Garant

GARANT Master Steel solid carbide roughing end mill HPC, TiAlN, ∅ f8 DC: 18mm

Order data

Order number	203035 18
GTIN	4045197718822
Item class	11X

Description

Version:
For **roughing and finishing.**
Up to 1.5×D into solid material **at very high feed rates** with smooth cutting action.
Advantage:
Optimised flute form, eccentric relief ground, wide chip space.
Tolerance nominal ∅: f8
No. of teeth Z: 4
Helix angle: 38 °
Direction of infeed: horizontal, oblique and vertical
Shank: DIN 6535 HB to h6
No. of teeth Z: 4
Flute length L_c: 36 mm
Overhang length L_1 incl. recess: 42 mm
Recess ∅ D_1: 17.8 mm
Overall length L: 92 mm
Shank ∅ D_s: 18 mm

Technical description

Recess ∅ D_1	17.8 mm
Cutting edge ∅ D_C	18 mm
No. of teeth Z	4
Overhang length L_1 incl. recess	42 mm

Feed f_z for side milling in steel < 900 N/mm²	0.13 mm
Feed f_z for slot milling in steel < 900 N/mm²	0.1 mm
Corner chamfer width at 45°	0.36 mm
Shank ∅ D_s	18 mm
Overall length L	92 mm
Flute length L_c	36 mm
Direction of infeed	horizontal, oblique and vertical
Shank	DIN 6535 HB to h6
Tolerance nominal ∅	f8
Helix angle	38 °
Corner chamfer angle	45 °
Series	Master Steel
Coating	TiAlN
Tool material	Solid carbide
Standard	DIN 6527
Type	N
Helix angle characteristic	unequal spacing
Spacing of the cutters	unequal spacing
Cutting width a_e for milling operation	0.3×D for side milling
Cutting width a_e for milling operation	Full slot cutting depth 1×D
Through-coolant	no
Machining strategy	HPC
Colour ring	green
Type of product	End / face mill

User data

	Suitability	V_c	ISO code
Steel < 500 N/mm²	suitable	260 m/min	P
Steel < 750 N/mm²	suitable	240 m/min	P

Steel < 900 N/mm²	suitable	190 m/min	P
Steel < 1100 N/mm²	suitable	180 m/min	P
Steel < 1400 N/mm²	suitable only under restricted conditions	150 m/min	P
INOX < 900 N/mm²	suitable	80 m/min	M
INOX > 900 N/mm²	suitable	70 m/min	M
GG(G)	suitable	250 m/min	K
Uni	suitable		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		
dry	suitable		
Air	suitable		