

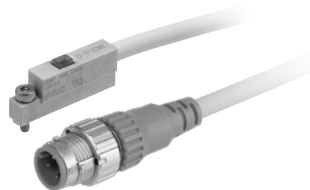
# Magnetic Field Resistant 2-Color Indicator Solid State Auto Switch

## D-P3DWSC/D-P3DWSE

(Electrical Entry: Pre-wired connector)



- It is possible to use in an environment which generates a magnetic field disturbance (AC magnetic field).
- The proper operating range can be determined by the color of the light.  
(Red → Green ← Red)



### ⚠ Caution

#### Precautions

For single-phase AC welding machines. If it is used for current inverter welders (including rectifying type) and condenser type welders, the magnetic field resistance is reduced. Please contact SMC regarding the performance.

### Magnetic Field Resistance

If the current of the AC welding machine is 16000 A or lower, the auto switch can be used, even if the distance between the welding conductor (gun cable) and the cylinder/actuator or auto switch is 0 mm. Please contact SMC when the AC welding current exceeds 16000 A.

### Weight

(g)

Auto switch model	D-P3DWSC	D-P3DWSE
Lead wire length (m)	0.3	23



Connector pin

Model	Connector pin/Wiring			
	1	2	3	4
D-P3DWSC	—	—	OUT(⊕)	OUT(⊖)
D-P3DWSE	OUT(⊖)	—	—	OUT(⊕)

### Auto Switch Specifications

Refer to SMC website for the details of the products conforming to the international standards.

PLC: Programmable Logic Controller

D-P3DWSC/E (With indicator light)		
Auto switch model	D-P3DWSC	D-P3DWSE
Applicable load	24 VDC relay, PLC	
Load voltage	24 VDC	
Load current	6 to 40 mA or less	
Internal voltage drop	5 V or less	
Leakage current	1 mA or less at 24 VDC	
Operating time	40 ms or less	
Indicator light	Operating range ..... Red LED illuminates. Proper operating range ..... Green LED illuminates.	
Standard	CE marking, UL (CSA), RoHS	

### Oilproof Heavy-duty Lead Wire Specifications

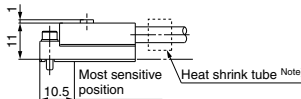
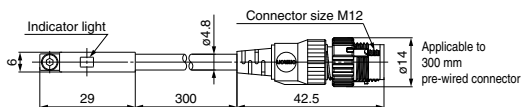
Auto switch model		D-P3DWSC	D-P3DWSE
Sheath	Outside diameter [mm]	ø4.8	
	Number of cores	2 cores	
Insulator	Outside diameter [mm]	ø1.52	
	Effective area [mm <sup>2</sup> ]	0.5	
Conductor	Strand diameter [mm]	ø0.08	
	Minimum bending radius [mm] (Reference values)	29	

- Impact resistance — Switch: 1000 m/s<sup>2</sup>, Connector: 300 m/s<sup>2</sup>
- Insulation resistance — 50 MΩ or more (500 VDC measured via megohmmeter) (between lead wire and case)
- Withstand voltage — 1000 VAC for 1 minute (between lead wire and case)
- Ambient temperature — -10 to 60°C
- Enclosure — IEC60529 standard IP67
- Polarity: Non-polar

### Dimensions

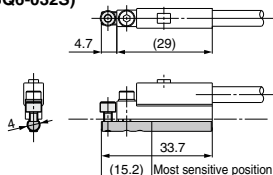
(mm)

#### Body

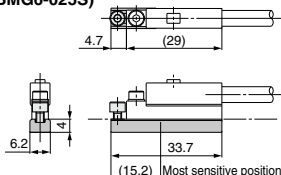


Note) A white color heat shrink tube is attached to the D-P3DWSE type only.

#### Auto switch mounting bracket (For round groove mounting: BQ6-032S)



#### Auto switch mounting bracket (For square groove mounting: BMG6-025S)



\* When the auto switch is ordered on its own, the auto switch mounting bracket is not enclosed. In that case, please order it separately.

# Magnetic Field Resistant 2-Color Indicator Solid State Auto Switch

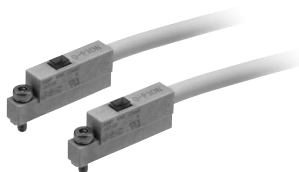
CE c  US  
RoHS

## D-P3DW

(Electrical Entry: Grommet)

Refer to SMC website for the details of the products conforming to the international standards.

- It is possible to use in an environment which generates a magnetic field disturbance (AC magnetic field).
- The proper operating range can be determined by the color of the light. (Red → Green ← Red)



### ⚠ Caution

#### Precautions

For single-phase AC welding machines. If it is used for current inverter welders (including rectifying type) and condenser type welders, the magnetic field resistance is reduced. Please contact SMC regarding the performance.

### Auto Switch Specifications

PLC: Programmable Logic Controller

D-P3DW (With indicator light)	
Auto switch model	D-P3DW
Applicable load	24 VDC relay, PLC
Load voltage	24 VDC
Load current	6 to 40 mA or less
Internal voltage drop	5 V or less
Leakage current	1 mA or less at 24 VDC
Operating time	40 ms or less
Indicator light	Operating range ..... Red LED illuminates. Proper operating range ..... Green LED illuminates.
Standard	CE marking, UL (CSA), RoHS

### Oilproof Heavy-duty Lead Wire Specifications

Auto switch model		D-P3DW
Sheath	Outside diameter [mm]	ø4.8
	Number of cores	2 cores (Brown/Blue)
Insulator	Outside diameter [mm]	ø1.52
	Effective area [mm <sup>2</sup> ]	0.5
Conductor	Strand diameter [mm]	ø0.08
	Minimum bending radius [mm] (Reference values)	29

- Impact resistance — Switch: 1000 m/s<sup>2</sup>
- Insulation resistance — 50 MΩ or more (500 VDC measured via megohmmeter) (between lead wire and case)
- Withstand voltage — 1000 VAC for 1 minute (between lead wire and case)
- Ambient temperature — -10 to 60°C
- Enclosure — IEC60529 standard IP67
- Polarity: Non-polar

### Magnetic Field Resistance

If the current of the AC welding machine is 16000 A or lower, the auto switch can be used, even if the distance between the welding conductor (gun cable) and the cylinder/actuator or auto switch is 0 mm. Please contact SMC when the AC welding current exceeds 16000 A.

### Weight

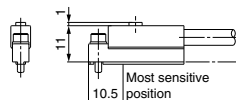
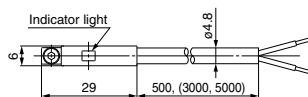
(g)

Auto switch model		D-P3DW
Lead wire length	0.5 m (NII)	20
	3 m (L)	102
	5 m (Z)	168

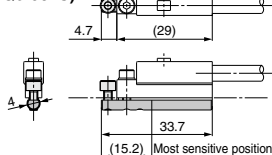
### Dimensions

(mm)

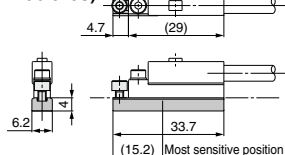
#### Body



#### Auto switch mounting bracket (For round groove mounting: BQ6-032S)



#### Auto switch mounting bracket (For square groove mounting: BMG6-025S)



\* When the auto switch is ordered on its own, the auto switch mounting bracket is not enclosed. In that case, please order it separately.