KRN1000 Series
Brand.................................................. AUTONICS

TP2500 Series HMI
Brand.................................................. HCFA

HCFA - HCABC-CBR/CBT
Brand.................................................. HCFA
Description
HCABC- CBR/ T is the I/O terminal block, used with HCA8C- 16X16YT together. Terminal blocks convert I/O terminals of connector type PLC into terminal blocks and become convenient for the end users to make the wiring.
We have two kinds:
Relay output HCA8C- CBR and Transistor output HCA8C- CBT.

HCFA - HCA8C-POWER / Power input module
Brand.................................................. HCFA
Description
Characteristics:
HCA8C-POWER Independent switching power supply
Power supply: Input 85-264VAC;
Output 24VDC/1.5A

HCFA - HCA8C-4GM/ 4-axes motion control block
Brand: HCFA
Description:
1) 4 axes motion control, 2-4 axes linear interpolation, 2 axes circular interpolation, 3 axes spiral interpolation and customized interpolation are available.
2) Max. pulse output frequency: 4Mpps
3) Support G code imported
4) Independent control and table detection
5) Customization is available

HCFA - HCA8C-4WK Temperature control block
Brand: HCFA
Description:
1) 4-channel temperature controller integrated into one block
2) Built-in 4 CT input, with function of heater disconnection alarm
3) Built-in MODBUS protocol, 16 blocks can be connected in parallel.
4) Balanced automatic heating function
5) Interference suppression
6) Support temperature input, 4 channels are insulated from each other.
7) Sampling period: 0.25s. High speed sampling processing.

HCFA - HCA8C-1PG & HCA8C-2PG Pulse positioning block
Brand: HCFA
Description:
1) Support 1/2 channels pulse output
2) Built-in T-/S-shaped acceleration/ deceleration function
3) Multiple position control modes

HCFA - HCA8C-4PG / HCA8C-4PG-D Pulse positioning block
Brand: HCFA
Description:
1) Support 4 channels pulse output
2) Built-in T-/S-shaped acceleration/ deceleration function
3) Multiple position control modes

HCFA - HCA8C-2LC Loading and tension input block
Brand: HCFA
Description:
1) 2-channel 4-wire or 6-wire load cell
2) 24 bits internal resolution
3) Communication ports RS485, with MODBUS function

HCFA - HCA8C-4PT Platinum resistor input block
Brand: HCFA
Description:
1) Input range: -100 to 600°C. Resolution: 0.1°C. Overall accuracy: 1%
2) 4 input channels

HCFA - HCA8C-2HC High speed counting block
Brand: HCFA
Description:
1) 2-channel encoder inputs
2) Frequency measurement function, Max. 60K
3) Counting range: When 32-bit is specified: -2,147,483,648 to +2,147,483,647 When 16-bit is specified: 0 to 65,535

HCFA - HCA8C-4TC Thermocouple input block
Brand: HCFA
Description:
1) Getting °C or °F data by reading appropriate buffer memories Type K: -100 to 1200°C Type J: -100 to 600°C
2) 4 input channels
3) Thermocouple type K or J sensor input block
4) Accurate Resolution Ratio: 0.1°C or 0.72°F(type K) 0.1°C or 0.54°F(type J)
HCFA - HCA8C-4AD4DA/ HCA8C-4AD2DA Analog input/ Output Block

Brand: HCFA

Description

1) High resolution for input is 16 bits binary (-32000 to 32000), resolution for output is 12.5 binary (-3000 to 3000)

2) 4 channels voltage input/ output (-10V+10V DC) or current input/ output (0 mA ~+20mA, 4mA~20mA)

3) Either “voltage input/ output” or “current input/ output” can be specified for each channel.

HCFA - HCA8C-8AD Analog input block

Brand: HCFA

Description

1) High accuracy analog input block with 16 bits binary (voltage),15 bits binary (current) Resolution

2) 4 channels voltage input (-10V~+10V DC) or current input (-20 mA ~+20mA, 4mA~20mA)

3) Either “voltage input” or “current input” can be specified for each channel.

HCFA - HCA8C-4DA Analog output block

Brand: HCFA

Description

1) High accuracy analog output block with 16 bits binary (-32000~+32000)

2) 4 channels voltage input (DC-10V~+10V) or current input (0 mA ~+20mA, 4mA~20mA)

3) Either “voltage output” or “current output” can be specified for each channel.

HCFA - HCA8C-4AD Analog input block

Brand: HCFA

Description

1) High accuracy analog input block with 16 bits binary (voltage),15 bits binary (current) Resolution

2) 4 channels voltage input (-10V~+10V DC) or current input (-20 mA ~+20mA, 4mA~20mA)

3) Either “voltage input” or “current input” can be specified for each channel.
HCFA - HCA8P Series

Brand: HCFA
High-speed High-performance Extension: 48~256 points
Controllable I/O: 48~256 points
Main Unit I/O: 48/64/80 points

Description

More reliable design
More reliable built-in power supply, dielectric withstand voltage improved, more reliable thermal design, new vibration resistance connector, greater transistor output 200V/ 1.5A, 48S communication insulation and EFT 4KV
PCBA coating processing

More user friendly
NPN&PNP input, newly-added reset switch, support downloading in power off state, high contrast I/O display LCD

Modular design
Common CPU and power board design, support A8C series right-side extension blocks, smaller size, newly-added ASP left-side extension block, support Ethernet and analog block

Safety design
Independent power supply (red terminal input) to prevent input point burn out caused by electric shock and incorrect wiring, three segment security encryption function

High performance
Newly-upgraded dual-core structure, 50ns basic instruction, Bus processing speed Improved by 10 times>A8, built-in 64K memory, 8-ch 200K high-speed input + 4-ch 200K high-speed output, built-in 3 communication ports, support MODBUS and new-added ETHERCAT block

HCFA - HCA8C PLC

Brand: HCFA
High-speed and compact blocks: 16~256 points
Controllable I/O: 16~256 points
Main Unit I/O: 16/32/64/96 points

Description

• New High speed and ultra-thin PLC
• Ultra high-speed, High Performance, More Functions
• Built-in 4 Pulse Train Outputs (100KHz ~ 200KHz)
• Built-in 6 100kHz & 2 10kHz high speed counter
• Built-in 2 Communication Ports (RS422 +RS48S)
### HCFA - HCA2P PLC

<table>
<thead>
<tr>
<th>Model</th>
<th>Controllable I/O</th>
<th>Main Unit I/O</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCA2P-14x10Y(24 points)</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>W (mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H (mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D (mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCA2P-24x16Y(40 points)</td>
<td>130</td>
<td>90</td>
</tr>
<tr>
<td>W (mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H (mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D (mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCA2P 36X24Y (60 points)</td>
<td>175</td>
<td>90</td>
</tr>
<tr>
<td>W (mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H (mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D (mm)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**General Expansion Type**

Controllable I/O: 24~128 points
Main Unit I/O: 24/40/60 points

### Description

- **HCFA - HCA2P Series**

  More cost-effective
  New appearance, CPU and power board design
  Low cost and cost performance improved by 10%

