ø30 Switches and Pilot Lights

TWN TWND Series



Heavy duty switches & pilot lights offer both variety and reliability.



- Pilot light is not approved by EN standards.
- See website for details on approvals and standards.









Model Features Page

Plastic TWN Series The all-time bestseller since first developed. Suitable for versatile applications.

B-304

Diecast Zinc TWND Series Heavy-duty switches for tough industrial usage.

ø30 TWN/TWND Selection Guide

Function	Pushbutton							
Catamami	y Flush Extended Momentary/Maintained Momentary/Maintained		Ext	ended	Extended wi	th Half Shroud		
Category			y/Maintained	Momentary	y/Maintained			
Shape		6		Diecast Zinc		Diecast Zinc		
Model	ABN1 AON1	ABD1 AOD1	ABN2 AON2	ABD2 ABN2G AOD2 AON2G		ABGD2 AOGD2		
Page	B-310	B-326	B-310 B-326		B-310 B-326			

Function		Pushbutton								
Catamani	Extended wit	h Full Shroud	Mush	room	Mushroom with Full Shroud					
Category	Momentary/Maintained		Momentary	/Maintained	Momentary	/Maintained				
	_	Diecast Zinc	Diecast Zinc			Diecast Zinc				
Shape										
Model	ABN2F	ABFD2	ABN3	ABD3	ABN3G	ABGD3				
iviouei	A0N2F	AOFD2	AON3	AON3 AOD3		AOGD3				
Page	B-310	B-326	B-311	B-327	B-311	B-327				

Function	Pushbutton							
Cotogony	Jumbo N	Nushroom	Jumbo Mushroom	with Shallow Shroud	Jumbo Mushroom	with Deep Shroud		
Category	Momentary		Momentary		Mom	entary		
	Diecast Zinc Diecast Zinc			Diecast Zinc		Diecast Zinc		
Shape								
Model	ABN4	ABD4	ABN4G	ABGD4	ABN4F	ABFD4		
Page	B-311	B-327	B-311	B-327	B-311	B-327		

Function	Pushbutton							
Category	Mushroom Pushlock Turn Reset (*1) Mushroom Push Turn Loc				Mushr	room Pull		
Shape		Diecast Zinc	Mushroom Push Turn Lock Mushroon			Diecast Zinc		
Model	AVN3	AVD3	AJN3	AJD3	AZN3	AZD3		
Page	B-312	B-328	B-312	B-328	B-312	B-328		

Function		Pushbutton							
Category	Mushroom	Push-Pull	Pin Lock						
Shape	_	Diecast Zinc		Diecast Zinc					
Model	— AYD3		_	ABD8P					
Page	_	— B-328		B-327					

 $^{^{\}star}$ 1) Cannot be used as emergency stop switch based on ISO 13850 and IEC 60947-5-5.

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Function		LED Illuminated Pushbutton							
Catagory	Exte	Extended		Extended with Half Shroud		h Full Shroud			
Category	Momentary/Maintained		Momentary	/Maintained	Momentary	/Maintained			
Shape		Diecast Zinc		Diecast Zinc —		Diecast Zinc			
Model	ALN2 AOLN2	ALD2 AOLD2	ALGN2 AOLGN2	_	ALFN2 AOLFN2	ALFD2 AOLFD2			
Page	B-313	B-329	B-313		B-313	B-329			

Function	LED Illuminated Pushbutton							
Category	Mush	Mushroom		ock Turn Reset (*1)	Mushroom P	ush Turn Lock		
outogory -	Momentary	/Maintained	Widom com r dom		Macinoomi	don ram Edok		
Shape		Diecast Zinc		Diecast Zinc The state of the		Diecast Zinc —		
Model	ALN3 AOLN3	ALD3 AOLD3	AVLN3	AVLD3	AJLN3	_		
Page	B-313	B-330	B-314	B-330	B-313			

Function		Selector Switches								
Category	Kr	ob		ver	Key					
Suisgory	14	Diecast Zinc		Diecast Zinc	Diecast Zinc					
Shape										
Model	ASN	ASN ASD		ASN□L ASD□L		ASD□K				
Page	B-316	B-331	B-317	B-332	B-318	B-333				

Function	Selector Switch	LED Illuminated Selector Switch		Selector Pushbutton		
Category	Key	LED Illuminated Knob		Ring O _l	perator	
Shape			Diecast Zinc		Diecast Zinc	
Model	ASN□K-N024401	ASLN	ASLD	ASBN2	ASBD2	
Page	B-319	B-320	B-334	B-323	B-335	

Function	LED Illuminated Pilot Light							
Category	D	ome	Square Extended (IP40)	Rectangular (Marking) (IP40)				
Shape		Diecast Zinc						
Model	APN1	APD1	UPQN3B	UPQN4				
Page	B-324	B-336	B-324	B-324				

^{*1)} Cannot be used as emergency stop switch based on ISO 13850 and IEC 60947-5-5.



ø30 TWN/TWND Ratings/Specifications

Heavy duty switches & pilot lights offer both variety and reliability. Endures harsh environments.

- Equipped with HW-U contact blocks featuring finger-safe (IP20) structure and spring-up terminals.
- •High-voltage type LED bulbs can now be mounted, and the rated operating voltage of the direct type can be up to 240V.

ø30 TWN Series (plastic)



ø30 TWND Series (Diecast Zinc)



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Ratings and Specifications

Contact ratings

Pushbuttons	Rated insulation voltage	600V
Illuminated Pushbuttons	Rated continuous current	10A
Selector Switches Illuminated Selector Switches Selector Pushbuttons	Contact ratings by utilization category JIS C8201-5-1 IEC 60947-5-1	AC-15 (A600) DC-13

Contact ratings by utilization category

HW-U10 (NO contact), HW-U01 (NC contact)

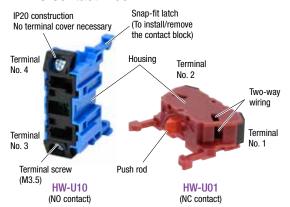
Operating Voltage AC AC-12 Control of resistive loads and solid state loads Occupation 50/60 Hz AC 15 Control of electromorphic loads (5, 72 W)		24V	48V	50V	110V	220V	440V	
	AC	AC-12 Control of resistive loads and solid state loads	10A	_	10A	10A	6A	2A
Operating	50/60 Hz	AC-15 Control of electromagnetic loads (> 72 VA)	10A	_	7A	5A	3A	1A
Current	DC	DC-12 Control of resistive loads and solid state loads	10A	5A	_	2.2A	1.1A	_
	DC	DC-13 Control of electromagnets	5A	2A	_	1.1A	0.6A	_

HW-U10R (EM contact/NO contact), HW-U01R (LB contact/NC contact)

Operating Voltage	e	24V	48V	50V	110V	220V	440V	
	AC	AC-12 Control of resistive loads and solid state loads	5A	-	5A	5A	3A	1A
Operating	50/60 Hz	AC-15 Control of electromagnetic loads (> 72 VA)		_	3.5A	2.5A	1.5A	0.5A
Current	20	DC-12 Control of resistive loads and solid state loads	5A	2.5A	-	1.1A	0.55A	_
	DC	DC-13 Control of electromagnets	2.5A	1A	_	0.55A	0.3A	_

- The operating current represents the classification by making and breaking currents (IEC 60947-5-1).
- Silver contacts
- . Minimum applicable load: 3V AC/DC, 5 mA (applicable range may vary with operating conditions and load types)
- For mono-lever switches and cam switches, see the brochures of each product.

HW-U Contact Block



Part No.	HW-U10	HW-U01	HW-U10R	HW-U01R			
Contact	_/_	7	_/_	7			
Contact	1NO	1NC	EM (NO) (early make)	LB (NC) (late break)			
Terminal No.	3-4	1-2	3-4	1-2			
Housing color	Blue	Reddish purple	Blue	Reddish purple			
Push Rod color	Green	Red	Black	White			
Weight	Approx. 11g						

- Up to 4 contacts in two decks can be mounted onto each operator. (AZN, AZD, AYD: Up to 2 contact blocks in one deck)
- Cannot be used on operators in dark gray or light gray color.
- Gold contact available (gold-plated silver)

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LED Illuminated Part Specifications

Illuminated pushbutton, Illuminated selector switch

Pated Valtage	Operating Vo	ltago	LED lamp		
Rated Voltage	Operating vo	niage	Lamp Base	Part No.	
6V AC/DC	6V AC/DC			LSRD-6	
12V AC/DC	12V AC/DC			LSRD-1	
24V AC/DC	24V AC/DC	±10%	BA9S/13	LSRD-2	
100/120V AC/DC	100/120V AC/DC		DA95/13	LSRD-H2	
200/220V AC	200/220V AC			LSRD-M2	
230/240V AC	230/240V AC	207 to 250V		LSRD-M4	

Pilot light

Dotad Voltage	Operating Vs	ltogo	LED lamp		
Rated Voltage	Operating Vo	лауе	Lamp Base	Part No.	
6V AC/DC	6V AC/DC			LSRD-6	
12V AC/DC	12V AC/DC			LSRD-1	
24V AC/DC	24V AC/DC	±10%		LSRD-2	
100/120V AC/DC	100/120V AC/DC			LSRD-H2	
200/220V AC	200/220V AC		BA9S/13	LSRD-M2	
230/240V AC	230/240V AC	207 to 250V		LSRD-M4	
380V AC	380V AC				
400/440V AC	400/440V AC	±10%		LSRD-6	
480V AC	480V AC				

• See below for details on LED lamp ratings.

Illuminated Part Type and Shape

	Illuminated Unit	Pilot	Light
Power Unit	Full voltage adapter	Full voltage adapter (integrated)	Transformer
Rated Voltage	6V AC/DC, 12V AC/DC, 24V AC/DC, 100 to 120V AC/DC, 200 to 240V AC	6V AC/DC, 12V AC/DC, 24V AC/DC, 100 to 120V AC/DC, 200 to 240V AC	380 to 480V AC
Polarity	None	None	None
Shape/Terminal	X2 X1	X2 APN1	X1 X2

LED Lamp Ratings

LOKD											
Part No.		LSRD-6	LSRD-1	LSRD-2	LSRD-H2	LSRD-M2	LSRD-M4				
Lamp Base		BA9S/13									
Rated Volta	ge	6V AC/DC	12V AC/DC	24V AC/DC	100/120V AC/DC	200/220V AC	230/240V AC				
Voltage Rar	nge	6V AC/DC ± 10%	12V AC/DC ± 10%	24V AC/DC ± 10%	100/120V AC/DC ± 10%	200/220V AC ± 10%	207 to 250V				
Current	DC	10 mA	7 mA	7 mA	2 mA	_	_				
Draw	AC	14 mA	8 mA	8 mA	2 mA	2 mA	2 mA				
Life (refere	nce valliei	1 !! /	pprox. 50,000 hours The luminance is reduced to 50% the initial intensity when used on complete DC at 25°C.)								
Internal Circuit			X1 —	Limited current circuit Noise protection circuit Rectifier circuit Dimmer protection circuit	Example:	LSRD-2					
Weight		Approx. 2g									

• Only one color is available for LSRD so there is no need to specify the color in the part no.

Attention: Customers who are using previous models

TWN/TWND series products not listed in this catalog are not compatible with high-voltage lamps. Improper use of these products may cause serious accidents. If you are unsure, please check the part number and contact an IDEC sales representative.



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Specifications

Specifications						
Operating Temperature			Non-illuminated: -25 to +70°C (no freezing) Illuminated: -25 to +50°C (no freezing)			
Storage Temperature			-40 to +80°C (no freezing)			
Operating Humidity			30 to 85% RH (no condensation)			
Contact Resistance			50 mΩ maximum (initial value)			
Insulation Resistance			100 MΩ minimum (500V DC megger)			
Overvoltage Category			II .			
Impulse Withstand coltage			4.0kV, Illuminated Unit: 2.5kV			
Dielectric Strength			Between live and dead metal parts: 2500V AC, 1 minute (Full voltage and pilot lights: 2000V AC, 1 minute) 2000V AC, (pilot lights: 6V AC/DC, 12V, 24V)			
Vibration Resistance	Damage limits		30 Hz, amplitude 1.5 mm			
VIDIALIUII NESISLAIICE	Operation extremes		5 to 55 Hz, amplitude 0.5 mm			
Shock Resistance	Damage limits		1000 m/s ²			
	Operation extremes		100 m/s ²			
Recommended Tightening T	orque for Locking Ring		3.0 to 3.5N·m			
Terminal Style			Screw terminal			
		Momentary	5,000,000			
	Duchhutton	Maintained	500,000 (over 3 contacts: 250,000)			
	Pushbutton	Push lock turn reset	500,000			
(minimum operations)		Pull	500,000			
	Illuminated pushbutton	Momentary	2,500,000			
	illuminated pushbutton	Maintained	500,000 (over 3 contacts: 250,000)			
	Selector switch		500,000			
	Key selector switch		500,000			
	Illuminated selector switch	:h	500,000			
	Selector pushbutton		250,000			
		Momentary	500,000 Switching frequency 1800 operations/h, duty ratio 40%			
	Pushbutton	Maintained	500,000 (over 3 contacts: 250,000) Switching frequency 900 operations/h, duty ratio 40%			
		Push lock turn reset	500,000 Switching frequency 900 operations/h, duty ratio 40%			
Flootrical Life		Momentary	500,000 Switching frequency 1800 operations/h, duty ratio 40%			
Electrical Life (minimum operations) (*1)	Illuminated pushbutton	Maintained	500,000 (over 3 contacts: 250,000) Switching frequency 900 operations/h, duty ratio 40%			
	Selector switch		500,000 Switching frequency 1200 operations/h, duty ratio 40%			
	Key selector switch		500,000 Switching frequency 1200 operations/h, duty ratio 40%			
	Illuminated selector switch	h	500,000 Switching frequency 1200 operations/h, duty ratio 40%			
	Selector pushbutton		250,000 Switching frequency 900 operations/h, duty ratio 40%			
		Pushbutton	ABN122: 82g ABN322: 87g			
		Illuminated pushbutton	ALN22222DN: 106g			
	TWN series	Selector switch	ASN222N: 83g ASN2K22N: 120g			
		Illuminated selector switch	ASLN22222DN: 106g			
Weight (approx.)		Pilot light	APN122DN: 46g APN1386DN: 125g			
Weight (approx.)		Pushbutton	ABD122: 108g ABD322: 113g			
		Illuminated pushbutton	ALD22222DN: 132g			
	TWND series	Selector switch	ASD222N: 110g ASD2K22N: 147g			
		Illuminated selector switch	ASLD22222DN: 133g			
		Pilot light	APD122DN: 75g APD116DN: 152g			

^{*1)} Load condition 220V AC 3A (AC-15)

Degree of Protection

Series	Unit	Model	IEC 60529	JIS C 0920	
	Pushbutton	ABN, AON, AVN			
	Illuminated pushbutton	ALN, AOLN, AVLN			
	Selector switch	ASN, ASN□L			
TMN assiss	Key selector switch	ASN□K	IP65	Dust-proof/jet-proof	
TWN series	Illuminated selector switch	ASLN			
	Selector pushbutton	ASBN			
	Round pilot light	APN			
	Square pilot light	UPQN	IP40	_	
	Pushbutton	ABD, AOD, AVD			
	Illuminated pushbutton	ALD, AOLD, AVLD			
THAIR :	Selector switch	ASD, ASD□L			
TWND series Diecast zinc	Key selector switch	ASD□K	IP65	Dustproof/jet-proof	
DIEGAST ZIIIG	Illuminated selector switch	ASLD			
	Selector pushbutton	ASBD			
	Round pilot light	APD			

[•] Switches/pilot lights have been tested in a test room in accordance with the degree of protection standards, by installing on an enclosure to valuate the effect on the enclosure or inside the switch or pilot light.

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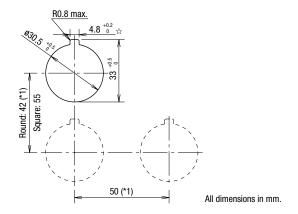
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Mounting Hole Layout/Mounting Centers



- The minimum mounting centers are applicable to pilot lights with one layer of contact blocks (one to two contact blocks). When two layers of contact blocks (four contact blocks) are mounted, determine the minimum mounting centers in consideration of convenience for wiring.
 - *1) Mushroom with shroud: 50 mm minimum
 - *1) Jumbo mushroom: 67 mm minimum
 - *1) Jumbo mushroom with shroud: 77 mm minimum

When high temperature is expected, take necessary measures such as

securing sufficient mounting centers or using a cooling fan. • The $4.8^{+0.2}_{-0}$ mm recess is for preventing rotation and is not necessary when the nameplate or anti-rotation ring is not used.

Note: For mounting hole layout of mono-lever switches and cam switches, see IDEC's website.

Notes for Ordering

Standard models

- Specify a color code in place of *
- Pilot lights, illuminated pushbuttons, and illuminated selector switches have an LED lamp installed.
- · Pilot lights are equipped with a terminal cover.
- Nameplates and accessories are ordered separately. See page B-337 to B-342.
- For terminal cover, nameplate and other accessories of mono-lever switches and cam switches, see IDEC's website.

For harsh environment such as torrid/frigid area

TWN/TWND series for harsh environment such as tropical/frigid area is also available (not approved by standards). Contact IDEC for details.

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Pilot Lights

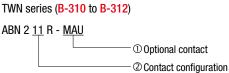
Ordering Information

Pushbutton

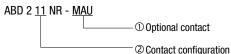
When specifying gold-plated silver contact and contact configuration:

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TWND series (B-326 to B-328)



<Codes>

① Optional contact

MAU: Gold-plated silver

2 Contact configuration

10: 1NO

01: 1NC

11: 1N01NC

20: 2N0 02: 2NC

2N02NC 22:

40: 4N0

04: 4NC

1N03NC 13:

31: 3N01NC

30: 3N0

03: 3NC

1N02NC 12:

2N01NC

Note:

- Pushbutton with one or three contact blocks contains a dummy block.
- Mushroom pull pushbuttons AZN, AZD and mushroom push-pull AYD have up to two contacts in one layer.



Ordering Information

Illuminated Pushbutton

When specifying gold-plated silver contact, contact configuration, and LED operating voltage:

2 Contact configuration

3 Operating voltage

TWN series (B-313 to B-315)

ALFN 2 QH2 13 DN R - MAU

① Optional contact
② Contact configuration
③ Operating voltage

TWND series (B-329 to B-330)

ALFD 2 QH2 13 DN R - MAU
① Optional contact

10: 1NO 01: 1NC 11: 1N01NC 2N0 20: 02: 2NC 3N01NC 31: 2N02NC 22: 1N03NC 13: 4N0 40: 04: 4NC

① Optional contact

2 Contact configuration

MAU: Gold-plated silver

③ Operating voltage
 66: 6V AC/DC
 11: 12V AC/DC
 22: 24V AC/DC
 QH2: 100/120V AC/DC
 QM: 200/220V AC
 QM4: 230/240V AC

Note:

• 2 or 4 contact types have a dummy block.

Selector Switch

When specifying gold-plated silver contact and contact configuration:

TWN series (B-316 to B-319)
ASN 2 11 N - MAU

① Optional contact
② Contact configuration

TWND series (B-331 to B-333)

ASD 2 11 N - MAU

① Optional contact
② Contact configuration

<Codes>
① Optional contact
MAU: Gold-plated silver

Key removable position code (example)

	Position	Key removable position	Key removable	Part No. Example				
	LOSITION	key removable position	position code		TWN series	TWND series		
		Removable in all positions	(blank)	ASN2K20N	ASN2K20N-N024401	ASD2K20N		
	Maintained	Removal in left only	В	ASN2K20NB	ASN2K20NB-N024401	ASD2K20NB		
-position		Removable in right only	С	ASN2K20NC	ASN2K20NC-N024401	ASD2K20NC		
	Spring return from right	Removal in left only	(blank)	ASN21K20N	ASN21K20N-N024401	ASD21K20N		
	Spring return from left	Removable in right only	(blank)	ASN22K20N	ASN22K20N-N024401	ASD22K20N		
		Removable in all positions	(blank)	ASN3K20N	ASN3K20N-N024401	ASD3K20N		
		Removable in left and center	В	ASN3K20NB	ASN3K20NB-N024401	ASD3K20NB		
		Removable in right and center	С	ASN3K20NC	ASN3K20NC-N024401	ASD3K20NC		
	Maintained	Removable in center only	D	ASN3K20ND	ASN3K20ND-N024401	ASD3K20ND		
		Removable in right and left	E	ASN3K20NE	ASN3K20NE-N024401	ASD3K20NE		
		Removal in left only	G	ASN3K20NG	ASN3K20NG-N024401	ASD3K20NG		
		Removable in right only	Н	ASN3K20NH	ASN3K20NH-N024401	ASD3K20NH		
-position		Removable in left and center	(blank)	ASN31K20N	ASN31K20N-N024401	ASD31K20N		
	Spring return from right	Removable in center only	D	ASN31K20ND	ASN31K20ND-N024401	ASD31K20ND		
		Removal in left only	G	ASN31K20NG	ASN31K20NG-N024401	ASD31K20NG		
		Removable in right and center	(blank)	ASN32K20N	ASN32K20N-N024401	ASD32K20N		
	Spring return from left	Removable in center only	D	ASN32K20ND	ASN32K20ND-N024401	ASD32K20ND		
		Removable in right only	Н	ASN32K20NH	ASN32K20NH-N024401	ASD32K20NH		
	Spring return two-way	Removable in center only	(blank)	ASN33K20N	ASN33K20N-N024401	ASD33K20N		

 \bullet The key cannot be removed in spring return positions.



