# SW1H1.2709

# **IHL** series

Hall effect pushbutton switches • bushing Ø 12 mm • linear



#### **DISTINCTIVE FEATURES**

Linear output pushbutton 0.5 to 4.5 volt output Different operating forces 5 million cycles Sealed to IP67



#### **ENVIRONMENTAL SPECIFICATIONS**

- Front panel sealing: IP67 according to IEC 60529
- Operating temperature : -40 °C to +85 °C (-40 °F to +185 °F)
- EMC testing: 10 V per meter extend to radiated fields in frequency range of 80 Mhz to 1,000 MHz. 1KHz 80 % sine wave modulation according to IEC/EN 61000-4-3



#### **ELECTRICAL SPECIFICATIONS**

- Supply voltage:
  4.5 VDC to 5.5 VDC without regulator
  6.5 VDC to 24 VDC with 5V regulator
- Supply current: 9 mA max.
- Max. output current : 1.25 mA
- Max. output voltage with or without regulator : see graph next page.



#### **GENERAL SPECIFICATIONS**

- Panel thickness: 1.5 mm (.059) min. 10 mm (.393) max.
- Total travel : 4 mm (.160) ± 0.3 mm
- Mechanical life: 5 million cycles
- Torque: 1 Nm max. applied to nut



#### **MATERIALS**

- Case: PA46, UL94-V0
- Actuator : polyamide 6/6
- Bushing : polyamide 6/6
- Multi-wire leads : AWG26, 150 mm

The company reserves the right to change specifications without notice.



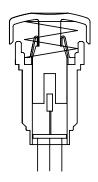


# **IHL** series

Hall effect pushbutton switches  $\bullet$  bushing Ø 12 mm  $\bullet$  linear

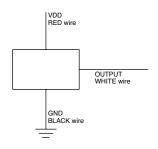


### **ELECTRICAL FUNCTIONS**



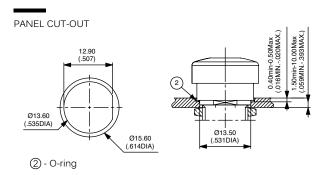


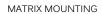
### WIRING DIAGRAM

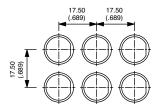




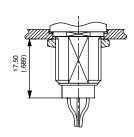
### **MOUNTING**





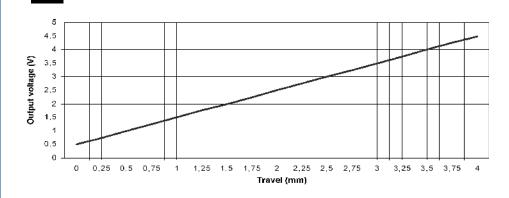


#### BACK OF PANEL SPACE REQUIREMENT





### LINEAR OUTPUT GRAPH (VDC = 5V@20°C)

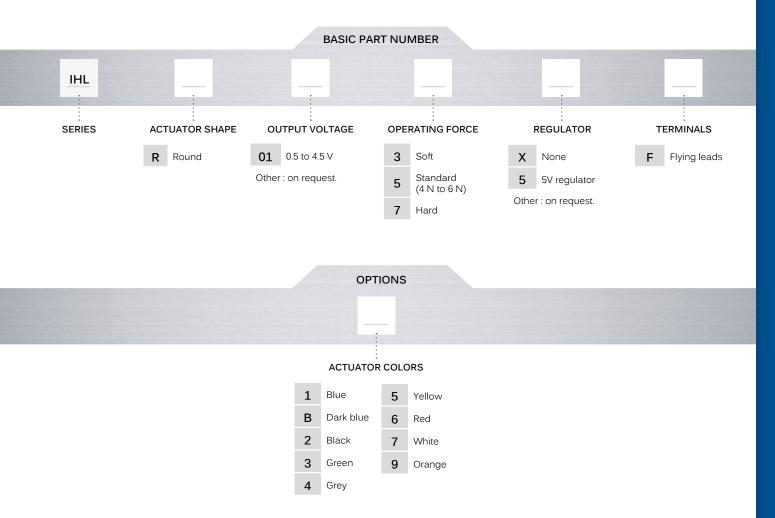


## **IHL** series

Hall effect pushbutton switches • bushing Ø 12 mm • linear



#### **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.
- (1) Mounting accessories: Standard hardware supplied: 1 hex nut 14 mm (.551) across flats and 1 O-Ring. Hex nut part number U166.

# **IHL** series

Hall effect pushbutton switches  $\bullet$  bushing Ø 12 mm  $\bullet$  linear

#### WITHOUT REGULATOR



Soft operating force IHLR013XF

Standard operating force IHLR015XF

> Hard operating force IHLR017XF

#### WITH 5V REGULATOR



Soft operating force

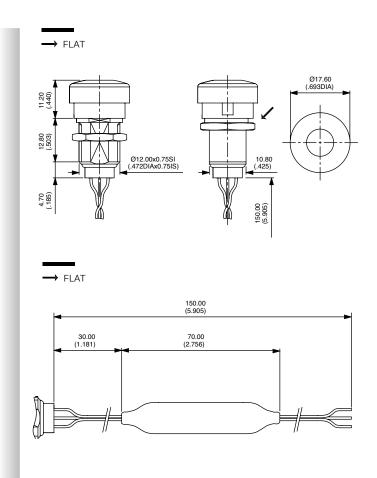
IHLR0135F

Standard operating force

IHLR0155F

Hard operating force

IHLR0175F



#### **ACTUATOR COLORS**

#### BASIC P/N

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