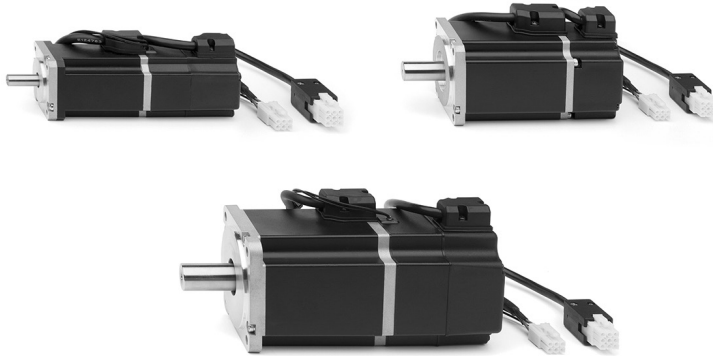


# Series MTB motors for electric actuation

Brushless motors in power classes 100, 400, 750, 1000 W

SERIES MTB MOTORS



- » Low inertia motors
- » Available with or without brake
- » With incremental 13 bit encoder
- » Different sizes or power classes available
- » IP65 version available

The Camozzi motors Series MTB 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 Series MTB of synchronous AC Brushless motors is available with a power of 100, 400, 750, 1000 W.

The standard motors are equipped with a 13 bit encoder with 10,000 increments per cycle and are offered with or without a motor brake. Due to the high dynamics of these motors, it is possible to guarantee a constant torque at any speed.

Due to the low mass inertia, they are particularly suitable for high work dynamics, like sudden changes in direction or high moving frequencies.

## GENERAL DATA

<b>Power</b>	100 W (Mod. MTB-010-...) 400 W (Mod. MTB-040-...) 750 W (Mod. MTB-075-...) 1000 W (Mod. MTB-100-...)
<b>Type of motor</b>	permanently excited synchronous servo motor
<b>Magnet</b>	Neodymium, iron and boron (NdFeB)
<b>Housing</b>	Aluminium
<b>Colour</b>	black
<b>Protection class: motor on the shaft connector</b>	IP65 IP40 IP20
<b>Insulation class</b>	class A
<b>Shaft end</b>	no machining
<b>Nominal torque</b>	0.32 Nm (100 W) - 1.27 Nm (400 W) - 2.4 Nm (750 W) - 4.77 Nm (1000 W)
<b>Peak torque</b>	3 × nominal torque
<b>Braking torque (only for motors with brake)</b>	0.32 Nm (100 W) - 1.27 Nm (400 W) - 2.4 Nm (750 W) - 4.77 Nm (1000 W)
<b>Service life</b>	> 20.000 h (at nominal load)
<b>Motor connection</b>	cable (300 mm) available out of the motor
<b>Encoder connection</b>	cable (300 mm) available out of the encoder (motors with 1 KW power are equipped with an outgoing motor connector)
<b>Cooling</b>	with an integrated radiator
<b>Thermal monitoring</b>	not available
<b>Encoder</b>	incremental 13-bit TTL encoder, 10 000 pulses/revolution
<b>Ambient temperature</b>	0°C ÷ 40°C
<b>Storage temperature</b>	-15°C ÷ 70°C
<b>Air humidity</b>	up to 80% of relative air humidity
<b>Max. installation height</b>	at below 1000 metres above sea level

## CODING EXAMPLE

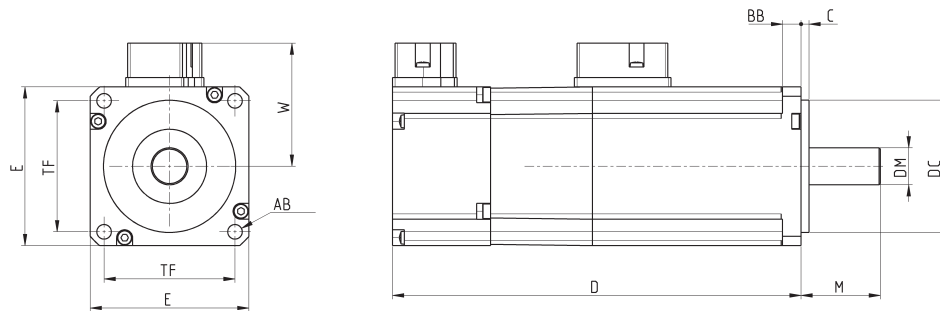
<b>MTB</b>	<b>-</b>	<b>010</b>	<b>-</b>	<b>2</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>E</b>
------------	----------	------------	----------	----------	----------	----------	----------	----------

