

Stationary chucks pneumatic/hydraulic



US-CL

With 2 jaws
long stroke chucks

Stationary cylinder and chuck unit, hydraulic
Ø 80 - 315 mm

- unit with static cylinder and chuck
- closed center chucks type CL/AN/AL

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US-A

With 3 jaws long or
normal stroke chucks

Stationary cylinder and chuck unit, hydraulic
Ø 80 - 315 mm

- unit with static cylinder and chuck
- closed center chucks type CL/AN/AL



M2-PB

Fixture
with 2 chucks

Multiple chucks on fixtures, pneumatic
Ø 130 - 315 mm

- built-in pneumatic cylinders
- 2 and 3 jaws

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M4-PB

Fixture
with 4 chucks

Multiple chucks on fixtures, pneumatic
Ø 130 - 315 mm

- built-in pneumatic cylinders
- 2 and 3 jaws



US-Large diameters

Pneumatic static cylinder
2 or 3 or 4 jaws

Pneumatic static cylinder and chuck unit
Ø 400 - 800 mm

- normal or long stroke depending on chuck model
- 2/3/4 jaws depending on chuck model & diameter
- sealed or not sealed chucks depending on chuck model

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PBI-D

INCH serration
2 or 3 jaws

Chuck for indexing tables
Ø 165 - 315 mm

- manifold for air supply (only for low r.p.m.)
- built-in cylinder
- 2 and 3 jaws

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PBI-C

Tongue & groove
3 jaws

Chuck for indexing tables
Ø 165 - 315 mm

- manifold for air supply (only for low r.p.m.)
- built-in cylinder
- 2 and 3 jaws



HB-D

INCH serration
2 or 3 jaws

Stationary chuck, hydraulic
Ø 130 - 315 mm

- built-in hydraulic cylinder
- 2 and 3 jaws

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HB-C

Tongue & groove
3 jaws

Stationary chuck, hydraulic
Ø 130 - 315 mm

- built-in hydraulic cylinder
- 2 and 3 jaws



PB-D

INCH serration
2 or 3 jaws

Stationary chuck, pneumatic
Ø 130 - 315 mm

- built-in pneumatic cylinder
- 2 and 3 jaws

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PB-C

Tongue & groove
3 jaws

Stationary chuck, pneumatic
Ø 130 - 315 mm

- built-in pneumatic cylinder
- 2 and 3 jaws



STP

INCH serration
3 jaws

Stationary chuck, pneumatic
Ø 125 - 280 mm

- built-in pneumatic cylinder
- with through-hole

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US-CL

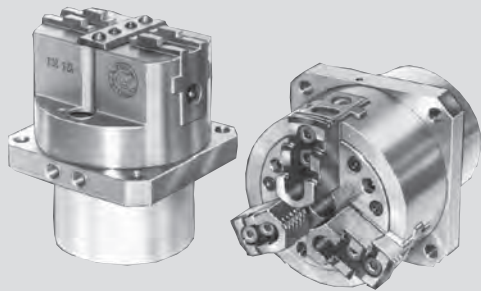
With 2 jaw long stroke chuck

US-A

With 3 jaw long or normal stroke chuck

Stationary cylinder + chuck unit Ø 80 - 315 mm

- hydraulic cylinder module + chuck
- closed center chucks type CL/AN/AL



Application/customer benefits

- Gripping units designed to suit special purpose machines and transfer lines
- Also used as loading chucks to handle workpieces

Technical features

- stationary hydraulic cylinder + chuck unit consisting of a modular cylinder and standard 2- or 3-jaw-chuck
- permanent oil pressure required
- for chuck details please see technical data of the selected chuck

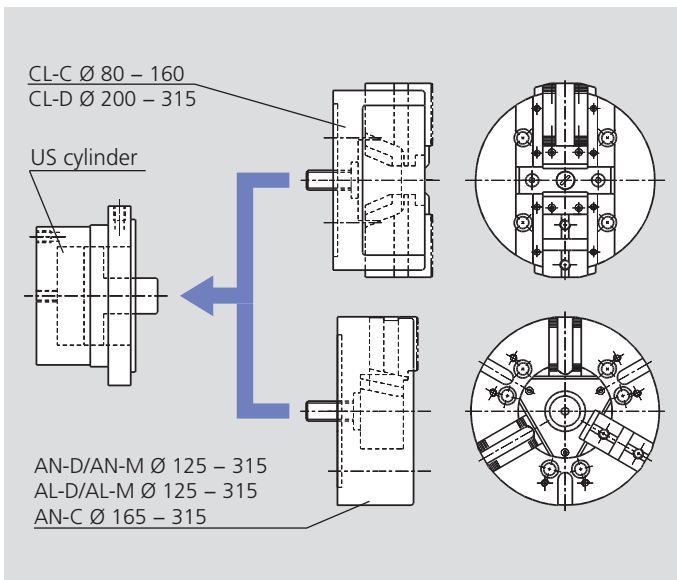
Remark: when ordering please specify the position of the oil connectors (on the side or on the back)

Standard equipment

Standard chuck with cylinder and connecting parts

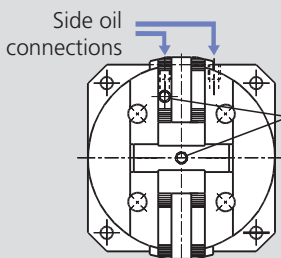
Ordering example

US 125-CLC with rear oil connection, or
US 250-AND with side oil connection and
chuck 90° revolved

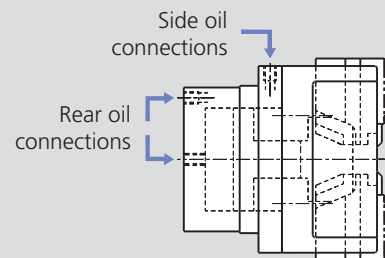
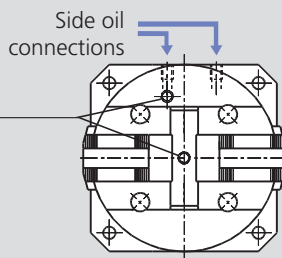


- **US-CL-C** = cylinder equipped with a 2 jaw chuck type CL-C (long stroke/tongue & groove). Chuck Ø 80 to 160 mm.
- **US-CL-D** = cylinder equipped with a 2 jaw chuck type CL-D (long stroke/inch serration). Chuck Ø 200 to 315 mm.
- **US-AN-D** = cylinder equipped with a 3 jaw chuck type AN-D (normal stroke/inch serration). Chuck Ø 125 to 315 mm.
- **US-AN-M** = cylinder equipped with a 3 jaw chuck type AN-M (normal stroke/metric serration). Chuck Ø 125 to 315 mm.
- **US-AL-D** = cylinder equipped with a 3 jaw chuck type AL-D (long stroke/inch serration). Chuck Ø 125 to 315 mm.
- **US-AL-M** = cylinder equipped with a 3 jaw chuck type AL-M (long stroke/metric serration). Chuck Ø 125 to 315 mm.
- **US-AN-C** = cylinder equipped with a 3 jaw chuck type AN-C (normal stroke/tongue & groove). Chuck Ø 165 to 315 mm.
- **Special units** = on request the US cylinder can be equipped with other chucks, for example with a quick jaw change chuck type AN-RM with stationary cylinder available.

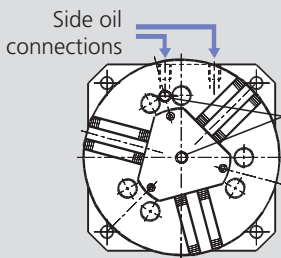
CL chuck in standard position



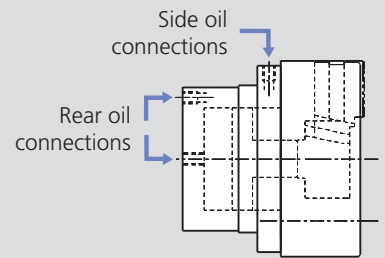
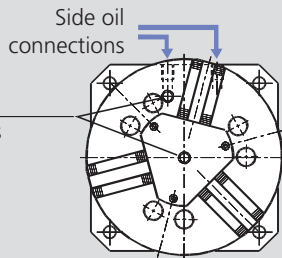
CL chuck 90° revolved



AN/AL chuck in standard position



AN/AL chuck 90° revolved



- The chuck can be mounted on the cylinder 90° revolved if the standard position creates interferences with the working cycle. Please specify in the order, if a revolved position is needed.

