Workholding Systems SCS

clamping against the fixed jaw, mechanically or hydraulically operated jaw widths 80 and 120 mm

Advantages

- Compact design
- High precision and accuracy of the manufactured workpieces by high rigidity
- High zero-point stability
- Sturdy design and good swarf protection
- Large jaw openings
- Extensive range of jaws
- Easy to maintain

Technical data

Clamping principle: **clamping against the fixed jaw**
Operation: **mechanical** with a torque wrench
hydraulical with a hydraulic power unit

SCS 80

Length of the base:	156 / 200 mm
Jaw width:	80 mm
Clamping force:	25 kN at 60 Nm
Clamping stroke:	35 / 49 mm
Max. jaw opening:	159 / 203 mm

SCS 80 H

Length of the base:	200 mm
Jaw width:	80 mm
Clamping force:	21 kN at 300 bar
Clamping stroke:	4 mm
Max. jaw opening:	155 mm

SCS 120

Length of the base:	250 / 350 mm
Jaw width:	120 mm
Clamping force:	40 kN at 100 Nm
Clamping stroke:	60 / 116 mm
Max. jaw opening:	200 / 300 mm

SCS 120 H

Length of the base:	250 mm
Jaw width:	120 mm
Clamping force:	37.5 kN at 300 bar
Clamping stroke:	4 mm
Max. jaw opening:	200 mm

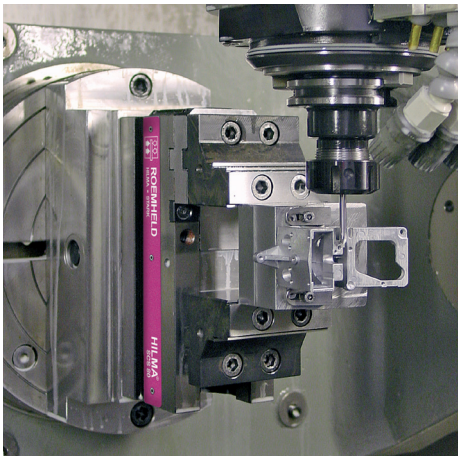
Application

The workholding systems SCS are especially advantageous for 5-axis machining.
The compact design allows a good accessibility of the tools to the workpiece. Collision-free tool paths and a 5-sided workpiece machining can be achieved with short standard tools.
Due to the good swarf protection, workholding systems SCS are particularly suitable for the use in pallet systems.
The stability of the clamping systems and the high retention force due to the use of the special grip reversible jaw with hard metal coating make pre-embossing of the workpieces superfluous.

Accessories

- Clamping jaws and accessories for mounting, positioning and operation see data sheet WS 5.460Z

Application example



Description

Workholding systems of the SCS series excel by a very compact design. Thanks to the adjusting spindle arranged in the upper part of the housing, deformation in the base during clamping is reduced.
All essential components are made of steel.

For workholding systems SCS, a wide range of clamping jaws is available
(see data sheet WS 5.460Z).

Customised versions

Workholding systems SCS can also be delivered as customised versions.
For example in other lengths, with individual mounting holes or with holes for a zero point clamping system.
Please contact us.

Consultation

Our experts will be pleased to advise you also on site, and work with you to find the optimum clamping solution.
Extensive information such as drawings and CAD models are available on request.

Versions

Mechanically operated

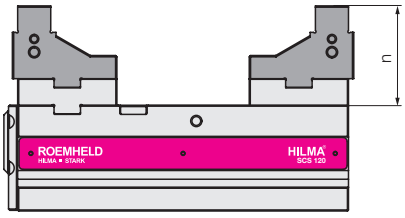
The movable clamping jaw is displaced by a threaded spindle which is also used to build-up the clamping force.
A torque wrench is used for exact and reproducible clamping force adjustment.

