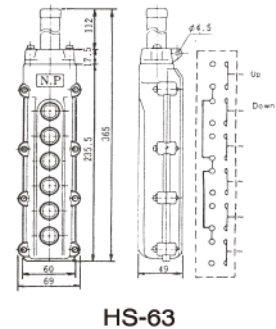
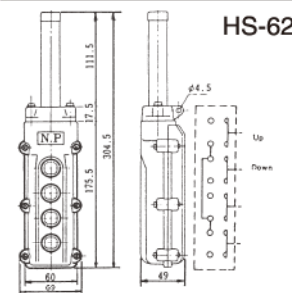
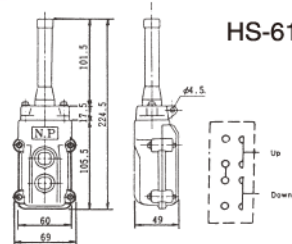


HOIST WATER PROOF PUSH BUTTON (INDIRECT OPERATION)

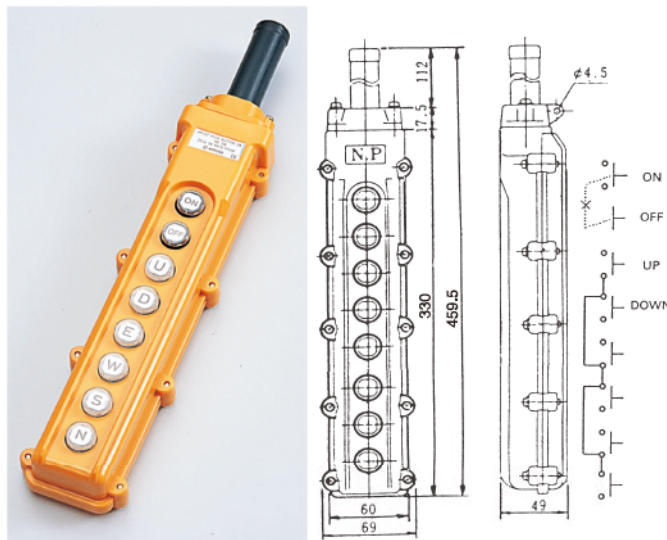


Number of buttons	Complete type	Rating	Cable bushing diameter (mm)
2 (1pair)	HS-61	24VAC 5A	8~16Dia
4 (2pair)	HS-62	120VAC 5A	
6 (3pair)	HS-63	250VAC 5A	
8 (4pair)	HS-64	500VAC 5A	
		24VDC 2A 120VDC 0.4A	



Compact high visibility orange enclosure NEMA 4x enclosure rating Ultra-long service life, -15°C~70°C operation 100g shock resistance Au switch pairs are mechanically interlocked ON-OFF can be substituted in first two buttons any switch shown

HS-64



LEGENDS

UP	DOWN	FAST	SLOW	HING	LOW	NORTH	SOUTH
ON	OFF	RIGHT	LEFT	RAISE	LOWER	EAST	WEST
IN	OUT	FWD	REV	START	STOP	OPEN	CLOSE

HS603 - ES



HS605 - ES



Item No.	Specification	Rating
HS603-ES	1 E-stop switch	24 VAC 5A
	2 Button(1 pair)	120 VAC 5A
HS605-ES	1 E-stop switch	250 VAC 5A
	4 Button(2 pair)	500 VAC 5A
HS607-ES	1 E-stop switch	24 VDC 2A
	6 Button(3 pair)	120 VDC 2A

