

SUPREME SENSORING

TWK

**TYPICAL TWK
PRODUCT RANGE
2022**

Brief introduction	5
Rotary encoders	6
Inclinometers	14
Vibration sensors	22
Linear transducers & scanners	30
Switching cam encoders	38
Draw-wire displacement converters	46
Accessories	54
Interfaces	60
Postscript	62



Johannes W. Steinebach

Managing Director

BRIEF INTRODUCTION

“Thanks for your interest in our products and for taking the time to look through this brochure. You may well have been a customer for many years, or perhaps you are just getting to know us. So a brief introduction: TWK has been manufacturing high-quality sensors for various applications since 1962 – all Made in Germany. Today our range has grown to over 130 model lines, which you can easily learn more about on our website. This brochure deliberately introduces only a few typical examples and strengths of TWK as well as providing an overview of our product groups. Just have a browse.”



ROTARY ENC

A close-up, low-angle photograph of a metallic rotary encoder. The main shaft is a brushed metal cylinder, and a smaller, polished metal cap is mounted on top. The lighting is dramatic, highlighting the textures and curves of the metal. The background is a soft, out-of-focus gradient.

ODERS

TRT/S3 – THE TOUGH

A prime example of an absolute single- or multi-turn rotary encoder. High vibration, shock and salt water-resistant design. An extremely durable model with PROFIsafe over PROFINET interface.



OUR SPECIFIC HIGHLIGHTS

- Absolute rotary encoder
- Designs from 58 to 105 mm
- PROFIsafe over PROFINET
- Single- or multi-turn design
- SIL2 IEC 61508 & PLd ISO 13849
- Various flange & shaft versions
- Aluminium or stainless steel housing
- Non-contact & wear-free sensor system
- High vibration & shock resistance
- Protection class IP66 to IP69K
- Reliable position & speed output
- Parametrisable via PROFINET
- Data sheet number 12845

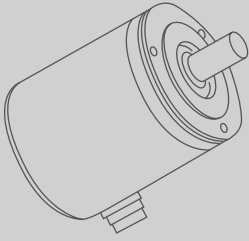


**KEYWORD: SAFETY**

“What’s the situation at your company? For many of our customers the focus is on reliable performance, functional reliability and internal plausibility checks in the sensor. That’s why we have a large selection of SIL2/PLd-certified types in the range. But if you prefer makes with a redundant design for your application – no problem. We have the right type for you and naturally also boast numerous EX-protected solutions for use in sensitive hazardous areas in zones 2, 22 or even 1. Strictly in line with ATEX – for plants, people and the environment.”



Andreas Meyer
Product Manager



MORE FAVOURITES AT A GLANCE

TRK/S3 SIL2

Basic principle	Absolute
Design	38 to 105 mm
Interface	FailSafe over EtherCAT
Type	Single- or multi-turn
Certification	SIL2 IEC 61508, PLd ISO 13849
Flange & shaft	Various versions
Housing material	Aluminium or stainless steel
Data sheet number	13348

TRN/S4

Basic principle	Absolute
Design	42 to 58 mm
Interface	CANopen, CANopen Safety
Type	Single- or multi-turn
Certification	SIL2 IEC 61508
Flange & shaft	Various versions
Housing material	Aluminium or stainless steel
Data sheet number	14271

TRE58

Basic principle	Absolute
Design	58 mm
Interface	SSI
Type	Single- or multi-turn
Flange & shaft	Various versions
Housing material	Aluminium or stainless steel
Data sheet number	14270

TRA50

Basic principle	Absolute
Design	50 mm
Interface	CANopen, SSI & analogue
Type	Multi-turn
Flange & shaft	Various versions
Housing material	Aluminium or stainless steel
Data sheet number	11820

FOI

Basic principle	Incremental
Design	58 mm
Flange & shaft	Various versions
Housing material	Aluminium
Impulse	1 to 16,384 pulses/360°
Data sheet number	14848

TKN46

Basic principle	Absolute
Design	Printed circuit board & magnet kit
Interface	CANopen
Type	Single- or multi-turn
Data sheet number	12638

OVERVIEW OF THE ENTIRE RANGE

- Basic principle: absolute or incremental
- Designs from 12 to 105 mm
- CANopen, CANopen Safety, PROFIBUS, PROFINET, PROFIsafe over PROFINET, EtherCAT, FailSafe over EtherCAT, EtherNet/IP, SSI, analogue, potentiometric
- Single- or multi-turn design
- SIL2 IEC 61508, PLd ISO 13849 or ATEX
- Various flange & shaft versions
- Various connector & cable versions
- Housing manufactured from different types of aluminium & stainless steel
- 1 to 16,384 pulses/360°
- Resolution up to 65,536 steps/360°
- Measuring range up to 4,096 revolutions
- Non-contact & wear-free sensor system
- High vibration & shock resistance
- Degrees of protection IP65 to IP69K
- Parametrisable
- Magnetic sensor system
- Position & speed signal
- Twin chamber system to separate the rotor & electronics
- Operating temperature from -40 to +85 °C
- Optional shielded housing to protect against strong magnetic fields
- Optional ATEX design



All rotary encoders?
You can find them
online here.

Looking for a miniature solution?
Give us a call.

ROTARY ENCODER AT WORK

e.g. HYDRAULIC ENGINEERING



LIFT BRIDGE CONSTRUCTION



LOCK CONSTRUCTION



BARRAGES



A close-up, low-angle photograph of two metal connectors on a device. The connectors are cylindrical with hexagonal bases and threaded sections. The one on the left has a black plastic cap with two yellow pins visible. The one on the right is open, showing a complex internal structure with several small holes. The device is light-colored, possibly aluminum, and is shown at an angle against a white background.

INCLINO



METERS

NBT/S3 – THE EXEMPLARY

A prime example of a redundant inclinometer. MEMS, preset function and synchronisation monitoring included. As of mid-2019 it was the only certified PROFIsafe over PROFINET inclinometer on the market.

