DMG8x-B
for pallet conveyor technology

Robust drum motors for operation with a decentralized Motor Controller for reliable pallet conveying at 48 VDC

Applications

Powerful drum motor for pallet conveyor technology, designed for the reliable transport of heavy loads.

It impresses with its robust construction, high power density and stable operation even under demanding operating conditions in heavy-duty transport.



Features & Benefits

- **48V technology**: Efficient and safe low-voltage technology for modern conveyor systems.
- **Powerhouse for up to 1500 kg**: Designed for the reliable transport of heavy pallet loads in conveyor technology.
- **Integrated rotary encoders** for operation on decentralized Motor Controllers.
- **Up to 1.1 m/s conveying speed**: Powerful drive for dynamic and continuous material flows.

Technical data

Type		DMG80-BD17 / DMG89-BD17	DMG80-BD30 / DMG89-BD30	DMG80-BD42 / DMG89-BD42	DMG80-BD56 / DMG89-BD56
Rated voltage	VDC	48	48	48	48
Rated Power (S3)	W	370	370	370	370
Rated Power (S1)	W	200	200	200	200
Speed	m/s	0 - 1.0 / 0 - 1.1	0 - 0.56 / 0 - 0.62	0 - 0.40 / 0 - 0.45	0 - 0.30 / 0 - 0.33
Nominal torque (S3)	Nm	16.23	28.64	40.10	53.47
Nominal torque (S1)	Nm	8.12	14.32	20.05	26.73
Maximum torque	Nm	27.12	47.86	67.00	70.00
Rated current	ADC	5	5	5	5
Maximum current	ADC	21.3	21.3	21.3	16.7

	Configuration
Rotary encoder	magnetic encoder
Maximum noise level	< 62 dB(A), application dependent
Temperature sensor *	PTC
Length of connecting cable	500 mm
Tube dimensions	Ø 80 x 3 mm / Ø 89 x 3 mm
Tube material *	Galvanized steel
Ambient temperature *	0 °C ... 40 °C
Protection class *	IP54

* other versions on request

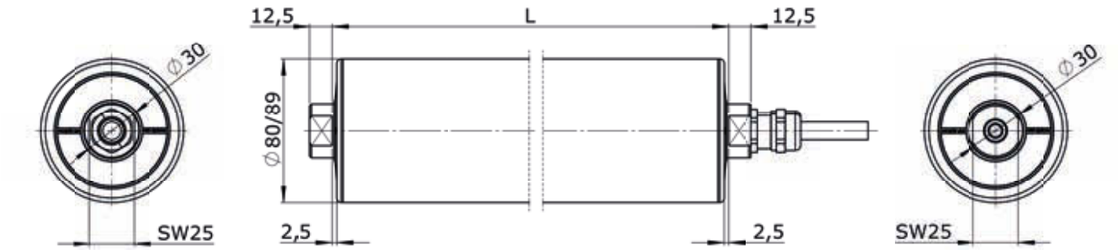
Motor cable connections

Pin	Signal	Presentation
1	Motor phase U	 M16 / 3-pin (3x1)/male
2	Motor phase V	
3	Motor phase W	

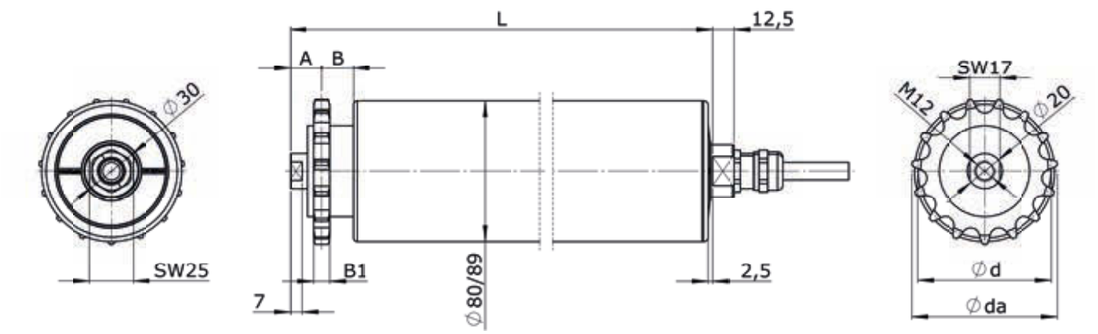
Magnetic encoder connections

Pin	Signal	Presentation
1	GND 5 V	 M16 / 18-pin/male
2	Supply 5 V	
3	I-	
4	I+	
5	B-	
6	B+	
7	A-	
8	A+	
9	PWM-	
10	PWM+	
11	Temp-	
12	Temp+	
13	Brake (GND)	
14	Brake (24 VDC)	
15-18	n.c.	