  More reliable

  New vibration resistance connector
  Greater transistor output 200V/1.5A
  More reliable built-in power supply and thermal design

  Functionality improved

  Input compatible NPN & PNP
  Built-in 485 interface, Ethernet communication board
  A2P supports A8C series right-side extension module and downloading at power-failure

### HCFA - HCA1P PLC

<table>
<thead>
<tr>
<th>Model</th>
<th>Controllable I/O</th>
<th>Main Unit I/O</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 ~ 34 points</td>
<td>10/14/20/30 points</td>
</tr>
</tbody>
</table>

**Description**

- More cost-effective

  New appearance, CPU and power board design
  Low cost and cost performance improved by 10%

  More reliable

  New vibration resistance connector
  Greater transistor output 200V/1.5A
  More reliable built-in power supply and thermal design

  Functionality improved

  NPN & PNP compatible
  Built-in 485 interface, Ethernet communication board
  A2P supports A8C series right-side extension module and downloading at power-failure
**HCFA E220/E380 Frequency Inverter**

Brand: HCFA

**Description**

E380 /E220

- Multi-function and compact
- Excellent overvoltage suppression capability
- Fast acceleration/deceleration
- Over-current protection function
- Superior low-frequency torque performance
- Flexible use of space
- More reliable
- Compact and integrated design
- Optimize drive board design

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**HCFA - X3 Series 1KW/1.5KW/2KW Lower Inertia - MA100A/150A/200A**

Brand: HCFA

**Description**

MA100A/150A/200A

1KW/1.5KW/2KW Low Inertia
HCFA - X3 Series 2KW Medium Inertia - MM200A

Brand: HCFA

Description

X3 Series 2KW Medium Inertia
MM200A - 2KW Medium Inertia

HCFA - X3 SERIES 1.5KW Middle/ 1.5W High Inertia - MM150A/MH150A

Brand: HCFA

Description

X3 Series 1.5KW Middle/ 1.5W High Inertia
MM150A - 1.5KW Medium Inertia /MH150A - 1.5KW High Inertia
HCFA - X3 Series 1KW Medium Inertia/1KW High Inertia - MM100A/MH100A

Brand: HCFA

Description

X3 Series 1KW Medium Inertia/1KW High Inertia

MM100A - 1 Kw Medium Inertia

/MH100A - 1 Kw High Inertia

HCFA - X3 Series 750W Low Inertia/750W High Inertia - MA075A/MH075A

Brand: HCFA

Description

X3 Series 750W Low Inertia/750W High Inertia

MA075A - 750W Low Inertia

MH075A - 750W High Inertia
HCFA - X3 Series 400W Low Inertia/400W High Inertia - MA040A/MH040A

Brand: HCFA

Description

X3 Series 400W Low Inertia/400W High Inertia

MA040A - 400W Low Inertia / MH040A - 400W High Inertia

HCFA - X3 Series 200W Low Inertia/200W High Inertia - MA020A/MH020A

Brand: HCFA

Description

MA020A - 200W Low Inertia
MH020A - 200W High Inertia
HCFA - HCSV-X3 series 50W/100W Medium Inertia - MM005A/010A

Brand: HCFA

Description
HCSV-X3 Series 50W/100W medium Inertia
MM005A/010A
50W/100W medium Inertia

HCSV-X3 Servo Motor Connectors and Pin Arrangements

Brand: HCFA
Cable list: (1kW or above)
Name: Cable
Motor Power Input: AWG14
Brake: AWG18
Encoder (Incremental): Power supply: AWG22 Signal: AWG24
Encoder (Absolute): Power supply: AWG22 Signal: AWG24
HCSV-X3 Servo Motor Connectors and Pin Signals

<table>
<thead>
<tr>
<th>Brand</th>
<th>HCFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable list</td>
<td>(750W or below)</td>
</tr>
<tr>
<td>Name</td>
<td>Cable</td>
</tr>
<tr>
<td>Motor Power Input</td>
<td>AWG18</td>
</tr>
<tr>
<td>Brake</td>
<td>AWG22</td>
</tr>
<tr>
<td>Encoder (Incremental)</td>
<td>Power supply: AWG22, Signal: AWG24</td>
</tr>
<tr>
<td>Encoder (Absolute)</td>
<td>Power supply: AWG22, Signal: AWG24</td>
</tr>
</tbody>
</table>

HCFA X3T Series Servo Motor

Brand: HCFA

Description

Sophisticated:
Advanced fuzzy control to increase the accuracy

High response frequency up to 2.3KHz

20-bit encoder supported, Shortened the positioning time

LCD panel, full and clear display

Intelligence:

Real-time auto gain adjustment/ inertia ratio identification
4 automatic notch filters to eliminate resonance
4 automatic damping filters to eliminate vibrations at stop
Installation wizards/device simulation/ life expectancy forecast etc.

Comprehension:

Full closed-loop control
DO& linear motor supported
Online switchover of control modes/DIDO function customization
External disturbance observing/torque feedforward/friction torque compensation
Regenerative braking/dynamic braking/ instantaneous power failure protection/power inrush suppression
3 gain switchover/inertia ratio switchover/gear ratio switchover/torque limit switchover
Temperature monitoring/test run/parameter initialization/frequency measurement/oscilloscope/warning records

Safety
Compliance with European safety standards
STO interface, double circuit, no need to switch off contactor
Radiation noise suppression
High noise immunity

IOT
IOT wireless debugging
EtherCAT interface
EtherNET interface
RS485 interface
PC/tablet/mobile APP (available soon)

HCFA X3E Series Servo Motor

Brand: HCFA
Fast: 4µs
Control loop calculation cycle: 4µs
Speed loop band-width: 1.2 KHz
Positioning time: ≤ 5ms (Tacc=SOms, Vmax=3000rpm)
Accurate: ±1/131072
Theoretical positioning accuracy: ±1/131072
Speed control accuracy: ± 1 RPM
Torque control resolution: 0.1%* rated torque
Analog input resolution: Max.16-bit

Description

Steady:

• Online load parameter identification
• Online automatic gain tuning
• Online adaptive notch filter for resonance elimination
• Low-frequency damping control

Advanced Functions:

Multiple homing options
Parameter grouping
Online control mode switchover
Standard 17-bit encoder, optional 20-bit
Two groups of gain switchover, quick response and steady stop
Built-in 16-segment position control (Point table P08 Group)
High-accuracy and high-response interrupt positioning setting (P08.86)
Potential energy load torque compensation (P06.10/ Z-axis Robot)
Built-in process control, tool turret function /E-CAM
I/O function customization (P04)
AC control power input
Wide voltage input range, lowest 50% (P06.36)
Instantaneous power failure protection (P06.24)
Regenerative braking and dynamic braking
Absolute system voltage monitoring, under-voltage warning function
OMRON E5CC-RX2ASM-800

Brand: OMRON

Description

E5CC Digital Temperature Controllers (48 x 48mm)

Premium range of temperature controllers which support a wide variety of applications. The controllers cover a comprehensive array of sensor inputs including Universal, Thermocouple, PT and Analogue current/voltage. Within the E5CC range, there is a temperature controller to suit your requirements.

