



COLLET CHUCK SERIES

kitagawa
EUROPE

COLLET CHUCK





**COLLET
CHUCK**

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**COLLET
CHUCK**

CRS Short Series Power Collet Chucks

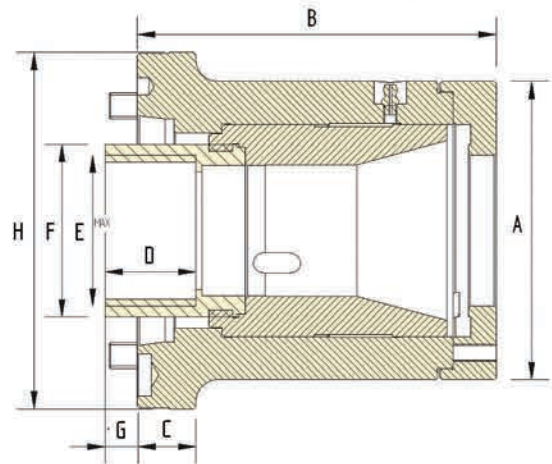
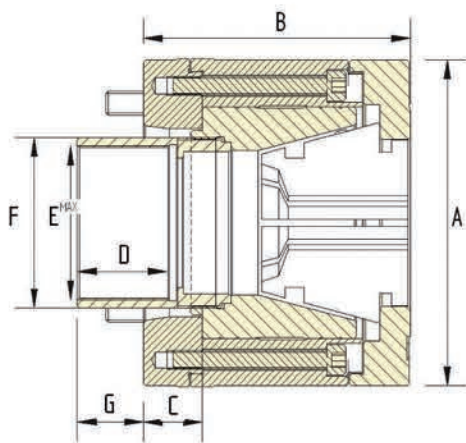
CRS series

Standard Features

- Ultra compact chuck design for first operation.
- Ideally suited for use with barfeeders.
- Short length maximises lathe work envelope.
- Bolt on collet retaining cap.
- Uses Varibore bore type collets only.
(CRS36 also accepts 171E spring collets.)



Collet Chuck



Specifications		CRS 36	CRS 54A5	CRS54A6	CRS60A5	CRS 66	CRS 66A6-S	CRS 66A8
Gripping Range	Max mm	35	54	54	60	66	66	66
	Min mm	4	3	3	4	4	4	4
Collet Increment	mm	2	3	3	2	3	3	3
Sleeve Stroke	mm	7	10	10	7	10	10	10
Max Input Force	kN	18	30	30	30	38	38	38
Max Gripping Force	kN	36	60	60	60	84	84	84
Max Speed (rpm)	min ⁻¹	7000	6300	6300	6300	4500	4500	4500
Net Weight	kg	8	11	11	11	19	24	18
Matching Cylinder		S1036	S1552/75	S1552/75	S1552/75	S1875	S1875	S1875
Collet Ref	Varibore	D-671	D-120	D-120	D-677	D-285	D-285	D-285
	Spring	D171E	-	-	-	-	-	-

Dimensions	CRS 36	CRS 54A5	CRS 54A6	CRS 60A5	CRS 66	CRS 66A6-S	CRS 66A8
Mount	115 x 5	A2-5	A2-6	A2-5	220 x 5	A2-6	A2-8
A	105	138	138	138	150	165	140
B	125	113	129	107.5	140	131	140
C	23	25	41	25	30	N/A	30
D	18	38	38	38	30	66	66
E Max	M50 x 1.5	M65 x 1.5	M65 x 1.5	M65 x 1.5	M80 x 2	M80 x 2	M80 x 2
F	58	72	72	72	90	90	90
G Max	-6	28	12	28	21	29.5	21
G Min	-13	18	2	21	11	19.5	11
H	135	138	166	139	230	166	210



**COLLET
CHUCK**

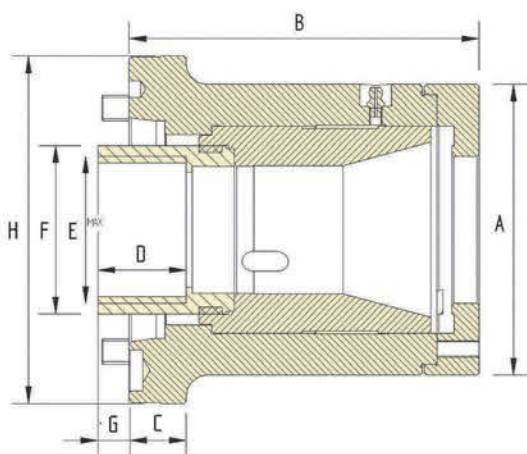
CRL Long Series Power Collet Chucks

CRL series



Standard Features

- Suitable for first and second operations.
- Compact design - minimum overhang.
- Interchangeable on spindle with Kitagawa series B200 chucks.
- Bolt on collet retaining cap.
- Supplied complete with blank connector as standard.
- All parts made of alloy steel hardened and precision ground.



