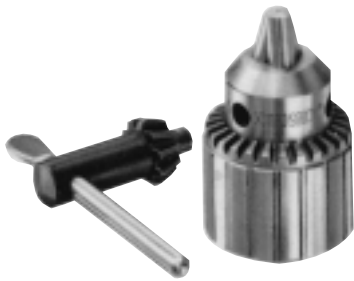


## DRILL CHUCKS



CAPACITY	THREAD SIZE	CHUCK NO.	BODY LENGTH		*CUTTING TOOL PENETRATION	OUTSIDE DIA.	CHUCK KEY NO.
			Jaws Closed	Jaws Open			
0-1/4" (0-6.4 mm)	1/2-20 R.H.	<b>33906</b>	2.190 (55.6)	1.750 (44.5)	11/16 (17.5)	1.320 (33.5)	30209-K
0-3/8" (0-9.5 mm)	3/8-24 R.H.	<b>47341</b>	2.47 (63)	1.930 (49)	13/16 (20.6)	1.420 (36)	30510-K
0-3/8" (0-9.5 mm)	5/8-16 R.H.	<b>45176</b>	3.060 (78)	2.310 (58.7)	61/64 (24)	1.790 (45.5)	30016-K
0-3/8" (0-9.5 mm)	1/2-20 R.H.	<b>33907</b>	2.500 (63.5)	1.906 (48.4)	13/16 (20.6)	1.437 (36)	30510-K
5/64"-1/2" (2-13 mm)	1/2-20 R.H.	<b>30018</b>	3.090 (78.5)	2.420 (61.5)	1-9/64 (29)	1.790 (45.5)	30016-K
3/16"-3/4" (4.8-19 mm)	5/8-16 R.H.	<b>45177</b>	4.120 (104.6)	3.190 (81)	1-17/32 (39)	2.550 (64.8)	45177-K
5/64"-1/2" (2-13 mm)	#33 Jacobs	<b>46977</b>	3.010 (76.4)	2.51 (63.4)	1-9/64 (29)	1.790 (45.5)	30016-K

\* Cutting Tool Penetration in chuck varies with Cutter Shank diameter.

## TAPER SHANK ADAPTERS

Taper Shank Adapters provide secure means of driving larger taper shank drills into harder materials. Sizes are available for all ARO Automatic Production Drills as optional equipment at extra cost.



MORSE TAPER	THREAD SIZE	TAPER SHANK ADAPTER NO.	LENGTH	OUTSIDE DIA.	FOR USE ON
1	1/2-20 female	35211	3.5" (89 mm)	1.0 (25.4)	Bant-A-Matic, Par-A-Matic
2	1/2-20 female	31394	4.0" (101.5 mm)	1.0 (25.4)	Super Par-A-Matic, 8660 Hi-Thrust
1	5/8-16 female	46090	4.0" (101.5 mm)	1.05 (26.7)	8670 Hi-Thrust
2	5/8-16 female	46091	4.5" (114 mm)	1.17 (29.7)	8670 Hi-Thrust
1	#33 Jacobs Taper	46987	4.0" (101.5 mm)	1.05 (26.7)	Series 34A, 54C & 74B
2	#33 Jacobs Taper	46986	4.5" (114 mm)	1.17 (29.7)	Series 34A, 54C & 74B

CAPACITY	MOUNTING STYLE	CHUCK NO.	LENGTH		CUTTING TOOL PENETRATION	OUTSIDE DIA.	RUBBER FLEX INSERT
			Min.	Max.			
No. 0—1/4" (M1.6 - M6)	.3675" Dia. (9.3 mm)	<b>31427</b>	2.340 (59.4)	2.510 (63.8)	1.0—1-11/64 (25.4—29.8)	1.070 (27.2)	31437
No. 10—5/16" (M4.5 - M8)	.3675" Dia. (9.3 mm)	<b>31432</b>	2.310 (58.7)	2.520 (64)	1.0—1-11/64 (25.4—29.8)	1.070 (27.2)	31436
No. 0—1/2" (M4.5 - M12)	#2 Jacobs Taper	<b>41374**</b>	2.880 (73.2)	3.130 (79.5)	1-3/32—1-3/8 (27.8—35)	1.460 (37.1)	<b>J440</b> <b>J443</b>
5/16"—5/8" (M7 - M16)	.3675" Dia. (9.3 mm)	<b>32060</b>	2.860 (72.6)	3.130 (79.5)	1-3/32—1-3/8 (27.8—35)	1.460 (37.1)	32061
5/16"—5/8" (M7 - M16)	#2 Jacobs Taper	<b>32063</b>	2.860 (72.6)	3.130 (79.5)	1-3/32—1-3/8 (27.8—35)	1.460 (37.1)	32061

\*\*41376 Tap Chuck Assembly includes 41374 Chuck and 41375 Arbor.