- Large white LCD display, 15.2 mm of height for best visibility
- Dual displays- PV/SV with 4-digit display
- 50 ms high-speed sampling
- Extended range of I/Os: 3 auxiliary outputs, 4 event inputs, transfer output and remote SPs
- Short housing case (60 mm depth) for added flexibility into space-restricted applications
- Easy connection to PLC with communications that require no programming
- Component communications can be used to link temperature controllers to each other
- Easy set up with CX-Thermo software (Windows XP, 7) without additional power supply via USB conversion cable

Approvals

CE

Omron - E5GC, E5CC, E5EC, E5AC, E5DC, E5CN & E5CB Ranges

PSS Series

Brand: AUTONICS

Negative Pressure: -101.3 to 0.0kPa
Standard Pressure: 0 to 100.0kPa, 0 to 1,000kPa
Compound Pressure: -101.3 to 100.0kPa
Compact design: W11.8×H29.3×L24.8mm
Power supply: 12-24VDC ±10%

Description

Compact Analog Pressure

- Rated pressure: negative pressure (-101.3 to 0.0kPa) standard pressure (0 to 100.0kPa, 0 to 1,000kPa) compound pressure (-101.3 to 100.0kPa)
- Analog output: Voltage (1-5VDC), current (DC4-20mA)

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/07/02&db_uid=68?catecode=01/07/02&db_uid=2795
PSB Series
Brand: AUTONICS

Description
Small size, High Accuracy pressure control digital pressure sensor

- High brightness red LED (LED height : 9.5mm)
- Min. display interval

- Negative pressure: 0.1kPa
- Standard pressure: 0.1kPa, 1kPa
- Compound pressure: 0.2kPa

- Convertible pressure unit
  - Negative, Compound pressure : kPa, kgf/cm2, bar, psi, mmHg, mmH2O, inHg
  - Standard pressure : kPa, kgf/cm2, bar, psi
- Various output modes: Hysteresis mode, Automatic sensitivity setting mode,
  Independent 2 output mode, Window comparative output mode
- Chattering prevention for output (selectable response time : 2.5ms, 5ms, 100ms, 500ms)
- One-touch connector type for easy wiring and maintenance
- Analog output: voltage (1-5VDC)
- Reverse power polarity and overcurrent protection circuit
- Zero-point adjustment function, peak value monitoring function, bottom hold display

More details:
autonics.com.my/products/products_detail.php?catecode=01/07/02&db_uid=68

PSQ Series
Brand: AUTONICS

Description
Dual Display Digital Pressure Sensors(Pneumatic)

- Pressure measurement of any gas, liquid or oil (Fluid type) (*) except substances which may corrode stainless steel 316L
- Simultaneous display of present value (PV) and set value (SV)
  ※Selectable SV, pressure unit, or none display for SV display part
- Selectable NPN, PNP open collector output by parameter setting
- 3 colors for PV display part (run mode: red or green / setting mode: orange)
- 12 segment LCD display for easier value reading
- Measurement range: -100.0 to 100.0kPa, -100 to 1,000kPa (pneumatic type: compound pressure, fluid type: sealed gauge pressure)
- Analog output: voltage (1-5VDC), current (DC4-20mA)
- Parameter copy function
- Option input/output: Auto Shift, Remote Zero, Hold (only for PSQ-C U- )
- Forced output control mode for device testing and maintenance
- Min. display unit: 0.1kPa, 1kPa (variable by model)
- One-touch connector type for easy wiring and maintenance
- Password setting for SV

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/07/01&db_uid=144?catecode=01/07/01&db_uid=69?catecode=01/07/01&db_uid=5747

PSA Series
Brand: AUTONICS

Negative pressure: 0.1kPa

Standard pressure: 0.1kPa, 1kPa

Compound pressure: 0.2kPa

Description

Small size, High Accuracy pressure control digital pressure sensor

- High brightness red LED (LED height : 9.5mm)

- Convertible pressure unit

  - Negative, Compound pressure : kPa, kgf/cm2, bar, psi, mmHg, mmH2O, inHg

  - Standard pressure : kPa, kgf/cm2, bar, psi

- Various output modes: Hysteresis mode, Automatic sensitivity setting mode, Independent 2 output mode, Window comparative output mode

- Chattering prevention for output

  (selectable response time : 2.5ms, 5ms, 100ms, 500ms)

- One-touch connector type for easy wiring and maintenance

- Analog output: voltage (1-5VDC)

- Reverse power polarity and overcurrent protection circuit

- Zero-point adjustment function, peak value monitoring function, bottom hold display

More details:
catecode=01/07/01&db_uid=144?catecode=01/07/01&db_uid=69
**PSAN Series**

Brand: AUTONICS

Negative Pressure: 0.1kPa

Standard Pressure: 0.1kPa, 1kPa

Compound Pressure: 0.1kPa

Description

Compact Digital Pressure Sensors

- Pressure measurement of any gas, liquid or oil (except substances which may corrode stainless steel 316L)
- Auto shift function: with change in the original pressure, the external input adjusts the determined level to match the change in pressure (only available in models with auto shift/hold function)
- High display resolutions
- Negative pressure: 0.1kPa
- Standard pressure: 0.1kPa, 1kPa
- Compound pressure: 0.1kPa

- Two independent outputs (N.O./N.C. output selectable)
- Hold function: hold current display value or control output
- Forced output control mode for device testing and maintenance
- One-touch connector type for easy wiring and maintenance
- Analog output: voltage (1-5VDC), current (DC4-20mA)
- Zero-point adjustment function, peak value monitoring function, chattering prevention function


**ERB Series**

Brand: AUTONICS

Description

Flexible Coupling

- Zero (0) Backlash
- High torsional stiffness by high strength aluminum alloy AL 7075-T6
- High corrosion resistance with alumite treated surface
- Two connection types (Clamp type, Set screw type)

MGAM50S Series

Brand: AUTONICS

Description

Shaft-Type Ø50 mm Magnetic Absolute Rotary Encoders (Multi-Turn)

- Higher resistant to vibration and impact by magnetic elements than optical encoder
- Total 23-bit resolution (8388608-division) of 10-bit single-turn (1024-division) and 13-bit multi-turn (8192-division)
- Compact size of diameter Ø50mm
- Parallel data / SSI data transmission type
- Power supply : 12-24VDC ±5%
- Protection structure IP50 (IEC standard)

More details:
autonics.com.my/products/products_detail.php?catecode=01/06/02&db_uid=47?catecode=01/06/02&db_uid=140?catecode=01/06/02&db_uid=46?catecode=01/06/02&db_uid=146?catecode=01/06/02&db_uid=3107?catecode=01/06/02&db_uid=3108

MGA50S Series

Brand: AUTONICS

Description

Shaft-Type Ø50 mm Magnetic Absolute Rotary Encoders

- Higher resistant to vibration and impact by magnetic elements than optical encoder
  - Various output code: BCD, Binary, Gray code
  - Various and high resolution (32, 40, 45, 48, 64, 90, 128, 180, 256, 360, 512, 720, 1024-divisions)
- Power supply : 5VDC ±5%, 12-24VDC ±5%
- Protection structure IP50 (IEC standard)

