# Service & Installation



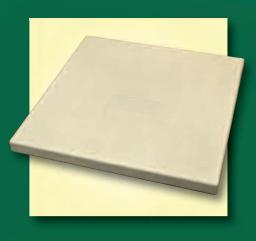












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### MARS A/C Condenser Pads

MARS SERIES 935

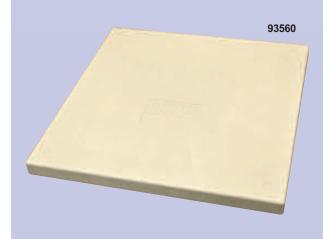
### **MARS A/C Condenser Pads**

MARS is pleased to offer a full line of Air Conditioning Condenser Pads. These gray plastic pads are molded from polypropylene. The lightweight, one piece constructed pads are virtually unbreakable and built to last. Two and three inch thick pads are available.

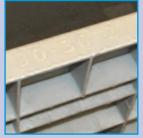
#### Features & Benefits:

- · UV stable prevents weathering or cracking
- Chemical resistant Solid wall construction
- · Will not chip or crack · Lightweight
- · Textured surface prevents unit from sliding
- · Unique footpads prevent unit from sinking into ground
- · Size molded in side of pad
- · Drillable for attachment of unit

MARS NO.	DESCRIPTION	CASE QTY.	MARS NO.	DESCRIPTION	CASE QTY.
93560	24" x 24" x 2"	44	93576	36" x 40" x 2"	22
93561	24" x 36" x 2"	22	93575	36" x 48" x 2"	22
93564	30" x 24" x 2"	22	93577	24" x 24" x 3"	16
93565	30" x 30" x 2"	22	93578	24" x 36" x 3"	16
93567	30" x 40" x 2"	22	93584	30" x 30" x 3"	16
93562	32" x 32" x 2"	22	93587	32" x 32" x 3"	16
93563	32" x 38" x 2"	22	93592	36" x 36" x 3"	16
93572	32" x 44" x 2"	22	93593	36" x 40" x 3"	16
93573	36" x 36" x 2"	22	93594	36" x 48" x 3"	16







- Rugged, easy to handle
- Weed wackers won't destroy the corners



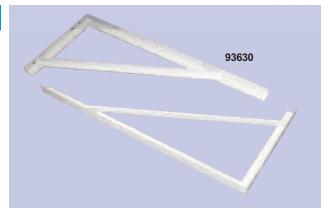
### A/C Mounting Brackets

MARS SERIES 936

### **MARS A/C Mounting Brackets**

Heavy duty engineered steel A/C brackets are used for mounting A/C condensers and heat pumps on vertical walls. Brackets include mounting holes and are finished in a durable gray powder coat.

MARS NO.	DESCRIPTION	MARS PACK
93630	30" Powder Coated Steel Bracket	1 Pair
93631	36" Powder Coated Steel Bracket	1 Pair
93632	42" Powder Coated Steel Bracket	1 Pair
93636	48" Powder Coated Steel Bracket	1 Pair





### **Anti-Vibration Pads**

MARS SERIES  $\frac{5}{21}$ 



MARS offers a complete line of anti-vibration pads. These high quality rubber pads provide maximum loading of 60 lbs. per square inch. Anti-vibration pads can be used on any type of mechanical/electrical machines such as pumps, motors, air conditioning units, generators, compressors, etc. The plain rubber pads have grooves on both sides. The cork rubber pads are the same but with the added advantage of reduction in sound level. The natural rubber Iso-Pads can be easily cut for odd sized dimensions under equipment legs and supports. The use of these pads eliminates the need for bolting down equipment to the floor. These Iso-Pads provide superior isolation, attenuation and vibration characteristics.

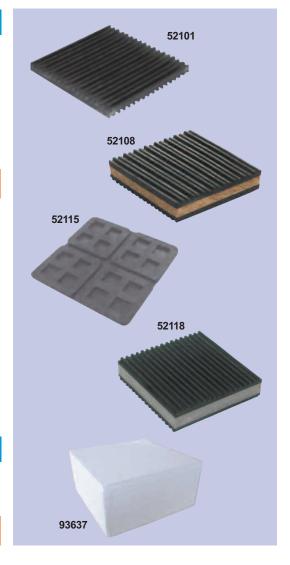
MARS NO.	DESCRIPTION	MARS PACK
52101	2" x 2" x 3/8" Rubber	1
52102	3" x 3" x 3/8" Rubber	1
52103	4" x 4" x 3/8" Rubber	1
52104	6" x 6" x 3/8" Rubber	1
52107	18" x 18" x 3/8" Rubber	1
52108	2" x 2" x 7/8" Cork/Rubber	1
52109	3" x 3" x 7/8" Cork/Rubber	1
52110	4" X 4" X 7/8" Cork/Rubber	1
52111	6" x 6" x 7/8" Cork/Rubber	1
52114	18" x 18" x 7/8" Cork/Rubber	1
52115	2" x 2" x 3/4" Iso-Pad	1
52116	4" x 4" x 3/4" Iso-Pad	1
52117	18" x 18" x 3/4" Iso-Pad	1
52119	2" x 2" x 7/8" Foam/Rubber	1
52118	4" x 4" x 7/8" Foam/Rubber	1
52120	6" x 6" x 7/8" Foam/Rubber	1
52122	18"x18"x7/8" Foam/Rubber	1

### **MARS Air Handler Blocks**

- · Lightweight 2 lb styrofoam block
- 8" x 8" x 4"

Packaged in boxes of 20 (21 boxes per pallet)

MARS NO.	DESCRIPTION	MARS PACK
93637	8" x 8" x 4" Air Handler Block	20



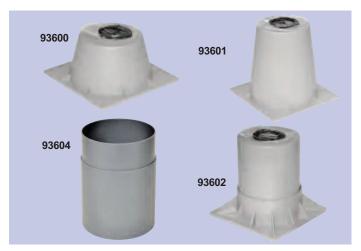
### **Heat Pump Risers**

MARS SERIES 936

### **MARS Heat Pump Risers**

Heavy duty composite heat pump risers are available in 2 popular heights in a cost effective 1 piece design as well as a 2 piece terrain adaptable design. Each riser includes factory installed buytl mastic patches on the top and bottom to absorb vibration and reduce noise.

MARS NO.	DESCRIPTION	MARS PACK
93600	3" 1 Piece Heat Pump Riser	48
93602	3" 2 Piece Heat Pump Riser	32
93601	6" 1 Piece Heat Pump Riser	24
93603	6" 2 Piece Heat Pump Riser	16
93604	4" Riser Extension	16







### **Roof Flashings & Furnace Legs**

MARS SERIES 74U

### Roof Flashings

Galvanized no calk® roof flashings feature a one-piece construction which insures a positive leak proof installation every time. Specially formulated elastomeric collar allows the vent stack plenty of room for expansion and contraction. The patented double seal no-calk collar "gives" with the pipe, without breaking the water tight seal. The galvanized base is made from 24 gauge deep drawing steel extra high with no seams.

Flex Flash flashings are manufactured from a special formulated clastomer material which is extremely flexible and durable. They permit the vent stack to expand and contract freely without disrupting the seal between pipe and flashing collar. The flashing adjusts to most any angle and adapts to all type of pipe; copper, cast iron, galvanized or plastic. Fits up to 45° angle.

MARS NO.	DESCRIPTION	MARS PACK
79360 79361 79362	1 1/4" - 1 1/2" no calk galvanized 2" no calk galvanized 3" no calk galvanized	12 12 12
79364	1/2", 3/4", 1" no calk galvanized solar	12

#### MARS Easy Leveler™ Furnace Legs

- · Includes 4 easy leveler legs & sheet metal screws
- · Designed to level a furnace & air conditioning coil for proper drainage.
- · Proper leveling helps eliminate standing water, thus reducing bacteria
- · Easily adjustable even after installation
- Legs can support up to 400 lbs.
- · Adjustable from 2-3/4" to 4" in height

MARS NO.	DESCRIPTION	MARS PACK
79095	Adjustable furnace legs	12

### **Economy Furnace Mounting Blocks**

- · Holds furnace 2" off the floor
- · Composite construction
- · Absorbs vibration, reduces noise
- Peel & stick installation

MARS NO.	DESCRIPTION	
79085	Economy furnace mounting blocks	12





### **C-Port Rooftop Support Systems**

MARS SERIES 939

#### **Rooftop Support Systems**

#### **Economy CX-Series**

- · Base only
- Material 100% recycled rubber, UV resistant
- Maximum Load 2 800 lbs.

CX Series rooftop support is designed as an economic alternative when a high load bearing is not required. They are perfect for supporting conduit or smaller pipe.

#### C-Series

- · Material 100% recycled rubber, UV resistant
- Maximum Load 750 lbs./ft

C Series channel support is designed for superior support of gas and refrigeration piping systems, cable tray, electrical conduit multiple lines, HVAC equipment and many other applications.

MARS NO.	DESCRIPTION			CASE QTY.
93950	CX-Series 4" H	x 6" W x 9.6" L	1	170
93951	C-Series 4 7/8	" H x 6" W x 9.6" L	1	170





### **Rooftop Support Systems**

MARS SERIES 939



### Caddy® Pyramid ST Series Rooftop Support

Caddy® Pyramid ST Series Rooftop Support is roof-friendly, high-quality, versatile and durable for roofing applications.

#### Features:

- Thermoplastic base is UV stabilized and weatherproof for long lasting
- Fixed-height mounting platform 4" off the roof surface and 10" of usable strut length, provides excellent load distribution
- Structurally engineered to support up to 1,000 lbs
- · Hot-dipped galvanized finish
- Superior corrosion protection
- Supports the green building requirements, bases are made from recycled material and can contribute toward earning LEED credit



MARS NO.	Mfg No.	Height	Length (1)	Length (2)	Width	Surface Area	MAX. Rec. Load
93955	RPS360400	4"	10"	12.5"	8"	94.3"	1,000 lbs.

Max. recommended load at 10.6 psi roof loading. Contact project or roofing engineer for maximum allowable load on individual project roof system.

### **Disconnects & Safety Switches**

MARS SERIES 833 & 803



### MARS Front Open Pullout Disconnect Boxes - NEMA 3R

MARS offers both fusible and non-fusible single phase air conditioner disconnects. These units provide a disconnecting means which should be located within sight from and readily accessible from the air conditioning or refrigerating equipment. UL listed. MARS #83315 is also CUL listed.

MARS NO.	DESCRIPTION	CASE QTY
83315	60 amp non-fused, single phase	6
83316	30 amp fused, single phase	6
83317	60 amp fused, single phase	6
83396	Compact 30 amp fused, single phase	6
83335	Generic brand 60 amp non-fused, single phase	6

### MARS Side Open Pullout Disconnect Boxes - NEMA 3R

The MARS Side Open Disconnect Boxes are contractor friendly and feature a unique side opening door, allowing easy access to the work area. The powder coated UV rated finish provides superior esthetics and greater longevity. The patented "finger safe" pullout section prevents accidental contact with electrodes. Easy to remove knockouts and a secure locking mechanism are also featured. This Pullout Disconnect Box is the ideal choice for the busy contractor.

MARS 80328 features an on/off switch so there are no pullout handles to be lost.

#### Specifications:

- Single phase, 240V
- 10,000 amp rated
- · NEMA 3R, rainproof
- · UL & CUL rated

MARS NO.	DESCRIPTION	STD. PACK	CASE QTY
80315	60 amp non-fused	6	6
80316	30 amp fused	6	6
80317	60 amp fused	6	6
80328	60 amp fused – Switch Disconnect	6	6







### **Disconnects & Safety Switches**

MARS SERIES 833 & 803

#### Midwest A/C Disconnects - NEMA 3R

MARS NO.	DESCRIPTION	CASE QTY.
83385	60 amp non-fused, single phase	6
83386	30 amp fused, single phase	6
83387	60 amp fused, single phase	6

#### **Pullouts For MARS Disconnect Boxes**

MARS offers both fusible and non-fusible single phase non-metallic air conditioner disconnects. These horse power rated units are constructed of Noryl® thermoplastic for extended and rugged durability. Units are corrosion resistant, weatherproof, and maintenance free. UL listed and CSA certified.

MARS NO.	DESCRIPTION	CASE QTY
83313	60 amp non-fused pullout for 83315	1
83314	30 amp fused pullout for 83316	1
83318	60 amp fused pullout for 83317	1
83319	30 amp fused pullout for 83396	1
80312	60 amp non-fused pullout for 80315 & 80308	1
80313	30 amp fused pullout for 80316	1
80314	60 amp fused pullout for 80317	1

### MARS A/C Disconnect/GFCI Receptacle Combination

MARS A/C Disconnect/ GFCI Receptacle Combination disconnects provide a convenient low cost means to satisfy NEC Article 210.63 requirements for HVAC/R Equipment Outlets and Article 406.8(B)(1) for Receptacle – Wet Locations. The NEMA 3R design insures a safe, weather tight installation for residential, light commercial and even some industrial applications.

#### Features & Benefits:

- 60 amp, non-fused, pullout type
- 240 volt A/C, single phase
- 15 amp,125V GFCI duplex receptacle included
- UL & CUL listed
- Meets NEC #210.63 & #406.8(B)(1)
- Compact size 5"x7"x4"
- Removable cover
- Heavy galvanized 'G90' steel with highest quality electro-deposition finish resists corrosion and fading
- NEMA 3R rated

MARS NO.	DESCRIPTION	MARS PACK
83308	Pullout disconnect/receptacle	4

### MARS Side Open Pullout Disconnect w/GFCI Receptacle

The MARS Side Open Disconnect w/GFCI Receptacle provides a convenient low cost means to satisfy NEC 2003 code changes requiring that a GFCI receptacle with a "while in use" cover be within a 25ft line of sight of the condenser unit. The pre-wired receptacle with stripped wire ends makes installation of disconnect and receptacle quick and easy. This unit provides a significantly lower "installed cost" to the contractor when compared to installing a standard disconnect and separate GFCI receptacle with "while in use" cover to comply with the new NEC code change.

Additional features and benefits include: Convenient electrical power cord channel w/retaining clip for easy and safe use of portable tools; Large wiring compartment for both disconnect switch and receptacle; Angled receptacle mounting to eliminate the possibility of crushing portable electrical plugs when closing "while in use" cover; Attractive side opening cover design for ease of installation; Ultra UV powder coating.

#### Specifications:

- 60 amp, non-fused, pullout type
- Pre-wired 15A, 125V GFCI receptacle included
- 240 volt, single phase
- 10,000 amp rated

- · NEMA 3R & UL rainproof
- UL & CUL approved
- Rated for 10HP @ 240 volts
- Meets NEC #210.63 & #406.8(B)(1)
- Multiple patents pending

MARS	DESCRIPTION	STD.	CASE
NO.		PACK	QTY
80308	Pullout disconnect W/GFCI receptacle	6	6







Convenient electrical power cord channel w/retaining clip for easy and safe use of portable tools

concentric knockouts & secure locking mechanism



Patented "Finger Safe" Pullout section prevents accidental contact with electrodes



### **Disconnects & Safety Switches**

MARS SERIES 833



### Midwest Non-Metallic Disconnects - NEMA 3R

Midwest Electric offers both fusible and non-fusible single phase non-metallic air conditioner disconnects. These horse power rated units are constructed of Noryl® thermoplastic for extended and rugged durability. Units are corrosion resistant, weatherproof, and maintenance free. UL listed and CSA certified.

MARS NO.	DESCRIPTION	CASE QTY
83312	60 amp non-fused, single phase	6
83306	30 amp fused, single phase	6
83307	60 amp fused, single phase	6

#### Midwest Three Phase Pullout Disconnects - 240V - NEMA 3R

Midwest Electric three phase pull out disconnects and single phase non-automatic switches are manufactured of heavy zinc coated steel with highest quality electrodeposition paint finish for maximum corrosion resistance. The three phase disconnects are available with and without fuse protection. Fusible units require three fuses. NEMA 3R.

MARS NO.	DESCRIPTION	CASE QTY
83321	60 amp non-fused, three phase	4
83322	30 amp fused, three phase	4
83323	60 amp fused, three phase	4

#### Midwest Non-Automatic Disconnects - Nema 3R

Midwest Electric has developed a new NEMA 3R, non-automatic A/C disconnect with a patent pending on/off switch mechanism so there is no pullout to lose. This UL and CSA listed disconnect features: a keyhole mounting slot for easy installation, a removable door for easy wiring access, straight in and out lugs for quick connections and six 1/2" x 3/4" x 1" concentric knockouts.

The single phase non-automatic disconnects do not provide overcurrent protection with manual internal on/off switch.

MARS NO.	DESCRIPTION	CASE QTY
83328	60 amp, 240V, 10 HP	4

### Midwest Heat Pump Disconnects - NEMA 3R

Multiple disconnect devices are offered for heat pump applications that require individual disconnects for the heating and cooling cycles. The dual pull outs accommodate either a 30A/60A or 60A/60A puller combination. Units require four fuses.

MARS NO.	DESCRIPTION	CASE QTY
83324	90 amp fused	1
83325	100 amp fused	1

#### Midwest Evaporative Cooler Disconnects - NEMA 3R

Evaporative cooler applications not only require fusing but switching or receptacle functions depending on equipment type and local codes. The 20 ampere unit utilizes 2 T plug fuses. The 40 ampere unit utilizes 3 S plug fuses.

MARS NO.	DESCRIPTION	CASE QTY
83327	40 amp fused, receptacles	1









### **Disconnects & Safety Switches**

MARS SERIES 633

### Midwest Non-Metallic, Non-Auto Switch Residential/Construction A/C Disconnect, NEMA 3R

MARS NO.	DESCRIPTION	CASE QTY.
83388	60 amp non-fused, single phase	6

### Midwest Metallic Residential/Construction, A/C Disconnects w/ Recepticle, NEMA 3R

MARS NO.	DESCRIPTION	CASE QTY.
83398	60 amp non-fused, single phase	6

### I-T-E Cartridge Fuse Type - UL Listed

1 Phase/2 wire, 3 Phase/3 wire, solid neutral

MARS NO.	DESCRIPTION	TYPE	CASE QTY.
83330	30a-240V 2 pole, exterior	3R	1
83331	60a-240V 2 pole, exterior	3R	1
83333	30a-240V 2 pole, interior	1	1
83334	60a-240V 2 pole, interior	1	1
83336	30a-240V 3 pole, exterior	3R	1
83337	60a-240V 3 pole, exterior	3R	1
83339	30a-240V 3 pole, interior	1	1
83340	60a-240V 3 pole, interior	1	1
83368	100a-240V 3 pole, interior	1	1

### I-T-E Plug Fuse Type - UL Listed

1 Phase, solid neutral

MARS NO.	DESCRIPTION	TYPE	CASE QTY.
83342	30a-120\/ 1 note interior	1	6

### I-T-E Unfused General Duty Enclosed Switches

1 Phase, solid neutral

MARS NO.	DESCRIPTION	TYPE	CASE QTY.
83346	30a-240V 2 or 3 pole, 3 phase exterior	3R	1
83347	60a-240V 2 or 3 pole, 3 phase, exterior	3R	1
83349	30a-240V 2 or 3 pole, 3 phase interior	1	1
83350	60a-240V 2 or 3 pole, 3 phase interior	1	1
83352	60a-240V 1 or 2 pole, 1 phase exterior	3R	1

### I-T-E Heavy Duty 3PH 600V - Type 1 - Indoor

MARS NO.	DESCRIPTION	CASE QTY.
83353	30a-600V fused	1
83354	60a-600V fused	1
83355	100a-600V fused	1
83356	30a-600V unfused	1

### I-T-E Heavy Duty 3PH 600V - Type 3R - Outdoor

MARS NO.	DESCRIPTION	CASE QTY.
83359	30a-600V fused	1
83360	60a-600V fused	1
83361	100a-600V fused	1
83362	30a-600V unfused	1
83363	60a-600V unfused	1
83364	100a-600V unfused	1













### MARS A/C Whips & Conduit

MARS SERIES 141



#### **All Whips Bagged**

### MARS A/C Whips Non-Metallic Fittings

MARS NO.		DESCRIPTION	MARS PACK
84131	4' x 1/2"	#10 ga. non-metallic whip UL	1
84133	4' x 3/4"	#8 ga. non-metallic whip UL	1
84135	6' x 1/2"	#10 ga. non-metallic whip UL	1
84137	6' x 3/4"	#8 ga. non-metallic whip UL	1
84139	8' x 1/2"	#10 ga. non-metallic whip	1
84141	8' x 3/4"	#8 ga. non-metallic whip	1
84143	10' x 3/4"	#8 ga. non-metallic whip	1

### MARS A/C Whips Metallic Fittings

Non-metallic conduit with metal fittings

MARS NO.	DESCRIPTION	MARS PACK
84132	4' x 1/2" #10 ga. metallic whip UL	1
84134	4' x 3/4" #8 ga. metallic whip UL	1
84136	6' x 1/2" #10 ga. metallic whip UL	1
84138	6' x 3/4" #8 ga. metallic whip UL	1

### MARS A/C Whips W/Two Straight Fittings

Metallic conduit with metal fittings

MARS NO.	DESCRIPTION	MARS PACK
84148	4' x 1/2" #10 ga. non-metallic whip	1
84145	4' x 1/2" #10 ga. non-metallic whip	1

### MARS A/C Whips All Metallic

MARS NO.	DESCRIPTION	MARS PACK
84125	4' x 1/2" all metallic whip	1
84126	4' x 3/4" all metallic whip	1
84127	6' x 1/2" all metallic whip	1
84128	6' x 3/4" all metallic whip	1

#### Sealtite® Flexible Metallic Conduit

Sealtite® flexible conduit provides protection for wet or oily locations. UL listed conduit has a continuous copper ground built into the core. All UL listed Sealtite® is UV resistant.

MARS NO.	DESCRIPTION	MARS PACK
84102	1/2", metallic conduit, UL, boxed 100 ft	1
84103	3/4", metallic conduit, UL, boxed 100 ft	1
84110	1/2", metallic conduit, boxed 100 ft	1
84111	3/4", metallic conduit, boxed 100 ft	1

#### Sealtite® Flexible Non-Metallic Conduit

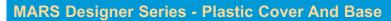
MARS NO.	DESCRIPTION	MARS PACK
84117	3/8", non-metallic conduit, UL, boxed 100 ft	1
84118	1/2", non-metallic conduit, UL, boxed 100 ft	1
84119	3/4", non-metallic conduit, UL, boxed 100 ft	1
84120	1", non-metallic conduit, UL, boxed 100 ft	1
84121	1/2", non-metallic conduit, UL, polybag 25 ft	1
84122	3/4", non-metallic conduit, UL, <i>polybag</i> 25 ft	1





### **Thermostat Guards**

MARS SERIES 702



INSIDE DIMENSIONS (inches)	BASE	HEIGHT	WIDTH	DEPTH
	Solid	4.25	7.63	2.13
	Ring	4.13	7.07	2.25

MARS NO.	DESCRIPTION	BASE	MARS PACK	CASE QTY.
70217	BTG-DK clear plastic	Dual	1	12
70219	BTG-DO opaque plastic	Dual	1	12

### **MARS Universal Series**

INSIDE DIMENSIONS (inches)	BASE	HEIGHT	WIDTH	DEPTH
	Solid	8.25	5.38	3.25
	Ring	8.13	4.63	3.63
	Solid	7.25	5.38	3.25
	Ring	6.75	4.25	3.56

MARS NO.	DESCRIPTION	BASE	MARS PACK	CASE QTY.
70220	BTG-UK2 clear plastic	Dual	1	12
70222	BTG-UO2 opaque plastic	Dual	1	12
70223	BTG-UM metal	Solid	1	12
70224	BTG-UWM metal	Ring	1	12
70236	F336, extra key for all BTG guards		1	1

### MARS Universal Series - White Metal Cover & Base

	BASE	HEIGHT	WIDTH	DEPTH
	Solid	6.25	9.38	3.00
INSIDE DIMENSIONS (inches)	Ring	6.25	9.38	3.00
DIMENSIONS (Inches)	Opening dim. of ring base	5.50	8.25	.38

MARS NO.	DESCRIPTION	BASE	MARS PACK	CASE QTY.
70238	BTG-UWM1 hinged wht. mtl. solid cover	Ring	1	12
70243	BTG-UM1D0H hinged wht. mtl. T-7300 Honeywell display & override opening	Solid	1	12
70247	BTG-UM1D0WR hinged wht. mtl. IF90 White Rogers override-display opening	Solid	1	12







### **Thermostat Guards**

MARS SERIES 702

#### **MARS Elite Series - Plastic Base**

MARS offers a broad selection of thermostat guards. Popular models available include metal, clear plastic and opaque plastic designs. MARS thermostat guards are ideal for protecting thermostats in schools, industrial plants institutions, public facilities and other areas where unauthorized tampering could be a problem. These attractive units feature a rugged, light weight and compact design. All units supplied with key. Extra keys are available. Order part #70236 for the BTG thermostat guard key.

INSIDE		BASE	HEIGHT	WIDTH	DE	PTH
DIMENSIONS (in	nches)	Solid	3.88	3.5	2	2.5
MARS NO.	DESCRIPTION			BASE	MARS PACK	CASE QTY.
70201	BTG-EK clear plastic cover			Solid	1	12
70204	BTG-EM metal cover			Solid	1	12

### **MARS Classic Series - Plastic Base**

MOIDE	BASE	HEIGHT	WIDTH	DEPTH
INSIDE DIMENSIONS (inches)	Solid	5.25	4.63	3.00
Difficito (files)	Rina	5.25	4.63	3.25

MARS NO.	DESCRIPTION	BASE	MARS PACK	CASE QTY.
70205	BTG-K clear plastic cover	Dual	1	12
70207	BTG-O opaque plastic cover	Dual	1	12
70208	BTG-KM metal cover	Solid	1	12
70209	BTG-KWM metal cover	Sing	1	12

### **MARS Regal Series - Plastic Base**

INSIDE DIMENSIONS (inches)	BASE	HEIGHT	WIDTH	DEPTH
	Solid	6.38	3.5	3.00
DIMENSIONS (Inches)	Ring	6.38	3.5	3.25

MARS NO.	DESCRIPTION	BASE	MARS PACK	CASE QTY.
70210	BTG-RK clear plastic cover	Dual	1	12
70212	BTG-RO opaque plastic cover	Dual	1	12
70213	BTG-RM metal cover	Solid	1	12
70214	BTG-RWM metal cover	Ring	1	12
70226	F229R Plastic base for BTG-RO, RWM, RK, RB	Ring	1	10

### **MARS Sentinel Series - Metal Cover And Base**

INSIDE DIMENSIONS (inches)	BASE	HEIGHT	WIDTH	DEPTH
	Solid	6.25	4.75	3.00
	Ring	6.00	3.82	3.13

MARS NO.	DESCRIPTION	BASE	MARS PACK	CASE QTY.
70215	BTG-54VL metal hinged	Solid	1	12
70216	BTG-54VLW metal hinged	Ring	1	12



### **Circuit Breakers**

MARS SERIES 832

### I-T-E Circuit Breakers Plug-In Interchangeable Type-Bulk

10,000 KA interrupting rating

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
83200	15a-120/240 VAC, 1 pole	1	6
83201	20a-120/240 VAC, 1 pole	1	6
83203	30a-120/240 VAC, 1 pole	1	6
83220	15a-120/240 VAC, 2 pole	1	3
83221	20a-120/240 VAC, 2 pole	1	3
83222	25a-120/240 VAC, 2 pole	1	3
83223	30a-120/240 VAC, 2 pole	1	3
83224	35a-120/240 VAC, 2 pole	1	3
83225	40a-120/240 VAC, 2 pole	1	3
83226	45a-120/240 VAC, 2 pole	1	3
83227	50a-120/240 VAC, 2 pole	1	3
83228	60a-120/240 VAC, 2 pole	1	3
83229	70a-120/240 VAC, 2 pole	1	3
83230	80a-120/240 VAC, 2 pole	1	3
83231	90a-120/240 VAC, 2 pole	1	3
83232	100a-120/240 VAC, 2 pole	1	63333333333333333
83212	Dual 20a-120/240 VAC, 1 pole	1	3

### I-T-E Circuit Breakers Plug-In Interchangeable Type-Carded

10,000 KA interrupting rating

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
83537	20a- 120/240 VAC, 2 pole	1	3
83538	30a- 120/240 VAC, 2 pole	1	3
83539	40a- 120/240 VAC, 2 pole	1	3
83540	50a- 120/240 VAC, 2 pole	1	3
83541	60a- 120/240 VAC, 2 pole	1	3

### **General Electric Circuit Breakers-Bulk**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
83522	15a-120/240 VAC, THQP 1 pole	1	10
83527	30a-120/240 VAC, THQP 2 pole	1	5
83431	20a-120/240 VAC, THQL 1 pole	1	10
83437	20a-120/240 VAC, THQL 2 pole	1	5
83436	30a-120/240 VAC, THQL 2 pole	1	5
83438	40a-120/240 VAC, THQL 2 pole	1	5
83439	50a-120/240 VAC, THQL 2 pole	1	5
83440	60a-120/240 VAC, THQL 2 pole	1	5
83444	100a-120/240 VAC, THQL 2 pole	1	5

### **GE Replacement Breakers For Square D**

MARS is pleased to introduce GE replacement circuit breakers for Square D QO® load centers. These Q line series circuit breakers lower your inventory costs by providing a single source for new construction & Square D QO® retrofit. These UL classified GE breakers are for use in place of Square D type QO circuit breakers.

MARS NO.	DESCRIPTION	GE NO.	SQUARE D NO.
83568	15A-1P	THQO1115	QO115
83569	20A-1P	THQO1120	QO120
83573	15A-2P	THQO2115	QO215
83574	20A-2P	THQO2120	QO220
83575	30A-2P	THQO2130	QO230
83576	40A-2P	THQO2140	QO240
83577	50A-2P	THQO2150	QO250
83578	60A-2P	THQO2160	QO260



Square D QO® load centers for which GE/MARS offers UL classified replacement circuit breakers:

100A	125A	200A
QO6-12L100DF/S	QO6-12M125FTRB	QO8-16M200FTRE
QO6-12L100DFCU/S	QO12-24L125	QO12L200
QO6-12L100F/S	QO12-24L125RB	QO12L200RB
QO6-12L100RB	QO12L125	QO20-30M200RB
QO6-12L100RBCU	QO12L125RB	QO20-40M200
QO6-12L100TF/S	QO16-24L125	QO20-40M200TF/
QO6-12M125FTRB	QO16-24L125RB	QO24M200
QO8-16L100DF/S	QO16L125	QO30-40L200
QO8-16L100DFCU/S	QO20-24L125	QO30-40L200RB
QO8-16L100TF/S	QO20L125	QO30-40M200
QO8-16L100F/S	QO2125BNF/S	QO30L200
QO8-16L100RB	QO24L125	QO30L200RB
QO8-16L100RBCU	QO12L125RB	QO30M200/RB
QO8-16L100TF/S	QO24M125/RB	QO40M200/RB
QO12M100/RB		_
QO16M100/RB	225A	
QO20M100/RB	QO40M225	
QO2100BNF/S	QO42L225	
	Q06-12L100DF/S Q06-12L100FCU/S Q06-12L100RB Q06-12L100RBCU Q06-12L100TF/S Q06-12L100TF/S Q06-12L100TF/S Q08-16L100DF/S Q08-16L100DF/S Q08-16L100F/S Q08-16L100F/S Q08-16L100TF/S Q08-16L100TF/S Q08-16L100RBCU Q08-16L100RBCU Q08-16L100TF/S Q012M100/RB Q016M100/RB	Q06-12L100DF/S Q06-12M125FTRB Q06-12L100DFCU/S Q012-24L125 Q06-12L100RB Q012-125RB Q06-12L100RBCU Q012L125RB Q06-12L100TF/S Q016-24L125RB Q08-16L100DF/S Q016-24L125RB Q08-16L100DFCU/S Q020-24L125 Q08-16L100TF/S Q02125BNF/S Q08-16L100TF/S Q02125BNF/S Q08-16L100TF/S Q02125BNF/S Q08-16L100TF/S Q02125BNF/S Q08-16L100TF/S Q02125BNF/S Q08-16L100TF/S Q02125BNF/S Q08-16L100TF/S Q024M125/RB Q012M100/RB Q024M125/RB Q016M100/RB Q024M125/RB Q016M100/RB Q024M125



QO24M100/RB

QO30M150/RB

QO42L225RB



QO8-16M200FTRB

QO20-40M200TF/S QO24M200 QO30-40L200





### **Circuit Breaker Branch Panels**

MARS SERIES 632

#### **Circuit Breakers**

Zbreaker is the same circuit breaker now found on many high-end transformers and systems. It protects from damage caused by shorts, overheating, or wiring problems. A sticker is included so that, if the Tech desires, he can inform his customer where to press the "reset" button and possibly save a midnight service call. Kit includes wires and pre-installed terminals that allow you to easily plug it in to the connectors where a plastic-type fuse existed.

- Crystal-Clear Clamshell Package with Hanging Hole
- Full-Color Insert with Instructions

MARS NO.	DESCRIPTION	MARS PACK
08574	3 Amp Circuit Breaker	1
08575	5 Amp Circuit Breaker	1

#### I-T-E® EQ® Load Center Enclosures

I-T-E EQ® load centers with main lugs feature a combination trim boxed in one package.

- The trim fits both surface and flush mounting applications saving money and space
- · Interiors offer removal in seconds
- Single phase, 3-wire design, 120/240 VAC
- One piece Albus bar construction. Designed for use only with I-T-E circuit breakers. UL listed
- Rated for 100,000 A IR
- Exclusive split neutral
- · Main lugs and neutral on same plane, same drive
- · Simple upper pan adjustment after trim is installed
- UL listed for 60/75 °C conductors
- 100% circuit breaker twistouts
- · Indoor and outdoor enclosures available

MARS NO.		DESCRIPTION	MARS PACK
83271	60a-2 pole	4 circuit, surface branch panel - type 1	1
83273	125a-4 pole	8 circuit, surface branch panel - type 1	1

### **Outdoor Enclosures - Type 3R**

MARS NO.		DESCRIPTION	MARS PACK
83277	60a-2 pole	4 circuit, outdoor enclosure	1
83278	125a-4 pole	8 circuit, outdoor enclosure	1

### **EQ Load Center**

Main Lug and Main Breaker with Copper Bus

#### Features:

- Interiors offer removal in seconds
- Single Phase
- One piece bus bar construction designed for use only with circuit breakers
- · Positive load side circuit breaker hook rails
- Outdoor NEMA Type 3R devices use HS Type hubs
- III listed

#### Specifications:

- 1000,000 IR
- 4-16 Circuits, 100-225 Amperes
- 1 Phase, 3-Wire, SN
- 120/240V AC

The EQ Load Center is suitable for use as service entrance equipment when a main breaker (125A maximum) is back-fed in a branch and used with main breaker retainer clip. Copper Bus load centers are recommended for those applications where the environment may be severe. (i.e. farm and coastal areas)

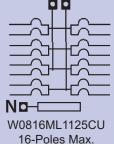
#### Main Lug Load Center - Outdoor

MARS NO.	AMP RATING	MAX 1 POLE NO. OF SPACES	NO OF CIRCUITS	QP MAX. 2-POLES	MARS PACK
83265	125	8	16	4	1
		DIME	NSIONS		
	Н	١	N	D	
14	-3/4	12	-1/8	4-1/	/4









### **Cartridge Fuses**

MARS SERIES 121

### Cartridge Fuses, Type TRS

Time delay (class RK5, 600 volt)

Tillio dolay	(oldoo i ti to, ooo voit)			
MARS NO.	DESCRIF	PTION	MARS PACK	CASE QTY.
82103*	2/10a - 600V,	TRS fuse	10	100
82106*	1/2a - 600V,	TRS fuse	10	100
82109*	1a - 600V,	TRS fuse	10	100
82110*	1.6a - 600V,		10	100
82111*	2a - 600V,	TRS fuse	10	100
82112*	2.25a - 600V,	TRS fuse	10	100
82124*	5a - 600V,	TRS fuse	10	200
82125*	6a - 600V,		10	200
82132	10a - 600V,		10	200
82133	12a - 600V,	TRS fuse	10	200
82134	15a - 600V,		10	200
82136	20a - 600V,		10	200
82137	25a - 600V,	TRS fuse	10	200
82138	30a - 600V,		10	200
82139	35a - 600V,		10	100
82140	40a - 600V,		10	100
82147	45a - 600V,		10	100
82141	50a - 600V,		10	100
82142	60a - 600V,		10	100
82143	70a - 600V,		5	5
82144	80a - 600V,		5	5
82145	90a - 600V,		5	5
82146	100a - 600V,	TRS fuse	5	5
82154	110a - 600V,	TRS fuse	1	1
82148	125a - 600V,	TRS fuse	1	1
82149	150a - 600V,		1	1
82150	175a - 600V,		1	1
82151	200a - 600V,		1	1
82152	250a - 600V,		1	1
82153	300a - 600V,	TRS fuse	1	1

<sup>\*</sup> NOTE: SmartSpot indicating fuse not available below 8 amps

### Cartridge Fuses, Type TRS Clamshell Packaging For Merchandisers

Time delay (class RK5, 600 volt)

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82632	10a - 600V, (3 pk) TRS fuse	1	1
82634 82636	15a - 600V, (3 pk) TRS fuse 20a - 600V, (3 pk) TRS fuse	1	1
82637	25a - 600V, (3 pk) TRS fuse	<u>i</u>	1
82638	30a - 600V, (3 pk) TRS fuse	1	1
82639	35a - 600V, (3 pk) TRS fuse	1	1
82640	40a - 600V, (3 pk) TRS fuse	1	1
82647	45a - 600V, (3 pk) TRS fuse	1	1
82641	50a - 600V, (3 pk) TRS fuse	1	1
82642	60a - 600V, (3 pk) TRS fuse	1	1

### **Gen. Purpose Cartridge Fuses, Type OT**

One-Time non-renewable, Class K-5

	,			
MARS NO.	DESCR	DESCRIPTION		CASE QTY.
82210	10a - 250V,	OT10 Fuse	10	100
82212	15a - 250V,	OT15 Fuse	10	100
82213	20a - 250V,	OT20 Fuse	10	100
82214	25a - 250V,	OT25 Fuse	10	100
82215	30a - 250V,	OT30 Fuse	10	100
82216	35a - 250V,	OT35 Fuse	10	100
82217	40a - 250V,	OT40 Fuse	10	100
82218	45a - 250V,	OT45 Fuse	10	100
82219	50a - 250V,	OT50 Fuse	10	100
82220	60a - 250V,	OT60 Fuse	10	100
82221	70a - 250V,	OT70 Fuse	5	100
82224	100a - 250V,	OT100 Fuse	5	100



#### SmartSpot blown-fuse indicator

With SmartSpot you'll find the open fuse FAST. When a fuse opens, the SmartSpot indicator on the label of the fuse senses it and turns from SILVER to eye-catching RED.

And it stays RED so you can spot the open fuse quickly and safely.

Just open a panel and scan. Wherever you see any red in a SmartSpot indicator, you know the fuse is open.

This is a big advantage to contractors/service personnel because it helps them to identify very quickly what fuse needs to be changed thereby avoiding costly downtime.

You'll find SmartSpot on all of the most widely used industry standard fuses such as Class RK5, RK1, and Class J.





### **Cartridge Fuses**

MARS SERIES 121

### Cartridge Fuses, Type TR

Time delay (class RK5, 250 volt)

Time delay (e.a.	20 : 11 : 10; 200 : 10:17		
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82006*	1/2a-250V, TR fuse	10	100
82009*	1a-250V, TR fuse	10	100
82016*	2a-250V, TR fuse	10	100
82017*	2 1/2a-250V, TR fuse	10	100
82019*	3a-250V, TR fuse	10	100
82020*	3 2/10a-250V, TR fuse	10	100
82021*	4a-250V, TR fuse	10	100
82024*	5a-250V, TR fuse	10	100
82025*	5 6/10a-250V, TR fuse	10	100
82026*	6a-250V, TR fuse	10	100
82027*	6 1/4a-250V, TR fuse	10	100
82029*	7a-250V, TR fuse	10	100
82030	8a-250V, TR fuse	10	100
82032	10a-250V, TR fuse	10	100
82033	12a-250V, TR fuse	10	100
82034	15a-250V, TR fuse	10	100
82035	17 1/2a-250V, TR fuse	10	100
82036	20a-250V, TR fuse	10	100
82037	25a-250V, TR fuse	10	100
82038	30a-250V, TR fuse	10	100
82039	35a-250V, TR fuse	10	100
82040	40a-250V, TR fuse	10	100
82041	45a-250V, TR fuse	10	100
82042	50a-250V, TR fuse	10	100
82043	60a-250V, TR fuse	10	100
82044	70a-250V, TR fuse	5	100
82045	80a-250V, TR fuse	5	100
82046	90a-250V, TR fuse	5	100
82047	100a-250V, TR fuse	5	100
82048	110a-250V, TR fuse	1	1
82049	125a-250V, TR fuse	1	1
82050	150a-250V, TR fuse	1	1
82051	175a-250V, TR fuse	1	1
82052	200a-250V, TR fuse	1	1
82053	225a-250V, TR fuse	1	1
82054	350a-250V, TR fuse	1	1
82056	400a-250V, TR fuse	1	1
82055	600a-250V, TR fuse	1	1

<sup>\*</sup> NOTE: SmartSpot indicating fuse not available below 8 amps

### Cartridge Fuses, Type TR Clamshell Packaging For Merchandisers

Time delay (class RK5, 250 volt)

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82532	10a - 250V, (3 pk) TR fuse	1	1
82534	15a - 250V, (3 pk) TR fuse	1	1
82536	20a - 250V, (3 pk) TR fuse	1	1
82537	25a - 250V, (3 pk) TR fuse	1	1
82538	30a - 250V, (3 pk) TR fuse	1	1
82539	35a - 250V, (3 pk) TR fuse	1	1
82540	40a - 250V, (3 pk) TR fuse	1	1
82541	45a - 250V, (3 pk) TR fuse	1	1
82542	50a - 250V, (3 pk) TR fuse	1	1
82543	60a - 250V, (3 pk) TR fuse	1	1





#### SmartSpot blown-fuse indicator

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And it stays RED so you can spot the open fuse quickly and safely.

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You'll find SmartSpot on all of the most widely used industry standard fuses such as Class RK5, RK1, and Class J.



82882

### **Midget & Specialty Fuses**

MARS SERIES 820



### **Midget Fast Acting Fuses, Type ATM**

Fast acting			
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82907	1/2a - 600V, ATM fuse	10	100
82909	1a - 600V, ATM fuse	10	100
82910	1 1/2a - 600V, ATM fuse	10	100
82911	2a - 600V, ATM fuse	10	100
82916	3a - 600V, ATM fuse	10	100
82912	4a - 600V, ATM fuse	10	100
82913	5a - 600V, ATM fuse	10	100
82914	6a - 600V, ATM fuse	10	100
82918	7a - 600V, ATM fuse	10	100
82915	8a - 600V, ATM fuse	10	100
82917	10a - 600V, ATM fuse	10	100
82919	15a - 600V, ATM fuse	10	100
82920	20a - 600V, ATM fuse	10	100
92022	20a 600\/ ATM fues	10	100

82922	30a - 600V, ATM fuse	10	100
Specialty	Fuses		
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
	mension (Electronic) Fuses . American Standards, Fast		<b>—</b>
82881 82879	GGM 2 250V fuse	5 5	5 5

(PC Boards and small Dimension Fuses) 82880 GMQ 3.2a, 300V fuse 100 82884 GMQ4a, 300V fuse 100

GGM 10 250V fuse

**Small Time Delay Fuses, Rejection Style** 

**Fast Acting Size Rejection Special Type Fuse** (PC Boards and small Dimension Fuses)

82980 GLQ 3.0a, 300V fuse 100 **Fast Acting Non Rejecting Special Type Fuse** 

(Low voltage supplementary fuses)				
82886	GLR 1.5a, 300V fuse	5	100	
82887	GLR 1.6a, 300V fuse	5	100	
82891	GLR 10a, 300V fuse	5	100	
82890	GLR 15a, 300V fuse	5	100	
82883	GSC 1a, 300V fuse	5	100	
	Slo Blo Fuses			
82439	3AB-326 1a, 250V fuse	5	100	
82442	3AB-326 5a, 250V fuse	5	100	
82445	3AB-326 15a, 250V fuse	5	100	
82444	3AB-326 20a, 250V fuse	5	100	
Time Delay, 1/4 x 1 1/4", Glass Type Fuses				
	(PC Boards and small Dimension	Fuses)		
82978	WVR heat limiter	10	10	
82979	WUR heat limiter	10	10	

	nsion Time Delay Non Rejecti Boards and small Dimension	• .	al Fuse
82888	SMF 3.2a. (LMF 3.2)	5	5



MARS NO.	DESCRIPTION	MARS PACK	

#### Low Voltage Supplementary Time Delay Fuse, 10X38 or 13/32 X 1-1/2 Size

82956	TRM .2a, 250V fuse	10	100
82953	TRM .8a, 250V fuse	10	100
82958	TRM 1a, 250V fuse	10	100
82959	TRM 2a, 250V fuse	10	100
82960	TRM 3a, 250V fuse	10	100
82963	TRM 4a, 250V fuse	10	100
82965	TRM 5a, 250V fuse	10	100
82946	TRM 6a, 250V fuse	10	100
82954	TRM 8a, 250V fuse	10	100
82969	TRM 10a, 250V fuse	10	100
82970	TRM 15a, 250V fuse	10	100
82972	TRM 20a, 250V fuse	10	100
82973	TRM 25a, 250V fuse	10	100
82974	TRM 30a, 250V fuse	10	100
Law Valtage E	Describ Cinevité Detect Fire	D Cl	- 00

Low Voltag	ge Branch Circuit Rated Fuse	s, R Clas	s CC
82977	ATMR -2a, 600V fuse	10	100
82966	ATMR -3a, 600V fuse	10	100
82967	ATMR -4a, 600V fuse	10	100
82971	ATMR -10a, 600V fuse	10	100
82976	ATMR -12a, 600V fuse	10	100
82968	ATMR -15a, 600V fuse	10	100
82981	ATMR 20a, 600V fuse	10	100



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### **Cartridge & Midget Fuses**

MARS SERIES  $\frac{820}{1}$ 

### Gen. Purpose Cartridge Fuses, Type OTS

One time non-renewable, Class K-5

MARS NO.	DESCRIPTION		MARS PACK	CASE QTY.
82249	10a - 600V,	OTS fuse	10	100
82251	15a - 600V,	OTS fuse	10	100
82252	20a - 600V,	OTS fuse	10	100
82253	25a - 600V,	OTS fuse	10	100
82254	30a - 600V,	OTS fuse	10	100
82255	35a - 600V,	OTS fuse	10	100
82256	40a - 600V,	OTS fuse	10	100
82259	60a - 600V,	OTS fuse	10	100
82264	100a - 600V,	OTS fuse	5	100

### Midget Fuses, Type OTM

Fast acting

MARS NO.	DESCRIPTION	I MAR PAC	
82702	2a - 250V, O	TM fuse 10	100
82705	5a - 250V, O	TM fuse 10	100
82710	15a - 250V, O	TM fuse 10	100
82711	20a - 250V, O	TM fuse 10	100

### Midget Time Delay Fuses, Type ATQ

Time delay

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82932	1/4a - 500V, ATQ fuse	10	100
82933	1/2a - 500V, ATQ fuse	10	100
82936	1a - 500V, ATQ fuse	10	100
82941	2a - 500V, ATQ fuse	10	100
82942	3a - 500V, ATQ fuse	10	100
82943	4a - 500V, ATQ fuse	10	100
82944	5a - 500V, ATQ fuse	10	100
82945	6a - 500V, ATQ fuse	10	100
82714	7a - 500V, ATQ fuse	10	100
82947	10a - 500V, ATQ fuse	10	100
82940	12a - 500V, ATQ fuse	10	100
82952	15a - 500V, ATQ fuse	10	100
82948	20a - 500V, ATQ fuse	10	100
82949	25a - 500V, ATQ fuse	10	100
82951	30a - 500V, ATQ fuse	10	100

### Midget Time Delay Fuse, Type ATQ **Clamshell Packaging For Merchandisers**

Time delay

DESCRIPTION	MARS PACK	CASE QTY.
1a - 500V, (6 pk), ATQ fuse	1	1
3a - 500V, (6 pk), ATQ fuse	1	1
5a - 500V, (6 pk), ATQ fuse	1	1
10a - 500V, (6 pk), ATQ fuse	1	1
15a - 500V, (6 pk), ATQ fuse	1	1
20a - 500V, (6 pk), ATQ fuse	1	1
25a - 500V, (6 pk), ATQ fuse	1	1
30a - 500V, (6 pk), ATQ fuse	1	1
	1a - 500V, (6 pk), ATQ fuse 3a - 500V, (6 pk), ATQ fuse 5a - 500V, (6 pk), ATQ fuse 10a - 500V, (6 pk), ATQ fuse 15a - 500V, (6 pk), ATQ fuse 20a - 500V, (6 pk), ATQ fuse 25a - 500V, (6 pk), ATQ fuse	DESCRIPTION         1a - 500V, (6 pk), ATQ fuse       1         3a - 500V, (6 pk), ATQ fuse       1         5a - 500V, (6 pk), ATQ fuse       1         10a - 500V, (6 pk), ATQ fuse       1         15a - 500V, (6 pk), ATQ fuse       1         20a - 500V, (6 pk), ATQ fuse       1         25a - 500V, (6 pk), ATQ fuse       1







### **Specialty Fuses & Fuse Display**

MARS SERIES 820



### **MARS HVACR Glass Fuse Display**

MARS NO.	DESCRIPTION	MARS PACK
82395	Glass fuse assortment display-300 fuses	1
82396	Glass fuse display-empty	1

### **Ceramic Body Fast Acting Fuses, Type GAB**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82403	1/2a -250V, GAB ceramic fuse	5	5
82404	1a -250V, GAB ceramic fuse	5	5
82402	1 1/2a -250V, GAB ceramic fuse	5	5
82405	2a -250V, GAB ceramic fuse	5	100
82406	2 1/2a -250V, GAB ceramic fuse	5	5
82407	3a -250V, GAB ceramic fuse	5	5
82408	4a -250V, GAB ceramic fuse	5	5
82409	5a -250V, GAB ceramic fuse	5	5
82410	6a -250V, GAB ceramic fuse	5	5
82411	7a -250V, GAB ceramic fuse	5	5
82412	8a -250V, GAB ceramic fuse	5	5
82413	10a -250V, GAB ceramic fuse	5	5
82414	12a -250V, GAB ceramic fuse	5	5
82415	15a -250V, GAB ceramic fuse	5	5
82416	20a -250V, GAB ceramic fuse	5	5
82417	25a -250V, GAB ceramic fuse	5	5
82418	30a -250V, GAB ceramic fuse	5	5

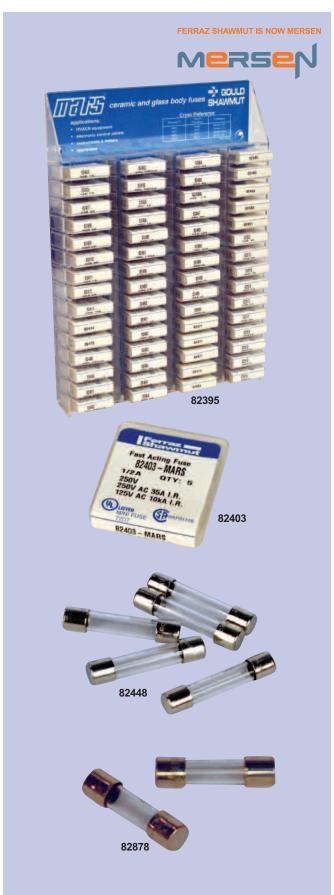
### **Glass Body Non-Time Delay Fuses, Type GGC**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82448	1/10a -250V, GGC glass fuse	5	5
82450	1/4a -250V, GGC glass fuse	5	100
82451	3/10a -250V, GGC glass fuse	5	5
82453	1/2a -250V, GGC glass fuse	5	100
82455	3/4a -250V, GGC glass fuse	5	5
82456	1a -250V, GGC glass fuse	5	100
82457	1 1/4a -250V, GGC glass fuse	5	5
82458	1 1/2a -250V, GGC glass fuse	5	100
82460	2a -250V, GGC glass fuse	5	100
82461	2 1/2a -250V, GGC glass fuse	5	100
82462	3a -250V, GGC glass fuse	5	100
82459	3 2/10a -250V, GGC glass fuse	5	100
82463	4a -250V, GGC glass fuse	5	100
82464	5a -250V, GGC glass fuse	5	5
82465	6a -250V, GGC glass fuse	5	100
82466	7 1/2a -250V, GGC glass fuse	5	5
82467	8a -250V, GGC glass fuse	5	100
82468	10a -250V, GGC glass fuse	5	100
82474	12a -125V, GGC glass fuse	5	100
82469	15a -125V, GGC glass fuse	5	100
82471	20a -32V, GGC glass fuse	5	100
82472	25a -32V, GGC glass fuse	5	5
82473	30a -32V, GGC glass fuse	5	5

### **Electronic/Glass Fuses, Type GGX**

Fast acting 1/4" x 1"

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82878	.4a -250V, GGX glass fuse	5	5
82470	2/10a -250V, GGX glass fuse	5	5
82484	1/2a -250V, GGX glass fuse	5	100
82486	1a -250V, GGX glass fuse	5	100
82488	2a -250V, GGX glass fuse	5	5
82491	5a -125V, GGX glass fuse	5	5
82877	3a -125V, GGX glass fuse	5	5







### **Specialty Fuses**

MARS SERIES 820

Special	ty Fuses	(Cont.)

