

**Garant**
**Face torus milling head, HB730, Ø D h10: 20mm**

**Order data**

Order number	210300 20
GTIN	4045197523235
Item class	21M

**Description**
**Note:**

**Comply strictly with  $a_{p,max}$ ! Recommended application values ( $v_c$  and  $f_z$ ) apply also to  $a_{p,max}$ .**

**Technical description**

Head length $l$	25 mm
maximum cutting depth $a_{p,max}$ in steel $< 900 \text{ N/mm}^2$	1 mm
Milling head Ø D	20 mm
Flute length $L_2$	15 mm
Programming radius $R_p$	3.675 mm
Corner radius	3 mm
Feed $f_z$ in steel $< 900 \text{ N/mm}^2$	1.1 mm
Arbor size	20 mm
Number of cutting edges Z	3
Grade	HB730
Tool material	Solid carbide
Standard	Manufacturer's standard
Type	N

Helix angle	45 degrees
Direction of infeed	horizontal, oblique and vertical
Cutting width $a_e$ for milling operation	$0.05 \times D$ for side milling
Machining strategy	HPC
Through-coolant	no
Shank type	GARANT TopCut
Type of product	Cutter insert for milling

## User data

	Suitability	$V_c$	ISO code
Steel < 500 N/mm <sup>2</sup>	suitable	210 m/min	P
Steel < 750 N/mm <sup>2</sup>	suitable	170 m/min	P
Steel < 900 N/mm <sup>2</sup>	suitable	150 m/min	P
Steel < 1100 N/mm <sup>2</sup>	suitable	130 m/min	P
Steel < 1400 N/mm <sup>2</sup>	suitable only under restricted conditions	110 m/min	P
Steel < 55 HRC	suitable only under restricted conditions	50 m/min	H
Steel < 60 HRC	suitable only under restricted conditions	40 m/min	H
INOX < 900 N/mm <sup>2</sup>	suitable	80 m/min	M
INOX > 900 N/mm <sup>2</sup>	suitable only under restricted conditions	50 m/min	M
Ti > 850 N/mm <sup>2</sup>	suitable only under restricted conditions	80 m/min	S
GG(G)	suitable	160 m/min	K
Oil	suitable only under restricted conditions		
wet maximum	suitable		
wet minimum	suitable only under restricted conditions		

dry	suitable only under restricted conditions
Air	suitable

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## Accessories

Assembly wrench Type 16X5	219987 16X5
Plug-in adapter for torque wrench Type 16X5	219986 16X5