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/06/02&db_uid=47?catecode=01/06/02&db_uid=140?catecode=01/06/02&db_uid=46?catecode=01/06/02&db_uid=146?catecode=01/06/02&db_uid=3107

EPM50S Series

Brand: AUTONICS

Description

Shaft Type Ø50mm Multi-Turn Absolute Rotary Encoder

- Total 23-bit resolution (8388608-division) of 10-bit single-turn (1024-division) and 13-bit multi-turn (8192-revolution)
- Compact size of diameter Ø50mm
- Parallel data/SSI data transmission type
- Easy zero adjustment using single-turn/multi-turn data separated reset function
- Memorizing revolution data up to ±90° after blackout without memory back up function
- Possible CW/CCW direction setting with direction function
- Maximizing users convenience with clear, over flow alarm (OVF) function
- Protection structure IP64 (IEC standard) (dust-proof, oil-proof)
- Provides Latch function (parallel output model only)
**EP50S Series**

Brand: AUTONICS

Compact size of external diameter: Ø50mm

**Description**

Shaft Type Ø50mm Absolute Rotary Encoder

- Various output code: BCD, Binary, Gray code
- Various and high resolution (720, 1024-division)
- Protection structure IP64 (dust-proof, oil-proof)

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/06/02&db_uid=47

**EP58 Series**

Brand: AUTONICS

**Description**

Shaft Type/Blind Hollow Shaft Type Ø58mm Absolute Rotary Encoder

- Ø58mm flange type
- Applicable to various mounting environments
- Various output code: BCD, Binary, Gray code (customizable)
- Various and high resolution (720, 1024-division)

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/06/02&db_uid=47

**ENP Series**

Brand: AUTONICS

**Description**

Shaft Type Ø60mm Absolute Rotary Encoder

- Allows to measure absolute variable angle with BCD code
- Strong against external impact
- Memorizing the absolute position when power is cut off

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/06/02&db_uid=47
**E15S Series**

Brand: AUTONICS

Power supply: 5VDC ±5%

**Description**

Shaft Type Ø15 mm Incremental Rotary Encoders

- Easy installation in tight or limited spaces
- Low moment of inertia

More details: [http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=49? catecode=01/06/01&db_uid=139? catecode=01/06/01&db_uid=116? catecode=01/06/01&db_uid=53? catecode=01/06/01&db_uid=55? catecode=01/06/01&db_uid=57? catecode=01/06/01&db_uid=2272?](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=49? catecode=01/06/01&db_uid=139? catecode=01/06/01&db_uid=116? catecode=01/06/01&db_uid=53? catecode=01/06/01&db_uid=55? catecode=01/06/01&db_uid=57? catecode=01/06/01&db_uid=2272?)

**E18S Series**

Brand: AUTONICS

Power supply: 5VDC ±5%

**Description**

Shaft Type Ø18 mm Incremental Rotary Encoders

- Ultra-compact (Ø18mm) and ultra-lightweight (12g)
- Easy installation in tight or limited spaces
- Low moment of inertia

More details: [http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=60? catecode=01/06/01&db_uid=51? catecode=01/06/01&db_uid=123? catecode=01/06/01&db_uid=48? catecode=01/06/01&db_uid=54? catecode=01/06/01&db_uid=56? catecode=01/06/01&db_uid=58? catecode=01/06/01&db_uid=2272?](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=60? catecode=01/06/01&db_uid=51? catecode=01/06/01&db_uid=123? catecode=01/06/01&db_uid=48? catecode=01/06/01&db_uid=54? catecode=01/06/01&db_uid=56? catecode=01/06/01&db_uid=58? catecode=01/06/01&db_uid=2272?)
**ENH Series**

**Brand:** AUTONICS  
**Power supply:** 5VDC ±5%, 12-24VDC ±5%

**Description**

Manual Handle Type Incremental Rotary Encoder  
- Suitable for manual pulse input type such as numerically controlled or milling machinery  
- Terminal connection type

More details:  
[http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=60?catecode=01/06/01&db_uid=49?catecode=01/06/01&db_uid=51?catecode=01/06/01&db_uid=139?catecode=01/06/01&db_uid=123?catecode=01/06/01&db_uid=116?catecode=01/06/01&db_uid=48?catecode=01/06/01&db_uid=53?catecode=01/06/01&db_uid=54?catecode=01/06/01&db_uid=55?catecode=01/06/01&db_uid=56?catecode=01/06/01&db_uid=57?catecode=01/06/01&db_uid=58]  

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**ENC Series**

**Brand:** AUTONICS  
**Power supply:** 5VDC, 12-24VDC ±5%

**Description**

- Suitable for measuring the length or speed of target moving successively by wheel type  
- The output waveform according to measuring distance is proportional to the unit of International Measurement type (Meter or inch)

More details:  
[http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=60?catecode=01/06/01&db_uid=49?catecode=01/06/01&db_uid=51?catecode=01/06/01&db_uid=139?catecode=01/06/01&db_uid=123?catecode=01/06/01&db_uid=116?catecode=01/06/01&db_uid=48?catecode=01/06/01&db_uid=53?catecode=01/06/01&db_uid=54?catecode=01/06/01&db_uid=55?catecode=01/06/01&db_uid=56?catecode=01/06/01&db_uid=57?catecode=01/06/01&db_uid=58]  

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**ENA Series**

**Brand:** AUTONICS  
**Power supply:** 5VDC, 12-24VDC ±5%

**Description**

Side-Mounting Shaft Type Incremental Rotary Encoder  
- Strong die cast structure against external impact  
- Convenient structure for direct mounting on the frame  
- Connector type

More details:  
[http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=60?catecode=01/06/01&db_uid=49?catecode=01/06/01&db_uid=51?catecode=01/06/01&db_uid=139?catecode=01/06/01&db_uid=123?catecode=01/06/01&db_uid=116?catecode=01/06/01&db_uid=48?catecode=01/06/01&db_uid=53?catecode=01/06/01&db_uid=54?catecode=01/06/01&db_uid=55?catecode=01/06/01&db_uid=56?catecode=01/06/01&db_uid=57]
**E100H Series**

**Brand**

AUTONICS

**Description**

Hollow Shaft Type Ø100mm Incremental Rotary Encoder

- Great environmental resistance
- High stability of output
- Exclusive for Elevator

More details:

http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=60

**Power supply**

5VDC, 12-24VDC ±5%

**Diameter**

Ø80mm

**Inner diameter**

shaft Ø30mm, Ø32mm

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**E80H Series**

**Brand**

AUTONICS

**Description**

Hollow Shaft Type Ø80mm Incremental Rotary Encoder

- No coupling needed with direct installation at motor or rotation shaft of machine
- Various output types

More details:

http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=60

**Power supply**

5VDC, 12-24VDC ±5%

**Diameter**

Ø80mm

**Inner diameter**

shaft Ø30mm, Ø32mm

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**E68S Series**

**Brand**

AUTONICS

**Description**

Shaft Type Ø68mm Incremental Rotary Encoder

- High speed response frequency: 180kHz
- Connector type
- Suitable for tooling machinery
- Protection structure IP65 (IEC standard)
  (tentative water-proof/oil)
- High shaft loading capabilities (Allowable load weight is 10kgf)

