

Data sheet for SIMOTICS S-1FG1

Article No. : 1FG1601-5RD22-2HM2

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

Item no. :
Consignment no. :
Project :



Figure similar

Gearbox data	
Gear box type	C29
Gearbox basic type	Helical worm geared C
Gearbox size	29
Transmission (ratio)	265.20
Gear number relation	1326/5
Output moment maximum (short-time)	127 Nm
max. input speed (briefly)	4,500 rpm
Output speed short-time	17 rpm
Emergency off output moment (1000 cycles)	143 Nm
Radial force maximum	4,140 N
Max. permissible radial force with Mmax	4,040 N
Moment of inertia	0.05 kgcm ²
Torsional stiffness	-/-
Efficiency	0.65
Mounting position	
Mounting type	Housing flange (C type)
Output shaft version	Hollow shaft standard
Output shaft dimension	H20 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	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	
Output shaft sealing	Standard
Oil charge	l

Motor data	
Motor type	Permanent-magnet synchronous motor
Motor type	Compact
DC-link voltage, max.	510...720V
Shaft height	48 mm
Cooling	Natural cooling
Rated speed	2,000 rpm
Rated torque (100K)	2.50 Nm
Rated power	0.52 kW
Rated current (100K)	1.45 A
Static torque	2.85 Nm
Static current	1.55 A
Moment of inertia	2.90 kgcm ²
Efficiency η	89 %
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	10.50 Nm
Motor current short term	5.6 A

Optimum operating point	
Optimum speed	2,000 rpm
Optimum power	0.53 kW

Recommended Motor Module	
Rated inverter current	3.0 A
Maximum inverter current	9.0 A
Maximum torque	10.5 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.