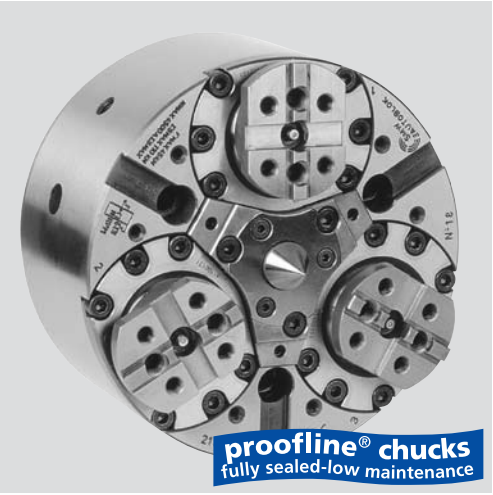
FRC-N

Compensating Jaw chuck

Lever chuck Ø 215 - 365 mm

- compensating rigid jaws
- spring loaded or fixed center
- proofline® chucks = fully sealed – low maintenance



Application/customer's benefit

Compensating clamping of shafts between centers, where the clamping diameter is not concentric to the workpiece axis. The workpiece is clamped compensating. The grip force of the chuck supplies the torque necessary to machine the workpiece and pulls it down to the axial datum (center point/axial stop).
Due to its high rigidity against torsion the chuck is ideal for turning as well as for milling operations.

Technical features

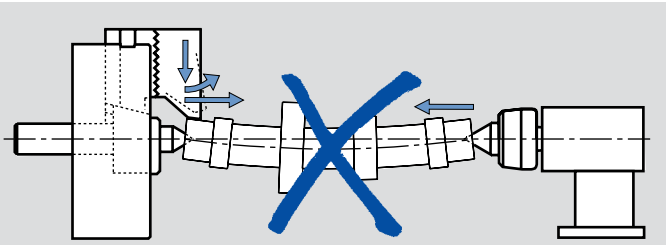
- large compensation stroke
- pull-down
- high rigidity against torsion
- center point adjustable
- tongue & groove base jaws
- permanent grease lubrication
- **proofline® chucks** = fully sealed – low maintenance

Standard equipment

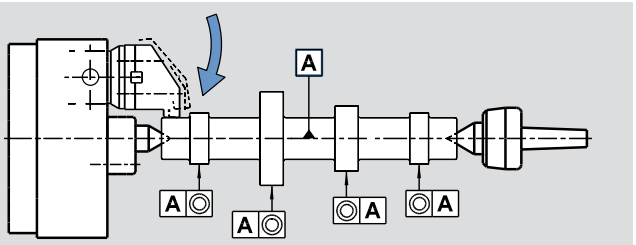
3-jaw-chuck without centering insert
Mounting bolts

Ordering example

Chuck FRC-N 215 A6



- **Non pull-down compensating chuck**
  Lifting of the top jaws pushes the shaft away from the centering reference; high tailstock force has to be used to overcome this lifting, resulting in a bending of the component



- **FRC-N pull-down and compensating clamping**
  The tailstock supplies the requested force to support the part only. The result is a cylindrical finished shaft with concentric diameters. The chuck pulls the work piece actively down to the center point without bending the work piece

