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Push Buttons and Operator Interface
Specifier's Guide
Type XB2B 22 mm Diecast Chrome Plated

File 9001



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Environment

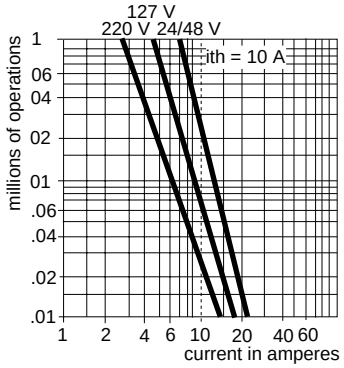
Conformity to standards	XB2B, XD2P: UL 508, IEC 60947-5-1, EN60947-5-1, IEC 60337-1, IEC 60337-2, NF C 63-140, ASE 0119, ASE1003, BS 4794, VDE 0660-200, CSA C 22-2 No. 14, CSA C 22-2 No. 66
Approvals	**UL:** push buttons and selector switches NEMA / UL Type A600-Q600; pilot lights and illuminated push buttons direct supply (120 V max.); pilot lights and illuminated push buttons with transformer (600 V) **CSA:** push buttons and selector switches NEMA / UL Type A600-Q600. pilot lights and illuminated push buttons direct supply (120 V max.); pilot lights and illuminated push buttons with transformer (600 V). ASE, DEMKO, NEMKO, SEMKO, BUREAU VERITAS, SAHKOTARKASTUSKESKUS, GL, DNV, LROS **XD2P,** standard version: CSA A600-Q600, LROS.
Protective treatment	Standard version: TC “All climates”
Ambient temperature	Operating: -25 °C to +70 °C (-13 °F to +158 °F) Storage: -40 °C to +70 °C (-40 °F to +158 °F)
Resistance to vibration	60 mm diameter mushroom head: 8 g. Other push buttons: 15 g. Small joystick controllers: 5 g (from 40 to 50 Hz) Conforming to IEC 60068-2-6.
Resistance to shock	Push buttons: 70 g. Mushroom head push-buttons: 15 g. Selector switches: 200 g. Conforming to IEC 60068-2-27.
Protection against electric shock	**XB2B, XD2P:** Class 1, conforming to IEC 60536 and NF C 20-030.
Degree of protection conforming to IEC 60529 and NF C 20-010	NEMA / UL ratings XB2B: 1, 2, 3, 4, 4X, 12K, 13, XB2B, XD2P: IP 65: flush and protecting, illuminated and non-illuminated push buttons (mounted). IP 66: booted and mushroom head push buttons, selector switches, pilot lights and small joystick controllers (mounted). IP 40: double- headed push buttons (IP 65 on request).
Mechanical life	Push buttons—3 million operations (Latching mushroom head push buttons: 300,000 operations. Illuminated selector switches: 100,000 operations). The product life expressed is based on average usage and normal operating conditions. Actual operating life will vary with conditions. The above statements are not intended to nor shall they create any express or implied warranties as to product operation or life. For information on the limited warranty offered on this product, please refer to Square D terms and conditions of sale found in the Square D Digest.

Contact block characteristics

Nominal thermal current	10 A conforming to IEC 60947-5-1, NF C 63-140, UL 508, CSA 22-2 No. 14, VDE 0660 part 2, NEMA / UL Type A600-Q600.
Nominal insulation voltage	500 V conforming to NF C 20-040, VDE 0110, IEC 60158-1, 600 V conforming to UL 508, 600 V conforming to CSA 22-2 No. 14.
Insulation category	Group C conforming to NF C 20-040 and VDE 0110.
Contact operation	Slow- make N.O. or slow-break N.C. with direct opening operation conforming to EN60947-5-1 section 3.
Contact resistance	ð25 m¾ conforming to: NF C 93-050 method A or IEC 60225-7 category 3.
Operating force	Flush or projecting push buttons - with 1 NO contact: 2.25 lb - with 1 NC contact: 1.8 lb Additional contacts - N.O.: add 1 lb - N.C.: add 0.7 lb.
Terminal referencing	Conforming to CENELEC EN 50013.
Short circuit protection	10 A cartridge fuses, Gl or N conforming to IEC 60269-1and VDE 0660-200.

Limited Availability
For replacement use only.
For new applications, use
XB4 (page 37 - 72)

Rated power
conforming to IEC 60947-5-1 Appendix C
duty categories AC11-DC11
Operating frequency: 3,600 ops/hour
Load factor: 0.5
AC supply (50-60 Hz)



DC supply

Power broken in watts
for 1 million operations

Voltage	24 V	48 V	120 V
Inductive load	65 W	48 W	40 W

AC Ratings, Inductive - NEMA / UL A600

35% Power factor

Volts	Make Amperes	VA	Break Amperes	VA	Continuous carrying Amperes	Resistive 75% Power factor Make, Break and continuous Amperes
120	60	7200	6	720	10	10
240	30	7200	3	720	10	10
480	15	7200	1.5	720	10	10
600	12	7200	1.2	720	10	10

DC Ratings, NEMA / UL Type Q600

Inductive and resistive

Volts	Make and break	Continuous
125	0.55	2.5
250	0.27	2.5
600	0.10	2.5

File E164353
CCN NKCR

File LR 44087
Class 3211 03

Marking

Cabling	**XB2B, XD2P:** Screw and captive clamp terminals. Recommended torque 15.62 lb-in. Capacity: minimum 1 x 0.5 mm^2 (20 AWG) solid or stranded, maximum with or without cable end: 2 x 1.5 mm^2 (16 AWG) or 1 x 2.5 mm^2 (14 AWG) or by quick connector conforming to NF C 20-120 (on request).

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Flush head
ZB2BA•



Metallic flush head
ZB2BA•9



Transparent flush head
ZB2BA•8



Guarded head
ZB2BA•6

Operator

Type	Color	Catalog Number
Flush head	White	ZB2BA1
	Black	ZB2BA2
	Green	ZB2BA3
	Red	ZB2BA4
	Yellow	ZB2BA5
	Blue	ZB2BA6
	Grey	ZB2BA8
Flush head premarked	White “I”	ZB2BA131
	Black “START”	ZB2BA230
	Black “O”	ZB2BA232
	Green “I”	ZB2BA331
	Red “O”	ZB2BA432
	Green “START”	ZB2BA333
	Green “ON”	ZB2BA341
	Red “STOP”	ZB2BA434
	Red “OFF”	ZB2BA435
Metallic flush head (metal pusher)	Black	ZB2BA29
	Green	ZB2BA39
	Red	ZB2BA49
	Yellow	ZB2BA59
Transparent flush head Use with mylar circular legend (ZB2BY1●●●) See page 333	Green	ZB2BA38
	Red	ZB2BA48
	Amber	ZB2BA58
	Blue	ZB2BA68
	Clear	ZB2BA78
Guarded head	White	ZB2BA16
	Black	ZB2BA26
	Green	ZB2BA36
	Red	ZB2BA46
	Yellow	ZB2BA56
	Blue	ZB2BA66

Limited Availability
For replacement use only.
For new applications, use
XB4 (page 37 - 72)

Operating heads with black metal bezel

To order, add suffix 7 to the above references (except **ZB2BP2 TO ZB2BP6**).
Example: **ZB2BA2** becomes **ZB2BA27**.

