# 3RF RETRACTABLE-JAW 3-JAW SHAFT CHUCK

- The workpiece compensation of eccentric is 1mm, fixed position for the center, swing and grasp the workpiece to three jaw.
- Second machining can be performed without reversing the workpiece, thus significantly reducing setup time.
- With compensating jaws clamping, the Rough and precision machining can be carried out.
- With sealed design, the maintenance costs can be reduced.
- Can be paired with double-rod rotary cylinder (3RF-D type).
- The driver pin thrust can be controlled by the pressure of the rotary cylinder (3RF-D type).

3RF

3RF-08 only 3 bolts
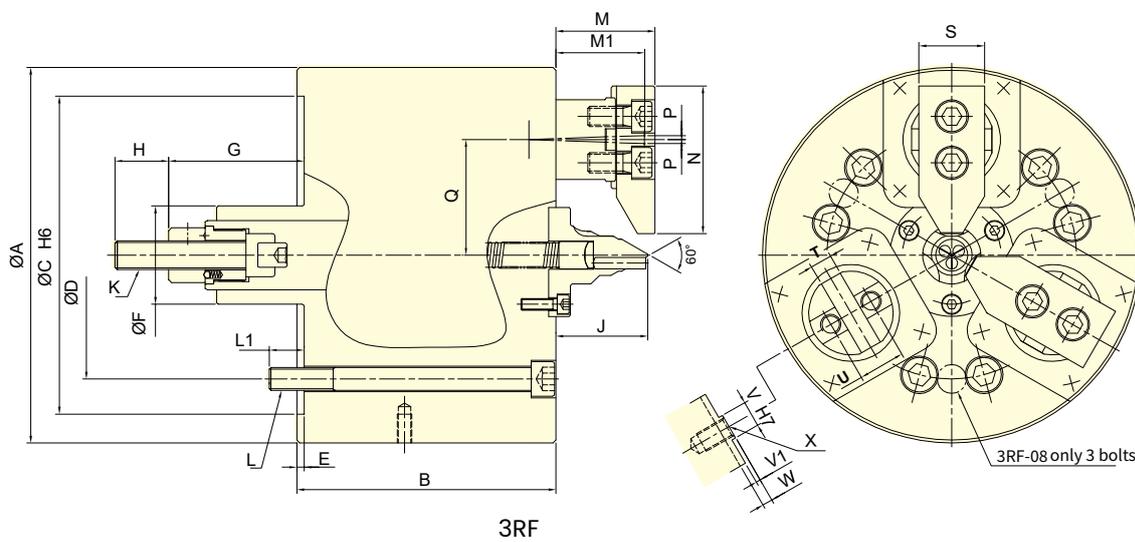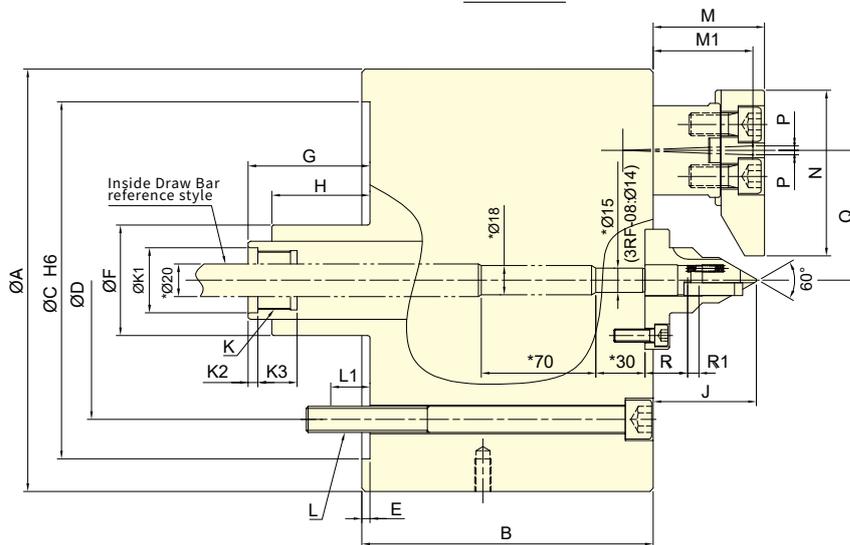
3RF-D

Note: The dimensions marked [*] are the dimensions of the inside Draw Bar , Please don't change it.

