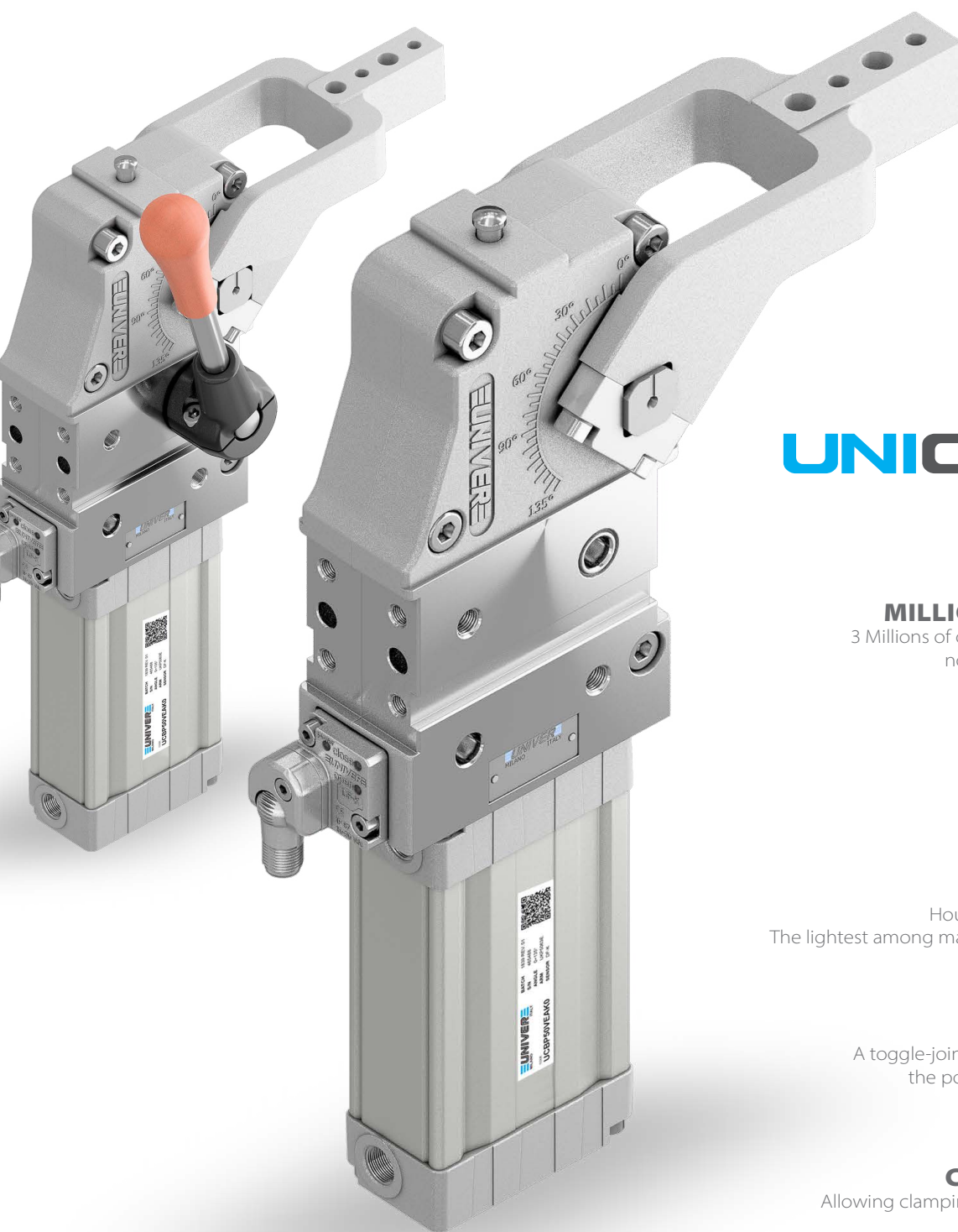


# PNEUMATIC POWER CLAMPS

Pneumatic power clamps with compensation system, toggle-joint mechanism and stepless adjustable opening angle, typically used for handling and holding metal sheets in welding applications, including the most demanding aluminium welding applications, characterized by high magnetic fields and fine dust:

- Fully adjustable opening angle
- Electronic sensor with M12 swivel connector or pneumatic sensor
- Self-holding device for open position upon request
- ATEX version available



