



NAVAHO[®]



Tungsten Carbide Rotary Burrs

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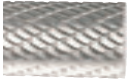
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Cut Selection Guide



Standard Cut Types



Cut 6 - Double cut for general purpose use. Improves control and reduces chips



Cut 2 - Standard cut for general applications



Cut 3 - Fast Mill cut for rapid stock removal of softer non-ferrous materials including plastics

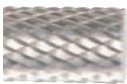
Special Cut Types



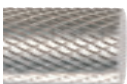
Cut 1 - Coarse cut for metal removal and finishing applications on non-ferrous metal alloys



Cut 4 - Fine cut for improved finish on all ferrous metals



Cut 5 - Foundry cut for maximum stock removal, rough edges and foundry applications



Cut 8 - Diamond cut for hardest materials and best finishes



Cut 9 - Chipbreaker cut for fast stock removal. Improves control and surface finish



Cut 10 - Fast Mill cut with chipbreaker for rapid stock removal

Cut Selection Guide

Material	Standard Cut Types			Special Cut Types					
	Cut 6	Cut 2	Cut 3	Cut 1	Cut 4	Cut 5	Cut 8	Cut 9	Cut 10
Aluminium, Plastic			●						○
Brass, Copper, Cast Iron, Bronze	●	●		○	○	●	○	○	
Unhardened Steel	●	●			○	●	○	○	
Hardened Steels, Stainless Steels, Nimonic Alloys, Titanium	●	●			●	○	●	○	

○ Recommended

● Highly Recommended

Speed Guide

Recommended Operating Speeds

All Speeds in the table below quoted x 1,000 rpm

Burr Head Diameter	Maximum Operating Speeds	Aluminium, Plastic		Brass, Copper Cast Iron, Bronze		Unhardened Steel		Hardened Steel, Stainless Steel, Nimonic Alloys	
		Speed Range	Recomm. Start Point	Speed Range	Recomm. Start Point	Speed Range	Recomm. Start Point	Speed Range	Recomm. Start Point
3mm (1/8")	100	60 - 80	65	45 - 80	65	60 - 80	80	60 - 80	80
6mm (1/4")	65	15 - 60	40	22 - 60	45	45 - 60	50	30 - 45	40
10mm (3/8")	55	10 - 50	25	15 - 40	30	30 - 40	30	19 - 30	25
12mm (1/2")	35	7 - 30	20	11 - 30	25	22 - 30	25	15 - 22	20
16mm (5/8")	25	6 - 20	15	9 - 20	20	18 - 20	20	12 - 18	15
20mm (3/4")	20	5 - 17	10	8 - 17	12	15 - 17	15	10 - 15	10
25mm (1")	15	4 - 13	8	6 - 13	10	10 - 13	10	7 - 11	8

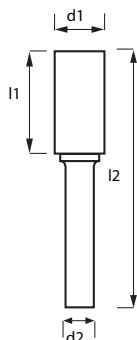
Recommended Speeds are based on standard shank length of 45mm / (1-3/4") max overhang of 10mm (3/8")

Maximum recommended operating speeds for extended length shanks is 15,000rpm



Cylinder without Endcut

Shape: A, ZYA, SA



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
1.5	6.0	3.0	38.0	Solid
2.0	11.0	3.0	38.0	Solid
2.5	12.0	3.0	38.0	Solid
3.0	14.0	3.0	38.0	Solid
5.0	12.7	3.0	38.0	Solid
6.3	4.7	3.0	37.0	Brazed
6.3	12.7	3.0	45.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-31.506A	6-31.506A	-
2-30211A	6-30211A	-
2-32.512A	6-32.512A	-
2-30314A	6-30314A	3-30314A
2-30512A	6-30512A	-
2-30605A	6-30605A	-
2-30612A	6-30612A	3-30612A

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
3.0	14.0	6.0	50.0	Solid
4.0	14.0	6.0	50.0	Solid
5.0	16.0	6.0	50.0	Solid
6.0	18.0	6.0	50.0	Solid
6.0	25.0	6.0	50.0	Solid
8.0	19.0	6.0	64.0	Brazed
9.6	13.5	6.0	59.0	Brazed
9.6	19.0	6.0	64.0	Brazed
9.6	25.0	6.0	70.0	Brazed
11.0	25.0	6.0	70.0	Brazed
12.7	19.0	6.0	64.0	Brazed
12.7	25.0	6.0	70.0	Brazed
16.0	25.0	6.0	70.0	Brazed
19.0	25.0	6.0	70.0	Brazed
25.0	25.0	6.0	70.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-60312A	6-60312A	-
2-60413A	6-60413A	-
2-60516A	6-60516A	-
2-60618A	6-60618A	3-60618A
2-60625A	6-60625A	-
2-60820A	6-60820A	3-60820A
2-61014A	6-61014A	-
2-61020A	6-61020A	3-61020A
2-61025A	6-61025A	-
2-61125A	6-61125A	-
2-61220A	6-61220A	-
2-61225A	6-61225A	3-61225A
2-61525A	6-61525A	3-61525A
2-62025A	6-62025A	3-62025A
2-62525A	6-62525A	3-62525A

8mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
12.7	25.0	8.0	70.0	Brazed
16.0	25.0	8.0	70.0	Brazed
19.0	25.0	8.0	70.0	Brazed
25.0	25.0	8.0	70.0	Brazed

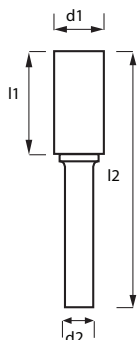
Part Numbers

Cut 2	Cut 6	Cut 3
2-81225A	6-81225A	3-81225A
2-81525A	6-81525A	3-81525A
2-82025A	6-82025A	3-82025A
2-82525A	6-82525A	3-82525A



Cylinder with Endcut

Shape: B, ZYAS, SB



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
1.5	6.0	3.0	38.0	Solid
2.0	11.0	3.0	38.0	Solid
2.5	12.0	3.0	38.0	Solid
3.0	14.0	3.0	38.0	Solid
5.0	12.7	3.0	38.0	Solid
6.3	4.7	3.0	37.0	Brazed
6.3	12.7	3.0	45.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-B31.506B	6-31.506B	-
2-30211B	6-30211B	-
2-32.512B	6-32.512B	-
2-30314B	6-30314B	3-30314B
2-30512B	6-30512B	-
2-30605B	6-30605B	-
2-30612B	6-30612B	3-30612B

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
3.0	14.0	6.0	50.0	Solid
4.0	14.0	6.0	50.0	Solid
5.0	16.0	6.0	50.0	Solid
6.0	18.0	6.0	50.0	Solid
6.0	25.0	6.0	50.0	Solid
8.0	19.0	6.0	64.0	Brazed
9.6	13.5	6.0	59.0	Brazed
9.6	19.0	6.0	64.0	Brazed
9.6	25.0	6.0	70.0	Brazed
11.0	25.0	6.0	70.0	Brazed
12.7	19.0	6.0	64.0	Brazed
12.7	25.0	6.0	70.0	Brazed
16.0	25.0	6.0	70.0	Brazed
19.0	25.0	6.0	70.0	Brazed
25.0	25.0	6.0	70.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-60312B	6-60312B	-
2-60413B	6-60413B	-
2-60516B	6-60516B	-
2-60618B	6-60618B	3-60618B
2-60625B	6-60625B	-
2-60820B	6-60820B	3-60820B
2-61014B	6-61014B	-
2-61020B	6-61020B	3-61020B
2-61025B	6-61025B	-
2-61125B	6-61125B	-
2-61220B	6-61220B	-
2-61225B	6-61225B	3-61225B
2-61525B	6-61525B	3-61525B
2-62025B	6-62025B	3-62025B
2-62525B	6-62525B	3-62525B

8mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
12.7	25.0	8.0	70.0	Brazed
16.0	25.0	8.0	70.0	Brazed
19.0	25.0	8.0	70.0	Brazed
25.0	25.0	8.0	70.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-81225B	6-81225B	3-81225B
2-81525B	6-81525B	3-81525B
2-82025B	6-82025B	3-82025B
2-82525B	6-82525B	3-82525B

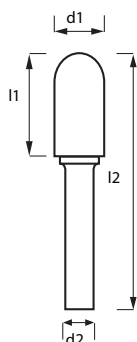


NAVAHO®



Ball Nosed Cylinder

Shape: C, WRC, SC



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
2.0	11.0	3.0	38.0	Solid
2.5	11.0	3.0	38.0	Solid
3.0	14.0	3.0	38.0	Solid
5.0	12.7	3.0	38.0	Solid
6.3	12.7	3.0	45.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-30211C	6-30211C	-
2-32.511C	6-32.511C	-
2-30312C	6-30312C	3-30312C
2-30512C	6-30512C	-
2-30612C	6-30612C	3-30612C

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
3.0	14.0	6.0	50.0	Solid
4.0	14.0	6.0	50.0	Solid
5.0	16.0	6.0	50.0	Solid
6.0	18.0	6.0	50.0	Solid
6.0	25.0	6.0	50.0	Solid
8.0	19.0	6.0	64.0	Brazed
9.6	19.0	6.0	64.0	Brazed
9.6	25.0	6.0	70.0	Brazed
11.0	25.0	6.0	70.0	Brazed
12.0	10.0	6.0	54.0	Brazed
12.7	19.0	6.0	64.0	Brazed
12.7	25.0	6.0	70.0	Brazed
16.0	25.0	6.0	70.0	Brazed
19.0	25.0	6.0	70.0	Brazed
25.0	25.0	6.0	70.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-60312C	6-60312C	-
2-60413C	6-60413C	-
2-60516C	6-60516C	-
2-60618C	6-60618C	3-60618C
2-60625C	6-60625C	-
2-60820C	6-60820C	3-60820C
2-61020C	6-61020C	3-61020C
2-61025C	6-61025C	-
2-61125C	6-61125C	-
2-61210C	6-61210C	-
2-61220C	6-61220C	3-61220C
2-61225C	6-61225C	3-61225C
2-61525C	6-61525C	3-61525C
2-62025C	6-62025C	3-62025C
2-62525C	6-62525C	-

8mm
shank

Dimensions - All in mm

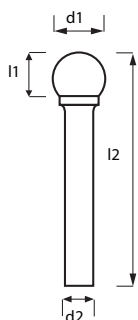
d1	l1	d2	l2	Type
12.7	25.0	8.0	70.0	Brazed
16.0	25.0	8.0	70.0	Brazed
19.0	25.0	8.0	70.0	Brazed
25.0	25.0	8.0	70.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-81225C	6-81225C	3-81225C
2-81525C	6-81525C	3-81525C
2-82025C	6-82025C	3-82025C
2-82525C	6-82525C	-

Ball

Shape: D, KUD, SD



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
2.0	1.8	3.0	38.0	Solid
2.5	2.3	3.0	38.0	Solid
3.0	2.5	3.0	38.0	Solid
4.0	3.4	3.0	38.0	Solid
5.0	4.7	3.0	38.0	Solid
6.3	5.0	3.0	38.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-30202D	6-30202D	-
2-32.52.5D	6-32.52.5D	-
2-30303D	6-30303D	3-30303D
2-30404D	6-30404D	3-30404D
2-30505D	6-30505D	-
2-30606D	6-30606D	3-30606D

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
3.0	2.5	6.0	50.0	Solid
4.0	3.0	6.0	50.0	Solid
5.0	4.0	6.0	50.0	Solid
6.0	4.7	6.0	50.0	Solid
8.0	6.0	6.0	52.0	Brazed
9.6	8.0	6.0	54.0	Brazed
11.0	9.5	6.0	55.0	Brazed
12.7	11.0	6.0	56.0	Brazed
16.0	14.0	6.0	59.0	Brazed
19.0	16.5	6.0	62.0	Brazed
25.0	22.0	6.0	67.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-60303D	6-60303D	-
2-60404D	6-60404D	-
2-60505D	6-60505D	-
2-60606D	6-60606D	3-60606D
2-60808D	6-60808D	3-60808D
2-61010D	6-61010D	3-61010D
2-61111D	6-61111D	-
2-61212D	6-61212D	3-61212D
2-61515D	6-61515D	3-61515D
2-62020D	6-62020D	3-62020D
2-62525D	6-62525D	3-62525D

8mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
12.7	11.0	8.0	56.0	Brazed
16.0	14.0	8.0	59.0	Brazed
19.0	16.5	8.0	62.0	Brazed
25.0	22.0	8.0	67.0	Brazed

Part Numbers

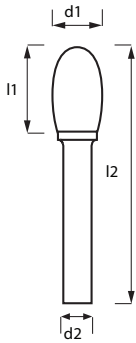
Cut 2	Cut 6	Cut 3
2-81212D	6-81212D	3-81212D
2-81515D	6-81515D	3-81515D
2-82020D	6-82020D	3-82020D
2-82525D	6-82525D	3-82525D



NAVAHO®

Oval

Shape: E, TRE, SE



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
3.0	6.0	3.0	38.0	Solid
5.0	8.0	3.0	38.0	Solid
6.3	9.5	3.0	42.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-30306E	6-30306E	3-30306E
2-30508E	6-30508E	-
2-30610E	6-30610E	3-30610E

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
6.0	10.0	6.0	50.0	Solid
8.0	15.0	6.0	60.0	Brazed
9.6	16.0	6.0	60.0	Brazed
12.7	22.0	6.0	67.0	Brazed
16.0	25.0	6.0	70.0	Brazed
19.0	25.0	6.0	70.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-60610E	6-60610E	3-60610E
2-60815E	6-60815E	3-60815E
2-61015E	6-61015E	3-61015E
2-61220E	6-61220E	3-61220E
2-61525E	6-61525E	3-61525E
2-62025E	6-62025E	3-62025E

8mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
12.7	22.0	8.0	67.0	Brazed
16.0	25.0	8.0	70.0	Brazed
19.0	25.0	8.0	70.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-81220E	6-81220E	3-81220E
2-81525E	6-81525E	3-81525E
2-82025E	6-82025E	3-82025E

