

Conduit Sealing Fittings

Chico Sealing Compound and Fiber see pages 155-156

Cl. I, Div. 1 & 2, Groups A, B, C, D Explosionproof
 Cl. II, Div. 1, Groups E, F, G Dust-Ignitionproof
 Cl. II, Div. 2, Groups F, G
 Cl. III

6F

Applications:

- EYS and EZS sealing fittings:
- Restrict the passage of gases, vapors or flames from one portion of the electrical installation to another at atmospheric pressure and normal ambient temperatures
 - Limit explosions to the sealed off enclosure
 - Limit precompression or pressure "piling" in conduit systems
- Sealing fittings are required:
- At each entrance to an enclosure housing an arcing or sparking device when used in Class I, Division 1 and 2 hazardous locations. To be located as close as practicable and, in no case, more than 18" from such enclosures
 - At each conduit entrance of 2" size or larger to an enclosure or fitting housing terminals, splices or taps when used in Class I, Division 1 hazardous locations. To be located as close as practicable and, in no case, more than 18" from such enclosures
 - In conduit systems when leaving Class I, Division 1 or Division 2 hazardous locations
 - In cable systems when the cables either do not have a gas/vaportight continuous sheath or are capable of transmitting gases or vapors through the cable core when those cables leave the Class I, Division 1 or Division 2 hazardous locations

Features:

- EYS and EZS sealing fittings include:
- Minimum turning radius
 - Large openings with threaded closures to provide easy access to conduit hubs for making dams
 - Integral bushings in conduit hubs to protect conductor insulation from damage
 - Taper-tapped hubs to ensure ground continuity
- EYS sealing fittings are available for installation in either vertical only or in both horizontal or vertical positions.
- EZS sealing fittings for installation at any angle; the covers with opening for sealing compound can be properly positioned to accept the compound.

Certifications and Compliances:

- NEC/CEC:
 - EYS1-3, 11-31, 16-36, 116-316**
Class I, Division 1 & 2, Groups A, B, C, D
Class II, Division 1, Groups E, F, G
Class II, Division 2, Groups F, G
Class III
 - EYS41-101, 416-1016**
Class I, Division 1 & 2, Groups B, C, D
Class II, Division 1, Groups E, F, G
Class II, Division 2, Groups F, G
Class III
 - EYS29, 4-014, 46-0146**
EZS1-8, 16-86
Class I, Division 1 & 2, Groups C, D
Class II, Division 1, Groups F, G
Class II, Division 2, Groups F, G
Class III
- UL Standard: 1203
- CSA Standard: C22.2

Sealing fittings are approved for use in hazardous locations only when *Chico*® X fiber and *Chico A* sealing compound or Chico SpeedSeal are used to make the seal.

Standard Materials:

- Bodies – *Feraloy*® iron alloy and/or ductile iron
- Plugs – *Feraloy* iron alloy and/or steel
- Removable nipples – steel

Standard Finishes:

- Feraloy* iron alloy and ductile iron – electrogalvanized and aluminum acrylic paint
- Steel – electrogalvanized

Options:

Description
Copper-free aluminum bodies, nipples and enclosures

Suffix
SA

Size Ranges:

- 1/2" – 6"

Ordering Information - EYS



Vertical female



Vertical male & female



Vertical or horizontal female



Vertical or horizontal male & female

For Sealing in Vertical Positions Only

Hub Size	Female Hub Cat. #	Male & Female Hub Cat. #	Approximate Internal Volume in Cubic Inches
1/2	EYS1*	EYS16*	1
3/4	EYS2*	EYS26*	2
1	EYS3*	EYS36*	3 3/4

For Sealing in Vertical or Horizontal Positions

Hub Size	Female Hub Cat. #	Male & Female Hub Cat. #	Approximate Internal Volume in Cubic Inches	
			Vertical	Horizontal
1/2	EYS11*	EYS116*	1	1
3/4	EYS21*	EYS216*	2	2
1	EYS31*	EYS316*	3	3 3/4
1 1/4	EYS41	EYS416	6	8
1 1/2	EYS51	EYS516	10 3/4	12 1/4
2	EYS61	EYS616	19	22 3/4
2 1/2	EYS71	EYS716	25 1/2	30
3	EYS81	EYS816	56	64 1/2
3 1/2	EYS91	EYS916	72	82
4	EYS101	EYS1016	95	110

*Available in copper-free aluminum – to order, add suffix SA to Cat. No.