Cable bushing diameter:8-16mmø

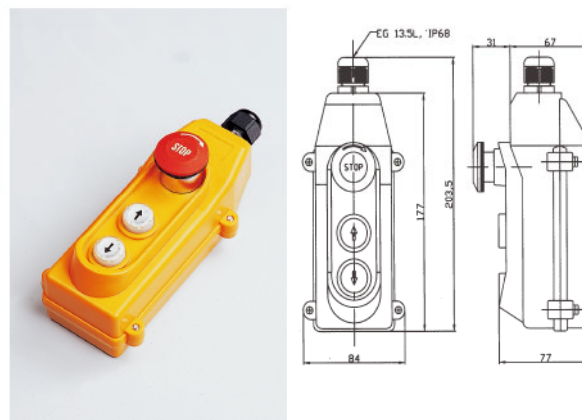
DIRECT OPERATION HOIST PUSH BUTTON PENDANT SWITCH



Dimensions and Connections of COB213



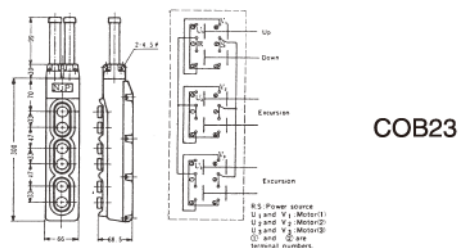
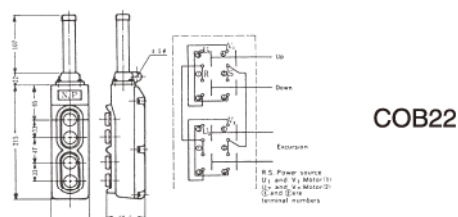
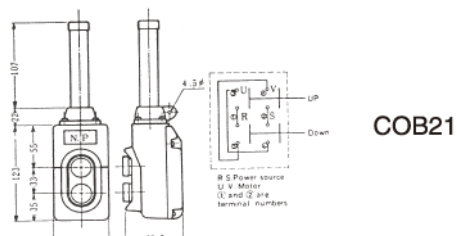
COB213ES



Designed for direct control of single phase electric motors. Since motor current is controlled directly by the pendant switch no extra reversing contactors or costly controls are required.

Features

- Durable high quality A.B.S. Pendant switch housing
- Highly visible safety orange color
- NEMA 4 water-proof enclosure
- Split case design for easy installation and wiring
- Flexible cable boot selected to match size of cable prevents entry of foreign debris
- Slim compact size suited for one hand operation
- Control ratings for 1HP max. at 120 VAC
- Two button switch with a wide range of legend markings



Legends

UP, DOWN, RAISE, LOWER, EAST, NORTH, SOUTH, U, D, E, W, N, S, R, L, ↑ ↓

Rating : 220VAC, 22KW water proof operation

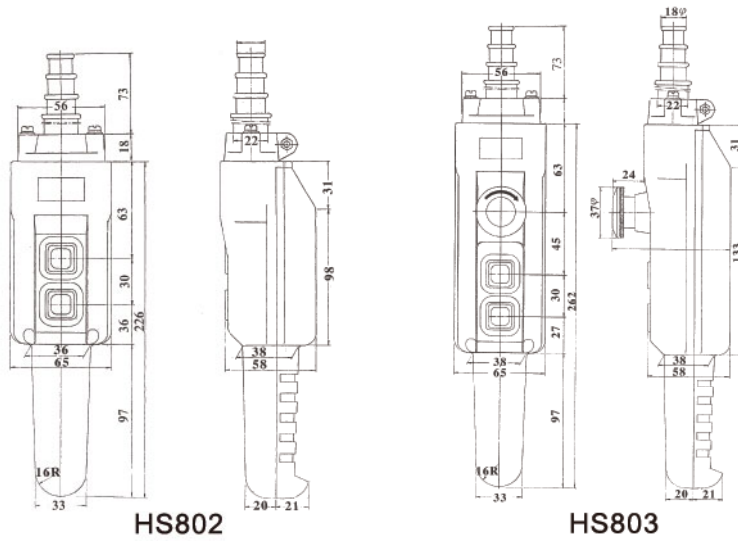
HOIST WATER PROOF PUSH BUTTON PENDANT SWITCH



HS802



HS803



HS802

HS803

The **HS80 Series** is a compact, pistol-grip design two-button, three-button with Emergency stop pendant station, and features:

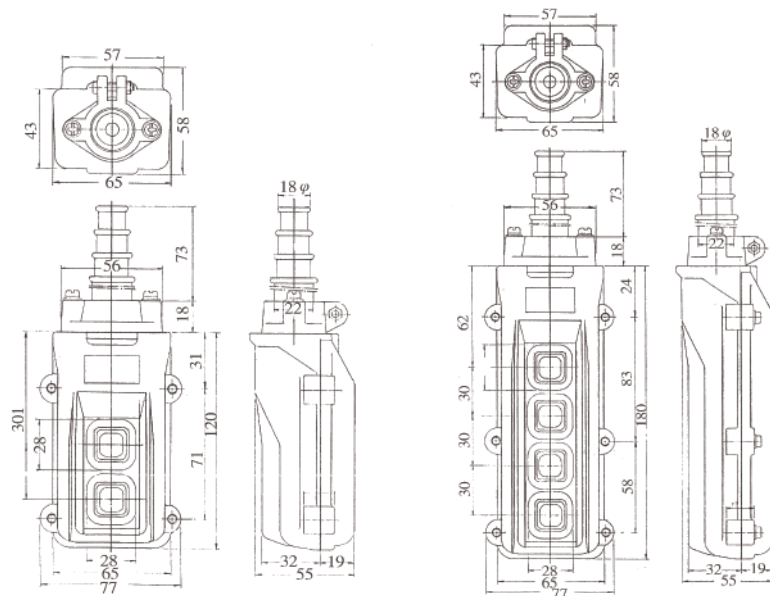
- An especially ergonomic design-less than three inches wide-weighing only 10 ounces
- Construction of high impact ABS, and high visibility safety yellow
- NEMA 4 waterproof rating
- Single-speed 5 amp, 250 volt contact block
- Multi-diameter cable bushing



