SHORT FORM CATALOG 2025/2026

pulses for automation

Further information

Contents

KÜBLER SHORT PROFILE 4

MEASUREMENT 6

- Encoders – incremental and absolute 8
- Bearingless encoders 20
- Motor Feedback Systems 22
- Radar sensors 24
- Draw-wire encoders 26
- Measuring wheel systems 28
- Magnetic length measuring systems 32
- Optical length measuring systems / Shaft copying systems 34
- Inclinometers 36
- Condition Monitoring Sensor 38

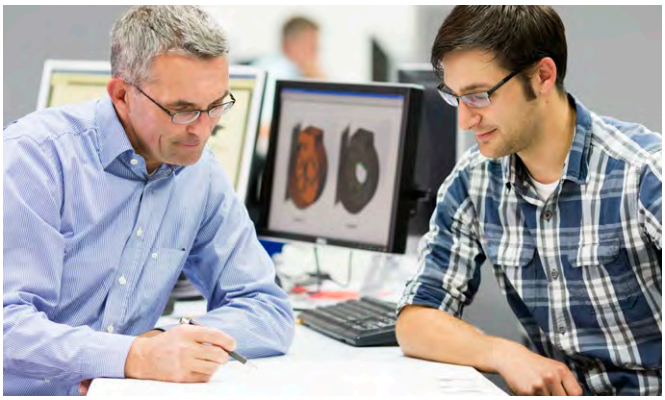
TRANSMISSION 40

- Slip rings 42
- I/O Modules 44
- Signal converters and optical fiber modules 46
- Cables and connectors 48

EVALUATION 52

- Displays and counters 54
- Process devices 68
- Safe speed monitors 72
- Signal lights and signal towers 74

Our pulses for innovations



The Kübler Group is one of the world's leading manufacturers and specialists for encoders and sensors to measure position, motion, and inclination, as well as slip rings for transmitting power, signals, and data.

The portfolio of premium products is rounded off by counters, process devices, and reliable speed monitors to record and evaluate various measured variables.

Founded in the year 1960 by Fritz Kübler, the family business is now led by the next generation of Gebhard and Lothar Kübler.

Innovative product and sector solutions, as well as solutions for functional safety and a high level of service, are the reasons behind our global success.

The strict focus on quality ensures the highest levels of reliability and a long service life for our products in the field.

Twelve international group members and distributors in more than 50 countries offer local product know-how, service and advice throughout the world.

Over 600 dedicated people worldwide make this success possible and ensure that customers can continue to place their trust in our company.

Product portfolio – Made in Germany

MEASUREMENT

- Encoders – incremental and abolute
- Bearingless encoders
- Motor Feedback Systems
- Radar sensors
- Draw-wire encoders
- Measuring wheel systems
- Magnetic length measuring systems
- Optical length measuring systems / Shaft copying systems
- Inclinometers
- Condition Monitoring Sensor

TRANSMISSION

- Slip rings
- Slip rings, customized solutions
- I/O Modules
- Signal converters and optical fiber modules
- Cables and connectors

EVALUATION

- Displays and counters
- Process devices
- Safe speed monitors up to SIL3/PLe
- Signal lights and signal towers

We offer solutions for the following industries:


DRIVE TECHNOLOGY


ELEVATOR TECHNOLOGY


MOBILE AUTOMATION


HEAVY INDUSTRY


WIND TURBINES


SOLAR INDUSTRY


PACKAGING INDUSTRY


BOTTLING PLANTS

The high performance level and reliability of the Kübler products are based on our long experience in these demanding application sectors. Learn more about our application-specific solutions under:

kuebler.com/industries

MEASUREMENT

Rotary speed and position detection, linear position, speed and vibration measurement, object detection and detection of inclination angles.
Whether encoders, bearingless encoders, motor feedback systems, linear measuring technology, Condition Monitoring sensors, shaft copying systems and inclinometers, choose the optimum solution for your application from a range of sizes and numerous ordering options. You too can design your systems, machines or motors with Kübler.
Your application is our focus: modifications and special solutions are therefore implemented flexibly and quickly for you.

kuebler.com/measurement


LINEAR MEASURING SYSTEMS
INCLINOMETERS
CONDITION MONITORING SENSORS

Encoders

Speed measurement and position detection using incremental and absolute encoders.
Choose the perfect encoder for your application from a variety of sizes and ordering options. The Sendix encoder – made in Germany – is the result of the highest quality awareness and careful selection of materials. It has proved its value in many industries as a robust and precise sensor technology. Design your plants, machines, or motors with Kübler. Your application is our priority: Your modifications and special solutions are implemented flexibly and quickly.
We look forward to your challenge.

kuebler.com/encoders

New generation of Kübler Sendix encoders

Equipped with state-of-the-art technology, the new Kübler Sendix K58I and K80I (for large hollow shafts) encoders impress with their high performance, flexibility and future-proofing.
The Sendix K58I Performance encoder is available as an individually programmable variant.

⊕ Configurable parameters include the following:

- Number of pulses up to 36.000 ppr
- HTL or TTL output
- Counting direction
- Zero pulse (length, position, links)

Find the right Kübler accessories

Cables, connectors and pre-assembled cordsets

Fixing components for hollow shaft encoders: spring element, torque stop, stator coupling, tether arm, isolation insert

Fixing components for shaft encoders: flange, robust bearing unit, bearing box

Connection of motor and encoder: coupling, flexible shaft coupling

SSI displays, safe speed monitors

Programming unit for Sendix K58I-PR

Enter order code of your encoder and find accessories:
kuebler.com/accessories

Incremental encoders

		Ø Dimensions in mm [inch]	Magnetic (accuracy ±1°)	Optical (accuracy ≤ ±0.015°)	Programmability	Resolution max. in ppr	Push-pull	RS422	SinCos	Open Collector	Ø Hollow shaft max. in mm [inch]	Speed max. in min^{-1}	Temperature range in °C [°F]	Protection max.	Type of connection	Power supply in V DC	Pulse frequency max. in kHz	Approvals
	Miniature, optical **2400** (shaft) **2420** (hollow shaft)	24 [0.94]	–	•	–	1.024	•	–	–	–	6	12.000	-20 ... +85 [-4 ... +185]	IP64	cable	5 ... 24 8 ... 30	160	cULus
	Miniature, magnetic **2430** (shaft) **2440** (hollow shaft)	24 [0.94]	•	–	–	256	–	•	–	–	6	12.000	-20 ... +85 [-4 ... +185]	IP64	cable	5	300	–
	Compact, optical **Sendix Base KIS40** (shaft) **Sendix Base KIH40** (hollow s.)	40 [1.57]	–	•	–	2.560	•	•	–	•	8	4.500	-20 ... +70 [-4 ... +158]	IP64	cable	5 5 ... 30 10 ... 30	250	cULus
	Compact, optical **3610** (shaft) **3620** (hollow shaft)	36 [1.43]	–	•	–	2.500	•	•	–	–	8	12.000	-20 ... +85 [-4 ... +185]	IP64	cable M12	5 5 ... 18 8 ... 30	300	cULus
	Standard, optical **Sendix 5000** (shaft) **Sendix 5020** (hollow shaft)	58 [2.28]	–	•	–	5.000	•	•	–	•	15.87	12.000	-40 ... +85 [-40 ... +185]	IP67	cable M12 M23 MIL Sub-D	5 5 ... 30 10 ... 30	300	cULus Ex 2/22
new 	Standard, optical **Sendix K58I** (shaft / hollow shaft)	58 [2.28]	–	•	–	5.000	•	•	–	–	25.4	12.000	-40 ... +85 [-40 ... +185]	IP67	cable M12 M23	5 5 ... 30	300	cULus Ex 2/22
new 	Standard, optical programmable, high resolution, high temperature **Sendix K58I Performance** (shaft / hollow shaft)	58 [2.28]	–	•	•	36.000	•	•	–	–	15	12.000	-40 ... +110 [-40 ... +230]	IP67	cable M12 M23	5 ... 30	300	cULus
	Standard, optical **Sendix Base KIS50** (shaft) **Sendix Base KIH50** (hollow s.)	58 [2.28]	–	•	–	5.000	•	•	–	•	15	6.000	-20 ... +70 [-4 ... +158]	IP65	cable M12 M23	5 4.7 ... 30 5 ... 30 10 ... 30	300	CE
	Standard, optical sine wave output + reference signal **5804** (shaft) **5824** (hollow shaft)	58 [2.28]	–	•	–	5.000	–	–	•	–	12	12.000	-20 ... +85 [-4 ... +185]	IP65	cable M23	5 10 ... 30	180	cULus
	Standard, optical sine wave output, highly interpolable **Sendix 5814** (shaft) **Sendix 5834** (hollow shaft)	58 [2.28]	–	•	–	1.024 and 2.048	–	–	•	–	15	12.000	-40 ... +90 [-40 ... +194]	IP67	cable M12	5 10 ... 30	400	cULus

Incremental encoders

		Ø Dimensions in mm [inch]	Magnetic (accuracy ±1°)	Optical (accuracy ≤ ±0.015°)	Resolution max. in ppr	Push-pull	RS422	SinCos	Open Collector	Ø Hollow shaft max. in mm [inch]	Speed max. in min^{-1}	Temperature range in °C [°F]	Protection max.	Type of connection	Power supply in V DC	Pulse frequency max. in kHz	Approvals
	Standard, optical Motor-Line **Sendix 5834** (tapered shaft)	58 [2.28]	–	•	1.024 and 2.048	–	–	•	–	10 tap. shaft	12.000	-40 ... +90 [-40 ... +194]	IP67	cable PCB connector	5 10 ... 30	400	cULus
	Standard, optical sine wave output, SIL2 / PLd **Sendix 5814FS2** (shaft) **Sendix 5834FS2** (hollow shaft)	58 [2.28]	–	•	1.024 and 2.048	–	–	•	–	14	12.000	-40 ... +90 [-40 ... +194]	IP67	cable M12 M23	5 10 ... 30	400	cULus SIL2 PLd
	Standard, optical sine wave output, SIL3 / PLe **Sendix 5814FS3** (shaft) **Sendix 5834FS3** (hollow shaft)	58 [2.28]	–	•	1.024 and 2.048	–	–	•	–	14	12.000	-40 ... +90 [-40 ... +194]	IP67	cable M12 M23	5 10 ... 30	400	cULus SIL3 PLe
	Standard, optical stainless-steel **Sendix 5006** (shaft) **Sendix 5026** (hollow shaft)	58 [2.28]	–	•	5.000	•	•	–	–	15	6.000	-40 ... +85 [-40 ... +185]	IP67	cable M12	5 5 ... 30 10 ... 30	300	cULus
	Standard, optical ATEX / IECEx – zone 1 / 21 **7000** (shaft) **7020** (hollow shaft)	70 [2.76]	–	•	5.000	•	•	–	–	14	6.000	-40 ... +60 [-40 ... +140]	IP67	cable	5 5 ... 30 10 ... 30	300	Ex IECEx
	Standard, optical ATEX / IECEx – mining **7100** (shaft) **7120** (hollow shaft)	70 [2.76]	–	•	5.000	•	•	–	–	14	6.000	-40 ... +60 [-40 ... +140]	IP67	cable	5 5 ... 30 10 ... 30	300	Ex IECEx

Incremental encoders with large hollow shaft

	Ø **Dimensions** in mm [inch]	**Magnetic** (accuracy ±1°)	**Optical** (accuracy ≤ ±0.015°)	**Resolution** max. in ppr	**Push-pull**	**RS422**	**SinCos**	**Open Collector**	Ø **Hollow shaft** max. in mm [inch]	**Speed** max. in min^{-1}	**Temperature range** in °C [°F]	**Protection** max.	**Type of connection**	**Power supply** in V DC	**Pulse frequency** max. in kHz	**Approvals**
new  Incremental, optical **K80I** (hollow shaft)	80 [3.15]	–	•	5.000	•	•	•	–	42	5.000	-40 ... +85 [-40 ... +185]	IP67	cable M12 M23 MIL	5 5 ... 30	300	cULus Ex 2/22
 Heavy Duty, Incremental, optical **Sendix H120** (hollow shaft)	100 [3.94]	–	•	5.000	•	•	–	–	28	6.000	-40 ... +100 [-40 ... +212]	IP67	cable [1] M12 M23	5 10 ... 30	300	–

1) With terminal box.

Absolute encoders SSI/BiSS

		Resolution max. in bit	**Ø Dimensions** in mm [inch]	SSI	BiSS INTERFACE	**Additional incremental track**	**Speed** max. in min^{-1}	**Temperature range** in °C [°F]	**Protection** max.	**Type of connection**	**Power supply** in V DC	**Approvals**
	Miniature, magnetic singleturn **2450** (shaft) **2470** (hollow shaft)	12 ST	24 [0.94]	•	–	–	12.000	-20 ... +85 [-4 ... +185]	IP64	cable	5	–
	Compact, magnetic singleturn **Sendix M3653A** (shaft) **Sendix M3673A** (hollow shaft)	14 ST	36 [1.43]	•	–	–	6.000	-40 ... +85 [-40 ... +185]	IP67	cable M12	10 ... 30	cULus
	Compact, magnetic electronic multiturn **Sendix M3663** (shaft) **Sendix M3683** (hollow shaft)	14 ST + 24 MT										
	Compact, magnetic robust singleturn **Sendix M3653AR** (shaft)	14 ST	36 [1.43]	•	–	–	4.000	-40 ... +85 [-40 ... +185]	IP69k	cable M12	10 ... 30	cULus
	Compact, magnetic robust electronic multiturn **Sendix M3663R** (shaft)	14 ST + 24 MT										
	Standard, magnetic singleturn **Sendix M5853A** (shaft)	14 ST	36 [1.43]	•	–	–	4.000	-40 ... +85 [-40 ... +185]	IP65	cable M12	10 ... 30	cULus
	Standard, magnetic electronic multiturn **Sendix M5863** (shaft)	14 ST + 24 MT										

Absolute encoders SSI/BiSS

		Resolution max. in bit	**Ø Dimensions** in mm [inch]	SSI	BiSS INTERFACE	**Additional incremental track**	**Speed** max. in min^{-1}	**Temperature range** in °C [°F]	**Protection** max.	**Type of connection**	**Power supply** in V DC	**Approvals**
	Compact, optical singleturn **Sendix F3653** (shaft) **Sendix F3673** (hollow shaft)	17 ST	36 [1.43]	•	•	Sin Cos RS422	12.000	-40 ... +90 [-40 ... +194]	IP67	cable M12	5 10 ... 30	cULus
	Compact, optical electronic multiturn **Sendix F3663** (shaft) **Sendix F3683** (hollow shaft)	17 ST + 24 MT										
	Standard, optical singleturn **Sendix 5853** (shaft) **Sendix 5873** (hollow shaft)	21 ST	58 [2.28]	•	•	Sin Cos RS422	12.000	-40 ... +90 [-40 ... +194]	IP65	cable M12 M23	5 10 ... 30	cULus
	Standard, optical mechanical multiturn **Sendix 5863** (shaft) **Sendix 5883** (hollow shaft)	19 ST + 12 MT										
	Standard, optical SIL2 / PLd singleturn **Sendix 5853FS2** (shaft) **Sendix 5873FS2** (hollow shaft)	17 ST	58 [2.28]	•	•	Sin Cos	12.000	-40 ... +90 [-40 ... +194]	IP67	cable M23	5 10 ... 30	cULus SIL2 PLd
	Standard, optical SIL2 / PLd mechanical multiturn **Sendix 5863FS2** (shaft) **Sendix 5883FS2** (hollow shaft)	17 ST + 12 MT										
	Standard, optical SIL3 / PLe singleturn **Sendix 5853FS3** (shaft) **Sendix 5873FS3** (hollow shaft)	17 ST	58 [2.28]	•	•	Sin Cos	12.000	-40 ... +90 [-40 ... +194]	IP67	cable M23	5 10 ... 30	cULus SIL3 PLe
	Standard, optical SIL3 / PLe mechanical multiturn **Sendix 5863FS3** (shaft) **Sendix 5883FS3** (hollow shaft)	17 ST + 12 MT										
	Standard, optical Motor-Line singleturn **Sendix 5873** (tapered shaft)	21 ST	58 [2.28]	•	•	SinCos RS422	12.000	-40 ... +90 [-40 ... +194]	IP65	cable PCB connector	5 10 ... 30 4.5 ... 5.5	cULus
	Standard, optical Motor-Line electronic multiturn **Sendix F5883M** (hollow shaft)	17 ST + 24 MT	58 [2.28]	•	–	SinCos RS422	9.000	-40 ... +85 [-40 ... +185]	IP65	cable	5 10 ... 30	cULus
	Standard, optical electronic multiturn **Sendix F5863** (shaft) **Sendix F5883** (hollow shaft)	17 ST + 24 MT	58 [2.28]	•	•	SinCos RS422	12.000	-40 ... +85 [-40 ... +185]	IP67	cable M12 M23	5 10 ... 30	cULus