**UNICLAMP**  
next generation

## MILLIONS OF CYCLES

3 Millions of operations granted with no maintenance required



## QR CODE

Helps identify products quickly and easily



## LIGHTWEIGHT

Housing in aluminium alloy  
The lightest among market equivalent devices



## IRREVERSIBLE

A toggle-joint mechanism maintains the position even with air lack



## COMPENSATION

Allowing clamping of different thickness





## UNICLAMP<sup>®</sup> next generation

Wide range of power clamps meeting the European standards, available in various versions:

- Pneumatic Ø 40 - 50 - 63 - 80 mm
- Pneumatic with hand lever Ø 40 - 50 - 63 - 80 mm
- Manual size 50 - 63 mm
- Double arm Ø 40 - 63 mm
- Fully protected version Ø 40 - 50 - 63 - 80 mm



## GLOBAL STANDARD COMPONENTS NAAMS

Pneumatic power clamps meeting NAAMS standard (North American Automotive Metric Standard) available in both standard version and version with hand lever:

- Pneumatic Ø 50 - 63 - 80 mm
- Pneumatic with hand lever Ø 50 - 63 - 80 mm



## BLUECLAMP<sup>®</sup> air saving

Air saving power clamps assuring a relevant reduction in air consumption without affecting the standard performances required from the market:

- Pneumatic size 32 - 40 - 50 - 63 - 80 mm
- Pneumatic with hand lever size 32 - 40 - 50 - 63 - 80 mm
- NAAMS Pneumatic size 50 - 63 - 80 mm
- NAAMS Pneumatic with hand lever size 50 - 63 - 80 mm

