



MAUXA SYSTEMS



**YOUR ULTIMATE SOLUTION PARTNER
FOR POSITION CONTROL APPLICATIONS**



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LINEAR POTENTIOMETRIC TRANSDUCERS

Linear Potentiometric Transducers Selection Table

		Max. Electrical Stroke (mm)	Resistance (Kohm)	Linearity ($\pm\%$)	Repeatability (mm)	Operating Speed	Output Signal	Supply Voltage	Electrical Connection	Operating Temperature ($^{\circ}\text{C}$)	Protection Class
	LTK Series Linear Position Transducer (sliding system)	1000	5, 10	0,1	0.01	≤ 5	Potentiometric	42V max.	DIN 43650	$-30...+100$	IP 40 IP 54
							0-10V 4-20 mA	12...30 VDC			
	LTM Series Linear Position Transducer (One-side Actuating Rod)	1000	5, 10	0,1...0,2	0.01	≤ 5	Potentiometric	42V max.	DIN 43650 or cable	$-30...+100$	IP 62
							0-10V 4-20 mA	12...30 VDC			
	LTP Series Linear Position Transducer (Double-side Articulated System)	1000	5, 10	0,1...0,2	0.01	≤ 5	Potentiometric	42V max.	DIN 43650 or cable	$-30...+100$	IP 62
							0-10V 4-20 mA	12...30 VDC			
	LTC Series Linear Position Transducer (Double-side Articulated System)	1000	5, 10	0,1...0,2	0.01	≤ 5	Potentiometric	42V max.	DIN 43650 or cable	$-30...+100$	IP 62
							0-10V 4-20 mA	12...30 VDC			
	LT Series Linear Position Transducer (Small Size)	300	5, 10	0,1...1	0.01	≤ 5	Potentiometric	42V max.	DIN 43650 or cable	$-30...+100$	IP 40
							0-10V 4-20 mA	12...30 VDC			
	LTR Series Linear Position Transducer (Push-back Spring System)	300	5, 10	0,1...1	0.01	≤ 5	Potentiometric	42V max.	DIN 43650 or cable	$-30...+100$	IP 40
							0-10V 4-20 mA	12...30 VDC			
	LF Series Linear Position Transducer (One-side Actuating Rod)	300	5, 10	0,1...1	0.01	≤ 5	Potentiometric	42V max.	DIN 43650 or cable	$-30...+100$	IP 40 IP 65
							0-10V 4-20 mA	12...30 VDC			
	LFM Series Linear Position Transducer (Double-side Articulated System)	300	5, 10	0,1...1	0.01	≤ 5	Potentiometric	42V max.	DIN 43650 or cable	$-30...+100$	IP 40 IP 65
							0-10V 4-20 mA	12...30 VDC			
	LFR Series Linear Position Transducer (Push-back Spring System)	150	5, 10	0,2...1	0.01	≤ 5	Potentiometric	42V max.	DIN 43650 or cable	$-30...+100$	IP 40 IP 65
							0-10V 4-20 mA	12...30 VDC			

LINEAR POTENTIOMETRIC TRANSDUCERS

Absolute Potentiometric Measurement, High Accuracy, Analog Output

Atek series linear transducers work as ABSOLUTE because they are measuring with the potentiometric principle, that is, they do not lose their position in case of power off. Potentiometric, 4-20 mA (optional 0-20 mA) or 0-10V analog output options are available.

Because of their linearized conductive plastic resistance alloy and special contacts, they are not affected by wear and operate for a long time with a life cycle of up to 100 million. They are stable by being linear and they measure evenly.

They are used in many fields such as plastic and metal injection machines, press brakes, transfer machines, hydraulic machines, sheet metal processing machines, bending machines, textile machines and profile cutting machines.



- Measuring ranges from 50 mm to 1000 mm
- Absolute potentiometric measurement
- Potentiometric, 4-20 mA or 0-10V analog output options
- Long life up to 100 million movements
- 5 m/s operating speed
- High accuracy
- Compact design
- DIN43650 connector or cable connection

LTK

- One-sided Actuating Rod
- Measurement lengths between 50 mm and 1000 mm
- DIN43650-A connector
- IP40 protection class
(if slider is mounted upside down, it becomes IP54)



LTM

- One-sided Actuating Rod
- Measurement lengths between 50 mm and 1000 mm
- Cable or DIN 43650-A connector
- IP62 protection class



LTP

- Double articulated body structure
- $\pm 30^\circ$ maximum angular motion with joints
- Measurement lengths between 50 mm and 1000 mm
- Cable or DIN 43650-C connector
- IP62 protection class



LTC

- Double articulated square body structure
- $\pm 30^\circ$ maximum angular motion
- Measurement lengths between 50 mm and 1000 mm
- Cable or DIN 43650-C connector
- IP62 protection class



LT

- Small size, short distance measurement with push-back spring
- Measurement lengths between 10 mm and 300 mm
- Cable or DIN 43650-C connector
- IP40 protection class



LTR

- Push-back spring system
- Measurement lengths between 10 mm and 300 mm
- Cable or DIN 43650-C connector
- IP40 protection class



LF

- One-side actuating rod
- Measurement lengths between 10 mm and 300 mm
- Cable or DIN 43650-C connector
- IP40 (optional IP65) protection class



LFM

- Double-side articulated body
- Measurement lengths between 10 mm and 300 mm
- Cable or DIN 43650-C connector
- IP40 (optional IP65) protection class



LFR

- Push-back spring system
- Measurement lengths between 10 mm and 150 mm
- Cable or DIN 43650-C connector
- IP40 (optional IP65) protection class



Model	Max. Stroke	Linearity	Resistance	Supply	Electrical Connection	Operating Temp.	Protection Class
LTK	1000 mm	±0,1%	5KΩ or 10KΩ (±20% tolerance)	For current or voltage output: 12...30 VDC For potentiometric output: 42V max.	DIN 43650-A 4 pin connector	-30...+100 °C	IP40 or IP54
LTM		±0,1% ... ±0,2%			DIN 43650-A 4 pin connector or cable		IP62
LTP					DIN 43650-C 4 pin connector or cable		
LTC					DIN 43650-A 4 pin connector or cable		
LT	300 mm	±0,1% ... ±1%			DIN 43650-C 4 pin connector or cable		IP40
LTR	300 mm						
LF	300 mm						
LFM	300 mm						
LFR	150 mm						



**LINEAR TOUCHLESS
TRANSDUCERS**

LINEAR TOUCHLESS TRANSDUCERS

ILT

Non-Contact, Inductive Measurement Technology, IP67 Protection Class

The working principle of ILT-10 series inductive linear position scales depends on the RLC connection between the positioning element and the sensor. An output signal is provided according to the position of the positioning element.

Thanks to the non-contact working principle, they are long-lasting since there are no factors such as wear and tear.

They offer wide temperature tolerance, high repeatability, resolution and linearity. They work stably for a long time without being affected by electromagnetic fields.



They are used in automation technology and manufacturing engineering, such as plastic and metal injection machines, textile machines, packaging machines, sheet metal working machines and woodwork machines.



General Features

- Inductive measurement technology
- Resistant to electromagnetic field
- Non-contact measurement
- Status LED
- Versatile mounting possibility
- 1 µm resolution
- 500 Hz high update rate
- Offset tolerance up to ± 2 mm
- Shock and vibration resistant
- Analog, SSI, CANopen, RS-232 or RS-485 interface
- IP67 protection class

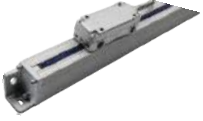


Model	Max. Stroke	Linearity	Resolution	Output and Supply		Electrical Connection	Operating Temp.	Protection Class
ILT	1000 mm	±0,1% ... ±1% (according to stroke)	1µm min.	Analog	15...33VDC	M12 connector or cable	-40...+85 °C	IP67
				SSI	8...33VDC			
				CANopen				



**OPTICAL LINEAR
ENCODERS**

Optical Linear Encoders Selection Table

		Measuring Lengths (max)	Resolution	Linearity (μm/m)	Repeatability (pulse)	Push pull ⁽¹⁾	TTL ⁽²⁾	HTL ⁽³⁾	HPL ⁽⁴⁾	1Vpp Sinus ⁽⁵⁾	PNP Open Collector	NPN Open Collector	Operating Speed (m/min)	Operating Temp. (°C)	Protection Class	Electrical Connection ⁽⁶⁾
	OLC-43X Optical Linear Encoder	1000 mm	5μm	±10	±1	✓	✓	✓	✓	-	✓	✓	60	0...+50	IP 54	Cable and M16 Conn.
	ALS-4 Optical Linear Encoder	1000 mm	1μm 5μm 1Vpp	±10	±1	-	✓	-	-	✓	-	-	60	0...+50	IP 54	Cable, M16 or D-Sub Conn.
	ALS-5 Optical Linear Encoder	1500 mm	1μm 5μm 1Vpp	±10	±1	-	✓	-	-	✓	-	-	60	0...+50	IP 54	Cable, M16 or D-Sub Conn.
	ALS-6 Optical Linear Encoder	3200 mm	1μm 5μm 1Vpp	±10	±1	-	✓	-	-	✓	-	-	60	0...+50	IP 54	Cable, M16 or D-Sub Conn.

(1) PP : 10...30VDC Supply - 10...30VDC Output

(2) TTL : 5VDC Supply - 5VDC TTL Output

(3) HTL: 10...30VDC Supply - 5VDC TTL Output

(4) HPL: 5...30VDC Supply - 5...30VDC PP Output

(5) 5VDC Supply - 1Vpp Sinus Output

(6) ALS series; For TTL signal: D-SUB 9 pin connector, For Sinus signal: M16 8 pin connector is used.

OPTICAL LINEAR ENCODERS



OLC 43X

**Long Distance, Accurate Measurement, IP54 Protection Class
Push-Pull, TTL RS422 Line Driver or Open Collector Output**

The OLC 43X series optical linear encoders consist of a gasket protected aluminium body and reader sensor moving in this body.

It is frictionless because of making non-contact measuring with glass scale. With its selectable reference signal at every 10 mm and its 5µm resolution, it is very suitable for high precision measurements.

With gasketed structure, it has extra protection against dust, dirt and chip.



Applications:

- Manuel Benches
- Press Brakes and Bending Machines
- Robotic and Material Packaging
- Linear Bearing Systems
- Automation
- Robotic Applications



General Features

- Incremental optical system
- Different measuring lengths from 50 mm to 1000 mm
- Reader sensor which is beared with steel shafts and rollers
- Gasket protected aluminium body
- Selectable reference signal which can be selected at every 10 mm
- 3 pcs LED indicators
- 5µm resolution
- IP54 protection class
- Compact design
- Wide mounting tolerance when connected with joint
- 60 m/min traversing speed



Model	Max. Stroke	Resolution	Electrical Interface	Electrical Connection	Traversing Speed	Operating Temp.	Protection Class
OLC-43X	1000 mm	5µm	PP : 10...30VDCSupply - 10...30VDCOutput TTL : 5VDCSupply - 5VDC TTLOutput HTL: 10...30VDCSupply - 5VDC TTLOutput HPL: 5...30VDCSupply - 5...30VDC PPOutput OCL: NPN Open Collector OCP: PNP Open Collector	D-Sub 9 pin connector; 5 veya 8 x 0,14 mm ² kablo	60 m/min	-25...+85 °C	IP54

OPTICAL LINEAR ENCODERS

ALS SERIES

Measurement up to 3200 mm, IP54 Protection Class, 5VDC TTL or Sinus Output Signal

ALS series optical linear encoder systems are protected from factors such as dust, shavings, dirt and coolant with its compact design. ALS series, which has optical measuring principle with glass ruler, can measure up to 3200 mm.

- Optical measurement
- Measuring lengths up to 3200 mm
- High resolution up to 1 μm
- $\pm 10 \mu\text{m}$ accuracy
- 5 ball bearing system
- 5 VDC TTL quadrature or 1vpp sinusoidal signal
- Easy mounting
- 60 m/min traveling speed

ALS-4

- Slim body type
- Different measuring lengths between 50 mm and 1000 mm



More information

ALS-5

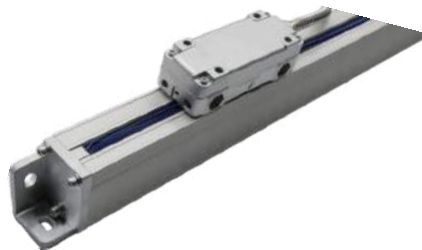
- Thick body type
- Different measuring lengths between 50 mm and 1500 mm



More information

ALS-6

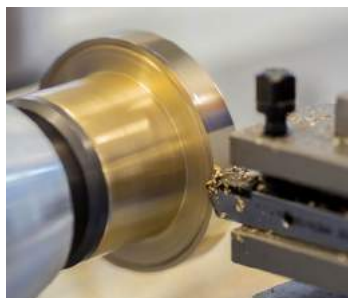
- Thick body type, long distance measurement
- Different measuring lengths between 50 mm and 3200 mm



More information

Applications:

- Manual Benches
- Press Brakes and Bending Machines
- Robotic / Material Packaging
- Automation and Robotic Applications
- Transfer Machines
- Linear Bearing Systems
- Turning, Milling
- Textile Machinery

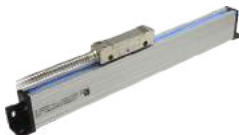


Model	Max. Stroke	Resolution	Supply Voltage	Output Type	Electrical Connection	Traversing Speed	Operating Temp.	Protection Class
ALS 4	1000 mm	1 μm , 5 μm , 1Vpp	5VDC	5VDC TTL, 1Vpp Sinus	Connector and cable with spiral (For TTL Signal : D-SUB conn. / For Sinus Signal: M16 connector)	60 m/min	0...+50 °C	IP54
ALS 5	1500 mm							
ALS 6	3200 mm							



MAGNETIC LINEAR ENCODERS

Magnetic Linear Encoders Selection Table

		Measuring Length (max)	Resolution (μm)	Accuracy (μm/m)	Repeatability (pulse)	Push pull ⁽¹⁾	TTL ⁽²⁾	HTL ⁽³⁾	HPL ⁽⁴⁾	Operating Speed (m/s)	Operating Temp. (°C)	Protection Class	Electrical Connection
	MLC-310 Magnetic Linear Encoder	Up to 20 meters	5, 10, 25, 50, 62.5, 100 (opt. other)	±40	±1	✓	✓	✓	✓	3	-25...+85	IP 67	Cable and D-Sub Conn.
	MLC-320 Magnetic Linear Encoder	Up to 20 meters	1, 5, 10, 25, 50, 62.5, 80 (opt. other)	±40 or ±20	±1	✓	✓	✓	✓	3	-25...+85	IP 67	Cable and D-Sub Conn.
	MLC-330 Magnetic Linear Encoder	Up to 20 meters	5, 10, 25, 50, 62.5, 100 (opt. other)	±40 or ±20	±1	✓	✓	✓	✓	3	-25...+85	IP 67	Cable and D-Sub Conn.
	MLC-410 Magnetic Linear Encoder	Up to 4 meters	5, 10, 25, 50, 62.5, 100 (opt. other)	±20	±1	✓	✓	✓	✓	3	-25...+85	IP 67	Cable and D-Sub Conn.
	MLC-420 Magnetic Linear Encoder	Up to 2 meters	5, 10, 25, 50 (opt. other)	±20	±1	✓	✓	✓	✓	3	-25...+85	IP 65	Cable and D-Sub Conn.
	MLS-110 Magnetic Reader Sensor	Up to 100 meters	1, 5, 10, 25, 50, 62.5, 80, 100 (opt. other)	±20	±1	✓	✓	✓	✓	3	-25...+85	IP 67	Cable and D-Sub Conn.
	MLS-120 Magnetic Reader Sensor	Up to 100 meters	1, 5, 10, 25, 50, 62.5, 80, 100 (opt. other)	±20	±1	✓	✓	✓	✓	3	-25...+85	IP 67	Conn.
	MLS-121 Magnetic Reader Sensor	Up to 100 meters	1, 5, 10, 25, 50, 62.5, 80, 100 (opt. other)	±20	±1	✓	✓	✓	✓	3	-25...+85	IP 67	Cable
	MLS-130 Magnetic Reader Sensor	Up to 100 meters	1, 5, 10, 25, 50, 62.5, 80, 100 (opt. other)	±20	±1	✓	✓	✓	✓	3	-25...+85	IP 67	Cable and D-Sub Conn.
	MLS-210 Magnetic Reader Sensor	Up to 100 meters	5, 10, 25, 62.5, 80, 100 (opt. other)	±20	±1	✓	✓	✓	✓	3	-25...+85	IP 67	Cable and D-Sub Conn.

