

HENGSTLER Product Brochure

V2021JAN



17.1 Absolute encoder



17.2 Incremental encoder



17.3 Counters



17.4 Relays



17.5 Printers & Cutters

Hengstler is a leading European manufacturer of industrial components for counting and control applications.

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17.1 Absolute encoder



17.1.1 SHAFTED ENCODER



Selection parameters

Parameters	Min	Max
Solid Shaft dia	3 mm	12 mm
Hollow Shaft dia	4 mm	42 mm
Revolutions	1000 rpm	12000 rpm
Temperature	-40 °C	+120 °C

Industries it caters to

- Automation
- Elevator & Escalators
- Motor Feedback
- Oil & Gas
- Wind
- Offshore & Off Highway Vehicles

Technology:- optical

- 1.Terminal box w/ conduit entry 2.Bayonet connector 3. Cable 4. Cable w/ In-line connector 5. M12 Connector 6. M16 Connector 6. M23 Connector 7. MIL Connector 8. MS connector 9. PT Connector Protection case:- IP40, IP50, IP54, IP64, IP67 Interface 1.Differential Line Driver 2. Push-pull 3. Push-pull complementary 4. Open collector 5. Open Collector NPN 6. RS422 Housing Option 1.Aluminum 2. Stainless Steel 3. Plastic 4. Nickel Finish, 5. Powder Coated Aluminum Approval:- 1. ATEX, 2. CE, 3. CSA, 4. IECEx 5. UL

17.1 Absolute encoder (continued)

17.1.2 HOLLOW SHAFT ENCODER



Selection parameters

Parameters	Min	Max
Solid Shaft dia	3 mm	12 mm
Hollow Shaft dia	4 mm	42 mm
Revolutions	1000 rpm	12000 rpm
Temperature	-40 °C	+120 °C

Industries it caters to

- Automation
- Elevator & Escalators
- Motor Feedback
- Oil & Gas
- Wind
- Offshore & Off Highway Vehicles

Technology:- optical

Connection

1. Terminal box w/ conduit entry
2. Bayonet connector
3. Cable
4. Cable w/ In-line connector
5. M12 Connector
6. M16 Connector
7. M23 Connector
8. MIL Connector
9. MS connector
10. PT Connector

Protection case:- IP40, IP50, IP54, IP64, IP67

Interface

1. Differential Line Driver
2. Push-pull
3. Push-pull complementary
4. Open collector
5. Open Collector NPN
6. RS422

Housing Option

1. Aluminum
2. Stainless Steel
3. Plastic
4. Nickel Finish,
5. Powder Coated Aluminum

Approval:- 1. ATEX, 2. CE, 3. CSA, 4. IECEx 5. UL

17.2 Incremental encoder



17.2 Incremental encoder (continued)

17.2.1 SHAFTED ENCODER



Selection parameters

Parameters	Min	Max
Solid Shaft dia	3 mm	12 mm
Hollow Shaft dia	4 mm	42 mm
Revolutions	1000 rpm	12000 rpm
Temperature	-40 °C	+120 °C

Industries it caters to

- Automation
- Elevator & Escalators
- Motor Feedback
- Oil & Gas
- Wind
- Offshore & Off Highway Vehicles

Technology:- Magnetic, Optical Connection

1.Terminal box 2.Bus cover 3. Cable 4. Cable w/ In-line connector 5. PCB Connector 6. M12 Connector 7. M23 Connector

Protection case:- IP40, IP50, IP64, IP66/IP67, IP 67, IP69 Interface

1.Analog 2. BiSS / SSI 3. CANLayer2 4.CANopen 5. DeviceNet 6.DRIVE-CLiQ 7. EtherCAT 8.

Interbus 9. Parallel 10. Profibus 11. Profinet 12. SSI, 13. SSI + Incremental, 14. SSI programmable, 15 SUCOnet Housing Option

1.Aluminum 2. Stainless Steel 3. Plastic 4.

Aluminum seawater resistant Approval:- 1.

ATEX, 2. CE, 3. DNV,4.E1 5. IECEx 6. UL 7.IECEx 8.

PNO 9. SIL Pulse / Resolution:- 1 Incremental -

1 to 10000 pulse 2. Singleturn: 12 to 22 Bit 3.

