

Accessory Catalogue

Commercial and Industrial Garage Door Accessories and Components

- Entrapment Protection Devices
- Control Devices
- Vehicle Management
- Miscellaneous and Specialty Items



Effective January 1, 2023

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For additional information, availability or additional products not listed, please consult inside sales.

Terms and Conditions of Sale

1. ACCEPTANCE OF ORDER

All Buyer's orders must either be written on the Buyer's Purchase Order or Manaras' Order Form and signed by the Buyer. Manaras is not bound by any terms listed on the Buyer's Order Form which are in variance with Manaras' Terms and Conditions of Sale. Upon receiving Manaras' Order acknowledgement, the Buyer is considered to have accepted Manaras' Terms and Conditions of Sale. No order, quotation or acknowledgements and no provisions of Manaras' Terms and Conditions of Sale shall be subject to change in any respect, except as may be expressly agreed to in writing by an authorized representative of Manaras. Manaras' failure to object to provisions contained in any Purchase Order or other communication from a Buyer, (including without limitations penalty clauses or labor charges) shall not be construed as a waiver of these Terms and Conditions of Sale, nor an acceptance of any such provisions. The Terms and Conditions herein constitute the entire Agreement between Manaras and the Buyer. No other representations or warranties shall be binding against Manaras. In no event shall Manaras be responsible or liable for any special indirect or consequential damages arising out of this Agreement with the Buyer. These conditions of sale do not constitute a franchise or establish an agency relationship and do not grant a trademark or any other expressed or implied license.

Minimum order: There is a minimum charge of **\$50.00 Net** (excluding tax and freight). We recommend that you consolidate your orders to meet or exceed this amount.

2. PRICES

Prices do not include any federal, state, provincial or local taxes. Prices and specifications are subject to change without notice. Written quotations expire 30 days from the date of the quotation, unless otherwise specified. In the event that the Buyer wants to postpone the delivery date of a previously accepted order, Manaras, on its sole discretion, reserves the right to approve such postponement. If Manaras agrees in writing to a postponed delivery date then the price that will apply to this Order shall be the price in effect on the postponed shipping date.

3. TERMS OF PAYMENT

Terms of payment are as specified in Manaras' Order Acknowledgment and in Manaras' Invoice, regardless of terms indicated in the Buyer's Order Form or other documents. Any outstanding balances unpaid on the due dates shall be subject to payment of an interest charge until paid at the maximum legally permissible rate of interest in the state or province having jurisdiction of the transaction. Accounts with outstanding balances may be placed on credit hold until the account is brought to date. Accounts past 60 days may be placed on collection and all charges incurred in the collection process will be invoiced to the Buyer. Furthermore, the account will be reclassified to 100% prepayment status; work in process will be placed on hold and warranty will no longer be honored. Payment on time and in accordance with the terms stated is of essence, and whenever the Buyer is in default, or in the event of substantial changes in the financial situation of the Buyer's Company, including but not limited to bankruptcy, change of ownership, change in credit rating, Manaras reserves the right to cancel the Purchase Order without any liability for damages to the Buyer, or defer or discontinue shipments until all past due payments are made and assurances furnished to Manaras' satisfaction, of the Buyer's ability to pay for such shipments. If an order involves partial shipments, failure to pay for a partial shipment entitles Manaras to hold subsequent deliveries until payment of past due shipments is made.

4. DELIVERY

All shipments are FCA Manaras' Montreal warehouse (Incoterms® 2020), unless otherwise specified by Manaras. Manaras shall specify Point of Shipment on its Purchase Order Acknowledgement, and Manaras shall select routing and method of transportation if not specified on Customer's Purchase Order. Risk of loss on all products shall pass to the Buyer at the FCA Manaras' Montreal warehouse (Incoterms® 2020). Claims for loss or damaged shipments shall be reported immediately to the carrier, and annotations shall be placed on all delivery receipts signed by the Buyer. The Buyer is further requested to inspect the merchandise upon delivery and in the event defects or damages should be noticed after delivery, the carrier should be immediately contacted by telephone and, if carrier fails to send an inspector within 5 days, a request should be made in writing to the carrier, confirming the telephone request for an inspection. Should the Buyer, in the first instance, fail to file a claim with the carrier properly substantiated in accordance with its rules and within allowable time-limit, any possibility of claim for defect against Manaras is eliminated.

5. SHIPPING DELAYS

Unless otherwise specified by Manaras, shipping dates provided by Manaras at the request of the Buyer are approximate, deviation from estimated shipping schedules shall not entail penalties or damages, nor shall it be an acceptable ground for cancellation of the order. Manaras shall not be responsible for any losses or damages to the Buyer (or any third party) occasioned by the non-performance of any of Manaras' obligations under the contract when due to any cause beyond Manaras' reasonable control, including without limitations an act of God, act or omission of the Buyer, embargo or other governmental act or authority regulations or request, fire, theft, accidents, strikes, slow-down, war, riot, delays in transportation, inability to obtain necessary labor, material or manufacturing facilities.

6. WARRANTY

Manaras warrants its operators to be free from defects in material and workmanship under normal and proper use for a period of two years from date of invoice, unless otherwise stated. Mechanical, electrical and electronic accessories are warranted for one year from date of invoice, unless otherwise stated. Wearing parts such as, but not limited to, clutch pads, V-belts, and brake bands are excluded from warranty. Manaras' only obligation shall be to repair or replace defective equipment which does not conform to the warranty. Manaras shall not be liable for any injury, loss or damage, direct or consequential, arising out of the inability to use the equipment. Before using, the Buyer and/or the ultimate User shall determine the suitability of the product for its intended use, and User assumes all risks and liability in connection therewith. The foregoing may not be changed except by an Agreement signed by an authorized representative of Manaras. The articles that are replaced pursuant to the terms of this warranty shall be retained by Manaras, and the User is responsible for any freight costs relating to repair or replacement.

The foregoing warranty is exclusive and in lieu of all other warranties of quality, whether written, oral or implied (including any other warranty of merchantability or fitness for purpose).

The following are **exclusions** from warranty:

- If usage, product modification, adaptation or installation are not in accordance with our installation and operating instructions.
- If the product has been opened, dismantled or returned with clear evidence of abuse or other damage.
- If our written specifications are not properly applied by the Buyer when selecting the equipment.
- If our written instructions for installation and wiring of the electrical connections have not been followed.
- If our equipment has been used to perform functions other than the functions it was designed to handle.
- If Manaras equipment is used with electrical accessories (switches, relays, etc.) that have not been previously approved in writing by the Manaras Engineering Department.
- If electrical accessories and other components have been used in disregard of the basic wiring diagram for which they were designed.

All costs related to installation and reinstallation of the Manaras equipment covered by this warranty are not the responsibility of Manaras. Manaras will not be responsible for any consequential damages following installation procedures performed by the Buyer or the User. If the Buyer resells any Manaras products to another Buyer or User, it shall include all of the terms and provisions of this warranty in such resale. Manaras' responsibility to any such Third Party shall be no greater than Manaras' responsibility under the warranty to the original Buyer.

7. RETURNS

No returns will be accepted without prior written authorization by Manaras. All returns must be accompanied by a Return Authorization Number issued by Manaras, and all unauthorized returns will be refused. The return shipment is to be freight prepaid by the Buyer, and under no circumstances shall the Buyer deduct the value of the returned merchandise from any remittance due. A restocking fee of 15% of the Manaras sale price will be charged for all returns not covered under warranty.

8. TITLE

Manaras shall retain a security interest in the products until fully paid and the Buyer agrees to perform all acts which may be necessary to perfect and assure the security interest in such equipment by Manaras. In the event that Manaras wishes to file a security interest in the products, pursuant to the Uniform Commercial Code, the Buyer authorizes Manaras to file such financing statements without the Buyer's signature.

9. DEFAULT

In the event of the Buyer's default in payment for the products purchased hereunder upon the terms and conditions agreed upon with Manaras, to the extent permissible for applicable State or Provincial Law, Buyer shall be responsible for all reasonable costs and expenses incurred by Manaras in collecting any sums owed by the Buyer, and Manaras shall not be obligated to make any further deliveries to the Buyer.

10. SUBSTITUTES

Manaras may furnish substitutes for materials not obtainable because of priorities or regulations established by governmental authorities or because of non-availability of materials from suppliers, provided such substitutes will not affect the technical soundness of the product or its performance.

11. ERRORS

All typographical or clerical errors made are subject to correction.

12. DIMENSIONS

The dimensions and measurements in our printed documents are approximate at the date of publication and may be superseded thereafter. Buyer should consult factory before utilizing such information.

13. WAIVER

The failure of Manaras to seek redress for violation of, or to insist upon the strict performance of any covenant or condition of this agreement shall not prevent a subsequent act which would have originally constituted a violation from having all the force and effect of an original violation. The receipt by Manaras of any payment with knowledge of the breach of any covenant of this agreement shall not be deemed a waiver of such breach and no provision of this agreement shall be deemed to have been waived by Manaras unless such waiver be in writing and is signed by Manaras.

Manaras Standard Terms and Conditions of Sale apply to all products. Prices and design modifications are subject to change without notice. All text, images and trademarks used in this document are not to be used by any third party unless expressly authorized by Manaras. The reproduction in whole or in part, in any form, of any information found in this document is illegal.

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Photoelectric Cells

Monitored Photoelectric Cells

PHOTO 070



- Monitored
- UL325 Recognized Component
- Type: Thru-beam
- Range: 5' to 45' (approx.)
- Interior use
- Nema 1 enclosure
- Materials: ABS-PC
- Operation Temperature: -12°C to 74°C (-10°F to 165°F)
- Power Supply: Self-powered by ECB main controller
- Dimensions: 2.13" W x 1.5" Ø
- Dimensions (bracket): 1.5" W x 1.5" H x 6.75" D
- Includes: Transmitter, receiver, 30' of connection wire, L shape mounting brackets, hardware kit
- Compatible with: INTERFACE001, INTERFACE003

PHOTO 061



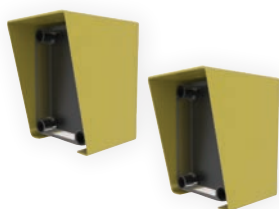
- Monitored
- UL325 Recognized Component
- Type: Thru-beam
- Range: 5' to 45' (approx.)
- Industrial environments
- Nema 4X, IP65 enclosure
- Materials: Thermoplastic elastomer (TPE)
- Operation Temperature: -25°C to 74°C (-13°F to 165°F)
- Power Supply: Self-powered by ECB main controller
- Dimensions: 2" W x 1.25" H x 6" D
- Dimensions (bracket): 1.5" W x 0.75" H x 3.58" D
- Includes: Transmitter, receiver, 3' of connection wire, soft brackets, L shape mounting brackets, hardware kit
- For 50' of connection wire: order PHOTO061A
- For sunlight reflection protection hood: order HOOD001

PHOTO 065



- Monitored
- UL325 Recognized Component
- Type: Retro-reflective
- Range: 5' to 40' (approx.)
- Harsh environments
- Nema 4X, IP65 enclosure
- Materials: Polyamide and steel
- Operation Temperature: -30°C to 60°C (-22°F to 140°F)
- Power Supply: Self-powered by ECB main controller
- Dimensions: 1.7 5" W x 4.25" H x 1.75" D
- Dimensions (reflector): 0.5" W x 3.5" H x 2" D
- Dimensions (bracket): 2" W x 1" H x 7" D
- Includes: Transmitter/receiver, reflector, 6.5' of connection wire, L shape mounting brackets, hardware kit
- For connection kit (1/2 NPT gland, 6.3' of 0.25" conduit, junction box): order PHOTO065A
- For replacement reflector: order PHOTO072

PHOTO 045M



- Monitored
- Type: Thru-beam
- Range: 3' to 115' (approx.)
- Interior/exterior use
- Nema 4X enclosure
- Materials: Polystyrene, polycarbonate cover (photocells), anodized aluminum (protective hoods)
- Operation Temperature: -40°C to 77°C (-40°F to 171°F)
- Power Supply: 12 to 24 V_{AC} 50/60 Hz // 12 to 24 V_{DC}
- Dimensions: 2.56" W x 3.7" H x 2.24" D
- Includes: Transmitter, receiver, protective hoods
- For replacement hood: order PHOTO015
- For replacement photocell: order PHOTO016M
- For non-monitored function: order PHOTO045

Photoelectric Cells

Non-Monitored Photoelectric Cells

PHOTO 008...



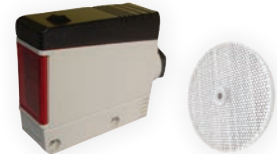
- Photoelectric cells and interface module
- Renders any monitored photoelectric cell compatible with non-monitored controls
- Various combinations available:
PHOTO008C3 (incl. PHOTO061),
PHOTO008D1 (incl. PHOTO065),
PHOTO008E1 (incl. PHOTO070)
- For replacement interface module order:
INTERFACE001

PHOTO 075



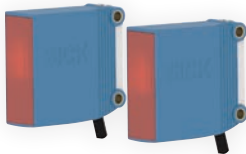
- Non-monitored (NO/NC relay output)
- UL325 Recognized Component
- Type: Retro-reflective
- Range: 32' (approx.)
- Interior/exterior use
- IP67 enclosure
- Materials: ABS, PMMA (photocell, reflector), zinc-plated steel (bracket)
- Operation Temperature: -30°C to 60°C (-22°F to 140°F)
- Power Supply: 24 to 240 V_{AC} 50/60 Hz // 24 to 240 V_{DC}
- Dimensions: 0.70"W x 1.90"H x 2.0"D
- Dimensions (reflector): 0.31"W x 2.02"H x 2.02"D (not shown)
- Dimensions (bracket): 2.76"W x 2.13"H x 0.87"D (not shown)
- Includes: Photocell, reflector, mounting bracket
- For replacement reflector order: PHOTO076

PHOTO 060



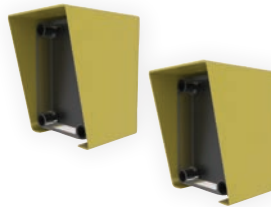
- Non-monitored (NO/NC relay output)
- UL325 Recognized Component
- Type: Retro-reflective
- Range: 39' (approx.)
- Interior/exterior use
- Nema 4/12, IP67 enclosure
- Materials: Reinforced ABS-PC
- Operation Temperature: -25°C to 55°C (-13°F to 131°F)
- Power Supply: 21.6 to 264 V_{AC} 50/60 Hz // 10.8 to 264 V_{DC}
- Dimensions: 3.20"W x 2.66"H x 1.00"D
- Dimensions (reflector): 0.37"W x 3.08"Ø
- Includes: Photocell, reflector, mounting bracket
- For replacement reflector: order PHOTO024

PHOTO 077



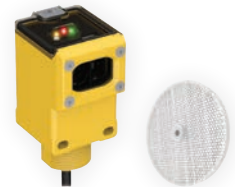
- Non-monitored (NO/NC relay output)
- UL325 Recognized Component
- Type: Thru-beam
- Range: 114' to 130' (approx.)
- Interior/exterior use
- IP67 enclosure
- Materials: ABS, PMMA (photocells), zinc-plated steel (brackets)
- Operation Temperature: -30°C to 60°C (-22°F to 140°F)
- Power Supply: 24 to 240 V_{AC} 50/60 Hz // 24 to 240 V_{DC}
- Dimensions: 0.70"W x 1.90"H x 2.0"D
- Dimensions (brackets): 2.76"W x 2.13"H x 0.87"D (not shown)
- Includes: Transmitter, receiver, brackets

