



SATIN CHROME



SATIN POLYAMIDE

AEG

HEAVY DUTY
NEMA 4X, 4, 12

30mm (1^{13/64}") FULL SIZE



SERIES B30

AEG

HEAVY DUTY
NEMA 4X, 4, 12

22mm & 30mm
600 Volt

**PUSHBUTTONS
SIGNALING LIGHTS**

SATIN POLYAMIDE "BF22"

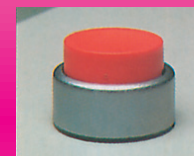
Round NEMA 4X, 22mm



SERIES B22

SATIN CHROME "BM22"

Round NEMA 12, 4, 22mm



SERIES B22

SATIN POLYAMIDE "BS22"

Square NEMA 4X, 12, 22mm



SERIES B22

THE MOST COMPLETE

- HIGH STYLE
- BRIGHT COLORS
- HEAVY DUTY
- NEMA 12, 4, 4X HOSE TEST
- WATER TIGHT / DUST TIGHT
- FULL APPROVALS



ELECTRICAL & ELECTRONIC
CONTROLS, INC.
3881 DANBURY ROAD
BREWSTER, NY 10509
845-278-5777 FAX 845-278-5444
E-MAIL: info@eecontrols.com
www.eecontrols.com

SERIES B22

GENERAL: Miniature - 7/8" Mounting

The new Series Heavy Duty Oil-Tight Control Units are a most complete series of buttons and lights, designed to save panel space in A.C. or D.C. control circuit applications.

Control units are available assembled or in individual units for customer assembly.

ELECTRICAL RATINGS International Standards:

	600 Volt AC	10 AMP	A600
	300 Volt DC		Q300

Other Codes: CSA, CEI, IEC, VDE, BSI, 

HEAVY DUTY OIL TIGHT

Type 12/13

Type 4 Hose Test / WaterTight (IP66)

Type 4x

OPERATIONAL TEMPERATURE RANGE:

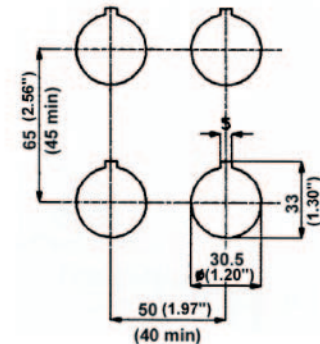
-25 degrees centigrade to +70 degrees centigrade

ELECTRICAL RATINGS:

One Million Operating life
(Double Contact Fidelity)

- ▲ Parallel Movable Controls
- ▲ Wiping Action
- ▲ Suitable for electronic dry circuit 12V, 5 mA

SERIES B30 FULL SIZE 30mm



"ALL ROUND" (22mm) Satin Chrome & (22mm) Polyamide operators can be ordered as a "FULL SIZE B30" Operator simply by putting the prefix: **B30** - to the part number.

To order adaptors separate, see page 163.

BCR-AX- (Round Polyamide) (\$8.00 List)

BCR-AM- (Round Satin Chrome) (\$14.00 List)

CONTACT BLOCKS

Self Cleaning With Wipe Action	Catalog Number
1 NO	SES 10
1 NC	SES 01
1 NO + NC	SEU 11
2 NO	SEU 20
2 NC	SEU 02



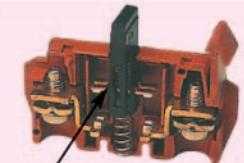
**NC CONTACTS
ARE POSITIVE
OPENING**



SES01
1 Pole



SEU20
2 Pole



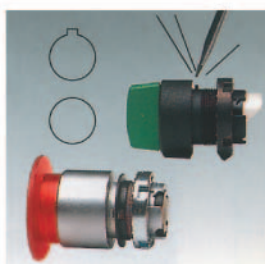
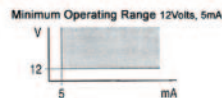
Double/Parallel movable contacts. — Plus contact wipe. Patented for Switching Fidelity!

PUSHBUTTONS 10 POLES MAX All Contact Blocks are interchangeable.

ELECTRICAL CHARACTERISTICS - CONTACT BLOCKS

UL (AC) A600	Thermal		10 AMP		DC RATING	Thermal	2.5 AMP
	120V	240V	480V	600V	250VDC	120VDC	24VDC
MAKE	60	30	15	12	.27	.55	2.5
BREAK	6	3	1.5	1.2	.27	.55	2.5

Low Level Current Rating 12 Volt - 5mA.



Heavy Duty Lock Ring can be tightened with hand, flat screwdriver or tightening wrench.

Locator Pin can be snapped off for circle mounting, without notch.



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22mm & 30mm "ROUND" ASSEMBLED PUSHBUTTONS & PILOT LIGHTS



22mm Round Design (Add "B30" - for 30mm size) add \$8.00 List for Polyamide & \$14.00 for Metal

Example: Round Polyamide B30-BFD-GG-10 \$25.90 List Round Metal B30-BMD-GG-10 \$31.90 List



Complete Pushbuttons (Includes Operator, Contact Blocks, Holder and Pilot Light where applicable)

(Nema 12, 3R, 4X)

ASSEMBLED

			Black Satin Round (Polyamide)	Series BF22	Satin Chrome Round (Metal)	Series BM22
	Metal "BM" units shown	Color Type	 Catalog No.	List \$	 Catalog No.	List \$
		Green	BFD-GG-10	\$17.90	BMD-GG-10	\$17.90
		Green (start)	BFD-GG-10-02	17.90	BMD-GG-10-02	17.90
		Black	BFD-GS-10	17.90	BMD-GS-10	17.90
		Yellow	BFD-GY-10	17.90	BMD-GY-10	17.90
		Blue	BFD-GB-10	17.90	BMD-GB-10	17.90
		Extd. Green	BFD-SG-10	17.90	BMD-SG-10	17.90
		Red	BFD-GR-01	17.90	BMD-GR-01	17.90
		Red (stop)	BFD-GR-01-01	17.90	BMD-GR-01-01	17.90
		Extended Red	BFD-SR-01	17.90	BMD-SR-01	17.90

Mushroom Pushbuttons (Red) 40mm

		Momentary	BFP-4R-01	\$27.00	BMP-4R-01	\$27.00
		Maintained	BFP-RN-01 (Twist to release)	51.00	BMP-RN-01 (Twist to release)	51.00
		Maintained	BFP-RZ-01 (Push Pull)	34.50	BMP-RZ-01 (Push Pull)	34.50
		Key Release	BFP-RS-01	68.50	BMP-RS-01	68.50

Selector Switch (Maintained)

			Black Handle			
	2 Pos	OX	BFK-1S-10 •	\$24.50	BMK-1S-10 •	\$24.50
	3 Pos	XOO OOX	BFK-3S-11 ▲	33.00	BMK-3S-11 ▲	33.00

▲ Includes two SES10 N.O. Contacts • Includes one SES10 N.O. Contact

Pilot Lights (Includes Lens, Socket & Bulb) (For LED Lamps use suffix L and add \$18.00 -To List Price)

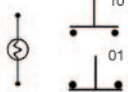
Full Voltage

Example: BFL-KR-AL

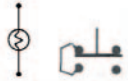
		Red 130V	BFL-KR-A or -G*	\$22.70	BML-KR-A or -G*	\$22.70
		Green 130V	BFL-KG-A or -G	22.70	BML-KG-A or -G	22.70
		Yellow 130V	BFL-KY-A or -G	22.70	BML-KY-A or -G	22.70

For above Pilot Light with Diffuser, substitute **M** for **K**. Marking then can be added onto Diffuser.

Illuminated Pushbuttons (Includes Lens, Socket, Bulb, and Contact Block)

Full Voltage (Flush)			Yellow	BFL-GY-10-A or -G*	\$37.20	BML-GY-10-A or -G*	\$37.20
			Green	BFL-GG-10-A or -G	37.20	BML-GG-10-A or -G	37.20
			White	BFL-GW-10-A or -G	37.20	BML-GW-10-A or -G	37.20
			Blue	BFL-GB-10-A or -G	37.20	BML-GB-10-A or -G	37.20
			Red	BFL-GR-01-A or -G	37.20	BML-GR-01-A or -G	37.20

Push-to-Test Lights (Full Voltage)

		Green	BFL-GG-11-A or -G*	\$45.70	BML-GG-11-A or -G*	\$45.70
		Red	BFL-GR-11-A or -G*	45.70	BML-GR-11-A or -G*	45.70

Full voltage type.

