Robust bearing unit

Suitable for Sendix 50xx and 58xx

Quick and simple – More protection

Separating the bearing load and the sensor technology affords the encoder greater protection in harsh environments.

Retrofitting to all encoders with a 58 mm clamping flange is very easy and quick.


Shock / vibration resistant

Temperature

High IP value


High shaft load capacity

Order-No.	8.0010.8200.000C

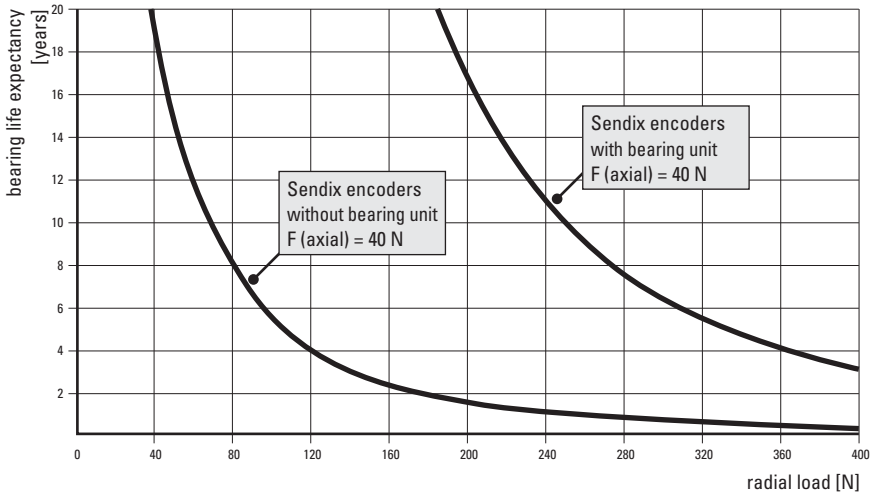
Robust bearing unit

(matching shaft encoders with clamping flange and shaft 10 mm)

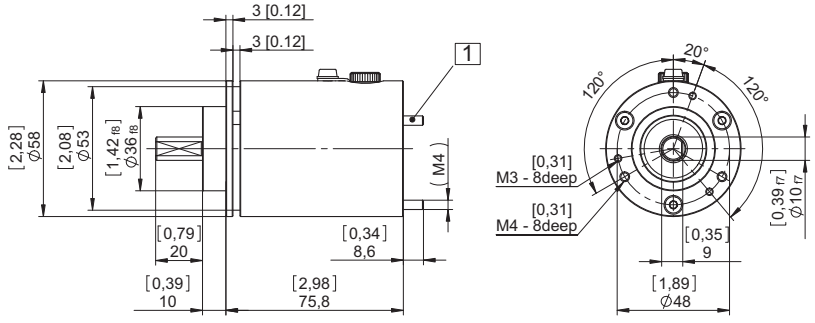
Technical Data		
Speed		max. 6.000 min^{-1}
Weight		ca. 560 g
Protection		IP67
Material	housing	aluminium (seawater resistant)
	shaft	stainless steel

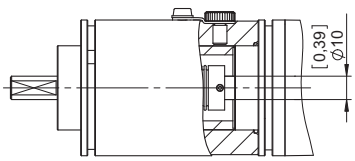
Bearing life expectancy L10

at 3,000 revolutions/min with continuous operation



Dimensions





1 3 x socket cap screw M4x25 (SW3)
1 x washer
included as mounting set

Connection of motor and encoder | **Couplings** | **Bellows and spring washer couplings**

Bellows couplings provide cost-effective connection of the motor and encoder. They are also able to correct any angular errors between the drive and encoder.

Spring washer couplings are used with high speeds.

Order code Couplings

8.0000	.	1	X	01	.	XX	XX
Type			ⓐ			ⓑ	ⓒ

ⓐ *Type of coupling*
1 = Bellows-type ø 19 mm
2 = Bellows-type ø 15 mm
3 = Spring washer type, ø 30 mm, one-part
4 = Spring washer type, ø 30 mm, three part, plug-in
5 = Bellows-type ø 25 mm

ⓑ *Bore diameter d1*
(see technical data)

Note:
for the bore diameter
d1 = 3/8" please enter Code A1
d1 = 1/4" please enter Code A2

ⓒ *Bore diameter d2*
(see technical data)

Example a) : d1 = 10 mm and d2 = 12 mm
Order-No. = 8.0000.1X01.**1012**

Example b) : d1 = 3/8" and d2 = 10 mm
Order-No. = 8.0000.1X01.**A110**

Technical data

Type		8.0000.1**1**01.XXXX	8.0000.1**2**01.XXXX	8.0000.1**3**01.XXXX	8.0000.1**4**01.XXXX	8.0000. 1**5**01.XXXX
Max. speed	min^{-1}	12000	12000	12000	12000	12000
Max. torque	Ncm	150	50	80	60	200
Max. radial displacement	mm	± 0.2	± 0.2	± 0.4	± 0.3	± 0.2
Max. angular displacement	°	± 1.5	± 1.5	± 3	± 2.5	± 1.5
Max. axial displacement	mm	± 0.7	± 0.5	± 0.4	± 0.4	± 0.6
Torsion spring parameter	Ncm/°	700	210	265	55	1300
Moment of inertia	gcm^2	5.5	1.2	19	35	18
working temperature	°C	-30 ... +120	-30 ... +120	-30 ... +120	-10 ... +80	-30 ... +120
Weight approx.	g	14	6	16	30	24
Material flange		Al	Al	Al Cu Mg Pb	zinc diecast	Al
Bellow or spring washer/casing		stainless steel	stainless steel	Cu Sn 6 nickel-plated	PA 6.6 20% gf	stainless steel
Diameter d/d1 from ... to	mm	3...12	3...9	3...8	4...16	3...16
Max. tightening torque	Ncm	150	70	80	80	180
Standard bore diameter	(d1 / d2) mm	12 / 12 12 / 10 10 / 10 6 / 6	8 / 6 6 / 6 6 / 4 4 / 4 10 / 8	6 / 6 6 / 4	12 / 12 12 / 10 10 / 10 10 / 6 6 / 6 3/8" / 10 3/8" / 6 1/4" / 10 1/4" / 6	15 / 12 14 / 12 14 / 10 6 / 14

Description and applications

Manufacturing and installation tolerances as well as the effects of temperature cause alignment errors between shafts in drive engineering which can sometimes lead to extreme overload on the bearings.

This may result in increased wear of the bearings and may lead to premature failure of the encoder. By using couplings, these alignment errors can be compensated, thereby reducing the load on the bearings to a minimum. A distinction should be made between three different kinds of alignment error: radial, angular and axial displacement.

Whilst with torsion-free but flexible shaft couplings, axial shaft displacements produce only static forces in the coupling, radial and angular displacements produce alternating stresses, restoring forces and moments which may have an impact on adjoining components (shaft bearings).

Depending on the type of coupling, particular attention should be paid to radial shaft displacement which should be kept to a minimum.