Absolute encoders SSI/BiSS

		Resolution max. in bit	**Ø Dimensions** in mm [inch]	SSI	BiSS INTERFACE	**Additional incremental track**	**Speed** max. in min^{-1}	**Temperature range** in °C [°F]	**Protection** max.	**Type of connection**	**Power supply** in V DC	**Approvals**
	Standard, optical singleturn ATEX/IECEx – zone 1/21 **Sendix 7053** (shaft) **Sendix 7073** (hollow shaft)	17 ST	70 [2.76]	•	•	–	6.000	-40 ... +60 [-40 ... +140]	IP67	cable	10 ... 30	
	Standard, optical mechanical multiturn ATEX/IECEx – zone 1/21 **Sendix 7063** (shaft) **Sendix 7083** (hollow shaft)	17 ST + 12 MT										
	Standard, optical singleturn ATEX/IECEx – mining **Sendix 7153** (shaft) **Sendix 7173** (hollow shaft)	17 ST	70 [2.76]	•	•	–	6.000	-40 ... +60 [-40 ... +140]	IP67	cable	10 ... 30	
	Standard, optical mechanical multiturn ATEX/IECEx – mining **Sendix 7163** (shaft) **Sendix 7183** (hollow shaft)	17 ST + 12 MT										

Absolute encoders Parallel, Highspeed

		Resolution max. in bit	**Ø Dimensions** in mm [inch]	**Speed** max. in min^{-1}	**Temperature range** in °C [°F]	**Protection** max.	**Type of connection**	**Power supply** in V DC	**Approvals**
	Standard, optical singleturn parallel, highspeed **5852** (shaft) **5872** (hollow shaft)	14 ST	58	12.000	-20 ... +85	IP66	cable M23	5 10 ... 30	

Absolute encoders Analog

Analog output

		Resolution max. in bit	Ø Dimensions in mm [inch]	Analog interfaces	Speed max. in min^{-1}	Temperature range in °C [°F]	Protection max.	Type of connection	Power supply in V DC	Approvals
	Compact, magnetic singleturn **Sendix M3651A** (shaft) **Sendix M3671A** (hollow shaft)	12 ST	36 [1.43]	4 ... 20 mA 0 ... 10 V 0 ... 5 V	6.000	-40 ... +85 [-40 ... +185]	IP67	cable M12	10 ... 30 15 ... 30	
	Compact, magnetic electronic multiturn **Sendix M3661** (shaft) **Sendix M3681** (hollow shaft)	12 ST + 16 MT								
	Compact, magnetic robust singleturn **Sendix M3651AR** (shaft)	12 ST	36 [1.43]	4 ... 20 mA 0 ... 10 V 0 ... 5 V	4.000	-40 ... +85 [-40 ... +185]	IP69k	cable M12	10 ... 30 15 ... 30	
	Compact, magnetic robust electronic multiturn **Sendix M3661R** (shaft)	12 ST + 16 MT								
	Standard, magnetic singleturn **Sendix M5851A** (shaft)	12 ST	58 [2.28]	4 ... 20 mA 0 ... 10 V 0 ... 5 V	4.000	-40 ... +85 [-40 ... +185]	IP65	cable M12	10 ... 30 15 ... 30	
	Standard, magnetic electronic multiturn **Sendix M5861** (shaft)	12 ST + 16 MT								

Absolute encoders Large hollow shaft

		Ø Dimensions in mm [inch]	Magnetic (accuracy ±1°)	Optical (accuracy ≤ ±0.015°)	Resolution max. in bit	SSI	BiSS Interface	Analog output	Additional incremental track	Speed max. in min^{-1}	Temperature range in °C [°F]	Protection max.	Type of connection	Power supply in V DC	Approvals
	Large hollow shaft multiturn **AX**	–	• 1)	• 1)	17 + 24	• 1)	• 1)	• 1)	• 1)	4.500	–	IP64	• 1)	• 1)	–

1) Depending on the encoder used.

Absolute encoders
Industrial Ethernet

		Resolution max. in bit	**Ø Dimensions** in mm [inch]	**Cyber Security**	EtherCAT Conformance tested	Safety over EtherCAT	PROFINET	PROFIsafe	EtherNet/IP	**Speed** max. in min^{-1}	**Temperature range** in °C [°F]	**Protection** max.	**Type of connection**	**Power supply** in V DC	**Approvals**
	Standard, optical Singleturn **Sendix 5858** (shaft) **Sendix 5878** (hollow shaft)	16 ST	58 [2.28]	–	•	–	•	–	–	9.000	-40 ... +85 [-40 ... +185]	IP67	M12	10 ... 30	cULus
	Standard, optical mechanical multiturn **Sendix 5868** (shaft) **Sendix 5888** (hollow shaft)	16 ST + 12 MT													
new	Standard, optical electronic singleturn **Sendix F5858** (shaft) **Sendix F5878** (hollow shaft)	19 ST	58 [2.28]	–	–	–	•	–	•	9.000	-40 ... +80 [-40 ... +176]	IP67	M12	10 ... 30	cULus
	Standard, optical electronic multiturn **Sendix F5868** (shaft) **Sendix F5888** (hollow shaft)	19 ST + 24 MT													
new available as of Q3/2025	Standard, optical electronic singleturn **Sendix F5858** (shaft) **Sendix F5878** (hollow shaft)	19 ST	58 [2.28]	S	•	–	–	–	–	9.000	-40 ... +80 [-40 ... +176]	IP67	M12	10 ... 30	cULus
	Standard, optical electronic multiturn **Sendix F5868** (shaft) **Sendix F5888** (hollow shaft)	19 ST + 24 MT													
new available as of Q3/2025	Standard, optical singleturn **Sendix S5858FS2** (shaft) **Sendix S5878FS2** (hollow shaft)	15 (safe) 24 (non safe) ST	58 [2.28]	S	•	•	–	–	–	9.000	-40 ... +80 [-40 ... +176]	IP67	M12	10 ... 30	cULus SIL2 PLd
	Standard, optical electronic multiturn **Sendix S5868FS2** (shaft) **Sendix S5888FS2** (hollow shaft)	15 (safe) 24 (non safe) ST + 12 MT													
new available as of Q3/2025	Standard, optical singleturn **Sendix S5858FS3** (shaft) **Sendix S5878FS3** (hollow shaft)	15 (safe) 24 (non safe) ST	58 [2.28]	S	•	•	–	–	–	9.000	-40 ... +80 [-40 ... +176]	IP67	M12	10 ... 30	cULus SIL3 PLe
	Standard, optical electronic multiturn **Sendix S5868FS3** (shaft) **Sendix S5888FS3** (hollow shaft)	15 (safe) 24 (non safe) ST + 12 MT													
new	Standard, optical singleturn **Sendix S5858FS3** (shaft) **Sendix S5878FS3** (hollow shaft)	15 (safe) 24 (non safe) ST	58 [2.28]	–	–	–	•	•	–	9.000	-40 ... +80 [-40 ... +176]	IP67	M12	10 ... 30	cULus SIL3 PLe
	Standard, optical electronic multiturn **Sendix S5868FS3** (shaft) **Sendix S5888FS3** (hollow shaft)	15 (safe) 24 (non safe) ST + 12 MT													

Absolute encoders
IO-Link

IO-Link

		Resolution max. in bit	Ø Dimensions in mm [inch]	Speed max. in min^{-1}	Temperature range in °C [°F]	Protection max.	Type of connection	Power supply in V DC	Approvals
	Compact, magnetic singleturn **Sendix M3658A** (shaft) **Sendix M3678A** (hollow shaft)	14 ST	36 [1.43]	6.000	-40 ... +85 [-40 ... +185]	IP67	M12	18 ... 30	cULus
	Compact, magnetic electronic multiturn **Sendix M3668** (shaft) **Sendix M3688** (hollow shaft)	14 ST + 18 MT							
	Standard, magnetic singleturn **Sendix M5858A** (shaft)	14 ST	58 [2.28]	4.000	-40 ... +85 [-40 ... +185]	IP65	M12	18 ... 30	cULus
	Standard, magnetic electronic multiturn **Sendix M5868** (shaft)	14 ST + 18 MT							

Absolute encoders
Fieldbus

		Resolution max. in bit	**Ø Dimensions** in mm [inch]	CANopen	SAE J1939	**Speed** max. in min^{-1}	**Temperature range** in °C [°F]	**Protection** max.	**Type of connection**	**Power supply** in V DC	**Approvals**
	Compact, magnetic singleturn **Sendix M3658A** (shaft) **Sendix M3678A** (hollow shaft)	14 ST	36 [1.43]	•	•	6.000	-40 ... +85 [-40 ... +185]	IP67	cable M12	10 ... 30	E1 cULus
	Compact, magnetic electronic multiturn **Sendix M3668** (shaft) **Sendix M3688** (hollow shaft)	14 ST + 29 MT									
	Compact, magnetic robust singleturn **Sendix M3658AR** (shaft)	14 ST	36 [1.43]	•	•	4.000	-40 ... +85 [-40 ... +185]	IP69k	cable M12	10 ... 30	E1 cULus
	Compact, magnetic robust electronic multiturn **Sendix M3668R** (shaft)	14 ST + 29 MT									
	Standard, magnetic singleturn **Sendix M5858A** (shaft)	14 ST	58 [2.28]	•	•	4.000	-40 ... +85 [-40 ... +185]	IP65	cable M12	10 ... 30	E1 cULus
	Standard, magnetic electronic multiturn **Sendix M5868** (shaft)	14 ST + 29 MT									

Absolute encoders
Fieldbus

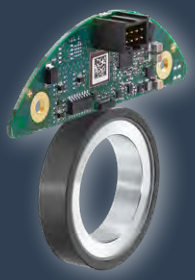
		Resolution max. in bit	**Ø Dimensions** in mm [inch]	CANopen	CANopen LIFT	PROFIBUS	Modbus	**Speed** max. in min^{-1}	**Temperature range** in °C [°F]	**Protection** max.	**Type of connection**	**Power supply** in V DC	**Approvals**
	Compact, optical singleturn **Sendix F3658** (shaft) **Sendix F3678** (hollow shaft)	16 ST	36	•	–	–	–	12.000	-40 ... +85 [-40 ... +185]	IP67	cable	10 ... 30	cULus
	Compact, optical electronic multiturn **Sendix F3668** (shaft) **Sendix F3688** (hollow shaft)	16 ST + 16 MT											
	Standard, optical singleturn **Sendix 5858** (shaft) **Sendix 5878** (hollow shaft)	16 ST	58	•	• (MT)	•	–	9.000	-40 ... +85 [-40 ... +185]	IP67	cable M23 M12 Sub-D (MT)	10 ... 30	cULus
	Standard, optical mechanical multiturn **Sendix 5868** (shaft) **Sendix 5888** (hollow shaft)	16 ST + 12 MT											
	Standard, optical electronic multiturn **Sendix F5868** (shaft) **Sendix F5888** (hollow shaft)	16 ST + 16 MT	58	•	–	–	•	12.000	-40 ... +80 [-40 ... +176]	IP67	cable M12	10 ... 30	cULus
	Standard, optical Motor-Line electronic multiturn **Sendix F5888M** (hollow shaft)	19 ST + 24 MT	58	•	–	–	–	9.000	-40 ... +85 [-40 ... +185]	IP65	cable	10 ... 30	cULus
	Standard, optical singleturn ATEX/IECEx – Zone 1/21 **Sendix 7058** (shaft) **Sendix 7078** (hollow shaft)	16 ST	70	•	–	•	–	6.000	-40 ... +60 [-40 ... +140]	IP67	cable	10 ... 30	Ex IECEx
	Standard, optical mechanical multiturn ATEX/IECEx – Zone 1/21 **Sendix 7068** (shaft) **Sendix 7088** (hollow shaft)	16 ST + 12 MT											
	Standard, optical singleturn ATEX/IECEx – mining **Sendix 7158** (shaft) **Sendix 7178** (hollow shaft)	16 ST	70	•	–	•	–	6.000	-40 ... +60 [-40 ... +140]	IP67	cable	10 ... 30	Ex IECEx
	Standard, optical mechanical multiturn ATEX/IECEx – mining **Sendix 7168** (shaft) **Sendix 7188** (hollow shaft)	16 ST + 12 MT											

Bearingless encoders

Reliable speed measuring with magnetic sensor solution.
Bearingless encoders are the perfect alternative to bearing mounted encoders, due to their compact design and easy mounting options on almost any shaft diameter. Bearingless encoders from Kübler are already used today in drive and elevator technology, for asynchronous motors or external rotor motors, or in generators, large motors, and wind turbines.
Our smart technology is available for the highest signal quality. Digital real-time signal processing compensates for possible signal errors and optimizes drive control.

kuebler.com/bearingless-encoders

Do you need a magnetic bearingless encoder for 100% integration into the motor with customized design of the size and connection technology? We have the solution - contact us.