Transformer type also available.

* Select Voltage -A 115Volt

-G 24Volt

See page 164 and 165 for Legend plate options. Contact Blocks & Lamp Sockets on page 156.

Discount Schedule B



BS22 SERIES "SQUARE" "COMPLETELY" ASSEMBLED PUSHBUTTONS & PILOT LIGHTS

AEG

Complete Pushbuttons (Includes Operator, Holder, and Contact Blocks)
(Nema 12, 3R, 4X)

Square Design

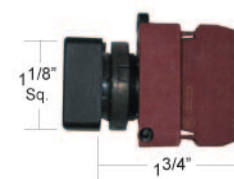


ASSEMBLED

Square (Polyamide)

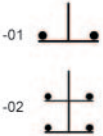
Series BS22

		Color	 Black Satin	List
		Type	Catalog No.	\$
• Includes 1 NO Contact SES10		Green	BSD-GG-10 •	\$17.90
		Green (start)	BSD-GG-10-02	17.90
		Black	BSD-GS-10 •	17.90
		Extd. Green	BSD-SG-10 •	17.90
		Red	BSD-GR-01 Δ	17.90
		Red (stop)	BSD-GR-01-01	17.90
		Extended Red	BSD-SR-01 Δ	17.90



Side view of Square Operator with single contact block.

Mushroom Pushbuttons (Red) 40mm

		Momentary	BSP-3S-01	\$29.50
		Maintained (Push-Pull)	BSP-RN-01	38.70
		Maintained per EN418 (Twist to Release)	BSP-RA-01 ① BSP-RA-02 ①	56.50 65.00
		Key to Release per EN418	BSP-RS-01 ① BSP-RS-02 ①	69.50 78.00



P/N: BSP-RS-01

Key to Release per EN418

EN 418

- ① EN 418 - Safety Spec.
Certain codes also require 2 NC poles for redundancy.
-02 Includes 2 NC Contacts attached to contact holders.

Selector Switch (Maintained)

	Black Handle		
	2 Pos	OX	BSK-1S-10
	3 Pos	XOO	BSK-3S-11 ▲
		OOX	

Pilot Lights (Includes Lens, Socket & Bulb Full Voltage)

(For LED Lamps use suffix L and add \$18.00 to list) Example: BFL-MR-AL				
		Yellow 130V	BSL-MY-*	\$23.70
		Green 130V	BSL-MG-*	23.70
		White 130V	BSL-MW-*	23.70
		Blue 130V	BSL-MB-*	23.70
		Red 130V	BSL-MR-*	23.70
		Clear 130V	BSL-MC-*	23.70

▲ Includes two SES10 N.O. Contacts

Illuminated Pushbuttons (Includes Lens, Socket, Bulb, and Contact Block)

		Yellow	BSL-GY-10-*	\$36.80
		Green	BSL-GG-10-*	36.80
		White	BSL-GW-10-*	36.80
		Blue	BSL-GB-10-*	36.80
		Red	BSL-GR-01-*	36.80
		Clear	BSL-GC-01-*	36.80

Voltage Suffix

* Select Voltage -A 115Volt -G 24Volt

Push-to-Test Lights (Full Voltage)

Use part numbers same as Illuminated PushButton except replace -10 with -11. Add \$8.50 List.				
		Green	BSL-GG-11-*	\$45.30
		Red	BSL-GR-11-*	45.30

Full voltage type. Transformer type also available.

See page 164 and 165 for Legend plate options. Contact Blocks & Lamp Sockets on page 156.

Discount Schedule B



22mm & 30mm "MOMENTARY" PUSHBUTTON & MUSHROOM OPERATOR MODULES

AEG

22mm Pushbuttons (Add "B30" - for 30mm size) add \$8.00 List for Polyamide & \$14.00 List for Metal   
Example: Round Polyamide B30-BFD-GS \$17.40 List Round Metal B30-BMD-GS \$23.40 List

(REQUIRED COMPONENTS)
(Nema 12, 3R, 4X)



page 156



OPERATOR	+	CONTACT BLOCK	=	COMPLETE UNIT
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Pushbutton Operators (Momentary)	Color Type	 ROUND Polyamide Series BF22 Black Operator	 ROUND Metal Satin Chrome Series BM22 Operator
-------------------------------------	------------	--	---

Operators	(Includes Contact Block Holder) Requires contact block on pg 169	Catalog No.	List \$	Catalog No.	List \$
	Flush Operator Less Color Cap →	Black Red Green Yellow Blue White	BFD-GS \$9.40 BFD-GR 9.40 BFD-GG 9.40 BFD-GY 9.40 BFD-GB 9.40 BFD-GW 9.40 •BFD-GO 8.40	BMD-GS \$9.40 BMD-GR 9.40 BMD-GG 9.40 BMD-GY 9.40 BMD-GB 9.40 BMD-GW 9.40 •BMD-GO 8.40	
	Extended Operator Less Color Cap →	Black Red Green Yellow Blue White	BFD-SS 9.40 BFD-SR 9.40 BFD-SG 9.40 BFD-SY 9.40 BFD-SB 9.40 BFD-SW 9.40 BFD-SO 8.40	BMD-SS 9.40 BMD-SR 9.40 BMD-SG 9.40 BMD-SY 9.40 BMD-SB 9.40 BMD-SW 9.40 BMD-SO 8.40	

Mushroom Operators (Momentary)		 ROUND Polyamide	 ROUND Metal	
	<u>Momentary</u> 28mm (1.1") includes contact block holder	Black Red Green Yellow	BFP-3S \$18.50 BFP-3R 18.50 BFP-3G 18.50 BFP-3Y 18.50	BMP-3S \$18.50 BMP-3R 18.50 BMP-3G 18.50 BMP-3Y 18.50
	<u>Momentary</u> 40mm (1.6") includes contact block holder	Black Red Green Yellow	BFP-4S 18.50 BFP-4R 18.50 BFP-4G 18.50 BFP-4Y 18.50	BMP-4S 18.50 BMP-4R 18.50 BMP-4G 18.50 BMP-4Y 18.50
	<u>Momentary</u> 60mm (2.4") includes contact block holder	Black Red Green Yellow	BFP-5S 23.30 BFP-5R 23.30 BFP-5G 23.30 BFP-5Y 23.30	BMP-5S 23.30 BMP-5R 23.30 BMP-5G 23.30 BMP-5Y 23.30

Illuminated Mushroom Operators

Add Pilot Light Socket and Contact Blocks pg.156

	Momentary 40mm (1.6")	Red Green Yellow Blue White	BFP-4RL \$22.00 BFP-4GL 22.00 BFP-4YL 22.00 BFP-4BL 22.00 BFP-4WL 22.00	BMP-4RL \$22.00 BMP-4GL 22.00 BMP-4YL 22.00 BMP-4BL 22.00 BMP-4WL 22.00
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See page 164 and 165 for Legend plate options. Contact Blocks & Lamp Sockets on page 156

Discount Schedule B



22mm & 30mm "MAINTAINED" MUSHROOM OPERATORS

AEG

22mm Mushroom Operators (Add "B30" - for 30mm size) add \$8.00 List for Polyamide & \$14.00 List for Metal
Example: Round Polyamide B30-BFP-RN \$50.50 List Round Metal B30-BMP-RN \$56.50 List



OPERATOR + LIGHT SOCKET + CONTACT BLOCK = COMPLETE UNIT

Mushroom Operators

(Includes Contact Block Holder)

Color Type			Series BF22 ROUND Polyamide		Series BM22 ROUND Metal	
			Catalog No.	List \$	Catalog No.	List \$
	40mm (1.6") Maintained Twist to Release	Red	BFP-RN	\$42.00	BMP-RN	\$42.00
	Push-Pull	Red	BFP-RZ	26.00	BMP-RZ	26.00

Add Contact Blocks, see page 156.

Illuminated Mushroom Operators

LED Bulbs Available - Page 156.

	40mm (1.6") Maintained Push-Pull	Red	BFL-PR	\$26.00	BML-PR	\$26.00
		Green	BFL-PG	26.00	BML-PG	26.00
		Yellow	BFL-PY	26.00	BML-PY	26.00
		Blue	BFL-PB	26.00	BML-PB	26.00
		White	BFL-PW	26.00	BML-PW	26.00

Add Pilot Light Socket and Contact Blocks page 156.