Specifications		CRL42	CRL42A5	CRL42A6	CRL54A6	CRL60	CRL60A6	CRL60A8
Gripping Range	Max mm	42	42	42	54	60	60	60
	Min mm	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Collet Increment	mm	3	3	3	3	3	3	3
Sleeve Stroke	mm	7	7	7	10	7	7	7
Max Input Force	kN	25	25	25	30	30	30	30
Max Gripping Force	kN	55	55	55	60	60	60	60
Max Speed (r.p.m.)	min ⁻¹	7100	7100	7100	6300	6300	6300	6300
Net Weight	kg	10	9.5	10.7	15	15.2	15	18.5
Matching Cylinder		S1246	S1246	S1246	S1552/75	S1552/75	S1552/75	S1552/75
Collet Ref	Varibore	D-673 DIN6343	D-673 DIN6343	D-673 DIN6343	D-120	D-677 DIN6343	D-677 DIN6343	D-677 DIN6343
	Spring	D173E 4728	D173E 4728	D173E 4728	D-853	D185E 4291	D185E 4291	D185E

Dimensions	CRL42	CRL42A5	CRL42A6	CRL54A6	CRL60	CRL60A6	CRL60A8
Mount	140 x 5	A2-5	A2-6	A2-6	170 x 5	A2-6	A2-8
A	110	110	110	138	138	138	138
B	133	143	145	160	148	160	156
C	20	20	33	27	24	27	36
D	30	30	30	25	30	30	30
E	M55 x 1.5	M55 x 1.5	M55 x 1.5	M70 x 1.5	M70 x 1.5	M70 x 1.5	M70 x 1.5
F	62	62	62	80	80	80	80
G Max	11	1	-1	-2	10	-2	2
G Min	4	-6	-8	-12	3	-9	-5
H	160	135	165	165	190	165	210



**COLLET
CHUCK**

QCRL Quick Change Collet Chucks

QCRL series

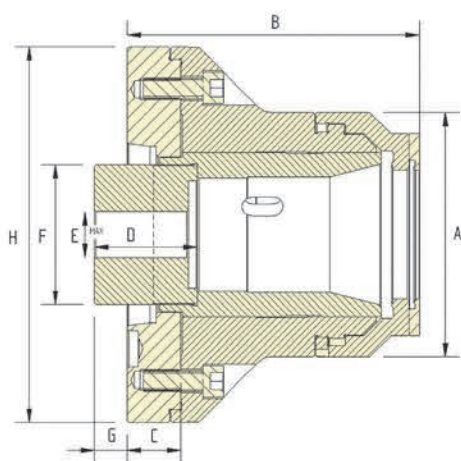


Standard Features

- Quick change chuck design for first or second operation.
- Ideally suited for use with barfeeders.
- Fixed length collet - no part movement.
- Quick change cap with safety catch.
- Uses varibore, spring and master collets.
- Exceptional accuracy in small package.



Collet Chuck



Specifications		QCRL 42(I)	QCRL 42	QCRL 54	QCRL 60
		Inch	Din	Inch	Din
Gripping Range - Round	Max mm	42	42	54	60
	Min mm	1.6	4	1.6	4
Collet Increment	mm	3	2	3	2
Sleeve Stroke	mm	7	7	10	7
Max Input Force	kN	25	25	30	30
Max Gripping Force	kN	55	55	60	60
Max Speed (r.p.m.)	min ⁻¹	7100	7100	6300	6300
Net Weight	kg	13.5	13.5	29	29
Matching Cylinder		S1246	S1246	S1552/75	S1552/75
Collet Ref	Varibore	D-850	D-673	D-120	D-677
	Spring	D-286	D173E	D-853	D185E

Dimensions	QCRL 42(I)/QCRL 42			QCRL 54				QCRL 60			
Mount	140 x 6	A5	A6	170 x 6	A5	A6	A8	170	A5	A6	A8
A	113			143				143			
B	149	143	143	181	190	175	175	177	186	171	171
C	31.5	25	25	36.5	45	36.5	36.5	36.5	46.5	36.5	36.5
D	60			60				60			
E Max	M58 x 1.5			M75 x 1.5				M75 x 1.5			
F	65			82				82			
G Max	17	23	23	15	25	21	21	14	5	21	21
G Min	10	16	16	5	15	11	11	7	-2	14	14
H	165	165	165	220	220	220	220	220	220	220	220

*QCRL54 and 60 models can be supplied with additional 42mm Inch and Din collet reduction sleeves and caps. See accessory page for details and part numbers.



