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.
- DC-DC convertor unit is not approved by standards.
- See website for details on approvals and standards.







Model Page **Features**



Plastic TWN Series

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

B-304



ø30 TWN/TWND Selection Guide

Function	Pushbutton						
Cotogony	Flush		Exte	nded	Extended wit	h Half Shroud	
Category	Momentary,	/Maintained	Momentary	/Maintained	Momentary	/Maintained	
Shape				Diecast Zinc		Diecast Zinc	
Model	ABN1 AON1	ABD1 AOD1	ABN2 AON2	ABD2 AOD2	ABN2G AON2G	ABGD2 AOGD2	
Page	B-310	B-326	B-310	B-326	B-310	B-326	

Function		Pushbutton					
Cotogony	Extended wit	th Full Shroud	Mu	shroom	Mushroom w	rith Full Shroud	
Category	Momentary	/Maintained	Momenta	ry/Maintained	Momentary	y/Maintained	
		Diecast Zinc		Diecast Zinc		Diecast Zinc	
Shape							
Madal	ABN2F	ABFD2	ABN3	ABD3	ABN3G	ABGD3	
Model	A0N2F	A0FD2	A0N3	AOD3	_	AOGD3	
Page	B-310	B-326	B-311	B-327	B-311	B-327	

Function		Pushbutton						
Cotogomi	Jumbo M	lushroom	Jumbo Mushroom	with Shallow Shroud	Jumbo Mushroom	with Deep Shroud		
Category	Momentary		Mom	entary	Mome	entary		
Shape		Diecast Zinc		Diecast Zinc		Diecast Zinc		
Model	ABN4	ABD4	ABN4G	ABGD4	ABN4F	ABFD4		
Page	B-311	B-327	B-311	B-327	B-311	B-327		

Function		Pushbutton						
Category	Mushroom Push	lock Turn Reset (*1)	Mushroom Push Turn Lock		Mus	hroom Pull		
Shape		Diecast Zinc		Diecast Zinc		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 I	Lock			
Shape	_	Diecast Zinc	_	Diecast Zinc			
Model	_	AYD3	_	ABD8P			
Page	_	B-328	_	B-327			

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

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

Function	Pushbutton					
Category	Mushroom Push-Pull		Pin	Lock		
Shape	ı	Diecast Zinc	_	Diecast Zinc		
Model	_	AYD3	<u> </u>	ABD8P		
Page	_	B-328	_	B-327		

Control Boxes

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

ø30 TWN/TWND Selection Guide

Function		LED Illuminated Pushbutton					
Cotogory	Extended		Extended wit	h Half Shroud	Extended wit	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	room	Mushroom Pushlock Turn Reset (*1)		Muchroom D	ush Turn Lock		
Category	Momentary	/Maintained	IVIUSIII UUIII FUSIIIC	ck fulli neset (1)	IWIUSIII OOIII FU	usii luiii Lock		
	_	Diecast Zinc		Diecast Zinc		Diecast Zinc		
Shape						_		
Model	ALN3 AOLN3	ALD3 AOLD3	AVLN3	AVLD3	AJLN3	_		
_			D 044	D 000	D 040			
Page	B-313	B-330	B-314	B-330	B-313			

Function		Selector Switches						
Category	Kı	Knob		ver	К	ey		
Shape		Diecast Zinc		Diecast Zinc		Diecast Zinc		
Model	ASN	ASD	ASN□L	ASD□L	ASN□K	ASD□K		
Page	B-316	B-331	B-317	B-332	B-318	B-333		

Function		Selector Switch	Selector P	ushhutton	
Tunction		OCICCIOI OWITCH		OCICCIOI 1	ashbatton
Category	Key	LED Illumir	nated 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 Illumina	ted Pilot Light	
Category	Do	me	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.

ø30 TWN Series (plastic)



ø30 TWND Series (Diecast Zinc)





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

Miniature

Pilot Lights

Ratings and Specifications

Contact ratings

Pushbuttons	Rated insulation voltage	600V
Illuminated Pushbuttons	Rated continuous current	10A
Selector Switches Illuminated Selector Switches Selector Pushbuttons		AC-15 (A600) DC-13

Contact ratings by utilization category HW-U10 (NO contact), HW-U01 (NC contact)

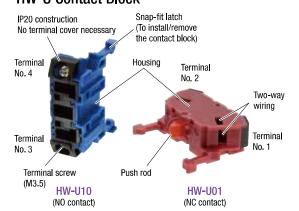
Operating Voltag	е	24V	48V	50V	110V	220V	440V	
Operating AC 50/60 Hz	AC	AC-12 Control of resistive loads and solid state loads	10A	_	10A	10A	6A	2A
	50/60 Hz	AC-15 Control of electromagnetic loads (> 72 VA)	10A	_	7A	5A	3A	1A
Current	DC	DC-12 Control of resistive loads and solid state loads	10A	5 A	_	2.2A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

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)	5 A	_	3.5A	2.5A	1.5A	0 . 5A
Current	DO.	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.	art No. HW-U10		HW-U10R	HW-U01R			
Contact	/_	7	_/_	7			
Comact	1N0	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)

Control Boxes

Stop Switches Enabling Switches Safety Products

LED Illuminated Part Specifications

Unit					LED lamp	
UIIIL	Rated Voltage		Operating Vo	oltage	Lamp Base	Part No.
	6V AC/DC		6V AC/DC			LSRD-6
	12V AC/DC		12V AC/DC		BA9S/13	LSRD-1
	24V AC/DC		24V AC/DC	1		LSRD-2
	100/110V AC		100/110V AC			
	115/120V AC (*1)		115/120V AC (*1)	±10%		
Illuminated pushbutton	120V AC (*2)		120V AC (*2)			
Illuminated selector switch	200/220V AC	1	200/220V AC	±10%		
Pilot light	230/240V AC (*1)	50/60 Hz	230/240V AC (*1)			LSRD-6
	240V AC (*2)		240V AC (*2)			roun-p
	380V AC		380V AC			
	400/440V AC		400/440V AC			
	480V AC		480V AC	7		
	110V DC		90 to 140V DC			

- See LED lamps, see LED Lamp Ratings below. *1) Illuminated pushbutton, illuminated selector switch
- *2) Pilot light

Illuminated Part Type and Shape

		Illuminated	d Unit			Pilot Light			
Power Unit	Full voltage adapter	Transfo	ormer	DC-DC converter	Full voltage adapter (unibody)	Transformer	DC-DC converter		
Rated Voltage	6V, 12V, 24V AC/DC	100 to 240V AC	380V AC min.	110V DC	6V, 12V, 24V AC/DC	100 to 480V AC	110V DC		
Polarity	None	None	None	X1 (+) X2 (–)	None	None	X1 (+) X2 (–)		
Shape/Terminal	X1 X2	X1 X2		X1 X2	(APN1)	- N	X1 X2		

• Note the polarity for wiring when connecting to DC-DC converter unit.

LED Lamp Ratings (LSRD)

Х2

X1

	LED Laiii	o nailliys	(LƏND)	/\ -					
	Part No.		LSRD-6	LSRD-1	LSRD-2				
Lamp Base BA9S/13			BA9S/13						
-	Rated Voltage	Э	6V AC/DC	12V AC/DC	24V AC/DC				
	Voltage Rang	е	6V AC/DC ±10%	12V AC/DC ±10%	24V AC/DC ±10%				
-	Current	DC	10mA	7mA	7mA				
	Draw AC		14mA	8mA	8mA				
	Voltage Mark	ing	Die stamped on the base						
	Life (reference	e value)	Approx. 50,000 hours (The luminance is reduced to 50% the initial intensity when used on complete DC at 25°C.)						
	Internal Circu	iit	X1 — Noise	ed current circuit e protection circuit fier circuit ner protection circuit	Example: LSRD-2				
	Weight		Approx. 2g						

[•] Only one color is available for LSRD so there are no codes to specify the color in the part no.

Terminal Blocks Relays & Sockets

Explosion Proof

Circuit Protectors

Power Supplies LED Illumination

Controllers

Operator Interfaces Sensors

AUTO-ID

Flush Silhouette

ø22

ø16

Miniature Pilot Lights

ARN

Specifications

opoomoanono					<u>\$</u>			
Operating Temperature			Non-illuminated: -25 to +	& Pilot Lights				
Storage Temperature			Illuminated: -25 to +50°C -40 to +80°C (no freezing	3/				
Operating Humidity			45 to 85% RH (no condens	,	<u></u>			
Contact Resistance			,	50 mΩ maximum (initial value)				
Insulation Resistance			100 MΩ minimum (500V E					
Insulation nesistance				etal parts: 2,500V AC, 1 minute				
Dielectric Strength		(Full voltage and pilot light 2000V AC, (pilot lights: 6V.)	s: 2,000V AC, 1 minute)	APEM				
101 - 11 - 15 - 14	Damage limits		30 Hz, amplitude 1.5 mm	, ,	Switches & Pilot Lights			
Vibration Resistance	Operation extremes		5 to 55 Hz, amplitude 0.5 i	mm				
	Damage limits		1000 m/s ²		Control Boxes			
Shock Resistance	Operation extremes		100 m/s ²		Emergency			
		Momentary	5,000,000		Stop Switches			
		Maintained	500,000 (over 3 contacts:	250.000)	Enabling Switches			
	Pushbutton	Push lock turn reset	500,000	• • • • • • • • • • • • • • • • • • • •	Safety Products			
		Pull	500,000	Salety Products				
Mechanical Life		Momentary	2,500,000		Explosion Proof			
(minimum operations)	Illuminated pushbutton	Maintained	500,000 (over 3 contacts:	250 000)				
(······-,	Selector switch	Maintainoa	500,000	200,000)	Terminal Blocks			
	Key selector switch		500,000		Relays & Sockets			
	Illuminated selector switch	 :h	500,000					
<u> </u>	Selector pushbutton	<u></u>	250,000		Circuit Protectors			
	Coloctor puonsutton	Momentary		uency 1800 operations/h, duty ratio 40%	Power Supplies			
	Pushbutton	Maintained	500,000 (over 3 contacts: Switching frequ	250,000) uency 900 operations/h, duty ratio 40%	LED Illumination			
		Push lock turn reset	500,000 Switching frequ	uency 900 operations/h, duty ratio 40%				
Electrical Diffe		Momentary	500,000 Switching frequ	uency 1800 operations/h, duty ratio 40%	Controllers			
Electrical Life (minimum operations) (*1)	Illuminated pushbutton	Maintained	500,000 (over 3 contacts: Switching frequ	250,000) uency 900 operations/h, duty ratio 40%	Operator Interfaces			
	Selector switch		500,000 Switching frequ	uency 1200 operations/h, duty ratio 40%	Sensors			
	Key selector switch		500,000 Switching frequ	uency 1200 operations/h, duty ratio 40%				
	Illuminated selector swite	ch	500,000 Switching frequ	uency 1200 operations/h, duty ratio 40%	AUTO-ID			
	Selector pushbutton		250,000 Switching frequ	uency 900 operations/h, duty ratio 40%				
		Pushbutton	ABN122: 82g	ABN322: 87g				
		Illuminated pushbutton	ALN22222DN: 106g	ALN21622DN: 163g				
	TWN series	Selector switch	ASN222N: 83g	ASN2K22N: 120g	Flush Silhouette			
		Illuminated selector switch	ASLN22222DN: 106g	ASLN21622DN: 163g	ø16			
Waight (approx.)		Pilot light	APN122DN: 46g	APN116DN: 125g	W10			
Weight (approx.)		Pushbutton	ABD122: 108g	ABD322: 113g	ø22			
		Illuminated pushbutton	ALD22222DN: 132g	ALD21622DN: 189g				
	TWND series	Selector switch	ASD222N: 110g	ASD2K22N: 147g	ø30			
		Illuminated selector switch	ASLD22222DN: 133g	ASLD21622DN: 190g	Miniature			
		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				
TM/N corios	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			
	Selector switch	ASD, ASD□L			
TWND series Diecast zinc	Key selector switch	ASD□K	IP65	Dustproof/jet-proof	
Diecast zinc	Illuminated selector switch	ASLD]		
	Selector pushbutton	ASBD	1		
	Round pilot light	APD	1		

[•] 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.

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.



Mounting Hole Layout/Mounting Centers

R0.8 max. 4.8 ^{+0.2} ☆ Round: 42 (*1) Square: 55 50 (*1) All dimensions in mm.

- . 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. \bullet 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 Ordering No. when ordering.
- 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.
- Color codes for units without LED lamps:

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

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 TWN/TWND series cannot be guaranteed when a commercially available lamp is used.

- Terminal covers, nameplates, and accessories for mono-lever swictch and cam switch are ordered separately.
- For terminal cover, nameplate and other accessories of mono-lever switches and cam switches, see IDEC's website.

Ordering Information

Pushbutton

When specifying gold-plated silver contact and contact configuration:

2 Contact configuration

TWN series (B-310 to B-312) ABN 2 11 R - MAU ① Optional contact

TWND series (B-326 to B-328)

ABD 2 11 NR - MAU ① Optional contact ② Contact configuration <Codes> ① Optional contact

MAU: Gold-plated silver

2 Contact configuration

10: 1NO 01: 1NC

11: 1N01NC

2N0 20:

02: 2NC

22: 2N02NC

40: 4N0

04: 4NC

13: 1N03NC

3N01NC 31:

30: 3N0

03: 3NC

1N02NC 12:

2N01NC

- 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.

APEM

Control Boxes

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

Ordering Information

Illuminated Pushbutton

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

TWN series (B-313 to B-315) <Codes> ① Optional contact ALFN 2 126 13 DN R - MAU MAU: Gold-plated silver ① Optional contact 2 Contact configuration 2 Contact configuration 10: 1NO 3 Operating voltage 01: 1NC 1N01NC 11: TWND series (B-329 to B-330) 2N0 20: 02: 2NC ALFD 2 126 13 DN R - MAU 3N01NC 31: 1 Optional contact 22: 2N02NC 2 Contact configuration 13: 1N03NC 4N0 40: 3 Operating voltage 04: 4NC 3 Operating voltage 99: Without LED lamp 66: 6V AC/DC 11: 12V AC/DC 22: 24V AC/DC 16: 100/110V AC 126: 115/120V AC 26: 200/220V AC 246: 230/240V AC 386: 380V AC 46: 400/440V AC 486: 480V AC

Note

- Odd number of contact blocks, such as 1NO, 1NC, 3NO, 2NO-1NC, 1NO-2NC, and 3NC, are not available for models of 100V AC or over.
- Illuminated pushbuttons of 24V AC/DC and below with two or four contact blocks contain a dummy block,
- See B-309 for how to specify 110V DC model (DC-DC converter).
- Color codes for units without LED lamps:

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

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.

Selector Switch

When specifying gold-plated silver contact and contact configuration:

TWND series (B-316 to B-319)

ASN 2 11 N - MAU

Optional contact

Codes>

Optional contact

MAU: Gold-plated silver

Contact configuration

Key removable position code (example)

	Position	Key removable position	Key removable		Part No. Example	
	Position	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
2-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
0!!		Removable in right only	Н	ASN3K20NH	ASN3K20NH-N024401	ASD3K20NH
3-position		Removable in left and center	(blank)	ASN31K20N	ASN31K20N-N024401	ASD31K20N
	Spring return from right	Removable in center only	D	ASN31K20ND	ASN31K20N D- 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

• The key cannot be removed in spring return positions.

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

ø22

ø16

Flush Silhouette

Miniature

Pilot Lights

TWN

ARN

Control Boxes

Stop Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Power Supplies

LED Illumination

Controllers

Operator Interfaces

Sensors

AUTO-ID

Flush Silhouette

ø16

ø22

Miniature

Pilot Lights

Circuit

Protectors

Enabling

Switches

Ordering Information

Illuminated Selector Switch

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

```
TWN series (B-320)
                                                                           ① Optional contact
ASLN 2 16 22 DN - MAU
                                                                                 MAU: Gold-plated silver
                                ① Optional contact
                                                                           ③ Operating voltage
                                ② Contact configuration (see B-321 to B-322)
                                                                                 99: Without LED lamp
                                                                                 66: 6V AC/DC
                                3 Operating voltage
                                                                                 11: 12V AC/DC
TWND series (B-334)
                                                                                 22:
                                                                                     24V AC/DC
                                                                                 16: 100/110V AC
ASLD 2 16 22 DN - MAU
                                                                                 136: 115/120V AC
                                ① Optional contact
                                                                                 26: 200/220V AC
                                2 Contact configuration
                                                                                 256: 230/240V AC
                                3 Operating voltage
                                                                                 386: 380V AC
                                                                                 46: 400/440V AC
                                                                                 486: 480V AC
```

- Odd number of contact blocks, such as 1NO, 1NC, 3NO, 2NO-1NC, 1NO-2NC, and 3NC, is not available for models of 100V AC or over.
- Illuminated selector switches of 24V AC/DC and below with two or four contact blocks contain a dummy block.
- See below for how to specify 110V DC model (DC-DC converter).
- · Color codes for units without LED lamps: R (red), G (green), A (amber), Y (yellow), S (blue)

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.

Pilot Light (LED)

When specifying LED operating voltage:

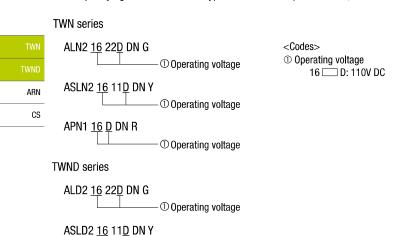
```
TWN series (B-324 to B-325)
                                                       <Codes>
                                                       ① Operating voltage
  APN1 26 DN R
                                                             99: Without LED lamp
                                                             66: 6V AC/DC
                         ① Operating voltage
                                                             11: 12V AC/DC
  UPQN3B 22 D R
                                                             22:
                                                                  24V AC/DC
                                                             16:
                                                                  100/110V AC
                         ① Operating voltage
                                                             126: 115/120V AC
                                                             26: 200/220V AC
  TWND series (B-336)
                                                             246: 230/240V AC
  APD1 26 DN R
                                                             386: 380V AC
                                                             46: 400/440V AC
                         ① Operating voltage
                                                             486: 480V AC
 See below for how to specify 110V DC model (DC-DC converter).

    Color codes for units without LED lamps: R (red), G (green), A (amber), Y (yellow), S (blue)
```

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.

DC-DC Convertor Model (110V DC)

When specifying DC-DC convertor type on illuminated pushbuttons, illuminated selector switches, and pilot lights:



① Operating voltage

① Operating voltage

APD1 16 D DN R

- See 110V DC model (DC-DC converter) is not approved by standards (operating voltage: 90 to 140V DC).
- Odd number of contact blocks, such as 1NO, 1NC, 3NO, 2NO-1NC, 1NO-2NC, and 3NC, is not available for 100V DC model (DC-DC converter).

