

# NTL-C

Tongue & groove

## High precision power chucks Ø 260 - 400 mm

- LONG STROKE
- centrifugal force compensation
- closed center - 3 jaws
- proofline® chucks = fully sealed – low maintenance



### Application/customer benefits

- For large batch production/high speed machining and for fragile parts
- Fully sealed, ideal for dry machining of castings and forgings or if high pressure coolant is used

**NTL-C:** Tongue & groove master jaws (American Standard)

### Technical features

- Long jaw stroke
- Centrifugal force compensation
- Constant gripping force with permanent grease lubrication
- Center bore for coolant and/or air
- Chuck body and internal parts case hardened
- **proofline® chucks** = fully sealed – low maintenance

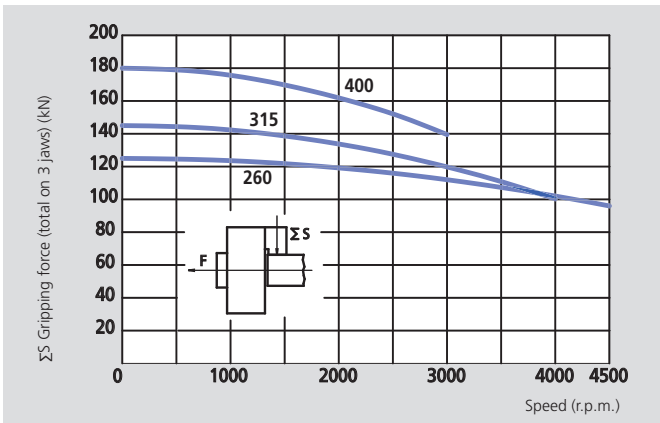
### Standard equipment

3 jaw chuck  
mounting bolts

### Ordering example

3 jaw chuck NTL-C 260/A6

## Actual gripping force diagram



The data in the diagram refer to 3-jaw-chucks, newly maintained according to their service manuals using SMW-AUTOBLOK K67 grease. The static and dynamic gripping forces have been measured using standard soft top jaws, placed in a position not exceeding the outer diameter of the chuck.

#### ⚠ Safety advice/danger of damage:

When using taller/heavier jaws and/or clamping on a bigger diameter reduce draw pull/rotating speed accordingly.

## Technical data

SMW-AUTOBLOK Type		NTL-C 260	NTL-C 315	NTL-C 400
<b>Number of jaws</b>		<b>3</b>	<b>3</b>	<b>3</b>
Radial jaw stroke	mm	9	11	12
Axial piston stroke	mm	22.3	27.3	30
Max. draw pull*	kN	68	80	100
Max. gripping force*	kN	125	145	180
Max. speed	r.p.m.	4400	3700	3000
Weight (without top jaws)	kg	44	69	114
Moment of inertia	kg·m <sup>2</sup>	0.35	0.85	2.15
<b>Recommended actuating cylinders</b>		<b>SIN-S 125/150</b>	<b>SIN-S 125/150</b>	<b>SIN-S 150/175</b>

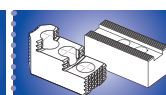
\* For internal clamping reduce the draw pull by 30 %



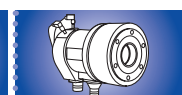
• on request:  
• Tooling Standard  
• Parts Catalog



