

# Pressure Switches (Piston Actuator)

TDZ□□□□/TDZ□□□□F



## Features

- The pressure switches have adopted a brass (nickel plated) or SUS420F piston as the pressure sensing element.
- An O-ring and a Teflon cup seal have been adopted as a seal of the piston, and this configuration realizes long-time duration of the pressure switches.
- The pressure switches are applicable to pressure ranging from 0.1 to 63.5MPa.
- The micro switch is selectable from a SPDT standard rating type, a micro-load type (for 24V DC), and a sealed type (environment resistance).
- A fixed differential type (symbol “F”) is also available.
- CCC and CE approved.  
(Please note that CE approved switches is not available for the sealed type. CCC certified products is not available for the with pilot lamps.)

	Models	Range		Differential (Dead Band)			Proof Pressure				
		MIN. - MAX.	MPa (kgf/cm <sup>2</sup> )	Lower Range MIN. - MAX.	Middle Range MIN. - MAX.	Higher range MIN. - MAX.	MPa (kgf/cm <sup>2</sup> )	MPa (kgf/cm <sup>2</sup> )			
Adjustable Differential (Dead Band) Type	TDZ-1	0.1-3.2	(1-32)	0.2-0.7	(2-7)	0.2-0.7	(2-7)	0.25-0.8	(2.5-8)	10	(100)
	TDZ-3	0.2-7	(2-70)	0.25-1.3	(2.5-13)	0.28-1.4	(2.8-14)	0.3-1.5	(3-15)	35	(350)
	TDZ-4	0.5-20.5	(5-205)	0.6-3.8	(6-38)	0.7-4	(7-40)	1.2-4.2	(12-42)	70	(700)
	TDZ-7	1-40	(10-400)	1.4-7.8	(14-78)	1.5-8	(15-80)	1.8-8.5	(18-85)	70	(700)
	TDZ-8	2-63.5	(20-635)	2-11	(20-110)	2.5-12	(25-120)	3-12	(30-120)	120	(1,200)
	TDZ-13	0.2-3.5	(2-35)	0.25-1.3	(2.5-13)	0.3-1.4	(3-14)	0.35-1.5	(3.5-15)	35	(350)
	TDZ-34	0.5-10	(5-100)	0.6-3.8	(6-38)	0.7-3.8	(7-38)	1.2-4	(12-40)	70	(700)
	TDZ-47	1-20	(10-200)	1.4-7.5	(14-75)	1.5-8	(15-80)	1.8-8.5	(18-85)	70	(700)
TDZ-78	2-30	(20-300)	2-11	(20-110)	2.5-12	(25-120)	3.5-12	(35-120)	120	(1,200)	
Fixed Differential (Dead Band) Type	TDZ-1F	0.1-3.2	(1-32)	0.2	(2)	0.25	(2.5)	0.3	(3)	10	(100)
	TDZ-3F	0.2-7	(2-70)	0.25	(2.5)	0.28	(2.8)	0.3	(3)	35	(350)
	TDZ-4F	0.5-20.5	(5-205)	0.7	(7)	0.8	(8)	1.2	(12)	70	(700)
	TDZ-7F	1-40	(10-400)	1.4	(14)	1.5	(15)	1.8	(18)	70	(700)
	TDZ-8F	2-63.5	(20-635)	2	(20)	2.5	(25)	3	(30)	120	(1,200)
	TDZ-13F	0.2-3.5	(2-35)	0.3	(3)	0.33	(3.3)	0.35	(3.5)	35	(350)
	TDZ-34F	0.5-10	(5-100)	0.7	(7)	0.8	(8)	1.2	(12)	70	(700)
	TDZ-47F	1-20	(10-200)	1.4	(14)	1.5	(15)	1.8	(18)	70	(700)
TDZ-78F	2-30	(20-300)	2.5	(25)	2.8	(28)	3	(30)	120	(1,200)	

- The differential (dead band) becomes larger to a certain extent in accordance with increase of the pressure. The above chart shows the differential adjustable range related to the pressure ranges divided into three stages.
- Select a type of your pressure switch so that it can be used within the middle of the range as much as possible.
- The differential (dead band) of Min. of adjustable differential type and fixed differential type indicates value at the middle of the pressure range. The differential (dead band) becomes smaller than the indicated value within the lower range, and larger within the higher range.
- A PT1/8 drain port is equipped on the side of the body so that the pressure switch is used with piping for drains beforehand, in an environment that will not allow even a small amount of seepage. The drain port must be opened to the atmospheric pressure.

TDZ-1 (F) / TDZ-3 (F)  
 TDZ-4 (F) / TDZ-7 (F)  
 TDZ-8 (F) / TDZ-13 (F)  
 TDZ-34 (F) / TDZ-47 (F)  
 TDZ-78 (F)

Mass : approx. 0.7kg

