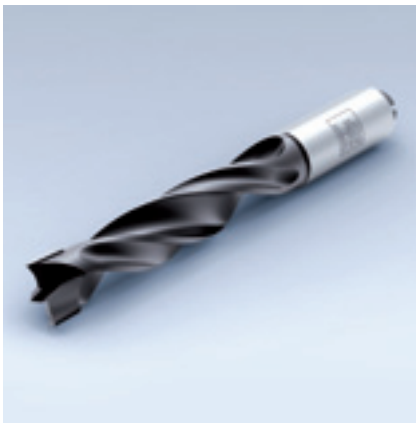


6. Drilling

6.1 Dowel drilling

6.1.1 Dowel drills



Shank 8 mm

Application:

For drilling dowel holes, especially dowel holes in cabinetry. Suitable for machines with insufficient bit guidance.

Machine:

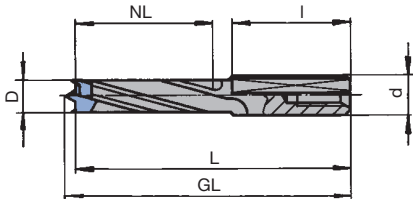
Point-to-point drilling machines, through-feed drilling machines, CNC machining centres, hinge boring machines, multi-spindle units.

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (chipboard, MDF, HF etc.), untreated, plastic-coated, veneered etc., laminated woods (plywood etc.).

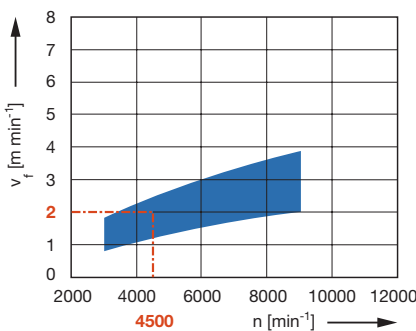
Technical information:

Spur geometry with shear cut. Can be combined with loose countersink WB 701-0-03. Countersink fixed on flute. Continuously adjustable boring and countersink depth. Good guidance during return stroke for tear-free hole edges.



Design with heel

Feed speed v_f depending on the spindle RPM n



Workpiece material:

Chipboard plastic coated

Working step:

Boring

Correction factor for v_f :

Veneered = 0.8

Paper-coated = 0.8

MDF, solid wood = 0.7

Chipboard, untreated = 1.3

GL 55.5 mm, with heel, Z 2 / V 2

WB 120-0-23

D	GL	L	NL	S	ID	ID
mm	mm	mm	mm	mm	LL	RL
4	55,5	54	30	8x19	042550	042551 ●
5	55,5	54	30	8x19	042552	042553 ●
6	55,5	54	30	8x19	042554	042555 ●
8	55,5	53,5	30	8x19	042558	042559 ●
10	55,5	53,5	30	8x21	042562	042563 ●

RPM: $n = 3000 - 9000 \text{ min}^{-1}$

GL 67 mm, with heel, Z 2 / V 2

WB 120-0-24

D	GL	L	NL	S	ID	ID
mm	mm	mm	mm	mm	LL	RL
4	67	65,5	40	8x19	042566	042567 ●
5	67	65,5	40	8x19	042568	042569 ●
6	67	65,5	40	8x19	042570	042571 ●
7	67	65,5	40	8x19	042572	042573 ●
8	67	65	40	8x19	042574	042575 ●
9	67	65	40	8x21	042576	042577 ●
10	67	65	40	8x21	042578	042579 ●

RPM: $n = 3000 - 9000 \text{ min}^{-1}$

Spare parts:

BEZ	ABM	BEM	ID
Allen screw	mm	Length adjustment	005802 ●
	M5x10		

6. Drilling

6.1 Dowel drilling

6.1.1 Dowel drills



Shank 10 mm

Application:

For drilling dowel holes, especially dowel holes in cabinetry.