Flush/Extended/Extended w/Half Shroud/Extended with Full Shroud

Package Quantity: 1

		_	Part No.	Button		rackage quantity.	E
Shape	Operation	Contact	(Ordering No.)	Color Code	Dimensions	(All dimensions in mm.)	t Lights
Flush		1NO	ABN110*	В			S
ABN1 AON1		1NC	ABN101*	G			
TONI	Momentary	1NO-1NC	ABN111*	RY			40544
	Wiomemary	2N0	ABN120*	S	-1	Panel Thickness 0.8 to 7.5	APEM
		2NC	ABN102*	W			Switches & Pilot Lights
		2NO-2NC	ABN122*	Note	4		
		1NO	AON110*	В	8 8		Control Boxes
		1NC	A0N101*	G	45.4 (1 or 2 blocks)	29.6	Emergency Stop Switches
	Maintained	1NO-1NC	A0N111*	R Y	65.4(3 or 4 blocks)	9 039	Enabling
	Mamamod	2N0	A0N120*	Š			Switches
		2NC	A0N102*	W			Safety Products
		2NO-2NC	A0N122*	Note			Explosion Proof
Extended ABN2		1NO	ABN210*	В			Explosion Proof
AON2		1NC	ABN201*	Ğ			Terminal Blocks
7.0	Momentary	1NO-1NC	ABN211*	R	B B		Relays & Sockets
		2N0	ABN220*	Y S		Panel Thickness 0.8 to 7.5	
		2NC	ABN202*	- 8 W		148	Circuit Protectors
		2NO-2NC	ABN222*	-			Power Supplies
		1NO	A0N210*	В	8 8		- Tower Supplies
		1NC	A0N201*	G	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks)	29.6 039	LED Illumination
	Maintained	1NO-1NC	A0N211*	R	05.4 (5 01 4 DIOCKS)	14 039	Controllers
		2N0	A0N220*	Y S			Operator
		2NC	A0N202*	- w			Interfaces
Extended with Half Shroud		2NO-2NC 1NO	A0N222* ABN2G10*				Sensors
ABN2G		1NC	ABN2G10* ABN2G01*	В			
AON2G		1NO-1NC	ABN2G11*	G			AUTO-ID
	Momentary	2N0	ABN2G11* ABN2G20*	R Y	,	Day J. Tribles and O. A. O. F.	
		2NC	ABN2G20*	- 's ∣		Panel Thickness 0.8 to 3.5	
		2NO-2NC	ABN2G22*	- w			
		1NO	AON2G10*		414	929	Flush Silhouette
		1NC	AON2G10*	В			ø16
		1NO-1NC	AON2G11*	- G	P	18.5 29.6 20.5 039	-00
	Maintained	2N0	AON2G11* AON2G20*	R Y	- 20.0 (0 01 4 NIOCOS)	20.0 4 F 803 4	ø22
		2NC	AON2G02*	S			ø30
		2NO-2NC	AON2G22*	- W			Miniature
Extended with Full Shroud		1NO	ABN2F10*	†			Williaddle
ABN2F		1NC	ABN2F01*	B			Pilot Lights
AON2F		1NO-1NC	ABN2F11*	– G R			
	Momentary	2N0	ABN2F20*	Ϋ́		Panel Thickness 0.9 to 6	
		2NC	ABN2F02*	S		Panel Thickness 0.8 to 6	
		2NO-2NC	ABN2F22*	W			TWN
		1N0	A0N2F10*		4 4 4 4	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TWND
		1NC	AON2F01*	B G			
	NA-int :	1NO-1NC	AON2F11*	R		14 16.5 29.6 039	ARN
	Maintained	2N0	AON2F20*	Y			CS
		2NC	A0N2F02*	S			
		2NO-2NC	AON2F22*	- W			

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

ABN1, AON1 with button color of B (black), G (green), or (R) red Supply of color buttons B, G, R has been discontinued for ABN1/AON1 without color code. When ordering, make sure to specify the required button color code.

Mushroom/Mushroom w/Full Shroud/Jumbo Mushroom/Jumbo Mushroom w/Shallow Shroud/Jumbo Mushroom w/Deep Shroud

Package Quantity: 1

<u> </u>							Package Quantity: 1
ot Lights	Shape	Operation	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions	(All dimensions in mm.)
ડ	Mushroom		1NO	ABN310*			
	ABN3 AON3		1NC	ABN301*	B G		
APEM	AONS	Momentary	1NO-1NC	ABN311*	R		
		Momoritary	2N0	ABN320*	Y S	Panel Thickness 0.8 to	el Thickness 0.8 to 7.5
Switches & Pilot Lights			2NC	ABN302*	W		
Control Boxes			2NO-2NC 1NO	ABN322* A0N310*		040	(
Emergency			1NC	A0N310* A0N301*	В		
Stop Switches			1NO-1NC	A0N311*	G R	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 22	29.6
Enabling Switches		Maintained	2N0	A0N320*	Υ	-	
Safety Products			2NC	A0N302*	S W		
Fundada Durat			2N0-2NC	A0N322*	w		
Explosion Proof	Mushroom with Full Shroud ABN3G		1NO	ABN3G10*		Panel Thickness 0.8 to 0	6.5 _ 29.6 _
Terminal Blocks			1NC	ABN3G01*	В		
Relays & Sockets			1NO-1NC	ABN3G11*	G R	4 4 8	
Circuit Protectors		Momentary	2N0	ABN3G20*	Y S		
Power Supplies			2NC	ABN3G02*	W	43.9 (1 or 2 blocks) 63.9 (3 or 4 blocks) 23.5	
LED Illumination			2NO-2NC	ABN3G22*		<u> </u>	
	Jumbo Mushroom ABN4		1NO	ABN410*		Panel Thickness 0.8 to 7.5	
Controllers		Momentary	1NC	ABN401*	B G R Y	Tallet Millocaless U.S. to 7.5	[]
Operator Interfaces			1NO-1NC	ABN411*		68	
Sensors			2N0	ABN420*			
AUTO-ID			2NC	ABN402*		45.4 (1 or 2 blocks)	
			2NO-2NC	ABN422*		65.4 (3 or 4 blocks) 29	2 <u>9.6</u>
	Jumbo Mushroom with Shallow Shroud		1NO	ABN4G10*		Panel Thickness 0.8 to 7.5	
Flush Silhouette	ABN4G		1NC	ABN4G01*			
ø16			1NO-1NC	ABN4G11*	B G	4 8 8	
ø22		Momentary	2N0	ABN4G20*	R Y	# B B S S S S S S S S S S S S S S S S S	
ø30			2NC	ABN4G02*	'	45.4 (1 or 2 blocks)	
Miniature			2NO-2NC	ABN4G22*		65.4 (3 or 4 blocks) 29	29.6
Pilot Lights	Jumbo Mushroom with Deep Shroud		1NO	ABN4F10*		Panel Thickness 0.8 to 7.5	
- Hot Lighto	ABN4F		1NC	ABN4F01*			
			1NO-1NC	ABN4F11*	B G	8 8	
TWN		Momentary	2N0	ABN4F20*	R	4 9 8	₩
TWND			2NC	ABN4F02*	. Y		
ARN				ABN4F22*		45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 33	29.6
CS	Specify a color code in place of * in	Part No. B (blac	k), G (green), R	(red), Y (vellow), S	S (blue). W (wh	nite)	

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

CS

Mushroom Pushlock Turn Reset/Mushroom Push Turn Lock/Mushroom Pull

Package Quantity: 1

Shape	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions (All dimensions in mm.)			
Mushroom Pushlock Turn Reset (*1) AVN3	1NO	AVN310N*					
AVINO	1NC	AVN301N*		Panel Thickness 0.8 to 7.5			
	1NO-1NC	AVN311N*	R Y				
	2N0	AVN320N*	Y	2 B B B			
	2NC	AVN302N*		45.4 (1 or 2 blocks) 29.6			
	2NO-2NC	AVN322N*		65.4 (3 or 4 blocks) 23.6			
Mushroom Push Turn Lock AJN3	1NO	AJN310N*		Panel Thickness 0.8 to 7.5			
AJINS	1NC	AJN301N*	B G R Y				
	1NO-1NC	AJN311N*		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			
100	2N0	AJN320N*					
*	2NC	AJN302N*		45.4 (1 or 2 blocks) 29.6 23.6			
	2NO-2NC	AJN322N*					
Mushroom Pull AZN3	1NO	AZN310N*					
AZINO	1NC	AZN301N*		Panel Thickness 0.8 to 7.5			
	1NO-1NC	AZN311N*	B G				
	2N0	AZN320N*	R	4. 4 de			
	2NC	AZN302N*	Υ	45.4 25.1 5.5 stroke 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
- · Integrated terminal cover
- *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 Lock

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

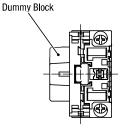
Pull

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

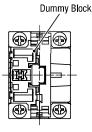
Pull contact operation

Contact	AZ	N3
Contact	Normal	Pull
1NO	o ₁ o	- - -
2NO-2NC	ರ• •••	0 0 ele
2N0	9,9 9,9	00 00
2NC	•_• •_•	616 616

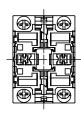
Bottom View (for non-illuminated pushbuttons and selector switches)



1 contact block (NO) (NC: opposite position)



3 contact blocks



2/4 contact blocks

See B-348 for wiring.
Integrated terminal cover

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

Miniature

Pilot Lights

WN

TWND

ARN

Control Boxes

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

> TWND ARN CS

LED Illuminated Extended/Extended with Half Shroud/Extended with Full Shroud

Shape	Base	Operation	Operating Voltage	Contact	Part No. (Ordering No.)	Color Code	Dimensions Page
Extended				1NO-1NC	ALN22211DN*		
ALN2 AOLN2			24V AC/DC	2N0	ALN22220DN*		
AULIN2				2NC	ALN22202DN*	R	
				1NO-1NC	ALN21611DN*	G	
		Momentary	100/110V AC	2N0	ALN21620DN*	Y A	
				2NC	ALN21602DN*	S	
and the same of th				1NO-1NC	ALN22611DN*	PW	
			200/220V AC	2N0	ALN22620DN*		
(24VAC/DC)	DAGO			2NC	ALN22602DN*		
	BA9S			1NO-1NC	A0LN22211DN*		
			24V AC/DC	2N0	AOLN22220DN*		
				2NC	A0LN22202DN*	R	
				1NO-1NC	AOLN21611DN*	G	
		Maintained	100/110V AC	2N0	A0LN21620DN*	Υ	
				2NC	A0LN21602DN*	⊢ A S	
				1NO-1NC	AOLN22611DN*	PW	
With transformer			200/220V AC	2N0	AOLN22620DN*		
(100/110V AC)				2NC	A0LN22602DN*		
Extended with Half Shroud				1NO-1NC	ALGN22211DN*		
ALGN2			24V AC/DC	2N0	ALGN22220DN*		
AOLGN2				2NC	ALGN22202DN*	R	
				1NO-1NC	ALGN21611DN*	G	
		Momentary	100/110V AC	2N0	ALGN21620DN*	- Y	
		momontary		2NC	ALGN21602DN*	A S	
				1NO-1NC	ALGN22611DN*	PW	
			200/220V AC	2N0	ALGN22620DN*		
(24V AC/DC)				2NC	ALGN22602DN*		
	BA9S			1NO-1NC	AOLGN22211DN*		B-315
			24V AC/DC	2N0	AOLGN22220DN*		
				2NC	AOLGN22202DN*	R	
				1NO-1NC	AOLGN21611DN*	G	
		Maintained	100/110V AC	2N0	AOLGN21620DN*	- Y	
			100,1101710	2NC	AOLGN21602DN*	⊢ A S	
				1NO-1NC	AOLGN22611DN*	PW	
With transformer			200/220V AC	2N0	AOLGN22620DN*	-	
(100/110V AC)			200/2201/10	2NC	AOLGN22602DN*		
Extended with Full Shroud				1NO-1NC	ALFN22211DN*		
ALFN2			24V AC/DC	2N0	ALFN22220DN*		
AOLFN2			217710750	2NC	ALFN22202DN*	R	
				1NO-1NC	ALFN21611DN*	⊢ G	
		Momentary	100/110V AC	2N0	ALFN21620DN*	- Y	
		Momontary	100/1101/10	2NC	ALFN21602DN*	- A	
				1NO-1NC	ALFN22611DN*	S PW	
			200/220V AC	2N0	ALFN22620DN*	┦ '''	
(24V AC/DC)			200/2201/10	2NC	ALFN22602DN*	_	
BA9S	BA9S			1NO-1NC	AOLFN22211DN*		
			24V AC/DC	2N0	AOLFN22220DN*	_	
			LAV AUIDU	2NC	AOLFN2220DN*	R	
				1NO-1NC	AOLFN21611DN*	⊢ G	
		Maintained	100/110V AC	2N0	AOLFN21620DN*	⊣ γ	
		Walitalieu	100/110V A0	2NC	AOLFN21602DN*	— A	
				1NO-1NC	AOLFN21602DN* AOLFN22611DN*	S PW	
With transformer			200/220V AC	2N0		- F VV	
(100/110V AC)	1		ZUU/ZZUV AU	ZINU	AOLFN22620DN*	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, 12V AC/DC, and 110V DC.
 Illuminated pushbuttons of 24V AC/DC or below with 2 or 4 contact blocks have a dummy block.
- See B-308 for other contact configurations and gold-plated silver contacts.
- See B-314 for bottom view.
- Terminal screws: M3.5
 Integrated terminal cover

LED Illuminated Mushroom (ø40)/Mushroom Pushlock Turn Reset/Mushroom Push Turn Lock

Package Quantity: 1

							torago duarrity.	
Shape	Base	Operation	Operating Voltage	Contact	Part No. (Ordering No.)	Color Code	Dimensions Page	t Lights
Mushroom (ø40)				1NO-1NC	ALN32211DN *			S
ALN3 AOLN3			24V AC/DC	2N0	ALN32220DN *			
AOLINS				2NC	ALN32202DN *	R		
				1NO-1NC	ALN31611DN *	G		APEM
		Momentary	100/110V AC	2N0	ALN31620DN *	Y		Switches & Pilot Lights
				2NC	ALN31602DN *	S		
				1NO-1NC	ALN32611DN *	PW		Control Boxes
			200/220V AC	2N0	ALN32620DN *			Emergency Stop Switches
(24V AC/DC)	BA9S			2NC	ALN32602DN *			Enabling
	BA95			1NO-1NC	AOLN32211DN *			Switches
			24V AC/DC	2N0	AOLN32220DN *			Safety Products
				2NC	A0LN32202DN *	R		l -
				1NO-1NC	AOLN31611DN *	G		Explosion Proof
		Maintained	100/110V AC	2N0	AOLN31620DN *	Y A		Terminal Blocks
				2NC	AOLN31602DN *	S		-
				1NO-1NC	AOLN32611DN *	PW		Relays & Sockets
With tranformer			200/220V AC	2N0	AOLN32620DN *			Circuit
(100/110V AC)				2NC	A0LN32602DN *		B-315	Protectors
Mushroom Pushlock Turn Reset				1NO-1NC	AVLN32211DN *		D-313	Power Supplies
AVLN3 (*1)			24V AC/DC	2N0	AVLN32220DN *			LED Illumination
				2NC	AVLN32202DN *			
				1NO-1NC	AVLN31611DN *			Controllers
	BA9S	_	100/110V AC	2N0	AVLN31620DN *	R		Operator Interfaces
				2NC	AVLN31602DN *			
				1NO-1NC	AVLN32611DN *			Sensors
			200/220V AC	2N0	AVLN32620DN *			AUTO-ID
(24V AC/DC)				2NC	AVLN32602DN *			
Mushroom Push Turn Lock				1NO-1NC	AJLN32211DN *			
AJLN3			24V AC/DC	2N0	AJLN32220DN *			
				2NC	AJLN32202DN *	R		Flush Silhouette
				1NO-1NC	AJLN31611DN *	G		-
	BA9S	_	100/110V AC	2N0	AJLN31620DN *	Ϋ́		ø16
				2NC	AJLN31602DN *	A		ø22
				1NO-1NC	AJLN32611DN *	PW		
			200/220V AC	2N0	AJLN32620DN *			ø30
(24V AC/DC)				2NC	AJLN32602DN *			Miniature

- 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, 12V AC/DC, and 110V DC.
- See B-308 for other contact configurations and gold-plated silver contacts.
- Illuminated pushbutttons of 24V AC/DC or below with 2 or 4 contact blocks have a dummy block.
- *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).
- Terminal screws: M3.5
- Integrated terminal cover

Illuminated pushbutton operation

6V, 12V, 24V AC/DC

Pushlock Turn Reset

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

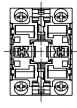
Push Turn Lock

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

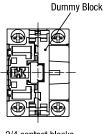
Bottom View (for illuminated pushbuttons, selector switches, and pilot lights)

Voltage Adapter

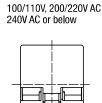
1 contact block



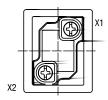
3 contact blocks



2/4 contact blocks



110V DC, 380V AC or over



DC-DC converter unit Terminal No. X1: positive Terminal No. X2: negative

Pilot Lights

TWND

CS

• See B-348 for wiring.

Dimensions (Illuminated Pushbuttons)

Extended, LED illuminated (momentary/maintained)

All dimensions in mm.

