

## Safety clamping cylinder



Our safety clamping cylinder solves a variety of clamping problems that could otherwise be risky, and it does this without having to resort to traditional safety devices. Thus, it is possible to realize even greater clamping strokes without running the risk of getting hurt.

The cylinder operates according to a principle of clamping only flat surfaces or flat surfaces that have a deviation of up to 2°. The permissible deviation of 2° was established in collaboration with the BIA (BG Institute for Occupational Safety). The BIA was also responsible for signing off on the approval inspection for the cylinder.

**This means we are the first company to be able to offer you a clamping cylinder that has been accepted and certified by the BIA and has received approval ratings for clamping without using safety devices.**

The streamlined cylinder's design keeps costs in check so that it is only slightly more expensive than other clamping cylinders currently on the market. Its simple design means that it works properly every time.

Customized clamping pieces are available for clamping work pieces whose surface deviation is greater than  $2^\circ$  or even stepped clamping surfaces. Thus, almost every conceivable work piece can be clamped properly.

Cylinder size ranges from 40 mm and 63 mm in double-acting and single-acting versions.

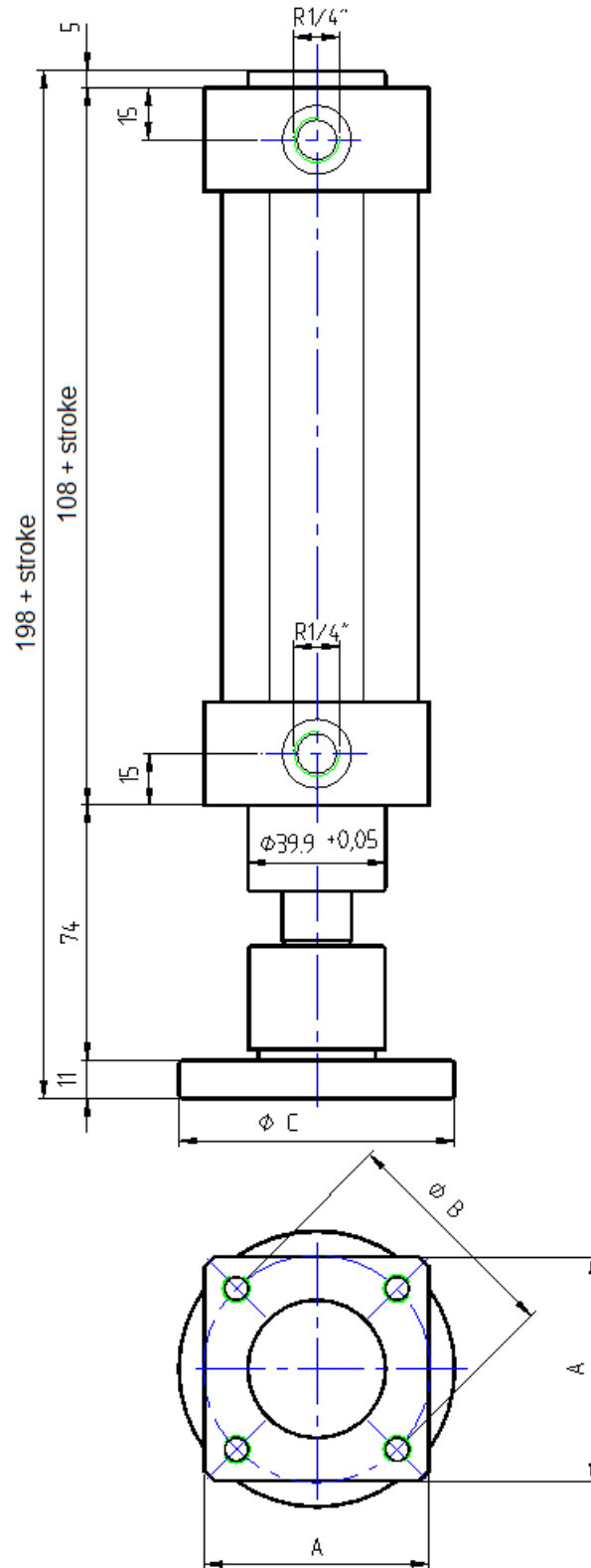
DW = Double-acting

EW = Single-acting

Design and operation:

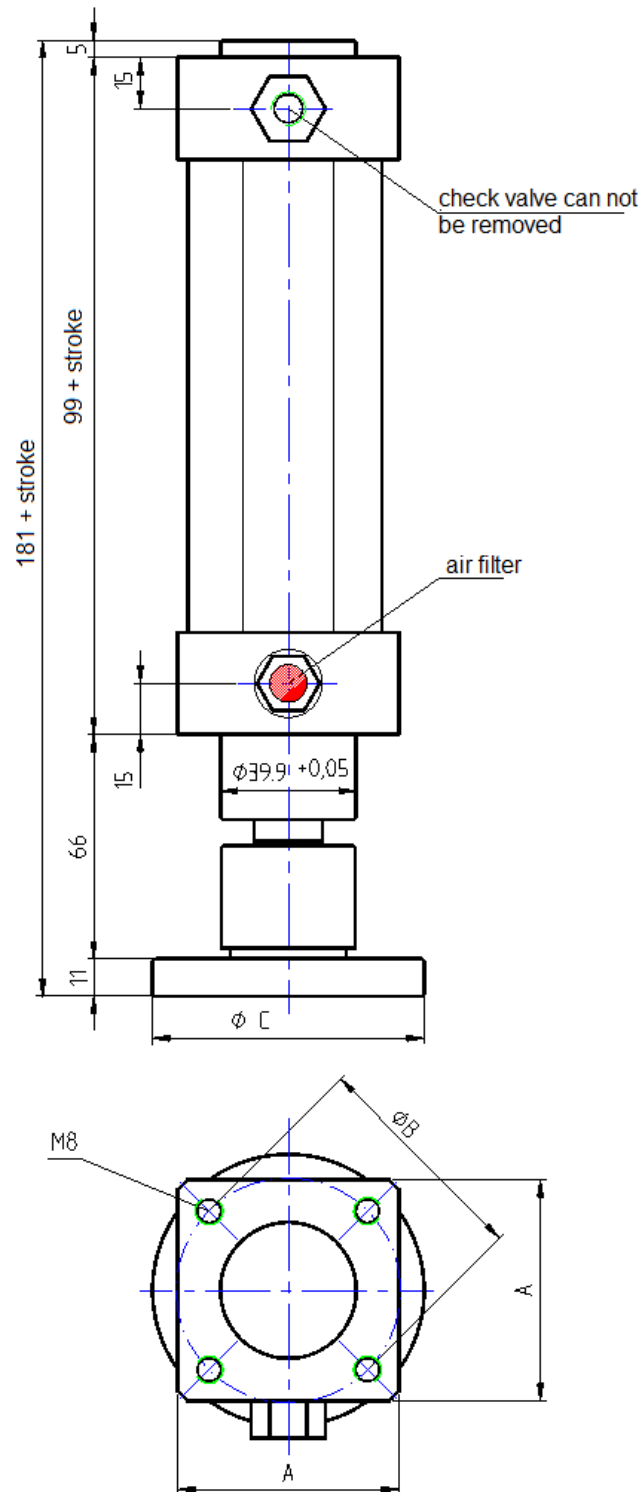
- Head cover, cylinder tube and clamping head are made of anodized aluminium; the other parts are made from corrosion-resistant material.
- The clamping plate is custom-manufactured according to the needs of the user.
- High-quality bearings and sealing materials ensure maintenance-free operation and long service life.
- For technical reasons, the cylinder only should be operated using air that is free of oil, and is clean and dry.

## Safety clamping cylinder DW



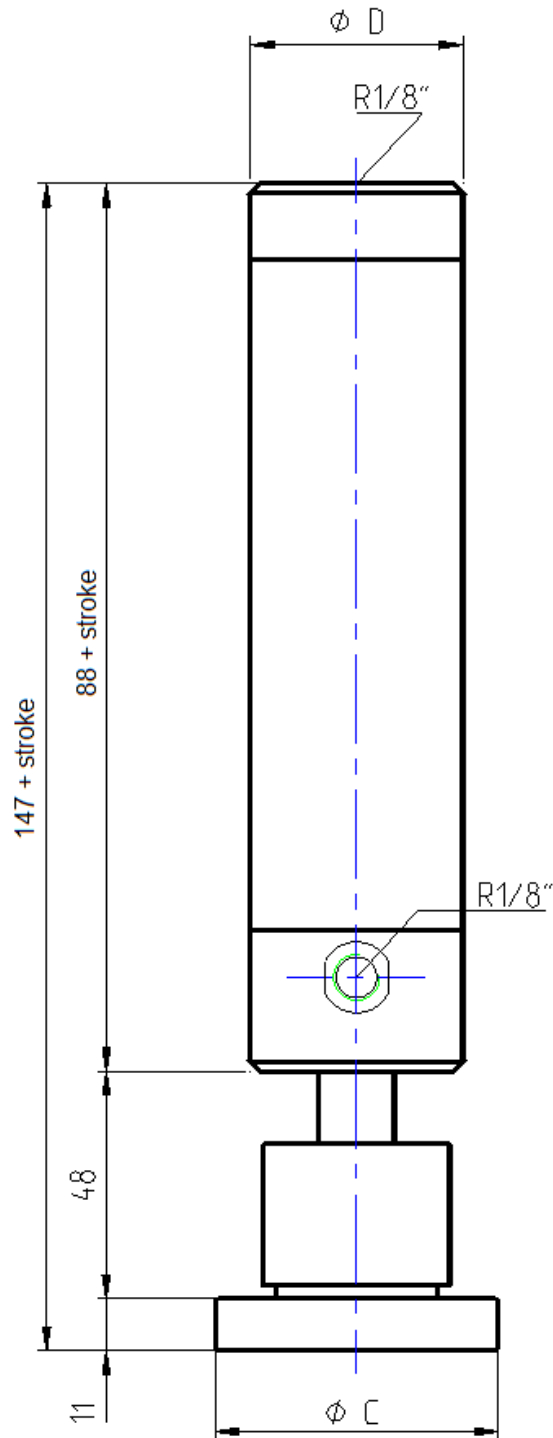
Size	A	Ø B	Ø C	Stroke
50 DW	65 mm	66 mm	min 80 mm	up to 40 mm
63 DW	75 mm	80,6 mm	min 80 mm	up to 40 mm