3 Position Illuminated Mushroom Operators

	40mm (1.6") Push Maintained Center Maintained Pull Momentary	Red Only	BF2-PR	\$39.00	BM2-PR	\$39.00
	40mm (1.6") Center Maintained Push and Pull Momentary	Red Only	BF3-PR	\$36.00	BM3-PR	\$36.00

Add Pilot Light Socket and Contact Blocks page 156..

EN 418 Emergency Stop Operators

EN 418 Emergency Stop comply to the EN 418 safety regulation:



Maintained Red EN418 Twist to Release Polyamide	Round Square	BFP-RA ☼ BSP-RA ☼	\$43.00 \$48.00
Maintained Red EN 418 Key to Release EN 418	Polyamide Round Square	BFP-RS ☼ BSP-RS ☼	\$60.00 \$63.00
Legend Plates 22mm - Plastic Round Yellow "E-STOP" (2 1/4" Dia.) Blank		BNP-ES 225 BNP-6KSOP	\$6.00 \$5.00
Round Yellow "E-STOP" (2 3/8" Dia.) Metal Blank (3" Dia.) Plastic		BNP-ES 275 BNP-GKSOB	\$12.00 \$3.50
Round Yellow E-STOP (3" Dia.) (Used with 60mm Mushroom Operators)		BNP-ES 300 Plastic	\$5.00

Section 4.1.11 "It shall not be possible for the control device to latch-in without generating the STOP command."

Design: Maintained Latch, Twist to Release, per EN 418.

☼ To satisfy selected safety requirements, 2 NC fixed contacts are required.
Add "-02FIX" to part number. Add \$17.00 List.



EMO - Emergency Off Plates per SEMI SPEC.

BNPES-238
(2 3/8" diam.) \$4.00 List
BNPES-350
(3 1/2" diam.) \$6.00 List

Discount Schedule B



22mm & 30mm ILLUMINATED OPERATORS

AEG

22mm Pilot Lights / Illuminated PB's (Add "B30" - for 30mm size) add \$8.00 List for Polyamide & \$14.00 List for Metal

Example: Round Polyamide B30-BFL-KR \$14.80 List Round Metal B30-BML-KR \$20.80 List

LED Bulbs
Available-
See Below



(Nema 12, 3R, 4X)

LIGHT MODULE + LIGHT SOCKET + CONTACT BLOCK = COMPLETE UNIT

Pilot Light Module Translucent Lens

ROUND (Polyamide)

List \$

ROUND (Metal)

List \$

without Diffuser. (Marking cannot be added onto light).

Catalog No. Series BF22

Catalog No. Series BM22

	Red	BFL-KR	\$6.80	BML-KR	\$6.80
	Green	BFL-KG	6.80	BML-KG	6.80
	Yellow	BFL-KY	6.80	BML-KY	6.80
	Blue	BFL-KB	6.80	BML-KB	6.80
	White	BFL-KW	6.80	BML-KW	6.80
	Clear	BFL-KC	6.80	BML-KC	6.80

Pilot Light Module with Diffuser, replace K with M. Example: Red Module #BFL-MR. Same Price. Marking on diffusers can be added.

Illuminated Pushbutton Module (Flush) (also includes Contact Block Holder)

	Red	BFL-GR	\$12.80	BML-GR	\$12.80
	Green	BFL-GG	12.80	BML-GG	12.80
	Yellow	BFL-GY	12.80	BML-GY	12.80
	Blue	BFL-GB	12.80	BML-GB	12.80
	White	BFL-GW	12.80	BML-GW	12.80
	Clear	BFL-GC	12.80	BML-GC	12.80

Push to Test Illuminated Pushbutton Module (Extended) (also includes Contact Block Holder)

	Red	BFL-SR	\$13.20	BML-SR	\$13.20
	Green	BFL-SG	13.20	BML-SG	13.20
	Yellow	BFL-SY	13.20	BML-SY	13.20
	Blue	BFL-SB	13.20	BML-SB	13.20
	White	BFL-SW	13.20	BML-SW	13.20
	Clear	BFL-SC	13.20	BML-SC	13.20

Illuminated Pushbutton Module (Recessed) (also includes Contact Block Holder)

	Red	BFL-ER	\$13.20	BML-ER	\$13.20
	Green	BFL-EG	13.20	BML-EG	13.20
	Yellow	BFL-EY	13.20	BML-EY	13.20
	Blue	BFL-EB	13.20	BML-EB	13.20
	White	BFL-EW	13.20	BML-EW	13.20
	Clear	BFL-EC	13.20	BML-EC	13.20

Pilot Light Socket Lamp Holder (also used on Illuminated P.B., Push-to-Test, and Illum. Mushroom)

Incandescent Bulbs



	Full Voltage to 130V	BLN-VO**	\$12.00	**Add Bulb	(max 380V 2 watt)
	Series Resistor 208/230 Includes	BLN-VN† Reduced from 208/230 to 110/130Volt	39.00	BA006 6V, 0.6W	\$3.90 List
	Transformer Type	BLT-VJ*	120 to 6 Volt	53.00	BA106 6V, 1.5W 3.90
		BLT-VN*	220-250 to 6 Volt	53.00	BA024 24V, 2W 3.90
		BLT-VU*	380 to 6 Volt	53.00	BA048 48V, 2W 3.90
					BA130 130V, 2W 3.90

* Includes Bulb 1.2W max (6V) † Includes Bulb BA 130V (2W)

For LED Bulbs see below

Contact Blocks



	Catalog No.	List
1 NO	SES 10	\$8.50
1 NC	SES 01	\$8.50
2 NO	SEU 20	\$17.00
2 NC	SEU 02	\$17.00
1 NO, 1NC	SEU 11	\$17.00
1NC(late Break)	SEV 01	\$8.50
1NO(early opening)	SEV 10	\$8.50

Multi - LED Bulbs (with integrated socket)

LED Bulbs (all for BA9 Switch)

Catalog No. - All BA9 Sockets

List

BLL-VND-☉ 24Volt AC/DC \$34.00

BLL-VNJ-☉ 120Volt AC \$34.00

☉	Color Suffix			
-Y	Yellow	-O	Orange	
-G	Green	-W	White	
-R	Red	-B	Blue	



AC voltages available:
24, 110, 230Volt

EXTRA BENEFITS

- 100,000 hours
- High Voltage Peak Capability
- Very Bright with Multi LED
- 15 mA low power
- Excellent Resistance & Vibration
- 6 Color Option

See page 164 and 165 for Legend plate options. Contact Blocks & Lamp Sockets on page 156.

Discount Schedule B

LAMP SOCKETS

Full Voltage Type



BLN-VO
Requires
1 Contact Space

Lamp Socket Blocks - Standard Lamp Holders

Screw connection - full voltage

max. 380V, 2W (without BA9s bulb*)

Screw connection with lamp test connection (diode) full voltage

max. 300V, AC/DC, 2W (without BA9s bulb*)

* Add bulb (BA9 type) located on right side of this page.

Catalog No.	List
BLN-VO	\$12.00
BLN-VP	\$36.00

RESISTOR & TRANSFORMER TYPE HOLDERS

Series Resistor Type



BLN-VN
Requires
2 Contact Spaces

Series Resistor, screw connection

220-240V AC/DC with 130V 2W BA 9s bulb

with resistor, lamp test (diode), screw connection

220-240V AC/DC with 130V 2W BA 9s bulb

with resistor and diode, screw connection

220-240V AC with 130V 2W BA 9s bulb

Catalog No.	List
BLN-VN	\$39.00
BLN-VR	\$57.00
BLN-VD	\$57.00

Transformer Type



BLT
Requires
2 Contact Spaces

Transformer, 50/60 Hz, screw connection

110-120V/6V with 6V 1.2W BA 9s bulb

220-250V/6V with 6V 1.2W BA 9s bulb

380V/6V with 6V 1.2W BA 9s bulb

415-440V/6V with 6V 1.2W BA 9s bulb

480-500V/6V with 6V 1.2W BA 9s bulb

BLT-VJ	\$53.00
BLT-VN	\$53.00
BLT-VU	\$53.00
BLT-VW	\$53.00
BLT-VY	\$53.00

Flashing Light



BLM
Requires
3 Contact Spaces

Flashing Light

24V AC/DC with 24V 2W BA 9s bulb

with transformer, 50/60 Hz, screw connection

110-120V/6V with 6V 0.6W BA 9s bulb

220-250V/6V with 6V 0.6W BA 9s bulb

380V /6V with 6V 0.6W BA 9s bulb

415-440V/6V with 6V 0.6W BA 9s bulb

480-500V/6V with 6V 0.6W BA 9s bulb

BLM-VD	\$56.00
BTM-VJ	\$88.00
BTM-VN	\$88.00
BTM-VU	\$88.00
BTM-VW	\$88.00
BTM-VY	\$88.00

BULBS - BA-9

Filament Type



Rated Voltage	Catalog No.	List
6V / 0.6W	BA006	\$3.90
6V / 1.5W	BA106	\$3.90
12V / 2W	BA012	\$3.90
24V / 2W	BA024	\$3.90
30V / 2.1W	BA030	\$3.90
48V / 2W	BA048	\$3.90
60V / 1.2W	BA060	\$3.90
130V / 2W	BA130	\$3.90

