

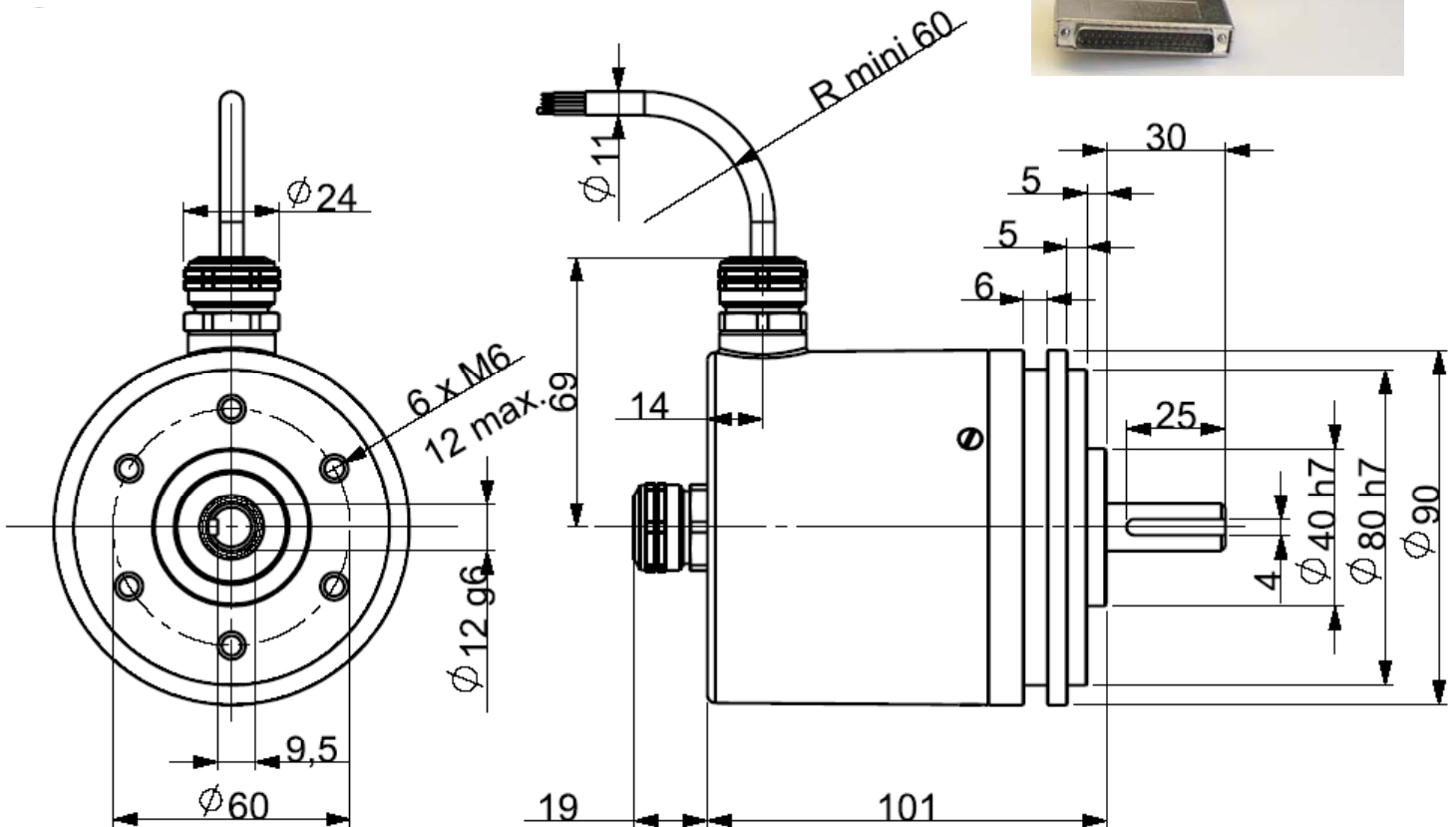
SSI ABSOLUTE MULTITURN ENCODERS, SHM9 RANGE, ROBUSTECH™



Especially designed for Heavy Duty Industry: steel and paper mills, lumber, cranes, etc.
Strong and compact design.
Excellent resistance to shocks/vibrations and to extreme axial/radial loads.



Also available in parallel, SSI and fieldbus interfaces: DeviceNet and Profibus



CHARACTERISTIC

Material	Cover : zinc alloy	Vibration (EN60068-2-6)	≤ 10 g (10 Hz...500 Hz)
Stainless steel option	Body: aluminium	EMC	EN 61000-6-4, EN 61000-6-2
Shaft	Stainless steel	Isolation voltage	1 000 V eff
Ball bearings	6001 ZZ	Electrical lifetime	> 10 ⁵ h
Maximal loads	Axial : 100 N	Weight	1,1kg zinc cover, alu body
	Radial : 200 N		2,4kg zinc cover, stainless steel body
Shaft inertia	≤ 12 g.cm ²		2,6kg stainless steel cover and body
Torque	≤ 0.8 N.cm	Operating temperature	- 20... + 85 °C
Max speed	9 000 rpm	Storage temperature	- 40... + 85 °C
Max speed (continuous)	6 000 rpm	Humidity	98 % (without condensation)
Max acceleration	1.10 ⁵ rad.s ⁻²	Protection (EN 60529)	IP 67 (cable), IP 66 (connector)
Shaft seal	Viton	Theoretical electrical lifetime 10 ⁹ turns (F _{axial} / F _{radial})	
Shock (EN60068-2-27)	≤ 30 g (during 11 ms)	20 N / 30 N	50 N / 100 N
Shock (EN60068-2-29)	≤ 10 g (during 6 ms)	360	100 N / 200 N
			2,5