Hydraulically operated

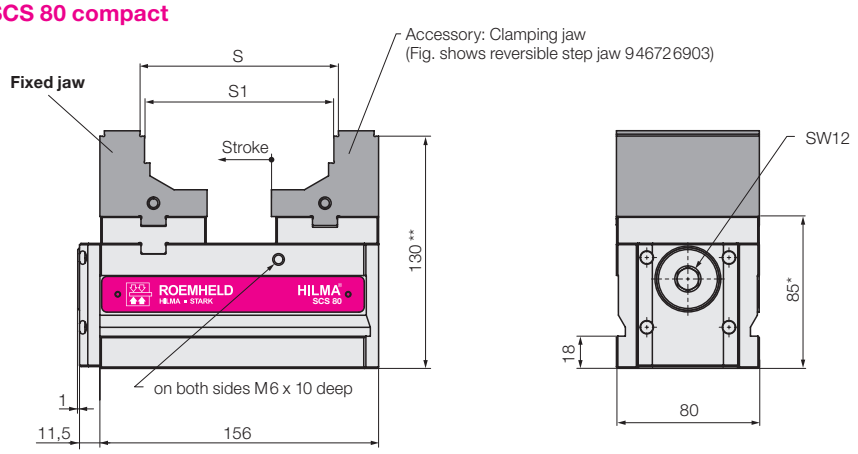
Hydraulically operated versions are single acting. Clamping is effected by hydraulic pressure, unclamping by spring force.

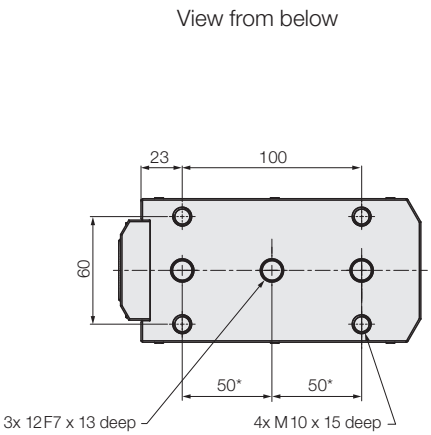
*Important note

The specified clamping forces apply to a clamping height (n) of 30 mm.
For higher clamping heights, the clamping forces are reduced.