Multiturn: 12 to 16 Bit

17.2.1 HOLLOW SHAFT ENCODER



Selection parameters

Parameters	Min	Max
Solid Shaft dia	3 mm	12 mm
Hollow Shaft dia	4 mm	42 mm
Revolutions	1000 rpm	12000 rpm
Temperature	-40 °C	+120 °C

Industries it caters to

- Automation
- Elevator & Escalators
- Motor Feedback
- Oil & Gas
- Wind
- Offshore & Off Highway Vehicles

Technology:- Magnetic, Optical Connection

1.Terminal box 2.Bus cover 3. Cable 4. Cable w/ In-line connector 5. PCB Connector 6. M12 Connector 7. M23 Connector

Protection case:- IP40, IP50, IP64, IP66/IP67, IP 67, IP69 Interface

1.Analog 2. BiSS / SSI 3. CANLayer2 4.CANopen 5. DeviceNet 6.DRIVE-CLiQ 7. EtherCAT 8.

Interbus 9. Parallel 10. Profibus 11. Profinet 12. SSI, 13. SSI + Incremental, 14. SSI programmable, 15 SUCOnet Housing Option

1.Aluminum 2. Stainless Steel 3. Plastic 4. Aluminum

seawater resistant Approval:- 1. ATEX, 2. CE, 3.

DNV,4.E1 5. IECEx 6. UL 7.IECEx 8. PNO 9. SIL

Pulse / Resolution:- 1 Incremental - 1 to 10000

pulse 2. Singleturn: 12 to 22 Bit 3. Multiturn: 12

to 16 Bit

17.3 Counters



17.3.1 TOTALIZING COUNTERS



Relays

Industries it caters to

Machine Tools
Energy Distribution
Factory Automation
Pneumatic Control
Medical Engineering

Selection parameters

Parameters	Min	Max
Width	.	132 mm
Height	.	80 mm
Depth	.	125 mm
	.	

Function-: Multifunctional Counter, Proximity Switch, Position Indicator, Totalizing Counter, Tachometer, Preset Counter, Time Counter
Voltage-: AC/DC/Battery
Reset-: Without reset, Lockable reset, Electrical reset, Automatic reset, Manual reset, Pneumatic reset
Preset-: 1 Preset, 2 Presets, 3 Presets
Technology-: Electromechanical, Electronic, Mechanical, Pneumatic
Mountin Options-: Front panel installation, DIN-rail attachment, PCB mounting, Surface mounting
Display-: LC-D, LED, Mechanical Number Rollers, Time Range
IP Protection Class-: IP10, IP30, IP40, IP65, IP66
Interface-: RS-232, RS-485, USB

17.3 Counters (continued)

17.3.2 PRESET COUNTERS



Selection parameters

Parameters	Min	Max
Width	.	132 mm
Height	.	80 mm
Depth	.	125 mm
.	.	.

Industries it caters to

Machine Tools
Energy Distribution
Factory Automation
Pneumatic Control
Medical Engineering

Function-: Multifunctional Counter, Proximity Switch, Position Indicator, Totalizing Counter, Tachometer, Preset Counter, Time Counter
Voltage-: AC/DC/Battery
Reset-: Without reset, Lockable reset, Electrical reset, Automatic reset, Manual reset, Pneumatic reset
Preset-: 1 Preset, 2 Presets, 3 Presets
Technology-: Electromechanical, Electronic, Mechanical, Pneumatic
Mountin Options-: Front panel installation, DIN-rail attachment, PCB mounting, Surface mounting
Display-: LC-D, LED, Mechanical Number Rollers, Time Range
IP Protection Class-: IP10, IP30, IP40, IP65, IP66
Interface-: RS-232, RS-485, USB

17.3.3 MULTIFUNCTIONAL COUNTERST



Selection parameters

Parameters	Min	Max
Width	.	132 mm
Height	.	80 mm
Depth	.	125 mm
.	.	.

