

WPS Workpiece positioning system

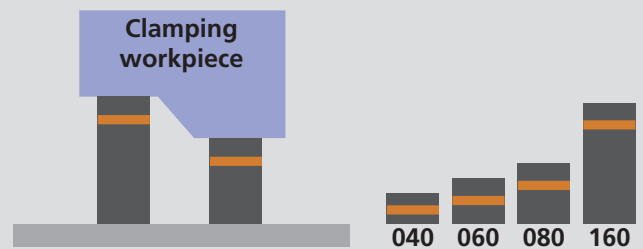
► Convincing advantages

Best accessibility



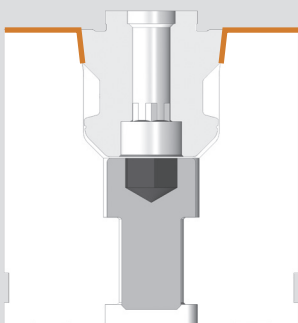
- Best accessibility, ideal for the 5-axis machining without interference.

Modular kit



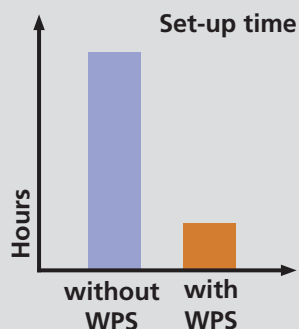
- Modular kit with a wide range of accessories ensures the flexible clamping of nearly every workpiece geometry. Furthermore, the clamping pins are interchangeable to the proven zero point clamping system APS.

Highest repeatability, extremely strong clamping



- The precise taper / face support ensures the interlocking and safe clamping with highest holding forces and maximum stiffness.

Increased efficiency



- Huge reduction of the set-up times and maximum efficiency. No other clamping devices are necessary.

Fully sealed



- Clamping modules are hermetic sealed, therefore low maintenance. The availability of the machine is increased.

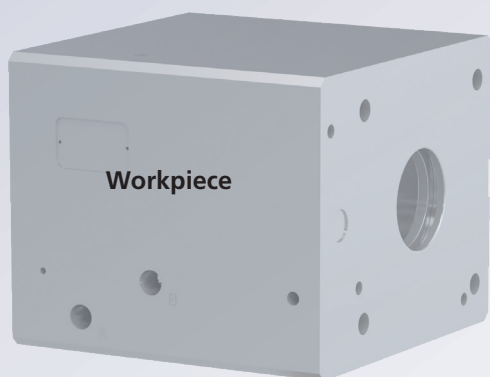
► Function

1 Clamping pins



Clamping pins WPS with adapter
for fit dia. 18, 20, 22, 24 and 25 mm
thread M12 and M16

- SMW-AUTOBLOK clamping pins for the clamping of workpieces or the top mounting are case hardened. The clamping pins are protected against wear and rust. The accurate manufacturing ensures highest centering precision. Due to the weight of the workpiece and the clamping situation different versions are available as a standard.



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2 Mounting screw

- Mounting screws for the clamping modules with thread M12 or M16 for maximum stability and stiffness.

3 Reducing washer

- Reducing washer for the mounting of the clamping modules for mounting screw M10 or M12.

4 Clamping modules

- Clamping modules with different heights (40, 60, 80 and 160 mm) guarantee the clamping of almost all workpiece geometries. The clamping modules can be mounted either on a grid plate or by means of a mounting flange directly onto the machine table.

5 Single quick-actuation

- Thanks to the single quick-actuation, the modules can be opened and closed by only 3.5 rotations. The actuation is done manual and without any media.
- The ideal accessibility of the actuation ensures a comfortable handling and use of the clamping system.

6 Adaption washers

- The adaption washers are available in different diameters (standard 25 mm). The clamping modules can be positioned exactly on the grid plate.

7 Grid plate

- The clamping modules will be mounted on the grid plate. Grid plates are available in different standard versions. Therefore, different workpiece configurations are possible. The grid plates are manufactured from tempered quality steel and are protected against wear and rust.