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.	
Low	<b>Voltage Supplementary Fast Act</b>	ting Fus	es	
82608 82609 82610 82611	BLS/BBS 1a, 250V fuse BLS/BBS 2a, 250V fuse BLS/BBS 3a, 250V fuse BLS/BBS 4a, 600V fuse	10 10 10 10	100 100 100 100	
82612	BLS/BBS 5a, 600V fuse	10	100	
	edium Voltage Fuses Class J Fas	_		
82158 82160 82161 82163 82169 82170 82179 82181 82182 82964	A4J -6a, 600V fuse A4J -15a, 600V fuse A4J -20a, 600V fuse A4J -30a, 600V fuse A3T -40a, 600V fuse A6T -25a, 600V fuse A6T -30a, 600V fuse A6T -60a, 600V fuse RFS -40a, 600V fuse	10 10 10 10 10 10 10 10 10	100 100 100 100 100 100 100 100 100	
	Fuse Reducer			
82975	263M/H632 fuse reducer(1 pair)	1	10	
Au	Automotive Blade Type Fuse Acting 32V DC			
82230 82232 82231 82233 82234 82235 82236 82237 82238	ATC-3a, auto blade fuse(5 pk) ATC -4a, auto blade fuse ATC -5a, auto blade fuse (5 pk) ATC -7.5a, auto blade fuse ATC -10a, auto blade fuse ATC -15a, auto blade fuse ATC -20a, auto blade fuse ATC -25a, auto blade fuse ATC -30a, auto blade fuse ATC -30a, auto blade fuse ATC -30a, auto blade fuse ATDR Time Delay Class CC motors, Contactors, Branch Circu	1 5 1 1 5 5 5 5 5 5	5 5 5 5 5 5 5 5 5 5	
82226 82228	ATDR -6.25a, 600V fuse, class CC ATDR-10a, 600V fuse	10 10	10 10	
0	ATQR-10a, 600V luse  ATQR Time Delay Class CC  ol Transformers, Solenoids, Indu  ATQR -15a, 600V fuse			

### Class G Fuses 480 Volt, 600 Volt Type AG = Type SC

Time delay (above 5A) current limiting

(			
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82271	1a -600V, AG fuse	4	100
82290	2a -600V, AG fuse	4	100
82272	3a -600V, AG fuse	4	100
82291	4a -600V, AG fuse	4	100
82273	5a -600V, AG fuse	4	100
82274	6a -600V, AG fuse	4	100
82275	8a -600V, AG fuse	4	100
82276	10a -600V, AG fuse	4	100
82278	15a -600V, AG fuse	4	100
82279	20a -600V, AG fuse	4	100
82280	25a -480V, AG fuse	4	100
82281	30a -480V, AG fuse	4	100
82282	35a -480V, AG fuse	2	100
82283	40a -480V, AG fuse	2	100
82285	50a -480V, AG fuse	2	100
82286	60a -480V AG fuse	2	100



### **Glass Body Time Delay Fuses, Type GDL**

Time delay 1/4" x 1 1/4"

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82502	1a -250V, GDL glass fuse	5	100
82505	1.5a -250V, GDL glass fuse	5	100
82507	2a -250V, GDL glass fuse	5	100
82508	2.5a -250V, GDL glass fuse	5	100
82510	3a -250V, GDL glass fuse	5	100
82512	4a -250V, GDL glass fuse	5	100
82513	5a -250V, GDL glass fuse	5	100
82514	7a -250V, GDL glass fuse	5	100
82517	8a -250V, GDL glass fuse	5	100
82518	10a -125V, GDL glass fuse	5	100
82519	15a -125V, GDL glass fuse	5	100



### **Glass & Plug Fuses**

MARS SERIES 820



### Dual Element, Time Delay (Type S) UL 125V

#### Plug fuses all UL listed; CSA models also listed

Rejection Time delay, tamper resistant

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82307	1 1/4a, S plug fuse	4	100
82308	1 6/10a, S plug fuse	4	100
82311	2a, S plug fuse	4	100
82313	2 1/2a, S plug fuse	4	100
82315	3a, S plug fuse	4	100
82316	3 2/10a, S plug fuse	4	100
82318	4a, S plug fuse	4	100
82320	5a, S plug fuse	4	100
82323	6 1/4a, S plug fuse	4	100
82325	8a, S plug fuse	4	100
82326	9a, S plug fuse	4	100
82327	10a, S plug fuse	4	100
82328	12a, S plug fuse	4	100
82330	15a, S plug fuse	4	100
82331	20a, S plug fuse	4	100
82332	25a, S plug fuse	4	100
82333	30a, S plug fuse	4	100

### Dual Element Time Delay Fuse-Type S Clamshell Packaging For Merchandisers

Rejection Time delay, tamper resistant

MARS NO.	DESCRIPTION	MARS PACK
82745	15 a, S plug fuse 125V, (6 pk)	1
82746	20 a, S plug fuse 125V, (6 pk)	1
82747	25 a, S plug fuse 125V, (6 pk)	1
82748	30 a, S plug fuse 125V, (6 pk)	1

### **Dual Element, Time Delay (Type T) UL 125V**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82334	1 1/4a, T plug fuse	4	100
82337	2a, T plug fuse	4	100
82344	2.5a, T plug fuse	4	100
82338	3.2a, T plug fuse	4	100
82339	4a, T plug fuse	4	100
82340	5a, T plug fuse	4	100
82341	6 1/4a, T plug fuse	4	100
82342	8a, T plug fuse	4	100
82343	10a, T plug fuse	4	100
82660	15a, T plug fuse GT15	4	100
82661	20a, T plug fuse GT20	4	100
82662	30a, T plug fuse GT30	4	100
82663	25a, T plug fuse GT25	4	100

### Dual Element, Time Delay (Type TL) UL 125V

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82346	15a, TL plug fuse	4	100
82347	20a, TL plug fuse	4	100
82348	25a, TL plug fuse	4	100
82349	30a, TL plug fuse	4	100



### **Dual Element, Time Delay (Type TD) UL 125V**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82350	15a, TD plug fuse-CSA	4	100
82351	20a, TD plug fuse-CSA	4	100
82352	25a, TD plug fuse-CSA	4	100
82353	30a, TD plug fuse-CSA	4	100

### **Dual Element Time Delay Fuse-Type TL Clamshell Packaging For Merchandisers**

MARS NO.	DESCRIPTION	MARS PACK
82735	15 a, 125V, TL plug fuse (6 pk)	1
82736	20 a, 125V, TL plug fuse (6 pk)	1
82737	25 a, 125V, TL plug fuse (6 pk)	1
82738	30 a, 125V, TL plug fuse (6 pk)	1





### **Plug Fuses**

MARS SERIES 820

S Plug	Fuse Adapters, UL 125		
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82375	2 1/2a, S plug fuse	4	100
82376	3 2/10a, S plug fuse	4	100
82379	6 1/4a, S plug fuse	4	100
82382	15a, S plug fuse	4	100
82383	20a, S plug fuse	4	100
82384	30a, S plug fuse	4	100

### Fast Acting, (Type W) UL 125V

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82360	10a, W plug fuse	4	100
82363	15a, W plug fuse	4	100
82364	20a, W plug fuse	4	100
82365	25a, W plug fuse	4	100
82366	30a, W plug fuse	4	100

### **Dual Element, Time Delay Fuse - Type W Clamshell Packaging For Merchandisers**

MARS NO.	DESCRIPTION	MARS PACK
82755	15a, 125V, W plug fuse (6 pk)	1
82756	20a, 125V, W plug fuse (6 pk)	1
82757	25a, 125V, W plug fuse (6 pk)	1
82758	30a, 125V, W plug fuse (6 pk)	1





## Fuse Blocks Mars Series 820

### Fuse Blocks - Class H & K 250 Volts

Mersen manufactures the highest quality 250 to 600 volt fuse blocks handling current capacities of 30 to 600 amperes. These durable fuse blocks are designed for class H, J, K, R, CC and Midget fuses. All blocks are UL listed and CSA certified.

Mersen fuse blocks feature a unique adder block which can be snapped on to form multi-pole segmented blocks of as many poles as desired. Multiple pole blocks thus formed save valuable space, are permanent, and can be added to in the future.

Fuse block insulators are constructed of either phenolic or molded polycarbonate. Three types of wire connectors are used. Screw type is for copper wire with terminals. Pressure plate type is for bare copper wire where vibration may be a factor. Box type connectors are the most durable and versatile for stranded or solid wire. All fuse clips are one piece high-conductivity tin-plated copper for low resistance connections and cool operation.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
83010	Adder 30 amp - Al box	1	50
83011	1 pole 30 amp - Al box	1	50
83012	1 pole 30 amp - screw	1	50
83013	2 pole 30 amp - screw	1	50
83015	Adder 60 amp - Al box	1	50
83017	2 pole 60 amp - Al box	1	25
83018	3 pole 60 amp - Al box	1	25



### **Fuse & Power Blocks**

MARS SERIES 820



### Fuse Blocks - Midget Fuses 600 Volts

Mersen power distribution blocks (pdb), afford a safe, convenient way of splicing cables, splitting primary power into a variety of secondary circuits or providing a fixed junction tap - off point. Insulators are virtually unbreakable polycarbonate. Standard aluminum box connectors accommodate aluminum and copper wire. Connector bars are all one piece and tin plated. The pdbs are UL listed and CSA certified.

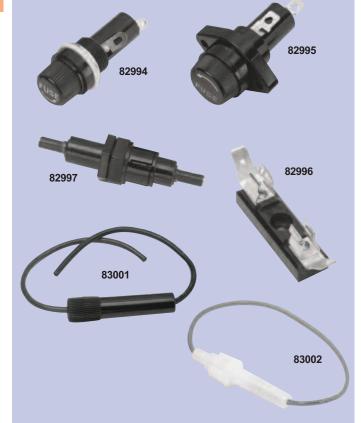
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
83061	1 pole 30 amp - screw	1	50
83062	2 pole 30 amp - screw	1	25
83063	3 pole 30 amp - screw	1	25
83065	1 pole 30 amp - plate	1	50
83066	2 pole 30 amp - plate	1	25
83067	3 pole 30 amp - plate	1	25

Power	<b>Distribution Blocks - 600</b>	Volts	
MARS	DESCRIPTION	MARS	CA

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
83090	1 pole pdb 1 to 4 #4-#14ga	1	50
83091	2 pole pdb 1 to 4 #4-#14ga	1	25
83092	3 pole pdb 1 to 4 #4-#14ga	1	25

Fuse Holders			
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
82994	panel mount glass holder 1/4" x 1 1/4" screw type knob	1	100
82995	panel mount midget holder 13/32" x 1 1/2" bayonet knob	1	100
82996	base mount glass fuse block 1/4" x 1 1/4"	10	100
82997	in-line midget holder-screw cap	1	100
83001 83002	in-line glass holder-screw cap (5 pk) in-line glass holder-snap cap (5 pk)	1	100 100
82987	HPF-EE fuse holder	10	100
82989	HPF-SC fuse holder-panel mount	10	100
82990	HHB fuse holder	10	100
82991 82993	HKP-HH fuse holder HRK fuse holder	1 10	10 100









MARS SERIES

#### **JARD Fuses**

#### **Applications:**

- · Recommended for AC power distribution system mains, feeders, and branch circuits.
- · Protection of motors and motor branch circuits.
- Protection of transformers and other inductive loads.
- · All general-purpose applications including lighting, heating and other non-inductive loads.

#### Benefits:

- · Superior overload and cycling capabilities.
- Current limiting provides component short-circuit protection.

#### Specifications:

**Dual-Element Time-Delay** 

Voltage Rating: RK5 - 250Vac, RK5 - 600Vac

Amp Rating: 1/10 - 600A

Interrupting Rating: 200,000 RMS Symmetrical Amps

Current Limiting: RK5 Fuse

**Agency Approvals:** 

UL Listed, Class RK5, CSA Certified, DC listed to UL standard 248 TRS only

Voltage Rating: RK5 250V

Volts: 250VAC

: 250VDC (.1-2.8A; 35-400A) : 160VDC (3-30A; 450-600A)

**RK5 600V** 

Volts: 600VAC

: 600VDC (.1-12A; 70-600A) : 160VDC (15-60A)

#### **RK5 Time Delay Fuse 250V** Replaces: TR, ECNR, FRNR, FLNR

MARS NO.	DESCRIPTION	MARS PACK
81006	.5A - 250V	10
81009	1A -250V	10
81016	2A - 250V	10
81017	2.5A - 250V	10
81019	3A - 250V	10
81020	3.2A - 250V	10
81021	4A - 250V	10
81024	5A - 250V	10
81025	5.6A - 250V	10
81026	6A -250V	10
81027	6.25A -250V	10
81029	7A -250V	10
81030	8A -250V	10
81032	10A -250V	10
81033 81034	12A -250V	10 10
81034	15A -250V 17.5A -250V	10
81036	20A - 250V	10
81037	25A -250V	10
81038	30A -250V	10
81039	35A -250V	10
81040	40A -250V	10
81041	45A -250V	10
81042	50A -250V	10
81043	60A -250V	10
81044	70A -250V	5
81045	80A -250V	5
81046	90A -250V	5
81047	100A -250V	5
81048	110A -250V	1
81049	125A -250V	1
81050	150A -250V	1
81051	175A -250V	1
81052	200A -250V	1
81053	225A -250V	1
81054	350A -250V	1
81056	400A -250V	1

600A -250V

### **RK5 Time Delay Fuse 600V** Replaces: TRS, ECSR, FRSR, FLSR

MADC

MADS

NO.	DESCRIPTION	PACK
81103 81106 81109 81111 81112 81077 81124 81125 81078 81132 81133 81134 81137 81136 81137 81140 81147 81141 81142 81143 81144 81145 81144 81145 81144 81154 81154 81150 81151 81152 81153	.2A -600V .5A -600V 1A -600V 1.6A -600V 2A -600V 4A -600V 5A -600V 10A -600V 15A -600V 15A -600V 15A -600V 20A -600V 25A -600V 25A -600V 30A -600V 40A -600V 40A -600V 50A -600V 10A -600V	10 10 10 10 10 10 10 10 10 10 10 10 10 1



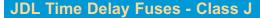






81056 81055

### MARS SERIES 810



#### **UL Fuses: Current Limiting**

MARS NO.	DESCRIPTION	MARS PACK
81621	7 A 600V Fuse Time Dly CL-J	10
81613	10A 600V Fuse Time Dly CL-J	10
81614	15A 600V Fuse Time Dly CL-J	10
81615	20A 600V Fuse Time Dly CL-J	10
81616	30A 600V Fuse Time Dly CL-J	10
81617	35A 600V Fuse Time Dly CL-J	10
81618	40A 600V Fuse Time Dly CL-J	10
81619	45A 600V Fuse Time Dly CL-J	10
81620	60A 600V Fuse Time Dly CL-J	10
81622	80A 600V Fuse Time Dly CL-J	5

### **JFL Fast-Acting Fuses - Class J**

#### **UL Fuses: Current Limiting**

MARS NO.	DESCRIPTION	MARS PACK
81158	6A UL CLASS J Fast Acting 600V	10
81160	15A UL CLASS J Fast Acting 600V	10
81161	20A UL CLASS J Fast Acting 600V	10
81163	30A UL CLASS J Fast Acting 600V	10
81623	70A UL CLASS J Fast Acting 600V	5

### TJN (300Vac) Class T Extremely Fast-Acting Fuses

#### **UL Fuses: Current Limiting**

Compact, space saving size. These fuses are ideal as the main fuse protection for panelboards, load centers and meter stacks.

MARS NO.	DESCRIPTION	MARS PACK
81664	30A TJN Fast Acting 300V Class T	10
81665	60A TJN Fast Acting 300V Class T	10
81663	150A TJN Fast Acting 300V Class T	1

### TJS (600Vac) Class T Extremely Fast-Acting Fuses

#### **UL Fuses: Current Limiting**

Compact, space saving size. These fuses are ideal as the main fuse protection for panelboards, load centers and meter stacks.

MARS NO.	DESCRIPTION	MARS PACK
81666	10A TJSFast Acting 600V Class T	10
81668	15A TJS Fast Acting 600V Class T	10
81669	40A TJSFast Acting 600V Class T	10
81670	45A TJSFast Acting 600V Class T	10
81671	50A TJSFast Acting 600V Class T	10
81672	70A TJSFast Acting 600V Class T	5
81673	80A TJSFast Acting 600V Class T	5
81674	90A TJSFast Acting 600V Class T	5
81667	100A TJSFast Acting 600V Class T	5

### SEC Fast Acting & Time Delay - Class G Fuse

### **UL Fuses: Current Limiting**

	•	
MARS NO.	DESCRIPTION	MARS PACK
81271	1A UL CLASS GTime Delay 600V	10
81290	2A UL CLASS G Time Delay 600V	10
81272	3A UL CLASS G Time Delay 600V	10
81273	5A UL CLASS G Time Delay 600V	10
81274	6A UL CLASS G Time Delay 600V	10
81275	8A UL CLASS G Time Delay 600V	10
81276	10A UL CLASS G Time Delay 600V	10
81278	15A UL CLASS G Time Delay 600V	10
81279	20A UL CLASS G Time Delay 600V	10
81280	25A UL CLASS G Time Delay 480V	10
81281	30A UL CLASS G Time Delay 480V	10
81282	35A UL CLASS G Time Delay 480V	10
81283	40A UL CLASS G Time Delay 480V	10
81285	50A UL CLASS G Time Delay 480V	10
81286	60A UL CLASS G Time Delay 480V	10







MARS SERIES #10

### **MOL Midget Fuses, Fast-Acting**

### UL Fuses: General Purpose (13/32" x 1 1/2")

MARS NO.	DESCRIPTION	MARS PACK
81702	2A UL MOL Fast Act Midget Fus 250V	10
81705	5A UL MOL Fast Act Midget Fus 250V	10
81710	15A UL MOL Fast Act Midget Fus 250V	10
81711	20A UL MOL Fast Act Midget Fus 250V	10

### **EBS Midget Fuses, Fast-Acting**

### UL Fuses: General Purpose (13/32" x 1 1/2")

MARS NO.	DESCRIPTION	MARS PACK
81608	1A UL EBS Fast Act Midget Fuse 600V	10
81609	2A UL EBS Fast Act Midget Fuse 600V	10
81610	3A UL EBS Fast Act Midget Fuse 600V	10
81611	4A UL EBS Fast Act Midget Fuse 600V	10
81612	5A UL EBS Fast Act Midget Fuse 600V	10

### **MEN Midget Fuses, Time Delay**

#### UL Fuses: General Purpose (13/32" x 1 1/2")

MARS NO.	DESCRIPTION	MARS PACK
81956	.2A UL MEN Time Dly Midget Fuse 250V	10
81953	.8A UL MEN Time Dly Midget Fuse 250V	10
81958	1A UL MEN Time Dly Midget Fuse 250V	10
81959	2A UL MEN Time Dly Midget Fuse 250V	10
81960	3A UL MEN Time Dly Midget Fuse 250V	10
81644	3.2A UL MEN Time Dly Midget Fuse 250V	10
81963	4A UL MEN Time Dly Midget Fuse 250V	10
81965	5A UL MEN Time Dly Midget Fuse 250V	10
81946	6A UL MEN Time Dly Midget Fuse 250V	10
81954	8A UL MEN Time Dly Midget Fuse 250V	10
81969	10A UL MEN Time Dly Midget Fuse 250V	10
81970	15A UL MEN Time Dly Midget Fuse 250V	10
81972	20A UL MEN Time Dly Midget Fuse 250V	10
81973	25A UL MEN Time Dly Midget Fuse 250V	10
81974	30A UL MEN Time Dly Midget Fuse 250V	10

### **MEQ Midget Fuses, Time Delay**

### UL Fuses: General Purpose (13/32" x 1 1/2")

MARS NO.	DESCRIPTION	MARS PACK
81645	.1A UL MEQ Time Dly Midget Fuse 500V	10
81932	.25A UL MEQ Time Dly Midget Fuse 500V	10 10
81933 81646	.5A UL MEQ Time Dly Midget Fuse 500V	10
81936	.6A UL MEQ Time Dly Midget Fuse 500V 1A UL MEQ Time Dly Midget Fuse 500V	10
81648	1.5A UL MEQ Time Dly Midget Fuse 500V	10
81941	2A UL MEQ Time Dly Midget Fuse 500V	10
81649	2.5A UL MEQ Time Dly Midget Fuse 500V	10
81942	3A UL MEQ Time Dly Midget Fuse 500V	10
81650	3.2A UL MEQ Time Dly Midget Fuse 500V	10
81651	3.5A UL MEQ Time Dly Midget Fuse 500V	10
81943	4A UL MEQ Time Dly Midget Fuse 500V	10
81944	5A UL MEQ Time Dly Midget Fuse 500V	10
81945	6A UL MEQ Time Dly Midget Fuse 500V	10
81653	6.25A UL MEQ Time Dly Midget Fuse 500V	10
81714	7A UL MEQ Time Dly Midget Fuse 500V	10
81654	8A UL MEQ Time Dly Midget Fuse 500V	10
81947	10A UL MEQ Time Dly Midget Fuse 500V	10
81940	12A UL MEQ Time Dly Midget Fuse 500V	10
81952	15A UL MEQ Time Dly Midget Fuse 500V	10
81948	20A UL MEQ Time Dly Midget Fuse 500V	10
81949	25A UL MEQ Time Dly Midget Fuse 500V	10
81951	30A UL MEQ Time Dly Midget Fuse 500V	10



81710

81612

AST-ACTING
EBSS



81969

81951



MARS SERIES 810

### **EDCC Time-Delay CLASS CC Fuses**

### UL Fuses: Current Limiting

MARS NO.	DESCRIPTION	MARS PACK
81079	1/2A 600V T/D Class CC	10
81080	1A 600V T/D Class CC	10
81081	1.5A 600V T/D Class CC	10
81086	3A 600V T/D Class CC	10
81097	3-1/2A 600V T/D Class CC	10
81088	4A 600V T/D Class CC	10
81089	5A 600V T/D Class CC,	10
81093	5 6/10 600V T/D Class CC	10
81094	6A 600V T/D Class CC	10
81095	7 A 600V T/D Class CC	10
81096	8A 600V T/D Class CC	10
81228	10A 600V T/D Class CC	10
81082	15A 600V T/D Class CC	10
81083	20A 600V T/D Class CC	10
81084	25A 600V T/D Class CC	10
81087	30A 600V T/D Class CC	10

### **HCTR Time Delay - Class CC**

### **UL Fuses: Current Limiting**

MARS NO.	DESCRIPTION	MARS PACK
81194	.25A UL CLASS CC Time Delay 600V	10
81195	.3A UL CLASS CC Time Delay 600V	10
81197	2A UL CLASS CC Time Delay 600V	10
81199	3.2A UL CLASS CC Time Delay 600V	10
81601	4A UL CLASS CC Time Delay 600V	10
81602	5A UL CLASS CC Time Delay 600V	10
81603	6A UL CLASS CC Time Delay 600V	10
81226	6.25A UL CLASS CC Time Delay 600V	10
81604	8A UL CLASS CC Time Delay 600V	10
81605	9A UL CLASS CC Time Delay 600V	10
81196	10A UL CLASS CC Time Delay 600V	10
81227	15A UL CLASS CC Time Delay 600V	10
81198	20A UL CLASS CC Time Delay 600V	10
81600	30A UL CLASS CC Time Delay 600V	10

### **HCLR Fast Acting - Class CC**

### **UL Fuses: Current Limiting**

MARS NO.	DESCRIPTION	MARS PACK
81189	1A UL CLASS CC Fast Act 600V	10
81977	2A UL CLASS CC Fast Act 600V	10
81966	3A UL CLASS CC Fast Act 600V	10
81191	3.5A UL CLASS CC Fast Act 600V	10
81967	4A UL CLASS CC Fast Act 600V	10
81192	5A UL CLASS CC Fast Act 600V	10
81193	6A UL CLASS CC Fast Act 600V	10
81971	10A UL CLASS CC Fast Act 600V	10
81976	12A UL CLASS CC Fast Act 600V	10
81968	15A UL CLASS CC Fast Act 600V	10
81981	20A UL CLASS CC Fast Act 600V	10
81190	25A UL CLASS CC Fast Act 600V	10

### **MCL Midget Fuses, Fast-Acting**

### UL Fuses: General Purpose (13/32" x 1 1/2")

MARS NO.	DESCRIPTION	MARS PACK
81907	.5A UL MCL Fast Act Midget Fus 600V	10
81909	1A UL MCL Fast Act Midget Fus 600V	10
81910	1.5A UL MCL Fast Act Midget Fus 600V	10
81911	2A UL MCL Fast Act Midget Fus 600V	10
81916	3A UL MCL Fast Act Midget Fus 600V	10
81628	3.5A UL MCL Fast Act Midget Fus 600V	10
81912	4A UL MCL Fast Act Midget Fus 600V	10
81913	5A UL MCL Fast Act Midget Fus 600V	10
81914	6A UL MCL Fast Act Midget Fus 600V	10
81918	7A UL MCL Fast Act Midget Fus 600V	10
81915	8A UL MCL Fast Act Midget Fus 600V	10
81917	10A UL MCL Fast Act Midget Fus 600V	10
81919	15A UL MCL Fast Act Midget Fus 600V	10
81920	20A UL MCL Fast Act Midget Fus 600V	10
81627	25A UL MCL Fast Act Midget Fus 600V	10
81922	30A UL MCL Fast Act Midget Fus 600V	10















MARS SERIES 810

### T Edison Base Plug Fuses - Dual Element, Time Delay

#### **UL Fuses: General Purpose**

MARS NO.	DESCRIPTION	MARS PACK
81334	1 1/4AT PLG Fuse Dual Element TD 125V	4
81337	2AT PLG Fuse Dual Element TD 125V	4
81344	2 1/2AT PLG Fuse Dual Element TD 125V	4
81338	3 2/10AT PLG Fuse Dual Element TD 125V	4
81339	4AT PLG Fuse Dual Element TD 125V	4
81340	5AT PLG Fuse Dual Element TD 125V	4
81341	6 1/4AT PLG Fuse Dual Element TD 125V	4
81342	8AT PLG Fuse Dual Element TD 125V	4
81343	10AT PLG Fuse Dual Element TD 125V	4
81660	15AT PLG Fuse Dual Element TD 125V	4
81661	20AT PLG Fuse Dual Element TD 125V	4
81662	30AT PLG Fuse Dual Element TD 125V	4

### **TL Edison Base Plug Fuses - Time Delay**

#### **UL Fuses: General Purpose**

MARS NO.	DESCRIPTION	MARS PACK
81346	15A Time Dly Base Plg FS TL 125V	4
81347	20A Time Dly Base Plg FS TL 125V	4
81348	25A Time Dly Base Plg FS TL 125V	4
81349	30A Time Dly Base Plg FS TL 125V	4

### TC and P Edison Base Plug Fuses - Dual Element, Time Delay

#### **UL Fuses: General Purpose**

MARS NO.	DESCRIPTION	MARS PACK
81350	15A Dual Element TimeDly TYP TC 125V	4
81370	15A Dual Element TimeDly TYP TC 125V	4
81351	20A Dual Element TimeDly TYP TC 125V	4
81352	25A Dual Element TimeDly TYP TC 125V	4
81353	30A Dual Element TimeDly TYP TC 125V	4

### GDA Fast Acting Ceramic Tube Small <u>Dimension</u> (Electronic) Fuses

5 x 20mm — IEC Standards High-Breaking Capacity Fuses UL Fuses: General Purpose

MARS NO.	DESCRIPTION	MARS PACK
81168	630mA Fast Acting High Break GDA 250V	4

### GDB Fast Acting Glass Tube Small Dimension (Electronic) Fuses

5 x 20mm — IEC Standards Low Breaking Capacity Fuses UL Fuses: General Purpose

MARS NO.	DESCRIPTION	MARS PACK
81171	630mA Fast Acting Low Break GDB 250V	5
81169	3.15A Fast Acting Low Break GDB 250V	5
81170	4A Fast Acting Low Break GDB 250V	5













MARS SERIES 810



### KON/KOS Fast Acting - Class H & K5

#### "One Time" UL Fuses: General Purpose

MARS NO.	DESCRIPTION	MARS PACK
81624	1A UL CLASS K5 Fast Act KON 250V	10
81210	10A UL CLASS K5 Fast Act KON 250V	10
81212	15A UL CLASS K5 Fast Act KON 250V	10
81213	20A UL CLASS K5 Fast Act KON 250V	10
81214	25A UL CLASS K5 Fast Act KON 250V	10
81215	30A UL CLASS K5 Fast Act KON 250V	10
81216	35A UL CLASS K5 Fast Act KON 250V	10
81217	40A UL CLASS K5 Fast Act KON 250V	10
81218	45A UL CLASS K5 Fast Act KON 250V	10
81219	50A UL CLASS K5 Fast Act KON 250V	10
81220	60A UL CLASS K5 Fast Act KON 250V	10
81221	70A UL CLASS H Fast Act KON 250V	5
81625	80A UL CLASS H Fast Act KON 250V	5
81224	100A UL CLASS H Fast Act KON 250V	5
81626	5A UL CLASS H Fast Act KOS 600V	10
81249	10A UL CLASS H Fast Act KOS 600V	10
81251	15A UL CLASS K5 Fast Act KOS 600V	10
81252	20A UL CLASS K5 Fast Act KOS 600V	10
81253	25A UL CLASS K5 Fast Act KOS 600V	10
81254	30A UL CLASS K5 Fast Act KOS 600V	10
81255	35A UL CLASS K5 Fast Act KOS 600V	10
81256	40A UL CLASS K5 Fast Act KOS 600V	10
81259	60A UL CLASS K5 Fast Act KOS 600V	10
81264	100A UL CLASS H Fast Act KOS 600V	5

### S Rejection Base Plug Fuses - Dual Element, Time Delay

### **UL Fuses: General Purpose**

MARS NO.	DESCRIPTION	MARS PACK
81307	1-1/4AS Reject Base Dual Element TD 125V	4
81308	1-6/10AS Reject Base Dual Element TD 125V	4
81311	2AS Reject Base Dual Element TD 125V	4
81313	2-1/2AS Reject Base Dual Element TD 125V	4
81315	3AS Reject Base Dual Element TD 125V	4
81316	3-2/10AS Reject Base Dual Element TD 125V	4
81318	4AS Reject Base Dual Element TD 125V	4
81320	5AS Reject Base Dual Element TD 125V	4
81323	6-1/4AS Reject Base Dual Element TD 125V	4
81325	8AS Reject Base Dual Element TD 125V	4
81326	9AS Reject Base Dual Element TD 125V	4
81327	10AS Reject Base Dual Element TD 125V	4
81328	12AS Reject Base Dual Element TD 125V	4
81658	15AS Reject Base Dual Element TD 125V	4

### **SL Rejection Base Plug Fuses -** Time Delay

### **UL Fuses: General Purpose**

MARS NO.	DESCRIPTION	MARS PACK
81330	15A Time Dly Base Plg FS SL 125V	4
81331	20A Time Dly Base Plg FS SL 125V	4
81332	25A Time Dly Base Plg FS SL 125V	4
81333	30A Time Dly Base Plg FS SL 125V	4

### **SA Rejection Base Fuse Adapter**

### **UL Fuses: General Purpose**

MARS NO.	DESCRIPTION	MARS PACK
81375	2-1/2ASA Reject Base Fuse Adapter	4
81376	3-2/10ASA Reject Base Fuse Adapter	4
81379	6-1/4ASA Reject Base Fuse Adapter	4
81382	15ASA Reject Base Fuse Adapter	4
81383	20ASA Reject Base Fuse Adapter	4
81384	30ASA Reject Base Fuse Adapter	4







MARS SERIES 610

### **ABC Small Dimension (Electronic) Fuses**

#### 1/4" x 1 1/4" Fast-Acting Fuses UL Fuses: General Purpose

MARS NO.	DESCRIPTION	MARS PACK
81402	1.5A ABC Sm Dim Fast Act 250V	5
81403	1/2A ABC Sm Dim Fast Act 250V	5
81404	1A ABC Sm Dim Fast Act 250V	5
81405	2A ABC Sm Dim Fast Act 250V	5 5
81406	2.5A ABC Sm Dim Fast Act 250V	5
81407	3A ABC Sm Dim Fast Act 250V	5 5
81408	4A ABC Sm Dim Fast Act 250V	5
81409	5A ABC Sm Dim Fast Act 250V	5
81410	6A ABC Sm Dim Fast Act 250V	5
81411	7A ABC Sm Dim Fast Act 250V	5
81412	8A ABC Sm Dim Fast Act 250V	5
81413	10A ABC Sm Dim Fast Act 250V	5
81414	12A ABC Sm Dim Fast Act 250V	5
81415	15A ABC Sm Dim Fast Act 250V	5
81416	20A ABC Sm Dim Fast Act 250V	5
81417	25A ABC Sm Dim Fast Act 125V	5
81418	30A ABC Sm Dim Fast Act 125V	5

### **AGC Small Dimension (Electronic) Fuses**

#### 1/4" x 1 1/4" Fast-Acting Fuses UL Fuses: General Purpose

MARS NO.	DESCRIPTION	MARS PACK
	1/16AAGC Sm Dim Glass Fast Act 250V 1/10AAGC Sm Dim Glass Fast Act 250V 1/4AAGC Sm Dim Glass Fast Act 250V 1/4AAGC Sm Dim Glass Fast Act 250V 1/2AAGC Sm Dim Glass Fast Act 250V 2/10AAGC Sm Dim Glass Fast Act 250V 3/10AAGC Sm Dim Glass Fast Act 250V 3/4AAGC Sm Dim Glass Fast Act 250V 1AAGC Sm Dim Glass Fast Act 250V 1-1/2AAGC Sm Dim Glass Fast Act 250V 2-1/2AAGC Sm Dim Glass Fast Act 250V 2-1/2AAGC Sm Dim Glass Fast Act 250V 3-2/10AAGC Sm Dim Glass Fast Act 250V 3-2/10AAGC Sm Dim Glass Fast Act 250V 3-2/10AAGC Sm Dim Glass Fast Act 250V 4AAGC Sm Dim Glass Fast Act 250V 5AAGC Sm Dim Glass Fast Act 250V 5AAGC Sm Dim Glass Fast Act 250V 6AAGC Sm Dim Glass Fast Act 250V 6AAGC Sm Dim Glass Fast Act 250V 6AAGC Sm Dim Glass Fast Act 250V 7AAGC Sm Dim Glass Fast Act 250V	
81466 81467 81468 81474 81469 81471 81472 81473	7-1/2AAGC Sm Dim Glass Fast Act 250V 8AAGC Sm Dim Glass Fast Act 250V 10AAGC Sm Dim Glass Fast Act 250V 12AAGC Sm Dim Glass Fast Act 250V 15AAGC Sm Dim Glass Fast Act 32V 20AAGC Sm Dim Glass Fast Act 32V 25AAGC Sm Dim Glass Fast Act 32V 30AAGC Sm Dim Glass Fast Act 32V	555555555

### **AGX Small Dimension (Electronic) Fuses**

#### 1/4" x 1" Fast-Acting Fuses UL Fuses: General Purpose

MARS NO.	DESCRIPTION	MARS PACK
81484	1/2AAGX Sm Dim Glass Fast Act 250V	5
81878	4/10A AGX Sm Dim Glass Fast Act 250V	5
81486	1AAGX Sm Dim Glass Fast Act 250V	5
81488	2AAGX Sm Dim Glass Fast Act 250V	5
81877	3AAGX Sm Dim Glass Fast Act 250V	5
81491	5AAGX Sm Dim Glass Fast Act 250V	5









MARS SERIES 810



5 x 20mm — IEC Standards Low Breaking Capacity Fuses UL Fuses: General Purpose

MARS NO.	DESCRIPTION	MARS PACK
81172	2A Time Delay Low Break GDC 250V	5
81173	3.15A Time Delay Low Break GDC 250V	5
81174	5A Time Delay Low Break GDC 250V	5
81175	FUSE Glass 6.3a 250V	5

### **GMA Fast Acting, Glass Fuses, Small Dimension (Electronic) Fuses**

5 x 20mm — N. American Standards, Fast Acting ULFuses: General Purpose

MARS NO.	DESCRIPTION	MARS PACK
81879	.5A GMA Glass tube Fast Act fus 250V	5
81181	1A GMA Glass tube Fast Act fus 250V	5
81179	1.25A GMA Glass tube Fast Act fus 250V	5
81881	2A GMA Glass tube Fast Act fus 250V	5
81182	3.15A GMA Glass tube Fast Act fus 125V	5
81183	3A GMA Glass tube Fast Act fus 250V	5
81184	4A GMA Glass tube Fast Act fus 125V	5
81185	5A GMA Glass tube Fast Act fus 125V	5
81882	10A GMA Glass tube Fast Act fus 125V	5

### **GLR Fast Acting Non Rejecting**

#### Florescent Light

MARS NO.	DESCRIPTION	MARS PACK
81886	1-1/2A Fast Act Non Reject 300V	5
81887	1-6/10A Fast Act Non Reject 300V	5
81176	1A Fast Act Non Reject 300V	5
81177	3A Fast Act Non Reject 300V	5
81178	5A Fast Act Non Reject 300V	5
81891	10A Fast Act Non Reject 300V	5
81890	15A Fast Act Non Reject 300V	5

### **GLQ Fast Acting Size Rejecting**

#### **Florescent Light**

MARS NO.	DESCRIPTION	MARS PACK
81980	3A GLO Fast Act Size Reject 300V	5

### **GMQ Time Delay Fuses, Size Rejecting**

### Florescent Light

MARS NO.	DESCRIPTION	MARS PACK
81188	8/10A GLQ Time Dly Size Reject 300V	5
81186	3A GLQ Time Dly Size Reject 300V	5
81880	3-2/10A GLQ Time Dly Size Reject 300V	5
81884	4A GLQ Time Dly Size Reject 300V	5
81187	5A GLQ Time Dly Size Reject 300V	5

### **GMF Time delay, Non Rejecting**

#### **Florescent Light**

MARS NO.	DESCRIPTION	MARS PACK
81888	3-2/10A Time Delay Non Reject 300V	5









MARS SERIES [1]

### MDA Small Dimension (Electronic) Ceramic Fuses, 1/4" x 1-1/4"

### Time-Delay UL Fuses: General Purpose

MARS NO.	DESCRIPTION	MARS PACK
81439	1A Ceramic Fuse Time Dly 250V	10
81629	2A Ceramic Fuse Time Dly 250V	10
81630	4A Ceramic Fuse Time Dly 250V	10
81442	5A Ceramic Fuse Time Dly 250V	5
81445	15A Ceramic Fuse Time Dly 250V	5
81444	20A Ceramic Fuse Time Dly 250V	5

### **MDL Small Dimension (Electronic) Fuses**

### 1/4" x 1-1/4" Time-Delay Fuses UL Fuses: General Purpose

MARS NO.	DESCRIPTION	MARS PACK
81631	1/2A Glass Fuse Time Dly 250V	5
81635	3/10A Glass Fuse Time Dly 250V	5
81502	1A Glass Fuse Time Dly 250V	10
81505	1-1/2A Glass Fuse Time Dly 250V	10
81507	2A Glass Fuse Time Dly 250V	10
81508	2-1/2A Glass Fuse Time Dly 250V	10
81510	3A Glass Fuse Time Dly 250V	10
81512	4A Glass Fuse Time Dly 250V	5
81513	5A Glass Fuse Time Dly 250V	5
81514	7A Glass Fuse Time Dly 250V	5
81517	8A Glass Fuse Time Dly 250V	5
81518	10A Glass Fuse Time Dly 250V	5
81519	15A Glass Fuse Time Dly 250V	5
81633	20A Glass Fuse Time Dly 250V	5
81643	30A Glass Fuse Time Dly 250V	5

### ATM Automotive Blade Type Fuse - Fast Acting UL Fuses

#### General Purpose Zinc ATM Fuses are Silver Plated

MARS NO.	DESCRIPTION	MARS PACK
81354	10A ATM Auto BLADE-TYPE, Red 32V DC	1

### **ATC Automotive Blade Type Fuse - Fast Acting UL Fuses**

### General Purpose Plastic Housing with Zinc Fuse Element

MARS NO.	DESCRIPTION	MARS PACK
81073	1AATC Auto BLADE-TYPE, Black 32V DC	5
81074	2A ATC Auto BLADE-TYPE, Gray 32V DC	5
81230	3AATC Auto BLADE-TYPE, Violet 32V DC	5
81232	4A ATC Auto BLADE-TYPE, Pink 32V DC	5
81231	5A ATC Auto BLADE-TYPE, Tan 32V DC	5
81233	7.5A ATC Auto BLADE-TYPE, Brown 32V DC	5
81234	10A ATC Auto BLADE-TYPE, Red 32V DC	5
81235	15AATC Auto BLADE-TYPE, Blue 32V DC	5
81236	20A ATC Auto BLADE-TYPE, Yellow 32V DC	5
81237	25A ATC Auto BLADE-TYPE, Clear 32V DC	5
81238	30A ATC Auto BLADE-TYPE, Green 32V DC	5





### **Edison Fuse Blocks**

MARS SERIES **310** 

### 2 Pole, Supplementary Fuse Block, Type M 600V

MARS NO.	DESCRIPTION	MARS PACK
81062	30A 2P Buss Fuseblk Scrw QC, BM6032SQBS	8
81066	30A 2P Buss Fseblk Prss Plt QC, BM6032PQ	10

### 3 Pole, Supplementary Fuse Block, Type M 600V

MARS NO.	DESCRIPTION	MARS PACK
81063	30A 3P BUSS FUSEBLK SCRW QC, BM6033SQ	6
81067	30A 3P BUSS FSEBLK PRSS PLT QC, BM6033PQ	10

### **Power Distribution & Terminal Blocks**

MARS NO.	DESCRIPTION	MARS PACK
81090	1 Pole 600V Power Terminal Block, 16220-1	48
81091	2 Pole 600V Power Terminal Block, 16220-2	24
81092	3 Pole 600V Power Terminal Block, 16220-3	24

### BG and G Series Fuse Blocks - G Series Fuses (SEC)

MARS NO.	DESCRIPTION	MARS PACK
81075	15A 3P 600V Screw w/QC, Class G, BG3013SQ	1
81167	30A 3P 480V Box Lug w/Clip G30060-3CR	1
81166	60A 3P 600V Box Lug w/clip, G30060-3C	1

### **Fuse Pullers**

MARS NO.	DESCRIPTION	MARS PACK
81165	Class T Fuses, 0 – 60A, 300/600V for dia 13/32" to 13/16"	1
81098	0 – 60A, 250V 0 – 30A, 600V, for dia 13/32" to 13/16"	1
81099	70 - 200A, 250V 35 - 200A, 600V, for dia 1" to 1 3/4"	1

### Panel-Mount and In-Line Fuse Holders Standard Fuse Holders With Screw

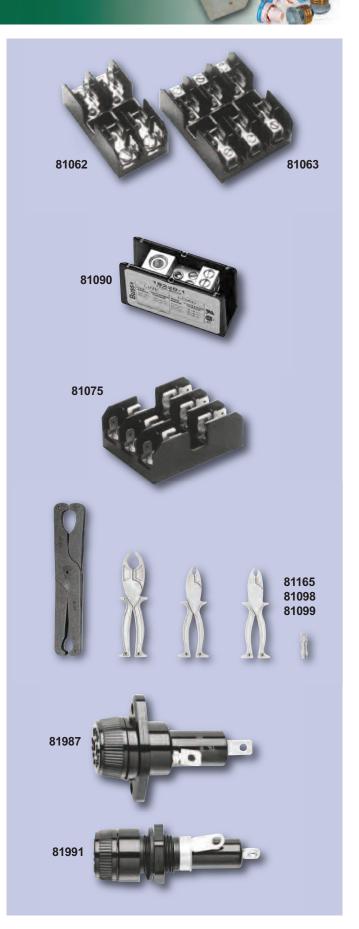
Type Knob: For use with 13/32" x 1 5/16" to 1 1/2" fuses

MARS NO.	DESCRIPTION	MARS PACK
81987	HPF-EE, 15A 480V (Sec) 0-15, 13/32" X 1 3/8" Fuses	10
81989	HPF-C Buss Fuseholder	10

### **Standard Fuseholders**

For use with 1/4" x 1-1/4" fuses (Edison type ABC, AGC, MDL, MDA etc.)

