

IX series

Pushbutton switches for harsh environments •
bushing Ø 12 mm • momentary NO & NC/NO



DISTINCTIVE FEATURES

NAMUR output option (Normally Open)

Backlighted marking in a compact case

Strong tactile feedback

NO or NC/NO

High sealing level, no space between actuator and
bushing (IP67/IP69K)



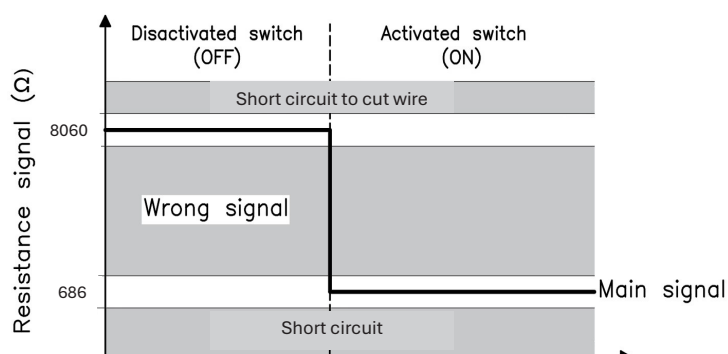
ENVIRONMENTAL SPECIFICATIONS

- Operating and storage temperature : -40 °C to +85 °C (-40 °F to +185 °F)
- Front panel sealing : IP67 according to IEC 60529,
IP69K according to DIN 40050-9
- Shock resistance: semi-sine 100m/s² 16ms, 1000m/s² 2ms, 6
directions according to IEC60068-2-27 not documented for NAMUR D
option
- Salt spray: 96h according to IEC60068-2-11 test Ka
- UV-resistant membrane : ISO 4892-2 : 2013 ; method A, cycle 1 ; 750h



ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load:
 - Gold plated contact (0):
100 mA 28 VDC, 1,000,000 cycles
 - Silver contact (1):
2 A 28 VDC, 100,000 cycles
- Initial contact resistance : 100 mΩ max. not applicable for function D
- Insulation resistance : 1 GΩ min. at 500 VDC not applicable for function D
- Dielectric strength : 1,500 Vrms not applicable for function D
- Contact bounce : 10 ms
- Function D (Namur)



The company reserves the right to change specifications without notice.



IX series

Pushbutton switches for harsh environments •
bushing Ø 12 mm • momentary NO & NC/NO

LED COMPONENT SPECIFICATIONS

LED color	Forward current	Typ. forward voltage	Max. forward voltage
Red (R)	20 mA	1.9 V	2.5 V
Yellow (Y)	20 mA	2.3 V	2.8 V
Green (G)	20 mA	4 V	4.5 V
Blue (B)	20 mA	3.2 V	3.7 V
White (W)	20 mA	3.3 V	4 V
Red/green (F)	20 mA	Red: 2 V / green: 3.2 V	Red: 2.8 V / green: 3.7 V

A resistor must be series-connected by the user.
Resistor value = $\frac{\text{supply voltage} - \text{LED forward voltage}}{\text{LED forward current}}$



GENERAL SPECIFICATIONS

- Panel thickness : 2 to 8 mm
- Total travel : 2 mm (.078) ± 0.3 mm
- Typical operating force :
Function 3 (NO) and D (Namur) : 7 N ± 2 N
Function 5 (NO/NC): 8 N ± 2 N
- Low level/mech. life : 1,000,000 cycles
- Torque : 0.55 Nm (0.6 Nm max.) applied to nut and actuator firmly pushed during the tightening process.
- Soldering : 320 °C (608 °F) max. for 3 sec.