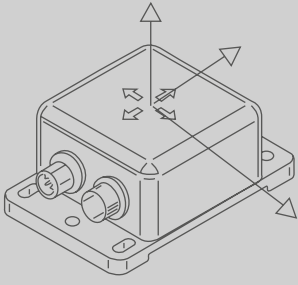


OUR SPECIFIC HIGHLIGHTS

- Designs: 65 & 90 mm
- PROFIsafe over PROFINET
- SIL2 IEC 61508 & PLd ISO 13849
- Aluminium or stainless steel housing
- 1 or 2 measuring axes
- Measuring range: $\pm 5^\circ$ to $\pm 100^\circ$ & 360°
- Sensor fusion with gyroscope
- 6 different installation positions
- Preset function
- Protection class IP66 to IP69K
- High vibration & shock resistance
- Incline recording using MEMS sensors
- Redundant MEMS sensor system
- Integrated 2-fold switch
- Data sheet number 13911







MORE FAVOURITES AT A GLANCE

NBN/S3 SIL2

Design	65 & 66 mm
Interface	CANopen Safety
Certification	SIL2 IEC 61508
Housing material	Aluminium or stainless steel
Measuring axes	1 or 2
Measuring range	$\pm 5^\circ$ to $\pm 100^\circ$ & 360°
Special equipment	Sensor fusion with gyroscope
Data sheet number	12054

NBT65

Design	65 mm
Interface	PROFINET
Housing material	Aluminium or stainless steel
Measuring axes	1 or 2
Measuring range	$\pm 5^\circ$ to $\pm 100^\circ$ & 360°
Special equipment	Sensor fusion with gyroscope
Data sheet number	14635

NBT90

Design	90 mm
Interface	PROFINET
Housing material	Extruded aluminium profile
Measuring axes	1 or 2
Measuring range	$\pm 5^\circ$ to $\pm 100^\circ$ & 360°
Special equipment	Sensor fusion with gyroscope
Data sheet number	14635

NBN65

Design	65 mm
Interface	CANopen
Housing material	Aluminium or stainless steel
Measuring axes	1 or 2
Measuring range	$\pm 5^\circ$ to $\pm 100^\circ$ & 360°
Special equipment	Sensor fusion with gyroscope
Data sheet number	11918

NBN66

Design	66 mm
Interface	CANopen
Housing material	Extruded aluminium profile
Measuring axes	1 or 2
Measuring range	$\pm 5^\circ$ to $\pm 100^\circ$ & 360°
Special equipment	Sensor fusion with gyroscope
Data sheet number	11918

NBA65

Design	65 mm
Interface	Analogue
Housing material	Aluminium or stainless steel
Measuring axes	1 or 2
Measuring range	$\pm 5^\circ$ to $\pm 100^\circ$
Data sheet number	11918

OVERVIEW OF THE ENTIRE RANGE

- Designs from 65 to 90 mm
- CANopen, CANopen Safety, PROFINET, PROFIsafe over PROFINET, analogue
- SIL2 IEC 61508 or PLd ISO 13849
- Housing manufactured from different types of aluminium & stainless steel
- Various connector & cable versions
- 6 installation positions
- Non-contact & wear-free sensor system
- Incline recording using MEMS sensors
- 1 or 2 measuring axes
- Measuring range $\pm 5^\circ$ to $\pm 100^\circ$ & 360°
- Preset function
- Degrees of protection IP66 to IP69K
- High vibration & shock resistance
- Parametrisable
- Optional sensor fusion with gyroscope
- Optional output of the angular velocity by the gyroscope
- Optional output of acceleration instead of angle



All inclinometers?
You can find them
online here.

Pending certifications?

Please feel free to contact us.

INCLINOMETER AT WORK

e.g. **FUNCTIONAL SAFETY**



SIL2
IEC 61508

**FUNCTIONAL
SAFETY
SENSOR**

PLd
ISO 13849

**FUNCTIONAL
SAFETY
SENSOR**

R2
REDUNDANT

**FUNCTIONAL
SAFETY
SENSOR**

A close-up photograph of a vibration sensor. The sensor is a small, cylindrical metal component with a hexagonal base, mounted on a larger, white, cylindrical component. The sensor's internal components, including two yellow pins, are visible through a central opening. The background is a soft, out-of-focus white and light grey.

VIBRATI SEN

A close-up photograph of a cylindrical metal connector, likely for a vibration sensor. The connector has a hexagonal base and a central opening with several small holes. The background is a blurred, light-colored surface.

ON SORS

NVA/S3 – THE CHECKER

A prime example of a redundant vibration sensor. With MEMS-based acceleration recording and digital signal processing with monitoring and safety shut-off function. The smart partner for harsh operating conditions.



OUR SPECIFIC HIGHLIGHTS

- Designs: 115 & 120 mm
- Aluminium housing
- CANopen or CANopen Safety
- 2x analogue, 2x safety relay
- Measuring range ± 2 g, higher is also possible
- PLd ISO 13849
- Frequency range 0.05 to 60 Hz
- Safety shut-off function
- Relay self-test function
- Adjustable relay shut-off time
- Instantaneous value, RMS, peak, etc., selectable
- Fourier analysis for the frequency range
- Parametrisable via CANopen
- Protection class IP67 to (optional) IP69K
- Data sheet number 13482

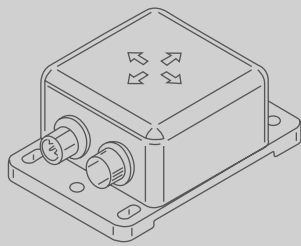


**KEYWORD: INNOVATION**

“Which technical changes will be critical for your industry in the coming years? This question motivates and drives us on in the development of the products of tomorrow and the targeted expansion of our range. And we are constantly working on targeted solutions – often also together with a customer. This means that at the exact time you are browsing through this brochure, we are certain to already have something new in store. So, regardless of whether you are looking at current or future requirements, get in touch with us. It’s worth it.”