Machine:

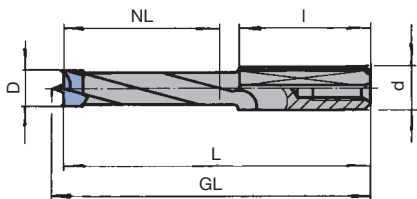
Point-to-point drilling machines, through-feed drilling machines, CNC machining centres, hinge boring machines, multi-spindle units

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (chipboard, MDF, HF etc.), untreated, plastic-coated, veneered etc., laminated woods (plywood etc.).

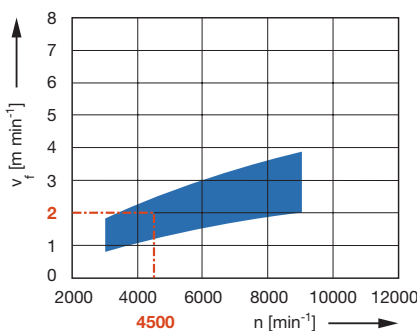
Technical information:

Spur geometry with shear cut. Recessed flute for minimum friction and feed force. Can be used with loose countersink WB 701-0-02. Countersinks are fixed to the shank.



Design without heel

Feed speed v_f depending on the spindle RPM n



Workpiece material:

Chipboard plastic coated

Working step:

Boring

Correction factor for v_f :

Veneered = 0.8

Paper-coated = 0.8

MDF, solid wood = 0.7

Chipboard, untreated = 1.3

GL 57.5 mm, without heel, Z 2 / V 2

WB 120-0-12

D mm	GL mm	L mm	NL mm	S mm	ID LL	ID RL
3	57,5	56	16	10x34	033610	033611
4	57,5	56	25	10x27	033670	033671
4,5	57,5	56	25	10x27	033710	033711
5	57,5	56	25	10x27	033672	033673
5,1	57,5	56	25	10x27	033674	033675
5,2	57,5	56	25	10x27	033676	033677
6	57,5	56	25	10x27	033678	033679
7	57,5	56	25	10x27	033680	033681
8	57,5	55,5	25	10x27	033682	033683
8,1	57,5	55,5	25	10x27	033684	033685
8,2	57,5	55,5	25	10x27	033686	033687
9	57,5	55,5	25	10x27	033688	033689
10	57,5	55,5	25	10x27	033690	033691
12	57,5	55,5	30	10x22	033692	033693
14	57,5	55,5	30	10x22	033694	033695
15	57,5	55,5	30	10x22	033696	033697
16	57,5	55,5	30	10x22	033698	033699
3,18	57,5	56	25	10x27	033700	033701
6,35	57,5	56	25	10x27	033702	033703
9,53	57,5	55,5	25	10x27	033704	033705
12,7	57,5	55,5	25	10x22	033708	033709

RPM: $n = 3000 - 9000 \text{ min}^{-1}$

Spare parts:

BEZ	ABM mm	BEM	ID
Allen screw	M5x10	Length adjustment	005802

6. Drilling

6.1 Dowel drilling

6.1.1 Dowel drills



Shank 10 mm

Application:

For drilling dowel holes, especially dowel holes in cabinetry.

Machine:

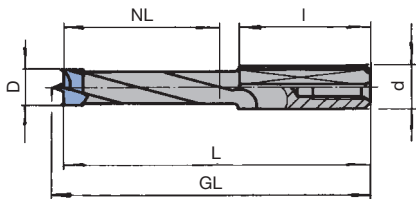
Point-to-point drilling machines, through-feed drilling machines, CNC machining centres, hinge boring machines, multi-spindle units

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (chipboard, MDF, HF etc.), untreated, plastic-coated, veneered etc., laminated woods (plywood etc.).

