

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1103-1RD43-4FL1-Z
D04+H04+K06+N23

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

Item no. :
Consignment no. :
Project :

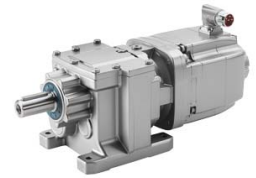
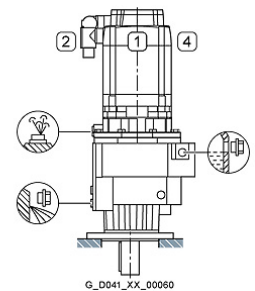


Figure similar

Gearbox data	
Gear box type	Z39
Gearbox basic type	Helical geared Z / D
Gearbox size	39
Transmission stages	2
Transmission (ratio)	13.92
Gear number relation	1183/85
Output moment maximum (short-time)	149 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	323 rpm
Emergency off output moment (1000 cycles)	320 Nm
Radial force maximum	1,590 N
Max. permissible radial force with Mmax	1,590 N
Moment of inertia	0.55 kgcm ²
Torsional stiffness	12 Nm/°
Efficiency	0.95
Mounting position	M4
Mounting type	Flange version (A type)
Output shaft version	Solid shaft standard
Output shaft dimension	V25 x 50 mm
Gearbox flange diameter	160 mm
Output shaft bearing	No
Figure 2 torque support	-

General tech. specifications	
Color of the housing	Standard painting (Anthracite RAL 7016)
Specification	CE / UL / CSA / EAC / cRUus
Net weight	14.81 kg
1m-sound pressure level L _{pA} (Tol.+3dB(A))	65
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	0.90 l



G_D041_XX_00060

Motor data	
Motor type	Permanent-magnet synchronous motor
Motor type	High Dynamic
DC-link voltage, max.	510...720V
Shaft height	48 mm
Cooling	Natural cooling
Rated speed	3,000 rpm
Rated torque (100K)	3.20 Nm
Rated power	1.01 kW
Rated current (100K)	3.15 A
Static torque	4.05 Nm
Static current	3.80 A
Moment of inertia	1.62000 kgcm ²
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)	9,000 rpm
Maximum torque	11.30 Nm
Motor current short term	10.4 A

Optimum operating point	
Optimum speed	3,000 rpm
Optimum power	1.01 kW

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Recommended Motor Module	
Rated inverter current	5.0 A
Maximum inverter current	15.0 A
Maximum torque	11.3 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 _{1Br}	3.00 Nm
Holding torque M _{4Br}	4.00 Nm
Opening time	70.0 ms
Closing time	30.0 ms
Maximum switching energy per braking action	150.0 J

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

Options	
D04	M4 for helical and parallel shaft gearboxes
H04	Gearbox flange diameter 160mm
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.