



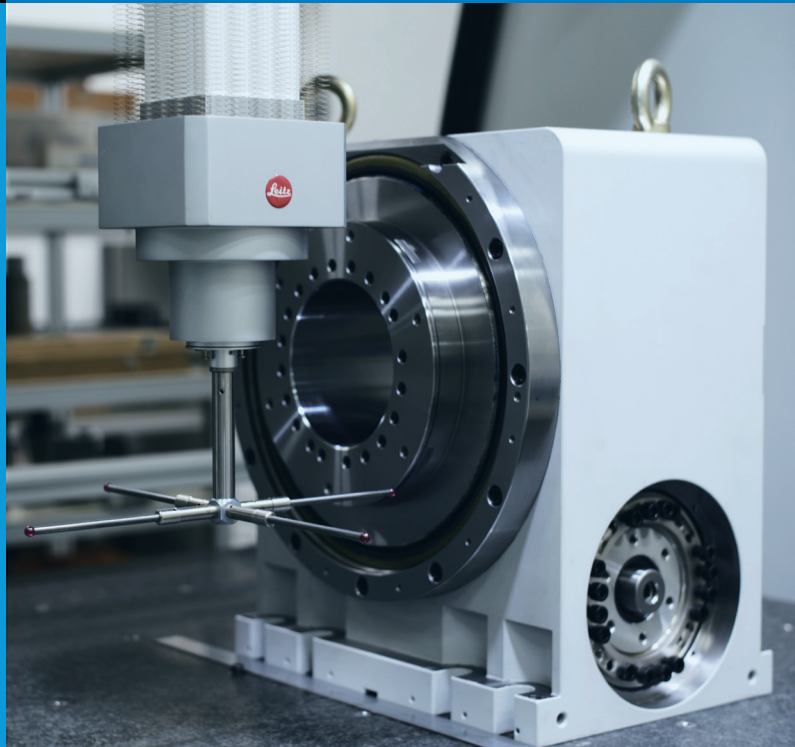
Samchully Machinery Co., Ltd.

Offers 30 years of experience in providing a wide range of premium quality work-holding products such as application, hydraulic, and manual chucks, milling vises, magnet chuck and rotary tables. In keeping with our tradition of providing quality products, we perennially hold ISO:9001 and TUV certifications.

Samchully Machinery Co., Ltd. also received Single Part Per Million certification [Single PPM] in 2007. The Single PPM quality assurance program is specifically adapted to North-East Asian manufacturing which relies heavily on outsourcings to leverage economies of scale. The Single PPM program emphasizes close collaboration with employees and vendors to reduce incoming component defects to a single digit (less than 10) for every million parts received. Samchully is one of the first certified organizations in South Korea.

We proudly supply some of the world's leading machine tool makers, including Doosan (Daewoo), Hyundai-Wia (Kia) and Haas Automation, and provide after-market sales support through an extensive global network of distributors.

At Samchully, we are committed to you, our customer. We pride ourselves in providing the best value product in the world by combining premium quality, affordable pricing, and reliable service. We believe that you deserve better workholding options— you deserve Samchully.



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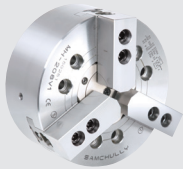


ACCESSORIES

158



POWER CHUCK



MH

Standard Mega-Bore 3-Jaw
High-Speed Open
-Center Chuck

6 P



HC-SE

3-Jaw Sealed
Close-Center Chuck

30 P



QJC

Quick Jaw Change
Chuck

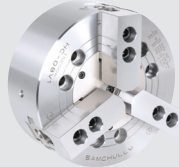
56 P



MHT/F

Mega-Bore 2, 4-Jaw High-
Speed Open-Center
Chuck

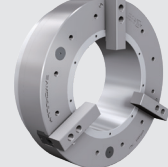
8 P



HC

Standard 3-Jaw Close-
Center Chuck

32 P



PAC-R

Mega-Bore Pneumatic
Self-Contained Chuck

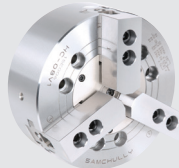
58 P



HS/HS-A (Adaptor)

Standard 3-Jaw High-
Speed Open-Center
Chuck

10 P



HC-A (Adaptor)

Standard 3-Jaw Close-
Center Chuck

38 P



HST/F

2, 4-Jaw High-Speed
Open-Center Chuck

16 P



HCT/F

2, 4-Jaw Close-Center
Chuck

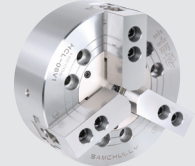
42 P



HSL (Long Stroke)

3-Jaw High-Speed Open-
Center Chuck

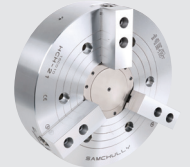
18 P



HCL (Long Stroke)

Standard 3-Jaw Close-
Center Chuck

46 P



HCH

Standard 3-Jaw
Open- Center Chuck

20 P



HCLT/F (Long Stroke)

2, 4-Jaw Close-Center
Chuck

48 P



HCH-A (Adaptor)

Standard 3-Jaw Open-
Center Chuck

24 P



IDF

Self centering 2+2 Jaw
Power Chuck

50 P



HCHT/F

2, 4-Jaw
Open Center Chuck

28 P



IDS

Self centering 2+2+2 Jaw
Power Chuck

54 P



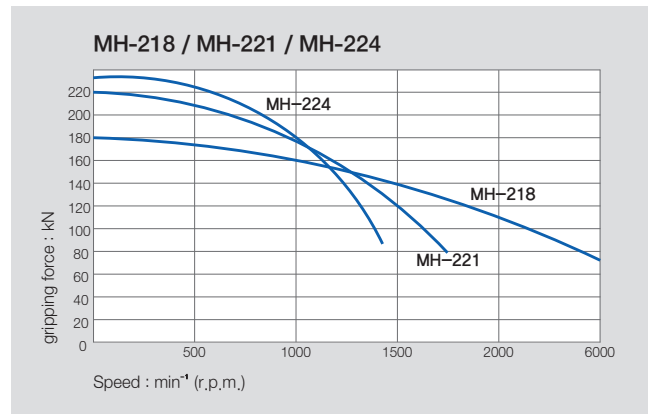
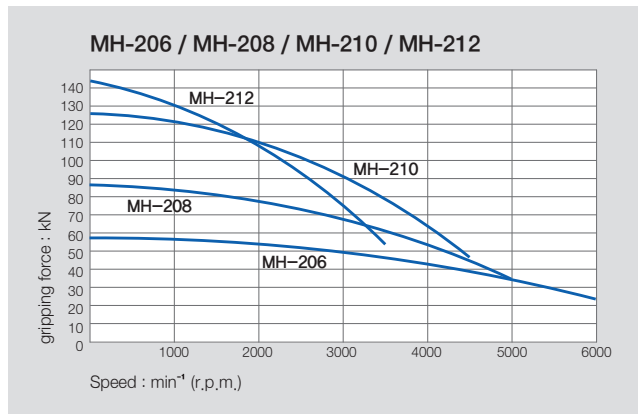
Application

Mega-bore 3-Jaw wedge-style, open-center power chuck

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier Jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly..

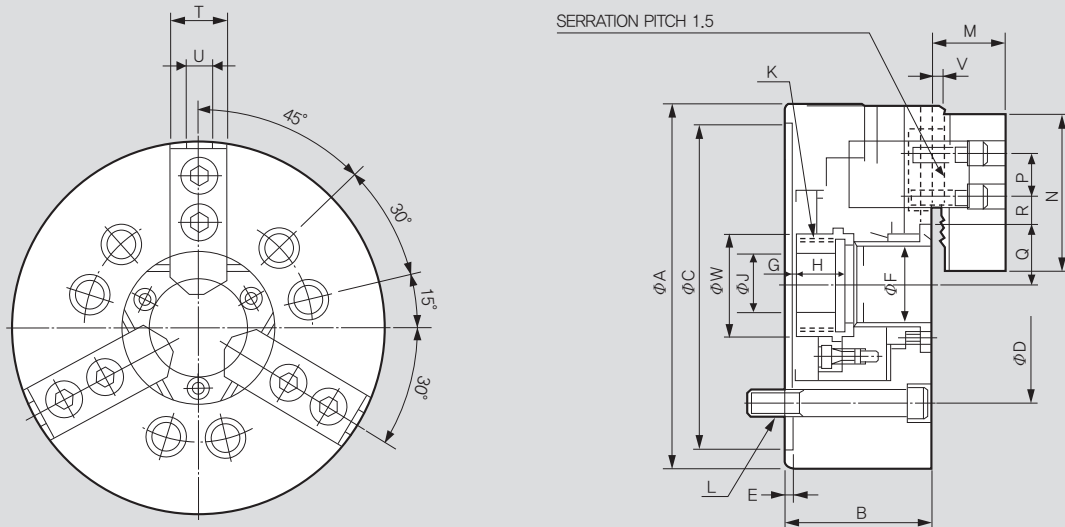
SPECIFICATIONS

	MH-206	MH-208	MH-210	MH-212	MH-218	MH-221	MH-224
Thru Hole Dia. [mm]	52	66	82	103	166.5	166.5	190
Grip Dia. Max [mm]	175	210	254	315	457	530	610
Grip Dia. Min. [mm]	16.5	23	30	54	73	105	120
Jaw Stroke Dia. [mm]	6.4	7.4	8.8	10.6	11.5	10.6	10.6
Plunger Stroke [mm]	14	16	19	23	25	23	23
Max. Permissible Input Force [kN(kgf)]	24.7(2551)	36.4(3596)	49(4976)	55(5608)	71(7240)	90(9177)	90(9177)
Max. Static Gripping Force [kN(kgf)]	57.3(5847)	87(8872)	126.6(12848)	144(14686)	180(18355)	220(22460)	234(23861)
Max. r.p.m. [min⁻¹]	6000	5000	4500	3000	2000	1700	1400
Weight [kg]	11.9	23	32	55.3	170	228	293
Moment of inertia [kg·m²]	0.05	0.14	0.295	0.785	4.75	8.9	15.9
Operating Cylinder	SD-15452	SD-17568	SD-18582	SD-21510	SDL-30516	SDL-30516	SHL-39024
Max. Hydraulic Pressure [MPa(kgf/cm²)]	1.78(18.1)	2.34(23.9)	2.74(28)	2.65(27.2)	3.07(32)	2.86(29.1)	1.57(16.1)
Operating Hard Jaw	HB06A1	HB08A1	HB10A1	HB12N1	HB15A1	HB18B2	HB18B2

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	MH-206	MH-208	MH-210	MH-212	MH-218	MH-221	MH-224
ΦA	175	210	254	315	457	530	610
B	81	91	100	110	135	140	149
$\Phi C(H6)$	140	170	220	300	380	380	380
$\varnothing D$	104.8	133.4	171.45	235	300	330.2	330.2
E	5	5	5	6	6	6	6
$\varnothing F$	52	66	82	103	166.5	166.5	190
G max.	14	7.5	8.5	8	8	11	20
G min.	0	-8.5	-10.5	-15	-17	-12	-3
H	17.5	27	25	28	50	39	40.5
ΦJ	20	30	52	66	107	80	80
K max.	M60x2.0	M75x2.0	M90x2.0	M116x2.0	M175x3.0	M180x3.0	M200x3.0
L	3-M10x95	6-M12x115	6-M16x120	6-M20x130	6-M20x130	6-M22x140	6-M22x150
M	32.5	39	43	50.5	69	73	73
N	72	95	110	111	165	180	180
P	20	25	30	30	50	60	60
Q max.	38	45.7	54.5	67.3	102	111.75	119.5
Q min.	34.8	42	50.1	62	96.25	106.5	114.2
R max.	21.75	23.75	32.25	45.75	58.25	72.5	105.5
R min.	10.25	11.75	14.25	15.75	20.25	21.5	21.5
T	31	35	40	49	69	65	65
U	12	14	16	21	22	25	25
V	2	2	2	2	5	5	5
ΦW	65	80	101	124	186	197	210

※ Blank and machined draw-nuts are available. 'K' is Max. Draw nut size.

RELATED PRODUCT





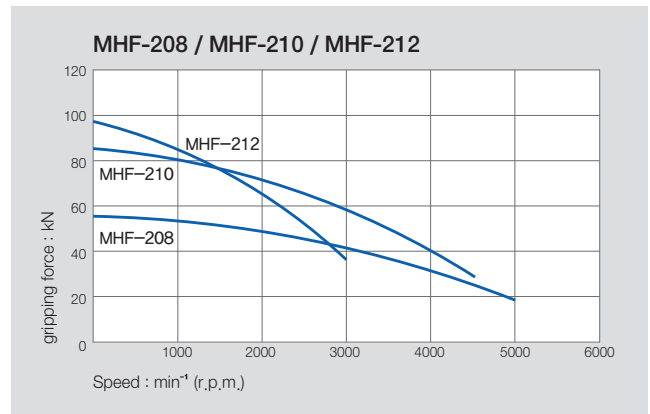
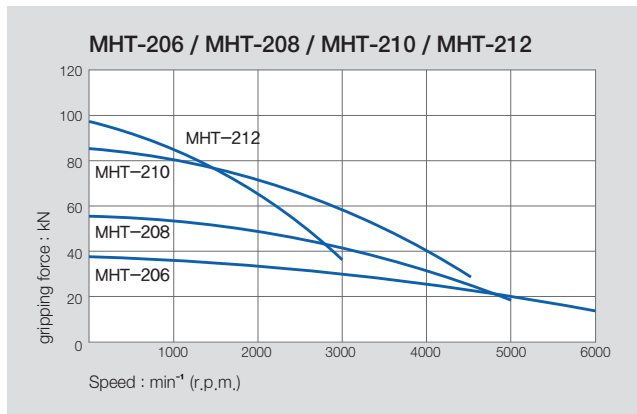
Application

Mega-bore 2-Jaw, 4-Jaw wedge-style, open-center power chuck

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

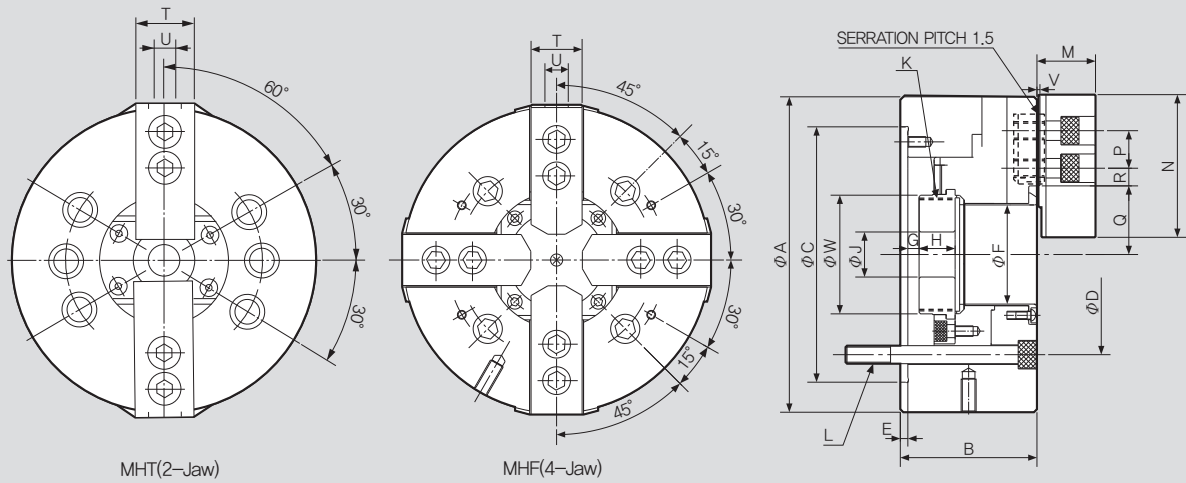
SPECIFICATIONS

	MHT-206	MHT-208	MHT-210	MHT-212	MHF-208	MHF-210	MHF-212
Thru Hole Dia. [mm]	52	66	82	103	66	82	103
Grip Dia. Max [mm]	175	210	254	315	210	254	315
Grip Dia. Min. [mm]	16.5	23	30	54	23	30	54
Jaw Stroke Dia. [mm]	6.4	7.4	8.8	10.6	7.4	8.8	10.6
Plunger Stroke [mm]	14	16	19	23	16	19	23
Max. Permissible Input Force [kN(kgf)]	16.6(1700)	23.5(2397)	32.5(3306)	36.7(3742)	23.25(2397)	32.5(3306)	36.7(3742)
Max. Static Gripping Force [kN(kgf)]	38(3875)	57.9(5914)	84(8530)	96(9789)	57.9(5914)	84(8530)	96(9789)
Max. r.p.m. [min ⁻¹]	6000	5000	4500	3000	5000	4500	3000
Weight [kg]	11.5	21.7	31	55.3	23.5	32	55.3
Moment of inertia [kg·m ²]	0.048	0.132	0.3	0.808	0.57	0.329	0.808
Operating Cylinder	SD-15452	SD-17568	SD-18582	SD-21510	SD-17568	SD-18582	SD-21510
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	1.18(12)	1.59(16.3)	1.86(19)	1.57(16.0)	1.59(16.3)	1.86(19)	1.57(16.0)
Operating Hard Jaw	HB06A1	HB08A1	HB10A1	HB12A1	HBF08A1	HBF10A1	HBF12A1

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	MHT-206	MHT-208	MHT-210	MHT-212	MHF-208	MHF-210	MHF-212
ΦA	175	210	254	315	210	254	315
B	81	91	100	110	91	100	110
ΦC	140	170	220	300	170	220	300
ØD	104.8	133.4	171.45	235	133.4	171.45	235
E	5	5	5	6	5	5	6
ØF	52	66	82	103	66	82	103
G max.	14	7.5	8.5	8	7.5	8.5	8
G min.	0	-8.5	-10.5	-15	-8.5	-10.5	-15
H	17.5	27	25	28	27	25	28
ΦJ	20	30	52	66	30	52	66
K max.	M60x2.0	M75x2.0	M90x2.0	M116x2.0	M75x2.0	M90x2.0	M116x2.0
L	6-M10x95	6-M12x115	6-M16x120	6-M20x130	4-M12x115	4-M16x120	4-M20x130
M	32.5	39	43	50.5	39	43	50.5
N	72	95	110	111	95	110	111
P	20	25	30	30	25	30	30
Q max.	38	45.7	54.5	67.3	45.7	54.5	67.3
Q min.	34.8	42	50.1	62	42	50.1	62
R max.	21.75	23.75	32.25	45.75	23.75	32.25	45.75
R min.	10.25	11.75	14.25	15.75	11.75	14.25	15.75
T	31	35	40	49	35	40	49
U	12	14	16	21	14	16	21
V	2	2	2	2	2	2	2
ΦW	65	80	101	124	80	101	124

※ Blank and machined draw-nuts are available. 'K' is Max. Draw nut size.

RELATED PRODUCT



HS Standard 3-Jaw High-Speed Open-Center Chuck



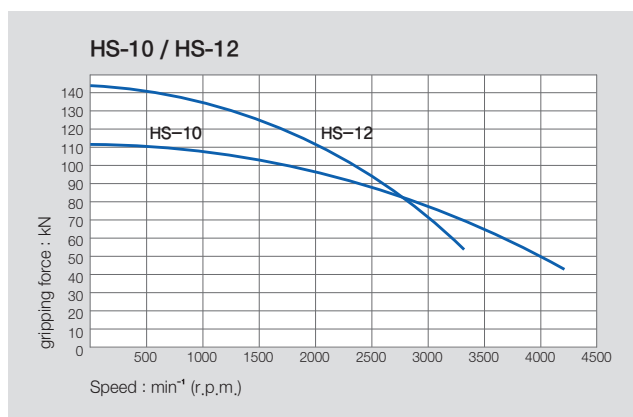
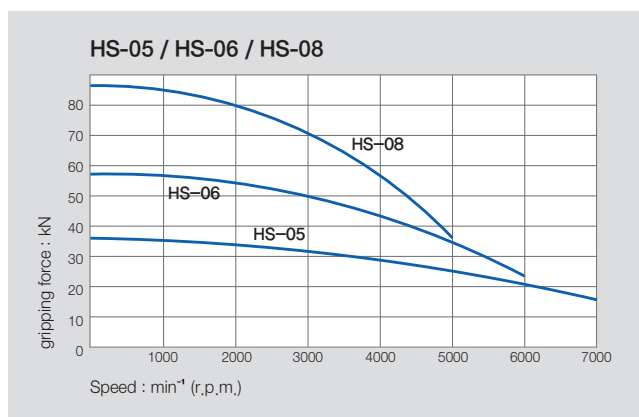
Application

Standard high-speed 3-Jaw wedge-style open center power chuck

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

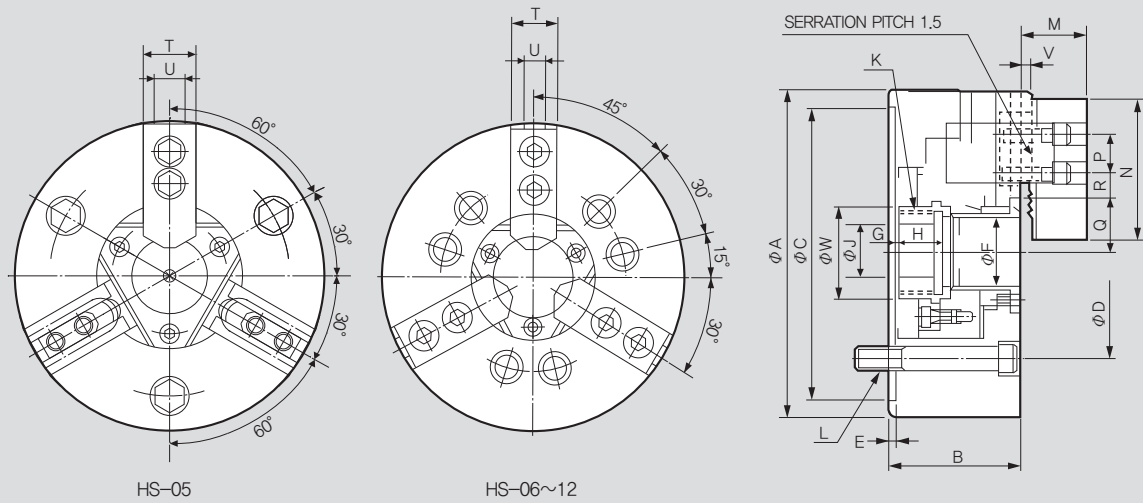
SPECIFICATIONS

	HS-05	HS-06	HS-08	HS-10	HS-12
Thru Hole Dia. [mm]	33	46	52	77	91
Grip Dia. Max [mm]	135	169	210	254	304
Grip Dia. Min [mm]	12	15	13	31	34
Jaw Stroke Dia. [mm]	5.4	5.5	7.4	8.8	10.6
Plunger Stroke [mm]	10	12	16	19	23
Permissible Input Force [kN(kgf)]	17.5(1784)	22(2243)	34.8(3549)	43(4385)	55(5608)
Max. Static Gripping Force [kN(kgf)]	36(3671)	57(5812)	86(8769)	111(11319)	144(14686)
Max. r.p.m. [min ⁻¹]	7000	6000	5000	4200	3300
Weight [kg]	6.7	11.9	22.3	34.5	55.3
Moment of inertia [kg·m ²]	0.016	0.052	0.145	0.305	0.707
Operating Cylinder	SH-10036	SD-13546	SD-15452	SD-18577	SD-20591
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	2.9(30)	2.8(28.6)	2.65(27)	2.7(27.5)	2.7(27.5)
Operating Hard Jaw	HB04N1	HB06A1	HB08A1	HB10A1	HB12N1
KITAGAWA® Model	B-205	B-206	B-208	B-210	B-212

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HS-05	HS-06	HS-08	HS-10	HS-12
ΦA	135	169	210	254	304
B	60	81	91	100	110
ΦC(H6)	110	140	170	220	220
ØD	82.6	104.8	133.4	171.4	171.4
E	4	5	5	5	6
ØF	33	46	52	77	91
G max.	1	11	14.5	8.5	8
G min.	-9	-1	-1.5	-10.5	-15
H	20	19	20.5	25	28
ΦJ	12	20	30	45	50
K max.	M40x1.5	M55x2.0	M60x2.0	M85x2.0	M100x2.0
L	3-M10x60	6-M10x95	6-M12x105	6-M16x120	6-M16x130
M	26	31	38.5	43	50.5
N	54	72	95	110	111
P	14	20	25	30	30
Q max.	26.5	32	38.7	51	61.3
Q min.	23.8	29.25	35	46.6	56
R max.	19.75	22.75	29.75	33.75	45.75
R min.	7.75	9.25	14.75	14.25	15.75
T	23	31	35	40	49
U	10	12	14	16	21
V	2	2	2	2	2
ΦW	47	60	66	94	108

※ Blank and machined draw-nuts are available. 'K' is Max. Draw nut size.

RELATED PRODUCT



HS-A 3-Jaw High-Speed Open-Center Chuck with Adaptor (135mm - 210mm)



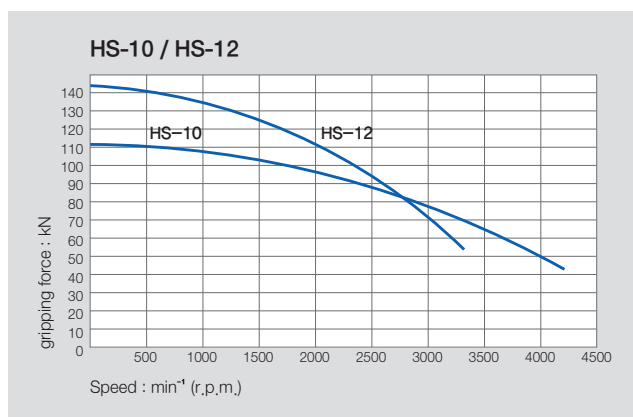
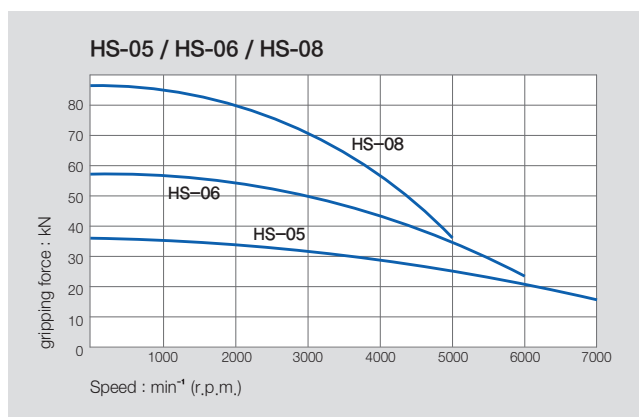
Application

Standard high-speed 3-Jaw wedge-style open center power chuck with adaptor

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram

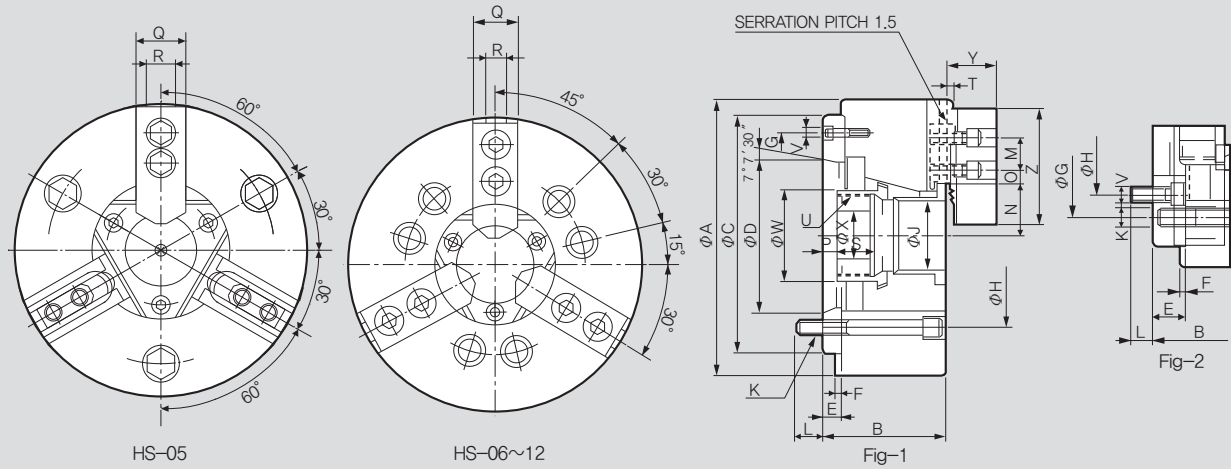


※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

	HS-05A05	HS-06A05	HS-08A06
Spindle Nose	A2-5	A2-5	A2-6
Thru Hole Dia. [mm]	33	46	52
Grip Dia. Max [mm]	135	169	210
Grip Dia. Min [mm]	12	15	13
Jaw Stroke Dia. [mm]	5.4	5.5	7.4
Plunger Stroke [mm]	10	12	16
Max. Permissible Input Force [kN(kgf)]	17.5(1784)	22(2243)	34.8(3549)
Max. Static Gripping Force [kN(kgf)]	36(3671)	57(5812)	86(8769)
Max. r.p.m. [min ⁻¹]	7000	6000	5000
Weight [kg]	7.5	13.7	23.6
Moment of inertia [kg·m ²]	0.016	0.052	0.145
Operating Cylinder	SH-10036	SD-13546	SD-15452
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	3.43(35.0)	2.8(28.6)	2.65(27)
Operating Hard Jaw	HB04N1	HB06A1	HB08A1
KITAGAWA® Model	B-205	B-206A5	B-208A6

- ※ Maximum turning speed is based upon actual measurement.
- ※ Specifications are subject to change without notice.
- ※ HS-10A06 and HS-10A08 are available with 75mm and 77mm thru holes.
- ※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



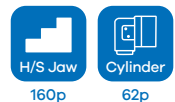
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HS-05A05	HS-06A05	HS-08A06
ΦA	135	169	210
B	72	91	103
$\Phi C(H6)$	110	140	170
$\varnothing D$	82.56	82.563	106.375
E	16	15	17
F	4	5	5
$\varnothing G$	104.8	104.8	133.4
$\varnothing H$	104.8	104.8	133.4
$\varnothing J$	33	46	52
K	3-M10x75	6-M10x95	6-M12x105
L	14	16	18
M	14	20	25
N max.	26.5	32	38.7
N min.	23.8	29.25	35
O max.	19.75	22.75	29.75
O min.	7.75	9.25	14.75
P max.	17	26	31.5
P min.	7	14	15.5
Q	23	31	35
R	10	12	14
S	20	19	20.5
T	2	2	2
U max.	M40x1.5	M55x2	M60x2
V	3-M6	3-M6	6-M6
ΦW	47	60	66
ΦX	-	20	30
Y	26	31	38.5
Z	54	72	95

※ Blank and machined draw-nuts are available. "U" is Max. Draw nut size.
※ Refer to Fig-2 for HS-10A06, HS-12A06.

RELATED PRODUCT



HS-A 3-Jaw High-Speed Open-Center Chuck with Adaptor (254mm - 304mm)



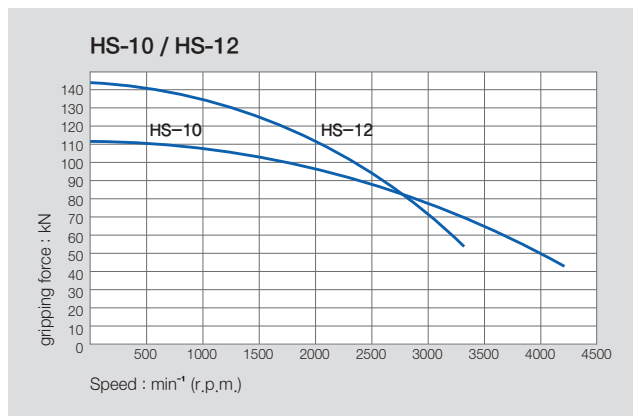
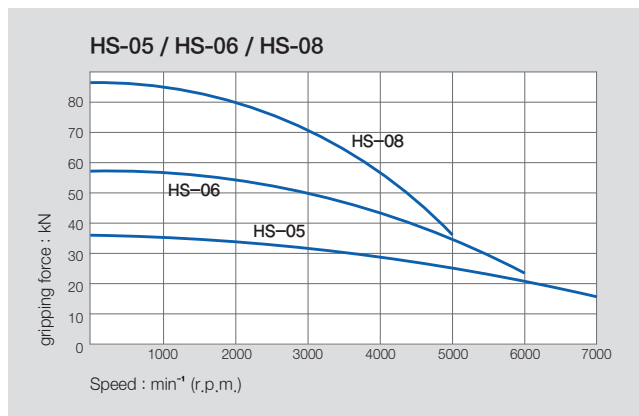
Application

Standard high-speed 3-Jaw wedge-style open center power chuck with adaptor

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ Diagram assumes use of standard Samchully soft jaws. Grip force will vary according to jaw size.

SPECIFICATIONS

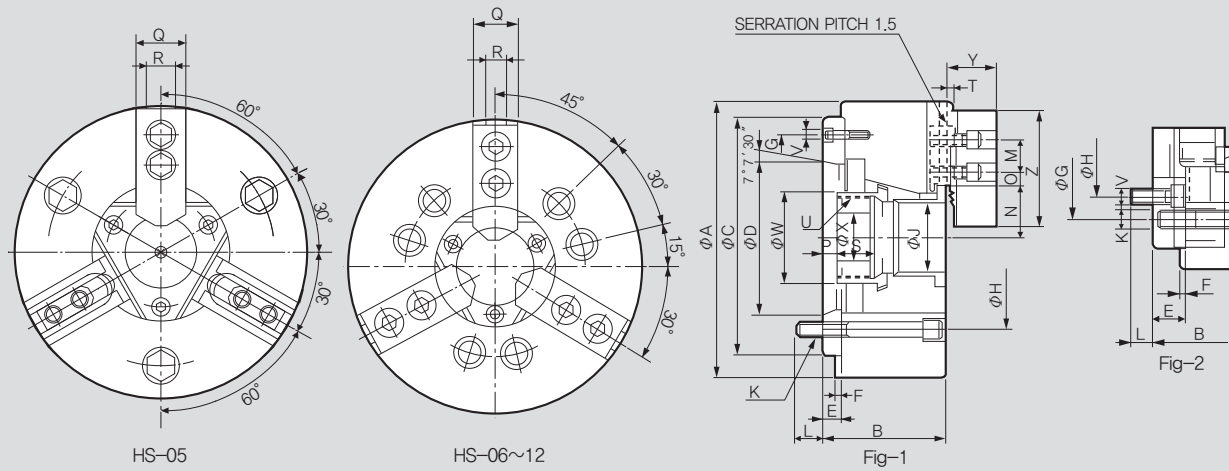
	HS-10A06	HS-10A08	HS-12A06	HS-12A08
Spindle Nose	A2-6	A2-8	A2-6	A2-8
Thru Hole Dia. [mm]	77	77	91	91
Grip Dia. Max [mm]	254	254	304	304
Grip Dia. Min [mm]	31	31	34	34
Jaw Stroke Dia. [mm]	8.8	8.8	10.6	10.6
Plunger Stroke [mm]	19	19	23	23
Max. Permissible Input Force [kN(kgf)]	43(4385)	43(4385)	55(5608)	55(5608)
Max. Static Gripping Force [kN(kgf)]	111(11319)	111(11319)	144(14684)	144(14684)
Max. r.p.m. [min ⁻¹]	4200	4200	3300	3300
Weight [kg]	41.5	40	67	64
Moment of inertia [kg·m ²]	0.305	0.305	0.707	0.707
Operating Cylinder	SD-18577	SD-18577	SD-20591	SD-20591
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	2.7(27.5)	2.7(27.5)	2.7(27.5)	2.7(27.5)
Operating Hard Jaw	HB10A1	HB10A1	HB12N1	HB12N1
KITAGAWA® Model	B-210A6	B-210A8	B-212A6	B-212A8

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ HS-10A06 and HS-10A08 are available with 75mm and 77mm thru holes.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

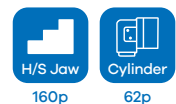
DIMENSIONS

	HS-10A06	HS-10A08	HS-12A06	HS-12A08
$\varnothing A$	254	254	304	304
B	120	113	129	122
$\varnothing C(H6)$	220	220	220	220
$\varnothing D$	106.375	139.719	106.375	139.719
E	25	18	25	18
F	5	5	6	6
$\varnothing G$	171.4	171.4	171.4	171.4
$\varnothing H$	133.4	171.4	133.4	190
$\varnothing J$	77	77	91	91
K	6-M16x100	6-M16x120	6-M16x110	6-M16x130
L	18.5	24	18.5	25
M	30	30	30	30
N max.	51	51	61.3	61.3
N min.	46.6	46.6	56	56
O max.	33.75	33.75	45.75	45.75
O min.	14.25	14.25	15.75	15.75
P max.	33.5	26.5	33	26
P min.	14.5	7.5	10	3
Q	40	40	49	49
R	16	16	21	21
S	25	25	28	28
T	2	2	2	2
U max.	M75x2	M85x2	M90x2	M100x2
V	6xM12	3xM8	6xM12	3xM8
$\varnothing W$	94	94	108	108
$\varnothing X$	45	45	50	50
Y	43	43	50.5	50.5
Z	110	110	111	111

※ Blank and machined draw-nuts are available. "U" is Max. Draw nut size.

※ Refer to Fig-2 for HS-10A06, HS-12A06.

RELATED PRODUCT





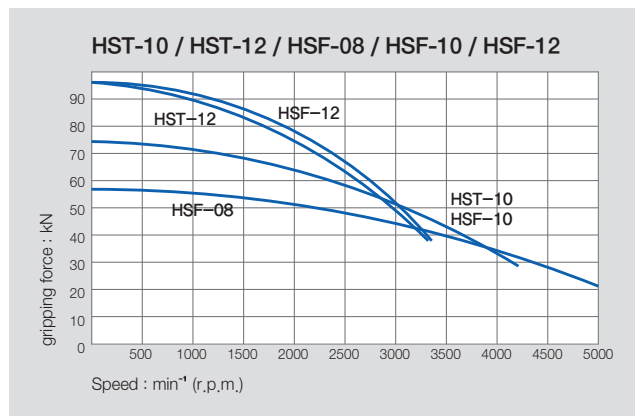
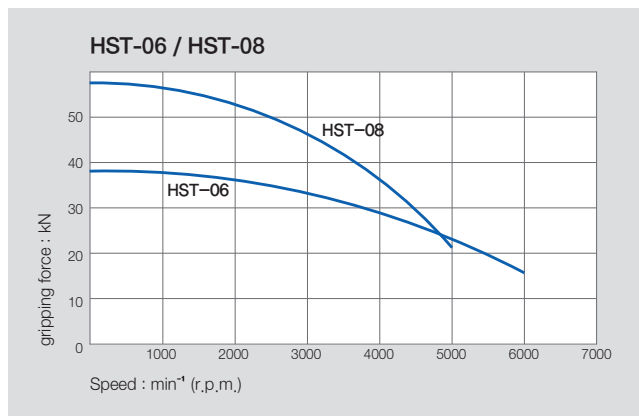
Application

high-speed 2-Jaw, 4-Jaw wedge-style open center power chuck

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

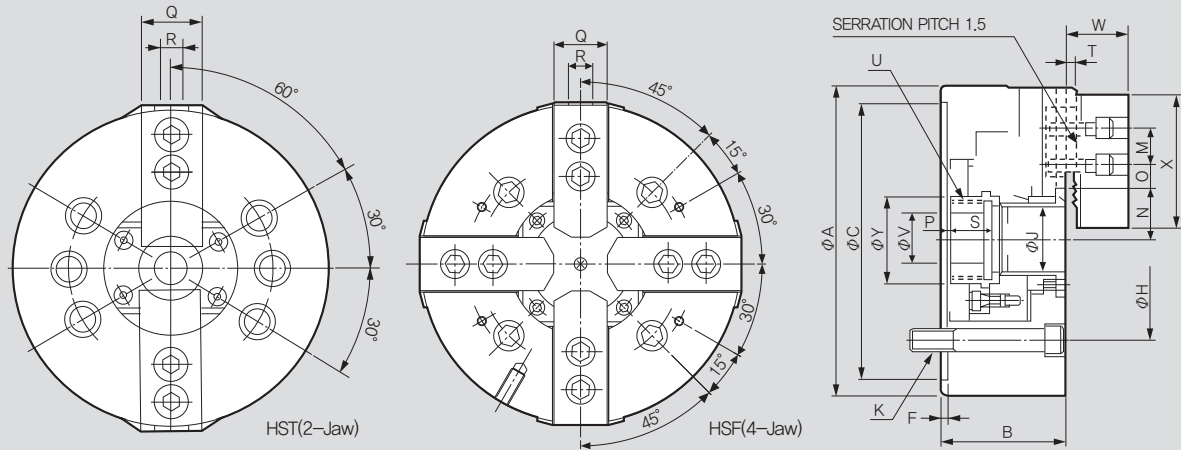
SPECIFICATIONS

	HST-06	HST-08	HST-10	HST-12	HSF-08	HSF-10	HSF-12
Thru Hole Dia. [mm]	46	52	77	91	52	77	91
Grip Dia. Max [mm]	169	210	254	304	210	254	304
Grip Dia. Min	15	13	31	34	13	31	34
Jaw Stroke Dia. [mm]	5.5	7.4	8.8	10.6	7.4	8.8	10.6
Plunger Stroke [mm]	12	16	19	23	16	19	23
Max. Permissible Input Force [kN(kgf)]	14.5 (1479)	23.2 (2366)	28.5 (2906)	36.7 (3742)	23.2 (2366)	28.5 (2906)	36.7 (3742)
Max. Static Gripping Force [kN(kgf)]	38 (3875)	57.3 (5843)	74 (7546)	96 (9789)	57.3 (5843)	74 (7546)	96 (9789)
Max. r.p.m. [min⁻¹]	6000	5000	4200	3300	5000	4200	3300
Weight [kg]	11.5	21.3	33.5	52	22.5	34.5	52
Moment of inertia [kg·m²]	0.05	0.14	0.298	0.67	0.15	0.312	0.744
Operating Cylinder	SD-13546	SD-15452	SD-18577	SD-20591	SD-15452	SD-18577	SD-20591
Max. Hydraulic Pressure [MPa(kgf/cm²)]	1.85 (18.9)	1.80 (18.4)	1.80 (18.4)	1.81 (18.5)	1.80 (18.4)	1.80 (18.4)	1.80 (28.5)
KITAGAWA® Model	BT-206	BT-208	BT-210	BT-212	-	-	-

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HST-06	HST-08	HST-10	HST-12	HSF-08	HSF-10	HSF-12
ΦA	169	210	254	304	210	254	304
B	81	91	100	110	91	100	110
$\Phi C(H6)$	140	170	220	220	170	220	220
F	5	5	5	6	5	5	5
ΦH	104.8	133.4	171.4	171.4	133.4	171.4	171.4
ΦJ	46	52	77	91	52	77	91
K	6-M10x95	6-M12x105	6-M16x120	6-M16x130	4-M12x105	4-M16x120	4-M16x130
M	20	25	30	30	25	30	30
N max.	32	38.7	51	61.4	38.7	51	61.4
N min.	29.25	35	46.6	56	35	46.6	56
O max.	22.75	29.75	33.75	45.75	29.75	33.75	45.75
O min.	9.25	14.75	14.25	15.75	14.75	14.25	15.75
P max	11	14.5	8.5	8	14.5	8.5	8
P min	-1	-1.5	-10.5	-15	-1.5	-10.5	-15
Q	32	35	40	49	35	40	49
R	12	14	16	21	14	16	21
S	19	20.5	25	28	20.5	25	28
Y	2	2	2	2	2	2	2
U max.	M55x2.0	M60x2.0	M85x2.0	M100x2.0	M60x2.0	M85x2.0	M100x2.0
ΦV	20	30	45	50	30	45	50
W	31	39	43	50.5	39	43	50.5
X	72	95	110	111	95	110	111
ΦY	60	66	94	108	66	94	108

※ Blank and machined draw-nuts are available. 'U' is Max. Draw nut size.

RELATED PRODUCT





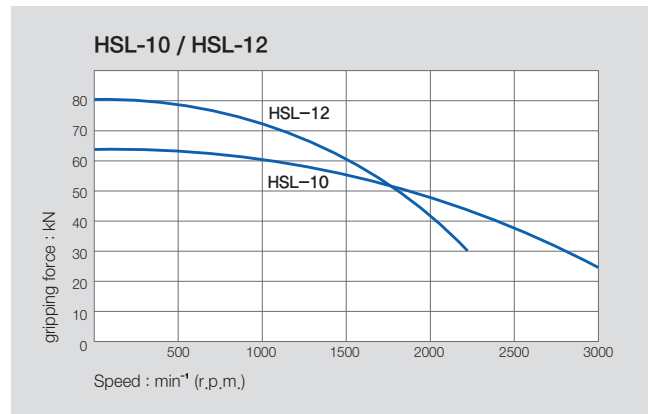
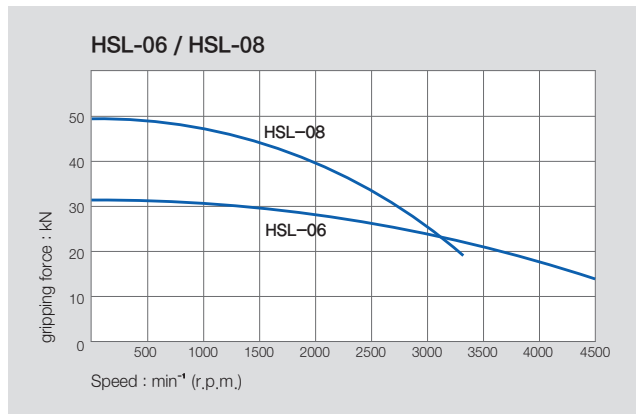
Application

Long-stroke high-speed 3-Jaw wedge-style open-center power chuck

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

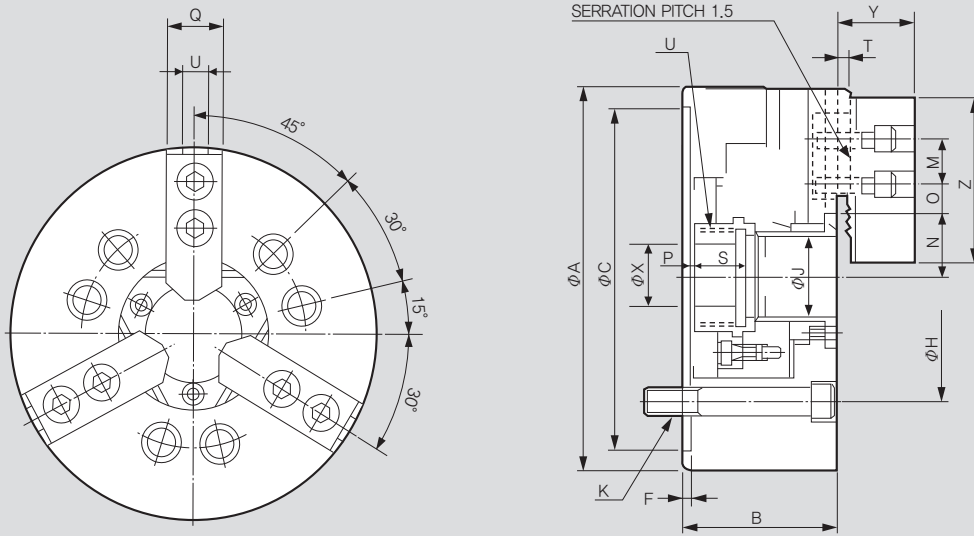
SPECIFICATIONS

	HSL-06	HSL-08	HSL-10	HSL-12
Thru Hole Dia. [mm]	33	46	53	63
Grip Dia. Max [mm]	169	215	254	304
Grip Dia. Min [mm]	28	32	42	43
Jaw Stroke Dia. [mm]	20.2	25.4	30	36
Plunger Stroke [mm]	15	22	25	30
Max. Permissible Input Force [kN(kgf)]	27.9(2845)	41.1(4191)	53.8(5486)	69.3(7067)
Max. Static Gripping Force [kN(kgf)]	31.2(3182)	49.0(4997)	63.0(6427)	80.4(8199)
Max. r.p.m. [min ⁻¹]	4500	3300	3000	2200
Weight [kg]	14	25	45	78
Moment of inertia [kg·m ²]	0.043	0.198	0.306	0.918
Operating Cylinder	SD-13546	SD-15452	SD-18577	SD-20591
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	3.40(34.7)	2.99(30.5)	3.20(32.6)	3.22(32.8)
Operating Hard Jaw	HB06A1	HB08A1	HB10A1	HB12N1
KITAGAWA® Model	BL-206	BL-208	BL-210	BL-212

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HSL-06	HSL-08	HSL-10	HSL-12
ΦA	169	215	254	304
B	84	99	110	130
$\Phi C(H6)$	140	170	220	220
F	5	5	5	6
ΦH	104.8	133.4	171.4	171.4
ΦJ	33	46	53	63
K	6-M10	6-M12	6-M16	6-M16
M	20	25	30	30
N max.	39.3	52.3	62	72.5
N min.	29.2	39.6	47	54.5
O max.	16.75	20.75	26.25	36
O min.	9.25	11.75	9.75	14
P max	14	15.5	14.5	15
P min	-1	-6.5	-10.5	-15
Q	31	35	40	49
R	12	14	16	21
S	19	22.5	25	28
T	2	2	2	2
U max.	M42x1.5	M55x2.0	M65x2.0	M75x2.0
W	47	66	80	83
ΦX	20	30	45	50
Y	32.5	37.5	43	50.5
Z	72	95	110	111

※ Blank and machined draw-nuts are available. 'U' is Max. Draw nut size.

RELATED PRODUCT



HCH Standard 3-Jaw Open-Center Chuck (110mm - 450mm)



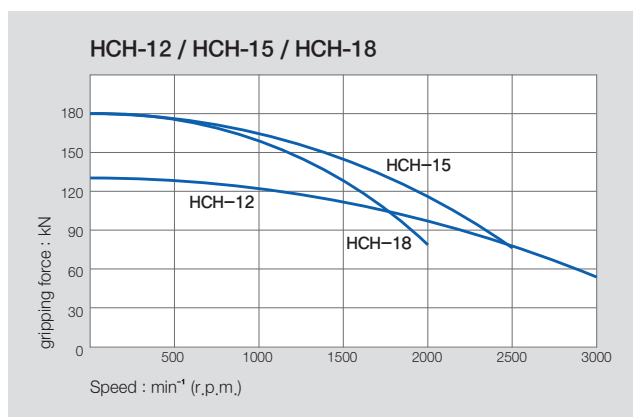
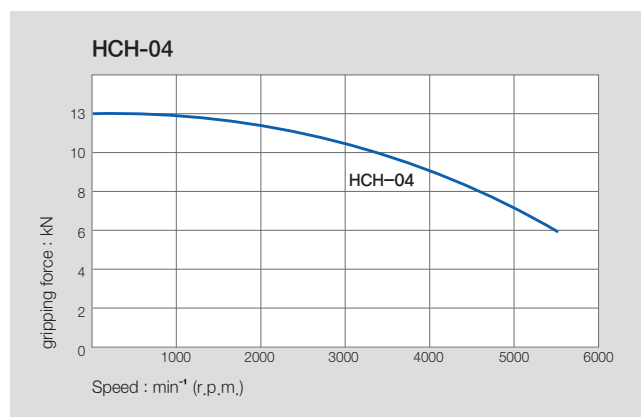
Application

Standard 3-Jaw wedge-style open center power chuck

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

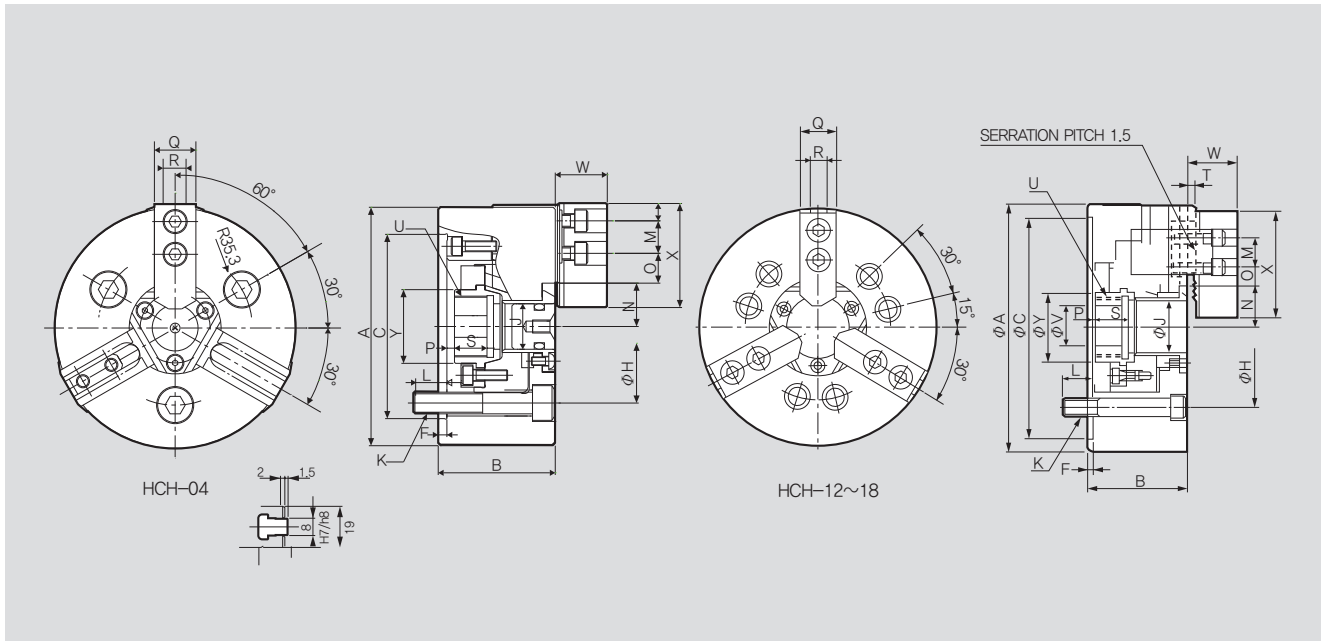
SPECIFICATIONS

	HCH-04	HCH-15	HCH-18
Thru Hole Dia. [mm]	21	117.5	117.5
Grip Dia. Max [mm]	110	381	450
Grip Dia. Min [mm]	5	30	30
Jaw Stroke Dia. [mm]	4.2	10.6	10.6
Plunger Stroke [mm]	6.5	23	23
Max. Permissible Input Force [kN(kgf)]	8(800)	71(7240)	71(7240)
Max. Static Gripping Force [kN(kgf)]	13(1350)	180(18355)	180(18355)
Max. r.p.m. [min ⁻¹]	5500	2500	2000
Weight [kg]	3.7	120	164
Moment of inertia [kg·m ²]	0.006	2.35	4.45
Operating Cylinder	HYH-0933	SD-25411	SD-25411
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	2.2(22.4)	2.3(23.5)	2.3(23.5)
Operating Hard Jaw	HB04A1	HB15A1	HB15A1
KITAGAWA® Model	B-04	B-15	B-18

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HCH-04	HCH-15	HCH-18
ΦA	110	381	450
B	54	133	133
ΦC(H6)	85	300	380
F	4	6	6
H	70.6	235	235
ΦJ	21	117.5	117.5
K	3-M10	6-M20	6-M20
L	15.5	30	30
M	15	43	43
N max.	20	82	82
N min.	17.9	76.7	76.7
O max.	15.25	46.75	78.25
O min.	7.75	18.25	18.25
P max.	3.5	11	11
P min.	-3	-12	-12
Q	19	62	62
R	8	22	22
S	15	39	39
T	2	5	5
U max.	M28x1.5	M130x2.0	M130x2.0
ΦV	10	60	60
W	24	70	70
X	48	165	165
ΦY	34	139	139

※ Blank and machined draw-nuts are available. 'U' is Max. Draw nut size.