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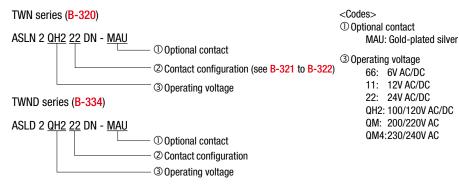
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Miniature Pilot Lights

Ordering Information

Illuminated Selector Switch

When specifying gold-plated silver contact, contact configuration, and LED operating voltage:

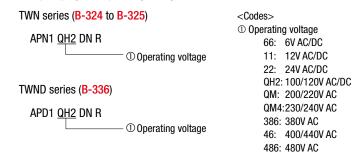


Note:

· 2 or 4 contact types have a dummy block.

Pilot Light (LED)

When specifying LED operating voltage:



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Pushbutton

Quantity: 1

		,		,		Quantity: 1	— <u>→</u>
Shape	Operation	Contact	Part No.	Button Color Code	Dimensions	(All dimensions in mm.)	ot Lights
Flush		1NO	ABN110*				ङ
ABN1 AON1		1NC	ABN101*	B G			
AUN1		1NO-1NC	ABN111*	R			
	Momentary	2N0	ABN120*	Y	Panel Thickness 0.	Panel Thickness 0.8 to 7.5	APEM
		2NC	ABN102*	S			Switches &
		2NO-2NC	ABN122*	- W	4		Pilot Lights
		1NO	A0N110*				Control Boxes
		1NC	A0N101*	B G	45.4 (1 or 2 blocks)	29.6	Emergency Stop Switches
	Maintained	1NO-1NC	A0N111*	_ Ř	65.4(3 or 4 blocks)	9 039	Enabling
	Walitalieu	2N0	A0N120*	Y			Switches
		2NC	A0N102*	S W			Safety Products
		2NO-2NC	A0N122*	VV			
Extended		1NO	ABN210*	B			Explosion Proof
ABN2 AON2		1NC	ABN201*	G			Terminal Blocks
710142	Momentary	1NO-1NC	ABN211*	R			Relays & Sockets
	Womentary	2N0	ABN220*	Y		Panel Thickness 0.8 to 7.5	
		2NC	ABN202*	S W	B B		Circuit Protectors
		2NO-2NC	ABN222*	- "	4.	835 44	Power Supplies
		1NO	A0N210*	В			
		1NC	A0N201*	G	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks)		LED Illumination
	Maintained	1NO-1NC	A0N211*	R		14 ø39	Controllers
		2N0	A0N220*	Y S			Operator
		2NC 2NO-2NC	A0N202*	-			Interfaces
Extended with Half Shroud			A0N222*				Sensors
ABN2G		1NO 1NC	ABN2G10*	В			
AON2G		1NO-1NC	ABN2G01* ABN2G11*	G G			AUTO-ID
	Momentary	2NO	ABN2G20*	_ R Y		Panel Thickness 0.8 to 3.5	
		2NC	ABN2G02*	- s	Pane		
		2NO-2NC	ABN2G22*	- w			
		1NO	AON2G10*		4 4 - 1	835	Flush Silhouette
		1NC	AON2G01*	- B			ø16
		1NO-1NC	A0N2G11*	_ G R	40.9 (1 or 2 blocks) 60.9 (3 or 4 blocks)	18.5 20.5 20.5 20.5	ann
	Maintained	2N0	AON2G20*	-	23.0 (0 0. 1 2.0010)	F 800 H	ø22
		2NC	AON2G02*	S			ø30
		2NO-2NC	AON2G22*	- w			Miniature
Extended with Full Shroud		1NO	ABN2F10*				IVIIIIIatule
ABN2F		1NC	ABN2F01*	B			Pilot Lights
AON2F		1NO-1NC	ABN2F11*	G R			
	Momentary	2N0	ABN2F20*	'Y		Panel Thickness 0.8 to 6	
		2NC	ABN2F02*	S		Panel Thickness 0.8 to 6	
		2NO-2NC	ABN2F22*	- w			TWN
		1NO	AON2F10*		4.		TWND
		1NC	AON2F01*	B G			
	Mointainad	1NO-1NC	AON2F11*	_	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks)	14 29.6 839	ARN
	Maintained	2N0	AON2F20*	Y	 	** **	CS
		2NC	AON2F02*	S			
		ONO ONO	AONOFOO.	W		i	

A0N2F22*

• Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow), S (blue), W (white)

2NO-2NC

- Round bezel and shroud (metal): Chrome-plated
- Pushbuttons with 1 or 3 contact blocks have a dummy block.
- See B-307 for other contact configurations and gold-plated silver contacts.
- See B-312 for bottom view.
- Terminal screws: M3.5
- Integrated terminal cover

Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID Flush Silhouette ø16 ø22 Miniature Pilot Lights ARN CS

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Pushbutton

Quantity: 1

	Shape	Operation	Contact	Part No.	Button Color Code	Dimensions	(All dimensions in mm.)
	ø40mm Mushroom		1NO	ABN310*	В		
	ABN3 AON3		1NC	ABN301*	G		
 /		Momentary	1NO-1NC	ABN311*	R		
2.			2N0	ABN320*	Y S	Panel Thickness (0.8 to 7.5
S			2NC 2NO-2NC	ABN302* ABN322*	W		
S			1NO	ADN322* AON310*		4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	(
y			1NC	A0N301*	В		
s g s		Maintainad	1NO-1NC	A0N311*	G R	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 22	29.6
9 S —		Maintained	2N0	A0N320*	Υ		
S			2NC	A0N302*	S W		
– f	.40 14 11 11 11 11 11		2NO-2NC	A0N322*			
- S	ø40mm Mushroom with Full Shroud ABN3G		1N0	ABN3G10*	D	Panel Thickness 0	.8 to 6.5
_			1NC 1NO-1NC	ABN3G01*	B G		
s — t		Momentary	2N0	ABN3G11* ABN3G20*	R Y	4 4 8	
S_			2NC	ABN3G02*	S W	43.9 (1 or 2 blocks)	
S —			2NO-2NC	ABN3G22*	, ,,,	63.9 (3 or 4 blocks) 23.5	
1	ø65mm Jumbo Mushroom	Momentary	1NO	ABN410*			T.
S	ABN4		1NC	ABN401*		Panel Thickness 0.8 to 7.5	
r s			1NO-1NC	ABN411*	B G	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
_ S			2N0	ABN420*	R Y		
_			2NC	ABN402*	'	45.4 (1 or 2 blocks)	
_			2NO-2NC	ABN422*		65.4 (3 or 4 blocks) 29	29.6
	ø65mm Jumbo Mushroom with Shallow Shroud		1NO	ABN4G10*		Panel Thickness 0.8 to 7.5	-
е	ABN4G		1NC	ABN4G01*			
— 6		Mamantani	1NO-1NC	ABN4G11*	B G	2 9 9	
_ 2		Momentary	2N0	ABN4G20*	R Y	4 9 9	'a
)			2NC	ABN4G02*		45.4 (1 or 2 blocks)	
<u> </u>			2NO-2NC	ABN4G22*		65.4 (3 or 4 blocks) 29	29.6
 S	ø65mm Jumbo Mushroom with Deep Shroud ABN4F		1NO	ABN4F10*		Panel Thickness 0.8 to 7.5	
-			1NC	ABN4F01*		1 4.107 11.101.1000 010 07.10	
			1NO-1NC	ABN4F11*	B G R		
٧		Momentary	2N0	ABN4F20*		\$ B B E	
)			2NC	ABN4F02*	Y		
V			2NO-2NC	ABN4F22*		45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 33	29.6
_			2110 2110	UDIALI CC.			

- ARN CS

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

- Round bezel and shroud (metal): Chrome-plated • Pushbuttons with 1 or 3 contact blocks have a dummy block.
- See B-307 for other contact configurations and gold-plated silver contacts.

• Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow), S (blue), W (white)

- See B-312 for bottom view.
- Terminal screws: M3.5
- · Integrated terminal cover

Pushbutton

Quantity: 1

Shape	Contact	Part No.	Button Color Code	Dimensions	(All dimensions in mm.)	
ø40mm Mushroom Pushlock Turn Reset	1NO	AVN310N*				
(*1) AVN3	1NC	AVN301N*		Panel Thickne	ss 0.8 to 7.5	
	1NO-1NC	AVN311N*	R			
	2N0	AVN320N*	Υ	4 B B		
	2NC	AVN302N*		45.4 (1 or 2 blocks)	29.6	
	2NO-2NC	AVN322N*		65.4 (3 or 4 blocks) 23.6		
ø40mm Mushroom Push Turn Lock AJN3	1NO	AJN310N*		Panel Thickness 0.8 to 7.5		
AJNO	1NC	AJN301N*	B G R Y			
	1NO-1NC	AJN311N*		41.4		
	2N0	AJN320N*	R			
	2NC	AJN302N*	'	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 23.6	29.6	
	2NO-2NC	AJN322N*		4- 4		
ø40mm Mushroom Pull AZN3	1NO	AZN310N*				
	1NC	AZN301N*	В	Panel Thickne	ss 0.8 to 7.5	
	1NO-1NC	AZN311N*	G R	4 4 1 1	940	
	2N0	AZN320N*	Υ		5.5 stroke 29.6	
	2NC	AZN302N*		45.4 4- 25.1	3.3 SHUKE 29.6	

- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow)
- Round bezel (metal): Chrome-plated
- Pushbuttons with 1 or 3 contact blocks have a dummy block.
- See B-307 for other contact configurations and gold-plated silver contacts.
- . Mushroom pull has up to 2 contact blocks.
- Terminal screws: M3.5
- *1) Pushlock turn reset switches cannot be used as emergency stop switches. When emergency stop switches are required, use XN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).

Pushbutton operation

Pushlock Turn Reset

Button is maintained when pressed and is reset when turned clockwise.

Push Turn Loci

Button is locked when turned clockwise in the depressed position and is reset when turned counterclockwise.

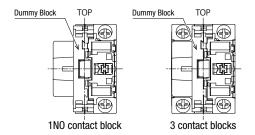
Pull

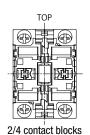
Pulling the button operates the contacts, and releasing the button return the contacts.

Pull contact operation

Contact	AZ	N3
Comaci	Normal	Pull
1NO	9,0	- - -
2NO-2NC	ის •1•	0 0 e1e
2N0	مړه مړه	00 00
2NC	•_•	●1● ●1●

Bottom View (for common to non-illuminated switches)





- For 1-contact (NC) configurations, the position of the contact block is reversed left to right.
- See B-348 for wiring.
- Integrated terminal cover



Switches &

Control Boxes

Emergency Stop Switches Enabling

Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Circuit Protectors

Power Supplies

LED Illumination

Controllers
Operator

Interfaces

Sensors

AUTO-ID

Flush Silhouette

ø16

ø22

ø30

Miniature

Pilot Lights

ΓWN

ARN

LED Illuminated Pushbutton

Pilot Lights								Quantity: 1
∄	Shape	Base	Operation	Operating Voltage	Contact	Part No.	Color Code	Dimensions Page
gh	Extended				1NO	ALN22210DN*		
S	ALN2			24V AC/DC	1NC	ALN22201DN*		
	AOLN2			24V A0/D0	1NO-1NC	ALN22211DN*		
					2NO	ALN22220DN* ALN2QH210DN*	R	
APEM					1NO 1NC	ALN2QH201DN*	G Y	
Switches &			Momentary	100/120V AC/DC	1NO-1NC	ALN2QH211DN*	Ä	
Pilot Lights					2N0	ALN2QH220DN*	S	
Control Boxes					1NO	ALN2QM10DN*	PW	
				200/220V AC	1NC	ALN2QM01DN*		
Emergency Stop Switches				200/2201/10	1NO-1NC	ALN2QM11DN*	_	
Enabling		BA9S			2N0 1N0	ALN2QM20DN* AOLN22210DN*		
Switches					1NC	A0LN22210DN*		
Safety Products				24V AC/DC	1NO-1NC	A0LN22211DN*		
					2N0	AOLN22220DN*	R	
Explosion Proof					1NO	AOLN2QH210DN*	G	
Terminal Blocks			Maintained	100/120V AC/DC	1NC	AOLN2QH201DN*	Y	
					1NO-1NC 2NO	AOLN2QH211DN* AOLN2QH220DN*	A S	
Relays & Sockets					1NO	AOLN2QM10DN*	PW	
Circuit				000/000140	1NC	AOLN2QM01DN*		
Protectors				200/220V AC	1NO-1NC	AOLN2QM11DN*		
Power Supplies					2N0	AOLN2QM20DN*		
LED III	Extended with Half Shroud				1NO	ALGN22210DN* ALGN22201DN*	_	
LED Illumination	ALGN2 AOLGN2			24V AC/DC	1NC 1NO-1NC	ALGN22211DN*	_	
Controllers	ACCUNZ				2NO	ALGN222217DN*		
Operator					1NO	ALGN2QH210DN*	R G	
Interfaces			Momentary	100/120V AC/DC	1NC	ALGN2QH201DN*	Y	
Sensors			Wiomontary	100/1201 A0/00	1NO-1NC	ALGN2QH211DN*	A S	
					2N0 1N0	ALGN2QH220DN* ALGN2QM10DN*		
AUTO-ID					1NC	ALGN2QM01DN*	\dashv	
				200/220V AC	1NO-1NC	ALGN2QM11DN*		
		BA9S			2N0	ALGN2QM20DN*		B-315
		DASS			1NO	AOLGN22210DN*		D-010
Flush Silhouette				24V AC/DC	1NC	AOLGN22201DN* AOLGN22211DN*		
					1NO-1NC 2NO	AOLGN22211DN* AOLGN22220DN*	_	
ø16					1NO	AOLGN2QH210DN*	R G	
ø22			Maintained	100/120\/ AC/DC	1NC	AOLGN2QH201DN*	Ϋ́	
			Maintained	100/120V AC/DC	1NO-1NC	AOLGN2QH211DN*	A	
ø30					2NO	AOLGN2QH220DN*	S PW	
Miniature					1NO 1NC	AOLGN2QM10DN* AOLGN2QM01DN*	_	
				200/220V AC	1NO-1NC	AOLGN2QM11DN*		
Pilot Lights					2N0	AOLGN2QM20DN*		
	Extended with Full Shroud				1NO	ALFN22210DN*		
	ALFN2			24V AC/DC	1NC	ALFN22201DN*		
	AOLFN2			211710720	1NO-1NC	ALFN22211DN* ALFN22220DN*	_	
TWN					2N0 1N0	ALFN2QH210DN*	R G	
TWND				4004400440470	1NC	ALFN2QH201DN*	Y	
TWIND			Momentary	100/120V AC/DC	1NO-1NC	ALFN2QH211DN*	A	
ARN					2N0	ALFN2QH220DN*	S PW	
	_				1NO	ALFN2QM10DN*		
CS				200/220V AC	1NC 1NO-1NC	ALFN2QM01DN* ALFN2QM11DN*	_	
		DAGO			2NO	ALFN2QM20DN*		
		BA9S			1N0	AOLFN22210DN*		
				24V AC/DC	1NC	AOLFN22201DN*		
				211710/00	1NO-1NC	AOLFN22211DN*	_	
					2N0 1N0	AOLFN22220DN* AOLFN2QH210DN*	R	
					1NC	AOLFN2QH210DN*	G Y	
			Maintained	100/120V AC/DC	1NO-1NC	AOLFN2QH211DN*	A	
					2N0	AOLFN2QH220DN*	S PW	
					1NO	AOLFN2QM10DN*	PW PW	
				200/220V AC	1NC	AOLFN2QM01DN* AOLFN2QM11DN*	_	
					1NO-1NC 2NO	AOLFN2QM11DN* AOLFN2QM20DN*		
	L		l.		2.10	:		

[•] Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)

[•] Illuminated pushbuttons have an LED lamp installed.

[•] Round bezel (metal): Chrome-plated

See B-308 for other operating voltage such as 6V AC/DC and 12V AC/DC.
 Illuminated pushbutttons with 2 or 4 contact blocks have a dummy block.

[•] See B-308 for other contact configurations and gold-plated silver contacts.

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature
Pilot Lights

ARN

LED Illuminated Pushbutton

	_						Quantity: 1
Shape	Base	Operation	Operating Voltage	Contact	Part No.	Color Code	Dimensions Page
Mushroom (ø40) ALN3				1NO	ALN32210DN*		
AOLN3			24V AC/DC	1NC	ALN32201DN*	_	
7.02.10			211710720	1NO-1NC	ALN32211DN*		
				2N0	ALN32220DN*	R	
				1NO	ALN3QH210DN*	— G	
		Momentary	100/120V AC/DC	1NC	ALN3QH201DN*	Υ	
		Womonary	100/1201/10/20	1NO-1NC	ALN3QH211DN*	– A S	
				2N0	ALN3QH220DN*	PW	
				1NO	ALN3QM10DN*		
			200/220V AC	1NC	ALN3QM01DN*		
			200/220V AG	1NO-1NC	ALN3QM11DN*		
	BA9S			2N0	ALN3QM20DN*		
	DASS			1NO	A0LN32210DN*		
			24V AC/DC	1NC	A0LN32201DN*		
			24V AG/DG	1NO-1NC	A0LN32211DN*		
				2N0	A0LN32220DN*		
				1NO	AOLN3QH210DN*	R G	
		Maintained	100/100// 10/00	1NC	AOLN3QH201DN*	Y	
		Maintained	100/120V AC/DC	1NO-1NC	AOLN3QH211DN*	A	
				2N0	AOLN3QH220DN*	S PW	
				1NO	AOLN3QM10DN*	7	
			000/000/	1NC	AOLN3QM01DN*		
			200/220V AC	1NO-1NC	AOLN3QM11DN*		
				2N0	AOLN3QM20DN*		B 045
Mushroom Pushlock Turn Reset				1NO	AVLN32210DN*		B-315
(ø40)				1NC	AVLN32201DN*		
AVLN3 (*1)			24V AC/DC	1NO-1NC	AVLN32211DN*		
				2N0	AVLN32220DN*		
				1NO	AVLN3QH210DN*		
				1NC	AVLN3QH201DN*		
	BA9S	Momentary	100/120V AC/DC	1NO-1NC	AVLN3QH211DN*	R	
				2N0	AVLN3QH220DN*		
				1NO	AVLN3QM10DN*		
				1NC	AVLN3QM01DN*		
			200/220V AC	1NO-1NC	AVLN3QM11DN*	-	
				2N0	AVLN3QM20DN*	-	
Mushroom Push Turn Lock (ø40)				1NO	AJLN32210DN*		
AJLN3				1NC	AJLN32201DN*	=	
			24V AC/DC	1NO-1NC	AJLN32211DN*	\dashv	
				2NO	AJLN32220DN*	_	
				1NO	AJLN3QH210DN*		
					+	R G	
	BA9S	Maintained	100/120V AC/DC	1NC	AJLN3QH201DN*	Y	
				1NO-1NC	AJLN3QH211DN*	A PW	
				2N0	AJLN3QH220DN*	FVV	
				1NO	AJLN3QM10DN*	\dashv	
			200/220V AC	1NC	AJLN3QM01DN*	_	
				1NO-1NC	AJLN3QM11DN*	_	
				2N0	AJLN3QM20DN*	1	

- Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)
- Illuminated pushbuttons have an LED lamp installed.
- Round bezel (metal): Chrome-plated
- See B-308 for other operating voltage such as 6V AC/DC and 12V AC/DC.
- See B-308 for other contact configurations and gold-plated silver contacts.
- See B-308 for other contact configurations and gold-plated silver contacts
 Illuminated pushbutttons with 2 or 4 contact blocks have a dummy block.

