Red Dot[®] - Rigid conduit fittings



Red Dot - Rigid conduit fittings

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Conduit unions – Hazardous locations



Applications

• Unions are used as connecting elements between enclosures, fittings or boxes, which permit future changes to the system in both hazardous and non-hazardous areas.

Features/benefits

- Copper-free (less than 0.004% copper content) aluminum provides increased corrosion resistance
- · Precision cast and machined surfaces permit safer wire pulling
- Precision NPT threaded hubs allow trouble-free field installation for rigid or IMC conduit
- Clear UL, CSA and cubic content markings speed approval by inspectors
- Unique concentric ring design ensures critical flame path control

Standard materials

- Die cast aluminum alloy A360 (less than 0.004% copper content)
- EXMU nipples are galvanized steel

Standard finish

• Aluminum lacquer finish

Compliances

Compliances as noted on each page of the catalogue include:

- CSA Certified
- UL Listed
- Class I, Div. 1 and 2, Groups C, D Explosion-proof Class II, Div. 1, Groups E, F, G – Dust-Ignition-proof Class III, Div. 1 and 2 - Raintight NEMA 3, 4, 7 CD, 9 EFG – Wet locations



Conduit fittings – Hazardous locations



Applications

- Junction for branch conduit
- Accessible wiring chamber provides a convenient location to pull conductors

Features/benefits

- Copper-free (less than 0.004% copper content) aluminum provides increased corrosion resistance
- Precision cast and machined surfaces permit safer wire pulling
- Precision NPT threaded hubs allow trouble-free field installation for rigid or IMC conduit
- Deep slotted cover screws for faster installation
- Clear UL, CSA and cubic content markings speed approval by inspectors

Standard materials

• Die cast aluminum alloy A360 (less than 0.004% copper content)

Standard finish

• Aluminum lacquer finish

Compliances

Compliances as noted on each page of the catalogue include:

- CSA Certified
- UL Listed
- Class I, Div. 1 and 2, Groups C, D Explosion-proof Class II, Div. 1, Groups E, F, G – Dust-Ignition-proof Class III, Div. 1 and 2 – Raintight NEMA 3, 4, 7 CD, 9 EFG – Wet locations



Copper-free aluminum (less than 0.004% copper content)





Sealing fittings – Hazardous locations



Applications:

- Limits flames and/or explosions to area within electrical system where they originate
- Limits pressure piling
- Required for conduit systems in hazardous locations 18 in. from an enclosure housing or a heat producing or arcing device; on 2 in. and larger system that enters an enclosure containing splices; wherever conduit leaves a Class I, Division I area and enters a non-hazardous area



Features/benefits:

- Copper-free (less than 0.004% copper content) aluminum provides increased corrosion resistance
- Precision cast and machined surfaces permit safer wire pulling
- Precision NPT threaded hubs allow trouble-free field installation for rigid or IMC conduit
- Large opening provides maximum working room for creating dam and seal pouring to speed up installation
- Compact design permits close construction
 of parallel conduit runs

Standard materials:

- Sealing fittings: Die cast aluminum alloy A360 (less than 0.004% copper content)
- Sealing cement
- Fiber: Flame-retardant Kaowool Type A fiber

Standard finish:

• Aluminum lacquer finish

Compliances:

Compliances as noted on each page of the catalogue include:

- CSA Certified
- UL Listed
- Class I, Div. 1 and 2, Groups C, D Explosion-proof Class II, Div. 1, Groups E, F, G – Dust-Ignition-proof Class III, Div. 1 and 2 – Raintight NEMA 3, 4, 7 CD, 9 EFG – Wet locations



Sealing fittings – Hazardous locations

— Sealing cement			
	Cat. no.	Qty. (oz.)	Volume (cu. in.)
	EXSC-2	3.2	2
	EXSC-8	13	3
	EXSC-16	1 lb, 10	4



— Packing fiber		
	Cat. no.	Qty. (lb)
	EXPF-16 [†]	1

[†] CSA not applicable

Concrete slab inserts



Applications:

- Permits in-slab ceiling drops and floor mounts in poured concrete
- Provides flush threaded conduit hub for mounting, pulling and future access to conduit systems
- Design permits prefabrication of in-slab conduit system

Features/benefits:

- Flush design leaves no broken or bent stubs for easy removal of undamaged forms
- Flush design permits simplified in-slab work
- Flush design leaves a neat, uncluttered job
- Offered in straight ES configuration for straight through conduit runs and mounting of floor boxes in slabs over 6 in. thick
- Offered in ESL configuration to eliminate bending of conduit in slabs over 4 in. thick
- Precision cast and machined surfaces permit safer wire pulling
- ZAMAK 3 Zinc can be embedded in concrete

Standard materials:

• Die cast zinc alloy ZAMAK 3; certified by the Certified Zinc Alloy Plan (CZAP)

Standard finish:

Natural

Compliances:

Compliances as noted on each page of the catalogue include:

- CSA Certified
- UL Listed

Old way



Conduit running in a cement slab is bent 90° to run through a hole drilled in the form. Drilling takes time and damages the form. Stripping form often damages conduit stubs. Varying length of stubs requires individual measuring and cutting of conduit drops

Red Dot way



Conduit running in a cement slab is attached to a 90° concrete slab insert, or conduit is bent 90° and is threaded to a straight insert. Nail or screw fitting to wood or metal forms. After concrete is poured and forms stripped, conduit drops quickly into fittings. Drops are easily measured from ceiling line to switch or outlet height and cut in uniform lengths.

Concrete slab inserts

Concrete-tight conduit inserts

	Cat. no.	Hub size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)
	Straight condu	it inserts (zinc)					
	ES-2	3/4	211/64	1%	1 ³¹ /32	11/4	1/4
	ES-3	1	21/16	2	25⁄16	117/32	1/4
	Diagrar					Diagrams	
and a state							

								(£₽ (4)
	Cat. no.	Hub size (in.)	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)
	90° angle o	onduit inserts (zinc)							
0	ESL-1	1/2	427/32	345/64	3 ²⁹ / ₃₂	3¾16	11/8	11/32	1/4
	ESL-2	3/4	511/64	3 ² 3⁄32	4 ¹ / ₈	41/8	21/8	11/4	1/4
6	ESL-3	1	5 ⁵⁄₃₂	3¾	3 ¹⁵ ⁄ ₁₆	3 ¹⁵ ⁄16	21⁄16	1 ¹⁷ / ₃₂	1/4

