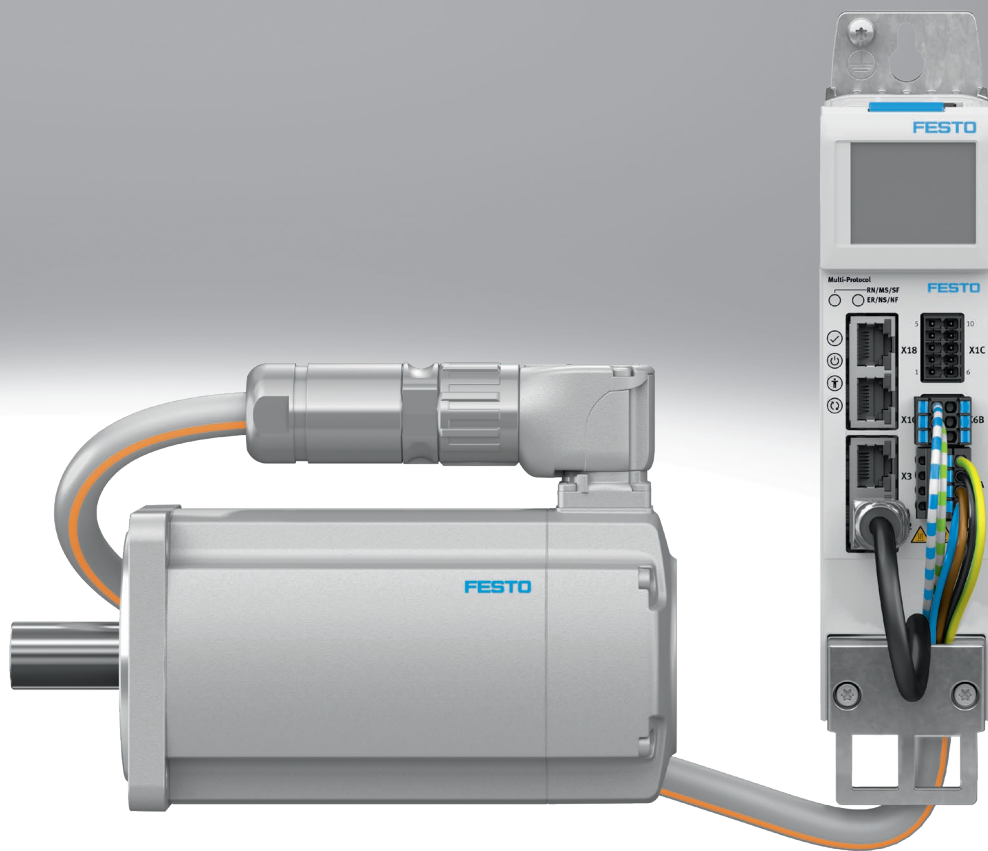



# Servo motors EMMT-AS and motor controllers CMMT-AS Preferred combinations

**FESTO**



## Preferred combinations HS

Order overview										
Servo motor EMMT-AS										
Stall torque [Nm]	Nominal torque [Nm]	Peak torque [Nm]	Nominal rot. speed [1/min]	Maximal rot. speed [1/min]	Nominal power [W]	Nominal current [A]	Peak current [A]	Moment of inertia [kgcm <sup>2</sup> ]	Type	
<b>Flange size 60</b>										
Length S										
0.70	0.64	1.60	3000	12500	200	1.60	5.40	0.169	EMMT-AS-60-S-	-HS
Length M										
1.24	1.10	3.40	3000	11800	350	2.40	11.00	0.286	EMMT-AS-60-M-	-HS
Length L										
1.66	1.40	5.60	3000	11900	440	3.20	18.30	0.403	EMMT-AS-60-L-	-HS
<b>Flange size 80</b>										
Length S										
1.46	1.30	2.80	3000	7440	408	1.76	5.40	0.59	EMMT-AS-80-S-	-HS
Length M										
2.60	2.20	6.40	3000	5650	690	2.20	9.00	1.04	EMMT-AS-80-M-	-HS
Length L										
3.50	2.90	9.90	3000	7100	910	3.50	17.50	1.47	EMMT-AS-80-L-	-HS
Length H										
4.30	3.40	13.50	3000	6500	1070	3.80	21.70	1.91	EMMT-AS-80-H-	-HS
<b>Flange size 100</b>										
Length S										
6.30	5.10	13.70	2700	3970	1450	3.50	13.70	3.15	EMMT-AS-100-S-	-HS
Length M										
8.60	6.30	22.40	2700	3980	1770	4.30	22.10	4.46	EMMT-AS-100-M-	-HS
Length L										
10.80	7.20	30.50	2700	3770	2030	4.70	28.60	5.77	EMMT-AS-100-L-	-HS
<b>Flange size 150</b>										
Length M										
33.00	27.10	64.00	1500	2368	4257	9.50	24.00	38.70	EMMT-AS-150-M-	-HS
Length L										
45.50	29.00	87.00	2100	3495	6377	15.40	49.50	57.60	EMMT-AS-150-L-	-HS
<b>Flange size 190</b>										
Length M										
76.70	59.10	118.30	1200	2163	7427	19.20	41.50	110.00	EMMT-AS-190-M-	-HS
<b>Output shaft</b>										
Smooth shaft										K
Shaft to DIN 6885										
<b>Rotary shaft seal</b>										
None										R
With standard shaft sealing ring										
<b>Electrical connection</b>										
Angled plug, rotatable										R
Angled plug M23, rotatable										R2
Angled plug M40, rotatable										R3
<b>Measuring unit</b>										
Absolute encoder, single turn										S
Absolute encoder, multi-turn										M
Absolute multi-turn safety encoder, EnDat®										MY
<b>Brake</b>										
None										B
With brake										