Technical data

SMW-AUTOBLOK Type			FRC-N 215	FRC-N 285	FRC-N 365
Angular jaw stroke	deg.		6°	6°	6°
Radial jaw stroke at distance **h**	mm		6.3	7.3	8.4
Wedge stroke	mm		22	26	31
Compensation (on the diameter) at distance **h**	mm		± 1.5	± 2	± 2.5
Max. draw pull	kN		45	70	110
Max. gripping force at distance **h**	kN		100	150	240
Max. speed	r.p.m.		4500	3500	2500
Mass (plain back without top jaws)	kg		30	62	120
Moment of inertia ($m \cdot r^2$)	kgm^2		0.17	0.65	2
Standard fixed center part	Id. No.		81732141	81732841	81733641
Standard spring loaded center part	Id. No.		81722141	81722841	81723641
Recommended actuating cylinders			**100 SIN-S** **125 SIN-S**	**125 SIN-S** **150 SIN-S**	**150 SIN-S** **200 SIN-S**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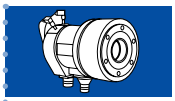
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Lever chuck Ø 215 - 365 mm
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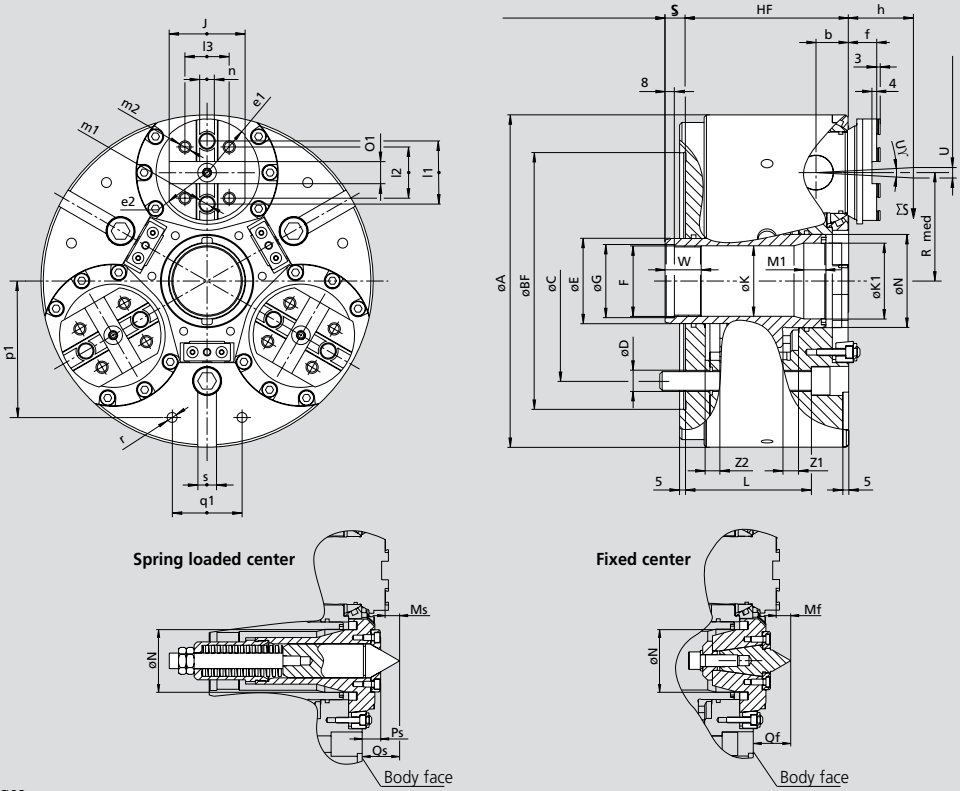
FRC-N
Compensating Jaw chuck



Subject to technical changes

SMW-AUTOBLOK Type				FRC-N 215	FRC-N 285	FRC-N 365
	A	mm		215	285	365
	B_F H6	mm		170	220	300
	C	mm		133.4	171.4	235
	D	mm		13.5	17	21
	E	mm		50	73	79
	F	mm		M42x1.5	M60x1.5	M68x2
	G H8	mm		43	61	69
	H_F	mm		120	140	168
Through-hole	**K**	mm		40	60.5	60.5
	Ø K1/ depthM1	mm		40	65/19	75/23.8
	L	mm		95	108	123
	N H8	mm		52	80	90
	Mf	mm		14.5	14.6	21.7
	Qf	mm		32.5	38.6	42.7
	Ms	mm		13.8	14.4	19.9
	Ps	mm		21	19	21.5
	Qs	mm		31.8	38.4	40.9
	Rmed	mm		67	93	120
at middle stroke - clamping position	**S**	mm		15.4	17.5	24.8
min./max.	**S**	mm		4/26	4/30	9/40
Angular jaw movement	**U°**	deg.		6°	6°	6°
Radial stroke (1)	**U**	mm		6.3	7.3	8.4
	W	mm		30	31	30
	Z1	mm		11.4	13.5	15.8
	Z2	mm		10.6	12.5	15.2
	b	mm		22	28	34
	e1	mm		37.5	46	50
	e2	mm		33	41	50
	f	mm		18	24	21
	h	mm		38	42	46
	j	mm		55	65	70
	l1	mm		38	54	63.5
	l2	mm		32	44	48
	l3	mm		32	38	48
Thread/depth	**m1**	mm		M12/16	M16/20	M16/20
Thread/depth	**m2**	mm		M10/14	M12/19	M12/19
	n h8	mm		7.94	12.7	12.7
	01 H7	mm		12.68	19.03	19.03
	p1	mm		80	117	150
	q1	mm		45	60	80
Thread/depth	**r**	mm		M8/17	M10/19	M12/22
	s H8	mm		16	16	20

(1) Calculated at h distance from the chuck's face (where normally the clamping takes place)