MARS NO.	DESCRIPTION	MARS PACK
81991	HKP-HH, 15A 250V with 1/4" QC Terminal	10







### **Edison Fuse Blocks**

MARS SERIES 11

### 1 Pole, Class H/K5 Fuse Block, 250V

#### For Use With KON, ERN, PONC, and CDNC Fuses

MARS NO.	DESCRIPTION	MARS PACK
81011	1/10 - 30 Amps, Box Lug W/Clip and Reinforced Spring, H25030-1CR-BN	1
81012	1/10 - 30 Amps, Screw W/Clip and Reinforced Spring, H25030-1Sr-Bn	1
81116	31 - 60 Amps, Box Lug W/Clip and Reinforced Spring H25060-1CR-BN	1

### 2 Pole, Class H/K5 Fuse Block, 250V

#### For Use With KON, ERN, PONC, and CDNC Fuses

MARS NO.	DESCRIPTION	MARS PACK
81117	1/10 - 30 Amps, Box Lug W/Clip and Reinforced Spring, H25030-2CR-BN	1

### 3 Pole, Class H/K5 Fuse Block, 250V

#### For Use With KON, ERN, PONC, and CDNC Fuses

MARS NO.	DESCRIPTION	MARS PACK
81018	1/10 - 30 Amps, Box Lug w/ Clip and Reinforced Spring, H25030-3CR-BN	1

### 1 Pole, Class H/K5 Fuse Block, 600V

#### For Use With KOS, ERS, and CDSC Fuses

MARS NO.	DESCRIPTION	MARS PACK
81031	1/10 - 30 Amps, Box lug w/ Clip and Reinforced Spring, H60030-1CR-BN	1
81130	1/10 - 30 Amps, Screw, H60030-1S	1

### 2 Pole, Class H/K5 Fuse Block, 600V

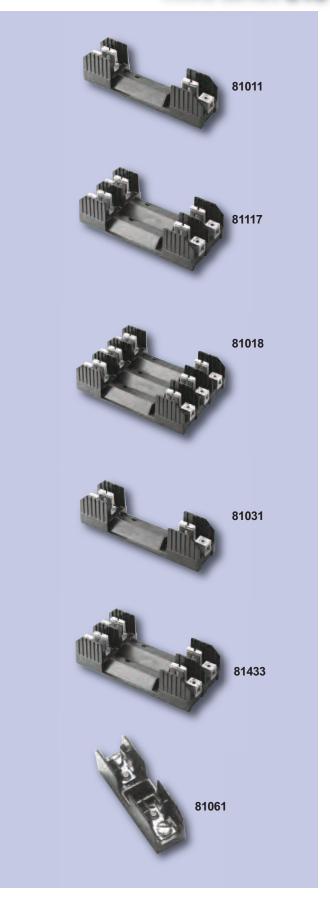
#### For Use With KOS, ERS, and CDSC Fuses

MARS NO.	DESCRIPTION	MARS PACK
81433	1/10 - 30 Amps, Screw, H60030-2S	1

#### **Type M Suppplementary Fuseblocks**

For use with any 13/32"x1 1/2' Fuses (Bussmann KTK, FNQ, FNM, BAF, BAN, and AGU) 1 Pole, Supplementary Fuse Block, Type M 600V

MARS NO.	DESCRIPTION	MARS PACE	_
81061	30A 1P Buss Fuseblk Scrw QC, BM	M6031SQ 10	
81069	30A 1P Buss Fuseblock Bx Lug, BM	M6031B 10	
81065	30A 1P Buss Fseblk Prss Plt QC, BM	M6031PQ 10	





### **Edison Fuse Blocks**

MARS SERIES <mark>110</mark>

### **Universal In-Line Fuseholder**

For use with 1/4" x 7/8" to 1-1/4" fuses

MARS NO.	DESCRIPTION	MARS PACK
81993	HRK, 15A 32V 1/4" dia fuses of different lengths	10

### In-Line Fuseholders For 13/32" x 1-1/2" Fuses

MOL MEN, MEQ and MCL (1/10 -30A)

MARS NO.	DESCRIPTION	MARS PACK
81997	HEB-AA 30A 1P 600V Buss Fuseholder	10

#### Fuse Reducers for Class H & K

Dimension Fuses KON, ERN, PONC, CDNC KOS, ERS, CDSC

MARS NO.	DESCRIPTION	MARS PACK
81975	250V, 30A, Buss Ruse Reducer	1

### **HLQ Fuseholder Use with: GLQ and GMQ**

MARS NO.	DESCRIPTION	MARS PACK
81607	In-Line Fuse Holder HLQ-3 2/10	10
81606	Fuse Holder 16-wire, 16A	10

### Class R Fuseblocks

(250V ECNR, LENRK, and NCLR & 600V ECSR, LESRK, and SCLR) Catalog Data Terminal Type (Suffix No.) Dimensions

MARS NO.	DESCRIPTION	MARS PACK
81675	60A 2P Box Lug 250V Fuse Block R25060-2CR	1
81655	30A 3P Box Lug 250V Fuse Block R25030-3CR	1
81657	100A 3P Box Lug 600V Fuse Block R60100-3CR	1
81676	FUSE BLOCK 60-AMP, 250VAC	1

### **Box Cover Units for Plug Fuses**

Plug-Fuse Box Cover Units provide a simple inexpensive way to protect small motors with Edison dual-element type "T" or type "TL" plug fuses.

MARS NO.	DESCRIPTION	MARS PACK
81793	2-1/4" Handy Single Fuse holder 125V 15A for Plg Fuse w/Rcptcl, Max Motor Size 1/2HP SRU	1
81795*	2-1/4" Handy Single Fuse holder 125V 15A for Plg Fuse w/Rcptcl, Control Switch, Max Motor Size 1/2HP SSU (Do not use on DC)	1

<sup>\*</sup>Switch turns power to fused load OFF or ON







FUSES
MARS SERIES 820

### **Fuses With A Resealable Plastic Pouch**

MARS NO.	DESCRIPTION	MARS PACK
08569	3 Amp Standard Size Plastic, 25/pk	1
08570	5 Amp Standard Size Plastic, 25/pk	1
08571	Assorted Fuses, 25/pk	1

### **Fuses & Fuse Holders**

Zebra Instruments offers a 4 pack Medium Duty (15A) standard size plastic fuses and fuse holder. This allows you to replace (or install) fuse protection for transformer outputs (and other devices) in HVAC systems .

MARS NO.	DESCRIPTION	MARS PACK
08568	4 kits – Medium duty 15Amp Standard Size Plastic	1





### **Wiring Devices**

MARS SERIES 🖰



	Toggle	Switches	With	Ground
--	--------	----------	------	--------

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
84712	15a -120V, 1P, silent, brown (bulk)	10	100
84800	15a -120V, 1P, silent, ivory (bulk)	10	100
84706	15a -120/277V, 1P, silent, ivory (bulk)	10	100
84727	20a -120/277V, 1P, silent, brown (bulk)	10	100
84707	20a -120/277V, 1P, silent, ivory (bulk)	10	100
84708	15a -120/277V, 2P, silent, ivory (bulk)	10	100
84709	20a -120/277V, 2P, silent, ivory (bulk)	10	100
84799	Combo switch/receptacle ivory (bulk) switch 15a-120/277V, 1P receptacle 15a-125V, 2P, 3W	10	100
84732	Tamper resistant smartlock pro combo switch/receptacle, ivory, 15a – 125V	10	100

### **Toggle Switches Without Ground**

MARS NO.	DESCRIPTION	MARS PACK	
84798	15a -120V, 1P, silent, ivory (bulk)	10	100
84726	15a -120/277V, 1P, switch w/pilot light (card)	1	100

### Metal Bat Handle Switches - Screw Terminals 10a-250V, 15a-125V, 3/4 HP 120/240

MARS NO.	DESCRIPTION	MARS PACK
84760	SPST on off	1

### **Straight Blade Receptacles With Ground**

MARS NO.	DESCRIPTION						MARS PACK	CASE QTY.
84721	Single,	ivory,	20a,			3W (bulk)	10	100
84723	Single,	ivory,	20a,	250V,	2P,	3W (bulk)	10	100
84746	Single,	brn,	20a,	250V,	2P,	3W (bulk)	10	100
84715	Duplex,	ivory,	15a,	125V,	2P,	3W (bulk)	10	100
84748	Duplex,	brn,	15a,	125V,	2P,	3W (bulk)	10	100
84797	Dup,	ivory,	EZ wir	e/screw	, 15a	,125V, (búlk)	10	100
84716	Dup,	ivory,	20a,	125V,	2P,	3W (bulk)	10	100
84756	Dup,	brn,	20a,	125V,	2P,	3W (bulk)	10	100



### **Wiring Devices**

MARS SERIES #47



### **Plugs, Connectors And Adapters**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
84770	Grnd rubr hndl plug, 2P, 3W, 15a, 125V, black	10	100
84772	Armrd plug, 2P, 3W, 15a, 125V,	10	100
84785	Blk rubr rnd conn, 2P, 3W, 15a, 125V	10	100
84773	Blk armored conn, 2P, 3W, 15a, 125V	10	100
84786	Blk armrd conn, 2P, 3W, 15a, 125V (card)	1	10

#### **GFCI Duplex Receptacles**

MARS NO.	DESCRIPTION	MARS PACK	
84767	15a, 125V, ivory, EZ wire & screw	1	10
84768	15a, 125V, ivory, EZ wire & screw (card)	1	10

### **Wall Plates - Plastic**

MARS NO.	DESCRIPTION	MARS CASE PACK QTY.
84751 84809	Single toggle ivory Duplex receptacle ivory	25 250 25 100

#### **Pullchain Lampholders - White**

MARS NO.	DESCRIPTION	MARS PACK	
84719	Porcelain lampholder w/ receptacle	1	50

### **Box Cover Units - 125V - For T Plug Fuses**

MARS NO.		DESCRIPTION		
84793	2 1/4"	handy box	receptacle cover, CRU	1
84795	2 1/4"	handy box	switch cover, CSU	1
84794	4"	square box	switch cover, CSY	1
84814	4"	octagon box	switch cover, CSX	1







### **Wire Nut Connectors**

MARS SERIES 259

#### Ideal Wire Nut® Wire Connectors

IDEAL's Wire Nut® wire connectors are second to none and preferred by electricians industry wide. There are five color coded models covering every wiring combination. Some features include: positive grip design, flame retardant thermoplastic shell, longest fully seated square wire spring, threaded entry, deep skirt and wide throat entry. All Wire Nut® wire connectors are UL listed and CSA certified

Greenie® grounding connectors enjoy all the benefits of the other Wire Nut® connectors, but are designed for making ground connections with a built-in hole for copper ground hook. They have a live action, square wire spring for easy and strong connections with built-in contoured wings.

Twister® wire connectors have become widely accepted due to their unsurpassed features: ribbed cap, fluted surface, compact, swept wings, hexagonal shape, tough thermoplastic shell, live action square wire spring and deep threaded skirt entry. Nutmaster™ nutdrivers can be used to install Twister® wire connectors quickly and securely. Twister® wires are UL and CSA approved. Exceptional wire range capacity for their size, just two Twister® wire connectors handle all wire combinations. This means reduced inventories and lower costs!

Wing Nut® wire connectors were first introduced by IDEAL in 1958 and remain the most comfortable, easy to use connector on the market. The wings act as a built in wrench to provide extra leverage for secure connections...every time. Wing Nut® wire connectors handle a wide range of branch circuit and fixture wiring requirements. Just three color coded models handle UL listed wire combinations from (2) No. 18's to (1) No. 6 with (2) No. 8's, solid or stranded wire.

MARS NO.	DESCRIPTION	BOX QTY.	MFG. NO	MARS PACK	CASE QYT.
25930	Gray wire nut, 22-14 AWG	100	30-071	1	10
25931	Blue wire nut, 22-14 AWG	100	30-072	1	10
25932	Orange wire nut, 22-14 AWG	100	30-073	1	10
25933	Yellow wire nut, 18-10 AWG	100	30-074	1	10
25934	Red wire nut, 18-8 AWG	100	30-076	1	10
25935	Greenie conn., 14-10 AWG	100	30-092	1	10
25936	Tan twister conn., 22-10 AWG	100	30-341	1	10
25976	Tan twister conn., 22-10 AWG	500	30-641	1	10
25937	Gray twister conn., 16-8 AWG	50	30-342	1	20
25938	Yellow wing nut, 18-10 AWG	100	30-451	1	10
25939	Red wing nut, 18-10 AWG	100	30-452	1	10
25979	Red wing nut, bag, 18-10 AWG	500	30-652	1	10
25940	Blue wing nut, 14-6 AWG	25	30-454	1	10





# **Wire Connectors**

MARS SERIES 259 & 842



MARS wire connectors are available in five color coded models: gray, blue, orange, yellow and red. Some features include a positive grip design and flame retardant thermoplastic shell. The large throat provides easy wire entrance and the deep skirt prevents shorts and grounds.

MARS NO.	DESCRIPTION	MARS PACK
25860	Gray wire connector, 300V (25/bag)	1
25880	Gray wire connector, 300V (100/bag)	1
25861	Blue wire connector, 300V (25/bag)	1
25881	Blue wire connector, 300V (100/bag)	1
25862	Orange wire connector, 600V (25/bag)	1
25882	Orange wire connector, 600V (100/bag)	1
25863	Yellow wire connector, 600V (25/bag)	1
25883	Yellow wire connector, 600V (100/bag)	1
25864	Red wire connector, 600V (25/bag)	1
25884	Red wire connector, 600V (100/bag)	1
25868	Yellow wing connector, 600V (25/bag)	1
25888	Yellow wing connector, 600V (100/bag)	1
25869	Red wing connector, 600V (25/bag)	1
25889	Red wing connector, 600V (100/bag)	1
25870	Blue wing connector, 600V (10/bag)	1
25800	Blue wing connector, 600V (50/bag)	1

MARS Wir	e Connectors - Jar	
MARS NO.	DESCRIPTION	MARS PACK
25875	MARS Yellow Wire connectors, 600V, 100/Jar	1
25876	MARS Orange Wire connectors, 600V, 100/Jar	1
25877	MARS Red Wire connectors, 600V, 50/Jar	1
25878	MARS Winged Blue Wire connectors, 600V, 25/Jar	1

#### Wiregard Color-Coded Screw-On Wire Connectors

MARS now offers Gardner Bender wire connectors. The industry's standard screw-on connector, with high quality, performance and durability.

- · UL listed, CSA approved.
- · Color-coded for easy size selection.
- Makes quick, secure connections for positive continuity. Tightens without ratcheting, removable for re-use. Fluted shell surface allows for easy finger-tight connections.
- Thermoplastic shell shields against environmental extremes.
   Flame retardant up to 221 degrees F.
- Superior flash-over protection. High-dielectric shell features deep skirt design to prevent exposure of bare wire.
- Versatile size selection covers building wire combinations from #22 to #10 AWG.
- · Complies with Federal Specification W-5-610d.

MARS NO.	MFG. NO	MODEL/SIZE	COLOR	BOX QTY.	CASE QTY.
25950	10-001	GB-1	Gray	100 Box	10
25941	10-002	GB-2	Blue	100 Box	10
25942	10-003	GB-3	Orange	100 Box	10
25943	10-004	GB-4	Yellow	100 Box	10
25944	10-006	GB-6	Red	100 Box	10







### **Wire Products**

MARS SERIES 842

# Stranded Copper Building Wire, 19 Strands 10-14 Ga. THHN, 16-18 Ga. TFFN, 600V, 90°C

MARS NO.		DESCRIPTIO	N	MARS PACK
84289	16 gauge	red	100' spool	1
84292	16 gauge	black	100' spool	1
84295	16 gauge	white	100' spool	1
84301	16 gauge	blue	100' spool	1
84304	16 gauge	yellow	100' spool	1
84307	14 gauge	red	100' spool	1
84308	14 gauge	red	500' spool	1
84310	14 gauge	black	100' spool	1
84311	14 gauge	black	500' spool	1
84313	14 gauge	white	100' spool	1
84314	14 gauge	white	500' spool	1
84319	14 gauge	blue	100' spool	1

### Solid Copper Building Wire, 10-14 Ga. THHN, 600V, 90°C

MARS NO.	ı	DESCRIPTIO	N	MARS PACK
84361	14 gauge	black	500' spool	4
84362	14 gauge	white	500' spool	4
84363	14 gauge	green	500' spool	4

### Stranded Copper Building Wire, 19 Strands 10-14 Ga. THHN, 16-18 Ga. TFFN, 600V, 90°C (cont.)

MARS NO.	ı	DESCRIPTIO	DN	MARS PACK
84322	12 gauge	red	100' spool	1
84325	12 gauge	black	100' spool	1
84328	12 gauge	white	100' spool	1
84337	10 gauge	red	100' spool	1
84340	10 gauge	black	100' spool	1
84341	10 gauge	black	500' spool	1
84343	10 gauge	white	100' spool	1
84344	10 gauge	white	500' spool	1
84346	10 gauge	green	100' spool	1
84349	10 gauge	blue	100' spool	1
84352	8 gauge	black	500' spool	1







### **Wire Products**

MARS SERIES 842



MARS NO.	DESCRIPTION	MARS PACK
84251	6 AWG, 2 conductors w/ground 125' coil	1
84253	8 AWG, 2 conductors w/ground 125' coil	1
84255	10 AWG, 2 conductors w/ground, 250' Reel, boxed	1
84257	12 AWG, 2 conductors w/ground, 250' Reel, boxed	1
84259	14 AWG, 2 conductors w/ground, 250' Reel, boxed	1

#### SJ Wire - 250 Foot Rolls

MARS NO.	DESCRIPTION	MARS PACK
84380	12/3 250 ft. roll	1
84381	14/3 250 ft. roll	1
84382	16/3 250 ft. roll	1

#### **Mini-Split Installation Wire**

Corra/Clad MC Cable consists of UL listed THHN soft drawn annealed solid copper conductors, cabled with fillers and wrapped with an overall solid Flexi-Rib aluminum sheath. The continuous sheath provides watertight protection and it is covered with a PVC outer jacket for outdoor use or direct burial. Cost effective, easy to strip and install. Meets all national codes and is suitable for outdoor use, under concrete, underground, and through interior walls and ceilings.

Compact 600 and Shielded Low Voltage Cables offer additional options to provide power and control to mini-split installations. Compact 600 uses a TPE jacket and is flexible, easy to strip, and is burial rated.

EZ-In™ cable is an all-purpose cable that meets code for both interior and exterior use, increasing the speed of installation and making sure the job will pass inspection. EZ-In™ Mini-Split Cable can be installed without the use of conduit and may be installed indoors and outdoors in wet locations.

### Corra/Clad MC Cable: 600V, UL, NEC 330 Direct Burial

MARS NO.	DESCRIPTION	MARS PACK
84470	14/3 Solid THHN w/Ground – 50' Roll	1
84471	14/3 Solid THHN w/Ground – 250' Reel	1
84472	Liquid-tight MC Cable Connector	1

#### Compact 600 Cable: 600V, UL, UV Rated, Direct Burial

MARS NO.	DESCRIPTION	MARS PACK
84473	14/4 Solid THHN Compact 600 – 50' Roll	1
84474	14/4 Solid THHN Compact 600 – 250' Reel	1
84479	14/4 Stranded THHN Compact 600V – 50' Roll	1
84480	14/4 Stranded THHN Compact 600V – 250' Reel	1
84475	14/7 Stranded THHN Compact 600 – 250' Reel	1

#### Shielded Low Voltage Cable: 300V, NEC 725/800, ETL, CMR/CL3R

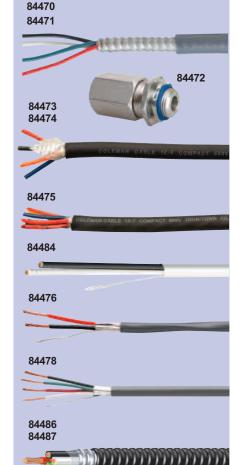
MARS NO.	DESCRIPTION	MARS PACK
84484	16/2 Stranded Shielded – 250' Reel	1
84476	18/2 Stranded BC Shielded – 50' Roll	1
84478	18/4 Stranded BC Shielded – 50' Roll	1
84482	18/2 OAS CMR/CL3R Gy - 500' Reel	1
84483	18/4 OAS CMR/CL3R Gy - 500' Reel	1
	For LG Mini-Splits	1

#### EZ-In™ Cable: 600V, UL, All Purpose, UV Rated, Direct Buriel

MARS NO.	DESCRIPTION	MARS PACK
84486	14/4 Stranded EZ-In, 600V, 50' Roll	1
84487	14/4 Stranded EZ-In, 600V, 250' Reel	1











# **Thermostat Wire**

MARS SERIES 842

### MARS 18 Gauge Thermostat Cable - UL Listed

Specifications: UL type CL2. UV rated. Temp rating -20° + 60°C. Meets UL subject 13 per article 725 of the 1990 National Electric Code (NEC) for power limited circuit cable. Soft drawn bare copper, semi-rigid pvc insulation and PVC overall jacket.

MARS NO.	DESCRIPTION	LBS. MFT	MARS PACK
84201	18 AWG, 2 conductors, 500 ft. spool	15	4
84202	18 AWG, 3 conductors, 500 ft. spool	21	4
84203	18 AWG, 4 conductors, 250 ft. spool	27	4
84204	18 AWG, 5 conductors, 250 ft. spool	34	4
84205	18 AWG, 6 conductors, 250 ft. spool	40	4
84206	18 AWG, 7 conductors, 250 ft. spool	45	4
84207	18 AWG, 8 conductors, 250 ft. spool	51	4
84209	18 AWG, 10 conductors, 250 ft. spool	63	4
84210	18 AWG, 12 conductors, 250 ft. spool	74	4
84231	18 AWG, 2 conductors, 250 ft. spool	15	4
84232	18 AWG, 3 conductors, 250 ft. spool	21	4

### MARS 20 Gauge Thermostat Cable - UL Listed

MARS NO.	DESCRIPTION	LBS. MFT	MARS PACK
84211	20 AWG, 2 conductors, 500 ft. spool	11	4
84212	20 AWG, 3 conductors, 500 ft. spool	15	4
84213	20 AWG, 4 conductors, 250 ft. spool	20	4
84214	20 AWG, 5 conductors, 250 ft. spool	24	4
84215	20 AWG, 6 conductors, 250 ft. spool	27	4
84217	20 AWG, 8 conductors, 250 ft. spool	35	4

#### Shielded Plenum T-Stat Wire - UL Listed - Type CL2P-Stranded

MARS NO.	DESCRIPTION	LBS. MFT	MARS PACK
84461	18 AWG, 2 conductors, 500 ft spool	4	4
84462	18 AWG, 3 conductors, 500 ft spool	4	4
84466	18 AWG, 8 conductors, 500 ft spool	4	4





### **Thermostat Wire**

MARS SERIES 842



#### 18 Ga UL Thermostat Wire - Self Dispensing Coils

MARS thermostat wire is now available in self dispensing coil packs. These shrink wrapped coils are easier to use and more convenient to store than the traditional thermostat wire sold on spools/reels.

#### Features & benefits:

- · Heavy duty shrink wrapped coils for durability
- · No reels to bend, break, or rust
- · Compact coils are easier to store takes up less space
- Easier to handle
- · Stacks better
- Easy and convenient to use

#### How to use:

- Simply punch hole in center of wrap. (Do not remove wrap)
- Pull loose end of wire from center (Wire will pull out easily)
- Snip off the required amount of wire
- Tuck loose end back into the coil for storage

MARS NO.	DESCRIPTION	MARS PACK
84401	18/2 500 ft. Coils	4
84402	18/3 500 ft. Coils	4
84403	18/4 250 ft. Coils	4
84404	18/5 250 ft. Coils	4
84405	18/6 250 ft. Coils	4
84406	18/7 250 ft. Coils	4
84407	18/8 250 ft. Coils	4

#### Plenum T-Stat Wire - Solid UL Listed

Temp rating (-20°C to 75°C) • UL type, CL2P

Thermoplastic jacket (2500 psi min)

Thermoplastic insulation (2000 psi min)

Can be used in overhead plenum area without conduit

MARS NO.	DESCRIPTION	MARS PACK
84241	18 AWG, 2 conductors, 500 ft. spool	4
84242	18 AWG, 3 conductors, 500 ft. spool	4
84243	18 AWG, 4 conductors, 250 ft. spool	4
84244	18 AWG, 5 conductors, 250 ft. spool	4
84245	18 AWG, 6 conductors, 250 ft. spool	4
84246	18 AWG, 8 conductors, 250 ft. spool	4

MARS NO.	DESCRIPTION	MARS PACK
84441	18 AWG, 2 conductors, 500 ft. spool	4
84443	18 AWG, 4 conductors, 500 ft. spool	4
84444	18 AWG, 6 conductors, 500 ft. spool	4









### **BX & Flexible Cable Cutter**

MARS SERIES **861 & 790** 

#### **BX & Flexible Cable Cutter**

Cuts BX, MC, AC, and Liquid Tight 3/8".

#### **Features**

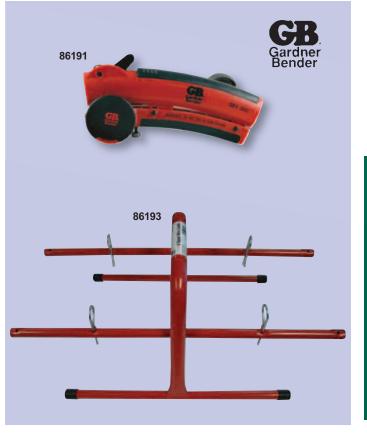
- · High durability blade provides 2X normal wear
- Storage space for replacement blades
- 25 foot drop test
- Thumbwheel for easy blade change, no tools required
- Quick Clamp feature automatically adjusts to cable size and secures it for splitting
- · Automatic release ejects cable
- Cutting depth adjustment ensures clean cuts without nicking cable

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
86191	BX Armor Cutter, & 1/4" Length	1	5
86192	Replacement Blade for 86191, 3/pk	1	10

#### **Hand Wire Caddy**

Rugged Construction, epoxy coated to reduce chipping & peeling Holds up to 8 reels, 7" D x 5" W, or 4 reels 7" D x 6" to 10" W

MARS NO.	DESCRIPTION	MARS PACK
86193	Wire Hand Caddy, 22-1/2" L x 13-1/2" W x 9-1/2" H	1





### **Wire Markers**

MARS SERIES 256

#### **Adhesive Wire Markers**

Wire marker dispenser measures  $3^{\circ}$  x  $6^{\circ}$  and holds 10 tape rolls at once. Rugged, sturdy case fits in your pocket. Durable long lasting tapes are excellent for wire, pipe and conduit identification.

Wire marker booklets contain 10 pages each. Plastic impregnated cloth marker resists abrasion, moisture, dirt and oil. Markers are 1-1/2" in length and can be separated into half-length sizes.

MARS NO.	DESCRIPTION	MFG. NO.	MARS PACK	CASE QTY.
25920	Wire marker dispenser, 0-9 legends	42-301	1	5
25921	Wire marker book, 0-9 legends	44-101	5	5
25922	Wire marker book, A-Z legends	44-102	5	5
25923	Wire marker book, 1-45 legends	44-103	5	5





# Light Bulbs MARS SERIES 791



### **Appliance Bulbs - 130 Volt**

MARS NO.	DESCRIPTION	MFG. NO.	CASE QTY.
79183	25W clear, intermediate screw base	25T61/2	25
79185	25W clear, intermediate base	25T8N	25
79188	40W clear, intermediate base	40T61/2	25

#### Pilot And Indicator Bulbs - 130 Volt

MARS	DESCRIPTION	MFG.	CASE
NO.		NO.	QTY.
79193	7W clear, candelabra, screw base	7C7	25

#### **Rough Service Bulbs 130 Volt**

MARS supplies 130V rough service, 130V rough service shatterproof coated, and 120V long life general service light bulbs. The 130V design provides an extended life cycle of filament and increases energy savings.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79171	50 watt 130V bulb	6	120
79172	75 watt 130V bulb	6	120
79173	100 watt 130V bulb	6	120

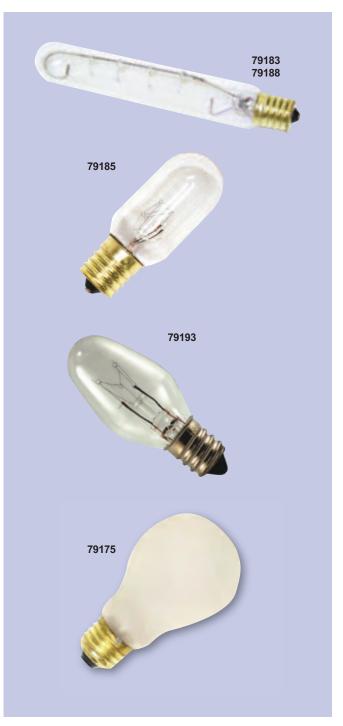
### Rough Service Coated Satterproof Bulbs 130 Volt

MARS supplies 130V rough service, 130V rough service shatterproof coated, and 120V long life general service light bulbs. The 130V design provides an extended life cycle of filament and increases energy savings.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79175	75 watt 130V bulb	6	120
79176	100 watt 130V bulb	6	120

#### **General Service Bulbs - 120 Volt**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79177	60 watt 120V bulb	120	120
79178	75 watt 120V bulb	120	120
79179	100 watt 120V bulb	120	120







# **Outlet Boxes**

MARS SERIES 849

4" Octagon Steel Boxes						
	MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.		
	84931 84932	2-1/8" D 1/2" & 3/4" K.O. 1-1/2" D 1/2" K.O.	1 1	25 25		

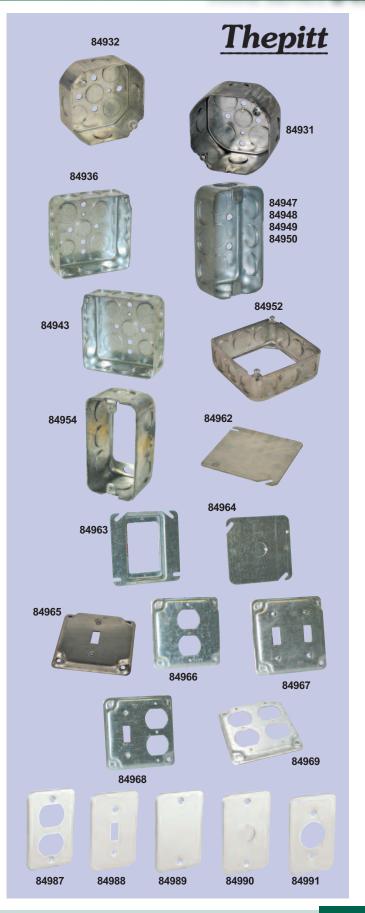
Square			
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
84936 84937 84938 84939 84943	4", 2-1/2"D 1/2" & 3/4" K.O. 4", 1-1/2"D 1/2" K.O. 4", 1-1/2"D 1/2" & 3/4" K.O. 4", 1-1/4"D 1/2" K.O. 4-11/16", 2-1/8" D 1/2" & 3/4" K.O.	1 1 1 1	25 25 25 25 25 25

2-1/8" x 4'			
MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
84947	1-1/2"D 1/2" K.O.	1	25
84948	1-7/8"D 1/2" K.O.	1	25
84949	2-1/8"D 1/2" K.O.	1	25
84950	1-7/8"D 3/4" K.O.	1	25

Steel Ex			
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
84952 84954	1-1/2"D 1/2" & 3/4" K.O. (4" sq.) 1-7/8"D 1/2" K.O. (utility)	1 1	25 25

Square Steel Covers					
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.		
84962	4", flat blank	1	25		
84963	4", 1/2" depth, single flush	1	25		
84964	4", flat, 1/2" K.O. in center	1	25		
84965	4", 1/2" raised, single toggle switch	1	25		
84966	4", 1/2" riased, 1 duplex receptacle	1	25		
84967	4", 1/2" raised, 2 toggle switch	1	25		
84968	4",1/2" raised, 1 toggle sw. & 1 dup. recept.	1	25		
84969	4", 1/2" raised, 2 duplex receptacle	1	25		

2-1/8"	x 4" Steel Utility Box Cover	S	
MARS NO.	DESCRIPTION	MARS PACK	
84987 84988 84989 84990 84991	Duplex receptacle Toggle switch Blank Blank with 1/2" K.O. in center Single receptacle	1 1 1 1	25 25 25 25 25 25



# **Weatherproof & PVC Outlet Boxes**

MARS SERIES 849



One Gang	- Weatherproof Outlet Box	es	
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
85901	Three 1/2" holes with lugs	1	50
85902	Three 3/4" holes with lugs	1	50
85904	Five 1/2" holes with lugs	1	50

Two Gan	g - Weatherproof Outlet Box	es	
MARS NO.	DESCRIPTION	MARS PACK	
85910	Three 1/2" holes with lugs	1	10
85911	Three 3/4" holes with lugs	1	10

Self Closin	g GFCI Weatherproof Cov	ers	
MARS NO.	DESCRIPTION	MARS PACK	
85932	One gang for vertical devices	1	10

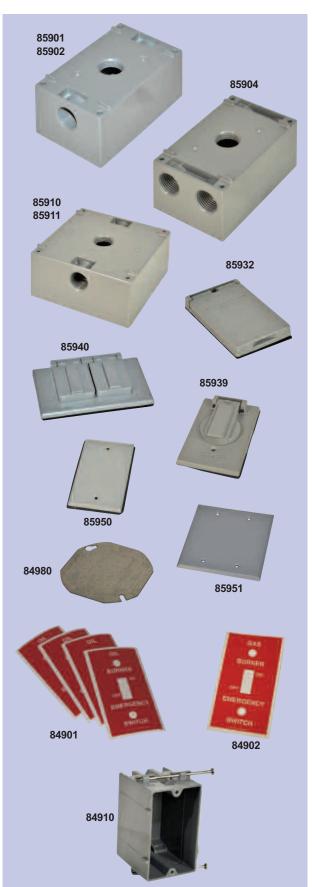
Self Closing Weatherproof Covers				
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.	
85939	One gang vertical for single receptacle, or switch	1	50	
85940	One gang for for duplex receptacle, switches or combo devices	1	50	

Weatherproof Blank Covers				
MARS	DESCRIPTION	MARS	CASE	
NO.		PACK	QTY.	
85950	One gang for vertical devices Two gang with gasket and screws	1	25	
85951		1	10	

4" Octagon Steel COVERS				
MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.	
84980	Flat blank	1	25	

Emergency Switch Cover Labels				
MARS	DESCRIPTION	MARS	CASE	
NO.		PACK	QTY.	
84901	Oil burner switch label; 4" x 2 1/8"	10	1	
84902	Gas burner switch label; 4" x 2 1/8"	10	1	

PVC Switch Boxes - Angles Nails				
MARS NO.	DESCRIPTION	MARS PACK		
84910	16 cubic content inches, 2 1/2"D	100		







# **Electrical Fittings**

MARS SERIES <mark>15</mark>1

Electrical	l Fittin	igs-EMT Type-Carded	
MARS NO.		DESCRIPTION	CASE QTY.
85325 85115 85326 85327 85329 85330 85332 85333 85335 85336 85302 85337 85338	1/2" 1/2" 3/4" 1/2" 3/4" 1/2" 3/4" 1/2" 3/4" 1/2" 3/4" 1/2" 1/4" 1/4"		10 50 5 10 10 5 10 5 10 10 100 100 20
85306 85307 85308 85345 85347 85348 85349	1/2" 3/4" 1" 1/2" 1/2" 3/4" 1"	rigid IMC strap, bulk rigid IMC strap, bulk rigid IMC strap, bulk rigid IMC strap, bulk EMT pull elbows, 1/cd EMT two-hole strap, 5/cd EMT two-hole strap, 4/cd EMT two-hole strap, 2/cd	100 100 50 10 10 10

### **Electrical Fittings-Rigid Conduit-Carded**

MARS NO.	DESCRIPTION	CASE QTY.
85355 85356	1/2" rigid conduit offset, threaded, 2/cd 3/4" rigid conduit offset, threaded, 1/cd	10 5
85359	1/2" rigid conduit onset, threaded, 1/cd	10
85360	3/4" rigid conduit locknut, 5/cd	10
85364	3/4" x 1/2" reducing washer, 4/cd	10
85365	1" x 1/2" reducing washer, 4/cd	10
85366	1" x 3/4" reducing washer, 4/cd	10
85279	1 1/4" x 3/4" reducing washer, bulk	50
85280	1 1/4" x 1" reducing washer, bulk	50
85281	1 1/2" x 1/2" reducing washer, bulk	50
85282	1 1/2" x 3/4" reducing washer, bulk	50
85284	2" x 3/4" reducing washer, bulk	25
85374	1/2" - 1" ground clamps, 1/cd	10
85375	1/2" plastic staples, 15/cd	10
85377	1/2" KO seals, 4/cd	10
85378	3/4" KO seals, 4/cd	10

### **Electrical Fittings-BX/Romex/Armored-Carded**

MARS NO.	DESCRIPTION	CASE QTY.
85386	1/2" arm./flex. squeeze connector, 2/cd	5
85387	3/4" arm./flex. squeeze connector, 2/cd	5
85389	3/8" arm./flex. 90° squeeze conn, 2/cd	10
85402	3/8" arm./flex. 90° squeeze conn, bulk	50
85390	1/2" arm./flex. 90° squeeze conn, 1/cd	5
85155	1/2" arm./flex. 90° squeeze conn, bulk	25
85156	3/4" arm./flex. 90° squeeze conn, bulk	10
85392	3/8" BX/Greenfield set screw conn, 4/cd	10
85393	1/2" BX/Greenfield set screw conn, 1/cd	10
85395	3/8" arm./flex. duplex connector, 1/cd	5
85175	3/8" arm./flex. duplex connector, bulk	25
85396	3/8" BX/MC/Romex connector, 3/cd	10
85403	3/8" BX/MC/Romex connector, bulk	100
85397	3/8" Romex squeeze connector, 4/cd	10
85185	3/8" Romex squeeze connector, bulk	100
85398	3/4" Romex squeeze connector, 2/cd	10
85186	3/4" Romex squeeze connector, bulk	25
85399	1" Romex squeeze connector, 2/bag	20
<b>1</b> 85187	1 1/2" Romex squeeze connector, bulk	50
85188	2" Romex squeeze connector, bulk	50





### **Electrical Fittings**

MARS SERIES 850



MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
85000	3/8" straight metallic connector	25	250
85001	1/2" straight metallic connector	20	250
85002	3/4" straight metallic connector	10	100
85003	1" straight metallic connector	5	50
85004	3/8" 90° metallic connector	10	100
85005	1/2" 90° metallic connector	10	100
85006	3/4" 90° metallic connector	10	100
85007	1" 90° metallic connector	5	50

### **Liquid-Tight PVC Flexible Non-Metallic Fittings**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
85015	3/8" straight non-metallic connector	25	250
85016	1/2" straight non-metallic connector	25	250
85017	3/4" straight non-metallic connector	10	100
85018	1" straight non-metallic connector	5	50
85019	3/8" 90° non-metallic connector	10	100
85020	1/2" 90° non-metallic connector	10	100
85021	3/4" 90° non-metallic connector	10	100
85022	1" 90° non-metallic connector	5	50

#### **Liquid-Tight 45° PVC Connectors**

Arlington's liquid-tight 45° pvc connectors are for use with non-metallic, liquid-tight conduit, type B. The 45° connector has the same smooth raceway as the 90° connector for easier pulling or pushing or wiring. These are UV rated like our other pvc fittings.

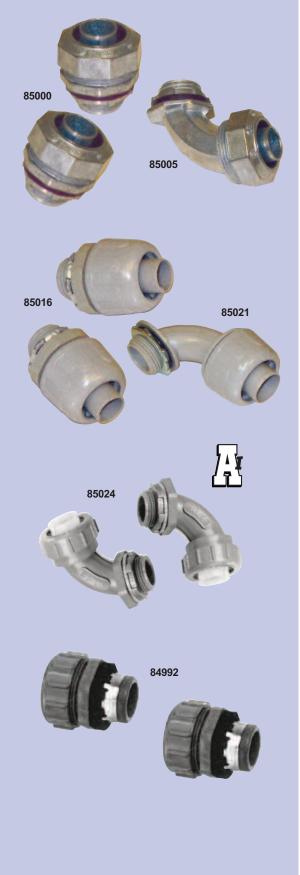
MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
85024	1/2" x 45° non-metallic connector	10	50

#### **Liquid-Tight Screw On Connectors**

This attractive one pc design allows superior liquid-tight seal & Optimum pull strength without compression nut. PVC construction produced from UV rated material for long outdoor life. Ideal for conduit assemblies & installers. "O" ring & steel locknut included.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
84992	1/2" Straight Screw On	25	100
84993	3/4" Straight Screw On	25	100
84994	1/2" 90 Deg Sweep Screw On	10	100
84995	3/4" 90 Deg Sweep Screw On	10	100









### **Appliance Cords & Cord Sets**

MARS SERIES **846** & **847** 

### **MARS Range And Dryer Receptacles**

MARS NO.	DESCRIPTION	CASE QTY.
84700	30a-250V, surface mount dryer receptacle	10
84701	30a-250V, flush mount dryer receptacle	25
84702	50a-250V, surface mount range receptacle	10
84699	30a-250V, srfc. mnt. dryer recept., 3P4W, ground	10
84705	50a-250V, srfc. mnt. range recept., 3P4W, ground	10

### **MARS Major Appliance Extension Cords, UL Listed**

MARS NO.	DESCRIPTION	CASE QTY.
84625	15a-125V, 14/3 spt, 3 foot appliance ext.	30
84626	15a-125V, 14/3 spt, 6 foot appliance ext.	25
84627	15a-125V, 14/3 spt, 9 foot appliance ext.	15
84629	15a-125V, 14/3 spt, 15' appl. ext., non UL	12
84633	20a-250V, 12/3 spt, 6 foot appliance ext.	25

#### MARS Pigtails/Replacement Cords - 13 Amp, 125V

MARS NO.		D	ESCR	RIPTION	CASE QTY.
84669	16/3	pigtail	3 ft.	SPT-3 RT	50
84670	16/3	pigtail	6 ft.	SPT-3 RT	50
84671	16/3	pigtail	8 ft.	SPT-3 RT	50
84673	16/3	pigtail	3 ft.	SPT-3 STR	50
84674	16/3	pigtail	6 ft.	SPT-3 STR	50
84679	16/3	pigtail	6 ft.	SJT-BL STR	50
84681	14/3	pigtail	6 ft.	SJT-BL STR	50

### Power Block Type Extension Cords, 15a-125V - UL listed

MARS NO.	DESCRIPTION	CASE QTY.
84649	Power block ext. 12/3 sjtwa, 2 foot	4

### Outdoor Heavy Duty Ext. Cords, Orange - UL Listed - SJTWA

MARS NO.	DESCRIPTION	CASE QTY.
84652	Outdoor ext. 16/3, 13a-125V, 25 foot	24
84653	Outdoor ext. 14/3, 15a-125V, 25 foot	14
84655	Outdoor ext. 16/3, 13a-125V, 50 foot	12
84656	Outdoor ext. 14/3, 15a-125V, 50 foot	10
84657	Outdoor ext. 12/3, 15a-125V, 50 foot	6
84658	Outdoor ext. 16/3, 10a-125V, 100 foot	6
84659	Outdoor ext. 14/3, 13a-125V, 100 foot	6

### **Trouble Lights, One Grounded Outlet - UL Listed**

MARS NO.	DESCRIPTION	CASE QTY.
84696	Metal cage trouble light, 16/3, SJT, 13a, 25'	8
84697	Metal cage trouble light, 16/3, SJT,13a, 50'	6

### **Portable Lighting**

MARS NO.	DESCRIPTION	CASE QTY.
84689	8-1/2" clamp light - 6 ft cord	6





# **Cylinder Cradles and Strap**





#### **Cylinder Cradles and Strap**

Cylinder cradles make transportation of cylinders easy and safe. The cradles are made with Maximum Visibility webbing for day or night work.

- Polyester webbing meets 5000 lb min breaking strength
- · Hardware meets 5000 lb min breaking strength
- · Specialized designed lifting solutions
- · Individually colored for easy identification
- Cylinder transportation

MARS NO.	DESCRIPTION	MARS PACK
79061	Shoulder Comfort Strap - to transport cylinders safely using Cradles	1
79062	Recovery Cylinder Cradle	1
79063	B Tank Cylinder Cradle	1
79064	Refrigerant Cylinder Cradle	1
79065	Nitrogen Cylinder Cradle	1



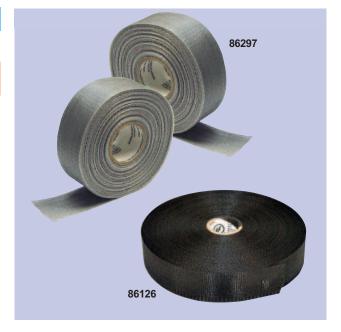
### **Polypropylene Web Duct Strap**

MARS SERIES 863

#### Polypropylene Web Duct Strap

· UL 723 Flame and Smoke

MARS NO.	DESCRIPTION	MARS PACK
86126	Black 1 3/4" x 100 yds.	24
86296	Black 3" x 100 yds	8
86297	Silver 1-3/4" x 100 yds	24
86298	Silver 3" x 100 yds	8







# **Rope, Tie Downs & Tarps**

MARS SERIES 790

#### **Truck And Equipment Tarps**

MARS equipment tarps provide a durable blue protective covering for truck beds, construction material and contractors tools.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79115	8' x 10' blue tarp	1	20
79116	12' x 12' blue tarp	1	12

#### **Molded Rubber Straps**

Molded rubber straps are made of high quality black rubber. Sturdy hooks will not loosen.

MARS NO.	DESCRIPTION	MARS PACK
79591	19" length - bulk	48
79592	24" length - bulk	24
79593	35" length - bulk	24

### Nylon Tie-Down Straps And Tow Straps - Clamshell Pkg

MARS NO.	DESCRIPTION	CASE QTY.
79596	10' universal tie down with non-slip cambuckle and vinyl coated steel hooks	12
79598	15' ratchet tie down with "J" hooks & "D" rings	12

#### Truck Rope-Polypropylene - USA

MARS truck rope is made of a polypropylene construction. All ropes are made in the USA. Applications range from hoisting, truck bed material tie down, job site tie off and a wide variety of other uses. MARS #79059 and #79060 include handy safety hook.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79053	3/8" x 50' yellow	1	12
79055	3/8" x 50' blk/orange	1	12
79056	3/8" x 100' blk/orange	1	12
79057	1/2" x 50' blk/orange	1	12
79059	3/8" x 50' blk/orange with safety hook	1	12
79060	1/2" x 50' blk/orange with safety hook	1	12

#### **Canvas Drop Cloths**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79118	9 Oz. Canvas Drop Cloth 9 x 12, 3 Mil	1	6
79119	6 Oz. Canvas Drop Cloth 12 x 15, 1 Mil	1	4
79120	6 Oz. Canvas Drop Cloth 4 x 12, 2 Mil	1	12



### **Duct Straps, Pipe Hangers & Hooks**

MARS SERIES 663



#### **Galvanized Duct Straps**

The perforated, galvanized duct strap has 1/4" and 9/64" holes for nails & bolts.

MARS NO.	DES	CRIPTION		MARS PACK	CASE QTY.
86025	28 gauge 3/	4" x 10' RL	bulk	100	100
86026	28 gauge 3/	4" x 50' RL	boxed	1	1
86027	28 gauge 3/4	4" x 100' RL	boxed	1	1
86031	20 gauge 3/	4" x 10' RL	bulk	100	100
86032	20 gauge 3/	4" x 25' RL	boxed	6	6
86033	20 gauge 3/	4" x 50' RL	boxed	1	1

#### **Duct Straps And Hangers**

The wire duct strap is used for all square duct run below the joist. Hammers right into duct and joist. No nails, screws or rivets are needed.

The pipe hanger is the fastest way to install round 5", 6" or 7" heating pipes below the joist. No nails needed.

Duct straps are for use on all square ducts run below the joist.