MATERIALS

- Case : thermoplastic UL94-V0
- Actuator : silicone
- Bushing : thermoplastic
- Contacts :
0 : brass, gold plated
1 : silver
- Output wires : AWG24, section 0.23 mm² - 500 mm
- Terminal seal : epoxy

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



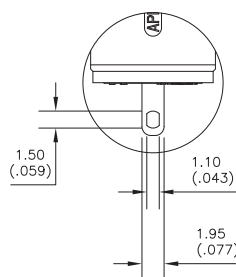
CONNECTIONS

WIRES TERMINALS

- Namur: yellow color
- Contact NO : black color / Contact NC : blue color
- LED : + : red color
- : white color



TERMINALS

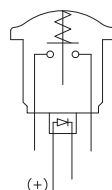


Solder lug S

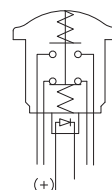


ELECTRICAL FUNCTION

ILLUMINATED MODELS

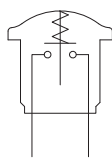


Function 3 (NO)

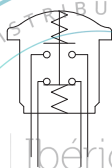


Function 5 (NC/NO)

NON-ILLUMINATED MODELS

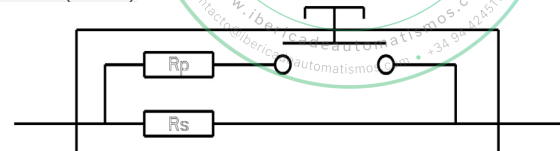


Function 3 (NO)



Function 5 (NC/NO)

Function D (Namur)



RP:750 Ω ±10%

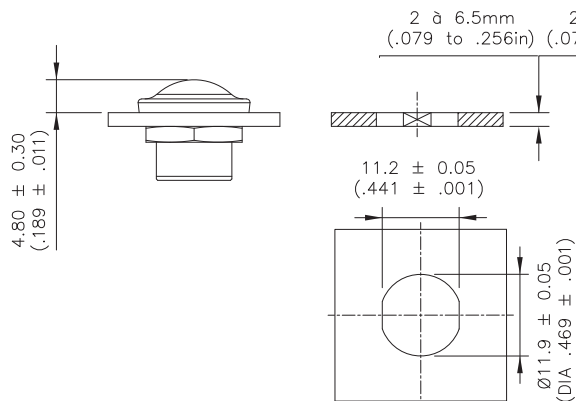
RS:8060 Ω ±10%

Pushbutton switches for harsh environments •
bushing Ø 12 mm • momentary NO & NC/NO

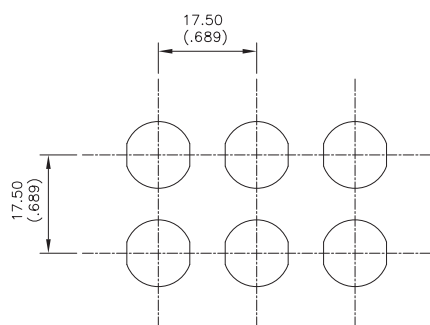


MOUNTING

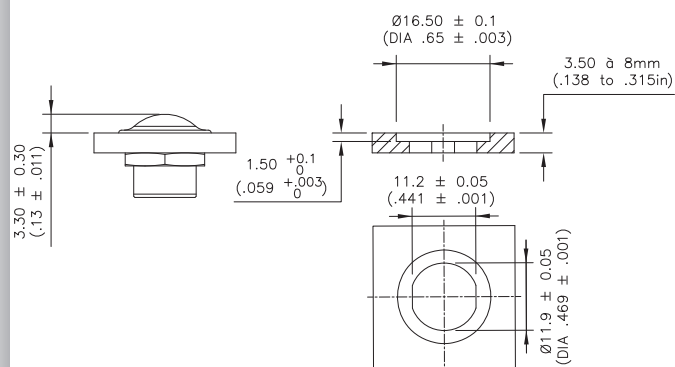
OTHER PANEL CUT-OUT



MATRIX MOUNTING



RECOMMENDED PANEL CUT-OUT (IP69K)

