

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

Stepper motors MTRE-ST

Key features and type codes

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

FESTO

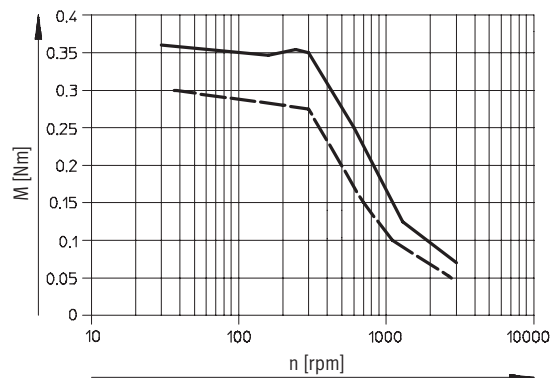


General technical data		MTRE-ST-42-48S-AA	MTRE-ST-42-48S-AB
Nominal voltage	[V]	48	
Nominal motor current	[A]	1.2	
Motor holding torque	[Nm]	0.34	
Stepper angle (full step)	[°]	1.8 ±5%	
Drive mass moment of inertia	[kg cm ²]	0.068	0.07
Brake voltage	[V]	–	24
Brake power	[W]	–	6
Brake holding torque	[Nm]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

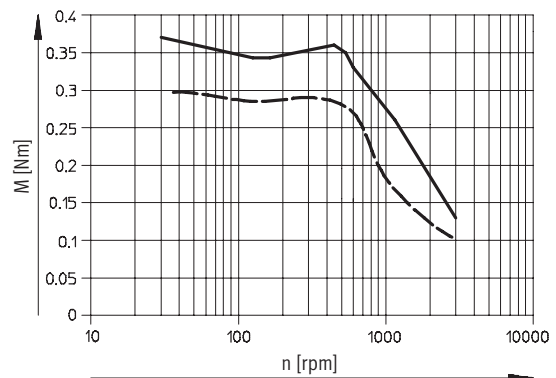
Operating and environmental conditions	
Insulation protection class to VDE 60034	B
Protection class with/without gear unit	IP54
Ambient temperature	[°C] 0 ... +50
CE mark (see declaration of conformity)	To EU EMC Directive
Storage temperature	[°C] –25 ... +60
Relative air humidity (non-condensing)	[%]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

Torque M as a function of rotational speed n

at nominal voltage 24 V



at nominal voltage 48 V



— Full step
 - - - Half step

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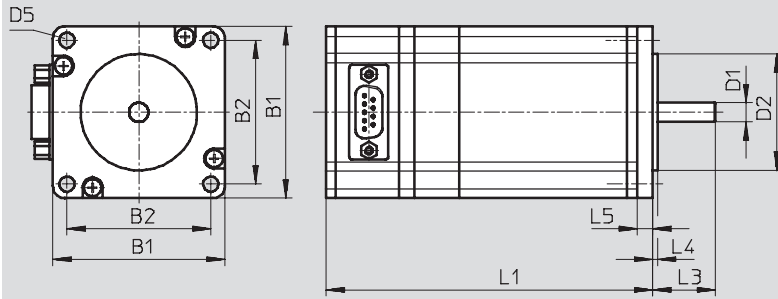
Technical data

FESTO

Dimensions

Download CAD data → www.festo.com

Motor

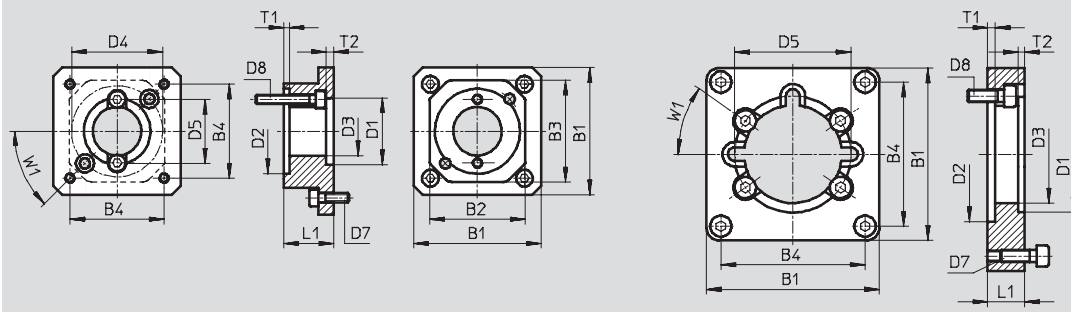


Type	B1	B2	D1 ∅	D2 ∅	D5	L1	L3	L4	L5
MTRE-ST-42-48S-AA	42	31	5	22	M3	111	24	2	-
MTRE-ST-42-48S-AA						136			

Motor flange

EAMF-A-28A-42A

EAMF-A-30A-42A



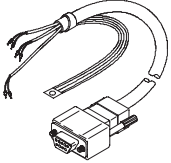
Type	B1	B2	B3	B4	D1 ∅	D2 ∅	D3 ∅	D4 ∅	D5 ∅	D7	D8	L1	T1	T2	W1
EAMF-A-28A-42A	42	31.5	33.5	31	22 G7	28 H7	16	30	21	M3	M3	16.5	1.8	2.5	45°
EAMF-A-30A-42A	42	-	-	31	22	30	16	-	26.2	M3	M3	18	4.6	2.5	30°


Ordering data

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

Stepper motors MTRE-ST

Accessories

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