



# FTR2 WEAR-FREE SINGLE AND REDUNDANT ROTARY SENSOR



No actuator shaft solutions in 3D Hall Technology. Dedicated to harsh applications with effective design.



FTR2 3D hall technology delivers accurate and reliable position measurement, with external magnet, minimizing risks related to wear over life and assembly tolerances.

Multiple options available to fulfil market requirements.







## KEY VALUES



Shock proof



3D hall effect technology



CAN open Digital Out



Up to IP68 and IP69K protection class



Wide temperature range



Current/voltage Analogue Out

Description	P/N
FTR2 0-5V	1110015
FTR2 Single CANbus	1110014
FTR2 Dual CANbus	1110017

#### **Default Parameters:**

360° full scale

0.5-4.5V or CANopen 406 profile

ID node No.1: 0x1F

ID node No.2: 0x1E (Redundant only)

Baud rate 125kbps (CANbus only)



## **APPLICATIONS**







Material Handling and Lifting Technology







Agricultural Machinery





Construction Equipment





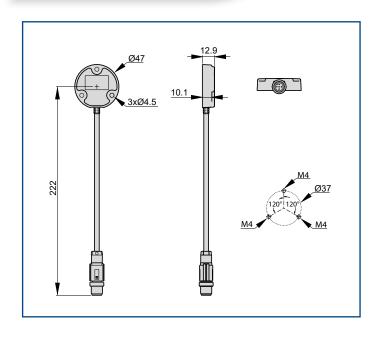
## **TECHNICAL DATA**

Measurement Range	Settable, up to 360°			
Supply voltage	+5Vdc; +9+36Vdc			
Output signal	CANbus, 0.54.5Vdc, 420 mA, 010Vdc*			
Resolution	up to 14 bit			
Independent linearity	±0.3% FS typ			
Working temperature	-40°C +85°C			
Thermal drift	<50ppm/°C			
Vibrations	20g between 10 Hz 2000 Hz IEC 60068-2-6.			
Shock	Pulse on 3 axes; 50g 11 ms IEC 60068-2-27.			
Electromagnetic compatibility	2014/30/EU Electromagnetic Compatibility (EMC).			
Protections and immunity	Protected against reverse polarity and short circuit			
IP Protection Level	IP66, IP68 and IP69K			
Housing body	Plastic			

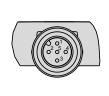
All performance data are values resulting from qualification tests on specific configuration sample production batch. Final product configuration, actual application and respect of installation recommendation may impact on some performance data. Where not differently indicated, data refer to Tamb condition test environment.

\*With limitations. Contact our specialist team for more details.

## **DIMENSIONS**

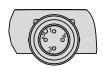


#### **CONNECTOR CANBUS**



N PIN	CANbus
1	CAN-S
2	+VIN
3	GND
4	CAN-H
5	CAN-L

#### **CONNECTOR ANALOGUE**



N PIN	Analogue
1	GND
2	+VIN
3	OUT CH1
4	NC





### **ORDERING KEY**

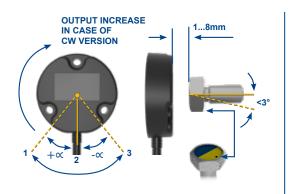
FAMILY	SUBFAMILY	CASE MATERIAL	CONNECTOR	CHANNEL 1 RANGE (±)	CHANNEL 2 RANGE (±) AND VERSE	SUPPLY VOLTAGE	OUTPUT TYPE	SPECIAL / CUSTOM FEATURE / SW / CUSTOMER	MANUAL ZERO HALL PEN	FACTORY LINEARITY TABLE SUPPLIED	ACCESSORIES / MAGNET TYPE	PROJECT REVISION
ROTATIVE	2 Single turn contactless	A Aluminium	M1 single Pigtail M12 5p 20cm	W180 clock wise ±xxx°	onot single channel	H 12-24Vdc nominal	001 analogue 0,5-4,5Vdc	000 standard	o not available (standard)	onot supplied (standard)	002 M10 Screw 1,5mm Pitch Thread	2
			M3 single Pigtail M12 4p 20cm	C180 counter clock wise ±xxx°	\$180 straight degrees	L 5Vdc	analogue 0-10Vdc (24V nominal supply Only)					
					C180 crossed degrees		051 CANopen standard					

#### **EXAMPLE OF RESULTING ORDERING CODE**

#### FTR2.A.M3.C180.0NOT.H.001.000.0.0.002.2

Further possibilities available, some options are mutually exclusive, please contact our team for more details.

#### **EXAMPLE OF APPLICATION**



Example with  $\alpha$  = 30° (± 30 FS)  $V_{out}$  = 0.5...4.5 Vdc:

	CW	ccw				
1	+ 4.5 Vdc	+ 0.5 Vdc				
2	+ 2.5 Vdc	+ 2.5 Vdc				
3	+ 0.5 Vdc	+ 4.5 Vdc				

#### **MAGNET**