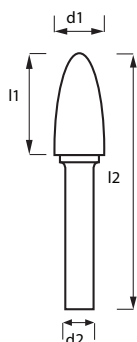


NAVAHO®



Ball Nosed Tree

Shape: F, RBF, SF



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
3.0	6.0	3.0	38.0	Solid
3.0	8.0	3.0	38.0	Solid
3.0	14.0	3.0	38.0	Solid
5.0	12.7	3.0	38.0	Solid
6.3	12.7	3.0	45.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-30306F	6-30306F	-
2-30308F	6-30308F	-
2-30312F	6-30312F	3-30312F
2-30512F	6-30512F	-
2-30612F	6-30612F	3-30612F

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
6.0	18.0	6.0	50.0	Solid
8.0	20.0	6.0	65.0	Brazed
9.6	19.0	6.0	64.0	Brazed
11.0	25.0	6.0	70.0	Brazed
12.7	19.0	6.0	64.0	Brazed
12.7	25.0	6.0	70.0	Brazed
16.0	25.0	6.0	70.0	Brazed
16.0	30.0	6.0	75.0	Brazed
19.0	25.0	6.0	70.0	Brazed
19.0	32.0	6.0	77.0	Brazed
19.0	38.0	6.0	83.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-60618F	6-60618F	3-60618F
2-60820F	6-60820F	3-60820F
2-61020F	6-61020F	3-61020F
2-61125F	6-61125F	-
2-61220F	6-61220F	-
2-61225F	6-61225F	3-61225F
2-61525F	6-61525F	3-61525F
2-61530F	6-61530F	-
2-62025F	6-62025F	3-62025F
2-62032F	6-62032F	3-62032F
2-62038F	6-62038F	3-62038F

8mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
12.7	25.0	8.0	70.0	Brazed
16.0	25.0	8.0	70.0	Brazed
19.0	25.0	8.0	70.0	Brazed
19.0	32.0	8.0	77.0	Brazed
19.0	38.0	8.0	83.0	Brazed

Part Numbers

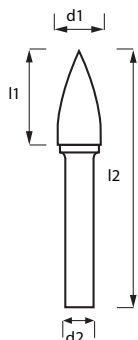
Cut 2	Cut 6	Cut 3
2-81225F	6-81225F	3-81225F
2-81525F	6-81525F	3-81525F
2-82025F	6-82025F	3-82025F
2-82032F	6-82032F	3-82032F
2-82038F	6-82038F	3-82038F





Pointed Tree

Shape: G, SPG, SG



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
3.0	6.0	3.0	38.0	Solid
3.0	10.0	3.0	38.0	Solid
3.0	14.0	3.0	38.0	Solid
5.0	12.7	3.0	38.0	Solid
6.3	12.7	3.0	45.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-30306G	6-30306G	-
2-30310G	6-30310G	-
2-30312G	6-30312G	3-30312G
2-30512G	6-30512G	-
2-30612G	6-30612G	3-30612G

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
6.0	18.0	6.0	50.0	Solid
8.0	19.0	6.0	64.0	Brazed
9.6	19.0	6.0	64.0	Brazed
12.7	19.0	6.0	64.0	Brazed
12.7	25.0	6.0	70.0	Brazed
12.7	30.0	6.0	75.0	Brazed
16.0	25.0	6.0	70.0	Brazed
16.0	30.0	6.0	75.0	Brazed
19.0	25.0	6.0	70.0	Brazed
19.0	38.0	6.0	83.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-60618G	6-60618G	3-60618G
2-60820G	6-60820G	3-60820G
2-61020G	6-61020G	3-61020G
2-61220G	6-61220G	-
2-61225G	6-61225G	3-61225G
2-61230G	6-61230G	-
2-61525G	6-61525G	3-61525G
2-61530G	6-61530G	-
2-62025G	6-62025G	-
2-62038G	6-62038G	-

8mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
12.7	25.0	8.0	70.0	Brazed
12.7	30.0	8.0	75.0	Brazed
16.0	25.0	8.0	70.0	Brazed
16.0	30.0	8.0	75.0	Brazed
19.0	25.0	8.0	70.0	Brazed
19.0	38.0	8.0	83.0	Brazed

Part Numbers

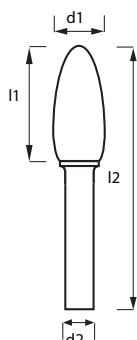
Cut 2	Cut 6	Cut 3
2-81225G	6-81225G	3-81225G
2-81230G	6-81230G	-
2-81525G	6-81525G	3-81525G
2-81530G	6-81530G	-
2-82025G	6-82025G	-
2-82038G	6-82038G	-



NAVAHO®

Flame

Shape: H, SH



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
3.0	6.0	3.0	38.0	Solid
5.0	9.5	3.0	38.0	Solid
6.0	10.0	3.0	43.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-30306H	6-30306H	-
2-30510H	6-30510H	-
2-30612H	6-30612H	-

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
6.0	14.0	6.0	50.0	Solid
8.0	19.0	6.0	64.0	Brazed
9.6	19.0	6.0	65.0	Brazed
12.7	32.0	6.0	77.0	Brazed
16.0	36.0	6.0	81.0	Brazed
19.0	41.0	6.0	86.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-60614H	6-60614H	-
2-60820H	6-60820H	3-60820H
2-61020H	6-61020H	3-61020H
2-61232H	6-61232H	3-61232H
2-61535H	6-61535H	3-61535H
2-62042H	6-62042H	-

8mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
12.7	32.0	8.0	77.0	Brazed
16.0	36.0	8.0	81.0	Brazed
19.0	41.0	8.0	86.0	Brazed

Part Numbers

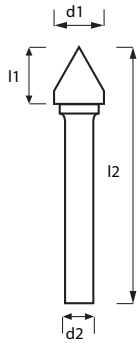
Cut 2	Cut 6	Cut 3
2-81232H	6-81232H	-
2-81535H	6-81535H	-
2-82042H	6-82042H	-



NAVAHO®

60° Countersink

Shape: J, KSJ, SJ



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
3.0	2.5	3.0	38.0	Solid

Part Numbers

Cut 2	Cut 6
2-30303J	6-30303J

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
6.0	4.0	6.0	50.0	Solid
9.6	8.0	6.0	56.0	Brazed
12.7	11.0	6.0	59.0	Brazed
16.0	14.5	6.0	63.0	Brazed
19.0	17.5	6.0	65.0	Brazed
25.0	24.5	6.0	70.0	Brazed

Part Numbers

Cut 2	Cut 6
2-60606J	6-60606J
2-61008J	6-61008J
2-61210J	6-61210J
2-61512J	6-61512J
2-62018J	6-62018J
2-62520J	6-62520J

8mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
12.7	11.0	8.0	59.0	Brazed
16.0	14.5	8.0	63.0	Brazed
19.0	17.5	8.0	65.0	Brazed
25.0	24.5	8.0	70.0	Brazed

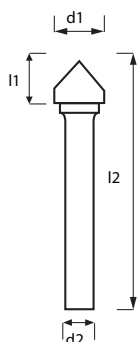
Part Numbers

Cut 2	Cut 6
2-81210J	6-81210J
2-81512J	6-81512J
2-82018J	6-82018J
2-82520J	6-82520J



90° Countersink

Shape: K, KSK, SK



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
3.0	1.5	3.0	38.0	Solid

Part Numbers

Cut 2	Cut 6
2-30303K	6-30303K

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
6.0	3.0	6.0	50.0	Solid
9.6	4.7	6.0	53.0	Brazed
12.7	6.3	6.0	55.0	Brazed
16.0	8.0	6.0	57.0	Brazed
19.0	9.5	6.0	59.0	Brazed
25.0	12.7	6.0	61.0	Brazed

