

IP series

Pushbutton switches for harsh environments •
bushing Ø 12 mm • momentary



GENERAL SPECIFICATIONS

- Panel thickness: 1.5 mm (.059) min.
4 mm (.157 max.)
- Total travel:
Function 3: 1.7 mm (.067) ± 0.3 mm (0.012)
Function 5: 1.3 mm (.051) ± 0.3 mm (0.012)
- Typical operating force: 6 N ± 2 N
- Low level/mech. life: 1,000,000 cycles
- Torque: 1.5 Nm max. applied to nut
- Soldering: 320 °C (608 °F) max. for 3 sec.



MATERIALS

- Case: thermoplastic UL94-V0
- Actuator: polyamide 6/6
- Bushing/bezel: zinc die-cast (zamak), black painted
- Contacts: - silver, gold plated (std)
- brass, gold plated (for option 104)
- Output wires (flying lead terminals):
F version: AWG20, section 0.6 mm²
W version: AWG24, section 0.23 mm²
- LED wires:
F version: AWG26, section 0.12 mm²
W version: AWG24, section 0.23 mm²
- Lens: polycarbonate
- Terminal seal: epoxy

APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.

AGENCY APPROVAL

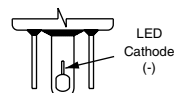


2 A 125 VAC/250 VAC
File E83438
See following pages.

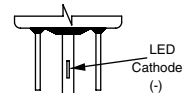


TERMINALS

ILLUMINATED MODELS

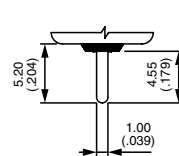


Solder lug **S**

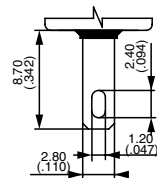


Straight **P**

NON-ILLUMINATED MODELS



Straight **P**

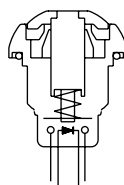


Quick-connect **Z1**



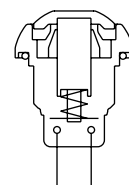
ELECTRICAL FUNCTIONS

ILLUMINATED MODELS

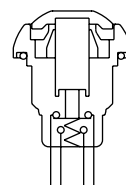


Function 3 (NO)

NON-ILLUMINATED MODELS



Function 3 (NO)

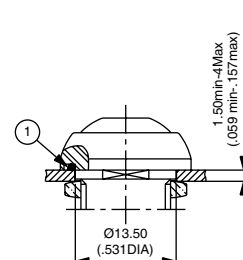
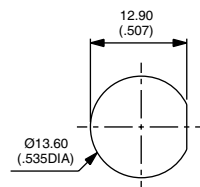


Function 5 (NC/NO)

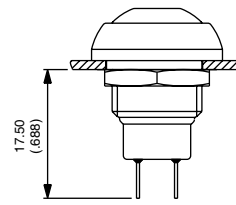
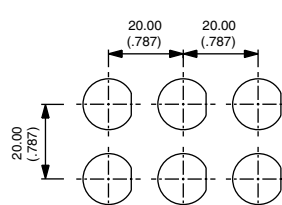


