

Quality - made in Germany



RSR 80

Incremental encoder

- shockproof up to 200 g
- twin-encoder with different pulse-numbers
- up to 9.000 pulses/turn
- pulse frequency up to 4 MHz
- expanded temperature range up to + 110° C

Technical data

Pulse/Turn	up to 9.000 P/T (see Standard-Pulse-Numbers) Track 1: up to max. 9.000 Track 2: up to max. 6.500
Number of channels	6 or 12
Pulse frequency	up to 4 MHz
Output driver	5 V Line-Driver or push-pull

Electrical data

Operating voltage	UB = 5 VDC ± 5 % or UB = 10...30 VDC
Current consumption	60...200 mA
Output current	20 mA...1A
Output signals	Channel A, B, N + inverted

Mechanical data

Speed	≤ 12.000 min ⁻¹
Moment of inertia	< 0,3 Ncm (20° C)
Shaft loading	≤ 20 N radial, 10 N axial
Angular acceleration	10 ⁴ rad/s ²

Material

Housing	Steel
Flange	Aluminium
Weight	< 0,4 kg

Ambient conditions

Vibration	≤ 10 g (20...2000 Hz)
Shock	≤ 1000 g (11 ms)
Operating temperature	0...+ 80° C or upgrade to - 42 ...+ 110° C
Storage temperature	- 30 ... + 90° C
Humidity	< 85 % r. h.
Protection type	IP 65 (DIN 40050/IEC 529)
EMV	IEC 801

PIN - assignment RSR 80

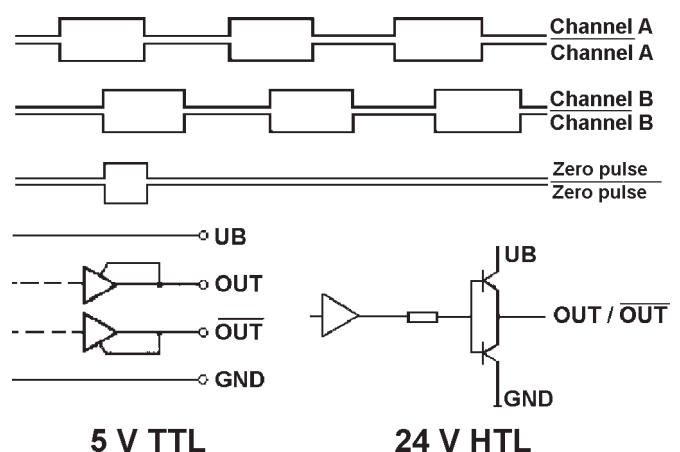
Signal	PIN	Cable colour
Channel B inverted	1	pink
not in use	2	
Zero pulse	3	red
Zero pulse inverted	4	black
Channel A	5	brown
Channel A inverted	6	green
not in use	7	-
Channel B	8	gray
Shield	9	transparent
GND	10	white 0,5
not in use	11	-
UB	12	brown 0,5

Instructions:

Not used out put channels before putting info operation.

Please note that for major conductor lengths, the conductor ends must be terminated with a characteristic impedance.