# POWER CLAMPS FEATURES

## ROLLER BEARINGS

Linear and rotary motion guided by roller bearings

## MANUAL RELEASE BUTTON

Safety unlocking system without air supply

## INTEGRATED COMPENSATION



Allows clamping of different thickness  
Up to **3 mm**

## TOGGLE-JOINT



Irreversible without external stops  
UNIVER Original

## OPTICAL SENSOR

High precision system  
No adjustment required

## SUPPLY PORTS ON BOTH SIDES

Calibrated holes

## SELF-ADJUSTING CUSHIONING SYSTEM

Special solution on piston rod  
allows flow regulation

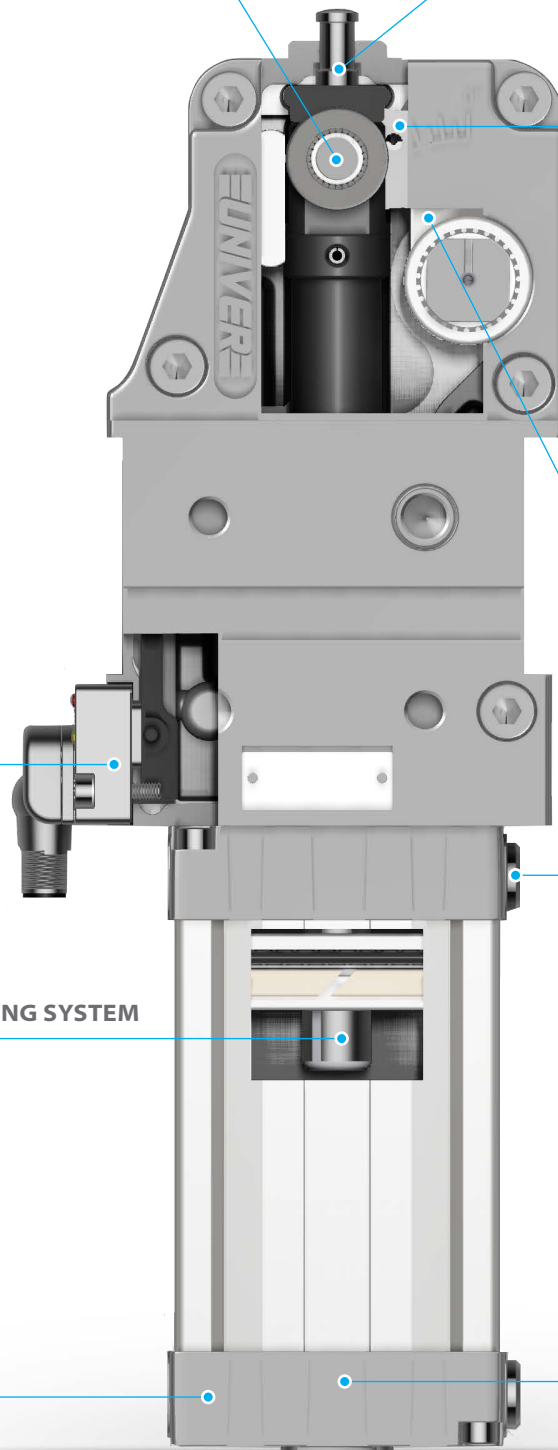
## REDUCED DIMENSIONS

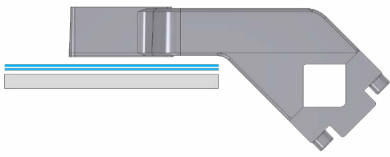
Compact end caps

## ANGLE ADJUSTMENT



Covers the whole range of possible  
opening angles





## INTEGRATED COMPENSATION

The original UNIVER integrated compensation system allows to compensate metal sheet thickness variations up to 3 mm

No need to modify the shims in case of clamping of different metal sheets inside the compensation range



## OPTICAL SENSOR

Fully metal body

One single sensor for the whole range of products

IP67 protection

M12 swivel connector (0-90°)

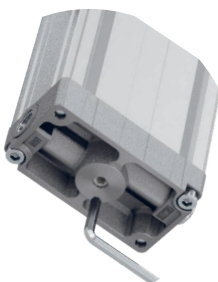
High precision

No set up

Two-parts design: electronic part outside the unit (available as spare part), optical part inside the unit (no touch point)

Insensitive to high magnetic fields, typical of new and modern welding systems like aluminium welding

Industry-recognized, tested and proven sensor



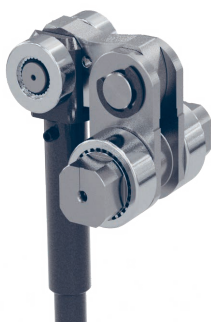
## ANGLE ADJUSTMENT 0°-135°

Stepless adjustment of the opening angle by means of a hex key from the bottom of the clamp

No need to set the sensor

Possibility to reduce the opening angle to the minimum required

One single device covers the whole range of opening angles aimed at stock reduction



## TOGGLE-JOINT MECHANISM

The original UNIVER toggle joint system allows the clamp to maintain the position even with lack of air without external stops

Position repeatability

No backlash in closed position

# COMPLEMENTARY PRODUCTS



## CLAMPING ARM

Aluminium or Steel

Different offsets for each arm size

NAAMS arms available upon request



## PNEUMATIC SENSOR

Compact design

Fully metal body

Easy to be replaced

One-piece construction



## SELF HOLDING SYSTEM

UNIVER original

Suitable for any opening angle

Adjustable holding force



## HAND LEVER

Ergonomic design

Welding debris resistant

## 2

Pneumatic power clamps size Ø40 mm with fixing patterns interchangeable with size Ø50-63mm, compensation system, toggle-joint mechanism and stepless adjustable opening angle, typically used for handling and holding metal sheets in welding applications

- Lightweight aluminium construction
- Compact dimensions
- Integrated compensation system up to 2 mm
- Version with manual hand lever available
- Fully optical electronic sensor or pneumatic sensor
- Fixing pattern on the front side
- Manual unlocking in case of air loss
- Self-holding system for open position available
- Clamping arm in aluminium

Operating temperature	5° ÷ 45° C
Min./Max. Operating pressure	0,4 / 0,6 MPa
Opening angle*	0° ÷ 135°
Bore Ø	40 mm
Holding moment	600 Nm
Clamping moment (0,5 MPa)	170 Nm
Weight (clamping arm not included)	1,6 Kg
Pneumatic supply ports	G1/8 on both sides
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP65

