



# Elgomatic 100

GMAW - MIG MAG  
Un-alloyed

Date: 2023-07-06  
Revision: 13

## Description:

Elgomatic 100 is a copper coated, manganese-silicon double deoxidised mild steel wire for use with a CO<sub>2</sub> or Ar/CO<sub>2</sub> gas shield. The carefully controlled wire metallurgy and surface finish ensure high quality welds and reliable wire feed for mechanised welding systems. Elgomatic 100 is suitable for all general engineering and structural steels.

## Welding current:

DC+

## Wire composition, wt. %

	C	Si	Mn	P	S	Cu
Min	0,06	0,80	1,40			
Typical	0,08	0,85	1,45	0,010	0,015	0,05
Max	0,12	1,00	1,60	0,025	0,025	0,35

## Shielding gas:

C1, CO<sub>2</sub>, 12-18 l/min

M21, 80% Ar + 20% CO<sub>2</sub>, 12-18 l/min

## Chemical composition, wt. %

	C	Si	Mn
Min			
Typical	0,07	0,8	1,4
Max			

## Mechanical properties

	<u>Specified</u>	<u>Typical</u>
Yield strength, Re:	≥ 420 MPa	470 MPa
Tensile Strength, Rm:	500-640 MPa	550 MPa
Elongation, A5	≥ 22%	26%
Impact energy, CV:	-20°C • >47 J -29°C • >27 J	-20°C • 85 J -29°C • 50 J

## Classification:

EN ISO 14341-A G 42 2 M21 3Si1  
G 42 2 C1 3Si1  
AWS A5.18 ER70S-6

## Approvals:

TÜV  
DB  
DNV  
CE

## Note

The typical values are based on M21  
Also available in AUTOPAC, a twist-free pay-off pack. For more information about Part no, type of spool and winding, please study the price list.

## Product data:

Diam. mm	Dip Current A	Dip Voltage V	Spray Current A	Spray Voltage V
0,8	50-90	16-18	120-160	22-26
1,0	80-150	17-20	180-230	24-30
1,2	110-180	18-22	240-300	26-33

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