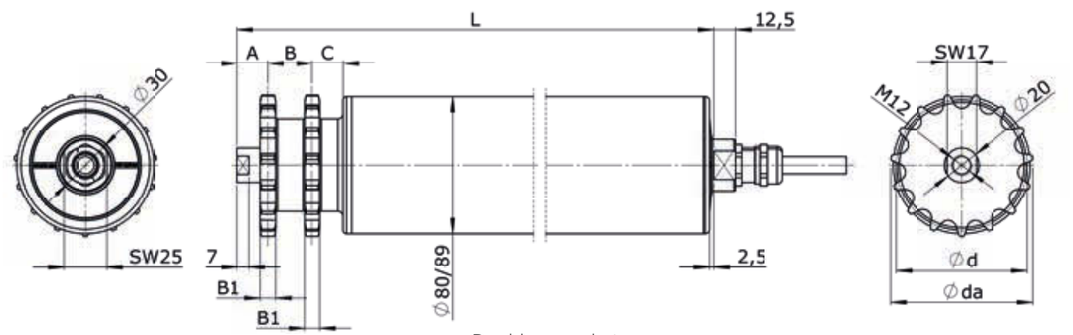
Mechanical execution



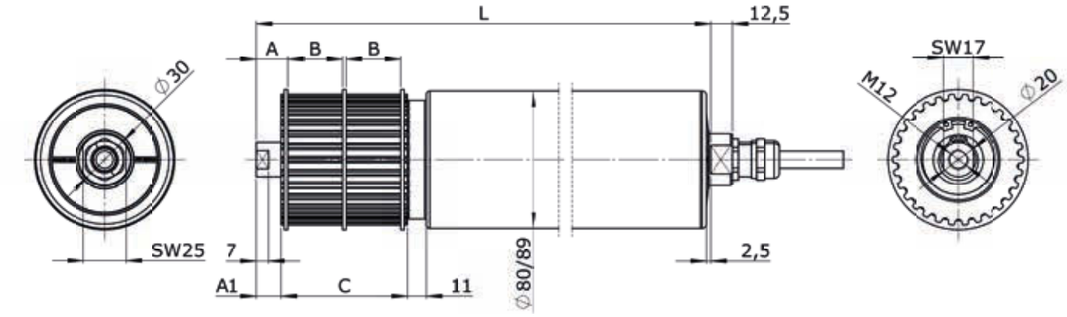
smooth



Single sprocket



Double sprocket



Timing belt pulley

variable	Single sprocket [mm]	Double sprocket [mm]	Timing belt pulley [mm]
A	18		
B	18	26	32
C	-	18	73.7
A1	-	-	14.15
B1	9.1		-
L	clamping length		
Ød	76.36		-
Øda	83		-
Number of teeth	15		-

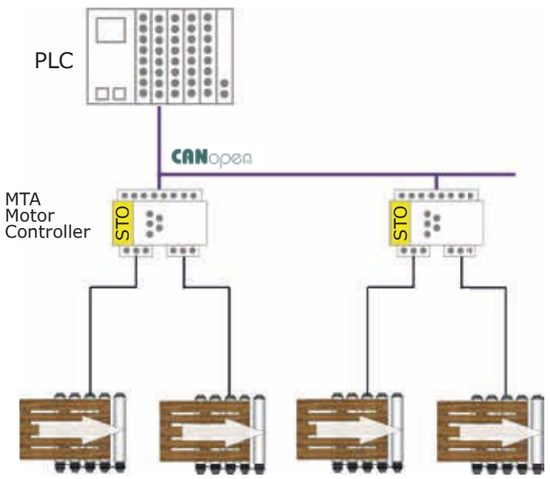
48 VDC DRIVE SYSTEMS FOR MODERN PALLET CONVEYOR TECHNOLOGY

Drum motors and Dual-Axis Motor Controllers with integrated STO function for safe and efficient conveying solutions

Our 48-VDC drum motors were developed specifically for the requirements of modern pallet conveyor systems. In combination with our powerful Dual-Axis Motor Controller, two drum motors can be controlled independently and precisely.

