XCE: Explosionproof Control Enclosures

FEATURES

- 64 standard sizes available
- Pre-drilled for hinges (hinges optional)
- Pre-drilled for sub-panel (sub-panel optional)
- One-piece, NEMA 4 water-tight gasket
- Premium, high-strength steel cover bolts
- Internal/external grounding provisions
- Cast-on mounting feet
- Tumblast surface preparation for uniform, natural, aluminum finish
- Cover alignment device (installed on enclosures 18" x 24" and larger)
- Removable lifting-eyes (installed on enclosures 18" x 24" and larger)

DESIGN OPTIONS

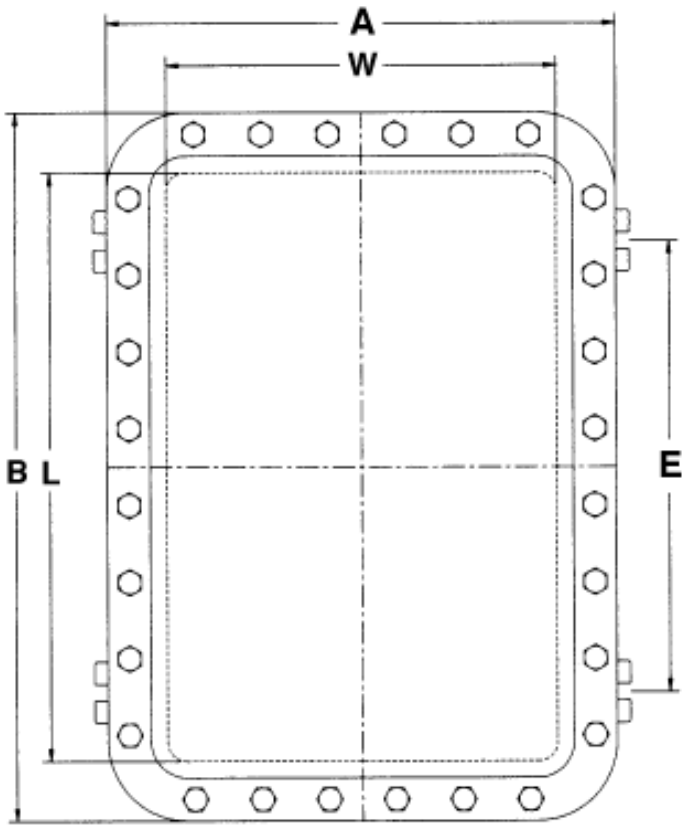
- Stainless steel cover bolts for NEMA 4X corrosion protection
- Sub-Panels – Available in galvanized steel (XSM) or aluminum (XSA)
- Aluminum hinge kits (with stainless steel hardware)
- Non-removable hinges
- Customer specified drilling and tapping
- Installation of operators and auxiliary devices
- Window kits
- Custom machining – milling, counter-boring, spot-facing, blind-tapped holes, etc
- Installation and wiring of internal terminal blocks and control components
- UL Listed NNNY populated/wired control panels
- Cast-on company logos
- Multiple coating options for additional corrosion resistance
- Special mounting provisions
- Captive cover bolts
- Quad-lead cover bolts
- Flat billet cover option (limited sizes)

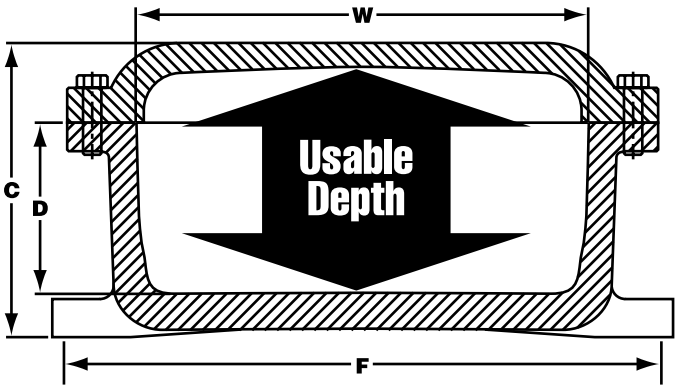
MATERIAL

- Enclosures cast from proprietary 359 aluminum alloy – contains less than 3/10 of 1% copper (.003)
- Standard steel cover bolts are zinc-plated and coated
- Silicone "O"-rings in 060804 thru 122410
- Nitrile "O"-rings in 123006 and larger
- XSM panels are #12 gauge galvanized steel (.108" thick)
- XSA panels are #10 gauge aluminum (.100 thick)
- Hinge blocks are extruded 359 aluminum, pins and hardware are 303 stainless steel

Certifications

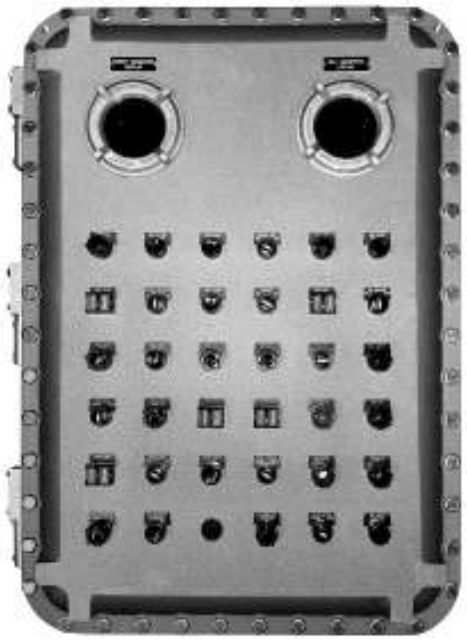
Class I, Divisions 1 and 2, Groups B, C, and D	UL1203/CSA C22.2 No. 25 & 30
Class II, Divisions 1 and 2, Groups E, F, and G	UL1203/CSA C22.2 No. 25 & 30
Class III	UL1203/CSA C22.2 No. 25 & 30
NEMA Type 4, 7, and 9	UL50
NEMA Type 4X (with stainless steel cover bolt option)	


A
W
B L
E


W
Usable
Depth
C
D
F

NNNY: Explosionproof Control Enclosure Assemblies

Adalet can provide UL Listed control panels and junction boxes built to meet the requirements of Underwriter's Laboratories' NNNY hazardous location panel program. Our experienced staff of engineers and designers will assist throughout the process as we work with you to design, manufacture, wire, and certify these panels to meet your precise specifications. These panels are built utilizing our XCE and XIFC enclosures populated with a nearly limitless list of UL-marked devices sourced from leading control manufacturers.



