

NO: SR-105
DATE: April 2021

PRODUCT: T5009 Tongue Switch
TYPE: Discontinuation Notice

T5009 – Tongue Switch Discontinuation Notice

Discontinuation Date: March 31st, 2022

Last Order Date: December 31st, 2021



Difference between recommended replacement and discontinued model

Recommended replacement Model	Appearance	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
D4NS series	-	-	-	-	-	-	-

- ** : Compatible
- * : The change is almost compatible
- : Not compatible
- : No corresponding specification

Discontinued Product

Omron Product Code	Discontinued Model		Recommended Replacement Model
	ORT P/N	Model	
SL0A0067E	44501-0120	T5009-021F1M	D4NS Series
SL0A5365E	44501-5120	T5009-021F1MHH	D4NS Series
SL0A0068C	44501-0220	T5009-021F1MM	D4NS Series
SL0A5313B	44501-0170	T5009-021F1N	D4NS Series
SL0A0069A	44501-0440	T5009-021F2M	D4NS Series
SL0A5319A	44501-0470	T5009-021F2N	D4NS Series
SL0A5323M	44501-0541	T5009-021FLX1-QD	D4NS Series
SL0A0070E	44501-0500	T5009-021FSSM	D4NS Series
SL0A3949M	44501-0520	T5009-021FSSN	D4NS Series
SL0A3509F	44501-0010	T5009-021M	D4NS Series
SL0A5358B	44501-5010	T5009-021MHH	D4NS Series
SL0A3472C	44501-0020	T5009-021N	D4NS Series
SL0A5359M	44501-5020	T5009-021NHH	D4NS Series
SL0A5311F	44501-0030	T5009-021QD	D4NS Series
SL0A5360D	44501-5030	T5009-021QDHH	D4NS Series
SL0A5316G	44501-0410	T5009-021SCC	D4NS Series
SL0A0066G	44501-0110	T5009-021SM	D4NS Series
SL0A5364G	44501-5110	T5009-021SMHH	D4NS Series
SL0A3993H	44501-0210	T5009-021SMM	D4NS Series
SL0A5317E	44501-0450	T5009-021SN	D4NS Series
SL0A3775G	44501-0060	T5009-021SSCC	D4NS Series
SL0A5363R	44501-5060	T5009-021SSCCHH	D4NS Series
SL0A3773M	44501-0040	T5009-021SSM	D4NS Series
SL0A5361B	44501-5040	T5009-021SSMHH	D4NS Series
SL0A3774R	44501-0050	T5009-021SSN	D4NS Series

SL0A5362M	44501-5050	T5009-021SSNHH	D4NS Series
SL0A3994F	44501-3120	T5009-6022F1M	D4NS Series
SL0A5346R	44501-3150	T5009-6022F1MM	D4NS Series
SL0A5330B	44501-1020	T5009-6022M	D4NS Series
SL0A5331M	44501-1025	T5009-6022N	D4NS Series
SL0A2079M	44501-3020	T5009-6022SM	D4NS Series
SL0A5340M	44501-3025	T5009-6022SN	D4NS Series
SL0A3777C	44501-2020	T5009-6022SSM	D4NS Series
SL0A3778A	44501-2025	T5009-6022SSN	D4NS Series
SL0A5332R	44501-1030	T5009-6031M	D4NS Series
SL0A5333G	44501-1035	T5009-6031N	D4NS Series
SL0A5341H	44501-3030	T5009-6031SM	D4NS Series
SL0A5342F	44501-3035	T5009-6031SN	D4NS Series
SL0A5336A	44501-2030	T5009-6031SSM	D4NS Series
SL0A5337M	44501-2035	T5009-6031SSN	D4NS Series
SL0A3628R	44501-3141	T5009-6040F1GN	D4NS Series
SL0A1929E	44501-3140	T5009-6040F1M	D4NS Series
SL0A5334E	44501-1040	T5009-6040M	D4NS Series
SL0A5335C	44501-1045	T5009-6040N	D4NS Series
SL0A5343D	44501-3040	T5009-6040SM	D4NS Series
SL0A5338H	44501-2040	T5009-6040SSM	D4NS Series
SL0A5339F	44501-2045	T5009-6040SSN	D4NS Series
SL0A5328M	44501-0785	SA01-SSTD	N/A
SL0A3471E	44501-0755	SA01-STD	N/A
SL0A3776E	44501-0760	SA01-FLX1	N/A
SL0A5329R	44501-0790	SA01-FSTD	N/A
SL0A3719F	44501-0765	SA01-FLX2	N/A

