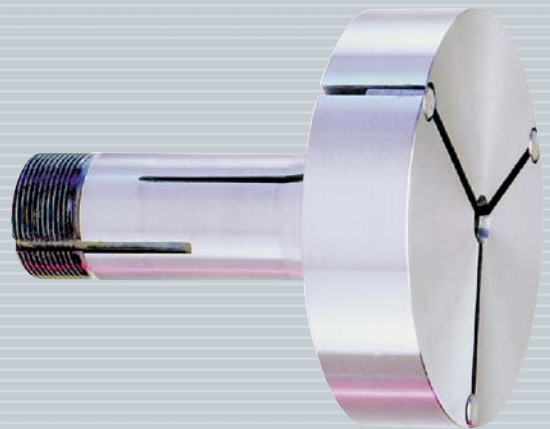


ROYAL PRODUCTS

NEW
Premium Grade
5C & R8
Collets

5C & R8 Collets & Tooling



5C COLLETS



NEW

- Royal 5C collets are now available in both economy and premium grades.
- 0.0005" TIR guaranteed for both grades.
- Premium grade 5C collets are spread after heat treatment for easier part loading.
- With ultra-tight manufacturing tolerances, outstanding surface finishes, and great prices, Royal Premium Grade 5C Collets are quite possibly the best 5C collets you will ever use.

Royal 5C Round Collets (Inch)

SIZE	PREMIUM GRADE		ECONOMY GRADE		SIZE	PREMIUM GRADE		ECONOMY GRADE	
	CAT. NO.	PRICE	CAT. NO.	PRICE		CAT. NO.	PRICE	CAT. NO.	PRICE
1/32"	19302	\$23	18302	\$18	5/8"	19340	\$23	18340	\$14
3/64"	19303	23	18303	18	41/64"	19341	23	18341	14
1/16"	19304	23	18304	18	21/31"	19342	23	18342	14
5/64"	19305	23	18305	18	43/64"	19343	23	18343	14
3/32"	19306	23	18306	18	11/16"	19344	23	18344	14
7/64"	19307	23	18307	18	45/64"	19345	23	18345	14
1/8"	19308	23	18308	14	23/32"	19346	23	18346	14
9/64"	19309	23	18309	14	47/64"	19347	23	18347	14
5/32"	19310	23	18310	14	3/4"	19348	23	18348	14
11/64"	19311	23	18311	14	49/64"	19349	23	18349	14
3/16"	19312	23	18312	14	25/32"	19350	23	18350	14
13/64"	19313	23	18313	14	51/64"	19351	23	18351	14
7/32"	19314	23	18314	14	13/16"	19352	23	18352	14
15/64"	19315	23	18315	14	53/64"	19353	23	18353	14
1/4"	19316	23	18316	14	27/32"	19354	23	18354	14
11/64"	19317	23	18317	14	55/64"	19355	23	18355	14
9/32"	19318	23	18318	14	7/8"	19356	23	18356	14
19/64"	19319	23	18319	14	57/64"	19357	23	18357	14
5/16"	19320	23	18320	14	29/32"	19358	23	18358	14
21/64"	19321	23	18321	14	59/64"	19359	23	18359	14
11/32"	19322	23	18322	14	15/16"	19360	23	18360	14
23/64"	19323	23	18323	14	61/64"	19361	23	18361	14
3/8"	19324	23	18324	14	31/32"	19362	23	18362	14
25/64"	19325	23	18325	14	63/64"	19363	23	18363	14
13/32"	19326	23	18326	14	1"	19364	23	18364	14
27/64"	19327	23	18327	14	1 1/64"*	19369	23	18369	14
7/16"	19328	23	18328	14	1 1/64"***	19365	23	-	-
29/64"	19329	23	18329	14	1 1/32"*	19370	23	18370	14
15/32"	19330	23	18330	14	1 1/32"***	19366	23	-	-
31/64"	19331	23	18331	14	1 3/64"*	19371	23	18371	14
1/2"	19332	23	18332	14	1 3/64"***	19367	23	-	-
33/64"	19333	23	18333	14	1 1/16"*	19372	23	18372	14
17/32"	19334	23	18334	14	1 1/16"***	19368	23	-	-
35/64"	19335	23	18335	14	1 5/64"*	19373	23	18373	14
9/16"	19336	23	18336	14	1 3/32"*	19374	23	18374	14
37/64"	19337	23	18337	14	1 7/64"*	19375	23	18375	14
19/32"	19338	23	18338	14	1 1/8"*	19376	23	18376	14
39/64"	19339	23	18339	14					

* Stepped bore limits thru capacity.

