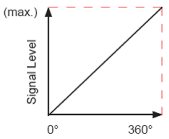
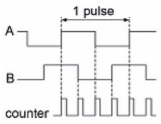
25x RSB

MAGNETIC ENCODERS SPEEDCONNECT

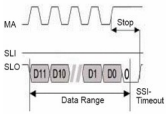
The determination of angular position and signal generation is realized by an intelligent CMOS Hall sensor. A diametrical polarized magnet induces its magnetic field into the sensor. It rotates and provides a conditioned signal to the integrated electronic.



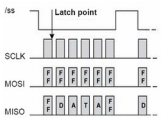
Analog



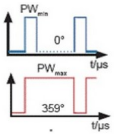
Incremental



SSI



SPI



PWM

SSI bus : consult the application note AN169.
SPI bus : consult the application notes AN172 and AN173

- Contactless
- Travel up to 360°
- Bush mounting
- Different connectors

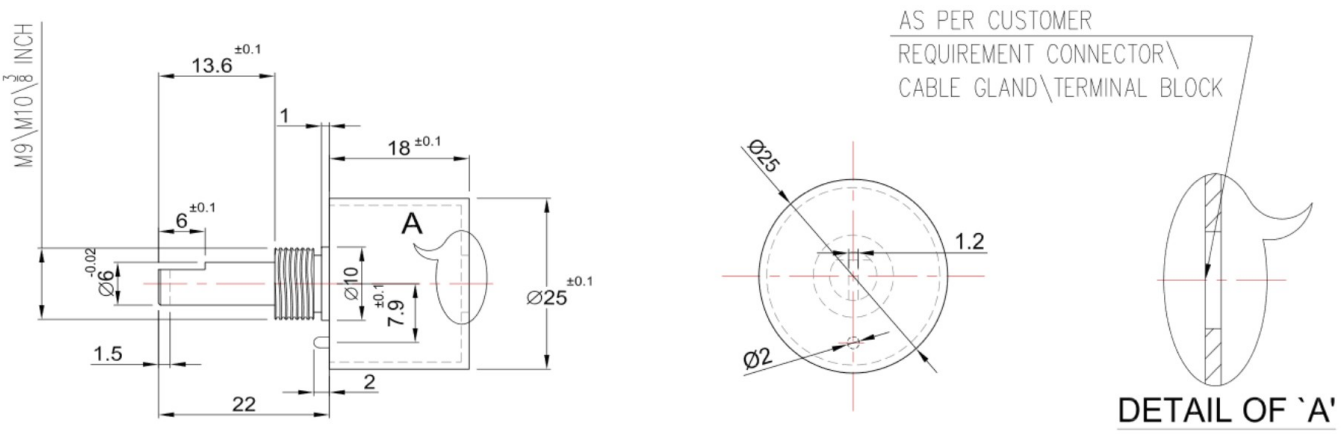
	Electrical specifications				
Version	**Analog (A)**	**Incremental (I)**	**SPI (P)**	**SSI (Y)**	**PWM (W)**
Electrical angle	360° (programmable by step of 1° on demand)				
Max frequency	/	500 kHz	5 kHz	10 kHz	/
Resolution	4096 step (12 bits)	2 to 128,256,512, 1024 step (10 bits)	16384 step (14 bits)	4096 step (12 bits)	4096 step (12 bits)
Voltage supply	5VDC ±10% 9-30VDC / 15-30VDC	5VDC ±10% 9-30VDC	3,3VDC ±10% 5VDC ±10%	5VDC ±10% 9-30VDC	5VDC ±10%
Current supply	< 16 mA	< 30 mA			< 16 mA
Output signal	0-5V / 0-10V / 4-20mA / 0-20mA	5V TTL / 5V / 24V Open Collector : max current 100mA	SPI	SSI	PWM
Linearity	0,5 %	/			0,5 %
Max rotation speed with reading	160 rpm	1600 rpm	800 rpm	1600 rpm	160 rpm

	Mechanical specifications
Mechanical angle	360°
Max rotation speed without reading	800 rpm (Brass) / 3000 rpm (Polymer)
Lifespan	10.10^6 rotations (Brass) / 15.10^6 (Polymer)
Starting torque	0,5 Ncm
Operating temperature	-40 à +85°C
Housing	PA66
Shaft	Stainless steel