(1) PP : 10...30VDC Supply - 10...30VDC Output

(2) TTL : 5VDC Supply - 5VDC TTL Output

(3) HTL: 10...30VDC Supply - 5VDC TTL Output

(4) HPL: 5...30VDC Supply - 5...30VDC PP Output

MAGNETIC LINEAR ENCODERS

MLC 300 Series

Retensiton Profile Closed System, Magnetic Measurement, IP67 Protection, Push-Pull or TTL RS422 Line Driver Output

MLC 300 magnetic linear encoder systems measure non-contactly and gives the output signal as an incremental encoder pulse.

They are not affected by external factors due to its compact design. MLC 300 sensor is housed along the aluminum profile. Extra protection from dust, dirt and chips is provided by having a seal protection system. It is the ideal solution for machining environments. It can be produced up to a measuring length of 20.000 mm.

- High accuracy and repeatability
- Magnetic measurement
- Contactless / non-friction system
- High tolerance to vibration and shocks
- Measuring up to 20 meters
- Resistant to dust, oil and moisture
- No maintenance required
- Robust aluminum body
- IP67 protection class
- Easy installation

MLC-310

- Thick profile structure, double sealed protection
- Different measuring lengths between 100 mm and 4000 mm
- *Optional up to 20.000 mm

MLC-320

- Extra thin profile structure, sealed protection
- Different measuring lengths between 100 mm and 1000 mm
- *Optional up to 20.000 mm

MLC-330

- Thin profile structure, sealed protection
- Different measuring lengths between 100 mm and 4000 mm
- *Optional up to 20.000 mm



More information



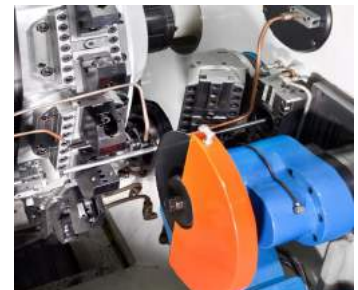
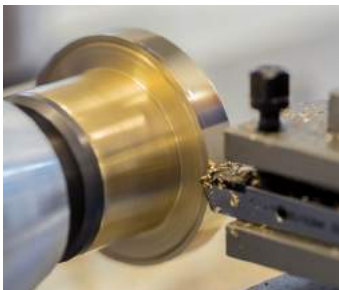
More information



More information

Applications:

- Machinery Industry
- PVC Cutting Machines
- Woodworking
- Press Brakes
- Textile Machinery
- Marble Machinery
- Metal Processing Machinery
- Lathe
- Milling
- Bohrwerk
- Transfer Machines
- Vargel



Model	Max. Stroke	Resolution	Electrical Interface	Electrical Connection	Operating Speed	Operating Temp.	Protection Class
MLC-310	20.000 mm	5µm, 10µm, 25µm, 50 µm, 62.5µm, 100µm	PP : 10...30VDCSupply - 10...30VDCOutput	D-Sub 9 pin connector, 5 or 8 x 0,14 mm ² cable	3 m/s	-25...+85 °C	IP67
MLC-320		1µm, 5µm, 10µm, 25µm, 50µm, 62.5µm, 80µm	TTL : 5VDCSupply - 5VDC TTL Output HTL: 10...30VDCSupply - 5VDC TTL Output				
MLC-330		5µm, 10µm, 25µm, 50 µm, 62.5µm, 100µm	HPL: 5...30VDCSupply - 5...30VDC PP Output				

MAGNETIC LINEAR ENCODERS

MLC 400 Series

**For Press Brake and Bending Machines, Contactless/Non-friction System,
Push-Pull or TTL RS422 Line Driver Output**

MLC 400 series magnetic linear encoder systems measure non-contactly and gives the output signal as an incremental encoder pulse.

MLC 400 series magnetic linear encoders are specially designed for high speed and vibration, especially for press brakes. Due to excellent bearing, it is possible to prevent any mistakes that may occur because of vibration, during measurement.

- High accuracy and repeatability
- Magnetic measurement
- Contactless / non-friction system
- High tolerance to vibration and shocks
- Excellent bearing system
- Easy mounting with wide mounting tolerances
- Portable reference point
- Resistant to dust, oil and moisture
- Robust aluminum body
- Excellent Stability

MLC-410

Due to excellent bearing, it is possible to prevent any mistakes that may occur because of vibration, during measurement. It is used to control right and left hydraulic cylinders to provide synchronization in press brakes. It can also be used for applications with vibrations other than press brakes.

- Measuring up to 4 meters
- IP67 protection class



More information

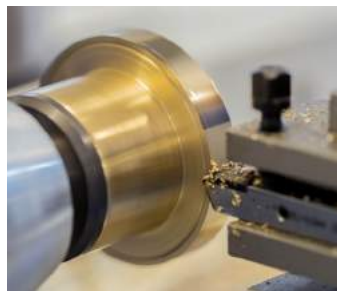
MLC-420

With its mounting points and design, it minimizes errors that may occur due to temperature changes. On the other hand, special measures have been taken against the vibrations caused by the machine. Thanks to its ergonomic design, the cable output does not interfere with the ruler and works in perfect stability. The direction of the ruler can be easily changed by the user.

- Measuring up to 2 meters
- IP65 protection class



More information



Model	Max. Stroke	Resolution	Electrical Interface	Electrical Connection	Operating Speed	Operating Temp.	Protection Class
MLC-410	4000 mm	5µm, 10µm, 25µm, 50 µm, 62.5µm, 100µm	PP : 10...30VDC Supply - 10...30VDC Output TTL : 5VDC Supply - 5VDC TTL Output HTL: 10...30VDC Supply - 5VDC TTL Output	D-Sub 9 pin connector, 5 or 8 x 0,14 mm ² cable	3 m/s	-25...+85 °C	IP67
MLC-420	2000 mm	5µm, 10µm, 25µm, 50 µm	HPL: 5...30VDC Supply - 5...30VDC PP Output				IP65

MAGNETIC LINEAR ENCODERS

MLS Series Reader Sensors

**Compact Reader Sensor, Magnetic Measurement, IP67 Protection
Push-Pull or TTL RS422 Line Driver Output**

The MLS series reader sensors can be used with magnetic stripe tape as well as PS profile system.

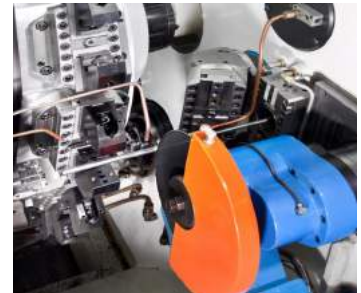
It moves at a distance of 0,1 - 2 mm without touching the magnetic band and reads the position information precisely and sends it as encoder pulse.

Its compact structure provides the user with maximum ease of installation. There are spiral and cable models.

- Non-contact measurement with magnetic principle
- Easy Installation
- Resolution from 1 μm to 100 μm
- Push-pull and TTL output
- High accuracy and repeatability
- Spiral or cable options
- Measuring up to 100 meters
- Dust, oil and nourishment insensitive
- Insensitive to noise and vibrations
- Robust aluminum body
- IP67 protection class

Applications:

- Machinery Industry
- PVC Cutting Machines
- Woodworking Machinery
- Press Brakes
- Textile Machinery
- Marble Machinery
- Transfer Machines
- Saws
- Metal Processing Machinery
- Lathe
- Milling
- Bohrwerk
- Vargel
- Robots



MLS 110

- Small reader sensor
- Resolution from 1 μm to 100 μm
- As standard, a Z Reference Signal at 5mm for B5 tape and one at 2mm for B2 tape
- External Z reference signal with optional magnet



More information

MLS 120 / MLS 121

- Compact reader sensor with scraper
- Model with socket or cable
- Resolution from 1 μm to 100 μm
- As standard, a Z Reference Signal at 5mm for B5 tape and one at 2mm for B2 tape
- External Z reference signal with optional magnet



More information

MLS 130

- Very small size reader sensor
- Resolution from 1 μm to 100 μm
- As standard, a Z Reference Signal at 5mm for B5 tape and one at 2mm for B2 tape
- Optional one Z reference signal



More information

MLS 210

- Big size reader sensor
- Resolution from 5 μm to 100 μm
- As standard, Z Reference Signal at every 5mm
- Optional one Z reference signal



More information

Magnetic Tape or Profile Systems Used with MLS Series



Ps1 Profile System



PS2 Profile System



PS3 Profile System



B2 or B5 Magnetic Tape

Sample Combinations



B5 Magnetic Tape +
MLS 110 Sensor



B2 Magnetic Tape +
MLS 120 Sensor



B2 Magnetic Tape +
MLS 130 Sensor



PS 110 Carrier Profile +
MLS 210 Sensor



PS 220 Carrier Profile +
MLS 110 Sensor



PS 220 Carrier Profile +
MLS 120 Sensor



PS 220 Carrier Profile +
MLS 130 Sensor



PS 310 Carrier Profile +
MLS 210 Sensor

Model	Magnetic Tape	Resolution	Electrical Interface	Electrical Connection	Operating Speed	Operating Temp.	Protection Class
MLS-110	B2 B5	1 μm , 5 μm , 10 μm , 25 μm , 50 μm , 62.5 μm , 80 μm , 100 μm (optional other)	PP : 10...30VDC Supply - 10...30VDC Output TTL : 5VDC Supply - 5VDC TTL Output HTL: 10...30VDC Supply - 5VDC TTL Output HPL: 5...30VDC Supply - 5...30VDC PP Output	D-Sub 9 pin connector, 5 or 8 x 0,14 mm ² cable	3 m/s	-25...+85 °C	IP67
MLS-120							
MLS-130							
MLS-210	B5	5 μm , 10 μm , 25 μm , 50 μm , 62.5 μm , 80 μm , 100 μm (optional other)					

MAGNETIC LINEAR ENCODER SYSTEMS

B SERIES MAGNETIC TAPE

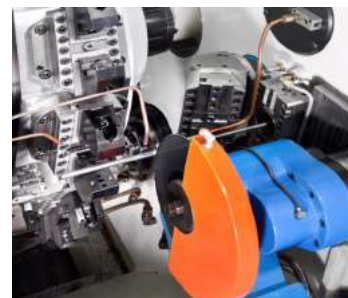
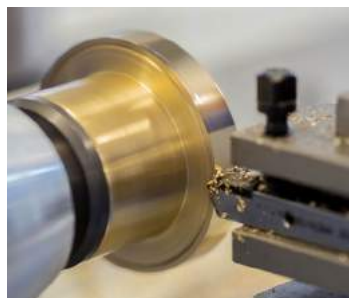
3 Layers Sturdy and Flexible Structure, Easy Installation

The magnetic tape is physically protected by a stainless steel shield with no magnetic properties. B series magnetic tape can be cut at desired dimensions. The magnetic tape consists of 3 layers:

- 1. Flexible Nitrile Rubber Magnetic Tape:** Featured with equally spaced magnetic properties. It is measured by this feature.
- 2. Steel Protection Sheet (Upper):** This sheet prevents the tape from being damaged due to external factors. There is adhesive tape on it to stick to magnetic tape. Used with magnetic tape.
- 3. Sub Protection Sheet:** Layer 3 is the most solid layer and is therefore delivered separately for transport and application needs. The first layer is gummed by the user. The steel tape is magnetically neutral and is used to protect the magnetic tape from physical effects.



More informations



General Features

- Easy Installation
- Robust and flexible construction
- 5 mm or 2 mm pole distance
- Measuring up to 100 meters
- Dust, oil and moisture insensitive
- IP67 protection class
- Nitrile rubber



B Magnetic Tape +
MLS 110 Sensor



B Magnetic Tape +
MLS 120 Sensor



B Magnetic Tape +
MLS 130 Sensor



B Magnetic Tape +
MLS 210 Sensor

Model	Pole Distance	Accuracy	Temperature Coefficient	Operating Temperature	Protection
B Series Magnetic Tape	5 mm or 2 mm	$\pm 18 \mu\text{m/m}$ or $\pm 20 \mu\text{m/m}$	$11 \pm 1 \mu\text{m} / \text{K}$	-40...+120 °C	CrNi 17 7 Stainless Steel Sheet Oil, dust, etc. insensitive

MAGNETIC LINEAR ENCODER SYSTEMS

PS SERIES CARRIER PROFILES

Robust Structure, Easy Mounting, IP67 Protection

In PS Series profile systems, magnetic tape is integrated into the profiles.

The most important feature of **PS 100** series are easy mounting. It can be used with MLS-110, MLS-120, MLS-130 and MLS-210 reader sensors.

- Tape in "L" Aluminum Profile
- Contactless and Wear Free System
- Easy Mounting
- High Accuracy
- IP67 Protection Class



More information

PS 200 Series "Slim" profile is extremely robust, flexible plastic magnetic tape can be easily applied to the machine tool. Can be used for all reader sensors.

- Slim Profile Type
- Non Contact / Frictionless Measurement
- Easy Mounting
- High Accuracy
- IP67 Protection Class



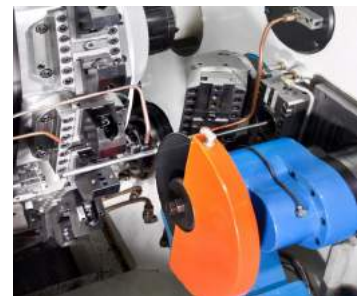
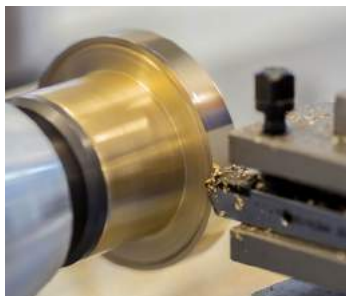
More information

PS 300 Series "Closed" profile, sealing system provides extra protection against dust and chips. Can only be used with MLS-210 reader sensors.