Please submit the following information when requesting a quote:

- Full-scaled CAD drawings
- Bill of materials including manufacturer and part number for each component
- Watt-loss data for each component
- Wiring schematic

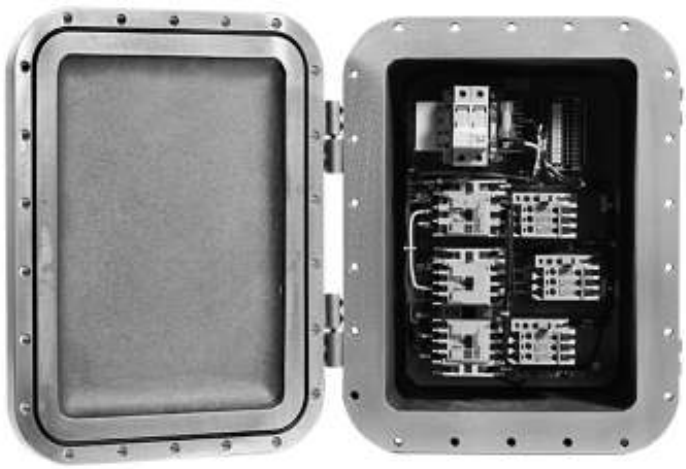
All components must be UL (for UL Listed panels) or cUL (for cUL Listed panels) marked

Certifications

Class I, Divisions 1 and 2, Groups B, C, and D	UL1203/CSA C22.2 No. 25 & 30
Class II, Divisions 1 and 2, Groups E, F, and G	UL1203/CSA C22.2 No. 25 & 30
Class III	UL1203/CSA C22.2 No. 25 & 30
NEMA Type 4, 7, and 9	UL50
NEMA Type 4X (with stainless steel cover bolt option)	

c UL us
LISTED 437S

XCEX: Flameproof Control Enclosures



FEATURES

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- Pre-drilled for hinges (hinges optional)
- Pre-drilled for sub-panel (sub-panel optional)
- One-piece, NEMA 4/IP66 water-tight gasket
- Premium, high-strength steel, metric cover bolts
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- Cast-on mounting feet
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- Special mounting provisions

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Class II, Divisions 1 and 2, Groups E, F, and G	UL1203/CSA C22.2 No. 25 & 30
Class III	UL1203/CSA C22.2 No. 25 & 30
NEMA Type 4, 7, and 9	UL50
NEMA Type 4X (with stainless steel cover bolt option)	
Class I, Zone 1, AEx d IIB+H2	
Class I, Zone 1, Ex d IIB+H2	IEC 60079-1/IEC 60079-31
0539 II 2GD	ATEX Directive 94/9/EC
IP66	IEC 60529

XCE/X SERIES

ENCLOSURE												PANS AND HINGES					
XCE/XCEX Catalog #	Inside Nom. Dimensions W	L	D	Usable Depth	Overall Dimensions A	B	C	Mounting Lug CL to CL E	F	Mtg. Bolt Size	Ship Weight	Pan Catalog # Steel	Alum.	Nom. Dimensions W	H	Steel Pan Weight	Hinge Cat #
XCE/X-041604	4	16	4	4 ¾	7 ¼	19 ¼	6	12 ⅛	6 ¾	⅜	25	XSM0416	XSA0416	3 ¼	15 ¼	1 ½	XHB-2
XCE/X-060804	6	8	4	4 ⅝	9 ¼	11 ¼	5 15⁄16	4 ½	9 ⅛	⅜	21	XSM0608	XSA0608	5 ⅛	7 ⅛	1	XHB-2
XCE/X-060805	6	8	5	5 ⅝	9 ¼	11 ¼	6 15⁄16	4 ½	9 ⅛	⅜	23	XSM0608	XSA0608	5 ⅛	7 ⅛	1	XHB-2
XCE/X-060806	6	8	6	6 ⅝	9 ¼	11 ¼	7 15⁄16	4 ½	9 ⅛	⅜	25	XSM0608	XSA0608	5 ⅛	7 ⅛	1	XHB-2
XCE/X-061105	6	11	5	5 ⅞	9 ¼	14 ¼	7 3⁄16	7 ½	9 ⅛	⅜	24	XSM0611	XSA0611	5 ⅛	10 ⅛	1 ½	XHB-2
XCE/X-061204	6	12	4	4 ¾	9 ¼	15 ¼	6 1⁄16	8 ½	9 ⅛	⅜	24	XSM0612	XSA0612	5 ⅛	11 ⅛	1 ¾	XHB-2
XCE/X-061206	6	12	6	6 ¾	9 ¼	15 ¼	8 1⁄16	8 ½	9 ⅛	⅜	29	XSM0612	XSA0612	5 ⅛	11 ⅛	1 ¾	XHB-2
XCE/X-061305	6	13	5	5 ⅞	9 ¼	16 ¼	7 3⁄16	9 ½	9 ⅛	⅜	26	XSM0613	XSA0613	5 ⅛	12 ⅛	2	XHB-2
XCE/X-071004	7	10	4	4 ¾	10 ⅜	13 ⅜	6 3⁄16	6 ½	9 ¾	⅜	27	XSM0710	XSA0710	6 ⅛	9 ⅛	1 ¼	XHB-2
XCE/X-071006	7	10	6 ⅛	6 ¾	10 ⅜	13 ⅜	8 3⁄16	6 ½	9 ¾	⅜	31	XSM0710	XSA0710	6 ⅛	9 ⅛	1 ¼	XHB-2
XCE/X-071805	7	18 ¼	5	5 ¾	10 ⅜	21 ⅝	7 3⁄16	14 ½	9 ¾	⅜	55	XSM0718	XSA0718	6 ⅛	17 ⅜	2 ½	XHB-2
XCE/X-080804	8	8	4	4 13⁄16	11 ⅜	11 ⅜	6 ⅜	4 ½	11	⅜	24	XSM0808	XSA0808	7	7	1 ¼	XHB-2
XCE/X-080806	8	8	6	6 13⁄16	11 ⅜	11 ⅜	8 ⅜	4 ½	11	⅜	28	XSM0808	XSA0808	7	7	1 ¼	XHB-2
XCE/X-080808	8	8	8	8 13⁄16	11 ⅜	11 ⅜	10 ⅜	4 ½	11	⅜	35	XSM0808	XSA0808	7	7	1 ¼	XHB-2
XCE/X-081004	8	10	4	4 ¾	11 ⅜	13 ⅜	6 ¼	6 ½	10 ¾	⅜	30	XSM0810	XSA0810	7	9 ⅛	1 ½	XHB-2
XCE/X-081006	8	10	6	6 ¾	11 ⅜	13 ⅜	8 ¼	6 ½	10 ¾	⅜	34	XSM0810	XSA0810	7	9 ⅛	1 ½	XHB-2
XCE/X-081204	8	12	4	4 ¾	11 ⅜	15 ⅜	6 ¼	8 ½	10 ¾	⅜	34	XSM0812	XSA0812	6 ⅞	10 ⅞	2 ¼	XHB-2
XCE/X-081206	8	12	6	6 ¾	11 ⅜	15 ⅜	8 ¼	8 ½	10 ¾	⅜	42	XSM0812	XSA0812	6 ⅞	10 ⅞	2 ¼	XHB-2
XCE/X-081208	8	12	8	8 ¾	11 ⅜	15 ⅜	10 ¼	8 ½	10 ¾	⅜	48	XSM0812	XSA0812	6 ⅞	10 ⅞	2 ¼	XHB-2
XCE/X-091105	9	11	5	5 ¾	12 ⅜	14 ⅜	7 5⁄16	7 ½	12	⅜	41	XSM0911	XSA0911	8	10	2 ½	XHB-2
XCE/X-101004	10	10	4	4 ¾	13 ⅜	13 ⅜	6 5⁄16	6 ½	13	⅜	34	XSM1010	XSA1010	8 ⅞	8 ⅞	2 ½	XHB-2
XCE/X-101006	10	10	6	6 ¾	13 ⅜	13 ⅜	8 5⁄16	6 ½	13	⅜	44	XSM1010	XSA1010	8 ⅞	8 ⅞	2 ½	XHB-2
XCE/X-101008	10	10	8	8 ¾	13 ⅜	13 ⅜	10 5⁄16	6 ½	13	⅜	50	XSM1010	XSA1010	8 ⅞	8 ⅞	2 ½	XHB-2
XCE/X-101206	10	12	6 ¼	7 ¼	13 ⅜	15 ⅜	8 ⅞	8 ½	13 ¼	⅜	46	XSM1012	XSA1012	10 ⅞	8 ⅞	3	XHB-2
XCE/X-101404	10	14	4	4 ¾	13 ⅜	17 ⅜	6 7⁄16	10 ⅝	13	⅜	42	XSM1014	XSA1014	8 ⅞	12 ⅞	3 ½	XHB-2
XCE/X-101406	10	14	6	6 ¾	13 ⅜	17 ⅜	8 7⁄16	10 ⅝	13	⅜	49	XSM1014	XSA1014	8 ⅞	12 ⅞	3 ½	XHB-2
XCE/X-101408	10	14	8	8 ¾	13 ⅜	17 ⅜	10 ½	10 ⅝	13	⅜	57	XSM1014	XSA1014	8 ⅞	12 ⅞	3 ½	XHB-2
XCE/X-121206	12	12	6	7	16 ¼	16 ¼	8 15⁄16	8 ⅝	16	½	68	XSM1212	XSA1212	10 ⅞	10 ⅞	3 ¾	XHC-2
XCE/X-121208	12	12	8	9	16 ¼	16 ¼	10 15⁄16	8 ⅝	16	½	80	XSM1212	XSA1212	10 ⅞	10 ⅞	3 ¾	XHC-2
XCE/X-121806	12	18	6	6 ¾	16 ¼	22 ¼	8 ¾	14 ⅛	16	½	93	XSM1218	XSA1218	10 ½	16 ½	5 ½	XHC-2
XCE/X-121808	12	18	8	8 ¾	16 ¼	22 ¼	10 ¾	14 ⅛	16	½	101	XSM1218	XSA1218	10 ½	16 ½	5 ½	XHC-2
XCE/X-122005	12	20	5	5 ¾	16 ¼	24 ¼	8 ⅛	14 ⅜	16	½	104	XSM1220	XSA1220	11	19	6 ½	XHC-2
XCE/X-122406	12	24	6	6 15⁄16	16 ¼	28 ¼	9 ¼	18 ⅜	16	½	127	XSM1224	XSA1224	11	23	8	XHC-2
XCE/X-122408	12	24	8	8 15⁄16	16 ¼	28 ¼	11 ¼	18 ⅜	16	½	142	XSM1224	XSA1224	11	23	8	XHC-2
XCE/X-122410	12	24	10	10 15⁄16	16 ¼	28 ¼	13 ¼	18 ⅜	16	½	154	XSM1224	XSA1224	11	23	8	XHC-2