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Telemecanique

Operator



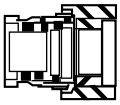
Extended head
ZB2BL•



Extended head marked stop
ZB2BL434



Silicon booted head
ZB2BP•



Flush with reinforced protection
ZB2BA•5

Type	Color	Catalog Number
Extended head	White	ZB2BL1
	Black	ZB2BL2
	Green	ZB2BL3
	Red	ZB2BL4
	Yellow	ZB2BL5
	Blue	ZB2BL6
Extended head premarked	Red “O”	ZB2BL432
	Red “STOP”	ZB2BL434
	Red “OFF”	ZB2BL435
Silicon booted head	Black	ZB2BP2
	Green	ZB2BP3
	Red	ZB2BP4
	Yellow	ZB2BP5
	Blue	ZB2BP6
Neoprene booted head	Black	ZB2BP02
	Green	ZB2BP03
	Red	ZB2BP04
	Yellow	ZB2BP05
	Blue	ZB2BP06
Flush with reinforced dust, damp, and cutting oil protection	White	ZB2BA15
	Black	ZB2BA25
	Green	ZB2BA35
	Red	ZB2BA45
	Yellow	ZB2BA55
	Blue	ZB2BA65
Transparent silicon booted push button Use with mylar circular legend (ZB2BY1●●●) See page 333.	Green	ZB2BP38
	Red	ZB2BP48
	Yellow	ZB2BP58
	Blue	ZB2BP68
	Clear	ZB2BP78

Limited Availability
For replacement use only
For new applications, use
XB4 (page 37 - 42)

Operating heads with black metal bezel

To order, add suffix **7** to the above references (except **ZB2BP2 TO ZB2BP6** and **ZB2BP02 TO ZB2BP06**).
Example: **ZB2BL2** becomes **ZB2BL27.**

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Mushroom head 40mm
ZB2BC•



Mushroom head 60mm
ZB2BR•



Mushroom head
key release
ZB2BS•4



Mushroom head
turn to release
ZB2BS54



Mushroom head
with trigger action
turn to release
ZB2BS844



ZB2BY8330

Operator

Type	Size	Color	Catalog Number
Mushroom head Momentary	30mm	Black	ZB2BC24
		Green	ZB2BC34
		Red	ZB2BC44
		Yellow	ZB2BC54
		Blue	ZB2BC64
	40mm	Black	ZB2BC2
		Green	ZB2BC3
		Red	ZB2BC4
		Yellow	ZB2BC5
		Blue	ZB2BC6
	60mm	Black	ZB2BR2
		Green	ZB2BR3
		Red	ZB2BR4
		Yellow	ZB2BR5
		Blue	ZB2BR6
Mushroom head Key release★	40mm	Red	ZB2BS14
	60mm	Red	ZB2BS24
Mushroom head push button with trigger action♦ Key release★	40mm	Red	ZB2BS944
Mushroom head turn to release	40mm	Red	ZB2BS54
Premarked “EMO”	40mm	Red	ZB2BS5430
Mushroom head push button with trigger action♦ Turn to release	40mm	Red	ZB2BS844
Mushroom head turn to release	60mm	Red	ZB2BS64
Mushroom head push-pull	40mm	Black	ZB2BT2
		Red	ZB2BT4
Premarked “EMERGENCY STOP”	40mm	Red	ZB2BT43
Mushroom head push-pull	60mm	Black	ZB2BX2
		Red	ZB2BX4

★ Key release operators come with Ronis #455 keys (quantity 2) as standard. For replacement keys see page 332. For other key numbers contact local field office.

♦ Trigger action mushroom heads are “tamper proof” whereby a change of contact state is not possible by “teasing” or floating the operator.

Limited Availability
For replacement use only.
For new applications, use
XB4 (page 37-12)

Guards / Locks

Type	Size	Color	Catalog Number
Metal	40 mm with finger cutout and 7 mm holes for padlocking	Red	ZB2BZ1804
Plastic	60 mm (for 40 mm turn to release)	Yellow	ZB2BZ1905

Yellow Contrast Plates

PVC Yellow Legend Plates 60 mm diameter

Text	Language	Catalog Number
Blank	N/A	ZB2BY9101
Emergency Stop	English	ZB2BY9330
Arret d’Urgence	French	ZB2BY9130
Not Aus	German	ZB2BY9230
Parada de Emergencia	Spanish	ZB2BY9430
Arresto Emergenza	Italian	ZB2BY9630

PVC Yellow Legend Plates 90 mm diameter

Text	Language	Catalog Number
Blank	N/A	ZB2BY8101
Emergency Stop	English	ZB2BY8330
Arret d’Urgence	French	ZB2BY8130
Not Aus	German	ZB2BY8230
Parada de Emergencia	Spanish	ZB2BY8430
Arresto Emergenza	Italian	ZB2BY8630

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Standard lever ZB2BD•••



Extended lever★ ZB2BJ•••

Lever Operators

Type	Number of positions, actions	Lever Color	Catalog Number
Standard or Extended lever ★	2-maintained	Black	ZB2BD2
		White	ZB2BD201
		Red	ZB2BD204
	2-spring return from right to left	Black	ZB2BD4
		White	ZB2BD401
		Red	ZB2BD404
	3-maintained	Black	ZB2BD3
		White	ZB2BD301
		Red	ZB2BD304
	3-spring return to center from left and right	Black	ZB2BD5
		White	ZB2BD501
		Red	ZB2BD504
	3-spring return from right to center	Black	ZB2BD8
		White	ZB2BD801
		Red	ZB2BD804
	3-spring return from left to center	Black	ZB2BD7
		White	ZB2BD701
		Red	ZB2BD704



Key switch ZB2BG••

Key Operators

Type	Number of positions, actions, key removal	Catalog Number
Key switch♦	2-maintained key removal from left	ZB2BG2
	2-maintained key removal from left or right	ZB2BG4
	2-spring return from right to left, key removal from left	ZB2BG6
	3-maintained key removal from center	ZB2BG3
	3-maintained key removal from left and right	ZB2BG5
	3-maintained key removal from left	ZB2BG9
	3-maintained key removal from all positions	ZB2BG0
	3-spring return left or right to center, key removal from center	ZB2BG7
	3-spring return left to center key removal right	ZB2BG1
	3-spring return right to center key removal center	ZB2BG8
	3-spring return right to center key removal left	ZB2BG08

Limited Availability
For replacement use only
For new applications use XB5 (page 37-72)

Selector Switch Sequences (using contact block assemblies, page 322)

2 Position selector switch		
↖	↗	Contact block guide
O	X	1 N.O. (left or right)
X	O	1 N.C. (left or right)
O X	X O	1 N.O. and 1 N.C.

Note: View from front of panel

3 Position selector switch			
↖	↑	↗	Contact block guide
X	O	O	1 N.O. (left)
O	X	O	2 NC wired in series (side-by-side)
O	O	X	1 N.O. (right)
X	X	O	1 N.C. (right)
O	X	X	1 N.C. (left)
X	O	X	2 NO wired in parallel (side-by-side)

Operating heads with black metal bezel

To order, add suffix **7** to the above references.
Example: **ZB2BD3** becomes **ZB2BD37**.

★ When ordering extended lever substitute J for D. Example: **ZB2BD2** becomes **ZB2BJ2**.

♦ Key selector switches come with Ronis #455 keys (quantity 2) as standard. For replacement keys see page 332. For switches keyed with different keys, add the suffixes shown in the table below (no change in price). For other key numbers contact local field office.

Key Number	Suffix
421	12
458A	10
520	14
3131A	20

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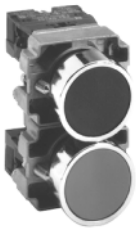
Two flush
ZB2BA9•••



One flush, one extended
ZB2BL94••



Start/stop
ZB2BL98••



Interlocked
XB2BF5••

Momentary operators

Type	Marked ♦	Color	Catalog Number
Two flush		Black/Red	ZB2BA9124
		Green/Red	ZB2BA9134
	I,O	Black/Red	ZB2BA9224
	I,O	Green/Red	ZB2BA9234
	STOP, START	Black/Red	ZB2BA9724
	STOP, START	Green/Red	ZB2BA9734
One flush, one extended		Black/Red	ZB2BL9324
		Green/Red	ZB2BL9334
	I,O	Black/Red	ZB2BL9424
	I,O	Green/Red	ZB2BL9434
	STOP, START	Black/Red	ZB2BL9824
	STOP, START	Green/Red	ZB2BL9834

♦ Additional markings available on special order. Contact local field office for details.

