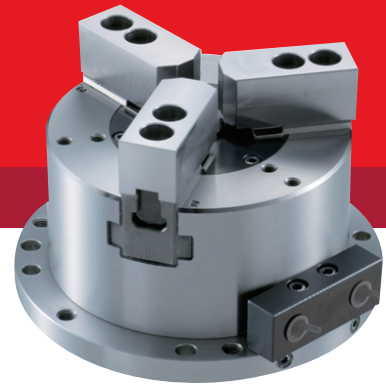


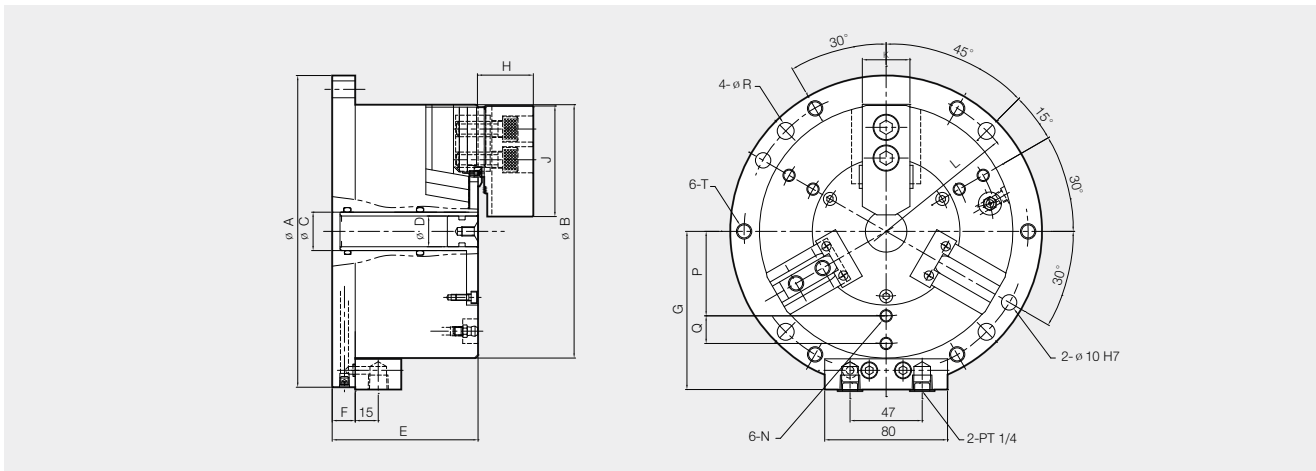
# MCA

## Stationary Pneumatic Chuck



### PNEUMATIC CHUCK

- Compact design with self contained cylinder allows more clearance
- Suitable for long workpieces
- Compatible with air blowing
- Relief valve ensures safe operation during power loss



### Dimensions

	ΦA	ΦB	ΦC	ΦD	E	F	G	H	J	K	N	L (P.C.D)	Q	ΦR	T
MCA-04	148	110	20	-	90	15	75.5	27	55	23	M8	130	-	9	M10
MCA-06	203	165	25	20	95	15	103	36	72	31	M8	185	18	11	M10
MCA-08	248	210	36	30	106	15	125.5	42	95	35	M8	230	25	11	M10
MCA-10	300	254	50	43	110	16	147.5	46	110	40	M10	280	30	13	M12

### Specifications

	CLAMPING FORCE (Kgf) Pneumatic 6bar	Jaw stroke mm(dia)	Chucking diameter (mm)		Max. Pneumatic pressure (bar)	Weight (Kg)
			MAX. (mm)	MIN. (mm)		
MCA-04	765	5.2	110	10	7	7.3
MCA-06	2140	5.2	165	23	7	16
MCA-08	3300	6.3	210	30	7	28
MCA-10	4800	6.3	254	50	7	43

# MANUAL CHUCKS



## Solid Jaw

SC	SC (Standard Scroll Chuck [Hard-Jaws])	56.
	FSC (Front-Mounting Scroll Chuck [Hard-Jaws])	58.
	SF (4-Jaw Scroll Chuck [Hard-Jaws])	59.

## 2-Piece Jaw

TC	TC (Standard Scroll Chuck [Soft and Hard top Jaws])	60.
	FTC (Front-Mounting Scroll Chuck [Soft and Hard top Jaws])	61.
	ST (2-Jaw Scroll Chuck [Soft top Jaws])	62.
	SL (Standard Slotter Chuck [Hard Jaws])	63.
	IC (Independent Chuck (Hard-Jaws))	64.

