

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1508-1QG12-2AL1-Z
D11+K08



Figure similar

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

Item no. :
Consignment no. :
Project :

Gearbox data

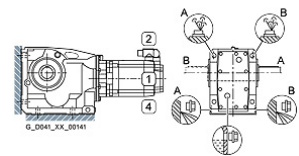
Gear box type	K79
Gearbox basic type	Bevel geared B / K
Gearbox size	79
Transmission stages	3
Transmission (ratio)	24.17
Gear number relation	83545/3456
Output moment maximum (short-time)	775 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	186 rpm
Emergency off output moment (1000 cycles)	1,300 Nm
Radial force maximum	14,000 N
Max. permissible radial force with Mmax	14,000 N
Moment of inertia	1.60 kgcm ²
Torsional stiffness	66 Nm/°
Efficiency	0.94
Mounting position	M1-A
Mounting type	Foot-mounted
Output shaft version	Solid shaft standard
Output shaft dimension	V40 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	58.58 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	Synthetic oil CLP PG VG460
Output shaft sealing	Standard
Oil charge	1.00 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)	18.00 Nm
Rated power	3.77 kW
Rated current (100K)	8.60 A
Static torque	24.50 Nm
Static current	11.10 A
Moment of inertia	79.00 kgcm ²
Efficiency η	93 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1.5
Degree of protection	IP65
Encoder system	Encoder AS20DQI: absolute encoder single-turn 20 bits

Limiting data

Maximum speed (short-time)	5,000 rpm
Maximum torque	80.00 Nm
Motor current short term	40.5 A

Optimum operating point

Optimum speed	2,000 rpm
Optimum power	3.75 kW

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Recommended Motor Module

Rated inverter current	18.0 A
Maximum inverter current	54.0 A
Maximum torque	80.0 Nm

Standards

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

Options

D11	M1-A for bevel and worm gearboxes
K08	Polyglycol oil CLP ISO PG VG460

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.