*\*The opening angle range may vary according to the arm position and style.*

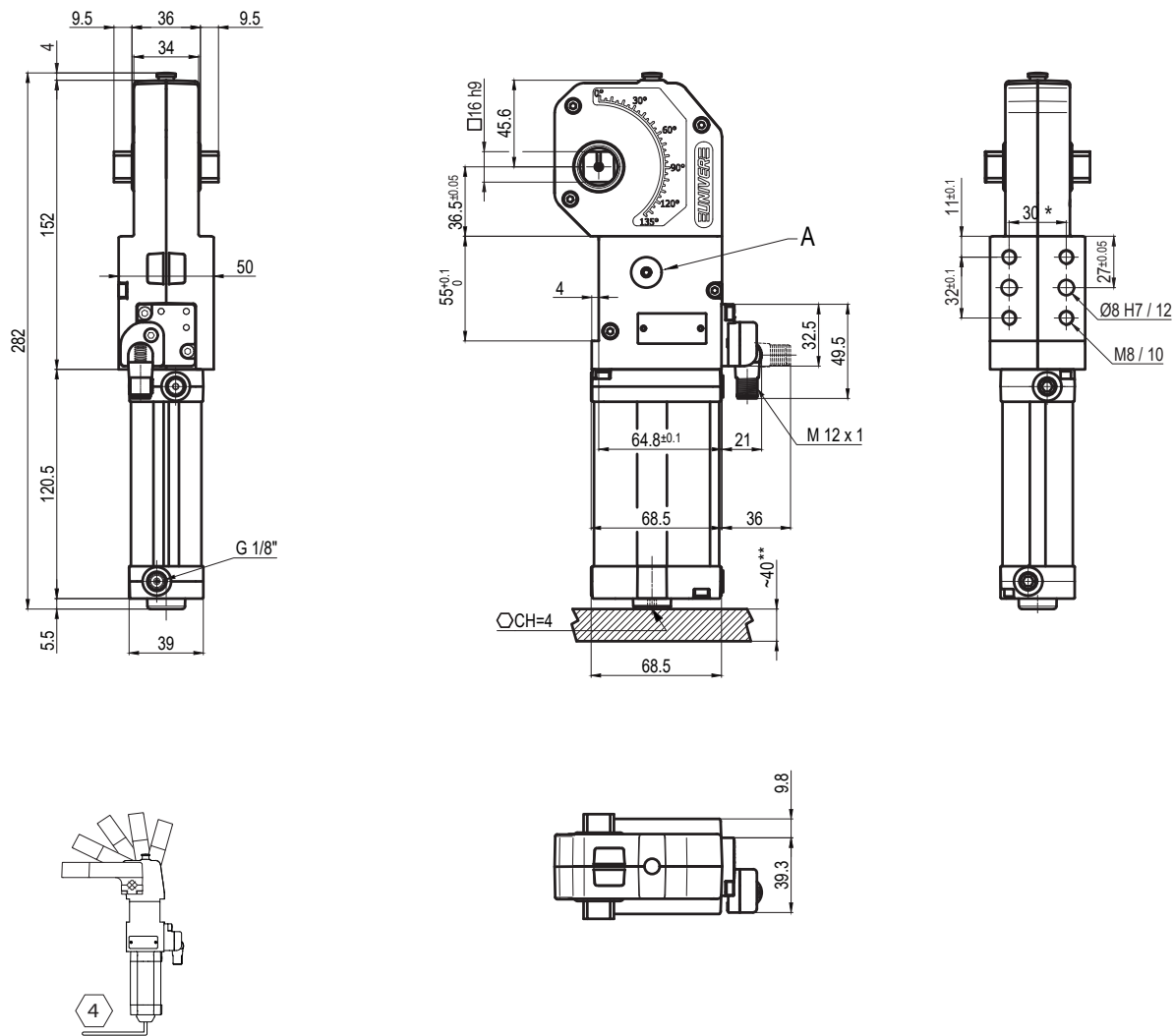


COMPACT

Subject to change



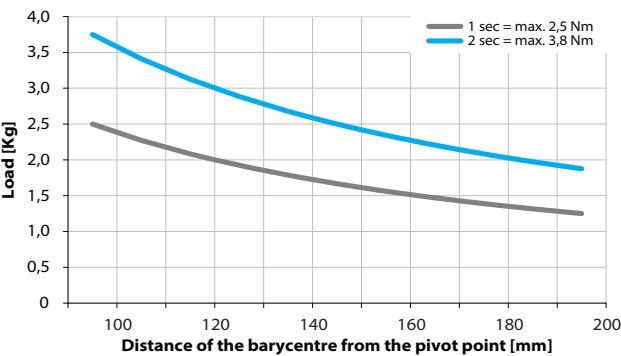
2



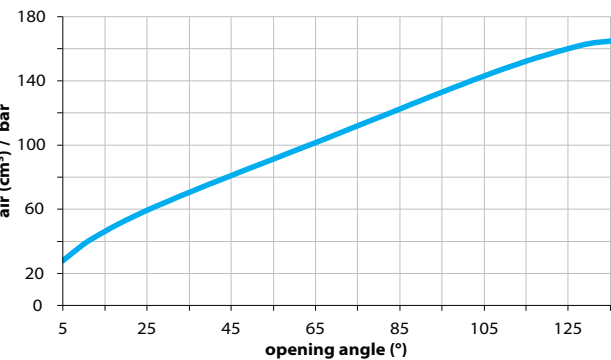
\*TOLERANCE BETWEEN DOWELS ± 0,02 BETWEEN SCREW HOLES ± 0,1  
\*\*AREA TO ACCESS ANGLE ADJUSTMENT