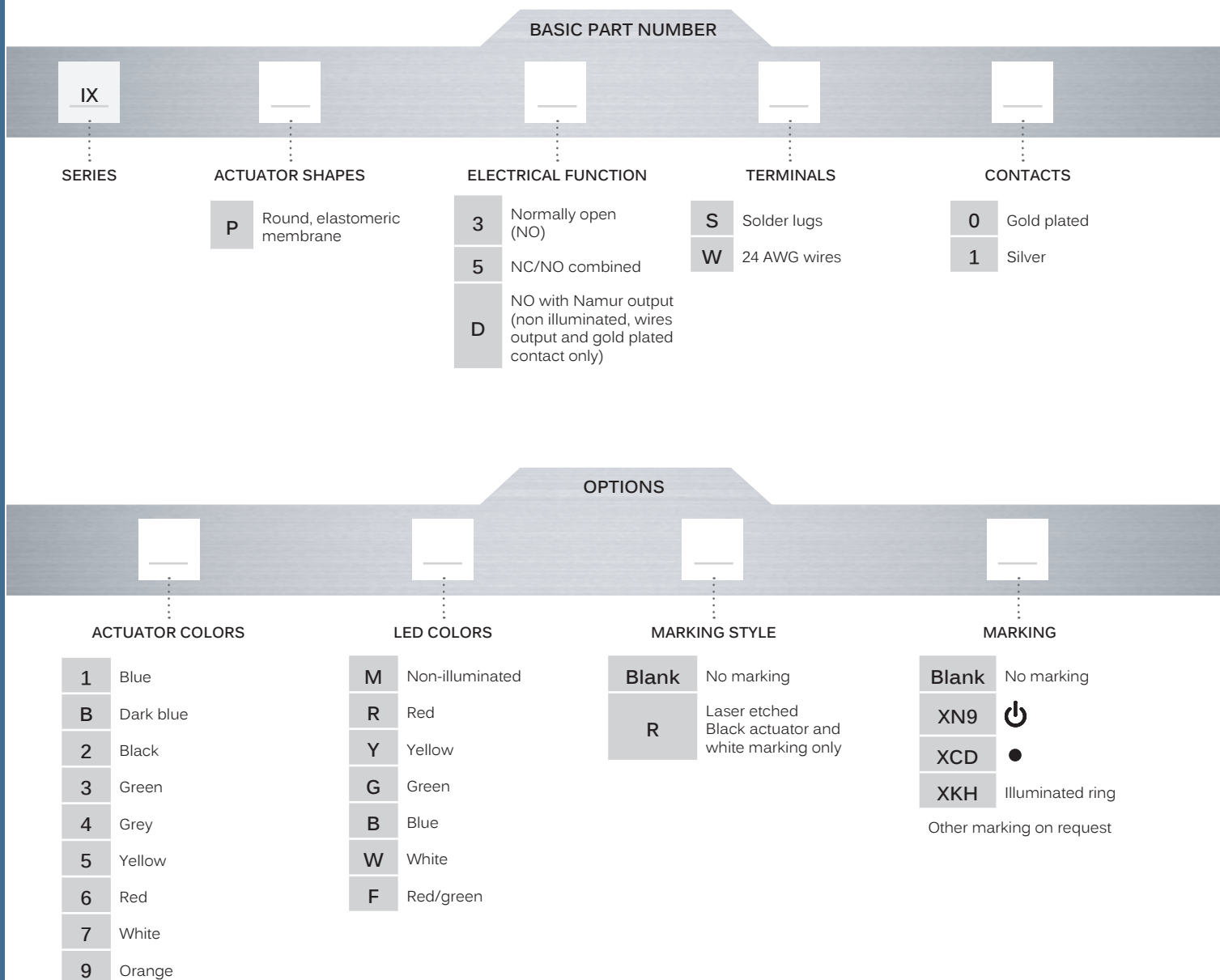


IX series

Pushbutton switches for harsh environments •
bushing Ø 12 mm • momentary NO & NC/NO



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 14 mm (.551) across flats.