RELATED PRODUCT



HCH Standard 3-Jaw Open-Center Chuck (530mm - 800mm)



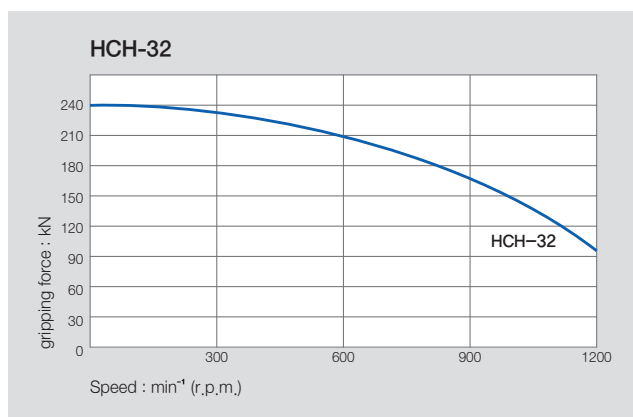
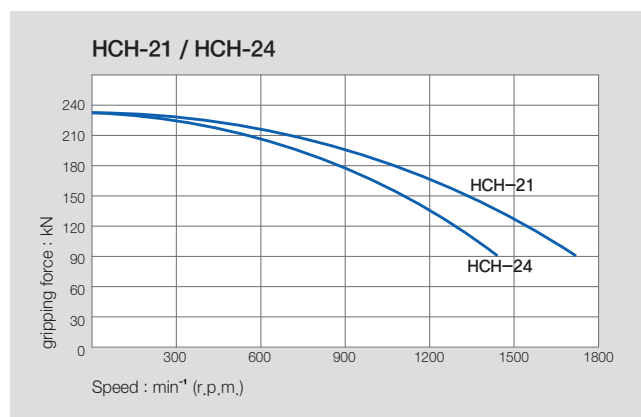
Application

Standard 3-Jaw wedge-style open center power chuck

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

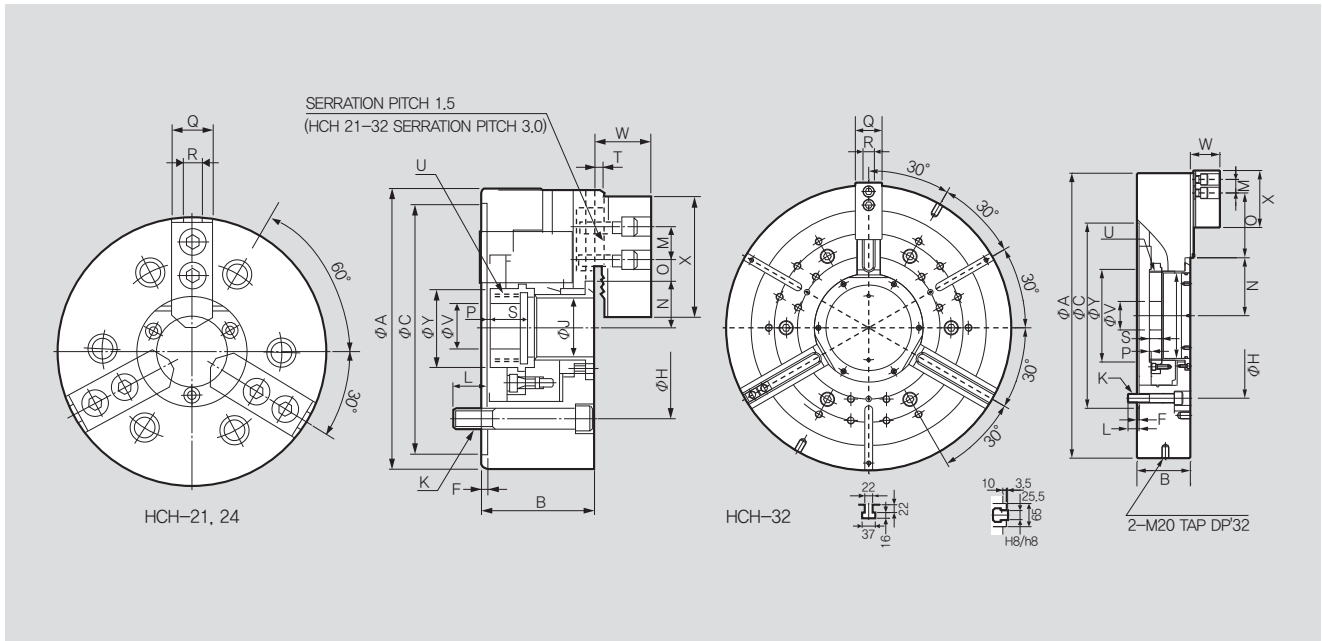
SPECIFICATIONS

	HCH-21	HCH-24	HCH-32
Thru Hole Dia. [mm]	140	165	240
Grip Dia. Max. [mm]	530	610	800
Grip Dia. Min. [mm]	87	110	240
Jaw Stroke Dia. [mm]	10.6	10.6	18
Plunger Stroke [mm]	23	23	34
Max. Permissible Input Force [kN(kgf)]	90(9177)	90(9177)	100(10193)
Max. Static Gripping Force [kN(kgf)]	234(23861)	234(23861)	240(24464)
Max. r.p.m. [min ⁻¹]	1700	1400	1200
Weight [kg]	235	293	530
Moment of inertia [kg·m ²]	8.85	15.8	51.5
Operating Cylinder	SD-25411	SDL-30516	SHL-39024
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	3.0(30.6)	3.0(30.6)	3.2(33.6)
Operating Hard Jaw	HB18B2	HB18B2	HB32B2
KITAGAWA® Model	B-21	B-24	-

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samcully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HCH-21	HCH-24	HCH-32
ΦA	530	610	800
B	140	149	150
$\Phi C(H6)$	380	380	520
F	6	6	6
H	330.2	330.2	463.6
ΦJ	140	165	240
K	6-M22	6-M22	6-M24
L	31	32	31
M	60	60	38
N max.	98.5	108	162.6
N min.	93.2	102.7	153.6
O max.	87.5	117.5	182
O min.	21.5	21.5	20
P max.	11	20	29
P min.	-12	-3	-5
Q	65	65	75
R	25	25	25.5
S	39	40.5	29.5
T	5	5	10
U max.	M155x3.0	M175x3.0	M250x3.0
ΦV	80	80	80
W	72	72	83
X	180	180	160
ΦY	170	187	260

※ Blank and machined draw-nuts are available. 'U' is Max. Draw nut size.

RELATED PRODUCT



HCH-A 3-Jaw Open-Center Chuck with adaptor (304mm - 381mm)



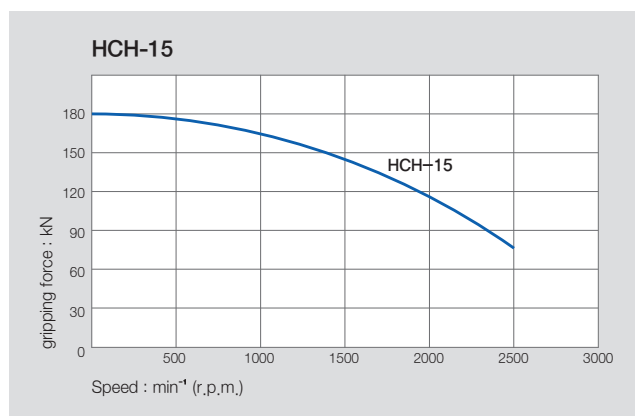
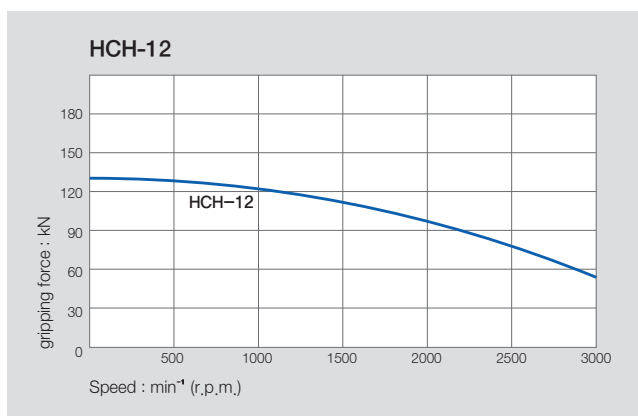
Application

Standard 3-Jaw wedge-style open center power chuck with adaptor

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

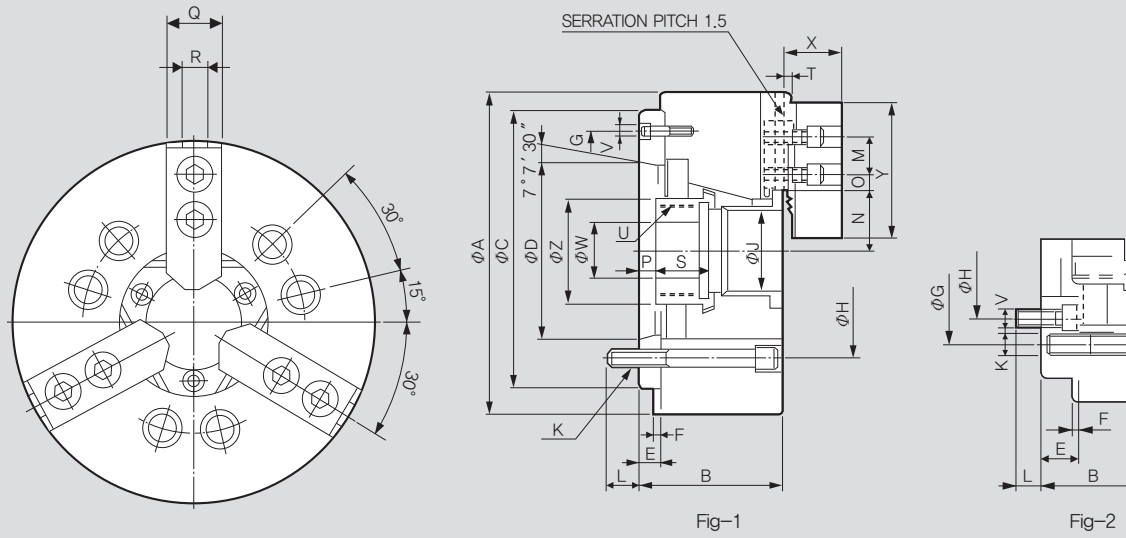
SPECIFICATIONS

	HCH-15A08	HCH-15A11
Spindle Nose	A2-8	A2-11
Thru Hole Dia. [mm]	117.5	117.5
Grip Dia. Max. [mm]	381	381
Grip Dia. Min. [mm]	30	30
Jaw Stroke Dia. [mm]	10.6	10.6
Plunger Stroke [mm]	23	23
Max. Permissible Input Force [kN(kgf)]	71(7240)	71(7240)
Max. Static Gripping Force [kN(kgf)]	180(18355)	180(18355)
Max. r.p.m. [min ⁻¹]	2500	2500
Weight [kg]	134	127
Moment of inertia [kg·m ²]	2.35	2.35
Operating Cylinder	SD-25411	SD-25411
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	2.3(23.5)	2.3(23.5)
Operating Hard Jaw	HB15A1	HB15A1
KITAGAWA® Model	B-15A8	B-15A11

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



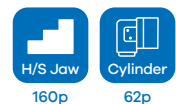
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HCH-15A08	HCH-15A11
ΦA	381	381
B	160	149
ΦC(H6)	300	300
ΦD	139.719	196.869
E	33	22
F	6	6
ΦG	235	260
ΦH	171.4	235
ΦJ	117.5	117.5
K	6-M20x130	6-M20x150
L	24	28
M	43	43
N max.	82	82
N min.	76.7	76.7
O max.	43.75	43.75
O min.	18.25	18.25
P max.	44	33
P min.	21	10
Q	62	62
R	22	22
S	39	39
T	5	5
U max.	M130x2.0	M130x2.0
V	6-M16	3-M10
ΦW	60	60
X	70	70
Y	165	165
ΦZ	139	139

※ Blank and machined draw-nuts are available. "U" is Max. Draw nut size.
※ Refer to Fig-2 for HCH-12A06, HCH-12A08.

RELATED PRODUCT



HCH-A 3-Jaw Open-Center Chuck with adaptor (304mm - 381mm)



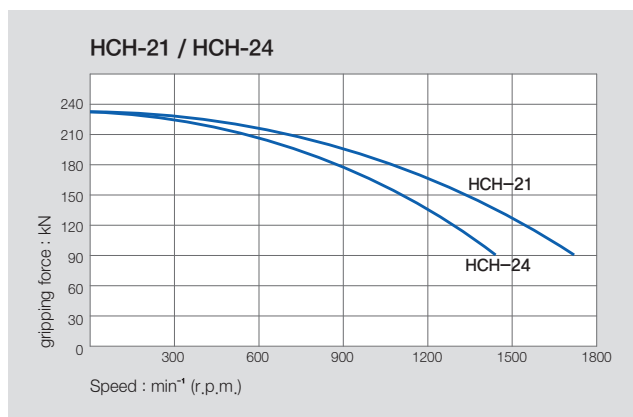
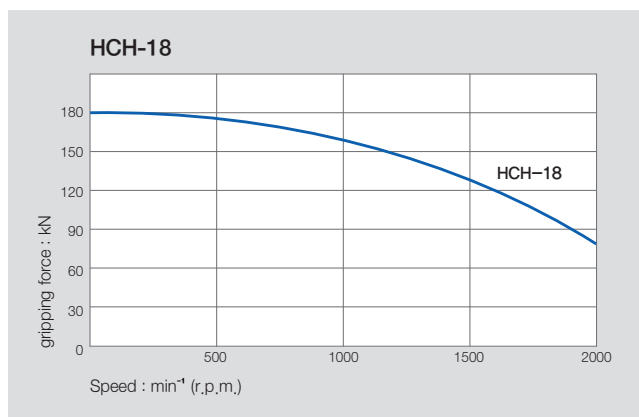
Application

Standard 3-Jaw wedge-style open center power chuck with adaptor

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

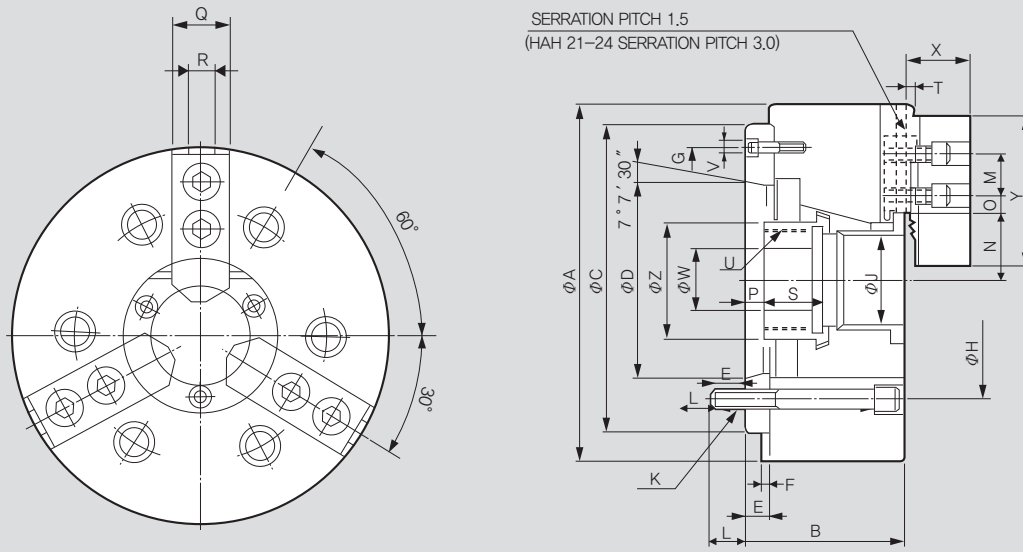
SPECIFICATIONS

	HCH-18A11	HCH-21A15	HCH-24A15
Spindle Nose	A2-11	A2-15	A2-15
Thru Hole Dia. [mm]	117.5	140	165
Grip Dia. Max. [mm]	450	530	610
Grip Dia. Min. [mm]	30	87	110
Jaw Stroke Dia. [mm]	10.6	10.6	10.6
Plunger Stroke [mm]	23	23	23
Max. Permissible Input Force [kN(kgf)]	71(7240)	90(91770)	90(9177)
Max. Static Gripping Force [kN(kgf)]	180(18355)	234(23861)	234(23861)
Max. r.p.m. [min ⁻¹]	2000	1700	1400
Weight [kg]	178	246	304
Moment of inertia [kg·m ²]	4.45	8.85	15.8
Operating Cylinder	SD-25411	SD-25411	SDL-30516
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	2.3(23.5)	3.0(30.6)	3.0(30.6)
Operating Hard Jaw	HB15A1	HB18B2	HB18B2
KITAGAWA® Model	B-18A11	B-21A15	B-24A15

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

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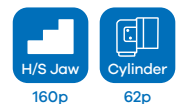
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HCH-18A11	HCH-21A15	HCH-24A15
$\varnothing A$	450	530	610
B	149	161	170
$\varnothing C(H6)$	380	380	380
$\varnothing D$	196.869	285.775	285.775
E	22	27	27
F	6	6	6
$\varnothing G$	320	330.2	330.2
$\varnothing H$	235	330.2	330.2
$\varnothing J$	117.5	140	165
K	6-M20x150	6-M22x170	6-M22x180
L	28	34	35
M	43	60	60
N max.	82	98.5	108
N min.	76.7	93.2	102.7
O max.	78.28	87.5	117.5
O min.	18.25	21.5	21.5
P max.	33	38	47
P min.	10	15	24
Q	62	65	65
R	22	25	25
S	39	39	40.5
T	5	5	5
U max.	M130x2.0	M155x3.0	M175x3.0
V	3-M10	3-M12	3-M12
$\varnothing W$	60	80	80
X	70	72	72
Y	165	180	180
$\varnothing Z$	139	170	187

※ Blank and machined draw-nuts are available. "U" is Max. Draw nut size.
※ HCH-21A15 and HCH24A15 are available with M22 or M24 mounting bolts.

RELATED PRODUCT



HCHT/HCHF 2-Jaw,4-Jaw Open-Center Chuck



Application

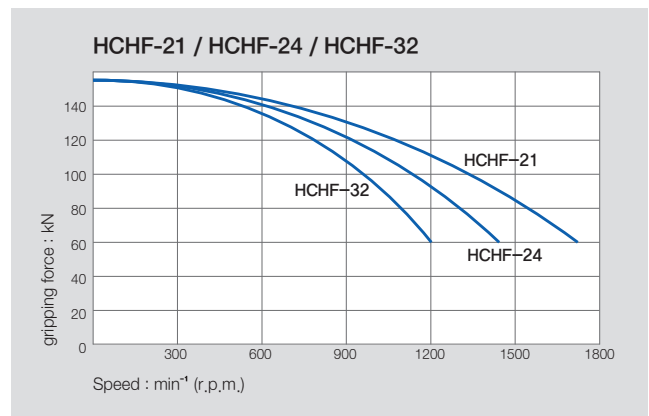
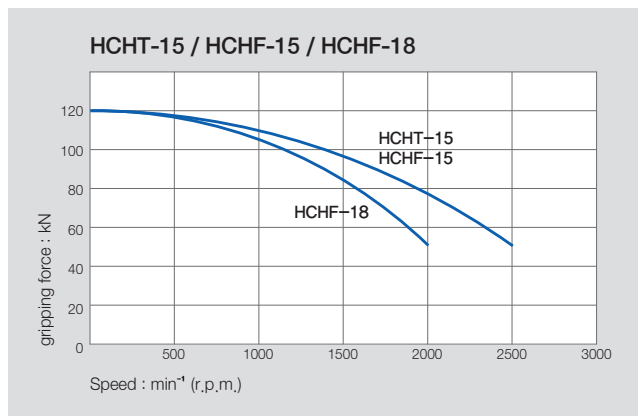
Standard 3-jaw wedge-style open-center chuck

Technical features

Gripping force transmission by wedge structure

Hardening treatment to assure greatest precision and longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

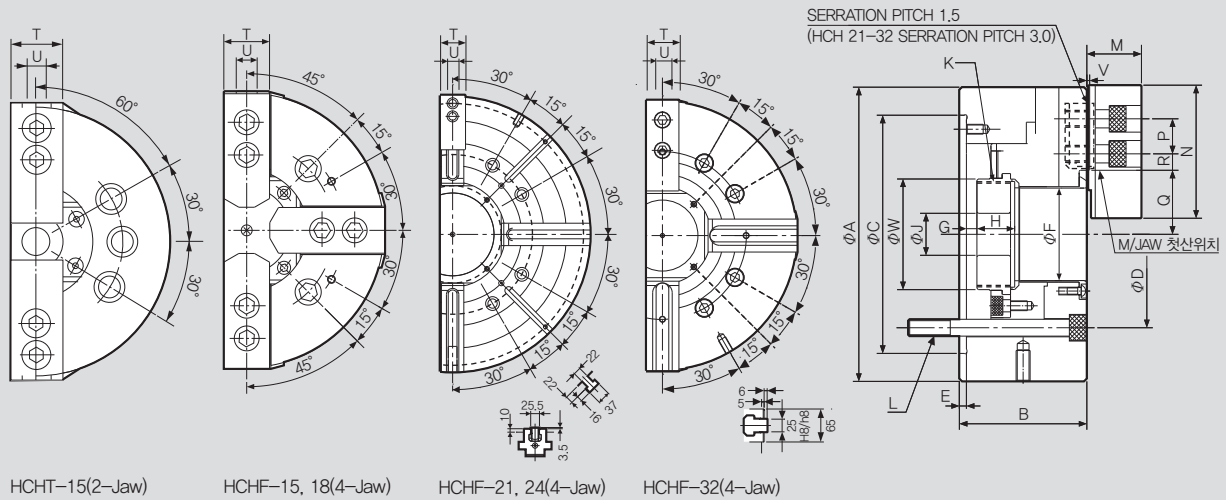
SPECIFICATIONS

	HCHT-15	HCHF-15	HCHF-18	HCHF-21	HCHF-24	HCHF-32
Thru Hole Dia. [mm]	117.5	117.5	117.5	140	165	240
Grip Dia. Max. [mm]	381	381	450	530	610	800
Grip Dia. Min. [mm]	30	30	30	87	110	160
Jaw Stroke Dia. [mm]	10.6	10.6	10.6	10.6	10.6	18
Plunger Stroke [mm]	23	23	23	23	23	34
Max. Permissible Input Force [kN(kgf)]	47(4793)	47(4793)	47(4793)	60(6117)	60(6117)	67(6795)
Max. Static Gripping Force [kN(kgf)]	120(12236)	120(12236)	120(12236)	156(15907)	156(15907)	160(16309)
Max. r.p.m. [min ⁻¹]	2500	2500	2000	1700	1400	1200
Weight [kg]	115	115	159	235	293	530
Moment of inertia [kg·m ²]	2.18	2.52	4.82	9.4	16.5	54.2
Operating Cylinder	SD-25411	SD-25411	SD-25411	SD-25411	SD-25411	SDL-30516
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	1.5(15.3)	1.5(15.3)	1.5(15.3)	1.97(20.1)	1.97(20.1)	2.2(22.4)
Operating Hard Jaw	HB15A1	HB15A1	HB15A1	HB18B2	HB18B2	HB32B2
KITAGAWA® Model	BT-15	-	-	-	-	-

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HCHT-15	HCHF-15	HCHF-18	HCHF-21	HCHF-24	HCHF-32
ΦA	381	381	450	530	610	800
B	133	133	133	140	149	150
$\Phi C(H6)$	300	300	380	380	380	520
ΦD	235	235	235	330.2	330.2	463.6
E	6	6	6	6	6	6
ΦF	117.5	117.5	117.5	140	165	240
G max.	11	11	11	11	20	29
G min.	-12	-12	-12	-12	-3	-5
H	39	39	39	39	40.5	34.5
ΦJ	60	60	60	80	80	80
K max.	M130x2.0	M130x2.0	M130x2.0	M155x3.0	M175x3.0	M250x3.0
L	6-M20x150	4-M20x130	4-M20x130	8-M22x140	8-M22x150	8-M24x130
M	70	70	70	72	72	83
N	165	165	165	180	180	160
P	43	43	43	60	60	38
Q max.	82	82	82	98.5	108	162.6
Q min.	76.7	76.7	76.7	93.2	102.7	153.6
R max.	43.75	43.75	78.25	87.5	117.5	182
R min.	18.25	18.25	18.25	21.5	21.5	20
T	62	62	62	65	65	75
U	22	22	22	25	25	25.5
V	5	5	5	5	5	10
ΦW	139	139	139	170	187	260

\※ Blank and machined draw-nuts are available. 'K' is Max. Draw nut size.

RELATED PRODUCT



HC-SE 3-Jaw Sealed Closed-center Chuck



Application

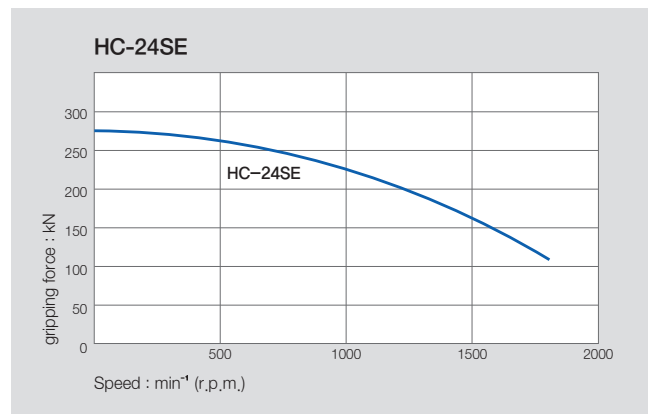
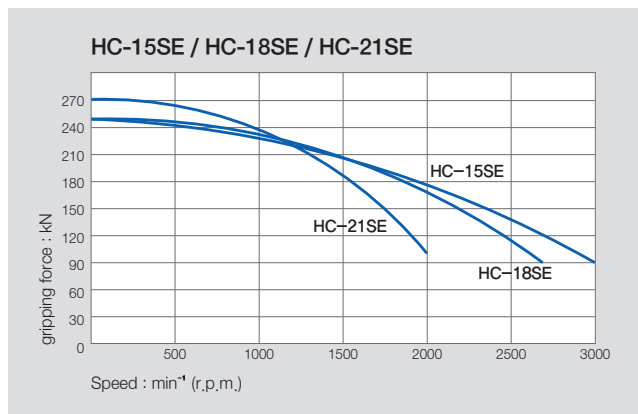
Sealed against coolant and chips

Technical features

Gripping force transmission by wedge structure

Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

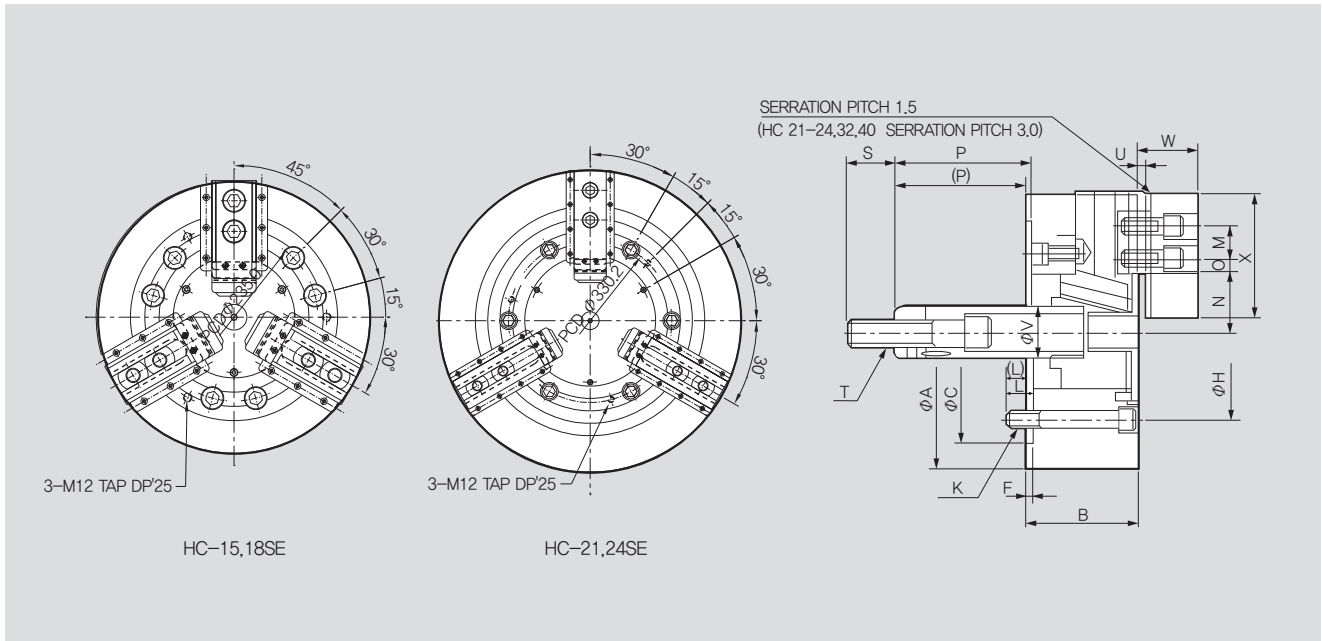
SPECIFICATIONS

	HC-15SE	HC-18SE	HC-21SE	HC-24SE
Jaw Stroke Dia. [mm]	16	16	16	16
Plunger Stroke [mm]	35	35	35	35
Grip Dia. Max [mm]	381	450	530	610
Grip Dia. Min [mm]	71	133	62	152
Max. Permissible Input Force [kN(kgf)]	82(8362)	82(8362)	82(8362)	82(8362)
Max. Static Gripping Force [kN(kgf)]	249(25391)	249(25391)	273(27838)	273(27838)
Max. r.p.m. [min ⁻¹]	3040	2710	1940	1760
Weight [kg]	96	124	180	223
Moment of inertia [kg·m ²]	1.8	2.35	4.8	6.925
Max. hydraulic Pressure [MPa(kgf/cm ²)]	3.2(32.6)	3.2(32.6)	3.2(32.6)	3.2(32.6)
Operating Cylinder Hydraulic	Y-2035R(RE)	Y-2035R(RE)	Y-2035R(RE)	Y-2035R(RE)
Operating Hard Jaw	HB15N1	HB15N1	HB18B2	HB18B2
KITAGAWA® Model	N-15	N-18	N-21	N-24

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ HCF-12 is also available with long stroke.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HC-15SE	HC-18SE	HC-21SE	HC-24SE
ΦA	381	450	530	610
B	114	114	125	125
ΦC(H6)	300	300	380	380
F	6	6	6	6
ΦH	235.0	235.0	330.2	330.2
K	6-M20x150	6-M20x115	6-M22x120	6-M22x120
L	65	30	31	31
M	43	43	60	60
N max.	77.5	108	86	125
N min.	69.5	100	78	117
O max.	48.75	48.75	93.5	93.5
O min.	23.25	23.25	27.5	27.5
P max.	104	92	97	97
P min.	69	57	62	62
Q	62	62	65	65
R	25.5	25.5	25	25
S	55	55	55	55
T	M30x3.5	M30x3.5	M30x3.5	M30x3.5
U	2	2	3	3
ΦV	60	60	60	60
W	61	61	71	71
X	135	135	180	180

RELATED PRODUCT





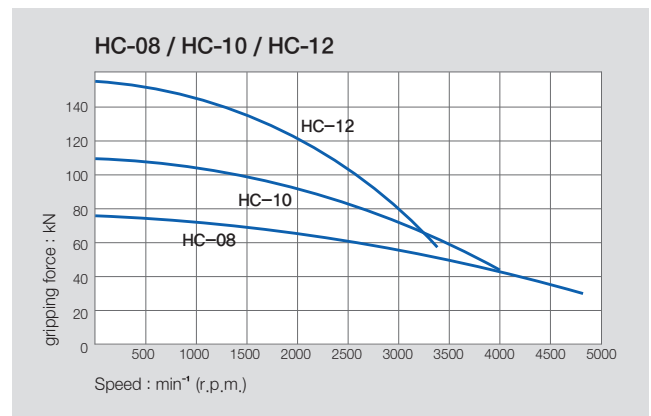
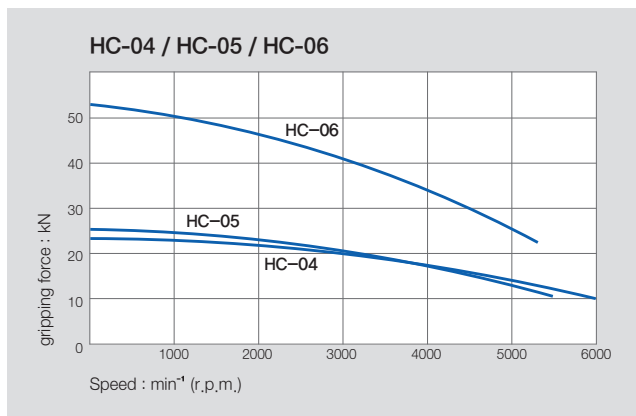
Application

Standard high-speed 3-Jaw wedge-style closed center power chuck

Technical features

Gripping force transmission by wedge structure
Hardening treatment to assure greatest precision and longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

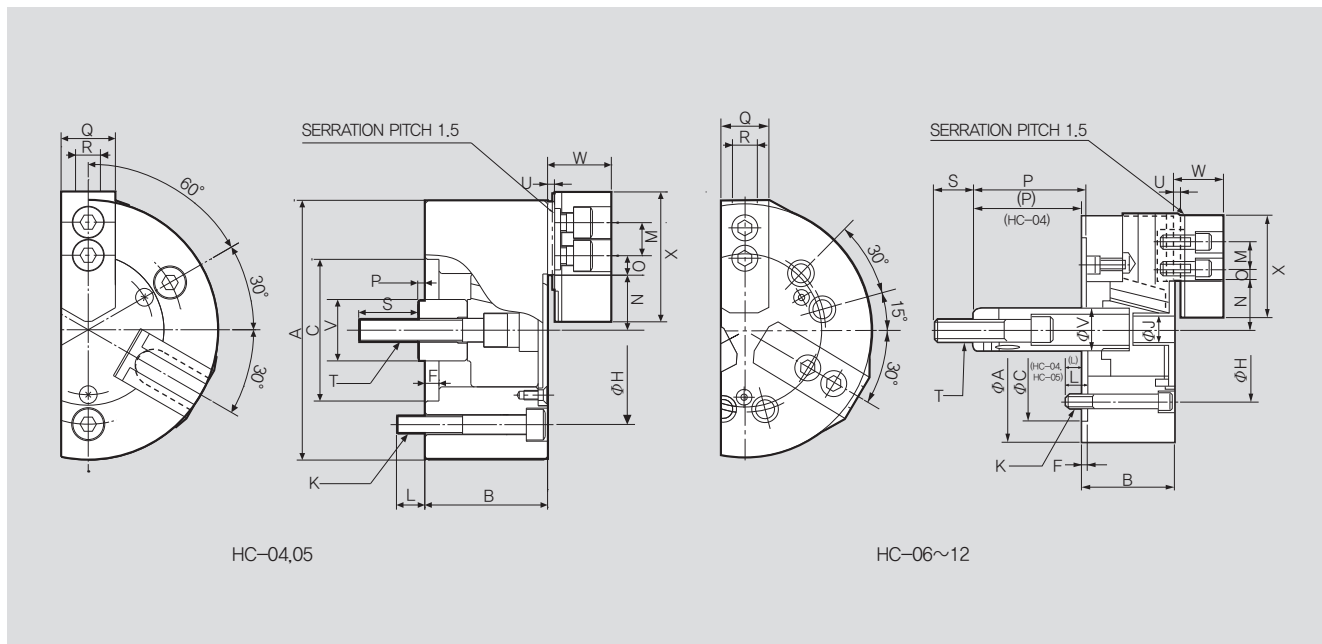
SPECIFICATIONS

	HC-04	HC-05	HC-06	HC-08	HC-10	HC-12
Jaw Stroke Dia. [mm]	6.4	6.4	8.5	8.8	8.8	10.5
Plunger Stroke [mm]	15	15	18.5	19	25	30
Grip Dia. Max. [mm]	110	135	165	210	254	304
Grip Dia. Min. [mm]	8	16	19	23	24	26
Max. Permissible Input Force [kN(kgf)]	8.2(836)	8.2(836)	18(1835)	25(2549)	29(2957)	41(4181)
Max. Static Gripping Force [kN(kgf)]	22.8(2325)	25.2(2570)	52.5(5353)	75(7648)	108(11013)	156(15907)
Max. r.p.m. [min ⁻¹]	6000	5500	5270	4760	4010	3380
Weight [kg]	4.1	6.2	13	25	37	57.3
Moment of inertia [kg·m ²]	0.008	0.014	0.042	0.135	0.3	0.72
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	2.4(24.5)	2.4(24.5)	2.6(26.5)	2.5(25.5)	2.8(28.6)	2.7(27.5)
Operating Cylinder Hydraulic	Y-0715R(RE)	Y-0715R(RE)	Y-1020R(RE)	Y-1225R(RE)	Y-1225R(RE)	Y-1530R(RE)
Operating Cylinder Pneumatic	AY-1315R	AY-1315R	AY-1720R	AY-2225R	AY-2225R	AY-2730R
Operating Hard Jaw	HB04N1	HB04N1	HB06A1	HB08A1	HB10A1	HB12B1
KITAGAWA® Model	N-04	N-05	N-06	N-08	N-10	N-12

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

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※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HC-04	HC-05	HC-06	HC-08	HC-10	HC-12
ΦA	110	135	165	210	254	304
B	52	55	74	85	89	106
ΦC(H6)	60	80	140	170	220	220
F	6	7	5	5	5	6
ΦH	80	100	104.8	133.4	171.4	171.4
ΦJ	-	-	21	25	34	34
K	3-M8x55	3-M8x60	6-M10x85	6-M12x100	6-M16x105	6-M16x120
L	12	14	24	30	38	38
M	14	19	20	25	30	30
N max.	23.3	30.4	37.8	46.3	51.1	61
N min.	20.1	27.2	33.55	41.9	46.7	55.75
O max.	11.25	11.25	13.75	22.25	30.75	48.75
O min.	8.25	6.75	7.75	11.75	11.25	12.75
P max.	18	6	100	111	125	163
P min.	3	-9	81.5	92	100	133
Q	23	23	31	35	40	49
R	10	10	12	14	16	18
S	25	35	36	36	38	36
T	M10x1.5	M12x1.75	M16x2.0	M20x2.5	M20x2.5	M24x3.0(단) / M20x2.5(장)
U	3	3	4	5	5	5
ΦV	26	28	34	38	45	50
W	27	29	34.5	41.5	46	53.5
X	54	62	72	95	110	129

※ The numbers in parentheses in columns P and T are also available upon request.

RELATED PRODUCT





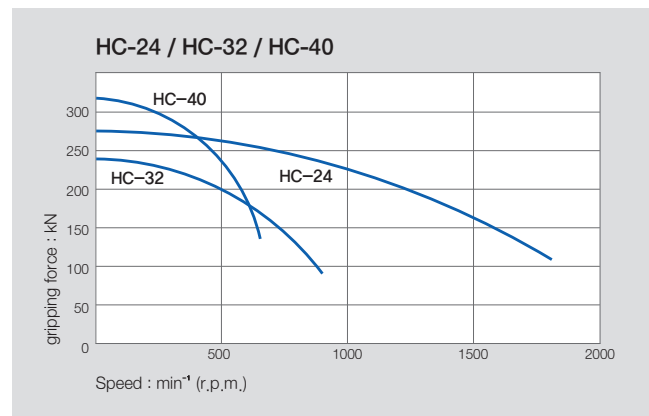
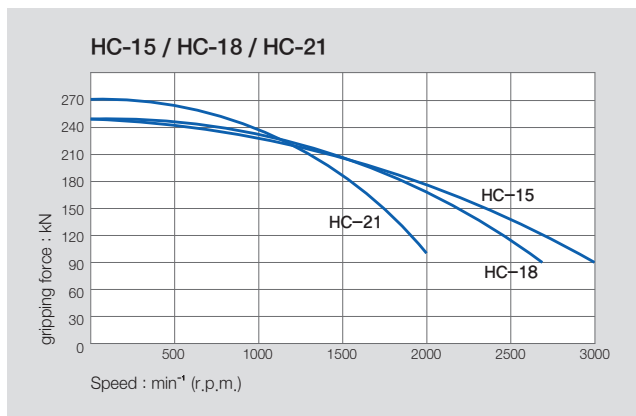
Application

Standard high-speed 3-Jaw wedge-style closed center power chuck

Technical features

Gripping force transmission by wedge structure
Hardening treatment to assure greatest precision and longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

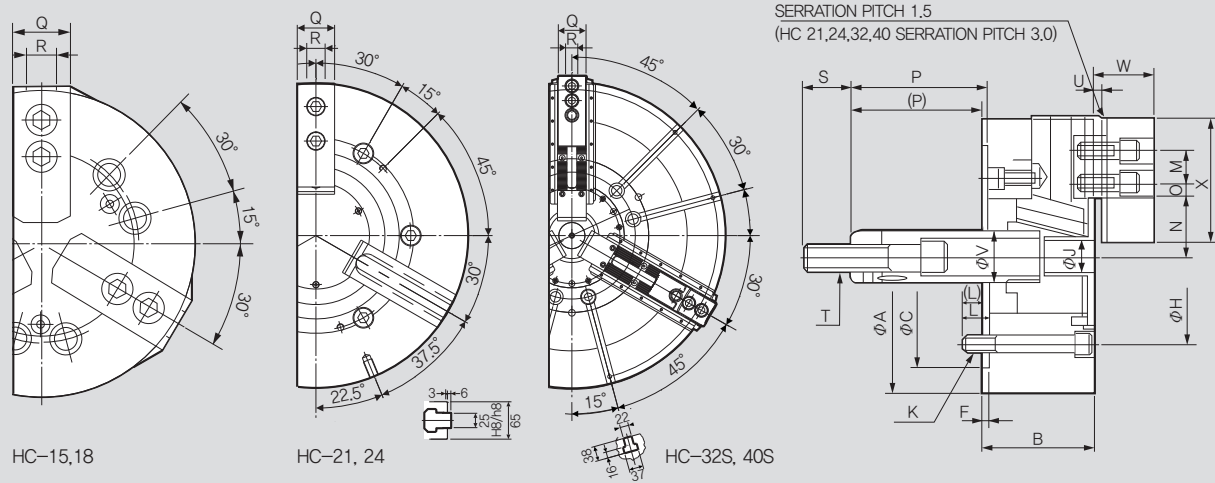
SPECIFICATIONS

	HC-15	HC-18	HC-21	HC-24	HC-32S	HC-40S
Jaw Stroke Dia. [mm]	16	16	16	16	20	46
Plunger Stroke [mm]	35	35	35	35	38	57
Grip Dia. Max. [mm]	381	450	530	610	800	1000
Grip Dia. Min. [mm]	71	133	62	152	200	330
Max. Permissible Input Force [kN(kgf)]	82(8362)	82(8362)	82(8362)	82(8362)	100(12236)	180(18256)
Max. Static Gripping Force [kN(kgf)]	249(25391)	249(25391)	273(27838)	273(27838)	240(21805)	320(32454)
Max. r.p.m. [min ⁻¹]	3040	2710	1940	1760	800	630
Weight [kg]	96	124	180	223	350	600
Moment of inertia [kg·m ²]	1.85	3.2	7.1	12.2	38.5	89
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	3.2(32.6)	3.2(32.6)	3.2(32.6)	3.2(32.6)	3.99(40.8)	3.99(40.8)
Operating Cylinder Hydraulic	Y-2035R(RE)	Y-2035R(RE)	Y-2035R(RE)	Y-2035R(RE)	Y-2050R(RE)	Y-2560RE
Operating Hard Jaw	HB15N1	HB15N1	HB18B2	HB18B2	HB32SB2	HB40SB2
KITAGAWA® Model	N-15	N-18	N-21	N-24	-	-

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co, Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HC-15	HC-18	HC-21	HC-24	HC-32S	HC-40S
ΦA	381	450	530	610	800	1000
B	114	114	125	125	150	180
$\Phi C(H6)$	300	300	380	380	380	520
F	6	6	6	6	6	8
ΦH	235	235	330.2	330.2	330.2	463.6
ΦJ	27	27	27	27	65	50
K	6-M20X150	6-M20X115	6-M22X120	6-M22X120	6-M24X120	6-M24X140
L	65	30	31	31	39	32
M	43	43	60	60	76.2	120
N max.	77.5	108	86	125	117.3	187.3
N min.	69.5	100	78	117	102.3	164.3
O max.	48.75	48.75	93.5	93.5	234.1	184
O min.	23.25	23.25	27.5	27.5	36	34
P max.	104	92	97	97	38	35
P min.	69	57	62	62	0	-22
Q	62	62	65	65	75	110
R	25.5	25.5	25	25	25.5	30
S	55	55	55	55	70	65
T	M30x3.5	M30x3.5	M30x3.5	M30x3.5	M30x3.5	M36x4.0
U	2	2	3	3	8	-4
ΦV	60	60	60	60	55	70
W	60	61	71	71	81	106
X	135	135	180	180	185	270

RELATED PRODUCT



HC (groove type)

3-Jaw Hydraulic / 4-Jaw Independent Chuck (800mm -1600mm)



Application

Standard high-speed 3-Jaw wedge-style closed center power chuck

Technical features

3-Jaw Power Chuck (HC-32G,HC-40G)

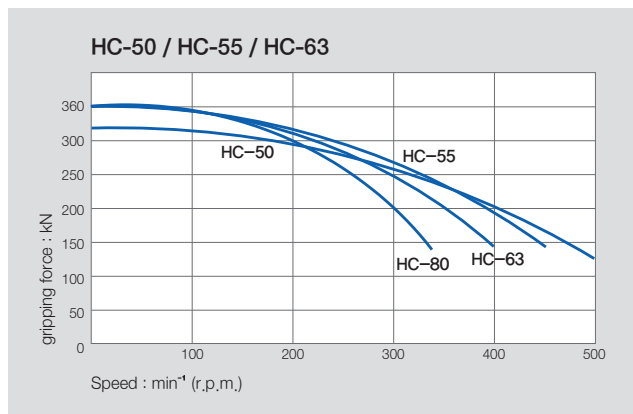
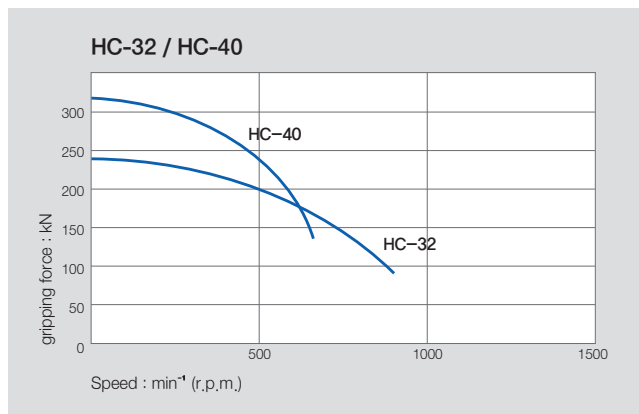
4-Jaw independent closed-center power chuck

(HC-50G,HC-55G,HC-63G)

Gripping force transmission by wedge structure

Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

	HC-32G	HC-40G	HC-50G	HC-55G	HC-63G
Jaw Stroke Dia. [mm]	20	46	46	48	48
Manual Setting	30	30	30	40	40
Plunger Stroke [mm]	38	57	57	60	60
Grip Dia. Max [mm]	800	1000	1250	1400	1600
Grip Dia. Min [mm]	200	330	330	460	460
Max. Permissible Input Force [kN(kgf)]	100 (12170)	180 (18256)	180 (18256)	200 (20394)	200 (20394)
Max. Static Gripping Force [kN(kgf)]	240 (21805)	320 (32454)	320 (32454)	360 (36710)	360 (36710)
Max. r.p.m. [min⁻¹]	800	630	500	450	400
Weight [kg]	350	600	1000	1350	1850
Moment of inertia [kg·m²]	15.25	43.625	55	70	125
Operating Cylinder	Y-2050RE	Y-2560RE	Y-2560RE	Y-2560RE	Y-2560RE
Max. Hydraulic Pressure [MPa(kgf/cm²)]	3.99(40.8)	3.99(40.8)	3.99(40.8)	4.5(46)	4.5(46)
Operating Hard Jaw	HB32GB	HB40GB	HB40GB	HB40GB	HB40GB

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



	HC-32G	HC-40G	HC-50G	HC-55G	HC-63G
ΦA	800	1000	1250	1400	1600
B	150	180	180	220	220
ΦC(H6)	380	520	520	720	720
F	6	8	8	8	8
G	442.5	509.6	623.9	710.6	786.8
ΦH	330.2	463.6	463.6	647.6	647.6
K	M24X120L	M24X140L	M24X110L	M24X160L	M30X160L
L	39	32	32	36	46
M	76.2	76.2	76.2	76.2	76.2
N max.	117.6	217.3	217.3	250	250
N min.	102.7	194.3	194.3	226	226
O max.	196.9	91.1	205.4	259.4	335.6
O min.	44.5	14.9	14.9	68.9	68.9
P max.	38	60	60	82	82
P min.	0	3	3	22	22
Q	75	110	110	110	110
S	70	65	65	65	65
S1	35	35	35	35	35
T	M30x3.5	M36x4.0	M36x4.0	M36x4.0	M36x4.0
ΦV	55	70	70	70	70
W	83	106	106	104	104
X	165	270	270	270	270
a1	12.7	30	30	30	30
a2	8	-4	-4	-6	-6
a3	3	4	4	4	4
a4	75	85	85	110	110

RELATED PRODUCT



HC-A

3-Jaw Closed-Center Chuck with Adaptor (165mm - 304mm)



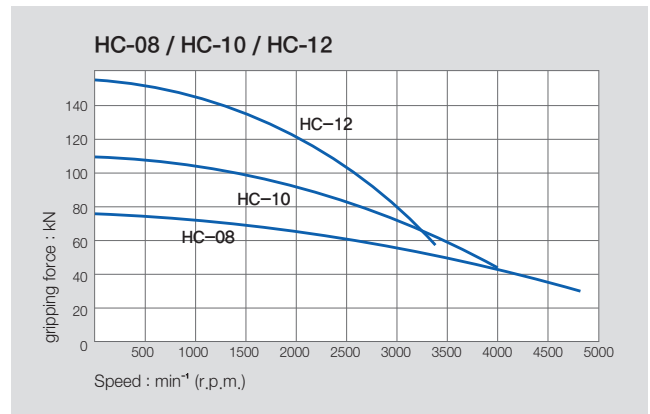
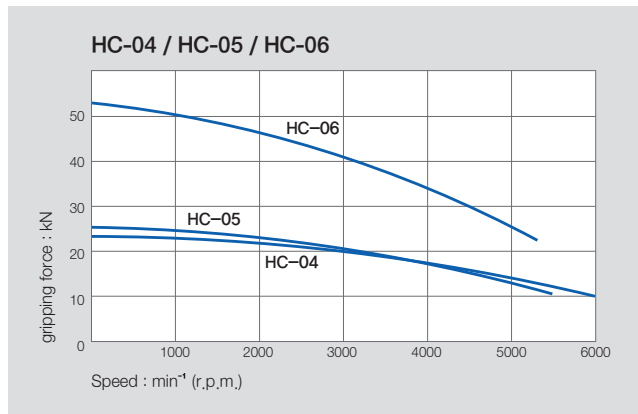
Application

Standard high-speed 3-Jaw wedge-style closed center power chuck with adaptor

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

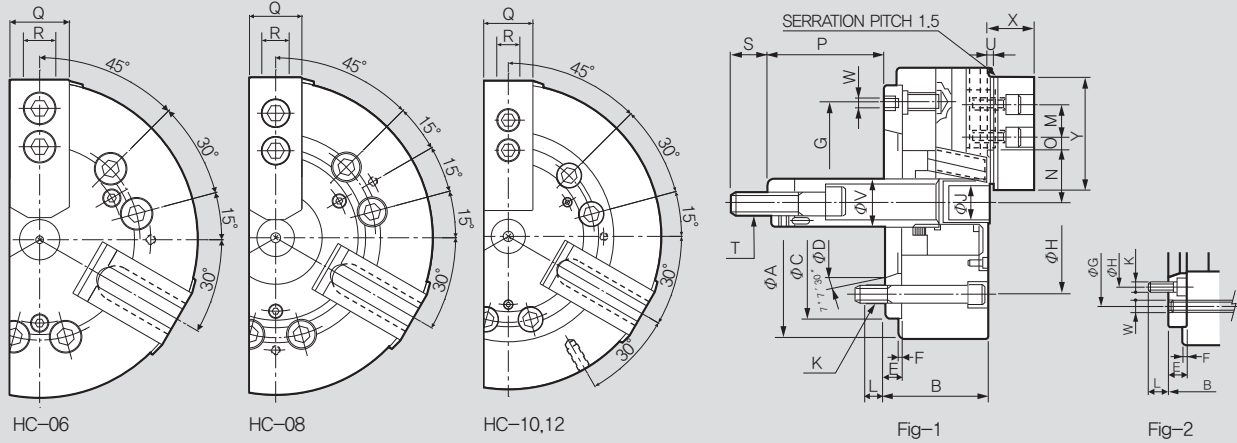
	HC-06A05	HC-08A06	HC-10A06	HC-10A08	HC-12A06	HC-12A08
Spindle Nose No.	A2-5	A2-6	A2-6	A2-8	A2-6	A2-8
Jaw Stroke Dia. [mm]	8.5	8.8	8.8	8.8	10.5	10.5
Plunger Stroke [mm]	18.5	19	25	25	30	30
Grip Dia. Max. [mm]	165	210	254	254	304	304
Grip Dia. Min. [mm]	19	23	24	224	26	26
Max. Permissible Input Force [kN(kgf)]	18(1835)	25(2549)	29(2957)	29(2957)	41(4181)	41(4181)
Max. Static Gripping Force [kN(kgf)]	52.5(5353)	75(7648)	108(11013)	108(11013)	156(15907)	156(15907)
Max. r.p.m. [min⁻¹]	5270	4760	4010	4010	3380	3380
Weight [kg]	14	27	40	40	67	66
Moment of inertia [kg·m²]	0.042	0.135	0.3	0.3	1.85	1.85
Max. Hydraulic Pressure [MPa(kgf/cm²)]	2.6(26.5)	2.5(25.5)	2.8(28.6)	2.8(28.6)	2.7(27.5)	2.7(27.5)
Operating Cylinder Hydraulic	Y-1020R(RE)	Y-1225R(RE)	Y-1225R(RE)	Y-1225R(RE)	Y-1530R(RE)	Y-1530R(RE)
Operating Cylinder Pneumatic	AY-1720R	AY-2225R	AY-2225R	AY-2225R	AY-2730R	AY-2730R
Operating Hard Jaw	HB06A1	HB08A1	HB10A1	HB10A1	HB12A1	HB12A1
KITAGAWA® Model	N-06A05	N-08A06	N-10A06	N-10A08	N-12A06	N-12A08

※ Refer to Fig-2 for HC-10A06 and HC-12A06.

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HC-06A05	HC-08A06	HC-10A06	HC-10A08	HC-12A06	HC-12A08
ΦA	165	210	254	254	304	304
B	84	97	109	102	125	118
$\Phi C(H6)$	140	170	220	220	220	220
ΦD	82.563	106.375	106.375	139.719	106.375	139.719
E	15	17	25	18	25	18
F	5	5	5	5	6	6
ΦG	116	150	171.4	190	171.4	190
ΦH	104.8	133.4	133.4	171.4	133.4	171.4
ΦJ	21	25	34	34	34	34
K	6-M10	6-M12	6-M16	6-M16	6-M16	6-M16
L	14	18	18.5	25	18	25
M	20	25	30	30	30	30
N max.	37.8	46.3	51.1	51.1	61	61
N min.	33.55	41.9	46.7	46.7	55.75	55.75
O max.	13.75	22.25	30.75	30.75	48.75	48.75
O min.	7.75	11.75	11.25	11.25	12.75	12.75
P max.	85	92(108)	94(133)	101(140)	117(138)	124(145)
P min.	66.5	73(89)	69(108)	76(115)	87(108)	94(115)
Q	31	35	40	40	49	49
R	12	14	16	16	18	18
S	35.8	36	38	38	36	36
T	M16x2.0	M20x2.5	M20x2.5	M20x2.5	M24x3.0(M20x2.5)	M24x3.0(M20x2.5)
U	4	5	5	5	5	5
ΦV	34	38	45	45	50	50
W	3-M6	3-M6	6-M16	3-M8	6-M16	3-M8
X	34.5	41.5	46	46	53.5	53.5

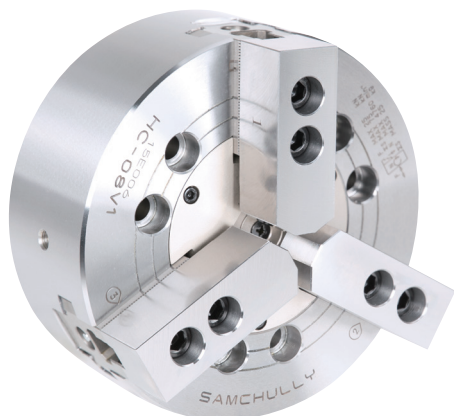
※ Blank and machined draw-nuts are available. 'U' is Max. Draw nut size.