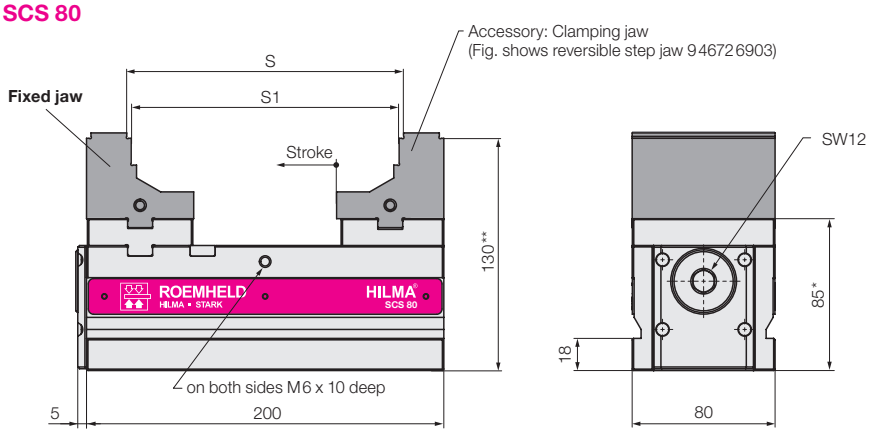


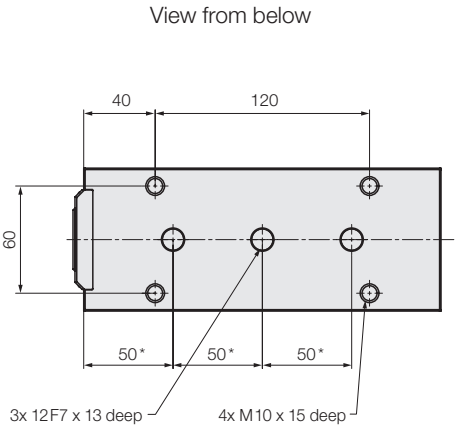
SCS 80 compact





SCS 80



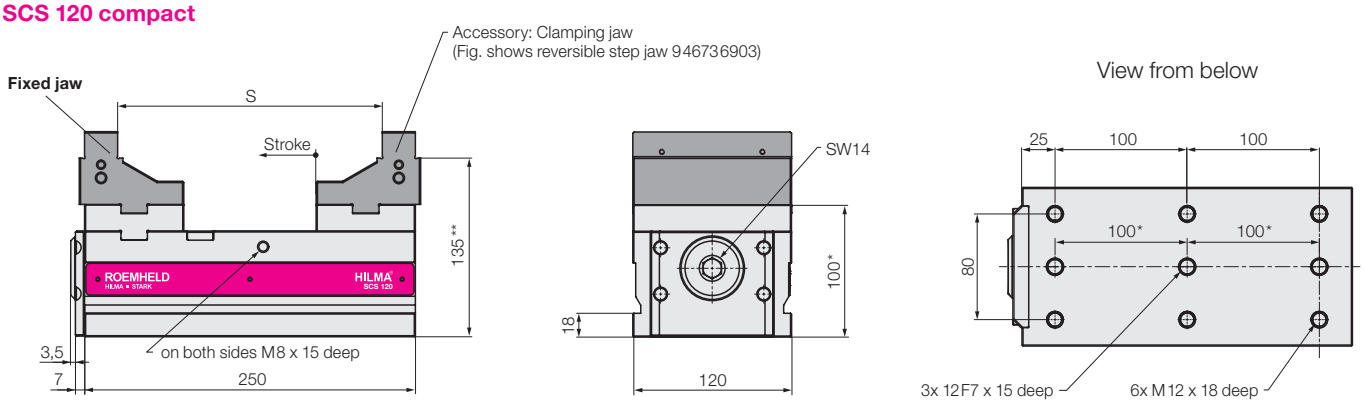


* Tolerance ±0.01 mm
** Tolerance ±0.02 mm
Dimensions in [mm]

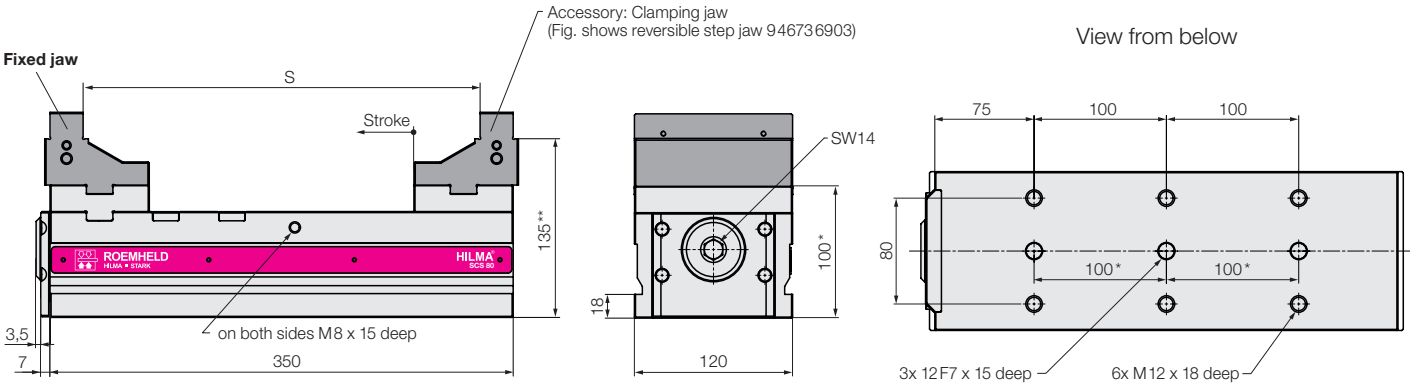
Series		SCS 80 compact	SCS 80
Clamping principle		**Fixed jaw**	**Fixed jaw**
Operation		**mechanical**	**mechanical**
Clamping force / torque	[kN/Nm]	25/60	25/60
Repetitive clamping accuracy	[mm]	± 0.01	± 0.01
Stroke	[mm]	35	49
Clamping range S [1)]	[mm]	6 – 111	6 – 155
Clamping range S1 [1)]	[mm]	71 – 106	71 – 150
Weight without clamping jaws	[kg]	6	8.8
Part no. without clamping jaws		**946720101**	**946720201**

[1)] depending on the used clamping jaw, see data sheet WS 5.460Z

SCS 120 compact



SCS 120

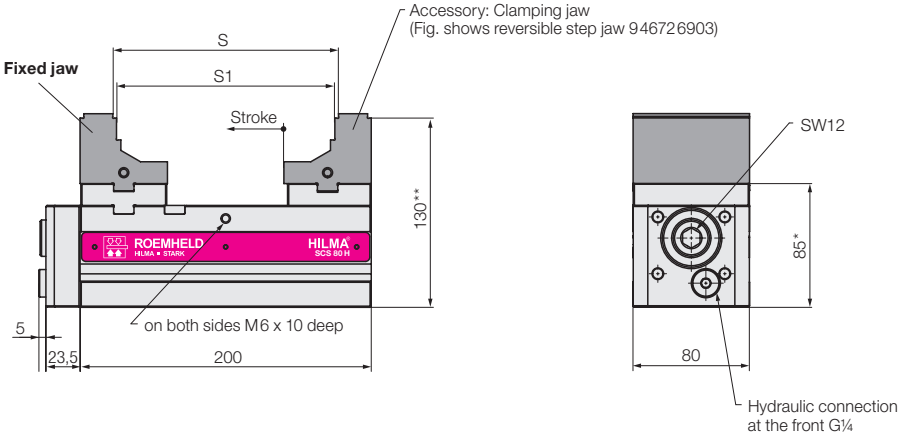


* Tolerance ±0.01 mm
** Tolerance ±0.02 mm
Dimensions in [mm]

