

Selection guide - Section B1 ermec@ermec.com

«I» range

	<i>New!</i> 	<i>New!</i> 	<i>New!</i> 			<i>New!</i> 	<i>New!</i> 	<i>New!</i> 
Series	IC	IL	IM	IP mom. & latching	IB-IS	IHS hall effect	IHL hall effect	IQ momentary
Page	B1-2	B1-6	B1-11	B1-15	B1-25	B1-29	B1-32	B1-35
Poles	1	1	1	1	1	1 NPN	1	1
Maximum current	5A 28VDC	2A 24VDC	3A 28VDC	5A 28VDC 4A 12VDC	100mA 24VDC	5mA 24VDC	1,25mA 4,5VDC	4A 28VDC
Illuminated		X		X				X
Bushing dimension								
Ø12 (.472)	X	X	X	X	X	X	X	
Ø16 (.629)								X
Mounting options								
Panel	X	X	X	X	X	X	X	
Snap-in					X			X
Terminal options								
PCB	X	X	X	X	X			X
Solder lugs	X	X		X	X			X
Quick-connect	X		X	X	X			X
Screw								X
Flying leads	X	X		X		X	X	X
Sealing	IP67	IP67	IP67	IP67	IP54 or IP67	IP67	IP67	IP54

	<i>New!</i> 							
Series	IQ latching	IZ metal	IZ plastic	IR standard	IR microswitch	IR latching	IA	IF
Page	B1-42	B1-48	B1-58	B1-66	B1-73	B1-79	B1-85	B1-88
Poles	1	1	1	1	1	1	1	1
Maximum current	100mA 24VDC	4A 48VDC 100mA 24VDC	4A 48VDC 100mA 24VDC	4A 48VDC	5A 250VAC	100mA 24VDC	2A 24VDC	100mA 48VDC
Illuminated	X	X	X	X	X	X		
Bushing dimension								
Ø12 (.472)								
Ø16 (.629)	X	X	X	X	X	X	X	X
Mounting options								
Panel		X	X	X	X	X	X	X
Snap-in	X							X
Terminal options								
PCB	X	X	X	X		X		
Solder lugs	X	X	X	X		X		
Quick-connect	X	X	X	X	X	X		X
Screw		X	X	X				
Flying leads	X	X	X	X		X	X	
Sealing	IP54	IP67	IP67	IP67	IP67	IP67	IP67	IP67



New!

IHS series ermec@ermec.com

Hall effect pushbutton switches - bushing \varnothing 12 mm - momentary

Distinctive features and specifications



- 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

ELECTRICAL SPECIFICATIONS

- Supply voltage : 3,5VDC to 24VDC
- Supply current : VDC = 12V : 2,5mA Typ. to 5mA max. (current consumption in OFF position)
- Max. output current : 50mA
- Max. output voltage : 24VDC
- Output type : NPN

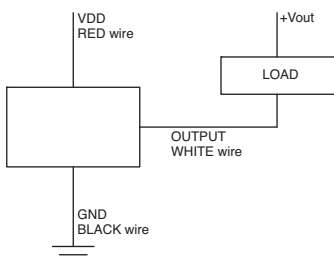
GENERAL SPECIFICATIONS

- Panel thickness : 1,5 mm (.059) min. 4 mm (.157) max.
- Total travel : 1,80 mm (.070) +/- 0,3 mm
- Typical operating force : 6N +/- 2N
- Mechanical life : 5 million cycles
- Torque : 1,5 Nm max. applied to nut

MATERIALS

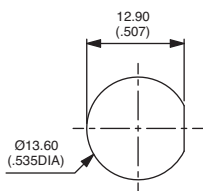
- Case : PBT, UL94-V0
- Actuator : polyamide 6/6
- Bushing/bezel : zinc die-cast (zamac), black painted
- Multi-wire lead : AWG26, 150 mm

