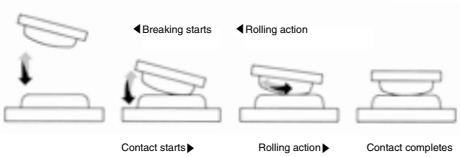
■Rolling action of contact mechanism improves contact stability

In the contact mechanism, the movable contact makes contact with the stationary contact at one point and then gradually increases the contact area while rolling on it. This rolling action minimizes the part exposed to the arc that is generated at the first contact or breaking, thereby maintaining much higher contact stability than the former product.



SPECIFICATIONS (RATINGS, PERFORMANCE)

Specification \ Type	B TYPE	BH TYPE
Rated insulation voltage (Ui)	600V	
Rated current-carrying capacity (Ith)	20A	
Max. wire size	5.5mm²	
Screw size	M4×9	
Withstand voltage	2,500V AC / 1 min.	
Lightning impulse	±7kV (1.2 / 50μs)	
Contact resistance	50mΩ or less	
Mechanical life	5,000,000 operations or more, Class 1	
Electrical life	500,000 operations or more, Class 1	
Shock resistance	500m/s² or more (6 directions)	
Vibration resistance	Range of vibration : 10 to 150Hz, Acceleration : 20m/s², Time : 1 hour (3 directions)	
Min. power requirements	5V AC 500mA, 5V DC 100mA (operating environment must be good)	
Operating temperature	–20 to 60°C	
Storing temperature	–40 to 70°C	
Altitude	2,000 m or less	

■Breaking capacity [electrical life of 500,000 operations (class 1)]

AC			DC				
Rated voltage (V)	Rated operating current (resistance load) (A)	Rated operating current (inductive load) (A)	Rated voltage (V)	Rated operating current (resistance load) (A)	Rated operating current (inductive load) (A)	2 contacts used in series Rated operating current (resistance load) (A)	2 contacts used in series Rated operating current (inductive load) (A)
110	20	15	24	15	10	20	20
220	15	10	48	10	6	18	15
440	4	3	110	3	1.5	4.5	4
——	——	——	220	1.2	0.8	2	1.5

∗ Inductive load: For AC: Power factor 0.6 to 0.7 (Class: AC11)
For DC: Time constant 40±6 ms (Class: DC12)

CAM-OPERATED SWITCH

B TYPE, BH TYPE

STANDARD SPECIFICATION SWITCHES

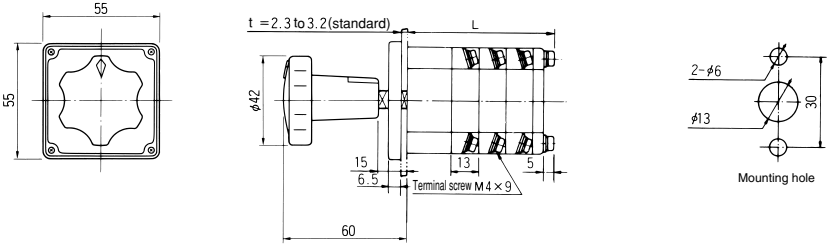
OUTLINES

Manual return and automatic return type

B-S,B,A,□ (H,K,V,T,F,E,G,J,O) (305,306,307,308)

∗ The BY type has the same dimensions and shape. (Unit color: Blue)

(B type)



No. of units	1	2	3	4	5	6	7	8	9	10
L(mm)	43	56	69	82	95	108	121	134	147	160

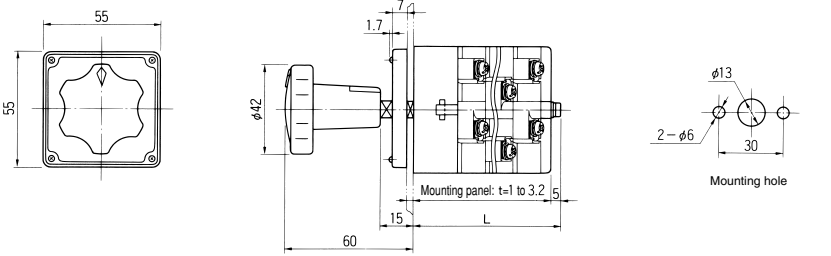
∗ Max unit No. of the Automatic return type is 6 (12 contacts).

Manual return and automatic return type

BH-S,B,A,□ (H,K,V,T,F,E,G,J,O) (305,306,307,308)

∗ The BHY type has the same dimensions and shape. (Unit color: Blue)

(BH type)



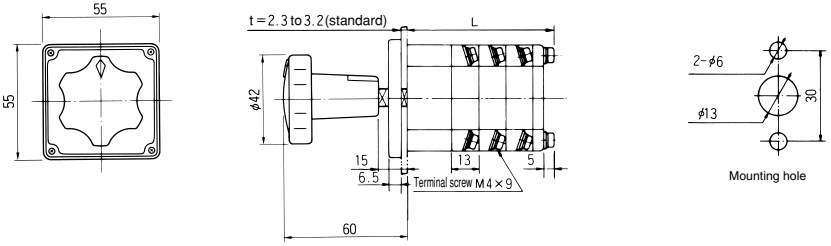
No. of units	1	2	3	4	5	6	7	8	9	10
L(mm)	43	56	69	82	95	108	121	134	147	160

∗ Max unit No. of the Automatic return type is 6 (12 contacts).