## TAP CHUCKS



TAPPING ATTACHMENT	CAPACITY	RUBBER FLEX INSERTS	MOUNTING THREAD	LENGTH	CUTTING TOOL PENETRATION	OUTSIDE DIA.
<b>38021-4*</b>	No. 0—1/4" (M1.6 - M6)	38036	1/2-20	5.781" (146.8 mm)	1-7/32 (31)	2.750 (69.9)
	1/4"—1/2" (M6 - M12)	38036-1	R.H.			
<b>42123-1**</b>	No. 0—1/4" (M1.6 - M6)	37431-1	1/2-20 R.H.	4.250" (108 mm)	43/64 (17)	1.890 (48)

\*Includes 38020-4 Tapping Head and 38020-4 Torque Arm. \*\*Includes 42106-1 Tapping Head and 37601 Torque Arm. Both attachments also include necessary wrenches.

## TAPPING HEAD ATTACHMENT



## Spindle Accessories

### SERIES 35069-( ) COLLETS

For use on Series 8660, Par-A-Matic and Super Par-A-Matic Drills.



COLLET NO.	SIZE RANGE in. (mm)	INSERT
35069-1	7/32 - 1/4 (5.5 - 6.4)	35263-1
35069-2	1/4 - 9/32 (6.4 - 7.1)	35263-2
35069-3	9/32 - 5/16 (7.1 - 7.9)	35263-3
35069-4	5/16 - 11/32 (7.9 - 8.7)	35263-4
35069-5	11/32 - 3/8 (8.7 - 9.5)	35263-5
35069-6	3/8 - 13/32 (9.5 - 10.3)	35263-6
35069-7	13/32 - 7/16 (10.3 - 11.1)	35263-7
35069-8	7/16 - 15/32 (11.1 - 11.9)	35263-8
35069-9	15/32 - 1/2 (11.9 - 12.7)	35263-9
35069-10	1/2 - 17/32 (12.7 - 13.5)	35263-10
35069-11	17/32 - 9/16 (13.5 - 14.3)	35263-11

**Sub-Assemblies**

- 35070 Body
- 35263-( ) Insert

**Specifications**

- Length: 3-1/4" (82.5 mm)
- Thread: 1/2-20 female
- Outside Dia.: 1-3/4" (44.5 mm)
- Approx. Tooling Penetration: 1-3/4" (44.5 mm)

### SERIES 35074-( ) COLLETS

For use on Series 8660, Par-A-Matic and Super Par-A-Matic Drills.



COLLET NO.	SIZE RANGE in. (mm)	INSERT
35074-1	7/32 - 1/4 (5.5 - 6.4)	35264-1
35074-2	1/4 - 9/32 (6.4 - 7.1)	35264-2
35074-3	9/32 - 5/16 (7.1 - 7.9)	35264-3
35074-4	5/16 - 11/32 (7.9 - 8.7)	35264-4
35074-5	11/32 - 3/8 (8.7 - 9.5)	35264-5
35074-6	3/8 - 13/32 (9.5 - 10.3)	35264-6
35074-7	13/32 - 7/16 (10.3 - 11.1)	35264-7
35074-8	7/16 - 15/32 (11.1 - 11.9)	35264-8
35074-9	15/32 - 1/2 (11.9 - 12.7)	35264-9
35074-10	1/2 - 17/32 (12.7 - 13.5)	35264-10
35074-11	17/32 - 9/16 (13.5 - 14.3)	35264-11
35074-12	9/16 - 19/32 (14.3 - 15.1)	35264-12
35074-13	19/32 - 5/8 (15.1 - 15.9)	35264-13
35074-14	5/8 - 21/32 (15.9 - 16.6)	35264-14
35074-17	23/32 - 3/4 (18.2 - 19.0)	35264-17

**Sub-Assemblies**

- 35075 Body
- 35264-( ) Insert

**Specifications**

- Length: 3-1/4" (82.5 mm)
- Thread: 1/2-20 female
- Outside Dia.: 2-1/32" (51.6 mm)
- Approx. Tooling Penetration: 1-7/8" (47.6 mm)

### SERIES 35079-( ) COLLETS

For use on Series 8660, Par-A-Matic and Super Par-A-Matic Drills.



