



▶ HIGH PERFORMANCE: SSP SERIES

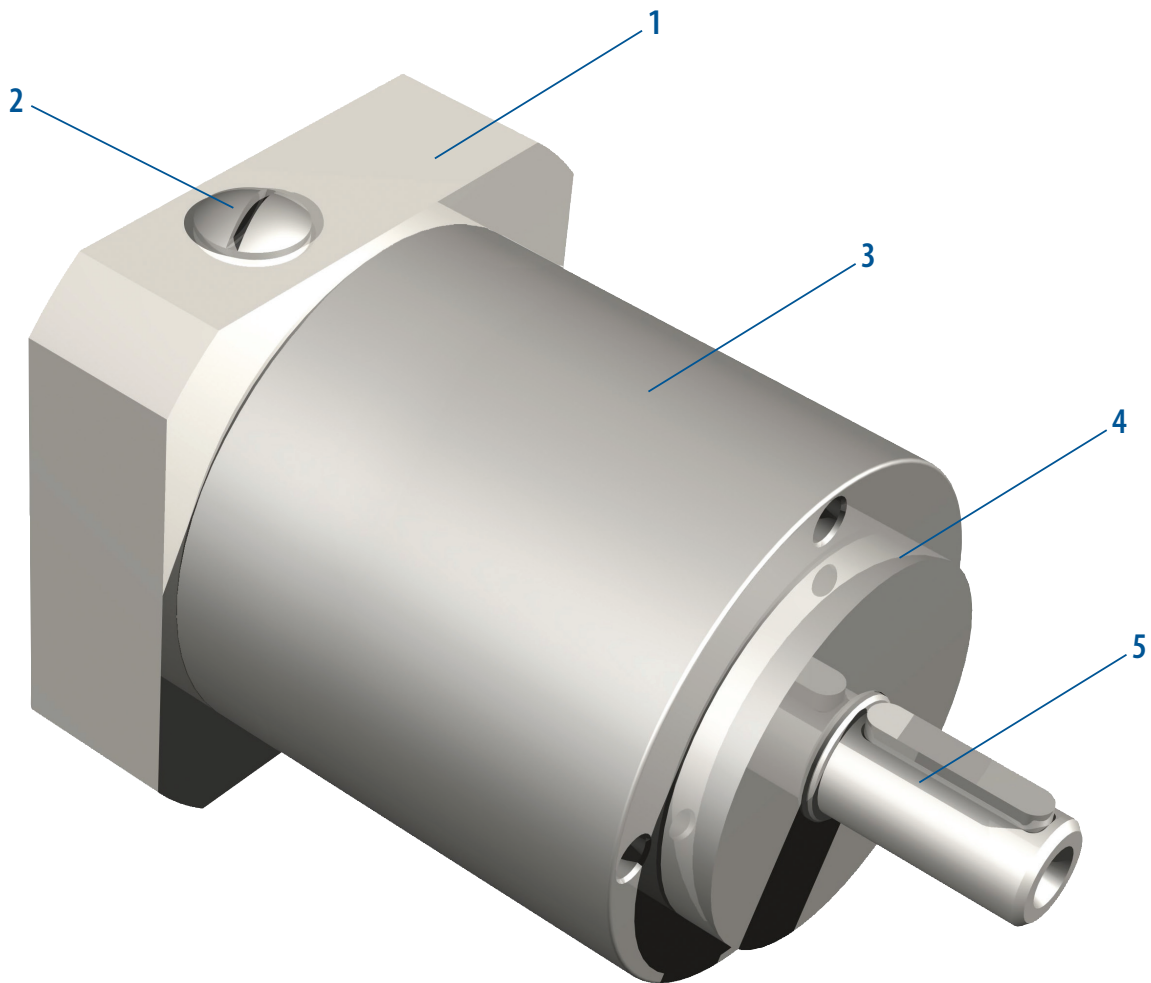
GAM can.

If you don't see exactly what you need, let us know. We can modify the SSP Series gearboxes to meet your needs. Page 4 provides a list of commonly requested modifications to give you a feel for our capabilities.