Combination of manual and automatic return type

B-TR,TL,FR,FL,FS

(B type)



No. of units	1	2	3	4	5	6
L(mm)	43	56	69	82	95	108

●CONTROL SWITCH

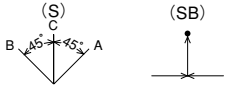
CAM-OPERATED SWITCH

B TYPE, BH TYPE

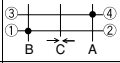
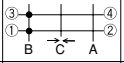
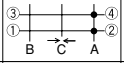
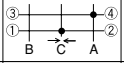
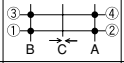
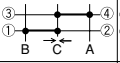
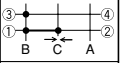
CONTACT ARRANGEMENT DIAGRAM INDEX

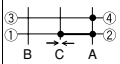
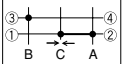
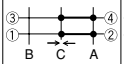
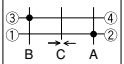
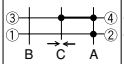
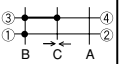
CONTACT ARRANGEMENT DIAGRAM

■Automatic return (S, SB)



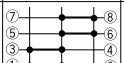
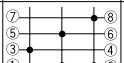
●2 contacts (1 unit)

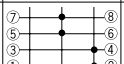
Type (automatic return)	S1001	S1002	S1003	S1004	S1005	S1006	S1007
Detail	S1-1B1A	S1-2B	S1-2A	S1-1C1A	S1-2BA	S1-1M1N	S1-1M1B
Contact arrangement							
Type (pulling)	SB1001	SB1002	SB1003	SB1004	SB1005	SB1006	SB1007

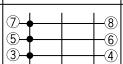
Type (automatic return)	S1008	S1009	S1010	S1101	S1102	S1103
Detail	S1-1N1A	S1-1N1B	S1-2N	S1-1A1B	S1-1A1N	S1-1B1M
Contact arrangement						
Type (pulling)	SB1008	SB1009	SB1010	SB1101	SB1102	SB1103

●4 contacts (2 units)

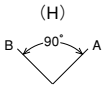
Type (automatic return)	S2001	S2002	S2003	S2004	S2005	S2006	S2007
Detail	S2-2B2A	S2-4A	S2-1B2C1A	S2-1B1C2A	S2-1M1N1B1A	S2-1M1N2A	S2-2N1B1A
Contact arrangement							
Type (pulling)	SB2001	SB2002	SB2003	SB2004	SB2005	SB2006	SB2007

Type (automatic return)	S2008	S2009	S2010	S2011	S2012	S2101	—
Detail	S2-2N2A	S2-2M2N	S2-1N1B1C1A	S2-1N1B2A	S2-1N3A	S2-2A2B	SB2-1N1B2A
Contact arrangement							
Type (pulling)	SB2008	SB2009	SB2010	SB2011	SB2012	—	SB2101

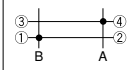
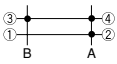
Type (automatic return)	S2102	—	S2103	S2104	S2105	S2106	S2107
Detail	S2-2A2N	SB2-2(1A1B)	S2-2A2C	S2-2(1A1B)	S2-1A1N1B1A	S2-1A1B1N1M	S2-2(1A1N)
Contact arrangement							
Type (pulling)	—	SB2102	SB2103	SB2104	SB2105	SB2106	SB2107

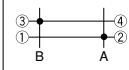
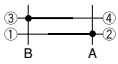
Type (automatic return)	S2108	S2109	S2110	S2111	S2120	—
Detail	S2-1A1B1C1BA	S2-1A1B1A1N	S2-1A3B	SB2-2(1B1A)	S2-1B1A1N	SBL2-2L1A1B
Contact arrangement						
Type (pulling)	SB2108	SB2109	SB2110	SB2111	SB2120	SBL2212

■90° 2-position changeover (H)

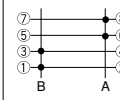
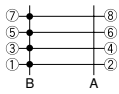
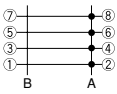
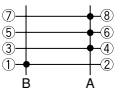
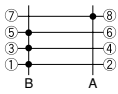
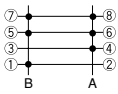


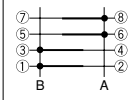
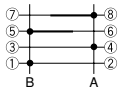
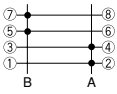
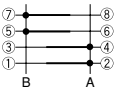
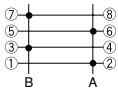
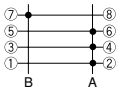
●2 contacts (1 unit)

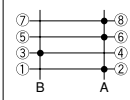
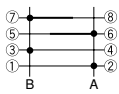
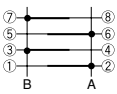
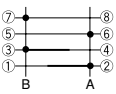
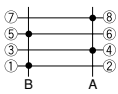
Type	H1001	H1002	H1003	H1004	H1005	H1006
Detail	H1-1B1A	H1-2B	H1-2A	H1-1BL1AL	H1-1B1BA	H1-1A1BA
Contact arrangement						

Type	H1101	H1102
Detail	H1-1A1B	H1-1AL1BL
Contact arrangement		

●4 contacts (2 units)

Type	H2001	H2002	H2003	H2004	H2005	H2006
Detail	H2-2B2A	H2-4B	H2-4A	H2-1B3A	H2-3B1A	H2-1B1A2BA
Contact arrangement						

Type	H2008	H2009	H2101	H2102	H2103	H2104
Detail	H2-2BL2AL	H2-1B1A1BL1AL	H2-2A2B	H2-2AL2BL	H2-2 (1A1B)	H2-3A1B
Contact arrangement						

Type	H2105	H2106	H2108	H2109	H2110
Detail	H2-1A1B2A	H2-1A1B1AL1BL	H2-2 (1AL1BL)	H2-1AL1BL1A1B	H2-2 (1B1A)
Contact arrangement					

Type	H2111	H2112	H2113
Detail	H2-1A1B2BA	H2-2 (1BL1AL)	H2-1B1A2B
Contact arrangement