

Encoder Product Program



PC9



RI32-O



	Economy Incremental		Economy Incremental
Key specs	<ul style="list-style-type: none"> > Provides digital control inputs from operators ´s panel > Bidirectional squarewave signal outputs > Up to 512 increments > Continuous and reversible rotation > Non-contacting > Operating temperature -40 C°... 100 °C 		<ul style="list-style-type: none"> > Replacement for type Typ RIS and RI 31 > The economical encoder for small appliances > High efficiency by means of ball bearing > Small torque > Very compact design: 30 mm housing diameter / mounting depth 27 mm > Up to 6,000 steps with 1,500 pulses > Solid shaft Ø 5 mm or 6 mm > Operating temperature -10°C ... +60°C
Fields of application	<ul style="list-style-type: none"> > Laboratory equipment > Crimping machines > Tampon printing machines > Miniature grinding machines > FHP motors 	<ul style="list-style-type: none"> > Labelling machines > Plotters > Graphic machines > Textile machinery 	<ul style="list-style-type: none"> > Laboratory Equipment > Training Equipment > Crimping Machines > Tampon Printing Machines > Miniature Grinding Machines
Verticals	<ul style="list-style-type: none"> > SMFB > FA (Light Duty) 		<ul style="list-style-type: none"> > FA (Light Duty)

RI38-O



RI42-O



	Economy Incremental		Economy Incremental
Key specs	<ul style="list-style-type: none"> > Replacement for type RI 39 > Encoder for universal fitting and front or rear panel > High performance due to ball-bearings > Low torque > Up to 3,600 pulses > Operating temperature -10°C ... +60°C 		<ul style="list-style-type: none"> > Economical miniature encoder > High protection IP65 > Incremental output TTL or HTL > High mechanical efficiency > Up to 4,096 steps with 1,024 pulses > 10,000 rpm continuous operation
Fields of application	<ul style="list-style-type: none"> > Miniature Motors > Laboratory Equipment > Labelling Machines 	<ul style="list-style-type: none"> > Plotters > Linear Encoders 	<ul style="list-style-type: none"> > Textile Machinery
Verticals	<ul style="list-style-type: none"> > FA (Light Duty) 		<ul style="list-style-type: none"> > FA (Light Duty)

RI30-O

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industry



RI36-O

ICURO®
industry



Industrial Incremental		Industrial Incremental	
<ul style="list-style-type: none"> > Small rotary encoder for industrial applications > Very compact design: 30 mm housing diameter / mounting depth 27 mm > Up to 6,000 steps with 1,500 pulses > Incremental output TTL or HTL > Protection class up to IP64 > Solid shaft Ø 5 mm > Operating temperature -10°C ... +70°C > Low current consumption > High interference protection > Suitable for high pulse frequencies > 360° full screen 		<ul style="list-style-type: none"> > Small rotary encoder for industrial applications > Compact design: 36 mm housing diameter / mounting depth 27 mm > Up to 14,400 steps with 3,600 pulses > Incremental output TTL or HTL > Protection class up to IP64 > Solid shaft Ø 6 / 6,35 mm > Operating temperature -10°C ... +70°C > Low current consumption > High interference protection > Suitable for high pulse frequencies > Wide range power supply DC 3 - 38 V available on request > 360° full screen 	
<ul style="list-style-type: none"> > CNC Machines > Manipulators > Motors > Medical Technology > Textile Machines 		<ul style="list-style-type: none"> > CNC Axes > Machine Tools > Robots > Special Machinery 	<ul style="list-style-type: none"> > Position Feedback in any kind of general machinery or factory automation application
<ul style="list-style-type: none"> > FA > Medical > Elevator 	<ul style="list-style-type: none"> > AGV > OHV 	<ul style="list-style-type: none"> > FA > Medical > Elevator 	<ul style="list-style-type: none"> > AGV > OHV

