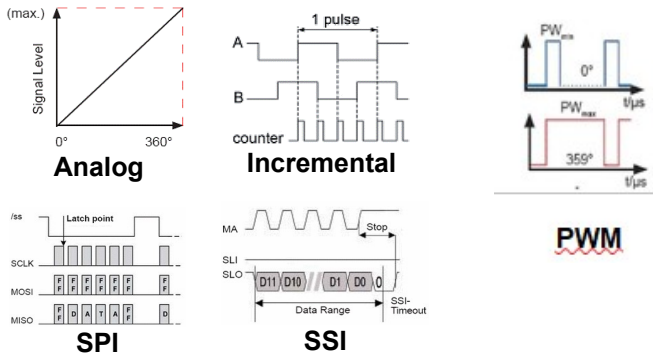


22/36X RCS

MAGNETIC ENCODERS WITH SERVO MOUNTING

The determination of angular position and signal generation is realised by an intelligent CMOS Hall sensor. A diametrical polarised magnet induces its magnetic field into the sensor. It rotates and provides a conditioned signal to the integrated electronic



- Contactless
- Travel up to 360°
- 2 ball bearings

SSI bus : consult the application note AN169.

Version	Electrical features				
	Analog (A)	Incremental (I)	SPI (P)	SSI (Y)	PWM (W)
Electrical angle	360° (programmable by step of 1° on demand)				
Max frequency	/	500 kHz	5 kHz	10 kHz	/
Resolution	4096 step (12 bits)	2 to 128,256,512, 1024 ppr (10 bits)	16383 step (14 bits)	4096 step (12 bits)	4096 step (12 bits)
Voltage supply	5VDC ±10% 9-30VDC / 15-30VDC	5VDC ±10% 9-30VDC	5VDC ±10%	5VDC ±10% 9-30VDC	5VDC ±10%
Current supply	< 25 mA	< 30 mA			< 16 mA
Output signal	0-5V / 0-10V / 4-20mA / 0-20mA / PWM	TTL / Open Collector : max current 100 mA	SPI	SSI	PWM
Linearity	0,5 %	/			0,5 %
Max rotation speed	160 rpm	1600 rpm	800 rpm	1600 rpm	160 rpm
Connection	Ø22: Flat cable 3 wires Ø36: 3 pins	Ø22: Flat cable 5 wires Ø36: 5 pins		Ø22: Flat cable 6 wires Ø36: 6 pins	Ø22: Flat cable 3 wires Ø36: 3 pins

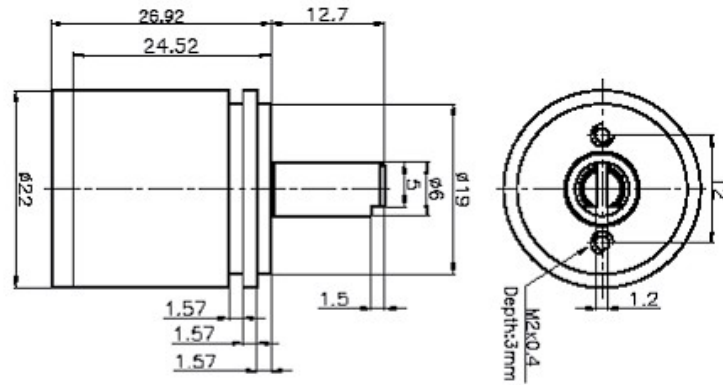
Version	Mechanical features	
	Ø 22 mm	Ø 36 mm
Mechanical angle	360°	
Max rotation speed	6000 rpm	8000 rpm
Lifespan	25.10 ⁶ rotations	35.10 ⁶ rotations
Starting torque	0,05 Ncm	
Operating temperature	-40 à +85°C	
Housing	Anodized aluminium	
Axe	Stainless steel	
Bearing	2 precision ball bearings	