MOUNTING

PANEL CUT-OUT



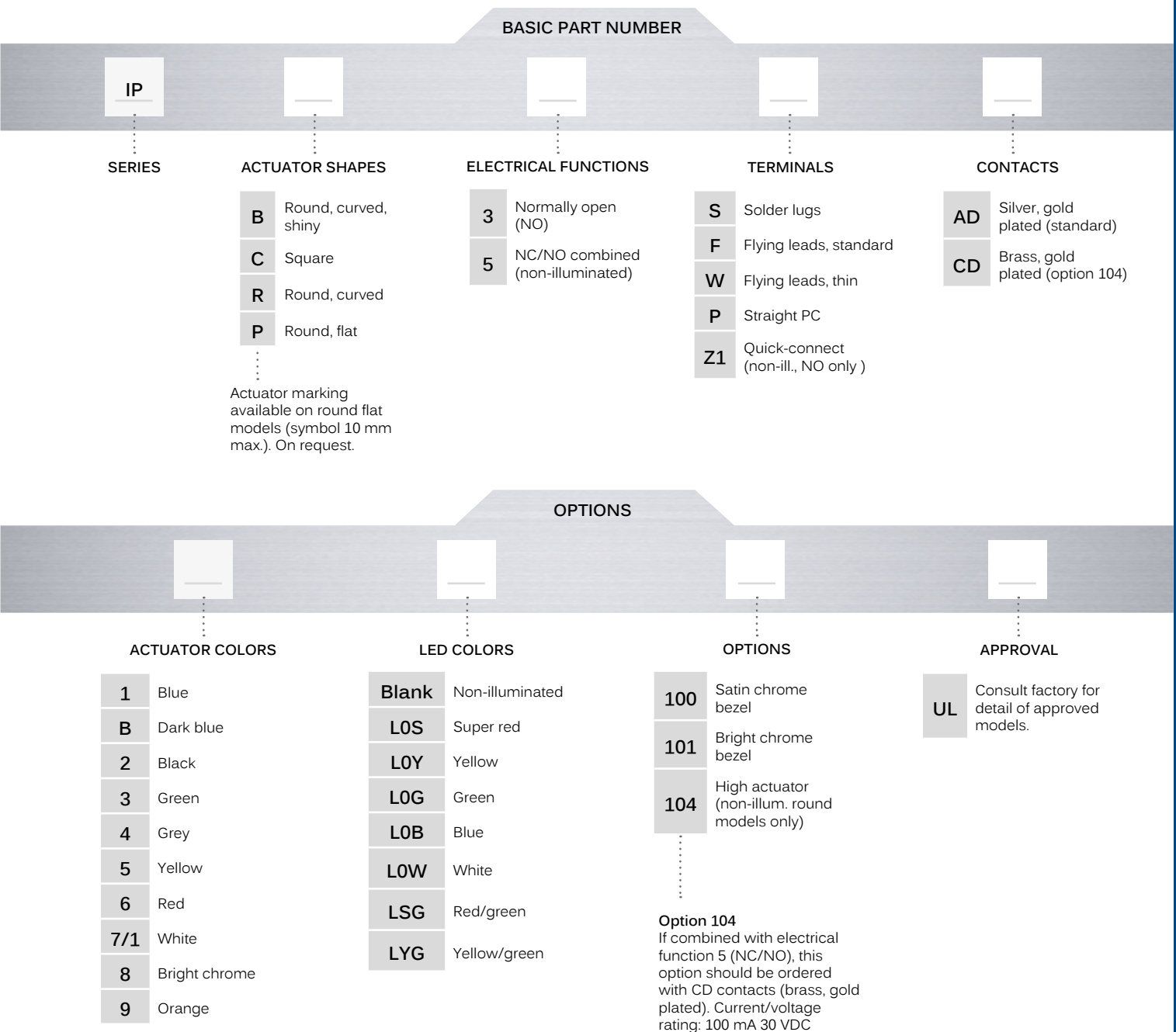
MATRIX MOUNTING - BACK OF PANEL SPACE REQUIREMENT



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BUILD YOUR PART NUMBER



ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

- ⚠ **Notice:** please note that not all combinations of above numbers are available. Refer to the following pages for further information.
- 💧 **A sealing boot** is available to protect the switches against frost and sand. See "Sealing Boots" section of website.
- 🔩 **Mounting accessories:** Standard hardware supplied: 1 hex nut 14 mm (.551) across flats and 1 O-ring. Hex nut part number U166.

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SQUARE - ILLUMINATED SOLDER LUG TERMINALS



IPC3SAD



Normally Open

Also available with straight PC terminals: **IPC3PAD**
LED color is indicated by the bottom of the switch.

SQUARE - ILLUMINATED FLYING LEAD TERMINALS



IPC3FAD



Normally Open

For THIN flying leads, replace F with W.
Wire colors: black: NO contact, red: LED anode(+), blue: LED cathode(-)
Shown with standard flying lead terminals.