- Bearing Profile System
- Double Seal Protection
- Extra Protection Against External Factors
- Non Contact / Frictionless Measurement
- Easy Mounting
- High Accuracy
- IP67 Protection Class



More information



Model	Body	Magnetic Tape Type	Operating Temp.	Protection Class
PS 100	Aluminum (L) Type Profile	B5 (Optional B2)	-25 ... +85°C	IP67
PS 200	Aluminum (L) Type Profile			
PS 300	Aluminum Closed Profile			



**DIGITAL READOUT
SYSTEMS**

DIGITAL READOUT SYSTEMS

ADR Series

2, 3 or 4 Axis Option, User Designated Resolution Option 1000 Program Memory, 5 Different Languages

ADR Series Digital Readout Systems are designed to provide maximum efficiency and performance from all your metalworking machines.

ADR series with 2, 3 and 4 axis options, has a powerful memory, 1000 program memories and 1000 tool memories for lathes. There are 5 different menu language options: Turkish, English, German, Spanish and Portuguese. Connection opportunity by contact probe is also available.



Applications:

- All metalworking machines
- Lathe
- Bohrwerk
- Milling
- EDM
- Grinding Machines



ADR-10

- 2, 3 or 4 Axis
- User Designated Resolution
- Data Transmission with RS-232 Port
- 1.000 Program Memory
- Angle Measuring
- 1.000 pieces of tool memory for turning
- Contact Probe Connection
- 24 VAC/VDC or 85 – 265 VAC Supply
- 8+1 Dijiit Digit Wide Display Screen
- 5 Different Language Options



More information



ADR-50

- 2, 3 or 4 Axis
- Colorful LCD
- User Designated Resolution
- USB or RS232 Port Option
- 6 Adet Open Collector Output
- 2D Simulations
- 1.000 Coordinate Memory
- Angle Measurement
- 24 VAC/VDC or 85 – 265 VAC Supply
- 5 Language Options



More information

Model	Number of Axis	Display	Display Resolution	Input Signal	Supply Voltage	Operating Temp.	Measuring Limits
ADR-10	2, 3 or 4	8 Digit +1 Sign Digit, Green, Touring (-) Sign	User can designate as requested	Optional Push Pull or TTL A,B,Z (Line Driver A, B, Z, /A, /B, /Z) Incremental Encoder Signals	85 – 265 VAC 50/60 Hz. or 24 VAC / VDC	-10...+45 °C	- 99999,999 mm ~ 99999,999 mm
ADR-50		Colorful LCD					



**DRAW WIRE SENSORS
AND ENCODERS**

Draw Wire Sensors Product Selection Table

		Max Stroke (mm)	Linearity	Analog Output	CANopen Output	Supply Voltage	Maximum Speed	Electrical Connection	Operating Temp. (°C)	Protection Class
	AWP 110 Series Draw Wire Sensor	1250	±0,25 FS	Potentiometric 0-10V 4-20 mA	-	12...30 VDC 42V max. (*)	2 m/s	cable M12	-25...+85	IP 53
	AWP 210 Series Draw Wire Sensor	5000	±0,25 FS	Potentiometric 0-10V 4-20 mA	-	12...30 VDC 42V max. (*)	2 m/s	cable M12	-25...+85	IP 53
	AWP 310 Series Draw Wire Sensor	11000	±0,25 FS	Potentiometric 0-10V 4-20 mA	-	12...30 VDC 42V max. (*)	2 m/s	cable M12	-25...+85	IP 53
	AWP 404 Series Draw Wire Sensor	4200	±0,1 FS	Potentiometric 0-10V 4-20 mA *Opt. redundant output	✓	10...30 VDC 12...30 VDC 42V max. (*)	2 m/s	cable M12	-25...+85	IP 67
	AWP 508 Series Draw Wire Sensor	8000	±0,1 FS	Potentiometric 0-10V 4-20 mA *Opt. redundant output	✓	10...30 VDC 12...30 VDC 42V max. (*)	2 m/s	cable M12	-25...+85	IP 67
	AWP 512 Series Draw Wire Sensor	12000	±0,1 FS	Potentiometric 0-10V 4-20 mA *Opt. redundant output	✓	10...30 VDC 12...30 VDC 42V max. (*)	2 m/s	cable M12	-25...+85	IP 67
	AWP 522 Series Draw Wire Sensor	22000	±0,5 FS	Potentiometric 0-10V 4-20 mA *Opt. redundant output	✓	10...30 VDC 12...30 VDC 42V max. (*)	2 m/s	cable M12	-25...+85	IP 67
	AWP 810 Series Draw Wire Sensor	5100	±0,25 FS	Potentiometric 0-10V 4-20 mA *Opt. redundant output	✓	10...30 VDC 12...30 VDC 42V max. (*)	2 m/s	cable M12	-25...+85	IP67
	AWP 820 Series Draw Wire Sensor	11000	±0,25 FS	Potentiometric 0-10V 4-20 mA *Opt. redundant output	✓	10...30 VDC 12...30 VDC 42V max. (*)	2 m/s	cable M12	-25...+85	IP67

(*) Supply Voltage;

For potentiometric output: 42V max.

For voltage and current output: 12...30VDC

For CANopen output: 10...30VDC

DRAW WIRE SENSORS AND ENCODERS

AWP Series Draw Wire Sensors

Potentiometric Measurement Up to 12000 mm, IP67 Protection

Potentiometric / 4-20 mA / 0-10V / CANopen Output

AWP 110 series draw wire sensors; consists of a rotary potentiometer which is controlled by stainless steel wire. They make measurement by pulling and rewinding stainless steel wire. They convert linear motion into potentiometric output. With these sensors, length or velocity measurements are made of linear movements. There is no tensions in these sensors. Precise position measurement is made without any tension, especially in vibrating movements with large range of motion at long distances.

Potentiometric, 4-20 mA, 0-10V or CANopen output signals can be received from draw wire sensors with a measurement distance of up to 12000 mm. In addition to the standard models, it is possible to produce non-standard models specific to the customer.

- Different measuring lengths up to 12000 mm
- Linearity up to $\pm 0.1\%$ FS
- Analog or CANopen output options
- Aluminum housing and ve stainless steel measuring wire
- 2 m/s maximum speed
- Small structure
- Models with IP67 protection class
- Shock / vibration resistant
- Easy installation

Applications:

- Elevators
- Crane systems
- Wood processing machines
- Press machines
- Hydraulic machines
- Forklifts
- Medical applications
- Sheet metal machines
- Construction machinery
- Horizontal control equipments
- Injection machines
- Industrial robots
- X-Y axis displacement
- Sluice gate control
- Air compressors
- Various Automation Applications



AWP 110

- Different measuring lengths between 0...200 mm and 0...1250 mm
- $\pm 0.25\%$ FS linearity
- Potentiometric, 0-10 VDC, or 4-20 mA output
- Standard IP53, optional IP67 protection class



More information

AWP 210

- Different measuring lengths between 0...1000 mm and 0...5000 mm
- $\pm 0.25\%$ FS linearity
- Potentiometric, 0-10 VDC, or 4-20 mA output
- Standard IP53, optional IP67 protection class



More information

AWP 310

- Different measuring lengths between 0...5100 mm and 0...11000 mm
- $\pm 0.25\%$ FS linearity
- Potentiometric, 0-10 VDC, or 4-20 mA output
- Standard IP53, optional IP67 protection class



More information

AWP 404

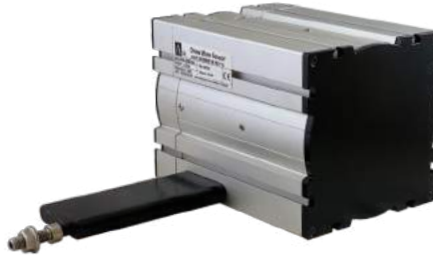
- Different measuring lengths between 0...1000 mm and 0...4200 mm
- ± 0.1 FS linearity
- Potentiometric, 0-10 VDC, 4-20 mA or CANopen output
- IP67 protection class



More information

AWP 508

- Different measuring lengths between 0...4000 mm and 0...8000 mm
- ± 0.1 FS linearity
- Potentiometric, 0-10 VDC, 4-20 mA or CANopen output
- IP67 protection class



More information

AWP 512

- Different measuring lengths between 0...5000 mm and 0...12000 mm
- ± 0.1 FS linearity
- Potentiometric, 0-10 VDC, 4-20 mA or CANopen output
- IP67 protection class



More information

AWP 522

- Different measuring lengths between 0...13000 mm and 0...22000 mm
- ± 0.5 FS linearity
- Potentiometric, 0-10 VDC, 4-20 mA or CANopen output
- IP67 protection class



More information

AWP 810

- Different measuring lengths between 0...2000 mm and 0...5100 mm
- ± 0.25 FS linearity
- Potentiometric, 0-10 VDC, 4-20 mA or CANopen output
- IP67 protection class



More information

AWP 820

- Different measuring lengths between 0...6000 mm and 0...11000 mm
- ± 0.25 FS linearity
- Potentiometric, 0-10 VDC, 4-20 mA or CANopen output
- IP67 protection class



More information

Model	Max. Stroke	Linearity	Electrical Interface		Electrical Connection	Max. Speed	Operating Temp.	Protection Class
AWP 110	1250 mm	±%0.25 FS	Output Potentiometric 0-10 V 4-20 mA	Supply 42V max. 12...30 VDC 12...30 VDC	Cable or M12 connector	2 m/s	-25...+85 °C	IP53 (opt. IP67)
AWP 210	5000 mm							
AWP 310	11000 mm							
AWP 404	4200 mm	±%0.1 FS	Output Potentiometric 0-10 V 4-20 mA CANopen	Supply 42V max. 12...30 VDC 12...30 VDC 10...30 VDC				IP67
AWP 508	8000 mm							
AWP 512	12000 mm							
AWP 522	22000 mm	±%0.5 FS						
AWP 810	5100 mm	±%0.25 FS						
AWP 820	11000 mm							

Draw Wire Encoders Selection Table

		Max Stroke (mm)	Linearity	Resolution	Push pull ⁽¹⁾	TTL ⁽²⁾	HTL ⁽³⁾	HPL ⁽⁴⁾	Maximum Speed	Electrical Connection	Operating Temp. (°C)	Protection Class
	AWE 110 Series	1250	±0,25 FS	0.1 0.2 0.05	✓	✓	✓	✓	2 m/s	cabl M12	-25...+85	IP 53
	AWE 210 Series	5000	±0,25 FS	0.2	✓	✓	✓	✓	2 m/s	cabl M12	-25...+85	IP 53
	AWE 310 Series	11000	±0,25 FS	0.3	✓	✓	✓	✓	2 m/s	cabl M12	-25...+85	IP 53
	AWE 404 Series	4200	±0,25 FS	0.1 0.2 0.05	✓	✓	✓	✓	2 m/s	cabl M12	-25...+85	IP67
	AWE 508 Series	8000	±0,25 FS	0.1 0.2 0.05	✓	✓	✓	✓	2 m/s	cabl M12	-25...+85	IP67
	AWE 512 Series	12000	±0,25 FS	0.3	✓	✓	✓	✓	2 m/s	cabl M12	-25...+85	IP67

(1) PP : 10...30VDC Supply - 10...30VDC Output

(2) TTL : 5VDC Supply - 5VDC TTL Output

(3) HTL: 10...30VDC Supply - 5VDC TTL Output

(4) HPL: 5...30VDC Supply - 5...30VDC PP Output

DRAW WIRE ENCODERS AND SENSORS

AWE Series Draw Wire Encoders

Incremental Measurement Up to 12000 mm, IP67 Protection

Push-Pull or TTL Output

AWP series draw wire encoders convert linear motion into incremental digital pulses. They make measurement by pulling and rewinding stainless steel wire. Length or velocity measurements are made with these sensors in linear movements..

Push-pull or TTL output signals can be received from draw wire encoders with a measurement distance of up to 12000 mm. In addition to the standard models, it is possible to produce non-standard models specific to the customer.

- Different measuring lengths up to 12000 mm
- ± 0.25 FS linearity
- High resolution up to 0.05 mm/pulse
- Push-pull or TTL output
- Aluminum housing and ve stainless steel measuring wire
- 2 m/s maximum speed
- Compact structure
- Models with IP67 protection class
- Shock / vibration resistant
- Easy installation

Applications:

- Elevators
- Crane systems
- Wood processing machines
- Press machines
- Hydraulic machines
- Forklifts
- Medical applications
- Sheet metal machines
- Construction machinery
- Horizontal control equipments
- Injection machines
- Industrial robots
- X-Y axis displacement
- Sluice gate control
- Air compressors
- Various Automation Applications



AWE 110

- Different measuring lengths between 0...300 mm and 0...1250 mm
- 0.1 mm/pulse, 0.2 mm/pulse or 0.05 mm/pulse resolution options
- Standard IP53, optional IP67 protection class



More information

AWE 210

- Different measuring lengths between 0...1000 mm and 0...5000 mm
- 0.2 mm/pulse resolution
- Standard IP53, optional IP67 protection class



More information

AWE 310

- Different measuring lengths between 0...5000 mm and 0...11000 mm
- 0.3 mm/pulse resolution
- Standard IP53, optional IP67 protection class



More information

AWE 404

- Different measuring lengths between 0...1000 mm and 0...4200 mm
- 0.1 mm/pulse, 0.2 mm/pulse or 0.05 mm/pulse resolution options
- IP67 protection class



More information

AWE 508

- Different measuring lengths between 0...4000 mm and 0...8000 mm
- 0.1 mm/pulse, 0.2 mm/pulse or 0.05 mm/pulse resolution options
- IP67 protection class



More information

AWE 512

- Different measuring lengths between 0...5000 mm and 0...12000 mm
- 0.3 mm/pulse resolution
- IP67 protection class