Neon Type



110V / 0.11W	BA110	\$20.00
220V / 0.33W	BA220	\$20.00

Contact Blocks

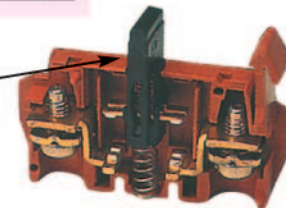


SES, SEU, SEV
Requires
1 Contact Space

	Catalog No.	List
1 NO	SES 10	\$8.50
1 NC	SES 01	\$8.50
2 NO	SEU 20	\$17.00
2 NC	SEU 02	\$17.00
1 NO, 1NC	SEU11	\$17.00
1NC(late Break)	SEV01	\$8.50
1NO(early opening)	SEV10	\$8.50

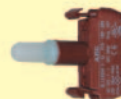
PATENTED SWITCHING FIDELITY!

Double/Parallel movable contacts. -- Plus contact wipe. Patented for Switching Fidelity!



ECONOMICAL

Multi - LED Bulbs (includes integrated socket)



EXTRA BENEFITS

- 100,000 hours
- High Voltage Peak Capability
- Very Bright with Multi LED
- 15 mA low power
- Excellent Resistance & Vibration
- 6 Color Option

LED Bulbs (all for BA9 Switch)

Catalog No. - All BA9 Sockets List

BLL-VND-⊕	24Volt AC/DC	\$34.00
BLL-VNJ-⊕	120Volt AC	\$34.00

⊕	Color Suffix		
-Y	Yellow		
-G	Green	-W	White
-R	Red	-B	Blue

Ultra Bright Hi-Lumen LED's



Hi-Lumen Output LED Bulbs (BA9-Base)

Part No.	Description	LED List
HLR24	Red 24v AC/DC	\$50.00
HLV24	Yellow 24v AC/DC	50.00
HLG24	Green 24v AC/DC	87.00
HLR110	Red 110v AC	50.00
HLV110	Yellow 110v AC	50.00
HLG110	Green 110v AC	87.00

• Part number includes lamp holder.

Discount Schedule B



22mm & 30mm SELECTOR SWITCH OPERATORS

AEG

22mm Selector Switches (Add "B30" - for 30mm size) add \$8.00 List for Polyamide & \$14.00 List for Metal
Example: Round Polyamide B30-BFK-1S \$24.00 List Round Metal B30-BMK-1S \$30.00 List

(Nema 12, 3R, 4X)

**OPERATOR + CONTACT BLOCK = COMPLETE UNIT**

Selector Switch Operators

Series BF22

Series BM22

Round Satin
Metal Shown

Description	Color Type	Round Polyamide Knob Type	List \$	Round Satin Knob Type	List \$
2 Positions Maintained Operator 	Black	BFK-1S	\$16.00	BMK-1S	\$16.00
	Red	BFK-1R	16.00	BMK-1R	16.00
	Green	BFK-1G	16.00	BMK-1G	16.00
	Yellow	BFK-1Y	16.00	BMK-1Y	16.00
	Blue	BFK-1B	16.00	BMK-1B	16.00
3 Positions Maintained Operator 	Black	BFK-3S	\$16.00	BMK-3S	\$16.00
	Red	BFK-3R	16.00	BMK-3R	16.00
	Green	BFK-3G	16.00	BMK-3G	16.00
	Yellow	BFK-3Y	16.00	BMK-3Y	16.00
	Blue	BFK-3B	16.00	BMK-3B	16.00

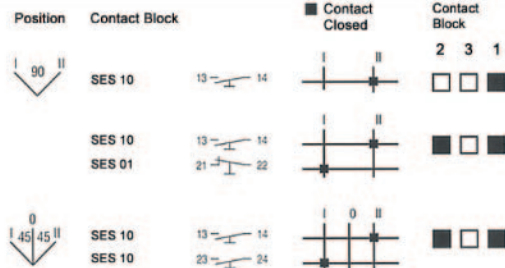
4 and 5 position - next page. See page 164 and 165 for Legend plate options. Contact Blocks & Lamp Sockets on page 156.

ILLUMINATED Selector Switches (Add Lamps + lamp socket, and contact blocks to components below)

Round Polyamide
Shown

Description	Color Type	Round Polyamide	List \$	Round Metal	List \$
2 Positions Maintained Operator 	Red	BFL-2R	\$20.60	BML-2R	\$20.60
	Green	BFL-2G	20.60	BML-2G	20.60
	Yellow	BFL-2Y	20.60	BML-2Y	20.60
	Blue	BFL-2B	20.60	BML-2B	20.60
	White	BFL-2W	20.60	BML-2W	20.60
	Clear	BFL-2C	20.60	BML-2C	20.60
3 Positions Maintained Operator 	Red	BFL-3R	\$20.60	BML-3R	\$20.60
	Green	BFL-3G	20.60	BML-3G	20.60
	Yellow	BFL-3Y	20.60	BML-3Y	20.60
	Blue	BFL-3B	20.60	BML-3B	20.60
	White	BFL-3W	20.60	BML-3W	20.60
	Clear	BFL-3C	20.60	BML-3C	20.60

CONTACT SELECTION



NOTE: Contact Selection - Other Options

A broad selection of contact switch targets is available through 5 position. Request fax from EEControls.



Long Lever Module

In Black as shown

Substitute "L" in place of "S" in 2 to 5 position selector switch. Available in Black only.

Example: BFK-1S change to BFK-1L
Same list price.

Joystick Operator - All Momentary Operation

Round Polyamide

3 Position #BFN 2T \$84.00 LIST
5 Position #BFN 4T \$114.00 LIST

Round Metal

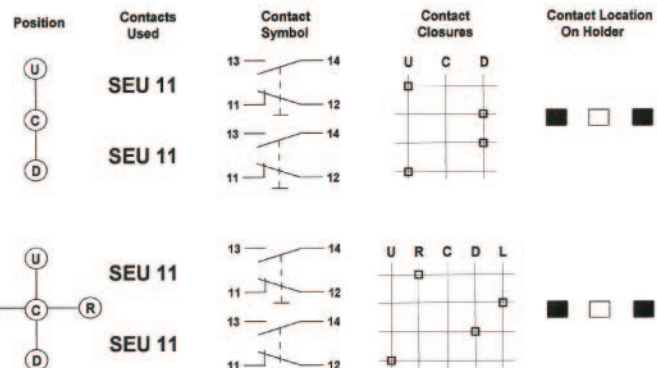
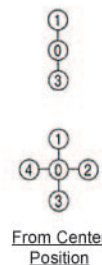
3 Position #BMN 2T \$84.00 LIST
5 Position #BMN 4T \$114.00 LIST

Add standard Contact Block #SEU-11 \$17.00 List

2 SEU-11 contact blocks are required per Joystick operator.
Other Joystick Operators available with maintained Operators.

Replace T in part number with "F" same price.

