

SGR series

HIGH PRECISION

PLANETARY REDUCER



Helical Gear

Reducer Performance Information

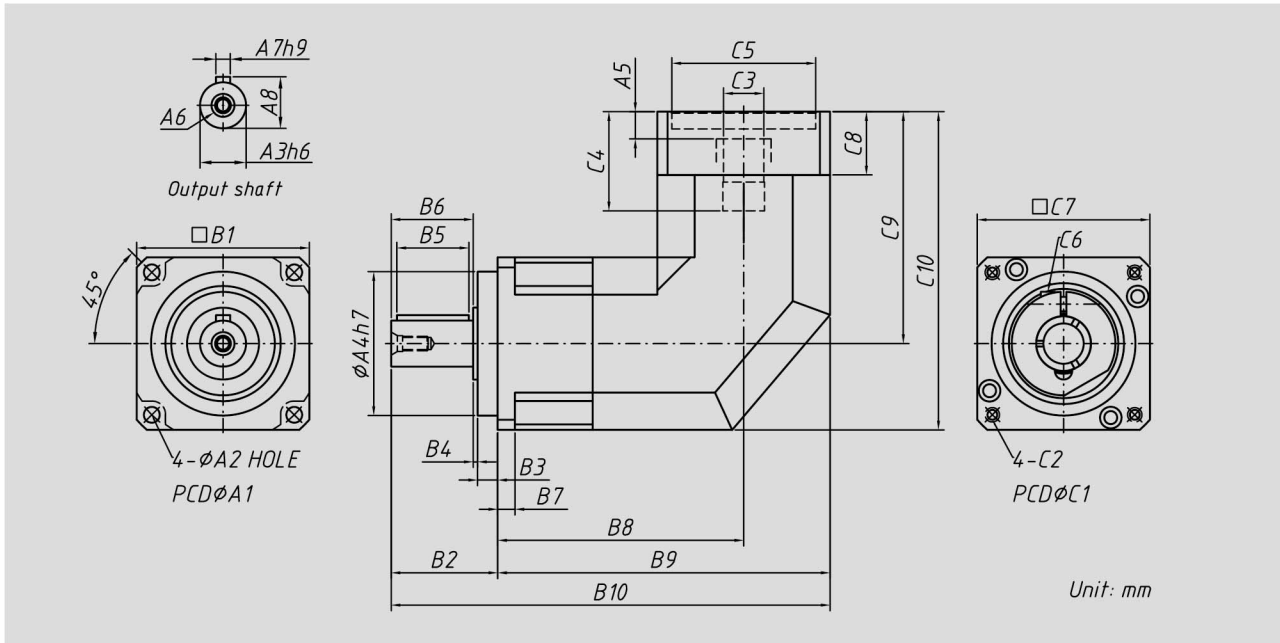
	Unit	Stage	Ratio	42	60	90	115	142
Rated Output Torque T_{2N}	Nm	L1	3	10	38	95	203	352
			4	13	50	125	268	530
			5	16	62	155	333	660
			6	19	57	155	318	610
			7	20	52	145	308	560
			8	18	47	125	268	510
			9	15	42	105	238	460
			10	15	62	155	333	660
			14	15	44	145	308	560
			20	15	42	105	238	460
		L2	25	16	62	155	333	660
			30	21	57	155	318	610
			35	20	52	145	308	560
			40	18	47	125	268	510
			50	15	62	105	238	660
			60	21	57	155	318	610
			70	20	52	145	308	560
			80	18	47	125	268	510
			90	15	42	105	238	460
			100	15	42	105	238	460
Max. Input Speed n_{1B}	rpm	L1/L2	3~100	10,000	10,000	8,000	8,000	6,000
Rated Input Speed n_{1N}	rpm	L1/L2	3~100	5,000	5,000	4,000	4,000	3,000
Backlash PS	arcmin	L1	3~20	≤ 2				
		L2	25~100	≤ 4				
Backlash P0	arcmin	L1	3~20	≤ 4				
		L2	25~100	≤ 7				
Backlash P1	arcmin	L1	3~20	≤ 6				
		L2	25~100	≤ 9				
Max. Acceleration Torque T_{2B}	Nm	L1/L2	3~100	1.8 Times of nominal output torque				
Max. Output(Emergency Stop)Torque T_{2NOT}	Nm	L1/L2	3~100	3 Times of nominal output torque				
Torsional Rigidity	Nm/arcmin	L1/L2	3~100	3	7	14	25	50
Max. Radial Force F_{2rB}	N	L1/L2	3~100	780	1,530	3,250	6,700	9,400
Max. Axial Force F_{2aB}	N	L1/L2	3~100	390	765	1,625	3,350	4,700
Service Life	hr	L1/L2	3~100	S5 Cycle Operation ; > 20,000 (S1 Continuous Operation ; > 10,000 hrs)				
Operation Temperature	°C	L1/L2	3~100	-25°C ~ 90°C				
Efficiency η	%	L1	3~20	≤ 95				
		L2	25~100	≤ 92				
Lubrication		L1/L2	3~100	Synthetic Lubrication Grease				
Noise Level	dB	L1	3~20	≤ 61	≤ 63	≤ 65	≤ 68	≤ 70
		L2	25~100	≤ 61	≤ 63	≤ 65	≤ 68	≤ 70
Protection Class	IP	L1/L2	3~100	IP 65				
Mounting Position		L1/L2	3~100	Any direction				
Weight	kg	L1	3~20	1	2.3	6.6	13.2	24.5
		L2	25~100	1.2	3	8.2	14.2	27.5