RI36-H

ICURO®
industry



RI41-O

ICURO®
industry



Industrial Incremental		Industrial Incremental	
<ul style="list-style-type: none"> > Small rotary encoder for industrial applications > Compact design: 36 mm housing diameter / mounting depth 40 mm > Up to 14,400 steps with 3,600 pulses > Incremental output TTL or HTL > Protection class up to IP64 > Hub shaft Ø4 to 10 mm > Operating temperature -10°C ... +70°C > Low current consumption > High interference protection > Suitable for high pulse frequencies > 360° full screen 		<ul style="list-style-type: none"> > Replacement for type RIM > Economical miniature encoder > Up to 14,400 steps with 3,600 pulses > Incremental output TTL or HTL > High mechanical efficiency > Solid shaft Ø 6 mm > Operating temperature -10°C ... +70°C 	
<ul style="list-style-type: none"> > Motors > Machine Tools > Robots > Automated SMD equipment 	<ul style="list-style-type: none"> > Position Feedback in any kind of general machinery or factory automation application 	<ul style="list-style-type: none"> > Wood Working Machines > FHP Motors > Graphic Machines > Table robots 	
<ul style="list-style-type: none"> > SMFB > FA > Medical 	<ul style="list-style-type: none"> > Elevator > AGV > OHV 	<ul style="list-style-type: none"> > FA > Medical > Elevator 	<ul style="list-style-type: none"> > AGV > OHV

RI58-O/T/C

ICURO®
industry



RI58-D/TD/CD/-G/TG/CG

ICURO®
industry



	Industrial Incremental	Industrial Incremental
Key specs	<ul style="list-style-type: none"> > Up to 40,000 steps with 10,000 pulses > Solid shaft 6 to 12 mm versions available > Compact design > High signal accuracy > Protection class up to IP67 > Wide operating temperature range of -40°C ... +100°C > Flexible due to many flange and configuration variants > Suitable for high shock ratings > 360° full screen > Wide range power supply DC 3 - 38 V available on request 	<ul style="list-style-type: none"> > Up to 20,000 steps with 5,000 pulses > Hub shaft or through hollow shaft (up to Ø 15mm) versions available > Compact design > High signal accuracy > Protection class up to IP65 > Wide operating temperature range of -40°C ... +100°C > Flexible due to many flange and configuration variants > Suitable for high shock ratings > 360° full screen
Fields of application	<ul style="list-style-type: none"> > Machine tools > CNC axes > Packing Machines > Motors/drives > Injection Moulding Machines > Sawing Machines > Textile Machines 	<ul style="list-style-type: none"> > Machine tools > CNC axes > Packing Machines > Motors/drives > Injection Moulding Machines > Sawing Machines > Textile Machines
Verticals	<ul style="list-style-type: none"> <li style="width: 50%;">> FA <li style="width: 50%;">> Wind <li style="width: 50%;">> Medical <li style="width: 50%;">> AGV <li style="width: 50%;">> Elevator <li style="width: 50%;">> OHV 	<ul style="list-style-type: none"> <li style="width: 50%;">> SMFB <li style="width: 50%;">> Wind <li style="width: 50%;">> FA <li style="width: 50%;">> AGV <li style="width: 50%;">> Medical <li style="width: 50%;">> OHV <li style="width: 50%;">> Elevator