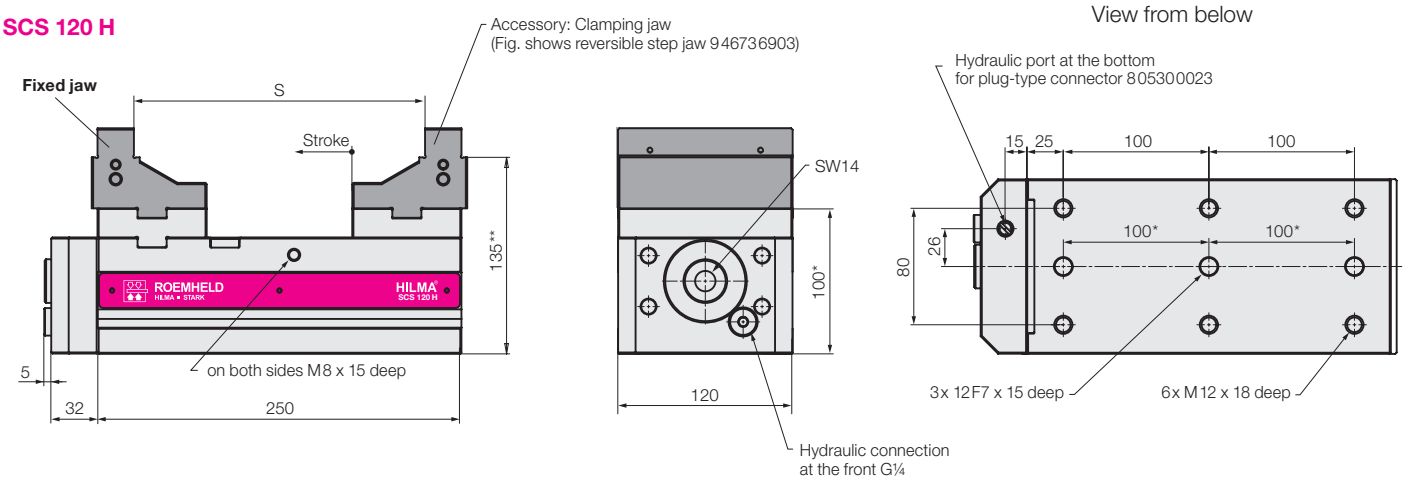
Series		SCS 120 compact	SCS 120
Clamping principle		**Fixed jaw**	**Fixed jaw**
Operation		**mechanical**	**mechanical**
Clamping force / torque	[kN/Nm]	40/100	40/100
Repetitive clamping accuracy	[mm]	± 0.01	± 0.01
Stroke	[mm]	60	116
Clamping range S[1)]	[mm]	9 – 200	9 – 300
Weight without clamping jaws	[kg]	15.4	21.6
Part no. without clamping jaws		**946730101**	**946730201**

[1)] depending on the used clamping jaw, see data sheet WS 5.460Z

SCS 80 H



SCS 120 H



* Tolerance ±0.01 mm
** Tolerance ±0.02 mm
Dimensions in [mm]

Hydraulic connection optionally at the bottom with plug-type connector Ø10 or G1/4 at the front.

Series		SCS 80 H	SCS 120 H
Clamping principle		**Fixed jaw**	**Fixed jaw**
Operation		**hydraulic**	**hydraulic**
Clamping force / operating pressure	[kN/bar]	21/300	37.5/300
Clamping stroke, hydraulic	[mm]	4	4
Repetitive clamping accuracy	[mm]	± 0.01	± 0.01
Stroke	[mm]	45	50
Clamping range S[1)]	[mm]	6 – 155	9 – 200
Clamping range S1[1)]	[mm]	71 – 150	–
Weight without clamping jaws	[kg]	8.8	15.4
Part no. without clamping jaws		**946820101**	**946830101**

[1)] depending on the used clamping jaw, see data sheet WS 5.460Z