

FD series

Double icon illuminated pushbuttons •
bushing Ø 24 or 26 mm • momentary or latching



DISTINCTIVE FEATURES

- Double icon actuator
- Snap-in and threaded bushing models
- Large but lightweight
- Sealed to IP69K (threaded bushing version)



ENVIRONMENTAL SPECIFICATIONS

- Front panel sealing :
 - Threaded bushing version : IP69K according to DIN 40050-9
 - Snap-in version : IP54 according to IEC 60529 with panel gasket and 2 mm panel thickness
- Operating temperature : -40 °C to +75 °C (40 °F to +167 °F)



ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
 - silver contacts (code 2) : 4 A 12 VDC
 - gold plated contacts (code 4) : 200 mA 12 VDC
- Initial contact resistance : 50 mΩ max.
- Insulation resistance : 1 GΩ min. at 500 VDC
- Dielectric strength : 1,000 Vrms 50 Hz min.
- Electrical life at full load :
 - Momentary models : 1 million cycles (gold plated contacts)
400,000 cycles (silver contacts)
 - Latching models : 200,000 cycles

LED COMPONENT SPECIFICATIONS

LED color	Forward current	Typ. forward voltage	Max. forward voltage
Red/Green	20 mA / 20 mA	2.2 V / 3.2V	2.8 V / 4 V

A resistor must be series-connected by the user

$$\text{Resistor value} = \frac{\text{supply voltage} - \text{LED forward voltage}}{\text{LED forward current}}$$

The company reserves the right to change specifications without notice.



FD series

Double icon illuminated pushbuttons •
bushing Ø 24 or 26 mm • momentary or latching



GENERAL SPECIFICATIONS

- Panel thickness :
 - Snap-in version :
1.5 (.059) to 2 mm (.078) with panel gasket
2 (.078) to 2.5mm (.098) without panel gasket
 - Threaded bushing version : 1(.039) to 15,5mm (.590) max.
- Total travel : 2.5 mm \pm 0.5 mm
- Typical operating force : 8 N \pm 2 N
- Low level or mechanical life :
 - Momentary models : 1 million cycles
 - Latching models : 200,000 cycles
- Torque : 2 Nm max. applied to nut



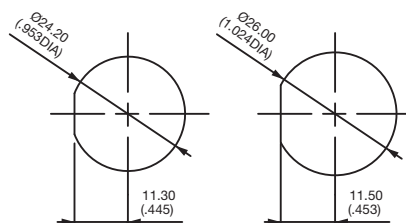
MATERIALS

- Case : PA46
- Actuator : PA12
- Bushing/ bezel : PA66
- Contacts : silver (code 2) or silver, gold plated (code 4)

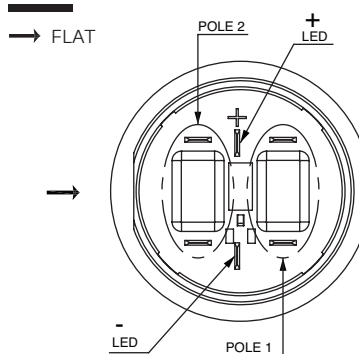
APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.