More information

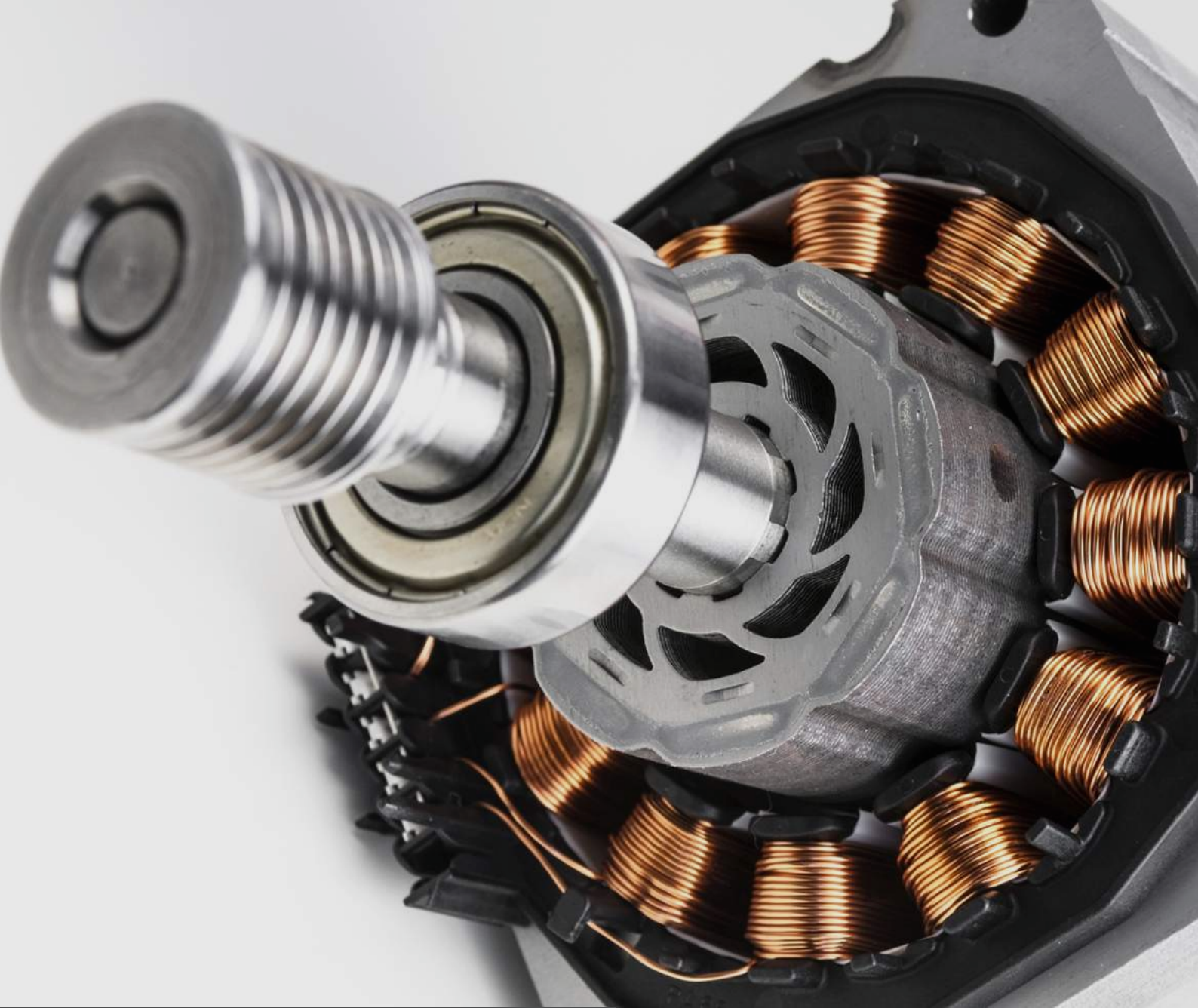
Model	Max Stroke	Linearity	Resolution	Electrical Interface	Electrical Connection	Max Speed	Operating Temp.	Protection Class
AWE 110	1250 mm	±%0.25 FS	0.1 mm/pulse 0.2 mm/pulse 0.05 mm/pulse	PP : 10...30VDCSupply - 10...30VDCOutput TTL : 5VDCSupply - 5VDC TTLOutput HTL: 10...30VDCSupply - 5VDC TTLOutput HPL: 5...30VDCSupply - 5...30VDC PPOutput	Cable or M12 Connector	2 m/s	-25...+85 °C	IP53 (opt. IP67)
AWE 210	5000 mm		0.2 mm/pulse					
AWE 310	11000 mm		0.3 mm/pulse					
AWE 404	4200 mm		0.1 mm/pulse 0.2 mm/pulse 0.05 mm/pulse					IP67
AWE 508	8000 mm		0.1 mm/pulse 0.2 mm/pulse 0.05 mm/pulse					
AWE 512	12000 mm		0.3 mm/pulse					



Draw Wire Sensors and Encoder

Atek series draw wire sensors with wide selection range and high precision for various applications are ideal for precise position measurement without tension, especially over long distances and vibrating movements with large range of motion.





**ROTARY
ENCODERS**

Incremental Rotary Encoders Selection Table

		Body Diameter (mm)	Magnetic	Optical	Resolution max. (pulse)	Push pull ⁽¹⁾	TTL ⁽²⁾	HTL ⁽³⁾	HPL ⁽⁴⁾	Open Collector ⁽⁵⁾	SSI ⁽⁶⁾	Shaft (mm)	Semi Hollow Shaft (mm)	Hollow Shaft (mm)	Operating Speed (RPM)	Operating Temp. (°C)	Protection Class	Electrical Connection
	ARS S 37 Incremental Rotary Encoder	37	✓	-	1024	✓	✓	✓	✓	✓	-	6...10	-	-	3000	-25...+85	IP 54	cable
	ARS S 50 Incremental Rotary Encoder	50	✓	-	1024	✓	✓	✓	✓	✓	✓	6...10	-	-	3000	-25...+85	IP 54	cable M16
	ARC S 50 Incremental Rotary Encoder	50	-	✓	20000	✓	✓	✓	✓	✓	-	6...10	-	-	6000	-25...+85	IP 54	cable M16
	ARS S 58 Incremental Rotary Encoder	58	✓	-	1024	✓	✓	✓	✓	✓	✓	6...14	-	-	3000	-25...+85	IP 54	cable M16 M23
	ARC S 58 Incremental Rotary Encoder	58	-	✓	20000	✓	✓	✓	✓	✓	-	6...14	-	-	6000	-25...+85	IP 54	cable M16 M23
	ARS B 37 Incremental Rotary Encoder	37	✓	-	1024	✓	✓	✓	✓	✓	-	-	4...6	-	3000	-25...+85	IP 54	cable
	ARS B 50 Incremental Rotary Encoder	50	✓	-	1024	✓	✓	✓	✓	✓	✓	-	6...10	-	3000	-25...+85	IP 54	cable M16
	ARC B 50 Incremental Rotary Encoder	50	-	✓	20000	✓	✓	✓	✓	✓	-	-	6...10	-	6000	-25...+85	IP 54	cable M16
	ARS B 58 Incremental Rotary Encoder	58	✓	-	1024	✓	✓	✓	✓	✓	✓	-	6...20	-	3000	-25...+85	IP 54	cable M16 M23
	ARC B 58 Incremental Rotary Encoder	58	-	✓	20000	✓	✓	✓	✓	✓	-	-	6...20	-	6000	-25...+85	IP 54	cable M16 M23

(1) PP : 10...30VDC Supply - 10...30VDC Output

(2) TTL : 5VDC Supply - 5VDC TTL Output

(3) HTL: 10...30VDC Supply - 5VDC TTL Output

(4) HPL: 5...30VDC Supply - 5...30VDC PP Output

(5) The supply signal should not be lower than the output signal

(6) 5...24VDC Supply

Incremental Rotary Encoders Selection Table

	Body Diameter (mm)	Magnetic	Optical	Resolution max. (pulse)	Push pull ⁽¹⁾	TTL ⁽²⁾	HTL ⁽³⁾	HPL ⁽⁴⁾	Open Collector ⁽⁵⁾	Shaft (mm)	Semi Hollow Shaft (mm)	Hollow Shaft (mm)	Operating Speed (RPM)	Operating Temp. (°C)	Protection Class	Electrical Connection
 ARC H 50 Incremental Rotary Encoder	50	-	√	5000	√	√	√	√	√	-	-	6...10	6000	-25...+85	IP 54	cable
 ARC H 58 Incremental Rotary Encoder	58	-	√	20000	√	√	√	√	√	-	-	10...14	6000	-25...+85	IP 54	cable
 ARC H 100 Incremental Rotary Encoder	100	-	√	1024	√	√	√	√	√	-	-	30...42	3000	-25...+85	IP 54	cable
 ARX S 1XP8001 Incremental Rotary Encoder	58	√	√	1024	√	√	√	√	√	8	-	-	6000	-25...+85	IP 54	cable M16
 ARK S 58 Incremental Rotary Encoder	58	√	-	1024	√	√	√	√	√	6...10	-	-	3000	-25...+85	IP 67	cable M16
 ART B 58 Incremental Rotary Encoder	58	√	-	1024	√	√	√	√	√	-	-	6...20	3000	-25...+85	IP 65	cable

(1) PP : 10...30VDC Supply - 10...30VDC Output

(2) TTL : 5VDC Supply - 5VDC TTL Output

(3) HTL: 10...30VDC Supply - 5VDC TTL Output

(4) HPL: 5...30VDC Supply - 5...30VDC PP Output

(5) The supply signal should not be lower than the output signal

INCREMENTAL ROTARY ENCODERS

ARC/ARS Series

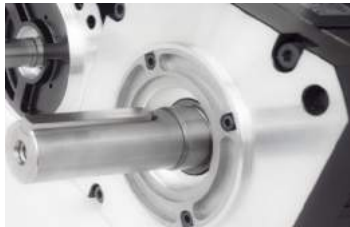
Optical or Magnetic Measurement, Push-Pull / TTL / Open Collector / SSI Output, IP54 Protection

Atek ARC / ARS series rotary encoders measure with optical or magnetic principle and operate incrementally.

These products, which are used frequently in every field of the industry, are used in many different applications such as process control, position, level, distance, control, cutting, height, robot, servo motor. With their low cost and high quality, they show the highest performance and are very economical.

Designed for high accuracy feedback control, Atek series rotary encoders have a wide selection range according to your needs.

- Incremental measurement with Optical (ARC) or Magnetic (ARS) principle
- Resolution up to 20.000 pulses for Optical (ARC) and 1024 pulses for Magnetic (ARS)
- Push-pull, TTL Line Driver, Open Collector or SSI output
- Different body and shaft diameter options
- Optical (ARC): 6000 RPM, Magnetic (ARS): 3000 RPM operating speed
- High accuracy
- Robust structure, long operating life
- Connection with cable or connector
- IP54 protection class



MODELS WITH SHAFT

ARSS 37

- Incremental measurement with magnetic principle
- 37 mm body diameter
- 6 mm, 8 mm or 10 mm shaft options
- Push-pull, TTL Line Driver, Open Collector output



More information

ARC/ARSS 50

- Incremental measurement with Optical (ARC) or Magnetic (ARS) principle
- 50 mm body diameter
- 6 mm, 8 mm or 10 mm shaft options
- Clamping flange
- Push-pull, TTL Line Driver, Open Collector or SSI* output

* SSI output is only available in ARS model.



More information

ARC/ARSS 58

- Incremental measurement with Optical (ARC) or Magnetic (ARS) principle
- 58 mm body diameter
- 6 mm, 8 mm, 10 mm, 12 mm or 14 mm shaft options
- Clamping, synchro, tacho or square flange
- Push-pull, TTL Line Driver, Open Collector or SSI* output

* SSI output is only available in ARS model.



More information



Clamping Flange

Synchro Flange

Tacho Flange

Square Flange

INCREMENTAL ROTARY ENCODERS

ARC/ARS Series (Semi Hollow Shaft)

Optical or Magnetic Measurement, 50 or 58 mm Body Diameter, IP54 Protection
Hollow Diameter Between 6 and 20 mm, Push-Pull / TTL / Open Collector / SSI Output

Atek ARC / ARS series rotary encoders measure with optical or magnetic principle and operate incrementally.

These products, which are used frequently in every field of the industry, are used in many different applications such as process control, position, level, distance, control, cutting, height, robot, servo motor. With their low cost and high quality, they show the highest performance and are very economical.

Designed for high accuracy feedback control, Atek series rotary encoders have a wide selection range according to your needs.

- Incremental measurement with Optical (ARC) or Magnetic (ARS) principle
- Resolution up to 20.000 pulses for Optical (ARC) and 1024 pulses for Magnetic (ARS)
- Push-pull, TTL Line Driver, Open Collector or SSI output
- 50 mm or 58 mm body diameter
- Semi hollow shaft options between 6 mm and 20 mm
- Optical (ARC): 6000 RPM, Magnetic (ARS): 3000 RPM operating speed
- 300 KHz response frequency
- High accuracy
- Robust structure, long operating life
- Connection with cable or socket
- IP54 protection class

ARS B 37

- Incremental measurement with magnetic principle
- 37 mm body diameter
- 6 mm, 8 mm or 10 mm semi hollow shaft options
- Push-pull, TTL Line Driver or Open Collector output



More information

ARC/ARS B 50

- Optical (ARC) or Magnetic (ARS) measurement principle
 - 50 mm body diameter
 - 6 mm, 8 mm or 10 mm semi hollow shaft options
 - Z type or circular flange options
 - Push-pull, TTL Line Driver, Open Collector or SSI* output
- * SSI output is only available in ARS model.



Circular Flange



Z Type Flange



More information

ARC/ARS B 58

- Optical (ARC) or Magnetic (ARS) measurement principle
 - 58 mm body diameter
 - Semi hollow shaft options between 6 mm and 20 mm
 - Z type or circular flange options
 - Push-pull, TTL Line Driver, Open Collector or SSI* output
- * SSI output is only available in ARS model.



Circular Flange



Z Type Flange



More information



Model	Shaft Type	Body Diameter	Measurement Type	Resolution (max)	Electrical Interface	Electrical Connection	Speed (max)	Shaft Diameter	Operating Temp.	Protection Class
ARS B 50	Semi Hollow Shaft	50 mm	Magnetic	1024 pulse	PP : 10...30VDC Supply - 10...30VDC Out TTL : 5VDC Supply - 5VDC TTL Out HTL: 10...30VDC Supply - 5VDC TTL Out HPL: 5...30VDC Supply - 5...30VDC PP Out OCL: NPN Open Collector OCP: NPN Open Collector SSI: 5...24VDC Supply - SSI Out	Cable, M16 or M23 connector	3000 RPM	6, 8 or 10 mm	-25...+85 °C	IP54
ARS B 58		58 mm						6 mm...20 mm		
ARC B 50		50 mm	Optical	20.000 pulse			6000 RPM	6, 8 or 10 mm		
ARC B 58		58 mm						6 mm...20 mm		

MODELS WITH SEMI HOLLOW SHAFT

ARS B 37

- Incremental measurement with magnetic principle
- 37 mm body diameter
- 6 mm, 8 mm or 10 mm semi hollow shaft options
- Push-pull, TTL Line Driver or Open Collector output



More information

ARC/ARS B 50

- Optical (ARC) or Magnetic (ARS) measurement principle
- 50 mm body diameter
- 6 mm, 8 mm or 10 mm semi hollow shaft options
- Z type or circular flange options
- Push-pull, TTL Line Driver, Open Collector or SSI* output
- * SSI output is only available in ARS model.



Circular Flange



More information

ARC/ARS B 58

- Optical (ARC) or Magnetic (ARS) measurement principle
- 58 mm body diameter
- Semi hollow shaft options between 6 mm and 20 mm
- Z type or circular flange options
- Push-pull, TTL Line Driver, Open Collector or SSI* output
- * SSI output is only available in ARS model.



