

## Classifications

EN ISO 18275-A	EN ISO 18275-B	AWS A5.5M	AWS A5.5 / SFA-5.5
E 55 6 1NiMo B 4 2 H5	E6218-G A H5	E6218-G H4R	E9018-G H4R
		E6218-D1 H4R (mod.)	E9018-D1 H4R (mod.)

## Characteristics and typical fields of application

Basic coated, Mo-Ni alloyed electrode with high ductility and crack resistance for applications on high-strength fine-grained steels. Suitable for service temperatures between  $-60^{\circ}\text{C}$  and  $+350^{\circ}\text{C}$ .

Metal recovery approximately 115%. Easy to handle in all positions except vertical-down. Very low hydrogen content (acc. AWS condition HD < 4 ml/100 g weld metal) with moisture resistant coating.

## Base materials

S460N, S460M, S460NL, S460ML, S460Q-S555Q, S460QL-S550QL, S460QL1-S550QL1, P460N, P460NH, P460NL1, P460NL2, L415NB, L415MB-L555MB, L415QB-L555QB, alform 500 M, 550 M, aldur 500 Q, 500 QL, 500 QL1, aldur 550 Q, 550 QL, 550 QL1, 20MnMoNi4-5, 15NiCuMoNb5-6-4, GE300

ASTM A 572 Gr. 65; A 633 Gr. E; A 738 Gr. A; A 852; API 5 L X60, X65, X70, X80, X60Q, X65Q, X70Q, X80Q

## Typical analysis

	C	Si	Mn	Ni	Mo
wt.-%	0.04	0.3	1.2	0.9	0.4


## 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	%	$20^{\circ}\text{C}$	$-60^{\circ}\text{C}$
u	590 ( $\geq 550$ )	670 ( $\geq 620 - 780$ )	24 ( $\geq 18$ )	160	70 ( $\geq 47$ )
s	590	670	24	130	

u untreated, as welded

s stress relieved  $580^{\circ}\text{C}/2\text{h}$  / furnace down to  $300^{\circ}\text{C}$

## Operating data

	Polarity	DC+	Dimension mm	Current A
	Electrode identification	FOX EV 70 9018-G E 55 6 1NiMo B	2.5 × 350	80 – 100
	Redrying	if necessary $300 - 350^{\circ}\text{C}$ , min. 2h	3.2 × 350	100 – 140
			4.0 × 450	140 – 180
			5.0 × 450	190 – 230

Preheat and interpass temperatures, as well as post-weld heat treatment as required by the base metal.

## Approvals

TÜV (00112), CE