**COLLET
CHUCK**

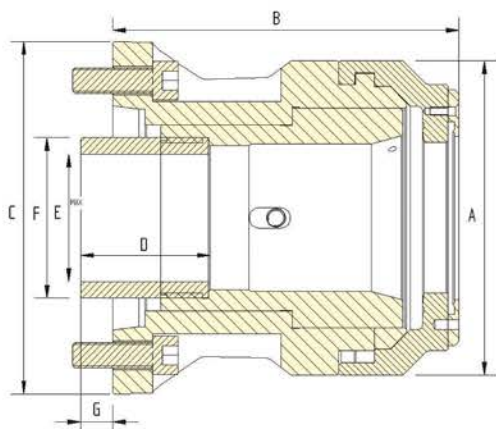
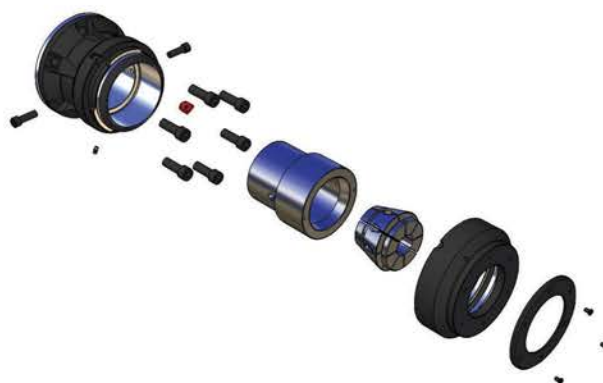
Quick Change Collet Chucks



DIRECT MOUNT series

Standard Features

- Quick change chuck design for first or second operation.
- Ideally suited for use with barfeeders.
- Fixed length collet - no part movement.
- Quick change cap with safety catch.
- Uses varibore, spring and master collets.
- Exceptional accuracy in small package.



Specifications		QD-CRL42 DIN	QD-CRL60 DIN	QCRS66 Inch	QCRS80 Inch	QCRL80 DIN
Gripping Range - Round	Max mm	42	60	66	80	80
	Min mm	4	4	3	12	12
Collet Increment	mm	2	4	3	3	3
Sleeve Stroke	mm	7	7	10	12	12
Max Input Force	kN	25	30	38	45	45
Max Gripping Force	kN	55	60	84	78	78
Max Speed (r.p.m)	min ⁻¹	7100	6300	4500	4500	4500
Net Weight	kg	10	20	24	29	37
Matching Cylinder		S1246	S1552	S1875	S2091	S2091
Collet Ref	Varibore	D-673	D-677	B-285	D-175	D-660
	Spring	D173E	D185E	-	-	D-193E

Dimensions	QD-CRL42	QD-CRL60	QCRS66		QCRS80	QCRL80
Mount	A5	A6	220 x 6	A8	A8	A8
A	113	143	162		196	196
B	142	170	158	152	170	221
C	135	165	230	220	220	220
D	60	60	80		80	80
E Max	M58 x 2.0	M75 x 2.0	M90 x 2.0		M90 x 2.0	M90 x 2.0
F	65	82	100		100	100
G Max	23	20	19	25	20	20
G Min	16	13	9	15	8	8



**COLLET
CHUCK**

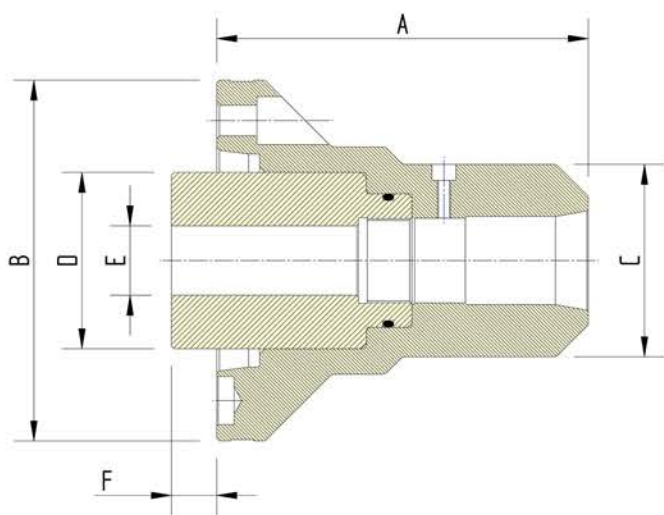
Pull Back Series Power Collet Chucks

PULL BACK series



Standard Features

- Pull back design for first operation.
- Suitable for 5C & 16C collets.
- Ejectors available.
- Compact design for improved tool access.



Collet Chuck

Specifications		DEL 5C	DEL 16C
Capacity	mm	0.5 - 27	0.5 - 42
Pull Back Ratio		1:3	1:3
Max Drawbar Pull	kN	20	24
Max Speed (r.p.m)	min ⁻¹	6000	6000
Net Weight	kg	7, 11	6, 8
Collet Ref	Pull Back	5C	16C

Dimensions	DEL 5C			DEL 16C		
Mount	140 x 6	A5	A6	170 x 6	A5	A6
A	144	139	147	157	152	160
B	160	135	170	190	135	170
C	72	72	85	85	85	85
D	65	83	65	83	83	83
E Max	M58 x 2.0	M75 x 2.0	M58 x 2.0	M75 x 2.0	M75 x 2.0	M75 x 2.0
F Min	12	17	17	12	17	9



