

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.

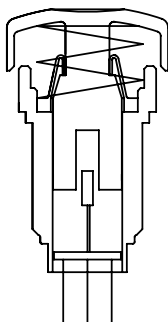


IHL series

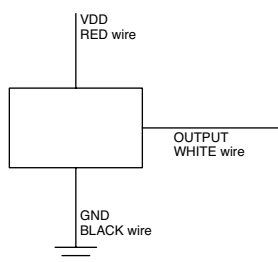
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ELECTRICAL FUNCTIONS

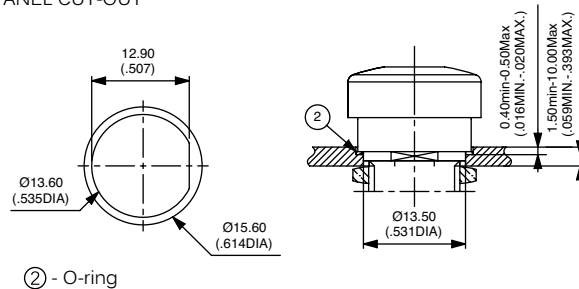


WIRING DIAGRAM

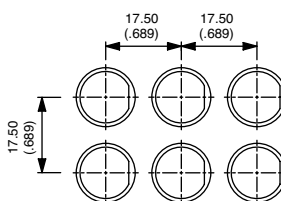


MOUNTING

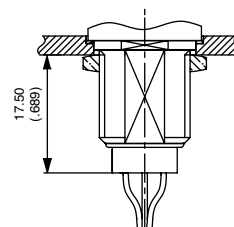
PANEL CUT-OUT



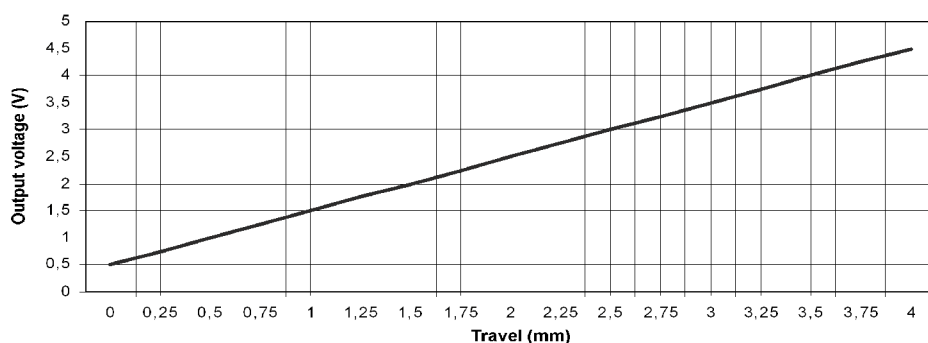
MATRIX MOUNTING



BACK OF PANEL SPACE REQUIREMENT



LINEAR OUTPUT GRAPH (VDC = 5V@20°C)



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BUILD YOUR PART NUMBER

BASIC PART NUMBER

SERIES	ACTUATOR SHAPE	OUTPUT VOLTAGE	OPERATING FORCE	REGULATOR	TERMINALS
IHL	R Round	01 0.5 to 4.5 V Other : on request.	3 Soft 5 Standard (4 N to 6 N) 7 Hard	X None 5 5V regulator Other : on request.	F Flying leads

OPTIONS

ACTUATOR COLORS

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

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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 and 1 O-Ring. Hex nut part number U166.

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WITHOUT REGULATOR



Soft operating force

IHLR013XF

Standard operating force

IHLR015XF

Hard operating force

IHLR017XF

WITH 5V REGULATOR



Soft operating force

IHLR0135F

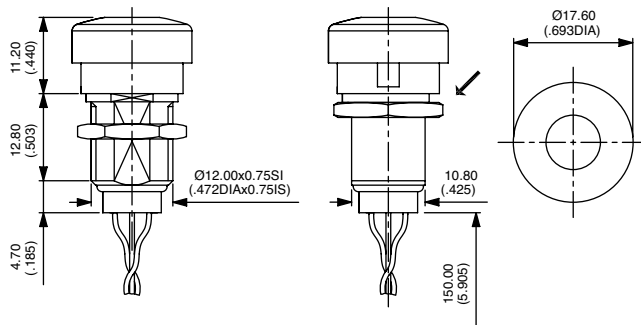
Standard operating force

IHLR0155F

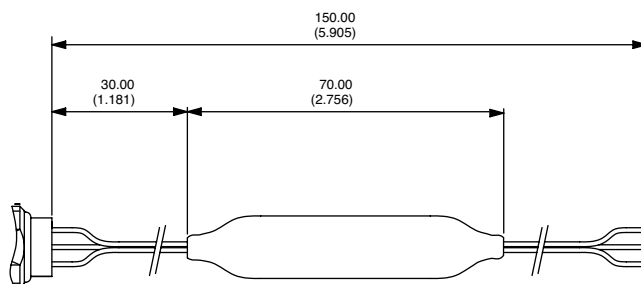
Hard operating force

IHLR0175F

→ FLAT



→ FLAT



ACTUATOR COLORS

BASIC P/N

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

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IHS series

Hall effect pushbutton switches •
bushing Ø 12 mm • momentary



DISTINCTIVE FEATURES

- Momentary pushbutton (NO)
- 5 million cycles
- Low behind-panel depth
- Standard and high actuator
- 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)



