# **PNEUMATIC POWER CLAMPS**

Pneumatic power clamps with compensation system, toggle-joint mechanism and stepless adjustable opening angle, tipically 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

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- Self-holding device for open position upon request
- ATEX version available

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AND NUMBER OF STREET

UNIVER





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

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

**COMPENSATION** Allowing clamping of different thickness







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





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

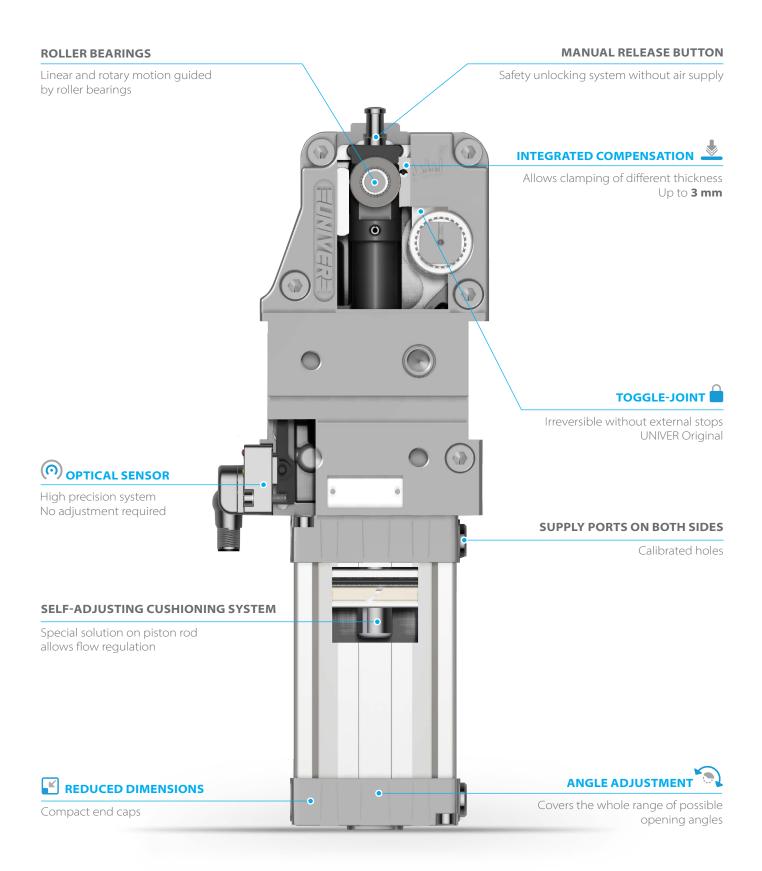




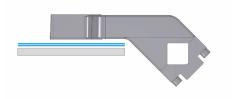
Air saving power clamps assuring a relevant reduction in air consumption without affecting the standard performances required from the market:

- 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













## 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





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









COMPENSATION





ANGLE ADJUSTMENT



# **UABP 40**

Air saving pneumatic power clamps size 40

AIR SAVING pneumatic power clamps with compensation system, toggle-joint mechanism and stepless adjustable opening angle. The special construction enables a relevant reduction in air consumption, without affecting standard performances required from the market.

- Air consumption saving up to 37%
  - Reduced dimensions compared to standard power clamps
- Integrated compensation .

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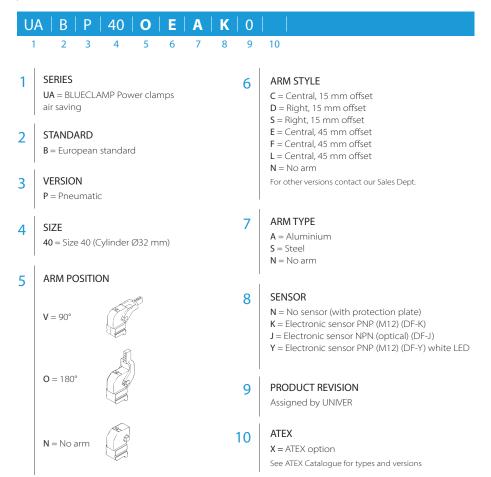
- Version with hand lever available .
- Fully optical electronic sensor
- Fixing pattern on 4 sides
- Manual unlocking in case of air loss •
- Self-holding system for open position available
- Clamping arm in aluminium or steel .

