



## ELECTRICAL OPTIONS FOR SPI VERSION 25/30P RSB

RotaCol® are the latest development in rotational position sensors and contactless devices. Modern Hall IC's in combination with special magnets and RISC processors provide intelligent customizing of output signals and interfacing. Not only precision potentiometer but also optoelectronic incremental and absolute encoders are replaced. The RotaCol® series is divided into 3 groups : analog types with analog output (replacement for precision potentiometer), incremental output (replacement of optoelectronic encoders), absolute digital SPI and SSI output. Because of wide variety of mechanical and electrical options it is possible to use them in almost any automation and control application where rotary angular sensing is required. Regardless of the wide variety of existing technical features, the price is relative low.

**SPI Bus Interface** The Serial Peripheral Interface bus or SPI bus is a synchronous serial data link standard developed by Motorola that operates in full duplex mode. One or more devices can communicate with one master. The length of the signal wire should not be longer than 0.5m. To bridge larger distances it is recommended to use the SSI interface. The digital signal in 2 byte Grey code transmits the angular position information through the data bus.

### Direction of Rotation (xxxx CW / CCW)

The standard direction of rotation is clockwise (CW). It is also possible to change the direction of turning to counter clockwise mode (CCW).

### Zero Point Programming (POZ)

The electrical zero point is at the beginning of the signal rise. If a shaft marking is brought in line with the housing marking, the electrical zero point can be set to that position. Beside that it is also possible to position the zero point at any position within the mechanical angle. In any case it is necessary to have a reference to the shaft marking.

### 2 Channel Output (2C)

The Hall sensor chip which is integrated into the sensor consists of two galvanically separated sensor units which are influenced by the same magnetic field. The sensor provides 2 operating modes: 1) redundancy i.e. channel one and channel two are identical. If one channel fails the other channel remains active. 2) It is also possible to have 2 different programs in the 2 channels. For this, additional functions can be obtained.

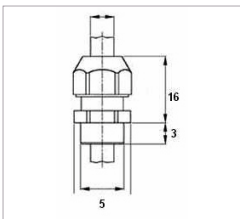
## MECHANICAL OPTIONS FOR SPI VERSION 25/30P RSB

Type / Series	Standard mechanical options	Customized mechanical options
25/30P RS B	Low torque (LT), High torque (HT)	Special shaft length

## SPEEDCONNECT OUTPUT CONNECTIONS FOR SPI VERSION 25/30P RSB

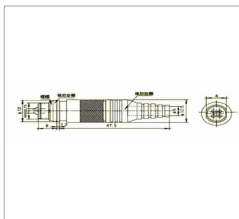
### Cable gland (OCG)

5 core cable of 1 m length according to interface



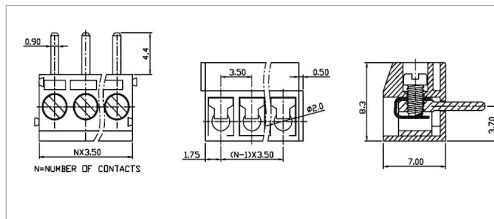
### Miniature connector (OCM)

5 pin in integrated socket with plug



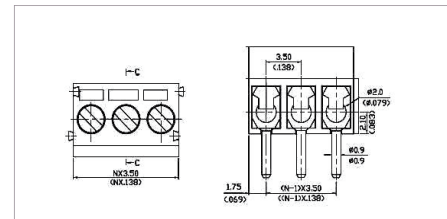
### Terminal block - Axial (OCTA) Wires leaving axial to shaft axis

5 sockets



### Terminal block - Radial (OCTR) Wires leaving radial to shaft axis

5 sockets



### European Sales & Technical Support

**MegAuto KG**  
Am Tummelsgrund 48  
D 01156 Dresden, Germany  
Tel : +49 351 6587894 0 Fax : +49 351 6587894 9  
Email : info@megauto.de / www.megauto.de  
a MegAuto Group Company

### Worldwide Technical & Marketing Center

**MegAuto International, Sensall Division**  
Div. of . Sendap Precision Electronics PVT. LTD  
3, Electronic Sadan - I, MIDC, Bhosari, Pune - 411026, INDIA  
Tel : +91 20 30681190 , +91 20 30626126  
Email : mail@megacraft.net / www.sensall.info  
a MegAuto Group Company

