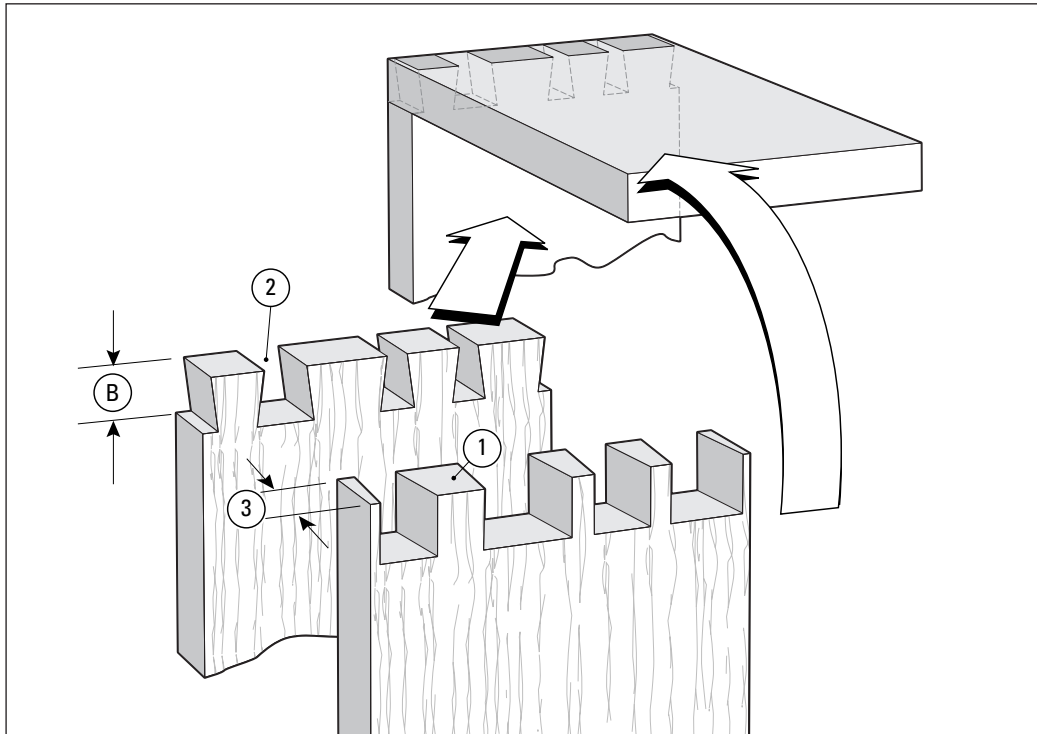


DA! APPENDIX II

Cutter Selection



Appendix II D4 User Guide



Cutter Selection for Through Dovetails

8° Dovetail Cutter for Tails

The pins ① must fit into the sockets ②. So the dovetail cutter's depth of cut ③ must be equal to or a little greater than the pinboard thickness ③.

Measure the pinboard thickness ③ and select the dovetail cutter with the correct depth of cut ③ from the following pages (cutters must be 8° for through dovetails).

Straight Cutter for Pins

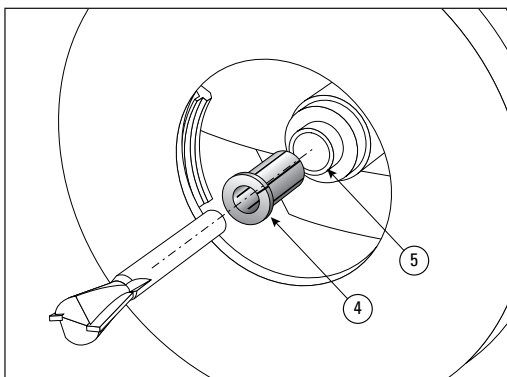
The matching straight cutter is listed just below the dovetail cutters.

