Pneumatic power clamps are especially suitable for clamping elements during welding, in the automotive industry or where it is necessary that the clamp does not take up a lot of space. Advantage of the clamp is that the parts moving rectilinearly are covered and are thereby protected from flying irons and dust. After clamping, the clamp is mechanically secured and there is no risk of loosening in the event of a compressed air failure.

Min. pressure	0,4 MPa
Max. pressure	0,6 MPa
Ambient temp.	+5°C to +45°C
Working medium	modified compressed air

Piston diameter [mm]	**32**
Connections	G1/8“
Release angle [°] (depends on arm*)	105
Clamping moment (0.5 MPa) [Nm]	50
Locking torque of the clamped position [Nm]	75
Clamping force for arm length 100 mm at pressure 0,5 MPa [N]	500
Working pressure [MPa]	0,4 to 0,6
End position damping method	rubber stop (requires use of throttle valves on both threaded connections)
Recommended min. clamping/release time [s]	1
Weight [kg]	0,98 (with the arm)
Weight of the clamping arm [kg]	0,23

Order codes

18201 10 00 032 0105

Arm position		
10	90°	
20	180°	
00	without arm	

Piston diameter	
032	32 mm

Arm opening angle	
0105	105°

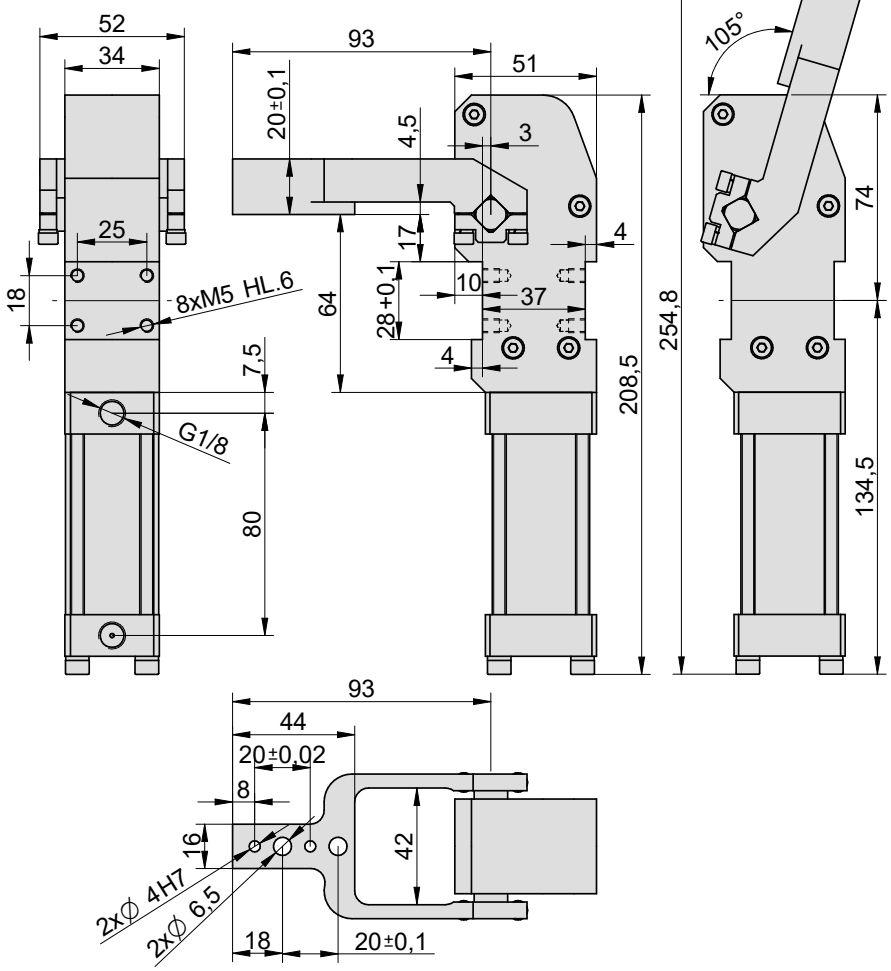
In case of a position sensing request, please contact our technical department

