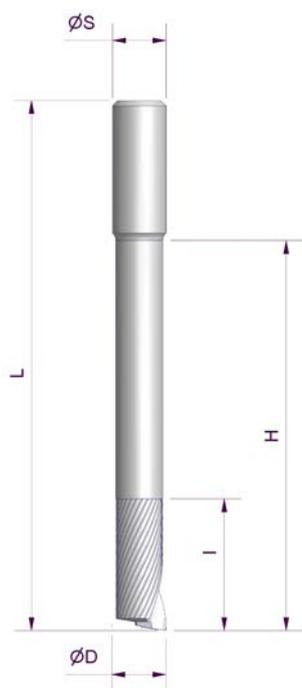


19D

HW Fresa integrale per alluminio

HW Solid carbide spiral router bit for aluminium
VHM Bohrnutenfräser für Aluminium

Fraise HW monobloc pour alu
HW fresa integral para aluminio



Ø D	I/H	L	Ø S	Part number
3	12	50	3	19D.030
4	12	60	4	19D.040
5	20	60	5	19D.050
5	20	70	8	19D.050.A
6	20	60	6	19D.060
6	20	70	8	19D.060.A
8	20	60	8	19D.080
8	20	80	8	19D.080.A
8	20/75	100	8	19D.080.B
10	25	75	10	19D.100
10	25/75	100	10	19D.100.A
12	35/75	100	12	19D.120

S = 18000 - 24000 F = 3 ÷ 9 mt./min.



MICRO

Z=1



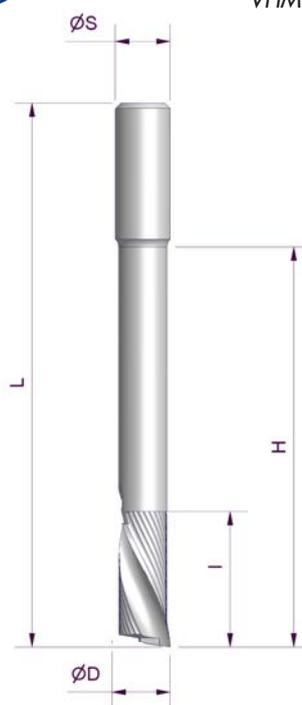
CNC

19G

HW Fresa integrale per alluminio

HW Solid carbide spiral router bit for aluminium
VHM Bohrnutenfräser für Aluminium

Fraise HW monobloc pour alu
HW fresa integral para aluminio



Ø D	I/H	L	Ø S	Part number
3	12	50	3	19G.030
4	12	60	4	19G.040
5	20	60	5	19G.050
5	20	70	8	19G.050.A
6	20	60	6	19G.060
6	20	70	8	19G.060.A
8	20	60	8	19G.080
8	20	80	8	19G.080.A
8	20/75	100	8	19G.080.B
10	25	75	10	19G.100
10	25/75	100	10	19G.100.A
12	35/75	100	12	19G.120

S = 18000 - 24000 F = 3 ÷ 9 mt./min.



MICRO

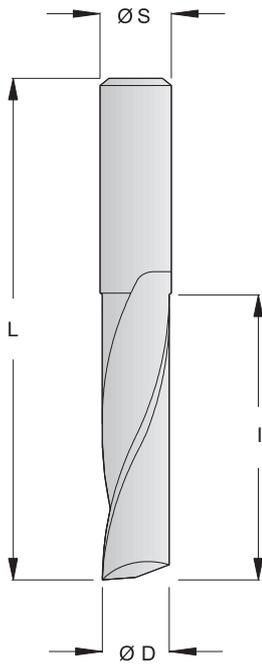
Z=1



CNC

9D

HW Fresa integrale elicoidale

HW Solid carbide spiral router bit
VHM VollhartmetallfräserHW Mèches helic. pour defonceuse
HW Fresas helicoidales integral

Ø D	I	L	Ø S	Part number
3	12	50	3	9D.030
4	12	50	4	9D.040
5	17	50	5	9D.050
6	17	60	6	9D.060
6	27	60	6	9D.060.A
8	22	80	8	9D.080
8	32	80	8	9D.080.A
10	32	80	10	9D.100
10	42	100	10	9D.100.A
12	32	80	12	9D.120
12	42	100	12	9D.120.A
12	52	100	12	9D.120.B

S = 18000 ÷ 24000 F = 3 ÷ 9 mt./min.



MICRO

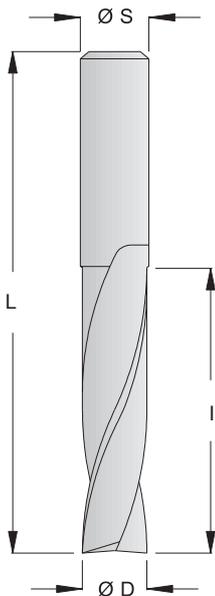
Z=1



CNC

9E

HW Punta integrale elicoidale

HW Solid carbide spiral router bit
VHM VollhartmetallfräserHW Mèches helic. pour defonceuse
HW Fresas helicoidales integral

Ø D	I	L	Ø S	Part number
3	12	50	3	9E.030
4	12	50	4	9E.040
5	17	50	5	9E.050
6	17	60	6	9E.060
6	27	60	6	9E.060.A
8	22	80	8	9E.080
8	32	80	8	9E.080.A
10	32	80	10	9E.100
10	42	100	10	9E.100.A
12	32	80	12	9E.120
12	42	100	12	9E.120.A
12	52	100	12	9E.120.B
14	42	100	14	9E.140
14	52	100	14	9E.140.A
16	42	100	16	9E.160
16	52	100	16	9E.160.A
16	72	120	16	9E.160.B
18	52	100	18	9E.180.
18	72	120	18	9E.180.A
18	102	150	18	9E.180.B
20	52	100	20	9E.200
20	72	120	20	9E.200.A
20	102	150	20	9E.200.B

S = 18000 ÷ 24000 rpm. F = 3 ÷ 12 mt./min.



MICRO

Z=2

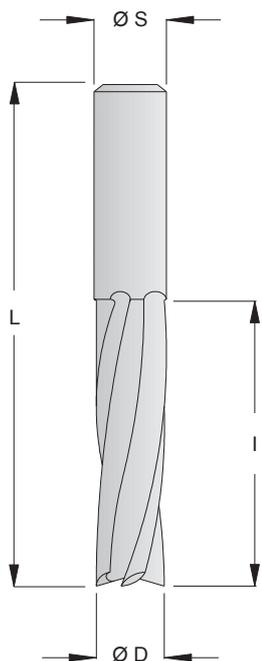


CNC



9F

HW Fresa integrale elicoidale

HW Solid carbide spiral router bit
VHM VollhartmetallfräserHW Mèches helic. pour defonceuse
HW Fresas helicoidales integral

Ø D	I	L	Ø S	Part number
8	22	80	8	9F.080
8	32	80	8	9F.080.A
10	32	80	10	9F.100
10	42	100	10	9F.100.A
12	32	80	12	9F.120
12	42	100	12	9F.120.A
12	52	100	12	9F.120.B
14	42	100	14	9F.140
14	52	100	14	9F.140.A
16	42	100	16	9F.160
16	52	100	16	9F.160.A
16	72	120	16	9F.160.B
18	52	100	18	9F.180
18	72	120	18	9F.180.A
18	102	150	18	9F.180.B
20	52	100	20	9F.200
20	72	120	20	9F.200.A
20	102	150	20	9F.200.B
25	102	150	25	9F.250

S = 18000 ÷ 24000 F = 6 ÷ 14 mt./min.



MICRO

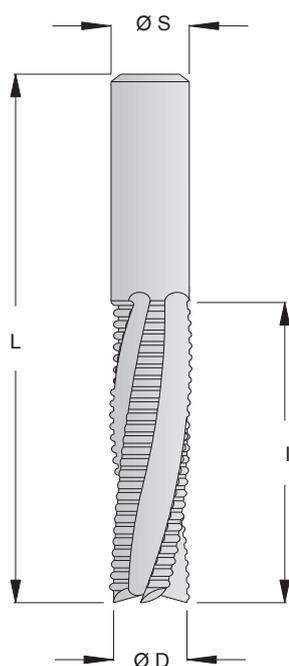
Z=3



CNC

9N

HW Fresa integrale elicoidale

HW Solid carbide spiral router bit
VHM VollhartmetallfräserHW Mèches helic. pour defonceuse
HW Fresas helicoidales integral

Ø D	I	L	Ø S	Part number
8	22	80	8	9N.080
8	32	80	8	9N.080.A
10	32	80	10	9N.100
10	42	100	10	9N.100.A
12	32	80	12	9N.120
12	42	100	12	9N.120.A
12	52	100	12	9N.120.B
14	42	100	14	9N.140
14	52	100	14	9N.140.A
16	42	100	16	9N.160
16	52	100	16	9N.160.A
16	72	120	16	9N.160.B
18	52	100	18	9N.180
18	72	120	18	9N.180.A
18	102	150	18	9N.180.B
20	52	100	20	9N.200
20	72	120	20	9N.200.A
20	102	150	20	9N.200.B
25	102	150	25	9N.250

S = 18000 ÷ 24000 F = 6 ÷ 24 mt./min.



MICRO

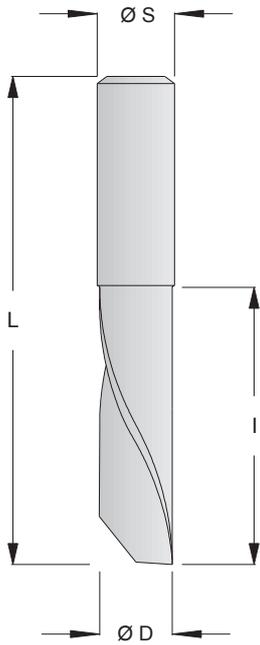
Z=3



CNC

9G

HW Fresa integrale elicoidale

HW Solid carbide spiral router bit
VHM VollhartmetallfräserHW Mèches helic. pour defonceuse
HW Fresas helicoidales integral

Ø D	I	L	Ø S	Part number
3	12	50	3	9G.030
4	12	50	4	9G.040
5	17	50	5	9G.050
6	17	60	6	9G.060
6	27	60	6	9G.060.A
8	22	80	8	9G.080
8	32	80	8	9G.080.A
10	32	80	10	9G.100
10	42	100	10	9G.100.A
12	32	80	12	9G.120
12	42	100	12	9G.120.A
12	52	100	12	9G.120.B

$$S = 18000 \div 24000 \quad F = 3 \div 9 \text{ mt./min.}$$



MICRO

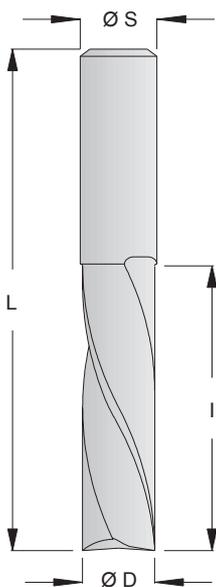
Z=1



CNC

9H

HW Punta integrale elicoidale

HW Solid carbide spiral router bit
VHM VollhartmetallfräserHW Mèches helic. pour defonceuse
HW Fresas helicoidales integral