Reducer Moment of inertia

	Unit	Stage	Ratio	42	60	90	115	142
Moment of inertia J_1	kg.cm ²	L1	3	0.09	0.35	2.25	6.84	23.4
			4	0.09	0.35	2.25	6.84	23.4
			5	0.09	0.35	2.25	6.84	23.4
			6	0.09	0.35	2.25	6.84	23.4
			7	0.09	0.35	2.25	6.84	23.4
			8	0.09	0.35	2.25	6.84	23.4
			9	0.09	0.35	2.25	6.84	23.4
			10	0.09	0.35	2.25	6.84	23.4
			14	0.09	0.07	1.87	6.25	21.8
			20	0.09	0.07	1.87	6.25	21.8
		L2	25	0.09	0.09	0.35	2.25	6.84
			30	0.09	0.09	0.35	2.25	6.84
			35	0.09	0.09	0.35	2.25	6.84
			40	0.09	0.09	0.35	2.25	6.84
			50	0.09	0.09	0.35	2.25	6.84
			60	0.09	0.09	0.35	2.25	6.84
			70	0.09	0.09	0.35	2.25	6.84
			80	0.09	0.09	0.35	2.25	6.84
			90	0.09	0.09	0.35	2.25	6.84
			100	0.09	0.09	0.35	2.25	6.84

MODEL : SGR SERIES

1-Stage (Ratio:3~10)

