Safety Door Switches





















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Safety Door Switches

Minimize bypassing of safety devices, prevent unauthorized access to hazardous areas, and ensure the safe implementation of emergency equipment stoppages.

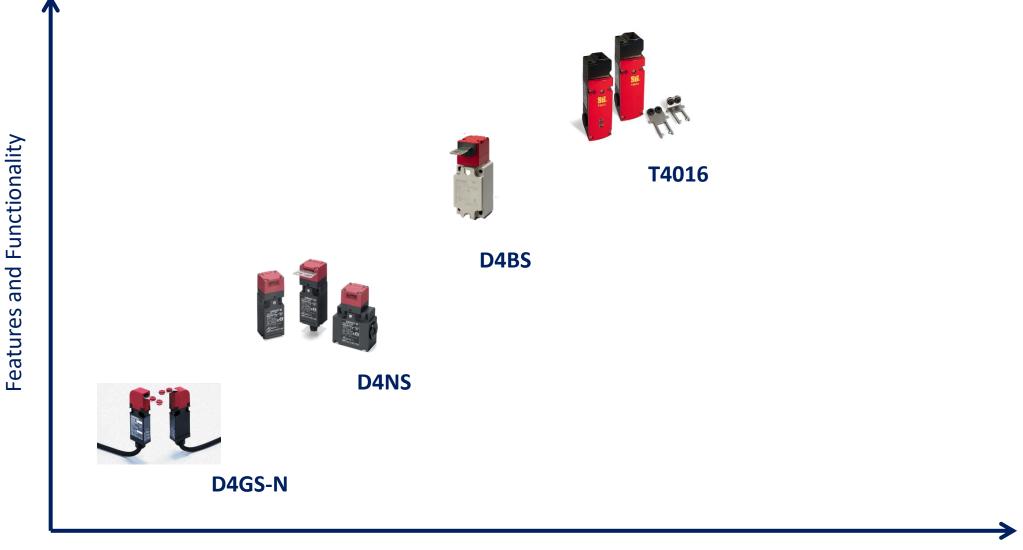






All designed in compliance with ISO 14119

Tongue Interlock Switches



Solution Value



A general purpose safety door switch, suitable for heavy duty applications

D4BS – Tongue Interlock

- Line-up with two contacts: 1NC/1NO and 2NC
- Standardized gold-clad contacts for high contact reliability
- Applicable for standard loads and micro loads
- 3 conduit size available: G1/2,M20 and PG13.5
- Robust metal housing
- Wide temperature range specifications: -40 to 80°C
- Degree of protection: IP67



A versatile key-operated door switch with several slides key and connector options

D4NS - Tongue Interlock

- Contact configuration: 2NC/1NO and 3NC contact forms
- MBB models in addition to the previous contact forms 1NC/1NO, and 2NC
- Variety of metallic heads and optional M12 connector available
- Standardized gold-clad contacts provide high contact reliability.
 Applicable to both standard loads and microloads
- Variety of metallic heads available
- Fits aluminum frames as small as 20 mm2



A key-operated safety door switch, with a slim design and IP67 rating

D4GS-N - Tongue Interlock

- Slim design with a width of only 17 mm
- Built-in Switches with two- or three-terminal contact construction are available
- Reversible design allowing either front or rear mounting
- Operation Key with rubber mounting hole to absorb vibration and shock
- Operation keys available for horizontal, vertical and adjustable mounting
- IP67 degree of protection

Guard Locking Switches



Solution Value



Safeguard the most challenging applications, including robotic cells, with partial or full body access

D41G – High-coded Guard Lock Door Switch

- Type 4, RFID coding with two options:
 - Individual coding
 - Individual coding with teaching capabilities (no limitation)
- Quick, automatic pairing for one or more switches at a time when connected in series
- Two actuator types available for sliding and hinged doors, right and left, with and without door handle
- Optional emergency exit and lock-out tag available



D41G – High-coded Guard Lock Door Switch

- Key holding force of 2,000N
- Power to unlock (solenoid release) and Power to lock (mechanical release) available
- Up to 31 switches in series
- Advanced diagnostic with 3-color led indicator and dedicated output
- Ideal for application with partial or full-body access like robotic cell, palletizers and machine tools
- Controller options: G9SE, G9SB, G9SX, G9SP, NX-S