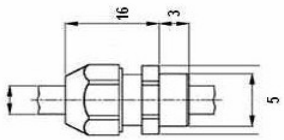
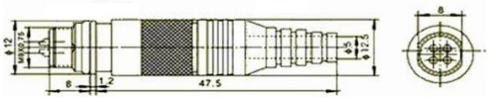
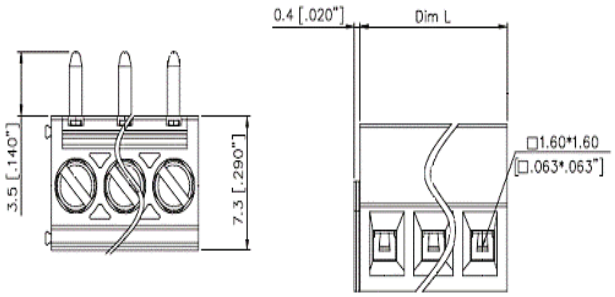
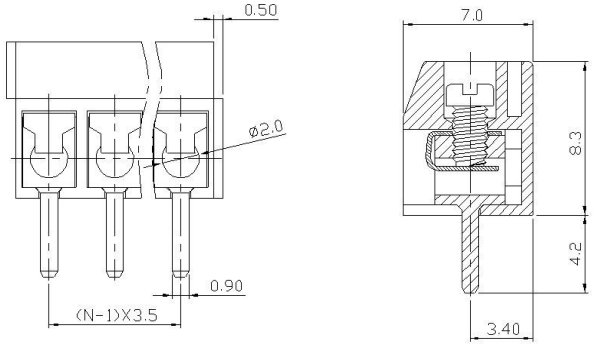
ANDIG S.A.R.L
451, route des Blaves
74200 ALLINGES
https://www.andig.fr

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

25 RSB



Interconnections for encoders 25 RSB:

Cable gland (OCG)	Miniature connector (OCM)
 Cable length 1m	
Axial terminal block (OCTA)	**Radial terminal block (OCTR)**
	

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

Wirings

Analog / PWM	1	2	3
OCG	Supply (red)	Output (brown)	Ground (noir)
OCM, OCTA, OCTR	Supply	Output	Ground

Incremental	1	2	3	4	5
OCG	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 3 wires	1	2	3	4	5
OCG	Supply (red)	Ground (black)	MOSI/MISO (brown)	CLK (orange)	CS (yellow)
OCM, OCTA, OCTR	Supply	Ground	MOSI/MISO	CLK	CS

SPI 4 wires	1	2	3	4	5	6
OCG	Supply (red)	Ground (black)	CLK (orange)	MOSI (blue)	MISO (brown)	CS (yellow)
OCM, OCTA, OCTR	Supply	Ground	CLK	MOSI	MISO	CS

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

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

Order code	Standard					Options
Sensor Ø 25mm	25					
Analog **Incremental** **SPI** **SSI** **PWM**		A I P Y W				
Range			RS			
Bushing M10 / shaft Ø 6mm **Bushing M9 / shaft Ø 6mm** **Bushing 3/8" / shaft Ø 6,35mm**				B1 B2 B3		
Power supply / Output signal : **5VDC±10% / 0-5V (ratio-metric)** **9-30VDC / 0-5V** **15-30VDC / 0-10V** **15-30VDC / 4-20mA** **5VDC±10% / PWM** **5VDC±10% / TTL** **9-30VDC / Open Collector** **5VDC±10% / Open Collector** **5VDC ±10% / SPI 3 wires (14 bits)** **5VDC ±10% / SPI 4 wires (14 bits)** **3,3VDC ±10% / SPI 4 wires (14 bits)** **5VDC±10% / 5V SSI (12 bits)** **9-30VDC / 24V SSI (12 bits)**					 S 0505 S DC05 S 2410 S 2442 S PWM S 05TTL S 24OC S 05OC 05 SPI S14 E 05 SPI S14 E 33 SPI S14 05 SSI S12 24 SSI S12	
Interconnections : **Cable gland with round cable 1m** **Miniature connector** **Terminal block - Axial** **Terminal block - Radial** **Rubber gromet with round cable 1m**						 OCG OCM OCTA OCTR OCR
Reference example :	**25**	**A**	**RS**	**B1**	**S0505**	**OCG**

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

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