	9.15	14.6
		2	1.7	7	13	19.2
Operating temp.	°C				-10 ~ 90	
Degree of protection					IP 65	
Lubrication					Synthetic lubrication	
Mounting direction					Any	

① Life reduced by half under continuous operation.

② Noise level measured on input running at 3000 rpm with no load (i = 5)

Model / Size		Stages	Ratio	60	90	120	140
Nominal output torque	Nm	1	3	55	130	208	342
			4	50	140	290	542
			5	60	160	330	650
			7	50	140	300	550
			10	40	100	230	450
		2	15	55	130	208	342
			20	50	140	290	542
			25	60	160	330	650
			30	55	150	310	600
			35	50	140	300	550
			40	50	140	290	542
			50	60	160	330	650
			70	50	140	300	550
			100	40	100	230	450

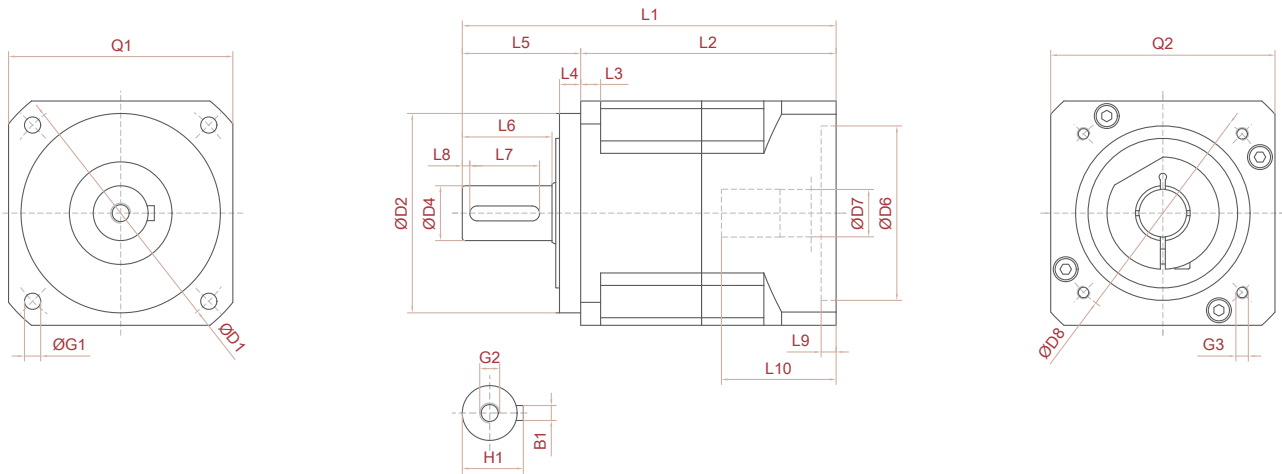
MAX Output torque 2.5 times of Nominal Output Torque

Model / Size		Stages	Ratio	60	90	120	140
Mass Moments of Inertia	Kg-cm ²	1	3	0.16	0.61	3.25	9.21
			4	0.14	0.48	2.74	7.54
			5	0.13	0.47	2.71	7.42
			7	0.13	0.45	2.62	7.14
			10	0.13	0.44	2.57	7.03
		2	15,20,25	0.13	0.47	2.71	7.42
			35	0.13	0.45	2.57	7.14
			30,40,50	0.13	0.44	2.62	7.03
			70,100	0.13	0.13	0.44	2.57