SPECIFICATIONS

Model	Chucking Dia.	Jaw stroke (Dia.)	Chucking Dia. Max.	Chucking Dia. Min.	Max. D.B. pull	Max. clamping force	Max. speed	Moment of inertia	Weight	Matching cyl.	Compensation
	mm	mm	mm	mm	kN (kgf)	kN (kgf)	min⁻¹ (r.p.m.)	kg · m²	kg		mm
3RF-08	43.5	9.4	70	18	39.2 (4000)	39.2 (4000)	4000	0.15	39.4	RS-1250	1
3RF-08D	43.5	9.4	70	18	39.2 (4000)	39.2 (4000)	4000	0.15	38.6	RDL-160S	1

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	mm	mm	mm	mm	kN (kgf)	kN (kgf)	min⁻¹ (r.p.m.)	kg·m²	kg		mm
3RF-10	50	11	85	25	44.1(4500)	67.4(6873)	3500	0.56	68.3	RS-1550	1
3RF-10D	50	11	85	25	44.1(4500)	67.4(6873)	3500	0.56	67.5	RDL-160S	1
3RF-12	52	11.2	110	25	78.4(8000)	99(10000)	2500	0.56	109	RS-2060	1
3RF-12D	52	11.2	110	25	78.4(8000)	99(10000)	2500	0.56	107.7	RDL-160S	1

DIMENSIONS

Model	A	B	C (H6)	D	E	F	G max.	G min.	H	J	K	K1 (H7)	K2	K3	L	L1
3RF-08	210	155	170	133.4	5	68	123	79.5	37	58	M20x2.5	-	-	-	3~M12	18
3RF-08D	210	155	170	133.4	5	68	98	54.5	50	58	M36x1.5	40.5	6	24	3~M12	18
3RF-10	260	178	220	171.4	5	68	143	93	37	63	M20x2.5	-	-	-	6~M16	24
3RF-10D	260	178	220	171.4	5	68	116.5	66.5	60	63	M36x1.5	40.5	6	24	6~M16	26
3RF-12	315	190	220	171.4	5	76	135	83	46	70	M24x3	-	-	-	6~M16	24
3RF-12D	315	190	220	171.4	5	76	167	115	75	70	M40x1.5	44.5	6	28	6~M16	24

| Model	M max.	M min.	M1	N	P	Q	R	R1 max.	R1 min.	S	T(H7)	U	V	V1	W	X
3RF-08	62	31	58	78	2.35	62	-	-	-	40	12	26	16	3	7	M12
3RF-08D	62	31	58	78	2.35	62	25.5	7	0	40	12	26	16	3	7	M12
3RF-10	68	35.5	61	102	2.75	80	-	-	-	45	15	32	18	3	7	M14
3RF-10D	68	35.5	61	102	2.75	80	28	7	0	45	15	32	18	3	7	M14
3RF-12	76	43	63	125	2.8	100	-	-	-	50	17	36	20	3	7	M16
3RF-12D	76	43	63	125	2.8	100	28	7	0	50	17	36	20	3	7	M16

APPLICATION NOTES

1.Clamping diameter machining

The compensating jaws are retracted. The workpiece is clamped between chuck center and tailstock center. Additionally, it is driven by the face driver.
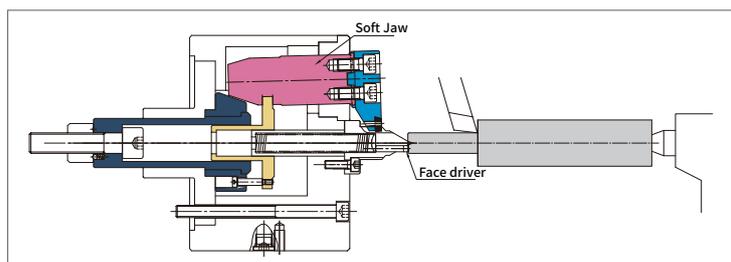
2.Rough machining

With compensating jaws clamping, the rough machining can be carried out.
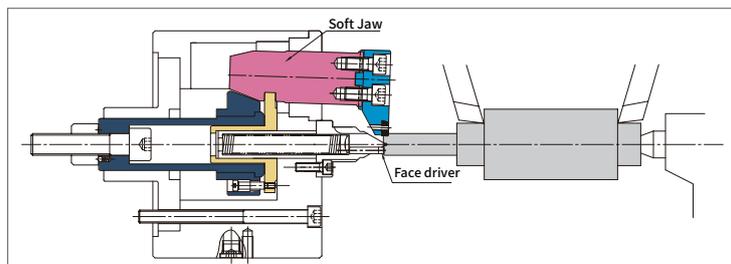
3.Finish machining

Additionally, it is driven by the face driver. The entire workpiece can be machined with precise concentricity.