kuebler.com/bearingless-encoders

Find the right Kübler accessories

Magnetic rings in different diameters

Programming unit EP1000 for RIM2000/RIM5000

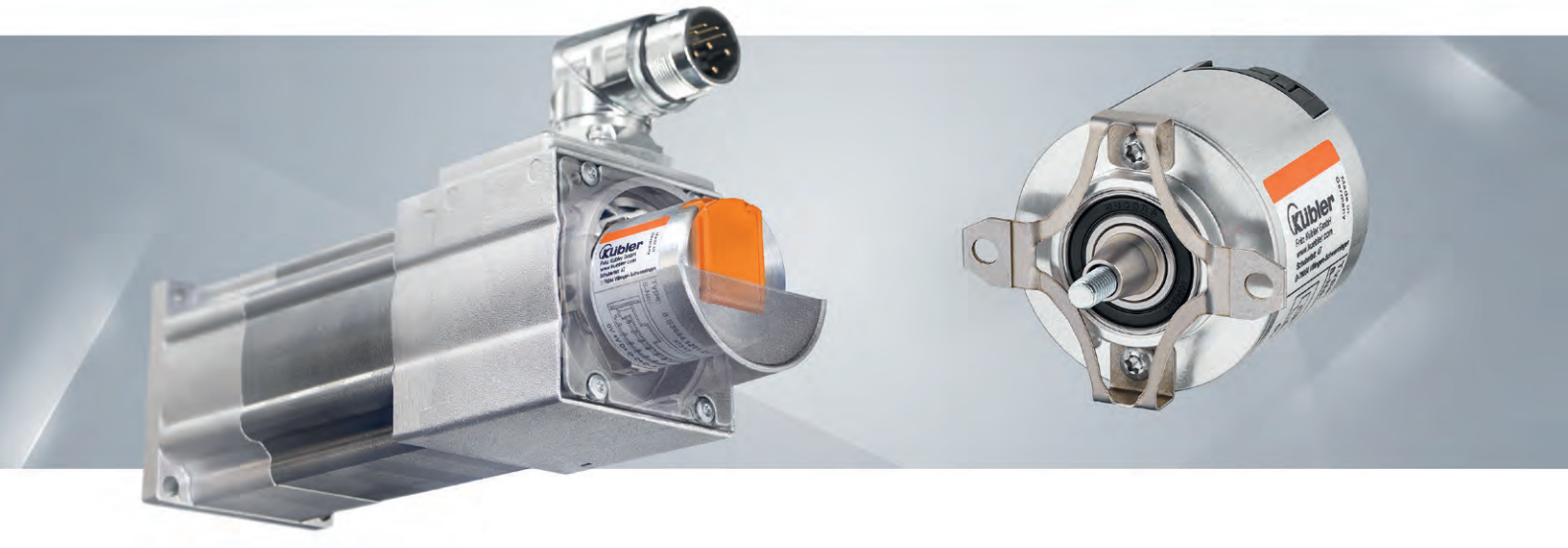
Position displays

Cables, connectors and pre-assembled cordsets

Enter order code of your encoder and find accessories:
kuebler.com/accessories

Bearingless encoders
Magnetic
Incremental

		Distance sensor head/ magnetic ring max. in mm	**Pole distance magnetic ring** in mm	**Hollow shaft max.** in mm	**Programmability**	**Resolution** max. in ppr	**Accuracy** max.	**Speed** max. in min^{-1}	Push-Pull HTL	RS422 TTL	**Temperature range** in °C [°F]	**Protection** max.	**Type of connection**	**Power supply** in V DC	**Pulse frequency** max. in kHz
new		**RIM200** (hollow shaft)	1	2	180	–	999.999	±0.3°	12.000	•	•	-20 ... +80 [-4 ... +176]	IP67, IP68/ IP69	cable	4.8 ... 26.4	300
new		**RIM500** (hollow shaft)	2	5	180	–	999.999	±0.3°	12.000	•	•	-20 ... +80 [-4 ... +176]	IP67, IP68/ IP69	cable	4.8 ... 26.4	300
new		**RIM2000** (hollow shaft) Programmable in the field	1	2	180	•	999.999	±0.3°	12.000	•	•	-20 ... +80 [-4 ... +176]	IP67, IP68/ IP69	cable	4.8 ... 26.4	300
new		**RIM5000** (hollow shaft) Programmable in the field	2	5	180	•	999.999	±0.3°	12.000	•	•	-20 ... +80 [-4 ... +176]	IP67, IP68/ IP69	cable	4.8 ... 26.4	300



Motor Feedback Systems for servo motors

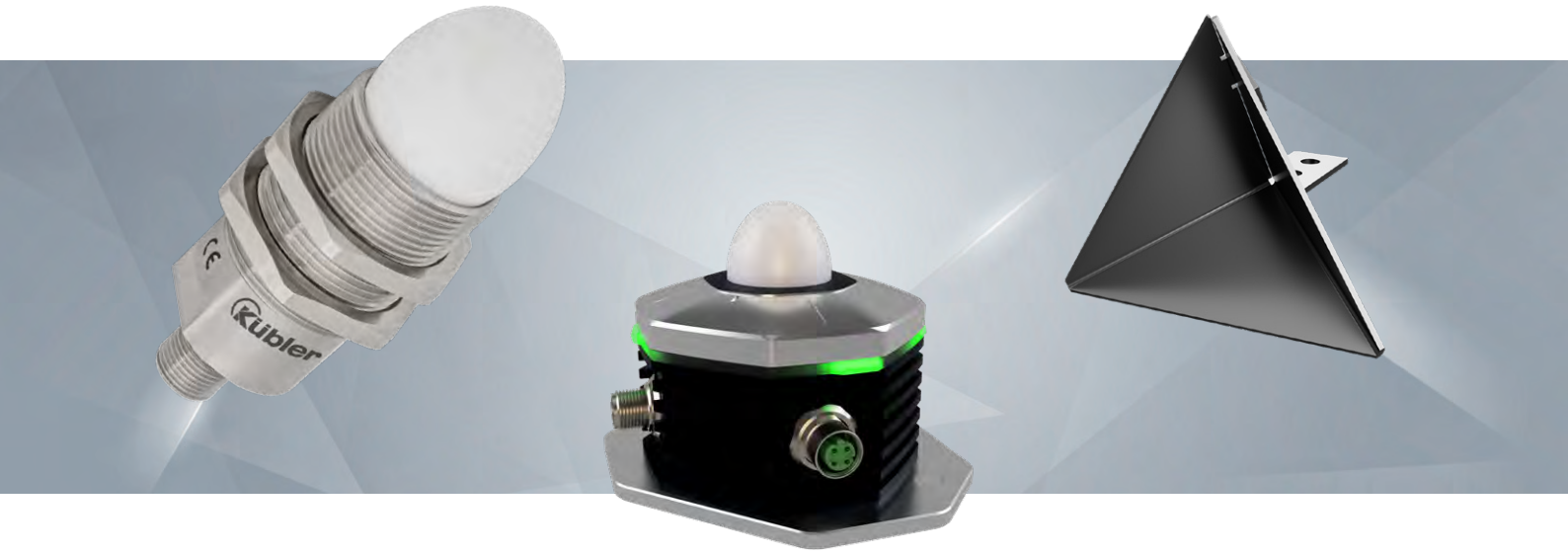
A constant dimension of 36.5 mm means enormous benefits for you.
With requirements from industry and many years of experience in drive technology, Kübler presents its new product family of Motor Feedback Systems. Kübler has developed its Motor Feedback Systems in close cooperation with prominent manufacturers of servo motors and converters. They are based on a unique platform that offers a multitude of possibilities and benefits for servo motors. From the reduction in number of motor variants and the standardization of the mechanical connection between encoder and drive to cost savings along the entire value chain. You also get maximum flexibility when selecting the electrical interfaces.

kuebler.com/motor-feedback-systems

Motor Feedback Systems

	ø Dimensions in mm [inch]	**Optical** (accuracy ≤ ±0.015°)	**Resolution** max. in bit	RS485 Sin/Cos [1]	BiSS INTERFACE	**Speed** max. in min^{-1}	**Temperature range** in °C [°F]	**Protection** max.	**Type of connection**	**Power supply** in V DC
 Singleturn Motor-Line compact, optical / magnetic **Sendix S3674** (hub shaft/tapered shaft)	36	•	24 ST	•	•	12.000	-40 ... +120 [-40 ... + 248]	IP40	PCB connector, radial	5 7 ... 30
 Multiturn Motor-Line compact, optical / magnetic **Sendix S3684** (hub shaft/tapered shaft)	36	•	24 ST + 12 MT	•	•	12.000	-40 ... +120 [-40 ... + 248]	IP40	PCB connector, radial	5 7 ... 30

1) Hiperface® compatibel.
Hiperface® is a registered trademark of Sick Stegmann GmbH.

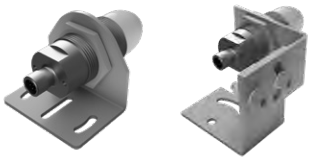


Radar sensors

Industrial radar sensors based on the latest radar technology.
Whether sensor or sensor system solution, Kübler offers a wide range of options for the most diverse measuring tasks in the most diverse applications from all industrial sectors. With a measuring rate of up to 500 Hz and accuracies of up to ±1µm, measurement is not only fast but also with unprecedented precision; a small blind range of just 0.15 m for use at close range of the sensor is an outstanding feature, as is the very narrow aperture angle of just ±1.5° for very precise and focused measurement. Suitable accessories and software tools ensure user-friendly installation and configuration.

kuebler.com/radar-sensors

Find the right Kübler accessories



Mounting bracket

Protective housing

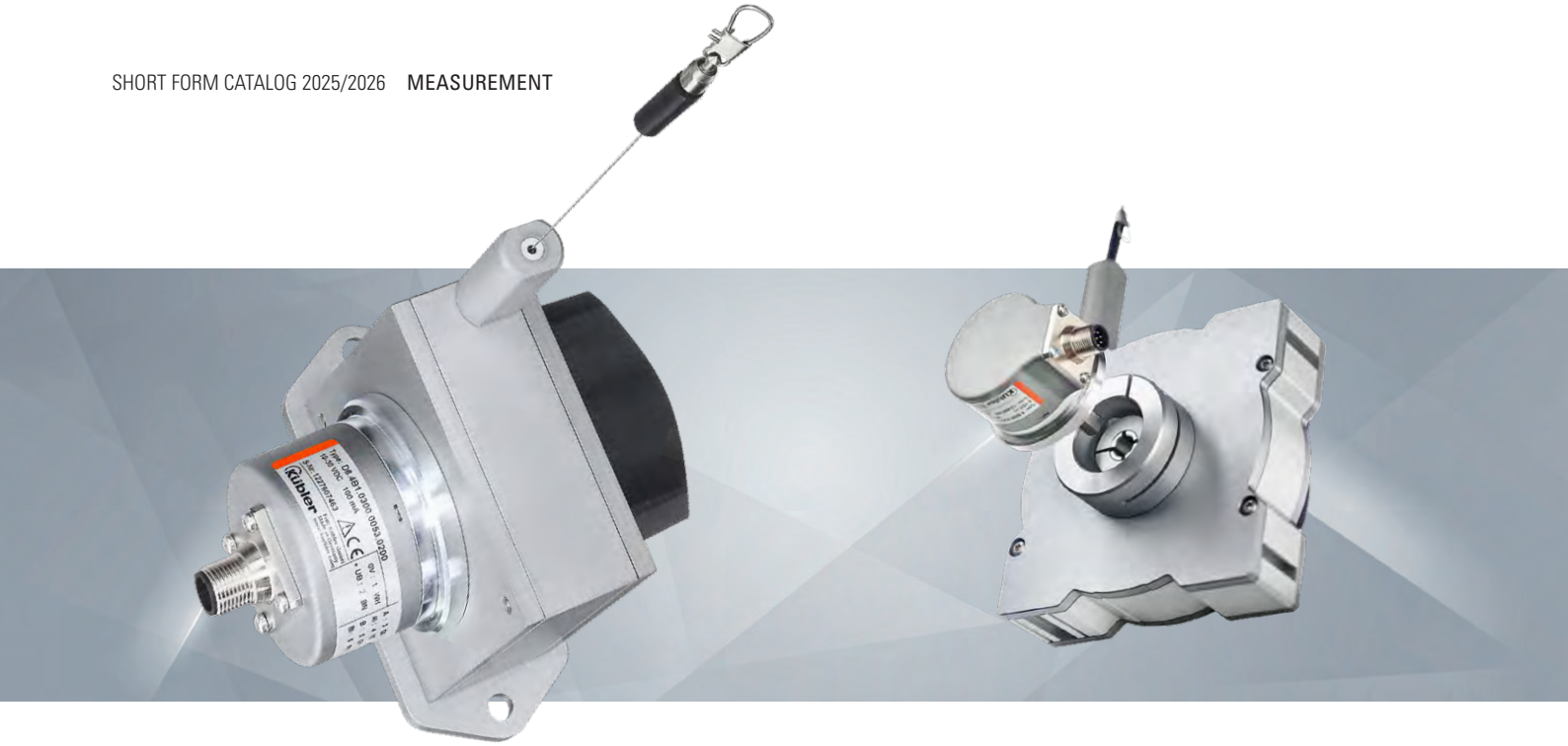
Radar angle reflector

Configuration box

Enter order code of your encoder and find accessories:
kuebler.com/accessories

Radar sensors

			Opening angle	Measuring range max. [m]	Linearity max. [mm]	Repeatability [mm]	Measuring rate [Hz]	Radar frequency, FMCW [GHz]	Temperature range [°C]	Protection max.	Type of connection	Interfaces			
												4 ... 20 mA analog	Switching outputs	RS485	PROFINET
Distance measurement, object detection, collision avoidance															
new		**RAD51C** Mounting via M30 fastening thread	±8° (16°)	0.15 ... 20 0.30 ... 30	±10	±2	100	122.25 ... 123	-40 ... +70 [-40 ... + 158]	IP67 / IP69k	M12	•	3	•	–
new		**RAD51D** Mounting via M30 fastening thread	±3° (6°)	0.15 ... 20 0.30 ... 40	±5	±1	100	122.25 ... 123	-40 ... +70 [-40 ... + 158]	IP67 / IP69k	M12	•	3	•	–
new		**RAD78D**	±1.5° (3°)	0.10 ... 6	±0.7	±0.1	500	119 ... 125	-40 ... +70 [-40 ... + 158]	IP67	M12	•	3	•	•
Level measurement															
new		**RAD78L**	±1.5° (3°)	0.10 ... 6	±0.7	±0.1	500	119 ... 125	-40 ... +70 [-40 ... + 158]	IP67	M12	•	3	•	•
				0.15 ... 20	± 2	±0.2	500	122 ... 123							
Distance change measurement															
new		**RAD78P**	±1.5° (3°)	0.10 ... 6 0.30 ... 40	±0.1 µm	±0.1 µm	500	119 ... 125	-40 ... +70 [-40 ... + 158]	IP67	M12	–	–	•	•



Draw-wire encoders

Linear measuring system for position detection.
The right draw-wire encoder for every application. From precise to compact to robust and cost-optimized. Kübler offers a comprehensive portfolio based on different measuring lengths. In addition to all common interfaces, innovative features such as integrated inclinometers or redundant sensors make the difference. From analog to fieldbus – draw-wire mechanisms can be combined with a wide variety of Sendix encoders according to customer requirements. That's why we offer countless ordering options and are ready to realize modifications and special solutions for you.

kuebler.com/draw-wire-encoders

EtherNet/IP PROFINET PROFIsafe EtherCAT Conformance tested PROFIBUS CANopen SAE J1939 IO-Link Modbus and many more

Find the right Kübler accessories

Cables, connectors and pre-assembled cordsets

Guide pulley, extension wire

Enter order code of your product and find accessories:
kuebler.com/accessories

Draw-wire encoders

		Measuring length max. in m	**Dimensions mechanics** in mm [inch] Depth depending on sensor type	**Linearity** max. [±% of measuring range]	**Traverse speed** max. in m/s	**Wire diameter** in mm [inch]	**Temperature range** in °C [°F]	**Protection** (sensor) max.	**Combinable with Sendix encoder**	**Interchangeable installation**	**Absolute digital**	**Absolute analog**	**Incremental**	**Redundant sensors**	**Integrated inclinometer**	**Type of connection**
Performance Line																
	**A50**	1.25	50 x 50 [1.97 x 1.97]	±0.02	10	0.5	-20 ... +85 [-4... +185]	IP65	•	•	•	•	•	–	–	cable M12
	**B80**	3	80 x 80 [3.15 x 3.15]	±0.02	10	0.5	-20 ... +85 [-4... +185]	IP65	•	•	•	•	•	–	–	cable M12 M23
	**C120**	6	120 x 120 [4.72 x 4.72]	±0.02	10	0.5	-20 ... +85 [-4... +185]	IP65	•	•	•	•	•	–	–	cable M12 M23
	**D135**	42.5	135 x 135 [5.32 x 5.32]	±0.02	10	0.5	-20 ... +85 [-4... +185]	IP65	•	•	•	•	•	–	–	cable M12 M23
Robust Line																
	**C60**	4	60 x 60 [2.36 x 2.36]	±0.1	3	1	-40 ... +85 [-40... +185]	IP69k	–	–	•	•	•	•	–	cable M12
	**D120**	10	120 x 120 [4.72 x 4.72]	±0.1	3	1.5	-40 ... +85 [-40... +185]	IP69k	–	–	•	•	•	•	–	cable M12
Compact Line																
	**A30**	0.6	30 x 30 [1.18 x 1.18]	±0.35	0.8	0.36	-10 ... +80 [+14 ... +176]	IP50	–	–	–	•	–	–	–	cable
	**A40/A41**	2	41 x 41 [1.61 x 1.61]	±0.25	1	0.45	-10 ... +80 [+14 ... +176]	IP65	•	–	•	•	•	–	–	cable M12 M23
	**B75**	3	75 x 75 [2.95 x 2.95]	±0.2	0.8	0.6	-40 ... +85 [-40... +185]	IP65	•	•	•	•	•	•	–	cable M12 M23
	**C105**	6	105 x 85 [4.13 x 3.35]	±0.2	3	0.6	-20 ... +85 [-4... +185]	IP65	•	•	•	•	•	•	–	cable M12 M23
Base Line																
	**C100**	5	100 x 100 [3.94 x 3.94]	±0.5	1	0.9	-40 ... +85 [-40... +185]	IP67	–	–	•	•	•	•	•	M12
	**D125**	10	125 x 125 [4.92 x 4.92]	±0.5	1	0.9	-40 ... +85 [-40... +185]	IP67	–	–	•	•	•	•	•	M12

