Z-15

Best-selling Basic Switch Boasting High Precision and Wide Variety

- A large switching capacity of 15 A with high repeat accuracy.
- A wide range of variations in contact form for your selection: basic, split-contact, maintained-contact, and adjustable contact gap types.
- A series of standard models for micro loads is available.
- A series of molded terminal-type models incorporating safety terminal protective cover is available.

⚠ Be sure to read *Safety Precautions* on page 22 and *Safety Precautions for All Basic Switches.*

Model Number Structure

Configuration

- Basic models
  - General-purpose — Refer to page 3.
  - Drip-proof
    - Without terminal protective cover — Refer to page 5.
    - With terminal protective cover — Refer to page 5.
    - Molded terminal — Refer to page 2.
- Split-contact models — General-purpose — Refer to page 4.
- Maintained-contact models — General-purpose — Refer to page 4.

Basic Models

General-purpose

- A variety of actuators is available for a wide range of application.
- The contact mechanism of models for micro loads is a crossbar type with gold-alloy contacts, which ensures highly reliable operations for micro loads.
- Contact Gap:
  - H2: 0.20 mm (extra-high-sensitivity)
  - H : 0.25 mm (high-sensitivity, micro voltage current load)
  - G : 0.5 mm (standard)
  - E : 1.8 mm (high-capacity)
  - F : 1.0 mm (split-contact models)

Drip-proof

- These Switches use a rubber boot on the actuator and adhesive fill between the case and cover to increase resistance to drips.
- Models with drip-proof terminal protective covers and molded terminals with resin filling are also available.

Split-contact Models

- This type is identical in construction to the general-purpose basic switch except that it has two pairs of simultaneous acting contacts by splitting moving contacts.
- Since the moving contacts are connected to a common terminal, either parallel or series connection is possible.
- Highly reliable micro load switching is ensured if the model is used as a twin-contact switch.

Maintained-contact Models

- The maintained-contact type has a reset button at the bottom of the switch case, in addition to the pushbutton (plunger) located on the opposite side of the reset button. Use these buttons alternately.
- Since the Switch has greater pretravel than overtravel, it is suitable for use in reversible control circuits, manual reset circuits, safety limit circuits, and other circuits which are not preferable for automatic resetting. (For further details, refer to individual datasheets.)

Model Number Legend

Basic Models

Z-□□□□-□
(1)(2)(3)(4) (5)

(1) Ratings

- 01 : 0.1 A (micro load)
- 15 : 15 A

(2) Contact Gap

- H2 : 0.20 (extra-high-sensitivity)
- H : 0.25 mm (high-sensitivity, micro load)
- G : 0.5 mm (standard)
- E : 1.8 mm (high-capacity)

(3) Actuator

- None : Pin plunger
- S : Slim spring plunger
- D : Short spring plunger
- K : Spring plunger (medium OP)
- K3 : Spring plunger (high OP)
- Q3 : Panel mount plunger (medium OP)
- Q : Panel mount plunger (medium OP)
- Q8 : Panel mount plunger (high OP)
- Q22 : Panel mount roller plunger
- Q21 : Panel mount cross roller plunger
- L : Leaf spring (high OF)
- L2 : Roller leaf spring
- W21 : Short hinge lever
- W : Hinge lever (low OF)
- W3 : Hinge lever (medium OF)
- W32 : Hinge lever (high OF)
- W4 : Low-force hinge lever
- W44 : Long hinge lever
- W78 : Low-force wire hinge lever (low OF)
- W52 : Low-force wire hinge lever (high OF)
- W22 : Short hinge roller lever
- W2 : Hinge roller lever
- W25 : Hinge roller lever (large roller)
- W49 : Short hinge cross roller lever
- W54 : Hinge cross roller lever
- W2277 : Unidirectional short hinge roller lever (low OF)
- M : Reverse hinge lever
- M22 : Reverse short hinge roller lever
- M2 : Reverse hinge roller lever
- NJ : Flexible rod (high OF)
- NJS : Flexible rod (low OF)

(4) Degree of Protection

- None : General-purpose
- 55 : Drip-proof (not include the terminals)
- A55 : Drip-proof (including the terminals)

(5) Terminals

- None : Solder terminal
- B : Screw terminal (with toothed washer)
- B5V : Screw terminal with terminal cover (for Z-15G□A55 only)

Standard Models (Drip-proof Type/Molded Terminals)

Z-□55-M□□ □M
(1) (2)(3) (4)

(1) Drip-proof Type

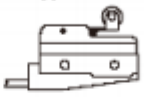
(2) Lead Outlets

- None : VSF
- 19 : VCT

(3) Directions of Lead Outlets (See following diagrams.)