NOTES

1. Operators, windows and hinges are ordered separately.
2. XCEX Ex d approval optional.
3. To indicate NEMA 4/IP66 option, add suffix “N4” after size (catalog number).
4. Where reference is made to Class I and Class II hazardous locations, the equipment is suitable for both Division1 and Division 2 locations.
5. Enclosures are pre-drilled for mounting panel and hinge kit unless otherwise specified.

ENCLOSURE												PANS AND HINGES					
XCE/XCEX Catalog #	Inside Nom. Dimensions W	L	D	Usable Depth	Overall Dimensions A	B	C	Mounting Lug CL to CL E	F	Mtg. Bolt Size	Ship Weight	Pan Catalog # Steel	Alum.	Nom. Dimensions W	H	Steel Pan Weight	Hinge Cat #
XCE/X-123006	12	30	6	6 1⅛	16 ¾	34 ¼	9 ⅝	23	16	½	180	XSM1230	XSA1230	10 ¾	28 ¾	9 ¾	XHC-2
XCE/X-123606	12	36	6	6 15⁄16	16 ¼	40 ¼	9 1⅛	29	16	½	212	XSM1236	XSA1236	10 ¾	34 ¾	11 ¾	XHD-3
XCE/X-123608	12	36	8	8 15⁄16	16 ¼	40 ¼	11 1⅛	29	16	½	232	XSM1236	XSA1236	10 ¾	34 ¾	11 ¾	XHD-3
XCE/X-124608	12	46	8	8 15⁄16	16 ¼	50 ¼	11 1⅛	39	16	⅝	280	XSM1246	XSA1246	10 ¾	44 ¾	15	XHD-4
XCE/X-141406	14	14	6	7	18 ¼	18 ¼	9 ¼	9 ¾	17 ¾	½	97	XSM1414	XSA1414	12 ⅞	12 ⅞	5	XHC-2
XCE/X-141408	14	14	8	9	18 ¼	18 ¼	11 ⅛	9 ¾	17 ¾	½	103	XSM1414	XSA1414	12 ⅞	12 ⅞	5	XHC-2
XCE/X-142806	14	28	6	7 13⁄16	18 ¼	32 ¼	9 9⁄16	22 ½	17 ¾	½	120	XSM1428	XSA1428	12 ⅞	26 ⅞	10 ¾	XHF-2
XCE/X-161606	16	16	6	7 ⅝	20 ⅞	20 ⅞	9 15⁄16	11	19 ¾	⅝	135	XSM1616	XSA1616	14 ¾	14 ¾	6 ¾	XHD-2
XCE/X-161608	16	16	8	9 ⅝	20 ⅞	20 ⅞	11 15⁄16	11	19 ¾	⅝	156	XSM1616	XSA1616	14 ¾	14 ¾	6 ¾	XHD-2
XCE/X-162406	16	24	6	7 13⁄16	20 ⅞	28 ⅞	10 ⅜	18 ⅜	19 ¾	⅝	190	XSM1624	XSA1624	14 ½	22 ½	10 ¼	XHF-2
XCE/X-162408	16	24	8	9 13⁄16	20 ⅞	28 ⅞	12 ⅜	18 ⅜	19 ¾	⅝	209	XSM1624	XSA1624	14 ½	22 ½	10 ¼	XHF-2
XCE/X-162410	16	24	10	11 13⁄16	20 ⅞	28 ⅞	14 ⅜	18 ⅜	19 ¾	⅝	225	XSM1624	XSA1624	14 ½	22 ½	10 ¼	XHF-2
XCE/X-162806	16	28	6	6 13⁄16	20 ½	32 11⁄16	9 ½	22 ½	19 ¾	⅝	200	XSM1628	XSA1628	26 ½	14 ½	12	XHF-2
XCE/X-163406	16	34	6	6 15⁄16	20 ½	38 ½	9 ½	27	19 ¾	⅝	260	XSM1630	XSA1630	14 ½	28 ½	12 ½	XHF-2
XCE/X-164610	16	46	10	11 13⁄16	20 ⅞	50 ⅞	14 9⁄16	39	19 ¾	⅝	390	XSM1646	XSA1646	14 ½	44 ½	20 ¼	XHF-4
XCE/X-181806	18	18	6	7 13⁄16	22 ⅞	22 ⅞	10 ½	13	21 ¾	⅝	177	XSM1818	XSA1818	16 ¾	16 ¾	8 ¾	XHF-2
XCE/X-181808	18	18	8	9 13⁄16	22 ⅞	22 ⅞	12 ½	13	21 ¾	⅝	200	XSM1818	XSA1818	16 ¾	16 ¾	8 ¾	XHF-2
XCE/X-182406	18	24	6	7 7⁄16	22 ⅞	28 ⅞	10 13⁄16	18 ⅜	21 ¾	⅝	226	XSM1824	XSA1824	16 ½	22 ½	11 ½	XHF-2
XCE/X-182408	18	24	8	9 7⁄16	22 ⅞	28 ⅞	12 13⁄16	18 ⅜	21 ¾	⅝	239	XSM1824	XSA1824	16 ½	22 ½	11 ½	XHF-2
XCE/X-182410	18	24	10	11 7⁄16	22 ⅞	28 ⅞	14 13⁄16	18 ⅜	21 ¾	⅝	260	XSM1824	XSA1824	16 ½	22 ½	11 ½	XHF-2
XCE/X-183008	18	30	8	9 ⅜	22 ⅞	34 ⅞	12 13⁄16	23	21 ¾	⅝	293	XSM1830	XSA1830	16 ½	28 ½	14 ¾	XHF-2
XCE/X-183608	18	36	8	9 ⅜	22 ⅞	40 ⅞	12 ⅞	29	21 ¾	⅝	318	XSM1836	XSA1836	16 ½	34 ½	18	XHF-3
XCE/X-183610	18	36	10	11 ⅜	22 ⅞	40 ⅞	14 ⅞	29	21 ¾	⅝	340	XSM1836	XSA1836	16 ½	34 ½	18	XHF-3
XCE/X-242408	24	24	8	9 7⁄16	28 ⅞	28 ⅞	12 7⁄16	18 ⅜	28	⅝	302	XSM2424	XSA2424	22	22	15 ¼	XHF-2
XCE/X-242410	24	24	10	11 7⁄16	28 ⅞	28 ⅞	14 7⁄16	18 ⅜	28	⅝	330	XSM2424	XSA2424	22	22	15 ¼	XHF-2
XCE/X-243008	24	30	8	9 ¼	28 ⅞	34 ⅞	12 15⁄16	23	28	⅝	356	XSM2430	XSA2430	22	28	19 ¼	XHF-2
XCE/X-243608	24	36	8	9 ¼	28 ⅞	40 ⅞	12 7⁄16	29	28	⅝	408	XSM2436	XSA2436	34	22	23 ½	XHF-3
XCE/X-243610	24	36	10	11 ¼	28 ⅞	40 ⅞	14 ⅞	29	28	⅝	433	XSM2436	XSA2436	34	22	23 ½	XHF-3
XCE/X-323612*	32	36	12	12	37 ¾	41 ¾	15 ½	29	36 ⅛	⅝	691	XSM3236	XSA3236	29	33	28 ¾	XHF-3

