

# OMRON

## Product Discontinuation

Notices

Safety Door Switches

March 1, 2010 No. 2010054E

**Discontinuation Notice of Compact Non-contact Door Switch D40B series** 

**Product Discontinuation** 

X

Sensor D40B-1[][]] series D40B-2[][]] series D40B-3[][]] series Controller D40B-J1 D40B-J2 **Recommended Replacement** 

Sensor D40A-1C[] series

Controller G9SX-NS202-[] G9SX-NSA222-T03-[]

## Discontinuation date : The end of March, 2011

Caution on recommended replacement

Because D40B series does not have any compatibility with D40A/G9SX series, please replace the sensor and the controller in sets.

#### Difference from discontinued product

Model	Body Color	Dimen sions	Wire connection	Mounting Dimensions	Charact eristics	Operation ratings	Operation methods
D40A-1C[] series	*	-	*	-	*	**	**
G9SX-NS[] series	-	*	-	*	*	**	**

\*\* : Fully compatible

\* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

OMRON Corporation Industrial Automation Company

## Product Discontinuation and recommended replacement

#### Sensor

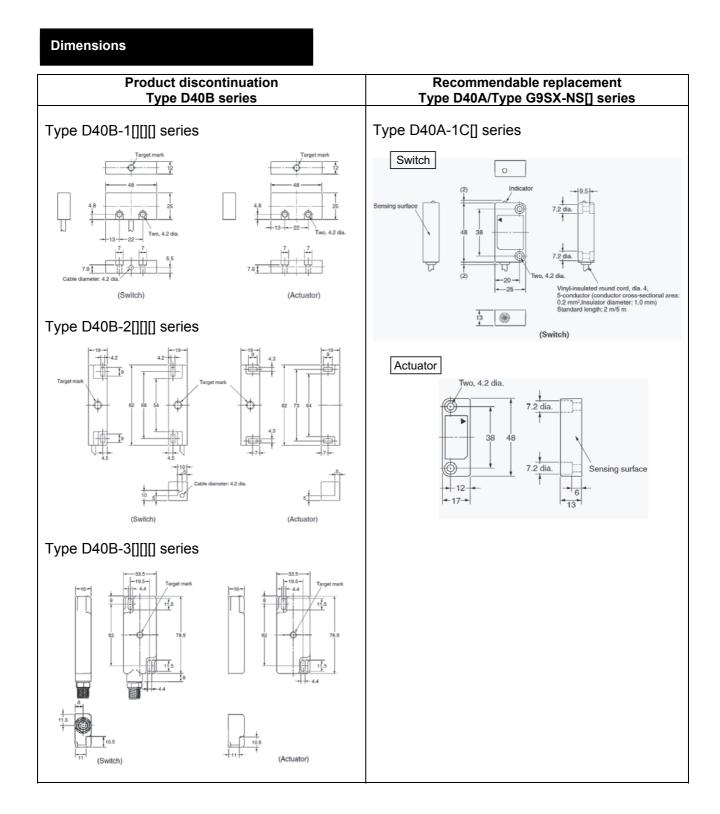
Product Discontinuation (Product Code)	Recommended replacement: (Product Code)
D40B-1B3 (D40B0001M)	D40A-1C2 (D40A0001E)
D40B-1B10 (D40B0002H)	D40A-1C5 (D40A0002C)
D40B-1D3 (D40B0003F)	
D40B-1D10 (D40B0004D)	
D40B-2B3 (D40B0005B)	
D40B-2B10 (D40B0006M)	
D40B-2D3 (D40B0007R)	
D40B-2D10 (D40B0008G)	
D40B-3D5C (D40B0009E)	None
D40B-3E5C (D40B0010R)	None