- The oil connections can be on the side or on the back of the cylinder in order to ease the installation of the gripping unit. Please specify in the order, which version is preferred.

Stationary cylinder + chuck unit Ø 80 - 315 mm

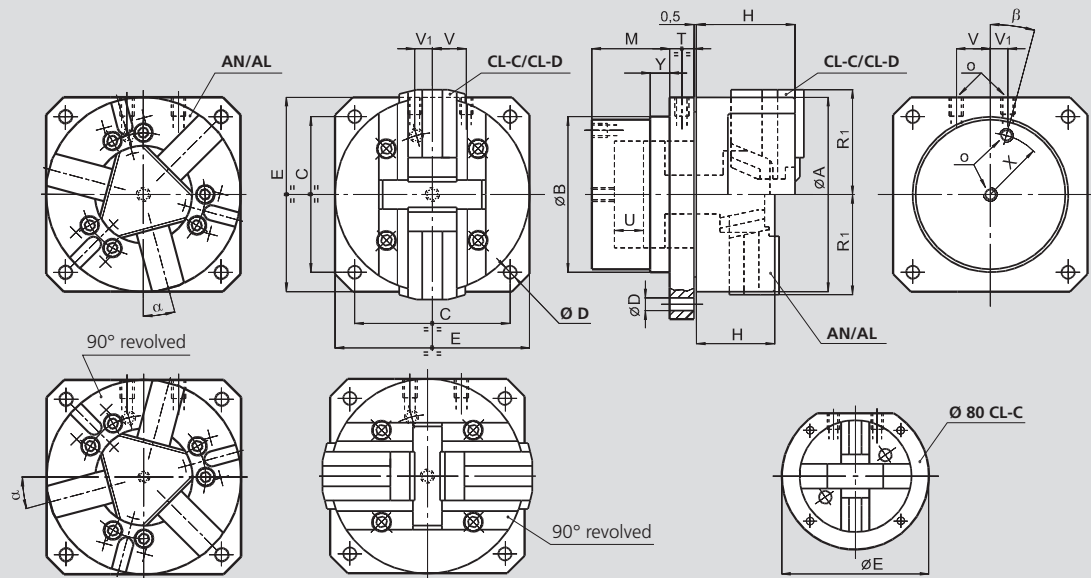
US-CL

US-A

- hydraulic cylinder module + chuck
- closed center chucks type CL/AN/AL

With 2 jaw long stroke chuck

With 3 jaw long or normal stroke chuck



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

US actuating cylinder dimensions

SMW-AUTOBLOK cylinder		US 80	US 100	US 125	US 160 US 165	US 200	US 250	US 315
Id. No. CL		77755008	77755010	77755013	77755016	77755120	77755025	77755031
Id. No. AL/AN		77755008	77755010	77755113	77755016	77755120	77755025	77755031
B h7	mm	70	84	106	128	158	185	185
C	mm	66	84	104	130	160	200	250
D	mm	7	9	11	11	13.5	17	17
E	mm	105	100	130	160	200	250	315
M	mm	45	52	60	70	80	90	90
oil connections	O	inch	1/8 BSP	1/8 BSP	1/4 BSP	3/8 BSP	3/8 BSP	3/8 BSP
	T	mm	16	16	20	25	25	25
	U	mm	11	14	20	25	30	35
	V	mm	15	18	12	28	35	41
	V1	mm	15	18	12	15	18	15
	X	mm	27	33	43	52	63	75
	Y	mm	10	10	10	20	20	20
	β	deg.	30°	30°	15°	15°	0°	0°
Piston area		cm ²	16	25	42	68	112	166

Units with CL-C and CL-D chucks (more information at general catalog page 78)

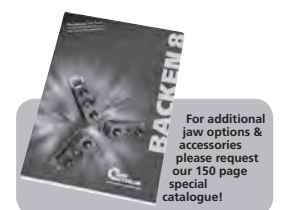
SMW-AUTOBLOK Type		US 80-CL-C	US 100-CL-C	US 125-CL-C	US 160-CL-C	US 200-CL-D	US 250-CL-D	US 315-CL-D
	A	mm	80	100	125	160	200	250
	H	mm	45	54	76	92	103	114
Chuck open	R1	mm	40	50	68	87	108	132
Max. pressure		bar	38	36	36	37	32	30
Max. gripping force		kN	9	14	24	40	55	78

Units with AN-D/AN-M/AN-C chucks (more information at general catalog page 38 and 42)

SMW-AUTOBLOK Type		US 125-AN-D US 125-AN-M	US 165-AN-D US 165-AN-M US 165-AN-C	US 210-AN-D US 210-AN-M US 210-AN-C	US 250-AN-D US 250-AN-M US 250-AN-C	US 315-AN-D US 315-AN-M US 315-AN-C
	A	mm	127	165	210	254
	H	mm	57	71	85	95
Chuck open	R1	mm	64	83	105	128
	α	deg.	0°	15°	15°	15°
Max. pressure		bar	47	36	31	28
Max. gripping force		kN	56	70	105	140

Units with AL-D/AL-M chucks (more information at general catalog page 40)

SMW-AUTOBLOK Type		US 125-AL-D US 125-AL-M	US 165-AL-D US 165-AL-M	US 210-AL-D US 210-AL-M	US 250-AL-D US 250-AL-M	US 315-AL-D US 315-AL-M
	A	mm	127	165	210	254
	H	mm	57	71	85	95
Chuck open	R1	mm	67	86	109	133
	α	deg.	0°	15°	15°	15°
Max. pressure		bar	60	44	45	39
Max. gripping force		kN	45	54	90	120

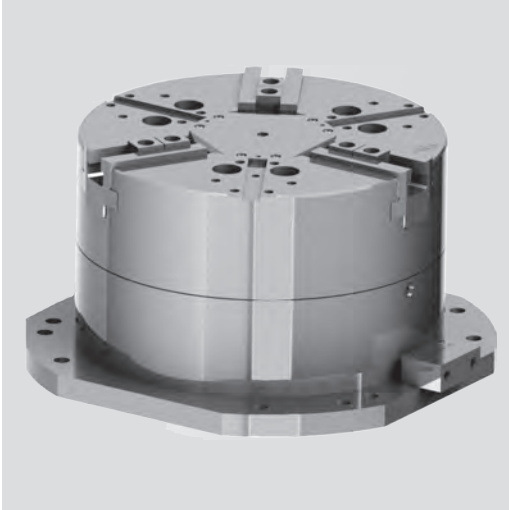


US-Large Diameters

Pneumatic static cylinder for 2 or 3 or 4 jaws

Stationary cylinder + chuck unit Ø 400 - 800 mm

- option for serrated or Tongue & Groove jaws
- option of sealed or not sealed chucks
- option of 2/3/4 jaws depending on chuck size and model
- option of long or normal stroke depending on chuck size & model



Application/customer benefits

- Gripping of large components on vertical or horizontal machining centers.

