



# CORE-BRIGHT 309L

Designed primarily for overlay applications on carbon steel. May also be used for welding 309 stainless and joining dissimilar metals.

<b>Classifications</b>	AWS A5.22 : E309LTO-3
<b>Approvals</b>	CERTIFIED BY C.W.B. - AWS A5.22 AWS A5.22 E309LTO-3 ASME SFA 5.22

Approvals are based on factory location. Please contact ESAB for more information.

## Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	440 MPa (64 ksi)	630 MPa (91 ksi)	34 %

## Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate	TTW Dist.	Deposition Efficiency %
1.2 mm (.045 in.)	110 A	26 V	762 cm/min (300 in./min)	2.6 kg/h (5.8 lb/h)	19 mm (3/4 in.)	86 %
1.2 mm (.045 in.)	150 A	27 V	1016 cm/min (400 in./min)	3.67 kg/h (8.1 lb/h)	19 mm (3/4 in.)	86 %
1.2 mm (.045 in.)	180 A	27 V	1270 cm/min (500 in./min)	4.45 kg/h (9.8 lb/h)	19 mm (3/4 in.)	87 %
1.6 mm (1/16 in.)	150 A	27 V	508 cm/min (200 in./min)	3.08 kg/h (6.8 lb/h)	19 mm (3/4 in.)	87 %
1.6 mm (1/16 in.)	210 A	28 V	762 cm/min (300 in./min)	4.67 kg/h (10.3 lb/h)	19 mm (3/4 in.)	87 %
1.6 mm (1/16 in.)	270 A	29 V	1016 cm/min (400 in./min)	6.12 kg/h (13.5 lb/h)	19 mm (3/4 in.)	85 %
2.4 mm (3/32 in.)	250 A	26 V	284 cm/min (112 in./min)	3.8 kg/h (8.4 lb/h)	25.4 mm (1 in.)	85 %
2.4 mm (3/32 in.)	250 A	26 V	338 cm/min (133 in./min)	4.5 kg/h (10.0 lb/h)	38 mm (1-1/2 in.)	89 %
2.4 mm (3/32 in.)	300 A	28 V	345 cm/min (136 in./min)	4.6 kg/h (10.2 lb/h)	25.4 mm (1 in.)	85 %
2.4 mm (3/32 in.)	300 A	28 V	402 cm/min (178 in./min)	6.1 kg/h (13.5 lb/h)	38 mm (1-1/2 in.)	89 %
2.4 mm (3/32 in.)	350 A	29 V	467 cm/min (184 in./min)	6.3 kg/h (13.9 lb/h)	25.4 mm (1 in.)	88 %
2.4 mm (3/32 in.)	350 A	29 V	577 cm/min (227 in./min)	7.8 kg/h (17.1 lb/h)	38 mm (1-1/2 in.)	87 %
2.4 mm (3/32 in.)	400 A	30 V	561 cm/min (221 in./min)	7.3 kg/h (16.2 lb/h)	25.4 mm (1 in.)	85 %
2.4 mm (3/32 in.)	400 A	30 V	767 cm/min (302 in./min)	10.3 kg/h (22.7 lb/h)	38 mm (1-1/2 in.)	87 %
2.4 mm (3/32 in.)	450 A	30 V	693 cm/min (273 in./min)	9.3 kg/h (20.6 lb/h)	25.4 mm (1 in.)	85 %
2.4 mm (3/32 in.)	450 A	30 V	871 cm/min (343 in./min)	11.7 kg/h (25.9 lb/h)	38 mm (1-1/2 in.)	87 %
2.0 mm (5/64 in.)	210 A	24 V	348 cm/min (137 in./min)	3.2 kg/h (7.1 lb/h)	19 mm (3/4 in.)	86 %
2.0 mm (5/64 in.)	250 A	26 V	460 cm/min (181 in./min)	4.3 kg/h (9.5 lb/h)	19 mm (3/4 in.)	87 %
2.0 mm (5/64 in.)	300 A	27 V	599 cm/min (236 in./min)	5.4 kg/h (12.0 lb/h)	19 mm (3/4 in.)	85 %