Measuring wheel systems

Systems for speed measurement, position detection and length measurement.
Measuring wheel systems from Kübler are the ideal solution for reliable speed measurement, position detection and length measurement in applications with linear movements. These are recorded rotationally via the measuring wheel with attached encoder directly on the surface of the material to be measured and converted into linear data. Integrated springs ensure the necessary contact force of the measuring wheel on the measuring surface for reliable measured value acquisition.

kuebler.com/measuring-wheel-systems

EtherNet/IP PROFINET PROFIsafe EtherCAT Conformance tested PROFIBUS CANopen SAE J1939 IO-Link Modbus and many more

Find the right Kübler accessories

O-rings, mounting brackets

Measuring wheels, encoder spring arms, rack and pinion

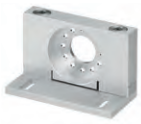
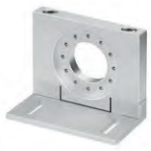
Cables, connectors and pre-assembled cordsets

Enter order code of your product and find accessories:
kuebler.com/accessories

Measuring wheel systems

		Spring force max. [N]	Spring travel max. [mm]	Flexible encoder mounting in 30° steps	Recommended incremental encoders	Recommended absolute encoders	Circumference measuring wheel						Surfaces measuring wheel					
							100 mm	200 mm	6"	300 mm	12"	500 mm	Knurled	Smooth	Nubbed	Corrugated	O-ring	Double O-ring
Compact Line																		
	 **MWE11** Smallest size	10	10	–	2400	–	•	–	–	–	–	–	•	•	–	–	–	–
new	 **MWE21** Adjustable preload	25	50	•	KIS40 3610	M366x F366x	–	•	•	–	–	–	•	•	–	–	•	–
new	 **MWE21 with flange adapter** Adjustable preload	25	50	•	KIS50	–	–	•	–	•	•	–	•	•	–	–	•	–
	 **MWE31** Internal springs	15	10	•	KIS40 3610	M366x F366x	–	•	•	–	–	–	•	•	–	–	•	–
Performance Line																		
	 **MWE41** Internal springs	25	10	•	KIS50 5000 5805	M586x F586x 586x	–	•	–	•	•	•	•	•	•	•	•	•
	 **MWE61** Highest contact force	40	80	•	KIS50 5000 5805	M586x F586x 586x	–	•	–	•	•	•	•	•	•	•	•	•
	 **MWE62** Double measuring wheel system	40	80	•	KIS50	–	–	•	–	•	•	•	•	•	•	•	•	•

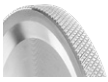
Measuring wheel systems
System components
Spring arms, spring bracket

		Spring force max. [N]	**Spring travel** max. [mm]	**For encoder** Clamping flange / shaft	**Circumference Measuring wheel**
Compact Line					
new 	**MWE20** Spring arm Adjustable contact force Flexible mounting options	25	50	ø 36 or 40 mm / ø 6 mm	200 mm 6“
	**MWE30** Spring bracket Compact design Internal springs	15	10	ø 36 or 40 mm / ø 6 mm	200 mm
Performance Line					
	**MWE40** Spring bracket Compact design Internal springs	25	10	ø 58 mm / ø 10 mm	300 mm 12“
	**MWE60** Spring arm Highest contact force, adjustable	40	80	ø 58 mm / ø 10 mm	200, 300, 500 mm 12“

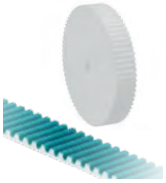
Measuring wheel systems
System components
Flange adapter for spring arm MWE20

		Spring force max. [N] (for use with MWE20)	**Spring travel** max. [mm] (for use with MWE20)	**For encoder** Clamping flange / shaft	**Circumference Measuring wheel** (recommended)
new 	For the use of encoders of size 50 or 58 mm with the MWE20 spring arm	25	50	ø 58 mm / ø 10 mm	200 mm 300 mm 12“

Measuring wheel systems
System components
Measuring wheels

		Circumference / ø / width [mm]							Suitable for									
		200 ±0.2 / Ø 63.7 / 5.5	200 ±0.2 / Ø 63.7 / 12	300 ±0.2 / Ø 95.5 / 12	500 ±1.0 / Ø 159.2 / 25	6" (152.4 ±0.2) / Ø 48.38 / 5.5	6" (152.4 ±0.2) / Ø 48.38 / 12	12" (304.8 ±0.2) / Ø 97.02 / 12	Cardboard	Wood	Textile	Paper	Plastic (PVC, PE, ...)	Painted surfaces	Carpet, cables, nonwoven	Rubber, soft plastic	Wire, greased metals, steel profiles, leather	Greased metals, glass, floor coverings
	Diamond knurl (aluminum)	•	•	•	•	•	•	•	•	•	•	–	–	–	–	•	–	–
	Plastic (polyurethane) smooth	•	•	•	•	•	–	•	•	•	•	•	•	•	•	–	–	•	–
	Single O-ring (NBR70)	•	•	•	–	•	–	•	•	•	•	•	•	•	•	–	–	–	–
	Double O-ring (NBR70)	–	•	•	–	–	–	•	•	•	•	•	•	•	•	–	–	–	–
	Tufted rubber (polyurethane)	–	•	•	•	–	–	•	•	•	•	•	•	•	–	•	–	–	–
	Plastic (polyurethane) corrugated	–	•	•	•	–	–	•	•	•	•	•	•	•	•	–	–	–	•

Pinion with rack
· 100 % slip-free
· For encoder shaft 6 mm [0.24"] and 10 mm [0.39"]
· Rack 1 m [3.94"], stackable
· Pitch circumference = 50 mm [1.97"]



Belt pulley with Toothed belt
· 100 % slip-free
· For encoder size ø 58 mm [2.28"]
· Toothed belt up to 100 m [32.8']
· Pitch circumference = 360 mm [14.14"]

Magnetic length measuring systems

Efficient, non-contact position measurement in industrial applications.
In a linear magnetic measuring system, the sensor system, also known as a scanning head or sensor, is guided contactlessly over a coded magnetic tape. You can choose between incremental and absolute sensors. The measuring system is insensitive to dust, chips and moisture and is resistant to many liquids and oils. Various interfaces are available for the respective applications.

kuebler.com/magnetic-length-measuring-systems

Find the right Kübler accessories

Cables, connectors and pre-assembled cordsets

Position displays

Programming unit for LIM2000/LIM5000

Enter order code of your product and find accessories:
kuebler.com/accessories

Magnetic length measuring systems Incremental

		Distance sensor head/ magnetic band max. in mm	**Pole distance magnetic band** in mm	**Programmability**	**Resolution** max. in µm	**Speed** max. in m/s	**Accuracy** in µm for measuring length 1 m	**Measuring length** max. in m	Push-Pull HTL	RS422 TTL	**Temperature range** in °C [°F]	**Protection** max.	**Type of connection**	**Power supply** in V DC
	**Limes LI20/B1** (sensor head/magnetic band)	1	2	–	10	25	35	70	•	•	-20 ... +85 [-4 ... +185]	IP68/ IP69k	cable	4.8 ... 26 4.8 ... 30
	**Limes LI50/B2** (sensor head/magnetic band)	2	5	–	5	16	35	70	•	•	-20 ... +85 [-4 ... +185]	IP68/ IP69k	cable	4.8 ... 26 4.8 ... 30
new 	**Limes LIM200/B1** (sensor head/magnetic band)	1	2	–	0.1	30	35	70	•	•	-20 ... +80 [-4 ... +176]	IP67, IP68/ IP69	cable	4.8 ... 26.4
new 	**Limes LIM500/B2** (sensor head/magnetic band)	2	5	–	0.1	30	35	70	•	•	-20 ... +80 [-4 ... +176]	IP67, IP68/ IP69	cable	4.8 ... 26.4
new 	**Limes LIM2000/B1** (sensor head/magnetic band) programmable in the field	1	2	•	0.1	30	35	70	•	•	-20 ... +80 [-4 ... +176]	IP67, IP68/ IP69	cable	4.8 ... 26.4
new 	**Limes LIM5000/B2** (sensor head/magnetic band) programmable in the field	2	5	•	0.1	30	35	70	•	•	-20 ... +80 [-4 ... +176]	IP67, IP68/ IP69	cable	4.8 ... 26.4
new 	**EP1000** Programming unit for LIM2000 and LIM5000			•										

Magnetic length measuring systems Absolute

		Distance sensor head/ magnetic band max. in mm	**Pole distance magnetic band** in mm	**Resolution** max. in µm	**Speed** max. in m/s	**Accuracy** in µm for measuring length 1 m	**Measuring length** max. in m	**Incremental SinCos**	**Absolute SSI/BiSS**	**Absolute fieldbus**	**Temperature range** in °C [°F]	**Protection** max.	**Type of connection**	**Power supply** in V DC
	**Limes LA10/BA1** (sensor head/magnetic band)	2	1	1	10	30	8	•	•	•	-10 ... +70 [+14 ... +158]	IP64	M12	10 ... 30
	**Limes LA50/BA5** (sensor head/magnetic band)	1.5	5	10	4	170	20	–	•	•	-10 ... +70 [+14 ... +158]	IP40	cable	10 ... 30

Shaft copying systems

Absolute positioning of the elevator car for travel heights up to 392 m.
The contactless absolute measuring system for shaft copying – also called shaft information or positioning system – has an extremely compact, very robust design. In addition to the sensor, which detects the position of the elevator car 100 % slip-free, it also includes the appropriate evaluation unit, a so-called Position Supervisor Unit (PSU). The safe system therefore consists of a SIL3-certified sensor and a suitable evaluation unit. This enables elevator and safety functions to be implemented in accordance with EN 81-20/21/50.

kuebler.com/shaft-copying-systems

**Easy installation -
Ants shaft copying systems.**

Installed in the elevator shaft in just a few steps.
Your benefits - cost and time savings over the entire length.

kuebler.com/video-shaft-copying

Find the right Kübler accessories

Coded band

Mounting kit consisting of:
rail mounting, snap hook, tension spring, car mounting, mounting material

Configuration strips for LES03

EMC shield terminal

Enter order code of your product and find accessories:
kuebler.com/accessories

Shaft copying systems
Sensors

		Measuring lenght max. in m	**Traverse speed** max. in m/s	**SIL3**	**EN 81**	**ASME**	**Absolute**	**Resolution** max. in mm	**Dimensions** in mm [inch]	**CANopen Lift (DS417)**	**CAN**	**SSI**	**RS485**	**Protection level**	**Type of connection**	**Approvals**
Ants Base																
	**Ants LEB02** Absolute position detection	392	8	–	•	–	•	1	126 x 55 x 37 [4.96 x 2.71 x 1.46]	•	–	•	•	IP54	cable Sub-D	
Ants Safe																
	**Ants LES02** Safe position detection	392	12	•	•	–	•	0.5	126 x 55 x 37 [4.96 x 2.71 x 1.46]	–	•	–	–	IP54	cable	SIL3 Functional Safety EN 81
	**Ants LES02D** Safe, redundant position detection Dual CAN	392	12	•	•	•	•	0.5	126 x 55 x 37 [4.96 x 2.71 x 1.46]	–	•	–	–	IP54	cable RJ45	SIL3 Functional Safety EN 81 ASME A17
	**Ants LES03** Safe position and speed detection	392	12	•	•	–	•	0.5	126 x 55 x 37 [4.96 x 2.71 x 1.46]	–	•	–	–	IP54	cable	SIL3 Functional Safety EN 81

Shaft copying systems
Safe systems

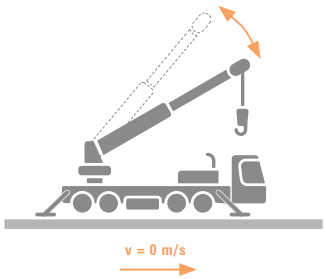
SIL3 Functional Safety EN 81

		Realizable elevator and safety functions																				
		Absolute position feedback	Final limit switch	Retardation control	Unintended Car Movement	Door bridging	Two redundant signals for the door zone	Door zone signalization in case of evacuation	Overspeed pretripping	Triggering electromech. safety gear in case overspeed	Status control of electromechanical safety gear	Reset control of electromech. safety gear	Triggering safety gear in case of upwards movement	Triggering safety gear in case of activating emergency braking switch	Inspection limit switch within reduced shaft head / pit	Shield Modus: ensuring refuge space	Triggering switch for opening safety circuit	Reset device control	Refuge space during scaffoldless installation	Functional safety already from wiring	Overspeed during inspection	Safe configuration management for accelerated approval process
	**Safe-System LES02 / PSU02** Safety functions according to EN 81-20/21/50	•	•	•	•	•	•	–	•	–	–	–	–	–	•	–	–	–	–	•	•	–
	**Safe-System LES03 / SGT02** Electronic overspeed governor	•	–	–	–	–	–	–	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	**Safe-System LES03 / SGT02 / PSU02** Safety functions with electronic overspeed governor	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
new 	**Safe-System LES03 / PSU03** Safety functions with electronic overspeed governor (available as of Q3/2025)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

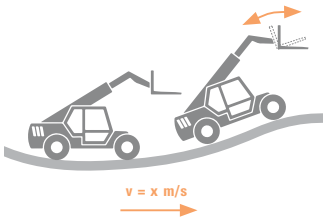
Inclinometers

Precise and reliable measuring – even in harsh environments.
The right solution for every application. Whether static or dynamic applications, Kübler offers the right sensor technology for both 1-axis and 2-axis inclination measurement. Compared to alternative measuring systems, inclinometers offer more flexibility and degrees of freedom in system design, as the sensor does not require a mechanical connection to a shaft or rotary axis. The advantage: simple installation and fewer sources of error. The sensors can be individually adapted to the respective application using simple tools.

Static applications



Dynamic applications



kuebler.com/inclinometers

Find the right Kübler accessories

Cables, connectors and pre-assembled cordsets

Teach adapter

IO-Link Master USB

Enter order code of your product and find accessories:
kuebler.com/accessories

Inclinometers 1- and 2-axis measurement

		Measuring angle max., 1-dimensional	Measuring angle max., 2-dimensional	Accuracy max.	Resolution max.	Analog output	PNP/NPN	IO-Link	CANopen	SAE J1939	Modbus	Parameterization via Easy Teach	Parameterization via FDT/IODD	Dimensions in mm [inch]	Temperature range in °C [°F]	Protection max.	Type of connection	Approvals
For static applications																		
new	 **IN61** Analog outputs, plastic housing	360°	±85°	±0.2°	16 bit	•	–	(•) [1]	–	–	–	•	•	71.6 x 62.6 x 20	-40 ... +85 [-40... +185]	IP68/ IP69k	M12	cULus
new	 **IN62** 2 switching outputs, plastic housing	360°	±85°	±0.2°	16 bit	–	•	(•) [1]	–	–	–	–	•	71.6 x 62.6 x 20	-40 ... +85 [-40... +185]	IP68/ IP69k	M12	cULus
new	 **IN68** IO-Link interface (CANopen), plastic housing	360°	±85°	±0.2°	0.01 °	–	–	•	•	–	–	–	•	71.6 x 62.6 x 20	-40 ... +85 [-40... +185]	IP68/ IP69k	M12	cULus
	 **IN81** Analog outputs, metal housing	360°	±85°	±0.2°	12 bit	•	–	–	–	–	–	•	–	80 x 60 x 23	-40 ... +85 [-40... +185]	IP67/ IP69k	M12	E1 cULus
	 **IN88** Fieldbus interface, metal housing	360°	±85°	±0.2°	0.01°	–	–	–	•	•	•	–	–	80 x 60 x 23	-40 ... +85 [-40... +185]	IP67/ IP69k	M12	E1 cULus
For dynamic applications																		
new	 **IN71** Analog outputs, plastic housing	360°	±85°	±0.2°	16 bit	•	–	(•) [1]	–	–	–	•	•	71.6 x 62.6 x 20	-40 ... +85 [-40... +185]	IP68/ IP69k	M12	cULus
new	 **IN72** 2 switching outputs, plastic housing	360°	±85°	±0.2°	16 bit	–	•	(•) [1]	–	–	–	–	•	71.6 x 62.6 x 20	-40 ... +85 [-40... +185]	IP68/ IP69k	M12	cULus
new	 **IN78** IO-Link interface (CANopen), plastic housing	360°	±85°	±0.2°	0.01 °	–	–	•	•	–	–	–	•	71.6 x 62.6 x 20	-40 ... +85 [-40... +185]	IP68/ IP69k	M12	cULus

1) IO-Link communication for parameterization via FDT/IODD with corresponding software (e.g. PACTware).