Cedric Petersen
Development Engineer



MORE FAVOURITES AT A GLANCE

NVA115/S3 PLd

Design	115 mm
Interface	CANopen Safety, Safety-Relay & analogue
Certification	PLd ISO 13849
Housing material	Die-cast aluminium
Measuring range	±2 g
Frequency filters	1 to 6
Frequency range	0.05 to 60 Hz
Data sheet number	13482

NVA120

Design	120 mm
Interface	CANopen Safety, Safety-Relay & analogue
Certification	Optional PLd ISO 13849
Housing material	Extruded aluminium profile
Measuring range	±2 g
Frequency filters	1 to 6
Frequency range	0.05 to 60 Hz
Data sheet number	13482

NVT90/S3 PLd

Design	90 mm
Interface	PROFIsafe over PROFINET
Certification	PLd ISO 13849
Housing material	Extruded aluminium profile
Measuring range	±2 g
Frequency filters	1 to 6
Frequency range	0.05 to 60 Hz
Data sheet number	14587

NVA65

Design	65 mm
Interface	CANopen, relay & analogue
Housing material	Aluminium or stainless steel
Measuring range	±2 g
Frequency filters	1 to 6
Frequency range	0.1 to 60 Hz
Data sheet number	12634

VIBRA TION SEN SORS

- Designs from 65 to 120 mm
- Housing manufactured from different types of aluminium & stainless steel
- CANopen, CANopen Safety, PROFINET, PROFIsafe over PROFINET, analogue
- PLd ISO 13849
- Switching outputs with relay or safety relay
- Measuring range ± 2 g, higher is also possible
- 1 to max. 6 frequency filters
- Non-contact & wear-free sensor system
- Acceleration recording using MEMS sensors
- Frequency range 0.05 to 60 Hz
- Selectable filter type
- Safety shut-Off function
- Adjustable relay shut-off time
- Fourier analysis for the frequency range
- Output of the RMS average
- Output of the peak value
- Output of the instantaneous value
- Resolution up to 4,096 digit/g
- Protection class IP67 & (optional) IP69K
- Operating temperature from -40 to $+85$ °C
- Parametrisable
- Optional special installation positions
- Integral function
- Relay self-test function
- Various connector & cable versions



All vibration sensors?
You can find them
online here.

Different interface requirement?

Get in touch with us.