Illuminated pushbutton operation

Pushlock Turn Reset

Button is maintained when pressed and is reset when turned clockwise.

*1) Pushlock turn reset switches cannot be used as emergency stop switches. When emergency stop switches are required, use XN or HN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).

Push Turn Lock

Button is locked when turned clockwise in the depressed position and is reset when turned counterclockwise.

Stop Switches Enabling Switches Safety Products

Explosion Proof

Controllers Operator Interfaces

Sensors

AUTO-ID

Flush Silhouette

ø16

Miniature

Pilot Lights

Dimensions (Illuminated Pushbuttons)

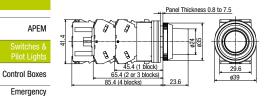
All dimensions in mm

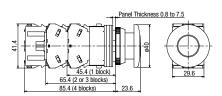
Extended, LED illuminated (momentary/maintained)

ALN2/AOLN2

Terminal screw: M3.5, Integrated terminal cover

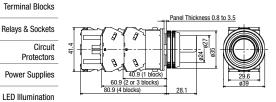
Mushroom (ø40), LED illuminated (momentary/maintained) ALN3/AOLN3 Terminal screw: M3.5, Integrated terminal cover

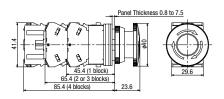




Extended with Half Shroud, LED illuminated (momentary/maintained) ALGN2/AOLGN2 Terminal screw: M3.5, Integrated terminal cover

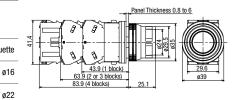
Mushroom Pushlock Turn Reset, LED illuminated AVLN3 Terminal screw: M3.5, Integrated terminal covera

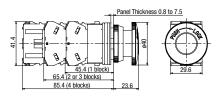




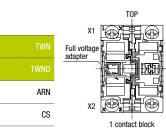
Extended with Full Shroud, LED illuminated (momentary/maintained) ALFN2/AOLFN2 Terminal screw: M3.5, Integrated terminal cover

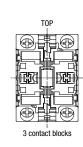
Mushroom Push Turn Lock, LED illuminated AJLN3 Terminal screw: M3.5, Integrated terminal cover

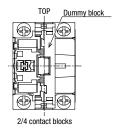




Bottom View (Common to Illuminated Switches)







• See B-348 for wiring.

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Selector Switches (Knob Operator)

Quantity: 1

Shape	Knob Opera ASN	tor					Ô					uuaniiy: 1
		Contact C	Configuratio	n		Maintained	Spring Return from Right		Spring	Retur	n from	Left
		Contact	Block	Op Po	erator sition	1 2	1 • 2	Contact	Block		rator ition	1, 2
	Contact	Mounting Position	Contact	1	2			Mounting Position	Contact	1	2	
90°	1NO (10)	① ②	NO —	Dumn	ny Block	ASN210N	ASN2110N	① ②	NO —	•		ASN2210N
2-position	1NO-1NC (11)	① ②	NO NC	•	•	ASN211N	ASN2111N	① ②	NO NC	•	•	ASN2211N
	2N0 (20)	0	NO NO		•	ASN220N	ASN2120N	0	NO NO	•		ASN2220N
	2NO-2NC (22)	① ② ③	NO NC NO	•	•	ASN222N	ASN2122N	① ② ③	NO NC NO	•	•	ASN2222N
		④ Contact C	NC Configuratio	on en		Maintained	Spring Return from Right	④ Spring	NC Return fro	om Lef	t •	Spring Return Two-way
	Contact	Contact	Block		erator sition	1 0 2	1 0 2		1, 0 2			1 0 2
		Mounting Position	Contact	1	0 2	V			-			
	2N0 (20)	① ②	NO NO	•	•	ASN320N	ASN3120N		ASN3220N	V		ASN3320N
	2NC (02)	① ②	NC NC			ASN302N	ASN3102N		ASN3202N	V		ASN3302N
45°	2NO-2NC (22)	① ② ③ ④	NO NO NC		•	ASN322N	ASN3122N		ASN3222N	ı		ASN3322N
3-position	4NO (40)	① ② ③ ④	NO NO NO	•	•	ASN340N	ASN3140N		ASN3240N	ı		ASN3340N
	4NC (04)	(4) (1) (2) (3) (4)	NC NC NC			ASN304N	ASN3104N		ASN3204N	l		ASN3304N
	☆ 3S	(4) (1) (2) (3) (4)	NO NO NC	Dumn	e ny Block	ASN33SN-243	_		_			_

- Knob: Black
- Round bezel (metal): Chrome-plated
- Selector switches with 1 or 3 contact blocks have a dummy block.
 Knob operator can be installed at 45-degree intervals in addition to the positions shown in the above table.
- See B-321 to B-322 for other contact configurations. Turn the operator to each position accurately.

- Selector switches with \$\sigma\$ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.

See B-308 for gold-plated silver contacts.
See B-312 for bottom view.

ARN CS

Flush Silhouette

ø16 ø22

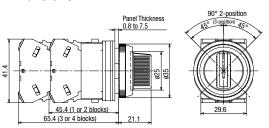
Miniature Pilot Lights

Contact Block Mounting Position



Dimensions

All dimensions in mm.



Terminal Screws: M3.5

Terminal cover: integrated



Selector Switches (Lever Operator)

Quantity: 1

Lever Operator ASN□L Shape APEM Spring Return Contact Configuration Spring Return from Left Maintained from Right Control Boxes Operator Operator Contact Block Contact Block Position Position Emergency Contact Stop Switches Mounting Mounting Contact 2 2 Contact Enabling Position Position Switches 1N0 1 NO • 1 NO ASN2L10N ASN21L10N ASN22L10N Safety Products (10)2 **Dummy Block** 2 90° 2-position 1NO-1NC 1 NO 1 NO • **Explosion Proof** ASN2L11N ASN21L11N ASN22L11N (11)2 NC • 2 NC • Terminal Blocks 1 • 1 N0 NO 2N0 ASN2L20N ASN21L20N ASN22L20N (20)2 NO 2 NO Relays & Sockets 1 NO 1 NO Circuit 2 2 2NO-2NC NC • NC lacktriangleProtectors ASN2L22N ASN21L22N ASN22L22N (22)3 NO • 3 NO • **Power Supplies** 4 NC • 4 NC • Spring Return Spring Return LED Illumination Contact Configuration Maintained Spring Return from Left from Right Two-way Controllers **Operator** Contact Block Position Operator Contact Interfaces Mounting Contact 1 2 0 Position Sensors 1 NO • 2N0 ASN3L20N ASN31L20N ASN32L20N ASN33L20N AUTO-ID (20)2 NO • 1 N0 2NC ASN3L02N ASN31L02N ASN33L02N ASN32L02N (02)2 NO 1 NO Flush Silhouette 2NO-2NC 2 NO ASN3L22N ASN31L22N ASN32L22N ASN33L22N (22)3 NO 45° ø16 3-position 4 N0 1 N0 ø22 2 NO • 4N0 ASN3L40N ASN31L40N ASN32L40N ASN33L40N (40)3 N0 • 4 NO Miniature 1 NO Pilot Lights 4NC 2 N0 ASN3L04N ASN31L04N ASN32L04N ASN33L04N (04)3 NO 4 N0 1 N0 ☆ 3S

ASN3L3SN-243

ARN • Lever: Black

CS

- Round bezel (metal): Chrome-plated · Selector switches with 1 or 3 contact blocks have a dummy block.
- Knob operator can be installed at 45-degree intervals in addition to the

2

3

4

positions shown in the above table.

NO

NO

Dummy Block

• See B-321 to B-322 for other contact configurations. Turn the operator to each position accurately.

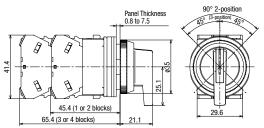
- Selector switches with \$\simeq\$ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- See B-308 for gold contact.
- See B-312 for bottom view.

Contact Block Mounting Position



Dimensions

All dimensions in mm.



Terminal Screws: M3.5

Terminal cover: integrated

Key Selector Switches

Key Selector (Key No. 0)

Quantity: 1

Contact Configuration	Shape	ASN□K	()										
Contact Contact Block Operator Position 2			Contact C	onfiguratio	n		Maintained			Spring	Return fr	om Le	eft
Position		0	Contact	Block			1 2	1 2	Contact	Block			1, 2
10		Contact		Contact	1	2				Contact	1	2	
100 20				NO		•	V CN 3K 1 UN	VZN31K1UN		NO	•		ASNOOK10N
2-position 1N0-1NC	90°	<u> </u>			Dumm	y Block	AONZICION	ASIVETRION	2				ASIVEZICION
Contact Block						•	ASN2K11N	ΔSN21K11N			•		ΔSN22K11N
(20) ② NO					•		AONZITT	AONZIKITIV				•	AONEZKITIN
Contact Configuration							ASN2K20N	ASN21K20N					ASN22K20N
2NO-2NC (22) 3		(20)										_	
Contact Configuration						•						_	
Contact Configuration					•	_	ASN2K22N	ASN21K22N				•	ASN22K22N
Contact Configuration		(22)				•							
Contact Contact Block Operator Position 1 0 2							Maintained						
Contact Cont					Ope	rator		nom rugnt		Two way			
Mounting Position Contact 1 0 2		Contact	Contact	Block			1 0 2	1 0 2	1,02				1 0 2
(20) ② NO		Contact			1	0 2							
Columbia				NO	•		ASN3K20N	ASN31K20N		ASN32K2 0	N		ASN33K20N
ASN33K02N ASN31K02N ASN32K02N ASN33K02N ASN33K04N ASN3		(20)				•	AONONZON	AONOTIZON	<u> </u>	HONOLINZO			AONOONEON
102 2 NC 10 NO 10 ASN31K22N ASN31K22N ASN32K22N ASN33K22N							ASN3K02N	ASN31K02N		ASN32K02	N		ASN33K02N
2N0-2NC (22)		(02)	-				7.0.10.10	7.0					7.0.1.001.00
45° 3-position (22) 3 NC ASN3K22N ASN31K22N ASN32K22N ASN33K22N ASN33K40N ASN3AK4N ASNAAKAN ASN					•								
3-position 4NO (40) 4NO (40) 3 NO 4NO (40) ASN3K40N ASN31K40N ASN32K40N ASN33K40N					 		ASN3K22N	ASN31K22N		ASN32K22	N		ASN33K22N
O NO	-	(22)											
4NO (40) ② NO	3-position											+	
(40) 3 NO ASN3K4UN ASN3TK4UN ASN3ZK4UN ASNAZK4UN ASNAZKAUN ASNAZKA		4110											
4NC (04) 3 NC ASN3K04N ASN31K04N ASN32K04N ASN33K04N 0 NO							ASN3K40N	ASN31K40N		ASN32K40	N		ASN33K40N
4NC (04) 3 NC ASN3K04N ASN31K04N ASN32K04N ASN33K04N ASN33K04N O		(40)											
4NC (04) 3 NC ASN3K04N ASN31K04N ASN32K04N ASN33K04N ASN33K04N						<u> </u>							
(04) 3 NC ASN3K04N ASN31K04N ASN32K04N ASN33K04N ASN33K04N ASN33K04N		ANC				$\overline{}$							
(4) NC (1) NO (1) NO (1)							ASN3K04N	ASN31K04N		ASN32K04	N		ASN33K04N
① NO ●		(3.7)											
												\dashv	
$\begin{vmatrix} & & & & & & & & & & & & & & & & & & &$			2	NO		•	<u></u> ✓-						
3S 3 NC		3S						_		_			_
4 — Dummy Block					Dumm	v Block							

- Cylinder: Chrome-plated Round bezel (metal): Chrome-plated
- Key selector switches with 1 or 3 contact blocks have a dummy block.
- See B-321 to B-322 for other contact configurations.
- On spring-returned types, the key can be released only from the maintained position. On maintained types, the key can be released from every position. See B-308 for specifying key retained positions.

Contact Block Mounting Position



- Key selector switch is supplied with two standard keys.
 (1) Insert the key completely before turning the key, otherwise failure may result.
 (2) Turn the operator to each position accurately.
- Different key number is available upon request. Contact IDEC.
- \bullet Selector switches with $\stackrel{\iota}{\bowtie}$ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- See B-308 for gold-plated silver contacts.
 See B-312 for bottom view.

Dimensions

All dimensions in mm. 90° 2-position Panel Thickness 16.5 45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks)

Terminal Screws: M3.5

Terminal cover: integrated

IDEC

APEM Control Boxes Emergency Stop Switches

Enabling Switches Safety Products

Explosion Proof Terminal Blocks

Relays & Sockets Circuit Protectors

Power Supplies LED Illumination

Controllers Operator Interfaces

Sensors AUTO-ID

Flush Silhouette

ø22

ø16

Miniature

Pilot Lights

ARN

Key Selector Switches

Quantity: 1

Key Selector (Key No. 24401) ASN□K Shape APEM Spring Return **Contact Configuration** Maintained from Right Control Boxes Operator Contact Block Contact Block Position Emergency Contact Mounting Mounting Stop Switches Contact 1 2 Contact Position Position Enabling Switches 1N0 1 NO ASN2K10N-ASN21K10N-1 Safety Products (10)N024401 N024401 2 **Dummy Block** 2 90° 1NO-1NC 1 NO ASN2K11N-ASN21K11N-1 2-position **Explosion Proof** (11)2 NC • N024401 N024401 2 Terminal Blocks 2N0 1 NO • ASN2K20N-ASN21K20N-1 N024401 (20)2 NO • N024401 2 Relays & Sockets 1 NO • 1 Circuit 2NO-2NC 2 NC • ASN2K22N-ASN21K22N-2 Protectors N024401 N024401 (22)3 NO 3 **Power Supplies** 4 NC 4 • Spring Return LED Illumination **Contact Configuration** Maintained Spring Return from Left from Right Operator Controllers Contact Block Position Operator Contact Mounting Interfaces Contact 1 0 2 Position Sensors 2N0 1 NO ASN3K20N-ASN31K20N-ASN32K20N-N024401 N024401 N024401 AUTO-ID (20)2 N0 1 NC 2NC ASN3K02N-ASN31K02N-ASN32K02N-N024401 (02)N024401 N024401 2 NC 1 NO 2 N0 Flush Silhouette 2NO-2NC ASN3K22N-ASN31K22N-ASN32K22N-N024401 N024401 N024401 (22)NC 3 45° ø16 4 NC 3-position ① N0 ø22 2 N0 • 4N0 ASN3K40N-ASN31K40N-ASN32K40N-(40)N024401 N024401 N024401 3 NO • 4 NO Miniature NC 1

ASN22K10N-

ASN22K11N-

ASN22K20N-

ASN22K22N-

Spring Return

Two-way

ASN33K20N-

ASN33K02N-

ASN33K22N-

ASN33K40N-

ASN33K04N-

N024401

N024401

N024401

N024401

N024401

N024401

N024401

N024401

N024401

Spring Return from Left

Operator

Position

2

•

1

•

•

•

•

•

NO

NO

NC

NO

NO

NO

NC

NO

NC

Pilot Lights

ARN CS

· Cylinder: Chrome-plated

· Round bezel (metal): Chrome-plated

3S

4NC

(04)

• Key selector switches with 1 or 3 contact blocks have a dummy block.

2

3

4

1

2

3

4

- See B-321 to B-322 for other contact configurations.
- On spring-returned types, the key can be released only from the maintained position. On maintained types, the key can be released from every position. See B-308 for specifying key retained positions.

NC

NC

NC

N0

N0

NC

•

Dummy Block

Contact Block Mounting Position



- · Key selector switch is supplied with two standard keys.
- (1) Insert the key completely before turning the key, otherwise failure may result.

ASN32K04N-

N024401

- (2) Turn the operator to each position accurately.
- Different key number is available upon request. Contact IDEC.
- Selector switches with
 have a half contact operating current (load switching) current value). Rated insulation voltage and rated current remain the same.
- See B-308 for gold-plated silver contacts.
- See B-312 for bottom view.

ASN31K04N-

N024401

Dimensions

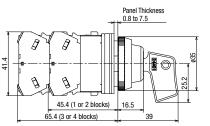
ASN3K04N-

ASN3K3SN-

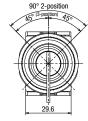
243-N024401

N024401

All dimensions in mm.



Terminal Screws: M3.5



Terminal cover: integrated

LED Illuminated Selector Switch

Quantity: 1

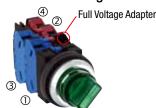
Illuminated Selector Switches (BA9S Base) Shape

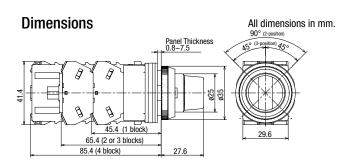


		Contact Co	nfiguratio	ın				Maintained	Spring Return from Right		Cn	rina B	Onturn	from Left									
				_	erat	tor	Doda d	Walitalieu	Spring neturn from night				rator		Calas								
	Contact	Contact	BIOCK		ositio		Rated Voltage	1 2	1 2	Contact	BIOCK		ition	1, 2	Color Code								
		Mounting Position	Contact	1		2				Mounting Position	Contact	1	2										
		①	NO			•	24V AC/DC	ASLN22210DN*	ASLN212210DN*	(1)	NO	•		ASLN222210DN*									
	1NO (10)			_	+	_	100/120V AC/DC	ASLN2QH210DN*	ASLN21QH210DN*			Ŭ		ASLN22QH210DN*									
		2	_				200/220V AC	ASLN2QM10DN*	ASLN21QM10DN*	2	_			ASLN22QM10DN*									
Iţion		①	NO			•	24V AC/DC	ASLN22211DN*	ASLN212211DN*	0	NO	•		ASLN222211DN*									
90° 2-position	1NO-1NC (11)				+	_	100/120V AC/DC	ASLN2QH211DN*	ASLN21QH211DN*					ASLN22QH211DN*	R								
90°2	()	2	NC	•			200/220V AC	ASLN2QM11DN*	ASLN21QM11DN*	2	NC		•	ASLN22QM11DN*	G								
		①	NO			•	24V AC/DC	ASLN22220DN*	ASLN212220DN*	①	NO	•		ASLN222220DN*	Y								
	2N0 (20)				+	_	100/120V AC/DC	ASLN2QH220DN*	ASLN21QH220DN*					ASLN22QH220DN*	S								
	(23)	2	NO			•	200/220V AC	ASLN2QM20DN*	ASLN21QM20DN*	2	NO	•		ASLN22QM20DN*	PW								
		①	NO			•	24V AC/DC	ASLN22222DN*	ASLN212222DN*	①	NO	•		ASLN222222DN*									
	2NO-2NC	2	NC	•			100/120V AC/DC	ASLN20H222DN*	ASLN210H222DN*	2	NC		•	ASLN22QH222DN*									
	(22)	3	NO			•				3	NO	•											
		4	NC	•			200/220V AC	ASLN2QM22DN*	ASLN21QM22DN*	4	NC		•	ASLN22QM22DN*									
		Contact Co	onfiguratio	n				Maintained	Spring Return from Right	Spring	Return fro	m Le	ft	Spring Return Two-Way									
	 	Contact	Block		oerat ositic		Rated Voltage	1 0 2	1 0 2	1	1 0 2			1 0 2	Color Code								
	Contact	Mounting Position	Contact	1	0	2	voltage			,	\bigvee				Code								
		①	NO	•			24V AC/DC	ASLN32220DN*	ASLN312220DN*	ASLN32	2220DN	*		ASLN332220DN*									
	2N0 (20)		INO				100/120V AC/DC	ASLN3QH220DN*	ASLN31QH220DN*	ASLN32	QH220D	N*		ASLN33QH220DN*									
	(20)	2	NO				200/220V AC	ASLN3QM20DN*	ASLN31QM20DN*	ASLN32QM20E		*		ASLN33QM20DN*									
		①	NC		_	5	24V AC/DC	ASLN32202DN*	ASLN312202DN*	ASLN322202DI		ASLN322202DN*		SLN322202DN*		N322202DN*		ASLN332202DN*					
	2NC (02)		110				100/120V AC/DC	ASLN3QH202DN*	ASLN31QH202DN*	ASLN32QH202DN*		ASLN32QH202DN*		ASLN32QH202DN*						ASLN32QH202DN*		ASLN33QH202DN*	
=	(02)	2	NC				200/220V AC	ASLN3QM02DN*	ASLN31QM02DN*	ASLN32	QM02DN	*		ASLN33QM02DN*									
45° 3-position		①	NO	•			24V AC/DC	ASLN32222DN*	ASLN312222DN*	ASLN32	2222DN	*		ASLN332222DN*									
 -63-	2NO-2NC	2	NO			•	100/120V AC/DC	ASLN3QH222DN*	ASLN31QH222DN*	ASLN32	OH222D	N*		ASLN33QH222DN*	R G								
₩	(22)	3	NC		_		200/220V AC	ASLN3QM22DN*	ASLN31QM22DN*	ASLN320				ASLN33QM22DN*	Ϋ́Α								
		(1)	NC NO	•			24V AC/DC	ASLN32240DN*	ASLN312240DN*	ASLN32				ASLN332240DN*	S								
	4410	2	NO			•	24V AC/DC	ASLN3224UDIN*	ASLN31224UDIN*	ASLN32	224UDIN	*		ASLN332Z4UDIN*	. "								
	4NO (40)	3	NO	•			100/120V AC/DC	ASLN3QH240DN*	ASLN31QH240DN*	ASLN320	LN32QH240D			ASLN33QH240DN*									
		4	NO			•	200/220V AC	ASLN3QM40DN*	ASLN31QM40DN*	ASLN32	QM40DN	*		ASLN33QM40DN*									
		①	NC				24V AC/DC	ASLN32204DN*	ASLN312204DN*	ASLN32	2204DN	*		ASLN332204DN*									
	4NC	2	NC			L	100/120V AC/DC	ASLN3QH204DN*	ASLN31QH204DN*	ASLN32	QH204D	N*		ASLN33QH204DN*									
	(04)	3	NC				200/220V AC	ASLN3QM04DN*	ASLN31QM04DN*	ASLN320				ASLN33QM04DN*									
		4	NC				LUUI LUU AU	TOPINORINIO-POIA-	AULINU I QIVIUNDINA	HULINDE	WINDADI.	W TP		AOLINOURIUMDIN*									

- Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)
- Illuminated selector switches include a built-in LED lamp.
- Round bezel (metal): Chrome-plated
- \bullet For voltages such as 6V AC/DC and 12V AC/DC, etc., not listed, See page
- Dummy blocks are built into 2-contact and 4-contact.
- Other contact configurations are also available. See pages B-321 to B-322.
- Make sure to operate the handle firmly to each notch position.
- For gold-plated silver contacts, see page B-309.