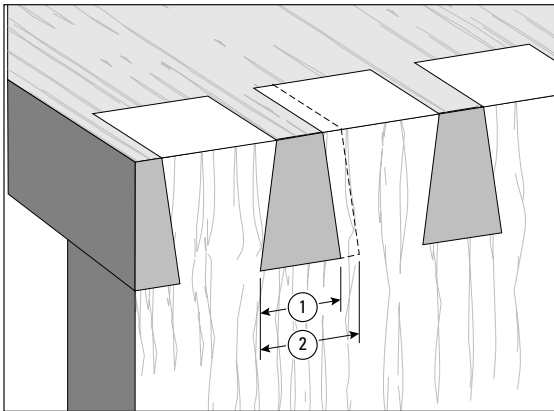
Guidebush

The correct diameter guidebush is in the last column of the cutter specifications.

Shank Selection

Note: If your router has an 8mm or larger collet, we highly recommend you use our 8mm shank cutters instead of 1/4" [6,35mm] shanks. For a 1/2" [12,7mm] collet you will require our 1/2" [12,7mm] to 8mm collet adapter No. 172-8. **Note:** This is a collet reducer ④, not a collet ⑤. It does not replace the collet, it slides directly into your 1/2" collet.





You will note that some of the dovetail cutters' depths of cut overlap. For example:
 No.80 cutter (B): 1/2"–13/16" [12 - 20mm]
 No.90 cutter (B): 5/8"–1" [16 - 26mm]

This means that boards between 5/8" and 13/16" [16 - 20mm] thick can be joined using either the No.80–140 combination or the No.90–160 combination.

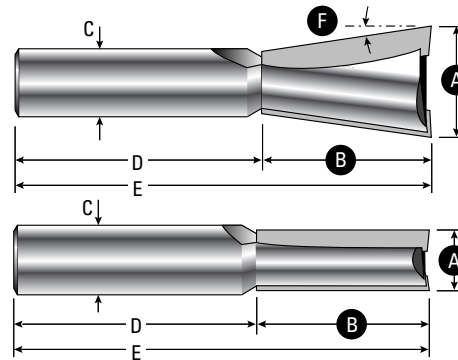
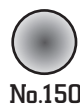
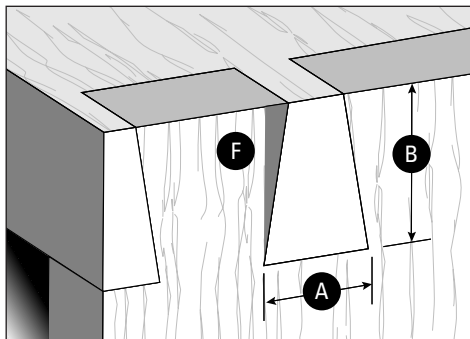
The two cutter combinations will produce slightly different-looking joints because the No.80 cutter can cut a narrower pin socket ① than the No.90 cutter ②.



Do not attempt to rout dovetails at less than the minimum depth of cut specified.

Leigh Through Dovetail Cutters

Note: Cutter and joint drawings about 75% actual size.



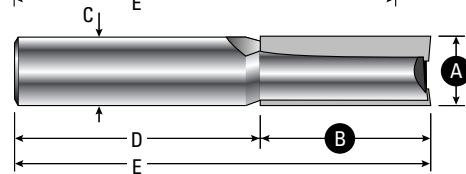
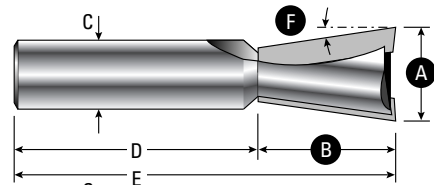
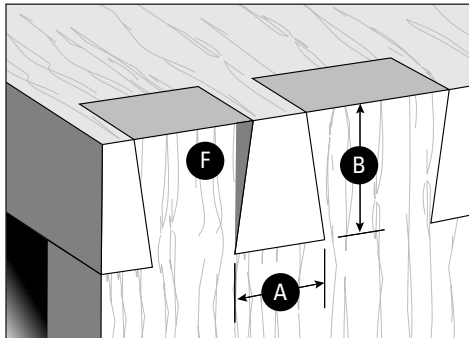
Cutters	A	B	C	D	E	F	Guidebush Diameter
	Overall Diameter	Cutting Depth Range	Shank Diameters	Shank Length	Overall Length	Angle	
No.100	13/16" [20,6]	1" to 1-1/4" [26,0-32,0]	1/2" [12,7]	1-3/4" [45,0]	3" [76,0]	8°	5/8" [159]
No.150	7/16" [11,1]	up to 1-1/4" [32,0]	1/2" [12,7]	1-3/4" [45,0]	3" [76,0]	–	5/8" [159]