Order overview						
Motor controller CMMT-AS			Operating voltage 400 V (HS)		Motor cable NEBM (up to 99.9 m)	
Nominal power [W]	Peak power [W]	Nom. current per phase [A]	Peak current per phase [A]	Type	Type	
<b>Flange size 60</b>						
Length S						
800	2400	1.70	5.10	CMMT-AS-C2-11A-P3-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
Length M						
1200	3600	2.50	7.50	CMMT-AS-C3-11A-P3-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
Length L						
2500	7500	5.00	15.00	CMMT-AS-C5-11A-P3-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
<b>Flange size 80</b>						
Length S						
1200	3600	2.50	7.50	CMMT-AS-C3-11A-P3-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
Length M						
1200	3600	2.50	7.50	CMMT-AS-C3-11A-P3-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
Length L						
2500	7500	5.00	15.00	CMMT-AS-C5-11A-P3-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
Length H						
2500	7500	5.00	15.00	CMMT-AS-C5-11A-P3-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
<b>Flange size 100</b>						
Length S						
2500	7500	5.00	15.00	CMMT-AS-C5-11A-P3-MP-S1	NEBM-M23G15-EH- -Q9N-R3LEG14	
Length M						
2500	7500	5.00	15.00	CMMT-AS-C5-11A-P3-MP-S1	NEBM-M23G15-EH- -Q9N-R3LEG14	
Length L						
4000	12000	7.00	21.00	CMMT-AS-C7-11A-P3-MP-S1	NEBM-M23G15-EH- -Q9N-R3LEG14	
<b>Flange size 150</b>						
Length M						
4000	12000	7.00	21.00	CMMT-AS-C7-11A-P3-MP-S1	NEBM-M23G15-EH- -Q9N-R3LEG14	
Length L						
6000	18000	12.00	36.00	CMMT-AS-C12-11A-P3-MP-S1	NEBM-M40G15-EH- -Q11N-R3LEG14	
<b>Flange size 190</b>						
Length M						
6000	18000	12.00	36.00	CMMT-AS-C12-11A-P3-MP-S1	NEBM-M40G15-EH- -Q11N-R3LEG14	
				Preferred combination	Code	Cable length
				Most economic combinations. The servo drive may not completely utilize all the possible motor performance.	2.5	2.5 m
					5	5 m
					7.5	7.5 m
					10	10 m
					15	15 m
					20	20 m
				...	X-length <sup>1)</sup>	
<b>Optional accessories (not included)</b>						
Operating panel CDSB-A1		8070984				
						
<p><b>Note:</b> The cable cross section depends on the selected cable length. Recommended cable cross sections → table page 4</p> <p>For detailed project planning please visit: → <a href="https://www.festo.com/EMS">https://www.festo.com/EMS</a></p>						

1) Choice of cable lengths: 0.5 ... 99.9 m, in increments of 0.1 m.


