

PLATING SPECIFICATIONS

Technical delivery conditions ISO 4042/DIN 267-9 apply to electro-plated standardized and non-standardized parts.

Plating designations are indicated by a 3 digit (letter/number/letter) code. Example: A3F

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|---|-----------------------------------|
| 1. Identifying letter for coating material | A = Zinc (Zn) |
| 2. Identifying number for thickness in um (microns) | 3 = 8 um |
| 3. Identifying letter for appearance and passivation (chromating) | F = bright, chromating color blue |

1. Identifying letter for coating

CODE LETTER	COATING MATERIAL	SYMBOL
A	Zinc	Zn
B	Cadmium	Cd
C	Copper	cu
D	Brass	CuZn
E	Nickel	Ni
F	Nickel-chrome ¹	NiCr
G	Copper-nickel	CuNi
H	Copper-nickel-chrome ¹	CuNiCr
J	Tin	Sn
K	Copper-tin	CuSn
L	Silver	Ag
N	Copper-silver	CuAg

1. Thickness of chrome layer = 0.3 um

2. Identifying number for thickness

CODE NUMBER	LAYER THICKNESS		
	Coating Metal		Coating Metals
	um	Inch	
0 ¹	-	-	-
1	3	.0001	-
2	5	.0002	2 + 3
3	8	.0003	3 + 5
4	12	.0004	4 + 8
5	15	.0005	5 + 10
6	20	.0007	8 + 12
7 ²	25	.0009	10 + 15
8 ²	32	.0012	12 + 20
9 ²	40	.0015	16 + 24

1. Code Number 0 applies to screw threads below M 1.6, where no specific layer thickness can be specified.
2. Does not apply to threaded components.

3. Identifying letter for appearance and passivation (chromating)

CODE LETTER	DEGREE OF GLOSS	Chromating in Accordance with DIN 50 941 Process Group	SELF-COLOR OF CHROMATIZING LAYER
A	mt (dull mat)	- ¹	-
B		B	Bluish to Bluish Iridescent ²
C		C	Yellowish Glistening to Yellowish-Brown, Iridescent
D		D	Olive Green to Olive Brown
E	bk (bright)	- ¹	-
F		B	Bluish to Bluish Iridescent ²
G		C	Yellowish Glistening to Yellowish-Brown, Iridescent
H		D	Olive Green to Olive Brown
J	gl (glossy)	- ¹	-
K		B	Bluish to Bluish Iridescent ²
L		C	Yellowish Glistening to Yellowish-Brown, Iridescent
M		D	Olive Green to Olive Brown
N	hgl (high gloss)	-	-
P	bel (optional)	B, C, or D ³ at manufacturer's discretion	As for Process Group B, C or d
R	mt (dull mat)	F	Brownish Black to Black
S	bk (bright)	F	
T	gl (glossy)	F	

1. In the case of Zn and Cd however, process group A
2. Only applies to Zn coatings
3. Process groups B, C or D in accordance with DIN 50 941 only apply to cadmium and zinc coatings. In the case of other electroplated coatings, "P" in the code symbol signifies "degree of gloss optional."

The thread tolerances are valid BEFORE application of galvanic coating; after coating, the nominal diameter of the male thread must not be exceeded, nor must the female thread be smaller. After coating, the actual thread dimension can measure anywhere between the range of tolerance and the nominal thread diameter.

WARNING: With regard to the known procedures of galvanic coatings on high tensile parts with tensile strengths from about 1000 N/sq. Millimeters (i.e. 10.9 ... 12.9), and hardened parts exceeding 390 HV, the danger of hydrogen embrittlement can not be entirely ruled out. (ISO 4042 sub-section 6/DIN 267-9 sub-sections 3.2 - 3.5)

Such parts are therefore galvanic plated only on the express order and at the responsibility of the customer!