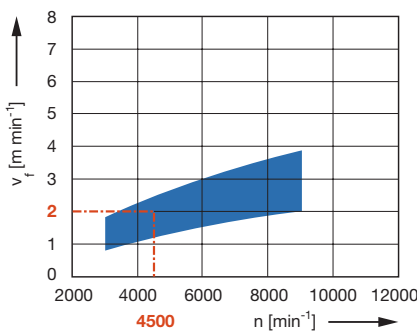
Technical information:

Spur geometry with shear cut. Recessed flute for minimum friction and feed force. Can be used with loose countersink WB 701-0-02. Countersinks are fixed to the shank.



Design without heel

Feed speed v_f depending on the spindle RPM n



Workpiece material:

Chipboard plastic coated

Working step:

Boring

Correction factor for v_f :

Veneered = 0.8

Paper-coated = 0.8

MDF, solid wood = 0.7

Chipboard, untreated = 1.3

GL 70 mm, without heel, Z 2 / V 2

WB 120-0-10

D mm	GL mm	L mm	NL mm	S mm	ID LL	ID RL
3	70	68,5	16	10x45	042596	042597
4	70	68,5	35	10x30	033476	033477
5	70	68,5	35	10x30	033440	033441
6	70	68,5	35	10x30	033442	033443
7	70	68,5	35	10x30	033444	033445
8	70	68	35	10x30	033446	033447
9	70	68	35	10x30	033478	033479
10	70	68	35	10x30	033448	033449
11	70	68	35	10x30	033480	033481
12	70	68	35	10x30	033450	033451
13	70	68	35	10x30	033452	033453
14	70	68	35	10x30	033454	033455
16	70	67,5	35	10x30	033456	033457

RPM: $n = 3000 - 9000 \text{ min}^{-1}$

GL 77 mm, without heel, Z 2 / V 2

WB 120-0-07

D mm	GL mm	L mm	NL mm	S mm	ID LL	ID RL
5	78,5	77	45	10x30	033370	033371
6	78,5	77	45	10x30	033372	033373
7	78,5	77	45	10x30	033374	033375
8	78,5	77	45	10x30	033376	033377
10	79	77	45	10x30	033378	033379
12	79	77	45	10x30	033380	033381

RPM: $n = 3000 - 9000 \text{ min}^{-1}$

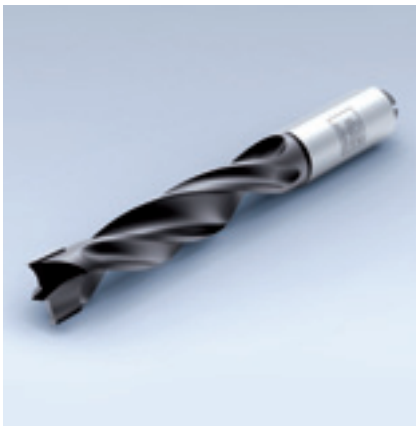
Spare parts:

BEZ	ABM	BEM	ID
Allen screw	M5x10	Length adjustment	005802

6. Drilling

6.1 Dowel drilling

6.1.1 Dowel drills



Shank 10 mm

Application:

For drilling dowel holes, especially dowel holes in cabinetry. Suitable for machines with insufficient bit guidance.

Machine:

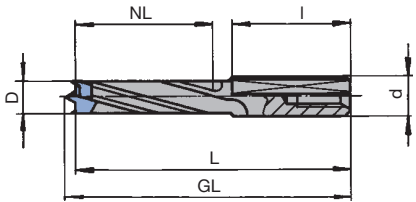
Point-to-point drilling machines, through-feed drilling machines, CNC machining centres, hinge boring machines, multi-spindle units

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (chipboard, MDF, HF etc.), untreated, plastic-coated, veneered etc., laminated woods (plywood etc.).

Technical information:

Spur geometry with shear cut. Can be combined with loose countersink WB 701-0-03. Countersink fixed on flute. Continuously adjustable boring and countersink depth. Good return stroke guidance for tear-free hole edges.