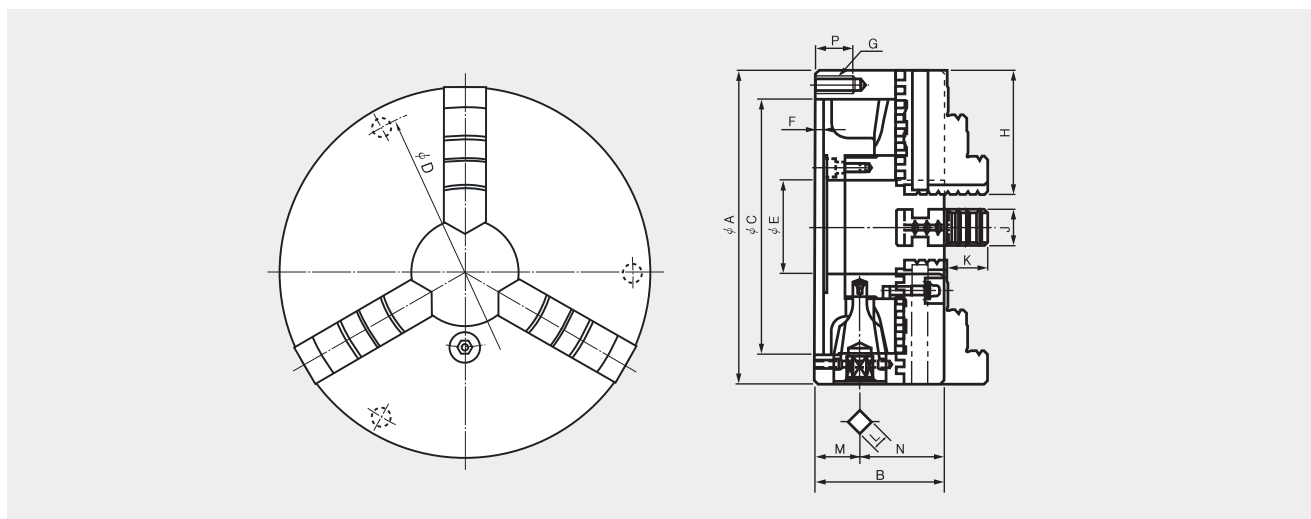
# SC

## Standard Scroll Chuck (Hard-Jaws) (85mm -192mm)



- Standard solid jaw scroll chuck (incl. internal and external hard jaws)

### SCROLL CHUCK



#### Dimensions

	A	B	C(H6)	D	E	F	G	H	J	K	L	M	N	P
SC-85(3")	85	45	60	73	16	3.5	3-M6	35	11	15.5	7	17	27.1	13
SC-110(4")	110	58	80	95	24	4.5	3-M8	44	14	20.0	8	24.5	32.35	16
SC-130(5")	130	60	100	115	34	4.5	3-M8	50	16	20.1	8	22.5	37	16
SC-165(6")	167	65	130	147	45	5	3-M10	65	19	25.07	10	24	41	20
SC-190(7")	192	75	155	172	57	5	3-M10	75	22	30.06	11	27.5	47.5	20

#### Specifications

	Max. Static Gripping dia. KN(kgf)	Max. r.p.m min <sup>-1</sup> (r.p.m)	weight kgf	GD <sup>2</sup> N·m <sup>2</sup> (kgf·m <sup>2</sup> )	(Gripping diameter)		Handle Torque N·m(kgf·m)
					(External) φmm	(Internal) φmm	
SC-85(3")	9(918)	2500	1.5	0.05(0.005)	2~70	24~64	29.4(3.0)
SC-110(4")	12(1224)	2500	3.1	0.17(0.017)	3~95	29~84	44.1(4.5)
SC-130(5")	15(1530)	2500	4.4	0.35(0.036)	3~110	33~100	63.7(6.5)
SC-165(6")	31(3161)	4000	11.4	1.18(0.12)	3~160	48~150	88.3(9.0)
SC-190(7")	31(3161)	3500	12.2	2.35(0.24)	4~180	56~170	107.9(11.0)

※Specifications are subject to change without notice.

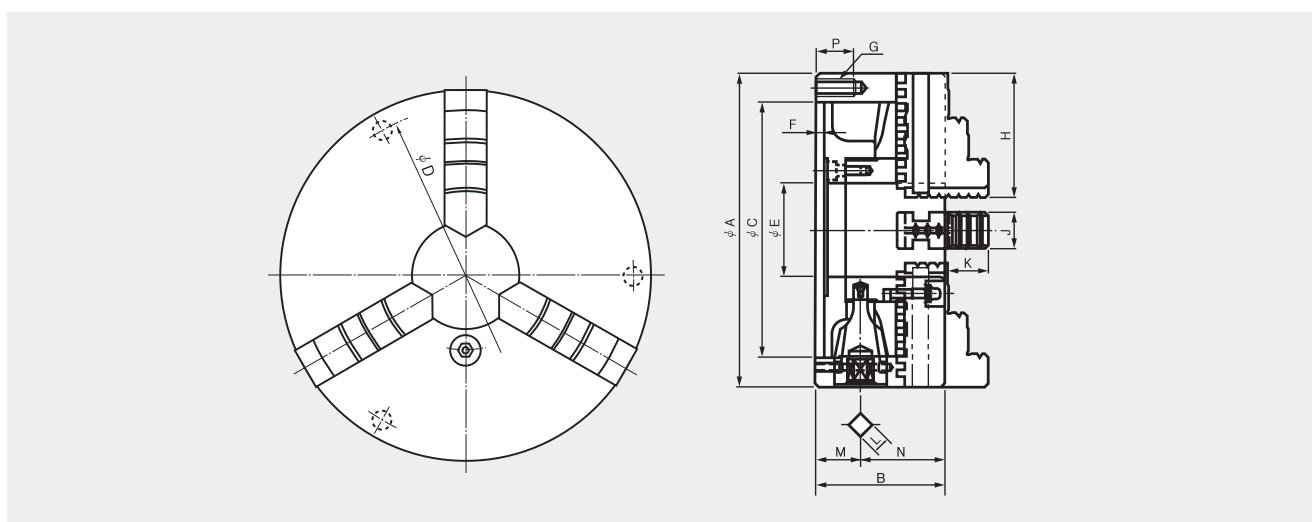
# SC

## Standard Scroll Chuck (Hard-Jaws) (232mm - 405mm)



- Standard solid jaw scroll chuck (incl. internal and external hard jaws)

