

CM-2-500

Permanent-magnet machine for direct drive of applications with highest speed demands.

- Special mechanical rotor construction for highest stresses
- Stator winding and core configuration for optimal efficiency despite highest rotational speeds
- Low heat generation in stator and rotor
- High-speed ball bearings with permanent lubrication
- Ideal in combination with converter CC-75-500
- Customized adaptations available

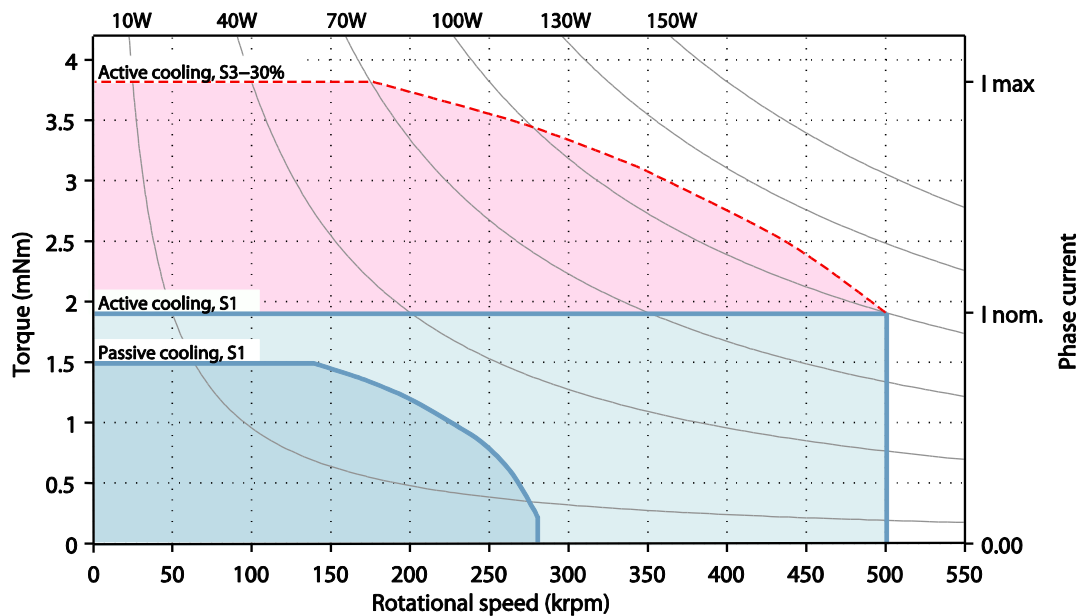


Specifications motor

Pole-pair number	1
Rated speed	500,000 rpm
Rated power	100 W
Rated torque	2 mNm
Weight	36 g
Temperature measurement	Thermocouple Type K
Axial moment of inertia (rotor)	$1.95 \cdot 10^{-8} \text{ kg m}^2$

Operating range

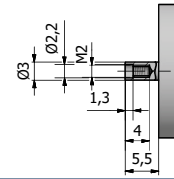
Mechanical torque/phase current versus rotational speed an



All rights reserved. All information in this document is based on Celeroton's best knowledge and is not to be considered as a warranty or quality specification. The information given is designed as a guidance and customers are requested to check the suitability and usability of the product in their specific application with consulting Celeroton. The information herein is subject to change without notification.

Order codes: CM-2-500.Rxxx.Bxx.Fxx.Cxx

Rotor type Rxxx	
RM00 (standard)	Without boring/thread
RM02	With M2 thread (right hand)
RM10	Extended shaft stub (10.7 mm)
RC99	Custom specific boring/thread



Bearing type Bxx	
B00 (standard)	Standard ball bearing
B01	Vacuum ball bearing
B99	Custom specific ball bearing

Front flange Fxx	
F00 (standard)	Standard flange, rotor dismountable only without front load attached
F01	Half-shell flanges, rotor dismountable with front load attached
F99	Custom specific front flange

Cooling flange Cxx (air cooling)	
C00 (standard)	No cooling flange
C01	Cooling flange with radial inlet
C02	Cooling flange with axial inlet
C99	Custom specific cooling flange

Cooling flange	
<p style="text-align: center;">Cooling flange C01</p>	<p style="text-align: center;">Cooling flange C02</p>