Industries it caters to

Machine Tools
Energy Distribution
Factory Automation
Pneumatic Control
Medical Engineering

Function-: Multifunctional Counter, Proximity Switch, Position Indicator, Totalizing Counter, Tachometer, Preset Counter, Time Counter
Voltage-: AC/DC/Battery
Reset-: Without reset, Lockable reset, Electrical reset, Automatic reset, Manual reset, Pneumatic reset
Preset-: 1 Preset, 2 Presets, 3 Presets
Technology-: Electromechanical, Electronic, Mechanical, Pneumatic
Mountin Options-: Front panel installation, DIN-rail attachment, PCB mounting, Surface mounting
Display-: LC-D, LED, Mechanical Number Rollers, Time Range
IP Protection Class-: IP10, IP30, IP40, IP65, IP66
Interface-: RS-232, RS-485, USB

17.3 Counters (continued)

17.3.4 TIME COUNTERS



Selection parameters

Parameters	Min	Max
Width	.	132 mm
Height	.	80 mm
Depth	.	125 mm
.	.	.

Industries it caters to

Machine Tools
Energy Distribution
Factory Automation
Pneumatic Control
Medical Engineering

Function-: Multifunctional Counter, Proximity Switch, Position Indicator, Totalizing Counter, Tachometer, Preset Counter, Time Counter
Voltage-: AC/DC/Battery
Reset-: Without reset, Lockable reset, Electrical reset, Automatic reset, Manual reset, Pneumatic reset
Preset-: 1 Preset, 2 Presets, 3 Presets
Technology-: Electromechanical, Electronic, Mechanical, Pneumatic
Mountin Options-: Front panel installation, DIN-rail attachment, PCB mounting, Surface mounting
Display-: LCD, LED, Mechanical Number Rollers, Time Range
IP Protection Class-: IP10, IP30, IP40, IP65, IP66
Interface-: RS-232, RS-485, USB

17.3.5 TACHOMETERS



Selection parameters

Parameters	Min	Max
Width	.	132 mm
Height	.	80 mm
Depth	.	125 mm
.	.	.

Industries it caters to

Machine Tools
Energy Distribution
Factory Automation
Pneumatic Control
Medical Engineering

Function-: Multifunctional Counter, Proximity Switch, Position Indicator, Totalizing Counter, Tachometer, Preset Counter, Time Counter
Voltage-: AC/DC/Battery
Reset-: Without reset, Lockable reset, Electrical reset, Automatic reset, Manual reset, Pneumatic reset
Preset-: 1 Preset, 2 Presets, 3 Presets
Technology-: Electromechanical, Electronic, Mechanical, Pneumatic
Mountin Options-: Front panel installation, DIN-rail attachment, PCB mounting, Surface mounting
Display-: LCD, LED, Mechanical Number Rollers, Time Range
IP Protection Class-: IP10, IP30, IP40, IP65, IP66
Interface-: RS-232, RS-485, USB

17.3 Counters (continued)

17.3.6 POSITION DISPLAYS



Selection parameters

Parameters	Min	Max
Width	.	132 mm
Height	.	80 mm
Depth	.	125 mm
	.	

Industries it caters to

Machine Tools
Energy Distribution
Factory Automation
Pneumatic Control
Medical Engineering

Function-: Multifunctional Counter, Proximity Switch, Position Indicator, Totalizing Counter, Tachometer, Preset Counter, Time Counter
Voltage-: AC/DC/Battery
Reset-: Without reset, Lockable reset, Electrical reset, Automatic reset, Manual reset, Pneumatic reset
Preset-: 1 Preset, 2 Presets, 3 Presets
Technology-: Electromechanical, Electronic, Mechanical, Pneumatic
Mountin Options-: Front panel installation, DIN-rail attachment, PCB mounting, Surface mounting
Display-: LC-D, LED, Mechanical Number Rollers, Time Range
IP Protection Class-: IP10, IP30, IP40, IP65, IP66
Interface-: RS-232, RS-485, USB