WIRING DIAGRAM

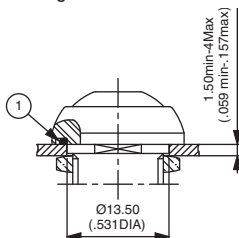


MOUNTING

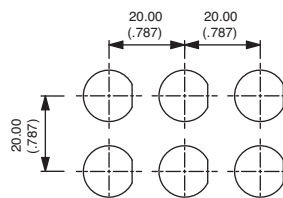
Panel cut-out



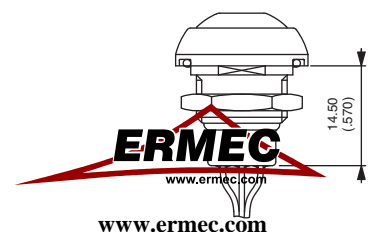
① O-ring



Matrix mounting

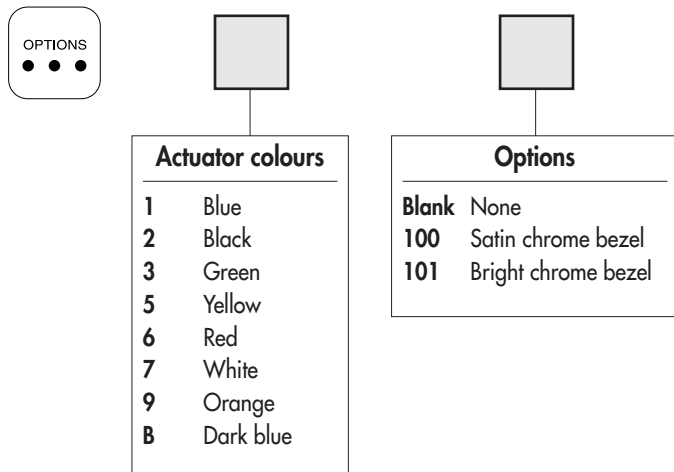
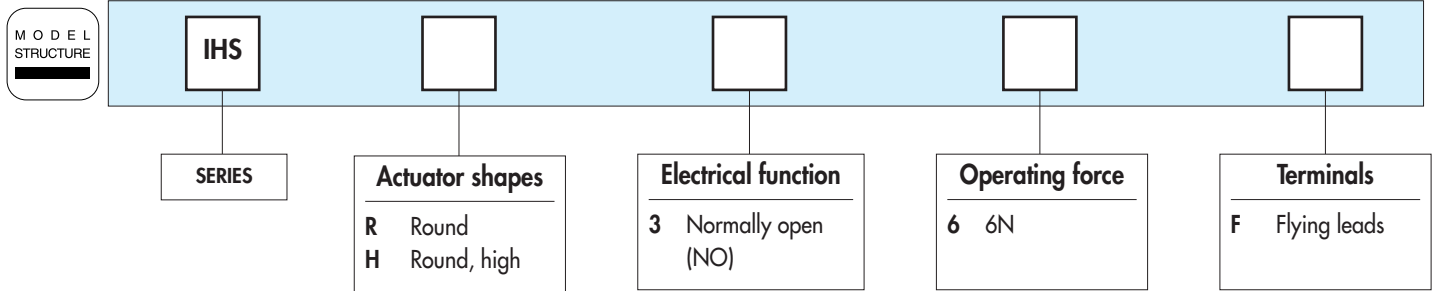


Back of panel space requirement



Hall effect pushbutton switches - bushing Ø 12 mm - momentary

Overview



ABOUT THIS SERIES

On the following pages, you will find successively :
model structure of switches and options in the same order as in above chart

Dimensions : first dimensions are in mm while inches are shown as bracketed numbers.



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). It is presented after the IA series and in section H.



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



Packaging unit : 25 pieces

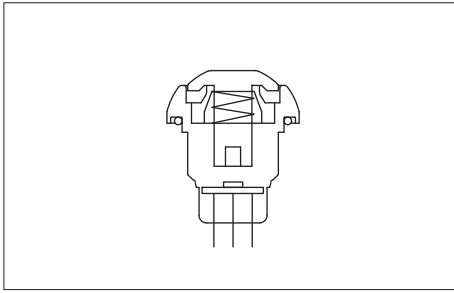


New!