RI58-F/TF/CF

ICURO®
industry



RI58-H

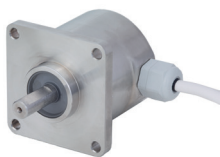
ICURO®
industry



	Industrial Incremental	Industrial Incremental
Key specs	<ul style="list-style-type: none"> > Up to 40,000 steps with 10,000 pulses > Hub shaft or through hollow shaft (up to Ø 12mm) versions available > Compact design > High signal accuracy > Protection class up to IP65 > Wide operating temperature range of -40°C ... +100°C > Flexible due to many flange and configuration variants > Suitable for high shock ratings > 360° full screen 	<ul style="list-style-type: none"> > High accuracy by means of integrated flexible coupling > Safe shaft mounting > Up to 20,000 steps with 5,000 pulses > Compact design > High signal accuracy > Protection class up to IP65 > Operating temperature range of -10°C ... +70°C > 360° full screen
Fields of application	<ul style="list-style-type: none"> > Machine tools > CNC axes > Packing Machines > Motors/drives > Injection Moulding Machines > Sawing Machines > Textile Machines 	<ul style="list-style-type: none"> > Textile Machines > Motors > Drives > Copiers
Verticals	<ul style="list-style-type: none"> <li style="width: 50%;">> SMFB <li style="width: 50%;">> Wind <li style="width: 50%;">> FA <li style="width: 50%;">> AGV <li style="width: 50%;">> Medical <li style="width: 50%;">> OHV <li style="width: 50%;">> Elevator 	<ul style="list-style-type: none"> <li style="width: 50%;">> SMFB <li style="width: 50%;">> Wind <li style="width: 50%;">> FA <li style="width: 50%;">> AGV <li style="width: 50%;">> Medical <li style="width: 50%;">> OHV <li style="width: 50%;">> Elevator

RI59-O/-T/-C

ICURO[®]
industry



RI76TD

ICURO[®]
industry



Industrial Incremental

- > Up to 40,000 steps with 10,000 pulses
- > Solid shaft versions available
- > Compact design
- > High signal accuracy
- > Protection class up to IP67
- > Wide operating temperature range of -40°C ... +100°C
- > Flexible due to many flange and configuration variants
- > Suitable for high shock ratings
- > 360° full screen

Industrial Incremental

- > Up to 40,000 steps with 10,000 pulses
- > Through hollow shaft Ø 15 to 42 mm
- > Outside diameter only 76 mm
- > Compact design: 43 mm mounting depth
- > Easy installation by means of clamping ring front or rear
- > Wide temperature range of -25°C ... +100°C
- > 360° full screen

- > Machine tools
- > Packing Machines
- > Injection Moulding Machines
- > Sawing Machines
- > Bottling Machines
- > Washing plants
- > Mixers
- > Cranes
- > Hoists,
- > Marine Outfitters
- > Food & Beverage

- > Speed and position feedback in asynchronous geared and non-geared motors
- > Point of motion measuring in any type of machine

- > FA
- > Medical
- > O/G
- > HD
- > OHV
- > Food

- > SMFB
- > FA
- > Medical
- > Elevator
- > Wind
- > AGV
- > OHV

RX70/71

ICURO[®]
Xproof



Dynapar Heavy Duty Rotary Encoder



Incremental Explosion Proof

- > ATEX and IECEx certification for Gas and Dust
 - Gas: Ex II 2 G Ex d IIC T6/T4 Gb
 - Dust: Ex II 2 D Ex tb IIIC T85°C/135°C Db IP6X
- > High precision standard as ICURO Industry
- > Interfaces incremental: RS422, Push Pull
- > Robust design
- > Highest working reliability
- > Extreme corrosion resistance: high grade stainless steel housing (1.4404 / AISI 316L)
- > Protection class: IP64 or IP67

Extreme robust Hollow and Solid Shaft Incremental Encoders

- > High Resolution Unbreakable Disks (1 - 5.000 ppr)
- > Extreme robust design
- > High shaft load (up to 440 N)
- > Isolated shaft
- > Protection class IP66, 67
- > Different housing materials: stainless steel / nickel / aluminium
- > Wide operating temperature range of -40°C ... +100°C
- > Up to 6,000 rpm continuous operation
- > Protection class: NEMA6 / IP67
- > ATEX Certification for Intrinsically Safe Applications
- > Redundant output

- > Drilling Equipment
- > Winches
- > Cranes
- > DrawWorks
- > Topdrive
- > Pipe Handling
- > Mills
- > Enameling Production Line
- > Petro Chemistry
- > Bottling Machines
- > Mixers
- > Silo Works

- > Paper and Steel
- > Food & Beverage
- > Packaging industry
- > Material Handling
- > AC - Motors
- > Converting Machinery
- > Wire line, any depth measurement

