



Product Data Sheet

E 'Manual metal-arc welding'

OK 61.35

| | | | | | | |
|-----------------------------|---------------------------|------------------------------|--------------------|------------------------|------------------------|---------------|
| Prepared by A-C Thorsson | Qualified by Tero Borg | Approved by Tapio Huhtala | Reg no EN007128 | Cancelling EN005955 | Reg date 2016-02-25 | Page 1 (2) |
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REASON FOR ISSUE

Approvals revised. Hardness data provided under Other Data. N and Ferrite FN added under Chemical composition.

GENERAL

Basic stainless electrode of the 308L-type designed for positional welding such as piping. Suitable for applications where requirements concerning mechanical properties are demanding. Lateral expansion of min. 0.38 mm is met down to -120 °C.

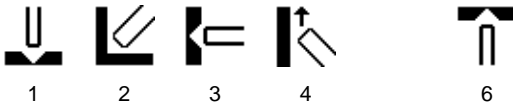
Polarity: DC+

Alloy Type: Austenitic CrNi

Coating Type: Basic

Ferrite Content: FN 4-8

WELDING POSITIONS



CLASSIFICATIONS Electrode

EN ISO 3581-A E 19 9 L B 2 2
SFA/AWS A5.4 E308L-15
Werkstoffnummer 1.4316

APPROVALS

NAKS/HAKC 2.5-5.0 mm
Seproz UNA 272580
VdTÜV 04811

APPROVAL COMMENT

NAKS/HAKC: Valid for lot numbers starting with SB

CHEMICAL COMPOSITION

All Weld Metal (%)

| | Min | Max | Nom |
|------------|------|-------|-----|
| C | | 0.04 | |
| Si | 0.20 | 0.70 | |
| Mn | 1.30 | 2.00 | |
| P | | 0.020 | |
| S | | 0.010 | |
| Cr | 18.0 | 20.0 | |
| Ni | 9.0 | 11.0 | |
| Mo | | 0.3 | |
| Cu | | 0.3 | |
| N | | 0.08 | |
| Ferrite FN | | | 6 |



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MECHANICAL PROPERTIES OF WELD METAL

| Properties | ISO | | AWS | |
|------------------------|-----|-----|-----|-----|
| | Min | Typ | Min | Typ |
| As welded | | | | |
| Rp0.2 (MPa) | 320 | | 320 | 445 |
| Rm (MPa) | 520 | | 520 | 610 |
| A4 (%) | | | 35 | 44 |
| A5 (%) | 32 | | | |
| Z (%) | | | 50 | 60 |
| Charpy V at 20°C (J) | | 100 | | |
| Charpy V at -120°C (J) | | 70 | | |
| Charpy V at -196°C (J) | 32 | 40 | | 40 |

ECONOMICS & CURRENT DATA

| Dimension (mm) | Current (A) | | W | η | N | B | H | T | U | Welding Positions |
|------------------------|-------------|-----|-----|--------|------|----|-----|----|----|-------------------|
| \varnothing x Length | Min | Max | | | | | | | | |
| 2.5 x 300 | 55 | 85 | 1.7 | 100 | 0.61 | 92 | 0.9 | 37 | 22 | 1,2,3,4,6 |
| 3.2 x 350 | 80 | 120 | 3.3 | 100 | 0.61 | 50 | 1.3 | 54 | 25 | 1,2,3,4,6 |
| 4.0 x 350 | 80 | 180 | 4.9 | 100 | 0.61 | 33 | 1.9 | 58 | 27 | 1,2,3,4,6 |
| 5.0 x 350 | 160 | 210 | 7.8 | 98 | 0.58 | 22 | 2.3 | 70 | 26 | 1,2,3 |

W = Weight (kg / 100 electrodes)

η = Efficiency (g weld metal x 100 / g core wire)

N = Effective value (kg weld metal / kg electrodes)

B = Changes (number of electrodes / kg weld metal)

H = Deposit rate at 90% of max current (kg weld metal / hour arc time)

T = Fusion time at 90% of max current (s / electrode)

U = Arc voltage (V)

OTHER DATA

Hardness data:

As welded condition, V-joint, matching base material: 177 - 197 HV10

Redrying 200 °C, 2h.