COLLET NO.	SIZE RANGE in. (mm)	INSERT
35079-1	3/32 - 1/8 (2.4 - 3.2)	32968-1
35079-2	1/8 - 5/32 (3.2 - 4.0)	32968-2
35079-3	5/32 - 3/16 (4.0 - 4.8)	32968-3
35079-4	3/16 - 7/32 (4.8 - 5.5)	32968-4
35079-5	7/32 - 1/4 (5.5 - 6.4)	32968-5
35079-6	1/4 - 9/32 (6.4 - 7.1)	32968-6
35079-7	9/32 - 5/16 (7.1 - 7.9)	32968-7
35079-8	5/16 - 11/32 (7.9 - 8.7)	32968-8
35079-9	11/32 - 3/8 (8.7 - 9.5)	32968-9

**Sub-Assemblies**

- 35080 Body
- 32968-( ) Insert

**Specifications**

- Length: 2-11/16" (68.3 mm)
- Thread: 1/2-20 female
- Outside Dia.: 1-7/16" (36.5 mm)
- Approx. Tooling Penetration: 1-3/8" (34.9 mm)

### SERIES 39959-( ) COLLETS

For use on Par-A-Matic Offset Drills.



COLLET NO.	SIZE RANGE in. (mm)	INSERT
39959-2	.094 - .177 (2.4 - 4.5)	37431-2
39959-3	.177 - .256 (4.5 - 6.5)	37431-3

**Sub-Assemblies**

- 39958 Body & Nut
- 37431-( ) Insert

**Specifications**

- Length: 1-15/16" (49.2 mm)
- Thread: 3/8-24 female
- Outside Dia.: 3/4" (19 mm)
- Approx. Tooling Penetration: 1-5/16" (33.3 mm)

### SERIES 41758-( ) COLLETS

For use on Series 8660, Par-A-Matic, Super Par-A-Matic and Bant-A-Matic Drills.



COLLET NO.	SIZE RANGE in. (mm)	INSERT
41758-1	1/64 - 3/64 (.40 - 1.2)	31812-1
41758-2	3/64 - 5/64 (1.2 - 2.0)	31812-2
41758-3	5/64 - 3/32 (2.0 - 2.4)	31812-3
41758-4	3/32 - 1/8 (2.4 - 3.2)	31812-4
41758-5	1/8 - 5/32 (3.2 - 4.0)	31812-5
41758-6	5/32 - 3/16 (4.0 - 4.8)	31812-6
41758-7	3/16 - 7/32 (4.8 - 5.5)	31812-7
41758-8	7/32 - 1/4 (5.5 - 6.4)	31812-8

**Sub-Assemblies**

- 41756 Body
- 32541 Nut
- 31812-( ) Insert

**Specifications**

- Length: 2-9/16" (65.1 mm)
- Thread: 1/2-20 female
- Outside Dia.: 3/4" (19 mm)
- Approx. Tooling Penetration: 1-5/16" (33.3 mm)

### SERIES 46093-( ) & 48175-( ) COLLETS

Series 8670 Hi-Thrust Drills use 46093-( ). Series 34A, 54C & 74B Electro-Feed Drills use 48175-( ).