Technical features

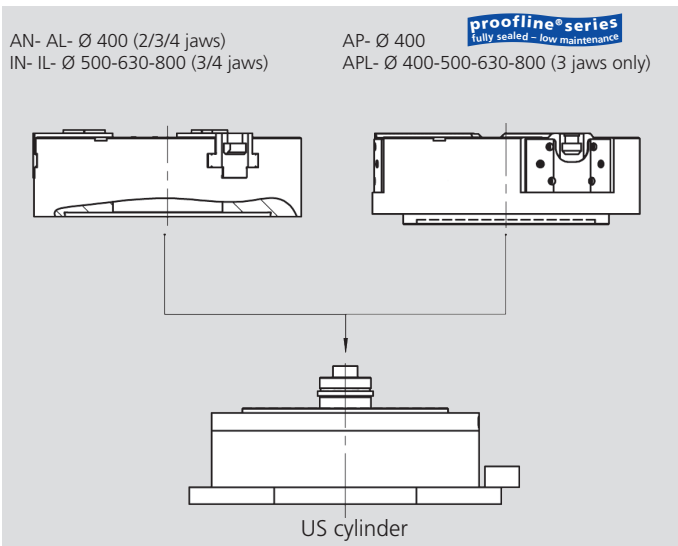
- Standard pneumatic cylinder to be equipped with various type of chucks:
 - 2/3/4 jaws versions depending on chuck model and diameter
 - Sealed or not sealed chucks with serrated or Tongue & Groove master jaw available
 - Normal or long stroke depending on chuck model and diameter
 - Permanent air pressure required
 - Optional SAB safety valve to hold pressure during pallet transfer
- Remark:** the clamping unit is made of standard cylinder + eventual connection kit (for AP and APL chucks only) + chuck to be selected.
For chuck details, please see the technical data of the selected chuck.

Standard equipment

Static cylinder with connecting parts for IN/IL chucks.
For AP and APL chucks a specific connecting kit must be added.

Ordering example

Please see the below table for part numbers and part descriptions.



- **US-AN** = cylinder equipped with a 3 jaw chuck type AN- (normal stroke). Chuck Ø 400 mm
- **US-AL** = cylinder equipped with a 3 jaw chuck type AL- (long stroke). Chuck Ø 400 mm
- **US-IN** = cylinder equipped with a 3 jaw chuck type IN- (normal stroke). Chuck Ø 500 to 800 mm
- **US-IL** = cylinder equipped with a 3 jaw chuck type IL- (long stroke). Chuck Ø 500 to 800 mm
- **US-AP** = cylinder equipped with a 3 jaw chuck type AP- (normal stroke). Chuck Ø 400 mm
- **US-APL** = cylinder equipped with a 3 jaw chuck type APL- (long stroke). Chuck Ø 400 to 800 mm

Technical data

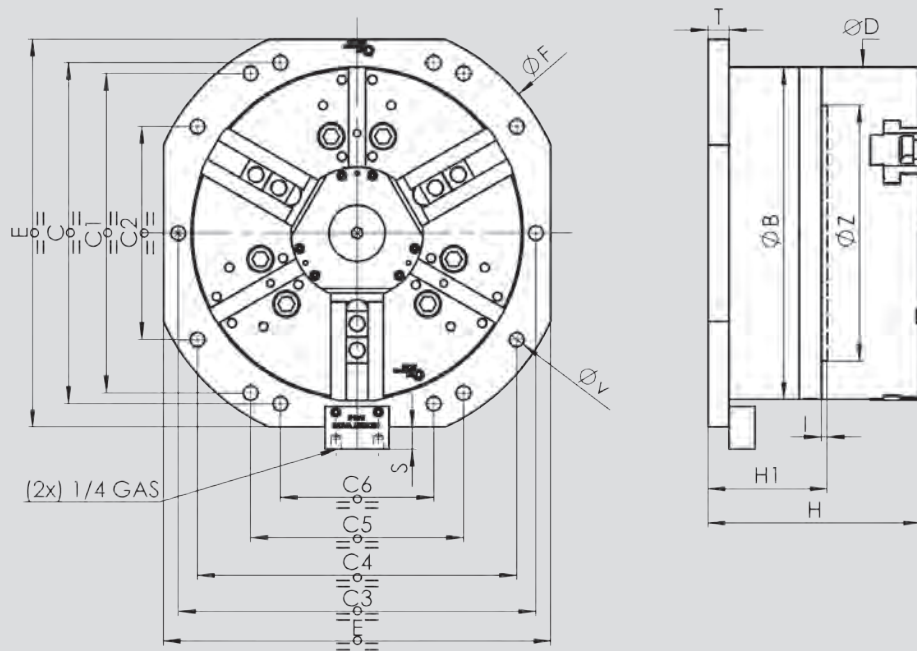
SMW-AUTOBLOK Type		US-400 AN/AL	US-400 AP/APL	US-500 APL	US-630 APL	US-800 APL	US-500 IN/IL	US-630 IN/IL	US-800 IN/IL
Piston area-chuck (open)	cm ²	800	800	1256	1256	1256	1256	1256	1256
Piston area-chuck (closed)	cm ²	760	760	1211	1211	1211	1211	1211	1211
Max operating pressure	bar	7	7	7	7	7	7	7	7
Masse of cylinder unit	kg	118	118	175	175	175	175	175	175
Gripping force at 6 bar "N"	kN	135	125	-	-	-	175	175	175
Gripping force at 6 bar "L"	kN	80	80	130	130	130	130	130	130

Stationary cylinder + chuck unit Ø 400 - 800 mm

- option for serrated or Tongue & Groove jaws
- option of sealed or not sealed chucks
- option of 2/3/4 jaws depending on chuck size and model
- option of long or normal stroke depending on chuck size & model

US-Large Diameters

Pneumatic static cylinder for
2 or 3 or 4 jaws



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

SMW-AUTOBLOK Type		US-400 AN/AL	US-400 AP/APL	US-500 APL	US-630 APL	US-800 APL	US-500 IN/IL	US-630 IN/IL	US-800 IN/IL
o.d. cylinder	B	mm	390	390	475	475	475	475	475
	C	mm	400	400	-	-	-	-	-
	C1	mm	375	375	300	300	300	300	300
	C2	mm	250	250	-	-	-	-	-
	C3	mm	-	-	500	500	500	500	500
	C4	mm	375	375	400	400	400	400	400
	C5	mm	250	250	-	-	-	-	-
Ø chuck	C6	mm	180	180	-	-	-	-	-
	D	mm	390	390	500	630	800	510	630
	E	mm	455	455	525	525	525	525	525
	E1	mm							
	ØF	mm	500	500	538	538	538	538	538
	H	mm	250	273	300	310	330	270	290
	H1	mm	140	140	146	146	146	146	146
	I	mm	7	7	7	7	7	7	7
	T	mm	25	25	25	25	25	25	25
	ØV	mm	17	17	17	17	17	17	17
	ØZ h7	mm	300	300	380	380	380	380	380

Ordering review

SMW-AUTOBLOK Size	400	500	630	800
A: Cylinder Id. No. (for all versions)	97504004	97506302	97506302	97506302
B: Kit Id. No. (only for „AP“ & „APL“ chucks)	97634004	97635002	97636302	97646302

- If the cylinder must operate a IN/IL or a AN/AL chuck (with 2/3/4 jaws and various jaw types), only the p/n in line A must be purchased. The chuck must be ordered separately.
- If the cylinder must operate a AP/APL chuck (only 3 jaws available and various jaw types), both p/ns in line A and B must be purchased. The chuck must be ordered separately.
- For technical information on the chucks, please see the specific catalogue page.
- For the chucks p/ns, please see our price lists or ask a quotation to your nearest SMW-AUTOBLOK office.



HB-D

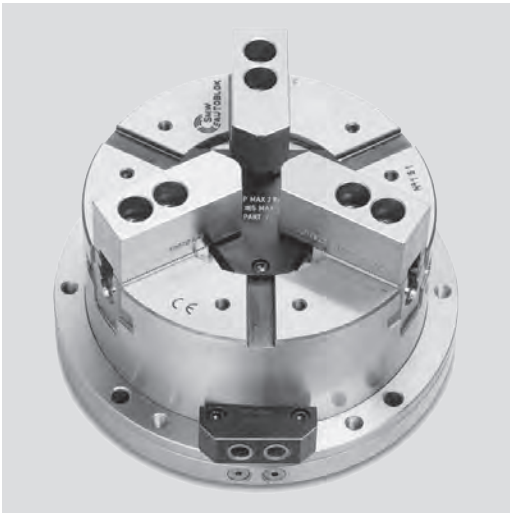
INCH serration
2 or 3 jaws

HB-C

Tongue & groove
3 jaws

Stationary chuck, hydraulic Ø 130 - 315 mm

- built-in hydraulic cylinder
- 2 and 3 jaws



Application/customer benefits

- Stationary hydraulic chuck for self centering clamping of parts on milling machines/machining centers/special machines

HB-D: inch serrated master jaws (1/16" x 90°)