VIBRATION SENSOR AT WORK

e.g. RENEWABLE ENERGIES



SOLAR SYSTEMS



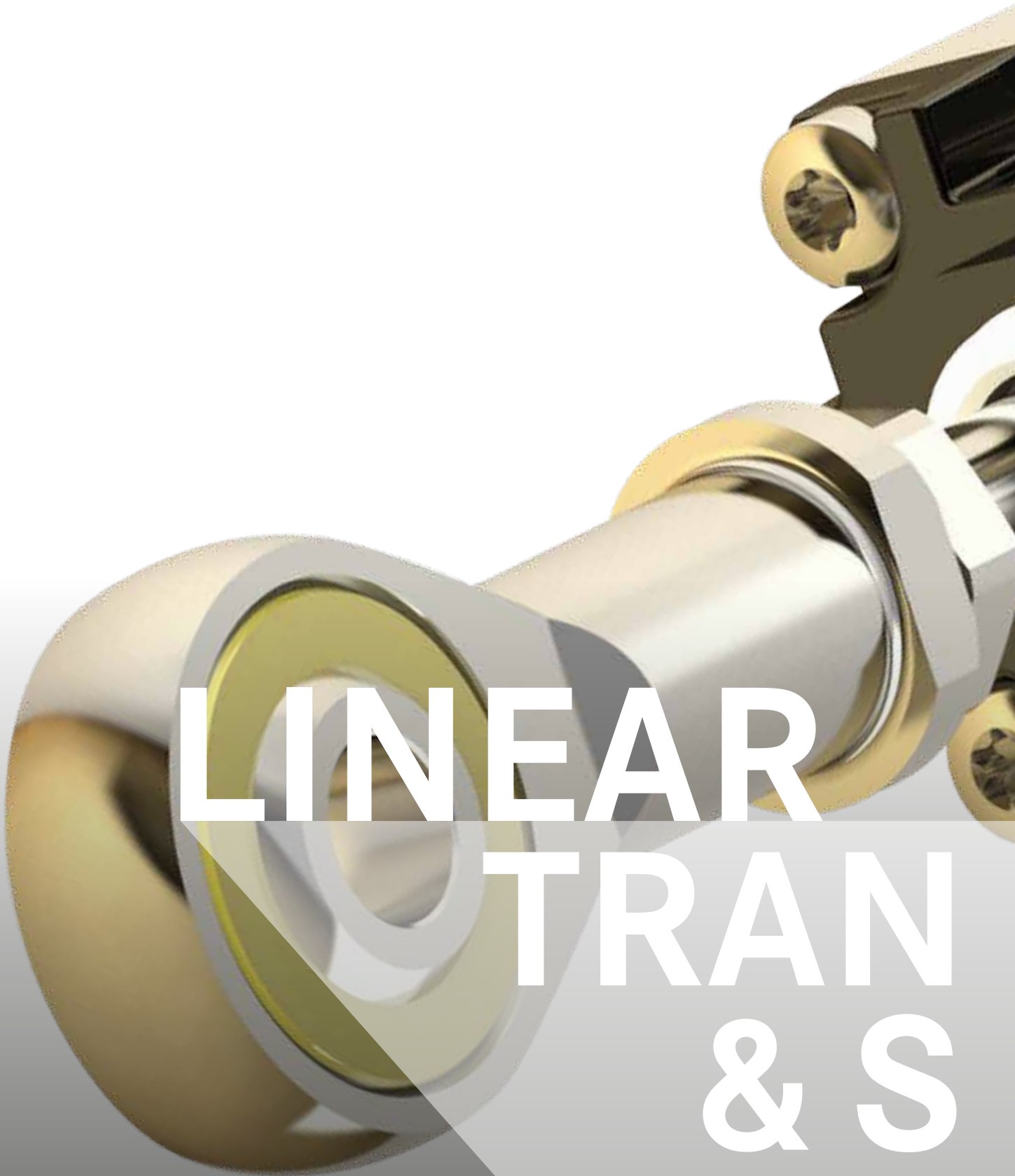
ONSHORE WIND ENERGY



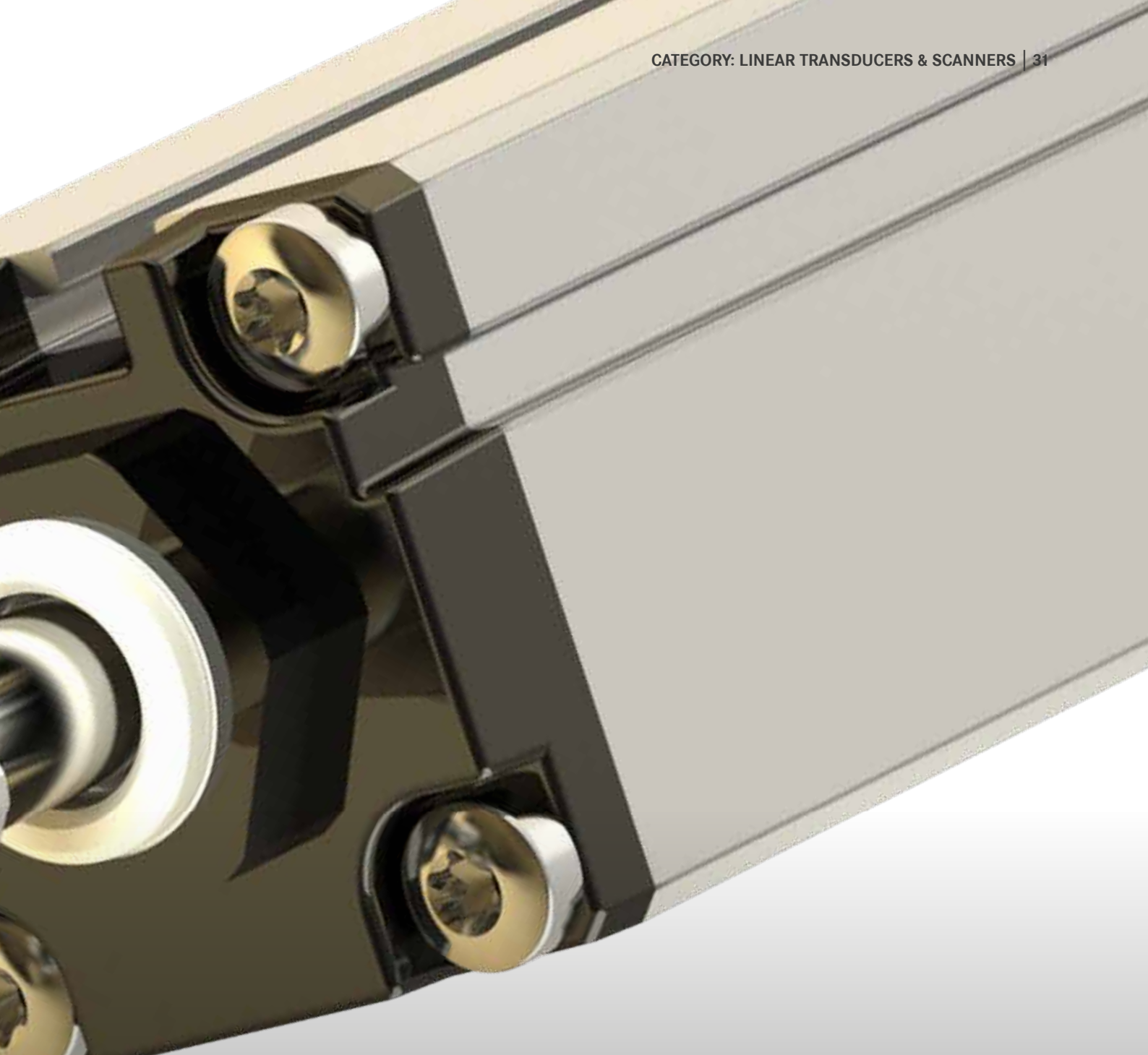
OFFSHORE WIND ENERGY



Photos: jimikrightley (stockphoto); Miradeo, iassacdesigner, Dyanra Dimitrova (shutterstock)



LINEAR TRAN & S



SDUCERS CANNERS

PWA – THE COMBINER

A prime example of an absolute linear transducer. New planar coil measuring system with the precision of a laser-trimmed potentiometer and the durability of inductive position sensors – a smart combination.



OUR SPECIFIC HIGHLIGHTS

- Inductive resonator measuring system
- Recording of absolute positions
- Measuring range up to 200 mm
- Analogue interface
- Accuracy $\pm 0.05\%$
- Protection classes up to IP67
- Aluminium housing
- Non-contact & wear-free measuring system
- Parametrisable measuring range
- Data sheet number 13535

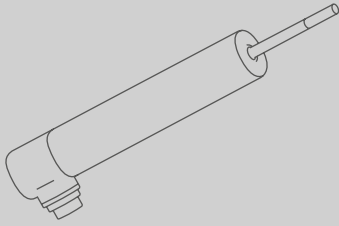


KEYWORD: FLEXIBILITY

“What do you need from your perfect sensor? And what design, interfaces, outputs or flange does your specific application need? It may be the case that we have not presented your favourites in this brochure but, with roughly 193,000 types, this certainly doesn't mean that it is not part of our range. Send through your detailed request and we will see what we can do. We can even deliver certain rare miniature solutions quickly – worldwide, exactly where you need them. Matter of honour.”

