

Serie FE 90



- **Impulse** Pulses 30...3600
- **Ausgangstreiber** Output driver Pull-up / Open collector
Push-pull / Line driver
- **Eingangsübersetzungen** Input ratios 1:1... 10 :1 (langsam / step down)
- **Eingangsübersetzungen** Input ratios 1:1...1:6 (schnell / step up)
- **Schutzart** Protection IP 63

Technical data

Elektrische Daten

Schnittstelle
Versorgungsspannung U_B (VDC)
Stromaufnahme
Signalpegel high
Signalpegel low
Max. Last pro Kanal
Abtastfrequenz
Anstiegs- / Abfallzeit
Kurzschlussfeste Ausgänge
Verpolschutz an U_B

Electrical data

Interface	Pull-up	Open Collector	Push-pull	RS 422
Power supply U_B (VDC)	4,5...13,2	4,5...13,2	10,8...26,4	4,75...5,25
Current consumption	<80 mA	<60 mA	<60 mA	<150 mA
Signal level high	1 V	-	-	>2,5 V
Signal level low	0,5 V	0,5 V	0,5 V	<0,5 V
Max. load per channel	20 mA	20 mA	20mA	20 mA
Scanning Frequency	200 kHz	200 kHz	200 kHz	200 kHz
Rise- / Falling time	<1 μ s	<1 μ s	<1 μ s	<200 ns
Short circuit proof	Nein/No	Nein/No	Nein/No	Nein/No
Reverse battery protection at U_B	Ja/Yes	Nein/No	Nein/No	Nein/No

Mechanische Daten

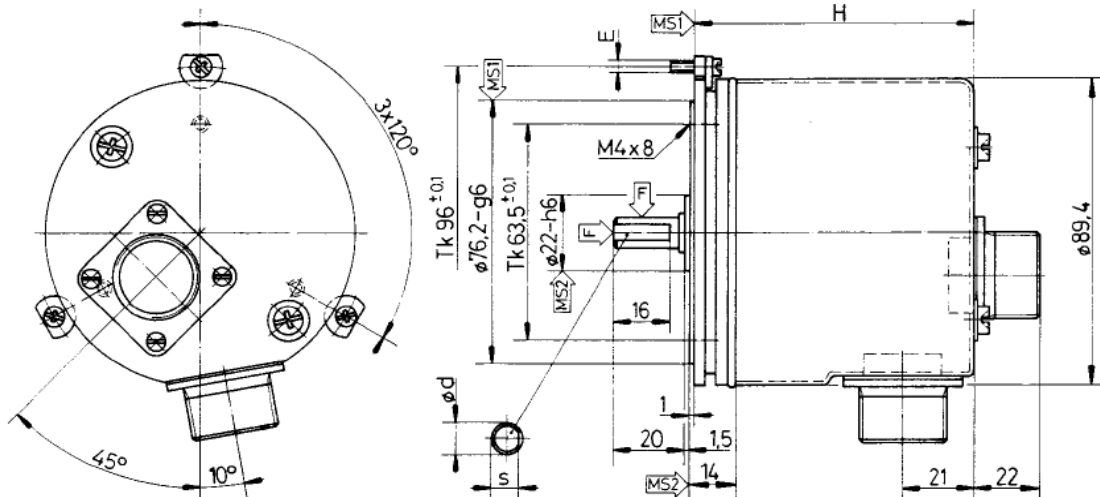
Drehzahl
Schutzart
Trägheitsmoment
Anlaufdrehmoment
Wellenbelastung
Schockfestigkeit
Vibrationsfestigkeit
Arbeitstemperatur
Lagertemperatur
Luftfeuchtigkeit
Gewicht

Mechanical data

Rotational speed <6000 min⁻¹ (rpm)
Protection IP 50
Moment of inertia 10 gcm²
Starting torque 9,8 x 10⁻⁴ Nm
Shaft loading F = 10 N axial, 30 N radial
Shock 294 m/s (Each 3 times)
Vibration 10...55 Hz / 1,5 mm 2 h
Operating temperature -10 °C +70 °C
Storage temperature -30 °C +80 °C
Atmospheric humidity 85 % RH
Weight ~120 g

Outline drawing

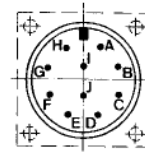
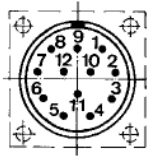
$\varnothing d = 9\text{-h8}$ $s = 8,5$ $E = M3 (4\text{-}40 \text{ UNC})$ $F = \Rightarrow 40 \text{ N} \quad \Downarrow 80 \text{ N}$ $MS = \text{Montagefläche / Mounting surface}$ $H = 82 \text{ mm} (3.228 \text{ inch})$



Technische Änderungen vorbehalten / Subject to change without prior notice

Serie FE 90

Electrical connection



Flanschdose männlich (Ansicht auf Steckerseite)
 Connector male (View from face side)

SFP12 (12 Pin) DIN

MS 3102 A18-1P (10 Pin) MIL

Drahtfarbe Wire colour	Encoder Encoder	Anschluss Function	Stecker / Pin Nr. Connector / pin no.	
Red		+ Vcc	1	A
Black	Ground	0 V	2	B
Green	Channel	A	3	C
White		B	4	D
Yellow		M	5	E
Blue	Channel	A'	6	F
Grey		B'	7	G
Orange		M'	8	H
Blank	Case Ground	-	-	-

Zubehör / Accessories

Gegenstecker gerade (weiblich)
 Female cable connector straight plug

12 pin / DIN
 SGS12 / PG9

10 pin / MIL
 MS 3106 A 18-1S

Gegenstecker (weiblich) 90°
 Female right angle connector 90°

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10 pin / MIL
 MS 3108 B 18-1S

Technische Daten + Zubehör / Technical data + accessories

Serie FE 90

Order key

FE90 L0 1 1 1 1

Dimension: Ø 3.54 inch
Input (Shaft to encor)

Input ratios (Shaft to encor): --> L = step down; S = step up

L0 =	1:1	S1 =	1:2
L1 =	2:1	S2 =	1:1,5
L2 =	2,5:1	S3 =	1:3
L3 =	3:1	S4 =	1:4
L4 =	4:1	S5 =	1:5
L5 =	5:1	S6 =	1:6
L6 =	6:1		
L7 =	6,5:1		
L8 =	7:1		
L9 =	7,666:1		
L10 =	8:1		
L11 =	9:1		
L12 =	10:1		

Cable outlet:

1	= axial	R
2	= lateral	S

Male receptacle:

1	= SD12 (12 Pin) DIN
2	= SD16 (16 Pin) DIN
3	= MS3102 A18-1P (10Pin) MIL
4	= MS3102 A20-27P (14Pin) MIL
5	= MS3102 A 20-29P (17Pin) MIL

Encoder:

1	= <= 2500
2	= > 2500

Interface:

1	= MR 265
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Accessoires:	Female cable connector straight plug	12 Pin / DIN (SGS12 / PG9)
	Female cable connector straight plug	10 Pin / MIL (MS 3106 A 18-1S)
	Female right angle connector 90°	10 Pin / MIL (MS 3108 B 18-1S)