Unilet® Conduit Outlet Bodies: FM7™, FM8®, Form 35® and Form 85™

For use with Rigid Steel, Rigid Aluminum, IMC, and EMT Conduit.

Applications

- Serve as pulling fittings.
- Make bends in conduit system.
- Provide openings for splicing.
- Connect and change direction of conduit runs.
- Allow connections for branch runs.
- Permit access to conductors for maintenance.

Features: Unilet® conduit outlet bodies

- Roomy interiors: more wiring space.
- Smooth, rounded integral bushings in hubs protect conductor insulation.
- Accurately tapped, tapered threads for tight, rigid joints and excellent ground continuity.

Features: FM7™ Series

❶FM7 Grayloy™-Iron Unilets: most economical conduit bodies for use where the special advantages of malleable iron or aluminum are not required.

❷FM7 Aluminum Unilets: same dimensions and design features as FM7 Grayloy™-Iron, plus light weight, high corrosion resistance.

- Unique Wedge-Lok™ clip covers allow easy removal. No retapping of corroded body screw holes is necessary to replace cover.
- Completely interchangeable with Crouse-Hinds Form 7* bodies, gaskets and covers. Equivalent FM7 and Form 7* units have identical applications and installation dimensions.
- Flat back design provides greater cubic content for easier wire pulling and more room for splicing.
- FM7 Grayloy™-Iron with "FG" Series cast covers and gaskets are approved for use in wet locations.
- Smooth hub bushings and cover openings protect conductor insulation. Smooth hub openings allow easy conduit joining.

FM7

❶ FM7 Grayloy™-iron, 1" Type C shown with cut-away body and cover to illustrate Wedge-Lok™ Clip Cover detail.

❷ FM7 Aluminum Conduit Body with Cast Aluminum Cover. 1" Type C shown.

❸ FM8 Grayloy™-iron Conduit Body with cast cover, 1" Type C shown.

❹ Form 35 Malleable. 2" Type LB with rollers shown.

❺ Form 85 Aluminum Conduit Body with Stamped Aluminum Cover. 2" Type C shown.

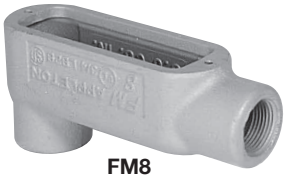
- Pan-head cover screws secure cover clips and provide superior screwdriver seating and torque. Cover screws and clips are captive to prevent loss.
- Hub size, body style, and compliance data molded into body in large, easy-to-read form. Also maximum wire number/size and cubic capacity.

Features: FM8® Series

❸Completely interchangeable with Crouse-Hinds Form 8* bodies, gaskets and covers. Equivalent FM8 and Form 8* units have identical applications and installation dimensions.

- Flat back design provides greater cubic content for easier wire pulling and more room for splicing.
- FM8 Grayloy™-iron with "FG" Series cast covers and gaskets are approved for use in wet locations.
- Stainless steel screws on stamped and cast covers.
- Smooth hub bushings and cover openings protect conductor insulation. Smooth hub openings allow easy conduit joining.

*Form 7 and Form 8 are products of Crouse-Hinds, a member company of Cooper Industries.



FM8

Effective September, 2005

Appleton®

800-621-1506
www.appletonelec.com

Unilet® Conduit Outlet Bodies: FM7™, FM8®, Form 35® and Form 85™

For use with Rigid Steel, Rigid Aluminum, IMC, and EMT Conduit.

Features: Form 35®

❹Form 35 malleable iron Unilets: high tensile strength and ductility. High corrosion-resistance, high impact and shock resistance.

- Exclusive built-in easy-pulling rollers in type C (1-1/4" thru 4") and type LB (1-1/4" thru 4")– eliminate damage when cable is pulled through hubs.
- Sizes with flat-back design ideal where fitting is mounted flat against surface.
- Complete line of conduit bodies, covers and receptacles.
- Blank covers domed for extra wiring space.

