

Counting Technology Counters, Timers, Tachometers

- **Display counters** electronic, electromechanical and pneumatic
- **Preset counters** electronic and electromechanical
- **Timers** electronic and electromechanical
- **Time Preset Counters**
- **Time relays**
- **Tachometers** electronic
- **Tachometer with Limits**
- **Position displays**
- **Accessories**



Electromechanical Microcounters



Version	Micro	Micro	Micro	Micro
Series	K 46/K 47	K 66/K 67	K 04/K 05/AK 05	K 06/K 07/AK 07
Special features	Shock resistant miniature counters, low power consumption, various models, e.g. for panel-, PCB and base mounting. Suitable for soldering and wash-down (IP 65). For kWh applications, medical equipment, alarm systems, battery-powered units, fuel pumps ...			
Technical data	High shock resistance	100% resistant to shock and magnetic fields	High shock resistance	High shock resistance
Number of digits	6/7	6/7	4/5	6/7
Digit height, visible [mm]	1,7 x 4/1,2 x 4	1,7 x 4/1,2 x 4	1,7 x 4/ 1,2 x 4	1,7 x 4/1,2 x 4
Panel cut-out [mm]	e.g. 27 x 14	e.g. 27x 14	e.g. 24 x 13	e.g. 30 x 13
Viewing angle	variable	variable	variable	variable
Type of mounting	Panel/PCB mount	Panel/PCB mount	Panel/base mount, PCB	Panel/base mount, PCB
Max. Protection	up to IP65	up to IP65	up to IP65	up to IP65
Pulse voltage min/max. [V DC]	1.5 / 24	1.5 / 24	3 / 24	3 / 24
	[V AC]	–	24 / 230	24 / 230
Max. count frequency [Hz]	10	10	25	25
Min. power consumption [mW]	70	70	50	50

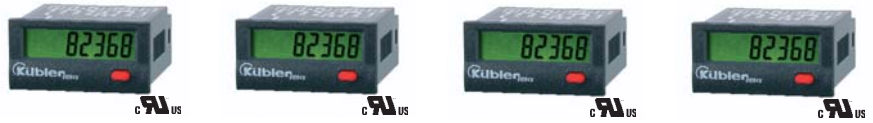
Electromechanical Standardcounters



Version	DIN-Rail	Miniature	Industry standard	Cyclometer display for Energy meters
Series	SK 07	W 15/W 16/W 17	B 15/B 16/B 18	KWH 17
Special features	Pulse counter for DIN rail mounting, high shock resistance	Miniature pulse counter for OEM applications. Various housing sizes and mounting options	Industry standard, plug-in versions	Stepper motor driven* for mounting in kWh meters, shielded against magnetic effects, low power consumption
Technical data				
Number of digits	7	5/6/7	5/6/8	7
Reset	–	yes/no/no	yes/yes/no	no
Digit height, visible [mm]	1,2 x 4	1,7 x 4	2 x 4,5/2 x 4,4/2 x 4	5 x 3
Panel cut-out [mm]	–	45 x 22 / 31 x 20	50 x 25	–
Viewing angle	front	front, top	front	front
Type of mounting	DIN rail	Panel/base mount ,PCB	Panel mount	PCB
Max. Protection	IP 50 front side	–	–	–
Pulse voltage min/max. [V DC]	12/24	12/24	12/24	5/10
	[V AC]	24/230	24/230	–
Max. count frequency [Hz]	25	10	25	–
Min. power consumption [mW]	50	130/50/50	1000	25

* Temperature range
–40 ... +90 °C

Display counters **CODIX 13X**



Version	LCD-Panel mount	LCD-Panel mount	LCD-Panel mount	LCD-Panel mount
Series	CODIX 130	CODIX 131	CODIX 132	CODIX 133
Special features	Low-cost compact LCD counter, battery-powered (service life > 8 years), count inputs for mechanical contacts or AC/DC voltage pulses. All models have screw terminals (5 mm raster), optional backlighting, high count speeds, customized versions possible.			
Function				
Totaliser	yes	yes	–	–
Differential/ up-down counter*	–	yes	–	–
Up/down counter	–	–	yes	–
Position display	–	–	–	yes
Technical data				
Number of digits	8	8	8	8
Reset	manual/electric	manual/electric	manual/electric	manual/electric
Digit height [mm]	8	8	8	8
Protection max.	IP 65 front	IP 65 front	IP 65 front	IP 65 front
Dimensions [mm]	DIN 48 x 24	DIN 48 x 24	DIN 48 x 24	DIN 48 x 24
Panel cut-out [mm]	45 x 22	45 x 22	45 x 22	45 x 22
Max. count frequency [Hz]	12 000	12 000	30	6 000
Power supply	Lithium-Battery	Lithium-Battery	Lithium-Battery	Lithium-Battery
Count inputs	NPN/PNP 10 ... 260 V AC/DC	NPN/PNP 10 ... 260 V AC/DC	10 ... 260 V AC/DC	NPN/PNP

