

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1305-9RE23-2AQ1-Z  
D05+H5B+K06+N23

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

Item no. :  
Consignment no. :  
Project :

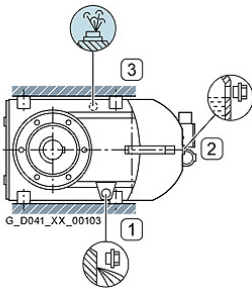


Figure similar

Gearbox data	
Gear box type	FZ79
Gearbox basic type	Parallel shaft geared F
Gearbox size	79
Transmission stages	2
Transmission (ratio)	26.08
Gear number relation	1330/51
Output moment maximum (short-time)	645 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	173 rpm
Emergency off output moment (1000 cycles)	1,700 Nm
Radial force maximum	13,600 N
Max. permissible radial force with Mmax	13,600 N
Moment of inertia	1.90 kgcm²
Torsional stiffness	77 Nm/°
Efficiency	0.95
Mounting position	M5
Mounting type	Foot-mounted
Output shaft version	Solid shaft, both ends without feather key
Output shaft dimension	VDG40 x 80 mm
Gearbox flange diameter	-/-
Figure 2 torque support	-

General tech. specifications	
Color of the housing	Standard painting (Anthracite RAL 7016)
Specification	CE / UL / CSA / EAC / cRUus
Net weight	45.31 kg
1m-sound pressure level LpA (Tol.+3dB(A))	70
Plug position	top (default) (2)
Adapter flange position	top (default) (2)

Lubrication and sealing	
Gear oil	Mineral oil CLP ISO VG220
Output shaft sealing	Standard
Oil charge	2.70 l



Motor data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
DC-link voltage, max.	510...720V
Shaft height	63 mm
Cooling	Natural cooling
Rated speed	3,000 rpm
Rated torque (100K)	5.40 Nm
Rated power	1.70 kW
Rated current (100K)	3.70 A
Static torque	7.50 Nm
Static current	4.85 A
Moment of inertia	12.20000 kgcm²
Efficiency η	91 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1
Degree of protection	IP65
Encoder system	Encoder AM20DQI: absolute encoder 20 bits (resolution 1048576, encoder-internal 512 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)

Limiting data	
Maximum speed (short-time)	7,200 rpm
Maximum torque	26.00 Nm
Motor current short term	19.2 A

Optimum operating point	
Optimum speed	3,000 rpm
Optimum power	1.69 kW

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Recommended Motor Module	
Rated inverter current	5.0 A
Maximum inverter current	15.0 A
Maximum torque	22.1 Nm

Holding brake	
Holding brake	with holding brake
Holding brake version	Permanent-magnet brake
Power supply voltage	DC 24 V ± 10 %
Dynamic braking torque M <sub>1Br</sub>	8.50 Nm
Holding torque M <sub>4Br</sub>	13.00 Nm
Opening time	100.0 ms
Closing time	50.0 ms
Maximum switching energy per braking action	380.0 J

Standards	
Compliance with standards	CE / UL / CSA / EAC / cRUus
CE marking	EN 60034

Options	
D05	M5 for helical and parallel shaft gearboxes
H5B	Solid shaft, both ends without feather key
K06	Mineral oil CLP ISO VG220
N23	Standard holding brake (permanent magnet brake)

**Info servo geared motor**

Outside the standard temperature range of -10 to +40 °C, further selectable options must be observed, in addition to the lubricant selection.

Further, you have to check the suitability of the components and options used for the requested temperature range.