WPS Workpiece positioning system

Clamping pins Basic WPS

Clamping pins	Id. No.
Clamping pins Basic M12 (without adapter)	460122
Clamping pins Basic M16 (without adapter)	460123
Clamping pins Basic 7/16" (without adapter)	460108
Clamping pins Basic 5/8" (without adapter)	460109

Adapter

Ø	Type	Id. No.	Type	Id. No.	Type	Id. No.
18*	A	460124	B	460341	C	460129
20	A	460125	B	460342	C	460130
22	A	460126	B	460343	C	460131
24	A	460127	B	460344	C	460132
25	A	460128	B	460345	C	460133

Detail description see page 89

* Use only together with Clamping pins M12 / 7/16"

Clamping module with flange

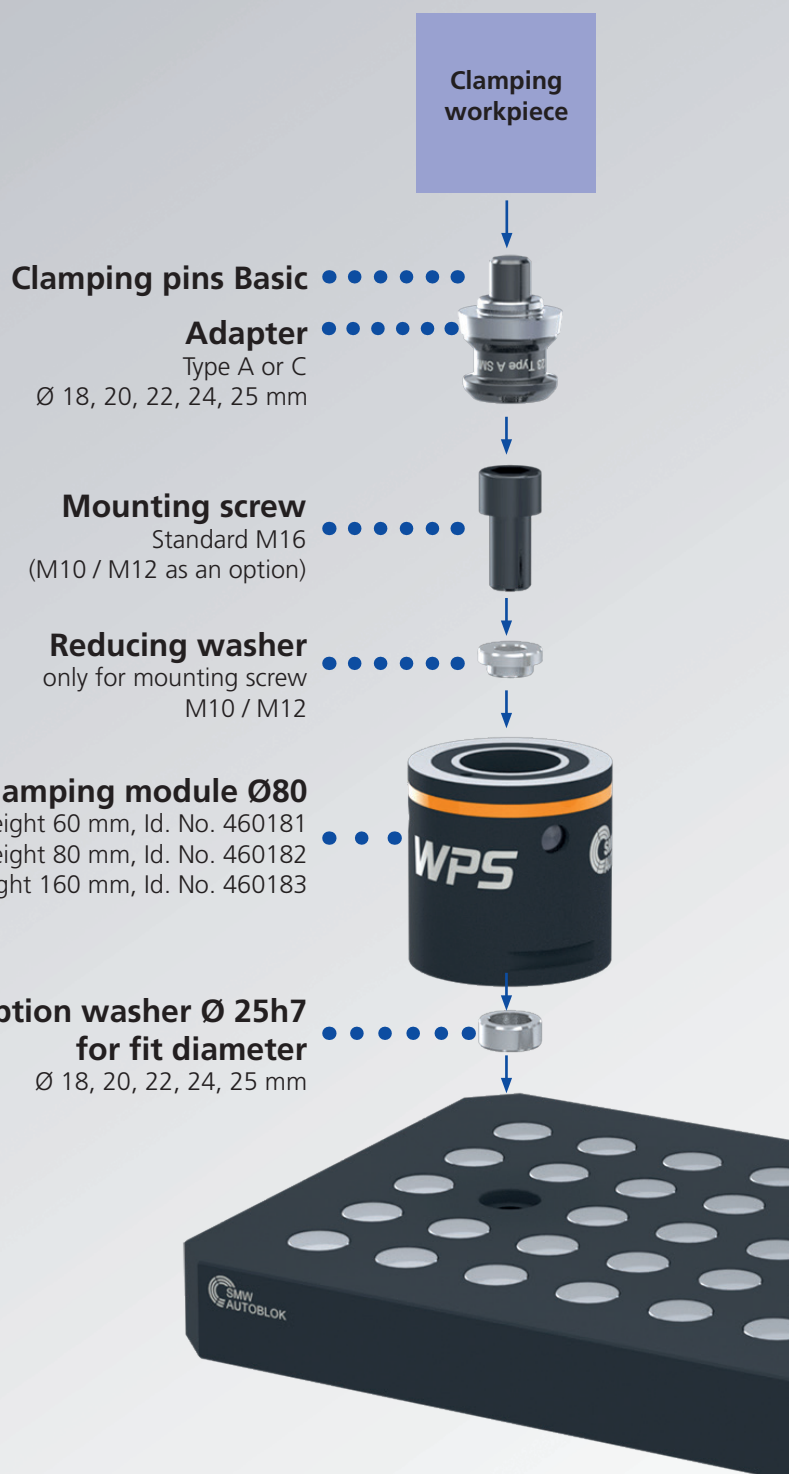
Height 40 mm
Id. No. 460180



Adaption washer Ø 25h7 on [D] pass diameter

Adaption washer Ø	Id. No.
Ø D 18	460135
Ø D 20	460136
Ø D 22	460137
Ø D 24	460138
Ø D 25	460139