## Safety clamping cylinder EW



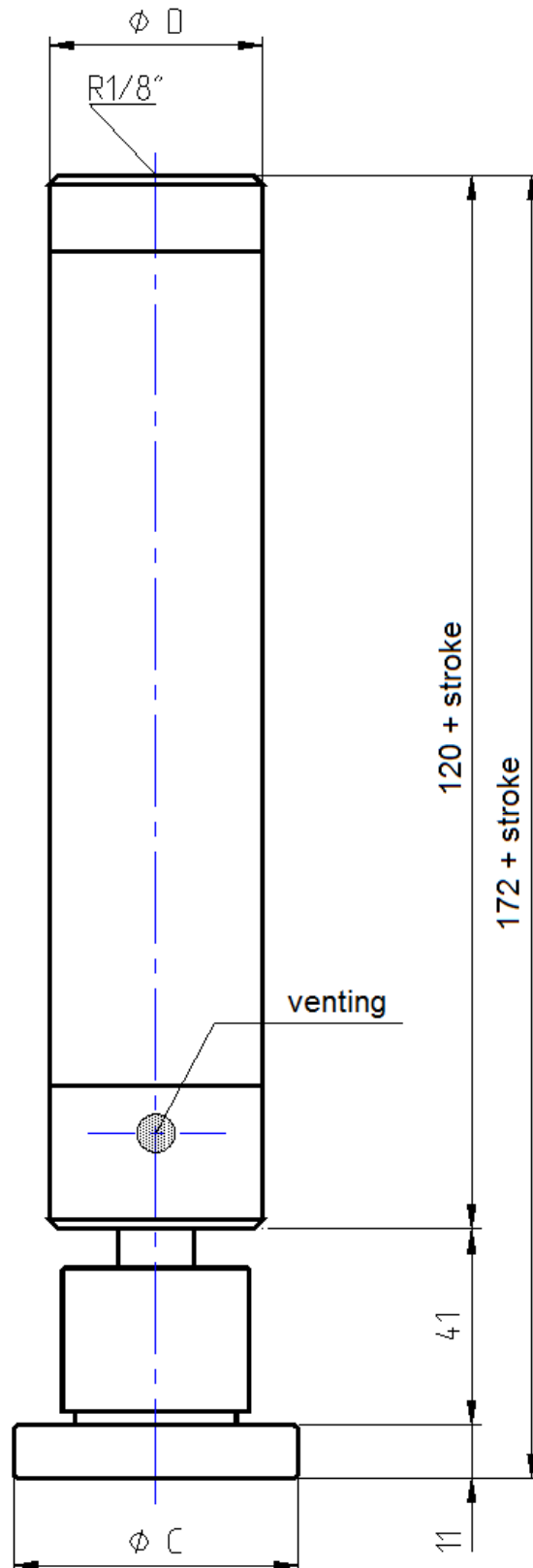
Size	A	Ø B	Ø C	Stroke
50 EW	65 mm	66 mm	min 80 mm	up to 40 mm to max. 100 mm
63 EW	75 mm	80,6 mm	min 80 mm	up to 40 mm to max. 100 mm

## Round safety clamping cylinder DW



Size	$\varnothing D$	$\varnothing C$	Stroke
40 DW	45 mm	min 60 mm	40 mm
50 DW	55 mm	min 80 mm	40 mm

## Round safety clamping cylinder EW



Size	$\text{Ø D}$	$\text{Ø C}$	Stroke
40 EW	45 mm	min. $\text{Ø 60}$	up to 40 mm to max. 80 mm
50 EW	55 mm	min. $\text{Ø 80}$	up to 40 mm to max. 100 mm

certificate  
no. **HO 171040**  
dated 2017-08-17

Translation In any case, the German original shall prevail.

