



Product Data Sheet

G 'Gas-shielded metal-arc welding'

OK AristoRod 79

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
Christoffer Svensson	Tero Borg	Helene Rasmuson	EN010425	EN006368	2022-12-22	1 (2)

REASON FOR ISSUE

Classification amended, EN ISO 16834-A M20 classification added, mechanical data table updated

GENERAL

The non copper coated OK AristoRod 79 is a low-alloyed, chromium-nickel-molybdenum (0,3% Cr, 1,9% Ni, 0,5% Mo), solid wire for GMAW of high tensile strength steels, heat treated steels and fine grained constructional steels, such as XABO90 with a minimum yield strength less than 850 MPa.

The AristoRod wires are suitable for operating at high currents with maintained disturbance free wire feeding giving a stable arc with a low amount of spatter.

OK AristoRod 79 delivered in the unique ESAB Octagonal Marathon Pac is excellent in mechanised welding applications.

Shielding Gas: M20, M21 (EN ISO 14175)

Alloy Type: 0,3% Cr, 1,9% Ni, 0,5% Mo

CLASSIFICATIONS Weld Metal (as welded)

EN ISO 16834-A	G 79 4 M20 Mn4Ni2CrMo
EN ISO 16834-A	G 79 4 M21 Mn4Ni2CrMo

APPROVALS

CE	EN 13479
----	----------

CLASSIFICATIONS Wire Electrode

EN ISO 16834-A	G Mn4Ni2CrMo
SFA/AWS A5.28	ER120S-G

CHEMICAL COMPOSITION

All Weld Metal (%) Wire/Strip (%)

	80Ar/20CO2 (M21)		
	Nom	Min	Max
C	0.1	0.08	0.12
Si	0.7	0.60	0.90
Mn	1.7	1.70	2.10
P	0.01		0.015
S	0.01		0.018
Cr	0.3	0.25	0.45
Ni	1.9	1.80	2.30
Mo	0.5	0.45	0.65
Cu	0.07		0.15
Ti	0.03		0.15

MECHANICAL PROPERTIES OF WELD METAL

All Weld Metal

Standard	Shielding Gas	Condition	Rp0.2 [MPa/ksi]		Rm [MPa/ksi]			A5 [%]	
			Min	Typ	Min	Max	Typ	Min	Typ
EN	80Ar/20CO2 (M21)	As welded	790/115	810/117	880/128	1080/157	900/131	16	18
EN	92Ar/8CO2 (M20)	As welded	790/115	825/120	880/128		900/131	16	17

Comments:



Product Data Sheet

G 'Gas-shielded metal-arc welding'

OK AristoRod 79

Prepared by Christoffer Svensson	Qualified by Tero Borg	Approved by Helene Rasmuson	Reg no EN010425	Cancelling EN006368	Reg date 2022-12-22	Page 2 (2)
-------------------------------------	---------------------------	--------------------------------	--------------------	------------------------	------------------------	---------------

MECHANICAL PROPERTIES OF WELD METAL

Standard	Shielding Gas	Condition	Temp [°C/°F]	Charpy V [J/ft-lb]	
				Min	Typ
EN	80Ar/20CO2 (M21)	As welded	0/32 -20/-4 -40/-40 -50/-58	47/35	70/52 60/44 55/41
EN	92Ar/8CO2 (M20)	As welded	0/32 -20/-4 -40/-40 -50/-58	47/35 47/35	75/56 65/48

Comments:

ECONOMICS & CURRENT DATA

Dimension	Current (A)		W	η	H			Feed			U		
	Min	Max			Nom	Nom	Min	Max	Nom	Min	Max	Nom	Min
1.0 mm (0.040 in.)	80	280	15	96	1.0 kg/h (2.2 lb/h)	5.4 kg/h (11.9 lb/h)		2.7 m/min (106 in/min)	14.7 m/min (579 in/min)		18	28	
1.2 mm (0.047 in.)	120	350	18	97	1.5 kg/h (3.3 lb/h)	6.6 kg/h (14.6 lb/h)		2.7 m/min (106 in/min)	12.4 m/min (488 in/min)		20	33	

- W** = Gas consumption (l/min)
 η = Filler metal efficiency (g weld metal x 100 / g wire)(%)
H = Deposition rate (kg weld metal/hour arc time)
Feed = Wire feed speed (m/min)
U = Arc voltage (V)