IHS series ermec@ermec.com

Hall effect pushbutton switches - bushing Ø 12 mm - momentary

Round - non-illuminated



- Standard or high actuator

MODEL
STRUCTURE



Standard actuator

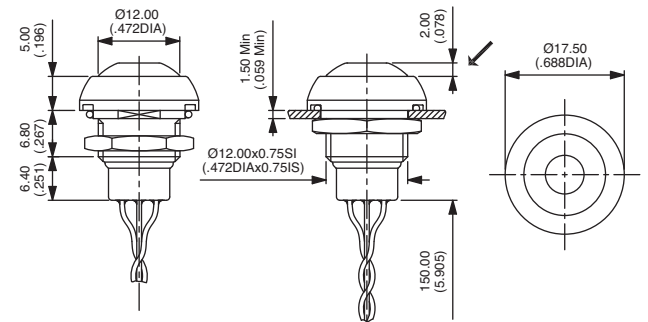
→ Flat



IHSR36F



Normally Open



High actuator

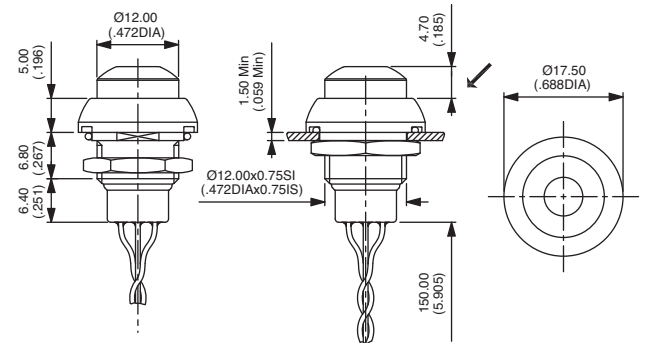
→ Flat



IHSH36F



Normally Open

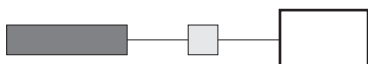


ACTUATOR COLOURS



1 : blue - 2 : black - 3 : green - 5 : yellow - 6 : red - 7 : white - 9 : orange - B : dark blue

OPTIONS



100 : Satin chrome bezel
101 : Bright chrome bezel



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Hall effect pushbutton switches - bushing Ø 12 mm - linear

Distinctive features and specifications



- Linear output pushbutton
- 0,5 to 4,5 volt output
- Modular operating force
- 5 million cycles
- Sealed to IP67

B1

ENVIRONMENTAL SPECIFICATIONS

- Front panel sealing : IP67 according to IEC 60529
- Operating temperature : -40°C to +85°C
- EMC testing : 10V per meter extend to radiated fields in freq. range of 80 Mhz to 1.000 MHz. 1KHz 80 % sine wave modulation according to IEC/EN 61000-4-3

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

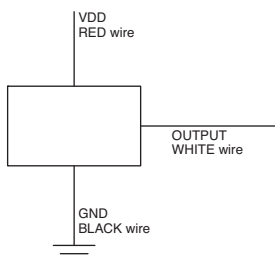
ELECTRICAL SPECIFICATIONS

- Supply voltage : 4,5VDC to 5,5VDC without regulator 6,5VDC to 24VDC with 5V regulator
- Supply current : 9mA max.
- Max. output current : 1,25mA
- Max. output voltage with or without regulator : see graph below.

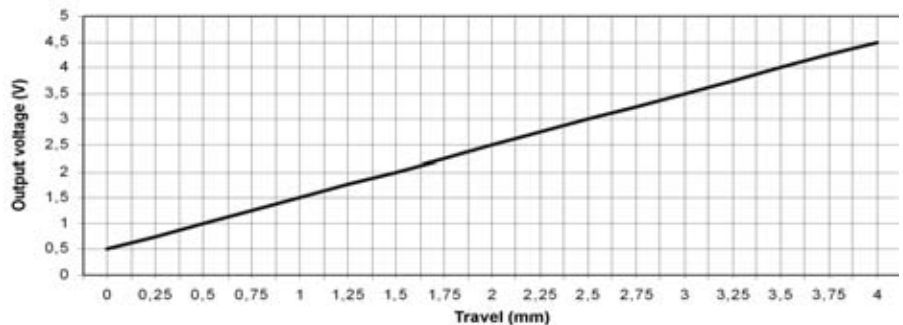
MATERIALS

- Case : PBT, UL94-V0
- Actuator : ABS
- Bushing : polyamide 6/6
- Multi-wire lead : AWG26, 150 mm