Series 46093



Series 48175

COLLET NO.	SIZE RANGE in. (mm)	INSERT
46093-1	48175-1 7/32 - 1/4 (5.5 - 6.4)	35264-1
46093-2	48175-2 1/4 - 9/32 (6.4 - 7.1)	35264-2
46093-3	48175-3 9/32 - 5/16 (7.1 - 7.9)	35264-3
46093-4	48175-4 5/16 - 11/32 (7.9 - 8.7)	35264-4
46093-5	48175-5 11/32 - 3/8 (8.7 - 9.5)	35264-5
46093-6	48175-6 3/8 - 13/32 (9.5 - 10.3)	35264-6
46093-7	48175-7 13/32 - 7/16 (10.3 - 11.1)	35264-7
46093-8	48175-8 7/16 - 15/32 (11.1 - 11.9)	35264-8
46093-9	48175-9 15/32 - 1/2 (11.9 - 12.7)	35264-9
46093-10	48175-10 1/2 - 17/32 (12.7 - 13.5)	35264-10
46093-11	48175-11 17/32 - 9/16 (13.5 - 14.3)	35264-11
46093-12	48175-12 9/16 - 19/32 (14.3 - 15.1)	35264-12
46093-13	48175-13 19/32 - 5/8 (15.1 - 15.9)	35264-13
46093-14	48175-14 5/8 - 21/32 (15.9 - 16.6)	35264-14
46093-15	48175-15 21/32 - 11/16 (16.6 - 17.4)	35264-15
46093-16	48175-16 11/16 - 23/32 (17.4 - 18.2)	35264-16
46093-17	48175-17 23/32 - 3/4 (18.2 - 19.0)	35264-17

**Series 46093 Sub-Assemblies**

- 46093 Body
- 35264-( ) Insert

**Series 46093 Specifications**

- Length: 3.0" (76.2 mm)
- Thread: 5/8-16 female
- Outside Dia.: 1-5/8" (41.3 mm)
- Approx. Tooling Penetration: 1-7/8" (47.6 mm)

**Series 48175 Sub-Assemblies**

- 48091 Body
- 35264-( ) Insert

**Series 48175 Specifications**

- Length: 3-5/16" (84 mm)
- Taper: No. 33 Jacobs
- Outside Dia.: 1-3/4" (44 mm)
- Approx. Tooling Penetration: 1-7/8" (47.6 mm)

## ARO AUTOMATION TOOLS STANDARD TWIN DRILL/TWIN TAP HEADS

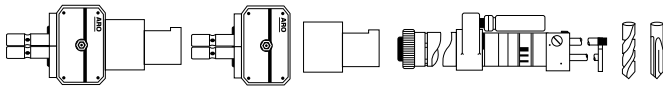
For single spindle drills already in operation, ARO Twin Drill Head Attachments can be ordered separately which fit directly to ARO Bant-A-Matic, Par-A-Matic, Super Par-A-Matic, and Series 3 Electra-Feed Drills.

Twin Drill Heads have a 1:1 gear ratio and are rated for 5,000 rpm maximum. Heads come complete with necessary wrenches. Collets must be ordered separately.

5/32" (4.0 mm) Collet Capacity  
**Model 46394**  
 for Bant-A-Matic Drills

1/4" (6.5 mm) Collet Capacity  
**Model 46023**  
 for Par-A-Matic Drills  
**Model 47489**  
 for Super Par-A-Matic Drills

3/8" (9.5 mm) Collet Capacity  
**Model 46063**  
 for Super Par-A-Matic Drills  
**Model 47276**  
 for Series 34A, 54C & 74B  
 Electra-Feed Drills



Complete Head Ass'y.	Head Only Ass'y.	Adapter Ass'y.	Used On	Used For	Adj. Spindle Center Distances, in.		Series Part No.	Collet Bore, in.		Max. Tap Size
					Min.	Max.		Min.	Max.	
46394	48057-1	48056-1	Bant-A-Matic	Drilling	.375	2.125	47368-(-)	.039	.157	
48060-1	48057-1	48058-1	Bant-A-Matic	Tapping	.375	2.125	47368-(-)			#6
46023	47980	47283	Par-A-Matic	Drilling	.500	2.500	45998-(-)	.039	.256	
48055	47980	47982	Par-A-Matic	Tapping	.500	2.500	45998-(-)			1/4"
46063	47768	47767	S. Par-A-Matic	Drilling	.750	3.750	46033-(-)	.079	.375	
47288	47768	47282	S. Par-A-Matic	Tapping	.750	3.750	46033-(-)			5/16"
47489	47980	47490	S. Par-A-Matic	Drilling	.500	2.500	45998-(-)	.039	.256	
47276	47768	47876	Series 34A, 54C, 74B	Drilling	.750	3.750	46033-(-)	.079	.375	
47908	47768	47907	Series 34A, 54C, 74B	Tapping	.750	3.750	46033-(-)			5/16"
48061-1	48057-1	48059-1	Lead Screw Tapper	Tapping	.375	2.125	47368-(-)			#6
48054	47980	47981	Lead Screw Tapper	Tapping	.500	2.500	45998-(-)			1/4"
47277	47768	47785	Lead Screw Tapper	Tapping	.750	3.750	46033-(-)			5/16"

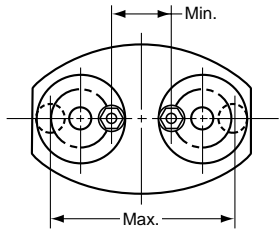
NOTE: Drill bits should always be operated in drill bushings for proper support and alignment.