* with count direction input

Display counters and multifunction displays **CODIX 52X**



Version	LED Panel mount	LED Panel mount	LED Panel mount	LED Panel mount
Series	CODIX 520 New*	CODIX 521...524 New*	CODIX 52P New*	CODIX 52U New*
Special features	A re-design and new models expand the field of applications for these compact, powerful LED counters, tachometers and timers. 60 kHz count frequency makes it possible to use these products with encoders, even at high speeds.			
Function			52P Position display and tachometer/frequency display	52U Multifunction device with dual functions
Pulse counter	yes	CODIX 521/524	–	2 pulse counters, pulse counter and timer, pulse and frequency counter or 2 timers.
Position display for encoders	–	CODIX 521/524	yes**	
Frequency meter/ Tachometer	–	CODIX 522/524	yes**	
Timer	–	CODIX 523/524	–	
Technical data				
Number of digits	6	6	6	6
Reset	manual/electric	manual/electric	manual/electric	manual/electric
Digit height, visible [mm]	8	8	8	8
Dimension [mm]	DIN 48 x 24	DIN 48 x 24	DIN 48 x 24	DIN 48 x 24
Panel cut-out [mm]	45 x 22	45 x 22	45 x 22	45 x 22
Max. Protection	IP 65 front	IP 65 front	IP 65 front	IP 65 front
Max. count frequency [Hz]	60 000	60 000	30 000	60 000
Power supply [V DC]	10 ... 30	10 ... 30	10 ... 30	10 ... 30
Inputs	Schmitt-Trigger	Schmitt-Trigger	Schmitt-Trigger	Schmitt-Trigger
Outputs	–	optional: Optocoupler	–	–

**separate inputs for frequency and position

*available from May 2006

Display counters and multifunction displays **CODIX 54X**



Version Series Special features	LED-Panel mount CODIX 540 <i>New</i>	LED-Panel mount CODIX 541...544 <i>New</i>	LED-Panel mount CODIX 54P <i>New</i>	LED-Panel mount CODIX 54U <i>New</i>
Function	A re-design and new models expand the field of applications for these compact, powerful LED counters, tachometers and timers. 60 kHz count frequency makes it possible to use these products with encoders, even at high speeds.			
			54P Position display and tachometer/frequency display	54U Multifunction device with dual functions
Pulse counter	yes	CODIX 541/544	–	2 pulse counters, pulse counter and timer, pulse and frequency counter or 2 timers.
Position display for Encoders	–	CODIX 541/544	yes*	
Frequency meter/Tachometer	–	CODIX 542/544	yes*	
Time	–	CODIX 543/544	–	
Technical data				
Number of digits	6	6	6	6
Reset	manual/electric	manual/electric	manual/electric	manual/electric
Digit height [mm]	14	14	14	14
Dimensions [mm]	DIN 96 x 48	DIN 96 x 48	DIN 96 x 48	DIN 96 x 48
Panel cut-out [mm]	92 x 45	92 x 45	92 x 45	92 x 45
Protection:	IP 65 front side	IP 65 front side	IP 65 front side	IP 65 front side
Max. count frequency [Hz]	60 000	60 000	30 000	60 000
Supply voltage [V DC]	10 ... 30	10 ... 30	10 ... 30	10 ... 30
[V AC]	90 ... 260	90 ... 260	90 ... 260	90 ... 260
Inputs	Schmitt-Trigger	Schmitt-Trigger	Schmitt-Trigger	Schmitt-Trigger
Outputs	–	optional: Optocoupler	–	–

*separate inputs for frequency and position

Electronic count modules



Version Series Special features	LCD-Count module 190 <i>New</i>	LCD-Count module 192 <i>New</i>	LCD-Count modules 166/167/168	LCD-Count modules 180
Technical data	LCD panel mount module for OEM pulse counter applications such as portable test equipment (with or without battery supply), current consumption < 10 iA			
Number of digits	7	6	4/6/6	8
Count mode	add.	add.	add./add./add-sub.	add./sub.
Reset	electrical	electrical	electrical	manual/electrical
Height of figures [mm]	6	5	6	8
Dimensions [mm]	33 x 15	33 x 15	31 x 24	47 x 21
Panel cut-out [mm]	–	–	29,4 x 22	–
Type of mounting	PCB mount	PCB mount	Panel/PCB mount	Panel/PCB mount
Protection max.	–	–	IP 40	–
Max. count frequency [Hz]	10000	100	18/10 000/10 000	10 000
Power supply	4,75 ... 60 V DC	8 ... 28 V DC	Battery ¹⁾ 2.6 ... 3.4 V DC ²⁾	2.4 ... 3.2 V DC