RELATED PRODUCT



HC-A

3-Jaw Closed-Center Chuck with Adaptor (381mm - 610mm)



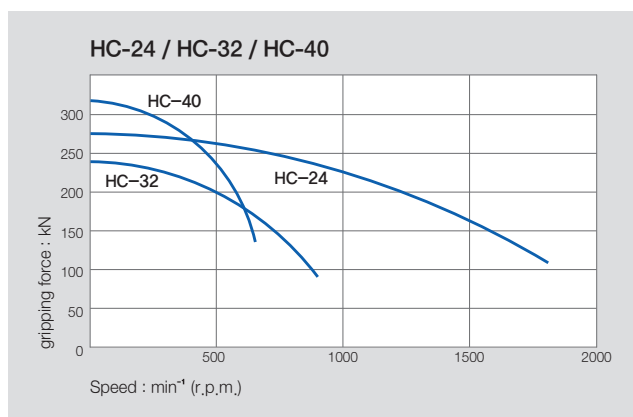
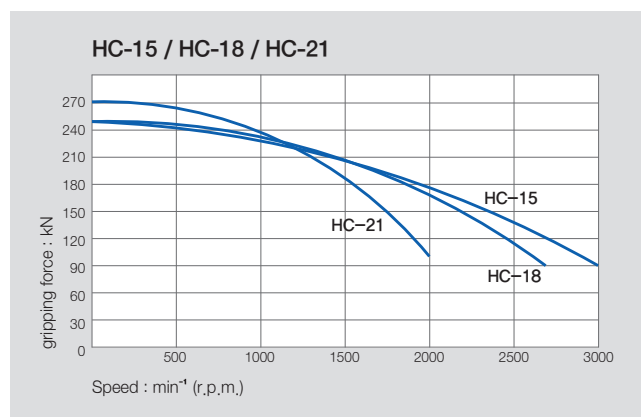
Application

Standard high-speed 3-Jaw wedge-style closed center power chuck with adaptor

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

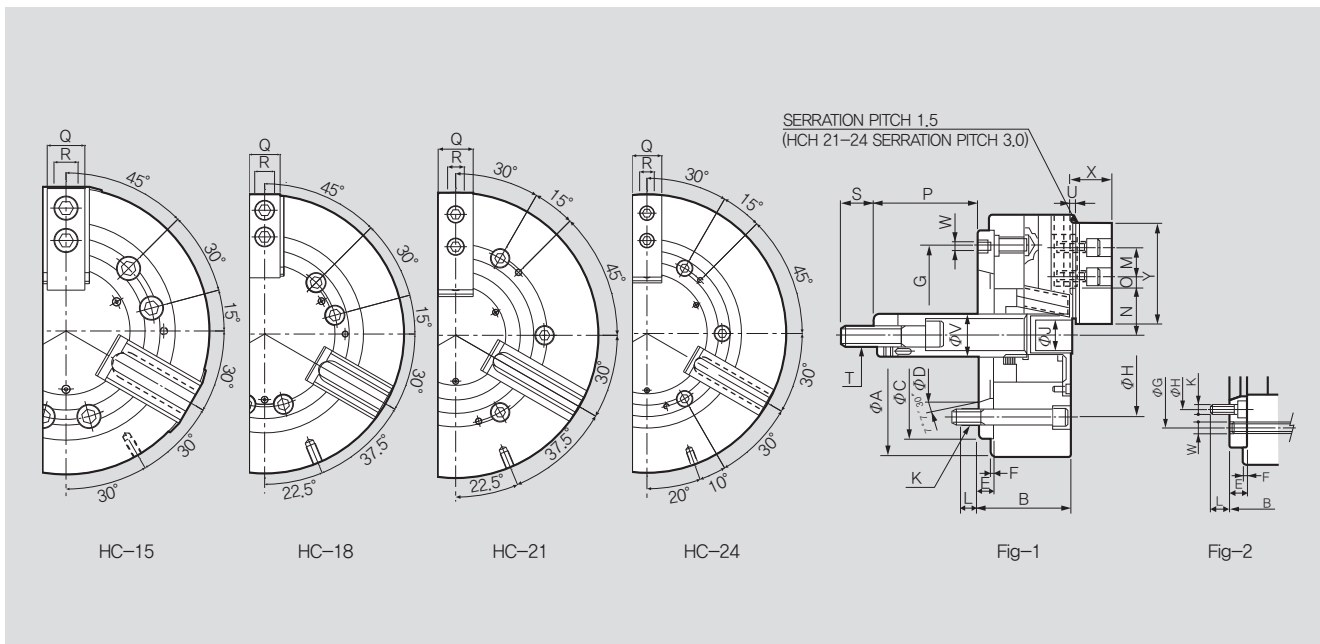
	HC-15A08	HC-15A11	HC-18A08	HC-18A11	HC-21A11	HC-21A15	HC-24A11	HC-24A15
Spindle Nose No.	A2-8	A2-11	A2-8	A2-11	A2-11	A2-15	A2-11	A2-15
Jaw Stroke Dia. [mm]	16	16	16	16	16	16	16	16
Plunger Stroke [mm]	35	35	35	35	35	35	35	35
Grip Dia. Max. [mm]	381	381	450	450	530	530	610	610
Grip Dia. Min. [mm]	71	71	133	133	62	62	152	152
Max. Permissible Input Force [kN(kgf)]	82(8362)	82(8362)	82(8362)	82(8362)	82(8362)	82(8362)	82(8362)	82(8362)
Max. Static Gripping Force [kN(kgf)]	249(25391)	249(25391)	249(25391)	249(25391)	273(27838)	273(27838)	273(27838)	273(27838)
Max. r.p.m. [min⁻¹]	3040	3040	2710	2710	1940	1940	1760	1760
Weight [kg]	105	103	134	131	198	190	241	234
Moment of inertia [kg·m²]	1.85	1.85	3.2	3.2	7.1	7.1	12.2	12.2
Max. Hydraulic Pressure [MPa(kgf/cm²)]	3.2(32.6)	3.2(32.6)	3.2(32.6)	3.2(32.6)	3.2(32.6)	3.2(32.6)	3.2(32.6)	3.2(32.6)
Operating Cylinder Hydraulic	Y-2035R(RE)	Y-2035R(RE)	Y-2035R(RE)	Y-2035R(RE)	Y-2035R(RE)	Y-2035R(RE)	Y-2035R(RE)	Y-2035R(RE)
Operating Hard Jaw	HB15N1	HB15N1	HB15N1	HB15N1	HB18B2	HB18B2	HB18B2	HB18B2
KITAGAWA® Model	N-15A08	N-15A08	N-18A11	N-18A11	N-21A11	N-21A15	N-24A11	N-24A15

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Refer to Fig-2 for HC-15A08, HC-18A08, HC-21A11, HC-24A11.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HC-15A08	HC-15A11	HC-18A08	HC-18A11	HC-21A11	HC-21A15	HC-24A11	HC-24A15
ΦA	381	381	450	450	530	530	610	610
B	141	130	141	130	161	146	161	146
$\Phi C(H6)$	300	300	300	300	380	380	380	380
$\varnothing D$	139.719	196.869	139.719	196.869	196.869	285.775	196.869	285.775
E	33	22	33	22	42	27	42	27
F	6	6	6	6	6	6	6	6
$\varnothing G$	235	260	235	260	330.2	330.2	330.2	330.2
$\varnothing H$	171.4	235	171.4	235	235	330.2	235	330.2
$\varnothing J$	27	27	27	27	27	27	27	27
K	6-M20	6-M20	6-M20	6-M20	6-M22	6-M22	6-M22	6-M22
L	24	33	24	33	29	34	29	34
M	43	43	43	43	60	60	60	60
N max.	77.5	77.5	108	108	86	86	125	125
N min.	69.5	69.5	100	100	78	78	117	117
O max.	48.75	48.75	48.75	48.75	93.5	93.5	93.5	93.5
O min.	23.25	23.25	23.25	23.25	27.5	27.5	27.5	27.5
P max.	71	82	59	70	55	70	55	70
P min.	36	47	24	35	20	35	20	35
Q	50	50	50	50	65	65	65	65
R	25.5	25.5	25.5	25.5	25	25	25	25
S	55	55	55	55	55	55	55	55
T	M30x3.5	M30x3.5	M30x3.5	M30x3.5	M30x3.5	M30x3.5	M30x3.5	M30x3.5
U	2	2	2	2	3	3	3	3
ΦV	60	60	60	60	60	60	60	60
W	6-M20	3-M10	6-M20	3-M10	6-M22	3-M12	6-M22	6-M12
X	60	60	61	61	71	71	70	70

RELATED PRODUCT



HCT 2-Jaw Closed-Center Chuck



Application

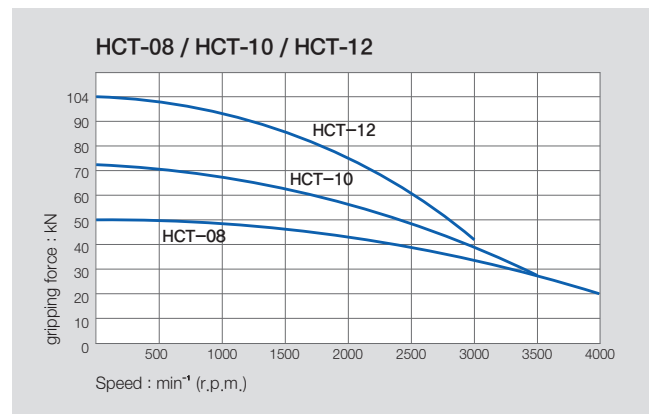
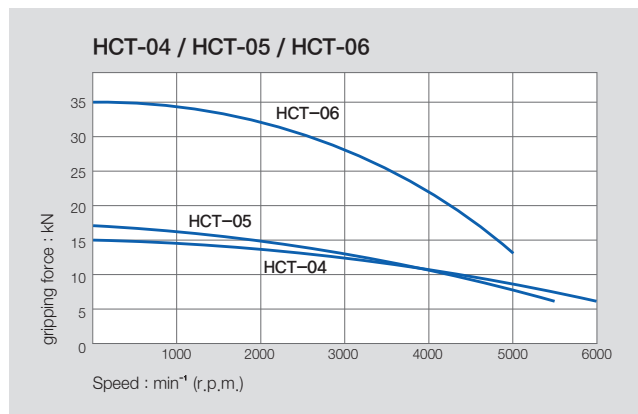
High-speed 2-Jaw wedge-style closed center power chuck

Technical features

Gripping force transmission by wedge structure

Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

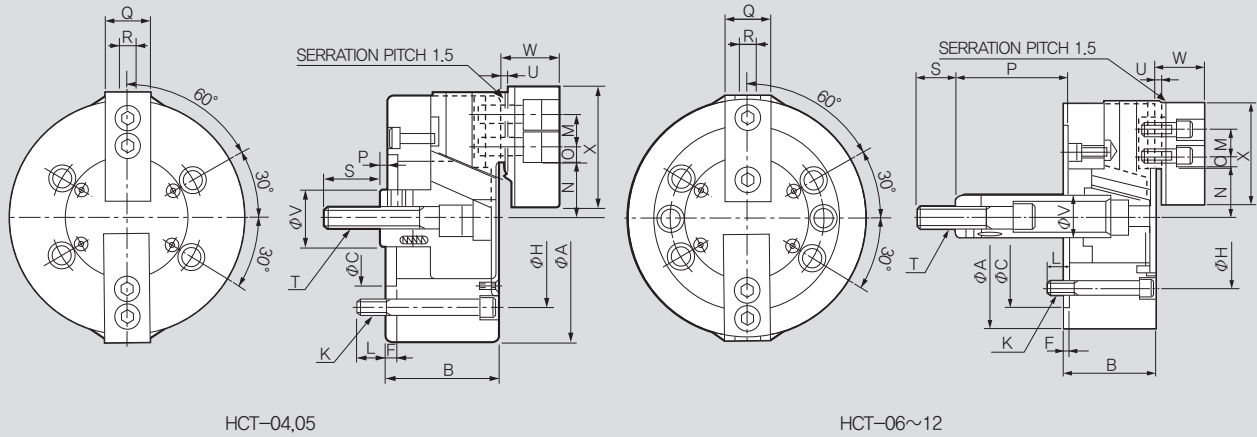
SPECIFICATIONS

	HCT-04	HCT-05	HCT-06	HCT-08	HCT-10	HCT-12
Jaw Stroke Dia. [mm]	6.4	6.4	8.5	8.8	8.8	10.5
Plunger Stroke [mm]	14	14	18.5	19	25	30
Grip Dia. Max [mm]	110	135	165	210	254	310
Grip Dia. Min [mm]	5	16	14	17	22	22
Max. Permissible Input Force [kN(kgf)]	5.3(540)	5.3(540)	12(1224)	16.5(1683)	19.5(1988)	27.5(2804)
Max. Static Gripping Force [kN(kgf)]	15.2(1550)	16.9(1713)	35(3569)	50(5099)	72(7342)	104(10605)
Max. r.p.m. [min⁻¹]	6000	5500	5500	4000	3500	3000
Weight [kg]	3.8	5.8	11.4	22	31.6	55
Moment of inertia [kg·m²]	0.007	0.013	0.04	0.13	0.293	0.68
Max. Hydraulic Pressure [MPa(kgf/cm²)]	1.68(17.1)	1.68(17.1)	1.7(17.3)	1.6(16.3)	1.9(19.4)	1.8(18.4)
Operating Cylinder	Y-0715R	Y-0715R	Y-1020R	Y-1225R	Y-1225R	Y-1530R
KITAGAWA® Model	NT-04	NT-05	NT-06	NT-08	NT-10	NT-12

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HCT-04	HCT-05	HCT-06	HCT-08	HCT-10	HCT-12
ΦA	110	135	165	210	254	304
B	52	55	74	85	89	106
ΦC(H6)	60	80	140	170	220	220
F	6	7	5	5	5	6
ΦH	80	100	104.8	133.4	171.4	171.4
K	4-M8x55	4-M8x60	6-M10x70	6-M12x85	6-M16x85	6-M16x100
L	12	14	14	20	18	18
M	14	19	20	25	30	30
N max.	23.3	30.4	37.8	46.3	51.1	61
N min.	20.1	27.2	33.55	41.9	46.7	55.75
O max.	11.25	11.25	13.75	22.25	30.75	48.75
O min.	8.25	6.75	7.75	11.75	11.25	12.75
P max.	17	6	100	125	158	163
P min.	3	-8	81.5	106	133	133
Q	23	23	31	35	40	49
R	10	10	12	14	16	18
S	25	35	36	36	36	36
T	M10x1.5	M12x1.75	M16x2.0	M20x2.5	M20x2.5	M20x2.5
U	3	3	4	5	5	5
ΦV	26	28	34	38	45	50
W	27	29	35	42	46	53.5
X	54	62	72	95	110	129

RELATED PRODUCT



HCF 4-Jaw Closed-Center Chuck



Application

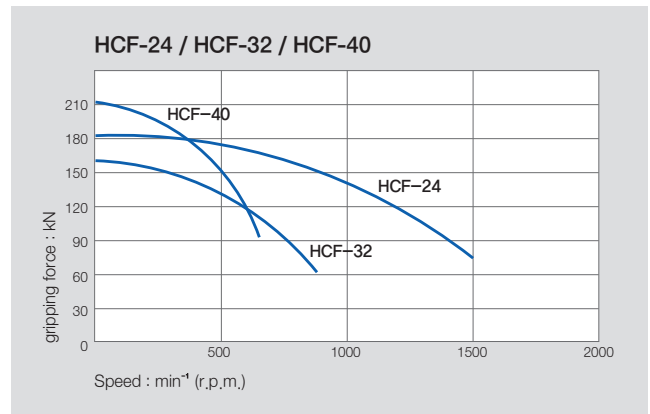
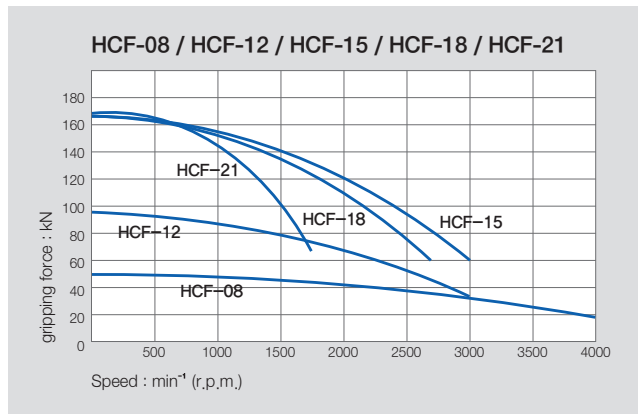
High-speed 4-Jaw wedge-style closed center power chuck

Technical features

Gripping force transmission by wedge structure

Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

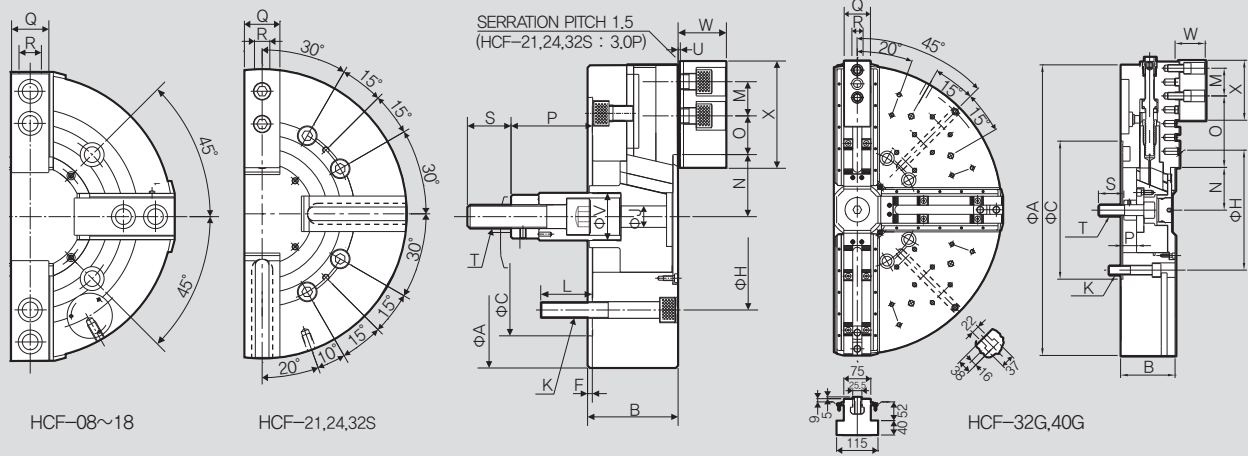
SPECIFICATIONS

	HCF-08	HCF-12	HCF-15	HCF-18	HCF-21	HCF-24	HCF-32	HCF-40
Jaw Stroke Dia. [mm]	8.8	10.5	16	16	16	16	20	46
Plunger Stroke [mm]	19	30	35	35	35	35	38	57
Grip Dia. Max [mm]	210	304	381	450	530	610	800	1000
Grip Dia. Min [mm]	17	26	71	133	62	152	85	150
Max. Permissible Input Force [kN(kgf)]	16.5(1638)	27.5(2804)	54.6(5575)	54.6(5575)	54.6(5575)	54.6(5575)	88(8925)	120(12245)
Max. Static Gripping Force [kN(kgf)]	50(5099)	104(10605)	165.8(16927)	165.8(16927)	183(18550)	183(18550)	156(15821)	213(21769)
Max. r.p.m. [min⁻¹]	4000	3000	3040	2710	1700	1500	800	630
Weight [kg]	22	55	98	124	180	223	350	620
Moment of inertia [kg·m²]	0.14	0.76	2.02	3.57	7.6	12.9	41.2	94
Max. Hydraulic Pressure [MPa(kgf/cm²)]	1.6(16.3)	1.8(18.4)	2.13(21.7)	2.13(21.7)	2.13(21.7)	2.13(21.7)	3(30.6)	2.7(27.2)
Operating Cylinder	Y-1225R(RE)	Y-1530R(RE)	Y-2035R(RE)	Y-2035R(RE)	Y-2035R(RE)	Y-2035R(RE)	Y-2050RE	Y-2560RE
Operating Hard Jaw	HB08A1	HB12B1	HB15N1	HB15N1	HB18B2	HB18B2	HB32SB2	HB40SB2

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ HCF-12 is also available with long stroke.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

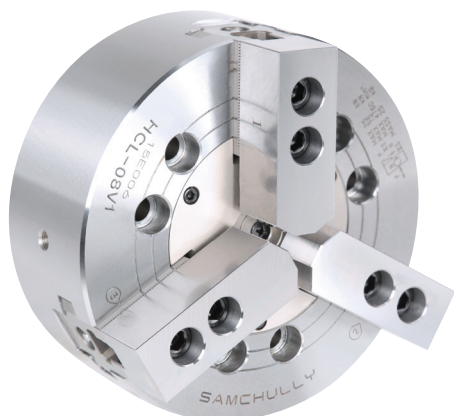
	HCF-08	HCF-12	HCF-15	HCF-18	HCF-21	HCF-24	HCF-32S	HCF-32G	HCF-40G
ΦA	210	304	381	450	530	610	800	800	1000
B	85	106	114	114	125	125	150	150	180
ΦC(H6)	170	220	300	300	380	380	380	380	520
F	5	6	6	6	6	6	6	6	8
ΦH	150	171.4	235	235	330.2	330.2	330.2	330.2	463.6
ΦJ	25	34	27	27	27	27	65	65	32
K	6-M12	4-M16	4-M20	4-M20	8-M22	8-M22	8-M24x160L	8-M24x120L	8-M24X120L
L	30	38	65	30	31	31	41	39	32
M	25	30	43	43	60	60	76.2	76.2	76.2
N max.	46.3	61	78	108	86	125	99.4	117.6	217.3
N min.	41.9	55.7	70	100	78	117	89.4	107.7	194.3
O max.	22.25	48.75	48.75	48.75	93.5	93.5	212.5	196.9	91.1
O min.	11.75	12.75	23.25	23.25	27.5	27.5	32.5	44.5	14.9
P max.	125	163	104	87	97	97	3	3	60
P min.	106	133	69	52	62	62	-35	-35	0
Q	35	49	50	50	65	65	75	75	110
R	14	18	26	25.5	25	25	25.5	25.5	30
S	36	36	55	59	55	55	73	70	65
T	M20x2.5	M20x2.5	M30x3.5	M30x3.5	M30x3.5	M30x3.5	M36x4	M30x3.5	M36x4.0
U	5	5	2	2	3	3	9	5	4
ΦV	38	50	60	60	57	60	100	55	70
W	42	53.5	61	61	71	70	82	84	106
X	95	129	135	135	180	180	185	165	270

※ Blank and machined draw-nuts are available. Groove type is standard model on HCF-32G and HCF-40G.

※ HCF-21 and HCF-24 are available with M22 to M24 mounting bolts.

RELATED PRODUCT





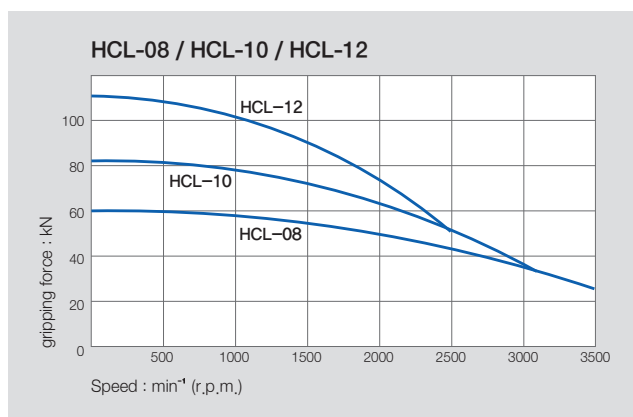
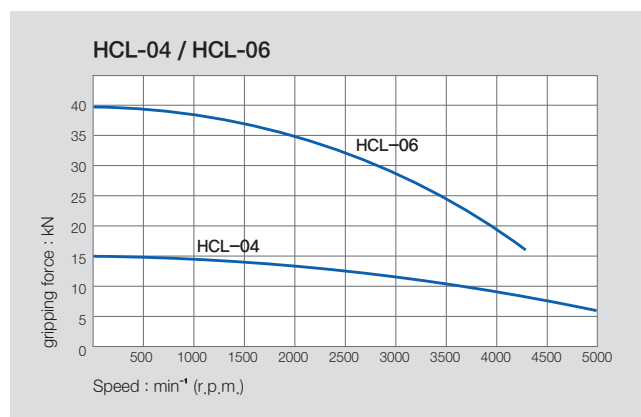
Application

High-speed 3-Jaw wedge-style closed center power chuck (long stroke)

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

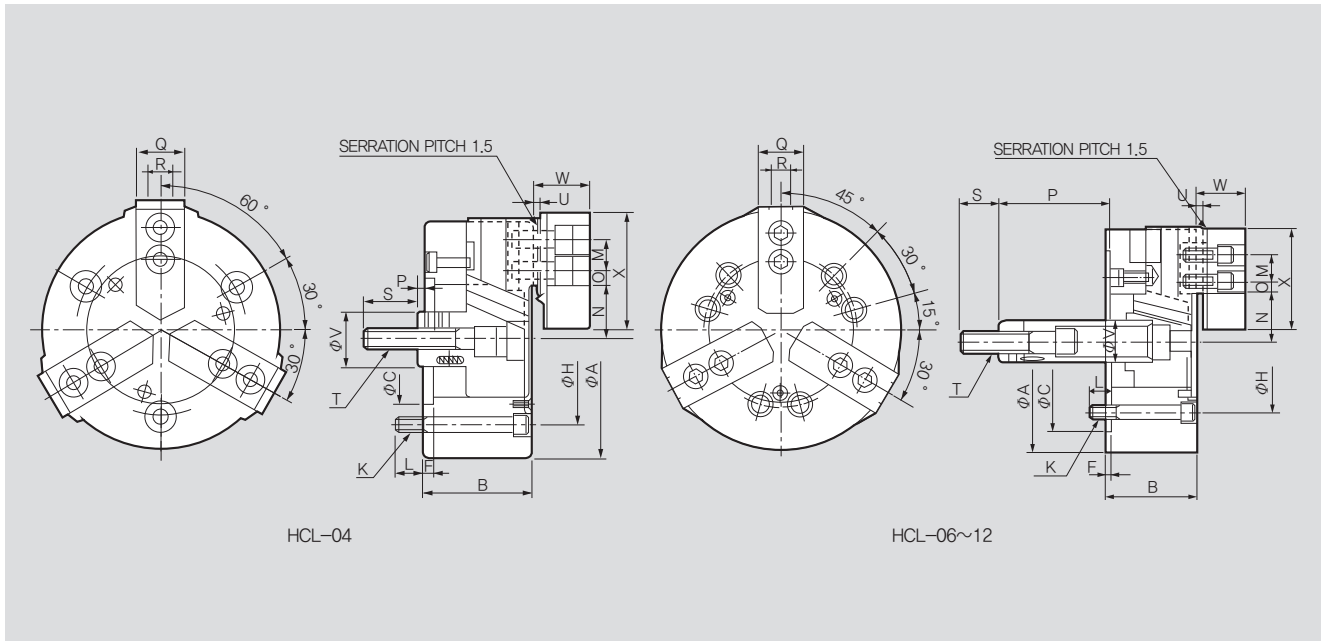
SPECIFICATIONS

	HCL-04	HCL-06	HCL-08	HCL-10	HCL-12
Jaw Stroke Dia. [mm]	12.1	13	16.2	18.1	19.4
Plunger Stroke [mm]	15	20	25	28	30
Grip Dia. Max [mm]	110	165	210	254	304
Grip Dia. Min [mm]	12	22	23	27	33
Max. Permissible Input Force [kN(kgf)]	10(1020)	21(2141)	30(3059)	40(4079)	54(5506)
Max. Static Gripping Force [kN(kgf)]	14.4(1468)	39(3977)	60(6118)	81(8260)	111(11319)
Max. r.p.m. [min ⁻¹]	5000	4300	3600	3100	2500
Weight [kg]	4.1	12	22.9	34.6	60
Moment of inertia [kg·m ²]	0.008	0.045	0.138	0.3	0.725
Max. hydraulic Pressure [MPa(kgf/cm ²)]	2.9(29.6)	3.0(29.6)	2.9(29.6)	2.8(28.6)	3.6(36.7)
Operating Cylinder	Y-0715R(RE)	Y-1020R(RE)	Y-1225R(RE)	Y-1530R(RE)	Y-1530R(RE)
Operating Hard Jaw	HB04N1	HB06A1	HB08A1	HB10A1	HB12B1
KITAGAWA® Model	NL-04	NT-06	NT-08	NT-10	NT-12

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HCL-04	HCL-06	HCL-08	HCL-10	HCL-12
ΦA	110	165	210	254	304
B	52	74	85	89	106
$\Phi C(H6)$	60	140	170	220	220
F	6	5	5	5	6
ΦH	80	104.8	133.4	171.4	171.4
K	3-M8	6-M10	6-M12	6-M16	6-M16
L	12	14	20	18	18
M	14	20	25	30	30
N max.	26.5	40.5	48.1	54.4	65.7
N min.	20.45	34	40	43.35	56
O max.	9.75	13.75	20.75	29.5	42.75
O min.	6.75	9.25	11.75	11.5	12.25
P max.	18	101.5	131	161	163
P min.	3	81.5	106	133	133
Q	23	31	35	40	50
R	10	12	14	16	18
S	25	36	36	36	36
T	M10x1.5	M16x2.0	M20x2.5	M20x2.5	M20x2.5
U	3	4	5	5	5
ΦV	26	34	38	45	50
W	27	35	42	46	54
X	55	72	95	110	129

RELATED PRODUCT



HCLT / HCLF

2-Jaw, 4-Jaw Closed-Center
Long-Stroke Chuck



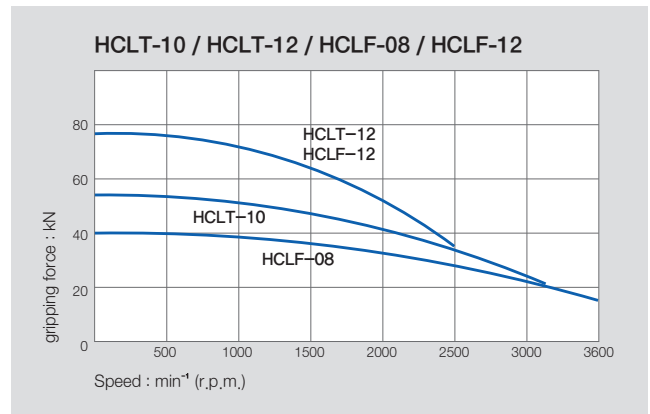
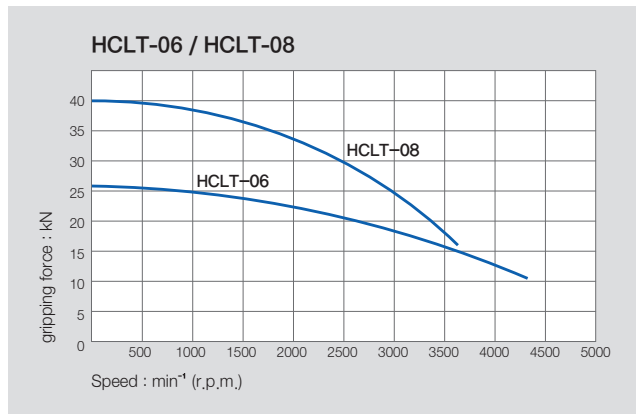
Application

High-speed 2-Jaw, 4-Jaw wedge-style closed center power chuck (long stroke)

Technical features

Gripping force transmission by wedge structure
Greatest precision and Hardening treatment of major part to maintain longer chuck life

Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

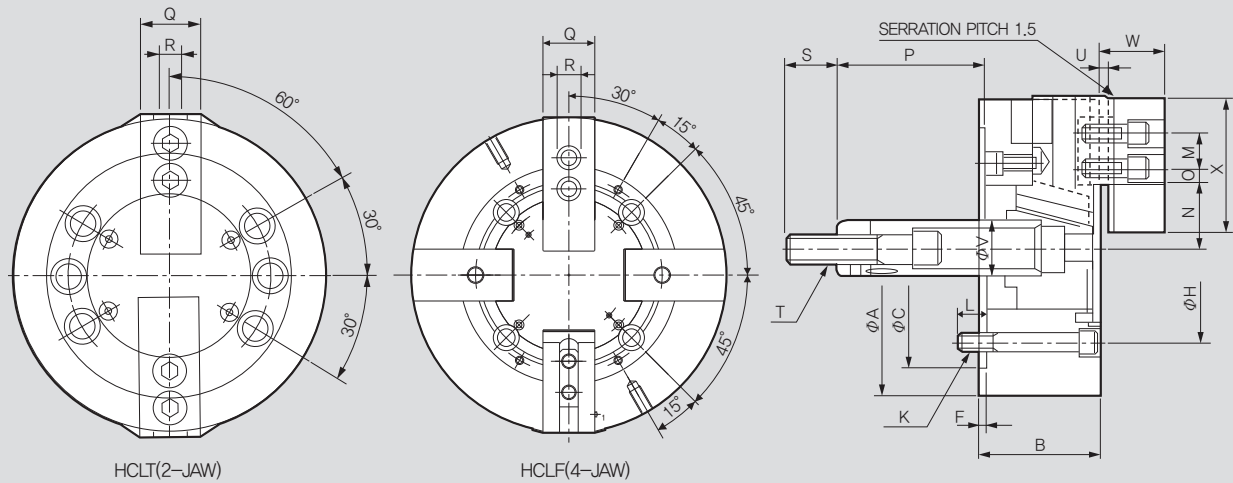
SPECIFICATIONS

	HCLT-06	HCLT-08	HCLT-10	HCLT-12	HCLF-08	HCLF-12
Jaw Stroke Dia. [mm]	13	16.2	18.1	19.4	16.2	19.4
Plunger Stroke [mm]	20	25	28	30	25	30
Grip Dia. Max [mm]	165	210	254	304	210	304
Grip Dia. Min [mm]	22	24	27	33	24	33
Max. Permissible Input Force [kN(kgf)]	14(1428)	20(2039)	27(2753)	36(3671)	20(2039)	36(3671)
Max. Static Gripping Force [kN(kgf)]	26(2651)	40(4079)	54(5508)	74(7546)	40(4079)	74(7546)
Max. r.p.m. [min ⁻¹]	4300	3600	3100	2500	3600	2500
Weight [kg]	12.5	12.5	35.5	60.5	24	60.5
Moment of inertia [kg·m ²]	0.043	0.133	0.293	0.71	0.132	0.71
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	2.06(21.0)	2.03(20.7)	1.93(19.7)	2.50(25.5)	2.03(20.7)	2.50(25.5)
Operating Cylinder	Y-1020R	Y-1225R	Y-1530R	Y-1530R	Y-1225R	Y-1530R
KITAGAWA® Model	NLT-06	NLT-08	NLT-10	NLT-12	NLT-08	NLT-12

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	HCLT-06	HCLT-08	HCLT-10	HCLT-12	HCLF-08	HCLF-12
ΦA	165	210	254	304	210	304
B	74	85	89	106	85	106
ΦC(H6)	140	170	220	220	170	220
F	5	5	5	6	5	6
ΦH	104.8	133.4	171.4	171.4	133.4	171.45
K	6-M10x70	6-M12x85	6-M16x105	6-M16x120	4-M16x85	4-M16x120
L	14	20	38	38	20	38
M	20	25	30	30	25	30
N max.	40.5	48.1	54.4	65.7	48.1	65.7
N min.	34	40	45.35	56	40	56
O max.	13.75	21	29.5	42.75	21	42.75
O min.	9.25	12	11.5	12.25	12	12.25
P max.	101.5	131	161	163	131	163
P min.	81.5	106	133	133	106	133
Q	31	35	40	50	35	50
R	12	14	16	18	14	18
S	36	36	36	36	36	36
T	M16x2.0	M20x2.5	M20x2.5	M20x2.5	M20x2.5	M20x2.5
U	4	5	5	5	5	5
ΦV	34	38	45	50	38	50
W	35	42	46	54	42	54
X	72	95	110	129	95	129

※ Blank and machined draw-nuts are available. 'K' is Max. Draw nut size.

RELATED PRODUCT



IDF Self centering 2+2 Jaw Power Chuck



Application

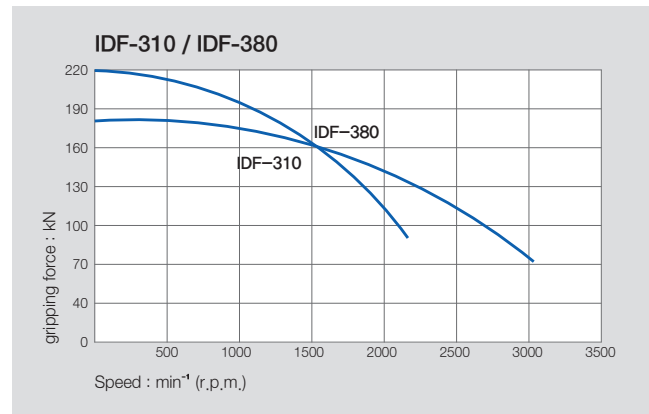
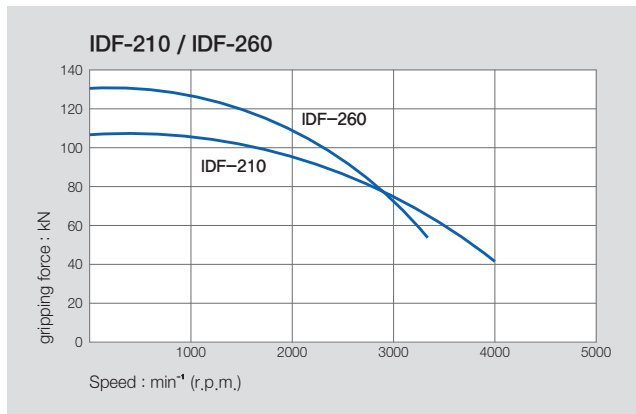
High precision self-centering 4-Jaw power chuck(2+2 Jaw)

Technical features

Ideal for rectangular and square work pieces self-centering in two axes

Single wedge actuation does not require dual-piston cylinder
2+2 Jaw chuck with 2 independent self-centering Jaws

Dynamic Grip Force Diagram



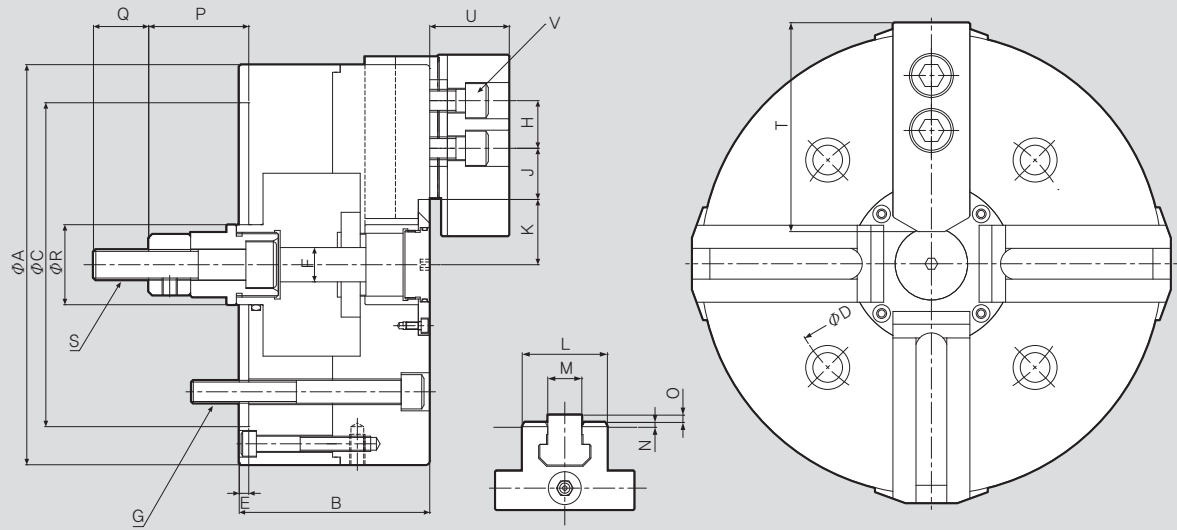
※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

	IDF-210	IDF-260	IDF-310	IDF-380
Jaw Stroke Radial. [mm]	5.2	6.2	6.2	6.2
Compensation [mm]	± 2	± 2	± 2	± 2
Plunger Stroke [mm]	10	12	12	12
Max. Permissible Input Force [kN(kgf)]	40(4081)	50(5102)	70(7143)	80(8163)
Max. Static Gripping Force [kN(kgf)]	100(10204)	130(13265)	180(18367)	200(20394)
Max. r.p.m. [min ⁻¹]	4000	3200	3000	2100
Operating Cylinder	Y-1225RE	Y-1530RE	Y-1530RE	Y-2035RE
Weight [kg]	24	43	68	110
Moment of inertia [kg·m ²]	0.14	0.39	0.88	2.2

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

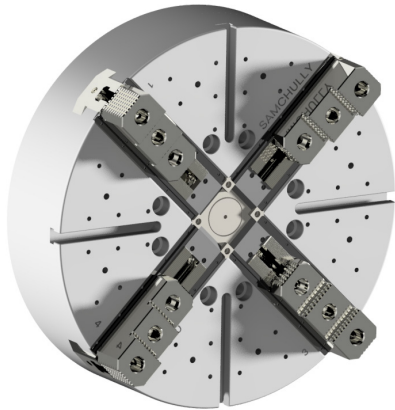
DIMENSIONS

	IDF-210	IDF-260	IDF-310	IDF-380
$\varnothing A$	210	260	310	380
B	102	120	127	135
$\varnothing C$	170	220	220	300
$\varnothing D$	133.4	171.4	171.4	235
E	5	5	5	5
F	24	30	30.5	40.5
G	M12	M16	M16	M20
H	25	30.5	30	43
J (Max/Min)	39/10	45/13	58/13	53/18
K (Max/Min)	34.2/29	46.2/40	53.2/47	74.2/68
L	35	40	50	62
M	14	16	18	25.5
N	2	5	5	5
O	3	3	3	3
P (Max/Min)	62.5/50.5	68/56	65/53	93/81
Q	29	30	33	50
R	42	50	55	80
S	M16x80	M20x85	M20x85	M30x120
T	95	98	115	135
U	42	46	54	63
V	M12x30	M12x30	M14x45	M20x55

RELATED PRODUCT



IDF Self centering 2+2 Jaw Power Chuck



Application

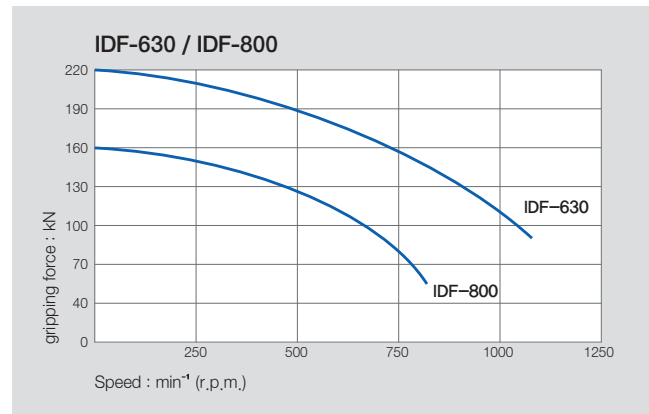
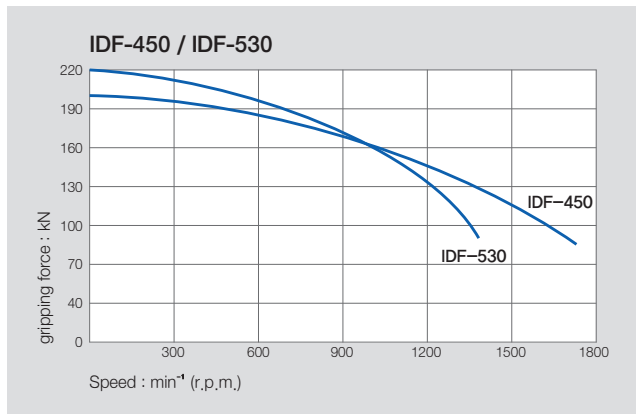
High precision self-centering 4-Jaw power chuck(2+2 Jaw)

Technical features

Ideal for rectangular and square work pieces self-centering in two axes

Single wedge actuation does not require dual-piston cylinder
2+2 Jaw chuck with 2 independent self-centering Jaws

Dynamic Grip Force Diagram



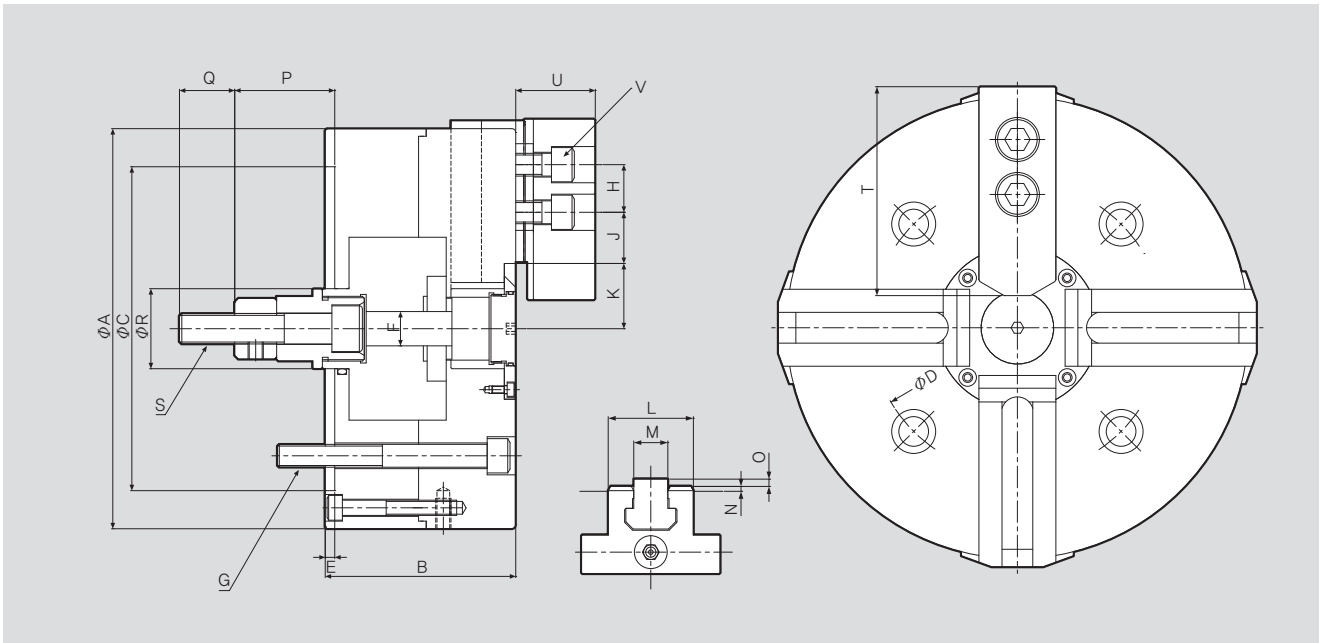
※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

	IDF-450	IDF-530	IDF-630	IDF-800
Jaw Stroke Radial. [mm]	6	8	9.7	9.7
Compensation [mm]	±2	±2	±4	±4
Plunger Stroke [mm]	12	18	20	20
Max. Permissible Input Force [kN(kgf)]	80(8158)	90(9177)	90(9177)	120(12237)
Max. Static Gripping Force [kN(kgf)]	200(20394)	220(22434)	220(22434)	160(16315)
Max. r.p.m. [min⁻¹]	1700	1400	1100	800
Operating Cylinder	Y-2035R	Y-2035R	Y-2035R	Y-2560RE
Weight [kg]	180	290	400	425
Moment of inertia [kg·m²]	7.4	15.2	17.7	27.5

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	IDF-450	IDF-530	IDF-630	IDF-800
ΦA	450	530	630	800
B	145	176	188	215
ΦC	300	380	380	380
ΦD	235	330.2	330.2	330.2
E	5	8	8	8
F	42	55	55	70
G	M20	M22	M22	M24
H	43	60	60	76.2
J (Max/Min)	89/21	98/23	149.5/23.5	197.5/23.5
K (Max/Min)	75.5/69.5	87/79	90/80.3	106/96.3
L	52	65	65	75
M	25.5	25	25	25.5
N	5	4	4	4
O	3	5	5	5
P (Max/Min)	93/81	73/55	75	45
Q	50	70	55	75
R	80	92	92	110
S	M30x120	M30x125	M30x125	M36x130
T	135	180	180	185
U	63	77	77	77
V	M20x50	M20x50	M20x50	M24x90

RELATED PRODUCT



IDS Self centering 2+2+2 Jaw Power Chuck



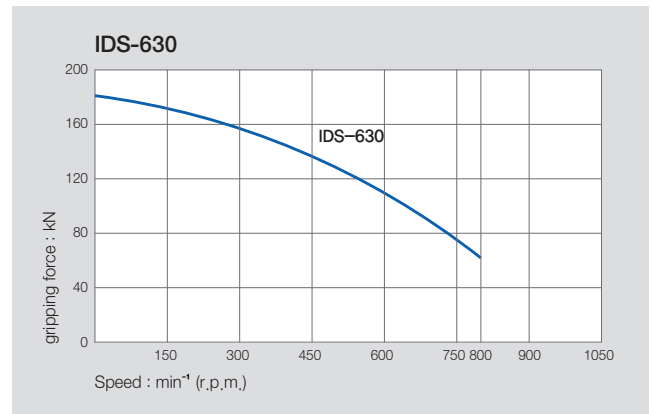
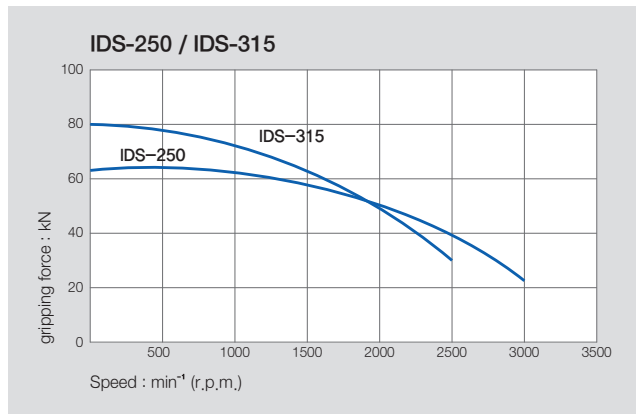
Application

High accuracy Self centering 2+2+2 Jaw power chuck

Technical features

Ideal for thin workpiece (Easily deformable workpiece)
Compensating deviation of workpieces by 2+2+2 Jaw
(clamping 6 point at once)
100% compatibility with existing cylinder

Dynamic Grip Force Diagram



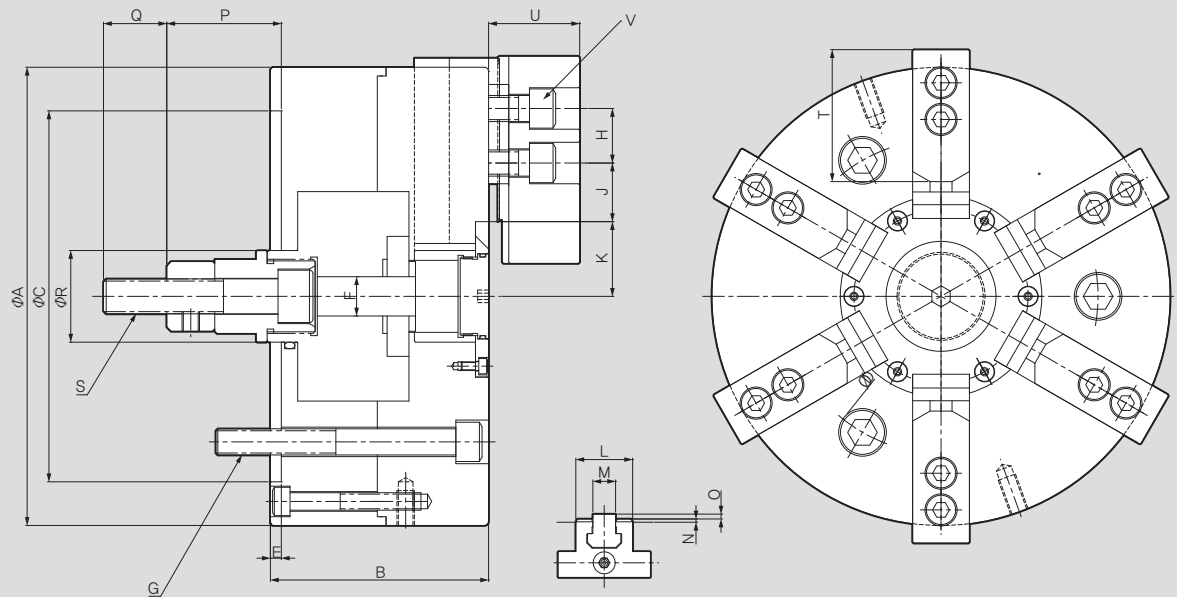
※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

	IDS-250	IDS-315	IDS-630
Jaw Stroke Radial. [mm]	6	6	7.5
Compensation [mm]	±2	±2	±4
Plunger Stroke [mm]	12	12	30
Max. Permissible Input Force [kN(kgf)]	38(3875)	40(4079)	120(12237)
Max. Gripping Force [kN(kgf)]	64(6526)	80(8158)	180(18354)
Max. r.p.m. [min ⁻¹]	3000	2500	800
Operating Cylinder	Y-1530RE	Y-1530RE	Y-2560RE
Weight [kg]	39	65	425
Moment of inertia [kg·m ²]	0.35	0.75	27.5

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



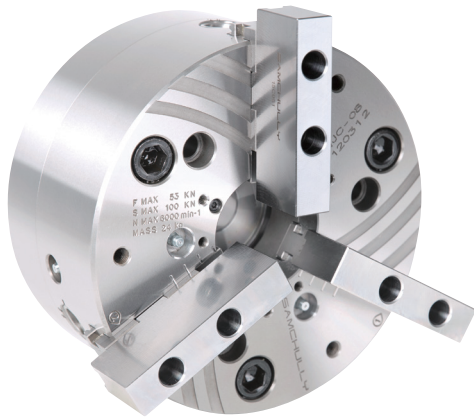
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	IDS-250	IDS-315	IDS-630
$\varnothing A$	250	315	630
B	113	121	195
$\varnothing C$	220	220	380
$\varnothing D$	171.4	171.4	330.2
E	6	6	8
F	34	38	65
G	M16	M16	M24
H	20	20	30
J max.	42.6	64	160
J min.	10.75	10.75	15
K max.	57	68	109.5
K min.	51	62	102
L	31	31	52
M	12	12	18
N	4	4	5
O	3	3	3
P max.	75	75	100
P min.	63	63	70
Q	36	36	55
R	56	70	100
S	M20x90	M20x90	M30x125
T	72	72	129
U	35	35	53.5
V	M10x30	M10x30	M14x45

RELATED PRODUCT





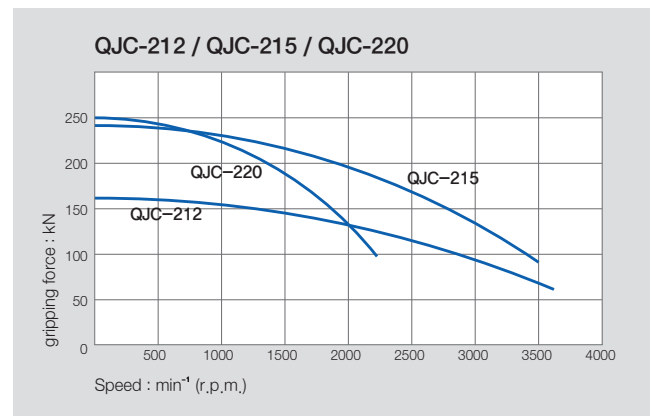
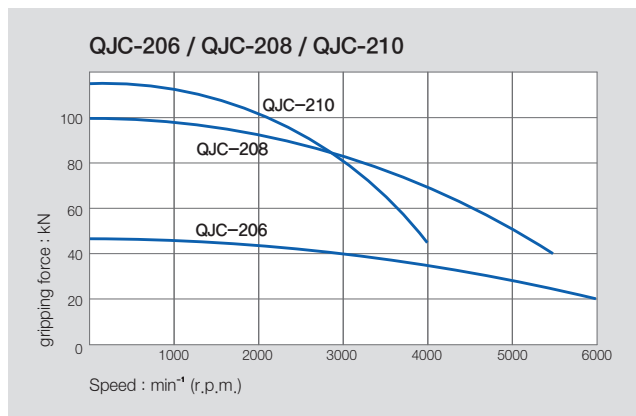
Application

Minimal Jaw set-up times(within 1 minute),
Jaws are reversible(180°)

Technical features

High repeatability when changing Jaws(runout < 0.02mm)
Minimum loss of gripping force because of wedge bars
The built-in safety interlock eliminates misoperation

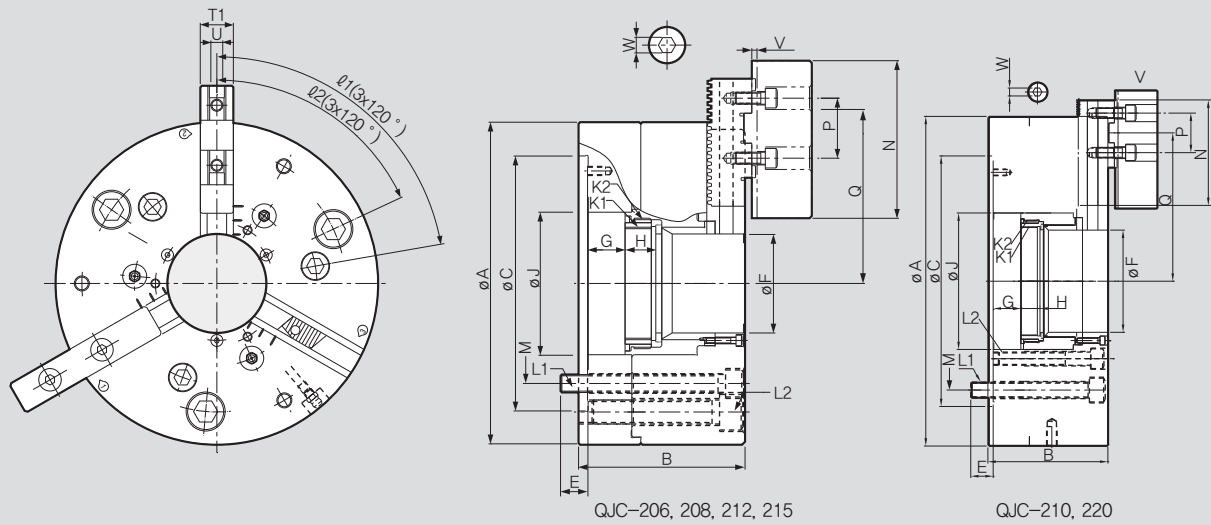
Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

	QJC-206	QJC-208	QJC-210	QJC-212	QJC-215	QJC-220
Jaw Stroke Dia. [mm]	11.4	14.4	16	16	17	20
Plunger Stroke [mm]	20	25	28	28	32	42
Permissible Input Force [kN(kgf)]	30(3059)	54(5404)	65(6628)	90(9177)	133(13562)	120(12236)
Max.static Gripping Force [kN(kgf)]	45(4538)	100(10197)	115(11726)	160(16315)	240(24473)	250(25492)
Max. r.p.m. [min ⁻¹]	6000	5500	4000	3600	3500	2200
Weight [kg]	13	24	42	66	109	225
Moment of inertia [kg·m ²]	0.11	0.11	0.41	0.97	2.3	6.5
Operating Cylinder	SD-13546	SD-17568	SD-18582	SD-21510	SDL-25411	SDL-30516
Max. Hydraulic Pressure [MPa(kgf/cm ²)]	3.0(30.5)	3.0(35.6)	3.7(37.7)	4.0(40.7)	4.0(40.7)	2.9(29.5)



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

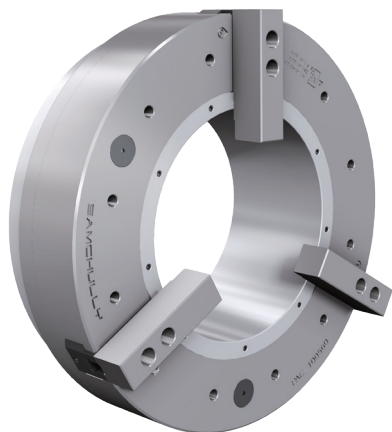
	QJC-206	QJC-208	QJC-210	QJC-212	QJC-215	QJC-220
ΦA	165	215	260	315	400	500
B	95	111	129.3	138.1	144	182
ΦC	140	170	220	220	300	380
E	14	18	23.7	24.9	25	34
ΦF	45	66	81	104	128	155
G max.	20.2	25	28	28.5	32	42
G min.	0	0	0	0	0	0
H	18	20.5	22	23.2	22	29
ΦJ	68	95	114	148	180	207
K1	M50	M75	M90	M115	M138	M165
K2	M60	M87	M105	M135	M160	M185
L1	3-M10	3-M12	3-M16	3-M16	3-M20	3-M24
L2	3-M12	3-M16	3-M12	3-M20	3-M24	3-M20
i1	80°	80°	80°	80°	70°	85°
i2	20°	65°	65°	70°	60°	75°
M	104.8	133.4	171.4	171.4	235	330.2
N	85	97	125	125	145	160
P	32	40	40	40	54	60
Q max.	76.8	113.5	129.7	161.9	185.1	225
Q min.	58	71	96.7	109.7	124.7	141
T1	20	22	30	30	35	45
T2	20	22	26	32	32	48
U	8	10	12	12	12	18
V	2.5	2.5	3	3	3	4
W	8	10	10	10	10	12

※ Blank and machined draw-nuts are available. 'K' is Max. Draw nut size.