PANEL CUT-OUT



WIRING DIAGRAM

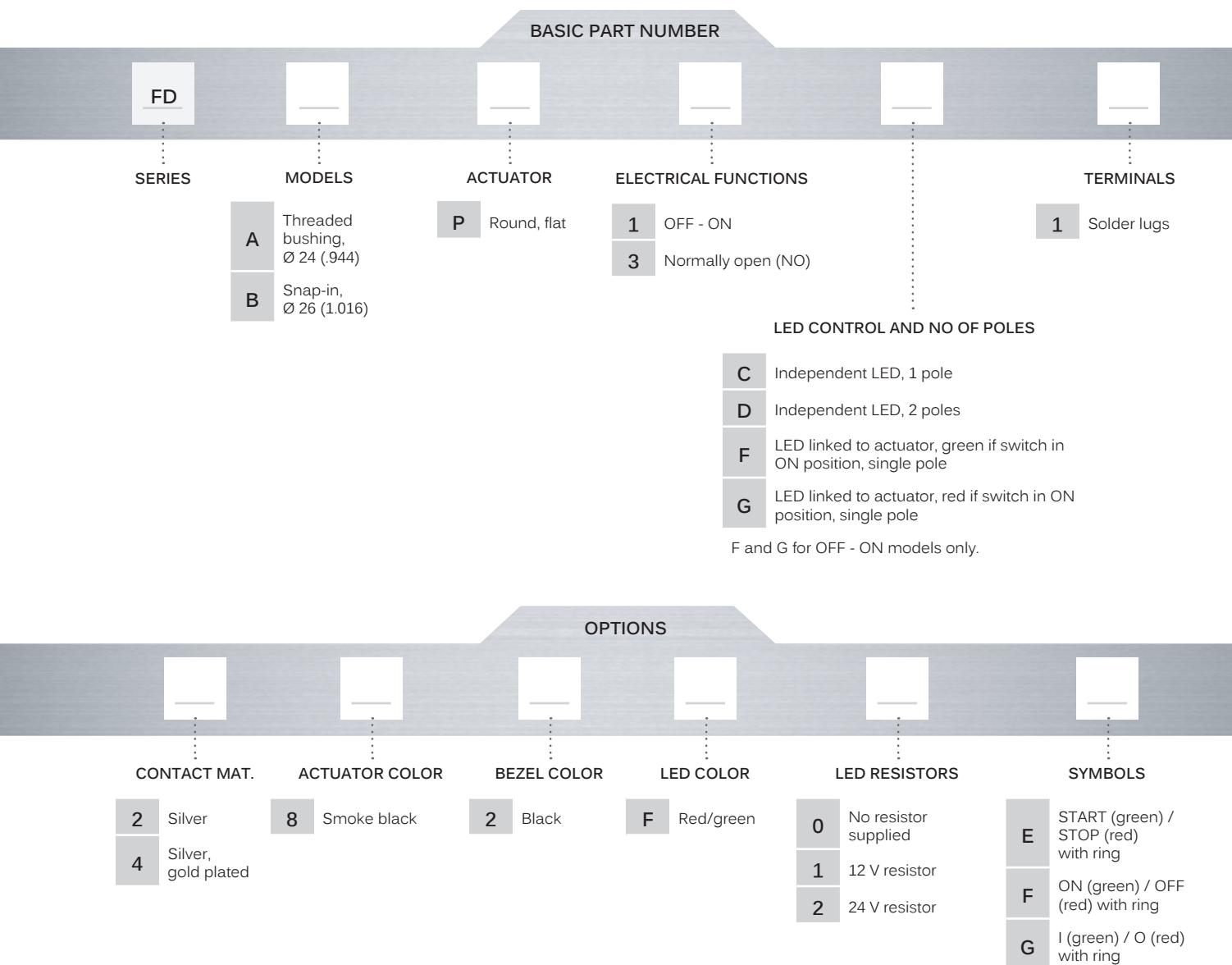


FD series

Double icon illuminated pushbuttons •
bushing Ø 24 or 26 mm • momentary or latching



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.

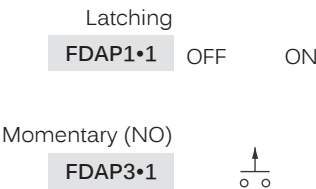


Mounting accessories : Standard hardware supplied : 1 hex nut (threaded bushing version) and 1 panel gasket.