**Beate Stooß**

Production Planning & Control



MORE FAVOURITES AT A GLANCE

IW250

Basic principle	Inductive
Interface	Analogue
Housing material	Stainless steel
Measuring range	20 to 200 mm
Protection class	Up to IP68
Linearity	±0.1%, ±0.25%, ±0.5%
Data sheet number	10225

IWE250

Basic principle	Inductive
Interface	SSI
Housing material	Stainless steel
Measuring range	20 to 200 mm
Protection class	Up to IP68
Linearity	±0.25%, ±0.5%
Data sheet number	11217

IWN250

Basic principle	Inductive
Interface	CANopen
Housing material	Stainless steel
Measuring range	20 to 200 mm
Protection class	Up to IP68
Linearity	±0.25%, ±0.5%
Data sheet number	11253

MSK

Basic principle	Magnetostrictive
Interface	EtherCAT
Housing material	Aluminium or stainless steel
Measuring range	25 to 7,600 mm
Protection class	Up to IP67
Resolution	Up to 1 µm
Magnets	1 to 5
Data sheet number	11791

MSD

Basic principle	Magnetostrictive
Interface	PROFIBUS
Housing material	Aluminium or stainless steel
Measuring range	25 to 7,600 mm
Protection class	IP67
Resolution	Up to 1 µm
Magnets	1 to 20
Data sheet number	11431

RP13

Basic principle	Potentiometric
Housing material	Aluminium
Measuring range	25 to 300 mm
Protection class	IP65
Linearity	Up to ±0.05%
Data sheet number	11392

OVERVIEW OF THE ENTIRE RANGE

- Basic principle: magnetostrictive, inductive or potentiometric
- Measuring range: 1 to 7,600 mm
- CANopen, PROFIBUS, EtherCAT, SSI, analogue, potentiometric
- Linearity $\pm 0.05\%$, $\pm 0.1\%$, $\pm 0.25\%$, $\pm 0.5\%$
- Degrees of protection IP54 to IP68
- Aluminium or stainless steel housing
- High vibration & shock resistance
- Robust measuring system
- Practically infinite resolution
- Pressure-resistant up to 350 bar
- Simultaneous measurement of 20 positions
- Operating temperature: -40 to $+120$ °C
- Suitable for ATEX zones 2 & 22
- Long service life & unlimited measuring strokes
- Transmission rate: 20 to 100 Mbits/s
- Optional protective tube
- Various ball joint variants
- Various connector & cable versions



All linear transducers & scanners?
You can find them
online here.

500 bar ambient pressure?

Just ask for a special model.

LINEAR TRANSDUCER AT WORK

e.g. **FACTORY AUTOMATION**





**FOOD/
BEVERAGE PRODUCTION**



ROBOTICS



STORAGE/CONVEYOR SYSTEMS

A close-up, high-angle photograph of a switching cam encoder. The image shows the metallic housing and the internal cam mechanism, which is a circular component with a complex profile. The lighting is dramatic, highlighting the textures and curves of the metal parts. The background is a soft, out-of-focus gradient.

SWITCH EN



ING CAM CODERS

NOCN / S3 – THE VISIONARY

A prime example of an electronic switching cam encoder. Compact, precise and light; parametrisable as a mechanical model thanks to the integrated rotary encoder with relay. Certified industry innovation in 2014.

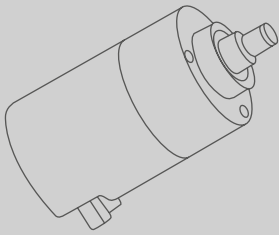


OUR SPECIFIC HIGHLIGHTS

- Designs from 58 to 79 mm
- CANopen & safety relay
- CANopen, CANopen Safety profile
- Electronically controlled switching contacts
- Play-free multi-turn rotary encoder design
- SIL2 IEC 61508 or PLd ISO 13849
- Various flange & shaft versions
- Aluminium or stainless steel housing
- Resolution up to 32,768 steps/360°
- Measuring range: 16 to 4,096 revolutions
- Accuracy up to $\pm 0.1\%$ over 360°
- Up to 4 switching contacts
- Use in safety chain
- Parametrisable via CANopen
- Protection class IP65 to (optional) IP69K
- Safety relay function check
- Data sheet number 13099







MORE FAVOURITES AT A GLANCE

NOCE79/S3 SIL2/PLd

Design	79 mm
Interface	SSI, 4x safety relay
Certification	Optional SIL2 IEC 61508, PLd ISO 13849
Housing material	Aluminium or stainless steel
Resolution	Up to 32,768 steps/360°
Measuring range	16 to 4,096 revolutions
Data sheet number	14199

NOCI79/S3 SIL2/PLd

Design	79 mm
Interface	Incremental, 4x safety relay
Certification	Optional SIL2 IEC 61508, PLd ISO 13849
Housing material	Aluminium or stainless steel
Resolution	512 pulses/360°
Measuring range	16 to 4,096 revolutions
Data sheet number	14200

NOCA

Design	64 to 120 mm
Interface	Analogue, 2x relay, 2x PhotoMOS
Flange & shaft	Various versions
Housing material	Aluminium or stainless steel
Measuring range	16 to 4,096 revolutions
Data sheet number	12393

NOCE

Design	64 mm
Interface	SSI, 2x relay, 2x PhotoMOS
Flange & shaft	Various versions
Housing material	Aluminium or stainless steel
Resolution	Up to 8,192 steps/360°
Measuring range	16 to 4,096 revolutions
Data sheet number	12555

NOCN

Design	58 to 120 mm
Interface	CANopen, 4x relay, 2x PhotoMOS
Flange & shaft	Various versions
Housing material	Aluminium or stainless steel
Resolution	Up to 8,192 steps/360°
Measuring range	16 to 4,096 revolutions
Data sheet number	12523

OVERVIEW OF THE ENTIRE RANGE

SWITCHING CAM ENCODERS

- Designs from 58 to 120 mm
- CANopen, CANopen Safety, SSI, analogue, incremental, relay, PhotoMOS
- Electronically controlled switching contacts
- Play-free multi-turn rotary encoder design
- SIL2 IEC 61508 or PLd ISO 13849
- Various flange & shaft versions
- Various connector & cable versions
- Different connector design
- Housing manufactured from different types of aluminium & stainless steel
- Resolution up to 32,768 steps/360°
- Incremental resolution: 512 pulses/360°
- Measuring range: 16 to 4,096 revolutions
- Accuracy up to $\pm 0.1\%$ over 360°
- Up to 6 switching contacts
- High vibration & shock resistance
- Degrees of protection IP65 to IP69K
- Operating temperature -40 to +85 °C
- Safety relay function check
- Adjustable output signal & cams
- Parametrisable



All switching cam encoders?
You can find them
online here.