- > FA
- > Elevator
- > O/G
- > HD
- > OHV

- > FA
- > Elevator
- > O/G
- > HD
- > OHV

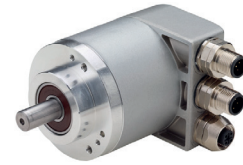
AC36

ACURO®
industry



AC58

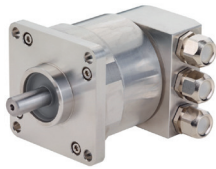
ACURO®
industry



	Industrial Absolute	Industrial Absolute
Key specs	<ul style="list-style-type: none"> > Resolution up to 22 Bit Singleturn + 12 Bit Multiturn > High accuracy +/- 35" > 6mm solid shaft or 8mm hubshaft > Overall length: 36 mm > Wide temperature range of -40°C ... +100°C > Protection class IP64 > 10,000 rpm continuous operation > Optical encoder with a true geared Multiturn > Interfaces: SSI, BiSS-B or BiSS-C > Optional Sine wave 1 Vpp > Bandwidth 500 kHz > 360° full screen 	<ul style="list-style-type: none"> > Solid or hollow shaft versions available > Wide temperature range of -40°C ... + 100°C > Resolution up to 22 Bit Singleturn + 12 Bit Multiturn > High EMC – Resistance > Optical encoder with a true geared Multiturn > Housing diameter 58 mm > Interfaces: EtherCAT, Profinet, Ethernet-IP, Profibus, CANopen, DeviceNet, CAN Layer 2, Interbus, SSI, Parallel, BiSS-B and BiSS-C, OPC UA ready for IIoT > MT Absolute SSI encoder + Incremental output TTL or HTL (AC58-I) > Wide range of programmable functions > 10,000 rpm continuous operation > High shock and vibration resistance > Large number of configuration options > Stainless steel as ACURO® AC59 and AC61 available
Fields of application	<ul style="list-style-type: none"> > For equipment engineering and industry > Robots > Surveying equipment > Patient beds > Surgical robots > C-Arc CT > AGV 	<ul style="list-style-type: none"> > Position Feedback in any kind of general machinery or factory automation application > Packaging Machines > Injection Molding Machines > Wood Processing Machines > Assembly and Handling Technology > Conveyor Technology > Printing and Paper Machines > Pitch Control systems (AC58-I)
Verticals	<ul style="list-style-type: none"> > FA > Medical > Elevator > AGV > OHV 	<ul style="list-style-type: none"> > SMFB > FA > Medical > Elevator > Wind > AGV > OHV

AC59/61

ACURO®
industry



AR60

ACURO®
industry



E1 10-036823

Industrial Absolute

- > Solid shaft version
- > Wide temperature range of -40°C ... + 100°C
- > Resolution up to 22 Bit Singleturn + 12 Bit Multiturn
- > High EMC – Resistance
- > Optical encoder with a true geared Multiturn
- > Protection class IP67
- > High corrosion resistance: high grade stainless steel housing
- > High shock and vibration resistance
- > 10,000 rpm continuous operation
- > Interfaces: EtherCAT, Profinet, SSI, BiSS, Parallel, Profibus, CANopen, CANlayer2, DeviceNet and Interbus
- > Wide range of programmable functions
- > Versions with cable or bus cover available

Absolute Robust

- > Resolution up to 12 Bit Singleturn + 16 Bit Multiturn
- > Wearless electronic Multiturn: contact- and attery-less, self-energetic
- > 40N axial and 110N radial load
- > 200 g shock resistance / 20 g vibrations resistance
- > Protection class IP64
- > Wide temperature range of -40°C ... +100°C
- > Solid or hollow shaft versions available
- > Compact design: 32 mm mounting depth
- > Interfaces: SSI, CANopen, Analog
- > CANopen interface with E1 approval for vehicle applications

