WOG1-150

Size 150 mm – Universal solution for flexible AGV platforms. Omnidirectional wheel/steering drive – without integrated Motor Controller.

Universal size for versatile omnidirectional vehicle concepts with a balanced ratio of height and performance.

Applications

This variant offers an optimal compromise between compact design and increased performance.

The control takes place via external Dual-Axis Motor Controllers or customer-specific controllers, which enables flexible integration into individual safety and control architectures. Ideal for modular AGV and AMR systems with varying requirements.



Features & Benefits

- **Flexible integration** in different vehicle concepts
- **Suitable for modular AGV and AMR platforms**
- **External driving and steering control** possible via Dual-Axis Motor Controller
- **High adaptability** of safety architectures
- **Freely configurable encoder and control integration**
- **Scalable** for medium load and power ranges

Technical data

		WOG1-150	
Drive		Steering drive	Wheel drive
Rated voltage	VDC	48	48
Rated power	W	80	225
Speed	°/s / m/s	0 - 243.0	0 - 1.91
Rated torque	Nm	9.1	5.89
Maximum torque	Nm	74.6	22.0
Rated current	Arms	4.4	10.0
Maximum current	Arms	33.2	37.1

		Steering drive	Wheel drive
Wheel load	kg	-	250
Wheel diameter	mm	-	100
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	-	1.5
Voltage	VDC	-	24
Inductive steering angle position sensors		3 pieces	-
Redundant steering angle sensors		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	BR+	blue	pluggable 6-pin screw-terminal or spring-clamp connector
PTC	white		BR-	white	

Dimensions