RELATED PRODUCT



PAC-R Mega-Bore Pneumatic Self-Contained Chuck



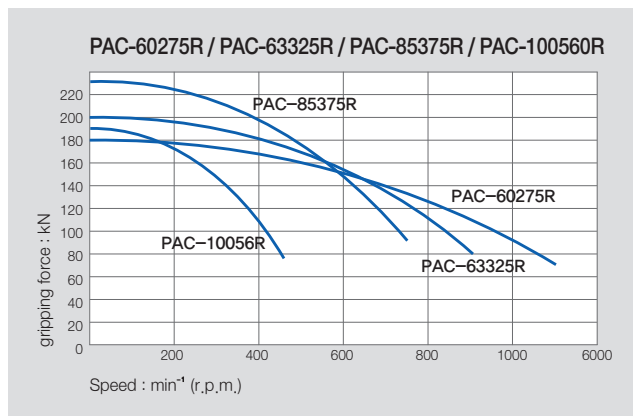
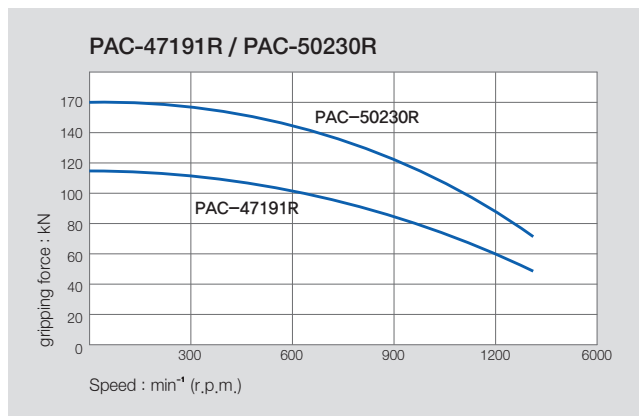
Application

Suitable for large pipe machining, Full spindle through-hole can be used

Technical features

- Application of rapid traverse section (Securing long stroke range)
- Stroke positioning detection plate applied (prevent clamping in rapid traverse section)
- Built-in pneumatic cylinder (with built-in lock valve)
- Continuously check clamp pressure (with built-in pressure drop check valve)

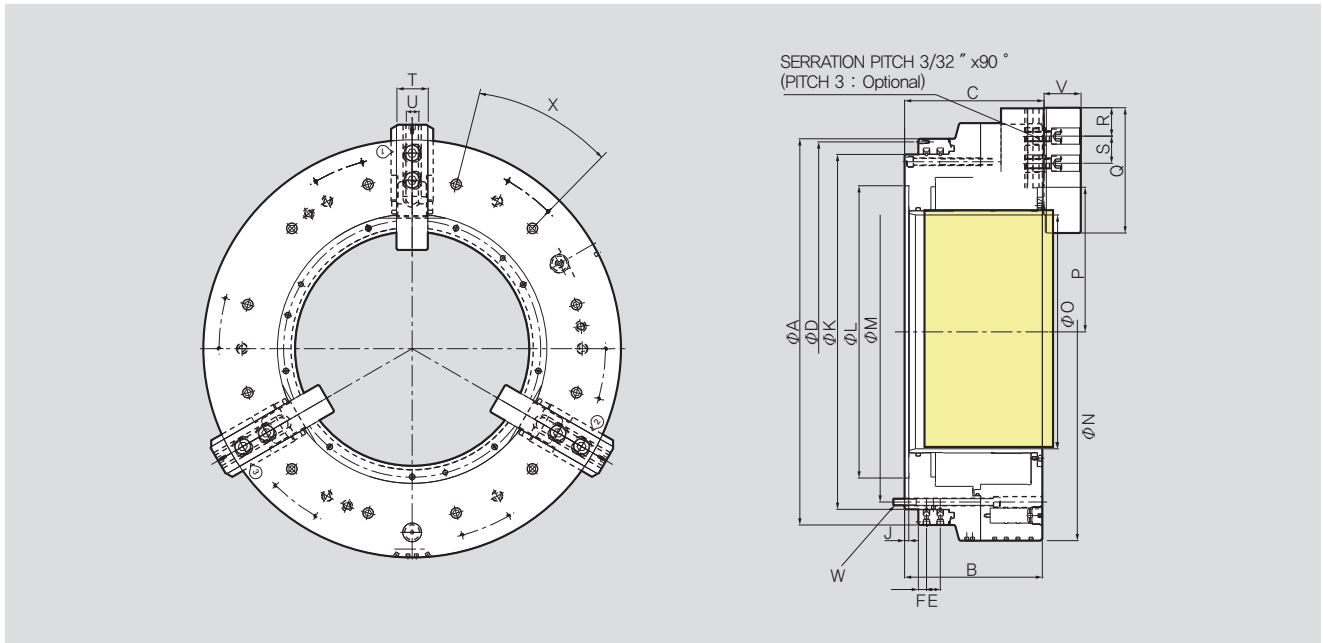
Dynamic Grip Force Diagram



※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

	PAC-47191R	PAC-50230R	PAC-60275R	PAC-63325R	PAC-85375R	PAC-100560R
Thru Hole Dia. [mm]	191	230	275	325	375	560
Jaw Stroke Dia. [mm]	20	25.4	25.4	25.4	25.4	25.4
Rapid	13	16.9	16.9	16.9	13.4	15
Clamp	7	8.5	8.5	8.5	12	10.4
Operating Pressure [MPa]	0.2~0.8	0.2~0.8	0.2~0.8	0.2~0.8	0.2~0.8	0.2~0.8
Clamping Force [kN]	115	170	180	200	230	190
Max. r.p.m. [min ⁻¹]	1300	1300	1100	900	750	450
Weight [kg]	190	325	355	530	970	960
Moment of inertia [N·m ² (kg·m ²)]	9.8	16.1	20.6	35.1	105	157.6



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

	PAC-47191R	PAC-50230R	PAC-60275R	PAC-63325R	PAC-85375R	PAC-10056R
ΦA	470	570	605	685	850	925
B	238	280	280	305.5	352	330
C	240	282	282	307.5	354	334
ΦD	448	550	585	666	830	910
E	26	26	26	33	33	33
F	17	17	17	19.5	19.5	19.5
J	8	8	8	8	8	10
ΦK	400	500	535	610	775	850
ΦL	310	415	450	510	700	700
ΦM	374	474	508	580	745	815
ΦN	470	570	605	685	850	1000
ΦO	191	230	275	325	375	560
P Max.	147	180.5	205.9	230.9	266.7	346.3
P Min.	127	156	180.5	205.5	241.3	320.9
Q	170	195	195	240	300	300
R	25	37	37	42	68	68
S	40	40	40	65	65	65
T	60	60	60	75	75	75
U	25.5	25.5	25.5	30	30	30
V	60	80	80	80	90	90
W	9-M12	12-M12	12-M12	12-M16	12-M16	12-M16
X	40°	30°	30°	30°	30°	30°



ROTARY CYLINDER



SD

Mega-Bore Short body
Open-Center
Hydraulic Cylinder

62 P



DY

Double Piston
Hyd. Cylinder

80 P



SD-E

Mega-Bore Short body
Open-Center
Hydraulic Cylinder

64 P



AY-R

Closed Center
Pneumatic Cylinder

82 P



SD-S

Mega-Bore Short Body Open-
Center Hydraulic
Cylinder (Seal Type)

66 P



Y-R

Standard Closed Center
Hyd. Cylinder

68 P



Y-RE

Closed Center Hyd.
Cylinder with Proximity
Bracket

70 P



YH-RE

Ultra Compact Closed
Center Hyd. Cylinder with
Proximity Bracket

74 P



YS-RA

Ultra Compact Closed Center
Hyd. Cylinder with Proximity
Bracket & Built in
Rotary Union

76 P



YS-RC

Ultra Compact Closed Center
Hyd. Cylinder with Proximity
Bracket & Built in
Rotary Union

78 P

SD Mega-Bore Short body Open-Center Hydraulic Cylinder



Application

Large bore work in machines with limited clearance

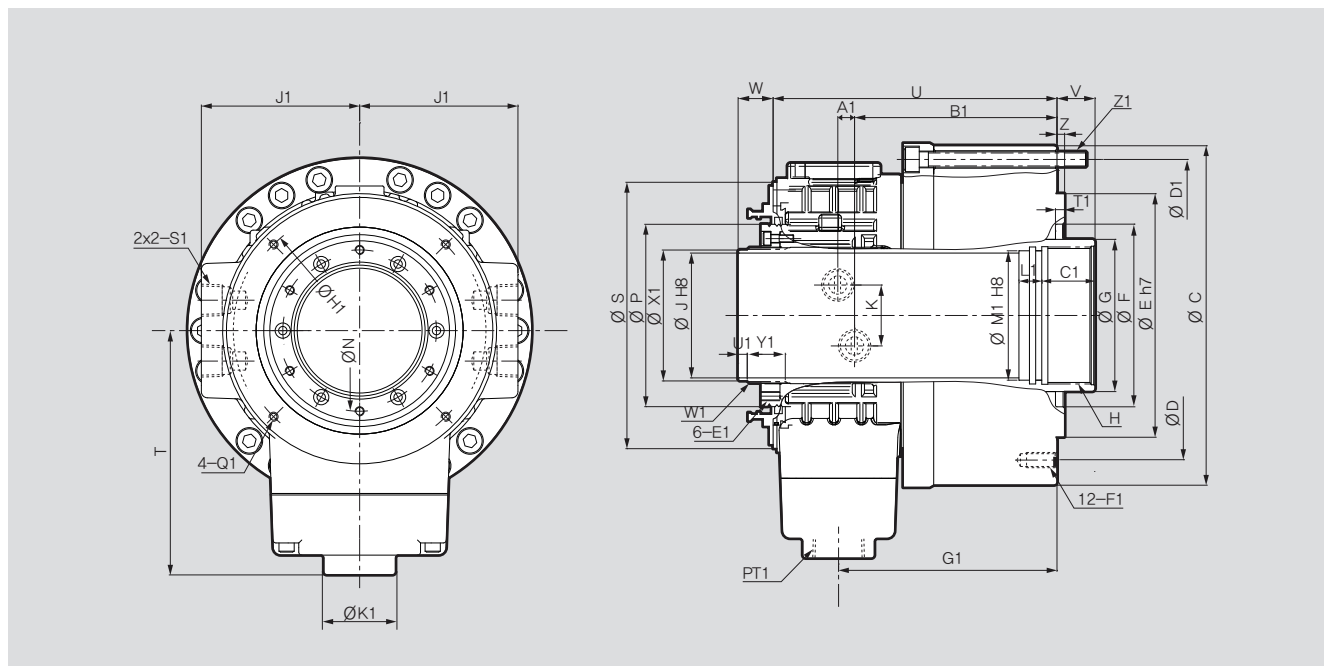
Technical features

Low drain rate reduces heat generation

SPECIFICATIONS

	SD-13546	SD-15452	SD-17568	SD-18577	SD-18582	SD-21510	SDL-25411	SDL-30516
Available I.D. [mm]	46	52	68	77	82	103	117.5	166.5
Piston Dia. [mm]	132	156	170	185	185	220	250	305
Piston Stroke [mm]	25	25	29	29	30	35	50	51
Piston Surface Area (Push) [cm ²]	108	151	172	201	195	238	356	480
Piston Surface Area (Pull) [cm ²]	97	142	160	187	180	230	325	436
Piston Force (Push) [kN(kgf)]	47(4800)	67(6800)	75(7656)	89(9000)	85(8700)	105(10700)	138(14100)	152(15483)
Piston Force (Pull) [kN(kgf)]	44(4500)	63(6400)	70(7050)	82(8300)	79(8100)	101(10300)	126(12900)	138(14060)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.5(45)	4.5(45)	4.5(45)	4.5(45)	4.5(45)	4.5(45)	4.0(40)	3.3(33)
Max. r.p.m. [min ⁻¹]	7000	6200	5600	5000	4800	3600	3000	2000
Moment of inertia [kg-m ²]	0.03	0.045	0.07	0.097	0.11	0.25	0.5	1.45
Weight [kg]	10	14	18	23	26	37	54	90
Total Leakage [ℓ/min]	2.5	3	3.2	3.5	3.5	4.5	6	8.4

※ Maximum turning speed is based upon actual measurement.
 ※ Specifications are subject to change without notice.



※ See the product dimension Table on the right.

DIMENSIONS

	SD-13546	SD-15452	SD-17568	SD-18577	SD-18582	SD-21510	SDL-25411	SDL-30516
ΦC	165	190	210	218	223	266	310	370
ΦD	130	170	190	190	190	225	275	290
ΦD1	147	170	190	200	205	240	275	345
ΦE	100	130	160	160	160	200	230	260
ΦF	80	85	120	120	120	160	166	240
ΦG	65	70	85	95	100	125	140	190
H	M52x2.0	M60x2.0	M75x2.0	M85x2.0	M90x2.0	M112x2.0	M130x2.0	M180x3.0
ΦJ	46	52	68	77	82	103	117.5	166.5
K	36	36	40	40	40	48	46	42
N	63	76	92	102	106	128	138	188
ΦP	79.8	89.8	105.8	115.8	119.8	173.5	170	222
ΦS	116	135	154	164	175	208	230	278
T	125	134	141	149.5	160.5	174.5	204	230
U	159.5	149.5	173	180.5	186.5	216.5	258	290
V max	15	22	25	25	25	35	46	51
V min	-10	-3	-4	-4	-5	0	-4	0
W max	41.5	51	58.5	57.5	53	63	75	76
W min	16.5	26	29.5	28.5	23	28	25	25
Z	5	5	5	5	5	5	6	5
A1	8.5	8.5	11	11	11	14	18	17.5
B1	117.5	107.5	122.5	129.5	133	153.5	178.5	206
C1	30	30	30	35	35	30	45	45
E1	M6	M6	M6	M6	M6	M6	M6	M6
F1	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'20	M12 TAP DP'20	M16 TAP DP'32	M16 TAP DP'32
G1	125.5	115.5	132.5	139.5	143.5	163	194.5	221
H1	105	118	145	155	160	190	206	256
J1	75	80	90	95	104	120	135	160
K1	47	47	47	47	47	47	47	47
L1	15	15	21	15	15	15	20	20
M1	48	55	71	80	85	106	123	170
Q1	M5 TAP DP'10	M6 TAP DP'10	M6 TAP DP'10	M6 TAP DP'10	M6 TAP DP'13	M6 TAP DP'10	M6 TAP DP'12	M6 TAP DP'12
S1	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8	G 1/2
T1	7	7	8	5	8	6	6	7
W1	M52x1.5	M58x1.5	M74x1.5	M84x2.0	M89x2.0	M120x2.0	M124x2.0	M173x2.0
ΦX1	50	56	71.5	81	86	117	121.5	170.5
Y1	21	27	28	26	25	34	29	45
U1	4	9	8	9	6	6	9	8
Z1	6-M8x95	6-M8x85	6-M10x100	8-M8x110	6-M10x110	6-M12x120	8-M12x140	12-M12x160

SD-E Mega-Bore Short body Open-Center Hydraulic Cylinder (Europe type)



Application

On lathes requiring a large bore and an ultra compact body for clearance
Mounting dimensions are ideal for European machine and mounting standards

Technical features

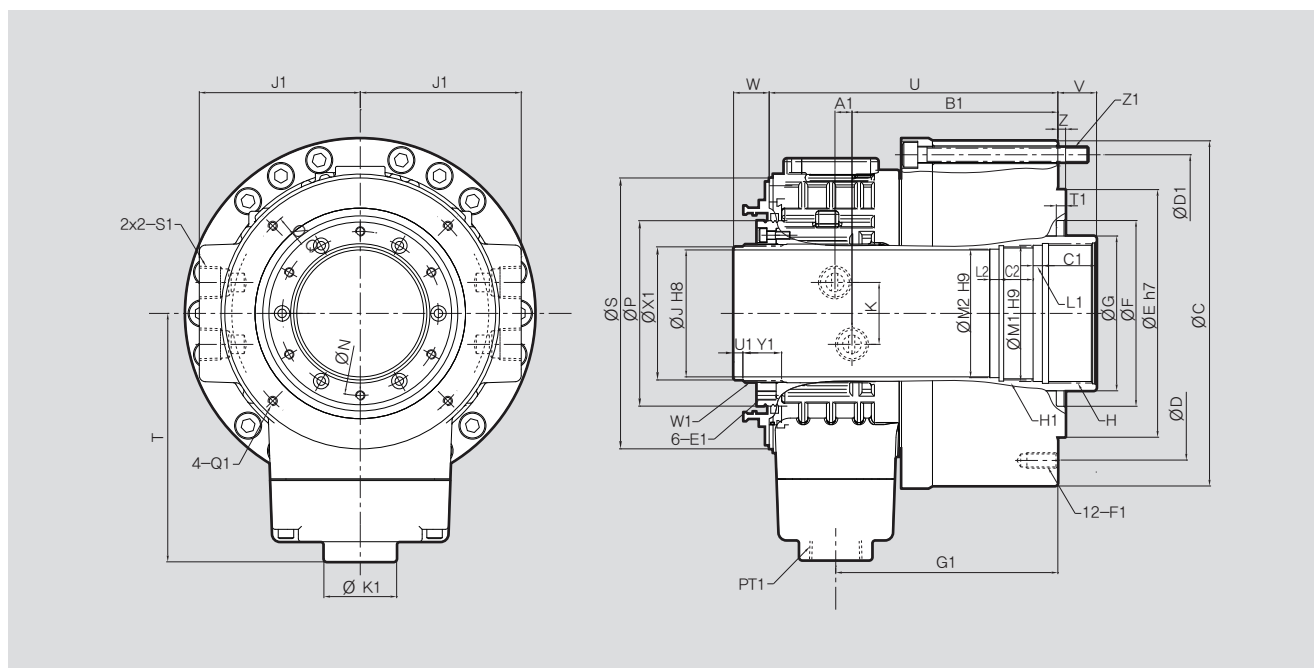
The low drain rate reduces the heat generated by the hydraulic unit

SPECIFICATIONS

	SD-13546E	SD-15452E	SD-16567E	SD-17577E	SD-18582E	SD-19568E	SD-20595E	SD-21511E
Available I.D. [mm]	46.5	52.5	67.5	77	82	86.5	95.5	110.5
Piston Dia. [mm]	132	151	165	177	185	190	205	220
Piston Stroke [mm]	25	25	29	29	30	34	34	35
Piston Surface Area (Push) [cm ²]	111	144	164	189	195	203	233	257
Piston Surface Area (Pull) [cm ²]	100	134	152	175	180	187	215	237
Piston Force (Push) [kN(kgf)]	47(4800)	62(6285)	67(6863)	80(8100)	85(8700)	90(9200)	105(10700)	115(11700)
Piston Force (Pull) [kN(kgf)]	44(4500)	57(5850)	62(6351)	73(7400)	79(8100)	83(8500)	95(9700)	107(10900)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.5(45)	4.5(45)	4.5(45)	4.5(45)	4.5(45)	4.5(45)	4.5(45)	4.5(45)
Max. r.p.m. [min ⁻¹]	7000	6200	5600	5000	4800	4500	4000	3600
Moment of inertia [kg·m ²]	0.03	0.045	0.07	0.097	0.11	0.13	0.17	0.28
Weight [kg]	10	14	18	23	26	27	29	440
Total Leakage [ℓ/min]	2.5	3	3.2	3.5	3.5	4	5	7

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



※ See the product dimension Table on the right.

DIMENSIONS

	SD-13546E	SD-15452E	SD-16567E	SD-17577E	SD-18582E	SD-19568E	SD-20595E	SD-21511E
ΦC	162	182	197	214	223	228	245	266
ΦD	147	165	180	195	205	210	227	240
ΦD1	147	165	180	195	205	210	227	240
ΦE	130	140	160	160	168	180	210	210
ΦF	80	85	120	120	120	120	130	160
ΦG	61	70	85	95	100	105	115	130
H	M55x2.0	M60x1.5	M75x2.0	M85x2.0	M90x2.0	M95x2.0	M105x2.0	M120x2.0
H1	M50x1.5	M55x2.0	M72x1.5	M80x2.0	-	M90x2.0	M100x2.0	M115x2.0
ΦJ	46.5	52.5	67.5	77	82	86.5	95.5	110.5
K	36	36	40	40	40	40	40	48
N	66	76	92	102	106	112	124	139
ΦP	79.8	89.8	105.8	115.8	119.8	125.8	137.8	173.5
ΦS	116	135	154	164	175	181	188	208
T	119	134	141	149.5	159.5	158.5	166	174.5
U	149	148	172.5	175	186.5	194	204	233.5
V max	22	22	25	25	23	31	31	31
V min	-3	-3	-4	-4	-7	-3	-3	-4
W max	42	45.5	51.5	49	53	55	55	63
W min	17	20.5	22.5	20	23	21	21	28
Z	5	5	8	8	5	8	8	8
A1	8.5	8.5	11	11	11	13	13	14
B1	107.5	107.5	122.5	122.5	133	136	143	170.5
C1	25	25	25	25	35	32	32	32
C2	25	28	28	28	-	30	30	30
E1	M6	M6	M6	M6	M6	M6	M6	M6
F1	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'17	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'20	M12 TAP DP'24
G1	115.5	115.5	132.5	132.5	143.5	144	151	180
J1	75	80	90	95	104	108	116	120
K1	47	47	47	47	47	47	47	47
L1	6	6	6	6	15	6	6	6
L2	6	6	6	6	-	6	6	6
M1	52.5	57	72.5	82	85	92	102.5	117.5
M2	47	52.5	69	77	-	87	97	112
Q	105	118	145	155	160	168	168	190
Q1	M5 TAP DP'10	M6 TAP DP'10	M6 TAP DP'10	M6 TAP DP'10	M6 TAP DP'13	M6 TAP DP'12	M6 TAP DP'12	M6 TAP DP'12
S1	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8	G 3/8
T1	7	7	8	8	8	9	9	9
W1	M52x1.5	M60x1.5	M74x1.5	M84x1.5	M89x2.0	M94x2.0	M104x2.0	M120x2.0
ΦX1	50	58	71	81	86	91	101	117
Y1	21	21	24	25	25	26	26	34
U1	4	5	5	5	6	5	6	6
Z1	6-M8x90	6-M8x90	6-M10x100	6-M10x100	6-M10x110	6-M10x105	6-M10x110	6-M10x135

SD-S Mega-Bore Short Body Open-Center Hydraulic Cylinder (Seal Type)



Application

Low drain, Ultra slim open-center cylinder

Technical features

Low drain minimizes heat generation

Sealed for use in subspindles when drain nipple does not face 6 o'clock position

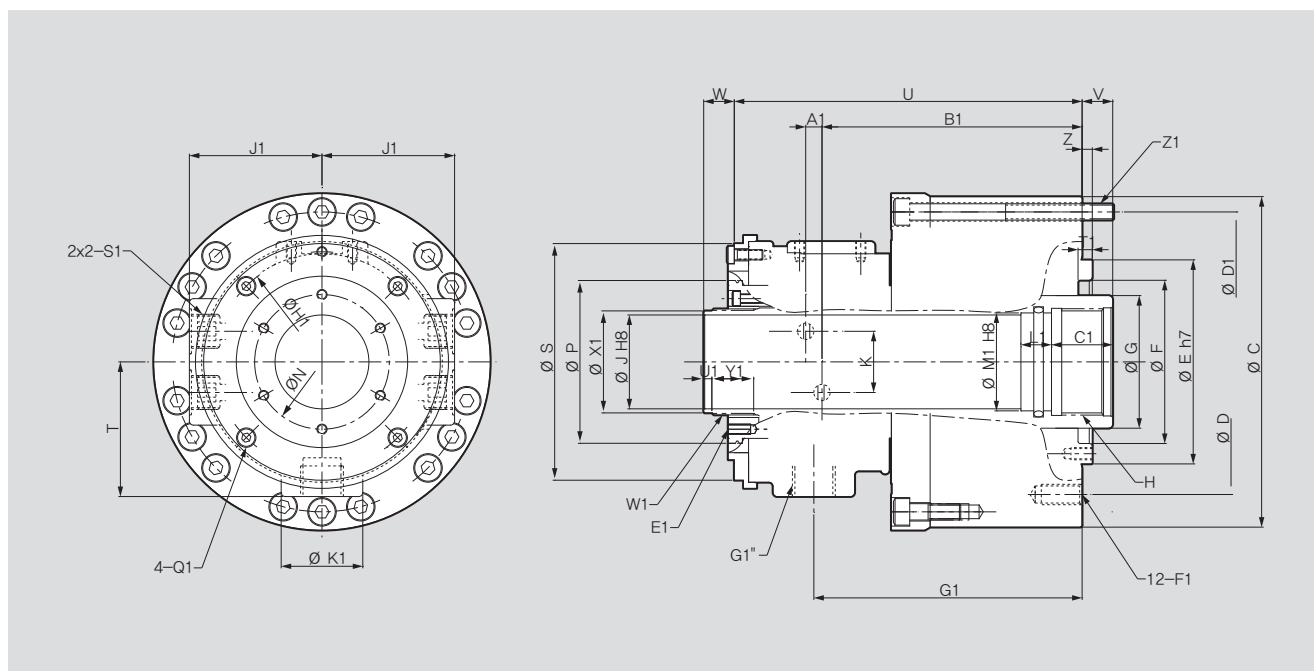
Compact design ideal for machines with minimal clearance

SPECIFICATIONS

	SD-13546S	SD-15452S	SD-17568S
Available I.D. [mm]	46	52	68
Piston Dia. [mm]	132	156	170
Piston Stroke [mm]	25	25	29
Piston Surface Area (Push) [cm ²]	108	156	178
Piston Surface Area (Pull) [cm ²]	100	147	165
Piston Force (Push) [kN(kgf)]	47(4800)	67(6800)	75(7656)
Piston Force (Pull) [kN(kgf)]	44(4500)	63(6400)	70(7050)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.5(45)	4.5(45)	4.5(45)
Max. r.p.m. [min ⁻¹]	6000	6000	4800
Moment of inertia [kg·m ²]	0.021	0.045	0.07
Weight [kg]	9	14	18
Total Leakage [ℓ/min]	2.5	3.5	3.2

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

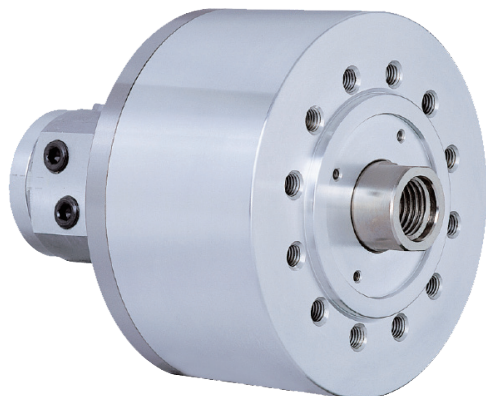


※ See the product dimension Table on the right.

DIMENSIONS

	SD-13546S	SD-15452S	SD-17568S
C	162	186	207
D	130	170	190
D1	147	170	190
E	100	130	160
F	80	85	120
G	65	70	85
H	M52x2.0	M60x2.0	M75x2.0
J	46	52	68
K	30	36	40
N	66	76	92
P	79.8	89.8	105.8
S	116	135	154
T	66	82	91
U	166	163.2	191.5
V max	15	22	25
V min	-10	-3	-4
W max	44.5	50	59
W min	19.5	25	30
Z	5	5	5
A1	8	8	10
B1	127.5	118	138.3
C1	30	30	30
E1	M5	M6	M6
F1	M10 TAP DP'20	M10 TAP DP'20	M10 TAP DP'20
G1	131.5	122	143
H1	105	118	145
J1	65	66	90
K1	40	47	47
L1	15	15	21
M1	48	55	71
Q1	M5 TAP DP'10	M6 TAP DP'10	M6 TAP DP'10
S1	G 3/8	G 3/8	G 3/8
T1	7	7	8
W1	M52x1.5	M58x1.5	M74x1.5
X1	50	56	71.5
Y1	20.5	25	38
U1	4	9	8
Z1	6-M8x100	6-M8x85	6-M10x100

Y-R Standard Closed-Center Hydraulic Cylinder



Application

Closed-Center Hydraulic Cylinder with Proximity Bracket

Technical features

Built-in lock and relief valves prevent damage caused by excessive pressure, and ensures safety during blackouts or loss of power by maintaining pull force

SPECIFICATIONS

	Y-0715R	Y-1020R	Y-1225R	Y-1530R	Y-2035R
Piston Stroke [mm]	15	20	25	30	35
Piston Surface Area (Push) [cm ²]	44	86	122	176	314
Piston Surface Area (Pull) [cm ²]	37	79	113	160	290
Piston Force (Push) [kN(kgf)]	16.6(1693)	32.0(3264)	45.0(4589)	66.0(6732)	117.0(11934)
Piston Force (Pull) [kN(kgf)]	13.9(1417)	29(2957)	42(4283)	60(6118)	108(11013)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)
Max. r.p.m. [min ⁻¹]	6000	6000	6000	5500	5500
Moment of inertia [kg-m ²]	0.012	0.05	0.09	0.19	0.39
Weight [kg]	4	7.1	10	13.5	22
Total leakage [ℓ/min]	0.8	0.8	0.8	0.8	0.8
KITAGAWA* Model	Y-0715R	Y-1020R	Y-1225R	Y-1530R	Y-2035R

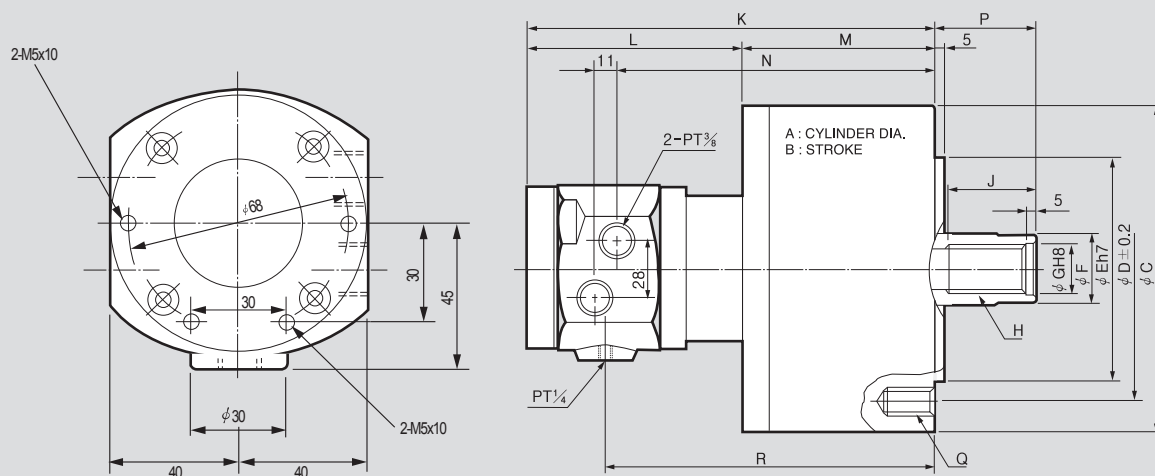
※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Piston Force : Hydraulic 4.0MPa (40.8 kgf/cm²)

※ Total leakage pressure : 3.0MPa(30.6 kgf/cm²) at 50℃

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for kitagawa Iron Works Co., Ltd

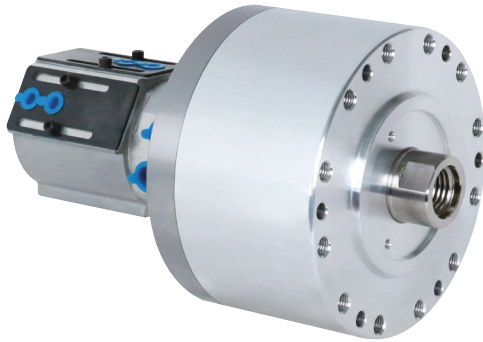


DIMENSIONS

	Y-0715R	Y-1020R	Y-1225R	Y-1530R	Y-2035R
A	75	105	125	150	200
B	15	20	25	30	35
ϕC	104	135	160	190	245
ϕD	90	100	130	130	145
ϕE	65	80	110	110	120
ϕF	30	30	35	45	55
ϕG	21	21	25	31	37
H max.	M20x2.5	M20x2.5	M24x3.0	M30x3.5	M36x4.0
J	35	35	44	45	60
K	172	197	205	214	228
L	106	108	108	108	106
M	66	89	97	106	122
N	127	152	160	169	183
P max.	46	45	51	56	69
P min.	31	25	26	26	34
Q	6-M6x20	6-M10x20	6-M12x24	6-M12x24	12-M16x30
R	133	158	166	175	189

Y-RE

Closed-Center Hydraulic Cylinder with Proximity Bracket (75mm~125mm)



Application

Closed-Center Hydraulic Cylinder with Proximity Bracket

Technical features

Built-in lock and relief valves prevent damage caused by excessive pressure, and ensures safety during blackouts or loss of power by maintaining pull force

SPECIFICATIONS

	Y-0715RE	Y-1020RE	Y-1025RE	Y-1225RE	Y-1240RE
Piston Stroke [mm]	15	20	25	25	40
Piston Surface Area (Push) [cm ²]	44	84	84	120	120
Piston Surface Area (Pull) [cm ²]	37	79	79	113	113
Piston Force (Push) [kN(kgf)]	15.9(1621)	31.0(3161)	31.0(3161)	45.0(4589)	45.0(4589)
Piston Force (Pull) [kN(kgf)]	13.9(1417)	29(2957)	29(2957)	42(4283)	42(4283)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)
Max. r.p.m. [min ⁻¹]	6000	6000	6000	6000	6000
Moment of inertia [kg-m ²]	0.012	0.05	0.05	0.09	0.09
Weight [kg]	4.0	7.6	7.7	10.5	11
Total leakage [ℓ/min]	0.8	0.8	0.8	0.8	0.8
KITAGAWA* Model	Y-0715RE	Y-1020RE	Y-1025RE	Y-1225RE	Y-1240RE

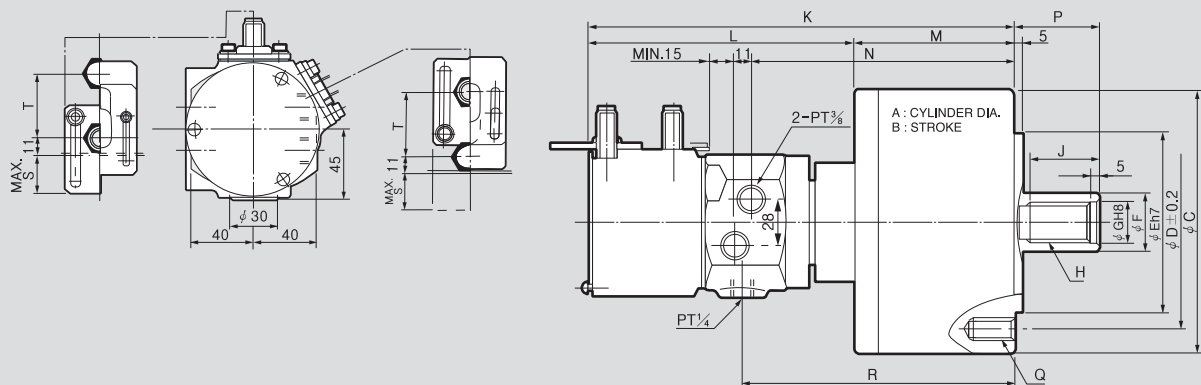
※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Piston Force : Hydraulic 4.0MPa (40.8 kgf/cm²)

※ Total leakage pressure : 3.0MPa(30.6 kgf/cm²) at 50℃

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for kitagawa Iron Works Co., Ltd

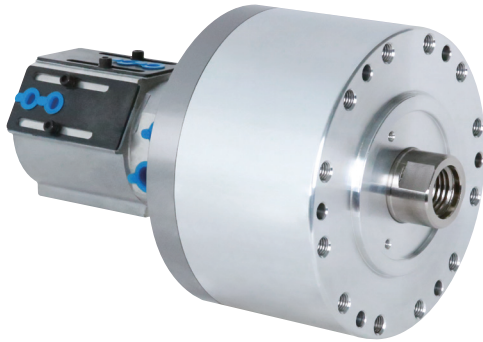


DIMENSIONS

	Y-0715RE	Y-1020RE	Y-1025RE	Y-1225RE	Y-1240RE
A	75	105	105	125	125
B	15	20	25	25	40
ΦC	104	135	135	160	160
ΦD	90	100	100	130	130
ΦE	65	80	80	110	110
ΦF	30	30	30	35	35
ΦG	21	21	21	25	25
H	M20x2.5	M20x2.5	M20x2.5	M24x3.0	M24x3.0
J	36	35	35	44	44
K	227	252	257	260	306
L	161	163	163	163	194
M	66	89	94	97	112
N	127	152	157	160	175
P max.	46	45	45	51	65
P min.	31	25	20	26	25
Q	6-M6x20	6-M10x20	6-M10x20	6-M12x24	6-M12x24
R	133	158	163	166	181
S	23	23	23	23	-
T	41	41	41	41	-

Y-RE

Closed-Center Hydraulic Cylinder with Proximity Bracket (150mm~250mm)



Application

Closed-Center Hydraulic Cylinder with Proximity Bracket

Technical features

Built-in lock and relief valves prevent damage caused by excessive pressure, and ensures safety during blackouts or loss of power by maintaining pull force

SPECIFICATIONS

	Y-1530RE	Y-1550RE	Y-2035RE	Y-2050RE	Y-2560RE
Piston Stroke [mm]	30	50	35	50	60
Piston Surface Area (Push) [cm ²]	174	174	312	312	515
Piston Surface Area (Pull) [cm ²]	160	160	290	290	482
Piston Force (Push) [kN(kgf)]	65.0(6628)	65(6628)	117.0(11934)	117.0(11934)	154(15759)
Piston Force (Pull) [kN(kgf)]	60(6118)	60(6118)	108(11013)	108(11013)	144.5(14749)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)
Max. r.p.m. [min ⁻¹]	5500	5500	5500	5500	2000
Moment of inertia [kg-m ²]	0.19	0.20	0.39	0.42	0.92
Weight [kg]	14	14.8	22.5	23.5	85
Total leakage [ℓ/min]	0.8	0.8	0.8	0.8	0.8
KITAGAWA* Model	Y-1530RE	Y-1550RE	Y-2035RE	Y-2050RE	-

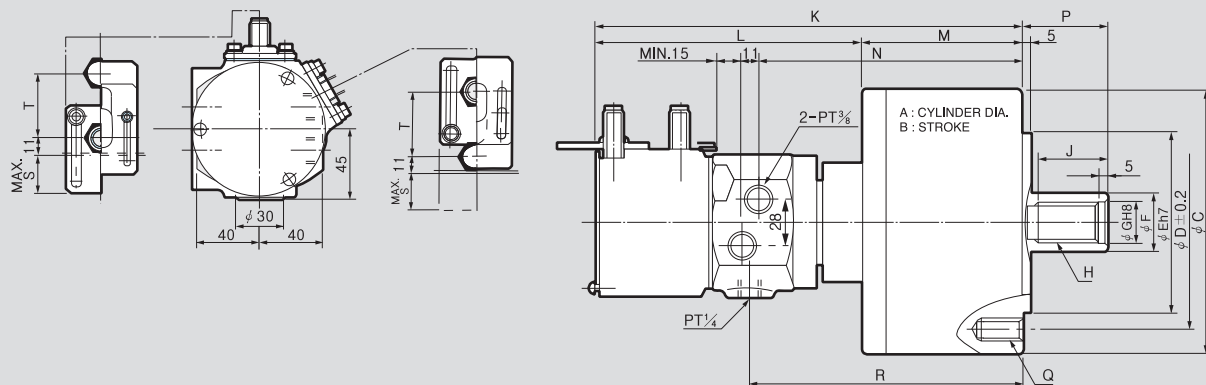
※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

※ Piston Force : Hydraulic 4.0MPa (40.8 kgf/cm²)

※ Total leakage pressure : 3.0MPa(30.6 kgf/cm²) at 50℃

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for kitagawa Iron Works Co., Ltd

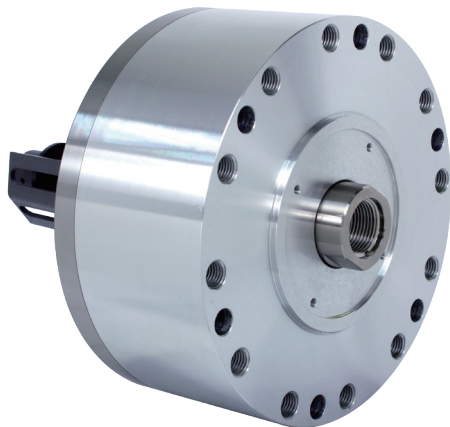


DIMENSIONS

	Y-1530RE	Y-1550RE	Y-2035RE	Y-2050RE	Y-2560RE
A	150	150	200	200	250
B	30	50	35	50	60
ΦC	190	190	245	245	300
ΦD	130	130	145	145	220
ΦE	110	110	120	120	160
ΦF	45	45	55	55	65
ΦG	31	31	37	37	44
H	M30x3.5	M30x3.5	M36x4.0	M36x4.0	M42x3.0
J	45	55	60	60	65
K	269	320.5	290	333	379
L	163	194.5	168	192	207
M	106	126	122	141	172
N	169	189	183	202	227
P max.	56	80	69	80	85
P min.	26	30	34	30	25
Q	6-M12 TAP DP'24	6-M12 TAP DP'24	12-M16 TAP DP'30	12-M16 TAP DP'30	12-M20 TAP DP'35
R	175	195	189	208	233
S	23	-	28	-	-
T	41	-	46	-	-

YH-RE

Ultra-Compact Closed-Center Hydraulic Cylinder with Proximity Bracket



Application

Ultra-Compact Closed-Center Hydraulic Cylinder with Proximity Bracket

Technical features

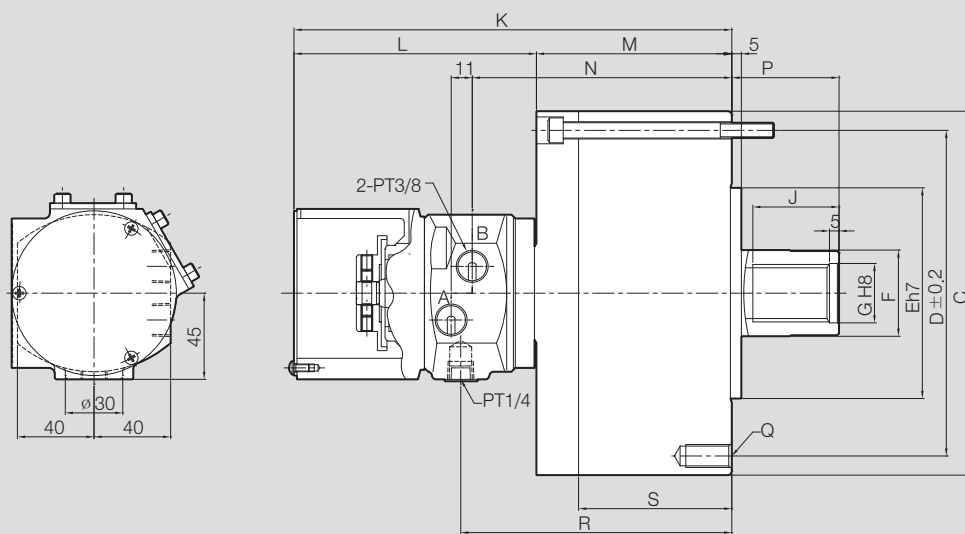
Built-in lock and relief valves prevent damage caused by excessive pressure, and ensures safety during blackouts or loss of power by maintaining pull force

SPECIFICATIONS

	YH-10120RE	YH-10125RE	YH-12125RE	YH-12140RE	YH-15130RE
Piston Stroke [mm]	20	25	25	40	30
Piston Surface Area (Push) [cm ²]	78	78	114	114	168
Piston Surface Area (Pull) [cm ²]	73	73	106	106	154
Piston Force (Push) [kN(kgf)]	29(2960)	29(2960)	42(4326)	42(4326)	63(6375)
Piston Force (Pull) [kN(kgf)]	27(2770)	27(2770)	39(4022)	39(4022)	57(5843)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)
Max. r.p.m. [min ⁻¹]	6000	6000	6000	6000	5500
Moment of inertia [kg-m ²]	0.05	0.05	0.09	0.09	0.19
Weight [kg]	7.6	7.7	10.5	11	14
Total leakage [ℓ/min]	0.8	0.8	0.8	0.8	0.8

	YH-15150RE	YH-20135RE	YH-20150RE	YH-25160RE
Piston Stroke [mm]	50	35	50	60
Piston Surface Area (Push) [cm ²]	168	305	305	515
Piston Surface Area (Pull) [cm ²]	154	283	283	482
Piston Force (Push) [kN(kgf)]	63(6375)	114(11573)	114(11573)	193(19541)
Piston Force (Pull) [kN(kgf)]	57(5843)	105(10738)	105(10738)	180(18289)
Max. Operating Pressure [MPa(kgf/cm ²)]	4.0(40.8)	4.0(40.8)	4.0(40.8)	4.0(40.8)
Max. r.p.m. [min ⁻¹]	5500	5500	5500	2000
Moment of inertia [kg-m ²]	0.2	0.39	0.42	0.92
Weight [kg]	14.5	22.5	23.5	88
Total leakage [ℓ/min]	0.8	0.8	0.8	0.8

※ Maximum turning speed is based upon actual measurement.
 ※ Specifications are subject to change without notice.



DIMENSIONS

	YH-10120RE	YH-10125RE	YH-12125RE	YH-12140RE	YH-15130RE	YH-15150RE	YH-20135RE	YH-20150RE	YH-25160RE
ΦC	135	135	160	160	190	190	245	245	305
ΦD	118	118	142	142	170	170	222	222	275
ΦE	80	80	110	110	110	110	120	120	160
ΦF	30	30	35	35	45	45	55	55	65
ΦG	21	21	25	25	31	31	37	37	44
J	35	35	44	44	45	55	60	60	65
K	209.6	214.6	220.6	267.1	228.6	280.1	265.1	280.1	310
L	126.6	126.6	126.6	156.5	126.6	158.1	158.1	158.1	136
M	83	88	94	109	102	122	107	122	142.5
N	116.5	121.5	127.5	142.5	135.5	155.5	140.5	155.5	176
P max.	45	45	51	65	56	80	69	80	85
P min.	25	20	26	25	26	30	34	30	25
Q	6-M10 TAP DP'20	6-M10 TAP DP'20	12-M12 TAP DP'24	12-M12 TAP DP'24	12-M12 TAP DP'24	12-M12 TAP DP'24	12-M16 TAP DP'30	12-M16 TAP DP'30	12-M20 TAP DP'35
R	122.5	127.5	133.5	148.5	141.5	161.5	146.5	161.5	182
S	67	72	72	87	80	100	85	100	120.5

YS-RA

Ultra-Compact Closed-Center Hydraulic Cylinder with Proximity Bracket and Built-in Rotary joint



Application

Ultra-Compact Closed-Center Hydraulic Cylinder with Proximity Bracket

Technical features

Built-in lock and relief valves prevent damage caused by excessive pressure

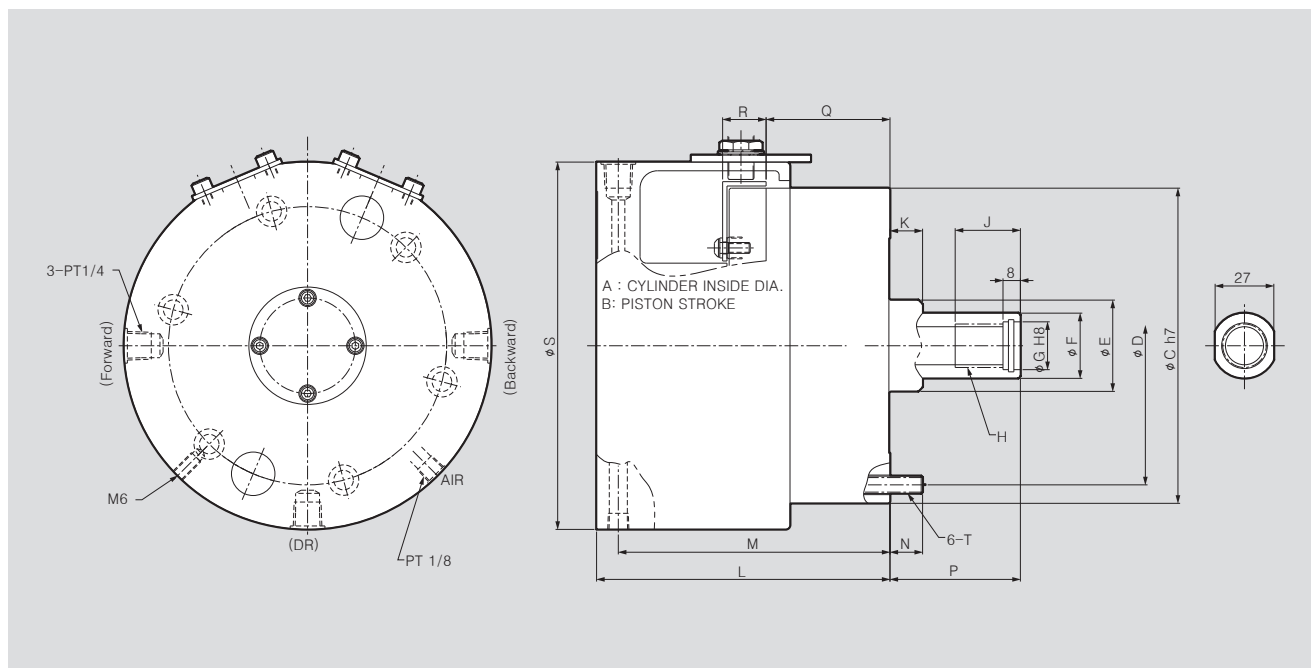
Ensures safety during blackouts or loss of power by maintaining pull force Built-in Rotary joint

SPECIFICATIONS

	YS-11020RA	YS-12021RA	YS-13030RA
Piston Stroke [mm]	20	21	30
Piston Surface Area (Push) [cm ²]	87.6	105.7	131.8
Piston Surface Area (Pull) [cm ²]	84	102	122.5
Piston Force (Push) [kN(kgf)]	28(2855)	39(3977)	47(4793)
Piston Force (Pull) [kN(kgf)]	27(2753)	38(3875)	45(4589)
Max. Operating Pressure [MPa(kgf/cm ²)]	3.5(35.7)	4.0(40.8)	4.0(40.8)
Max. r.p.m. [min ⁻¹]	6000	6000	6000
Moment of inertia [kg-m ²]	0.016	0.028	0.029
Weight [kg]	8.5	10.2	10.3
Total leakage [ℓ/min]	1.2	1.2	1.2

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



DIMENSIONS

	YS-11020RA	YS-12021RA	YS-13030RA
A	110	120	130
B	20	21	30
ΦC	145	168	168
ΦD	128	145	150
ΦE	42	44	51
ΦF	30	32	36
ΦG	22	22	26
H	M20x2.5	M20x2.5	M24x3.0
J	30	30	35
K	15	15	15
L	135	135	144
M	125	125	134
N	15	17	17
P max.	60	60	60
P min.	40	39	30
Q max.	77	77	86
Q min.	57	57	66
R	20	20	20
ΦS	169	192	192
T	M8x80	M10x80	M10x90

YS-RC

Ultra-Compact closed-center hydraulic cylinder
with proximity bracket and built-in rotary joint



Application

Ultra-compact closed-center hydraulic cylinder

Technical features

Built-in lock and relief valves prevent damage caused by excessive pressure

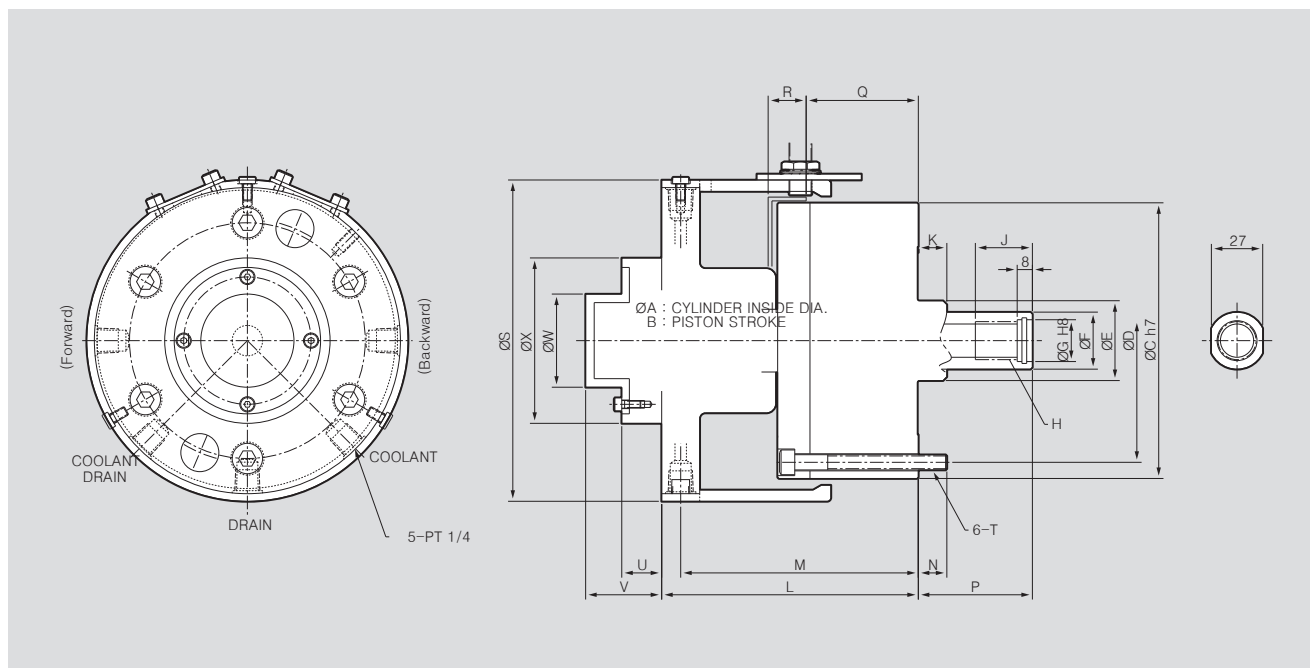
Ensures safety during blackouts or loss of power by maintaining pull force Built-in Rotary joint

SPECIFICATIONS

	YS-11020RC
Piston Stroke [mm]	20
Piston Surface Area (Push) [cm ²]	87.6
Piston Surface Area (Pull) [cm ²]	84
Piston Force (Push) [kN(kgf)]	28(2855)
Piston Force (Pull) [kN(kgf)]	27(2753)
Max. Operating Pressure [MPa(kgf/cm ²)]	3.5(35.7)
Max. r.p.m. [min ⁻¹]	6000
Moment of inertia [kg-m ²]	0.016
Weight [kg]	8.5
Total leakage [ℓ/min]	1.2

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

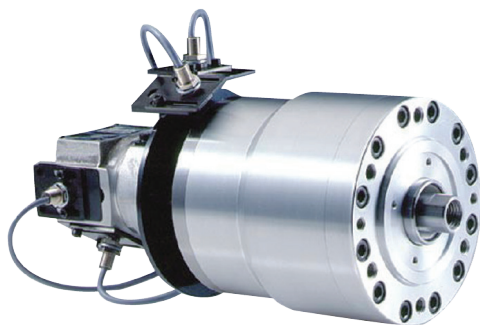


DIMENSIONS

YS-11020RC	
A	110
B	20
ΦC	145
ΦD	128
ΦE	42
ΦF	30
ΦG	22
H	M20x2.5
J	30
K	15
L	135
M	125

YS-11020RC	
N	15
P max.	60
P min.	40
Q max.	77
Q min.	57
R	20
ΦS	169
T	M8x80
U	21
V	40
W	49
X	87

DY Double-Piston Hydraulic Cylinder



Application

2+2 chucks and chucks with face drivers or part ejectors

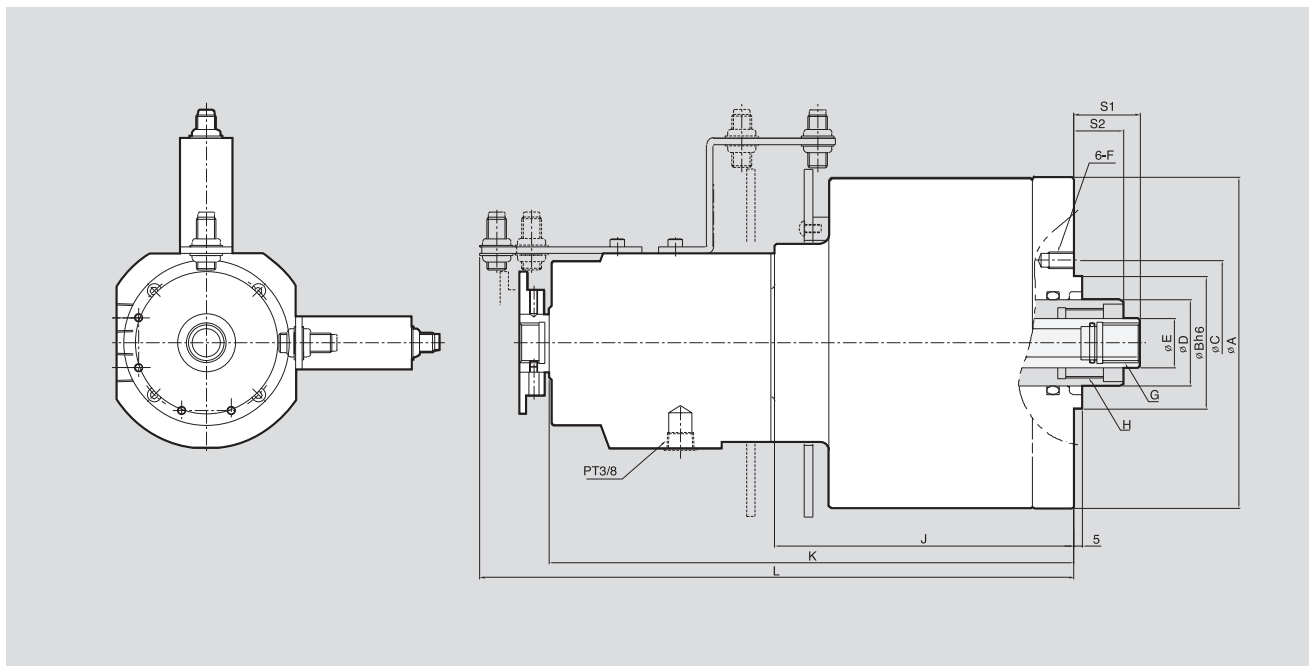
Technical features

Dual actuation with a single cylinder

SPECIFICATIONS

	Piston Dia. (mm)	Piston Area (cm ²)	Piston Stroke		Weight (kg)	GD2 (kgf.m ²)	Max. Operating Pressure (kgf/cm ²)	Max. Speed (r.p.m.)
			S1(Max/Min)	S2(Max/Min)				
DY-1253030	125/70	103/33	60/30	45/15	-	0.065	40.8	5000
DY-1251535L	125/70	103/33	116/101	75/40	-	0.07	40.8	5000
DY-1251535S	125/70	103/33	90/75	75/40	-	0.07	40.8	5000
DY-1253060	125/70	103/33	90/60	75/15	-	0.085	40.8	5000
DY-1255030	125/70	103/33	80/30	45/15	-	0.072	40.8	5000

※ Maximum turning speed is based upon actual measurement.
 ※ Specifications are subject to change without notice.



