

# APEM

## IH Series HALL EFFECT

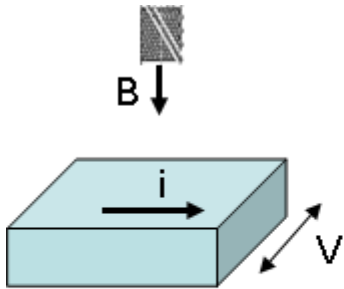
---

### Benefits

- switch and linear version
- 5 million cycle
- low behind panel depth
- IP67 sealing



## HALL EFFECT



$i$  : current in conductor  
→ need supply  
 $B$  : field generated by magnet  
 $V$  : tension "result"

**Hall effect = contactless => long life**

## APPLICATIONS

### IH Switch:

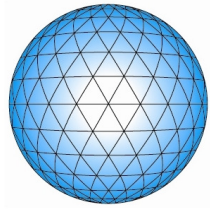
This rugged switch is designed to be subjected to a high rate of actuation while being in harsh environments. The IHS is recommended for applications where the switch is often activated. For example, in applications where positioning the load is critical: material handling, loaders, lifts trucks, buckets and shovels ...

### IH Linear:

This rugged switch is intended for applications where a simple On /Off control is not sufficient and where therefore a linear output is preferable. Typical use of IHL: an operator can control the movement of a device and particularly its speed. This switch is ideal for control valves or variable speed drives and can be used in various applications such as industrial control, heavy equipment and handling.

### A few applications



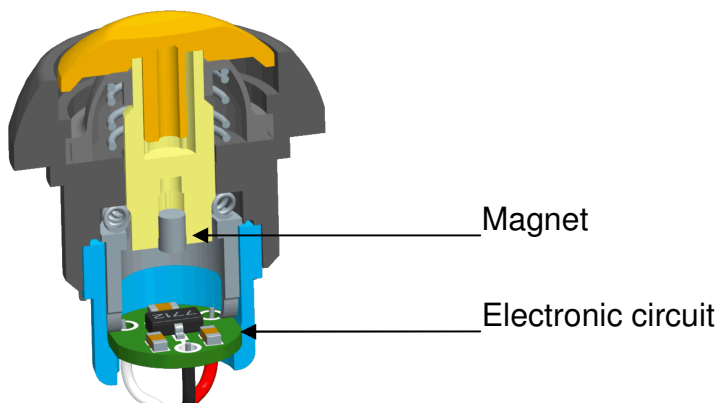


# APEM

## IH Series HALL EFFECT

### Product description

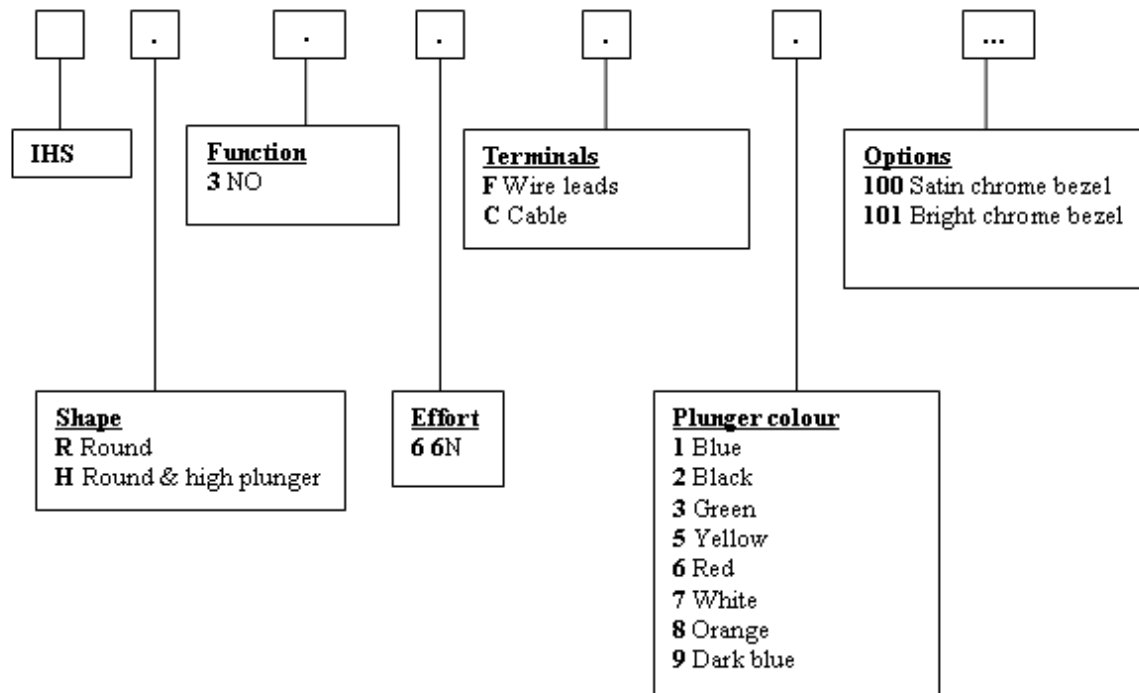
Apem has created a momentary switch, the IHS, using the hall effect. It has a long life contactless switching of 5 million to operations. This switch is sealed to IP67. The dome shaped actuator is available in eight colors.