Panel Thickness 0.8 to 3.5

ALN2/AOLN2 (terminal screws M3.5)

Integrated terminal cover

6, 12, 24V AC/DC · Without LED Lamp

100/110V AC, 200/220V AC (240V AC or below)

110V DC/380V AC or over



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

TWND

ARN CS Panel Thickness 0.8 to 7.5

Panel Thickness 0.8 to 7.5 75.5 (2 blocks), 95.5 (4 blocks

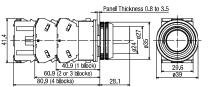
Panel Thickness 0.8 to 7.5 85.5 (2 blocks), 105.5 (4 blocks)

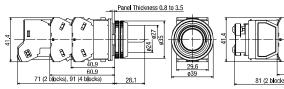
Extended with Half Shroud, LED illuminated (momentary/maintained) ALGN2/AOLGN2 (terminal screws M3.5) Integrated terminal cover

6, 12, 24V AC/DC· Without LED Lamp

100/110V AC, 200/220V AC (240V AC or below)

110V DC/380V AC or over



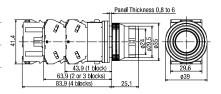


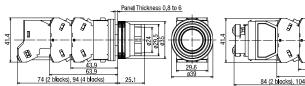
Extended with Full Shroud, LED illuminated (momentary/maintained) ALFN2/AOLFN2 (terminal screws M3.5) Integrated terminal cover

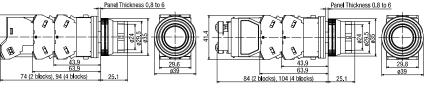
6, 12, 24V AC/DC · Without LED Lamp

100/110V AC, 200/220V AC (240V AC or below)

110V DC/380V AC or over







Mushroom (ø40), LED illuminated (momentary/maintained)

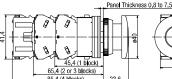
ALN3/AOLN3 (terminal screws M3.5)

Integrated terminal cover

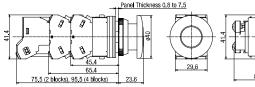
6, 12, 24V AC/DC · Without LED Lamp

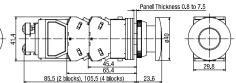
100/110V AC, 200/220V AC (240V AC or below)

110V DC/380V AC or over





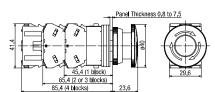


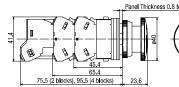


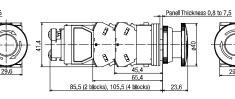
Mushroom Pushlock Turn Reset, LED illuminated

AVLN3 (terminal screws M3.5) 6, 12, 24V AC/DC · Without LED Lamp Integrated terminal cover 100/110V AC, 200/220V AC

110V DC/380V AC or over





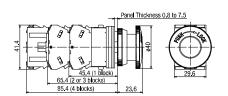


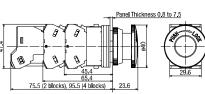
Mushroom Push Turn Lock, LED illuminated AJLN3 (terminal screws M3.5)

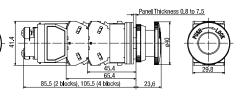
6, 12, 24V AC/DC · Without LED Lamp

Integrated terminal cover 100/110V AC, 200/220V AC

110V DC/380V AC or over







ASN Selector Switches (Knob Operator)

Package Quantity: 1

Shape	Knob Opera ASN	tor												t Lights
														APEM
		Contact C	Configuratio	on			Maintained	Spring Return from Right		Spring	, Retur	n from	Left	Switches & Pilot Lights
		Contact	Block		Operat Positio		1 2	1 -2	Contact	Block		rator ition	1, 2	Control Boxes
	Contact	Mounting Position	Contact	1	2				Mounting Position	Contact	1	2		Emergency Stop Switches Enabling
	1NO	①	NO		•		ASN210N	ASN2110N	0	NO	•		ASN2210N	Switches
90°	(10)	2	_	Dur	mmy E	Block	7101121011	71011211011	2	<u> </u>	-		71011221011	Safety Products
2-position	1NO-1NC	0	NO NO		•	-	ASN211N	ASN2111N	0	NO NO	•	_	ASN2211N	Explosion Proof
	(11)	2	NC	•					2	NC		•		
	2NO (20)	① ②	NO NO		•	1	ASN220N	ASN2120N	① ②	NO NO	•		ASN2220N	Terminal Blocks
	(20)	0	NO NO						0	NO NO	•			Relays & Socket
	2NO-2NC	2	NC	•		1			2	NC		•		Circuit
	(22)	3	NO NO		•	1	ASN222N	ASN2122N	3	NO	•		ASN2222N	Protectors
	()	4	NC	•		1			4	NC		•		Power Supplies
			Configuration	on			Maintained	Spring Return from Right		g Return fro	om Lef	t	Spring Return Two-way	LED Illumination
		Contact	Block		Operat Positio		1 0 2	1 0 - 2		1, 0 2			1 0 2	Controllers
	Contact	Mounting Position	Contact	1	0	2								Operator Interfaces
	2N0	①	NO	•										Sensors
	(20)	2	NO			•	ASN320N	ASN3120N		ASN32201	V		ASN3320N	AUTO-ID
	2NC	0	NC											
	(02)	2	NC				ASN302N	ASN3102N		ASN32021	V		ASN3302N	
		①	NO	•										
	2NO-2NC	2	NO			•	ASN322N	ASN3122N		ASN32221	М		ASN3322N	Flush Silhouette
45°	(22)	3	NC				ASINSZZIN	ASINSTZZIN		ASINSZZZI	V		ASINSSZZIN	
3-position		4	NC											ø16
		①	NO.	•		<u> </u>	-							ø22
	4N0	2	NO NO	_		•	ASN340N	ASN3140N		ASN32401	V		ASN3340N	
	(40)	3	NO NO	•			-							ø30
		4	NO NC			Ŀ								Miniature
	4110	① ②	NC NC		=		-							
	4NC (04)	3	NC NC			_	ASN304N	ASN3104N		ASN32041	V		ASN3304N	Pilot Lights
	(0.1)	4	NC	_	5		-							
		0	NO NO	•										
	☆	2	NO	Ť		•	☆							71441
	3S	3	NC		•		ASN33SN-243	_		_			_	TWN
	I	4	_	T _	mmy E		1	I	1				I .	1

- 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.

- current value). Rated insulation voltage and rated current remain the same.
- See B-312 for bottom view.

• Selector switches with \$\simeq\$ have a half contact operating current (load switching

• See B-308 for gold-plated silver contacts.

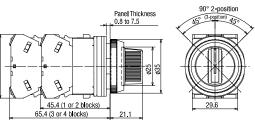
CS

Contact Block Mounting Position



Dimensions





osion Proof

s & Sockets

er Supplies

Illumination

Silhouette

ASN-□ Selector Switches (Lever Operator)

Package Quantity: 1

Lever Operator ASN□L Shape APEM Spring Return Contact Configuration Maintained Spring Return from Left from Right Control Boxes Operator Operator Contact Block Contact Block Position Position Emergency Contact Stop Switches Mounting Mounting 2 2 Contact Contact Enabling Position Position Switches 1N0 1 NO 1 NO • ASN2L10N ASN21L10N ASN22L10N Safety Products (10)2 **Dummy Block** 2 1 NO 1 NO • 2-position 1NO-1NC **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 2NO-2NC 2 NC 2 NC Protectors 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 0 Position Sensors 2N0 1 NO • ASN3L20N ASN31L20N ASN32L20N ASN33L20N AUTO-ID (20)2 NO 1 NO 2NC ASN3L02N ASN31L02N ASN32L02N ASN33L02N (02)2 NO 1 NO Flush Silhouette 2NO-2NC 2 NO ASN3L22N ASN31L22N ASN32L22N ASN33L22N (22)3 NO 45° ø16 3-position 4 NO 1 NO • ø22 4N0 2 NO • ASN3L40N ASN31L40N ASN33L40N ASN32L40N (40)NO 3 • 4 NO Miniature 1 NO Pilot Lights 2 NO 4NC ASN3L04N ASN31L04N ASN32L04N ASN33L04N (04)3 N0 4 NO 1 N0 ☆ 3S 2 NO • ASN3L3SN-243 3 N0 •

Lever: Black

TWND

CS

- Round bezel (metal): Chrome-plated
- Selector switches with 1 or 3 contact blocks have a dummy block.

4

Knob operator can be installed at 45-degree intervals in addition to the positions shown in the above table.

Dummy Block

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

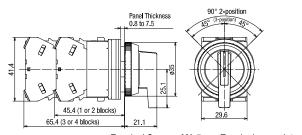
- Selector switches with ☆ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
 See B-308 for gold contact.
- See B-312 for bottom view.

Contact Block Mounting Position



Dimensions

All dimensions in mm.



ASN-□K Key Selector Switches

Key Selector (Key No. 0)

Package Quantity: 1

Shape	ASN□K	i (Rey No. 0)											
		Contact C	onfiguratio	n			Maintained	Spring Return from Right		Spring	Returr	n from I	Left
		Contact	Block		Operato Positio		1 2	1 ~ 2	Contact	Block	Ope Pos	erator sition	2 جا 1
	Contact	Mounting Position	Contact	1	2				Mounting Position	Contact	1	2	
	1NO	0	NO		•		ACNOVAON	ACNO1V10N	①	NO	•		ACM22V10N
90°	(10)	2	_	Dur	mmy B	lock	ASN2K10N	ASN21K10N	2	_	-		ASN22K10N
2-position	1NO-1NC	0	NO		•		ASN2K11N	ASN21K11N	①	NO	•		ASN22K11N
	(11)	2	NC	•			ASNZKTIN	ASNZIKITN	2	NC		•	ASINZZICTIN
	2N0	0	NO		•		ASN2K20N	ASN21K20N	①	NO	•		ASN22K20N
	(20)	2	NO		•		ASNIZRZUN	ASINZTRZUN	2	NO	•		ASINZZKZUN
		0	NO		•				①	NO	•		
	2NO-2NC	2	NC	•			ASN2K22N	ASN21K22N	2	NC		•	ASN22K22N
	(22)	3	NO		•		AONZKZZN	ASIVETREEN	3	NO	•		AONZZNZZN
		4	NC	•					3	NC		•	
		Contact C	Configuratio	n			Maintained	Spring Return from Right	Sprin	g Return fro	om Lef	ft	Spring Return Two-way
	Contact	Contact	Block		Operato Positio		1 0 2	1 0 2		1 0 2			1,0,2
	Contact	Mounting Position	Contact	1	0	2				\bigvee			
	2N0	0	NO	•			ASN3K20N	ASN31K20N		ASN32K20	N		ACMOOKOON
	(20)	2	NO			•	ASINSKZUN	ASINSTRZUN		ASNOZNZU	IV		ASN33K20N
	2NC	0	NC				ASN3K02N	ASN31K02N		VENISSINOS	N		ASN33K02N
	(02)	2	NC				ASINSKUZIN	ASINSTRUZIN		ASN32K02	IN		ASINSSKUZIN
		0	NO	•									
	2NO-2NC	2	NO			•	ASN3K22N	ASN31K22N		ASN32K22	N		ASN33K22N
45°	(22)	3	NC				AUNUNZZN	AUNUTIVEZIN		HUNULNEL			AUNUUNZZN
3-position		4	NC										
		0	NO	•									
	4N0	2	NO			•	ASN3K40N	ASN31K40N		ASN32K40	N		ASN33K40N
	(40)	3	NO	•			710110117011	AUTOHOLI (. ICHOLINTO			701100114011
		4	NO			•						_	
		0	NC										
	4NC	2	NC				ASN3K04N	ASN31K04N		ASN32K04	N		ASN33K04N
	(04)	3	NC				AUTOROTIV	AUTOTIO		5.1021104			AONOONOTIV
		4	NC										
		0	NO	•									
	☆ 3S	2	NO			•	☆	_		_			_
		3	NC		•		ASN3K3SN-243						
		4	—	Dur	mmy B	lock							

- 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.

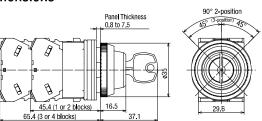
Contact Block Mounting Position



- Key selector switch is supplied with two standard keys.
 Insert the key completely before turning the key, otherwise failure may result.
 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 cityer contacts.
- See B-308 for gold-plated silver contacts.
- See B-312 for bottom view.

Dimensions

All dimensions in mm.



APEM Control Boxes

Emergency Stop Switches Enabling Switches

Safety Products **Explosion Proof**

Terminal Blocks

Relays & Sockets Circuit

Power Supplies

LED Illumination

Controllers Operator Interfaces

Sensors

Flush Silhouette ø16

Miniature

Pilot Lights

Shape

90°

2-position

ASN-□K Key Selector Switches

Contact Configuration

Contact

NO

NO

NC

NO

NO

NO

NC

N0

NC

Contact

NO

NO

NC

NC

NO

NO

NC

NC

NO

N0

NO

NO

NC

NC

NC

NC

N0

NO

NC

Contact Configuration

Contact Block

Contact Block

Mounting

Position

1

2

1

2

1

2

1

2

3

4

Mounting

Position

1

2

1

2

1

2

3

4

1

2

3

4

1

2

3

4

1

2

3

(4)

Operator

Position

•

Dummy Block

•

•

Operator

Position

0 2

•

•

Dummy Block

•

•

1

•

•

•

lacktriangle

Package Quantity: 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

•

•

Contact Block

Contact

NO

NO

NC

NO

NO

NO

NC

NO

NC

Spring Return from Left

ASN32K20N-

ASN32K02N-

ASN32K22N-

ASN32K40N-

ASN32K04N-

N024401

N024401

N024401

N024401

N024401

Mounting

Position

1

2

1

2

1

2

1

2

3

4

APEM

Key Selector (Key No. 24401) ASN□K

Contact

1N0

(10)

1NO-1NC

(11)

2N0

(20)

2NO-2NC

(22)

Contact

2N0

(20)

2NC

(02)

2NO-2NC

(22)

4N0

(40)

4NC

(04)

3S

Maintained

ASN2K10N-

ASN2K11N-

ASN2K20N-

ASN2K22N-

Maintained

ASN3K20N-

ASN3K02N-

ASN3K22N-

ASN3K40N-

ASN3K04N-

ASN3K3SN-

243-N024401

N024401

N024401

NO24401

NO24401

N024401

N024401

NO24401

N024401

NO24401

Spring Return

from Right

ASN21K10N-

ASN21K11N-

ASN21K20N-

ASN21K22N-

N024401

N024401

N024401

N024401

Spring Return

from Right

ASN31K20N-

ASN31K02N-

ASN31K22N-

ASN31K40N-

ASN31K04N-

N024401

N024401

N024401

N024401

NO24401

Operator Interfaces

> Sensors AUTO-ID

ø22

- Cylinder: Chrome-plated
- · Round bezel (metal): Chrome-plated

☆

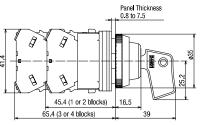
- Key selector switches with 1 or 3 contact blocks have a dummy block.
- See B-321 to B-322 for other contact configurations.
- On spring-returned types, the key can be released only from the maintained position, On maintained types, the key can be released from every position, See B-308 for specifying key retained positions.
- · 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,
- Selector switches with ☆ have a half contact operating current (load switching
- See B-308 for gold-plated silver contacts.
- See B-312 for bottom view.

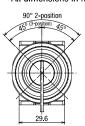
Contact Block Mounting Position



Dimensions

All dimensions in mm.





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

Flush Silhouette ø16

Miniature Pilot Lights

TWND

CS

45°

3-position

current value). Rated insulation voltage and rated current remain the same.

ASLN Illuminated Selector Switches (LED)

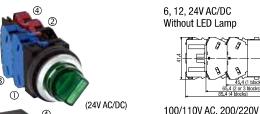
Package Quantity: 1

Shape	Illuminate ASLN	d Selecto	r Switches	s (BA	9S B	Base)							i donago di		: Lights
								(24V AC/DC)								APEM
		Contact C	onfiguration	on				Maintained	Spring Return from Right		Spring	g Retu	ırn fro	om Left		Switches & Pilot Lights
		Contac	t Block	Op Po	erato sitio	or n	Rated Voltage	1 2	1 * 2	Contact	Block	Opei Posi	rator ition	2 جا	Color Code	Control Boxes
	Contact	Mounting Position	Contact	1	2		romago			Mounting Position	Contact	1	2			Emergency Stop Switches
uo	4110 4110	①	NO		•		24V AC/DC	ASLN22211DN*	ASLN212211DN*	①	NO	•		ASLN222211DN*		Enabling Switches
90° 2-position	1NO-1NC (11)	2	NC	•			100/110V AC	ASLN21611DN*	ASLN211611DN*	2	NC		•	ASLN221611DN*		Safety Products
2-p	(11)						200/220V AC	ASLN22611DN*	ASLN212611DN*					ASLN222611DN*	R	
.06	2N0	1	NO		•		24V AC/DC	ASLN22220DN*	ASLN212220DN*	0	NO	•		ASLN222220DN*	G	Explosion Proof
	(20)	2	NO		lacktriangle		100/110V AC	ASLN21620DN*	ASLN211620DN*	2	NO	•		ASLN221620DN*	Y	Terminal Blocks
	, ,	•	NO				200/220V AC 24V AC/DC	ASLN22620DN*	ASLN212620DN*		NO.	_		ASLN222620DN*	A S	Terrifical plocks
	2NO-2NC	① ②	NO NC	•	•		100/110V AC	ASLN22222DN* ASLN21622DN*	ASLN212222DN* ASLN211622DN*	① ②	NO NC	•	•	ASLN222222DN* ASLN221622DN*	PW	Relays & Sockets
	(22)	3	NO		•		200/220V AC	ASLN22622DN*	ASLN211022DN*	3	NO NO	•		ASLN222622DN*		Circuit
	(/	4)	NC	•			_	—	—	4)	NC		•	AOLIVEZEDEEDIN		Protectors
		Contact C	onfiguration	on				Maintained	Spring Return from Right	Spring	Return fr	om Lo	eft	Spring Return Two-Way		Power Supplies
		Contoo	t Disale	0p	erat	or	Rated		non rught						Color	LED Illumination
	Contact	Contac Mounting	1		sitio		Voltage	1 0 2	1 0 2		1 0 7	2		1 0 2	Code	Controllers
		Position	Contact	1	0	2		V	\bigvee							Operator
	2N0	①	NO				24V AC/DC	ASLN32220DN*	ASLN312220DN*	ASL	.N322220	DN*		ASLN332220DN*		Interfaces
	(20)	2	NO			•	100/110V AC	ASLN31620DN*	ASLN311620DN*		.N321620			ASLN331620DN*		Sensors
	(20)						200/220V AC	ASLN32620DN*	ASLN312620DN*		.N322620			ASLN332620DN*		
_	2NC	①	NC		9		24V AC/DC	ASLN32202DN*	ASLN312202DN*		.N322202			ASLN332202DN*		AUTO-ID
itio	(02)	2	NC				100/110V AC	ASLN31602DN*	ASLN311602DN*		.N321602			ASLN331602DN*		
sod			NO	•			200/220V AC	ASLN32602DN*	ASLN312602DN*		N322602			ASLN332602DN*		
45° 3-position	2NO-2NC	① ②	NO NO		-	•	24V AC/DC 100/110V AC	ASLN32222DN* ASLN31622DN*	ASLN312222DN* ASLN311622DN*		.N322222 .N321622			ASLN332222DN* ASLN331622DN*	R	
45	(22)	3	NC			<u>.</u>	200/220V AC	ASLN31622DN*	ASLN311622DN*	1	.N322622			ASLN331622DN*	G Y	Flush Silhouette
	(22)	<u> </u>	NC		5			AJENJZUZZDN*	AGENG 12022DN*	AGE	.14322022	.DIN*		AGENGGZOZZDIN*	Å	-10
		0	NO	•			24V AC/DC	ASLN32240DN*	ASLN312240DN*	ASI	.N322240)DN*		ASLN332240DN*	S	ø16
	4NO	2	NO			•	100/110V AC	ASLN31640DN*	ASLN311640DN*		.N321640			ASLN331640DN*	PW	ø22
	(40)	3	NO	•			200/220V AC	ASLN32640DN*	ASLN312640DN*		N322640			ASLN332640DN*		
		4	NO			•	_		_					_		ø30
		①	NC				24V AC/DC	ASLN32204DN*	ASLN312204DN*		.N322204			ASLN332204DN*		Miniature
	4NC	2	NC				100/110V AC	ASLN31604DN*	ASLN311604DN*		.N321604			ASLN331604DN*		
	(04)	3	NC		9		200/220V AC	ASLN32604DN*	ASLN312604DN*	ASL	.N322604	IDN*		ASLN332604DN*		Pilot Lights
	a color code	4	NC NC						 See B-321 to B-322 off					<u> </u>		

- \bullet 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 have an LED lamp installed.
- Round bezel (metal): chrome-plated
- See B-309 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
- Illuminated selector switches of 24V AC/DC or below with 2 or 4 contact blocks have a
- \bullet See B-321 to B-322 other contact configurations.
- Turn the operator to each position accurately.
- See B-309 for gold-plated silver contacts. • See B-314 for bottom view.

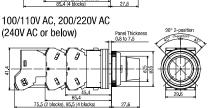
All dimensions in mm.

