

- Low-cost drive solutions
- Simple commissioning
- Coordinated motor/controller combinations

Stepper motors MTRE-ST

Key features and type codes

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Key features

Motors MTRE-ST

→ 3

- System product for positioning technology
- Stepper motor with integrated controller
- With/without brake
- Controlled operation
- Step-accurate positioning through pre-specified number of control pulses



Motor flange MTR-FL

→ 5

- The right motor flange for every motor/axis combination



Motor cable KMTRE-ST

→ 5

- Screened cable
- Can be used at -40 ... +125 °C
- Suitable for use with energy chains
- Protection class IP67



Type codes

		MTRE	–	ST	–	42	–	48S	–	AB
Type										
MTRE	Motor with integrated controller									
Type of motor										
ST	Stepper motor									
Flange dimensions										
42	42 mm									
Nominal voltage/connection type										
48	24 ... 48 V DC									
S	Plug connection									
Additional function										
A	No additional function									
B	Brake									

Stepper motors MTRE-ST

Technical data

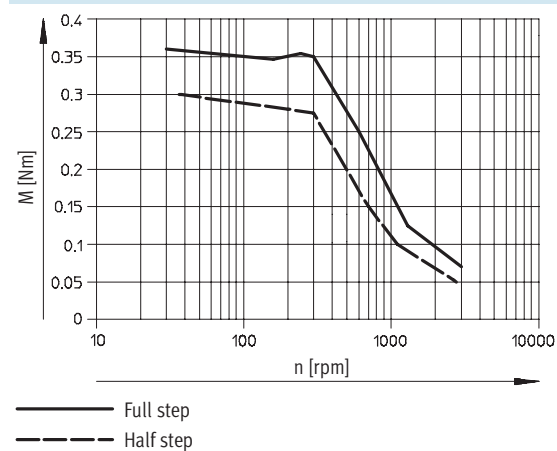
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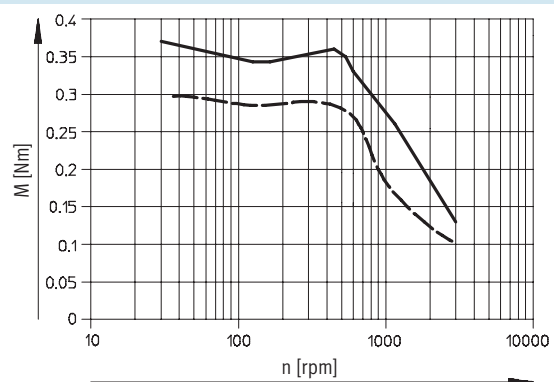
General technical data		
	MTRE-ST-42-48S-AA	MTRE-ST-42-48S-AB
Nominal voltage [V]	48	
Nominal motor current [A]	1.2	
Motor holding torque [Nm]	0.34	
Stepper angle (full step) [°]	1.8 ±5%	
Drive mass moment of inertia [kg cm ²]	0.068	0.07
Brake voltage [V]	–	24
Brake power [W]	–	6
Brake holding torque [Nm]	–	0.4
Radial shaft load [N]	18	18
Axial shaft load [N]	7	7
Product weight [kg]	0.45	0.55

Operating and environmental conditions	
Insulation protection class to VDE 60034	B
Protection class with/without gear unit	IP54
Ambient temperature [°C]	0 ... +50
CE mark (see declaration of conformity)	To EU EMC Directive
Storage temperature [°C]	–25 ... +60
Relative air humidity [%] (non-condensing)	45 ... 80

Torque M as a function of rotational speed n
at nominal voltage 24 V



at nominal voltage 48 V



Stepper motors MTRE-ST

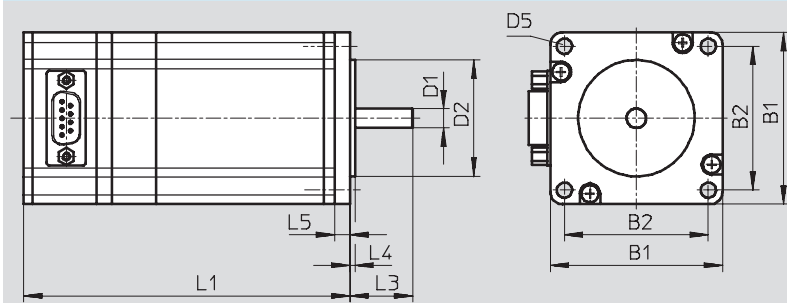
Technical data

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Dimensions

Download CAD data → www.festo.com

Motor

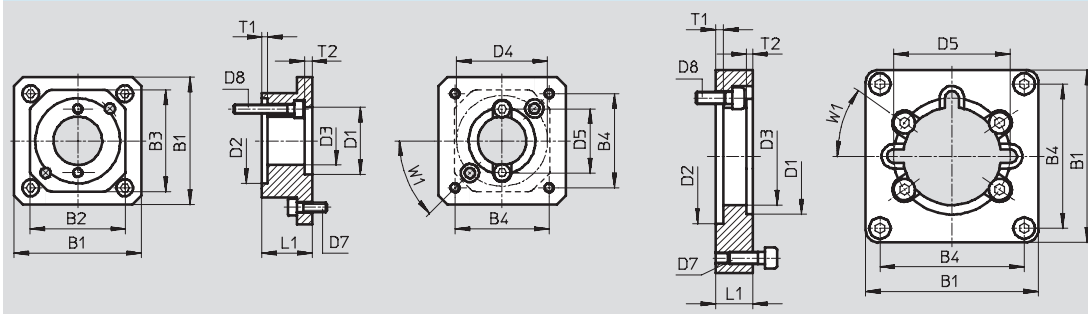


Type	B1	B2	D1 Ø	D2 Ø	D5	L1	L3	L4	L5
MTRE-ST-42-48S-AA	42	31	5	22	M3	111	24	2	-
MTRE-ST-42-48S-AA						136			

Motor flange

EAMF-A-28A-42A

EAMF-A-30A-42A



Type	B1	B2	B3	B4	D1 Ø G7	D2 Ø H7	D3 Ø	D4 Ø	D5 Ø	D7	D8	L1	T1	T2	W1
EAMF-A-28A-42A	42	31.5	33.5	31	22	28	16	30	21	M3	M3	16.5	1.8	2.5	45°
EAMF-A-30A-42A	42	-	-	31	22	30	16	-	26.2	M3	M3	18	4.6	2.5	30°

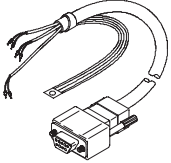
Ordering data


Part No.	Type
530 059	MTRE-ST-42-48S-AA
530 060	MTRE-ST-42-48S-AB

Stepper motors MTRE-ST

Accessories

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Ordering data for cable KMTRE-ST-...					
	Protection class of motor plug	Ambient temperature	Suitable for energy chains	Cable length	Part No. Type
	IP67	-40 ... +125 °C	Yes	5 m	530 074 KMTRE-ST42-5
				10 m	530 075 KMTRE-ST42-10
				X length (max. 25 m)	530 076 KMTRE-ST42-X

Ordering data for motor flange MTR-FL-...		
	Brief description	Part No. Type
	For connection to a toothed belt axis DGE-8-...-ZR	530 080 EAMF-A-28A-42A
	For connection to a spindle axis DGE-18-...-SP	
	For connection to a toothed belt axis DGE-12-...-ZR	530 079 EAMF-A-30A-42A

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