**COLLET
CHUCK**

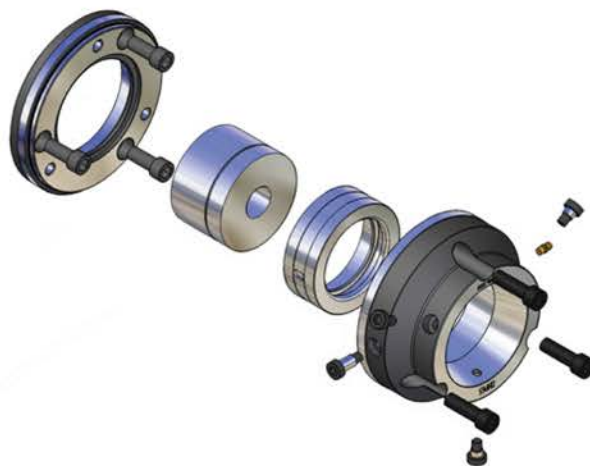
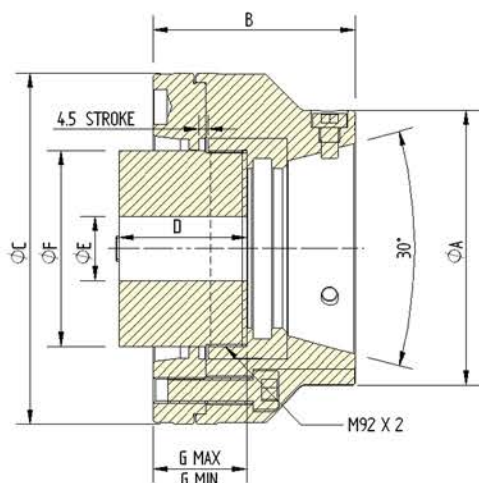
DHP Pull Back Series Power Collet Chucks



DHP series

Standard Features

- Pull back action for secure first operation clamping.
- Compact design and high accuracy.
- Requires collet changing device.
- Compatible with quick change collet clamping heads.



Specifications		DHP 52	DHP65	DHP80
Gripping Range - Round	Max mm	52	65	80
	Min mm	4	4	10
Collet Increment	mm	0.5	0.5	1
Sleeve Stroke	mm	4.5	4.5	4.5
Max Input Force	kN	40	45	50
Max Gripping Force	kN	94	105	115
Max Speed (r.p.m)	min ⁻¹	6500	6000	5500
Net Weight	kg	9	9	29
Matching Cylinder		S1552	S1875	SS1881
Collet/Clamping Head	Varibore	DC-52	DC-65	DC-80

Dimensions	DHP52			DHP65			DHP80			
Mount	A5	A6	A8	A5	A6	A8	220 x 6	A2-6	A2-8	A2-11
A	120			130			160			
B	89		109	95		115	114.5	134.5	127.5	156.5
C	165		210	165		210	230			
D	60			60			70			
E Max	M70 x 2.0	M85 x 2.0		M70 x 2.0	M85 x 2.0	M85 x 2.0	M105 x 2.0	M92 x 2.0	M105 x 2.0	M105 x 2.0
F	79	92		79	92		115	102	115	
G Max	44		64	44		64	43	63	56	85
G Min	39.5		59.5	39.5		59.5	38.5	58.5	51.5	80.5



**COLLET
CHUCK**

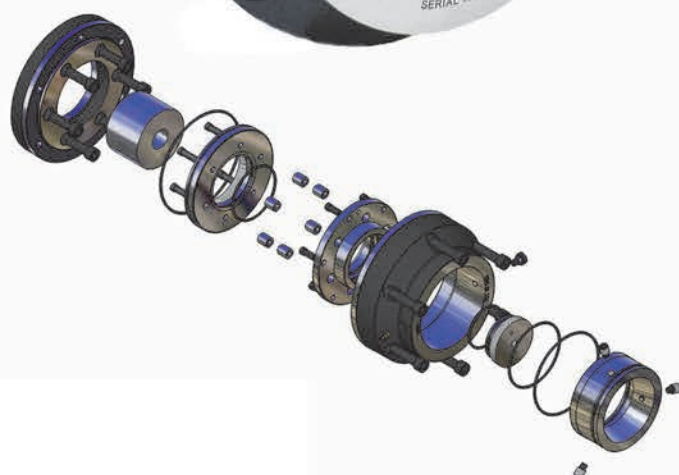
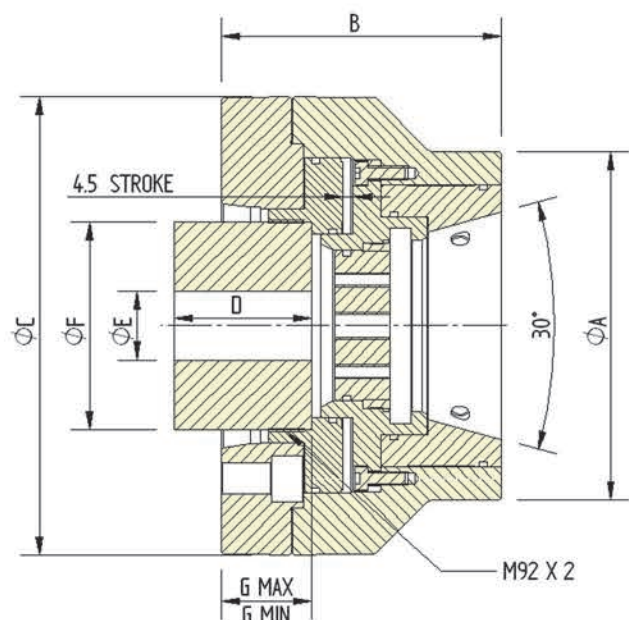
DHF Fixed Length Series Power Collet Chucks