For detailed description see page 83



Clamping
workpiece



Reduction Ø 32

Detail description see page 84



Further clamping modules Ø 80 mountable on top

Height 60 mm, Id. No. 460181

Height 80 mm, Id. No. 460182

Height 160 mm, Id. No. 460183

with mounting kit (order separate):

Mounting kit WPS height 60 mm, Id. No. 460261

Mounting kit WPS height 80 mm, Id. No. 460262

Mounting kit WPS height 160 mm, Id. No. 460263

(Mounting kit consisting of clamping pin and mounting screw)



Mounting with reduction for smaller screws M10 and M12

Mounting screw / reduction for M10 and M12	Screw M10	Reduction M10	Screw M12	Reduction M12
WPS height 60 mm, bolt length 40 mm	207780	460206	207779	460207
WPS height 80 mm, bolt length 50 mm	010814	460204	010212	460205
WPS height 160 mm, bolt length 130 mm	019363	460204	010599	460205

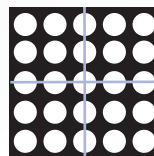
Detail description see page 83

Grid plates (examples)

Grid 50 and 100 mm
Material 1.2311/1.2312

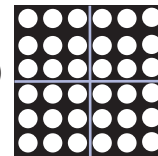
Grid (in center)

Positioning holes Ø25H7,
thread M12 / 16



Grid (not in center)

Positioning holes Ø25H7,
thread M12 / 16



Grid	Length	Width
50 / 100	500	500
50 / 100	600	600
50 / 100	800	800
50 / 100	1000	500
50 / 100	1000	800
50 / 100	1200	800
50 / 100	1000	1000

Special versions on request

Grid	Length	Width
50 / 100	600	400
50 / 100	500	500
50 / 100	600	500
50 / 100	600	800
50 / 100	1000	500
50 / 100	1000	600
50 / 100	1000	800
50 / 100	1000	1000

Special versions on request



Manual zero point clamping system for workpiece direct clamping

- Single quick-actuation for the rapid opening and closing
- Fully sealed



proofline® series
fully sealed – low maintenance

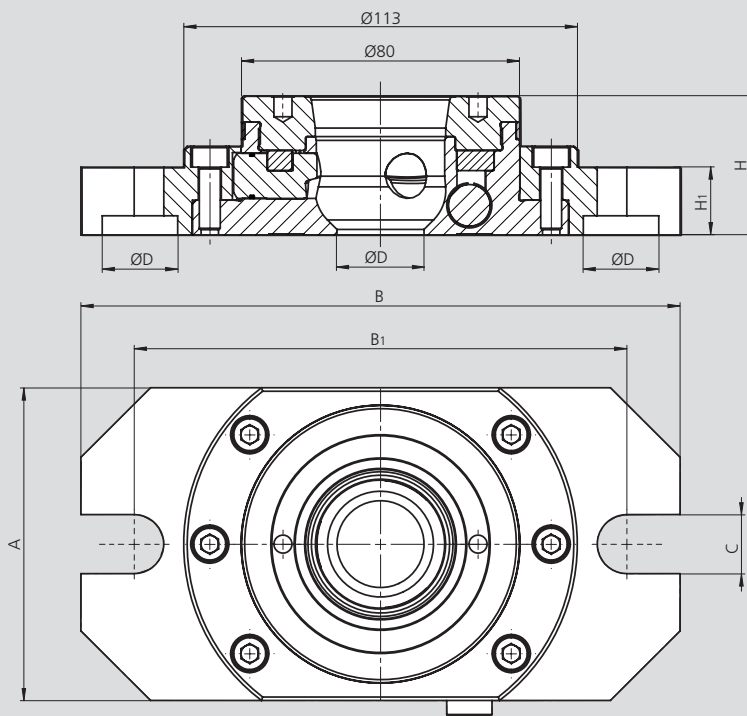
Application/customer benefits

- Huge reduction of set-up times for highest efficiency
- Safe workpiece clamping with maximum holding forces and highest repeatability
- Ideal for 5-axis machining
- Single quick-actuation for the rapid opening and closing of the modules with only 3.5 rotations
- Flexible configurations for customized use
- Interchangeable to the proven zero point system APS

