

Unions, Sealing Fittings, Flexible Couplings, Elbows, Drain/Breather, Close-Up Plugs: Explosionproof

UNILETS® for Use with Threaded Metal Conduit

Applications: Unions

- UNY and UNF unions are used for joining conduit and connecting conduit to enclosures. Facilitates modifications, permits removal of enclosures without turning or removal of conduit.
- Expansion unions compensate for expansion and contraction of conduit.

Applications: Sealing Fittings

- Prevent passage of gases, vapors or flames from one portion of conduit system to another. Restrict any explosion to the sealed off enclosure. Prevent pressure piling within conduit system.
- Required in Class 1, Division 1 and 2 locations within 18" of enclosures containing apparatus that may cause arcs, sparks or high temperatures.
- Required in Class I, Division 1 and 2 locations where 2" or larger conduit enters enclosure, fitting housing terminals, splices or taps.
- Required in Class 1, Division 1 and 2 locations at the boundary where conduit leaves classified location.
- Required in Class 1, Division 1 and 2 locations where two or more enclosures are connected by 36" or less conduit. Seal must be located within 18" of either enclosure.
- Required where cables (which exceed rate of gas or vapor transmission permitted for seals) are used in Class 1, Division 2 locations.

Applications: Sealing Hubs

- Used to seal vertical conduit risers at switch gear and motor control centers, sheet metal structures, or cast boxes and enclosures.

Applications: Flexible Couplings

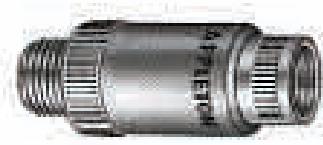
- Used in areas where vibration and/or movement is a problem. Also used in place of rigid conduit in difficult-bend situations.

Applications: Combination Drain/Breather

- ECBD, when installed in bottom of housing, functions as a drain for water formed by condensation within system. Installed in top of housing, it serves as a breather, providing ventilation to minimize condensation and prevent mildew formation.



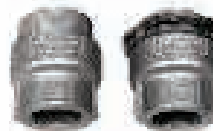
④ UNY/UNF Unions



④ UNY/UNF Expansions Unions



④ EY, EYS, EYD Series Drain Seals



④ ES Series Sealing Hubs



④ EXGJH/EXLK Flexible Couplings



PLG Close-Up Plugs



BR Bell Reducer



EL Elbows



ECDB Drain/Breathers

Unions, Sealing Fittings, Flexible Couplings, Elbows, Drain/Breather, Close-Up Plugs: Explosionproof

UNILETS® for Use with Threaded Metal Conduit

Features: All Fittings

- Explosionproof, dust-ignitionproof.
- Smooth, rounded integral bushing in each hub protects conductor insulation.
- Accurately tapped, tapered threads for tight, rigid joints and ground continuity.

Features: Non-Expansion Unions

- ① Concentric ring interlocked design of 1/2", 3/4" and 1" sizes makes possible smaller diameter, allowing use in tighter spaces. 1-1/4" and larger UNY sizes have removable male nipple.
- Choice of malleable iron or aluminum.

Features: Expansion Unions

- ② One-piece design eliminates need for disassembly during installation.
- Telescoping cylinder within cylinder design permits expansion or contraction.
- Standard or long types available.
- Small external diameters—excellent in restricted areas in wiring of pumps, motors, and other equipment.
- Internal phosphor bronze "bonding jumper" ring assures positive ground between telescoping cylinders.

Features: Sealing Fittings

- ③ Raintight construction.
- Removable nipple in male sealing fitting may be used interchangeably in top or bottom hub.
- EYS—for sealing vertical conduit. Large opening for damming and filling.
- Expanded Fill EYSEF/EYDEF—allow up to 40% conduit fill in compliance with the National Electrical Code.
- EYSF/EYSM—for sealing vertical conduit. Large opening for damming and filling.
- ESUF/ESUM for sealing vertical or horizontal conduit. Pouring spout rotates 90° Removable cover provides full access for damming 2-1/2" thru 4" sizes have threaded cover openings for damming.
- EYF/EYM—close radius type for sealing vertical or horizontal conduit runs.
- EYDM Drain Sealing Fittings—close radius type for sealing vertical conduit runs. Access cover has drain valve for automatic draining of water accumulation above the seal.
- Kwiko® A sealing cement is a specially formulated water soluble powder. Mixed to the proper proportions, it is poured in sealing fittings and hardens to contain

and restrict the passage of gases and explosions in classified areas.

