

ONPOW PIEZOELECTRIC SWITCH



• PS165P10Y◆1



• PS165Z10Y◆1



• PS161P10Y◆1



• PS165P10Y◆1▲▲



• PS193P10Y◆1



• PS193Z10Y◆1



• PS193P10Y◆1▲▲



• PS193C10Y◆1▲▲



• PS223PY◆1



• PS223ZY◆1



• PS223PY◆1▲▲



• PS225PY◆1▲▲

Environmental specifications

- Sealing : IP68
- Vibration resistance : 10-500 Hz / 10 g
- Operating temperature : -40°C to +75°C

Materials

- Case : aluminium, anodized
- Multi-wire leads section 0,22 mm length 300 mm, twisted by pair
- Cable, length 300 mm, section depending on switch model
- PC terminals : bronze, tin plated

Electrical and general specifications

- Max. current/voltage rating : 1A 24VAC/DC or 200mA 24VAC/DC depending on version
- Switch resistance ON : 10 max.
- Switch resistance OFF : 5Mmin.
- Operating force : 2 to 6N
- Life expectancy : 50 million cycles
- LED consumption : Illuminated dot : 10mA - Illuminated ring : 20mA

PS Series

ONPOW PIEZOELECTRIC SWITCH OVERVIEW

IMPLICATION OF TYPE

PS	16	★	□	□	◆	□	△	▲
Series	Mounting dimensions	Operator 5P Flat operator, height 4,5 1P Flat operator, height 1.0 (non illuminated) 5Z With finger location, height 4,5 (non-illuminated)	Electrical function 10 NO (pulse)	Terminals Y Lead (length 30mm) Other Lead length and connection mode can be customized.	Colours / Materials 0 Natural anodized 1 Black anodized 2 Blue anodized 3 Gold anodized 4 Red anodized S Stainless steel 316L	Switch ratings 1 200mA 24VAC/DC	LED colour Blank Non-illum. R Red G Green Y Yellow O Orange B Blue W White	Lamp voltage Blank Non-illum. 05 Standard ring - 5VDC 12 Standard ring - 12VDC 24 Standard ring - 24VDC

PS	19	★	□	□	◆	□	△	▲
Series	Mounting dimensions	Operator 3P flat operator, height 3.0 3Z with finger location, height 3.0	Electrical function 10 NO (pulse)	Terminals Y Lead (length 30mm) Other Lead length and connection mode can be customized.	Colours / Materials 0 Natural anodized 1 Black anodized 2 Blue anodized 3 Gold anodized 4 Red anodized S Stainless steel 316L	Switch ratings 1 200mA 24VAC/DC	LED colour Blank Non-illum. R Red G Green Y Yellow O Orange B Blue W White	Lamp voltage Blank Non-illum. 05T thin ring - 5VDC 12T thin ring - 12VDC 24T thin ring - 24VDC 05L large ring - 5VDC 12L large ring - 12VDC 24L large ring - 24VDC

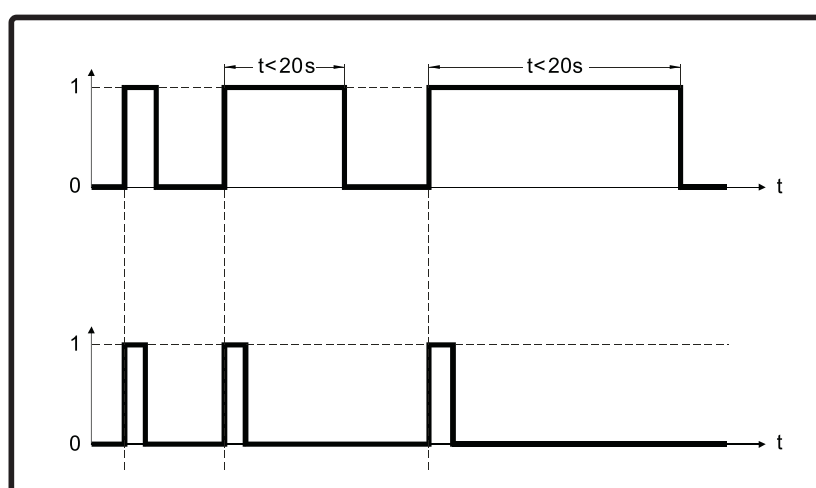
PS	22	★	□	□	◆	□	△	▲
Series	Mounting dimensions	3P Flat operator, height 3.0 (Not available with large illuminated ring.) 3Z With finger location ,height 3.0, (Not available with illuminated ring). 5P Flat operator, height 4.5 (Available with large illuminated ring only.)	Electrical function A NO (pulse)	Terminals Y Lead (length 30mm) Other Lead length and connection mode can be customized.	Colours / Materials 0 Natural anodized 1 Black anodized 2 Blue anodized 3 Gold anodized 4 Red anodized S Stainless steel 316L	Switch ratings 1 200mA 24VAC/DC	LED colour Blank Non-illum. R Red G Green Y Yellow O Orange B Blue W White	Lamp voltage Blank Non-illum. 05T thin ring - 5VDC 12T thin ring - 12VDC 24T thin ring - 24VDC 05L large ring - 5VDC 12L large ring - 12VDC 24L large ring - 24VDC 05D dot - 5VDC 12D dot - 12VDC 24D dot - 24VDC

