

Garant
Machine reamer H7, uncoated, Nominal Ø DC: 19mm

Order data

Order number	163000 19
GTIN	4045197253262
Item class	110

Description
Version:

With long flutes and left-hand helix.
 From size 1.8 even number of teeth and uneven spacing.
 Up to size 3.7 both ends with external centres;
 from size 3.9 both ends with internal centres.

Reamers finish ground for fit H7.
Application:

For reaming through holes. Also suitable for blind holes (from 3.9 mm Ø) due to short chamfer lead.

Note:

- **Straight flute machine chucking reamers – available ex-stock.**
- **For reamers with other diameters and fits see No. 162951.**

Technical description

Overhang L_1	140 mm
Nominal Ø D_c	19 mm
Shank tolerance	h9
Feed f in steel < 750 N/mm ²	0.3 mm/rev.
Shank Ø D_s	16 mm
Overall length L	189 mm
Flute length L_c	58 mm
Number of cutting edges Z	8

Tolerance	H7
Reaming oversize in diameter	0.2 - 0.3 mm
Coating	uncoated
Tool material	HSS E
Standard	DIN 212 B
Through-coolant	no
Shank	Plain shank with h9
Application for type of drilling	for through holes
Colour ring	without
Type of product	Phillips bit

User data

	Suitability	V _c	ISO code
Aluminium	suitable	20 m/min	N
Aluminium (short chipping)	suitable	20 m/min	N
Steel < 500 N/mm ²	suitable	15 m/min	P
Steel < 750 N/mm ²	suitable	10 m/min	P
Steel < 900 N/mm ²	suitable	7 m/min	P
Steel < 1100 N/mm ²	suitable	5 m/min	P
Steel < 1400 N/mm ²	suitable only under restricted conditions	4 m/min	P
INOX < 900 N/mm ²	suitable	5 m/min	M
INOX > 900 N/mm ²	suitable only under restricted conditions	5 m/min	M
Ti > 850 N/mm ²	suitable only under restricted conditions	5 m/min	S
GG(G)	suitable only under restricted conditions	5 m/min	K
CuZn	suitable only under restricted conditions	13 m/min	N

Uni	suitable
Oil	suitable
wet maximum	suitable