## **SIEMENS**

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

Article No.: 1FK2104-4AF10-2SB0

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 AS22DQC: Absolute encoder single turn 22 bit				

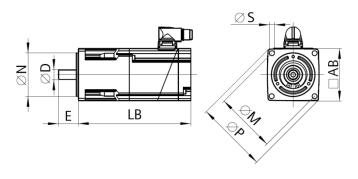
Motor connection					
Connection type	Double cable connection for S120				
Connector size	M17				



Item no. : Consignment no. : Project :

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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%.