Ideal for harsh environment and applications with hygienic requirements

D41L – High-coded Guard Lock Door Switch

- Type 4, RFID coding with two options:
 - Individual coding
 - Individual coding with teaching capabilities (no limitation)
- Quick, automatic pairing for one or more switches at a time when connected in series
- Hygienic design with smooth surfaces and no key-hole that prevent water, food, and dust accumulation
- Supports ECOLAB certified detergent for quick cleaning
- IP69 Housing rating



ECSLAB



Click on picture to link to datasheet

D41L – High-coded Guard Lock Door Switch

- Unique design allows to use it as door stop
- Holding force 1,150N
- Large actuator tolerances
- Identical mounting for left and right hinged doors
- Up to 31 switches in series to a single controller
- Advanced diagnostic with 3-color led indicator and dedicated output
- Optional Emergency exit available
- Controller options: G9SE, G9SB, G9SX, G9SP, NX-S



Reduce efforts during installation and troubleshooting with a wide range of models and different contact options.

D4SL-N Guard Lock Switch

- Key holding force of 1,300N
- 4, 5, and 6 contacts-contacts model available
- Door lock and release types available: mechanical lock/ 24
 VDC solenoid release and 24VDC solenoid lock/ mechanical release
- Switches available with optional metal head, indicators and inner lever
- Slide Key with lockout key, and up to 30 different key types
- Can be easily mounted on 40 × 40 mm aluminum frames



Magnetic latching combines with RFID technology to deliver high holding force and tamper resistance

D40ML – RFID magnetic guard lock switch

- RFID and magnetic lock for a high degree of tamper resistance
- Holding force up to 1500 N (medium to heavy duty)
- Case materials: plastic, diecast metal, 316 stainless steel
- IP67 and IP69K versions available
- Up to 20 switches in series
- High tolerance for misalignment
- Actuators with two coding levels: basic and unique
- Led indicator for status and diagnostic



Perfect for harsh environments, including large or heavy door with a holding force up to 3,000N

D4JL – Guard Lock Switch

- Two safety circuits and two monitor contacts provide an array of monitoring patterns
- Standard gold-clad contacts enable use with ordinary loads and microloads
- Holding force of 3,000 N
- Plastic housing, IP67
- Prevent workers from being trapped in hazardous areas and assure they can escape with 30 different trapped keys and rear release buttons to unlock the switch and escape
- Ideal for large, heavy doors

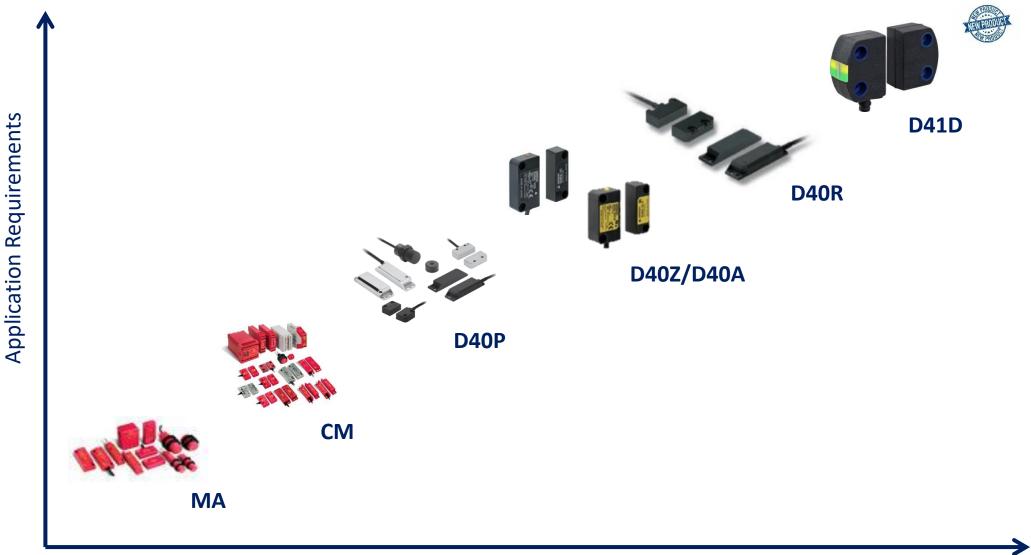


A cost effective guard-locking door switch, available in different contacts configurations.