Our Stainless Steel Planetary (SSP) Series is an innovative washdown servo gearbox solution designed for food, medical or sanitary applications. It is a precision planetary gearbox outwardly constructed of 300-series stainless steel. The motor adapter plate, housing and shaft are all stainless steel. Viton® seals, stainless steel hardware and sealed interfaces provide outstanding corrosion resistance in all types of wet and caustic washdown environments. Ideal for any light or demanding servo application where corrosion resistance is a requirement, the SSP Series offers economy, high precision, and long lasting performance.

SSP Series benefits:

- All exposed surfaces stainless steel
- Frame sizes from 70 to 120 mm
- Ratios from 3:1 to 100:1



Suitable for food or medical applications!

1. Adapter Flange

(Stainless steel adapter for quick and easy motor mounting)

2. Hole Plug

(Threaded stainless steel plug)

3. Lubrication (internal)

(Standard with food grade grease)

4. Seals (internal)

(Viton® seals keep contaminants out and lubricant in and achieves an IP66 rating)

5. Shaft

(Stainless steel keyed output shaft)

Sold & Serviced By:

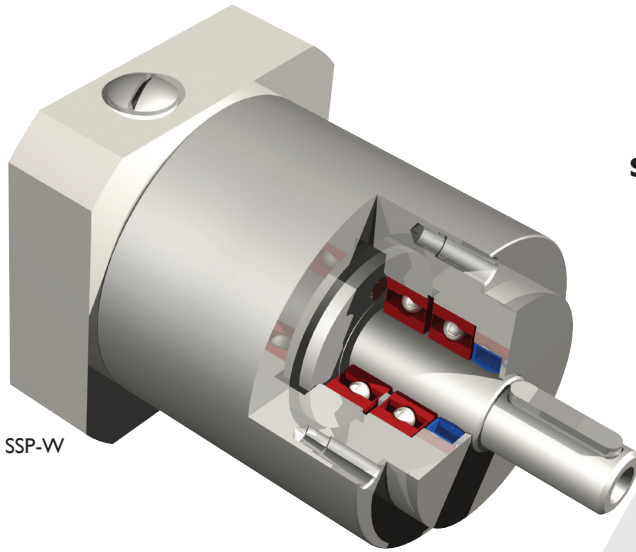
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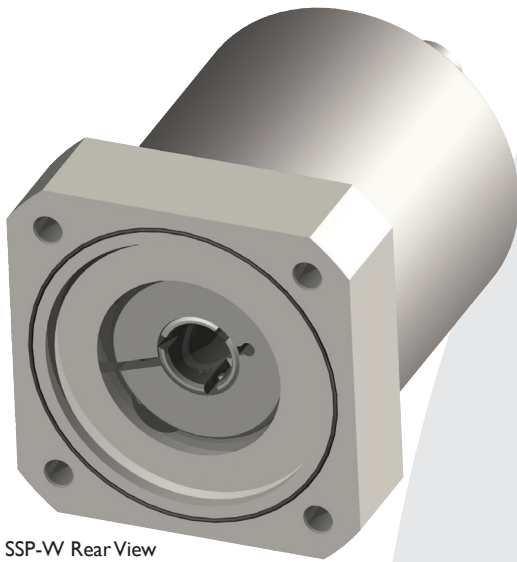
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SSP-W

SSP-W

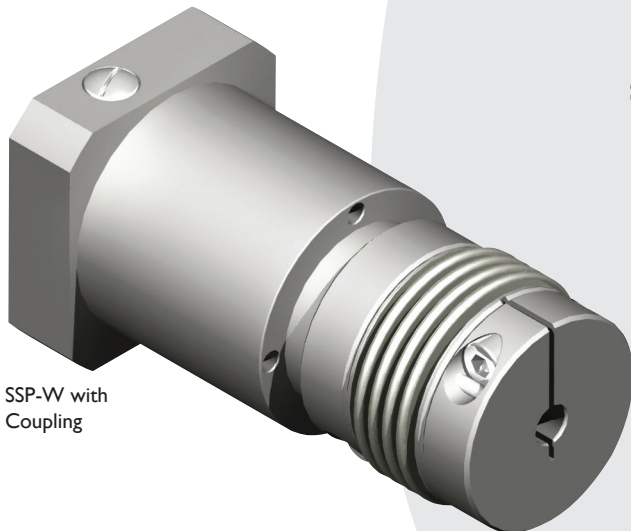
- Dual output bearings for high radial and axial loading
- Frame sizes from 70 mm to 120 mm
- Ratios from 3:1 to 100:1