Finger pressure applied to switch

- 1 = pressure
- 0 = no pressure

Output

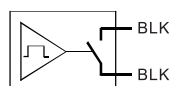
- Momentary NO (pulse)
- No external power supply required



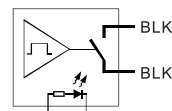
Wiring diagrams

Momentary NO

Non-illuminated



1 LED*





PS SERIES PIEZOELECTRIC SWITCH Ø16 OPTIONS

Non-illuminated, operator
height 4.50mm, flat



• PS165P10Y◆1

Non-illuminated, operator
height 4.50mm, with finger
location



• PS165Z10Y◆1

Non-illuminated, operator
height 1mm, flat

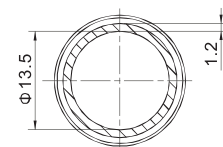
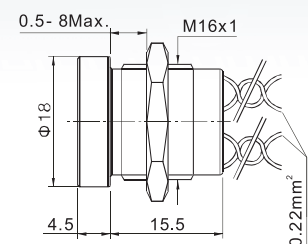
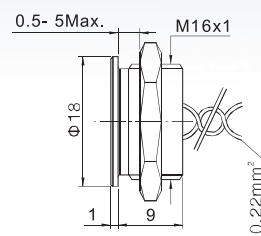
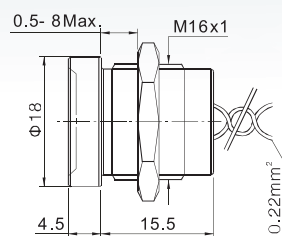
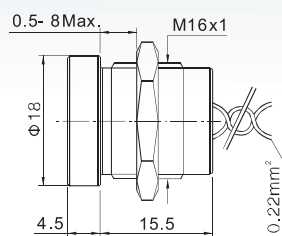


• PS161P10Y◆1

With standard illuminated
ring, operator
height 4.50mm, flat



• PS165P10Y◆1△▲



PS	16	◆	△	▲
Series	Mounting dimensions	Colours / Materials 0 Natural anodized 1 Black anodized 2 Blue anodized 3 Gold anodized 4 Red anodized S Stainless steel 316L	LED colour Blank Non-illum. R Red G Green Y Yellow O Orange B Blue W White	Lamp voltage Blank Non-illum. 05 Standard ring - 5VDC 12 Standard ring - 12VDC 24 Standard ring - 24VDC

