

Select 80W-S

Low Alloy / Flux Shielded / Submerged Arc

PRODUCT DATA SHEET

FEATURES

- This electrode is designed to be used in applications where weathering steel is used. Typical applications include use in bridges and other structural applications of weathering steels such as ASTM A588, A242 and A709-50W.
- The weld deposit chemistry is designed to approximate the composition of the base metal, thus matching the mechanical properties, corrosion resistance, and color.
- The recommended flux is ArcFlux BF-10MW.

CONFORMANCES

AWS A5.23

F8A6-ECW-W (ARCFLUX BF-10 MW)

DIAMETERS [in (mm)]

1/8 (3.2), 5/32 (4.0)

POSITIONS



FLUX

ARCFLUX BF-10MW

POLARITY

DCEP

TYPICAL WELD DEPOSIT CHEMISTRY [WT%]

Flux	C	Cr	Cu	Mn	Ni	P	S	Si
ARCFLUX BF-10 MW	0.04	0.49	0.61	1.39	0.64	0.009	0.009	0.48

TYPICAL MECHANICAL PROPERTIES

Flux	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp	CVN @ -20°F (-30°C) ft-lb (J)	CVN @ -50°F (-46°C) ft-lb (J)
ARCFLUX BF-10 MW	92 (633)	80 (554)	26	As-Welded	-	66 (89)	54 (73)



Revision: 2/23/2024

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)	Flux	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
1/8 (3.2 mm)	ARCFLUX BF-10 MW	Flat & Horizontal	55 (1.4)	350	28.5	1 - 1 1/4 (25 - 32)
		Flat & Horizontal	75 (1.9)	450	29.5	1 - 1 1/4 (25 - 32)
		Flat & Horizontal	100 (2.5)	550	30.5	1 - 1 1/4 (25 - 32)
5/32 (4.0 mm)	ARCFLUX BF-10 MW	Flat & Horizontal	50 (1.3)	450	30	1 - 1 1/4 (25 - 32)
		Flat & Horizontal	65 (1.7)	550	31	1 - 1 1/4 (25 - 32)
		Flat & Horizontal	80 (2.0)	650	32	1 - 1 1/4 (25 - 32)

* 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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