

MANDO G

The best choice for gear cutting





MANDRELS Mandrel MANDO G

Clamping solutions for the gear-cutting sector are unique and have very special requirements. Consequently, it is not easy to find the suitable clamping device, particularly in the case of part variation and smaller lot sizes. The conventional solution is to use fixtures that are more or less effective.

However, this is now history. With the MANDO G211 you are relying on a standard segmented mandrel. You profit from in-stock segmented clamping bushings. The rigid and narrow mandrel with optimized tool run-out contour is ideal for use in gear cutting applications. It can also be used for gear shaping or grinding. Three end-stop levels that are placed with different proximity to the workpiece make it possible to use individual workpiece end-stops. Also a coolant connection ensures process reliability.

Whether you design the machine connection on your own, or whether you want a complete solution from us extending to the quick change-over system, in every case you profit from radial clamping with pull-back effect - and this incredibly increases the rigid clamping. Therefore you have complete control of accuracy and vibration.

Key advantages

- Standard segmented mandrel with slim interference contour
- Rigid radial clamping with pull-back effect
- Large clamping range and vibration dampening due to vulcanized clamping elements
- Three end-stop levels
- Integrated flushing channels



MANDO G in use

MANDRELS

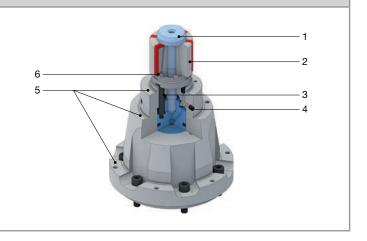
Mandrel MANDO G



MANDO G211 in detail

Designation

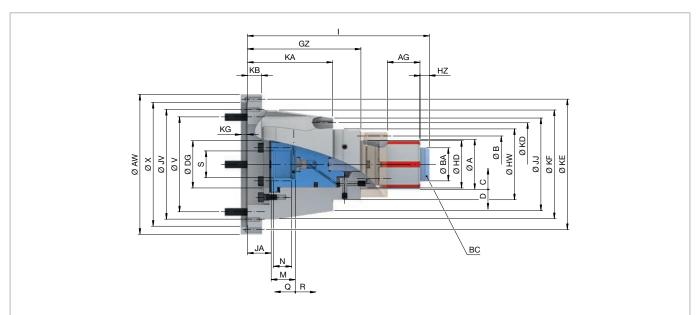
- 1 Draw bolt [with safeguard to prevent unscrewing when in open position]
- 2 Vulcanized segmented clamping bushing made of case-hardened steel [60 HRC]
- 3 Integrated ejector pins for forced opening of the clamping
- 4 Three flush holes to prevent contamination
- 5 Mounting possibility for end-stops
- 6 Torsional safety lock of segmented clamping bushing







MANDO G211. Technical data and order overview



Size		0	1	2	3	4
Clamping range [mm]	А	20 – 28	26 – 38	36 – 54	50 – 80	69 – 120
Run-out ≤ [mm]		0,010				
Max. radial clamping force [kN]		42		85	105	150
Max. axial drawtube force		10		20	25	35
[pull / push] [kN]				-	25	33
Max. clamping length [mm]	AG	22	26	43	49	59
Reserve stroke in Ø [mm]	D		0,3		0,4	0,5
Release stroke in Ø [mm]	С	0,4		0,5		0,6
RPM n max. [1/min.]		600				
Reserve stroke axial [mm]	Q	1,5			2	2,5
Release stroke axial [mm]	R	2		2,5		3
Max. actuating torque [Nm]	BC	10	20	25	5	*
Draw bolt Ø [mm]	BA	19	25	35	49	68
Draw bolt head height [mm]	HZ	7,5		10		16
Bolt hole circle end-stop	В	LK Ø 42 [3 x M4]	LK Ø 50 [3 x M4]	LK Ø 60 [3 x M4]	LK Ø 75 [3 x M4]	
Bolt hole circle end-stop 2	KD	LK Ø 65 [3 x M6]	LK Ø 72 [3 x M6]	LK Ø 88 [3 x M6]	LK Ø 102 [3 x M6]	LK Ø 88 [3 x M5]
Bolt hole circle end-stop 3	KE	LK Ø 138 [3 x M6]				
Total length [mm]	- 1	171	178,5	192,5	198,5	213
Connecting thread inside	S	M30 x 1,5				
Distance [mm]	JA	25				
Depth of thread [mm]	М	25,5				
Thread length [mm]	N					
Max. drawtube Ø [mm]	DG	50			60	
Minimum length of DG [mm]		13				
Interface	X	Ø 131 H7				
Bolt hole circle	V	LK Ø 116 [6 x M8]				
Bolt hole circle 2	JV	LK Ø 116 [6 x M5]				
Outer Ø [mm]	AW	148				
Outer Ø 2 [mm]	HD	32 f8	38 f8	50 f8	62 f8	75 f8
Outer Ø 3 [mm]	HW	50 f8	58 f8	75 f8	85 f8	
Outer Ø 4 [mm]	JJ	75	82	98	114	115
Outer Ø 5 [mm]	KF	115 f8				
End-stop height [mm]	GZ	125			20	
End-stop height 2 [mm]	KA		90		70	90
End-stop height 3 [mm]	KB	15				
Fitting depth [mm]	KG	7				
Weight [kg]		5.	9	7,5	7,7	9,7
In stock		✓	✓	✓	✓	✓
Material no.		10001051	10001052	10001053	10001054	10001055

Customer-specific flanges and drawtube adapters available upon request.



Scope of delivery

- Mandrel without spindle flange
- Draw bolt