More details:

http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=60

**Diameter**

Ø68mm

**Shaft diameter**

Ø15mm
**E60H Series**

Brand: AUTONICS  
Power supply: 5VDC, 12-24VDC ±5%  
Diameter: Ø60mm  
Inner Diameter: shaft Ø20mm  

**Description**

Hollow Shaft Type Ø60mm Incremental Rotary Encoder

- Easy installation at narrow space
- Suitable for measuring angle, position, revolution, speed, acceleration and distance
- Various output types

More details:  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=60)  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=49)  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=51)  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=139)  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=123)  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=116)  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=48)

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**E30S Series**

Brand: AUTONICS  
Power supply: 5VDC, 12-24VDC ±5%  

**Description**

Shaft Type Ø30mm Incremental Rotary Encoder  
Diameter: Ø30mm of miniature shaft type rotary encoder  
Easy installation at narrow space  
Small shaft inertia moment  
Various output types

More details:  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=60)  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=49)  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=51)  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=139)  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=123)  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=116)  
[Link](http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=48)
E50S-C Series

Brand: AUTONICS
Power supply: 5VDC, 12-24VDC ±5%

Description

Diameter Ø50mm Shaft type Incremental Rotary encoder (Connector Type)

- 12-24VDC power supply of line driver output (line-up)
- Suitable for measuring angle, position, revolution, speed, acceleration and distance

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=49
http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=139

E20S/E20HB Series

Brand: AUTONICS
Power supply: 5VDC, 12VDC ±5%

Description

Diameter Ø20mm Shaft type/Hollow shaft built-in type Incremental Rotary encoder

- Diameter Ø20mm of miniature rotary encoder
- Easy installation at narrow space
- Small shaft inertia moment
- Various output types

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=49
http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=139

E58 Series

Brand: AUTONICS
Power supply: 5VDC, 12-24VDC ±5%

Description

Shaft Type/Blind Hollow Shaft Type Ø58mm Incremental Rotary Encoder

- Diameter Ø58mm flange type
- Suitable for measuring angle, position, revolution, speed, acceleration and distance

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=139
E50S Series

Brand: AUTONICS
Power supply: 5VDC, 12-24VDC ±5%

Description

Shaft Type Ø50mm Incremental Rotary Encoder

- 12-24VDC power supply of line driver output (line-up)
- Suitable for measuring angle, position, revolution, speed, acceleration and distance

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db_uid=60?
catecode=01/06/01&db uid=49?catecode=01/06/01&db uid=51

E40 Series

Brand: AUTONICS
Power Supply: 5VDC, 12-24VDC ±5%

Description

Shaft Type/Blind Hollow Shaft Type Ø40mm Incremental Rotary Encoder

- Easy installation at narrow space
- Low moment of inertia
- Various output types

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db uid=60?
catecode=01/06/01&db uid=49

ENHP Series

Brand: AUTONICS

Description

Portable, Handle Type Incremental Rotary Encoder

- Suitable for manual pulse input type such as numerically controlled or milling machinery
- Emergency stop switch, enable switch is available
- 6-axis, 4-rate select switches

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/06/01&db uid=60
FD/FT/FL/GD/GT Series
Brand: AUTONICS

Description
The FD/FT/FL/GD/GT series fiber optic cables are available in various head types (thread, cylindrical, flat, perpendicular, plastic, area detection), sensing methods (through-beam, diffuse reflective, convergent reflective), cable types (standard, flexible, coaxial, break-resistant, heat-resistant) and sensing directions (flat, top, side, etc.).

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/05/02&db_uid=149

BF3R Series
Brand: AUTONICS

Description
Compact and Long Distance Sensing Type Photoelectric Sensor
- Convenient DIN rail mounting type
- Response time: Max. 1ms
- Enables to adjust sensitivity with high accuracy by dual adjuster
- Selectable Light ON/Dark ON operation mode by control wire
- Reverse power polarity and short-circuit (overcurrent) protection circuit
- Enables to use for explosion proof (fiber part)
- Adjustable length with free cut type fiber optic cable

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/05/01&db_uid=143?catecode=01/05/01&db_uid=152?catecode=01/05/01&db_uid=66?catecode=01/05/01&db_uid=67

BF4R Series
Brand: AUTONICS

Description
Small, diffuse reflective type with long sensing distance
- High speed response: max. 0.5ms
- Auto sensitivity setting (button setting)/external input sensitivity setting type
- External synchronization input, mutual interference protection, self-diagnosis
- Reverse power polarity and short-circuit (overcurrent) protection circuit
- Timer function: selectable none / 40ms OFF delay timer (fixed) (standard type, remote sensitivity setting type only)
- Automatically selectable Light ON / Dark ON
- Precise detection of small target and easy to install in the complicated place

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/05/01&db_uid=143?catecode=01/05/01&db_uid=152?catecode=01/05/01&db_uid=66
BFC Series

Brand: AUTONICS

Description

Ultra-Compact, Slim Type Photoelectric Sensors with Built-In Amplifiers

- Sets all Functional performance and parameters from external devices (PL, PLC)
- Supports various communications: RS485 communication, Serial Communication, SW input
- Connected up to 32 amplifier units (BF5 Series)
- Slim design with depth 10mm (W10×H30×L70mm)


BF5 Series

Brand: AUTONICS

Slim Design, W10×H30×L70mm

Description

Ultra-Compact, Thin Type Photoelectric Sensors with Built-In Amplifiers

- Dual-display for light incident level and setting value (BF5-D)
- Enables to detect the minute object with 1/10,000 high resolution
- Enables to detect with high-speed moving object (response speed 50μs)
- 5 response speeds: Ultra fast mode (50μs), High speed mode (150μs), Standard mode (500μs), Long distance mode (4ms), Ultra long distance mode (10ms)
- Anti-saturation setting function prevents malfunction by saturated light
- Easy sensitivity setting
- Long lasting amplifier regardless of element’s life degradation or temperature change
- Multiple sensitivity setting modes available: auto tuning, 1 point (maximum sensitivity), 2 point, positioning teaching
- Up to 8 units enable to connect with mutual interference prevention function using side connectors
- Auto channel setting function for multiple installations
- Adopts red, green, blue light sources for various environment


ADS-SE1/2 Series

Brand: AUTONICS

Long sensing distance, 0 to 10m

Description

Ultra-Compact, Slim Type Photoelectric Sensors with Built-In Amplifiers

- High ambient intensity of illumination: Max. 100,000lx of sunlight
- Easy to connect sensor head to controller
- Easy sensitivity setting (automatic sensitivity setting by one push method)
- Self-diagnosis function

Compact Size (W77×L44×H24mm): minimized max. 20% than existing product (based on depth)

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/04/02&db_uid=65?catecode=01/04/02&db_uid=3109

