

**Garant****Centre drill HSS-E A, TiAlN, Nominal  $\varnothing$  DC k12: 3mm****Order data**

Order number	111100 3
GTIN	4067263118916
Item class	11A

**Description****Version:**

Ground from solid and relief ground, spiral fluted.

**Technical description**

Overall length L	50 mm
Feed f in steel < 900 N/mm <sup>2</sup>	0.03 mm/rev.
Number of cutting edges Z	2
for workpiece $\varnothing$	20 – 40 mm
Shank tolerance	h7
Nominal $\varnothing$ D <sub>c</sub>	3 mm
Shank $\varnothing$ D <sub>s</sub>	8 mm
Coating	TiAlN
Tool material	HSS E
Standard	DIN 333
Type	A
Tolerance nominal $\varnothing$	k12
Countersink angle	60 degrees
Cutting direction	right-hand
Shank	Parallel shank to h7

Through-coolant	no
Colour ring	without
Type of product	Centre drill

### User data

	Suitability	V <sub>c</sub>	ISO code
Alu plastics	suitable	70 m/min	N
Aluminium (short chipping)	suitable	45 m/min	N
Alu > 10% Si	suitable only under restricted conditions	40 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	40 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	30 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	25 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	10 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable	8 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	12 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable	8 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable	5 m/min	S
GG(G)	suitable	25 m/min	K
CuZn	suitable	80 m/min	N
Oil	suitable		
wet maximum	suitable		