

**Garant**
**Centre drill HSS-E R with flat, uncoated, Nominal  $\varnothing$  DC k12: 2mm**

**Order data**

Order number	111450 2
GTIN	4045197000712
Item class	11A

**Description**
**Version:**

Ground from solid and relief ground, spiral fluted.  
Features of centre drills with radius form R: See No. 111350.

**Technical description**

Feed f in steel < 900 N/mm <sup>2</sup>	0.02 mm/rev.
for workpiece $\varnothing$	15 – 20 mm
Shank tolerance	h7
s – 0.1	4.2 mm
Number of cutting edges Z	2
Nominal $\varnothing$ D <sub>c</sub>	2 mm
Shank $\varnothing$ D <sub>s</sub>	5 mm
Overall length L	40 mm
Coating	uncoated
Tool material	HSS E
Standard	DIN 333
Type	R
Tolerance nominal $\varnothing$	k12
Countersink angle with radius	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
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
GG(G)	suitable only under restricted conditions	25 m/min	K
CuZn	suitable	80 m/min	N
Oil	suitable		
wet maximum	suitable		