

**Garant**
**Solid carbide milling cutter, AlCrN, Ø e8 DC: 20mm**

**Order data**

Order number	202293 20
GTIN	4045197931351
Item class	11X

**Description**
**Version:**

 Dimensions similar to **DIN 6527**.

Improved coating for general-purpose applications in steel and cast iron.

**Note:**
**Successor product to No. 202320.**
**Technical description**

Overhang length $L_1$ incl. recess	54 mm
Flute length $L_c$	38 mm
Shank $\varnothing D_s$	20 mm
Cutting edge $\varnothing D_c$	20 mm
Corner chamfer width at 45°	0.1 mm
Recess $\varnothing D_1$	19.7 mm
No. of teeth $Z$	3
Direction of infeed	horizontal, oblique and vertical
Feed $f_z$ for side milling in steel < 750 N/mm <sup>2</sup>	0.15 mm
Feed $f_z$ for slot milling in steel < 750 N/mm <sup>2</sup>	0.1 mm
Shank	DIN 6535 HB to h6
Helix angle	45 degrees
Overall length $L$	104 mm

Tolerance nominal $\varnothing$	e8
Shank form	HB
Corner chamfer angle	45 degrees
Coating	AlCrN
Tool material	Solid carbide
Standard	DIN 6527
Type	N
Cutting width $a_e$ for milling operation	0.5×D for side milling
Cutting width $a_e$ for milling operation	Full slot cutting depth 1×D
Through-coolant	no
Colour ring	without
Type of product	End / face mill

## User data

	Suitability	$V_c$	ISO code
Aluminium (short chipping)	suitable only under restricted conditions	280 m/min	N
Alu > 10% Si	suitable only under restricted conditions	200 m/min	N
Steel < 500 N/mm <sup>2</sup>	suitable	120 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	110 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	100 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	70 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	60 m/min	P
INOX < 900 N/mm <sup>2</sup>	suitable	70 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	50 m/min	M
GG(G)	suitable	90 m/min	K
Uni	suitable		

wet maximum	suitable
wet minimum	suitable
dry	suitable only under restricted conditions
Air	suitable