One Size Does Not Fit All –
So We Turned Special Centers Into Standards!

One of Royal's strengths as a leading live center manufacturer is our ability to design and build custom centers to address non-standard applications. However, there are two major drawbacks that are almost always associated with custom-made centers: longer lead times and higher prices.

As an ISO company dedicated to continuous improvement, we decided to see if it might be possible to categorize special centers according to their similarities, and then offer a few new standard models that could handle most jobs.

Our engineers analyzed the prints of hundreds of special centers that we had manufactured over the past three years, and the results were shocking – over 90% of our customers' special needs could be covered with just five new point styles. These are:

Full-diameter long point for shaft work and parts with large center holes

A reduced-diameter long point for use when greater clearance is needed

A small bull-nose point for use with tubes or parts with large center holes

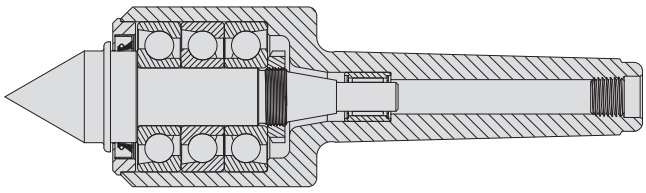
A female point with a 90° included angle for locating on OD part chamfers

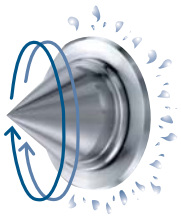
A male point with a 90° included angle for locating on internal part chamfers

See pages 62-63 for ordering information

Royal maintains a full inventory of each model to ensure same-day delivery, and because we manufacture them in quantity, they are very aggressively-priced.

OFF-THE-SHELF "SPECIALS"





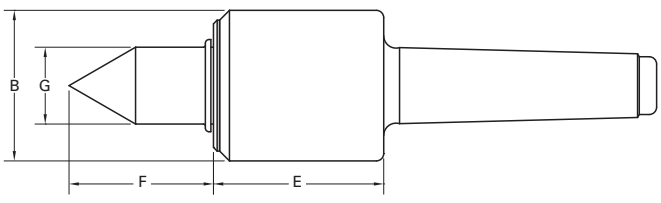
EXCLUSIVE ROYAL ROTO-SHIELD™ TECHNOLOGY

Deciding which live center model to use as a platform for Royal's new off-the-shelf "special" program was easy. We chose the High-Precision Quad-Bearing model for the following reasons:

1- Very Rigid Bearing Arrangement
2- Exclusive Roto-Shield™ Technology
3- Low-Profile Head

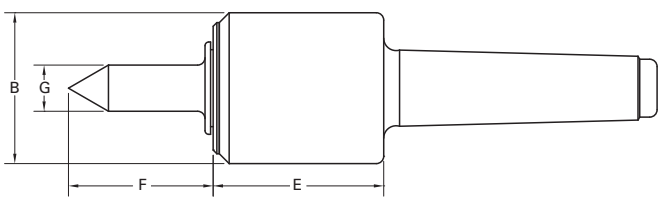
All Models In Stock for Immediate Delivery

High-Pressure Coolant Approved



Royal High-Precision Quad-Bearing Live Centers – Full Diameter Long Point

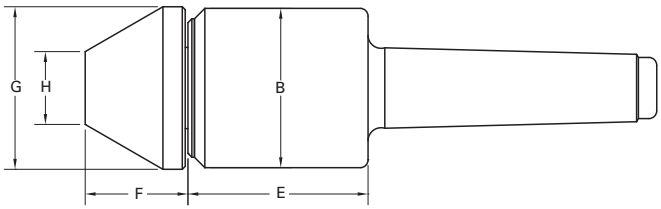
TAPER	B	E	F	G	MAX. SUGGESTED RPM*	WEIGHT OF WORKPIECE (lbs.)	THRUST LOAD (lbs.)	PART NUMBER	PRICE
2 MT	1.70	2.12	1.75	0.88	6,000	465	1,270	10478	**$546**
3 MT	1.70	2.12	1.75	0.88	6,000	465	1,270	10479	**564**
4 MT	2.45	2.78	2.35	1.25	5,000	1,230	2,150	10480	**699**
5 MT	2.45	2.78	2.35	1.25	5,000	1,230	2,150	10481	**733**