Operating heads with black metal bezel

To order, add suffix **7** to the above references.
Example: **ZB2BA9124** becomes **ZB2BA91247**.

2 Button maintained operators

Type	Number of contact(s)	Button 1	Button 2	Catalog Number
Flush interlocked push buttons (30 mm centers, maintained, mechanically interlocked) Units include contact block(s) as shown.	1	NO-Black	Black	XB2BF521
	1	NO-Black	Red	XB2BF551
	1	NO-Green	Red	XB2BF581
	2	NO-Black	NO-Black	XB2BF523
	2	NO-Black	NO-Red	XB2BF553
	2	NO-Green	NO-Red	XB2BF583
	2	NO-Black	NO-Black	XB2BF525
	2	NO-Black	NC-Red	XB2BF555
	2	NO-Green	NC-Red	XB2BF585

Type	Color		Catalog Number
Replacement push button operators only (with no spring return in head) for XB2BF	Black		ZB2BAW80424194002
	Green		ZB2BAW80424194003
	Red		ZB2BAW80424194004

Operating heads with black metal bezel

To order, add suffix **7** to the above references.
Example: **ZB2BF521** becomes **ZB2BF5217**.

Limited Availability
For replacement use only.
For new applications, use
XB4 (page 37 - 72)

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Wobble sticks



Potentiometer operator



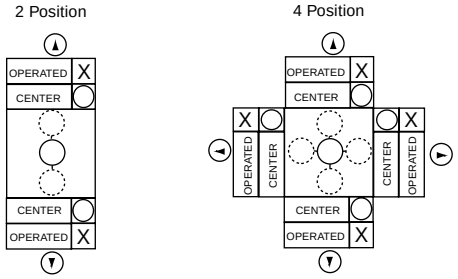
Joysticks

Operators

Type	Color	Catalog Number
Wobble sticks	Black	ZB2BB2
	Red	ZB2BB4
Potentiometer operator ♦	Black	ZB2BD922
Joysticks✱ Contacts supplied	2-maintained	XD2PA12
	2-spring return	XD2PA22
	4-maintained	XD2PA14
	4-spring return	XD2PA24

✱ Units come with 1 N.O. contact in each direction. Screw terminals. Contact blocks cannot be added or removed from the above arrangements. For other requirements, contact local sales office.

♦ Customer to supply potentiometer, unit accepts 1/4" diameter, 1.625" (43-47 mm) length shaft potentiometer.



These 2 direction and 4 direction position charts are viewed from behind the panel, thereby reversing east and west positions. When lever is moved away from center, only one contact changes from N.O. to N.C. The other contact blocks in the switch are unaffected.

Limited Availability
For replacement use only.
For new applications, use
XB4 (page 37 - 72)

Two step push buttons (contacts supplied)

Type	Contact 1st step	Contact 2nd step	Catalog Number
Flush head	N.O.	N.O.	XB2BA●41
	N.O.	N.C.	XB2BA●42
	N.O.+N.C.	N.O.	XB2BA●43
	N.O.+N.C.	N.O.+N.C.	XB2BA●44

● Replace ● with desired color head. (1-white, 2-black, 3-green, 4-red, 5-yellow, 6-blue).

Two position toggle switch (maintained)

Type		Color	Catalog Number
Two position toggle switch NEMA Type 1 only		Black	ZB2BD28

Operating heads with black metal bezel

To order, add suffix **7** to the above references.
Example: **ZB2BD922** becomes **ZB2BD9227**.

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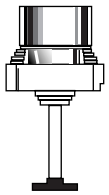
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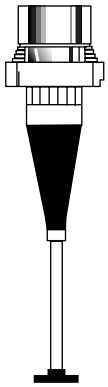
Reset operators



XB2BA8●●



XB2BA9●●
30 to 82 mm



XB2BA9●●
80 to 257 mm

Type	Description	Adjustable length of rod	Color	Catalog Number
Flush head	0.39" (10 mm) Travel Panel thickness: 0.04" - 0.12" (1-3 mm) Tightened by nut	0.24" - 0.63" (6 - 16 mm)	Black	XB2BA821
			Red	XB2BA841
			Blue	XB2BA861
		0.63" - 1.02" (16 - 26 mm)	Black	XB2BA822
			Red	XB2BA842
			Blue	XB2BA862
	0.55" (14 mm) Travel Panel thickness: 0.04" - 0.23" (1-6 mm) Tightened by 2 screw mounting base (supplied)	1.18" - 2.25" (30 - 57 mm)	Black	XB2BA921
			Red	XB2BA941
			Blue	XB2BA961
		2.16" - 3.23" (55 - 82 mm)	Black	XB2BA922
			Red	XB2BA942
			Blue	XB2BA962
	0.55" (14 mm) Travel Panel thickness: 0.04" - 0.23" (1-6 mm) Tightened by 2 screw mounting base (supplied)	3.15" - 4.2" (80 - 107 mm)	Black	XB2BA923
			Red	XB2BA943
			Blue	XB2BA963
		4.13" - 5.2" (105 - 132 mm)	Black	XB2BA924
			Red	XB2BA944
			Blue	XB2BA964
		5.12"- 6.18" (130 - 157 mm)	Black	XB2BA925
			Red	XB2BA945
			Blue	XB2BA965
		6.1" - 7.16" (155 - 182 mm)	Black	XB2BA926
			Red	XB2BA946
			Blue	XB2BA966
		7.08" - 8.15" (180 - 207 mm)	Black	XB2BA927
			Red	XB2BA947
			Blue	XB2BA967
		8.07" - 9.13" (205 - 232 mm)	Black	XB2BA928
			Red	XB2BA948
			Blue	XB2BA968
		9.05" - 10.1" (230 - 257 mm)	Black	XB2BA929
			Red	XB2BA949
			Blue	XB2BA969

Operating heads with black metal bezel

To order, add suffix **7** to the above references.
Example: **ZB2BA944** becomes **ZB2BA9447**.

Limited Availability
For replacement use only
For new applications, use
XB4 (page 37 - 72)

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ZB2BZ101

Mounting base with contact block(s) "Screw clamp connection"

Type	Contacts N.O.	Contacts N.C.	N.O.	N.C.	Catalog Number
1 Contact Block	1	-			ZB2BZ101
	-	1			ZB2BZ102
2 Contact Blocks	2	-			ZB2BZ103
	-	2			ZB2BZ104
	1	1			ZB2BZ105



ZB2BE10●

Additional contact blocks

Type	Contacts N.O.	Contacts N.C.		Catalog Number
For making up body assemblies with 3, 4, 5 or max. of 6 contact blocks or replacing 1st or 2nd contact block♦	1	-		ZB2BE101
	-	1	⊖ ■	ZB2BE102

Mounting base with contact block(s) "Quick connect" ∗

Type	Contacts N.O.	Contacts N.C.		Catalog Number
1 Contact Block	1	-		ZB2BZ1013
	-	1		ZB2BZ1023
2 Contact Blocks	2	-		ZB2BZ1033
	-	2		ZB2BZ1043
	1	1		ZB2BZ1053

Additional contact blocks "Quick Connect" ∗

Type	Contacts N.O.	Contacts N.C.		Catalog Number
For making up body assemblies with 3, 4, 5 or max. of 6 contact blocks or replacing 1st or 2nd contact block♦	1	-		ZB2BE1013
	-	1	⊖ ■	ZB2BE1023



ZB2BZ009

Spare parts

Description		Catalog Number
Mounting Base only	With fixing screws	ZB2BZ009
Quick Connect ∗	Fitting by customer	ZB2BZ003

∗ Quick connect contact blocks will accept commercially available female quick slide connector (1 x 0.25" or 2 x 0.11")
♦ Non-illuminated devices can be configured with 6 contacts maximum (3 decks of 2).
■ ⊖ N.C. contact is direct opening operation conforming to EN 60 947-5-1, Section 3.