Design with heel

GL 70 mm, with heel, Z 2 / V 2

WB 120-0-26

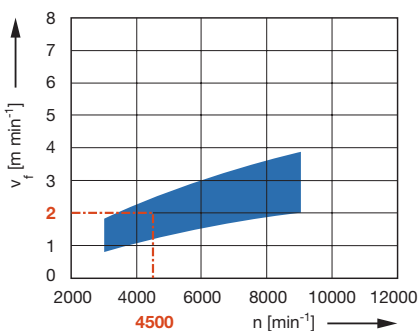
D	GL	L	NL	S	ID	ID
mm	mm	mm	mm	mm	LL	RL
5	70	68,5	43	10x19	042586	042587 ●
6	70	68,5	43	10x19	042588	042589 ●
8	70	68	43	10x19	042590	042591 ●
10	70	68	43	10x19	042592	042593 ●
12	70	68	43	10x19	042594	042595 ●

RPM: $n = 3000 - 9000 \text{ min}^{-1}$

Spare parts:

BEZ	ABM	BEM	ID
	mm		
Allen screw	M5x10	Length adjustment	005802 ●

Feed speed v_f depending on the spindle RPM n



Workpiece material:

Chipboard plastic coated

Working step:

Boring

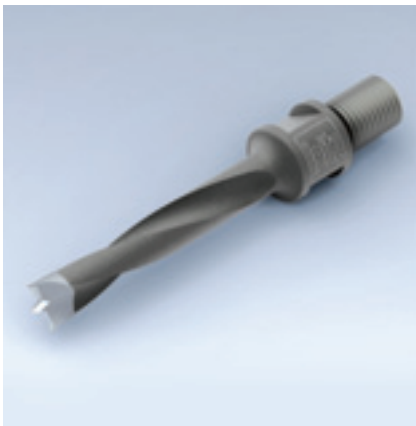
Correction factor for v_f :

Veneered = 0.8

Paper-coated = 0.8

MDF, solid wood = 0.7

Chipboard, untreated = 1.3



Threaded shank

Application:

For drilling dowel holes, especially dowel holes in cabinetry.

Machine:

Point-to-point drilling machines, through-feed drilling machines, CNC machining centres, hinge boring machines, multi-spindle units

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (chipboard, MDF, HF etc.), untreated, plastic-coated, veneered etc., laminated woods (plywood etc.).

Technical information:

Spur geometry with shear cut. Recessed flute for minimum friction and feed force. Threaded shank for direct mounting in the drilling spindles.



M 10, tapered seating 11 mm, without heel, Z 2 / V 2

WB 120-0-17

D mm	GL mm	NL mm	b mm	S mm	ID LL	ID RL
5	75	40	60	M 10, tapered seating 11 mm	035200	● 035201 ●
6	75	40	60	M 10, tapered seating 11 mm	035202	● 035203 ●
8	75	40	60	M 10, tapered seating 11 mm	035204	● 035205 ●
10	75	40	60	M 10, tapered seating 11 mm	035206	● 035207 ●
12	75	40	60	M 10, tapered seating 11 mm	035208	● 035209 ●

RPM: n = 3000 - 9000 min⁻¹

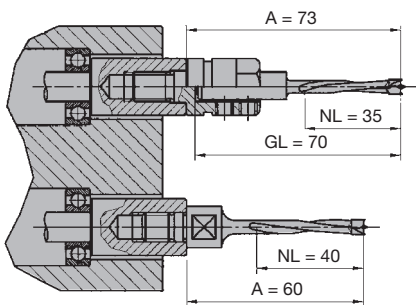
M 10, without tapered seating, without heel, Z 2 / V 2

WB 120-0-18

D mm	GL mm	NL mm	b mm	S mm	ID LL	ID RL
5	78	43	63	M 10, without tapered seating	035260	● 035261 ●
6	78	43	63	M 10, without tapered seating	035262	● 035263 ●
8	78	43	63	M 10, without tapered seating	035264	● 035265 ●
10	78	43	63	M 10, without tapered seating	035266	● 035267 ●
12	78	43	63	M 10, without tapered seating	035268	● 035269 ●