Ø D	I	L	Ø S	Part number
3	12	50	3	9H.030
4	12	50	4	9H.040
5	17	50	5	9H.050
6	17	60	6	9H.060
6	27	60	6	9H.060.A
8	22	80	8	9H.080
8	32	80	8	9H.080.A
10	32	80	10	9H.100
10	42	100	10	9H.100.A
12	32	80	12	9H.120
12	42	100	12	9H.120.A
12	52	100	12	9H.120.B
14	42	100	14	9H.140
14	52	100	14	9H.140.A
16	42	100	16	9H.160
16	52	100	16	9H.160.A
16	72	120	16	9H.160.B
18	52	100	18	9H.180.
18	72	120	18	9H.180.A
18	102	150	18	9H.180.B
20	52	100	20	9H.200
20	72	120	20	9H.200.A
20	102	150	20	9H.200.B

$$S = 18000 \div 24000 \text{ rpm.} \quad F = 3 \div 12 \text{ mt./min.}$$



MICRO

Z=2

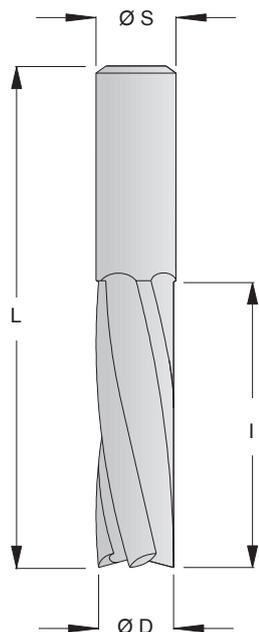


CNC



91

HW Fresa integrale elicoidale

HW Solid carbide spiral router bit
VHM VollhartmetallfräserHW Mèches helic. pour defonceuse
HW Fresas helicoidales integral

Ø D	I	L	Ø S	Part number
8	22	80	8	91.080
8	32	80	8	91.080.A
10	32	80	10	91.100
10	42	100	10	91.100.A
12	32	80	12	91.120
12	42	100	12	91.120.A
12	52	100	12	91.120.B
14	42	100	14	91.140
14	52	100	14	91.140.A
16	42	100	16	91.160
16	52	100	16	91.160.A
16	72	120	16	91.160.B
18	52	100	18	91.180
18	72	120	18	91.180.A
18	102	150	18	91.180.B
20	52	100	20	91.200
20	72	120	20	91.200.A
20	102	150	20	91.200.B
25	102	150	25	91.250

S = 18000 ÷ 24000 F = 6 ÷ 14 mt./min.



MICRO

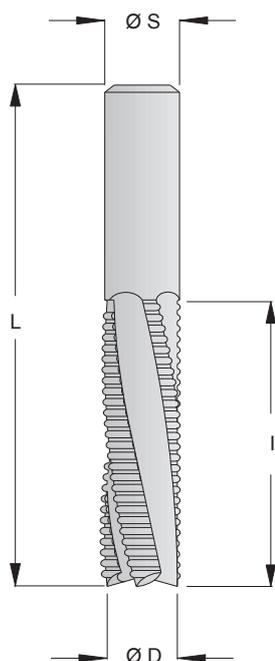
Z=3



CNC

9L

HW Fresa integrale elicoidale

HW Solid carbide spiral router bit
VHM VollhartmetallfräserHW Mèches helic. pour defonceuse
HW Fresas helicoidales integral

Ø D	I	L	Ø S	Part number
8	22	80	8	9L.080
8	32	80	8	9L.080.A
10	32	80	10	9L.100
10	42	100	10	9L.100.A
12	32	80	12	9L.120
12	42	100	12	9L.120.A
12	52	100	12	9L.120.B
14	42	100	14	9L.140
14	52	100	14	9L.140.A
16	42	100	16	9L.160
16	52	100	16	9L.160.A
16	72	120	16	9L.160.B
18	52	100	18	9L.180
18	72	120	18	9L.180.A
18	102	150	18	9L.180.B
20	52	100	20	9L.200
20	72	120	20	9L.200.A
20	102	150	20	9L.200.B
25	102	150	25	9L.250

S = 18000 ÷ 24000 F = 6 ÷ 24 mt./min.



MICRO

Z=3



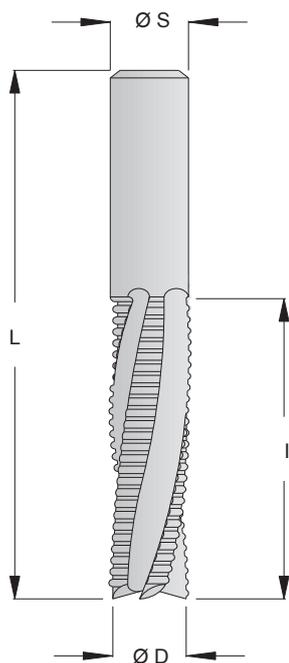
CNC

9NT

HW Fresa integrale elicoidale

HW Solid carbide spiral router bit
VHM Vollhartmetallfräser

HW Mèches helic. pour defonceuse
HW Fresas helicoidales integral



Ø D	I	L	Ø S	Part number
8	22	80	8	9NT.080
10	32	80	10	9NT.100
12	32	80	12	9NT.120
14	42	100	14	9NT.140
16	42	100	16	9NT.160
18	52	100	18	9NT.180
20	52	100	20	9NT.200

$$S = 18000 \div 24000 \quad F = 6 \div 24 \text{ mt./min.}$$

Fresa specifica per truciolare
Router bit specific for chipboards
Spezieller spanabhebende-fräser
Mèches speciale pour bois agglomère
Fresa specifica para triturar



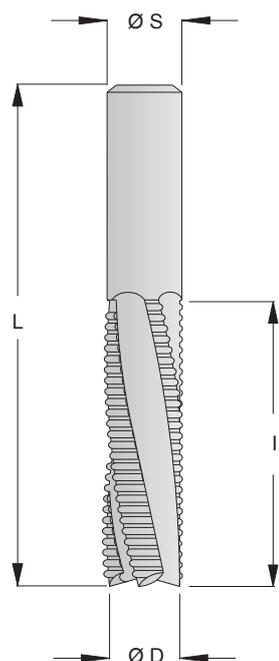
Lunga durata
Extended life

**MICRO****Z=3****CNC****9LT**

HW Punta integrale elicoidale

HW Solid carbide spiral router bit
VHM Vollhartmetallfräser

HW Mèches helic. pour defonceuse
HW Fresas helicoidales integral



Ø D	I	L	Ø S	Part number
8	22	80	8	9LT.080
10	32	80	10	9LT.100
12	32	80	12	9LT.120
14	42	100	14	9LT.140
16	42	100	16	9LT.160
18	52	100	18	9LT.180
20	52	100	20	9LT.200

$$S = 18000 \div 24000 \quad F = 6 \div 24 \text{ mt./min.}$$

Fresa specifica per truciolare
Router bit specific for chipboards
Spezieller spanabhebende-fräser
Mèches speciale pour bois agglomère
Fresa specifica para triturar

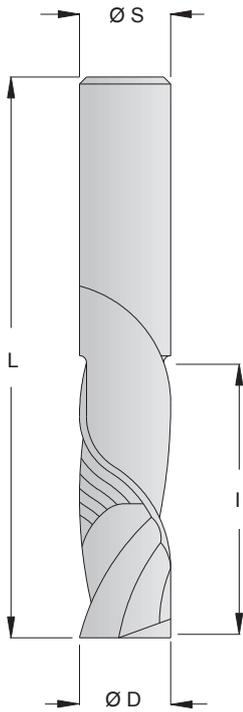


Lunga durata
Extended life

**MICRO****Z=3****CNC**

9M

HW Fresa Up-Down integrale elicoidale

HW Solid carbide spiral router bit
VHM VollhartmetallfräserHW Mèches helic. pour defonceuse
HW Fresas helicoidales integral

Ø D	I	L	Ø S	Part number
8	22	80	8	9M.080
8	32	80	8	9M.080.A
10	32	80	10	9M.100
10	42	100	10	9M.100.A
12	42	100	12	9M.120
12	52	100	12	9M.120.A
14	42	100	14	9M.140
14	52	100	14	9M.140.A
16	42	100	16	9M.160
16	52	100	16	9M.160.A
18	52	100	18	9M.180
18	72	120	18	9M.180.A
20	52	100	20	9M.200
20	72	120	20	9M.200.A

S = 18000 ÷ 24000 F = 5 ÷ 14 mt./min.



MICRO

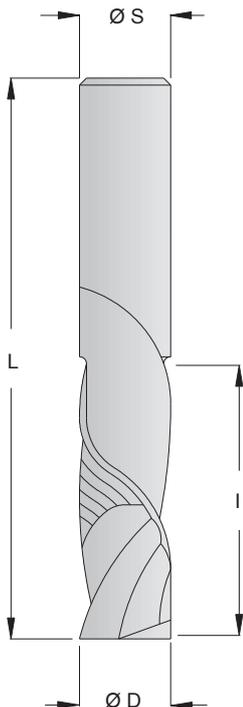
Z2+2



CNC

9R

HW Fresa Up-Down integrale elicoidale

HW Solid carbide spiral router bit
VHM VollhartmetallfräserHW Mèches helic. pour defonceuse
HW Fresas helicoidales integral

Ø D	I	L	Ø S	Part number
12	42	100	12	9R.120
12	52	100	12	9R.120.A
14	42	100	14	9R.140
14	52	100	14	9R.140.A
16	42	100	16	9R.160
16	52	100	16	9R.160.A
18	52	100	18	9R.180
18	72	120	18	9R.180.A
20	52	100	20	9R.200
20	72	120	20	9R.200.A

S = 18000 ÷ 24000 F = 5 ÷ 18 mt./min.



MICRO

Z3+3



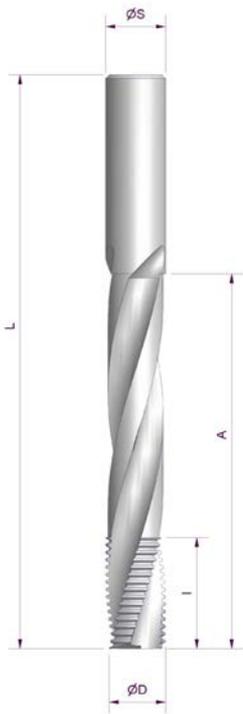
CNC

9P

HW Fresa integrale elicoidale

HW Solid carbide spiral router bit
VHM Vollhartmetallfräser

HW Mèches helic. pour defonceuse
HW Fresas helicoidales integral



Ø D	I	L	Ø S	Part number
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Su richiesta

On request



MICRO

Z=3



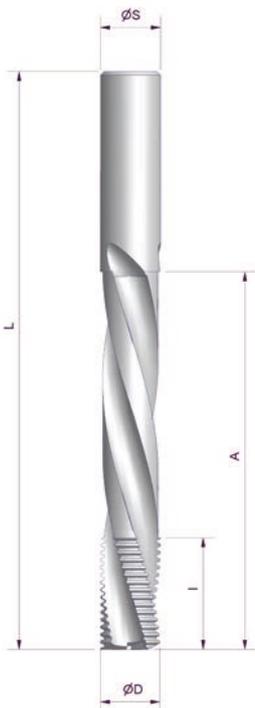
CNC

9Q

HW Punta integrale elicoidale

HW Solid carbide spiral router bit
VHM Vollhartmetallfräser

HW Mèches helic. pour defonceuse
HW Fresas helicoidales integral



Ø D	I	L	Ø S	Part number
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Su richiesta