- > Position Feedback in any kind of general machinery or factory automation application
- > Packaging Machines
- > Injection Molding Machines
- > Wood Processing Machines
- > Assembly and Handling Technology
- > Conveyor Technology
- > Printing and Paper Machines

- > Wind Power Plants
- > Cranes
- > Marine Equipment
- > Offshore Plants
- > Commercial Solar Plants
- > Bottling Machines Industry
- > Presses
- > Food & Beverage
- > Harvester
- > Fire-fighting Trucks

- > FA
- > Elevator
- > Wind
- > O/G
- > HD
- > OHV
- > Food

- > FA
- > Medical
- > AGV
- > OHV

Absolute

AR62/63

ACURO®
robust

AX65

ACURO®
Xproof

	Absolute Robust	Absolute Explosion Proof
Key specs	<ul style="list-style-type: none"> > Resolution up to 12 Bit Singleturn + 16 Bit Multiturn > Wearless electronic Multiturn: contact- and battery-less, self-energetic > 300 N axial and radial load > 200 g shock resistance / 20 g vibrations resistance > Submersible: Protection class up to IP69K > Wide temperature range of -40°C ... +100°C > Solid or hollow shaft versions available > Compact design: 32 mm mounting depth > High corrosion resistance: high grade stainless steel housing > DNV GL certificate for maritime application > Interfaces: SSI, CANopen, Analog > CANopen interface with E1 approval for vehicle applications 	<ul style="list-style-type: none"> > ATEX and IECEx certification for Gas, Dust and Mining <ul style="list-style-type: none"> - Gas: Ex II 2G Ex db IIC T4 - Dust: Ex II 2D Ex tb IIIC T135 °C - Mining: Ex I M2 Ex db I > Most compact design of its class: <ul style="list-style-type: none"> 59 mm housing diameter / 70 mm mounting depth > Extreme robust design > 300 N axial and radial load > 200 g shock resistance / 30 g vibrations resistance > Protection class up to IP66 / IP67 > Easy field installation <ul style="list-style-type: none"> - Free choice of cable in the field (terminal box with cage clamp technology) - In case of emergency service, encoder and cable can be removed separately - Access to control elements (DIP) > Extreme corrosion resistance: high grade stainless steel housing (1.4404 / AISI 316L) > Wearless electronic Multiturn: contact- and battery-less, self-energetic > Interfaces: SSI, CANopen
Fields of application	<ul style="list-style-type: none"> > Wind Power Plants > Cranes > Marine Equipment > Offshore Plants > Commercial Solar Plants > Bottling Machines > Presses > Food & Beverage Industry > Harvester > Fire-fighting Trucks 	<ul style="list-style-type: none"> > Drilling Equipment > Winches > Cranes > DrawWorks > Topdrive > Pipe Handling > Mills > Enameling Production Line > Petro Chemistry > Bottling Machines > Mixers > Silo Works
Verticals	<ul style="list-style-type: none"> > FA > Medical > Wind > O/G > AGV > HD > OHV 	<ul style="list-style-type: none"> > FA > Elevator > O/G > HD > OHV

AX70/71

ACURO®
Xproof



AX73

ACURO®
Xproof



Absolute Explosion Proof

- > ATEX, IECEx and AEx certification for Gas and Dust
 - Gas: Ex II 2 G Ex d IIC T6/T4 Gb
 - Dust: Ex II 2 D Ex tb IIIC T85°C/135°C Db IP6X
- > High precision standard as ACURO Industry
- > Interfaces absolute: SSI, BiSS, Profibus, CANopen, DeviceNet
- > Resolution up to 22 Bit Singleturn + 12 Bit Multiturn
- > Optical encoder with a true geared Multiturn
- > Robust design
- > Highest working reliability
- > Extreme corrosion resistance: high grade stainless steel housing (1.4404 / AISI 316L)
- > Protection class: IP64 or IP67