The DWV pipe hangers are designed for rapid installation of both ABS and PVC plastic DWV piping with standard flat head galvanized nails. Galvanized steel construction.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
86037	Duct strap DS 3	100	100
86040	DWV pipe hanger 2" x 12"	50	50
86041	DWV pipe hanger 3" x 12"	50	50

#### Mechanics Hanging Wire - Plasta-Reel™

MARS presents hanging wire on a Handi-Reel<sup>TM</sup>. This convenient reel unwinds easily. Hangs over post or peg on truck bed, from a  $2 \times 4$  or nail. Plasta-Reel<sup>TM</sup> prevents tangling. This polyethylene reel is smooth and safe to handle. Never blisters, burns or cuts the skin as metal might do! 4,150 ft. per roll.

MARS NO.	DESCRIPTION			MARS PACK	CASE QTY.
84418	18 gauge	Black Ann	5 lbs.	50	500
84419	18 gauge	Galvanized	5 lbs.	50	500

#### **MARS Plastic Hanger Strap**

- Flexible, non-conductive. 3/4" wide x .050 thick 100' roll
- 1/8" holes spaced every 3/4"
- · Uses: pipe/duct hanging
- Convenient dispenser box keeps roll neat and tidy

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
86177	Hanger strap 100L	1	1







# Wire Ties Mars series 865

### **MARS Wire Ties, 100 Packs**

MARS nylon wire ties and duct straps are avaliable in a wide variety of styles, color and tensile strengths. They range in sizes from 4" to 36" with tensile strengths from 18 lbs. to 175 lbs. All MARS wire ties and duct straps feature the bent tip design for ease and insertion.

MARS NO.			DESCRIPTION	ON	MARS PACK
86100	4"	natural	standard	3/4" dia. x 18 lbs.	1
86101	4"	black	standard	3/4" dia. x 18 lbs.	
86104	5.5"	natural	standard	1 1/4" dia. x 40 lbs.	1
86105	5.5"	black	standard	1 1/4" dia. x 40 lbs.	1
86106	8"	natural	standard	1 3/4" dia. x 40 lbs.	1
86107	8"	black	standard	1 3/4" dia. x 40 lbs.	1
86151	8"	blue	standard	2" dia. x 50 lbs.	1
86108	11"	natural	standard	3" dia. x 50 lbs.	1
86109	11"	black	standard	3" dia. x 50 lbs.	1
86153	14"	black	standard	4" dia. x 120 lbs.	1
86110	14.5"	natural	standard	4" dia. x 50 lbs.	1
86111	14.5"	black	standard	4" dia. x 50 lbs.	1
86112	6"	natural	screw mount	1 1/4" dia. x 30 lbs.	1
86113	6"	black	screw mount	1 1/4" dia. x 30 lbs.	1
86114	7.5"	natural	screw mount	1 3/4" dia. x 50 lbs.	1
86115	7.5"	black	screw mount	1 3/4" dia. x 50 lbs.	1
86155	11"	black	screw mount	3" dia. x 50 lbs.	1
86156	14"	black	screw mount	4" dia. x 50 lbs.	1
86157	14"	natural	screw mount	4" dia. x 50 lbs.	1

#### **MARS Wire Ties, Bulk Packs**

MARS NO.			DES	SCRIPTION	MARS PACK
86116	8"	natural	standard	1 3/4" dia. x 40 lbs. (1000 pk)	1
86117	8"	black	standard	1 3/4" dia. x 40 lbs. (1000 pk)	1
86152	8"	blue	standard	2" dia. x 50 lbs. (1000 pk)	1
86118	11"	natural	standard	3" dia. x 50 lbs. (500 pk)	1
86119	11"	black	standard	3" dia. x 50 lbs. (500 pk)	1
86120	14.5"	natural	standard	4" dia. x 50 lbs. (500 pk)	1
86122	14.5"	black	standard	4" dia. x 50 lbs. (500 pk)	1

### **MARS Wire Ties, Assortment Packs**

MARS NO.	DESCRIPTION				MARS PACK
86123	(100) 4"	(100) 8"	natural	assortment	1
86124	(100) 8"	(50) 11"	natural	assortment	1
86125	(200) 5"	(200) 8"	(50) 11" natural	assortment	1

### MARS Duct Straps, 175 lbs., 50 Packs

MARS NO.	DESCRIF	TION		MARS PACK
86127	24" duct strap for up to	6" duct	natural	1
86128	36" duct strap for up to	10" duct	natural	1
86129	48" duct strap for up to	14" duct	natural	1
86102	24" duct strap for up to	6" duct	black	1
86103	36" duct strap for up to	10" duct	black	1



### **Utility Knife**

MARS SERIES **256** & **274** 



- · Featuring the QUICKEST blade change in the industry.
- · Rugged all steel construction
- · Folds to a very compact size
- · Easily and quickly change blades with the push of a button
- Set includes knife, nylon carrying case, and 5 standard blades

MARS NO.	DESCRIPTION	MARS PACK	
25784	Utility knife	1	48

#### **MARS Knife Sharpener**

Finally, a Knife Sharpener anyone can use! No more messy oils or stones. Sharpen knives in about 10 seconds (even serrated knives), cleavers, axes, machetes, and many other cutting tools. The full length finger guard protects your fingers. Sharpening blades are Diamond Honed Tungsten Carbide for years of reliable use. AccuSharp Knife Sharpeners will not rust and can be cleaned with soap and water or in the dishwasher.

MARS NO.	DESCRIPTION	CASE QTY.
27520	MARS Knife Sharpener	12

#### **Cable Tie Tool**

Cable Tie Tools are economical, lightweight and easy to use.

Ideal for heavy duty ties and duct straps. Constructed from high grade steel.

- · Heavy duty construction
- · Installer controls tensioning
- Squeeze to cut excess

MARS	DESCRIPTION		BAG	CASE
NO.	LENGTH	COLOR	DAG	QTY.
25683	175 lbs	Red	1	100













### **Access Fittings & Service Valves**

MARS SERIES 654



#### **Braze-On Service Valves - Saddle Valves**

Braze-on self-piercing copper service valves are widely used and easily installed on a charged line. After brazing the saddle portion onto the line, the steel pin with valve core penetrates the line and is locked into place simply by tightening the cap. Available in sizes from 1/4" to 1-1/8".

MARS NO.	DESCRIPTION	MARS PACK
65425	1/4" qty 6 per bag	1
65426	5/16" qty 6 per bag	1
65427	3/8" qty 6 per bag	1
65428	1/2" qty 4 per bag	1
65429	5/8" qty 3 per bag	1
65430	3/4"qty 2 per bag	1
65431	7/8" qty 2 per bag	1
65432	11/8" qty 2 per bag	1

#### **Economy Line Service Valves -Extended Copper Tubes**

- With valve core & flat cap (#65408)
- · 1/4" male flare access fitting

MARS NO.	DESCRIPTION	MARS PACK
65438	3/16" copper tube extension, qty. 6 / bag	1
65439	1/4" copper tube extension, qty. 6 / bag	1
65440	5/16" copper tube extension, qty. 6 / bag	1
65441	3/8" copper tube extension, qty. 6 / bag	1
65442	1/8" copper tube extension, qty. 6 / bag	1
65434	5/16" copper tube extension, bulk	100
65435	3/8" copper tube extension, bulk	100
65436	3/16" copper tube extension, bulk	100
65437	1/4" copper tube extension, bulk	100
65443	1/8" copper tube extension, bulk	100

#### Copper Tees - 1/4" Male Flare

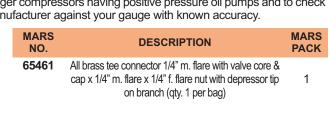
Copper tees have bodies brazed on. Using copper for the tee portion allows tubing to be attached to each end and allows using a solderless than silver solder, such as 95-5. They are to be used where two line ends have not yet been attached or where it is desireable to cut a line rather than drive a hole on an uncharged system. Copper tees save time and money. • includes valve core and flat cap (#65408).

MARS NO.	DESCRIPTION	MARS PACK
65447	Tee for 1/4" O.D. tube (2 bag)	1
65448	Tee for 5/16" O.D. tube (2 bag)	1
65449	Tee for 3/8" O.D. tube (2 bag)	1
65450	Tee for 1/2" O.D. tube (2 bag)	1
65451	Tee for 5/8" O.D. tube (2 bag)	1
65452	Tee for 3/4" O.D. tube (2 bag)	1
65453	Tee for 7/8" O.D. tube (2 bag)	1
65454	Tee for 11/8" O.D. tube (2 bag)	1

#### Tees Connectors

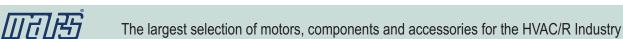
Tee connectors are used to connect controls to check oil pressure on larger compressors having positive pressure oil pumps and to check the accuracy of oil pressure gauges installed on the equipment by the manufacturer against your gauge with known accuracy.

MARS NO.	DESCRIPTION	MARS PACK
65459	1/4" m. flare x 1/4" f. flare nut w/ depressor tip x 1/4" m. flare on the branch w/one valve core (qty. 2 per bag)	1
65460	1/4" m. flare with valve core x 1/4" m. flare x 1/4" f. flare nut w/ depressor tip on the branch (qty. 2 per bag)	1



65447-451





# **Access Fittings & Service Valves**





#### **Brass Bodies - Half Unions**

MARS brass bodies have a 1/4" standard male flare above the hex. Below the hex are various threads, outside diameters and inside diameters for accepting different sizes of tubing and connections. A flat top brass cap and teflon valve core are included.

MARS NO.	DESCRIPTION	MARS PACK
65401	1/4" MPT dry seal x 1/4" male flare 5/16" I.D. hole accommodates 5/16" O.D. tube. Qty. 2 per bag	1
65402	1/8" MPT dry seal x 1/4" male flare 1/4" I.D. hole accommodates 1/4" O.D. tube. Qty. 6 per bag	1
65403	1/4" male flare for 1/8" I D hole - accommodates 1/8" O.D. tube. (3/16", 1/4", 5/16" O.D. steps) Qty 6 per bag	1

Brass (	Caps & Valve Cores	
MARS NO.	DESCRIPTION	MARS PACK
65408	Round brass flat cap w/neoprene O-ring seal for 1/4" flare, qty 6 per bag	1
65409	Round brass cap w/ core wrench top and neoprene O-ring seal for 1/4" flare, qty 6 per bag	1
65410	Plastic core container - includes six valve cores and a core wrench and thread chaser	1
65411	Brass core remover container with wrench tip - includes three valve cores	1
65412	Valve core w/teflon seal, qty. 6 per bag	1

#### **Core Removal Tools With Ball Valve**

MARS core removal tools are used to remove and replace valve cores in a 1/4" flare without losing refrigerant. Because it has a ball valve inside rather than a stem-type valve, the tool can be closed with just a quarter turn. This convenient compact size tool is ideal for working in close quarters.

MARS NO.	DESCRIPTION	MARS PACK
65418	Core removal tool	1
65419	Core removal tool w/ 1/4" male flare side port	1







# **Chemicals**

MARS SERIES 931

#### **Chemicals**

Thawzone liquid dehydrant chemically "dries" all refrigerants (R12, R22, R134, etc.), methyl chloride, and methylene chloride. Thawzone frees frozen systems due to moisture in five minutes. It prevents refreezing, does not leave any residue, does not contain any dissolved solids or methanol, and works with or without solid dryers. Available in 1 oz., 4 oz. and 16 oz. plastic bottles.

Leak Lock joint sealer is a soft setting pipe joint compound for sealing threaded joints, flanged joints, gasket surfaces and mating surfaces. This resin based brushable paste remains permanently flexible, adheres to internal surfaces and fills voids. It is ideal for use on metal and plastic materials subject to extreme vibrations, temperatures from -100°F (-73°C) to 400°F (204°C) full vacuums to 10,000 PSI. Leak Lock seals all refrigerants (R12, R22, R502, R134A, etc.) petroleum products, natural and manufactured gases, steam, water, air, etc. Available in 11/3 oz. plastic tube and 4 oz. and 1 pint brushtop plastic jars.

Red Epoxy aluminum sealer is a high performance heat cured, two part epoxy kit for patching or sealing on all metals and some plastics. Red Epoxy is cured within minutes and equipment is serviceable immediately. It is excellent for sealing threaded or unthreaded pipes and is great as a field repair kit for aluminum evaporators, coils, radiators, pipes, tanks, etc. Temperature range: -100°F (-73°C) to 300°F (149°C). Tensile strength: 600psi. working pressure tested in excess of 3000 psi. Kit includes resin & hardener. (.5 oz. tube each)

Low-Temp Gas Leak Detector is non-toxic and non-hazardous and does not contain ethylene glycol. This non-freezing, viscous florescent, bubble type gas leak detector is rated to -30°F (-34°C). The leaks appear as large strong bubbles which cling to the applied surface and are florescent under a black light. For use on hot and cold piping and equipment containing most gases such as air, natural gas, all refrigerants (R12, R134A, R22, R502, etc.) ammonia, SO<sub>2</sub> etc.

The mid-temp gas leak detector is non-toxic and non-hazardous. It is a viscous, florescent, bubble-type gas leak detector rated to 27°F (-3°C). Leaks appear as large strong bubbles which cling to the applied surface and are florescent under a black light. For use on hot and cold piping equipment containing most gases such as air, natural gas, all refrigerants (R12, R134A, R22, R502A, etc.), ammonia, SO<sub>2</sub> etc.

Solderlene is a high quality, paste type, non-acid soldering flux with industrial strength wetting agents to promote solder flow. For use with all low and mid temperature soft solders, both lead bearing and lead-free, on all metals except aluminum and magnesium.

Trace is a red dye trace type internal leak detector for use with mineral oil base refrigerant lubricants and hydraulic systems. Leaks show as intense red stains. Trace is non-volatile, will not sludge oil or deposit gum. Trace is soluble in the lubricant and liquid refrigerant but not the gas and travels with the lubricant. Oil separators will remove trace and should be bypassed. Trace passes through solid core dryers but the color intensity may be reduced.

MARS NO.	DESCRIPTION	MARS PACK
93801	Thawzone 1 oz. bottle	24
93802	Thawzone 4 oz. bottle	12
93815	Thawzone 16 oz. bottle	6
93803	Leak Lock 1 1/3 oz. tube	12
93804	Leak Lock 4 oz. brush top jar	12
93805	Leak Lock 1 pint brush top jar	12
93806	Red Epoxy kit .5 oz. tube	24
93807	Low Temp Gas Detector 8 oz. dauber bottle	24
93808	Low Temp Gas Detector 32 oz. trigger spray	12
93809	Mid-temp gas detector 8 oz. dauber bottle	24
93810	Mid-temp gas detector 32 oz. trigger spray	12
93811	Screwloose® Solderlene 4 oz. brushtop jar	24
93812	Solderlene 1 pint brush top jar	12
93813	Trace® 4 oz. bottle	12
93814	Trace® 16 oz. bottle	6





# **Liquid Line Filter Driers**

MARS SERIES 201



#### **MARS Liquid Line Filter Driers**

The MARS Liquid Line Filter Driers are designed to offer complete protection of your refrigerant system. The desiccant block is a carefully selected blend of molecular sieve and activated alumina, providing for maximum removal of moisture, acid, and foreign materials. This molded desiccant block allows for efficient filtration and retention of solid contaminants, while insuring minimum pressure drop. The solid molded block exposes maximum surface area and provides even distribution of filtered material as the refrigerant flows through the drier. These driers are intended for use on R-134A, R-404A, R-410A, R-507, R-12, R-500, R-502

#### Features & Benefits:

- · High moisture removal
- · High organic & inorganic acid removal
- · Solid block desiccant core
- For use with HCFCs, CFCs, and the lubricants that go with them
- · Nickel plated SAE flare and solid copper ODF fittings
- Corrosion resistant
- · Maximum working pressure 600 PSIG
- · Minimum burst pressure 2500 PSIG
- UL & CSA listed



MARS	MODEL	CONNECTIONS	DIMEN	SIONS	Flow	Capacity¹ Tons	@ 1 PSI	CASE
NO.	NO.	SIZE & TYPE	Α	В	R-134A	R-22/R410A	R404A/R507	QTY.
20106	MLD-032	1/4 SAE	4.32	1.63	2.0	1.9	1.2	12
20107	MLD-032S	1/4 ODF	3.76	1.63	3.0	2.8	1.8	12
20108	MLD-052	1/4 SAE	4.88	2.50	2.1	2.0	1.3	12
20109	MLD-052S	1/4 ODF	4.33	2.50	3.0	2.9	1.9	12
20111	MLD-053S	3/8 ODF	4.53	2.50	6.0	5.8	3.8	12
20112	MLD-082	1/4 SAE	5.80	2.50	2.1	2.1	1.3	12
20113	MLD-082S	1/4 ODF	5.24	2.50	3.1	3.0	1.9	12
20114	MLD-083	3/8 SAE	6.10	2.50	4.9	4.7	3.0	12
20115	MLD-083S	3/8 ODF	5.43	2.50	6.2	5.9	3.9	12
20116	MLD-162	1/4 SAE	6.58	2.50	2.1	2.1	1.3	12
20117	MLD-162S	1/4 ODF	6.02	2.50	3.1	3.0	1.9	12
20118	MLD-163	3/8 SAE	6.89	2.50	5.1	4.9	3.2	12
20119	MLD-163S	3/8 ODF	6.22	2.50	6.4	6.2	4.0	12
20120	MLD-164	1/2 SAE	7.13	2.50	8.8	8.4	5.5	12
20121	MLD-164S	1/2 ODF	6.27	2.50	9.2	8.8	5.7	12
20123	MLD-165S	5/8 ODF	6.54	2.50	15.3	14.6	9.5	6
20125	MLD-303S	3/8 ODF	8.90	3.00	7.5	7.2	4.7	6
20126	MLD-304	1/2 SAE	9.80	3.00	9.9	9.5	6.2	6
20127	MLD-304S	1/2 ODF	8.94	3.00	12.3	11.8	7.7	6
20128	MLD-305	5/8 SAE	10.18	3.00	12.6	12.1	7.9	6
20129	MLD-305S	5/8 ODF	9.21	3.00	16.8	16.1	10.5	6
20130	MLD-306S	3/4 ODF	9.63	3.00	18.1	17.4	11.3	6
20131	MLD-307S	7/8 ODF	9.80	3.00	19.0	18.2	11.8	6

<sup>&</sup>lt;sup>1</sup> All ratings in accordance with ARI standard 710-04, 86°F Liquid Refrigerant Temperature, 5°F Saturated Temperature 4.0 lbs./min./ton for R-134a, 2.9 lbs./min./ton for R-22, 4.0 lbs./min/ton for R-404A/R-507





### **Bi-Flow Heat Pump Driers**



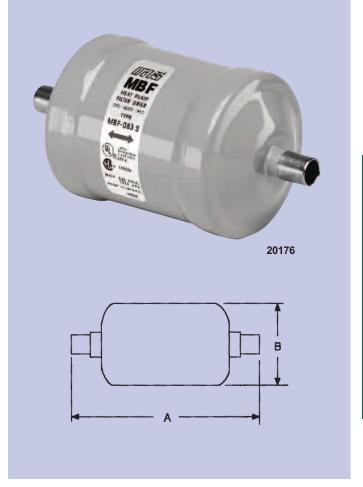
#### **MARS Bi-Flow Heat Pump Driers**

The MARS Bi-Flow Heat Pump Driers are designed to provide complete protection to the heat pump or reverse cycle system. The molded block core exposes maximum surface area for efficient filtration and retention of solid contaminants. The internal check valves prevent the release of collected contaminants when the heat pump cycles from the heating to cooling modes.

The use of molecular sieve and activated alumina in the desiccant core block provide the heat pump drier maximum moisture and acid removal. The addition of charcoal to the desiccant core allows for the removal of wax that may occur at low evaporator temperatures, giving protection to your expansion device.

#### Features & Benefits:

- For use on R134A, R12, R22, R500, R404A, R410A, R507
- · For heat pump or reverse cycle applications
- · High organic & inorganic acid removal
- · Solid block desiccant core
- · Proven, nylon internal check valves
- High moisture removal
- Nickel plated SAE flare and solid copper ODF fittings
- · Corrosion resistant paint
- · Maximum working pressure 600 PSIG
- · Minimum burst pressure 2500PSIG
- UL & CSA listed



MARS	MODEL	CONNECTIONS	DIMEN	ISIONS	Flow Capacity <sup>1</sup> Tons @ 1 PSI	CASE
NO.	NO.	SIZE & TYPE	Α	В	R-22/R410A	QTY.
20176	MBF-083S	3/8 ODF	5.63	2.63	7.4	12
20178	MBF-084S	1/2 ODF	5.66	2.63	9.4	12
20181	MBF-163	3/8 SAE	6.97	3.09	6.7	12
20182	MBF-163S	3/8 ODF	6.31	3.09	7.5	12
20186	MBF-165S	5/8 ODF	6.63	3.09	12.4	12

<sup>1</sup> All ratings in accordance with ARI standard 710-04 2.9 lbs./min./ton for R-22



### **Suction Line Filter Driers**

MARS SERIES 201



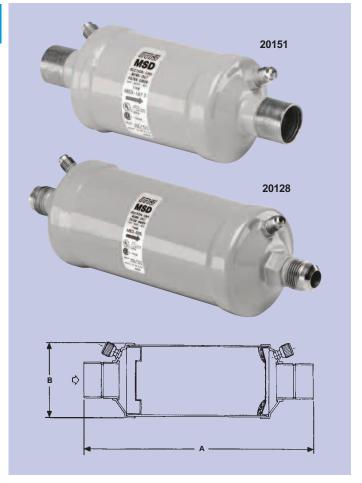
### MARS suction line driers - flow capacities<sup>1</sup> in refrigerant tons at selected evaporator temps

The MARS Suction Line Filter Driers are designed to effectively clean up the refrigerant system by removing solid contaminants and harmful acids that were created during a motor burnout. As well as motor burnout applications, the MARS Suction Line Drier should be installed in remote systems with long refrigerant lines. The filter drier will collect and hold any dirt that is in the evaporator or suction line at start up. Any field built-up system requires the protection that the MARS Suction Line Drier offers.

The desiccant block core effectively removes and holds a maximum amount of contaminants with minimum pressure drop. The binding material in the core protects the core from acid decomposition and allows it to collect and hold organic and inorganic acids from motor burnout. An inlet deflector spreads the refrigerant flow evenly across the molded core to provide full filtration capacity and to prevent erosion of the core.

#### Features & Benefits:

- For use on R134A, R12, R22, R500, R404A, R410A, R507
- · Dual access valve for accurate pressure drop readings
- · Solid block desiccant core
- · High organic & inorganic acid removal
- For use with HCFCs, CFCs and the lubricants that go with them
- · Nickel plated SAE flare and solid copper ODF fittings
- Corrosion resistant paint
- Maximum working pressure 600 PSIG
- · Minimum burst pressure 2500 PSIG
- UL & CSA listed



	+40°F	+20°F	0°F	-20°F	+40°F	+20°F	0°F	-20°F	-40°F	+40°F	+20°F	0°F	-20°F	-40°F	+40°F	+20°F	0°F	-20°F	-40°F
MARS NO.	Pre	R-1 essure D		S.I.		Pressu	R-22 re Drop	In P.S.I.			Pressu	R-502 re Drop	In P.S.I.		R410A Flow Capacity Evaporator Temperature (F°)				
	2	1.5	1	0.5	3	2	1.5	1	0.5	3	2	1.5	1	0.5	3	2	1.5	1	0.5
20141	0.8	0.5	0.3	0.2	1.3	0.8	0.6	0.4	0.2	1.0	0.7	0.5	0.3	0.1	1.7	1.1	8.0	0.5	0.3
20143	1.7	1.2	0.7	0.4	2.7	1.8	1.2	0.8	0.4	2.2	1.4	1.0	0.6	0.3	2.8	1.9	1.3	0.8	0.5
20145	2.4	1.6	1.0	0.5	3.8	2.5	1.7	1.1	0.6	3.1	2.0	1.3	0.8	0.4	3.9	2.6	1.7	1.1	0.6
20149	2.2	1.5	0.9	0.5	3.4	2.2	1.5	1.0	0.5	2.8	1.8	1.2	0.8	0.4	3.5	2.2	1.5	1.0	0.5
20150	2.6	1.8	1.1	0.6	4.1	2.7	1.8	1.2	0.6	3.4	2.2	1.5	0.9	0.5	4.2	2.8	1.8	1.2	0.6
20151	2.7	1.8	1.1	0.6	4.6	2.8	1.9	1.1	0.6	4.3	2.6	1.7	1.0	0.6	4.2	2.8	1.8	1.2	0.6
20154	3.4	2.3	1.4	0.7	5.4	3.5	2.4	1.5	0.8	4.4	2.8	1.9	1.2	0.6	5.5	3.6	2.4	1.5	0.8
20155	3.8	2.5	1.6	0.8	5.9	3.9	2.6	1.7	0.9	4.9	3.1	2.1	1.3	0.7	6.0	4.0	2.6	1.7	0.9
20156	3.9	2.6	1.6	0.8	6.1	4.0	2.7	1.7	0.9	5.0	3.2	2.2	1.3	0.7	6.2	4.1	2.8	1.7	0.9

Flow Capacity In Tons Refrigerant<sup>1</sup> (For kW, Multiply Tons By 3.5)

<sup>&</sup>lt;sup>2</sup> Example: 1.0 tons x 3.5 = 3.5 KW

MARS NO.	MODEL NO.	SIZE & TYPE	DIMEN	NSION	MARS NO.	MODEL NO.	SIZE & TYPE	DIMEN	NSION	MARS NO.	MODEL NO.	SIZE & TYPE	DIMEN	ISION
			Α	В				Α	В				Α	В
20141	MSD-83S	3/8 ODF	5.43	2.5	20149	MSD-165S	5/8 ODF	6.54	2.5	20154	MSD-306S	3/4 ODF	9.63	3.0
20143	MSD-84S	1/2 ODF	5.48	2.5	20150	MSD-166S	3/4 ODF	6.95	2.5	20155	MSD-307S	7/8 ODF	9.80	3.0
20145	MSD-85S	5/8 ODF	5.74	2.5	20151	MSD-167S	7/8 ODF	7.13	2.5	20156	MSD-309S	1-1/8 ODF	9.80	3.0



<sup>&</sup>lt;sup>1</sup> All ratings in accordance with ARI standard 730-04



### **Compact Suction Line Driers**

MARS SERIES 201

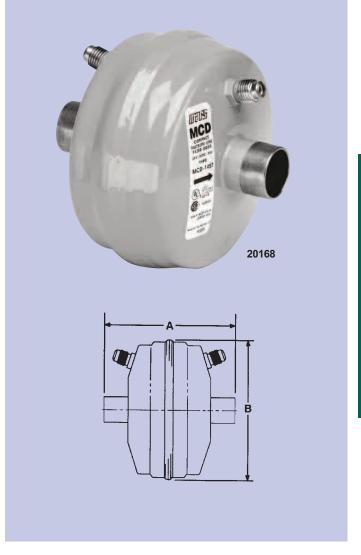
#### MARS compact suction line driers - flow capacities in refrigerant tons at selected evaporator temperatures

The MARS compact suction line driers are designed for use in air conditioning, heat pump, and refrigeration systems in which the available space in the suction line is limited. This is especially useful in heat pump systems where the drier must be placed between the reversing valve and the compressor. This compact suction drier should be used for motor burnout clean-up applications, and installed in remote systems with long refrigerant lines. The filter drier will collect and hold any dirt that is in the evaporator or suction line at start up.

The molded desiccant core block effectively removes and holds a maximum amount of contaminants with a minimum pressure drop. The binding material in the core protects the core from acid decomposition and allows it to collect and hold organic acids from a motor burnout. An inlet deflector, spreads the refrigerant flow evenly to prevent erosion and effectively uses the full filtration capacity of the filtering system.

#### Features & Benefits:

- For use on R134A, R12, R22, R500, R404A, R507, R502
- · High organic & inorganic acid removal
- Dual access valves for accurate pressure drop readings
- · Solid block desiccant core
- · For use with HCFCs, CFCs and the lubricants that go with them
- Solid copper ODF fittings
- · Corrosion resistant paint
- Maximum working pressure 302 PSIG
- · Minimum burst pressure 1510 PSIG



		MODEL SIZE 9				+40°F	+20°F	0°F	-20°F	+40°F	+20°F	0°F	-20°F	-40°F	+40°F	+20°F	0°F	-20°F	-40°F
MARS MODEL NO. NO.		SIZE & TYPE			R-134A Pressure Drop In P.S.I.			R-22 Pressure Drop In P.S.I.					R-502 Pressure Drop In P.S.I.						
				Α	В	2	1.5	1	0.5	3	2	1.5	1	0.5	3	2	1.5	1	0.5
20	<b>167</b> MC	CD-14S6	3/4 ODF	4.37	4.57	3.1	2.1	1.3	0.7	4.9	3.2	2.2	1.4	0.7	3.6	2.3	1.5	0.9	0.5
20	168 MC	CD-14S7	7/8 ODF	4.55	4.57	3.3	2.2	1.4	0.7	5.2	3.4	2.3	1.5	8.0	3.6	2.3	1.5	0.9	0.5



### **Replacement Cores**

MARS SERIES 201



#### **MARS Interchangeable Replacement Core**

The MARS replaceable cores are molded using selected desiccant materials for high acid, moisture and wax removal capabilities. They are molded for high mechanical strength using the same process used in our sealed liquid and suction line driers. The cores are fully activated and sealed in individual foil packages. The core is then packaged with a set of replacement gaskets that include a flange gasket, core gasket and a gasket for other manufacturer's shells.

The Burnout Core is for wax removal in low temperature R22 and R404A/R507 systems and for cleanup in all types of systems where motor burnout has occurred.



MARS	MODEL	Core Type	Dime	nsion	Water (	Capacity <sup>1</sup>	at 75°F	Water Capacity <sup>1</sup> at 125°F			
NO.	NO.	Core Type	Α	В	R-134A	R-22	R502	R-134A	R-22	R502	
20193	MBRC-48	Burnout	3.66	5.50	345	345	400	224	224	277	

<sup>&</sup>lt;sup>1</sup> R-134A = drops @ 60 ppm, R-22 = drops @ 60 ppm, R-502 = drops @ 30 ppm

### **Moisture Indicator Sight Glass**

MARS SERIES 656



#### **MARS Sight Glass - Moisture Indicators**

The MARS Moisture Indicators are constructed of forged brass bodies with brass fittings. The large viewing area of the sight glass allows for quick and easy inspection of the refrigerant as it flows through the system. Bubbles passing through the sight glass may be an indication of a low system charge or a restriction in the refrigerant system.

The moisture Indicators are designed to provide an accurate method of determining when the moisture content is dangerously wet in a refrigerant system and when the liquid line drier is no longer effective. An indicator element is highly sensitive to moisture and will gradually change color in reaction to the moisture content of the refrigerant system. Maximum working pressure is 500 PSIG. Minimum Burst pressure is 2500PSIG. UL and CSA listed.

MARS NO	MARS MODEL NO.	DESCRIPTION	LENGTH x HEIGHT INCHES	CASE QTY.
65634	MSG-2FM	1/4 Female x Male Flare	2.56 x 1.29	12
65635	MSG-3FM	3/8 Female x Male Flare	2.97 x 1.38	12
65636	MSG-4FM	1/2 Female x Male Flare	3.99 x 1.66	12
65638	MSG-2SS	1/4 Solder x Solder	4.57 x 1.11	12
65639	MSG-3SS	3/8 Solder x Solder	4.69 x 1.11	12
65640	MSG-4SS	1/2 Solder x Solder	4.88 x 1.29	12
65641	MSG-5SS	5/8 Solder x Solder	4.88 x 1.38	12
65642	MSG-7SS	7/8 Solder x Solder	5.90 x 1.66	12







### Thermo Expansion Valves

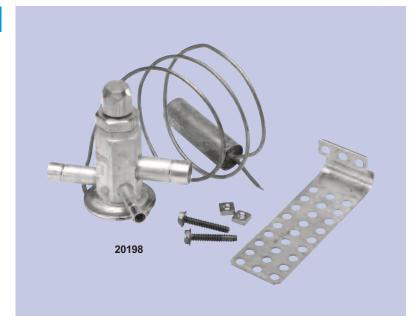


#### **MARS Thermo Expansion Valves**

The MARS Thermo Expansion Valves are used for heat pump, air conditioning, food service and commercial applications. These valves incorporate a high stability charge designed for R-22 HVAC applications. The wide range charge provides greater superheat stability, allowing two valves to cover a wide range of capabilities from 1 to 5 tons. These thermo expansion valves allow the wholesaler to consolidate inventory by replacing several valves with the two wide range valves we offer.

#### Features & Benefits:

- Hermetic construction eliminates external leakage
- · Compact size allows installation in limited spaces
- · External equalizer
- · Stainless steel power element eliminates corrosion and prevents valve failure
- · Integral check valve
- · Maximum working pressure 600 PSIG
- · Designed for R-22 applications



MARS NO.	MODEL NO.	CAPACITY	R-22 CAPACITY RANGE	CONNECTIONS	CAP. TUBE	CASE QTY.
20198	MXV2-1/2	2-1/2 Ton	1 – 3 Tons	3/8 x 1/2 ODF S/T	30"	12
20199	MXV5	5 Ton	1 – 5 Tons	3/8 x 1/2 ODF S/T	30"	12



# **Spun Copper Driers**

MARS SERIES 201



#### **MARS Spun Copper Driers**

The MARS Spun Copper Liquid Line Filter Driers are recommended for use in original equipment or replacement residential, air-conditioning or refrigeration equipment. These driers feature 100% molecular sieve for a high capacity of water retention. They provide 100 micron filtration. MARS Spun Copper driers are to be used with R-134A blends and systems with conventional refrigerants.



MAR NO.	S MODEL NO.	DESCRIPTION	CONNECT	IONS TONS	CAPACITY TONS R-134A	CAPACITY DESICCANT R-22	LENGTH in GRAMS	OUTER in INCHES	DIAMETER
			INCE	OUTLET	K-134A	N-22			
2010	1 MSCD-80	Std. Duty	1/4	CAP	1/3	1/2	10	9-5/8	5/8



# **Spun Copper Driers**

MARS SERIES 201

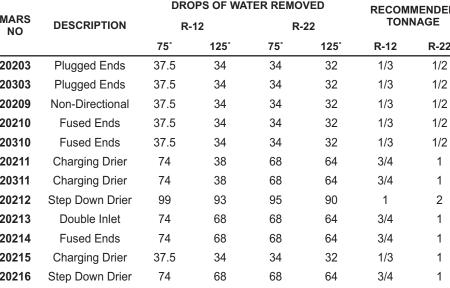


### **MARS Spun Drier Capacity Table**

#### Features:

- Recommended for use on original equipment, residential and commercial refrigerators, freezers and air conditioners
- XH-9 beaded molecular sieve for maximum water capacity in HFC refrigerants
- High quality high capacity
- Hermetically sealed
- Easy break off grooved ends
- Copper shells and end tubes
- Compatible with R134

		DRO	PS OF WA	VED	RECOMMENDE		
MARS NO	DESCRIPTION	R-	12	R	-22	TON	NAGE
		75°	125°	75°	125°	R-12	R-22
20203	Plugged Ends	37.5	34	34	32	1/3	1/2
20303	Plugged Ends	37.5	34	34	32	1/3	1/2
20209	Non-Directional	37.5	34	34	32	1/3	1/2
20210	Fused Ends	37.5	34	34	32	1/3	1/2
20310	Fused Ends	37.5	34	34	32	1/3	1/2
20211	Charging Drier	74	38	68	64	3/4	1
20311	Charging Drier	74	38	68	64	3/4	1
20212	Step Down Drier	99	93	95	90	1	2
20213	Double Inlet	74	68	68	64	3/4	1
20214	Fused Ends	74	68	68	64	3/4	1
20215	Charging Drier	37.5	34	34	32	1/3	1
20216	Step Down Drier	74	68	68	64	3/4	1





MARS NO	DESCRIPTION	INLET	OUTLET	LENGTH	DIA.	MARS PACK
20203	Plugged Ends	1/4" OD	1/4" OD	7-3/4"	1"	1
20303	Plugged Ends	1/4" OD	1/4" OD	7-3/4"	1"	50
20209	Non-Directional	1/4" OD	1/4" OD	8-1/2"	3/4"	1
20210	Fused Ends	1/4" OD	1/4" OD	8-3/4"	3/4"	1
20310	Fused Ends	1/4" OD	1/4" OD	8-3/4"	3/4"	50
20211	Charging Drier	1/4" OD 1/4" Flare	1/4" OD or Cap.	8-3/4"	1"	1
20311	Charging Drier	1/4" OD 1/4" Flare	1/4" OD or Cap.	8-3/4"	1"	50
20212	Step Down Drier	5/16"OD	5/16" OD or Cap.	10-3/4"	1"	1
20213	Double Inlet	(2) 1/4" OD	1/4" OD	8-3/4"	1"	1
20214	Fused Ends	1/4" ID 1/4" OD	1/4" OD or Cap.	9"	1"	1
20215	Charging Drier	1/4" ID 1/4"OD 1/4"Flare	1/4" OD or Cap.	9"	3/4"	1
20216	Step Down Drier	3/16, 1/4, 5/16" ID	5/16" ID or Cap.	8-3/4"	1"	1







MARS SERIES <mark>11</mark>

#### **Tubing Cutters And Accessories**

Imperial Eastman offers a quality line of tube working tools, well recognized as standards of excellence in the HVACR industry. All tubing tools are made in the U.S.A. and come with a limited lifetime warranty.

Imperial tube cutters can be used on hard or soft copper, aluminum, brass, thin wall steel, stainless steel, monel, titanium and other metal tubing. The Hi-Duty® tube cutters (MARS #65001 and #65002) feature rollers with flare cut-off groove, fold away reamer and a spare cutting wheel. MARS #65003 is a combination tube constrictor and cutter. This combo cutter is used for brazed or sweat type connections. A roller is used in place of cutter wheel.

MARS #65004, Imp® tube cutter, requires only 1 1/4" swing radius and a 1 3/8" swing radius with 5/8" tube. This tube cutter features rollers on the bottom of the tool which allows for easier cutter engagement on tubing. The enclosed feed design minimizes contamination, assuring continued free operation. MARS #65005 requires only 1 11/16" swing radius.

The Big-Imp<sup>™</sup> tube cutter, MARS #65006, requires only 1 15/16" swing radius and a 2 1/4" swing radius with 1 1/8" tube.

MARS NO.	MFG. NO.	DESCRIPTION	CASE QTY.
65001	TC1000	Hi-Duty <sup>®</sup> 1/8" to 1 1/8" OD	20
65002	312FC	Hi-Duty® 1/4" to 1 5/8" OD	10
65003	TC1020	Hi-Duty® combo 1/8" to 1 1/8" OD	10
65004	TC1050	Imp® cutter 1/8" to 5/8" OD	20
65005	TC2050	Imp® cutter 3/16" to 7/8" OD	10
65006	174F	Big Imp™ 3/8" to 1 1/8" OD	10
65008	S75015	Standard cutter wheel (10 pk) for use on #65001, 65002, 65003, 65006	10
65009	S75046	Cutter wheel for stainless steel and hard temper tubing (5 pk) for use on #65001, 65002, 65003, 65006	10
65010	S74762	Screws for cutter wheel (5 pk) for use on #65008, 65009	10
65011	TC1A	Cutter wheel service kit includes: 3 standard cutter wheels 1 screw for cutter wheel	10
65012	TC1B	Cutter wheel stainless service kit includes: 3 cutter wheels for stainless steel and hard temper tubing 1 screw for cutter wheel	10
65013	TC1C	Cutter wheel service kit includes: 2 cutter wheels for #65004 1 screw for cutter wheel	10
65014	206FB	AdjO-Matic® 1/8" - 2-5/8" OD	1
65072	S74761	Cutter wheel 5 pak for use on 65014	1
65076	S77511	Screw for cutter wheel for #65072	1
65056	S32633	Cutter wheel 5 pk. on 65004, 65015	1
65073	S26883	Screw for cutter wheel for 65056	1
65088	406FA	Hi Duty Adj-O-Matic® 2" - 4-1/8" OD	1
65074	S74833	Cutter wheel for 65088	1
65075	S74834	Screw for cutter wheel for #65074	1





MARS SERIES **650 & 256** 



Imperial lever type tube benders are used for soft copper, aluminum, brass, steel and other metal tubing. Each tool bends one size. The open size design slips over tube at any point. Our tube benders make smooth short radius bends up to 180°. Each bender tool is calibrated to show angle of bend. The wide hook grips tubing securely and the new fixed hook has easy 90° start. Our line of lever tube benders feature a swivel handle which may be repositioned to regain leverage for bends greater than 90°, eliminating bender twisting and handle crossing. The enclosed swivel mechanism provides extended life. Ideal for bending stainless steel, as well as other tubing.

Imperial Imp® triple header benders feature calibrated markings for accurate left-hand, right-hand and offset bends. 90° start requires less effort - making bending fast and easy.

Imperial spring type tube benders are for use on soft copper and aluminum tubing. These tools allow hand bending of soft tubing to any shape without collapsing walls. Special spring steel, nickel finished. End belled for quick tube removal.

MARS NO.	MFG. NO.	DESCRIPTION	CASE QTY.
65018	364FHA06	Lever type 3/8" OD	10
65063	364FHA10	Lever type 5/8" OD	10
65021*	364FHB06	Lever type with swivel handle 3/8" OD	5
65022*	364FHB08	Lever type with swivel handle 1/2" OD	5
65024	368FH	Triple header; 1/4", 5/16", 3/8" OD 15/16" radius to center	10
65025	102F04	Spring type 1/4" OD	10
65026	102F06	Spring type 3/8" OD	10
65028	102F08	Spring type 1/2" OD	10
65031	102F10	Spring type 5/8" OD	10
65032	102F12	Spring type 3/4" OD	10
65033	102F14	Spring type 7/8" OD	10
65029	163F	Spring set; 1/4", 3/8", 1/2", 5/8" OD	10

\*patented

#### **MARS Tube Benders**

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
25660	External spring type tube benders, 1/4", 3/8", 1/2" & 5/8", set of 4	1	24

#### **Tubing Tool Kits**

MARS #65059, 45° flaring and swaging tool kit is for use on 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2" and 3/4" OD tubing. Flares or swages. Converts quickly. Features screw-type feed. Ideal close quarters tool. Swivel type swaging adapters and spreader cone are hard-chrome finished for easy operation. Self centering, slip-on forged steel yoke. Includes five swage adapters for 3/16", 1/4", 5/16", 3/8", 1/2" and 3/4" OD tubing. Packaged in a plastic kit.

MARS #65034, 45° flaring kit is for use on 1/8" - 3/4" OD tubing. This compact kit contains two flaring bars & one yoke. The self centering forged steel yoke has a slip-on feature. The swivel flaring cone reduces effort. Packaged in plastic case.

MARS NO.	MFG. NO.	DESCRIPTION	CASE QTY.
65059	275FS	45° flaring and swaging tool	1
65034	375FS	45° flaring kit for 1/8" - 3/4"	1







MARS SERIES <mark>551</mark>

#### **Flaring Tools**

Imperial MARS #65035, Rol-Air® flaring tool, is used for soft copper, aluminum and brass. This flaring tool flares and burnishes 3/16", 1/4", 5/16", 3/8", 1/2" and 5/8" OD tubing. The faceted, hard chrome finished cone rolls out perfect 37° flares above die block - then automatically burnishes flare face. Original wall thickness is maintained at base of flare. Slip-on yoke permits use in tight quarters. The heat treated dies grip tubing without scoring.

MARS #65036, 37° flaring tool, is for use on copper, aluminum, steel, stainless steel and other metal tubing. Three rollers in flaring cone roll out a 37° flare above die block. There is an extension on the yoke for clamping in vise. This flaring tool is for 3/16", 1/4", 5/16", 3/8", 1/2" and 5/8" OD tubing and is furnished in a plastic kit.

Imperial's 45° flaring tool, MARS #65037, is for 3/16", 1/4", 5/16", 3/8", 7/16", 1/2" and 5/8" OD tubing. This tool features a self-centering yoke with swivel-type, hard chrome finished flaring cone to form better flares with less effort. The yoke is designed to permit flaring where there is little space between nut and tube end. This flaring tool is for use on soft copper, aluminum and brass tubing.

The 45° Rol-Air<sup>®</sup> flaring tool, MARS #65038, is used for flaring and burnishing 3/16", 1/4", 5/16", 3/8", 1/2" and 5/8" OD tubing. The flares are rolled out above die bar by a super-smooth faceted cone. Automatically burnishes flare face. The slip-on yoke permits use in tight quarters. Heat treated dies grip tubing without scoring. For use on soft copper, aluminum and brass tubing.

Imperial's Grabber™ Rol-Air® flaring tool flares and burnishes 3/16" to 5/8" OD tubing. This 45° flaring tool is for use on soft copper, aluminum and brass tubing. MARS #65039 features a unique, self-adjusted, tube holding mechanism which permits use in tight quarters. The faceted, hard chrome finished cone rolls out and burnishes a perfect 45° flare above the tube holding mechanism.

MARS NO.	MFG. NO.	DESCRIPTION	CASE QTY.
65035	507FB	Rol-Air® 37° for 3/16" to 5/8" OD	1
65037	195FC	45° for 3/16" to 5/8" OD	10
65038	500FC	Rol-Air® 45° for 3/16" to 5/8" OD	10
65039	525F	Grabber™ Rol-Air <sup>®</sup> 45° for 3/16" to 5/8" OD	10
65046	103FS	45° for 3/4", 7/8", 1" OD	1
65047	203FA	45° for 5/8" to1-1/8" OD	1
65048	296FC	45° for 3/16" to 5/8" OD	1
65049	300FB	Hi Duty 45° for 3/16" to 5/8" OD	1

#### **Pinch Off Tool**

Pinch-off tool temporarily closes soft copper, aluminum or steel tubing so no liquid or gas passes. Lets you disconnect line while making repairs without loss of liquid or gas. Also opens tubing and rounds it back into shape. For use on 1/4", 3/8" and 1/2" OD tubing.

MARS NO.	MFG. NO.	DESCRIPTION	CASE QTY.
65050	105FF	Pinch off tool (copper tubing)	1



MARS SERIES **650 & 790** 

#### Reamers, Swaging Tools, Wrenches & Tube Adapters

Imperial inner/outer reamers and deburring tools ream both inside and outside edges of tube with three hollow ground tool steel cutters. Fits comfortably in hand. MARS #65066, inner/outer reamer and deburing tool is used for copper, aluminum and brass tubing and has a blue finish.

Swaging tools are to be used on soft copper, aluminum and brass tubing. Our punchtype swaging tools make tubing connections without the use of fittings. Simply enlarge end of tube, insert another tube and solder like a sweat fitting. MARS #65069 swaging punch tool is for 1/2" OD tubing. The swaging punch kit, MARS #65070, contains four swaging punches - 1/4", 3/8", 1/2" and 5/8" OD. Packaged in vinyl case.

Imperial's tube adapter is used for charging and testing. To connect a hermetic system, pinch-off tube is cut off and adapter is slipped over cut end of tube and tightened. Synthetic rubber seal of adapter grips outside of tube. This gives a 1/4" male flare connection to system for purging, charging or testing. After system is recharged, tube is pinched off next to adapter. Adapter is then removed and tube is cut off and sealed with solder. Adapter can be used repeatedly.

MARS #65082 is a combination wrench with the four sizes most needed for servicing air conditioning units. MARS #65083 is for use on compressors with access valves in hard to reach places. This reversible ratchet is chrome plated.