HS81



HS82



HS81

HS82

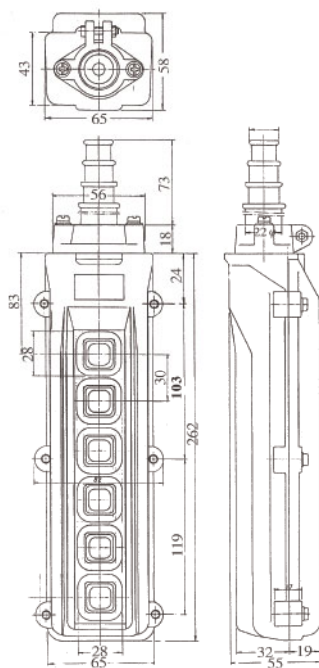
HOIST WATER PROOF PUSH BUTTON PENDANT SWITCH



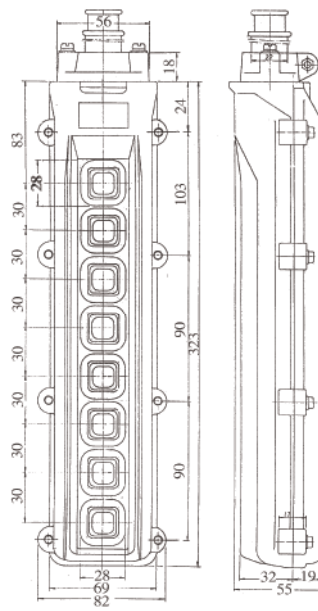
HS83



HS84



HS83



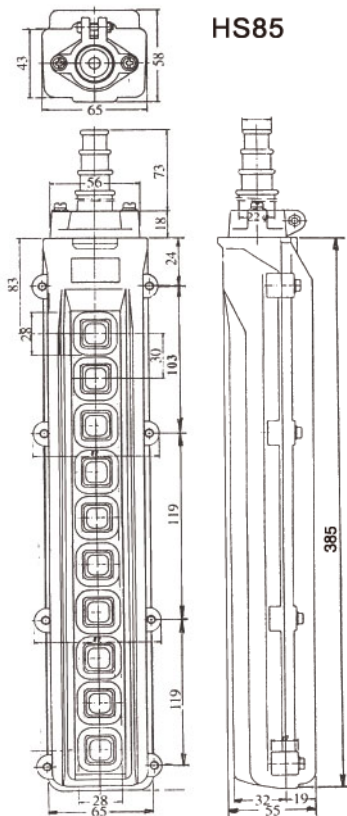
HS84



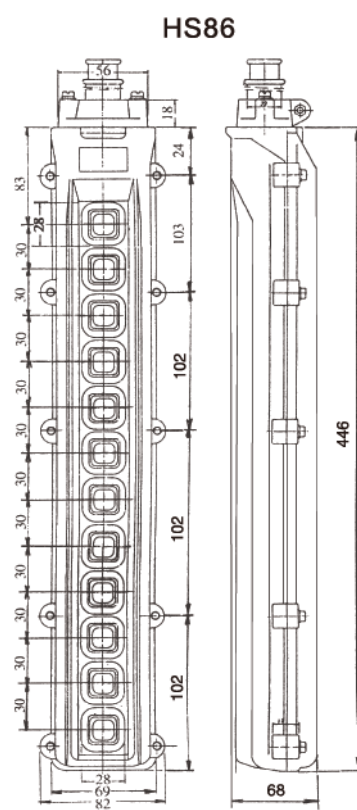
HS85



HS86



HS85



HS86

HOIST WATERPROOF PUSH BUTTON PENDANT SWITCH



Item No.	
HS803-ES	Emergency stop switch, (Reset) 2 Single Speed UP, Down (↓ · ↑)
HS803-2S	Emergency stop switch, (Reset) 2 Double Speed (↓↓ · ↑↑)
HS805-ES	Emergency stop switch, (Reset) 4 Single Speed UP, Down (↓ · ↑ ← · →)
HS805-2S	Emergency stop switch, (Reset) 4 Double Speed (↓↓ · ↑↑ ⇐ · ⇒)



HS821	Emergency stop switch, (Reset) Illuminated push off -push on switch 2 Single speed UP, Down (↓ · ↑) Deep back
HS822	Emergency stop switch, (Reset) Illuminated push off -push on switch 2 Double speed UP, Down (↓↓ · ↑↑) Deep back



HS831	Emergency stop switch, (Reset) Selector switch 2 position, 1 - 2 4 Single speed
HS832	Emergency stop switch, (Reset) Selector switch 2 position, 1 - 2 4 Double speed
HS833	Emergency stop switch, (Reset) Illuminated push off -push on switch 4 Single speed Deep back
HS834	Emergency stop switch, (Reset) Illuminated push off -push on switch 4 Double speed Deep back



HSD-84S	Single speed ON-OFF, UP DOWN, LEFT RIGHT EAST WEST, (Others Available)
HSD-84D	Two speed ON-OFF, UP DOWN, LEFT RIGHT EAST WEST, (Others Available)

HOIST WATER PROOF PUSH BUTTON PENDANT SWITCH



HS841
HS842

HS843
HS844



Item No.	
HS841	Emergency stop switch, (Reset) Selector switch 2 position, 1 - 2 6 Single speed
HS842	Emergency stop switch, (Reset) Selector switch 2 position, 1 - 2 6 Double speed
HS843	Emergency stop switch, (Reset) Pilot lamp 6 Single speed
HS844	Emergency stop switch, (Reset) Pilot lamp 6 Double speed

HS861
HS862

HS851
HS852

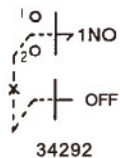
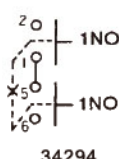
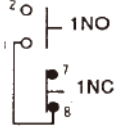
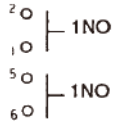
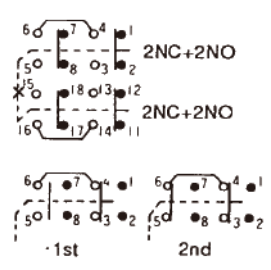
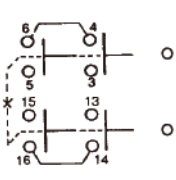
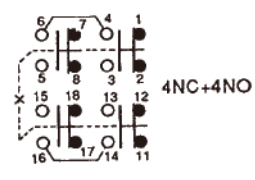
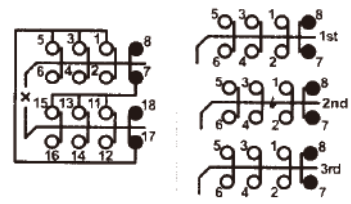