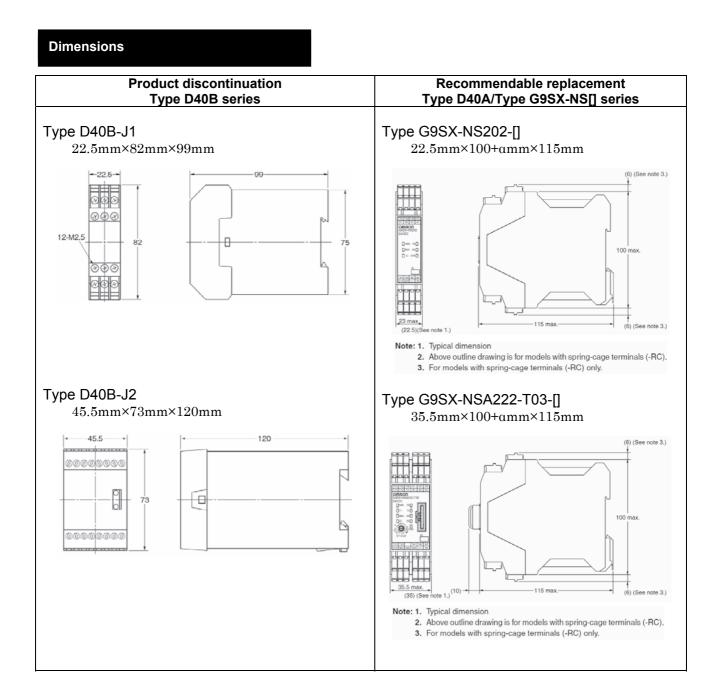
## Controller

Product Discontinuation (Product Code)	Recommended replacement: (Product Code)
D40B-J1 (D40B0014A)	G9SX-NS202-RT (G9SX0016M) G9SX-NS202-RC (G9SX0017R)
D40B-J2 (D40B0015M)	G9SX-NS222-T03-RT (G9SX0018G) G9SX-NS222-T03-RC (G9SX0019E)

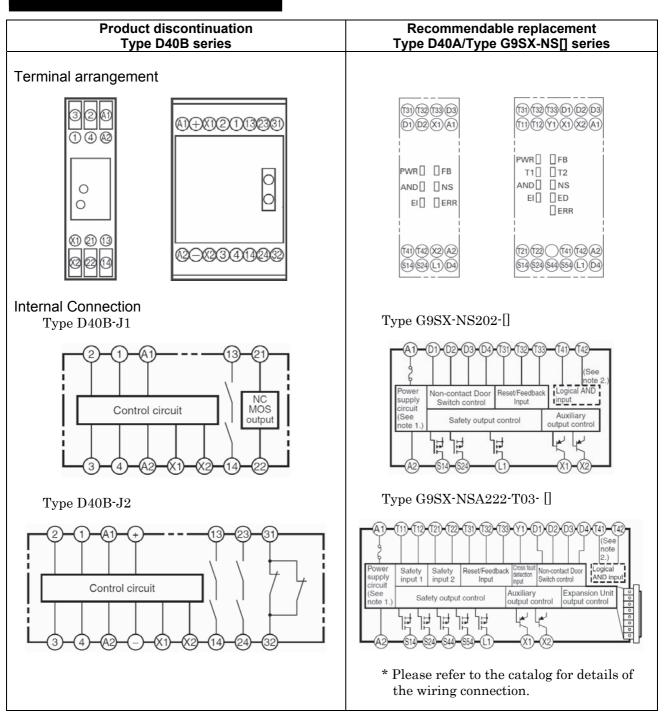
## Body color

Product discontinuation	Recommendable replacement
Type D40B series	Type D40A/Type G9SX-NS[] series
D40B-1[][]] series: Black D40B-2[][]] series: Black D40B-3[][]] series: Silver D40B-J1: Red D40B-J2: Red	D40A-1C[] series: Black G9SX-NS202-[]: Gray G9SX-NSA222-T03-[]: Gray





#### **Wire Connection**



#### Mounting dimensions

Product discontinuation	Recommendable replacement
Type D40B series	Type D40A/Type G9SX-NS[] series
Controller: DIN rail only.	Controller: DIN rail only. * Please refer to the Manual or "Dimensions" for Sensor.