HB-C: tongue & groove master jaws (American standard)

HB-M: metric serrated master jaws (1.5 mm x 60°) **on request from Ø 165**

Technical features

- Stationary chuck consisting of a 2/3 jaw self centering chuck with built-in hydraulic cylinder
- Compact design
- Case hardened body to assure highest precision and long chuck life

Standard equipment

Stationary chuck
1 set T-nuts with bolts
(HB-C excluded)
1 set of soft blank top jaws
(HB-C excluded)
Grease gun

Ordering example

3 jaw chuck HB-C 250
or
2 jaw chuck HBL-D2 165

Technical data

SMW-AUTOBLOK Type		HB-D 130	HB-D 165 HB-C 165	HB-D 210 HB-C 210	HB-D 250 HB-C 250	HB-D 315 HB-C 315
Radial jaw stroke	mm	3	3.2	4	4.6	5.5
Radial jaw stroke HBL-D2 (2 jaws)*	mm	5.6	6	7.5	8.8	10.5
Piston area	cm ²	63	79	114	167	203
Max. operating pressure	bar	30	30	30	30	30
Gripping force at 25 bar	kN	50	55	85	125	150
Gripping force at 25 bar HBL-D2 (2 jaws)*	kN	28	35	52	75	90
Weight (without top jaws)	kg	9.5	18	30	44	69

* The 2 jaw fixture is available with serrated master jaws (inch or metric) and long stroke only.



Stationary chuck, hydraulic Ø 130 - 315 mm

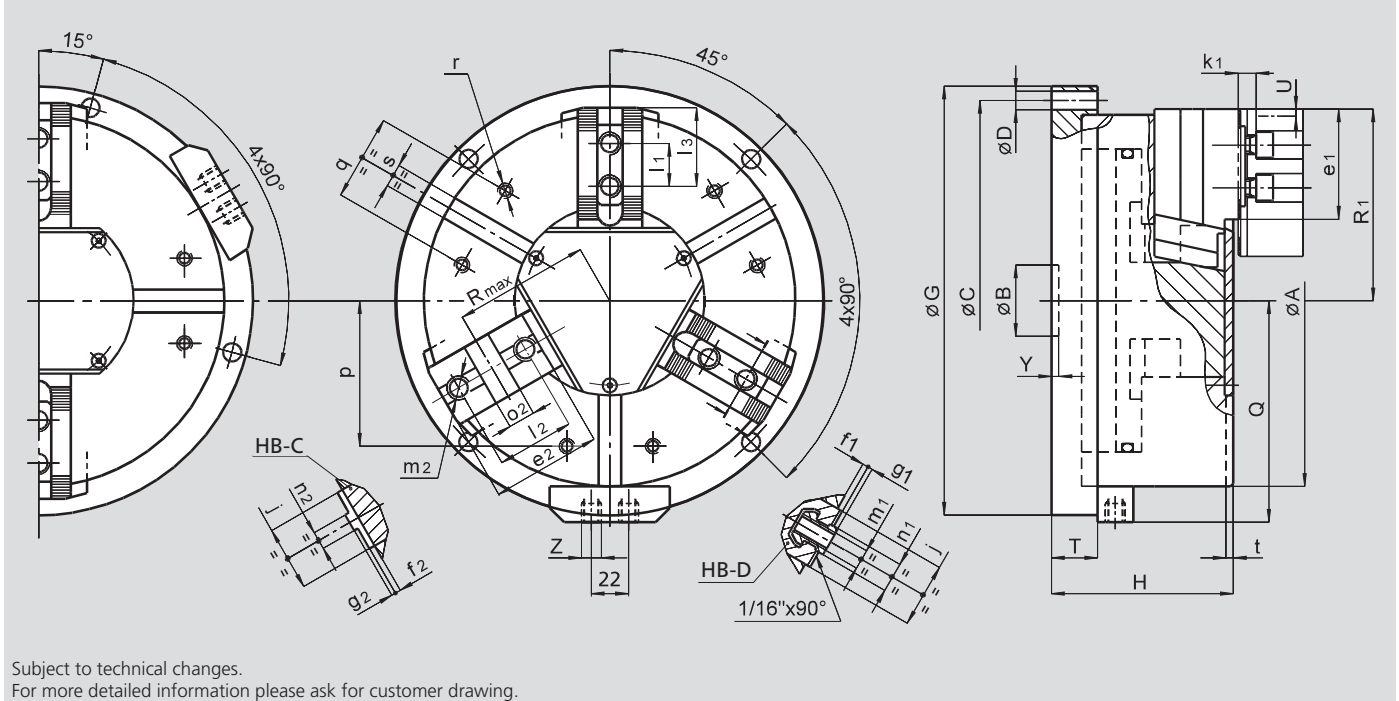
HB-D

HB-C

- built-in hydraulic cylinder
- 2 and 3 jaws

INCH serration
2 or 3 jaws

Tongue & groove
3 jaws



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

Common dimensions

SMW-AUTOBLOK Type		HB-D 130	HB-D 165 HB-C 165	HB-D 210 HB-C 210	HB-D 250 HB-C 250	HB-D 315 HB-C 315	
	A	mm	135	170	215	260	315
	B	mm	30	30	35	50	50
Fixing holes circle	C	mm	155	190	235	280	340
Fixing holes diameter	D	mm	9	11	11	13	13
	G	mm	175	210	255	300	360
	H	mm	89	100	117	127	141
	Q	mm	92.5	110	133	155	183
	T	mm	25	27	30	32	32
Radial jaw stroke (3 jaws)	U	mm	3	3.2	4	4.6	5.5
Radial jaw stroke HBL-D2 (2 jaws)	U	mm	5.6	6	7.5	8.8	10.5
	Y	mm	5	5	5	5	5
Hydraulic connections	Z	inch	R1/4"	R1/4"	R1/4"	R1/4"	R1/4"
	j	mm	26	30	36	45	45
	k1	mm	10	10	11	12	12
	p	mm	52	65	80	102	120
	q	mm	30	36	45	60	60
	r	mm	M6	M8	M8	M10	M10
	s H12	mm	12	16	16	16	16
	t	mm	3.5	5	5	5	5

HB-D and HBL-D2 fixtures dimensions

SMW-AUTOBLOK Type		HB-D 130	HB-D 165	HB-D 210	HB-D 250	HB-D 315
	e1	mm	45	48	60	99
	f1	mm	3	4	3	4
	g1	mm	2.5	2.5	2.5	3.5
	l1	mm	16	16.5	23	30
T-nut position min./max.	l3	mm	23/30	24/40	33/50	43/84
	m1	mm	M8	M10	M12	M16
	n1 h8	mm	12	14	17	21
Chuck open (3 jaws)	R1	mm	71	89	110	162
Chuck open HBL-D2 (2 jaws)	R1	mm	74	92	114	168

HB-C fixtures dimensions (available only in 3 jaw chuck version)

SMW-AUTOBLOK Type		HB-C 165	HB-C 210	HB-C 250	HB-C 315
	e2	mm	54	71	99
	f2	mm	4	4	4
	g2	mm	3	3	3
	l2	mm	38	44.4	54
	m2	mm	M10	M12	M16
	n2 h8	mm	7.94	7.94	12.70
	o2H7	mm	12.68	12.68	19.03
Chuck open	R1	mm	89	110	134
Chuck open	Rmax	mm	62	77	94

PB-D

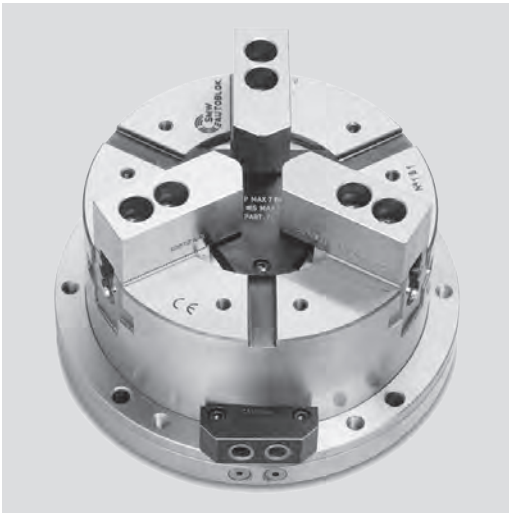
INCH serration
2 or 3 jaws

PB-C

Tongue & groove
3 jaws

Stationary chuck, pneumatic Ø 130 - 315 mm

- built-in cylinder
- 2 and 3 jaws



Application/customer benefits

- Self centering chuck used on milling machines/machining centers/special machines

