



## Enkoder absolutne AFS/AFM60 PROFINET

AFS60A-BFNB262144



Nazwa modelu > **AFS60A-BFNB262144**

Numer cz ci > **1059045**



Produkt mo e ró ni  
si od ilustracji

#### At a glance

- High-resolution 30-bit absolute encoder (18-bit singleturn and 12-bit multiturn)
- Face mount flange, servo flange and blind hollow shaft
- Connection type: 3 x M12 axial plug
- PROFINET-IO-RT interface
- Less than 5 ms data update time
- Round axis functionality
- Alarms, warnings and diagnostics functions for speed, position, temperature, operating time, etc.
- Status display via 5 LEDs

#### Your benefits

- Increased productivity as a result of intelligent diagnostics functions and rapid data transfer
- Increase in network reliability due to early error detection
- Simple installation with various configuration options
- Flexible, easy setup and high resolutions for various applications with binary, integer and "decimal point" values based on round axis functionality
- Maximum system availability through embedded switch technology
- Compact and cost-efficient design



#### Wydajno

Maks. liczba kroków na obrót:	262.144
Maks. liczba obrotów:	1
Resolution power:	262.144 x 1
Rozdzielczość:	18 bit
Granice błędu:	≤ 0,03 °
Dokładność powtarzania:	≤ 0,002 °
Odchylenie kroku pomiarowego:	± 0,002 °
Initialization time:	6 s

#### !Mechanical data!

Mechanical interface:	Blind hollow shaft
Średnica wałka:	0,5 "
Mass:	0.2 kg
Moment rozruchowy:	0.8 Ncm (+20 °C)
Roboczy moment obrotowy:	0,6 Ncm (+20 °C)
Maximum operating speed:	6.000 Hz <sup>1)</sup>

Moment bezwładności wirnika:	40 gcm <sup>2</sup>
Żywotność łożyska:	3.0 x 10 <sup>9</sup> revolutions
Maks. przyspieszenie kątowe:	500.000 rad/s <sup>2</sup>
Permissible movement axial static/dynamic:	≤ 0,5 mm, ≤ 0,1 mm
Permissible movement radial static/dynamic:	≤ 0,3 mm, ≤ 0,05 mm
Shaft material:	Stainless steel
Flange material:	Aluminium
WELLENART:	Blind hollow shaft

<sup>1)</sup> Self warming of 3.3 K per 1000 revolutions/min when applying note working temperature range

### !Electrical data!

Operating voltage range:	10 V DC ... 30 V DC
MTTFd: mean time to dangerous failure:	80 a (EN ISO 13849-1) <sup>1)</sup>
Sposób przyłączenia:	3 x connector M12, 4-pin, osiowa
Zabezpieczenie przed zmianą biegunowości:	0

<sup>1)</sup> This product is a standard product and does not constitute a safety component as defined in the Machinery Directive.

Calculation based on nominal load of components, average ambient

temperature 40°C, frequency of use 8760 h/a. All

electronic failures are considered hazardous. For more information, see document no. 8015532.

### Interfejsy

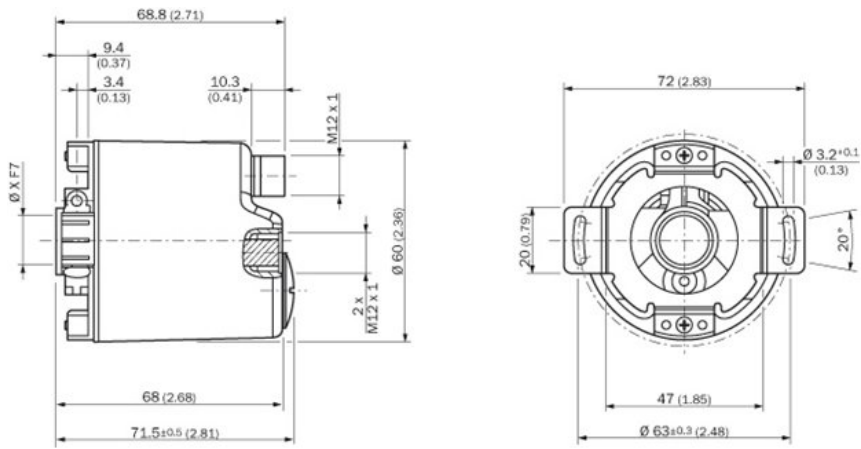
Electrical interface:	PROFINET
Bus interface:	PROFINET IO/ RT Class B
Data transmission rate (baud rate):	10 Mbit/s / 100 Mbit/s
Encoder profile:	V4.1 class3
RPI (requested packet interval):	2 ms ... 750 ms
DLR (Device Level Ring):	0
Endless operating functionality:	0

### Dane otoczenia

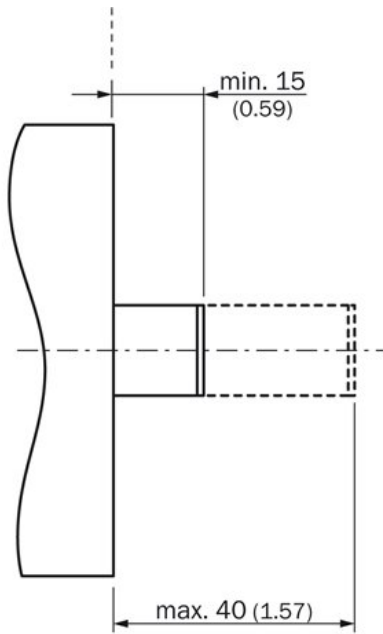
Kompatybilność elektromagnetyczna::	(according to EN 61000-6-2 and EN 61000-6-3) <sup>1)</sup>
Rodzaj zabezpieczenia:	IP 65 (according to IEC 60529), shaft side, IP 67 (according to IEC 60529), housing side <sup>2)</sup>
Dopuszczalna wilgotność względna:	90 % (condensation of the optical scanning not permitted)
Working temperature range:	-30 °C ... +85 °C
Storage temperature range:	-40 °C ... +100 °C, without package
Odporność na udar:	100 g, 6 ms (according to EN 60068-2-27)
Odporność na drgania:	30 g, 10 Hz ... 2.000 Hz (according to EN 60068-2-6)

<sup>1)</sup> The EMC according to the standards quoted is achieved if screened cables are used. <sup>2)</sup> With mating connector fitted

# Rysunek techniczny



## Proposed fitting



All dimensions in mm (inch)

## PIN assignment

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