



Incremental encoders DFS60, Rotary

DFS60B-S4PA10000



Nazwa modelu > **DFS60B-S4PA10000**

Numer cz ci > **1036720**



Produkt mo e ró ni
si od ilustracji

At a glance

- Compact installation depth
- High resolution up to 16 bits
- Optionally programmable: Output voltage, zero pulse position, zero pulse width and number of pulses
- Connection: Radial or axial cable outlet, M23 or M12 connector, axial or radial
- Electrical interfaces: 5V & 24V TTL/RS-422, 24 V HTL/push pull
- Mechanical interfaces: face mount or servo flange, blind or through hollow shaft
- Remote zero set possible

Your benefits

- Reduced storage costs and downtime due to customer-specific programming
- Variety of different mechanical and electrical interfaces enable the encoder to be optimally adjusted to fit the installation situation
- Excellent concentricity even at high speeds
- High resolution of up to 16 bits ensures precise measurements
- Permanent and safe operation due to a high enclosure rating, temperature resistance and a long bearing lifetime
- Programmability via the PGT-08 programming software and the PGT-10-S display programming tool allow the encoder to be adapted flexibly and quickly according to customer needs
- Programmable zero pulse position simplifies installation



Wydajno

Granice błędu:	± 0,05 °
Krok pomiaru:	90 ° /electronically/number of lines
Initialization time:	30 ms, 32 ms ¹⁾
Maks. liczba kroków na obrót:	10.000

¹⁾ With mechanical zero pulse width

!Mechanical data!

Mechanical interface:	Walek, Kołnierz serwowymotoru
Średnica wałka:	10 mm x 19 mm
Mass:	0,3 kg
Moment rozruchowy:	0,5 Ncm (20 °C)
Roboczy moment obrotowy:	0,3 Ncm (20 °C)
Maximum operating speed:	10.000 /min

Moment bezwładności wirnika:	6,2 gcm ²
Żywotność łożyska:	3.6 x 10 ¹⁰ revolutions
Maks. przyspieszenie kątowe:	500.000 rad/s ²
Permissible shaft loading radial/axial:	40 N (osiowa), 80 N (kątowe)

!Electrical data!

Electrical interface:	Connector M23, 12-pin, kątowe, TTL/HTL programmable
Typ połączenia:	Connector M23, 12-pin, kątowe
Maximum output frequency:	600 kHz
Sygnal referencyjny, liczba:	1
Sygnal referencyjny, pozycja:	90 °, electronically, gated with A and B
Operating voltage range:	4,5 V ... 32 V
Load current max.:	30 mA
Pobór mocy:	0,7 W (bez obciążenia)

Dane otoczenia

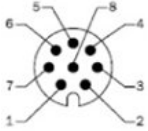
Kompatybilność elektromagnetyczna.:	(according to EN 61000-6-2 and EN 61000-6-3)
Working temperature range:	-30 °C ... 100 °C
Storage temperature range:	-40 °C ... 100 °C, without package
Odporność na udar:	70 g (according to EN 60068-2-27)
Odporność na drgania:	30 g, 10 Hz ... 2.000 Hz (according to EN 60068-2-6)
Enclosure rating:	IP 65 (according to IEC 60529), shaft side, IP 67 (according to IEC 60529)
Dopuszczalna wilgotność względna:	90 % (Condensation of the optical scanning not permitted)

¹⁾ With mating connector fitted

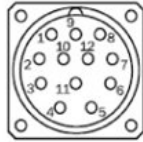
PIN assignment

8-core cable

View of M12 device connector on encoder



View of M23 device connector on encoder



PIN, 8-pin, M12 connector	PIN, 12-pin, M23 connector	Core colors of encoders with cable outlet	TTL/HTL signal	Explanation
1	6	Brown	\bar{A}	Signal cable
2	5	White	A	Signal cable
3	1	Black	\bar{B}	Signal cable
4	8	Pink	B	Signal cable
5	4	Yellow	\bar{Z}	Signal cable
6	3	Lilac	Z	Signal cable
7	10	Blue	GND	Ground connection of the encoder
8	12	Red	+U _s	Supply voltage (volt-free to housing)
-	9	-	N.C.	Not assigned
-	2	-	N.C.	Not assigned
-	11	-	N.C.	Not assigned
-	7 ²⁾	-	SET	Zero pulse teach
Shield	Shield	Shield	Shield	Shield connected to housing on side of encoder. Connected to ground on side of control.

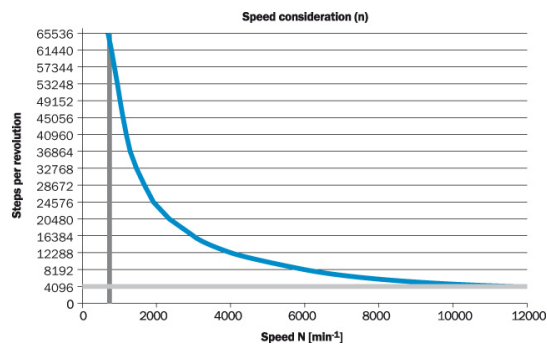
²⁾ Only at 4.5 ... 32 V, TTL/HTL programmable

The SET input serves to carry out the zero pulse teach function. If the SET input is applied to U_s for longer than 250 ms, after it has been open for at least 1,000 ms or applied to GND, the current shaft position is assigned the zero pulse signal "Z".

Signalansgänge

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Drehzahlbetrachtung



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