# Unilet<sup>®</sup> Conduit Outlet Bodies: FM7<sup>™</sup>, FM8<sup>®</sup>, Form 35<sup>®</sup> and Form 85<sup>™</sup>

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**

- FM7 Grayloy™-Iron Unilets: most economical conduit bodies for use where the special advantages of malleable iron or aluminum are not required.
- ②FM7 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



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



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





Form 35 Malleable.Type LB with rollers shown.



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.



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- Form 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™

- ⊕ Form 85 aluminum Unilets: copperfree 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: Grayloyiron.
- 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: triple-coat— (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 explosion proof conduit outlet bodies and boxes, see Cat. Section J.
- For Mogul Unilets<sup>®</sup>, see pages A-17 through A-24.

# Form 35<sup>®</sup> Malleable Iron Unilet<sup>®</sup> Conduit Outlet Bodies

Threaded Type for use with Rigid Metal Conduit and IMC; Compression Type for use with Threadless Rigid Metal Conduit.

Appleton	Form 35 <sup>®</sup> Threaded Type	e Conduit Bodies NOTE:	Refer to page A-16 for Wiring	Capacity Tables	
Hub Size (in.)	C MEDICAL CONTROL CONT	E	LB  PORTOR INCIT  ENTITION AND	LL Transports	LR Interest of the second of t
1/2	C50-M	E50-M	LB50-M	LL50-M	LR50-M
3/4	C75-M	E75-M	LB75-M	LL75-M	LR75-M
1	C100-M	E100-M	LB100-M	LL100-M	LR100-M
1-1/4	C125-M∜	E125-M	LB125-M <b>◊</b>	LL125-M	LR125-M
1-1/2	C150-M∜	E150-M	LB150-M <b>◊</b>	LL150-M	LR150-M
2	C200-M∜	—	LB200-M <b>◊</b>	LL200-M	LR200-M
2-1/2	C250-M◊	-	LB250-M∜	LL250-M	LR250-M
3	C300-M◊	-	LB300-M∜	LL300-M	LR300-M
3-1/2	C350-M◊	-	LB350-M∜	LL350-M	LR350-M
4	C400-M◊	-	LB400-M∜	LL400-M	LR400-M
5 6	_ _	<u>-</u>	LB500-M LB600-M	_ _	<u> </u>
	LRL*	Т	TA	ТВ	X
Hub Size (in.)				Control of the Contro	
1/2	LRL50-M	T50-M	TA50-M	TB50-M	X50-M
3/4	LRL75-M	T75-M	TA75-M	TB75-M	X75-M
1	LRL100-M	T100-M	TA100-M	TB100-M	X100-M
1-1/4	LRL125-M	T125-M	_	TB125-M	X125-M
1-1/2	LRL150-M	T150-M	=	TB150-M	X150-M
2	LRL200-M	T200-M	-	TB200-M	X200-M
2-1/2	-	T250-M	-	-	-
3	-	T300-M	-	-	-
3-1/2	-	T350-M	-	-	-
4	-	T400-M	-	-	-

<sup>\*</sup>LRL Unilets have double opening and are furnished with one steel cover, assembled.

### Compression Type—For use with Threadless Rigid Metal Conduit

	LB	LRL*	Т
Hub Size (in.)			9
1/2 3/4 1	LB50N-M LB75N-M LB100N-M	LRL50N-M LRL75N-M LRL100N-M	T50N-M T75N-M T100N-M

### Back Style for Form 35 Unilet conduit body sizes (inches)

Unilet Body	Flat Back	Round Back
C, LB	1/2 - 2	2-1/2 and up
E	1/2 - 1-1/2	1-1/4 and up
LL, LR, T	1/2 - 2	2-1/2 and up
TB	1-1/4, 1-1/2	1/2, 3/4, 1, 2
X	1/2 - 1	1-1/4 and up

All TA Unilets are round back design. All Compression Type are flatback design.



<sup>♦</sup> Catalog numbers having patented roller feature, all others do not.

### Covers and Gaskets for Form 35<sup>®</sup> Unilet<sup>®</sup> Conduit Outlet Bodies

Covers Furnished with Stainless Steel Fastening Screws.

