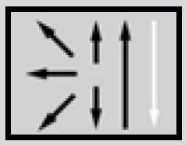
BÖHLER AWS E309L-17

Classifications			Operating data	
EN ISO 3581-A	AWS A5.4 / SFA-5.4		Welding positions	Polarity
E 23 12 L R 3 2	E309L-17			

Typical analysis of all weld metal, wt. %					
	C	Si	Mn	Cr	Ni
	0.02	0.7	0.8	23.2	12.5

Mechanical properties, all weld metal (single values typical)						
	Condition	Yield strength $R_{p0.2\%}$ MPa	Tensile strength R_m MPa	Elongation A ($L_0 = 5d_0$) %	CVN Impact toughness ISO-V KV J 20 °C	−60 °C
	As welded	450 (≥ 320)	570 (≥ 520)	37 (≥ 25)	55	42 (≥ 32)

Steels to be welded

EN	ASTM

Primarily used for surfacing (buffer layer) unalloyed or low-alloyed steels and when joining non-molybdenum-alloyed stainless and carbon steels. Joints and mixed joints between austenitic steels such as
1.4301 X5CrNi18-10, 1.4306 X2CrNi19-11, 1.4308 GX5CrNi19-10, 1.4401 X5CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4408 GX5CrNiMo19-11-2, 1.4435 X2CrNiMo18-14-3, 1.4436 X3CrNiMo17-12-3, 1.4541 X6CrNiTi18-10, 1.4550 X6CrNiNb18-10, 1.4552 GX5CrNiNb19-11, 1.4571 X6CrNiMoTi17-12-2, 1.4580 X6CrNiMoNb17-12-2, 1.4581 GX5CrNiMoNb19-11-2, 1.4583 X10CrNi-MoNb18-12, 1.4948 X6CrNi18-10
UNS S30400, S30403, S30809, S31600, S31603, S31635, S32100, S34700, S31640
AISI 304, 304L, 316, 316L, 316Ti, 321, 347
or mixed joints between austenitic and heat resistant steels such as
1.4713 X10CrAlSi7, 1.4724 X10CrAlSi13, 1.4742 X10CrAlSi18, 1.4826 GX40CrNiSi22-10, 1.4828 X15CrNiSi20-12, 1.4832 GX25Cr-NiSi20-14, 1.4837 GX40CrNiSi25-12
with ferritic steels to pressure boiler steels P295GH and fine grained structural steels to P355N, ship building steel grades A – E, AH 32 – EH 36, A40 – F40, etc.

Approvals

ABS, CE

Carton Packaging

Weight: ~ 4.1 kg

Diameter:
2.5 x 300 mm
3.2 x 350 mm
4.0 x 350 mm