Circular Flange



More information

Z Type Flange

MODELS WITH HOLLOW SHAFT

ARCH 50

- Optical measurement
- 50 mm body diameter
- Resolution from 60 to 5000 pulse
- 6 mm, 8 mm or 10 mm hollow shaft
- Z type, circular or backside flange
- Push-pull, TTL Line Driver, Open Collector output



Z type flange



Circular flange



Backside flange



More information

ARCH 58

- Optical measurement
- 58 mm body diameter
- Resolution from 1024 to 20.000 pulse
- 10 mm, 12 mm or 14 mm hollow shaft
- Z type or circular flange
- Push-pull, TTL Line Driver, Open Collector output



Z type flange



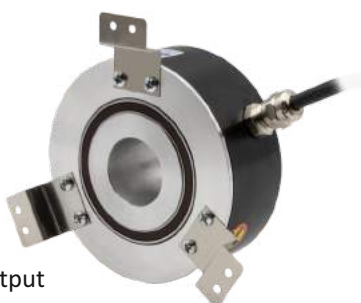
Circular flange



More information

ARCH 100

- Optical measurement
- 100 mm body diameter
- 1024 pulse resolution
- 30 mm, 32 mm, 38 mm, 40 mm or 42 mm hollow shaft
- Push-pull, TTL Line Driver, Open Collector output



More information

INCREMENTAL ROTARY ENCODERS

ARX-S-1XP8001 Series

**Optical or Magnetic Measurement, Push-Pull / TTL / Open Collector Output
IP54 Protection, Special Shaft**

- Incremental measurement with Optical (ARC) or Magnetic (ARS) principle
- Standard 1024 pulse, optional up to 4096 pulse resolution
- Push-pull, TTL Line Driver or Open Collector output options
- 58 mm body diameter
- Special design shaft
- Optical (ARC): 6000 RPM, Magnetic (ARS): 3000 RPM operating speed
- 300 KHz response frequency
- High accuracy
- Robust structure, long operating life
- Connection options with cable or connector
- IP54 protection class



More information

ARK S 58 Series

**Magnetic Non-Contact Measurement, Push-Pull / TTL / Open Collector Output
IP67 Protection**

- Non-contact measurement with magnetic principle
- Incremental output
- Resolution options between 1 pulse and 1024 pulses
- Push-pull, TTL Line Driver or Open Collector output options
- 58 mm body diameter
- 6 mm, 8 mm or 10 mm shaft options
- 3000 RPM operating speed
- 300 KHz response frequency
- High accuracy
- Robust structure, long service life
- Connection options with cable or connector
- IP67 protection class for heavy environmental conditions



More information

ART B 58 Series

**Magnetic Non-Contact Measurement, Push-Pull / TTL / Open Collector Output,
IP 65 Protection**

- Non-contact measurement with magnetic principle
- Incremental output
- All resolution values between 1 and 1024 pulses
- Push-pull, TTL Line Driver or Open Collector output options
- 58 mm body diameter
- Different hollow diameters from 6 mm to 20 mm
- 20.000 RPM operating speed
- 300 KHz response frequency
- High accuracy
- Robust structure, long service life
- IP65 protection class



More information

Absolute Rotary Encoders Selection Table

		Body Diameter (mm)	Measurement Range	Accuracy	Resolution max. (bit)	Magnetic	Optical	Analog Interface ⁽¹⁾	CANopen Interface ⁽²⁾	Parallel Interface ⁽³⁾	Shaft (mm)	Semi Hollow Shaft (mm)	Hollow Shaft (mm)	Operating Speed (RPM)	Operating Temp. (°C)	Protection Class	Electrical Connection
	SAS S 37 Single Turn Absolute Rotary Encoder	37	0...360°	±0,1°	14	√	-	4-20 mA 0-10V 0.5-4.5V 0-5 V	√	-	6...10	-	-	3000	-20...+70	IP 67	cable M12
	SAS B 37 Single Turn Absolute Rotary Encoder	37	0...360°	±0,1°	14	√	-	4-20 mA 0-10V 0.5-4.5V 0-5 V	√	-	-	6...10	-	3000	-20...+70	IP 67	cable M12
	SAS K 37 Single Turn Absolute Rotary Encoder	37	0...360°	±0,1°	14	√	-	4-20 mA 0-10V 0.5-4.5V 0-5 V	√	-	8	-	-	3000	-20...+70	IP 67	cable M12
	SAS S 50 Single Turn Absolute Rotary Encoder	50	0...360°	±0,1°	14	√	-	-	-	√	6...8	-	-	3000	-20...+85	IP 67	cable
	MAS S 50 Multi Turn Absolute Rotary Encoder	50	2...2 ¹⁷ turn	±0,5°	16	√	-	4-20 mA 0-10V 0.5-4.5V 0-5 V	√	-	6...8	-	-	3000	-20...+70	IP 64	cable M12
	MAS B 50 Multi Turn Absolute Rotary Encoder	50	2...2 ¹⁷ turn	±0,5°	16	√	-	4-20 mA 0-10V 0.5-4.5V 0-5 V	√	-	-	6...15	-	3000	-20...+70	IP 64	cable M12
	MAS S 58 Multi Turn Absolute Rotary Encoder	58	2...2 ¹⁷ turn	±0,5°	16	√	-	4-20 mA 0-10V 0.5-4.5V 0-5 V	√	-	6...10	-	-	3000	-20...+70	IP 64	cable M12
	MAS B 58 Multi Turn Absolute Rotary Encoder	58	2...2 ¹⁷ turn	±0,5°	16	√	-	4-20 mA 0-10V 0.5-4.5V 0-5 V	√	-	-	6...15	-	3000	-20...+70	IP 64	cable M12
	MAH B 58 Multi Turn Absolute Rotary Encoder	58	2...2 ¹⁷ turn	±0,5°	16	√	-	4-20 mA 0-10V 0.5-4.5V 0-5 V	√	-	-	6...15	-	3000	-20...+70	IP 68	cable M12

ABSOLUTE ROTARY ENCODERS

SAS Series Singleturn Rotary Encoders

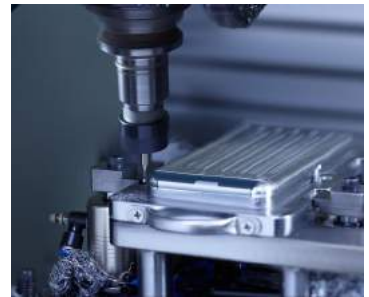
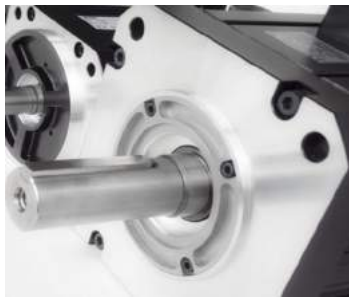
Single Turn Absolute Rotary Encoder, 37 or 50 mm Body Diameter, IP67 Protection, CANopen, Analog or Parallel Output

SAS series encoders operate absolute. In other words, unlike the incremental systems, they do not lose their positions in power outages and continue to measure from where they left off.

They offer a maximum resolution of 14 bits per rotation. The angle increase direction can be selected to be clockwise (cw) or counterclockwise (ccw). Thanks to the reset function, the desired position can be determined as the 0 point.

Speed and position accuracy in one application; If it is more important than fault tolerance and system simplicity, absolute encoders should be used. Absolute encoders provide precise operation in applications.

- Identifying multi-axis orientation in CNC machines used in component manufacturing
- Automatically determine the height of the scissor bearings used in hospitals
- Correct placement of multiple stabilizers for large vehicles such as cranes or air lifts
- Automatic doors or slots to move without limiting key
- Continue robotic movement even after a power failure



- Absolute measurement with magnetic principle
- 14-bit resolution per revolution
- Analog, CANopen or parallel output options
- Redundant output
- 37 mm or 50 mm body diameter
- 6 mm, 8 mm or 10 mm shaft diameter
- 3000 RPM operating speed
- High signal capacity
- Robust structure, long service life
- Easy mounting
- IP67 protection class

SAS 37 Series

- 37 mm body diameter
- Shaft, semi hollow shaft or sleeved options
- Analog or CANopen output



More information

SAS 50 Series

- 50 mm body diameter
- 6 or 8 mm shaft diameter
- Analog, CANopen or Parallel output



More information

Model	Shaft Type	Body Dia.	Shaft Dia.	Output	Resolution	Supply Voltage	Electrical Conn.	Operating Temp.	Protection Class
SAS S 37	Shaft	37 mm	6, 8, 10 mm	CANopen or Analog: 4-20 mA, 0-10V, 0.5-4.5V, 0-5V	CANopen: Singleturn: 1...14 bit Multiturn: 1...31 bit Analog: 16 Bit	CANopen: 15...30 VDC Analog: 15...26 VDC	Cable or M12 connector	-25...+85 °C	IP67
SAS B 37	Semi hollow shaft								
SAS K 37	Sleeved								
SAS S 50	Shaft	50 mm	6, 8 mm	Parallel (push-pull, open collector)	1...1684 pulse	5...30 VDC	Cable		

ABSOLUTE ROTARY ENCODERS

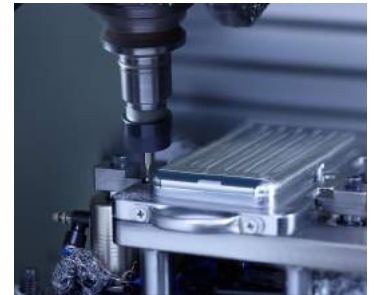
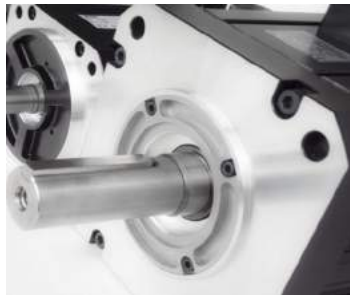
MAS Series Multiturn Rotary Encoders

Multiturn Absolute Rotary Encoder, 50 mm Body Diameter, IP64 Protection, Shaft or Semi Hollow Shaft, CANopen or Analog Output

The MAS series encoders operate absolute. In other words, unlike the incremental systems, they do not lose their positions in power outages and continue to measure from where they left off.

Speed and position accuracy in one application; If it is more important than fault tolerance and system simplicity, absolute encoders should be used. Absolute encoders provide precise operation in applications.

- Identifying multi-axis orientation in CNC machines used in component manufacturing
- Automatically determine the height of the scissor bearings used in hospitals
- Correct placement of multiple stabilizers for large vehicles such as cranes or air lifts
- Automatic doors or slots to move without limiting key
- Continue robotic movement even after a power failure



- Absolute measurement with magnetic principle
- 16 bit resolution
- Analog or CANopen output options
- 0.02 ° accuracy in multiple turns of the desired number
- 50 mm or 58 mm body diameter
- Shaft or semi hollow shaft options
- 3000 RPM operating speed
- High accuracy
- Robust structure, long service life
- IP64 protection class



More information
for Analog Output



More information
for CANopen Output

MAS S 50

- 50 mm body diameter
- 6 or 8 mm shaft diameter



MAS S 58

- 58 mm body diameter
- 6, 8 or 10 mm shaft diameter



MAS B 50

- 50 mm body diameter
- 6, 8, 10, 12, 14 or 15 mm shaft diameter



MAS B 58

- 58 mm body diameter
- 6, 8, 10, 12, 14 or 15 mm shaft diameter



Model	Shaft Type	Body Diameter	Shaft Diameter	Output	Resolution	Supply Voltage	Electrical Connection	Operating Temp.	Protection Class
MAS S 50	Shaft	50 mm	6, 8 mm	CANopen or Analog: 4-20 mA, 0-10V, 0.5-4.5V, 0-5V	CANopen: Single turn : 1...14 bit Multi turn : 1...31 bit Analog: 16 Bit	CANopen: 15...30 VDC Analog: 15...26 VDC	Cable or M12 connector	-25...+85 °C	IP64
MAS S 58		58 mm	6, 8, 10 mm						
MAS B 50	Semi hollow shaft	50 mm	6, 8, 10, 12, 14, 15 mm						
MAS B 58		58 mm	6, 8, 10, 12, 14, 15 mm						

ABSOLUTE ROTARY ENCODERS

MAH B 58

**Multiturn Absolute Rotary Encoder, 58 mm Body Diameter, Shaft or Semi Hollow Shaft
IP68 Protection, CANopen or Analog Output**

The MAH series encoders operate absolute. In other words, unlike the incremental systems, they do not lose their positions in power outages and continue to measure from where they left off.

With its IP68 high protection class, it is resistant to harsh environmental conditions and vibrations.

Speed and position accuracy in one application; If it is more important than fault tolerance and system simplicity, absolute encoders should be used. Absolute encoders provide precise operation in applications.

- Identifying multi-axis orientation in CNC machines used in component manufacturing
- Automatically determine the height of the scissor bearings used in hospitals
- Correct placement of multiple stabilizers for large vehicles such as cranes or air lifts
- Automatic doors or slots to move without limiting key
- Continue robotic movement even after a power failure



- Absolute measurement with magnetic principle
- 16 bit resolution
- Analog or CANopen output options
- 0.02 ° accuracy in multiple turns of the desired number
- 50 mm or 58 mm body diameter
- Shaft or semi hollow shaft options
- 3000 RPM operating speed
- High accuracy
- Robust structure, long service life
- IP68 protection class

MAH S 50

- 50 mm body diameter
- 6, 8, 10, 12, 14, 15 or 17 mm shaft



More information
for Analog Output



CANopen

More information
for CANopen Output

MAH B 58

- 58 mm body diameter
- 6, 8, 10, 12, 14 or 15 mm hollow shaft



More information



Model	Shaft Type	Body Diameter	Shaft Diameter	Supply Voltage	Output	Resolution	Electrical Connection	Operating Temp.	Protection Class
MAH S 50	Shaft	50 mm	6, 8, 10, 12, 14 or 15, 17 mm	15...30 VDC	CANopen	Single turn1...14 bit Multi turn1...31 bit	Cable or M12 connector	-45...+85 °C	IP68
MAHB 58	Semi Hollow Shaft	58 mm	6, 8, 10, 12, 14 or 15 mm	16...26 VDC	Analog: 420 mA, 0 10V, 0.5-4.5V, 0-5V	16 bit			

ABSOLUTE SIN/COS ROTARY ENCODERS

ARF S 58

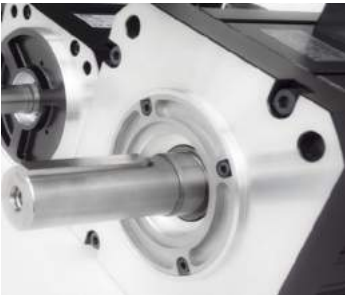
Optical or Magnetic Measurement, 59.6 mm Body Diameter,
1:10 Tapered Shaft, IP54 Protection, SinCos Output



ARF S 58 series SinCos rotary encoders measure with magnetic and optical principle. They offer 2048 pulse resolution per revolution.

They are particularly suitable for applications in the field of elevator and drive technology. Thanks to their high signal quality, they work stably without being affected by noise.

Designed for high accuracy feedback control, Atek series rotary encoders have a comprehensive selection range according to your needs.



