

# Motors for electric actuation Series MTS

## Stepper motors with Nema 17, 23, 24, 34 fixing flange

SERIES MTS MOTORS



- » Low inertia motors
- » Different sizes or power classes available
- » Version with incremental encoder
- » Version with incremental encoder and brake
- » IP65 version available

The new Camozzi motors Series MTS have been designed to be connected in an easy and practical way to the new product range within electrical actuation, being able to drive both electromechanical cylinders and axes.

The new Series MTS electrical Stepper motors are available in the sizes Nema 17, Nema 23, Nema 24 and Nema 34. Each motor version comes with its own driving version that is interfaceable with the QSet configuration software, especially developed by Camozzi in order to simplify the setting up of the electric actuator.

### GENERAL DATA

	Models: MTS-17-18-050-0-0-S-C MTS-17-18-050-0-F-S-C	Models: MTS-23-18-060-0-0-S-C MTS-23-18-060-0-0-E-C MTS-23-18-060-0-F-E-C MTS-23-18-120-0-0-S-CP	Models: MTS-24-18-250-0-0-S-C MTS-24-18-250-0-0-E-C MTS-24-18-250-0-F-E-C MTS-24-18-250-0-0-S-CP	Models: MTS-34-18-701-0-0-S-C
<b>Shaft</b>	single	single	single	single
<b>Leads</b>	4	4	4	5
<b>Holding torque</b>	0,5 Nm	0,6 Nm 0,6 Nm/1.2 Nm (Nema 23 IP65 only)	2,5 Nm	7,1 Nm
<b>Current per phase</b>	1,7 A/Phase	4,5 A/Phase	4,5 A/Phase	7 A/Phase
<b>Resistance</b>	1,8 Ω/Phase	0,48 Ω/Phase	0,65 Ω/Phase	0,49 Ω/Phase
<b>Motor inertia</b>	68 g·cm <sup>2</sup>	135 g·cm <sup>2</sup>	900 g·cm <sup>2</sup>	2750 g·cm <sup>2</sup>
<b>Dielectric strength</b>	500 V AC/min	500 V AC/min	500 V AC/min	500 V AC/min