<b>Appleton Form 35®</b>	<b>Covers and G</b>	iaskets NOTE: Refer to	page A-16 for Wiring	Capacity Tables.
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Size	Blank Stamped Steel	Blank Cast Malleable	Neoprene	Composition Fiber
Form 35 Body Size (in.)	Domed: 1/2" - 3"  Flat: 3-1/2" - 6"	Flat: 1/2" - 2"	Tear out inner perforated section to convert to "open type" gasket.	
1/2	K50	K50-CM	GK50-N	GK50-V
3/4	K75	K75-CM	GK75-N	GK75-V
1	K100	K100-CM	GK100-N	GK100-V
1-1/4	K125 & 150	K125 & 150-CM	GK125-150-N	GK125-150-V
1-1/2	K125 & 150	K125 & 150-CM	GK125-150-N	GK125-150-V
2	K200	K200-CM	GK200-N	GK200-V
2-1/2	K250 & 300	K250 & 300-CM	GK250-300-N	GK-250-300-V
3	K250 & 300	K250 & 300-CM	GK250-300-N	GK-250-300-V
3-1/2	K350 & 400	K350 & 400-CM	GK350-400-N	GK-350-400-V
4	K350 & 400	K350 & 400-CM	GK350-400-N	GK-350-400-V
5 6	K500 K600	=	GK500-SN† GK600-SN†	

<sup>†</sup> Not perforated

### **Wiring Device Covers**



Lamp Receptacle with 1-1/2" Shade Holder Groove. Porcelain, 600 Watt, 600 Volt Rating

Cat. No.

1/2 KLR50 3/4 KLR75

Form 35

Body Size (in.)



**Device Cover** for Interchangeable (Despard) Wiring Devices, Cast Aluminum with Mounting Strap

Form 35 Body Size (in.)

1/2

KWD50-A

Cat. No.



**Switch Cover** for Interchangeable (Despard) Devices, Cast Aluminum with Gasket and Steel Mounting Strap

Form 35 Body Size

3/4

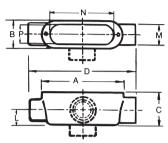
Body Size (in.)

Cat. No.

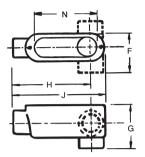
KVS75-A

# Dimensions: Form 35<sup>®</sup> Malleable Iron Unilet<sup>®</sup> Conduit Outlet Bodies

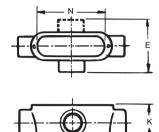
Threaded Type for use with Rigid Metal Conduit and IMC; Compression Type for use with Threadless Rigid Metal Conduit.



Types A, C, TA, TB



Types E, LB, LL, LR, LRL

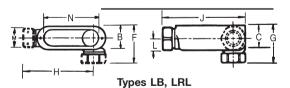


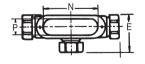
Types T, X

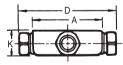
### **Fraction/Decimal Equivalents (Inches)**

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

Threaded	Threaded Type Dimensions in Inches													
Hub Size	Α	В	С	D	E	F	G	н	J	К	L	М	N	Р
1/2	3.94	1.31	1.44	5.38	2.69	2.00	2.13	3.94	4.63	1.75	.63	1.19	3.16	1.00
3/4	4.63	1.56	1.69	6.06	2.88	2.19	2.31	4.44	5.38	2.00	.75	1.38	3.78	1.22
1	5.38	1.81	1.94	7.13	3.38	2.56	2.69	5.13	6.25	2.25	.94	1.69	4.53	1.47
1-1/4	7.19	2.50	2.56	9.19	4.50	3.50	3.56	7.06	8.19	2.56	1.19	2.00	6.00	2.00
1-1/2	7.19	2.50	2.75	9.19	4.50	3.50	3.75	6.81	8.19	2.75	1.38	2.38	6.00	2.00
2	9.50	3.13	3.38	11.63	5.25	4.19	4.63	8.94	10.56	3.38	1.63	2.94	8.06	2.56
2-1/2	12.25	4.31	3.88	15.13	7.19	5.75	5.25	11.88	13.69	3.88	1.81	3.38	10.63	3.69
3	12.25	4.31	4.63	15.13	7.19	5.75	6.00	11.56	13.69	4.63	2.19	4.13	10.63	3.69
3-1/2	14.88	5.50	5.19	18.13	8.75	7.13	6.81	14.00	16.50	5.19	2.50	4.75	13.13	4.88
4	14.88	5.50	5.56	18.13	8.75	7.13	7.19	13.75	16.50	5.56	2.75	5.13	13.13	4.88
5	18.25	7.25	7.00				9.00	16.88	20.25		3.38	6.50	16.25	6.50
6	23.00	8.63	8.69				10.69	21.06	25.00		3.94	7.56	21.00	7.81







