

TREGASKISS® BA1

COBOT AIR-COOLED MIG GUN

MIG (GMAW)
ROBOTIC WELDING



Issued June 2024 • Index No. BA1/1.9

DUTY CYCLE RATING	100%: 350 amp with mixed gases (Ratings are based on tests that comply with IEC 60974-7 standards)
PROCESSES	MIG (GMAW) Welding
COBOTS	• Universal Robots (UR) • FANUC® • Yaskawa Motoman
WELDING MACHINES	Compatible with most brands of welding machines (see Power Pin Options p.7)

Cobot users expect a quick-to-implement and easy-to-use automation solution that keeps their operations agile and profitable. Tregaskiss® BA1 cobot air-cooled MIG guns deliver this through their proven durability and overall simplicity of design – keeping weld operators focused on manufacturing quality parts instead of troubleshooting or maintaining MIG guns.

AccuLock™

AccuLock™ MIG gun consumables were designed to maximize production uptime through their long service life and quick and accurate replacement.

To further reduce the potential for error through simplified inventory, AccuLock consumables share a common contact tip across Bernard® semi-automatic, and Tregaskiss robotic, fixed automatic and cobot MIG welding guns.



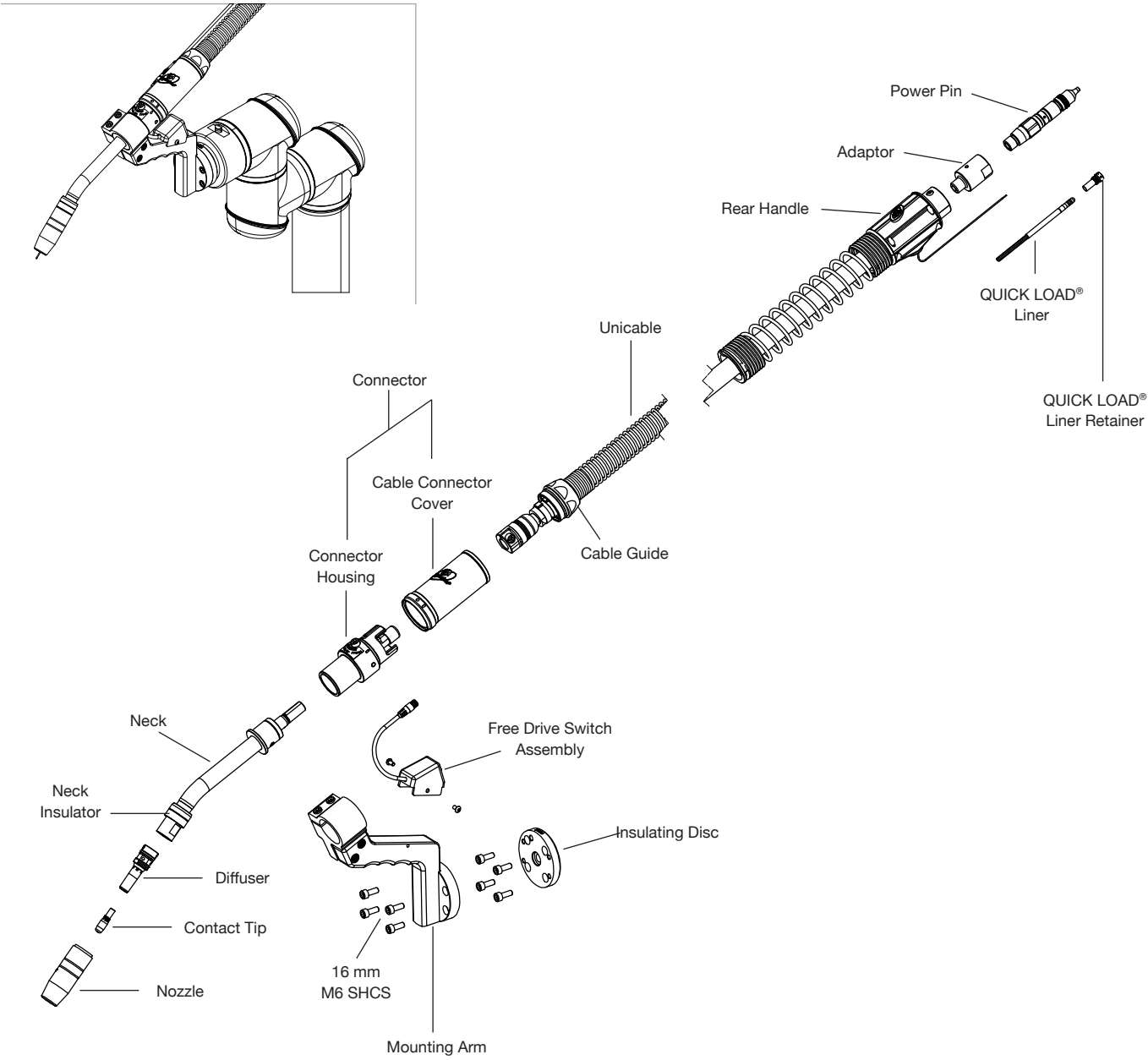
EASY MAINTENANCE
WITH MINIMAL DOWNTIME



INCREASE
UPTIME & THROUGHPUT



SYSTEM COMPONENTS



KNOW YOUR OPTIONS



ACCULOCK™ R CONSUMABLES

Eliminate contact tip cross-threading issues with new AccuLock™ R consumables. These new consumables are designed for increased tip life, which can reduce replacement frequency and related downtime. AccuLock™ HDP contact tips can increase life by an additional 10x or more in pulse welding applications. And in most cases, your current tip and diffuser can be replaced with no impact to Tool Center Point (TCP), making this upgrade low effort, low risk, and high payoff.



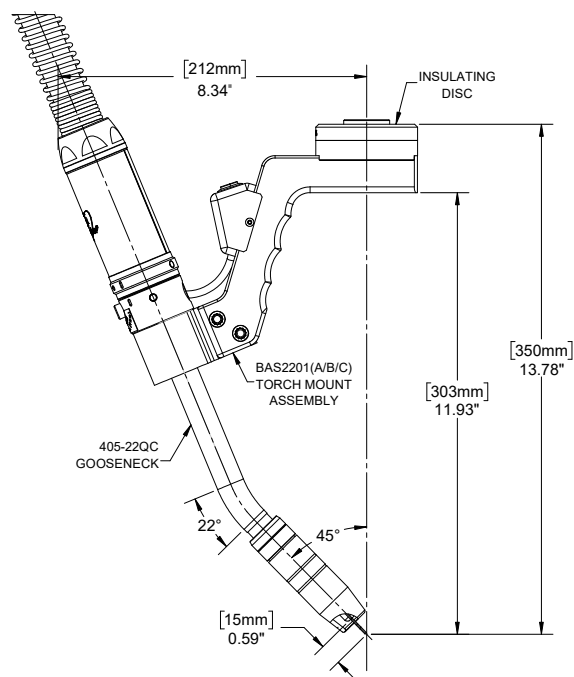
QUICK LOAD® LINERS

The QUICK LOAD® Liner System loads from the front of the MIG gun, and requires less than half the time and effort for replacement when compared with conventional liners. These liners interface with a QUICK LOAD® Liner Retainer that is seated within the power pin of the gun on first use. QUICK LOAD® Liners come standard on Tregaskiss® cobot MIG Guns. Available for wire sizes between 0.030" and 3/32" and in lengths of up to 15 feet.

