

Excalibur® 308/308L-17

Stainless • AWS E308-17, E308L-17

Typical Applications

- ▶ 304 and 304L stainless steels
- ▶ Common austenitic stainless steels referred to as “18-8” steels
- ▶ ASTM A743 or A744 Types CF-8 and CF-6

Conformances

AWS A5.4/A5.4M: 2006	E308-17, E308L-17
ASME SFA-A5.4:	E308-17, E308L-17
CWB/CSA W48-06:	E308-17, E308L-17

Welding Positions

Flat & Horizontal

Key Features

- ▶ Flux coating provides smooth arc transfer in the flat and horizontal positions
- ▶ Versatile electrode designed to weld several types of austenitic stainless steels
- ▶ Q2 Lot® - Certificate showing actual deposit composition and ferrite number (FN) by ferrite scope available online
- ▶ Designed with low carbon levels to help eliminate carbide precipitation in high temperature service

DIAMETERS / PACKAGING

Diameter in (mm)	Length in (mm)	1 lb (0.5 kg) Plastic Tube 6 lb (2.7 kg) Master Carton	8 lb (3.6 kg) Easy Open Can	10 lb (4.5 kg) Easy Open Can
3/32 (2.4)	12 (300)	ED033093	ED033089	ED033090 ED033091 ED033092
1/8 (3.2)	14 (350)			
5/32 (4.0)	14 (350)			
3/16 (4.8)	14 (350)			

MECHANICAL PROPERTIES⁽¹⁾ – As Required per AWS A5.4/A5.4M: 2006

	Yield Strength ⁽²⁾ MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Ferrite Number
Requirements				
AWS E308-17	Not Specified	550 (80) min.	35 min.	Not Specified
AWS E308L-17	Not Specified	520 (75) min.	35 min.	Not Specified
Typical Performance⁽³⁾ - As-Welded	425 - 470 (62 - 68)	585 - 635 (85 - 92)	42 - 50	6 - 11

DEPOSIT COMPOSITION⁽¹⁾ – As Required per AWS A5.4/A5.4M: 2006

	%C ⁽⁴⁾	%Cr	%Ni	%Mo	%Mn
Requirements - AWS E308L-17	0.04 max.	18.0 - 21.0	9.0 - 11.0	0.75 max.	0.5 - 2.5
Typical Performance⁽³⁾	≤0.03	20.0 - 20.5	9.7 - 9.9	≤0.20	0.6 - 0.7
	%Si	%P	%S	%Cu	
Requirements - AWS E308L-17	1.00 max.	0.04 max.	0.03 max.	0.75 max.	
Typical Performance⁽³⁾	0.56 - 0.77	≤0.03	≤0.02	≤0.22	

TYPICAL OPERATING PROCEDURES

Polarity ⁽⁵⁾	Current (Amps)			
	3/32 in (2.4 mm)	1/8 in (3.2 mm)	5/32 in (4.0 mm)	3/16 in (4.8 mm)
DC+	40 - 80	75 - 110	95 - 150	130 - 200
AC	40 - 80	75 - 110	95 - 150	130 - 200

IMPORTANT: SPECIAL VENTILATION AND/OR EXHAUST REQUIRED

Fumes from the normal use of some welding products can contain significant quantities of components - such as chromium and manganese - which can lower the 5.0 mg/m³ maximum exposure guideline for general welding fume. BEFORE USE, READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET (MSDS) FOR THIS PRODUCT AND SPECIFIC INFORMATION PRINTED ON THE PRODUCT CONTAINER.

⁽¹⁾Typical all weld metal. ⁽²⁾Measured with 0.2% offset. ⁽³⁾See test results disclaimer on pg. 16. ⁽⁴⁾AWS Requirement for E308-17 is 0.08% max. carbon. ⁽⁵⁾Preferred polarity is listed first.