Production of small quantities?

Tell us what you need.

SWITCHING CAM ENCODER AT WORK

e.g. HEAVY INDUSTRY





LATTICE BOOM CRANES



PORT CRANES



STEEL PRODUCTION



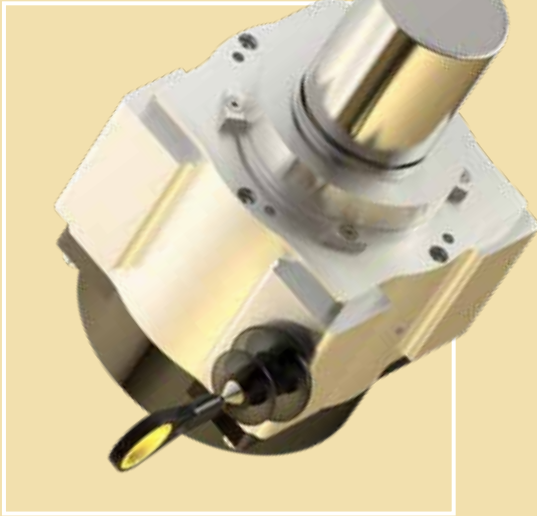
DRAW-W DISPLAC CON



DRAW-WIRE DISPLACEMENT CONVERTERS

SWF – THE ENDURANCE RUNNER

A prime example of a resilient and reliable draw-wire displacement converter. For converting a displacement of up to 30 m to a rotating movement. Either way, the cable and spring can withstand up to 1 million load changes.



OUR SPECIFIC HIGHLIGHTS

- Measuring range: 5 to 30 m
- Cable material manufactured from highly flexible steel braid
- Cable diameter: 1.3 mm
- Aluminium housing
- Plastic spring housing
- Protection class IP65 for the housing
- Protection class IP54 for the cable inlet
- Operating temperature: -20 to +70 °C
- Robust measuring system
- Easy handling & installation
- Wide range of accessories
- Data sheet number 10652

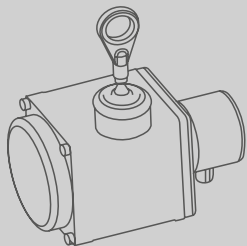


KEYWORD: DURABILITY

“Where are your sensors used? In rough seas, extreme cold or hot engine rooms? You can count on the high resilience of our products. Because even in areas where plastic is the material of choice for accessories, our material has precisely the properties it needs for enduring performance. And exceptional endurance is also guaranteed by our precise manufacturing right up to the final testing. This eliminates unnecessary down-times in your operation and ensures that you remain a loyal customer. Another important aspect of longevity for us – obviously.”



Matthias Kraemer
Plant Manager



MORE FAVOURITES AT A GLANCE

SWH

Housing material	Anodised aluminium
Protection class	Housing IP65 & cable inlet IP54
Measuring range	1 to 3 m
Cable material	Highly flexible steel braid
Cable diameter	1.35 mm
Data sheet number	10783

SWA

Housing material	Anodised aluminium
Protection class	IP53
Measuring range	2 m
Cable material	Highly flexible steel braid
Cable diameter	0.61 mm
Spring material	Stainless steel
Data sheet number	10171

SWL

Housing material	Anodised aluminium
Measuring range	50 & 60 m
Cable material	Highly flexible steel braid
Cable diameter	1.35 or optional 0.81 mm
Spring housing	Coated aluminium
Data sheet number	11063

SWG

Housing material	Anodised aluminium
Protection class	Housing IP65 & cable inlet IP54
Measuring range	15 to 40 m
Cable material	Highly flexible steel braid
Cable diameter	1.35 or optional 0.81 mm
Spring housing	Plastic
Data sheet number	11243

SWF

Housing material	Anodised aluminium
Protection class	Housing IP65 & cable inlet IP54
Measuring range	5 to 30 m
Cable material	Highly flexible steel braid
Cable diameter	1.35 or optional 0.81 mm
Spring housing	Plastic
Data sheet number	10652

SWM

Housing material	Anodised aluminium
Protection class	Housing IP64 & cable inlet IP54
Measuring range	1 to 5 m
Cable material	Highly flexible steel braid
Cable diameter	0.55 mm
Spring housing	Plastic
Data sheet number	11440

DRAW WIRE DIS PLACEMENT CON VERTERS

OVERVIEW OF THE ENTIRE RANGE

- Measuring range: 1 to 60 m
- Cable material manufactured from highly flexible stainless steel braid
- Cable diameter from 0.55 to 1.35 mm
- Anodised aluminium housing
- Coated aluminium or plastic spring housing
- Degrees of protection IP54 to IP65
- Operating temperature: -20 to +70 °C
- Robust measuring system
- Easy handling & installation
- Exchangeable rotary encoder
- Compact design
- Cable & spring designed for up to 1 million load changes
- With optional grease chamber
- With optional brush & compressed air attachment
- With optional deflection roller
- With optional rubber bellows
- Optional operating temperature: -30 to +70 °C
- Various connector & cable versions



All draw-wire displacement converters?
You can find them online here.

Modified application profile?

Take our developer with you.