PB-D: inch serrated master jaws (1/16" x 90°)

PB-C: tongue & groove master jaws (American standard)

PB-M: metric serrated master jaws (1.5 mm x 60°) **on request**

Technical features

- Stationary chuck consisting of a 2/3 jaw chuck with a built-in pneumatic cylinder
- Compact design
- Case hardened body to assure highest precision and long chuck life

Caution! Filtered and oiled operating air required

Standard equipment

Clamping unit
1 set of soft blank top jaws
(PB-C excluded)
Grease gun

Ordering example

3 jaw chuck fixture PB-C 250
or
2 jaw chuck fixture PBL-D2 165

Technical data

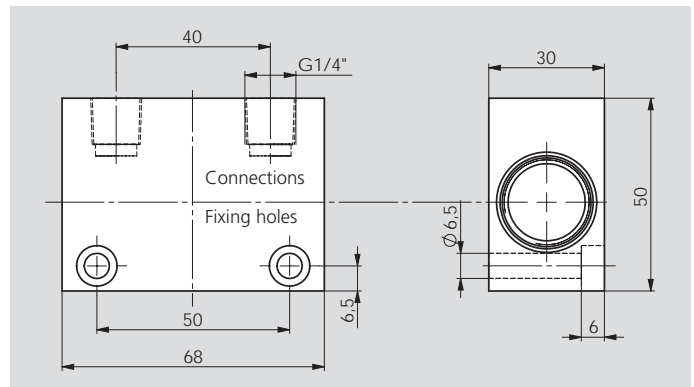
SMW-AUTOBLOK Type		PB-D 130	PB-D 165 PB-C 165	PB-D 210 PB-C 210	PB-D 250 PB-C 250	PB-D 315 PB-C 315
Radial jaw stroke	mm	3.2	3.6	4.4	5	6.3
Radial jaw stroke PBL-D2 (2 jaws)*	mm	6	6.8	8.4	9.7	12
Piston area	cm ²	82	143	236	358	548
Max. operating pressure	bar	7	7	7	7	7
Gripping force at 6 bar	kN	14	24	42	64	98
Gripping force at 6 bar PBL-D2 (2 jaws)*	kN	9	16	26	39	60
Weight (without top jaws)	kg	9	17	28	42	63

* The 2 jaw fixture is available with serrated master jaws (inch or metric) and long stroke only.

Option for the PB-D and PB-C chuck
Safety unit that maintains a constant pressure inside the cylinder which maintains a steady clamping force even in case of a drop or lack of line pressure.

SAB

Safety unit with double non-return valve,
Id. No. 27581620



Stationary chuck, pneumatic \varnothing 130 - 315 mm

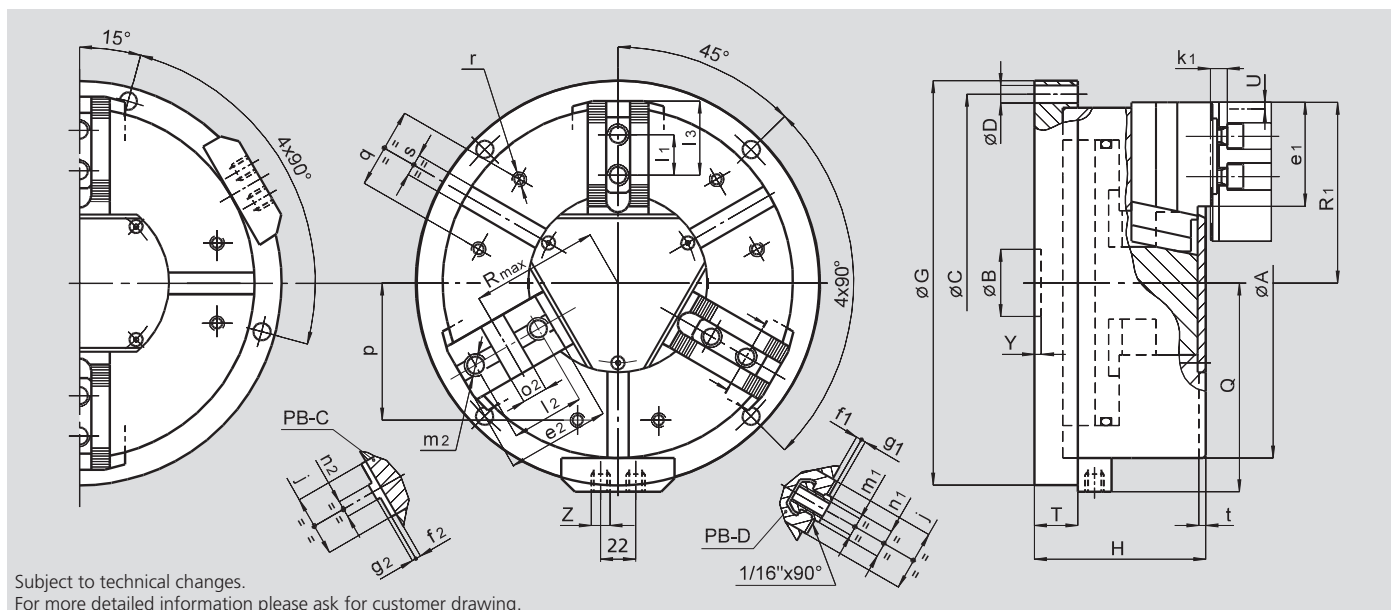
PB-D

INCH serration
2 or 3 jaws

PB-C

Tongue & groove
3 jaws

- built-in cylinder
- 2 and 3 jaws



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

Common dimensions

SMW-AUTOBLOK Type		PB-D 130	PB-D 165 PB-C 165	PB-D 210 PB-C 210	PB-D 250 PB-C 250	PB-D 315 PB-C 315
A	mm	135	170	215	260	315
B	mm	30	30	35	50	50
Fixing holes circle	C	mm	155	190	235	340
Fixing holes diameter	D	mm	9	11	11	13
G	mm	175	210	255	300	360
H	mm	89	100	117	127	141
Q	mm	93	110	133	155	183
T	mm	25	27	30	32	32
Radial jaw stroke (3 jaws)	U	mm	3.2	3.6	4.4	5
Radial jaw stroke PBL-D2 (2 jaws)	U	mm	6	6.8	8.4	12
Y	mm	5	5	5	5	5
Pneumatic connections	Z	inch	R1/4"	R1/4"	R1/4"	R1/4"
j	mm	26	30	36	45	45
k1	mm	10	10	11	12	12
p	mm	52	65	80	102	120
q	mm	30	36	45	60	60
r	mm	M6	M8	M8	M10	M10
s H12	mm	12	16	16	16	16
t	mm	5	5	5	5	5

PB-D and PBL-D2 fixtures dimensions

SMW-AUTOBLOK Type		PB-D 130	PB-D 165	PB-D 210	PB-D 250	PB-D 315
e1	mm	37	48	60	77	99
f1	mm	3	4	3	4	4
g1	mm	2.5	2.5	2.5	3.5	3.5
l1	mm	16	16.5	23	30	30
T-nut position min./max.	l3	mm	23/30	24/40	33/50	43/62
m1	mm	M8	M10	M12	M16	M16
n1 h8	mm	12	14	17	21	21
Chuck open (3 jaws)	R1	mm	71	89	110	162
Chuck open PBL-D2 (2 jaws)	R1	mm	74	92	114	168

PB-C fixtures dimensions (available in 3 jaw chuck version only)