### SCROLL CHUCK



#### Dimensions

	A	B	C(H6)	D	E	F	G	H	J	K	L	M	N	P
SC-230(9")	232	84	190	210	75	6	3-M12	87	24	35.04	12	29.5	54.5	25
SC-273(10")	273	86	230	250	89	6	3-M12	98	28	40.02	12	31.5	54.5	25
SC-310(12")	310	96	260	285	100	7	3-M12	110	30	45.08	14	31.5	64.5	25
SC-355(14")	355	110	300	328	105	8	6-M12	133	35	62.98	14	42.4	67.6	36
SC-405(16")	405	114.5	345	375	130	8	6-M12	133	35	63	15	43	71.5	36

#### Specifications

	Max. Static Gripping dia. KN(kgf)	Max. r.p.m min <sup>-1</sup> (r.p.m)	weight kgf	GD <sup>2</sup> N·m <sup>2</sup> (kgf·m <sup>2</sup> )	(Gripping diameter)		Handle Torque N·m(kgf·m)
					(External) φmm	(Internal) φmm	
SC-230(9")	37 (3773)	2900	21.2	6.27 (0.64)	5~220	62~210	147 (15.0)
SC-273(10")	46 (4691)	2500	28	9.90 (1.01)	5~260	70~250	176.5 (18.0)
SC-310(12")	55 (5608)	2200	41	23.0 (2.35)	10~300	86~290	206 (21.0)
SC-355(14")	40.5 (4130)	1500	54	37.2 (3.8)	25~315	107~290	225.6 (23.0)
SC-405(16")	45 (4589)	1500	74	67.6 (6.9)	25~346	113~324	245 (25.0)

※Specifications are subject to change without notice.

Application Chuck

Power Chuck

Manual Chuck

Rotary Cylinder

Steady Rest

NC Rotary Table

Vise

Replacement Accessories

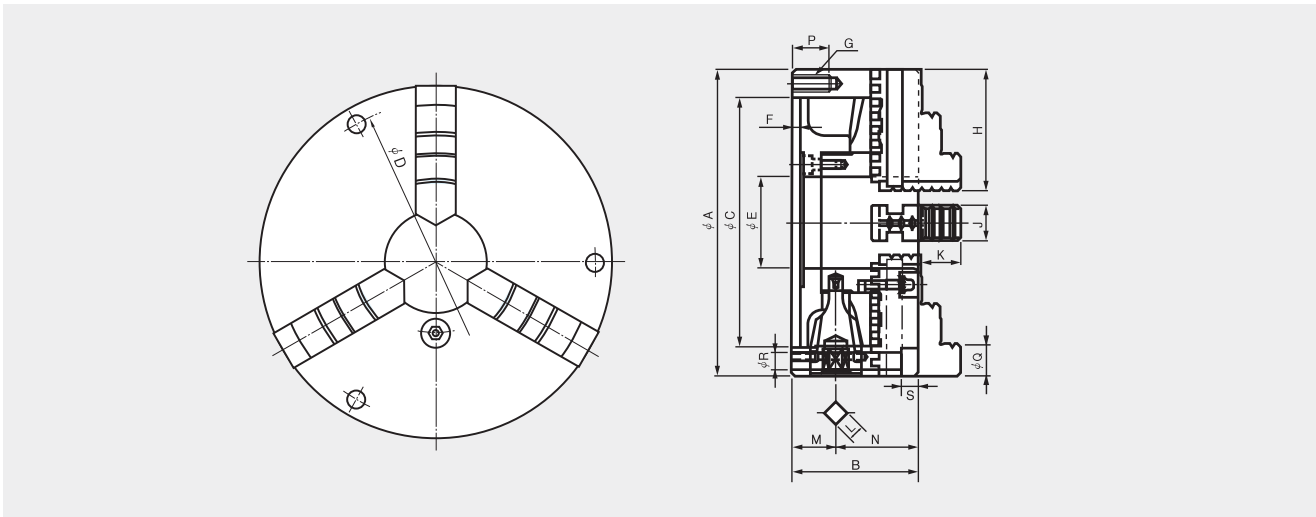
# FSC

## Standard Front-Mounting Scroll Chuck (Hard-Jaws)



- Front-mounting solid jaw scroll chuck (incl. internal and external hard jaws)

### SCROLL CHUCK



#### Dimensions

	A	B	C(H6)	D	E	F	G	H	J	K	L	M	N	P	Mounting Bolt			
															Q	R	S	Bolt
FSC-165(6")	167	65	130	147	45	5	3-M10	65	19	25.07	10	24	41	20	17.5	11	10.5	3-M10
FSC-190(7")	192	75	155	172	57	5	3-M10	75	22	30.06	11	27.5	47.5	20	17.5	11	10.5	3-M10
FSC-230(9")	232	84	190	210	75	6	3-M12	87	24	35.04	12	29.5	54.5	25	20	14	12.5	3-M12
FSC-273(10")	273	86	230	250	89	6	3-M12	98	28	40.02	12	31.5	54.5	25	20	14	12.5	3-M12
FSC-310(12")	310	96	260	285	100	7	3-M12	110	30	45.08	14	31.5	64.5	25	20	14	12.5	3-M12

#### Specifications

	Max. Static Gripping dia. KN(kgf)	Max. rpm min <sup>-1</sup> (rpm)	weight kgf	GD <sup>2</sup> N·m <sup>2</sup> (kgf·m <sup>2</sup> )	(Gripping diameter)		Handle Torque N·m(kgf·m)
					(External) φmm	(Internal) φmm	
FSC-165(6")	31 (3161)	4000	11.4	1.18 (0.12)	3~160	48~150	88.3 (9.0)
FSC-190(7")	31 (3161)	3500	12.2	2.35 (0.24)	4~180	56~170	107.9 (11.0)
FSC-230(9")	37 (3773)	2900	21.2	6.27 (0.64)	5~220	62~210	147 (15.0)
FSC-273(10")	46 (4691)	2500	28	9.90 (1.01)	5~260	70~250	176.5 (18.0)
FSC-310(12")	55 (5608)	2200	41	23.0 (2.35)	10~300	86~290	206 (21.0)

※Specifications are subject to change without notice.