Absolute Explosion Proof

- > ATEX and IECEx certification for Gas and Dust
 - Gas: Ex II 2 G Ex d IIC T4 Gb
 - Dust: Ex II 2 D Ex tb IIIC T130 Db
- > High precision standard as ACURO Industry
- > Resolution up to 22 Bit Singleturn + 12 Bit Multiturn
- > Optical encoder with a true geared Multiturn
- > Interfaces: SSI/BISS and Profibus
- > Easy field installation
 - Free choice of cable in the field (terminal box with cage clamp technology)
 - In case of emergency service, encoder and cable can be removed separately
 - Access to control elements (DIP)
- > Robust design
- > Extreme corrosion resistance: high grade stainless steel housing (1.4404 / AISI 316L)
- > Protection class IP66 / IP67

- > Drilling Equipment
- > Winches
- > Cranes
- > DrawWorks
- > Topdrive
- > Pipe Handling
- > Mills
- > Enameling Production Line
- > Petro Chemistry
- > Bottling Machines
- > Mixers

- > Drilling Equipment
- > Winches
- > Cranes
- > DrawWorks
- > Topdrive
- > Pipe Handling
- > Mills
- > Enameling Production Line
- > Petro Chemistry
- > Bottling Machines
- > Mixers
- > Silo Works

- > FA
- > Elevator
- > O/G
- > HD
- > OHV

- > FA
- > Elevator
- > O/G
- > HD
- > OHV

AD34

ACURO®
drive



AD35

ACURO®
drive



	Absolute Feedback	Absolute Feedback
Key specs	<ul style="list-style-type: none"> > Operating temperature up to +120°C > 10,000 rpm continuous operation > Compact design: 24 mm (ST), 33 mm (MT) mounting depth > Resolution up to 22 Bit Singleturn + 12 Bit Multiturn > High accuracy +/- 35" > Optical encoder with a true geared Multiturn > Interfaces: SSI, BiSS-B or BiSS-C > Option Sine wave 1 Vpp > Notched shaft 6 mm > Bandwidth 500 kHz > Unique mounting concept: Save installation time and cost 	<ul style="list-style-type: none"> > Operating temperature up to +120°C > 10,000 rpm continuous operation > Compact design: 24 mm mounting depth > Resolution up to 22 Bit Singleturn > High accuracy +/- 35" > Interfaces: SSI, BiSS-B or BiSS-C > Option Sine wave 1 Vpp > Hub shaft shaft 8 mm > Bandwidth 500 kHz
Fields of application	<ul style="list-style-type: none"> > Servo Motors > Medical technology 	<ul style="list-style-type: none"> > Servo Motors > Medical technology > surveying equipment > camera equipment
Verticals	<ul style="list-style-type: none"> > SMFB > FA > Medical <ul style="list-style-type: none"> > Elevator > AGV > OHV 	<ul style="list-style-type: none"> > SMFB > FA > Medical <ul style="list-style-type: none"> > Elevator > AGV > OHV

AD36

ACURO®
drive



AD58

ACURO®
drive



	Absolute Feedback	Absolute Feedback
Key specs	<ul style="list-style-type: none"> > Operating temperature up to +120°C > 10,000 rpm continuous operation > Compact design: 33,5 mm mounting depth > Resolution up to 22 Bit Singleturn > High accuracy +/- 35" > Optical encoder with a true geared Multiturn > Interfaces: SSI, BiSS-B or BiSS-C > Option Sine wave 1 Vpp > Hub shaft or through hollow shaft 8 mm > Bandwidth 500 kHz > Resolver size 15 compatible 	<ul style="list-style-type: none"> > Operating temperature up to +120°C > 10,000 rpm continuous operation > Resolution up to 22 Bit singleturn + 12 Bit Multiturn > High accuracy +/- 35" > Interfaces: SSI, BiSS-B or BiSS-C > Option Sine wave 1 Vpp: Harmonic distortion less than 1% > Optical encoder with a true geared Multiturn > Tapered solid or hollow shaft > Bandwidth 500kHz
Fields of application	<ul style="list-style-type: none"> > Servo Motors > Medical technology 	<ul style="list-style-type: none"> > Servo Motors > Medical technology > surveying equipment > camera equipment
Verticals	<ul style="list-style-type: none"> > SMFB > FA > Medical <ul style="list-style-type: none"> > Elevator > AGV > OHV 	<ul style="list-style-type: none"> > SMFB > FA > Medical <ul style="list-style-type: none"> > Elevator > AGV > OHV