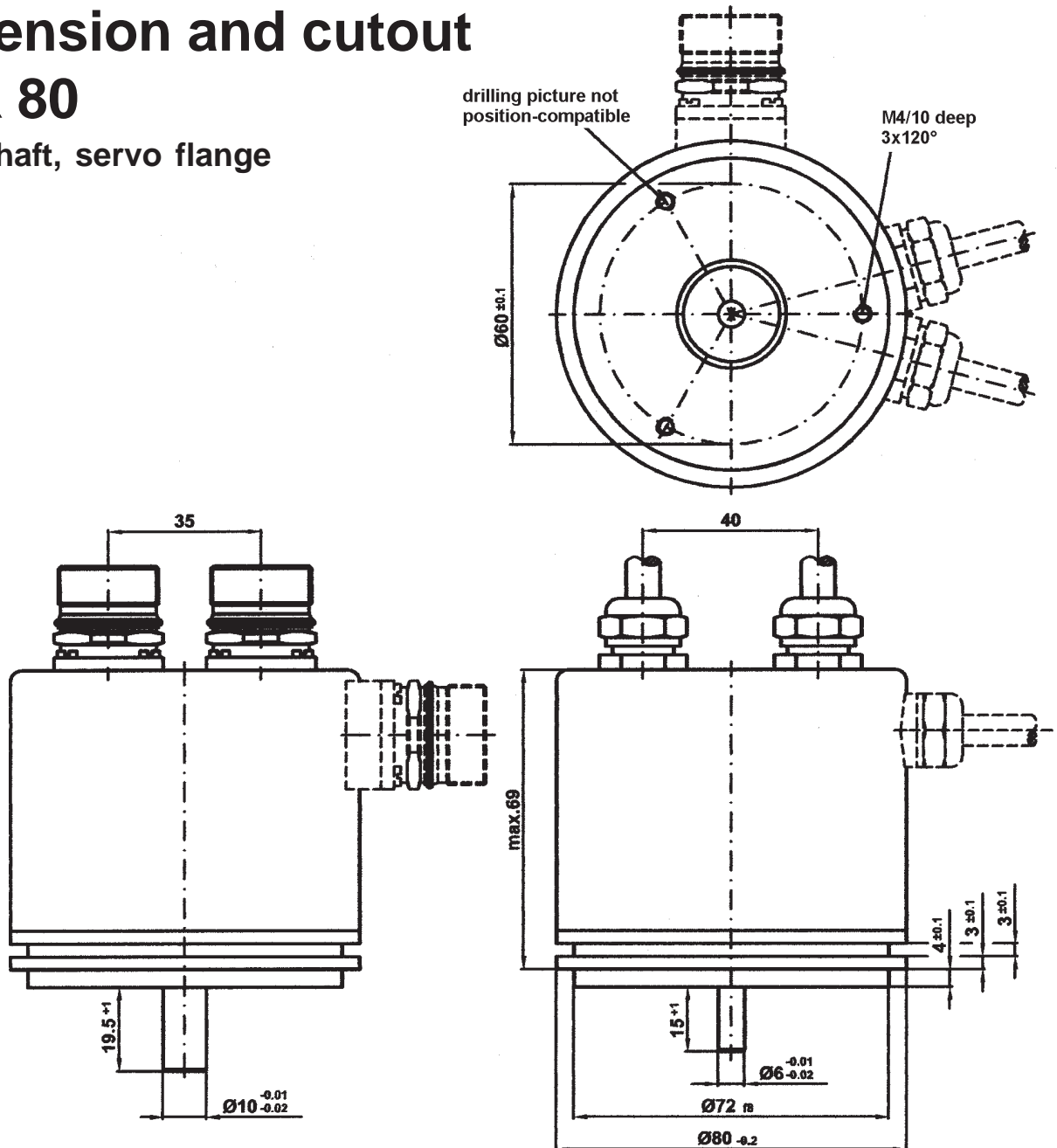
Circuit principle



Dimension and cutout

RSR 80

6mm shaft, servo flange



Type key of encoder

Encoder type	Pulse/T	Channels	Voltage	Driver	Flange	Output	Option
RSR 80	Pulse-Numbers encoderr 1		5 = 5 VDC	S = TTL	W1 = 10 mm shaft clamping flange	KG = 2 X Cable axial	T = temperature-resistant up to + 110° C
RSR 80	Pulse-Numbers encoder 2	Y = 6channelled	3 = 10 - 30 VDC	G = circuit pulse	V6 = 6 mm shaft servo flange	KS = 2 X Cable radial	D = twin-encoder
RSR 80	See Standard-Pulse-Numbers	Z = 12channelled			V1 = 10 mm shaft servo flange	SG = 2 X 12pol. plug axial	
RSR 80						SS = 2 X 12pol. plug radial	
RSR 80	_____	_____	_____	_____	_____	_____	_____

Standard-Pulse-Numbers:

10 - 50 - 100 - 125 - 150 - 180 - 200 - 250 - 256 - 300 - 314 - 360 - 400 - 500 - 512 - 600 - 625 - 720 - 750 - 800 - 900 - 1000 - 1024 - 1200 - 1250 - 1375 - 1500 - 1800 - 2000 - 2048 - 2500 - 3600 - 4096 - 5000 - 6000 - 9000

Other pulse numbers on request