

# EXCLUSIVE<sup>LINE</sup><sup>®</sup>

## HR 500 ACTIVE

### Step reamers made to measure

#### Order

Name/customer no. if available  New customer ☐

Street no.

Telephone

Date

#### Inquiry

Contact for questions

Order no.

Town/post code

Fax

Signature

#### Quantity




Minimum order quantity 5 tools

#### Hole Ø / tol.

or

#### Reamers

#### manufact. Ø / tol.



nom.-Ø d <sub>1</sub>	tol. d <sub>1</sub>	step Ø d <sub>3</sub>	tol. d <sub>3</sub>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Example

Ø 12	F <sub>8</sub>	Ø 10	H <sub>7</sub>
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Example

Ø 12	+0.02 -0.004	Ø 10	±0.2
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nom.-Ø d <sub>1</sub>	upper/lower limit	step Ø d <sub>3</sub>	upper/lower limit
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Example

Ø 12	+0.01 -0.004	Ø 10	+0.01 -0.004
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#### cyl. step length/ countersink angle



Step length l<sub>3</sub> ±0.1

Countersink angle W<sub>1</sub> ±1°

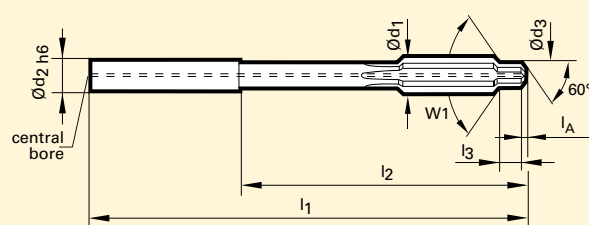
#### Blind hole



Stepped hole



Hole and countersink



with internal cooling for blind holes

#### Through hole



☐ with internal cooling

☐ without internal cooling



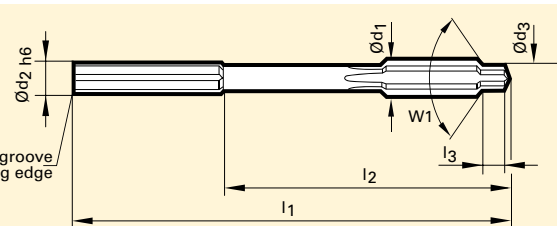
Stepped hole



Hole and countersink



one coolant groove per cutting edge



patent applied for longitudinal grooves in the shank for through holes (with IC)

#### Dimensions



☐ long version

☐ short version

Further dimensions on request

Nom.-Ø [mm] from - to d <sub>1</sub>	smallest poss. step-Ø d <sub>3</sub>	long version		short version		Chamfer length l <sub>A</sub> (only blind holes)	Shank-Ø h6 DIN 6535 d <sub>2</sub>
		l <sub>1</sub>	Reach l <sub>2</sub>	l <sub>1</sub>	Reach l <sub>2</sub>		
2.950 - 4.1	d1x0.7 (min. Ø2.95)	68	40	-	-	0.4	4
4.101 - 6.1	d1x0.7 (min. Ø2.95)	76	40	-	-	0.4	6
6.101 - 8.1	d1 x 0.8	101	65	76	40	0.4	8
8.101 - 10.1	d1 x 0.8	101	61	76	36	0.4	10
10.101 - 12.1	d1 x 0.8	130	85	80	35	0.5	12
12.101 - 14.1	d1 x 0.8	130	85	90	45	0.5	14
14.101 - 16.1	d1 x 0.8	150	102	90	42	0.5	16
16.101 - 18.1	d1 x 0.8	150	102	100	52	0.5	18
18.101 - 20.1	d1 x 0.8	150	100	100	50	0.5	20

#### Coating



TiAlN (optimal for machining  
cast iron and steel)

☐

bright (optimal for machining titanium)

☐

#### Material



Steel/hardened steels/  
GGG/VA

☐

GG

☐