

Empty enclosures

Version	Number of command points	Degree of protection	Order No.①	Pack Unit
Standard enclosures come with 2 1/4" leg center for legend spacing. Automotive end plates require 2 1/2 " spacing. For more than 2 contact blocks on the right or left, use extra deep enclosure.	1	NEMA Type 12/13	P30EMS01	
	1	NEMA Type 12/13 extra deep	P30EMS01D	
	1	NEMA Type 4/4X stainless steel	P30EMS014	
	1	NEMA Type 4/4X Fiberglass	P30EMS01X	
Mounting hole arrangement	2	NEMA Type 12/13	P30EMS02	
	2	NEMA Type 12/13 extra deep	P30EMS02D	
	2	NEMA Type 4/4X stainless steel	P30EMS024	
	2	NEMA Type 4/4X Fiberglass	P30EMS02X	
1 thru 4 are in one row	3	NEMA Type 12/13	P30EMS03	
6 holes are 3 down and 2 across	3	NEMA Type 12/13 extra deep	P30EMS03D	
9 holes are 3 down and 3 across	3	NEMA Type 4/4X stainless steel	P30EMS034	
12 holes are 4 down and 3 across	3	NEMA Type 4/4X Fiberglass	P30EMS03X	
16 holes are 4 down and 4 across	4	NEMA Type 12/13	P30EMS04	
	4	NEMA Type 12/13 extra deep	P30EMS04D	
	4	NEMA Type 4/4X stainless steel	P30EMS044	
	4	NEMA Type 4/4X Fiberglass	P30EMS04X	
	6	NEMA Type 12/13	P30EMS06	
	6	NEMA Type 12/13 extra deep	P30EMS06D	
	6	NEMA Type 4/4X stainless steel	P30EMS064	
	9	NEMA Type 12/13	P30EMS09	
	9	NEMA Type 12/13 extra deep	P30EMS09D	
	9	NEMA Type 4/4X stainless steel	P30EMS094	
	12	NEMA Type 12/13	P30EMS12	
	12	NEMA Type 12/13 extra deep	P30EMS12D	
	12	NEMA Type 4/4X stainless steel	P30EMS124	
	16	NEMA Type 12/13	P30EMS16	
	16	NEMA Type 12/13 extra deep	P30EMS16D	
	16	NEMA Type 4/4X stainless steel	P30EMS164	

	A	B	C	D
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐

Enclosure Hole Arrangement

To order non-standard control stations select catalog numbers from the previous pages, determine the required position in the enclosure and fill in the table below. If a special legend plate is required, specify description in the table. The combined list prices of the components is the list price of the station.

- Select enclosure
- Vertical or Horizontal. Outline Diagram at left starting at the top left-hand corner. Example: 3 unit vertical outline location No. 1A, 2A and 3A. 3 unit horizontal outline location No. 1A, 1B, and 1C
- List location No. and applicable catalog numbers in the table below. Use complete catalog numbers where possible

Order No./Item No.

Customer

Enclosure Catalog No.