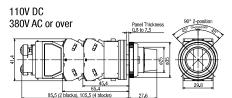
Contact Block Mounting Position



With transformer

Dimensions





TWND

Control Boxes

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

> TWND ARN CS

Selector Switches Contact Configuration (90° 2-position)

					Op	perator Opera	tion and Circ	uit	
				Maint	tained		Return		Return
		Cont		1	2	trom 1	Right → ²	Trom	Left 2
Cambaat		Bloo	CK						
Contact Configuration	Circuit Code			Knob Lever	Key	Knob Lever	Key	Knob Lever	Key
				Operator	Position	Operator	Position	Operator	Position
		Mounting	Contact	1	2	1	2	1	2
		Position			Ø		Ø		Ø
10	Not	①	NO		•		•	•	
10	required	2	_	Dumm	y Block	Dumm	y Block	Dumm	y Block
01	Not	①	NC	•		•			•
UI	required	2	_	Dumm	y Block	Dumm	y Block	Dumm	y Block
	☆	①	EM			(
2R	118	2	LB						
^{∠n}	☆	①	EM						
	168	2	LB						

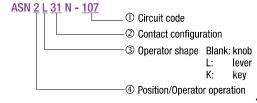
						0p	erator O	peration	and Circ	uit		
			Contact Block			ned 2		ring Reto rom Righ		Spring Return from Left		
Contact Configuration	Circuit Code			Knob Lever	Key	Illumi- nated	Knob Lever	Key	Illumi- nated	Knob Lever	Key	Illumi- nated
					Operator Position		Operator Position			Operator Position		
		Mounting Position	Contact	1	,	2	1		2	1		2
11	Not	①	NO			•			•	•		
11	required	2	NC	•			•					•
20	Not	①	NO			•			•	•		
20	required	2	NO			•			•	•		
02	Not	0	NC	•			•					•
02	required	2	NC	•			•					•
		①	NO			•			•	•		
22	Not	2	NC	•	_		•					•
	required	3	NO			•			•	•		
		4	NC	•			•			ļ		•
		①	NC	•			•					•
31	107	2	NO			•			•	•		
		3	NO		_	•			•	•		
		4	NO		_	•			•	•		
		0	NO			•			•	•		
40	Not	2	NO			•			•	•		
	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

Selector Switches Contact Configuration (45° 3-position)

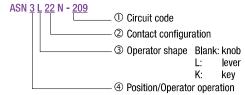
Contact Configuration												nerator (Onera	tion an	d Circu	it				∄
Mounting Contact 1 0 2 Knob/ Lever Key Illumit K		Circuit Code			Ope	rator Pos	sition	N 1			Spr fro	ing Retur om Right	rn	Spr f	ing Ret	turn ft	ן ד	wo-wa	ıy	ot Lights
11 203	Configuration			Contact		_			Key						Key			Key		Switches &
11 203 ① NC		202							√			√			√			√		
20	11	203	1	NC					٠,						٠					Stop Switches
20	''						•		v											
20		303				•		ł	$\sqrt{}$			$\sqrt{}$			\checkmark			$\sqrt{}$		Safety Products
20 required	00	Not			•				,											Explosion Proof
O2 required O2 NC O3 NC O4 O5 O5 O5 O5 O5 O5 O5	20	required					•		√			√			√			<u>_</u>		
Pelips & Sockets Pelips & Sockets Pelips & Sockets Power Supplies	02							ļ	√			V			√			V		Terminal Blocks
Not required 30 NC 10 NC		requireu			_							-								Relays & Sockets
Power Supplies Powe		Not					•	1	,			,			,			,		
209 0 NC NC		1]	٧			٧			٧			٧		
209																				
209 3								-												LED Illumination
22 210 (a) NO (b) (b) NC (c) (c) NC (c) N		209						1	√			$\sqrt{}$			_			_		Controllers
22 210				NO			•													
22 210																				-
⊕ NO	22	210					<u> </u>	-	√			$\sqrt{}$			√			√		
310								1												AUTO-ID
Silvaria Silvaria						•														
3		310					•		J						_			_		
40 NO		310				•		-	V											Flush Silhouette
311 ② NO								-				-								
311 3								1												Ø16 ————————————————————————————————————
A0		311				•		1	√			$\sqrt{}$			√			√		ø22
40 Not required ② NO			4	NC																ø30
10					•															
4	40	i					•	-	√			$\sqrt{}$			√			√		Miniature
04 Not required		required					•	1												Pilot Lights
04 Not required ② NC																				
3S 243	04		2	NC]	,/			J			./			./		
3S 243	"	required						-	٧			V			V			V		TWN
3S	-							-			-	-		-						
3S 243 3 NC		☆					•	1												TWND
4 Dummy Block cs	3S	243				•		۱ ۱	/	-					_			_		ARN
• Selector switches with $\stackrel{\downarrow}{\sim}$ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.			4																	CS

- Selector switches with ☆ have a half contact operating current (load switching current value). Rated insulation voltage and rated current remain the same.
 On selector switches with ☆, the contact blocks may overlap each other while turning the ring or lever operator.

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

ASBN2 Selector Pushbuttons

						Ring F	Position			
	Contact	Circuit		itact ock	Left			Right	Button	Ring Operator
Shape	Contact Configuration	Code		,				'))	Color Code	
			Mounting	Comtost		Push	button		Code	Part No.
			Position	Contact	Normal	Push	Normal	Push		(Ordering No.)
Ring Operator (90°2-position)		A03	0	NO		•		•		ASBN211N-A03*
ASBN2		7100	2	NC	•					AODIETTI AOO
	11	☆	0	NC	•				В	☆
	(1NO-1NC)	K04	2	EM		•			G	ASBN211N-K04*
		G03	1	NO		•		Blocked	R Y	ASBN211N-G03*
			2	NC	•		•		ī	Nobital III doo
	20	D01	0	NO		•				ASBN220N-D01*
	(2NO)		2	NO				•		
			0	NO		•		•		
		A08	2	NC	•					ASBN222N-A08*
			3	NO		•		•		
			4	NC	•					
			1	NO		•		•		
		☆ C10	2	NO				•		☆
			3	NC	•					ASBN222N-C10*
			4	NC						
			1	NO		•				
		D10	2	NO				•		ASBN222N-D10*
		510	3	NC	•					AODITEZEN DIO
			4	NC			•			
			1	NO		•			В	
	22	☆	2	NO				•	G	☆
	(2NO-2NC)	E10	3	NC					R	ASBN222N-E10*
			4	NC					Υ	
			1	NO				•		
		☆	2	NO		•				☆
		F10	3	NC			•			ASBN222N-F10*
			4	NC	•					
			1	NO		•				
		G10	2	NO		•		Blocked		ASBN222N-G10*
		410	3	NC	•		•	PIOCKER		MODINZZZIN-UTU*
			4	NC	•		•			
			①	NC	•					
		☆	2	NC	•					☆
I	1	1						-		l

TWND

Miniature Pilot Lights

Flush Silhouette

ø16 ø22

CS

- \bullet Specify a color code in place of \ast in Part No.
- 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.

K15

• 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.

EM

EM

• When using the selector pushbutton, do not turn the ring operator with the pushbutton depressed. Otherwise, damage or failure may be caused.

3

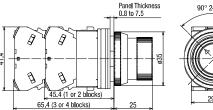
4

- 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)



ASBN222N-K15*

(All dimensions in mm.)

Pilot Lights Round, Square Extended, Rectangular (Marking)

Package Quantity: 1

Shape	Illumination	Base	Rated Voltage	Part No. (Ordering No.)	Color Code	LED Lamp Part No.	Dimensions Page
Round APN1			24V AC/DC	APN122DN*	R, G, Y, A, S, PW	LSRD-2	
APNI			100/110V AC	APN116DN*	R, G, Y, A, S, PW		
(24V AC/DC)	LED	BA9S	200/220V AC	APN126DN*	R, G, Y, A, S, PW	LSRD-6	
Square Extended UPQN3B			24V AC/DC	UPQN3B22D*	R, G, Y, A, S, PW	LSRD-2	
	LED	BA9S	100/110V AC	UPQN3B16D*	R, G, Y, A, S, PW	LSRD-6	B-325
(24V AC/DC)			200/220V AC	UPQN3B26D*	R, G, Y, A, S, PW	LOND-0	
Rectangular (Marking) UPQN4			24V AC/DC	UPQN422D*	R, G, Y, A, S, PW	LSRD-2	
	LED	BA9S	100/110V AC	UPQN416D*	R, G, Y, A, S, PW	1000 0	
(24V AC/DC)			200/220V AC	UPQN426D*	R, G, Y, A, S, PW	LSRD-6	

• 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, 12V AC/DC, and 110V DC.
- Terminal cover is installed on pilot lights for electric shock prevention.

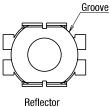
Type	Terminal Cover	Quantity
6V, 12V, 24V AC/DC	APN-PVL	1
100V/110V AC, 200/220V AC	N-VL3	1
110V DC	N-VL3	1

Note: DC-DC converter types are not approved by UL and CSA, and not CE compliant.

• See B-314 for bottom view.

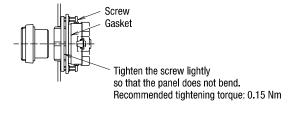
Reflector

- 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.
- 3. After tightening, do not turn the square bezel, otherwise it may fall off.



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

ø30

Miniature

Pilot Lights

TWN

TWND

ARN

Control Boxes

Emergency Stop Switches Enabling

Switches Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Power Supplies

LED Illumination Controllers

> Operator Interfaces

Sensors AUTO-ID

Circuit Protectors

Dimensions (Pilot Light)

All dimensions in mm

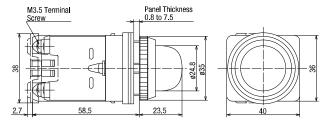
Round APN1

6V, 12V, 24V AC/DC (Terminal Cover: APN-PVL) Without LED Lamp

Panel Thickness 0.8 to 7.5 M3 Terminal

Terminal screws: M3

100 to 480V AC, 110V DC (Terminal Cover: N-VL3)

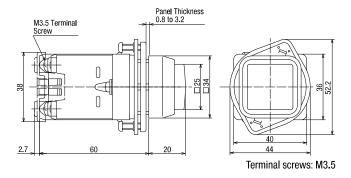


Terminal screws: M3.5

Square Extended **UPQN3B**

6V, 12V, 24V AC/DC (Terminal Cover: APN-PVL) Without LED Lamp

Panel Thickness 0.8 to 3.2 M3 Terminal 46 Terminal screws: M3 100 to 480V AC, 110V DC (Terminal Cover: N-VL3)

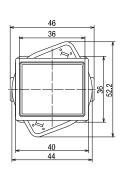


6V, 12V, 24V AC/DC (Terminal Cover: APN-PVL) Without LED Lamp

Rectangular (Marking)

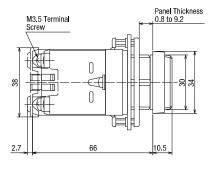
UPQN4

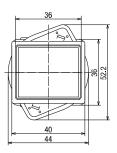
Panel Thickness 0.8 to 9.2 M3 Terminal Screw 29.5 10.5



Terminal screws: M3

100 to 480V AC, 110V DC (Terminal Cover: N-VL3)





Terminal screws: M3.5

• See B-349 for wiring.

Flush Silhouette

ø22

ø16

Miniature Pilot Lights

TWND ARN

Flush/Extended/Extended with Half Shroud/Extended with Full Shroud

Package Quantity: 1

			1		1	Package Quantity: 1	ı 🖺
Shape	Operation	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions	(All dimensions in mm.)	ot Lights
Flush		1NO	ABD110N*	В			0"
ABD1		1NC	ABD101N*	G			
AOD1	Momentoni	1NO-1NC	ABD111N*	R			APEM
	Momentary	2N0	ABD120N*	s	Pane 0.8	Thickness o 7.5 . ø39 .	
		2NC	ABD102N*	W		,	Switches & Pilot Lights
		2NO-2NC	ABD122N*	Note			Control Boxes
		1NO	A0D110N*	В	4 a a		Emergency
		1NC	A0D101N*	G R	45.4 (1 or 2 blocks)	29.4	Stop Switches
	Maintained	1NO-1NC	A0D111N*	Y	65.4 (3 or 4 blocks) 9	40	Enabling
	Maintainod	2N0	A0D120N*	S			Switches
		2NC	A0D102N*	W			Safety Products
		2NO-2NC	A0D122N*	Note			Explosion Proof
Extended ABD2		1NO	ABD210N*	В			
AOD2		1NC	ABD201N*	G			Terminal Blocks
	Momentary	1NO-1NC	ABD211N*	R			Relays & Sockets
	·	2N0	ABD220N*	Y S		1 Thickness o 7,5 ø39	Circuit
		2NC	ABD202N*	⊣ w̃			Protectors
		2NO-2NC	ABD222N*		4	72	Power Supplies
		1NO 1NC	AODOOAN	В			LED Illumination
		1NO-1NC	AOD201N*	G	45.4 (1 or 2 blocks) 65.4(3 or 4 blocks) 14	29.4	
	Maintained	2NO	AOD211N* AOD220N*	R Y	65.4(3 or 4 blocks) 14	40 4	Controllers
		2NC	AOD220N*	S			Operator
		2NO-2NC	AOD222N*	W			Interfaces
Extended with Half Shroud		1NO	ABGD210N*				Sensors
ABGD2		1NC	ABGD201N*	В			AUTO-ID
AOGD2		1NO-1NC	ABGD211N*	- G R			-
	Momentary	2N0	ABGD220N*	Ϋ́	Panel	Thickness	
		2NC	ABGD202N*	S	0.8 to	3.5	
		2NO-2NC	ABGD222N*	- W			Flush Silhouette
		1NO	AOGD210N*		4	024 026.8	ø16
		1NC	AOGD201N*	B G			Ø16
	Maintained	1NO-1NC	A0GD211N*	R	40.9 (1 or 2 blocks) 18.5 60.9 (3 or 4 blocks) 20.5	29.4 40	ø22
	Walitalileu	2N0	AOGD220N*	Υ			ø30
		2NC	A0GD202N*	S W			000
		2NO-2NC	AOGD222N*	***			Miniature
Extended with Full Shroud		1NO	ABFD210N*	В			Pilot Lights
ABFD2 AOFD2		1NC	ABFD201N*	G			
2 -	Momentary	1NO-1NC	ABFD211N*	R			
		2N0	ABFD220N*	Y S	Pan-	Pl Thickness 0 6 ø39	
		2NC	ABFD202N*	W			TWN
		2NO-2NC	ABFD222N*				TWND
		1NO	AOFD210N*	В	2 B B		
		1NC 1NO-1NC	A0FD201N*	N* G	45.4 (1 or 2 blocks) 14	29.4	ARN
	Maintained	2NO	AOFD211N* AOFD220N*	R Y	65.4 (3 or 4 blocks) 16.5	40 4	CS
		2NC	AOFD220N*	Ś			
		2NO-2NC	AOFD202N*	W			
		LINO-ZINO	MUI DZZZIV*	1	1		1

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

Note ABD1, AOD1 with button color of B (black), G (green), or (R) red

Supply of color buttons B, G, R has been discontinued for ABD1/AOD1 without color code. When ordering, make sure to specify the required button color code.

Control Boxes

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

TWN

ARN CS

Mushroom/Mushroom with Full Shroud/Jumbo Mushroom/Jumbo Mushrooms with Shallow/Deep Shroud/Pin Lock

				·		Package Quantity:
Shape	Operation	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions	(All dimensions in mm.)
Mushroom ABD3		1NO	ABD310N*	В		
AOD3		1NC 1NO-1NC	ABD301N* ABD311N*	. G R		
	Momentary	2N0	ABD320N*] γ	Panel Thickness 0.8	to 7.5
		2NC	ABD302N*	S W		
		2NO-2NC 1NO	ABD322N* AOD310N*		41-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	(
		1NC	A0D301N*	B G		
	Maintained	1NO-1NC	A0D311N*	R	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 22	40
	Mamamod	2NO	AOD320N*	Y S		
		2NC 2NO-2NC	A0D302N* A0D322N*	w		
Mushroom with Full Shroud		1NO	ABGD310N*	В		
ABGD3 AOGD3		1NC	ABGD301N*	G	Panel Thickness 0.8 t	0 6.5
AUGDS	Momentary	1NO-1NC 2NO	ABGD311N* ABGD320N*	R Y		
		2NC	ABGD302N*	Ś	2	
		2NO-2NC	ABGD322N*	W		
		1NO	AOGD310N*	В	43.9 (1 or 2 blocks)	
		1NC 1NO-1NC	AOGD301N* AOGD311N*	G R	63.9 (3 or 4 blocks) 23.5	
	Maintained	2N0	AOGD320N*	Υ		
		2NC	AOGD302N*	S W		
Jumbo Mushroom		2NO-2NC	ADDA4ON*	VV		29.4
ABD4		1NO	ABD410N*	<u> </u> 	Panel Thickness 0.8 to 7.5	
		1NC	ABD401N*	В		
	Momentary	1NO-1NC	ABD411N*	G	4	
		2N0	ABD420N*	R Y		
		2NC	ABD402N*		45.4 (1 or 2 blocks)	
Jumpha Mushmaana wiith		2NO-2NC	ABD422N*		65.4 (3 or 4 blocks) 29 Panel Thickness 0.8 to 7.5	29.4
Jumbo Mushroom with Shallow Shroud		1NO	ABGD410N*		Tallel Mickiess V.O to 7.3	
ABGD4		1NC	ABGD401N*			
	M	1NO-1NC	ABGD411N*	B G	4 4 4	
	Momentary	2N0	ABGD420N*	R	4 8 8	
		2NC	ABGD402N*	Y		
		2NO-2NC	ABGD422N*	-	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 29	40
Jumbo Mushroom with					Panel Thickness 0.8 to 7.5	29.4
Deep Shroud		1NO	ABFD410N*			
ABFD4		1NC	ABFD401N*	В		
	Momentary	1NO-1NC	ABFD411N*	G	4.5	<i>((()</i>
	Momortary	2N0	ABFD420N*	R Y		
		2NC	ABFD402N*	. '	45.4 (1 or 2 blocks)	
		2NO-2NC	ABFD422N*		65.4 (3 or 4 blocks) 33	40
Pin Lock (On-off Lock Type) (*1) ABD8P		1NO	ABD8P10N*			
ADDOL JORGE		1NC	ABD8P01N*	В		40
		1NO-1NC 2NO	ABD8P11N* ABD8P20N*	G R	•	29.4
	No.	2NC	ABD8P02N*	Ϋ́	Panel Thickness 0.8 to 7.5	
	120 120	2NO-2NC	ABD8P22N*]		
Pin Lock (On-lock Type) (*1) ABD8PN		1NO	ABD8PN10N*		14	
ADDOLIA		1NC	ABD8PN01N*	В		
		1NO-1NC 2NO	ABD8PN11N* ABD8PN20N*	G R	45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 27.5	FOX BELL
		2NC	ABD8PN02N*	Ϋ́	27.3	\checkmark
		2NO-2NC	ABD8PN22N*			

