



LS Electric AC Servo Systems

Accessories, continued

NOTE: These parts available for sale to North American locations only

L7C/L7P/iX7NH/PHOX System Planetary Gearboxes

Precision planetary gearboxes can increase the torque output of servo systems while reducing the reflected load inertia for higher response. Gearboxes offer high stiffness, high efficiency, and very quiet operation. Input motor shaft clamp, oversized output shaft key, and mounting hardware are included for mating to LS Electric motors.

Features:

- Maintenance free (no need to replace lubrication)
- IP65
- Operating temperature range of -10°C to +90°C [14°F to 194°F]
- Uses VIGO Grease RE #0



MSS Series Planetary Gearbox

MSS Series Planetary Gearbox Specifications										
Model	96200004	96200005	96200103	96200007	96200008	96200257	96200373	96200378	96200393	96200459
Manufacturer Part Number	MSS0601A-005KS-B3110103C14	MSS0601A-010KS-B3110103C14	MSS0902B-020KS-B3110103C14	MSS0901A-005KS-C3110103C19	MSS0901A-010KS-C3110103C19	MSS1152B-020KS-C3110103C19	MSS0901A-005KS-C4120103C19	MSS0901A-010KS-C4120103C19	MSS1152B-020KS-C4120103C19	MSS1151A-005KS-D3110103C22
Compatible Motors	APMC-FBL series 100, 200, 300, and 400 W motors			APMC FCL series 750W and 1kW motors			APM-FE series 900W and 1.5 kW motors			APM-FE series 1.6 kW motors
Price	\$288.00	\$296.00	\$528.00	\$387.00	\$387.00	\$762.00	\$350.00	\$350.00	\$699.00	\$499.00
Drawing	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Ratio	5:1	10:1	20:1	5:1	10:1	20:1	5:1	10:1	20:1	5:1
Nominal Output Torque	54 N·m	42 N·m	143 N·m	160 N·m	121 N·m	295 N·m	160 N·m	121 N·m	295 N·m	332 N·m
Inertia	0.13 kg/cm²	0.13 kg/cm²	0.13 kg/cm²	0.48 kg/cm²	0.44 kg/cm²	0.48 kg/cm²	0.48 kg/cm²	0.44 kg/cm²	0.48 kg/cm²	2.81 kg/cm²
Output Shaft Diameter	16mm	16mm	22mm	22mm	22mm	32mm	22mm	22mm	32mm	32mm
Stage	1	1	2	1	1	2	1	1	2	1
Frame	60mm	60mm	90mm	90mm	90mm	115mm	90mm	90mm	115mm	115mm
Nominal Input Speed (rpm)	5,000	5,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Max Input Speed (rpm)	10,000	10,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
Emergency Stop Torque	3 times nominal output torque									
Noise (dB)	≤54	≤54	≤56	≤56	≤56	≤59	≤56	≤56	≤59	≤59
Efficiency (%)	≥97	≥97	≥94	≥97	≥97	≥94	≥97	≥97	≥94	≥97
Backlash (Arcmin)	≤7	≤7	≤9	≤7	≤7	≤9	≤7	≤7	≤9	≤7
Max Radial Load (N)	1,280	1,280	3,200	3,200	3,200	6,800	3,200	3,200	6,800	6,800
Max Axial Load (N)	690	690	1,600	1,600	1,600	3,400	1,600	1,600	3,400	3,400
Service Life (Hours)	20,000 (10,000 under continuous operation)									
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Accessories, continued

MSS Series Planetary Gearbox Specifications											
Model	96200464	96200479	96200010	96200011	96200445	96200013	96200014	96200701	96200016	96200017	96200862
Manufacturer Part Number	MSS1151A-010KS-D3110103C22	MSS1422B-020KS-D3110103C22	MSS1151A-005KS-D3110103C24	MSS1151A-010KS-D3110103C24	MSS1422B-020KS-D3110103C24	MSS1421A-005KS-E3110103C35	MSS1421A-010KS-E3110103C35	MSS1802B-020KS-E3110103C35	MSS1801A-005KS-F3110103C42	MSS1801A-010KS-F3110103C42	MSS1802A-015KS-F3110103C42
Compatible Motors	APM-FE series 1.6 kW motors		APM-FE series 2.2 kW motors			APM-FF series 3.5 kW and 5.5 kW motors			APM-FF series 7.5 kW motors		
Price	\$499.00	\$1,030.00	\$499.00	\$499.00	\$1,030.00	\$770.00	\$770.00	\$1,850.00	\$1,480.00	\$1,480.00	\$1,850.00
Drawing	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF	PDF
Ratio	10:1	20:1	5:1	10:1	20:1	5:1	10:1	20:1	5:1	10:1	15:1
Nominal Output Torque	262 N·m	295 N·m	332 N·m	262 N·m	295 N·m	634 N·m	500 N·m	1060 N·m	1195 N·m	960 N·m	897 N·m
Inertia	2.59 kg/cm ²	2.81 kg/cm ²	2.81 kg/cm ²	2.59 kg/cm ²	2.81 kg/cm ²	7.52 kg/cm ²	7.05 kg/cm ²	7.52 kg/cm ²	24.29 kg/cm ²	23.51 kg/cm ²	24.29 kg/cm ²
Output Shaft Diameter	32mm	40mm	32mm	32mm	40mm	40mm	40mm	55mm	55mm	55mm	55mm
Stage	1	2	1	1	2	1	1	2	1	1	2
Frame	115mm	142mm	115mm	115mm	142mm	142mm	142mm	180mm	180mm	180mm	180mm
Nominal Input Speed (rpm)	4,000	3,000	4,000	4,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Max Input Speed (rpm)	8,000	6,000	8,000	8,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Emergency Stop Torque	3 times nominal output torque										
Noise (dB)	≤59	≤62	≤59	≤59	≤62	≤62	≤62	≤64	≤64	≤64	≤64
Efficiency (%)	≥97	≥94	≥97	≥97	≥94	≥97	≥97	≥94	≥97	≥97	≥94
Backlash (Arcmin)	≤7	≤9	≤7	≤7	≤9	≤7	≤7	≤9	≤7	≤7	≤9
Max Radial Load (N)	6,800	9,300	6,800	6,800	9,300	9,300	9,300	15,100	15,100	15,100	15,100
Max Axial Load (N)	3,400	4,500	3,400	3,400	4,500	4,500	4,500	7,500	7,500	7,500	7,500
Service Life (Hours)	20,000 (10,000 under continuous operation)										