Form 35

Form 35

Features: Form 85™

❺Form 85 aluminum Unilets: copper-free aluminum (max. 4/10 of 1% copper content). Lightweight, high corrosion resistance. Self-oxidizing, self-renewing.

- Lightweight aluminum facilitates shipping, handling and installing.
- Sizes with flat-back design ideal where fitting is mounted flat against surface.
- Complete line of conduit bodies, covers and receptacles.
- Blank covers domed for extra wiring space.

Form 85

Standard Materials

- *Form 35 Unilet conduit outlet bodies:* malleable iron.
- *Form 85 Unilet conduit outlet bodies:* aluminum– copper-free (max. 4/10 of 1%). 1/2" thru 2"– pressure cast. 2-1/2" thru 4"– sand cast.
- *FM7 Unilet conduit bodies:* Grayloy-iron or copper-free aluminum.
- *FM8 Unilet conduit bodies:* Grayloy-iron.
- *Covers for Form 35 and 85:* blank– malleable iron, steel and aluminum. Duplex grounding receptacle– phenolic. Lamp receptacle– porcelain. Wiring device and switch covers– aluminum. Cover screws: stainless steel.
- *Covers for FM7:* stamped steel, stamped aluminum, cast Grayloy-iron, and cast aluminum; cover screws: stainless steel.
- *Covers for FM8:* cast Grayloy-iron, stamped steel; cover screws: stainless steel.
- *Gaskets for Form 35 and Form 85:* neoprene or composition fiber.
- *Gaskets for FM7 and FM8:* neoprene.

Standard Finishes

- *Form 35 malleable iron bodies:* triplecoat– (1) zinc electroplate, (2) dichromate, and (3) epoxy powder coat.
- *Form 35 Covers:* steel: zinc electroplate. Malleable iron: triple-coat– (1) zinc electroplate, (2) dichromate, and (3) epoxy powder coat.
- *Form 85 aluminum bodies:* epoxy powder coat.
- *Form 85 stamped aluminum covers:* natural finish.
- *Form 85 cast aluminum covers:* epoxy powder coat.
- *FM7 and FM8 Grayloy-iron bodies:* triplecoat– (1) zinc electroplate, (2) dichromate, and (3) epoxy powder coat.
- *FM7 aluminum bodies:* epoxy powder coat.
- *FM7 and FM8 steel covers:* zinc electroplate.
- *FM7 stamped aluminum covers:* natural finish.
- *FM7 and FM8 Grayloy-iron covers:* triplecoat– (1) zinc electroplate, (2) dichromate, and (3) epoxy powder coat.
- *FM7 cast aluminum covers:* epoxy powder coat.

Compliances

- UL Standard 514A.
- Federal Spec. W-C-586B.
- Suitable for classified location use in Class I, Division 2 areas, if installed in compliance with NEC 501-4(b).
- 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 of 1% max.) alloy.
- Appleton Grayloy-iron products are a gray iron alloy with tensile strength similar to ASTM-A48 Class 30A (30,000 psi tensile), and with a Brinell hardness of approximately 180BH.

Product Cross Reference

- For explosionproof conduit outlet bodies and boxes, see Cat. Section J.
- For Mogul Unilets®, see pages A-17 through A-24.

FM8® Grayloy™–Iron Conduit Bodies and Covers; FM7™ Grayloy™–Iron and Aluminum Unilet® Conduit Bodies: Wedge–Lok™ Clip Covers

For use with Rigid Steel, Rigid Aluminum and IMC Conduit.

Freedom of Choice. With new FM8 series added to Appleton's full-line family of conduit bodies, you have a single source for the right choice needed for every job– FM8 Grayloy-iron bodies and covers, FM7 Grayloy-iron or aluminum threaded bodies and covers... malleable iron Form 35... aluminum Form 85... and malleable iron or aluminum NEC Mogul 6x8x.