PHOTO 045



- Non-monitored (NO/NC relay output)
- Type: Thru-beam
- Range: 3' to 115' (approx.)
- Interior/exterior use
- Nema 4X enclosure
- Materials: Polystyrene, polycarbonate cover (photocells), anodized aluminum (protective hoods)
- Operation Temperature: -40°C to 77°C (-40°F to 171°F)
- Power Supply: 12 to 24 V_{AC} 50/60 Hz // 12 to 24 V_{DC}
- Dimensions: 2.56"W x 3.7"H x 2.24"D
- Includes: Transmitter, receiver, protective hoods
- For replacement hood: order PHOTO015
- For replacement photocell: order PHOTO016
- For monitored function: order PHOTO045M

PHOTO 073



- Non-monitored
- Type: Retro-reflective
- Range: 30' (approx.)
- Classified hazardous location
- Nema 6P, IEC IP67, NAMUR enclosure
- Materials: Polyester (enclosure), acrylic (lens), stainless steel (hardware)
- Operation Temperature: -40°C to 70°C (-40°F to 158°F)
- Power Supply: 5 to 15 V_{DC}
- Dimensions: 1.75"W x 3.45"H x 2.13"D
- Dimensions (reflector): 0.28"W x 3.19"Ø
- Dimensions (bracket): 2.25"W x 2.25"H x 2.76"D (not shown)
- For use with certified intrinsically safe switching amplifiers and barriers
- Compatible with: SAFEPACK003
- Includes: Photocell, reflector, mounting bracket
- For replacement reflector order: PHOTO074

Photoelectric Cells

Non-Monitored Photoelectric Cells

PHOTO 059



- Non-monitored (NO/NC relay output)
- Type: Thru-beam
- Range: 3' to 115' (approx.)
- Classified hazardous location
- Nema 4X and 7 enclosure, NEC Class I Groups B/C/D, Class II Groups E/F/G, Class III, EExd IIC
- Materials: Aluminum die-cast, epoxy coating
- Operation Temperature: -40°C to 77°C (-40°F to 171°F)
- Power Supply: 12 to 24 V_{AC} 50/60 Hz // 12 to 24 V_{DC}
- Dimensions: 3.44" W x 4.69" H x 4.5" D
- Includes: Transmitter, receiver

Photoelectric Cells

Components and Accessories

INTERFACE 001



- Interface module
- Enables the connection of monitored photoelectric cells to an electronic/electromechanical control without monitoring function
- Interior use
- Nema 1 enclosure
- Materials: Plastic
- Operation Temperature: -30°C to 70°C (-22°F to 158°F)
- Power Supply: 24 V_{AC}/V_{DC}
- Dimensions: 2.62" W x 4.75" H x 1.34" D
- Includes: Interface module
- Compatible with: PHOTO061, PHOTO065, PHOTO070
- Used in: PHOTO008 series

INTERFACE 003



- Interface module
- Used to merge two monitored devices on the same monitored input on the ECB
- Interior/exterior use
- Nema 4 enclosure
- Materials: ABS/PA6 30% GF/TPE
- Operation Temperature: -25°C to 75°C (-13°F to 167°F)
- Power Supply: 24 V_{AC}/V_{DC}, 15 mA
- Dimensions: 1.5" W x 3" H x 0.5" D
- Includes: Interface module
- Compatible with: LIGHTCURTAIN001, LIGHTCURTAIN002, PHOTO045M, PHOTO061/061A, PHOTO065, PHOTO067A, PHOTO068C, PHOTO068D, PHOTO070, SENSEEDGE007UM, SENSEEDGE018UM, SENSEEDGE042, SENSEEDGE044UM, SENSEEDGE046M

HOOD 001



- Sunlight protection hood/visor
- To be installed on the receiver unit of compatible thru-beam type photoelectric cells to increase transmission accuracy
- Dimensions: 1.5" W x 1" Ø
- Includes: Hood, hardware
- Compatible with: PHOTO061/061A (receivers)

HOOD 002



- Sunlight protection hood/visor
- To be installed on receiver unit of compatible thru-beam type photoelectric cells to increase transmission accuracy
- Dimensions: 0.71" W x 0.47" Ø
- Includes: Hood

PHOTO 024



- Reflector
- Materials: Clear acrylic
- Dimensions: 0.37" W x 3.08" Ø
- Includes: Reflector
- Compatible with: PHOTO060

PHOTO 072



- Reflector
- Dimensions: 0.5" W x 3.5" H x 2" D
- Includes: Reflector
- Compatible with: PHOTO008D1, PHOTO065

Photoelectric Cells

Components and Accessories

PHOTO 074



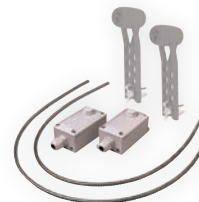
- Reflector
- Material: clear acrylic
- Dimensions: 0.28" W 3.19" Ø
- Includes: Reflector
- Compatible with: PHOTO073

PHOTO 076



- Reflector
- Materials: ABS, PMMA
- Dimensions: 0.31" W x 2.02" H x 2.02" D
- Includes: Reflector
- Compatible with: PHOTO075

CONNECTSET 001



- Junction box and connection set for photoelectric cell installation applications which require all wiring to be done in a conduit
- Includes: Fittings to cover both sides of the door; flexible stainless steel conduit (3' W x 3/16" Ø) (x2), junction box (x2), wire nuts
- Not included: Photoelectric cells
- Compatible with: PHOTO061/061A, SENSEGE042, etc.

Light Curtains

Monitored and Non-Monitored Light Curtains, Components and Accessories

LIGHTCURTAIN 001



- Monitored
- UL325 Recognized Component
- Type: Thru-beam
- Range: 32' (approx.)
- Detection Height: 36"
- Interior/exterior use
- IP67 enclosure
- Materials: Black PVC, aluminum
- Operation Temperature: -40°C to 60°C (-40°F to 140°F)
- Power Supply: 12 to 24 V_{AC}/V_{DC}, 100 mA max. at 24 V_{DC}
- Dimensions: 1.13"W x 38"H x 1"D
- Detection Angle: Tx: +/- 10°, Rx: +/- 20°
- Includes: Transmitter, receiver, 3' of connection wire, mounting brackets
- Compatible with: INTERFACE003
- For non-monitored function: order LIGHTCURTAIN003

LIGHTCURTAIN 002



- Monitored
- UL325 Recognized Component
- Type: Thru-beam
- Range: 32' (approx.)
- Detection Height: 72"
- Interior/exterior use
- IP67 enclosure
- Materials: Black PVC, aluminum
- Operation Temperature: -40°C to 60°C (-40°F to 140°F)
- Power Supply: 12 to 24 V_{AC}/V_{DC}, 100 mA max. at 24 V_{DC}
- Dimensions: 1.13"W x 74"H x 1"D
- Detection Angle: Tx: +/- 10°, Rx: +/- 20°
- Includes: Transmitter, receiver, 3' of connection wire, mounting brackets
- Compatible with: INTERFACE003
- For non-monitored function: order LIGHTCURTAIN004

LIGHTCURTAIN 003



- Non-monitored
- UL325 Recognized Component
- Type: Thru-beam
- Range: 32' (approx.)
- Detection Height: 36"
- Interior/exterior use
- IP67 enclosure
- Materials: Black PVC, aluminum
- Operation Temperature: -40°C to 60°C (-40°F to 140°F)
- Power Supply: 12 to 24 V_{AC}/V_{DC}, 100 mA max. at 24 V_{DC}
- Dimensions: 1.13"W x 38"H x 1"D
- Detection Angle: Tx: +/- 10°, Rx: +/- 20°
- Includes: Transmitter, receiver, 3' of connection wire, mounting brackets, INTERFACE005
- For monitored function: order LIGHTCURTAIN001

LIGHTCURTAIN 004



- Non-monitored
- UL325 Recognized Component
- Type: Thru-beam
- Range: 32' (approx.)
- Detection Height: 72"
- Interior/exterior use
- IP67 enclosure
- Materials: Black PVC, aluminum
- Operation Temperature: -40°C to 60°C (-40°F to 140°F)
- Power Supply: 12 to 24 V_{AC}/V_{DC}, 100 mA max. at 24 V_{DC}
- Dimensions: 1.13"W x 74"H x 1"D
- Detection Angle: Tx: +/- 10°, Rx: +/- 20°
- Includes: Transmitter, receiver, 3' of connection wire, mounting brackets, INTERFACE005
- For monitored function: order LIGHTCURTAIN002

INTERFACE 003



- Interface module
- Used to merge two monitored devices on the same monitored input on the ECB
- Interior/exterior use
- Nema 4 enclosure
- Materials: ABS/PA6 30% GF/TPE
- Operation Temperature: -25°C to 75°C (-13°F to 167°F)
- Power Supply: 24 V_{AC}/V_{DC}, 15 mA
- Dimensions: 1.5"W x 3"H x 0.5"D
- Includes: Interface module
- Compatible with: LIGHTCURTAIN001, LIGHTCURTAIN002, PHOTO045M, PHOTO061/061A, PHOTO065, PHOTO067A, PHOTO068C, PHOTO068D, PHOTO070, SENSEEDGE007UM, SENSEEDGE018UM, SENSEEDGE042, SENSEEDGE044UM, SENSEEDGE046M

INTERFACE 005

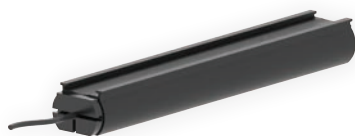


- Interface module
- Controller for non-contact opto sensing edges and light curtains
- UL325 Recognized Component
- Interior/exterior use
- Nema 4 enclosure
- Materials: Polycarbonate
- Operation Temperature: -18°C to 55°C (-0°F to 131°F)
- Power Supply: 12 to 24 V_{AC}/V_{DC}, 50 mA
- Dimensions: 6.63"W x 1.75"H x 1.75"D
- Includes: Interface module, hardware
- Included with: PHOTO067, PHOTO068A/B, LIGHTCURTAIN003, LIGHTCURTAIN004

Electric Sensing Edges

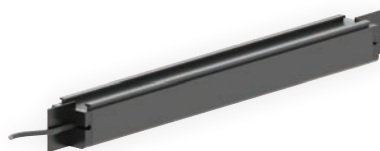
Monitored Electric Sensing Edges

SENSEEDGE 044UM



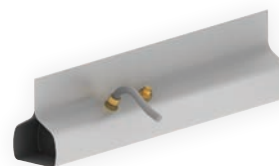
- For sectional doors, sliding gates
- Industry Codification: ME-123
- Type: 2-wire, monitored
- UL325 Recognized Component
- Wire Outlet Location: Universal
- Vertical or horizontal mount
- Section: 2"W x 1.5"H
- Min./Max. Length: 6'/40'
- Power Supply: Self-powered by ECB main controller
- To be used with: INTERFACE002
- Sold per inch, made-to-order lengths, no returns or exchanges
- Mounting channels available
- For non-monitored function: order SENSEEDGE044U

SENSEEDGE 007UM



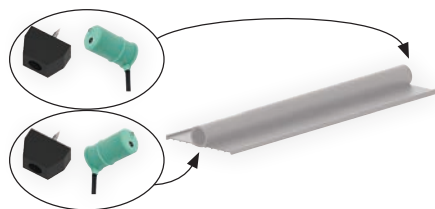
- For sectional doors
- Industry Codification: ME-113
- Type: 2-wire, monitored
- UL325 Recognized Component
- Wire Outlet Location: Universal, other options available
- Vertical or horizontal mount
- Section: 1.5"W x 1.5"H
- Min./Max. Length: 4'/40'
- Power Supply: Self-powered by ECB main controller
- To be used with: INTERFACE002
- Sold per foot, made-to-order lengths, no returns or exchanges
- Mounting channels available
- For non-monitored function: order SENSEEDGE007

SENSEEDGE 018UM



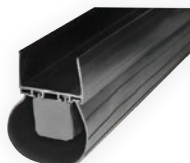
- For rolling doors
- Industry Codification: MT-22
- Type: 2-wire, monitored
- UL325 Recognized Component
- Wire Outlet Location: Universal, other options available
- Horizontal mount
- Section: 2"W x 2"H with 1.5" flap
- Min./Max. Length: 4'/40'
- Power Supply: Self-powered by ECB main controller
- To be used with: INTERFACE002
- Sold per foot, made-to-order lengths, no returns or exchanges
- Must order 2" less than total width of door for flaps to fit
- For non-monitored function: order SENSEEDGE018U

SENSEEDGE 042



- Opto edge kit for sectional doors
- Monitored
- To be assembled in the field with HOSE010 (sold separately)
- UL325 Recognized Components (active), Nema 4X, IP65
- Operation Temperature: -25°C to 74°C (-13°F to 165°F)
- Power Supply: Self-powered by ECB main controller
- Mounting channels available
- Includes: Modular bumpers, photoeyes
- Not included: Rubber hose (HOSE010)
- Compatible with: CONNECTSET001, HOSE010
- Replacement parts order: BUMPER001, PHOTO061A (photoeyes only)

SENSEEDGE 046M

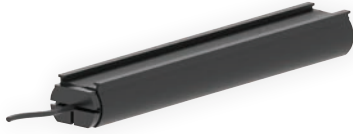


- For sectional doors
- Industry Codification: Clima-GUARD
- Type: 2-wire, monitored
- UL325 Recognized Component
- Wire Outlet Location: Options available
- Horizontal mount
- Section: 2.0"W x 2.75"H (including loop seal)
- Min./Max. Length: 4'/40'
- Power Supply: Self-powered by ECB main controller
- To be used with: INTERFACE002
- Sold per foot, made-to-order lengths, no returns or exchanges
- Includes: Sensing edge, loop seal, mounting channel
- For non-monitored function: order SENSEEDGE046

Electric Sensing Edges

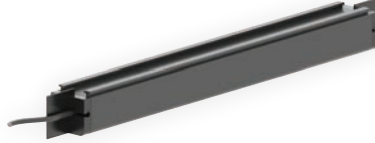
Non-Monitored Electric Sensing Edges

SENSEEDGE 044U



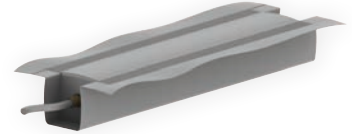
- For sectional doors, sliding gates
- Industry Codification: ME-123
- Type: 2-wire/NO, non-monitored
- Wire Outlet Location: Universal
- Vertical or horizontal mount
- Section: 2"W x 1.5"H
- Min./Max. Length: 6'/40'
- Electrical Rating: 24 VAC/VDC, 0.5 A
- Sold per inch, made-to-order lengths, no returns or exchanges
- Mounting channels available
- For monitored function: order SENSEEDGE044UM
- For 4-wire option: order SENSEEDGE014 and MOD004 (failsafe sensing edge circuit)