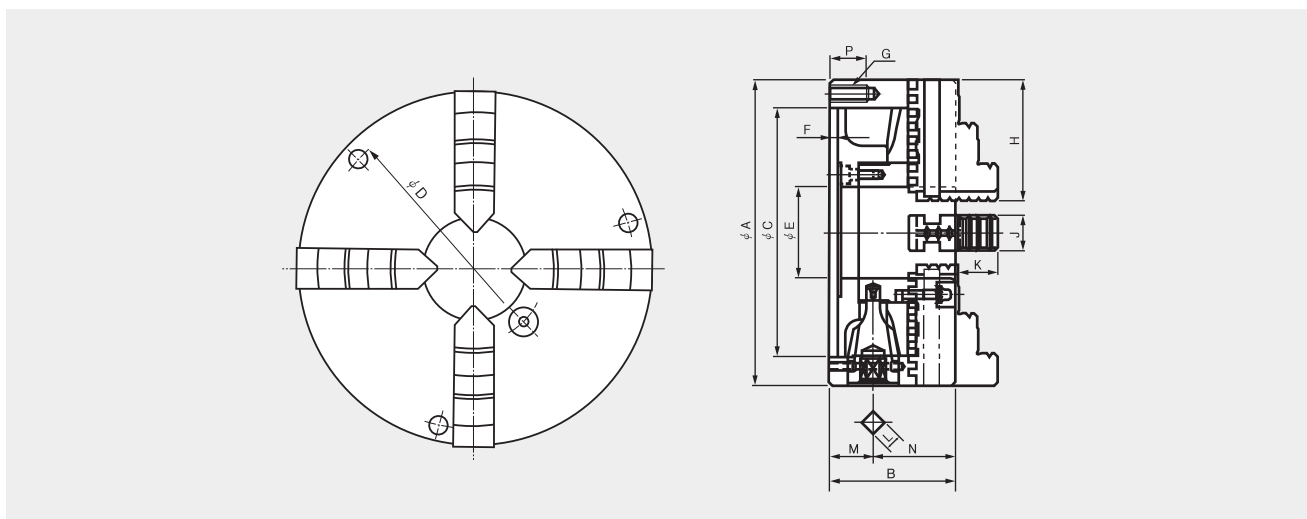
# SF

## 4-Jaw Scroll Chuck (Hard-Jaws)



- Four-jaw scroll chuck with solid jaws (incl. internal and external hard jaws)

### SCROLL CHUCK



#### Dimensions

	A	B	C(H6)	D	E	F	G	H	J	K	L	M	N	P
SF-190(7")	192	75	155	172	57	5	3-M10	75	22	30.06	11	27.5	47.5	20
SF-230(9")	232	84	190	210	75	6	3-M12	85	24	35.04	12	29.5	54.5	25
SF-273(10")	273	86	230	250	89	6	3-M12	98	28	40.02	12	31.5	54.5	25
SF-310(12")	310	96	260	285	100	7	3-M12	110	30	45.08	14	31.5	64.5	25

#### Specifications

	Max. Static Gripping dia. KN(kgf)	Max. r.p.m min <sup>-1</sup> (r.p.m)	weight kgf	GD <sup>2</sup> N·m <sup>2</sup> (kgf·m <sup>2</sup> )	(Gripping diameter)		Handle Torque N·m(kgf·m)
					(External) φmm	(Internal) φmm	
SF-190(7")	31 (3161)	3500	12.5	2.45 (0.25)	4~180	56~170	107.9 (11.0)
SF-230(9")	37 (3773)	2900	21.5	6.37 (0.65)	5~220	62~210	147 (15.0)
SF-273(10")	46 (4691)	2500	28	9.90 (1.01)	5~260	70~250	176.5 (18.0)
SF-310(12")	55 (5608)	2200	41	23.0 (2.35)	10~300	86~290	206 (21.0)

※ Specifications are subject to change without notice.

