## Pendant Push

 Button Controls
## For the Control of

## Cranes

## - Hoists

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- Material Handling Equipment
}
- Lift Tables

Transfer Cars



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Rer hard work C $\epsilon$

ISO 9001

## Features

- Wide variety for easy customization.
- High impact ABS enclosures.
- One and two speed operators.
- Neoprene booted buttons.
- Easy force \& positive detent switches /buttons.
- $-15^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}\left(-5^{\circ} \mathrm{F}\right.$ to $\left.+160^{\circ} \mathrm{F}\right)$ oper at i on.
- CE Approved.
- Contacts Rated 5A at 120 VAC .
- 100g Shock resistance.
- Indoor or Outdoor use, fix between bushing collar and control cable by a clamps for water-proof (IP65) if outdoor use.


## Bushing Collar

3 sizes for cable diameters ( 9.5 mm to 21 mm ).

## Enclosure

Ergonomic design, visible safety yellow. shock and vibration resistant, rugged ABS 2 through 10 button. Regular or deep style. Two piece enclosure simplifies field wiring.

## Buttons

Silicon Rubber booted buttons.
Seals out dirt and moisture.

## Button legends

Standard button legends are included.

## Fasteners

Hardware and threaded inserts in housing to prevent thread stripping.

## Warning

To avoid severe personalinjury or death do not :

1. Lift loads greater than rated load capacity of hoist.
2. Operate if direction of hook travel does not agree with that indicated on control.
3. Lift people or loads over people
4.Operate unless load is centered in hook and latch is closed.
4. Operate unless hook travel limit devices function-test whout loads each shift.
5. Operate with worn, twisted, kinked, or other damaged chain or wire rope.
6. Operate when hoist is not centered over load.
7. Operate hoist if chain or wire rope is not seted properly in sprockets, drum, or sheave.
8. Operate damaged or malfunctioning hoist.

## HOB 81 Series



| Model No. | Complete Pendant Push Button Controls | Weight |
| :--- | :--- | :--- |
| HOB 81 | 2 buttons $w /$ single speed | About |
| HOB 81-1 | 2 buttons $w /$ double speed | 0.32 kg |

## HOB 83 Series



| Model No. | Complete Pendant Push Button Controls | Weight |
| :--- | :--- | :--- |
| HOB 83 | 6 buttons $w /$ single speed |  |



| Model No. | Complete Pendant Push Button Controls | Weight |
| :---: | :---: | :---: |
| HOB 82 | 4 buttons w/single speed | About <br> 0.49 kg |
| HOB 82-1 | 2 buttons w/single speed; 2 buttons w/double speed |  |
| HOB 82-2 | 4 buttons w/double speed |  |
| HOB 82-A | ON \& OFF \& 2 buttons w/single speed |  |
| HOB 82-A1 | ON \& OFF \& 2 buttons w/double speed |  |
| HOB 82-B | EMS \& 2 buttons w/single speed |  |
| HOB 82-B1 | EMS \& 2 buttons w/double speed |  |
| HOB 82-BE | EMS \& INDICATOR \& 2 buttons w/single speed |  |
| HOB 82-BF1 | EMS \& Variable Resistor \& 2 buttons w/double speed |  |

## HOB 84 Series



| Model No. | Complete Pendant Push Button Controls | Weight |
| :---: | :---: | :---: |
| HOB 84 | 8 buttons w/single speed | $\begin{gathered} \text { About } \\ 0.715 \mathrm{~kg} \end{gathered}$ |
| HOB 84-1 | 2 buttons $\mathrm{w} /$ double speed $\& 6$ buttons $\mathrm{w} /$ single speed |  |
| HOB 84-2 | 4 buttons $\mathrm{w} /$ double speed \& 4 buttons $\mathrm{w} /$ single speed |  |
| HOB 84-3 | 6 buttons $\mathrm{w} /$ double speed \& 2 buttons $\mathrm{w} /$ single speed |  |
| HOB 84-4 | 8 buttons w/double speed |  |
| HOB 84-A | ON \& OFF 6 buttons w/single speed |  |
| HOB 84-A1 | ON \& OFF 2 buttons $w /$ double speed \& 4 buttons $\mathrm{w} /$ single speed |  |
| HOB 84-A2 | ON \& OFF 4 buttons $w /$ double speed \& 2 buttons $\mathrm{w} /$ single speed |  |
| HOB 84-A3 | ON \& OFF 6 buttons w/double speed |  |
| HOB 84-B | EMS \& 6 buttons w/single speed |  |
| HOB 84-B1 | EMS \& 2 buttons w/double speed \& 4 buttons w/single speed |  |
| HOB 84-B2 | EMS \& 4 buttons w/double speed \& 2 buttons w/single speed |  |
| HOB 84-B3 | EMS \& 6 buttons w/double speed |  |