Type T

Compress	Compression Type Dimensions in Inches													
Hub Size	Α	В	С	D	E	F	G	н	J	К	L	М	N	Р
1/2	3.94	1.31	1.44	6.06	2.38	2.38	2.50	4.31	5.00	1.75	.63	1.31	3.16	1.00
3/4	4.63	1.56	1.69	6.81	2.69	2.69	2.81	4.81	5.75	2.00	.75	1.63	3.78	1.22
1	5.38	1.81	1.94	7.63	2.94	2.94	3.06	5.38	6.50	2.25	.94	1.88	4.53	1.47

### **A**-16

# Wiring Capacity: Form 35® and Form 85™ Conduit Bodies and Covers

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

Form 35<sup>®</sup> Malleable Iron Bodies and Covers: Threaded and Compression

Capacity	Capacity in Cubic Inches												
Hub Size (In.)	С	Е	LB	LL LR	LRL	т	TA	ТВ	х	Stamped Cover	Cast Cover		
1/2	4.5	4.5	4.5	4.5	5.0	6.0	4.3	4.3	6.0	0.5	0		
3/4	7.5	7.5	7.5	7.5	8.8	9.5	7.0	7.0	9.5	8.0	0.3		
1 1-1/4 1-1/2	12.5 35.0 35.3	12.5 29.3 32.5	12.5 32.3 35.3	12.5 32.0 35.3	14.3 34.8 40.0	15.0 33.0 36.0	15.0 — —	13.0 35.0 35.3	15.0 31.5 40.0	1.0 2.5 2.5	0.5 0.8 0.8		
2 2-1/2	75.0 143.0	_	73.0 139.0	73.0 140.5	85.0 —	71.0 146.0	_	71.0 —	71.0 —	6.5 18.0	1.5 30.0		
3 3-1/2	180.0 303.0	_	177.0 300.0	175.0 300.0	_	185.0 314.0		_	_	18.0	30.0 50.0		
4 5 6	340.0	=	330.0 756.0 1328.0	330.0 — —	_ _ _	345.0 — —		=	=	=	50.0 —		

### Form 85™ Aluminum Bodies and Covers: Threaded and Setscrew

Capacity	in Cubic	Inches									
Hub Size (In.)	С	E	LB	LL LR	LRL	т	TA	ТВ	х	Stamped Cover	Cast Cover
1/2 3/4	4.0 7.0	4.0 7.0	4.0 7.0	4.0 7.0	_	4.0 7.0	_	6.0 7.0	4.0 7.0	0.5 0.8	0 0.3
1 1-1/4 1-1/2	11.8 34.8 35.0	11.8 — —	11.8 34.8 35.0	11.8 34.0 35.0	_ _ _	11.8 34.0 35.0	_ _ _	13.0 35.0 34.5	11.8 — —	1.0 2.5 2.5	0.5 0.8 0.8
2 2-1/2	70.0 143.0	_	70.0 139.0	70.0 140.5	_	70.0 146.0	_	71.0	_	6.5 18.0	1.5 30.0
3 3-1/2	180.0 303.0	_	177.0 300.0	175.0 300.0	_	185.0 314.0	_	_	_	18.0	30.0 50.0
4	340.0	_	330.0	330.0	_	345.0	_	_	_	_	50.0

