

# Differential Pressure Switches (Piston Actuator)

SZ□□□PD (SPDT) / SZ□□□PDW (DPDT)



## Features

- The differential pressure switch detects pressure difference between two pressures. Not only differential pressure but also dead band of the switch can be set.
- A piston made of SUS420F is adopted, which is suitable for oil pressure. An ethylene-propylene sealed piston can be selected.
- The differential pressure switches are applicable to the range from 0.2 to 20.5MPa.
- The micro switch is selectable from a SPDT standard rating type, a micro-load type (for 24V DC), and a sealed type (environment resistance). In addition, a DPDT contact micro switch is also available. \* Refer to page 56 for details.
- CCC, UL and CSA approved (Please note that UL or CSA approved switches are not available for the devices equipped with a SPDT micro-load contact, a sealed contact and a DPDT contact. CCC certified switches is not available for the with pilot lamps.)

Type of Micro Switches	Models	Range MPa (kgf/cm <sup>2</sup> ) MIN. - MAX.	Sensitivity (Dead Band) * The switch is activated on increasing pressure difference. MPa (kgf/cm <sup>2</sup> ) MIN. - MAX.	Range of Adjustable Difference The switch is reset on decreasing pressure difference. MPa (kgf/cm <sup>2</sup> ) MIN. - MAX.	Rated Pressure Maximum Pressure in Continuous Use MPa (kgf/cm <sup>2</sup> )	Proof Pressure MPa (kgf/cm <sup>2</sup> )
SPDT	SZ070PD	0.2-7 (2-70)	0.3-1.3 (3-13)	0-7 (0-70)	7 (70)	35 (350)
	SZ210PD	0.5-20.5 (5-205)	0.7-3.8 (7-38)	0-20.5 (0-205)	20.5 (205)	70 (700)
DPDT	SZ070PDW	0.2-7 (2-70)	0.3-1.3 (3-13)	0-7 (0-70)	7 (70)	35 (350)
	SZ210PDW	0.5-20.5 (5-205)	0.7-3.8 (7-38)	0-20.5 (0-205)	20.5 (205)	70 (700)

- Fixed sensitivity (dead band) types are available for each model equipped with SPDT or DPDT micro switch.
- The sensitivity (dead band) of the fixed sensitivity (dead band) type is less than or equal to the minimum value of the adjustable sensitivity (dead band) models.
- Two PT 1/8 drain ports are equipped on the both sides of the body so that the differential pressure switch is used with piping for drains beforehand, in an environment that will not allow even a small amount of seepage. The drain ports must be opened to the atmospheric pressure.
- The set point must be within the range.

\* The minimum sensitivity (dead band) of these two switches that adopt the sealed piston method varies according to activation differential pressures as shown in the below list.

Models	Minimum Sensitivity (Dead Band) MPa (kgf/cm <sup>2</sup> )		
	Low Range	Middle Range	High Range
SZ070PD	0.3 (3)	0.4 (4)	0.6 (6)
SZ210PD	0.6 (6)	0.9 (9)	1.2 (12)

SZ070PD / PED  
SZ210PD / PED

Mass : approx. 1.40kg