WIRING DIAGRAM



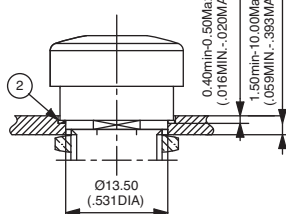
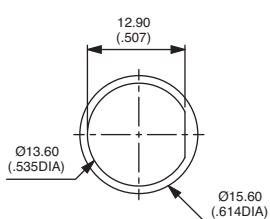
LINEAR OUTPUT GRAPH (VDC = 5V@20°C)



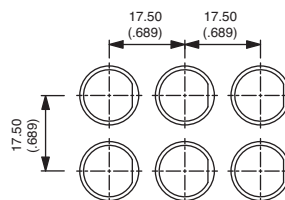
MOUNTING

Panel cut-out

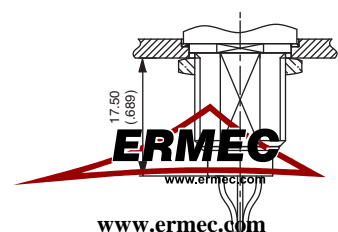
② O-ring



Matrix mounting



Back of panel space requirement

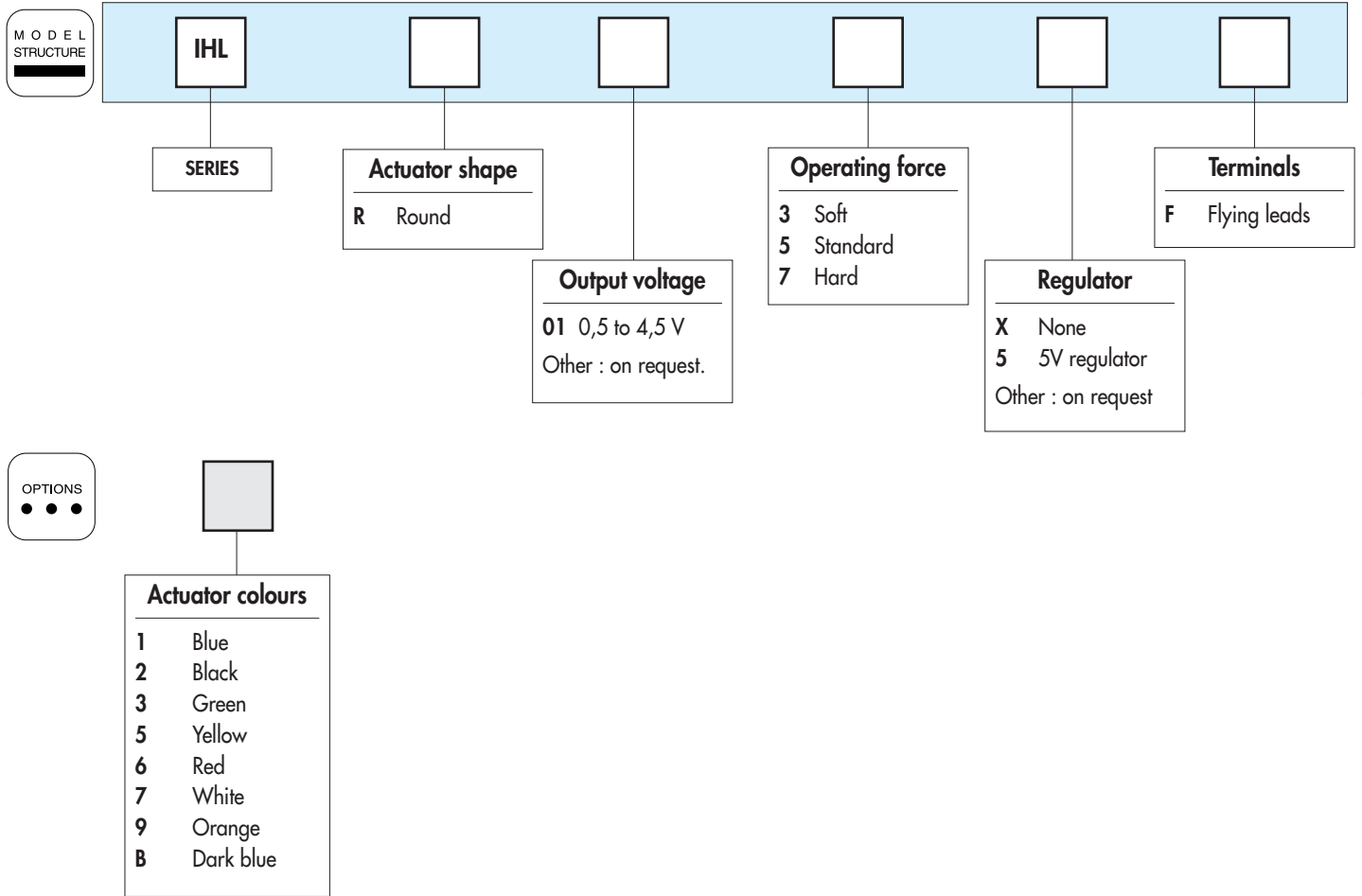


New!

IHL ermec@ermec.com

Hall effect pushbutton switches - bushing Ø 12 mm - linear

Overview



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model structure of switches and options in the same order as in above chart

Dimensions : first dimensions are in mm while inches are shown as bracketed numbers.



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.



Packaging unit : 25 pieces



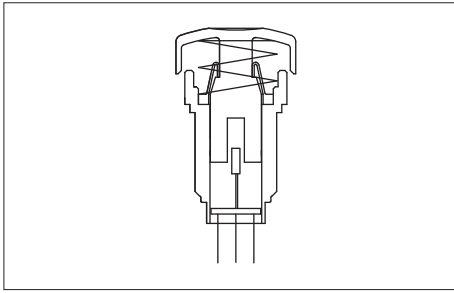
