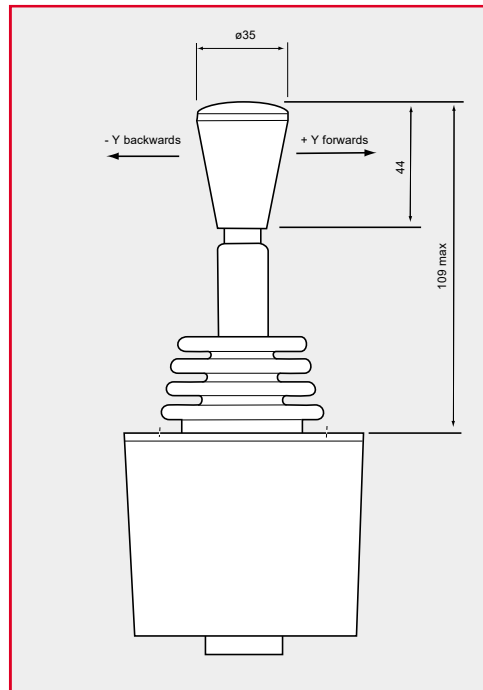


# HKN HANDLE OPTION

## DIMENSIONS



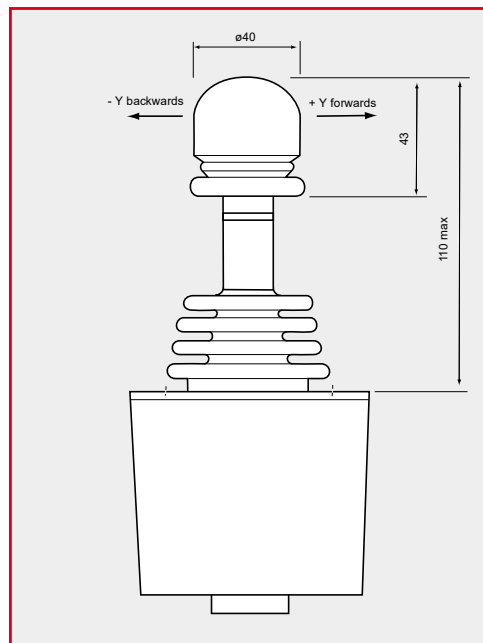
## SPECIFICATION

**Handle material**  
**Colour**  
**Handle retention force**

Gloss finish duroplast  
Black  
60N min

# CL/EL HANDLE OPTION

## DIMENSIONS



## SPECIFICATION

**Handle material**  
**Colour**

Neoprene rubber  
Black

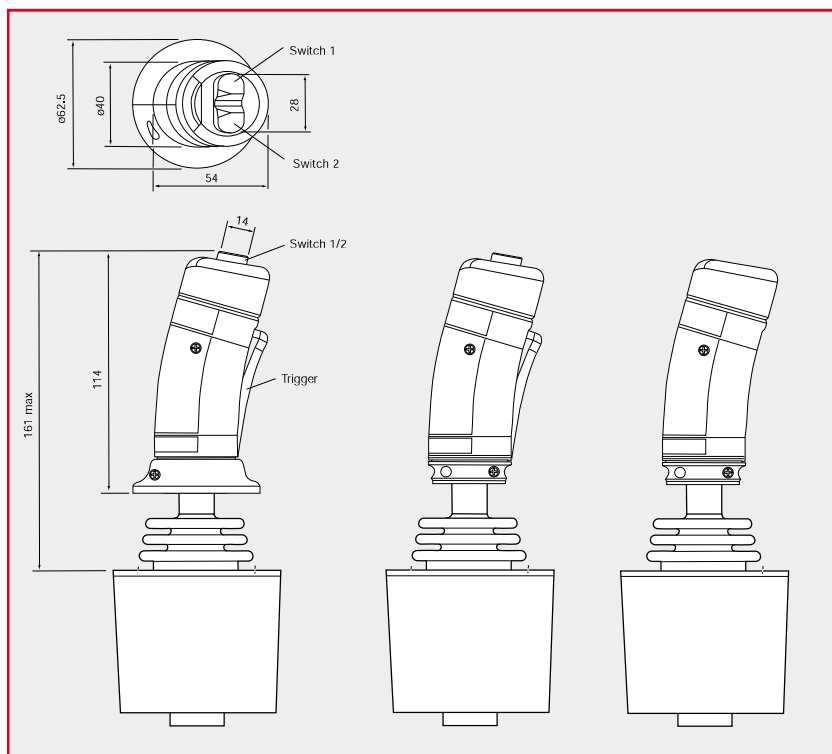
# HB HANDLE OPTIONS

NO LONGER AVAILABLE

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# MG HANDLE OPTIONS

## DIMENSIONS



## SPECIFICATION

<b>Maximum height above flange</b>	<b>mm</b>	161
<b>Maximum grip diameter</b>	<b>mm</b>	40
<b>Environmental sealing (IEC 60529)</b>		IP67 (IP66 with trigger switch)
<b>Number of switches</b>		0 to 3
<b>Action</b>		Momentary Button (1), Rocker (1+2) or Trigger
<b>Switch operating force</b>		
<b>Trigger</b>	<b>N</b>	5
<b>Switch 1 or 2</b>	<b>N</b>	7
<b>Maximum current @ 30Vdc</b>	<b>mA</b>	100
<b>Expected life (operations)</b>		1 million
<b>Operating temperature</b>	<b>°C</b>	-25 to +75
<b>Storage temperature</b>	<b>°C</b>	-30 to +80

**HANDLE CODE**

	<b>Top switch position</b>	<b>Trigger switch</b>	<b>Hand rest</b>
<b>MG00</b>	None	No	No
<b>MG01</b>	1	No	No
<b>MG02</b>	1 & 2	No	No
<b>MG03</b>	1 & 2	Yes	No
<b>MG04</b>	1 & 2	Yes	Yes
<b>MG05</b>	1	Yes	Yes
<b>MG06</b>	1 & 2	No	Yes
<b>MG07</b>	1	No	Yes
<b>MG08</b>	1	Yes	No
<b>MG09</b>	None	Yes	Yes
<b>MG10</b>	None	No	Yes
<b>MG11</b>	None	Yes	No

See electrical connections for wire color codes.