※ Piston A : Outer Piston

※ Piston B : Inner Piston

DIMENSIONS

	DY-1253030	DY-1251535	DY-1253060	DY-1255030
A	165	165	165	165
B (g6)	110	110	110	110
C	142	142	142	142
D	55	55	55	55
E	25	25	25	25
F	6-M8	6-M8	6-M8	6-M8
G	M16x2.0	M16x2.0	M16x2.0	M16x2.0
H	M45x1.5	M45x1.5	M45x1.5	M45x1.5
J	164	154	194	184
K	305	325	365	340
L	374.3	394.3	434.3	429.3

AY-R Closed-Center Pneumatic Cylinder



Application

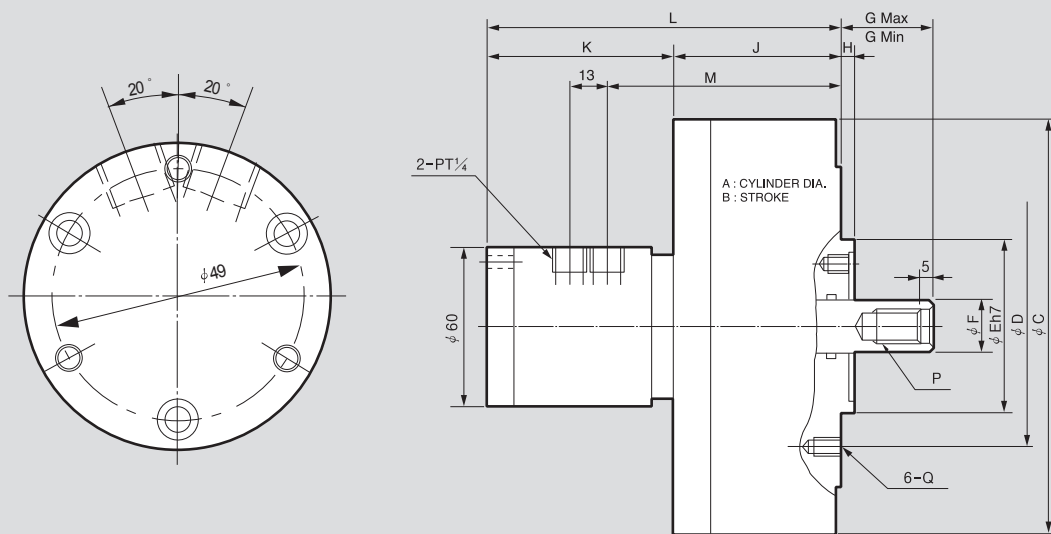
Closed-Center Pneumatic Cylinder
Suitable for cutting thin material

SPECIFICATIONS

	AY-1005R	AY-1315R	AY-1720R	AY-2225R	AY-2730R
Piston Stroke [mm]	5	15	20	25	30
Piston Surface Area (Push) [cm ²]	78.5	131	225	378	570.4
Piston Surface Area (Pull) [cm ²]	73.6	128	220.1	371.1	560.8
Piston Force (Push) [kN(kgf)]	5.4(552)	7.7(786)	13.23(1350)	22.2(2268)	33.5(3422)
Piston Force (Pull) [kN(kgf)]	5.1(518)	7.5(770)	12.9(1320)	21.8(2226)	33.0(3364)
Max. Operating Pressure [MPa(kgf/cm ²)]	8(0.82)	8(0.82)	8(0.82)	8(0.82)	8(0.82)
Max. r.p.m. [min ⁻¹]	5000	5000	5000	4000	3000
Weight [kg]	4.1	5.2	8.3	13.3	18.7
Moment of inertia [kg·m ²]	0.04	0.07	0.11	0.32	0.75

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



DIMENSIONS

	AY-1005R	AY-1315R	AY-1720R	AY-2225R	AY-2730R
A	100	130	170	220	270
B	5	15	20	25	30
ϕC	128	156	200	255	305
ϕD	90	90	100	130	130
$\phi E(h7)$	65	65	80	110	110
ϕF	20	20	25	30	35
G max.	30	35	65	71	76
G min.	25	20	45	46	46
H	5	5	5	5	5
J	53	63	82	93	103
K	71	71	71	71	74.5
L	124	134	153	164	177.5
M	80	90	109	120	133.5
N	M5	M5	M5	M5	M5
Q	M6x11	M6x11	M10x16	M12x20	M12x20
P	M12x22	M12x22	M16x30	M20x35	M24x40



SCROLL CHUCK



SC

Standard Scroll Chuck
(Hard Jaws)

86 P



SL

Standard Slotter Chuck
(Hard Jaws)

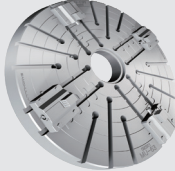
96 P



FSC

Standard Front Mounting
Scroll Chuck(Hard Jaws)

88 P



MU

Manual Chuck

98 P



TC

Standard Scroll Chuck
(Soft & Hard Top Jaws)

89 P



IC

Independent Chuck
(Hard Jaws)

100 P



FTC

Front Mounting Scroll
Chuck(Soft & Hard Top Jaws)

90 P



IC Mega Bore

Independent Chuck
(Hard Jaws)

102 P



FTU

Standard Front Mounting
Scroll Chuck(Hard Jaws)

92 P



ST

2-Jaw Scroll Chuck
(Soft Top Jaws)

93 P



SF

4-Jaw Scroll Chuck
(Hard Jaws)

94 P



SCS

6-Jaw Scroll Chuck
(Hard Jaws)

95 P

SC Standard Scroll Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 16 \sim \varnothing 57$
Clamping Range : $\varnothing 2 \sim \varnothing 180$

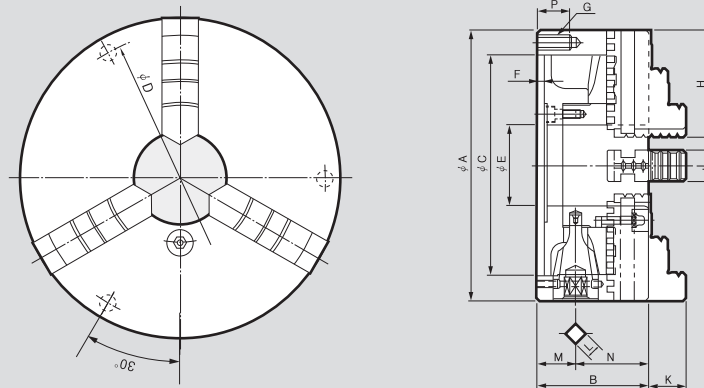


Application

Scroll chuck with hardened jaws

Technical features

Includes external and internal gripping jaws.



DIMENSIONS

	SC-85(3")	SC-110(4")	SC-130(5")	SC-165(6")	SC-190(7")
ΦA	85	110	130	167	192
B	44.1	56.85	59.5	65	75
ΦC(H6)	60	80	100	130	155
ΦD	73	95	115	147	172
ΦE	16	24	34	45	57
F	3.5	4.5	4.5	5	5
G	3-M6	3-M8	3-M8	3-M10	3-M10
H	35	42	50	65	75
J	11	14	16	19	22
K	14.6	18.75	20.1	25.07	30.06
L	7	8	8	10	11
M	17	24.5	22.5	24	27.5
N	27.1	32.35	37	41	47.5
P	12	16	16	20	20

SPECIFICATIONS

	SC-85 (3")	SC-110 (4")	SC-130 (5")	SC-165 (6")	SC-190 (7")
Max. Static Gripping Force [kN(kgf)]	9(918)	12(1224)	15(1530)	31(3161)	31(3161)
Clamping Range External [Ømm]	2~70	3~94	3~110	3~160	4~180
Clamping Range Internal [Ømm]	24~64	29~84	33~100	48~150	56~170
Handle Torque [N·m(kgf·m)]	29.4(3.0)	44.1(4.1)	63.7(6.5)	88.3(9.0)	107.9(11.0)
Max. r.p.m. [min ⁻¹]	2500	2500	2500	4000	3500
Weight [kg]	1.5	3.1	4.4	11.4	12.2
Moment of inertia [N·m ² (kg·m ²)]	0.05(0.005)	0.17(0.017)	0.35(0.036)	1.18(0.12)	2.35(0.24)

※ Maximum turning speed is based upon actual measurement.

SC Standard Scroll Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 75 \sim \varnothing 130$
Clamping Range : $\varnothing 5 \sim \varnothing 346$

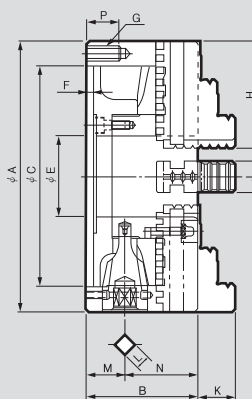
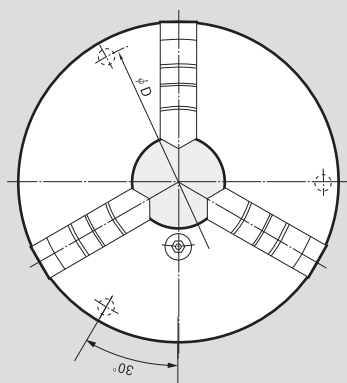


Application

Scroll chuck with hardened jaws

Technical features

Includes external and internal gripping jaws.



DIMENSIONS

	SC-230(9")	SC-273(10")	SC-310(12")	SC-355(14")	SC-405(16")
ΦA	232	273	310	355	405
B	84	86	96	110	114.5
ΦC(H6)	190	230	260	300	345
ΦD	210	250	285	328	375
ΦE	75	89	100	105	130
F	6	6	7	8	8
G	3-M12	3-M12	3-M12	6-M12	6-M12
H	85	98	110	133	133
J	24	28	30	35	35
K	35.04	40.02	45.08	62.98	63
L	12	12	14	14	15
M	29.5	31.5	31.5	42.4	42
N	54.5	54.5	64.5	67.6	72.5
P	25	25	25	36	36

SPECIFICATIONS

	SC-230 (9")	SC-273 (10")	SC-310 (12")	SC-355 (14")	SC-405 (16")
Max. Static Gripping Force [kN(kgf)]	37(3773)	46(4691)	55(5608)	40.5(4130)	45(4589)
Clamping Range External [Ømm]	5~200	5~260	10~300	25~315	25~346
Clamping Range Internal [Ømm]	62~210	70~250	86~290	107~290	113~324
Handle Torque [N·m(kgf·m)]	147(15.0)	176.5(18.0)	206(21.0)	225.6(23.0)	245(25.0)
Max. r.p.m. [min ⁻¹]	2900	2500	2200	1500	1500
Weight [kg]	21.2	28	41	54	74
Moment of inertia [N·m ² (kg·m ²)]	6.27(0.64)	9.90(1.01)	23.0(2.35)	37.2(3.8)	67.6(6.9)

※ Maximum turning speed is based upon actual measurement.

FSC Standard Front-Mounting Scroll Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 34 \sim \varnothing 100$
Clamping Range : $\varnothing 3 \sim \varnothing 300$

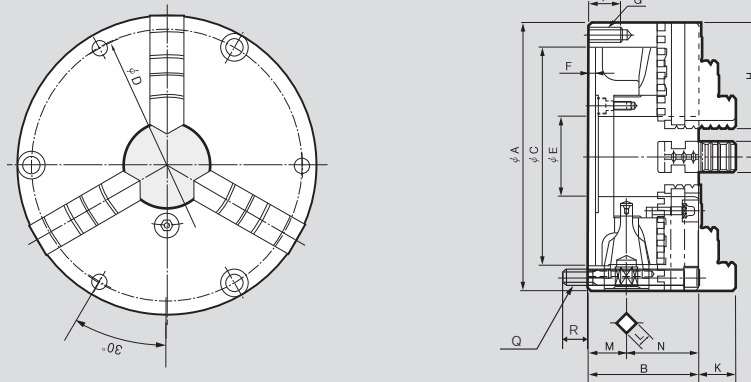


Application

Scroll chuck with hardened jaws (Front mounting)

Technical features

Includes external and internal gripping jaws



DIMENSIONS

	FSC-85(3")	FSC-110(4")	FSC-130(5")	FSC-165(6")	FSC-190(7")	FSC-230(9")	FSC-273(10")	FSC-310(12")
ΦA	85	110	130	167	192	232	273	310
B	44.1	56.85	59.5	65	75	84	86	96
ΦC(H6)	60	80	100	130	155	190	230	260
ΦD	73	95	115	147	172	210	250	285
ΦE	16	24	34	45	57	75	89	100
F	3.5	4.5	4.5	5	5	6	6	7
G	3-M6	3-M8	3-M8	3-M10	3-M10	3-M12	3-M12	3-M12
H	35	42	50	65	75	87	98	110
J	11	14	16	19	22	24	28	30
K	14.6	18.75	20.1	25.07	30.06	35.04	40.02	45.08
L	7	8	8	10	11	12	12	14
M	17	24.5	22.5	24	27.5	29.5	31.5	31.5
N	27.1	32.35	37	41	47.5	54.5	54.5	64.5
P	13	16	16	20	20	25	25	25
Q	3-M6x50	3-M8x60	3-M8x65	3-M10x70	3-M10x85	3-M12x90	3-M12x90	3-M12x100
R	12.4	11.65	14	15.5	20.5	20	20	20

SPECIFICATIONS

	FSC-85(3")	FSC-110(4")	FSC-130(5")	FSC-165(6")	FSC-190(7")	FSC-230(9")	FSC-273(10")	FSC-310(12")
Max. Static Gripping Force [kN(kgf)]	9(918)	12(1224)	15(1530)	31(3161)	31(3161)	37(3773)	46(4691)	55(5608)
Clamping Range External [Ømm]	2~70	3~94	3~110	3~160	4~180	5~220	5~260	10~300
Clamping Range Internal [Ømm]	24~64	29~84	33~100	48~150	56~170	62~210	70~250	86~290
Handle Torque [N-m(kgf-m)]	29.4(3.0)	44.1(4.1)	63.7(6.5)	88.3(9.0)	107.9(11.0)	147(15.0)	176.5(18.0)	206(21.0)
Max. r.p.m. [min ⁻¹]	2500	2500	2500	4000	3500	2900	2500	2200
Weight [kg]	1.5	3.1	4.4	11.4	12	21.2	28	41
Moment of inertia [N-m2(kg-m ²)]	0.05(0.005)	0.17(0.017)	0.35(0.036)	1.18(0.12)	2.35(0.24)	6.27(0.64)	9.90(1.01)	23.0(2.35)

※ Maximum turning speed is based upon actual measurement.
※ Specifications are subject to change without notice.

TC Standard Scroll Chuck (Soft and Hard top Jaws)

Thru Hole Range : $\varnothing 57 \sim \varnothing 100$
Clamping Range : $\varnothing 4 \sim \varnothing 300$

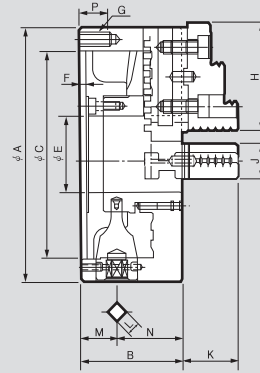
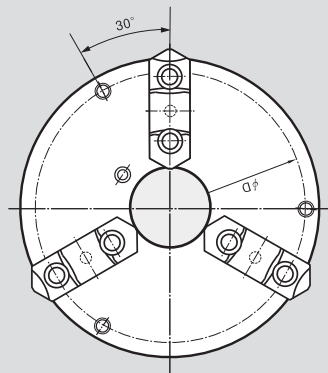


Application

Two-piece, base jaw and to jaw configuration(Includes hard and soft jaws)

Technical features

Reversible hard jaws.



DIMENSIONS

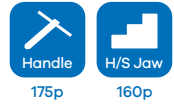
	TC-190(7")	TC-230(9")	TC-273(10")	TC-310(12")
ΦA	192	232	273	310
B	78.7	84	86	96
ΦC	155	190	230	260
ΦD	172	210	250	285
ΦE	57	75	89	100
F	5	6	6	7
G	3-M10	3-M12	3-M12	3-M12
H	80.5	90.5	103.5	115.5
J	28	32	35	40
K	42.8	53.8	56	56.08
L	11	12	12	14
M	27.5	29.5	31.5	31.5
N	51.2	54.5	54.5	64.5
P	20	25	25	25
Mounting bolt	3-M10	3-M12	3-M12	3-M12

SPECIFICATIONS

	TC-190(7")	TC-230(9")	TC-273(10")	TC-310(12")
Max. Static Gripping Force [kN(kgf)]	31(3161)	37(3773)	46(4691)	55(5608)
Clamping Range External [Ømm]	4~180	5~220	5~260	10~300
Clamping Range Internal [Ømm]	56~170	62~210	70~250	86~290
Handle Torque [N·m(kgf·m)]	107.9(11.0)	147(15.0)	173.5(18.0)	206(21.0)
Max. r.p.m. [min ⁻¹]	3500	2900	2500	2200
Weight [kg]	12.2	21.2	28	41
Moment of inertia [N·m ² (kg·m ²)]	2.35(0.24)	6.24(0.64)	9.90(1.01)	23.0(2.35)

※ Maximum turning speed is based upon actual measurment.

FTC Front-Mounting Scroll Chuck (Soft and Hard top Jaws)



Application

Front mounting scroll chuck with two-piece jaws

Technical features

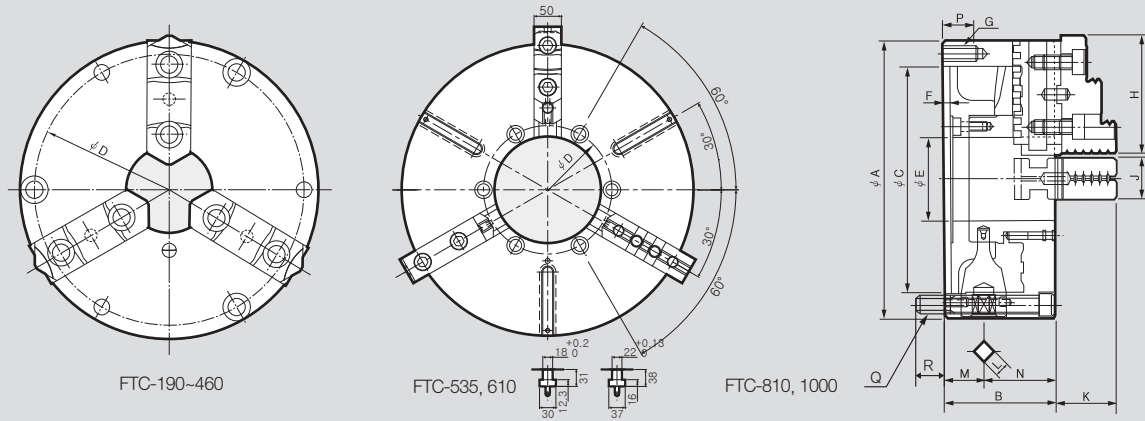
Reversible hard jaws

SPECIFICATIONS

	FTC-165	FTC-190(7")	FTC-230(9")	FTC-273(10")	FTC-310(12")
Max. Static Gripping Force [kN(kgf)]	31(3161)	31(3161)	37(3773)	46(4691)	55(5608)
Clamping Range External [Ømm]	3~160	4~180	5~220	5~260	10~300
Clamping Range Internal [Ømm]	55~150	56~170	62~210	70~250	86~290
Handle Torque [N·m(kgf·m)]	88(9.0)	107.9(11.0)	147(15.0)	176.5(18.0)	206(21.0)
Max. r.p.m. [min ⁻¹]	4000	3500	2900	2500	2200
Weight [kg]	9	12.2	21.2	28	41
Moment of inertia [N·m ² (kg·m ²)]	0.033	0.62(0.063)	1.61(0.163)	2.63(0.265)	5.85(0.588)

	FTC-460(18")	FTC-535(21")	FTC-610(24")	FTC-810(32")	FTC-1000(40")
Max. Static Gripping Force [kN(kgf)]	65(6650)	73(7400)	80(8200)	110(11216)	110(11216)
Clamping Range External [Ømm]	40~410	45~481	130~576	270~810	340~990
Clamping Range Internal [Ømm]	152~436	155~499	235~592	390~800	450~940
Handle Torque [N·m(kgf·m)]	255.0(26)	313.9(32)	372.7(38)	588(60)	588(60)
Max. r.p.m. [min ⁻¹]	1200	950	850	650	470
Weight [kg]	106	182	238	480	780
Moment of inertia [N·m ² (kg·m ²)]	124(12.6)	287(29.3)	488(49.8)	598(61)	598(61)

※ Maximum turning speed is based upon actual measurement.

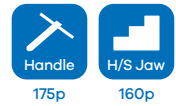


DIMENSIONS

	FTC-165	FTC-190(7")	FTC-230(9")	FTC-273(10")	FTC-310(12")	FTC-460(18")	FTC-535(21")	FTC-610B(24")	FTC-810(32")	FTC-1000(40")
ΦA	167	192	232	273	310	460	535	610	810	1000
B	69	78.7	84	86	96	114	143	143	180	196
$\Phi C(H6)$	130	155	190	230	260	400	270	380	520	910
ΦD	147	172	210	250	285	425	235	315	425	610
ΦE	47	57	75	89	100	190	195	275	375	560
F	5	5	6	6	7	8	12	14	16	16
G	3-M10	3-M10	3-M12	3-M12	3-M12	-	-	-	-	-
H	67.3	80.5	90.5	103.5	115.5	140(130)	150(130)	130	140	140
J	26	28	32	35	40	50	50	50	70	70
K	38.57	42.8	53.8	56	56.08	79.8	82	82	95	95
L	10	11	12	12	14	17	22	22	22	22
M	24	27.5	29.5	31.5	31.5	38.2	57.5	57.5	64	69.5
N	45	51.2	54.5	54.5	64.5	75.8	85.5	85.5	116	126.5
P	20	20	25	25	25	-	-	-	-	-
Q	3-M10x75	3-M10x85	3-M12x90	3-M12x90	3-M12x105	3-M16x120	3-M20x140	3-M20x140	3-M24x170	3-M24x200
R	16.5	16.8	20	20	20	24	19	18	15	24

FTU Standard Front-Mounting Scroll Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 32 \sim \varnothing 103$
Clamping Range : $\varnothing 3 \sim \varnothing 300$

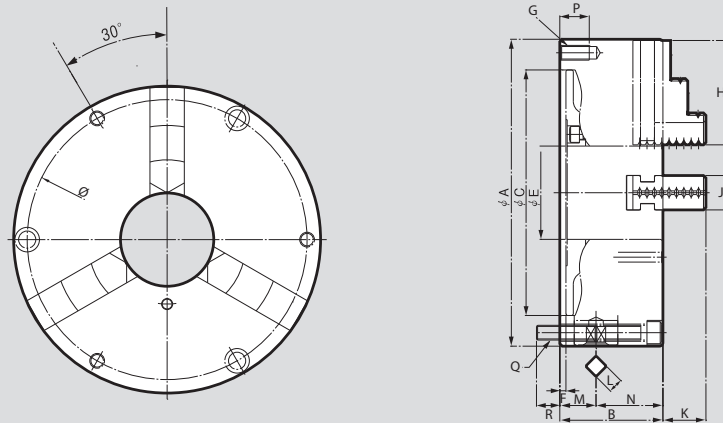


Application

Scroll chuck with hardened jaws (Front mounting).

Technical features

Includes a set of one-piece hard jaws.
Two-piece hard jaws and soft jaws are available as additional options.



DIMENSIONS

	FTU-125	FTU-160	FTU-200	FTU-250	FTU-315
ΦA	125	160	200	250	315
B	56	65	75	85	96
ΦC	95	125	160	200	260
ΦD	108	140	176	224	286
ΦE	32	42	55	76	103
F	4	4	4	5	5
G	3-M8	3-M10	3-M10	3-M12	3-M126
H	50	65	75	85	110
J	20	20	25	28	32
K	20	29	32	34	43
L	8	10	11	12	14
M	21	24	27.5	30.5	31.5
N	35	41	47.5	54.5	64.5
P	16	20	20	24	32
Q	3-M8x60	6-M10x70	6-M10x80	6-M12x90	6-M16x100
R	13	16	16	18	21

SPECIFICATIONS

	FTU-125	FTU-160	FTU-200	FTU-250	FTU-315
Max. Static Gripping Force [kN(kgf)]	15(1530)	31(3161)	37(3773)	46(4691)	55(5608)
Clamping Range External [Ømm]	3~110	3~1655	4~190	5~220	10~300
Clamping Range Internal [Ømm]	33~100	48~145	56~180	62~230	86~290
Handle Torque [N·m(kgf·m)]	63.7(6.5)	88.3(9.0)	147.0(15.0)	176.5(18.0)	206.0(21.0)
Max. r.p.m. [min ⁻¹]	2500	4000	2900	2500	2200
Weight [kg]	4.0	10.5	17.0	25.0	42.0
Moment of inertia [N·m ² (kg·m ²)]	0.32	1.02	4.95	7.75	21.0

※ Specifications are subject to change without notice.

ST 2Jaw Scroll Chuck (Soft top Jaws)

Thru Hole Range : $\varnothing 57 \sim \varnothing 100$
Clamping Range : $\varnothing 4 \sim \varnothing 300$

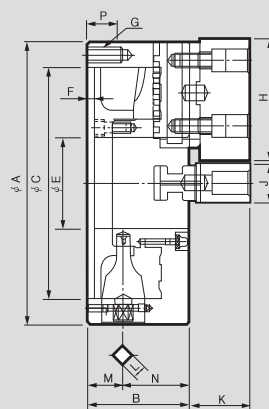
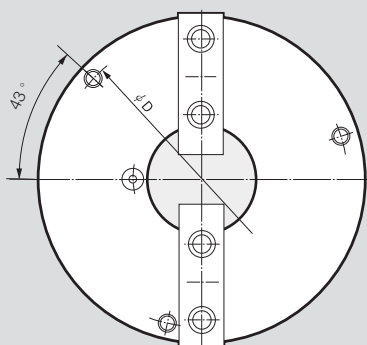


Application

Front mounting scroll chuck with two-piece jaws

Technical features

Suitable for clamping valves, pipe fittings and irregular parts



DIMENSIONS

	ST-190(7")	ST-230(9")	ST-273(10")	ST-310(12")
ΦA	192	232	273	310
B	78.7	84	86	96
ΦC(H6)	155	190	230	260
ΦD	172	210	250	285
ΦE	57	75	89	100
F	5	6	6	7
G	3-M10	3-M12	3-M12	3-M12
H	88	100	110	125
J	32	32	35	40
K	42.8	49.8	48	59.3
L	11	12	12	14
M	27.5	29.5	31.5	31.5
N	51.2	54.5	54.5	64.5
P	20	25	25	25

SPECIFICATIONS

	ST-190(7")	ST-230(9")	ST-273(10")	ST-310(12")
Max. Static Gripping Force [kN(kgf)]	20.7(2110)	24.7(2518)	46(4691)	55(5608)
Clamping Range External [Ømm]	4~180	5~220	5~260	10~300
Clamping Range Internal [Ømm]	62~170	70~210	70~250	86~290
Handle Torque [N·m(kgf·m)]	73.5(7.5)	98(10.0)	176.5(18.0)	206(21.0)
Max. r.p.m. [min ⁻¹]	3500	2900	2500	2200
Weight [kg]	12.6	21.4	28	41
Moment of inertia [N·m ² (kg·m ²)]	2.55(0.26)	6.27(0.64)	9.90(1.01)	23.0(2.35)

※ Maximum turning speed is based upon actual measurement.

SF 4-Jaw Scroll Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 57 \sim \varnothing 100$
Clamping Range : $\varnothing 4 \sim \varnothing 300$

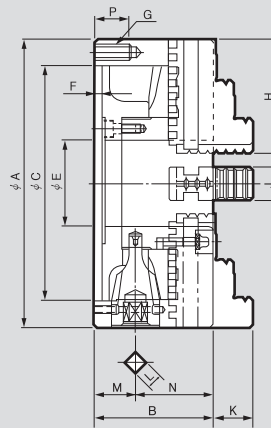
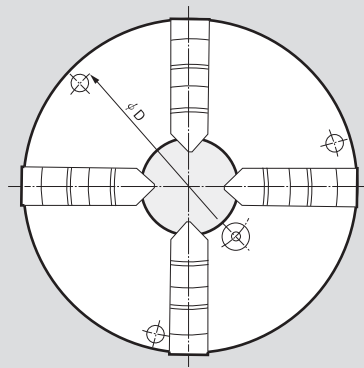


Application

4-Jaw Scroll chuck

Technical features

Suitable for clamping square parts



DIMENSIONS

	SF-190(7")	SF-230(9")	SF-273(10")	SF-310(12")
ΦA	192	232	273	310
B	75	84	86	96
$\Phi C(H6)$	155	190	230	260
ΦD	172	210	250	285
ΦE	57	75	89	100
F	5	6	6	7
G	3-M10	3-M12	3-M12	3-M12
H	75	87	98	110
J	22	24	28	30
K	30.06	35.04	40.02	45.08
L	11	12	12	14
M	27.5	29.5	31.5	31.5
N	47.5	54.5	54.5	64.5
P	20	25	25	25

SPECIFICATIONS

	SF-190(7")	SF-230(9")	SF-273(10")	SF-310(12")
Max. Static Gripping Force [kN(kgf)]	31(3161)	37(3773)	46(4691)	55(5608)
Clamping Range External [$\varnothing$ mm]	4~180	5~220	5~260	10~300
Clamping Range Internal [$\varnothing$ mm]	56~170	62~210	70~250	86~290
Handle Torque [N·m(kgf·m)]	107.9(11.0)	147(15.0)	176.5(18.0)	206(21.0)
Max. r.p.m. [min^{-1}]	3500	2900	2500	2200
Weight [kg]	12.5	21.5	28	41
Moment of inertia [N·m ² (kg·m ²)]	2.45(0.25)	6.37(0.65)	9.90(1.01)	23.0(2.35)

※ Maximum turning speed is based upon actual measurement.

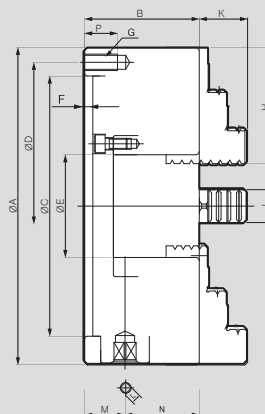
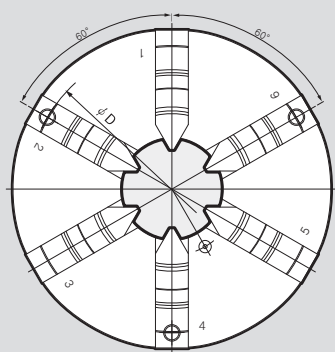


Application

Rigid 6-jaw scroll chuck with hard jaws

Technical features

Minimizes deformation



DIMENSIONS

SCS-230(9")		SCS-273(10")		SCS-310(12")	
ΦA	232	273	310		
B	84	86	96		
ΦC(H6)	190	230	260		
ΦD	210	250	285		
ΦE	75	89	100		
F	6	6	7		
G	3-M12	3-M12	3-M12		
H	85	98	110		
J	24	28	30		
K	35.04	40.02	45.08		
L	12	12	14		
M	29.5	31.5	31.5		
N	54.5	54.5	64.5		
P	25	25	25		

SPECIFICATIONS

	SCS-230 (9")	SCS-273 (10")	SCS-310 (12")
Max. Static Gripping Force [kN(kgf)]	37(3773)	46(4691)	55(5608)
Clamping Range External [Ømm]	5~200	5~260	10~300
Clamping Range Internal [Ømm]	62~210	70~250	86~290
Handle Torque [N·m(kgf·m)]	147(15.0)	176.5(18.0)	206(21.0)
Max. r.p.m. [min ⁻¹]	2900	2500	2200
Weight [kg]	24	32	45
Moment of inertia [N·m ² (kg·m ²)]	6.27(0.64)	9.90(1.01)	23.0(2.35)

※ Maximum turning speed is based upon actual measurement.

SL Standard Slotter Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 60 \sim \varnothing 100$
Clamping Range : $\varnothing 4 \sim \varnothing 266$

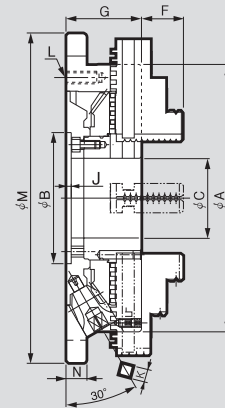
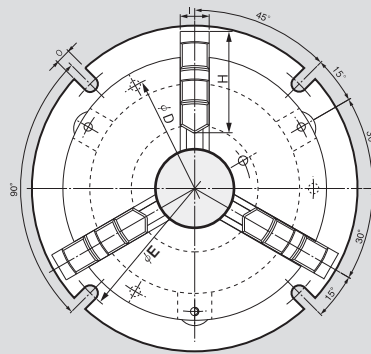


Application

Easy installation and operation

Technical features

Mounted adaptor plate



DIMENSIONS

	SL-08	SL-10	SL-12
ΦA	215	255	305
$\Phi B(HC6)$	110	125	160
ΦC	60	76	100
ΦD	190.5	230	280
ΦE	240	286	340
F	35.04	40.02	45.08
G	64	72	76
H	85	98	110
I	25	28	30
J	4	4.5	5
K	11	12	14
L	M10	M12	M12
M	266	315	370
N	17	20	22
O	13	15	17

SPECIFICATIONS

	SL-08	SL-10	SL-12
Max. Static Gripping Force [kN(kgf)]	37(3,800)	46(4,700)	55(5,620)
Clamping Range External [$\varnothing$ mm]	4~182	4~220	5~266
Clamping Range Internal [$\varnothing$ mm]	58~174	68~212	80~263
Handle Torque [N·m(kgf·m)]	117.7(13)	176.5(18)	196.2(20)
Compatibility Jaw	SC-230	SC-273	SC-310
Weight [kg]	17.6	27.7	40

※ Maximum turning speed is based upon actual measurement.





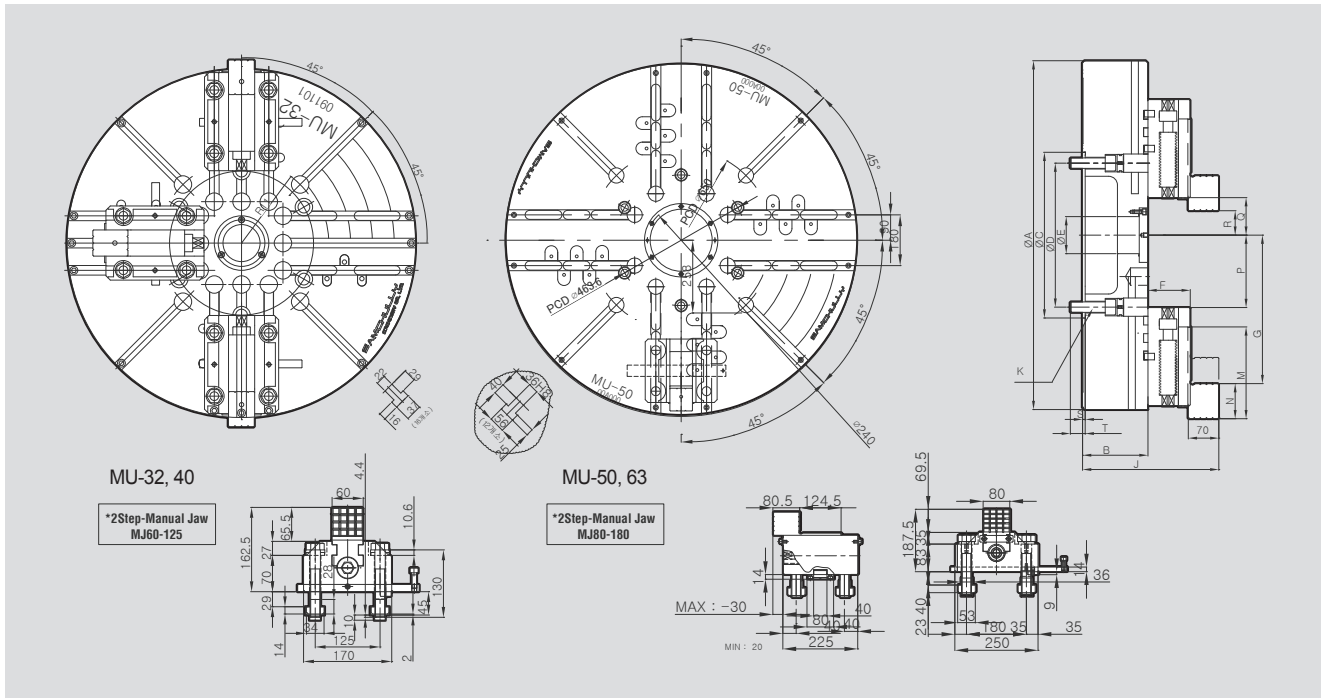
Application

Easy to operate scroll chuck with stepped jaws.

SPECIFICATIONS

	MU-32	MU-40	MU-50	MU-63
Box Jaw Stroke [mm]	60	60	50	50
Max. Static Gripping Force. [kN(kgf)]	-	-	-	-
Clamping Range Max. [mm]	681	885	1050	1450
Clamping Range Min. [mm]	112	316	281	321
Max. r.p.m. [min ⁻¹]	650	500	360	400
Weight [kg]	350	800	1250	1600
Moment of inertia [N·m ² (kg·m ²)]	-	-	-	-

※ Maximum turning speed is based upon actual measurement.
 ※ T-Slot can be changed at the request.



DIMENSIONS

	MU-32	MU-40	MU-50	MU-63
ΦA	800	1000	1250	1600
$\Phi B(76)$	150	150	180	240
ΦC	380	520	520	1020
ΦD	330.2	463.6	463.6	956
ΦE	85	178	220	320
F	97	97	124.5	124.5
G max	340.5	442.5	525	725
J	312.5	312.5	367.5	427.5
K	6-M24x80L	6-M24x90L	6-M24x100L	12-M24x140L
M	210.5	210.5	205	205
N	80.5	80.5	80.5	80.5
P	166	268	345	365
Q	86	188	170.5	190.5
R min	56	158	140.5	160.5
S	6	8	8	8
T	34	41	54	38

IC Independent Chuck (Hard Jaws) (200mm - 400mm)

Thru Hole Range : $\varnothing 50 \sim \varnothing 90$
Clamping Range : $\varnothing 75 \sim \varnothing 360$

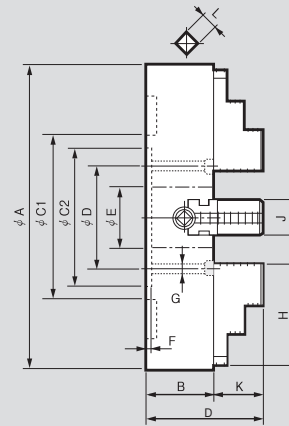
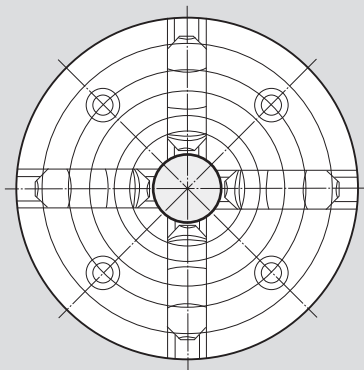


Application

Independent chuck with independently moving jaws

Technical features

Chucks 12 inches and larger add versatility with t-slots



DIMENSIONS

	IC-08	IC-10	IC-12	IC-14	IC-16
A	200	250	300	350	400
B	75	80	90	90	100
C1	-	165	186	210	230
C2	175	150	170	190	210
D	155	125	140	160	180
E	50	55	65	75	90
F	6	7	6	8	8
G	M12	M12	M12	M12	M16
H	75	90	100	110	120
J	30	30	35	35	40
K	30	35	40	45	50
L	10	10	12	12	14

SPECIFICATIONS

	IC-08	IC-10	IC-12	IC-14	IC-16
Max. Static Gripping Force [kN(kgf)]	1000	1400	1600	1700	2000
Clamping Range External [Ømm]	12	12	16	20	20
Clamping Range Internal [Ømm]	180	230	270	320	370
Max. r.p.m. [min ⁻¹]	1600	1600	1400	1400	1200
Weight [kg]	14.8	21	29.5	40	56.5
Moment of inertia [N·m²(kg·m²)]	0.3	0.6	1.4	2.9	4.5

※ Maximum turning speed is based upon actual measurement.
※ Specifications are subject to change without notice.

IC Independent Chuck (Hard Jaws) (450mm - 813mm)

Thru Hole Range : $\varnothing 100 \sim \varnothing 140$
Clamping Range : $\varnothing 220 \sim \varnothing 750$

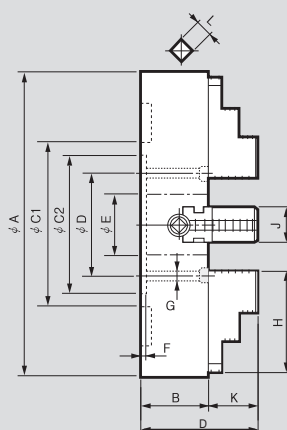
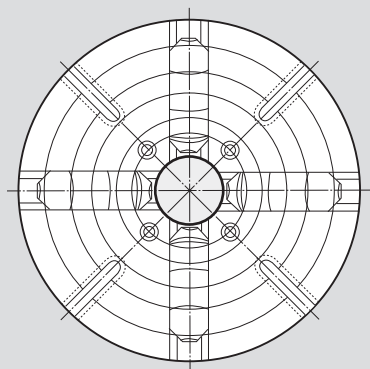


Application

Independent chuck with independently moving jaws

Technical features

Chucks 12 inches and larger add versatility with t-slots



DIMENSIONS

	IC-18	IC-20	IC-24	IC-28	IC-32
A	450	500	600	710	800
B	105	110	120	120	130
C1	250	272	330	382	440
C2	230	250	300	350	400
D	200	220	260	300	350
E	100	110	120	140	140
F	8	8	10	12	12
G	M16	M16	M20	M20	M20
H	130	140	160	180	200
J	40	45	50	50	60
K	55	60	70	70	89
L	14	14	14	14	24

SPECIFICATIONS

	IC-18	IC-20	IC-24	IC-28	IC-32
Max. Static Gripping Force [kN(kgf)]	2000	2200	2300	2396	2447
Clamping Range External [Ømm]	20	20	25	30	40
Clamping Range Internal [Ømm]	420	460	560	660	750
Max. r.p.m. [min ⁻¹]	1200	900	900	900	600
Weight [kg]	70	90	150	247	357
Moment of inertia [N·m ² (kg·m ²)]	7	11.8	25.3	58	103

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.

IC Independent Chuck (Hard Jaws) (500mm - 600mm) **MEGA BORE**

Thru Hole Range : $\varnothing 180 \sim \varnothing 275$
Clamping Range : $\varnothing 450 \sim \varnothing 550$

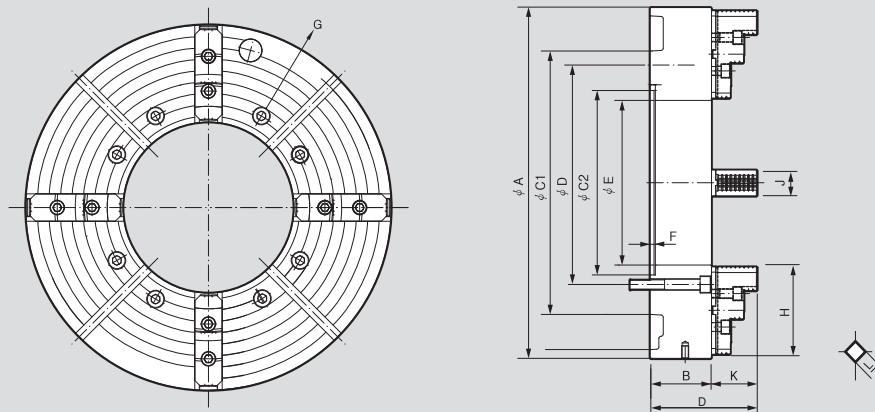


Application

Mega-bore facilitates work on large oil pipe

Technical features

Jaws actuate independently via screw bar
A set of both hard jaws and soft jaws are included



DIMENSIONS

	IC-2018	IC-2023	IC-2423	IC-2427
ΦA	500	500	600	600
B	110	110	140	140
$\Phi C2$	260	300	420	420
ΦD	230	270	463.6	463.6
ΦE	185	230	230	275
F	-	8	10	10
G	M16	M16	M24	M24
H	135	140	200	200
J	45	45	60	60
K	83.45	83.45	104.15	104.15
L	14	14	24	24

SPECIFICATIONS

	IC-2018	IC-2023	IC-2423	IC-2427
Max. Static Gripping Force [kN(kgf)]	27.4(2800)	27.4(2800)	28.5(2904)	30(3056)
Clamping Range External [Ømm]	460	460	550	550
Clamping Range Internal [Ømm]	450	450	530	550
Max. r.p.m. [min^{-1}]	800	800	800	800
Weight [kg]	180	170	350	340
Moment of inertia [N·m 2 (kg·m 2)]	54.9(5.6)	51.41(5.3)	61.74(6.3)	61.74(6.3)

※ Soft & Hard jaws are basic components.
 ※ Maximum turning speed is based upon actual measurement.
 ※ Specifications are subject to change without notice.

IC Independent Chuck (Hard Jaws) (600mm - 1000mm) **MEGA BORE**

Thru Hole Range : $\varnothing 320 \sim \varnothing 560$
Clamping Range : $\varnothing 550 \sim \varnothing 1000$

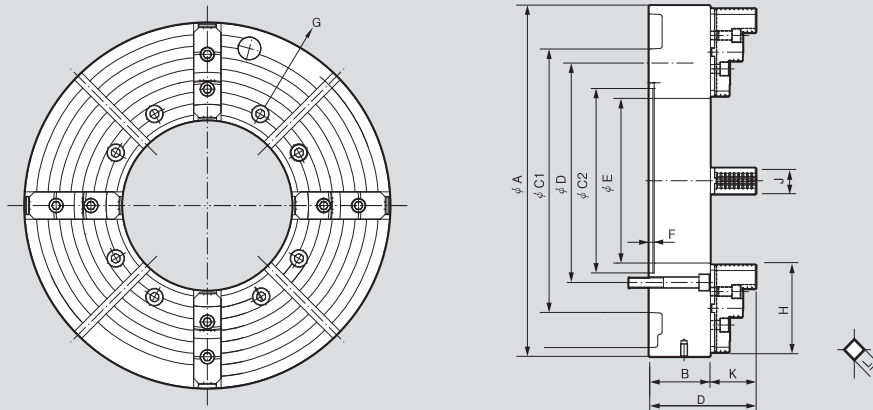


Application

High durability by applying advanced cast irons
Suitable for machining materials such as oil pipe lines and industrial pipes
Independent clamps of each four jaws

Technical features

Best for comatibility as detailed size management and high-quality
Ideal for using general lathe(KS, JIS standard)



DIMENSIONS

	IC-2432	IC-3232	IC-3237	IC-4056
ΦA	600	800	800	1000
B	140	140	140	160
$\Phi C2$	420	420	420	650
ΦD	463.6	463.6	463.6	700
ΦE	320	325	375	560
F	10	12	12	10
G	M24	M24	M24	M22
H	200	200	200	200
J	60	60	60	60
K	104.15	104.15	104.15	104.15
L	24	24	24	-

SPECIFICATIONS

	IC-2432	IC-3232	IC-3237	IC-4056
Max. Static Gripping Force [kN(kgf)]	30(3056)	32.4(3300)	32.4(3300)	36(3700)
Clamping Range External [Ømm]	550	750	750	920
Clamping Range Internal [Ømm]	550	730	730	840
Max. r.p.m. [min^{-1}]	800	600	600	480
Weight [kg]	340	463	490	660
Moment of inertia [N·m ² (kg·m ²)]	61.74(6.3)	382(39)	382(39)	-

- ※ Soft & Hard jaws are basic components.
- ※ Maximum turning speed is based upon actual measurment.
- ※ Specifications are subject to change without notice.