Example: BMN-4F (maintaine)





22mm & 30mm "ROUND" SPECIAL SELECTOR & KEY OPERATORS

AEG

22mm Selector Switches (Add "B30" - for 30mm size)

Add \$8.00 List for Polyamide & \$14.00 List for Metal

Example: Round Polyamide B30-BFK-1* \$24.00 Round Metal B30-BMK-1* \$30.00

(Nema 12, 3R, 4X)



Multi position & Spring Return Operators

TO 5 POSITIONS

Maintained Operators

Selection of Knob Positions	Round Polyamide	Round Metal
	BFK1-* \$16.00 List	BMK1-* \$16.00 List
	BFK3-* \$16.00 List	BMK3-* \$16.00 List
	BFK7-* \$24.00 List	BMK7-* \$25.00 List
	BFK8-* \$33.00 List	BMK8-* \$33.00 List

* Add Color

-S Black
-R Red
-G Green
-Y Yellow
-B Blue



Spring Return Operator

	BFK2-* \$18.00 List	BMK2-* \$18.00 List
	BFK6-* \$18.00 List	BMK6-* \$18.00 List
	BFK5-* \$20.00 List	BMK5-* \$20.00 List
	BFK4-* \$20.00 List	BMK4-* \$20.00 List



LONG LEVER MODULE

(Available in Black only)

22mm Key Operated Selector Switches

(Add "B30" - for 30mm size)

Add \$8.00 List for Polyamide & \$14.00 List for Metal

Example: B30-BFS-OT \$74.50

Available in Round Polyamide or Round Metal

Momentary Key Selectors



Key Operated
Spring Return
2 Positions



BFS-OT
\$66.50 List



Key Operated
Spring Return
3 Positions



BFS-OS
\$61.00 List



BFS-4R
\$61.00 List



BFS-2S
\$61.00 List



BFS-2P
\$61.00 List



BFS-2R
\$61.00 List

All PN's are Round Polyamide.
For Round Metal,

change BF to BM in catalog number.
Add \$3.00 List.

Key Removable Position

All Keys code #95.
Special Keys available at
extra cost.

Maintained Key Selectors



Key Operated
Maintained
2 Position



BFS-OK
\$48.00 List



BFS-OA
\$48.00 List



BFS-OE
\$48.00 List



Key Operated
Maintained
3 Position



BFS-OM
\$58.00 List



Selector Switch
Key Operated
4 Positions
Maintained



BFS-1V
\$72.00 List

CONTACT SELECTION

Position	Contact Block	Contact Closed	Contact Block
	SES 10		2 3 1
	SES 10 SES 01		
	SES 10 SES 10		

Note: Many other selector switch contact codes are available.
See page 179 for contact target table.

*ALL Operators on this page are available as
(30mm) full size design.

- Add B30- to part number and add
\$8.00 List for polyamide & \$14.00 List for metal.

Example P/N: B30-BFS-OT (polyamide) \$74.50 List
B30-BMS-OT (metal) \$83.50 List

For contact block requirements and target
table specifications, see page 166.
Other options available.

Contact EEControls technical department.



(22mm) SERIES BS22 SQUARE OPERATORS

AEG

Square Operators (Add Contact Blocks for complete unit)



Flush Design
Shown

Color	Square Design Flush Type Catalog No.	List \$	Square Design Extended Type Catalog No.	List \$
Black	BSD-GS	\$9.40	BSD-SS	\$9.40
Red	BSD-GR	9.40	BSD-SR	9.40
Green	BSD-GG	9.40	BSD-SG	9.40
Yellow	BSD-GY	9.40	BSD-SY	9.40
Blue	BSD-GB	9.40	BSD-SB	9.40
White	BSD-GW	9.40	BSD-SW	9.40

Illuminated Square Pushbutton (marking can be added to diffuser, page 164)

**See page 164 and 165 for Legend plate options.
Contact Blocks & Lamp Sockets on page 156.**

Add pilot light Socket and Contact Block for complete Illuminated Pushbutton. Page 156



Extended Design
Shown

Color	BSL-GS	List \$	BSL-SS	List \$
Black	BSL-GS	\$13.00	BSL-SS	\$13.00
Red	BSL-GR	13.00	BSL-SR	13.00
Green	BSL-GG	13.00	BSL-SG	13.00
Yellow	BSL-GY	13.00	BSL-SY	13.00
Blue	BSL-GB	13.00	BSL-SB	13.00
White	BSL-GW	13.00	BSL-SW	13.00

Square Pilot Light (Extended Type) (marking can be added to diffuser, page 164)

Pilot Lights suitable for labeling Add pilot light Lamp Socket for complete Pilot Light.



Color	BSL-MR	List \$
Red	BSL-MR	\$10.00
Green	BSL-MG	10.00
Yellow	BSL-MY	10.00
Blue	BSL-MB	10.00
White	BSL-MW	10.00
Clear	BSL-MC	10.00

Contact Blocks



1 Pole



2 Pole

	Catalog No.	List
1 NO	SES 10	\$8.50
1 NC	SES 01	\$8.50
2 NO	SEU 20	\$17.00
2 NC	SEU 02	\$17.00
1 NO, 1NC	SEU 11	\$17.00
1NC(late Break)	SEV01	\$8.50
1NO(early opening)	SEV10	\$8.50

Square Mushroom Operator (30x30mm)

(Add Contact Block for complete unit.)



Color	BSP-3S	List \$
Black Momentary	BSP-3S	\$21.00
Red Momentary	BSP-3R	21.00
Green Momentary	BSP-3G	21.00
Yellow Momentary	BSP-3Y	21.00

Pilot Light Lamp Sockets

Full Voltage to 130V	BLN-VO**	\$12.00	**Add Bulb (max 380V 2 watt)
Series Resistor 208/230	BLN-VN▲	39.00	BA006 6V/0.6W \$3.90 List BA106 6V/1.5W \$3.90
Reduced from 208/230 to 110/130V			
Transformer Type	BLT-VJ*	\$53.00	BA024 24V/2W \$3.90
	120 to 6V		
	BLT-VN*	53.00	BA048 48V/2W \$3.90
	220 to 6V		
	BLT-VU*	53.00	BA130 130V/2W \$3.90
	380 to 6V		

* Includes Bulb 1.2W max (6V) Name Plates on page 165.
▲ Includes Bulb BA 130V (2W)

Illuminated Square Mushroom Operator

Add Pilot Light, Socket and Contact Block for complete unit.



Color	BSL-PR	List \$
Red	BSL-PR	\$29.50
Green	BSL-PG	29.50
Yellow	BSL-PY	29.50
Blue	BSL-PB	29.50
White	BSL-PW	29.50
Clear	BSL-PC	29.50

Mushroom Operator Per EN418 Safety Standard (-418)

(Round Mushroom)



Color	BSP-RA-418*	List \$
Red Maintained (twist to release)	BSP-RA-418*	\$48.00
(pull to release)	BSP-RN*	30.20
Red Maintained (key release)	BSP-RS-418*	61.00

* To satisfy selected safety requirements, 2 NC fixed contacts are required.
Add "-02FIX" to part number. Add \$17.00 List.

Multi - LED Bulbs (with integrated socket)

LED Bulbs (all for BA9 Switch)

Catalog No. - All BA9 Sockets

Catalog No.	24Volt AC/DC	List
BLL-VND-☉	24Volt AC/DC	\$34.00
BLL-VNJ-☉	120Volt AC	\$34.00

☉	Color Suffix
-Y	Yellow
-G	Green
-R	Red
-O	Orange
-W	White
-B	Blue

AC voltages available:
24, 110, 230Volt

EXTRA BENEFITS

- 100,000 hours
- High Voltage Peak Capability
- Very Bright with Multi LED
- 15 mA low power
- Excellent Resistance & Vibration
- 6 Color Option

Discount Schedule B

Square Selector Switch Operators Series BS22



Maintained Operator

Knob Type Options	Square Polyamide
	BSK1-2 \$16.00 List
	BSK3-2 \$16.00 List
	BSK7-2 \$25.00 List
	BSK8-2 \$33.00 List

Spring Return Operator

	BSK2-2 \$21.00 List
	BSK6-2 \$21.00 List
	BSK5-2 \$21.00 List
	BSK4-2 \$21.00 List

Key Operated Selector Switch



3 Position

	BSS-OS \$71.00 List
	BSS-4R \$71.00 List
	BSS-2S \$71.00 List

Illuminated Selector Switches (Square Design)



2 Position
BSL-2
\$30.00 List

3 Position
BSL-3
\$32.00 List

Add Illuminated Knob Color

-R Red	-W White
-G Green	-B Blue
-Y Yellow	
-C Transparent	

Key Operated Selector Switches (Square Design)

Selector Switch with Key 2 Position Maintained



	BSS-OK \$55.00 List
	BSS-OA \$55.00 List
	BSS-OE \$55.00 List

Selector Switch with Key 3 Position Maintained



Selector Switch with Key 4 Position Maintained



BSS-1V
\$78.00 List

Key Operated Spring Return



BSS-OT
\$71.00 List

Key Removable Position. All keys code 95. Special keys available at extra cost.