Part Numbers

Cut 2	Cut 6
2-60603K	6-60603K
2-61004K	6-61004K
2-61206K	6-61206K
2-61508K	6-61508K
2-62012K	6-62012K
2-62512K	6-62512K

8mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
12.7	6.3	8.0	55.0	Brazed
16.0	8.0	8.0	57.0	Brazed
19.0	9.5	8.0	59.0	Brazed
25.0	12.7	8.0	61.0	Brazed

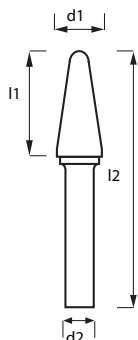
Part Numbers

Cut 2	Cut 6
2-81206K	6-81206K
2-81508K	6-81508K
2-82012K	6-82012K
2-82512K	6-82512K



Ball Nose Cone

Shape: L, KEL, SL



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type	Angle
3.0	10.0	3.0	38.0	Solid	10°
3.0	14.0	3.0	38.0	Solid	8°
5.0	12.7	3.0	38.0	Solid	14°
6.3	15.8	3.0	48.0	Brazed	22°

Part Numbers

Cut 2	Cut 6	Cut 3
2-30310L	6-30310L	-
2-30312L	6-30312L	3-30312L
2-30512L	6-30512L	-
2-30612L	6-30612L	3-30612L

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type	Angle
6.0	18.0	6.0	50.0	Solid	14°
8.0	25.4	6.0	70.0	Brazed	14°
10.0	20.0	6.0	65.0	Brazed	14°
9.6	30.0	6.0	76.0	Brazed	14°
12.0	25.0	6.0	70.0	Brazed	14°
12.7	32.0	6.0	77.0	Brazed	14°
16.0	33.0	6.0	78.0	Brazed	14°
19.0	41.0	6.0	86.0	Brazed	14°

Part Numbers

Cut 2	Cut 6	Cut 3
2-60618L	6-60618L	3-60618L
2-60822L	6-60822L	3-60822L
2-61020L	6-61020L	3-61020L
2-61026L	6-61026L	3-61026L
2-61225L	6-61225L	-
2-61228L	6-61228L	3-61228L
2-61533L	6-61533L	3-61533L
2-62038L	6-62038L	-

8mm
shank

Dimensions - All in mm

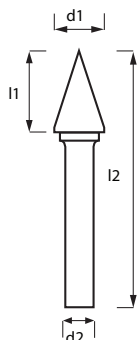
d1	l1	d2	l2	Type	Angle
12.7	32.0	8.0	77.0	Brazed	14°
16.0	33.0	8.0	78.0	Brazed	14°
19.0	41.0	8.0	86.0	Brazed	14°

Part Numbers

Cut 2	Cut 6	Cut 3
2-81228L	6-81228L	3-81228L
2-81533L	6-81533L	3-81533L
2-82038L	6-82038L	-

Cone

Shape: M, SKM, SM



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type	Angle
3.0	8.0	3.0	38.0	Solid	18°
3.0	11.0	3.0	38.0	Solid	14°
3.0	15.0	3.0	38.0	Solid	10°
6.3	12.7	3.0	49.0	Brazed	22°

Part Numbers

Cut 2	Cut 6	Cut 3
2-30308M	6-30308M	-
2-30311M	6-30311M	3-30311M
2-30315M	6-30315M	-
2-30612M	6-30612M	3-30612M

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type	Angle
6.0	12.7	6.0	50.0	Solid	20°
6.0	20.0	6.0	50.0	Solid	14°
6.0	25.0	6.0	50.0	Solid	10°
8.0	18.0	6.0	64.0	Brazed	22°
9.6	16.0	6.0	64.0	Brazed	28°
12.7	22.0	6.0	71.0	Brazed	28°
16.0	25.0	6.0	71.0	Brazed	31°

Part Numbers

Cut 2	Cut 6	Cut 3
2-60612M	6-60612M	-
2-60620M	6-60620M	3-60620M
2-60625M	6-60625M	-
2-60818M	6-60818M	-
2-61020M	6-61020M	3-61020M
2-61222M	6-61222M	3-61222M
2-61525M	6-61525M	-

8mm
shank

Dimensions - All in mm

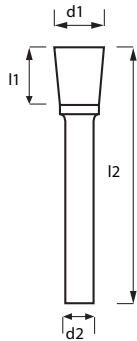
d1	l1	d2	l2	Type	Angle
12.7	22.0	8.0	71.0	Brazed	28°
16.0	25.0	8.0	71.0	Brazed	31°

Part Numbers

Cut 2	Cut 6	Cut 3
2-81222M	6-81222M	-
2-81525M	6-81525M	-

Inverted Cone

Shape: N, WKN, SN



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type	Angle
3.0	4.0	3.0	38.0	Solid	10°
3.0	4.0	3.0	38.0	Solid	10°
6.3	6.0	3.0	39.0	Brazed	12°
6.3	6.4	3.0	39.0	Brazed	12°

Part Numbers

Cut 2	Cut 6
2-30304N	6-30304N
2E-30304N*	6E-30304N*
2-30606N	6-30606N
2E-30606N*	6E-30606N*

* Inverted Cone with Endcut

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type	Angle
6.0	8.0	6.0	50.0	Solid	10°
9.6	9.5	6.0	55.0	Brazed	16°
12.7	12.7	6.0	58.0	Brazed	28°
16.0	19.0	6.0	64.0	Brazed	18°
19.0	16.0	6.0	61.0	Brazed	30°

Part Numbers

Cut 2	Cut 6
2-60606N	6-60606N
2-61010N	6-61010N
2-61212N	6-61212N
2-61520N	6-61520N
2-62015N	6-62015N

8mm
shank

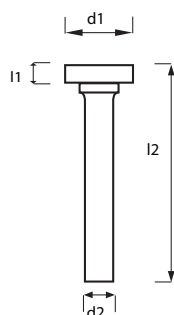
Dimensions - All in mm

d1	l1	d2	l2	Type	Angle
12.7	12.7	8.0	58.0	Brazed	28°
16.0	19.0	8.0	64.0	Brazed	18°
19.0	16.0	8.0	61.0	Brazed	30°

Part Numbers

Cut 2	Cut 6
2-81212N	6-81212N
2-81520N	6-81520N
2-82015N	6-82015N

Rim Shape



A - Rectangle	R - Radius	RA - 90°	RAR - 90°+Rad

Profile Shapes



3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
10.0	1.6	3.0	34.0	A

Part Numbers

Cut 2

2-3101.6A

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
12	2.6	6.0	48.0	A
25.0	3.2	6.0	48.0	RAR
25.0	5.5	6.0	50.0	RA
25.0	6.3	6.0	51.0	R
38.0	6.1	6.0	51.0	RAR

Part Numbers

Cut 2

2-6122.6A

2-62503RAR

2-62505RA

2-62506R

2-63806RAR

8mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
25	3.2	8.0	48.0	RAR
25.0	5.5	8.0	50.0	RA
25.0	6.3	8.0	51.0	R
38.0	6.1	8.0	51.0	RAR