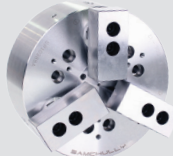
SPECIAL CHUCK



EGL

Centering Ball Lock Chuck

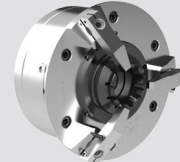
108 P



DDL

Outside Draw-Down Chuck

122 P



BDG

Bevel-Gear Chuck

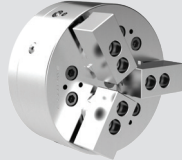
133 P



PBL

Universal Ball-Lock Power Chuck

110 P



DDO

Inside Pin Arbor Chuck

124 P



IAHT

Auto-Indexing Chuck

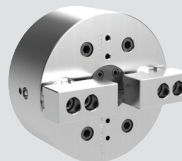
134 P



LCC

Lever Chuck

112 P



DDT

2-Jaw Draw-Down Chuck

126 P



IAH

Auto-Indexing Chuck

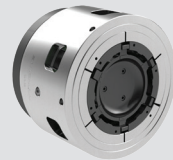
136 P



PIL

Inside Pin Arbor Chuck

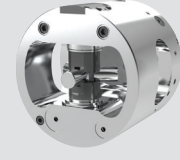
114 P



CDO

Outside-Collet Chuck

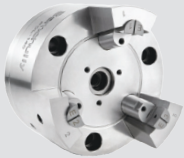
128 P



IAN

Auto-Indexing Chuck

138 P



POL

Outside Pin Arbor Chuck

115 P



CDI

Inside-Collet Chuck

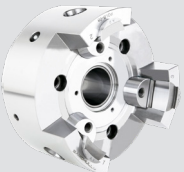
129 P



PHD

Outside Pull-Down Chuck

140 P



POLB

Big Bore Pin Arbor Chuck

116 P



COR

Outside-Collet Chuck

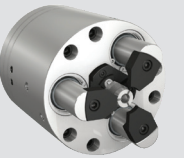
130 P



PHDN

Inside Pull-Down Chuck

142 P



RS

Retractable-Jaw Shaft Chuck

118 P



CORH

Module change type Collet Chuck

131 P



DP

Diaphragm Chuck

144 P



CSF

Compensating Chuck

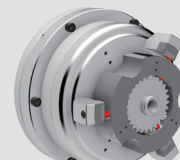
120 P



FD

Finger Chuck

132 P



GDP

Gear Chuck

145 P



FWC

Aluminum Wheel Chuck

146 P

EGL Centering Ball Lock Chuck



Application

I.D & O.D Clamping for rough castings or forgings

Technical features

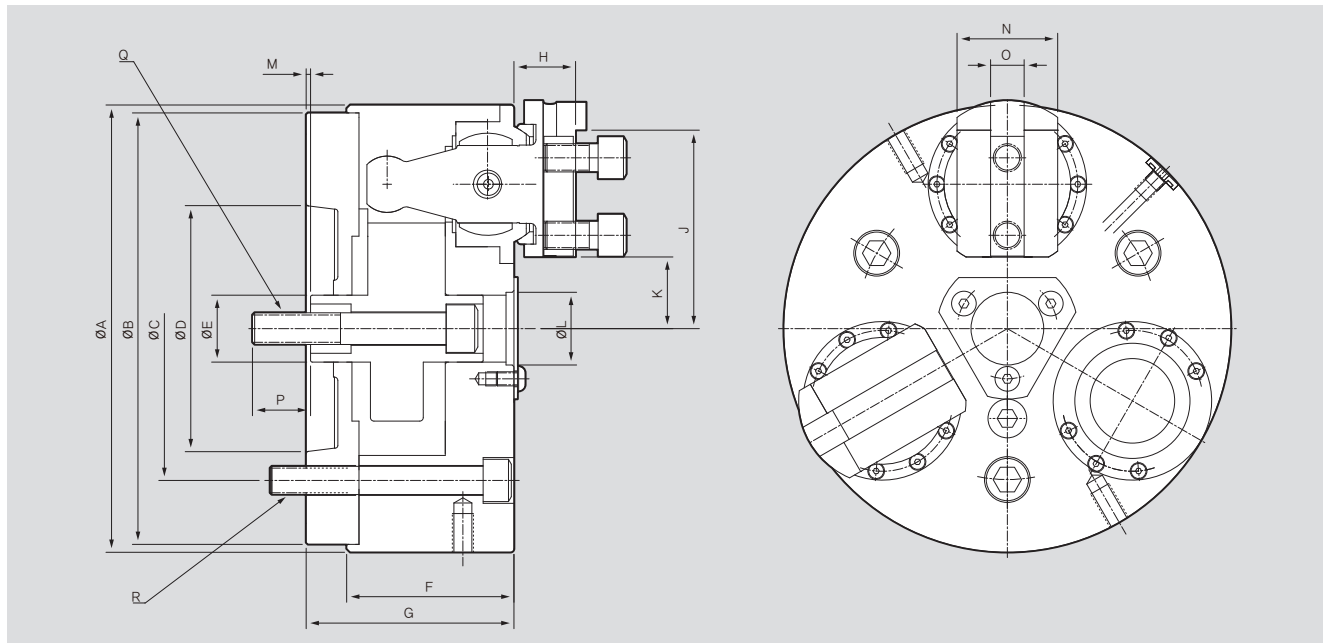
Grips on taper upto 10°

Centrifugal force compensations allows faster RPM than standard ball lock chucks (PBL series)

Fully sealed from chips entering chuck body
pull down function (1mm)

SPECIFICATIONS

	EGL-06	EGL-08	EGL-10
Plunger Stroke[mm]	12	18	23
Jaw Stroke Ang. [°]	5	5.2	5.3
Max. Drawbar Pull [kgf]	18	25	40
Max. Clamping Force [kgf]	44	60	96
Moment of inertia [kgf·m ²]	0.06	0.16	0.37
Recommended Actuating Cylinders	Y-1020RE	Y-1225, 1240RE	Y-1225, 1240RE
Max. Speed [r.p.m.]	4500	4500	3800
Weight [kg]	16	27	39



DIMENSIONS

	EGL-06	EGL-08	EGL-10
ΦA	170	212	254
ΦB	163	205	245
ΦC	104.8	133.4	171.4
ΦD	82.563	106.375	139.719
ΦE	40	31.76	38
F	66	81	95
G	84	100	118
H	21.5	26.5	35
J	73.145	88.95	112.7
K	23.3	29	40.7
ΦL	30.17	31.76	41.29
M max.	9.5	12.5	14.5
M min.	-2.5	-5.5	-7.5
N	38.1	44.45	57.15
O	12.65	14.24	19.05
P	27	28	33
Q	M16 x 80L	M16 x 90L	M18 x 110L
R	M10 x 90L	M12 x 105L	M16 x 120L

PBL Universal Ball-Lock Power Chuck



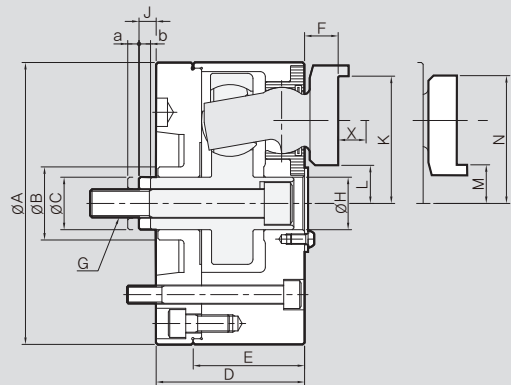
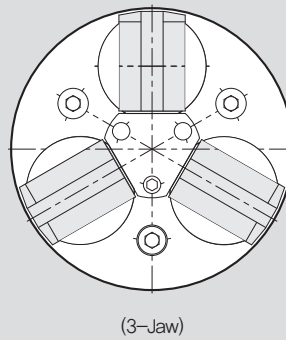
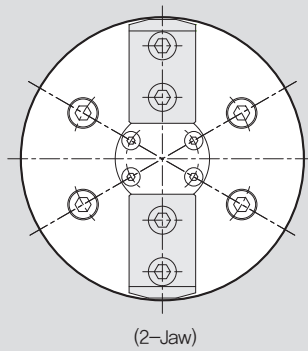
Application

Castings or forgings can be O.D. or I.D. clamped

Technical features

Grips on taper up to 10°

Jaws pivot up to 5° to grip on uneven surfaces



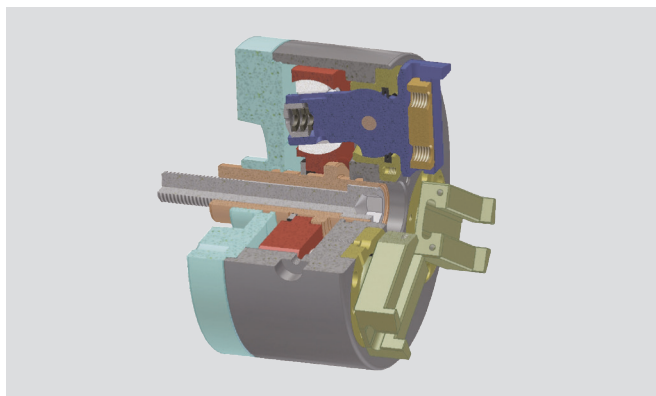
DIMENSIONS

	PBL-06	PBL-08	PBL-10	PBL-12	PBL-15	PBL-18	PBL-21	PBL-24
ΦA	162	200	254	300	381	457	533	610
ΦB min.	40	45	55	55	80	120.7	120.7	-
ΦC	30.17	31.76	41.285	41.285	57.16	80.00	80	80
D	84.2	100	118	118	131	131	131	131
E	59.2	70	86.6	86.6	96.1	96.1	96.1	96.1
F	19.3	23.3	29.1	29.1	32.4	32.4	32.4	32.4
G	M16	M16	M18	M18	M24	M30	M30	M30
ΦH	30.170	31.760	41.285	41.285	57.160	88.900	88.900	88.900
J	10.6	10.4	13.5	13.5	24.7	31.7	31.7	31.7
a	5.1	8	8	8	10.3	10.3	10.3	10.3
b	6.2	6.4	9.5	9.5	12	12	12	12
K	73.15	88.95	112.7	133.27	171.45	209.55	247.65	285.8
L	20.3	25.3	30.2	50.77	65.8	103.94	142	180.2
M	22.1	25.35	30.3	50.77	69.8	107.9	146	184.2
N	75	89	112.8	133.37	175.45	213.6	252	289.81
X	24.9	24.2	36.5	36.5	41.9	41.9	41.9	41.9

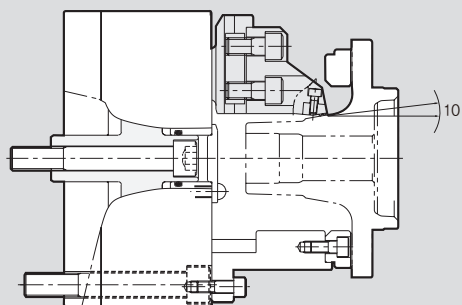
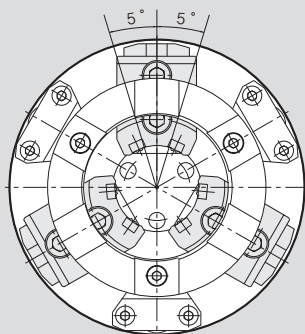
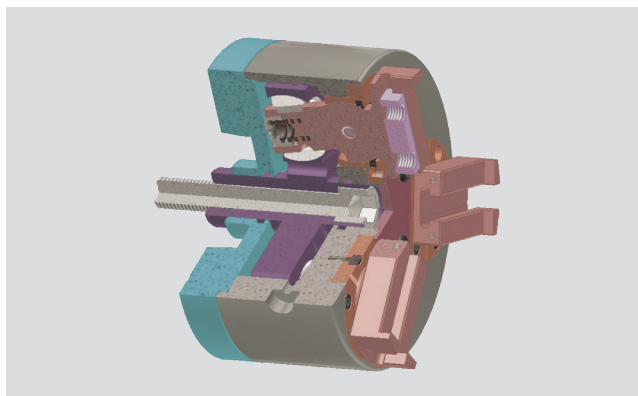
SPECIFICATIONS

	PBL-06	PBL-08	PBL-10	PBL-12	PBL-15	PBL-18	PBL-21	PBL-24
Max. Clamping Force [kgf]	6600	8700	10800	10800	16500	16500	16500	16500
Max. Drawbar Pull [kgf]	2200	2900	3600	3600	5500	5500	5500	5500
Jaw Stroke Dia. [mm]	7.9	9.5	12.7	12.7	15.8	15.8	15.8	15.8
Plunger Stroke [mm]	11.3	14.3	17.5	17.5	22.3	22.3	22.3	22.3
Clamping Range	Outside Dia. [mm]	12.7~120	16~152	50~203	63~241	76~317	89~394	162~470
	Inside Dia. [mm]	70~152	76~203	85~235	127~305	165~381	241~457	317~533
Max. Speed [r.p.m.]	4000	3500	2500	2000	1800	1500	1000	1000
Weight [kg]	18.0	27.0	45.0	67.5	84.5	120.0	180.0	290
GD2 [kgf·m ²]	0.15	0.48	1.23	2.42	8.49	15.17	25.00	25

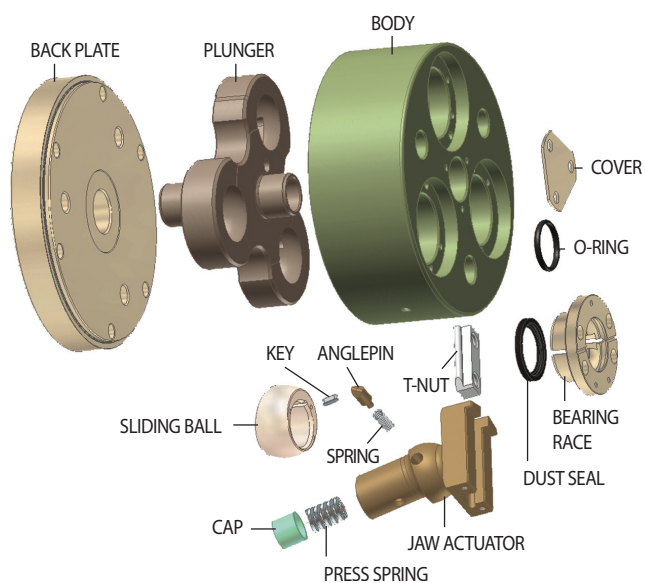
Centralizing



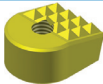
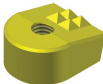
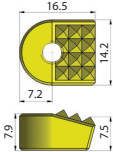
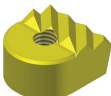
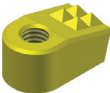
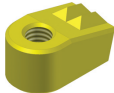
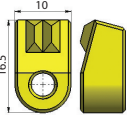
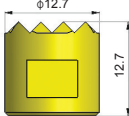
Compensating



PBL Components



Inserts

Angle Lot Style			
			
PC127-10SC	PC127-4SC	PC130-4SC	
			
PC132-4SC	PC145-5SC		
			
PC127-4SC-S	PC130-2SC-S		
Round Style			
			
PC070-12SC	PC070-4SC		

LCC Lever Chuck



Application

Materials for clamp may be provided for simple deformation by low clamping force.

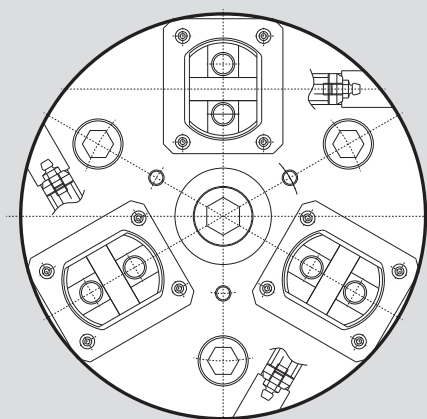
Technical features

Close adhesion of the cross section is enabled by pulling the workpiece.

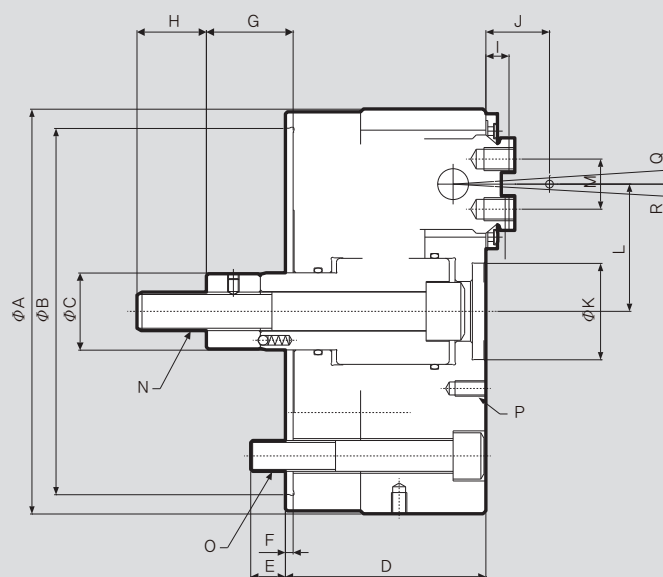
Centrifugal force recovered.

SPECIFICATIONS

	LCC-06	LCC-08	LCC-10	LCC-12
Max. Clamping Force [kgf]	1,498	2,997	4,496	6,903
Max. Drawbar Pull [kgf]	2,304	3,997	5,995	8,004
Plunger Stroke [mm]	4	5.5	5.5	6
Clamping Range	Outside Dia. [mm]	25~110	40~132	50~160
	Inside Dia. [mm]	130~175	150~210	190~255
Max. Speed [r.p.m.]	3800	3000	2600	2200
Weight [kg]	16	24	36	600
GD2 [kgf·m ²]	0.053	0.13	0.28	0.67



LCC



DIMENSIONS

	LCC-06	LCC-08	LCC-10	LCC-12
ØA	175	210	254	304
ØB	100	190	220	250
ØC	40	40	52	60
D	85	104	109	120
E	22	18	18	17
F	5	4	4	5
G _{max}	39	47.5	49.5	52
G _{min}	35	42	44	46
I	11	12	12	14
J	29	33	39	42
ØK	50	50	65	90
L	55	66	80	100
M	20	26	32	36
N	M16	M20	M24	M27
O	3-M16 PCD130	3-M16 PCD150	3-M16 PCD150	6-M16 PCD170
P	M6	M8	M8	M10
Q	2.6°	3.7°	3.4°	3.0°
R	3.3°	3.3°	2.9°	3.1°

PIL Inside Pin Arbor Chuck



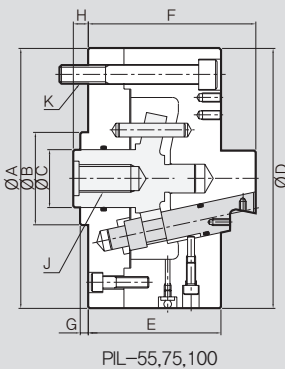
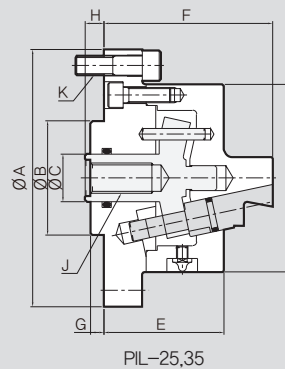
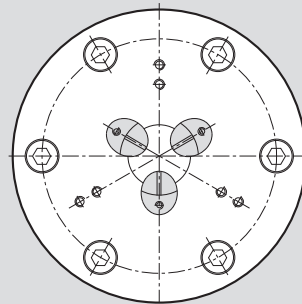
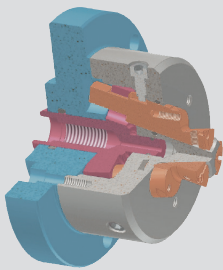
Application

Ideal for second operation I.D. gripping

Technical features

Active pull-down for high precision

Counter centrifugal gripping reduces distortion



※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	PIL-25	PIL-35	PIL-55	PIL-75	PIL-100
ΦA	135	135	190	225	270
ΦB(h7)	60	60	80	80	120
ΦC	20	25	32	50	50
ΦD	85	98.5	190	225	270
E	60	63	93	100	130
F	80	88.4	120	132.5	163
G	7	7	7	7	7
Hmax.	12	12	18	18	23
Hmin.	8	8	8	8	13
J	M12	M16	M16	M24	M24
K	3-M10 PCD118	3-M10 PCD118	3-M16 PCD150	6-M16 PCD180	6-M16 PCD180

SPECIFICATIONS

	PIL-25	PIL-35	PIL-55	PIL-75	PIL-100
Max. Clamping Force [kgf]	2250	3380	5640	7150	17860
Max. Drawbar Pull [kgf]	1200	1800	3000	3800	3800
Jaw Stroke Dia. [mm]	1.7	1.7	4.2	4.2	4.2
Plunger Stroke [mm]	4	4	10	10	10
Clamping Range	Pin Jaw [mm]	17~25	25~40	35~55	55~76
	Top Jaw [mm]	-	48~60	62~90	85~130
Max. Speed [r.p.m.]	5000	4500	3500	2500	2000
Weight [kg]	3.5	4.3	18.4	35	55
GD2 [kgf·m ²]	0.013	0.026	0.33	0.88	2.0

POL Outside Pin Arbor Chuck



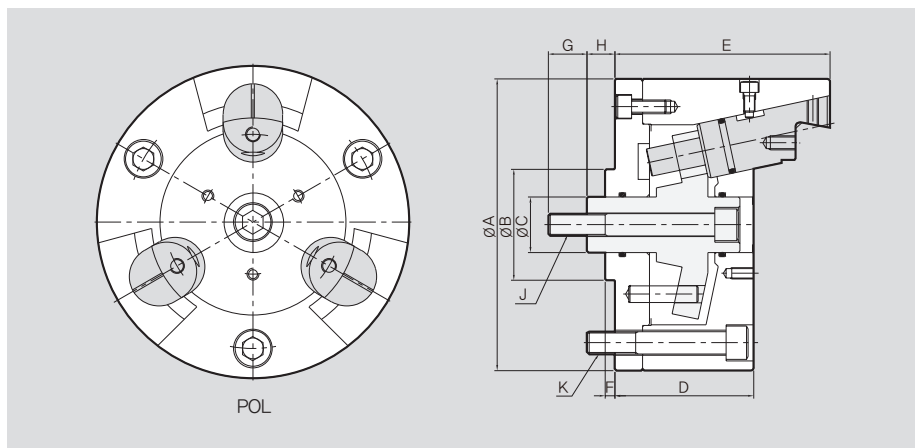
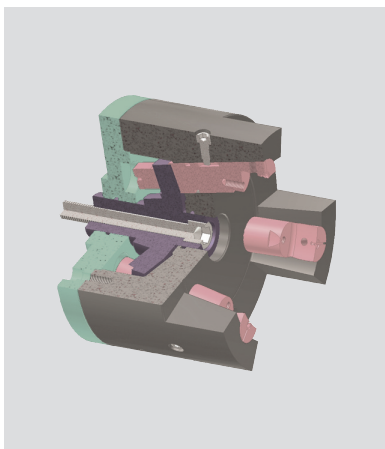
Application

Ideal for second operation O.D. gripping

Technical features

Active pull-down for high precision

Counter centrifugal gripping reduces distortion



※ Maximum turning speed is based upon actual measurement.

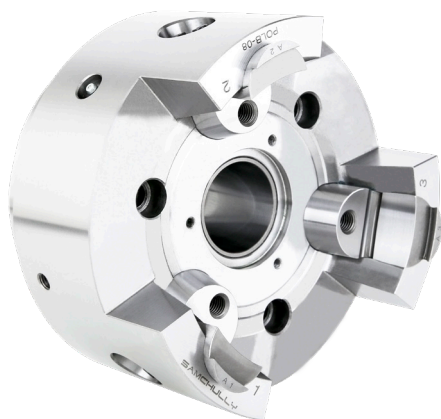
DIMENSIONS

	POL-80	POL-100	POL-140	POL-180	POL-230	POL-300
ΦA	130	162	210	250	320	400
ΦB(h7)	60	80	80	80	120	-
ΦC	24	30	40	45	50	60
ΦD	72	90	100	110	130	137
E	103	130	155	165	200	248
F	5	7	7	7	7	7
G	25	30	30	30	40	40
Hmax.	18	22.5	25	25	30	25
Hmin.	10	12.5	15	15	20	15
J	M12	M16	M16	M18	M20	M30
K	3-M8 PCD100	3-M12 PCD130	3-M16 PCD170	3-M16 PCD210	6-M16 PCD270	6-M24 PCD330.2

SPECIFICATIONS

	POL-80(5")	POL-100(6")	POL-140(8")	POL-180(10")	POL-230(12")	POL-300(16")
Max. Clamping Force [kgf]	2250	3760	4700	5600	7520	7520
Max. Drawbar Pull [kgf]	1200	2000	2500	3000	4000	4000
Jaw Stroke Dia. [mm]	3.4	4.2	4.2	4.2	4.2	4.2
Plunger Stroke [mm]	8	10	10	10	10	10
Clamping Range	Pin Jaw [mm]	65~80	86~100	120~140	150~180	-
	Top Jaw [mm]	15~60	20~80	60~110	100~145	120~200
Max. Speed [r.p.m.]	5000	4500	3000	2000	2000	2000
Weight [kg]	8	16	27	46	70	165
GD2 [kgf·m²]	0.067	0.2	0.54	1.43	3.5	5.6

POLB Big Bore Pin Arbor Chuck

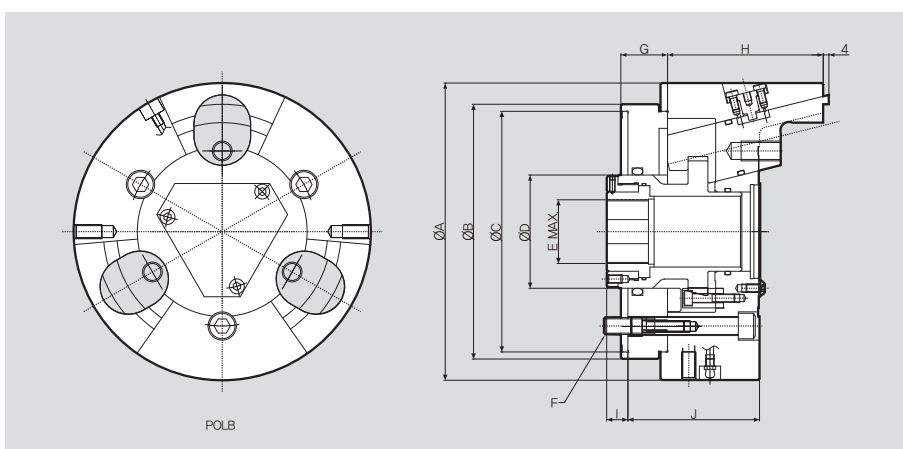
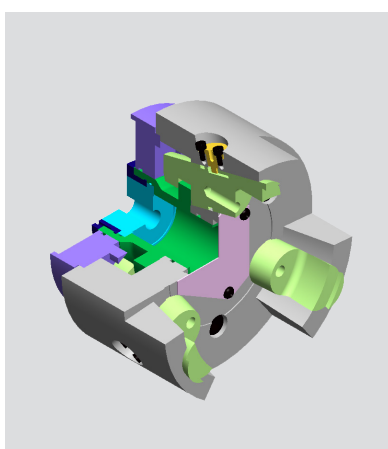


Application

Second operation O.D. gripping

Technical features

Sufficient space is provided for manufacturing shafts by inner diameter penetration shape.



※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	POLB-06	POLB-08	POLB-10	POLB-12
ØA	165	210	254	304
ØB	155	180	230	280
ØC	140	170	220	260
D	58	80	101.5	134
E (MAX)	M33x 1.5p	M45x 2.0p	M65x 2.0p	M92x 2.0p
F	3-M10 / PCD 104.7	3-M12 / PCD 133.4	3-M16 / PCD 171.45	6-M16 PCDØ230
G	25.5	33	31	31
H	98	110	127	132
lmax	20	20	24	19
lmin	10	10	14	9
J	80.5	93	103	103

SPECIFICATIONS

	POLB-06	POLB-08	POLB-10	POLB-12
Max. Clamping Force [kgf]	5,914	5,914	10,197	10,197
Max. Drawbar Pull [kgf]	1,835	1,835	3,569	3,569
Plunger Stroke [mm]	10	10	10	10
Clamping Range	-	-	-	-
Pin Jaw [mm]	-	-	-	-
Top Jaw [mm]	20~65	30~85	50~105	100~150
Max. Speed [r.p.m.]	7000	5000	4500	3600
Weight [kg]	14.4	25.3	43.5	60.5
GD2 [kgf·m²]	0.053	0.053	0.355	0.675



RS Retractable-Jaw Shaft Chuck



Application

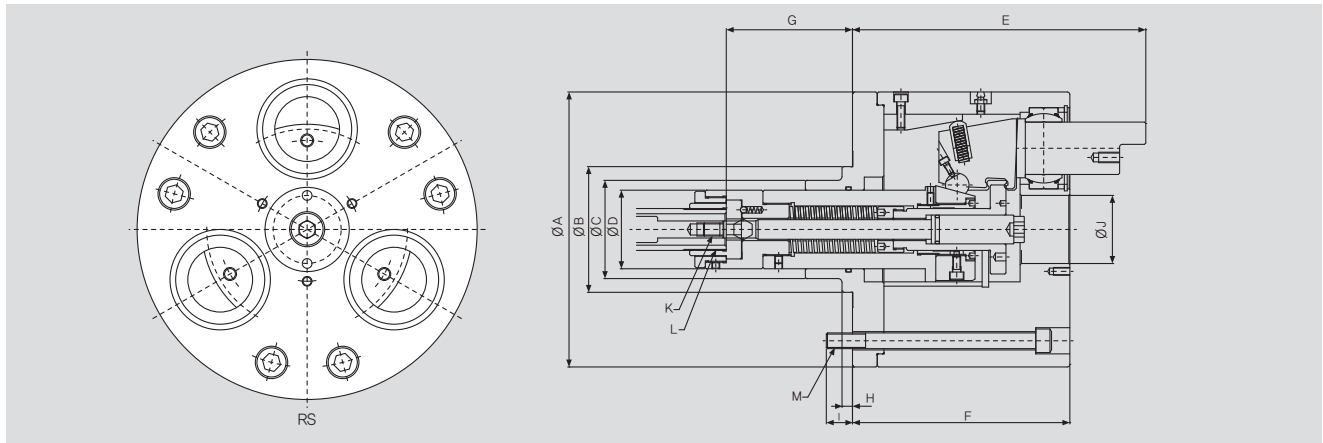
Complete machining of shaft in one set-up. Run two operations on one chuck.

Technical features

Jaws and face drivers are easily interchangeable for clamping on shafts of various diameters

SPECIFICATIONS

	RS-200	RS-250
Max. Clamping Force [kgf]	4000	6500
Max. Drawbar Pull [kgf]	3878	6000
Clamping Range Top Jaw [mm]	18~80	25~110
Clamping Range Face Driver Dia. [mm]	12~70	12~100
Max. Speed [r.p.m.]	4000	3500
Weight [kg]	48	60
GD ² [kgf·m ²]	0.19	0.79



※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	RS-200	RS-250
ΦA	210	250
ΦB	96	120
ΦC	75	95
ΦD	60	75
E max.	224	278
E min.	185	226
F	166	208
G max.	143	183
G min.	87	109
H	8	10
I	20	25
ΦJ	52	65
K	M10	M12
L	M32	M40
M	6-M12 PCD170	6-M16 PCD210



Application

A spherical bearing enables the jaws to compensate for high-precision work on rounded surfaces

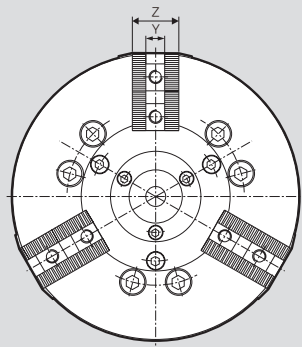
Technical features

Jaws float on spherical bearing to determined clamping points

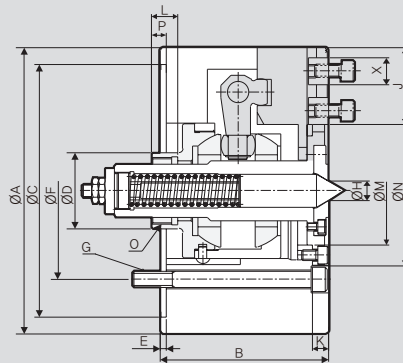
Spring or fixed center available, All three jaws apply constant gripping force

SPECIFICATIONS

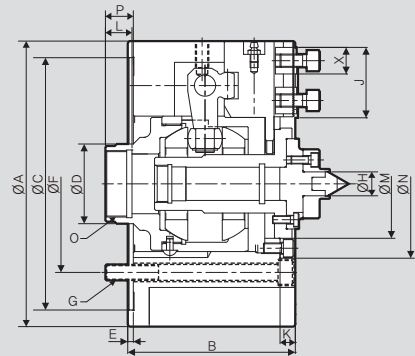
	CSF-07	CSF-08	CSF-12
Static Clamping force [kgf]	2600	3200	3200
Max. Drawbar Pull [kgf]	1500	2100	2700
Jaw Stroke Dia. [mm]	12	20	25
Plunger Stroke [mm]	15	25	30
Min. Chucking Dia. [mm]	20	25	30
Max. Runout Dia. [mm]	4	4	6
Max. Speed [r.p.m.]	4000	3200	2000
Spring Force [kgf]	45	52	106
Weight[kg]	15	28	58
GD2 [kgf·m ²]	0.25	0.8	3.13



CSF



Spring center type



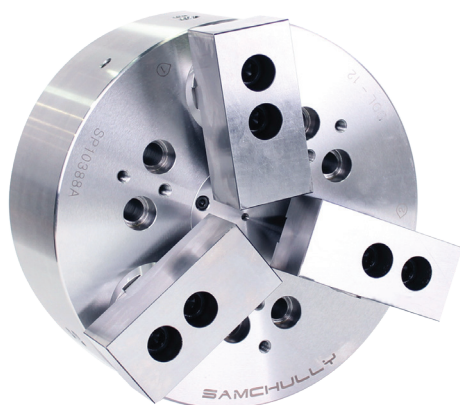
Fixed center type

※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	CSF-07	CSF-08	CSF-12
ΦA	170	215	280
B	99	126.2	154.7
ΦC(h7)	140	190	255
ΦD	42	57	72
E	4	4.2	5.7
ΦF	104.8	133.4	171.4
G	3-M10	6-M12	6-M16
ΦH	11	15	20
J	45	57.5	72
K	11	13	17
L	20	20	29
ΦM	65	82	110
ΦN	86	112.1	142.2
O	M34xP1.5	M50xP1.5	M60xP1.5
Pmax.	24.0	34	44
Pmin.	9.0	9	14
X	16	20	26
Y	11	14	20
Z	28	35	45

DDL Outside Draw-Down Chuck



Application

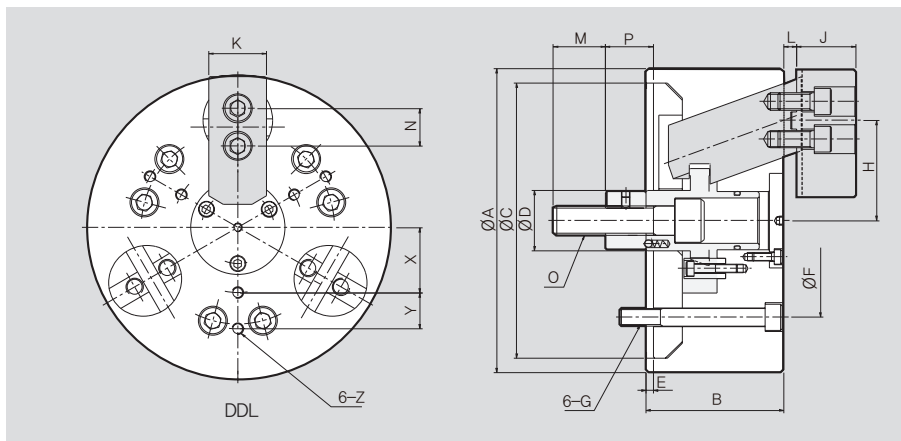
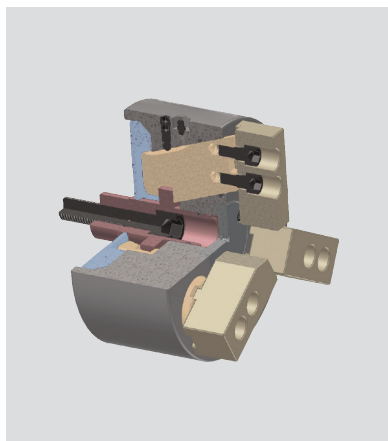
Workpiece pulled down to location for superior accuracy

Technical features

Very accurate for parallel and perpendicular surfaces
Sealed to prevent chips and coolant from entering the chuck body

SPECIFICATIONS

		DDL-04	DDL-05	DDL-06	DDL-08	DDL-10	DDL-12	DDL-15	DDL-18	DDL-20
Max. Clamping Force [kgf]		1,350	2,000	2,500	4,500	6,000	7,500	9,000	9,000	23,800
Max. Drawbar Pull [kgf]		800	1,000	1,500	2,500	3,500	4,500	5,500	5,500	9,100
Jaw Stroke Dia. [mm]		5	5	7.2	7.2	10.8	10.8	14.5	18.2	18
Plunger Stroke [mm]		7	7	10	10	15	15	20	25	25
Clamping Range	Standard [mm]	10~55	15~65	35~85	40~200	50~250	50~300	60~380	80~450	80~450
	Top Jaw [mm]	10~50	15~60	35~80	40~150	50~200	50~250	60~320	80~360	80~400
Max. Speed [r.p.m.]		5,500	3,500	3,500	3,000	2,500	2,000	1,500	1,500	1,200
Weight [kg]		4.5	7.3	14	27	46	68	110	185	230
GD2 [kgf·m ²]		0.05	0.07	0.18	0.66	1.5	3.2	9	11	12



※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	DDL-04	DDL-05	DDL-06	DDL-08	DDL-10	DDL-12	DDL-15	DDL-18	DDL-20
ØA	110	130	165	210	254	304	381	460	500
B	60	70	85	95	110	125	140	150	150
ØC(h7)	98	118	140	190	230	230	300	370	420
ØD	25	28	34	40	50	54	60	90	95
E	5	5	5	5	5	5	8	9.5	9
ØF	80	100	104.8	133.4	171.4	171.4	230	310	360
G	3-M8	3-M8	6-M10	6-M12	6-M16	6-M16	6-M20	6-M24	6-M27
Hmax	37	44	58	71	85	102	133.6	159.6	180.5
Hmin	34.5	41.5	54.4	67.4	79.6	96.6	126.4	150.5	171.4
J	19.5	24.5	31	41	49	51	60	65	65
K	25	30	35	40	50	60	70	80	80
Lmax	10.5	10.5	14	14	19	19	26	32	32
Lmin	3.5	3.5	4	4	4	4	6	7	7
M	20	25	36	36	46	50	47	50.5	49
N	-	-	-	26	32	36	40	44	44
O	M10	M12	M16	M20	M24	M27	M30	M30	M33
Pmax	14	14	33	38	47	47	71	72.5	72
Pmin	7	7	23	28	32	32	51	47.5	47
X	25	30	35	45	55	70	95	130	150
Y	-	-	20	25	30	35	45	50	50
Z	3-M6	3-M6	6-M6	6-M8	6-M8	6-M10	6-M12	6-M12	6-M16

DDO Inside Draw-Down Chuck



Application

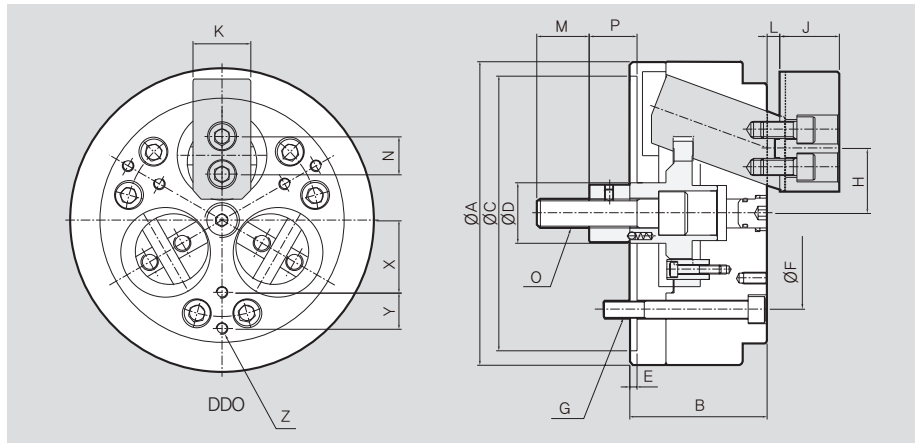
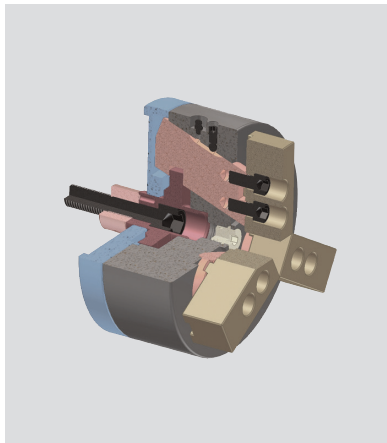
Workpiece pulled down to location for superior accuracy

Technical features

Very accurate for parallel and perpendicular surfaces
Sealed to prevent chips and coolant from entering the chuck body

SPECIFICATIONS

		DDO-06	DDO-08	DDO-10	DDO-12	DDO-15	DDO-18
Max. Clamping Force [kgf]		2,500	4,500	6,000	7,500	9,000	9,000
Max. Drawbar Pull [kgf]		1,500	2,500	3,500	4,500	5,500	5,500
Jaw Stroke Dia. [mm]		5.8	7.2	10.8	10.8	14.5	10.9
Plunger Stroke [mm]		8	10	15	15	20	15
Clamping Range Pin Jaw	Standard [mm]	35~140	40~180	50~220	60~270	200~340	260~420
	Top Jaw [mm]	70~140	90~180	100~220	110~220	250~340	310~420
Max. Speed [r.p.m.]		5,000	4,500	4,000	3,500	1,500	1,200
Weight [kg]		13	26	44	68	110	217
GD2 [kgf·m ²]		0.18	0.66	1.5	3.1	7.9	24.6

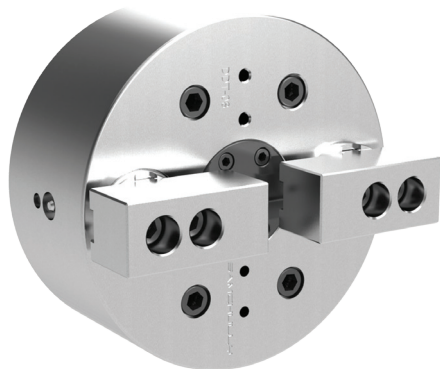


※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	DDO-06	DDO-08	DDO-10	DDO-12	DDO-15	DDO-18
ØA	165	210	254	304	381	480
B	80	95	110	125	140	170
ØC(h7)	140	190	230	230	300	430
ØD	35	42	52	54	80	100
E	5	5	5	5	8	9
ØF	104.8	133.4	171.4	171.4	230	320
G	M10	M12	M16	M16	M20	M24
Hmax	37.4	46.6	57.9	65.4	93.6	117.7
Hmin	34.5	43	52.5	60	86.4	112.3
J	30	41	46	51	60	60
K	35	40	50	60	70	75
Lmax	12	14	19	19	26	27
Lmin	4	4	4	4	6	12
M	36	36	45	50	55	46
N	20	26	32	36	40	44
O	M16	M20	M24	M27	M30	M30
Pmax	31	38	47	47	71	57.5
Pmin	23	28	32	32	51	42.5
X	40	50	60	70	95	130
Y	20	25	30	40	45	50
Z	M6	M8	M8	M10	M12	M12

DDT 2-Jaw Draw-Down Chuck



Application

Workpiece pulled down to location for superior accuracy

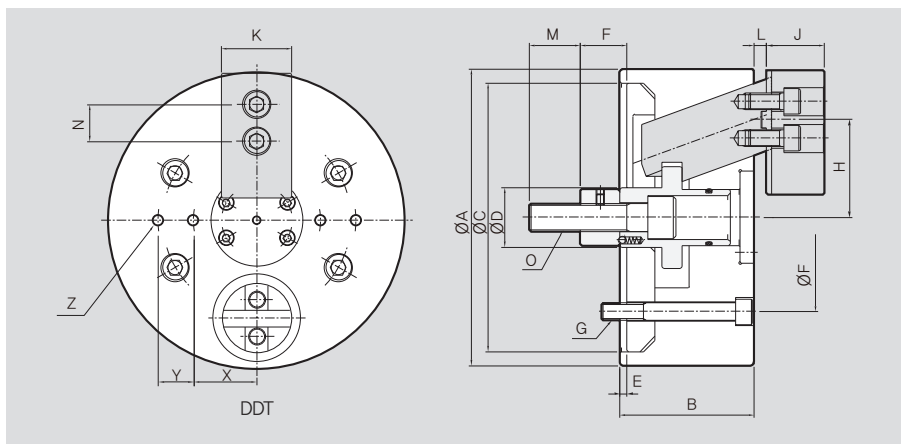
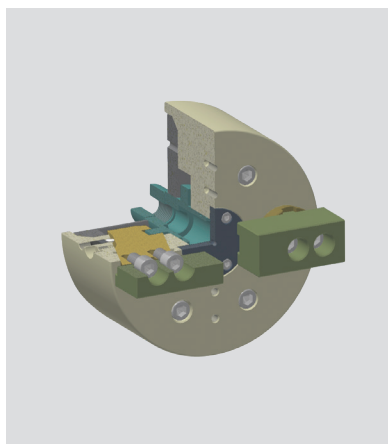
Technical features

Ideal for machining square, rectangular and irregular-shaped components

Very accurate for parallel and perpendicular surfaces

SPECIFICATIONS

		DDT-06	DDT-08	DDT-10
Max. Clamping Force [kgf]		1600	2800	4000
Max. Drawbar Pull [kgf]		1000	1700	2500
Jaw Stroke Dia. [mm]		7.2	7.2	10.2
Plunger Stroke [mm]		10.0	10.0	16.0
Clamping Range Pin Jaw	Standard [mm]	35~85	40~200	50~250
	Top Jaw [mm]	35~80	40~150	50~200
Max. Speed [r.p.m.]		2500	2200	1800
Weight [kg]		14	26	42
GD2 [kgf·m ²]		0.19	0.57	1.50



※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	DDT-06	DDT-08	DDT-10
ΦA	165	210	254
B	85	95	110
ΦC(h7)	140	190	230
ΦD	35	42	50
E	5	5	5
ΦF	104.8	133.4	171.4
G	M10	M12	M16
Hmax.	56.2	71	85
Hmin.	52.6	67.4	79.6
J	31	41	49
K	35	50	50
Lmax.	14	14	19
Lmin.	4	4	4
M	36	36	46
N	-	26	32
O	M16	M20	M24
Pmax.	33	38	47
Pmin.	23	28	32
X	35	45	55
Y	20	25	30
Z	M6	M8	M8

CDO Outside-Collet Chuck



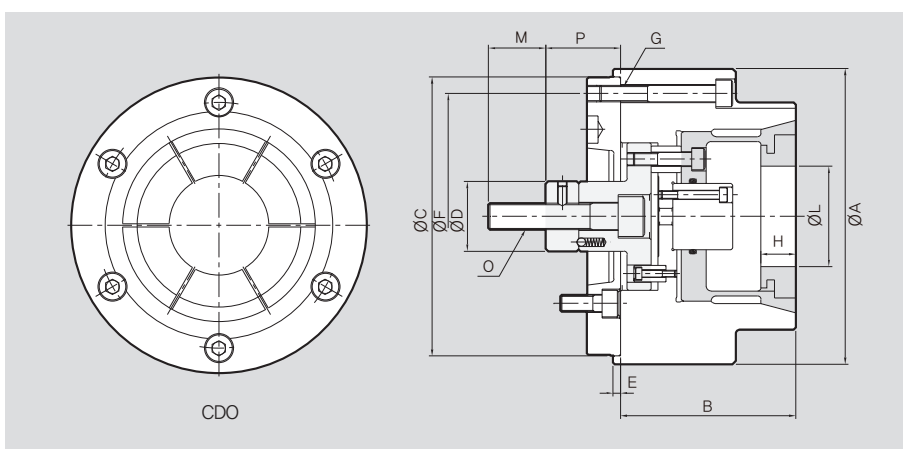
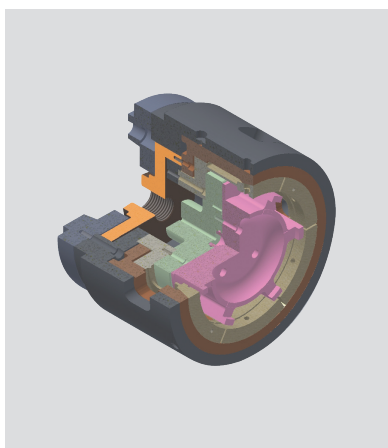
Application

Ideal for OD gripping requiring maximum contact

Technical features

Interchangeable top jaws grip the workpiece O.D.

Air sensing available, Air / Coolant through the spindle available



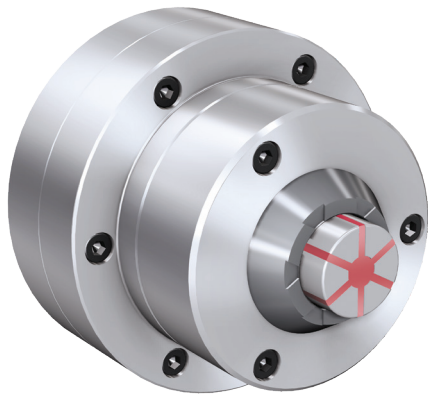
※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	CDO-06	CDO-08	CDO-10	CDO-12
ΦA	165	210	250	300
B	115	125	145	170
ΦC(h7)	150	200	230	230
ΦD	35	42	52	52
E	5	5	5	5
ΦF	130	180	210	270
G	M12	M12	M16	M16
H	30	35	45	50
ΦLmax.	50	90	130	180
ΦLmin.	15	80	80	100
M	36	36	46	50
O	M16	M20	M24	M24
Pmax.	26	32	35	36
Pmin.	23	29	32	32

SPECIFICATIONS

	CDO-06	CDO-08	CDO-10	CDO-12
Max. Clamping Force [kgf]	2800	4600	6500	7500
Max. Drawbar Pull [kgf]	1500	2500	3500	4000
Jaw Stroke Dia. [mm]	1.6	1.6	1.6	2.0
Plunger Stroke [mm]	3	3	3	4
Clamping Range				
Max. [mm]	50	80	130	180
Min. [mm]	15	40	80	100
Max. Speed [r.p.m.]	4500	4000	3300	2500
Weight [kg]	11	23	49	67
GD2 [kgf·m ²]	0.11	0.44	1.76	3.10

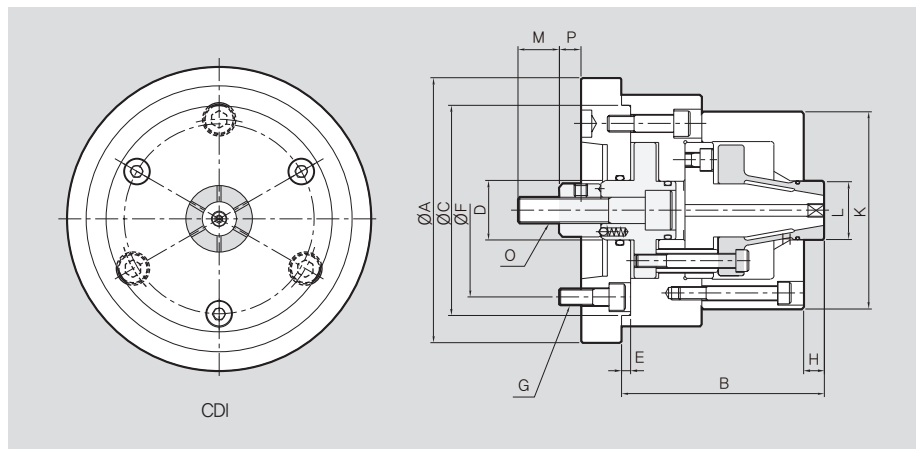
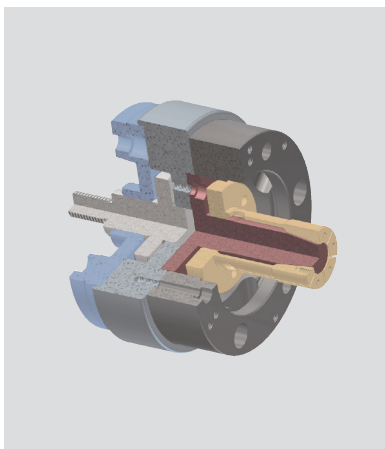


Application

The squareness and parallelism are excellent.

Technical features

Collet changes quickly for machining a variety of work pieces
Air sensing can be added for automatic loading



※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	CDI-06	CDI-08	CDI-10	CDI-12
ΦA	165	200	250	300
B	115	135	180	220
ΦC(h7)	150	170	230	230
ΦD	35	42	52	52
E	6	6	6	6
ΦF	104.8	133.4	171.4	171.4
G	M10	M12	M16	M16
H	15	20	35	40
ΦK	L+25	L+35	L+40	L+50
ΦLmax.	15	90	130	180
ΦLmin.	40	40	90	130
M	40	45	55	55
O	M16	M20	M24	M24
Pmax.	26	33	36	37
Pmin.	23	29	32	32

SPECIFICATIONS

	CDI-06	CDI-08	CDI-10	CDI-12
Max. Clamping Force [kgf]	4000	7000	12000	15000
Max. Drawbar Pull [kgf]	1500	2500	4000	4800
Jaw Stroke Dia. [mm]	0.8	1.0	1.0	1.4
Plunger Stroke [mm]	3	4	4	5
Clamping Max. [mm]	40	90	130	180
Range Min. [mm]	15	40	90	130
Max. Speed [r.p.m.]	4500	4000	3300	2500
Weight [kg]	7	14	34	55
GD2 [kgf·m ²]	0.06	0.19	0.71	2

COR Outside-Collet Chuck

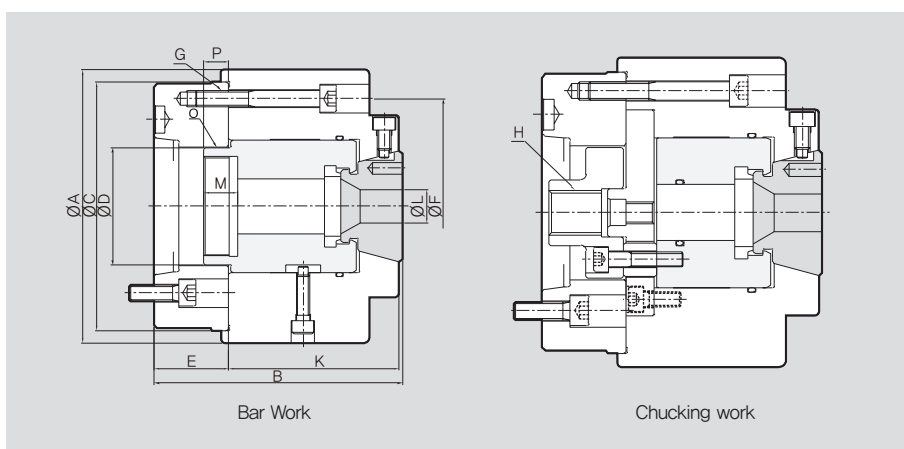
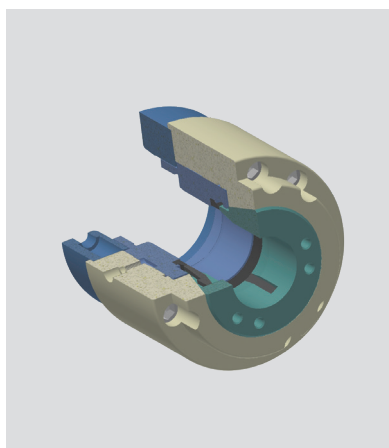


Application

For bar or workpieces requiring maximum gripping contact

Technical features

Quick change rubber-steel segment collet
Round, square and hexagonal collets available



※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	COR-32	COR-50	COR-65	COR-90
ΦA	165	165	180	210
B	150	150	170	190
ΦC(h7)	150	150	170	200
ΦD	72	87	103	118
E	45	45	49	55
ΦF	130	130	150	180
G	M10	M10	M12	M12
H	M24	M24	M30	M30
K	103	103	119	133
ΦLmax.	32	50	65	90
ΦLmin.	5	12	16	38
M	20.5	27.5	25	28
Omax.	M60x2.0	M76x1.5	M90x2.0	M100x2.0P
Pmax.	16	23	25.5	32
Pmin.	13	20	22.5	29

SPECIFICATIONS

		COR-32	COR-50	COR-65	COR-90
Max. Clamping Force [kgf]		6400	8200	9200	13300
Max. Drawbar Pull [kgf]		3200	4100	4600	6500
Collect Expansion [mm]		1.0	1.0	1.0	2.0
Plunger Stroke [mm]		3	3	3	3
Chucking Dia. Pin Jaw	Bar Work [mm]	5~32	12~50	16~65	30~90
	Chuck Work [mm]	7~32	12~50	16~65	30~90
Max. Speed [r.p.m.]		4500	4500	4000	3500
Weight [kg]		25	25	32	38

CORH Modular Collet Chuck

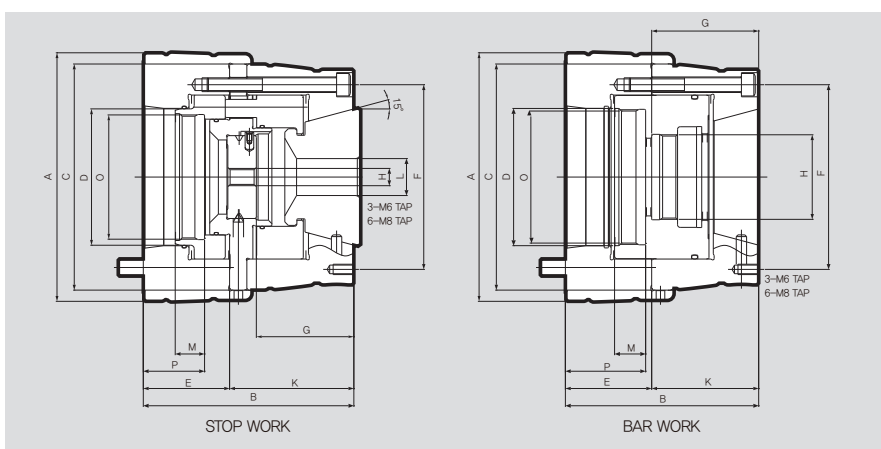
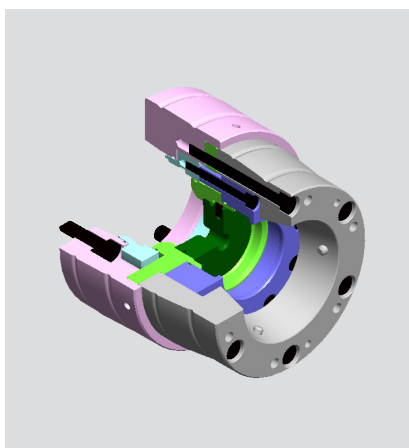


Application

Projects requiring maximum gripping surface on variously sized workpieces that may benefit from quick collet changeover

Technical features

Quick change rubber -steel segment collet
Round, square and hexagonal collets available



※ Maximum turning speed is based upon actual measurment.

DIMENSIONS

	CORH-42B	CORH-52B	CORH-65B
ΦA	144	144	160
B	122 / 112	122 / 112	131 / 121
ΦC	131	131	148
ΦD	79 / 79.5	79 / 79.5	79 / 79.5
E	50	50	52
ΦF	107	107	126
G	56.5 / 64	56.5 / 64	63.5 / 67.5
H	M10 / M49 X 1.5p	M10 / M60 X 1.5p	M12 / M72 X 1.5p
K	72 / 62	72 / 62	79 / 69
ΦL max.	42	52	65
ΦL min.	5	5	5
ΦM	17 / 18	17 / 16	18
O	M72 X 1.5p / M78 X 1.5p	M72 X 1.5p / M78 X 1.5p	M72 X 1.5p / M78 X 1.5p
P max.	38.0 / 49.0	38.0 / 47.0	36.0 / 52.0
P min.	33.5 / 44.5	33.4 / 42.5	32.0 / 47.5

SPECIFICATIONS

	CORH-42B	CORH-52B	CORH-65B
Max. Clamping force [kgf]	8100	9500	10700
Max. Drawbar Pull [kgf]	3500	4000	4500
Collet Expansion [mm]	Φ 1.6	Φ 1.6	Φ 1.6
Plunger Stroke [mm]	4.5	4.5	4.5
Clamp Dia Range [mm]	Φ 5 ~ Φ 42	Φ 5 ~ Φ 52	Φ 5 ~ Φ 65
Max. Speed [r.p.m.]	7000	7000	6000
Weight [kg]	10	10	10

FD Finger Chuck

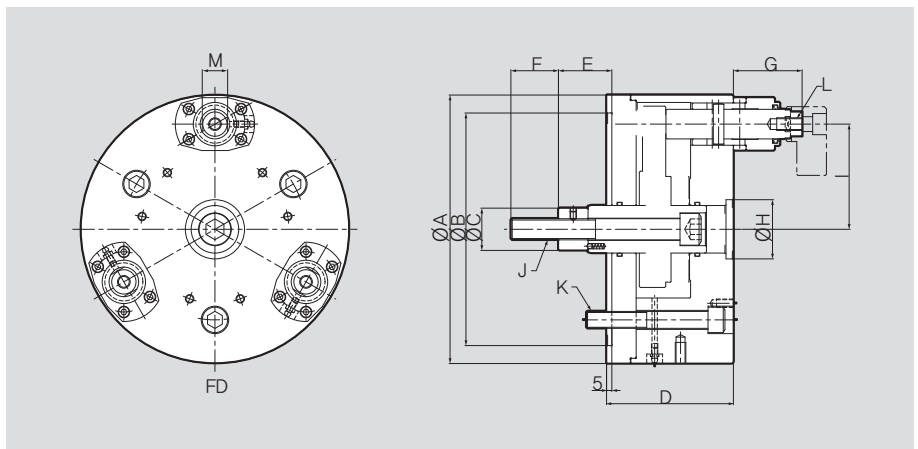
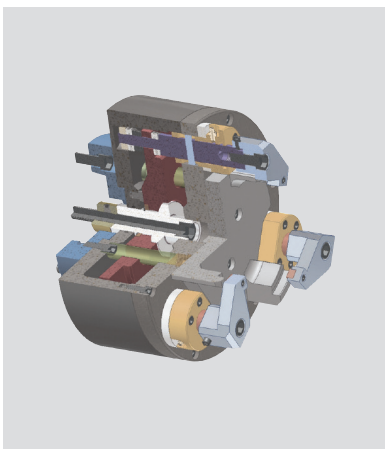


Application

Ideal for gripping workpieces that are impossible to grip from the inner and outer diameter or where deformations are likely to occur.

Technical features

Floating clamping fingers adjust to workpiece shape
Available in 2-jaw, 3-jaw, and 4-jaw models



※ Maximum turning speed is based upon actual measurement.