General Features

- Magnetic or optical measurement
- Incremental 2048 pulse resolution
- Absolute Sin/Cos output signals
- 59.6 mm body diameter
- 1:10 tapered shaft
- 3000 RPM operating speed
- M type flange
- High accuracy
- Robust structure, long service life
- IP54 protection class

Model	Shaft Type	Body Diameter	Resolution	Supply Voltage	Output	Electrical Connection	Speed (max)	Flange Type	Shaft Diameter	Operating Temp.	Protection Class
ARF (Optical and Magnetic)	Shaft	59.6 mm	2048 pulse	5 VDC	1 Vpp Analog	Kablo	3000 RPM	FM flange	1:10 Tapered	-25...+85 °C	IP54



**NON-CONTACT
ANGLE SENSORS**

NON-CONTACT ANGLE SENSORS

RCS Series

Magnetic Non-contact Measurement, Analog Output Options, IP67 Protection

RCS series non-contact angle sensors use the direction of the magnetic field to determine the measuring angle. Magnetic field direction is captured by an integrated circuit and indicated by analog output signals. Angle measurement information between 0-360° can be obtained from RCS series angle sensors. Measurement limits can be adjusted between 0-360° depending on the user's request. 0-10 V, 4-20 mA or ratiometric output options are available.

RCS series angle sensors with high accuracy, compact design and robust construction; offers suitable solutions for angle measurement in industrial areas like crane and lifting systems, robotic systems, solar energy, wind power plants, auto parts etc.

- Non-contact measurement
 - 12 bit resolution
 - User-selectable angle values between 0-360°
 - 0-10 VDC, 4-20 mA or ratiometric output options
 - Resistant to harsh environmental conditions and vibration
- IP54 or IP67 protection class
 - Long service life
 - Compact design
 - High accuracy



RCS 2100

- 6 mm magnet hole diameter
- Mechanically unlimited operating speed
- IP67 protection class



More information

RCS 2200

- 6 mm magnet hole diameter
- Mechanically unlimited operating speed
- IP67 protection class



More information

RCS 3100

- 6 mm shaft diameter
- 120 RPM operating speed
- IP54 protection class



More information

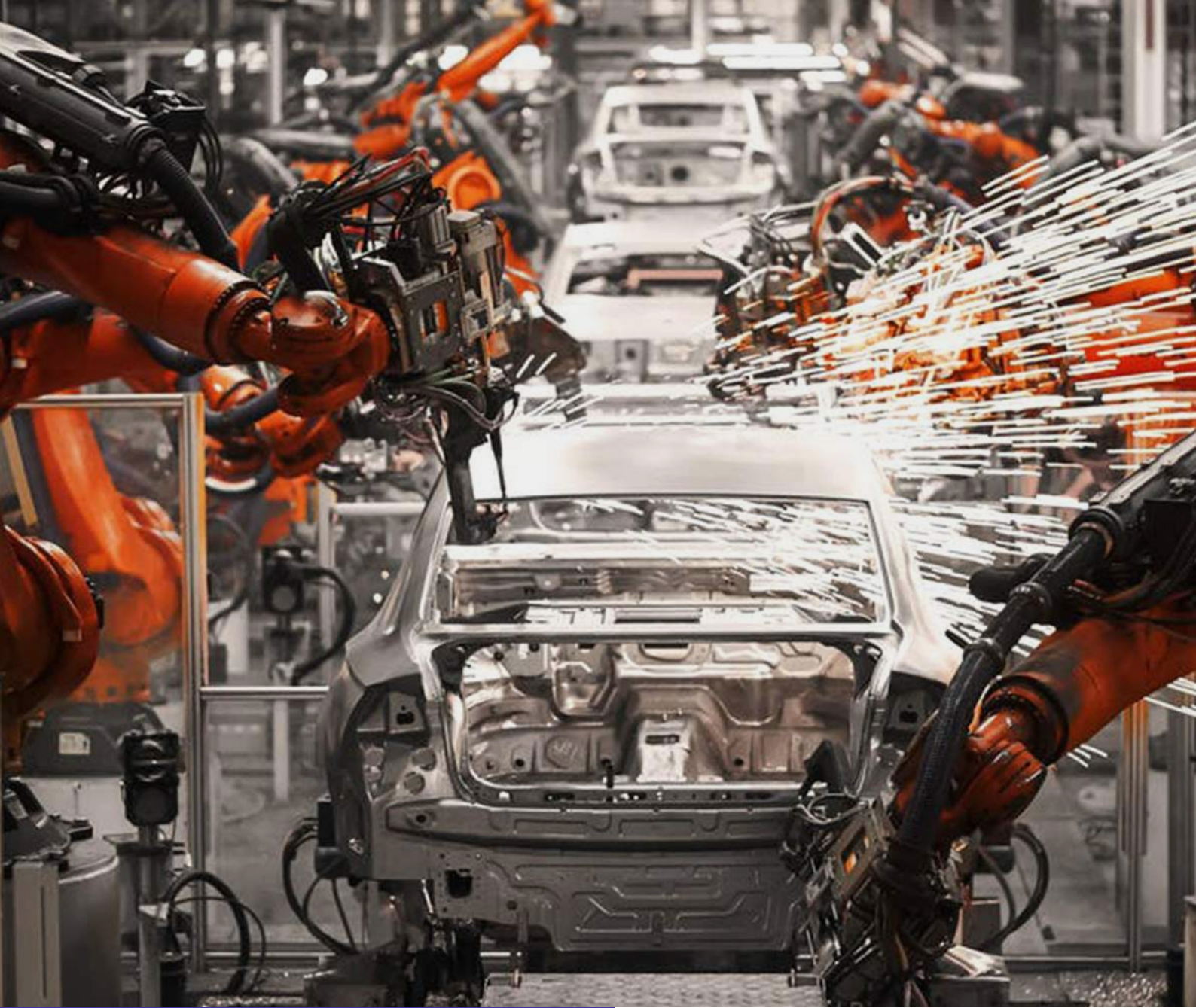
RCS 3700

- 6 mm shaft diameter
- 120 RPM operating speed
- IP67 protection class



More information

Model	Measuring Range	Linearity	Resolution	Repeatability	Operating Speed	Electrical Interface		Electrical Conn.	Operating Temp.	Protection Class
RCS 2100	Can be produced in the desired range from 0 to 360°	±%0.3 FS	12 Bit	0.1°	Mechanically unlimited	Output	Supply	Cable	-25...+85 °C	IP67
RCS 2200					120 RPM	4...20 mA 0...10 VDC Ratiometric	9...32 VDC 15...32 VDC 5VDC			IP54
RCS 3100										IP67
RCS 3700										



**ROTARY
POTENTIOMETERS**

ROTARY POTENTIOMETER

ERP and RHP Series

Precise Potentiometric Measurement, Infinite and Continuous Rotation Feature

Atek series rotary potentiometers working with the principle of resistive carbon are infinite turn. They do not break as they have no mechanical limitation. They are used in many applications in industry due to their durability, very long life and precision.

They do not deteriorate and wear easily thanks to their sensitive roller bearing, resistive carbon path and spring contacts, and have a long life up to 5 million movements.

There are different resistance options such as 5 or 10 Kohm in the specified electrical measurement area. It is used for precise angle and position measurement at high speeds with its 0.5% linearity.

Applications

- Textile machinery
- Automotive
- Automatic door control systems
- All kinds of control and measurement



ERP Series

- 345°, 350° or 355° electrical angle
- 6 mm or 6,34 mm shaft
- 50.8 mm body diameter
- Potentiometric, 0-10V or 4-20 mA output
- High linearity up to $\pm 0.5\%$
- Long life up to 5 million movements
- Resolution better than 0.1°
- IP40 protection class
- No mechanical rotation limitation



More information

RHP Series

- 45°, 150° or 354° electrical angle
- 6 mm hollow shaft
- 30.1 mm body diameter
- Potentiometric output
- High linearity up to $\pm 0.2\%$
- Long life up to 5 million movements
- Resolution better than 0.1°
- IP63 protection class
- No mechanical rotation limitation



More information

Model	Electrical Angle	Mechanical Angle	Resistance Value	Linearity	Repeatability	Output Type	Supply	Operating Speed	Operating Temp.	Protection Class
ERP	345° 350° 355°	360° continuous	5K 10K	±%0.5 FS	0.1° max.	Potentiometric	42V max.	1000 RPM max.	-25... +75 °C	IP40
	0-10 V					12...30VDC				
	4-20 mA									
RHP	45° 150° 354°			±%0.2 FS		Potentiometric	42V max.			IP63



INCLINOMETERS / TILT SENSORS

Tilt Sensors Product Selection Table

	Measurement Axis	Measuring Range	Accuracy	Resolution	Dimensions (mm)	Analog Output	Transistor Output	Relay Output	CANopen Output	Supply Voltage (VDC)	Electrical Connection	Operating Temp.(°C)	Protection Class
 INS 110 Tilt Sensor	2 axis	±90° (1)	±0,15°	±0,05°	72 x 61 x 29	-	PNP OCL	✓	-	12...24	cabl M12	-30...+70	IP 67
 INS 120 Tilt Sensor	1 axis	360°	±0,15°	±0,05°	72 x 61 x 29	0-10V 4-20 mA *Opt. double analog output	PNP OCL	-	-	12...24	cabl M12	-30...+70	IP 67
 INS 130 Tilt Sensor	2 axis	360°	±0,15°	±0,05°	72 x 61 x 29	0-10V 4-20 mA	PNP OCL	-	-	12...24	cabl M12	-30...+70	IP 67
 INC 110 Tilt Sensor	1 axis	360°	±0,1°	±0,05°	66 x 49 x 26	0-10V 4-20 mA	-	-	✓	12...24 15...24 (2)	cabl M12	-30...+70	IP 67
	2 axis	±90°											
 INC 210 Tilt Sensor	1 axis	360°	±0,1°	±0,05°	89 x 45	0-10V 4-20 mA	-	-	✓	12...24 15...24 (2)	cabl M12	-30...+70	IP 67

(1) INS 110 series have 4 different set option (Adjustable between ±90°). These options must be specified at the order stage.

(2) For INC 110 and INC 210 series sensors, the supply voltage is 12...24VDC for 4-20mA and CANopen outputs, 15...24VDC for 0-10V output.

TILT SENSORS / INCLINOMETERS

INS Series

Single or Dual Axis Measurement, Analog, PNP Open Collector or Relay Output Options, IP 67 Protection Class

INS series inclinometers are used for inclination measurement for single or dual axis. They have $\pm 90^\circ$ dual axis and 0-360° single axis programmable measurement range. Analog, open collector or relay output options are available. They can in harsh ambient conditions with its high IP67 protection class.

INS series angle and inclination sensors with high precision, compact design and durable structure are used in crane and lifting systems, construction machinery and special purpose vehicles, solar energy and photovoltaic systems, wind power plants etc. offers suitable solutions for angle measurement in industrial areas. Thanks to their IP protection classes, they can work easily in outdoor environments.

- $\pm 90^\circ$ dual axis measurement range or 0-360° single axis measurement range option
- Programmable measurement limits
- Compensated axis sensitivity
- Analog, PNP open collector or relay output
- High accuracy: $\pm 0.15^\circ$
- Easy installation
- IP67 protection class
- Small and robust housing
- Compact structure

INS 110

- Dual axis $\pm 90^\circ$ measurement range
- Four different set options (Adjustable between $\pm 90^\circ$)
- Model option with relay or PNP Open Collector output



More information

INS 120

- Single axis 360° measurement range
- 0-10VDC or 4-20mA analog output options (Dual analog output options)
- PNP Open Collector output



More information

INS 130

- Dual axis 0...360° measurement range
- Analog output options :0...10VDC or 4...20mA
- Programmable Switching output (≤ 300 mA)
- PNP Open Collector output



More information

Applications

- Agricultural and forestry machinery
- Construction machinery and special-purpose vehicles
- Solar thermal energy and photovoltaics
- Automated guided systems
- Crane and lifting technology
- Wind power plant



Model	Number of Axis	Measuring Range	Accuracy	Supply Voltage	Output Type	Electrical Connection	Operating Temp.	Protection Class
INS 110	2 axis	$\pm 90^\circ$	$\pm 0.15^\circ$	12...24VDC	PNP Open Collector or Relay	Cable or M12 connector	-30...+70 °C	IP67
INS 120	1 axis	0...360°			0-10V, 4-20 mA or PNP Open Collector			
INS 130	2 axis	0...360°			0-10V, 4-20 mA or PNP Open Collector			

TILT SENSORS / INCLINOMETERS

INC Series

Single or Dual Axis Measurement, Analog or CANopen Output, IP 67 Protection Class

INS series inclinometers are used for inclination measurement for single or dual axis. They have $\pm 90^\circ$ dual axis and $0-360^\circ$ single axis measurement range. These sensors with 0-10VDC voltage output, 4-20mA current output or CANopen signal output option, can take measurement with $\pm 0.1^\circ$ accuracy. Thanks to its compensated axis sensitivity, the effect of the axes on each other is minimized.

These sensors, especially used in machine and crane industries, can operate in outdoor environments with their high IP protection classes.

Optionally, sensors with redundant output can be produced.

- $\pm 90^\circ$ dual axis measurement range or $0-360^\circ$ single axis measurement range option
- 4-20 mA, 0-10V or CANopen signal output option
- Redundant output option
- Compensated axis sensitivity
- High accuracy : $\pm 0.1^\circ$
- Ability to specify 0° point
- Easy installation
- IP67 protection class
- Small and robust housing
- Compact structure

INC 110

- $\pm 90^\circ$ dual axis measurement range or $0-360^\circ$ single axis measurement range option



More information

INC 210

- $0-360^\circ$ single axis measurement



More information

Applications

- Agricultural and forestry machinery
- Construction machinery and special-purpose vehicles
- Solar thermal energy and photovoltaics
- Automated guided systems
- Crane and lifting technology
- Wind power plant



Model	Number Of Axis	Measuring Range	Accuracy	Supply Voltage	Output Type	Electrical Connection	Operating Temp.	Protection Class
INC 110	1 or 2 Axis	1 axis : 360° 2 axis : $\pm 90^\circ$	$\pm 0.1^\circ$	15...24 VDC	0-10 V, 4-20 mA or CANopen	Cable or M12 connector	$-30...+70^\circ\text{C}$	IP67
INC 210	1 Axis	1 axis : 360°						



PRESSURE TRANSMITTERS

Pressure Transmitters Product Selection Table

	Measuring Range	Max Pressure	Accuracy (@25°C)	Response Time (max)	O-Ring	Analog Output	Supply Voltage (VDC)	Body Material	Mechanical Connection	Electrical Connection	Operating Temp. (°C)	IP Protection Class
BCT-22 Pressure Transmitter 	100 mbar ... 600 bar and 100 mbar ... 600 bar	%300FS ≤700mbar %200FS <250Bar %150FS ≥250Bar	±%0,5 FS or ±%0,3 FS	1ms	NBR FKM EPDM	4-20 mA	12...30	1.4305 (AISI 303)	G1/4 G1/8 G1/2 NPT1/4 NPT1/8 NPT1/2 M14x1 7/16"-20 UNF	DIN43650 M12 PACKARD cable	-40...+85	IP65 or IP67
						0-10V 1-6V 0-5V	12...30					
						Ratiometric	5					
BT10-214 Pressure Transmitter (Flush Diaphragm) 	0,1 bar and 600 bar	300%F.S. (≤0.7bar) 200%F.S. (≥1bar) 150%F.S. (≥60bar)	±%0,5 FS	1ms	NBR	4-20 mA 0-10V	10...32	304 stainless steel	G1/2 G1	DIN43650	-40...+85 (*)	IP65
EPT-22 Pressure Sensor 	10 bar 16 bar 0...-1 bar -1...0 bar		±%1 FS		NBR	0-10V	12...30	303 stainless steel	G1/4 G1/8 NPT1/4 NPT1/8	DIN43650 cable	-20...+85	IP65
						4-20 mA	12...30					
						Ratiometric	5					
BFT-210 Differential Pressure Transmitter 	100 mbar ... 25 bar		±%0.5 FS	1ms		4-20 mA	16...36	304 stainless steel	G1/2 1/4-18 NPT M20x1.5	DIN43650 cable	-10...+70	IP65
						0-5V	12...36					
						1-5V	12...36					

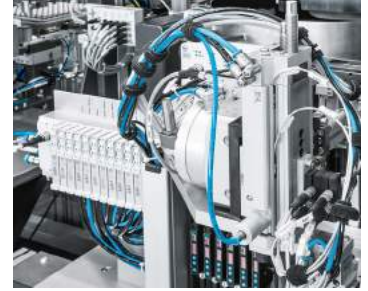
(*) -40~85°C (without cooling fan)
-40~150°C (with 3 cooling fans)
-40~250°C (with 5 cooling fans)

PRESSURE TRANSMITTER

Atek series Pressure transmitters offer high performance for demanding commercial and heavy industry applications.