Limited Availability
For replacement use only.
For new applications, use
XB4 (page 37 - 72)

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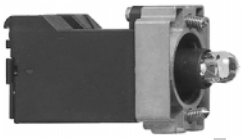
Standard
ZB2BV••



Special lens for neon and LED bulbs
ZB2BV0••



Direct supply
ZB2BV6



Transformer type
ZB2BV3

Pilot light heads

Type	Color	Catalog Number
Standard	White	ZB2BV01
	Green	ZB2BV03
	Red	ZB2BV04
	Amber	ZB2BV05
	Blue	ZB2BV06
	Clear	ZB2BV07
Special lens for neon and LED bulbs	Green	ZB2BV033
	Red	ZB2BV043
	Amber	ZB2BV053
	Blue	ZB2BV063
	Clear	ZB2BV073
Glass lens (NEMA Type 1 only)	Green	ZB2BV032
	Red	ZB2BV042
	Amber	ZB2BV052
	Clear	ZB2BV072

Pilot light modules ♦

Type	Catalog Number
Direct supply (incandescent bulb included)∗ (AC/DC)	ZB2BV6∗
Transformer type (1.2 VA/6 V bulb included) (AC only)	
24 V: 50-60 Hz	ZB2BV1
48 V: 50-60 Hz	ZB2BV2
110 V: 50 Hz 110-120 V: 60 Hz	ZB2BV3
127 V: 50 Hz	ZB2BV91
220 V: 50 Hz	ZB2BV4
240 V: 50 Hz 220-240 V: 60 Hz	ZB2BV94
380 V: 50 Hz	ZB2BV5
415 V: 50 Hz	ZB2BV9
440-480 V: 60 Hz	ZB2BV95
500 V: 50 Hz	ZB2BV8
550-660 V: 60 Hz	ZB2BV98
Resistor type (130 V bulb included).	
220/250 V (AC/DC)	ZB2BV7

∗ Complete catalog number by adding one of the following voltages: 6, 12, 24, 48 or 120 V. If desired without bulb, omit voltage.
♦ Light module assemblies are available with quick connectors. Add suffix “3” to end of part number.
Example: ZB2BV6 becomes ZB2BV63.

Limited Availability
For replacement use only.
For new applications, use
XB4 (page 37 - 72)

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Telemecanique

Operator



Flush Head
ZB2BW3•



Flush Head for LED
ZB2BW3••



Extended Head
ZB2BW1•



Extended Head for LED
ZB2BW1••



Silicon Booted Flush Head
ZB2BW5•

Type	Color	Catalog Number
Flush head	White	ZB2BW31
	Green	ZB2BW33
	Red	ZB2BW34
	Amber	ZB2BW35
	Blue	ZB2BW36
	Clear	ZB2BW37
Flush head for neon and LED lamps	Green	ZB2BW333
	Red	ZB2BW343
	Amber	ZB2BW353
	Blue	ZB2BW363
	Clear	ZB2BW373
Extended head	White	ZB2BW11
	Green	ZB2BW13
	Red	ZB2BW14
	Amber	ZB2BW15
	Blue	ZB2BW16
	Clear	ZB2BW17
Extended head for neon and LED lamps	Green	ZB2BW133
	Red	ZB2BW143
	Amber	ZB2BW153
	Blue	ZB2BW163
	Clear	ZB2BW173
Silicon booted flush head Use with mylar circular legend (ZB2BY1●●●) See page 333	Green	ZB2BW53
	Red	ZB2BW54
	Amber	ZB2BW55
	Blue	ZB2BW56
	Clear	ZB2BW57
Push to test	Green	ZB2BV031
	Red	ZB2BV041
	Amber	ZB2BV051
	Blue	ZB2BV061
	Clear	ZB2BV071

Limited Availability
For replacement use only
For new applications, use
XB4 (page 37 - 72)

Operating heads with black metal bezel

To order, add suffix **7** to the above references.
Example: **ZB2BV071** becomes **ZB2BV0717**.

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40 mm Mushroom head
ZB2BW••

Mushroom operator

Type	Color	Catalog Number
40 mm Mushroom head 2 position momentary	Green	ZB2BW43
	Red	ZB2BW44
	Amber	ZB2BW45
	Blue	ZB2BW46
	Clear	ZB2BW47
40 mm Mushroom head 2 position maintained	Green	ZB2BW63
	Red	ZB2BW64
	Amber	ZB2BW65
	Blue	ZB2BW66
	Clear	ZB2BW67



Two Flush
Amber Indicator
ZB2BW8••54

Two button with amber indicator∗ NEMA Type 1 only♦

Type	Marked	Color	Catalog Number
Two Flush		Black/Red	ZB2BW81254
		Green/Red	ZB2BW81354
	I,O	Black/Red	ZB2BW82254
	I,O	Green/Red	ZB2BW82354
	START,STOP	Black/Red	ZB2BW87254
	START,STOP	Green/Red	ZB2BW87354
One flush, one extended		Black/Red	ZB2BW83254
		Green/Red	ZB2BW83354
	I,O	Black/Red	ZB2BW84254
	I,O	Green/Red	ZB2BW84354
	START,STOP	Black/Red	ZB2BW88254
	START,STOP	Green/Red	ZB2BW88354

∗ Additional color indicators available, contact local field office for details.
♦ To upgrade to NEMA Type 3, 4, 13 order clear silicon boot ZB2BW008.

Limited Availability
For replacement use only
For new applications, use
XB4 (page 37 - 72)

Operating heads with black metal bezel

To order, add suffix **7** to the above references.
Example: **ZB2BW64** becomes **ZB2BW647**.

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Selector switch
ZB2BK1●●

Selector Switches

Number of positions, action	Color	Catalog Number
2-maintained	Green	ZB2BK123
	Red	ZB2BK124
	Amber	ZB2BK125
	Blue	ZB2BK126
	Clear	ZB2BK127
2-spring return from right to left	Green	ZB2BK143
	Red	ZB2BK144
	Amber	ZB2BK145
	Blue	ZB2BK146
	Clear	ZB2BK147
3-maintained	Green	ZB2BK133
	Red	ZB2BK134
	Amber	ZB2BK135
	Blue	ZB2BK136
	Clear	ZB2BK137
3-spring return to center from right and left	Green	ZB2BK153
	Red	ZB2BK154
	Amber	ZB2BK155
	Blue	ZB2BK156
	Clear	ZB2BK157
3-spring return from right to center	Green	ZB2BK183
	Red	ZB2BK184
	Amber	ZB2BK185
	Blue	ZB2BK186
	Clear	ZB2BK187
3-spring return from left to center	Green	ZB2BK173
	Red	ZB2BK174
	Amber	ZB2BK175
	Blue	ZB2BK176
	Clear	ZB2BK177

Limited Availability
For replacement use only
For new applications, use
XB4 (page 37 - 72)

Selector Switch Sequences (using contact block assemblies, page 328)

2 Position selector switch		
↖	↗	Contact block guide
O	X	1 N.O. (left or right)
X	O	1 N.C. (left or right)
O X	X O	1 N.O. and 1 N.C.