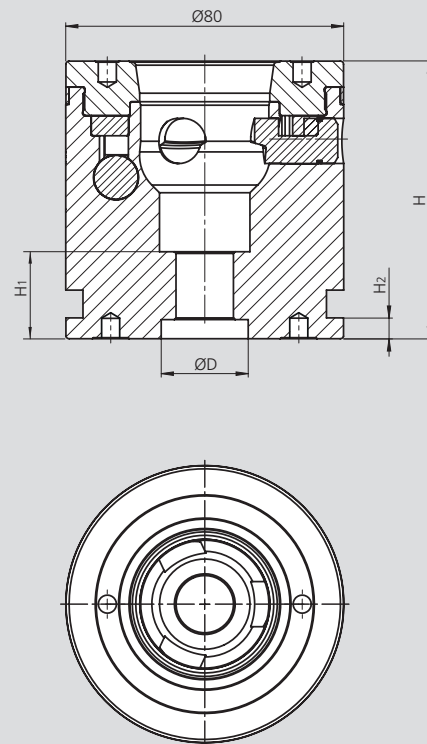
Technical features

- Diameter 80 mm
- Pull-in force 15 kN
- Max. torque 15 Nm
- Repeatability < 0.005 mm
- Holding force 50 / 75 kN (M12 / M16) depending on thread of clamping pin
- 3 clamping slides for maximum hold while clamping
- **proofline®** = fully sealed - low maintenance

WPS 080-040



WPS 080-060, 080-080, 080-160



Subject to technical changes.

Technical data

SMW-AUTOBLOK Type	WPS 080-040 460180	WPS 080-060 460181	WPS 080-080 460182	WPS 080-100 460199	WPS 080-120 460461	WPS 080-160 460183
A	90	-	-	-	-	-
B	172	-	-	-	-	-
B1	141.4	-	-	-	-	-
C	17	-	-	-	-	-
D / Depth	Ø 25H6 / 5.5***	Ø 25H6 / 5.5	Ø 25H6 / 5.5	Ø 25H6 / 5.5	Ø 25H6 / 5.5	Ø 25H6 / 5.5
H	40 ± 0.005	60 ± 0.005	80 ± 0.005	100 ± 0.005	120 ± 0.005	160 ± 0.005
H1	19.5	21	25	45	25	105
H2	-	6	6	6	6	6
Pull-in force (kN)	15	15	15	15	15	15
Repeatability (mm)	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Holding force M12 (kN)	25* / 50*	25* / 50*	25* / 50*	25* / 50*	25* / 50*	25* / 50*
Holding force M16 (kN)	40** / 75**	40** / 75**	40** / 75**	40** / 75**	40** / 75**	40** / 75**

* Holding force for ISO 4762 M10x45 - 12.9 / Holding force for ISO 4762 M12 - 12.9 (see clamping pins)
 ** Holding force for ISO 10642 M12x55 - 10.9 / Holding force for ISO 4762 M16 - 12.9 (see clamping pins)
 *** Do not use centre hole with module 460180

Manual zero point clamping system for workpiece direct clamping

- Single quick-actuation for the rapid opening and closing
- Fully sealed

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Workpiece positioning system