DRAW-WIRE DISPLACEMENT CONVERTER AT WORK

e.g. MOBILE AUTOMATION



CONSTRUCTION MACHINERY



DRIVERLESS
TRANSPORT SYSTEMS



MOBILE CRANES





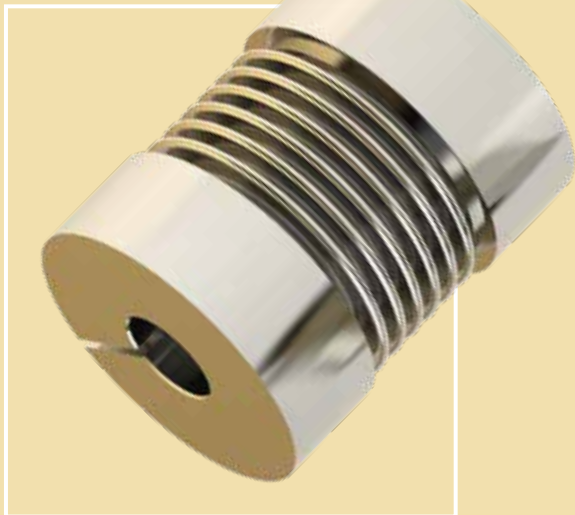
ACCESS



ACCESSORIES

BKA – THE SOLID

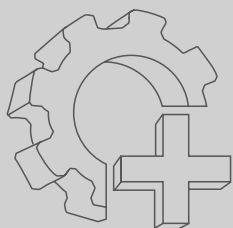
A prime example of a hard-wearing accessory. Robust bellows coupling specifically designed for high-resolution rotary encoders with torsion values up to 300 Ncm – rock solid, play-free and torsion-proof.



OUR SPECIFIC HIGHLIGHTS

- Aluminium hub
- Stainless steel bellows
- Operating temperature: -40 to +200 °C
- Max. torque: 300 Ncm
- ±1 mm max. axial displacement
- 2° max. angular offset
- 0.2 mm max. parallel displacement (lateral movement)
- Max. speed: 10,000 revolutions/min.
- Data sheet number 15029





MORE FAVOURITES AT A GLANCE

BEARING BRACKET LB

Shaft load	Axial 100 N, radial 500 N
Operating speed	6,000 rpm
Operating torque	Max. 5 Ncm
Moment of inertia	100 gcm ²
Operating temperature	-40 to +85 °C
Protection class	IP65
Data sheet number	10103

MEASURING GEAR ZRS

Material	Plastic
Module	5 to 24
Number of teeth	From 8
Operating temperature	-40 to +150 °C
Tensile strength	Approx. 110 N/mm ²
Pressure angle	20°
Shaft adapter	Ø 12 mm flattened to 11 mm
Load cycle	2x 106 at 50 rpm
Data sheet number	11877

BELLOWS COUPLING BKM

Material	Stainless steel
Operating temperature	-40 to +150 °C
Max. torque	50 Ncm
Max. speed	20,000 rpm
Max. parallel displacement	0.25 mm
Max. axial displacement	0.6 mm
Max. angular offset	2°
Bore hole diameter	3 to 9 mm
Data sheet number	11995

CLAMPING COUPLING KK14

Sprocket material	Polyurethane
Clamping hub material	AlMgSiSnBi
Operating temperature	-50 to +80 °C
Max. torque	8 Nm
Max. speed	12,000 rpm
Max. parallel displacement	0.2 mm
Max. axial displacement	1 mm
Max. angular offset	1°
Bore hole diameter	6 to 16 mm
Data sheet number	12301

STATOR COUPLING ZMS58

Design	58 mm
Material	Plastic
Operating temperature	-40 to +85 °C
Flange	Synchro or clamping flange
Optional	9 mm height adapter
Data sheet number	12939

MULTIFUNCTIONAL DISPLAY PAS

Interface	SSI
Display	12 positions
Supply voltage	24, 110 or 230 VAC
Operating temperature	0 to +50 °C
Protection class	IP40
Data sheet number	11524

OVERVIEW OF THE ENTIRE RANGE

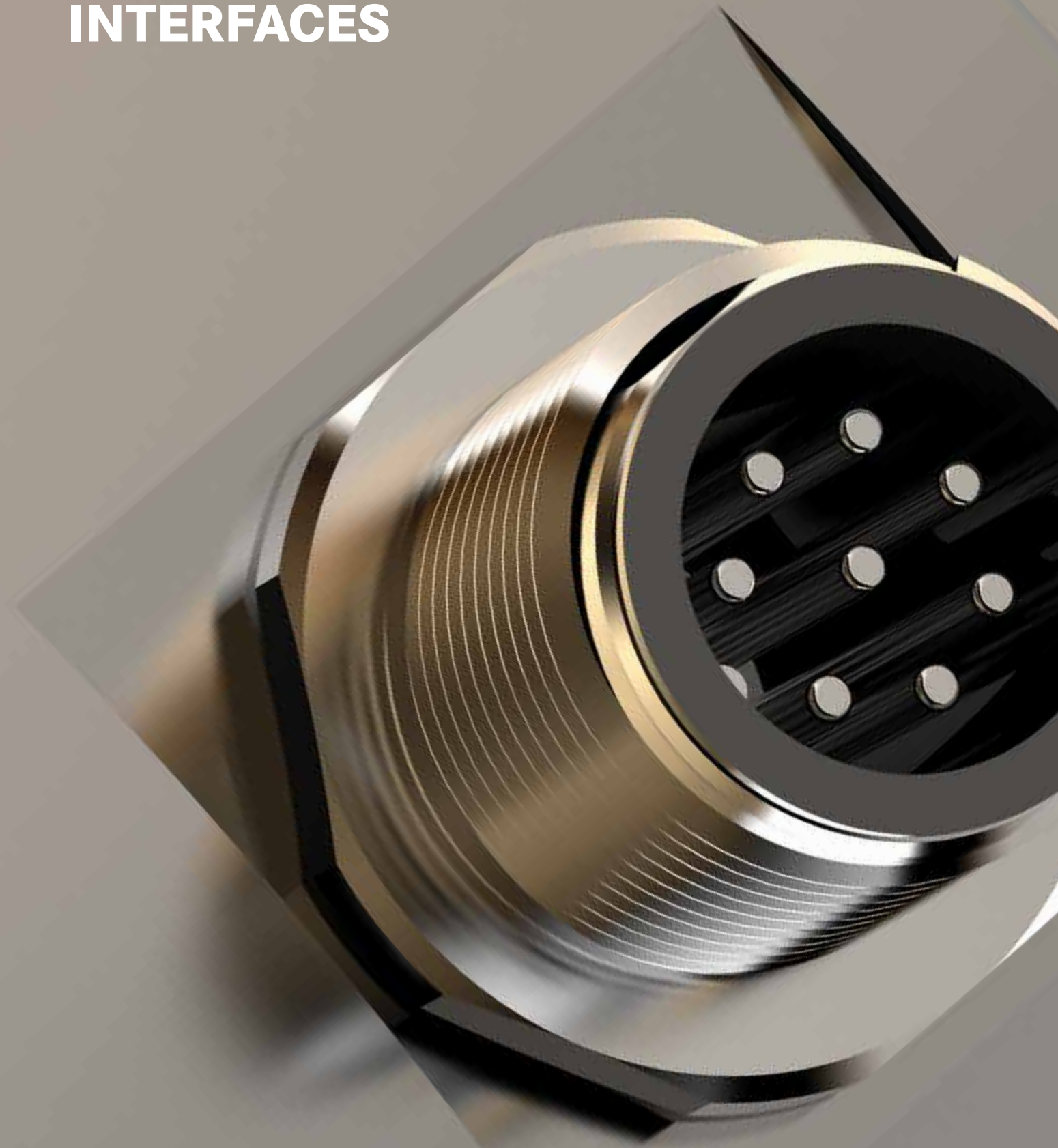
- Multifunctional display & programming units
- Bellows couplings
- Oldham couplings
- Clamping couplings
- Position magnets & mounting material
- Protective housing for harsh applications
- Front flange for rotary encoders
- Insulating flange for rotary encoders, pulse generators & potentiometers
- Mounting brackets for rotary encoders, pulse generators & potentiometers
- Reducing bushes for rotary encoders, pulse generators & potentiometers
- Mounting angles for rotary encoders, pulse generators & potentiometers
- Play-compensating measuring gears
- Various cable designs
- Bearing brackets in various designs
- Couplings in ATEX design
- Couplings with groove
- Couplings in a galvanically isolated design