ANDIG S.A.R.L
451, route des Blaves
74200 ALLINGES
<https://www.andig.fr>

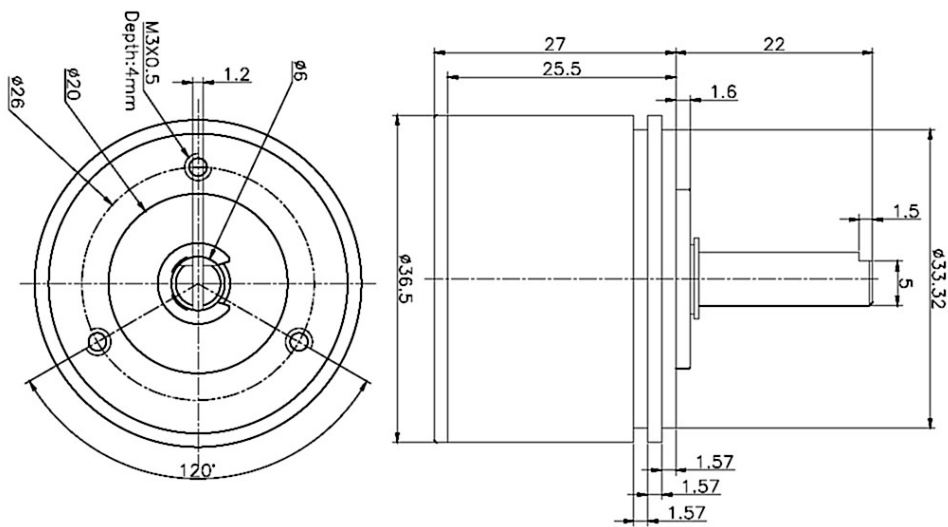
Tél : +33 (0)4 50 70 54 54
Fax : +33 (0)4 50 70 56 56
Email : info@andig.fr

22x RCS



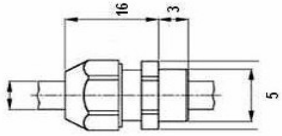
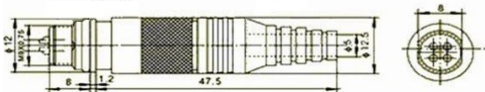
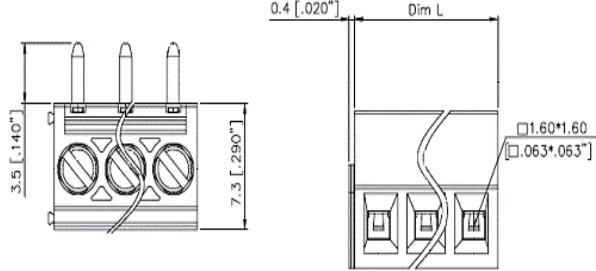
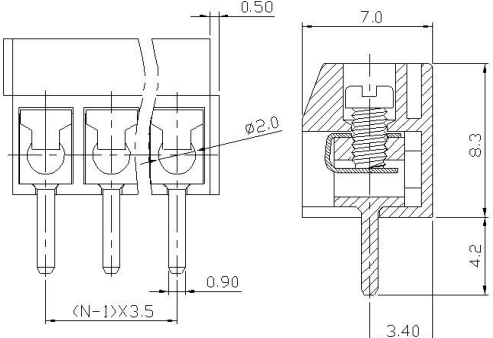
Also available with an axis $\varnothing 3,17$ mm

36x RCS

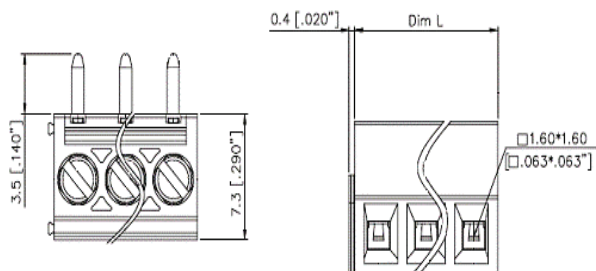
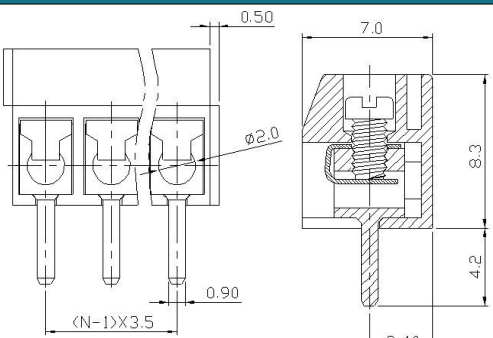


