



A20 Series

Ø22 Switches/Buttons



- Compact & light weight
- IP20 finger safe screw terminal (IEC60529)
- Matted surface on buttons, lenses, and bezels to reduce reflection of ambient light
- Detachable contact block for easy installation & removal
- Wide light distribution to increase the visibility range
- Comply with EN standard

General Specifications

Insulation Resistance		100MΩ minimum at 500V DC megger
Dielectric Strength		Contact block: 2,500VAC for 1 Min. Illuminated unit: 2,000VAC for 1 Min.
Vibration Resistance	E-stop switches	Operation Extremes: 10-500Hz, Amplitude: 0.35mm 50m/s ² Damage Extremes: 10-500Hz, Amplitude: 0.35mm 50m/s ²
	Indicator, Pushbutton, Selector switches	Operation Extremes: 5-55Hz, Amplitude: 0.5mm Damage Extremes: 30Hz, Amplitude: 1.5mm
Shock Resistance	E-stop switches	Operation Extremes: 150m/s ² Damage Extremes: 1,000m/s ²
	Indicator, Pushbutton, Selector switches	Operation Extremes: 100m/s ² Damage Extremes: 1,000m/s ²
Mechanical Durability	E-Stop switches	250,000
	Pushbuttons	Momentary: 5,000,000 (Single contact), 1,000,000 (double contact) Maintained: 250,000 (Single contact), 100,000 (double contacts)
	Selector switches	250,000 (Single contact), 100,000 (double contacts)
Electrical Life	E-stop switches	100,000
	Pushbuttons	250,000 (Single contact), 100,000 (double contacts)
	Selector switches	250,000 (Single contact), 100,000 (double contacts)
Ambient Temperature		Operation: -25°C~ +55°C, Storage: -45°C~+85°C
Ambient Humidity		45~85%RH
Degree of Protection		IP65
Terminal Soldering Temperature		20W 5sec / 260°C 3sec

Contacts Rating	Rated Insulation Voltage		250V			
	Rated Terminal Current		10A			
	Operation Voltage (AC/DC)		24V	120V	240V	380V
	AC 50/60Hz	Resistive Load	10A	10A	6A	2A
		Inductive Load	10A	6A	3A	1.9A
	DC	Resistive Load	8A	2.2A	1.1A	-
Inductive Load		4A	1.1A	0.55A	-	
Minimum Applicable Load		3V AC/DC x 3mA				



LED Rating	Type No	Rated voltage	Rated Current	Color code	LED life
LED Rating	LAED-6	6V AC/DC	10mA (R, Y) 7mA (G, W, S)	G: Green W: White R: Red S: Blue Y: Yellow	50,000 Hrs
	LAED-1	12V AC/DC	14mA (R, Y) 13mA (G, W, S)		50,000 Hrs
	LAED-2	24V AC/DC	14mA (R, Y) 13mA (G, W, S)		50,000 Hrs
	LAED-H	110V AC/DC	5.5mA		50,000 Hrs
	LAED-M3	230/240V AC/DC	2.7mA		50,000 Hrs




Switch Construction Instructions

Assembly	A	B	C	B LED Lamps Part Number	C Contact Block Assembly Part Number
	Pushbutton Operators	LED Lamps	Contact Block Assembly		
Illuminated				LAED-6G (6VAC/DC) LAED-6R (6VAC/DC) LAED-6S (6VAC/DC) LAED-6W (6VAC/DC) LAED-6Y (6VAC/DC) LAED-1G (12VAC/DC) LAED-1R (12VAC/DC) LAED-1S (12VAC/DC) LAED-1W (12VAC/DC) LAED-1Y (12VAC/DC) LAED-2G (24VAC/DC) LAED-2R (24VAC/DC) LAED-2S (24VAC/DC) LAED-2W (24VAC/DC) LAED-2Y (24VAC/DC) LAED-HG (110VAC/DC) LAED-HR (110VAC/DC) LAED-HS (110VAC/DC) LAED-HW (110VAC/DC) LAED-HY (110VAC/DC) LAED-M3G (230/240VAC/DC) LAED-M3R (230/240VAC/DC) LAED-M3S (230/240VAC/DC) LAED-M3W (230/240VAC/DC) LAED-M3Y (230/240VAC/DC)	A20L-E10P (1NO) A20L-E01P (1NC) A20L-E20P (2NO) A20L-E02P (2NC) A20L-E11P (1NO-1NC)
Non-illuminated				LAED-M3G (230/240VAC/DC) LAED-M3R (230/240VAC/DC) LAED-M3S (230/240VAC/DC) LAED-M3W (230/240VAC/DC) LAED-M3Y (230/240VAC/DC)	A20B-E10P (1NO) A20B-E01P (1NC) A20B-E20P (2NO) A20B-E02P (2NC) A20B-E11P (1NO-1NC) A20B-E30P (3NO) A20B-E03P (3NC) A20B-E21P (2NO-1NC) A20B-E12P (1NO-2NC)