- Fiber Filler-makes dams around and between all conductors to prevent sealing compound from leaking while being poured in its liquid state.

Features: Sealing Hubs

- ④ UL Listed for use in hazardous locations when Kwiko® A Sealing Compound or Crouse-Hinds Chico® A Sealing Compound are used to make the seal.

Features: Flexible Couplings

- ⑤ Heavy duty design resists mechanical abuse. Watertight.
- Electrical conductivity equal to rigid conduit on a similar length basis—no bonding jumper required.
- Interior insulating liner protects conductors from abrasion under vibrating conditions.
- EXGJH—both end fittings are female, each furnished with a removable male nipple.
- EXLK—female end fitting with union at one end and a female end fitting with a removable male nipple at the other end.

Standard Materials

- UNY and UNF (Non-Expansion) Unions, 1/2" thru 1": steel or aluminum. 1-1/4" thru 6": malleable iron or aluminum.
 - UNY and UNF Expansion Unions: steel.
 - UNL Unions: malleable iron and steel.
 - EYSF/EYSM, EYF/EYM and EYDM Seals: malleable iron or Almag 35 aluminum.
 - EYS, EYSEF/EYDEF, and ESUF/ESUM: malleable iron.
 - EYD and EYS Seals: Grayloy®-iron.
 - EXGJH and EXLK Couplings, 1/2" thru 2": outer bronze braid, inner brass core with insulating liner; 2-1/2" thru 4": outer stainless steel braid, inner stainless steel core with insulating liner. End Fittings: 1/2" thru 2"—brass; 2-1/2" thru 4"—stainless steel.
 - PLG Close-Up Plugs: malleable iron, steel, or aluminum.
 - BR Reducers: malleable iron or aluminum.
 - EL and UNA Elbows: malleable or cast iron.
 - ECDB Combination Drain/Breather: stainless steel.
- ## Standard Finishes
- Unions—UNY, UNF and UNL (Non-Expansion) and UNY and UNF (Expansion)

of malleable iron have triplecoat—(1) zinc electroplate, (2) dichromate, and (3) epoxy powder coat, of steel have zinc electroplate, of aluminum 1/2" thru 2" have natural finish and 2-1/2" thru 4" have epoxy powder coat.

- Sealing Fittings—EYSF/EYSM, ESUF/ESUM, EYF/EYM, EYDM and EYD/EYS of malleable iron and Grayloy®-iron have triple-coat—(1) zinc electroplate, (2) dichromate, and (3) epoxy powder coat, of Almag 35 aluminum have epoxy powder coat.

- Sealing Hubs—ES of malleable iron have a triple-coat—(1) zinc electroplate, (2) dichromate, and (3) epoxy powder coat.

- Flexible Couplings—EXGJH and EXLK natural finish.

- Close-up Plugs—PLG of malleable iron have a triple-coat—(1) zinc electroplate, (2) dichromate, and (3) epoxy powder coat; steel have zinc electroplate; aluminum have natural finish.

- Bell Reducers—BR of malleable iron have a triple-coat—(1) zinc electroplate, (2) dichromate, and (3) epoxy powder coat; aluminum have natural finish.

- Elbows—EL are malleable iron and have zinc electroplate; UNA are malleable iron and have a triple-coat—(1) zinc electroplate, (2) dichromate, and (3) epoxy powder coat.

- Combination Drain/Breathers—ECDB are passivated stainless steel and have a natural finish.

Options

- For ES Sealing Hubs, add suffix BLSG for sealing gaskets and locknuts (provide a water and oil-tight connection).