- 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 bloc
- See B-307 for other contact configurations and gold-plated silver contacts.
- See B-342 for maintenance parts.
- *1) The pin for ABD8P is ø4.6 mm and is not compatible with ABN8P (old series).
- See B-312 for bottom view.
- Terminal screws: M3.5
- Integrated terminal cover

Pushlock Turn Reset/Push Turn Lock/Pull/Push-Pull

Package Quantity: 1

Shape	Contact	Part No. (Ordering No.)	Button Color Code	Dimensions (All dimensions in mm.)
Mushroom Pushlock Turn Reset (*1) AVD3	1NO	AVD310N*		
AVD5	1NC	AVD301N*		Panel Thickness 0.8 to 7.5
	1NO-1NC	AVD311N*	R	
	2N0	AVD320N*	Υ	
	2NC	AVD302N*		45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 23.6
	2NO-2NC	AVD322N*		05.4 (5 0) 4 000(ns) = 23.0 = 40 =
Mushroom Push Turn Lock AJD3	1NO	AJD310N*		
A003	1NC	AJD301N*		Panel Thickness 0.8 to 7.5
	1NO-1NC	AJD311N*	B G	B B TO
	2N0	AJD320N*	- Y	
	2NC	AJD302N*		45.4 (1 or 2 blocks) 65.4 (3 or 4 blocks) 23.6
	2NO-2NC	AJD322N*		00.4 (0 0) 4 (00000) 20.0 4 40 40
Mushroom Pull AZD3	1NO	AZD310N*		Panel Thickness 0.8 to 7.5
	1NO-1NC	AZD311N*	B G	
	2NO	AZD320N*	R Y	114
	2NC	AZD302N*		45.4 25.1 5.5 stroke 29.4 40
Mushroom Push-Pull (*2) AYD31	1NO-1NC	AYD3111N*		Panel Thickness 0.8 to 7.5
	2NO	AYD3120N*	B G R Y	
	2NC	AYD3102N*	'	5.5 stroke 45.4 5.5 stroke 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
- 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.
- *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).
- See B-312 for bottom view.
- Terminal screws: M3.5
- · Integrated terminal cover

Pushbutton operation

Pushlock Turn Reset

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

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

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

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

Pull contact operation

Contact	AZD3								
Contact	Normal	Pull							
1N0	9,0	- - -							
2NO-2NC	ი-ი ••	° • • • • • • • • • • • • • • • • • • •							
2N0	9,9 9,9	9 4 9 4 9							
2NC	•••	919 919							

Push-Pull contact operation

Contact	AYD31								
Contact	Push	Pull							
1NO	ტ <u>•</u> ••	<u></u>							
2N0	مړه مړه	100 100							
2NC	<u>.</u>	616 616							

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

TWN

ARN

LED Illuminated Extended/Extended with Full Shroud

Package Quantity: 1

≃							Package Quantity: 1
ot Lights	Shape	Base	Operation	Operating Voltage	Contact	Part No. (Ordering No.)	Button Color Code
S	Extended				1NO-1NC	ALD22211DN*	
	ALD2			24V AC/DC	2N0	ALD22220DN*	
	AOLD2				2NC	ALD22202DN*	R
APEM					1NO-1NC	ALD21611DN*	G G
Switches &			Momentary	100/110V AC	2N0	ALD21620DN*	Y A
Pilot Lights					2NC	ALD21602DN*	S
Control Boxes					1NO-1NC	ALD22611DN*	PW
Emergency				200/220V AC	2N0	ALD22620DN*	
Stop Switches	(24V AC/DC)	BA9S			2NC	ALD22602DN*	
Enabling Switches	(2117.6723)	DA93			1NO-1NC	A0LD22211DN*	
Safety Products				24V AC/DC	2N0	AOLD22220DN*	
Salety Floudets					2NC	A0LD22202DN*	R
Explosion Proof					1NO-1NC	A0LD21611DN*	G Y
To and a Library			Maintained	100/110V AC	2N0	A0LD21620DN*	
Terminal Blocks					2NC	A0LD21602DN*	S
Relays & Sockets					1NO-1NC	A0LD22611DN*	PW
Circuit	With transformer			200/220V AC	2N0	AOLD22620DN*	
Protectors	(100/110V AC)				2NC	A0LD22602DN*	
Power Supplies	Extended with Full Shroud				1NO-1NC	ALFD22211DN*	
	ALFD2 AOLFD2		-	24V AC/DC	2N0	ALFD22220DN*	
LED Illumination	AULFUZ				2NC	ALFD22202DN*	R G Y A
Controllers				100/110V AC	1NO-1NC	ALFD21611DN*	
			Momentary		2N0	ALFD21620DN*	
Operator Interfaces					2NC	ALFD21602DN*	s
Sensors					1NO-1NC	ALFD22611DN*	PW
Sensors				200/220V AC	2N0	ALFD22620DN*	
AUTO-ID	(24V AC/DC)	BA9S			2NC	ALFD22602DN*	
		D7100			1NO-1NC	AOLFD22211DN*	
				24V AC/DC	2N0	AOLFD22220DN*	
					2NC	AOLFD22202DN*	R G
Flush Silhouette					1NO-1NC	AOLFD21611DN*	— ч
			Maintained	100/110V AC	2N0	AOLFD21620DN*	_
ø16	Milds Annual Communication				2NC	AOLFD21602DN*	s
ø22					1NO-1NC	AOLFD22611DN*	PW
722	With transformer (100/110V AC)			200/220V AC	2N0	AOLFD22620DN*	_
ø30	, ,				2NC	AOLFD22602DN*	
Miniature	 Specify a color code in place of * in Part No. R (red S (blue), PW (pure white) Illuminated purbuttons have an LED lamp installed 	,, (0 ,,	(yellow), A (amber)		ushbutttons of 24V	figurations and gold-plated silve AC/DC or below with 2 or 4 cont	

- 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, 12V AC/DC, and 110V DC.
- Illuminated pushbutttons of 24V AC/DC or below with 2 or 4 contact blocks have a dummy block.

110V DC, 380V AC or over

• See B-314 for bottom view.

Dimensions All dimensions in mm

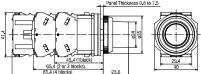
Extended, LED illuminated (momentary/maintained)

ALD2/AOLD2 (terminal screws M3.5)

Integrated terminal cover

6, 12, 24V AC/DC · Without LED Lamp

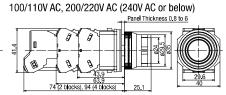
100/110V AC, 200/220V AC (240V AC or below)

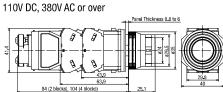




Extended with Full Shroud, LED illuminated (momentary/maintained) ALFD2/AOLFD2 (terminal screws M3.5) Integrated terminal cover

6, 12, 24V AC/DC · Without LED Lamp





TWN

Pilot Lights

ARN

LED Illuminated Mushroom (ø40)/Mushroom Pushlock Turn Reset

Package Quantity: 1

						rackage Quantity.	
Shape	Base	Operation	Operating Voltage	Contact	Part No. (Ordering No.)	Color Code	ot Lights
Mushroom (ø40)				1NO-1NC	ALD32211DN*		0,
ALD3			24V AC/DC	2N0	ALD32220DN*		
AOLD3				2NC	ALD32202DN*		APEM
				1NO-1NC	ALD31611DN*	R G Y	
		Momentary	100/110V AC	2N0	ALD31620DN*		Switches & Pilot Lights
				2NC	ALD31602DN*	A S	Control Boxes
				1NO-1NC	ALD32611DN*	3	
			200/220V AC	2N0	ALD32620DN*		Emergency Stop Switches
(24V AC/DC)	BA9S			2NC	ALD32602DN*		Enabling
	BA95	Maintained		1NO-1NC	A0LD32211DN*		Switches
			24V AC/DC	2N0	AOLD32220DN*	R	Safety Products
				2NC	A0LD32202DN*		Explosion Proof
				1NO-1NC	AOLD31611DN*	G	Explosion Frooi
			100/110V AC	2N0	AOLD31620DN*	Υ	Terminal Blocks
				2NC	A0LD31602DN*	A W S	Relays & Sockets
			200/220V AC	1NO-1NC	A0LD32611DN*		
With transformer				2N0	AOLD32620DN*		Circuit Protectors
(100/110V AC)				2NC	AOLD32602DN*		Power Supplies
Mushroom Pushlock Turn Reset (*1)				1NO-1NC	AVLD32211DN*		
AVLD3			24V AC/DC	2N0	AVLD32220DN*		LED Illumination
				2NC	AVLD32202DN*		Controllers
				1NO-1NC	AVLD31611DN*		
	BA9S	_	100/110V AC	2N0	AVLD31620DN*	R	Operator Interfaces
(24V AC/DC)				2NC	AVLD31602DN*		Sensors
				1NO-1NC	AVLD32611DN*		
			200/220V AC	2N0	AVLD32620DN*		AUTO-ID
(211110,20)				2NC	AVLD32602DN*		

- Specify a color code in place of * in Part No. R (red), G (green), Y (yellow), A (amber), S (blue)
- Illuminated pushbuttons have an LED lamp installed.
- Round bezel (metal): Chrome-plated
- See B-308 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
- See B-308 for other contact configurations and gold-plated silver contacts.
- Illuminated pushbutttons of 24V AC/DC or below with 2 or 4 contact blocks have a dummy block.
- *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).
- See B-314 for bottom view.

Illuminated pushbutton operation

Pushlock Turn Reset

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

Flush Silhouette

ø16

ø22

Miniature

Pilot Lights

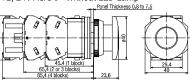
Dimensions All dimensions in mm

Mushroom, LED illuminated (momentary/maintained)

ALD3/AOLD3 (terminal screws M3.5)

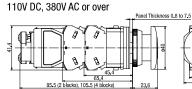
Integrated terminal cover

6, 12, 24V AC/DC · Without LED Lamp



100/110V AC, 200/220V AC





Mushroom Pushlock Turn Reset, LED illuminated

AVLD (terminal screws M3.5)

6, 12, 24V AC/DC · Without LED Lamp

Integrated terminal cover

100/110V AC, 200/220V AC





110V DC, 380V AC or over

TWN

ARN

ASD Selector Switches (Knob Operator)

Package Quantity: 1

ASD2210N

ASD2211N

ASD2220N

ASD2222N

Spring Return

Two-way

ASD3320N

ASD3302N

ASD3322N

ASD3340N

ASD3304N

Spring Return from Left

1

lacktriangle

•

•

•

Contact Block

Contact

N0

N0

NC

N0

NO

N0

NC

NO

NC

Spring Return

from Left

ASD3220N

ASD3202N

ASD3222N

ASD3240N

ASD3204N

Mounting

Position

1

2

1

2

1

2

1

2

3

4

Operator

Position

2

Knob Operator ASD Shape APEM **Contact Configuration** Contact Block Control Boxes Contact Emergency Mounting Contact Stop Switches Position Enabling 1N0 1 NO Switches (10)2 Safety Products 90° 1NO-1NC 1 NO 2-position **Explosion Proof** (11)2 NC 1 N0 2N0 Terminal Blocks (20)2 N0 Relays & Sockets 1 NO 2 NC Circuit 2NO-2NC Protectors (22)3 NO Power Supplies 4 NC **LED Illumination Contact Configuration** Controllers Contact Block Operator Contact Interfaces Mounting Contact Position Sensors NO 1 2N0 AUTO-ID (20)2 NO 1 NC 2NC (02)2 NC 1 NO Flush Silhouette 2NO-2NC 2 N0 (22)3 NC 45° ø16 4 NC 3-position ø22 1 N0 2 N0 4N0 (40)3 N0 Miniature 4 NO 1 NC Pilot Lights NC 2 4NC (04)NC 3 NC 4 1 N0 TWN

•	Knob:	Black

ARN

CS

• Round bezel (metal): Chrome-plated

☆ 3S

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

2

3

4

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

NO

NC

See B-321 to B-322 for other contact configurations.

- 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



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

- . Turn the operator to each position accurately.
- See B-308 for gold-plated silver contacts.
- See B-312 for bottom view.

Spring Return

from Right

ASD2110N

ASD2111N

ASD2120N

ASD2122N

Spring Return

from Right

ASD3120N

ASD3102N

ASD3122N

ASD3140N

ASD3104N

Maintained

ASD210N

ASD211N

ASD220N

ASD222N

Maintained

ASD320N

ASD302N

ASD322N

ASD340N

ASD304N

ASD33SN-243

Operator

Position

2

lacktriangle

Dummy Block

lacktrian

•

•

•

•

•

Operator

Position

0 2

•

•

Dummy Block

ASD□L Selector Switches (Lever Operator)

Package Quantity: 1

	Lever Opera	ator					•						Lights
	ASD					1							ts
Shape													
						•							APEM Switches &
		Contact (Configurati	ion		Maintained	Spring Return		Pilot Lights				
			Contact Block Ope				from Right	Contoo	Spring Return fro Contact Block Operator]	Control Boxes Emergency
	Contact	Mounting			sition	1 2		Mounting			ition	1 2	Stop Switches Enabling
		Position	Contact	1 2		Ÿ	·	Position	Contact	1	2	·	Switches
	1N0 (10)	① ②	N0		ny Block	ASD2L10N	ASD21L10N	① ②	NO —	•	<u> </u>	ASD22L10N	Safety Products
90°	1NO-1NC	0	NO	Dann	• Iloux			0	NO	•			Explosion Proof
2-position	(11)	2	NC	•		ASD2L11N	ASD21L11N	2	NC		•	ASD22L11N	Terminal Blocks
	2N0	0	NO		•	ASD2L20N	ASD21L20N	①	NO	•		ASD22L20N	Relays & Sockets
	(20)	2	NO		•	AODZEZON	AGDZTLZON	2	NO	•		AODZZLZON	Circuit
		0	NO		•			0	NO	•			Protectors
	2NO-2NC (22)	3	NC NO	•	•	ASD2L22N	ASD21L22N	3	NC NO	•	•	ASD22L22N	Power Supplies
		4	NC	•				4	NC		•		LED Illumination
		Contact (Configurati			Maintained	Spring Return from Right	Sprin	g Return f	from Le	eft	Spring Return Two-way	Controllers
	0	Contact	Block		erator sition	1 0 2	1 0 - 2	1, 0 2				1,0,2	Operator Interfaces
	Contact	Mounting Position	Contact	1	2								Sensors
	2N0	0	NO NO	•		ASD3L20N	ASD31L20N ASD31L20N ASD33L20N ASD33L20N						AUTO-ID
	(20)	② ①	NO NC		-								
	2NC (02)	2	NC			ASD3L02N	ASD31L02N		ASD32L0	2N		ASD33L02N	
	(/	0	NO										Flush Silhouette
	2NO-2NC	2	NO		•	A O D O L O O L	AODON OOM		A O D O O I	ON		A O D O O I	ø16
45°	(22)	3	NC		-	ASD3L22N	ASD31L22N		ASD32L2	.ZN		ASD33L22N	
3-position	<u> </u>	4	NC										ø22
		0	NO NO	•	-								ø30
	4NO (40)	2	NO NO		•	ASD3L40N	ASD31L40N		ASD32L4	-ON		ASD33L40N	Miniature
	(40)	<u>3</u> <u>4</u>	NO NO	•	•								- Williature
		0	NC										Pilot Lights
	4NC	2	NC										
	(04)	3	NC			ASD3L04N	ASD31L04N		ASD32L0	4N		ASD33L04N	
	<u> </u>	4	NC										TWN
		0	NO	•									
	☆	2	NO		•	☆ ASD3L3SN-243	_		_			_	TWND
	\$\frac{\frac{1}{3}}{3}\$	3	NC		•	7.55020011 240		_ _				ARN	
	<u> </u>	4	_	Dumr	ny Block			<u> </u>					 CS
Lever: Blac	K					•	Turn the operator to e	ach position	n accurate	ely.			00

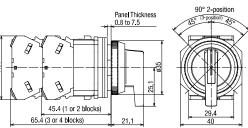
- Round bezel (metal): Chrome-plated
 Selector switches with 1 or 3 contact blocks have a dummy block.
 Knob operator can be installed at every 45 degrees intervals in addition to the positions shown in the above table.
- Turn the operator to each position accurately.
 Selector switches with ☆ have a 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.

Contact Block Mounting Position



Dimensions

All dimensions in mm.



ASD□K Key Selector Switches

Package Quantity: 1

ASD22K10N

ASD22K11N

ASD33K04N

Spring Return from Left

Operator

Position

2

Contact Block

Contact

NO

N0

NC

Mounting

Position

1

2

1

2

Key Selector (Key No. 0) ASD□K Shape APEM **Contact Configuration** Control Boxes Emergency Contact Block Stop Switches Contact Enabling Mounting Switches Position Safety Products 1 1N0 (10)2 **Explosion Proof** 90° 1 1NO-1NC 2-position Terminal Blocks (11)2 Relays & Sockets Circuit Protectors Power Supplies **LED Illumination** Controllers Operator Interfaces Sensors AUTO-ID Flush Silhouette ø16 ø22 Miniature Pilot Lights 4NC 2 (04)3 4 TWN 1 2

		2N0	1	NO NO				ASD2K20N	ASD21K20N	0	NO NO	•		ASD22K20N
-		(20)	2	NO				ASDZKZUN	ASDZ I KZUN	2	NO	•		ASDZZNZUN
			①	NO		•				①	NO	•		
		2NO-2NC	2	NC	•			ASD2K22N	ASD21K22N	2	NC		•	ASD22K22N
-		(22)	3	NO		•		ASDZNZZN	ASDZINZZN	3	NO	•		ASDZZKZZN
			4	NC	•					4	NC		•	
			Contact Configuration					Maintained	Spring Return from Right	Spring Return from Left				Spring Return Two-way
			Contact		Opera	ator Po	sition	1 0 2	1 0 2		0 ـ 1	2		1, 0, 2
		Contact	Mounting Position	Contact	1	2		\rightarrow						
		2N0	1	NO	•			ASD3K20N	ASD31K20N		ASD32K2	ON		ASD33K20N
-		(20)	2	NO			•	ASDSNZUN	ASDSTRZUN		ASDSZNZ	UIN		ASDSSKZUN
		2NC	①	NC				ASD3K02N	ASD31K02N		ASD32K0	12NI		ASD33K02N
		(02)	2	NC				ASDSRUZIV	ASDSTRUZN		ASDSZNO	/ZIV		ASDSSKUZN
			①	NO	•									
-		2NO-2NC	2	NO			•	ASD3K22N	ASD31K22N		ASD32K2	2NI		ASD33K22N
_		(22)	3	NC				AODORZZN	ASDSTREEN		AODOZINZ	.214		AODOORZZIV
	45°		4	NC										
	3-position		①	NO	•									
		4NO	2	NO			•	ASD3K40N	ASD31K40N		ASD32K4	ΩN		ASD33K40N
		(40)	3	NO	•			AUDUNTUN	AUDUTRAUN		AUDUZIN	ON		AUDUUNAUN
-			4	NO			•							
_			①	NC										

ASD3K04N

ASD3K3SN-243

Maintained

ASD2K10N

ASD2K11N

Operator

Position

2

•

Dummy Block

Contact

NO

NO

NC

Spring Return

from Right

ASD21K10N

ASD21K11N

· Cylinder: Chrome-plated • Round bezel (metal): Chrome-plated

ARN

CS

☆ 3S

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

3

4

• 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

NO

NO

NC

•

Dummy Block

- Key selector switch is supplied with two standard keys.
 Insert the key completely before turning the key, otherwise failure will result.
 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.