## ARO MULTI-SPINDLE DRILLING/TAPPING HEADS

In addition to the Twin Spindle drill and tapping heads shown on page 26, there are several other configurations available. Each

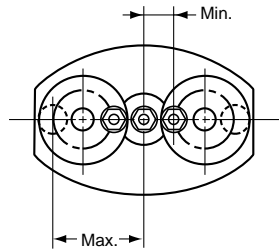
configuration is offered in a head size (type) that matches the size and duty of a particular self-feed tool.

### TWIN SPINDLE EXTRA REACH ADJUSTABLE



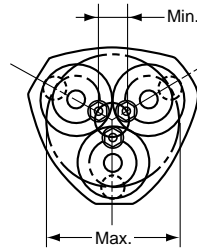
TYPE	MAX.	DRILL	CENTERS		USED WITH	COLLETS USED
			MIN.	MAX.		
400	5/32	(4.0)	.750 (19.0)	2.500 (63.5)	A	47368 - ( )
650	1/4	(6.5)	1.000 (12.7)	3.000 (76.2)	B, F, G.	45998 - ( )
950	3/8	(9.5)	1.500 (38.1)	4.500 (114.3)	C, D, E, F, G.	46033 - ( )

### THREE SPINDLE IN LINE ADJUSTABLE



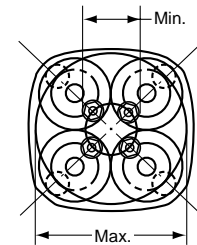
TYPE	MAX.	DRILL	CENTERS		USED WITH	COLLETS USED
			MIN.	MAX.		
400	5/32	(4.0)	.375 (9.5)	1.250 (31.7)	A	47368 - ( )
650	1/4	(6.5)	.500 (12.7)	1.500 (38.1)	B, F, G.	45998 - ( )
950	3/8	(9.5)	.750 (19.0)	2.250 (57.1)	C, D, E, F, G.	46033 - ( )

### THREE SPINDLE ADJUSTABLE



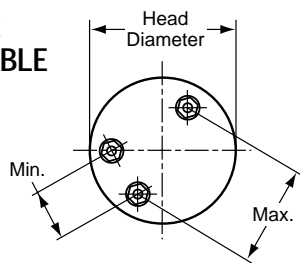
TYPE	MAX.	DRILL	CENTERS		USED WITH	COLLETS USED
			MIN.	MAX.		
400	5/32	(4.0)	.565 (14.3)	2.320 (58.9)	A	47368 - ( )
650	1/4	(6.5)	.735 (18.7)	2.730 (69.3)	B, F, G.	45998 - ( )
950	3/8	(9.5)	1.100 (27.9)	4.100 (104.1)	C, D, E, F, G.	46033 - ( )

### FOUR SPINDLE ADJUSTABLE



TYPE	MAX.	DRILL	CENTERS		USED WITH	COLLETS USED
			MIN.	MAX.		
400	5/32	(4.0)	.890 (22.6)	2.645 (67.2)	A	47368 - ( )
650	1/4	(6.5)	1.125 (28.6)	3.120 (79.2)	B, F, G.	45998 - ( )
950	3/8	(9.5)	1.680 (42.7)	4.680 (118.9)	C, D, E, F, G.	46033 - ( )

### FIXED CENTER NON-ADJUSTABLE



TYPE	MAX.	DRILL	CENTERS		USED WITH	COLLETS USED
			MIN.	MAX.		
400	5/32	(4.0)	.375 (9.5)	2.125 (54.0)	A	47368 - ( )
650	1/4	(6.5)	.500 (12.7)	2.500 (63.5)	B, F, G.	45998 - ( )
950	3/8	(9.5)	.750 (19.0)	3.750 (95.0)	C, D, E, F, G.	46033 - ( )

( )=mm

USED WITH: A=Bant-A-Matic B=Par-A-Matic C=Super Par-A-Matic D=8660 E=8670  
F=FE034A G=FE054C H=FE074A

For assistance with application, dimensions, price and delivery - consult factory.

