

**Classifications**

EN ISO 18275-A	AWS A5.5 / SFA-5.5	AWS A5.5M
E 89 4 Mn2Ni1CrMo B 4 2 H5	E12018-G	E8318-G
	(E12018M mod.)	(E8318M mod.)

**Characteristics and typical fields of application**

Basic coated NiCrMo alloyed electrode for welding of high strength steels (typical yield strength 890 MPa)  
 Low hydrogen content <5 ml/100 g (HD) in the weld metal. For high strength fine grained structural steels.  
 Suitable for bridge building, steel and crane construction; the weld metal is insensitive to cold cracking.

**Base materials**

Quenched and tempered fine grained structural steels up to 890 MPa yield strength.  
 High strength fine grained structural steels S890Q, S890QL, aldur 900 Q, aldur 900 QL, HY 130

**Typical analysis**

	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.08	0.40	1.45	0.80	2.20	0.50

**Mechanical properties of all-weld metal - typical values (min. values)**

Condition	Yield strength $R_{p0.2}$	Tensile strength $R_m$	Elongation A ( $L_0=5d_0$ )	Impact energy ISO-V KV J	
	MPa	MPa	%	20°C	-40°C
u	930 ( $\geq 890$ )	1000 (980 - 1180)	17	90	47

u untreated, as welded

**Operating data**

	Polarity	DC+	Dimension mm	Current A	
	Electrode identification	FOX EV 105 / E 12018-G/MIL		3.2 × 350	90 – 140
		12018-M2		4.0 × 450	140 – 190
	Redrying	300-350°C/2h		5.0 × 450	170 – 240

**Approvals**

CE