ASD32K04N

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

ASD31K04N

Contact Block Mounting Position



All dimensions in mm. **Dimensions** 90° 2-position Panel Thickness 0.8 to 7.5 45.4 (1 or 2 blocks) 16.5

Control Boxes

Stop Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Power Supplies

LED Illumination

Controllers

Operator

Sensors

ALITO-ID

Flush Silhouette

ø16

ø22

Miniature

Pilot Lights

Interfaces

Circuit

Protectors

Emergency

Enabling

Switches

ASLD Illuminated Selector Switches (LED)

Package Quantity: 1

Illuminated Selector Switches (BA9S Base) **ASLD** Shape (24V AC/DC) **Contact Configuration** Spring Return from Left Maintained Spring Return from Right Operator Operator Contact Block Operating Contact Block Color ~2 Position Position Voltage Code Contact Mounting Mounting Contact 2 1 2 Contact 1 Position Position NO • 24V AC/DC ASLD22211DN* ASLD212211DN* 1 NO • ASLD222211DN* 1 1NO-1NC NC \bullet 100/110V AC 2 2 ASLD21611DN* ASLD211611DN* NC • ASLD221611DN* (11)200/220V AC ASLD212611DN* ASLD222611DN* 90° ASLD22611DN* R 2-position 1 NO lacktriangle24V AC/DC ASLD22220DN* ASLD212220DN* 1 NO lacktriangleASLD222220DN* G 2N0 • lacktriangle2 NO 100/110V AC ASLD21620DN* ASLD211620DN* 2 N0 ASLD221620DN* γ (20)Α 200/220V AC ASLD22620DN* ASLD212620DN* ASLD222620DN* S 24V AC/DC ASLD22222DN* 1 NO • ASLD212222DN* 1 NO • ASLD222222DN* PW 2 2NO-2NC NC 100/110V AC ASLD21622DN* ASLD211622DN* 2 NC ASLD221622DN* (22)3 N0 • 200/220V AC ASLD22622DN* ASLD212622DN* 3 NO • ASLD222622DN* (4) NC • NC Spring Return from Spring Return **Contact Configuration** Maintained Spring Return from Left Right Two-way Operating Color Operator Position Contact Block 0 2 1 0 2 Voltage Code Contact Mounting Contact 0 Position • 1 N0 24V AC/DC ASLD32220DN ASLD312220DN* ASLD322220DN* ASLD332220DN* 2N0 2 NO 100/110V AC ASLD31620DN* ASLD311620DN* ASLD321620DN* ASLD331620DN* (20)200/220V AC ASLD32620DN* ASLD312620DN* ASLD322620DN* ASLD332620DN* ① NC 24V AC/DC ASLD32202DN* ASLD312202DN* ASLD322202DN* ASLD332202DN* 2NC 2 NC 100/110V AC ASLD31602DN* ASLD311602DN* ASLD331602DN* ASLD321602DN* (02)200/220V AC ASLD32602DN* ASLD312602DN* ASLD332602DN* ASLD322602DN* 45° 1 N0 • 24V AC/DC ASLD32222DN* ASLD312222DN* ASLD32222DN* ASLD332222DN* 3-position • 100/110V AC ASLD31622DN* ASLD311622DN* ASLD331622DN* 2 N0 ASLD321622DN* 2NO-2NC G (22)3 NC 200/220V AC ASLD32622DN* ASLD312622DN* ASLD322622DN* ASLD332622DN* 4 NC S 1 24V AC/DC ASLD32240DN* ASLD312240DN* ASLD322240DN* ASLD332240DN* N0 PW 2 N0 100/110V AC ASLD31640DN* ASLD311640DN* ASLD321640DN* ASLD331640DN* 4N0 (40)3 N0 • 200/220V AC ASLD32640DN* ASLD312640DN* ASLD322640DN* ASLD332640DN* 4 N0 24V AC/DC ASLD32204DN* ASLD312204DN* ASLD332204DN* 1 NC ASLD322204DN* 100/110V AC ASLD31604DN* ASLD321604DN* 4NC 2 NC ASLD311604DN* ASLD331604DN* (04)3 ASLD332604DN* NC 200/220V AC ASLD32604DN* ASLD312604DN* ASLD322604DN* 4 NC

- 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.
- Use a pure white (PW) LED for yellow (Y) illumination.
- See B-309 for other operating voltage such as 6V AC/DC, 12V AC/DC, and 110V DC.
- Illuminated selector switches of 24V AC/DC or below with 2 or 4 contact blocks have a dummy block,
- Turn the operator to each position accurately.
- See B-309 for gold-plated silver contacts.
- See B-314 for bottom view.

TWN

TWND

ARN

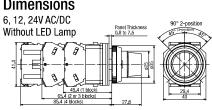
CS

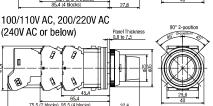
All dimensions in mm.

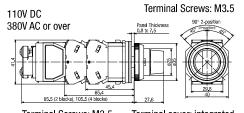
Contact Block Mounting Position Dimensions











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

ASBD2 Selector Pushbuttons

Package Quantity: 1

Shape	Contact Configuration	Circuit Code	Contact Block		Ring Position Left Right			Right	Button Color Code	Ring Operator	
			Mounting Position	Contact	ļ., .,		button		0000	Part No.	
			Position		Normal	Push	Normal	Push		(Ordering No.)	
Ring Operator (90°2-position) ASBD2	11	A03	0	NO		•		•	B G	ASBD211N-A03*	
	(1NO-1NC)	7.00	2	NC	•				R Y	7,05521711 7,00	
			①	NO		•		•			
		A08	2	NC	•					ASBD222N-A08*	
		AUO	3	NO		•		•		ASDDZZZN-ASO*	
			4	NC	•						
		☆ C10	①	NO		•		•			
			2	NO				•		☆	
			3	NC	•					ASBD222N-C10*	
			4	NC		_					
			0	NO NO		•			В		
	22 (2NO-2NC)	D10	2	NO NC				_	G	ASBD222N-D10*	
	(2110-2110)		<u>3</u>	NC NC		_	-		R Y		
			0	NO NO		╤					
			2	NO							
		☆ E10	3	NC				_		☆ ASBD222N-E10*	
		210	4	NC						NODDELEN ETO	
			0	NO				•			
			2	NO		•				- /-	
		☆ F10	3	NC			•			☆ ASBD222N-F10*	
			4	NC	•						

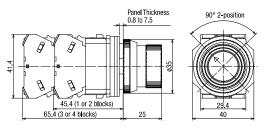
- Specify a color code in place of * in Part No. B (black), G (green), R (red), Y (yellow)
- Bezel (metal): Chrome-plated
- Circuit codes E and F: The right and left NC contact blocks on circuit code E or F may overlap each other while turning the ring operator. The NO and NC contact blocks on circuit 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 Screws: M3.5

Terminal cover: integrated

TWN

Flush Silhouette

ø16

ø22

Miniature

Pilot Lights

ARN

Control Boxes

Safety Products

Explosion Proof Terminal Blocks Relays & Sockets Circuit

Protectors

Controllers

Operator

Sensors

AUTO-ID

Interfaces

Power Supplies LED Illumination

Emergency Stop Switches Enabling Switches

Pilot Lights (Round)

Package Quantity: 1

Shape	Illumination	Base	Operating Voltage	Part No. (Ordering No.)	Color Code	LED Lamp Part No.
Round APD1			24V AC/DC	APD122DN*	R, G, Y, A, S, PW	LSRD-2
1	LED	BA9S	100/110V AC	APD116DN*	R, G, Y, A, S, PW	LCDD.C
(24V AC/DC)			200/220V AC	APD126DN*	R, G, Y, A, S, PW	LSRD-6

• 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, 12V AC/DC, and 110V DC.
See B-309 for how to specify units without LED lamps.

• Terminal cover is installed on pilot lights for electric shock prevention.

Туре	Terminal Cover	Quantity
6V, 12V, 24V AC/DC	APN-PVL	1
100V/110V AC, 200/220V AC	N-VL3	1
110V DC	N-VL3	1

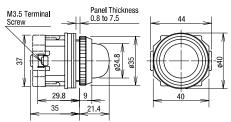
Note: DC-DC converter types are not approved by UL and CSA, and not CE compliant.

• See B-314 for bottom view.

Dimensions

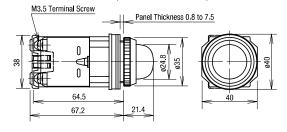
Round, LED illuminated

6V, 12V, 24V AC/DC · Without LED Lamp (Terminal Cover: APD-PVL)



Terminal Screws: M3.5

100 to 480V AC, 110V DC (Terminal Cover: N-VL3)



Terminal Screws: M3.5

All dimensions in mm.

ø16

Flush Silhouette

ø22

Miniature Pilot Lights

TWN

CS

• See B-349 for wiring.

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

Miniature

Pilot Lights

TWN

ARN

CS

Nameplates

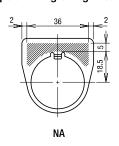
Model	Legend	Material	Part No.	Ordering No.	Package Quantity	Dimensions (mm)
NA	Diami		NA O	NA-0	1	40 - 11.2
	Blank	Aluminium 1.2 mm thick	NA-0	NA-0PN10	10	152
	With	White letters on black background	NA-□	NA-□	1	9 030.5
For TWN/TWND	Legend		NA-⊔	NA-□PN10	10	1 (800.0)
NALO	Dlonk	Aluminium 1.2 mm thick	NALO	NALO	1	40 1.2
For TWN/TWND	For TWN/TWND Blank		NALU	NALOPN10	10	630.5

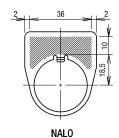
Specify a legend code in place of $\hfill\Box$ in the Ordering No.

Legends

□: Code	Legend
1	ON
2	0FF
3	START
4	ST0P
31	OFF ON
35	HAND AUTO
53	HAND OFF AUTO

Shape and Engraving Area





All dimensions in mm.

Example (when the legend height is 4 mm)

Shape		ng Area m)	Max. No.	No. of Letters on	
	Height Width		OI LINES	1 Line	
NA	5	36	1	14	
NALO	10 36		2	14	

Accessories

A0003301103						Pilo
Shape	Material	Part No.	Ordering No.	Package Quantity	Remarks	& Pilot Lights
Locking Ring Wrench B A For TWN/TWND	Nitril rubber (black)	OR-12	0R-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	APEM Switches & Pilot Lights Control Boxes Emergency Stop Switches
Lamp Holder Tool A B For TWN/TWND	Nitril rubber (black)	OR-55	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 59	Enabling Switches Safety Products Explosion Proof Terminal Blocks Relays & Sockets
Contact Block Removal Tool For TWN	Metal (zinc-plated) Rubber (nitryl)	TW-KC1	TW-KC1	1	Used to remove transformer units. See B-347 for how to use. 130 130 130	Circuit Protectors Power Supplies LED Illumination Controllers Operator Interfaces
Contact Rubber Boot For momentary 1 layer of contact blocks (2 contact blocks)	Nitril rubber (black)	0C-99	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.	Sensors AUTO-ID Flush Silhouette ø16
Anti-rotation Ring For TWN/TWND	Metal (diecast) (zinc-plated)	0GL-11	OGL-11PN10	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.	Miniature Pilot Lights
Rubber Mounting Hole Plug	Nitril rubber (black) Nitril rubber	0B-13B	0B-13BPN05	. 5	Used to plug unused ø30.5 mm mounting holes. Degree of protection: IP40	TWN
For TWN/TWND	(gray)	0B-13	0B-13PN05		< 034 ≥	ARN ————————————————————————————————————
Plastic Mounting Hole Plug For TWN/TWND	Plug: ABS plastic (gray) Gasket: Chloroprene rubber Locking ring: diecast zinc	0BP-11	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 ^{P1.5} Screw Locking Ring	
Metallic Mounting Hole Plug For TWN/TWND	Plug: ABS plastic (gray) Gasket: Chloroprene rubber Locking ring: diecast zinc	0B-11	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° ^{1.5} Screw Locking Ring	

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

Accessories All dimensions in mm.

				0.1.	5.1	
Shape	Material	Pa	rt No.	Ordering No.	Package Quantity	Remarks
Button Cover for Extended Pushbuttons		Black	0C-11B	0C-11B		Metallic bezels covered with a rubber boot to enhance waterproof characteristics.
	Nitril rubber	Red	0C-11R	0C-11R	1	Button is not included. Applicable to extended pushbuttons only. Oil-proof
	Bezel: diecast zinc	Green	0C-11G	0C-11G	'	• Operating temperature: -5 to +60°C.
For TWN/TWND		Yellow	0C-11Y	0C-11Y		/M30 P1.5
For flush pushbuttons	EPDM rubber	0C-12	1	0C-121	1	Used to cover and protect push-buttons where units are subject to water splash. Not suitable for outdoor use or where the units are subject to oil splash.
For extended pushbuttons		0C-122	2	0C-122	1	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-4G	N	OC-4GN	1	Used for ABN4G and ABGD4 pushbuttons. Panel Thickness 1.2 to 5.5
Padlock Cover For TWN/TWND	Polyarylate (gasket: nitryl rubber)	OL-KL1	ı	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 Vitalian and illuminated pushbuttons Raz.5 Panel Thickness Raz.5 Raz.5 Raz.5 Raz.5 Raz.6 Raz.6 Raz.6 Raz.6 Raz.6 Raz.6 Raz.6 Raz.7 Raz.8 Raz.8 Raz.8 Raz.8 Raz.9 Raz.9
Padlock Cover for Key Selector Switches For TWN/TWND	Metal Paint: red (zinc-plated brass)	HS9Z-I	PC30	HS9Z-PC30	1	Applicable model Key selector switches ASN□K/ASD□K See padlock cover catalog for operating instruction. Materias SPCC 1.6 mm-thick Med paint Rec. 2 mm-thick 3.7 2.7.5 4.84 Red. 820.5 838 840.5 840.5
For Flush Pushbuttons For TWN/TWND	Metal (zinc-plated brass)	OL-C		OL-C	1	Used to protect flush pushbuttons from inadvertent operation. Can be easily attached using the locking ring. 42.5 42.5 11.4 11.6

ø35, height 4

For TWN

Shape		Material	Part No.	Ordering No.	Package Quantity	Remarks	Pilot Lights
Metallic Bezel		Metal				Cannot be used with pin lock,	APEM
)	(diecast zinc: chrome-plated)	0G-11 0G-11PN02 2	2	selector pushbuttons, and monolever units.	Switches & Pilot Lights Control Box	
ø35/ø26, height 9 For	or TWN/TWND						Emergency Stop Switch
						Specify a color code in place of *.	Enabling Switches Safety Prod
		Polycarbonate	0GP-11*	0GP-11*PN02	2	B (black), G (green), R (red), W (white), Y (yellow)	Explosion P
						Cannot be used with pin lock, selector pushbuttons, and monolever units.	Terminal Bl
ø35/ø26, height 9	For TWN						Relays & So
Octagonal Metal Bezel	① Flush						Circuit Protectors Power Supp
	W35 (37.6)		0G-81	0G-81PN02	2		LED Illumin
	H9 ´	Metal (diecast zinc:				Use with TWDN series diecast zinc witches and pilot lights	Controllers
② Extended W35		chrome-plated)				switches and pilot lights. • Cannot be used with half-shrouds.	Operator Interfaces
			0G-82	0G-82	1		Sensors
En TMF	(37.6) H16						AUTO-ID
For TWI Clear Plastic Shroud for Flush Pu							
		Acrylic (clear)	0GP-13	0GP-13PN02	2		Flush Silho
							ø16
ø35, height 14	For TWN						ø22
Clear Plastic Shroud for Extende	-					Clear plastic full shroud.	ø30 Miniature
							Pilot Lights
		Acrylic (clear)	0GP-14	0GP-14PN02	2		Filot Lights
ø35, height 20.6	For TWN						TWN
Clear Plastic Shroud for Illuminated	1 Pushbuttons						TWND
							ARN
		Acrylic (clear)	0GP-1411	0GP-1411	1	Buttons may protrude slightly depending on the panel thickness.	CS
Shroud: ø35, height 20.6 Metal Nut Ring: height 4	For TWN						
Metal Nut Ring for Illuminated Pu	ushbuttons						
		Metal (diecast zinc)	0L-11	OL-11PN05	5	Metal nut ring for OGP-1411 only.	

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

Accessories

	S	hape	Material	Part No.	Ordering No.	Package Quantity	Color Code *
Button for Pushbutt		① Flush ø24.6, height 4		ABN1BN-*	ABN1BN-*PN05	5	
2		② Extended ø24.6, height 9		ABN2BN-*	ABN2BN-*PN05	5	B (black), G (green), R (red), Y (yellow), S (blue), W (white)
_ 3		3 Mushroom ø40, height 16.2	Polyacetal	ABN3BN-*	ABN3BN-*PN02	2	
- 4		④ Jumbo Mushroom ø65, height 23.2		ABN4BN-*	ABN4BN-*	1	B (black), G (green), R (red), Y (yellow), S (blue)
- ⑤ -		© Button for Pin Lock (ABD8P) ø23.6, height 3		ABW1B-*	ABW1B-*PN05	5	B (black), G (green), R (red), Y (yellow), S (blue), W (white)
- © - _⑦	9	© Ø40 Pushlock Turn Reset (AVN3, AVD3) Ø40, height 18.5	AC vacin	AVN3B-*	AVN3B-*	1	R (red),Y (yellow)
	or TWN/TWND		AS resin	AJN3B-*	AJN3B-*	1	B (black), G (green), R (red), Y (yellow)
Pushbutto	Illuminated ons	① Extended (ALN2, ALD2) ø24, height 18.5		ALN2LD-*-K	ALN2LD-*-KPN05	5	R (red), G (green), S (blue), Y (yellow), A (amber), W (white) Specify W for PW (pure white) illumination.
2 Fo	or TWN/TWND	② ø40 Pushlock turn reset (AVLN3, AVLD3) ø40, height 18.5	AS resin	AVLN3L-R-K	AVLN3L-R-KPN02	2	R (red) only
Selector	Operator	① Knob operator ø25, height 20.5		ASNHT-*	ASNHT-*PN02		
2 (3		② Lever operator ø25, height 20.5, length 37.5	Polyacetal	ASNHL-*	ASNHL-*PN02	2	B (black), G (green), R (red)
-	7	3 Color insert Width 21, depth 5, height 18		TW-HC1*	TW-HC1*PN05	5	B (black), G (green), R (red), Y (yellow), S (blue), W (white)
For	or TWN/TWND	4 Knob for illuminated selector switch (ASLN, ASLD) ø25, height 28	AS resin	ASLNHD-*-K	ASLNHD-*-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 (APN1, APD1) ø24.8, height 28, M20 For TWN/TWND		APN106LN-*-K	APN106LN-*-KPN05	5	R (red), G (green), Y (yellow) A (amber), W (white), S (blue) Specify W for PW (pure white) illumination.
2		② Rectangular (UPQN4) Width 36, depth 30, height 8.5	AS resin	UPQN406LD-*-K	UPQN406LD-*-KPN05	5	R (red), G (green), Y (yellow), A (amber), C (clear), S (blue) Specify C for PW (pure white) illumination.
3		③ Square extended (UPQN3B) □25, height 26.5 For TWN		UPQN06LD-*-K	UPQN06LD-*-KPN05	5	R (red), G (green), S (blue), Y (yellow), A (amber), W (white) Specify W for PW (pure white) illumination.
Marking	Plate For TWN	Rectangular pilot lights (UPQN4) Width 29.8, depth 23.8, thickness 2	Acrylic	UPQN406N-W	UPQN406N-WPN05	5	W (white) only See B-346 for engraving area.