GUN CONFIGURATIONS

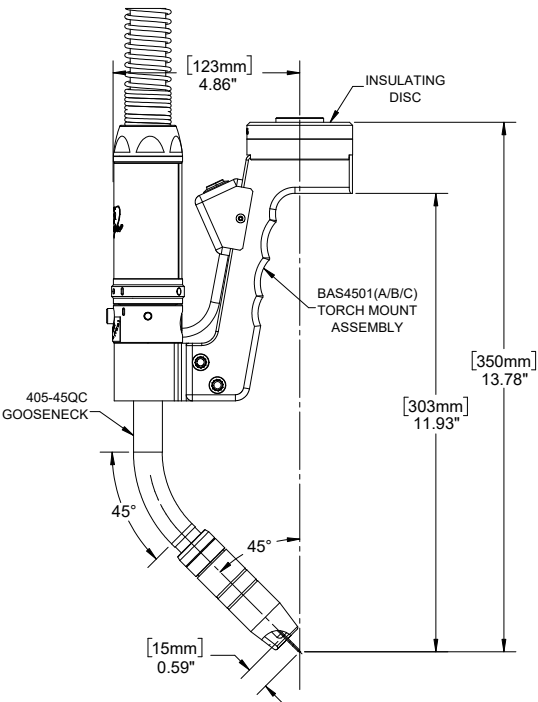
NOTE: FOR CENTER OF MASS INFORMATION, SEE OWNER’S MANUAL OM-BA1 AT BERNARDTREGASKISS.COM/BA1

CONFIGURATION – 22 DEGREE NECK



350 mm (13.78") TCP,
Neck 405-22QC

CONFIGURATION – 45 DEGREE NECK



350 mm (13.78") TCP,
Neck 405-45QC

CONSUMABLE OPTIONS

ACCULOCK™ HEAVY DUTY (HD) COPPER CONTACT TIPS

T-A030CH*	for 0.030" (0.8 mm) wire; qty. 10	T-A062CH	for 1/16" (1.6 mm) wire; qty. 10
T-A035CH*	for 0.035" (0.9 mm) wire; qty. 10	T-A072CH	for 0.072" (1.8 mm) wire; qty. 10
T-A039CH*	for 0.039" (1.0 mm) wire; qty. 10	T-A078CH	for 5/64" (2.0 mm) wire; qty. 10
T-A045CH*	for 0.045" (1.2 mm) wire; qty. 10	T-A094CH	for 3/32" (2.4 mm) wire; qty. 10
T-A052CH*	for 0.052" (1.3 mm) wire; qty. 10		

NOTE: ADD "-100" TO THE END OF THE ABOVE HD COPPER CONTACT TIP PART NUMBERS FOR QUANTITIES OF 100.
*ADD "-1000" TO THE END OF THE ABOVE PART NUMBERS FOR QUANTITIES OF 1000.

ACCULOCK™ HEAVY DUTY (HD) CHROME ZIRCONIUM CONTACT TIPS

T-A030ZH	for 0.030" (0.8 mm) wire; qty. 10	T-A045ZH	for 0.045" (1.2 mm) wire; qty. 10
T-A035ZH	for 0.035" (0.9 mm) wire; qty. 10	T-A052ZH	for 0.052" (1.3 mm) wire; qty. 10
T-A039ZH	for 0.039" (1.0 mm) wire; qty. 10	T-A062ZH	for 1/16" (1.6 mm) wire; qty. 10

NOTE: ADD "-100" TO THE END OF THE ABOVE HD CHROME ZIRCONIUM CONTACT TIP PART NUMBERS FOR QUANTITIES OF 100.

ACCULOCK™ HDP CONTACT TIPS

T-A035WH	for 0.035" (0.9 mm) wire; qty. 10	T-A045WH	for 0.045" (1.2 mm) wire; qty. 10
T-A039WH	for 0.039" (1.0 mm) wire; qty. 10	T-A052WH	for 0.052" (1.3 mm) wire; qty. 10

NOTE: ADD "-100" TO THE END OF THE ABOVE HD CHROME ZIRCONIUM CONTACT TIP PART NUMBERS FOR QUANTITIES OF 100.

