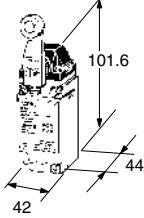
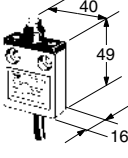
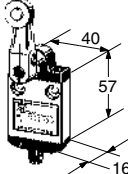


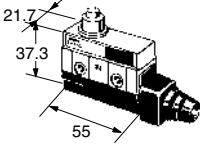
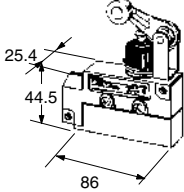
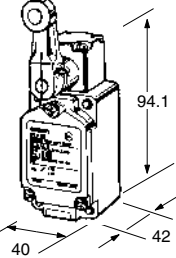
Limit Switches

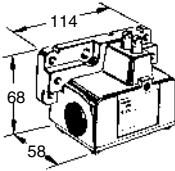
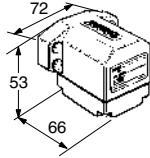
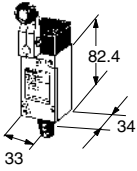
Classification		General-purpose limit switch	Enclosed switch	Miniature limit switch
Model		D4A-□N	D4C	D4CC
Appearance				
Features		A new version with better seal, shock resistance, and strength	Small, slim-bodied high-precision enclosed switch	Many models including roller lever switches only 16-mm thick with connector
Degree of protection	IEC	IP67	IP67	IP67
	JIS	Immersion-proof	Immersion-proof	Immersion-proof
Rated current (A)	20	-----	-----	-----
	15	-----	-----	-----
	10	-----	-----	-----
	5	-----	-----	-----
		-----	-----	-----
Microload type		Yes	Yes	---
Mechanical life* expectancy (x 1,000 operations min.)	50,000	-----	-----	-----
	40,000	-----	-----	-----
	30,000	-----	-----	-----
	20,000	-----	-----	-----
	10,000	-----	-----	-----
Electrical life* expectancy (x 1,000 operations min.)	1,000	-----	-----	-----
	800	-----	-----	-----
	600	-----	-----	-----
	400	-----	-----	-----
	200	-----	-----	-----
Operation indicator		Yes	Yes	Yes
Mounting pitch		59.5 x 29.4 mm	25 mm	25 mm
Actuators		Roller lever, adjustable roller lever, top plunger, side roller lever, coil spring	Roller lever, top plunger, bevel plunger, top roller plunger	Center roller lever, roller lever, top plunger, bevel plunger, top roller plunger
Approved standards			-	UL, CSA
Page No.		F-9	F-31	F-53

Small sealed switches	Enclosed switch	General-purpose limit switch	
D4E-□N	SHL	WL	WLM□
Slim and compact switch with better seal and ensuring longer service life than D4E	Subminiature limit switch with high sealing property	Wide selection of two-circuit double break	Double seal fitted to rotating parts. Improved resistance to abrasion and smoother movement. Improved visibility when setting stroke zones.
IP67	IP67	IP67	IP67
Immersion-proof	Immersion-proof	Immersion-proof	Immersion-proof
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
33 mm	16.5 mm	58.7 x 30.2 mm	58.7 x 30.2 mm
Panel mount roller plunger, top roller plunger, hinge roller lever, top plunger	Panel mount roller plunger, hinge lever, hinge roller lever, top plunger	Roller lever, adjustable roller lever, adjustable rod lever, fork lever lock, top plunger, top roller plunger, side roller plunger, top ball plunger, side ball plunger, coil spring	Roller lever

F-65	F-79	F-91	F-133

Limit Switches





Classification		General-purpose limit switch	Enclosed switch	Miniature explosion-proof limit switch
Model		ZC-□55	ZE/ZV/XE/XV	WLF6E
Appearance				
Features		Small, high-precision enclosed switch	Long-service life and large breaking capacity	Miniature explosion-proof (hydrogen atmospheres) limit switch with terminal block. Same mounting method, pitch, and size as WL Switch.
Degree of protection	IEC	IP67	IP65 (-N type)/IP60 (-Q type)	IP67
	JIS	Immersion-proof	Jet-proof (-N type) Dust-proof (-Q type)	Immersion-proof
Rated current (A)	20	-----	-----	-----
	15	-----	-----	-----
	10	-----	-----	-----
	5	-----	-----	-----
Microload type		Yes	---	---
Mechanical life* expectancy (x 1,000 operations min.)	50,000	-----	-----	-----
	40,000	-----	-----	-----
	30,000	-----	-----	-----
	20,000	-----	-----	-----
Electrical life* expectancy (x 1,000 operations min.)	1,000	-----	-----	-----
	800	-----	-----	-----
	600	-----	-----	-----
	400	-----	-----	-----
Operation indicator		Yes	---	---
Mounting pitch		25.4 mm	ZE: 25.4 mm, ZV: 41.3 mm ZV2: 31 x 75 mm	58.7 x 30.2 mm
Actuators		Top roller plunger, hinge lever, hinge roller lever, top plunger	Top plunger, top roller plunger, roller arm lever	Stainless steel roller lever Resin roller lever Adjustable stainless steel roller lever Adjustable resin roller lever Adjustable rod lever Top plunger Top roller plunger
Approved standards				---
Page No.		F-143	F-153	This product is not shown in the catalogue. For more information please contact your local Omron sales office or download the data from www.eu.omron.com