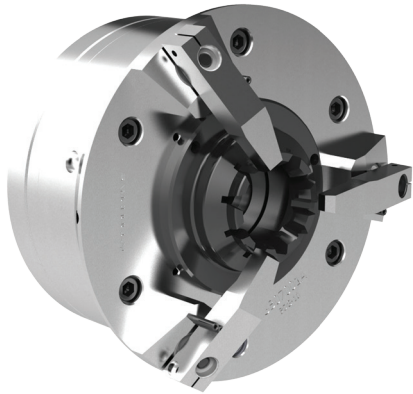
DIMENSIONS

	FD-06	FD-08	FD-10	FD-12	FD-15
ØA	167	210	254	304	380
ØB	140	170	220	220	300
ØC	34	38	40	40	50
D	103	110	115	120	140
E _{max}	48.5	28.5	53.5	53.5	74
E _{min}	28.5	8.5	33.5	33.5	49
F	33	33	45	45	46
G _{max}	69.8	79.8	81.8	81.8	124.5
G _{min}	50	60	62	62	100
ØH	38	40	56	56	90
I	57.5	77.5	99.5	124.5	150
J	M16	M18	M20	M20	M24
K	3-M10 PCD Ø 104.8	3-M12 PCD Ø133.4	3-M16 PCD Ø171.4	3-M16 PCD Ø171.4	6-M20 PCD Ø235.0
L	M10	M10	M12	M12	M16
M	21	21	24	24	28

SPECIFICATIONS

	FD-06	FD-08	FD-10	FD-12	FD-15
Max. Clamping Force [kgf]	1,200	1,600	2,000	2,000	2,800
Max. Drawbar Pull [kgf]	1,500	2,000	2,500	2,500	3,500
Plunger Stroke [mm]	20	20	20	20	25
Max. Speed [r.p.m.]	3500	3000	2500	2000	1800
Weight [kg]	20	32	44	54	97
GD2 [kgf·m ²]	0.12	0.41	1.05	2.17	5.65

BDG Bevel-Gear Chuck



Application

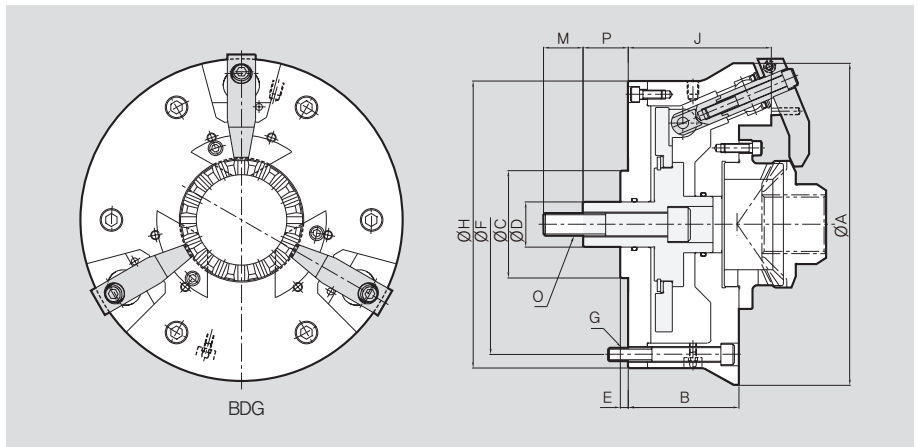
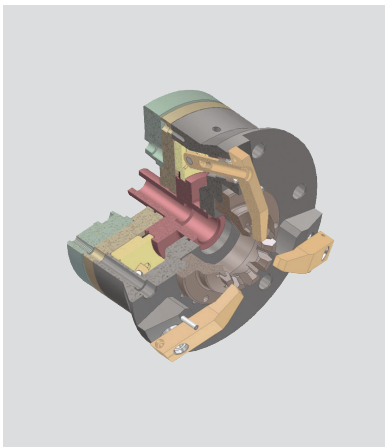
For highly accurate machining on bevel gears

Technical features

Finger chuck for high accuracy clamping of bevel gears

Floating action ensures equal clamping force on all 3 fingers

Available with hydraulic and pneumatic actuation



※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	BDG-07	BDG-10
ΦA	215	285
B	98	98
ΦC(h7)	80	95
ΦD	30	40
E	7	7
ΦF	160	230
G	M12	M12
ΦH	185	254
J	126.5	126.5
M	27	35
O	M16	M20
Pmax.	45	45
Pmin.	30	30

SPECIFICATIONS

	BDG-07	BDG-10
Max. Drawbar Pull [kgf]	1500	1500
Plunger Stroke [mm]	15	15
Clamping Range [mm]	22.2 ~ 147.5	88.9 ~ 203.2
Max. Speed [r.p.m.]	2000	1500
Weight [kg]	30	45

IAHT Auto-Indexing Chuck



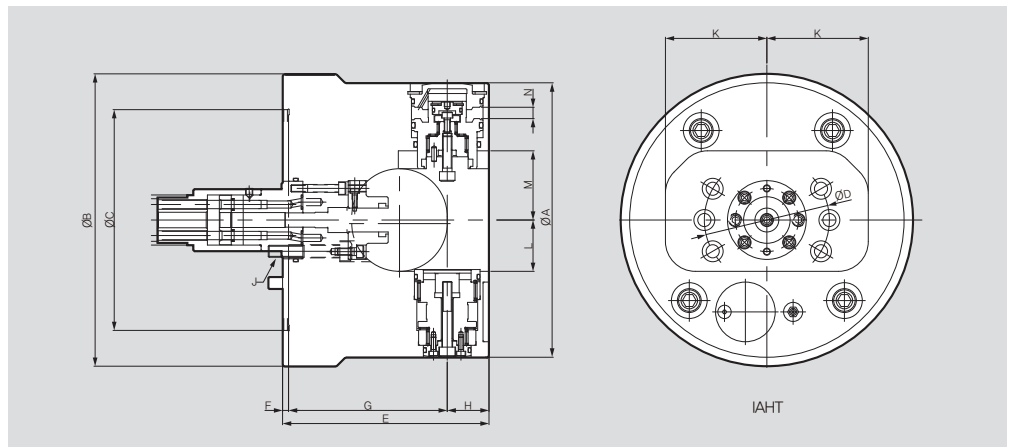
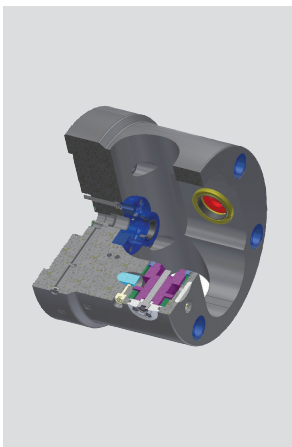
Application

on workpieces requiring indexing to machine multiple surfaces in one operation

Technical features

Accurate, durable indexing system

Index positions 6 x 60° or 3 x 120°, The check valve assures safe operation



※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	IAHT-230	IAHT-280	IAHT-300
ΦA	230	280	300
ΦB	245	295	315
ΦC(h6)	185	210	170
ΦD	104.8	171.4	130
E	173	210	211
F	5	5	11
G	133	162	152
H	35	43	48
J	M10 X 1.5p	M16 X 2.0p	M16 X 2.0p
K	85	100	110
L	43	58	56
M	58	68	65
N Max	14.5	20	25

SPECIFICATIONS

	IAHT-230	IAHT-280	IAHT-300
Max. Clamping Force [kgf]	1270	2170	3500
Main Spindle Bore [mm]	OVER 45	OVER 45	OVER 45
Max. Speed [r.p.m.]	2400	2000	1800
Weight [kg]	35	65	83
GD2 [kgf·m ²]	1.3	3.6	4.2



IAH Auto-Indexing Chuck



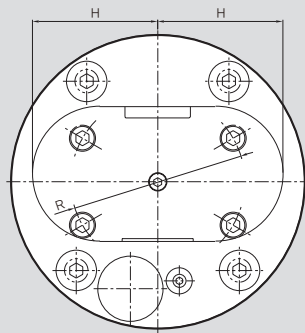
Application

on workpieces requiring indexing to machine multiple surfaces in one operation

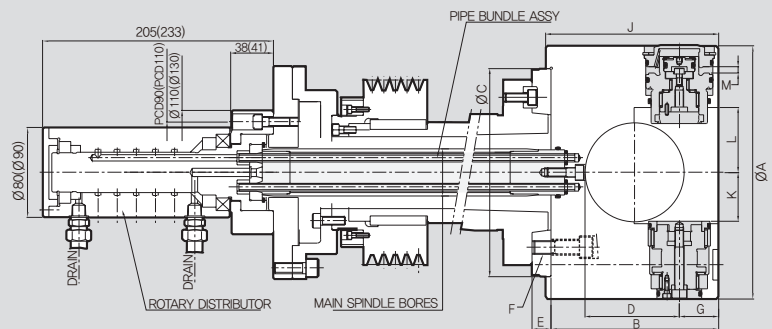
Technical features

Accurate, durable indexing system

Index positions 4 x 90° or 8 x 45°, The check valve assures safe operation



IAH



■ bracketed dimensions refer to models IAH-400 and larger.

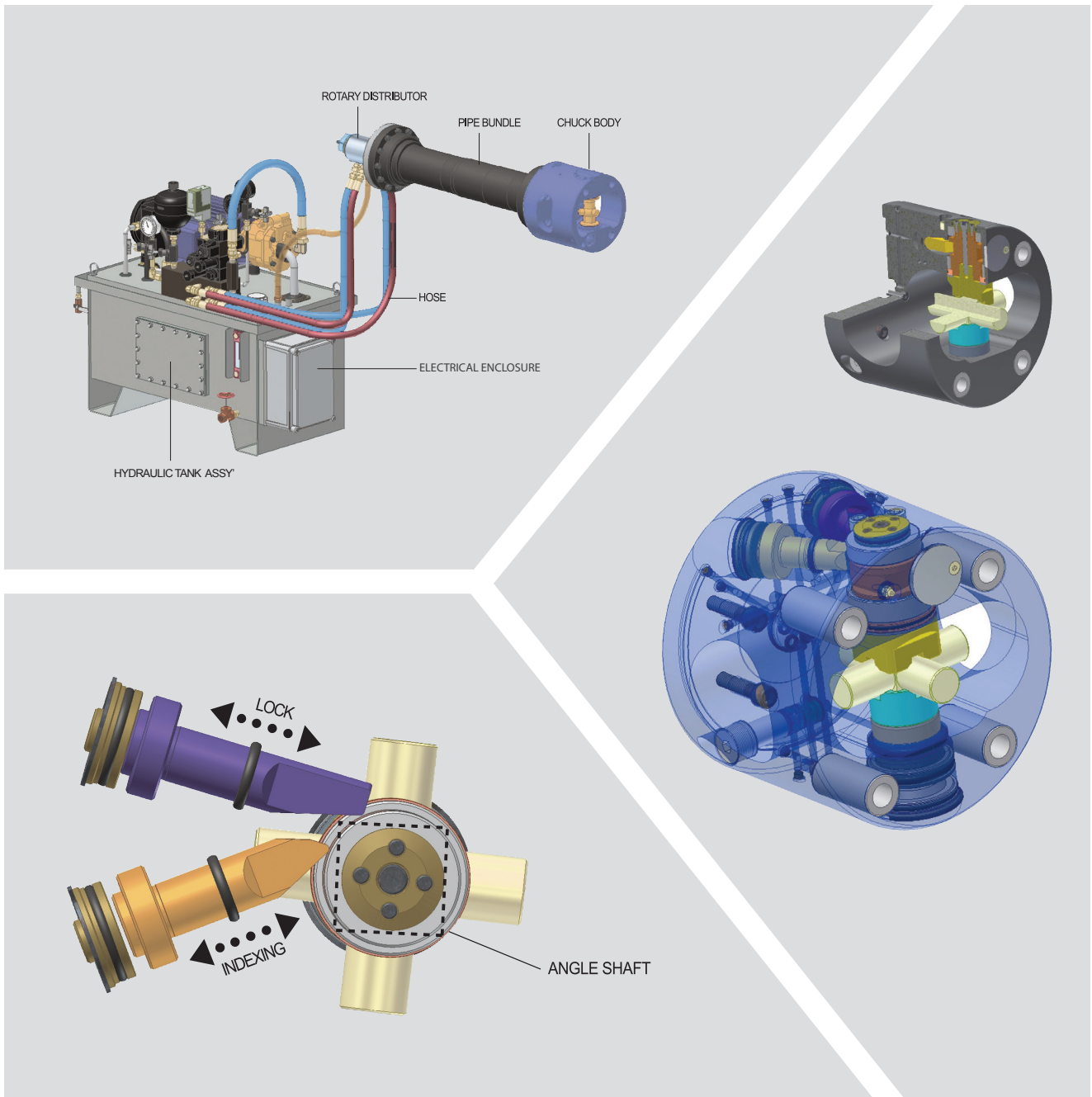
※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	IAH-225	IAH-250	IAH-275	IAH-315	IAH-350	IAH-400	IAH-500
ΦA	225	250	275	315	350	400	500
B	149	185	208	227	235	253	301
ΦC(h7)	185	210	210	235	290	290	380
D	84	113	125	136	148	160	200
E	25	25	25	25	30	30	35
F	M12	M12	M16	M16	M20	M20	M20, M24
G	35	40	48	50	50	60	68
H	90	100	117.5	136	145	165	205
J	154	190	213	232	240	259	308
K	43.5	46	57	70.5	84.5	100	133
L	53	50.5	75	91.5	109.5	125.5	168.5
M	9.5	12	19.5	20	20	28	30
ΦR	133.4	133.4	171.4	171.4	235	235	330.2

SPECIFICATIONS

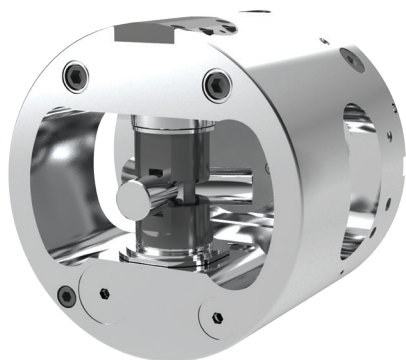
	IAH-225	IAH-250	IAH-275	IAH-315	IAH-350	IAH-400	IAH-500
Max. Clamping Force [kgf]	1270	1730	2550	2550	2550	3530	4670
Main Spindle Bore [mm]	OVER 45	OVER 45	OVER 45	OVER 45	OVER 55	OVER 55	OVER 55
Max. Speed [r.p.m.]	2800	2400	2000	1800	1800	1200	900
Weight [kg]	29	44	56	75	100	145	230
GD2 [kgf·m ²]	0.9	1.7	2.8	5.0	8.0	15.0	25.4
Max. Workpiece Size ØS [mm]	60	65	80	100	135	170	220
Max. Workpiece Size T [mm]	100	160	220	230	240	260	310



Work Pieces



IAN Auto-Indexing Chuck



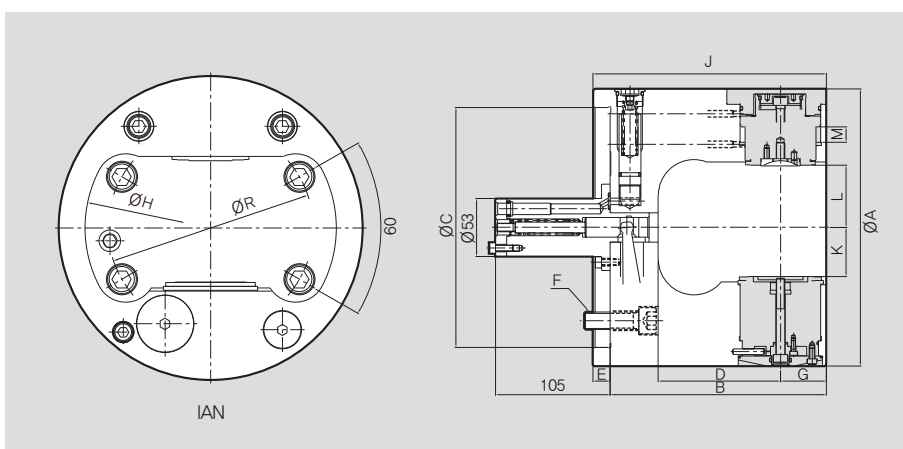
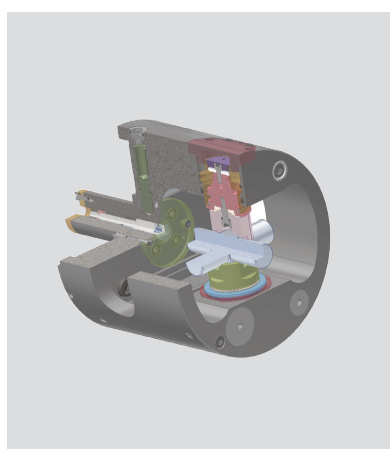
Application

on workpieces requiring indexing to machine multiple surfaces in one operation

Technical features

Accurate, durable indexing system

Index positions 3 x 120° / 4 x 90°



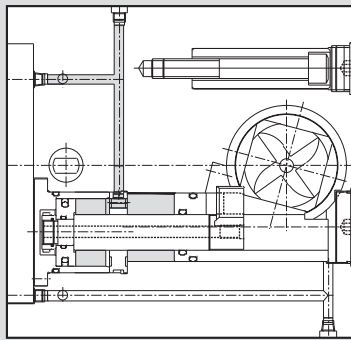
※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

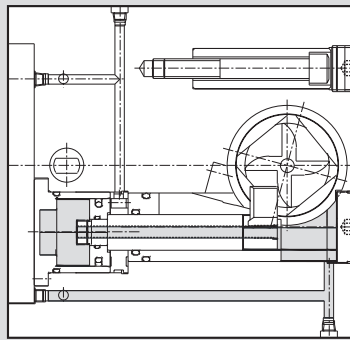
	IAN-235	IAN-254	IAN-280
ΦA	235	254	280
B	178	198	211
ΦC(h7)	170	220	220
D	99	112	125
E	16	16	16
F	M12	M14	M16
G	36	42	42
ΦH	180	210	250
J	194	214	227
K	42.5	45	58
L	47.5	45	70
M	4	12	17
R	133.4	171.4	171.4

SPECIFICATIONS

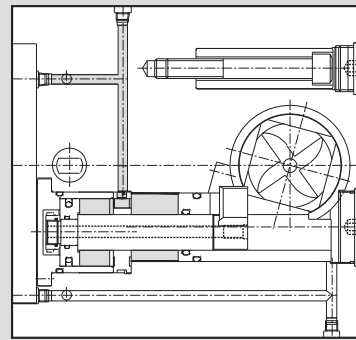
	IAN-235	IAN-254	IAN-280
Clamp Piston Area [cm ²]	30	43	43
Max. Pressure [kgf·m ²]	45	45	45
Max. Speed [r.p.m.]	3000	2500	2300
Weight [kg]	32	45	55
GD2 [kgf·m ²]	0.27	0.47	0.88



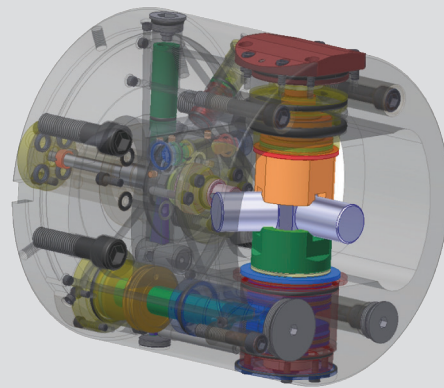
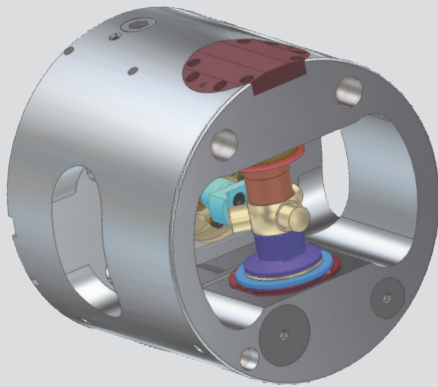
0 °



45 ° INDEX



90 ° INDEX



Work Pieces



PHD Outside Pull-Down Chuck



Application

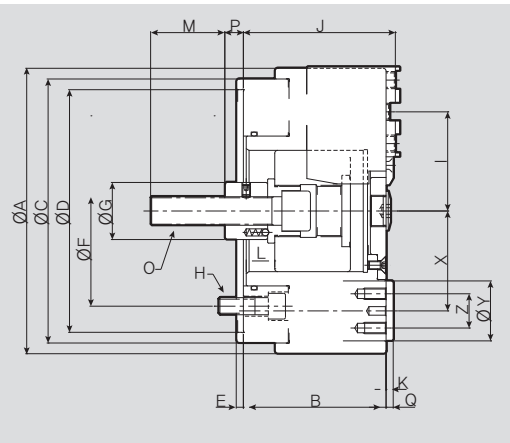
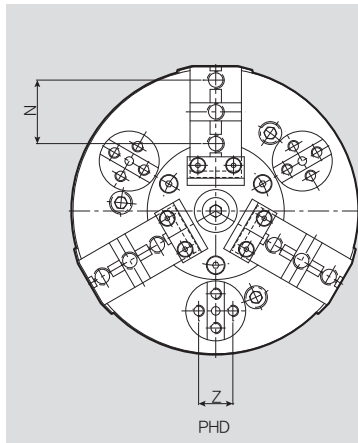
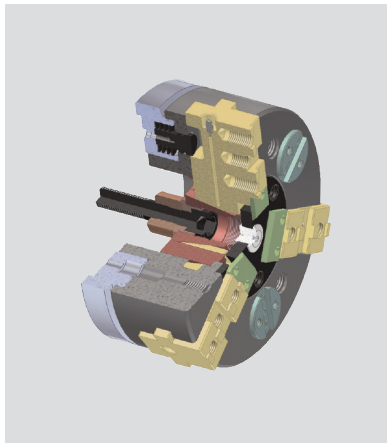
Workpieces requiring highly accurate parallelism and perpendicularity

Technical features

Workpiece is pulled back and shuttled flushly to locating point

SPECIFICATIONS

	PHD-200	PHD-250	PHD-300	PHD-380
Max. Clamping Force [kgf]	8100	11000	13500	16500
Max. Drawbar Pull [kgf]	3000	4000	5000	6000
Jaw Stroke Dia. [mm]	8.5	10.5	12	12
Plunger Stroke [mm]	24	30	34	34
Stop Traction [kgf]	200	300	300	450
Max. Speed [r.p.m.]	3500	3000	2500	2000
Weight [kg]	21	37	54	95



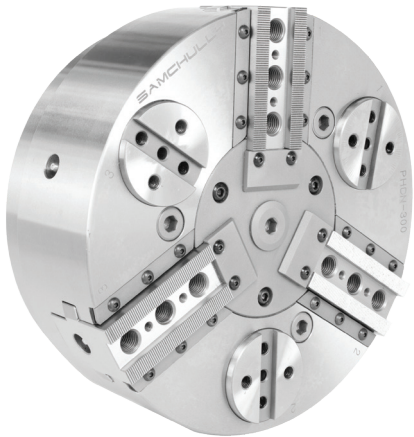
※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	PHD-200	PHD-250	PHD-300	PHD-380
ØA	200	250	300	380
B	100	110	118	130
ØC	185	230	280	360
ØD (h7)	170	220	220	300
E	5	5	5	5
ØF	133.4	171.4	171.4	235
ØG	40	40	50	50
H	M12	M16	M16	M20
I max	71.5	86.7	105	133.5
I min	67.3	81.4	99	127.5
J	106.5	117.2	125	137
K	1	1	1	1
L max	34	34	39	50
L min	10	4	5	16
M	52	61	60	60
N	44.5	54	63.5	76.2
O	M20	M20	M24	M24
P max	25	31	30	19
P min	1	1	-4	-15
Q	5	5	5	5
X	70	87	108	130
ØY	42	50	68	80
Z	24	30	40	54

PHDN

Inside Pull-Down Chuck



Application

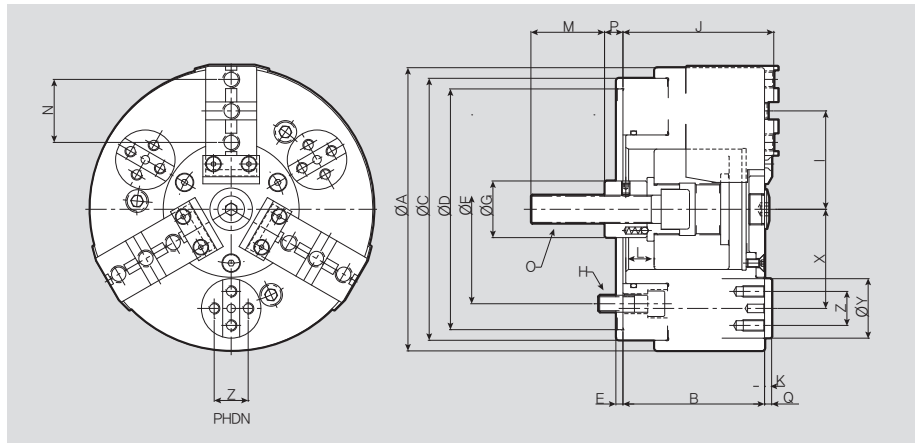
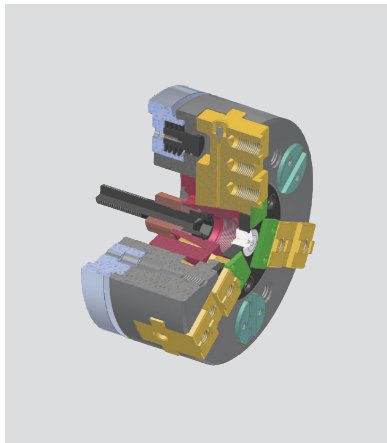
Workpieces requiring highly accurate parallelism and perpendicularity

Technical features

Workpieces is pulled back and shuttled flushly to locating point

SPECIFICATIONS

	PHDN-200	PHDN-250	PHDN-300	PHDN-380
Max. Clamping Force [kgf]	8100	11000	13500	16500
Max. Drawbar Pull [kgf]	3000	4000	5000	6000
Jaw Stroke Dia. [mm]	8.5	10.5	12.0	12.0
Plunger Stroke [mm]	24	30	34	34
Stop Traction [kgf]	200	300	300	450
Max. Speed [r.p.m.]	3500	3000	2500	2000
Weight [kg]	21	37	54	95



※ Maximum turning speed is based upon actual measurement.

DIMENSIONS

	PHDN-200	PHDN-250	PHDN-300	PHDN-380
ØA	200	250	300	380
B	100	110	118	130
ØC	185	230	280	360
ØD (h7)	170	220	220	300
E	5	5	5	5
ØF	133.4	171.4	171.4	235
ØG	40	40	50	50
H	M12	M16	M16	M20
I max	71.5	86.4	105	133.5
I min	67.3	81.1	99	127.5
J	106.5	117.2	125	137
K	1	1	1	1
L max	34	34	39	50
L min	10	4	5	16
M	52	61	60	60
N	44.5	54	63.5	76.2
O	M20	M20	M24	M24
P max	25	31	30	19
P min	1	1	-4	-15
Q	5	5	5	5
X	70	87	108	130
ØY	42	50	68	80
Z	24	30	40	54

DP Diaphragm Chuck



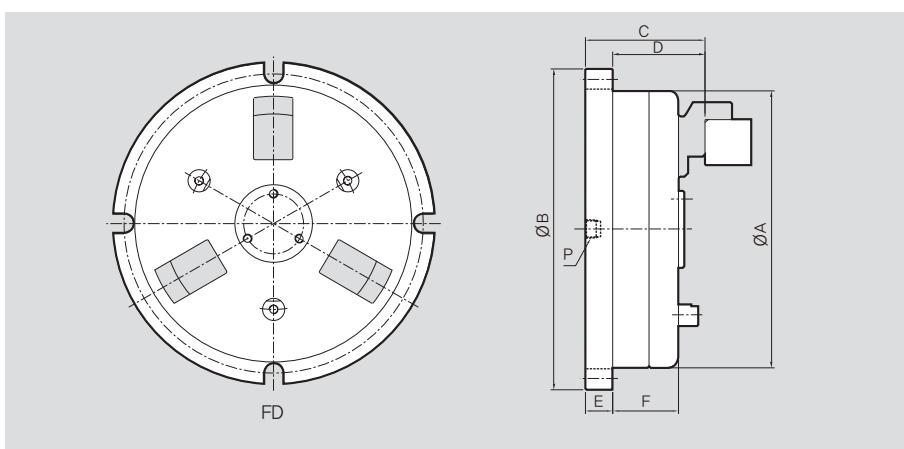
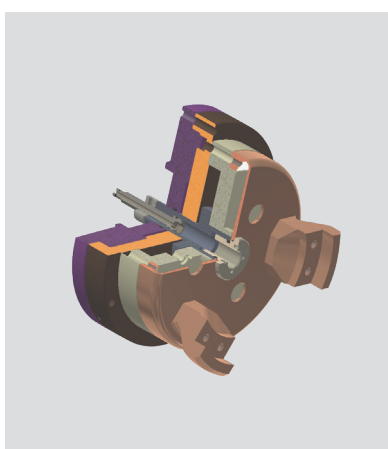
Application

The pliable elastic nature of the diaphragm chuck increases accuracy within 2 μ while eliminating the need for maintenance

Technical features

Sealed body eliminates maintenance, Jaws change easily for quick set-up

Self-contained cylinder



※ Maximum turning speed is based upon actual measurement.

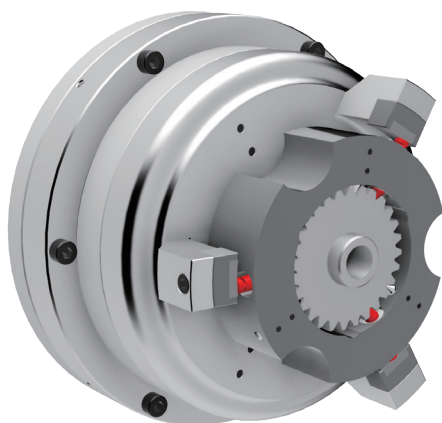
DIMENSIONS

	DP-06	DP-08	DP-10	DP-13	DP-17
ØA	171.4	212.9	251	327.2	428.9
ØB	208	246	284	360	476
C	92	96.8	96.8	108	109.5
D	72.9	77.7	77.7	88.9	90.4
E	19.1	19.1	19.1	19.1	19.1
F	65	70	85	85	85
P	1/4	1/4	1/4	1/4	1/4

SPECIFICATIONS

	DP-06	DP-08	DP-10	DP-13	DP-17
Max. Clamping Force [kgf]	450	720	1150	2000	3600
No. of Jaw	3 (6Jaw)	3 (6Jaw)	3 (6Jaw)	3 (6Jaw)	3 (6Jaw)
Jaw Stroke [mm]	0.23	0.25	0.25	0.35	0.40
Grip Dia. [mm]	44~107	76~143	114~181	150~248	203~349
Max. Speed [r.p.m.]	4500	4000	3500	3000	2000
Pressure [kgf/cm ²]	4.5	4.5	4.5	4.5	4.5
Weight [kg]	11	20	26.5	43	89

GDP Gear Chuck

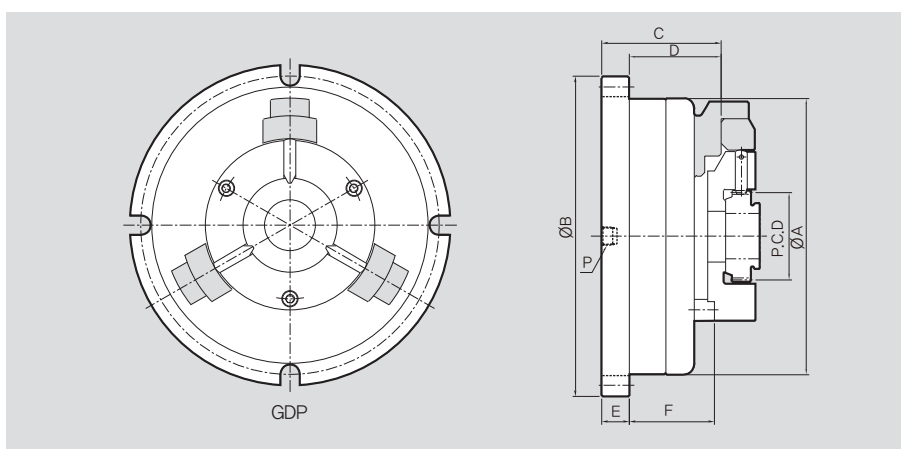
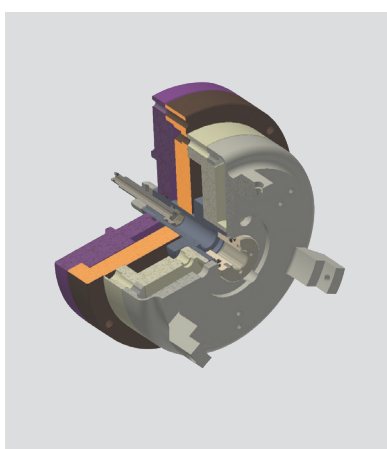


Application

For hard turning gears while clamping on the pitch diameter

Technical features

Jaws can be easily changed



※ Maximum turning speed is based upon actual measurement.

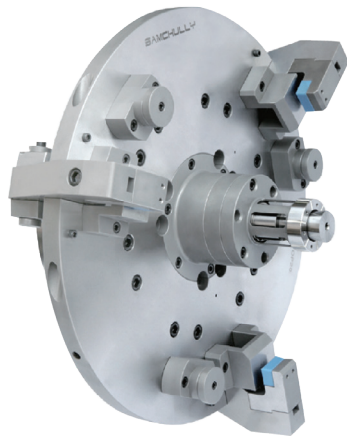
DIMENSIONS

	GDP-08	GDP-10	GDP-13	GDP-17
ΦA	212.9	251	327.2	428.9
ΦB	246	284	360	476
C	96.8	96.8	108	109.5
D	77.7	77.7	88.9	90.4
E	19.1	19.7	19.1	19.1
F	70	85	85	85
P	1/4	1/4	1/4	1/4
H	55	75	95	120
Lmax.	54	59	72	72
Lmin.	30	35	40	45
M	36	36	46	46
ΦN	40	45	55	55
O	M16	M20	M24	M24
Pmax.	44	50	60	60
Pmin.	30	35	40	40

SPECIFICATIONS

	GDP-08	GDP-10	GDP-13	GDP-17
Max. Clamping Force [kgf]	720	1150	2000	3600
No. of Jaw	3	3	3	3
Jaw Stroke [mm]	0.25	0.25	0.35	0.40
Grip Dia. [mm]	40~70	70~100	100~160	160~250
Max. Speed [r.p.m.]	4000	3500	3000	2000
Pressure [kgf/cm ²]	4.5	4.5	4.5	4.5
Weight [kg]	20	26.5	43	89

FWC Aluminum Wheel Chuck



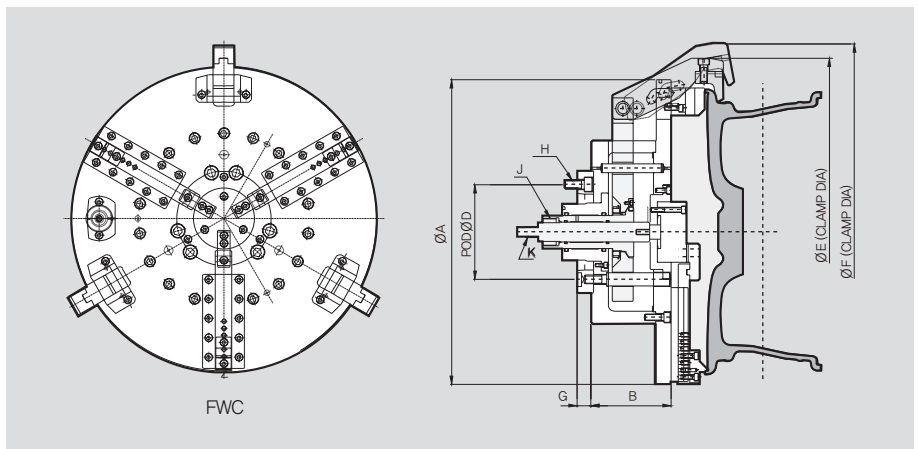
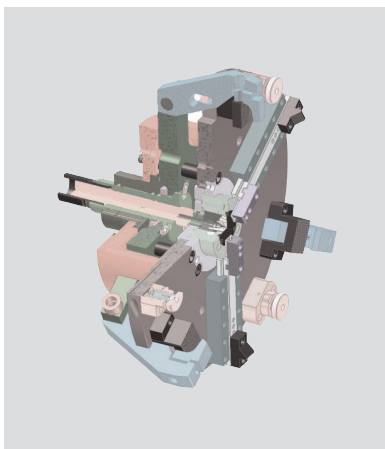
Application

Ideal for machining the aluminum wheels

Technical features

Cam arm structure achieves high clamp force

Lower weight increases efficiency and reduces down time

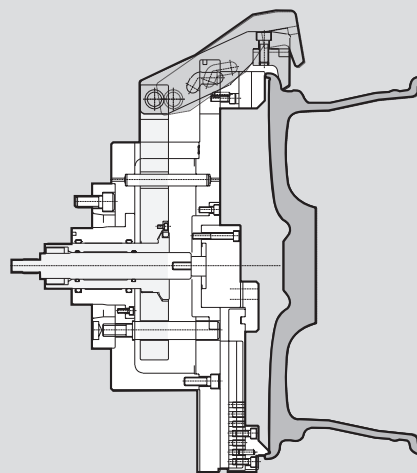
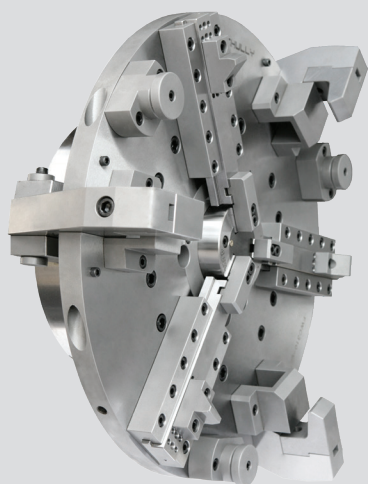


※ Maximum turning speed is based upon actual measurement.

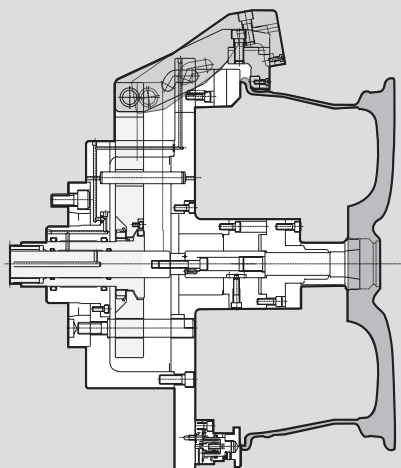
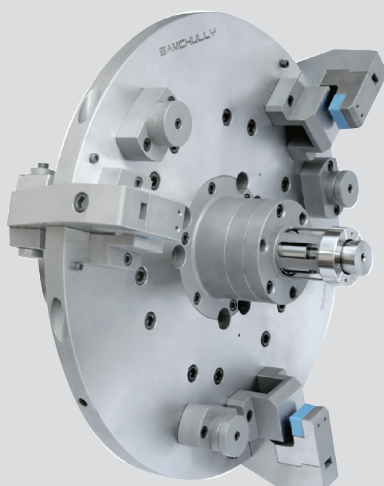
DIMENSIONS

JAW		A	B	C	D	
FWC-300	Cam Arm	S	12	13	14	15
		M	13	14	15	16
		L	14	15	16	17
		XL	15	16	17	18
JAW		A	B	C	D	
FWC-310	Cam Arm	S	13	14	15	16
		M	14	15	16	17
		L	15	16	17	18
		XL	16	17	18	19
		XXL	17	18	19	20
JAW		A	B	C	D	
FWC-320	Cam Arm	S	17	18	19	20
		M	18	19	20	21.5
		L	19	20	21.5	22.5

	FWC-300	FWC-310	FWC-320
ΦA	495	550	660
B	139.7	145	199.5
C(h6)	139.719	196.87	196.87
ΦD	171.45	235	235
E	Flexible	Flexible	Flexible
F	Flexible	Flexible	Flexible
G	25	35	35
H	M16	M20	M20
J	M42	M42	M42
K	M24	M24	M24



(OP#10)



(OP#20)

SPECIFICATIONS

	FWC-300	FWC-310	FWC-320
Max. Clamping Force [kgf]	970	970	970
Max. Drawbar Pull [kgf]	3000	3000	3000
Jaw Stroke Dia. [mm]	27	27	27
Plunger Stroke [mm]	35	35	35
Wheel Size Range [inch]	12~18	13~20	17.5~24.5
Max. Speed [r.p.m.]	2800	2200	1800
Weight [kg]	120	160	240
GD2 [kgf·m ²]	2.4	3.5	7.5

	FWC-300	FWC-310	FWC-320
Wheel Size	12"	O	
	13"	O	O
	14"	O	O
	15"	O	O
	16"	O	O
	17"	O	O
	18"	O	O
	19"	O	O
	20"	O	O
	21.5"		O
	22.5"		O



STEADY REST



STA

Self-Centering Steady Rest

150 P



STRA

Wide-Opening Self-Centering Steady Rest

152 P



STAB

side mounted cylinder Steady Rest

154 P

STA Self-Centering Steady Rest



Application

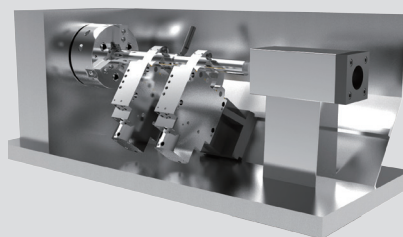
on lathes needing support for long bar and pipe

Technical features

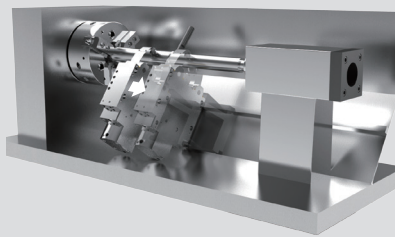
The arms and center rollers are interconnected and designed to self-adjust to various size workpieces

The mechanical design improves durability by eliminating the need for springs

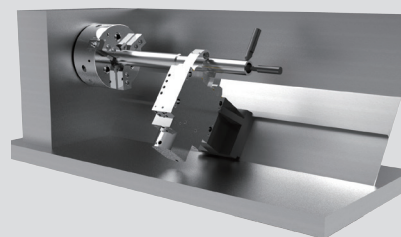
Fixed or Travelling Applications



Fixed Tandem Steady Rest



Travelling Steady Rest

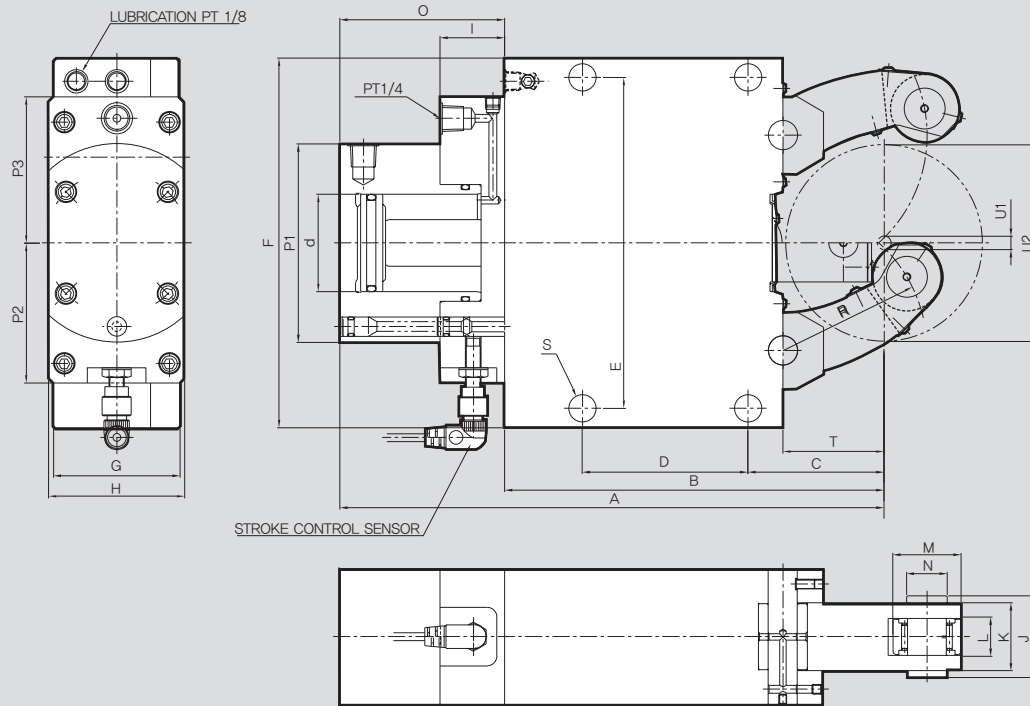


Fixed Steady Rest For End Machining

SPECIFICATIONS

	STA-1	STA-2	STA-3	STA-3.1	STA-3.2	STA-4	STA-5	STA-5.1	STA-6
Piston Area [cm ²]	7	19.6	50	50	50	78	78	78	132
Max. Clamping Force / Roller [kgf]	100	450	1000	1000	1000	1500	2000	2000	3000
Operation Pressure Max. [bar]	50	70	60	60	60	60	80	80	70
Operation Pressure Min. [bar]	6	8	8	8	8	8	8	8	8
Centering Range Max. [mm]	64	101	152	165	200	245	310	350	460
Centering Range Min. [mm]	4	8	12	20	50	30	45	85	125
Max. Roller Surface Speed [m/min]	800	800	725	725	725	715	700	700	700
Centering Accuracy [mm]	0.02	0.02	0.04	0.04	0.04	0.05	0.06	0.06	0.06
Repeatability Accuracy [mm]	0.005	0.005	0.007	0.007	0.007	0.007	0.01	0.01	0.01
Weight [kg]	6	14	39	40	43	92	152	155	420

STA



DIMENSIONS

	STA-1	STA-2	STA-3	STA-3.1	STA-3.2	STA-4	STA-5	STA-5.1	STA-6
A	207	279.5	429	437	455	608	697.5	717.5	944.5
B	137	195	311	319	335	448	510	530	709
C	51	70	115	123	138	146	178	198	215
D	64	85	135	135	135	240	270	270	330
E	118	170	262	262	262	365	400	400	640
F	132	190	290	290	290	400	440	440	680
G	55	70	85	85	85	110	145	145	145
H	70	68	100	100	100	144	144	144	158
I	33	33	37	37	37	37	37	37	37
J	24	42	52	52	52	67	83	83	83
K	20	35	45	45	45	60	75	75	75
L	12	19	25	25	25	25	29	29	29
M	19	35	47	47	47	52	62	62	80
N	6	21	25	25	25	32	36	36	42
O	70	84.5	118	118	120	160	187.5	187.5	235.5
P1	84	102	137	137	137	165	165	165	190
P2	66	72	90	90	90	102	102	102	115
P3	66	75	100	100	100	110	110	110	130
R	50.5	74	119	124	139	172	209	229	290
S	11	14	18	18	18	23	23	23	27
T	37	52	85	93	103	128	160	180	175
U1	4	8	12	20	50	30	45	85	125
U2	64	101	152	165	200	245	310	350	460

STRA Wide-Opening Self-Centering Steady Rest



Application

on lathes needing support for long bar and pipe for vertical loading

Technical features

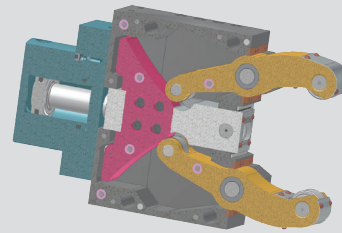
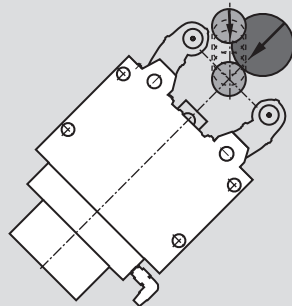
The arms and center rollers are interconnected and designed to self-adjust to various size workpieces.

The mechanical design improves durability by eliminating the need for springs

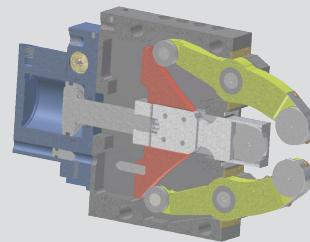
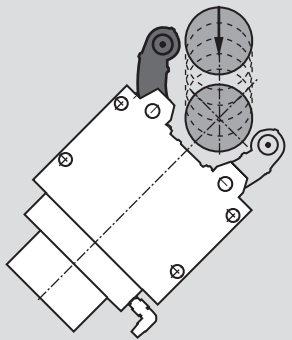
Wide arm opening allows vertical loading and automation

Fixed or Travelling Applications

STA
Conventional model



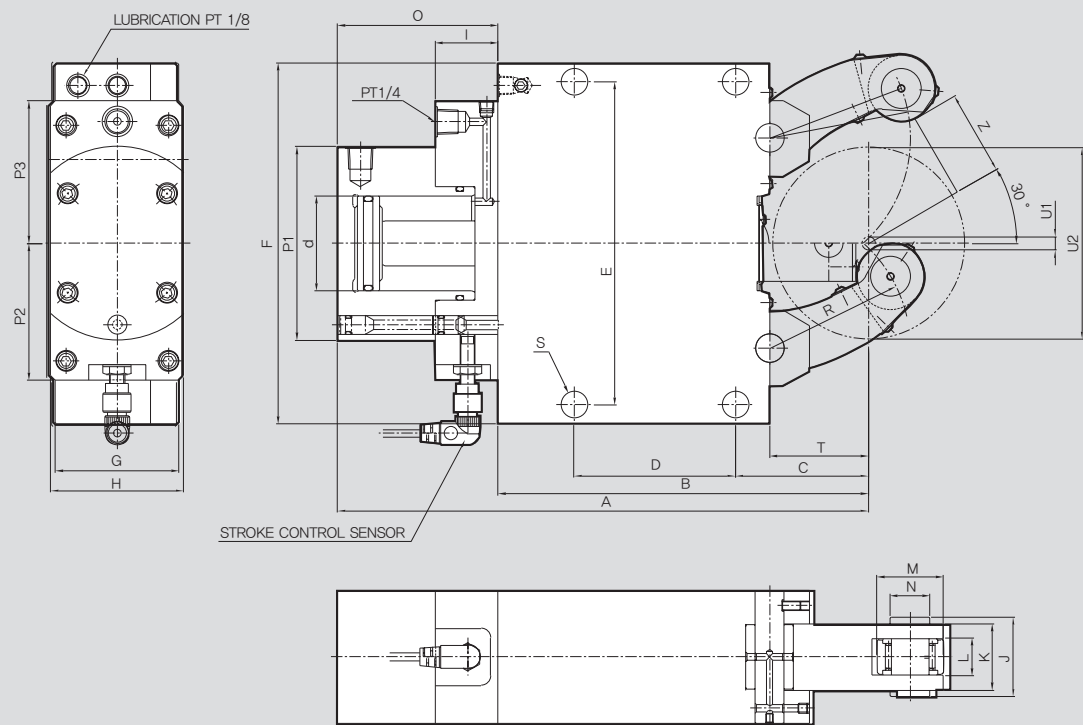
STRA
Wide arm opening allows vertical loading and automation



SPECIFICATIONS

	STRA-1	STRA-2	STRA-3	STRA-3.1	STRA-4	STRA-5	STRA-6
Piston Area [cm ²]	7	19.6	50	50	78	78	132
Max. Clamping Force / Roller [kgf]	100	450	1000	1000	1500	2000	3000
Operation Pressure Max. [bar]	50	70	60	60	60	80	70
Operation Pressure Min. [bar]	6	8	8	8	8	8	8
Centering Range Max. [mm]	52	80	130	150	220	268	460
Centering Range Min. [mm]	4	8	12	22	30	50	160
Max. Roller Surface Speed [m/min]	800	800	725	725	715	700	700
Centering Accuracy [mm]	0.02	0.02	0.04	0.04	0.05	0.06	0.06
Repeatability Accuracy [mm]	0.005	0.005	0.007	0.007	0.007	0.01	0.01
Weight [kg]	6	14	39	40	92	152	420

STRA



DIMENSIONS

	STRA-1	STRA-2	STRA-3	STRA-3.1	STRA-4	STRA-5	STRA-6
A	207	279.5	431	440	608	685	944.5
B	137	195	312	320	448	510	709
C	51	70	115	123	146	178	215
D	64	85	135	135	240	270	330
E	118	170	262	262	365	400	640
F	132	190	290	290	400	440	680
G	55	70	85	85	110	145	145
H	70	70	100	100	144	144	158
I	33	33	37	37	37	37	37
J	24	42	52	52	67	83	83
K	20	35	45	45	60	75	75
L	12	19	25	25	25	29	29
M	19	35	47	47	52	62	80
N	6	21	25	25	32	36	42
O	70	84.5	120	120	160	175	235.5
P1	84	102	137	137	165	165	190
P2	66	72	90	90	102	102	115
P3	66	75	100	100	110	110	130
R	50.5	74	119	124	172	209	290
S	11	14	18	18	23	23	27
T	37	52	85	93	128	160	175
Z	26.5	41	66	76	111	135	230
U1	4	8	12	22	30	50	160
U2	52	80	130	150	220	268	460

STAB Side Mounted Cylinder Steady Rest



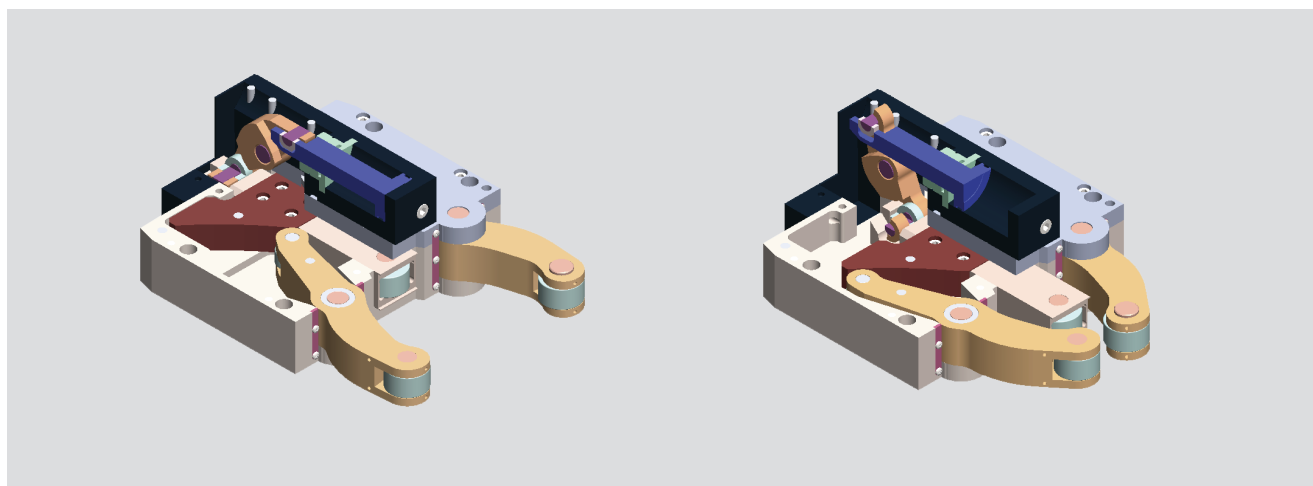
Application

Compact steady rest fits in machines with minimal clearance

Technical features

large centering ranges in relation to size

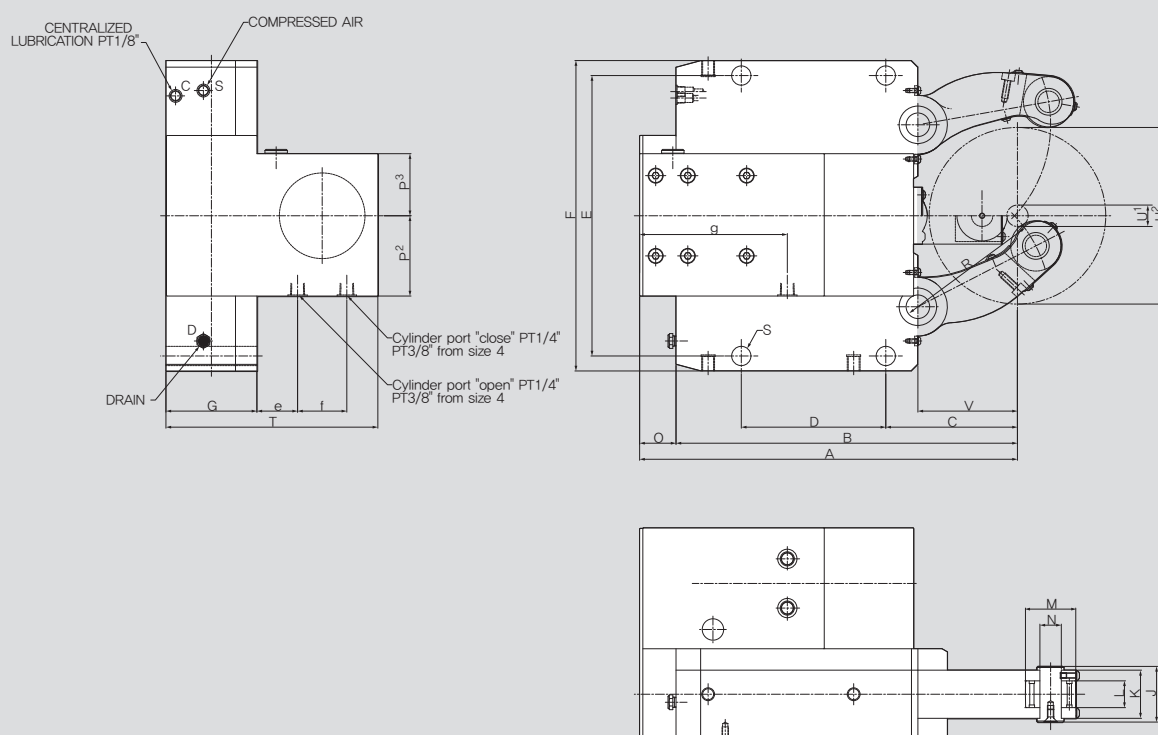
Fixed or Travelling Applications



SPECIFICATIONS

	STAB-3	STAB-3.1	STAB-3.2	STAB-4	STAB-5	STAB-5.1	STAB-6
Piston Area	50	50	50	78	78	78	132
Max. Clamping Force / Roller	1,000	1,000	1,000	1,500	2,000	2,000	3,000
Operation Pressure Max. [bar]	60	60	60	60	80	80	70
Operation Pressure Min. [bar]	8	8	8	8	8	8	8
Centering Range Max. [mm]	152	165	200	245	310	350	460
Centering Range Min. [mm]	12	20	50	35	45	85	125
Max. Roller Surface Speed	725	725	725	715	600	600	560
Centering Accuracy	0.04	0.04	0.04	0.05	0.06	0.06	0.06
Repeatability Accuracy	0.007	0.007	0.007	0.007	0.01	0.01	0.01
Weight	45	46	48	106	175	178	483

STAB-3.1

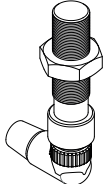
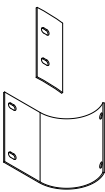
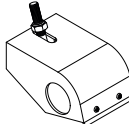
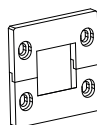
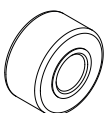


DIMENSIONS

	STAB-3	STAB-3.1	STAB-3.2	STAB-4	STAB-5	STAB-5.1	STAB-6
A	345	353	372.5	480	612.5	632.5	800
B	311	319	335	448	510	530	709
C	115	123	138	146	178	198	215
D	135	135	135	240	270	270	330
E	262	262	262	365	400	400	610/640
F	290	290	290	400	440	440	680
G	85	85	85	110	145	145	145
J	52	52	52	67	83	83	83
K	45	45	45	60	75	75	75
L	25	25	25	25	29	29	29
M	47	47	47	52	62	62	80
N	20	20	20	25	30	30	35
O	34	34	37.5	32	102.5	102.5	91
P2	75	75	75	68	85	85	100
P3	58	58	58	68	85	85	85
R	119	124	139	172	209	229	290
S	18	18	18	23	23	23	27
T	198	198	198	243.5	325	325	350
V	85	93	103	128	160	180	185
U1	12	20	50	35	45	85	125
U2	152	165	200	245	310	350	460
e	38	38	38	38.5	79.5	79.5	74.5
f	46	46	46	66	66	66	96
g	138	138	138	190	261	261	334.5

OPTIONAL SPECIFICATIONS

TYPE - STA, STRA, STAB

SIZE		STA-1	STA-2	STA-3/3.1/3.2	STA-4	STA-5/5.1
Proximity Sensor		100S08	200S08	300S12	300S12	300S12
Swarf guard 2-pieces		101819	201819	301819	401819	501819
Spring loaded chip guard		100031	200031	300032	400032	500032
Roller stripper (2-pieces)		101700	201700	301617	401617	501617
Roller cylindrical design		10RC06	20RC15	30RC20	40RC25	50RC30
Roller spherical design		10RS06	20RS15	30RS20	40RS25	50RS30





ACCESSORIES



Soft Jaw

Power Chuck Soft Jaw

160 P



Etc.