SSP-W Rear View

SSP-W

- Input clamping element for fast and easy mounting
- Optional input O-ring to keep contaminants out custom designed for your motor. (Special request at time of order)



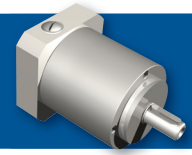
SSP-W with Coupling

SSP-W

- Optional stainless steel output coupling KG-VA for corrosion resistant connections to other shafts
- Contact GAM for more information on these couplings



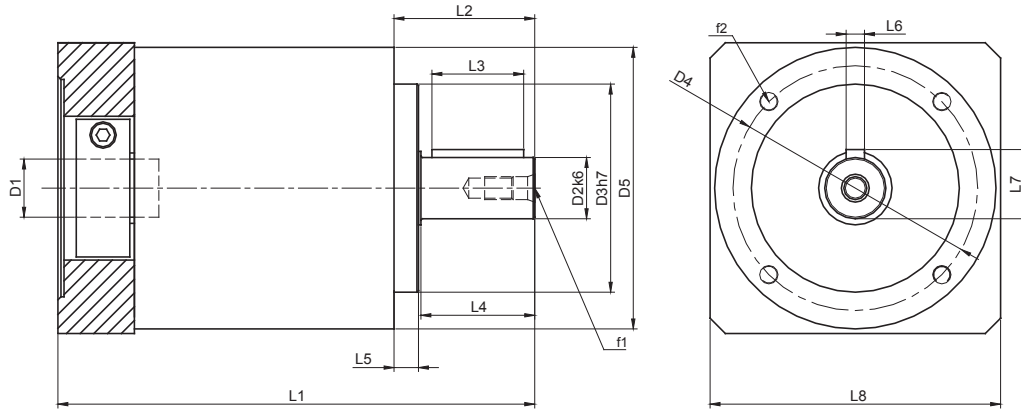
▶ SSP-SERIES - SSP



SSP Series		70	90	120	
Stock Ratios		5,10			
All Ratios Available		1-stage: 3, 4, 5, 7, 10 2-stage: 12, 16, 20, 25, 35, 40, 50, 70, 100 For other ratios, consult GAM			
Nominal Output Torque (T_{2n})	Nm (lb-in)	3:1	20 (177)	40 (354)	100 (885)
		4, 5, 7:1	26 (230)	54 (478)	120 (1062)
		10, 100, 1000:1	16 (142)	40 (354)	105 (929)
		12:1	36 (319)	80 (708)	170 (1505)
		all other ratios	42 (372)	100 (885)	210 (1859)
Max Acceleration Output Torque (T_{2B})	Nm (lb-in)	3:1	36 (319)	70 (620)	180 (1593)
		4, 5, 7:1	44 (389)	100 (885)	200 (1770)
		10, 100, 1000:1	24 (212)	75 (664)	180 (1593)
		12:1	45 (398)	100 (885)	215 (1903)
		all other ratios	52 (460)	125 (1106)	255 (2257)
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)
		12:1	72 (637)	160 (1416)	400 (3540)
		all other ratios	84 (743)	216 (1912)	480 (4248)
Nominal Input Speed (n_{1n})	RPM	-	3500	3000	2500
Max Speed (n_{1max})		-	6000	6000	5000
Standard Output Backlash (j)	arcmin	3:1 - 10:1	< 10	< 10	< 8
		12:1 - 100:1	< 14	< 14	< 12
Allowable Radial Load (F_{rad}) ¹⁾	N (lbs)	-	910 (205)	1500 (338)	3000 (675)
Allowable Axial Load (F_{axial})	N (lbs)	-	500 (113)	1000 (225)	1500 (338)
Torsional Stiffness (C_{t21})	Nm/arcmin (lb-in/rcmin)	10:1, 100:1	1.3 (11.5)	3.4 (30.1)	8.3 (73.5)
		7:1, 70:1	1.7 (15)	4.8 (42.5)	13.6 (120.4)
		all other ratios	2.4 (21.2)	7.1 (62.8)	17.2 (152.2)
Weight (m)	kg (lbs)	1-stage	2 (4.4)	3.9 (8.6)	8.8 (19.4)
		2-stage	2.3 (5.1)	4.7 (10.4)	10.9 (24)
Noise Level (L_{pk})	dB(A)	-	< 64	< 66	< 68
Mass Moment of Inertia (J_1)	kg cm ² (lb-in ²)	3:1	0.45 (0.154)	1.37 (0.468)	6.54 (2.235)
		4:1, 12:1, 16:1	0.38 (0.130)	1.14 (0.390)	4.8 (1.640)
		5:1, 20:1, 25:1	0.36 (0.123)	1.05 (0.359)	4.05 (1.384)
		7:1, 35:1	0.35 (0.120)	0.97 (0.331)	3.4 (1.162)
		10:1, 40:1 - 100:1	0.34 (0.116)	0.93 (0.318)	3.1 (1.059)
Efficiency at Load	1-stage: 94% 2-stage: 92%				
Service Life	> 30,000 hours				
Lubrication	Food Grade Grease: Note 1. Meets FDA 21 CFR 178.3570 requirements Note 2. USDA H1 authorized (authorized for use in federally inspected meat and poultry plants)				
Protection Rating	IP 66				
Operating Temperature Range	-20°C to 90°C				