Application Chuck

Power Chuck

Manual Chuck

Rotary Cylinder

Steady Rest

NC Rotary Table

Vise

Replacement Accessories

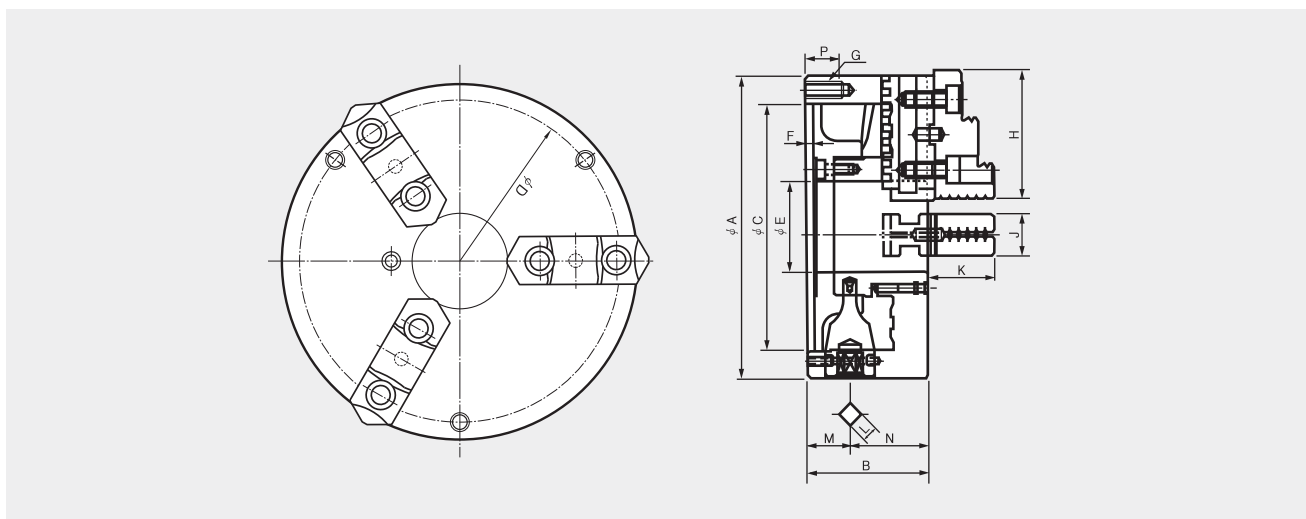
# TC

## Standard Scroll Chuck (Soft and Hard top Jaws)



- Standard 2-piece jaw scroll chuck (incl. soft and hard top jaws)

### SCROLL CHUCK



#### Dimensions

	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Mounting Bolt
TC-190(7")	192	78.7	155	172	57	5	3-M10	80.5	28	42.8	11	27.5	51.2	20	3-M10
TC-230(9")	232	83.7	190	210	75	6	3-M12	90.5	32	53.8	12	29.5	54.2	25	3-M12
TC-273(10")	273	88	230	250	89	6	3-M12	103.5	35	57.82	12	31.5	56.5	25	3-M12
TC-310(12")	310	96	260	285	100	7	3-M12	115.5	40	56.08	14	31.5	64.5	25	3-M12

#### Specifications

	Max. Static Gripping dia. KN(kgf)	Max. rpm min <sup>-1</sup> (r.p.m)	weight kgf	GD <sup>2</sup> N·m <sup>2</sup> (kgf·m <sup>2</sup> )	(Gripping diameter)		Handle Torque N·m(kgf·m)
					(External) φmm	(Internal) φmm	
TC-190(7")	31 (3161)	3500	12.2	2.35 (0.24)	4~180	56~170	107.9 (11.0)
TC-230(9")	37 (3773)	2900	21.2	6.27 (0.64)	5~220	62~210	147 (15.0)
TC-273(10")	46 (4691)	2500	28	9.90 (1.01)	5~260	70~250	176.5 (18.0)
TC-310(12")	55 (5608)	2200	41	23.0 (2.35)	10~300	86~290	206 (21.0)

※ Specifications are subject to change without notice.

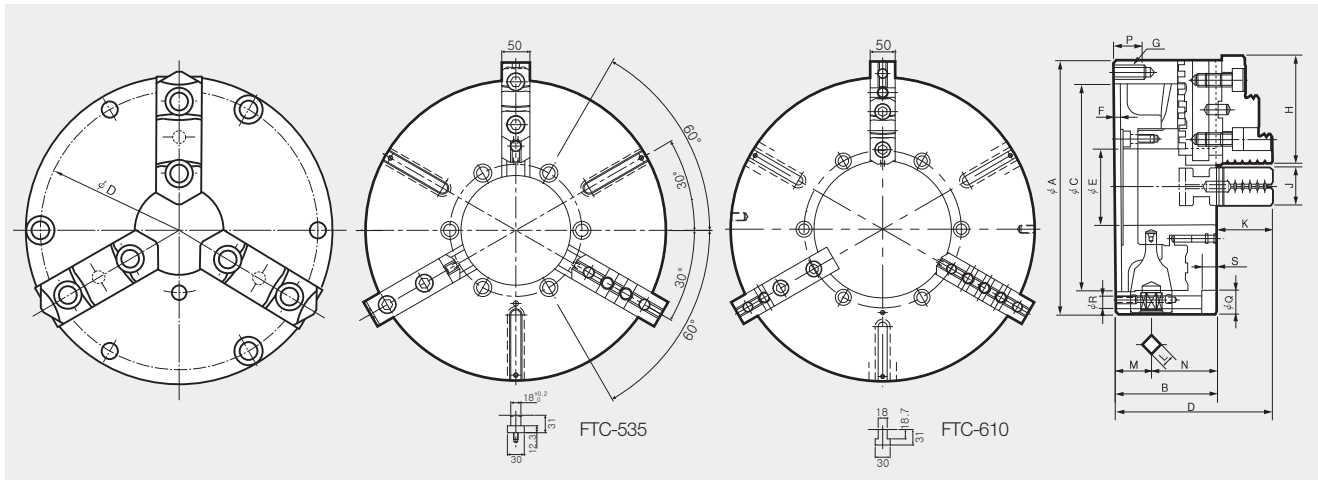
# FTC

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



- Front-mounting 2-piece jaw scroll chuck (incl. soft and hard top jaws)