¹⁾ 166 ²⁾ 167/168

Multifunction displays



Versions	LED Panel mount SSI display Type 570	LED Panel mount Multifunctional display Type 571
Series		
Special features	SSI-clock frequency up to 1 MHz, master or slave mode position display for absolute encoders	Fast count input for our LIMES system programmable: speed, rotational speed, count and timer functions
Technical data		
Number of digits	6	6
Height of figures [mm]	15	15
Panel cut-out [mm]	92 x 45	92 x 45
Protection	IP 65 front side	IP 65 front side
Max. count frequency [Hz]	1 MHz data freq.	100 kHz at count
Supply voltage [V DC]	17 ... 30 V DC	16 ... 35 V DC
[V AC]	115/230 V AC	115/230 V AC
Inputs	2	2
Outputs	Scaleable analogue output or optocoupler with trail signal or RS 232/485 interface	

Present counters multifunction

Codix 716/717 with serial interface and software EzControl



Versions	LCD Panel mount 901	LCD Panel mount 903/904 optional: backlit	LED Panel mount 715	LCD Panel mount CODIX 716/717 optional EX proof
Series				
Special features	Simple, low-cost, very easy to programme using decade keyboard, alternative to electromechanical counters	Multifunction preset counters as pulse counters, position indicators, frequency displays, preset timers or elapsed time meters. Programmable scaling function or various time ranges. Many operation and output modes. Plug-in screw terminals. Supplied with front gasket and fixing clips.		
Technical data				
Number of digits/display	6/LCD	6/LCD	5/LED	6/LED
Dimensions [mm]	DIN 48 x 48	DIN 48 x 48	DIN 48 x 48	DIN 48 x 48
Panel cut-out [mm]	45 x 45	45 x 45	45 x 45	45 x 45
Protection:	IP 65 front side	IP 65 front side	IP 65 front side	IP 65 front side
Max. count frequency [Hz]	25	10 000	10 000	20 000
Supply voltage [V DC]	Battery (8 Years)	10 ... 30	11 ... 30	10 ... 30
[V AC]	–	90 ... 250	115/230	90 ... 250
Preselection	1	903: 1, 904: 2	1	716: 1, 717: 2
Inputs	Relay	Relay or Optocoupler	Relay or Optocoupler	Relay or Optocoupler
Outputs	count, reset and program disable inputs 12 ... 250 V AC/DC	2 count inputs, gate, reset and program disable inputs.	Relay or Optocoupler count, gate, reset-, latch and key lock input	2 count inputs, gate- and mode input
Serial interface			–	optional R232/422/485

Preset counters multifunction/electromechanical



Versions	LED Panel mount Multifunction counter Type 571	electromechanical adding, panel mount Bva 15	Electromechanical, panel mount Mvs 13	Electromechanical, panel mount Mvs 16
Series				
Special features	Fast count input for our LIMES system programmable: counter and position indicator, speed, rotational speed, time functions and reciprocal speed	Preset changeable during operation, plug-in version available, easy to operate, various front plate sizes		
Technical data		adding	subtracting	subtracting
Number of digits	6	5	3	6
Height of figures [mm]	15	Counter 4,5,	4	4
Panel cut-out [mm]	92 x 45	50 x 50	50x33,3	50x50
Protection	IP 65 front side	–	–	–
Max. count frequency [Hz]	100 kHz at count	25	25	25
Supply voltage [V DC]	16 ... 35	24	24	24
[V AC]	115/230	24/115/230	24/115/230	24/115/230
Preselection	2	1	1	1
Outputs	Scaleable analogue output or 2 optocoupler outputs, programmable as limits or RS232 or 485 interface	Microswitch with changeover contact	Microswitch with changeover contact	Microswitch with changeover contact