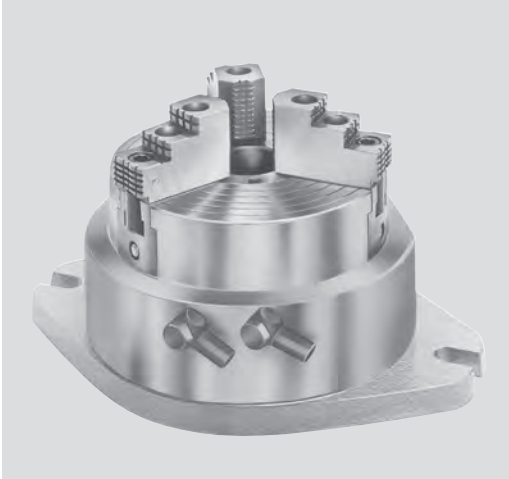
SMW-AUTOBLOK Type		PB-C 130	PB-C 165	PB-C 210	PB-C 250	PB-C 315
e2	mm	-	54	71	77	99
f2	mm	-	4	4	4	4
g2	mm	-	3	3	3	3
l2	mm	-	38	44.4	54	63.5
m2	mm	-	M10	M12	M16	M16
n2 h8	mm	-	7.94	7.94	12.70	12.70
o2 H7	mm	-	12.68	12.68	19.03	19.03
Chuck open	R1	mm	89	110	134	162
Chuck open	Rmax	mm	62	77	94	109

STP

INCH serration
3 jaws

Stationary chuck, pneumatic Ø 125 - 280 mm

- built-in cylinder
- with THROUGH-HOLE



Application/customer benefits

- Self centering stationary chuck used on milling machines/machining centers/ special machines
- Low profile – large open center
- Easy installation on the machine

Technical features

- Stationary chuck consisting of a 3 jaw chuck with a built-in pneumatic cylinder
- Operating pressure from 2 to 10 bar

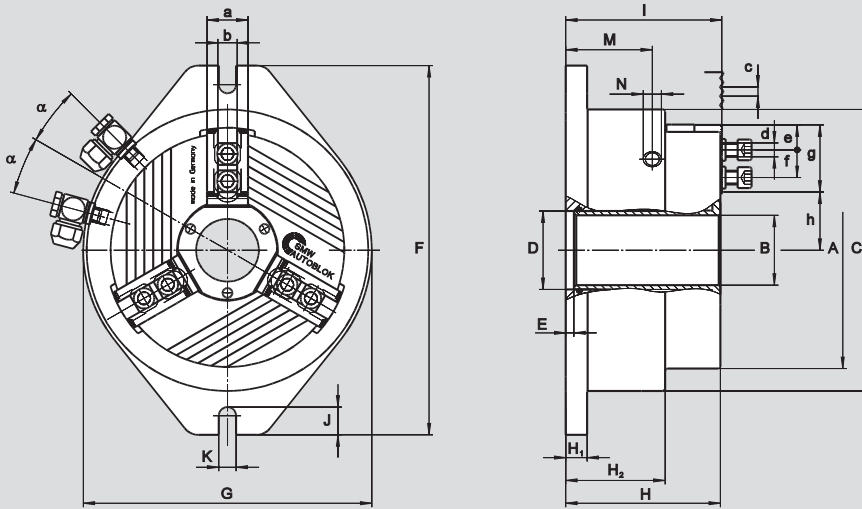
Caution! Filtered and oiled, operating air required

Standard equipment

- Stationary chuck
- 1 set T-nuts with bolts
- 1 set of soft blank top jaws
- 2 elbow fittings G1/4"
- (G1/8" on STP 125)

Ordering example

3 jaw stationary chuck STP 280



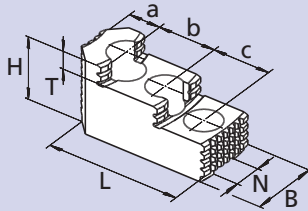
Subject to technical changes.
For more detailed information please ask for customer drawing.

Technical data

SMW-AUTOBLOK Type Id. No.		STP 125 013904	STP 160 013905	STP 240 053273	STP 280 052810	
	A	mm	136	171	240	284
	B	mm	26	38	78	92
	C	mm	156	201	250	316
	D H6	mm	34	46	86	102
	E	mm	8	7.5	7	6
	F	mm	220	275	320	400
	G	mm	160	206	250	316
	H	mm	102.5	130	134	155.5
	H1	mm	14.5	19	18.5	23.5
	H2	mm	66	83	86	97.5
	I	mm	104	132	135.5	157
	J	mm	22	24	24	30
	K	mm	13	15	15	18
	M	mm	57	72	75	86
Pneumatic connections	N	inch	G 1/8"	G 1/4"	G 1/4"	G 1/4"
	a	mm	25	30	36	44
	b f7	mm	12	14	17	21
Serration	c	inch	1/16" x 90°	1/16" x 90°	1/16" x 90°	1/16" x 90°
Bolt ISO 4762 12.9 min.	d	mm	M8 x 30	M10 x 35	M12 x 35	M16 x 40
T-nuts distance min./max.	e	mm	4	6	8	12
Serration length min./max.	f	mm	17/25	17/31	22/41.5	25/51
	g	mm	40	50	59	75
	h	mm	25.9/28.9	24.9/37	57.7/61.9	70/65
	α	deg.	15	15	15	7.5
Radial jaw stroke	mm	3	4.1	4.2	5	
Operating pressure min./max.	bar	2/10	2/10	2/10	2/10	
Piston area	cm ²	129	206	290	532	
Gripping force at 6 bar	kN	20	35	60	95	
Air consumption at 6 bar	l	1	2.4	5.5	6.6	
Weight (without top jaws)	kg	19	21	40	56	

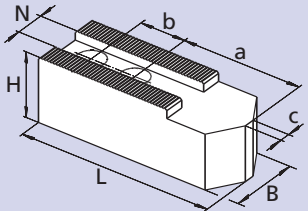
- Top jaws
- T-nuts

MHB-D Hardened reversible top jaws



Chuck Type	STP 125	STP 160	STP 240	STP 280
Jaw type	MHB-D 125	MHB-D 160	MHB-D 200	MHB-D 251
Jaw Id. No. (set)	12081306	12081636	12082036	12083036
B	30	34	40	5
H	34	39	45	56
L	58	65	82	105
T	8.5	10	10.5	13.5
N	12	14	17	21
Serration	1/16" x 90°	1/16" x 90°	1/16" x 90°	1/16" x 90°
a	13	18	19	26
b	16	16	23	30
c	16	16	23	30
kg/set	0.6	0.9	1.7	2.85

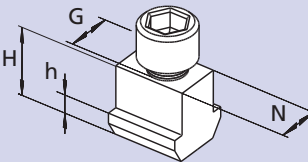
AWB-D Soft top jaws



Chuck Type	STP 125	STP 160	STP 240	STP 280
Jaw type	AWB-D 125	AWB-D 165	AWB-D 200	AWB-D 250
Jaw Id. No. (set)	12071300*	035954	081616	081618
B	30	40	40	50
H	30	40	40	50
L	60	80	90	120
N	12	14	17	21
Serration	1/16" x 90°	1/16" x 90°	1/16" x 90°	1/16" x 90°
a	29	43	53	70
b	16	22	22	28
kg/set	0.9	2.0	2.7	5.1

* Id. No. is per piece. 1 set = 3 pieces.

NST T-nuts



Chuck Type	STP 125	STP 160	STP 240	STP 280
T-nut type	NST 12	NST 14	NST 17-4	NST 21-5
T-nut Id. No.	089810*	013863*	013864*	033429*
N	12	14	17	21
H	21.5	26.5	26.5	30
h	7.5	9.5	9.5	11
G	M8	M10	M12	M16
Bolt ISO 4762 12.9	M8 x 30	M10 x 35	M12 x 35	M16 x 40
Tighten torque	30	50	70	150

* Id. No. is per piece. 1 set = 6 pieces.



M2-PB

Multiple fixture
with 2 chucks

M4-PB

Multiple fixture
with 4 chucks

Multiple chucks on fixture, pneumatic Ø 130 - 315 mm

- 2 or 3 jaws (PB-D/PB-M)
- 3 jaws (PB-C)



Application/customer benefits

- For milling machines/machining centers to clamp and machine multiple pieces

M2-PB: Multiple fixture with 2 chucks type PB-D, PB-C oder PB-M

M4-PB: Multiple fixture with 4 chucks type PB-D, PB-C oder PB-M

Technical features

(more features on chucks see general catalog page 374)

- The basic model needs separate circuits to operate the chucks singularly.