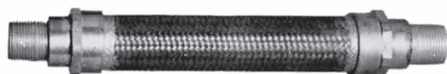
Compliances

- UL Standard 886
- Appleton malleable iron products conform to ASTM A47-77, Grade 32510. which has the following properties: tensile strength, 50,000 psi; yield, 32,000 psi; and elongation, 10%.
- Appleton aluminum products are produced from a high strength copper-free (4/10 or 1% max.) alloy.
- Class I, Div. 1 & 2 and Class II, Div. 1 & 2, if installed as follows: Unions, Elbows, Plugs, Flex. Couplings—NEC 501-4 (a)(b); Seals—NEC 501-5 (a)(b)(c)(d)(e) and NEC 502-5; Drains—NEC 501-5(f).

Class I, Div. 1 and 2
Groups A,B,C,D
Class II, Div. 1 and 2
Groups E,F,G
Class III

Flexible Couplings: EXGJH and EXLK; Explosionproof, Dust-Ignitionproof, Watertight

UNILETS® for use with Threaded Metal Conduit



EXGJH
 Two Removable Male Nipples



EXLK
 One Removable Male Nipple, One Removable Union

Size, Inches Flex Length	Dia. Size	Catalog Number	
		EXGJH	EXLK
4	1/2	EXGJH-14	EXLK-14
4	3/4	EXGJH-24	EXLK-24
6	1/2	EXGJH-16	EXLK-16
6	3/4	EXGJH-26	EXLK-26
6	1	EXGJH-36	EXLK-36
8	1/2	EXGJH-18	EXLK-18
8	3/4	EXGJH-28	EXLK-28
8	1	EXGJH-38	EXLK-38
10	1/2	EXGJH-110	EXLK-110
10	3/4	EXGJH-210	EXLK-210
10	1	EXGJH-310	EXLK-310
12	1/2	EXGJH-112	EXLK-112
12	3/4	EXGJH-212	EXLK-212
12	1	EXGJH-312	EXLK-312
12	1-1/4	EXGJH-412	EXLK-412
12	1-1/2	EXGJH-512	EXLK-512
12	2	EXGJH-612	EXLK-612
12	2-1/2	EXGJH-712	
12	3	EXGJH-812	
12	4	EXGJH-1012	
15	1/2	EXGJH-115	EXLK-115
15	3/4	EXGJH-215	EXLK-215
15	1	EXGJH-315	EXLK-315
15	1-1/4	EXGJH-415	EXLK-415
15	1-1/2	EXGJH-515	EXLK-515
15	2	EXGJH-615	EXLK-615
15	2-1/2	EXGJH-715	
15	3	EXGJH-815	
15	4	EXGJH-1015	

Size, Inches Flex Length	Dia. Size	Catalog Number	
		EXGJH	EXLK
18	1/2	EXGJH-118	EXLK-118
18	3/4	EXGJH-218	EXLK-218
18	1	EXGJH-318	EXLK-318
18	1-1/4	EXGJH-418	EXLK-418
18	1-1/2	EXGJH-518	EXLK-518
18	2	EXGJH-618	EXLK-618
18	2-1/2	EXGJH-718	
18	3	EXGJH-818	
18	4	EXGJH-1018	
21	1/2	EXGJH-121	EXLK-121
21	3/4	EXGJH-221	EXLK-221
21	1	EXGJH-321	EXLK-321
21	1-1/4	EXGJH-421	EXLK-421
21	1-1/2	EXGJH-521	EXLK-521
21	2	EXGJH-621	EXLK-621
21	2-1/2	EXGJH-721	
21	3	EXGJH-821	
21	4	EXGJH-1021	
24	1/2	EXGJH-124	EXLK-124
24	3/4	EXGJH-224	EXLK-224
24	1	EXGJH-324	EXLK-324
24	1-1/4	EXGJH-424	EXLK-424
24	1-1/2	EXGJH-524	EXLK-524
24	2	EXGJH-624	EXLK-624
24	2-1/2	EXGJH-724	
24	3	EXGJH-824	
24	4	EXGJH-1024	