Hour meter electromechanical



Version	Miniature	Miniature	Miniature/DIN-Rail	Panel mount
Series	HK 07	HK 46 / HK 47	AHK 07/SHK 07	HK 17
Special features	Shock resistant miniature hour meter for installation in control panels, on PCBs or for DIN-rail mounting. Various models, IP65 (PCB versions can be soldered and washed down). For applications in technical equipment (medical apparatus, UV-lamps) and in industrial applications.			Rugged miniature counter with synchro/stepper motor, various front plate sizes
Technical data				
Number of digits	7	6/7	7	7/8
Digit height, visible [mm]	1,2 x 4	1,7 x 4/ 1,25 x 4	1,2 x 4	1,7 x 3,8
Dimensions [mm]	32 x 15	30 x 20/ 30 x 34	45 x 14/ 30 x 75	33 x 22
Panel cut-out [mm]	30 x 13	27 x 14	–	–
Viewing angle	variable	variable	front	front
Type of mounting	Panel mount, PCB	Panel mount, PCB	Base mount/DIN rail	Panel mount
Protection	up to IP 65	IP 66	up to IP66	IP 65 front side
Typ. power consumption 5/24 V [mW]	82/135	82/135	82/135	0,5 W – 1,65 VA
Voltage ranges [V DC]	4 ... 35	4,5 ... 35	4 ...35	10 ... 130
[V AC]	–	–	20 ... 264 (SHK)	20 ... 440

Hour meter electromechanical



c US



c US



c US



Version	Panel mount	Panel mount	Panel mount	Panel mount
Series	H 37/H 37S	H 57/H 57S/AH 57	HR 76	HB 26 / 27
Special features	low cost, stepper-motor driven hour meters for panel/base mount. Quiet motor running even after >8 years thanks to special motor technology.			
Technical data		short panel mount depth, adapters for □ 55, □ 72 and ø72	Shock-resistant round hour meter, IP 65	with reset, plug-in version available HB 27 without reset
Number of digits	7/8	7/8	6	6/7
Time range	0.01 ... 99 999.99 h	0.01 ... 99 999.99 h	0.1 ... 99 999.9 h	0.01 ... (9) 9 999.99 h
Digit height, visible [mm]	1,7 x 4	1,7 x 4	1,8 x 3,5	4,5
Dimensions [mm]	DIN 48 x 24/53 x 28	DIN 48 x 48	ø 58.7 / 71.1	different versions
Panel cut-out [mm]	45 x 22/50 x 25	□ 46/ø 50,5	ø 50,5	50 x 25
Viewing angle	front	front	front	front
Type of mounting	Panel mount	Panel/base mount	Panel mount	Panel mount
Protection	IP 65 front side	IP 65 front side	IP 65 from all sides	IP 41 front side
Min. power consumption [W/VA]	0,5/1,2	0,5/1,2	0,08/0,4	0,5/1,2
Voltage ranges	[V DC]	10 ... 130/24 (S)	10 ... 80	10 ... 130
	[V AC]	20 ... 264/100 ... 264 (S)	20 ... 264/100 ... 264 (S)	115/230

*not for S-Line

Hour meter electromechanical



c US

Version	for DIN rail	Combination with hour meter and pulse counter HC 77/SHC 77	
Series	SH 17		
Special features	DIN rail hour meter, double module wide, with easy connection	Pulse and hours-run meter in one unit	
Technical data			
Number of digits hour meter	7	7	
Time range	0.01 ... 99 999.99 h	0.01 ... 99 999.99 h	
Number of digits adding counter	–	8	
Digit height, visible [mm]	1,5 x 3,5	1.7 x 4	
Panel cut-out [mm]	–	□ 46/ø 50,5	
Viewing angle	front	front	
Type of mounting	DIN rail	Panel mount, DIN rail	
Protection	IP 65 front side	IP 52 front side	
Min. power consumption [W/VA]	1/2,5	1/3	
Voltage ranges	[V DC]	10 ... 27	10 ... 130
	[V AC]	230	20 ... 264

Hour meter Electronic LCD



Version Series	LCD Panel mount CODIX 134	LCD Panel mount CODIX 135	LCD Count module 194 <i>New</i>	LCD Count module 198 <i>New</i>
Special features	Low cost, battery-powered LCD timer. Screw terminals. IP 65. Optional backlighting. Inputs: PNP, NPN or 10 ... 260 V AC/DC		PCB mount module with wide temperature range -40 ... +85°C, high shock resistance	PCB mount module with wide temperature range -40 ... +85°C, high shock resistance
Technical data				
Number of digits	7	8	6	6
Time range	0.01 h; h.min	h.min.s; 0.1s	9999-99 h	99999.9 h*
Digit height, visible [mm]	8	8	6	5
Dimension [mm]	DIN 48 x 24	DIN 48 x 24	ca. 32 x 19	ca. 32 x 19
Panel cut-out [mm]	45 x 22	45 x 22	-	-
Protection max.	IP 65 front side	IP 65 front side	-	-
Type of mounting	Panel mount	Panel mount	PCB mount	PCP mount
Voltage range [V DC]	Lithium Battery (service life >8 years)	Lithium Battery (service life >8 years)	4,75 ... 15/9-60	8-28