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INTERFACES



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Ether**CAT**

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BUS

PROFI
NET



RELAY

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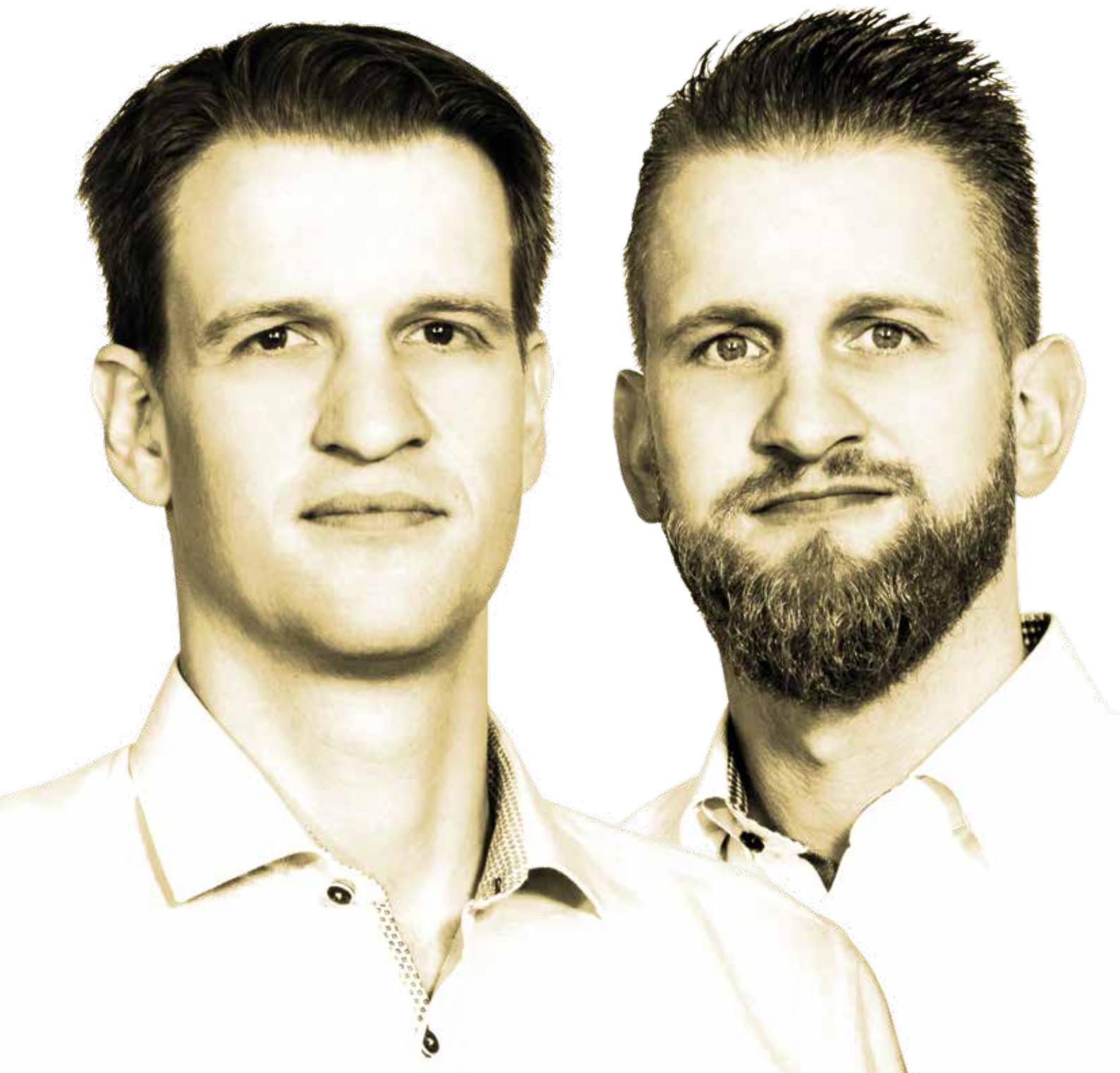
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Dr Hannwelm Steinebach

Managing Director

Dr Felix Steinebach

Managing Director



SUPREME SENSORING

TWK

TWK-ELEKTRONIK GmbH
Bismarckstraße 108
40210 Düsseldorf | Germany

Tel: +49 (0)211 961 170
info@twk.de | twk.de/en

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