HS851	Emergency stop switch, (Reset) Pilot lamp 6 Single speed 2 Double speed
HS852	Emergency stop switch, (Reset) Pilot lamp 4 Single speed 4 Double speed
HS861	Emergency stop switch, (Reset) Selector switch 2 position, 1 - 2 6 Single speed 4 Double speed
HS862	Emergency stop switch, (Reset) Selector switch 2 position, 1 - 2 4 Single speed 6 Double speed

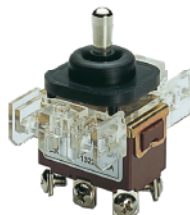
HOIST WATERPROOF PUSH BUTTON PENDANT SWITCH



SWITCHES

Type	Appearance	Contact arrangement	Operation
N80B		N80B 10  N80B 11 	MAINTAINED ON-OFF SUPPLIED WITH RED & GREEN BOOT.
N80C		N80C 20  N80C 22 	MOMRNTARY SINGLE-SPEED WITH MECHANICAL INTERLOCKING
N80J		N80J 11  N80J 20  N80J 22 	MOMENTARY SINGLE SPEED OR MOMENTARY ON-OFF NON-INTERLOCKED SUPPLIED WITH RED & GREEN BOOT.
N80D		N80D 44  N80D 40 	MOMENTARY 2-SPEED WITH MECHANICAL INTERLOCKING
N80T		N80T 44 	MOMENTARY DUAL POLE MECHANICAL INTERLOCKING
			MOMENTARY 3-SPEED WITH MECHANICAL & ELECTRICAL INTERLOCKING