Interchangeable. Appleton FM7 and FM8 bodies, covers and gaskets are completely interchangeable with equivalent Crouse-Hinds Form 7* and Form 8* bodies and covers. Applications and installation dimensions are also interchangeable.

No wire damage. Appleton FM7 and FM8 bodies have a smooth, rounded, internal bushing in each hub and smooth cover openings to protect conductor insulation.

Easy cover removal. Unique FM7 Wedge-Lok Clip-Cover design allows easy removal at any later time, without damaging the conduit body. Because the cover is secured with clips– not screws – no retapping of corroded body screw holes is necessary to replace cover.

Positive-seating cover screws. Pan-head cover screws, which hold the clips, provide superior screwdriver seating and torque for easier cover installation or removal. Each cover screw and its attached locking clip are held captive in the cover to prevent loss.

Full-line choice. Appleton FM7 and FM8 bodies are offered in a complete range of hub configurations and sizes. FM7 covers are available in blank stamped steel or stamped aluminum, and also in cast Grayloy-iron or cast aluminum. FM8 covers are available in Grayloy-iron. Covers can be used without gaskets, or with a solid neoprene gasket. All Appleton FM7 and FM8 bodies, covers and gaskets are interchangeable with Crouse-Hinds Form 7* and Form 8* bodies, covers and gaskets.

Approved for wet locations. FM7 and FM8 Grayloy-iron bodies with the "FG" series cast covers and gasket are approved for use in wet locations. (NEMA 3R)

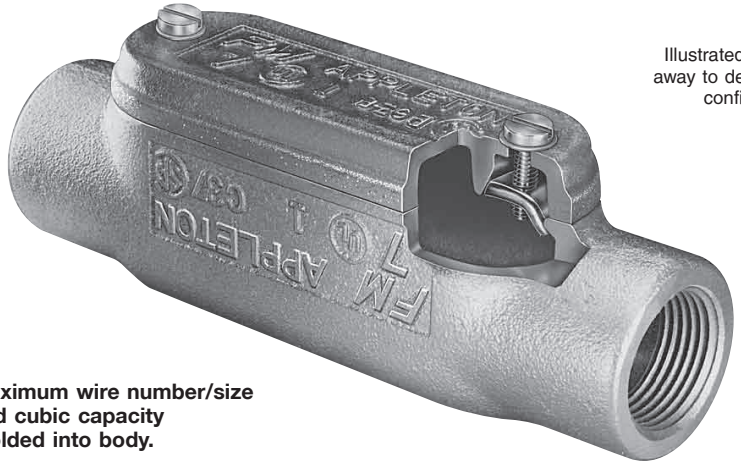
Maximum corrosion protection. Appleton FM7 and FM8 Grayloy-iron conduit bodies and cast covers have a triple-coat finish– (1) zinc electroplate, (2) dichromate, and (3) epoxy powder coating. FM7 aluminum bodies and cast covers are coated with epoxy powder coating. FM7 and FM8 blank steel covers have a zinc electroplate finish. Superior FM7 and FM8 finish gives greater corrosion protection in wet or harsh environments, assuring long, trouble-free service.

Grayloy-iron properties. Grayloy™ is an Appleton proprietary cast graphite flake gray iron alloy with superior physical and mechanical properties offering strength, hardness, fracture toughness, high vibration absorption and dimensional stability. Tensile strength is similar to ASTM-A48 Class 30A (30,000 tensile), with Brinell hardness of approximately 180BH.

Aluminum properties. Aluminum products are produced from a high strength copper-free (4/10 of 1% max.) alloy.

More wiring space. Appleton's FM7 and FM8 flat-back design provides greater cubic content for easier wire pulling, and more room for splicing. FM7 and FM8 flat back fits flush and snug against flat surfaces for more stable installation.

