

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1501-1QE04-2AF1

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

Item no. :
Consignment no. :
Project :



Figure similar

Gearbox data	
Gear box type	B29
Gearbox basic type	Bevel geared B / K
Gearbox size	29
Transmission stages	2
Transmission (ratio)	6.51
Gear number relation	644/99
Output moment maximum (short-time)	75 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	691 rpm
Emergency off output moment (1000 cycles)	127 Nm
Radial force maximum	3,100 N
Max. permissible radial force with Mmax	3,150 N
Moment of inertia	0.50 kgcm ²
Torsional stiffness	12 Nm/°
Efficiency	0.93
Mounting position	
Mounting type	Foot-mounted
Output shaft version	Solid shaft standard
Output shaft dimension	V20 x 40 mm
Gearbox flange diameter	-/-
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	12.96 kg
1m-sound pressure level L _{pA} (Tol.+3dB(A))	70
Plug position	top (default) (2)
Adapter flange position	top (default) (2)

Lubrication and sealing	
Output shaft sealing	Standard
Oil charge	I

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	4,500 rpm
Rated torque (100K)	3.30 Nm
Rated power	1.56 kW
Rated current (100K)	3.95 A
Static torque	5.30 Nm
Static current	5.70 A
Moment of inertia	7.70 kgcm ²
Efficiency η	91 %
Temperature monitoring	Pt1000 temperature sensor
Connector size	1
Degree of protection	IP65
Encoder system	Encoder AS20DQI: absolute encoder single-turn 20 bits

Limiting data	
Maximum speed (short-time)	7,200 rpm
Maximum torque	18.00 Nm
Motor current short term	21.5 A

Optimum operating point	
Optimum speed	4,500 rpm
Optimum power	1.55 kW

Recommended Motor Module	
Rated inverter current	9.0 A
Maximum inverter current	27.0 A
Maximum torque	18.0 Nm

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

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.