<b>MTB</b>	SERIES
<b>010</b>	POWER: 010 = 100 W 040 = 400 W 075 = 750 W 100 = 1000 W
<b>2</b>	SUPPLY: 2 = 220 V DC
<b>0</b>	BRAKE: 0 = without brake F = with brake
<b>E</b>	ENCODER: E = incremental 13 bit
	VERSION: = Standard P = IP65

## Series MTB Brushless motors - dimensions

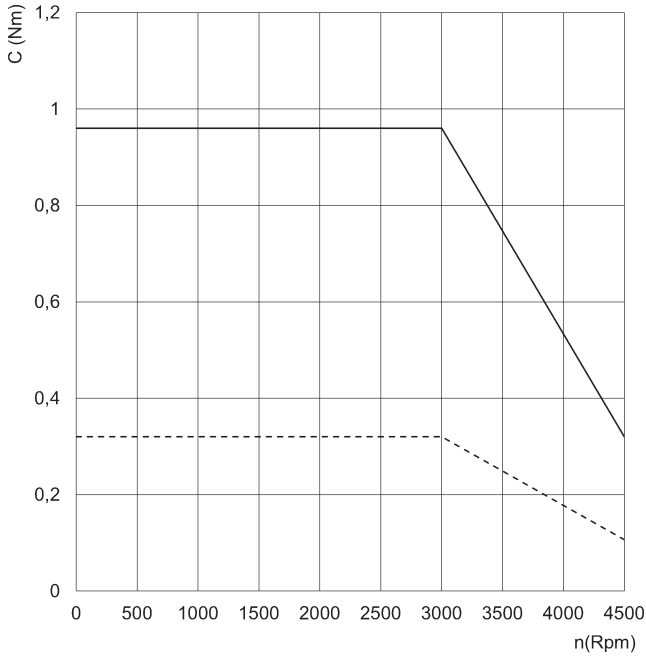


Supplied with:  
1 motor  
4 screws



Mod.	Power	D	E	W	$\varnothing_{DM}^{(h6)}$	M	$\varnothing_{DC}$	C	TF	$\varnothing_{AB}$	BB	Weight (Kg)
MTB-010-2-0-E	100 W	110.5	42	32	8	25	30 f7	2.5	31.8	3.4	12	0.63
MTB-010-2-0-EP	100 W	110.5	42	32	8	25	30 f7	2.5	31.8	3.4	12	0.75
MTB-010-2-F-E	100 W	139	42	32	8	25	30 f7	2.5	31.8	3.4	12	0.76
MTB-010-2-F-EP	100 W	139	42	32	8	25	30 f7	2.5	31.8	3.4	12	0.9
MTB-040-2-0-E	400 W	121.5	60	46.5	14	30	50 h7	3	49.5	5.5	7.5	1.31
MTB-040-2-0-EP	400 W	121.5	60	46.5	14	30	50 h7	3	49.5	5.5	7.5	1.4
MTB-040-2-F-E	400 W	159	60	46.5	14	30	50 h7	3	49.5	5.5	7.5	1.86
MTB-040-2-F-EP	400 W	159	60	46.5	14	30	50 h7	3	49.5	5.5	7.5	1.95
MTB-075-2-0-E	750 W	140	80	56.5	19	40	70 f6	3	63.6	6.6	9	2.66
MTB-075-2-0-EP	750 W	140	80	56.5	19	40	70 f6	3	63.6	6.6	9	2.75
MTB-075-2-F-E	750 W	176	80	56.5	19	40	70 f6	3	63.6	6.6	9	3.32
MTB-075-2-F-EP	750 W	176	80	56.5	19	40	70 f6	3	63.6	6.6	9	3.45
MTB-100-2-0-EP	1000 W	141	130	113	24	55	110	3	102.5	9	12	5.8
MTB-100-2-F-EP	1000 W	175	130	113	24	55	110	3	102.5	9	12	7.7