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IHL series

New! ermec@ermec.com

Hall effect pushbutton switches - bushing \varnothing 12 mm - linear

Round - non-illuminated



- With or without regulator

MODEL
STRUCTURE



Without regulator

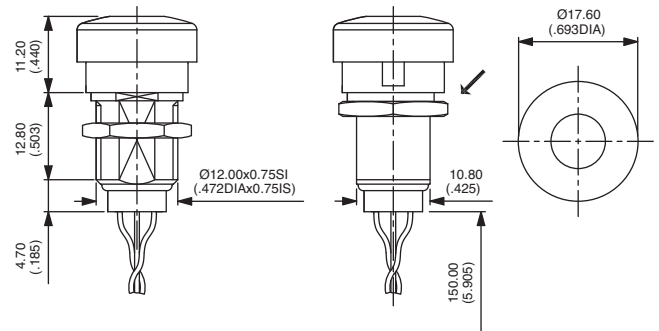


Soft operating force
IHLR013XF

Standard operating force
IHLR015XF

Hard operating force
IHLR017XF

→ Flat



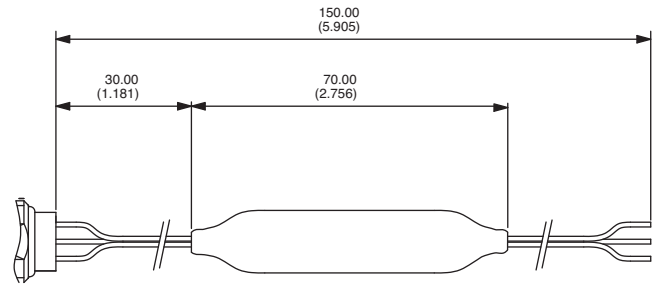
With 5V regulator



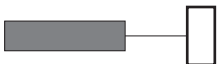
Soft operating force
IHLR0135F

Standard operating force
IHLR0155F

Hard operating force
IHLR0175F



ACTUATOR COLOURS



1 : blue - 2 : black - 3 : green - 5 : yellow - 6 : red - 7 : white - 9 : orange - B : dark blue



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