Contact Block Mounting Position





Terminal screw: M3.5, Integrated terminal cover For switch rear view, see page B-315.



APEM

Control Boxes Emergency Stop Switches Enabling Switches

Safety Products

Explosion Proof Terminal Blocks

Relays & Sockets

Circuit Protectors

Power Supplies LED Illumination

Controllers

Operator Interfaces

Sensors

AUTO-ID

Flush Silhouette

ø16

ø22

Miniature

Pilot Lights

ARN

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors

Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

> ARN CS

Selector Switches Contact Configuration (90° 2-position)

							0p	erator 0	peration	and Circ	uit		
				N	laint	ained			ring Ret			ring Re	
		Cont	act		1	2		f	rom Rigi	nt O	1	rom Le	ft
Contont		Bloo											2
Contact Configuration	Circuit Code			Knob Lever	Ke	еу	Illumi- nated	Knob Lever	Key	Illumi- nated	Knob Lever	Key	Illumi- nated
				Oper	ator	Posi	tion	Ope	rator Pos	sition	Opei	ator Po	sition
		Mounting	Contact	1			2	1		2	1		2
		Position				<	Ø		>	Ø			
10	Not	1	NO				•			•	•		
10	required	2	_	Du	mmy	y Bloc	ck	Dι	ımmy Blo	ock	Du	mmy B	ock
01	Not	1	NC	•				•					•
01	required	2		Du	mmy	y Bloc	ck	Dι	mmy Blo	ock	Du	mmy B	ock
	☆	1	EM		•								
2R	118	2	LB										
ZN.	☆	1	EM			_							
	168	2	LB		_							<u></u>	

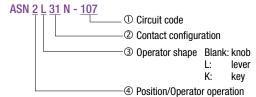
						Or	perator 0	peration	and Circ	uit		
		Comb	and	N	laintaii	ned 2		ring Ret rom Rigl			ring Re from Le	
		Cont Blo				/ ²		$\overline{}$			<u>'</u>	, 2
Contact Configuration	Circuit Code			Knob Lever	Key	Illumi- nated	Knob Lever	Key	Illumi- nated	Knob Lever	Key	Illumi- nated
				Opei	rator P	osition	Ореі	rator Pos	sition	Opei	ator Po	sition
		Mounting Position	Contact	1		2	1		2	1		2
11	Not	①	NO			•			•	•		
- ''	required	2	NC	•			•					•
20	Not	①	NO			•			•	•		
20	required	2	NO			•			•	•		
02	Not	1	NC	•			•		,			•
02	required	2	NC	•			•					•
		1	NO			•			•	•		
22	Not	2	NC	•			•					•
	required	3	NO			•			•	•		
		4	NC	•			•					•
		①	NC	•			•					•
31	107	2	NO			•			•	•		
"	107	3	NO			•			•	•		
		4	NO			•			•	•		
		①	NO			•			•	•		
40	Not	2	NO			•			•	•		
1 40	required	3	NO			•			•	•		
		4	NO			•			•	•		

[•] Selector switches with 🜣 have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.

Contact Block Mounting Position

Part No. Development





- 2: 2-position, maintained
- 21: 2-position, spring return from right 22: 2-position, spring return from left

[•] Prices may vary by circuit configuration, even for the same number of contacts.

Selector Switches Contact Configuration (45° 3-position)

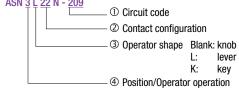
Contact Corrigoration Contact Configuration Contact Corrigoration Cont											perato	r Opera	tion an	d Circu	iit				Ţ.
Mounthy Contact 1		Circuit Code			Оре	rator Pos	sition	M 1		Spr fr	ing Ret om Rig	turn ht	Spi f	ring Re rom Le	turn eft	T	wo-wa	y	jhts
11 203	Configuration			Contact		_			Key		Key			Key			Key		Switches &
11		202	1)	NO					,		,						,		Control Boxes
11		202	2						٧		٧			٧			٧		Emergency
303 0 NC	11	203							V		V			V			V		
20							•				v .						· ·		
20		303				•			√		$\sqrt{}$			$\sqrt{}$			$\sqrt{}$		Safety Products
Pelays & Society Pelays & So		Not					_												Fordering Board
Not required ② NC	20								$\sqrt{}$		$\sqrt{}$						$\sqrt{}$		Explosion Proof
Pelays & Sockets Power Supplies Po							–					-							Terminal Blocks
Not Coroll Protectors Prover Supplies	02	•							√		√			√			√		Relays & Sockets
Not required 3			①	NO	•														
Power Supplies Powe							•	_	1		V			V			V		
22 210		required							٧		V			V			٧		Power Supplies
209																			
22 210 3 NC					_			-											LED Illumination
22 210		209					_		$\sqrt{}$		$\sqrt{}$			_			_		Controllers
22 210																			
22 210 ② NO																			Interfaces
3	22	210	2				•		.1		.1			.1			.1		Sensors
① NC ○ NC	22	210							٧		٧			٧			٧		AUTO-ID
310 2							•												
310 3 NC				1		•													
40		310					•		√		_			_			_		
10 NO								1											Flush Silhouette
311					•		_												ø16
311 3				1				1	,		,			,			,		שוע
A0		311				•]	V		√			V			√		ø22
40 Not required				NC															ø30
40 required 3 NO					•														
Pilot Lights Pilo	40						•		V								√		Miniature
04 Not required	-	required			•			-	•		•			•			•		Pilot Lights
04																			
1 required 3 NC		Not						1											
3S 243	04							1	√		√			√			$\sqrt{}$		
3S 243								1											TWN
3S					•														TWND
③ NC Dummy Block CS	30	☆	2				•		./					_			_	İ	
	33	243		NC					ν		_			_					ARN
			-	<u> </u>	_					 <u> </u>									CS

- Selector switches with $\stackrel{1}{>}$ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- $\bullet \ \, \text{On selector switches with } \not \simeq, \text{the contact blocks may overlap each other while turning the ring or lever operator.}$
- Prices may vary by circuit configuration, even for the same number of contacts.

Contact Block Mounting Position

Part No. Development





- 3: 3-position, maintained
- 31: 3-position, spring return from right
- 32: 3-position, spring return from left
- 33: 3-position, spring return two-way



Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors **Power Supplies** LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Selector Pushbuttons

Quantity: 1

Shape	Contact Configuration	Circuit Code		tact ock	Left		Position	Right	Button Color Code	Ring Operator
			Mounting Position	Contact	Normal	Push!	button Normal	Push	oodo	Part No.
Ring Operator (90°2-position)		A03	1	NO		•		•		ASBN211N-A03*
ASBN2			2	NC	•					NODILLI III NOO
	11	☆	①	NC	•				В	*
	(1NO-1NC)	K04	2	EM		•			G R	ASBN211N-K04*
		G03	①	NO NC		•		Blocked	Υ	ASBN211N-G03*
	- 00		② ①	NO NO	•	•	•		·	
	20 (2NO)	D01	2	NO NO				•		ASBN220N-D01*
	(LIVO)		①	NO NO		•		•		
			2	NC	•					
		A08	3	NO NO		•		•		ASBN222N-A08*
			4	NC	•					
			①	NO		•		•		
		☆	2	NO				•		☆
		C10	3	NC	•					ASBN222N-C10*
			4	NC						
			①	NO		•				
		D10	2	NO				•		ASBN222N-D10*
		סוט	3	NC	•					AODNZZZN-D1U*
			4	NC			•			
			1	NO		•			В	
	22	☆	2	NO				•	G	☆
	(2NO-2NC)	E10	3	NC					R Y	ASBN222N-E10*
			4	NC				_	ī	
			①	NO NO				•		
		☆	2	NO NO		•	_			☆
		F10	3	NC			•			ASBN222N-F10*
			4	NC	•	•				
			① ②	NO NO		•				
		G10	3	NC NC	•	•	•	Blocked		ASBN222N-G10*
			4	NC	•					
			①	NC	•		–			
			2	NC	•					☆
		☆ K15	3	EM		•				x ASBN222N-K15∗
			4	EM		•				

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Flush Silhouette

ø16 ø22

Miniature Pilot Lights

B (black), G (green), R (red), Y (yellow)

Bezel (metal): Chrome-plated

• Circuit code G: The pushbutton does not operate when the ring operator is turned to the right position.

• Circuit codes E and F: The right and left NC contact blocks on circuit code E or F may overlap each other while turning the ring operator. The NO and NC contact blocks on circuit code F may overlap each other while pressing the button.

- When using the selector pushbutton, do not turn the ring operator with the pushbutton depressed. Otherwise, damage or failure may be caused.
- Selector switches with 🖄 have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- See B-312 for bottom view.

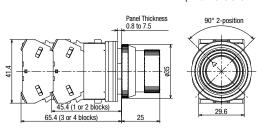
Contact Block Mounting Position

• Specify a color code in place of * in Part No.



Dimensions Ring operator (90° 2-position)

(All dimensions in mm.)



Terminal Screws: M3.5

Terminal cover: integrated

LED Illuminated Pilot Light

Quantity: 1

Shape	Illumination	Base	Rated Voltage	Part No.	Color Code	LED Lamp Part No.	Dimensions Page
Round APN1			24V AC/DC	APN122DN*	R, G, Y, A, S, PW	LSRD-2	
AFNI			100/120V AC/DC	APN1QH2DN*	R, G, Y, A, S, PW	LSRD-H2	
(*)	LED	BA9S	200/220V AC	APN1QMDN*	R, G, Y, A, S, PW	LSRD-M2	
Square Extended UPQN3B			24V AC/DC	UPQN3B22D*	R, G, Y, A, S, PW	LSRD-2	
	LED	BA9S	100/120V AC/DC	UPQN3BQH2D*	R, G, Y, A, S, PW	LSRD-H2	B-325
			200/220V AC	UPQN3BQMD*	R, G, Y, A, S, PW	LSRD-M2	
Rectangular (Marking) UPQN4			24V AC/DC	UPQN422D*	R, G, Y, A, S, PW	LSRD-2	
	LED	BA9S	100/120V AC/DC	UPQN4QH2D*	R, G, Y, A, S, PW	LSRD-H2	
			200/220V AC	UPQN4QMD*	R, G, Y, A, S, PW	LSRD-M2	

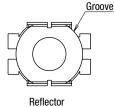
Specify a color code in place of * in Part No.
 R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)

- Round bezel (metal): chrome-plated
- Square bezel (metal): chrome-plated
- Pilot lights have an LED lamp installed.
- See B-346 for the marking plate size of rectangular pilot lights.
- See B-309 for other operating voltage such as 6V AC/DC and 12V AC/DC.
- Terminal cover is installed on pilot lights for electric shock prevention.

Type	Terminal Cover	Quantity
6V AC/DC, 12V AC/DC, 24V AC/DC, 100/120V AC/DC, 200/220V AC, 230/240V AC	APN-PVL	1
380V AC and above	N-VL3	1

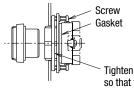
Reflector

- The lamp housing of the square LED illuminated pilot lights has a built-in reflector.
- Make sure that the reflector does not fall off when removing the lens or making plate.
- When replacing the LED lamp of UPQN4 (rectangular), use a lamp holder tool (OR-55).
- To remove the reflector, insert a flat screwdriver inside the groove of the reflector and lightly push out.



Panel Mounting of Square Pilot Lights

- 1. Tighten the square bezel to the operator and position the bezel correctly.
- 2. Lightly tighten the screw to secure the pilot light on the panel.
- ${\it 3. After\ tightening,\ do\ not\ turn\ the\ square\ bezel,\ otherwise\ it\ may\ fall\ off.}$



Tighten the screw lightly so that the panel does not bend. Recommended tightening torque: 0.15 Nm APEM

Switches &

Control Boxes

Emergency Stop Switches Enabling Switches

Safety Products

Explosion Proof

Terminal Blocks
Relays & Sockets

Circuit Protectors

Power Supplies

LED Illumination

Controllers

Operator Interfaces

Sensors

AUTO-ID

Flush Silhouette

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Miniature

Pilot Lights

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Control Boxes

Emergency Stop Switches Enabling

Switches
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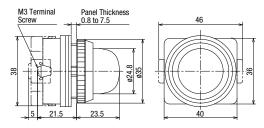
Sensors AUTO-ID

Dimensions (Pilot Light)

All dimensions in mr

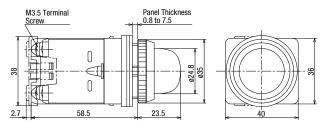
Round APN1

6 to 120V AC/DC, 200 to 240V AC (Terminal Cover: APN-PVL) Without LED Lamp



Terminal screws: M3

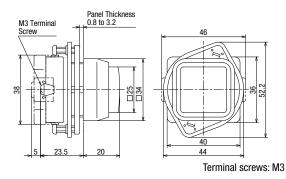
380V AC and above (Terminal Cover: N-VL3)



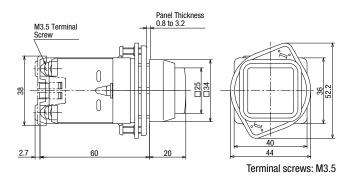
Terminal screws: M3.5

Square Extended UPQN3B

6 to 120V AC/DC, 200 to 240V AC (Terminal Cover: APN-PVL) Without LED Lamp



380V AC and above (Terminal Cover: N-VL3)



Flush Silhouette

ø16 6 to 120V A Without LED

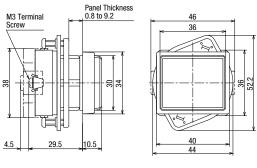
ø30 Miniature

Pilot Lights

ARN CS

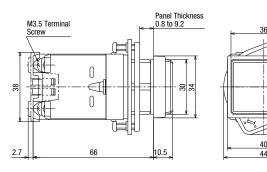
Rectangular (Marking) UPQN4

6 to 120V AC/DC, 200 to 240V AC (Terminal Cover: APN-PVL) Without LED Lamp



Terminal screws: M3

380V AC and above (Terminal Cover: N-VL3)



Terminal screws: M3.5

• See B-349 for wiring.

Pushbuttons (Diecast Zinc)

Quar	ıtitv.	1
Quai	iuty.	•

	1	1				Quantity: 1				
Shape	Operation	Contact	Part No.	Button Color Code	Dimensions	(All dimensions in mm.)				
Flush		1NO	ABD110N*	В						
ABD1 AOD1		1NC	ABD101N*	G						
NOD I	Momentary	1NO-1NC	ABD111N*	R			APEN			
	Momontary	2N0	ABD120N*	Y	-	Panel Thickness 0.8 to 7.5 ø39	Swite			
		2NC	ABD102N*	S W			Pilot			
		2NO-2NC	ABD122N*		4 4		Conti			
		1NO	AOD110N*	В	8 8		Emer			
		1NC	A0D101N*	G	45.4 (1 or 2 blocks)	294	Stop			
	Maintained	1NO-1NC	AOD111N*	R	65.4 (3 or 4 blocks)	9 40	Enab			
	Maintainod	2N0	AOD120N*	Y			Swite			
		2NC	AOD102N*	S W			Safet			
		2NO-2NC	AOD122N*				Explo			
Extended ABD2 AOD2		1NO	ABD210N*	В			<u> </u>			
		1NC	ABD201N*	G			Term			
· · · -	Momentary	1NO-1NC	ABD211N*	R			Relay			
	o.iioiitai y	2N0	ABD220N*	Y S		Panel Thickness 0.8 to 7.5	Circu			
		2NC	ABD202N*	- W			Prote			
		2NO-2NC	ABD222N*		4 7 4 1 1		Powe			
		1NO	AOD210N*	В	4 A A					
		1NC	A0D201N*	G	45.4 (1 or 2 blocks)		LED			
	Maintained	1NO-1NC	A0D211N*	R	65.4(3 or 4 blocks)	14 40	Conti			
	Maintainod	2N0	A0D220N*	Y						
		2NC	A0D202N*	S W			Inter			
		2NO-2NC	A0D222N*				Sens			
Extended with Half Shroud ABGD2		1NO	ABGD210N*	В						
AOGD2		1NC	ABGD201N*	G			AUTO			
	Momentary	1NO-1NC	ABGD211N*	R Y S						
		2N0	ABGD220N*		(Panel Thickness 0.8 to 3.5				
		2NC	ABGD202N*	W						
		2NO-2NC	ABGD222N*			32 28	Flush			
		1NO	AOGD210N*	В	4 a a		ø16			
		1NC	AOGD201N*	G	40.9(1 or 2 blocks)	18.5				
	Maintained	1NO-1NC	AOGD211N*	R	40.9 (1 or 2 blocks) 60.9 (3 or 4 blocks)	20.5	ø22			
		2N0	AOGD220N*	Y S			ø30			
		2NC	AOGD202N*	- W						
Educated with E WOL		2NO-2NC	AOGD222N*				Minia			
Extended with Full Shroud ABFD2		1NO	ABFD210N*	В			Pilot			
AOFD2		1NC	ABFD201N*	G						
	Momentary	1NO-1NC	ABFD211N*	R						
	, , , , ,	2N0	ABFD220N*	Y S	_ 	Panel Thickness 0.8 to 6 ø39				
		2NC	ABFD202N*	- W			TWN			
		2NO-2NC	ABFD222N*				77.47			
		1NO	AOFD210N*	В	4 1 4		TWN			
		1NC	AOFD201N*	G	45.4 (1 or 2 blocks)	14 29 4	ARN			
	Maintained	1NO-1NC	AOFD211N*	R	65.4 (3 or 4 blocks)	14 29.4 40				
		2N0	A0FD220N*	Y S			CS ——			
		2NC	A0FD202N*	- W						
		2NO-2NC	AOFD222N*							

- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow), S (blue), W (white)
- Round bezel (metal): Chrome-plated
- Pushbuttons with 1 or 3 contact blocks have a dummy block.
 See B-307 for other contact configurations and gold-plated silver contacts.
- Terminal screw: M3.5, Terminal cover: Integrated
- See B-312 for bottom view.