• Used to plug the hole in the center of a contact block.

10

Olara	8.6.4	D- 4 **	Out of N	Package	Day 1	(-
Shape	Material	Part No.	Ordering No.	Quantity	Remarks	s & Pilot Lights
ubber Washer (1.5 mm-thick) For TWN/TWND	Rubber (synthetic soft vinyl) ø39/ø29.5, height 1.5	0W-11	OW-11PN10	10	To tighten mounting panels	APEM Switches &
ubber Washer (3.0 mm-thick) For TWN/TWND	Rubber (synthetic soft vinyl) ø39/ø29.5, height 3	0W-12	OW-12PN10	10	To tighten mounting panels	Pilot Lights Control Boxe Emergency Stop Switch Enabling
hroud for Pushbuttons ①	① Half shroud ø35/ø27, height 20.5	ABN2G	ABN2G	1	• With nut ring (ø35, height 4)	Switches Safety Prod Explosion P
3	② Full shroud ø35/ø28.5, height 16.5	ABN2F	ABN2F	1		Relays & So Circuit Protectors
(a)	③ Full shroud (for mushroom pushbuttons) ø48, height 20	ABN3G	ABN3G	1		Power Supp LED Illumina Controllers
S	④ Shallow shroud (for jumbo mushroom) ø75, height 18	ABN4G	ABN4G	1		Operator Interfaces Sensors
For TWN/TWND	© Deep shroud (for jumbo mushroom) ø75/ø69, height 33	ABN4F	ABN4F	1		Flush Silho
hroud for Illuminated Pushbuttons ① ② ②	① Half shroud (For BA9S base) ø35/ø27, height 25	ALN2GL	ALN2GL	1	• With nut ring (ø35, height 4)	ø16 ø22 ø30
For TWN/TWND	② Full shroud (For BA9S base) ø35/ø29.5, height 22.5	ALN2FL	ALN2FL	1	• With nut ring (ø35, height 4)	Miniature Pilot Lights
pare Key or Key Selector Switches For TWN/TWND	Metal Nickel plated brass Length 3, width 19.7, thickness 1.8	TW-SK-0	TW-SK-0PN02	2	ASN□K□N ASD□K□N	TWN TWND
pare Key or Key Selector Switches For TWN	Metal Nickel plated brass Length 37.5, thickness 2	ASN-SK-24401	ASN-SK-24401PN02	2	◆ ASN□K□-N024401	ARN CS
in/Chain Kit or ABD8P	Pin: Nickel plated brass	ABD8P-PIN	ABD8P-PIN	1	• Pin, chain, and plate for ABN8P • Pin (ø4.6)	

HW9Z-CBPL

Polyamide

For TWN/TWND

HW9Z-CBPLPN10

Maintenance Parts

All dimensions in mm

Shape	Description	Part No.	Ordering No.	Package Quantity	Remarks
Contact block	NO contact	HW-U10	HW-U10	1	Housing color: Blue Push rod color: Green
HW-U	NO contact	HW-U10-MAU	HW-U10-MAU	'	MAU has gold contacts
	NC contact	HW-U01	HW-U01		Housing color: Reddish purple Push rod color: Red
	NG COMACI	HW-U01-MAU	HW-U01-MAU	1	MAU has gold contacts
	EM contact	HW-U10R	HW-U10R	1	Housing color: Blue Push rod color: Black
	(early make)	HW-U10R-MAU	HW-U10R-MAU	'	MAU has gold contacts
	LB contact	HW-U01R	HW-U01R		Housing color: Reddish purple
For TWN/TWND, 11g approx.	(late break)	HW-U01R-MAU	HW-U01R-MAU	1	Push rod color: White MAU has gold contacts
Dummy Block For TWN/TWND 3.5g approx.	Polyamide	HW-DB	HW-DBPN10	10	For HW-U contact blocks Used when the number of contact blocks and full voltage adapters is 1 or 3.
Full Voltage Adapter For Illuminated Switches (*1) For TWN/TWND 12g approx.	Polyamide	HW-GA1N	HW-GA1NPN02	2	Applicable model: Illuminated pushbuttons Illuminated selector switches Applicable load (LED lamp) LSRD-6, LSTD-6 (6V AC/DC) LSRD-1, LSTD-1 (12V AC/DC) LSRD-2, LSTD-2 (24V AC/DC)
Transformer Unit For Illuminated Switches (*1)	100/110V AC	HW-T16	HW-T16	1	Applicable model: Illuminated pushbuttons
For TWN/TWND 66g approx.	200/220V AC	HW-T26	HW-T26	1	Illuminated selector switches • Applicable load (LED lamp) LSRD-6, LSTD-6 (6V AC/DC)
Transformer Unit For Pilot Lights (*1)	100/110V AC	TWR-016B	TWR-016B	1	Mounting screws are not included. See B-347 for mounting screws.
For TWN/TWND 69g approx.	200/220V AC	TWR-026B	TWR-026B	1	Applicable load (LED lamp) LSRD-6, LSTD-6 (6V AC/DC)

^{*1)} For use as maintenance parts. Do not use for expansion or remodelling purposes.

LED Lamps (Use LED lamps for replacing incandescent lamps)

Model	Operating		nt Draw	Part No.	Ordering No.	Color Code	Package	Base
model	Voltage	DC	DC	T GIT THOI	ordorning itel	00101 0000	Quantity	Buoo
LSRD	6V AC/DC	10mA	14mA	LSRD-6	LSRD-6		1	
	OV AC/DC	TOTTA	TAMA	LOND-0	LSRD-6PN10		10	
2 4	12V AC/DC	7mA	8mA	LSRD-1	LSRD-1		1	BA9S
C	12V AG/DC	/IIIA	OHA	LSKD-1	LSRD-1PN10	_	10	/13
	24V AC/DC	7mA	8mA	LSRD-2	LSRD-2		1	
	24V AU/DU	/IIIA	OHA	LOND-2	LSRD-2PN10		10	
LSTD	6V AC/DC	7mA (R, A) 5.5mA (G, PW)	8mA (except S)	LSTD-6*	LSTD-6*		1	
	OV AO/DO	4.5mA (S)	7mA (S)	2010 0	LSTD-6*PN10	R, G, A, S, PW	10	BA9S - /13
	12V AC/DC	10mA (except S)	11mA (except S)	LSTD-1*	LSTD-1*		1	
	12V AO/DC	8mA (S)	9mA (S)	LSTD-1*	LSTD-1*PN10		10	
	24V AC/DC	10mA (except S)	11mA (except S)	LSTD-2*	LSTD-2*		1	
	24V AO/DC	8mA (S)	9mA (S)	LSTD=Z*	LSTD-2*PN10		10	
LETD	6V AC/DC	14mA (R, A)	17mA (R, A)	LETD-6*	LETD-6*		1	
	OV AC/DC	5.5mA (G, S, PW)	8mA (G, S, PW)	LEID-0*	LETD-6*PN10		10	
	12V AC/DC	6.5mA		LETD-8*	LETD-8*	D C A C DW	1	E12
	12V AU/DU	(10mA: at 15V)	(11mA: at 15V)	LEID=0*	LETD-8*PN10	R, G, A, S, PW	10	/15
	24V AC/DC	10mA	11mA	LETD-2*	LETD-2*		1	1 1
	24V AU/DU	TUITA	TITIIA	LEIU-Z*	LETD-2*PN10		10	

- Only one color is available for LSRD so there are no codes to specify the color in the part no.
- Specify a color code in place of * in Part No. R (red), G (green), A (amber), S (blue), PW (pure white)
- Use a PW (pure white) LED for Y (yellow) illumination.
- When replacing the LED with LSRD, the lens must also be replaced (see B-341).

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 Transf

AUTO-ID

Flush Silhouette

ø22

ø16

Miniature

Pilot Lights

TWN

ARN

Maintenance Parts All dimensions in mm.

LED lamps for replacing incandescent lamps

Incandescent Lamp							
Model (mm)	Part No.	Operating Voltage	Lamp Rating	Base			
LS	LS-6	6V AC/DC	1W (6V)				
-1	LS-8	12V AC/DC	1W (18V)	BA9S			
Bulb: ø11	LS-2	18V AC/DC	1W (24V)	/13			
Length: 23	LS-3	24V AC/DC	1W (30V)				
LE	LE-6	6V AC/DC	2W (6V)				
	LE-8	12V AC/DC	2W (18V)	E12			
Bulb: ø13	LE-2	18V AC/DC	2W (24V)	/15			
Length: 34	LE-3	24V AC/DC	2W (30V)				

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

Operating Voltage

100/110V AC

200/220V AC

400/4440V AC

100/110V AC

200/220V AC

400/4440V AC

Voltage Range

±10%

±10%

±10%

±10%

±10%

±10%

• When replacing incandescent lamps to LSRD, the lens must also be replaced (see B-341).

Replacement LED Lamp							
Part No.	Color Code	Operating Voltage	Base				
LSRD-6		6V AC/DC					
LSRD-1		12V AC/DC	BA9S				
LSRD-2	_	24V AC/DC	/13				
LSRD-2		24V AC/DC					
LETD-6*		6V AC/DC					
LETD-8*	R, G, A,	12V AC/DC	E12				
LETD-2*	S, PW	24V AC/DC	/15				
LETD-2*		24V AC/DC					

Part No.

(Ordering No.)

TWR516

TWR526

TWR546

TWR512

TWR522

TWR542

- When using a commercially available incandescent lamp, choose a lamp with the same dimensions, operating voltage, and base.
- Specify a color code in place of * in Part No.
- R (red), G (green), A (amber), S (blue), PW (pure white)
- Use a PW (pure white) LED lamp for Y (yellow) illumination.
- For O (orange) and C (clear) color code of incandescent lamp, use A (amber) LED lamp.

Applicable Load

LSRD-6, LSTD-6* (6V AC/DC, LED lamp)

R (red), G (green), A (amber), S (blue),

R (red), G (green), A (amber), S (blue),

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

LSRD-2, LSTD-2* (24V AC/DC, LED lamp)

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

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

• Terminal cover (TWR-VL3) is installed on transformers as standard.

Specifications

For 6V

For 24V

Transformer

Shape

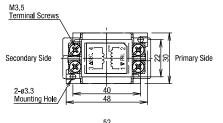
Part No.	TWR5□6	TWR5□2	
Rated Voltage	100/110V AC, 200/220V AC,	400/440V AC (50/60 Hz)	
Current Draw	2.4VA		
Rated Insulation Voltage	600V		
Insulation Resistance	100MΩ minimum (500V DC	megger)	
Operating Temperature	-30 to 60°C (no freezing)		
Operating Humidity	35 to 85% RH (no condensa	tion)	
Storage Temperature	-40 to +80°C (no freezing)		
Vibration Resistance	Damage limits: 30 Hz, amplitude 1.5 mm		
Vibration 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		

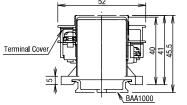
Dimensions

PW (pure white)

PW (pure white)

All dimensions in mm.







	TWN	
I		

ARN

CS

Accessories

Shape	Material	Part No.	Ordering No.	Package Quantity	Dimensions (mm)
DIN 35 mm Rail Weight: 200g approx.	Aluminum Length: 1000 mm	BAA1000	BAA1000PN10	10	12.5 12.5 1.7
End Clip Weight: 15g approx.	Metal (zinc-plated steel) Applicable rail: BAA1000	BNL6	BNL6PN10	10	M4 screw

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 and
- 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.

APEM

Control Boxes

Emergency Stop Switches Enabling

Safety Products

Switches

Explosion Proof

Terminal Blocks

Relays & Sockets

Protectors

Circuit

Power Supplies

LED Illumination

Controllers

Operator Interfaces

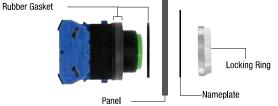
Sensors

AUTO-ID

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.
- 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.



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.

(flush/extended/mushroom/jumbo mushroom)

Illuminated pushbutton (extended/mushroom)

2 pieces

2 pieces

Pushbutton (extended with half shroud)

1.5 mm-thick

Rubber Washer

1.5 mm-thick 3.0 mm-thick

Rubber Washer

1

1

3.0 mm-thick

Pilot light (except for square type)

Panel Thickness (mm)

Supplied

0.8 to 3.5

3.5 to 5.0 5.0 to 6.5

6.5 to 7.5

Panel

Thickness (mm)

Supplied 0.8 to 1.8 1.8 to 3.5

TWN/TWND series

Illuminated pushbutton

(extended with half shroud)



Applicable Model Flush Silhouette

TWN/TWND series ø16 Pushbutton

ø22

Miniature

Pilot Lights

ARN

CS

TWN/TWND series

Illuminated pushbutton (extended w/full shroud) Mushroom with full shroud

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	
2.0 to 3.5	1	1	
3.5 to 5.0	_	1	
5.0 to 6.0 (6.5)*1	1	-	

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

TWND series

Pin lock pushbutton

Panel	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

Pushbutton (extended with full shroud)

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

TWN/TWND series

Other models (excluding square)

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	_	

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

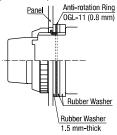
Locking ring wrench (OR-12) can be used to tighten the bezel. Use side B to tighten. Side B: For TWN/TWND series Side A: TWS series



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.



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.



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

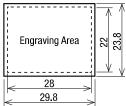
Material: Acrylic resin

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.

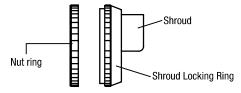




Installing the Half Shroud on Extended Pushbuttons/ **Illuminated Pushbuttons**

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.
- (4) Install the half shroud on the upper side of the switch, and tighten the shroud
- (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



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

APFM

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



Shrouds may rattle depending on the panel thickness.

Control Boxes

Stop Switches

Emergency

Enabling

Switches Safety Products

> Circuit Protectors

Power Supplies

LED Illumination

Controllers

Operator

Interfaces

Sensors

AUTO-ID

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.

Key Selector Switches

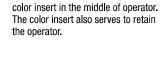
Insert the key completely before turning. Failure to do so may cause failures.

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.



Explosion Proof ② On non-illuminated models, install the Terminal Blocks Relays & Sockets





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



45° 3-position

Flush Silhouette

ø16

ø22

ARN

CS

Miniature Pilot Lights Recess

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

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

90° 2-position

(illuminated selector switches do not have a recess on the shaft).







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.

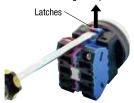
Removing the Operator from Illuminated Selector Switches



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

Transformer Units and DC-DC Converters

Insert the end of the contact block removal tool (TW-KC1) into the snap-fit latch of the transformer units or DC-DC converter and pull the tool forward. The contact block removable tool cannot be used to remove the HW-U contact blocks or full voltage adapters.



Mhen replacing parts (contact block, dummy block, full voltage adapter, transformer) for maintenance, make sure to install the parts to the original position. Otherwise proper operation cannot be guaranteed.

Transformer Units and DC-DC Converters for Pilot Lights

Unfasten the two mounting screws on the back to remove the transformer unit/ DC-DC converter.



Mounting screws APN: M3 × 6 (screw diameter ø5.5 or below) APD: M3.5 \times 6 (screw diameter ø5.5 or below)

Operating Instructions

Applicable Wiring

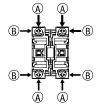
(1) Contact Block 0.3 to 3.5 mm² (solid wire 0.5 to 2.0 mm)

Pushbutton/illuminated pushbutton/selector switch/ illuminated selector switch/selector pushbutton

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

<Contact Block>

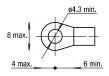
Terminal screws M3.5 (spring-up)

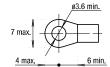


Applicable Crimping Terminal

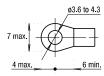
Be sure to use an insulation tube or cover on the crimping part of the crimping terminal to prevent electrical shocks.

Crimping terminal for (A)

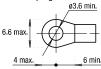




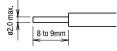
IP20 crimping terminal



Crimping terminal for (B) 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,

(1)-1 IP20 Degree of Protection

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

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

When using a crimping terminal

Use IP20 crimping terminals.

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.

(2) Power Unit

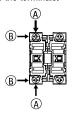
0.3 to 2 mm2 (solid wire 0.5 to 1.6 mm)

Illuminated pushbutton/illuminated selector switch

A and B show the wiring direction to the terminals.

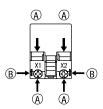
<Full Voltage Adapter>

Terminal screws M3.5 (spring-up)



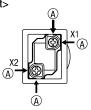
<Transformer Unit>

100/110V AC, 200/220V (240V AC or below) Terminal screws M3.5 (spring-up)



<DC-DC Conver Unit/Transformer Unit>

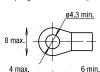
110V DC, 380V Terminal screws M3.5 (spring-up)

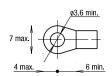


Applicable Crimping Terminal

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

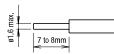
Crimping terminal for (A)





Crimping terminal for (B)

Solid wire



- Strip the wire insulation 7 to 8 mm from the end
- Insert the wire until the insulation comes into contact with the terminal metal part.
- Terminal cover is integrated in the full voltage adapter and transformer unit.
 Note that the connection terminal is not IP20.

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

Miniature

Pilot Lights

WN

ARN

Control Boxes

Stop Switches

Safety Products

Explosion Proof

Terminal Blocks

Relays & Sockets

Circuit

Protectors

Operator Interfaces

Sensors

AUTO-ID

Power Supplies

LED Illumination

Enabling

Switches

ø30 TWN/TWND Series

Operating Instructions

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

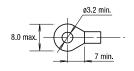
Applicable crimping terminal

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, 12, 24V AC/DC)

Terminal screws M3 (self-lifting)

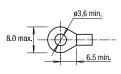
(Arrows show the wiring direction)





APD1 (6, 12V, 24V AC/DC)

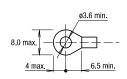
Terminal screws M3.5 (self-lifting)





APN1, UPQN3B, UPQN4, APD1 (100 to 480V AC or below, 110V DC)

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.

Cautions for Wiring

About using DC-DC Converter Unit

1. Note the polarity for wiring when connecting to the DC-DC converter.

Terminal No.	Polarity
X1	Positive
X2	Negative

- 2. Incandescent lamps cannot be used in DC-DC converter unit.
- DC-DC converters are equipped with an electric circuit and noise may be heard inside the unit, which does not affect the performance of DC-DC converters.