MARS NO.	MFG. NO.	DESCRIPTION	CASE QTY.
65066	208F	Inner/outer reamer and deburring tool	10
65069	94S	1/2", 5/8", 7/8" OD swaging punch tool	1
65070	193S	swaging punch kit	20
65085	93S03	3/16" OD swaging punch	20
65086	93S04	1/4" OD swaging punch	1
65089	93S05	5/16" OD swaging punch	1
65093	93S12	3/4" OD swaging punch	1
65094	93S14	7/8" OD swaging punch	1
65051	241F04	Tube adapter 1/4" O.D.	1
65082	124C	9/16" and 1/2" hex; 3/16" & 1/4" sq. ratchet	1
65083	127C	1/4", 3/8", 3/16", 5/16" square ratchet	1

#### **SURE CUT Ratchet Tubing Cutter**

- · Cuts copper, brass, aluminum tubing and thin-wall conduit
- · Ratchets for fast, easy cuts in tight areas
- · Self feeding action for automatic cutting
- · Strong, lightweight nylon & fiberglass handle
- Spare cutting wheel is supplied in the handle

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
65201	5/16" to 1 1/8" OD	1	12
65202	1/4" to 7/8" OD	1	12
65203	Replacement Blades	1	12

#### **EASY BEND Ratcheting Tubing Bender**

- For bending OD tubing sizes from 3/8" to 7/8"
- Use on soft copper, coated soft copper, thin wall hydraulic tubing and plastic coated aluminum composite pipe
- Kit includes impact resistant carry case, tubing cutter and ID/OD reamer
- Single-hand manual ratchet operation

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
65210	Tubing Bender	1	3







# **Service Manifolds & Accessories**

MARS SERIES



#### **Service Manifolds**

Imperial and Motors & Armatures, Inc., offer refrigeration and air conditioning service manifolds. The Man Handler™ 4-valve manifolds feature up to four times faster system evacuation. The 4 valve efficiency provides vacuum, low side, high side and refrigerant lines individually connected and controlled. No need to switch charging lines. T-grip controls offer non-slip operation. Other features include swivel hanger, brass hose end closure bracket and a deep, vacuum valve design. The red and blue gauges are calibrated in psi. MARS #65101 is a standard 4 valve manifold and MARS #65102 is a 4 valve manifold with four 60" std. fitting charging lines (one 3/8" line, three 1/4" lines). MARS #65103 is a 4 valve manifold with sight glass. For R-12, R-22 and R-502 refrigerants.

Imperial's convertible 2 valve brass manifolds feature non-flutter gauges, tough gauge crystals, swivel hanger, brass hose end closure spuds, soft-seat valves and color coded controls. The red and blue gauges are calibrated in psi. MARS #65104 is the standard 2 valve manifold. MARS #65105 is the 2 valve manifold with three 36" std. fitting charging lines. For R-12, R-22 and R-502 refrigerants.

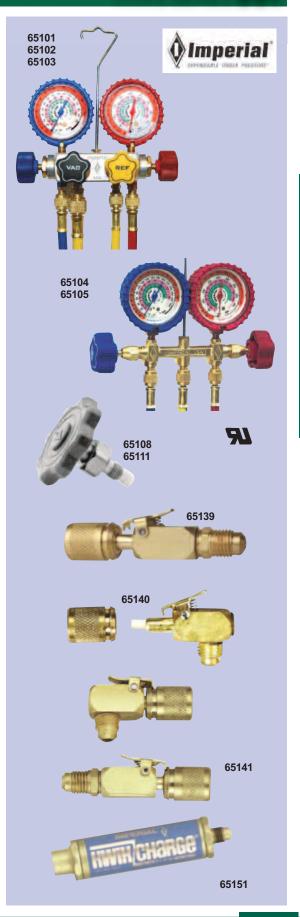
MARS NO.	MFG. NO.	DESCRIPTION	CASE QTY.
65101 <sup>1</sup>	620C	4 valve manifold	20
65102 <sup>1</sup>	621C	4 valve mnifld with (4) 60" hoses	20
65103 <sup>1</sup>	620CS	4 valve manifold with sight glass	1
65104	495C	2 valve manifold	30
65105	496C	2 valve mnifld with (3) 36" hoses	30
65108	400RL	Low side repair kit for 2 valve	1
65111	400RH	High side repair kit for 2 valve	1
65109	S8922562	Hook assembly for 4 valve	1
65110	S9449101	Closure bracket plate for 4 valve	1
65116	600R	Diaphragm replacement seal kit	1
65117	601R	Replacement VAC & REF knobs w/stems	1
65118	602R	Replacement HI & LO	1

<sup>&</sup>lt;sup>1</sup>Patented, UL recognized for commercial refrigeration & A/C applications

#### **Manifold Accessories**

Imperial patented, UL recognized kwik-couplers are intended for use with refrigeration/air conditioning service manifold high and low side hoses, when connecting to core valve type service fittings. Simply push to connect and pull to disconnect. Valve cores are depressed automatically without adjustments or loss of refrigerant. An automatic shut off valve retains refrigerant pressure in disconnect hose.

MARS NO.	MFG. NO.	DESCRIPTION	CASE QTY.
65139	16C	Straight coupler (45° flare) 1/4"F x 1/4"M	20
65140	17C	90° elbow coupler (45° flare) 1/4"F x 1/4"M	20
65141	18C	Coupler set (#16C and 17C)	15
65151	535C	Kwik charge liquid low side	1





# **Vibration Absorbers**

MARS SERIES 523



### **Stainless Steel Vibration Absorbers**

- 100% Copper connections
- Hose and copper braze welded
- · Each unit dehydrated and vacuum tested
- Units individually packaged in poly bags and corrugate boxes
- · UL, cUL, and CE

MARS NO.	DESCRIPTION	MARS PACK
52329	1/4" Vibration Absorber	1
52330	3/8" Vibration Absorber	1
52331	1/2" Vibration Absorber	1
52332	5/8" Vibration Absorber	1
52333	3/4" Vibration Absorber	1
52334	7/8" Vibration Absorber	1
52335	1-1/8" Vibration Absorber	1
52336	1-3/8" Vibration Absorber	1
52337	1-5/8" Vibration Absorber	1
52338	2-1/8" Vibration Absorber	1
52339	2-5/8" Vibration Absorber	1
52340	3-1/8" Vibration Absorber	1







# **Wrot Copper Fittings**

MARS SERIES <mark>647</mark>

### 9600 RS Couplings-Rolled Stop-Copper To Copper

MARS NO.	MODEL NO.	DESCRIPTION	MARS PACK	CASE QTY.
64721	W1001	3/16" O.D.	10	100
64722	W1003	1/4" O.D.	100	1000
64720	W10142	5/16" O.D.	100	4000
64723	W1009	3/8" O.D.	100	2000
64724	W1017	1/2" O.D.	100	2000
64725	W1022	5/8" O.D.	100	1000
64726	W1028	3/4" O.D.	100	500
64727	W1034	7/8" O.D.	50	500
64728	W1047	1½" O.D.	25	250
64729	W1055	1¾" O.D.	25	250

### 9600 Reducing Couplings - W/Stop-Copper To Copper

MARS NO.	MODEL NO.	DESCRIPTION	MARS PACK	CASE QTY.
64734	W1010	3/8" x 5/16" O.D.	10	1000
64735	W1011	3/8" x 1/4" O.D.	50	1000
64739	W1025	5/8" x 3/8" O.D.	10	2000
64740	W1029	3/4" x 5/8" O.D.	50	500
64741	W1030	3/4" x 1/2" O.D.	10	1000
64742	W1035	7/8" x 3/4" O.D.	50	500
64745	W1049	1½" x 7/8" O.D.	25	250

### 9607LT 90° Elbows - Long Radius Copper To Copper

MARS NO.	MODEL NO.	DESCRIPTION	MARS PACK	CASE QTY.
64823	W2715	1/4" O.D.	50	3000
64825	W2716	3/8" O.D.	50	2000
64826	W2717	1/2" O.D.	50	1000
64827	W2722	5/8" O.D.	50	500
64828	W2728	3/4" O.D.	50	500
64829	W2734	7/8" O.D.	25	250
64830	W2747	1½" O.D.	10	1000
64831	W2055	1³8" O.D.	5	100

### 9607 90° Elbows-Short Radius Copper To Copper

MARS NO.	MODEL NO.	DESCRIPTION	MARS PACK	CASE QTY.
64800	W2003	1/4" O.D.	50	500
64801	W2009	3/8" O.D.	50	2000
64802	W2017	1/2" O.D.	50	1000
64803*	W2022	5/8" O.D.	100	1000
64804*	W2028	3/4" O.D.	50	500
64805*	W2034	7/8" O.D.	50	250
*intermediate radius				

### 9607-2LT 90° Street Elbows - Long Radius

MARS NO.	MODEL NO.	DESCRIPTION	MARS PACK	CASE QTY.
64813	W2809	3/8" O.D.	50	500
64814	W2817	1/2" O.D.	50	500
64815	W2822	5/8" O.D.	50	500
64816	W2828	3/4" O.D.	25	250
64817	W2834	7/8" O.D.	25	250
64818	W2847	1½" O.D.	10	100
64819	W2350	1¾" O.D.	10	100



# **Brazing Alloys, Solders & Fluxes**

MARS SERIES 793



# Sil-Fos Brazing Alloys - 1/8" X .05" X .20"-1 Lb. Spool

Sil-Fos® alloys allow the joining of copper to copper without a flux and copper based alloys (brass and bronze) with a flux. Sil-Fos® is the workhorse filler metal used in the a/c and refrigeration industry. A key factor is the ductility of Sil-Fos® 15. It can be readily bent (without heating), thus permitting easier access to the backsides of joints.

The Sil-Fos® 15 is the best alloy for general copper-copper brazing in the Sil-Fos® family. The phosphorus in the Sil-Fos® product serves as the fluxing agent and no separate flux is necessary. For brass applications however, flux is recommended. For use where close fit-ups cannot be maintained Sil-Fos® 15 works well to "bridge" gaps. Sil-Fos® 15 is the most ductile of the entire Sil-Fos® family to best withstand the stresses inherent in refrigeration applications. Slow Flow.

The Sil-Fos® 6M is recommended for use where close fitups cannot be maintained. It has the ability to fill gaps and form fillets without affecting joint strength. Slow Flow.

The Sil-Fos® 5 is designed primarily for those applications where close fit-ups cannot be maintained. It has the ability to fill gaps and form fillets without adversely affecting joint strength. Slow Flow.

Fos-Flo® 7 is an economical, very fluid medium temperature filler metal for use with copper, brass and bronze. Withstands moderate vibration. Fast Flow.

Also available for merchandising assistance is the point of purchase display rack suitable for counter top display or hanging on pegboard. This display #78300 is available at no charge upon request with a \$1500 minimum order of Lucas brazing/solder products. Cardboard display dimensions: 25"H x 23"W x 10 1/5" deep at base x 6 1/4" deep at top (30 3/4" overall height including header).







MARS	ARS AMG SDEC		ARS AMAGE EDEC		cc	OMPOSITION	I %	TEMPER	RATURE	MARS	CASE
NO.		AWS SPEC	Ag	Cu	Р	MELT	FLOW	PACK	QTY.		
78301	Sil-Fos® 15	BCuP-5	15	80	5	1190° F	1475° F (1300°)	1	25		
78302	Sil-Fos® 6M	BCuP-4	6	88	6	1190° F	1460° F (1300°)	1	25		
78303	Sil-Fos® 5	BCuP-3	5	89	6	1125° F	1495° F (1300°)	1	25		
78304	Fos-Flo® 7	BCuP-2		92.8	7.2	1310° F	1460° F (1350°)	1	25		



# **Brazing Alloys, Solders & Fluxes**

MARS SERIES 198

### High Silver Brazing Alloys - 1/16" Dia. Coils

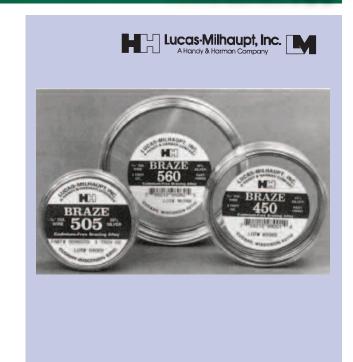
In refrigeration applications, much of the brazing involves joining copper tubing. However, there are numerous applications where other materials need to be joined (steel, brass, stainless, etc.). These high silver brazing alloys facilitate the joining of these metals. The one alloy in particular which is highly recommended for virtually all above mentioned base metals is Braze® 505. It's advantages over 56% and 45% include:

- It contains 2% Nickel which enhances wetting and strength and facilitates the joining of steels, stainless steel, carbide, etc.
- It doesn't contain tin. This prevents the formation of brittle intermetallics which can cause joint failures when stresses accumulate.
- · The flow characteristics can be easily manipulated by either fast or slow heating techniques - this allows bridging of gaps.
- It's available in flux-coated rod for added convenience and ease-ofuse: No separate fluxing operation.

Braze® 450 is a general purpose filler metal for joining ferrous, nonferrous and dissimilar metals with large joint clearances. Cadmium-free.

Braze<sup>®</sup> 505 is the best general purpose filler metal available. It is the only alloy recommended for stainless steel (as it retards/eliminates interface corrosion) and carbide applications. Nickel content provides superior adhesion ("wetting") to base metal surfaces. Available, and especially convenient, as flux coated rod. Cadmium-free.

Braze® 560 is the lowest temperature, Cadmium-free filler metal available. This is a good general purpose alloy for close joint tolerances.



MARS	S	AWC CDEC		CON	<b>IPOSITIO</b>	N %		TEMPER	RATURE	MARS	CASE
NO.		AWS SPEC	Ag	Cu	Zn	Sn	Other	MELT	FLOW	PACK	QTY.
7830	<b>5</b> Braze <sup>®</sup> 450 1oz	BAg-5	45	30	25			1225° F	1370° F	1	24
78306	6 Braze <sup>®</sup> 450 3oz									1	24
78307	7 Braze <sup>®</sup> 450 5oz									1	24
78308	8 Braze <sup>®</sup> 505 1oz	BAg-24	50	20	28		2 Ni	1220° F	1305° F	1	24
78309	9 Braze <sup>®</sup> 505 3oz									1	24
78310	<b>0</b> Braze <sup>®</sup> 505 5oz									1	24
78314	Braze <sup>®</sup> 505 F/C, Flux coated rod, 18" stick x 1/4 lb tube	BAg-24	50	20	28		2 Ni	1220° F	1305° F	1	15

### **Brazing & Solder Fluxes**

Where fluxing is required as part of the brazing operation, Handy Flux is recommended. Handy Flux is an all-purpose flux for use in brazing both ferrous and non-ferrous metals and alloys. Handy Flux conforms to: AWS Brazing Flux Type #3A, Federal Spec. O-F-499d (216185) Type B, Society of Automotive Engineers AMS-3410G. For soldering applications we offer two different flux products depending on the materials to be joined. They include Cleann-Brite Flux for general purpose applications and TEC Liquid Flux where more aggressive fluxing is required for the more difficult-to-solder materials (e.g. steel, stainless steel, etc.).

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
78315	Handy Flux - 7oz. jar w/brush cap	1	24
78319	TEC Liquid Flux - 4oz. squeeze bottle	1	48
78320	Clean-n-Brite Flux -4oz. paste w/brush	1	24





# **Brazing Alloys, Solders & Fluxes**

MARS SERIES 793



### Silver Bearing Soft Solders - 1/8" X 1 Lb. Spool

Clean-n-Brite solders are a high strength general purpose solder. They offer a higher strength than Tin/Lead solders and are safe for potable water systems. These alloys are widely used in low stress, low pressure copper-copper and copper-steel applications (e.g. sight glasses where temperature must be kept low, etc.). For copper-copper, Clean-n-Brite Paste Flux is the flux of choice. For copper-steel applications, TEC Liquid Flux is recommended as it is more aggressive at keeping the metal surfaces to be joined free of oxides. TEC is a more corrosive flux however, and subsequent flux residue removal is recommended.

Clean-n-Brite is a Lead-free, silver-bearing high-strength solder used for applications requiring close joint clearances.

Clean-n-Brite 6 is a Lead-free, silver-bearing high-strength solder used for applications requiring large joint clearances. It is the easiest Silver-bearing soft solder to work with as temperature range permits "bridging" loose fit-ups if necessary.

Clean-n-Brite No Lead is a Silver-bearing solder with good strength used in potable water system applications requiring no lead.



MARS	COMPOSITION			N %	% TEMPERATURE			CASE
NO.		Ag	Cu	Р	MELT	FLOW	PACK	QTY.
78316	Clean-n-Brite	3.6		96.4	431° F	431° F	1	24
78317	Clean-n-Brite 6	6		94	431° F	535° F	1	24
78318	Clean-n-Brite No Lead	0.5	4	95.5	428° F	446° F	1	24

### **MARS Cross Reference Guide**

MARS NO.	HANDY HARMON	LUCAS MILHAUPT	J.W. HARRIS	ENGELHARD
78301	Sil-Fos15	95150	61035 (Stay-Silv 15)	Silvaloy 15
78302	Sil-Fos 6M	95120	66000 (Dynaflow)	Silvaloy 6
78303	Sil-Fos 5	95060	41035 (Stay-Silv 5)	Silvaloy 5
78304	Fos-Flo 7	95000	21035 (Stay-Silv 0)	Silvaloy 0
78305	Braze 450 (1oz.)	98000	76310 (Safety-Silv 45)	Silvaloy A-45
78306	Braze 450 (3oz.)	98001	76313 (Safety-Silv 45)	Silvaloy A-45
78307	Braze 450 (5oz.)	98002	76315 (Safety-Silv 45)	Silvaloy A-45
78308	Braze 505 (1oz.)	98070		
78309	Braze 505 (3oz.)	98071		
78310	Braze 505 (5oz.)	98072		
78311	Braze 560 (1oz.)	98060	75310 (Safety-Silv 56)	Silvaloy A-56
78314	Braze 505 F/C	98110		
78315	Handy Flux	97030	40022 (Stay-Silv Flux)	Ultra Flux
78316	Clean-n-Brite	96000	10001 (Stay-Brite)	Silvabrite
78317	Clean-n-Brite 6	96010	10009 (Stay-Brite 8)	Silvabrite S
78318	Clean-n-Brite (no lead)	96150	15000 (Stay-Safe 50)*	Silvabrite 100
78319	Tec Liquid Flux	97000	40002 (Stay-Clean)	70001
78320	Clean-n-Brite Flux	97020	40027 (Stay-Clean Solder Flux)	71003

<sup>\*</sup> While this material does not have a chemistry exactly equivalent, it is similar in composition to Clean-n-Brite no lead and typically used in similar applications.





# **Soft Copper Refrigeration Coils**

MARS SERIES <mark>549</mark>



### **Soft Copper Refrigeration Coils**

- 50' Length
- ASTMB280
- · Individually shrink wrapped rolls

MARS NO.	SIZE	COILS/ SKID	COILS/ BOX
50014	1/4"	440	10
50516	5/16"	480	10
50038	3/8"	416	8
50012	1/2"	100	5
50058	5/8"	100	5
50034	3/4"	69	3
50078	7/8"	60	3
50118	1-1/8"	42	1





# **Lines & Tubing**

MARS SERIES

### **MARS Pilot Burner Gas Lines**

MARS pilot burner gas line is 6.5 ft of clean aluminum tubing with compression nuts and sleeves. Coiled and individually polybagged. 50' coils do not include fittings.

MARS NO.	DESCRIPTION	MARS PACK
79126	1/4" OD x 6.5' aluminum tubing	1

### MARS Clear Vinyl Tubing, - Boxed

MARS NO.	DESCRIPTION	CASE QTY.
79131	1/4" ID clear tubing 32 PSI375 O.D.	100 feet
79132	3/8" ID clear tubing 27 PSI500 O.D.	100 feet
79133	1/2" ID clear tubing 24 PSI625 O.D.	100 feet
79134	5/8" ID clear tubing 21 PSI750 O.D.	100 feet
79135	3/4" ID clear tubing 19 PSI890 O.D.	100 feet
79136	7/8" ID clear tubing 16 PSI - 1.015 O.D.	50 feet

### **MARS Polyethylene Tubing, FDA Approved**

MARS NO.	DESCRIPTION	CASE QTY.
79137	1/4" OD clear tubing boxed 135 PSI @ room temp.	100 feet

### MARS Humidifier/Icemaker Kit

The MARS humidifier/icemaker tubing kit includes 25' of FDA approved, 1/4" OD, non-toxic polyethylene tubing. Self tapping saddle valve and compression fittings also included. Polybagged.

MARS NO.	DESCRIPTION	CASE QTY.
79129	Humidifier/icemaker kit	36
79139	MARS saddle valve	1





# **Specialty Tools**

MARS SERIES 791



### **Specialty Tools**

The MARS telescoping pilot match holder with magnet collapses to fit in shirt pocket. Extends to 25". Attractively packaged and barcoded for merchandising.

MARS NO.	DESCRIPTION	MARS PACK
79130	Pilot match holder	1

### **Inspection Mirrors**

MARS offers inspection mirrors for virtually any application! Telescoping types available, along with round glass, oval glass, rectangular glass, round metal and rectangular metal. Attractively carded and barcoded.

MARS NO.	DESCRIPTION	MARS PACK
79350	1 1/4" round dia.glass mirror with 6" arm, adjustable angle	1
79351	2 1/4 round dia.glass mirror with 10 1/2" arm, adjustable angle	1
79352	1" x 2" oval glass mirror with 6" arm, adjustable angle	
79353	2 1/8" x 3-1/2" rectangle glass mirror with 11"-12" extendible arm	1
79358	2 1/4" dia.round magnifying glass mirror with vinyl grip handle 14 1/2"	1

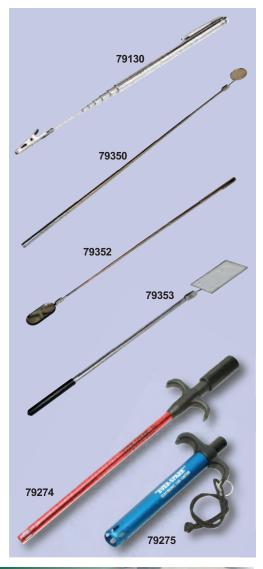
### **EVERSPARK Electronic Igniter**

Designed to fit your hand. Makes igniting any burner or torch quick & easy. Stands up to the most demanding field applications.

MARS # 79275 is designed for soldering, brazing, cutting, welding, plumbing, heating, refrigeration, air conditioning and process piping, etc...

MARS #79274 is designed for use with natural or bottled gas. Applications include: hot water heaters, pilots, gas bbq's, gas logs, gas appliances, industrial, residential, camping & RV's.

MARS NO.	DESCRIPTION	CASE QTY.
79275	Everspark Torch Ignitor	12
79274	Everspark II Long Reach Gas Ignitor	12



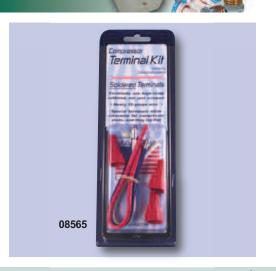
# **Compressor Terminal Repair Kit**

MARS SERIES 862



Zebra Instruments offers a compressor terminal repair kit. The terminals are high-temp soldered to the 10ga. Fine strand, color coded wires for the best connection. These special terminals allow clearance for compressor post, and lay flat under the safety cover, Twist on wire nuts also provided.

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
08565	Compressor Terminal Repair Kit	1	24







# **Compressor Stake On Repair Kits**

MARS SERIES <mark>162</mark>

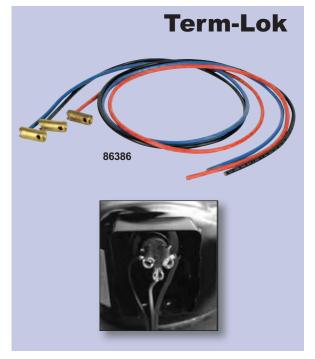
### **MARS Compressor Stake On Repair Kits**

MARS Term-Lok compressor stake on repair kits are designed with the technician in mind! During servicing of the air conditioning system or refrigeration system, it is not unusual for a technician to remove the compressor cover to find the electrical connector or spade terminal broken or melted away from the compressor. In reconnecting the electrical power, the metal plate is often found to have deteriorated to such an extent that the conventional female connector will no longer attach to the spade type male connector. Technology for reattaching a metal plate to the metal pin without damaging the encapsulated block is not normally available thus requiring the technician to attempt various types of crimping arrangements to avoid replacing the compressor assembly (which normally does not work).

The MARS Term-Lok is a brass cylindrical tube with a diameter large enough to slip over the pins and has a stainless set screw to lock onto the terminal. Term-Lok comes in packages of one or three terminal locks with color coded 65 strands, 600 volt permanently attached wire, with wrench provided for easy application. Once installed the compressor cover may be placed back over the terminals without any obstructions.

It takes approximately 15 minutes to install on most systems, thus saving the technician time and the customer money, with virtually no call backs.

MARS NO.	DESCRIPTION	MFG. NO.	CASE QTY.
86386	Brass stake on 12 gauge - 3 wire	TLC-3-12	1
86388	Brass stake on 10 gauge - 3 wire	TLC-3-10	1
86390	Brass stake on 8 gauge - 3 wire	TLC-3-8	1





# **Solderless Terminals**

MARS SERIES <mark>16</mark>2

### Quick Disconnects - Insulated (105°C)

MARS solderless terminals are competitively priced, yet manufactured of superior quality materials to rigid quality control standards. Seams are brazed to ensure perfect crimps EVERY TIME!

MARS solderless terminals are UL listed and CSA certified. Terminals are all manufactured in the USA. They are provided in clear, reclosable plastic display boxes. These attractive boxes, with clear and easy-to-read labels provide for visual inspection of the product and encourage impulse buying.

All packages display a MARS bar code for your convenience. MARS solderless terminals are available in two different package sizes. Both sizes enhance contractor self service. The MARS mini-pak display boxes contain very reasonable quantities with all types and sizes sold at one price. Perfect for the handyman, do-it-yourselfer and your sales and counter people. The MARS mini-pak is excellent for that small, unique HVACR odd job. The MARS super-pak contains much larger quantities of the more common solderless terminals at a super value. The contractor and tradesman will make great use of this size reclosable package. Ask your MARS sales representative about our solderless terminal merchandiser program!

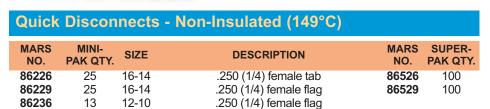
MARS NO.	MINI- PAK QTY	SIZE	DESCRIPTION	MARS NO.	SUPER PAK QTY.
86200	20	22-18	.250 (1/4) female tab	86500	100
86201	20	16-14	.187 (3/16) female tab	86501	100
86202	20	16-14	.250 (1/4) female tab	86502	100
86203	15	12-10	.250 (1/4) female tab	86503	50
86219	20	22-18	.187 (3/16) female tab		
86205	20	16-14	.250 (1/4) male tab	86505	100
86207	12	22-18	.250 (1/4) female full insul.	86507	100
86208	12	16-14	.250 (1/4) female full insul.	86508	100
86209	8	12-10	.250 (1/4) female full insul.	86509	50
86220	7	16-14	.250 (1/4) female flag fully insul.	86520	25
86221	6 pair		combo of #86208, 09		
86211	12	16-14	.250 (1/4) male fully insul.		
86216	12	22-18	.250 (1/4) male/female p/back		
86217	12	16-14	.250 (1/4) male/female p/back	86517	100
86218	8	12-10	.250 (1/4) male/female p/back	86518	50

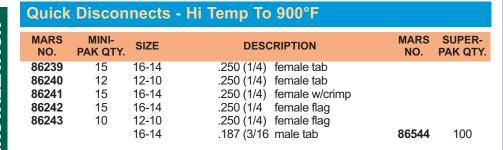




# **Solderless Terminals**

MARS SERIES 862





Rings	- Insula	ated (105°C)			
MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION	MARS NO.	SUPER- PAK QTY.
86251	20	22-18	#8 stud 11/64 i.d.	86551	100
86252	20	22-18	#10 stud 13/64 i.d.		
86253	20	16-14	#6 stud 9/64 i.d.		
86254	20	16-14	#8 stud 11/64 i.d.	86554	100
86255	20	16-14	#10 stud 13/64 i.d.	86555	100
86258	12	12-10	#8 stud 11/64 i.d.		
86259	12	12-10	#10 stud 13/64 i.d.	86559	50
86260	12	12-10	1/4 stud 17/64 i.d.		
86262	5	8	1/4 stud 17/64 i.d.	86562	25
86263	3	6	1/4 stud 17/64 i.d.		

Rings	- Non-l	nsulat	ted (149°C)		
MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION	MARS NO.	SUPER- PAK QTY.
86275	15	22-18 12-10	#10 stud 13/64 i.d. #10 stud 13/64 i.d.	86569	100

Rings	- High Te	mp To 900°F	
MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION
86283 86285	20 15	16-14 12-10	#10 stud 13/64 i.d. #10 stud 13/64 i.d.







# **Solderless Terminals**

MARS SERIES 862

Spade Flan	ged - Insul	lated (10	5°C)
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MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION
86294	15	16-14	#10 stud 13/64 i.d.
86295	12	12-10	#10 stud 13/64 i.d.

### Spade - Insulated (105°C)

MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION	MARS NO.	SUPER- PAK QTY.
86300	20	22-18	#8 stud 11/64 i.d.	86600	100
86303	20	16-14	#8 stud 11/64 i.d.	86603	100
86304	20	16-14	#6 stud 9/64 i.d.		
86301	15	16-14	#10 stud 13/64 i.d.	86601	100
86302	12	12-10	#10 stud 13/64 i.d.	86602	50

### Spade Flanged - Non- Insulated (149°C)

MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION
86307	20	22-18	#8 stud 11/64 i.d.
86308	20	22-18	#10 stud 13/64 i.d.

### Spade - Non- Insulated (149°C)

MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION
86315	25	22-18	#10 stud 13/64 i.d.
86317	15	12-10	#10 stud 13/64 i.d.

### Spade Hi Temp To 900°F

MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION		SUPER- PAK QTY.
86323	20	16-14	#10 stud 13/64 i.d.	86623	100

### **Butt Connectors And Plugs And Receptacles**

MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION	MARS NO.	SUPER- PAK QTY.
86329	20	22-18	Insulated	86629	100
86330	20	16-14	Insulated	86630	100
86331	15	12-10	Insulated	86631	50
		16-14	Non-insulated	86633	100
86334	20	12-10	Non-insulated		
		8	Non-insulated	86635	25
		22-18	Plug insulated	86637	50 pairs
			Recept - fully insulated		·
		16-14	Plug insulated Recept - fully insulated	86638	50 pairs





# **Solderless Terminals**

MARS SERIES 862 & 930



### Closed End Connectors (105°C)

MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION	MARS NO.	SUPER- PAK QTY.
86341	25	22-18	Insulated crimp type		
86342	20	16-14	Insulated crimp type	86642	100
86343	15	12-10	Insulated crimp type	86643	50

### Tab Adapters - Non Insulated (149°C)

MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION	MARS NO.	SUPER- PAK QTY.
86350 86351	20 15	- -	.250 (1/4) 2 male x 1 female .250 (1/4) 2 male x 1 female	86650 86651	100 50
86353	12	-	8 stud, male tab, straight, .250 .250 (1/4) 2 male x 1 female		

### Compressor Terminals - Non Insulated (149°C)

MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION		SUPER- PAK QTY.
86358	13	12-10	.250 (1/4) tab notched for bending	86658	50
86359	8	12-8	.250 (1/4) tab	86659	50

### Spade Spring - Insulated (105°C)

MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION		SUPER- PAK QTY.
86366 86367	20 20	16-14 16-14	#8 stud #6 stud	86666	100

### **Line Tap Connectors**

MARS NO.	MINI- PAK QTY.	SIZE	DESCRIPTION
86373	8	18-14	tap blue

### **Compressor Terminal W/Wire Kit**

MARS	DESCRIPTION	MARS
NO.	DESCRIPTION	PACK

86379 Includes 3 color coded #10AWG type AWM extra flexible lead wires in 10" lenghts.
One end with .250" x .032" female tab 12-10 quick disconnect. Other end stripped
5/16". Supplied with three 12-10 shrink tube butt connectors.

### **Push-On Terminal Kit**

The MARS push on terminal kit includes; four push on terminal adapters and four screws. Converts screw type terminals to push on. Use with the MARS 18000 series contactors.

MARS NO.	DESCRIPTION	MARS PACK
93103	(4) push on terminal adapters	1
	(4) screws	







MARS SERIES 41

### Slic-Tite® paste - thread sealants

- Contains more Teflon particles for greater sealing power
   Use on metal, PVC, CPVC, and ABS plastic pipe threads • For sealing water, air, steam, natural gas, LP gas, refrigerants, ammonia, gasoline, and oil
- Do not use on Oxygen service, use Teflon tape or Oxytite® Paste Washes off hands and clothing easily • Non-toxic, non-drying • Sealing temperature range: -50° F to 500°F (-46°C to 260°C)
- Working pressures: 3,000 PSI (204 BAR) for Gas, 10,000 PSI (680 BAR) for liquids
- USDA approved for use in federally inspected meat and poultry plants.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95400*	1.5 oz. tube	12	24
95401	1/4 pt. w/ brushcap	24	24
95402	1/2 pt. w/ brushcap	24	24
95403	1 pt. w/ brushcap	24	24
95406	1qt. w/ brushcap	12	12

<sup>\*</sup> packaged in one dozen per display box

### Slic-Tite® Stik w/ Teflon - Thread Sealant

- PTFE thread compound in handy stick form use on metal and PVC pipe thread connections for water, air, natural gas, steam, gasoline, oil, refrigerants and ammonia
- Do not use on Oxygen service, use Teflon tape working pressures: 5,000 PSI (340 BAR) - liquid to 500 PSI (34 BAR) -gas
- Temperature range: -50°F to 350°F (-46°C to 177°C)

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95407*	1 1/4 oz. stick	12	24

<sup>\*</sup> packaged in one dozen per display box

### **Low Density Teflon Tape**

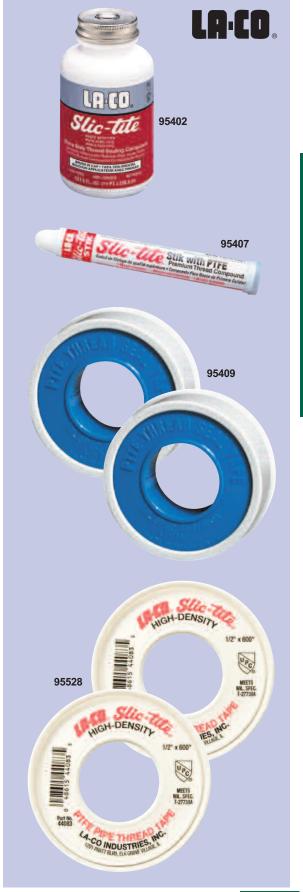
- Thickness 3 mils. Standard grade, low density
- Provides a highly resistant seal on pipe threads for all types of service
- Suitable for use with solvents, chemicals, oxygen, and on food lines
- Non-toxic Permits easy disassembly, even after years of service
- Meets Mil. Spec. T-27730A
- Sealing temperature range: -450° F to 550° F (-268° C to 288° C)
- Working pressures: 2,000 PSI (136 BAR)
- Sold in case quantities only

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95409	1/2" x 260"	144	144
95410	1/2" x 520"	144	144
95412	3/4" x 520"	144	144

### High Density Slic-Tite® Teflon Tape

- · Thickness 3 mils. · High density
- Provides a highly resistant seal on pipe threads for all types of service
- Made in USA Suitable for use with solvents, chemicals, oxygen, and on food lines
- Non-toxic Permits easy disassembly, even after many years
- Meets Mil. Spec. T-27730A
- Sealing temperature range: -450° F to 550° F, (-268° C to 288° C)
- · Working pressures: 2,000 PSI (136 BAR)

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95525	1/4" x 300"	12	12
95526	1/4" x 600"	12	12
95527	1/2" x 300"	12	12
95528	1/2" x 600"	12	12
95530	3/4" x 300"	12	12
95532	1" x 300"	12	12





MARS SERIES 954



### T.O.T.® Pipe Joint Compound

- · No-drip, siliconized for fast application on metal threads
- · For water, steam, air, and natural gas service
- · Lead free, non-toxic
- Certified by NSF to meet ANSI/NSF Std. 61 for use on potable water
- Do not use on Oxygen service, use Teflon® tape or Oxytite
- Sealing temperature: up to 350° F (177° C)
- Working pressures: to 500 PSI (34 BAR) for liquids to 350 PSI (24 BAR) for gases

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95415	1/2 pt. w/ brushcap	48	48

### Pipetite® Paste - Pipe Thread Compound

- · Soft set pipe thread compound
- For refrigerants, butane, gasoline, oil, as well as water, steam, air, natural and lp gas
- · Use on metal threads
- · Classified by Underwriters Laboratories in USA and Canada
- Do not use on oxygen service, use Teflon® or Oxytite®
- Sealing temperature: up to 400° F (204° C)
- Pressures: to 5,000 PSI (340 BAR) for liquids to 2,600 PSI (177 BAR) for gases

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95419	1/4 pt. w/brush cap	24	24
95420	1/2 pt. w/brush cap	24	24

### Anaerobic Pipe Thread Sealant

- · Contains Teflon® for a positive seal
- · Anaerobic adhesive provides locking power
- · Contains no solvents, won't shrink and weaken seal
- · Seals and locks in the absence of air
- Ideal for threads in heavy vibration areas such as compressors and reciprocating equipment
- · Classified by Underwriters Laboratories in USA and Canada
- Do not use on Oxygen service, use Teflon® tape or Oxytite
- Sealing temperature range: -65° F to 400° F (-54° C to 204° C)
- Working pressures: to 10,000 PSI (680 BAR) for liquids to 3,000 PSI (204 BAR) for gases

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95421	50 ml (1.69 oz.)	12	12
95422	250 ml (8.45 oz.)	6	6

### **Teflon Cords**

- Use as packing for faucets, valves, pumps, etc. Also as gasket between flanges
- Smaller sizes come packaged in a unique Visu-Kit that keeps cord clean and ready for use. The durable kit can be mounted over the work bench or carried in a tool box
- Sealing temperature range: -450° F to 550° F (-268° C to 288° C)

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95425	3/32" x 50'	6	6
95426	5/32" x 50'	6	6
95427	7/32" x 10'	6	6







MARS SERIES 954

### Heat-Seal Stik®

- · Fast repairs completed in 90 seconds
- · One part epoxy, no mixing or measuring needed
- · Stick melts, seals and cures in one operation
- · Use on aluminum, copper and other metals, glass and ceramics
- · Ideal for use on high and low side of refrigeration systems
- Sealing temperature : up to 350° F (177° C)
- Pressures: to 600 PSI (41 Bar)

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95430	3/8 oz. stick, carded	12	12

### Bloc-it® Heat Absorbing Paste

- Effectively absorbs surface heat
- Protects adjoining surfaces that may be damaged by excessive heat
- Safe to use: non-toxic, no asbestos, harmless to skin, and odorless
- · Easy to use: apply directly to surface from tube
- Easy to clean: wipe off with cloth or wash with water. Leaves no stains
- Typical uses: protects rubber and plastic components in ball, dielectric, and solenoid valves during soldering; protects painted or finished surfaces from adjacent soldering, brazing or welding; prevents distortion to light gauge metals during brazing or welding

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95455	10 oz. tube	24	24

### **Cool Gel - Heat Dissipating Spray**

- Helps prevent heat damage to components and surrounding materials during soldering, brazing, and welding
- · Unique gelled formula sticks to surfaces without dripping or running off
- · Clear, non-staining gel leaves no residue, eliminating cleanup
- · Safe, non-toxic, harmless to skin and odorless
- Saves time by eliminating the costly disassembly of valves and other components before soldering, brazing or welding
- · Protects the seals and seats in ball, dielectric, and solenoid valves
- Protects painted and finished surfaces from discoloration due to adjacent torch operations
- · Protects soldered joints from loosening when soldering adjacent joints

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95536	1 quart	12	12

### Regular Flux Paste

- · Super detergent action cleans as it solders
- · Non-acid, non-toxic, lead free
- · Contains no zinc chloride
- Use with all common soft solders including: tin-silver, 96/4, 94/6, 95/5, 50/50, 40/60 and 60/40
- For use on copper, brass, galvanized iron, lead, zinc, tin, silver, nickel, mild steel, terne plate, and malleable iron
- Meets Mil. Spec. Mil-F4995 Type II, Meets ASTM B813
- · Water soluble for faster flushing from pipe lines

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95441	2 oz	48	48
95443	4 oz. w/brushcap	48	48
95444	1 lb	24	24





MARS SERIES 954



### Silver Brazing Flux Paste

- Powerful cleaning action reduces waste of expensive silver solders
- · Packed in break-resistant plastic jars
- · Use with torch, furnace, resistance or induction heating
- Meets Mil. Spec. MIL-F-4883
- · Certified by NSF to meet ANSI/NSF Std. 61 for use on potable water
- Temperature range: 1000° F to 1700° F (538° C to 927° C)

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95448	2 oz.	48	48
95449	6 oz. w/brushcap	24	24

### Regular Soldering Flux Liquid

- Contains no zinc chloride or other heavy metal chloride
- Non-acid, non-toxic, lead free
- Use with new lead-free, tin/silver, plus 40/60, 50/50, 60/40 and 95/5 solders
- For high speed production and mechanized soldering equipment
- For use on copper, galvanized iron, sheet lead, zinc, nickel, tin, silver, mild steel, terne plate, malleable iron
   Packed in break resistant plastic bottles

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95445	1 gt.	12	12

### **Aluminum Flux Paste & Solder Kit**

- · Complete repair kit for tradesmen and repairmen
- · Solders aluminum easily
- · For repairing aluminum evaporators and tubing, ducts, and gutters
- Also solders aluminum to copper
   Blister carded for impulse sales

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95454	1 oz. of alum. flux and 1/2 oz. of #60 solder	12	12

### Flux-Rite 90<sup>®</sup> Flux

- Meets ASTM B-813 Completely water soluble for faster flushing from pipe lines
- Super detergent action cleans as it solders Non-acid, non-toxic, lead-free
- Contains no zinc chloride
   Use with all common soft solders including: tin-silver,96/4, 94/6, 95/5, 50/50, 40/60 and 60/40
- For use on copper, brass, galvanized iron, lead, zinc, tin, silver, nickel, mild steel, terne plate, and malleable iron

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95456	4 oz.	24	24

### Visu-Glow® Leak Detector

- · High visibility, fluorescent color shows brightly, even in dimly lit places
- · High viscosity, stays on vertical surfaces · Makes it easy to find leaks
- Temperature range: 15° F to 200° F (-9° C to 93° C)
   Safe for oxygen
- Non-corrosive, non-toxic

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95462	8 oz.	24	24

### Sure-Check® All Temperature Leak Detector

- All temperature formula: -55° F to 200° F (-48° C to 93° C)
- Ultra-sensitive, long-lasting bubbles Available in handy spray bottle
- · Fluorescent for improved visibility · Safe for oxygen
- · Non-corrosive, non-toxic · Green liquid

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95466	1 pint	24	24
95468	1 quart	12	12
	·		







# **Pipe Protection**

MARS SERIES 707

### **Residential Self Regulating Pipe Tracing Cable**

- Cut to length (3 watts/ft @ 120VAC) up to 75 ft.
- · Braided metal jacket for dry location application
- Connection kit provides end seal and plugs into standard 120 VAC outlet
- Automatically varies heat output with changes in surrounding temperature
- · For use on plastic or metal pipes

MARS NO.	DESCRIPTION	MARS PACK	
70701	100' Reel	1	1
70704	Connection Kit	1	10
70705	Pre-set Thermostat (38 degrees)	1	10

### **Commercial Pipe Freeze Protection Cable**

- No thermostat, no plug
- 2 foot orange 14/3 cold lead
- Jacketed for wet or dry applications
- 120 VAC unless noted
- · For use on metal pipes only

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
70720	3.28' length, 23 watts	1	20
70721	6.56' length, 46 watts	1	20
70722	6.56' length, 46 watts (240V)	1	20
70723	9.84' length, 69 watts	1	20
70724	13.12' length, 92 watts	1	20
70725	13.12' length, 92 watts (240V)	1	20
70726	16.41' length, 115 watts	1	20
70727	19.69' length, 138 watts	1	20
70728	19.69' length, 138 watts (240V)	1	20
70729	22.97' length, 161 watts	1	10
70730	26.25' length, 184 watts (240V)	1	10
70731	29.53' length, 207 watts	1	10
70732	32.81' length, 230 watts (240V)	1	10

# EASYHEAT

### **Residential Pipe Freeze Protection Cable**

- · For use on plastic or metal pipes
- Jacketed for wet or dry applications
- · Preassembled ready to install
- · Plugs into standard 120 VAC outlet
- · Built-In fixed thermostat

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
70710	3' length, 21 watts	1	10
70711	6' length, 42 watts	1	10
70712	9' length, 63 watts	1	10
70713	12' length, 84 watts	1	10
70714	15' length, 105 watts	1	10
70715	18' length, 126 watts	1	5
70716	24' length, 168 watts	1	5
70717	30' length, 210 watts	1	5
70718	40' length, 280 watts	1	5

# **Commercial Sr Trace Self Regulating Pipe Tracing Cable**

- Cut to length, up to 458' (120VAC)
- Wet (J jacket) or dry (copper braid) applications
- Automatically varies heat output with changes in surrounding temperature

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
70742	250' reel, J jacket 5 watts/ft, (120V)	1	1
70743	250' reel, J jacket 5 watts/ft (240V)	1	1
70744	Heat shrink end seal kit	1	5
70745	Heat shrink power/end connection kit	1	1
70746	Heat shrink splice and "T" connection kit	1	2
70747	250' reel, CB Jacket (120V)	1	1



# **Hose Clamps**

MARS SERIES 783

### Ideal 52 Series - 1/2" Clamps

Ideal manufacturers a broad line of standard worm drive and specialty hose clamps designed to satisfy a wide range of applications. The completely mechanical design locks the one piece housing directly to the band using the full strength of the material to provide maximum anti-shear protection. No spot welds to rupture under stress or corrosion, and a one piece housing can not come apart under high loading.

Ideal's 52 series clamps are comprised of a 1/2" stainless steel band with carbon steel housing and a 5/16" plated hex head screw.

MARS NO.		DESCRIPTION	MARS PACK	CASE QTY.
79310	Size 06	3/8"-7/8" clamp dia.	10	100
79311	Size 08	7/16"-1" clamp dia.	10	100
79312	Size 10	1/2"-1 1/8" clamp dia.	10	100
79313	Size 12	1/2"-1 1/4" clamp dia.	10	100
79314	Size 16	3/4"-1 1/2" clamp dia.	10	100
79315	Size 20	3/4"-1 3/4" clamp dia.	10	100
79317	Size 24	1"-2" clamp dia.	10	100
79318	Size 28	1 5/16"-2-1/4" clamp dia.	10	100
79316	Size 32	1 9/16"-2 1/2" clamp dia.	10	100
79319	Size 36	7/8"-2 3/4" clamp dia.	10	100
79345	Size 40	1-1/8"-3" clamp dia.	10	100
79309	Size 72	3-1/8"-5" clamp dia.	10	100

### Ideal 67-5 Series 1/2" Clamps

Ideal's 67-5 series clamps are all stainless steel. They are comprised of a 1/2" 300 series stainless steel band, housing and a 5/16 hex head screw.

MARS NO.		DESCRIPTION	MARS PACK	CASE QTY.
79320	Size 06	3/8"-7/8" clamp dia.	10	100
79321	Size 08	7/16"-1" clamp dia.	10	100
79322	Size 10	1/2"-1 1/8" clamp dia.	10	100
79323	Size 12	1/2"-1 1/4" clamp dia.	10	100
79324	Size 16	3/4"-1 1/2" clamp dia.	10	100
79325	Size 20	3/4"-1 3/4" clamp dia.	10	100
79328	Size 24	1"-2" clamp dia.	10	100
79307	Size 28	1 5/16"-2 1/4" clamp dia.	10	100
79326	Size 32	1 9/16"-2 1/2" clamp dia.	10	100
79327	Size 36	7/8"-2 3/4" clamp dia.	10	100
79308	Size 72	3"-5" clamp dia.	10	100
79304	Size 128	6 1/2"-8 1/2" clamp dia.	50	100
79305	Size 152	8"-10" clamp dia.	50	100
79306	Size 188	10"-12" clamp dia.	50	50

### Ideal 50" All Stainless 1/2" Clamp For Ducts

MARS NO.		DESCRIPTION	MARS PACK	CASE QTY.
79329	Size 248	14"-16" clamp dia.	50	100







# **Hose Clamps & Merchandisers**

MARS SERIES 783

### **Ideal 52 Series Micro Gear Clamps**

Ideal's 52 series micro-gear clamps consist of a 5/16" stainless steel band with carbon steel housing and 1/4" plate hex-head screw.

MARS NO.		DESCRIPTION	MARS PACK	CASE QTY.
79330	Size 04	7/32"-5/8" clamp dia.	10	100
79331	Size 06	5/16"-7/8" clamp dia.	10	100
79332*	Size 12	9/16"-1 1/4" clamp dia.	10	100
79333*	Size 16	11/16"- 1 1/2" clamp dia.	10	100
79334*	Size 20	7/8"-1 3/4" clamp dia.	10	100

<sup>\*</sup> size 12 and larger have a stainless steel housing

### **Ideal 62M Series Micro Gear Clamps**

Ideal's 62M series micro gear clamps are all stainless. They are comprised of a 5/16" stainless steel band, housing and 1/4" hex-head screw.

