

# NTL-D

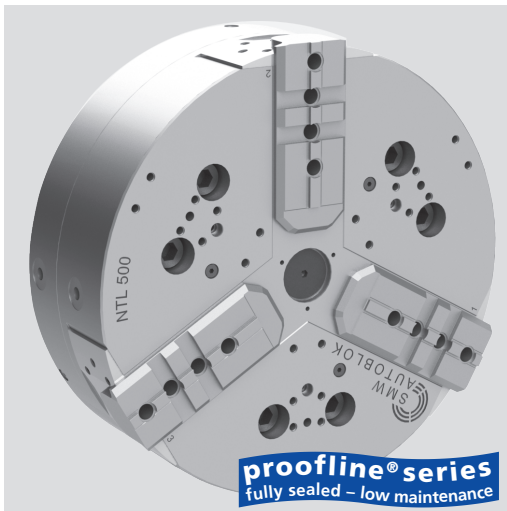
INCH  
SERRATION

# NTL-C

TONGUE & GROOVE

## High precision power chucks Ø 500 - 1000 mm

- Centrifugal force compensation
- Closed center - 3 jaws
- Long stroke
- proofline® chucks = fully sealed – low maintenance



### Application/customer benefits

- For mid to 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-D:** Master jaws with INCH SERRATION (3/32" x 90°)

**NTL-C:** Master jaws with TONGUE & GROOVE

### 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

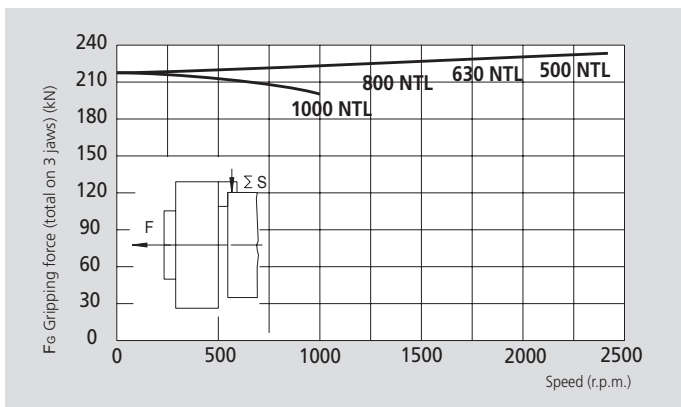
### Standard equipment

- 3 jaw chuck
- 1 set soft top jaws
- Mounting bolts

### Ordering example

- 3 jaw chuck NTL-D 500 / Z380
- or
- 3 jaw chuck NTL-C 800 / Z520

## 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.

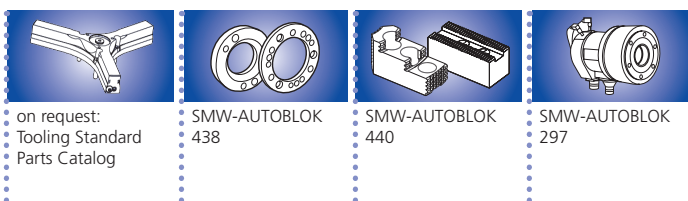
#### ⚠ Safety advice / danger of damage:

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

## Technical data

SMW-AUTOBLOK Type		NTL-D 500 NTL-C 500	NTL-D 630 NTL-C 630	NTL-D 800 NTL-C 800	NTL-D 1000 NTL-C 1000
Radial jaw stroke	mm	12.1	12.1	12.1	12.1
Axial piston stroke	mm	30	30	30	30
Max. draw pull*	kN	120	120	120	120
Max. gripping force*	kN	240	240	240	240
Max. speed	r.p.m.	2400	2000	1500	1000
Weight (without top jaws)	kg	255	420	680	970
Moment of inertia	kg·m²	8.2	21.2	55.7	110
Recommended actuating cylinders	Type	SIN-S 175 / 200	SIN-S 175 / 200	SIN-S 175 / 200	SIN-S 175 / 200