### Maximum Applicable Load

Pressure: 5 bar - 90° cycle time (Open - Close)



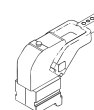
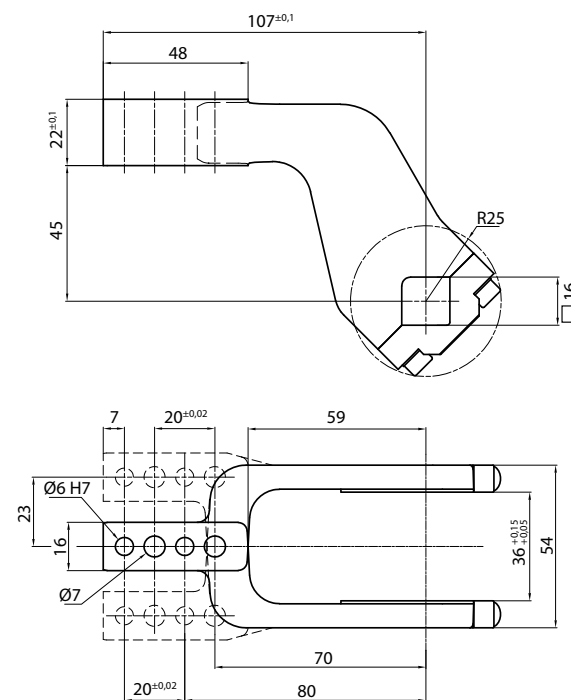
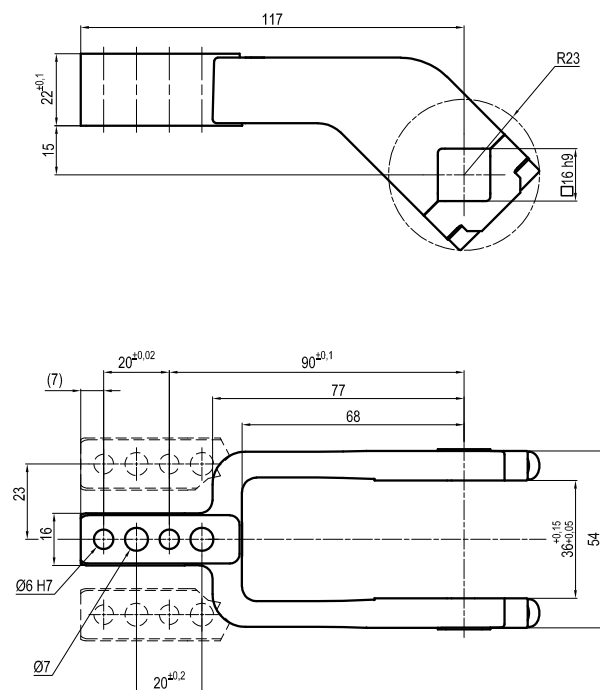
### Air Consumption per Cycle



## Clamping Arms

### Arm Offset 15mm

### Arm Offset 45mm



Armcode	Offset	Material	Arm style	Weight (Kg)	Opening angle (90°)	Opening angle (180°)
LKP01CST	15	ALUMINIUM	CENTRAL	0,2	0÷135°	0÷120°
LKP01DST	15	ALUMINIUM	RIGHT	0,2	0÷135°	0÷120°
LKP01SST	15	ALUMINIUM	LEFT	0,2	0÷135°	0÷120°
IKP40E	45	ALUMINIUM	CENTRAL	0,3	0÷135°	0÷135°
IKP40F	45	ALUMINIUM	RIGHT	0,3	0÷135°	0÷135°
IKP40L	45	ALUMINIUM	LEFT	0,3	0÷135°	0÷135°

## Sensors



Electronic (optical)

DF-K PNP M12  
DF-J NPN M12  
DF-Y PNP M12 White LED



Pneumatic

DF-UPNW

## Accessories



Self holding system

UBK46P16 For arm 15 offset  
UBK46P16-45 For arm 45 offset