SENSEEDGE 007



- For sectional doors
- Industry Codification: ME-113
- Type: 2-wire/NO, non-monitored
- Wire Outlet Location: Universal, other options available
- Vertical or horizontal mount
- Section: 1.5"W x 1.5"H
- Min./Max. Length: 4'/40'
- Electrical Rating: 24 VAC/VDC, 0.5 A
- Sold per foot, made-to-order lengths, no returns or exchanges
- Mounting channels available
- For monitored function: order SENSEEDGE007UM
- For 4-wire option: order SENSEEDGE008 and MOD004 (failsafe sensing edge circuit)

SENSEEDGE 021



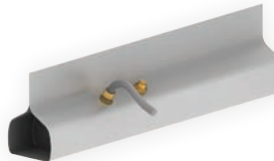
- For sectional doors/aircraft hangars (sliding doors)
- Industry Codification: MU-22
- Type: 2-wire/NO, non-monitored
- Wire Outlet Location: Options available
- Vertical or horizontal mount
- Section: 2"W x 2"H with 1.63" flap
- Min./Max. Length: 4'/40'
- Electrical Rating: 24 VAC/VDC, 0.5 A
- Sold per foot, made-to-order lengths, no returns or exchanges
- For 4-wire option: order SENSEEDGE022 and MOD004 (failsafe sensing edge circuit)

SENSEEDGE 040



- For sectional doors
- Industry Codification: MU-21
- Type: 2-wire/NO, non-monitored
- Wire Outlet Location: Universal, other options available
- Vertical or horizontal mount
- Dimensions: 1.75"W x 1"H with 1.63" flap
- Min./Max. Length: 4'/40'
- Electrical Rating: 24 VAC/VDC, 0.5 A
- Sold per foot, made-to-order lengths, no returns or exchanges

SENSEEDGE 018U



- For rolling doors
- Industry Codification: MT-22
- Type: 2-wire/NO, non-monitored
- Wire Outlet Location: Universal, other options available
- Horizontal mount
- Section: 2"W x 2"H with 1.5" flap
- Min./Max. Length: 4'/40'
- Electrical Rating: 24 VAC/VDC, 0.5 A
- Sold per foot, made-to-order lengths, no returns or exchanges
- Must order 2" less than total width of door for flaps to fit
- For monitored function: order SENSEEDGE018UM
- For 4-wire option: order SENSEEDGE020 and MOD004 (failsafe sensing edge circuit)

SENSEEDGE 002



- For counter shutters, emergency switches, conveyor systems, rolling grills, barrier arms
- Industry Codification: ME-110
- Type: 2-wire/NO, non-monitored
- Wire Outlet Location: Options available
- Vertical or horizontal mount
- Section: 0.88"W x 0.75"H
- Min./Max. Length: 4'/40'
- Electrical Rating: 24 VAC/VDC, 0.5 A
- Sold per foot, made-to-order lengths, no returns or exchanges
- Mounting channels available
- For 4-wire option: order SENSEEDGE003 and MOD004 (failsafe sensing edge circuit)

Electric Sensing Edges

Components and Accessories

INTERFACE 002



- Interface module
- For 10 kΩ sensing edge, designed to ensure compatibility with Manaras electronic controls
- UL325 Recognized Component
- Interior use
- Nema 4 enclosure
- Materials: ABS/epoxy potting (module), galvanized steel (junction box)
- Operation Temperature: -35°C to 70°C (-31°F to 158°F)
- Dim. Module: 1.8"W x 1.25"H x 0.8"D
- Dim. Jbox: 4"W x 2"H x 1.5"D
- Includes: Interface module unit, junction box, cover
- To be used with: SENSEGE007UM, SENSEGE018UM, SENSEGE044UM, SENSEGE046M

INTERFACE 003



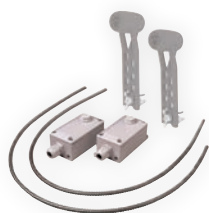
- Interface module
- Used to merge two monitored devices on the same monitored input on the ECB
- Interior/exterior use
- Nema 4 enclosure
- Materials: ABS/PA6 30% GF/TPE
- Operation Temperature: -25°C to 75°C (-13°F to 167°F)
- Power Supply: 24 V_{AC}/V_{DC}, 15 mA
- Dimensions: 1.5"W x 3"H x 0.5"D
- Includes: Interface module
- Compatible with: LIGHTCURTAIN001, LIGHTCURTAIN002, PHOTO045M, PHOTO061/061A, PHOTO065, PHOTO067A, PHOTO068C, PHOTO068D, PHOTO070, SENSEGE007UM, SENSEGE018UM, SENSEGE042, SENSEGE044UM, SENSEGE046M

SENSLINK 002



- Monitored electric sensing edge wireless link kit
- Provides wireless signal transmitter from a monitored electric sensing edge to the operator
- UL325 Recognized Component
- Nema 4 enclosure (Tx)
- Housing Material: Polycarbonate (Tx), steel (Rx)
- Operation Temperature: -40°C to 60°C (-40°F to 140°F)
- Dimensions (Tx): 4.62"W x 1.75"H x 1.75"D
- Dimensions (Rx): 4"W x 4.75"H x 1"D
- Electrical Rating: 2AA, 1.5V lithium (Tx), 12 to 24V_{AC}/V_{DC} (Rx)
- Includes: Transmitter, receiver, antenna (not shown)
- To be used with: SENSEGE007UM, SENSEGE018UM, SENSEGE044UM

CONNECTSET 001



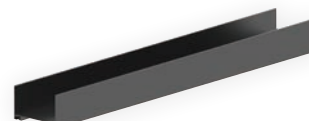
- Junction box and connection set for photoelectric cell installation applications which require all wiring to be done in a conduit
- Includes: Fittings to cover both sides of the door; flexible stainless steel conduit (3"W x 3/16"Ø) (x2), junction box (x2), wire nuts
- Not included: Photoelectric cells
- Compatible with: PHOTO061/061A, SENSEGE042, etc.

HOSE 010



- Air hose with rubber profile for pneumatic edge to be built in the field
- Materials: Soft rubber
- Section: 0.75" inside Ø/1" outside Ø + 2 edges to be inserted in mounting channel
- Compatible with: AIRSWITCH016A, PNEUMATIC021A, SENSEGE042

SENSEMOUNT 001A/B/C

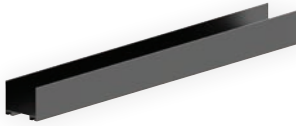


- Mounting channel
- Applications: SENSEGE044UM, SENSEGE044U
- Industry Codification: ME-123-C, ME-123-C3, ME-123-C7
- Channel Shape: "C", "L", flat
- Vertical or horizontal mount
- Dimensions A ("C" shape): 2.0"W x 1.25"H
- Dimensions B ("L" shape): 2.0"W x 1.25"H
- Dimensions C (flat): 3.5"W x 0.25"H
- Other shapes available upon request
- Sold per inch, made-to-order lengths, no returns or exchanges

Electric Sensing Edges

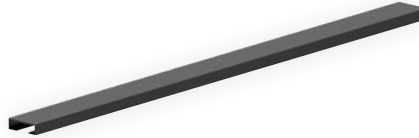
Components and Accessories

SENSEMOUNT 003A/B/C



- Mounting channel
- Applications: SENSEEDGE007UM, SENSEEDGE007U
- Industry Codification: ME-113-C, ME-113-C3, ME-113-C7
- Channel Shape: "C", "L", flat
- Vertical or horizontal mount
- Dimensions A ("C" shape): 1.5"W x 1.25"H
- Dimensions B ("L" shape): 1.5"W x 1.25"H
- Dimensions C (flat): 1.5"W x 0.25"H
- Other shapes available upon request
- Sold per foot, made-to-order lengths, no returns or exchanges

SENSEMOUNT 004



- Mounting channel
- Applications: SENSEEDGE002
- Industry Codification: ME-110-C
- Channel Shape: "C"
- Vertical or horizontal mount
- Dimensions: 0.88"W x 0.25"H with 0.31" gap
- Other shapes available upon request
- Sold per foot, made-to-order lengths, no returns or exchanges

REELITE 005



- Metal take-up reel
- Cables: 2-wire
- 18 gauge
- Max. Cord Extension: 20'
- Includes: Take-up reel, hanging bracket

REELITE 003



- Metal take-up reel
- Cables: 3-wire
- 16 gauge
- Max. Cord Extension: 30'
- Includes: Take-up reel, hanging bracket

COIL 014



- Curly coil cord
- Cables: 2-wire
- 18 gauge
- Max. Cord Extension: 12'
- For 20' extension order: COIL001

COIL 001



- Curly coil cord
- Cables: 2-wire
- 18 gauge
- Max. Cord Extension: 20'
- For 12' max. extension order: COIL014

Electric Sensing Edges

Components and Accessories

COIL 003



- Curly coil cord
- Cables: 4-wire
- 18 gauge
- Max. Cord Extension: 20'
- Color: Red-orange
- For 25' max. extension (black only) order: COIL010

COIL 010



- Curly coil cord
- Cables: 4-wire
- 18 gauge
- Max. Cord Extension: 25'
- Color: Black
- For 20' max. extension (red-orange) order: COIL003

COIL 007



- Curly coil cord
- Cables: 3-wire
- 18 gauge
- Max. Cord Extension: 20'
- Color: Red-orange

Pneumatic Sensing Edge Kits

Non-Monitored Pneumatic Sensing Edge Kits

PNEUMATIC 004



- Pneumatic sensing edge kit
- Type: 2-wires / SPDT (NO and NC), non-monitored
- Nema 1 enclosure (air switch)
- Materials: Plastic (air switch), aluminum (junction box)
- Coil cord: 2-wire cable, 18 gauge, 12' cord extension max.
- Rubber hose to be ordered separately according to door width + 2'
- Weather stripping not included (supplied by door manufacturer)
- Includes: Air switch, junction box, coil cord, air hose plug
- Compatible with: HOSE001
- Replacement parts: order AIRSWITCH007, AIRSWITCH008, COIL014, PLUG005

PNEUMATIC 005



- Pneumatic sensing edge kit
- Type: 2-wires / SPDT (NO and NC), non-monitored
- Nema 1 enclosure (air switch)
- Materials: Plastic (air switch), aluminum (junction box), metal (take-up reel)
- Take-up reel: 2-wire cable, 18 gauge, 20' cord extension max.
- Rubber hose to be ordered separately according to door width + 2'
- Weather stripping not included (supplied by door manufacturer)
- Includes: Air switch, junction box, take-up reel, hanging bracket, air hose plug
- Compatible with: HOSE001
- Replacement parts: order AIRSWITCH007, AIRSWITCH008, PLUG005, REELITE005

PNEUMATIC 009



- Pneumatic sensing edge kit
- Type: 2-wires / SPDT (NO and NC), non-monitored
- Nema 1 enclosure (air switch)
- Materials: Plastic (air switch), aluminum (junction box), metal (take-up reel)
- Take-up reel: 3-wire cable, 16 gauge, 30' cord extension max.
- Rubber hose to be ordered separately according to door width + 2'
- Weather stripping not included (supplied by door manufacturer)
- Includes: Air switch, junction box, take-up reel, hanging bracket, air hose plug
- Compatible with: HOSE001
- Replacement parts: order AIRSWITCH007, AIRSWITCH008, PLUG005, REELITE003

PNEUMATIC 007



- Pneumatic sensing edge kit
- Type: 2-wires / SPDT (NO and NC), non-monitored
- Nema 1 enclosure (air switch)
- Materials: ABS (air switch)
- Coil cord: 2-wire cable, 18 gauge, 12' cord extension max.
- Rubber hose to be ordered separately according to door width + 2'
- Weather stripping not included (supplied by door manufacturer)
- Includes: Air switch, coil cord, air hose plug
- Compatible with: HOSE001
- Replacement parts: order AIRSWITCH018, COIL014, PLUG005

PNEUMATIC 008



- Pneumatic sensing edge kit
- Type: 2-wires / SPDT (NO and NC), non-monitored
- Nema 1 enclosure (air switch)
- Materials: ABS (air switch)
- Take-up reel: 2-wire cable, 18 gauge, 20' cord extension max.
- Rubber hose to be ordered separately according to door width + 2'
- Weather stripping not included (supplied by door manufacturer)
- Includes: Air switch, take-up reel, hanging bracket, air hose plug
- Compatible with: HOSE001
- Replacement parts: order AIRSWITCH018, PLUG005, REELITE005

PNEUMATIC 017A

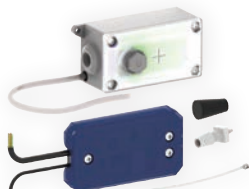


- Pneumatic sensing edge kit
- Type: 2-wires / SPDT (NO), non-monitored
- Nema 4X enclosure (air switch)
- Materials: Polycarbonate (air switch), silicone (tube), metal (take-up reel)
- Take-up reel: 3-wire cable, 16 gauge, 30' cord extension max.
- Rubber hose to be ordered separately according to door width + 2'
- Weather stripping not included (supplied by door manufacturer)
- Includes: Air switch, take-up reel, hanging bracket, adapter, air hose plug
- Compatible with: HOSE001, HOSE009
- Replacement parts: order AIRSWITCH015, ADAPTER051, PLUG005, REELITE003

Pneumatic Sensing Edge Kits

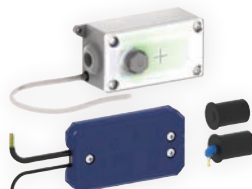
Non-Monitored Pneumatic Sensing Edge Kits

PNEUMATIC 021



- Pneumatic sensing edge kit
- Type: 2-wires/SPDT (NO and NC), non-monitored
- Nema 4 enclosure (air switch)
- Rubber hose to be ordered separately according to door width + 2'
- Weather stripping not included (supplied by door manufacturer)
- Includes: Air switch/transmitter, receiver, tube, adapter, air hose plug, 3V CR2032 lithium battery (Tx)
- Compatible with: HOSE001
- Replacement parts: order AIRSWITCH017A, ADAPTER051, PLUG005

PNEUMATIC 021A



- Pneumatic sensing edge kit
- Type: 2-wires/SPDT (NO and NC), non-monitored
- Nema 4 enclosure (air switch)
- Rubber hose to be ordered separately according to door width + 2'
- Weather stripping not included (supplied by door manufacturer)
- Includes: Air switch/transmitter, receiver, tube, air hose end plug, angled connector end plug, 3V CR2032 lithium battery (Tx)
- Compatible with: HOSE010
- Replacement parts: order AIRSWITCH017A, PLUG011, PLUG012

PNEUMATIC 006



- Pneumatic sensing edge kit
- Type: 2-wires/NO, non-monitored
- Materials: Aluminum (air switch), polyurethane (air coil hose)
- Hazardous locations, Nema enclosure 3, 4 NEC Class I, Div 1 and 2, Groups B, C, D NEC Class II, Div 1 and 2, Groups E, F, G NEC Class III (air switch)
- Rubber hose to be ordered separately according to door width + 2'
- Weather stripping not included (supplied by door manufacturer)
- Includes: Air switch, air coil hose (max. 25' ext.) with fittings, air hose plug
- Compatible with: HOSE001
- Replacement parts: order AIRSWITCH001, ADAPTER043, CLAMP005, COILHOSE001, COILHOSE002, PLUG005

SENSEEDGE 045



- Air hose with rubber profile + end cap kit for pneumatic edge to be built in the field
- Materials: Soft rubber
- Section: 0.75" inside Ø/1" outside Ø + 2 edges to be inserted in mounting channel
- Sold per inch, made-to-order lengths, no returns or exchanges
- Mounting channel available
- Replacement parts: order HOSE010, PLUG011, PLUG012