#### Features:

- 5 million cycle performance
- Hall Effect sensor technology for long life
- Eight actuator colors
- IP67 sealing
- Effort:  $6\text{ N} \pm 2\text{ N}$
- Low behind panel depth
- Compact:  $\text{Ø}12\text{mm}$  (.472) case

## Order guide



Standard bezel: zamak, black

### MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

- Sealing : IP67 according to IEC 529
- Temperature range: -40°C to 85°C
- Total travel: 1,70mm ( .070 )

### ELECTRICAL AND GENERAL SPECIFICATIONS

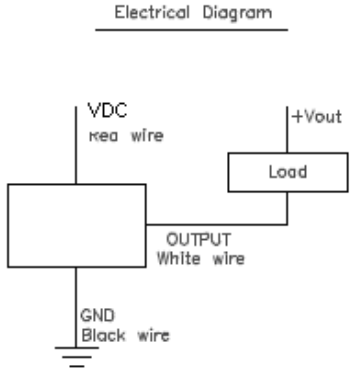
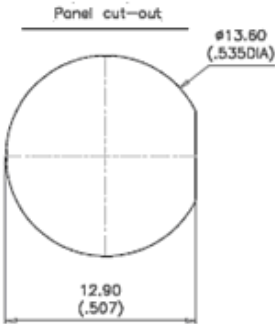
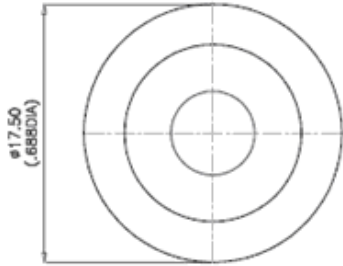
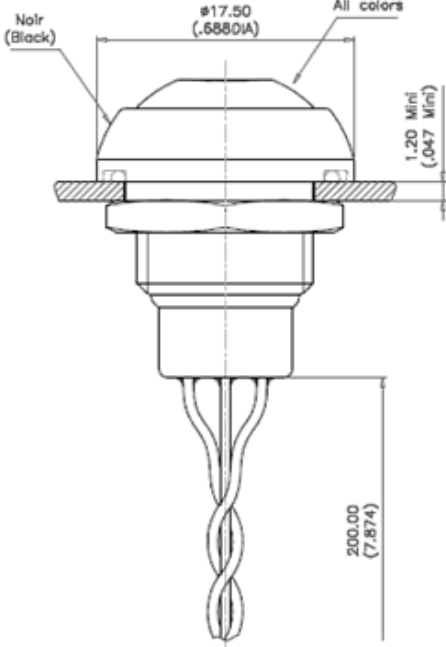
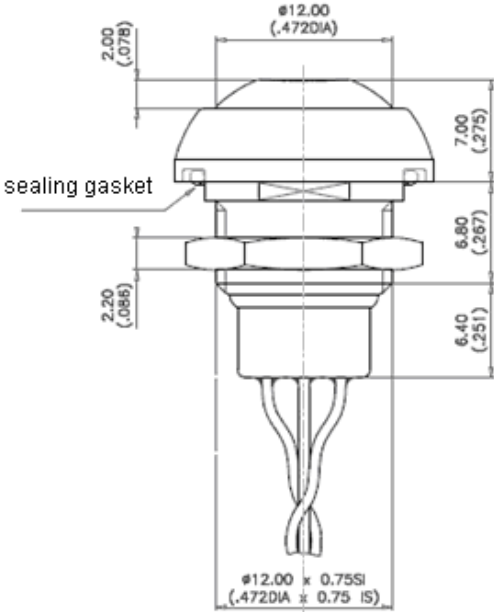
- Electrical function: Normally open ( NO ) momentary
- Supply voltage: 3.5VDC to 24VDC
- Supply current: Vcc=12V: 2.5mA Typ. to 5mA max (current consumption in off position)
- Max output current: 50mA
- Max output voltage: 28Vcc
- Mechanical life: 5.000.000 cycles

### MATERIALS

- Case: PBT, UL94-V0
- Plunger: polyamide 6/6
- Bushing: black painted Zamak
- Multi-wire lead: AWG26