Numbers in brackets are millimetres

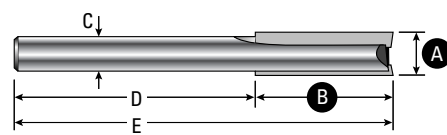
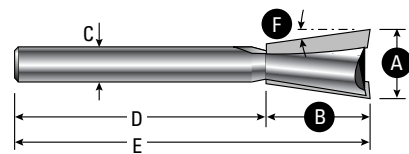
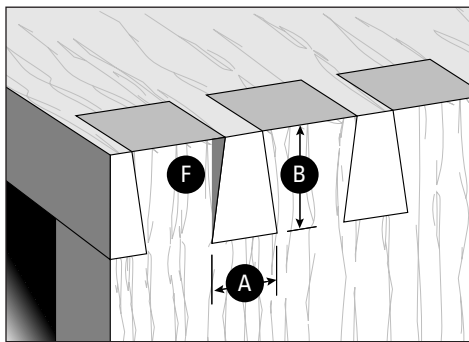
Appendix II D4 User Guide

Leigh Through Dovetail Cutters

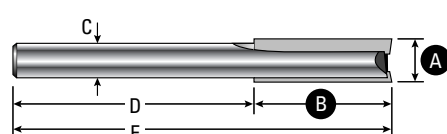
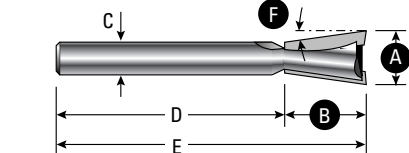
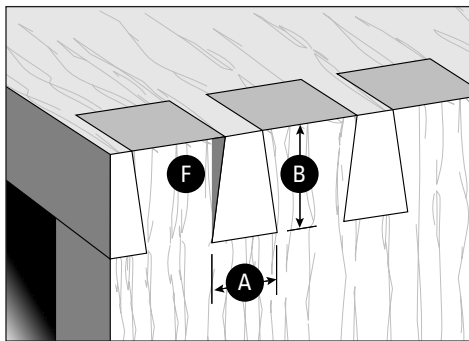
Note: Cutter and joint drawings about 75% actual size.



Cutters	A Overall Diameter	B Cutting Depth Range	C Shank Diameters	D Shank Length	E Overall Length	F Angle	Guidebush Diameter
No. 90	11/16" [17,5]	5/8" to 1" [16,0-26,0]	1/2" [12,7]	1-3/4" [45,0]	2-3/4" [70,0]	8°	5/8" [159]
No. 160	1/2" [12,7]	up to 1-1/4" [32,0]	1/2" [12,7]	1-3/4" [45,0]	3" [76,0]	-	5/8" [159]



Cutters	A Overall Diameter	B Cutting Depth Range	C Shank Diameters	D Shank Length	E Overall Length	F Angle	Guidebush Diameter
*No. 80	1/2" [12,7]	1/2" to 13/16" [13,0-20,6]	1/4" or 8mm	1-3/4" [45,0]	2-9/16" [65,0]	8°	7/16" [11.1]
*No. 140	5/16" [7,9]	up to 1" [26,0]	1/4" or 8mm	1-3/4" [45,0]	2-3/4" [70,0]	-	7/16" [11.1]