SWITCHES

Emergency stop(E-stop)  <table> <tr> <th>Part NO.</th><th>Contact</th></tr> <tr> <td>37122</td><td>1O (1 N/O)</td></tr> <tr> <td>34313</td><td>1C (1 N/C)</td></tr> <tr> <td>37123</td><td>1O/C(N/O+N/C)</td></tr> <tr> <td>37125</td><td>2/O (2 N/O)</td></tr> <tr> <td>37124</td><td>2/C (2 N/C)</td></tr> </table>		Part NO.	Contact	37122	1O (1 N/O)	34313	1C (1 N/C)	37123	1O/C(N/O+N/C)	37125	2/O (2 N/O)	37124	2/C (2 N/C)	Selector switch 3 position  <table> <tr> <th>Part NO.</th><th>Contact</th></tr> <tr> <td>37110</td><td>1O/C(N/O+N/C)</td></tr> <tr> <td>34320</td><td>2/O (2 N/O)</td></tr> <tr> <td>34319</td><td>2/C (2 N/C)</td></tr> </table>		Part NO.	Contact	37110	1O/C(N/O+N/C)	34320	2/O (2 N/O)	34319	2/C (2 N/C)				
Part NO.	Contact																										
37122	1O (1 N/O)																										
34313	1C (1 N/C)																										
37123	1O/C(N/O+N/C)																										
37125	2/O (2 N/O)																										
37124	2/C (2 N/C)																										
Part NO.	Contact																										
37110	1O/C(N/O+N/C)																										
34320	2/O (2 N/O)																										
34319	2/C (2 N/C)																										
Selector switch 2 position  <table> <tr> <th>Part NO.</th><th>Contact</th></tr> <tr> <td>37108</td><td>1O (1 N/O)</td></tr> <tr> <td>37107</td><td>1C (1 N/C)</td></tr> <tr> <td>34317</td><td>1O/C(N/O+N/C)</td></tr> <tr> <td>34318</td><td>2/O (2 N/O)</td></tr> <tr> <td>37109</td><td>2/C (2 N/C)</td></tr> </table>		Part NO.	Contact	37108	1O (1 N/O)	37107	1C (1 N/C)	34317	1O/C(N/O+N/C)	34318	2/O (2 N/O)	37109	2/C (2 N/C)	Contact  <table> <tr> <th>Part NO.</th><th>Contact</th></tr> <tr> <td></td><td>1O (1 N/O)</td></tr> <tr> <td></td><td>1C (1 N/C)</td></tr> <tr> <td></td><td>1O/C(N/O+N/C)</td></tr> <tr> <td></td><td>2/O (2 N/O)</td></tr> <tr> <td></td><td>2/C (2 N/C)</td></tr> </table>		Part NO.	Contact		1O (1 N/O)		1C (1 N/C)		1O/C(N/O+N/C)		2/O (2 N/O)		2/C (2 N/C)
Part NO.	Contact																										
37108	1O (1 N/O)																										
37107	1C (1 N/C)																										
34317	1O/C(N/O+N/C)																										
34318	2/O (2 N/O)																										
37109	2/C (2 N/C)																										
Part NO.	Contact																										
	1O (1 N/O)																										
	1C (1 N/C)																										
	1O/C(N/O+N/C)																										
	2/O (2 N/O)																										
	2/C (2 N/C)																										
Alternating switch 10A 125VAC. 6A250VAC  <table> <tr> <th>Part NO.</th><th>Contact</th></tr> <tr> <td>34299</td><td>1O (1 N/O)</td></tr> <tr> <td>34300</td><td>1O/C(N/O+N/C)</td></tr> <tr> <td>37126</td><td>2/O (2 N/O)</td></tr> </table>		Part NO.	Contact	34299	1O (1 N/O)	34300	1O/C(N/O+N/C)	37126	2/O (2 N/O)	Toqgle switch 10A 250VAC  <table> <tr> <th>Part NO.</th><th>Contact</th></tr> <tr> <td>1021</td><td>2 Pole ON - OFF</td></tr> <tr> <td>1121</td><td>3 Pole ON - ON</td></tr> <tr> <td>1122</td><td>3 Pole ON - OFF - ON</td></tr> <tr> <td>1221</td><td>4 Pole ON - OFF</td></tr> <tr> <td>1321</td><td>6 Pole ON - ON</td></tr> <tr> <td>1322</td><td>6 Pole ON - OFF - ON</td></tr> </table>		Part NO.	Contact	1021	2 Pole ON - OFF	1121	3 Pole ON - ON	1122	3 Pole ON - OFF - ON	1221	4 Pole ON - OFF	1321	6 Pole ON - ON	1322	6 Pole ON - OFF - ON		
Part NO.	Contact																										
34299	1O (1 N/O)																										
34300	1O/C(N/O+N/C)																										
37126	2/O (2 N/O)																										
Part NO.	Contact																										
1021	2 Pole ON - OFF																										
1121	3 Pole ON - ON																										
1122	3 Pole ON - OFF - ON																										
1221	4 Pole ON - OFF																										
1321	6 Pole ON - ON																										
1322	6 Pole ON - OFF - ON																										
 Emergency stop 6A 120VAC 3A 240VAC <table> <tr> <th>Part NO.</th><th>Contact</th></tr> <tr> <td>LMS-22</td><td>1/C (N/C)</td></tr> <tr> <td>LMS-22</td><td>1O/C (N/O+N/C)</td></tr> </table>	Part NO.	Contact	LMS-22	1/C (N/C)	LMS-22	1O/C (N/O+N/C)	 Emergency stop 6A 120VAC 3A 240VAC <table> <tr> <th>Part NO.</th><th>Contact</th></tr> <tr> <td>LEB-22</td><td>1/C (N/C)</td></tr> <tr> <td>LEB-22</td><td>1O/C (N/O+N/C)</td></tr> </table>	Part NO.	Contact	LEB-22	1/C (N/C)	LEB-22	1O/C (N/O+N/C)	 Emergency stop 6A 120VAC 3A 240VAC <table> <tr> <th>Part NO.</th><th>Contact</th></tr> <tr> <td>LMB22-1/C</td><td>(N/C)</td></tr> <tr> <td>LMB22-1O/C</td><td>(N/O+N/C)</td></tr> </table>	Part NO.	Contact	LMB22-1/C	(N/C)	LMB22-1O/C	(N/O+N/C)							
Part NO.	Contact																										
LMS-22	1/C (N/C)																										
LMS-22	1O/C (N/O+N/C)																										
Part NO.	Contact																										
LEB-22	1/C (N/C)																										
LEB-22	1O/C (N/O+N/C)																										
Part NO.	Contact																										
LMB22-1/C	(N/C)																										
LMB22-1O/C	(N/O+N/C)																										
Key switch 6A 120VAC. 3A240VAC  <table> <tr> <th>Part NO.</th><th>Contact</th></tr> <tr> <td>KS22-1O/C</td><td>(N/O+N/C)</td></tr> <tr> <td>2 position</td><td></td></tr> <tr> <td>KS22-2/O</td><td>(2 N/O)</td></tr> </table>		Part NO.	Contact	KS22-1O/C	(N/O+N/C)	2 position		KS22-2/O	(2 N/O)	Selector switch 6A 120VAC. 3A240VAC  <table> <tr> <th>Part NO.</th><th>Contact</th></tr> <tr> <td>CS22-1/O</td><td>(N/O)</td></tr> <tr> <td>CS22-1O/C</td><td>(N/O+N/C)</td></tr> <tr> <td>CS22-2/O</td><td>(2 N/O)</td></tr> </table>		Part NO.	Contact	CS22-1/O	(N/O)	CS22-1O/C	(N/O+N/C)	CS22-2/O	(2 N/O)								
Part NO.	Contact																										
KS22-1O/C	(N/O+N/C)																										
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Part NO.	Contact																										
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CS22-1O/C	(N/O+N/C)																										
CS22-2/O	(2 N/O)																										