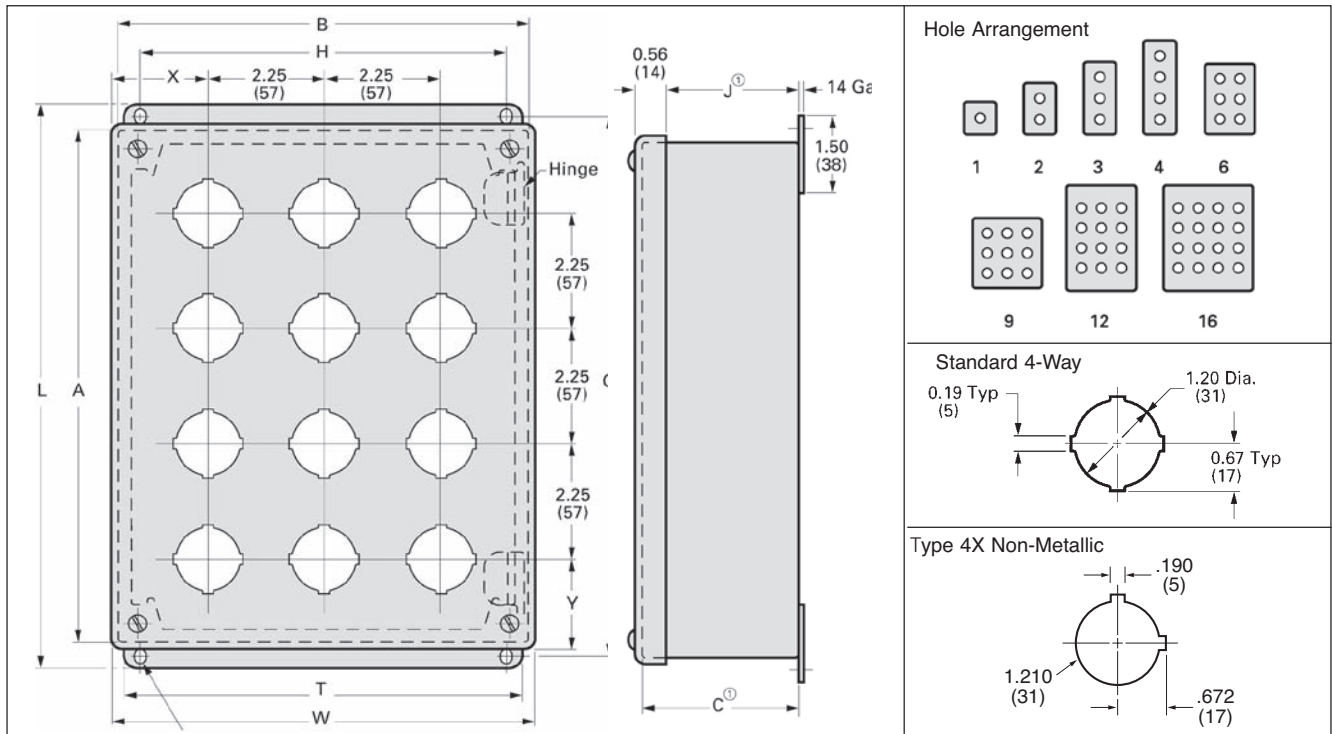
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① NEMA 4X Stainless Steel Enclosure is 304 SS.

Pushbutton Units and Indicator Lights

30mm Heavy Duty, Watertight/Oiltight, Class 52

Dimensional drawings



Type 12/13 and 4X Stainless Steel

Units	Enclosure Size			Mounting		Overall					
	A	B	C	G	H	L	W	J	T	X	Y
1	3.50 (89)	3.25 (83)	2.75 (70)	4.00 (102)	2.38 (60)	4.50 (114)	3.47 (88)	2.31 (59)	3.00 (76)	1.73 (44)	1.86 (47)
2	5.75 (146)	3.25 (83)	2.75 (70)	6.25 (159)	2.38 (60)	6.75 (171)	3.47 (88)	2.31 (59)	3.00 (76)	1.73 (44)	1.86 (47)
3	8.00 (203)	3.25 (83)	2.75 (70)	8.50 (216)	2.38 (60)	9.00 (229)	3.47 (88)	2.31 (59)	3.00 (76)	1.73 (44)	1.86 (47)
4	10.25 (260)	3.25 (83)	2.75 (70)	10.75 (273)	2.38 (60)	11.25 (286)	3.47 (88)	2.31 (59)	3.00 (76)	1.73 (44)	1.86 (47)
6	9.50 (241)	6.25 (159)	3.00 (76)	10.00 (254)	5.38 (137)	10.50 (267)	6.47 (164)	2.56 (65)	6.00 (152)	2.11 (54)	2.61 (66)
9	9.50 (241)	8.50 (216)	3.00 (76)	10.00 (254)	7.62 (194)	10.50 (267)	8.72 (221)	2.56 (65)	8.25 (210)	2.11 (54)	2.61 (66)
12	11.75 (298)	8.50 (216)	3.00 (76)	12.25 (311)	7.62 (194)	12.75 (324)	8.72 (221)	2.56 (65)	8.25 (210)	2.11 (54)	2.61 (66)
16 ²⁾	11.75 (298)	10.75 (273)	3.00 (76)	12.25 (311)	9.88 (251)	12.75 (324)	10.97 (279)	2.56 (65) ²⁾	10.50 (267)	2.11 (54)	2.61 (66)