17.3.7 PROXIMITY SWITCHES



Selection parameters

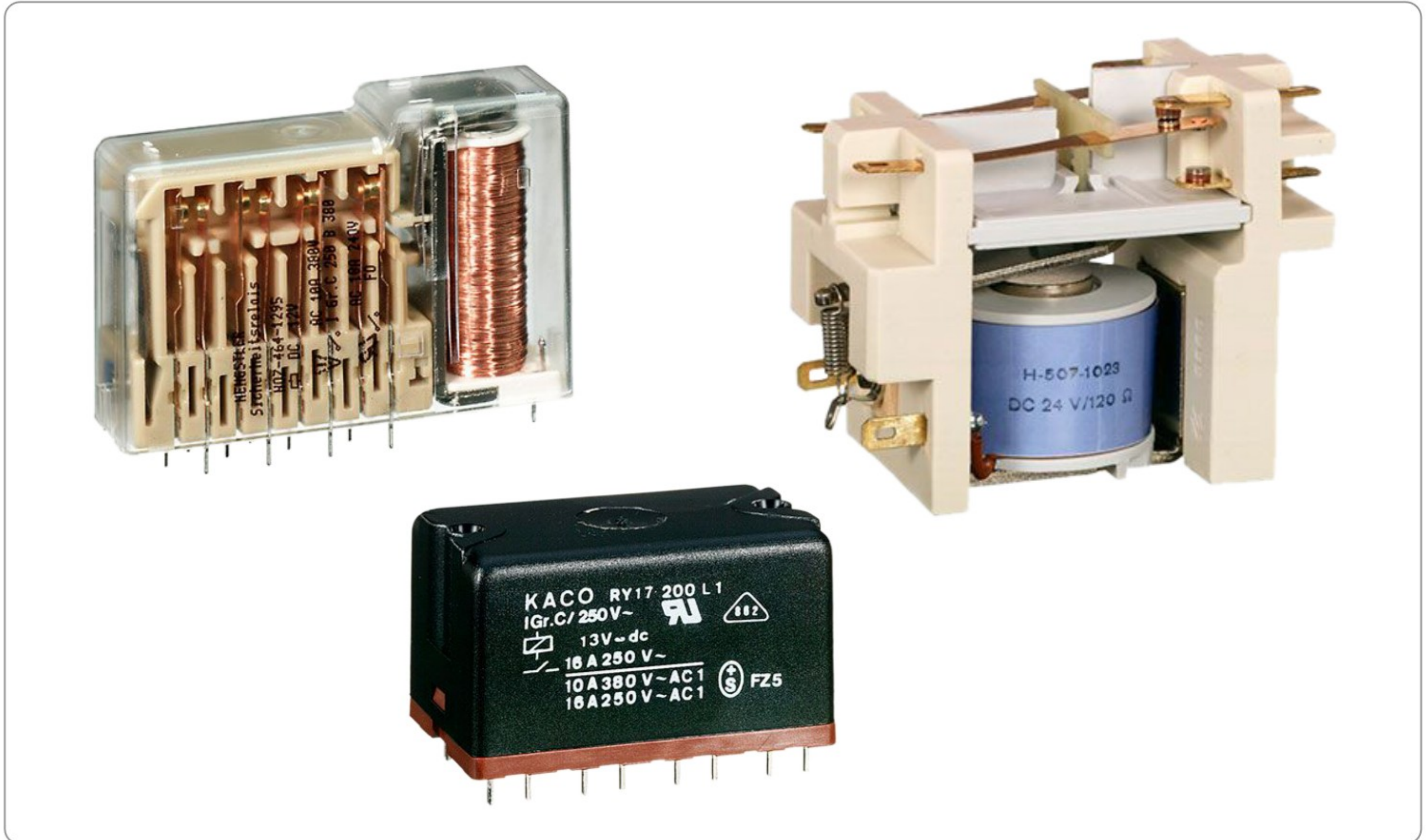
Parameters	Min	Max
Width	.	132 mm
Height	.	80 mm
Depth	.	125 mm
	.	

Industries it caters to

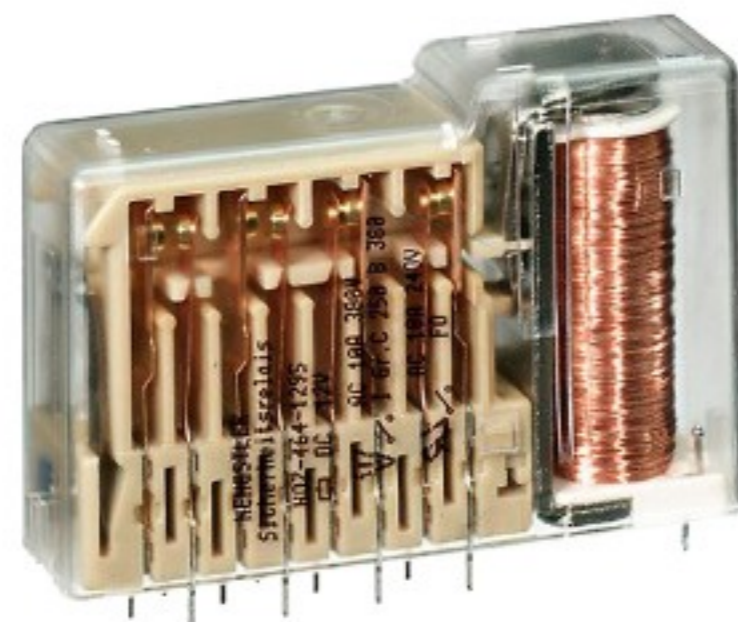
Machine Tools
Energy Distribution
Factory Automation
Pneumatic Control
Medical Engineering