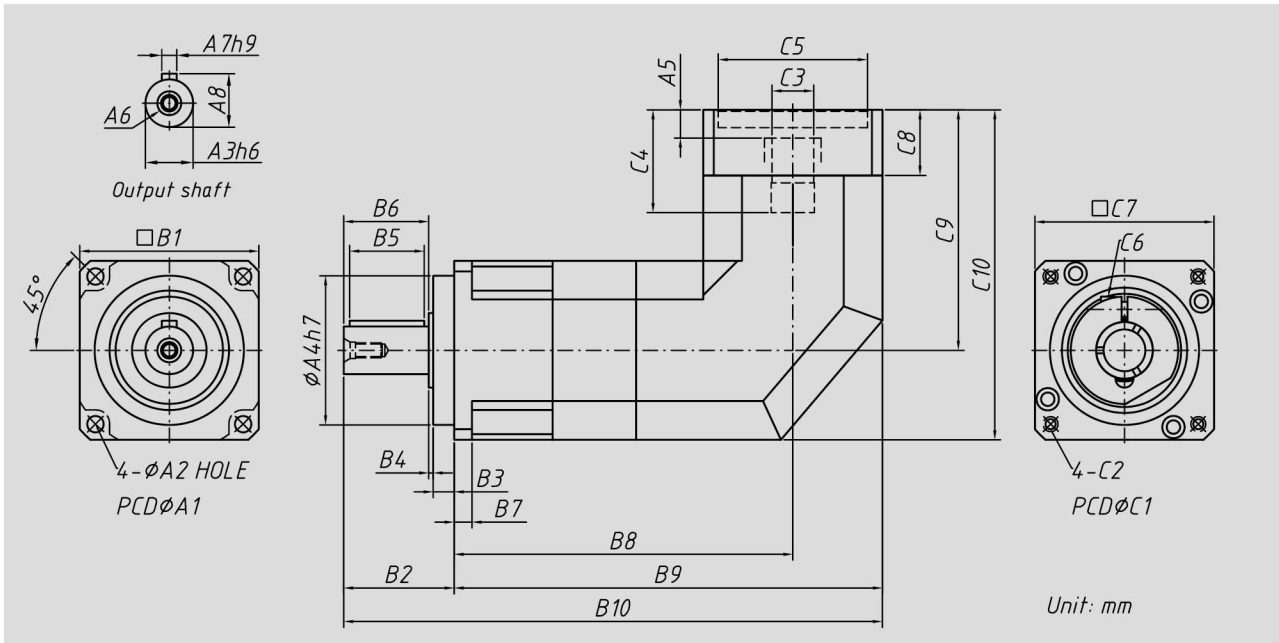


Code \ Model	42	60	90	115	142
A1	50	70	100	130	165
A2	3.5	5.5	6.5	8.5	10.5
A3	13	16	22	32	40
A4	35	50	80	110	130
A5	6.14	6.47	7.5	19.1	11
A6	M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0
A7	5	5	6	10	12
A8	15	18	24.5	35	43
B1	42.6	60	90	115	142
B2	26	37	48	65	97
B3	5.5	7	10	12	15
B4	1.6	1.5	1.5	2	3
B5	15	25	30	40	63
B6	18.9	28.5	36.5	51	79
B7	4	6	8	10	12
B8	76	85.5	122.1	140	178
B9	97.3	115.5	167.1	197.5	249
B10	123.3	152.5	215.1	262.5	346
C1	46	70	90	145	165
C2	M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
C3	8	14	19	24	35
C4	26	34	53	78	74
C5	30	50	70	110	130
C6	M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
C7	42.6	60	90	130	142
C8	20	22	25.5	45	35
C9	61	80.6	106.35	144.2	151
C10	82.3	110.6	151.35	201.7	222

SGR

MODEL : SGR SERIES

2-Stage (Ratio:15~100)



Code \ Model	42	60	90	115	142
A1	50	70	100	130	165
A2	3.5	5.5	6.5	8.5	10.5
A3	13	16	22	32	40
A4	35	50	80	110	130
A5	6	6	7.5	19	11
A6	M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0
A7	5	5	6	10	12
A8	15	18	24.5	35	43
B1	42.6	60	90	115	142
B2	26	37	48	65	97
B3	5.5	7	10	12	15
B4	1.6	1.5	1.5	2	3
B5	15	25	30	40	63
B6	18.9	28.5	36.5	51	79
B7	4	6	8	10	12
B8	102	113.5	162.1	188	239
B9	123.3	143.5	207.1	245.5	310
B10	149.3	180.5	255.1	310.5	407
C1	46	70	90	145	165
C2	M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
C3	8	14	19	24	35
C4	26	34	53	78	74
C5	30	50	70	110	130
C6	M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5
C7	42.6	60	90	130	142
C8	20	22	25.5	45	35
C9	61	80.6	106.35	144.2	151
C10	82.3	110.6	151.35	201.7	222