Note: View from front of panel

3 Position selector switch			
↖	↑	↗	Contact block guide
X	O	O	1 N.O. (left)
O	X	O	2 NC wired in series (side-by-side)
O	O	X	1 N.O. (right)
X	X	O	1 N.C. (right)
O	X	X	1 N.C. (left)
X	O	X	2 NO wired in parallel (side-by-side)

Operating heads with black metal bezel

To order, add suffix **7** to the above references.
Example: **ZB2BK123** becomes **ZB2BK1237.**

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40 mm Mushroom head



Non-Illuminated
XB2BN•••



Illuminated
(Direct Supply)
XB2BN••6•



Illuminated
(Transformer type)
XB2BN••••

Type	Push position∗	Color	Catalog Number 1N.O. - 1N.C.♦	Catalog Number 2N.O. - 2N.C.
Non-illuminated M: Maintained SR: Spring Return	M	White	XB2BN111	XB2BN112
	M	Green	XB2BN311	XB2BN312
	M	Red	XB2BN411	XB2BN412
	M	Amber	XB2BN511	XB2BN512
	M	Blue	XB2BN611	XB2BN612
	M	Clear	XB2BN711	XB2BN712
	SR	White	XB2BN121	XB2BN122
	SR	Green	XB2BN321	XB2BN322
	SR	Red	XB2BN421	XB2BN422
	SR	Amber	XB2BN521	XB2BN522
	SR	Blue	XB2BN621	XB2BN622
	SR	Clear	XB2BN721	XB2BN722
Illuminated Direct supply	M	White	XB2BN1161	XB2BN1162
	M	Green	XB2BN3161	XB2BN3162
	M	Red	XB2BN4161	XB2BN4162
	M	Amber	XB2BN5161	XB2BN5162
	M	Blue	XB2BN6161	XB2BN6162
	M	Clear	XB2BN7161	XB2BN7162
	SR	White	XB2BN1261	XB2BN1262
	SR	Green	XB2BN3261	XB2BN3262
	SR	Red	XB2BN4261	XB2BN4262
	SR	Amber	XB2BN5261	XB2BN5262
	SR	Blue	XB2BN6261	XB2BN6262
	SR	Clear	XB2BN7261	XB2BN7262
Illuminated Transformer Type 110/120 V (lamp included)	M	White	XB2BN1131	XB2BN1132
	M	Green	XB2BN3131	XB2BN3132
	M	Red	XB2BN4131	XB2BN4132
	M	Amber	XB2BN5131	XB2BN5132
	M	Blue	XB2BN6131	XB2BN6132
	M	Clear	XB2BN7131	XB2BN7132
	SR	White	XB2BN1231	XB2BN1232
	SR	Green	XB2BN3231	XB2BN3232
	SR	Red	XB2BN4231	XB2BN4232
	SR	Amber	XB2BN5231	XB2BN5232
	SR	Blue	XB2BN6231	XB2BN6232
	SR	Clear	XB2BN7231	XB2BN7232
Illuminated Transformer Type 220/240V (lamp included)	M	White	XB2BN1141	XB2BN1142
	M	Green	XB2BN3141	XB2BN3142
	M	Red	XB2BN4141	XB2BN4142
	M	Amber	XB2BN5141	XB2BN5142
	M	Blue	XB2BN6141	XB2BN6142
	M	Clear	XB2BN7141	XB2BN7142
	SR	White	XB2BN1241	XB2BN1242
	SR	Green	XB2BN3241	XB2BN3242
	SR	Red	XB2BN4241	XB2BN4242
	SR	Amber	XB2BN5241	XB2BN5242
	SR	Blue	XB2BN6241	XB2BN6242
	SR	Clear	XB2BN7241	XB2BN7242
Mushroom lens only		White	W40429264001	
		Green	W40429264003	
		Red	W40429264004	
		Amber	W40429264005	
		Blue	W40429264006	
		Clear	W40429264007	

∗ Position status: Position 1 - Pull. Spring return, Position 2- Center, Maintained, Position 3 - Push. Maintained or spring return.

♦ Contacts cannot be modified or interchanged; therefore operators are not sold separately.

Limited Availability
For replacement use only
For new applications, use
XB4 (page 37-2)

1 N.O./1 N.C.

Pos. 1 Pull	Pos. 2 Center	Pos. 3 Push
		
		

2 N.O./2 N.C.

Pos. 1 Pull	Pos. 2 Center	Pos. 3 Push
		
		
		
		

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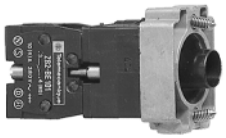
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Telemecanique

Light module assemblies with contact block(s) screw clamp connectors•

N.O. N.C.

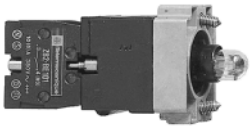
Type	Contacts N.O.	Contacts N.C.	Catalog Number
Direct supply (incandescent bulb included) (AC/DC)			
Without contacts♦	-	-	ZB2BW060+
1 Contact block	1	-	ZB2BW061+
	-	1	ZB2BW062+
2 Contact blocks	2	-	ZB2BW063+
	-	2	ZB2BW064+
	1	1	ZB2BW065+
Transformer type (1.2 VA/6 V AC incandescent bulb included) (AC only)†			
Without contacts♦	-	-	ZB2BW0∗0
1 Contact block	1	-	ZB2BW0∗1
	-	1	ZB2BW0∗2
2 Contact blocks	2	-	ZB2BW0∗3
	-	2	ZB2BW0∗4
	1	1	ZB2BW0∗5
Resistor type (130 V incandescent bulb included) 220-250 V supply			
2 Contact blocks	1	1	ZB2BW075



Direct supply
ZB2BW06●



Transformer type
ZB2BW03●



Resistor type
ZB2BW075

Additional contact blocks ♦ ■

N.O. N.C.

Type	Contacts N.O.	Contacts N.C.	Catalog Number
For making up body assemblies with 3 or maximum 4 contact blocks or replacing 1st or 2nd contact block	1	-	ZB2BE101
	-	1 ⊖ ■	ZB2BE102



Additional contact block
ZB2BE10●

\+ Complete catalog number by adding one of the following voltages: 6, 12, 24, 48 or 120 V AC/DC.
Note: If desired without bulb, omit voltage.

∗ Select proper digit for voltage desired: **1** (24 V 50/60 Hz) 2(48 V 50/60 Hz) **3** (110/120 V 50/60 Hz). **94** (220/240 V 60 Hz) **95** (440/480 V 60 Hz) **98** (550/600 V 60 Hz).

♦ Illuminated devices can be configured with a light module and 4 contacts maximum (2 decks of 2).

† Additional primary voltages available, contact local field office for details.

● Contact blocks and light module assemblies are available with quick connectors. Add suffix "3" to end of part number. Example: ZB2BW061 becomes ZB2BW0613.

■ ⊖ N.C. contact is direct opening operation conforming to EN 60 947-5-1, Section 3.

Limited Availability
For replacement use only.
For new applications, use
XB4 (page 37 - 72)

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Specialty contact blocks N.O. N.C.

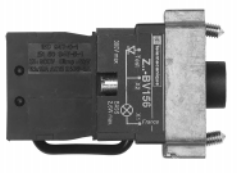
Type	Description	Number of contacts	Catalog Number
Low voltage / low current Gold flashed contacts 5-24 volt 0.1-100 mA	Contact block without mounting base	1-N.O.	ZB2BE1016
		1-N.C.	ZB2BE1026
		1-N.O.	ZB2BZ1016
		1-N.C.	ZB2BZ1026
Overlapping, sequencing & time delay contact blocks	Contact block w/o mounting base	1-N.O. Early closing	ZB2BE201
		1-N.C. Late opening	ZB2BE202
	Overlapping block w/mounting base	1-NO (early closing) & 1-NC (late opening)	ZB2BZ106
	Sequencing block w/mounting base	1-NO (early closing) & 1-N.O.	ZB2BZ107
	0.1-30 sec. time delay block w/mounting base (on delay)	1-N.O. & 1-N.C.	ZB2BZ91
	10-180 sec. time delay block w/mounting base (on delay)	1-N.O. & 1-N.C.	ZB2BZ92
Contact blocks for ring tongue lugs with widths smaller than 0.312" (8 mm)		1-N.O.	ZB2BE1019
		1-N.C.	ZB2BE1029

Limited Availability
For replacement use only.
For new applications, use
XB4 (page 37 - 72)

