## **SIEMENS**

## **Data sheet for SIMOTICS S-1FK2**

Article No.: 1FK2104-4AF10-2MB0

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

Basic motor data		
Motor type	Permanent-magnet synchronous motor, Natural cooling, IP64	
Motor type	High Dynamic	
Static torque	1.27 Nm	
Static current	1.2 A	
Maximum torque	3.75 Nm	
Maximum current	4.2 A	
Maximum speed	7,200 rpm	
Rotor moment of inertia	0.4300 kgcm²	
Weight	2.9 kg	

	Rated data		
S	SINAMICS S120, BLM/SLM 3AC 400V		
	Rated speed	3,000 rpm	
	Rated torque	1.27 Nm	
	Rated current	1.2 A	
	Rated power	0.40 kW	

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

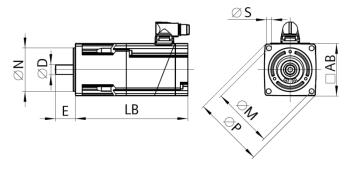
Motor connection		
Connection type	Double cable connection for S120	
Connector size	M17	



Item no. : Consignment no. : Project :

			Figure
no.:			

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)	142 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	110 ms
Closing time	40 ms
Maximum single switching energy 1)	270 J
Service life, operating energy	35,000 J
Rated current <sup>2)</sup>	0.5 A

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

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