**ELECTRICAL CONNECTIONS**

	<b>Pin number</b>	<b>Wire color</b>
<b>Common terminal (for top switches)</b>	16	Black
<b>Switch 1</b>	6	Blue
<b>Switch 2</b>	3	Green
<b>Trigger switch</b>	4	Blue/Orange
<b>Trigger switch</b>	5	Yellow

# A RANGE HANDLE OPTIONS

## SPECIFICATION

<b>Maximum height above flange</b>	<b>mm</b>	166
<b>Maximum grip diameter</b>	<b>mm</b>	61
<b>Environmental sealing (IEC 60529)</b>		IP65
<b>Number of switches</b>		1 to 6 in the top plate
<b>Action</b>		Momentary button
<b>Switch operating force</b>	<b>N</b>	3
<b>Maximum current @ 50Vdc</b>	<b>mA</b>	200
<b>Expected life (operations)</b>		1 million
<b>Weight</b>	<b>g</b>	170 - A2LD option
<b>Operating temperature</b>	<b>°C</b>	-40 to +70
<b>Storage temperature</b>	<b>°C</b>	-40 to +80

## ROCKER

<b>Rocker profile</b>		Standard (S) or V profile (V)
<b>Breakout force</b>	<b>N</b>	5 at the end of the rocker
<b>Operating force</b>	<b>N</b>	15 at the end of the rocker
<b>Mechanical movement</b>	°	±10 (±1°)
<b>Electrical movement</b>	°	±9 (±1°)
<b>Expected life (operations)</b>		5 million
<b>Load current (maximum)</b>	<b>mA</b>	200 (see note on page 4)
<b>Power dissipation @ 25°C</b>	<b>W</b>	0.25
<b>Track resistance</b>		Will match JC150 resistance <sup>†</sup>
<b>Output voltage</b>		Will match JC150 output <sup>†</sup>
<b>Center tap angle</b>	°	±1.5
<b>Directional or center off switch</b>		Standard
<b>Switch gap</b>	°	2.5 either side of center
<b>Switch supply voltage</b>	<b>Vdc</b>	35

<sup>†</sup> Unless requested otherwise.