Part Numbers

Cut 2

2-82503RAR

2-82505RA

2-82506R

2-83806RAR



NAVAHO®

Miniature Range



Cylinder without Endcut - Shape A, ZYA, SA



Dimensions - All in mm

d1	l1	d2	l2	Type
1.5	6.0	3.0	38.0	Solid
2.0	11.0	3.0	38.0	Solid
2.5	12.0	3.0	38.0	Solid
3.0	14.0	3.0	38.0	Solid
5.0	12.7	3.0	38.0	Solid
6.3	4.7	3.0	37.0	Brazed
6.3	12.7	3.0	45.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-31.506A	6-31.506A	-
2-30211A	6-30211A	-
2-32.512A	6-32.512A	-
2-30314A	6-30314A	3-30314A
2-30512A	6-30512A	-
2-30605A	6-30605A	-
2-30612A	6-30612A	3-30612A

Cylinder with Endcut - Shape B, ZYAS, SB



Dimensions - All in mm

d1	l1	d2	l2	Type
1.5	6.0	3.0	38.0	Solid
2.0	11.0	3.0	38.0	Solid
2.5	12.0	3.0	38.0	Solid
3.0	14.0	3.0	38.0	Solid
5.0	12.7	3.0	38.0	Solid
6.3	4.7	3.0	37.0	Brazed
6.3	12.7	3.0	45.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-31.506B	6-31.506B	-
2-30211B	6-30211B	-
2-32.512B	6-32.512B	-
2-30314B	6-30314B	3-30314B
2-30512B	6-30512B	-
2-30605B	6-30605B	-
2-30612B	6-30612B	3-30612B

Ball Nosed Cylinder - Shape C, WRC, SC



Dimensions - All in mm

d1	l1	d2	l2	Type
2.0	11.0	3.0	38.0	Solid
2.5	11.0	3.0	38.0	Solid
3.0	14.0	3.0	38.0	Solid
5.0	12.7	3.0	38.0	Solid
6.3	12.7	3.0	45.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-30211C	6-30211C	-
2-32.511C	6-32.511C	-
2-30312C	6-30312C	3-30312C
2-30512C	6-30512C	-
2-30612C	6-30612C	3-30612C

Ball - Shape D, KUD, SD



Dimensions - All in mm

d1	l1	d2	l2	Type
2.0	1.8	3.0	38.0	Solid
2.5	2.3	3.0	38.0	Solid
3.0	2.5	3.0	38.0	Solid
4.0	3.4	3.0	38.0	Solid
5.0	4.7	3.0	38.0	Solid
6.3	5.0	3.0	38.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-30202D	6-30202D	-
2-32.52.5D	6-32.52.5D	-
2-30303D	6-30303D	3-30303D
2-30404D	6-30404D	3-30404D
2-30505D	6-30505D	-
2-30606D	6-30606D	3-30606D



Oval - Shape E, TRE, SE



Dimensions - All in mm					Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3
3.0	6.0	3.0	38.0	Solid	2-30306E	6-30306E	3-30306E
5.0	8.0	3.0	38.0	Solid	2-30508E	6-30508E	-
6.3	9.5	3.0	42.0	Brazed	2-30610E	6-30610E	3-30610E

Ball Nosed Tree - Shape F, RBF, SF



Dimensions - All in mm					Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3
3.0	6.0	3.0	38.0	Solid	2-30306F	6-30306F	-
3.0	8.0	3.0	38.0	Solid	2-30308F	6-30308F	-
3.0	14.0	3.0	38.0	Solid	2-30312F	6-30312F	3-30312F
5.0	12.7	3.0	38.0	Solid	2-30512F	6-30512F	-
6.3	12.7	3.0	45.0	Brazed	2-30612F	6-30612F	3-30612F

Pointed Tree - Shape G, SPG, SG



Dimensions - All in mm					Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3
3.0	6.0	3.0	38.0	Solid	2-30306G	6-30306G	-
3.0	10.0	3.0	38.0	Solid	2-30310G	6-30310G	-
3.0	14.0	3.0	38.0	Solid	2-30312G	6-30312G	3-30312G
5.0	12.7	3.0	38.0	Solid	2-30512G	6-30512G	-
6.3	12.7	3.0	45.0	Brazed	2-30612G	6-30612G	3-30612G

Flame - Shape H, SH



Dimensions - All in mm					Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3
3.0	6.0	3.0	38.0	Solid	2-30306H	6-30306H	-
5.0	9.5	3.0	38.0	Solid	2-30510H	6-30510H	-
6.0	10.0	3.0	43.0	Brazed	2-30612H	6-30612H	-

60° Countersink - Shape J, KSJ, SJ



Dimensions - All in mm					Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3
3.0	2.5	3.0	38.0	Solid	2-30303J	6-30303J	-

Miniature Range



90° Countersink - Shape K, KSK, SK



Dimensions - All in mm

d1	l1	d2	l2	Type
3.0	1.5	3.0	38.0	Solid

Part Numbers

Cut 2	Cut 6	Cut 3
2-30303K	6-30303K	-

Ball Nosed Cone - Shape L, KEL, SL



Dimensions - All in mm

d1	l1	d2	l2	Type	Angle
3.0	10.0	3.0	38.0	Solid	10°
3.0	14.0	3.0	38.0	Solid	8°
5.0	12.7	3.0	38.0	Solid	14°
6.3	15.8	3.0	48.0	Brazed	22°

Part Numbers

Cut 2	Cut 6	Cut 3
2-30310L	6-30310L	-
2-30312L	6-30312L	3-30312L
2-30512L	6-30512L	-
2-30612L	6-30612L	3-30612L

Cone - Shape M, SKM, SM



Dimensions - All in mm

d1	l1	d2	l2	Type	Angle
3.0	8.0	3.0	38.0	Solid	18°
3.0	11.0	3.0	38.0	Solid	14°
3.0	15.0	3.0	38.0	Solid	10°
6.3	12.7	3.0	49.0	Brazed	22°

Part Numbers

Cut 2	Cut 6	Cut 3
2-30308M	6-30308M	-
2-30311M	6-30311M	3-30311M
2-30315M	6-30315M	-
2-30612M	6-30612M	3-30612M

Inverted Cone Shape N, WKN, SN



Dimensions - All in mm

d1	l1	d2	l2	Type	Angle
3.0	4.0	3.0	38.0	Solid	10°
6.3	6.4	3.0	39.0	Brazed	12°
3.0	4.0	3.0	38.0	Solid	10°
6.3	6.4	3.0	39.0	Brazed	12°

Part Numbers

Cut 2	Cut 6	Cut 3
2-30304N	6-30304N	-
2-30606N	6-30606N	-
2E-30304N*	6E-30304N*	-
2E-30606N*	6E-30606N*	-

* Inverted cone with endcut

Rim



Dimensions - All in mm

d1	l1	d2	l2	Type
10.0	1.6	3.0	34.0	Brazed

Part Numbers

Cut 2	Cut 6	Cut 3
2-3101.6A	-	-



Micro Range -

High tolerance geometry for precision applications



Cylinder
without
Endcut
Shape A

Dimensions - All in mm					Part Numbers
d1	l1	d2	l2	Type	Cut 2 MICRO
1.0	4.0	3.0	38.0	Solid	2-30104A MICRO
1.5	4.0	3.0	38.0	Solid	2-31.504A MICRO
2.0	4.0	3.0	38.0	Solid	2-30204A MICRO