ACCULOCK™ TEACH POINTERS [USED FOR COBOT PROGRAMMING]

T-A001TP	Adjustable teach pointer	T-A075TP	Teach pointer, 3/4" CTWD
T-A050TP	Teach pointer, 1/2" CTWD	T-A10MTP	Teach pointer, 10 mm CTWD
T-A062TP	Teach pointer, 5/8" CTWD	T-A15MTP	Teach pointer, 15 mm CTWD

ACCULOCK™ R GAS DIFFUSERS

D-ATTH	Gas diffuser, thread-on, AccuLock™ R	D-ATSH	Gas diffuser, slip-on, AccuLock™ R
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NOTE: ADD "-100" TO THE END OF THE ABOVE GAS DIFFUSER PART NUMBERS FOR QUANTITIES OF 100.

TREGASKISS® NOZZLES

PART NUMBER	DESCRIPTION	STYLE	CONFIGURATOR DIGIT
401-14-62	HD - 5/8" bore, 1/8" recess (copper)	Thread-on	D
401-43-62	SD - 5/8" bore, 1/8" recess (copper)	Thread-on	G
401-18-62	SD - 5/8" bore, 1/8" stick out (copper)	Thread-on	E
401-20-62	HD - 5/8" bore, 1/8" stick out (copper)	Thread-on	L
401-30-62T	SD - 5/8" bore, 1/8" stick out (bottleneck, brass)	Thread-on	4
401-6-62	HD - 5/8" bore, 1/8" recess (copper)	Slip-on	A
401-8-62	SD - 5/8" bore, 1/8" stick out (copper)	Slip-on	G
401-48-62	HD - 5/8" bore, flush tip (bottleneck, copper)	Slip-on	K
401-81-62	HD - 5/8" bore, 1/8" stick out (copper)	Slip-on	D
401-71-62	HD - 5/8" bore, 1/8" recess (bottleneck, brass)	Slip-on	N
401-87-62	HD - 5/8" bore, 1/8" stick out (brass)	Slip-on	P
401-30-62	HD - 5/8" bore, 1/8" stick out (bottleneck, brass)	Slip-on	3

TOUGH GARD® ANTI-SPATTER LIQUID



This ready-to-use water-soluble, non-toxic product creates a sacrificial surface that reduces spatter adhesion. This prolongs the life of your consumables and minimizes downtime due to nozzle cleaning which can help reduce your operating and maintenance costs.

TG-101-32SP 32 fl. oz. / 946 mL (spray bottle)

FOR FURTHER INFORMATION VISIT BERNARDTREGASKISS.COM/TOUGHGARD

CONSUMABLE OPTIONS [CONTINUED]

QUICK LOAD® LINERS

415-26	Liner retainer
415-24	Liner retainer (required for 3/32" wire)
415-30-6Q	for 0.030" (0.8 mm) wire; 6' (1.8 m)
415-30-15Q	for 0.030" (0.8 mm) wire; 15' (5.0 m)
415-35-6Q	for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 6' (1.8 m)
415-35-10Q	for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 10' (3.05 m)
415-35-15Q	for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 15' (5.0 m)
415-116-6Q	for 0.052" (1.3 mm) - 1/16" (1.6 mm) wire; 6' (1.8 m)
415-116-10Q	for 0.052" (1.3 mm) - 1/16" (1.6 mm) wire; 10' (3.05 m)
415-116-15Q	for 0.052" (1.3 mm) - 1/16" (1.6 mm) wire; 15' (5.0 m)
415-564-6Q	for 1/16" (1.6 mm) - 5/64" (2.0 mm) wire; 6' (1.8 m)
415-564-15Q	for 1/16" (1.6 mm) - 5/64" (2.0 mm) wire; 15' (5.0 m)
415-332-6Q	for 0.078" (2.0 mm) - 3/32" (2.4 mm) wire; 6' (1.8 m) (requires 415-24 retainer)
415-332-15Q	for 0.078" (2.0 mm) - 3/32" (2.4 mm) wire; 15' (5.0 m) (requires 415-24 retainer)

QUICK LOAD E-Z FEED™ LINERS — FOR CORED AND ALUMINUM WIRE

415-31	Liner retainer
415-35-062Q	for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 6' (1.8 m) (requires 415-26 retainer)
415-116-062Q	for 0.045" (1.2 mm) - 1/16" (1.6 mm) wire; 6' (1.8 m) (requires 415-31 retainer)