* This unit has limited approval dependent on number of entries

NOTES

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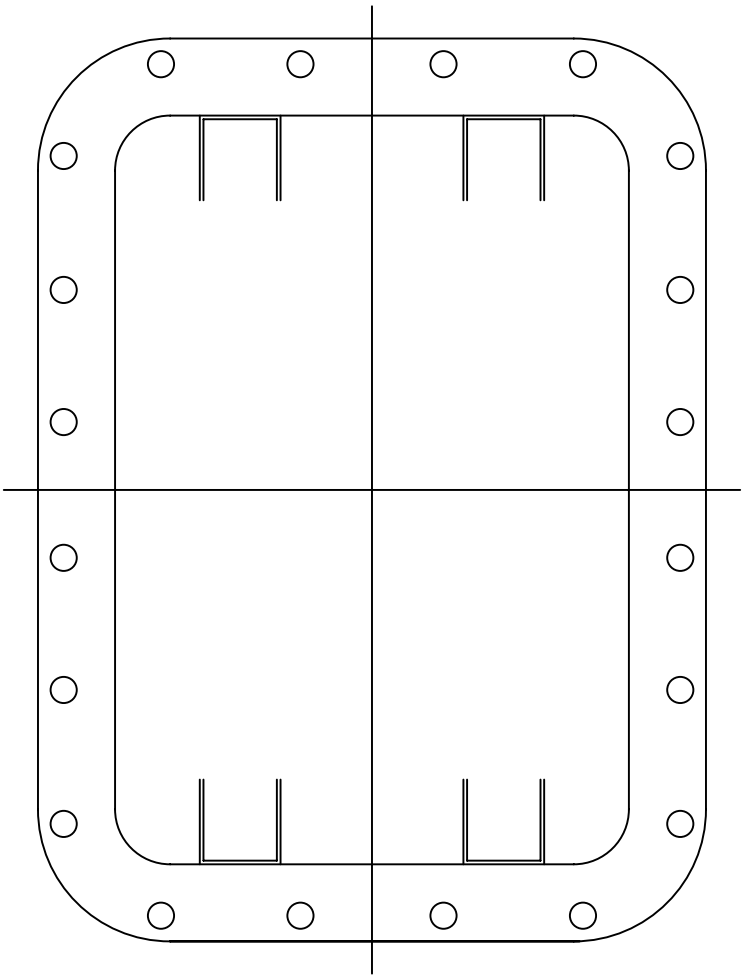
2. XCEX Ex d approval optional.
3. To indicate NEMA 4/IP66 option, add suffix “N4” after size (catalog number).
4. Where reference is made to Class I and Class II hazardous locations, the equipment is suitable for both Division1 and Division 2 locations.
5. Enclosures are pre-drilled for mounting panel and hinge kit unless otherwise specified.