Size, Inches Flex Length	Dia. Size	Catalog Number	
		EXGJH	EXLK
27	1/2	EXGJH-127	EXLK-127
27	3/4	EXGJH-227	EXLK-227
27	1	EXGJH-327	EXLK-327
27	1-1/4	EXGJH-427	EXLK-427
27	1-1/2	EXGJH-527	EXLK-527
27	2	EXGJH-627	EXLK-627
27	2-1/2	EXGJH-727	
27	3	EXGJH-827	
27	4	EXGJH-1027	
30	1/2	EXGJH-130	EXLK-130
30	3/4	EXGJH-230	EXLK-230
30	1	EXGJH-330	EXLK-330
30	1-1/4	EXGJH-430	EXLK-430
30	1-1/2	EXGJH-530	EXLK-530
30	2	EXGJH-630	EXLK-630
30	2-1/2	EXGJH-730	
30	3	EXGJH-830	
30	4	EXGJH-1030	
33	1/2	EXGJH-133	EXLK-133
33	3/4	EXGJH-233	EXLK-233
33	1	EXGJH-333	EXLK-333
33	1-1/4	EXGJH-433	EXLK-433
33	1-1/2	EXGJH-533	EXLK-533
33	2	EXGJH-633	EXLK-633
33	2-1/2	EXGJH-733	
33	3	EXGJH-833	
33	4	EXGJH-1033	
36	1/2	EXGJH-136	EXLK-136
36	3/4	EXGJH-236	EXLK-236
36	1	EXGJH-336	EXLK-336
36	1-1/4	EXGJH-436	EXLK-436
36	1-1/2	EXGJH-536	EXLK-536
36	2	EXGJH-636	EXLK-636
36	2-1/2	EXGJH-736	
36	3	EXGJH-836	
36	4	EXGJH-1036	

1/2" thru 2" brass alloy is standard.

1/2" thru 2" available in stainless steel. Add suffix **-SS**.

2-1/2" thru 4" stainless steel is standard.

1/2" thru 1" stainless steel nipple. Add suffix **-NS**.

NOTE: Unions are not available in stainless steel.

Shaded area (1/2" and 3/4" sizes) indicates items suitable for Class I, Groups A and B as well as Class I, Groups C,D; Class II, Groups E,F,G; and Class III.

1/2" and 3/4" Sizes:

Suitable for Class I, Groups A,B,C and D; Class II, Groups E,F and G, and Class III.

Custom lengths available—consult factory.

1" Size:

Suitable for Class I, Groups C and D; Class II, Groups E,F and G, and Class III.

1-1/4" thru 4" Sizes:

Suitable for Class I, Group D; Class II, Groups E, F and G, and Class III.

Dimensions: EXGJH and EXLK Flexible Couplings

EXGJH and EXLK Dimensions Dimensions in Inches

Coupling Size	A	B	C	D	E	Bending Radius*
1/2	2.06	1.38	3.00	1.41	1.47	10.00
3/4	2.25	1.38	3.25	1.75	1.75	12.00
1	1.69	1.75	3.63	2.06	2.00	14.00
1-1/4	3.00	2.03	4.38	2.63	2.81	16.00
1-1/2	3.38	2.19	4.56	3.13	3.06	16.00
2	3.94	2.44	4.94	3.88	3.72	18.00
2-1/2	4.00	2.63	6.25	4.50	4.88	15.00
3	4.03	2.63	6.25	5.03	5.38	23.00
4	4.09	2.63	6.38	6.63	6.44	48.00

Dimensions in Millimeters

1/2	52.4	34.9	76.2	35.7	37.3	25.4
3/4	57.2	34.9	82.6	44.5	44.5	30.5
1	68.3	44.5	92.1	52.4	50.8	35.6
1-1/4	76.2	51.6	111.1	66.7	71.4	35.6
1-1/2	85.7	55.6	115.9	79.4	77.8	40.6
2	100.0	61.9	125.4	98.4	94.5	40.6
2-1/2	101.6	66.7	158.8	114.3	123.8	38.1
3	102.4	66.7	158.8	127.8	136.5	48.3
4	104.0	66.7	161.9	168.3	163.5	96.5

*Bending Radius shown is minimum recommended.

Fraction/Decimal Equivalents (Inches)

Fraction	Decimal
1/16	0.06
1/8	0.13
3/16	0.19
1/4	0.25
5/16	0.31
3/8	0.38
7/16	0.44
1/2	0.50
9/16	0.56
5/8	0.63
11/16	0.69
3/4	0.75
13/16	0.81
7/8	0.88
15/16	0.94
1	1.00

