

Encoders

magnetic Encoder, digital outputs, 2 channels, 50 - 400 lines per revolution

For combination with DC-Micromotors

Series IE2-400

		IE2-50	IE2-100	IE2-200	IE2-400	
Lines per revolution	Ν	50	100	200	400	
Frequency range, up to ¹⁾	f	20	40	80	160	kHz
Signal output, square wave		2				Channels
Supply voltage	U_{DD}	4,5 5,5				V
Current consumption, typical ²⁾	I DD	typ. 9,5, max. 13				mA
Output current, max.3)	І оит	5				mA
Phase shift, channel A to B	Φ	90 ± 45				°e
Signal rise/fall time, max. (CLOAD = 50 pF)	tr/tf	0,1 / 0,1				μs
Inertia of sensor magnet	J	0,05				gcm ²
Operating temperature range		-25 +85				°C

³⁾ $U_{DD} = 5 \text{ V}$: low logic level < 0,5 V, high logic level > 4,5 V: CMOS- and TTL compatible

For combination with Motor		
For combination with Motor Dimensional drawing A 1319 SR	<l1 [mm]<="" th=""><th></th></l1>	
1319 SR	21.9	
1331 SR	21,9 33,9	

Characteristics

These incremental shaft encoders in combination with the FAULHABER DC-Micromotors are used for the indication and control of both shaft velocity and direction of rotation as well as for positioning.

The encoder is integrated in the DC-Micromotors SR-Series and extends the overall length by only 1,7 mm! Hybrid circuits with sensors and a low inertia magnetic disc provide two channels with 90° phase shift.

The supply voltage for the encoder and the DC-Micromotor as well as the two channel output signals are interfaced through a ribbon cable with connector.

Details for the DC-Micromotors and suitable reduction gearheads are on separate catalogue pages.

To view our large range of accessory parts, please refer to the "Accessories" chapter.

¹⁾ Velocity (min-1) = $f(Hz) \times 60/N$

²⁾ $U_{DD} = 5$ V: with unloaded outputs