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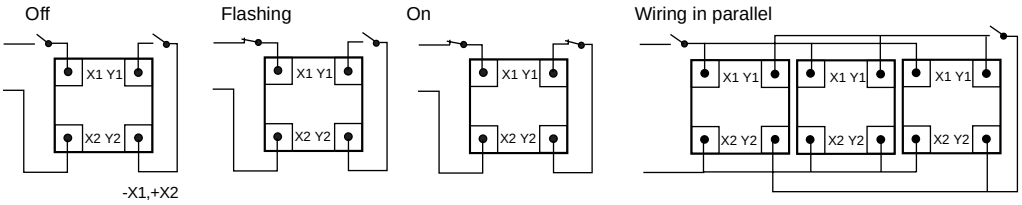


Flashing pilot light base
ZB2BV184

Specialty Light Modules

Type	Description	Supply Voltage	Catalog Number
Flashing pilot light base	Light Module with incandescent bulb included	120 Vac	ZB2BV184
Flashing illuminated push button base	Light Module with incandescent bulb and 1 N.O./1 N.C. included	120 Vac	ZB2BW1845

Typical Wiring Diagrams



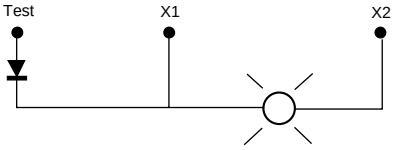


Remote test
pilot light base
ZB2BV156

Type	Description	Supply Voltage	Catalog Number
Remote test pilot light base	Single Diode	<380 V ac or dc	ZB2BV156■

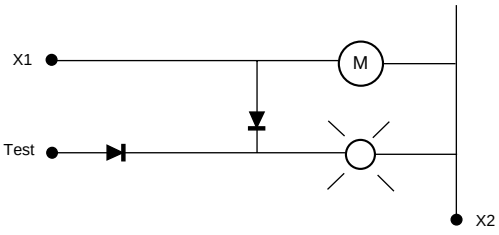
■ When ordering, specify voltage required (6-120 V) Example: ZB2BV156120V

Typical Wiring Diagram – Single Diode



Type	Description	Supply Voltage	Catalog Number
Remote test pilot light base	Dual Diode	<380 V ac or dc	ZB2BV68

Typical Wiring Diagram – Dual Diode



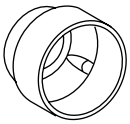
Limited Availability
For replacement use only.
For new applications, use
XB4 (page 37 - 72)

Illuminated Operators . . . . . Pages 324-326
Application Information . . . . . Page 314
Legend Plates . . . . . Page 333
Accessories . . . . . Page 331
Replacement Parts . . . . . Page 332
Dimensions . . . . . Pages 334-335

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XB2B Accessories



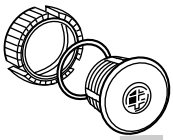
ZB2BZ16●●



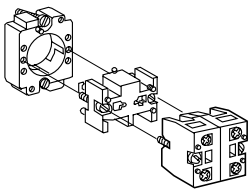
ZB2BZ17●●



ZB2BZ18●●



ZB2SZ3



ZB2BZ21

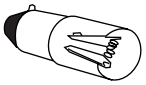
Type	Description		Catalog Number
Boots	Silicon boot for rectangular push button w/indicator light		ZB2BW008
	Silicon boot for rectangular push button w/o light		ZB2BA008
Guards/Locks	40 mm for Momentary Mushrooms (metal)	Blue	ZB2BZ1601
		Black	ZB2BZ1602
		Red	ZB2BZ1604
		Yellow	ZB2BZ1605
	40 mm with finger cut-out for push-pull (metal)	Blue	ZB2BZ1701
		Black	ZB2BZ1702
		Red	ZB2BZ1704
		Yellow	ZB2BZ1705
	40 mm with finger cut-out and 7mm holes for padlocking (metal)	Blue	ZB2BZ1801
		Black	ZB2BZ1802
		Red	ZB2BZ1804
		Yellow	ZB2BZ1805
	60 mm mushroom guard (black plastic) no padlocking provision		ZB2BZ19
	60 mm guard for 40 mm T-T-R EMO button (yellow plastic)		ZB2BZ1905
	Padlock attachment (makes flush operator inaccessible)		ZB2BZ6
Closing plates 22 mm	Black plastic		ZB2SZ3
	Gray plastic		ZB2 SZ4
	Blue metallic		ZB2SZ2
Miscellaneous accessories	Adapter for mounting into 1 3/16" (30 mm) hole and used with 30 mm P.B. nameplate		ZB2BZ41
	Adapter for mounting into 30 mm hole and use with XB2B nameplate		ZB2BZ4
	Base only-for mounting contact blocks		ZB2BZ009
	Add on push-on/push-off mechanism		ZB2BZ21
	Bulb extractor for use with BA9s		XBFX13

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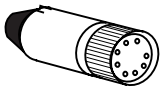
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Lamps



DL1CE• • •
(incandescent)

Type	Voltage AC/DC	Watts	Catalog Number
Incandescent Replacement bulbs (Type BA9s)	6	1.5	DL1CB006
	12	2.0	DL1CE012
	24	2.0	DL1CE024
	48	2.4	DL1CE048
	130	2.6	DL1CE130
Neon (use with direct supply light module)	120	-	NE51HRT120V
	220	-	NE51HRT220V
	380	-	NE51HRT380V



DL1CJUS• • •
(LED)

Type	Color	Voltage	Part Number
LED, BA9s base for Direct Supply blocks	Green	6 Vac/dc	DL1CJUS0063
	Red	6 Vac/dc	DL1CJUS0064
	Amber	6 Vac/dc	DL1CJUS0065
	Green	12 Vac/dc	DL1CJUS0123
	Red	12 Vac/dc	DL1CJUS0124
	Amber	12 Vac/dc	DL1CJUS0125
	Green	24 Vac/dc	DL1CJUS0243
	Red	24 Vac/dc	DL1CJUS0244
	Amber	24 Vac/dc	DL1CJUS0245
	Green	120 Vac/dc	DL1CJUS1203
	Red	120 Vac/dc	DL1CJUS1204
	Amber	120 Vac/dc	DL1CJUS1205
LED, BA9s base for retrofitting into transformer Light Modules	Green	9 Vac only	DL1CJUS0093
	Red	9 Vac only	DL1CJUS0094
	Amber	9 Vac only	DL1CJUS0095

Limited Availability
For replacement use only
For new applications, use
XB4 (page 7 - 72)

Replacement Lenses, Boots and Keys



ZB2BV●●●



ZB2BW93●



ZB2BP012



Q99900901

Type	Description	Catalog Number
Replacement lenses	Lens - standard pilot light	ZB2BV01●
	Lens kit - standard pilot light (includes lens, diffuser & gasket)	ZB2BV02●
	Lens - pilot light (jeweled for LED & Neon)	ZB2BV01●3
	Lens - flush illuminated push buttons	ZB2BW91●
	Lens - flush illuminated push buttons (Jeweled for LED & Neon)	ZB2BW93●3
	Lens - extended push buttons	ZB2BW93●
	Lens - extended push buttons (jeweled for LED & Neon)	ZB2BW93●3
	Lens - push-to-test	ZB2BV01●1
	Lens - rectangle for ZB2BW80000 series (2 button with indicator)	ZB2BW90●
	Lens - 40 mm mushroom	W4042926400●
Replacement boots	Replacement silicon boot for ZB2BP series operators	ZB2BP01†
	Replacement neoprene boot for ZB2BP series operators	ZB2BP02†
Replacement keys	Replacement key for standard selector switches and key release mushroom operators. Qty. 1 - Ronis key #455	Q99900901
	Key # 421 Qty. 1	Q99900911
	Key # 458A Qty. 1	Q99900910
	Key # 520 Qty. 1	Q99900912
	Key # 3131A Qty. 1	Q99900915

● Complete lens part number by replacing with digit for desired color. (1- white, 3- green, 4-red, 5- amber, 6- blue, 7-clear). **Example ZB2BV013 green standard pilot lens. Note: Jeweled lens not available in white.**