Condition Monitoring Sensor

Vibration and temperature sensor with IO-Link interface: detect and analyze vibrations.
The CMSVT38 condition monitoring sensor reliably records information about vibrations / oscillations in 3 axes as well as temperatures. The measurement data is exchanged with the controller for processing via an IO-Link interface.
The CMSVT38 can be integrated into various condition monitoring concepts. In addition to condition monitoring, the sensors can also be used to record process steps.

IO-Link

kuebler.com/condition-monitoring-sensor

Find the right Kübler accessories

IO-Link master

IO-Link master USB

Signal lights and signal towers

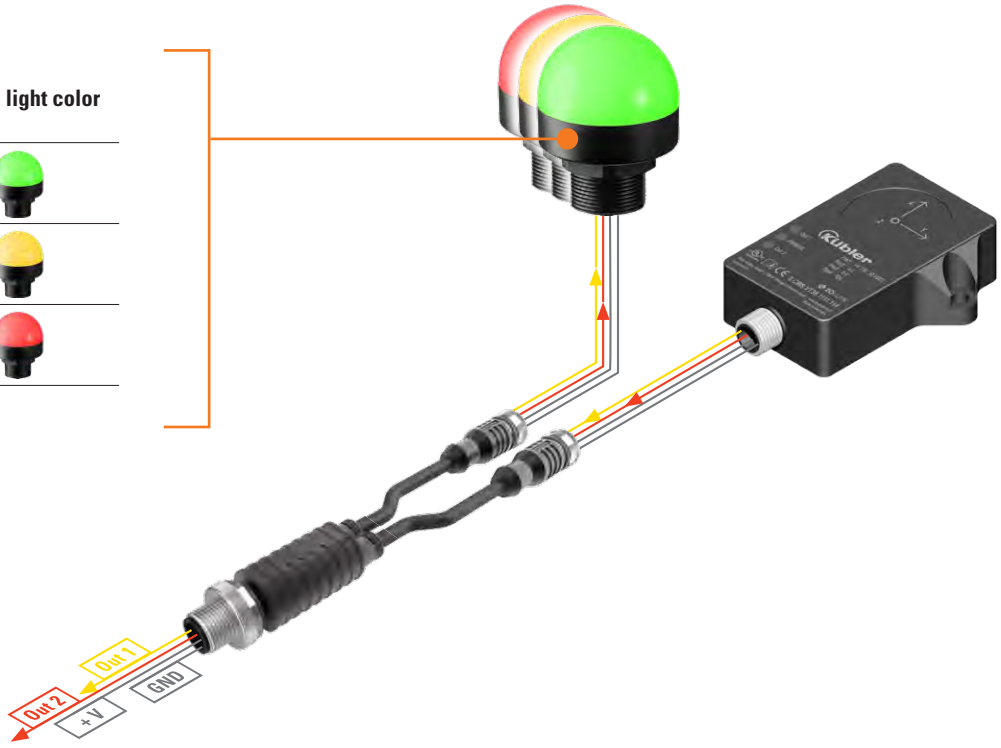
Cables, connectors and pre-assembled cordsets, Y-distributor

Enter order code of your product and find accessories:
kuebler.com/accessories

Vibration and temperature sensor

		Acceleration output				Speed output											
		Measuring range RMS [g]	Resolution RMS [g]	Linearity deviation RMS [%]	Repeatability, RMS [%]	Measuring range RMS [mm/s]	Resolution RMS [mm/s]	Linearity deviation RMS [%]	Repeatability, RMS [%]	PNP/NPN	IO-Link	Parameterization via USB (FDT/IODD)	Dimensions [mm]	Temperature range in °C [°F]	Protection max.	Type of connection	Approvals
new	 **CMSVT38** IO-Link interface, plastic housing	±16	0.01	≤ ±3 at 78 Hz	≤ ±5 at 78 Hz	0 ... 320 at 78 Hz	0.01	≤ ±1 at 78 Hz	≤ ±5 at 78 Hz	•	•	•	71.6 x 62.6 x 20	-40 ... +85 [-40... +185]	IP68/ IP69k	cable M12	cULus

Switching state Sensor	Signal light color
No switching output active	
Switching output 1 active	
Switching output 2 active	



CMSVT38 in combination with signal light and Y-distributor as a stand-alone solution for condition monitoring.

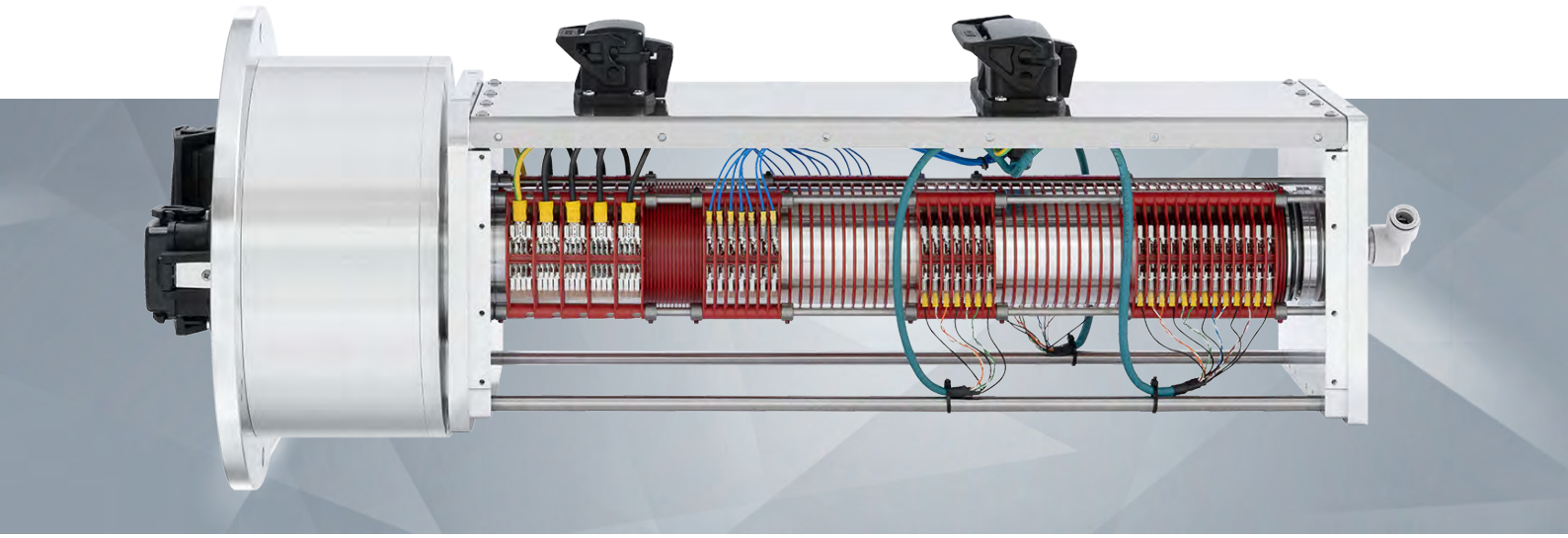
As an alternative to connection to a controller, two PNP/NPN switching outputs can be used individually in SIO mode and parameterized via IO-Link communication. The CMSVT38 vibration sensor detects vibrations and transmits 2 switching signals for predefined limit values. The switching outputs can be connected directly to signal lights via the IO-Link Y-distributor, which also supplies the system with power. At the same time, the switching signals are also transmitted for further processing. For example, switches, motors or valves can be activated in addition to the visualization.

TRANSMISSION

With Kübler you can always reliably transmit power, signals, and data.
The increasing degree of automation and the increasing networked communication demand trouble-free and reliable transmission.
Kübler offers high-quality slip rings that transmit power, signals, data, and other media from stationary to rotating platforms. Complete data networks can be set up with the I/O modules and the extensive range of cables and connectors. A broad portfolio of signal converters rounds off this range. Find the right solution for your application.

kuebler.com/transmission


CABLES AND CONNECTORS
SIGNAL CONVERTERS AND
OPTICAL FIBER MODULES



Slip rings

Slip ring platform with Gigabit transmission.
Due to the increasing networking of all components of a plant / machine and the associated complexity of machine controllers through to the implementation of Industry 4.0 / IIoT concepts such as Condition Monitoring, the demand for high-end data transmission is increasing. Following this trend, Kübler has developed a new, future-proof slip ring platform, which on the one hand is equipped with reliable „high-end" transmission technology in a maximum compact design and on the other hand has a 1 Gbit module. This operates without further electronic components and thus enables interference-free, reliable and direct transmission.

Industrie 4.0 / IIoT ready

The intelligent networking of all components is based on the use of smart sensors. Smart Kübler slip rings with integrated sensors are understood to be industry 4.0 enablers. Thanks to condition monitoring and the predictive maintenance associated with this, for example, they ensure greater system availability.

Find out more at:
kuebler.com/iiot

In addition to the transmission of electrical currents as well as pneumatic and hydraulic, other functions for speed, position, vibration or temperature monitoring can be integrated into the slip ring concept. Such as Kübler incremental and absolute encoders or bearingless encoders.

kuebler.com/slip-rings

Slip rings

	Power (load)	Signal/data (analog/digital)	Pneumatics	Hydraulics	N° of channels max.	Ø Hollow shaft max. in mm	Load max.	Protection max.	Speed max. in min^{-1}	Temperature range max. in °C [°F]
Base Line										
new  Fig. SR060E **Dimension 60 mm** compact, slim, low-maintenance, standardized with a wide range of options for 24/7 operation New: Version with M12 connector	•	•	–	–	3 load 2 signal	25	240 V 20 A	IP64	500	0 ... +75 [+32 ... +167]
 Fig. SR060U **Dimension 60 mm, with UL approval** compact, slim, low-maintenance, standardized with a wide range of options for 24/7 operation	•	•	–	–	3 load 2 signal	25	240 V 16 A	IP64	500	0 ... +45 [+32 ... +113]
 Fig. SR085 **Dimension 85 mm** modular, wide range of variants, extreme service life, especially for 24/7 operation	•	•	•	•	max. 20	30	400 V 20 A (25 A)	IP64	800	-35 ... +85 [-31 ... +185]
new  Fig. SR085IE **Dimension 85 mm, for Industrial Ethernet up to 100 Mbit/s** modular, wide range of variants, extreme service life, especially for 24/7 operation Single Pair Ethernet System Alliance	•	•	•	•	max. 20	30	400 V 20 A (25 A)	IP64	800	-35 ... +85 [-31 ... +185]
Industrial Line										
 Fig. SR120 **Dimension 120 mm** customer-specific structure with a modular construction, supports all common fieldbuses up to 1 Gbit/s	•	•	•	•	on request	25	400 V 20 A (25 A)	IP65	300	-35 ... +85 [-31 ... +185]
 Fig. SR160 **Dimension 160 mm** customer-specific design with an individual interface layout, up to 3 paths for gigabit fieldbuses	•	•	•	•	on request	on request	400 V 50 A	IP67	150	-35 ... +85 [-31 ... +185]
 Fig. SR250H **Dimension 250 mm and larger** 100% customer-specific, condition monitoring, integration of sensor systems	•	•	•	•	on request	on request	1000 V 150 A	IP67	150	-35 ... +85 [-31 ... +185]
Pancake slip rings										
 Fig. SR160P **Pancake slip rings** customer-specific design, large hollow shaft, extremely flat design	•	•	–	–	on request	on request	60 VDC 5 A	IP00	60	0 ... +75 [+32 ... +167]

IO-Link master modules

Intelligent fieldbus-independent communication.
Discover the IO-Link master modules from Kübler and optimize your automation with state-of-the-art technology. The IO-Link master modules from Kübler reliably establish the connection between all IO-Link devices (sensors and actuators) and the higher-level controller (e.g. PLC). The bidirectional communication with the connected IO-Link devices enables parameters to be read and written. With reliable data transmission. In addition, the Kübler IO-Link Master Module collects diagnostic information from the devices and forwards it to the control system, which enables errors to be detected and rectified at an early stage. All in the spirit of condition monitoring and predictive maintenance.

kuebler.com/io-link-master-modules

Find the right Kübler accessories


IO-Link encoders


IO-Link counters and process devices


IO-Link inclinometers


IO-Link condition monitoring sensor


Cables, connectors and pre-assembled cordsets, Y-distributor


IO-Link signal towers

IO-Link master modules

IO-Link

		Number of ports Class A IO-Link / SIO-Mode	Number of ports Class B IO-Link	EtherCAT Conformance tested	PROFINET	EtherNet/IP	USB connection	Type of connection Power supply	Type of connection Ethernet data transmission	Type of connection IO-Link communication	Dimensions [mm]	Working temperature range [°C]	Protection max.
new	 **IOL4A4B**	4	4	•	•	•	–	M12 5-pin L coded	M12 4-pin D coded	M12 5-pin A coded	205 x 60 x 34.4	-25 ... +70 [-13 ... +158]	IP67
new	 **IOL4A**	4	–	•	•	•	–	M8 4-pin + PE	M8 4-pin + shield	M12 5-pin A coded	155 x 30 x 31.9	-25 ... +70 [-13 ... +158]	IP68/ IP69k
new	 **IOL1A**	1	–	–	–	–	•	–	–	M12 5-pin A coded	54 x 41 x 24	-25 ... +70 [-13 ... +158]	IP40

Signal converters and optical fiber modules

Error-free and reliable signal transmission.
Signal converters in various models and fiber optic modules enable reliable communication – with a wide variety of interfaces – between controllers and sensors. In addition to encoders, linear sensors, and inclinometers from Kübler, these products are a suitable addition to the overall range of sensors. Take advantage of the new possibilities for a comprehensive overall concept from a single source.

kuebler.com/signal-converters
kuebler.com/fiber-optic

Signal converters

		Input signals	Output signals	Control inputs	Power supply in V DC	Encoder supply in V DC	Types of connection	Protection max.	Working temperature max. in °C [°F]
	Level converter **PW 1D-1D**	incremental HTL / TTL / RS422	incremental HTL / TTL / RS422	–	5 ... 30	5 ... 30	screw terminals, Sub-D	IP20	0 ... +45 [+32 ... +113]
	Signal splitter **SP 1SC-2SC2D**	SinCos	SinCos, incremental HTL / TTL / RS422	–	17 ... 30	5.2 5 ... 30	screw terminals, Sub-D	IP20	0 ... +45 [+32 ... +113]
	Signal splitter **SP 2D-2D**	incremental HTL / TTL / RS422	incremental HTL / TTL / RS422	2	12 ... 30	5.2 10 ... 28	screw terminals	IP20	-20 ... +60 [-4 ... +140]
	Signal converter **SK 1A-1S1D2RS**	analog	incremental HTL / TTL / RS422, RS232 / RS485, SSI	4	12 ... 30	–	screw terminals, Sub-D, USB	IP20	0 ... +45 [+32 ... +113]
	Signal converter **SK 1SC-1D**	SinCos	incremental HTL / TTL / RS422	–	18 ... 30	5.2	screw terminals, Sub-D	IP20	0 ... +45 [+32 ... +113]
	Signal converter **SK 1S-1P**	SSI	parallel	–	18 ... 36 5 12	–	screw terminals, Sub-D	IP20	0 ... +50 [+32 ... +122]
	Signal converter **SK 1S1D-1A2RS**	incremental HTL / TTL / RS422, SSI	analog, RS232 / RS485	1	18 ... 30	5.5	screw terminals, Sub-D	IP20	0 ... +60 [+32 ... +140]
	Frequency divider **FT 1D-1D**	incremental HTL differential / HTL / TTL / RS422	incremental HTL differential / HTL / TTL / RS422	–	9 ... 30	5.5	screw terminals	IP20	0 ... +60 [+32 ... +140]

