SIEMENS Data sheet for Absolute encoder

MLFB-Ordering data

6FX2001-5SS12



Figure similar

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

Remarks :

Item no.: Consignment no.:

Project :

Data output Differential line driver according to EIA Standard RS 485 Short-circuit strength Yes Transmission rate 100 kHz 1 MHz Connection type Flange socket, Axial Resolution 13 bit (8192 increments) Telegram 13 bit, without parity With ± 1 bit accuracy Max. permissible speed (mech.) Sampling Gray Load capacity Transmission Gray, fir-tree format Preset Yes Counting direction Yes n > 6000 rpm Accuracy ± 79 " (with 8192 increments) Preset Yes n > 6000 rpm - Axial 10 N - Axial Up to 100 kHz 40 0.0 m Shock, max. Up to 100 kHz 1000 m/s² Degree of protection	Electrical data		Mechanical data	
Linterface SSI Shaft length 20 mm Clock input Differential line receiver according to EIA Standard RS 485 Data output Differential line driver according to EIA Standard RS 485 Short-circuit strength Yes Transmission rate 100 kHz 1 MHz Connection type Flange socket, Axial Resolution 13 bit (8192 increments) Telegram 13 bit, without parity With ± 1 bit accuracy 10000 rpm Code type Wax, permissible speed (mech.) 12000 rpm Code type Load capacity Transmission Gray, fir-tree format n < 6000 rpm Preset Yes Radial at shaft end 60 N Counting direction Yes 179 "(with 8192 increments) Accuracy ± 79 "(with 8192 increments) Accuracy ± 79 " (with 8192 increments) Accuracy Accuracy ± 79 " (with 8192 increments) Accuracy Balant end 10 N Color type Shapel Preset Yes Radial at shaft end 20 N Counting direction Yes Radial At shaft end 20 N Counting direction Yes Radial At shaft end 20 N Counting directi	perating voltage Up	DC 10 30 V	Shaft version	Solid shaft
Clock input Differential line receiver according to EIA Standard RS 485 Data output Differential line driver according to EIA Standard RS 485 Short-circuit strength Yes Connection type Flange socket, Axial Resolution 13 bit (8192 increments) Telegram 13 bit, without parity ode type Sampling Gray Cony, fir-tree format Accuracy \$79 "(with 8192 increments) Accuracy \$79 "(with 8192 increments) Accuracy \$70 "(with 8192 incremen	lax. power consumption	160 mA	Shaft diameter	10 mm
Data output Differential line driver according to EIA	terface	SSI	Shaft length	20 mm
Data output Differential line driver according to EIA Standard RS 485	Clock input		Angular acceleration, max.	100000 rad/s²
Standard RS 485 Friction torque (at 20°C)			Moment of inertia of rotor	0.00000145 kgm²
Short-circuit strength Yes Starting torque (at 20°C) <= 0.01 Nm Transmission rate 100 kHz 1 MHz Net weight 0.3 kg Connection type Flange socket, Axial Speed max. Resolution 13 bit (8192 increments) With ± 1 bit accuracy 5000 rpm Telegram 13 bit, without parity With ± 100 bit accuracy 10000 rpm ode type Max. permissible speed (mech.) 12000 rpm Sampling Gray Load capacity Transmission Gray, fir-tree format n <= 6000 rpm	ata output		Vibration (552000 Hz), max.	300 m/s ²
Transmission rate 100 kHz 1 MHz Net weight 0.3 kg Connection type Flange socket, Axial Resolution 13 bit (8192 increments) With ± 1 bit accuracy 5000 rpm Telegram 13 bit, without parity With ± 100 bit accuracy 10000 rpm Max. permissible speed (mech.) 12000 rpm Sampling Gray Load capacity Transmission Gray, fir-tree format n <= 6000 rpm arameterizability - Axial 40 N Preset Yes - Radial at shaft end 60 N Counting direction Yes n > 6000 rpm Accuracy ± 79 " (with 8192 increments) - Axial 10 N able length up to the subsequent electronics, max Radial at shaft end 20 N Up to 100 kHz 400.0 m Shock, max. Up to 300 kHz 100.0 m 2 ms 2000 m/s² Up to 1 MHz 50.0 m 6 ms 1000 m/s² Degree of protection	hort-circuit strength	Yes	Friction torque (at 20°C)	<= 0.01 Nm
Connection type Flange socket, Axial Speed max. Resolution 13 bit (8192 increments) With ± 1 bit accuracy 5000 rpm Telegram 13 bit, without parity With ± 100 bit accuracy 10000 rpm ode type Max. permissible speed (mech.) 12000 rpm Sampling Gray Load capacity Transmission Gray, fir-tree format n <= 6000 rpm	ransmission rate	100 kHz 1 MHz	Starting torque (at 20°C)	<= 0.01 Nm