Pneumatic Sensing Edge Kits

Components and Accessories

HOSE 001



- Air hose
- Materials: EPT/EPDM
- 0.38" inside Ø/0.57" outside Ø
- Compatible with: AIRSWITCH015A, PLUG005, PLUG023, PNEUMATIC004, PNEUMATIC005, PNEUMATIC006, PNEUMATIC007, PNEUMATIC008, PNEUMATIC009, PNEUMATIC017A, PNEUMATIC021
- When ordering with pneumatic sensing edge kits: order according to door width + 2'

HOSE 009



- Air hose
- Materials: EPT/EPDM
- 0.5" inside Ø/0.75" outside Ø
- Compatible with: AIRSWITCH015A, PLUG005, PLUG023, PNEUMATIC017A
- When ordering with pneumatic sensing edge kits: order according to door width + 2'

HOSE 010



- Air hose with rubber profile for pneumatic edge to be built in the field
- Materials: Soft rubber
- Section: 0.75" inside Ø/1" outside Ø + 2 edges to be inserted in mounting channel
- Compatible with: AIRSWITCH016A, PNEUMATIC021A, SENSE042

PLUG 005



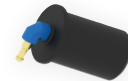
- Air hose plug
- Materials: Rubber
- Compatible with: HOSE001, HOSE009
- Used in: PNEUMATIC004, PNEUMATIC005, PNEUMATIC006, PNEUMATIC007, PNEUMATIC008, PNEUMATIC009, PNEUMATIC017A, PNEUMATIC021, TREADLE002, TREADLE002A

PLUG 011



- Air hose end plug
- 0.86" outside Ø
- Compatible with: HOSE010
- Used in: PNEUMATIC021A

PLUG 012



- Angled connector end plug
- 0.86" outside Ø
- Compatible with: HOSE010
- Used in: PNEUMATIC021A

Pneumatic Sensing Edge Kits

Components and Accessories

PLUG 023



- Air hose plug (with hole)
- Materials: Rubber
- Compatible with: HOSE001, HOSE009
- Used in: PNEUMATIC004, PNEUMATIC005, PNEUMATIC006, PNEUMATIC007, PNEUMATIC008, PNEUMATIC009, PNEUMATIC017A, PNEUMATIC021

ADAPTER 051



- Connection adapter, 0.09" to 0.5" Ø, for air hose with 0.38" or 0.5" inside Ø
- Compatible with: AIRSWITCH015, AIRSWITCH016, AIRSWITCH017A, HOSE001, HOSE009
- Used in: AIRSWITCH015A, AIRSWITCH016B, PNEUMATIC017A, PNEUMATIC021, TREADLE002A

AIRSWITCH 001



- Air switch
- Hazardous locations
- Materials: Aluminum
- Nema enclosure 3, 4
- NEC Class I, Div 1 and 2, Groups B, C, D
- NEC Class II, Div 1 and 2, Groups E, F, G
- NEC Class III
- Type: 2-wires/NO, non-monitored
- Compatible with: ADAPTER043, COILHOSE001, COILHOSE002
- Used in: PNEUMATIC006

AIRSWITCH 007



- Air switch
- Type: 2-wires/SPDT (NO and NC)
- Materials: Plastic
- Use with: Junction box AIRSWITCH008
- Includes: Junction gasket
- Compatible with: HOSE001
- Used in: PNEUMATIC004, PNEUMATIC005, PNEUMATIC009

AIRSWITCH 008



- Junction box
- Materials: Aluminum
- Use with: AIRSWITCH007
- Used in: PNEUMATIC004, PNEUMATIC005, PNEUMATIC009

AIRSWITCH 018



- Air switch
- Type: 2-wires/SPDT (NO and NC), non-monitored
- Materials: ABS
- Nema 12 enclosure
- Dimensions: 5.25"W x 2.125"H x 2.125"D
- Compatible with: HOSE001, HOSE009
- Used in: PNEUMATIC007, PNEUMATIC008, TREADLE002

Pneumatic Sensing Edge Kits

Components and Accessories

AIRSWITCH 015A



- Air switch kit
- Type: 2-wires/SPST (NO), non-monitored
- Materials: Polycarbonate (air switch), silicone (tube)
- Power Supply: 220 VAC, 0.5 A max.; 48 Vdc, 1 A max.
- Dimensions: 6.63"W x 1.75"H x 1.75"D
- Dimensions (tube): 0.09" inside Ø x 12" L
- Adapter for tube with 0.5" inside Ø (HOSE009) and 0.38" (HOSE001)
- Nema 4X enclosure
- Includes: Air switch, connection adapter, tube
- Compatible with: HOSE001, HOSE009 (order separately according to door width + 2')
- Used in: PNEUMATIC017A, TREADLE002A
- Replacement parts: order AIRSWITCH015, ADAPTER051

AIRSWITCH 016A



- Air switch kit
- Type: 2-wires/SPST (NO), non-monitored
- Materials: ABS (enclosure), silicone (tube)
- Power Supply: 220 VAC, 0.5 A max.
- Dimensions: 3.97"W x 1.91"H x 1.89"D
- Dimensions (tube): 0.09" inside Ø x 6" L
- IP65 enclosure
- Includes: Air switch, end and angle plugs, tube
- Compatible with: HOSE010 (order separately according to door width + 2')
- Replacement parts: order AIRSWITCH016, PLUG011, PLUG012

AIRSWITCH 016B



- Air switch kit
- Type: 2-wires/SPST (NO), non-monitored
- Materials: ABS (enclosure), silicone (tube)
- Power Supply: 220 VAC, 0.5 A max.
- Dimensions: 3.97"W x 1.91"H x 1.89"D
- Dimensions (tube): 0.09" inside Ø x 6" L
- Adapter for tube with 0.5" inside Ø (HOSE009) and 0.38" (HOSE001)
- IP65 enclosure
- Includes: Air switch, adapter, tube
- Compatible with: HOSE001, HOSE009 (order separately according to door width + 2')
- Replacement parts: order AIRSWITCH016, ADAPTER051

AIRSWITCH 020



- Air switch
- Type: 2-wires/NO, non-monitored
- Materials: ABS (enclosure), silicone (tube)
- Dimensions: 3.29"W x 1.7"H x 1.95"D
- Dimensions (tube): 0.09" inside Ø x 12" L
- Compatible with: ADAPTER051 (HOSE001, HOSE009), PLUG012 (HOSE010)

AIRSWITCH 017A



- Wireless air switch with embedded transmitter and receiver
- Type: 2-wires/SPDT (NO and NC), non-monitored
- Materials (air switch / transmitter): ABS (enclosure), silicone (tube)
- Materials (receiver enclosure): ABS/PA6 30% FV/TPE
- Dimensions (air switch/transmitter): 3.97"W x 1.91"H x 1.89"D
- Dimensions (receiver): 1.5"W x 3"H x 0.5"D
- Dimensions (tube): 0.09" inside Ø x 6" L
- Nema 4 enclosure
- Includes: Air switch/transmitter, receiver, tube
- Compatible with: ADAPTER051 (HOSE001, HOSE009), PLUG012 (HOSE010)
- Used in: PNEUMATIC021, PNEUMATIC021A

AIRSWITCH 019



- Wireless air switch with embedded transmitter and receiver
- Type: 2-wires/SPDT (NO and NC), non-monitored
- Materials (air switch / transmitter): ABS (enclosure), silicone (tube)
- Power Supply: 10 to 40 Vdc / 10 to 30 VAC, 50 mA max.
- Dimensions (air switch/transmitter): 3.29"W x 1.7"H x 1.95"D
- Dimensions (receiver): 3.75"W x 4.9"H x 1.2"D
- Dimensions (tube): 0.09" inside Ø x 12" L
- Includes: Air switch/transmitter, receiver, tube
- Compatible with: ADAPTER051 (HOSE001, HOSE009), PLUG012 (HOSE010)

Pneumatic Sensing Edge Kits

Components and Accessories

REELITE 005



- Metal take-up reel
- Cables: 2-wire
- 18 gauge
- Max. Cord Extension: 20'
- Includes: Take-up reel, hanging bracket

REELITE 003



- Metal take-up reel
- Cables: 3-wire
- 16 gauge
- Max. Cord Extension: 30'
- Includes: Take-up reel, hanging bracket

COIL 014



- Curly coil cord
- Cables: 2-wire
- 18 gauge
- Max. Cord Extension: 12'
- For 20' max. extension order: COIL001

COIL 001



- Curly coil cord
- Cables: 2-wire
- 18 gauge
- Max. Cord Extension: 20'
- For 12' max. extension order: COIL014

COIL 003



- Curly coil cord
- Cables: 4-wire
- 18 gauge
- Max. Cord Extension: 20'
- Color: Red-orange
- For 25' max. extension (black only), order: COIL010

COIL 010



- Curly coil cord
- Cables: 4-wire
- 18 gauge
- Max. Cord Extension: 25'
- Color: Black
- For 20' max. extension (red-orange) order: COIL003

Pneumatic Sensing Edge Kits

Components and Accessories

COIL 007



- Curly coil cord
- Cables: 3-wire
- 18 gauge
- Max. Cord Extension: 20'
- Color: Red-orange

COILHOSE 001



- Recoil air hose
- Material: Polyurethane
- Max. Cord Extension: 25'
- 1/4" EPT swivel fittings
- Operation Temperature: -36°C to 65°C
(-34°F to 150°F)
- Used in: PNEUMATIC006
- Compatible with: ADAPTER043, AIRSWITCH001,
COILHOSE002

Interface Modules

INTERFACE 001



- Interface module
- Enables the connection of monitored photoelectric cells to an electronic/electromechanical control without monitoring function
- Interior use
- Nema 1 enclosure
- Materials: Plastic
- Operation Temperature: -30°C to 70°C (-22°F to 158°F)
- Power Supply: 24 V_{AC}/V_{DC}
- Dimensions: 2.62" W x 4.75" H x 1.34" D
- Includes: Interface module
- Compatible with: PHOTO061, PHOTO065, PHOTO070
- Used in: PHOTO008 series

INTERFACE 002



- Interface module
- For 10 kΩ sensing edge, designed to ensure compatibility with Manaras electronic controls
- UL325 Recognized Component
- Interior use
- Nema 4 enclosure
- Materials: ABS/epoxy potting (module), galvanized steel (junction box)
- Operation Temperature: -35°C to 70°C (-31°F to 158°F)
- Dim. Module: 1.8" W x 1.25" H x 0.8" D
- Dim. Jbox: 4" W x 2" H x 1.5" D
- Includes: Interface module unit, junction box, cover
- To be used with: SENSEGE007UM, SENSEGE018UM, SENSEGE044UM, SENSEGE046M

INTERFACE 003



- Interface module
- Used to merge two monitored devices on the same monitored input on the ECB
- Interior/exterior use
- Nema 4 enclosure
- Materials: ABS/PA6 30% GF/TPE
- Operation Temperature: -25°C to 75°C (-13°F to 167°F)
- Power Supply: 24 V_{AC}/V_{DC}, 15 mA
- Dimensions: 1.5" W x 3" H x 0.5" D
- Includes: Interface module
- Compatible with: LIGHTCURTAIN001, LIGHTCURTAIN002, PHOTO045M, PHOTO061/061A, PHOTO065, PHOTO067A, PHOTO068C, PHOTO068D, PHOTO070, SENSEGE007UM, SENSEGE018UM, SENSEGE042, SENSEGE044UM, SENSEGE046M

INTERFACE 005



- Interface module
- Controller for non-contact opto sensing edges and light curtains
- UL325 Recognized Component
- Interior/exterior use
- Nema 4 enclosure
- Materials: Polycarbonate
- Operation Temperature: -18°C to 55°C (-0°F to 131°F)
- Power Supply: 12 to 24 V_{AC}/V_{DC}, 50 mA
- Dimensions: 6.63" W x 1.75" H x 1.75" D
- Includes: Interface module, hardware
- Included with: PHOTO067, PHOTO068A/B, LIGHTCURTAIN003, LIGHTCURTAIN004

Push-Button Control Stations

Surface Mount

STATION 001



- Surface mount
- 1-button: Open or open/close command
- 1 NO contact
- Nema 1 enclosure
- Interior use
- Materials: Steel
- Dimensions: 2.38" W x 2.78" H x 1.81" D
- Includes: Control station, hardware
- Stop buttons are not provided on 1-button push-button stations. They should only be used with operators wired for constant-pressure-to-open/close (D1 operating mode)

STATION 081



- Surface mount
- 1-button: Open or open/close command
- 1 NO contact
- Nema 4/12 and 4X enclosure
- Interior/exterior use
- Materials: Polycarbonate
- Dimensions: 2.68" W x 2.68" H x 2.44" D
- Operation Temperature: -25°C to 70°C (-13°F to 158°F)
- Includes: Control station
- Additional NO or NC contacts: order PUSH148, PUSH149
- Stop buttons are not provided on 1-button push-button stations. They should only be used with operators wired for constant-pressure-to-open/close (D1 operating mode)

STATION 010



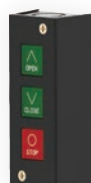
- Surface mount
- 2-button: Open only and close only command
- 2 NO contacts
- Nema 1 enclosure
- Interior use
- Materials: Steel
- Dimensions: 2.38" W x 4.06" H x 1.81" D
- Includes: Control station, hardware
- Stop buttons are not provided on 2-button push-button stations. They should only be used with operators wired for constant-pressure-to-open/close (D1 operating mode)

STATION 082



- Surface mount
- 2-button: Open only and close only command
- 2 NO contacts
- Nema 4/12 and 4X enclosure
- Interior/exterior use
- Materials: Polycarbonate
- Dimensions: 2.68" W x 4.17" H x 2.44" D
- Operation Temperature: -25°C to 70°C (-13°F to 158°F)
- Includes: Control station
- Additional NO or NC contacts: order PUSH148, PUSH149
- Stop buttons are not provided on 2-button push-button stations. They should only be used with operators wired for constant-pressure-to-open/close (D1 operating mode)

STATION 020



- Surface mount
- 3-button: Open/close/stop command
- 2 NO and 1 NC (stop) contacts
- Nema 1 enclosure
- Interior use
- Materials: Steel
- Dimensions: 2.38" W x 5" H x 1.81" D
- Includes: Control station, hardware kit
- For French version: order STATION084

STATION 078



- Surface mount
- 3-button: Open/close/stop command
- 2 NO and 1 NC (stop) contacts
- Nema 4/12 and 4X enclosure
- Interior/exterior use
- Materials: Polycarbonate
- Dimensions: 2.68" W x 5.35" H x 2.44" D
- Operation Temperature: -25°C to 70°C (-13°F to 158°F)
- Includes: Control station
- Additional NO or NC contacts: order PUSH148, PUSH149
- For French version: order STATION078F

Push-Button Control Stations

Surface Mount

STATION 056



- Surface mount
- 3-button: Open/close/stop command
- 2 NO and 1 NC (stop) contacts
- Nema 3R, 4, 12 enclosure
- Interior/exterior use
- Materials: Aluminum die-cast
- Dimensions: 4.2" W x 4.4" H x 3.25" D
- Includes: Control station