# Spindle Accessories



## TWIN DRILL COLLETS

BORE Dia. <sup>+0.001</sup> / <sub>-.0005</sub>	DRILL SIZES		46394 HEAD (Bant-A-Matic)	46023 HEAD (Par-A-Matic) 47489 Head	46063/47276 HEAD (Super Par-A-Matic) Series 34A, 54C, 74A Electra-Feed	BORE Dia. <sup>+0.001</sup> / <sub>-.0005</sub>	DRILL SIZES		46023 HEAD (Par-A-Matic) 47489 Head	46063/47276 HEAD (Super Par-A-Matic) Series 34A, 54C, 74A Electra-Feed	
	inch	no. mm					inch	no. mm			
.039"	61	1.0	47368-1	45998-1		.209"	4	5.3	45998-44	46033-34	
.043"	57	1.1	47368-2	45998-2		.213"	3	5.4	45998-45	46033-35	
.047"	3/64	56	47368-3	45998-3		.216"	—	5.5	45998-46	46033-36	
.052"		55	47368-4	45998-4		.220"	7/32	2	5.6	45998-47	46033-37
.055"		54	47368-5	45998-5		.224"	—	5.7	45998-48	46033-38	
.059"		53	47368-6	45998-6		.228"	1	5.8	45998-49	46033-39	
.063"	1/16	52	47368-7	45998-7		.232"	—	5.9	45998-50	46033-40	
.067"		51	47368-8	45998-8		.236"	15/64	A	6.0	45998-51	46033-41
.071"		50	47368-9	45998-9		.240"		B	6.1	45998-52	46033-42
.075"		48	47368-10	45998-10		.244"		C	6.2	45998-53	46033-43
.079"	5/64	47	47368-11	45998-11	46033-1	.248"		D	6.3	45998-54	46033-44
.083"		45	47368-12	45998-12	46033-2	.252"	1/4	E	6.4	45998-55	46033-45
.087"		44	47368-13	45998-13	46033-3	.256"		F	6.5	45998-56	46033-46
.091"		43	47368-14	45998-14	46033-4	.260"		G	6.6		46033-47
.094"	3/32	42	47368-15	45998-15	46033-5	.264"	17/64	—	6.7		46033-48
.098"		40	47368-16	45998-16	46033-6	.268"		H	6.8		46033-49
.102"		38	47368-17	45998-17	46033-7	.272"		I	6.9		46033-50
.106"		36	47368-18	45998-18	46033-8	.276"		J	7.0		46033-51
.110"	7/64	35	47368-19	45998-19	46033-9	.280"	9/32	K	7.1		46033-52
.114"		33	47368-20	45998-20	46033-10	.283"	—	7.2			46033-53
.118"		32	47368-21	45998-21	46033-11	.287"	—	7.3			46033-54
.122"		31	47368-22	45998-22	46033-12	.291"		L	7.4		46033-55
.126"	1/8	—	47368-23	45998-23	46033-13	.295"		M	7.5		46033-56
.130"		30	47368-24	45998-24	46033-14	.299"	19/64	—	7.6		46033-57
.134"		29	47368-25	45998-25	46033-15	.303"		N	7.7		46033-58
.138"		—	47368-26	45998-26	46033-16	.307"		—	7.8		46033-59
.142"	9/64	28	47368-27	45998-27	46033-17	.311"	5/16	—	7.9		46033-60
.146"		26	47368-28	45998-28	46033-18	.315"		O	8.0		46033-61
.150"		25	47368-29	45998-29	46033-19	.319"		—	8.1		46033-62
.154"		23	47368-30	45998-30	46033-20	.323"		P	8.2		46033-63
.157"	5/32	22	47368-31	45998-31	46033-21	.327"	21/64	—	8.3		46033-64
.161"		20	4.1	45998-32	46033-22	.331"		Q	8.4		46033-65
.165"		19	4.2	45998-33	46033-23	.335"		—	8.5		46033-66
.169"		18	4.3	45998-34	46033-24	.339"		R	8.6		46033-67
.173"	11/64	17	4.4	45998-35	46033-25	.342"	11/32	—	8.7		46033-68
.177"		16	4.5	45998-36	46033-26	.346"		—	8.8		46033-69
.181"		14	4.6	45998-37	48033-27	.350"		S	8.9		46033-70
.185"		13	4.7	45998-38	46033-28	.354"		—	9.0		46033-71
.189"	3/16	12	4.8	45998-39	46033-29	.358"	23/64	T	9.1		46033-72
.193"		10	4.9	45998-40	46033-30	.362"		—	9.2		46033-73
.197"		9	5.0	45998-41	46033-31	.366"		—	9.3		46033-74
.201"		7	5.1	45998-42	46033-32	.370"		U	9.4		46033-75
.205"	13/64	5	5.2	45998-43	46033-33	.375"	3/8	—	9.5		46033-76

