

Data sheet for SIMOTICS S-1FG1

Article No. : **1FG1103-1RF12-2FC1-Z**
D01+G99+H04+K06+N24

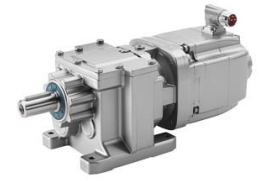


Figure similar

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

Item no. :
 Consignment no. :
 Project :

Gearbox data	
Gear box type	Z39
Gearbox basic type	Helical geared Z / D
Gearbox size	39
Transmission stages	2
Transmission (ratio)	4.64
Gear number relation	427/92
Output moment maximum (short-time)	130 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	970 rpm
Emergency off output moment (1000 cycles)	220 Nm
Radial force maximum	325 N
Max. permissible radial force with Mmax	325 N
Moment of inertia	0.97 kgcm ²
Torsional stiffness	9 Nm/°
Torsional backlash	14.3'
Efficiency	0.97
Mounting position	M1
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	24.67 kg
1m-sound pressure level L _{pA} (Tol.+3dB(A))	75
Plug position	top (default) (2)
Adapter flange position	top (default) (2)

Lubrication and sealing	
Gear oil	Mineral oil CLP VG220
Output shaft sealing	Standard
Oil charge	0.30 l

Motor data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
DC-link voltage, max.	510...720V
Shaft height	80 mm
Cooling	Natural cooling
Rated speed	2,000 rpm
Rated torque (100K)	9.10 Nm
Rated power	1.91 kW
Rated current (100K)	4.00 A
Static torque	11.00 Nm
Static current	4.65 A
Moment of inertia	35.40000 kgcm ²
Efficiency η	92 %
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)	6,000 rpm
Maximum torque	37.00 Nm
Motor current short term	17.2 A

Optimum operating point	
Optimum speed	2,000 rpm
Optimum power	1.90 kW

Data sheet for SIMOTICS S-1FG1

Article No. : **1FG1103-1RF12-2FC1-Z**
D01+G99+H04+K06+N24

Recommended Motor Module

Rated inverter current	5.0 A
Maximum inverter current	15.0 A
Maximum torque	33.3 Nm

Holding brake

Holding brake	reinforced brake
Holding brake version	Permanent-magnet brake
Power supply voltage	DC 24 V \pm 10 %
Dynamic braking torque M_{1Br}	25.00 Nm
Holding torque M_{4Br}	48.00 Nm
Rated current	1.0 A
Opening time	220.0 ms
Closing time	65.0 ms
Maximum switching energy per braking action	1,900.0 J

Standards

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

Options

D01	M1 for helical and parallel shaft gearboxes
G99	Version with reduced backlash
H04	Gearbox flange diameter 160mm
K06	Mineral oil CLP ISO VG220
N24	Holding brake with increased braking torque (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.