Optical fiber modules (LWL)

		Interface	Transmission distance in m	Input frequency in kHz	Temperature range in °C [°F]	Power supply in V DC	Power consumption in W
	Optical fiber module, incremental **LWL**	RS422 HTL	2.000	400	- 10 ... + 60 [+14 ... +140]	5 10 ... 30	2
	Optical fiber module, absolute **LWL.A**	SSI	2.000	1000	-10 ... +70 [+14 ... +158]	5 10 ... 30	1

Cables and connectors

The right connection technology for every application.
Cables and connectors play a decisive role in the reliable operation of your systems, machines, or motors. High-quality and adaptable – this is what Kübler cables and connectors stand for. A comprehensive product range is available for selection, from cables as unassembled yard ware and self-assembly connectors such as M8, M12, M23, MIL, Sub-D or RJ45, through to pre-assembled cable sets such as printed circuit board connectors.

kuebler.com/connection-technology

Cables, unprepared, cut to length

		PVC cable	PUR cable	TPE cable	Cross section in mm²	Cable diameter in mm	SSI, BiSS INTERFACE	Analog output Sin/Cos, Push-Pull RS422 TTL, HTL, Open Collector NPN	Parallel, Parallel Highspeed	PROFIBUS	CANopen	SAE J1939	Modbus	IO-Link	For ATEX zone 2/22	RoHS compliant
	2 core + shield	–	•	–	2 x 0.34	appr. 7.6	–	–	–	•	–	–	–	–	–	•
	5 core + shield	•	•	–	5 x 0.14 5 x 0.75	appr. 4.7 appr. 7.5	–	–	–	–	•	•	•	•	–	•
	6 core + shield	•	–	–	3 x 2 x 0.25	appr. 6.2	–	–	–	–	•	–	–	–	–	•
	8 core + shield	–	•	–	8 x 0.14 3 x 2 x 0.14 + 2 x 0.5	appr. 5.5 appr. 7.4	•	•	–	–	–	–	–	–	–	–	•
	10 core + shield	–	•	–	4 x 2 x 0.25 + 2 x 1	appr. 7.9	•	•	–	–	–	–	–	–	–	–	•
	12 core + shield	•	•	•	10 x 0.14 [AWG25] + 2 x 0.5 [AWG20] 12 x 0.14 [AWG25] 6 x 2 x 0.14 [AWG25] 5 x 2 x 0.14 [AWG25] + 2 x 0.5 [AWG20] 6 x 2 x 0.14 [AWG25] 4 x 0.1 [AWG27] + 4 x 2 x 0.14 [AWG25]	appr. 6.9 appr. 6.7 appr. 7.5 appr. 8.5 appr. 7.3 appr. 5.8	•	•	•	–	–	–	–	–	–	•	•
	18 core + shield	•	–	–	18 x 0.14 [AWG25]	appr. 7.8	–	–	•	–	–	–	–	–	–	•

Connectors, self-assembly

		N° of pins	Housing	Connection technology	Cable diameter Ø in mm	Straight connector	Right angle connector	Wall/panel lead-through	For fieldbus	For ATEX zone 2/22	For ATEX zone 1/21
	M12	4/5/8/12	Metal, plastic	Screw terminals	6 - 8	•	•	•	•	•	•
	M23	12/17	Metal	Solder pins	5.5 - 10.5	•	•	•	–	–	–
	MIL	7/10	Metal	Solder pins	5 - 8	•	–	–	–	–	–
	RJ45	8	Plastic	Crimp connection	4.5 - 8	•	–	–	•	–	–
	Sub-D	9	ABS metallized	Solder pins	3.5 - 8.6	–	•	–	–	–	–

T-distributor

		Connector A	Connector B	Connector C	Housing
	M12 T-distributor (shielded or unshielded)	male contacts 5-pin A coded	female contacts 5-pin A coded	female contacts 5-pin A coded	Metal, plastic

Cordsets, pre-assembled

	PVC cable	PUR cable	TPE cable	Optical fiber	Straight connector	Right angle connector	SSI	BiSS INTERFACE	Analog output 1Vpp, SinCos, Push-Pull RS422 HTL, TTL	Open Collector NPN	PROFIBUS	CANopen SAE J1939, Modbus	EtherCAT Conformance tested, PROFINET, EtherNet/IP	IO-Link
 with M8 connector	–	•	–	–	•	•	•	–	•	–	–	–	•	–
 with M12 connector	•	•	–	–	•	•	•	•	•	•	•	•	•	•
 with M23 connector	•	•	•	–	•	–	–	•	•	•	–	–	–	–
 with PCB connector	•	–	–	–	–	–	–	•	•	–	–	–	–	–
 Simplex patch cable optical fiber	–	–	–	•	•	–	–	–	–	–	–	–	–	–
 with RJ45 connector	–	•	–	–	•	–	–	–	–	–	–	–	•	–
 with Sub-D connector	•	•	–	–	–	•	–	–	–	–	•	–	–	–

EVALUATION

Display, control, monitor and count – accurately and reliably with Kübler.
Kübler is known worldwide in the field of counting technology. Our electromechanical, electronic and pneumatic indicators and counters have proven themselves in many industries. Electronic process devices for recording, controlling and monitoring processes round off this product diversity. Our signal lights and signal towers are used for optimum visualization of system statuses directly on site. We offer compact speed monitors for functional safety. Regardless of which product you choose, each one is manufactured with the highest quality awareness and precision.

kuebler.com/evaluation

SAFE SPEED MONITORS

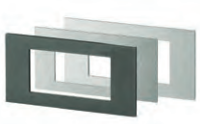
SIGNAL LIGHTS AND SIGNAL TOWERS

Displays and counters

Electronic, electromechanical or pneumatic recording, control and evaluation.
Discover the world of displays and counters. We have been developing and manufacturing counting technology for the whole world for over 65 years. In addition to the high quality of our products, the variety of options for accurately and reliably recording times, frequencies, energy, and positions as well as controlling processes is particularly impressive. Every display, every meter stands for optimum readability – in all environments. Count with us – count on Kübler.

kuebler.com/counters

Find the right Kübler accessories


Adapter front bezel


Sealing cover, transparent cover

Front bezel, mounting frame


Socket boxes, DIN rail mount


Gaskets

Further accessories such a enclosure blind, terminal cover, base-mount socket, mounting support, adapter and anti-vibration set

Enter order code and find accessories:
kuebler.com/accessories

Pulse counters electronic

	Pulse	Time	Frequency	Tachometer	Position	Serial interface (SI) Fieldbus (FB)	Presets: o = optocoupler; r = relay	Reset manual	Reset electrical	Programmable	Display	Number of digits	Dimensions front in mm [inch]	Panel cut-out in mm [inch]	Depth in mm [inch]	Temperature range in °C [°F]	Protection max.	Power supply	Approvals
LCD pulse counters																			
 **Codix 130** adding or subtracting, AC/DC	•	–	–	–	–	–	–	•	•	–	LCD	8	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-10 ... +60 [+14 ... +140]	IP65	batt.	cULus
Codix 131 count direction or difference counter, AC/DC	•	–	–	–	–	–	–	•	•	–	LCD	8	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-10 ... +60 [+14 ... +140]	IP65	batt.	cULus
Codix 132 count direction, AC	•	–	–	–	–	–	–	•	•	–	LCD	8	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-10 ... +60 [+14 ... +140]	IP65	batt.	cULus
 **Codix 140** adding, 0...9999999	•	–	–	–	–	–	–	•	•	–	LCD	7	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-20 ... +65 [-4 ... +149]	IP65	DC	–
LCD service counter																			
 **Codix 142** service counter 0...9999999	•	–	–	–	–	–	1o	•	•	•	LCD	7	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-20 ... +65 [-4 ... +149]	IP65	DC	–
new  **Codix 144** service pulse counter -999999 ... 9999999	•	–	–	–	–	IO-Link	1o	•	•	•	LCD	7	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-20 ... +65 [-4 ... +149]	IP65	DC	–
LED pulse counters																			
 **Codix 520** adding	•	–	–	–	–	–	–	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
Codix 521 6 count modes	•	–	–	–	•	–	1o	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
Codix 524 multifunctional	•	•	•	•	•	–	1o	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
Codix 52U with dual functions in 4 combinations	•	•	•	•	–	–	–	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
Codix 52P + Frequency 6 count modes	•	–	•	•	•	–	–	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
Codix 52T / 52C 2 totalizers with separate scaling; 52C with separate inputs	•	–	–	–	–	–	–	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
 **Codix 540** adding	•	–	–	–	–	–	–	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
Codix 541 6 count modes	•	–	–	–	•	–	1o	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
Codix 544 multifunctional	•	•	•	•	•	–	1o	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
Codix 54U with dual functions in 4 combinations	•	•	•	•	–	–	–	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
Codix 54P + Frequency 6 count modes	•	–	•	•	•	–	–	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
LCD modules																			
 **190** PCB mounting	•	–	–	–	–	–	–	–	•	–	LCD	7	32x18 [1.26 x 0.71]	–	5 [0.20]	-40 ... +80 [-40 ... +176]	–	DC	–
192 PCB mounting	•	–	–	–	–	–	–	–	•	–	LCD	6	32x18 [1.26 x 0.71]	–	5 [0.20]	-40 ... +85 [-40 ... +185]	–	DC	–
LCD touch counter																			
 **571T** multifunctional (also reciprocal) analog output, serial interface	•	•	•	•	•	SS FB	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–

Pulse counters electromechanical

		Pulse	Time	kWh	Panel mounting	PCB mounting	Base mounting	DIN rail mounting	Reset	Number of digits	Dimensions in mm [inch]	Panel cut-out in mm [inch] (for front panel version)	Standard temperature range in °C [°F] (extended on request)	Protection max.	Supply type	Approvals
Micro counters																
	**K46 / K47** high shock resistance	•	–	–	•	•	–	–	–	6 / 7	30 x 20 [1.18 x 0.79] panel mount	27 x 14 [1.06 x 0.55]	- 10 ... + 60 [+14 ... +140]	IP65	DC	cULus
	**K66 / K67** high shock resistance, magnetic field resistant	•	–	–	•	•	–	–	–	6 / 7	30 x 20 [1.18 x 0.79] panel mount	27 x 14 [1.06 x 0.55]	- 10 ... + 60 [+14 ... +140]	IP65	DC	–
	**K04 / K05** high shock resistance	•	–	–	•	•	–	–	–	4 / 5	26 x 15 [1.02 x 0.59] panel mount	24 x 13 [0.94 x 0.51]	- 10 ... + 60 [+14 ... +140]	IP65	AC/DC	cULus
	**K06 / K07 / AK07** high shock resistance	•	–	–	•	•	•	–	–	6 / 7	32 x 15 [1.26 x 0.59] panel mount	30 x 13 [1.18 x 0.51]	- 10 ... + 60 [+14 ... +140]	IP65	AC/DC	cULus
	**SK07** high shock resistance, for DIN rail	•	–	–	–	–	•	•	–	7	30 x 65 [1.18 x 2.56]	–	- 10 ... + 60 [+14 ... +140]	IP50	AC/DC	cULus
Mini counters																
	**W15** also in DIN format 48 x 24 mm [1.89 x 0.94"]	•	–	–	•	–	–	–	manual	5	from 34 x 23 [1.34 x 0.91]	from 31 x 20 [1.22 x 0.79]	-10 ... + 50 [+14 ... +122]	IP40	AC/DC	–
	**W16 / W17** also in DIN format 48 x 24 mm [1.89 x 0.94"]	•	–	–	•	•	–	–	–	6 / 7	from 34 x 23 [1.34 x 0.91]	from 31 x 20 [1.22 x 0.79]	-10 ... + 50 [+14 ... +122]	IP41	AC/DC	–
Robust counters																
	**Bk14** very long service life	•	–	–	•	–	–	–	manual	4	from 37 x 28 [1.46 x 1.10]	from 33.3 x 25 [1.31 x 0.98]	- 10 ... + 60 [+14 ... +140]	IP40 IP41	AC/DC	–
	**B16 / B18** very long service life	•	–	–	•	–	–	•[1]	manual (only B16)	6 / 8	from 50 x 25 [1.97 x 0.98]	50 x 25 [1.31 x 0.87]	- 10 ... + 60 [+14 ... +140]	IP40 IP41	AC/DC	–
	**Mk14 / Mk16** very long service life	•	–	–	•	–	–	–	manual electrical	4 / 6	from 37 x 26 [1.46 x 1.02]	from 33.3 x 22 [1.46 x 1.02]	-10 ... + 45 [+14 ... +113]	IP40 IP41	AC/DC	–
Dual function counters																
	**HC77** combination hour meter and totalizer	•	•	–	•	–	–	–	–	2 x 7	from 48 x 48 [1.89 x 1.89]	45 x 45 [1.77 x 2.78] ø50.5 [1.99]	-15 ... + 50 [+5... +122]	IP65	AC/DC	cULus
	**SHC77** combination hour meter and totalizer	•	•	–	–	–	–	•	–	2 x 7	48.5 x 61.5 [1.91 x 2.42]	–	-15 ... + 50 [+5... +122]	IP52	AC/DC	cULus

1) With mounting frame.

Pulse counters pneumatic

		Panel mounting	PCB mounting	Base mounting	DIN rail mounting	Reset	Number of digits	Panel cut-out in mm [inch] (for front panel version)	Signal	Protection max.	Count frequency max. in Hz
	**PMk14 / PMk16 / PMk18** Totalizer	•	–	–	–	manual (PMk 14, PMk 16)	4/6/8	33.3x22 [1.31 x 0.87] 48x24 [1.89 x 0.94]	L signal = 1.5 ... 8 bar O signal ≤ 0.15 bar	IP41	17 / 50

Preset counters electronic

		Pulse	Time	Frequency	Tachometer	Position	Serial interface (SI) Fieldbus (FB)	Presets: o = optocoupler; r = relay	Reset manual	Reset electrical	Programmable	Display	Number of digits	Dimensions front in mm	Panel cut-out in mm	Depth in mm	Temperature range in °C	Protection max.	Power supply	Approvals
LCD preset counters																				
new 	**Codix 144** service pules counters -999999 ... 9999999	•	–	–	–	–	IO-Link	1o	•	•	•	LCD	7	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-20 ... +65 [-4 ... +149]	IP65	DC	–
new 	**Codix 145** service timer h, min, sec oder hh.mm.ss	–	•	–	–	–	IO-Link	1 o	•	•	•	LCD	7	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-20 ... +65 [-4 ... +149]	IP65	DC	–
	**901** 1 preset – pulse, time (battery)	•	•	–	–	–	–	1r	•	•	•	LCD	2x6	48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77]	63.2 [2.49]	-20 ... +65 [-4 ... +149]	IP65	batt.	cULus
	**Codix 907 / 908** multicolor display (optional), decade keyboard count frequency 5 kHz	•	•	–	–	•	–	1r 2r	•	•	•	LCD/ LED Look	2x6	48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77]	91 [3.58]	-10 ... +50 [+14 ... +122]	IP65	AC/DC	–
	**Codix 923 / 924** multicolor display (optional), decade keyboard count frequency 65 kHz	•	•	•	•	•	–	up to 4r 6o	•	•	•	LCD/ LED Look	2x6	48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77]	91 [3.58]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
LCD touch preset counters																				
	**570T** SSI absolute encoder display, analog output, serial interface	–	–	•	•	•	SI FB	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–
	**571T** multifunctional (also reciprocal) analog output, serial interface	•	•	•	•	•	SI FB	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–
LED preset counters																				
	**Codix 560** LED multifunction preset counters, 14 segment LED, automatic help texts, opt. serial interface	•	•	•	•	•	SS FB	2r	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	91 [3.58]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus

Preset counters electromechanical

		Pulse	Time	Panel mounting	PCB mounting	Base mounting	DIN rail mounting	Presets	Reset	Number of digits	Dimensions in mm [inch]	Panel cut-out in mm [inch] (for front panel version)	Temperature range in °C [°F]	Protection max.	Supply type
	**BVa 15** adding with preset constantly visible	•	–	•	–	–	•[1) 2)]	1	manual	2 x 5	from 50 x 50 [1.97 x 1.97]	50 x 50 [1.97 x 1.97]	-10 ... +60 [+14 ... +140]	IP40	AC/DC
	**MVs 13** subtracting	•	–	•	–	–	–	1	manual electrical	2 / 3	from 39 x 55 [1.54 x 2.17]	33.3 x 50 [1.31 x 1.97]	-10 ... +45 [+14 ... +113]	IP40	AC/DC

1) With mounting frame G300003.
2) With DIN rail mount G300002.