## CODING EXAMPLE

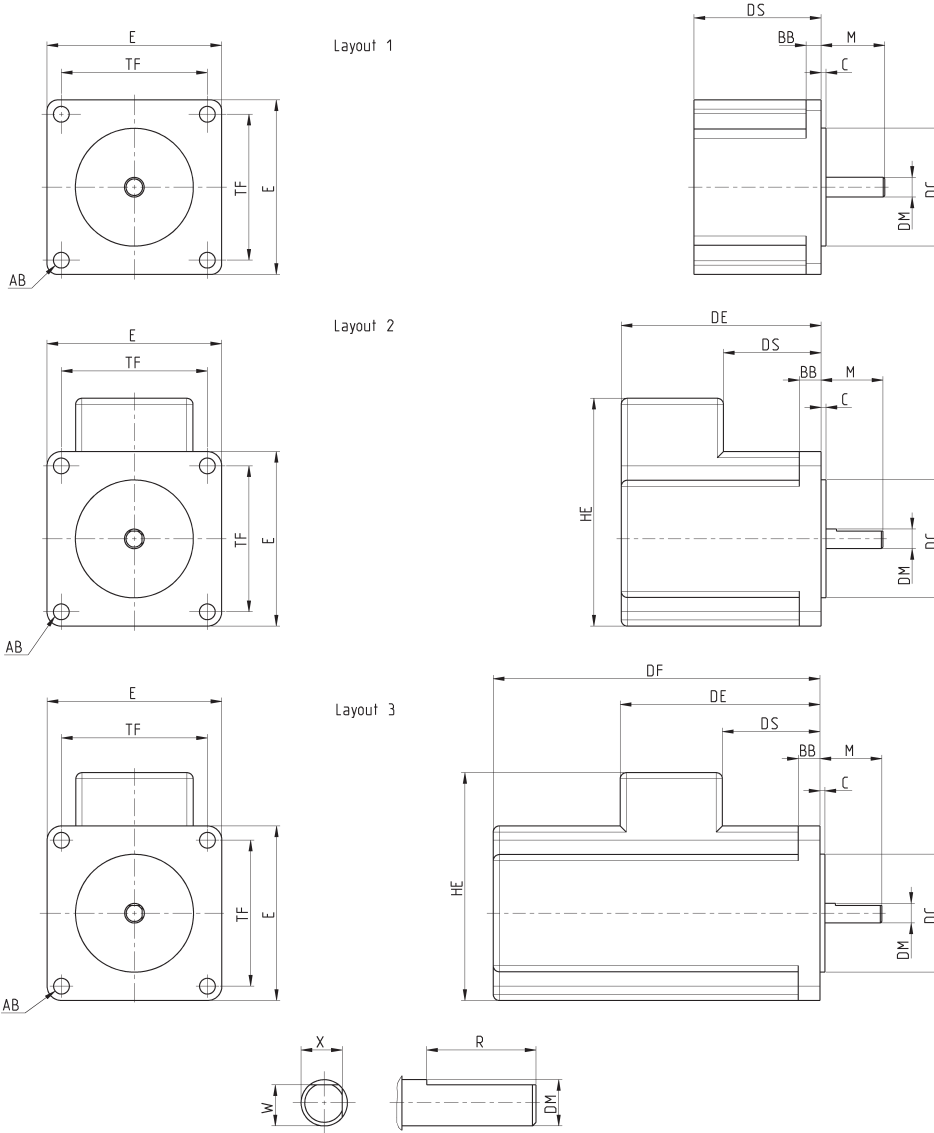
<b>MTS</b>	-	<b>23</b>	-	<b>18</b>	-	<b>060</b>	-	<b>0</b>	-	<b>0</b>	-	<b>S</b>	-	<b>C</b>
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<b>MTS</b>	SERIES
<b>23</b>	MOTOR SIZE FLANGE CONNECTION 17 = Nema 17 23 = Nema 23 24 = Nema 24
<b>18</b>	RESOLUTION IN DEGREES PER REVOLUTION 18 = 1.8° per step
<b>060</b>	TORQUE 050 = 0.5 Nm with Nema 17 only 060 = 0.6 Nm with Nema 23 only 120 = 1.2 Nm with Nema 23 IP65 only 250 = 2.5 Nm with Nema 24 only
<b>0</b>	ELECTRICAL CONNECTION 0 = connector
<b>0</b>	BRAKE 0 = without brake F = with brake
<b>S</b>	ENCODER VARIANTS S = single shaft without encoder E = single shaft with encoder (SIZE Nema 23 and 24 only)
<b>C</b>	MECHANICAL SHAFT VARIANTS C = cylindrical shaft
	VERSION = Standard P = IP65