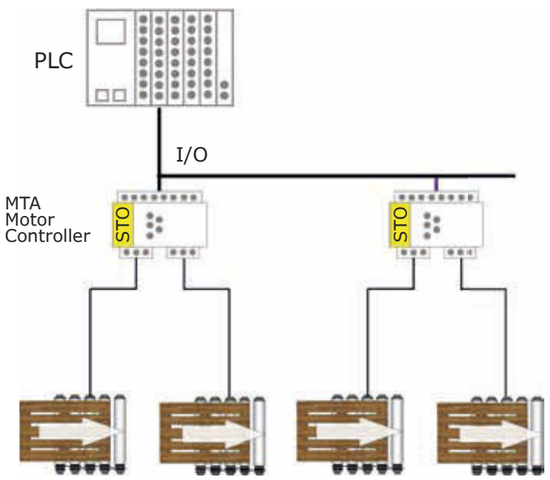
The integrated Safe Torque Off (STO) function enables the torque to be switched off safely and supports the implementation of modern safety concepts in conveyor technology. For maximum flexibility, our drum motors can alternatively be operated with decentralized drive controllers from third-party providers.

We adapt the required encoder interface individually to the respective system architecture. This creates a powerful and future-proof drive solution that can be optimally integrated into existing automation environments.



MTA Drum Motors 48 VDC

Communication and parameterization via CAN – for maximum functionality and seamless integration into modern automation systems.



MTA Drum Motors 48 VDC

Plug & Convey – uncomplicated control via I/O signals for quick commissioning and high availability.

DMG8x-D
for pallet conveyor technology

Drum motor for 400 VAC pallet conveyor technology for easy integration into classic frequency converter systems.

Applications

Powerful drum motor for pallet conveyor technology, designed for the reliable transport of heavy loads.

It impresses with its robust construction, high power density and stable operation even under demanding operating conditions in heavy-duty transport.



Features & Benefits

- **400V technology**: Integration into classic 400 V pallet conveyor technology.
- **Powerhouse for up to 1500 kg**: Designed for the reliable transport of heavy pallet loads in conveyor technology.
- **Integrated rotary encoders** for operation on decentralized drive controllers.
- **Up to 1.1 m/s conveying speed**: Powerful drive for dynamic and continuous material flows.

Technical data

Type		DMG80-DH07 / DMG89-DH07	DMG80-DH50 / DMG89-DH50
Rated voltage	VAC	400	400
Rated power (S3)	W	572	432
Rated power (S1)	W	311	235
Speed	m/s	0 - 2.39 / 0 - 2.66	0 - 0.34 / 0 - 0.38
Nominal torque (S3)	Nm	9.40	51.60
Nominal torque (S1)	Nm	5.10	28.1
Maximum torque	Nm	44.0	125.0
Rated current	Arms	0.7	0.6
Maximum current	Arms	2.4	2.4

	Configuration
Rotary encoder	Resolver or magnetic encoder
Maximum noise level	< 62 dB(A), application dependent
Temperature sensor *	PTC
Length of connecting cable	500 mm
Pipe dimensions	Ø 80 x 3 mm / Ø 89 x 3 mm
Pipe material *	Galvanized steel
Ambient temperature *	0 °C ... 40 °C
Protection class *	IP54

* other versions on request

Motor cable connections

Pin	Signal	Presentation
1	Motor phase U	 M16 / 3-pin (3x1)/male
2	Motor phase V	
3	Motor phase W	

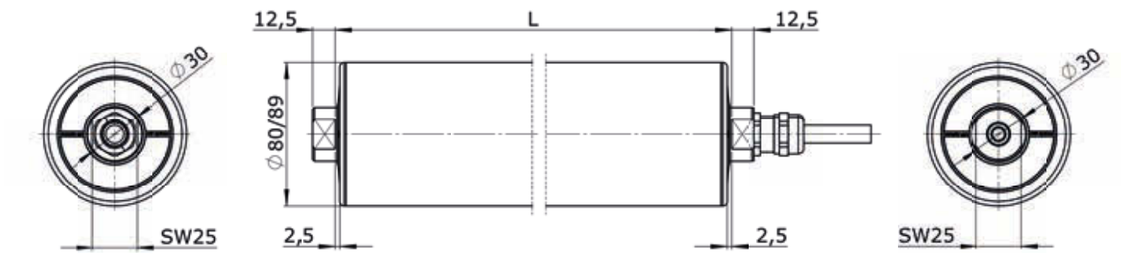
Resolver connections

Pin	Signal	Presentation
1	Reference+	 M16 / 18-pin/male
2	Reference-	
3	Cosine+	
4	Sine+	
5	Cosine-	
6	Sine-	
7-18	n.c.	