Caution

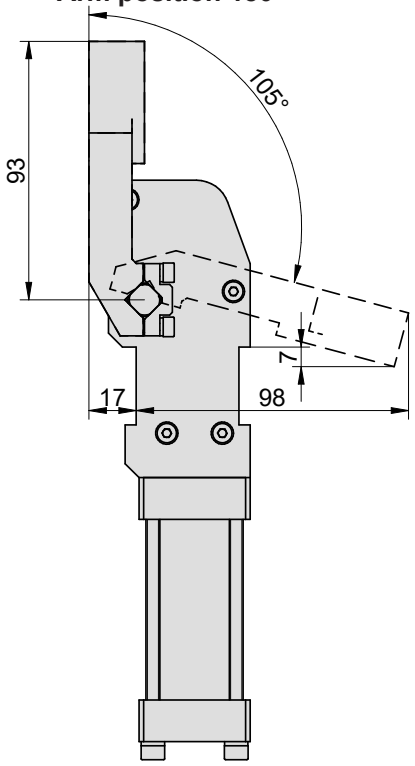
The clamp must be correctly adjusted in its working (clamped) position. The adjustment procedure is described on the next page.

Dimensions

Arm position 90°



Arm position 180°



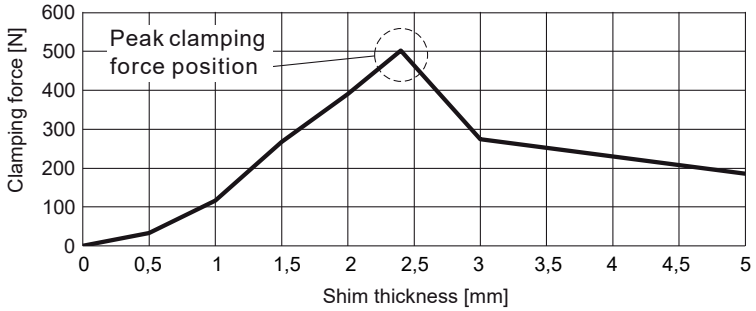
Clamp adjusting

For the clamp to function properly, it is very important to ensure its correct adjustment. Correct adjustment ensures the best use of force, low wear and ensures self-locking of the clamp.

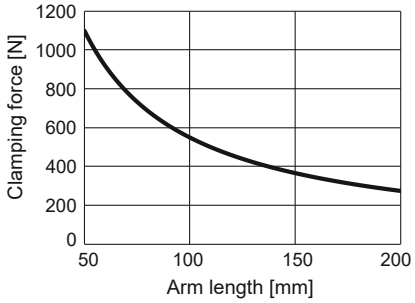
Setting procedure:

1. Fit the clamp with the necessary accessories – (clamping tools).
2. Bring the clamp into the closed state
3. Adjust the clamp grip so that it is closed with minimal play without clamping force (can be verified, for example, with paper).
4. Pre-tension the clamping device with screws, or support it with a shim of the specified thickness, in accordance with the support graph.
5. Pre-tensioning (supporting) must respect the rotation arm in the center of gravity of the clamping device and the value of the compressed air of the clamp. As the arm is extended, the pre-tensioning (supporting) also increases linearly.
6. After test clamping, verify the self-locking of the clamp by releasing the compressed air. The clamps must hold clamped.

If a too slim shim (low pre-tension) is used, the clamp will not be used sufficiently and the clamping force will be low.
If a too thick shim is used (significant preload), the clamp will not reach the self-locking clamping area and will again not achieve the necessary clamping force due to the low gear ratio of the link.



Dependence of clamping force on the shim thickness at 0,5 MPa



Dependence of clamping force on arm length at 0,5 MPa