Control Boxes Emergency Stop Switches Enabling Switches Safety Products Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Sensors AUTO-ID Flush Silhouette ø16 ø22 Miniature Pilot Lights ARN

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors **Power Supplies** LED Illumination Controllers Operator

> Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

> ARN CS

Pushbuttons (Diecast Zinc)

	T .	T .	T			Quantity
Shape	Operation	Contact	Part No.	Button Color Code	Dimensions	(All dimensions in mm.)
ø40mm Mushroom		1NO	ABD310N*	В		
ABD3 AOD3		1NC	ABD301N*	G		
AODS	Momentary	1NO-1NC 2NO	ABD311N* ABD320N*	R Y	, , Panel Thickness 0.8	to 7.5 29.4
		2NC	ABD302N*	Š		
		2NO-2NC	ABD322N*	W		
		1NO	AOD310N*	В	A B B	
		1NC 1NO-1NC	A0D301N* A0D311N*	G	45.4 (1 or 2 blocks)	
	Maintained	2N0	AOD320N*	R Y	65.4 (3 or 4 blocks) 22	40
		2NC	A0D302N*	S		
		2NO-2NC	A0D322N*	W		
ø40mm Mushroom with Full Shroud ABGD3		1NO 1NC	ABGD310N* ABGD301N*	В		
AOGD3		1NO-1NC	ABGD311N*	_ G R	Panel Thickness 0.8 t	to 6.5 29.4
_	Momentary	2N0	ABGD320N*	Υ		
		2NC	ABGD302N*	S	4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	((-
		2NO-2NC 1NO	ABGD322N* AOGD310N*	W		
		1NC	AOGD301N*	B G	43.9 (1 or 2 blocks) 63.9 (3 or 4 blocks) 23.5	40
	Maintained	1NO-1NC	AOGD311N*	R		
	Maintaineu	2N0	AOGD320N*	Y		
		2NC 2NO-2NC	AOGD302N* AOGD322N*	S W		
ø65mm Jumbo Mushroom		1NO	ABD410N*			29.4
ABD4		1NC	ABD410N*	1	Panel Thickness 0.8 to 7.5	
		1NO-1NC	ABD401N*	В		
	Momentary	2N0	ABD411N* ABD420N*	G R	4.14	(
		2NC		Υ		
		2NO-2NC	ABD402N*	-	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 29	40
ø65mm Jumbo Mushroom with			ABD422N*		Panel Thickness 0.8 to 7.5	29.4
Shallow Shroud		1NO	ABGD410N*			
ABGD4		1NC	ABGD401N*	В		
	Momentary	1NO-1NC	ABGD411N*	G	41.4 a a a a a a a a a a a a a a a a a a a	# 11 11 11
	Wildinginary	2N0	ABGD420N*	R Y		
		2NC	ABGD402N*	T		
		2NO-2NC	ABGD422N*		45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 29	40
ø65mm Jumbo Mushroom with		1NO	ABFD410N*		Panel Thickness 0.8 to 7.5	29.4
Deep Shroud				1		
ABFD4		1NC	ABFD401N*	В		
	Momentary	1NO-1NC	ABFD411N*	G	4.14	-{((
	,	2N0	ABFD420N*	R Y		
		2NC	ABFD402N*		45.4 (1 or 0 blooks)	
		2NO-2NC	ABFD422N*		45.4 (1 or 2 blocks) 33	40
Pin Lock (On-off Lock Type) (*1)	I.	1NO	ABD8P10N*			
ABD8P		1NC	ABD8P01N*	В		40
		1NO-1NC	ABD8P11N*	G	9	29.4
		2NO 2NC	ABD8P20N*	R Y	Panel Thickness 0.8 to 7.5	(
Control of the Contro	3 9	2NO-2NC	ABD8P02N* ABD8P22N*	1		
Pin Lock (On-lock Type) (*1)		1NO	ABD8PN10N*		41.1	/ /(((-\))
ABD8PN		1NC	ABD8PN01N*	В	3 3	
		1NO-1NC	ABD8PN11N*	G	45.4 (1 or 2 blocks)	L. C.
		2NO	ABD8PN20N*	R Y	65.4 (3 or 4 blocks) 27.5	\
		2NC 2NO-2NC	ABD8PN02N* ABD8PN22N*	· '		
		ZINO-ZINO	MUDUF NZZIV*	1	<u>l</u>	

- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow), S (blue), W (white)
- Round bezel (metal): Chrome-plated
- Pin Lock (On-lock type): Button can be locked in depressed position by inserting the pin (the button cannot be locked in reset position).
- Pushbuttons with 1 or 3 contact blocks have a dummy block.
- \bullet See B-307 for other contact configurations and gold-plated silver contacts.
- See B-342 for maintenance parts.
- Terminal screw: M3.5, Terminal cover: Integrated
- See B-312 for bottom view.
- * 1) The pin for ABD8P is \emptyset 4.6 mm and is not compatible with ABN8P (old series).

Pushbuttons (Diecast Zinc)

Quantity: 1

Shape	Contact	Part No.	Button Color Code	Dimensions (All dimensions in mm.)	
ø40mm Mushroom Pushlock Turn Reset (*1) AVD3	1NO	AVD310N*]
AVEO	1NC	AVD301N*		Panel Thickness 0.8 to 7.5	
	1NO-1NC	AVD311N*	R		1
	2N0	AVD320N*	Υ		
	2NC	AVD302N*		45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 23.6	
	2NO-2NC	AVD322N*		<u> </u>	
ø40mm Mushroom Push Turn Lock AJD3	1NO	AJD310N*			
A000	1NC	AJD301N*	_	Panel Thickness 0.8 to 7.5	-
	1NO-1NC	AJD311N*	B G R Y		-
	2N0	AJD320N*			
	2NC	AJD302N*		45.4 (1 or 2 blocks) 654 (3 or 4 blocks) 23.6	
	2NO-2NC	AJD322N*		00.4 (5 til 4 tillocks) 12 20:0 1 4 40 1] .
ø40mm Mushroom Pull AZD3	1NO	AZD310N*		Panel Thickness 0.8 to 7.5	
	1NO-1NC	AZD311N*	B G		
	2N0	AZD320N*	R Y		
	2NC	AZD302N*		45.4 25.1 5.5 stroke 29.4 40	
ø40mm Mushroom Push-Pull (*2) AYD31	1NO-1NC	AYD3111N*		Panel Thickness 0.8 to 7.5	
	2N0	AYD3120N*	B G R Y		
	2NC	AYD3102N*		5.5 stroke 45.4 30.7 29.4 40	

- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow)
- Round bezel (metal): Chrome-plated
- \bullet Pushbuttons with 1 or 3 contact blocks have a dummy block.
- See B-307 for other contact configurations and gold-plated silver contacts.
- Mushroom pull has up to 2 contact blocks.
- Terminal screw: M3.5, Terminal cover: Integrated
- See B-312 for bottom view.
- *1) Pushlock turn reset switches cannot be used as emergency stop switches. When emergency stop switches are required, use XN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).
- *2) Push-Pull switches with red button cannot be used as emergency stop switches. When emergency stop switches are required, use XN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).

Pushbutton operation

Pushlock Turn Reset

Button is maintained when pressed and is reset when turned clockwise.

Push Turn Lock

Button is locked when turned clockwise in the depressed position and is reset when turned counterclockwise.

<u>Pull</u>

Pulling the button operates the contacts, and releasing the button return the contacts.

<u>Push-Pull</u>

2-position switches with button maintained in both depressed and reset positions.

Pull contact operation

Comtost	AZD3							
Contact	Normal	Pull						
1NO	o ^l o	10						
2NO-2NC	مه ⊶.	<u>°</u> • • • • • • • • • • • • • • • • • • •						
2N0	9,0 9,0	9 9 9						
2NC	•_• •_•	•1• •1•						

Push-Pull contact operation

Contact	AYI	AYD31							
Contact	Push	Pull							
1NO	ტ •_•	00							
2N0	9,9 9,9	00 00 T 00							
2NC	<u>••</u> ••	616 616							

APEM

Switches &

Control Boxes

Emergency Stop Switches Enabling

Switches

Safety Products

Explosion Proof
Terminal Blocks

Relays & Sockets

Circuit Protectors

Power Supplies

LED Illumination

Controllers

Operator Interfaces

Sensors

AUTO-ID

Flush Silhouette

ø16

ø22

Ø3U

Miniature

Pilot Lights

TWN

TWND

ARN

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors **Power Supplies** LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

> ARN CS

LED Illuminated Pushbuttons (Diecast Zinc)

Quantity: 1

Extended ADD2	Shape	o. Color	Code
AOLD2 Momentary Mome	ed	DN*	
Momentary 100/120V AC/DC 1N0 ALD22220DN ALD2204210DN ALD2204210DN NO ALD2204210DN NO ALD2204210DN NO ALD2204210DN ALD2204210DN NO ALD2204210DN ALD2204210DN NO ALD2204220DN ALD2204220DN NO ALD2204220DN NO ALD2204220DN ALD2204220DN NO ALD2204220DN NO ALD2204220DN NO ALD22220DN NO ALD22220DN NO ALD22220DN NO ALD22220DN NO ADD22220DN NO ALFD2220DN NO ALFD2220DN NO ALFD2220DN NO ALFD2220DN NO ALFD220H21DN NO ALFD2		DN*	
Momentary 100/120V AC/DC 1NC ALD2QH210DN* 1NC ALD2QH210DN* 1NC ALD2QH211DN* 1NO-1NC ALD2QH210DN* 1NO-1NC ALD2QH210DN* 1NO-1NC ALD2QH210DN* 1NO-1NC ALD2QH210DN* 1NO-1NC ALD2QH210DN* 1NO-1NC ALD2QH21DN* 1NO-1NC ALD2QH21DN* 1NO-1NC ALD2QH21DN* 1NO-1NC AUD2QH21DN* 1NO-1NC AUD2QH210DN* 1NO-1NC AUD2Q210DN* AUD2Q220DN* AUD2Q2000N* AUD2Q2000N* AUD2Q2000N* AUD2Q2000N* AUD2Q2000N* AUD2Q2000N* AUD2Q2000N* AUD2Q2000N* AUD2Q0000N* AUD2Q00000N* AUD2Q0000N* AUD2Q00000N* AUD2Q00000N* AUD2Q0000N* AUD2Q00000N* AUD2Q0000N* AUD2Q00000N* AUD2Q00000N* AUD2Q00000N* AUD2Q00000N* AUD2Q00000N* AUD2Q00000N* AUD2Q00000N* AUD2Q0000N* AUD2Q0000N* AUD2Q00000N* AUD2Q0000N* AUD2Q0000N		DN*	
Momentary		DN*	,
Momentary 100/120V AC/DC 1NC ALD20H21DN= 1N0-1NC ALD20H21DN= 1N0-1NC ALD20H21DN= 1N0 ALD20H20DN= 1ND ALD20H11DN= 1ND-1NC ALD20H11DN= 1ND-1NC ALD20H11DN= 1ND-1NC ALD20H11DN= 1ND-1NC ALD20H11DN= 1ND-1NC AUD2221DN= AUD2220DN= AUD22000+ AUD220000+ AUD2200000- AUD2200000000000000000000000000000000000		ODN*	
Momentary		1DN∗ γ	
BA9S			
BA9S		ODN*	3
Bags		DI/	N
BASS	_		
BA9S 24V AC/DC 24V AC/DC 1NO			
Maintained 24V AC/DC			
Maintained 100/120V AC/DC 1NC			
Maintained 100/120V AC/DC 1NO-1NC AOLD22211DN*			
Maintained 100/120V AC/DC			
Maintained 100/120V AC/DC			
Maintained 100/120V AC/DC 1NC		10DN.	
Maintained 100/120V AC/DC 1NO-1NC AOLD20H211DN*			
BA9S BA9S Section			
BA9S 100			
BA9S 200/220V AC 1NC		DV	
Extended with Full Shroud ALFD2 AOLD2QM11DN*			
Extended with Full Shroud ALFD2 AOLFD2 AOLF			
Extended with Full Shroud ALFD2 AOLFD2			
ALFD2 AOLFD2 AOLFD2 AOLFD2 AOLFD2 AOLFD2 AUFD22201DN* 1N0-1NC ALFD2221DN* 1N0 ALFD2241DN* 1N0-1NC ALFD2QH210DN* 1N0-1NC ALFD2QH210DN* 1N0-1NC ALFD2QH21DN* 2N0 ALFD2QH21DN* 1N0 ALFD2QM1DN* 1N0 ALFD2QM1DN* 1N0 ALFD2QM1DN* 1N0-1NC ALFD2QM1DN* 1N0-1NC ALFD2QM1DN* 1N0-1NC ALFD2QM1DN* 1N0-1NC ALFD2QM1DN* 1N0-1NC AUFD22210DN* 1N0 AOLFD2221DN* 1N0 AOLFD2221DN*	5		
AOLFD2 AOLFD2 24V AC/DC 1N0-1NC ALFD22211DN*			
Momentary 100/120V AC/DC 1NO			
Momentary 100/120V AC/DC 1NC ALFD2QH210DN* 1NO-1NC ALFD2QH211DN* 2NO ALFD2QH220DN* 1NO-1NC ALFD2QM10DN* 1NO ALFD2QM01DN* 1NO-1NC ALFD2QM01DN* 1NO-1NC ALFD2QM01DN* 2NO ALFD2QM20DN* 2NO ALFD2QM20DN* 1NO AOLFD22210DN* 1NO AOLFD2221DN* 1NO-1NC AOLFD2221DN* 1NO-1NC AOLFD22211DN*	<u>-</u>		
Momentary 100/120V AC/DC 1NC ALFD2QH201DN* 1N0-1NC ALFD2QH211DN* 2NO ALFD2QH20DN* 1NO ALFD2QM10DN* 1NC ALFD2QM01DN* 1NO-1NC ALFD2QM01DN* 1NO-1NC ALFD2QM20DN* 2NO ALFD2QM20DN* 1NO AOLFD22210DN* 1NC AOLFD2221DN* 1NC AOLFD2221DN* 1NO-1NC AOLFD22211DN* 1		К	}
Momentary 100/120V AC/DC 1N0-1NC		10DN*	G Y A
BA9S TNO-1NC ALFD2QH21TIDN*			
BA9S 1N0			
BA9S 200/220V AC 1NC ALFD2QM01DN*		20DN* S	
BA9S 200/220V AC		ODN*	/V
BA9S BA9S 1N0-1NC ALFD2QM1DN*		1DN*	
BA9S 1N0		1DN*	
24V AC/DC 1NC AOLFD2221DN* 1NC AOLFD2221DN* 1NO-1NC AOLFD2221DN*		.0DN*	
24V AC/DC 1NO-1NC AOLFD22211DN*		ODN*	
1NO-1NC AUL-DZ2Z71DN*)1DN*	
2NO AOLFD22220DN*		1DN*	
		20DN*	,
1NO AOLFD2QH210DN*		R10DN*	
1NC ANI FD20H201DN*		.01DN∗ Υ	
Maintained 100/120V AC/DC 1NO-1NC AOLFD2QH211DN*		211DN* A	4
2NO AOLFD2QH220DN*		20DN* S	
1NO AOLFD2QM10DN*		DV	PW
1NC AOLFD20M01DN*			
200/220V AC 1NO-1NC AOLFD2QM11DN*			
2NO AOLFD2QM20DN*			

- Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)

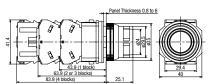
 Illuminated pushbuttons have an LED lamp installed.
 Round bezel (metal): Chrome-plated

- See B-308 for other operating voltage such as 6V AC/DC and12V AC/DC.
 See B-308 for other contact configurations and gold-plated silver contacts.
 Dummy blocks are built into 2-contact and 4-contact.

Dimensions

Extended, LED illuminated (momentary/maintained) ALD2/AOLD2 (Terminal Screw: M3.5, integrated terminal)

Extended with Full Shroud, LED illuminated (momentary/maintained) ALFD2/AOLFD2 (Terminal Screw: M3.5, integrated terminal)



• See B-315 for bottom view.

LED Illuminated Pushbuttons (Diecast Zinc)

Quantity: 1

	1				T .	Quantity: 1
Shape	Base	Operation	Operating Voltage	Contact	Part No.	Color Code
Mushroom (ø40)				1NO	ALD32210DN*	
ALD3			0.014.0750	1NC	ALD32201DN*	7
AOLD3			24V AC/DC	1NO-1NC	ALD32211DN*	7
				2N0	ALD32220DN*	
				1NO	ALD3QH210DN*	R G
			100/100/140/00	1NC	ALD3QH201DN*	Y
		Momentary	100/120V AC/DC	1NO-1NC	ALD3QH211DN*	A
				2N0	ALD3QH220DN*	S PW
				1NO	ALD3QM10DN*	PW
			000/0001/40	1NC	ALD3QM01DN*	
			200/220V AC	1NO-1NC	ALD3QM11DN*	
	DAGC			2N0	ALD3QM20DN*	
	BA9S			1NO	A0LD32210DN*	
			0.41/ 4.0/D0	1NC	AOLD32201DN*	
			24V AC/DC	1NO-1NC	A0LD32211DN*	
				2N0	AOLD32220DN*	
				1NO	AOLD3QH210DN*	R G
		Maintained	100/100\/ AC/DC	1NC	AOLD3QH201DN*	Ϋ́
		Maintained	100/120V AC/DC	1NO-1NC	AOLD3QH211DN*	A
				2N0	AOLD3QH220DN*	S PW
				1NO	AOLD3QM10DN*	PW
			000/0001/ 40	1NC	AOLD3QM01DN*	
			200/220V AC	1NO-1NC	AOLD3QM11DN*	
				2N0	AOLD3QM20DN*	
Mushroom Pushlock Turn Reset (ø40) (*1)				1NO	AVLD32210DN*	
AVLD3			0.4)/ A.C./D.C	1NC	AVLD32201DN*	
			24V AC/DC	1NO-1NC	AVLD32211DN*	
				2N0	AVLD32220DN*	
				1NO	AVLD3QH210DN*	
	DAGC		100/100\/ AC/DC	1NC	AVLD3QH201DN*	
	BA9S	_	100/120V AC/DC	1NO-1NC	AVLD3QH211DN*	R
				2N0	AVLD3QH220DN*	
				1NO	AVLD3QM10DN*	
_			200/2207 40	1NC	AVLD3QM01DN*	
			200/220V AC	1NO-1NC	AVLD3QM11DN*	
				2N0	AVLD3QM20DN*	

- Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)
- Illuminated pushbuttons have an LED lamp installed.
- Round bezel (metal): Chrome-plated
- See B-308 for other operating voltage such as 6V AC/DC and 12V AC/DC.
- See B-308 for other contact configurations and gold-plated silver contacts.
- Dummy blocks are built into 2-contact and 4-contact.
- *1) Pushlock turn reset switches cannot be used as emergency stop switches. When emergency stop switches are required, use XN or HN series emergency stop switches (ISO 13850 and IEC 60947-5-5 compliant).

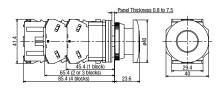
Illuminated pushbutton operation

Pushlock Turn Reset

Dimensions

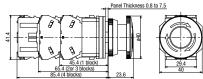
Button is maintained when pressed and is reset when turned clockwise.

Mushroom, LED illuminated (momentary/maintained) ALD3/AOLD3 (Terminal Screw: M3.5, integrated terminal)



AVLD3 (Terminal Screw: M3.5, integrated terminal)

Mushroom, LED illuminated (momentary/maintained)



• See B-315 for bottom view.



Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Pilot Lights

Miniature

Flush Silhouette

ø16 ø22

ARN

Selector Switches (Diecast Zinc) (Knob Operator)

Quantity: 1

Knob Operator ASD Shape APEM Spring Return **Contact Configuration** Spring Return from Left Maintained from Right Operator Operator Contact Block Contact Block Control Boxes Position Position Contact Emergency Mounting Mounting Contact 2 Stop Switches Contact Position Position Enabling 1 NO • NO 1N0 1 . Switches **ASD2110N** ASD210N ASD2210N (10)2 2 **Dummy Block** Safety Products 90° NO NO 1NO-1NC 1 1 2-position ASD211N ASD2111N ASD2211N **Explosion Proof** (11)2 NC 2 NC 1 NO 1 NO 2N0 Terminal Blocks ASD220N **ASD2120N** ASD2220N (20)2 NO • 2 NO . Relays & Sockets 1 NO 1 NO Circuit 2 NC 2 NC 2NO-2NC ASD222N ASD2122N ASD2222N Protectors (22)3 NO 3 NO **Power Supplies** 4 NC 4 NC Spring Return Spring Return Spring Return LED Illumination **Contact Configuration** Maintained from Right Two-way Controllers Operator Contact Block Operator Position Contact Interfaces Mounting Contact 2 1 0 Position Sensors 1 N0 • 2N0 ASD320N ASD3120N ASD3220N ASD3320N AUTO-ID (20)2 N0 • 1 NC 2NC ASD302N ASD3102N ASD3202N ASD3302N (02)2 NC 1 NO Flush Silhouette NO 2 lacktriangle2NO-2NC ASD322N **ASD3122N** ASD3222N ASD3322N (22)3 NC ø16 45° 4 NC 3-position ø22 1 NO 2 NO • 4N0 ASD340N ASD3140N ASD3240N ASD3340N (40)3 NO • Miniature 4 N0 • 1 NC Pilot Lights 2 NC 4NC ASD304N ASD3104N ASD3204N ASD3304N (04)3 NC 4 NC 1 N0 2 N0 ☆ 3S

ASD33SN-243

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• Round bezel (metal): Chrome-plated

Selector switches with 1 or 3 contact blocks have a dummy block.

3

4

 Knob operator can be installed at every 45 degrees intervals in addition to the positions shown in the above table

NC

Dummy Block

- . Turn the operator to each position accurately.
- Selector switches with \$\alpha\$ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- See B-308 for gold-plated silver contacts.
- See B-312 for bottom view.

Contact Block Mounting Position



All dimensions in mm. **Dimensions** 90° 2-position Panel Thickness 45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks)

> Terminal Screws: M3.5 Terminal cover: integrated

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Flush Silhouette

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Miniature Pilot Lights

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Selector Switches (Diecast Zinc) (Lever Operator)

Quantity: 1

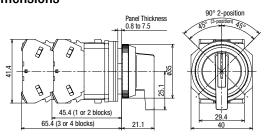
Shape	Lever Opera ASD□L	ator					Ç					quantity: 1	
		Contact C	Configurat	ion		Maintained	Spring Return from Right	Spring Return from Left					
	Contact	Contact	Block	Block Operator Position		1 2	1 2	Contact Block Operator Position			1, 2		
	Contact	Mounting Position	Contact	1	2			Mounting Position	Contact	1	2		
	1N0	0	NO		•	ASD2L10N	ASD21L10N	①	NO	•		ASD22L10N	
90°	(10)	2	_	Dumn	ny Block	AUDZETON	AUDZIZION	2	_	-		AODZZETOW	
2-position	1NO-1NC	0	NO	_	•	ASD2L11N	ASD21L11N	①	NO	•		ASD22L11N	
	(11)	2	NC	•	<u> </u>			2	NC	_	•		
	2N0	0	NO NO		•	ASD2L20N	ASD21L20N	0	NO NO	•		ASD22L20N	
	(20)	2	NO NO		•			2	NO NO	•			
		0	NO NO	_	•			0	NO NO	•			
	2NO-2NC (22)	2	NC	•	-	ASD2L22N	ASD21L22N	2	NC		•	ASD22L22N	
	(22)	3	NO NC		•			3	NO NC	•			
		4	NC	•			Spring Return	4	NC		•	Caring Datum	
		Contact C	Configurat			Maintained	from Right	Sprin	g Return f	rom L	eft	Spring Return Two-way	
	Contact	Contact Mounting		Po	erator sition	1 0 2	1 0 2		1 0		1, 0, 2		
		Position	Contact	1	0 2							<u> </u>	
	2N0	0	NO	•		ASD3L20N	ASD31L20N		ASD32L2	ON		ASD33L20N	
	(20)	2	NO		•								
	2NC	0	NC			ASD3L02N	ASD31L02N		ASD32L0	2N		ASD33L02N	
	(02)	2	NC										
		0	NO NO	•									
	2NO-2NC (22)	2	NO NC		÷	ASD3L22N	ASD31L22N		ASD32L2	2N		ASD33L22N	
45°	(22)	<u>3</u>	NC NC		$\overline{}$								
3-position		①	NO NO										
	4NO	2	NO NO		•								
	(40)	3	NO	•		ASD3L40N	ASD31L40N		ASD32L4	ON		ASD33L40N	
	``,	4	NO NO		•								
		0	NC										
	4NC	2	NC										
	(04)	3	NC			ASD3L04N	ASD31L04N		ASD32L0	4N		ASD33L04N	
	' '	4	NC										
		0	NO	•									
	_^>	2	NO		•	☆							
	☆ 3S	3	NC		•	ASD3L3SN-243					_		
		4	_	Dumn	ny Block								

- Lever: Black

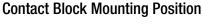
- Round bezel (metal): Chrome-plated
 Selector switches with 1 or 3 contact blocks have a dummy block.
 Knob operator can be installed at every 45 degrees intervals in addition to the positions shown in the above table.
- Turn the operator to each position accurately.
 Selector switches with ☆ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
 See B-308 for gold-plated silver contacts.
- See B-312 for bottom view.

Dimensions

All dimensions in mm.



Terminal Screws: M3.5 Terminal cover: integrated





IDEC

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors **Power Supplies** LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

ARN

CS

Key Selector Switches (Diecast Zinc)

Quantity: 1

1	Shape	Key Selecto ASD⊡K	or (Key No.	0)												
S			Contact C	Configurat	ion			Maintained	Spring Return from Right	Spring Return from Left						
y s g			Contact	Block		perat ositio		1 0	1 0	Contact	Block		erator sition	2 بد1		
S		Contact	Mounting Position	Contact	1		2	1 2		Mounting Position	Contact	1	2			
s —		1NO	0	NO		Ι.	•	ASD2K10N	ASD21K10N	0	NO	•		ASD22K10N		
f	90°	(10)	② ①	— N0	Dum	ımy E	Block			2	NO	•	_			
S	2-position	1NO-1NC (11)	2	NC	•	+		ASD2K11N	ASD21K11N	① ②	NC		•	ASD22K11N		
 s		2N0	0	NO	_	\top	•	ACDOMOCNI	AODOJIVOON	0	NO	•		AODOGUGON		
it		(20)	2	NO			•	ASD2K20N	ASD21K20N	2	NO	•		ASD22K20N		
S			①	NO		_	•			①	NO	•				
S		2NO-2NC	2	NC	•	_		ASD2K22N	ASD21K22N	2	NC		•	ASD22K22N		
n		(22)	<u>3</u>	NO NC	•	+	•			<u>3</u>	NO NC	•	•			
s									Spring Return		_			Spring Return		
o Ir				Configurat				Maintained	from Right	Spring	g Return f	rom L	.eft	Two-way		
S		0	Contact	Block	Opera	tor Po	osition	1 0 2	1 0 - 2		1, 0	2		1, 0, 2		
s		Contact	Mounting Position	Contact	1	0	2		\bigvee			,				
_)		2N0	①	NO	•			ACDOMOON	ACD24K00N		ACDOOKO	ON		ACDOOMOON		
_		(20)	2	NO			•	ASD3K20N	ASD31K20N		ASD32K2	UN		ASD33K20N		
		2NC	①	NC				ASD3K02N	ASD31K02N		ASD32K0	2N		ASD33K02N		
_		(02)	2	NC				7.020.102.1	7.050.11.02.1					7.0200.102.11		
е			0	NO NO	•											
6		2NO-2NC (22)	3	NO NC		_	Ŀ	ASD3K22N	ASD31K22N		ASD32K2	2N		ASD33K22N		
_	45°	()	4	NC		5										
	3-position		0	NO	•											
0		4N0	2	NO			•	ASD3K40N	ASD31K40N		ASD32K4	ON		ASD33K40N		
е		(40)	3	NO	•			ASDSK40N	ASDS I K40N	1	ASDSZK4	UIV		ASDSSK40N		
s			4	NO			•									
—			0	NC	_	_										
		4NC (04)	2	NC NC				ASD3K04N	ASD31K04N		ASD32K0	4N		ASD33K04N		
		(04)	<u>3</u>	NC												
٧			0	NO	•					+						
		-^-	2	NO			•	∆cpovcon odo								
		☆ 3S	3	NC		•		ASD3K3SN-243	_		_			_		
N			4	_	Dun	ımy E	Block									

- Cylinder: Chrome-plated
- · Round bezel (metal): Chrome-plated • Key selector switches with 1 or 3 contact blocks have a dummy block.
- On spring-returned types, the key can be released only from the maintained position. On maintained types, the key can be released from every position. See $\hbox{\ensuremath{B}-308}$ for specifying key retained positions.

Contact Block Mounting Position



- Key selector switch is supplied with two standard keys.
 (1) Insert the key completely before turning the key, otherwise failure will result.
- (2) Turn the operator to each position accurately.
 Different key number is available upon request. Contact IDEC.
 Selector switches with have a half contact operating current (load switching current)
- value). Rated insulation voltage and rated current remain the same.
- See B-308 for gold-plated silver contacts.
 See B-312 for bottom view.

All dimensions in mm. **Dimensions** 90° 2-position Panel Thickness 0.8 to 7.5 45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks)

Terminal screw: M3.5, Integrated terminal cover

Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Flush Silhouette

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Illuminated Selector Switches (Diecast Zinc)

Quantity: 1

Illuminated Selector Switches (BA9S Base) ASLD Shape



tion		Contact Co	nfiguratio				Maintained	Spring Return from Right		Spring	_		1				
2-position		Contact	TRINCK I TO		rator ition	Operating Voltage	1 2	1 _ 2	Contact	Block		rator ition	1, 2	Color			
90°2-	Contact	Mounting Position	Contact	1 2		eperaning remage	1 2		Mounting Position	Contact		2		Code			
		①	NO		•	24V AC/DC	24V AC/DC ASLD22210DN* ASLD212210DN* ① NO ●			ASLD222210DN*							
	1NO (10)					100/120V AC/DC	ASLD2QH210DN*	ASLD21QH210DN*					ASLD22QH210DN*				
	(10)	2	_			200/220V AC	ASLD2QM10DN*	ASLD21QM10DN*	2	_			ASLD22QM10DN*				
	1NO-	(1)	NO		•	24V AC/DC	ASLD22211DN*	ASLD212211DN*	(I)	NO	•		ASLD222211DN*				
	1NC	U NO		•		100/120V AC/DC	ASLD2QH211DN*	ASLD21QH211DN*					ASLD22QH211DN*	R			
	(11) ② NC				•	•	•		200/220V AC	ASLD2QM11DN*	ASLD21QM11DN*	2	NC			ASLD22QM11DN*	G Y
	2010	① NO		•	24V AC/DC	ASLD22220DN*	ASLD212220DN*	(1)	NO	•		ASLD222220DN*	A				
	2NO (20)					100/120V AC/DC	ASLD2QH220DN*	ASLD21QH220DN*	 				ASLD22QH220DN*	PW			
	(20)	2	NO		•	200/220V AC	ASLD2QM20DN*	ASLD21QM20DN*	2	NO	NO •		ASLD22QM20DN*				
	2NO-	①	NO		•	24V AC/DC	ASLD22222DN*	ASLD212222DN*	①	NO	•		ASLD222222DN*				
	2NC	3	NC NO	•		100/120V AC/DC	ASLD2QH222DN*	ASLD21QH222DN*	3	NC NO NC			ASLD22QH222DN*				
	(22)	<u>(4)</u>	NC	•		200/220V AC	ASLD2QM22DN*	ASLD21QM22DN*	4)				ASLD22QM22DN*				
uo		Contact Co	nfiguratio	n			Maintained	Spring Return	Spr	Spring Return			Spring Return				
3-position		Contact Block Operator		CONTACT BIOCK Position			Operating Voltage	1 0 2	from Right		om Right			Two-way	Color		
45° 3-I	Contact	Mounting Position	Contact) 2	Operating voltage	1 0 2	1 0 2	!	0 2			1,0,2	Code			
		(1)	NO	•		24V AC/DC	ASLD32220DN*	ASLD312220DN*	ASLD3222	20DN*			ASLD332220DN*				
	2N0 (20)				+	100/120V AC/DC	ASLD3QH220DN*	ASLD31QH220DN*	ASLD32QH	1220DN*			ASLD33QH220DN*				
	(20)	2	NO		•	200/220V AC	ASLD3QM20DN*	ASLD31QM20DN*	ASLD32QN	//20DN*			ASLD33QM20DN*				
		(1)	NC			24V AC/DC	ASLD32202DN*	ASLD312202DN*	ASLD3222	02DN*			ASLD332202DN*				
	2NC (02)				+	100/120V AC/DC	ASLD3QH202DN*	ASLD31QH202DN*	ASLD32QH	1202DN*			ASLD33QH202DN*				
	(02)	2	NC			200/220V AC	ASLD3QM02DN*	ASLD31QM02DN*	ASLD32QN	//02DN*			ASLD33QM02DN*	R			
	2NO-	①	NO	•		24V AC/DC	ASLD32222DN*	ASLD312222DN*	ASLD3222	22DN*			ASLD332222DN*	G			
	2NC	3	NO NC		╩	100/120V AC/DC	ASLD3QH222DN*	ASLD31QH222DN*	ASLD32QH	1222DN*			ASLD33QH222DN*	Y			
	(22)	<u> </u>	NC		\top	200/220V AC	ASLD3QM22DN*	ASLD31QM22DN*	ASLD32QN	//22DN*			ASLD33QM22DN*	S			
		1)	NO	•		24V AC/DC	ASLD32240DN*	ASLD312240DN*	ASLD322240DN* ASLD32QH240DN*			ASLD332240DN*	PW				
	4NO	2	NO NO		•	100/120V AC/DC	ASLD3QH240DN*	ASLD31QH240DN*				ASLD33QH240DN*					
	(40)	<u>3</u> <u>4</u>	NO NO		•	200/220V AC	ASLD3QM40DN*	ASLD31QM40DN*	ASLD32QN	//40DN*			ASLD33QM40DN*	1			
		1	NC			24V AC/DC	ASLD32204DN*	ASLD312204DN*	ASLD3222				ASLD332204DN*				
	4NC	② NC		100/120V AC/DC	ASLD3QH204DN*	ASLD31QH204DN*					ASLD33QH204DN*						
	(04)	<u>3</u> <u>4</u>	NC NC			200/220V AC	ASLD3QM04DN*	ASLD31QM04DN*	ASLD32QN				ASLD33QM04DN*	1			
		4)	NU														

- Specify a color code in place of * in Part No. R (red), G (green), Y (yellow),
- A (amber), S (blue). PW (pure white) Round bezel (metal): Chrome-plated
- Illuminated selector switches have an LED lamp installed.

Contact Block Mounting Position



- See B-309 for other operating voltage such as 6V AC/DC and 12V AC/DC.
- Dummy blocks are built into 2-contact and 4-contact.
 Make sure to operate the handle firmly to each notch position.
 See B-309 for gold-plated silver contacts.

Dimensions

All dimensions in mm.

Terminal screw: M3.5, Integrated terminal cover

For switch bottom view, see page B-315.



Selector Pushbuttons (Diecast Zinc)

Quantity: 1

Shape	Contact Configuration	Circuit Code	Con Blo		Left	Ring F	Position	Right	Button Color Code	Ring Operator	
			Mounting Position	Contact	Normal	Push Push	button	Push		Part No.	
Ring Operator (90°2-position) ASBD2	11	400	①	NO	INUITIAL	Pusii	INUITIAL	Pusii	B G	AODDOLLN AGO	
	(1NO-1NC)	A03	2	NC	•				R Y	ASBD211N-A03*	
			①	NO		•		•			
		A08	3	NC NO	•	•		•		ASBD222N-A08*	
			4	NC	•						
			①	NO		•		•			
		☆ C10	2	NO				•		☆	
		C10	<u>3</u>	NC NC						ASBD222N-C10*	
			①	NO NO							
	22	D10	2	NO				•	B G	AODDOON DAG	
	(2NO-2NC)	D10	3	NC	•				R Y	ASBD222N-D10*	
			4	NC			•		Y		
			① ②	NO NO		•					
		☆ E10	3	NC						☆ ASBD222N-E10*	
			4	NC							
			①	NO				•			
		☆ F10	2	NO NC		•				ACRESON ETO.	
		FIU	<u>3</u>	NC NC	•		•			ASBD222N-F10*	

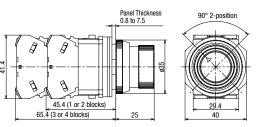
- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow)
- Bezel (metal): Chrome-plated
- Circuit codes E and F: The right and left NC contact blocks on circuit code E or F may overlap each other while turning the ring operator. The NO and NC contact blocks on circuit code F may overlap each other while pressing the button.
- When using the selector pushbutton, do not turn the ring operator with the pushbutton depressed. Otherwise, damage or failure may be caused.
- Selector switches with 🛱 have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
- See B-312 for bottom view.

Contact Block Mounting Position



Dimensions Ring operator (90° 2-position)

All dimensions in mm.



Terminal screw: M3.5, Integrated terminal cover

APEM

Pilot Ligh

Control Boxes Emergency

Stop Switches
Enabling
Switches

Safety Products

Explosion Proof

Terminal Blocks
Relays & Sockets

Circuit

Protectors
Power Supplies

LED Illumination

Controllers

Operator Interfaces

Sensors AUTO-ID

Flush Silhouette

ø16 ø22

ø30

Miniature

Pilot Lights

TWN
TWND
ARN

Control Boxes

Emergency Stop Switches

Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination

Controllers

Operator

Interfaces

Sensors AUTO-ID

Enabling Switches

Pilot Lights (Diecast Zinc) (Round)

Quantity: 1

	Shape	Illumination	Base	Operating Voltage	Part No.	Color Code	LED Lamp Part No.
Round APD1	(24V AC/DC)	LED	BA9S	24V AC/DC	APD122DN*	R, G, Y, A, S, PW	LSRD-2
				100/120V AC/DC	APD1QH2DN*	R, G, Y, A, S, PW	LSRD-H2
				200/220V AC	APD1QMDN*	R, G, Y, A, S, PW	LSRD-M2

• Specify a color code in place of * in Part No.

R (red), G (green), Y (yellow), A (amber), S (blue), PW (pure white)

Round bezel (metal): Chrome-plated

Pilot lights have an LED lamp installed.

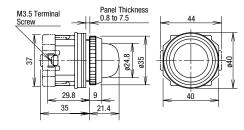
See B-309 for other operating voltage such as 6V AC/DC and 12V AC/DC.
 See B-309 for how to specify units without LED lamps.
 Terminal cover is installed on pilot lights for electric shock prevention.

Type	Terminal Cover	Quantity
6V AC/DC, 12V AC/DC, 24V AC/DC, 100/120V AC/DC, 200/220V AC, 230/240V AC	APD-PVL	1
380V AC and above	N-VL3	1

Dimensions

Round, LED illuminated

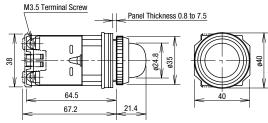
6 to 120V AC/DC, 200 to 240V AC (Terminal Cover: APD-PVL)



Terminal Screws: M3.5

• See B-349 for wiring.

380V AC and above (Terminal Cover: N-VL3)



Terminal Screws: M3.5

All dimensions in mm.

ø22

ø16

Flush Silhouette

Miniature

Pilot Lights

ARN

Control Boxes

Emergency
Stop Switches
Enabling
Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

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Interfaces
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AUTO-ID

Nameplates

Model	Legend	Material	Part No.	Quantity	Dimensions (mm)	
NA	Blank	Aluminium 1.2 mm thick	NA-0	10	40 1.2	
For TWN/TWND	With Legend	White letters on black background	NA-□	10	930.5	
NALO For TWN/TWND	Blank	Aluminium 1.2 mm thick Black	NALO	10	40 1.2	

Specify a legend code in place of \square in the Part No.