Ball
Nosed
Cylinder
Shape C

Dimensions - All in mm					Part Numbers
d1	l1	d2	l2	Type	Cut 2 MICRO
1.0	4.0	3.0	38.0	Solid	2-30104C MICRO
1.5	4.0	3.0	38.0	Solid	2-31.504C MICRO
2.0	4.0	3.0	38.0	Solid	2-30204C MICRO

Ball
Shape D

Dimensions - All in mm					Part Numbers
d1	l1	d2	l2	Type	Cut 2 MICRO
1.0	0.9	3.0	38.0	Solid	2-30101D MICRO
1.5	1.4	3.0	38.0	Solid	2-31.51.5D MICRO
2.0	1.8	3.0	38.0	Solid	2-30202D MICRO

Oval
Shape E

Dimensions - All in mm					Part Numbers
d1	l1	d2	l2	Type	Cut 2 MICRO
1.5	4.0	3.0	38.0	Solid	2-31.504E MICRO

Ball
Nosed
Tree
Shape F

Dimensions - All in mm					Part Numbers
d1	l1	d2	l2	Type	Cut 2 MICRO
1.5	4.0	3.0	38.0	Solid	2-31.504F MICRO

Pointed
Tree
Shape G

Dimensions - All in mm					Part Numbers
d1	l1	d2	l2	Type	Cut 2 MICRO
1.5	4.0	3.0	38.0	Solid	2-31.504G MICRO

Cone
Shape M

Dimensions - All in mm						Part Numbers
d1	l1	d2	l2	Type	Angle	Cut 2 MICRO
1.5	4.0	3.0	38.0	Solid	16°	2-31.504M MICRO

Long Shank Range

Cylinder without Endcut - Shape A, ZYA, SA

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 2	Cut 6
6mm shank	3.0	14.0	3.0	50	Solid	2-30314A-50	6-30314A-50
	3.0	14.0	3.0	75	Solid	2-30314A-75	6-30314A-75
	3.0	14.0	3.0	100	Solid	2-30314A-100	6-30314A-100
6mm shank	d1	l1	d2	l2	Type	Cut 2	Cut 6
6mm shank	6.0	18.0	6.0	100	Solid	2-60618A-100	6-60618A-100
	6.0	18.0	6.0	150	Solid	2-60618A-150	6-60618A-150
	8.0	19.0	6.0	172	Brazed	2-60820A-170	6-60820A-170
	9.6	19.0	6.0	172	Brazed	2-61020A-170	6-61020A-170
	12.7	25.0	6.0	178	Brazed	2-61225A-175	6-61225A-175*

Cylinder with Endcut - Shape B, ZYAS, SB

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 2	Cut 6
6mm shank	3.0	14.0	3.0	50	Solid	2-30314B-50	6-30314B-50
	3.0	14.0	3.0	75	Solid	2-30314B-75	6-30314B-75
	3.0	14.0	3.0	100	Solid	2-30314B-100	6-30314B-100
6mm shank	d1	l1	d2	l2	Type	Cut 2	Cut 6
6mm shank	6.0	18.0	6.0	100	Solid	2-60618B-100	6-60618B-100
	6.0	18.0	6.0	150	Solid	2-60618B-150	6-60618B-150
	8.0	19.0	6.0	172	Brazed	2-60820B-170	6-60820B-170
	9.6	19.0	6.0	172	Brazed	2-61020B-170	6-61020B-170
	12.7	25.0	6.0	178	Brazed	2-61225B-175	6-61225B-175*

Ball Nosed Cylinder - Shape C, WRC, SC

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 2	Cut 6
6mm shank	3.0	14.0	3.0	50	Solid	2-30312C-50	6-30312C-50
	3.0	14.0	3.0	75	Solid	2-30312C-75	6-30312C-75
	3.0	14.0	3.0	100	Solid	2-30312C-100	6-30312C-100
6mm shank	d1	l1	d2	l2	Type	Cut 2	Cut 6
6mm shank	6.0	18.0	6.0	100	Solid	2-60618C-100	6-60618C-100
	6.0	18.0	6.0	150	Solid	2-60618C-150	6-60618C-150
	8.0	19.0	6.0	172	Brazed	2-60820C-170	6-60820C-170
	9.6	19.0	6.0	172	Brazed	2-61020C-170	6-61020C-170
	12.7	25.0	6.0	178	Brazed	2-61225C-175	6-61225C-175*



NAVAHO®

*Also available with 8mm shank



Ball - Shape D, KUD, SD

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 2	Cut 6
6mm shank	3.0	2.5	3.0	50	Solid	2-30303D-50	6-30303D-50
	3.0	2.5	3.0	75	Solid	2-30303D-75	6-30303D-75
	d1	l1	d2	l2	Type	Cut 2	Cut 6
	8.0	6.0	6.0	182	Brazed	2-60808D-180	6-60808D-180
	9.6	8.0	6.0	184	Brazed	2-61010D-185	6-61010D-185
	12.7	11.0	6.0	164	Brazed	2-61212D-162	6-61212D-162*

Oval - Shape E, TRE, SE

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 2	Cut 6
6mm shank	3.0	6.0	3.0	50	Solid	2-30306E-50	6-30306E-50
	3.0	6.0	3.0	75	Solid	2-30306E-75	6-30306E-75
	d1	l1	d2	l2	Type	Cut 2	Cut 6
	9.6	16.0	6.0	168	Brazed	2-61015E-165	6-61015E-165
	12.7	22.0	6.0	175	Brazed	2-61220E-170	6-61220E-170*

Ball Nosed Tree - Shape F, RBF, SF

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 2	Cut 6
6mm shank	3.0	14.0	3.0	50	Solid	2-30312F-50	6-30312F-50
	3.0	14.0	3.0	75	Solid	2-30312F-75	6-30312F-75
	d1	l1	d2	l2	Type	Cut 2	Cut 6
	6.0	18.0	6.0	150	Solid	2-60618F-150	6-60618F-150
	9.6	19.0	6.0	172	Brazed	2-61020F-170	6-61020F-170
	12.7	25.0	6.0	178	Brazed	2-61225F-175	6-61225F-175*

Long Shank Range

Pointed Tree - Shape G, SPG, SG

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 2	Cut 6
6mm shank	3.0	14.0	3.0	50	Solid	2-30312G-50	6-30312G-50
	3.0	14.0	3.0	75	Solid	2-30312G-75	6-30312G-75
	d1	l1	d2	l2	Type	Cut 2	Cut 6
	9.6	19.0	6.0	172	Brazed	2-61020G-170	6-61020G-170
	12.7	25.0	6.0	178	Brazed	2-61225G-175	6-61225G-175*

Flame - Shape H, SH

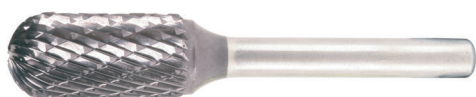
3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 2	Cut 6
6mm shank	3.0	14.0	3.0	50	Solid	2-30306H-50	6-30306H-50
	3.0	14.0	3.0	75	Solid	2-30306H-75	6-30306H-75
	d1	l1	d2	l2	Type	Cut 2	Cut 6
	8.0	19.0	6.0	172	Brazed	2-60820H-170	6-60820H-170
	12.7	32.0	6.0	178	Brazed	2-61232H-182	6-61232H-182*