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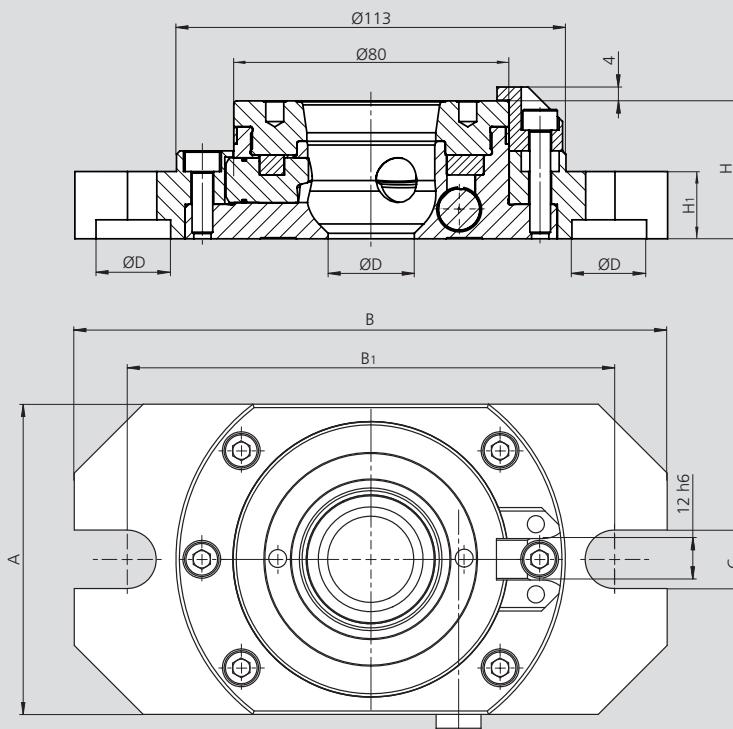
Application/customer benefits

- Huge reduction of set-up times for highest efficiency
- Safe workpiece clamping with maximum holding forces and highest repeatability
- Ideal for 5-axis machining
- Single quick-actuation for the rapid opening and closing of the modules with only 3.5 rotations
- Flexible configurations for customized use
- Interchangeable to the proven zero point system APS
- Anti rotating protection

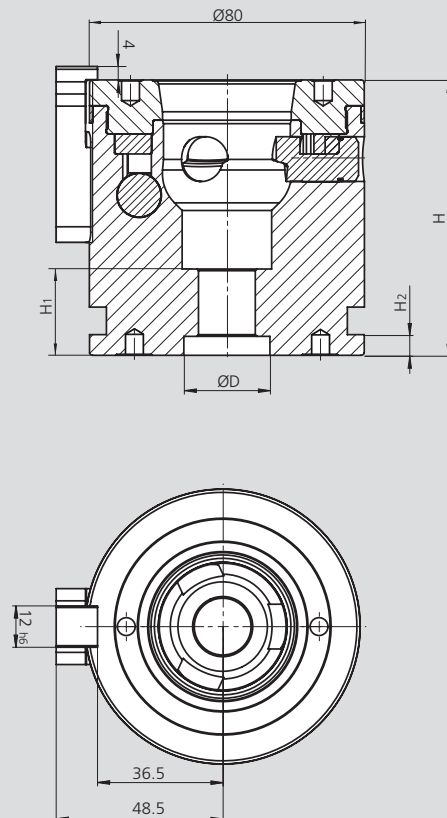
Technical features

- Diameter 80 mm
- Pull-in force 15 kN
- Max. torque 15 Nm
- Repeatability < 0.005 mm
- Holding force 50 / 75 kN (M12 / M16) depending on thread of clamping pin
- 3 clamping slides for maximum hold while clamping
- **proofline®** = fully sealed - low maintenance

WPS 080-040 Index



WPS 080-060, 080-080, 080-160 Index



Subject to technical changes.

Technical data

SMW-AUTOBLOK Type	WPS 080-040 460240	WPS 080-060 460241	WPS 080-080 460242	WPS 080-160 460243
A	90	-	-	-
B	172	-	-	-
B1	141.1	-	-	-
C	17	-	-	-
D / Depth	Ø 25H6 / 5.5***	Ø 25H6 / 5.5	Ø 25H6 / 5.5	Ø 25H6 / 5.5
H	40 ± 0.005	60 ± 0.005	80 ± 0.005	160 ± 0.005
H1	19.5	21	25	105
H2	-	6	6	6
Pull-in force (kN)	15	15	15	15
Repeatability (mm)	< 0.005	< 0.005	< 0.005	< 0.005
Holding force M12 (kN)	25* / 50*	25* / 50*	25* / 50*	25* / 50*
Holding force M16 (kN)	40** / 75**	40** / 75**	40** / 75**	40** / 75**

* Holding force for ISO 4762 M10x45 - 12.9 / Holding force for ISO 4762 M12 - 12.9 (see clamping pins)

** Holding force for ISO 10642 M12x55 - 10.9 / Holding force for ISO 4762 M16 - 12.9 (see clamping pins)

*** Do not use centre hole with module 460240

Workpiece positioning system

