

Electrical data

Number of pulses	Z	1024, 2048, 4572, 5000 pulses/revolution (other on request)	XXXX
Electronic version (output signals)	sine	with amplifier stage, supply voltage: $U_B = 5 \text{ VDC} \pm 10\%$ (polarity protected) output amplitude A+B : $1 V_{PP}$ at $Z_0 = 120 \Omega$ output amplitude N : approx. 0.4 V (useable part) at $Z_0 = 120 \Omega$	M
Output signals	A, B, N	2 sine wave signal trains phase shifted by 90° electr. + zero pulse	NI
Limit frequency	f_G	180 kHz (-3 dB)	
Current consumption (no-load)	I_{max}	$\leq 90 \text{ mA}$	
Type of connection		socket type 2, pin contacts, radial, 12-poles	D2SR12
Operating temperature range		-20°C to $+85^\circ \text{C}$	S
Permissible relative humidity		$\leq 90\%$ (condensation not permitted)	

Options

Electronic version (output signals)	sine	with amplifier stage, supply voltage: $U_B = 8 - 26 \text{ VDC} \pm 10\%$ (polarity protected) output amplitude A+B : $1 V_{PP}$ at $Z_0 = 120 \Omega$ output amplitude N : approx. 0.4 V (useable part) at $Z_0 = 120 \Omega$	S
Operating temperature range		-20°C to $+100^\circ \text{C}$	

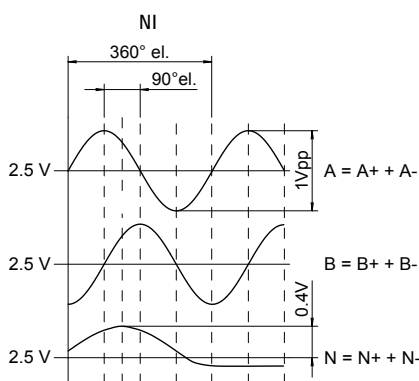
Accessories

Connector, for version D2SR12	connector type 2, bush contacts, straight, 12-poles	S2BG12
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Connection table

PIN-no.	signals
PIN 5	A +
PIN 6	A -
PIN 8	B +
PIN 1	B -
PIN 3	N +
PIN 4	N -
PIN 12	+ U_B
PIN 10	0 V
PIN 2	+ U_{sensor}
PIN 11	0 V_{sensor}
PIN 7	NC
PIN 9	NC

Output signal diagram



Pulse trains: Clockwise rotation when looking at the end of the shaft (mounting side).

Ordering example:

ITD 22 Incremental encoder ITD 22	A 4 Design A 4	Y47 Mechanical variant Y47 = look at the drawing	2048 Number of pulses 2048 pulses/revolution	M Electronic version signal amplitude = $1 V_{PP}$	NI Output signals A-, B-, N-track	D2SR12 Type of connection socket type 2, pin contacts, radial, 12-poles	S Operating temperature range -20°C to $+85^\circ \text{C}$	12 Hollow shaft diameter 12 mm	IP65 Protection IP65	02 Attachment kit variant 02
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