

# D41G high-coded guard lock safety door switch

## Product Guide



## Overview

For OEMs, machine builders, and end users seeking to better protect operators by preventing bypassing, the D41 Series offers a single product family of RFID high-coded door switches that simplifies the design and reduces costs.

For applications involving full body access (such robotics and palletizers) in which operators could be trapped during maintenance or troubleshooting, the D41G provides a guard lock with different actuator options including emergency escape door handles. An asymmetric structure allows it to be combined with left and right actuators. The D41G is compliant with ANSI/RIA 15.06.

## Applications

- Safety systems that are experiencing frequent bypassing
- Machines failing to meet specifications due to tampering
- Robotic systems and machine tools with full body access
- Palletizing and depalletizing systems

## Primary Benefits

- Minimizes bypassing to meet the highest level of protection
- Quick automatic pairing makes installation and troubleshooting easy
- Pairing for door switches connected in series reduces commissioning time
- Three-color LED indicators and diagnostic output improve troubleshooting
- Optional integrated emergency exit unit ensures that people can exit hazardous areas even if power supply is unavailable
- Single product family reduces total cost of ownership

## Key features

- Individual coding, single or multiple teaching type
- Power-to-lock and power-to-unlock versions
- OSSD configuration for guard monitoring only or guard and lock monitoring
- Actuators for right and left hinged or sliding doors with door handle and optional emergency exit and lockout tag
- Actuators with no door handle for sliding doors, right and left options available with optional release tab
- Three-color LED indicators and diagnostic output
- Protection class IP66, IP67
- Up to 31 devices connected in series
- Complies with ISO 14119 (Type 4/High Coded), ISO 13849-1 (PLe)

# D41G Product Selection



| Part Number                |              | Lock and Release | Teaching                             | OSSD Configuration                   | Connection Method     |  |  |
|----------------------------|--------------|------------------|--------------------------------------|--------------------------------------|-----------------------|--|--|
| Sensor <sup>1</sup>        | D41G-1YDA-N2 | Power to unlock  | Individual coding, single teaching   | Guard monitoring and lock monitoring | M12 connector         |  |  |
|                            | D41G-2YDA-N2 | Power to unlock  | Individual coding, multiple teaching |                                      |                       |  |  |
|                            | D41G-2YDG-N2 | Power to lock    | Screw Terminal                       |                                      |                       |  |  |
|                            | D41G-2YDG-T1 | Power to lock    |                                      |                                      | Only guard monitoring |  |  |
|                            | D41G-2ZDA-T1 | Power to unlock  |                                      |                                      |                       |  |  |
| Actuator Type <sup>1</sup> | Part Number  | Handle Position  |                                      | Emergency Exit Unit                  | Lock-out option       |  |  |
| With door handle           | D41G-A2L-E1  | Left             |                                      | Yes                                  | -                     |  |  |
|                            | D41G-A2L-E1T |                  |                                      | Yes                                  | Yes                   |  |  |
|                            | D41G-A2R-E1  | Right            |                                      | Yes                                  | -                     |  |  |
|                            | D41G-A2R-E1T |                  |                                      | Yes                                  | Yes                   |  |  |
| Non door handle            | D41G-A1L     | Left             |                                      | -                                    | -                     |  |  |
|                            | D41G-A1R     | Right            |                                      | -                                    | -                     |  |  |

1. Actuators sold separately

## Accessories

|        |                     | Part Number                    | Description |
|--------|---------------------|--------------------------------|-------------|
| Cables | D41L-8P5-CFM12-905M | Cable, 5m, M12 connector, IP69 |             |
|        | D41L-8P5-CFM12-910M | Cable, 10m, M8 connector, IP69 |             |

## Related Products

| Part Number | Description   |
|-------------|---|
| G9SE-401    | Monitoring Relay, 24 VDC, Inputs: dual or single CH, Auto or Manual reset. Outputs: Dual Safety (4PST-NO) and Aux Single (PNP)                            |
| G9SP-N10S   | Programmable safety controller, 24 VDC, 10 safety inputs, 4 safety outputs (solid state), 4 test pulses - Optional Ethernet/IP or serial boards available |
| NX-SL5500   | CIP Safety / FSоЕ CPU, 128 connections, 2MB memory compatible with NX-CSG320 and NX102  |
| NXSID800    | NX Safety, 8-input, 2 test output module, PNP outputs from safety light curtains and laser area scanners, dry contacts from switches                      |
| NXSOD400    | NX Safety, 4-output module, PNP, 0.5A/point connects frequency inverters, servos, force guided relays   |