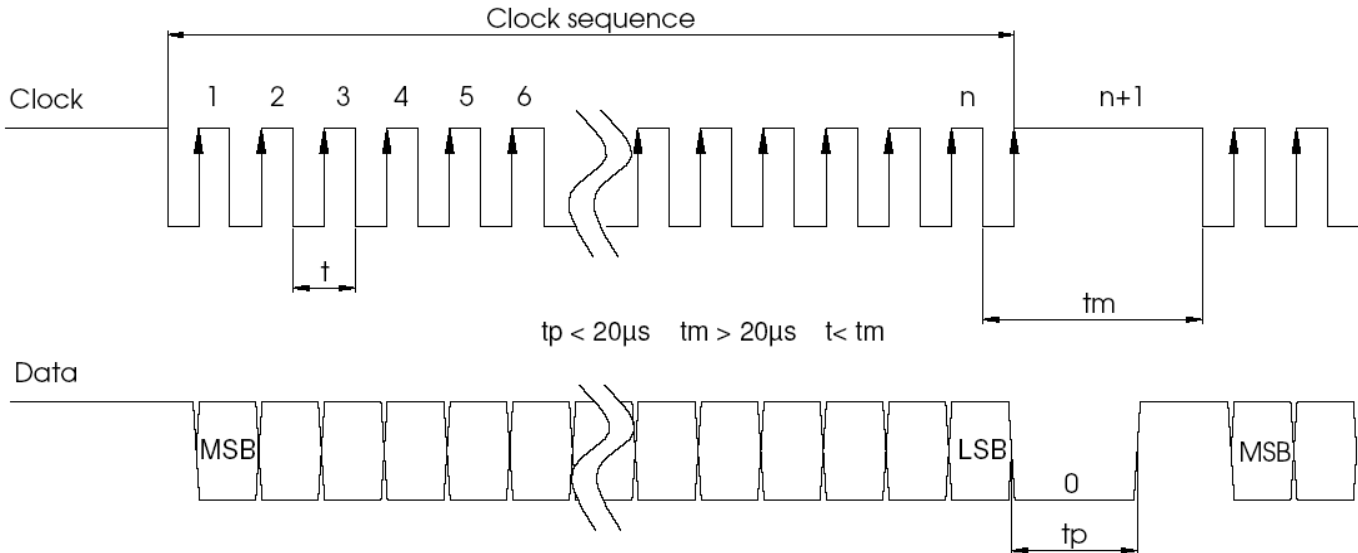
SSI ABSOLUTE MULTITURN ENCODERS, SHM9 RANGE, ROBUSTECH™

ELECTRICAL CHARACTERISTIC

Input signal clock CLK	per opto-coupleur
Output signal DATA	line - driver RS422
Clock frequency CLK	100kHz – 500kHz
Precision	+ ½ LSB (13 bits)

Power supply	5 – 30Vdc
Introduction	< 1 s
Consumption	100mA

SSI TRANSMISSION



Transmission	Transmission up to 400m at 100kHz in function of cable characteristics
Cable	High security of transmission by using shielded cable and twisted pairs

SSI CONNECTION

Type	Vcc	Gnd	Clk+	Data+	Rax	Data-	Clk-	A/	Sens	A	B	B/
S6	1	2	3	4	5	6	7	8	9	10	11	12
S7	BN brown	WH white	GN green	GY grey	BU blue	PK pink	YE yellow	VT violet	RD red	BK black	RD/BU red/blue	RD/GY red/grey
S8	8	1	3	2	6	10	11	7	5	4	9	12

ORDERING REFERENCE (Special versions upon request, for ex. special flanges/electronics/connections...)

	Shaft Ø	Supply	Output stage	Code	Resolution / Nb of turns	Connection	Connection orientation	
SHM9 Zinc cover Alu body	12:12mm	5 : 11 to 30Vdc	SS : SSI without parity SP : SSI even parity SI : SSI uneven parity	B : Binary G : Gray	13B12D5 : resolution 13 bits, number of turns 12 bits 12B12D4 : resolution 12 bits, number of turns 12 bits	S6 : M23 12 pins CW. for SSI	A : axial	
S8 : M23 12 pins CCW for SSI						R : radial		
S7 : cable gland + SSI cable						Example : R020 : radial cable of 2m A050 : axial cable of 5m		
SHM9	-	12 //	5	SS	B //	13B12D5 //	S7	R050