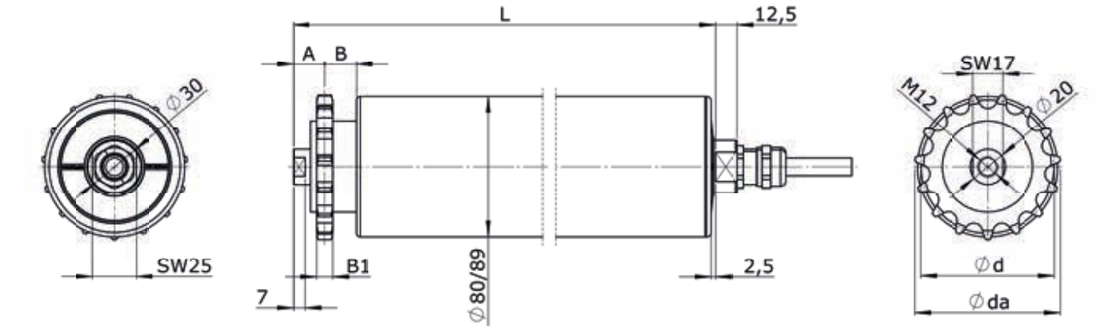
Magnetic encoder connections

Pin	signal	Presentation
1	GND 5 V	 M16 / 18-pin/male
2	Supply 5 V	
3	I-	
4	I+	
5	B-	
6	B+	
7	A-	
8	A+	
9	PWM-	
10	PWM+	
11	Temp-	
12	Temp+	
13	Brake (GND)	
14	Brake (24 VDC)	
15-18	n.c.	

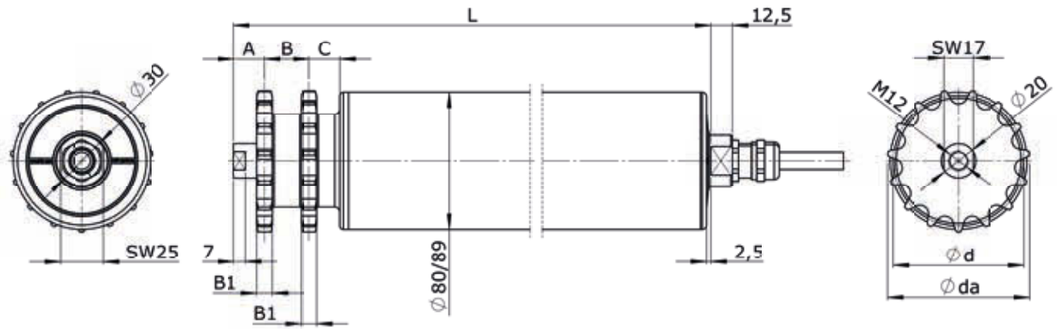
Mechanical execution



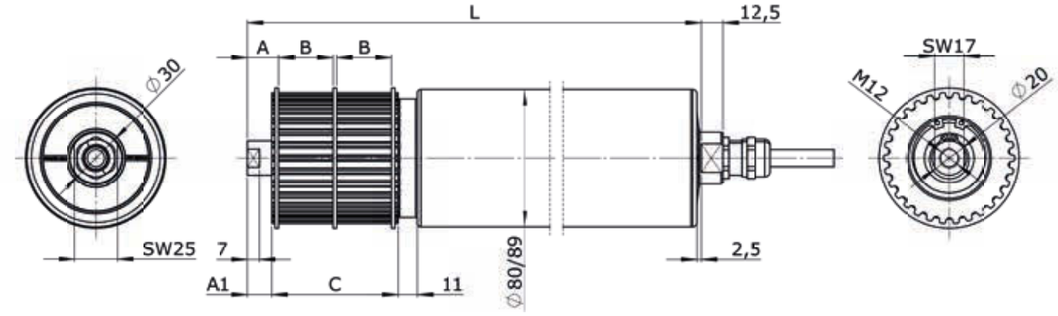
smooth



Single sprocket



Double sprocket



Timing belt pulley

Variable	Single sprocket [mm]	Double sprocket [mm]	Timing belt pulley [mm]
A	18		
B	18	26	32
C	-	18	73.7
A1	-	-	14.15
B1	9.1		-
L	clamping length		
Ød	76.36		-
Øda	83		-
Number of teeth	15		-

SEAMLESS INTEGRATION INTO YOUR 400 VAC DRIVE ARCHITECTURE

400 VAC drum motors with flexible control and individual system connection

Our drum motors are designed for operation on common frequency converters and servo controllers. Depending on the application, we provide the required encoder interface or enable reliable sensorless operation.

This means you benefit from a drive solution that is optimally tailored to your conveyor system – including competent support with system integration.

