

## Data sheet for SIMOTICS S-1FK2

Article No. : 1FK2103-4AG10-0MA0

Client order no. :  
Order no. :  
Offer no. :  
Remarks :

Item no. :  
Consignment no. :  
Project :



Figure similar

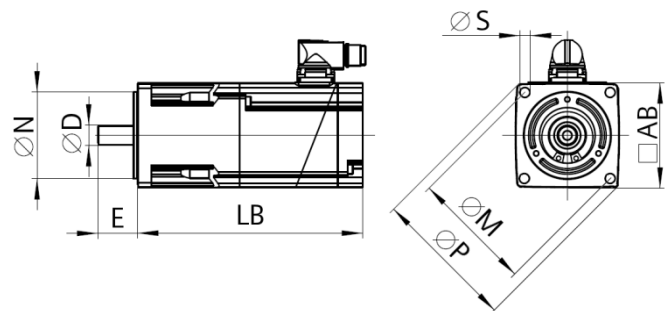
| Basic motor data        |                                                           |
|-------------------------|-----------------------------------------------------------|
| Motor type              | Permanent-magnet synchronous motor, Natural cooling, IP64 |
| Motor type              | High Dynamic                                              |
| Static torque           | 1.27 Nm                                                   |
| Static current          | 2.4 A                                                     |
| Maximum torque          | 4.05 Nm                                                   |
| Maximum current         | 8.7 A                                                     |
| Maximum speed           | 7,300 rpm                                                 |
| Rotor moment of inertia | 0.1580 kgcm <sup>2</sup>                                  |
| Weight                  | 2.0 kg                                                    |

| Rated data              |           |
|-------------------------|-----------|
| SINAMICS S210, 1AC 230V |           |
| Rated speed             | 3,000 rpm |
| Rated torque            | 1.27 Nm   |
| Rated current           | 2.4 A     |
| Rated power             | 0.40 kW   |

| Encoder system |                                                             |
|----------------|-------------------------------------------------------------|
| Encoder system | Encoder AM22DQC: Absolute encoder 22 bit + 12 bit multiturn |

| Motor connection |              |
|------------------|--------------|
| Connection type  | OCC for S210 |
| Connector size   | M12          |

| Mechanical data               |                                            |
|-------------------------------|--------------------------------------------|
| Design acc. to Code I         | IM B5 (IM V1, IM V3)                       |
| Vibration severity grade      | Grade A                                    |
| Shaft height                  | 30                                         |
| Flange size (AB)              | 60 mm                                      |
| Centering ring (N)            | 50 mm                                      |
| Hole circle (M)               | 70 mm                                      |
| Screw-on hole (S)             | 5.5 mm                                     |
| Overall length (LB)           | 155 mm                                     |
| Diameter of shaft (D)         | 14 mm                                      |
| Length of shaft (E)           | 30 mm                                      |
| Length of flange diagonal (P) | 81 mm                                      |
| Shaft end                     | Plain shaft                                |
| Color of the housing          | Standard (Anthracite, similar to RAL 7016) |



| Holding brake                                  |          |
|------------------------------------------------|----------|
| Holding torque                                 | 1.30 Nm  |
| Average dynamic torque                         | 1.30 Nm  |
| Opening time                                   | 40 ms    |
| Closing time                                   | 30 ms    |
| Maximum single switching energy <sup>1)</sup>  | 62 J     |
| Service life, operating energy                 | 17,500 J |
| Holding current <sup>2)</sup>                  | 0.15 A   |
| Break-induced current for 500 ms <sup>2)</sup> | 0.8 A    |

<sup>1)</sup>Up to three consecutive emergency stops and up to 25% of all emergency stops as a Wmax high energy stop possible.

<sup>2)</sup>Typical value for 20°C ambient temperature. At -15°C the break-induced currents can be increased by up to 30%.