On request



MICRO

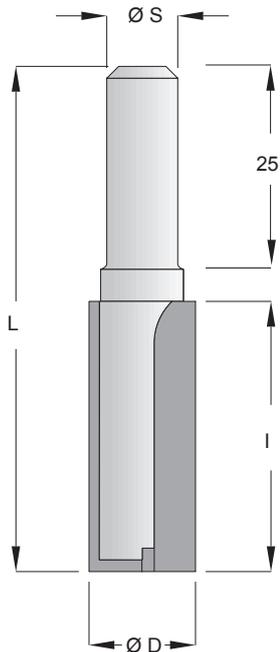
Z=3



CNC

8A

HW Fresa a taglienti diritti

HW Straight router bit
HW NutfräserHW Mèches a defoncer
HW Fresa de pantografo

CNC

Z=2+1

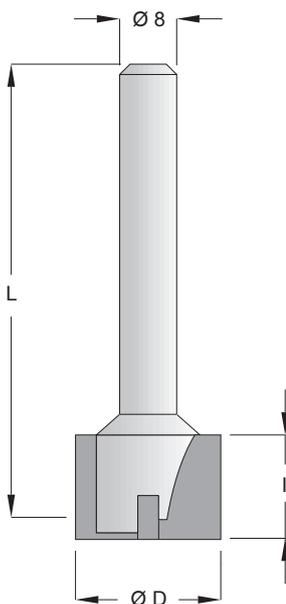
Ø D	I	L	Ø D	Part number
8	25	58	9,5	8A.080.A
8	30	63	9,5	8A.080.B
10	25	58	9,5	8A.100.A
10	30	63	9,5	8A.100.B
10	35	68	9,5	8A.100.C
10	40	73	9,5	8A.100.D
12	25	58	12	8A.120.A
12	40	73	12	8A.120.D
14	25	58	12	8A.140.A
14	40	73	12	8A.140.D
15	25	58	12	8A.150.A
15	40	73	12	8A.150.D
16	25	58	12	8A.160.A
16	40	73	12	8A.160.D
18	25	58	12	8A.180.A
18	40	73	12	8A.180.D
20	25	58	12	8A.200.A
20	40	73	12	8A.200.D
22	25	58	12	8A.220.A
22	40	73	12	8A.220.D
24	25	58	12	8A.240.A
24	40	73	12	8A.240.D
25	25	58	12	8A.250.A
25	40	73	12	8A.250.D
26	25	58	12	8A.260.A
26	40	73	12	8A.260.D
28	25	58	12	8A.280.A
28	40	73	12	8A.280.D
30	25	58	12	8A.300.A
30	40	73	12	8A.300.D
35	25	58	12	8A.350.A
35	40	73	12	8A.350.D

Ø S = 9,5 - 12 S = 18000 ÷ 24000 F = 4 ÷ 8



35A

HM Fresa a taglienti diritti

HW Straight router bit
HW NutfräserHW Mèches a defoncer
HW Fresa de pantografo

Ø D	I	L	Part number
4*	8	55	35A.040
5*	10	55	35A.050
6*	15	55	35A.060
8	20	70	35A.080
10	20	70	35A.100
12	20	70	35A.120
14	20	70	35A.140
15	20	70	35A.150
16	20	70	35A.160
18	20	70	35A.180
20	20	70	35A.200
22	20	70	35A.220
24	20	70	35A.240
25	20	70	35A.250
30	20	70	35A.300

- * HM integrale
- * Solid carbide
- * Vollhartmetall
- * Metal dur integral
- * MD integral

Ø S = 8
S = 18000 ÷ 24000 F = 4 ÷ 8

CNC

Z=2+1

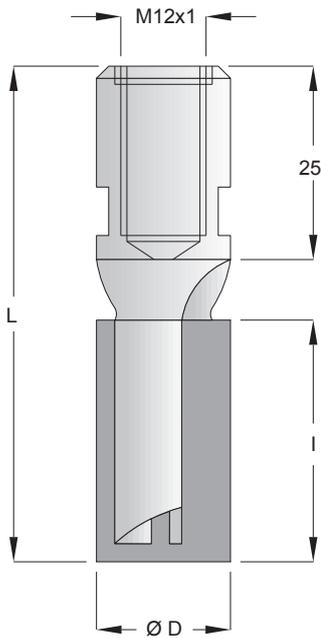


8AA

HW Fresa a taglienti diritti

HW Straight router bit
HW Nutfräser

HW Mèches a defoncer
HW Fresa de pantografo con rosca interior



Ø D	I	L	Part number
8	25	60	8AA.080.A
10	25	60	8AA.100.A
10	30	65	8AA.100.B
10	35	68	8AA.100.C
10	40	73	8AA.100.D
12	25	60	8AA.120.A
12	40	73	8AA.120.D
14	25	60	8AA.140.A
14	40	73	8AA.140.D
15	25	60	8AA.150.A
15	40	73	8AA.150.D
16	25	60	8AA.160.A
16	40	73	8AA.160.D
16	60	92	8AA.160.E
18	25	60	8AA.180.A
18	40	73	8AA.180.D
20	25	60	8AA.200.A
20	40	73	8AA.200.D
20	60	92	8AA.200.E
22	25	60	8AA.220.A
22	40	73	8AA.220.D
24	25	60	8AA.240.A
24	40	73	8AA.240.D
25	25	60	8AA.250.A
25	40	73	8AA.250.D
26	25	60	8AA.260.A
26	40	73	8AA.260.D
28	25	60	8AA.280.A
28	40	73	8AA.280.D
30	25	60	8AA.300.A
30	40	73	8AA.300.D
35	25	60	8AA.350.A
35	40	73	8AA.350.D

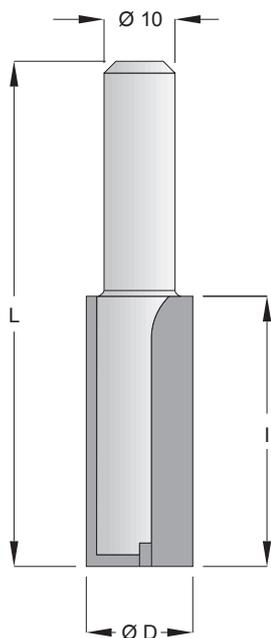


Ø S = M 12 x 1
S = 18000

Z=2+1

10A

HW Fresa a taglienti diritti

HW Straight router bit
HW NutfräserHW Mèches a defoncer
HW Fresa de pantografo

Ø D	I	L	Part number
4*	10	65	10A.040
5*	10	65	10A.050
6*	14	65	10A.060
8	25	70	10A.080
10	25	70	10A.100
12	25	70	10A.120
14	25	70	10A.140
15	25	70	10A.150
16	25	70	10A.160
18	25	70	10A.180
20	25	70	10A.200
22	25	70	10A.220
24	25	70	10A.240
25	25	70	10A.250
26	25	70	10A.260
30	25	70	10A.300
35	25	70	10A.350

- * HM integrale
- * Solid carbide
- * Vollhartmetall
- * Metal dur integral
- * MD integral

Ø S = 10 x 35
S = 18000 ÷ 24000 F = 4 ÷ 8

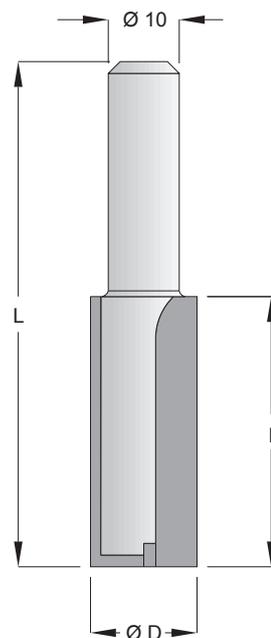


CNC

Z=2+1

10B

HW Fresa a taglienti diritti

HW Straight router bit
HW NutfräserHW Mèches a defoncer
HW Fresa de pantografo

Ø D	I	L	Part number
10	40	87	10B.100
12	40	87	10B.120
14	40	87	10B.140
15	40	87	10B.150
16	40	87	10B.160
18	40	87	10B.180
20	40	87	10B.200

Ø S = 10 x 35 L = 87 I = 40
S = 18000 ÷ 24000 4 ÷ 8



CNC

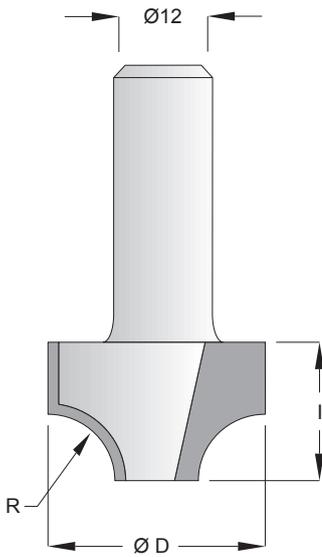
Z=2+1

32AA

HW Fresa a raggio concavo

HW Roundover bit
HW Radius-Fräser

HW Mèches profilées
HW Fresas de perfil para fresadora



R	Ø D	I	Part number
8	28	13	32AA.080
10	32	15	32AA.100
12	37	18	32AA.120
15	42	21	32AA.150
20	52	25	32AA.200

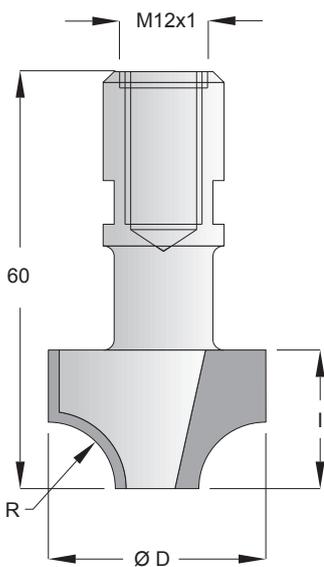
Ø S = 12 x 50
S = 18000 F = 3 ÷ 6

**CNC****Z=2****42AA**

HW Fresa a raggio concavo

HW Roundover bit
HW Radius-Fräser

HW Mèches profilées
HW Fresas de perfil para fresadora



R	Ø D	I	Part number
8	28	13	42AA.080
10	32	15	42AA.100
12	37	18	42AA.120
15	42	21	42AA.150
20	52	25	42AA.200

Ø S = M 12 x 1
S = 18000

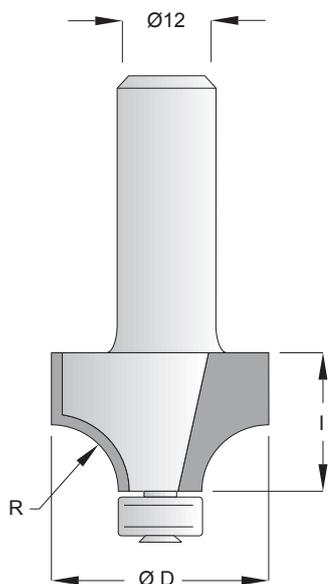
**Z=2**

32AC

HW Fresa a raggio concavo

HW Roundover bit
HW Radius-Fräser

HW Mèches profilées
HW Fresas de perfil para fresadora



R	Ø D	I	Part number
8	29	13	32AC.080
10	33	15	32AC.100
12	37	17	32AC.120
15	43	20	32AC.150
20	53	25	32AC.200

Ø S = 12 x 50
S = 18000



1V.008



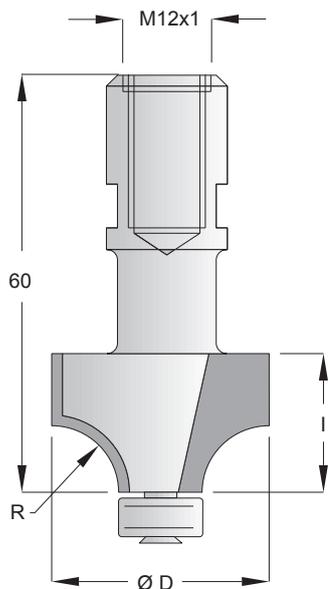
624ZZ

Z=2**42AC**

HW Fresa a raggio concavo

HW Roundover bit
HW Radius-Fräser

HW Mèches profilées
HW Fresas de perfil para fresadora



R	Ø D	I	Part number
8	29	13	42AC.080
10	33	15	42AC.100
12	37	17	42AC.120
15	43	20	42AC.150
20	53	25	42AC.200

Ø S = M 12 x 1
S = 18000



1V.008



624ZZ

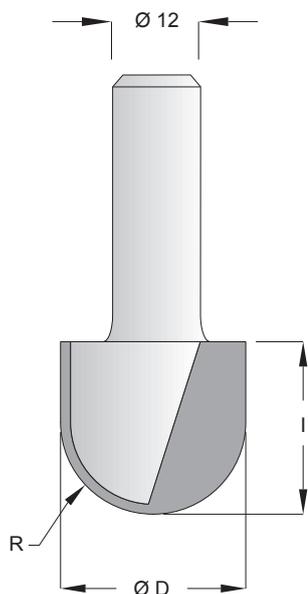
Z=2

33AA

HW Fresa a raggio convesso

HW Cove router bit
HW Röhkehlfräser

HW Mèches profilées
HW Fresas de perfil para fresadora



R	Ø D	I	Part number
8	16	18	33AA.080
10	20	18	33AA.100
12	24	18	33AA.120
15	30	18	33AA.150