** No internal threads – enables full thru capacity.

Royal 5C Round Collets (Metric)

SIZE	ECONOMY GRADE		SIZE	ECONOMY GRADE		SIZE	ECONOMY GRADE	
	CAT. NO.	PRICE		CAT. NO.	PRICE		CAT. NO.	PRICE
1.0 mm	18202	\$18	10.0 mm	18220	\$14	19.0 mm	18238	\$14
1.5 mm	18203	18	10.5 mm	18221	14	19.5 mm	18239	14
2.0 mm	18204	18	11.0 mm	18222	14	20.0 mm	18240	14
2.5 mm	18205	18	11.5 mm	18223	14	20.5 mm	18241	14
3.0 mm	18206	18	12.0 mm	18224	14	21.0 mm	18242	14
3.5 mm	18207	14	12.5 mm	18225	14	21.5 mm	18243	14
4.0 mm	18208	14	13.0 mm	18226	14	22.0 mm	18244	14
4.5 mm	18209	14	13.5 mm	18227	14	22.5 mm	18245	14
5.0 mm	18210	14	14.0 mm	18228	14	23.0 mm	18246	14
5.5 mm	18211	14	14.5 mm	18229	14	23.5 mm	18247	14
6.0 mm	18212	14	15.0 mm	18230	14	24.0 mm	18248	14
6.5 mm	18213	14	15.5 mm	18231	14	24.5 mm	18249	14
7.0 mm	18214	14	16.0 mm	18232	14	25.0 mm	18250	14
7.5 mm	18215	14	16.5 mm	18233	14	25.5 mm	18251	14
8.0 mm	18216	14	17.0 mm	18234	14	26.0 mm*	18255	14
8.5 mm	18217	14	17.5 mm	18235	14	26.5 mm*	18256	14
9.0 mm	18218	14	18.0 mm	18236	14	27.0 mm*	18257	14
9.5 mm	18219	14	18.5 mm	18237	14			

Royal 5C Collet Sets (Inch)



NEW

SETS	NO. COLLETS IN SET	PREMIUM GRADE		ECONOMY GRADE	
		CAT. NO.	PRICE	CAT. NO.	PRICE
1/16" - 1 1/16" x 64ths	65	19420	\$1,495	18420	\$926
1/16" - 1 1/16" x 32nd	33	19421	759	18421	470
1/16" - 1 1/16" x 16ths	17	19422	391	18422	242
1/8" - 1" x 8ths	8	19423	184	18423	112

Royal 5C Collet Sets (Metric)

SETS	NO. COLLETS IN SET	ROYAL ECONOMY GRADE	
		CAT. NO.	PRICE
3 mm - 27 mm x 0.5 mm	49	18292	\$690
3 mm - 27 mm x 1 mm	25	18290	354



5C Adjustable Collet Stop

CAT. NO. 20030 **\$11**

- Provides a fixed locating surface for short parts.
- Fits all 5C collets with a 1 3/64" - 24" internal thread.

5C COLLETS



Royal 5C Hex Collets

SIZE	CAT. NO.	PRICE
1/8"	18380	\$34
3/16"	18381	34
1/4"	18382	34
5/16"	18383	34
3/8"	18384	34
7/16"	18385	34
1/2"	18386	34
9/16"	18387	34
5/8"	18388	34
11/16"	18389	34
3/4"	18390	34
13/16"	18391	34
7/8"	18392	34



Royal 5C Square Collets

SIZE	CAT. NO.	PRICE
1/8"	18401	\$34
3/16"	18402	34
1/4"	18403	34
5/16"	18404	34
3/8"	18405	34
7/16"	18406	34
1/2"	18407	34
9/16"	18408	34
5/8"	18409	34
11/16"	18410	34
3/4"	18411	34



Royal 5C Emergency Collets

MATERIAL	PILOT HOLE	CAT. NO.	PRICE
Steel	1/16"	18430	\$16
Brass	1/16"	18435	27
Nylon	1/16"	18437	23

- Includes pins for accurate boring to size.
- Internally threaded to accept a collet stop.
- Steel emergency collet can be heat-treated after machining for wear resistance.



Royal 5C Step Collets

HEAD DIA.*	PILOT HOLE	PIN DIA.	CAT. NO.	PRICE
2"	1/4"	1/8"	20020	\$91
3"	5/16"	1/4"	20022	119
4"	5/16"	1/4"	20024	186
5"	5/16"	1/4"	20025	241
6"	5/16"	1/4"	20026	311

*We recommend ordering a collet with a head diameter at least 1/2" larger than workpiece diameter.

- Royal step collets allow large diameter parts to be held in a 5C collet.
- Head can be easily bored out by customer to required size.
- Three dowel pins are supplied to ensure accurate machining.
- 1/4" thick head allows for 1" bore depth.
- Collets are made from 1144 steel and can be hardened for wear resistance.

Note — these step collets close on the 10° angle, not the head OD. When using, be sure part is sufficiently clamped.