Our products with piezoresistive working principle can be used in water, air, oil etc. applications. The standard stainless steel housing with IP65 / IP67 protection can work in harsh environments.

Pressure transmitters, which is not affected by electrical fluctuations and reverse connections due to over voltage and reverse polarity protection, has a long life.



- Pneumatic Systems
- Hydraulic Systems
- Machine Equipments
- Air Cooling – Heating Systems
- Water Technologies
- Automation Applications

BCT 22

Piezoresistive Measuring Principle, Analog Output Options, IP 65 or IP 67 Protection Class

- Piezoresistive pressure sensor
- 22 mm body diameter
- Long-term excellent work
- Stainless steel body
- EMC and reverse polarity protection
- 4...20mA / 0...10VDC etc. different outputs
- Different models from 100 mBar to 600 Bar



More information

Model	Measuring Range	Max. Pressure	Accuracy	Supply Voltage	Output Signal	Body Material	Electrical Connection	Mechanical Connection	Operating Temp.	Protection Class
BCT 22	Different models between 0...100mbar and 0...600Bar	300%F.S. ≤700mbar 200%F.S. <250Bar 150%F.S. ≥250Bar *Can be 3 or 5 times	±%0,5 F.S. or ±%0,3 F.S. @25° C	4-20 mA and 0-10V: 12 ... 30 VDC Ratiometric: 5 VDC	4...20mA, 0...20mA, 0...10VDC, 1...6VDC, 0...5VDC, Ratiometric etc.	1.4305 (AISI303) Optional 316L or Titanium	DIN43650-A, DIN43650-C, M12, Packard or PVC cable (Optional PUR cable)	G1/4, G1/8, G1/2, NPT1/4, NPT1/8, NPT1/2, M14, UNF7/16X20M, UNF7/16X20F	-40...+85 °C	IP65 or IP67*
	Different models between 0... -100mbar and 0...-1Bar									

*IP67 protection is provided if M12 socket models are equipped with press-printed.

BT10-214

Flush Pressure Transmitter for Sanitary Applications, Analog Output, Cooling Fans for High Temperature, IP 65 Protection Class

- 316L flush diaphragm structure
- Sanitary, anti-fouling
- EMC and reverse polarity protection
- Analog output options
- Wide pressure range
- IP65 protection class
- Good seal, long-term stable work
- With cooling fans, excellent performance for high temperature medium application
- Affordable price, economical solution



More information

Model	Measuring Range	Overpressure	Accuracy	Supply Voltage	Output Signal	Body Material	Electrical Connection	Mechanical Connection	Çalışma Sıcaklığı	Protection Class
BT10-214	1bar ... 0~0.1bar ... 600bar	300%F.S. (≤0.7bar) 200%F.S. (1...25bar) 150%F.S. (60...100bar) 120%F.S. (250...400bar)	±%0,5 F.S.	24 VDC	4...20 mA 0...10 VDC 0...5 VDC 0.5...4.5 VDC	Stainless 304 (316L diaphragm)	DIN43650 female connector	G1, G1/2	-40...+85 °C (without fan) -40°C...250°C (with 5 fans)	IP65

PRESSURE TRANSMITTER

EPT 22

Piezoresistive Measuring Principle, Analog Output Options,
IP65 Protection Class

- MEMS technology
- Piezoresistive measurement principle
- Small and compact housing
- Long-term excellent work
- Stainless steel housing
- EMC and reverse polarity protection
- Analog Output (4...20mA, 0...10VDC or Ratiometric)
- IP65 protection class



More information

Model	Measuring Range	Accuracy	Supply Voltage	Output Signal	Body Material	Electrical Connection	Mechanical Connection	Operating Temp.	Protection Class
EPT 22	10 Bar, 16 Bar, 0...-1 Bar, -1...0 Bar	%1	0-10V or 4-20 mA: +12...30VDC Ratiometric: 5VDC	4...20mA (2 Wire), 0...10VDC (3 Wire), Ratiometric	303 Stainless Steel	DIN43650 -A, DIN43650 -C connector or cable	G1/4, G1/8, NPT1/4, NPT1/8	-20...+85 °C	IP65

BFT-210

Differential Pressure Sensor, Piezoresistive Measuring Principle
Analog Output Options, IP65 Protection Class

- Piezoresistive silicon pressure sensor produced by MEMS technology
- Differential pressure measurement
- Long life, excellent stability for many years
- EMC, short circuit and reverse polarity protection
- 4...20mA, 0...5VDC or 1...5VDC analog output options
- High accuracy: %0,5FS
- IP65 protection class
- Easy installation
- Affordable price, economical solution



More information

Model	Measuring Range	Input Pressure	Accuracy	Supply Voltage	Output Signal	Body Material	Electrical Connection	Mechanical Connection	Operating Temp.	Protection Class
BFT 210	Different options from 100 mBar to 25 Bar	Up to 0-200 Bar	±%0,5 F.S.	4~20mA (16~36VDC) 1~5V, 0~5V (12~36VDC)	4...20 mA 0...5 VDC 1...5 VDC	Stainless Steel 304	DIN43650 Female connector	G1/2 or 1/4-18 NPT or M20x1.5	-10...+70 °C	IP65



MELT PRESSURE SENSORS

MELT PRESSURE TRANSMITTERS

MPTS Series

Rigid or Flexible Body, 4-20 mA, 0-10V or 3.33 mV/V Output, Model Option With Thermocouple

MPTS series melt pressure sensors are used to measure the pressure and temperature of hot fluids in the plastics, rubber, food, etc. sectors. In this way, the quality of the production is higher and damage due to the high pressure is provided to the machine. They are ideal for the measurement of melt pressure in extrusion processes at temperatures of up to 400°C.

The MPTS series are low cost and high quality products. The MPTS makes mercury measurements in the series. In products in the health and food sector, oily measurements are made.

Designed to work directly with DCS and PLC thanks to analog output signals. EPA Series Process Control Devices are also available with the measured value being displayed.



General Features

- Rigid or flexible body
- Model option with thermocouple
- Better than $\pm 0.5\%$ accuracy
- 4 - 20mA, 0 - 10V or 3.33mV/V output options
- 0-35 to 0-2000 bar / 0-500 to 0-30000 psi
- Internal 80% shunt calibration
- Standard Inconel diaphragm
- Optional auto-zero function
- Applications with process temperature of up to 400°C
- Maximum Torque: 30Nm (22lbf ft)

MPTS 112 (Rigid Body)



More information

MPTS 123 (Flexible Body)



More information

MPTS 133 (Flexible Body and Thermocouple)



More information

Model	Pressure Measuring Range	Max. Diaphragm Temp.	Max. Pressure	Accuracy	Supply Voltage	Output Signal	Body Material	Electrical Connection	Max. Torque
MPTS	From 0~35 to 2000 bar	400°C	1.5 x FS (<1000bar)	± 0.5 FS	For 4-20 mA and 0-10V: 9...36 VDC	4-20 mA 0-10 V 3.33mV/V	Titanium Nitride	6 pin, 7 pin, 8 pin connector	30Nm
			1.2 x FS (>1000bar)		For 3.33mV/V: 6...12 VDC				



SUBMERSIBLE LEVEL TRANSMITTERS

SUBMERSIBLE LEVEL TRANSMITTERS

PTL Series

Piezoresistive Measurement Principle, 4-20 mA or 0-10V Output, IP68 Protection Class

PTL series level control transmitters are used for level measurement in applications like streams, reservoirs, water tanks etc.

With its stainless steel housing with IP68 protection class, it can work in harsh environments. Thanks to the surge voltage and reverse polarity protection, the PTL series are unaffected by electrical fluctuations and reverse connections

Optionally configurable pressure ranges, analog output and mechanical connection options offer solutions suitable for various applications

- Piezoresistive measurement principle
- Long-term stable operation
- EMC and Reverse Polarity protection
- 4-20 mA or 0-10 V analog output
- Different level measuring between 1 meter and 100 meters
- IP68 protection class
- High quality
- Reasonable price, economical solution

PTL-110

- Different models from 100 mbar to 25 bar
- 1.4434 (AISI316L) body material (Ø29)
- Suitable for general applications such as wells, water tanks, reservoirs, etc.



More information

PTL-120

- Different models from 600 mbar to 25 bar
- 1.4462 (dublex), 1.4434(AISI316L) or titanium body material (Ø29)
- Suitable for sea water, salt water, marine applications



More information

PTL-130

- Different models from 100 mbar to 25 bar
- 1.4434 (AISI316L) body material (Ø29)
- Suitable for applications such as oils and fuels etc.



More information

PTL-190

- Different models from 100 mbar to 25 bar
- 1.4434 (AISI316L) body material (Ø19)
- Suitable for general applications such as wells, water tanks, reservoirs, etc.



More information



Model	Measuring Range	Body Diameter	Max Pressure	Accuracy	Supply Voltage	Output Signal	Body Material	Electrical Connection	Operating Temp.	Protection Class
PTL 110	100 mbar...25 bar	Ø29	%200 FS	%0,3	12 ... 30 VDC	4...20 mA 0...10 VDC	1.4404 (AISI316L)	PE cable	-25 ... 85 °C	IP68
PTL 120	600 mbar...25 bar	Ø29					1.4462 (dublex) 1.4404 (AISI316L) Titanium	PE cable		
PTL 130	100 mbar...25 bar	Ø29					1.4404 (AISI316L)	PTFE cable		
PTL 190	100 mbar...25 bar	Ø19					1.4404 (AISI316L)	PE cable		



**ULTRASONIC LEVEL
CONTROL SENSORS**

ULTRASONIC LEVEL CONTROL SENSORS

ULS and ULT Series

Accurate Non-Contact Measurement, Analog and CANopen Output, IP67 Protection Class

The ultrasonic sensor sends and detects high-frequency ultrasonic sound with a piezoelectric transducer. A part of the reflected sound wave by hitting the measuring surface is detected by the transducer, depending on the speed of the signal in the air, the distance of the objects is determined. When the specified switching point is reached, the output is switched. The measured value is given as analog (0 ... 10 V / 4 ... 20 mA) or CANopen signal.

With ultrasonic sensors, objects can be reliably detected and measured regardless of material, color, transparency and surface properties.

ULS series ultrasonic sensors are used in non-contact, level and volume measurement of liquid and solid materials in open and closed tanks. There is also an open canal flow measurement option.

- Ultrasonic working principle
- Non-contact and high precision measurement
- ± 0.2 FS accuracy
- RS-232, RS-485, CANopen serial connection options
- 4-20 mA, 0-20 mA or 0-10V analog output options
- 2 pcs. switch outputs
- IP67 high protection class
- Economical and maintenance-free design

Applications

- Level measurement, pump control in tank, warehouse etc.
- Occupancy rate calculation in product warehouses
- Treatment plants
- Food industry
- Chemical industry



ULS Series

- 0.4 - 9 meters measuring range which can be calibrated from the menu
- Delrin® POM-C EN 10204 body
- Single line 5 digit LCD display and 4 sealed keypads for configuration
- Display of measured value in level, distance (cm, m, inch or feet) or volume (liters, m³, imp, gallons)



More information

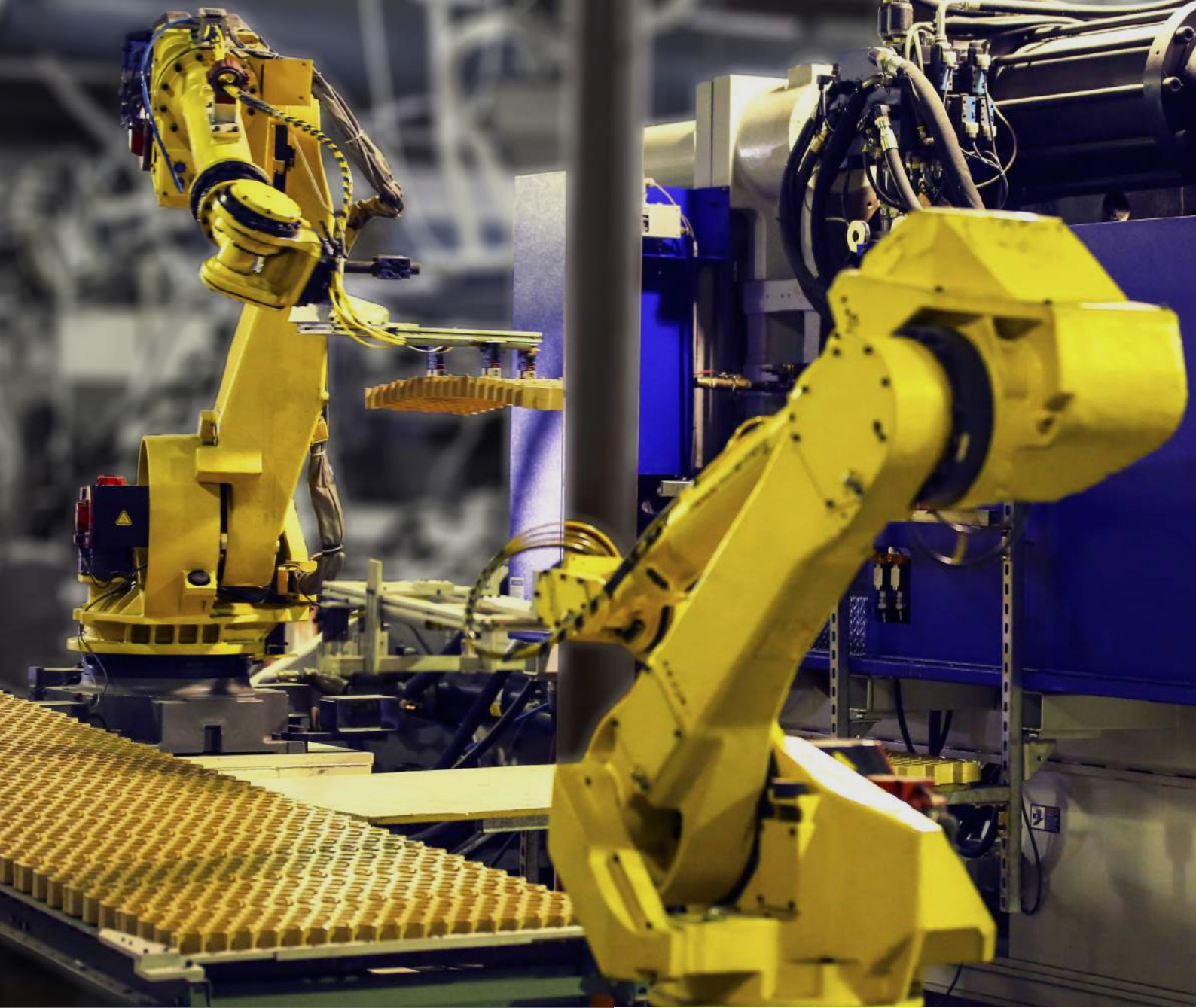
ULT Series

- Measuring range up to 6 meters
- 316L stainless steel, delrin or teflon acid-proof body options
- Small structure



