Select 111-K3M

Low Alloy / Gas Shielded / Flux Cored

PRODUCT DATA SHEET

FEATURES

- Intended for single and multiple pass welding of various high strength, low alloy steels in all positions.
- Well suited for structural and fabrication welding of steels such as ASTM A514, A710, and HY-80
- Typical applications would be cranes, trailers, and mining truck frames.

CONFORMANCES

AWS A5.29

E111T1-K3M-JH4

ASME SFA 5.29

E111T1-K3M-JH4

DIAMETERS (in (mm))

0.045 (1.2), 0.052 (1.3), 1/16 (1.6)

POSITIONS









SHIELDING GAS

75-80% Ar/Balance CO2 Flow Rate: 40 - 50 CFM

POLARITY

Direct Current Electrode Positive (DCEP)

TYPICAL WELD DEPOSIT CHEMISTRY (WT%)

Shielding Gas	С	Cr	Mn	Мо	Ni	P	S	Si	V
75%Ar / 25%CO2	0.07	0.06	2.03	0.38	1.99	0.007	0.003	0.38	0.014

TYPICAL MECHANICAL PROPERTIES

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp	CVN @ -20°F (-30°C) ft-lb (J)	CVN @ -40°F (-40°C) ft-lb (J)
75%Ar / 25%CO2	120 (828)	108 (745)	20	As-Welded	-	47 (64)	38 (52)



Revision: 9/14/2022

RECOMMENDED WELDING PARAMETERS

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.045 (1.2 mm)		All Positions	200 (5.1)	145	23	1/2 - 5/8 (13 - 16)
	75% Ar/25% CO2	All Positions	235 (6.0)	160	24	1/2 - 5/8 (13 - 16)
		All Positions	300 (7.6)	185	25	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	375 (9.5)	215	26	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	440 (11.2)	235	28	5/8 - 3/4 (16 - 19)
0.052 (1.3 mm)	75% Ar/25% CO2	All Positions	170 (4.3)	155	23	5/8 - 3/4 (16 - 19)
		All Positions	200 (5.1)	175	24	5/8 - 3/4 (16 - 19)
		All Positions	250 (6.4)	225	25	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	310 (7.9)	250	26	3/4 - 1 (19 - 25)
		Flat & Horizontal	395 (10.0)	280	28	3/4 - 1 (19 - 25)
1/16 (1.6 mm)		All Positions	125 (3.2)	165	23	5/8 - 3/4 (16 - 19)
	75% Ar/25% CO2	All Positions	150 (3.8)	195	24	5/8 - 3/4 (16 - 19)
		All Positions	180 (4.6)	225	25	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	265 (6.7)	280	26	3/4 - 1 (19 - 25)
		Flat & Horizontal	325 (8.3)	320	28	3/4 - 1 (19 - 25)

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

APPROVALS

Agency	Approval	Shielding Gas	Diameter(s) in (mm)	
ABS	E111T1-K3MJ	M21 (75%Ar / 25%CO2)	0.045 (1.2) - 1/16 (1.6)	

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.



Revision: 9/14/2022

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