Function-: Multifunctional Counter, Proximity Switch, Position Indicator, Totalizing Counter, Tachometer, Preset Counter, Time Counter
Voltage-: AC/DC/Battery
Reset-: Without reset, Lockable reset, Electrical reset, Automatic reset, Manual reset, Pneumatic reset
Preset-: 1 Preset, 2 Presets, 3 Presets
Technology-: Electromechanical, Electronic, Mechanical, Pneumatic
Mountin Options-: Front panel installation, DIN-rail attachment, PCB mounting, Surface mounting
Display-: LC-D, LED, Mechanical Number Rollers, Time Range
IP Protection Class-: IP10, IP30, IP40, IP65, IP66
Interface-: RS-232, RS-485, USB

17.4 Relays



17.4.1 SAFETY RELAYS



Selection parameters

Parameters	Min	Max
Nominal Voltage	12V	230V
Max. Switching Current	4A	16A

Industries it caters to

Safety Modules / Safety PLC's
On Machine Safety
Safety Sensors
Railway Applications
Elevators & Escalators

Function / Application:-High voltage relay, Mains isolation relay, Safety relay
Drive system:-AC monostable, DC bistable, 115, DC load current activation, 100, DC monostable
Insulation:-Basic insulation, 10, Reinforced insulation
Product Family:-
462,463,464,465,466,468,469,472,473,480,507, 509, RAS,RBS,RDA,RDB,RDM,ROS,RY
NO contacts:0 NO contacts to 8 NO contacts
CO contacts:-: 0 CO contacts, 2 CO contacts

17.4 Relays (continued)

17.4.2 HIGH-VOLTAGE



Selection parameters

Parameters	Min	Max
Nominal Voltage	12V	230V
Max. switching Current	4 A	16 A

Industries it caters to

Safety Modules / Safety PLC's
On Machine Safety
Safety Sensors
Railway Applications
Elevators & Escalators

Function / Application:-High voltage relay, Mains isolation relay, Safety relay
Drive system:-AC monostable, DC bistable, 115, DC load current activation, 100, DC monostable
Insulation:-Basic insulation, 10, Reinforced insulation
Product Family:-
462,463,464,465,466,468,469,472,473,480,507, 509, RAS,RBS,RDA,RDB.RDM,ROS,RY
NO contacts:0 NO contacts to 8 NO contacts
CO contacts:-: 0 CO contacts, 2 CO contacts