* with run indicator

Hour meter Electronic LED



Version Series	LED Panel mount CODIX 523/524 <i>New*</i>	LED Panel mount CODIX 52U <i>New*</i>	LED Panel mount CODIX 543/544 <i>New</i>	LED Panel mount CODIX 54U <i>New</i>
Special features	523: Time meter 524: multifunction timer, frequency meter, pulse counter or position display 523/524 with set function	New functions, dual functions as time counter and totaliser or 2 time counters or 2 impulse counters or tachometer and totaliser	543: Timer 544: Multifunction timer, frequency meter, pulse counter or position display 543/544 with set function	New functions, dual functions as time counter and totaliser or 2 time counters or 2 impulse counters or tachometer and totaliser
Technical data				
Number of digits	6	6	6	6
Time range	sec, min, h or hh.mm.ss	sec, min, h or hh.mm.ss	sec, min, h or hh.mm.ss	sec, min, h or hh.mm.ss
Digit height, visible [mm]	8	8	14	14
Dimensions [mm]	DIN 48 x 24	DIN 48 x 24	DIN 96 x 48	DIN 96 x 48
Panel cut-out [mm]	45 x 22	45 x 22	92 x 45	92 x 45
Protection max.	IP 65 front side	IP 65 front side	IP 65 front side	IP 65 front side
Type of mounting	Panel mount	Panel mount	Panel mount	Panel mount
Voltage range [V DC]	10 ... 30	10 ... 30	10 ... 30	10 ... 30
[V AC]			90 ... 260	90 ... 260

* available from May 2006

Time preset counter electronic

Codix 716/717 with serial interface and software EzControl



LCD Panel mount 903/904
opt.: back light

LED Panel mount 715

LCD Panel mount CODIX 716/717
optional EX proof

LED Panel mount Type 571
Multifunction display
run time monitoring

Multifunction preset counters as pulse counters, position indicators, frequency displays, preset timers or elapsed time meters. Programmable scaling function or various time ranges. Many operation and output modes. Plug-in screw terminals. Supplied with front gasket and fixing clips.

Technical data

Version Series				
Special features				
Number of digits/display	6/LCD	5/LED	6/LED	6/LED
Dimensions [mm]	DIN 48 x 48	DIN 48 x 48	DIN 48 x 48	DIN 96 x 48
Panel cut-out [mm]	45 x 45	45 x 45	45 x 45	92 x 45
Protection max.	IP 65 front side	IP 65 front side	IP 65 front side	IP 65 front side
Count frequency max. [Hz]	10 000	10 000	20 000	100 000 count mode
Power supply [V DC]	10 ... 30	11 ... 30	10 ... 30	16 ... 35
[V AC]	90 ... 260	115/230	90 ... 250	115/230
Preselection	903: 1, 904: 2	1	716: 1, 717: 2	2
Output	Relay or Optocoupler	Relay or Optocoupler	Relay	Scaleable analogue output or optocoupler with trail signal or RS 232/485 interface
Input	2 count inputs, gate, reset and key lock input	Count, gate, reset, latch and key lock input	2 count inputs, gate-and mode input	
Serial interface			optional R232/422/485	

Time preset counter electromechanical



electromechanical HVa 15

Low-cost preset counter for simple time measurement

Technical data

Version Series	
Special features	
Number of digits	5
Reset	manual
Digit height, [mm]	Count: 4,5; Preset: 4
Dimension [mm]	56 x 68 / 53 x 53
Panel cut-out [mm]	50 x 50
Protection max.	IP 42 front side
Time range	0,01h ... 999,99h
Power supply [V DC]	10 ... 130
[V AC]	20 ... 440
Preset	1
Outputs	Microswitch with changeover contact

Time relay/Timer



Time relay LCD 910

Can be used for ON/OFF Delay, clock-pulse generator, 3 control modes (level, edge, edge-trig.), thus 24 programmable operation are possible.