Customer Design Sheets

Cover Layout



DIMENSION ALL MODIFICATIONS
FROM CENTER LINES OF COVER

ATEX/IECEx

☐ DEMKO U Cert.
REF. DS483

UL

☐ UL APPROVED
REF. DS361 & B301

HINGES

☐ LEFT HAND
☐ RIGHT HAND
☐ LONG SIDE
☐ SHORT SIDE
☐ NON REMOVABLE

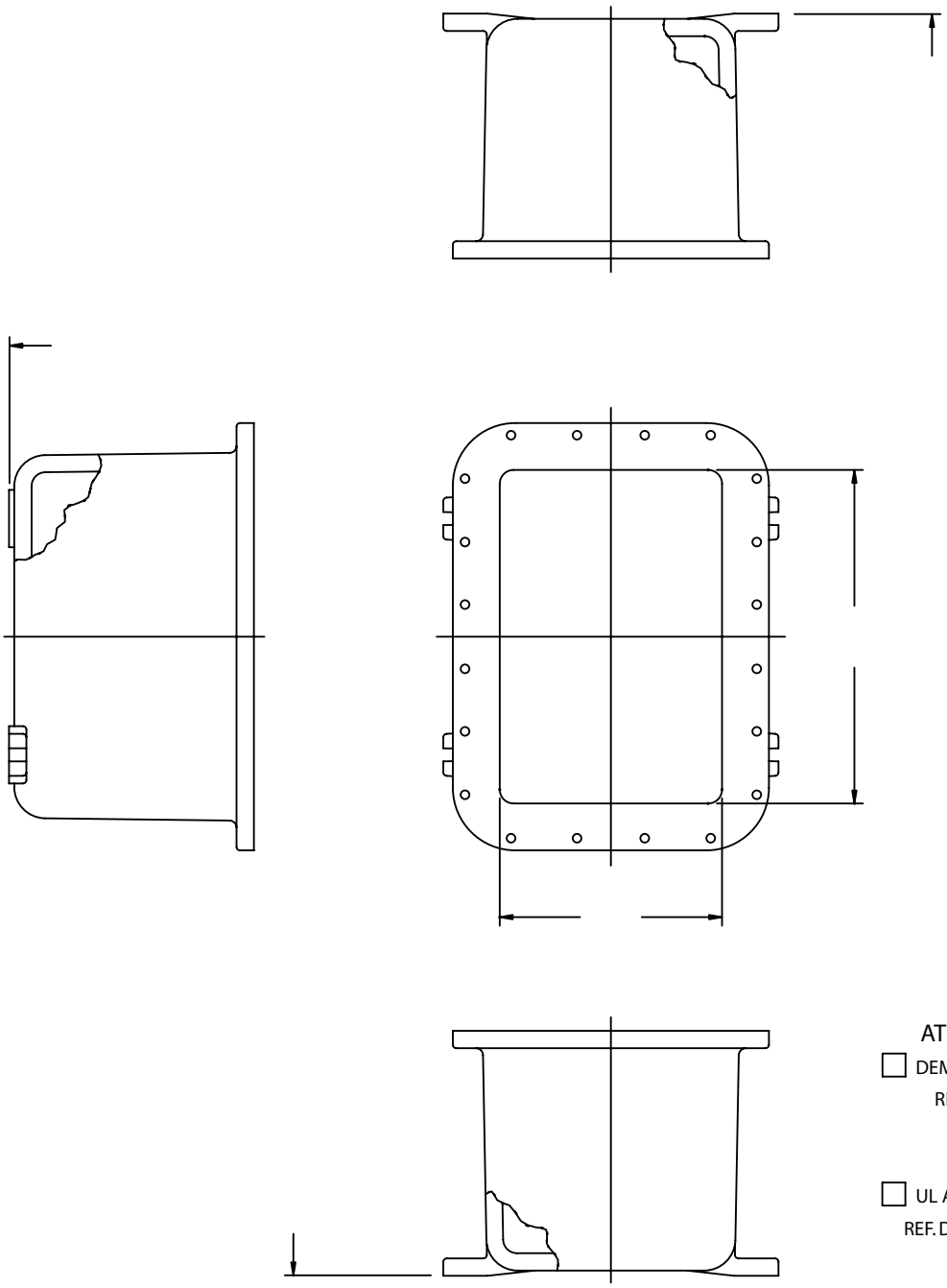
NEMA 4/ IP66

☐ N4 GROOVE

CAT #: X __ __ __ __ __ __ __ __

Customer Design Sheets

Box Layout



ATEX/IECEx

☐ DEMKO U Cert.
REF. DS483

UL

☐ UL APPROVED
REF. DS248 & B301

MTG. PANS

☐ XSA PAN
☐ XSB PAN
☐ XSM PAN

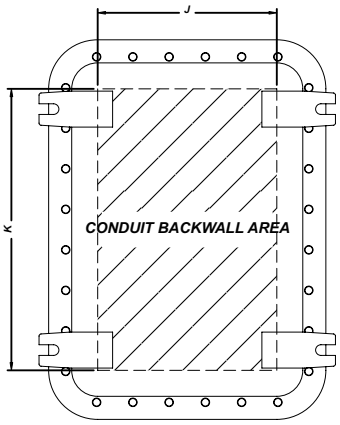
HINGES

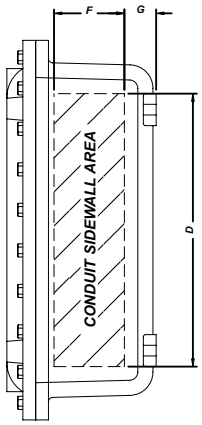
☐ LEFT HAND
☐ RIGHT HAND
☐ LONG SIDE
☐ SHORT SIDE
☐ NON REMOVABLE

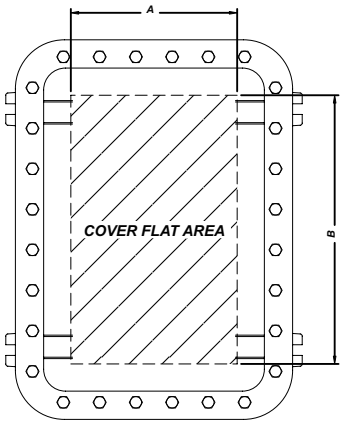
DIMENSION ALL MODIFICATIONS FROM CENTER LINES AND BOTTOM OF MOUNTING LUGS WHENEVER POSSIBLE.