STATION 049



- Surface mount
- 3-button: Open/close/stop command
- 2 NO and 1 NC (stop) contacts
- Class I, Div. 1 and 2, Groups C, D
Class I, Zones 1 and 2, Groups IIB, IIA
Class II, Div. 1 and 2, Groups E, F, G
Class III, Nema 7 (C, D)/9 (E, F, G) for classified hazardous locations
- CSA certified/UL listed
- Materials: Aluminum die-cast
- Operation Temperature: -50°C to 40°C (-58°F to 104°F)
- Dimensions: 3" W x 6.13" H x 4.34" D

STATION 079



- Surface mount
- 3-button: Open/close/stop command, key lock-out
- 2 NO and 1 NC (stop) contacts, 1 NO contact (key)
- Nema 4/12 and 4X enclosure
- Interior/exterior use
- Materials: Polycarbonate
- Operation Temperature: -25°C to 70°C (-13°F to 158°F)
- Dimensions: 2.68" W x 6.54" H x 3.35" D (without key)
- Includes: Control station, 2 keys
- Additional NO or NC contacts: order PUSH148, PUSH149
- Replacement parts: order KEY006

STATION 057



- Surface mount
- 3-button: Open/close/stop command, key lock-out
- 2 NO and 1 NC (stop) contacts, NC contact for the key (in series with the NC contact for stop)
- Nema 3R, 4, 12 enclosure
- Interior/exterior use
- Materials: Aluminum die-cast
- Dimensions: 4.2" W x 4.4" H x 3.25" D (without key)
- Includes: Control station, 2 keys

STATION 050



- Surface mount
- 3-button: Open/close/stop command, key lock-out
- 2 NO and 1 NC (stop) contacts, 1 NO and 1 NC contacts (key)
- Class I, Div. 1 and 2, Groups C, D
Class I, Zones 1 and 2, Groups IIB, IIA
Class II, Div. 1 and 2, Groups E, F, G
Class III, Nema 7 (C, D)/9 (E, F, G) for classified hazardous locations
- CSA certified/UL listed
- Materials: Aluminum die-cast
- Operation Temperature: -50°C to 40°C (-58°F to 104°F)
- Dimensions: 6.5" W x 6.13" H x 5.08" D (without key)
- Includes: Control station, 2 keys

STATION 080



- Surface mount
- 3-button: Open/close/stop command, key lock-out and red pilot light
- 2 NO and 1 NC (stop) contacts, 1 NO contact (key)
- Nema 4/12 and 4X enclosure
- Interior/exterior use
- Materials: Polycarbonate
- Operation Temperature: -25°C to 70°C (-13°F to 158°F)
- Dimensions: 2.68" W x 7.72" H x 3.35" D (without key)
- Includes: Control station, hardware, 2 keys
- Additional NO or NC contacts: order PUSH148, PUSH149
- Replacement parts: order KEY006

Push-Button Control Stations

Surface Mount, Flush Mount, Components and Accessories

STATION 070



- Surface mount
- 1-button: Open only or open/close command, mushroom head (green, 40mm) with spring return
- 1 NO contact
- Nema 4/12 and 4X enclosure
- Interior/exterior use
- Materials: Polycarbonate
- Operation Temperature: -25°C to 70°C (-13°F to 158°F)
- Dimensions: 2.68"W x 2.68"H x 3.5"D
- Includes: Control station
- Additional NO or NC contacts: order PUSH148, PUSH149

STATION 085A



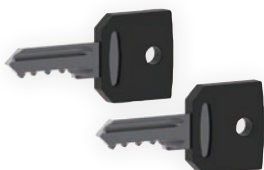
- Surface mount
- 1-button: Emergency-stop, mushroom head (red, 40mm), push/twist to unlock
- 1 NC contact
- Nema 4/12 and 4X enclosure
- Interior/exterior use
- Materials: Polycarbonate
- Operation Temperature: -25°C to 70°C (-13°F to 158°F)
- Dimensions: 2.68"W x 2.68"H x 3.75"D
- Includes: Control station
- Additional NO or NC contacts: order PUSH148, PUSH149
- Push/pull option: order STATION085B

STATION 086



- Flush mount
- 3-button: Open/close/stop command
- 2 NO and 1 NC (stop) contacts
- Nema 1 enclosure
- Interior use
- Materials: Steel (enclosure), aluminum (face plate)
- Dimensions (faceplate): 2.75"W x 4.5"H x 0.38"D
- Dimensions (back box): 2.75"W x 4.25"H x 1.88"D
- Includes: Control station

KEY 006



- Replacement keys (2x)
- Compatible with: STATION079, STATION080, KEYSWITCH050

Key Switch Control Stations

Surface Mount and Post Mount

KEYSWITCH 015



- Surface mount
- Function: Open/close/stop with automatic return to stop position
- 2 SPDT NO and NC (open/close) contacts
- Tamper-proof
- Interior/exterior use
- Nema 3R, 4, 12 enclosure
- Materials: Aluminum die-cast enclosure and face plate
- Operation Temperature: -18°C to 66°C (0°F to 150°F)
- Dimensions: 4.2"W x 4.4"H x 2.8"D (without key)
- Includes: Key switch, 2 keys
- Key switches without a stop button should only be used with operators wired for constant-pressure-to-open/close (D1 operating mode)

KEYSWITCH 017



- Surface mount
- Locking feature
- 1 SPDT NO and NC contact
- 2 stable positions
- Interior/exterior use
- Nema 3R, 4, 12 enclosure
- Materials: Aluminum die-cast enclosure and face plate
- Operation Temperature: -18°C to 66°C (0°F to 150°F)
- Dimensions: 4.2"W x 4.4"H x 2.8"D (without key)
- Includes: Key switch, 2 keys

KEYSWITCH 050



- Surface mount
- Locking feature
- 1 SPDT NO contact
- 2 stable positions
- Interior/exterior use
- Nema 4/12 and 4X enclosure
- Materials: Polycarbonate
- Operation Temperature: -25°C to 70°C (-13°F to 158°F)
- Dimensions: 2.68"W x 2.68"H x 3.35"D (without key)
- Includes: Key switch, 2 keys
- Additional NO or NC contacts: order PUSH148, PUSH149
- Replacement keys: order KEY006

KEYSWITCH 051



- Surface mount
- Locking feature
- 1 NO and 1 NC contacts
- Class I, Div. 1 and 2, Groups C, D
Class I, Zones 1 and 2, Groups IIB, IIA
Class II, Div. 1 and 2, Groups E, F, G
Class III, Nema 7 (C, D) / 9 (E, F, G)
for classified hazardous locations
- CSA certified / UL listed
- Materials: Aluminum die-cast
- Operation Temperature: -50°C to 40°C (-58°F to 104°F)
- Dimensions: 3"W x 6.13"H x 5.08"D (without key)
- Includes: Key switch, 2 keys
- Key switches without a stop button should only be used with operators wired for constant-pressure-to-open/close (D1 operating mode)

KEYSWITCH 019



- Surface mount
- Function: Open/close/stop with automatic return to stop position + stop button
- 2 SPDT NO and NC (open/close) contacts, 1 NC contact (stop)
- Tamper-proof
- Interior/exterior use
- Nema 3R, 4, 12 enclosure
- Materials: Aluminum die-cast enclosure and face plate
- Operation Temperature: -18°C to 66°C (0°F to 150°F)
- Dimensions: 4.2"W x 4.4"H x 3.25"D (without key)
- Includes: Key switch, 2 keys

KEYSWITCH 034



- Wall, surface or pedestal mount
- Locking feature
- 1 SPDT NO contact
- Tamper-proof
- Interior/exterior use
- Materials: Aluminum die-cast
- Dimensions: 2.75"W x 4.5"H x 2"D (without key)
- Includes: Key switch, 2 keys
- Key switches without a stop button should only be used with operators wired for constant-pressure-to-open/close (D1 operating mode)
- Replacement parts: order KEYSWITCH006, KEYSWITCH023, KEYSWITCH041

Key Switch Control Stations

Flush Mount, Components and Accessories

KEYSWITCH 010



- Flush mount
- Function: Open/close/stop with automatic return to stop position
- 2 SPDT NO and NC (open/close) contacts
- Tamper-proof
- Interior use
- Nema 1 enclosure
- Materials: Steel enclosure
- Operation Temperature: -18°C to 66°C (0°F to 150°F)
- Dimensions: 4.75"W x 6"H x 3"D (without key)
- Includes: Key switch, mounting screws, 2 keys
- Key switches without a stop button should only be used with operators wired for constant-pressure-to-open/close (D1 operating mode)

KEYSWITCH 006



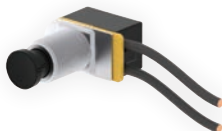
- Replacement cylinder
- Includes: Replacement cylinder, 2 keys
- Compatible with: KEYSWITCH034

KEYSWITCH 023



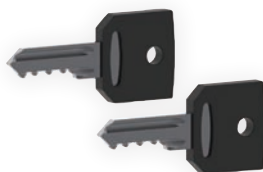
- Replacement switch
- 1 SPST momentary NO contact
- Compatible with: KEYSWITCH034

KEYSWITCH 041



- Replacement switch
- 1 SPST momentary NC contact
- Compatible with: KEYSWITCH034

KEY 006



- Replacement keys (2x)
- Compatible with: STATION079, STATION080, KEYSWITCH050

Pull Switch Controls

Surface Mount and Universal Mount

PULLCORD 001



- Surface mount
- Pull switch control
- Exterior use
- Nema 3R, 4, 12 enclosure
- Materials: Aluminum die-cast enclosure
- 1 SPST momentary NO contact
- Dimensions: 4" W x 3.88" H x 3.75" D
- Includes: Pull switch, cord, handle

PULLCORD 002



- Surface mount
- Pull switch control
- Exterior use
- Nema 3R, 4, 12 enclosure
- Materials: Aluminum die-cast enclosure
- 2 SPST momentary NO contacts
- Dimensions: 4" W x 3.88" H x 3.75" D
- Includes: Pull switch, cord, handle

PULLCORD 003



- Universal surface mount
- Pull switch control, swivel-type
- Exterior use
- Nema 3R, 4, 12 enclosure
- Materials: Aluminum die-cast enclosure
- 1 SPST momentary NO and NC contact
- Dimensions: 4.25" W x 6" H x 4.5" D
- Includes: Pull switch, cord, handle
- Replacement contact: LIMIT020

PULLCORD 007



- Universal surface mount
- Pull switch control, swivel type, heated
- Exterior use
- Nema 3R, 4, 12 enclosure
- Materials: Aluminum die-cast enclosure
- 1 SPST momentary NO and NC contact
- Heating Element: 24 V_{AC} 15 W
- Dimensions: 4.25" W x 6" H x 4.5" D
- Includes: Pull switch, cord, handle, heating element
- Replacement contact: LIMIT020

Keypads and Card Readers

Components and Accessories

KEYLESS 042



- Hand held or wall mount
- Rolling code technology
- Twelve-button digital keypad
- 1-4 doors (MD)
- Function: Open/close/stop (configurable on operators equipped with an ECB) or open/close
- Environment: Nema 1 with weather-proof cover
- Range: 100' (approx.)
- Dimensions: 2.2" W x 4.6" H x 0.12" D
- Battery: 1x AAA (1.5V)
- Includes: Digital keypad, battery, mounting screws
- For compatible receivers: order RADIORE901, RADIORE901A, RADIORE901B, RADIOKIT004 (BOARD070), RADIORE102

CARDREADER 017



- Waterproof card reader/digital keypad
- Installation: Close proximity to the door, wall or post mount
- Operation Temperature: -25°C to 60°C (-13°F to 140°F)
- Range: 3 to 8 cm
- Dimensions: 2.2" W x 4.74" H x 0.71" D
- Power Supply: 24 Vdc
- Includes: Card reader/digital keypad
- Compatible with: POWERBLOCK006, POWERBLOCK012 (to be factory installed in Opera control box, order MOD149 (Nema 1)/MOD149A (Nema 4))
- For access card: order CARDREADER018

POST 001



- Goose neck post 90°
- Installation: Close proximity to the door
- Surface-mounted card reader/digital keypad
- Materials: Steel
- Dimensions (post): 42" H
- Dimensions (faceplate): 4" W x 4" H
- Dimensions (baseplate): 5.69" W x 5.69" H
- Compatible with: CARDREADER017

CARDREADER 018



- Reinforced access card
- Swipe in front of card reader
- Dimensions: 3.4" W x 1.2" H x 0.1" D
- Compatible with: CARDREADER017

POWERBLOCK 006



- Single output industrial power supply
- Installation: DIN rail mount, inside operator control box or separate control panel
- Power Supply: 110 to 240 VAC
- Output Specifications: 24 Vdc, 1 A, 20 W
- UL 508, NEC class 2/LPS compliant
- Operation Temperature: -20°C to 70°C (-4°F to 158°F)
- Dimensions: 0.88" W x 3.54" H x 3.93" D
- Compatible with: CARDREADER017, for inclusion in Opera control box, order: MOD149 (Nema 1), MOD149A (Nema 4)

RECTIFIER 011



- Rectifier
- Power Supply: 24 VAC
- Output Capacity: 24 Vdc, 35 A max.
- To be placed inside operator control box or separate control panel
- Centerhole mounting (#10 screw max.)
- Dimensions: 1.125" W x 1.125" H x 0.79" D
- Tab Terminals: 4 x 0.25"
- Operation Temperature: -55°C to 150°C (-67°F to 302°F)
- Includes: Rectifier (without wire leads)

Radio Controls

Rolling Code Technology - Series "100"

RADIOEM 101



- Hand held or visor mount
- Rolling code technology
- One-button transmitter
- 1 door (SD)
- Function: Open/close/stop (configurable on operators equipped with an ECB) or open/close
- Nema 1
- Range: 100' (approx.)
- Dimensions: 2" W x 3.25" H x 0.75" D
- Battery: 1x CR2032 (3V)
- Includes: Transmitter unit with LED indicator, battery and sun visor clip (not shown)
- For compatible receivers: order RADIORE901, RADIORE901A, RADIORE901B, RADIOKIT004 (BOARD070), RADIORE102

RADIOEM 103SD



- Hand held or visor mount
- Rolling code technology
- Three-button transmitter
- 1 door (SD)
- Function: Open/close/stop
- Configurable as RADIOEM103MD (1 to 3 doors)
- Nema 1
- Range: 100' (approx.)
- Dimensions: 2" W x 3.25" H x 0.75" D
- Battery: 1x CR2032 (3V)
- Includes: Transmitter unit with LED indicator, battery and sun visor clip (not shown)
- For compatible receivers: order RADIORE901, RADIORE901A, RADIORE901B, RADIOKIT004 (BOARD070)

RADIOEM 103MD



- Hand held or visor mount
- Rolling code technology
- Three-button transmitter
- 1-3 doors (MD)
- Function: Open/close/stop (configurable on operators equipped with an ECB) or open/close
- Configurable as RADIOEM103SD (1 door)
- Nema 1
- Range: 100' (approx.)
- Dimensions: 2" W x 3.25" H x 0.75" D
- Battery: 1x CR2032 (3V)
- Includes: Transmitter unit with LED indicator, battery and sun visor clip (not shown)
- For compatible receivers: order RADIORE901, RADIORE901A, RADIORE901B, RADIOKIT004 (BOARD070), RADIORE102