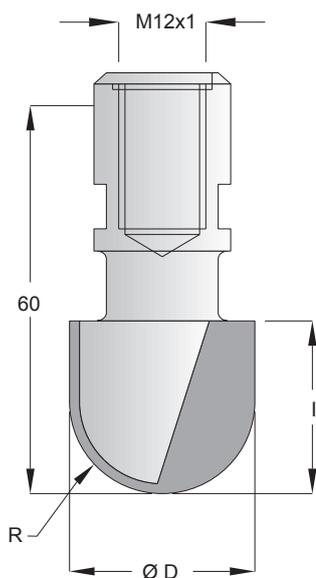
Ø S = 12 x 50
S = 18000 F = 3 ÷ 6

**CNC****Z=2****43AA**

HW Fresa a raggio concavo

HW Roundover bit
HW Radius-Fräser

HW Mèches profilées
HW Fresas de perfil para fresadora



R	Ø D	I	Part number
8	16	18	43AA.080
10	20	18	43AA.100
12	24	18	43AA.120
15	30	18	43AA.150

Ø S = M 12 x 1
S = 18000

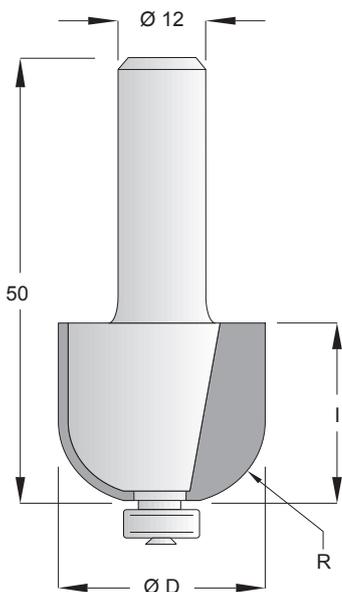
**Z=2**

33AC

HW Fresa a raggio convesso

HW Cove router bit
HW Rhohehlfräser

HW Mèches profilées
HW Fresas de perfil para fresadora



R	Ø D	I	Part number
8	29	18	33AC.080
10	33	18	33AC.100
12	37	18	33AC.120
15	43	18	33AC.150

Ø S = 12 x 50
S = 18000



1V.008



624ZZ

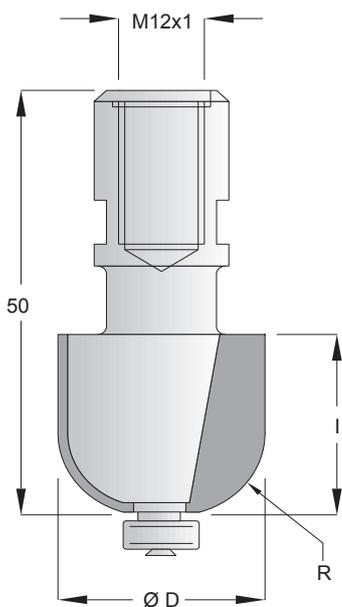
Z=2

43AC

HW Fresa a raggio convesso

HW Cove router bit
HW Rhohehlfräser

HW Mèches profilées
HW Fresas de perfil para fresadora



R	Ø D	I	Part number
8	29	18	43AC.080
10	33	18	43AC.100
12	37	18	43AC.120
15	43	18	43AC.150

Ø S = M 12 x 1
S = 18000



1V.008



624ZZ

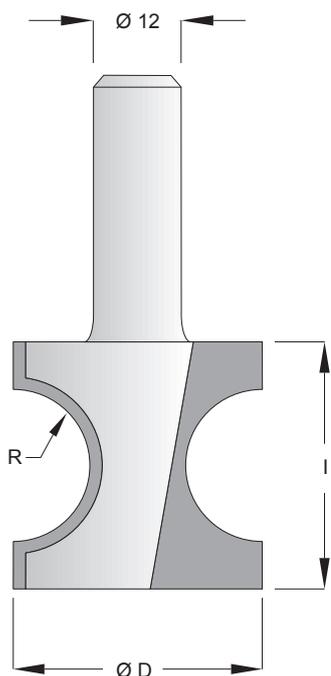
Z=2

32AD

HW Fresa a mezzo tondo

HW Cove router bit
HW Rhohehlfräser

HW Mèches profilées
HW Fresas de perfil para fresadora



R	Ø D	I	Part number
6	25	30	32AD.060
8	30	35	32AD.080
10	35	40	32AD.100
12	40	45	32AD.120
15	45	50	32AD.150

Ø S = 12 x 50

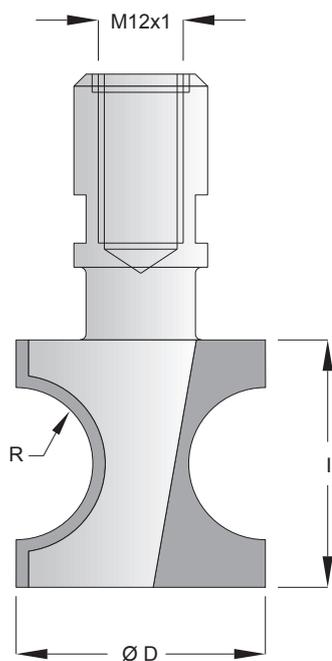
S = 10000 ÷ 18000 F = 3 ÷ 6

**CNC****Z=2****42AD**

HW Fresa a mezzo tondo

HW Cove router bit
HW Rhohehlfräser

HW Mèches profilées
HW Fresas de perfil para fresadora



R	Ø D	I	Part number
6	25	30	42AD.060
8	30	35	42AD.080
10	35	40	42AD.100
12	40	45	42AD.120
15	45	50	42AD.150

Ø S = M 12 x 1

S = 10000 ÷ 18000

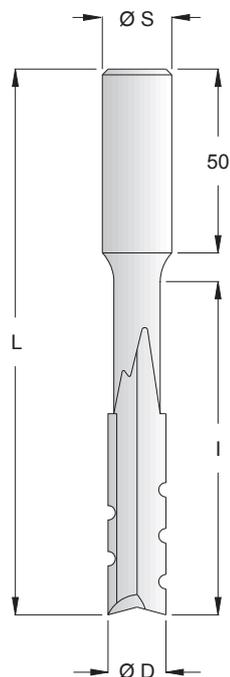
**Z=2**

102A

KSS Punta per mortasatrice

KSS Mortise bit
KSS Langlochfräsbohrer

KSS Mèches à marteiser
KSS Broca para escoplear



Ø D	I	L	DX - RH
6	45	115	102A.060
7	45	115	102A.070
8	50	115	102A.080
9	50	125	102A.090
10	55	135	102A.100
11	55	135	102A.110
12	65	145	102A.120
13	65	145	102A.130
14	75	155	102A.140
15	75	155	102A.150
16	75	155	102A.160
18	85	170	102A.180
20	85	170	102A.200
22	85	170	102A.220
24	85	170	102A.240

Ø S = 13 x 50
S = 6000 ÷ 12000

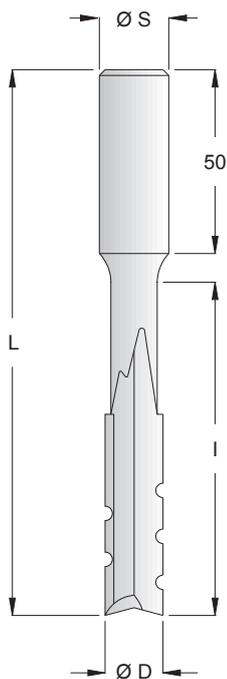


102B

KSS Punta per mortasatrice

KSS Mortise bit
KSS Langlochfräsbohrer

KSS Mèches à marteiser
KSS Broca para escoplear



Ø D	I	L	DX - RH
6	45	45	102B.060
7	45	45	102B.070
8	50	50	102B.080
9	50	50	102B.090
10	55	55	102B.100
11	55	55	102B.110
12	65	65	102B.120
13	65	65	102B.130
14	75	75	102B.140
15	75	75	102B.150
16	75	75	102B.160
18	85	85	102B.180
20	85	85	102B.200
22	85	85	102B.220
24	85	85	102B.240

Ø S = 16 x 50
S = 6000 ÷ 12000

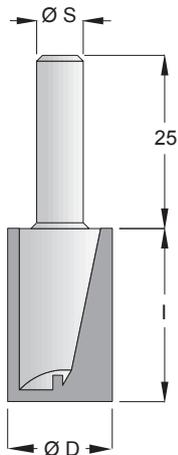


H0

Frese per elettrofresatrici portatili

Router bits for electric routers
Shaftfräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



Ø D	l	Ø S = 6	Ø S = 8
3*	8	H0.030.A	H0.030.C
4*	10	H0.040.A	H0.040.C
5*	15	H0.050.A	H0.050.C
6*	18	H0.060.A	H0.060.C
7	20	H0.070.A	H0.070.C
8	20	H0.080.A	H0.080.C
8	30	H0.081.A	H0.081.C
9	20	H0.090.A	H0.090.C
10	20	H0.100.A	H0.100.C
10	30	H0.101.A	H0.101.C
11	20	H0.110.A	H0.110.C
12	20	H0.120.A	H0.120.C
12	30	H0.121.A	H0.121.C
13	20	H0.130.A	H0.130.C
14	20	H0.140.A	H0.140.C
15	20	H0.150.A	H0.150.C
16	20	H0.160.A	H0.160.C
18	20	H0.180.A	H0.180.C
20	20	H0.200.A	H0.200.C
22	20	H0.220.A	H0.220.C
24	20	H0.240.A	H0.240.C
25	20	H0.250.A	H0.250.C

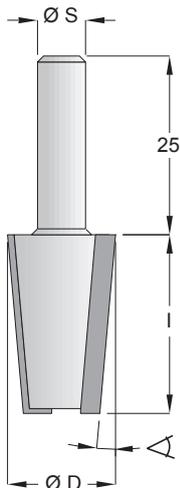
- * HM integrale
- * Solid carbide
- * Vollhartmetall
- * Metal dur integral
- * MD integral

Z2+1**H1**

Frese per elettrofresatrici portatili

Router bits for electric routers
Shaftfräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



∠	Ø D	l	Ø S = 6	DX - RH
5°	11	18	H1.050.A	H1.050.C

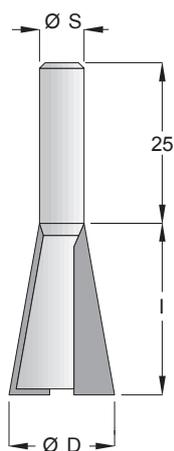
**Z=2**

H2

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



Ø D	l	ØS = 6	ØS = 8
8	12	H2.080.A	H2.080.C
11	14	H2.011.A	H2.011.C
14	18	H2.140.A	H2.140.C

Ø S = 6 - 8 mm.

Z=2

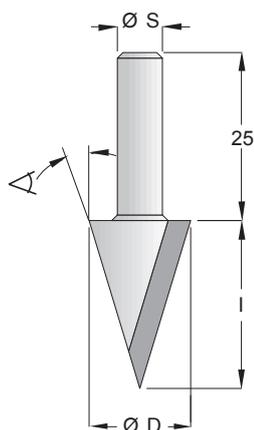


H3

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

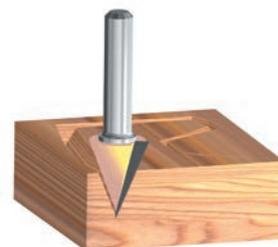
Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



∠	Ø D	l	ØS = 6	ØS = 8
22°	15	18	H3.220.A	H3.220.C

Ø S = 6 - 8 mm.