17.4.3 MAINS ISOLATION RELAY



Selection parameters

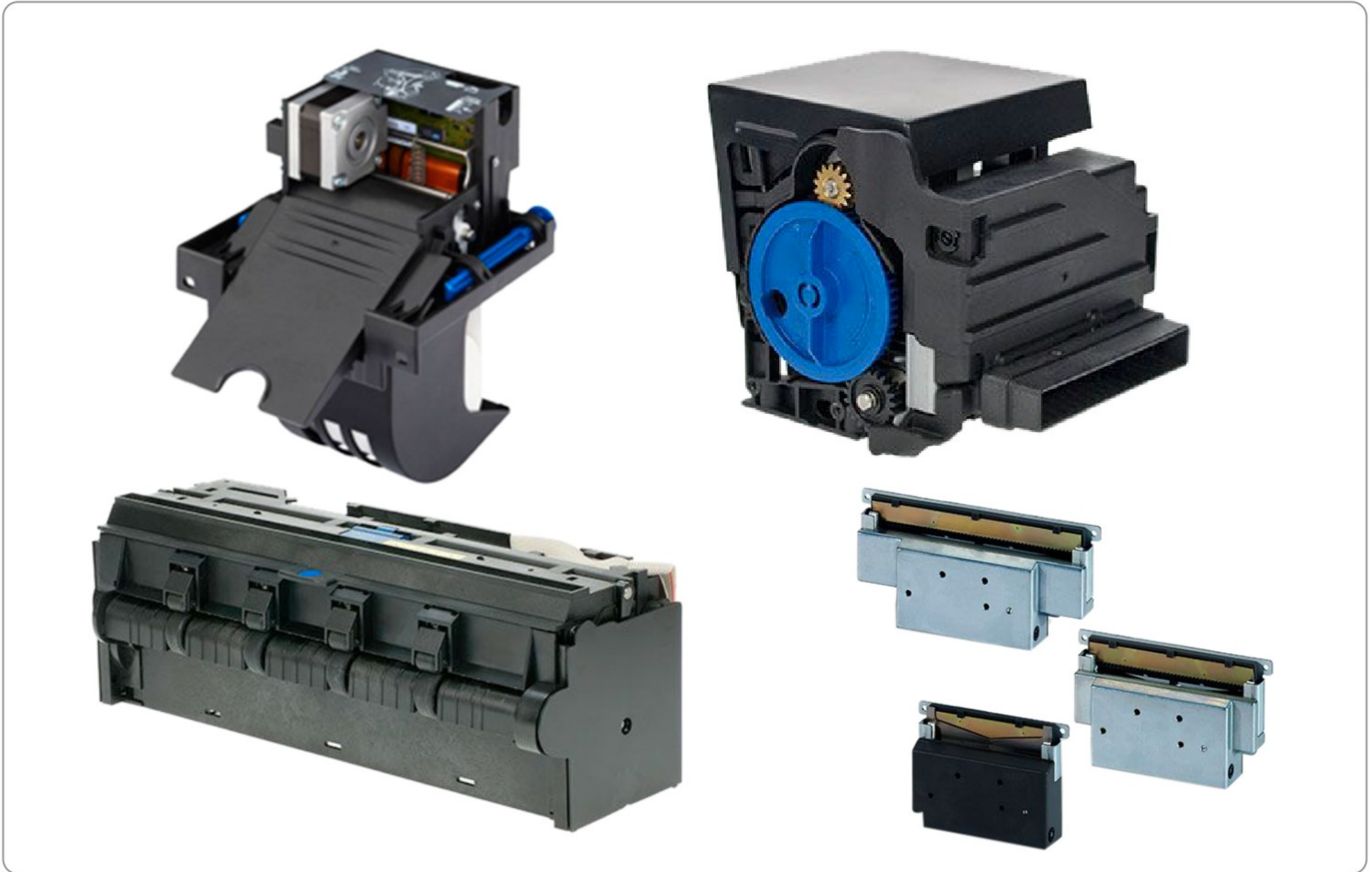
Parameters	Min	Max
Nominal Voltage	12V	230V
Max. switching Current	4 A	16 A

Industries it caters to

Safety Modules / Safety PLC's
On Machine Safety
Safety Sensors
Railway Applications
Elevators & Escalators

Function / Application:-High voltage relay, Mains isolation relay, Safety relay
Drive system:-AC monostable, DC bistable, 115, DC load current activation, 100, DC monostable
Insulation:-Basic insulation, 10, Reinforced insulation
Product Family:-
462,463,464,465,466,468,469,472,473,480,507, 509, RAS,RBS,RDA,RDB.RDM,ROS,RY
NO contacts:0 NO contacts to 8 NO contacts
CO contacts:-: 0 CO contacts, 2 CO contacts

17.5 Printers & Cutters



17.5.1 THERMAL PRINTERS



Selection parameters

Parameters	Min	Max
Nominal Voltage	12VDC	24VDC
Max. Paper Width	63 mm	222 mm
Max. Paper Weight	80 g/mm ²	200 g/mm ²

Industries it caters to

- Outdoor Payment
- Gas Dispensers
- Ticket Vending Machines
- Retail Self-Ordering Kiosks