Type 12/13 Extra Deep Enclosures

Units	Enclosure Size			Mounting		Overall					
	A	B	C	G	H	L	W	J	T	X	Y
1	4.00	4.00	4.75	4.50	3.12	5.00	4.22	4.31	3.75	2.11	2.11
2	6.00	4.00	4.75	6.50	3.12	7.00	4.22	4.31	3.75	2.11	1.98
3	8.00	4.00	4.75	8.50	3.12	9.00	4.22	4.31	3.75	2.11	1.86
4	10.00	4.00	4.75	10.50	3.12	11.00	4.22	4.31	3.75	2.11	1.73
6	9.50	6.25	4.75	10.00	5.38	10.50	6.47	4.31	6.00	2.11	2.61
9	9.50	8.50	4.75	10.00	7.62	10.50	8.72	4.31	8.25	2.11	2.61
12	11.75	8.50	4.75	12.25	7.62	12.75	8.72	4.31	8.25	2.11	2.61
16 ²⁾	11.75	10.75	4.75	12.25	9.88	12.75	10.97	4.31	10.50	2.11	2.61

Type 4X Non-Metallic

Units	Enclosure Size			Mounting		Overall	
	A	B	C	G	H	L	W
1	6.00	3.19	3.63	4.88	2.94	6.63	3.81
2	6.00	3.19	3.63	4.88	2.94	6.63	3.81
3	8.26	3.19	3.63	7.13	2.94	8.88	3.81
4	10.51	3.19	3.63	9.37	2.94	11.13	3.81

All dimensions shown in inches and (millimeters). For reference purposes only. Not to be used for design or construction purposes.

- 1) Grounding stud in body of enclosure.
- 2) For stainless steel add 1.75 (45) to depth.

Standards	UL Listed File # E22655	CSA Certified File # LR6535
Utilization	Category NEMA	A600/P600
Degree of Protection	52B, 52P-, 52S-, 52M- Operators	NEMA: 1, 3, 3R, 4, 4X, 12 and 13 IEC 529; IP10, IP11, IP14, IP52, IP54, IP56 and IP66

Rated Operational Current

NEMA A600 – 10 Continuous Amps			NEMA P600 – Rating Codes for DC Control	
Voltage AC	Make Amps	Break Amps	Circuit Application	
120V	60	6	Thermal Continuous Test Current Amps	5.0
240V	30	3	Maximum Make or Break; Current / Amps	
480V	15	1.5	125V	1.10
600V	12	1.2	250V	0.55
Total VA	7200	720	301-600V	0.20
			Maximum Make or Break	
			Volt amperes at 300V or Less	138

Contact Blocks	52BAK, -BAJ®, -BAH, -BAU, -BJK® 52BAR	600VAC Maximum, Heavy Duty 200VAC .25 Amp, 10 Watt Maximum 200VDC .50 Amp, 10 Watt Maximum
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® Positively driven contacts. Contact blocks are suitable for applications down to 5V/1MA low voltage applications as found in PLCs. 52BAR are Class 1; Division 2 Compliant