### SCROLL CHUCK



#### Dimensions

	A	B	C(H6)	D	E	F	G	H	J	K	L	M	N	P	Mounting Bolt			
															Q	R	S	Bolt
FTC-190(7")	192	78.7	155	172	57	5	3-M10	80.5	28	42.8	11	27.5	51.2	20	16.5	10.5	10.5	M10
FTC-230(9")	232	83.7	190	210	75	6	3-M12	90.5	32	53.8	12	29.5	54.2	25	20	13	12.5	M12
FTC-273(10")	273	88	230	250	89	6	3-M12	103.5	35	57.82	12	31.5	56.5	25	20	13	12.5	M12
FTC-310(12")	310	96	260	285	100	7	3-M12	115.5	40	56.08	14	31.5	64.5	25	20	13	12.5	M12
FTC-460(18")	460	114	400	425	190	8	-	140(130)	50	80	17	38.2	76	-	26	18	18	6-M16X125
FTC-535(21")	535	143	270	235	195	12	-	150(130)	50	82	22	57.5	85.5	-	32	22	22	6-M20X140
FTC-610B(24")	610	143	380	315	216	14	-	150(130)	50	82	22	57.5	85.5	-	32	21	22	6-M20X140
FTC-610HA(24")	610	143	380	315	275	14	-	130	50	82	22	57.5	85.5	-	32	22	21	6-M20X140

#### Specifications

	Max. Static Gripping dia. KN(kgf)	Max. rpm min <sup>-1</sup> (rpm)	weight kgf	GD <sup>2</sup> N·m <sup>2</sup> (kgf·m <sup>2</sup> )	(Gripping diameter)		Handle Torque N·m(kgf·m)
					(External) φmm	(Internal) φmm	
FTC-190(7")	31 (3161)	3500	12.2	2.35 (0.24)	4~180	56~170	107.9 (11.0)
FTC-230(9")	37 (3773)	2900	21.2	6.27 (0.64)	5~220	62~210	147 (15.0)
FTC-273(10")	46 (4691)	2500	28	9.90 (1.01)	5~260	70~250	176.5 (18.0)
FTC-310(12")	55 (5608)	2200	41	23.0 (2.35)	10~300	86~290	206 (21.0)
FTC-460(18")	65 (6650)	870	106	124(12.6)	40~410	152~436	255.0(26)
FTC-535(21")	73 (7400)	950	182	287(29.3)	45~481	155~499	313.9(32)
FTC-610B(24")	80 (8200)	850	238	488(49.8)	50~576	160~592	372.7(38)
FTC-610HA(24")	80 (8200)	850	238	488(49.8)	130~576	235~592	372.7(38)

※Specifications are subject to change without notice.

Application Chuck

Power Chuck

Manual Chuck

Rotary Cylinder

Steady Rest

NC Rotary Table

Vise

Replacement Accessories



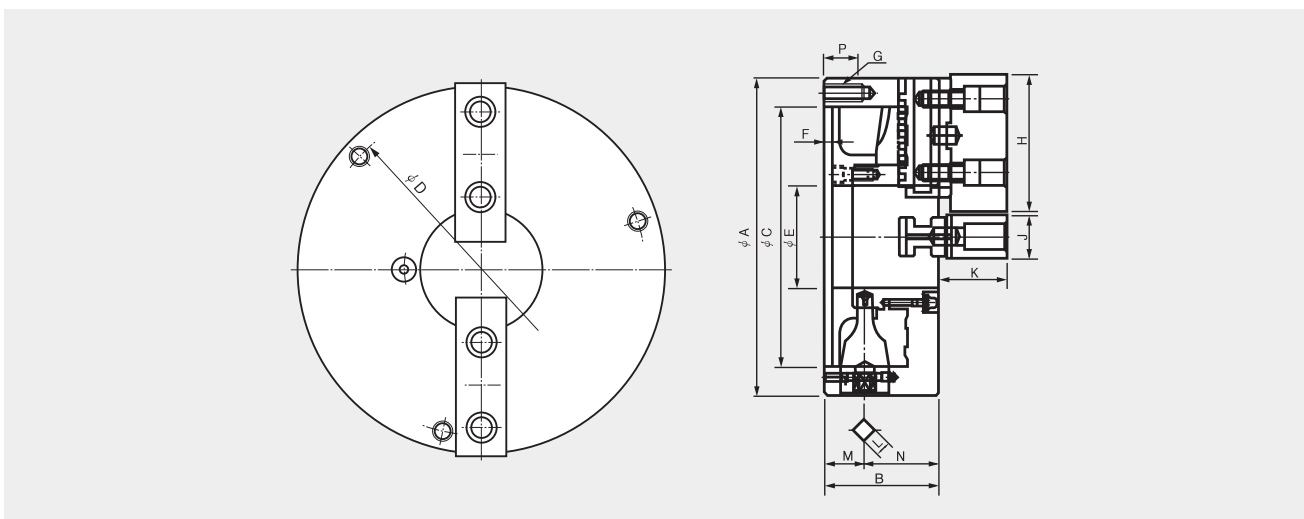
# ST

## 2-Jaw Scroll Chuck (Soft top Jaws)



- Two-jaw scroll chuck with 2-piece jaw (incl. soft top jaws)

**SCROLL CHUCK**



### Dimensions

	A	B	C(H6)	D	E	F	G	H	J	K	L	M	N	P
ST-190(7")	192	78.7	155	172	57	5	3-M10	88	32	44.8	11	27.5	51.2	20
ST-230(9")	232	83.7	190	210	75	6	3-M12	100	32	49.8	12	29.5	54.2	25
ST-273(10")	273	88	230	250	89	6	3-M12	110	35	54.32	12	31.5	56.5	25
ST-310(12")	310	96	260	285	100	7	3-M12	125	40	50.58	14	31.5	64.5	25

### Specifications

	Max. Static Gripping dia. KN(kgf)	Max. r.p.m min <sup>-1</sup> (r.p.m)	weight kgf	GD <sup>2</sup> N·m <sup>2</sup> (kgf·m <sup>2</sup> )	(Gripping diameter)		Handle Torque N·m(kgf·m)
					(External) φmm	(Internal) φmm	
ST-190(7")	20.7 (2110)	3500	12.6	2.55 (0.26)	4~180	62~170	73.5 (7.5)
ST-230(9")	24.7 (2518)	2900	21.4	6.27 (0.64)	5~220	70~210	98 (10.0)
ST-273(10")	46 (4691)	2500	28	9.90 (1.01)	5~260	70~250	176.5 (18.0)
ST-310(12")	55 (5608)	2200	41	23.0 (2.35)	10~300	86~290	206 (21.0)

※Specifications are subject to change without notice.