RADIOEM 102



- Hand held or keychain attachment
- Rolling code technology
- Three-button transmitter
- Configurable as 1 door (SD) or 1-3 doors (MD)
- Function SD: Open/close/stop
- Function MD: Open/close/stop (configurable on operators equipped with an ECB) or open/close
- Nema 1
- Range: 100' (approx.)
- Dimensions: 1.2" W x 2.2" H x 0.12" D
- Battery: 1x CR2032 (3V)
- Includes: Transmitter unit with LED indicator, battery and key ring (not shown)
- For compatible receivers: order RADIORE901, RADIORE901A, RADIORE901B, RADIOKIT004 (BOARD070), RADIORE102 (MD only)

RADIOEM 104



- Hand held or visor mount
- Rolling code technology
- Four-button transmitter
- 1-4 doors (MD)
- Function: Open/close/stop (configurable on operators equipped with an ECB) or open/close
- Nema 1
- Range: 100' (approx.)
- Dimensions: 2" W x 3.25" H x 0.75" D
- Battery: 1x CR2032 (3V)
- Includes: Transmitter unit with LED indicator, battery and sun visor clip (not shown)
- For compatible receivers: order RADIORE901, RADIORE901A, RADIORE901B, RADIOKIT004 (BOARD070), RADIORE102

KEYLESS 042



- Hand held or wall mount
- Rolling code technology
- Twelve-button digital keypad
- 1-4 doors (MD)
- Function: Open/close/stop (configurable on operators equipped with an ECB) or open/close
- Environment: Nema 1 with weather-proof cover
- Range: 100' (approx.)
- Dimensions: 2.2" W x 4.6" H x 0.12" D
- Battery: 1x AAA (1.5V)
- Includes: Digital keypad, battery, mounting screws
- For compatible receivers: order RADIORE901, RADIORE901A, RADIORE901B, RADIOKIT004 (BOARD070), RADIORE102

Radio Controls

Rolling Code Technology - Series "100"

RADIOEM 144



- Hand held or wall mount
- Rolling code technology
- Three-button transmitter
- 1-144 doors
- Function: Open/close/stop
- Nema 1
- Range: 100' (approx.)
- Dimensions: 3"W x 6.5"H x 1.5"D
- Battery: 2x AA (1.5V)
- Includes: Transmitter with LED indicator, batteries, screws, anchors
- For compatible receivers: order RADIORE901, RADIORE901A, RADIORE901B, RADIOKIT004 (BOARD070)

RADIORE 901



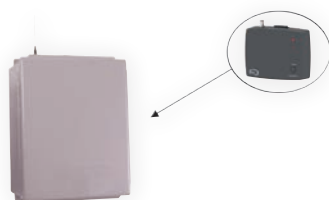
- Wall mount
- Universal receiver
- Rolling code and fixed code (dip switch) technology
- 1 door
- Compatible with up to 50 transmitters per receiver
- Nema 1
- Range: 100' (approx.)
- Dimensions: 5"W x 4.5"H x 1.25"D
- Power Supply: 24 Vac/Vdc
- Includes: Receiver with LED indicator, screws, anchors
- Retro-fit for Series "0" receivers: RADIO014, RADIO015, RADIORE900
- Compatible with: Most operator brands on the market and transmitters RADIOEM101, RADIOEM102, RADIOEM103SD/MD, RADIOEM104, RADIOEM144, KEYLESS042, RADIOEM901, RADIOEM903, RADIOEM932, Series "0" transmitters

RADIORE 901A



- Wall mount
- Universal Receiver
- Rolling code and fixed code (dip switch) technology
- 1 door
- Compatible with up to 50 transmitters per receiver
- Nema 1
- Range: 100' (approx.)
- Dimensions: 5"W x 4.5"H x 1.25"D
- Power Supply: 24 Vac/Vdc
- Includes: Receiver with LED indicator, antenna, screws, anchors
- Retro-fit for Series "0" receivers: RADIO015, RADIO037, RADIORE900A
- Compatible with: most operator brands on the market and transmitters RADIOEM101, RADIOEM102, RADIOEM103SD/MD, RADIOEM104, RADIOEM144, KEYLESS042, RADIOEM901, RADIOEM903, RADIOEM932, Series "0" transmitters

RADIORE 901B



- Wall mount
- Universal receiver
- Rolling code and fixed code (dip switch) technology
- 1 door
- Compatible with up to 50 transmitters per receiver
- Nema 4/12-4X enclosure
- Range: 100' (approx.)
- Dimensions: 8"W x 8"H x 4"D
- Power Supply: 24 Vac/Vdc
- Includes: Receiver, enclosure, antenna
- Retro-fit for Series "0": RADIO031, RADIORE900B
- Compatible with: most operator brands on the market and transmitters RADIOEM101, RADIOEM102, RADIOEM103SD/MD, RADIOEM104, RADIOEM144, KEYLESS042, RADIOEM901, RADIOEM903, RADIOEM932, Series "0" transmitters

RADIORE 102



- Wall mount
- External radio receiver
- Rolling code technology
- Sixteen-button digital keypad
- 1 door
- Compatible with up to 1000 transmitters per receiver
- Nema 1
- Range: 100' (approx.)
- Dimensions: 4.2"W x 4.2"H x 0.9"D
- Power Supply: 12 to 24 Vac/Vdc
- Includes: Receiver with LED indicator, mounting screws and template
- Compatible with: Most operator brands on the market and transmitters RADIOEM101, RADIOEM102 (MD only), RADIOEM103 (MD only), RADIOEM104, KEYLESS042

Radio Controls

Fixed Code Dip Switch Technology - Series "900"

RADIOEM 901



- Hand held or keychain attachment
- Fixed code (dip switch) technology
- One-button transmitter
- 1 door
- Function: Open/close
- Nema 1
- Range: 100' (approx.)
- Dimensions: 1.43" W x 2.78" H x 0.63" D
- Battery: 1x A23 (12V)
- Includes: Transmitter with LED indicator, battery, key ring (not shown)
- Retro-fit for Series "0": RADIO028
- For compatible receivers: order RADIORE900, RADIORE900A, RADIORE900B, RADIORE901, RADIORE901A, RADIORE901B, Series "0" receivers: RADIO014, RADIO015

RADIOEM 903



- Hand held or visor mount
- Fixed code (dip switch) technology
- Three-button transmitter
- 1-3 doors
- Function: Open/close
- Nema 1
- Range: 100' (approx.)
- Dimensions: 2" W x 3.25" H x 0.75" D
- Battery: 1x CR2032 (3V)
- Includes: Transmitter with LED indicator, battery, sun visor clip (not shown)
- Retro-fit for Series "0": RADIO016, RADIO022, RADIO027
- For compatible receivers: order RADIORE900, RADIORE900A, RADIORE900B, RADIORE901, RADIORE901A, RADIORE901B, Series "0" receivers: RADIO014, RADIO015

RADIOEM 932



- Hand held or wall mount
- Fixed code (dip switch) technology
- Three-button transmitter
- 1-32 doors
- Function: Open/close/stop
- Nema 1
- Range: 100' (approx.)
- Dimensions: 3" W x 6.5" H x 1.5" D
- Battery: 2x AA (1.5V)
- Includes: Transmitter with LED indicator, batteries, mounting screws
- Retro-fit for Series "0": RADIO042, RADIO047, RADIO050
- For compatible receivers: order RADIORE900, RADIORE900A, RADIORE900B, RADIORE901, RADIORE901A, RADIORE901B, Series "0" receivers: RADIO031, RADIO037

RADIORE 901



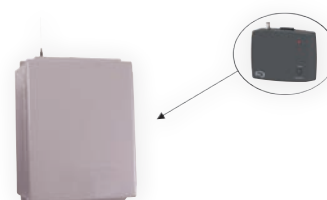
- Wall mount
- Universal receiver
- Rolling code and fixed code (dip switch) technology
- 1 door
- Compatible with up to 50 transmitters per receiver
- Nema 1
- Range: 100' (approx.)
- Dimensions: 5" W x 4.5" H x 1.25" D
- Power Supply: 24 V_{AC}/V_{DC}
- Includes: Receiver with LED indicator, screws, anchors
- Retro-fit for Series "0" receivers: RADIO014, RADIO015, RADIORE900
- Compatible with: Most operator brands on the market and transmitters RADIOEM101, RADIOEM102, RADIOEM103SD/MD, RADIOEM104, RADIOEM144, KEYLESS042, RADIOEM901, RADIOEM903, RADIOEM932, Series "0" transmitters

RADIORE 901A



- Wall mount
- Universal Receiver
- Rolling code and fixed code (dip switch) technology
- 1 door
- Compatible with up to 50 transmitters per receiver
- Nema 1
- Range: 100' (approx.)
- Dimensions: 5" W x 4.5" H x 1.25" D
- Power Supply: 24 V_{AC}/V_{DC}
- Includes: Receiver with LED indicator, antenna, screws, anchors
- Retro-fit for Series "0" receivers: RADIO015, RADIO037, RADIORE900A
- Compatible with: most operator brands on the market and transmitters RADIOEM101, RADIOEM102, RADIOEM103SD/MD, RADIOEM104, RADIOEM144, KEYLESS042, RADIOEM901, RADIOEM903, RADIOEM932, Series "0" transmitters

RADIORE 901B



- Wall mount
- Universal receiver
- Rolling code and fixed code (dip switch) technology
- 1 door
- Compatible with up to 50 transmitters per receiver
- Nema 4/12-4X enclosure
- Range: 100' (approx.)
- Dimensions: 8" W x 8" H x 4" D
- Power Supply: 24 V_{AC}/V_{DC}
- Includes: Receiver, enclosure, antenna
- Retro-fit for Series "0": RADIO031, RADIORE900B
- Compatible with: most operator brands on the market and transmitters RADIOEM101, RADIOEM102, RADIOEM103SD/MD, RADIOEM104, RADIOEM144, KEYLESS042, RADIOEM901, RADIOEM903, RADIOEM932, Series "0" transmitters

Radio Controls

Components and Accessories

CABLEKIT 001



- Coaxial antenna extension cable kit
- Includes: 15' of coaxial cable with BNC male and female connectors, commercial receiver antenna with BNC male connector
- Compatible with: receivers RADIO015, RADIO031, RADIO037, RADIORE900, RADIORE900A, RADIORE900B, RADIORE901, RADIORE901A, RADIORE901B
- Replacement parts: order CABLE015, RADIO029
- For 20' of coaxial antenna extension cable: order CABLEKIT001A

RADIO 029



- Commercial receiver antenna
- Dimensions: 10.5" L
- Includes: Antenna with BNC male connector
- Compatible with: receivers RADIO015, RADIO031, RADIO037, RADIORE900, RADIORE900A, RADIORE900B, RADIORE901, RADIORE901A, RADIORE901B

CABLE 015



- Coaxial antenna extension cable
- Dimensions: 15" L
- Includes: Cable with BNC male and female connectors
- Compatible with: receivers RADIO015, RADIO031, RADIO037, RADIORE900, RADIORE900A, RADIORE900B, RADIORE901, RADIORE901A, RADIORE901B
- For 20' of coaxial antenna extension cable: order CABLE015A

RADIOKIT 004



- Direct ECB plug-in receiver card
- On-site installation kit
- Rolling code technology
- 1 door
- Compatible with up to 50 transmitters per receiver
- Range: 100' approx.
- Dimensions: 2" W x 1.75" H x 1.13" D
- Power Supply: Self-powered by ECB main controller
- Includes: Receiver, posts
- Compatible with: operators equipped with BOARD070
- Compatible with: transmitters RADIOEM101, RADIOEM102, RADIOEM103SD/MD, RADIOEM104, RADIOEM144, KEYLESS042

Wi-Fi Control Devices

Manaras Internet Control™, Components and Accessories

MIC 001



- The Wi-Fi control device (MIC) allows you to control and monitor a garage door remotely
- 1 door
- Free downloadable MIC Manaras Internet Control™ app, available for iOS and Android
- Easy connection and pairing
- Share access with multiple users (temporary or permanent access)
- Includes: MIC device, ECB BOARD070M with integrated MIC Wi-Fi compatibility software (factory installed), access to the MIC app (App Store or Google Play)
- Required: monitored "M" type Manaras operator, monitored photoelectric cells, 2 GHz Wi-Fi connection, smart device (iOS or Android)

MODKITMIC 001A



- Retro-fit kit for in-field installation
- Compatible with "M" type operators already equipped with monitored photoelectric cells
- The Wi-Fi control device (MIC) allows you to control and monitor a garage door remotely
- 1 door
- Free downloadable MIC Manaras Internet Control™ app, available for iOS and Android
- Easy connection and pairing
- Share access with multiple users (temporary or permanent access)
- Includes: MIC device (MIC001), ECB BOARD070M with integrated MIC Wi-Fi compatibility software
- Required: 2 GHz Wi-Fi connection, smart device (iOS or Android)

MODKITMIC 001B



- Retro-fit kit for in-field installation with Nema 1, thru-beam, monitored photoelectric cells
- Compatible with "E" type operators
- The Wi-Fi control device (MIC) allows you to control and monitor a garage door remotely
- 1 door
- Free downloadable MIC Manaras Internet Control™ app, available for iOS and Android
- Easy connection and pairing
- Share access with multiple users (temporary or permanent access)
- Includes: MIC device (MIC001), ECB BOARD070M with integrated MIC Wi-Fi compatibility software, monitored photoelectric cells (PHOTO070)
- Required: 2 GHz Wi-Fi connection, smart device (iOS or Android)

MODKITMIC 001C



- Retro-fit kit for in-field installation with Nema 4X, thru-beam, monitored photoelectric cells
- Compatible with "E" type operators
- The Wi-Fi control device (MIC) allows you to control and monitor a garage door remotely
- 1 door
- Free downloadable MIC Manaras Internet Control™ app, available for iOS and Android
- Easy connection and pairing
- Share access with multiple users (temporary or permanent access)
- Includes: MIC device (MIC001), ECB BOARD070M with integrated MIC Wi-Fi compatibility software, monitored photoelectric cells (PHOTO061)
- Required: 2 GHz Wi-Fi connection, smart device (iOS or Android)

MODKITMIC 001D



- Retro-fit kit for in-field installation with Nema 4X, retro-reflective, monitored photoelectric cells
- Compatible with "E" type operators
- The Wi-Fi control device (MIC) allows you to control and monitor a garage door remotely
- 1 door
- Free downloadable MIC Manaras Internet Control™ app, available for iOS and Android
- Easy connection and pairing
- Share access with multiple users (temporary or permanent access)
- Includes: MIC device (MIC001), ECB BOARD070M with integrated MIC Wi-Fi compatibility software, monitored photoelectric cells (PHOTO065)
- Required: 2 GHz Wi-Fi connection, smart device (iOS or Android)

Loop Detectors

Components and Accessories

LOOP 035A



- Loop detector module
- Power Supply: 12-60 Vdc or 12-240 Vac
- Dual relay output (NO and NC)
- Loop Inductance Range: 20-2000 uH (Q-factor: ≥ 5)
- Operation Temperature: -40°C to 82°C (-40°F to 180°F)
- Installation: On a 11-pin base, in an electrical enclosure
- Dimensions: 2.56" W x 3.25" H x 3.65" D
- To be used in conjunction with an inductive wire loop embedded in the pavement
- Includes: Loop detector, harness to connect to operator's terminal strip
- Compatible with: LOOP15, LOOP027, RELAY021