CONTACT SELECTION

Position	Contact Block	Contact Closed	Contact Block
	SES 10		2 3 1
	SES 10		2 3 1
	SES 01		2 3 1
	SES 10		2 3 1
	SES 10		2 3 1

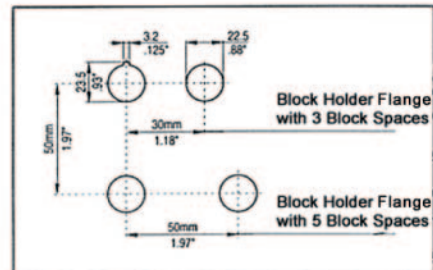
SELECTOR SWITCHES KEY SWITCHES

MANY other versions and contact cam selections are available. Request fax options from EEControls.

Discount Schedule B

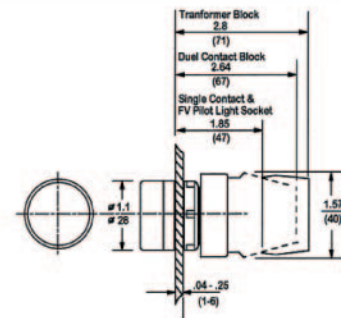
DIMENSIONS-All Round or Square Operators

Spacing Panels 1-6mm thick (0.24") B22



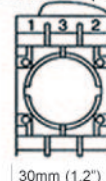
NOTE: This spacing complies with international standard CENELEC EN 50007.

Contact Block Dimensions

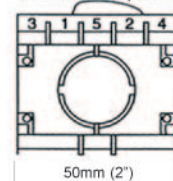


Contact Block Holder

contact block position



contact block position



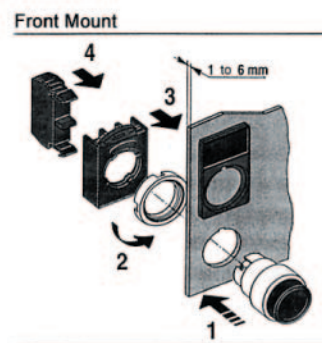
Contact Block Holder with 3 spaces. This standard holder is supplied with all operators at no charge. **Six poles max. 4 poles max with Lamp Socket.**

BTF C3 \$3.50

If additional Contact Block spaces are required, the 5 space block is required. **Pushbuttons 10 poles max. Illuminated Pushbuttons 8 poles max.**

BTF C5 \$5.00

Mounting Data



TWIN PUSHBUTTONS

Includes contact block holder

	Description	Part#	List
	Green-Red I/O Symbol	BSD-L01	\$25
	• With contacts added	BSD-L01-11	\$42
	Description	Part#	List
	Green-Red Extended Red I/O Symbol	BSD-R01	\$25
	• With contacts added	BSD-R01-11	\$42

	Description	Part#	List
	Green-Red Flush buttons No Symbol	BSD-L00	\$24
	• With contacts added	BSD-L00-11	\$41
	Description	Part#	List
	Green-Red Extended Red No Symbol	BSD-R00	\$24
	• With contacts added	BSD-R00-11	\$41

Twin operators are NEMA 1 type as "standard" to use in NEMA 12, 3R, 4X applications "add" boot on accessory page 166.

• Units that have "with added contacts" include 1 NO and 1 NC Contact.

-For applications requiring pilot light, add pilot light holder and bulb from page 156.



**Potentiometer
Operator
"ONLY"**

Description	Part#	List
Round Polyamide	BFU-PZ	\$70
Round Metal	BMU-PZ	\$70
Square Polyamide	BSU-PZ	\$70

Potentiometer Element - Part #PTM* - Add \$50.00 List

Single turn (2 watt) commercial element. Select from the following OHM suffixes.

*- 2.5K To make a complete assembly, add appropriate suffix to potentiometer operator part number.
*- 5K
*- 10K

Example:
BFU-PZ-PTM2.5K Assembled List \$110.00

For precision 3, 5 or 10 turn wirewound pots, check with factory.



**Pushbutton
Emergency Lever**

Description	Part#	List
Wobble operator Move any direction to actuate	BFT-WR	\$39
Add 2 contact blocks max. Page 157.		



**Square Toggle
Switch**

Description	Part#	List
2 Positions Maintained	BFX-CD	\$23
3 Positions Maintained	BFX-CB	\$24



***Buzzer**

Description	Part#	List
Round Black 24V AC/DC	BFU-AZ	\$70
110V AC/DC	BFU-BZ	\$71

*Buzzer is IP66 Type 4X Rated (80db@1M)



Description	Part#	List
Round Plastic	BFT-RG	\$22



Description	Part#	List
Round Metal	BMT-RG	\$22



Description	Part#	List
Square Plastic	BST-RG	\$22

Overload Reset Extension:

Resets above are adjustable from 2" to 3^{1/4}". For additional length extension order P/N
*BCV-LR. *(Extension adjustable up to 6^{3/4}")

Part#	List
*BCV-LR	\$10

Discount Schedule B



SERIES B22 CONTROL STATIONS

AEG



LOW COST WATER TIGHT DUST TIGHT

All control stations below, as standard, are **Round Design**. If square is desired, simply place a "S" at the end of the part number.
Example: B22-S4-101S (same list)

B22-S4-201-S \$63.00 List

Start-Stop Non Metal PVC (UL 4X)

DESCRIPTION

Type S4 Enclosures are Non Metal PVC fully gasketed against dust and hose pressure water tight. (International Rating: IP 66 and UL 4X)

Type S4X Enclosures are UL and CSA - Fiberglass Reinforced Polyester and are fully gasketed & hose pressure water tight.

Type M4/12 are cast metal and meet NEMA 12/4 standards.
Series B22mm Operators are Metal Nema 4/12.

ELECTRICAL RATINGS

All buttons supplied are heavy duty oil dust tight, Type 4(water tight) and Type 12/13. Each is 600 Volt, 10 Amp UL, CSA,

Button Size: Part number example: B22S4-101	B22-S4 PVC LIST	B22-S4X Polyester LIST	B22-M 4/12 Cast Aluminum B22-M4/12 LIST
ONE BUTTON			
Start	-101 \$39.00	-101 \$106.00	-101 \$62.00
Stop	-102 39.00	-102 106.00	-102 62.00
Stop (Maintained Mushroom Button) (push pull)	-104 55.00	-104 122.00	-104 78.50
Stop (Maintained Mushroom Button) per EN 418	-114 -418 64.00	-114 -418 129.00	-114 -418 87.00
Stop (Momentary Mushroom Button)	-104MO 48.00	-104MO 113.00	-104MO 71.00
Jog	-105 39.00	-105 106.00	-105 62.00
Off-On (Selector Switch)	-106 46.00	-106 112.00	-106 68.00
Open-Close (Selector Switch)	-107 46.00	-107 112.00	-107 68.00
For-Rev. (Selector Switch)	-108 54.00	-108 119.00	-108 77.00
Hand-Off-Auto (Selector Switch)	-109 54.00	-109 119.00	-109 77.00
Man.-Auto (Selector Switch)	-110 54.00	-110 119.00	-110 77.00
Red Pilot Light: Resistor Type 240V 60Hz	-112 60.00	-112 127.00	-112 83.00
Red Pilot Light: Full Voltage Type			
120V AC or DC	-113 44.00	-113 111.00	-113 67.00
Enclosure Only with 7/8" Drilling	S4-405-M1 19.00	S4X-M1 86.00	BMD-G1 42.00
TWO BUTTON			
Start-Stop	-201 66.00	-201 127.00	-201 84.00
On-Off	-202 66.00	-202 127.00	-202 84.00
For-Rev.	-203 66.00	-203 127.00	-203 84.00
Up-Down	-204 66.00	-204 127.00	-204 84.00
Open-Close	-205 66.00	-205 127.00	-205 84.00
High-Low	-206 66.00	-206 127.00	-206 84.00
Red Pilot Light, 1 Button:			
120V	-208 73.00	-208 130.00	-208 94.00
240V	-209 91.00	-209 148.00	-209 94.00
Enclosure Only with 7/8" Drilling	S4-406-M2 27.00	S4X-M2 87.00	BMD-G2 47.00
THREE BUTTON			
Start-Jog-Stop	-301 109.00	-301 153.00	-301 106.00
Open-Close-Stop	-302 109.00	-302 153.00	-302 106.00
Up-Down-Stop	-303 109.00	-303 153.00	-303 106.00
For-Rev.-Stop	-304 109.00	-304 153.00	-304 106.00
High-Low-Stop	-305 109.00	-305 153.00	-305 106.00
Up-Down-Run	-306 109.00	-306 153.00	-306 106.00
Red Pilot Light and 2 Buttons:			
(Start-Stop)			
120V AC or DC	-307 112.00	-307 156.00	-307 112.00
240V AC or DC	-308 130.00	-308 174.00	-308 112.00
Enclosure Only with 7/8" Drilling	S4-408-M3 42.00	S4X-M3 93.00	BMD-G3 57.00

