

Low Alloy / Gas Shielded / Metal Cored

**PRODUCT DATA SHEET** 

### **FEATURES**

- This electrode is intended for single and multiple pass welding of certain high strength, low alloy steels, in the flat and horizontal positions.
- Ideal choice for joining low alloy, high strength steels such as HY-100 and A514.
- This electrode is specifically formulated for superior arc stability, making it suitable for high strength steel robotic welding applications.

#### CONFORMANCES

AWS A5.28 E120C-G

**ASME SFA 5.28** E120C-G

# **DIAMETERS** (in [mm])

0.040 (1.0), 0.045 (1.2)

#### **POSITIONS**



## **SHIELDING GAS**

90% Ar/ 10% CO2 Flow Rate: 40 - 50 CFH

#### **POLARITY**

Direct Current Electrode Positive (DCEP)

### **TYPICAL WELD DEPOSIT CHEMISTRY (WT%)**

Shielding Gas	С	Cr	Mn	Мо	Ni	P	S	Si
90%Ar / 10%CO2	0.08	0.33	1.91	0.48	2.28	0.008	0.008	0.66

#### **TYPICAL MECHANICAL PROPERTIES**

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp
90%Ar / 10%CO2	140 (966)	129 (890)	20	As-Welded	-



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Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.

#### **RECOMMENDED WELDING PARAMETERS \*\***

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.040 (1.0 mm)	75% Ar/25% CO2	Flat & Horizontal	185 (4.7)	300	25	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	205 (5.2)	365	26	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	225 (5.7)	420	27.5	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	240 (6.1)	490	29	5/8 - 3/4 (16 - 19)
0.045 (1.2 mm)	75% Ar/25% CO2	Flat & Horizontal	200 (5.1)	260	25	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	220 (5.6)	305	26	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	240 (6.1)	360	27.5	5/8 -3/4 (16 - 19)
		Flat & Horizontal	255 (6.5)	405	29	5/8 -3/4 (16 - 19)

Welding parameters are for 75% Ar/25% CO2, at higher levels of argon the voltage should be decreased: 1-1 1/2 volts for 90% Ar/10% CO2.

# PACKAGING (lbs (kgs))

33 (15) Spools, 60 (27.2) Coils, 500 (226.8) Round Drum, 800 (362.9) Hex Drum, 900 (408.2) Hex Drum

#### STORAGE AND HANDLING

All products should be stored in original packaging, in dry conditions and handled with care. For more information refer to our website.



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<sup>\*</sup> WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance
\*\*The parameters listed are recommended starting points of operation and the ranges for amperage, wfs, and voltage could be extended based on fitness for application. For products with "allposition" capability, as determined and listed in classification, the position recommendation can be determined based on operator skill and material thickness and isn't limited to the listing.

<sup>\*</sup>Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.