† Complete boot part number by replacing with digit for desired color. (2- black, 3- green, 4- red, 5- yellow, 6- blue, 7-clear). **Example ZB2BP013 green silicon boot.**

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PVC Standard legend plates 30 x 40 mm

Text★	Catalog Number
Close	ZB2BY2314
Down	ZB2BY2308
Emergency Stop	ZB2BY2330
Fast	ZB2BY2328
Forward	ZB2BY2305
For Rev	ZB2BY2371
For-O-Rev	ZB2BY2384
Hand Off Auto	ZB2BY2387
High	ZB2BY2338
High Low	ZB2BY2369
In	ZB2BY2503
Inch	ZB2BY2321
Jog For	ZB2BY2381
Jog Rev	ZB2BY2380
Jog Run	ZB2BY2365
Left	ZB2BY2310
Low	ZB2BY2336
Lower	ZB2BY2337
Man-Auto	ZB2BY2372
Off	ZB2BY2312

Text★	Catalog Number
On	ZB2BY2311
Off On	ZB2BY2367
Open	ZB2BY2313
Open Close	ZB2BY2376
Open-O-Close	ZB2BY2388
Out	ZB2BY2339
Power On	ZB2BY2326
Raise	ZB2BY2335
Reset	ZB2BY2323
Reverse	ZB2BY2306
Right	ZB2BY2309
Run	ZB2BY2334
Slow	ZB2BY2327
Start	ZB2BY2303
Stop	ZB2BY2304
Stop Start	ZB2BY2366
Up	ZB2BY2307
Up Down	ZB2BY2370
Up-O-Down	ZB2BY2389

★ All nameplates are black w/white lettering except “Stop”, “Emergency Stop” and “Reset” which are red w/white lettering. For black “Reset” change final digit of catalog number to 2.



ZB2BY8330

PVC Yellow Legend Plates 60 mm diameter

Text	Language	Catalog Number
Blank	N/A	ZB2BY9101
Emergency Stop	English	ZB2BY9330
Arret d’Urgence	French	ZB2BY9130
Not Aus	German	ZB2BY9230
Parada de Emergencia	Spanish	ZB2BY9430
Arresto Emergenza	Italian	ZB2BY9630

PVC Yellow Legend Plates 90 mm diameter

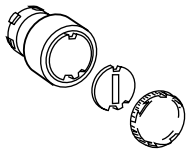
Text	Language	Catalog Number
Blank	N/A	ZB2BY8101
Emergency Stop	English	ZB2BY8330
Arret d’Urgence	French	ZB2BY8130
Not Aus	German	ZB2BY8230
Parada de Emergencia	Spanish	ZB2BY8430
Arresto Emergenza	Italian	ZB2BY8630

Limited Availability
For replacement use only.
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XB4 (page 72)

Type	Description		Catalog Number
PVC blank legend	Blank	Black or red background-30 mm x 40 mm	ZB2BY2101
	Blank	Yellow or white background-30 mm x 40 mm	ZB2BY4101
	Blank	Red background-45 mm x 67.5 mm (For use w/mushroom head operators)	ZB2BY5101
	Blank	Oversized legend-48 mm x 48 mm (For use with XB2 operators)	XBCY22011
	Blank	Black or red background- 30 mm x 48 mm (For use w/2 position joysticks)	ZD2GY2201
Metal legend plates	Silver	30 x 40 mm	ZB2BY2011
		30 x 50 mm	ZB2BY6011
	Black	30 x 40 mm	ZB2BY2021
		30 x 50 mm	ZB2BY6021
	Red	30 x 40 mm	ZB2BY2041
		30 x 50 mm	ZB2BY6041
PVC custom engraved	Special engraving†	Black background, white letters-30 mm x 40 mm	ZB2BY2002
	Special engraving†	Red background, white letters-30 mm x 40 mm	ZB2BY2004
	Special engraving†	White background, black letters-30 mm x 40 mm	ZB2BY4001
	Special engraving†	Yellow background, black letters-30 mm x 40 mm	ZB2BY4005
	Special engraving†	Red background, white letters-45 mm x 67.5 mm	ZB2BY5004

† Please specify lettering when ordering. Two lines with 11 characters (including spaces) maximum on each line.

Mylar Circular Legends



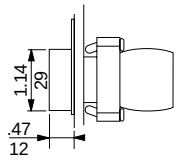
Type	Description	Catalog Number
Mylar circular legends for use with transparent flush head operators See page 315, 324	No text	ZB2BY1101
	O	ZBZBY1146
	I	ZBZBY1147
	Auto	ZB2BY1115
	Hand	ZB2BY1316
	Off	ZB2BY1312
	On	ZB2BY1311
	Start	ZB2BY1303
	Stop	ZB2BY1304
	Forward	ZB2BY1305
	Reverse	ZB2BY1306

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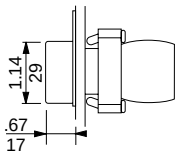
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Dimensions

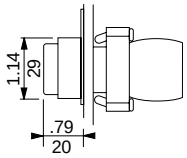
ZB2BA•
ZB2BA•8
ZB2BA•9
ZB2BW3•



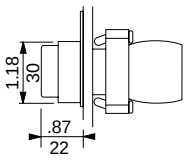
ZB2BA•6



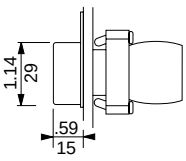
ZB2BL•
ZB2BW1•



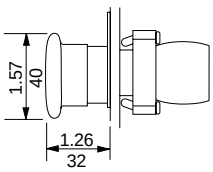
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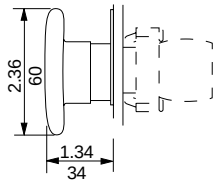
ZB2BP•
ZB2BW5•



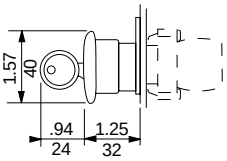
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ZB2BT•
ZB2BS54
ZB2BW4•



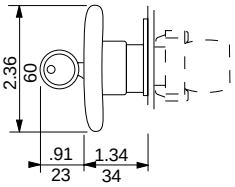
ZB2BR•
ZB2BX•
ZB2BS64



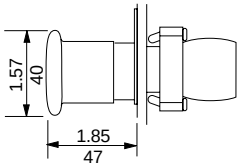
ZB2BS14



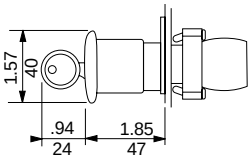
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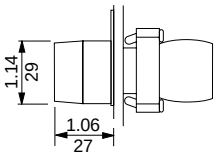
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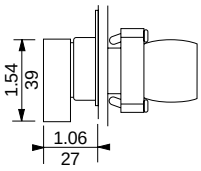
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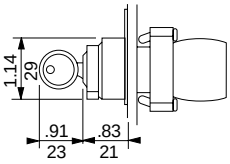
ZB2BD•••
ZB2BK1•••



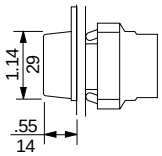
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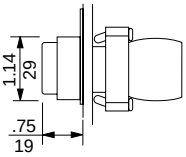
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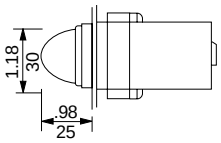
ZB2BVO•
ZB2BVO•3