Appearance/Dimensions/Specifications

Discontinued Product			
T5009 Specifications			
Electrical	All Models	T5009	T5009-6
Contact Configurations:		2 N/C + 1 N/O	2 N/C + 2 N/O, 3 N/C + 1 N/O, 4 N/C
Safety Contacts:	2 N/C positive break		
Switching Ability	AC: 500 V-1 A, 240 V-3 A, 120 V-6 A DC: 250 V-0.5 A, 24 V-2.5 A		
Safety Contact Gap:	> 2 mm (0.079 in.)		
Auxiliary Contacts:		1 N/O	1 N/C + 1 N/O, 2 N/C, 2 N/O
Max Switching Current/Volt/Amp:	500 V/500 VA		
Minimum Current:	5 V 5 mA DC		
Electrical Life:	1 x 10 ⁶ minimum		
Mechanical			
Mounting:	Any position		
Mounting Hardware:	2 x M5 screws		
Actuator Travel for Positive Opening:	7 mm (0.275 in.)		
Min Operating Radius:	60 mm (2.5 in.) with Flex 1 actuator; 175 mm (6.89 in.) with standard actuator		
Break Contact Min Force:	12 N (2.7 lb.); Hi-Hold models are 50 N (11.2 lbs.)		
Max Actuation Speed:	160 mm/sec (6.30 in./sec)		
Max Actuation Frequency:	2 cycles/sec		
Case Material:	UL listed, glass-filled polyester, optional stainless steel head		
Actuator Material:	Stainless steel		
Wiring Entry:	M20 with 1/2 in. NPT adapter included, 1/2 in. NPT, 6-pin micro AC connector 1/2 in.-20		
Weight:	160 g (5.6 oz.)		
Color:	Red		
Mechanical Life:	1 x 10 ⁶ minimum		
Environmental			
Protection:	IP67 (NEMA 6)		
Operating Temperature:	-25 to 80°C (-13 to 176°F)		
Cleaning:	Water washdown		
Compliance			
Standards:	EN1088, EN292, EN60947-5-1, EN60204-1, UL508		
Approvals/Listings:	CE marked for all applicable directives, UL and C-UL		

Replacement Product for T4012 and T5009

D4NS Series



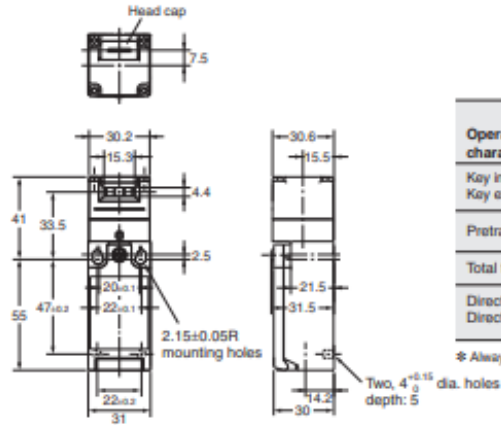
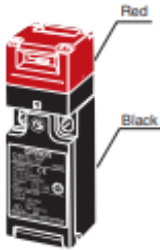
Slide keys