Timers / Hour meters electronic

	Pulse	Time	Frequency	Tachometer	Position	Serial interface (SI) Fieldbus (FB)	Presets: o = optocoupler; r = relay	Reset manual	Reset electrical	Programmable	Display	Number of digits	Dimensions front in mm [inch]	Panel cut-out in mm [inch]	Depth in mm [inch]	Temperature range in °C [°F]	Protection max.	Power supply	Approvals
LCD hour meters																			
 **Codix 134** 99999h59m or 99999.99h	–	•	–	–	–	–	–	•	•	–	LCD	7	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-10...+60 [+14 ... +140]	IP65	batt.	cULus
Codix 135 9999h59m59s or 9999999.9s	–	•	–	–	–	–	–	•	•	–	LCD	8	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-10...+60 [+14 ... +140]	IP65	batt.	cULus
 **Codix 141** 99999.99h	–	•	–	–	–	–	–	•	•	–	LCD	7	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-20...+65 [-4 ... +149]	IP65	DC	–
LCD service timer																			
 **Codix 143** service timer 99999.99h	–	•	–	–	–	–	1 o	•	•	•	LCD	7	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-20...+65 [-4 ... +149]	IP65	DC	–
new  **Codix 145** service timer h, min, sec oder hh.mm.ss	–	•	–	–	–	IO-Link	1 o	•	•	•	LCD	7	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-20...+65 [-4 ... +149]	IP65	DC	–
LED timers																			
 **Codix 523** h, min, sec or hh.mm.ss	–	•	–	–	–	–	1 o	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20...+65 [-4 ... +149]	IP65	DC	cULus
Codix 524 multifunction	•	•	•	•	•	–	1 o	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20...+65 [-4 ... +149]	IP65	DC	cULus
Codix 52U with dual functions in 4 combinations	•	•	•	•	–	–	–	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20...+65 [-4 ... +149]	IP65	DC	cULus
 **Codix 543** h, min, sec or hh.mm.ss	–	•	–	–	–	–	1 o	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20...+65 [-4 ... +149]	IP65	AC/DC	cULus
Codix 544 multifunction	•	•	•	•	•	–	1 o	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20...+65 [-4 ... +149]	IP65	AC/DC	cULus
Codix 54U with dual functions in 4 combinations	•	•	•	•	–	–	–	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20...+65 [-4 ... +149]	IP65	AC/DC	cULus
LCD time modules																			
 **194** PCB mounting	–	•	–	–	–	–	–	–	•	–	LCD	6	32x18 [1.26 x 0.71]	–	5 [0.20]	-40...+80 [-40 ... +176]	–	DC	–
198 PCB mounting	–	•	–	–	–	–	–	–	•	–	LCD	6	32x18 [1.26 x 0.71]	–	5 [0.20]	-40...+85 [-40 ... +185]	–	DC	–

Timers / Hour meters electromechanical

	Pulse	Time	kWh	Panel mounting	PCB mounting	Base mounting	DIN rail mounting	Reset	Number of digits	Dimensions in mm [inch]	Panel cut-out in mm [inch] (for front panel version)	Standard temperature range in °C [°F]	Protection max.	Supply type	Approvals
Micro timers															
 **HK47** high shock resistance	–	•	–	•	•	–	–	–	7	30 x 20 [1.18 x 0.79] panel mount	27 x 14 [1.06 x 0.55]	-10 ... +60 [+14 ... +140]	IP65	DC	–
 **HK07 / AHK07** high shock and impact resistance	–	•	–	•	•	•	–	–	7	32 x 15 [1.26 x 0.59] panel mount	30 x 13 [1.18 x 0.51]	-10 ... +60 [+14 ... +140]	IP65	DC	–
Timers with DIN dimensions															
 **HK17** small dimensions	–	•	–	•	–	–	–	–	7 / 8	from 37 x 26 [1.18 x 0.51]	33 x 22 [1.30 x 0.87]	-15 ... +50 [+5... +122]	IP65	AC/DC	cULus
 **H37** also in DIN format 48 x 24 mm [1.89 x 0.94"]	–	•	–	•	–	–	•[1]	–	7 / 8	from 48 x 24 [1.89 x 0.94]	from 45 x 22 [1.89 x 0.94]	-15 ... +50 [+5... +122]	IP65	AC/DC	cULus
 **H57** DIN format 48 x 48 mm [1.89 x 1.89"]	–	•	–	•	–	–	–	–	7 / 8	from 48 x 48 [1.89 x 1.89]	45 x 45 [1.77 x 2.78] ø60 [2.36]	-15 ... +50 [+5... +122]	IP65	AC/DC	cULus
Timers for DIN rail mounting															
 **AH57** DIN format 48 x 48 mm [1.89 x 1.89"]	–	•	–	–	–	–	•	–	7 / 8	48.5 x 61.5 [1.91 x 2.40]	–	-15 ... +50 [+5... +122]	IP65	AC/DC	cULus
 **SHK07.1** high shock resistance	–	•	–	–	–	–	•	–	7	30 x 65 [1.18 x 2.56]	–	-10 ... +60 [+14 ... +140]	IP52	AC/DC	–
 **SH17** 36 mm wide	–	•	–	–	–	–	•	–	7	36 x 90 [1.42 x 3.54]	–	-10 ... +70 [+14 ... +158]	IP65	AC/DC	–
Timers, round design															
 **HR47** opt. run indicator	–	•	–	•	–	–	–	–	7	ø58 [2.28]	ø50 [1.31]	-25 ... +80 [-13 ... +176]	IP65	AC/DC	–
 **HR76** high shock resistance	–	•	–	•	–	–	–	–	6	from ø58.7 [2.31]	ø50.8 [2.00]	-30 ... +65 [-22 ... +149]	IP65	AC/DC	cULus
Robust timers															
 **HB26** plug-in version, long service life	–	•	–	•	–	–	•[1]	manual	6	from 50 x 25 [1.97 x 0.98]	50 x 25 [1.31 x 0.87]	-15 ... +50 [+5... +122]	IP41	AC/DC	–
 **HB27** long service life	–	•	–	•	–	–	•[1]	–	7	from 50 x 25 [1.97 x 0.98]	50 x 25 [1.31 x 0.87]	-15 ... +50 [+5... +122]	IP51	AC/DC	–
Dual function counters															
 **HC77** combination hour meter and totalizer	•	•	–	•	–	–	–	–	2 x 7	from 48 x 48 [1.89 x 1.89]	45 x 45 [1.77 x 2.78] ø50.5 [1.99]	-15 ... +50 [+5... +122]	IP65	AC/DC	cULus
 **SHC77** combination hour meter and totalizer	•	•	–	–	–	–	•	–	2 x 7	48.5 x 61.5 [1.91 x 2.40]	–	-15 ... +50 [+5... +122]	IP52	AC/DC	cULus
 **HW66M** combination hour meter and energy meter	–	•	•	•	–	–	•[1]	–	2 x 6	from 48 x 48 [1.89 x 1.89]	45 x 45 [1.77 x 2.78] ø50 [1.97]	-10 ... +55 [+14 ... +131]	IP65	AC	MID

1) With mounting frame.

Time preset counters electronic

	Pulse	Time	Frequency	Tachometer	Position	Serial interface (SI) Fieldbus (FB)	Presets: o = optocoupler; r = relay	Reset manual	Reset electrical	Programmable	Display	Number of digits	Dimensions front in mm	Panel cut-out in mm	Depth in mm	Temperature range in °C	Protection max.	Power supply	Approvals
LCD time preset counters																			
 **Codix 145** service timer h, min, sec oder hh.mm.ss	–	•	–	–	–	IO-Link	1 o	•	•	•	LCD	7	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-20...+65 [-4 ... +149]	IP65	DC	–
 **901** 1 preset – pulse, time (battery)	•	•	–	–	–	–	1r	•	•	•	LCD	2x6	48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77]	63.2 [2.49]	-20...+65 [-4 ... +149]	IP65	batt.	c UL us
 **Codix 907 / 908** multicolor display (optional), decade keyboard, count frequency 5 kHz	•	•	–	–	•	–	1r 2r	•	•	•	LCD/ LED Look	2x6	48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77]	91 [3.58]	-10...+50 [+14 ... +122]	IP65	AC/DC	–
 **Codix 923 / 924** multicolor display (optional), decade keyboard, count frequency 65 kHz	•	•	•	•	•	–	up to 4r 6o	•	•	•	LCD/ LED Look	2x6	48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77]	91 [3.58]	-20...+65 [-4 ... +149]	IP65	AC/DC	c UL us
LED time preset counter																			
 **Codix 560** LED multifunction preset counters, 14 segment LED, automatic help texts, opt. serial interface	•	•	•	•	•	SI FB	2r	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	91 [3.58]	-20...+65 [-4 ... +149]	IP65	AC/DC	c UL us
LCD touch time preset counter																			
 **571T** multifunctional (also reciprocal) analog output, serial interface	•	•	•	•	•	SI FB	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20...+60 [-4 ... +140]	IP65	AC/DC	–

1) With mounting frame G300003 or DIN rail mount G300002.

Frequency displays
Tachometers

		Pulse	Time	Frequency	Tachometer	Position	Serial interface (SI) Fieldbus (FB)	Presets: o = optocoupler, r = relay	Reset manual	Reset electrical	Programmable	Display	Number of digits	Dimensions front in mm [inch]	Panel cut-out in mm [inch]	Depth in mm [inch]	Temperature range in °C [°F]	Protection max.	Power supply	Approvals
LCD frequency display																				
	**Codix 136** in Hz	–	–	•	•	–	–	–	–	–	–	LCD	8	48 x 24 [1.89 x 0.94]	45 x 22.2 [1.77 x 0.87]	47.7 [1.88]	-10 ... +60 [+14 ... +140]	IP65	batt.	cULus
LED frequency displays																				
	**Codix 522** 1/sec or 1/min	–	–	•	•	–	–	1o	•	•	•	LED	6	48 x 24 [1.89 x 0.94]	45 x 22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
	Codix 524 multifunctional	•	•	•	•	•	–	1o	•	•	•	LED	6	48 x 24 [1.89 x 0.94]	45 x 22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
	Codix 52U with dual functions in 4 combinations	•	•	•	•	–	–	–	•	•	•	LED	6	48 x 24 [1.89 x 0.94]	45 x 22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
	Codix 52P + Frequency 6 count modes	•	–	•	•	•	–	–	•	•	•	LED	6	48 x 24 [1.89 x 0.94]	45 x 22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
	**Codix 542** 1/sec or 1/min	–	–	•	•	–	–	1o	•	•	•	LED	6	96 x 48 [3.78 x 1.89]	92 x 45 [3.62 x 1.77]	83 [3.27]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
	Codix 544 multifunctional	•	•	•	•	•	–	1o	•	•	•	LED	6	96 x 48 [3.78 x 1.89]	92 x 45 [3.62 x 1.77]	83 [3.27]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
	Codix 54U with dual functions in 4 combinations	•	•	•	•	–	–	–	•	•	•	LED	6	96 x 48 [3.78 x 1.89]	92 x 45 [3.62 x 1.77]	83 [3.27]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
	Codix 54P + Frequency 6 count modes	•	–	•	•	•	–	–	•	•	•	LED	6	96 x 48 [3.78 x 1.89]	92 x 45 [3.62 x 1.77]	83 [3.27]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
LCD touch frequency displays																				
	**570T** SSI absolute encoder display, analog output, serial interface	–	–	•	•	•	SI FB	4o 2r	•	•	•	LCD touch 3 color	8	96 x 48 [3.78 x 1.89]	92 x 45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–
	**571T** multifunctional (also reciprocal) analog output, serial interface	•	•	•	•	•	SI FB	4o 2r	•	•	•	LCD touch 3 color	8	96 x 48 [3.78 x 1.89]	92 x 45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–

Frequency displays Tachometers with limits

	Pulse	Time	Frequency	Tachometer	Position	Serial interface (SI) Fieldbus (FB)	Presets: o = optocoupler; r = relay	Reset manual	Reset electrical	Programmable	Display	Number of digits	Dimensions front in mm	Panel cut-out in mm	Depth in mm	Temperature range in °C	Protection max.	Power supply	Approvals
LCD tachometer (with multicolor, LED look)																			
 **Codix 923 / 924** multicolor display, decade keyboard, count frequency 65 kHz	•	•	•	•	•	–	up to 4r 6o	•	•	•	LCD/ LED Look	2x6	48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77]	91 [3.58]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
LED tachometers with limits																			
 **Codix 560** LED multifunction preset counters, 14 segment LED, automatic help texts, opt. serial interface	•	•	•	•	•	SI FB	2r	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	91 [3.58]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
LCD touch tachometers with limits																			
 **570T** SSI absolute encoder display, analog output, serial interface	–	–	•	•	•	SI FB	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–
 **571T** multifunctional (also reciprocal) analog output, serial interface	•	•	•	•	•	SI FB	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–

Position displays

	Pulse	Time	Frequency	Tachometer	Position (incremental = i; SSI = s; a = analog)	Serial interface (SI) Fieldbus (FB)	Presets: o = optocoupler; r = relay	Reset manual	Reset electrical	Programmable	Display	Number of digits	Dimensions front in mm	Panel cut-out in mm	Depth in mm	Temperature range in °C	Protection max.	Power supply	Approvals
LCD position display																			
 **Codix 133** phase discriminator (quadrature) x1 and x2 evaluation	–	–	–	–	i	–	–	•	•	–	LCD	8	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	47.7 [1.88]	-10 ... +60 [+14 ... +140]	IP65	batt.	cULus
LED position displays																			
 **Codix 521** 6 count modes	•	–	–	–	i	–	1o	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
Codix 524 multifunctional	•	•	•	•	i	–	1o	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
Codix 52P + Frequency 6 count modes	•	–	•	•	i	–	–	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
 **Codix 541** 6 count modes	•	–	–	–	i	–	1o	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
Codix 544 multifunctional	•	•	•	•	i	–	1o	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
Codix 54P + Frequency 6 count modes	•	–	•	•	i	–	–	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
LCD touch SSI position displays																			
 **570T** SSI absolute encoder display, analog output, serial interface	–	–	•	•	s	SI FB	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–
 **571T** multifunctional (also reciprocal) analog output, serial interface	•	•	•	•	i	SI FB	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–
new  **573T IO-Link** 2 inputs (analog) 4 limit values, analog output, serial interface	–	–	•	•	a	SI FB IO-Link	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–