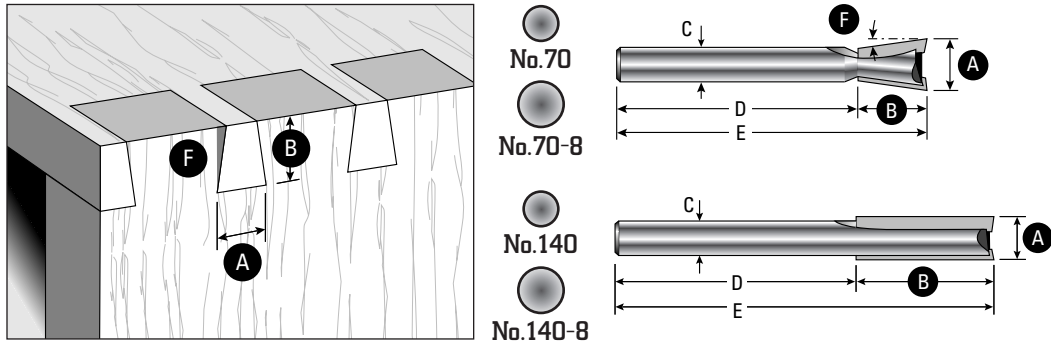


Cutters	A Overall Diameter	B Cutting Depth Range	C Shank Diameters	D Shank Length	E Overall Length	F Angle	Guidebush Diameter
No. 75	7/16" [11,1]	3/8" to 5/8" [9,5-16,0]	1/4" or 8mm	1-3/4" [45,0]	2-3/8" [60,0]	8°	7/16" [11.1]
No. 140	5/16" [7,9]	up to 1" [26,0]	1/4" or 8mm	1-3/4" [45,0]	2-3/4" [70,0]	-	7/16" [11.1]

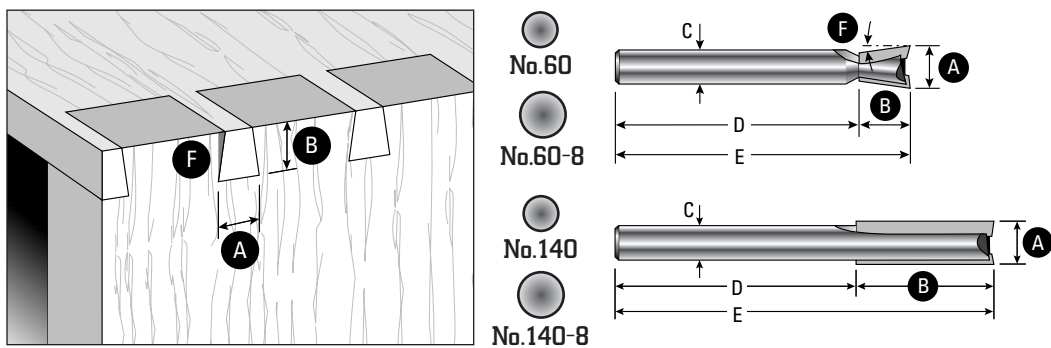
Numbers in brackets are millimetres

* No. 80 and No. 140 cutters come standard with the Leigh Jig

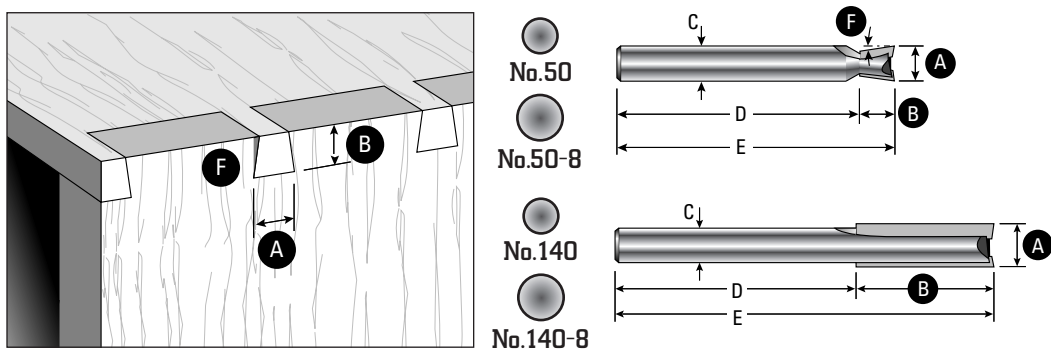
Note: Cutter and joint drawings about 75% actual size.