IX series

Pushbutton switches for harsh environments •
bushing Ø 12 mm • momentary NO & NC/NO

SOLDER LUG TERMINALS
NON-ILLUMINATED - NO



IXP3S••M

SOLDER LUG TERMINALS
NON-ILLUMINATED - NC/NO



IXP5S••M

SOLDER LUG TERMINALS
ILLUMINATED - NC/NO



IXP5S

FLYING LEAD TERMINALS
ILLUMINATED - NC/NO



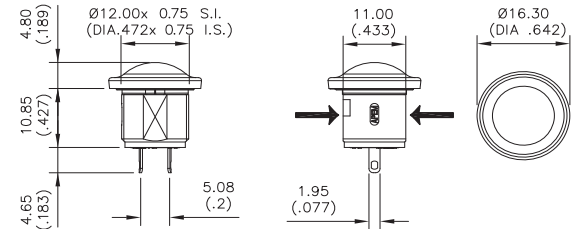
IXP5W

FLYING LEAD TERMINALS
- NON ILLUMINATED - NAMUR

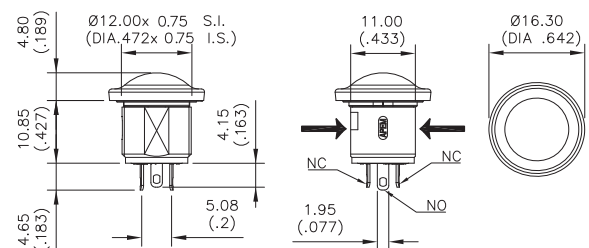


IXPDW--M

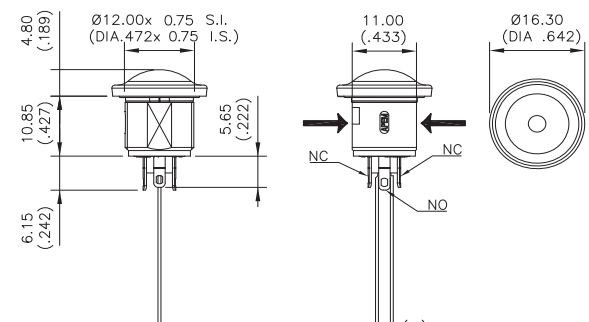
→ Flat



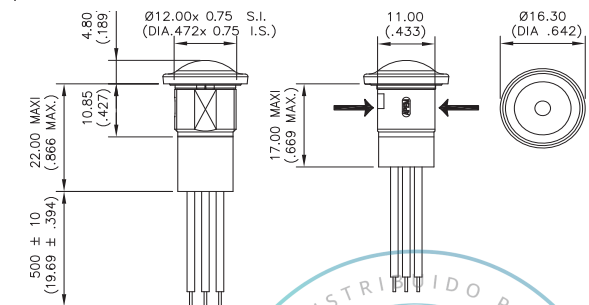
→ Flat



→ Flat



→ Flat



Illuminated

Non-Illuminated



Ibérica de
Automatismos

www.ibericadeautomatismos.com • +34 91 441 913
@ibericadeautomatismos

IX series

Pushbutton switches for harsh environments •
bushing Ø 12 mm • momentary NO & NC/NO

ACTUATOR COLORS



1	Blue	5	Yellow
B	Dark blue	6	Red
2	Black	7	White
3	Green	9	Orange
4	Grey		

LED COLORS



M	Non-illuminated
R	Red
Y	Yellow
G	Green
B	Blue
W	White
F	Red/green

MARKING STYLE



Blank	No marking
R	Laser etched - Black actuator and white marking only

MARKING



Blank	No Marking
XN9	☰ - Symbol "power"
XCD	● - Symbol "dot"
XKH	○ - Illuminated ring

Other marking on request

Example of IX switch with marking.
Please note that the anti-rotation flats are pointed with the arrows.

→ Flat