RPM: n = 3000 - 9000 min⁻¹

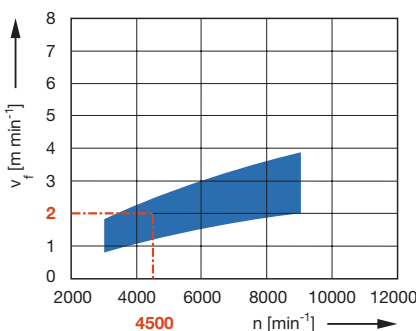
Boring bit mounted in reducing chucks



Boring bit with threaded shank mounted directly in the boring spindle

Length comparison: Dowel drills with threaded shank have a deeper boring depth than a comparable boring bit with cylindrical shank mounted in reducing chucks while having a lower overhang A with regard to the boring spindle.

Feed speed v_f depending on the spindle RPM n



Workpiece material:

Chipboard plastic coated

Working step:

Boring

Correction factor for v_f :

Veneered = 0.8

Paper-coated = 0.8

MDF, solid wood = 0.7

Chipboard, untreated = 1.3

6. Drilling

6.1 Dowel drilling

6.1.2 Dowel drill, Marathon design



Shank 8 mm

Application:

For drilling dowel holes, especially dowel holes in cabinetry. Suitable for drilling tear-free hinge holes in visible areas and for machining panel materials which are covered with hard-to-machine surface coatings (e.g. thin decorative paper).

Machine:

Point-to-point drilling machines, through-feed drilling machines, CNC machining centres, hinge boring machines, multi-spindle units

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (chipboard, MDF, HF etc.), untreated, plastic-coated, veneered etc., laminated woods (plywood etc.).

Technical information:

Spur geometry with extreme shear cut. High wear-resistant tungsten carbide quality for maximum life time. Recessed flute for minimum friction and feed forces.



GL 55.5 mm, Z 2 / V 2

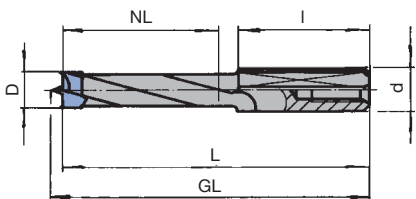
WB 120-0-31

D	GL	L	NL	S	ID	ID
mm	mm	mm	mm	mm	LL	RL
5	55,5	54	30	8x19	033724	● 033725 ●
8	55,5	54	30	8x19	033726	● 033727 ●

RPM: $n = 3000 - 9000 \text{ min}^{-1}$

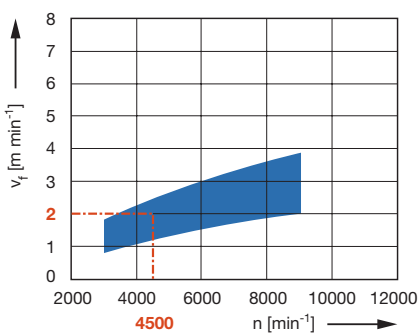
Spare parts:

BEZ	ABM	BEM	ID
	mm		
Allen screw	M5x10	Length adjustment	005802 ●



Design without heel

Feed speed v_f depending on the spindle RPM n



Workpiece material:

Chipboard plastic coated

Working step:

Boring

Correction factor for v_f :

Veneered = 0.8

Paper-coated = 0.8

MDF, solid wood = 0.7

6. Drilling

6.1 Dowel drilling

6.1.2 Dowel drill, Marathon design



Shank 10 mm

Application:

For drilling dowel holes, especially dowel holes in cabinetry. Suitable for drilling tear-free hinge holes in visible areas and for machining panel materials which are covered with hard-to-machine surface coatings (e.g. thin decorative paper).