AD37 ACURO®link

ACURO®
drive



SIL2
PLd
Functional Safety

SIL3
PLe
Functional Safety

Absolute Safety

- > High performance motor feedback
 - > Single Cable Solution with ACURO® link interface for 4 wire applications
 - > Allow users to create SIL2 and SIL3 Functional Safety Applications
 - > Electronic Data Sheet
 - > Motor and Drive data storage
 - > High resolution 20 Bit Singleturn + 12 Bit Multiturn
 - > High accuracy +/- 35"
 - > Operating temperature of -40°C ... +115°C
 - > 12,000 rpm max. speed
 - > Shortest mounting depth
 - > Motor winding temperature sensor input
 - > Internal encoder temperature sensor
 - > Condition monitoring data
-
- > Servo Motors
 - > Functional Safety Applications
 - > Single Cable Solution
-
- > SMFB > OHV
 - > Medical
 - > AGV

AD58 ACURO®link

ACURO®
drive



SIL2
PLd
Functional Safety

SIL3
PLe
Functional Safety

Absolute Safety

- > High performance motor feedback
 - > ACURO®link interface
 - > Allow users to create SIL2 and SIL3 Functional Safety Applications
 - > Electronic Data Sheet
 - > Motor and Drive data storage
 - > High resolution 24 Bit Singleturn + 12 Bit Multiturn
 - > High accuracy ±20 arcsec
 - > Operating temperature of -20°C ... +115°C
 - > 12,000 rpm max. speed
 - > Shortest mounting depth
 - > Motor winding temperature sensor input
 - > Internal encoder temperature sensor
 - > Condition monitoring data
-
- > Servo Motors
 - > Functional Safety Applications
 - > Single Cable Solution
-
- > SMFB > AGV
 - > Medical > OHV

AD58 DRIVE-CLiQ

ACURO®
drive



DRIVE-CLiQ

SIL2
PLd
Functional Safety

SIL3
PLe
Functional Safety

Absolute Safety

- > High performance motor feedback
 - > DRIVE-CLiQ Interface
 - > SINAMICS compatible
 - > Allow users to create SIL2 Functional Safety Applications
 - > Operating Temperature of -25°C ... +110° C
 - > 10,000 rpm Continuous Operation
 - > Optical encoder with a true geared 12 Bit Multiturn
 - > High resolution up to 24 Bit Singleturn + 12 Bit Multiturn
 - > High accuracy up to ±20 arcsec
 - > Motor Temperature Logging and Temperature Monitoring of Encoder
 - > EDS
-
- > Servo Motors
 - > SINAMICS motion control
 - > Functional safety applications
-
- > SMFB > Elevator
 - > Medical > Wind

Absolute Motorfeedback & Absolute Safety

E9



M9



	Incremental Feedback	Incremental Feedback
Key specs	<ul style="list-style-type: none"> > Feedback device for small DC motors > Ideal for position and speed sensing in small Machines and actuators > Low power consumption ideal for battery powered devices > Incremental signals A, A/ , B, B/ , N, N/ > Resolution up to 512 ppr > Frequency response up to 200 kHz > Wide temperature range of -40°C ... +100°C > Compact design: 22 mm housing diameter / 20 mm mounting depth > Hub shaft Ø 1.5 to 4 mm 	<ul style="list-style-type: none"> > Ideal for position and speed sensing in small machines and actuators > Max. output frequency: 200 kHz > Resolution up to 512 lines/rev > Compact design > Easy "snap-on" installation
Fields of application	<ul style="list-style-type: none"> > DC motors > Medical devices > Small apparatus devices 	<ul style="list-style-type: none"> > Small Servo and Stepper Motor Feedback
Verticals	<ul style="list-style-type: none"> > SMFB > FA > Medical > Elevator > AGV > OHV 	<ul style="list-style-type: none"> > SMFB > FA > Medical > Elevator > AGV > OHV