Replacement Product for T5009

D4NS Series

1-Conduit Models

D4NS-1□F
 D4NS-2□F
 D4NS-4□F
 D4NS-2□F-SJ
 D4NS-4□F-SJ

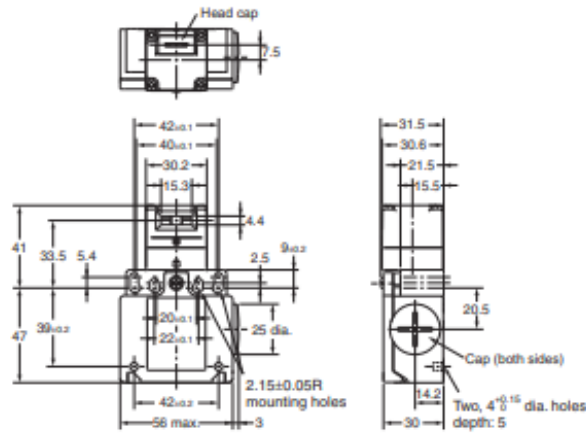
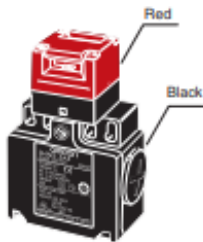


Operating characteristics	Model	D4NS-1□F D4NS-2□F D4NS-4□F	D4NS-2□F-SJ D4NS-4□F-SJ
	Key insertion force Key extraction force		15 N max. 30 N max.
Pretravel (PT)		6±3 mm	6±3 mm
Total travel (TT)		(28 mm)	(28 mm)
Direct opening force * Direct opening stroke *		60 N min. 10 mm min.	80N min. 10mm min.

* Always maintain the above operating characteristics for safe use.

2-Conduit Models

D4NS-6□F
 D4NS-8□F

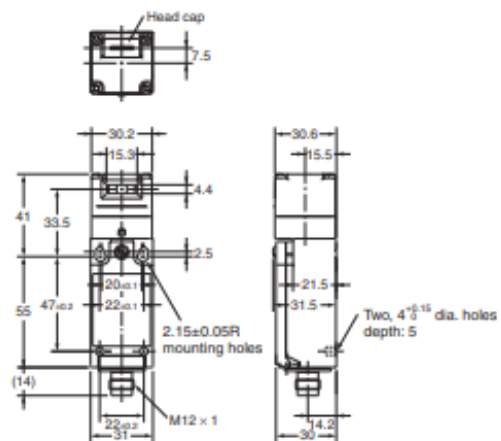
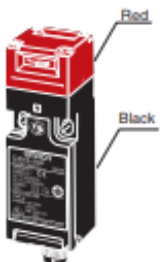


Operating characteristics	Model	D4NS-6□F D4NS-8□F
	Key insertion force Key extraction force	
Pretravel (PT)		6±3 mm
Total travel (TT)		(28 mm)
Direct opening force * Direct opening stroke *		60 N min. 10 mm min.

* Always maintain the above operating characteristics for safe use.

1-Conduit Connector Models

D4NS-9□F



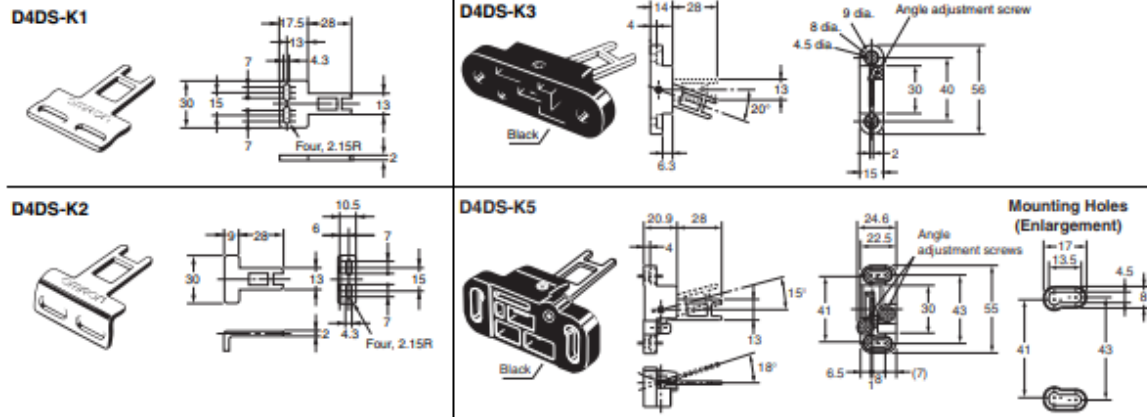
Operating characteristics	Model	D4NS-9□F
	Key insertion force Key extraction force	
Pretravel (PT)		6±3 mm
Total travel (TT)		(28 mm)
Direct opening force * Direct opening stroke *		60 N min. 10 mm min.

