

Teknik veri sayfası Enkoder Serisi Bilgileri

Ürün no.: 90000380

EI30-P 058 SF

İçerik

- Teknik veriler
- Ürün anahtarı



Şekil farklılık gösterebilir

Enkoder_Serisi	EI 058 SF
Enkoder_Temel_Prensip	artımlı
Enkoder_Çalışma_Prensibi	optik interpolasyonlu
Enkoder_Flanş_Çapı	Ø 58 mm
Enkoder_Flanş_Tipi	Vida
Enkoder_Dolu Şaft/İçi Boş Şaft	İçi boş mil
Enkoder_Şaft_Çapı	Ø 10 mm
Enkoder_Besleme_Gerilimi	10 ... 30 V DC
	4,75 ... 5,5 V DC
	5 ... 30V DC
Enkoder_Çıkış_Devresi	1 Vss Sin/Cos
	HTL
	HTL, inv.
	TTL
	TTL, RS422 uyumlu, inv.
Enkoder_Darbe_Sayısı	10000 I/U
	10240 I/U
	12000 I/U
	12500 I/U
	1440 I/U
	15000 I/U
	16384 I/U
	20000 I/U
	20480 I/U
	25000 I/U
	2880 I/U
	3000 I/U
	3600 I/U
	4000 I/U
	5760 I/U
	6000 I/U
	7200 I/U
	7500 I/U
	8000 I/U
	9182 I/U

Teknik veriler

Encoder EI30 P 058 SF

Resolution

Pulses per revolution PPR	up to 25000 PPR
---------------------------	-----------------

Mechanical Data

Flange	clamping flange
Flange material	stainless steel, V4A
Housing material	stainless steel, V4A
Flange diameter	Ø 58 mm [Ø 2.283"]

Shaft(s)

Shaft material	stainless steel, V4A
Starting torque	approx. 1 Ncm [1.416 in-ozf] at ambient temperature

Shaft	Ø 10 mm [Ø 0.394"]
--------------	--------------------

Shaft length	L: 18 mm [0.709"]
--------------	-------------------

Max. Permissible shaft loading radial	100 N [10.197 kp]
---------------------------------------	-------------------

Max. Permissible shaft loading axial	100 N [10.197 kp]
--------------------------------------	-------------------

Bearings

Bearings type	2 precision ball bearings
Nominal service life	1 x 10 ⁹ revs. at 100 % rated shaft load 1 x 10 ¹⁰ revs. at 40 % rated shaft load 1 x 10 ¹¹ revs. at 20 % rated shaft load
Max. operating speed	3600 rpm

Machinery Directive: basic data safety integrity level

MTTF _d	200 a
Mission time (TM)	25 a
Nominal service life (L10h)	1 x 10 ¹¹ revs. at 20 % rated shaft load and 3600 rpm
Diagnostic coverage (DC)	0 %

Electrical Data

Power supply/Current consumption	4,75 VDC up to 5,5 VDC: typ. 70 mA (100 mA only C3, D3)
Power supply/Current consumption	5 VDC up to 30 VDC: typ. 70 mA
Power supply/Current consumption	10 VDC up to 30 VDC: typ. 70 mA (100 mA only C2, C4, D4)
Operating principle	optical
Output circuit	TTL TTL, RS422 compatible, inv. HTL HTL, inv. 1 Vpp sin/cos
Pulse frequency	TTL ≤ 5000 ppr: max. 200 kHz HTL ≤ 5000 ppr: max. 200 kHz TTL more than 1200 ppr: max. 2 MHz HTL more than 1200 ppr: max. 600 kHz 1 Vpp sin/cos: max. 100 kHz
Channels	B N and inverted signals
Load	max. 40 mA / channel @ 1 Vpp sin/cos: min. 120 Ohm
Circuit protection	circuit type C4, C6, D4, D6 only

Accuracy

Phase offset	90° ± max. 7.5 % of the period duration
pulse-/pause-ratio	≤5000 ppr: 50 % ± max. 7 % Output circuits C2, C3, C4, D3, D4: 50 % ± max. 10 %

Environmental data

ESD (DIN EN 61000-4-2):	8 kV
Burst (DIN EN 61000-4-4):	2 kV
includes EMC:	DIN EN 61000-6-2 DIN EN 61000-6-3
Vibration: (DIN EN 60068-2-6)	50 m/s ² (10 Hz up to 2000 Hz)
Shock: (DIN EN 60068-2-27)	1000 m/s ² (6 ms)
Electrical Safety:	according DIN VDE 0160