M53



F-Series



	Incremental Feedback	Incremental + Comtracks
Key specs	<ul style="list-style-type: none"> > Modular hollow shaft encoder, ideal for BLDC, DC-Servo and Stepper feedback > Through hollow shaft Ø 6 ... 12,7 mm > Up to 2048 PPR with Commutation Tracks > Incremental + Commutation > Incremental signals A, B, N and 4, 6 or 8 pole > Outside diameter 53 mm > Mounting depth: only 23 mm > Maximum speed: 12,000 rpm > Standard Operating temperature: 0 ... +120°C > Easy installation and alignment 	<ul style="list-style-type: none"> > Resolver compatible mounting Size 10, 15, 21 > Ideal for BLDC, DC-Servo and Stepper motor > Through hollow shaft up to Ø 9.52 mm > Incremental signals A, B, N > Resolution up to 2.048 ppr > 6, 8 or 10 pole commutation signals > Frequency response up to 300 kHz > Operating temperature up to 120° C > Mounting depth: 22.4 mm
Fields of application	<ul style="list-style-type: none"> > Servo Motors 	<ul style="list-style-type: none"> > Brushless Servomotors
Verticals	<ul style="list-style-type: none"> > SMFB > FA > Medical > Elevator > AGV > OHV 	<ul style="list-style-type: none"> > SMFB > FA > Medical > Elevator > AGV > OHV

RF53



Resolver



Incremental Feedback	Absolute Singleturn
<ul style="list-style-type: none"> > Operating temperature up to +120°C > 12,000 rpm continuous operation > Incremental up to 10 000 ppr + commutation up to 32 pole > Tapered solid shaft > Tether front or back mounted > IP54 > 360° full screen 	<ul style="list-style-type: none"> > Ambient temperature up to 220°C > Absolute position feedback > Rugged: high shock and vibration > Pollution resistant > No electronic components > Maintenance-free > Size 10 ... 55 > Frameless and housed resolvers available
<ul style="list-style-type: none"> > Speed and position feedback in asynchronous geared and non-geared motors as well as point of motion measuring in any type of machine 	<ul style="list-style-type: none"> > Servo Motors > Medical technology (can be sterilized) > Robots > Gearless drives > Military devices
<ul style="list-style-type: none"> > SMFB > FA > Medical > Elevator 	<ul style="list-style-type: none"> > SMFB > Medical

S21



RI64



ICURO[®]
industry

Sin/Cos	Incremental Feedback
<ul style="list-style-type: none"> > Operating temperature up to +120°C > 12,000 rpm continuous operation > Sine-Cosine 1 Vpp > Excellent immunity to interference > Higher signal quality > Low harmonics (THD) > High functional safety > Tapered solid or hollow shaft > Bandwidth 500 kHz with excellent signal quality > 360° full screen 	<ul style="list-style-type: none"> > Through Hollow shaft Ø 10 -16 mm > Unbreakable code disc > Protection class up to IP67 > Isolated shaft > High shock and vibration resistance > Wide operating temperature range of -40°C ... +100°C > Up to 20,000 steps with 5,000 pulses > Wide power supply range DC 5-26 V > Suitable for high shock ratings > 360° full screen
<ul style="list-style-type: none"> > Servo Motors 	<ul style="list-style-type: none"> > Speed and position feedback in asynchronous geared and non-geared motors as well as point of motion measuring in any type of machine
<ul style="list-style-type: none"> > SMFB > FA > Medical 	<ul style="list-style-type: none"> > SMFB > FA > Medical > Elevator

Incremental Motorfeedback, Resolver & Sin/Cos

HENGSTLER
● BEYOND THE STANDARD

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