Also available with an axis $\varnothing 6,35$ mm

Connectors for encoders 36x RCS

Cable gland 1m (OCG)	Miniature connector (OCM)
	
Terminal block - Axial (OCTA)	Terminal block - Radial (OCTR)
	
Pins (OCP)	Core round cable 1m (OCR)

Connectors for encoders 22x RCS

Terminal block - Axial (OCTA)	Terminal block - Radial (OCTR)
	
Core flat cable 150mm (OCF)	

sf_22_36x_rcs_2404_e10 - Document & produit soumis à modifications sans préavis.

Order code	Standard				Option
Sensor Ø 22mm Sensor Ø 36mm	22 36				
Analog Incremental SPI SSI PWM		A I P Y W			
Axe Ø 6 mm Model 22 : Opt. axe Ø 3,17 mm Model 36 : Opt. axe Ø 6,35 mm			MSL ZSL ZSL		
Gamme				RCS	
Power Supply / Output signal :					
5VDC±10% / 0-5V (ratio-metric) 9-30VDC / 0-5V 15-30VDC / 0-10V 15-30VDC / 4-20mA				S 0505 S DC05 S 2410 S 2442	
5VDC±10% / TTL 5VDC±10% / Open Collector 9-30VDC / Open Collector				S 05TTL S 05OC S 24OC	
5VDC ±10% / SPI (14 bits) 3 wires 5VDC±10% / SPI (14 bits) 4 wires 3,3VDC±10%/SPI (14 bits) 4 wires				05 SPI S14 E05 SPI S14 E33 SPI S14	
5VDC±10% / 5V SSI (12 bits) 9-30VDC / 24V SSI (12 bits)				05 SSI S12 24 SSI S12	
5VDC±10% / PWM				S PWM	
Interconnections :					
Core flat cable (Model Ø22) Pins (Model Ø36) Core round cable 1m (Model Ø36) Cable gland 1m (Model Ø36) Miniature connector (Model Ø36) Terminal block - Axial Terminal block - Radial					OCF OCP OCR OCG OCM OCTA OCTR
Reference :				RCS	

Optional mounting kit : Bag of 3 SFN2 fixing nails (to be specified when ordering)

Connection 22x RCS

	1	2	3	4	5	6
Analog/ PWM	Supply (red)	Output	Ground			
Incremental	Supply (red)	ChZ	ChB	ChA	Ground	
SPI	Supply (red)	Ground	Output	Clock	Chip Select	
SSI	Supply (red)	Ground	Clock+	Clock-	Data+	Data-

Analog / PWM connection 36A/W RCS

	1	2	3
OCG / OCR	Supply (red)	Output (brown)	Ground (black)
OCP	Supply (red)	Output (brown)	Ground (black)
OCM / OCTA / OCTR	Supply	Output	Ground

Incremental connection 36I RCS

	1	2	3	4	5
OCG / OCR	Supply (red)	Ch Z (brown)	Ch B (yellow)	Ch A (orange)	Ground (black)
OCM / OCTA / OCTR	Supply	Ch Z	Ch B	Ch A	Ground

SPI connection 36P RCS

	1	2	3	4	5
OCG / OCR	Supply (red)	Ground (black)	MOSI / MISO (brown)	Clock (orange)	Chip select (yellow)
OCM / OCTA / OCTR	Supply	Ground	MOSI / MISO	Clock	Chip select

SSI connection 36Y RCS

	1	2	3	4	5	6
OCG OCR	Supply (red)	Ground (black)	Clock+ (orange)	Clock- (brown)	Data+ (green)	Data- (yellow)
OCM / OCTA / OCTR	Supply	Ground	Clock+	Clock-	Data+	Data-