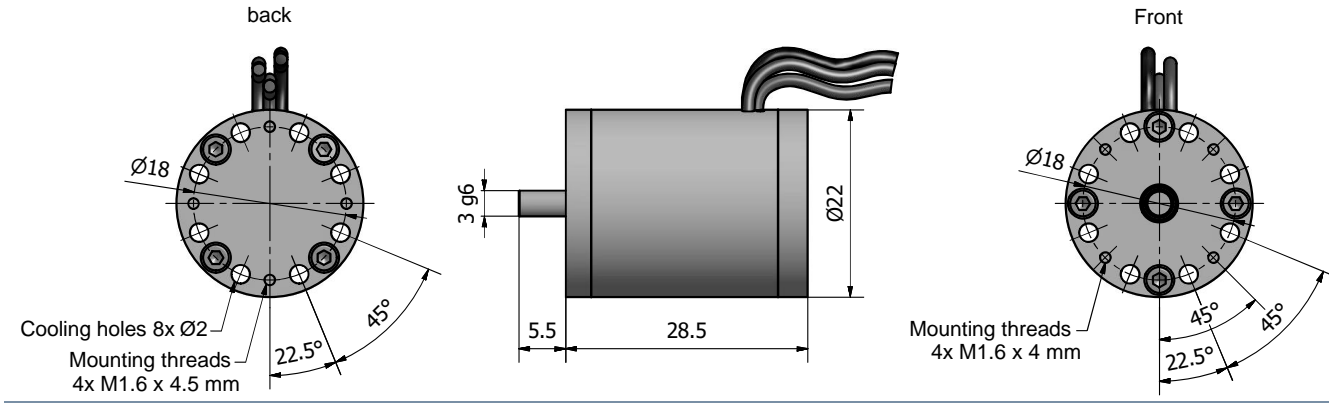
Optional services for customized adaption	
<ul style="list-style-type: none"> Thermal design 	<ul style="list-style-type: none"> Rotor dynamic design

All rights reserved. All information in this document is based on Celeroton's best knowledge and is not to be considered as a warranty or quality specification. The information given is designed as a guidance and customers are requested to check the suitability and usability of the product in their specific application with consulting Celeroton. The information herein is subject to change without notification.

Ordering information	Article number
CM-2-500.RM00.B00.F00.C00	4020001
CM-2-500.RM02.B00.F00.C00	4020002
CM-2-500.RM10.B00.F00.C00	4020004
CM-2-500.RM00.B01.F00.C00	4020005
CM-2-500.RM02.B01.F00.C00	4020006
CM-2-500.RM10.B01.F00.C00	4020008
CM-2-500.RM00.B00.F01.C00	4020009
CM-2-500.RM02.B00.F01.C00	4020010
CM-2-500.RM10.B00.F01.C00	4020012
CM-2-500.RM00.B01.F01.C00	4020013
CM-2-500.RM02.B01.F01.C00	4020014
CM-2-500.RM10.B01.F01.C00	4020016
CM-2-500.RM00.B00.F00.C01	4020017
CM-2-500.RM02.B00.F00.C01	4020018
CM-2-500.RM10.B00.F00.C01	4020020
CM-2-500.RM00.B01.F00.C01	4020021
CM-2-500.RM02.B01.F00.C01	4020022
CM-2-500.RM10.B01.F00.C01	4020024
CM-2-500.RM00.B00.F01.C01	4020025
CM-2-500.RM02.B00.F01.C01	4020026
CM-2-500.RM10.B00.F01.C01	4020028
CM-2-500.RM00.B01.F01.C01	4020029
CM-2-500.RM02.B01.F01.C01	4020030
CM-2-500.RM10.B01.F01.C01	4020032
CM-2-500.RM00.B00.F00.C02	4020033
CM-2-500.RM02.B00.F00.C02	4020034
CM-2-500.RM10.B00.F00.C02	4020036
CM-2-500.RM00.B01.F00.C02	4020037
CM-2-500.RM02.B01.F00.C02	4020038
CM-2-500.RM10.B01.F00.C02	4020040
CM-2-500.RM00.B00.F01.C02	4020041
CM-2-500.RM02.B00.F01.C02	4020042
CM-2-500.RM10.B00.F01.C02	4020044
CM-2-500.RM00.B01.F01.C02	4020045
CM-2-500.RM02.B01.F01.C02	4020046
CM-2-500.RM10.B01.F01.C02	4020048

All rights reserved. All information in this document is based on Celeroton's best knowledge and is not to be considered as a warranty or quality specification. The information given is designed as a guidance and customers are requested to check the suitability and usability of the product in their specific application with consulting Celeroton. The information herein is subject to change without notification.

Drawing in mm



i Depending on custom specific operation conditions and the corresponding Celeroton converter the operating range shown in this document may be different or may have additional limitations. For technical details and further information, please refer to the user manual or contact Celeroton directly.