

Select 100-K3

Low Alloy / Gas Shielded / Flux Cored

PRODUCT DATA SHEET

FEATURES

- Designed for flat or horizontal welding in single or multiple pass applications.
- Intended for use with 100% CO₂ shielding gas with a stable, small to medium droplet arc transfer that produces low spatter.
- Slag removes easily with no residual slag where minimal clean-up is required.
- Intended for single and multiple pass welding of structural steel and fabrications utilizing high strength, low alloy steels, such as HY-100, ASTM A514, A633, and A710.
- Typical applications include low temperature storage tanks, offshore drilling rigs, shipbuilding, and construction machinery where excellent low-temperature toughness is required.

CONFORMANCES

AWS A5.29

E100T1-K3C

ASME SFA 5.29

E100T1-K3C

DIAMETERS (in [mm])

0.045 (1.2), 1/16 (1.6), 5/64 (2.0), 3/32 (2.4)

POSITIONS



SHIELDING GAS

100% CO₂

Flow Rate: 40 - 50 CFM

POLARITY

Direct Current Electrode Positive (DCEP)

TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

Shielding Gas	C	Cr	Mn	Mo	Ni	P	S	Si	V
100%CO ₂	0.06	0.05	1.22	0.35	1.94	0.006	0.009	0.25	0.01

TYPICAL MECHANICAL PROPERTIES

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp	CVN @ 0°F (-20°C) ft-lb (J)
100%CO ₂	106 (731)	94 (648)	23	As-Welded	-	40 (54)



Revision: 9/13/2022

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.

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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	250 (6.4)	175	24	5/8 (16)
		Flat & Horizontal	340 (8.6)	205	27	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	440 (11.2)	235	29	5/8 - 3/4 (16 - 19)
1/16 (1.6 mm)	100% CO2	Flat & Horizontal	235 (6.0)	245	24	3/4 (19)
		Flat & Horizontal	280 (7.1)	275	27	3/4 - 1 (19 - 25)
		Flat & Horizontal	325 (8.3)	320	29	3/4 - 1 (19 - 25)
5/64 (2.0 mm)	100% CO2	Flat & Horizontal	145 (3.7)	280	25	1 (25)
		Flat & Horizontal	190 (4.8)	320	27	1 - 1 1/4 (25 - 32)
		Flat & Horizontal	230 (5.8)	365	29	1 - 1 1/4 (25 - 32)
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

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

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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