| Model No. | Complete Pendant Push Button Controls | Weight |
| :---: | :---: | :---: |
| HOB 85 | 10 buttons $\mathrm{w} /$ single speed | About$0.91 \mathrm{~kg}$ |
| HOB 85-1 | 2 buttons $\mathrm{w} /$ double speed $\& 8$ buttons $\mathrm{w} /$ single speed |  |
| HOB 85-2 | 4 buttons $\mathrm{w} /$ double speed $\& 6$ buttons $\mathrm{w} /$ single speed |  |
| HOB 85-3 | 6 buttons $\mathrm{w} /$ double speed $\& 4$ buttons $\mathrm{w} /$ single speed |  |
| HOB 85-4 | 8 buttons $\mathrm{w} /$ double speed \& 2 buttons $\mathrm{w} /$ single speed |  |
| HOB 85-5 | 10 buttons w/double speed |  |
| HOB 85-A | ON \& OFF \& 8 buttons w/single speed |  |
| HOB 85-A1 | ON \& OFF \& 2 buttons w/double speed $\& 6$ buttons $\mathrm{w} /$ single speed |  |
| HOB 85-A2 | ON \& OFF \& 4 buttons w/double speed $\& 4$ buttons $\mathrm{w} /$ single speed |  |
| HOB 85-A3 | ON \& OFF \& 6 buttons $\mathrm{w} /$ double speed \& 2 buttons $\mathrm{w} /$ single speed |  |
| HOB 85-A4 | ON \& OFF \& 8 buttons w/double speed |  |
| HOB 85-BE | EMS \& INDICATOR \& 8 buttons $\mathrm{w} /$ single speed |  |
| HOB 85-BE1 | EMS \& INDICATOR \& 2 buttons $\mathrm{w} /$ double speed \& 6 buttons $\mathrm{w} /$ single speed |  |
| HOB 85-BF | EMS \& VARIABLE RESISTOR \& 8 buttons $w /$ single speed |  |
| HOB 85-BF1 | EMS \& VARIABLE RESISTOR \& 2 buttons $w /$ double speed \& 6 buttons $w /$ single speed |  |


| Model No. | Number of Buttons | Contact Rating | Cable Bushings Diameter |
| :---: | :---: | :---: | :---: |
| HOB 81 | 2 single speed buttons | 2 A at 500 VAC <br> 5 A at 250 VAC | From 9.5 mm To 21 mm |
| HOB 82 | 4 single speed buttons |  |  |
| HOB 83 | 6 single speed buttons |  |  |
| HOB 84 | 8 single speed buttons |  |  |
| HOB 85 | 10 single speed buttons |  |  |



| No. of Positions | A | B | C |
| :---: | :---: | :---: | :---: |
| 2 | 123 | 76 | 53 |
| 4 | 182 | 76 | 53 |
| 6 | 242 | 76 | 53 |
| 8 | 301 | 76 | 53 |
| 10 | 369 | 83.5 | 56 |

## Cable Bushing Size



Crane Cable with or w/o Steel Wire

| Stranded Conductor | No.of Core | Insulation thickness | Insulation Diameter | Jacket Thickness | Overall Diameter |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{mm}^{2}$ |  | mm | mm | mm | mm |
|  | 3 c | 0.8 | 3.0 | 1.5 | 9.5 |
|  | 4 c | 0.8 | 3.0 | 1.5 | 11.0 |
|  | 5 c | 0.8 | 3.0 | 2.0 | 12.0 |
|  | 6 c | 0.8 | 3.0 | 2.0 | 12.5 |
| 1.25 | 8 c | 0.8 | 3.0 | 2.0 | 15.5 |
|  | 10c | 0.8 | 3.0 | 2.0 | 17.1 |
|  | 14 c | 0.8 | 3.0 | 2.0 | 18.4 |
|  | 16c | 0.8 | 3.0 | 2.0 | 19.1 |
|  | 24c | 0.8 | 3.0 | 2.0 | 19.3 |

## Replacement of Pendant Push Buttons Gontrols

Part NO.

Designed for direct control of single phase electric motors. Since motor current is controlled directly by the pendant switch, extra reversing contactors or costly controls are not required.

## Features

- Durable high quality $A B S$ pendant switch housing.
- Highly visible safety orange color.
- NEMA 4/12 water-proof enciosure.
- Split case design for easy installation and wiring.
- Flenible cable boot selection to match size of cable prevents entry of debris.
- Slim compact size suited for one hand operation, insulated for operator safety.
- Direct control ratings for 1HP max. @120VAC.
- Two button switch with a wide range of legend markings
- Silicone rubber booted buttons seals out dirt and molsture.
(9)


| Power Source | Specification |
| :--- | :---: |
| Voltage Rating | $1 \phi 100 / 110 \mathrm{~V} / 1 \phi 200 / 220 \mathrm{~V}$ |
| Current Rating | $\mathrm{AC} \mathrm{250V}$ |
| Insulation Resistance | 15 A |
| Voltage Endurance | Above $100 \mathrm{M} \Omega$ (DC500) |

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