* Always maintain the above operating characteristics for safe use.

Replacement Product for T5009

D4NS Series

Operation Keys

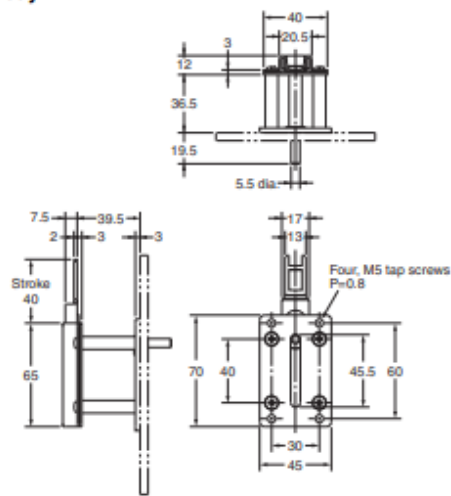


Note: Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

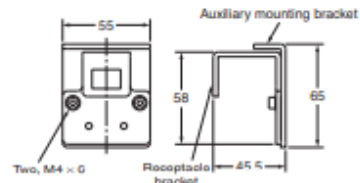
Slide Keys

D4NS-SK01

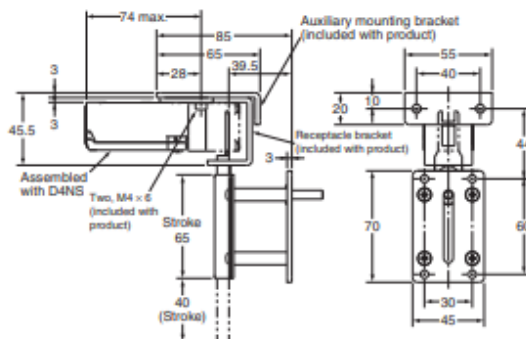
Main Body



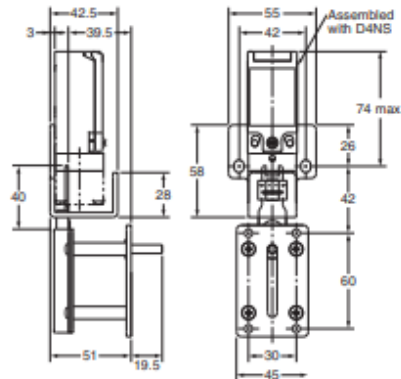
Auxiliary Mounting Bracket and Receptacle Bracket



Switch Mounting Pattern 1



Switch Mounting Pattern 2



Replacement Product for T5009

D4NS Series Specifications

Standards and EC Directives

Conforms to the following EC Directives:

- Machinery Directive
- Low Voltage Directive
- EN50047
- EN60204-1
- EN ISO 14119
- GS-ET-15

Certified Standards

Certification body	Standard	File No.
TÜV SÜD	EN60947-5-1 (certified direct opening)	Consult your OMRON representative for details.
UL #1	UL508, CSA C22.2 No.14	E76675
CQC (CCC)	GB14048.5	2003010305077330
KOSHA #2	EN60947-5-1	Consult your OMRON representative for details.

