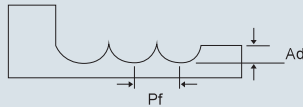


TECHNICAL DATA | GENERAL PURPOSE |

BA302, BA304 Series

Work Material	Cast Iron		Mild Steels Carbon Steels		Alloy Steels, Tool Steels, Ti Steels(Annealed)		Hardened Steels, Prehardened Steels, Ti, Alloys(Solution Treated & Aged)		Hardened Steels, Prehardened Steels, Stainless Steels, Inconel, Ni Bases Alloys		Aluminum Alloys	
Hardness	-		-		≤ 30 HRc		30 ~ 38 HRc		38 ~ 45 HRc		38 ~ 45 HRc	
Strength	-		Up to 108,779lbf / inch ²		-		-		-		-	
Cutting Diameter(inch)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1/32	19,600	4.8	19,600	4.5	14,680	2.5	12,200	1.2	9,780	0.9	50,000	6.8
3/64	14,140	5.2	14,140	4.8	10,305	3.0	8,620	1.5	6,885	1.0	35,535	8.0
1/16	11,115	5.8	11,115	5.1	8,045	3.4	6,720	1.7	5,360	1.2	29,585	9.8
5/64	8,090	6.3	8,090	5.4	5,780	3.7	4,810	1.8	3,840	1.4	23,630	11.7
3/32	6,970	6.5	6,970	5.7	4,965	3.9	4,140	1.9	3,290	1.4	20,420	11.8
7/64	5,920	6.7	5,920	6.0	4,205	4.1	3,520	1.9	2,795	1.4	17,325	11.8
1/8	5,090	7.2	5,090	6.1	3,610	4.3	3,030	1.9	2,400	1.4	14,945	11.8
9/64	4,545	7.9	4,545	6.2	3,225	4.3	2,690	1.9	2,140	1.4	13,470	11.8
5/32	4,000	8.6	4,000	6.3	2,850	4.3	2,360	1.9	1,875	1.4	11,990	11.8
11/64	3,670	9.2	3,670	6.6	2,620	4.3	2,160	1.9	1,725	1.4	11,020	12.7
3/16	3,360	9.6	3,360	6.9	2,405	4.4	1,970	1.9	1,580	1.4	10,090	13.6
13/64	3,090	10.1	3,090	7.1	2,205	4.4	1,810	1.9	1,455	1.4	9,275	14.2
7/32	2,870	10.4	2,870	7.1	2,045	4.3	1,690	1.9	1,360	1.4	8,630	14.2
1/4	2,520	11.3	2,520	6.9	1,775	4.2	1,490	1.9	1,205	1.4	7,570	14.6
9/32	2,260	12.5	2,260	6.4	1,580	4.1	1,350	1.9	1,080	1.4	6,785	15.5
5/16	1,995	13.6	1,995	5.9	1,390	4.0	1,200	1.9	960	1.4	6,000	16.4
11/32	1,820	13.7	1,820	5.8	1,290	4.0	1,100	1.9	880	1.4	5,495	16.5
3/8	1,655	13.7	1,655	5.7	1,200	4.0	1,005	1.9	800	1.4	5,020	16.5
13/32	1,515	13.7	1,515	5.6	1,110	3.9	920	1.9	735	1.4	4,610	16.9
7/16	1,420	13.7	1,420	5.4	1,030	3.7	855	1.9	690	1.4	4,300	17.8
1/2	1,250	13.7	1,250	5.2	900	3.5	750	1.9	600	1.4	3,750	18.9
9/16	1,120	13.9	1,120	5.2	795	3.5	660	1.9	530	1.4	3,290	18.5
5/8	1,005	13.9	1,005	5.2	720	3.5	590	1.9	470	1.4	2,960	16.7
11/16	915	13.9	915	5.2	650	3.5	540	1.9	430	1.4	2,715	16.5
3/4	820	12.9	820	5.2	580	3.5	485	1.9	380	1.4	2,415	16.5
7/8	710	11.2	710	5.2	510	3.5	425	1.8	335	1.4	2,100	16.5
1	630	9.8	630	5.1	440	3.5	370	1.6	300	1.4	1,830	16.3

RPM = rev. / min.
FEED = inch / min.



R	Ad	pf
$D < 1/8$	0.1D	0.2D
$1/8 \leq D$	0.3D	0.7D

Note

• for 2Flute

- Reduce Speeds & Feeds 25% for 2FL. Ball nose Long length
- Reduce Speeds & Feeds 50% for 2FL. Ball nose Extra Long length

• for 4Flute

- Increase Speeds & Feeds 40% for 4FL. Ball nose Standard & Stub length
- Reduce Speeds 25% & Increase Feeds 10% for 4FL. Ball nose Long length