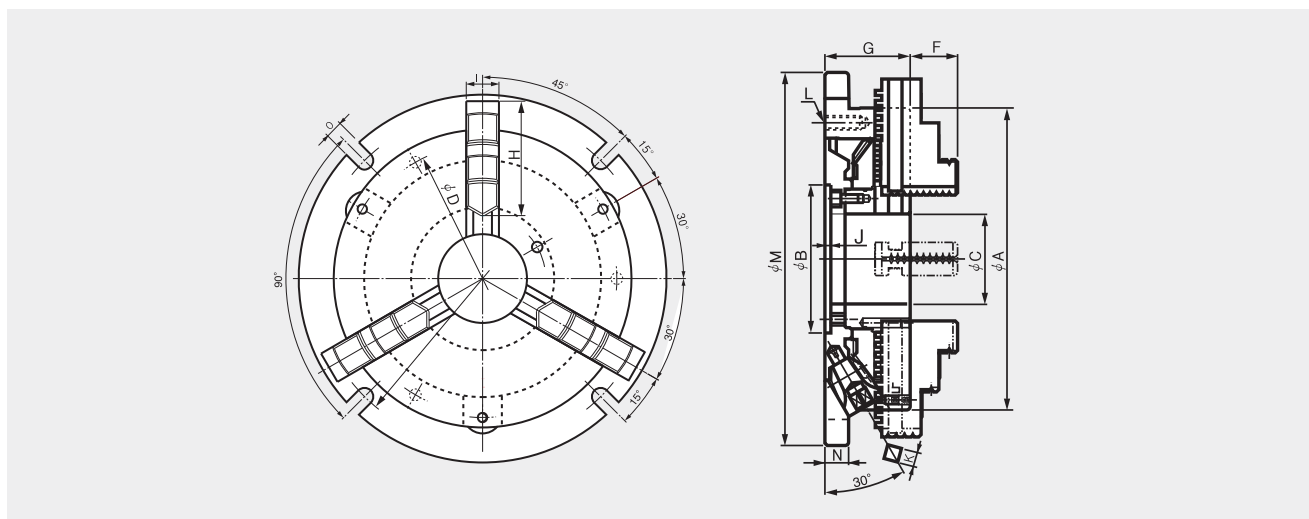
# SL

## Standard Slotter Chuck (Hard Jaws)



- Standard slotter chuck with solid jaw (incl. internal and external hard jaws)

### SLOTTER CHUCK



#### Dimensions

	A	B(H6)	C	V	E	F	G	H	I	J	K	L	M	N	O
SL-08	215	110	60	190.5	240	35.04	64	80	25	4	11	M10	266	17	13
SL-10	255	125	76	230	286	40.02	72	98	28	4.5	12	M12	315	20	15
SL-12	305	160	100	280	340	45.08	76	110	30	5	14	M12	370	22	17

#### Specifications

	Max. Static Gripping dia. KN(kgf)	weight kgf	(Gripping diameter)		Handle Torque N·m(kgf·m)
			(External) φmm	(Internal) φmm	
SL-08	37 (3,800)	17.6	58~174	4~182	117.7 (13)
SL-10	46 (4,700)	27.7	68~212	4~220	176.5 (18)
SL-12	55 (5,620)	40.0	80~263	5~266	196.2 (20)

\* Specifications are subject to change without notice.

Application Chuck

Power Chuck

Manual Chuck

Rotary Cylinder

Steady Rest

NC Rotary Table

Vise

Replacement Accessories

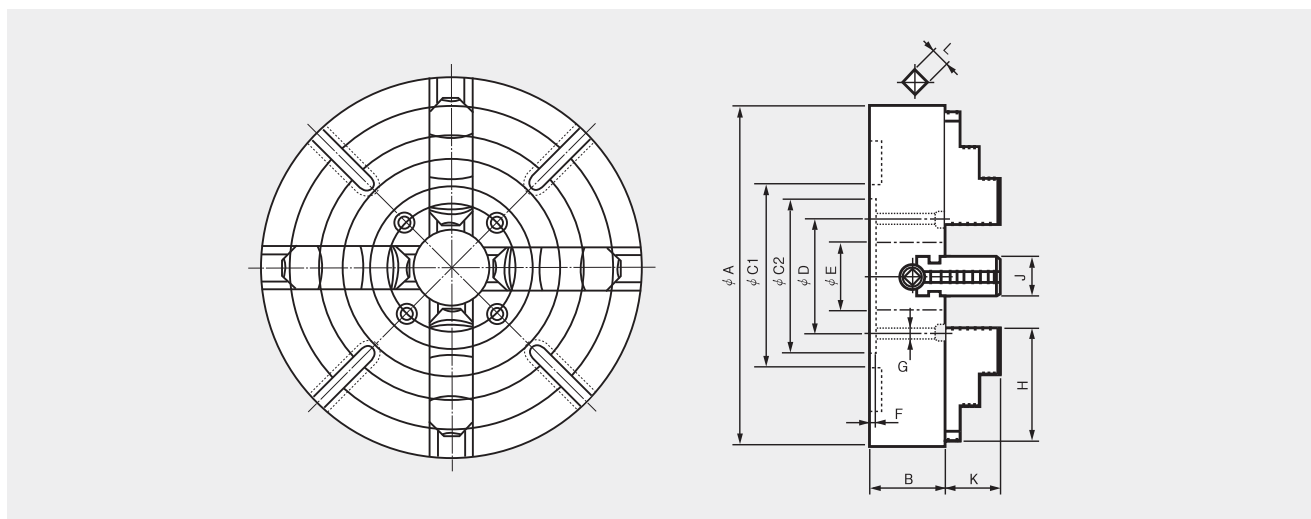
# IC

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



- 4-jaw Independent chuck (incl. reversible hard jaws)