More information

Model	Measuring Range	Measurement Frequency	Taper Angle	Body Material	Accuracy	Supply Voltage	Relay Output	Serial Communication	Analog Outputs	Operating Temp.	Protection Class
ULS	400-9000 mm	40 Khz	30°	Delrin	± 0.2 FS	16...30VDC	2 x PNP Open Collector Output	RS-232 RS-485 CANopen	0-10 V 4-20 mA 0-20 mA	-40 ... 75 °C	IP67
ULT30-40	400-6000 mm	40 Khz	30°	316L, Delrin							
ULT30-65	350-6000 mm	65 Khz	10°	316L, Delrin							
ULT30-75	200-4000 mm	75 Khz	12°	316L, Delrin							
ULT30-75A	200-4000 mm	75 Khz	12°	Teflon							
ULT30-125	100-3000 mm	125 Khz	10°	316L, Delrin							
ULT30-175	50-2000 mm	175 Khz	10°	316L, Delrin							



PROCESS CONTROL DEVICES

Process Control Devices Product Selection Table

		Display	Supply Voltage	Refresh Rate	Resolution	Analog Input ⁽¹⁾	Relay Output	Analog Output ⁽²⁾	Serial Communication ⁽³⁾	Electrical Connection	Operating Temp. (°C)	IP Protection Class
	EPA 100 Process Control Device	2 lines 5 digits	24 VAC/DC 85-265 VAC	3.5 kHz	16 bit	✓	2 x 250 VAC 3A	✓	✓	2,5 mm ² Socket Terminal	0...+50	IP60 Front Panel IP20 Back Panel
	EPA 200 Process Control Device	2 lines 5 digits	24 VAC/DC 85-265 VAC	3.5 kHz	16 bit	✓	3 x 250 VAC 3A	✓	✓	2,5 mm ² Socket Terminal	0...+50	IP60 Front Panel IP20 Back Panel
	EPA 300 Process Control Device	1 lines 5 digits	24 VAC/DC 85-265 VAC	3.5 kHz	16 bit	✓	4 x 250 VAC 3A	✓	✓	2,5 mm ² Socket Terminal	0...+50	IP60 Front Panel IP20 Back Panel

EPA 100 series:

- (1) Potentiometer, 0.5-4.5 V, 0-5 V, 0-10 V, 4-20 mA, 0-20 mA, 3.33 mV/V, 2mV/V, 2.5mV/V Ratiometric
- (2) 0-10 V, 0-5 V, 0.5- 4.5 V, 4-20 mA, 0-20 mA
- (3) RS-232, RS-485, USB, CANopen

EPA 200 series:

- (1) Potentiometer, 0.5-4.5 V, 0-5 V, 0-10 V, 4-20 mA, 0-20 mA, 3.33 mV/V, 2mV/V, 2.5mV/V Ratiometric, Thermocouple, RTD
- (2) 0-10 V, 0-5 V, 0.5- 4.5 V, 4-20 mA, 0-20 mA
- (3) RS-232, RS-485, USB, CANopen

EPA 300 series:

- (1) Potentiometer, 0.5-4.5 V, 0-5 V, 0-10 V, 4-20 mA, 0-20 mA, 3.33 mV/V, 2mV/V, 2.5mV/V Ratiometric
- (2) 0-10 V, 0-5 V, 0.5- 4.5 V, 4-20 mA, 0-20 mA
- (3) RS-232, RS-485, USB, CANopen

		Display	Supply Voltage	Refresh Rate	Inputs	Relay Output	Serial Communication	Electrical Connection	Operating Temp. (°C)	IP Protection Class
	ALC 77 Process Control Device	2 lines 7 digits	24 VAC/DC 85-265 VAC	600 kHz	A/B Encoder pulse, Z (reset), Hold	2 x 250 VAC 3A	RS-232	2,5 mm ² Socket Terminal	0...+50	IP60 Front Panel IP20 Back Panel
	ALC 94 Process Control Device	1 lines 6 digits	24 VAC/DC 85-265 VAC	600 kHz	A/B Encoder pulse, Z (reset), Hold	2 x (opt. 4 pcs.) 250 VAC 3A	RS-232	2,5 mm ² Socket Terminal	0...+50	IP60 Front Panel IP20 Back Panel

PROCESS CONTROL DEVICES

EPA 100

Multifunctional Universal Process Control Device

EPA series process control devices are used to instantly display the output of each device with potentiometric, voltage, current or CANopen output and to give a signal output in terms of 4-20mA current, 0-10V voltage or CANopen according to the information obtained from them. There are also relay outputs that can be adjusted to different functions.

They are designed to meet all your needs with its compact design, different analog input functions and output options.



General Features

- Load Cell can also be connected
- RS-232, RS-485, USB or CANopen communication
- Relay outputs which can be set in different functions
- Analog output options (0-10V, 0-5V, 0.5-4.5V, 4-20mA, 0-20mA)
- Invertible analog output (eg, 20-0 mA)
- High refresh rate: 3.5 kHz
- Fast and easy parameter configuration via USB
- Converting analogue signals (4-20 mA, 0-20 mA, 0-10 V, potentiometric, ratiometric) to CANopen signals, and CANopen signals to analogue signals
- Compact design
- User friendly and easy interface
- Tare function (scaling to zero)
- Password protection and Hide function for menu

EPA-100 Series

- 4 different analogue input on one device
- 2 relay outputs which can be set in different functions
- Two lines display;
The first line shows the analog process value from the sensor and the second line shows the unit or relay set point for the measured value
- Small size



More information

EPA-200 Series

- Process and temperature measurement at the same time
- Two lines display;
The first line shows the analog process value from the sensor and the second line shows the temperature information from the thermocouple
- PT100, PT1000 or Thermocouples can be connected
- Thermocouple type K, J, N, R, S, T, E and B can be selected from menu
- Temperature can be shown as °C, °K and °F
- 3 relay outputs, adjustable for different functions



More information

EPA-300 Series

- 4 different analog input functions in one device
- 4 relay outputs, adjustable in different functions
- Scalable bar graph
- Single line large display



More information

PROCESS CONTROL DEVICES

ALC 77

Multifunctional Digital Pulse Counter for Encoders

ALC 77 series are multi-functional digital pulse counter which can be connected sensors that is giving digital pulse signal like encoders and NPN-NPN proximity etc. These devices with 73.5 x 73.5 x 96 mm dimensions and 2 line / 7 digit display have counter, tachometer and batch sub-models.

The device is very easy to use with the help of the keys on it and its settings can be made easily. Relay contact outputs can be set in 11 different modes.

Sensors such as rotary encoders, linear encoders, limit switches, which are frequently used by the machine and automation industry, can be connected.



ALC 77 C (Counter)

- 600 KHz input frequency
- Functional External Z (Reset) Input
- Functional External Hold Input
- Quadrature Mode Up-Down Counter
- Selectable multiplier value (between 0.000001 - 9999999)
- 5 VDC or 12 VDC Encoder Power Output
- 2 relay outputs, can be set in 11 different modes
- Ability to enter offset value

ALC 77 T (Tachometer)

- 5 kHz input frequency
- Encoder input (A and B signal input)
- Display range: -999999....9999999
- Programmable 2 set points
- 2 relay outputs
- 5 VDC or 12 VDC sensor output

ALC 77 B (Batch)

- Functional External Z (Reset) Input
- Functional External Hold Input
- Encoder input (A and B signal input)
- 10 Different Control Modes (6 Counter + 4 Batch)
- 2 relay outputs
- 5 VDC or 12 VDC Encoder Power Output
- Ability to enter offset value



ALC 77 C
More information



ALC 77 T
More information



ALC 77 B
More information

Model	Display	Supply Voltage	Sensor Supply Voltage	Inputs	Outputs	Serial Comm.	Operating Temp.	Protection Class
ALC 77 C	2 lines, 7 digits	24 VAC/DC 50/60 Hz 85-265 VAC 50/60 Hz	5 VDC 100 mA (TTL Sensor) 12 VDC 100 mA (PP Sensor)	A/B Encoder Pulse Inputs (600 KHz)	2 x 250 VAC 3A (For resistive load) Relay	RS-232 (opt.)	0...+50 °C	IP60 Front Panel, IP20 Back Panel
ALC 77 B				Z (External Reset) Input (Edge selection from menu)		-		
ALC 77 T				Hold Input (Edge selection from menu)		-		
ALC 77 T				A/B Encoder Pulse Inputs		-		

PROCESS CONTROL DEVICES

ALC 94



More information

Multifunctional Digital Pulse Counter for Encoders

ALC 94 Series are counters that perform up / down counting at high input frequency of 600 KHz in quadrature mode (4 multiplier) to which sensors that give digital pulse signals such as encoders are connected. Thanks to the high input frequency, encoders with high resolution and high speed can be connected. A and B encoder pulse signals or NPN / PNP signals are input.

The device is very easy to use with the help of the keys on it and its settings can be made easily. Relay contact outputs can be set in 11 different modes.

Sensors such as rotary encoders, linear encoders, limit switches, which are frequently used by the machine and automation industry, can be connected.



General Features



- 600 KHz input frequency
- 6 digits display
- 96 x 88 x 48 mm boiyut
- Functional External Z (Reset) Input
- Functional External Hold Input
- Quadrature Mode Up-Down Counter
- Prescale Can Be Adjustable (0,00001 – 999999)
- 5 VDC or 12 VDC Encoder Power Output
- 11 Different Control Modes
- Offset Value
- Password Protection

Model	Display	Supply Voltage	Sensor Supply Voltage	Inputs	Outputs	Serial Connection	Operating Temp.	Protection Class
ALC 94	2 lines, 6 digits	24 VAC/DC 50/60 Hz 85-265 VAC 50/60 Hz	5 VDC 100 mA (TTL Sensor) 12 VDC 100 mA (PP Sensor)	A/B Encoder Pulse Inputs (600 KHz) Z (External Reset) Input (Edge selection from menu) Hold Input (Edge selection from menu)	2 x (opt. 4 pcs.) 250 VAC 3A (For resistive load) Relay	RS-232 (opt.)	0...+50 °C	IP60 Front Panel, IP20 Back Panel



Process Control Devices

EPA series process control devices, which are programmed to display the signals received from the sensor connected to it in the most accurate way with special algorithms, meet all the requirements you need in your measurement and control applications with many input and output options.





COUPLINGS

COUPLINGS

GT and EC Series

- Non-rebound, flexible and durable design
- Maintenance, lubrication, etc. not required, very long life
- Fully error-free motion and power transfer
- 100% electrical and vibration isolation between the two ends of the interconnection piece separated by polyurethane
- High torque-resistant polyurethane material
- All parts are jointly centered and prestressed to protect against misalignment

EC Series

Set Screw System Steel Body

- The special structure of the intermediate element flexible polyurethane connecting material from steel body, specially pure polyurethane material reduces axial misalignments to a minimum.
- 6, 8 or 10 mm hole diameter options
- D: 26 mm body diameter, L: 28 mm body length



More information

GT Series

Compressed / Clamped System, Aluminum Body

- Aluminum body, intermediate element special purity polyurethane spider. The pit / bump structure of the body and polyurethane intervening reduces angular, parallel and axial misalignments to a minimum
- 6, 8 or 10 mm hole diameter options
- D: 20 mm body diameter, L: 30 mm body length
- Compressed / clamped system



More information

Model	Body Diameter (D)	1. and 2. Hole Diameter	Body Length (L)
GT	20 mm	6-6 mm 8-8 mm 10-10mm	30 mm
EC	26 mm	6-6 mm 6-8 mm 8-8 mm 8-10 mm 10-10 mm	28 mm

COUPLINGS

PC Series

Set Screw System, Plastic Body

- One piece
- Flexible plastic structure
- Set screw system
- High speed transmission
- 6-6, 8-8 and 6-8 mm hole diameter options
- Long life, robust



More information

SC Series

Set Screw System, Stainless Steel Body

- Aluminum flange
- Stainless steel flexible body
- Constant Velocity Transmission
- High torque and long life
- 6-6, 6-8, 6-10, 8-8, 8-10, 10-10, 12-12, 14-14 mm hole diameter options



More information

HT Series

“Squeezed / Clamped System, Aluminum Body

- One piece
- Aluminum body
- High torque and speed transmission
- 6-6, 8-8, 6-8, 8-10 mm hole diameter options
- Squeezed clamped system
- Long life, durable



More information

HC Series

Set Screw System, Aluminum Body

- One Piece
- Aluminum body
- High torque and speed transmission
- 6-6, 8-8, 6-8, 8-10, 10-10 mm hole diameter options
- Set screw system
- Long life, durable



More information

Model	Body Diameter (D)	1. and 2. Hole Diameter	Body Diameter (L)
PC	19 mm	6-6 / 8-8 / 6-8 mm	23 mm
SC	16 mm / 21 mm	6-6 / 6-8 / 6-10 / 8-8 / 8-10 / 10-10 / 12-12 / 14-14 mm	24 mm* / 28 mm* / 33 mm *Only for 16 mm body models
HT	16 mm / 20 mm / 25 mm	6-6 / 8-8 / 10-10 6-8 / 8-10 mm	24 mm / 28 mm / 32 mm
HC	16 mm / 20 mm / 25 mm	6-6 / 8-8 / 10-10 6-8 / 8-10 mm	24 mm / 28 mm / 32 mm



Rotary Encoders

Leading Atek series rotary encoders in motion feedback control; It has a wide selection range to meet all the features that suit your needs, whether in the heavy industry or light-duty sector. Industrial machinery, elevators, robots, cutting machines, injection molding machines etc. Besides providing highly accurate feedback in your applications, they are stable and long-lasting.



Leader Of Sensor Manufacture