Pilot Light	Full Voltage LED Module Transformer Type	52PL4/52PL5 or 52BL4/52BL5	-B (6-8V), -C (12V), -D (24V), -E (120V), -F (240V) -L (24V), -M (120V) -N (240V) -G (120V), -H (240V), -J (480V), -K (600V)	240V AC/DC Max. 240V AC Max. 600V AC Max., 50/60 Hz
Push-to-Test	Full Voltage LED Module Transformer Type	52PT6 or 52BT6	-B (6-8V), -C (12V), -D (24V), -E (120V), -F (240V) -L (24V), -M (120V), -N (240V) -G (120V), -H (240V), -J (480V), -K (600V)	240V AC/DC Max. 240V AC Max. 600VAC Max., 50/60 Hz
Illuminated Push-Pull	Full Voltage LED Module Transformer	52PP2(3,7) or 52BP2(3,7)	-B (6-8V), -C (12V), -D (24V), -E (120V), -F (240V) -L (24V), -M (120V), -N (240V) -G (120V), -H (240V), -J (480V), -K (600V)	240V AC/DC Max. 240V AC Max. 600VAC Max., 50/60 Hz
Twist-to-Release	Full Voltage LED Module Transformer	52BR8 or 52PR8	-B (6-8V), -C (12V), -D (24V), -E (120V), -F (240V) -L (24V), -M (120V), -N (240V) -G (120V), -H (240V), -J (480V), -K (600V)	240V AC/DC Max. 240V AC Max. 600VAC Max., 50/60 Hz
Illuminated Selector Switch	Full Voltage Transformer	52SA7(A,B,C) or 52SX7(A,B,C)	-B (6-8V), -C (12V), -D (24V), -E (120V), -F (240V) -G (120V), -H (240V), -J (480V), -K (600V)	240V AC/DC Max. 600V AC Max., 50/60 Hz

Dielectric Strength	2200V for one minute
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Mechanical Design Life Cycles

Vibration	Frequency 5 - 60Hz.; Disp. .030 inches, sweep 5 minutes for a duration of 30 minutes on each axis. Not to exceed 5.5 G's for maximum of 1 minute.		
Pushbuttons	Momentary, Non-illuminated	5,000,000 Operating Cycles	
	Momentary, Illuminated	300,000 Operating Cycles	
Push-Pull	Maintained	300,000 Operating Cycles	
	Momentary	2,000,000 Operating Cycles	
Twist-to-Release		300,000 Operating Cycles	
Selector Switches	Non-illuminated	2,000,000 Operating Cycles	
	Illuminated, Key-operated	2,000,000 Operating Cycles	
Contact Operation	Standard Contact Black Logic Reed		
Wire Gauge	#18-12 AWG		
Terminal Screw Torque	2-10 lb-in / 20 lb-in max; 8 lb-in recommended		
Locknut Torque	15 ft. lbs. max		
Temperature Range	Operating	31F to +158F (-35C to +70C)	
	Storage	40F to +185F (-40C to +85C)	

All parts are designed and manufactured of corrosion resistant material or are plated or painted as corrosion protection. All contact block contacts are gold flashed as a standard offering. Internal return spring mechanisms of operators and contact blocks of stainless steel. RoHS Compliant.

Declaration of Conformity — The products listed below, to which this declaration relates, are in conformity with the following standards, following the provisions of the Low Voltage Directive (LVD) (73/23/EEC), and the Electromagnetic Compatibility Directive (89/336/EEC.)

Products: Contact Blocks: Cat Nos. 52BAE, 52BAH, 52BAJ, 52BAK, 52BAR, 52BAU and 52BJK, with suffixes. Pilot Lights: Cat Nos 52P, with suffixes. Operators: Cat Nos 52S or 52P, with suffixes.

Applicable Standards: EN 60947-5-1 Low-Voltage Switchgear and controlgear. Enclosed devices meet the requirements of environmental ratings of IP10, IP11, IP14, IP52, IP54, and IP56. Open devices, when mounted as instructed, in environmental type IP10, IP11, IP14, IP52, IP54 or IP56 enclosures, maintain the environmental requirements for those enclosure types. Cat. No. 52BP, 52BR, 52PP, and 52PR, 2 Position, Twist-To-Release and 2 Position, Push Pull Maintained operators provided with red operating heads and 52BJK contact blocks meet the requirements of EN 60947-5-5 for Electrical Emergency Stop Device With Mechanical Latching Function (e-stop).