



## NEW PRODUCT HIGHLIGHT

### ACW4, TCW4 SERIES ABSOLUTE MODULAR SENSORS

The ACW4 and TCW4 Series are two-part rotary hall effect sensor assemblies and magnet aimed for absolute single-turn or absolute multi-turn measurement respectively, offering design flexibility and protection from the environment.

The single-turn (ACW4) modular encoder is ideal for applications measuring less than one turn (360° of rotation), for example, in a parking barrier that swings 90 degrees and returns to the original position. The multi-turn (TCW4) is used in applications that require to measure both the degrees and the number of rotations, as measuring the opening of a rollup freight door. Both versions use non-contacting technology which ensures repeatability reducing the need for maintenance and increasing the overall lifetime of the application.

ACW4 and TCW4 hall effect sensors feature a modular design and a wide range of interface options which make them easy to integrate to most applications.

#### TECHNOLOGY

Hall Effect technology with external magnet. Non-contacting solutions for an unlimited mechanical lifetime and superior resistance to shock and vibration

#### RESOLUTION

Available resolution up to 12 bits per revolution to accommodate wide range of applications

#### SIZE

Only 52 mm across and about 12 mm thick permits to fit into tight areas

**ACW4**  
Single-turn  
Absolute Sensor



**TCW4**  
Multi-turn  
Absolute Sensor



#### IP PROTECTION

IP 67 or IP69K  
Sensor assembly completely encapsulated make it perfectly suitable for use in harsh environmental conditions



#### OUTPUT INTERFACES

Analog, PWM, SSI, CANopen, IO-Link

#### ELECTRICAL PROTECTIONS

Integrated Overvoltage, Reverse Polarity and Short Circuit protection for a higher reliability

#### WORKING TEMPERATURE

Extended operating range from -40° C to 85° C

The **Magnet Mounting System** (ordered separately from the sensor) simplifies the installation of the magnet (the 8810/013 Rare-Earth Magnet, included). Available versions include front mount, female and male magnet supports in various sizes. The M9105 series of magnet holders are designed to make mounting and alignment of the magnet to its sensor assembly easy to accomplish.



Female Support + Magnet  
(M9105/Kxx)



Male Support + Magnet  
(M9105/M10-01)



Front Support + Magnet  
(M9105/F26)

## ORDERING OPTIONS

Here some example of high runner part numbers (refer to datasheets for the complete offer)

Model number	Part Number	Description
ACW4_00//3L11//00120//L3R010	ACW400-0120-001	Single-turn Absolute Sensor - Analog 0-10V
ACW4_00//3L31//00090//L3R010	ACW400-0090-009	Single-turn Absolute Sensor - Analog 4-20mA
ACW4_00//5L21//00090//L3R020	ACW400-0090-003	Single-turn Absolute Sensor - Analog 0.5-4.5V
ACW4_00//5LP2//00360//L3R020	ACW400-0360-013	Single-turn Absolute Sensor – PWM
ACW4_00//PBBB//12//B2R050	ACW400-12BT-007	Single-turn Absolute Sensor - CANopen
ACW4_00//PCSG//12//S5R005	ACW400-12BT-002	Single-turn Absolute Sensor - SSI
ACW4_00//ZIOB//12//BDR003	ACW400-12BT-010	Single-turn Absolute Sensor - IO-Link
TCW4_00//3L13//36000//L5D005	TCW400D3600-001	Multi-turn Absolute Sensor - Analog 0-10V
TCW4_00//PBBB//12B16//B5D020	TCW400-1216-003	Multi-turn Absolute Sensor - CANopen
TCW4_00//PSSG//12B13D5//S5D050	TCW400-1213-002	Multi-turn Absolute Sensor - SSI
TCW4_00//ZIOB//12B16//BDD003	TCW400-1216-006	Multi-turn Absolute Sensor - IO-Link
M9105/F26	M9105/F26	Front support magnet mounting system
M9105/K06	M9105/K06	Female support magnet mounting system for 6 mm shaft
M9105/K14	M9105/K14	Female support magnet mounting system for 14 mm shaft
M9105/M10-01	M9105/M10-01	Male support, shaft mounted magnet for 10mm bore

## APPLICATIONS

- Factory Automation
- Material Handling
- Manufacturing Engineering
- Access Control
- Mobile Hydraulic Machines

## ACCESS CONTROL



## FACTORY AUTOMATION



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