Z=1

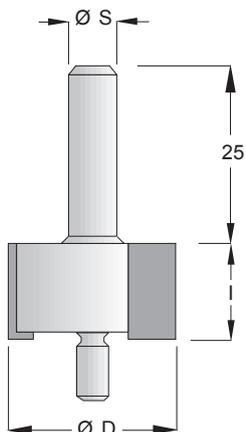


H4

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

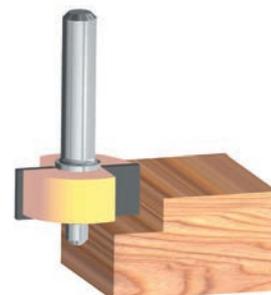
Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



Ø D	l	ØS = 6	ØS = 8
18	11.5	H4.180.A	H4.180.C
24	11.5	H4.240.A	H4.240.C

Ø S = 6 - 8 mm.

Z=2



H5

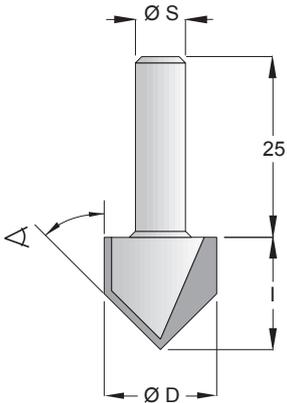
Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour defonseuse portative
Fresas para electrofresadoras portatiles

\angle	$\varnothing D$	l	$\varnothing S = 6$	$\varnothing S = 8$
45°	19	18	H5.450.A	H5.450.C

$\varnothing S = 6 - 8$ mm.



Z=2



H6

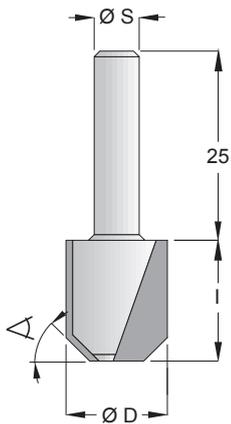
Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

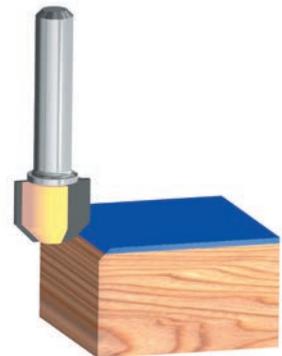
Mèches pour defonseuse portative
Fresas para electrofresadoras portatiles

\angle	$\varnothing D$	l	$\varnothing S = 6$	$\varnothing S = 8$
22°	12	12	H6.220.A	H6.220.C
30°	12	12	H6.300.A	H6.300.C
45°	12	12	H6.450.A	H6.450.C

$\varnothing S = 6 - 8$ mm.



Z=2



H7

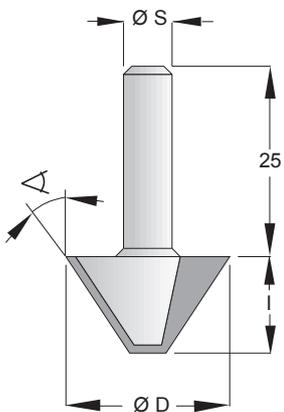
Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

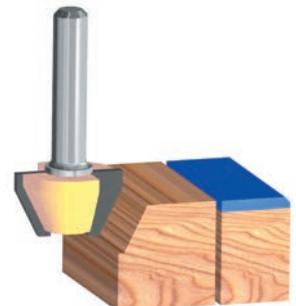
Mèches pour defonseuse portative
Fresas para electrofresadoras portatiles

\angle	$\varnothing D$	l	$\varnothing S = 6$	$\varnothing S = 8$
10°	24	14	H7.100.A	H7.100.C
15°	24	14	H7.150.A	H7.150.C
30°	24	12	H7.300.A	H7.300.C
45°	24	9	H7.450.A	H7.450.C

$\varnothing S = 6 - 8$ mm.



Z=2

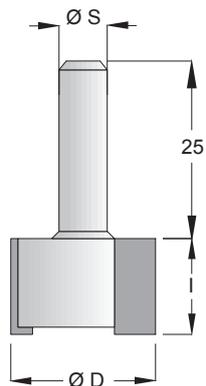


H8

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



Ø D	I	Ø S = 6	Ø S = 8
19	15	H8.190.A	H8.190.C

Ø S = 6 - 8 mm.

Z=2

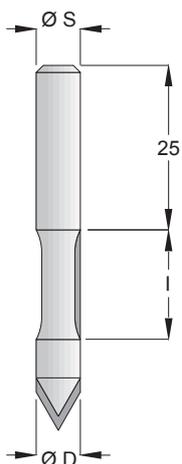


H10

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



Ø D	I	Ø S = 6	Ø S = 8
6	18	H10.060.A	H10.060.C
8	18	H10.080.A	H10.080.C

Ø S = 6 - 8 mm.

Z1+1

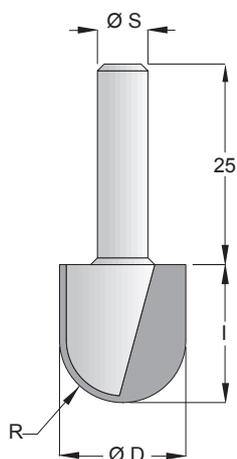


H11

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
3	6	12	H11.030.A	H11.030.C
4	8	14	H11.040.A	H11.040.C
5	10	15	H11.050.A	H11.050.C
6	12	16	H11.060.A	H11.060.C
7	14	16	H11.070.A	H11.070.C
8	16	16	H11.080.A	H11.080.C
10	20	20	H11.100.A	H11.100.C

Ø S = 6 - 8 mm.

Z=2

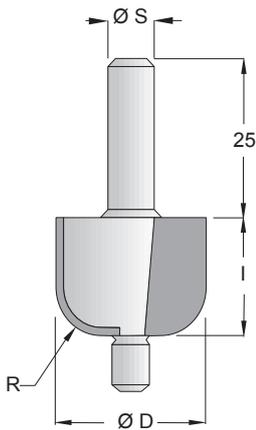


H12

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour defonseuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
4	13	12	H12.040.A	H12.040.C
5	15	14	H12.050.A	H12.050.C
6	17	15	H12.060.A	H12.060.C
8	21	16	H12.080.A	H12.080.C
10	25	20	H12.100.A	H12.100.C

Ø S = 6 - 8 mm.

Z=2

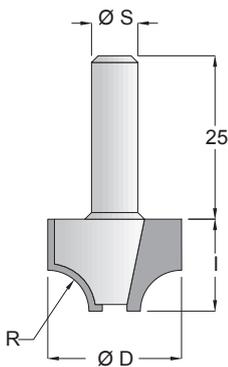


H13

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

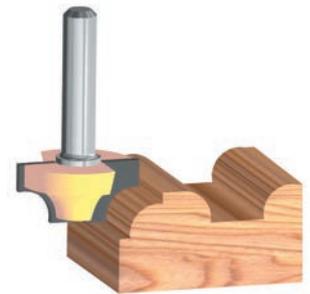
Mèches pour defonseuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
3	12	7	H13.030.A	H13.030.C
4	14	9	H13.040.A	H13.040.C
5	16	11	H13.050.A	H13.050.C
6	18	13	H13.060.A	H13.060.C
8	22	15	H13.080.A	H13.080.C
10	26	17	H13.100.A	H13.100.C

Ø S = 6 - 8 mm.

Z=2

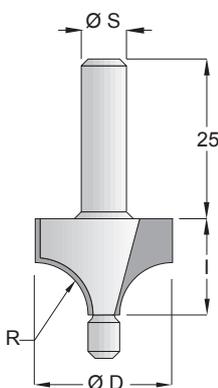


H14

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour defonseuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
3	12	7	H14.030.A	H14.030.C
4	14	9	H14.040.A	H14.040.C
5	16	11	H14.050.A	H14.050.C
6	18	13	H14.060.A	H14.060.C
8	22	16	H14.080.A	H14.080.C
10	26	19	H14.100.A	H14.100.C

Ø S = 6 - 8 mm.

Z=2

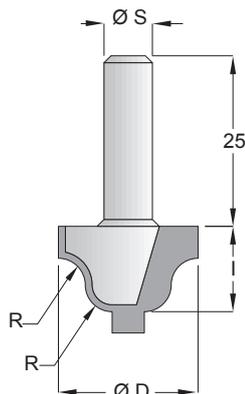


H15

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour defonseuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
3	18.5	13	H15.030.A	H15.030.C
4	23	17	H15.040.A	H15.040.C
5	28	21	H15.050.A	H15.050.C
6	33	25	H15.060.A	H15.060.C

Ø S = 6 - 8 mm.

Z=2

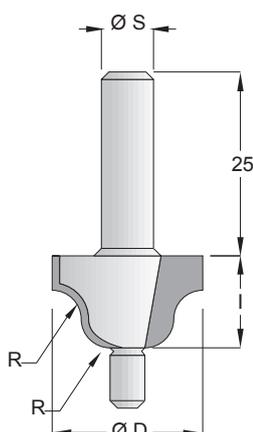


H16

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

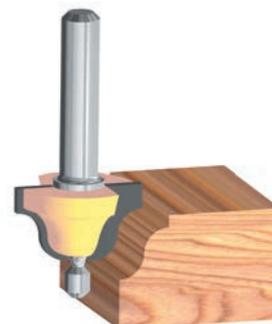
Mèches pour defonseuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
3	17,5	10	H16.030.A	H16.030.C
4	22	13	H16.040.A	H16.040.C
5	26	16	H16.050.A	H16.050.C
6	30	19	H16.060.A	H16.060.C

Ø S = 6 - 8 mm.

Z=2

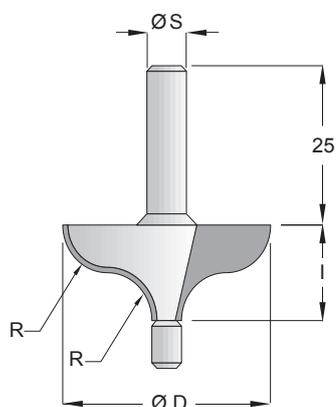


H17

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour defonseuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
5	25	11	H17.050.A	H17.050.C
7.5	35,5	16	H17.075.A	H17.075.C

Ø S = 6 - 8 mm.

Z=2

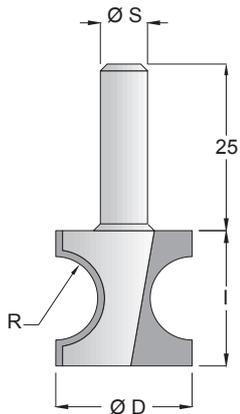


H18

Frese per elettrofresatrici portatili

Router bits for electric routers
Shaftfräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
3	19	12	H18.030.A	H18.030.C
4	22	16	H18.040.A	H18.040.C
5	25	19	H18.050.A	H18.050.C
6	28	22	H18.060.A	H18.060.C
8	31	25	H18.080.A	H18.080.C
10	35	30	H18.100.C	

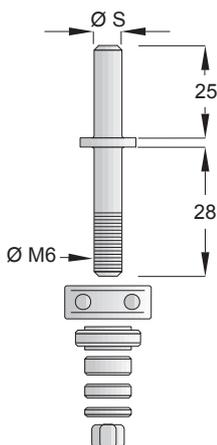
Ø S = 6 - 8 mm.

**Z=2****H19**

Frese per elettrofresatrici portatili

Router bits for electric routers
Shaftfräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



Ø S = 6 Ø S = 8

H19.060.A H19.060.C

Ø S = 6 - 8 mm.