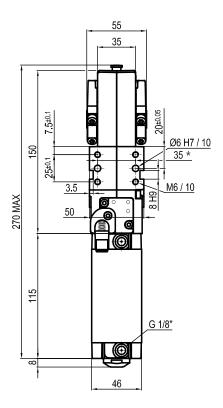
## CHARACTERISTICS

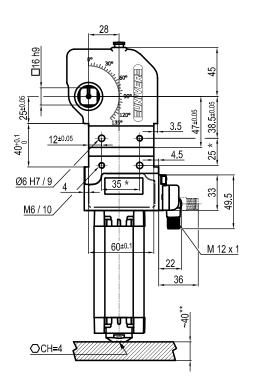
Operating temperature	5° ÷ 45° C		
Min./Max. Operating pressure	0,4 / 0,6 MPa		
Opening angle*	0° ÷ 135° 40 32 mm 600 Nm 125 Nm 1,4 Kg		
Size			
Cylinder bore Ø			
Holding moment			
Clamping moment (0,5 MPa)			
Weight (clamping arm not included)			
Pneumatic supply ports	G1/8		
Sensor	electronic (optical)		
Supply voltage	10 ÷ 30 Vdc		
IP code	IP65		

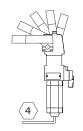
\*The opening angle range may vary according to the arm position and style.

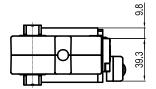
## CODIFICATION KEY







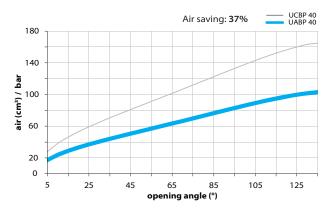




\*TOLERANCE BETWEEN DOWELS  $\pm$  0,02 BETWEEN SCREW HOLES  $\pm$  0,1 \*\*AREA TO ACCESS ANGLE ADJUSTMENT

## Air Consumption per Cycle

Compared with standard version

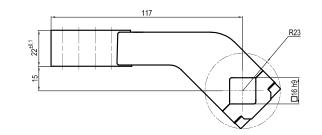


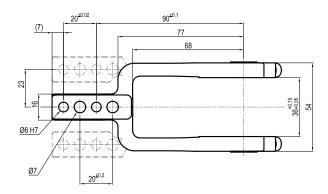
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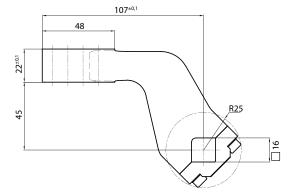
## Clamping Arms

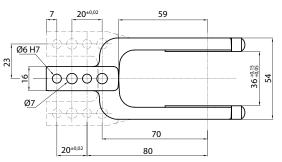
## Arm Offset 15mm

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÷125°
LKP01DST	15	ALUMINIUM	RIGHT	0,2	0÷135°	0÷125°
LKP01SST	15	ALUMINIUM	LEFT	0,2	0÷135°	0÷125°
UP120151441S	15	STEEL	CENTRAL	0,4	0÷135°	0÷125°
UP120151442S	15	STEEL	RIGHT	0,4	0÷135°	0÷125°
UP120151443S	15	STEEL	LEFT	0,4	0÷135°	0÷125°
UKP01E	45	ALUMINIUM	CENTRAL	0,25	0÷125°	0÷135°
UKP01F	45	ALUMINIUM	RIGHT	0,25	0÷125°	0÷135°
UKP01L	45	ALUMINIUM	LEFT	0,25	0÷125°	0÷135°
UKP01ES	45	STEEL	CENTRAL	0,4	0÷125°	0÷135°
UKP01FS	45	STEEL	RIGHT	0.4	0÷125°	0÷135°
UKP01LS	45	STEEL	LEFT	0,4	0÷125°	0÷135°

## Sensors



Electronic (optical)

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

## Accessories



Self holding system

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