### INDEPENDENT CHUCK



#### Dimensions

	A	B	C1	C2	D	E	F	G	H	J	K	L
IC-8	200	75	200	175	155	50	6	M12	75	30	30	10
IC-10	250	80	165	150	125	55	6	M12	90	30	35	10
IC-12	300	90	186	170	140	65	6	M12	100	35	40	12
IC-14	350	90	210	190	160	75	8	M12	110	35	45	12
IC-16	400	100	130	210	180	90	8	M16	120	40	50	14

#### Specifications

	Max. Static Gripping dia. KN(kgf)	Max.r.p.m min <sup>-1</sup> (r.p.m)	weight kgf	GD <sup>2</sup> N·m <sup>2</sup> (kgf·m <sup>2</sup> )	(Gripping diameter)	
					(External) φmm	(Internal) φmm
IC-8	1000	1600	14.8	0.3	75	185
IC-10	1400	1600	21	0.6	95	220
IC-12	1600	1400	29.5	1.4	125	265
IC-14	1700	1400	40	2.9	155	310
IC-16	2000	1200	56.5	4.5	190	360

※Specifications are subject to change without notice.

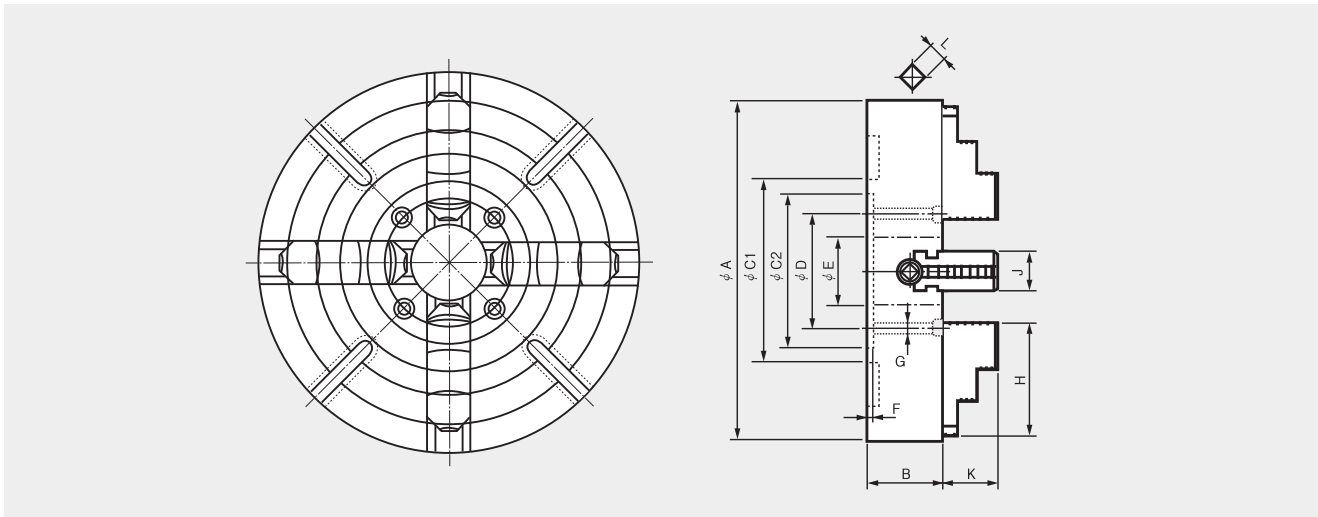
# IC

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



- 4-jaw Independent chuck (incl. reversible hard jaws)

### INDEPENDENT CHUCK



#### Dimensions

	A	B	C1	C2	D	E	F	G	H	J	K	L
IC-18	450	105	230	230	200	100	8	M16	130	40	55	14
IC-20	500	110	272	250	220	110	8	M16	140	45	60	14
IC-24	600	120	330	300	260	120	10	M20	160	50	70	14
IC-28	710	120	382	350	300	130	12	M20	190	55	85	14
IC-32	813	120	440	400	350	140	12	M20	190	55	85	19

#### Specifications

	Max. Static Gripping dia. KN(kgf)	Max. r.p.m min <sup>-1</sup> (r.p.m)	weight kgf	GD <sup>2</sup> N·m <sup>2</sup> (kgf·m <sup>2</sup> )	(Gripping diameter)	
					(External) φmm	(Internal) φmm
IC-18	2000	1200	70	7.0	220	405
IC-20	2200	900	90	11.8	250	450
IC-24	2300	900	150	25.3	320	550
IC-28	2396	900	247	58	385	650
IC-32	2447	600	357	103	485	750

※Specifications are subject to change without notice.

Application Chuck

Power Chuck

Manual Chuck

Rotary Cylinder

Steady Rest

NC Rotary Table

Vise

Replacement Accessories