(Lens color) = G: Green, R: Red, S: Blue,
W: White, Y: Yellow











A20 Series Operators












	Style	Operation	Part Numbers
Non-illuminated Pushbutton Plastic bezel		Momentary	A20B-M1E①
		Maintained	A20B-A1E①
		Momentary	A20B-M2E①
		Maintained	A20B-A2E①
		Momentary	A20B-M4E①
		Maintained	A20B-A4E①
Non-illuminated Pushbutton metal bezel		Momentary	A204B-M1E①
		Maintained	A204B-A1E①
		Momentary	A204B-M2E①
		Maintained	A204B-A2E①
		Momentary	A204B-M4E①
		Maintained	A204B-A4E①
Non-illuminated Pushbutton flush mountable metal bezel		Momentary	A204B-M1E①-U
		Maintained	A204B-A1E①-U
		Momentary	A204B-M2E①-U
		Maintained	A204B-A2E①-U
		Momentary	A204B-M4E①-U
		Maintained	A204B-A4E①-U

	Style	Operation	Part Numbers
Illuminated Pushbutton plastic bezel		Momentary	A20L-MF2E②
		Maintained	A20L-AF2E②
		Momentary	A20L-M2E②
		Maintained	A20L-A2E②
		Momentary	A20L-M4E②
		Maintained	A20L-A4E②
Illuminated Pushbutton metal bezel		Momentary	A204L-M1E②
		Maintained	A204L-A1E②
		Momentary	A204L-M2E②
		Maintained	A204L-A2E②
		Momentary	A204L-M1E②-BU
		Maintained	A204L-A1E②-BU
Illuminated Pushbutton flush mountable metal bezel		Momentary	A204L-M2E②-U
		Maintained	A204L-A2E②-U
		Momentary	A204L-M4E②
		Maintained	A204L-A4E②
		Momentary	A204L-M4E②-U
		Maintained	A204L-A4E②-U

* ① (Head color) = B: Black, G: Green, R: Red, S: Blue, W: White, Y: Yellow


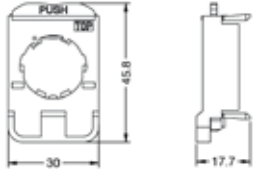

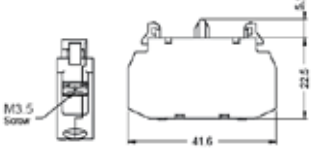

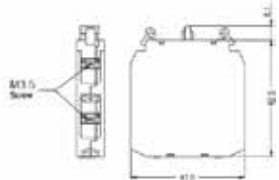

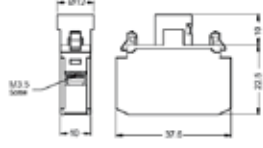

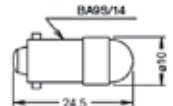
* ② (Lens color) = G: Green, R: Red, S: Blue, W: White, Y: Yellow

	Style	Operation	Part Numbers
Non-illuminated selector switches		Maintained	A20S-2E①
		Spring return from right	A20S-21E①
		Maintained	A20S-3E①
		Spring return from right	A20S-31E①
		Spring return from two-way	A20S-33E①
	Illuminated selector switches		Maintained
Spring return from right			A20F-21E②
		Maintained	A20F-3E②
		Spring return from right	A20F-31E②
		Spring return from two-way	A20F-33E②
Non-illuminated selector switches with metal bezel			Maintained
	Spring return from right		A204S-21E①
		Maintained	A204S-3E①
		Spring return from right	A204S-31E①
		Spring return from two-way	A204S-33E①
	Illuminated selector switches with metal bezel		Maintained
Spring return from right			A204F-21E②
		Maintained	A204F-3E②
		Spring return from right	A204F-31E②
		Spring return from two-way	A204F-33E②
Non-illuminated selector switches with flush mountable metal bezel			Maintained
	Spring return from right		A204S-21E①-U
		Maintained	A204S-3E②-U
		Spring return from right	A204S-31E②-U
		Spring return from two-way	A204S-33E②-U