Cutters	A Overall Diameter	B Cutting Depth Range	C Shank Diameters	D Shank Length	E Overall Length	F Angle	Guidebush Diameter
No. 70	3/8" [9,5]	1/4" to 1/2" [6,0-13,0]	1/4" or 8mm	1-3/4" [45,0]	2-1/4" [57,0]	8°	7/16" [11.1]
No. 140	5/16" [7,9]	up to 1" [26,0]	1/4" or 8mm	1-3/4" [45,0]	2-3/4" [70,0]	-	7/16" [11.1]



Cutters	A Overall Diameter	B Cutting Depth Range	C Shank Diameters	D Shank Length	E Overall Length	F Angle	Guidebush Diameter
No. 60	5/16" [7,9]	up to 3/8" [9,5]	1/4" or 8mm	1-3/4" [45,0]	2-1/8" [54,0]	8°	7/16" [11.1]
No. 140	5/16" [7,9]	up to 1" [26,0]	1/4" or 8mm	1-3/4" [45,0]	2-3/4" [70,0]	-	7/16" [11.1]

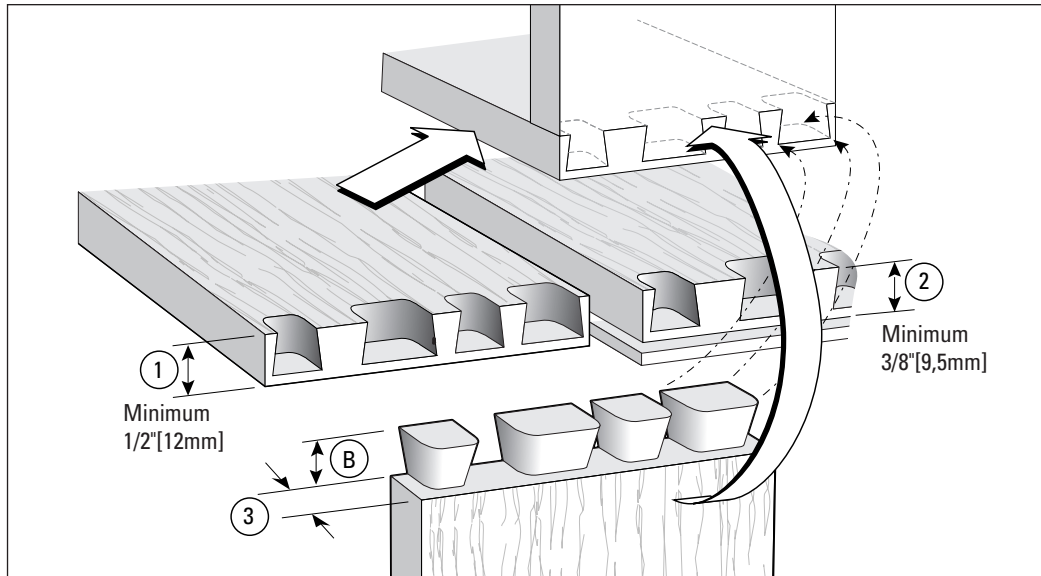


Cutters	A Overall Diameter	B Cutting Depth Range	C Shank Diameters	D Shank Length	E Overall Length	F Angle	Guidebush Diameter
No. 50	1/4" [6,35]	up to 1/4" [6,35]	1/4" or 8mm	1-3/4" [45,0]	2" [50,0]	8°	7/16" [11.1]
No. 140	5/16" [7,9]	up to 1" [26,0]	1/4" or 8mm	1-3/4" [45,0]	2-3/4" [70,0]	-	7/16" [11.1]

Numbers in brackets are millimetres

Appendix II D4 User Guide

Half-Blind Dovetails

**Cutter Selection for Half-Blind Dovetails**

Both parts of a half-blind dovetail are cut with the same dovetail cutter. The dovetail cutter's working depth of cut \textcircled{B} must be less than the pinboard thickness $\textcircled{1}$ for flush drawers by at least $\frac{1}{8}$ " [2mm], and slightly less than the rabbet depth $\textcircled{2}$ for rabbeted drawer fronts. Minimum pin board (drawer front) thickness is $\frac{1}{2}$ " [12mm].

Drawer side thickness $\textcircled{3}$ does not affect cutter selection.

Note: \textcircled{B} is the nominal working depth for half-blind dovetails, not the maximum depth. \textcircled{B} must not be varied, except for minor adjustments for joint fit. See page 82.

Measure the drawer front thickness (minimum $\frac{1}{2}$ " [12mm]) $\textcircled{1}$ or rabbet depth (minimum $\frac{3}{8}$ " [9,5mm]) $\textcircled{2}$ and select the cutter with the appropriate depth of cut \textcircled{B} from one of the four cutters on the following pages.