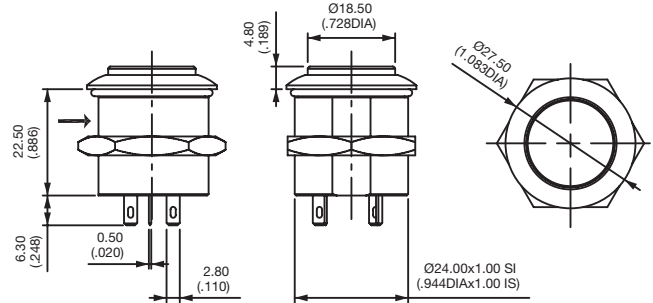
FD series

Double icon illuminated pushbuttons •
bushing Ø 24 or 26 mm • momentary or latching

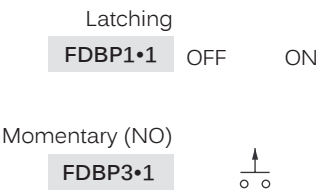
MOUNTING BY THREADED BUSHING Ø 24 (.944)



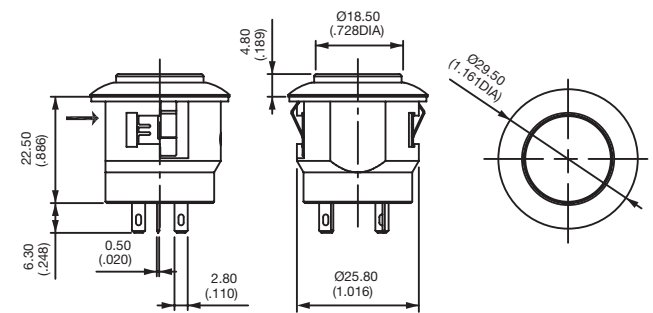
→ FLAT



SNAP-IN MOUNTING Ø 26 (1.024)



→ FLAT



LED CONTROL AND NUMBER OF POLES

To order a product, replace • with one of the following codes, then add the desired options.

	Function 1 (latching)	Function 3 (momentary)
Independent LED single pole C		
Independent LED double pole D		
Green LED in ON position single pole F		-
Red LED in ON position single pole G		-

green line = jumper to be wired by the user. LED- has to be wired to one pin of pole 2.

FD series

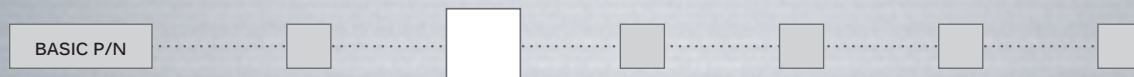
Double icon illuminated pushbuttons •
bushing Ø 24 or 26 mm • momentary or latching

CONTACT MATERIALS



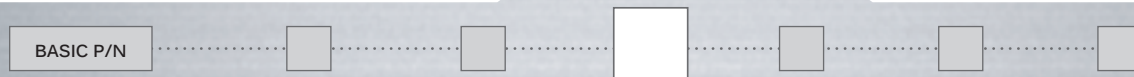
- 2 Silver
- 4 Silver, gold plated

ACTUATOR COLOR



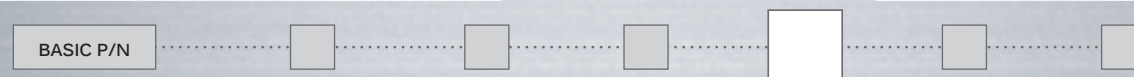
- 8 Smoke black

BEZEL COLOR



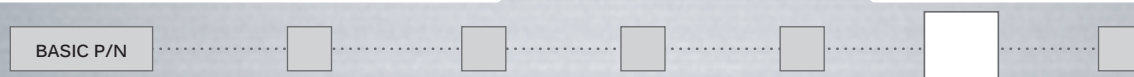
- 2 Black

LED COLOR



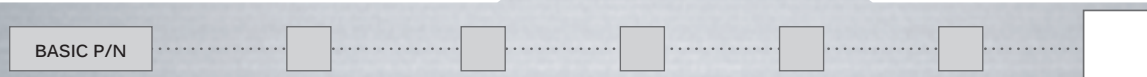
- F Red/green

LED RESISTOR



- 0 No resistor supplied
- 1 12 VDC resistor
- 2 24 VDC resistor
- 4 30 VDC resistor
- 5 15 VDC resistor

SYMBOLS



- E START (green) / STOP (red) with ring
- F ON (green) / OFF (red) with ring
- G I (green) / O (red) with ring

→ FLAT



E



F



G