Dimensions (In Inches)

EYS 16 Series

Size	a	b	Turning Radius
1/2	3 9/32	1 1/4	1 5/8
3/4	3 11/16	1 1/2	1 29/32
1	4 5/16	1 3/4	2 3/8

EYS 116 Series

a	b	Turning Radius
3 11/16	1 1/4	1 3/32
3 11/16	1 1/2	1 1/4
4 5/16	1 3/4	1 5/8

EYS 46 Series

Size	a	b	Turning Radius
1 1/4	5 1/16	2 3/16	1 23/32
1 1/2	5 1/2	2 7/16	2 1/16
2	6 1/4	3	2 5/16
2 1/2	7 1/2	3 1/2	2 11/16
3	8 1/2	4 1/4	3 5/16
3 1/2	9 3/16	4 3/4	3 7/16 ‡
4	9 3/4	5 1/4	3 11/16 ‡
5	11 1/16	6 1/2	4 19/32 ‡
6	12 1/8	7 5/8	5 11/32 ‡

EYS 116 Series

a	b	Turning Radius
5 1/16	2 3/16	1 23/32
5 1/2	2 7/16	2 1/16
6 1/4	3	2 5/16
7 1/2	3 1/2	2 11/16
8 1/2	4 1/4	3 5/16
9 3/16	4 3/4	3 7/16 ‡
9 3/4	5 1/4	3 11/16 ‡

‡With cover removed.

Crouse-Hinds
by **E.T.N**

Conduit Sealing Fittings

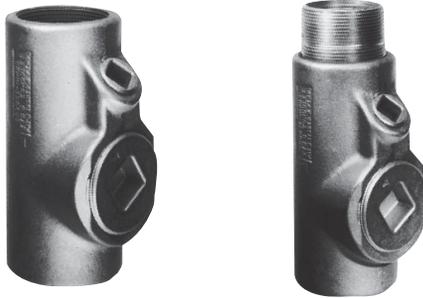
Chico Sealing Compound and Fiber see pages 155-156

Cl. I, Div. 1 & 2, Groups C, D
Cl. II, Div. 1, Groups E, F, G
Cl. II, Div. 2, Groups F, G
Cl. III

Explosionproof
Dust-Ignitionproof

6F

Ordering Information - EYS



Vertical or horizontal male & female

Ordering Information - EZS



Male & female hub

For Sealing in Vertical or Horizontal Positions

Hub Size	Female Hub Cat. #	Male & Female Hub Cat. #	Approximate Internal Volume in Cubic Inches	
			Vert.	Horiz.
1¼	EYS4*	EYS46*	6	8
1½	EYS5*	EYS56*	10¾	12¼
2	EYS6*	EYS66*	19	22¾
2½	EYS7*	EYS76*	25½	30
3	EYS8*	EYS86*	56	64½
3½	EYS9*	EYS96*	72	82
4	EYS10*	EYS106*	95	110
5	EYS012	EYS0126	200	222
6	EYS014	EYS0146	290	315

*Available in copper-free aluminum – to order, add suffix SA to Cat. No.

For Sealing at Any Angle

Hub Size	Female Hub Cat. #	Male & Female Hub Cat. #	Approximate Internal Volume in Cubic Inches	
			Vert.	Horiz.
½	EZS1	EZS16	6¼	6¼
¾	EZS2	EZS26	6½	6½
1	EZS3	EZS36	10¼	10¼
1¼	EZS4	EZS46	12½	12½
1½	EZS5	EZS56	14½	14½
2	EZS6	EZS66	46	46
2½	EZS7	EZS76	55	55
3	EZS8	EZS86	90	90

