


Motor-Feedback System

VFS60A-
TGPZ0-S01

 Number of lines programmable
Incremental Encoder

Deviation to Standard Motor-Feedback-System VFS60A-TGPK01024

- Customized flange
- Cable with connector
- Mating connector in box

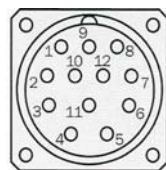
Features

- **Electrical Interface**
5... 32 V, TTL/HTL
- **Through hollow shaft**
14 mm
- **Connection type, cable**
8-core, universal, 350 mm



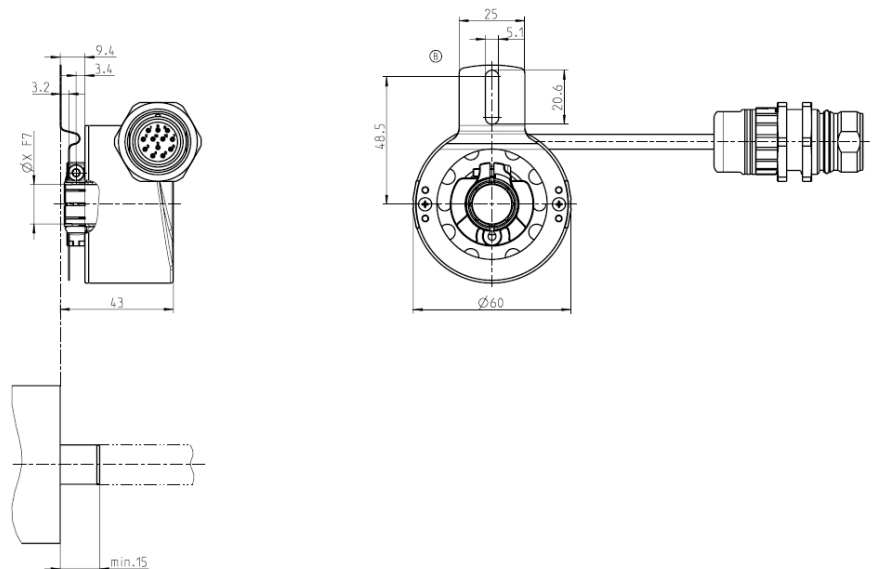
PIN	Signal TTL/HTL	Explanation
1	B_	Signal line
2	N.C.	Not connected
3	Z	Signal line
4	Z_	Signal line
5	A	Signal line
6	A_	Signal line
7	N.C.	Not connected
8	B	Signal line
9	Shield	Housing potential
10	GND	Supply voltage of the encoder
11	N.C.	Not connected
12	U _s	Power supply ¹⁾

¹⁾ Potential free to housing



View of the plug in face.

Dimensional drawing



Order information	
Type	Part no.
VFS60A-TGPZ0-S01	1037013

Technical Data acc. to DIN 32878		VFS60A-TGPZ0- S01
Hollow shaft diameter		14 mm
Electrical Interface		TTL/ HTL
Number of lines per revolution		programmable
Mass		0.2 kg
Moment of inertia of the rotor		40 gcm ²
Measuring step		90°/number of lines electr.
Reference signal		
Number		1
Position		90° electrical and logical interlocked with A + B
Error limits		± 0.03°
Measuring step deviation		± 0.01°
Max. output frequency TTL/RS 422		820 kHz
Operating speed ¹⁾		9,000 rpm
Angular acceleration		5 x 10 ⁵ rad/s ²
Operating torque at 20 °C		0.6 Ncm
Starting torque at 20 °C		0.8 Ncm
Permissible movement of the drive element		
Radial static/ dynamic		± 0.3/ ± 0.005 mm
Axial static/ dynamic		± 0.5/ ± 0.01 mm
Bearing lifetime		3 x 10 ⁹ revolutions
Working temperature range		± 0 ... + 100 °C
Storage temperature range (without package)		- 40 ... + 100 °C
Permissible relative humidity ²⁾		90 %
EMC ³⁾		
Resistance to shocks ⁴⁾		50g/6 ms
Resistance to vibration ⁵⁾		20 g/10 ... 2,000 Hz
Protection class acc. IEC 60529		IP 65
Load current 5...32V, TTL/HTL programmable		Max 30 mA
No-load operating current 5...32V, TTL/HTL programmable		60 mA
Initialisation time after power on 5...32V, TTL/HTL programmable		1,000 ms

¹⁾ Self warming 3.3 k/1,000 rpm when applying, note working temperature range

²⁾ Condensation of the optical scanning not permitted
³⁾ Acc. EN 61000-6-2 and EN 61000-6-4

⁴⁾ Acc. EN 60068-2-27

⁵⁾ Acc. EN 60068-2-6

Australia

Phone +61 3 9497 4100
1800 33 48 02 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail sac@sick.com.br

Ceská Republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +852-2763 6966
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-250
E-Mail info@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-999-0590
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 3358 1341
E-Mail support@sick.jp

Nederlands

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail austefjord@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

Republic of Korea

Phone +82-2 786 6321/4
E-Mail kang@sickkorea.net

Republika Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7 495 775 05 34
E-Mail info@sick-automation.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail admin@sicksgp.com.sg

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886 2 2365-6292
E-Mail sickgrc@ms6.hinet.net

Türkiye

Phone +90 216 587 74 00
E-Mail info@sick.com.tr

USA/Canada/México

Phone +1(952) 941-6780
1 800-325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
in all major industrial nations at
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