**Series MTS Stepper motors - dimensions**



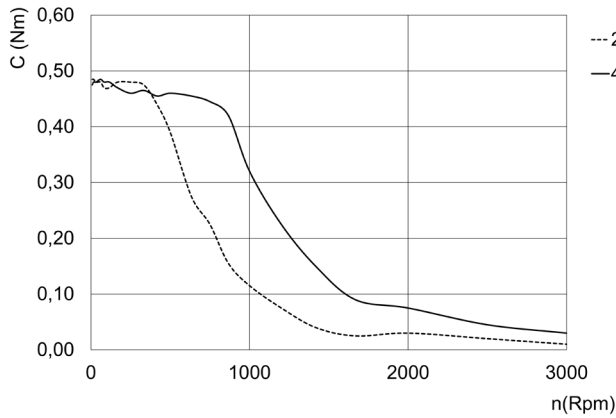
SERIES MTS MOTORS



Mod.	Brake	Encoder	Nema	Layout	DS	DE	DF	HE	E	$\varnothing DM^{(M7)}$	M	$\varnothing DC^{(M20)}$	C	TF	$\varnothing AB$	BB	$L_{cavi}$	X	W	R	J(Kgcm <sup>2</sup> )	Weight(kg)	
MTS-17-18-050-0-0-S-C	-	-	17	1	48	-	-	-	42,3	5	24	22	2	31	M3	4,5	-	300 ± 10	4,5	-	22	0,07	0,35
MTS-17-18-050-0-F-S-C	x	-	17	1	78	-	-	-	42,3	5	24	22	2	31	M3	4,5	-	300 ± 10	-	-	-	0,07	0,46
MTS-23-18-060-0-0-S-C	-	-	23	1	39	-	-	-	56,4	6,35	20,6	38,1	1,6	47,14	5,1	5	300 ± 10	-	-	-	0,135	0,42	
MTS-23-18-120-0-0-S-CP*	-	-	23	1	61,7	-	-	-	56,4	6,35	20,6	38,1	1,6	47,14	5,1	7	2000 ± 20*	5,8	-	15	0,46	0,6	
MTS-23-18-060-0-0-E-C	-	x	23	2	31,5	64,5	-	73,6	56,35	6,35	20,6	38,1	1,6	47,14	5,1	7	200 ± 50	5,8	-	15	0,135	0,52	
MTS-23-18-060-0-F-E-C	x	x	23	3	31,5	64,5	105,5	73,6	56,3	6,35	20,6	38,1	1,6	47,14	5,1	7	200 ± 50	5,8	-	15	0,135	0,62	
MTS-24-18-250-0-0-S-C	-	-	24	1	86,5	-	-	-	60	8	20,6	38,1	1,5	47,14	4,5	7	300 ± 10	-	-	-	0,9	1,4	
MTS-24-18-250-0-0-S-CP*	-	-	24	1	94,5	-	-	-	60	8	24	38,1	1,5	47,14	4,5	8	2000 ± 20*	7,5	-	20	0,9	1,6	
MTS-24-18-250-0-0-E-C	-	x	24	2	78	111	-	77,4	60	8	20,6	38,1	1,5	47,14	4,5	8	200 ± 50	7,5	5	15	0,9	1,5	
MTS-24-18-250-0-F-E-C	x	x	24	3	78	111	152	77,4	60	8	20,6	38,1	1,5	47,14	4,5	8	200 ± 50	7,5	5	15	0,9	1,6	
MTS-34-18-701-0-0-S-C	-	-	34	1	125,5	-	-	-	86	14	37	73,025	2	69,6	6,5	10	300 ± 10	-	-	-	2,75	3,8	
MTS-34-18-701-0-0-S-CP*	-	-	34	1	127,5	-	-	-	86	14	37	73,025	2	69,6	6,5	10	2000 ± 20*	13	13	25	2,75	3,8	

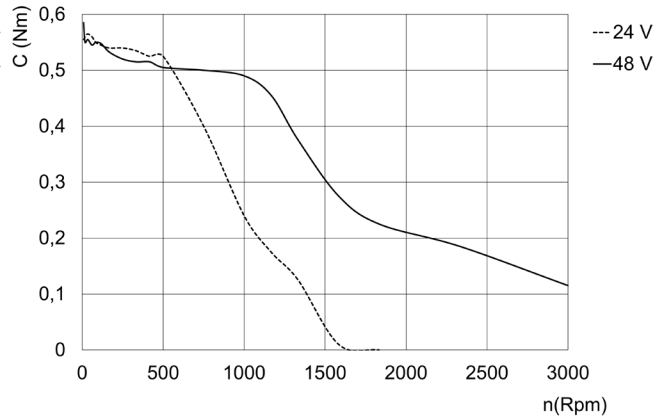
\*wire without connector, a cabling kit will be supplied