Resolution 13 bit (8192 increments) With ± 1 bit accuracy Max. permissible speed (mech.) Sampling Gray Load capacity Transmission Gray, fir-tree format arameterizability Preset Yes n < 6000 rpm - Axial - Radial at shaft end 60 N Counting direction Yes n > 6000 rpm - Axial 10 N Accuracy ± 79 " (with 8192 increments) able length up to the subsequent electronics, max. Up to 100 kHz 400.0 m Shock, max. Up to 300 kHz 100.0 m 2 ms 2000 m/s² Degree of protection	onnection type		Net weight	0.3 kg
Telegram 13 bit, without parity With ± 100 bit accuracy 10000 rpm Max. permissible speed (mech.) 12000 rpm Max. permissible speed (mech.) 12000 rpm Load capacity Transmission Gray, fir-tree format n <= 6000 rpm Accuracy Yes - Radial at shaft end 60 N Counting direction Yes n > 6000 rpm Accuracy ± 79 " (with 8192 increments) - Axial 10 N able length up to the subsequent electronics, max. Up to 100 kHz 400.0 m Shock, max. Up to 300 kHz 100.0 m 2 ms 2000 m/s² Up to 1 MHz 50.0 m 6 ms 1000 m/s² Degree of protection	211	, g ,	Speed max.	
Max. permissible speed (mech.) 12000 rpm Sampling Gray Load capacity Transmission Gray, fir-tree format n <= 6000 rpm - Axial 40 N Preset Yes - Radial at shaft end 60 N Counting direction Yes n > 6000 rpm Accuracy ± 79 " (with 8192 increments) - Axial 10 N able length up to the subsequent electronics, max Radial at shaft end 20 N Up to 100 kHz 400.0 m Shock, max. Up to 300 kHz 100.0 m 2 ms 2000 m/s² Up to 1 MHz 50.0 m 6 ms 1000 m/s² Degree of protection	esolution	13 bit (8192 increments)	With ± 1 bit accuracy	5000 rpm
Sampling Gray Transmission Gray, fir-tree format n <= 6000 rpm - Axial 40 N Preset Yes - Radial at shaft end 60 N Counting direction Yes n > 6000 rpm Accuracy ± 79 " (with 8192 increments) - Axial 10 N able length up to the subsequent electronics, max Radial at shaft end 20 N Up to 100 kHz 400.0 m Shock, max. Up to 300 kHz 100.0 m 2 ms 2000 m/s² Up to 1 MHz 50.0 m 6 ms 1000 m/s² Degree of protection	elegram	13 bit, without parity	With ± 100 bit accuracy	10000 rpm
Transmission Gray, fir-tree format n <= 6000 rpm - Axial	de type		Max. permissible speed (mech.)	12000 rpm
Preset Yes - Radial at shaft end 60 N Counting direction Yes n > 6000 rpm Accuracy ± 79 " (with 8192 increments) - Axial 10 N able length up to the subsequent electronics, max Radial at shaft end 20 N Up to 100 kHz 400.0 m Shock, max. Up to 300 kHz 100.0 m 2 ms 2000 m/s² Up to 1 MHz 50.0 m 6 ms 1000 m/s² Degree of protection	ampling	Gray	Load capacity	
Preset Yes - Radial at shaft end 60 N Counting direction Yes n > 6000 rpm Accuracy ± 79 " (with 8192 increments) - Axial 10 N able length up to the subsequent electronics, max. - Radial at shaft end 20 N Up to 100 kHz 400.0 m Shock, max. Up to 300 kHz 100.0 m 2 ms 2000 m/s² Up to 1 MHz 50.0 m 6 ms 1000 m/s² Degree of protection	ransmission	Gray, fir-tree format	n <= 6000 rpm	
Counting direction Yes n > 6000 rpm Accuracy ± 79 " (with 8192 increments) - Axial 10 N able length up to the subsequent electronics, max. - Radial at shaft end 20 N Up to 100 kHz 400.0 m Shock, max. Up to 300 kHz 100.0 m 2 ms 2000 m/s² Up to 1 MHz 50.0 m 6 ms 1000 m/s² Degree of protection	ameterizability		- Axial	40 N
Accuracy ± 79 " (with 8192 increments) - Axial 10 N able length up to the subsequent electronics, max Radial at shaft end 20 N Up to 100 kHz 400.0 m Shock, max. Up to 300 kHz 100.0 m 2 ms 2000 m/s² Up to 1 MHz 50.0 m 6 ms 1000 m/s² Degree of protection	reset	Yes	- Radial at shaft end	60 N
Table length up to the subsequent electronics, max. - Radial at shaft end 20 N Up to 100 kHz 400.0 m Shock, max. 2 ms 2000 m/s² Up to 1 MHz 50.0 m 6 ms 1000 m/s² Degree of protection	ounting direction	Yes	n > 6000 rpm	
Up to 100 kHz 400.0 m Shock, max. Up to 300 kHz 100.0 m 2 ms 2000 m/s² Up to 1 MHz 50.0 m 6 ms 1000 m/s² Degree of protection	ccuracy	± 79 " (with 8192 increments)	- Axial	10 N
Up to 300 kHz 100.0 m 2 ms 2000 m/s² Up to 1 MHz 50.0 m 6 ms 1000 m/s² Degree of protection Degree of protection	Cable length up to the subsequent electronics, max.		- Radial at shaft end	20 N
Up to 1 MHz 50.0 m 6 ms 1000 m/s² Degree of protection	p to 100 kHz	400.0 m	Shock, max.	
Degree of protection	p to 300 kHz	100.0 m	2 ms	2000 m/s²
	p to 1 MHz	50.0 m	6 ms	1000 m/s ²
			Degree of protection	
Without shaft input IP67			Without shaft input	IP67
With shaft input IP64			With shaft input	IP64



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Figure similar

Ambient temperature		Standards	
During operation	-40 85 °C	Compliance with standards	CE, cULus
		EMC class filter	Tested to DIN EN 50081 and EN 50082