ADS-SE Series

Brand: AUTONICS
Compact Size: W77×L44×H30mm
Long sensing distance: 0 to 10m

Description
Ultra-Compact, Thin Type Photoelectric Sensors with Built-In Amplifiers
- High ambient intensity of illumination: Max. 100,000lx of sunlight
- Easy to connect sensor head to controller
- Easy sensitivity setting (automatic sensitivity setting by one push method)
- Self-diagnosis function

More details:

ADS-A Series

Brand: AUTONICS

Description
Auto Door Sensor
- Stop time selection function (Selectable stop time 2 / 7 / 15sec.)
- 4 steps variable function for front sensing area (7.5°, 14.5°, 21.5°, 28.5°: 4 steps variable)
● Right/Left sensing area elimination function
● Wide power supply range: 24-240VAC/24-240VDC universal, 12-24VAC/12-24VDC universal
● Built-in Microprocessor


BWPK Series

Brand: AUTONICS
Slim Body: W30×H140×T10mm

Description

Picking Sensor
● Plastic injection case
● Long/Short sensing distance mode (sensing distance selection function)
● Mutual interference prevention (frequency switching function)
● Selectable Light ON/Dark ON operation mode by switch
● Picking indicator includes
● Protection structure IP40 (IEC standard)

More details: http://autonics.com.my/products/products_detail.php?catecode=01/03/01&db_uid=202?catecode=01/03/01&db_uid=61?catecode=01/03/01&db_uid=62?catecode=01/03/01&db_uid=63

BWP Series

Brand: AUTONICS

Description

Area Sensor with Plastic Case
● 13mm slim body with fresnel lens
● Adoption of plastic (polycarbonate, acrylonitrile butadiene styrene) injection case
● Various functions: stop transmission, interference prevention, lightening/flashing JOB indicator, Light ON/Dark ON operation by switch
● Easy to recognize at side, front, and long-distance by high brightness LED of Emitter and Receiver
● Fast response time up to 7ms
● 4 models with various optical axes (8 to 20) and sensing height (140 to 380mm)
● Protection structure IP40 (IEC standard)

More details: http://autonics.com.my/products/products_detail.php?catecode=01/03/01&db_uid=202?catecode=01/03/01&db_uid=61?catecode=01/03/01&db_uid=62
BW Series
Brand: AUTONICS
Description
General Purpose Area Sensors
● Long sensing distance up to 7m
● 22 types of products (optical axis: 20/40mm, sensing height: 120 to 940mm)
● Minimizes unsensing area with 20mm optical axis pitch (BW20- )
● Easy to recognize at side, front, and long-distance by high brightness LED of Emitter and Receiver
● Includes self-diagnosis function, mutual interference prevention function, external diagnosis function.
● Protection structure IP65 (IEC standard)


BWC Series
Brand: AUTONICS
Description
Cross-Beam Area Sensors
● 3-point cross-beam netting method minimizes non-sensing area and increases sensing ability
● Long sensing distance 7m
● 7 models of number of optical axes (4 to 20EA) and optical axis pitch (40,80mm), sensing height (120 to 1,040mm)
● Easy installation by installation mode function
● Built-in interference protection, self-diagnosis function
● High luminance indicators for emitter and receiver to check the status at side, front, and long distance
● Protection structure IP65 (IEC structure)


BS5-P Series
Brand: AUTONICS
Description
Push Button Type Photomicro Sensors
● Button operation enables accurate detection regardless of material, color, or reflectance of target object
● Optimized for transport detection of semiconductor wafer enclosures (FOUP, FOSB, etc.)
● Optical detection of button operation guarantees mechanical life cycle of 5 million operations
● Total of 4 red LED indicators (side:2, top:2) for higher visibility of operation status
● Increased product durability with steel mounting brackets
● Emitter OFF function and check stable operation functions
● Power supply reverse polarity protection circuit, output short-circuit protection circuit
BS5 Series

Brand ___________________________ AUTONICS

Description

New Cable Type Sensors Added to Line-Up for Wider User Options

● Ultra compact, Built-in amplifier, NPN/PNP open collector output
● Various selection by installation position (Appearance: K, T, L, Y, V type)
● Light ON / Dark ON selectable by control terminal
● High speed response frequency : 2kHz
● Wide range of power source: 5-24VDC
(Easy to connect with various IC, relay, programmable controller etc)
● Dust resistance structure: Protecting by window of emitter/receiver
● Red LED status indication


MST Series

Brand ___________________________ AUTONICS

Description

Retroeflective Tape in Varius Sizes

● Easy attached at curved surface or narrow space
● Available to cut the tape according to the environment
● High retroreflective performance per unit

More details: http://autonics.com.my/products/products_detail.php?catecode=01/02/06&db_uid=2521

BL Series

Brand ___________________________ AUTONICS

Description

Compact Photoelectric Liquid Level Sensors

● Detects liquid in a transparent/semitransparent pipe diameter Ø6 to 13mm, thickness 1mm
● Compact size: W23×H14×L13mm
● Selectable Light ON/Dark ON operation mode by operation mode switching button
● Easy to check operation status by operation mode indicator
  [green LED (Light ON: ON, Dark ON: OFF)], operation indicator [red LED]
● Built-in reverse polarity and output short-circuit protection circuits
● IP64 of protection structure (IEC standards)

BR Series
Brand: AUTONICS

Description
Cylindrical Photoelectric (Ø18mm) Sensors

- Realizes long sensing distance (20m) (through-beam type)
- Superior noise resistance with digital signal processing
- High-speed response time under 1ms
- Power reverse polarity protection circuit, output short over current protection circuit
- Suitable for sensing in narrow space (narrow beam type)
- External sensitivity adjustment (except through-beam type)
- Light ON, Dark ON switchable by control wire (except through-beam type)
- Excellent environment-resistance performance with glass lens(BR4M)
- Protection structure IP66 (IEC standard)

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/02/05&db_uid=20

BUM Series
Brand: AUTONICS

Description
U-Shaped 4-Channel Photoelectric Sensors

- Highly reliable 4 channel detection
- High-speed response time under 1 ms
- Reverse polarity protection circuit and output short-circuit (overcurrent) protection circuit
- IP65 protection structure (IEC standard)

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/02/04&db_uid=19?catecode=01/02/04&db_uid=3195
BUP Series
Brand: AUTONICS
Description
Reinforced Plastic Case U-Shaped Type Photoelectric Sensor
- Improves noise resistance to disturbance light
- High speed response type
- Reverse power polarity and short-circuit (Overcurrent) protection circuit
- Light ON / Dark ON Selectable by control wire
- Protection structure IP66 (IEC standard): BUP-30, BUP-50

BEN Series
Brand: AUTONICS
Description
Compact, Universal Voltage Type with Built-in Amplifier
- Small and power supply built-in type
- Easy installation with LED indicators on product
- Light ON/Dark ON operation mode switch
- Status and output LED indication
- Built-in IC photo diode for disturbing light and electrical noise
More details: http://autonics.com.my/products/products_detail.php?catecode=01/02/03&db_uid=17?catecode=01/02/03&db_uid=18
BX Series