MARS NO.	DESCRIPTION		MARS PACK	CASE QTY.
79340	Size 04	7/32"-5/8" clamp dia.	10	100
79341	Size 06	5/16"-7/8" clamp dia.	10	100
79342	Size 12	9/16"-1 1/4" clamp dia.	10	100
79343	Size 16	11/16"-1 1/2" clamp dia.	10	100
79344	Size 20	7/8"-1 3/4" clamp dia.	10	100



# Flexible Gas Appliance Fittings & Valves

MARS SERIES 734 & 643



# Flexible Stainless Steel Gas Range Connectors 1/2" I.D. (5/8" O.D.) With Fittings

Brass Craft coated stainless steel gas connectors are known for superior quality and reliable performance. The ProCoat polymer based yellow coating resists corrosion from sea, salt, UV rays and the harsh chemical vapors from common household cleaning, plumbing repair and building products such as: ammonia, chlorine, solder flux, muratic acid, and bleach. These ProCoat gas connectors provide great strength and flexibility making installation easier.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
73402	18"L-1/2" MIP x 1/2" MIP	1	25
73403	24"L-1/2" MIP x 1/2" MIP	1	25
73404	36"L-1/2" MIP x 1/2" MIP	1	25
73405	48"L-1/2" MIP x 1/2" MIP	1	25
73410	24"L-3/4" FIP x 3/4" FIP	1	25
73411	36"L-3/4" FIP x 3/4" FIP	1	25
73412	48"L-3/4" FIP x 3/4" FIP	1	25
73418	36"L-1/2" FIP x 1/2" FIP	1	25
73419	48"L-1/2" FIP x 1/2" FIP	1	25
73422	12"L-3/4" FIP x 3/4" MIP	1	25
73423	18"L-3/4" FIP x 3/4" MIP	1	25
73424	24"L-3/4" FIP x 3/4" MIP	1	25
73425	36"L-3/4" FIP x 3/4" MIP	1	25
73426	48"L-3/4" FIP x 3/4" MIP	1	25
73427	60"L-3/4" FIP x 3/4" MIP	1	25
73429	12"L-1/2" FIP x 1/2" MIP	1	25
73430	18"L-1/2" FIP x 1/2" MIP	1	25
73431	24"L-1/2" FIP x 1/2" MIP	1	25
73432	36"L-1/2" FIP x 1/2" MIP	1	25
73433	48"L-1/2" FIP x 1/2" MIP	1	25
73434	60"L-1/2" FIP x 1/2" MIP	1	12

# Flexible Stainless Steel Gas Dryer Connectors 3/8" I.D. (1/2" O.D.) With Fittings

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
73438	24"L-1/2" MIP x 1/2" MIP	1	25
73439	36"L-1/2" MIP x 1/2" MIP	1	25
73440	48"L-1/2" MIP x 1/2" MIP	1	25
73445	24"L-1/2" FIP x 1/2" MIP	1	25
73446	36"L-1/2" FIP x 1/2" MIP	1	25
73447	48"L-1/2" FIP x 1/2" MIP	1	25
73448	60"L-1/2" FIP x 1/2" MIP	1	12

# Flexible Stainless Steel Gas Dryer Connectors 3/8" I.D. (1/2" O.D.) With Valves

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
73457	18"L-1/2" MIP x 1/2" FIP-BALL	1	25
73458	24"L-1/2" MIP x 1/2" FIP-BALL	1	25
73459	36"L-1/2" MIP x 1/2" FIP-BALL	1	25

### Flexible Stainless Steel Gas Heater Connectors 1/4" I.D. (3/8" O.D.) With Fittings

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
73461	12"L-1/2" FIP x 1/2" MIP	1	25
73464	36"L-1/2" FIP x 1/2" MIP	1	25

### Steel Gas Fittings For 7/8" O.D. Connectors

With MARS male gas fittings, wholesalers need fewer items on the shelf and contractors need fewer parts on the job. Tapped gas fittings hook up gas connectors to male or female iron pipe and female in-line gas valves. One fitting does many jobs.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
73480	straight-5/8" OD x 1/2" MIP (tapped 3/8" FIP)	25	25
73481	straight-5/8" OD x 3/4" MIP (tapped 1/2" FIP)	25	25

### Steel Gas Fittings For 1/2" O.D. Connectors

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
73483	straight-1/2" OD x 1/2" FIP	25	25

### **MARS Gas Ball Valves**

MARS gas ball valves are for use with natural, manufactured and mixed gases, as well as liquified petroleum and LP gas/air mixtures. Corrosion fighting chrome plated brass ball and aluminum, quarter turn handle. MARS gas ball valves feature threads that conform to all appropriate standards.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
73492	straight-1/2" OD x 1/2" FIP	10	10
73494	straight-5/8" OD x 3/4" FIP	10	10
73495	straight-1/2" FIP x 1/2" FIP	10	10
73496	straight-3/4" FIP x 3/4" FIP	10	10

### NIBCO Gas Ball Valves - Type GB1

- Tamper proof brass ball valve
- Lever Handle
- 1/2 psi for indoor appliance connections
- Female x Female threads
- 5 psi for indoor shutoff
- AGA 3-88, CGA 9.1, CGA 9.2, CR91-002, ANSI Z21.15

MARS	NOM.	DIM	ENSION	S (INCH	ES)	MARS	CASE	
NO.	SIZE	Α	В	С	D	PACK	QTY.	
64317	1/2	2.21	1.34	1.93	0.47	20	120	
64318	3/4	2.38	1.41	1.93	0.59	10	120	

### **MARS Cross Reference Guide**

MARS NO.	NIBCO	MUELLER	B & K	HAMMOND	LEGEND
64317	GB1 1/2	T220012	110-523	875 1/2	T3000 1/4
64318	GB1 3/4	T220034	110-524	875 3/4	T3000 3/4





# **PVC Cement, Cleaner & Primer**

MARS SERIES 730

### Oatey All Purpose Cement - ABS, PVC, CPVC

Oatey all purpose cement is a heavy bodied, clear cement recommended for use on ABS, PVC or CPVC pipe and fittings. For all pipe schedules, potable water pressure pipe, gas, conduit, drain waste and vent pipe. Flows freely and provides a thick layer of cement on the pipe. Helps to fill gaps in larger diameter pipe and loose fitting joints. Apply at temperature 40°F to 100°F. Exceeds performance requirements of ASTM D-2564, D-2864, D-2235, F-493. Special applicator brush cap for fast and easy



MARS NO.	DESCRIPTION	MARS PACK
73161	4 oz. clear	24
73162	8 oz. clear	24
73163	16 oz. clear	24

### **Oatey Heavy Duty Cement - PVC**

Oatey heavy duty cement is recommended for use on pvc pipe and fittings up to 12" in diameter for schedule 40 and schedule 80 potable water pressure pipe, gas, conduit, drain waste and vent pipe. This heavy bodied cement flows freely and provides a thick layer of cement on the pipe. A special brush cap applicatior is provided. Apply at temperatures 40°F to 100°F. This clear cement helps to fill gaps in larger diameter pipe and loose fitting joints. Exceeds ASTM D-2564.



MARS NO.	DESCRIPTION	MARS PACK
73165	4 oz. clear	24
73166	8 oz. clear	24
73167	16 oz. clear	24

### **Oatey Regular Cement - PVC**

Oatey regular cement is recommended for use on PVC pipe and fittings up to 4" for DWV or schedule 40 and up to 2" for schedule 80 potable water pressure pipe, gas, conduit, drain waste and vent pipe. It flows freely and sets up quickly. Apply at temperatures 40°F to 100°F. Exceeds ASTM D-2564. Special brush top appliactor.



MARS NO.	DESCRIPTION	MARS PACK
73174	4 oz. clear	24
73175	8 oz. clear	24
73176	16 oz. clear	24
73177	32 oz. clear	12

### Oatey Rain-R-Shine™ Cement - PVC

Oatey Rain-R-Shine™ is a blue colored cement recommended for PVC pipe and fittings up to 6" in diamter. A very fast setting cement formulated for wet conditions and/or when quick pressurization and fast installation is needed. For schedule 40 and schedule 80 potable water pressure pipe, irrigation, gas, conduit, drain waste and vent pipe. This medium bodied cement flows freely and covers with a thicker layer than regular PVC. Apply at temperatures 40°F to 100°F.



MARS NO.	DESCRIPTION	MARS PACK
73150	4 oz. blue	24
73151	8 oz. blue	24

### Oatey Clear Primer - NSF Listed - PVC, CPVC

Oatey clear primer is a clear aggressive primer for use on PVC and CPVC pipe and fittings for all schedules and diameters. This NSF listed formula removes all surface dirt, grease and grime as well as softens pipe in preparation for solvent cement. Meets ASTM F-656.

MARS NO.	DESCRIPTION	MARS PACK
73186	16 oz. clear	24

### Oatey All Weather Cement-PVC

Oatey all weather cement is recommended for use on PVC pipe and fittings up to 6" in diameter. Formulated for fast initial set up at temperatures down to 10°F, for schdule 40 and schedule 80 potable water pressure pipe, gas, conduit, drain waste and vent pipe. This medium bodied, clear cement flows freely and maintains good gap filling properties. Apply at temperatures 10°F to 100°F. Exceeds ASTM D-2564.



MARS NO.	DESCRIPTION	MARS PACK
73156	16 oz. clear	24
73157	32 oz. clear	12

### Oatey Purple Primer - PVC, CPVC

Oatey purple primer is recommended for use on PVC and CPVC pipe and fittings, all schedules and diameters. This purple tinted aggressive primer is formulated to remove surface dirt, grease and grime, as well as, soften the pipe surface to allow for a fast, secure and permanent solvent weld. For use in area where code calls for verification that a primer has been used. Exceeds ASTM F-656.



MARS NO.	DESCRIPTION	MARS PACK
73178	4 oz. purple	24
73179	8 oz. purple	24
73180	16 oz. purple	24
73185	32 oz. purple	24

### Oatey All Purpose Cleaner - PVC, CPVC, ABS

Oatey all purpose cleaner is recommended for use on ABS, PVC and CPVC pipe and fittings, all schedules and diameters. This fast acting cleaner removes surface dirt, grease and grime. Flows freely and evaporates quickly. Does not penetrate pipe surface. Apply at temperatures 40°F to 100°F.



MARS NO.	DESCRIPTION	MARS PACK
73170	8 oz. clear	24
73171	16 oz. clear	24
73172	32 oz. clear	12



73003

73006

# **Schedule 40 PVC Fittings & Traps**

MARS SERIES 730





50

25

# Schedule 40 - PVC Couplings MARS NO. DESCRIPTION MARS PACK 73001 1/2" slip x slip 100 73002 3/4" slip x slip 50

1" slip x slip

2" slip x slip

Schedule 40 - PVC Elbow 45°		
MARS NO.	DESCRIPTION	MARS PACK
73013	3/4" slip x slip	50

Schedule 40 - PVC Elbow 90°		
MARS NO.	DESCRIPTION	MARS PACK
73023 73024 73025 73033	1/2" slip x slip 3/4" slip x slip 1" slip x slip 3/4" slip x FPT	50 50 50 50

Schedule 40 - PVC Street Elbow 90°			
MARS NO.	DESCRIPTION	MARS PACK	
73045 73051	3/4" slip x slip 3/4" slip x MPT	50 50	

Schedule 40 - PVC Caps			
MARS NO.	DESCRIPTION	MARS PACK	
73073 73075	3/4" slip 3/4" FPT	100 100	

Schedule 4	0 - PVC Reducing A	dapters
MARS NO.	DESCRIPTION	MARS PACK
73096	3/4" MPT x 1/2" slip	50

Schedule 40 - PVC Tees		
MARS NO.	DESCRIPTION	MARS PACK
73059	1/2" all slip	50
73060	3/4" all slip	50
73061	1" all slip	50
73058	3/4" slip x FPT x slip	50
73066	3/4" clean-out tee (2 pk)	1

Schedule 40	- PVC Adapters	
MARS NO.	DESCRIPTION	MARS PACK
73079 73080 73081 73086 73087	1/2" slip x MPT 3/4" slip x MPT 1" slip x MPT 3/4" slip x FPT 1" slip x FPT	50 50 50 50 50

Schedule	40 - PVC Reducing	Bushings
MARS NO.	DESCRIPTION	MARS PACK
73101 73102	3/4" slip x 1/2" slip 1" slip x 3/4" slip	50 50

Schedule 40	) - PVC Plugs	
MARS NO.	DESCRIPTION	MARS PACK
73110	3/4" MPT plug	50

Sabadula 40 DVC Tr

Schedule	40 - PVC Traps	
MARS NO.	DESCRIPTION	MARS PACK
73126	3/4" P-trap	1
73128	3/4" mini P-trap	1
73129	3/4" super P-trap	1
73131	3/4" R trap	1
73133	3/4" PVC P-trap Clear	1
73134	3/4" PVC Mini P-trap Clear	1
73135	3/4" PVC Super P-trap Clear	1
73136	3/4" PVC R-trap Clear	1



# MARS Nylon & Galvanized Fittings & Nipples

MARS SERIES 730

### Excellent for clear vinyl tubing! All nylon parts are white.

Adapter Nylon Fitting				
MARS NO.	DESCRIPTION	CASE QTY.		
73201	Adapter 1/4 barb x 1/4 MPT - 10/pack	1		
73203	Adapter 3/8 barb x 3/8 MPT - 10/pack	1		
73204	Adapter 3/8 barb x 1/2 MPT - 8/pack	1		
73206	Adapter 1/2 barb x 1/2 MPT - 6/pack	1		
73207	Adapter 1/2 barb x 3/4 MPT - 4/pack	1		
73208	Adapter 5/8 barb x 3/4 MPT - 4/pack	1		
73209	Adapter 3/4 barb x 3/4 MPT - 4/pack	1		

### **Elbow Nylon Fitting**

MARS NO.	DESCRIPTION	CASE QTY.
73227	Elbow 3/8 barb x 3/8 MPT - 4/pack	1
73229	Elbow 1/2 barb x 1/2 MPT - 4/pack	1
73230	Elbow 1/2 barb x 3/4 MPT - 4/pack	1
73231	Elbow 5/8 barb x 1/2 MPT - 4/pack	1
73232	Elbow 5/8 barb x 3/4 MPT - 4/pack	1
73234	Elbow 3/4 barb x 3/4 MPT - 4/pack	1
73243	Hose mender 3/8 barb - 5/pack	1
73244	Hose mender 1/2 barb- 4/pack	1
73245	Hose mender 5/8 barb - 4/pack	1

### **Tee Nylon Fitting**

MARS NO.	DESCRIPTION	CASE QTY.
73252	Tee 3/8 x 3/8 x 3/8 barb - 5/pack	1
73253	Tee 1/2 x 1/2 x 1/2 barb - 4/pack	1
73265	Drain plug 3/4 square head - 5/pack	1
73268	Drain plug 3/4 hex head - 5/pack	1

### **NIBCO DWV Couplings**

MARS NO.	DESCRIPTION	CONNECTION TYPE	CASE QTY.
73269	2" coupling	hub x hub	100
73270	3" coupling	hub x hub	50
73271	3" X 2" adapter coupling	hub x hub	50

### **NIBCO DWV Couplings 90° Elbows**

MARS	DESCRIPTION	CONNECTION	CASE
NO.		TYPE	QTY.
73274	2" 90° elbow long turn	hub x hub	50
73275	3" 90° elbow long turn	hub x hub	25
73278	2" 90° street elbow long turn	spg x hub	20

### NIBCO DWV Couplings 45° Elbows

MARS	DESCRIPTION	CONNECTION	CASE
NO.		TYPE	QTY.
73280	2" 45° elbow	hub x hub	50
73281	3" 45° elbow	hub x hub	20
73282	2" 45° street elbow	spg x hub	50



# **Condensate Products**

MARS SERIES 932 & 934



MARS TAB™, condensate and drip pan clean-out tablets, prevent plugging of air conditioning condensate drip pans and drain lines.

MARS **TAB**™ does not release any chlorine or other noxious fumes. This economical, simple positive protection can be used on steel, copper, galvanized, painted surfaces and other materials without damage. It is one of the few treatments that will not stain exterior wall when line drains outside.

MARS NO.	DESCRIPTION	MARS PACK
93202	MARS <b>TAB</b> ™ (100 tablets per bottle)	18

### MARS One-Shot® Kits - 12 Applications Per Can

MARS One-Shot® is all it takes to instantly clear clogs. MARS One-Shot® drain opener kit instantly clears blockages in all types of fixtures and drains while simultaneously delivering a specially designed enzyme ingredient. This enzyme continues to dissolve grease buildup in the drain long after the initial blockage was cleared. The kit includes: One-Shot drain opener can 7 oz., three foot extension hose and twist fit adapter for ice markers and condensate drain pans.

### **Benefits & Features:**

- Enzyme activated
- · No ozone depleting chemicals
- · Safe for sewers & septic systems
- Works instantly
- · Sanitary and easy to use
- Universal adapter for all types of fixtures
- Seamless aluminum container will not rust
- For drains from 3/8" i.d. to 7/8 i.d.
- · Made in the USA
- 12 applications per can

### For Use On:

- Condensate pans
- · Ice machines
- Bar sinks
- Toilets
- Bathtubs
- Kitchen sinks
- · Shower drains
- · Floor drains.
- Lavatories

MARS NO.	DESCRIPTION	MARS PACK
93220	MARS One-Shot® drain opener (7 oz.)	25
93221	MARS One-Shot® refill can (7 oz.)	36

### **Panseal**

### Seals and Restores Leaking and Rusted Drain Pans

Panseal is a unique multi-component 2 part epoxy designed to quickly and permanently seal, repair, and restore leaking and corroded drain pans. The product is available in caulk gun cartridges for easy application, gallon size containers for larger surfaces such as cooling towers, patch kits for vertical surfaces and single use 250 gram burstseal bags. All contain pre-measured amounts of resin and hardener.

- Works in standing water
- Seals leaks immediately
- No surface preparation
- No system down time
- Works on both metal and plastic pans
- 100% solids and entirely free of solvents and volatile organic compounds

MARS NO.	DESCRIPTION	MARS PACK
93526	Panseal Cartridge	1
93527	Panseal Gallon	1
93528	Panseal Patch	1
93579	Panseal Bag	1
93500	Cartridge Nozzle	12







# **X-Treme Tape**

MARS SERIES 932

### X-Treme Tape

Originally developed for the military, X-Treme Tape is a high quality wrap made from a special silicone compound that adheres to itself when wrapped under tension. 1"W x 10'L roll is packaged in a clamshell and sold in 18 count display cases. Great for emergency repairs of all kinds:

- · No Adhesive, bonds to itself
- · Cures into a homogeneous mass
- Won't melt up to 500° F
- · Remains flexible to -60° F
- · Forms a permanent air & water tight seal
- · Tensile strength of 600 psi
- Insulates to 8,000 Volts
- Conforms to irregular shapes, stretches to 3x's its length

MARS NO.	DESCRIPTION	MARS PACK	
93299	X-Treme tape	18	18





# **Circuit Protection Products**

MARS SERIES 132

### **Circuit Protection**

The ZBreaker set from Zebra Instruments protects systems that you install or service from damage caused by shorts, overheating, or wiring problems. A sticker is included so that, if the Tech desires, he can inform his customer where to press the "reset" button and possibly save a midnight service call.

The same circuit breakers now found on many high-end transformers and systems, but at a great price! Kit includes wires and pre-installed terminals that allow you to easily plug it in to the connectors where a plastic-type fuse existed. 3 Amp Size.

MARS NO.	DESCRIPTION	MARS PACK	
08574	ZBreaker Set – 3A	1	24

The Short-Pro Tool is a 24 volt system "short-finder". This helps the tech locate a control voltage short. A built-in automatically resetting circuit breaker turns on a bright red LED when tripped. As the tech removes the short, the breaker automatically resets, the LED goes out, and the circuit is restored. Lightweight and compact, with two 18" leads.

MARS NO.	DESCRIPTION	MARS PACK	
08577	Short Finder Pro Tool	1	24



08577



# **MARS Multimeters**





### **MARS Digital Multimeters**

MARS digital multimeter #65748 is a compact pocket sized multimeter for measuring DC and AC voltage, DC current, resistance and diode. This economy digital multimeter offers full range overload protection and low battery voltage indication. Unit comes complete with a 9V battery and test leads, and also includes a temperature probe.

SPECIFICATIONS					
FUNCTION	RANGE	RESOLUTION	ACCURACY		
DCV	200 mV 2 V 20 V 200 V 1000 V	100 µV 1 mV 10 mV 100 mV 1 V	± 0.5% of rdg ± 2D		
AC (50/60Hz)	200 V 750 V	100 mV 1 V			
DCA	200 μA 2000 μA 20 mA 200 mA 10 A	0.1 μA 1 μA 10 μA 100 μA 10 mA	± 1% of rdg ± 2D ± 1% of rdg ± 2D ± 1% of rdg ± 2D ± 1.2% of rdg ± 2D ± 2% of rdg ± 2D		
ОНМ	200 Ω 2000 Ω 20 ΚΩ 200 ΚΩ 2000 ΚΩ	100 mΩ 1 Ω 10 KΩ 100 KΩ 1 KΩ	± 0.8% of rdg ± 2D ± 1% of rdg ± 2D		
Diode Test Transistor Test * Temperature					



### **Features**

- AC Current DC/AC Voltage Resistance Continuity Check
- · Continuity check buzzer sounds at approx. 50 ohm max
- Peak Hold & Data Hold 1.3" (33mm) Clamp Jaw Opening
- Large 0.68", 3-1/2 digit LCD with low battery indicator
- · Includes test leads, manual and carry case
- Overload protection provided for all ranges
- Meets IEC 1010 Safety Standard 9 volt battery included

Range: 0-600 A Resolution: 1 A

Frequency: 50/60 Hz (+/- 1.5% rdg +/- 4 dgt) 40-400 Hz (+/- 2.5% rdg +/- 4 dgt)

-	A A		- 14"	tare

MARS NO.	DESCRIPTION	MARS PACK
65748*	Digital multimeter w/temperature	1
65749	Digital clamp-on meter	1
65747	Replacement temp. leads for 65748	1











# **Test Instruments**

MARS SERIES (1)



### **MARS Capacitor Tester**

### Features:

- Easy to use
- 9V battery and test leads included
- · Low battery indicator

### Specifications:

Range	Resolution	Accuracy	Test Frequency
200pF	0.1pF	± (0.8% + 7)	
2000pF	1pF	± (0.8% + 5)	
20nF	10 pF	1 (0.070 1 3)	800Hz
200nF	100pF	± (0.5% + 5)	
2 µF	1000pF	± (0.8% +5)	
20 μF	0.01 μF	± (0.6 % ± 3)	80Hz
200 μF	0.1 μF	± (2.0% + 5)	
2000 µF	1 μF	± (2.0% + 5)	8Hz
20mF	10 μF	± (5.0% + 5)	

### **MARS Analog Multimeter**

The MARS analog multimeter, MARS #86143, offers fuse and diod protection. This meter is ideal for testing electrical and electronic circuits. This pocket size, lightweight meter features easy to read, two color scale, recessed safety designed input terminals and 12 ranges plus separate off position. Comes complete with test leads, battery, fuse and instruction manual.

### Specifications:

- DC voltage: 0-10/50/250/500Vdc
- AC voltage: 0-50/250/500Vdc
- DC current: 0-50/250mAdc
- Battery: 1.5V button cell/1.5V "AA"
- · Resistance: 0-10M Ohm (5K Ohm mid-scale)
- Decibels: -20 to +56dB (on AC ranges)

### **MARS Test Instruments**

MARS NO.	DESCRIPTION	MARS PACK
65746	MARS capacitor tester	1
86143	MARS economy analog multimeter	1

### **Safety Power Adapters**

Zebra'Dapter's provide visual indication of voltage levels before damage can occur. One is a fused power tap cordset & the other is a cheater cord used for a safer way to obtain and use 120V power. They are lighted to show the voltage level available, and if the indicator light is ignored, the fused circuit provides a last line of defense to protect you and your customer's equipment. These adapters are significantly a safer way to obtain 120V power.

MARS No. 08566 (Male end) has an in-Line fuse. (Two fuses included). Safer Power from Outlet to test Motors, Components & Systems

MARS No. 08567 (Female end) shows the voltage level at the plug. Used to check 120V power to run vacuum pumps, charging scales, drop lights, etc. lighting

Lighted Plug confirms Power

- · No light means no power
- · Normal light means 120VAC
- A brilliant light means you accidently hooked it up to 240VAC

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
08566	Fused Cheater Power Cord (male end) Fused Power Tap Cordset (female end)	1	12
08567		1	12







# **Electrical Testers**

MARS SERIES <mark>161</mark>



### **MARS Volt Stick**

The Volt Stick is an instrument for safely checking the presence of an AC voltage in cables, wall outlets, fuses, circuit breakers, junction boxes, power tools and appliances. Also, distinguishes between live and neutral wire in single or three phase supplies. No current flow is needed for correct operation of the Volt Stick. When a voltage is detected, a red indicator in the plastic tip of the Volt Stick illuminates. No contact is needed, unit operates at 1/8" distance from device.

### **Specifications**

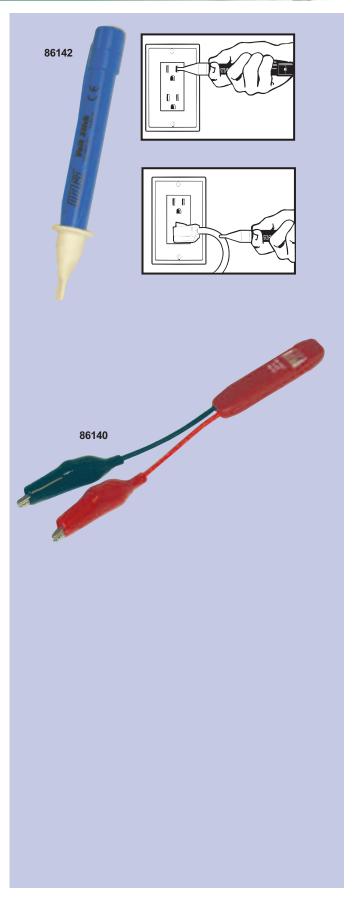
- Voltage range: 110 to 480 volts AC
- · Not sensitive to stray electromagnetic static
- Response time: instantaneous
- Case breakdown: 4000 volts
- Operation temp: 0° to 120°F
- · Batteries: two AAA, 1.5 volt alkalines included

MARS NO.	DESCRIPTION	MARS PACK	
86142	Volt Stick	1	12

### **MARS Voltage Tester - Carded**

The low voltage tester with insulated leads is the fast, easy way to trace and check low voltage AC or DC circuits from 5 to 50 volts. The built-in indicator lamp lights up dim or bright depending on the voltage tested. Comes with pocket clip.

MARS NO.	DESCRIPTION	MARS PACK
86140	Low voltage tester	1







# **Heat Shrink Tubing & Test Leads**

MARS SERIES # 61



### **MARS Heat Shrink Tubing - Black**

The MARS heat shrink tubing shrinks to fit approximately one half its diameter. This polyolefin, flame retardent tubing insulates wiring, repairs cords, covers tool handles, makes strong rope loops and neat ends. It may be easily assembled over irregular shapes. UL and CSA rated. Operating temperature; -55°C to 110°C. Shrink temperature; 120°C to 250°C. Attractively packaged in a dispenser disk for easy dispensing. Simply unwind and cut the amount you need, then wind the unused tubing back into the disk. This clear disk permits visual stock status and keeps tubing clean and protected. Disk packs are center punched for merchandising.

MARS NO.	TUBE SIZE	EXPAND DIA.	RECOVER DIA.	LENGTH	MARS PACK	CASE QTY.
86163	3/16"	.187	.093	4'	1	10
86164	1/4"	.250	.125	4'	1	10
86165	5/16"	.312	.156	4'	1	10
86166	3/8"	.375	.187	4'	1	10
86167	1/2"	.500	.250	4'	1	10
86168	3/4"	.750	.375	4'	1	10

### MARS Heat Shrink Tubing Kit And Replacement Packs

MARS NO.	DESCRIPTION	KIT QTY	MARS PACK	CASE QTY.
86170	Heat shrink tubing kit			
86173	3/8" exp. i.d. red 4"L 24/bag	12	1	1

### MARS Test Leads - Pkg'd In Poly Bags

MARS NO.	CLIP SIZE	TYPE	CASE COLORS	WIRE SIZE	L	BAG QTY.
86070	Sm	Alligator	Wht, red, blk, yellow, grn	18	18"	10
86071	Med	Alligator	Red/blk w/boots	18	24"	2
86073	Lg	Alligator	Red/blk w/boots	14	24"	2
86074	Lg	Battery	Red/blk w/boots	16	36"	2

### MARS Special Leads - Pkg'd In Poly Bags

MARS	CLIP	DESCRIPTION	WIRE
NO.	SIZE		SIZE
86075	Med	6'-2 wire test cord w/red & blk insul. clips 24" - 3 wire test cord w/fem plug & 3 insul. clips	16
86076	Med		16

### MARS Alligator & Battery Clips - Pkg'd in Zip Lock Bag

MARS NO.	CLIP SIZE	TYPE	DESCRIPTION	BAG QTY.
86078	Med	Alligator	Red/blk (1 ea. color boot - 2 clips)	1 pr.
86079	Sm	Battery		1 pr.
86080	Med	Battery		1 pr.
86081	Lg	Battery		1 pr.

### Zebra Alligator Leads - Clamshell

	IARS NO.	CLIP SIZE	TYPE	DESCRIPTION	BAG QTY.
0	8572	Sm	Alligator	5 different colors (up to 6A)	5
0	8573	Med	Alligator	8 different colors (up to 15A)	8





# **Batteries**

MARS SERIES 794



### **Eveready Industrial Alkaline - Bulk**

Motors & Armatures, Inc., and the Eveready Battery Company offer a complete line of alkaline, general purpose and lantern batteries. These high quality batteries are made in the U.S.A. and are competitively priced.

The Eveready Energizer Industrial Alkaline batteries are environmentally safe. The new black and green shell signifies the "ZMA" (zero mercury added) formulation. This provides a better discharge rate, lower impedance and better low temperature performance than carbon zinc. These ZMA alkaline batteries are also less sensitive to changes in the discharge rate or duty cycle.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79401	D cell - 1.5V	12	72
79402	C cell - 1.5V	12	72
79403	AA - 1.5V	24	144
79404	AAA - 1.5V	24	144
79406	6V GP lantern battery	12	72
79405	9V	12	72
79458	lithium coin - 3V	6	6

### **Eveready Industrial Alkaline - Carded**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79441	D cell - 2 pack	12	48
79442	C cell - 2 pack	12	48
79443	AA - 4 pack	12	48
79444	AAA - 4 pack	12	48
79445	9V - 2 pack	12	48
79457	AAAA - 2 pack	6	6

### **Bulk Battery Counter Display**

Increase your battery sales with the MARS battery counter display. This attractive, eye-catching display incorporates a gravity feed design that conveniently dispenses one battery at a time. This space saver display holds (11) D cells, (14) C cells, (26) AA cells, (36) AAA cells and (14) 9V batteries. Purchase three MARS bulk packs of each alkaline battery size and receive your display FREE! Ask your MARS Representative for details!

MARS NO.	DESCRIPTION	MARS PACK
79410	Counter display (empty)	1

### **Eveready Watch/Calculator Batteries**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79467	#386 1.5V repl. SR43W, SP386, GP86, H, S150, SG12	6	480
79468	#393 1.5V repl. SR48, RW48, F, SR754W, 546, 515	5	100
79469	#357 1.5V repl. SR44, RW42, J, SR44W, 541, 547	6	480





### MAGLITE® Laser Engraving Program

Motors & Armatures is pleased to offer the Mag-Lite Laser Engraving Program. A Maglite® flashlight can be permanently laser engraved with your company's name or logo. This makes an outstanding gift when you, or your company want to be remembered in the very finest light.

Flashlights are available in our standard blister pack or an attractive presentation gift box for an additional nominal fee per flashlight. The minimum order quantity for the Maglite® Laser Engraving Program is 48 pieces per size.

### **Engraving Charges**

\*Note: Engraving is not available on Mag's rechargeable flashlight Set Up Charge \$50.00 (ea. size)

**Artwork** Mag requires camera ready artwork. An authorization release to print corporate logos must be obtained prior to engraving.

**Lead Time** Approximately five days after receipt of artwork and order, paper proof will be sent via fax for approval. If the fax transmission is sufficient for approval, Mag must be notified so that the actual flashlights may be engraved.

Following approval of the sample, the order will be shipped within approximately ten to fifteen working days.

**Special Colors** A minimum 10,000 unit order and approximately three week leadtime is required on special color orders.

Imprint Area				
	Head	Switch	Knurl	End
Solitaire <sup>®</sup>	N/A	N/A	5/16 x 1-1/4	5/16 x 1/4
Mini Maglite® AAA	7/16 x 5/8	5/16 x 3/8	5/16 x 1-3/4	5/16 x 1/2
Mini Maglite® AA	5/8 x 3/4	7/16 x 1/4	7/16 x 2-1/8	7/16 x 1/2
Standard Maglite® 2C	1-7/16 x 1	3/4 x 1-3/4	3/4 x 2-3/4	3/4 x 1/2
Standard Maglite® 3C	1-7/16 x 1	3/4 x 1-3/4	3/4 x 3-3/4	3/4 x 1-3/8
Standard Maglite® 4C	1-7/16 x 1	3/4 x 1-3/4	3/4 x 4-3/4	3/4 x 2-1/8
Standard Maglite® 5C	1-7/16 x 1	3/4 x 1-3/4	3/4 x 5-3/4	3/4 x 2-7/8
Standard Maglite® 6C	1-7/16 x 1	3/4 x 1-3/4	3/4 x 7-3/4	3/4 x 3-5/8
Standard Maglite® 2D	1-7/16 x 1	1 x 1-3/4	1 x 2-3/4	1 X 1-3/4
Standard Maglite® 3D	1-7/16 x 1	1 x 1-3/4	1 x 3-3/4	1 X 3
Standard Maglite® 4D	1-7/16 x 1	1 x 1-3/4	1 x 4-3/4	1 X 4/3/8
Standard Maglite® 5D	1-7/16 x 1	1 x 1-3/4	1 x 5-3/4	1 X 5-1/2



# Flashlights MARS SERIES 792

### **MAGLITE® Flashlights**

MARS and Maglite® are committed to providing a full selection of flashlight products designed for use by professionals. Features include anodized aircraft aluminum with knurled grip, o-ring sealed for minimum water resistance and adjustable beams from pinpoint spot to flood. All Maglite flashlights are designed and tested for high impact, precise illumination and longer use. All units have a limited lifetime warranty for repair and replacement of all internal and external components.

MARS NO.	DESCRIPTION	MAG. NO.	CASE QTY.
79205	Mini-mag AAA (black)	M3A016	12
79201	Mini-mag AA (black)	M2A016	12
79230	Mini-mag AA (blue)	M2A116	12
79252	Mini-mag AA (camouflage)	M2A026	12
79207	Mag-light 2C-cell (black)	S2C016	12
79203	Mag-light 2D-cell (black)	S2D016	12
79204	Mag-light 3D-cell (black)	S3D016	12
79210	Mag-light 4D-cell (black)	S4D016	12
79202	AA combo pack (black)	M2A01C	12
79215	AA mag holster combo (black)	M2A01H	12

### **MAGLITE® Led Flashlights**

MARS NO.	DESCRIPTION	MAG. NO.	CASE QTY.
79238	MiniMaglite 2AA LED (black)	SP221H	6
79239	Maglite 2D-cell LED (black)	SP221H	6
79212	MiniMaglite XL200 3AAA LED (black)	XL200- S3016	6
79240	Maglite Pro 2AA LED (black)	SP2P01H	6
79241	Maglite Pro + 2AA LED (black)	SP+P01H	6

### MAGLITE® Accessories

MARS NO.	DESCRIPTION	MAG. NO.	CASE QTY.
79222	AA nylon holster (black)	AM2A056	12
79226	AA leather holster (black)	AM2A026	12

### MAGLITE® Replacement Lamps

MARS NO.	DESCRIPTION	MAG. NO.	CASE QTY.
79223	AA/AAA bulb 2 pack	LM2A001	12
79221	2D-2C krypton bulb	LMSA201	12
79220	3D-3C krypton bulb	LMSA301	12
79219	4D-4C krypton bulb	LMSA401	12
79278	Halogen Replacement lamp	LR00001	12

### Upgrade LED Kits for MAGLITE®

MARS NO.	DESCRIPTION	MAG. NO.	CASE QTY.
79233	AA LED Upgrade	LRB-07	6
79232	AA LED Upgrade II-White	LRB2-07	6
79234	C & D LED Upgrade	LRB-07-PR	6
79227	AA MiniMaglite IQ Switch	NIQ-07-AA	6
79228	AA MiniMaglite LED Upgrade II	LRB2-07-1W	6
79229	AA MiniMaglite LED II & Switch	NIQ2-07-1WC	6







# **Lanterns & Flashlights**

MARS SERIES 794

### Lumilite® Lanterns & Industrial Flashlights

Motors & Armatures is pleased to re-introduce Lumilite Flashlights. Our Lumilite product offering provides the wholesaler with high quality lanterns and flashlights at competitive prices and attractive packaging.

The Lumilite 6-Volt Krypton Lanterns are constructed of heavy duty yellow plastic. These lantern flashlights use one 6 volt spring terminal battery. The MARS #79471 is a 6-volt lantern with 4-D battery adapter, 4-D batteries and provided with clamshell packaging.

The 6-Volt Z-Lite Lantern, MARS #79472, features a gray rubberized body. This floatable lantern features an adjustable stand for hands free operation. The unit is provided in clamshell packaging and includes a 4-D battery adapter and 4-D batteries. Unit will operate with a 6-volt spring terminal battery or the 4-D battery adapter.

Lumilite Industrial Flashlights feature a rugged, shockproof polypropylene body. All units come with a super bright krypton bulb and batteries. Yellow safety color. Attractive clamshell packaging. Available in 2AA, 2D, 2D with magnet and 3D sizes.

The Lumilite LED Headlight, MARS #79477, includes an adjustable strap with head cushion and 2 AA batteries. The ratchet headlight rotates up and down for directional beam.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79472	6-volt Z-Lite lantern w/4D adapter & 4D batteries	1	6
79474	2D flashlight w/batteries	1	12
79475	2D with magnet and batteries	1	12
79476	3D flashlight with batteries	1	12

### **MARS Extendable Magnetic Flashlight**

### **Introducing the MARS Extendable Magnetic Flashlight**

The extendable, flexible, lighted, magnetic pickup tool Tool box utility in your shirt pocket

- · Flexible shaft
- Telescopes from 6" to 21"
- · 3 Super bright LED's
- · Durable machined aluminum body
- · Powerful magnetic head and tail
- · Uses 4 LR44 batteries (included)

MARS NO.	DESCRIPTION	MARS PACK
79479	Extendable Magnetic Flashlight	

### **MARS Accessories**

MARS NO.	DESCRIPTION	MARS PACK
79460	LR44, Batteries for 79479, 4 pk	1



# **Electronic P/T Chart**

MARS SERIES 657



"Throw away your worn out paper charts"

- · Pocket sized
- · Includes 61 refrigerants
- · Pressure readings in PSI, BAR & MPa
- · Temp readings in Fahrenheit and Celsius
- Battery included
- · Clamshell packaging

MARS	MARS	
NO.	PACK	
65700	1	



# **Infra-Red Thermometers**

MARS SERIES 255



- · Built-in laser pointer
- · Data hold & Auto power off
- Temperature Range: -50°C to 350°C (-58°F to 662°F)
- Accuracy: ±2% of reading or ±2°C/±4°F D:S=8:1
- · Complete with 9V battery
- Quickly and easily take the surface temperature of any object. Just point, pull the trigger, and read the temperature on the display.
- °C / °F switchable button
- · Backlit LCD display

	ARS DESCRIPTION	MARS PACK	CASE QTY.
25	Infrared thermometer	1	500







# **Scales**

MARS SERIES 741

### **Pelouze Refrigerant Scales**

MARS #79040, the 250 lb platform scale, is ideal for weighing heavy packages and containers. Activated by either hand or foot, the unique "memory lock" holds reading when dial is obscured. The platform and body feature a combination of steel subframe and glass fiber reinforced nylon. Scratch, rust and chemical resistant

The Pelouze electronic scale #79042 features a heavy duty "no-slip" platform, LCD display, and a wall mount control panel. Automatic shut off. Low battery indicator. Displays in 0.2lb/0.1kg increments. All steel construction. Tare functions and remote display head on a 9' cord. Operates on AC adapter (included) or a 9V battery (not included).

MARS #79043 is the ideal electronic scale for heavy duty weighing. This 400 lb x 1/2 lb scale features an easy to read LCD display, automatic shut off, and low battery indicator. The control panel can be wall mounted for easy viewing. Tare functions. Strain gauge weighing operates on AC adapter (included) or one 9V battery (not included).

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79040	250 lb. x 1 lb. platform scale	1	1
79042	150 lb. x .2 lb. electronic scale	1	4
79043	400 lb. x 1/2 lb. electronic scale	1	1

### **MARS Hand Held Scale**

- · Ideal for weighing and checking most gas and refrigerant cylinders
- · Easy to use
- · Push button for accuracy
- · Auto shut off
- Max scale up to 55 lbs
- 9V battery included
- Accuracy up to +/- 2%
- LBS/KGS switch

MARS NO.	DESCRIPTION	MARS PACK
79039	Digital hand held scale	1





# **Refrigerant I.D. Labels**

MARS SERIES 790

### MARS Refrigerant I.D. Labels

MARS refrigerant I.D. labels are color coded to conform to each particular refrigerant. Each label specifies the type of refrigerant, the chemical name, the UN # and a space for the name and address of the cylinder owner. These self-adhering labels are 4 1/2" x 3 1/2", except for MARS #79528, Refrigerant Evacuation Certificate, which is 7 1/2" x 4 1/2".

MARS NO.		DESCRIPTION	MARS PACK
79522	R-22	Refrigerant I.D. Labels (10 pk)	1
79523	R-134A	Refrigerant I.D. Labels (10 pk)	1
79516	R-404A	SUVA® HP62 Refrig. Labels (10 pk)	1
79511	R-407A	Refrigerant I.D. Labels (10 pk)	1
79512	R-407C	Refrigerant I.D. Labels (10 pk)	1
79536	R-410A	GENETRON® AZ-20 Refrig. Labels (10 pk)	1
79526	R-421A	Refrigerant I.D. Labels (10 pk)	1
79525	R-422B	Refrigerant I.D. Labels (10 pk)	1
79527	R-422D	Refrigerant I.D. Labels (10 pk)	1
79506	R-438A	Refrigerant I.D. Labels (10 pk)	1
79513	R-507	Refrigerant I.D. Labels (10 pk)	1
79528	Refrigera	nt evacuation certification (5 pk)	1
79514	R-508B	SUVA® refrig. Label (10 pk)	1



# **Thermometers**

MARS SERIES 255

### **MARS Pocket Bi-Metal Dial Thermometers**

MARS pocket dial thermometers consist of stainless steel cases with 5" stem. Thermometers are completely waterproof. Units are protected by flexible plastic case with clip. They can be recalibrated for accuracy.

MARS NO.	DESCRIPTION	MARS PACK	
25510	1" dial-40° F to 160°F thermometer	1	12
25520	1" dial 0° F to 220°F thermometer	1	12

### **MARS Pocket Digital Thermometers**

MARS #25531 deluxe digital pocket thermometer features an on/off switch and a data hold button. The easy to read LCD digits can be displayed in both fahrenheit and centigrade. The new slim design fits nicely in your pocket. Pocket clip and battery are included. ±2° accuracy. Uses MARS #79467 replacement battery. Water and drop resistant. Auto power off is also a new feature.

The multi feature round digital thermometer features an "on/off" switch and "clear" button. This pocket thermometer displays both fahrenheit and centigrade. A "min/max" button is also featured and a clear protective plastic sheath with pocket clip is included.

MARS NO.	DESCRIPTION	MARS PACK	
25531	Deluxe digital pocket, -40°F to 300°F, -50°C to +150°C	1	12
79467	#386 replacement battery for #25531	6	480
79468	#393 replacement battery for #25532	6	48

### **Deltatrak Environmental Temperature Recorders**

The 5 day *disposable* temperature recorder is an inexpensive, one-time use temperature recorder indispensable for HVAC/R uses. It gives an accurate 5-day strip chart recording of a wide ambient temperature range. It can be easily changed on the job! After use, recycle it. Drop in any mailbox using the postage paid return label.

### Single-Use Deltatrak features & benefits:

- Inexpensive (cheaper than renting a recorder)
   Factory calibrated, no need for field calibration
   Security sealed, tamper proof and built rugged
   Ideal monitor/verification of performance of HVAC or refrigeration units, after installation or repair
   Worry-free from loss or breakage of an expensive recorder
   Simple to understand & use
   The DeltaTRAK cost can easily be charged to the job at a profit
   Ideal to use when a number of jobs are in progress and several recorders become necessary
   Never need to repair since they are used only once
   Ideal for the occasional user of a recorder
- Displays both Fahrenheit and Centigrade.

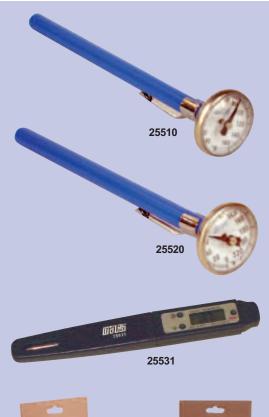
MARS NO.	DESCRIPTION	MARS PACK	
25563	5 day disposable model	1	20

### MARS Refrigerator/Oven Thermometers

Horizontal refrigerator/freezer thermometer is most often specified for commercial applications. Hang, stand, or permanent mount. Stainless steel refrigerator or oven models utilize 2" easy to read dial. Hang or stand.

MARS NO.	DESCRIPTION	MARS PACK	
25540	Horizontal glass tube refrig40°F to 80°F, -40°C + 0° to +26°C	1	6
25542	Stainless steel refrigerator -20°F to 80°F, -29°C to +26°C	1	6









25540







# **Visible Defects**

MARS SERIES 938

### Visual Heat Exchanger Inspection System

The Visible Defects Heat Exchanger Inspection System is a tool that provides service technicians with an accurate, cost effective, and non-destructive means for evaluating heat exchangers in fuel fired furnaces. Cracked heat exchangers emit carbon monoxide gas into the living space of the dwelling which can result in sickness or death.

To perform the test, the technician simply inserts the brass spray nozzle fully into the air side of the heat exchanger and slowly pulls the nozzle out while spraying the patent pending green fluorescent dye and coating the inside of the heat exchanger. Next, the technician uses the black UV light to illuminate any dye that breaches the wall (via a crack) between the air-side and combustion-side of the heat exchanger. The test is fast, easy, and very effective. The real value lies in the fact that the service technician can easily show the furnace owner the existing problem.

### The kit includes:

- · Instructional Video
- · Patent Pending Spray Applicator w/2 Nozzles
- · Super Bright LED UV Light
- UV Blocking Safety Glasses
- · Acrylic Inspection Mirror
- · 2 Gallons of Crack Finder Dye
- · 1 year Warranty

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
93800	93800 VD Detection kit		1
93816	Dye-Gallon Refill	1	4
93817	22" Replacement Nozzle Set	1	1
93818	Replacement Spray Bottle	1	1



93800

# **Welding/Brazing/Cutting/Heating Tools**

MARS SERIES 256

### **Oxy Fuel Outfits**

These light/medium duty outfits are designed for a variety of HVAC,Plumbing, Refrigeration and general maintenance work. They include cylinders and a tough, lightweight polypropylene carrier. All components are UL listed.

- Torch Handles are machined from high quality forged brass and feature a Tube-in-a-Tube design for high handle strength.
- Oxygen and acetylene regulators are compact rear entry inlet design for better balance and come with 2" easy view gauges.
- Check valves prevent reverse flow of gases which can cause dangerous mixtures.
   All cylinders are shipped empty.

### MARS #26901

### Kit Includes:

- 1 welding/brazing tip
- 1 multi-flame rosebud tip
- 1 torch handle
- 1 acetylene regulator (rear mount)
- 1 oxygen regulator (rear mount)
- 1 12' grade "R" welding & soldering hose
- 1 single flint striker
- 1 pair torch end check valves
- 1 plastic carrier
- 1 "type 40" oxygen cylinder
- 1 "MC" acetylene cylinder
- 1 eye cup style welding goggles

### MARS #26902

### Kit includes:

All items included with 26901

1 cutting attachment

### Welding/Brazing/Heating Tips

MARS welding & brazing tips have red copper tip ends and are ideal for soldering, brazing, heating and hardfacing, etc. Interchangeable with all major manufacturers.