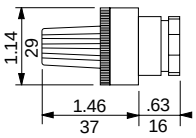
ZB2BVO•1



ZB2BVO•2

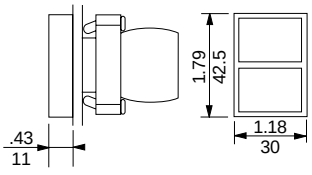


ZB2BD922

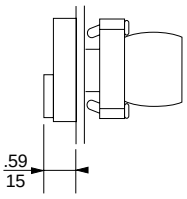


Dual Dimensions inches / mm

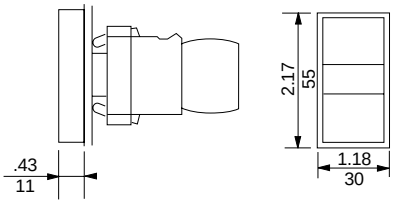
ZB2BA91•4



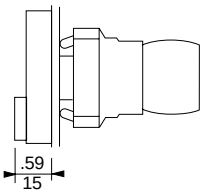
ZB2 BL93•4



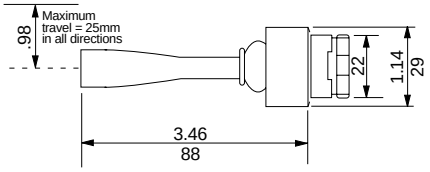
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ZB2BW83•••



ZB2BB•

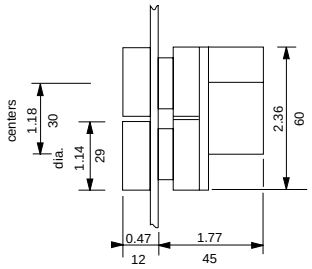


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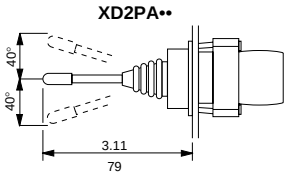
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Dimensions

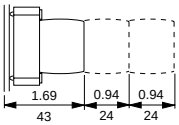
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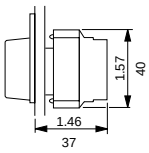
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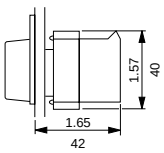
Contact blocks and bases only
ZB2BZ10•, ZB2BZ10••,
ZB2BE10•, ZB2BE10••,
ZB2BE20•



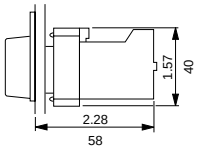
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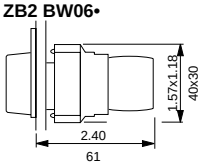
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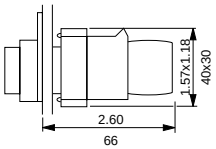
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ZB2BV3, ZB2BV9•



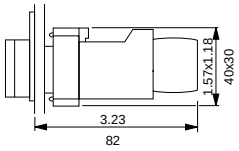
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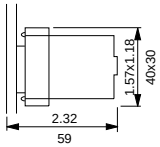
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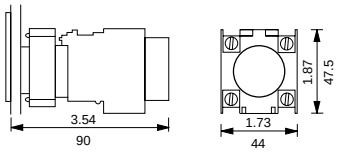
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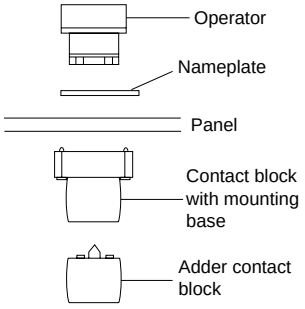
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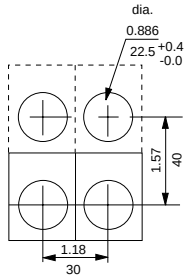
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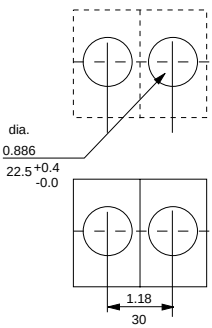
MOUNTING DIMENSIONS (Minimum spacing)
General mounting set-up



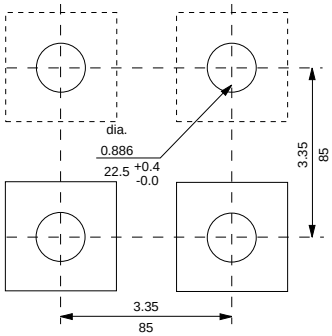
Standard pushbuttons and pilot lights



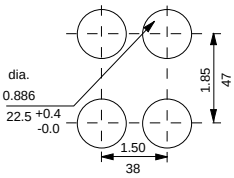
2 Position Joysticks



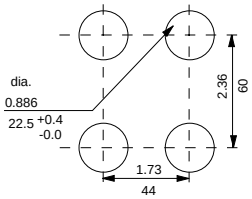
4 Position Joysticks



Rectangular units w/o indicator



Rectangular units w/ indicator



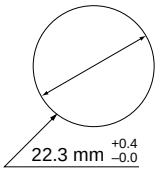
Dual Dimensions $\frac{\text{inches}}{\text{mm}}$

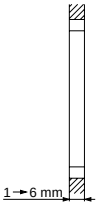
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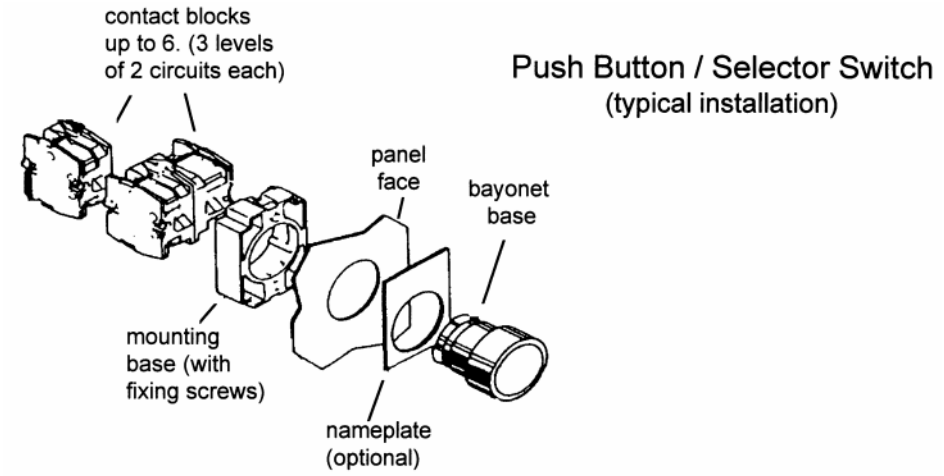
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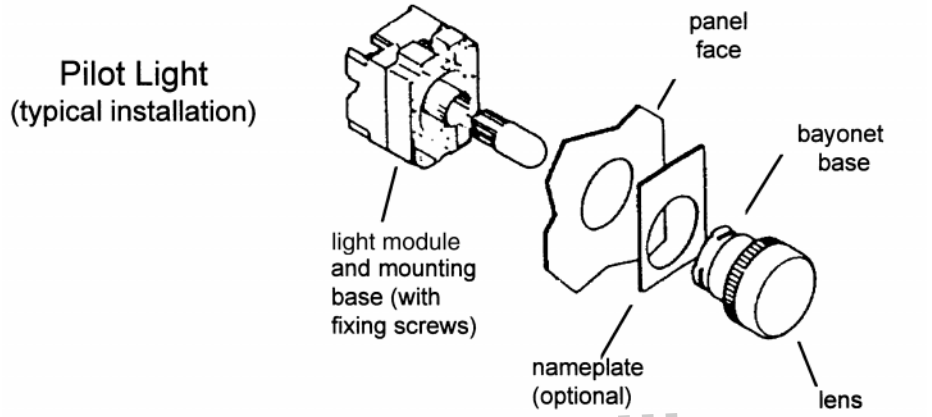
Mounting Instructions for ZB2B

1. The panel knockout must be 7/8" (22.3 mm) with a panel thickness of 1 to 6 mm (0.04 in to 0.23 in). No anti-rotation notch is required.
2. Insert the operator through the knockout.
3. Bayonet lock the operator into the diecast mounting base with a 1/8 clockwise turn.
4. Orient the angled fixing screws at 12 and 6 o'clock and alternately tighten the 2 screws.
5. The fixing screws will bite into the metal of the inside panel door and provide anti-rotation and a tamper proof installation.









Limited Availability
For replacement use only.
For new applications, use
XB4 (page 37 - 72)

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