ELECTRICAL SPECIFICATIONS

- Supply voltage : 3.5 VDC to 24 VDC
- Supply current : VDC = 12 V : 2.5 mA Typ. to 5 mA max.
(current consumption in OFF position)
- Max. output current : 50 mA
- Max. output voltage : 24 VDC
- Output type : NPN



GENERAL SPECIFICATIONS

- Panel thickness : 1.5 mm (.059) min. - 4 mm (.157) max.
- Total travel : 1.80 mm (.070) ± 0.3 mm
- Typical operating force : 6 N ± 2 N
- Mechanical life : 5 million cycles
- Torque : 1.5 Nm max. applied to nut



MATERIALS

- Case : PBT, UL94-V0
- Actuator : polyamide 6/6
- Bushing/bezel : zinc die-cast (zamac), black painted
- Multi-wire leads : AWG26, 150 mm

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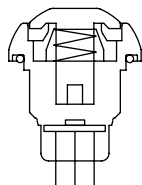


IHS series

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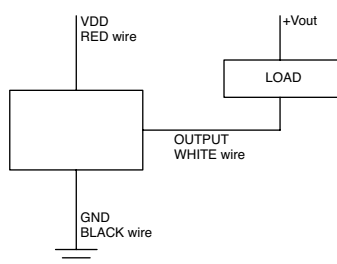
ELECTRICAL FUNCTIONS



Function 3 (NO)

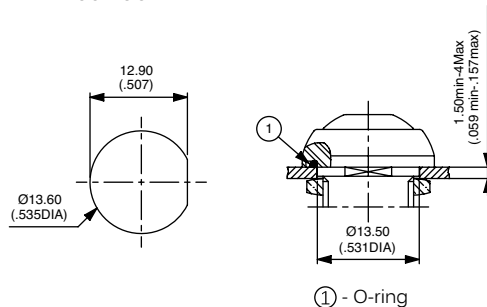


WIRING DIAGRAM

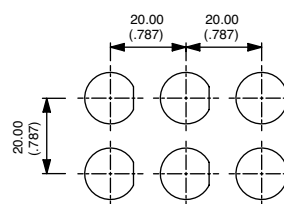


MOUNTING

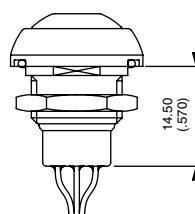
PANEL CUT-OUT



MATRIX MOUNTING



BACK OF PANEL SPACE REQUIREMENT



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BUILD YOUR PART NUMBER

BASIC PART NUMBER				
IHS				
SERIES	ACTUATOR SHAPE	ELECTRICAL FUNCTION	OPERATING FORCE	TERMINALS
	R Round H Round, high	3 Normally open (NO)	6 6 N	F Flying leads

OPTIONS	
ACTUATOR COLORS	OPTIONS
1 Blue B Dark blue 2 Black 3 Green 4 Grey 5 Yellow 6 Red 7 White 9 Orange	Blank None 100 Satin chrome bezel 101 Bright chrome bezel

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- ⚠ **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 (P/N U5125). 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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STANDARD ACTUATOR



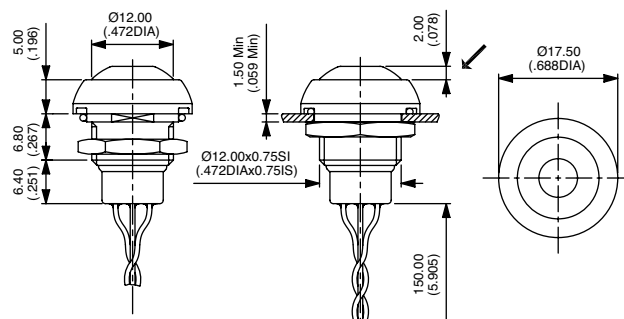
IHSR36F  Normally Open

HIGH ACTUATOR

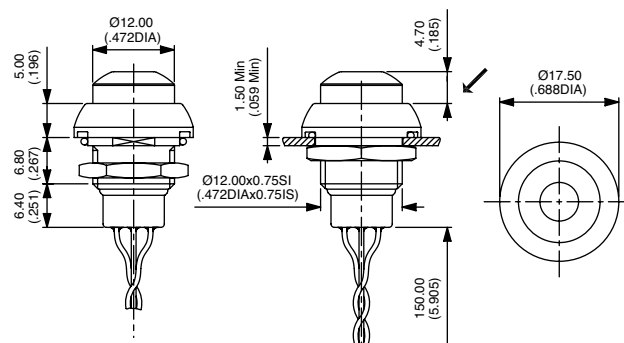


IHSH36F  Normally Open

→ FLAT



→ FLAT



ACTUATOR COLORS

BASIC P/N

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

OPTIONS

BASIC P/N

- | | |
|-----|---------------------|
| 100 | Satin chrome bezel |
| 101 | Bright chrome bezel |

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