



Safety Door Switches

Overview and compatibility with safety logic devices

Tongue Interlock Switches



D4NS



D4GS



D4BS



T4016

	Key operated switches	Key operated switches	Key operated switches	Key operated switches
Housing	Plastic	Plastic	Metal	Metal
Contact Configuration	1NC/1NO 2NC 2NC/1NC 3NC	1NC/1NO 2NC 2NC/1NC 3NC	1NC/1NO 2NC	2NC/2NO 3NC/1NO 4 NC
Connectivity	M12 connector M20 connector G1/2 1/2-14NPT PG 13.5	1 m pre-wired 3 m pre-wired 5 m pre-wired	M20 connector G1/2 1/2-14NPT PG 13.5	3 X 0.5 in. NPT conduit
IP Rating	IP67	IP67	IP97	IP67

Tongue Interlock Switches compatibility with Omron Safety Logic devices

Safety Logic Devices Type	Product Family	D4NS	D4GS	D4BS	T4016
Safety Relays	G7SA	✓	✓	✓	✓
	G9SA	✓	✓	✓	✓
	G9SB	✓	✓	✓	✓
	G9SE	✓	✓	✓	✓
	G9SX	✓	✓	✓	✓
Programmable Safety Controllers	G9SP	✓	✓	✓	✓
	NX-SL_+NX-SID	✓	✓	✓	✓
	GIS-SMD	✓	✓	✓	✓

Guard Locking Switches



D41G



D41L



D4NL



D4SLN



D4JL



D40ML

	RFID Guard Locking	RFID Guard Locking	Guard Locking, Key operated switches	Guard Locking, Key operated switches	Guard Locking, Key operated switches	RFID magnetic locking switch
Housing	Plastic	Plastic	Plastic	Plastic Metal head	Plastic	Metal, Plastic, Stainless steel
Configuration	OSSD	OSSD	NC and NO combinations	NC and NO combinations	NC and NO combinations	2NC
Holding Force	2000 N	1,150 N	1,300 N	1,300 N	3,000 N	600 N ,900 N, 950 N, 1,500 N
Coding level*	High	High	Low	Low	Low	High
Teaching capabilities	Yes – Single and multiple	Yes – Single and multiple	-	-	-	No
Connectivity	M12 Terminal (M20)	M12 connector	M20 connector G1/2 PG 13.5	M20 connector G1/2 1/2-14NPT	M20 connector G1/2	5 m pre-wired 10 m pre-wired M12 connector
IP Rating	IP67	IP67, IP69	IP67	IP67	IP67	IP67, IP69K

*Coding levels based on ISO 14119

Guard Locking Switches compatibility with Omron Safety Logic devices

Safety Logic Devices Type	Product Family	D41G	D41L	D4NL	D4SLN	D4JL	D40ML
Safety Relays	G7SA	✓	✓	✓	✓	✓	✓
	G9SA	✓	✓	✓	✓	✓	✓
	G9SB	✓	✓	✓	✓	✓	✓
	G9SE	✓	✓	✓	✓	✓	✓
	G9SX	✓	✓	✓	✓	✓	✓
Programmable Safety Controllers	G9SP	✓*	✓*	✓	✓	✓	✓
	NX-SL_+NX-SID	✓*	✓*	✓	✓	✓	✓
	GIS-SMD	✓*	✓*	✓	✓	✓	✓

*Refer to datasheet, input filter must be used.

Non-Contact Interlock Switches



Description	RFID	Hall Effect	RFID	Hall Effect	RFID	Coded Magnetic	Magnetic
Housing	Plastic	Plastic	Plastic	Plastic Stainless steel	Plastic Stainless steel	Plastic Stainless steel	Plastic Stainless steel
Configuration	2 OSSD	2NC/1NO	2NC/1NO	2NC/1NO	2NC/1NO	1NC/1NO 2NC/1NO 2-wire system	1NC 1NC/1NO 2NC 2NC/1NO
Coding level*	High	--	--	--	High, Basic or Unique	--	--
Teaching capabilities	Yes – Single and multiple	--	--	--	--	--	--
Connectivity		2 m pre-wired 5 m pre-wired	2 m pre-wired 5 m pre-wired	5 m pre-wired 10 m pre-wired M12 connector	5 m pre-wired 10 m pre-wired M12 connector	Various pre-wired lengths M12 connector	Various pre-wired lengths M12 connector
IP Rating	IP67	IP67	IP67	IP67 IP69K	IP67 IP69K	IP67	IP67

*Coding levels based on ISO 14119

Non-Contact Switches compatibility with Omron Safety Logic devices

Safety Logic Devices Type	Product Family	D41D	D40Z	D40A	D40P	D40R
Safety Relays	G7SA	✓	X	X	X	X
	G9SA	✓	X	X	✓	✓
	G9SB	✓	X	X	✓	✓
	G9SE	X	X	X	✓	✓
	SR103	✓	X	X	✓	✓
	G9SX	✓	✓**	✓**	✓	✓
Programmable Safety Controllers	G9SP	✓*	✓	✓	✓	✓
	NX-SL_+NX-SID	✓*	✓***	✓***	✓	✓
	GIS-SMD	✓*	X	X	✓	✓

*Refer to datasheet, input filter must be used.

** Compatible with G9SX-NS202 and G9SX-NSA222.

*** Compatible with safety output unit NX-SIH400.

We make machine safety easy



Easy-to integrate



Easy-to use



Easy-to maintain