Machine:

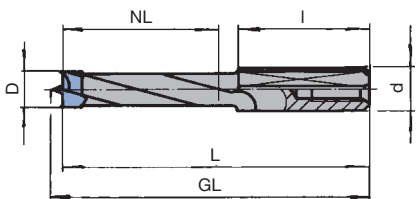
Point-to-point drilling machines, through-feed drilling machines, CNC machining centres, hinge boring machines, multi-spindle units

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (chipboard, MDF, HF etc.), untreated, plastic-coated, veneered etc., laminated woods (plywood etc.).

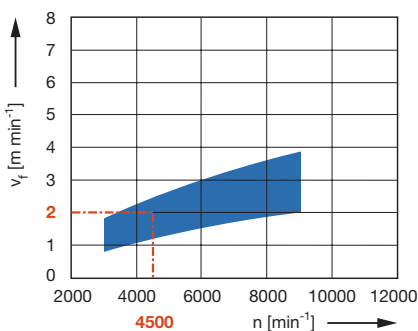
Technical information:

Spur geometry with extreme shear cut. High wear-resistant tungsten carbide quality for maximum life time. Can be combined with loose countersink
WB 701-0-02. Countersink fixed on flute. Recessed flute for minimum friction and feed forces.



Design without heel

Feed speed v_f depending on the spindle RPM n



Workpiece material:

Chipboard plastic coated

Working step:

Boring

Correction factor for v_f :

Veneered = 0.8

Paper-coated = 0.8

MDF, solid wood = 0.7

GL 57.5 mm, Z 2 / V 2

WB 120-0-29

D mm	GL mm	L mm	NL mm	S mm	ID LL	ID RL
4	57,5	56	25	10x27	033714	033715 ●
5	57,5	56	25	10x27	033716	033717 ●
6	57,5	56	25	10x27	033718	033719 ●
8	57,5	55,5	25	10x27	033720	033721 ●
10	57,5	55,5	25	10x27	033722	033723 ●

RPM: $n = 3000 - 9000 \text{ min}^{-1}$

GL 70 mm, Z 2 / V 2

WB 120-0-30

D mm	GL mm	L mm	NL mm	S mm	ID LL	ID RL
4	70	68,5	35	10x30	033482	033483 ●
5	70	68,5	35	10x30	033484	033485 ●
5,1	70	68,5	35	10x30	033492	033493 ●
6	70	68,5	35	10x30	033486	033487 ●
8	70	68,5	35	10x30	033488	033489 ●
8,2	70	68,5	35	10x30	033494	033495 ●
10	70	68,5	35	10x30	033490	033491 ●

RPM: $n = 3000 - 9000 \text{ min}^{-1}$

Spare parts:

BEZ	ABM mm	BEM	ID
Allen screw	M5x10	Length adjustment	005802 ●
Allen screw	M3x2,5	Locking device	007889 ●

6. Drilling

6.1 Dowel drilling 6.1.3 Dowel drill, HW-solid



Shank 10 mm

Application:

For drilling dowel holes, especially dowel holes in cabinetry. Suitable for drilling tear-free hinge holes in visible areas and for machining panel materials which are covered with hard-to-machine surface coatings (e.g. thin decorative paper).

Machine:

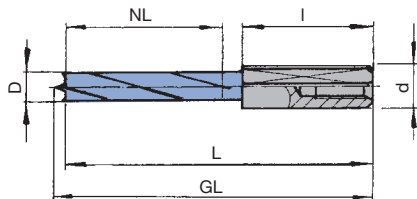
Point-to-point drilling machines, through-feed drilling machines, CNC machining centres, hinge boring machines, multi-spindle units

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (chipboard, MDF, HF etc.), untreated, plastic-coated, veneered etc., laminated woods (plywood etc.).