Ball Nosed Cone - Shape L, KEL, SL

3mm shank	Dimensions - All in mm						Part Numbers	
	d1	l1	d2	l2	Type	Angle	Cut 2	Cut 6
6mm shank	3.0	14.0	3.0	50	Solid	8°	2-30312L-50	6-30312L-50
	3.0	14.0	3.0	75	Solid	8°	2-30312L-75	6-30312L-75
	d1	l1	d2	l2	Type	Angle	Cut 2	Cut 6
	9.6	30.0	6.0	183	Brazed	14°	2-61026L-176	6-61026L-176
	12.7	30.2	6.0	185	Brazed	14°	2-61228L-182	6-61228L-182*



*Also available with 8mm shank



Coated Range - TiAlN coated for extended tool life

Cylinder without Endcut - Shape A, ZYA, SA

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 6	Cut 3
	3.0	14.0	3.0	38.0	Solid	6-30314A TIALN	-

6mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 6	Cut 3
	6.0	18.0	6.0	50.0	Solid	6-60618A TIALN	-
	8.0	19.0	6.0	64.0	Brazed	6-60820A TIALN	-
	9.6	19.0	6.0	64.0	Brazed	6-61020A TIALN	3-61020A TIALN
	12.7	25.0	6.0	70.0	Brazed	6-61225A TIALN	3-61225A TIALN

Cylinder with Endcut - Shape B, ZYAS, SB

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 6	Cut 3
	3.0	14.0	3.0	38.0	Solid	6-30314B TIALN	-

6mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 6	Cut 3
	6.0	18.0	6.0	50.0	Solid	6-60618B TIALN	-
	8.0	19.0	6.0	64.0	Brazed	6-60820B TIALN	-
	9.6	19.0	6.0	64.0	Brazed	6-61020B TIALN	3-61020B TIALN
	12.7	25.0	6.0	70.0	Brazed	6-61225B TIALN	3-61225B TIALN

Ball Nosed Cylinder - Shape C, WRC, SC

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 6	Cut 3
	3.0	14.0	3.0	38.0	Solid	6-30312C TIALN	-

6mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 6	Cut 3
	6.0	18.0	6.0	50.0	Solid	6-60618C TIALN	-
	8.0	19.0	6.0	64.0	Brazed	6-60820C TIALN	-
	9.6	19.0	6.0	64.0	Brazed	6-61020C TIALN	3-61020C TIALN
	12.7	25.0	6.0	70.0	Brazed	6-61225C TIALN	3-61225C TIALN

Coated Range

Ball - Shape D, KUD, SD

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 6	Cut 3
	3.0	2.5	3.0	38.0	Solid	6-30303D TIALN	-

6mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 6	Cut 3
	6.0	4.7	6.0	50.0	Solid	6-60606D TIALN	-
	8.0	6.0	6.0	52.0	Brazed	6-60808D TIALN	-
	9.6	8.0	6.0	54.0	Brazed	6-61010D TIALN	3-61010D TIALN
	12.7	11.0	6.0	56.0	Brazed	6-61212D TIALN	3-61212D TIALN

Ball Nosed Tree - Shape F, RBF, SF

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 6	Cut 3
	3.0	14.0	3.0	38.0	Solid	6-30312F TIALN	-

6mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 6	Cut 3
	6.0	18.0	6.0	50.0	Solid	6-60618F TIALN	-
	9.6	19.0	6.0	65.0	Brazed	6-61020F TIALN	3-61020F TIALN
	12.7	25	6.0	70.0	Brazed	6-61225F TIALN	3-61225F TIALN

Pointed Tree - Shape G, SPG, SG

3mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 6	Cut 3
	3.0	14.0	3.0	38.0	Solid	6-30312G TIALN	-

6mm shank	Dimensions - All in mm					Part Numbers	
	d1	l1	d2	l2	Type	Cut 6	Cut 3
	6.0	18.0	6.0	50.0	Solid	6-60618G TIALN	-
	9.6	19.0	6.0	64.0	Brazed	6-61020G TIALN	-
	12.7	25.0	6.0	70.0	Brazed	6-61225G TIALN	-



Coated Range

Flame - Shape H, SH

6mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
8.0	19.0	6.0	64.0	Brazed
12.7	32.0	6.0	77.0	Brazed

Part Numbers

Cut 6	Cut 3
6-60820H TIALN	-
6-61232H TIALN	-

Ball Nosed Cone - Shape L, KEL, SL

3mm
shank

Dimensions - All in mm

d1	l1	d2	l2	Type
3.0	14.0	3.0	38.0	Solid

Part Numbers

Cut 6	Cut 3
6-30312L TIALN	-

6mm
shank

d1	l1	d2	l2	Type
12.7	32.0	6.0	77.0	Brazed

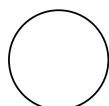
Cut 2	Cut 3
6-61228L TIALN	3-61228L TIALN

Diamond Cut Router Range -

for fibre glass and composite materials (GFK, CFK)

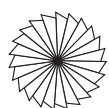


Without
Endcut



Dimensions - All in mm					Part Numbers
d1	l1	d2	l2	Type	Cut 8
3.0	13.0	3.0	45.0	Solid	8-30313P
4.0	16.0	4.0	50.0	Solid	8-40416P
6.0	19.0	6.0	63.0	Solid	8-60619P
8.0	25.0	8.0	63.0	Solid	8-80825P
10.0	25.0	10.0	63.0	Solid	8-101025P
12.0	30.0	12.0	75.0	Solid	8-121230P

With
Endcut



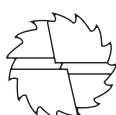
Dimensions - All in mm					Part Numbers
d1	l1	d2	l2	Type	Cut 8
3.0	13.0	3.0	45.0	Solid	8E-30313P
4.0	16.0	4.0	50.0	Solid	8E-40416P
6.0	19.0	6.0	63.0	Solid	8E-60619P
8.0	25.0	8.0	63.0	Solid	8E-80825P
10.0	25.0	10.0	63.0	Solid	8E-101025P
12.0	30.0	12.0	75.0	Solid	8E-121230P

Two Flute
Endmill
Endcut



Dimensions - All in mm					Part Numbers
d1	l1	d2	l2	Type	Cut 8
3.0	13.0	3.0	45.0	Solid	8ME-30313P
4.0	16.0	4.0	50.0	Solid	8ME-40416P
6.0	19.0	6.0	63.0	Solid	8ME-60619P
8.0	25.0	8.0	63.0	Solid	8ME-80825P
10.0	25.0	10.0	63.0	Solid	8ME-101025P
12.0	30.0	12.0	75.0	Solid	8ME-121230P

135°
Drill Point



Dimensions - All in mm					Part Numbers
d1	l1	d2	l2	Type	Cut 8
3.0	13.0	3.0	45.0	Solid	8DP-30313P
4.0	16.0	4.0	50.0	Solid	8DP-40416P
6.0	19.0	6.0	63.0	Solid	8DP-60619P
8.0	25.0	8.0	63.0	Solid	8DP-80825P
10.0	25.0	10.0	63.0	Solid	8DP-101025P
12.0	30.0	12.0	75.0	Solid	8DP-121230P



