

BCI motor

BCI 42.25



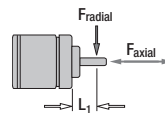
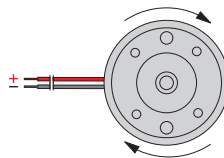
- Direct current motor with permanent magnets made of ceramic bound ferrite.
- Mechanical commutation through 8-piece collector.
- Closed steel motor housing with die-cast zinc bearing flanges.
- Operation in both directions of rotation.
- Service life 3.000 hrs for continuous operation (S1).
- Insulation class B.
- Protection class IP 40, optionally higher.

Nominal data

Type		BCI 42.25 A00	BCI 42.25 B00	BCI 42.25 C00	BCI 42.25 E00
Nominal voltage (U_{BN})	V DC	12	24	40	60
Nominal speed (n_N)	rpm	3 300	3 300	3 300	3 300
Nominal torque (M_N)	mNm	38	38	38	38
Nominal current (I_{BN})	A	1,90	0,96	0,55	0,36
Nominal output power (P_N)	W	13	13	13	13
Nominal efficiency approx. (η_N)	%	60	60	60	60
Speed at no-load operation (n_l)	rpm	4 000	3 900	4 000	4 000
No-load current (I_{Bl})	A	0,30	0,19	0,11	0,07
Starting torque (M_A)	mNm	200	190	240	240
Starting current (I_A)	A	7,6	4,0	2,6	1,7
Induced voltage (U_{imax})	V/1000 rpm	2,74	5,5	9,15	13,7
Terminal resistance (R_V)	Ohm	1,54	6,05	15,2	35
Terminal inductance (L_V)	mH	2,2	8,9	25	56
Rotor moment of inertia (J_R)	kgm ² x 10 ⁻⁶	7,4	7,4	7,4	7,4
Thermal resistance (R_{th})	K/W	4,8	4,8	4,8	4,8
Protection class		IP 40	IP 40	IP 40	IP 40
Perm. amb. temp. range (T_U)	°C	0 to +40	0 to +40	0 to +40	0 to +40
Motor mass (m)	kg	0,4	0,4	0,4	0,4
Order No.		931 4225 002	931 4225 001	931 4225 003	931 4225 004

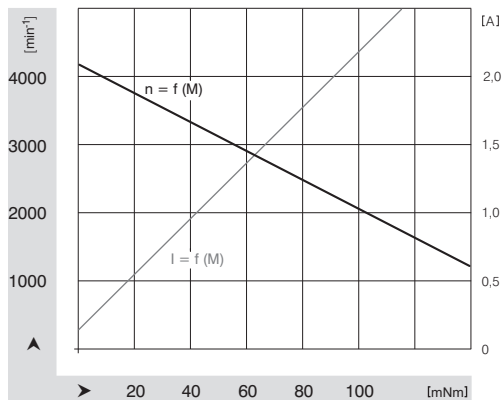
Electrical connection

Direction of rotation, clockwise as seen on shaft
 Cable length 300 ± 30 from motor
 Cable length 7 ± 2 stripped and tin-coated



F_{axial} 30 N
 F_{radial} 60 N
 L_1 20 mm
 Permissible shaft load at nominal speed and life expectancy L_{10} at 3 000 h (at T_U max. 40°C).

Motor curves for 24 V



Blind holes for self threading screws according to DIN 7500

