WHEEL DRIVES

Differential Drive



Short Description

This drive was specially developed for AGVs and AMRs, which are operated differentially. It is characterised by its compactness and the ability to carry high wheel loads.

It offers maximum safety and precision thanks to the integrated holding/emergency stop brake and a high-resolution encoder system for motor commutation.

Its optimised design creates more space in your vehicle for important components such as power supply and automation technology.



Key Features

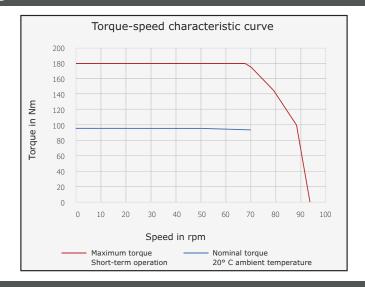
- Compact design for a light, space-saving vehicle design
- **High efficiency and maximum effectiveness** through synchronous technology
- Maintenance-free through a lifetime lubricated gearbox
- Optimum regulation to standstill when using the MTA motor controller
- **Simple replacement** of the wheels
- Maximum **robustness** through the use of high-quality components

Technical Data

Designation	Description
Nominal voltage	48 VDC
Nominal power	665 W
Nominal speed	70 rpm
Nominal torque	91 Nm
Maximum torque	180 Nm
Nominal current	20.5 A
Maximum current	44.5 A
Brake	Holding / emergency stop brake, spring force 24 VDC, 5 Nm
Feedback	Magnetic encoder 5 VDC, 1024 ppr
Motor protection	PT1000
Protection class	IP54



Characteristics



Connections

Motor cable length 3.3 m with ring cable lug M4

Signal	Wire colour	No.	Cross section
U	Black	1	
V	Black	2	4.0 mm ²
W	Black	3	
n.c.	Green-yellow	-	

Brake cable length 3.3 m with open end

Signal	Wire colour	No.	Cross section
+	Black	1	0 53
-	Black	2	0.5 mm ²

Encoder cable length 3.3 m with JST "PUDP-10V-S" 10 pin / 2 row

Signal	Wire colour	Cross section
TH1	Blue	
TH2	White	0.25 mm ²
GND	Green-brown	
5 VDC	Green-white	
I-	Purple	
I+	Yellow	
B-	Pink	
B+	Grey	0.14 mm²
A-	Black	
A+	Red	
PWM-	Green	
PWM+	Brown	

Dimensions