UL (4X) ENCLOSURES IP 66
Industrial enclosures

(FIELD PB MOUNTING) WEATHERPROOF AND HOSEPROOF
Junction Boxes/Pushbuttons Enclosures/ Terminal Boxes/Controls Enclosures

UL 4X

ENCLOSURES ONLY (22mm) 7/8" Standard Drilling or Optional (30mm) 1^{13/64}"



S4-406-M2 Enclosure

# Holes xx	Scarlet S4 (PVC) Cat. No.	List	H	W	D*	Fiberglass (4X) Catalog No.	List	Dimensions (Inches) H W D*
1	S4-405-M1	\$19.00	4.1	4.1	2.2			
1	S4-406-M1	26.00	4.9	3.2	2.6	B22-S4X-M1	\$86.00	7 4 3
2	S4-406-M2	27.00	4.9	3.2	2.6	B22-S4X-M2	87.00	7 4 3
3	S4-408-M3	42.00	6.9	4.1	3.2	B22-S4X-M3	93.00	9 4 3
4	S4-410-M4	43.00	6.9	5.9	3.2	B22-S4X-M4	94.00	9 4 3
6	S4-410-M6	45.00	6.9	5.9	3.2	B22-S4X-M6	98.00	6 6 4
8	S4-414-M8	66.00	8.7	6.9	4.7	B22-S4X-M8	108.00	10 8 4
12	S4-372-M12	110.00	11.1	8.7	4.3	B22-S4X-M12	112.00	10 8 4

* Above enclosures are drilled for (22mm) 7/8" operators. For drillings to be (30mm) 1^{13/64}" full size, change "M" to "S" in part number (same price). **Example: S4-405-S1 \$19.00 List**

Discount Schedule B



AEG PUSHBUTTON ACCESSORIES

AEG

ACCESSORIES



**Boot for Round
Flush Pushbuttons**

Description	Catalog No.	List
Black	<u>BGC-PS</u>	\$6.00
Red	<u>BGC-PR</u>	6.00
Green	<u>BGC-PG</u>	6.00
Yellow	<u>BGC-PY</u>	6.00
Transparent	<u>BGC-PT</u>	6.00

**Boot for Extended
Round Pushbuttons**

Transparent	<u>BGA-PT</u>	\$6.00
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**Boot for Square
Flush Pushbuttons**

Black	<u>BSC-PS</u>	\$6.00
Red	<u>BSC-PR</u>	6.00
Green	<u>BSC-PG</u>	6.00
Yellow	<u>BSC-PY</u>	6.00
Transparent	<u>BSC-PT</u>	6.00

**Boot for Square
Extended Pushbuttons**

Transparent	<u>BSA-PT</u>	\$6.00
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Adaptor

Converts any "Round" Black or
Satin Chrome 22mm operator into
a NEMA 12, 4 30mm Operator.

Round Polyamide	<u>BCR-AX</u>	\$8.00
Metal	<u>BCR-AM</u>	\$8.00



**22mm
Plugs**

Round	<u>BRH-PR</u>	\$5.50
Square	<u>BSH-P3</u>	6.50



**3 Space Contact
Block Holder**

Block for up to 6 contacts	<u>BTF-C3</u>	\$3.50
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**5 Space Contact
Block Holder**

Block for up to 10 contacts	<u>BTF-C5</u>	\$5.00
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Description	Catalog No.	List
Padlockable Cover (for P.B., P.L., Selector Switches (22mm only))	<u>BCR-CL</u>	\$19.50



**Spare
Keys**

Code 3095 Standard	<u>BSE-95</u>	\$5.00
Code 9901 Key Options	<u>BSE-01</u>	9.00
Code 9902	<u>BSE-02</u>	9.00
Code 9903	<u>BSE-03</u>	9.00



Mushroom Head Guard Ring (40mm) For use on 40mm Momentary Mushroom	<u>BCF-S3</u>	\$11.00
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Adaptor, Converts Round to Square (30 x 30mm)	<u>BCR-SN</u>	\$2.50
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Push-Push Adaptor for PB's & Illum. PB's. Use only with 1 pole N.O. Contacts early close #SEV-10V (30 x 30mm)	<u>BCD-PP</u>	\$30.00
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P.B. Extended Screw Increases reset extension to 6 ³ / ₄ "	<u>BCV-LR</u>	\$10.00
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Insert For Center Contact Operation (On pushbuttons non-illuminated)	<u>BSH-AC</u>	\$8.50
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Tool-Locking Wrench For pushbutton/selector mounting nut	<u>BCW-AF</u>	\$13.00
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Bulb Extractor (For BA9 bulbs)	<u>BCW-AL</u>	\$4.50
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P.B. Cap Extractor	<u>BCW-AG</u>	\$8.50
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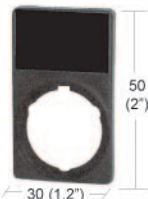
Twin "Flush" Pushbutton Boot	<u>BSC-DT</u>	\$7.00
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Twin "Extended" Pushbutton Boot	<u>BSC-XT</u>	\$7.50
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Discount Schedule B

Plate Holder - Standard (Supplied with Blank Insert for Marking)



STANDARD (For Round Operators)
#BZS-T1
 30 x 50 mm (1.2" x 2") **\$1.60 List Each**

STANDARD (For Square Operators)
#BZS-T3
 30 x 50 mm (1.2" x 2") **\$1.60 List Each**

Includes Blank Plate Insert (Reversible sides Black & Red)

Extra Blank Engravable Insert for Plate Holder **#BZS-T1**,
 and **BZS-T3**. Reversible, Black-Red. **#BZS-OB \$0.50 List**
 27 x 16 mm (1" x 0.6") Blank Insert
 \$0.50 List adder for standard engraving

Plate Holder - Enlarged



ENLARGED (For Round Operators)
#BZS-T2
 45 x 50 mm (1.8" x 2") **\$2.40 List Each**
 Includes Blank Plate insert (Reversible Black-Red)
 \$0.50 List adder for standard engraving

EXTRA BLANK INSERT FOR ABOVE

#BZS-UB
 42 x 16 mm (1.7" x 0.6") **\$1.20 List Each**
 Enlarged Holder (Reversible Black-Red)
 Insert Dimension
 \$0.50 List adder for standard engraving

"B22" Series Name Plates

(See page 165 for engraved nameplates)



Type BZ-U
 Black Finish
 (1^{5/8}" H x 1^{3/4}" W) **Blank \$2.60 List**
Engraved BZ-U-* \$3.10 List



Type BZ-AB
 Aluminum Finish
 (2^{7/16}" H x 2^{7/16}" W) **Blank \$5.00 List**
Engraved BZ-AB-* \$5.50 List

*- Suffix for engraving on page 165.

"B30" Series Name Plates (See page 165 for engraved nameplates)



B30-BZ-U
 H W
 1.77" 1.57"
 List \$2.60



B30-BZ-UL
 H W
 2.05" 1.81"
 List \$3.60



B30-BZ-AB
 2^{7/16}" Square
 List \$5.00



B30-BZ-AU
 2^{7/16}" Square
 List \$5.00

Pushbutton Operator Caps



Pushbutton Operators
 without Operator Cap

Round Polyamide
#BFD-GO \$8.40 LIST
Round Metal
#BMD-GO \$8.60 LIST
Square Operator
#BSD-GO \$8.60 LIST

Marking / Caps
 black / red

	For Round Pushbuttons		For Square Pushbuttons		List Each
	with flush or recessed cap	for round with extended cap	with flush or recessed cap	with extended cap	
 Blue	BAL-37				\$1.00
 Red	BAR-36				1.00
 Black	BAS-30	BCS-30	BES-30	BNS-30	1.00
 Green	BAG-30	BCG-30	BEG-30	BNG-30	1.00
 Red	BAR-21	BCR-21	BER-21	BNR-21	1.00
 Black	BAS-22	BCS-22	BES-22	BNS-22	1.00
 Green	BAG-22	BCG-22	BEG-22	BNG-22	1.00
Black	BRB-GS	BRB-SS	BSB-GS	BSB-SS	1.00
Red	BRB-GR	BRB-SR	BSB-GR	BSB-SR	1.00
Green	BRB-GG	BRB-SG	BSB-GG	BSB-SG	1.00
Yellow	BRB-GY	BRB-SY	BSB-GY	BSB-SY	1.00
Blue	BRB-GB	BRB-SB	BSB-GB	BSB-SB	1.00
White	BRB-GW	BRB-SW	BSB-GW	BSB-SW	1.00
Gray	BSB-GU	-	-	-	1.00

All dimensions approx.