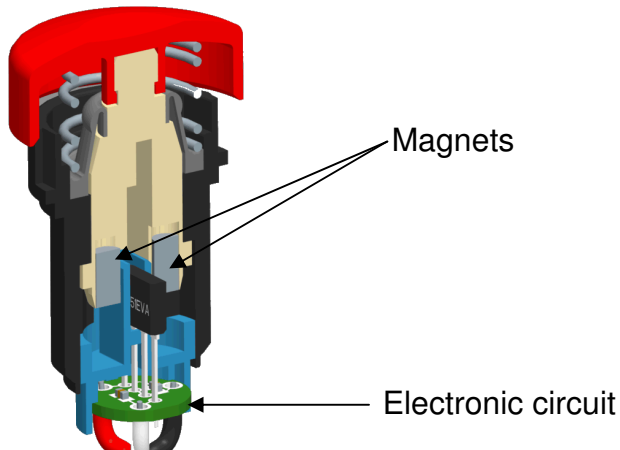
# IHS AND IHL Series

IH series - Hall Effect switch



## Product description

APEM has created a revolutionary switch, the IHL, using Hall Effect technology to provide an output proportional to the actuator travel. The IHL using the hall effect to have a long life contactless switching with 5 millions operations. This is sealed to IP67.

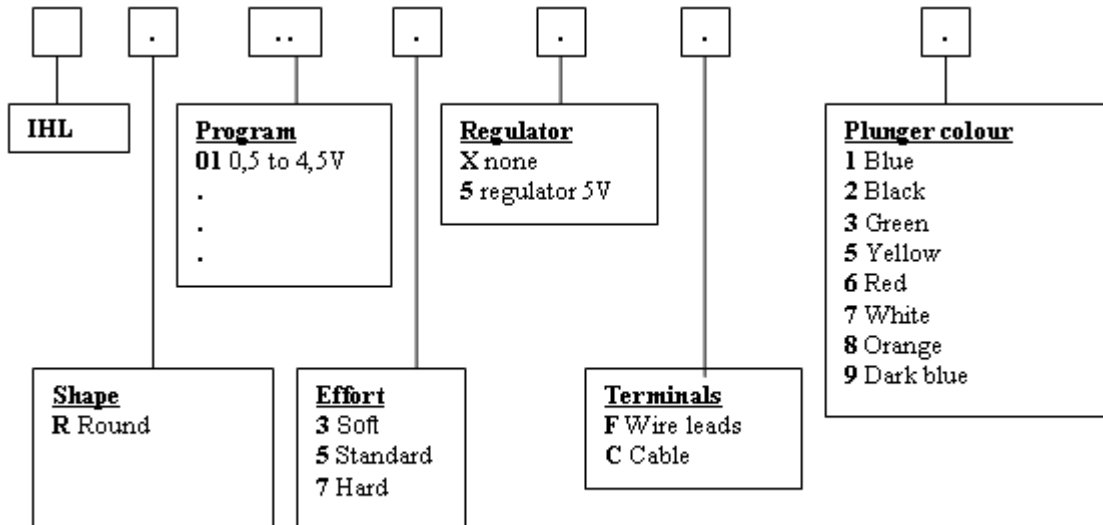


### Features:

- Outputs of 0.5 to 4.5 volts
- 5 million cycle performance
- Hall Effect for reliable contactless switching
- IP67 sealing
- Effort: Modular
- Low behind panel depth
- Compact: Ø12mm (.472) case

**Specific request :**  
Programmable output

## Order guide



Bezel : plastic, black, round

### MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

- Sealing : IP67 according to IEC 529
- Temperature range: -40°C to 85°C
- Total travel: 4,00mm ( .160 )
- EMC testing: 10V per meter extend to radiated fields in freg range of 80 Mhz to 1000Mhz. 1Khz 80% sine wave modulation, IEC/EN61000-4-3

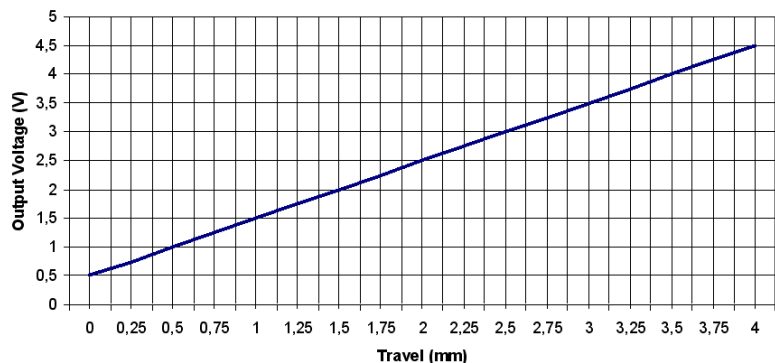
### ELECTRICAL AND GENERAL SPECIFICATIONS

- Electrical function: proportional linear output
- Supply voltage: 4.5 Vcc to 5.5 Vcc
- Supply current: 9mA max
- Max output current: 1.25mA max
- Max output voltage: see graph
- Mechanical life: 10.000.000 cycles

### MATERIALS

- Case: PBT, UL94-V0
- Plunger: ABS
- Bushing: Polyamide 6/6
- Multi-wire lead: AWG26

Linear Output Graph (Vcc=5V@20°C)



# IHS AND IHL Series

IH series - Hall Effect switch