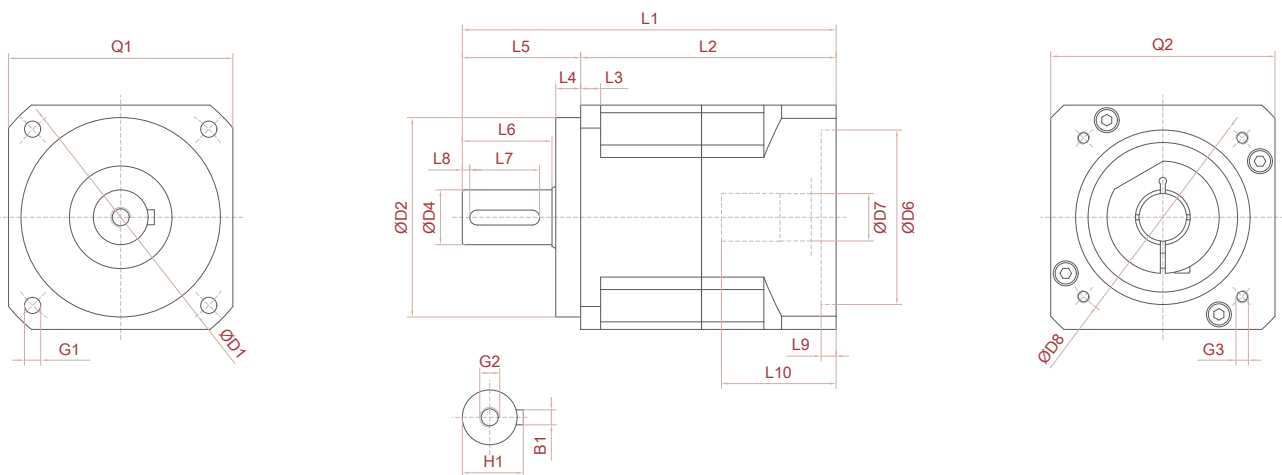
MZS

Profile Dimensions

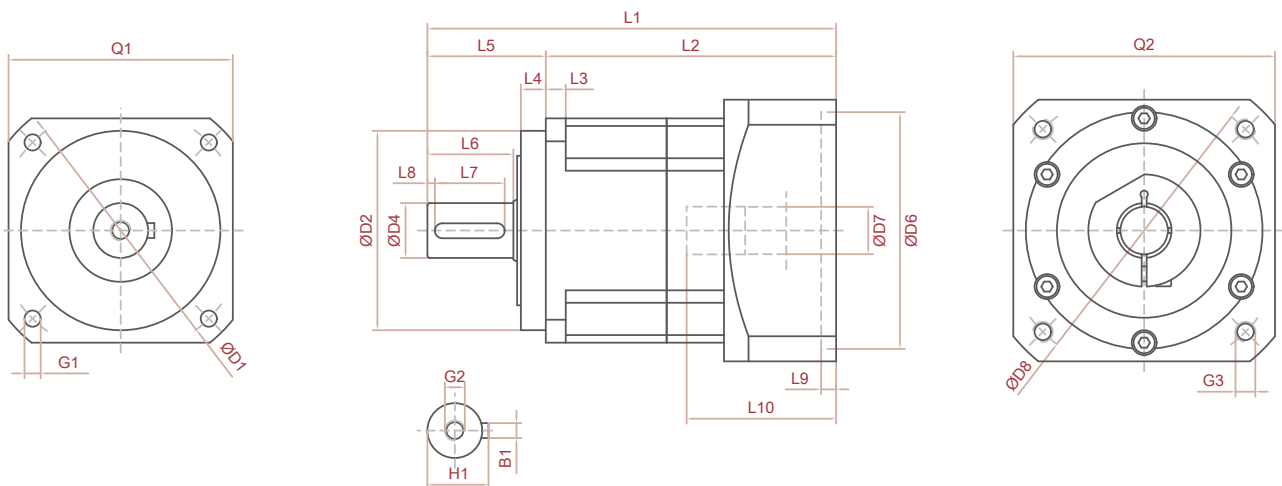
MZS60



MZS90



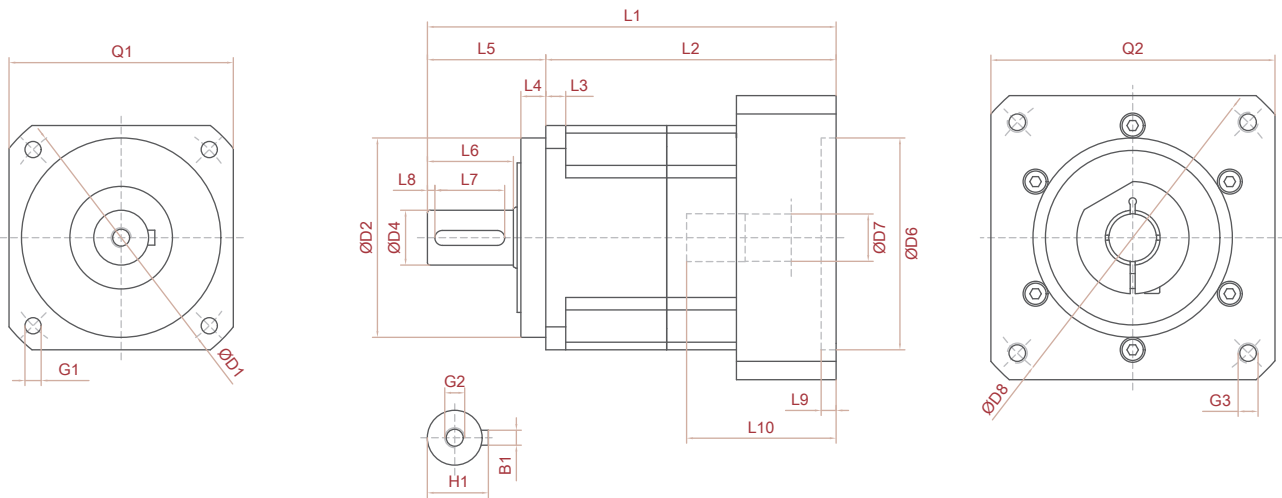
MZS120



MZS

Profile Dimensions

MZS140



Model / Size	Stages		MZS60	MZS90	MZS120	MZS140
Overall length	1	L1	113	150	201	259
	2		133	183	238	300.5
Body length	1	L2	76	102.5	136	162
	2		96	135.5	173	203.5
Output flange		Q1	□60	□90	□115	□140
Input flange		Q2	□60	□90	□130	□180
Output						
Length from flange		L3	8	8	10	12
Pilot length		L4	7	10	12	12
Output shaft length		L5	37	47.5	65	97
shaft shoulder to the shaft end		L6	28.5	36	49	82
Flat end length / Key length		L7	20	30	40	65
Key length to the shaft end		L8	3	3	5	5
Mounting hole circle		D1	Ø70	Ø100	Ø130	Ø165
Pilot diameter		D2	Ø50 g6	Ø80 g6	Ø110 g6	Ø130 g6
Output shaft diameter		D4	Ø16 g6	Ø22 g6	Ø32 g6	Ø40 g6
Key width		B1	5	6	10	12
Flat end height / Key Height		H1	18	24.5	35	43
mounting thread x depth		G1	4-Ø5.5	4-Ø6.5	4-Ø9	4-Ø11
center screw hole x depth		G2	M5x12	M8	M12	M16
Input						
Pilot depth		L9	6	6	8	8
motor shaft length		L10	32.5	46	62.5	81.5
Pilot diameter		D6	Ø50 G6	Ø70 G6	Ø110 G6	Ø114.3 G6
Input shaft diameter		D7	Ø14 G6	Ø19 G6	Ø22 G6	Ø35 G6
Mounting hole circle		D8	Ø70	Ø90	Ø145	Ø200
mounting thread x depth		G3	4-M4	4-M5	4-M8	4-M12