

BP4S / BP5M

1 signal plunger type (Contacting ball type)
Indexing check / sliding touch type

NEW

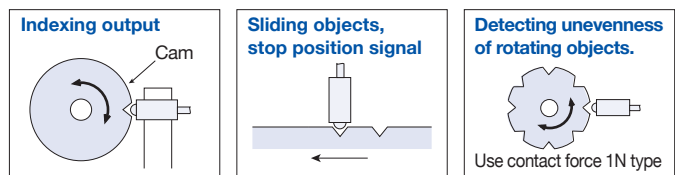


Features

**Two functions in one,
a touch switch built into the ball plunger.**

Able to provide identifying and positioning functions using notches on index rotating or sliding objects as well as output a confirmation signal.

Reduces the number of components and design manhours, allowing miniaturization of the machine.



Standard specification

Unit: mm

Product name	Size	Stroke	Contact force (axial direction)	Protective structure
BP4SWA	φ4	0.8	1N	IP40
BP5MWA	M5×0.5	1		

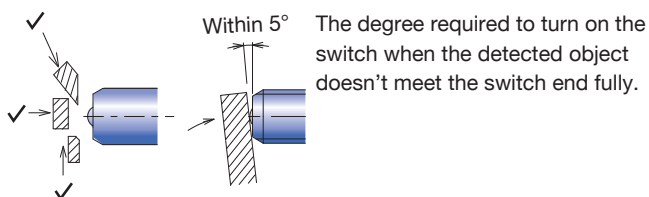
Switch structure	Dry contact
Output mode	A : Normally open
Pretravel	0.3
Repeatability	Both On→Off, Off→On/ 0.01 (range)(axial direction) (At operating speed 50-200mm/min)*
Movement differential	0
Contact life time	BP4SWA : 1 million BP5MWA : 3 million
Case material	SUS 303
Contact material	Tungsten carbide

Cable	Core-wire cable 0.5m×2 Oil resistant φ0.66 Tensile strength 15N
Operating temperature range	0°C-80°C (ice-free)
Temperature drift	0 (because of no amplifier)
Oscillation	10-55Hz total amplitude 1.5 for X,Y,Z each direction
Impact	300m/s ² for X,Y,Z each direction
Contact rating	DC5V-DC24V Steady current : 10 mA or less (rush current: 20 mA or less)
Standard accessory	BP5MWA : Two fixing nuts

*Operating speed slower than 10mm/min is not recommended.

How to use

Suitable for sliding / angled touch

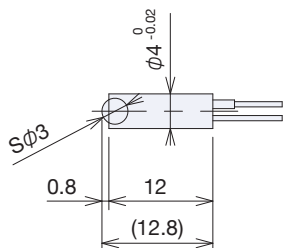


- When using for rotation indexing, adjust the position in consideration of eccentricity and core blurring accuracy of rotating objects.
- According to the operation circumstance, the signal point varies due to wear of the contacting part.
- Carefully calculate the angle and roughness of chamfer so that the contacting part is not easily worn off.
- Try not to bend the threaded part during installation. It will cause malfunction.

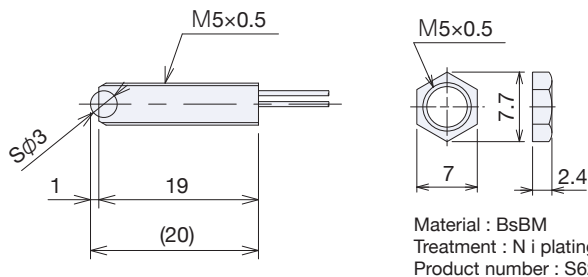
Outer dimension

Ultra-small Ball Plunger Switch

BP4SWA (A : NO)

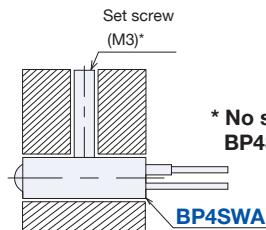


BP5MWA (A : NO)



Tightening torque for case screws and nuts

	Screw / Nut	Tightening torque	Applicable models
Ball Plunger Switch	Set screw*	0.1N·m or less	BP4SWA
	M5x0.5	1 N·m	BP5MWA



* No set screws are provided with BP4SWA/BP5MWA.

Circuit diagram