*1. Certification for CSA C22.2 No. 14 is authorized by the UL mark.
*2. Only certain models have been certified.

Certified Standard Ratings

TÜV (EN60947-5-1), CCC (GB14048.5)

Item	Utilization category	AC-15		DC-13
		3 A		0.27 A
Rated operating current (I _n)		3 A		0.27 A
Rated operating voltage (U _n)		240 V		250 V

Note: Use a 10 A fuse type gI or gG that conforms to IEC60269 as a short-circuit protection device. This fuse is not built into the Switch.

UL/CSA (UL508, CSA C22.2 No. 14)

A300

Rated voltage	Carry current	Current (A)		Volt-amperes (VA)	
		Make	Break	Make	Break
120 VAC	10 A	60	6	7,200	720
240 VAC		30	3		

Q300

Rated voltage	Carry current	Current (A)		Volt-amperes (VA)	
		Make	Break	Make	Break
125 VDC	2.5 A	0.55	0.55	69	69
250 VDC		0.27	0.27		

Characteristics

Degree of protection #1	IP67 (EN60947-5-1)	
Durability #2	Mechanical	<Standard type> 1,000,000 operations min. <High pull-force type> 100,000 operations min.
	Electrical	<Standard type> 500,000 operations min. (3 A resistive load at 250 VAC) #3 300,000 operations min. (10 A resistive load at 250 VAC) <High pull-force type> 100,000 operations min. (10 A resistive load at 250 VAC)
Operating speed	0.05 to 0.5 m/s	
Direct opening force #4	<Standard type> 60 N min. <High pull-force type> 80 N min.	

Direct opening travel #4	10 mm min.	
Contact resistance	25 mΩ max.	
Minimum applicable load #5	1 mA resistive load at 5 VDC (N-level reference value)	
Rated insulation voltage (U _i)	300 V	
Rated frequency	50/60 Hz	
Protection against electric shock	Class II (double insulation)	
Pollution degree (operating environment)	3 (EN60947-5-1)	
Impulse withstand voltage (EN60947-5-1)	Between terminals of same polarity	2.5 kV
	Between terminals of different polarity	4 kV
	Between each terminal and non-current carrying metallic parts	6 kV
Insulation resistance	100 MΩ min.	
Contact gap	2 × 2 mm min.	
Vibration resistance	Malfunction	10 to 55 Hz, 0.75 mm single amplitude
	Destruction	1,000 m/s ² min.
Shock resistance	Malfunction	300 m/s ² min.
	Conditional short-circuit current	100 A (EN60947-5-1)
Conventional free air thermal current (I _{th})	10 A (EN60947-5-1)	
Ambient operating temperature	-30 to 70°C (with no icing)	
Ambient operating humidity	95% max.	
Weight	Approx. 96 g (D4NS-1CF)	

Note: 1. The above values are initial values.
2. The Switch contacts can be used with either standard loads or microloads. Once the contacts have been used to switch a load, however, they cannot be used to switch smaller loads. The contact surfaces will become rough once they have been used and contact reliability for smaller loads may be reduced.

*1. The degree of protection is tested using the method specified by the standard (EN60947-5-1). Confirm that sealing properties are sufficient for the operating conditions and environment beforehand. Although the switch box is protected from dust or water penetration, do not use the D4NS in places where foreign material may enter through the key hole on the head, otherwise Switch damage or malfunctioning may occur.

*2. The durability is for an ambient temperature of 5 to 35°C and an ambient humidity of 40% to 70%. For more details, consult your OMRON representative.

*3. Do not pass the 3 A, 250 VAC load through more than 2 circuits.

*4. These figures are minimum requirements for safe operation.

*5. This value will vary with the switching frequency, environment, and reliability level. Confirm that correct operation is possible with the actual load beforehand.

Specifications and prices in this product news are as of the issue date and are subject to change without notice. Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, product specifications, instructions, and manuals for precautions and necessary information when using products