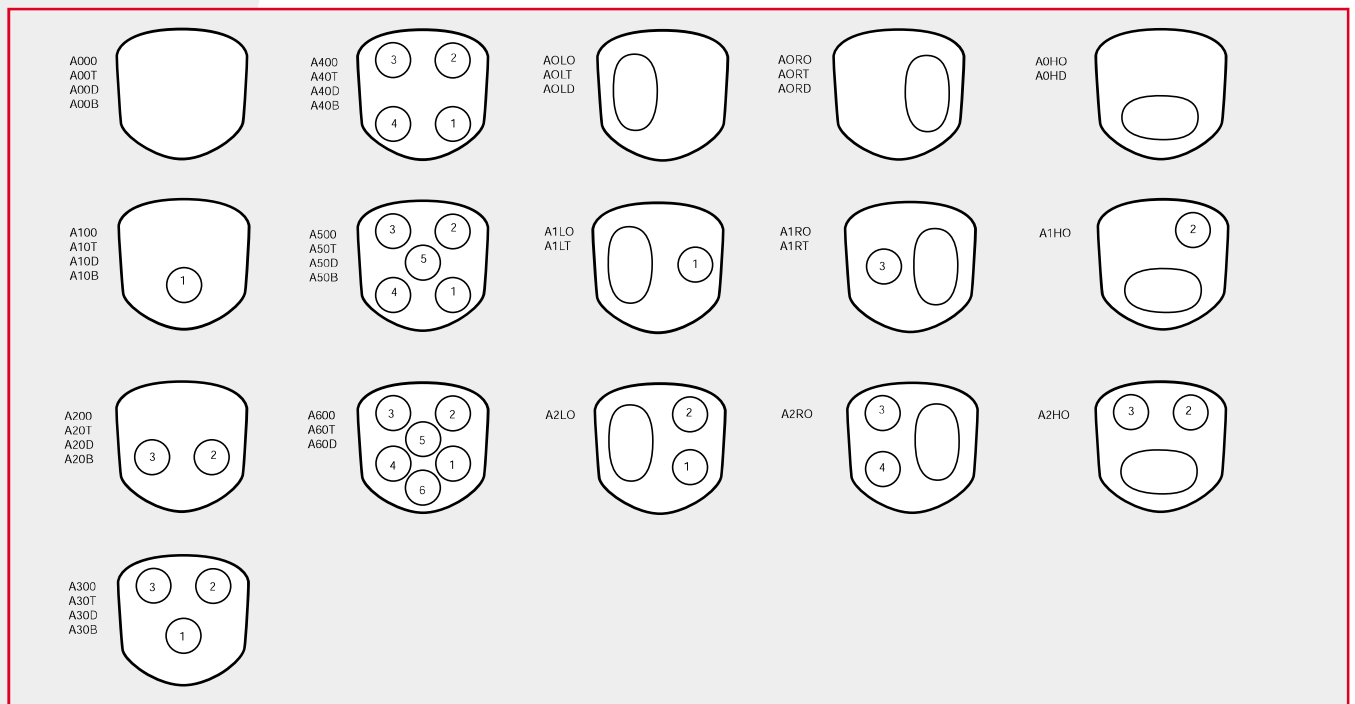
## FUNCTIONALITY

## SWITCHES

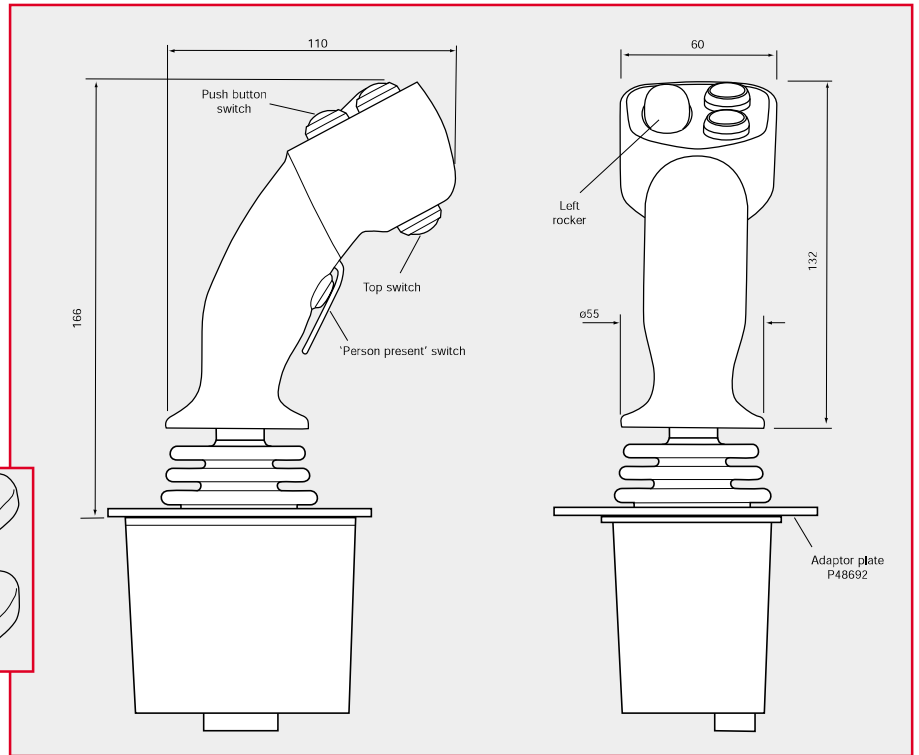
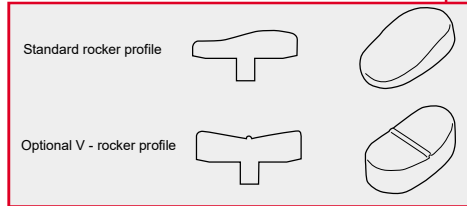
## ROCKERS