DHF series

Standard Features

- Fixed collet position ensures no part movement.
- Removable fixed stop in chuck bore.
- High accuracy - ideal for second operation.
- Requires collet changing device.
- Compatible with quick change collet clamping heads.



Collet Chuck

Specifications		DHF65-A5	DHF65-A6	DHF65-A8
Gripping Range - Round	Max mm	65	65	65
	Min mm	4	4	4
Collet Increment	mm	0.5	0.5	0.5
Sleeve Stroke	mm	4.5	4.5	4.5
Max Input Force	kN	45	45	45
Max Gripping Force	kN	105	105	105
Max Speed (r.p.m)	min ⁻¹	6000	6000	6000
Net Weight	kg	12	12	12
Matching Cylinder		S1875	S1875	S1875
Collet / Clamping Head	Varibore	DC-65	DC-65	DC-65

Dimensions	DHF65-A5	DHF65-A6	DHF65-A8
Mount	A2-5	A2-6	A2-8
A	162	162	162
B	125	125	125
C	210	210	210
D	60	60	60
E Max	M70x2	M85x2	M85x2
F	79	92	92
G Max	42.5	42.5	42.5
G Min	38	38	38



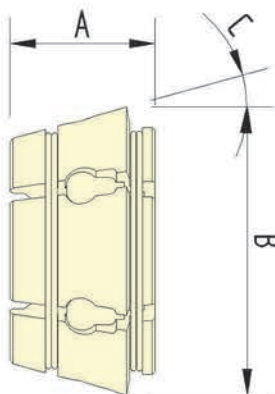
**COLLET
CHUCK**

Collet Chuck Series

COLLETS



Varibore Collets

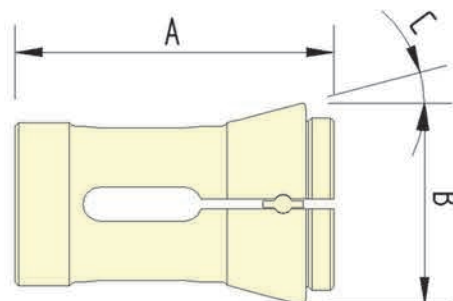


- Inch varibore collets have a gripping range of 1/8" on diameter and feature a plain bore.
- Metric round DIN varibore collets have a gripping range of 2mm on diameter and have a spiral gripping surface (above 8mm).
- Metric hex and square DIN varibore collets use a gripping range of 2mm and feature annular gripping surface (above 8mm).
- Optional heavy duty collets are available for black bar (may cause marking).



Chuck	Type	Capacity mm			Dimensions mm		
		Round	Hex	Square	Length (A)	Diameter (B)	Taper (C)
CRS36	D-671 DIN	4-34	4-28	4-24	38	56.5	14.75°
QCRL42I	D-850	1.6-44.5	1.6-38.1	1.6-31.8	51.8	70.1	15°
QCRL42	D-673 DIN	4-42	4-36	4-30	39	61.5	14.75°
CRS54, QCRL54	D-120	1.6-53.9	3.2-50.8	3.2-41.3	62.7	88	15°
QCRL60	D-677 DIN	4-60	4-52	4-42	45	85.5	14.75°
CRS66, QCRL66	D-285	3.2-66.6	3.2-57.1	3.2-44.4	73.2	99.3	15°
QCRS80	D-175	12.7-80	12.7-66.7	12.7-54	80	120	15°
QCRL80	D-660	12-80	12-68	12-56	48	108.5	14.75°

Spring Collets



- Spring collets used primarily for second operation work, where marking of the component is to be avoided, or where necessary to grip a short portion of the component.
- Collet bore diameters are dedicated.
- Emergency collets are supplied where fast turn around, small batch quantities are machined.