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

SSP-W



SSP Series		70		90		120	
		mm	(in)	mm	(in)	mm	(in)
D1 max standard	motor shaft diameter	14	(0.551)	19	(0.748)	24	(0.945)
D1 max available*	motor shaft diameter	16	(0.63)	24	(0.945)	32	(1.26)
D2 k6	output shaft diameter	16	(0.63)	22	(0.866)	32	(1.26)
D3 h7	pilot diameter	52	(2.047)	68	(2.677)	90	(3.543)
D4	bolt circle	62	(2.441)	80	(3.15)	108	(4.252)
D5	housing diameter	70	(2.756)	92	(3.622)	122	(4.803)
f1	shaft thread	M5x12		M6x16		M10x22	
f2	mounting holes	M6x12		M6x14		M8x18	
L1 1-STAGE***	gearbox total length	131 (5.157)		174 (6.85)		232 (9.134)	
L1 2-STAGE***		153 (6.024)		207 (8.15)		271 (10.669)	
L2	shaft length	36 (1.417)		46 (1.811)		70 (2.756)	
L3	key length	25 (0.984)		30 (1.181)		50 (1.969)	
L4	usable shaft length	28 (1.102)		36 (1.417)		58 (2.283)	
L5	pilot height	7 (0.276)		9 (0.354)		11 (0.433)	
L6	key width	5 (0.197)		6 (0.236)		8 (0.315)	
L7	key height	18 (0.709)		24.600 (0.969)		34.8 (1.37)	

* for these larger motor shaft diameters, please contact GAM

** depending on the motor, value can vary



Recommended Output Coupling (if necessary)

all stainless bellows

KG-VA-80

KG-VA-220

KG-VA-350

TYPE CODES FOR SSP SERIES (SSP-W)

Example: SSP - W - 090 - 005 G - [115 - A01] - S111

Gearbox Series

Stainless Steel
Planetary Series

Gearbox Style

W = Output Shaft

Gearbox Size

070, 090, 120

Ratio

3, 4, 5, 7, 10, 12, 16, 20, 25, 35, 40, 50, 70, 100

Special Options

Assigned by GAM

Motor Mount Kit

Assigned by GAM

Options Available for This Product

G = Key on output DIN688

Tolerances (mm)

Size	k6	h7
Over 10	+0.012	0
Thru 18	+0.001	-0.018
Over 18	+0.015	0
Thru 30	+0.002	-0.021
Over 30	+0.018	0
Thru 50	+0.002	-0.025
Over 50	+0.021	0
Thru 80	+0.002	-0.030
Over 80	+0.025	0
Thru 120	+0.003	-0.035

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