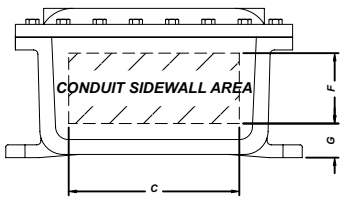
Cover & Sidewall Area

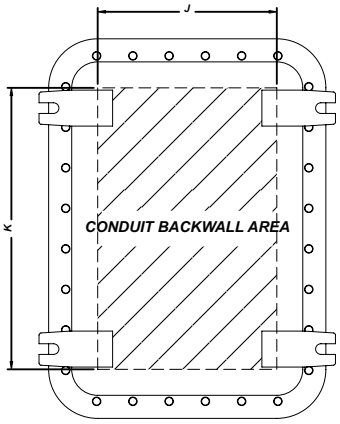
	COVER FLAT		CONDUIT - SIDEWALL				BACKWALL	
Enclosure Series	A	B	C	D	F	G	J	K
041604	2 1/8	14 1/8	2 11/16	14 11/16	2 7/8	1	3 1/8	15 1/8
060804	3 7/8	5 7/8	4 11/16	6 11/16	2 7/8	1	5 1/8	7 1/8
060805	3 7/8	5 7/8	4 5/8	6 5/8	3 7/8	1	5 1/16	7 1/16
060806	3 7/8	5 7/8	4 9/16	6 9/16	4 7/8	1	4 15/16	6 15/16
061105	3 7/8	8 7/8	4 5/8	9 5/8	3 5/8	1	5 1/8	10 1/8
061204	3 7/8	9 7/8	4 11/16	10 11/16	2 7/8	1	5 1/8	11 1/8
061206	3 7/8	9 7/8	4 9/16	10 9/16	4 9/16	1 5/16	4 7/16	10 7/16
061305	3 7/8	10 7/8	4 5/8	11 5/8	3 5/8	1	5 1/8	12 1/8
071004	4 7/8	7 7/8	5 5/8	8 5/8	2 1/2	1 3/8	5 5/8	8 5/8
071006	4 7/8	7 7/8	5 9/16	8 9/16	4 5/8	1 3/8	5 9/16	8 9/16
071805	5	16 1/4	5 7/16	16 11/16	3 1/2	1 3/8	5 7/16	16 11/16
080804	5 7/8	5 7/8	6 5/8	6 5/8	2 11/16	1 1/8	7 1/8	7 1/8
080806	5 7/8	5 7/8	6 9/16	6 9/16	4 11/16	1 1/8	7 1/16	7 1/16
080808	5 7/8	5 7/8	6 7/16	6 7/16	6 11/16	1 1/8	6 15/16	6 15/16
081004	5 7/8	7 7/8	6 5/8	8 5/8	2 1/2	1 3/8	6 5/8	8 5/8
081006	5 7/8	7 7/8	6 9/16	8 9/16	4 1/2	1 3/8	6 9/16	8 9/16
081204	5 7/8	9 7/8	6 5/8	10 5/8	2 1/2	1 3/8	6 5/8	10 5/8
081206	5 7/8	9 7/8	6 9/16	10 9/16	4 1/2	1 3/8	6 9/16	10 9/16
081208	5 7/8	9 7/8	6 7/16	10 7/16	6 1/2	1 3/8	6 7/16	10 7/16
091105	6 7/8	8 7/8	7 5/16	9 5/16	3 3/8	1 9/16	7 5/16	9 5/16
101004	7 7/8	7 7/8	8 3/8	8 3/8	2 3/8	1 9/16	8 3/8	8 3/8
101006	7 7/8	7 7/8	8 5/16	8 5/16	4 3/8	1 9/16	8 5/16	8 5/16
101008	7 7/8	7 7/8	8 3/16	8 3/16	6 3/8	1 9/16	8 3/16	8 3/16
101206	7 3/4	9 3/4	8 1/4	10 1/4	4 5/8	1 9/16	8 1/4	10 1/4
101404	7 7/8	11 7/8	8 3/8	12 3/8	2 3/8	1 9/16	8 3/8	12 3/8
101406	7 7/8	11 7/8	8 5/16	12 5/16	4 3/8	1 9/16	8 5/16	12 5/16
101408	7 7/8	11 7/8	8 1/16	12 1/16	6 1/4	1 3/4	7 5/8	11 5/8
121206	9 3/4	9 3/4	9 13/16	9 13/16	4 1/8	1 7/8	9 13/16	9 13/16
121208	9 3/4	9 3/4	9 11/16	9 11/16	6 1/8	1 7/8	9 11/16	9 11/16
121806	9 3/4	15 3/4	9 13/16	15 13/16	4 1/8	1 7/8	9 13/16	15 13/16
121808	9 3/4	15 3/4	9 11/16	15 11/16	6 1/8	1 7/8	9 11/16	15 11/16
122005	9 3/4	17 3/4	10 1/16	18 1/16	3 3/16	2	10 1/16	18 1/16
122404	9 5/8	21 5/8	10 1/8	22 1/8	2 1/8	2	10 1/8	22 1/8

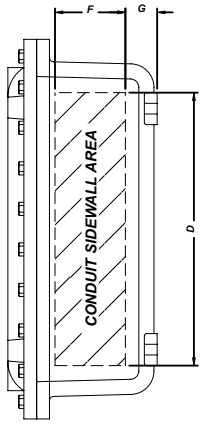


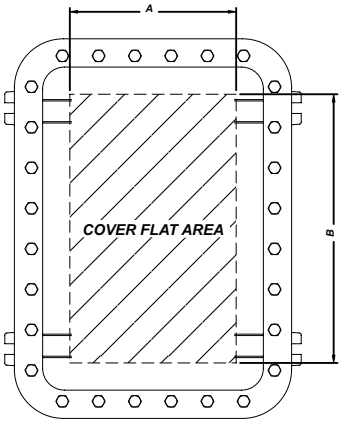


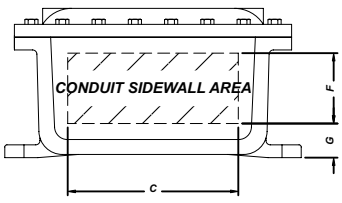












Cover & Sidewall Area

	COVER FLAT		CONDUIT - SIDEWALL				BACKWALL	
Enclosure Series	A	B	C	D	F	G	J	K
122406	9 5/8	21 5/8	10 1/16	22 1/16	4 1/8	2	10 1/16	22 1/16
122408	9 5/8	21 5/8	9 15/16	21 15/16	6 1/8	2	9 15/16	21 15/16
122410	9 5/8	21 5/8	9 13/16	21 13/16	8 1/8	2	9 13/16	21 13/16
123006	9 5/8	27 7/8	10 1/16	28 1/16	4	2 5/16	10 1/16	28 1/16
123606	9 5/8	33 7/8	10 1/16	34 1/16	4	2 3/8	10 1/16	34 1/16
123608	9 5/8	33 7/8	9 15/16	33 15/16	6	2 3/8	9 15/16	33 15/16
124608	9 5/8	42 1/4	9 7/16	43 7/16	5 5/8	2 11/16	9 3/16	43 3/16
141406	11	11	12 1/16	12 1/16	3 3/4	2 1/8	11 9/16	11 9/16
141408	11	11	11 15/16	11 15/16	5 3/4	2 1/8	11 7/16	11 7/16
142806	11	25	11 5/8	25 5/8	4	2	11 5/8	25 5/8
161606	12 1/2	12 1/2	14 1/16	14 1/16	4	2 1/16	14 1/16	14 1/16
161608	12 1/2	12 1/2	13 15/16	13 15/16	6	2 1/16	13 15/16	13 15/16
162406	12 1/2	20 1/2	13 1/2	21 1/2	3 7/8	2 5/16	13 1/2	21 1/2
162408	12 1/2	20 1/2	13 3/8	21 3/8	5 7/8	2 5/16	13 3/8	21 3/8
162410	12 1/2	20 1/2	13 1/4	21 1/4	7 7/8	2 5/16	13 1/4	21 1/4
162806	13 1/4	25 1/4	14 1/16	26 1/16	3 11/16	2 3/16	14 1/16	26 1/16
163406	13 3/8	31 3/8	14 1/16	32 1/16	3 15/16	2 5/16	14 1/16	32 1/16
164610	12 1/2	42 1/4	13 7/8	43 7/8	7 7/8	2 7/16	13 7/8	43 7/8
181806	14 1/4	14 1/4	16 1/16	16 1/16	3 7/8	2 5/16	16 1/16	16 1/16
181808	14 1/4	14 1/4	15 15/16	15 15/16	5 7/8	2 5/16	15 15/16	15 15/16
182406	14 1/4	20 1/4	15 7/16	21 7/16	3 7/8	2 1/2	15 7/16	21 7/16
182408	14 1/4	20 1/4	15 3/8	21 3/8	5 7/8	2 1/2	15 3/8	21 3/8
182410	14 1/4	20 1/4	15 1/4	21 1/4	7 7/8	2 1/2	15 1/4	21 1/4
183008	14 1/4	26 1/4	15 3/8	27 3/8	5 7/8	2 1/2	15 3/8	27 3/8
183608	14 1/4	32 1/4	15 3/8	33 3/8	5 7/8	2 1/2	15 3/8	33 3/8
183610	14 1/4	32 1/4	15 1/4	33 1/4	7 7/8	2 1/2	15 1/4	33 1/4
242408	20 1/4	20 1/4	20 7/8	20 7/8	5 5/8	2 9/16	20 7/8	20 7/8
242410	20 1/4	20 1/4	20 3/4	20 3/4	7 5/8	2 9/16	20 3/4	20 3/4
243008	20 1/4	26 1/4	20 5/8	26 5/8	5 7/8	2 7/16	21 3/8	27 3/8
243608	20 1/4	32 1/4	21 3/16	33 3/16	5 7/8	2 1/2	21 15/16	33 15/16
243610	20 1/4	32 1/4	21 1/8	33 1/8	7 7/8	2 3/4	20 7/8	32 7/8
323612	28 3/4	32 3/4	30	34	3 3/8	2 3/4	28 7/8	32 7/8