Legends

□: Code	Legend
1	ON
2	0FF
3	START
4	STOP
31	OFF ON
35	HAND AUTO
53	HAND OFF AUTO

Flush Silhouette

ø16

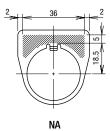
ø22

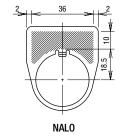
ARN

Miniature

Pilot Lights







All dimensions in mm.

Example (when the legend height is 4 mm)

	Maximum Number	Character	s per Line
Shape	of Lines	Alphabetic Characters	Japanese Characters
NA	1	14	8
NALO	2	14	8

Accessories

Shape	Material	Part No.	Quantity	Remarks
Locking Ring Wrench B A For TWN/TWND	Nitril rubber (black)	OR-12	1	Used to tighten the round bezel when installing the ø30 or ø25 switch onto a panel from the front. A: TWS series (ø25) B: TWN/TWND series (ø30) A B B B B B B B B B B B B
Lamp Holder Tool A For TWN/TWND	Nitril rubber (black)	OR-55	1	Used to install and remove the LED/incandescent lamps. See B-345. A: For BA9S base B: For E12 base A OR-55 F S9 B B B B B B B B B B B B B
Contact Rubber Boot For momentary 1 layer of contact blocks (2 contact blocks) For TWN	Nitril rubber (black)	0C-99	1	Rubber boot used to prevent oil and dirt from entering into the contact block. Temperature range: —5 to +60°C When inserting a cable, cut the projection on the cover to match the cable size.
Anti-rotation Ring For TWN/TWND	Metal (diecast) (zinc-plated)	0GL-11	10	Used to prevent the operator from turning. Generally used when using no nameplates on selector switches and selector pushbuttons. See B-345 for installation. Cannot be used for pin lock.
Rubber Mounting Hole Plug For TWN/TWND	Nitril rubber (black) Nitril rubber (gray)	0B-13B	5	Used to plug unused ø30.5 mm mounting holes. Degree of protection: IP40
Plastic Mounting Hole Plug For TWN/TWND	Plug: ABS plastic (gray) Gasket: Chloroprene rubber Locking ring: diecast zinc	0BP-11	1	Tightening torque: 1.2 N·m. Degree of protection: IP65 (when there is no anti-rotation ring hole) Supplied with a locking ring. Gasket M30°1.5Screw Locking Ring
Metallic Mounting Hole Plug For TWN/TWND	Plug: ABS plastic (gray) Gasket: Chloroprene rubber Locking ring: diecast zinc	0B-11	1	Tightening torque: 1.2 N·m. Degree of protection: IP65 (when there is no anti-rotation ring hole) Supplied with a locking ring. Gasket M30 ^{P1.5} Screw Locking Ring

APEM

Control Boxes

Emergency Stop Switches Enabling Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Circuit Protectors

Power Supplies

LED Illumination

Controllers

Operator Interfaces

Sensors

AUTO-ID

Flush Silhouette

ø16

ø22

Miniature

Pilot Lights

ARN

Control Boxes

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ø16 ø22

Miniature Pilot Lights

ARN

Accessories All dimensions in mm

	Shape	Material	Pa	art No.	Quantity	Remarks
	Button Cover for Extended Pushbuttons For TWN/TWND	Nitril rubber Bezel: diecast zinc	Black Red Green Yellow	0C-11B 0C-11R 0C-11G 0C-11Y	. 1	Metallic bezels covered with a rubber boot to enhance waterproof characteristics. Button is not included. Applicable to extended pushbuttons only. Oil-proof Operating temperature: -5 to +60°C.
- S	FOI TWIN/TWIND					Used to cover and protect
- f - ; - 6 - t	For flush pushbuttons For extended pushbuttons For TWN/TWND	EPDM rubber	0C-121 0C-122		1	pushbuttons where units are subject to water splash. Not suitable for outdoor use or where the units are subject to oil splash. Part No. A B 0C-121 37 16 0C-122 37 22
	Dust-proof Rubber Cover for Jumbo Mushrooms For TWN/TWND	Nitril rubber (black)	OC-4GN		1	Used for ABN4G and ABGD4 pushbuttons. Panel Thickness 1.2 to 5.5 32 32
	Padlock Cover For TWN/TWND	Polyarylate (gasket: nitryl rubber)	OL-KL1		1	Used to protect pushbuttons and illuminated pushbuttons (momentary/maintained) with 24 mm max. height from the panel, and selector switches (knob operator). Not used for the following models. Pushbuttons Mushroom with full shroud Mushroom Jumbo mushroom with shroud Illuminated Pushbuttons With half shroud With full shroud Selector Switches Lever operator Key selector switch with key installed Not used for the following models. Panel Thickness Panel Thickness Panel Thickness Panel Thickness Rubber Gasket 0.51 Waterproof Rubber Gasket 0.51
	Padlock Cover for Key Selector Switches For TWN/TWND	Metal Paint: red (zinc-plated brass)	HS9Z-PC	30	1	Applicable model Key selector switches ASNIIK/ASDIIK See padlock cover catalog for operating instruction. Material SPCC 1.6 mm thick Red paint Revet: State State 2 mm thick 32.5 38.4 47.2 37.7 48.4 48.4 49.5 30.5 30.5 4
	For Flush Pushbuttons For TWN/TWND	Metal (zinc-plated brass)	OL-C		1	Used to protect flush pushbuttons from inadvertent operation. Can be easily attached using the locking ring. 42.5 42.5 42.5 42.5 42.5 42.5 43.6 43.6 43.6 44.6

Accessories All dimensions in mm.

Shape		Material Part No. Qua		Quantity	Remarks	ot Lights
Metallic Bezel		I matorial	Ture No.	quantity	Tomano	hts
Wetalite Bezei		Metal (diecast zinc: chrome- plated)	0G-11	2	Cannot be used with pin lock, selector pushbuttons, and monolever units.	APEM Switches & Pilot Lights
ø35/ø26, height 9 For T	WN/TWND					Control Boxes
Plastic Bezel	WIN/ TWIND				• Specify a color code in place of *. B (black), G (green), R (red), W (white),	Emergency Stop Switches Enabling Switches Safety Products
		Polycarbonate	0GP-11*	2	Y (yellow)	Explosion Proof
					Cannot be used with pin lock, selector pushbuttons, and monolever units.	Terminal Blocks
	5 TM					
ø35/ø26, height 9 Octagonal Metal Bezel	For TWN					Relays & Sockets Circuit
Cotagonal Motal Bozol	① Flush					Protectors
0	W35 (37.6)		0G-81	2		Power Supplies
	H9	Metal			Use with TWDN series diecast zinc switches and pilot	LED Illumination Controllers
	2	(diecast zinc: chrome- plated)			lights. • Cannot be used with half-shrouds.	Operator
0	Extended W35		0G-82	1		Interfaces Sensors
(37.6) H16						AUTO-ID
For TWDN Clear Plastic Shroud for Flush Pusht	outtone					
Clear Flastic Stilloud for Flastic Fusili	outtoris					
						Flush Silhouette
		Acrylic (clear)	0GP-13	2		ø16
						ø22
ø35, height 14	For TWN				Clear plastic full shroud.	ø30
Clear Plastic Shroud for Extended P	usnbuttons					Miniature
						Pilot Lights
		Acrylic (clear)	OGP-14	2		
ø35, height 20.6	For TWN					TWN
Clear Plastic Shroud for Illuminated F	Pushbuttons					TWND
0						ARN
		Acrylic (clear)	0GP-1411	1	Buttons may protrude slightly depending on the panel	CS
		Activité (cical)	oui 1411	'	thickness.	
Shroud: ø35, height 20.6 Metal Nut Ring: height 4 For TWN						
Metal Nut Ring for Illuminated Push	buttons					
		Metal (diecast zinc)	0L-11	5	Metal nut ring for OGP-1411 only.	
ø35, height 4	For TWN					

Control Boxes

Emergency
Stop Switches
Enabling
Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Circuit
Protectors

Power Supplies

LED Illumination

Controllers

Operator
Interfaces

Sensors

AUTO-ID

Flush Silhouette

ø16 ø22

Miniature Pilot Lights

ARN

Maintenance Parts

All dimensions in mm.

Button for Pushbuttons © Extended © 24.6, height 4 © Extended © 24.6, height 9 © 40 Mushroom Ø 65, height 23.2 © Button for Pin Lock Ø 23.6, height 3 © 6 Ø 40 Mushroom Pushlock Turn Reset Ø 40, height 18.5 © Ø 40 Mushroom Pushlock Turn Reset Ø 40, height 18.5	2BN-* 5 BBN-* 2 BBN-* 1 1B-* 5	5 B (black), G (green), R (red), Y (yellow), S (blue), W (white) 1 B (black), G (green), R (red), Y (yellow), S (blue) 5 B (black), G (green), R (red), Y (yellow), S (blue), W (white) 1 R (red),Y (yellow) 1 B (black), G (green), R (red), Y (yellow)
Pushbuttons ABN1 ABN1 ABN2 Polyacetal ABN3 ABN4 ABN5 ABN4 ABN6 ABN6 ABN6 ABN6 ABN7 ABN7 ABN8 ABN8 ABN8 ABN9	2BN-* 5 BBN-* 2 BBN-* 1 BB-* 1 BB-* 1	B (black), G (green), R (red), Y (yellow), S (blue), W (white) B (black), G (green), R (red), Y (yellow), S (blue) B (black), G (green), R (red), Y (yellow), S (blue), W (white) R (red),Y (yellow) B (black), G (green), R (red), Y (yellow)
② Extended ø24.6, height 9 ③ ø40 Mushroom ø40, height 16.2 ④ ø65 Jumbo Mushroom ø65, height 23.2 ⑤ Button for Pin Lock ø23.6, height 3 ⑥ ø40 Mushroom Pushlock Turn Reset ø40, height 18.5 ⑦ ø40 Mushroom Push Turn Lock	BBN-* 2 BBN-* 1 BB-* 1 BB-* 1	Y (yellow), S (blue), W (white) B (black), G (green), R (red), Y (yellow), S (blue) B (black), G (green), R (red), Y (yellow), S (blue), W (white) R (red),Y (yellow) B (black), G (green), R (red), Y (yellow)
## Wind Polyacetal ## ABN3 ## ABN4 ## Wind Polyacetal ## ABN4 ## ABN4 ## ABN4 ## Wind Polyacetal ## ABN4 ##	IBN-* 1 IB-* 5 IB-* 1	B (black), G (green), R (red), Y (yellow), S (blue) B (black), G (green), R (red), Y (yellow), S (blue), W (white) R (red),Y (yellow) B (black), G (green), R (red), Y (yellow)
© Button for Pin Lock Ø23.6, height 3 © Ø40 Mushroom Pushlock Turn Reset Ø40, height 18.5 © Ø40 Mushroom Push Turn Lock	1B-* 5 B-* 1	Y (yellow), S (blue) B (black), G (green), R (red), Y (yellow), S (blue), W (white) R (red),Y (yellow) B (black), G (green), R (red), Y (yellow)
S Button for Pill Lock ø23.6, height 3 S Ø40 Mushroom Pushlock Turn Reset ø40, height 18.5 Ø40 Mushroom Push Turn Lock Ø40 Mushroom Push Turn Lock	B-* 1	Y (yellow), S (blue), W (white) R (red),Y (yellow) B (black), G (green), R (red), Y (yellow)
Push Turn Lock AVN3I	B-* 1	B (black), G (green), R (red), Y (yellow)
S Duch Turn Lock		Y (yellow)
Moderation Series Compatible 440, height 18.5	LD-*-K 5	5
Lens for Illuminated Pushbuttons ① Extended Ø24, height 18.5		R (red), G (green), S (blue),
S O a 40 Mushroom	LD-*-K 1	Y (yellow), A (amber), W (white) Specify W for PW (pure white) illumination.
3 ø40 Mushroom Push-Lock Turn-Reset ø40, height 18.5	3L-R-K 2	2 R (red) only
	3LD-*-K 1	R (red), G (green), S (blue), Y (yellow), A (amber), W (white) Specify W for PW (pure white) illumination.
Series companie		, ,
Selector Operator ① Knob operator Ø25, height 20.5		
© Lever operator #25, height 20.5, length 37.5 Polyacetal ASNH		B (black), G (green), R (red)
③ Color insert Width 21, depth 5, height 18	IC1* 5	B (black), G (green), R (red), Y (yellow), S (blue), W (white)
Knob for illuminated selector Series Compatible AS resin ASLNI AS resin ASLNI	IHD-*-K 1	G (green), R (red), S (blue), A (amber), W (white), Y (yellow) Specify W for PW (pure white) illumination.
Lens for Pilot Lights ① Round Ø24.8, height 28, M20 Series Compatible	06LN-*-K 5	R (red), G (green), Y (yellow) A (amber), W (white), S (blue) Specify W for PW (pure white) illumination.
② Rectangular Width 36, denth 30, height 8.5	1406LD-*-K 5	R (red), G (green), Y (yellow), A (amber), C (clear), S (blue) Specify C for PW (pure white) illumination.
③ Square extended □25, height 26.5 For TWN	106LD-*-K 5	R (red), G (green), S (blue), Y (yellow), A (amber), W (white) Specify W for PW (pure white) illumination.
Marking Plate Rectangular pilot lights Width 29.8, depth 23.8, thickness 2 UPQN	1406N-W 5	W (white) only See B-346 for engraving area.

Maintenance Parts

All dimensions in mm.

	γ				. 유
Shape	Material	Part No.	Quantity	Remarks	ot Lights
Rubber Washer (1.5 mm-thick) For TWN/TWND	Rubber (synthetic soft vinyl) ø39/ø29.5, height 1.5	0W-11	10	To tighten mounting panels	APEM Switches &
Rubber Washer (3.0 mm-thick) For TWN/TWND	Rubber (synthetic soft vinyl) ø39/ø29.5, height 3	0W-12	10	To tighten mounting panels	Pilot Lights Control Boxes Emergency Stop Switches Enabling
Shroud for Pushbuttons ①	① Half shroud ø35/ø27, height 20.5	ABN2G	1	• With nut ring (ø35, height 4)	Switches Safety Products Explosion Proof
3	② Full shroud ø35/ø28.5, height 16.5	ABN2F	1		Relays & Sockets Circuit Protectors
(a)	③ Full shroud (for mushroom pushbuttons) ø48, height 20	ABN3G	1		Power Supplies LED Illumination Controllers
© ()	Shallow shroud (for jumbo mushroom) ø75, height 18	ABN4G	1		Operator Interfaces Sensors
For TWN/TWND	© Deep shroud (for jumbo mushroom) ø75/ø69, height 33	ABN4F	1		Flush Silhouette
Shroud for Illuminated Pushbuttons ① ② ②	① Half shroud (For BA9S base) ø35/ø27, height 25	ALN2GL	1	• With nut ring (ø35, height 4)	ø16 ø22 ø30
For TWN/TWND	© Full shroud (For BA9S base) ø35/ø29.5, height 22.5	ALN2FL	1	• With nut ring (ø35, height 4)	Miniature Pilot Lights
Spare Key For Key Selector Switches For TWN/TWND	Metal Nickel plated brass Length 3, width 19.7, thickness 1.8	TW-SK-0	2	● ASN□K□N ASD□K□N	TWN TWND
Spare Key For Key Selector Switches For TWN	Metal Nickel plated brass Length 37.5, thickness 2	ASN-SK-24401	2	◆ ASN□K□-N024401	ARN CS
Pin/Chain Kit For ABD8P	Pin: Nickel plated brass	ABD8P-PIN	1	• Pin, chain, and plate for ABN8P • Pin (ø4.6)	
Contact Block Plug For TWN/TWND	Polyamide	HW9Z-CBPL	10	Used to plug the hole in the center of a contact block.	

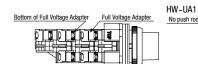
Control Boxes Emergency Stop Switches Enabling Switches Safety Products **Explosion Proof** Terminal Blocks Relays & Sockets Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces Sensors AUTO-ID

Maintenance Parts

All dimensions in mm

	Shape	Specification	Part No.	Quantity	Remarks
	Contact Block HW-U	1NO	HW-U10	4	Housing color: Blue, Push rod color: Green
		1N0	HW-U10-MAU	ļ	MAU has gold contacts
1		1NC	HW-U01	-	Housing color: Reddish purple, Push rod color: Red
k S		INC	HW-U01-MAU	l l	MAU has gold contacts
3		EM contact	HW-U10R	1	Housing color: Blue, Push rod color: Black
<i>y</i> S		(early make contact)	HW-U10R-MAU	I	MAU has gold contacts
g s —		LB	HW-U01R	1	Housing color: Reddish purple, Push rod color: White
s —	Weight: 11g (approx.)	(late break contact)	HW-U01R-MAU	I	MAU has gold contacts
of S S	Dummy Block Weight: 3.5g (approx.)	Polyamide	HW-DB	10	For HW-U contact blocks Used when the total number of contact blocks and full voltage adapters is odd.
t s -	Full Voltage Adapter For illuminated unit (*1) (*2) HW-UA1	For 1 contact only (see diagram below) Full Voltage Adapter Contact Block	HW-UA1	1	Applicable model: Illuminated pushbuttons Illuminated selector switches Applicable load (LED lamp) LSRD-6, LSTD-6 (6V AC/DC)
r s s	HW-UA1-H Weight: 11g (approx.)	For 2 or more contacts (see diagram below) Contact Block Full Voltage Adapter	HW-UA1-H	1	LSRD-1, LSTD-1 (12V AC/DC) LSRD-2, LSTD-2 (24V AC/DC) LSRD-H2 (100/120V AC/DC) LSRD-M2 (200/220V AC) LSRD-M4 (230/240V AC)

- *1) For use as maintenance parts. Do not use for expansion or remodelling purposes.
- *2) There are two types of full voltage adapter specifications. Please confirm your current contact configuration before placing an order.
- For configurations without a contact block mounted beneath the full voltage adapter (1 contact): Order model HW-UA1.
- For contact configurations with contact blocks mounted under the full voltage adapter (2 to 4 contacts): Order model HW-UA1-H.



HW-UA1-H Push rod

LEDs

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Miniature

Pilot Lights

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Shape/Dimensions	Operating Voltage	Currer DC	t Draw AC	Part No.	Quantity	Base
	6V AC/DC	10mA	14mA	LSRD-6	10	
Cale	12V AC/DC	7mA	8mA	LSRD-1	10	
	24V AC/DC	7mA	8mA	LSRD-2	10	BA9S/13
2.4 (20.5)	100/120V AC/DC	2mA	2mA	LSRD-H2	10	<i>B</i> /100/10
Voltage Indication	200/220V AC	_	2mA	LSRD-M2	10	
Violtage indication Base (×2) Eyelet (×1)	230/240V AC	_	2mA	LSRD-M4	10	

- Only one color is available for LSRD so there are no codes to specify the color in the part no.
- Also available for purchase individually. Standard pricing differs in this case.
- When replacing the LED lamp, please check the part no. and voltage of the product currently in use.

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Terminal Blocks Relays & Sockets

Transformer

Quantity: 1

Shape	Operating Voltage	Voltage Range	Part No.	Applicable Load
For 6V	100/110V AC	100/110V AC ±10%	TWR516	
	200/220V AC	200/220V AC ±10%	TWR526	
	380V AC	380V AC ±10%	TWR5386	LSRD-6 (6V AC/DC, LED lamp)
W.	400/440V AC	400/440V AC ±10%	TWR546	
	460/480V AC	460/480V AC ±10%	TWR5486	
For 24V	100/110V AC	100/110V AC ±10%	TWR512	
	200/220V AC	200/220V AC ±10%	TWR522	LSRD-2 (24V AC/DC, LED lamp)
	400/440V AC	400/440V AC ±10%	TWR542	

- The terminal cover (TWR-VL3 type) is included as standard with the separate transformer.
 Only one illuminated unit can be connected.

Specifications

Part No.	TWR5□6	TWR5□2			
Rated Voltage	100/110V AC 200/220V AC 380V AC 400/440V AC 460/480V AC (50/60Hz)	100/110V AC 200/220V AC 400/440V AC (50/60Hz)			
Current Draw	2.4VA				
Rated Insulation Voltage	600V				
Insulation Resistance	100MΩ minimum (500V DC megger)				
Operating Temperature	-30 to 60°C (no freezing)				
Operating Humidity	35 to 85% RH (no condensation)				
Storage Temperature	-40 to +80°C (no freezing)				
Vibration Resistance	Damage limits: 30 Hz, amplitude 1.5 mm				
VIDIATION RESISTANCE	Operating extremes: 5 to 55 Hz, amplitude 0.5 mm				
Shock Resistance	1000 m/s ²				
SHOCK RESISTANCE	100 m/s ²				
Dielectric Strength	2500V AC, 1 minute				
Terminal Screw	M3.5				
Applicable Wire	2 mm² maximum, 2 wires maximum				
Weight	87g				

Dimensions

M3.5 Terminal Screws

Secondary Side

2-ø3.3 Mounting Hole

Terminal Cover

All dimensions in mm.