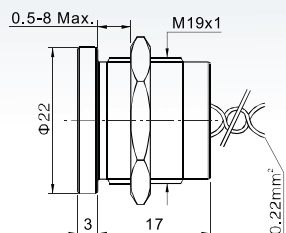


PS SERIES PIEZOELECTRIC SWITCH Ø19 OPTIONS

Non-illuminated - operator
height 3mm, flat



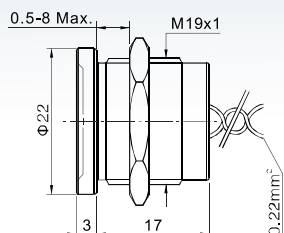
• PS193P10Y ◆ 1



Non-illuminated - operator
height 3mm, with finger
location



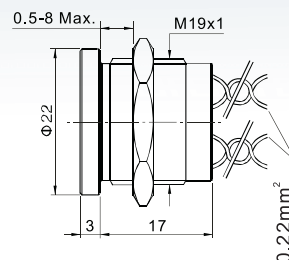
• PS193Z10Y ◆ 1



With thin illuminated ring,
operator height 3mm, flat



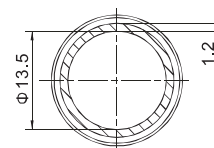
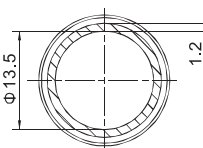
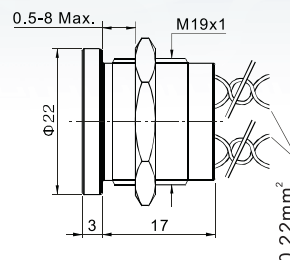
• PS193PY ◆ 1 ▲ ▲



With large illuminated ring,
operator height 3 mm, with
chamfer



• PS193CY ◆ 1 ▲ ▲



PS	19	◆	▲	▲
Series	Mounting dimensions	Colours / Materials	LED colour	Lamp voltage
		0 Natural anodized	Blank Non-illum.	Blank Non-illum.
		1 Black anodized	R Red	05T thin ring - 5VDC
		2 Blue anodized	G Green	12T thin ring - 12VDC
		3 Gold anodized	Y Yellow	24T thin ring - 24VDC
		4 Red anodized	O Orange	05L large ring - 5VDC
		S Stainless steel 316L	B Blue	12L large ring - 12VDC
			W White	24L large ring - 24VDC

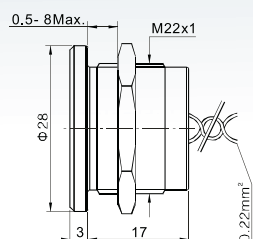


PS SERIES PIEZOELECTRIC SWITCH Ø22 OPTIONS

Non-illuminated, operator
height 3 mm, flat



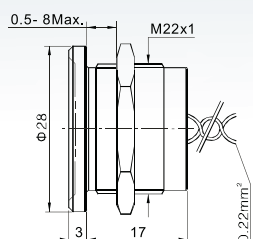
• PS223PY◆1



Non-illuminated, operator
height 3 mm, with finger
location



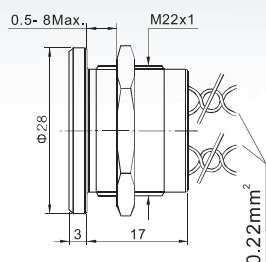
• PS223ZY◆1



With thin illuminated ring -
operator height 4,50, flat



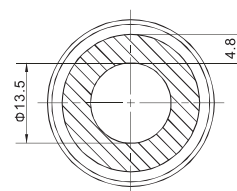
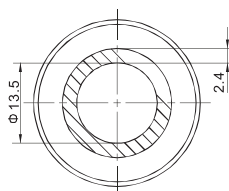
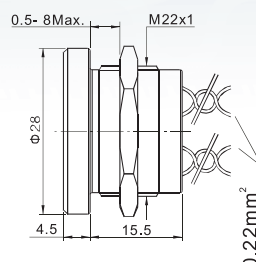
• PS223PY◆1△▲



With large illuminated ring,
operator height 4,50, flat



• PS225PY◆1△▲



PS	22	◆	△	▲
Series	Mounting dimensions	Colours / Materials	LED colour	Lamp voltage
		0 Natural anodized	Blank Non-illum.	Blank Non-illum.
		1 Black anodized	R Red	05D dot - 5VDC
		2 Blue anodized	G Green	12D dot - 12VDC
		3 Gold anodized	Y Yellow	24D dot - 24VDC
		4 Red anodized	O Orange	05T thin ring- 5VDC
		S Stainless steel 316L	B Blue	12T thin ring- 12VDC
			W White	24T thin ring- 24VDC
				05L large ring - 5VDC
				12L large ring - 12VDC
				24L large ring - 24VDC



PS SERIES PIEZOELECTRIC SWITCH APPLICATIONS



• Shower (IP68 sealing)



• Home automation (design, customization)



• Bath (IP68 sealing, customization)



• Car wash (IP68 sealing, long life)



• Marine (IP68 sealing, design)



• Medical
(easy to clean surface, no retention area)



• Food processing (IP68 sealing)



• Mining (IP68 sealing)