	1	2	3	4	5	6	TOP	Person Present	LEFT	RIGHT	HORIZONTAL
<b>SWITCH 1</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓		
<b>SWITCH 2</b>	✓		✓	✓	✓	✓	✓	✓	✓		✓
<b>SWITCH 3</b>	✓	✓		✓	✓	✓	✓	✓		✓	✓
<b>SWITCH 4</b>	✓	✓	✓		✓	✓	✓	✓		✓	
<b>SWITCH 5</b>	✓	✓	✓	✓		✓	✓	✓			
<b>SWITCH 6</b>	✓	✓	✓	✓	✓		✓	✓			
<b>TOP SWITCH</b>	✓	✓	✓	✓	✓	✓		✓	✓	✓	
<b>PERSON PRESENT</b>	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
<b>LEFT ROCKER</b>	✓	✓					✓	✓			
<b>RIGHT ROCKER</b>			✓	✓			✓	✓			
<b>HORIZONTAL</b>		✓	✓					✓			

## SWITCH AND ROCKER OPTIONS



## DIMENSIONS

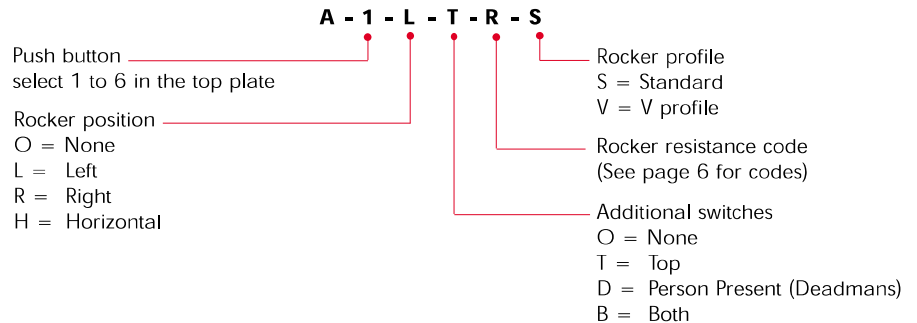


## ELECTRICAL CONNECTIONS

	<b>Pin</b>	<b>Wire color</b>		<b>Pin</b>	<b>Wire color</b>
<b>Common terminal (for all switches)</b>	16	Black	<b>Rocker center tap</b>	8	Yellow/Red
<b>Switch 1</b>	6	Blue	<b>Rocker zero or negative supply (L, R or H)</b>	15	Pink/Grey
<b>Switch 2</b>	5	Yellow	<b>Rocker output signal (L or H)</b>	7	Pink
<b>Switch 3</b>	4	Blue/White	<b>Rocker output signal (R)</b>	7	White
<b>Switch 4</b>	3	White/Green	<b>Rocker switch common</b>	16	Black
<b>Switch 5</b>	7	Red	<b>Rocker switch (L forward)</b>	4	Blue/Orange
<b>Switch 6</b>	8	Violet	<b>Rocker switch (L backward)</b>	3	Green
<b>Top switch</b>	†	Pink with marker	<b>Rocker switch (R forward)</b>	5	Yellow
<b>Person present switch</b>	†	Red/Green	<b>Rocker switch (R backward)</b>	6	Blue
<b>Person present switch</b>	†	Black/White	<b>Rocker switch (H left)</b>	6	Blue/Orange
<b>Rocker positive supply (L, R or H)</b>	2	White/Red	<b>Rocker switch (H right)</b>	3	Green

† Depends on other options selected

## ORDERING CODES



Note: When ordering a handle fitted with a rocker, two profiles can be supplied (S = standard profile; V = v profile) please specify style when ordering.