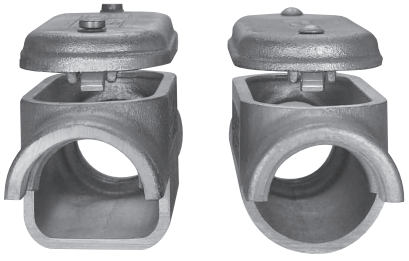
* Form 7 and Form 8 are products of Crouse-Hinds, a member company of Cooper Industries.



- **Maximum wire number/size and cubic capacity molded into body.**
- **Large size, style and compliance data molded into body.**

Illustrated views are cut away to demonstrate back configurations.

Appleton FM7™ | **Crouse–Hinds Form 7**



LEFT
Appleton FM7 (C57, 1-1/2")
28 Cubic Inches Capacity
Flat-Back Design

RIGHT
Crouse-Hinds Form 7 (C57, 1-1/2")
26 Cubic Inches Capacity

FM8® Grayloy™–Iron Unilet® Conduit Bodies with Covers and Gaskets

For use with Rigid Steel and IMC Conduit.

These Appleton FM8 conduit bodies, covers and gaskets have the same applications and installation dimensions as Crouse-Hinds Form 8 conduit bodies. Equivalent FM8 and Form 8 items are interchangeable.

Appleton FM8® Conduit Bodies NOTE: Refer to page A-15 for Wiring Capacity Table

Hub Size (in.)	C  Grayloy-Iron	LB  Grayloy-Iron	LL  Grayloy-Iron	LR  Grayloy-Iron
1/2	C18	LB18	LL18	LR18
3/4	C28	LB28	LL28	LR28
1	C38	LB38	LL38	LR38
1-1/4	C448	LB448	LL448	LR448
1-1/2	C58	LB58	LL58	LR58
2	C68	LB68	LL68	LR68
2-1/2	C78	LB78	LL78	LR78
3	C88	LB888	LL888	LR888
3-1/2	—	LB98	—	—
4	—	LB108	—	—

Hub Size (in.)	T  Grayloy-Iron	TB  Grayloy-Iron	X  Grayloy-Iron
1/2	T18	TB18	X18
3/4	T28	TB28	X28
1	T38	TB38	X38
1-1/4	T448	TB448	X448
1-1/2	T58	TB58	X58
2	T68	TB68	X68
2-1/2	T78	—	—
3	T88	—	—

Appleton FM8® Blank Covers and Gaskets (Covers furnished with stainless steel screws, 1-1/2"–4" covers provided with 4 screws)

FM8 Body Size (in.)	Stamped Cover Steel 	Cast Cover Grayloy-Iron 	Solid Gasket Neoprene 	Open Gasket Neoprene 
1/2	180	180F	GASK851N	—
3/4	280	280F	GASK852N	—
1	380	380F	GASK853N	—
1-1/4	480	480F	GASK854N	—
1-1/2	580	580F	—	GASK805N
2	680	680F	—	GASK806N
2-1/2	880	880F	—	GASK808N
3	880	880F	—	GASK808N
3-1/2	980	980F	—	GASK809N
4	980	980F	—	GASK809N