## DGUV Test Certificate

Name and address of the holder of the certificate: (customer) **SOMATEC  
Klaus Mayer  
Gewerbestraße 19  
88636 Illmensee**

Product designation: **Pneumatic safety clamping cylinder**

Type: 40x40 bis 40x400, 50x40 bis 50x400, 63x40 bis 63x400  
EW: single-action cylinder; DW: double-action cylinder

Testing based on: **GS-HO-01: 08.2013 Woodworking machines**

Test report: **117006**

Further details: Intended purpose:  
Clamping of workpieces.

Follow-up certificate to no. HO 121112 dated 2012-11-09.

The type tested complies with the test specified above.

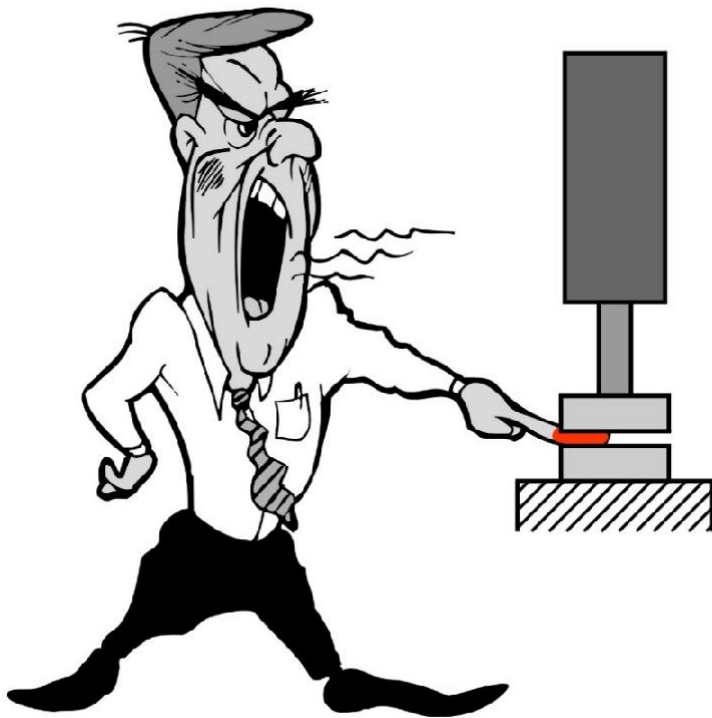
The holder of the certificate is entitled to affix the DGUV Test mark shown overleaf to the products complying with the type tested.

The present certificate including the right to affix the DGUV Test mark is valid until: **2022-08-16**

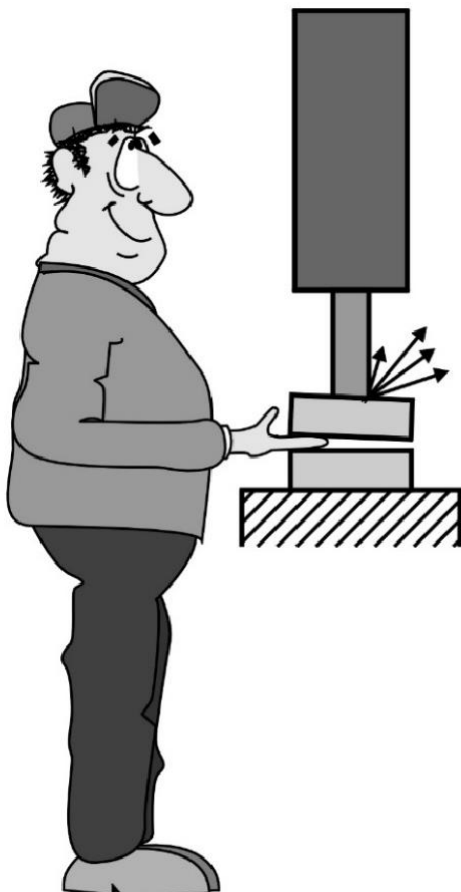
Further provisions concerning the validity, the extension of the validity and other conditions are laid down in the Rules of Procedure for Testing and Certification.

  
Frank Hagedorn  


# Mastery of crushing forces during clamping



conventional clamping cylinder



Safety clamping cylinder