Number of digits	6
Reset	manual/electrical
Digit height, [mm]	6,5/3,5
Dimension [mm]	DIN 48 x 48
Panel cut-out [mm]	45 x 45
Protection max.	IP 65 front side
Time range	sec, min, h
Power supply	Replaceable lithium battery
Preset	1
Outputs	Relay

Tachometers



Version Series	LCD Panel mount CODIX 136	LED Panel mount CODIX 522/524 New*	LED Panel mount CODIX 52U New*	LED Panel mount CODIX 52P New*
Special features	easy to operate frequency indicator, direct display in Hz	522: Tachometer 524: Multifunction as tachometer, pulse counter, timer, position display	Higher count speeds, new functions, dual function also as tachometer and pulse counter	52P Position display and tachometer/frequency display
Technical data				
Number of digits	8	6	6	—
Digit height [mm]	8	8	8	yes**
Dimensions [mm]	DIN 48 x 24	DIN 48 x 24	DIN 48 x 24	yes**
Panel cut-out [mm]	45 x 22	45 x 22	45 x 22	—
Protection max.	IP 65 front side	IP 65 front side	IP 65 front side	
Max. Count frequency [kHz]	12	60	35	6
Measurement principle	Gate time	Gate or time interval	Gate or time interval	Gate or time interval
Measuring period or gate time	1/sec	1/sec or 1/min	1/sec or 1/min	8
Power supply [V DC] [V AC]	Lithium Battery	10 ... 30	10 ... 30	DIN 48 x 24 45 x 22
Input	NPN/PNP	Schmitt-Trigger	Schmitt-Trigger	IP 65 front 30 000 10 ... 30 Schmitt-Trigger —

* available from May 2006

**separate inputs for frequency and position

Tachometers / with limits



Version Series	LED Panel mount CODIX 542/544 New	LCD Panel mount CODIX 54U New	LED Panel mount CODIX 54P New	LCD Panel mount 903
Special features	Higher count speeds, new functions, dual function also as tachometer and pulse counter	Higher count speeds, new functions, dual function also as tachometer and pulse counter	Tachometer and position display with separate inputs	Multifunction as tachometer, timer and preset counter
Technical data				
Number of digits	6	6	6	6
Digit height [mm]	14	14	14	Count: 9, Preset: 7
Dimensions [mm]	DIN 96 x 48	DIN 96 x 48	DIN 96 x 48	DIN 48 x 48
Panel cut-out [mm]	92 x 45	92 x 45	92 x 45	45 x 45
Protection max.	IP 65 front side	IP 65 front side	IP 65 front side	IP 65 front side
Count frequency max. [kHz]	60	35	30	10
Measurement principle	Gate or time interval	Gate or time interval	Gate or time interval	Gate time
Measuring period or gate time	1/sec or 1/min	1/sec or 1/min	1/sec or 1/min	0,01 ... 99,99 sec
Power supply [V DC] [V AC]	10 ... 30 90 ... 260	10 ... 30 90 ... 260	10 ... 30 90 ... 260	10 ... 30 90 ... 250
Input/Output	Schmitt-Trigger	Schmitt-Trigger	Schmitt-Trigger	2 count inputs, gate-, reset- and key lock input/ 2 limits

Tachometer / with limits



Version Series	LCD Panel mount 904	LED Panel mount 715	LED Panel mount CODIX 716/717	LED Panel mount 571
Special features	Multifunction as tachometer, timer and preset counter	Multifunction as tachometer, timer and preset counter	Multifunction as tachometer, timer and preset counter	Multifunction as frequency display, frequency from run/operation time, position display or timer
Technical data			Optional: proof	
Number of digits	6	5	6	6
Digit height [mm]	Count: 9, Preset: 7	7,5	8	15
Dimensions [mm]	DIN 48 x 48	DIN 48 x 48	DIN 48 x 48	DIN 96 x 48
Panel cut-out [mm]	45 x 45	45 x 45	45 x 45	92 x 45
Protection max.	IP 65 front side	IP 65 front side	IP 65 front side	IP 65 front side
Count frequency max. [kHz]	10	10	20	25
Measurement principle	Gate time	Gate time	Time interval	Time interval
Measuring period or gate time	0,01 ... 99,99 sec	0,01 ... 99,99 sec	1/sec or 1/min	Programmable as required
Power supply [V DC]	10 ... 30	11 ... 30	10 ... 30	16 ... 35
[V AC]	90 ... 250	115/230	90 ... 250	115/230
Input/outputs	2 count inputs, gate-, reset- and key lock input/ 2 limits	Count, Gate, Reset, Latch- and Keylockinput/ 1 Relay output	2 count inputs, Gate, Reset and Keylock-input /2 limits as relay or optocoupler	2 count inp., Reset/ 2 Optocoupler or Analogue inputs or RS232/485 output