POLYMER LINERS — FOR ALUMINUM WIRE [MUST BE USED WITH BELOW JUMP LINERS]

415-45-01	for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 6' (1.8 m)
415-45-02	for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 10' (3.05 m)
415-45-03	for 0.035" (0.9 mm) - 0.045" (1.2 mm) wire; 15' (5.0 m)
415-116-21	for 0.045" (1.2 mm) - 1/16" (1.6 mm) wire; 6' (1.8 m)
415-116-22	for 0.045" (1.2 mm) - 1/16" (1.6 mm) wire; 10' (3.05 m)
415-116-23	for 0.045" (1.2 mm) - 1/16" (1.6 mm) wire; 15' (5.0 m)

JUMP LINERS [USED WITH ABOVE POLYMER LINERS FOR ALUMINUM WIRE]

415-25	for 0.030" (0.8 mm) - 1/16" (1.6 mm) wire; 8"
415-25-13	for 0.030" (0.8 mm) - 1/16" (1.6 mm) wire; 13"

NECK OPTIONS

AIR-COOLED NECKS

405-22QC	22 degree neck
405-45QC	45 degree neck

POWER PINS OPTIONS

POWER PINS

425-20E	Euro	214-7	Lincoln®	214-30	Panasonic®
214-17	Fronius®	214-40	Lincoln® (short)	214	Tweco® #4
425E	L-Tec® Euro	214-1	Miller®	214-12	Tweco® #5
				214-18	Tweco® #5 (external gas line)

MOUNTING OPTIONS [SOLD SEPARATELY]

MOUNTING ARM ASSEMBLY

OPTION A

- BAS2201A** Mounting arm assembly for 22 degree neck, standard, TCP 350 mm, for all cobot models
- BAS4501A** Mounting arm assembly for 45 degree neck, standard, TCP 350 mm, for all cobot models

OPTION B

- BAS2201B** Mounting arm assembly for 22 degree neck, with free drive switch for controller I/O connection (3-pin, 5 meter cable, not terminated), TCP 350 mm, for all cobot models
- BAS4501B** Mounting arm assembly for 45 degree neck, with free drive switch for controller I/O connection (3-pin, 5 meter cable, not terminated), TCP 350 mm, for all cobot models

OPTION C

- BAS2201C** Mounting arm assembly for 22 degree neck, with free drive switch for UR wrist I/O connection (8-pin connector), TCP 350 mm, for Universal Robots (UR) only
- BAS4501C** Mounting arm assembly for 45 degree neck, with free drive switch for UR wrist I/O connection (8-pin connector), TCP 350 mm, for Universal Robots (UR) only'

MOUNTING ARM ASSEMBLY - OPTION B

FREE DRIVE SWITCH FOR
CONTROLLER I/O CONNECTION
(3-pin, 5 meter cable, not terminated)



MOUNTING ARM ASSEMBLY - OPTION C

FREE DRIVE SWITCH FOR
UR WRIST I/O CONNECTION
(8-pin connector)



INSULATING/TRANSITION DISCS

FOR UNIVERSAL ROBOT (UR) COBOTS:

- 59D06** Insulating disc for Universal Robot cobot models: UR5, UR5e, UR10, UR10e, UR16, UR16e

FOR FANUC® COBOTS:

- 59D06** Insulating disc for Fanuc cobot models: CRX-5iA, CRX-10iA, CRX-10iA/L, CRX-20iA/L, CRX-25iA
- 59DT-010** Insulating disc for Fanuc cobot models: CR-4iA, CR-7iA, CR-7iA/L, CR-14iA/L, CR-15iA, CR-35iA
*kit includes transition disc and 59D01 insulating disc

FOR YASKAWA MOTOMAN COBOTS:

- 59DT-013** Insulating disc for Yaskawa Motoman cobot models: HC10DT-XP
*kit includes transition disc and 59D02 insulating disc

REPLACEMENT UNICABLE [SOLD SEPARATELY]

