



ESB 48



Basic electrode with high mechanical properties – AWS/ASME SFA 5.1 E7018

Key Benefits

- Weld metal recovery is appx. 115 %. Smooth and clean welds merging into base metal without undercuts. Good gap bridging properties.
- Welds are of X-ray quality. It is suited for depositing buffer layers on higher carbon steels.

Welding Positions



Typical applications

- Suitable for welding fabrication of dynamically loaded steel constructions, bridge, shipbuilding, pipe-line, pressure vessels, tanks, boiler and machines where high toughness is required.

Chemical Analysis in %

Requirements – AWS E7018 Typical Chemical Composition	%C 0.07	%Mn 1.1	%Si 0.4	%S	%P
Requirements - AWS E7018 Typical Chemical Composition	%Cr	%Mo	%V	%Cu	%Ti

Mechanical Properties

	Yield Strength MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Impact Energy J (ft = lbf)
Requirements - AWS E7018 As Welded	500 MPa	570 MPa	27	-30°C → 90J -40°C → 80J

Ordering Information

Product Number	Product/AWS Specification	Dimension mm/inches	Single Pack Weight kg/lb	Box Weight kg/lb
1124004M15	ESB 48 (E7018)	2.00 x 350 mm (5/64" x 14")	4.0 kg (8.8 lb)	12.0 kg (26.4 lb)
1124010M15	ESB 48 (E7018)	2.50 x 350 mm (3/32" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1124010M22	ESB 48 (E7018)	2.50 x 350 mm (3/32" x 14")	2.5 kg (5.5 lb)	15.0 kg (33.0 lb)
1124016M15	ESB 48 (E7018)	3.25 x 350 mm (1/8" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1124016M22	ESB 48 (E7018)	3.25 x 350 mm (1/8" x 14")	2.5 kg (5.5 lb)	15.0 kg (33.0 lb)
1124018M15	ESB 48 (E7018)	3.25 x 450 mm (1/8" x 18")	6.5 kg (14.3 lb)	19.5 kg (43.0 lb)
1124020M15	ESB 48 (E7018)	4.00 x 350 mm (5/32" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1124020M22	ESB 48 (E7018)	4.00 x 350 mm (5/32" x 14")	2.5 kg (5.5 lb)	15.0 kg (33.0 lb)
1124024M15	ESB 48 (E7018)	4.00 x 450 mm (5/32" x 18")	6.5 kg (14.3 lb)	19.5 kg (43.0 lb)
1124024M22	ESB 48 (E7018)	4.00 x 450 mm (5/32" x 18")	2.5 kg (5.5 lb)	15.0 kg (33.0 lb)
1124025M15	ESB 48 (E7018)	4.00 x 450 mm (5/32" x 18")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1124032M15	ESB 48 (E7018)	5.00 x 450 mm (3/16" x 18")	6.5 kg (14.3 lb)	19.5 kg (43.0 lb)
1124033M15	ESB 48 (E7018)	5.00 x 450 mm (3/16" x 18")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1124038M15	ESB 48 (E7018)	6.00 x 450 mm (3/16" x 18")	6.5 kg (14.3 lb)	19.5 kg (43.0 lb)

Note: All products are vacuum packed.



Box



Single Pack