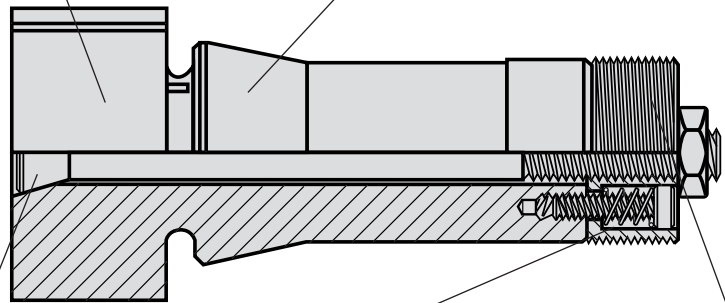
5C EXPANDING COLLETS

- ❑ Unlike chucks and most collets that grip the OD of a workpiece, 5C expanding collets are designed to grip on the ID of a part.
- ❑ Accu-length design ensures precise workpiece positioning — no z-axis movement.
- ❑ Collet head is easily machined to required size. Can be re-machined as necessary.
- ❑ Concentricities of ± 0.0002 " can typically be achieved using Royal 5C expanding collets.
- ❑ Made from 1144 steel that can be hardened after machining for wear resistance.
- ❑ Additional head lengths and diameters available. Contact us for information.



Head is easily machined to required size by customer. See chart for range.

Precision ground body for excellent workpiece concentricity.



Expanding rod is hardened and ground for strength and durability.

Internal spring provides positive release.

Rear threaded section is separate from collet body. When this section is pulled back by the drawtube, it pulls the tapered expanding rod back, causing the head to expand.

Royal 5C Internal Expanding Collets

NOMINAL HEAD DIAMETER	HEAD LENGTH	MACHINEABLE RANGE MIN-MAX	CATALOG NO.	PRICE
3/4"	1"	1/4" - 11/16"	20100	\$90
1"	1"	7/16" - 15/16"	20101	90
1 1/2"	1"	3/4" - 1 1/16"	20102	90
1 1/2"	1 1/2"	3/4" - 1 7/16"	20103	104
1 1/2"	2"	3/4" - 1 7/16"	20104	105
2"	1"	3/4" - 1 15/16"	20107	109
2"	1 1/2"	3/4" - 1 15/16"	20108	114
2"	2"	3/4" - 1 15/16"	20109	130
2 1/2"	1"	3/4" - 2 7/16"	20112	133
3"	1"	3/4" - 2 15/16"	20117	146
5"	2"	3/4" - 4 15/16"	20127	282
6"	2"	3/4" - 5 15/16"	20128	315

Replacement Expanding Rods

HEAD DIA.	HEAD LENGTH	CAT. NO.	PRICE
3/4"	1"	20135	\$29
1"	1"	20136	26
1 1/2"-6"	1"	20130	20
1 1/2"-6"	1 1/2"	20131	21
1 1/2"-6"	2"	20132	22



- Royal R8 collets are now available in both economy and premium grades.
- 0.0005" TIR guaranteed for both grades.
- The drawbar threads on Royal premium grade R8 collets are machined into the collet body, making them much stronger than two-piece collets and eliminating the risk of plug separation.
- With ultra-tight manufacturing tolerances, outstanding surface finishes, and great prices, Royal Premium Grade R8 Collets are quite possibly the best R8 collets you will ever use.

Royal R8 Round Collets (Inch)

SIZE	PREMIUM GRADE		ECONOMY GRADE	
	CAT. NO.	PRICE	CAT. NO.	PRICE
1/16"	19504	\$25	18504	\$18
3/32"	19506	25	18506	18
1/8"	19508	25	18508	14
5/32"	19510	25	18510	14
3/16"	19512	25	18512	14
7/32"	19514	25	18514	14
1/4"	19516	25	18516	14
9/32"	19518	25	18518	14
5/16"	19520	25	18520	14
11/32"	19522	25	18522	14
3/8"	19524	25	18524	14
13/32"	19526	25	18526	14
7/16"	19528	25	18528	14
15/32"	19530	25	18530	14
1/2"	19532	25	18532	14
17/32"	19534	25	18534	14
9/16"	19536	25	18536	14
19/32"	19538	25	18538	14
5/8"	19540	25	18540	14
21/32"	19542	25	18542	14
11/16"	19544	25	18544	14
23/32"	19546	25	18546	14
3/4"	19548	25	18548	14
25/32"	19550	25	18550	14
13/16"	19552	25	18552	14
27/32"	19554	25	18554	14

NEW

Royal R8 Round Collets (Metric)

SIZE	ECONOMY GRADE	
	CAT. NO.	PRICE
2mm	18604	\$18
3mm	18606	18
4mm	18608	14
5mm	18610	14
6mm	18612	14
7mm	18614	14
8mm	18616	14
9mm	18618	14
10mm	18620	14
11mm	18622	14
12mm	18624	14
13mm	18626	14
14mm	18628	14
15mm	18630	14
16mm	18632	14
17mm	18634	14
18mm	18636	14
19mm	18638	14
20mm	18640	14

Royal R8 Collet Sets (Inch)

SETS	NO. COLLETS IN SET	PREMIUM GRADE		ECONOMY GRADE	
		CAT. NO.	PRICE	CAT. NO.	PRICE
1/8"-3/4" x 32nds	21	19562	\$525	18562	\$294
1/8"-3/4" x 16ths	11	19560	275	18560	154
1/8"-3/4" x 8ths	6	19561	150	18561	84

Royal R8 Collet Sets (Metric)

SETS	NO. COLLETS IN SET	ECONOMY GRADE	
		CAT. NO.	PRICE
2mm-20mm x 1mm	19	18680	\$274