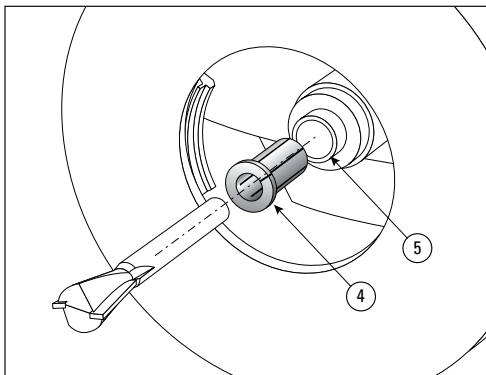
Guidebush

The correct diameter guidebush is in the last column of the cutter specifications.

Shank Selection

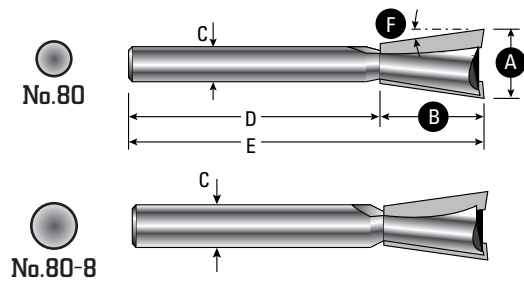
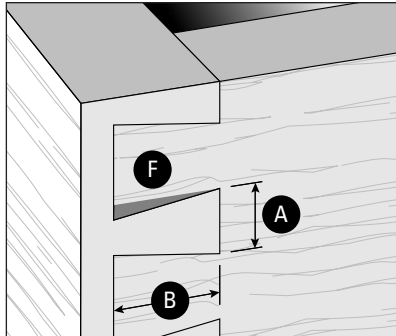
Note: If your router has an 8mm or larger collet, we highly recommend you use our 8mm shank cutters instead of $\frac{1}{4}$ " [6,35mm] shanks. For a $\frac{1}{2}$ " [12,7mm] collet you will require our $\frac{1}{2}$ " [12,7mm] to 8mm collet adapter No. 172-8. **Note:** This is a collet reducer $\textcircled{4}$, not a collet $\textcircled{5}$. It does not replace the collet, it slides directly into your $\frac{1}{2}$ " collet.

All half-blind dovetails on the D4 are routed with a $\frac{7}{16}$ " OD guidebush. See page 151.

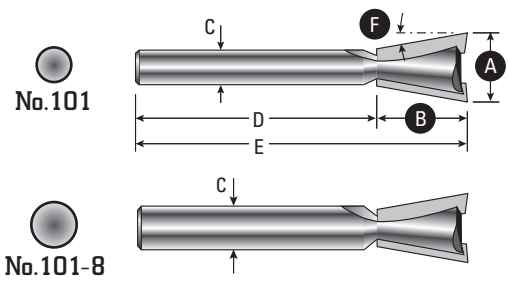
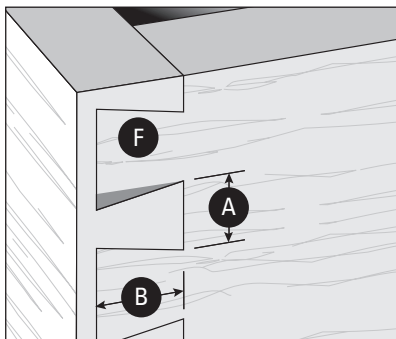


Leigh Half-Blind Dovetail Cutters

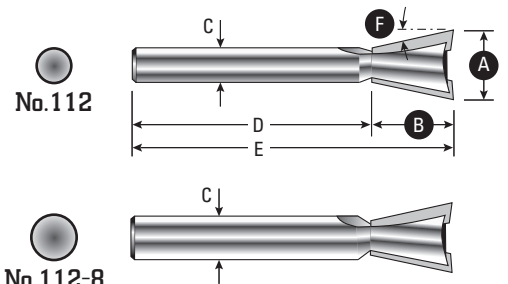
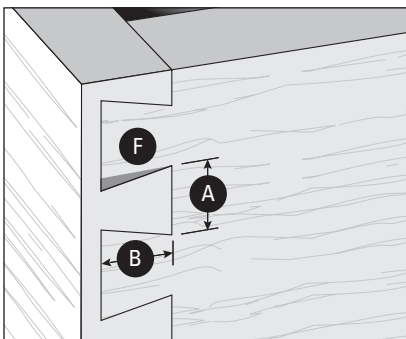
Note: Cutter and joint drawings about 75% actual size.