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



• on request:  
• Tooling Standard  
• Parts Catalog

• SMW-AUTOBLOK  
• 438

• SMW-AUTOBLOK  
• 440

• SMW-AUTOBLOK  
• 297

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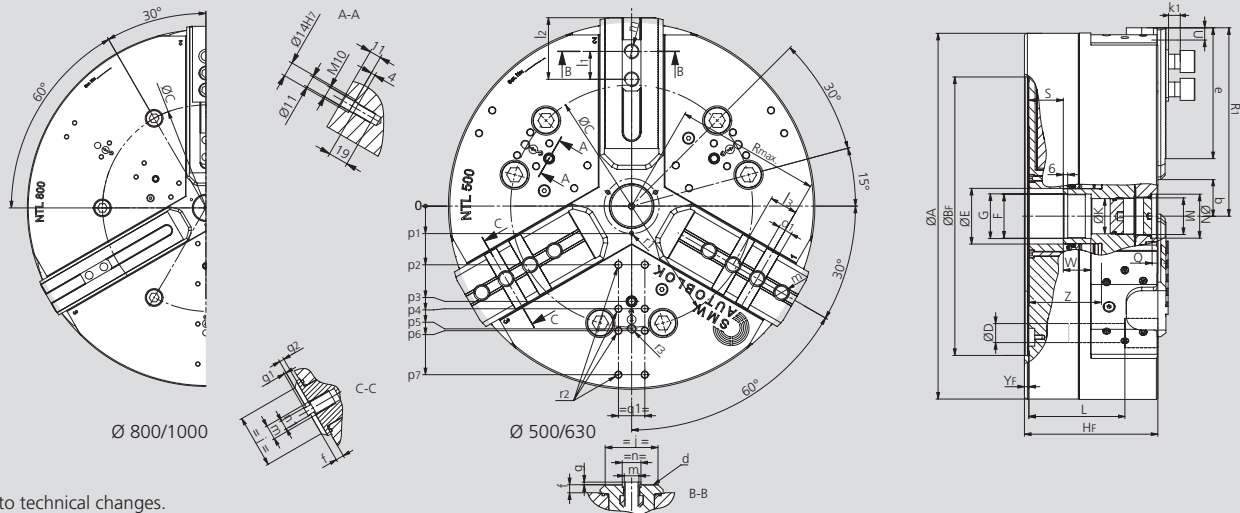
## NTL-D

INCH  
SERRATION

## NTL-C

TONGUE & GROOVE

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Subject to technical changes.  
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type			NTL-D 500 NTL-C 500	NTL-D 630 NTL-C 630	NTL-D 800 NTL-C 800	NTL-D 1000 NTL-C 1000
<b>Mounting</b>			<b>Z380</b>	<b>Z380</b>	<b>Z520</b>	<b>Z520</b>
	<b>A</b>	mm	500	630	800	1000
	<b>Bf</b>	H6 mm	380	380	520	520
	<b>C</b>	mm	330.2	330.2	463.6	463.6
	<b>D</b>	mm	26	26	26	26
	<b>E</b>	mm	75	75	75	75
	<b>F</b>	mm	M60 x 1.5	M60 x 1.5	M60 x 1.5	M60 x 1.5
	<b>G</b>	H8 mm	61	61	61	61
	<b>Hf</b>	mm	182	182	182	187
	<b>K</b>	mm	48	48	48	48
	<b>L</b>	mm	131	131	131	146
	<b>M</b>	mm	M52 x 1.5	M52 x 1.5	M52 x 1.5	M52 x 1.5
	<b>N</b>	H8 mm	60	60	60	60
	<b>Q</b>	mm	7.5	7.5	7.5	7.5
Chuck open	<b>R1</b>	mm	257	322	407	507
	<b>R max.</b>	mm	198	250	351	465
	<b>S</b>	mm	47	47	47	52
Jaw stroke	<b>U</b>	mm	12.1	12.1	12.1	12.1
	<b>W</b>	mm	38	38	38	38
Max. / min.	<b>Z</b>	mm	99.5 / 69.5	99.5 / 69.5	99.5 / 69.5	99.5 / 69.5
Min.	<b>b</b>	mm	38	38	38	38
	<b>d</b>	mm	3 / 32 x 90°	3 / 32 x 90°	3 / 32 x 90°	3 / 32 x 90°
	<b>e</b>	mm	177	242	327	457
	<b>f</b>	mm	11	11	11	11
	<b>g</b>	mm	3.5	3.5	3.5	3.5
	<b>g1</b>	mm	3	3	3	3
	<b>g2</b>	mm	6.5	6.5	6.5	6.5
	<b>j</b>	mm	72	72	72	72
	<b>k1</b>	mm	16	16	16	16
	<b>l1</b>	mm	38	38	38	38
Max. / min.	<b>l2</b>	mm	145 / 54	210 / 54	295 / 54	393 / 54
	<b>l3</b>	mm	38.1	38.1	38.1	38.1
	<b>m</b>	mm	M20	M20	M20	M20
	<b>n</b>	h8 mm	25.5	25.5	25.5	25.5
	<b>n1</b>	h8 mm	12.7	12.7	12.7	12.7
	<b>o1</b>	H8 mm	19.03	19.03	19.03	19.03
	<b>p1</b>	mm	37.5	37.5	37.5	37.5
	<b>p2</b>	mm	80	80	80	80
	<b>p3</b>	mm	130	130	130	130
	<b>p4</b>	mm	140	170	170	170
	<b>p5</b>	mm	167.5	280	280	280
	<b>p6</b>	mm	170	-	260	260
	<b>p7</b>	mm	230	260	350	350
	<b>q1</b>	mm	36	36	36	36
	<b>r1</b>	mm	M6	M6	M6	M6
	<b>r2</b>	mm	M10	M10	M10	M10
	<b>r3</b>	mm	M12	M16	M16	M16
	<b>YF</b>	mm	6	6	6	6
Number of 01 cross grooves (only for NTL-C)			2	3	6	9
Number of "m" threads (only for NTL-C)			4	5	8	10