LOOP 015



- Pre-formed inductive loop, ready to be embedded and used
- Type: Pave-over
- Detection Height: 1/2-2/3 of the shortest side of the surface area covered by the loop
- Detection Zone: 8' x 4' (approx.)
- Wire Leads: 50'
- Includes: Inductive wire loop
- To be used with LOOP035A
- Other sizes available

LOOP 027



- Pre-formed inductive loop, ready to be embedded and used
- Type: Saw-cut
- Detection Height: 1/2-2/3 of the shortest side of the surface area covered by the loop
- Detection Zone: 8' x 4' (approx.)
- Wire Leads: 50'
- Includes: Inductive wire loop
- To be used with LOOP035A
- Other sizes available

RELAY 021



- Socket base for loop detector module
- 10 A, 300 Vac
- 11-pin
- DIN rail or anchor plate mounting
- Compatible with: LOOP035A
- Includes: Socket base

Motion and Presence Detectors

Laser, Microwave and Infrared Technology Kits

MOTION 003



- Non-monitored (NO or NC output relay)
- Motion detector (microwave doppler radar technology)
- Power Supply: 12-24 VAC/VDC
- Bi-directional
- IP65 enclosure
- Materials: ABS, polycarbonate
- Detection Field: 13' x 6.5' @ 8.2'
- Installation Height: 7' to 11.5'
- Current Consumption: < 2 W
- Operation Temperature: -30°C to 60°C (-22°F to 140°F)
- Dimensions: 3.75"W x 4"H x 5"D (+ support)
- Includes: Motion detector, remote control for long distance programming, 2x AAA (1.5V) batteries
- Replacement parts: order MOTION010 (detector), MOTION012 (remote)

MOTION 003A



- Non-monitored (NO or NC output relay)
- Motion detector (microwave doppler radar technology)
- Power Supply: 12-24 VAC/VDC
- Bi-directional
- IP65 enclosure
- Materials: ABS, polycarbonate
- Detection Field: 13' x 16' @ 16'
- Installation Height: 11.5' to 23'
- Current Consumption: < 2 W
- Operation Temperature: -30°C to 60°C (-22°F to 140°F)
- Dimensions: 3.75"W x 4"H x 5"D (+ support)
- Includes: Motion detector, remote control for long distance programming, 2x AAA (1.5V) batteries
- Replacement parts: order MOTION011 (detector), MOTION012 (remote)

MOTION 003E



- Non-monitored (2 NO/NC output relays)
- Motion/presence detector (laser technology)
- Power Supply: 10-35 VDC
- 4 curtains of detection
- Nema 4/IP65 enclosure
- Materials: ASA, polycarbonate
- Max. Detection Field: 30' x 30'
- Current Consumption: < 5 W
- Operation Temperature: -30°C to 60°C (-22°F to 140°F)
- Dimensions: 5"W x 2.75"H x 3.66"D (+ support)
- Includes: Motion detector, remote control for long distance programming, 2x AAA (1.5V) batteries
- Replacement parts: order MOTION013 (detector), MOTION012 (remote)

MOTION 003B



- Non-monitored (2 NO/NC output relays)
- Motion/presence detector (microwave and infrared technology)
- Power Supply: 12-24 VAC/VDC
- Nema 4/IP65 enclosure
- Materials: ABS, polycarbonate
- Detection Field: 13' x 16.5' (microwave) 10" x 10" (infrared)
- Installation Height: 8' to 16'
- Current Consumption: < 3.5 W
- Operation Temperature: -30°C to 60°C (-22°F to 140°F)
- Dimensions: 3.75"W x 4"H x 5"D (+ support)
- Includes: Motion detector, remote control for long distance programming, 2x AAA (1.5V) batteries
- Replacement parts: order MOTION014 (detector), MOTION012 (remote)

MOTION 003C



- Non-monitored (2 NO/NC output relays)
- Motion/presence detector (microwave and infrared technology)
- Power Supply: 12-24 VAC/VDC
- Nema 4/IP65 enclosure
- Materials: ABS, polycarbonate
- Detection Field: 13' x 6.5' (microwave) 7.5" x 7.5" (infrared)
- Installation Height: 6.5' to 11.5'
- Current Consumption: < 3.5 W
- Operation Temperature: -30°C to 60°C (-22°F to 140°F)
- Dimensions: 3.75"W x 4"H x 5"D (+ support)
- Includes: Motion detector, remote control for long distance programming, 2x AAA (1.5V) batteries
- Replacement parts: order MOTION014A (detector), MOTION012 (remote)

MOTION 003D



- Non-monitored (2 NO/NC output relays)
- Presence detector (infrared technology)
- Power Supply: 12-24 VAC; 12-30 VDC
- 2 curtains of detection
- IP54 enclosure
- Installation Height: 6.5' to 11.5'
- Current Consumption: < 2.5 W
- Operation Temperature: -25°C to 55°C (-13°F to 131°F)
- Dimensions: 10.6"W x 2.27"H x 2.25"D
- Includes: Motion detector, remote control for long distance programming, 2x AAA (1.5V) batteries
- Replacement parts: order MOTION015 (detector), MOTION012 (remote)

Motion and Presence Detectors

Pneumatic Treadle Kits

TREADLE 002



- Pneumatic (forced air) treadle kit
- Type: 2-wires/SPDT (NO and NC), non-monitored
- Installation at ground level
- Materials: EPT/EPDM (hose), ABS (air switch)
- Dimensions (air switch): 5.25"W x 2.125"H x 2.125"D
- Dimensions (hose): 10', 0.38" inside Ø / 0.75" outside Ø
- Includes: Air switch, hose, air hose plug
- Replacement parts: order AIRSWITCH018, HOSE001, PLUG005

TREADLE 002A



- Pneumatic (forced air) treadle kit
- Type: 2-wires/SPDT (NO), non-monitored
- Installation at ground level
- Nema 4X enclosure
- Materials: EPT/EPDM (hose), polycarbonate / silicone (air switch)
- Dimensions (air switch): 6.63"W x 1.75"H x 1.75"D
- Dimensions (hose): 10', 0.38" inside Ø / 0.75" outside Ø
- Includes: Air switch, hose, plug and connection adapter
- Replacement parts: order AIRSWITCH015A, HOSE001, PLUG005, PLUG023

Motion and Presence Detectors

Components and Accessories

MOTION 012



- Universal remote control
- Wireless
- Dimensions: 2" W x 5.25" H x 1" D
- Includes: 2x AAA (1.5V) batteries
- Compatible with: MOTION003, MOTION003A, MOTION003B, MOTION003C, MOTION003D, MOTION003E

AIRSWITCH 018



- Air switch
- Type: 2-wires/SPDT (NO and NC), non-monitored
- Materials: ABS
- Nema 12 enclosure
- Dimensions: 5.25" W x 2.125" H x 2.125" D
- Compatible with HOSE001, HOSE009
- Used in: PNEUMATIC007, PNEUMATIC008, TREADLE002

AIRSWITCH 015A



- Air switch kit
- Type: 2-wires/SPST (NO), non-monitored
- Materials: Polycarbonate (air switch), silicone (tube)
- Power Supply: 220 V_{AC}, 0.5 A max.; 48 V_{DC}, 1 A max.
- Dimensions: 6.63" W x 1.75" H x 1.75" D
- Dimensions (tube): 0.09" inside Ø x 12" L
- Adapter for tube with 0.5" inside Ø (HOSE009) and 0.38" (HOSE001)
- Nema 4X enclosure
- Includes: Air switch, connection adapter, tube
- Compatible with: HOSE001, HOSE009 (order separately according to door width + 2')
- Used in: PNEUMATIC017A, TREADLE002A
- Replacement parts: order AIRSWITCH015, ADAPTER051

HOSE 001



- Air hose
- Materials: EPT/EPDM
- 0.38" inside Ø / 0.57" outside Ø
- Compatible with: AIRSWITCH015A, PLUG005, PLUG023, PNEUMATIC004, PNEUMATIC005, PNEUMATIC006, PNEUMATIC007, PNEUMATIC008, PNEUMATIC009, PNEUMATIC017A, PNEUMATIC021
- When ordering with pneumatic sensing edge kits: order according to door width + 2'

HOSE 009



- Air hose
- Materials: EPT/EPDM
- 0.5" inside Ø / 0.75" outside Ø
- Compatible with: AIRSWITCH015A, PLUG005, PLUG023, PNEUMATIC017A
- When ordering with pneumatic sensing edge kits: order according to door width + 2'

PLUG 005



- Air hose plug
- Materials: Rubber
- Compatible with: HOSE001, HOSE009
- Used in: PNEUMATIC004, PNEUMATIC005, PNEUMATIC006, PNEUMATIC007, PNEUMATIC008, PNEUMATIC009, PNEUMATIC017A, PNEUMATIC021, TREADLE002, TREADLE002A

Motion and Presence Detectors

Components and Accessories

PLUG 023



- Air hose plug (with hole)
- Materials: Rubber
- Compatible with: HOSE001, HOSE009
- Used in: PNEUMATIC004, PNEUMATIC005, PNEUMATIC006, PNEUMATIC007, PNEUMATIC008, PNEUMATIC009, PNEUMATIC017A, PNEUMATIC021

ADAPTER 051



- Connection adapter, 0.09" to 0.5" Ø, for air hose with 0.38" or 0.5" inside Ø
- Compatible with: AIRSWITCH015, AIRSWITCH016, AIRSWITCH017A, HOSE001, HOSE009
- Used in: AIRSWITCH015A, AIRSWITCH016B, PNEUMATIC017A, PNEUMATIC021, TREADLE002A

Audible and Visible Warning Devices

Traffic Lights

TRAFFIC 028A



- Red 8" LED traffic light kit
- Black casing
- Power Supply: 120 VAC
- Current Consumption: 6W
- Type: LED
- Operation Temperature: -40°C to 74°C (-40°F to 165°F)
- Lens Diameter: 8"
- Moisture resistant
- Materials: Polycarbonate, galvanized steel (supports)
- Dimensions: 10"W x 20"H x 20"D
- Includes: Traffic light, mounting support kit
- For replacement lens: order TRAFFIC007A

TRAFFIC 033A



- Green 8" LED traffic light kit
- Black casing
- Power Supply: 120 VAC
- Current Consumption: 6W
- Type: LED
- Operation Temperature: -40°C to 74°C (-40°F to 165°F)
- Lens Diameter: 8"
- Moisture resistant
- Materials: Polycarbonate, galvanized steel (supports)
- Dimensions: 10"W x 20"H x 20"D
- Includes: Traffic light, mounting support kit
- For replacement lens: order TRAFFIC009A

TRAFFIC 049A



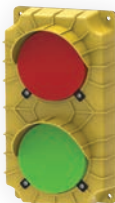
- Yellow 8" LED traffic light
- Black casing
- Power Supply: 120 VAC
- Current Consumption: 6W
- Type: LED
- Operation Temperature: -40°C to 74°C (-40°F to 165°F)
- Lens Diameter: 8"
- Moisture resistant
- Materials: Polycarbonate, galvanized steel (supports)
- Dimensions: 10"W x 20"H x 20"D
- Includes: Traffic light, mounting support kit
- For replacement lens: order TRAFFIC008A

TRAFFIC 029A



- Red and green 8" LED traffic light kit
- Black casing
- Power Supply: 120 VAC
- Current Consumption: 6W per lens
- Type: LED
- Operation Temperature: -40°C to 74°C (-40°F to 165°F)
- Lens Diameter: 8"
- Moisture resistant
- Materials: Polycarbonate, galvanized steel (supports)
- Dimensions: 10"W x 30"H x 20"D
- Includes: Traffic light, mounting support kit
- For replacement lens: order TRAFFIC007A (red) and TRAFFIC009A (green)

TRAFFIC 036A/037A



- Red and green 4.25" LED traffic light
- Yellow casing
- Power Supply: 120 VAC (TRAFFIC036A)/24 Vdc (TRAFFIC037A)
- Current Consumption: 0.10 A (TRAFFIC036A)/0.13 A (TRAFFIC037A)
- Type: LED
- Operation Temperature: -29°C to 54°C (-20°F to 129°F)
- Lens Diameter: 4.25"
- Dimensions: 6.5"W x 11.5"H x 3.75"D
- IP54
- cULus Listed
- Includes: Traffic light
- For black casing: order TRAFFIC036B/037B

TRAFFIC 036B/037B



- Red and green 4.25" LED traffic light
- Black casing
- Power Supply: 120 VAC (TRAFFIC036B)/24 Vdc (TRAFFIC037B)
- Current Consumption: 0.10 A (TRAFFIC036B)/0.13 A (TRAFFIC037B)
- Type: LED
- Operation Temperature: -29°C to 54°C (-20°F to 129°F)
- Lens Diameter: 4.25"
- Dimensions: 6.5"W x 11.5"H x 3.75"D
- IP54
- cULus Listed
- Includes: Traffic light
- For yellow casing: order TRAFFIC036A/037A

Audible and Visible Warning Devices

Traffic Lights and LED Light Strips

TRAFFIC 046A/047A



- Red and green 3.75" LED traffic light
- Yellow casing
- Power Supply: 120 V_{AC} (TRAFFIC046A)/24 V_{DC} (TRAFFIC047A)
- Current Consumption: 30 mA (TRAFFIC046A)/70 mA (TRAFFIC047A)
- Type: LED
- Lens Diameter: 3.75"
- Dimensions: 5" W x 10" H x 2.5" D
- Weather-proof housing
- Includes: Traffic light
- For black casing: order TRAFFIC046B/047B

TRAFFIC 046B/047B



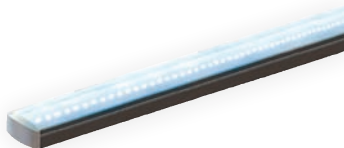
- Red and green 3.75" LED traffic light
- Black casing
- Power Supply: 120 V_{AC} (TRAFFIC046B)/24 V_{DC} (TRAFFIC047B)
- Current Consumption: 30 mA (TRAFFIC046B)/70 mA (TRAFFIC047B)
- Type: LED
- Lens Diameter: 3.75"
- Dimensions: 5" W x 10" H x 2.5" D
- Weather-proof housing
- Includes: Traffic light
- For yellow casing: order TRAFFIC046A/047A

TRAFFIC 038/040



- Red, yellow and green 8" LED traffic light kit
- Black casing
- Power Supply: 120 V_{AC} (TRAFFIC038)/24 V_{DC} (TRAFFIC040)
- Current Consumption: 6W per lens (TRAFFIC038) / red 5 W, yellow 11 W, green 9 W (TRAFFIC040)
- Type: LED
- Lens Diameter: 8"
- Operation Temperature: -40°C to 74°C (-40°F to 165°F)
- Moisture resistant
- Materials: Black polycarbonate, galvanized steel (supports)
- Dimensions: 10" W x 40" H x 20" D
- Includes: Traffic light, mounting support kit
- For replacement lens (TRAFFIC038): order TRAFFIC007A (red), TRAFFIC008A (yellow) and TRAFFIC009A (green)
- For replacement components (TRAFFIC040): order TRAFFIC0039