EYS

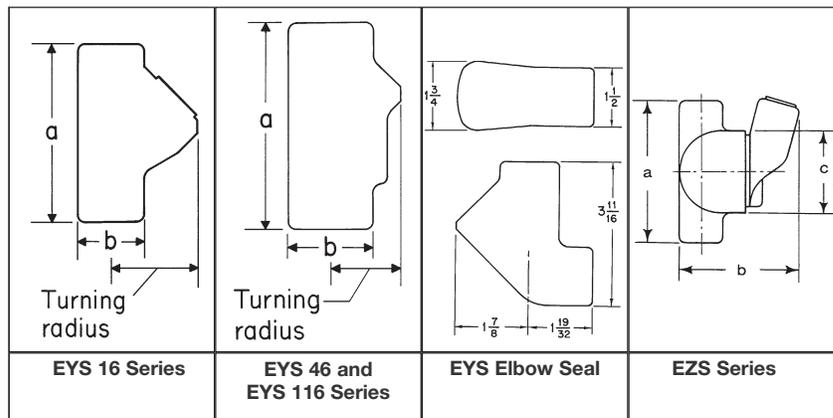


Elbow seal

For Sealing in Vertical Positions

Hub Size	Cat. #	Approximate Internal Volume in Cubic Inches
¾	EYS29	1¾

Dimensions In Inches



EYS Elbow Seal

Size	a	b	Turning Radius (Vertical)
¾	3 ¹¹ / ₁₆	1¾	1 ⁷ / ₈

EZS Series

Size	a	b	c	Turning Radius†
½	4 ⁹ / ₁₆	3 ⁵ / ₈	2½	1 ⁷ / ₈
¾	4 ³ / ₁₆	3 ⁵ / ₈	2½	1 ⁷ / ₈
1	4 ¹⁵ / ₁₆	3 ³¹ / ₃₂	3	2 ¹ / ₈
1¼	5 ¹ / ₁₆	4 ¹³ / ₃₂	3	2 ⁹ / ₁₆
1½	5 ³ / ₁₆	4 ⁹ / ₁₆	3¼	2 ¹¹ / ₃₂
2	7 ¹ / ₁₆	5 ¹³ / ₃₂	5 ³ / ₁₆	3 ³ / ₃₂
2½	7 ¹⁵ / ₁₆	5 ²⁷ / ₃₂	5 ⁹ / ₁₆	3 ³ / ₈
3	8 ⁵ / ₈	6½	5 ⁷ / ₈	3 ⁷ / ₈

†With cover removed.

Crouse-Hinds

by E.T.N

6F

Chico® A and Chico® A-P Sealing Compound

Chico® X Fiber

Chico® SpeedSeal™

For Sealing Fittings and Hubs



Applications:

Chico X fiber:

- Forms a dam between the integral bushing of the sealing fitting and the end of the conduit and around the electrical conductors entering the hub

Chico A sealing compound:

- Forms a seal around each electrical conductor and between them and inside of the sealing fitting to restrict the passage of gases, vapors or flames through the sealing fitting at atmospheric pressure and at normal ambient temperatures

Chico® SpeedSeal™ Compound:

- Designed to separate and form an explosionproof seal around each electrical conductor in Eaton's Crouse-Hinds EYS and EYD sealing fittings
- Restricts the passage of gases, vapors or flames through the sealing fitting
- Creates a seal for Class I, Division 1, Groups C, D and Class II, Division 1, Groups E, F, G hazardous areas

Features:

Chico A sealing compound:

- A water soluble powder that can be easily mixed and poured. The compound, unusually dense, expands slightly when hardening and bonds to inner walls of sealing fittings. Compound hardens in 60–70 minutes
- Chico A cure time is 8 hours for Class I, Group C and D applications and 72 hours for Class I, Group A and B applications.
- Chico A has a 1 year shelf life from date of manufacture.
- Chico A ambient temperature range (after curing) is –40°F to +165°F.

Chico A-P Intrapak®:

- Packaged in two-compartment plastic pouch with precise amount of water for mixing. No mixing or measuring implements required.
- A hard squeeze of the water compartment forces the water into the compartment containing the Chico compound. Mixing is completed by kneading the pouch for one minute.
- The mixed sealing compound is poured directly into the sealing fitting – no funnel required. The package label indicates the size and quantity of sealing fittings each pouch will properly fill. Compound hardens in 60–70 minutes.