Effective September, 2005

Appleton®

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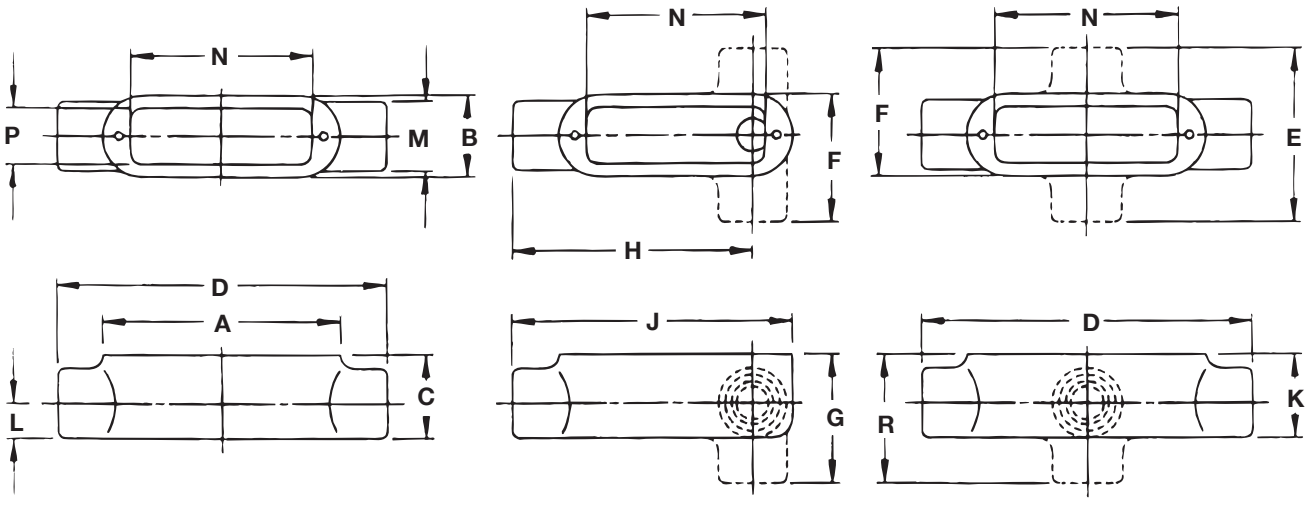
FM8® Conduit Body Dimensions



TYPE C | TYPES E, LB, LL, LR | TYPES T, TB, X

Dimensions In Inches

Hub Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R
1/2	4.22	1.47	1.47	5.94	3.13	2.31	2.28	4.38	5.09	1.78	0.63	1.25	3.28	1.00	2.59
3/4	4.81	1.66	1.69	6.56	3.31	2.50	2.50	4.91	5.75	2.00	0.75	1.50	3.94	1.19	2.81
1	5.59	1.84	1.97	7.56	3.72	2.78	2.91	5.72	6.63	2.28	0.88	1.75	4.53	1.38	3.22
1-1/4	6.56	2.19	2.38	8.44	4.06	3.13	3.31	6.41	7.50	2.63	1.09	2.19	5.31	1.75	3.56
1-1/2	7.88	2.78	2.78	10.38	5.28	4.03	4.03	7.75	9.13	2.78	1.38	2.44	6.50	2.09	4.03
2	9.75	3.88	3.56	12.38	6.38	5.13	4.81	9.19	11.13	3.56	1.88	3.00	8.63	3.00	4.81
2-1/2	12.25	5.00	4.44	15.63	—	6.69	6.13	11.44	13.94	4.44	2.50	3.50	10.88	4.25	—
3	12.25	5.00	4.81	15.63	—	6.69	6.50	11.44	13.94	4.81	2.50	4.25	10.88	4.25	—
3-1/2	15.00	6.25	5.69	—	—	—	7.56	13.75	16.88	—	3.13	4.75	13.44	5.44	—
4	15.00	6.25	5.94	—	—	—	7.81	13.75	16.88	—	3.13	5.25	13.44	5.44	—

Fraction/Decimal Equivalents (Inches)

Fraction	Decimal	Fraction	Decimal	Fraction	Decimal	Fraction	Decimal
1/32	0.03	9/32	0.28	17/32	0.53	25/32	0.78
1/16	0.06	5/16	0.31	9/16	0.56	13/16	0.81
3/32	0.09	11/32	0.34	19/32	0.59	27/32	0.84
1/8	0.13	3/8	0.38	5/8	0.63	7/8	0.88
5/32	0.16	13/32	0.41	21/32	0.66	29/32	0.91
3/16	0.31	7/16	0.44	11/16	0.69	15/16	0.94
7/32	0.22	15/32	0.47	23/32	0.72	31/32	0.97
1/4	0.25	1/2	0.50	3/4	0.75	1	1.00