Minimum Spacing for Operators in Covers

	STANDARD OPERATORS				MINIATURE OPERATORS				COVER WALL
Catalog #	Max #	Max Rows	Max Per Row	Spacing CL to CL	Max #	Max Rows	Max Per Row	Spacing CL to CL	Thickness
XCE041604	5	5	1	2 ½	13	13	1	1	½
XCE060804	2	2	1	2 ½	8	4	2	1	½
XCE060805	2	2	1	2 ½	8	4	2	1	½
XCE060806	2	2	1	2 ½	8	4	2	1	½
XCE061105	3	3	1	2 ½	14	7	2	1	½
XCE061204	4	4	1	2 ½	16	8	2	1	⅝
XCE061206	4	4	1	2 ½	16	8	2	1	⅝
XCE061305	4	4	1	2 ½	18	9	2	1	½
XCE071004	6	3	2	2 ½	18	6	3	1	⅝
XCE071006	6	3	2	2 ½	18	6	3	1	⅝
XCE071805	12	6	2	2 ½	45	15	3	1	⅝
XCE080804	4	2	2	2 ½	16	4	4	1	11⁄16
XCE080806	4	2	2	2 ½	16	4	4	1	11⁄16
XCE080808	4	2	2	2 ½	16	4	4	1	11⁄16
XCE081004	6	3	2	2 ½	24	6	4	1	11⁄16
XCE081006	6	3	2	2 ½	24	6	4	1	11⁄16
XCE081204	8	4	2	2 ½	32	8	4	1	11⁄16
XCE081206	8	4	2	2 ½	32	8	4	1	11⁄16
XCE081208	8	4	2	2 ½	32	8	4	1	11⁄16
XCE091105	6	3	2	2 ½	35	7	5	1	11⁄16
XCE101004	9	3	3	2 ½	36	6	6	1	11⁄16
XCE101006	9	3	3	2 ½	36	6	6	1	11⁄16
XCE101008	9	3	3	2 ½	36	6	6	1	11⁄16
XCE101206	12	4	3	2 ½	48	8	6	1	¾
XCE101406	12	4	3	2 ½	60	10	6	1	¾
XCE101408	12	4	3	2 ½	60	10	6	1	¾
XCE101410	12	4	3	2 ½	60	10	6	1	¾
XCE121206	9	3	3	3	64	8	8	1	⅞
XCE121208	9	3	3	3	64	8	8	1	⅞
XCE121806	15	5	3	3	92	14	8	1	15⁄16
XCE121808	15	5	3	3	92	14	8	1	15⁄16
XCE122005	18	6	3	3	128	16	8	1	1 ⅛

NOTE For closer spacing consult factory for details. Hydro test may be necessary for closer hole spacing.

Minimum Spacing for Operators in Covers

	STANDARD OPERATORS				MINIATURE OPERATORS				COVER WALL
Catalog #	Max #	Max Rows	Max Per Row	Spacing CL to CL	Max #	Max Rows	Max Per Row	Spacing CL to CL	Thickness
XCE122406	21	7	3	3	150	20	8	1	1 1/8
XCE122408	21	7	3	3	150	20	8	1	1 1/8
XCE122410	21	7	3	3	150	20	8	1	1 1/8
XCE123006	27	9	3	3	150	26	8	1	1 3/8
XCE123606	33	11	3	3	150	32	8	1	1 3/16
XCE123608	33	11	3	3	150	32	8	1	1 3/16
XCE124608	42	14	3	3	150	41	8	1	1 1/4
XCE141406	16	4	4	3	100	10	10	1	7/8
XCE141408	16	4	4	3	100	10	10	1	7/8
XCE142806	32	8	4	3	150	24	10	1	1 1/8
XCE161606	16	4	4	3 1/2	121	11	11	1	7/8
XCE161608	16	4	4	3 1/2	121	11	11	1	7/8
XCE162406	24	6	4	3 1/2	150	19	11	1	7/8
XCE162408	24	6	4	3 1/2	150	19	11	1	7/8
XCE162410	24	6	4	3 1/2	150	19	11	1	7/8
XCE162806	28	7	4	3 1/2	150	24	11	1	1 1/4
XCE163406	32	8	4	3 1/2	150	30	11	1	1 1/4
XCE164610	48	12	4	3 1/2	150	41	11	1	1
XCE181806	36	6	6	2 1/2	150	13	13	1	1
XCE181808	36	6	6	2 1/2	150	13	13	1	1
XCE182406	24	6	4	3 1/2	150	19	13	1	1 1/2
XCE182408	24	6	4	3 1/2	150	19	13	1	1 1/2
XCE182410	24	6	4	3 1/2	150	19	13	1	1 1/2
XCE183008	32	8	4	3 1/2	150	25	13	1	1 1/2
XCE183608	36	9	4	3 1/2	150	31	13	1	1 7/8
XCE183610	36	9	4	3 1/2	150	31	13	1	1 7/8
XCE242408	36	6	6	3 1/2	150	19	19	1	1 1/2
XCE242410	36	6	6	3 1/2	150	19	19	1	1 1/2
XCE243008	42	7	6	3 1/2	150	25	19	1	1 7/8
XCE243608	54	9	6	3 1/2	150	31	19	1	1 7/8
XCE243610	54	9	6	3 1/2	150	31	19	1	1 7/8
XCE323612**	42	7	6	3 1/2	50	31	27	1	1 3/8

** Consult factory

NOTE For closer spacing consult factory for details. Hydro test may be necessary for closer hole spacing.

Conduit Drilling and Tapping Guidelines

When drilling & tapping enclosures for conduit, proper installation requires compliance with the following:

1. Must be tapped with at least 5 full NPT threads in enclosure back or sides only; min. 1/2" conduit size for XCE series.
2. Depth of NPT holes must be plus 1/2 turn min. to plus 2 turns max. past standard NPT plug gage notch.
3. Inner end of conduit openings shall be smooth and well-rounded.