1st option: SAB safety unit with non-return valve for every chuck

2nd option: single non-return valve to operate all chucks simultaneously, with coupling unit to repressurize the fixtures after the storage of the pallets.

3rd option: every chuck can be equipped with a spring loaded clamping unit (internal or external clamping), to hold the workpieces during the pallet transfer.

Standard equipment

Multiple chuck on fixture
1 set of soft blank top jaws and
1 set T-nuts with bolts
(PB-C excluded)
Grease gun

Ordering example

Multiple chuck on fixture M2-PBC 250
(3 jaws)
or
Multiple chuck on fixture M4-PBD 165
(2 jaws)

Technical data

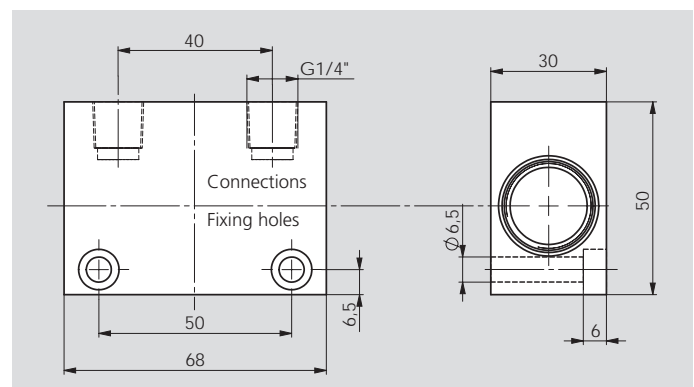
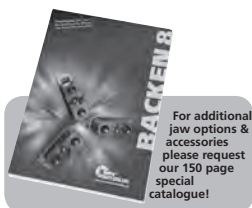
SMW-AUTOBLOK Type		M2-PB 130 M4-PB 130	M2-PB 165 M4-PB 165	M2-PB 210 M4-PB 210	M2-PB 250 M4-PB 250	M2-PB 315 M4-PB 315
Chucks radial jaw stroke	mm	3.2	3.6	4.4	5	6.3
Chucks radial jaw stroke PBL-D2 (2 jaws)*	mm	6	6.8	8.4	9.7	12
Actuating cylinder piston area	cm ²	82	143	236	358	548
Max. operating pressure	bar	7	7	7	7	7
Chucks gripping force at 6 bar	kN	14	24	42	64	98
Chucks gripping force at 6 bar PBL-D2 (2 jaws)*	kN	9	16	26	39	60
M2-PB weight (without top jaws)	kg	29.5	49	83	121	172

* The 2 jaw fixture is available with serrated master jaws (inch or metric) and long stroke only

Option for the M2-PB and M4-PB fixtures
Safety unit that maintains a constant pressure inside the cylinder which maintains a steady clamping force even in case of a drop or lack of line pressure.

SAB

Safety unit with double non-return valve
Id. No. 27581620



Multiple chucks on fixture, pneumatic Ø 130 - 315 mm

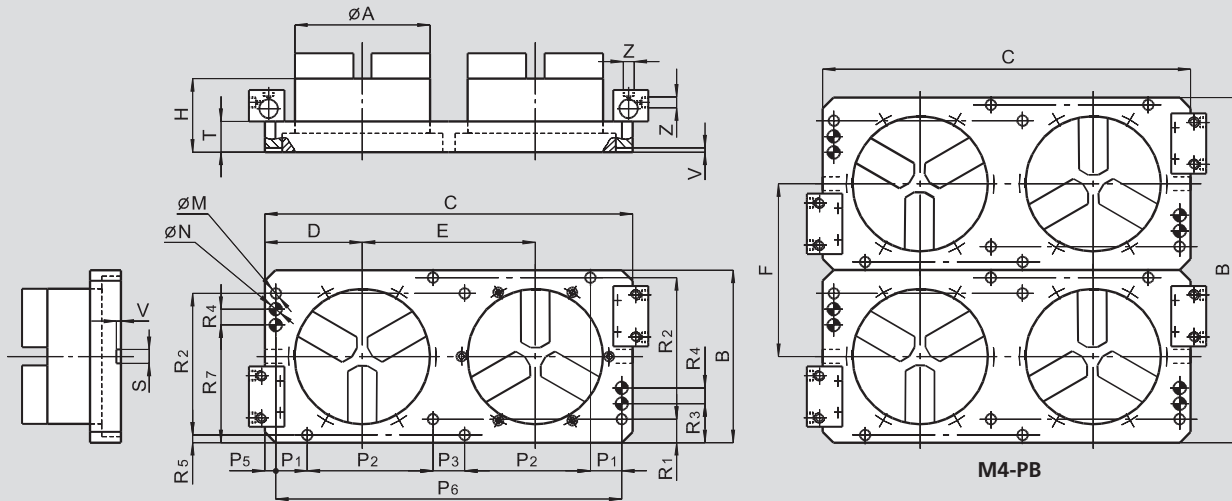
- 2 or 3 jaws (PB-D/PB-M)
- 3 jaws (PB-C)

M2-PB

Multiple fixture
with 2 chucks

M4-PB

Multiple fixture
with 4 chucks



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

M2-PB dimensions

SMW-AUTOBLOK Type			M2-PB 130	M2-PB 165	M2-PB 210	M2-PB 250	M2-PB 315
Chuck diameter	A	mm	135	170	215	260	315
	B	mm	198	224	274	324	374
	C	mm	400	460	585	660	780
	D	mm	107.5	131	155	175	205
	E	mm	185	223	275	310	370
	H	mm	89	100	117	127	141
	M	mm	17	17	17	17	17
Fixing holes diameter	N H8	mm	20	20	20	20	20
Reference pin holes	P1	mm	-	50	50	50	50
	P2	mm	150	150	200	250	300
	P3	mm	50	50	50	-	-
	P5	mm	25	17.5	17.5	30	40
	P6	mm	350	460	550	600	700
	R1	mm	24	37	37	37	37
	R2	mm	150	175	225	275	325
	R3	mm	24	62	62	62	62
	R4	mm	-	25	25	25	25
	R5	mm	24	12	12	12	12
	R7	mm	174	137	187	237	287
S	mm	14	18	18	18	18	
T	mm	39	44	49	54	54	
V	mm	6	6	6	6	6	
Pneumatic connections	Z	inch	R1/4"	R1/4"	R1/4"	R1/4"	R1/4"

M4-PB dimensions

SMW-AUTOBLOK Type			M4-PB 130	M4-PB 165	M4-PB 210	M4-PB 250	M4-PB 315
Chuck diameter	A	mm	135	170	215	260	315
	B	mm	398	449	549	649	749
	C	mm	400	460	585	660	780
	D	mm	107.5	131	155	175	205
	E	mm	185	223	275	310	370
	F	mm	200	225	275	325	375
	H	mm	89	100	117	127	141
Fixing holes diameter	M	mm	17	17	17	17	17
Reference pin holes	N H8	mm	20	20	20	20	20
	P1	mm	-	50	50	50	50
	P2	mm	150	150	200	250	300
	P3	mm	50	50	50	-	-
	P5	mm	25	17.5	17.5	30	40
	P6	mm	350	460	550	600	700
	R1	mm	24	37	37	37	37
	R2	mm	150	175	225	275	325
	R3	mm	24	62	62	62	62
	R4	mm	-	25	25	25	25
	R5	mm	24	12	12	12	12
R7	mm	174	137	187	237	287	
S	mm	14	18	18	18	18	
T	mm	39	44	49	54	54	
V	mm	6	6	6	6	6	
Pneumatic connections	Z	inch	R1/4"	R1/4"	R1/4"	R1/4"	R1/4"

PBI-D

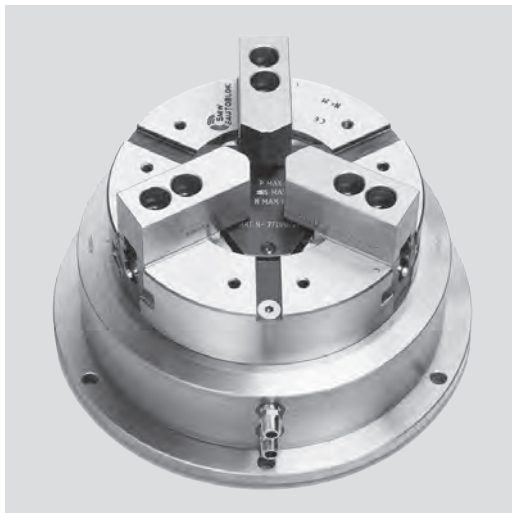
INCH serration
2 or 3 jaws

PBI-C

Tongue & groove
3 jaws

Pneumatic chuck for indexing tables Ø 165 - 315 mm

- built-in cylinder
- 2 and 3 jaws



Application/customer benefits

- Self centering rotating chuck with a pneumatic manifold used on indexing tables, not designed for constant rotation on turning machines.