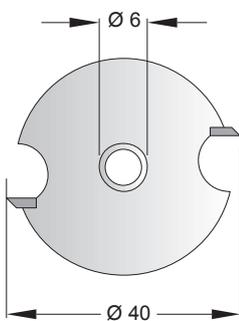
626ZZ

**H22**

Frese per elettrofresatrici portatili

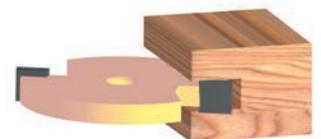
Router bits for electric routers
Shaftfräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



B **Part number**

1.5	H22.015.A
1.8	H22.018.A
2	H22.020.A
2.2	H22.022.A
2.5	H22.025.A
2.8	H22.028.A
3	H22.030.A
3.2	H22.032.A
3.5	H22.035.A
4	H22.040.A
5	H22.050.A
6	H22.060.A

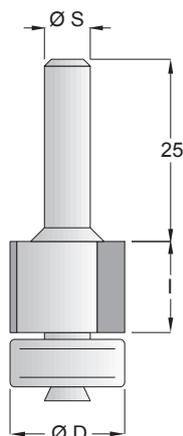
**Z=2**

H23

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



Ø D	l	Ø S = 6	Ø S = 8
9.5	13	H23.095.A	H23.095.C
13	15	H23.130.A	H23.130.C
19	15	H23.190.A	H23.190.C

Ø S = 6 - 8 mm.

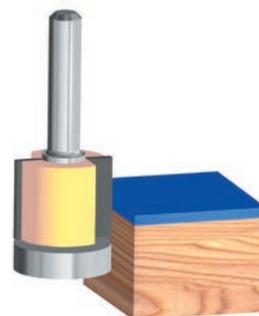


1V.005
1V.008



624ZZ
626ZZ
R166ZZ

Z=2

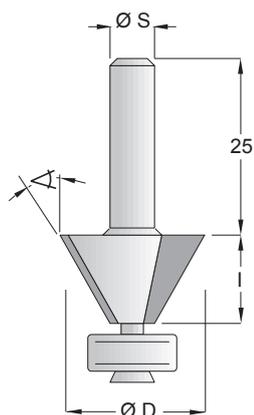


H24

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



∠	Ø D	l	Ø S = 6	Ø S = 8
15°	19	13	H24.150.A	H24.150.C
30°	22	12	H24.300.A	H24.300.C
45°	32	11	H24.450.A	H24.450.C

Ø S = 6 - 8 mm.

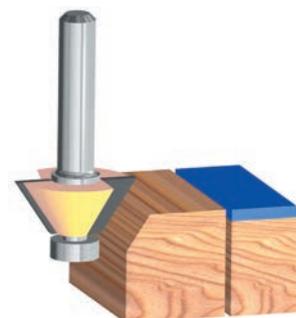


1V.008



624ZZ

Z=2

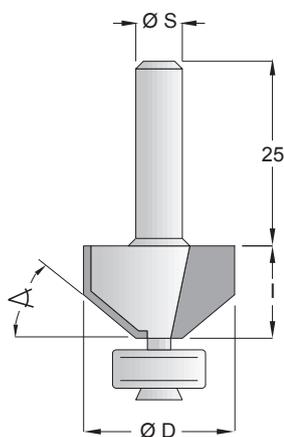


H25

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



∠	Ø D	l	Ø S = 6	Ø S = 8
45°	28	15	H25.450.A	H25.450.C

Ø S = 6 - 8 mm.

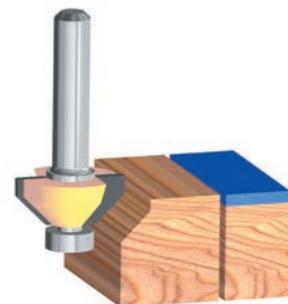


1V.007



625ZZ

Z=2

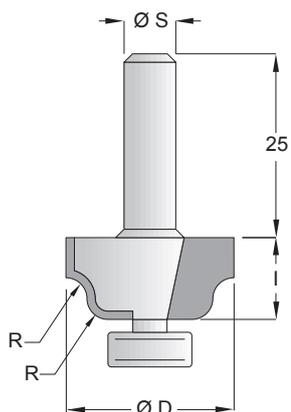


H26

Frese per elettrofresatrici portatili

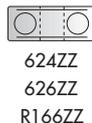
Router bits for electric routers
Shaftfräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
4	25.5	12	H26.040.A	H26.040.C
4.8	28.5	14,5	H26.048.A	H26.048.C
6.4	35	17,5	H26.064.A	H26.064.C

Ø S = 6 - 8 mm.



Z=2

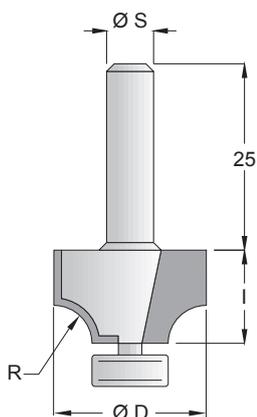


H28

Frese per elettrofresatrici portatili

Router bits for electric routers
Shaftfräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
3	19	8	H28.030.A	H28.030.C
4	22	10	H28.040.A	H28.040.C
5	24	12	H28.050.A	H28.050.C
6	26	13	H28.060.A	H28.060.C
8	30	15	H28.080.A	H28.080.C
10	34	17	H28.100.A	H28.100.C
12	38	19	H28.120.A	H28.120.C

Ø S = 6 - 8 mm.



Z=2

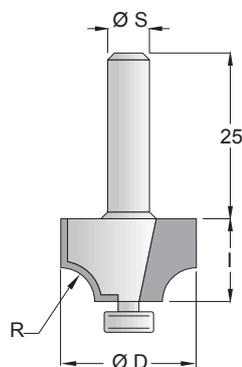


H29

Frese per elettrofresatrici portatili

Router bits for electric routers
Shaftfräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
3	19	8	H29.030.A	H29.030.C
4	22	10	H29.040.A	H29.040.C
5	24	12	H29.050.A	H29.050.C
6	26	13	H29.060.A	H29.060.C
8	30	15	H29.080.A	H29.080.C
10	34	17	H29.100.A	H29.100.C
12	38	19	H29.120.A	H29.120.C

Ø S = 6 - 8 mm.



Z=2

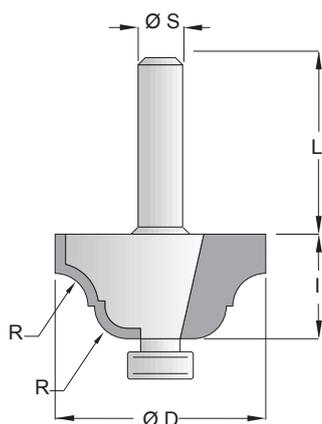


H30

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
4	29	13	H30.040.A	H30.040.C
6.3	38	18	H30.063.A	H30.063.C

Ø S = 6 - 8 mm.



1V.005
1V.008



624ZZ
626ZZ
R166ZZ

Z=2

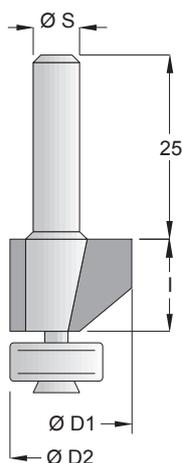


H31

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



∠	Ø D	I	Ø S = 6	Ø S = 8
0-45°	19-26	15	H31.000.A	H31.000.C

Ø S = 6 - 8 mm.

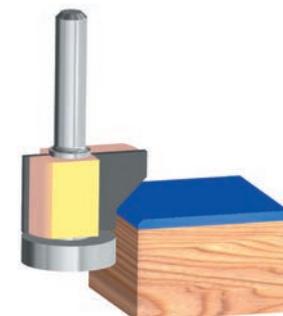


1V.008



624ZZ

Z=2

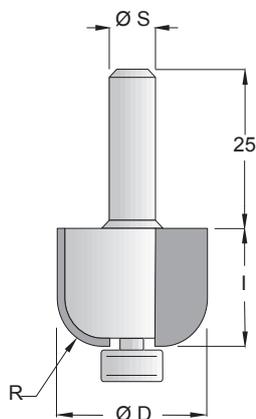


H33

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
4	21	18	H33.040.A	H33.040.C
5	23	18	H33.050.A	H33.050.C
6	25	18	H33.060.A	H33.060.C
8	29	18	H33.080.A	H33.080.C
10	33	18	H33.100.A	H33.100.C

Ø S = 6 - 8 mm.



1V.007



625ZZ

Z=2

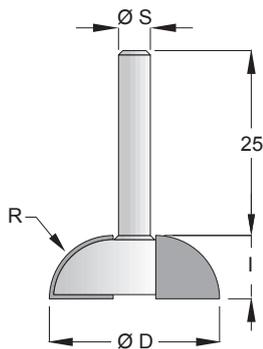


H34

Frese per elettrofresatrici portatili

Router bits for electric routers
Shaftfräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
10	25	12	H34.100.A	H34.100.C

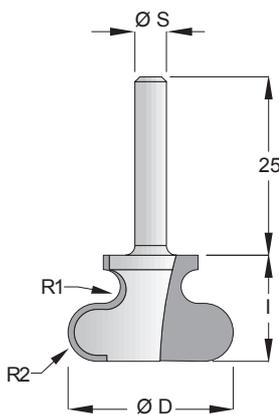
Ø S = 6 - 8 mm.

Z=2**H35**

Frese per elettrofresatrici portatili

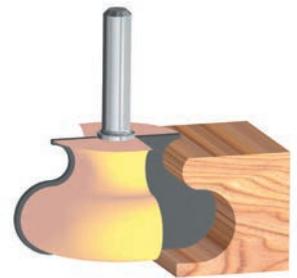
Router bits for electric routers
Shaftfräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
8-4	44	25	H35.080.A	H35.080.C

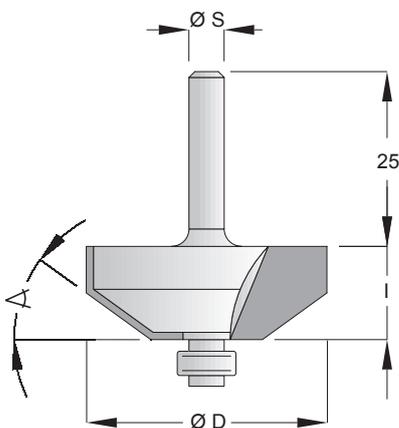
Ø S = 6 - 8 mm.

Z=2**H36**

Frese per elettrofresatrici portatili

Router bits for electric routers
Shaftfräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



Δ	Ø D	I	Ø S = 6	Ø S = 8
25°	41	14	H36.250.A	H36.250.C

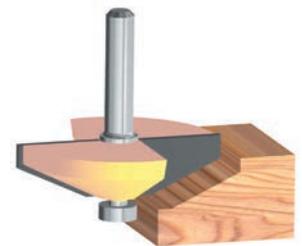
Ø S = 6 - 8 mm.



1V.008



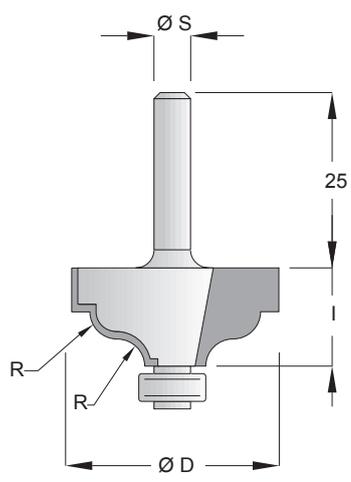
MR104ZZ

Z=2

H37

Frese per elettrofresatrici portatili

Router bits for electric routers Mèches pour défonceuse portative
 Shafffräser für Handoberfräsmaschinen Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
4	29	13	H37.040.A	H37.040.C
6	37	18	H37.060.A	H37.060.C

Ø S = 6 - 8 mm.