LEDSTRIP 001/002/003/004



- LED light strip
- Power Supply: 24 V_{DC}
- Current Consumption: 0.033 A/0.067A/0.117A/0.233 A
- Operation Temperature: -20°C to 40°C (-4°F to 104°F)
- IP67 (LED ribbon)
- Material: Aluminum (profile), frosted plastic (lens)
- Red, green, blue LED sequences available
- Lengths Available: 14"/27"/46"/96"
- Includes: 1 LED strip, sold per unit
- For wiring sequences: order MODKIT168

Audible and Visible Warning Devices

Beacons and Sirens

BEACON 012A/012B



- Rotating mirror beacon, red/amber LED
- Power Supply: 24 VAC/VDC
- Current Consumption: 125 mA
- Lens Diameter: 3.31"
- Materials: Polycarbonate (globe), ABS (body), painted metal (mounting bracket)
- Dimensions: 3.31" Ø x 5.81" H
- Operation Temperature: -10°C to 50°C (-14°F to 122°F)
- IP23
- UL listed, CSA approved
- Includes: 1 beacon, mounting bracket

BEACON 013A/013B



- Rotating mirror beacon, red/amber LED
- Power Supply: 120 VAC
- Current Consumption: 42 mA
- Lens Diameter: 5.12"
- Materials: Polycarbonate (globe), ABS (body), painted metal (mounting bracket)
- Dimensions: 5.12" Ø x 7.85" H
- Operation Temperature: -30°C to 50 °C (-22°F to 122°F)
- IP66/IP67
- UL listed, CSA approved
- Includes: 1 beacon, mounting bracket

HORN 015



- Beacon with integrated siren
- Wall mounted
- Power Supply: 24 VDC
- Current Consumption: 56 mA (horn), 170 mA (beacon)
- Brightness: 75 cd
- Sound Power Level: 100 dBA at 10'
- Operation Temperature: -35°C to 66°C (-31°F to 150.8°F)
- ANSI/UL 1638 and 464 listed
- Dimensions (beacon): 4.75"W x 5.75"H x 3.25" D
- Dimensions (rectifier): 1"W x 1"H x 1"D
- Includes: Beacon, rectifier
- Replacement components: order HORN014, RECTIFIER010

Audible and Visible Warning Devices

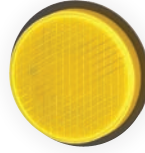
Components and Accessories

TRAFFIC 007A



- Red 8" LED replacement lens
- Power Supply: 120 VAC
- Current Consumption: 6W
- Type: LED
- Operation Temperature: -40°C to 74°C (-40°F to 165°F)
- Lens Diameter: 8"
- Dimensions: 8.25" Ø x 4.08" D
- Compatible with: TRAFFIC028A, TRAFFIC029A, TRAFFIC038

TRAFFIC 008A



- Yellow 8" LED replacement lens
- Power Supply: 120 VAC
- Current Consumption: 6W
- Type: LED
- Operation Temperature: -40°C to 74°C (-40°F to 165°F)
- Lens Diameter: 8"
- Dimensions: 8.25" Ø x 4.08" D
- Compatible with: TRAFFIC038A, TRAFFIC049A

TRAFFIC 009A



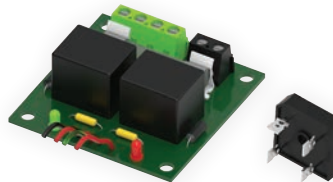
- Green 8" LED replacement lens
- Power Supply: 120 VAC
- Current Consumption: 6W
- Type: LED
- Operation Temperature: -40°C to 74°C (-40°F to 165°F)
- Lens Diameter: 8"
- Dimensions: 8.25" Ø x 4.08" D
- Compatible with: TRAFFIC029A, TRAFFIC033A, TRAFFIC038

MODKIT 027B1/027D1



- Universal auxiliary output module kit for electronically controlled operators
- Enables the connection of audible and visible warning devices
- 2 relay outputs
- Applications: Opera, Manaras, Silencio® (MODKIT027B1)/Rapido® (MODKIT027D1)
- Power Supply: 24 Vdc
- Dimensions: 2" L x 2" H x 1" D
- ROHS compliant
- Includes: Module, supports
- Replacement parts: order BOARD048

MODKIT 168



- Auxiliary auxiliary output module kit for electronically controlled operators
- Enables the connection of 24 Vdc LED light strips
- 2 relay outputs to separately manage 2 different colors
- Power Supply: 24 Vdc
- Dimensions: 2" W x 2" H x 1" D
- Dimensions (rectifier): 1.125" W x 1.125" H x 0.79" D
- ROHS compliant
- Includes: Module, supports, rectifier
- Replacement parts: order BOARD048, RECTIFIER011

RECTIFIER 011



- Rectifier
- Power Supply: 24 VAC
- Output Capacity: 24 Vdc, 35 A max.
- To be placed inside operator control box or separate control panel
- Centerhole mounting (#10 screw max.)
- Dimensions: 1.125" W x 1.125" H x 0.79" D
- Tab Terminals: 4 x 0.25"
- Operation Temperature: -55°C to 150°C (-67°F to 302°F)
- Includes: Rectifier (without wire leads)

Miscellaneous Control Equipment

Egress Devices, Interlock Switches and Cycle-Counters

EGRESSKIT 001



- Emergency egress control device
- For quick operators disconnect (OPJ/OHJ models)
- Flush mount
- Interior use
- Materials: Steel
- Dimensions: 3.75"W x 7"H x 3.5"D
- Includes: Handle (with face plate), 15' sheathed cable, S-connection hook

INTERLOCK 004



- Interlock switch for rolling grilles
- 1 NC contact
- Universal mount
- Interior use
- Materials: Galvanized steel
- Dimensions: 2.13"W x 3.38"H x 2.5"D
- Includes: Interlock switch

INTERLOCK 005



- Interlock switch for sectional doors
- 1 NC contact
- Rail mount
- Interior use
- Materials: Galvanized steel
- Dimensions: 1.32"W x 3"H x 3"D
- Includes: Interlock switch

MODKIT 012/012B



- Non-resettable electromechanical cycle counter kit
- Electromechanical/electronic controlled operators
- 6 digits
- Irremovable
- UL Recognized Component, CSA and CE approved
- Integrated base
- Power Supply: 24 V_{AC}
- Dimensions: 1.5"W x 1"H x 1.6"D
- Operation Temperature: -25°C to 65°C (-13°F to 149°F)
- Includes: Cycle counter, connectors, screws
- Replacement parts: order CYCLE006

Mounting Accessories and Hardware

Chain Spreaders, Mounting Brackets and Isolating Kits

SPREADER 001



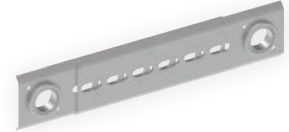
- Chain spreader 1"/1"
- Materials: Zinc-plated steel
- Dimensions: 0.75" W x 16" to 22.5" H x 3.5" D
- Extension Shaft to Shaft: min. 12", max. 19.5"
- Includes: Chain spreader, 1" collar shaft (2x), mounting bolts (2x)
- Applications: Jackshaft operators, $\leq 1.5\text{HP}$

SPREADER 002



- Chain spreader 1"/1.25"
- Materials: Zinc-plated steel
- Dimensions: 0.75" W x 16" to 22.5" H x 3.5" D
- Extension Shaft to Shaft: min. 12", max. 19.5"
- Includes: Chain spreader, 1" and 1.25" collar shaft (1x), mounting bolts (2x)
- Applications: Jackshaft operators, $\leq 1.5\text{HP}$

SPREADER 003



- Chain spreader 1.25"/1.25"
- Materials: Zinc-plated steel
- Dimensions: 0.75" W x 16" to 22.5" H x 3.5" D
- Extension Shaft to Shaft: min. 12", max. 19.5"
- Includes: Chain spreader, 1.25" collar shaft (2x), mounting bolts (2x)
- Applications: Jackshaft operators, $\leq 1.5\text{HP}$

BRACKET 111



- Hood angle mounting bracket
- Materials: Steel
- Applications: Jackshaft hood mounted operators on rolling doors
- Dimensions: 8.1" W x 7.5" H x 4.2" D

BRACKET 112



- Wall mounting bracket
- 4 studs 3/8"-16 x 1.25"
- Materials: Steel
- Applications: Jackshaft operators
- Dimensions: 10.5" W x 11.75" H

ISOLATOR 004



- Vibration reducing mounting kit
- Applications: Jackshaft operators (Opera brand)

Mounting Accessories and Hardware

Splash Proof and Protective Covers

SPLASH 001



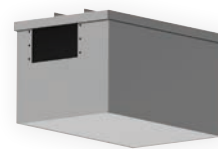
- Splash proof cover
- Materials: Galvanized steel
- Dimensions: 21" W x 28" H x 22" D
- Compatible with jackshaft models: OGH, MGH up to 2HP, GHW/C, MGHW/C up to 2HP

SPLASH 003



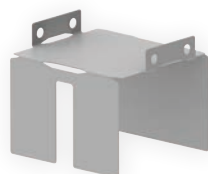
- Splash proof cover
- Materials: Galvanized steel
- Dimensions: 22" W x 30" H x 16" D
- Compatible with jackshaft models: OPJ, OPH, OHJ, OSH, MSJ, RSH, RVH, OPJW/C, OPHW/C, OHJW/C, OSHW/C

SPLASH 005



- Splash proof cover
- Materials: Galvanized steel
- Dimensions: 17" W x 15" H x 27" D
- Compatible with trolley and sliding door models: OMT, OTH, OTBH, OSL, RTBH, OTHW/C, OTBHW/C, OSLW/C

MODKIT 148



- Anti-bird nest replacement/upgrade kit
- Prevents birds from building a nest inside the operator
- Materials: Galvanized steel
- Dimensions: 5.5" W x 4.15" H x 6.22" D
- Includes: Guard, hardware
- Compatible with trolley and sliding door models: OTH, OTBH, OSL

Mounting Accessories and Hardware

Hand Chain and Various Chain Kits

CHAIN 002



- Pocket wheel hand chain
- Materials: Yellow zinc-plated steel
- For models: OMH, OPH, OHJ, OSH, MSJ, OGH, MGH, GHW/C

CHAINKIT 002A



- Disconnect chain kit, 14' extension
- Materials: White zinc-plated steel
- Includes: 14' chain, S-connection hook
- For models: OMJ, OPJ, OSH, MSJ, MGH, GHW/C

CHAINKIT 004



- Disconnect chain kit, 28' extension
- Materials: White zinc-plated steel
- Includes: 28' chain, S-connection hook
- For models: OMJ, OPJ, OSH, MSJ, MGH, GHW/C

CHAINKEEPER 001



- Chain keeper for pocket wheel hand chain
- Keeps chain in place, out of door's path
- Materials: Zinc-plated steel
- Dimensions: 3.25" W x 2.75" H x 1.75" D
- For models: OMH, OPH, OHJ, OSH, MSJ, OGH, MGH, GHW/C

CHAINKEEPER 002



- Chain keeper for disconnect chain
- Keeps chain in place, out of door's path
- Materials: White zinc-plated steel
- Dimensions: 1" W x 2.25" H x 1.5" D
- For models: OMJ, OPJ, OSH, MSJ, MGH, GHW/C

Mounting Accessories and Hardware

Hand Cranks and Manual Chain Hoists

CRANK 009/010



- Hand crank
- To manually operate operators equipped with MOD074A/B instead of using the chain hoist
- Materials: White zinc-plated steel (hook), white powder coated steel (crank), white plastic (handle)
- Lengths Available: 4' (CRANK009) / 6.5' (CRANK010)
- Includes: Crank, hook, handles

MODKIT 066/066WC



- Chain hoist for manual hand operation of sectional doors
- Hoist directly drives the door shaft with #41 chain
- Wall mount
- Incorporates an electric cut-out
- Hand chain for 14' standard lift door is standard
- Hoist Assembly Width: 8.5" W
- When using with a trolley operator, door arm must be disconnected
- Applications: Trolley operators, center mount jackshafts (MOD164)
- Includes: Hoist, door sprocket (36 tooth), 6' #41 roller chain (MODKIT066)/6' #41 corrosion proof chain (MODKIT066WC)
- Replacement parts: order HOIST002

HOIST 002



- Self-engaging manual hoist for sectional doors
- Hoist directly drives the door shaft with #41 chain
- Wall mount
- Materials: White zinc-plated steel, polyamide
- Door shaft sprocket and #41 chain, sold separately

HOIST 003/003A



- Chain hoist for manual hand operation of sectional or light rolling doors
- Equipped with self-braking band brake
- 4:1 reduction
- Type: Hollow shaft
- For 1" door shaft Ø: order HOIST003
- For 1.25" door shaft Ø: order HOIST003A
- Materials: Zinc-plated steel, aluminum alloy
- Includes: Chain keeper, collars (2x), hand chain, torque arm, hardware

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CANIMEX



Founded in 1969, Canimex is specialized in manufacturing and global trading of mechanical, electrical, hydraulic and electronic components as well as access system hardware.



OUTILLAGE DE PRÉCISION DRUMMOND



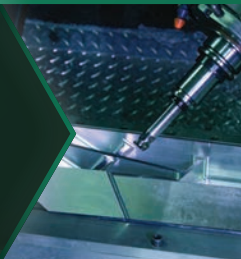
Outillage de précision Drummond (OPD), a manufacturing company offering unlimited possibilities in sheet metal transformation as well as in the fabrication of metallic parts and weldments, has distinguished itself due to the excellence, innovation, and determination of its team.



LES OUTILLEURS ARPEX



Technology and innovation have guided this specialized team in tool design and fabrication as well as precision machining for aeronautics, aerospace, and windmill industries for more than 40 years.



MANARAS-OPERA



Manaras-Opera has been designing, assembling and marketing operators for commercial and industrial garage doors, commercial grilles and shutters for more than 40 years.



COVANA



Covana manufactures automated solutions that elevate and close with the simple turn of a key to cover hot tubs and swim spas. With this unique innovation, users do not need to remove the cover manually, which greatly facilitates its use in any season. Covana distributes its products all over the world through a vast network of specialized retailers.





RECORD PROVEN RECORD

Based in Montréal, Québec, Canada, Manaras-Opera is a leader in quality and manufacturing excellence. Backed by over 40 years of experience, we have one of the most comprehensive, reliable and innovative product lines on the market, which includes the signature **Opera** brand of jackshaft, gearhead, trolley and sliding door operators in medium and heavy-duty applications.

OPERA OPERA FEATURES

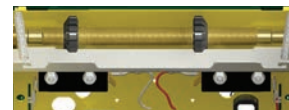
- Built to last
- User friendly
- Lifetime tested
- UL/CSA
- 2 year warranty
- Easy to install
- Easy to maintain
- Easy to adjust
- Easy to wire

The **Opera** range has been specifically designed to meet the needs of installers. It features numerous innovations, such as the patented **Hoist-a-matic®**, and **Accu-cam®** which make installation and maintenance easier, quicker and safer.



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Manaras-Opera is not your typical industrial operator manufacturer. Our engineering department is recognized for having a unique approach and the flexibility to work closely with our customers in order to develop custom-designed operators to meet the specific needs and performance requirements of their particular applications. Each one of the operators in our comprehensive line can also be customized to meet the specific requirements of the most unique applications.



SOLUTIONS SOLUTIONS ORIENTED

Relying on our broad range of expertise, we aim to offer superior solutions, in order to benefit the market as a whole.

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