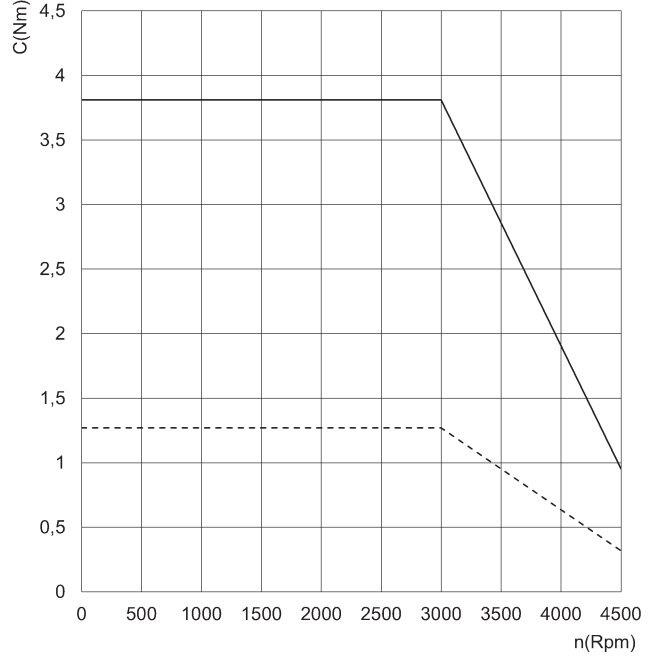
**Torque-speed curves**



**MTB-010..**

C = torque  
n = number of revolutions per minute

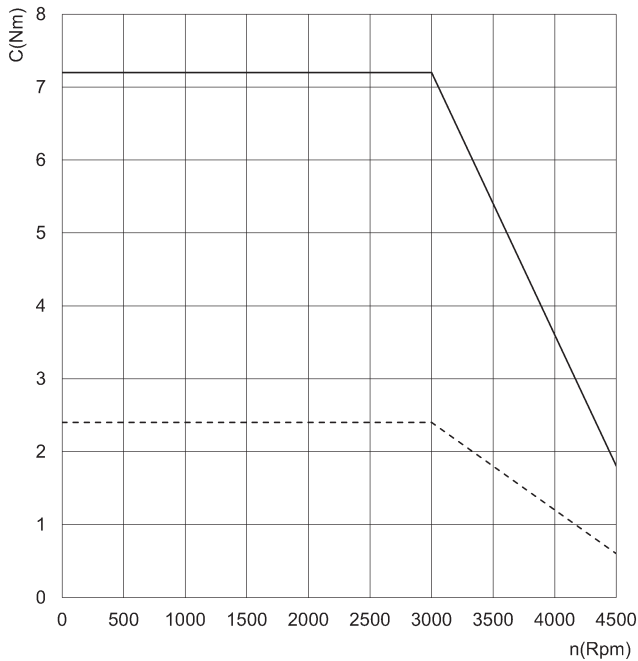
The continuous line represents the peak torque of the motor.  
The dashed line represents the nominal torque of the motor.



**MTB-040..**

C = torque  
n = number of revolutions per minute

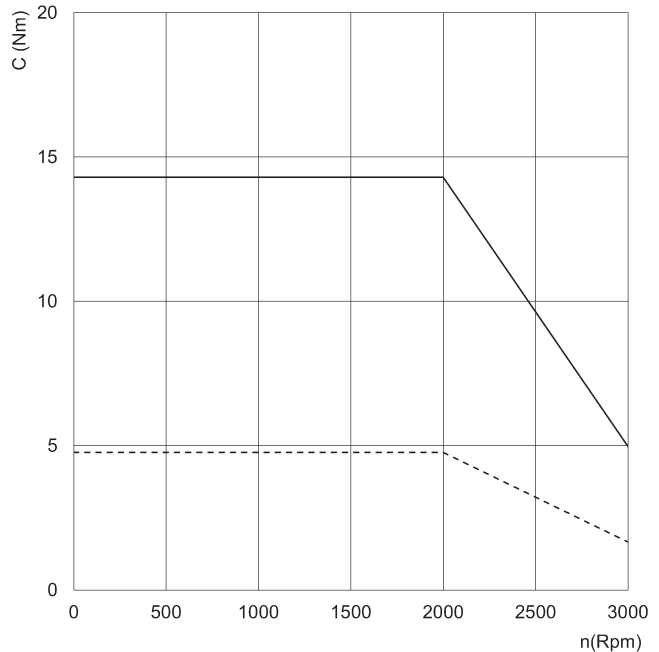
The continuous line represents the peak torque of the motor.  
The dashed line represents the nominal torque of the motor.



**MTB-075..**

C = torque  
n = number of revolutions per minute

The continuous line represents the peak torque of the motor.  
The dashed line represents the nominal torque of the motor.



**MTB-100..**

C = torque  
n = number of revolutions per minute

The continuous line represents the peak torque of the motor.  
The dashed line represents the nominal torque of the motor.