

## Classification

**AWS A5.5**

E8016-G4R

## Characteristics and typical fields of application

Basic electrode excellent suited for positional welding of root passes using both D.C. negative and D.C. positive polarity as well as for filler and cover passes of pipes, tubes and structural/plates on DC or even AC polarity.

It is user friendly and provides a good gap bridging ability together with easy slag removal to ensure minimum grinding. Weld metal toughness is available down to -30 °C. Very low hydrogen content (HD < 4ml / 100 g weld metal as per AWS). BÖHLER FOX S E8016-G offers considerable time savings against AWS E8018 type electrodes when welding root passes due to increased travel speeds. Also the use of dia. 3.25 mm is possible for root passes in case of wall thicknesses of 8 mm and more.

## Base Materials

S235J2G3 - S355J2G3, L210NB - L450NB, L210MB - L450MB, P235GH - P295GH, E295, E335, S355J2G3, C35-C45, P310GH, S380N - S460N, P380NH - P460NH, S380NL - S460NL, S380NL1 - S460NL2, GE260 - GE300

API Spec. 5 L: X 42, X46, X 52, X 56, X 60, X 65

ASTM A516 Gr. 65, A572 Gr. 55, 60, 65, A633 Gr. E, A612, A618 Gr. I, A537 Gr. 1-3

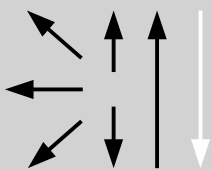
## Typical analysis of all weld metal (wt.-%)

C	Si	Mn	Ni
0.06	0.6	1.3	0.8

## Mechanical properties of all-weld metal

Heat treatment	Yield strength R <sub>e</sub> N/mm <sup>2</sup>	Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Elongation (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J	
				- 30 °C	- 50 °C
As Welded	MPa 540	MPa 620	% 29	80	50

## Operating data



### Polarity



Re-drying if necessary: 300 – 350°C, min. 2 h.

Preheated and interpass temperature as required by the base material. The optimum gap width for root passes is 2-3 mm, the root face should be in the range 2-2.5 mm.

## Approvals

## Size, Packaging and Electrical Operating Data

Size mm	Kg / Pack	Kg / Box	Amperage (A)
2.50 x 350	5.0	20.0	40 – 90
3.25 x 350	5.0	20.0	60 – 130
4.00 x 450	5.0	20.0	110 - 180