Product Family:-C-56, eXtendo X-56,eXtendo X-80, Guillotine Cutter F (full and partial cut), Guillotine Cutter F (full cut), Guillotine Cutter L, Rotary Cutter G, Rotary Cutter H, XPM-200, XPM-80 Interface:-RS-232, USB
Resolution:-203 dpi, 300dpi Partial Cut
Paper Width:- 49-60 mm, 55-86 mm, 58-60 mm, 60-86 mm, 210-220 mm
Cutter:-Tear Bar, Tear Bar omitted, No Cutter, Rotary, Full Cut Only up to 250 g/m², Standard Pizza-cutter type, Twincut, Full cut only, up to 160g/m², Twincut, Full- and Partial up to 120g/m² Voltage:-10-36VDC, 12VDC, 24VDC
Full Cut: Cut Technology:- Guillotine,Rotary

17.5 Printers & Cutters (continued)

17.5.2 INDUSTRIAL RECEIPT PRINTERS



Selection parameters

Parameters	Min	Max
Nominal Voltage	12 VDC	24 VDC
Max. Paper Width	63 mm	222 mm
Max. Paper Weight	80 g/mm ²	200 g/mm ²

Industries it caters to

Outdoor Payment
Gas Dispensers
Ticket Vending Machines
Retail Self-Ordering Kiosks

Product Family:-C-56, eXtendo X-56,eXtendo X-80, Guillotine Cutter F (full and partial cut), Guillotine Cutter F (full cut), Guillotine Cutter L, Rotary Cutter G, Rotary Cutter H, XPM-200, XPM-80 Interface:-RS-232, USB Resolution:-203 dpi, 300dpi Partial Cut Paper Width:- 49-60 mm, 55-86 mm, 58-60 mm, 60-86 mm, 210-220 mm Cutter:-Tear Bar, Tear Bar omitted, No Cutter, Rotary, Full Cut Only up to 250 g/m², Standard Pizza-cutter type, Twincut, Full cut only, up to 160g/m², Twincut, Full- and Partial up to 120g/m² Voltage:-10-36VDC, 12VDC, 24VDC Full Cut: Cut Technology:- Guillotine, Rotary

17.5.3 THERMAL KIOSK PRINTERS



Selection parameters

Parameters	Min	Max
Nominal Voltage	12 VDC	24 VDC
Max. Paper Width	63 mm	222 mm
Max. Paper Weight	80 g/mm ²	200 g/mm ²

Industries it caters to

Outdoor Payment
Gas Dispensers
Ticket Vending Machines
Retail Self-Ordering Kiosks

Product Family:-C-56, eXtendo X-56,eXtendo X-80, Guillotine Cutter F (full and partial cut), Guillotine Cutter F (full cut), Guillotine Cutter L, Rotary Cutter G, Rotary Cutter H, XPM-200, XPM-80 Interface:-RS-232, USB Resolution:-203 dpi, 300dpi Partial Cut Paper Width:- 49-60 mm, 55-86 mm, 58-60 mm, 60-86 mm, 210-220 mm Cutter:-Tear Bar, Tear Bar omitted, No Cutter, Rotary, Full Cut Only up to 250 g/m², Standard Pizza-cutter type, Twincut, Full cut only, up to 160g/m², Twincut, Full- and Partial up to 120g/m² Voltage:-10-36VDC, 12VDC, 24VDC Full Cut: Cut Technology:- Guillotine, Rotary

17.5 Printers & Cutters (continued)

17.5.4 CUTTERS



Selection parameters

Parameters	Min	Max
Nominal Voltage	12 VDC	24 VDC
Max. Paper Width	63 mm	222 mm
Max. Paper Weight	80 g/mm ²	200 g/mm ²

Industries it caters to

- Outdoor Payment
- Gas Dispensers
- Ticket Vending Machines
- Retail Self-Ordering Kiosks

Product Family:-C-56, eXtendo X-56,eXtendo X-80, Guillotine Cutter F (full and partial cut), Guillotine Cutter F (full cut), Guillotine Cutter L, Rotary Cutter G, Rotary Cutter H, XPM-200, XPM-80 Interface:-RS-232, USB Resolution:-203 dpi, 300dpi Partial Cut Paper Width:- 49-60 mm, 55-86 mm, 58-60 mm, 60-86 mm, 210-220 mm Cutter:-Tear Bar, Tear Bar omitted, No Cutter, Rotary, Full Cut Only up to 250 g/m², Standard Pizza-cutter type, Twincut, Full cut only, up to 160g/m², Twincut, Full- and Partial up to 120g/m² Voltage:-10-36VDC, 12VDC, 24VDC Full Cut: Cut Technology:- Guillotine, Rotary