UNICABLES

- BA1UXXS** Replaceable uncable, solid mount
- EBA1UXXS** Replaceable uncable, solid mount (Euro)

NOTE: XX IN THE PART NUMBERS ABOVE REPRESENT CABLE LENGTH; I.E. BA1U04S = 4', BA1U04.5S = 4.5', BA1U10S = 10', ETC.
(REFER TO ORDERING INFORMATION ON PAGE 8 FOR AVAILABLE CABLE LENGTHS)

ORDERING INFORMATION

STEP #1: TREGASKISS® BA1 COBOT MIG GUNS

BA1 Series			Gun Style	Neck	Option #1	Contact Tip + Diffuser ⁺	Cable Length	Nozzle	Option #2	Wire Size	Power Pin
B	A	1	2	A	A	B	C	D	0	E	M
			2 Solid mount	AIR-COOLED	A No options	ACCULOCK™ FOR SLIP-ON NOZZLES	A 3'	SLIP-ON	A No options	QUICK LOAD® E-Z FEED™ LINER^ FOR CORED WIRE	E Euro 425-20E
				A 22 degree 405-22QC B 45 degree 405-45QC		A T-A0XXCH* + D-ATSH B T-A0XXZH** + D-ATSH C T-A0XXWH*** + D-ATSH FOR THREAD-ON NOZZLES D T-A0XXCH* + D-ATTH E T-A0XXZH** + D-ATTH F T-A0XXWH*** + D-ATTH	B 3.5' C 4' D 4.5' E 5' F 5.5' G 6' J 7' L 8' N 9' R 10' S 12' T 15'	A 401-6-62 D 401-81-62 G 401-8-62 K 401-48-62 N 401-71-62 P 401-87-62 3 401-30-62 THREAD-ON D 401-14-62 E 401-18-62 G 401-43-62 L 401-20-62 4 401-30-62T		A 0.035" N 1.0 mm P 0.045" W 0.052" Y 1/16" QUICK LOAD LINER B 0.030" C 0.035" D 1.0 mm E 0.045" G 0.052" J 1/16" K 0.070" L 0.078" M 3/32" POLYMER LINER FOR ALUMINUM WIRE R 0.035" T 1/16" U 0.045"	F Fronius® 214-17 L Lincoln® 214-7 M Miller® 214-1 C L-Tec® Euro 425E P Panasonic® 214-30 R Tweco® #5 (external gas line) 214-18 S Lincoln® (short) 214-40 T Tweco #4 214 W Tweco #5 214-12

+ WIRE SIZE = XX

* NOT AVAILABLE FOR 0.078" WIRE SIZE

** AVAILABLE FOR 0.030", 0.035", 1.0 MM AND 0.045" WIRE SIZES

*** AVAILABLE FOR 0.035", 1.0 MM, 0.045" AND 0.052" WIRE SIZES

^ QUICK LOAD PRO LINER FEATURES A SPECIAL PROFILE AND COATING FOR APPLICATIONS REQUIRING EXTRA WIRE FEEDABILITY;

NOT AVAILABLE IN CABLE LENGTHS LONGER THAN 6 FEET: FOR CORED WIRE

+ WIRE SIZE = XX
* NOT AVAILABLE FOR 0.078" WIRE SIZE
** AVAILABLE FOR 0.030", 0.035", 1.0 MM AND 0.045" WIRE SIZES
*** AVAILABLE FOR 0.035", 1.0 MM, 0.045" AND 0.052" WIRE SIZES
^ QUICK LOAD PRO LINER FEATURES A SPECIAL PROFILE AND COATING FOR APPLICATIONS REQUIRING EXTRA WIRE FEEDABILITY;
NOT AVAILABLE IN CABLE LENGTHS LONGER THAN 6 FEET; FOR CORED WIRE

STEP #2: INSULATING/TRANSITION DISC

Select your insulating disc from page 7 and enter it here:

STEP #3: MOUNTING ARM

Select your mounting arm from page 7 and enter it here:

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