Typical
 Pushbutton
 Caps



Diffuser Marking on Pilot Lights & Illuminated Pushbuttons



Note: International Symbols.
 Available on request, \$4.00 List.
 Minimum order quantity 10.
 Special Marking on
 Diffuser, \$5.50 List.

Diffuser Standard Markings	Diffuser for Round		Diffuser for Square	List Each
	Pilot Lights	Illuminated Pushbuttons	Pilot lights and Illuminated Pushbuttons	
Blank	BRF-LS	BRF-PL	BPE-KL	\$1.50
	BRL-41	BRU-41	BWL-41	4.00
	BRL-42	BRU-42	BWU-42	4.00
	BRL-06	BRU-06	BWU-06	4.00
	BRL-12	BRU-12	BWU-12	3.00

Maximum Characters
 including 2 Lines.



See next page for standard engraved nameplates.



Typical Diffusers
 with markings.



22mm & 30mm ENGRAVED "STANDARD" NAMEPLATES

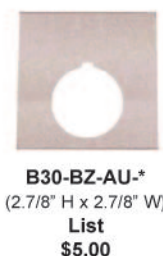
AEG

"Standard" Legend Markings

"B22" Series



"B30" Series



Below engraved suffixes are considered "standard" engraved markings.
Order Example: BZ-U-19 - BZ-U legend with "Auto" engraved \$3.10 List

For special nameplates, submit by fax a legend layout based on the maximum letters shown. Two lines maximum.

Description	*Suffix	Description	*Suffix
Auto	-19	Lower-Raise	-85
Auto-Off-Man	-58	Man-Off-Auto	-69
Close	-05	Motor-Run	-87
Close-Off-Open	-00	Off	-13
Close-Open	-35	Off-On	-33
Down	-03	On	-12
Down-Up	-36	On-Off	-88
Emergency Stop	-29	Open	-06
Fast	-08	Open-Close	-34
Fast-Off-Slow	-60	Power On	-40
Fast-Slow	-84	Raise	-16
Forward	-14	Raise-Lower	-49
For-Off-Rev	-39	Reset	-91
For-Rev	-31	Reverse	-15
Hand	-20	Run	-11
Hand-Off-Auto	-61	Slow	-07
High	-21	Slow-Off-Fast	-71
High-Low	-47	Start	-02
High-Off-Low	-38	Stop (Red Insert)	-01
Inch	-09	Test	-25
Jog	-10	Up	-04
Left	-22	Up-Down	-56
Low	-23	Up-Off-Down	-89
Lower	-17	Auto / Man	-46
Lower-Off-Raise	-68	Test-Off-Auto	-28
		Run-Jog	-63

"Special" Legend Markings

Special Marking Nameplates \$6.80

Choose your desired nameplate and check chart below for maximum letters or numbers allowable. Two lines max. Please fax in layout of text for accuracy. Example Part#: BZ-AU-*

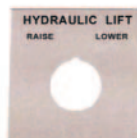
(B22 Type)

BZS-T1 or T3*	(12)
BZS-T2*	(14)
BZ-U*	(14)
BZ-AU*	(18)

(B30 Type)

B30-BZ-U*	(14)
B30-BZ-UL*	(16)
B30-BZ-AB*	(18)
B30-BZ-AU*	(18)

* Layout



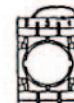


SELECTOR SWITCHES TARGET TABLE

AEG

Target Table Reference: (How to use this chart)

- Step 1) Locate your part number. This will designate the selectors abilities as far as how many positions there are, cam used and color.
- Step 2) What position do you want your contacts to actuate and how many contacts need to actuate? Look at the "Contact Closure Chart". The "DOT" on the chart indicates in what positions the contacts will make in that position.
- Step 3) After choosing the chart desired, look to the left under "Contacts Used". These are the contacts that you need to use in order to get the closures shown. Then look at the "Contact Location on Holder". The black square indicates where the contact block must be.



Selector Switch Part Number	Positions	CAM	Contacts Use	Contact Symbol	Contact Closures	Contact location on holder
BFK1-S,R,G,Y,B (polyamide) BMK1-S,R,G,Y,B (metal) BMK1-L (with lever) (metal)		D	SES10			
		D	SES10 SES01	 		
		D	SEU11	 		
BFK3-S,R,G,Y,B BMK3-S,R,G,Y,B BMK3-L		B	SES10 SES10	 		
BFKE3-S,R,G,Y,B BMKE-S,R,G,Y,B BMKE3-L		E	SEU11	 		
BFKL3-S,R,G,Y,B BMKL3-S,R,G,Y,B BMKL3-L		L	SEU11	 		
BFKU3-S,R,G,Y,B BMKU3-S,R,G,Y,B BMKU3-L		U	SEU11 SEU11	   		
BFK3-S,R,G,Y,B BMK3-S BMK3-L		Z	SEU11 SEU11	   		
		Z	SES10 SES01	 		
BFK7-S,R,G,Y,B BMK7-S,R,G,Y,B BMK7-L		X	SEU11 SEU11	   		
BFK8-S,R,G,Y,B BMK8-S,R,G,Y,B BMK9-L		Y	SEU11 SEU11	   		
BFKW8-S,R,G,Y,B BMKW8-S,R,G,Y,B BMKW9-L		W	SEU11 SEU11	   		

(Above selectors are stock 2-3 days).

BROADEST CHOICE 22mm and 30mm OPERATORS

22mm



MARKINGS ON PLATES



30mm



MARKINGS ON INSERTS (Diffusers)

Pilot Lights

Illuminated Pushbuttons



EMERGENCY STOP STATIONS (RED-MAINTAINED OPERATORS)



Per EN418- (Twist Release)

-S4 (4X) NEMA 4X

B22-S4-114

\$64.00 LIST

B22-S4-114-FIX*

\$72.50 LIST

Standard Operator

(Push-Pull - Non-EN418)

B22-S4-104 \$55.00 LIST

Polycarbonate & PVC



Per EN418- (Twist Release)

-S4X NEMA 4X

B22-S4X-114-418

\$129.00 LIST

B22-S4X-114-FIX*

\$137.50 LIST

Standard Operator

(Push-Pull - Non-EN418)

B22-S4X-104 \$122.00 LIST

Glass Polyester (Heavy Duty)

(22mm) / (30mm) EMERGENCY STOP COMPLETE OPERATOR

(22mm)



NEMA 4/4X,13,12

#BMP-RZ-01-ES

(Push Pull)

(1NC) \$47.00 LIST

#BFP-RA-01-ES (EN418)

(Twist to Release)

(1NC) \$57.00 LIST

#BFP-RN-02-ES

(Twist to Release)

(2NC) \$65.00 LIST

(30mm)



NEMA 4/4X,13,12

#B30-BMP-RZ-01-ES

(Push Pull)

(1NC) \$54.50 LIST

#B30-BFP-RA-01-ES (EN418)

(Twist to Release)

(1NC) \$65.50 LIST

#B30-BFP-RN-02-ES

(Twist to Release)

(2NC) \$73.50 LIST

COMPACT -- ENCLOSURES



Meets EN418
Standard

Maintained
Twist Release
Operator

NEMA 4

#B22-SC1-50D

\$84.00 LIST



Per EN418- (Twist Release)

-M4/12 NEMA 12, 4, 3

B22-M4/12-114-418

\$87.00 LIST

B22-M4/12-114-FIX*

\$95.50 LIST

Standard Operator

(Push-Pull - Non-EN418)

B22-M4/12-104

\$78.50 LIST

Cast Aluminum (Heavy Duty)

SAFETY CODES

RECENT selected **SAFETY CODES (IEC 947.5) (EN 418)** require positive opening of the NC Contacts. Also the EMERGENCY STOP BUTTON latches into the MAINTAINED POSITION as soon as the contacts open.

ADDITIONALLY, certain **Safety Circuits** require redundancy on the NC contact circuit. 2 NC poles required.

* "FIX". Above Emergency Operators per **EN418** with suffix - "FIX" are supplied with 2 NC poles. Block Holder to supply