Scroll Chuck
Accessories

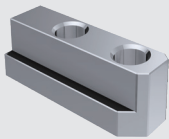
174 P



Hard Jaw

Power Chuck Hard Jaw

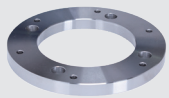
162 P



T-Nut

Power Chuck T-Nut

164 P



Adaptor

Power Chuck
Adaptor Plates

166 P



QJC Jaw

Quick Jaw Change
Chuck Jaws

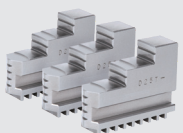
168 P



TC, FTC Jaw

Scroll Chuck Jaws

170 P



SC, IC Jaw

Scroll Chuck Jaws

171 P



FTU Jaw

Scroll Chuck Jaws

172 P

Soft Jaw

Power Chuck Soft Jaw



Application
Works with HC.

Fig. 1

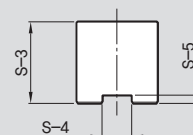
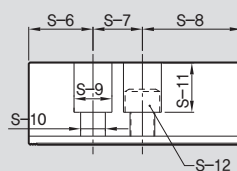
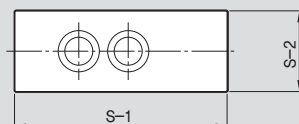


Fig. 2

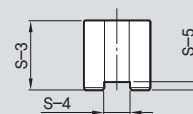
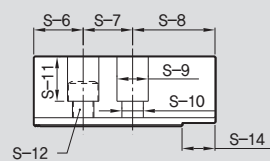
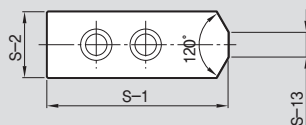


Fig. 3

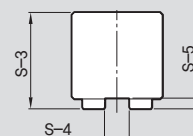
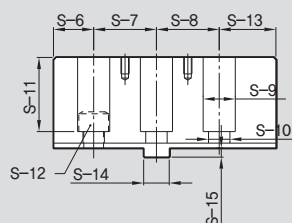
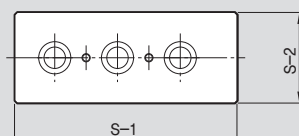


Fig. 4

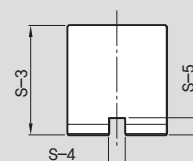
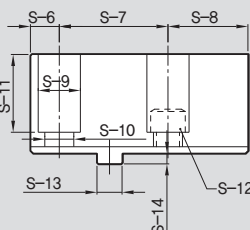
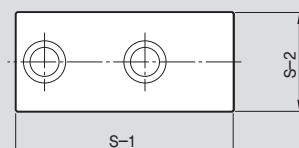
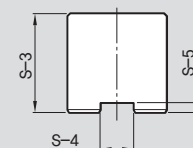
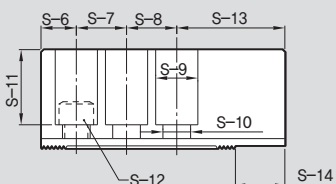
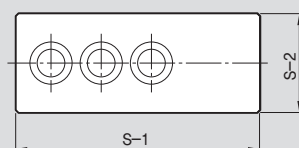


Fig. 5



※ See the product dimension Table on the right.
※ Please inquire separately for the special Jaw.

DIMENSIONS

	SB04C1	SB05N1	SB05B1	SB06B1	SB08B1	SB10B1	SB12A1	SB12N1	SB15C1
Fig.	2	2	2	2	2	2	1	1	1
Serration Pitch	1.5x60°	1.5x60°	1.5x60°	1.5x60°	1.5x60°	1.5x60°	1.5x60°	1.5x60°	1.5x60°
S-1	48	54	62	72	95	110	129	111	165
S-2	19	23	23	31	35	40	49	49	50
S-3	23	25	27	32	37.5	42	49.5	49.5	66
S-4	8	10	10	12	14	16	18	21	22
S-5	3	4	4	5	5	5	5	4	8
S-6	8	12	14	15	24	30	39	21	37
S-7	15	14	19	20	25	30	30	30	43
S-8	25	28	29	37	46	50	60	60	85
S-9	11	13.5	13.5	17	19	19	23	25	32
S-10	6.6	8.5	8.5	11	13	13	15	17	21
S-11	15	16.5	18	20	23	27	30	32.5	42
S-12	M6x16	M8x20	M8x20	M10x30	M12x35	M12x35	M14x45	M16x40	M20x60
S-13	6	5	12	5	12	15	-	-	-
S-14	-	-	14	15	20	20	-	-	-
S-15	-	-	-	-	-	-	-	-	-
Corresponding	HCH-04	HC-04, HS-05, MCA-04	HC-05	HS/HCH/HC-06, MH-206, UR-175	HCH/HC/HS-08, MH-208, UR-210	HCH/HC/HS-10, MH-210, UR-250	HC/HCH-12	HS-12, MH-212, UR-315	HCH-15, HCH-18

	SB15N1	SB15A2	SB18A2	SB32B2	SB32GB	SB32SB2	SB40GB	SB40SB2
Fig.	1	1	1	1	4	5	3	5
Serration Pitch	1.5x60°	3.0x60°	3.0x60°	3.0x60°	-	3.0x60°	-	3.0x60°
S-1	135	165	180	160	165	185	270	270
S-2	50	62	65	75	75	75	110	110
S-3	59	66	69	75	82	75	117	110
S-4	25.5	22	25	25.5	12.7	25.5	30	30
S-5	5	8	9	7	13	7.5	13	7.5
S-6	26	30	40	25	21.9	26.8	48.8	32.5
S-7	43	50	60	38	76.2	38.1	76.2	60
S-8	66	85	80	97	66.9	38.1	76.2	60
S-9	36	32	32	32	32	32	39	39
S-10	21	21	21	22	22	21	26	26
S-11	38	42	45	54	59	57	90	90
S-12	M20x55	M20x60	M20x60	M20	M20	M20	M24	M24
S-13	-	-	-	-	19.025	82	68.8	117.5
S-14	-	-	-	-	7	-	19.025	85
S-15	-	-	-	-	-	-	7	-
Corresponding	HC-15, HC-18	MH-218	HC/HCH-21, HC/HCH-24, MH-221,224	HCH-32 [Serration]	HC-32 [Groove]	HC-32 [Serration]	HC-40,50,55,63,70,80 [Groove]	HC-40,50,55,63,70,80 [Serration]

Hard Jaw

Power Chuck Hard Jaw



Application
Works with HC.

Fig. 1

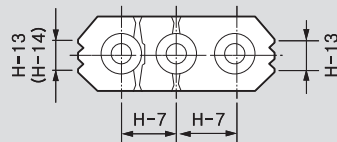


Fig. 2

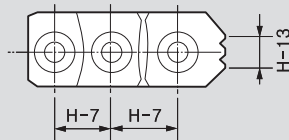


Fig. 3

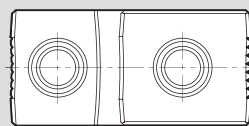
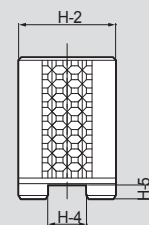
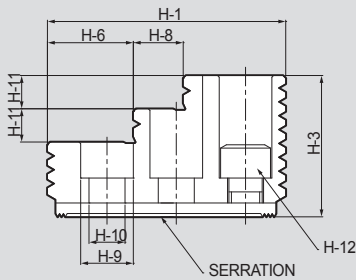
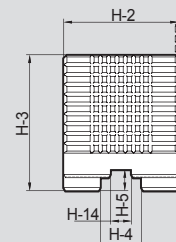
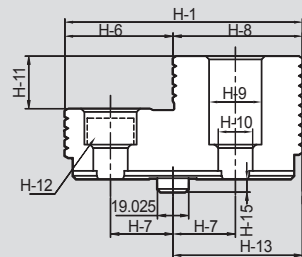
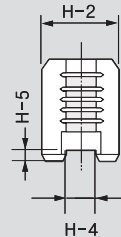
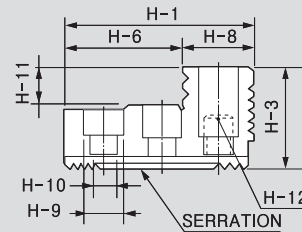
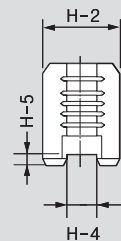
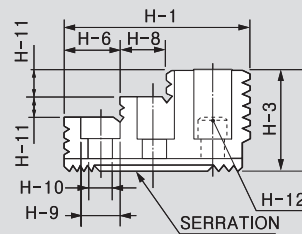
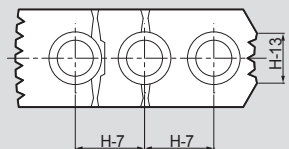


Fig. 4



※ See the product dimension Table on the right.

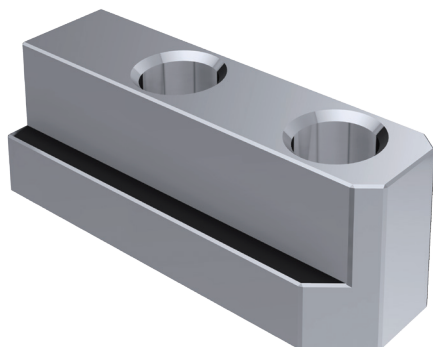
DIMENSIONS

	HB04N1	HB06A1	HB08A1	HB10A1	HB12B1	HB12N1	HB15A1	HB15A2
Fig.	2	4	1	1	2	2	1	1
Serration Pitch	1.5x60°	1.5x60°	1.5x60°	1.5x60°	1.5x60°	1.5x60°	1.5x60°	3.0x60°
H-1	53	67	86	99.5	97.5	103	149	149
H-2	23	31	35	40	50	50	62	62
H-3	27.5	41	51	54	55	52	86	86
H-4	10	12	14	16	18	21	22	22
H-5	4	5	5	5	5	4	9	9
H-6	30.5	18	31	43	64.5	62.5	63	63
H-7	14	20	25	30	30	30	43	50
H-8	22.5	17	18	17	33	40.5	34	34
H-9	13.5	17	19	19	22	25	32	32
H-10	8.5	11	13	13	15	17	21	21
H-11	10	9	12	13	20	17	20	20
H-12	M8	M10	M12	M12	M14	M16	M20	M20
H-13	6	10	12	15	18	30	40	40
H-14	-	-	12	15	-	-	40	40
H-15	-	-	-	-	-	-	-	-
Corresponding	HS-04, HS-05	"HC/HS-06 MH-206, UR-175"	HC/HCH/HS-08, MH-208, UR-210	HC/HCH/HS-10, MH-210, UR-250	HC/HCH-12	HS-12, MH-212 UR-315	HCH-15, HCH-18	MH-218

	HB15N1	HB18B2	HB32B2	HB32GB	HB32SB2	HB40GB	HB40SB2	-
Fig.	1	2	2	3	2	3	2	-
Serration Pitch	1.5x60°	3.0x60°	3.0x60°	-	3.0x60°	-	3.0x60°	-
H-1	149	159.5	150	150	168	223	223	-
H-2	62	80	70	70	70	80	80	-
H-3	86	90	75	83	75	124	117	-
H-4	25.5	25	25.5	25	25.5	30	30	-
H-5	5	9	7	13	7.5	15	8	-
H-6	69	104.5	66	66	89	133	133	-
H-7	43	50	76.2	38.1	38.1	38.1	114.3	-
H-8	27	55	79	79	79	90	90	-
H-9	32	32	32	32	32	39	39	-
H-10	21	21	21	21	21	26	26	-
H-11	20	40	32	32	32	55	55	-
H-12	M20	M20	M20	M20	M20	M24	M24	-
H-13	43	55	-	79	-	83	-	-
H-14	38	-	-	12.7	-	-	-	-
H-15	-	-	-	8	-	7	-	-
Corresponding	HC-15, HC-18	HC/HCH-21, HC/HCH-24, MH-221,224	HCH-32 [Serration]	HC-32 [Groove]	HC-32 [Serration]	HC-40[Groove] 50,55,63,70,80	HC-40[Serration] 50,55,63,70,80	-

T-NUT

Power Chuck T-Nuts



Application
Works with HC.

Fig. 1

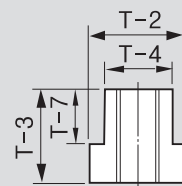
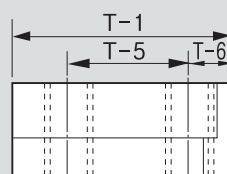
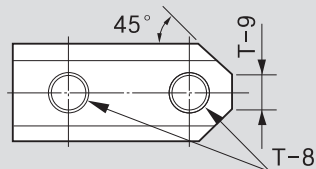


Fig. 2

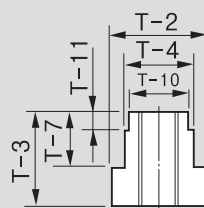
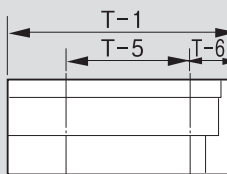
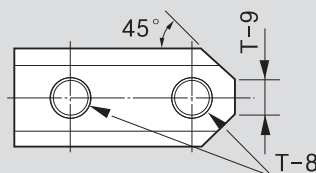
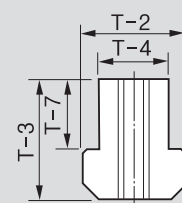
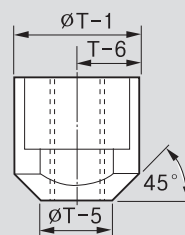
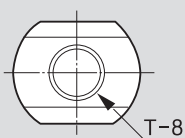


Fig. 3



※ See the product dimension Table on the right.

DIMENSIONS

	TN-HCH-04	TN-HS-04, TN-HS-05	TN-HC-04	TN-HC-05	TN-HS-06	TN-HCH, TN-HC-06	TN-HS-08	TN-HCH, TN-HC-08	TN-HS-10	TN-HCH, TN-HC-10
Fig.	1	1	1	1	1	1	1	1	1	1
T-1	24.5	26	28	32	36	36.5	46.5	48	51	55
T-2	11.5	15	15	15	17.5	17.5	20.5	20.5	22.5	22.5
T-3	13.5	15	18	18	18.5	22.5	20.5	25.5	21.5	25.5
T-4	8	10	10	10	12	12	14	14	16	16
T-5	15	14	14	19	20	20	25	25	30	30
T-6	4.5	6	7	6	8.25	7.5	10.5	11	11	11
T-7	9	9.5	12.5	12.5	11	15	12	16	13	16
T-8	M6	M8	M8	M8	M10	M10	M12	M12	M12	M12
T-9	5	5	5	6	8	6	12	8	11	8
T-10	-	-	-	-	-	-	-	-	-	-
T-11	-	-	-	-	-	-	-	-	-	-
Corresponding	HCH Type of 4" Chuck	HS Type of 4", 5" Chuck	HC Type of 4" Chuck	HC Type of 5" Chuck	HS/MH/UR Type of 6" Chuck	HCH/HC Type of 6" Chuck	HS/MH/UR Type of 8" Chuck	HCH/HC Type of 8" Chuck	HS/MH/UR Type of 10" Chuck	HCH/HC Type of 10" Chuck

	TN-HS-12	TN-HCH, TN-HC-12	TN-HCH-15, TN-HCH-18	TN-HC-15, TN-HC-18	TN-MH-218	TN-HCH-21, TN-HCH-24	TNX-HC-21, TNX-HC-24	TN-HCH-32	TN-HC-32	TN-HC-40
Fig.	1	1	2	1	2	3	3	3	3	3
T-1	55.5	55.5	80	80	80	100	46	35	37	42
T-2	29.5	26.5	33.5	35	33.5	37.5	37.5	35	37.5	42.5
T-3	27.75	33.5	45.5	39	45.5	45	45	39.5	47.5	49.5
T-4	21	18	24	25.5	24	25	25	25.5	25.5	30
T-5	30	30	43	43	50	60	26.5	25	-	-
T-6	12	11.5	17	17	17	20	23	-	-	-
T-7	16.25	20	29	20	29	26	26	20.5	28.5	30.5
T-8	M16	M14	M20	M20	M20	M20	M20	M20	M20	M24
T-9	13	12	11	11	16	11	-	-	-	-
T-10	-	-	22	-	-	22	-	-	-	.
T-11	-	-	7.5	-	-	7.5	-	-	-	.
Corresponding	HS/MH Type of 12" Chuck	HCH/HC Type of 12" Chuck	HCH Type of 15", 18" Chuck	HC Type of 5", 18" Chuck	MH-218	HCH/HCHF- 21,24(S), MH-221(S)	HC/HCF-21,24 HCH/HCHF- 21,24(H), MH-221(H)	HCH-32	HC-32	HC-40

※ TNX-HC-21-24, TNX-HC-32 require two T-nuts per Jaw.

※ TNX-HC-40 require three T-nuts per Jaw.

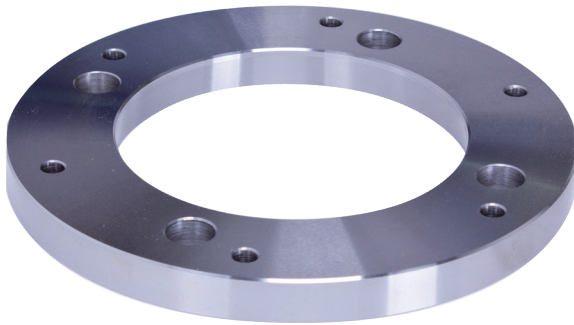


Important for maintenance and safe operation.

- Maximum extreme-pressure protection
- Exceptional adhesion & cohesion characteristics
- Superior friction-reduction properties-protects against friction-related heat & wear
- Excellent resistance to water washout & spray off
- Reduces maintenance & downtime
- Reduces operating temperatures
- Extends equipment life.

Adaptor Plates

Power Chuck Adaptor Plates



Application
Works with HC.

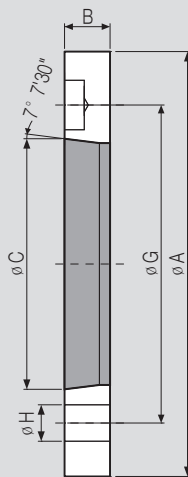


Fig. 1 : Direct Type

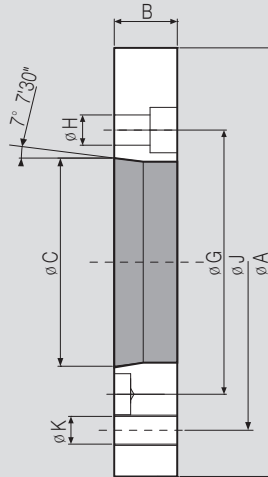


Fig. 2 : Indirect Type

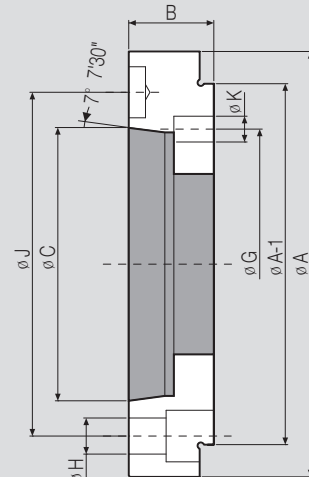


Fig. 3 : Plate Type

※ See the product dimension Table on the right.

DIMENSIONS

	Fig.	Spindle Nose	A	B	C	G	H	Corresponding
AP06A05	1	A2-5	140	15	82.563	104.78	12	HS/HSL/HCH/HC/HCL-06, MH-206, UR-175
APT06A05	1	A2-5	140	15	82.563	104.78	12	HST/HCT/HCLT-06, MHT-206
AP08A06	1	A2-6	170	17	106.375	133.35	13.5	HS/HSL/HCH/HC/HCL-08, MH-208, UR-210
APT08A06	1	A2-6	170	17	106.375	133.35	13.5	HST/HCT/HCLT-08, MHT-208
APF08A06	1	A2-6	170	17	106.375	133.35	13.5	HSF/HCF/HCLF-08, MHF-208
AP10/12A08	1	A2-8	220	18	139.719	171.45	18	HS/HSL/HCH/HC/HCL-10,12, MH-210, UR-250
APT10/12A08	1	A2-8	220	18	139.719	171.45	17	HST/HCT/HCLT-10,12
APF10/12A08	1	A2-8	220	18	139.719	171.45	18	HSF-10,12, HCF/HCLF-12
AP212A08	1	A2-8	300	22	139.719	235	21	MH-212, UR-315
AP212A11	1	A2-11	300	22	196.87	235	21	MH-212
AP15A11	1	A2-11	300	22	196.87	235	21	HCH-15, HC-15,18
APT15A11	1	A2-11	300	22	196.87	235	21	HCHT-15
APF15A11	1	A2-11	300	22	196.87	235	21	HCHF-15, HCF-15,18
AP18A11	1	A2-11	380	22	196.87	235	21	HCH-18
APF18A11	1	A2-11	380	22	196.87	235	21	HCHF-18
AP21/24A15	1	A2-15	380	27	285.775	330.2	24	HCH/HC-21,24, MH-221,224

	Fig.	Spindle Nose	A	B	C	G	H	J	K	Corresponding
AP08A05	2	A2-5	170	25	82.563	104.78	12	133.35	M12	HS/ HST/ HSF/ HSL/ HCH/ HC/ HCT/ HCF/ HCL/ HCLT/ HCLF-08, MH/ MHT/ MHF-208
AP10/12A06	2	A2-6	220	25	106.375	133.35	13.5	171.45	M16	HS/ HST/ HSF/ HSL/ HCH/ HC/ HCT/ HCL/ HCLT-10,12, MH-210, HCF/ HCLF-12
AP15A08	2	A2-8	300	33	139.719	171.45	18	235	M20	HCH/ HCHT/ HCHF-15, HC/HCF-15,18
AP218A15	2	A2-15	380	60	285.775	330.2	24	300	M20	MH-218
AP21/24A11	2	A2-11	380	27	196.87	235	21	330.2	M22	HCH/ HC-21,24,MH-221,224
AP21/24A11	2	A2-11	380	42	196.87	235	22	330.2	M22	HCH/ HCHF/ HC/ HCF-21,24, MH-221,224
AP21/24A11	2	A2-11	380	42	196.87	235	22	330.2	M24	HC/HCF-32, HCH/HCHF/HC-21N,24N
AP21/24A15	2	A2-15	380	42	285.775	330.2	24	330.2	M22	HCH/ HC-21,24, MH-221,224
AP32A15	2	A2-15	380	42	285.775	330.2	26	330.2	M24	HC-32
AP32/40A11	2	A2-11	520	50	196.87	235	22	463.6	M24	HCH-32, HC-40, HC-50
AP32/40A15	2	A2-15	520	42	285.775	330.2	26	463.6	M24	HCH-32, HC-40, HC-50

	Fig.	Spindle Nose	A	A-1	B	C	G	H	J	K	Corresponding
AP06A06	3	A2-6	165	140	33	106.375	133.35	14	104.78	M10	HS/ HSL/ HCH/ HC/ HCL-06, MH-206
AP08A08	3	A2-8	210	170	30	139.719	171.45	18	133.35	M12	HS/ HST/ HSF/ HSL/ HCH/ HC/ HCT/ HCF/ HCL/ HCLT/ HCLF-08, MH/ MHT/ MHF-208

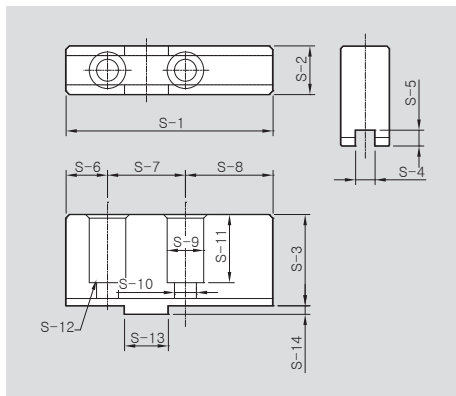
QJC-Jaw Quick Jaw Change Chuck Jaws



Soft Top Jaws

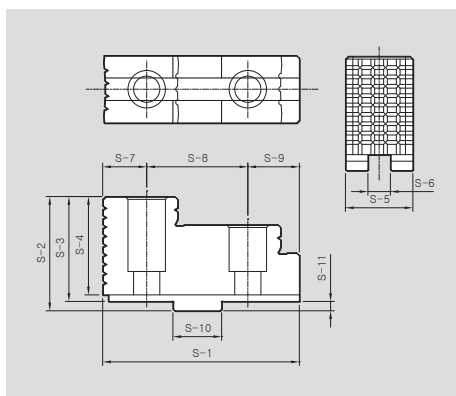


Hard Top Jaws



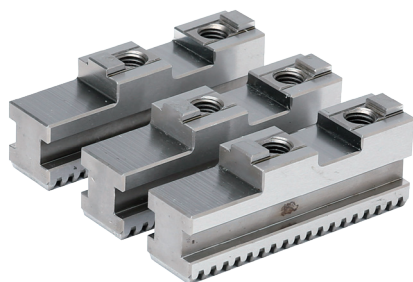
SOFT TOP JAWS DIMENSIONS

	QSB206	QSB208	QSB210	QSB215
S-1	85	105	125	145
S-2	20	22	30	35
S-3	37.5	40	50	50
S-4	8	10	12	12
S-5	6.5	8.5	8.5	8.5
S-6	17	25	25	31
S-7	32	40	40	54
S-8	36	40	60	60
S-9	15	15	20	20
S-10	9	9	14	14
S-11	28	31	39	34
S-12	M8x20	M8x20	M12x30	M12x40
S-13	18	20	20	26
S-14	3.5	5	5	5
Corresponding	QJC-206	QJC-208	QJC-210,QJC-212	QJC-215



HARD TOP JAWS DIMENSIONS

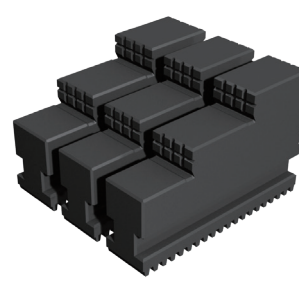
	QHB206	QHB208	QHB210	QHB215
S-1	63	72	90	105
S-2	36	43	55	61
S-3	32.5	38	50	56
S-4	29.5	34.5	46.5	52.5
S-5	20	22	30	36
S-6	8	10	12	12
S-7	17	15	21	23.5
S-8	32	40	40	54
S-9	14	17	29	27.5
S-10	18	20	20	26
S-11	3.5	5	5	5
Corresponding	QJC-206	QJC-208	QJC-210,QJC-212	QJC-215



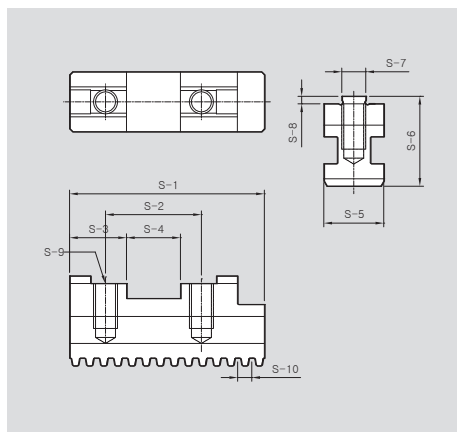
Base Jaws



Solid Soft Jaws

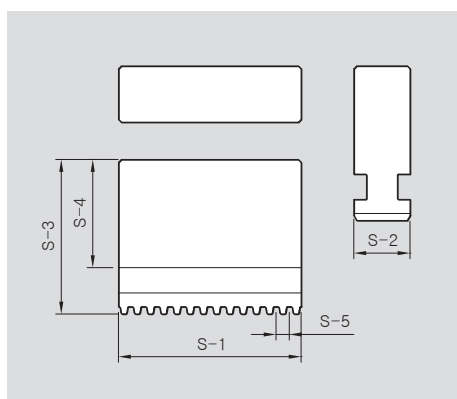


Solid Hard Jaws



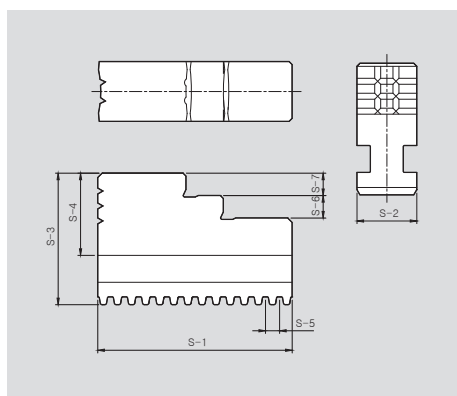
BASE JAWS DIMENSIONS

	QBJ206	QBJ208	QBJ210	QBJ212	QBJ215
S-1	65	85	104	115	125
S-2	32	40	40	40	54
S-3	19	23	26	26	30
S-4	18	20	20	20	26
S-5	20	22	26	32	32
S-6	30	32	40	45	45
S-7	8	10	12	12	12
S-8	2.5	2	3	3	3
S-9	M8	M8	M12	M12	M12
S-10	4.712	4.712	5.498	5.498	5.498
Corresponding	QJC-206	QJC-208	QJC-210	QJC-212	QJC-215



SOLID SOFT JAWS DIMENSIONS

	MQSB206	MQSB208	MQSB210	MQSB212	MQSB215
S-1	65	85	104	115	125
S-2	20	22	26	32	32
S-3	55	65	84	90	100
S-4	38.5	48	63	64	74
S-5	4.712	4.712	5.498	5.498	5.498
Corresponding	QJC-206	QJC-208	QJC-210	QJC-212	QJC-215



SOLID HARD JAWS DIMENSIONS

	MQHB206	MQHB208	MQHB210	MQHB212	MQHB215
S-1	65	85	104	115	125
S-2	20	22	26	32	32
S-3	55	65	84	90	100
S-4	38.5	48	63	64	74
S-5	4.712	4.712	5.498	5.498	5.498
S-6	7.5	10	14	14	45
S-7	7.5	10	14	14	15
Corresponding	QJC-206	QJC-208	QJC-210	QJC-212	QJC-215

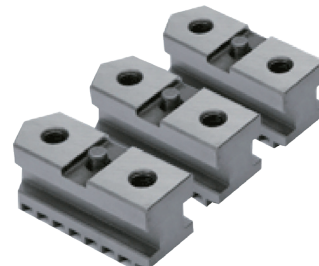
TC, FTC-Jaw Scroll Chuck Jaws



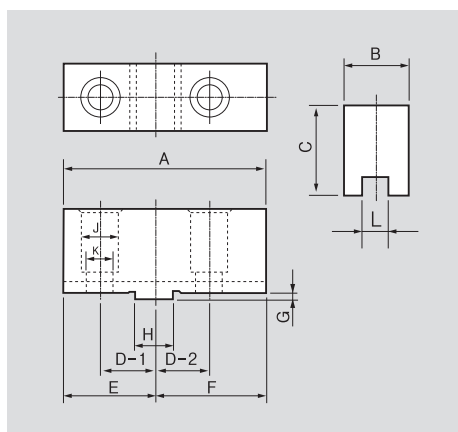
TC / FTC Soft Jaws



TC / FTC Hard Jaws

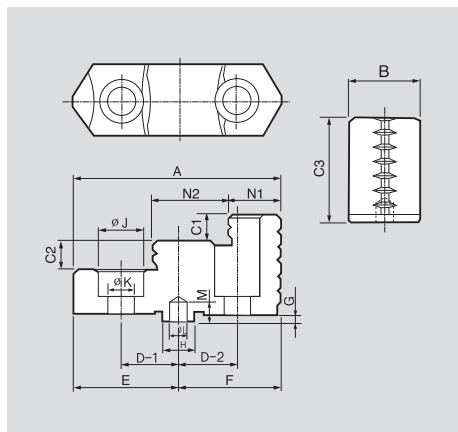


TC / FTC Base Jaws



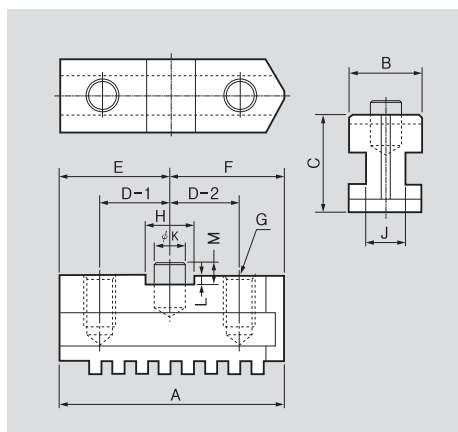
TC/FTC SOFT JAWS DIMENSIONS

	TC-190	TC-230	TC-273	TC-310	FTC-460	FTC-535	FTC-610
A	88	100	110	125	140	150	150
B	32	32	35	40	50	50	50
C	41	44	48.5	49.5	71.5	76.5	76.5
D-1	22.225	26.99	26.99	31.75	38.1	38.1	38.1
D-2	22.225	26.99	26.99	31.75	38.1	38.1	38.1
E	40	45	51	58	63.5	67.5	67.5
F	48	55	59	67	76.5	82.5	82.5
G	3	3	3	3	5.8	6	6
H	12.68	19.03	19.03	19.03	19.03	19.03	19.03
J	17	19	19	19	32	32	32
K	11	12.7	12.7	12.7	22	22	22
L	7.94	12.7	12.7	12.7	12.7	12.7	12.7
M	7	7	7	7	-	-	-



TC/FTC HARD JAWS DIMENSIONS

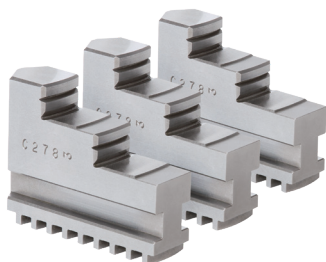
	TC-190	TC-230	TC-273	TC-310	FTC-460	FTC-535	FTC-610
A	80.5	90.5	103.5	115.5	130	130	130
B	28	32	35	40	50	50	50
C1	10	12	14	15	17	17	17
C2	10	12	14	15	17	17	17
C3	41	48	52	54	76.8	76.8	76.8
D1	22.225	26.99	26.99	31.75	38.1	38.1	38.1
D2	22.225	26.99	26.99	31.75	38.1	38.1	38.1
E	40.5	45.5	52	58	63.5	63.5	63.5
F	40	45	51.5	57.5	66.5	66.5	66.5
G	3	3	3	3	5.8	5.8	5.8
H	12.68	19.03	19.03	19.03	19.025	19.025	19.025
ΦJ	17	19	19	19	32	32	32
ΦK	11	13	13	13	22	22	22
ΦL	7.9	12.7	12.7	12.7	-	-	-
N1	21.5	23.5	31.5	30.5	52	52	52
N2	29	33	34	40	35	35	35



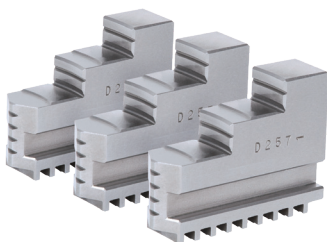
TC/FTC BASE JAWS DIMENSIONS

	TC-190	TC-230	TC-273	TC-310	FTC-460	FTC-535	FTC-610
A	75	87	98	111	165	177	205
B	28	28	28	32	45	50	50
C	34	38	40	42.5	54	60	60
D-1	22.225	26.99	26.99	31.75	38.1	38.1	38.1
D-2	22.225	26.99	26.99	31.75	38.1	38.1	38.1
E	35.5	42.5	47	54	-	-	-
F	39.5	44.5	51	57	66.5	66.5	66.5
G	2-M10	2-M12	2-M12	2-M12	4-M20	4-M20	5-M20
H	12.68	19.03	19.03	19.03	2-19.025	2-19.025	2-19.025
J	15	15	15	17.2	27	30	30
K	7.95	12.7	12.7	12.7	-	-	-
L	3.5	3.5	3.5	3.5	-	-	-
M	6.5	6.5	6.5	6.5	9.3	9.3	9.3

SC, IC-Jaw Scroll Chuck Jaws



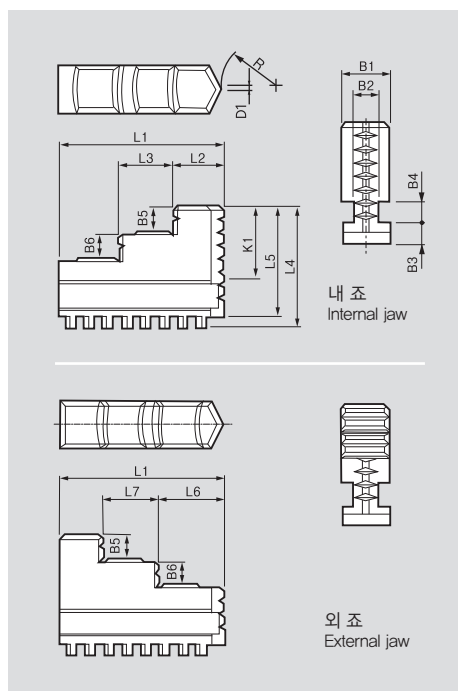
SC Jaws(Internal)



SC Jaws(External)

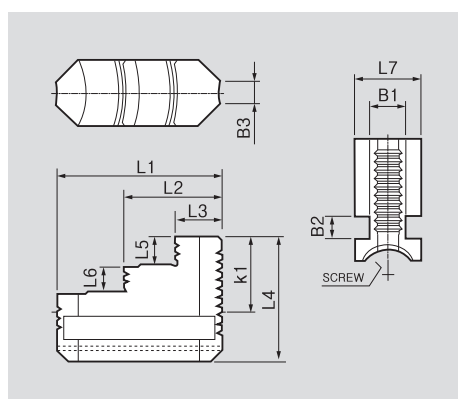


IC Jaws



SC JAWS DIMENSIONS

	SC-85	SC-110	SC-130	SC-165	SC-190	SC-230	SC-273	SC-310	SC-355	SC-405
L1	35	42	50	65	75	85	98	110	133	133
L2	11	13	15	20	23	26	30	35	44	44
L3	10	13	15	22	25	28	33	35	42	42
L4	29	34.5	40	46.5	55.5	64.5	69.5	82.5	101	101
L5	26.5	31	36	42	50.5	59.5	64	76	94.5	94.5
L6	16	19	21	27	30	33	38	43	53	53
L7	10	13	15	22	25	28	33	35	42	42
B1	11	14	16	19	22	24	28	30	35	35
B2	5.7	7.5	7.2	9.2	11.2	13.2	15	15	19	19
B3	4.7	6.2	7.7	8.2	9.7	11.2	11.2	13.4	14	14
B4	6.55	6.55	8.2	8.13	9.74	11.38	11.38	16.12	16.2	16.2
B5	6	7	8	10	12	14	15	16	21	21
B6	6	4.3	7.4	10	12	14	15	16	22	22
K1	17.75	21.05	23.4	25.07	30.06	35.04	40.02	45.08	62.98	62.98
R	7.5	11	15	20	25	30	37	43	43	43
D1	1	1.5	1.5	2	2	3	3	4	4	4



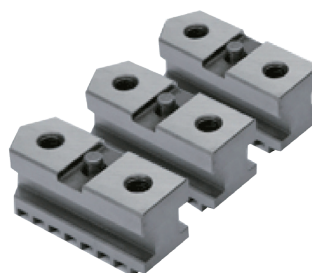
IC JAWS DIMENSIONS

	IC-08	IC-10	IC-12	IC-14	IC-16	IC-18	IC-20	IC-24	IC-28	IC-32
L1	75	90	100	110	120	130	140	160	180	200
L2	44	54	60	67	73.5	80	85	99	100	120
L3	21	26	28	31	33.5	37	40	46	47	55
L4	55.5	61.5	70.5	75.5	84	89	106	116.4	111	138
L5	12	14	16	18	20	22	24	28.2	28	30
L6	12	14	16	18	20	22	24	28.2	29	30
L7	30	30	35	35	40	40	45	50	50	60
B1	16	16	19	19	22.5	22.5	27.5	31	30	40
B2	10.3	10.3	11.5	11.5	11.5	11.5	16.4	16.4	15.3	20
B3	10	10	13.6	14.6	15	15	16	18	20	34
K1	30	35	40	45	50	55	60	70	70	89
Threads /inch	5/inch	5/inch	4/inch	4/inch	4/inch	4/inch	3.5/inch	3.5/inch	4/inch	6.0 mm

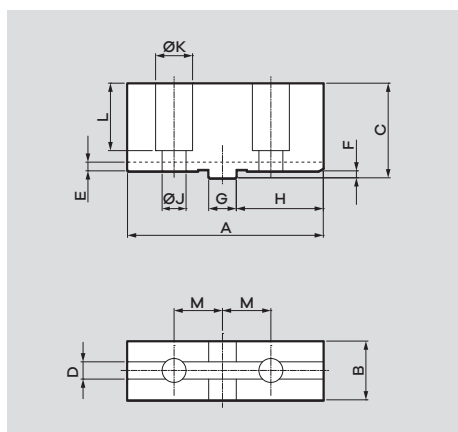
FTU-Jaw Scroll Chuck Jaws



FTU Soft Jaws

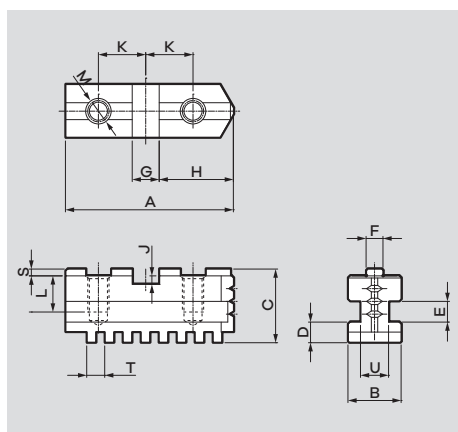


FTU Base Jaws



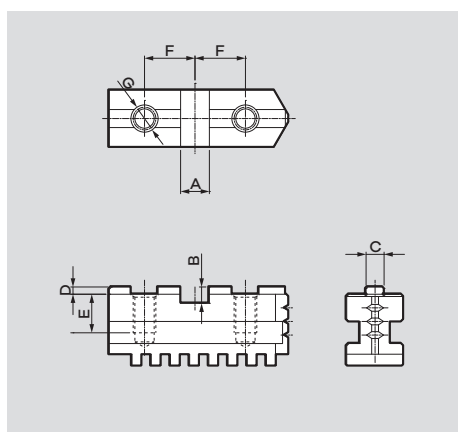
FTU SOFT JAWS DIMENSIONS

	FTU-125	FTU-160	FTU-200	FTU-250	FTU-315
A	64	78	90	106	120
B	22	25	27	32.5	37
C	41.5	41.5	43.5	51.5	55
D	7.94	7.94	7.94	12.7	12.7
E	4	4	4	4	4
F	3.2	3.2	3.2	3.2	3.2
G	12.68	12.68	12.68	19.03	19.03
H	25	34	40	45	53
J	9	9	11	14	14
K	15	15	17	20	20
L	29	29	31	38	40
M	16	19.05	22.25	27	31.75



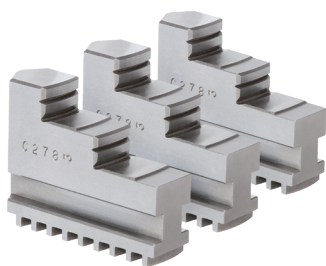
FTU BASE JAWS 1 DIMENSIONS

	FTU-125	FTU-160	FTU-200	FTU-250	FTU-315
A	54	65	79	92	110
B	20	20	25	28	32
C	29.5	30	34.6	39.7	45.6
D	7.7	8.2	9.7	10.9	13.4
E	8.13	8.13	9.74	12.3	16.3
F	7.94	7.94	7.94	12.7	12.7
G	12.68	12.68	12.68	19.03	19.03
H	22.6	28.6	34.9	39.7	47.6
J	4	4	4	4	4
K	16	19.05	22.25	27	31.75
L	14	14	17	20	20
M	M8	M8	M10	M12	M12
S	3.2	3.2	3.2	3.2	3.2
T	6.35	7.26	8.47	8.47	10.16
U	9.2	9.2	13.2	15.5	17

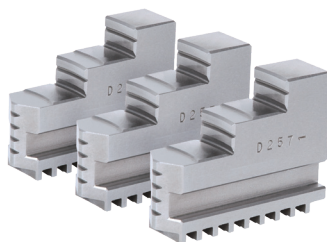


FTU BASE JAWS 2 DIMENSIONS

	FTU-125	FTU-160	FTU-200	FTU-250	FTU-315
A	12.68 ^{+0.011} ₀	12.68 ^{+0.011} ₀	12.68 ^{+0.011} ₀	19.03 ^{+0.013} ₀	19.03 ^{+0.013} ₀
B	7.2	7.2	7.2	7.2	7.2
C	7.94 ^{-0.005} _{-0.012}	7.94 ^{-0.005} _{-0.012}	7.94 ^{-0.005} _{-0.012}	12.7 ^{-0.005} _{-0.012}	12.7 ^{-0.005} _{-0.015}
D	3.2	3.2	3.2	3.2	3.2
E	14	14	17	20	20
F	16	19.05	22.25	27	31.75
G	M8	M8	M10	M12	M12



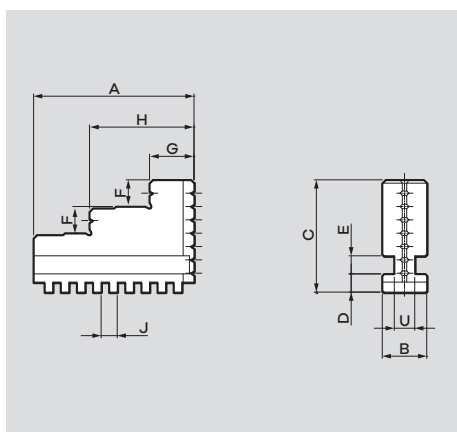
FTU Internal Jaws



FTU External Jaws

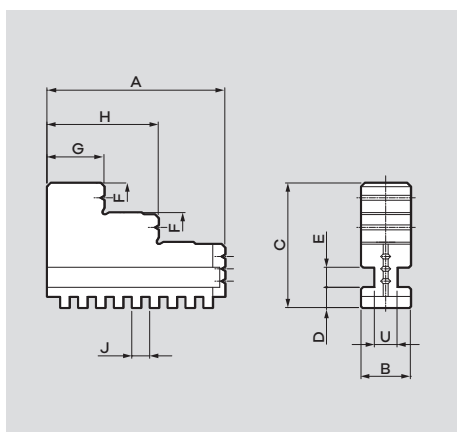


FTU Hard Jaws



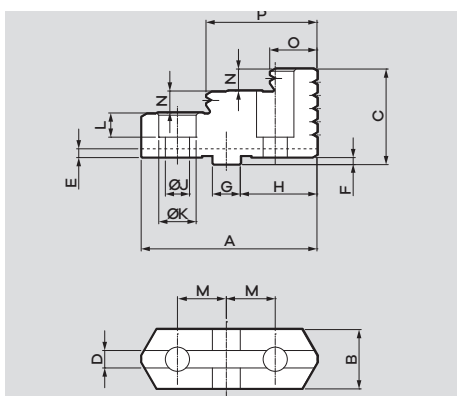
FTU INTERNAL JAWS DIMENSIONS

	FTU-125	FTU-160	FTU-200	FTU-250	FTU-315
A	50	65	75	85	110
B	20	20	25	28	32
C	39.5	50.5	57.5	65.5	80.5
D	7.7	8.2	9.7	10.9	13.4
E	8.13	8.13	9.74	12.3	16.3
F	8	12	12	14	16
G	15	20	23	26	35
H	30	47	48	54	70
J	6.35	7.26	8.47	8.47	10.16
U	9.2	9.2	13.2	15.5	17



FTU EXTERNAL JAWS DIMENSIONS

	FTU-125	FTU-160	FTU-200	FTU-250	FTU-315
A	50	65	75	85	110
B	20	20	25	28	32
C	39.5	50.5	57.5	65.5	80.5
D	7.7	8.2	9.7	10.9	13.4
E	8.13	8.13	9.74	12.3	16.3
F	8	12	12	14	16
G	14	16	20	24	32
H	29	38	45	52	67
J	6.35	7.26	8.47	8.47	10.16
U	9.2	9.2	13.2	15.5	17



FTU HARD JAWS DIMENSIONS

	FTU-125	FTU-160	FTU-200	FTU-250	FTU-315
A	56	67	80	95	114
B	22	25	27	32	37
C	39.5	41.5	43.5	51.2	54.2
D	7.94	7.94	7.94	12.7	12.7
E	4	4	4	4	4
F	3.2	3.2	3.2	3.2	3.2
G	12.68	12.68	12.68	19.03	19.03
H	22.6	28.6	34.9	39.7	47.6
J	9	9	11	13	13
K	15	15	17	19	19
L	11	11	11	13.5	14.5
M	16	19.05	22.25	27	31.75
N	8	9	10	12	13
O	14.5	18.5	21.5	24.5	30.5
P	35	42.5	50.5	59.5	70.5

Accessories

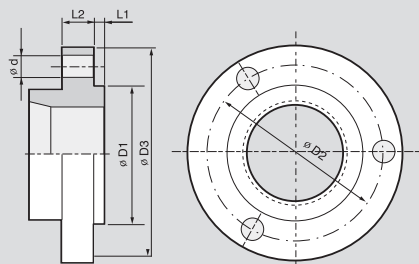
Scroll Chuck Accessories



IC Screw Bar

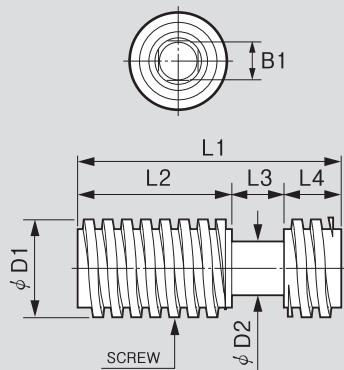


IC Stopper



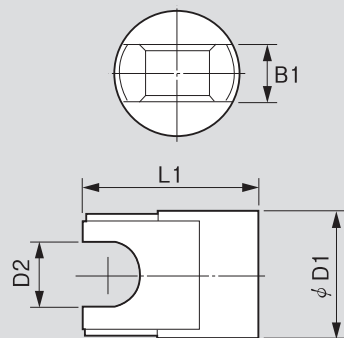
SC ADAPTOR DIMENSIONS

		SC-85	SC-110	SC-130	SC-165	SC-190	SC-230	SC-273	SC-310	SC-355
ΦD1	base length	60	80	100	130	155	190	230	260	300
	tolerance	-0.021	-0.021	-0.025	-0.028	-0.028	-0.033	-0.033	-0.036	-0.036
		-0.002	-0.002	-0.003	-0.003	-0.003	-0.004	-0.004	-0.004	-0.004
ΦD2	base length	73	95	115	147	172	210	250	285	328
	tolerance	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2	±0.3	±0.3
ΦD3		88	115	135	170	195	235	275	310	355
L1		3	4	4	4.5	4.5	5.5	5.5	6.5	6.5
L2		10	12	12	15	18	20	20	22	26
Φd		6.6	9	11	11	13	13	13	13	13



IC SCREW BAR DIMENSIONS

	IC-08	IC-10	IC-12	IC-14	IC-16	IC-18	IC-20	IC-24	IC-28	IC-32
L1	70	91.5	111	130	149	169	189	233	299	330
L2	41	58	73	85.5	108.5	123.5	137	162	193	216
L3	14	14	16	16	18	18	20	20	18	24
L4	15	19.5	22	28.5	22.5	27.5	32	51	68	90
ΦD1	26	26	30	30	34	34	35	38	38	44
ΦD2	14	14	16	16	18	18	19	20	22	28
B1	10	10	12	12	14	14	14	14	14	19
Thread / inch	5/inch	5/inch	4/inch	4/inch	4/inch	4/inch	3.5/inch	3.5/inch	4/inch	6/inch



IC STOPPER DIMENSIONS

	IC-08	IC-10	IC-12	IC-14	IC-16	IC-18	IC-20	IC-24	IC-28	IC-32
L1	42	45	51	49	55	60	53	59	57.5	59
ΦD1	26	26	30	30	34	34	35	38	38	44
ΦD2	14.5	14.5	16.5	16.5	18.5	18.5	19.5	20.5	23	27.5
B1	14	14	16	16	18	18	20	20	18	24



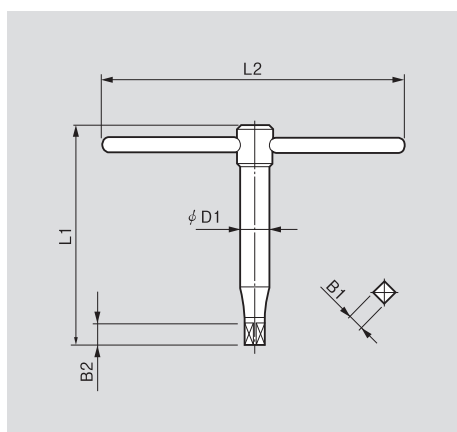
Scroll Chuck Handles



Scroll Chuck Mounting Bolts(SC Type)



Scroll Chuck Mounting Bolts(IC Type)



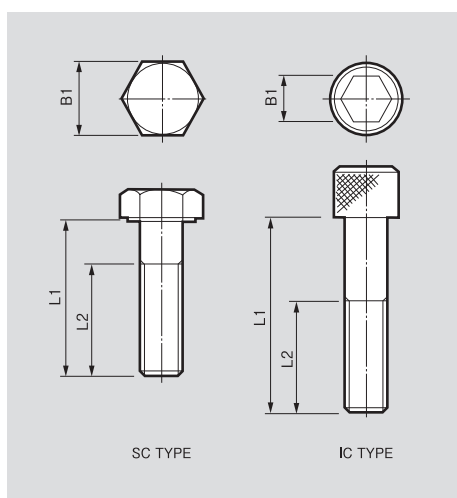
SC, FTC, SL, IC HANDLE DIMENSIONS

	SC-85	SC-110	SC-130	SC-165	SC-190	SC-230	SC-273	SC-310	SC-355	SC-405
L1	65	70	75	120	160	160	160	200	200	170
L2	110	140	170	210	240	290	330	390	390	450
B1	7	8	8	10	11	12	12	14	14	15
B2	10	11	11	13	14	15	15	18	18	20
ØD1	15	17	20	20	20	22	22	26	26	26

	FTC-460	FTC-535	FTC-610	SL-08	SL-10	SL-12
L1	205	230	230	200	240	280
L2	500	500	500	240	270	320
B1	17	6*-22	6*-22	11	12	14
B2	20	26	26	16	16	18
ØD1	25	30	30	20	22	26

	IC-08	IC-10	IC-12	IC-14	IC-16	IC-18	IC-20	IC-24	IC-28	IC-32
L1	130	150	170	170	220	220	220	230	300	300
L2	200	250	300	350	400	400	450	500	500	500
B1	10	10	12	12	14	14	14	14	14	19
B2	14	14	17	17	19	19	20	20	20	20
ØD1	15	18	19	19	22	22	22	25	28	35

※ 6* = Hexagon



SC, FTC, IC MOUNTING BOLT DIMENSIONS

	SC-85	SC-110	SC-130	SC-165	SC-190	SC-230	SC-273	SC-310	SC-355
Bolt size	M6xP1.0	M8xP1.25	M8xP1.25	M10xP1.5	M10xP1.5	M12xP1.75	M12xP1.75	M12xP1.75	M12xP1.75
QTR	3	3	3	3	3	3	3	3	6
L1	22	25	25	32	36	40	40	45	50
L2	18	20	20	26	26	30	30	30	30
ØB1	10	13	13	17	17	19	19	19	19

	FTC-460	FTC-535	FTC-610
Bolt size	M16xP125	M20xP140	M20xP140
QTR	6	6	6
L1	125	140	140
L2	38	52	52
ØB1	24	30	30

	IC-08	IC-10	IC-12	IC-14	IC-16	IC-18	IC-20	IC-24	IC-28	IC-32
Bolt size	M12xP1.75	M12xP1.75	M12xP1.75	M12xP1.75	M16xP2.0	M16xP2.0	M16xP2.0	M20xP2.5	M20xP2.5	M20xP2.5
QTR	4	4	4	4	4	4	4	4	8	8
L1	60	85	100	100	110	110	120	135	120	130
L2	35	40	55	55	60	60	60	70	54	54
ØB1	10	10	10	10	14	14	14	17	17	17