

Classifications

EN ISO 18275-A	AWS A5.5	AWS A5.5M
E 89 4 Mn2Ni1CrMo B 4 2 H5	E12018-G	E8318-G

Characteristics and typical fields of application

Basic coated electrode with high ductility and cracking resistance for high-strength fine-grained constructional steels.

Low-temperature ductility down to -40 °C . Easy weld ability in all positions except vertical-down. Preheating, interpass temperature and post weld heat treatment as required by the base metal.

Deposits have very low hydrogen contents ($\text{HD} < 5\text{ ml}/100\text{ g}$).

Base materials

Quenched and tempered fine-grained constructional steels with 890 MPa yield strength, QT-steels, low alloyed up to 1000 MPa tensile strength, XABO 890

Typical analysis of all-weld metal (wt.-%)

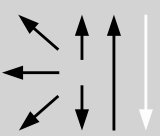
	C	Si	Mn	Cr	Ni	Mo	V
wt.-%	0.06	0.35	1.7	0.7	2.5	0.5	0.07

Mechanical properties of all-weld metal

Condition	Yield strength	Tensile strength	Elongation	Impact work	
	$R_{p0,2}$	R_m	A ($L_0=5d_0$)	ISO-V KV J	
	MPa	MPa	%	+20 °C	-40 °C
u	≥ 890	980 – 1180	≥ 15	≥ 47	≥ 47

u untreated, as welded

Operating data

	Polarity: DC (+)	Redrying if necessary: 300 – 350 °C, min. 2 h	Electrode identification: FOX EV 100 12018-G E 89 4 Mn2Ni1CrMo B	ø (mm)	L mm	Amps A
				3.2	350	100 – 140
				4.0	450	140 – 180
5.0	450	190 – 230				

Approvals

TÜV (07629.), VG 95132, CE