HOIST WATER PROOF PUSH BUTTON PENDANT SWITCH

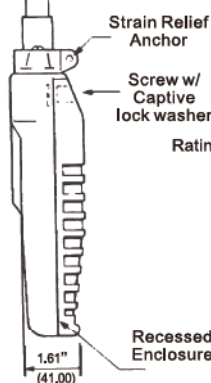
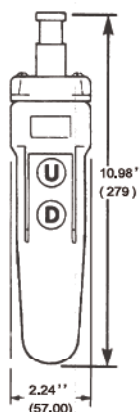


SWITCHES

HS-61P Pistol grip Pendant



- Ergonomic comfort design
- Single speed 5A, 125V contact block
- Made of high impact ABS resin
- Highly visible safety yellow enclosure
- Waterproof NEMA 4 rating -indoor use only
- Internal and external strain relief
- Variable dia cable bushing inlet with clamp
- Standard UP/Down (Others Available)



Rating: 120 V AC 5A
220 V AC 5A
24 V AC 2A
120 VDC 0.4A



Rating: 120VAC. 220VAC 5A
24 VDC 2A
120VDC 0.4A

Part No. HS 5M-2P UP, DOWN (↑ · ↓)
2 magnet on the back of the switch housing
15ft. (4.5 M.) or 20ft. (6M) long SJT 18AWG
3core cable.

Part No. HS 5M-3P UP, DOWN (↑ · ↓)
2 magnet on the back of the switch housing
15ft. (4.5 M.) or 20ft. (6M) long SJT 18AWG
4core cable.