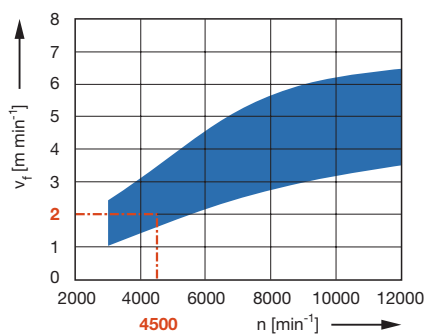
Technical information:

Spur geometry with extreme shear cut. Solid tungsten carbide design with high wear-resistant tungsten carbide quality. High stability and long performance time. Polished gullet for minimum friction and feed forces.



Design without heel

Feed speed v_f depending on the spindle RPM n



Workpiece material:

Chipboard plastic coated

Working step:

Boring

Correction factor for v_f :

Veneered = 0.8

Paper-coated = 0.8

MDF, solid wood = 0.7

Chipboard, untreated = 1.3

GL 57.5 mm, Z 2 / V 2

WB 120-0-11, WB 120-0-32, WB 120-0-33

D mm	GL mm	L mm	NL mm	S mm	ID LL	ID RL
3	57,5	56	16	10x34	033610	033611 ●
5	57,5	56	25	10x27	033728	033729 ●
6	57,5	56	25	10x27	033730	033731 ●
8	57,5	56	25	10x27	033732	033733 ●

RPM: $n = 3000 - 12000 \text{ min}^{-1}$

GL 70 mm, Z 2 / V 2

WB 120-0-11, WB 120-0-32, WB 120-0-33

D mm	GL mm	L mm	NL mm	S mm	ID LL	ID RL
5	70	68,5	35	10x27	033496	033497 ●
6	70	68,5	35	10x27	033498	033499 ●
8	70	68,5	35	10x27	033500	033501 ●

RPM: $n = 3000 - 12000 \text{ min}^{-1}$

Spare parts:

BEZ	ABM mm	BEM	ID
Allen screw	M5x10	Length adjustment	005802 ●
Allen screw for S10x27	M5x8	Length adjustment	006378 ●

6. Drilling

6.1 Dowel drilling 6.1.3 Dowel drill, HW-solid



Shank 10 mm

Application:

For drilling dowel holes, especially dowel holes in cabinetry, with increased feed speed compared to drilling bits with Z 2 / V 2.

Machine:

Point-to-point drilling machines, through-feed drilling machines, CNC machining centres, hinge boring machines, multi-spindle units

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (chipboard, MDF, HF etc.), untreated, plastic-coated, veneered etc., laminated woods (plywood etc.).

Technical information:

Spur geometry with shear cut. Version in HW-solid.



Z 3 / V 3

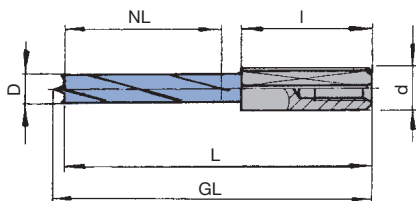
WB 120-0-11,

D	GL	L	NL	S	ID	ID
mm	mm	mm	mm	mm	LL	RL
5	57,5	56	25	10x26	034124	034125

RPM: $n = 3000 - 9000 \text{ min}^{-1}$

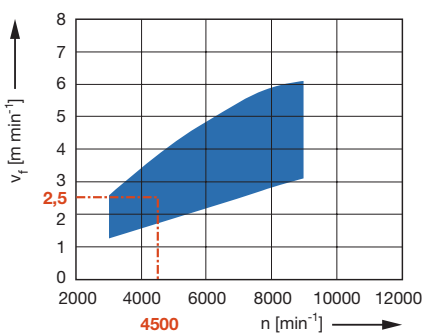
Spare parts:

BEZ	ABM	BEM	ID
Allen screw	mm	Length adjustment	
	M5x10		005802



Design without heel

Feed speed v_f depending on the spindle RPM n



Workpiece material:

Chipboard plastic coated

Working step:

Boring

Correction factor for v_f :

Veneered = 0.8

Paper-coated = 0.8

MDF, solid wood = 0.7

Chipboard, untreated = 1.3