Primary Side

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Accessories

Accessories				
Shape	Material Material	Part No.	Quantity	Dimensions (mm)
DIN 35 mm Rail Weight: 200g approx.	Aluminum Length: 1000 mm	BAA1000	10	12.5 12.5 1.7
End Clip Weight: 15g approx.	Metal (zinc-plated steel) Applicable rail: BAA1000	BNL6	10	M4 screw

ARN

Safety Precautions

- Turn off the power to the TWN/TWND switches & pilot lights before starting installation, removal, wiring, maintenance, and starting installation, removing, wiring, maintenance, and inspection of the products. Failure to turn power off may cause electrical shocks or fire hazard.
- To avoid a burn on your hand, use the lamp holder tool when replacing lamps.
- For wiring, use wires of a proper size to meet the voltage and current requirements. Tighten the terminal screws to the recommended tightening torque (see B-349). Failure to tighten terminal screws may cause overheat
- When using a commercially available lamp, choose a lamp with rated voltage 5 to 30V AC/DC and 1W maximum, and with the same base and shape. Make sure of correct operation before installation. The operation of illuminated pushbutton switches cannot be guaranteed when a commercially available lamp is used.

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Operating Instructions

Panel Mounting

- 1. Remove the locking ring from the operator and check that the rubber gasket is in place. For mushroom and jumbo mushroom switches, remove the button before removing the locking ring.
- 2. Adjust the thickness of the rubber washers according to the panel thickness.
- 3. Insert the switch into the panel from the back of the panel.
- 4. On the panel front, install the nameplate and locking ring. For mushroom and jumbo mushroom switches, install the button before installing the locking ring.

Rubber Gasket Locking Ring Nameplate

Panel Thickness and Rubber Washer

Adjust the thickness of the rubber washers according to the panel thickness as shown in the tables below. Also, make sure to include the nameplate thickness when using a nameplate.



Illuminated pushbutton (extended w/full shroud)

Rubber Washer

1.5 mm-thick 3.0 mm-thick

1

Applicable Model

TWN/TWND series

(flush/extended/mushroom/jumbo mushroom) Illuminated pushbutton (extended/mushroom) Pilot light (except for square type)

Panel	Rubber	Washer
Thickness (mm)	1.5 mm-thick	3.0 mm-thick
Supplied	2 pieces	1
0.8 to 3.5	2 pieces	1
3.5 to 5.0	1	1
5.0 to 6.5	_	1
6.5 to 7.5	1	_

*1: (6.5) is for mushroom pushbuttons with full shroud

2 pieces

2 pieces

1

TWN/TWND series TWND series Pushbutton (extended with half shroud)

Rubber Washer

1.5 mm-thick 3.0 mm-thick

Pin lock pushbutton

TWN/TWND series

Panel

Thickness (mm)

Supplied

0.8 to 3.5

2.0 to 3.5

3.5 to 5.0 5.0 to 6.0 (6.5)*

Mushroom with full shroud

Panel Thickness (mm)	Rubber	Washer
Thickness (mm)	1.5 mm-thick	3.0 mm-thick
Supplied	2 pieces	1
0.8 to 3.0	2 pieces	1
3.0 to 4.5	1	1
4.5 to 6.0	-	1
6.0 to 7.5	1	_

TWN/TWND series

Illuminated pushbutton

Panel

Thickness (mm)

Supplied

0.8 to 1.8 1.8 to 3.5

(extended with half shroud)

Pushbutton (extended with full shroud)

•		,
Panel	Rubber	Washer
Thickness (mm)	1.5 mm-thick	3.0 mm-thick
Supplied	2 pieces	1
0.8 to 2.5	2 pieces	1
2.5 to 4.0	1	1
4.0 to 5.5	_	1
5.5 to 6.0	1	

TWN/TWND series

Other models (excluding square)

Panel Thickness (mm)	Rubber	Washer
Thickness (mm)	1.5 mm-thick	3.0 mm-thick
Supplied	2 pieces	1
0.8 to 3.5	2 pieces	1
3.5 to 5.0	1	1
5.0 to 6.5	_	1
6.5 to 7.5	1	_

- See B-324 for square pilot lights about installing on the panel and replacing LED lamps.
- The number of rubber washers shown in the dimensions of TWN/TWND series may differ from the number of rubber washers supplied.

Notes for Panel Mounting

Locking ring wrench recommended torque

Tighten the bezel to a tightening torque of 3.0 to 3.5 N·m.

Locking ring wrench

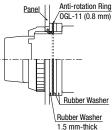
Locking ring wrench (OR-12) can be used to tighten the bezel. Use side B to tighten. Side B: For TWN/TWND series Side A: TWS series



Installing the Anti-rotation Ring (OGL-11)

Anti-rotation rings are used on selector switches or pushbuttons which rotate and used when using no nameplates. Insert a 1.5 mm-thick rubber washer between the panel and the anti-rotation ring as shown on the right.

To install, adjust the panel thickness by taking the thickness of anti-rotation ring (OGL-11) into consideration.



Replacement of LED Lamps

Lamps can be replaced by using the lamp holder tool (OR-55) from the front of the panel. (See B-338 for lamp holder tool.)

How to Remove

To remove, slip the lamp holder tool onto the lamp head lightly. Then push slightly, and turn the lamp holder tool counterclockwise.



How to Install

To install, insert the lamp head into the lamp holder tool. Place the two pins on the lamp base to the grooves in the lamp socket. Inset the lamp and turn it clockwise.



Operating Instructions

Installing/Removing the Buttons and Lenses

To install

Pushbutton button

Flush/Extended

Push in the button to install.



Insert a flat screwdriver between the button and the bezel to remove the button (see below for details).

To remove



<Notches

Notches on the operating shaft

The operating shaft has four notches as shown at right. Insert a flat screwdriver (3 mm max.) into one of the notches, and tilt the screwdriver to remove the button.



 \triangle

Make sure to insert a flat screwdriver into one of the notches, otherwise the pushbutton may be damaged.

Notes on button removal

To avoid damaging the bezel or the button, remove the bezel from the pushbutton before inserting a flat screwdriver.

Mushroom/ Jumbo Mushroom

Button has threads. Turn clockwise to install the button.



Turn the button counterclockwise to remove.



Illuminated Pushbutton Lens

Extended/Mushroom

Lens has threads. Turn clockwise to install the lens.



Turn the lens counterclockwise to remove.



Pilot Light Lens Round

Lens has threads. Turn clockwise to install the lens.



Turn the lens counterclockwise to remove.



 Λ

A rubber gasket is installed between the lens and operator on pilot lights. Make sure that the rubber gasket is in place when installing the lens.

Marking Plate on Pilot Lights

Rectangular Marking Plates (for UPQN4)

Removing

① Insert a flat screwdriver between the lens and bezel, and tilt the screwdriver to remove the lens.



Engraving Area

Material: Acrylic resin Size:

29.8 W \times 23.8 D, thickness 2.0 mm Engraving area:

28 W \times 22 D \times 1.0 mm height max.

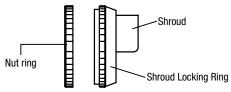
② A white marking plate is installed in the lens which can be removed easily.



Installing the Half Shroud on Extended Pushbuttons/ Illuminated Pushbuttons

Half Shroud Parts

A shroud is installed in the shroud locking ring. Tightening the shroud locking ring in the switch locks the shroud.



Installing the Half Shroud

- ① Adjust the thickness of the rubber washers according to the panel thickness (see B-345).
- ② Insert the switch into the panel from the back of the panel.
- ③ Install the nut ring from the panel front to tighten the switch.
- Install the half shroud on the upper side of the switch, and tighten the shroud locking ring.
- (5) Make sure that the shroud is securely fastened inside the shroud locking ring.

Tightening the Half Shroud

Align the three projections on the shroud with the groove on the switch, and tighten the shroud on the upper side of the switch. Tighten the shroud locking ring.





- Shrouds may rattle depending on the panel thickness.
- A gap may appear between the nut ring and the shroud locking ring depending on the panel thickness.

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Operating Instructions

Selector Switches

Turn the operator such as knob, lever, and key to each position accurately. Releasing halfway may cause the operator to return to the former position, or to get stuck between. On spring return two-way types, the center of operators may be misaligned slightly.

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Key Selector Switches

Insert the key completely before turning. Failure to do so may cause failures.

Installing the Operator on Selector Switches

① Install the switch with TOP marking facing upward, so that the operator can be installed on the switch in the correct direction.



② On non-illuminated models, install the color insert in the middle of operator. The color insert also serves to retain the operator.

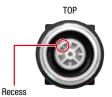


③ On illuminated models, align the operator with the switch by confirming the TOP marking on the switch and also the switch operation. Then press in the operator into the switch.



Installation of Selector Operators

The shaft of each non-illuminated selector switch has a recess to identify in which direction to install the operator. Align the operator with the recess and press in the operator. Press a color insert (non-illuminated) into the operator (illuminated selector switches do not have a recess on the shaft).





90° 2-position



45° 3-position

The non-illuminated operators can be installed in positions other than the standard position shown above.







Standard positions

Removal

Removing the Operator from Selector Switches



① Insert a flat screwdriver into the recess under the color insert. Turn the screwdriver to push out the insert from the operator.



② Pull out the operator sideways as shown in the left photo to remove the operator

Removing the Operator from Illuminated Selector Switches



- ① Insert a flat screwdriver (4 to 5 mm) into the recess at right or left under the operator and tilt. The operator is displaced slightly.
- ② Insert the flat screwdriver into the other recess and tilt. The operator can be removed.

Removing the Contact Blocks/Full Voltage Adapters

Insert a flat screwdriver (4 to 6 mm) into the snap-fit latches of the contact block or full voltage adapter and lift to remove.



- Make sure to lift both latches. Contact blocks cannot be removed by lifting one latch only.
- Do not apply excessive force to the latches, otherwise damage maybe caused.

Caution When Replacing Units

When replacing parts during maintenance (contact block, dummy block, full voltage adapter), be sure to install them in their original positions. If changed, the product will not be covered under warranty.

Operating Instructions

Applicable Wiring

(1) Contact Block 0.3 to 3.5 mm² (solid wire 0.5 to 2.0 mm)

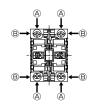
Pushbutton Switch, Illuminated Pushbutton Switch, Selector Switch, Key Selector Switch, Illuminated Selector Switch,

Selector Pushbutton Switch

A and B show the wiring direction to the terminals.

<Contact Block>

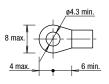
Terminal screws M3.5 (spring-up)

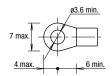


Applicable Crimping Terminal

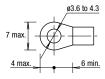
Be sure to use an insulation tube or cover on the crimping part of the crimping terminal to prevent electrical shocks.

Crimping terminal for (A)

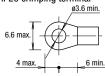




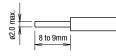
IP20 crimping terminal



Crimping terminal for ® IP20 crimping terminal



Solid wire



- \bullet Strip the wire insulation 8 to 9 mm from the end.
- Insert the wire until the insulation comes into contact with the terminal metal part.

(2) Full Voltage Adapter

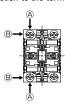
0.3 to 3.5 mm² (solid wire 0.5 to 2.0 mm)

Illuminated pushbutton, Illuminated selector switch

(A) and (B) show the wiring direction to the terminals.

<Full Voltage Adapter>

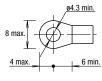
Terminal screws M3.5 (spring-up)

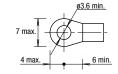


Applicable Crimping Terminal

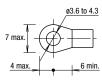
Be sure to use an insulation tube or cover on the crimping part of the crimping terminal to prevent electrical shocks.

Crimping terminal for (A)

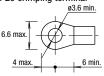




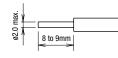
IP20 crimping terminal



Crimping terminal for ® IP20 crimping terminal



Solid wire



- Strip the wire insulation 8 to 9 mm from the end.
- Insert the wire until the insulation comes into contact with the terminal metal part.

(2)-1 IP20 Degree of Protection

The terminal of HW-U contact block and full voltage adapter has IP20 degree of protection. When IP20 is required for wiring, observe the followings.

 $\label{eq:make-sure-to-the-composition} \mbox{Make sure to insert the crimping terminal or wire to the terminal straight and fully.}$

When using a crimping terminal

Please use IP20-compliant crimp terminals as specified in the above contact block and full voltage adapter section.

When using a solid wire

Strip the wire insulation 8 to 9 mm from the end and insert the wire to the terminal fully.

When using a stranded wire

Strip the wire insulation 8 to 9 mm from the end and insert the wire to the terminal fully. Make sure that the wires are not loosened.

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Operating Instructions

(3) Pilot Light 0.3 to 2 mm² (solid wire 0.5 to 1.6 mm)

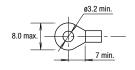
Applicable crimping terminal

Be sure to use an insulation tube or cover on the crimping part of the crimping terminal to prevent electrical shocks.

APN1, UPQN3B, UPQN4 (6 to 120V AC/DC, 200 to 240V AC)

Terminal screws M3 (self-lifting)

(Arrows show the wiring direction)

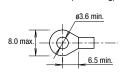




 When wiring two wires to the same terminal, do not route them in the same direction. One wire can be routed upward and one downward. Sideways routing is not possible.

APD:

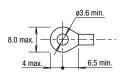
(6 to 120V AC/DC, 200 to 240V AC) Terminal screws M3.5 (self-lifting)





APN1, UPQN3B, UPQN4, APD1 (380V AC and above)

Terminal screws M3.5 (self-lifting)





- Install the terminal cover supplied with the pilot light. The connection terminal is not IP20.
- When selecting mounting centers and crimping terminals, take sufficient insulation distance into consideration.

Recommended Tightening Torque Number of Wires

Unit		Wire	Number of Wires	Recommended Tightening Torque (N·m)	Terminal Screw
	Crimp	oing Terminal	2	1.0 to 1.3	
HW-U Contact	Solid	Ø0.5 to 1.6 mm (AWG14 to 22)	2	1.0 to 1.3	
Block	Wire	ø1.7 to 2.0 mm (AWG12)	1	1.2 to 1.3	M3.5
Full Voltage Adapter(*1)	Stranded	0.3 to 2.0 mm ² (AWG14 to 22)	2	1.0 to 1.3	
Adaptor(1)	Wire	2.1 to 3.5 mm ² (AWG12)	1	1.2 to 1.3	
	Crimp	oing Terminal			
Pilot Light	Solid Wire	ø0.5 to 1.6 mm (AWG14 to 22)	2	0.6 to 1.0 (M3.0)
	Stranded Wire	0.3 to 2.0 mm ² (AWG14 to 22)		1.0 to 1.3 (M3.5)

*1) Lamp terminal of illuminated pushbuttons and illuminated selector switches

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SAPEN01A_B TWN September 2025



Ordering Terms and Conditions

Thank you for using IDEC Products.

By purchasing products listed in our catalogs, datasheets, and the like (hereinafter referred to as "Catalogs") you agree to be bound by these terms and conditions. Please read and agree to the terms and conditions before placing your order.

1. Notes on contents of Catalogs

- (1) Rated values, performance values, and specification values of IDEC products listed in this Catalog are values acquired under respective conditions in independent testing, and do not guarantee values gained in combined
 - Also, durability varies depending on the usage environment and usage
- (2) Reference data and reference values listed in Catalogs are for reference purposes only, and do not guarantee that the product will always operate appropriately in that range.
- (3) The specifications / appearance and accessories of IDEC products listed in Catalogs are subject to change or termination of sales without notice, for improvement or other reasons.
- (4) The content of Catalogs is subject to change without notice.

2. Note on applications

- (1) If using IDEC products in combination with other products, confirm the applicable laws / regulations and standards.
 - Also, confirm that IDEC products are compatible with your systems, machines, devices, and the like by using under the actual conditions. IDEC shall bear no liability whatsoever regarding the compatibility with IDEC products.
- (2) The usage examples and application examples listed in Catalogs are for reference purposes only. Therefore, when introducing a product, confirm the performance and safety of the instruments, devices, and the like before use. Furthermore, regarding these examples, IDEC does not grant license to use IDEC products to you, and IDEC offers no warranties regarding the ownership of intellectual property rights or non-infringement upon the intellectual property rights of third parties.
- (3) When using IDEC products, be cautious when implementing the following.
 - Use of IDEC products with sufficient allowance for rating and performance
 - Safety design, including redundant design and malfunction prevention design that prevents other danger and damage even in the event that an IDEC product fails
 - Wiring and installation that ensures the IDEC product used in your system, machine, device, or the like can perform and function according to its specifications
- (4) Continuing to use an IDEC product even after the performance has deteriorated can result in abnormal heat, smoke, fires, and the like due to insulation deterioration or the like. Perform periodic maintenance for IDEC products and the systems, machines, devices, and the like in which they are used.
- (5) IDEC products are developed and manufactured as general-purpose products for general industrial products. They are not intended for use in the following applications, and in the event that you use an IDEC product for these applications, unless otherwise agreed upon between you and IDEC, IDEC shall provide no guarantees whatsoever regarding IDEC products.
 - Use in applications that require a high degree of safety, including nuclear power control equipment, transportation equipment (railroads / airplanes / ships / vehicles / vehicle instruments, etc.), equipment for use in outer space, elevating equipment, medical instruments, safety devices, or any other equipment, instruments, or the like that could endanger life or human health
 - ii. Use in applications that require a high degree of reliability, such as provision systems for gas / waterworks / electricity, etc., systems that operate continuously for 24 hours, and settlement systems
 - Use in applications where the product may be handled or used deviating from the specifications or conditions / environment listed in the Catalogs. such as equipment used outdoors or applications in environments subject to chemical pollution or electromagnetic interference If you would like to use IDEC products in the above applications, be sure to consult with an IDEC sales representative.

3. Inspections

We ask that you implement inspections for IDEC products you purchase without delay, as well as thoroughly keep in mind management/maintenance regarding handling of the product before and during the inspection.

4. Warranty

(1) Warranty period

The warranty period for IDEC products shall be one (1) year after purchase or delivery to the specified location. However, this shall not apply in cases where there is a different specification in the Catalogs or there is another agreement in place between you and IDEC.

(2) Warranty scope

Should a failure occur in an IDEC product during the above warranty period for reasons attributable to IDEC, then IDEC shall replace or repair that product, free of charge, at the purchase location / delivery location of the product, or an IDEC service base. However, failures caused by the following reasons shall be deemed outside the scope of this warranty.

- The product was handled or used deviating from the conditions / environment listed in the Catalogs
- The failure was caused by reasons other than an IDEC product
- Modification or repair was performed by a party other than IDEC
- The failure was caused by a software program of a party other than IDFC
- The product was used outside of its original purpose
- Replacement of maintenance parts, installation of accessories, or the like was not performed properly in accordance with the user's manual and
- vii. The failure could not have been predicted with the scientific and technical standards at the time when the product was shipped from
- viii. The failure was due to other causes not attributable to IDEC (including cases of force majeure such as natural disasters and other disasters) Furthermore, the warranty described here refers to a warranty on the IDEC product as a unit, and damages induced by the failure of an IDEC product are excluded from this warranty.

5. Limitation of liability

The warranty listed in this Agreement is the full and complete warranty for IDEC products, and IDEC shall bear no liability whatsoever regarding special damages, indirect damages, incidental damages, or passive damages that occurred due to an IDEC product.

6. Service scope

The prices of IDEC products do not include the cost of services, such as dispatching technicians. Therefore, separate fees are required in the following cases.

- (1) Instructions for installation / adjustment and accompaniment at test operation (including creating application software and testing operation, etc.)
- (2) Maintenance inspections, adjustments, and repairs
- (3) Technical instructions and technical training
- (4) Product tests or inspections specified by you

The above content assumes transactions and usage within your region. Please consult with an IDEC sales representative regarding transactions and usage outside of your region. Also, IDEC provides no guarantees whatsoever regarding IDEC products sold outside your region.

IDEC CORPORATION

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