

**Garant****Jobber drill set HSS No. 114150 in a case, uncoated, Type: 1-13KB****Order data**

Order number	115120 1-13KB
GTIN	4045197657596
Item class	11B

**Description****Version:**

Composed of jobber drills DIN 338.

Profile ground: Jobber drill with high pitch accuracy and concentricity as well as precision ground point.

Steam tempered from  $\varnothing$  2.4 mm.

With point geometry shape C from size 4 mm.

**Note:**

Size 16 – 20: Drills with shank  $\varnothing$  16 mm.

**Technical description**

Incremental steps of drills	0.5 mm
Number of drills	29
Drill range	1 - 13 mm
Shank	Plain shank
Tapping hole $\varnothing$	3.3; 4.2; 6.8; 10.2 mm

Number of cutting edges Z	2
Coating	uncoated
Tool material	HSS
Standard	DIN 338
Type	N
Tolerance nominal $\varnothing$	h8
Point angle	118 degrees
Through-coolant	no
with case	yes
Colour ring	without
Type of product	Jobber drill

## User data

	Suitability	$V_c$	ISO code
Alu plastics	suitable only under restricted conditions	80 m/min	N
Aluminium (short chipping)	suitable only under restricted conditions	45 m/min	N
Alu > 10% Si	suitable only under restricted conditions	50 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 only under restricted conditions	10 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	8 m/min	P
GG(G)	suitable	25 m/min	K
CuZn	suitable	80 m/min	N
Uni	suitable		

Oil suitable

## Accessories

HSS jobber drillN Ø DC h8 (mm or inch) 12	114150 12
HSS jobber drillN Ø DC h8 (mm or inch) 3,3	114150 3,3
HSS jobber drillN Ø DC h8 (mm or inch) 3	114150 3
HSS jobber drillN Ø DC h8 (mm or inch) 2,5	114150 2,5
HSS jobber drillN Ø DC h8 (mm or inch) 1,5	114150 1,5
HSS jobber drillN Ø DC h8 (mm or inch) 6,5	114150 6,5
HSS jobber drillN Ø DC h8 (mm or inch) 8,5	114150 8,5
HSS jobber drillN Ø DC h8 (mm or inch) 1	114150 1
HSS jobber drillN Ø DC h8 (mm or inch) 13	114150 13
HSS jobber drillN Ø DC h8 (mm or inch) 10,2	114150 10,2
HSS jobber drillN Ø DC h8 (mm or inch) 4	114150 4
HSS jobber drillN Ø DC h8 (mm or inch) 8	114150 8
HSS jobber drillN Ø DC h8 (mm or inch) 4,2	114150 4,2
HSS jobber drillN Ø DC h8 (mm or inch) 4,5	114150 4,5
HSS jobber drillN Ø DC h8 (mm or inch) 5,5	114150 5,5
HSS jobber drillN Ø DC h8 (mm or inch) 3,5	114150 3,5
HSS jobber drillN Ø DC h8 (mm or inch) 10	114150 10
HSS jobber drillN Ø DC h8 (mm or inch) 6,8	114150 6,8
HSS jobber drillN Ø DC h8 (mm or inch) 11,5	114150 11,5
HSS jobber drillN Ø DC h8 (mm or inch) 5	114150 5
HSS jobber drillN Ø DC h8 (mm or inch) 6	114150 6
HSS jobber drillN Ø DC h8 (mm or inch) 7	114150 7
HSS jobber drillN Ø DC h8 (mm or inch) 11	114150 11
HSS jobber drillN Ø DC h8 (mm or inch) 7,5	114150 7,5
HSS jobber drillN Ø DC h8 (mm or inch) 12,5	114150 12,5

HSS jobber drillN Ø DC h8 (mm or inch) 9,5	114150 9,5
HSS jobber drillN Ø DC h8 (mm or inch) 9	114150 9
HSS jobber drillN Ø DC h8 (mm or inch) 2	114150 2
HSS jobber drillN Ø DC h8 (mm or inch) 10,5	114150 10,5
Jobber drill set HSS No. 114150 as refill set Type 1-13	115140 1-13
Empty case for jobber drills to DIN 338 Type 1-13KB	115470 1-13KB