Duty information

Customs tariff number:	90318020
Country of origin:	Germany

General Data

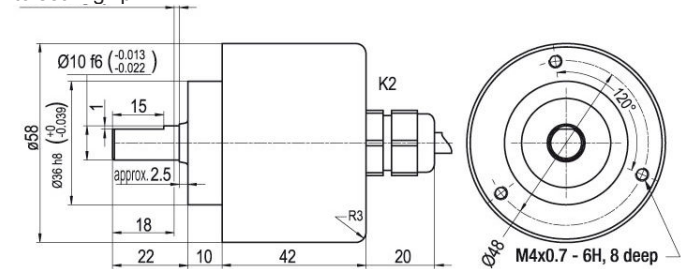
Weight	approx. 600 g [21.164 oz]
Connections	cable outlet (TPE)
Protection rating (EN 60529)	IP67+IP69K all around. Resistance to salt mist (IEC 60068-2-11) after 672 hours.
Operating temperature	-20 °C up to +80 °C [-4 °F up to +176 °F] 1 Vpp: -10 °C up to +70 °C [+14 °F up to +158 °F]
Storage temperature	-20 °C up to +80 °C [-4 °F up to +176 °F]

Teknik veriler

Encoder EI30 P 058 SF

Cable connection A-N, A-C, axial, with 2 m cable

Minimum distance of 1.5
to sealing lip



All dimensions in mm

Description		N inv. poss.
A-N	axial, shield not connected	•
A-C	axial, shield connected to encoder housing	•

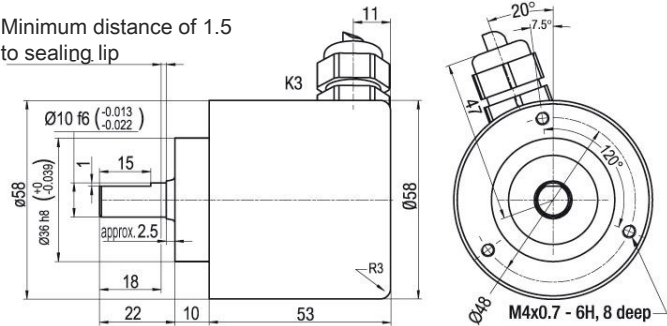
Assignments			
Circuit	A-N, A-C	A-N, A-C	A-C
	C3, C4, C5, C6, C7	C1, C2, D3, D4, D5, D6, D7	D8
GND	WH	WH	WH
(+) Vcc	BN	BN	BN
A	GN	GN	GN
B	YE	YE	GY
N	GY	GY	–
–	–	–	–
A inv.	–	RD	YE
B inv.	–	BU	PK
N inv.	–	VT	–
Shield	flex	flex	flex

Teknik veriler

Encoder EI30 P 058 SF

Cable connection R-N, R-C, radial, with 2 m cable

Minimum distance of 1.5 to sealing lip



All dimensions in mm

Description		N inv. poss.
R-N	radial, shield not connected	•
R-C	radial, shield connected to encoder housing	•

Assignments

	R-N, R-C	R-N, R-C	R-C
Circuit	C3, C4, C5, C6, C7	C1, C2, D3, D4, D5, D6, D7	D8
GND	WH	WH	WH
(+) Vcc	BN	BN	BN
A	GN	GN	GN
B	YE	YE	GY
N	GY	GY	-
-	-	-	-
A inv.	-	RD	YE
B inv.	-	BU	PK
N inv.	-	VT	-
Shield	flex	flex	flex

Teknik veriler

Encoder EI30 P 058 SF

Options

Cable length

Order key

The encoder EI30 P 058 SF can be supplied with more than 2 m cable.

The maximum cable length depends on the supply voltage and the frequency.

XXX = Decimeter

Please extend the standard order code with a three figure number, specifying the cable length in decimetres.

Example: 5 m cable = 050

Teknik veriler

Encoder EI30 P 058 SF

Example Order No. Type

EI30 P 058 SF	EI30 P 058 SF	EI30 P 058 SF
---------------	---------------	---------------

Pulses per revolution PPR:

5000	2, 5, 10, 15, 20, 25, 30, 36, 40, 48, 50, 60, 64, 72, 90, 100, 120, 125, 128, 150, 160, 180, 200, 216, 240, 250, 254, 256, 300, 314, 320, 360, 400, 500, 512, 571, 600, 720, 750, 768, 800, 900, 1000, 1024, 1200, 1250, 1270, 1440, 1500, 1800, 2000, 2048, 2400, 2500, 2880, 3000, 3600, 4000, 4096, 4685, 5000, 5760, 6000, 7200, 7500, 8000, 8192, 10000, 10240, 12000, 12500, 15000, 16384, 20000, 20480, 25000 1 Vpp Sin/Cos only 1024, 2048 Other PPRs on request
------	--

Channels:

N	B, N (SIN: B)
---	---------------

Output circuit

Resolution PPR	Power supply VDC	Output circuit	-	Order key
C6	up to 2500	5 - 30	HTL (TTL at 5 VDC)	C7
		5 - 30	HTL, inv. (TTL/RS422 comp. at 5 VDC)	D7
	up to 5000	4.75 - 5.5	TTL	C5
		4.75 - 5.5	TTL, RS422 comp., inverted	D5
		10 - 30	HTL	C6
		10 - 30	HTL inverted	D6
	(higher frequency) 1200 up to 25000	10 - 30	TTL, RS422 comp., inverted	C1
		4.75 - 5.5	TTL	C3
		4.75 - 5.5	TTL, RS422 comp., inverted	D3
		10 - 30	HTL	C4
		10 - 30	HTL inverted	D4
		10 - 30	TTL, RS422 comp., inverted	C2
	1024, 2048	4.75 - 5.5	1 Vpp sin/cos	D8

Electrical connections

Description	N inv. poss.	Order key
Cable: length (2 m standard)		
A-N axial, shield not connected	•	A-N
axial, shield connected to encoder housing	•	A-C
radial, shield not connected	•	R-N
radial, shield connected to encoder housing	•	R-C

Options

Description	Order key
Without option	Empty
Cable length	XXX = Decimeter

Example Order No.:	EI30P058SF	10	5000	N	C6	A-N	EI30P058SF	Your encoder
--------------------	------------	----	------	---	----	-----	------------	--------------

Ürün anahtarı

Parça atama: EABB CCCDDEE FFFFFFF GHJJKK LLMNOPPP RR

A	Enkoder tipi I: Artımlı S: Mutlak, tek turlu M: Mutlak, çok turlu
BB	Seri 10: Giriş 30: Temel 50: Uzatılmış 70: Gelişmiş
CCC	Flanş çapı 024: 24 mm 036: 36 mm 058: 58 mm 063: 63 mm 067: 67 mm 070: 70 mm 080: 80 mm 100: 100 mm 115: 115 mm
DD	Flanş tipi BB: Kör delikli içi boş şaft CC: Sıkıştırma flanşı (kompakt tasarım) CF: Sıkıştırma flanşı (gıda ve içecek) CH: Sıkıştırma flanşı (ağır hizmet tipi) CL: Sıkıştırma flanşı HI: İçi boş şaft (izole edilmiş) HO: İçi boş şaft HT: İçi boş şaft (özel tork desteği) RC: Yuvarlak flanş (36/40 sıkıştırma flanşı, 58 – 6 mm şaftlı) RE: Yuvarlak flanş (genişletilmiş delikler) RN: Yuvarlak flanş SC: Stator soketi SF: Vidalı flanş (53 sıkırtırmalı flanş, 58 Gıda ve içecek) SI: Servo flanşı (artırılmış mil yükü ve IP koruma sınıfı) SQ: Kare flanş SR: Vidalı flanş (36/40 sıkırtırmalı flanş, 58 korozyona dayanıklı) SY: Senkron (artımlı), Servo (36), Senkron (58) (mutlak) TM: Hızölçer (115, 1 mm şaftlı, 58 motor geri beslemeli) TS: Hızölçer (10 mm şaft)
EE	Şaft/Delik Çapı 06: 6 mm 07: 7 mm 08: 8 mm 08: 8 mm 10: 10 mm 11: 11 mm 12: 12 mm 14: 14 mm 15: 15 mm 06-72: Delik/kör delik delme (6 ... 72 mm)
FFFFFF	Sinyal/Çözünürlük Axxxx: A Bxxxx: AB Nxxxx: ABN P16384: Programlanabilir xx: Tek turlu, 1 ... 16 Bit xx: Çok turlu, 0 ... 43 Bit (Tek turluda 00)
G	Galvanik izolasyon (yalnızca mutlak) 0: Yok 1: Birlikte
HH	Gerilim beslemesi (yalnızca mutlak) 0: 10 ... 32 V DC/galvanik izolasyonlu 1: 4,75 ... 5,5 V DC 2: 18 ... 30 V DC
J	Çalışma prensibi M: Manyetik O: Optik P: Optik interpolasyonlu

Ürün anahtarı

KK	Arayüz 01: RS485 07: SSI ikili 08: SSI Gri 35: CANopen 38: EtherCAT 48: PROFINET 58: EtherNET/IP
LL	Elektrik bağlantısı M08: Yuvarlak konektör M8 M12: Yuvarlak konektör M12 M16: Yuvarlak konektör M16 M23: Yuvarlak konektör M23 M12BC: Motor kaputu konektörü
M	Kablo çıkışı A: Eksenel R: Radyal T: Teğetsel
NN	Kutup sayısı xx: Kutup sayısı
O	Ekran bağlantısı (2 m kablo) (isteğe bağlı) C: Bağlı N: Bağlı değil
PPP	Kablo uzunluğu xxx: Kablo uzunluğu (in dm)

Uyarı



→ Mevcut tüm cihaz modellerine sahip bir listeyi, www.leuze.com Leuze internet sitesinde bulabilirsiniz.

