WHEEL DRIVES
Differential Drive

MTA
innovation is our 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.
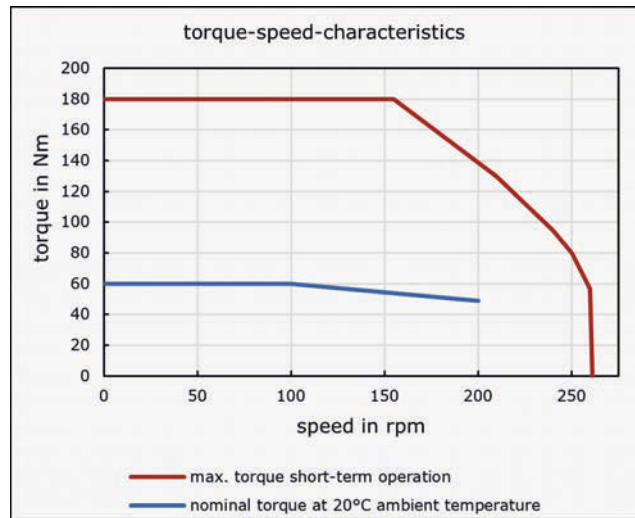
Key Features

- **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	
Nominal voltage	48 VDC
Nominal power	1020 W
Nominal Speed	200 rpm
Nominal torque	49 Nm
Maximum torque	180 Nm
Nominal current	30 Arms
Maximum current	105 Arms
Ambient temperature	0 … 40 °C
Encoder	magnetic encoder, 5 VDC, 1024 ppr
Brake	Holding-/emergency stop brake, spring-applied, 24 VDC, 5 Nm
Temperature sensor	PT1000
Protection class	IP54

Characteristics

Connections

Motor cable length 2.0 m with flying leads

Signal	Wire colour / label
U	black / 1
V	black / 2
W	black / 3
n.c.	green-yellow

Brake cable length 2.0 m with flying leads

Signal	Wire colour / label
+	black / 1
-	black / 2

Signal cable length 2.0 m with flying leads

Signal	Wire colour / label
PT1000 +	blue
PT1000 -	white
GND	green-brown
5 V	green-white
I -	violet
I +	yellow
B -	pink
B +	gray
A -	black
A +	red
PWM -	green
PWM +	brown

Dimensions