- L : Left
- R : Right
- D : Descending

L Type



D Type

R Type

(4) Length of Lead Outlets

- 1 : 1 m
- 3 : 3 m

Split-contact Models

Z-10F□Y-B
(1)(2)(3)(4) (5)

(1) Ratings

- 10 : 10 A (split-contact models)

(2) Contact Gap

- F : 1 mm (high-capacity)

(3) Actuator

- None : Pin plunger
- S : Slim spring plunger
- D : Short spring plunger
- Q : Panel mount plunger
- Q22 : Panel mount roller plunger
- W : Hinge lever
- W22 : Short hinge roller lever
- W2 : Hinge roller lever
- M22 : Reverse short hinge roller lever

(4) Construction

- Y : Split-contact models

(5) Terminals

- B : Screw terminal (with toothed washer)

Maintained-contact Models

Z-15-E□R
(1) (2)(3)(4)

(1) Ratings

- 15 : 15 A

(2) Contact Gap

- E : 1.8 mm (high capacity)

(3) Actuator

- None : Pin plunger
- S : Slim spring plunger
- W : Hinge lever

(4) Structure

- R : Maintained-contact models

Main Unit

Basic Models (General-purpose)

Actuator	Classification		Standard	High-sensitivity	Extra-high sensitivity	High-capacity	Micro load
	Contact gap		G (0.5 mm)	H (0.25 mm)	H2 (0.20 mm)	E (1.8 mm)	H (0.25 mm)
	Terminal *1		Model	Model	Model	Model	Model
Pin plunger			Z-15G	Z-15H	Z-15H2	Z-15E	Z-01H
			Z-15G-B	Z-15H-B	Z-15H2-B	Z-15E-B	Z-01H-B
Slim spring plunger			Z-15GS	Z-15HS	--	--	Z-01HS
			Z-15GS-B	Z-15HS-B			Z-01HS-B
Short spring plunger			Z-15GD	Z-15HD	--	Z-15ED	Z-01HD
			Z-15GD-B	Z-15HD-B		Z-15ED-B	Z-01HD-B
Panel mount plunger	Low OP		Z-15GQ3	--	--	--	--
			Z-15GQ3-B				
	Medium OP		Z-15GQ	Z-15HQ	--	Z-15EQ	Z-01HQ
			Z-15GQ-B	Z-15HQ-B		Z-15EQ-B	Z-01HQ-B
	High OP		Z-15GQ8	--		--	--
			Z-15GQ8-B				
Panel mount roller plunger			Z-15GQ22	Z-15HQ22	--	Z-15EQ22	--
			Z-15GQ22-B	Z-15HQ22-B		Z-15EQ22-B	
Panel mount cross roller plunger			Z-15GQ21	Z-15HQ21	--	Z-15EQ21	--
			Z-15GQ21-B	Z-15HQ21-B		Z-15EQ21-B	
Leaf spring			Z-15GL	--	--	--	--
			Z-15GL-B				
Roller leaf spring			Z-15GL2	--	--	--	--
			Z-15GL2-B				
Short hinge lever			Z-15GW21	--	--	--	--
			Z-15GW21-B				
Hinge lever	Low OP		Z-15GW	Z-15HW	--	--	--
			Z-15GW-B	Z-15HW-B			
	Medium OP		Z-15GW3	--			
			Z-15GW3-B				
	High OP		Z-15GW32				
			Z-15GW32-B				
Low-force hinge lever			Z-15GW4	Z-15HW24	--	--	--
			Z-15GW4-B	Z-15HW24-B			
Low-force wire hinge lever	Low OP		--	Z-15HW78	--	--	--
				Z-15HW78-B			
	High OP			Z-15HW52			
				Z-15HW52-B			
Short hinge roller lever			Z-15GW22	Z-15HW22	--	Z-15EW22	Z-01HW22
			Z-15GW22-B	Z-15HW22-B		Z-15EW22-B	Z-01HW22-B
Short hinge cross roller lever			Z-15GW49	--	--	--	--
			Z-15GW49-B				
Hinge roller lever	Stan-dard		Z-15GW2	Z-15HW2	--	--	--
			Z-15GW2-B	Z-15HW2-B			
	Large roller		Z-15GW25	--		--	--
			Z-15GW25-B				
Hinge cross roller lever			Z-15GW54	--	--	--	--
			Z-15GW54-B				
Unidirectional short hinge roller lever	Parallel		Z-15GW2277	--	--	--	--
			Z-15GW2277-B				
Reverse hinge lever *2			Z-15GM	--	--	--	--
			Z-15GM-B				
Reverse short hinge roller lever *2			Z-15GM22	--	--	--	--
			Z-15GM22-B				
Reverse hinge roller lever *2			Z-15GM2	--	--	--	--
			Z-15GM2-B				