## TWIN TAP COLLETS

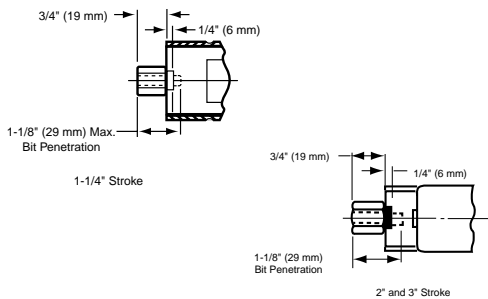
TAPPING HEAD NUMBER	TAP SIZE					
	#0-#6	#8	#10	#12	1/4"	5/16"
48060-1						
48061-1	47368-27	NA	NA	NA	NA	NA
48054						
48055	45998-27	45998-34	45998-41	45998-47	45998-56	NA
47277, 47288, 47908	46033-17	46033-24	46033-31	46033-37	46033-46	46033-62

## COLLET SELECTION FOR HIGH SPEED DRILL UNITS

Collets, built into the spindle, are furnished as standard equipment on all highest speed feed tools. This provides for superior gripping, better balance and lower runout of smaller cutters typically used at these high speeds.

## FOR BANT-A-MATIC AND PAR-A-MATIC TOOLS

Models: 8245-203-(), 8255-172-(), 8360-172-3, 8345-203-() and 8355-172-().



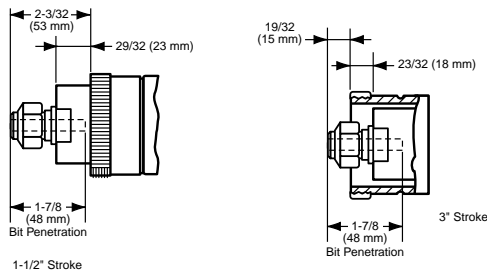
Standard Equipment →

COLLET INSERT NO.	NOMINAL SIZE	MINIMUM CAPACITY		MAXIMUM CAPACITY	
		INCHES	MM	INCHES	MM
31812-1	1/64	1/64	0.40	3/64	1.19
31812-2	3/64	3/64	1.19	5/64	1.98
31812-3	1/16	1/16	1.59	3/32	2.38
31812-4	3/32	3/32	2.38	1/8	3.18
31812-5	1/8	1/8	3.18	5/32	3.97
31812-6	5/32	5/32	3.97	3/16	4.76
31812-7	7/32	3/16	4.76	7.32	5.56
31812-8	1/4	7/32	5.56	1/4	6.35

Order other available collet sizes shown above as, less 31812-8 with 31812-().

## FOR SUPER PAR-A-MATIC TOOLS

Models: 8265-171-().



Standard Equipment →

COLLET INSERT NO.	NOMINAL SIZE	MINIMUM CAPACITY		MAXIMUM CAPACITY	
		INCHES	MM	INCHES	MM
32968-1	1/8	1/64	0.40	3/64	1.19
32968-2	5/32	3/64	1.19	5/64	1.98
32968-3	3/16	1/16	1.59	3/32	2.38
32968-4	7/32	3/32	2.38	1/8	3.18
32968-5	1/4	1/8	3.18	5/32	3.97
32968-6	9/32	5/32	3.97	3/16	4.76
32968-7	5/16	3/16	4.76	7.32	5.56
32968-8	11/32	7/32	5.56	1/4	6.35
32968-9	3/8	11/32	8.73	3/8	9.53

Order other available collet sizes shown above as, less 32968-9 with 32968-().