**Torque-speed curves**



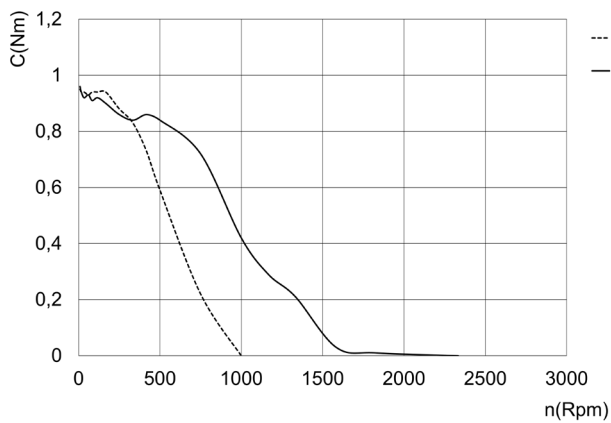
Nema 17 motors  
 Mod. MTS-17-18-050-0-0-S-C  
 Mod. MTS-17-18-050-0-F-S-C

C = torque [Nm]  
 n = revolutions per minute [Rpm]



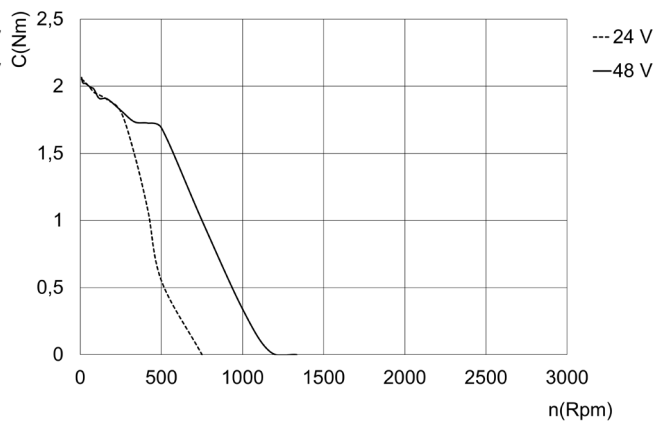
Nema 23 motors IP65  
 Mod. MTS-23-18-060-0-0-S-C  
 Mod. MTS-23-18-060-0-0-E-C  
 Mod. MTS-23-18-060-0-F-E-C

C = torque [Nm]  
 n = revolutions per minute [Rpm]



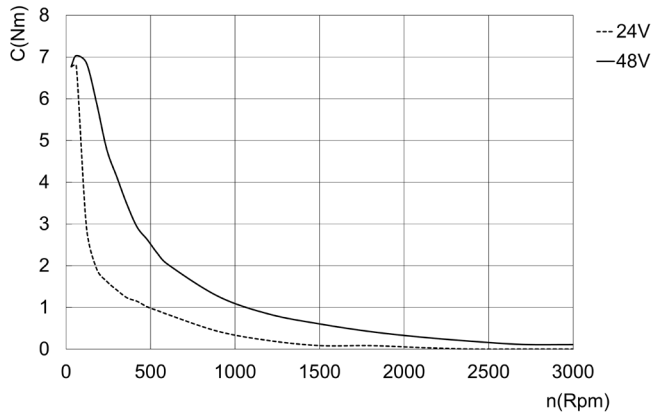
Nema 23 motors IP65  
 Mod. MTS-23-18-120-0-0-S-CP

C = torque [Nm]  
 n = revolutions per minute [Rpm]



Nema 24 motors IP65  
 Mod. MTS-24-18-250-0-0-S-C  
 Mod. MTS-24-18-250-0-0-E-C  
 Mod. MTS-24-18-250-0-F-E-C  
 Mod. MTS-24-18-250-0-0-S-CP

C = torque [Nm]  
 n = revolutions per minute [Rpm]



Nema 34 motors  
Mod. MTS-34-18-701-0-0-S-C

C = torque [Nm]  
n = revolutions per minute [Rpm]