Royal High-Precision Quad-Bearing Live Centers – Small Diameter Long Point

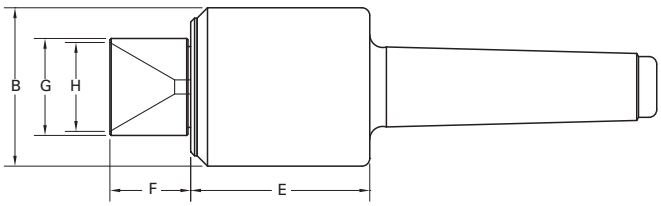
TAPER	B	E	F	G	MAX. SUGGESTED RPM*	WEIGHT OF WORKPIECE (lbs.)	THRUST LOAD (lbs.)	PART NUMBER	PRICE
2 MT	1.70	2.12	1.75	0.50	6,000	350	1,270	10482	**$546**
3 MT	1.70	2.12	1.75	0.50	6,000	350	1,270	10483	**564**
4 MT	2.45	2.78	2.35	0.75	5,000	925	2,150	10484	**699**
5 MT	2.45	2.78	2.35	0.75	5,000	925	2,150	10485	**733**

* Maximum recommended operating limit. Operating above this speed could result in heat build-up and accelerated bearing wear.



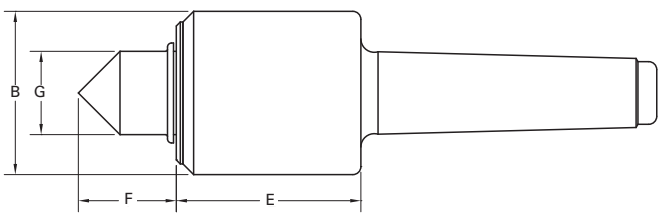
Royal High-Precision Quad-Bearing Live Centers – Bull Nose Point

TAPER	B	E	F	G	H	MAX. SUGGESTED RPM*	WEIGHT OF WORKPIECE (lbs.)	THRUST LOAD (lbs.)	PART NUMBER	PRICE
2 MT	1.70	2.12	1.25	1.75	0.75	6,000	750	1,270	10490	**$558**
3 MT	1.70	2.12	1.25	1.75	0.75	6,000	750	1,270	10491	**576**
4 MT	2.45	2.78	1.58	2.50	1.12	5,000	1,905	2,150	10492	**733**
5 MT	2.45	2.78	1.58	2.50	1.12	5,000	1,905	2,150	10493	**771**



Royal High-Precision Quad-Bearing Live Centers – 90° Female Point

TAPER	B	E	F	G	H	MAX. SUGGESTED RPM*	WEIGHT OF WORKPIECE (lbs.)	THRUST LOAD (lbs.)	PART NUMBER	PRICE
2 MT	1.70	2.12	1.00	1.12	0.15–1.00	6,000	885	1,270	10494	**$546**
3 MT	1.70	2.12	1.00	1.12	0.15–1.00	6,000	885	1,270	10495	**564**
4 MT	2.45	2.78	1.25	1.50	0.21–1.38	5,000	2,240	2,150	10496	**699**
5 MT	2.45	2.78	1.25	1.50	0.21–1.38	5,000	2,240	2,150	10497	**733**



Royal High-Precision Quad-Bearing Live Centers – 90° Male Point

TAPER	B	E	F	G	MAX. SUGGESTED RPM*	WEIGHT OF WORKPIECE (lbs.)	THRUST LOAD (lbs.)	PART NUMBER	PRICE
2 MT	1.70	2.12	1.07	0.88	6,000	885	1,270	10486	**$538**
3 MT	1.70	2.12	1.07	0.88	6,000	885	1,270	10487	**558**
4 MT	2.45	2.78	1.47	1.25	5,000	2,240	2,150	10488	**693**
5 MT	2.45	2.78	1.47	1.25	5,000	2,240	2,150	10489	**731**

* Maximum recommended operating limit. Operating above this speed could result in heat build-up and accelerated bearing wear.