



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 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.

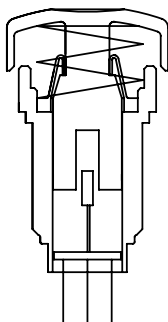


# IHL series

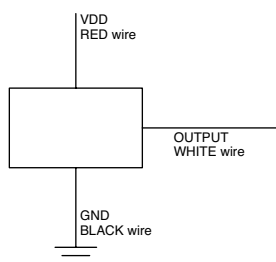
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## ELECTRICAL FUNCTIONS

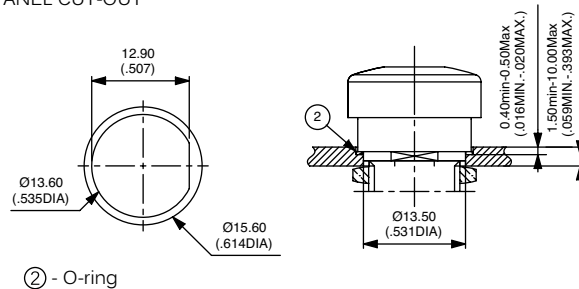


## WIRING DIAGRAM

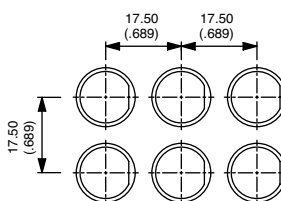


## MOUNTING

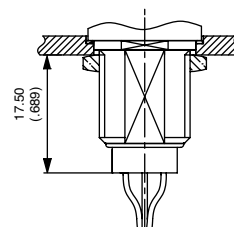
### PANEL CUT-OUT



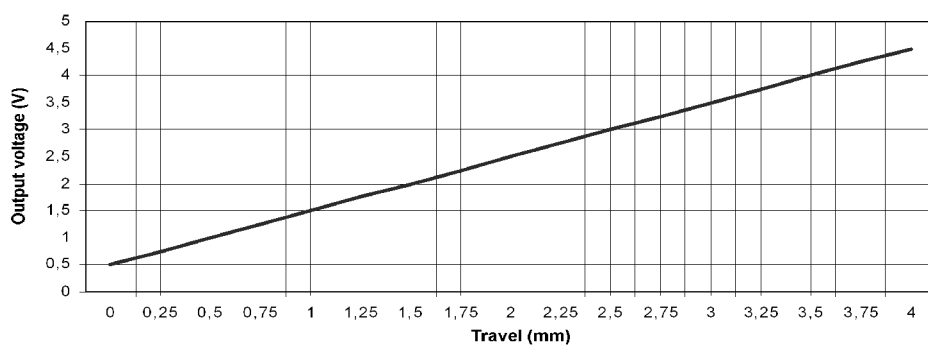
### MATRIX MOUNTING



### BACK OF PANEL SPACE REQUIREMENT



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





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## BUILD YOUR PART NUMBER

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

OPTIONS	
<div>_____</div> <div>_____</div> <div>_____</div> <div>_____</div> <div>_____</div> <div>_____</div>	
ACTUATOR COLORS	
<div>1</div> Blue <div>B</div> Dark blue <div>2</div> Black <div>3</div> Green <div>4</div> Grey	<div>5</div> Yellow <div>6</div> Red <div>7</div> White <div>9</div> Orange



## 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**

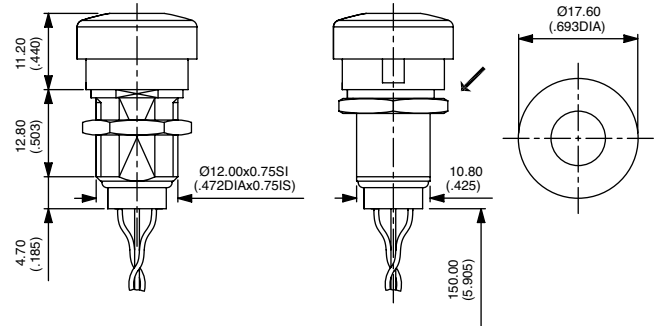
Standard operating force

**IHLR0155F**

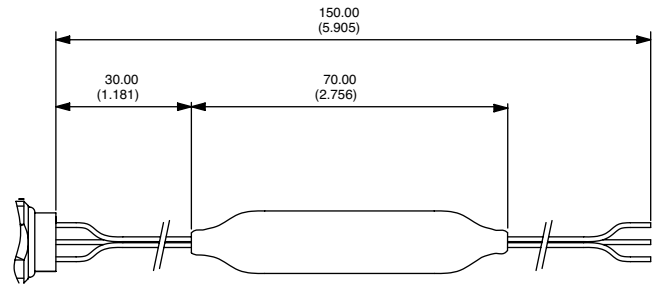
Hard operating force

**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    |