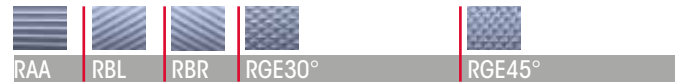


# Series 191



**Knurling profiles on DIN 82 workpiece:**

**Feed knurling**



**Selection of knurling wheels:**

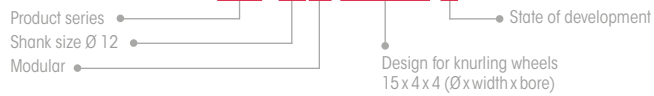
3 x AA	3 x BR	3 x BL	1 x BL30° / 2 x BR30° //	1 x BL45° / 2 x BR45° //
			1 x BR30° / 2 x BL30°	1 x BR45° / 2 x BL45°

**Product features:**

- Easy and precise fine adjustment
- Modular exchangeable knurl holder jaws for conversion to knurling up to a shoulder (192) or a cut knurling tool (291)
- Carbide pins

Tool holder  
Designation

**191 - 12M 150404 - B**



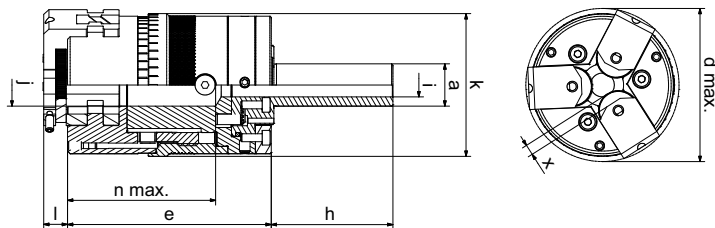
**TOOL VERSIONS:**

Order no.	Tool holder Designation	Working area Ø [mm]	Dimension [mm]										Knurling wheels (Ø x b x b) [mm]
			a Ø	d max.Ø	e	h	i Ø	j Ø	k Ø	l	n max.	x Ø	
31001902	191-12M150404-B	2-13.5	12	57	78	45	9	16	54	9	56	1.5	10 x 4 x 4
		3-8.5	12	57	78	45	9	16	54	9	56	4	15 x 4 x 4

Other shank variants available on request

d = for max. workpiece Ø

n = max. workpiece length (with Ø)



**JAWS:**

Order no. Form knurling up to a shoulder	Order no. Cut knurling
21BHR1128	21BHR1127