	Style	Operation	Part Numbers
Illuminated selector switches with flush mountable metal bezel		Maintained	A204F-2E②-U
		Spring return from right	A204F-21E②-U
		Maintained	A204F-3E②-U
		Spring return from right	A204F-31E②-U
		Spring return from two-way	A204F-33E②-U
	Key selector switches		Maintained
Spring return from right			A20K-21BE-2
		Maintained	A20K-3AE-2
		Spring return from right	A20K-31BE-2
		Spring return from two-way	A20K-33DE-2
Key selector switches with metal bezels			Maintained
	Spring return from right		A204K-21BE-2
		Maintained	A204K-3AE-2
		Spring return from right	A204K-31BE-2
		Spring return from two-way	A204K-33DE-2
	Key selector switches with flush mountable metal bezels		Maintained
Spring return from right			A204K-21BE-2U
		Maintained	A204K-3AE-2U
		Spring return from right	A204K-31BE-2U
		Spring return from two-way	A204K-33DE-2U
Non-illuminated E-Stop switches			Push lock Twist reset
Illuminated E-Stop switches		Push lock Twist reset	A20L-V4ER
Key-Reset E-Stop switches		Push lock Key reset	A20E-K4


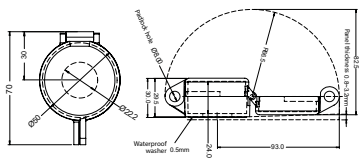

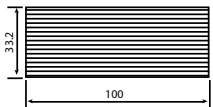

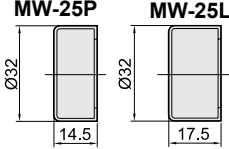

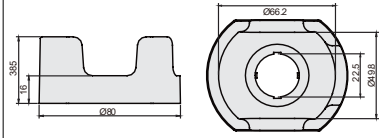
* ① (Head color) = **N**one: Black, **G**: Green, **R**: Red, **S**: Blue, **W**: White, **Y**: Yellow
 * ② (Lens color) = **G**: Green, **R**: Red, **S**: Blue, **W**: White, **Y**: Yellow

A20 Components

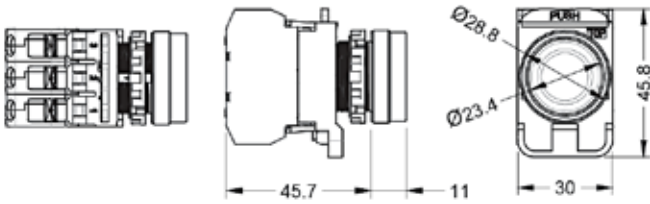
Name	Part No.	Description	Dimensions
	A20B-E00P	Contact block mounting adapter	
	A20-E01P	1NC contact block	
	A20-E10P	1NO contact block	
	A20-E20P	2NO contact block	
	A20-E11P	1NO-1NC contact block	
	A20-E02P	2NC contact block	
	A20-E00P	Lamp socket - full voltage adapter	
	LAED-①②*	LED lamp	

* ① (Operation Voltage) = 6: 6VAC/DC, 1: 12VAC/DC, 2: 24VAC/DC, H: 110VAC/DC, M3: 230/240VAC/DC
 * ② (Lens color) = G: Green, R: Red, S: Blue, W: White, Y: Yellow

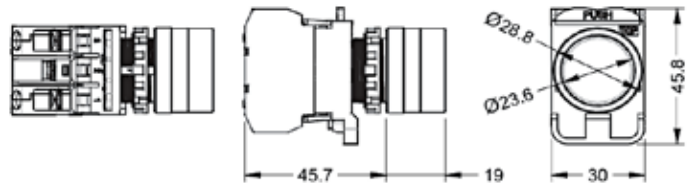
A20 Series Accessories

Name	Part No.	Description	Dimensions
	A29Z-KL1	Padlock cover	
	MC2-P100	Locking ring wrench	
	MW-25P	Water proof cap	
	MW-25L (for Illuminated Button)		
	KEG12Y	Shroud for E-Stop switch	

