

Data sheet for SIMOTICS S-1FK2

Article No. : 1FK2204-5AK10-2MA0

Client order no. :  
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Figure similar

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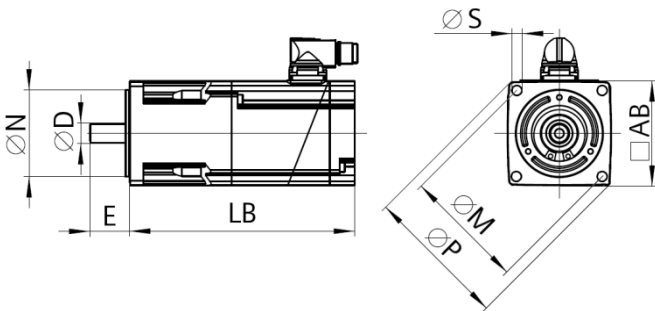
| Basic motor data        |                                                           |
|-------------------------|-----------------------------------------------------------|
| Motor type              | Permanent-magnet synchronous motor, Natural cooling, IP64 |
| Motor type              | Compact                                                   |
| Static torque           | 2.40 Nm                                                   |
| Static current          | 4.4 A                                                     |
| Maximum torque          | 7.10 Nm                                                   |
| Maximum current         | 14.2 A                                                    |
| Maximum speed           | 8,000 rpm                                                 |
| Rotor moment of inertia | 1.3100 kgcm <sup>2</sup>                                  |
| Weight                  | 3.8 kg                                                    |

| Rated data              |           |
|-------------------------|-----------|
| SINAMICS S210, 3AC 400V |           |
| Rated speed             | 6,000 rpm |
| Rated torque            | 0.90 Nm   |
| Rated current           | 2.0 A     |
| Rated power             | 0.57 kW   |

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

| Motor connection |              |
|------------------|--------------|
| Connection type  | OCC for S210 |
| Connector size   | M17          |

| Mechanical data               |                                            |
|-------------------------------|--------------------------------------------|
| Design acc. to Code I         | IM B5 (IM V1, IM V3)                       |
| Vibration severity grade      | Grade A                                    |
| Shaft height                  | 40                                         |
| Flange size (AB)              | 80 mm                                      |
| Centering ring (N)            | 70 mm                                      |
| Hole circle (M)               | 90 mm                                      |
| Screw-on hole (S)             | 6.5 mm                                     |
| Overall length (LB)           | 170 mm                                     |
| Diameter of shaft (D)         | 14 mm                                      |
| Length of shaft (E)           | 30 mm                                      |
| Length of flange diagonal (P) | 105 mm                                     |
| Shaft end                     | Plain shaft                                |
| Color of the housing          | Standard (Anthracite, similar to RAL 7016) |



| Holding brake                                  |           |
|------------------------------------------------|-----------|
| Holding torque                                 | 3.30 Nm   |
| Average dynamic torque                         | 3.30 Nm   |
| Opening time                                   | 50 ms     |
| Closing time                                   | 40 ms     |
| Maximum single switching energy <sup>1)</sup>  | 270 J     |
| Service life, operating energy                 | 120,000 J |
| Holding current <sup>2)</sup>                  | 0.2 A     |
| Break-induced current for 500 ms <sup>2)</sup> | 1.2 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%.