Brand: AUTONICS

Description

Terminal Type Photoelectric Sensor for Long Distance

- Sensitivity adjuster
- Timer function: ON Delay, OFF Delay, One-shot Delay
- NPN/PNP open collector output (DC power type)
- Self-diagnosis function (green LED turns on in stable level)
- Wide power supply range: Universal 24-240VDC/24-240VAC
- Protection structure IP66 (IEC standard)

More details: http://autonics.com.my/products/products_detail.php?catecode=01/02/03&db_uid=17

BMS Series

Brand: AUTONICS

Description

High Speed Response Type with Built-in Output Protection Circuit

- Reverse power polarity and overcurrent
- Response time: Max. 1ms
- Light ON/Dark ON mode selectable by control wire
- Sensitivity adjuster (except for through-beam type)

More details: http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=192?catecode=01/02/02&db_uid=2458?catecode=01/02/02&db_uid=5748?catecode=01/02/02&db_uid=107?catecode=01/02/02&db_uid=11?catecode=01/02/02&db_uid=12?catecode=01/02/02&db_uid=13?catecode=01/02/02&db_uid=14?catecode=01/02/02&db_uid=15?catecode=01/02/02&db_uid=16
BM Series

Brand: AUTONICS

Description

Small and Light, Common Type Photoelectric Sensor

- Easy to mount at a narrow space with small size and light weight.
- Convenient to adjust the sensitivity by external sensitivity adjustment control. (diffuse reflective type only)
- Easy to mount by screw type in mounting hole.
- Built-in reverse polarity protection circuit.

More details:

http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=192?catecode=01/02/02&db_uid=2458?catecode=01/02/02&db_uid=5746?catecode=01/02/02&db_uid=10?catecode=01/02/02&db_uid=11?catecode=01/02/02&db_uid=12?catecode=01/02/02&db_uid=13?catecode=01/02/02&db_uid=14?catecode=01/02/02&db_uid=15

BPS Series

Brand: AUTONICS

Description

Slim Photoelectric Sensor for Long Sensing Distance

- Easy to mount by Flat type
- Realization of 3m sensing distance as small size
- Protection structure IP67 (IEC standard)

More details:

http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=192?catecode=01/02/02&db_uid=2458?catecode=01/02/02&db_uid=5746?catecode=01/02/02&db_uid=10?catecode=01/02/02&db_uid=11?catecode=01/02/02&db_uid=12?catecode=01/02/02&db_uid=13?catecode=01/02/02&db_uid=14

BYD Series

Brand: AUTONICS

Description

Small Diffuse Reflective and Convergent Reflective Type Photoelectric Sensor

- Easy installation by compact size
- Superior detection not affected by color of target (convergent reflective type)
- Operation indicator is located on the top (BYD30-DDT-U, BYD50-DDT-U)
- Easy to adjust the response time via Timer function (off delay time: 0.1 to 2 sec variable)
- Built-in reverse polarity protection circuit and output overcurrent (short-circuit) protection circuit

More details:

http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=192?catecode=01/02/02&db_uid=2458?catecode=01/02/02&db_uid=5746?catecode=01/02/02&db_uid=10?catecode=01/02/02&db_uid=11?catecode=01/02/02&db_uid=12?
BY Series
Brand: AUTONICS
Small size: W12×H16×D30mm

Description
Small Emitter/Receiver Synchronizing Type

- Minimize malfunction by extraneous light by synchronizing emitter and receiver
- Reverse power polarity and overcurrent protection circuit
- Fast response speed: Max. 1ms

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=192
http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=2458
http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=5746
http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=10
http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=11

BJ Series
Brand: AUTONICS

Description
Compact and Long Distance Sensing Type Photoelectric Sensor

- High performance lens with long sensing distance
  - Through-beam type: 15m
  - Diffuse reflective type: 1m
  - Polarized retroreflective type: 3m (MS-2A)
- M.S.R. (Mirror Surface Rejection) function (polarized retroreflective type) for detecting mirrors or highly reflective targets
- Compact size: W10.6 × H32 × L20mm
- Light ON/Dark ON operation mode switch
- Sensitivity adjuster
- Built-in reverse polarity protection circuit and output overcurrent (short-circuit) protection circuit
- Mutual interference prevention function (except through-beam type)
- Excellent noise immunity and minimal influence from ambient light
- IP65 protection structure (IEC standard) / IP67 for BJ-C connector types

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=192
http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=2458
http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=5746
http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=10
http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=11

BA2M Series
Brand: AUTONICS

Description
Small, diffuse reflective type with long sensing distance

- Realization of long sensing distance (2m) by special optical design
- Protection structure IP64 (IEC standard)
Built-in stability indicator
Includes sensitivity adjustment function
2 color LED display

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=192?catecode=01/02/02&db_uid=2458?catecode=01/02/02&db_uid=5746?catecode=01/02/02&db_uid=10

BTS Series
Brand.................................................................AUTONICS

Description
Ultra-Compact, Slim Type Photoelectric Sensors with Built-In Amplifiers

- Ultra-slim width of only 7.2mm
  - W7.2×H18.6×L9.5mm (through-beam type)
  - W7.2×H24.6×L10.8mm (retroreflective type, convergent reflective type)

- Detection methods and minimum target size
  - Through-beam type (BTS1M): Ø2mm
  - Retroreflective type (BTS200): Ø2mm (at distance 100mm)
  - Convergent reflective type (BTS15/BTS30): Ø0.15mm (at distance 10mm)
※Detecting distance may vary by environmental factors

- Maximum detection distance: 1m (through-beam type)
- Stability indicator (red LED) and operation indicator (green LED)
- Stainless steel 304 mounting brackets
- IP67 protection structure (IEC standard)

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/02/02&db_uid=192?catecode=01/02/02&db_uid=2458

BTF Series
Brand.................................................................AUTONICS

Description
Ultra-Compact, Thin Type Photoelectric Sensors with Built-In Amplifiers

- Ultra-thin size of only 3.7mm
- W13 × H19 × L3.7mm (through-beam type)
- W13 × H24 × L3.7mm (diffuse reflective type, BGS reflective type)

**Detection methods and minimum target size**

- Through-beam type (BTF11): Ø0mm
- Diffuse reflective type (BTF30): Ø0.2mm (at distance 10mm)
- BGS reflective type (BTF15): Ø0.2mm (at distance 10mm)

**Detecting distance may vary by environmental factors**

- Stability indicator (green LED) and operation indicator (red LED)
- Stainless steel 304 mounting brackets
- IP67 protection structure (IEC standard)

More details:  
● Loop powered type
The signal is transmitted by magnetic coupling of coils.
● Superior with environmental resistance
Non-malfunction for oil or dust on transmission part
● Applications
  Drilling, Machine table, Robot arm, Conveyor belt and Various revolution axis.