SQUARE - NON ILLUMINATED SOLDER LUG TERMINALS



IPC3SAD



Normally Open

IPC5SAD



Normally Open

Also available with straight PC terminals: **IPC3PAD** (NO) or **IPC5PAD** (NC/NO)
and quick-connect terminals: **IPC3Z1AD** (NO only)

SQUARE - NON ILLUMINATED FLYING LEAD TERMINALS



IPC3FAD



Normally Open

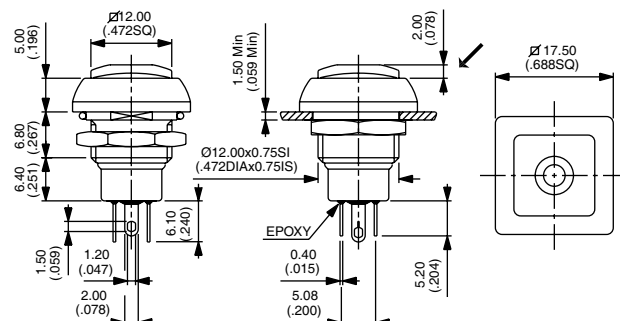
IPC5FAD



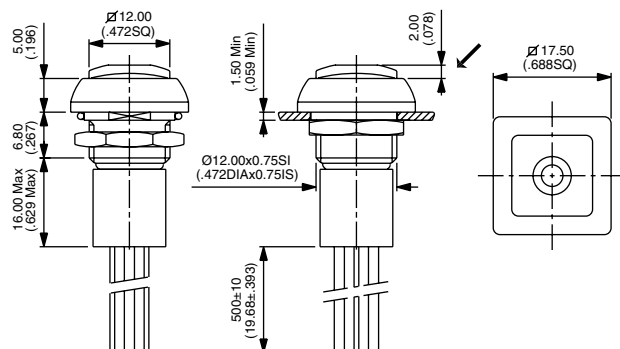
NC/NO combined

For THIN flying leads, replace F with W.
Wire colors (NC/NO): black: NO, blue: NC.
Shown with standard flying lead terminals.

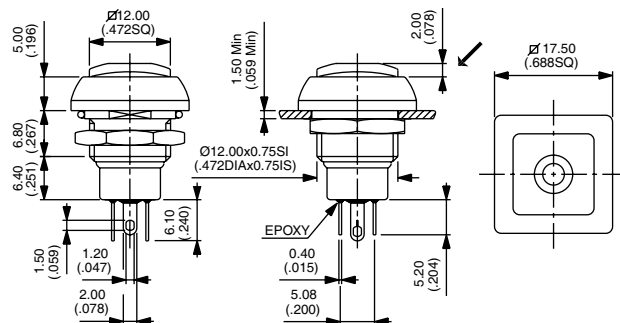
→ FLAT



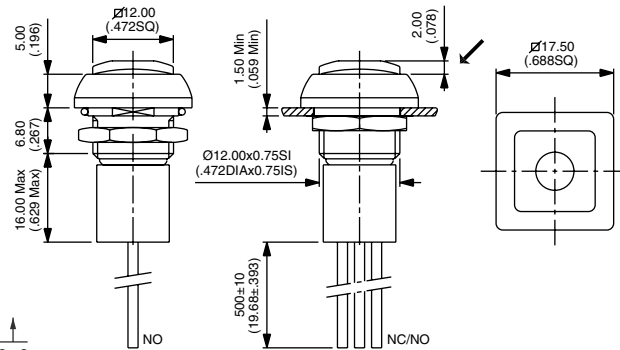
→ FLAT



→ FLAT



→ FLAT



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ROUND - ILLUMINATED SOLDER LUG TERMINALS



IPR3SAD



Normally Open

Also available with straight PC terminals: **IPR3PAD**
LED colour is indicated by the bottom of the switch.

ROUND - ILLUMINATED FLYING LEAD TERMINALS



IPR3FAD



Normally Open

For THIN flying leads, replace F with W.
Wire colors: black: NO contact, red: LED anode(+), blue: LED cathode(-)
Shown with standard flying lead terminals.

ROUND - NON ILLUMINATED SOLDER LUG TERMINALS



Curved actuator, NO

IPR3SAD



Curved actuator, NC/NO

IPR5SAD



Flat actuator, NO

IPP3SAD



Flat actuator, NC/NO

IPP5SAD



Also available with straight PC terminals: **IPC3PAD** (NO) or **IPC5PAD** (NC/NO)
and quick-connect terminals: **IPC3Z1AD** (NO only)

