Servosila Servo Drives

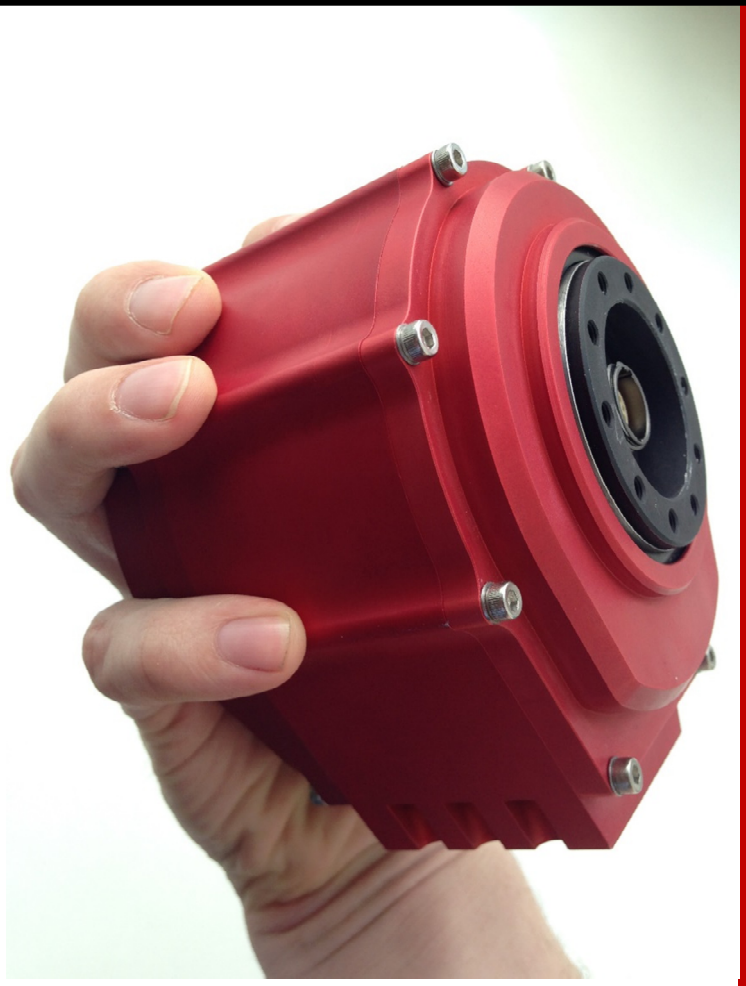

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TABLE OF CONTENTS

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The servo drives are specifically designed for outdoor mobile robotics applications such robotic arm manipulators or antenna positioning systems.

Lightweight yet Powerful Servo Drives

Mobile robots are similar to aircraft when it comes to weight: the lower the weight is, the better. A low weight of servos increases mobility of the robotic system, reduces overall power consumption, improves motion dynamics and reduces the risk of serious injuries due to hits by moving robotic arms.

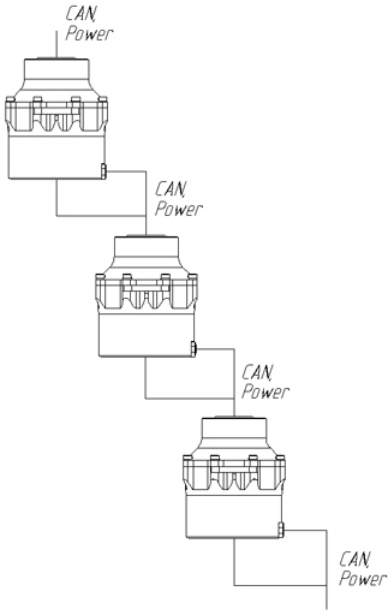
Built-in Intelligence

The servos are controlled via a CAN bus (optionally, via PWM) with a realtime telemetry feedback and automatic health checks.

The standards-based CAN interface and an integrated controller board makes it easy to interface the servo drives to an onboard control system. Low weight of the servo drives make them well suited for mobile robotics applications where weight is always at premium.

Up to 15 servo drives can be connected in a chain with a unified CAN bus and a power supply bus. An integrated power management module enables reconfiguration of your robotic system in the field.

Hollow Shafts



The servo drives have either hollow shafts or pass-through connectors for power and control bus cables. These features are specifically introduced to facilitate robotic arm designs. The cables hidden inside a robotic arm with a hollow shaft servos are well protected from possible damage caused by outdoor use.

The hollow shafts of the servo drives simplify design of the robotic systems. Cables including a power bus, a CAN bus or an Ethernet bus can be routed through a chain of servo drives. Rotating joints of robotic arms based on the servo drives hide the cables inside and reliably protect them from harsh outdoor environments. Reliability of the overall robotic system is improved due to better protection of the cables and their connectors.

Protection rating IP68

The servo drives are watertight, work in dust, rain and snow. Extended temperature range options are available.

The servo drives come with water- and dust-proof connectors suitable for outdoor use. The connectors simplify replacement of faulty parts in the field without special tools thus ensuring continuous operation of the robotic system.

Specifications

	Servo Drive 35Nm	**Servo Drive 56Nm**	**Servo Drive 64Nm**
			
Torque, Nm	35.0	56.0	64.0
Weight, kg	1.0	1.0	1.25
Hollow shaft	A built-in cable passes through the shaft.	A built-in cable passes through the shaft.	A built-in cable passes through the shaft.
Speed (90°, sec)	4.2	6.0	9.0
Precision, deg	± 0.2	± 0.2	± 0.2
Input voltage, VDC	18-36	18-36	18-36
Nominal voltage, VDC	24	24	24
Average power consumption, W	32	32	32
Max. number of servo drives connected in a single chain	15	15	15
Control bus	CAN (options: RS232 or PWM)		
IP class	IP68 (dustproof, waterproof)		
Operating temperature, °C	-20…+65C		

About Servosila

Servosila is a technology company that designs, produces and markets a range of mobile robots, servo drives, and robotic control systems as well as software that makes the mobile robots intelligent.

www.servosila.com

www.youtube.com/user/servosila/videos