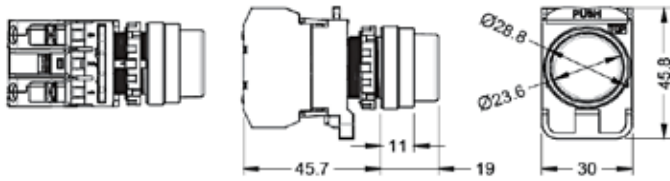
Flush type pushbutton



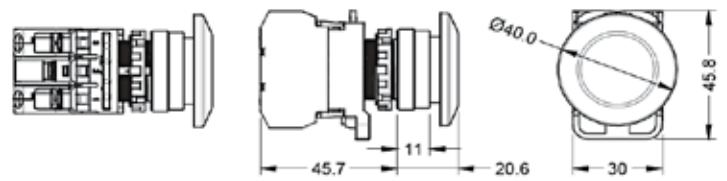
Illuminated flush type pushbutton



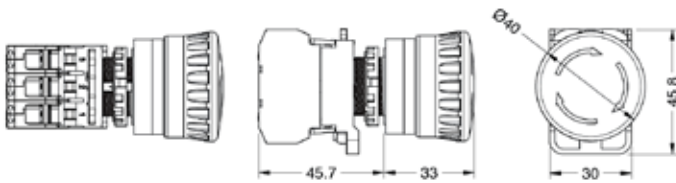
Extended type pushbutton



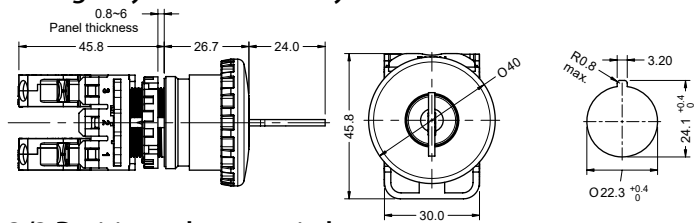
Mushroom type pushbutton



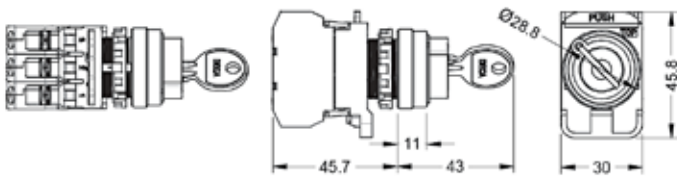
E-Stop switches



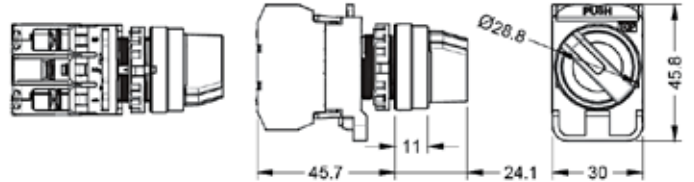
Emergency Switch with Key Reset



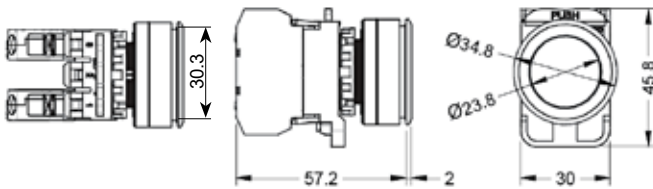
2/3 Position key selector switch



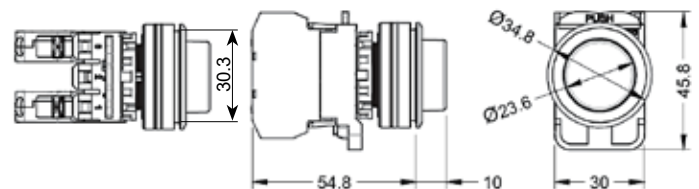
2/3 Position selector switch



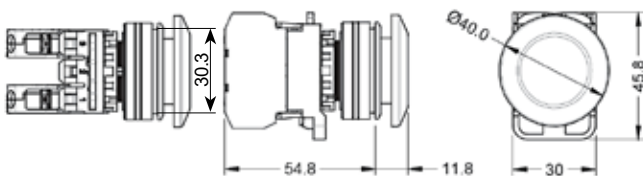
Flush type w/flush mountable metal bezels



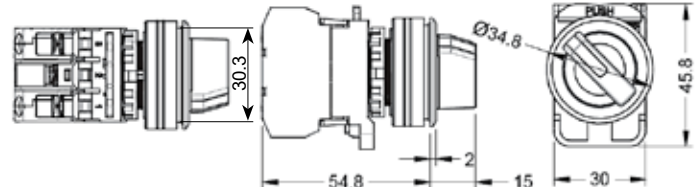
Extended type w/flush mountable metal bezels



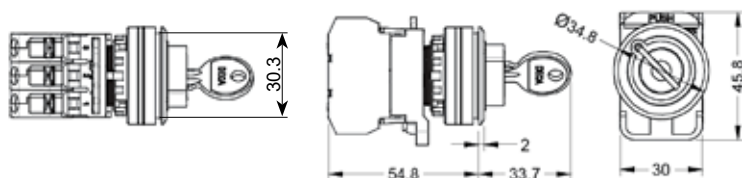
Mushroom type w/flush mountable metal bezels



2/3 Position selector w/flush mountable metal bezels

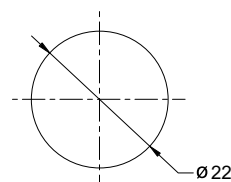


2/3 Position key selector switch w/flush mountable metal bezels



Panel Hole Guide

Standard Type



Metal bezel Flush Mountable Type

