

Data sheet for SIMOTICS S-1FG1

Article No. : **1FG1508-5RG32-2HN1-Z**
D15+E21+K07+N23

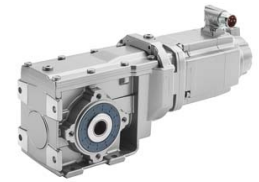


Figure similar

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

Item no. :
Consignment no. :
Project :

Gearbox data

Gear box type	K79
Gearbox basic type	Bevel geared B / K
Gearbox size	79
Transmission stages	3
Transmission (ratio)	27.20
Gear number relation	83545/3072
Output moment maximum (short-time)	805 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	165 rpm
Emergency off output moment (1000 cycles)	1,360 Nm
Radial force maximum	14,000 N
Max. permissible radial force with Mmax	14,000 N
Moment of inertia	1.20 kgcm ²
Torsional stiffness	66 Nm/°
Efficiency	0.94
Mounting position	M5-A Rotation angle 5° X axis
Mounting type	Housing flange (C type)
Output shaft version	Hollow shaft standard
Output shaft dimension	H40 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	64.20 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	Polyglycol oil CLP ISO PG VG220
Output shaft sealing	Standard
Oil charge	2.60 l

Motor data

Motor type	Permanent-magnet synchronous motor
Motor type	Compact
DC-link voltage, max.	510...720V
Shaft height	100 mm
Cooling	Natural cooling
Rated speed	2,000 rpm
Rated torque (100K)	22.50 Nm
Rated power	4.71 kW
Rated current (100K)	9.50 A
Static torque	31.50 Nm
Static current	12.90 A
Moment of inertia	112.00000 kgcm ²
Efficiency η	93 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1.5
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)	5,000 rpm
Maximum torque	108.00 Nm
Motor current short term	46.5 A

Optimum operating point

Optimum speed	2,000 rpm
Optimum power	4.70 kW

Recommended Motor Module

Rated inverter current	18.0 A
Maximum inverter current	54.0 A
Maximum torque	108.0 Nm

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Holding brake

Holding brake	with holding 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}	43.00 Nm
Opening time	300.0 ms
Closing time	70.0 ms
Maximum switching energy per braking action	3,380.0 J

Standards

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

Options

- D15 M5-A for bevel and worm gearboxes
- E21 Rotation angle 5° - X axis
- K07 Polyglycol oil CLP ISO PG 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.