D4NL Guard Lock Safety-door Switch

- Built-in switch with Door Open/Closed switch and Lock
 Monitor switch contacts available in different configurations
- Selectable operation key insertion direction and adjustable mounting ensure installation flexibility
- Holding force of 1,300 N
- Can be used for either standard loads or microloads
- Lineup includes models with a conduit size of M20
- Variety of metallic heads available

Non-Contact Interlock Switches



Solution Value -> Measures against Defeating Interlocks

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Reduce defeat possibilities and simplify your design by choosing the right actuator to fit your machine

D41D – High-coded RFID Non-Contact switch

- Type 4, high coded door switch with two code/teaching options: individual coding and individual coding with teaching capabilities (no limitation)
- 3 actuators type available: standard, flat and miniature
- Support front and lateral approach
- 3-color led indicator and dedicated output
- IP65 and IP67
- Connect up to 31 switches in series to a single controller
- Controller options: G9SA, G9SB, G9SX, G9SP, NX-S



A compact door switch with electronic detection mechanism for better stability

D40A - Coded Magnet Non-Contact switch

- Available with pre-wired cable (2 or 5 m) and M12 connector
- Up to 30 switches in series to a single controller
- 2-color LED indicators and aux. output
- Compact actuator design
- Reversible switch design, provides flexibility in installation
- Controller options: G9SX, G9SP, NX-S



A versatile non-contact door switch for a wide range of applications.

D40Z - Ferroresonant Non-Contact switch

- Non-magnetic actuator makes it ideal for use in applications with metal fillings
- Compact body and can be mounted from both sides
- Up to 30 units can be connected to a single G9SX and maintain Cat 4/PLe
- Ideal for middle to large scale device applications
- 2-color red/yellow LED indicators
- Controller options: G9SX, G9SP, NX-S



A cost effective option for door monitoring function, with housing and body options

D40P – Hall-Effect Non-Contact switch

- Contact configuration 2NC/1NO with aux. output
- Housing options incudes polyester, stainless steel and hygienic
- Different body types available: elongated, small, miniature and barrel sensors
- LED indicators
- Connect up to 20 switches in series, up to PLd
- Compatible with all OMRON safety logic devices



Designed for the most challenging applications, offers high anti-tamper resistance and IP69K versions

D40R – RFID Non-Contact switch

- RFID technology provides increased tamper resistance, with two anti-tamper coding: Basic and Unique
- Contact configuration 2NC/1NO with aux. output
- Housing options incudes polyester and stainless steel
- Different body types available, elongated and small, with flying leads or M12 connector
- LED indicator for fast troubleshooting
- Connect up to 20 switches in series, up to PLd
- Compatible with all OMRON safety logic devices



A budget-friendly option with a large selection options of contact configurations and housing

MA - Magnetically Actuated Non-Contact switch

- Large selection of contact configurations housed in plastic to satisfy most application requirements
- NEMA 6 enclosure enables the MA Series switches to satisfy most application requirements (MA 3, 4, 5 are NEMA 4)
- Misalignment tolerant up to 10 mm (0.39 in.)
- Variety of terminations—select various cable lengths or terminal strip termination for easy installation. Cable connector on selected models.
- Long life—the MA Series is designed for a minimum of one million actuations



A cost-effective door switch with housing options

CM – Coded Magnetic Non-Contact switch

- Coded magnetic actuator to increase tamper resistance
- Models with and without dedicated controllers available
- Pre-wired cable (5 or 10 m) available and 6-pin micro AC connector in some specific models
- Robust ABS housing and IP67, NEMA 6
- Stainless steel option available for harsh environments
- Designed to be connected to a safety control circuit which has less than 0.5 amp inrush current

We make machine safety easy



Easy-to integrate



Easy-to use



Easy-to maintain

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