Chuck	Type	Max. Capacity mm			Dimensions		
		Round	Hex	Square	Length (A)	Diameter (B)	Taper (C)
CRS36	D171E	36	30	26	94	55.3	14.75°
QCRL42I	D-286	38.5	33	29	95.25	68.25	15°
QCRL42	D173E	42	38	30	94	60	14.75°
QCRL54	D-853	51	44	36	125.4	88.1	15°
QCRL60	D185E	60	52	42	110	84	14.75°
QCRL80	D-193E	80	69	56	130	170	15°



**COLLET
CHUCK**

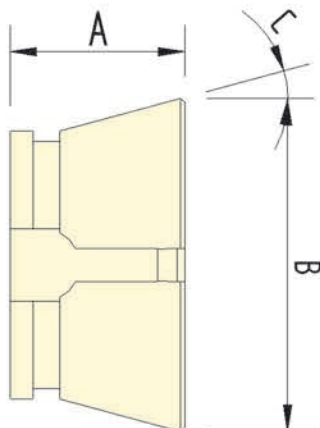
Collet Chuck Series

COLLETS



Collet Chuck

DC Collets

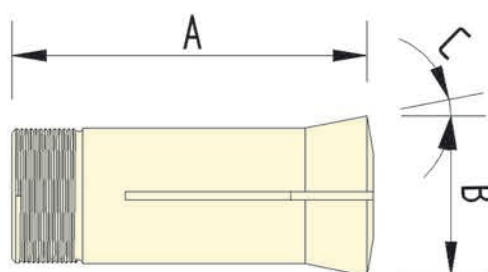


- Collet bore diameters are dedicated.
- Short changeover time by use of manual or pneumatic changing devices.



Chuck	Type	Capacity mm			Dimensions mm		
		Round	Hex	Square	Length (A)	Diameter (B)	Taper (C)
DHP/F 52	DC-52 (smooth)	6 - 52	7	-	46	79.2	15°
DHP/F 52	DC-52 (radial groove)	8 - 11	8 - 45	8 - 36	46	79.2	15°
DHP/F 52	DC-52 (serrated)	12 - 52	-	-	46	79.2	15°
DHP/F 65	DC-65 (smooth)	4.0 - 65	7	-	53	99.5	15°
DHP/F 65	DC-65 (radial groove)	8 - 10.5	8 - 56	8 - 46	53	99.5	15°
DHP/F 65	DC-65 (serrated)	11 - 65	-	-	53	99.5	15°

Pull Back Collets



- Collet bore diameters are dedicated.
- Emergency collets (soft face and pilot bore) are available upon request.



Type	Range	Max. Capacity mm			Dimensions mm		
5C	Plainbore	Round	Hex	Square	Length (A)	Diameter (B)	Taper (C)
	1 - 27.0mm	27	22	18	83.4	37.3	10°
16C	1.5 - 42.5mm	42.5	35	25	110.5	57.5	10°



**COLLET
CHUCK**

Collet Chuck Series

ACCESSORIES

Reduction Sleeve and Cap



- Optional reduction sleeve and cap sets allow a variety of collet types to be used in the same chuck body.
- Precision manufactured and matched to chuck body to guarantee accuracy.
- Standard models are Q-RSC6042 and RSC6042 allowing DIN 42 collets to be used in 60mm chucks.
- Alternate reduction options are available to order.

Standard and Custom Collet Chuck Adaptors



- Chuck adaptors available to all spindle mount types.
- Extra wide chuck adaptors allows small chucks to be assembled to large spindles.
- The QCRL chuck range features an interchangeable back body for different spindle mounts

Drawtube Connectors and Ejectors



- Drawtube connectors are precision machined to allow collet chucks to be easily connected to a wide range of lathe types.
- All chucks include blank connector as standard.
- Custom part ejectors and fixed length stops are available to order.

Bar Seals



- Reduces coolant and chip ingress into chuck / collet.
- Bar seal should be prepared to suit bar stock diameter.
- Compatible with QCRL range only. Bar seal and retaining cap supplied as standard with QCRL chuck range.



**COLLET
CHUCK**

Collet Chuck Series

Related Products

Collet Chuck



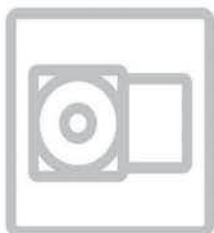
Chuck series

The Kitagawa Chuck series offers a complete range of hydraulic, pneumatic and manual chucks. Many years of application experience allows Kitagawa to offer solutions to a range of workholding problems.



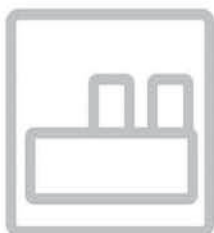
Rotary Cylinder series

The Kitagawa Cylinder series is designed to complement Kitagawa chucks to ensure optimum performance and safety. Kitagawa cylinders include light-weight compact design for high speed and internal lock valves for safe operation.



NC Rotary Table series

The Kitagawa NC Rotary Table series offers a wide variety of 4th and 5th axis models to suit many applications. Rotary Tables feature a rigid body design, powerful brake clamping forces and high indexing accuracy



Power Vise series

The Kitagawa Power Vise series features adjustable clamping force, high accuracy and low profile design across the range



Workgripper series

The Kitagawa Workgripper series offers a complete range of pneumatic and hydraulic workholding for a variety of static applications.