MARS NO.	METAL THICKNESS	DRILL SIZE	OXYGEN (PSIG)	ACETYLENE (PSIG)	ACETYLENE (SCFH)
26904	3/64" - 3/32"	60(.040)	3/5	3/5	3/6
26905	1/16" – 1/8"	56(.046)	3/5	3/5	5/10
26906	1/8" - 3/16"	53(.060)	4/7	3/6	8/18
26907	3/16 - 1/4"	49(.0730)	5/10	4/7	10/25

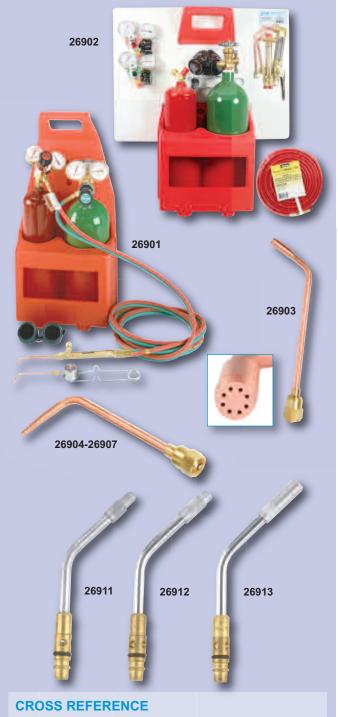
MARS Rosebud tips are multi-flamed tips designed for heating in confined areas.

MARS NO.	OXYGEN (PSIG)	BRAZING CAPACITY FOR COPPER
26903	15	1/2" - 6"

### **Air Acetylene Swirl Flame Tips**

MARS swirl flame tips are constructed with replaceable stainless steel tips ends, an industry exclusive, for easy repair and maintenance. These tips produce a very hot flame that expands the heat zone providing maximum combustion efficiency for fast soldering and brazing. All swirl flame tips are interchangeable with all major manufacturers.

MARS	COPPER TUBING CAPACITY		
NO.	SOFT SOLDER	SILVER SOLDER	
26911	1/4"-1"	1/8"-1/2"	
26912	3/4"-1 1/2"	1/4"-3/4"	
26913	1"-2"	1/2"-1"	



	<b>A1301</b>
26913 A-8 A-8 QD-SJ-5A	11301





# **MARS Hardware**

MARS SERIES 798

MARS hardware and fasteners are competitively priced and exhibit superior quality required by the HVACR contractor and tradesman.

All fasteners are available in two different package configurations. Both configurations enhance contractor self service and encourage impulse purchases.

# Round Head Combo Slotted/Phillips Machine Screws - Steel Zinc Plated

MARS NO.	MINI-PAK QTY.	DESCRIPTION
79808	25	1/4-20 x 3/4
79809	25	1/4-20 x 1
79811	25	1/4-20 x 1 1/2

### **Hexagon Nuts - Steel Zinc Plated**

MARS NO.	MINI-PAK QTY.	DESCRIPTION	MARS NO.	SUPER-PAK QTY.
79836	25	6-32 for 1/8 bolt		
79837	25	8-32 for 5/32 bolt		
79838	25	1/4-20 for 1/4 bolt	80038	100
79839	25	3/8-16 for 3/8 bolt	80039	100

# Pan Hd Combo Slotted/Phillips Tap Screws - Zinc Chromate

	MARS NO.	MINI-PAK QTY.	DESCRIPTION
Ī	79860	25	12 x 1

### Indented Hex Washer Hd Slotted Drill Screws - Zinc Plated

MARS NO.	MINI-PAK QTY.	DESCRIPTION	MARS NO.	SUPER-PAK QTY.
79871	25	8 x 1/2 x 1/4 hd	80071	100
79872	25	10 x 3/4 x 5/16 hd	80072	100
79873	25	10 x 1 x 5/16 hd	80073	100
79874	25	10 x 1 1/4 x 5/16 hd		
79875	25	10 x 1 1/2 x 5/16 hd		
79876	25	10 x 2 x 5/16 hd		

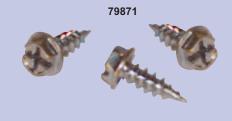
### Indented Hex Washer Hd Self Drill Screw - Steel Zinc Chrom.

MARS NO.	MINI-PAK QTY.	DESCRIPTION	MARS NO.	SUPER-PAK QTY.
79887	25	8 x 1/2 x 1/4 hd	80087	100
		8 x 3/4 x 1/4 hd	88008	100
79889	25	10 x 1/2 x 5/16 hd	80089	100
79890	25	10 x 3/4 x 5/16 hd	80090	100
79891	25	10 x 1 x 5/16 hd	80091	100











# **MARS Hardware**

MARS SERIES 798



## Drywall Screw - Bugle Hd Phillips 20 Ga. Max Steel Stud, Blk

MARS NO.	MINI-PAK QTY.	DESCRIPTION
79904	25	6 x 1 5/8
79905	25	6 x 2

### **Fender Washers - Steel Zinc Chromate**

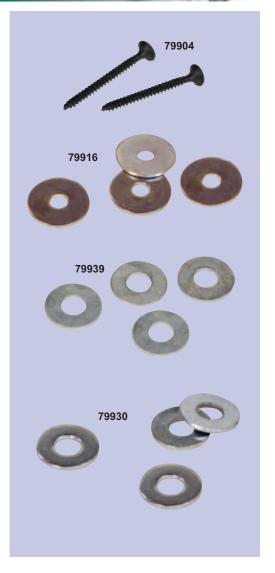
MARS NO.	MINI-PAK QTY.	DESCRIPTION	MARS NO.	SUPER-PAK QTY.
79916	25	1/4 x 1 for 1/4 bolt		
79917	25	1/4 x 1 1/4 for 1/4 bolt	80117	100
79918	25	3/8 x 1 1/4 for 3/8 bolt	80118	100
79919	25	3/8 x 1 1/2 for 3/8 bolt		

## Flat Wrought Washers - Steel Zinc Chromate

MARS NO.	MINI-PAK QTY.	DESCRIPTION
79939	25	1/4 USS for 1/4 bolt
79940	25	3/8 USS for 3/8 bolt

## Flat SAE Washers - Steel Zinc Chromate

MARS NO.	MINI-PAK QTY.	DESCRIPTION	MARS NO.	SUPER-PAK QTY.
79930	25	10 SAE for 3/16 bolt		
79931	25	1/4 SAE for 1/4 bolt	80131	100
79932	25	3/8 SAE for 3/8 bolt	80132	100







## **MARS Hardware**

MARS SERIES 79

### **Spring Wing Toggle Bolts - Zinc Plated - Mushroom Head**

MARS NO.	MINI-PAK QTY.	DESCRIPTION
79953	10	1/4-20 x 4

### **MARS Plastic Anchor Kits**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79974	Plastic conical anchor with pan head combo kit contents: (100) 1/4 plastic anchors, (100) #10 x 1 pan combo hd screw zinc, (1) 1/4 x4 masonry drill	1	200
79975	Plastic conical anchor with hex washer head kit contents: 100) 1/4 plastic anchors, (100) #10 x 1 hex washer hd slot screws zinc, (1) 1/4 x4 masonry drill	1	200
79976	Plastic screw-in anchor with pan head combo kit contents: (50) plastic screw-in anchors, (50) #8 1 1/2 pan combo hd screw zinc	1	100
79977	Metal screw-in anchor with pan head combo kit contents: (50) metal screw-in anchors, (50) #8 1 1/2 pan combo hd screws zinc	1	100

## **Green Grounding Screws & Box Clips**

MARS NO.	MINI-PAK QTY.	DESCRIPTION	MARS PACK
80160	25	10-32 x 3/8" slotted hex head washer type	1

#### **Plastic Anchor Kits**

Plastic anchors are designed to be used with either woodscrews or sheet metal screws. They are recommended for quick, easy fastening of fixtures such as thermostats, thermostat guards, shelf brackets, cabinets, mirrors, pictures, etc. All plastic anchor kits include plastic anchor, screws and carbide masonry drill bit. All kits are packaged in a durable, see-through reclosable plastic storage case.

	MARS NO.	DESCRIPTION	CASE QTY.		
	80168	8-10 x 7/8" plastic anchor kit with slotted pan screw, contains: (100) 8-10 conical anchors, (100) 8 x 1" slotted pan screw, (1) 3/16" x 4" carbide masonry drill bit	1		
	80169	8-10 x 7/8" plastic anchor kit with pan combo screw, contains: (100) conical anchors, (100) 8 x 1" phillips/slotted pan screw, (1) 3/16" x 4" carbide masonry drill bit	1		
	80171	10-12 x 1" plastic anchor kit with slotted pan screw, contains: (100) 1/4" conical anchors,(100) 10 x 1 1/4" phillips, slotted pan screw, (1) 1/4" x 4" carbide masonry drill bit	1		
	80172	10-12 x 1" plastic anchor kit with hex washer slotted screw, contains: (100) 1/4" conical anchors, (100) 10 x 1 1/4" hex washer slotted screw, (1) 1/4" x 4" carbide masonry drill bit	1		
	80174	14-16 x 1 3/8" plastic anchor kit with slotted pan screw, contains: (50) conical anchors, (50) 14 x 1" slotted pan screw, (1) 5/16" x 4" carbide masonry drill bit	1		

### **Hollow Wall Anchor Kits**

MARS NO.	DESCRIPTION	CASE QTY.
80179	#6 hollow wall anchor kit, contains: (50) #6 hollow wall plastic anchors (50) 6 x 1" slotted phillips pan screw	1
80180	#8 hollow wall anchor kit, contains: (50) #8 self drill hollow wall plastic anchors (50) 8 x 1 1/4" slotted phillips pan screw	1



# **MARS Brushes**

MARS SERIES 788



## **Tube Fitting Brushes - Heavy Duty Stainless Steel**

MARS NO.	DESCRIPTION		MARS PACK	
78801	1/4" OD	1/8" ID	fitting brush (2 bag)	6
78802	3/8" OD	1/4" ID	fitting brush (2 bag)	6
78803	1/2" OD	3/8" ID	fitting brush (2 bag)	6
78804	5/8" OD	1/2" ID	fitting brush (2 bag)	6
78805	3/4" OD	5/8" ID	fitting brush (2 bag)	6
78806	7/8" OD	3/4" ID	fitting brush (2 bag)	6
78808	1 1/8" OD	1" ID	fitting brush (2 bag)	6
78809	1 3/8" OD	1 1/4" ID	fitting brush (2 bag)	3

## **Tube Cleaning Brushes**

MARS NO.	DESCRIPTION	MARS PACK
78818	3/8" x 3/4" OD refrig. 4-1 brush tool	12
78819	1/2" x 3/4" OD refrig. 4-1 brush tool	12
78820	5/8" x 7/8" OD refrig. 4-1 brush tool	12

## **Refrigeration Coil Brush**

MARS NO.	DESCRIPTION	MARS PACK
78828	5/8" to 1 5/8" fiber condenser cleaner 32"	12
78829	5/8" to 1 5/8" tapered condenser cleaner 29"	12
78830	3/4" to 1 5/8" tapered refrig. coil brush 28"	12

## **Fin And Coil Brushes**

MARS NO.	DESCRIPTION	MARS PACK
78833	Fin and coil whiskbrush, 6 3/4"	12
78834	Fin and comb scraping tool, adjustable	12
78835	6-in-one fin comb (8, 9, 10, 12, 14, 15 fins per inch)	12

## **Acid And Flux Brushes**

MARS NO.	DESCRIPTION	MARS PACK
78839	#1 acid brush 1/4" - 48 box	1
78840	#2 acid brush 3/8" - 48 box	1
78841	#1 acid brush 1/4" - 10 bag	10
78842	#2 acid brush 3/8" - 6 bag	10







## **MARS Brushes**

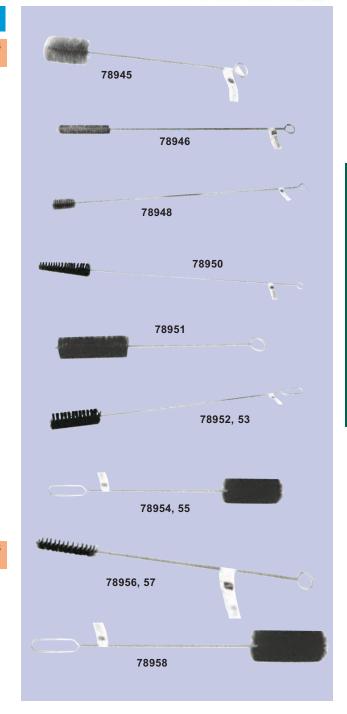
MARS SERIES 788

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MARS NO.	DESCRIPTION	MARS PACK
78945	1-1/2" x 1-1/8", 30" OAL, Specialty Boiler Brushes - WEIL MCLAIN	6
78946	1/2" x 1", 27" OAL, Flat, Specialty Boiler Brushes - COLUMBIA	6
78947	2-1/4", 20" OAL, Tapered, Specialty Boiler Brushes - SLANT FIN	6
78948	1-1/2" x 1-1/8" x 36" OAL, HD, Gold Series Original, Specialty Boiler Brushes - WEIL MCLAIN	6
78949	1/2" - 1" Taper, 30" OAL, Horsehair, Specialty Boiler Brushes - TAPERED	6
78950	1-7/8" - 1-1/8" Taper, 42" OAL, Horsehair, Specialty Boiler Brushes - TAPERED	6
78951	1" Dia., 16" OAL, Horsehair Brushes for Boilers Burners, Radiators, Flues, Vents and Nozzles	6
78952	2" Dia., 27" OAL, Horsehair Brushes for Boilers Burners, Radiators, Flues, Vents and Nozzles	6
78953	3" Dia., 27" OAL, Tampico/Fiber Tube Brushes for Boilers Burners, Radiators, Flues, Vents and Nozzles	6
78954	2" Dia., 42" OAL, Horsehair Brushes for Boilers Burners, Radiators, Flues, Vents and Nozzles	6
78955	3" Dia., 42" OAL, Tampico/Fiber Tube Brushes for Boilers Burners, Radiators, Flues, Vents and Nozzles	6

## These brushes have 3" brush lengths and 1/2" or 3/4" loop handles for easy hanging.

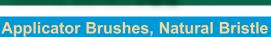
	MARS NO.	DESCRIPTION	MARS PACK
	78956	1/2" Dia., 18" OAL, Stainless Steel Fine-Wire Single Spiral Brushes for Small Boilers, Burners, Nozzles & Fans	12
	78957	3/4" Dia., 24" OAL, Stainless Steel Fine-Wire Single Spiral Brushes for Small Boilers, Burners, Nozzles & Fans	12
	78958	1-1/2" Dia., 42" OAL, Carbon Steel Fine-Wire Single Spiral Brushes for Small Boilers, Burners, Nozzles & Fans	6





# **MARS Brushes**

MARS SERIES 788



MARS NO.	DESCRIPTION	MARS PACK
78902	1 1/2" economy paint brush-wood handle	36
78903	2" economy paint brush-wood handle	24
78904	2 1/2" economy paint brush-wood handle	12
78905	3" economy paint brush-wood handle	12
78906	4" economy paint brush-wood handle	12

Utility	And	Appl	iance	Brushes

MARS NO.	DESCRIPTION	MARS PACK
78910	Plastic handle stainless brush, 3 x 7 rows, 3 pk.	12
78911	Wood handle stainless brush, 2 x 9 rows, 3 pk.	12
78912	1 1/16" dia. parts cleaning brush	6
78913	Bent handle carbon scratch brush, 4 x 18 rows	12
78915	Shoe handle carbon scratch brush, 4 x 16 rows	12

## **Abrasive Cloth And Pads**

MARS NO.	DESCRIPTION	MARS PACK
78920	1 1/2" x 5 yds. open coat white cloth	24
78921	1 1/2" x 10 yds. open coat white cloth	24
78922	1 1/2" x 25 yds. open coat white cloth	20
78923	1 1/2" x 5 yds. open nylon mesh cloth	24
78924	1 1/2" x 10 yds open nylon mesh cloth	24
78925	1 1/2" x 25 yds. open nylon mesh cloth	20
78926	4" x 6" med. nylon abrasive pad, maroon, 10 pk	1
78928	1 1/2" x 10 yds competitive abrasive cloth	1
78918	1 1/2" x 25 yds. competitive abrasive cloth	1

#### **Accessories**

MARS NO.	DESCRIPTION	MARS PACK
78930	Solder/braze heat shield, 9" x 12" x 1/2" temperatures exceeding 2500°F	10
78931	Solder heat shield, 9" x 12" temperatures up to 2500°F	10
78932	Heavy duty deburring tool, 3 blades	10
78933	Deburring tool replacement blades, 5 pack	10
78935	Heavy duty plastic stackable utility box. 12"x6"x6"	12







# **Hand Tools**

MARS SERIES 733 & 257

#### **PowerCrown Outward Clinch Tackers**

#### Model PC4000-OC1 & PC4000-OC2 Features:

- · Easy squeeze design
- · Compact, lightweight
- · Convenient bottom load
- Unique design turns staple legs outward
- · For pipe wrap, duct board and corrugated

MARS NO.	DESCRIPTION	MFG. NO.	CASE QTY
73349	Outward Clinch Tacker	T6-80C2	12
73346	1/4" Staples / 5M Box	STCR5019 1/4"	20
73347	3/8" Staples / 5M Box	STCR5019 3/8"	20
73350	1/2" Staples / 4M Box	STCR5019 1/2"	20
73351	9/16" Staples / 4M Box	STCR5019 9/16"	20

### PowerCrown Outward Clinch Tacker - Model PC3000-OC2

#### Model PC3000-OC2 Features:

- · Professional quality
- · Drives 1/2" light wire Bostitch PowerCrown staples
- · Powerful direct drive
- · Unique design turns staple legs outward
- · Convenient bottom load
- · For pipe wrap, duct board and corrugated

MARS NO.	DESCRIPTION	MFG. NO.	CASE QTY
73343	Outward Clinch Tacker	T6-60C2	12
73348	1/2" Staples / 5.8M Box	STCR2619 1/2"	20

## PowerClench<sup>™</sup> Stapling Plier

#### Model P6C-8 Features:

- · Ergonomic design
- Easy squeeze action
- · Fast loading of staples
- · Top loading

MARS NO.	DESCRIPTION	MFG. NO.	CASE QTY
73352	Stapling Plier	P6C-8	12
73353	3/8" staples / 5.8M Box	STH5019	20

## **MARS Multi Purpose Cutters**

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
25656	Compound ratchet action cutter, cuts hose, cable and plastic pipe 1 1/8" OD, replaceable bade, internal parts and pivots all stainless	1	12

#### Vise-Grip® Locking Pliers And Clamps

MARS offers Vice-Grip hand tools for the HVAC/R contractor. MARS #25700 is a "Quick Pierce" Vise-Grip for the extraction of refrigerant from A/C units and appliances. Excellent for recovery applications. This plier adjusts to various tube sizes.

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
25700	MARS Quick Pierce tool (pouch) Quick Pierce replacement tip (bulk)	1	1
25688		1	100









## **Hand Tools**

MARS SERIES 283



#### **Channellock Pliers**

For over a century Channellock has been the leader in manufacturing professional quality tools for all trades. All tools are made in the U.S.A. The MARS line of Channellock tools are housed in attractive merchandiser hang type style packaging to generate impulse sales and increase your profits.

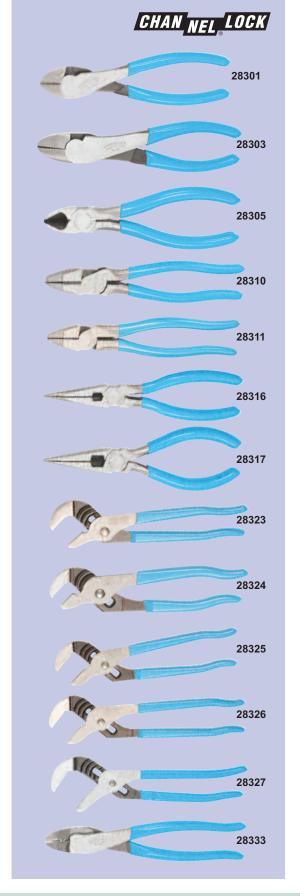
Channellock pliers are hand honed perfectly matched cutters which are heat treated to hold their edge. These pliers are precision made of fine polished, high carbon drop forged steel and features blue plastic comfort grips. MARS #28310, 9" linemans Wiremaster™ plier provides high leverage and an enclosed joint design to hold cutter in perfect alignment for the life of the plier.

Channellock Long Nose Pliers feature slender, perfectly matched jaws with no side wobble to provide a firm grip on fine work in tight places. MARS #28316 and #28317 also feature a side cutter.

The popular Tongue and Groove Pliers provide right angle teeth that grip in all directions for maximum bite and minimum wear. The undercut tongue and groove design assures the strongest non-slip jaw action and the patented PermaLock® fastener provides safer and smoother working than the old-time bolt and nut.

The Channellock crimping tool, MARS #28333, is used for crimping and cutting of both insulated and non-insulated solderless connections and terminals.

MARS NO.	DESCRIPTION	MFG. NO.	CASE QTY.
28301	7" cutting plier - lap joint diagonal	337	20
28303	7 3/4" cutting plier - lap joint curved diag.	447	20
28305	6" cutting plier - box joint	436	20
28310	9" Wire Master™ linemans plier	349	20
28311	9" high leverage linemans plier	369	20
28316	7 1/2" Long Nose Plier with side cutter	317	20
28317	6" Long Nose Plier with side cutter	326	20
28323	9 1/2" Tongue & Groove Plier 5 Adjustments - 1 1/2" capacity	420	20
28324	6 1/2" Tongue & Groove Plier 5 adjustments - 7/8" capacity	426	20
28325	10" Tongue & Groove Plier 7 adjustments - 2" capacity	430	20
28326	12" Tongue & Groove Plier 7 adjustments - 2 1/2" capacity	440	20
28327	16" Tongue & Groove Plier	460	20
28333	Crimping tool	909	20







## **Hand & Electricians Tools**

MARS SERIES 256

#### **Fuse Pullers**

MARS #25915, medium fuse puller is molded of tough, high impact nylon for greater strength. Handles with no-slip gripping surface, protective finger stops and yellow color are provided for extra safety.

MARS NO.	DESCRIPTION	MFG. NO.	MARS PACK	CASE QTY.	
25915	7-1/4" medium puller for 0-100A fuses	34-016	1	10	

### **Torpedo Level**

Torpedo level measures 9" and consists of aluminum frame. Has magnetic edge and "v" grooved edge for pipe work. A window in each vial provides easy reading of plumb, level and 45° mitre in dim lighting.

MARS	DESCRIPTION	MFG.	MARS	CASE
NO.		NO.	PACK	QTY.
25840	9" torpedo level	35-205	1	3

### Terminal Strips, 600V, 30a, UL & CSA

MARS NO.	DESCRIPTION	MFG. NO.	MARS PACK	CASE QTY.
25952	3 circuit terminal strip	89-203	1	10
25953	4 circuit terminal strip	89-204	1	10
25954	6 circuit terminal strip	89-206	1	10
25955	8 circuit terminal strip	89-208	1	10
25956	10 circuit terminal strip	89-210	1	10
25957	12 circuit terminal strip	89-212	1	10

#### Tap-Pak® Fish Tape

IDEAL Tape-Pak® fish tape reels and winders provide maximum strength and flexibility for fishing long runs of conduit. The case is built of high impact plastic that never dents or rusts. Use as a handle for pulling on fish tape to eliminate the dangers of bare-handed pulling as well as handy tape storage system. High grade tempered steel tape is fully protected and locked in reel when not in use so tape cannot kink spring free. Excellent for snaking long runs of thermostat wire.

MARS	DESCRIPTION	MFG.	MARS	CASE
NO.		NO.	PACK	QTY.
25849	50' fish tape - 8 1/2" dia.	31-033	1	1

#### Safe-T-Grip® Fuse Pullers

IDEAL's Safe-T-Grip® Fuse Pullers provide maximum efficiency and convenience when removing or replacing cartridge fuses. Constructed of fully insulated, reinforced, high-dielectric engineering plastic. Notched handles for a no-slip safe grip. Clearly marked amperage ranges. Moisture resistant...will not warp. Bright yellow in color.

MARS NO.	DESCRIPTION	MFG. NO.	MARS PACK	CASE QTY.
25911	5" midget for fuses 9/32-1/2 dia.	34-001	1	1
25912	7 1/2" pocket for 0-100A fuses	34-002	1	10
25913	11 3/4" giant for 31-600A fuses	34-003	1	1





## **Electricians Hand Tools**

MARS SERIES **256**, **650 & 798** 



Preferred by professionals for over three decades and originated by IDEAL, these quality built T<sup>®</sup>-strippers feature built in wire cutters, looping holes, cushioned plastic grips and precision knife-type blades that give an accurate, easy strip every time.

The MARS #25705 stripper is a versatile seven-function tool featuring spring loaded handles for quick and easy use, cushioned grips for comfort and a locking panel to keep jaws closed when not in use. It strips, cuts wire, crimps terminals, cuts bolts and screw, gauges 6-18 AWG wire, loops wire and reams conduit (reams and de-burrs).

The multi-crimp tool provides excellent leverage for sure, easy crimping and cutting...even in close quarters. Crimps bare or insulated terminals and splices on wire sizes 10-22 AWG.

MARS NO.	DESCRIPTION	MFG. NO.	MARS PACK	CASE QTY.
25701	T®-5 Stripper 10-18 AWG solid	45-120	1	10
25702	T®-6 Stripper 16-26 AWG strand	45-121	1	10
25703	T®-8 Stripper 8-16 AWG strand	45-124	1	10
25705	7-in-1 Stripper Crimper	45-777	1	5
25711	Multi-crimp Tool	30-429	1	5

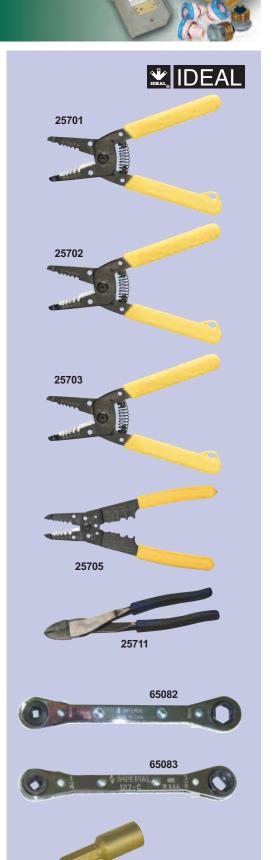
### **Refrigeration Wrenches**

The Kwik-tite® ratchet wrenches (MARS #65079, 80, 81, 87) feature open jaw design which makes it easy to slip wrench onto fittings and fasteners - even in tight quarters. Flips quickly into tightening position with a sure grip on all hex surfaces. MARS #65082 is a combination wrench with the four sizes most needed for servicing air conditioning units. MARS #65083 & #65084 are designed for use on compressors with access valves in hard to reach places. This reversible ratchet is chrome plated.

MARS NO.	MFG. NO.	DESCRIPTION	CASE QTY.
65082	124C	9/16" and 1/2" hex; 3/16" & 1/4" sq. ratchet	1
65083	127C	1/4", 3/8", 3/16", 5/16" square ratchet	1

### **MARS Drill Screw Chuck With Magnetic Insert**

MARS NO.	DESCRIPTION	MARS PACK
79990	1/4" hex x 1 5/8", 1/card	12
79991	5/16" hex x 1 5/8", 1/card	12



79990





# **Hand Tools, Bits & Blades**

MARS SERIES **256**, **933** & **216** 

### MARS 6-in-1 Super Driver

The MARS Super driver features a comfort grip handle. The soft easy grip promotes excellent torque. This six-in-one driver includes 3/16" & 1/4" slotted bits, #1 & #2 phillips bits and 1/4" & 5/16" nutdriver. These screwdrivers are packaged twelve per counter display box.

MARS NO.	DESCRIPTION	MARS PACK	
25984	MARS 6-in-1 super driver	12	12

### **Red Devil Putty Knives And Wall Scrapers**

Red Devil offers professional high quality putty knives and wall scrapers. The black polypropylene comfort grip handles are shatterproof and solvent resistant for safety. Durable, high carbon, steel precision-ground blades extend through handles for maximum dependability. The blade has a mirror lacqured finish to prevent rust. Made in the U.S.A.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
93402	1 1/4" wide stiff putty knife	12	72
93280	1 1/2" wide stiff putty knife	12	72
93403	1 1/4" wide flexible putty knife	12	72
93281	2" wide flexible putty knife	12	72
93404	3" wide flexible putty knife	6	72

## **Magnetic Nut Setters**

MARS NO.	DESCRIPTION	CASE QTY.
21620	1/4" mag nut setter 2 9/16"L (1/cd)	96
21621	5/16" mag nut setter 2 9/16"L (1/cd)	60
21627	1/4" mag nut setter 6"L (1/cd)	72
21628	5/16" mag nut setter 6"L (1/cd)	72

### Flex A Bit™ Kits (Patented Worldwide)

MARS NO.	DESCRIPTION	CASE QTY.
21669	11" industrial flex a bit plus (1/cd)	36

## **Superior Tool Mini Hacksaw And Blades**

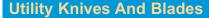
MARS NO.	DESCRIPTION	MARS PACK	
25668	10" mini hacksaw - cuts wood, plaster, steel, brass, etc., cushioned handle	1	6
25669	6" high carbon steel repl. blades (10/card)	1	6





## **Knives & Blades**

MARS SERIES 274 & 932



MARS #27401, retractable utility knife features a four position metal slider which accepts any utility blade. Zinc die cast construction. One heavy duty blade is provided with tool. Replacement heavy duty utility blades, MARS #27403, fits most utility knives. Used for cutting drywall, fiberglass, wood, plastic, cardboard and more!

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
27401	Retractable utility knife with blade	5	100
27403	H.D. utility blade (10 per dispenser)	10	60

#### **Breakaway Knives And Blades**

MARS #27410, is a heavy duty, retractable, 8 point, breakaway knife with a unique internal blade storage. The strong steel shank is molded into the durable plastic handle. Blade locks in place. Snap-cap tool accepts all standard 8 point blades. Ideal for cutting and trimming cardboard, wood, leather and more. Knife is carded and packaged with 3 blades.

The 13 point heavy duty retractable breakaway knife also features a unique internal blade storage where the steel shank is molded into the durable plastic handle. The blade locks in place and the snap-cap doubles as a pocket clip. Accepts all standard 13 point blades. Ideal for cutting and trimming wall coverings, vinyl, paper and more. Knife packaged with 3 blades.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
27410	H.D. 8 point knife with 3 blades	10	100
27411	8 point break blade (5/card)	10	60
27412	H.D. 13 point knife with 3 blades	10	200

#### **Red Devil Knives And Blades**

Red Devil's all purpose adjustable utility knife, #93271 is made of diecast metal and has a unique button lock blade to cut in 3 different positions. Contains an extra blade and is carded for hanging.

The heavy duty utility knife, #93274, has a breakaway blade design and has many uses. Posi-lock pull back button retains blade safely and tightly in cutting position. Stainless steel break away blade has eight sharp cutting edges. The automatic razor knife, #93275, is a heavy duty premium break away blade tool. The package includes 80 cutting edges, 3 blades in knife, 7 in dispenser. Both break away knives come attractively carded for your display.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.	
93271	Adjustable utility knife	6	72	
93273	Blade for 93271, 5/card	10	120	
93274	Heavy duty utility knife	6	72	
93275	Automatic razor knife	12	72	
93276	Blades for 93274, 93275, 3/card	10	150	
93277	Blades for 93274,5, 10/dispenser	12	144	





MARS SERIES 257, 795 & 782

#### **Knee Pads**

The Superflex™ knee pads provide super duty protection for tough jobs. The long, soft rubber black cap is designed for traction and full knee coverage. Color: black. MARS #25679 includes a buckle fastening system.

MARS NO.	DESCRIPTION	CASE QTY.
25679	Superflex™ knee pads with buckle	20

#### **Dust Masks**

MARS NO.	DESCRIPTION	CASE QTY.
79170	50 pc. box, dust mask	12
79169	20 pc. box, dust & mist resperator	12

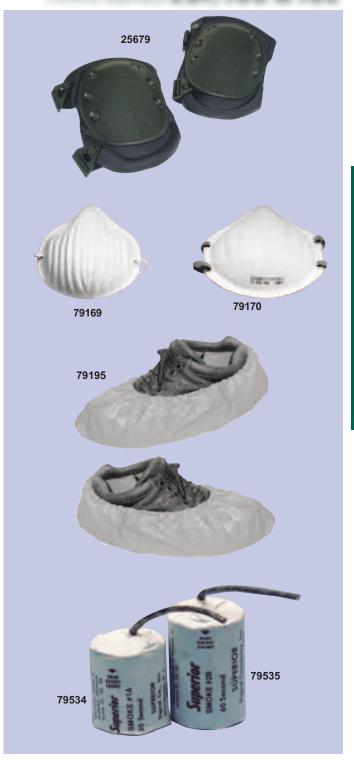
#### **MARS Disposable Shoe Covers**

Amphibious shoe covers are waterproof and made of a 6 MIL copolymer with a non slip embossed sole. In addition to providing protection to the customer's property, Amphibious shoe covers also keep the shoes dry when working in wet grass or hosing down equipment. Premium shoe covers are made of heavyweight breathable polypropylene with a non-slip PVC zigzag sole.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79195	Amphibious shoe covers - 300 XL covers/box	1	10
79100	Premium shoe covers - 300 XL covers/box	1	10
79103	Premium shoe covers - 50 XL covers/box	1	1
79199	Copolymer shoe covers - 5 XL covers/box	1	1

### **MARS Smoke Candles**

MARS NO.	DESCRIPTION	CASE QTY.
79534	4000 cu. ft. smoke, 30 seconds	12
79535	8000 cu. ft. smoke, 1 minute	12





## **Industrial Work Gloves**

MARS SERIES 782

### **Cotton/Jersey Gloves**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79143	8 oz. cotton canvas gloves/individual pack	1	12
79149	10 oz. cotton hob nob/individual pack	1	12
79151	9 oz. brown jersey glove/individual pack	1	12
79148	9 oz. hob nob jersey	1	12
79153	Fleece lined cotton jersey/individual pack	1	12

### **Leather Gloves**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79157	Leather palm safety cuff/individual pack	1	12
79159	Split cowhide leather (suede)	1	12
79166	Grain cowhide leather	1	12
79162	Medium truckers glove	1	12
79165	Large truckers glove	1	12

## **PVC/Nitrile/Neoprene Gloves**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79145	PVC long gauntlet cuff gloves	1	12
79147	Coated neoprene gauntlet cuff	1	12

### **MARS Disposable Gloves**

Disposable vinyl, latex, and nitrile gloves are heavy weight 5 mil and powdered. Packaged in a convenient dispenser box.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79096	Nitrile Gloves - L 100/box	1	10
79097	Nitrile Gloves - XL 100/box	1	10
79092	Latex Gloves - L 100/box	1	10
79098	Latex Gloves - XL 100/box	1	10
79093	Vinyl Gloves - L 100/box	1	10
79099	Vinyl Gloves - XL 100/box	1	10
79200	Black Nitrile Gloves - L 100/box	1	10

#### **Black Mamba Gloves**

- Made with a patented NITREX® polymer
- Super strong (6.0 mils) powder free nitrile glove
- 3 times the chemical and puncture resistance of a comparable thickness latex or vinyl glove
- · Grip rite finish for secure handling

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
79200	Black Nitrile Gloves – L 100/box	1	10
79138	Black Nitrile Gloves – XL 100/box	1	10







## **Hand Cleaners**

MARS SERIES 931 & 932

#### **Goop Hand Cleaners**

For nearly 50 years, Goop has been the only name you need to know in hand cleaners. It's a name that wholesalers and contractors alike know and trust. Goop is non-toxic and biodegradable. Goop will remove almost anything...from almost everything. Use Goop to clean the dirtiest, greasiest hands. Use it for other tough cleaning jobs as well, such as removing stains from washable clothing, cleaning vinyl, plastic, canvas, floor tile - or whatever else gets dirty.

MARS NO.	DESCRIPTION	MARS PACK
93150	14 oz. can	12

### **Orange Goop Hand Cleaners**

For customers who want a fresh orange scent in a tough, natural liquid hand cleaner, get the Orange Goop. There are no harsh solvents - just natural citrus. Available in regular or pumice formula. Biodegradable, too. Orange Goop...just another example of how we're giving today's contractors what they want.

MARS NO.	DESCRIPTION	MARS PACK
93157	14 oz. can	12
93160	16 oz. liquid squeeze bottle	12
93162	1/2 gallon orange pumice liquid w/ pump	6
93163	16 oz. liquid squeeze bottle w/ pumice	12

#### **CRC Citrus Hand Cleaner**

CRC Mechanix Orange™citrus hand cleaners are petroleum solvent free, natural formulations that effectively remove grease, oil, grime, paint and inks safely and quickly. The citrus based formula is PH balanced, highly concentrated and fortified with aloe vera, and other conditioners to help keep hands soft and smooth. All this with the great new scent of citrus. Fine pumice is easy on your skin.

MARS NO.	DESCRIPTION	MARS PACK
93228	Mechanix Orange™, 16 oz.	12

#### Scubs in-a-Bucket<sup>®</sup>

Scrubs in-a-Bucket™ provide fast, easy and effective hand cleaning with portability. Can be used anywhere, anyplace, anytime on the toughest soils, greases, tar, graphite...even printers ink. Each dispensing canister contains 10 1/2" x 12 1/4" perforated high-strength absorbant cleaning towels, treated with a gentle-to-the-skin but effective heavy duty grease cutting and soil lifting formulation. Pumice performance, without the messy, gritty pumice! Leaves skin lotion-soft, with a natural citrus fragrance. Contains germ fighting Triclosan. No rinsing, no drying, no residue. Also ideal for cleaning tools, work in process and for spills.

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
93201	Scrubs in-a-Bucket™ (72 towels)	6	42
93203	Scrubs in-a-Bucket™ (30 towels)	6	72





MARS SERIES 787, 790 & 932



Used by virtually every mechanic and technician in the heating, ventilation, air conditioning and refrigeration field.

#### 93240 Zoom Spout® Oiler

- Contains 4 oz. highest quality turbine oil
- Rust and oxidation inhibited
- · Paraffin base...non-gumming
- Use on motor bearings and bushings
- Squeeze bottle action
- Spout extends to 14", wipes dry
- · SAE 10 weight
- Non detergent

#### 93241 Rust Buster

- Loosens rusted bolts, nuts, shafts, etc.
- Cleans corroded and dirty parts
- Contains no harsh chemicals such as acid or alkali
- Spout wipes itself dry
- · Contents always visible
- · Won't short out
- · Spout extends to 14"

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
93240	Zoom Spout <sup>®</sup> Oiler 4 oz.	12	72
93241	Rust Buster 4 oz.	12	72

#### **MARS Maintenance Products**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79036	WD-40 8 oz. spray smart straw, No CA	12	24
79037	WD-40 11 oz. spray smart straw, No CA	12	12
79006	WD-40 8 oz. spray smart straw CA	12	24
79007	WD-40 11 oz. spray smart straw CA	12	12

### Kimberly-Clark Disposable Wiper/Towels

Kimberly-Clark® Kimtex® wipers are heavy duty oil and solvent wipers. Strong and durable, cloth-like feel and performance.

Kimberly-Clark<sup>®</sup> Kimtowels<sup>®</sup> are highly absorbent and versatile multi-ply tissue wipers. They quickly absorb water, oil and grease. Textured side for tough jobs and soft side for personal wiping. Contains no additives or glues.

Kimberly-Clark® Teri® wiper is durable for demanding jobs. Strong, even when wet. This 4-ply tissue wiper traps dirt and absorbs liquids quickly. Made with 100% recycled paper.

Workhorse<sup>™</sup> manufactured rags by Kimberly-Clark<sup>®</sup> are made of a Hydroknit<sup>™</sup> fast absorbing material. Workhorse<sup>™</sup> rags stand up to water, oil, solvents and chemicals without falling apart. Amazingly strong when wet. Highly resistant to rips and tear wet or dry. Workhorse<sup>™</sup> is the versatile and economical alternative to rags.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79110	Kimtex <sup>®</sup> 100 pc. pop-up <sup>™</sup> box, 9-3/4" x 16-3/4"	1	5
79109	Kimtowels <sup>®</sup> 88 pc. pop-up <sup>™</sup> box, 9-3/4" x 16-3/4"	1	10
79105	Teri <sup>®</sup> wipers 136 pc. pop-up <sup>™</sup> box, 9-3/4" x 16-3/4"	1	10
79111	Workhorse™ manufactured rags, 150 pc. brag box, 12" x 16-3/4"	1	1

#### **MARS Shop Towels**

MARS shop towel rags are 100% cotton material. This 15" x 15" red cloth towel is extra absorbent and ideal for cleaning up grease on tools or machinery. Long lasting and machine washable. Hemmed edges.

The MARS 100% cotton terry towel is an all purpose, white terry cloth towel that can be used for drying, polishing, dusting and waxing.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79025	White terry towel (12 pack)	1	12
79026	Red cloth shop towel (12 pack)	1	18
79027	Red cloth shop towel (50 pack)	1	6







MARS SERIES 787, 790 & 932

## 32 oz. Spray Bottle

MARS NO.	DESCRIPTION	MARS PACK
79009	32 oz. Spray Bottle	12

### **Blue Huck Towels**

- · Excellent absorbency!
- 5 lb. box
- · Lint free
- · Prewashed
- Approx. 22" x 13"
- · 30-35 towels in box

MARS NO.	DESCRIPTION	MARS PACE
79024	Blue Huck Towels	1

### **Dyna-Wipes**

- No Water Needed
- Removes Odors From Hands
- Gentle On Hands With 4 Skin Conditioners
- Non-Flammable
- Towel Size 9" x 12", 80 Towels In Each Tub

#### **Use Them For:**

- Hands
- Vinyl Windows
- Sports Equipment
- Leather
- Vinyl
- Much More!!
- Soiled Garments
- Tools & Equipment
- Counters
- Keyboards
- · Stainless Steel Surfaces

#### Removes:

- Coffee Stains
- Permanent Marker
- Nail Polish
- Labels & Residue
- · Urethane Sealants
- Carpet Spots
- · Tar & Asphalt
- · Gasket Cement
- · Paints & Varnishes
- Many Inks

- Caulking
- Tree Pitch
- Scuff Marks
- Pipe Cement
- Most Graffiti
- Crayon Marks
- Counter Stains
- Plumbers Cement
- Tape Residue

#### Keep some with you... Wherever you go!

- RV's
- Cars
- Work Vans
- Shops
- Hiking
- Fishing Garages
- Boats
- Sports
- Camping
- Kitchens · Bathrooms

MARS NO.	DESCRIPTION	MARS PACK
93200	Dyna-Wipes	8



## **Sealant Products**

MARS SERIES 934



MARS HVAC/R Silicone Sealant is a superior quality silicone which remains flexible from -85° to 500°F. Never dryes out. Has excellent adhesion to metals and can be used for virtually every HVAC need.

MARS NO.	DESCRIPTION		MARS PACK	CASE QTY.
93246	Silicone sealant almond	10.1 oz.	12	12
93249	Silicone sealant clear	10.1 oz.	12	12
93251	Silicone sealant white	10.1 oz.	12	12
93252	Silicone sealant gray	10.1 oz.	12	12
93264	Silicone sealant black	10.1 oz.	12	12
93253	Silicone sealant clear	2.8 oz.	12	12
93254	Silicone sealant white	2.8 oz.	12	12

#### **MARS Heat Resistant Silicone**

MARS HVAC/R Hi-Temp Red Silicone Sealant is a superior quality silicone which was formulated to perform at temperatures ranging from -85°F to 500°F (-65°C to 260°C) for continuous operation and 600°F (316°C) for intermitent exposure. These features make MARS HVAC/R Hi-Temp red Silicone ideal for use around furnace vent pipes, restaurant hoods and heat exchangers.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
93255	Hi-Temp. silicone red 10.1 oz.	12	12
93247	Heat resistant silicone red 2.8 oz.	12	12

## Fire Stop Caulk

Red Devil Fire Stop Caulk effectively seals penetration openings against the spread of fire, smoke, toxic gases and water when applied properly.

- · A Latex-based, high-solids Fire Stop compound
- · No Shrinkage
- Withstands temperatures up to 2000° F and is up to 4 hour fire rated
- · Sandable and Paintable
- Meets Fed. Specs ASTM E-814 (UL 1479) and ASTM E-84 (UL 723) and many UL Classifications

MARS NO.	DESCRIPTION	CASE QTY.
93293	Firestop Caulk, 10.5 FL Oz Red	12

### **Red Devil Celulon And Acrylic Caulk**

Celulon™ plumbing and HVAC adhesive sealant is sometimes preferred over silicone. This easy to apply adhesive sealant adheres to all substances, is paintable, cleans up with water and has no offensive odor. Used to seal A/C ducts and lines. Application temp: 40 ° to 90°F. Service temp: -25° to 200°F.

MARS NO.	DESCRI	PTION		MARS PACK	CASE QTY.
93256	Celulon HVAC sealant			12	12
93257 93258	Celulon HVAC sealant 35 yr. acrylic caulk		10.1 oz. 10.1 oz.	12 12	12 12





93256



## **Sealant Products**

MARS SER<u>IES</u>



### **Red Devil Butyl Sealants**

Red Devil's butyl sealant is a high performance rubber-like sealant that is ideal for tough outdoor jobs and below grade applications. (marine usage above waterline) It can be used wherever watertight seal is required. This paintable sealant provides excellent adhesion to most building surfaces including aluminum, stone, wood, brick, fiberglass, plastic, metal, etc. This sealant is ideal for use on window/door frames, aluminum gutters, chimney roofs, concrete foundations etc. Sealant remains rubbery and flexible from 0°F to 225°F after full cure.

MARS NO.	DESCRIPTION		MARS PACK	CASE QTY.
93290	Butyl sealant white	10.1 oz.	12	12
93291	Butyl sealant aluminum gray	10.1 oz.	12	12
93292	Butyl sealant bronze	10.1 oz.	12	12

#### **Red Devil Specialty Products**

Red Devil's blacktop & roof repair is water resistant and stays flexible. This butyl rubber asphalt sealant adheres to cinder block, wood asphalt, concrete, brick and metal. Use on blacktop driveway cracks, chimney flashings, shingles & skylights. Apply at temperatures between 10°F & 100°F. Full cure in 72 hours

Red Devil speed demon latex caulk is a general purpose caulk that applies easily, dries quickly is paintable and won't stain or bleed.

Red Devil's QPF™ tub & tile caulk provides a long lasting water-tight seal around tubs, showers & sinks. This odorless and mildew resistant caulk is paintable & wont stain or bleed. The acrylic based caulk features a quick protection formular (QPF) which forms a protective outer covering in seconds allowing a bath or shower within 3-4 hours use of application.

MARS NO.	DESCRIPTION	NC		MARS PACK	CASE QTY.
93244	Blacktop & roof repair	black	10.1 oz.	12	12
93265	Speed demon latex caulk	white	10.1 oz.	12	12
93248	Tub & tile caulk	white	10.1 oz.	12	12

#### **Expanding Foam Sealing Products**

MARS foam sealant is a multi-purpose expanding polyurethane foam sealant, designed for the professional contractor. Excellent for HVAC projects and wall/floor penetrations. It is ideal for sealing around air conditioners, vents, ducts, electrical and plumbing penetrations. The Handi-Foam, MARS #93243, is a two component polyurethane foam to seal, bond, retrofit, insulate and dampen sound. Excellent for use in the HVAC, plumbing, roofing, cold storage, transportation and building maintenance applications, Expands and cures within seconds. Conforms to any shape. Each kit contains 2 cans (.88 lbs. ea.) of polyurethane expanding foam, two spray nozzles with 24" hoses and 1" clamp. Covers one cubic foot (12 board feet).