## Preferred combinations LS

Order overview									
Servo motor EMMT-AS									
Stall torque [Nm]	Nominal torque [Nm]	Peak torque [Nm]	Nominal rot. speed [1/min]	Maximal rot. speed [1/min]	Nominal power [W]	Nominal current [A]	Peak current [A]	Moment of inertia [kgcm <sup>2</sup> ]	Type
<b>Flange size 60</b>									
Length S									
0,70	0,64	1,60	3000	7100	200	1,60	5,40	0,169	EMMT-AS-60-S- -LS
Length M									
1,24	1,10	3,40	3000	6800	350	2,40	11,00	0,286	EMMT-AS-60-M- -LS
Length L									
1,66	1,40	5,60	3000	6800	440	3,20	18,30	0,403	EMMT-AS-60-L- -LS
<b>Flange size 80</b>									
Length S									
1,46	1,30	2,80	3000	6700	408	2,70	8,40	0,59	EMMT-AS-80-S- -LS
Length M									
2,60	2,20	6,40	3000	6150	690	4,10	17,10	1,04	EMMT-AS-80-M- -LS
Length L									
3,50	2,90	9,90	3000	6400	910	5,10	27,30	1,47	EMMT-AS-80-L- -LS
<b>Output shaft</b>									
Smooth shaft									-
Shaft to DIN 6885									K
<b>Rotary shaft seal</b>									
None									-
With standard shaft sealing ring									R
<b>Electrical connection</b>									
Angled plug, rotatable									R
Angled plug M23, rotatable									R2
Angled plug M40, rotatable									R3
<b>Measuring unit</b>									
Absolute encoder, single turn									S
Absolute encoder, multi-turn									M
Absolute multi-turn safety encoder, EnDat®									MY
<b>Brake</b>									
None									
With brake									B

### Recommended cable cross section at an ambient temperature of 40°C as a function of cable length and servo drive CMMT-AS







up to 10 m    up to 20 m    up to 30 m    up to 40 m    up to 50 m    up to 75 m    up to 100 m

EMMT-AS-60-...									
EMMT-AS-80-...									
EMMT-AS-100-...									
EMMT-AS-100-S-HS-...B									
EMMT-AS-100-M-HS-...B									
EMMT-AS-100-L-HS-...B									
EMMT-AS-150-M-HS / L-HT									
EMMT-AS-150-M-HV / L-HS									
EMMT-AS-190-...									
EMMT-AS-150-M-HS-...-B / L-HT-...-B									
EMMT-AS-150-M-HV-...-B / L-HS-...-B									
EMMT-AS-190-...-B									

Order overview						
Motor controller CMMT-AS			Operating voltage 230 V (LS)		Motor cable NEBM (up to 99,9 m)	
Nominal power [W]	Peak power [W]	Nom. current per phase [A]	Peak current per phase [A]	Type	Type	
<b>Flange size 60</b>						
Length S						
350	1000	2,00	6,00	CMMT-AS-C2-3A-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
Length M						
700	2000	4,00	12,00	CMMT-AS-C4-3A-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
Length L						
700	2000	4,00	12,00	CMMT-AS-C4-3A-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
<b>Flange size 80</b>						
Length S						
700	2000	4,00	12,00	CMMT-AS-C4-3A-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
Length M						
700	2000	4,00	12,00	CMMT-AS-C4-3A-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
Length L						
700	2000	4,00	12,00	CMMT-AS-C4-3A-MP-S1	NEBM-M23G15-EH- -Q7N-R3LEG14	
				Preferred combination	Code	Cable length
				Most economic combinations. The servo drive may not completely utilize all the possible motor performance.	2,5	2,5 m
					5	5 m
					7,5	7,5 m
					10	10 m
					15	15 m
					20	20 m
					...	X-length <sup>1)</sup>
<b>Optional accessories (not included)</b>						
Operating panel CDSB-A1			8070984			
						
<p><b>Note:</b> The cable cross section depends on the selected cable length. Recommended cable cross sections → table page 4</p> <p>For detailed project planning please visit: → <a href="https://www.festo.com/EMS">https://www.festo.com/EMS</a></p>						

1) Choice of cable lengths: 0.5 ... 99.9 m, in increments of 0.1 m.

## Legend

	0,75 mm <sup>2</sup>
	1,5 mm <sup>2</sup>
	2,5 mm <sup>2</sup>
	4 mm <sup>2</sup>
	6 mm <sup>2</sup>
	no cable

## Note

- When using other servo drives, the max. cable lengths may be shorter or the cable cross sections may be different.
- For cable lengths > 25 m, prior technical clarification is recommended.
- Motors with a holding brake require a logic power supply of UB > 24 V DC. In this case, the recommended motor cables from Festo with the appropriate cross sections should also be used.
- This recommendation is made on the basis that the servo drive is connected to the supply network via a short connecting cable and network-side voltage drops can therefore be neglected.

## Link to the catalogue:

Servo motors EMMT-AS



Motor controllers CMMT-AS



Motor cables NEBM