Cutters	A Overall Diameter	B Working Depth	C Shank Diameters	D Shank Length	E Overall Length	F Angle	Guidebush Diameter
*No. 80	1/2" [12,7]	~3/4" [19]	1/4" or 8mm	1-3/4" [45,0]	2-9/16" [65,0]	8°	7/16" [11.1]



Cutters	A Overall Diameter	B Working Depth	C Shank Diameters	D Shank Length	E Overall Length	F Angle	Guidebush Diameter
No. 101	1/2" [12,7]	~5/8" [16,0]	1/4" or 8mm	1-3/4" [45,0]	2-3/8" [60,0]	10°	7/16" [11.1]



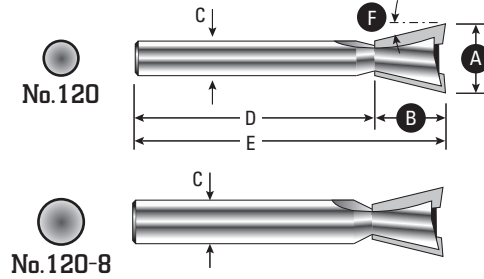
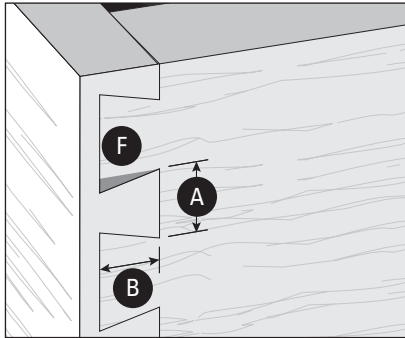
Cutters	A Overall Diameter	B Working Depth	C Shank Diameters	D Shank Length	E Overall Length	F Angle	Guidebush Diameter
No. 112	1/2" [12,7]	~1/2" [13,0]	1/4" or 8mm	1-3/4" [44,0]	2-21/64" [59]	12°	7/16" [11.1]

Numbers in brackets are millimetres

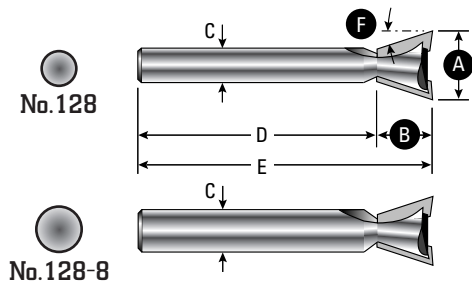
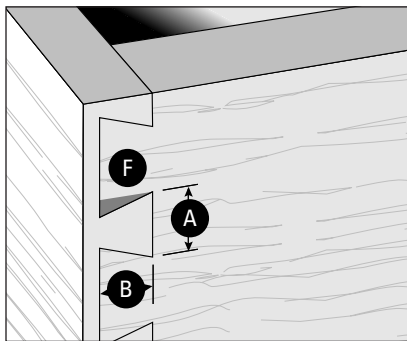
* No.80 cutter comes standard with the Leigh Jig

Appendix II D4 User Guide

Note: Cutter and joint drawings about 75% actual size.



Cutters	A Overall Diameter	B Working Depth	C Shank Diameters	D Shank Length	E Overall Length	F Angle	Guidebush Diameter
No. 120	1/2" [12,7]	~7/16" [11,0]	1/4" or 8mm	1-3/4" [45,0]	2-1/4" [57]	14°	7/16" [11.1]



Cutters	A Overall Diameter	B Working Depth	C Shank Diameters	D Shank Length	E Overall Length	F Angle	Guidebush Diameter
No. 128	1/2" [12,7]	~3/8" [9,5]	1/4" or 8mm	1-3/4" [45,0]	2-1/8" [54,0]	18°	7/16" [11.1]

Numbers in brackets are millimetres