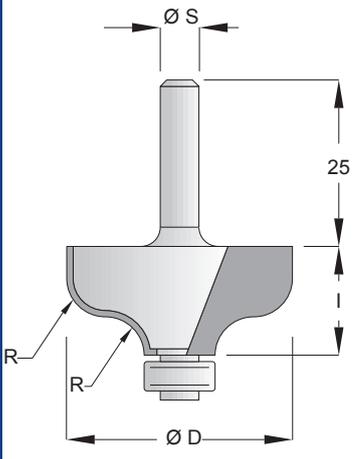
Z=2



H38

Frese per elettrofresatrici portatili

Router bits for electric routers Mèches pour défonceuse portative
 Shafffräser für Handoberfräsmaschinen Fresas para electrofresadoras portátiles

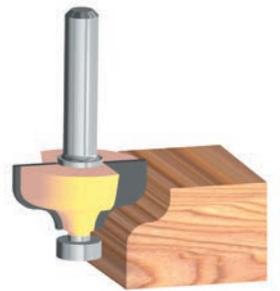


R	Ø D	I	Ø S = 6	Ø S = 8
4	29	13	H38.040.A	H38.040.C
6	37	16	H38.060.A	H38.060.C

Ø S = 6 - 8 mm.



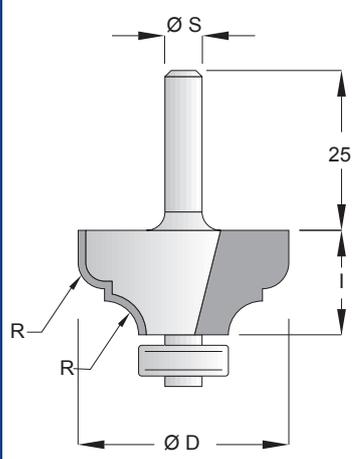
Z=2



H39

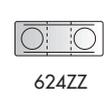
Frese per elettrofresatrici portatili

Router bits for electric routers Mèches pour défonceuse portative
 Shafffräser für Handoberfräsmaschinen Fresas para electrofresadoras portátiles



R	Ø D	I	Ø S = 6	Ø S = 8
4	29	15	H39.040.A	H39.040.C
6	37	18	H39.060.A	H39.060.C

Ø S = 6 - 8 mm.



Z=2

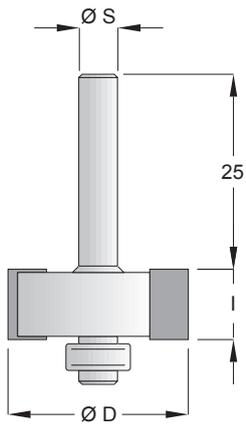


H40

Frese per elettrofresatrici portatili

Router bits for electric routers
Shafffräser für Handoberfräsmaschinen

Mèches pour défonceuse portative
Fresas para electrofresadoras portátiles



R	I	$\varnothing S = 6$	$\varnothing S = 8$
25	12	H40.250.A	H40.250.C
33	12	H40.330.A	H40.330.C
43	12		H40.400.C

$\varnothing S = 6 - 8$ mm.

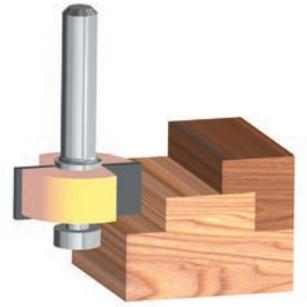


1V.008



624ZZ

Z=2

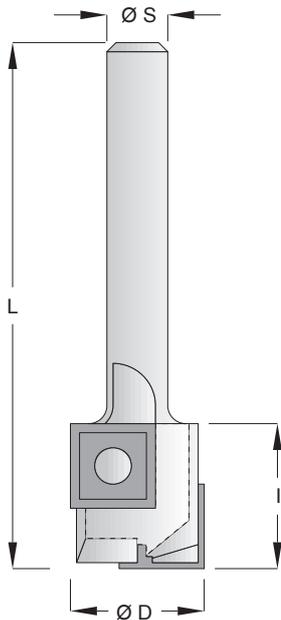


1A

HW Fresa a taglienti diritti a coltellini

HW Reversible knives straight router bit
HW Wendeplattenoberfräser

HW Mèches avec couteaux interc.
HW Cabezal de pantografo



Ø D	I	L	Ø S	Part number
15	20	50	6	1A.150.A
15	20	50	6,35	1A.150.B
15	20	70	8	1A.150.C
15	20	70	12	1A.150.E
16	20	50	6	1A.160.A
16	20	50	6,35	1A.160.B
16	20	70	8	1A.160.C
16	20	70	12	1A.160.E
18	20	50	6	1A.180.A
18	20	50	6,35	1A.180.B
18	20	70	8	1A.180.C
18	20	70	12	1A.180.E
20	20	50	6	1A.200.A
20	20	50	6,35	1A.200.B
20	20	70	8	1A.200.C
20	20	70	12	1A.200.E
22	20	50	6	1A.220.A
22	20	50	6,35	1A.220.B
22	20	70	8	1A.220.C
22	20	70	12	1A.220.E

S = 18000 F = 6 ÷ 8 mt./min.



1N.121 (12X12X1,5)



1V.002 (M4)



1Z.000 (T15)

CNC

Z2+1

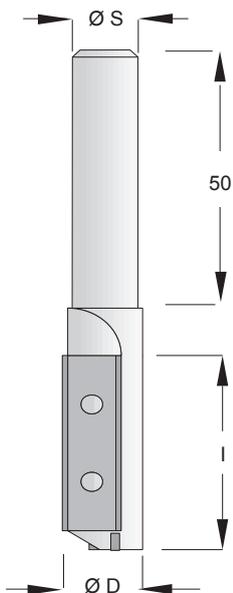


2B

HW Fresa a taglienti diritti a coltellini

HW Reversible knives straight router bit
HW Wendeplattenoberfräser

HW Mèches avec couteaux interc.
HW Cabezal de pantografo



Ø D	I	L	Part number
16	50	12	2B.160.R
18	50	12	2B.180.R
20	50	12	2B.200.R
22	50	12	2B.220.R
16	50	20	2B.161.R
18	50	20	2B.181.R
20	50	20	2B.201.R
22	50	20	2B.221.R

Ø S = 12 x 50 - 20 x 50
S = 18000 F = 6 ÷ 8 mt./min.



1N.401 (40X12X1,5)



1V.002 (M4)



1Z.000 (T15)

CNC

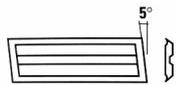
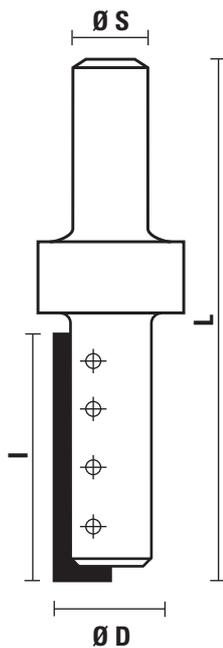
Z2+1



HW Fresa a taglienti diritti a coltellini

HW Reversible knives straight router bit
HW Wendepattenoberfräser

HW Mèches avec couteaux interc.
HW Cabezal de pantografo



1P.220 (20X5,5X1,1) Ø 8 ÷ 12
1P.221 (20X10X1,5) Ø 14 ÷ 22
1P.230 (30X6,5X1,1) Ø 12,7
1P.231 (30X10X1,5) Ø 14 ÷ 22
1P.251 (50X10X1,5) Ø 14 ÷ 22



1V.016 ø 8 ÷ 13,9
1V.017 ø 14 ÷ 22



1Z.001 (1,3)
1Z.002 (2)

Z1

CNC



S= 18000-24000 rpm
F = 2 ÷ 6 mt./min.

Ø D	I	L	Ø S	Part number
8	20	63	6	2C.080.A
8	20	63	6,35	2C.080.B
8	20	63	8	2C.080.C
8	20	68	10	2C.080.D
8	20	68	12	2C.080.E
8	20	68	12,7	2C.080.F
10	20	63	6	2C.100.A
10	20	63	6,35	2C.100.B
10	20	63	8	2C.100.C
10	20	68	10	2C.100.D
10	20	68	12	2C.100.E
10	20	68	12,7	2C.100.F
12	20	63	6	2C.120.A
12	20	63	6,35	2C.120.B
12	20	63	8	2C.120.C
12	20	68	10	2C.120.D
12	20	68	12	2C.120.E
12	20	68	12,7	2C.120.F
12,7	30	74	12,7	2C.127.F
14	20	59	6	2C.140.A
14	20	59	6,35	2C.140.B
14	20	59	8	2C.140.C
14	30	74	10	2C.140.D
14	30	74	12	2C.140.E
14	30	74	12,7	2C.140.F
14	50	94	10	2C.141.D
14	50	94	12	2C.141.E
14	50	94	12,7	2C.141.F
15	20	59	6	2C.150.A
15	20	59	6,35	2C.150.B
15	20	59	8	2C.150.C
15	30	74	10	2C.150.D
15	30	74	12	2C.150.E
15	30	74	12,7	2C.150.F
16	20	59	6	2C.160.A
16	20	59	6,35	2C.160.B
16	20	59	8	2C.160.C
16	30	74	10	2C.160.D
16	30	74	12	2C.160.E
16	30	74	12,7	2C.160.F
16	50	94	10	2C.161.D
16	50	94	12	2C.161.E
16	50	94	12,7	2C.161.F
18	20	59	6	2C.180.A
18	20	59	6,35	2C.180.B
18	20	59	8	2C.180.C
18	30	74	10	2C.180.D
18	30	74	12	2C.180.E
18	30	74	12,7	2C.180.F
18	50	94	10	2C.181.D
18	50	94	12	2C.181.E
18	50	94	12,7	2C.181.F
20	20	59	6	2C.200.A
20	20	59	6,35	2C.200.B
20	20	59	8	2C.200.C
20	30	74	10	2C.200.D
20	30	74	12	2C.200.E
20	30	74	12,7	2C.200.F
20	50	94	10	2C.201.D
20	50	94	12	2C.201.E
20	50	94	12,7	2C.201.F
22	20	59	6	2C.220.A
22	20	59	6,35	2C.220.B
22	20	59	8	2C.220.C
22	30	74	10	2C.220.D
22	30	74	12	2C.220.E
22	30	74	12,7	2C.220.F

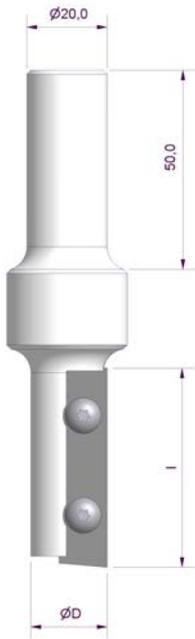


2D

HM Fresa a taglienti diritti a coltellini

HM Reversible knives straight router bit
HM Wendeplattenoberfräser

HM Mèches avec couteaux interc.
HM Cabezal de pantografo



Ø D	I	Ø S	Part number
12	23	20	2D.120
14	23	20	2D.140
16	30	20	2D.160
16	50	20	2D.160.A
18	30	20	2D.180
18	50	20	2D.180.A
20	30	20	2D.200
20	50	20	2D.200.A

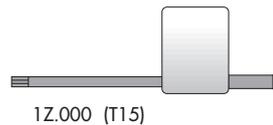
S= 16000-24000 rpm F=3-8 mt/min



1N.319 (30X9X1,5) Ø 12 ÷ 14
1N.311 (30X12X1,5) Ø 16 ÷ 20
1N.519 (50X9X1,5) Ø 16 X 50
1N.511 (50X12X1,5) Ø 18 ÷ 20



1V.018 (M 3,5)