ROUND - NON ILLUMINATED FLYING LEAD TERMINALS



Curved actuator, NO

IPR3FAD



Curved actuator, NC/NO

IPR5FAD



Flat actuator, NO

IPP3FAD



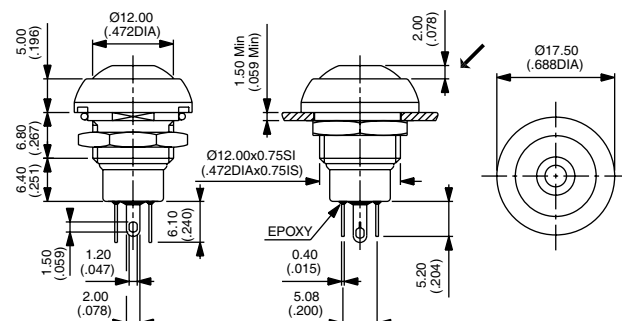
Flat actuator, NC/NO

IPP5FAD

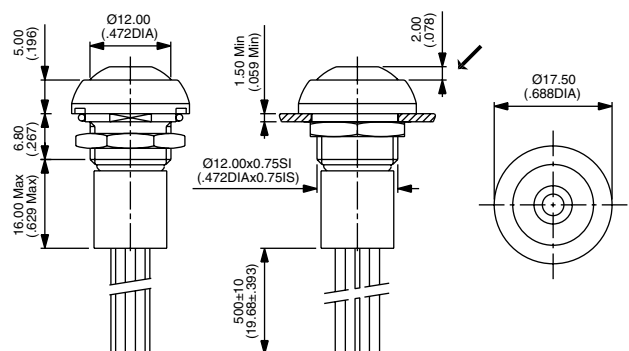


For THIN flying leads, replace F with W.
Wire colors (NC/NO): black: NO, blue: NC
Shown with standard flying lead terminals.

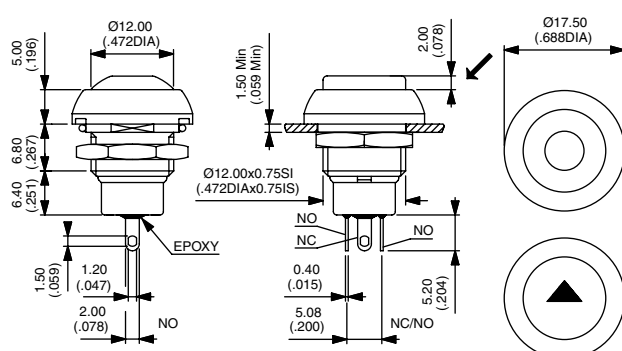
→ FLAT



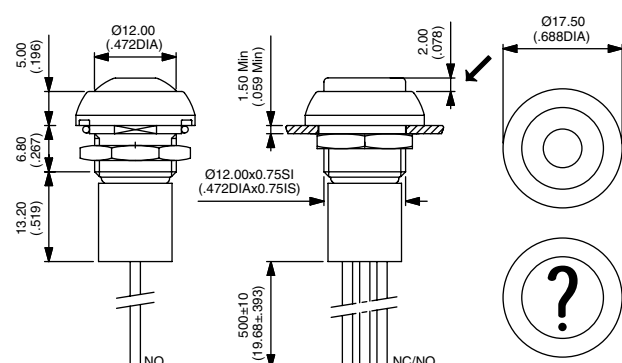
→ FLAT



→ FLAT



→ FLAT



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ACTUATOR COLORS

BASIC P/N

1	Blue	6	Red
B	Dark blue	7/1	White
2	Black	8	Bright chrome
3	Green	9	Orange
4	Grey	A	Satin chrome
5	Yellow		

LED COLORS

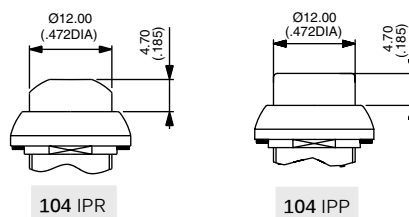
BASIC P/N

Blank	Non-illuminated
L0S	Super red
L0Y	Yellow
L0G	Green
L0B	Blue
L0W	White
LSG	Red/green
LYG	Yellow/green

OPTIONS

BASIC P/N

100	Satin chrome bezel
101	Bright chrome bezel
104	High actuator - For round, non-illuminated only If combined with function 5 (NC/NO), order with CD contacts (instead of AD contacts).



AGENCY APPROVAL

BASIC P/N

UL

Consult factory for details of approved models. To order switches marked UL, complete above box with "UL".