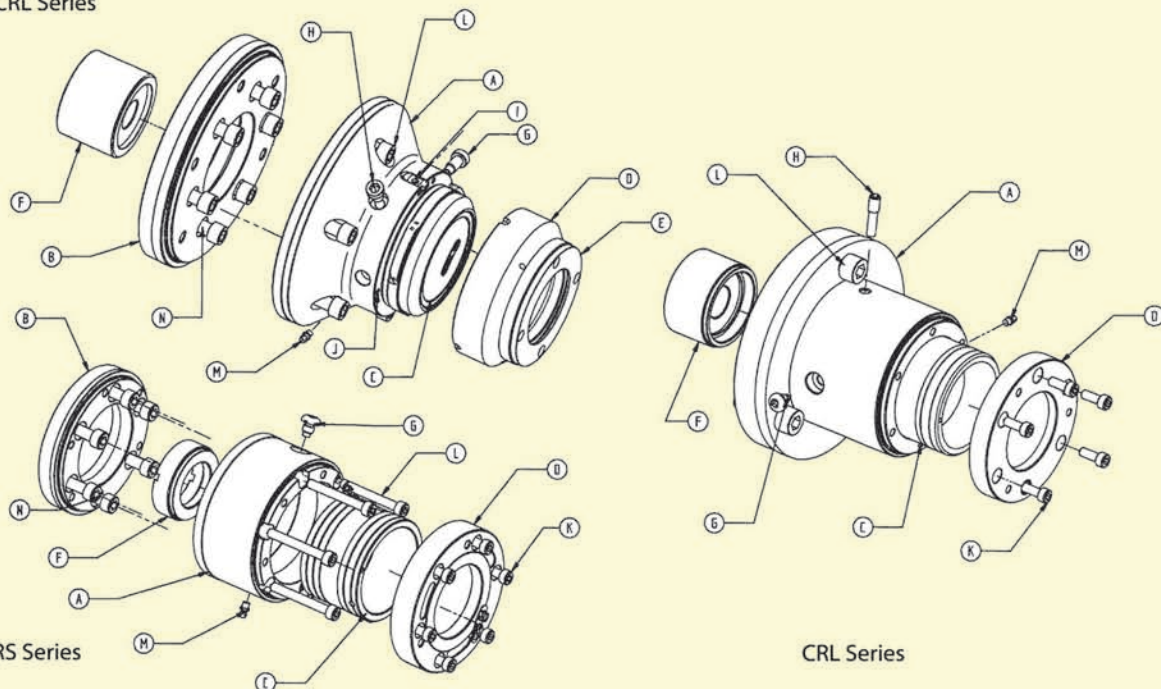
**COLLET
CHUCK**

Collet Chuck Series

PARTS LIST

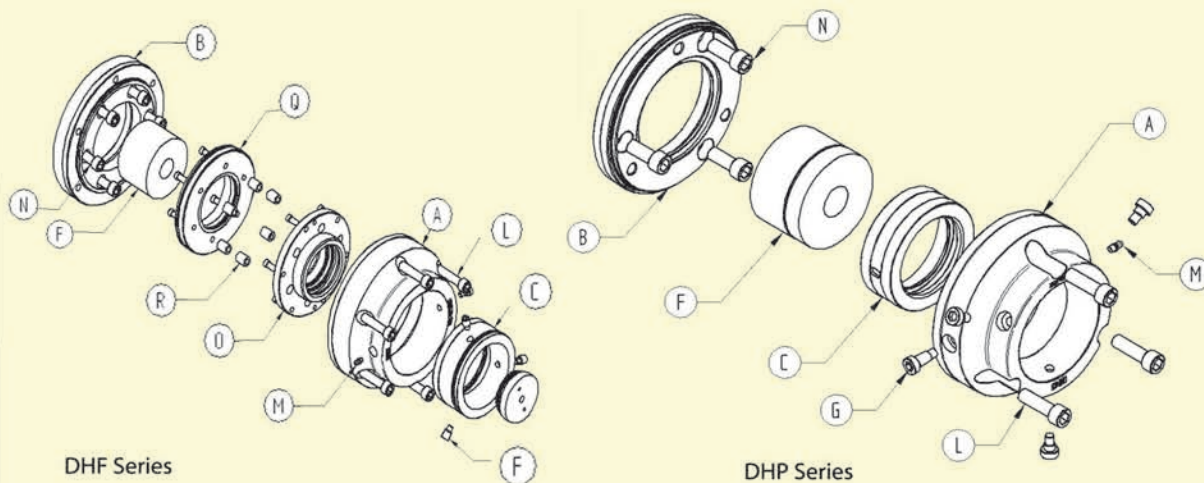
Exploded Parts View

QCRL Series



CRS Series

CRL Series



DHF Series

DHP Series

- | | | |
|----------------------------|-----------------------------------|---------------------------|
| a) Chuck Body | g) Anti Rotation Screws | m) Lubrication Nipple |
| b) Back Body | h) Backstop Retaining Screws | n) Spindle Mounting Bolts |
| c) Operating Sleeve | i) Quick Change Safety Catch | o) Collet Retainer |
| d) Front Cup | j) Spring Plunger for Cap Removal | q) Plunger |
| e) Bar Seal Cap | k) Front Cup Retaining Screws | r) Plunger bushes |
| f) Semi Finished Connector | l) Chuck Mounting Bolts | |