Multiple limit switches		General purpose limit switch
VB	SB	HL-5000
		
12-mm pitch between poles	Subminiature multiple limit switch with 8 mm pitch between plunger	Economical miniature limit switch boasting rigid construction
IP67	IP67	IP65
Immersion-proof	Immersion-proof	Jet-proof

----- 250 VAC ----- █	----- 250 VAC ----- █	----- 250 VAC ----- █
Yes	Yes	---

----- 5,000 ----- █	----- 1,500 ----- █	----- ----- █
----- (300) ----- █	----- ----- █	----- ----- █
---	---	---
98 x 28 mm, 50 mm	57 x 14 mm	50 x 24 mm
Bevel plunger, roller plunger, hemispherical plunger	Bevel plunger	Roller lever, adjustable roller lever, top plunger, top roller plunger, coil spring
---	---	---
This product is not shown in the catalogue. For more information please contact your local Omron sales office or download the data from www.eu.omron.com		

Limit Switches

Classification		General-purpose Basic Switches, Z-size			
Model		A	DZ	TZ	X
Appearance					
Features		High-capacity load switching	Ideal for controlling two independent circuits with two built-in switches.	Stable operation at 400°C. Suitable for electric furnaces or boilers.	Direct current switching. Built-in permanent magnet for extinguishing arc.
Contact	Contact specification	Rivet	Rivet	Rivet	Cylinder+flat surface
	Contact material	Silver alloy	Silver alloy	Platinum	Silver alloy
	Rating (resistive load)	20 A at 250 VAC	10 A at 250 VAC	1 A at 250 VAC	10 A at 125 VDC
	Max. operating current (A)	20 15 10 8 5 3 2 1 0.5 0.3 0.1			
	Min. permissible load (mA)	100 10 1 0.1 0.01			
	(N-level reference value)				
Operating force (OF) (see note)		3.92..6.13 N {400..625 gf}	5.59 N {570 gf}	4.90 N {500 gf}	5.00 N {510 gf}
Life expectancy (see note)	Mechanical	1 x 10 ⁶ min.	1 x 10 ⁶ min.	1 x 10 ⁵ min.	1 x 10 ⁶ min.
	Electrical	500 x 10 ³ min.	500 x 10 ³ min.	50 x 10 ³ min.	100 x 10 ³ min.
Ambient operating temperature		-25°C..80°C	-25°C..80°C	-65°C..400°C	-25°C..80°C
Mounting pitch		25.4 mm	25.4 mm	25.4 mm	25.4 mm
Actuators		Pin plunger, panel mount plunger, panel mount roller plunger, hinge lever, hinge roller lever, roller leaf spring	Pin plunger, hinge lever, hinge roller lever	Pin plunger, hinge lever, hinge roller lever	Pin plunger, panel mount plunger, panel mount roller plunger, leaf Spring, hinge lever, hinge roller lever
Approved standards					
Page No.		F-165	F-173	F-179	F-183

- Note:**
1. These values are for pin plunger models.
 2. The above table provides only an overview of specifications. Before actual use, be sure to check the specification details and precautions given on the relevant reference pages.

General-purpose Basic Switches, Z-size

Z



Z-15H	Z-15G	Z-15E	Z-01H	Z-10FY	Z-15ER
Basic Models (most popular)				Split-contact model	Maintained contact model
High sensitivity models, drip-proof models, micro load models, and models with protective covers.					
Rivet			Single crossbar	Rivet	
Silver			Gold alloy	Silver	
15 A at 250 VAC			0.1 A at 125 VAC	10 A at 250 VAC (series connection)	15 A at 250 VAC
0.4 A at 125 VDC	0.5 A at 125 VDC	0.75 A at 125 VDC			
(160 mA at 5 VDC)			(1 mA at 5 VDC)	(160 mA at 5 VDC)	(160 mA at 5 VDC)
1.96..2.75 N {200..280 gf}	2.45..3.43 N {250..350 gf} Drip-proof: 4.22 N {250..430 gf}	6.12..7.85 N {625..800 gf}	2.45 N {250 gf} Drip-proof: 3.43 N {350 gf}	4.46..7.26 N {455..740 gf}	1.96..2.50 N {200..255 gf}
20 x 10 ⁶ min.		300 x 10 ³ min.	10 x 10 ⁶ min.	500 x 10 ³ min.	300 x 10 ³ min.
500 x 10 ³ min.		100 x 10 ³ min.	500 x 10 ³ min.	100 x 10 ³ min.	100 x 10 ³ min.
25°C..80°C (Drip-proof: -15°C..80°C)					
25.4 mm					
Pin plunger, panel mount plunger, panel mount roller plunger, leaf spring, hinge lever, roller leaf spring, hinge roller lever, flexible rod		Pin plunger, panel mount plunger, panel mount roller plunger, roller leaf spring	Pin plunger, panel mount plunger, roller leaf spring	Pin plunger, panel mount roller plunger, hinge lever, hinge roller lever	Pin plunger, hinge lever
Solder Screw				Screw	Solder
F-191					