Position displays LCD/LED



Version Series	LCD Panel mount CODIX 133	LED Panel mount CODIX 521 <i>New*</i>	LED Panel mount CODIX 524 <i>New*</i>	LED Panel mount CODIX 52P <i>New*</i>
Special features	easy to operate position indicator; direct display of encoder impulses	Position indicator with multiplying and dividing factor, set value and faster speed	Combination device with position indicator, pulse counter, frequency meter and timer function	Position indicator and Tachometer with separate scalable inputs
Technical data				
Number of digits	8	6	6	6
Digit height [mm]	8	8	8	15
Dimensions [mm]	DIN 48 x 24	DIN 48 x 24	DIN 48 x 24	DIN 48 x 24
Panel cut-out [mm]	45 x 22	45 x 22	45 x 22	45 x 22
Protection max.	IP 65 front side	IP 65 front side	IP 65 front side	IP 65 front side
Count frequency max. [kHz]	6	25 (Quad mode)	25 (Quad mode)	15 (Quad mode)
Counting mode	Single and dual evaluation	Single, dual, quadruple evaluation direction or differential mode	Single, dual, quadruple evaluation direction or differential mode	Single, dual, quadruple evaluation direction or differential mode
Power supply [V DC]	Lithium battery	10 ... 30	10 ... 30	10 ... 30
[V AC]				
Input	NPN/PNP	Schmitt-Trigger NPN/PNP	Schmitt-Trigger NPN/PNP	Schmitt-Trigger NPN/PNP

* available from May 2006

Position displays LED



		Version Series	LED Panel mount CODIX 541 <i>New</i>	LED Panel mount CODIX 544 <i>New</i>	LED Panel mount CODIX 54P <i>New</i>
		Special features	Position indicator with multiplying and dividing factor, set value and faster speed	Combination device with position indicator, pulse counter, frequency meter and timer function	Position indicator and Tachometer with separate scalable inputs
		Technical data			
Number of digits			6	6	6
Digit height	[mm]		14	14	14
Dimensions	[mm]		DIN 96 x 48	DIN 96 x 48	DIN 96 x 48
Panel cut-out	[mm]		92 x 45	92 x 45	92 x 45
Protection max.			IP 65 front side	IP 65 front side	IP 65 front side
Count frequency max.	[kHz]		25 (Quad mode)	25 (Quad mode)	15 (Quad mode)
Counting mode			Single, dual, quadruple evaluation direction or differential mode	Single, dual, quadruple evaluation direction or differential mode	Single, dual, quadruple evaluation direction or differential mode
Power supply	[V DC]		10 ... 30	10 ... 30	10 ... 30
	[V AC]		90 ... 260	90 ... 260	90 ... 260
Input			Schmitt-Trigger NPN/PNP	Schmitt-Trigger NPN/PNP	Schmitt-Trigger NPN/PNP

Positioning multifunction displays



		Versions Series	LED Panel mount SSI display Type 570	LED Panel mount Multifunctional display Type 571
		Special features	SSI-clock frequency up to 1 MHz, master or slave mode position display for absolute encoders	Fast count input for our LIMES system programmable: speed, rotational speed, count and timer functions
		Technical data		
Number of digits			6	6
Height of figures	[mm]		15	15
Panel cut-out	[mm]		92 x 45	92 x 45
Protection			IP 65 front side	IP 65 front side
Max. count frequency	[Hz]		1 MHz data freq.	100 kHz at count
Supply voltage	[V DC]		17 ... 30 V DC	16 ... 35 V DC
	[V AC]		115/230 V AC	115/230 V AC
Inputs			2	2
Outputs			Scaleable analogue output or optocoupler with trail signal or RS 232/485 interface	