TABLE I

THREAD SIZE OF CONDUIT	MINIMUM WALL THICKNESS AT CONDUIT ENTRANCE EXCLUDING XCEX	
Inches (NPT)	Explosionproof	Dust Ignition Proof / Weather Proof
½ - ¾	⅜ inch	¼ inch
1 - 2	7⁄16 inch	5⁄16 inch
2 ½ - 5	⅝ inch	7⁄16 inch

TABLE II

Conduit size, inches (NPT)	½	¾	1	1 ¼	1 ½	2	2 ½	3	3 ½	4	5
Minimum Distance from conduit CL to inside corner or back of box	1 5⁄16	1 7⁄16	1 9⁄16	1 ¾	1 ⅞	2 ⅛	2 ⅜	2 11⁄16	2 15⁄16	3 ¼	3 ⅞
Approximate diameter of union	1 ⅞	1 ⅞	2 1⁄16	2 ⅞	3 ¼	3 ⅞	4 ⅞	5 ½	6	6 ½	7 ½

TABLE III

SIZE	5	4	3 1/2	3	2 1/2	2	1 1/2	1 1/4	1	3/4	1/2
½	4 ½	3 ⅝	3 ⅜	3	2 ⅝	2 ⅜	2	1 ⅞	1 ¾	1 ⅝	1 ½
¾	4 ¾	3 ¾	3 ½	3 ⅛	2 ¾	2 ½	2 ⅛	2	1 ⅞	1 ¾	
1	4 ⅞	4	3 ⅝	3 ¼	3	2 ⅝	2 ⅜	2 ¼	2		
1 ¼	5 ⅛	4 ⅛	3 ⅞	3 ½	3 ⅛	2 ⅞	2 ½	2 ⅜			
1 ½	5 ½	4 ¼	4	3 ⅝	3 ¼	3	2 ⅝				
2	5 ¾	4 ⅝	4 ¼	3 ⅞	3 ⅝	3 ¼					
2 ½	6	4 ⅞	4 ⅝	4 ¼	3 ⅞						
3	6 ¼	5 ⅜	5	4 ⅝							
3 ½	6 ½	5 ⅝	5 ¼								
4	6 ¾	5 ⅞									
5	7 ¼										

NOTES

1. This information is compiled from data which we believe is reliable and is given in good faith. Since the methods of application and conditions under which our products are used are beyond our control, we are not able to guarantee the application and/or use of same. The user assumes all risks and liability in connection with the application and use of our products.
2. All dimensions are in inches.
3. Metric threads available from factory for most applications – Consult Factory.
4. Consult Factory for special spacing arrangements. Hydro test may be required.

Auxiliary Device Drilling & Tapping Guidelines

Spacing For Auxiliary Devices Installed in Box Walls of Control Panel Enclosures Used in Hazardous Locations.

When using an Auxiliary Device in the box wall of an enclosure used in hazardous locations, proper installation requires compliance with the following:

1. A minimum of (5) thread engagement, class 2 fit, required for group C & D applications.
   A minimum of (7) thread engagement, class 2 fit, required for group B applications.

2. Table I shows minimum box wall thickness for Auxiliary Device threads.

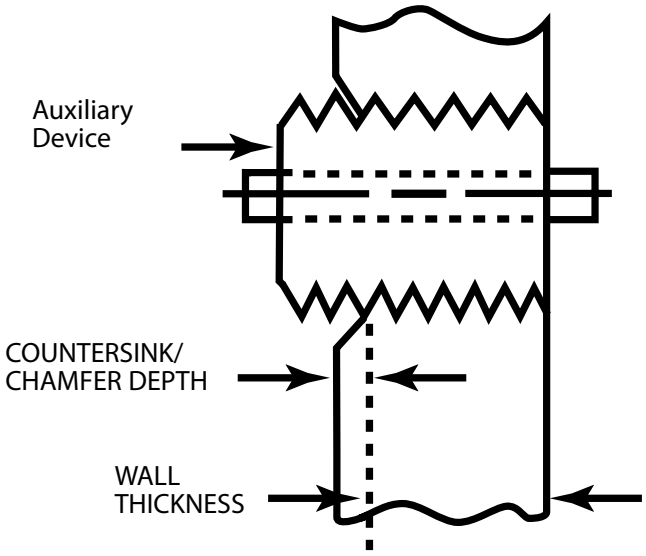
TABLE I

REQUIRED MINIMUM BOX WALL THICKNESS				
Thread Size (In.)	Group C & D min. (5) thread engagement	Group B min. (7) thread engagement	Typical Auxiliary Devices	Drill Dia.
½ -14 NPSM	⅜ Inch	½ Inch	XBO, XHPB, XHSS, Standard Operators	.747/.759
¾ -14 NPSM	⅜ Inch	½ Inch	XBO, XHPB, XHSS, Standard Operators	.958/.970
1 -11 ½ NPSM	7/16 Inch	⅝ Inch	XCBH Large Handle Assembly	1.201/1.211
⅜ - 18 NPSM	9/32 Inch	13/32 Inch	XCBH Small Handle Assembly	.603/.612
⅜ – 16 UNC	5/16 Inch	7/16 Inch	XMOB, XMOSS, Mini Operators	5/16

3. If Auxiliary Device contains undercut in engaging threaded section, the minimum wall thickness shown in Table I must increase to maintain the minimum required thread engagement. (Fig. A)

(continued next page)

FIG. A
SEE NOTE 3



Auxiliary Device Drilling & Tapping Guidelines

Spacing For Auxiliary Devices Installed in Box Walls of Control Panel Enclosures Used in Hazardous Locations.

When using an Auxiliary Device in the box wall of an enclosure used in hazardous locations, proper installation requires compliance with the following (continued from previous page):

4. Table II provides the minimum distance an Auxiliary Device center can be placed from inside corner or back of box.

TABLE II

REQUIRED MINIMUM BOX WALL THICKNESS	3/8 - 16 UNC	3/8 NPSM	1/2 NPSM	3/4 NPSM	1 NPSM
Minimum Distance from auxiliary Device CL to corner of back of box	1 ½	1 ⅝	1 ¾	1 ⅞	2

5. Table III shows minimum spacing between conduit and Auxiliary Device entrances.

TABLE III

AUXILIARY DEVICE THREAD (In.)	5	4	3-1/2	3	2-1/2	2	1-1/2	1-1/4	1	3/4	1/2
⅜	4 ½	3 ⅝	3 ⅜	3	2 ⅝	2 ⅜	2	1 ⅞	1 ¾	1 ⅝	1 ½
½	4 ⅝	3 ¾	3 ½	3 ⅛	2 ¾	2 ½	2 ¼	2 ⅛	2	1 ⅞	1 ¾
¾	4 ¾	4	3 ⅝	3 ¼	2 ⅞	2 ⅝	2 ⅜	2 ¼	2 ⅛	2	1 ⅞
1	5	4 ¼	3 ⅞	3 ½	3	2 ¾	2 ½	2 ⅜	2 ¼	2 ⅛	2

Auxiliary Device Drilling & Tapping Guidelines

Spacing For Auxiliary Devices Installed in Box Walls of Control Panel Enclosures Used in Hazardous Locations.

When using an Auxiliary Device in the box wall of an enclosure used in hazardous locations, proper installation requires compliance with the following (continued from previous page):

6. Table IV shows minimum spacing between auxiliary device entrances. NOTE: Increase distance between devices as required to maintain minimum through air spacing of contacts required by electrical codes.

7. Double all distances in Table III and IV for holes located in back wall.

TABLE IV

MIN. SPACING BETWEEN AUX. DEVICE OF VARYING THREAD SIZES (INCHES)				
	⅜	½	¾	1
⅜	1 ½	1 ½	1 ½	2 ½
½	1 ½	2	2	2 ½
¾	1 ½	2	2	3
1	2 ½	2 ½	3	3 ½