Chico X fiber:

- A mineral wool that packs easily, forming around each conductor

Chico® SpeedSeal™ Compound:

- Installs a reliable seal in five minutes - *every time*
- Hardens to a dense, strong mass that is suitable for Class I, Division 1, Groups C, D and Class II, Division 1, Groups E, F, G hazardous applications.
- UL and cUL Listed for use with 1/2" to 2" Eaton's Crouse-Hinds sealing fittings only.
- Packaged in a 2 oz. or 6 oz. pre-measured cartridge, eliminating the need for measuring before mixing.
- Packaged with a screw-on nozzle for accurate dispensing.
- Expands four times its original size in the sealing fitting, eliminating the need to separate the individual conductors with Chico X fiber.
- Chico X fiber dams are not required in horizontal applications, reducing installation times.
- Completely hardens in 20 minutes, simplifying use for OEMs.
- Suitable for cold temperature environments without the costly need to build a temporary shelter around sealing fittings. All ice crystals must be removed from inside the conduit seal before dispensing Chico SpeedSeal compound. The Chico SpeedSeal compound should be kept above 10°C (50°F) and below 85°F (29°C) prior to mixing. The sealing fitting must be kept at or above 4°C (40°F) during the 4 to 10 minute expansion/gel time of the compound.
- 18 months shelf-life.
- Patent pending.

Size Ranges:

- *Chico A* compound – 1 lb. to 5 lbs. (provides 23–115 cubic inches of compound)
- *Chico X* fiber – 2 oz. to 1 lb.
- *Chico A-P* (5 pouches per carton) – provides 25 and 55 cubic inches of compound
- *Chico SpeedSeal* - 2 oz. or 6 oz. cartridge

Eaton's Crouse-Hinds sealing fittings are approved for use in hazardous locations only when *Chico X* fiber and *Chico A* Sealing Compound or *Chico SpeedSeal* are used to make the seal.

Ordering Information - Chico A



Net Weight	Vol. Cu. In.†	Cat. #
1 lb.	23	Chico A3
1 lb.‡	23	Chico A4
5 lb.	115	Chico A05

Ordering Information - Chico A-P Intrapak®



Cu. In. Fill per Pouch†	No. of Pouches per Carton	Cat. #
5	5	Chico A19 PX*
11	5	Chico A39 PX*

*A sixth pouch, containing an appropriate quantity of Chico X fiber, is included in these cartons.

†Number of cubic inches this amount will fill when set. See internal volume requirements for EYS, EZS, EYD, EZD and EYSR sealing fittings and ES sealing hubs (see pages 140–149).

‡Includes 1 oz. Chico X fiber.

Crouse-Hinds

by **E:T·N**

Chico® A and Chico® A-P Sealing Compound

Chico® X Fiber

Chico® SpeedSeal™

For Sealing Fittings and Hubs

Ordering Information - Chico X Fiber



Net Weight	Cat. #
2 oz.	Chico X4
8 oz.	Chico X6
1 lb.	Chico X7

Chart for Approximate Amount of Fiber Per Hub

Hub Size	Ozs. Required
1/2	1/32
3/4	1/16
1	1/8
1 1/4	1/4
1 1/2	1/2
2	1
2 1/2	1 1/2
3	2
3 1/2	3
4	4 1/2
5	7
6	10

Ordering Information - Chico SpeedSeal

Class I, Div. 1, Groups C & D and Class II, Div. 1, Groups E, F and G



Sealing Fitting Cat. #	Amount of SpeedSeal Material Needed (in Ounces) per Fitting	Suggested SpeedSeal Cat. #	Required Cartridge Quantity
EYS1, EYS16; EYS11, EYS116 EYD1, EYD16, EYD11, EYD116 EYS2, EYS26, EYS21, EYS216 EYD2, EYD26, EYD21, EYD216 EYSX11, EYDX11	1	CHICO SS2 (2 oz. Cartridge)	1
EYS3, EYS36, EYS31, EYS316 EYD3, EYD36, EYD31, EYD316 EYSX21, EYDX21	2	CHICO SS2 (2 oz. Cartridge)	1
EYS41, EYS416, EYS4, EYS46 EYD4, EYD46, EYD41, EYD416 EYSX31, EYDX31	3	CHICO SS6 (6 oz. Cartridge)	1
EYSX41, EYDX41 EYD5, EYD56, EYD51, EYD516 EYS51, EYS516, EYS5, EYS56 EYSX51, EYDX51 EYD6, EYD66, EYD61, EYD616 EYS61, EYS616, EYS6, EYS66	6	CHICO SS6 (6 oz. Cartridge)	1

MSDS sheets are available at www.crouse-hinds.com