Z1

CNC

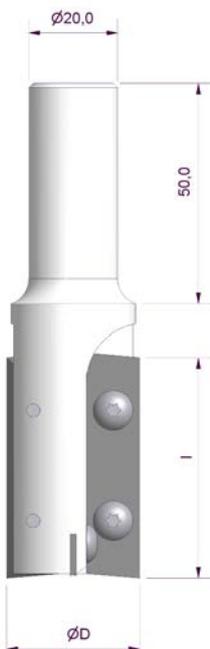


2E

HM Fresa a taglienti diritti a coltellini

HM Reversible knives straight router bit
HM Wendeplattenoberfräser

HM Mèches avec couteaux interc.
HM Cabezal de pantografo

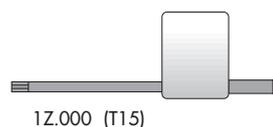


Ø D	I	Ø S	Part number
25	50	20	2E.250
30	50	20	2E.300

S= 14000-18000 rpm F=4-12 mt/min



1N.241 (24X10X1,5) Ø 25 ÷ 30 forante/plunging 1V.018 (M 3,5)
1N.509 (50X9X1,5) Ø 25
1N.501 (50X12X1,5) Ø 30



Z2

CNC

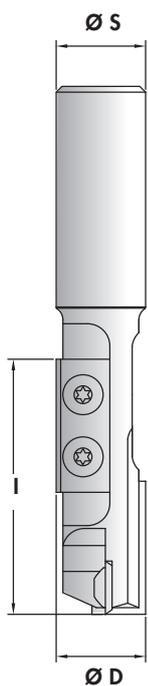


2F

HW Fresa a taglienti diritti UP-DOWN a coltellini

HW Reversible knives straight router bit
HW Wendeplattenoberfräser

HW Mèches avec couteaux interc.
HW Cabezal de pantografo



Ø D	I	Ø S	Part number
20	58	20	2F.200

S= 14000-18000 rpm F=4-12 mt/min



1N.311 (30X12X1,5)



1V.018 (M 3,5)



1Z.000 (T15)



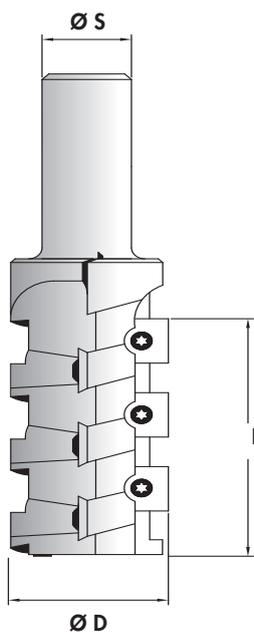
Z2+1

3A

HM Fresa a taglienti diritti a coltellini

HM Reversible knives straight router bit
HM Wendeplattenoberfräser

HM Mèches avec couteaux interc.
HM Cabezal de pantografo



Ø D	I	Z	Ø S	Part number
26	52	2/6	20	3A.260
35	62	3/9	20	3A.350
60	80	4/16	25	3A.600

S= 14000-18000 rpm F=4-12 mt/min



1N.105 (10,5X10,5X1,5)
1N.121 (12X12X1,5)



1V.018 (M 3,5)



1Z.000 (T15)



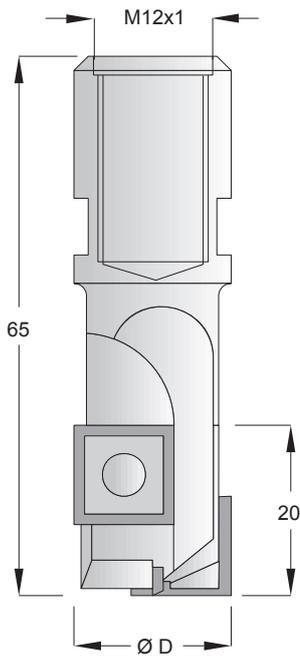
Z2+1

1AA

HM Fresa a taglienti diritti a coltellini

HM Reversible knives straight router bit
HM Wendeplattenoberfräser

HM Mèches avec couteaux interc.
HM Cabezal de pantografo



Ø D	l	Part number
15	20	1AA.150
16	20	1AA.160
18	20	1AA.180
20	20	1AA.200
22	20	1AA.220

Ø S = M 12 x 1
S = 18000



1N.121 (12X12X1,5)



1V.002 (M4)



1Z.000 (T15)

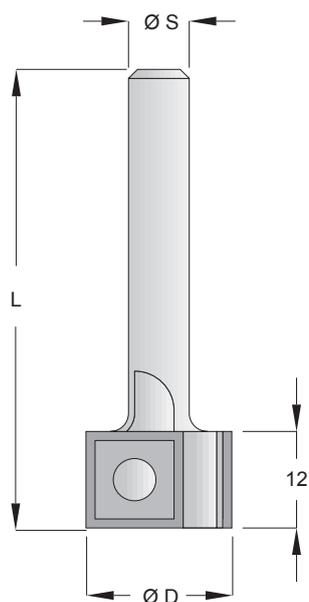
Z2+1

1E

HM Fresa a coltellini

HM Reversible knives router bit
HM Wendeplattenoberfräser

HM Mèches avec couteaux interc.
HM Cabezal de pantografo



Ø D	I	L	Ø S	Part number
19	12	45	6	1E.190.A
19	12	45	6,35	1E.190.B
19	12	54	8	1E.190.C

Ø S = 6 - 6,35 - 8 mm.
S = 18000



1N.121 (12X12X1,5)



1V.002 (M4)



1Z.000 (T15)

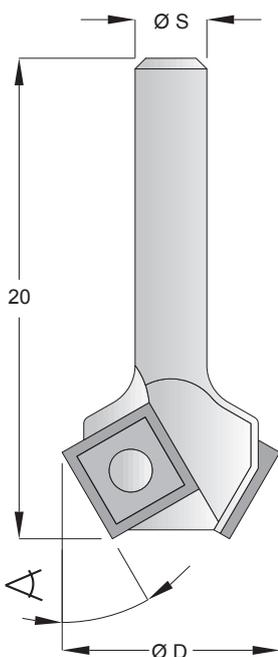
Z=2

1B

HM Fresa a coltellini

HM Reversible knives router bit
HM Wendeplattenoberfräser

HM Mèches avec couteaux interc.
HM Cabezal de pantografo



α	Ø D	Ø S	L	Part number
22°	24	6	45	1B.220.A
22°	24	6,35	45	1B.220.B
22°	24	8	55	1B.220.C
30°	26	6	45	1B.300.A
30°	26	6,35	45	1B.300.B
30°	26	8	55	1B.300.C
45°	29	6	45	1B.450.A
45°	29	6,35	45	1B.450.B
45°	28	8	55	1B.450.C

Ø S = 6 - 6,35 - 8 mm.
S = 18000



1N.121 (12X12X1,5)



1V.002 (M4)



1Z.000 (T15)

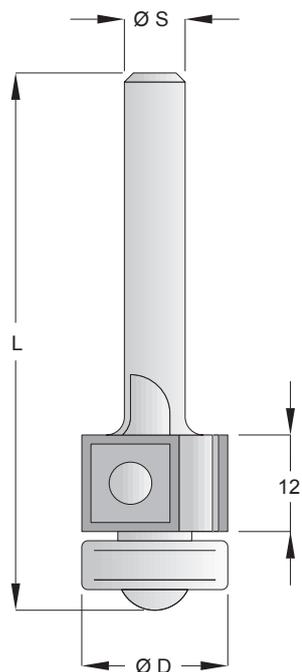
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1C

HM Fresa a coltellini

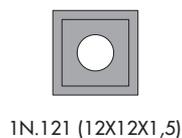
HM Reversible knives router bit
HM Wendeplattenoberfräser

HM Mèches avec couteaux interc.
HM Cabezal de pantografo



Ø D	I	L	Ø S	Part number
19	12	55	6	1C.190.A
19	12	55	6,35	1C.190.B
19	12	70	8	1C.190.C
19	12	70	12	1C.190.E

Ø S = 6 - 6,35 - 8 - 12 mm.
S = 18000



Z=2

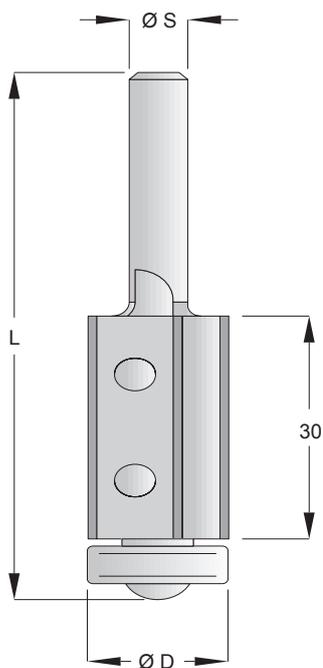


1G

HM Fresa a coltellini

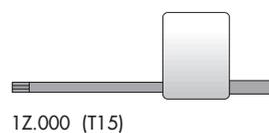
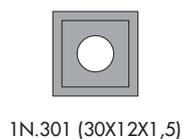
HM Reversible knives router bit
HM Wendeplattenoberfräser

HM Mèches avec couteaux interc.
HM Cabezal de pantografo



Ø D	I	L	Ø S	Part number
19	30	75	6	1G.190.A
19	30	75	6,35	1G.190.B
19	30	90	8	1G.190.C
19	30	90	12	1G.190.E

Ø S = 6 - 6,35 - 8 - 12 mm.
S = 18000



Z=2

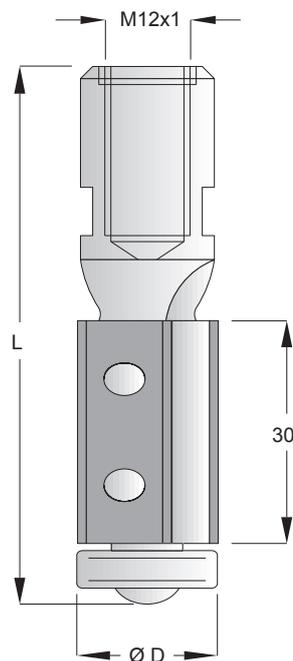


1GG

HM Fresa a coltellini

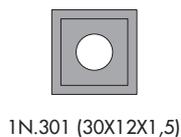
HM Reversible knives router bit
HM Wendeplattenoberfräser

HM Mèches avec couteaux interc.
HM Cabezal de pantografo



Ø D	I	Part number
19	12	1GG.190

Ø S = M 12 x 1
S = 18000



1N.301 (30X12X1,5)



1V.002 (M4)



626ZZ



1V.005



1Z.000 (T15)



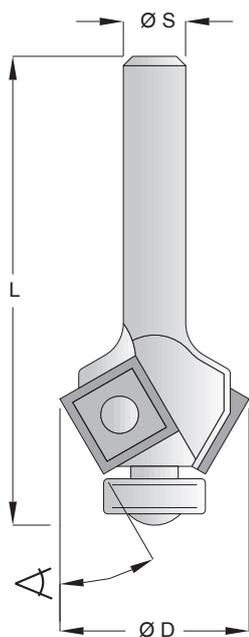
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1D

HM Fresa a coltellini

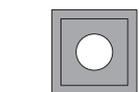
HM Reversible knives router bit
HM Wendeplattenoberfräser

HM Mèches avec couteaux interc.
HM Cabezal de pantografo



∠	Ø D	Ø S	L	Part number
22°	24	6	55	1D.220.A
22°	24	6,35	55	1D.220.B
22°	24	8	70	1D.220.C
30°	26	6	55	1D.300.A
30°	26	6,35	55	1D.300.B
30°	26	8	70	1D.300.C
45°	29	6	55	1D.450.A
45°	29	6,35	55	1D.450.B
45°	29	8	70	1D.450.C

Ø S = 6 - 6,35 - 8 - 12 mm.
S = 18000



1N.121 (12X12X1,5)



1V.002 (M4)



626ZZ



1V.005



1Z.000 (T15)



Z=2