Wiring Capacity: FM7™ and FM8® Conduit Bodies and Covers

Combine Body and Cover Capacities for Total usable Capacity per NEC 370-6(a)(1)

FM7™ Grayloy™–Iron Bodies and Covers: Threaded

Capacity in Cubic Inches

Hub Size (In.)	C	E	LB	LL LR	L	T	TA	TB	X	Stamped Cover	Cast Cover
1/2	4.0	4.0	4.0	4.0	5.0	6.0	6.0	6.0	6.0	0.3	0.4
3/4	7.0	7.0	7.0	7.0	9.0	10.0	10.0	10.0	10.0	0.5	0.8
1	11.0	11.0	11.0	11.0	13.5	15.5	15.5	15.5	15.5	1.3	1.3
1-1/4	20.0	—	20.0	20.0	22.5	20.0	20.0	20.0	20.0	1.8	2.0
1-1/2	28.0	—	28.0	28.0	31.0	28.0	28.0	28.0	28.0	2.3	3.0
2	50.0	—	50.0	50.0	55.0	50.0	50.0	50.0	50.0	2.8	4.8
2-1/2	102.0	—	102.0	102.0	—	102.0	—	—	—	9.8	9.7
3	133.0	—	133.0	133.0	—	133.0	—	—	—	9.8	9.7
3-1/2	—	—	218.0	218.0	—	218.0	—	—	—	16.5	16.0
4	—	—	244.0	244.0	—	244.0	—	—	—	16.5	16.0

FM7™ Aluminum Bodies and Covers: Threaded

Capacity in Cubic Inches

Hub Size (In.)	C	E	LB	LL LR	L	T	TA	TB	X	Stamped Cover	Cast Cover
1/2	4.0	4.0	4.0	4.0	—	6.0	—	6.0	6.0	0.3	0.4
3/4	7.0	7.0	7.0	7.0	—	10.0	—	10.0	10.0	0.5	0.8
1	11.0	11.0	11.0	11.0	—	15.5	—	15.5	15.5	1.3	1.3
1-1/4	20.0	—	20.0	20.0	—	20.0	—	20.0	20.0	1.8	2.0
1-1/2	28.0	—	28.0	28.0	—	28.0	—	28.0	28.0	2.3	3.0
2	50.0	—	50.0	50.0	—	50.0	—	50.0	50.0	2.8	4.8
2-1/2	102.0	—	102.0	102.0	—	102.0	—	—	—	9.8	9.7
3	133.0	—	133.0	133.0	—	133.0	—	—	—	9.8	9.7
3-1/2	—	—	218.0	218.0	—	218.0	—	—	—	16.5	16.0
4	—	—	244.0	244.0	—	244.0	—	—	—	16.5	16.0

FM8® Grayloy™–Iron Bodies and Covers: Threaded

Capacity in Cubic Inches

Hub Size (In.)	C	E	LB	LL LR	L	T	TA	TB	X	Stamped Cover	Cast Cover
1/2	5.0	—	5.0	5.0	—	6.0	—	6.0	6.0	0.5	0.3
3/4	8.0	—	8.0	8.0	—	10.0	—	10.0	10.0	0.8	0.8
1	13.0	—	13.0	13.0	—	15.0	—	15.0	15.0	1.0	1.0
1-1/4	24.0	—	24.0	24.0	—	25.0	—	25.0	25.0	1.5	1.5
1-1/2	42.5	—	42.5	42.5	—	44.0	—	44.0	44.0	1.8	7.5
2	105.0	—	105.0	105.0	—	105.0	—	105.0	105.0	4.5	12.5
2-1/2	200.0	—	200.0	200.0	—	200.0	—	—	—	12.3	34.5
3	217.0	—	217.0	217.0	—	217.0	—	—	—	12.3	34.5
3-1/2	—	—	380.0	—	—	—	—	—	—	24.0	65.3
4	—	—	400.0	—	—	—	—	—	—	24.0	65.3