Low Alloy / Gas Shielded / Flux Cored

PRODUCT DATA SHEET

FEATURES

- The basic slag system of this electrode provides better mechanical properties and diffusible hydrogen levels in the weld deposit than T-1 (rutile) slag systems.
- Globular arc transfer, producing more spatter than T-1 slag systems but much improved over usual T-5 types.
- Slag removal and bead geometry are similar to those of E12018 electrodes.
- Ideal selection for welding high strength, low alloy steels such as T-1, HY-100, ASTM A514, and others of similar strength. Also use for repair of high strength castings.
- Designed for 100% CO2 shielding gas. If you wish to use 75% Ar / 25% CO2, Select 125-K4M is the preferred product

CONFORMANCES

AWS A5.29

E120T5-K4C

DIAMETERS (in (mm))

0.045 (1.2), 1/16 (1.6), 3/32 (2.4)

POSITIONS



SHIELDING GAS

100% 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	V
100%CO2	0.06	0.42	2.15	0.35	2.27	0.006	0.009	0.43	0.006

TYPICAL MECHANICAL PROPERTIES

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp	CVN @ -60°F (-50°C) ft-lb (J)
100%CO2	127 (879)	113 (778)	19	As-Welded	-	39 (53)



Revision: 1/17/2025

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)	
0.045 (1.2 mm)	100% CO2	Flat & Horizontal	Flat & Horizontal 275 (7.0)		25	5/8 (16)	
		Flat & Horizontal	350 (8.9)	190	27	5/8 - 3/4 (16 - 19)	
		Flat & Horizontal	435 (11.0)	220	29	5/8 - 3/4 (16 - 19)	
1/16 (1.6 mm)	100% CO2	Flat & Horizontal	250 (6.4)	265	25	3/4 (19)	
		Flat & Horizontal	280 (7.1)	290	27	3/4 - 1 (19 - 25)	
		Flat & Horizontal	315 (8.0)	315	29	3/4 - 1 (19 - 25)	
3/32 (2.4 mm)	100% CO2	Flat & Horizontal	120 (3.0)	275	25	1 1/4 (32)	
		Flat & Horizontal	150 (3.8)	335	27	1 1/4 - 1 1/2 (32 - 38)	
		Flat & Horizontal	165 (4.2)	400	29	1 1/4 - 1 1/2 (32 - 38)	

^{*} WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance

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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**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.

^{*}Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.