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
93268	Foam sealant 12 oz.	12	12
93267	Foam sealant 24 oz.	12	12
93243	Handi-Foam	1	12

#### **MARS Duct Seal Putty**

MARS Duct Sealing Putty is a non-hardening, non-toxic, gray putty compound used for countless applications in the refrigeration, heating and cooling, electrical trade, and plumbing fields. It can be shaped by hand to any form, and reused if necessary, for plugging openings through foundations, sealing around electrical boxes, refrigeration tube entry and so much more.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
93520	1 lb. slug - boxed	1	10
93521	5 lb. slug - boxed	1	10
93522	2 lb. slug - boxed	1	10





## **Sealant Products**

MARS SERIES 934

### **Caulking Guns**

For your convenience, MARS also offers easy to load and operate caulking guns. Guns hold the standard 10.3 oz. cartridges. MARS #93269 skeleton gun is ideal for large jobs. This heavy duty but light weight unit saves time in loading for the busy contractor. The professional skeleton gun, MARS #93278, offers three times more thrusting power with a smooth rod parellel frame. The professional ratchet type caulking gun, MARS #93279, is a professional conventional type gun recommended for sealants from light to heavy consistencies.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
93269	Skeleton caulking gun	1	24
93278	Professional skeleton caulking gun	1	12
93270	Econo conventional caulking gun	1	24
93279	Professional ratchet caulking gun	1	24



## **Pipe Insulating Cork Tape**

MARS SERIES 932

#### MARS Cork Tape - 1/8"x 2"x 30' Roll

MARS Cork Tape is ozone resistant and specially designed for all types of climate. It insulates cold pipes for all kinds of air conditioners, freezers, and refrigerators. Cork Tape helps stop condensation problems. It is ideal for retarding heat gain in cold pipes and prevents heat loss in hot pipes. Can also be used for gasketing purposes. MARS Cork Tape sticks to all kinds of dry metals. This flexible tape seals tightly without drying. Temperature range: -20°F to 200°F / -29°C to 93°C.

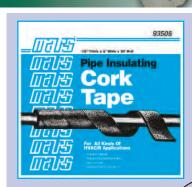
Corktape is made from virgin cork specially imported from Portugal & Spain and has the following characteristics:

- Compared to other cork tapes our cork tape features rubber/asphalt & 100% virgin cork instead of asbestos / saw dust as used by other manufacturers.
- 2. The width is always 2" wide unlike other brands where size varies from 1-3/4" 2".
- Very good adhesion property. It sticks on the metal pipe tightly and does not come out in one piece if unwrapped.
- 4. A wide service temperature range -29° F +200°F
- 5. Once installed the outer surface dries creating a shield against unwanted dust and dirt while the inner side remains wet. So even after a year or two, the user can remove the cork tape and reapply elsewhere without any change in the properties of the tape. Other brands such as Prestite/Virgin are mostly wet outside and inside making it vulnerable to dust and dirt which eventually deteriorates its insulation properties.

#### **Thickness To Prevent Pipe Condensation**

Ambient	Pipe Temperature	
Temperature & %RH	50°F (10°C)	32°F (0°C)
77°F (25°C) & 50% RH	Double Layer	Triple Layer
85°F (29°C) & 70% RH	Double Layer	Triple Layer
	plus Double Layer	Plus Triple Layer

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
93505	Cork Tape	1	12







#### **Physical properties:**

Composition:

Polymer based material containing synthetic rubbers, asphalt and approximately 50% cork by volume. It has a grainy rubber-like consistency and contains no asbestos.

Solid Contents:

99.8% Color:

Black

Thermal Conductivity: 0.60 BTU/hr /ft²/°F/in at 75°F

Moisture / Vapor Transmission:

0.02 perms.

(ASTM E-90 Procedure C)

Water Absorption:

0.01% by volume (ASTM D-1056)

Ozone Resistance:

Good





## **Self Adhesive Insulation Foam Tape**

MARS SERIES <mark>982</mark>

## MARS Foam Tape - 1/8"X 2"X 30' Roll

MARS Foam Tape is a self-adhering closed cell thermal insulation tape. This flexible tape is ideal for wrapping hot or cold pipings and fittings. The energy saving and very easy to use Foam Tape is excellent for preventing condensation problems. MARS Foam Tape is designed for retarding heat loss in hot pipings and preventing heat gain or frost formation on cold, chilled water pipings or refrigerant lines. Adheres firmly to all metals. Temperature range: -20°F to 200°F / -29°C to 93°C.

- 1. Good weather and UV resistant reason being EPDM (Ethylene Propylene Diene Monomer) is the main compound in the manufacturing of Foamtape. In practice EPDM is also used in the manufacturing of glass window strips of cars, which lasts for more than 10 years outdoors without any replacement (inspite of being exposed to rain, heat & cold).
- 2. The specially coated acrylic adhesive provides extra adhering strength compared to other tapes. Once installed, the special adhesive will act as the bonding agent and won't let the tape delaminate.
- 3. Low thermal conductivity (0.26 BTU. in/sq. ft. hr. deg. F at 75°F) to prevent heat loss/heat gain and save energy.
- 4. An ozone friendly product manufactured under strict supervision of trained personnels with quality check at every production point.
- 5. Low halogen contents. Tests have proved that MARS Foam Tape (or FOAMTAPE excluding the adhesive) has chlorine and bromine content of 4.36% and 1.35% compared to NBR/PVC (Armstrong, Rubatex) based brand insulation which has 12.45% and 6.14% respectively.
- 6. Our vulcanization system uses negligible amount of Sulphur (chemical which corrodes copper tubings) and this special vulcanization process decomposes chemicals almost completely.

#### **Thickness To Prevent Pipe Condensation**

<b>Ambient Temperature</b>	Pipe Temperature		
and Relative Humidity	50°F (10°C)	35°F (2°C)	
80°F (27°C) & 50% RH 85°F (30°C) & 70% RH	Single Layer 50% Overlap plus Single Layer	50% Overlap 50% Overlap Plus 50% Overlap	

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
93506	Foam Tape	1	12



#### **Physical properties:**

Composition:

Closed cell, elastomeric thermal insulation.

Color:

Black

Density:

6±1 pounds per cubic feet. (0.09-0.12 g/cm<sup>3</sup>)

(ASTM D-1667)

Thermal Conductivity:

0.26 BTU in./ft2 hr. °F at 75°F (0.04 W/mK at 24°C)

(ASTM C-177)

Water Absorption:

Max 5% by weight (ASTM D-1056)

Water Vapor Permeability:

0.15 Perm-inch (ASTM C-355) Temperature Range:

-20°F (-29°C) to +200°F (+93°C)



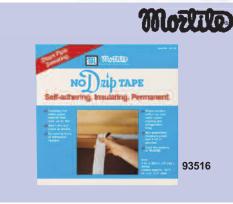
## **Maintenance Products**



#### **Mortite Pipe Wraps**

Mortite's no-drip® tape stops cold water pipe sweating permanently. Won't dry out, crack or shrink. This self-adhering tape insulates hot water pipes up to 160°F. No-drip® tape molds around valves, joints, tees and irregular fittings. The 2"W x 30'L roll covers 30 lineal feet of 1/2" O.D. pipe. Provides clean, neat appearance.

MARS NO.	DESCRIPTION	CASE QTY.
93516	No-drip® tape - 2" x 30' roll	10





MARS SERIES 932

### **Mortite Weather Stripping Products**

MARS #93507, air conditioner window seal, seals the gap between window sill and air conditioner. This permanent, all season foam strip prevents heat loss in winter, cooling loss in summer. Attractively packaged in a colorful poly bag for pegboard merchandising.

Mortite's closed-cell foam tape, MARS #93509 seals better in hot and cold climates. This durable vinyl tape stands up to extreme cold temperatures and will not freeze. Closed-cell means the cells prevent air from passing through the weatherstrip tape and won't absorb moisture. Self adhering, seals out drafts, dust and insects better than open-cell tape. MARS #93509 cushions and eliminates noisy vibrations around storm windows, A/C's and small appliances.

MARS NO.	DESCRIPTION	CASE QTY.
93507	Foam strip - 1/4" x 1-1/4" x 42"L	12
93509	Closed cell foam tape 3/8"T x 3/4"W x 10'L	12

#### Mortite A/C Foam Filter

Mortite's air conditioner filter helps to keep the room free from outside dust and dirt while increasing efficiency. This polyurethane foam filter is easy to install. And the 15" x 24" size can be cut to fit all window and through-wall air conditioners. Easy to clean - requires only regular detergent and water. Reusable.

MARS NO.	DESCRIPTION	CASE QTY.
93524	Foam filter - 15" x 24"	24



## **Tapes & Supplies**

MARS SERIES 789

### **Cloth Duct Tapes**

MARS is committed to supply high quality tape products to the HVACR industry. MARS offers 5 grades of the most popular duct tapes for a wide variety of applications.

MARS #79070 is the tape of choice for professional contractors. This double-calendered adhesive system is designed to meet the most rigorous demands of HVAC and asbestos removal specialists. Also available in black.

MARS #79072 and 79073 are recommended for use in many heating, air conditioning, ventilating and refrigeration applications.

MARS #79074 and 79075 has an excellent adhesion for a wide variety of surfaces. Excellent for most industrial applications.

MARS econo grade is an all around economical duct tape product for binding, patching and repair applications.

MARS #79088 is a heavy duty printed duct tape used to seal metal duct work, fiberglass insulations and to cover thermal insulations. Will not twist or curl during application. Meets UL723. Max temp 200°F with 4-1/2" repeat.

MARS NO.	DESCRIPTION	SIZE	MARS PACK
79070	Premium grade silver	2" x 60 yds.	24
79071	Premium grade black	2" x 60 yds.	24
79072	Professional grade silver	2" x 60 yds.	24
79073	Professional grade black	2" x 60 yds.	24
79074	Industrial grade silver	2" x 60 yds.	24
79075	Industrial grade black	2" x 60 yds.	24
79076	Plumbers grade silver	2" x 60 yds.	24
79077	MARS econo grade silver	2" x 60 yds.	24
79088	Heavy duty printed black	2" x 60 yds.	24







## **Tapes & Supplies**

MARS SERIES 789

#### **MARS Foil Duct Tapes**

MARS #79081 and 79082 are dead-soft aluminum foils with aggressive adhesive properties. The FSK foil scrim kraft tape is a fiberglass scrim reinforced foil that gives the tape high tensile strength, yet it is flexible and easy to use.

MARS NO.	DESCRIPTION	SIZE	MARS PACK
79081	Aluminum foil tape	2" x 50 yds.	24
79082	Aluminum foil tape	3" x 50 yds.	16
79083	Foil scrim kraft tape	2" x 50 yds.	24
79084	Foil scrim kraft tape	3" x 50 yds.	16

#### **U.L. Listed Tapes**

MARS #79087 is a UL181A-P listed foil. This foil product has a more technically sophisticated acrylic adhesive system designed to meet the more stringent demands of UL.

MARS NO.	DESCRIPTION	SIZE	MARS PACK
79087	U.L. 181 foil tape	2 1/2" x 60 vds.	16

#### **Spray Adhesive**

MARS #79094 is especially designed to bond polyethylene to itself, concrete block, wood and other hard to bind surfaces. Does not contain methylene chloride. Very quick, aggressive tack. Excellent for HVAC insulation applications.

MARS NO.	DESCRIPTION	MARS PACK
79094	Spray adhesive, 17 fl. oz.	12

### **Liquid Electrical Tape**

MARS NO.	DESCRIPTION	MARS PACK
86135	Liquid electrical tape (black), 4oz.	1

#### **PVC Electrical Tape**

PVC electrical tape provides excellent adhesion to aluminum and copper conductors and plastic and rubber insulations where quick identification is most needed. Due to its primary use in low temperatures, it can be stretched to conform to any shape without breaking. UL listed and CSA approved. PVC electrical tape is designed for general splicing and as a protective outer jacket. Flame retardant and cold and weather resistant. UL listed and CSA approved.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
86186	3/4" x 66' - red	1	100
86187	3/4" x 66' - white	1	100
86188	3/4" x 66' - green	1	100
86189	3/4" x 66' - blue	1	100
86184	3/4" x 60' - black	1	100
86133*	3/4" x 60' - black	10	100
* Non-UL			





## Tapes & Supplies

MARS SERIES **954 & 788** 

## **Low Density Teflon Tape**

- · Thickness 3 mils.
- · Standard grade, low density
- Provides a highly resistant seal on pipe threads for all types of service
- · Suitable for use with solvents, chemicals, oxygen, and on food lines
- Non-toxic
- · Permits easy disassembly, even after years of service
- Meets Mil. Spec. T-27730A
- Sealing temperature range: -450°F to 550°F (-268°C to 288°C)
- Working pressures: 2,000 PSI (136 BAR)
- Sold in case quantities only

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95409	1/2" x 260"	44	144
95410	1/2" x 520"	44	144
95412	3/4" x 520"	44	144

### High Density Slick-Tite® Teflon Tape

- · Thickness 3 mils.
- High density
- Provides a highly resistant seal on pipe threads for all types of service
- Made in USA
- · Suitable for use with solvents, chemicals, oxygen, and on food lines
- Non-toxic
- · Permits easy disassembly, even after many years
- · Meets Mil. Spec. T-27730A
- Sealing temperature range: -450°F to 550°F (-268°C to 288°C)
- Working pressures: 2,000 PSI (136 BAR)

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95525	1/4" x 300"	12	12
95526	1/4" x 600"	12	12
95527	1/2" x 300"	12	12
95528	1/2" x 600"	12	12
95530	3/4" x 300"	12	12
95532	1" x 300"	12	12

### **MARS Teflon Tapes**

MARS NO.	DESCRIPTION	MARS PACK
78940	1/2" x 260" - STD grade white teflon tape	12
78941	1/2" x 520" - STD grade white teflon tape	12
78942	1/2 x 260" - hi-density pink teflon tape	10
78944	1/2" x 260" - hi-density yellow (UL) gas tape	10













MARS SERIES 933

#### **Plews Standard Grease Fitting**

Standard grease fittings are precision engineered to withstand rugged use in most automotive and industrial applications. The feature steel fittings with corrosion resistant plated finish and built-in ball check.

The small grease fitting assortments contain the three most popular 1/4"-28 threaded fittings used when making a "change-over" from plugs to fittings. Ideal for the contractor.

Plews small 4-way grease fitting tool (MARS #93385) is for most popular 1/4"-28 and 6 mm fittings. Tap repairs 1/4"-28 threads. Wrench removes 5/16" and 3/8" hex fittings and plugs. Wrench installs new fittings. "Easy-out" removes broken fittings. Large tool (MARS #93384) is designed for 1/8" NPT fittings. Tap repairs 1/8" NPT threads. Wrench removes 7/16" and 3/8" hex fittings and plugs. Wrench installs new fittings. 1/8" NPT "Easy-out" removes broken fittings.

MARS NO.	DESCRIPTION		MARS PACK	CASE QTY.
93375	1/8" npt, short-straight fitting, 100/box	11-150	1	1
93376	1/8" npt, short-straight fitting, 10/card	11-151	1	10
93378	1/8" npt, short 45° fitting, 5/card	11-159	1	10
93372	1/8" npt, short-90° fitting, 5/card	11-167	1	10
93388	1/4" npt, straight fitting, 5/card	11-201	1	10
93383	8 assorted grease fitting kit	11-955	1	10
93384	Large 4-way grease fitting tool	11-901	1	5
93385	Small 4-way grease fitting tool	11-903	1	10
93386	1/4"-28 thread, short-straight fitng, 10/card	11-101	1	10

Standard fitting assortment includes:					
93383 Qty. 4	Description short-straight	Thread 1/4"-28			
2	short 45° short 90°	1/4"-28 1/4"-28			

#### **Plews Handled And Pistol Oilers**

When you reach for an oiler, make sure it's a Plews! Plews oilers are truly the finest in the industry; for either the professional or the handyman. Epoxy finish handled oilers and pistol oilers are made of heavy duty, drawn steel bodies. Durable epoxy finish resists rust. Zinc plated, detachable flex spouts are featured.

MARS NO.	DESCRIPTION		MARS PACK	CASE QTY.
93390	Pint oiler w/9" flexible spout	50-337	1	5
93393	6 oz. oiler w/6" flexible spout	50-516	1	10

#### **Plews Plastic Funnels**

MARS NO.	DESCRIPTION		MARS PACK	CASE QTY.
93396	5 1/2" utility funnel, 1 pint	75-062	1	20
93397	7" heavy duty funnel, 2 quart	75-070	1	10
93398	5 3/4" utility funnel w/screen includes 13" flex extension	75-007	1	10



MARS SERIES 933



Plews grease guns allow one hand operation and are perfect for hard to reach jobs. Precision pump develops up to 7000 p.s.i. Easy three-way loading by standard 14 oz. cartridge or suction filled. There is a head cap port for adding air bleeder or bulk loader fitting. Available in two different styles. Both feature tough all-steel construction with rugged baked enamel finish and tough zinc plated handles. New non-slip knurl on barrel allows for positive grip.

The mini grease gun kit is a compact "tool box" size grease gun that goes where other grease guns can't.

Features include:

- Zinc die cast head cap
- Pistol grip for easy one hand operation combined with heavy duty performance
- · Uses standard 3 oz. cartridge
- Kit includes gun with rigid pipe and coupler and one 3 oz. multi purpose grease cartridge

MARS #93353 is a general purpose grease gun with professional features. This grease gun offers 2 way loading: 14 oz. cartridge or suction. The lever action gun includes 5-3/8" pipe and coupler. Developes up to 6,000 psi. Durable baked enamel finish.

MARS #93355, professional grease gun features variable/short stroke for easy use in confined areas. This lever action gun provides an air bleeder and bulk loader fitting for 3-way loading (14 oz. cartridge, bulk or suction). Grease gun includes 5-3/8" pipe and coupler. Plated lever with comfortable oversized grip is also featured. Develops up to 10,000 psi.

MARS NO.	DESCRIPTION		MARS PACK	CASE QTY.
93350	Pistol grease gun, 12" hose	30-415	1	5
93351	Pistol grease gun, with pipe ass'y	30-425	1	5
93352	Mini grease gun kit, 3 oz.	30-132	1	10
93353	Lever action grease gun, 14 oz.	30-445	1	10
93355	Professional grease gun, 14 oz.	30-475	1	10

#### **Plews Multi Purpose Grease**

Plews multi-purpose lithium grease is a long lasting, hard working formula which delivers high performance in a wide range of heavy duty applications. NLG1 #1-1/2, drop point  $350^{\circ}$  F.

MARS DESCRIPTION NO.		MARS PACK	CASE QTY.	
93361	Multi purpose cartridge, 14 oz.	11-310	1	40
93362	Multi purpose cartridge, 3 oz./4 pk	11-300	1	10

#### **Plews Lubrication Accessories**

Plews standard jaw-type couplers feature a spring loaded ball check valve. Fits all 1/8" NPT threads. For all hand operated lube equipment (not for power lubricating equipment). Recommended working pressure is 3,000 psi. Heavy duty coupler recommended working pressure is 4,000 psi.

For use on hand operated grease guns only, heavy duty hoses have high quality 1/8" NPT male fittings on each end. Recommended working pressure is 3,000 psi. Burst pressure is 12,000 psi. Meets U.S. Government Specification MIL-L-4387C.

MARS NO.	DESCRIPTION		MARS PACK	CASE QTY.
93365	Standard grease gun coupler	05-031	1	10
93366	Heavy duty grease gun coupler	05-035	1	10
93367	Heavy duty grease hose, 12"	10-212	1	10
93369	Heavy duty grease hose, 18"	10-219	1	10







MARS SERIES 954

### Epoxy-Stik<sup>®</sup>

- · Cures rock hard with no shrinkage
- · Safe on portable water systems
- · Withstands temperatures up to 250° F
- · Hardens in 5-10 minutes, full cure in 24 hours
- · Can be applied under water
- · After 1 hour can be drilled, tapped, filed, sawed, sanded and painted

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95522*	4 oz. stick	24	24

<sup>\*</sup> Packaged in one dozen per display box

### Sharpie® #15 Fiber Tip Marker (Dura-Ink #15)

- Fine tip Ideal for fine line marking Extra tough tip, won't spread
- Smear resistant, water resistant
- Marks on metal, wood, cardboard, paper, plastic, glass, etc.
- · For identification of parts, layout work, marking cartons and crates
- Meets U.S. Fed. Spec. TT-1-544

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95488	Black	12	72

#### Valve Action<sup>™</sup> Paintmarker

- Marking range: -50° to 150°F / -46° to 66° C Marks w/ real paint, dries in minutes
- · Valve action nib releases paint as needed for continuous marking
- Marks on all surfaces including: metal, wood, glass, plastic, rubber, cardboard and paper
   Lead - free, low halogens
- The fiber nib is replaceable to assure complete use of each marker
- · Durable metal barrel · Meets California VOC regulations

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95480	Black	12	48
95481	Red	12	48
95485	Yellow	12	48

#### **Dura-Ink® Fiber Tip Markers**

- · Larger ink supply, heavy duty metal barrel
- · Water resistant, fade resistant
- · Chisel tip makes fine lines or broad marks
- · Meets Fed. Spec. TT-1- 544
- · Use on cardboard, wood, metal, paper, ceramics, glass, etc.
- · For identification of equipment, marking shipping cartons, sign making, etc.
- #20 is medium size, #25 is king size

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95500	Dura - Ink® #25 - black	12	48
95516	Markal Dura-Ink #25 Black Marker (2-pk)	1	24
95519	Black	1	36

#### **Pipe Joint Compound**

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95432	Oyltite Stick 1 oz.	12	24
95433	Pipertite Stick 1-1/4 oz.	12	144
90400	ripertite Stick 1-1/4 02.	12	144





MARS SERIES 954 & 730

#### E-Z Break® Anti-Seize Compound

- Copper-based anti-seize and lubricating compound
- Resists rust and corrosion
- Recommended for coating nuts, bolts, valves, flanges, splines, for easy break out after years of service
- Meets Mil. Spec. Mil-A-907E
- Authorized by USDA for use in federally inspected meat and poultry plants
- Temperature: to 1800° F (982° C)

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95472	10 oz. w/brushcap	24	24

#### Pierce® Rust Remover Penetrant

- Drives under rust and penetrates into the tightest crevices to protect against rust and corrosion
- Removes asphalt, tar, grease, dirt from metal surfaces
- Colorless moisture repellent film guards against continuing rust and corrosion
- Use on all euipment tools, chain saws, cables, ignition systems, threaded parts, and any rotating or sliding metal surfaces.
- Lubricates and eliminates squeaks

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
95423	12 oz. aerosol w/extension	24	24

#### Spray Weld

#### All-in-one cleaner, primer & cement in a handy aerosol can.

- · Valve sprays in any angle, even when can is upside down!
- Commercial grade fast-setting, heavy-bodied, CFC's free aerosol propellant
- 11 oz. can yields up to 300 3/4" joints. That's over 100 more joints than a quart can of traditional brush-on cement!
- All-weather formula works Hot or Cold, Wet or Dry
- Sets in 1-2 minutes!
- Pressure test to 100 PSI in as little as 30 minutes!

SDR 35CL200, Schedules 20, 40 & 80 up to 6" dia.

MARS NO.	DESCRIPTION	MARS PACK
73010	Clear	12
73011	Purple	12

#### Permatex® Adhesives & Sealants

Permatex® PermaPoxy™ 5 Minute General Purpose Epoxy and 30 Minute High Strength General Purpose Epoxy

- · Versatile easy to use, clear appearance, 2 part adhesive and filler system. No need to weld or braze
- Fills gaps and will not shrink
- Temperature range -60°F to 180°F (-51°C to 82°C).
- 5 min. general purpose epoxy permanent strength up to 3400 PSI
- 30 min high strength permanent strength up to 3500 PSI

#### Permatex® Super Glue

This formulation was specially designed for a faster, long-lasting bond. It is easily applied and works on non-porous materials including metal, plastics, rubber, vinyl, paper, wood, textiles, and cork gaskets. Permanent transparent bond fills gaps to .004".

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
95555	5 Min Epoxy, .84 fl oz	12	12
95556	30 Min Epoxy, .84 fl oz dual syringe	12	12
95557	Super Glue Gel tube, 2 grams	12	12
95558	Super Glue tube, 2 grams	12	12

















95556









MARS SERIES

#### **CRC Lubricants**

CRC products incorporate the **MSD(L)**™, a removable material safety data sheet printed on the reverse side of the label. With this new labeling system, a MSDS is always where you need it the most, right on the product you are using!

CRC 3-36 is a multi purpose lubricant and penetrant that forms a clear film that lubricates and stops corrosion. Its high affinity for metal allows it to penetrate and displace moisture leaving a long lasting rust preventing film. Available in aerosol with a nonflammable CO2 propellant and 360° valve.

CRC Screwloose® Penetrating Oil is a no compromise penetrant that attacks rust and corrosion, penetrating through oxides and soil to free corroded fasteners and mechanical components.

CRC Power Lube® is a unique new lubricant that incorporates a sophisticated additives package with Teflon® to provide long lasting protection against friction and wear. It is able to work longer and better than other lubricants under the extremes of pressure and the environment. Unlike most lubricants with Teflon®, it contains no chlorinated solvents.

CRC Cutting Oil is a superior thread cutting lubricant for use on all types of metal. The low odor formula is safe for soft metals such as brass and aluminum, and is non-staining. The same formula is also used for steel and galvanized metal, and cuts without that strong sulphur smell. Aerosol formulation with viscosity improved for increased cling, and reduces waste.

CRC White Lithium grease with Teflon® is a high purity, high quality grade 2 white lithium based grease with an additive package that includes Teflon® for superior lubrication. It is truly white, smooth and buttery in consistency for optimum surface coverage. It has both rust and oxidation inhibitors to provide durable lubrication and protection in any application.

MARS NO.	DESCRIPTION	MARS PACK
93208	3-36 Multi Purpose Lubricant, 11 oz.	12
93211	Screwloose® Penrtrating Oil, 11 oz.	12
93212	Power Lube® Teflon Lubricant, 11 oz.	12
93213	Cutting Oil, 12 oz.	12
93214	White Lithium Grease, 10 oz.	12
93284	2-26 Lubricant, 11 oz.	12

### **CRC Specialty Products**

The Wasp and Hornet Killer Plus™ is a fast acting, high strength insecticide that kills wasps, hornets, black widow spiders, fire ants and scorpians. Will not damage plastic connectors and other insulating materials. Provides a dense accurate spray that will reach over 20 feet. Excellent for the A/C contractor.

HydroForce™ Glass Cleaner Professional Strength is formulated to clean streak-free – the first time and every time. The ammonia-fortified formula quickly cleans the toughest dirt, dust, fingerprint and haze deposits without leaving unsightly streaks due to residue. HydroForce™ is versatile and safe to use on all glass surfaces. The foaming, ready-to-use formula allows for greater coverage and less run-off when cleaning vertical surfaces. HydroForce™ is biodegradable, non-corrosive, non-flammable and non-abrasive. Let us prove it to you.

CRC Rubberized Spray Undercoating is a specially formulated rubberized product that dries quickly and is exceptionally resistant to abrasion, rust and corrosion. Seals underbody, fender, panels, frame, hood, doors, weld joints, etc., against moisture, salt and road debris.

Ask your MARS representative for information on how to become a full line CRC distributor and also for details on additional CRC problem solving products.

MARS NO.	DESCRIPTION	MARS PACK
93226	Wasp and Hornet Killer Plus™, 14 oz.	12
93227	HydroForce Glass Cleaner, 18 oz.	12
93233	Rubberized spray undercoating, 16 oz.	12







#### **CRC Cleaners/Degreasers**

CRC Heavy Duty Degreaser is a chlorinated solvent based cleaner/degreaser that is chemically stable and extremely effective in most heavy duty applications. It has no fire or flash point, evaporates quickly with no residue and is non-conductive. New formula contains no ozone depleting compounds. Effectively removes grease, tar, oil, adhesives, etc. to increase operating efficiency.

CRC Industrial Contact Cleaner is designed to quickly and effectively clean sensitive electrical and electronic components. It has no flash point and evaporates quickly, leaving no residue. Contains no CFC's or VOC's

CRC QD Contact Cleaner is an alcohol based precision cleaner that is 100% free of CFC's. For use on non-energized equipment, it evaporates rapidly and is harmless to most plastics. For use on electrical and electronic components where precision cleaning is necessary.

The CRC Contact Cleaner 2000™ is a revolutionary precision cleaning solvent designed to meet today's environmental challenges. This high purity solvent is a new generation HCFC and does not exhibit the same ozone depleting properties as conventional CFC solvents. It evaporates rapidly, has no flash point and leaves no residue (may affect some plastics).

CRC Gasket Remover is a solvent based high strength cleaner that effectively loosens and helps remove fiber gaskets, adhesives and sealants. It helps protect equipment surfaces by eliminating damage caused by scraping. Also removes paint and graffiti.

MARS NO.	DESCRIPTION	MARS PACK
93215	Heavy Duty Degreaser, 19 oz.	12
93217	Industrial Contact Cleaner, 14 oz.	12
93218	QD Contact Cleaner, 11 oz.	12
93219	Contact Cleaner 2000™, 14 oz.	12
93222	Gasket Remover, 12 oz.	12
93294	Lectra Clean	12







MARS SERIES 932 & 790

#### **CRC Food Grade Silicone**

CRC Food Grade Silicone forms a colorless, tasteless, non-toxic and non-staining film that is authorized by the USDA for use in federally inspected meat and poultry plants. Its silicone lubrication film meets FDA specifications for incidental food contact.

MARS NO.	DESCRIPTION	MARS PACK
93210	Food Grade Silicone, 10 oz.	12

#### **CRC RTV Silicone**

CRC RTV Silicone Adhesive/Sealants are the perfect way to seal, bond and protect. With the press of the nozzle, a precise bead of high purity silicone is easily applied. No lumps, gaps, bubbles or waste. The package keeps the silicone fresh with the product in the nozzle forming a self sealing plug. Convenient and easy to use.

MARS NO.	DESCRIPTION	MARS PACK
93236	8 oz.clear	12

#### **CRC Corrosion Inhibitors**

CRC Zinc-It® Instant Cold Galvanize is a high performance 95% zinc-rich coating that restores hot dipped galvanized properties to ferrous metals. Its sacrificial coating helps fight rust and corrosion creepage with a durable, flexible film.

CRC Belt Dressing extends the life of drive belts by improving traction and allowing runs under reduced belt tension. Formulated with a synthetic polymer that is non-drying, water resistant and chemically stable. It also meets FDA regulations for incidental food contact.

MARS NO.	DESCRIPTION	MARS PACK
93223	Zinc-It <sup>®</sup> 13 oz.	12
93224	Belt Dressing, 10 oz.	12

### **Industrial All Purpose Spray Enamal**

Krylon TOUGH COAT® acrylic alkyd enamels feature a high-solids formula that ensures maximum coverage and performance. Tough Coat delivers the ultimate in protection, durability, high gloss, color retention and applies with a smooth even coverage. Fast-drying to the touch in 15 minutes. Ideal for light to heavy duty painting projects both indoors & outdoors.

MARS NO.	DESCRIPTION	REFRIG. ID#	CASE QTY.
78976	Machinery light gray	R-23	6
78987	Machinery dark gray	R-123	6
78981	OSHA white (gloss)	R-12, R-406A	6
78982	White (flat)		6
78983	OSHA black (gloss)		6
78984	Black (flat)		6
78985	Aluminum		6

#### Reflect-All™ All Purpose Spray Coating

Reflect-All™ is a revolutionary light-reflective paint that can be applied to virtually any surface. The reflective microbeads capture, intensify and reflect light back to the source resulting in amazing nighttime visibility.

Reflect-All™ has unlimited applications. Wherever low-light or nighttime safety is a must, Reflect-All™ is your brilliant answer!

Goes on semi-transparent and dries in 10 minutes.

MARS NO.	DESCRIPTION	MARS PACK
78995	Reflect-All™ 12 oz.	6





## **Pipeseal**

MARS SERIES 934



#### **Pipeseal**

Pipeseal is a unique multi-component epoxy designed to quickly and permanently patch, seal and repair cracks, holes and leaks in all types of pipe.

## Seals Holes in Pipe to Full Pressure in Under Five Minutes!

- Works on all types of pipes including copper, steel, lead, cast iron and aluminum.
- · Heat activated Hardens fully in less than 1 minute.
- · Withstands pressures up to 1200psi.
- No wrap/plug required.
- Suitable for refrigerant lines.
- · Extreme chemical resistance
- 100% solids No VOCs
- Permanently seals holes of up to 1/4 in. in diameter.

#### **INSTRUCTIONS:**

- 1 Prepare Surface around pipe hole/crack with sand paper or file.
- 2 Remove clip and cut-off the end with the clear material and apply entire content to mixing surface; ensure mixing surface is not porous.
- 3 Thoroughly mix entire contents.
- 4 Apply to pipe with a wooden stick or trowel.
- 5 Cover a 2-inch-wide area around pipe hole/crack.
- 6 Apply heat with a heat gun/hair dryer (approx. 140°) until Pipeseal cures and hardens (usually within 1minute).

MARS	DESCRIPTION	MARS	CASE
NO.		PACK	QTY.
93629	Pipeseal	1	12



















## **Sprayers & Garden Hoses**

MARS SERIES 797 & 790

#### **Chapin Sprayers & Accessories**

MARS #79067, 2 gallon (1.5 gallon usable) polyethylene sprayer is a high density sprayer that resists breaking, leaking and chemical corrosion. This sprayer has a polymer shut off with lock on feature and a polymer nozzle that adjusts from fine spray to 30' stream, with a poly/brass extension that rotates 360°. Reinforced 36" hose resists crimping, cracking and leaking.

The Chapin acid sprayer is the ideal sprayer for cleaning and degreasing air conditioning coils, engines and many other uses. This 2 gallon (1.5 gallon usable) heavy-duty polyethylene tank features a new built-in relief valve/pressure gauge for added safety and polymer shut offs with lock off features to prevent accidental spraying. A 12" extension tube with adjustable poly cone nozzle ensures for better control when spraying chemically active liquids. Sprays coarse stream to fine mist. 42" hose included

MARS #79069, hand held pressure sprayer is a 48 oz. multi purpose sprayer for small areas. Heavy duty, chemical resistant poly tank features adjustable nozzle control for fine mist or straight stream spraying.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79067	2 gallon polyethylene sprayer	1	1
79068	2 gallon acid sprayer	1	1
79069	48 oz. hand held sprayer	1	1

#### **Swan Garden Hoses**

Fairlawn® reinforced garden hose combines excellent quality and good value. This light duty, three-ply strength hose offers good pressure capacity and is flexible for easy handling. Solid brass couplings. Two year warranty.

MARS #79539 and 79540, premium rubber hose, provide superior flexibility and pressue capacity. Maximum kink resistance and burst strength make this hose very durable. Handles hot water up to 160°F. Seal-tite™ washerless leakproof coupling. Lifetime warranty.

The professional hot water hose is designed for a wide range of applications requiring hot water use up to 200°F. The heavy duty rubber construction offers maximum wear and abrasion resistance. Industrial style reinforcing for high burst pressure and kink resistant. Seal-tite™ washerless leakproof coupling. All hoses are made in the U.S.A.

MARS #79641 and 79642, WeatherFlex<sup>®</sup> Hose is an all-weather reinforced garden hose with its popular mint green Clear Tough™ jacket. Its medium duty construction makes it perfect in all seasons by staying pliable in cold weather. Comes with Eco couplings and patented Hose Armour™ to prevent kinking at the spigot.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79538	Fairlawn <sup>®</sup> -5/8" x 50'	1	5
79539	Premium rubber - 5/8" x 25'	1	5
79540	Premium rubber - 5/8" x 50'	1	5
79541	Hot water rubber - 5/8" x 25'	1	5
79542	Hot water rubber - 5/8" x 50'	1	5
79641	All weather - 5/8" x 50'	1	5
79642	All weather - 5/8" x 75'	1	5

#### **Gilmour Full Size Pistol Grip Nozzles**

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
79581	Insulated chrome plated	1	24
79582	Insulated threaded front	1	24
79583	Vinyl cushioned grip	1	24
79584	Metalized threaded front	1	48
79560	Hose washers, fits 5/8" hoses, 20/pk	1	1



Features of Gilmour® Pistol Grip Nozzles				
	79581	79582	79583	79584
Nozzle features		chrome plated, full-size		
All bras		tem with p g nut on a		t
	Hold-ope	n clip on a	all	
Patented, insul. grip & industrial				
strength lever	yes	yes	no	no
Unique	brass	rubber	vinyl	
features	head	head	molded	
	insert	guard,	comfort	
		brass	grip	
		head insert		
Sta	inless ste	el spring o	on all	
Lifetin	ne duck p	acking se	al on all	
Male hose threaded for				
attaching				
accessories	no	yes	yes	yes
Pack carded on all				



## **Custom Leather Craft Products**



MARS SERIES 790

### **Custom Leather Craft Products**

Professional contractors require professional tools andaccessories. Carrying a CLC Softside Tool Carrier is like owning a workshop to go. Loads of pockets, rugged polyester fabric, reinforced bottom panels, heavy duty stitching and bar tacking at critical stress points are features that make CLC a requested brand.

MARS NO.	S DESCRIPTION	MARS PACK
79279	28 Pocket Tool Pouch  7" x 5-1/2" multi compartment tray slides into bottom of pouch  Box shaped design prevents tipping  Padded carrying handle and adjustable shoulder strages 8"L x 8"W x 17"H	1
79280	<ul> <li>15 Pocket, 16" Center Tray Tool Bag</li> <li>13-1/2" x 9" multi compartment tray stores in middle of bag</li> <li>8 pockets outside and 7 pockets inside</li> <li>Padded carrying handle and adjustable shoulder strageting to 16"L x 9"W x 9"H</li> </ul>	1
79281	<ul> <li>4 Pocket Tool Holder</li> <li>Hang, strap, or clip on workbelts, suspenders, or pant</li> <li>Securely holds small tools or accessories</li> </ul>	1 s
79282	<ul> <li>23 Pocket Large Tool Carrier</li> <li>11" x 6" multi compartment plastic tray that slides into the bottom of the carrier</li> <li>16 multi use outside pockets and 7 inside to organize tools &amp; accessories</li> <li>Box shaped design prevents tipping</li> <li>11"L x 10"W x 19"H</li> </ul>	1
79283	26 Pocket Backpack Bag  20 inside and 6 outside pockets organize a variety of tools & accessories  Exclusive Tools-In-A-Row system folds open, then open again to layout your most used tools  Padded adjustable shoulder straps	1
79285	Mini Cell Phone Holder  • Specially designed to securely hold newer and smalle cell phones  • Versatile 2-way attachment for belt pants, etc.  • Elastic side panels and inside padding for protection	1 er
79286	<ul> <li>Large Cell Phone Holder</li> <li>Hang, strap, clip onto workbelts, suspenders, and par</li> <li>Holds most brands of large cell phones</li> <li>Elastic side pockets for pens, pencils, small tools, etc</li> </ul>	
79287	Plastic Cap Swivel Kneepads One size fits all Exclusive grooved cap design prevents thread abrasic Foam padded with easy on/off hook and loop fastener	1 on
79270	<ul> <li>Ultraflex® Non-Skid Professional Kneepads</li> <li>One size fits all</li> <li>Upper cap design for all day comfort and protection</li> <li>Soft, flexible outer shell protects and grips most surfar without scratching or scuffing</li> <li>Slot n dot strap connections, Memory Flex™ synthetic rubber straps</li> </ul>	
79288 79289	Work Crew Gloves-L Work Crew Gloves-XL  • Synthetic leather palm is tough, soft, and comfortable  • Lycra side panels provide flexibility  • Spanday back ensures soug fit	1





Spandex back ensures snug fit



# **Custom Leather Craft Products**

MARS SERIES 790

MARS NO.	S DESCRIPTION	MARS PACK
79263	<ul> <li>14 Pocket LargeTraytote Bag</li> <li>2 Pockets inside, 12 outside</li> <li>13 1/2" x 6" multi-compartment plastic tray included, slides securely into bottom of bag.</li> <li>16"L x 9"w x 12"H</li> </ul>	1
79290 79291 79292	Work Right OC™-M Work Right OC™-L Work Right OC™-L  - Padded synthetic palm material is soft and comfortable - Open cuff design with textured pull-on tab for easy-on, e - Textured fingertip pads provide added abrasion resist - Padded knuckles for protection against bumps - Stretch spandex back for flexibility and fit	asy off
79264	<ul> <li>Tradesmen High Dexterity Gloves-M (pair)</li> <li>Clarino® synthetic leather is tough, soft and comfortabl to wear, resists shrinking, stretching and hardening</li> <li>Flexibile neoprene wrist cuff keeps debris out</li> <li>Flex-Spot™ thumb design for better flexibility</li> <li>Stretch spandex for flexibility and fit</li> <li>Padded knuckles provide protection against bumps</li> </ul>	1 e
79265	Tradesmen High Dexterity Gloves-L (pair)	1
79266	Tradesmen High Dexterity Gloves-XL (pair)	1
79267	Mossy Oak® 16" Bigmouth® Bag  12 Multi-use pockets inside and 10 outside to organize tools and accessories  Heavy duty stitching and bar tacking at all stress points  16"L x 8.5"W x 10"H	
79268	Mossy Oak® 12" Bigmouth Bag  17 Multi-use pockets inside and 6 outside to organize and accessories  Opens wide for easy access to bags contents  Adjustable shoulder strap and padded reinforced well carrying handles  12"L x 8.5"W x 8"H	
79269	<ul> <li>48 Pocket Bucket Pockets</li> <li>14 Double row pockets inside and 34 triple row outside to organize a wide range of tools and accessories</li> <li>Security pocket with hook and loop closure</li> <li>Drill pocket with hook and loop handle strap</li> <li>Designed to fit most 3 1/2 – 5 gallon buckets</li> <li>Measuring tape strap and key clip included</li> </ul>	1 de
79276	<ul> <li>50 Pocket Double Zipper Tote Bag</li> <li>9 Multi-use pockets inside and 41 outside to organize tools and accessories</li> <li>Double pull zipper for easy access</li> <li>Padded bottom will not scratch, mar countertops, floors and upholstery like metal tool boxes</li> <li>18"L x 6"W x 9"H</li> </ul>	1
79277	<ul> <li>75 Pocket-Tool Backpack</li> <li>7"x 5" multi compartment plastic tray included</li> <li>Adjustable padded shoulder straps and carry handles</li> <li>13"W x 17-1/2"H x 9"D</li> </ul>	1
79284	<ul> <li>5 Pocket Cell Phone</li> <li>The cell phone, tool and accessory holder you can HANG - STRAP - CLIP on workbelts, web suspender pants, etc.</li> <li>Holds most brands of compact cell phones</li> <li>Securely holds small tools and accessories like pliers flashlight, screwdrivers, multi-tools, etc.</li> </ul>	s, mini-

· Versatile 3-way attachment for pants, web suspenders,





work aprons, etc.

# **Tool Boxes & Organizers**

MARS SERIES 790



All Plano tool boxes and stowaway boxes are constructed of premium quality impact resistant plastics. Solid brass hardware and sturdy ABS drawbolt type latches, withstands rugged wear. All boxes are made in the U.S.A. and have a lifetime warranty!

The Plano Tote-More®, MARS #79368, features a multi compartment drawer and convenient handle for portability. Open top for easy access. Unit measures 14 3/4" L x 9 1/8" W x 6 7/8" H.

MARS NO.	DESCRIPTION	MARS PACK
79368	Tote More® w/draw - gray/black	4

#### **Plano Tool Boxes**

MARS NO.	DESCRIPTION	MARS PACK
79643	Clear StowAway 18 Fixed Compartments, 11.13" x 7.94" x 11.63"	6
79644	Clear StowAway - 5 to 9 Adj. Compt. Pro-Latch, 1' Deep Storage, 8.38"x5.38"x 9.88"	6
79645	Graphite Gray & Black 16" Tool Box with bulk storage space and tray, Removable StowAway Organizer built into the top,  19.38" x 16" x 16.63"	4
79646	Graphite Gray & Black 20" tool box with bulk storage space and tray, Heavy Duty handle, 22.38" x 20.69" x 19"	4
79647	Graphite Gray & Iron Yellow 22" tool box with extra deep storage space and tray, 21.88"x12.75"x13.75"	1

#### **Stowaways - Plastic**

MARS stowaway boxes are ideal for the professionals or do it yourselfers. These utility boxes hold bolts, screws, washers, bits, solderless terminals and many other small items. MARS #79378 has 6-18 adjustable compartments and measures 11" L x 7 1/4"W x 1 3/4"H. MARS #79379 has 4-24 adjustable compartments and measures 13 3/4"L x 9 1/8"W x 2"H.

MARS NO.	DESCRIPTION	MARS PACK
79378	6-18 adj. stowaway box - translucent gray	6
79379	4-24 adjustable stowaway box - translucent gray	6

### Storage Bins

- Heavy duty bins securely stack on top of each other, sit on shelving and hang from racks, panels, rails and carts
- · Anti slide stop prevents stacked bins from shifting forward
- · Guaranteed not to crack or break under normal load conditions
- Sturdy one piece construction is water, rust and corrosion proof.
- · Large front label are for easy coding and scanning
- · Curved bottom hopper makes it easy to retrieve small parts

MARS NO.	DESCRIPTION	MARS PACK
79764	12" Blue Shelf Bin 11 5/8" L x 4 1/8" W x 4" H	24
79765	12" Blue Shelf Bin 11 5/8" L x 6 5/8" W x 4" H	12
79766	12" Blue Shelf Bin 11 5/8" L x 8 3/8" W x 4" H	12







# Clipboards & Formholders

MARS SERIES 790

#### **MARS Clipboards And Formholders**

MARS aluminum Style A Formholder is versatile, efficient and easy to use. It can be used by both left and right handed people and will accommodate forms ruled either lengthwise or across the width. The storage compartment below keeps completed forms dry and protected.

The MARS Snapaks are very popular aluminum formholders that accommodate loose forms or sales books. Unit opens like a book. Clipboard is included on inside front cover. A hinged aluminum strap on inside back cover holds copies or sales books securely in place. The entire holder folds into a compact protective box to keep forms safe and dry.

The MARS #79558 Redi-Rite is a clipboard on a box. This is the holder to have when you need to carry many forms. Extra storage capacity. All aluminum construction.

MARS #79559 Portfolio is simple yet functional. The cover is hinged on the left with a light spring action so it stays open and stays shut. Paper will stay safe under cover from wind, rain and dirt. Aluminum construction.

MARS NO.	DESCR	RIPTION	CASE QTY.
79552	"A" formholder	8-1/2" x 12"	12
79555	Snapak	8-1/2" x 12"	12
79558	Redi-Rite	8-1/2" x 12"	6
79559	Portfolio	8-1/2" x 12"	12



## **HVAC/R Textbooks**

MARS SERIES 790



Motors & Armatures is pleased to offer textbooks for the HVAC/R and electrical professionals.

Modern Refrigeration and Air Conditioning is the leader in the refrigeration and air conditioning field! It teaches fundamental principles and service techniques. The text tells and shows how to diagnose and remedy HVAC problems. It provides an excellent blend of theory with job-qualifying skills. Fully covers the practical application of refrigeration in all its branches including: Domestic, Commercial, Air Conditioning, Heat Pumps, Automotive Air Conditioning, Thermoelectric, Solar Energy, and Special Devices. Includes up-to-date information on refrigerant recovery, recycling, and reclaiming.

Emphasizing practical skills and presenting complete, up-to-date information, **Heating and Cooling Essentials** is the ideal introductory book for individuals who plan to enter the HVAC field. Special attention is paid to skills essential to the new technician, such as the familiarity with tools, materials, and fasteners; the ability to read dimensions and perform other math-related activities; and the ability to perform installation, service, and repair techniques. **Heating and Cooling Essentials** provides the new technician with a thorough discussion on temperature/pressure relationships, refrigerants (including the new ones that are replacing CFCs) and refrigerant recycling, valves and flow controls, compressors, HVAC electrical systems and components, major types of heating systems (including heat pumps), and the vital topic of customer relations.

**Doolin's Trouble Shooters Bible** is used by technicians and contracters everywhere. Partial contents include: electric motors, heat pumps, ice machines, gas and electric heating, central systems, servicing of commercial equipment, basic refrigeration and basic electricity. This reference book is available in a spanish edition as well.

MARS NO.	DESCRIPTION	MARS PACK	CASE QTY.
78701	Modern refrigeration & A/C	1	8
78702	Heating & cooling essentials	1	10
78710	Doolin's trouble shooters bible	1	22
78711	Doolin's trouble shooters spanish edition	1	22

#### **HVAC Professional Reference Books**

## DeWalt HVAC Technician Certification Exam Guide MARS # 78725

This comprehensive exam study guide for electricians can be utilized in every state. Based on the 2005 NEC, this book is ideal for preparing to take any one of the licensing exams currently required in the electrical industry. This book includes realistic sample exams with answer keys.

## DeWalt HVAC/R Professional Reference-Master Edition MARS # 78726

This expanded edition contains approx. twice as much info as the earlier edition. This comprehensive jobsite solution for HVAC/R technicians covers formulas, design data, heating, ventilation, piping, service, troubleshooting, electrical motors & much more.

## DeWalt HVAC Estimating Professional Reference MARS # 78727

This professional reference guide is the ideal pocket tool for any mechanical estimator. This book guides you through each step of the HVAC bidding process; includes checklist, worksheets, forms and more.

MARS NO.	DESCRIPTION
78725	DeWalt HVAC Technician Certification Exam Guide
78726	DeWalt HVAC/R Professional Reference-Master Edition
78727	DeWalt HVAC Estimating Professional Reference