Push button switch for horn mounting hole 12 φ



Part NO.	Contact
34312	1/O (N/O) 125V 3A 250V 1.5A

Single button



Part NO.	Contact
34306	1 O (1 N/O)
34305	1 C (1 N/C)
34307	1 O/C (N/O+N/C)
37199	2/O (2 N/O)
37114	2/C (2 N/C)
39868	2 O/C (2N/O+2N/C)

Variable position resistor



Part NO.	OHM
34314B	1K
34314D	2K
34314	5K
34314C	10K

Pilot light housing (one button space)



Part NO.	Contact
35181	12V DC
36042	24V DC
34303	110V AC
37581	220V AC

Pilot light mounting hole 10mm φ



Part NO.	Contact
36088	12V DC
36081	24V DC
34316	110V AC
36083	220V AC

Pilot light mounting hole 8mm φ



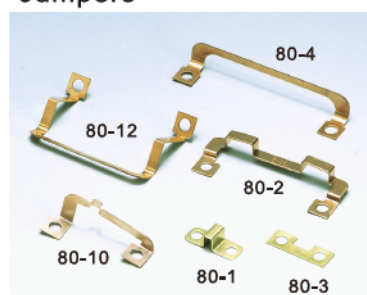
Part NO.	Contact
36087	12V DC
34315	24V DC
35293	110V AC
36082	220V AC

HOIST WATER PROOF PUSH BUTTON PENDANT SWITCH



PART NO.	CABLE GLAND SIZE	STYLE	CABLE BUSHING SIZE	BUSHING COLLARS
34411	7.5mm DIA. ~ 10.5mm DIA.	C1	7.5mm DIA. ~ 13.5mm DIA.	CABLE O.D. 7.5 ~ 19.5 mm
34412	10.3mm DIA. ~ 13.5mm DIA.			
34413	13.3mm DIA. ~ 16.5mm DIA.	C2	13.3mm DIA. ~ 19.5mm DIA.	CABLE O.D. 19.3 ~ 28.5 mm
34414	16.3mm DIA. ~ 19.5mm DIA.			
34415	19.3mm DIA. ~ 22.5mm DIA.	C3	19.3mm DIA. ~ 25.5mm DIA.	CABLE O.D. 19.3 ~ 28.5 mm
34416	22.3mm DIA. ~ 25.5mm DIA.			
34417	25.3mm DIA. ~ 28.5mm DIA.	C4	25.3mm DIA. ~ 28.5mm DIA.	
39825	13.3mm DIA. ~ 16.5mm DIA.	C23	13.3mm DIA. ~ 25.5mm DIA.	CABLE O.D. 13.3 ~ 25.5 mm
39826	16.3mm DIA. ~ 19.5mm DIA.			
303C18		C18	14 mm DIA. ~ 18.4 mm DIA.	

Jumpers



PART NO.	STYLE	
34759	80-1	Internal use on 34294 & 34295 to connect 1 and 5
34760	80-2	Used to connect common between 1-speed, 2-speed, 3-speed on-off switches
34761	80-3	Internal use on all 2-speed switches to connect terminals 6 to 4 and 14 to 16
35538	80-4	External use on 3-speed sw. to connect terminal 18 of two adjacent 3-speed sw. Also use to connect terminal 8 of two adjacent 3-speed sw.
35540	80-10	
34992	80-12	Internal use on 2-speed sw. to connect 5 to 15

Blank plate
Part No. 34304
Blind rubber gasket with
metal plate



Legend sheet

Button legend

UP	DOWN	ON	OFF
IN	OUT	START	STOP
HIGH	LOW	OPEN	CLOSE
RAISE	LOWER	FAST	SLOW
RIGHT	LEFT	NORTH	SOUTH
FWD	REV	EAST	WEST
FWD	REV	↑	↑

34326

Selector sw legend sheet

OFF	ON	MANUAL	OFF	AUTO
JOG	RUN	AUTO	OFF	MANUAL
RUN	JOG	JOG	OFF	RUN
LEFT	RIGHT	RUN	OFF	JOG
RIGHT	LEFT	JOG	OFF	AUTO
MANUAL	AUTO	AUTO	OFF	JOG
AUTO	MANUAL	RIGHT	OFF	LEFT
OPEN	CLOSE	LEFT	OFF	RIGHT
CLOSE	OPEN	OPEN	OFF	CLOSE
RETARD	ADVANCE	CLOSE	OFF	OPEN

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