**COLLET
CHUCK**

Collet Chuck Series

Drawtube Connector / Machine Spindle Information

Machine Make		Chuck Make		Cylinder Make	
Model		Model		Model	
Year		Serial Number		Serial Number	

Please send along with your company details to your local distributor

FIG. 1

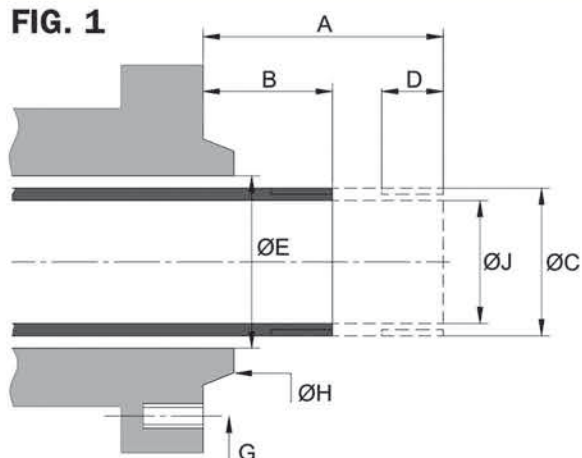


FIG. 2

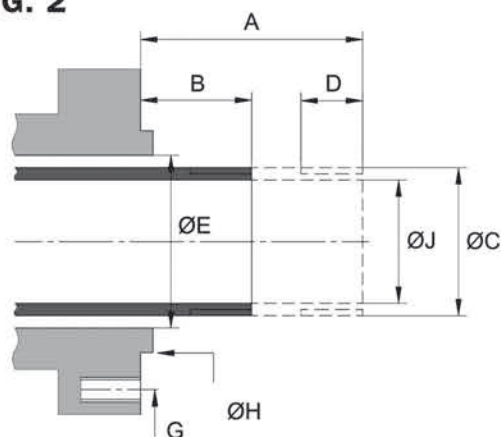


FIG. 3

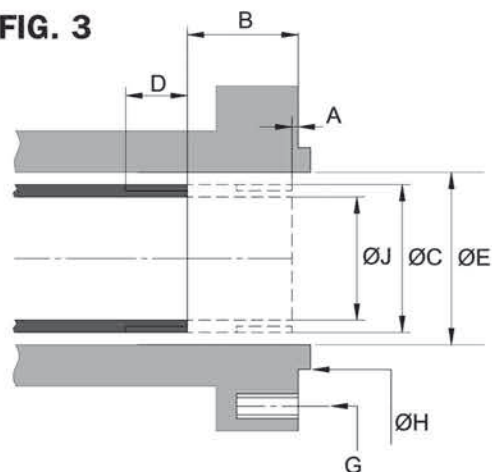
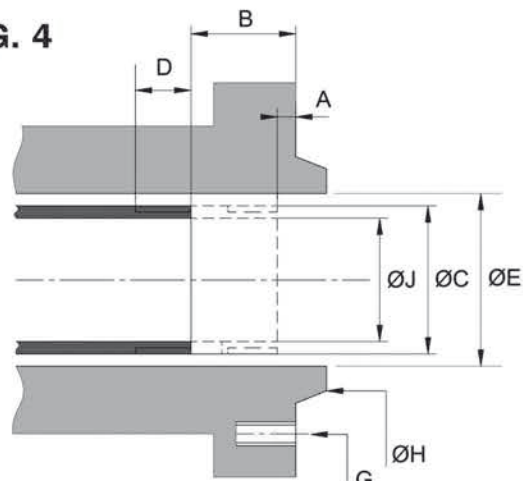


FIG. 4



A) FORWARD POSITION OF
(DRAWTUBE FROM SPINDLE FACE)

B) BACKWARD POSITION OF
(DRAWTUBE FROM SPINDLE FACE)

C) THREAD DIAMETER FORM &
PITCH. STATE IF R/H OR L/H
& EXTERNAL OR INTERNAL

D) OPERATIVE LENGTH OF FULL THREAD

E) SPINDLE BORE DIAMETER.
STATE IF TAPER

F) FIXING DETAILS. THREAD SIZE =
P.C.D. = QTY =

SPACING =

G) AMERICAN SPINDLE MOUNT –
STATE TYPE

H) STRAIGHT SPINDLE MOUNT
STATE DIAMETER

I) DRAWTUBE INTERNAL DIAMETER

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