## Characteristics

Product discontinuation Type D40B series	Recommendable replacement Type D40A/Type G9SX-NS[] series
Composition	
Sensors	Contraction in the internet (OFF CON):
<ul> <li>Safety contact switching distance (OFF→ON)</li> <li>Type D40B-1[[[]] series: 5mm min.</li> </ul>	- Safety contact switching distance (OFF→ON): 5mm min.
Type D40B $2[[]]$ series: 5mm min.	511111 11111.
Type D40B-3[][] series: 5min min.	
8mm min. (Aux. 5mm min.)	
- Safety contact switching distance (OFF $\rightarrow$ ON)	- Safety contact switching distance (OFF $\rightarrow$ ON) :
Type D40B-1[][] series: 15mm max.	15mm max.
Type D40B-2[][]] series: 18mm max.	
Type D40B-3[[[]] series: 21mm max.	
- Actuator approach speed: 17mm/s min.	- Actuator approach speed: unregulated
- Operating temperature: -10 to +55°C	- Operating temperature: -10 to +55°C
(Type D40B-3: -25 to +125°C)	- On susting hoursi dita: 25 to 250/ DII
- Operating humidity: 35 to 85%RH - Degree of protection: IP67	- Operating humidity: 25 to 85%RH - Degree of protection: IP67
- Material: ABS (Type D40B-3: Stainless steel)	- Material: PBT
- Mounting method: M4 screws	- Mounting method: M4 screws
- Mounting screw tightening torque: 1Nm	- Mounting screw tightening torque: 1Nm
- Switch auxiliary output rating: 24VDC 10mA	- Switch auxiliary output rating: 24VDC 10mA
cosø=1	(PNP open-collector outputs)
Controller	
Ratings (Power supply)	
- Power supply voltage:	- Power supply voltage: 24VDC
Type D40B-J1: 24VAC 50/60Hz / 24VDC	
Type D40B-J2: 24VAC 50/60Hz / 24VDC	
or 110V/230VAC 50/60Hz	A11 1.1 1
- Allowable voltage range:	- Allowable voltage range: -15% to +10% of rated supply voltage
Power supply voltage±15%	- Power consumption
- Power consumption Type D40B-J1: 2.0VA max.	Type G9SX-NS202: 3W max.
Type D40B $J1$ : 2.0VA max. Type D40B- $J2$ : 4.0VA max.	Type G9SX-NSA222: 4W max.
Ratings (Switch)	
- Rated load:	- Rated load: 0.8A DC max.
250VAC 4A cosø=1 30VDC 2A cosø =1	

## Characteristics

Product discontinuation Type D40B series	Recommendable replacement Type D40A/Type G9SX-NS[] series
Characteristics	
- Contact resistance: $100 \text{m}\Omega$ max.	- Contact resistance: unregulated
<ul> <li>Auxiliary output ON resistance: 36Ω (nominal value)</li> </ul>	- Auxiliary output ON resistance: unregulated
- Response time: 25ms max.	- Response time: 20ms max.
- Insulation resistance: $100M\Omega$ min (at $500VDC$ )	- Insulation resistance: $20M\Omega$ min (at $100VDC$ )
- Dielectric strength: 1,500VAC 1min.	- Dielectric strength: 500VAC 1min.
- Vibration resistance:	- Vibration resistance:
10 to 55 to 10Hz 1mm single amplitude	10 to 55 to 10Hz 0.375mm single amplitude
- Shock resistance: 300m/s <sup>2</sup>	- Shock resistance:
	Destruction: 300m/s <sup>2</sup> Malfunction: 100m/s <sup>2</sup>
- Mechanical Durability: 1,000,000 operations min.	- Mechanical Durability: unregulated
- Electrical Durability: 100,000 operations min.	- Electrical Durability: unregulated
- Minimum rated current for safety contacts: 10VAC/DC 10mA	<ul> <li>Minimum rated current for safety contacts: unregulated</li> </ul>
- Operating temperature: -10 to +55°C	- Operating temperature: -10 to +55°C
- Operating humidity: 90%RH at +50%	- Operating humidity: 25 to 85%RH
- Mounting method: 35mm DIN Track	- Mounting method: 35mm DIN Track
- Terminal screw tightening torque: 1Nm	- Terminal screw tightening torque: 0.5Nm
- Weight:	- Weight:
Type D40B-J1: 147g	Type G9SX-NS202: Approx.125g
Type D40B-J2: 200g	Type G9SX-NSA222: Approx.200g

## **Operation methods**

Product discontinuation	Recommendable replacement	
Type D40B series	Type D40A/Type G9SX-NS[] series	
Non-contact Door Switch	Non-contact Door Switch	