Power Cut Range - for heavy duty applications (Foundries / Shipyards)

Cylinder without Endcut - Shape A, ZYA, SA

6mm shank	Dimensions - All in mm					Part Numbers
	d1	l1	d2	l2	Type	Cut 5
8mm shank	9.6	19.0	6.0	64.0	Brazed	5-61020A
	12.7	25.0	6.0	70.0	Brazed	5-61225A
	16.0	25.0	6.0	70.0	Brazed	5-61525A
	d1	l1	d2	l2	Type	Cut 5
	12.7	25.0	8.0	70.0	Brazed	5-81225A

Cylinder with Endcut - Shape B, ZYAS, SB

6mm shank	Dimensions - All in mm					Part Numbers
	d1	l1	d2	l2	Type	Cut 5
8mm shank	9.6	19.0	6.0	64.0	Brazed	5-61020B
	12.7	25.0	6.0	70.0	Brazed	5-61225B
	16.0	25.0	6.0	70.0	Brazed	5-61525B
	d1	l1	d2	l2	Type	Cut 5
	12.7	25.0	8.0	70.0	Brazed	5-81225B

Ball Nosed Cylinder - Shape C, WRC, SC

6mm shank	Dimensions - All in mm					Part Numbers
	d1	l1	d2	l2	Type	Cut 5
8mm shank	8.0	19.0	6.0	64.0	Brazed	5-60820C
	9.6	19.0	6.0	64.0	Brazed	5-61020C
	12.7	25.0	6.0	70.0	Brazed	5-61225C
	16.0	25.0	6.0	70.0	Brazed	5-61525C
	d1	l1	d2	l2	Type	Cut 5
	12.7	25.0	8.0	70.0	Brazed	5-81225C

Power Cut Range

Ball - Shape D, KUD, SD

6mm shank		Dimensions - All in mm				Part Numbers
d1	l1	d2	l2	Type	Cut 5	
9.6	8.0	6.0	54.0	Brazed	5-61010D	
12.7	11.0	6.0	56.0	Brazed	5-61212D	

Oval - Shape E, TRE, SE

6mm shank		Dimensions - All in mm				Part Numbers
d1	l1	d2	l2	Type	Cut 5	
9.6	16.0	6.0	60.0	Brazed	5-61015E	
12.7	22.0	6.0	67.0	Brazed	5-61220E	

Ball Nosed Tree - Shape F, RBF, SF

6mm shank		Dimensions - All in mm				Part Numbers
d1	l1	d2	l2	Type	Cut 5	
9.6	19.0	6.0	64.0	Brazed	5-61020F	
12.7	25	6.0	70.0	Brazed	5-61225F	
16.0	25	6.0	70.0	Brazed	5-61525F	

8mm shank		Dimensions - All in mm				Part Numbers
d1	l1	d2	l2	Type	Cut 5	
12.7	25	8.0	70.0	Brazed	5-81225F	
16.0	25	8.0	70.0	Brazed	5-81525F	



Power Cut Range

Pointed Tree - Shape G, SPG, SG

6mm shank	Dimensions - All in mm					Part Numbers
	d1	l1	d2	l2	Type	Cut 5
8mm shank	9.6	19.0	6.0	64.0	Brazed	5-61020G
	12.7	25.0	6.0	70.0	Brazed	5-61225G
8mm shank	d1	l1	d2	l2	Type	Cut 5
	12.7	25.0	8.0	70.0	Brazed	5-81225G

Flame - Shape H, SH

6mm shank	Dimensions - All in mm					Part Numbers
	d1	l1	d2	l2	Type	Cut 5
	12.7	32.0	6.0	77.0	Brazed	5-61232H

Ball Nosed Cone - Shape L, KEL, SL

6mm shank	Dimensions - All in mm						Part Numbers
	d1	l1	d2	l2	Type	Angle	Cut 5
8mm shank	8.0	25.0	6.0	70.0	Brazed	14°	5-60822L
	9.6	30.0	6.0	76.0	Brazed	14°	5-61026L
	12.7	32.0	6.0	77.0	Brazed	14°	5-61228L
	16.0	33.0	6.0	78.0	Brazed	14°	5-61533L
8mm shank	d1	l1	d2	l2	Type	Angle	Cut 5
	12.7	32.0	8.0	77.0	Brazed	14°	5-81228L

Cone - Shape M, SKM, SM

6mm shank	Dimensions - All in mm						Part Numbers
	d1	l1	d2	l2	Type	Angle	Cut 5
	12.7	22.0	6.0	7.1	Brazed	28°	5-61222M

Burr Sets

Burr Set 8pc (6mm Shank/Cut 6)

Part Number: **SET-8-6-6**

6-61225A
6-61020C
6-61225C
6-61212D
6-61015E
6-61020F
6-61225F
6-61020G



Burr Set 5pc (6mm Shank/Cut 6)

Part Number: **SET-5-6-6**

6-61020B
6-61225C
6-61225F
6-61020G
6-61228L



Coated Burr Set 5pc (6mm Shank/Cut 6)

Part Number: **SET-5-6-6C**

6-61020B TIALN
6-61225C TIALN
6-61225F TIALN
6-61020G TIALN
6-61228L TIALN



Power Cut Burr Set 5pc (6mm Shank/Cut 5)

Part Number: **SET-5-6-5**

5-61225B
5-61225C
5-61225F
5-61225G
5-61228L



Burr Set 10pc (3mm Shank/Cut 6)

Part Number: **SET-10-3-6**

6-30314A
6-30312C
6-30303D
6-30306E
6-30312F
6-30312G
6-30306H
6-30312L
6-30311M
6-30304N



Micro Burr Set 10pc (3mm Shank/Cut 2 MICRO)

Part Number: **SET-10-3-2**

2-30104A MICRO
2-31.504A MICRO
2-30104C MICRO
2-31.504C MICRO
2-30101D MICRO
2-31.51.5D MICRO
2-31.504E MICRO
2-31.504F MICRO
2-31.504G MICRO
2-31.504M MICRO



40pc Burr Display Part

Number: **SET-40**

6-60618B	6-61020F
6-60820B	6-61225F
6-61020B	6-60618G
6-61225B	6-60820G
6-60618C	6-61020G
6-60820C	6-61225G
6-61020C	6-60618L
6-61225C	6-60822L
6-60618F	6-61026L
6-60820F	6-61228L

- 2 pieces of each part included
- Secure lockable design
- Dimensions: (w)165mm x (h)310mm x (l)245mm



Recommendations For Use

- It may be necessary to alter the running speeds from those shown in the speed chart in order to achieve optimum performance.
- Harder materials require slower running speeds.
- Smaller burrs require faster running speeds.
- Long shank burrs require slower speeds for safety reasons.
- Apply constant movement and light pressure when using the burr.
- Running below the optimum speed will cause chipping.
- Running above optimum speed will cause premature tooth wear.
- Allowing the burr to become too hot may cause the braze to soften, and cause the head to become detached from the shank.
- Using tools and collets which have become worn will encourage chipping.
- Do not sink the burr for more than one third of its periphery.

Always Remember to Wear



Ear Protection



Face Mask



Safety Glasses



Protective Gloves



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