*1. : Solder terminal : Screw terminal

*2. The pin plungers of reverse-type models are continuously pressed by the actuator levers with compression coil springs and the pin plungers are freed by operating the levers. Reverse-type models are highly vibration- and shock-resistive because the pin plungers are normally pressed.

Actuator	Classification / Contact gap / Drip-proof terminal protective cover / Terminal *1	Standard G (0.5 mm) Not provided Model	Standard G (0.5 mm) Provided Model	Micro load H (0.25 mm) Not provided Model
Pin plunger	Solder terminal	Z-15G55	---	Z-01H55
	Screw terminal	Z-15G55-B	Z-15GA55-B5V	Z-01H55-B
Short spring plunger	Solder terminal	Z-15GD55	---	Z-01HD55
	Screw terminal	Z-15GD55-B		Z-01HD55-B
Spring plunger, Low OP	Solder terminal	Z-15GK55	---	---
	Screw terminal	Z-15GK55-B		
Spring plunger, High OP	Solder terminal	Z-15GK355	---	---
	Screw terminal	Z-15GK355-B	Z-15GK3A55-B5V	
Panel mount plunger	Solder terminal	Z-15GQ55	---	---
	Screw terminal	Z-15GQ55-B	Z-15GQA55-B5V	
Panel mount roller plunger	Solder terminal	Z-15GQ2255	---	---
	Screw terminal	Z-15GQ2255-B	Z-15GQ22A55-B5V	
Panel mount cross roller plunger	Solder terminal	---	---	---
	Screw terminal	Z-15GQ2155-B	Z-15GQ21A55-B5V	
Leaf spring	Solder terminal	Z-15GL55	---	---
	Screw terminal	Z-15GL55-B		
Roller leaf spring	Solder terminal	Z-15GL255	---	---
	Screw terminal	Z-15GL255-B		
Short hinge lever	Solder terminal	Z-15GW2155	---	---
	Screw terminal	Z-15GW2155-B		
Long hinge lever	Solder terminal	Z-15GW4455	---	---
	Screw terminal	Z-15GW4455-B	Z-15GW44A55-B5V	
Hinge lever	Solder terminal	Z-15GW55	---	---
	Screw terminal	Z-15GW55-B	Z-15GWA55-B5V	
Short hinge roller lever	Solder terminal	Z-15GW2255	---	Z-01HW2255
	Screw terminal	Z-15GW2255-B	Z-15GW22A55-B5V	Z-01HW2255-B
Hinge roller lever	Solder terminal	Z-15GW255	---	---
	Screw terminal	Z-15GW255-B	Z-15GW2A55-B5V	
Unidirectional short hinge roller lever	Solder terminal	Z-15GW227755	---	---
	Screw terminal	Z-15GW227755-B	Z-15GW2277A55-B5V	
Reverse hinge lever *2	Solder terminal	Z-15GM55	---	---
	Screw terminal	Z-15GM55-B		
Reverse short hinge roller lever *2	Solder terminal	Z-15GM2255	---	---
	Screw terminal	Z-15GM2255-B		
Reverse hinge roller lever *2	Solder terminal	Z-15GM255	---	---
	Screw terminal	Z-15GM255-B		
Flexible rod (coil spring) *3	Solder terminal	Z-15GNJ55	---	---
	Screw terminal	Z-15GNJ55-B		

*1. : Solder terminal : Screw terminal
*2. The pin plungers of reverse-type models are continuously pressed by the actuator levers with compression coil springs and the pin plungers are freed by operating the levers.
*3. The tip is made of resin.