



Product Data Sheet

E 'Manual metal-arc welding'

OK 84.78

| | | | | | |
|-----------------------------|---|--------------------|------------------------|------------------------|---------------|
| Signed by A-C Gustavsson | Approved by Tapio Huhtala/Barbro Karlström | Reg no EN002384 | Cancelling EN002068 | Reg date 2004-09-13 | Page 1 (2) |
|-----------------------------|---|--------------------|------------------------|------------------------|---------------|

REASON FOR ISSUE

Sepros approval revised.

GENERAL

Electrode giving a weld metal with coarse chromium carbides in an austenitic matrix. Suitable for surfacing worn parts in earth-moving equipment, sand pumps, mixers, feed screws, dust extractors, crushers etc exposed to wear by coal, ores and other minerals. Also in corrosive environment and/or elevated temperature.

Min AC OCV: 50

Alloy Type: Carbide rich steel

Polarity: AC, DC+

Coating Type: Rutile Basic

WELDING POSITIONS



CLASSIFICATIONS Electrode

DIN 8555

E10-UM-60-CZ

APPROVALS

Sepros

UNA 409819

CHEMICAL COMPOSITION

| | All Weld Metal (%) | |
|----|--------------------|------|
| | Min | Max |
| C | 3.5 | 5.5 |
| Si | 0.50 | 1.10 |
| Mn | | 1.6 |
| P | | 0.04 |
| S | | 0.03 |
| Cr | 29.5 | 36.5 |

ECONOMICS & CURRENT DATA

| Dimension (mm) Ø x Length | Current (A) | | W | η | N | B | H | T | U |
|------------------------------|-------------|-----|------|-----|------|------|------|-----|----|
| | Min | Max | | | | | | | |
| 2.5 x 350 | 90 | 120 | 3.4 | 180 | 0.62 | 48.0 | 1.20 | 60 | 24 |
| 3.2 x 350 | 115 | 170 | 6.3 | 190 | 0.62 | 26.0 | 1.60 | 85 | 24 |
| 4.0 x 450 | 130 | 210 | 11.4 | 180 | 0.64 | 13.5 | 2.00 | 135 | 26 |
| 5.0 x 450 | 150 | 300 | 17.8 | 185 | 0.64 | 9.0 | 2.90 | 140 | 26 |

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)



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OTHER DATA

Hardness, typical as welded:

3-layer 59-63 HRC (no preheat and interpass temp. 100 °C).

3-layer 55-61 HRC (preheat and interpass temp. ca 500 °C).

Tempering resistance:

Hardness at room temperature after 1 hour tempering in the range 100-700 °C, 3-layer weld. Diameter 4 mm electrode.

°C.....HRC

10058

30059

40057

49059

60057

70058

Redrying: 300 °C for 2 h.