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/01/04&db_uid=4

CR Series
Brand:_________________________________________AUTONICS

Description
Electric Capacitive Type Proximity Sensor
  ● Sensing of iron, metal, plastic, water, stone, wood etc.
  ● Long life cycle and high reliability
  ● DC type: Built-in surge protection circuit, reverse polarity protection circuit
  AC type: Built-in surge protection circuit
  ● Easy to adjust of the sensing distance with sensitivity adjuster
  ● Red LED operation indicator
  ● Easy to control of level and position

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/01/03&db_uid=3

PFI Series
Brand:_________________________________________AUTONICS

Description
Flat Type Proximity Sensor
  ● Easy to mount in narrow space by flat structure (height: 10mm)
  ● Improved the noise immunity with dedicated IC (DC type)
  ● Built-in reverse polarity protection circuit, over-current protection circuit (DC type)
  ● Built-in surge protection circuit
  ● Red LED operation indicator
  ● IP67 protection structure (IEC standard)
  ● Replaceable for micro switches and limit switches
**PS/PSN Series**

Brand: AUTONICS

Description

Rectangular Type Proximity Sensor

- Excellent noise immunity with specialized sensor IC
- Long life cycle, reliable performance, economical, and easy-to-install
- Operation indicator (red LED)
- Built-in surge protection circuit
- Built-in overcurrent protection circuit (DC types)
- Built-in reverse polarity protection circuit (DC 3-wire types)
- IP67 protection structure (IEC standard)

More details:

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**AS Series**

Brand: AUTONICS

Description

Long Sensing Distance Type Proximity Sensor

- Sensing up to as 50mm
- Improved the noise immunity with dedicated IC
- Built-in reverse polarity protection circuit, surge protection circuit, over-current protection circuit
- Wide range of power supply: 12-48VDC
  (voltage range: 10-65VDC)
- Simultaneous output of Normal Open+Normal Close
- Built-in power indicator and operation indicator
- IP67 protection structure (IEC standard)

Specification

More details:
PRDAW Series
Brand: AUTONICS
Description
Cylindrical, Spatter-Resistance, Cable Connector type, Proximity Sensor
More details:
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=79
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=77
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=155
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=2807
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=153
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=5721

PRDACM Series
Brand: AUTONICS
Description
Long Distance Cylindrical Spatter-Resistance Connector Type Proximity Sensor
- Prevent malfunction due to welding spatter with PTFE coating
- Improved the noise immunity with dedicated IC
- Built-in reverse polarity protection circuit (DC 3-wire type)
- Built-in surge protection circuit, over-current protection circuit
- IP67 protection structure (IEC standard)
- Replaceable for spatter-resistance type limit switches
More details:
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=79
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=77
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=155
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=2807
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=153
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=5721
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=2808
PRACM Series

Brand: AUTONICS

Description

Cylindrical Spatter-Resistance Connector Type Proximity Sensor

- Prevent malfunction due to welding spatter with PTFE coating
- Improved the noise immunity with dedicated IC
- Built-in reverse polarity protection circuit (DC 3-wire type)
- Built-in surge protection circuit, over-current protection circuit
- IP67 protection structure (IEC standard)
- Replaceable for spatter-resistance type limit switches

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=7?catecode=01/01/02&db_uid=79?catecode=01/01/02&db_uid=6?catecode=01/01/02&db_uid=77?catecode=01/01/02&db_uid=154?catecode=01/01/02&db_uid=155?catecode=01/01/02&db_uid=8?catecode=01/01/02&db_uid=2807

PRW Series

Brand: AUTONICS

Description

Cylindrical Cable Outgoing Connector Type Proximity Sensor

- Shorten the time of maintenance with the body
- Improved the noise immunity with dedicated IC
- Built-in reverse polarity protection circuit (DC 3-wire type)
- Built-in surge protection circuit
- Built-in over-current protection circuit
- IP67 protection structure (IEC standard)
- Replaceable for micro switches and limit switches

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=7?catecode=01/01/02&db_uid=79
PRCM Series

Brand: AUTONICS

Description

Cylindrical Connector Type Proximity Sensor

- Improved the noise immunity with dedicated IC
- Built-in reverse polarity protection circuit (DC 3-wire type)
- Built-in surge protection circuit
- Built-in over-current protection circuit (DC type)
- IP67 protection structure (IEC standard) for connector part
- Replaceable for micro switches and limit switches

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=79?catecode=01/01/02&db_uid=77?catecode=01/01/02&db_uid=6

PRDCM Series

Brand: AUTONICS

Description

Cylindrical Long Sensing Distance, Connector Type Proximity Sensor

- Long sensing distance (1.5 to 2 times longer sensing distance guaranteed compared to existing models)
- Advanced durability as comprehensive existing case and rear cap structure
- Shorten the time of maintenance
- Improved the noise immunity with dedicated IC
- Built-in surge protection, reverse polarity protection, over-current protection circuit
- Red LED operation indicator
- IP67 protection structure (IEC standard)

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=7?catecode=01/01/02&db_uid=79?catecode=01/01/02&db_uid=6?catecode=01/01/02&db_uid=154?catecode=01/01/02&db_uid=155
PRDW Series
Brand: AUTONICS
Description
Cylindrical, Long Sensing Distance, Cable Connector Type Proximity Sensor
- Long sensing distance (1.5 to 2 times longer sensing distance guaranteed compared to existing models)
- Improved the noise immunity with dedicated IC
- Built-in surge protection, reverse polarity protection, over-current protection circuit
- Long life cycle and high reliability, and simple operation
- Red LED operation indicator
- IP67 protection structure (IEC standard)
- Replaceable for micro switches and limit switches
- Strain relief cables: improved flexural strength of cable connecting component

More details:
catecode=01/01/02&db_uid=79?catecode=01/01/02&db_uid=77?
catecode=01/01/02&db_uid=154

PRDAT Series
Brand: AUTONICS
Description

Long Distance Sensing Spatter-resistant Type Proximity Sensors

PRD Series
Brand: AUTONICS

Description

Long Distance Sensing Proximity Sensors

- Long sensing distance (1.5 to 2 times longer sensing distance guaranteed compared to existing models)
- Improved the noise immunity with dedicated IC
- Built-in surge protection, reverse polarity protection, over-current protection circuit
- Long life cycle and high reliability, and simple operation
- Red LED operation indicator
- IP67 protection structure (IEC standard)
- Replaceable for micro switches and limit switches
- Strain relief cables: improved flexural strength of cable connecting component

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=7
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=79
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=6
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=77

PRA Series
Brand: AUTONICS

Description

Spatter-resistant Type Proximity Sensor

- Prevent malfunction due to welding spatter with PTFE coating
- Improved the noise immunity with dedicated IC
- Built-in reverse polarity protection circuit (DC 3-wire type)
- Built-in surge protection circuit
- Built-in over-current protection circuit (DC type)
- IP67 protection structure (IEC standard)
- Replaceable for spatter-resistance type limit switches

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=7
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=79
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=6
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=77
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=154
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=155
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=8
PR Series

Brand: AUTONICS

Description

Cylindrical Type Proximity Sensor

- Improved the noise immunity with dedicated IC
- Built-in reverse polarity protection circuit (DC 3-wire type)
- Built-in surge protection circuit
- Built-in over-current protection circuit (DC type)
- Long life cycle and high reliability, and simple operation
- IP67 protection structure (IEC standard)
- Replaceable for micro switches and limit switches

More details:
http://autonics.com.my/products/products_detail.php?catecode=01/01/02&db_uid=7


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