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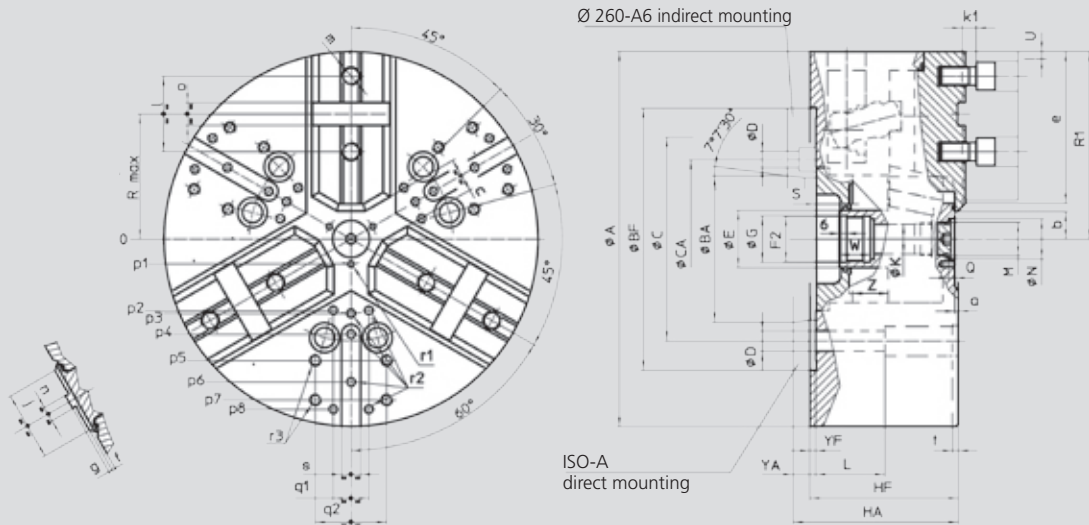
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Subject to technical changes  
For more detailed information please ask for customer drawing

SMW-AUTOBLOK Type			NTL-C 260			NTL-C 315		NTL-C 400	
Mounting			Z220	A6	A8	Z220	A8	Z300	A11
	<b>A</b>	mm		262			315		390
	<b>Bf/BA</b>	H6 mm	220	106.375	139.719	220	139.719	300	196.869
	<b>C</b>	mm	171.4	-	171.4		171.4		235
	<b>CA</b>	mm	-	133.4	-	-	-	-	-
	<b>D</b>	mm	17	13.5	17		17		21
	<b>E</b>	mm		48			48		75
	<b>F2</b>	mm		M38 x 1.5			M38 x 1.5		M60 x 1.5
	<b>G</b>	H8 mm		39			39		61
	<b>Hf/HA</b>	mm	118	137	132	125	139	149	164
	<b>K</b>	mm		25			25		48
	<b>L</b>	mm		58			58		74
	<b>M</b>	mm		M28 x 1.5			M28 x 1.5		M52 x 1.5
	<b>N</b>	H9 mm		34			34		60
	<b>Q</b>	mm		5.5			5.5		9
	<b>R</b>	mm		92.5			111		139
Chuck open	<b>R1</b>	mm		136			163.6		202
max./min.	<b>S</b>	mm		22/-0.3			20/-7.3		33/3
Chuck fully closed	<b>T</b>	mm		275			328		412
Radial jaw stroke	<b>U</b>	mm		9			11		12
	<b>W</b>	mm		26			26		38
max./min.	<b>Yf/YA</b>	mm	5	24	19	5	19	6	21
	<b>Z</b>	mm		22.3/0			27.3/0		30/0
	<b>a</b>	mm		3			3		3
min.	<b>b</b>	mm		10			12		26
min.	<b>c</b>	mm		7.4			7.9		30
	<b>e</b>	mm		110			134		154
	<b>f</b>	mm		3			3		6
	<b>g</b>	mm		3			3		3
	<b>j</b>	mm		48			58		63
	<b>k1</b>	mm		12			12		14
	<b>l</b>	mm		54			63.5		76.2
	<b>m</b>	mm		M16			M16		M20
	<b>n</b>	mm		12.7			12.7		12.7
	<b>o</b>	mm		19.03			19.03		19.03
	<b>p1</b>	mm		21			21		37.5
	<b>p2</b>	mm		-			60		80
	<b>p3</b>	mm		55			62.5		83
	<b>p4</b>	mm		70			80		110
	<b>p5</b>	mm		102			102		140
	<b>p6</b>	mm		102			120		155
	<b>p7</b>	mm		-			135		170
	<b>p8</b>	mm		-			-		170
	<b>q1</b>	mm		-			30		36
	<b>q2</b>	mm		60			60		80
	<b>r1</b>	mm		M6/10			M6/10		M6/12
	<b>r2</b>	mm		M8/17			M8/17		M10/19
	<b>r3</b>	mm		M10/19			M10/19		M12/22
	<b>s</b>	mm		16			16		20
	<b>t</b>	mm		5			5		5