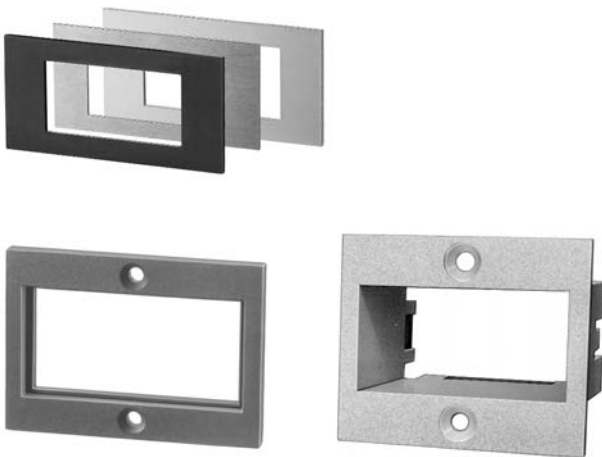
Accessories



Enclosure



Transparent cover with key lock



Bezel adapter



Slip-on bezel



Connection boxes

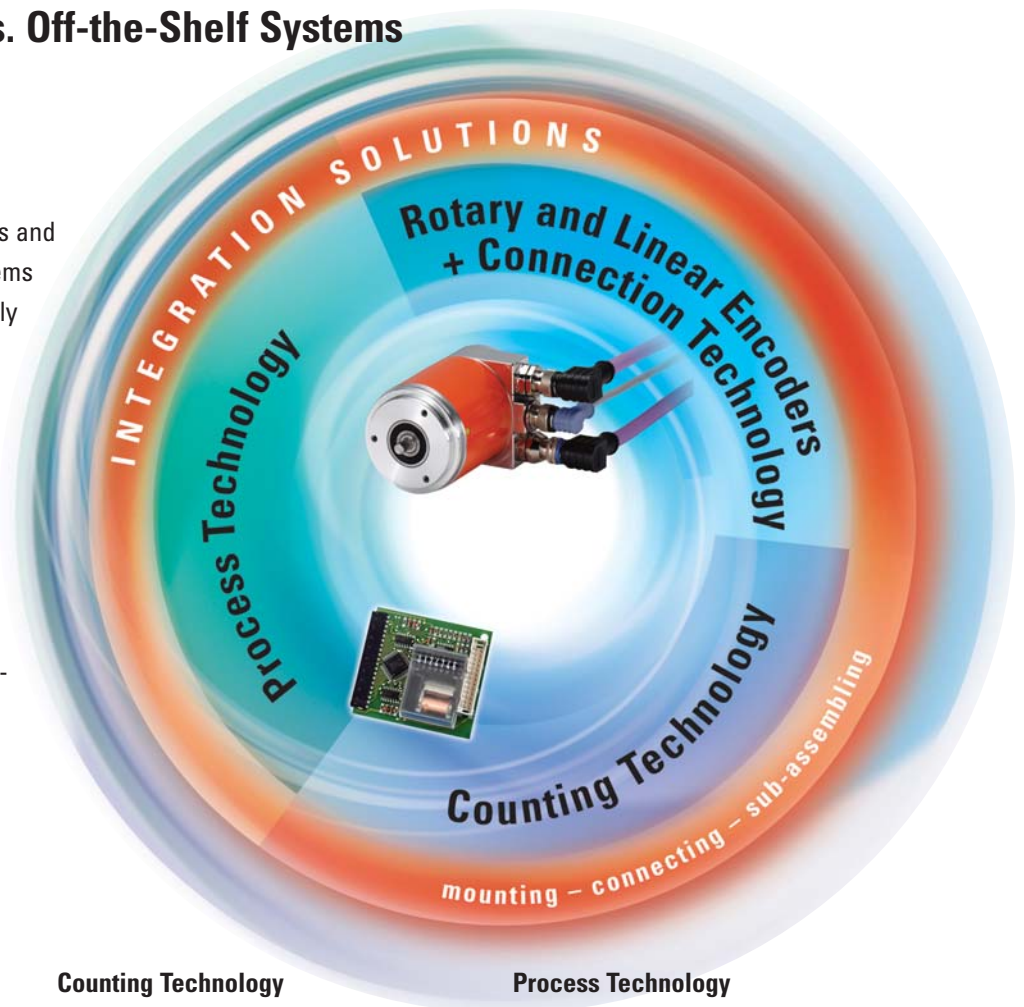


Software EzControl

Integrated Components. Off-the-Shelf Systems

Added value for our customers

We deliver not only individual devices and components, but also complete systems that the customer can integrate simply and quickly into his environment. This is why there is a wide choice of customized fixing solutions and connectors. In certain areas we have come up with specialized solutions, for example for geared motors, elevators or energy measurement. And everywhere you will find proficient friendly Kübler employees there to assist you, as we are at home everywhere in automation and instrument technology.



Encoders, Linear Measuring Systems, Connection Technology



From our incremental miniature encoder up to singleturn and multiturn encoders and a range of ATEX and Heavy Duty products. We offer all popular interfaces including field bus interfaces. Our patented Integrative Technology as well as our Intelligent Sensing Technology are setting new standards worldwide for reliability and space saving.

The linear range consists of magnetic sensors and draw-wire encoders.

Counting Technology



Our wide and diverse variety of electromechanical counters make them ideal for use as time/pulse counters for pumps, elevators, dryers, UV lamps etc. Our special area of expertise - miniature counters for PCB mounting, e.g. for kWh meters. Our simple to operate preset counters facilitate distributed control with reduced cycle times. Our **CODIX** series sets new standards for functional inexpensive electronic display counters, position indicators, timers and rate indicators.

Process Technology



Our user-friendly, compact and functionally well thought-out **CODIX** process displays and controllers are suitable for all linear and non-linear analogue signals. Our temperature displays and controllers offer a further choice of product applications. Our devices lend themselves either to mounting in a panel or on a DIN-rail.