PBI-D: inch serrated master jaws (1/16" x 90°)

PBI-C: tongue & groove master jaws

PBI-M: metric serrated master jaws (1.5 mm x 60°) **on request**

Technical features

- 2/3 jaw chuck with a built-in pneumatic cylinder
 - manifold for air supply
 - Case hardened body to assure highest precision and long chuck life
- Important!** Due to the friction between fixed manifold and rotating central body, the indexing table must provide a higher rotation torque than the one shown in the schedule below!

Standard equipment

Chuck unit
 1 set of soft blank top jaws
 (PBI-C excluded)
 1 set T-nuts with bolts
 (PBI-C excluded)
 Grease gun

Ordering example

3 jaw chuck PBI-C 250
 or
 2 jaw chuck PBI-D 165

Technical data

SMW-AUTOBLOK Type		PBI-D 165 PBI-C 165	PBI-D 210 PBI-C 210	PBI-D 250 PBI-C 250	PBI-D 315 PBI-C 315
Radial jaw stroke	mm	3.6	4.4	5	6.3
Radial jaw stroke PBIL-D2 (2 jaws)*	mm	6.8	8.4	9.7	12
Piston area	cm ²	143	236	358	548
Max. operating pressure	bar	7	7	7	7
Gripping force at 6 bar	kN	24	42	64	98
Gripping force at 6 bar PBIL-D2 (2 jaws)*	kN	16	26	39	60
Torque Md	Nm	40	60	85	120
Weight (without top jaws)	kg	23	38	56	82

* The 2 jaw fixture is available with serrated master jaws (inch or metric) and long stroke only.



Pneumatic chuck for indexing tables Ø 165 - 315 mm

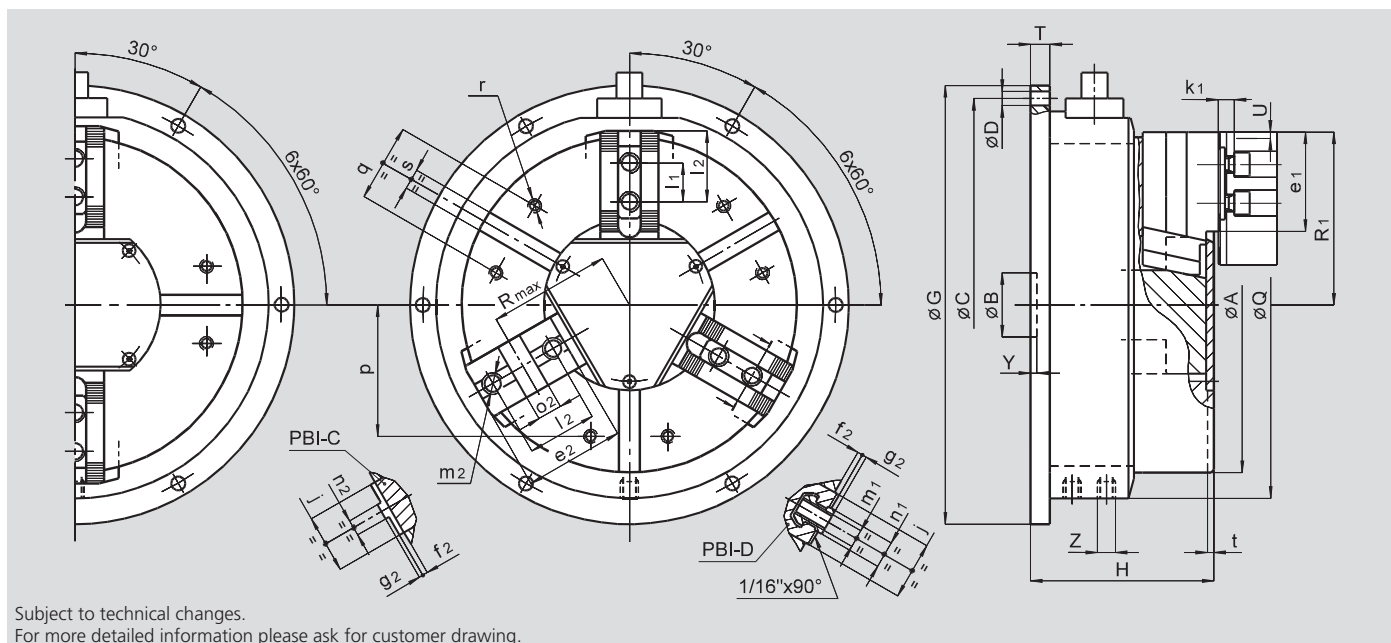
- built-in cylinder
- 2 and 3 jaws

PBI-D

INCH serration
2 or 3 jaws

PBI-C

Tongue & groove
3 jaws



Common dimensions

SMW-AUTOBLOK Type		PBI-D 165 PBI-C 165	PBI-D 210 PBI-C 210	PBI-D 250 PBI-C 250	PBI-D 315 PBI-C 315	
	A	mm	170	215	260	315
	B	mm	30	35	50	50
Fixing holes circle	C	mm	225	280	320	390
Fixing holes diameter	D	mm	9	11	11	13
	G	mm	240	300	340	415
	H	mm	114	132	140	145
	Q	mm	210	260	300	365
	T	mm	10	12	14	14
Radial jaw stroke (3 jaws)	U	mm	3.6	4.4	5	6.3
Radial jaw stroke PBI-D2 (2 jaws)	U	mm	6.8	8.4	9.7	12
	Y	mm	5	5	5	5
Pneumatic connections	Z	inch	R1/4"	R1/4"	R1/4"	R1/4"
	j	mm	30	36	45	45
	k1	mm	10	11	12	12
	p	mm	65	80	102	120
	q	mm	36	45	60	60
	r	mm	M8	M8	M10	M10
	s H12	mm	16	16	16	16
	t	mm	5	5	5	5

PBI-D and PBI-D2 fixtures dimensions

SMW-AUTOBLOK Type		PBI-D 165	PBI-D 210	PBI-D 250	PBI-D 315	
	e1	mm	48	60	77	99
	f1	mm	4	3	4	4
	g1	mm	2.5	2.5	3.5	3.5
	l1	mm	16.5	23	30	30
T-nut position min./max.	l3	mm	24/40	33/50	43/62	43/84
	m1	mm	M10	M12	M16	M16
	n1 h8	mm	14	17	21	21
Chuck open (3 jaws)	R1	mm	89	110	134	162
Chuck open PBI-D2 (2 jaws)	R1	mm	92	114	138.5	168

PBI-C fixtures dimensions (available only in 3 jaw chuck version)

SMW-AUTOBLOK Type		PBI-C 165	PBI-C 210	PBI-C 250	PBI-C 315	
	e2	mm	54	71	77	99
	f2	mm	4	4	4	4
	g2	mm	3	3	3	3
	l2	mm	38	44.4	54	63.5
	m2	mm	M10	M12	M16	M16
	n2 h8	mm	7.94	7.94	12.70	12.70
	o2 H7	mm	12.68	12.68	19.03	19.03
Chuck open	R1	mm	89	110	134	162
Chuck open	Rmax	mm	62	77	94	109