Position displays with limits

	Pulse	Time	Frequency	Tachometer	Position (incremental = i; SSI = s; a = analog)	Serial interface (SI) Fieldbus (FB)	Presets: o = optocoupler; r = relay	Reset manual	Reset electrical	Programmable	Display	Number of digits	Dimensions front in mm	Panel cut-out in mm	Depth in mm	Temperature range in °C	Protection max.	Power supply	Approvals
LCD position preset counters (optional with multicolor, LED look)																			
 **Codix 907 / 908** multicolor display (optional), decade keyboard, count frequency 5 kHz	•	•	–	–	i	–	1r 2r	•	•	•	LCD/ LED Look	2x6	48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77]	91 [3.58]	-10 ... +50 [+14 ... +122]	IP65	AC/DC	–
 **Codix 923 / 924** multicolor display (optional), decade keyboard, count frequency 65 kHz	•	•	•	•	i	–	up to 4r 6o	•	•	•	LCD/ LED Look	2x6	48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77]	91 [3.58]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
LED touch position preset counters																			
 **Codix 560** LED multifunction preset counters, 14 segment LED, automatic help texts, opt. serial interface	•	•	•	•	i	SI FB	2r	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	91 [3.58]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus
LCD touch position preset counters																			
 **570T** SSI absolute encoder display, analog output, serial interface	–	–	•	•	s	SI FB	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–
 **571T** multifunctional (also reciprocal) analog output, serial interface	•	•	•	•	i	SI FB	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–
new  **573T IO-Link** 2 inputs (analog) 4 limit values, analog output, serial interface	–	–	•	•	a	SI FB IO-Link	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–

Multifunction devices electronic

	Pulse	Time	Frequency	Tachometer	Position	Serial interface (SI) Fieldbus (FB)	Presets: o = optocoupler; r = relay	Reset manual	Reset electrical	Programmable	Display	Number of digits	Dimensions front in mm	Panel cut-out in mm	Depth in mm	Temperature range in °C	Protection max.	Power supply	Approvals
LED multifunction displays																			
 **Codix 524** multifunctional	•	•	•	•	•	–	1_o	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20...+65 [-4 ... +149]	IP65	DC	c UL us
 **Codix 544** multifunctional	•	•	•	•	•	–	1_o	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20...+65 [-4 ... +149]	IP65	AC/DC	c UL us
LCD multifunction preset counters																			
 **901** 1 preset – pulse, time (battery)	•	•	–	–	–	–	1_r	•	•	•	LCD	2x6	48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77]	63.2 [2.49]	-20...+65 [-4 ... +149]	IP65	batt.	c UL us
 **Codix 907 / 908** multicolor display (optional), decade keyboard, count frequency 5 kHz	•	•	–	–	•	–	1_r 2_r	•	•	•	LCD/ LED Look	2x6	48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77]	91 [3.58]	-10...+50 [+14 ... +122]	IP65	AC/DC	–
 **Codix 923 / 924** multicolor display (optional), decade keyboard, count frequency 65 kHz	•	•	•	•	•	–	up to 4_r 6_o	•	•	•	LCD/ LED Look	2x6	48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77]	91 [3.58]	-20...+65 [-4 ... +149]	IP65	AC/DC	c UL us
LED multifunction preset counter																			
 **Codix 560** LED multifunction preset counters, 14 segment LED, automatic help texts, opt. serial interface	•	•	•	•	•	SI FB	2r	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	91 [3.58]	-20...+65 [-4 ... +149]	IP65	AC/DC	c UL us
LCD touch multifunction preset counter																			
 **571T** multifunctional (also reciprocal) analog output, serial interface	•	•	•	•	•	SI FB	4o 2r	•	•	•	LCD touch 3 color	8	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–
LED dual function displays																			
 **Codix 52U** with dual functions in 4 combinations	•	•	•	•	–	–	–	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20...+65 [-4 ... +149]	IP65	DC	c UL us
Codix 52P + Frequency 6 count modes	•	–	•	•	•	–	–	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20...+65 [-4 ... +149]	IP65	DC	c UL us
Codix 52T 2 counters with separate scaling	•	–	–	–	–	–	–	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20...+65 [-4 ... +149]	IP65	DC	c UL us
Codix 52C 2 counters with separate inputs and separate scaling	•	–	–	–	–	–	–	•	•	•	LED	6	48x24 [1.89 x 0.94]	45x22.2 [1.77 x 0.87]	59 [2.32]	-20...+65 [-4 ... +149]	IP65	DC	c UL us
 **Codix 54U** with dual functions in 4 combinations	•	•	•	•	–	–	–	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20...+65 [-4 ... +149]	IP65	AC/DC	c UL us
Codix 54P + Frequency 6 count modes	•	–	•	•	•	–	–	•	•	•	LED	6	96x48 [3.78 x 1.89]	92x45 [3.62 x 1.77]	83 [3.27]	-20...+65 [-4 ... +149]	IP65	AC/DC	c UL us

Multifunction devices electromechanical

	Pulse	Time	kWh	Panel mounting	PCB mounting	Base mounting	DIN rail mounting	Reset	Number of digits	Dimensions in mm [inch]	Panel cut-out in mm [inch] (for front panel version)	Temperature range in °C [°F]	Protection max.	Supply type	Approvals
 **HC77** combination hour meter and totalizer	•	•	–	•	–	–	–	–	2x7	from 48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77] ø50.5 [1.99]	-15 ... +50 [+5... +122]	IP65	AC/DC	cULus
 **SHC77** combination hour meter and totalizer	•	•	–	–	–	–	•	–	2x7	48.5x61.5 [1.91 x 2.42]	–	-15 ... +50 [+5... +122]	IP52	AC/DC	cULus

Energy meters

	Pulse	Time	kWh	Panel mounting	PCB mounting	Base mounting	DIN rail mounting	Reset	Number of digits	Dimensions in mm [inch]	Panel cut-out in mm [inch] (for front panel version)	Temperature range in °C [°F]	Protection max.	Supply type	Approvals
 **HW66M** combination hour meter and energy meter	–	•	•	•	–	–	• [1]	–	2x6	from 48x48 [1.89 x 1.89]	45x45 [1.77 x 1.77] ø50 [1.97]	-10 ... +55 [+14 ... +131]	IP65	AC	**MID**

1) With mounting frame.

Process devices

The right solution for any conceivable application.
Discover the variety of electronic process devices from Kübler. These are used reliably worldwide in various applications for the acquisition and control of standard signals, measured temperature values, or the monitoring of measured pressure and weight values. Maximum flexibility: scalable or linear display, multicolor, or modern touch displays are available for you. Kübler process devices stand for highest quality, optimum readability, and long service life.
You, too, can count with us – count on Kübler.

kuebler.com/process-devices

Find the right Kübler accessories

Adapter front bezel

Sealing cover, transparent cover

Front bezel, mounting frame

Socket boxes, DIN rail mount

Gaskets

Further accessories such a parameterization software, enclosure blind, terminal cover, base-mount socket, mounting support, adapter and anti-vibration set

Enter order code and find accessories:
kuebler.com/accessories

Process displays
Process controllers

		Standard signal 0...20; 4...20 mA	Standard signal 0...10; 2...10 V	Standard signal ± 10 V	Serial interface (SI) Fieldbus (FB)	Input characteristic curve S = control points	Presets / limit values o = optocoupler; r = relay	Analog output	Display	Number of digits	Dimensions front in mm	Depth in mm	Temperature range in °C	Protection max.	Power supply	Approvals
LED process display																
	**Codix 534** Min / Max value detection with totalizer	•	•	–	–	linear	–	–	LED	5	48 x 24 [1.89 x 0.94]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	
LED process controller																
	**Codix 565** **standard input signal** Min / Max value detection 2 limit values with totalizer, tare, analog output	•	•	•	–	12 S	2 r	•	LED	6	96 x 48 [3.78 x 1.89]	90.5 [3.56]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	
LCD touch process controller																
new 	**573T IO-Link** 2 inputs 4 limit values, analog output, serial interface	•	•	•	SI FB IO-Link	24 S	4 o 2 r	•	LCD touch 3 color	8	96 x 48 [3.78 x 1.89]	120 [4.72]	-20 ... +60 [-4 ... +140]	IP65	AC/DC	–

Setpoint adjusters

		Display	Number of digits	Dimensions front in mm	Depth in mm	Temperature range in °C	Protection max.	Power supply	Approvals
LED setpoint adjuster									
	**Codix 533** setpoint adjuster 0...12 V output 0...24 mA output manual or time-based operation	LED	4	48 x 24 [1.89 x 0.94]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	

Temperature displays
Temperature controllers

		Temperature **Thermocouples**	Temperature **Resistance thermometers (RTDs)**	**mV/V sensors / strain gauge input**	**Input characteristic curve** S = control points	**Presets / limit values** o = optocoupler; r = relay	**Analog output**	**Display**	**Number of digits**	**Dimensions front** in mm [inch]	**Depth** in mm [inch]	**Temperature range** in °C [°F]	**Protection** max.	**Power supply**	**Approvals**
LED temperature displays															
	**Codix 531** Min / Max value detection	–	Pt100 Ni100	–	–	–	–	LED	5	48 x 24 [1.89 x 0.94]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
	**Codix 532** Min / Max value detection	J; K; N	–	–	–	–	–	LED	5	48 x 24 [1.89 x 0.94]	59 [2.32]	-20 ... +65 [-4 ... +149]	IP65	DC	cULus
LED temperature controller															
	**Codix 564** Min / Max value detection, 2 limit values, analog output	B; E; J; K; N; R; S; T	Pt100 0...500 Ω	±100 mV	12 S	2 r	•	LED	6	96 x 48 [3.78 x 1.89]	90.5 [3.56]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	cULus

Strain-Gauge controllers

		mV/V sensors / strain gauge input	**Input characteristic curve** S = control points	**Presets / limit values** o = optocoupler; r = relay	**Analog output**	**Display**	**Number of digits**	**Dimensions front** in mm [inch]	**Depth** in mm [inch]	**Temperature range** in °C [°F]	**Protection** max.	**Power supply**	**Approvals**
LED strain-gauge controller													
	**Codix 566** Min / Max value detection, 2 limit values with totalizer, tare, analog output	1.0 1.5 2.0 3.0 3.3 mV/V	12 S	2 r	•	LED	6	96 x 48 [3.78 x 1.89]	90.5 [3.56]	-20 ... +65 [-4 ... +149]	IP65	AC/DC	c UL us

Safe speed monitors

Reliable and safe speed monitoring.
The compact base module of the Safety-M compact series is a complete speed monitor in the smallest possible space (50 mm wide). The detachable operating and diagnostic display (OLED) stands for simple parameterization. The safe inputs/outputs and integrated signal splitter allow integration into existing safety circuits and upgrade of old machines.

kuebler.com/safe-speed-monitors

Reliable individual components alone do not lead to a reliable overall application.
A reliable speed monitor and the corresponding reliable sensor technology are required for a reliable connection from the motor to the control unit. Kübler offers SIL2 and SIL3 certified encoders for both incremental and absolute measurements (see page 10+13).
kuebler.com/functional-safety

Find the right Kübler accessories

Display and programming unit

Programming cable, set

EMC shield terminal for encoder cable

Cordset pre-assembled

Parameterization software SafeConfig

Enter order code and find accessories:
kuebler.com/accessories

Safety modules
Safety-M compact

		Monitoring - number of axes	Encoder systems	Safe digital input lines	Signal splitter / USB programming interface	Relay output lines	Safe digitale output lines	Analog output lines	Encoder interface	Power supply in VDC	Module width in mm [inch]	Approvals
	Speed monitoring 1 axis / 1 encoder system **SMC1.1**	1	1	4/2	1	1	8 / 4	1 opt.	SinCos	24	50 [1.97]	SIL3 PLe
	Speed monitoring 1 axis / 2 encoder systems **SMC2.2**	1	2	4/2	1	1	8 / 4	1 opt.	HTL/TTL/ SinCos	24	50 [1.97]	SIL3 PLe
	Speed monitoring 1 axis / 1 encoder system **SMC1.3**	1	1	8/4	1	2	8 / 4	1 opt.	HTL/TTL	24	50 [1.97]	SIL2 PLd
	Speed monitoring 1 axis / 2 encoder systems **SMC2.4**	1	2	8/4	1	2	8 / 4	1 opt.	HTL/TTL	24	50 [1.97]	SIL3 PLe

Signal lights and signal towers

Designing industrial processes safely. Increase plant availability.
In industry, where every minute counts, reliable signaling is essential. Illuminated signs, light signal towers, traffic lights and audible alarms are crucial for the safety of employees and the availability of systems. They ensure clear communication and enable quick reactions to changing operating conditions. This minimizes downtimes, increases productivity and contributes to sustainable production. Rely on these technologies to ensure smooth operation, increase employee satisfaction and optimize efficiency in your company.

kuebler.com/signal-tower-lights

Find the right Kübler accessories

Mounting bracket

Y-distributor

IO-Link master

Enter order code and find accessories:
kuebler.com/accessories

Signal lights and signal towers

		Diameter [mm]	Height [mm]	Light source	Light image	Without siren	With siren (Sound volume)	IO-Link	Temperature range in °C [°F]	Protection max.	Type of connection	Approvals
Signal lights												
new 	**SL35** Mounting via M22 thread	35	64	LED Multicolor	Permanent light	•	• (85 dpi)	–	-20 ... +50 [-4 ... +122]	IP65/ IP69k	M12	cULus
new 	**SL55** Mounting via M30 thread	55	82	LED Multicolor	Permanent light	•	• (85 dpi)	–	-20 ... +50 [-4 ... +122]	IP65/ IP69k	M12	cULus
Signal towers												
new 	**ST40** Single-hole or floor mounting	40	235 or 265	LED green, yellow, red	Permanent light, flashing	•	• (85 dpi)	•	-30 ... +60 [-22 ... +140]	IP66/ IP69k	Push-in terminals	–

KÜBLER WORLDWIDE

600 EMPLOYEES · 4 PRODUCTION SITES · PRESENCE IN OVER 50 COUNTRIES

EUROPE AUSTRIA · BELGIUM · BULGARIA · CROATIA · CZECH REPUBLIC · DENMARK · ESTONIA · FINLAND · FRANCE · GERMANY · GREAT BRITAIN · GREECE · HUNGARY · ICELAND · IRELAND · LITHUANIA · ITALY · NETHERLANDS · NORWAY · POLAND · PORTUGAL · SLOVAKIA · SLOVENIA · SPAIN · SWEDEN · SWITZERLAND · TURKEY · UKRAINE
AFRICA ÄGYPT · MOROCCO · SOUTH AFRICA · TUNISIA **NORTH AND SOUTH AMERICA** ARGENTINA · BRAZIL · CANADA · MEXICO · PERU · U.S.A.
OCEANIA AUSTRALIA · NEW ZEALAND **ASIA** CHINA · HONG KONG, CHINA · INDIA · INDONESIA · ISRAEL · LEBANON · MALAYSIA · PHILIPPINES · SINGAPORE · SOUTH KOREA · TAIWAN, CHINA · THAILAND · UNITED ARAB EMIRATES · VIETNAM

KÜBLER GROUP

- FRITZ KÜBLER GMBH
- FRITZ KÜBLER SARL
- KÜBLER ITALIA S.R.L.
- KÜBLER ÖSTERREICH
- KÜBLER SP. Z.O.O.
- KÜBLER TURKEY OTOMASYON TICARET LTD. STI.
- KÜBLER INC.
- KÜBLER AUTOMATION INDIA PVT. LTD.
- KUEBLER (BEIJING) AUTOMATION TRADING CO. LTD.
- KUEBLER KOREA (BY F&B)
- KÜBLER AUTOMATION SOUTH EAST ASIA SDN. BHD.
- KUEBLER PTY LTD

Kübler Group
Fritz Kübler GmbH
Schubertstrasse 47
78054 Villingen-Schwenningen
Germany

Phone +49 7720 3903-0
Fax +49 7720 21564
info@kuebler.com

kuebler.com

Art. D000086882 | Edition 05/2025