WOG1-187

Size 187 mm – powerful for demanding applications.

Robust size for powerful omnidirectional vehicles with increased load and dynamic requirements.

Applications

This size is designed for applications with higher loads and performance requirements. The greater height ensures higher power density and robustness.

The travel and steering drives are integrated via external Dual-Axis Motor Controllers or customer-specific controllers, which ensures maximum freedom in the design of the control and safety architecture.



Features & Benefits

- **Optimized for heavy AGVs** and industrial transport vehicles
- **Robust design** for demanding operating conditions
- **External driving and steering control can be flexibly integrated**
- **Suitable for customer-specific safety architectures**
- **Freely configurable encoder integration**
- **High continuous load capacity and stability**
- **Maximum system flexibility** despite performance focus

Technical data

		WOG1-187	
Drive		Steering drive	Wheel drive
Rated voltage	VDC	48	48
Rated power	W	120	346
Speed	°/s / m/s	0 - 245.0	0 - 1.70
Rated torque	Nm	19	13.2
Maximum torque	Nm	166	52
Rated current	Arms	7.4	8.9
Maximum current	Arms	57.9	39.6

		Steering drive	Wheel drive
Wheel load	kg	-	500
Wheel diameter	mm	-	130
Gear steering		worm gearbox	
Gear driving			Planetary gearbox
Coating		-	Vulkollan 95° Shore A
Temperature sensor		PTC	
Encoder/feedback		magnetic encoder	
Signals		A,/A, B,/B I,/I, PWM,/PWM	
Resolution	Counts/rev	4096 / 12 bits	
Voltage	VDC	5	
Holding brake		-	Spring-applied brake
Braking torque	Nm	-	4,0
Voltage	VDC	-	24
Inductive steering angle position sensors		3 pieces	-
Redundant steering angle sensors		TR-Electronics and Sick	-
Ambient temperature	°C	0…40	
Relative humidity	%	< 80	
Noise level	dB	< 60 depending on the application	
Protection class		IP54	

Motor cable connections

Steering drive			Wheel drive		
Signal description	**Core color (open ends)**	**Plug / Connection**	**Description**	**Core color (open ends)**	**Plug / Connection**
U	black 1	Round cable lug M4	Motor phase U	red	M4 ring cable lug
V	black 2	Round cable lug M4	Motor phase V	white	
W	black 3	Round cable lug M4	Motor phase W	black	
PE	yellow-green	2-pole terminal	-	-	

Control line connections

Steering drive			Wheel drive		
Signal description	**Core color (open ends)**	**Plug / Connection**	**Description**	**Core color (open ends)**	**Plug / Connection**
GND	green-brown	JST connector 10-pin / 2 rows	GND	green-brown	JST connector 10-pin / 2 rows
5V	green-white		5V	green-white	
/I	violet		/I	violet	
I	yellow		I	yellow	
/B	pink		/B	pink	
B	grey		B	grey	
/A	black		/A	black	
A	red		A	red	
/PWM	green		/PWM	green	
PWM	brown		PWM	brown	
PTC	blue	pluggable 6-pin screw-terminal or spring-clamp connector	PTC	blue	pluggable 6-pin screw-terminal or spring-clamp connector
PTC	white		PTC	white	
-	-	-	BR+	black 1	
-	-	-	BR-	black 2	

Dimensions

