



The directly submersible motor
for any underwater application

Goldline S-Series

Submersible Motors



Goldline S-Series motors operate reliably through a long service life without the need to add special enclosures or seals. They are the high-performance, low-maintenance choice for everything from theme-park submarines to inspection of nuclear reactor cooling tanks, mineral exploration on the sea floor, wastewater treatment, industrial irrigation and many other uses.

Operate at depths up to 20,000 feet under the sea

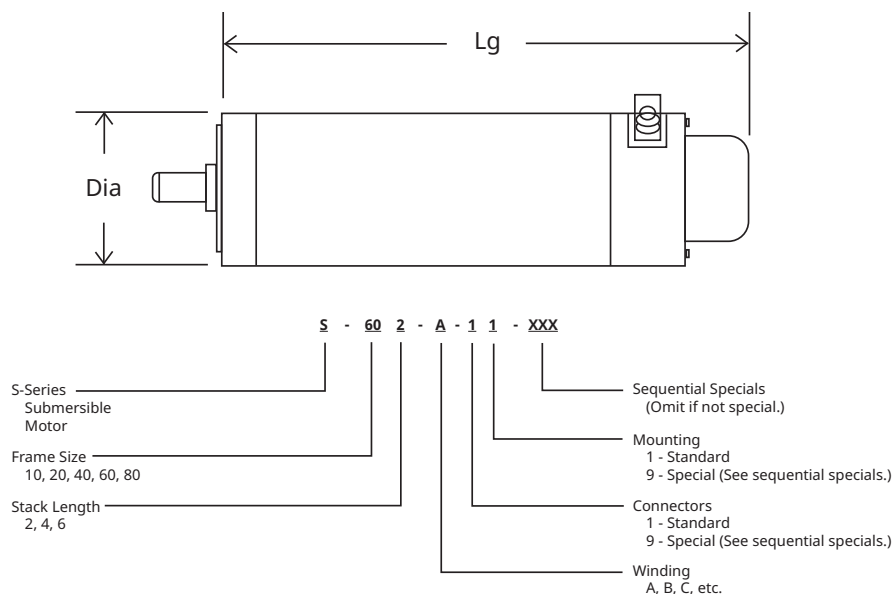
- **Any application, shallow or deep.** Oil-filled, pressure-compensated brushless servo motors operate at underwater pressures up to 10,000 psi, depending on specified connectors.
- **Rugged performance.** Stainless steel and aluminum nickel bronze alloy housings with specialized shaft, seals, bearings and connectors withstand deep-sea pressures, shocks and corrosives.
- **Superior vehicle control.** Smooth, fast acceleration provides exceptional underwater maneuverability. Reduced EMI and RFI helps maintain integrity of remote-control, video and audio signals.

Maximize operating times

- **Highly efficient.** Permanent-magnet motor maximizes battery life or allows for a smaller umbilical cable in ROV applications.
- **High thermal efficiency.** A high ratio of output power to frame size enables use of a smaller, lighter motor.
- **Long life with minimal maintenance.** With a brushless design, the durable bearings and seals are the only contact parts subject to wear. O-ring seals are externally serviceable.

Goldline S-Series

Submersible Motors



PERFORMANCE DATA - 240VAC (320VDC) Rated

Motor Model	Cont. Torque (stall) @40C Amb., Nm	Cont. Current, Arms	Peak Torque, Nm	Peak Current, Arms	Torque Constant, Nm/Arms	Back EMF Constant, Vrms/krpm	Resistance @25C, Ohms	Inductance (line-to-line), mH	Rotor Inertia, kg-m ²	Dia (in)	Lg (in)	Weight (kg)
S-102-A*	1.68	4.86	2.4	7.0	0.35	20.91	6.8	30	3.10E-05	3.24	8.76	2.5
S-104-A**	3.09	6	4.38	9.0	0.512	31.0	5.3	28.1	4.61E-05	3.24	9.87	3.2
S-106-A***	4.39	6.1	6.18	9.0	0.723	43.7	6.5	37.5	7.65E-05	3.24	11.07	8.6

*Ratings assume water-cooling, continuously moving, 1 Liter/min. at 25C Water Temperature

**Ratings assume water-cooling, continuously moving, 3 Liters/min. at 25C Water Temperature

***Ratings assume water-cooling, continuously moving, 3 Liters/min. at 22C Water Temperature

S-202-A*	4.49	3.4	7.46	6.0	1.31	79.5	17.7	185	9.97E-05	4.24	10.16	11.87
S-204-A**	8.95	5.4	13.7	8.7	1.66	100.5	9.46	133	1.73E-04	4.24	11.72	15
S-206-A**	11.9	5.5	20.5	10.0	2.15	130.2	8.82	130	2.51E-04	4.24	13.28	16.3

*Ratings assume water-cooling, continuously moving, 1 Liters/min. at 25C Water Temperature

**Ratings assume water-cooling, continuously moving, 6 Liters/min. at 25C Water Temperature

S-404-A*	26.3	11.4	35.9	17.0	2.31	139.4	4.1	102	6.51E-04	5.24	13.68	25.9
S-406-A*	35.3	18.8	48.5	27.3	1.87	113.2	1.7	42	9.29E-04	5.24	15.78	31.7

*Ratings assume water-cooling, continuously moving, 3 Liters/min. at 22C Water Temperature

S-604-A*	54.2	34.2	86.4	54.0	1.59	95.78	0.508	13.3	2.03E-03	6.33	16.61	45
S-606A-*	84.1	37.6	131.9	62.0	2.24	135.4	0.5	15.6	3.04E-03	6.33	19.31	55

For More Information or to Order

Visit <https://www.kollmorgen.com/en-us/products/motors/servo/goldline-/goldline-s-series/goldline-s-series-submersible-servo-motors>