Recommended Tightening Torque Number of Wires

INDITION OF WILES						
Unit		Wire	Number of Wires	Recommended Tightening Torque (Nm)	Terminal Screw	
	Crimp	oing Terminal	2	1.0 to 1.3		
	Solid	ø0.5 to 1.6 mm (AWG14 to 22)	2	1.0 to 1.3		
HW-U Contact	Wire	ø1.7 to 2.0 mm (AWG12)	1	1.2 to 1.3	M3.5	
Block	Stranded	0.3 to 2.0 mm ² (AWG14 to 22)	2	1.0 to 1.3		
	Wire	2.1 to 3.5 mm ² (AWG12)	m ² 1 1.2 to 1.3			
	Crimping Terminal			1.0 to 1.3		
Illuminated	Solid		2		M3.5	
Unit (*1)	Stranded 0.3 to 2.0 mm ² (AWG14 to 22)					
	Crimp	oing Terminal				
	Solid	ø0.5 to 1.6 mm	2	0.6 to 1.0 (M3.0)		
Pilot Light	Wire	(AWG14 to 22)				
	Stranded 0.3 to 2.0 mm ² (AWG14 to 22)			1.0 to 1.3 (M3.5)		
*1) Lomp torn		ninated nushbutton	o and illur	ninatad aalaatar	owitches	

^{*1)} Lamp terminal of illuminated pushbuttons and illuminated selector switches

Flush Silhouette ø16

ø22

ø30

Miniature Pilot Lights

77.4.4.17

ARN

ø30 Selector Switches / Pushbuttons Part Number Replacement List

Old Series				
Model	Operator	Old Part No.	New Part No. (*3)	Remarks
		ASN310	ASN210N	
		ASN311	ASN211N	
		ASN320 ASN322	ASN220N ASN222N	
		ASN37S	ASN22RN-118	
		ASN410	ASN2110N	
		ASN411	ASN2111N	
		ASN420	ASN2120N	
		ASN422	ASN2122N	
	90°	ASN47S	ASN212RN-118	
	2-position	ASN3010	ASN201N	(*2)
		ASN3011	ASN211N	(*1)
		ASN3020	ASN202N	(*2)
		ASN3022 ASN307S	ASN222N ASN22RN-118	(*1) (*1)
		ASN4010	ASN2210N	(')
		ASN4010	ASN2211N	
		ASN4020	ASN2220N	
4011		ASN4022	ASN2222N	
ASN Knob		ASN407S	ASN222RN-168	
Operator		ASN111	ASN320N	(*2)
oporator		ASN122	ASN340N	(*2)
		ASN15S	ASN322N	(1.1)
		ASN17S	ASN302N	(*1)
		ASN18S ASN211	ASN304N ASN3220N	(*1)
		ASN211 ASN222	ASN3240N	(*2) (*2)
		ASN25S	ASN3222N	(2)
		ASN27S	ASN3202N	(*1)
	45° 3-position	ASN28S	ASN3204N	(*1)
		ASN1011	ASN320N	(*1) (*2)
		ASN1022	ASN340N	(*1) (*2)
		ASN105S	ASN322N	(*1)
		ASN107S	ASN302N	
		ASN108S	ASN304N	(14) (15)
		ASN2011	ASN3120N	(*1) (*2)
		ASN2022 ASN205S	ASN3140N ASN3122N	(*1) (*2) (*1)
		ASN203S ASN207S	ASN3102N	(')
		ASN208S	ASN3104N	
		ASN3L10	ASN2L10N	
		ASN3L11	ASN2L11N	
		ASN3L20	ASN2L20N	
		ASN3L22	ASN2L22N	
		ASN3L7S	ASN2L2RN-118	
		ASN4L10	ASN21L10N	
		ASN4L11	ASN21L11N	
		ASN4L20	ASN21L20N	
	90°	ASN4L22 ASN4L7S	ASN21L22N ASN21L2RN-118	
	2-position	ASN30L10	ASN2L01N	(*2)
	_ pooluon	ASN30L10	ASN2L11N	(*1)
4041.1		ASN30L20	ASN2L02N	(*2)
ASN-L		ASN30L22	ASN2L22N	(*1)
Lever Operator		ASN30L7S	ASN2L2RN-118	(*1)
opolatoi		ASN40L10	ASN22L10N	
		ASN40L11	ASN22L11N	
		ASN40L20	ASN22L20N	
		ASN40L22	ASN22L22N	-
		ASN40L7S ASN1L11	ASN22L2RN-168 ASN3L20N	(*2)
		ASN1L11	ASN3L40N	(*2)
		ASN1L5S	ASN3L22N	\
	45°	ASN1L7S	ASN3L02N	(*1)
	3-position	ASN1L8S	ASN3L04N	(*1)
		ASN2L11	ASN32L20N	(*2)
		ASN2L22	ASN32L40N	(*2)
		ASN2L5S	ASN32L22N	

	Old Series	3	Now Port No. (*2)	Domorko
Model	Operator	Old Part No.	New Part No. (*3)	Remarks
		ASN2L7S	ASN32L02N	(*1)
		ASN2L8S	ASN32L04N	(*1)
		ASN10L11	ASN3L20N	(*1) (*2)
		ASN10L22	ASN3L40N	(*1) (*2)
ASN-L		ASN10L5S	ASN3L22N	(*1)
Lever	45°	ASN10L7S	ASN3L02N	
Operator	3-position	ASN10L8S	ASN3L04N	
		ASN20L11	ASN31L20N	(*1) (*2)
		ASN20L22	ASN31L40N	(*1) (*2)
		ASN20L5S	ASN31L22N	(*1)
		ASN20L7S	ASN31L02N	
		ASN20L8S	ASN31L04N	
		ASN3K10□	ASN2K10N□-N024401	
		ASN3K11□	ASN2K11N - N024401	
		ASN3K20□	ASN2K20N□-N024401	
		ASN3K22□	ASN2K22N - N024401	
		ASN3K7S□	ASN2K2RN□-118-N024401	
		ASN4K10	ASN21K10N-N024401	
		ASN4K11	ASN21K11N-N024401	
		ASN4K20	ASN21K20N-N024401	
		ASN4K22	ASN21K22N-N024401	
	90°	ASN4K7S	ASN21K2RN-118-N024401	
	2-position	ASN30K10□	ASN2K01N□-N024401	(*2)
		ASN30K11□	ASN2K11N□-N024401	(*1)
		ASN30K20□	ASN2K02N□-N024401	(*2)
		ASN30K22□	ASN2K22N□-N024401	(*1)
		ASN30K7S□	ASN2K2RN□-118-N024401	(*1)
		ASN40K10	ASN22K10N-N024401	
		ASN40K11	ASN22K11N-N024401	
		ASN40K20	ASN22K20N-N024401	
ASN-K		ASN40K22	ASN22K22N-N024401	
Key		ASN40K7S	ASN22K2RN-168-N024401	
Selector		ASN1K11□	ASN3K20N□-N024401	(*2)
00100101		ASN1K22□	ASN3K40N□-N024401	(*2)
		ASN1K5S□	ASN3K22N□-N024401	(*1) (*2)
		ASN1K7S□	ASN3K02N□-N024401	(*1) (*2)
		ASN1K8S□	ASN3K04N□-N024401	(*1) (*2)
		ASN2K11□	ASN32K20N□-N024401	(*2)
		ASN2K22□	ASN32K40N□-N024401	(*2)
		ASN2K5S□	ASN32K22N□-N024401	(*1) (*2)
		ASN2K7S□	ASN32K02N□-N024401	(*1) (*2)
	45°	ASN2K8S□	ASN32K04N□-N024401	(*1) (*2)
	3-position	ASN10K11□	ASN3K20N□-N024401	(*1) (*2)
		ASN10K22□	ASN3K40N□-N024401	(*1) (*2)
		ASN10K5S□	ASN3K22N□-N024401	(*1) (*2)
		ASN10K7S□	ASN3K02N□-N024401	(*2)
		ASN10K8S□	ASN3K04N□-N024401	(*2)
		ASN20K11□	ASN31K20N□-N024401	(*1) (*2)
		ASN20K22□	ASN31K40N□-N024401	(*1) (*2)
		ASN20K5S□	ASN31K22N□-N024401	(*1) (*2)
		ASN20K7S□	ASN31K02N□-N024401	(*2)
		ASN20K8S□	ASN31K04N□-N024401	(*2)
		ASTN3211	ASN211N	
	90°	ASTN3222	ASN222N	(*1)
	2-position	ASTN4211	ASN2111N	
		ASTN4222	ASN2122N	(*1)
		ASTN1122	ASN322N	
		ASTN1222	ASN322N-311	
4071		ASTN1340	ASN340N	
ASTN		ASTN1422	ASN322N-209	
Knob		ASTN1520	ASN320N	
Operator	45°	ASTN1540	ASN340N	(*1)
	3-position	ASTN1611	ASN311N-303	
		ASTN1622	ASN322N-310	
		ASTN2122	ASN3222N	
		ASTN2222	ASN3222N-311	
		ASTN20122	ASN3122N	
		ASTN20222	ASN3122N-311	

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

[•] \square : Key removable position code. Specify the same code as the old series.

*1) The location of contacts is different. In application for maintenance purpose, make sure of contact operation before wiring.

^{*2)} Contact operation is same as the old series, but contact type is different.

ø30 Selector Switches / Pushbuttons Part Number Replacement List

<u>P</u>					
Pilot Lights		Old Se	ries	Now Port No. (*2)	Domorko
Ŀj	Model Operator Old Part No.			New Part No. (*3)	Remarks
裏			ASTN20422	ASN3122N-209	
S	<i>"</i>		ASTN20520	ASN3120N	(*1)
	ASTN	45°	ASTN20540	ASN3140N	(*1)
	Knob	3-position	ASTN5120	ASN3320N	
APEM	Operator	o poortion	ASTN5122	ASN3322N	
Switches &			ASTN5222	ASN3322N-311	
Pilot Lights			ASTN5111	ASN3311N-202	
			ASTN32L11	ASN2L11N	66.43
Control Boxes		90°	ASTN32L22	ASN2L22N	(*1)
Emergency		2-position	ASTN42L11	ASN21L11N	/*1\
Stop Switches			ASTN42L22 ASTN11L22	ASN21L22N ASN3L22N	(*1)
Enabling Switches			ASTN11L22	ASN3L22N-311	
			ASTN12L22	ASN3L40N	
Safety Products			ASTN14L22	ASN3L22N-209	
Explosion Proof			ASTN15L20	ASN3L20N	(*1)
Explodion 1 Tool			ASTN15L40	ASN3L40N	(*1)
Terminal Blocks	ASTN■L		ASTN16L11	ASN3L11N-303	
	Lever		ASTN16L22	ASN3L22N-310	
Relays & Sockets	Operator	45°	ASTN21L22	ASN32L22N	
Circuit		3-position	ASTN22L22	ASN32L22N-311	
Protectors		o position	ASTN201L22	ASN31L22N	
Power Supplies			ASTN202L22	ASN31L22N-311	
			ASTN204L22	ASN31L22N-209	
LED Illumination			ASTN205L20	ASN31L20N	(*1)
			ASTN205L40	ASN31L40N	(*1)
Controllers			ASTN51L20	ASN33L20N	
Operator			ASTN51L22 ASTN52L22	ASN33L22N ASN33L22N-311	
Interfaces			ASTN52L22 ASTN51L11	ASN33L11N-202	
Sensors			ASTN32K11□	ASN2K11N□	
		90° 2-position	ASTN32K22□	ASN2K22N□	(*1)
AUTO-ID			ASTN42K11	ASN21K11N	.,,
			ASTN42K22	ASN21K22N	(*1)
			ASTN11K22□	ASN3K22N□	
			ASTN12K22□	ASN3K22N□-311	
Flush Silhouette			ASTN13K40□	ASN3K40N□	
			ASTN14K22□	ASN3K22N□-209	
ø16			ASTN15K20□	ASN3K20N□	(*1)
			ASTN15K40□	ASN3K40N□	(*1)
ø22	ASTN■K		ASTN16K11□	ASN3K11N□-303	
ø30	Key Selector		ASTN16K22	ASN3K22N□-310	
700	Selector	45°	ASTN21K22□ ASTN22K22□	ASN32K22N□ ASN32K22N□-311	
Miniature		3-position	ASTN201K22	ASN31K22N□-311	
			ASTN202K22□	ASN31K22N□-311	
Pilot Lights			ASTN204K22□	ASN31K22N□-209	
			ASTN205K20□	ASN31K20N□	(*1)
			ASTN205K40□	ASN31K40N□	(*1)
			ASTN51K20	ASN33K20N	
TWN			ASTN51K22	ASN33K22N	
			ASTN52K22	ASN33K22N-311	
TWND			ASTN51K11	ASN33K11N-202	
ADM			ASN120-T	ASN320N	
ARN	ASN-T	450	ASN140-T	ASN340N	
CS	Knob	45° 3-position	ASN220-T ASN240-T	ASN3220N ASN3240N	
	Operator	o position	ASN2020-T	ASN3120N	(*1)
			ASN2040-T	ASN3140N	(*1)
			ASN1L20-T	ASN3L20N	· · · /
			ASN1L40-T	ASN3L40N	
	ASN-T	45°	ASN2L20-T	ASN32L20N	
	Lever	3-position	ASN2L40-T	ASN32L40N	
	Operator		ASN20L20-T	ASN31L20N	(*1)
			ASN20L40-T	ASN31L40N	(*1)

 Specify a color 	code i	n place	of *	in ا	Part No.	B (black),	G (green)	, R (r	ed), Y	(yellow).

 $[\]bullet \ \square$: Key removable position code. Specify the same code as the old series.

	Old Seri	es		
Model	Operator	Old Part No.	New Part No. (*3)	Remarks
		ASN3K10□-T	ASN2K10N□	
		ASN3K11□-T	ASN2K11N□	
		ASN3K20□-T	ASN2K20N□	
		ASN3K22□-T	ASN2K22N□	
		ASN3K7S□-T	ASN2K2RN□-118	
ACN T		ASN4K10-T	ASN21K10N	
	90°	ASN4K11-T ASN4K20-T	ASN21K11N ASN21K20N	
	2-position	ASN4K20-T	ASN21K22N	
		ASN4K7S-T	ASN21K2RN-118	
		ASN40K10-T	ASN22K10N	
		ASN40K11-T	ASN22K11N	
		ASN40K20-T	ASN22K20N	
		ASN40K22-T	ASN22K22N	
ASN■K-T Key		ASN40K7S-T	ASN22K2RN-168	
Selector		ASN1K20□-T	ASN3K20N□	
36166101		ASN1K40□-T	ASN3K40N□	
		ASN1K5S□-T	ASN3K22N□	
		ASN1K7S□-T	ASN3K02N□	(*1)
		ASN1K8S□-T	ASN3K04N	(*1)
		ASN2K20□-T	ASN32K20N□	
	45°	ASN2K40□-T	ASN32K40N□ ASN32K22N□	
	3-position	ASN2K5S□-T ASN2K7S□-T	ASN32K02N□	(*1)
		ASN2K8S□-T	ASN32K04N□	(*1)
		ASN20K20□-T	ASN31K20N□	(*1)
		ASN20K40□-T	ASN31K40N□	(*1)
		ASN20K5S□-T	ASN31K22N□	(*1)
		ASN20K7S□-T	ASN31K02N□	1 .,
		ASN20K8S□-T	ASN31K04N□	
		ABN6111□	ASBN211N-A03□	
		ABN6411□	ASBN211N-K04□	(*2)
		ABN9111□	N/A	
		ABN7120□	ASBN220N-D01□	
Selector	90°	ABN6122□	ASBN222N-A08□	(*1)
Pushbuttons		ABN6222□	ASBN222N-C10□	(*1)
Ring		ABN6422□	ASBN222N-K15□	(*2)
Operator		ABN7122	ASBN222N-D10	(*1)
		ABN7222□ ABN7322□	ASBN222N-E10□ ASBN222N-F10□	(*1) (*1)
		ABN9122□	N/A	(1)
	2-position	ABN6L111□	ASBN211N-A03□	(*4)
		ABN6L411□	ASBN211N-K04□	(*2) (*4)
		ABN9L111□	N/A	(2)(4)
Colootor		ABN6L122□	ASBN222N-A08□	(*1) (*4)
Selector		ABN6L222□	ASBN222N-C10□	(*1) (*4)
Pushbuttons Lever		ABN6L422□	ASBN222N-K15□	(*2) (*4)
Operator		ABN7L122□	ASBN222N-D10□	(*1) (*4)
oporator		ABN7L222□	ASBN222N-E10□	(*1) (*4)
		ABN7L322□	ASBN222N-F10□	(*1) (*4)
		ABN9L122□	N/A	
		ABN8P10	ABD8P10N□	(*5)
		ABN8P01	ABD8P01N□	(*5)
	Pin Lock	ABN8P11	ABD8P11N□	(*5)
		ABN8P20	ABD8P20N□	(*5)
		ABN8P02	ABD8P02N	(*5)
		ABN8P22	ABD8P22N	(*5)
		ABN8P10-TK231-1	ABD8PN10N□	(*5)
Pushbuttons	ON Lock Type Pin Lock	ABN8P01-TK231-1 ABN8P11-TK231-1	ABD8PN01N□ ABD8PN11N□	(*5) (*5)
		ABN8P20-TK231-1		
		ABN8P02-TK231-1	ABD8PN20N□ ABD8PN02N□	(*5) (*5)
		ABN8P22-TK231-1	ABD8PN22N□	(*5)
		ATN2310□	AZN310N□	1 (3)
				1
	Mushroom			
	Mushroom Pull	ATN2311□ ATN2320□	AZN311N□ AZN320N□	

^{*3)} The knob operator is diecast zinc and in new shape. The knob operator can be installed at 45 degrees intervals.

^{*1)} The location of contacts is different. In application for maintenance purpose, make sure of contact operation before wiring.

^{*2)} Contact operation is same as the old series, but contact type is different.

^{*4)} The new knob operator of selector pushbuttons is ring operator. The old series is lever operator.

^{*5)} Button material New series: plastic / Old series: metal

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 conditions.
 - Also, durability varies depending on the usage environment and usage conditions.
- (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.
 - i. 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
 - iii. 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.

- i. The product was handled or used deviating from the conditions / environment listed in the Catalogs
- ii. The failure was caused by reasons other than an IDEC product
- ii. Modification or repair was performed by a party other than IDEC
- iv. The failure was caused by a software program of a party other than $\ensuremath{\mathsf{IDEC}}$
- v. 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 Catalogs
- 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

Head Office 6-64, Nishi-Miyahara-2-Chome, Yodogawa-ku, Osaka 532-0004, Japan

re IDEC Izumi Asia Pte. Ltd. China IDEC (Shanghai) Corporation

Japan

www.idec.com

IDEC Corporation

USA EMEA

IDEC Corporation APEM SAS Singapore IDE0
Thailand IDE0
India IDE0

IDEC Asia (Thailand) Co., Ltd.
IDEC Controls India Private Ltd.

IDEC Izumi (H.K.) Co., Ltd. **Taiwan** IDEC Taiwan Corporation