# PNEUMATIC MINI CLAMPS

Pneumatic Miniclamps are typically used for handling and blocking pieces in assembly process.

UNIVER offer two sizes Ø25 and Ø32 and optional version equipped with handlever for manual operations.

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







# **MINICLAMP**

Small-size power clamps perfect to be used for handling and assembly process

- Pneumatic Miniclamps Ø 25-32 mm
- Fully protected version available 25-32 mm



Small-size power clamps with hand lever typically used for assembly process, white goods sector, on eoat and moving robots

- Pneumatic Miniclamps with hand lever Ø 25-32 mm

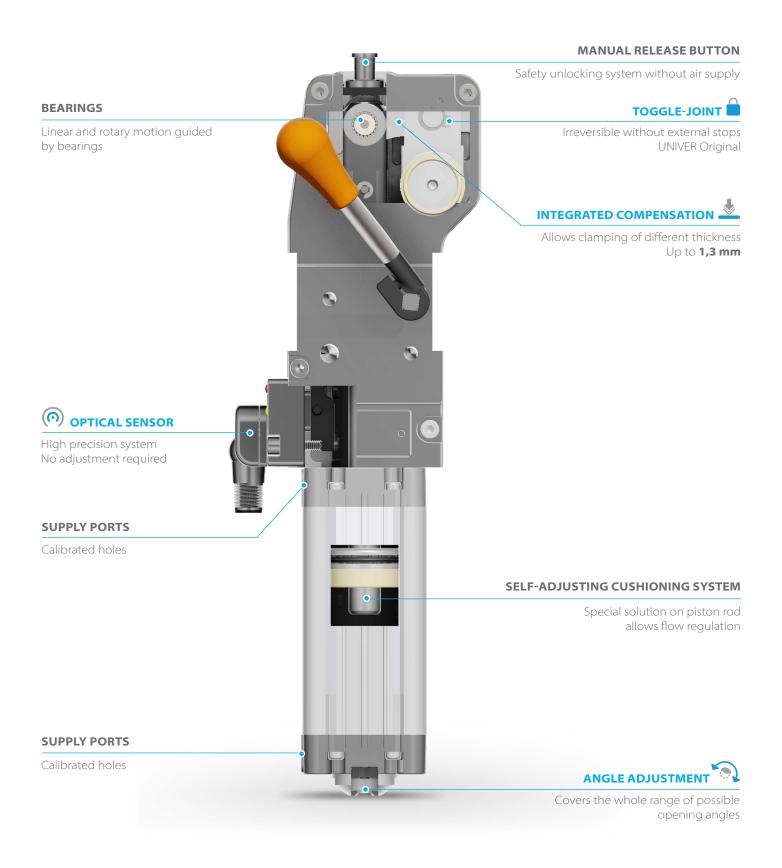




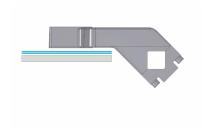
Air saving power clamps assuring a relevant reduction in air consumption without affecting the standard performances required from the market:

- Pneumatic Miniclamp size 32 mm

# **MINICLAMP** FEATURES









#### INTEGRATED COMPENSATION

The original UNIVER integrated compensation systems allows to compensate metal sheet thickness variations up to 1,3 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°- 105° FOR SIZE 25

0°- 135° FOR SIZE 32

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**



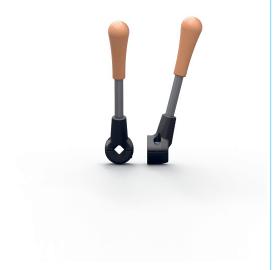
#### **CLAMPING** ARM

Aluminium to assure lightweight Different offsets for each arm size



### **SELF HOLDING SYSTEM**

UNIVER original
Suitable for any opening angle
Adjustable holding force



### **HAND** LEVER

Ergonomic design
Welding debris resistant

#### MINICLAMP



# **UCBM 32**

Pneumatic power clamps Ø32 mm with hand lever

Pneumatic Miniclamps with compensation system, toggle-joint mechanism and stepless adjustable opening angle, typically used for handling and blocking pieces in assembly process.

- Compact dimensions and lightweight
- Integrated compensation up to 1,3 mm
- Hand lever mount on both sides
- Fully optical electronic sensor or pneumatic sensor
- Fixing pattern on 4 sides
- Manual unlocking in case of air loss
- Self holding system for open position available
- Wishbone clamping arm in aluminium

#### **CHARACTERISTICS**

Operating temperature	5° ÷ 45° C			
Min./Max. Operating pressure	0,4 / 0,6 MPa			
Opening angle*	0° ÷ 105°			
Bore Ø	32 mr			
Holding moment	250 Nm			
Clamping moment (0,5 MPa)	75 Nm			
Weight (clamping arm not included)	1,4 Kg			
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.				

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### **CODIFICATION KEY**



COMPENSATION



LIGHTWEIGHT



**IRREVERSIBLE** 



ANGLE ADJUSTMENT



OPTICAL SENSOR

#### $B \mid M \mid$ 0

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**SERIES** 

UC = UNICLAMP Power clamps

STANDARD

B = European standard

M = Pneumatic with hand lever

SIZE

**32** = Ø 32mm

ARM POSITION

 $V = 90^{\circ}$ 



 $0 = 180^{\circ}$ 



N = No arm



PRODUCT REVISION Assigned by UNIVER

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X = ATEX option

**ATEX** 

ARM STYLE

N = No arm

ARM TYPE

N = No arm

**SENSOR** 

A = Aluminium

D = Pneumatic sensor

B = Central, 0mm offset

C = Central, 10mm offset E = Central, 25mm offset

For other versions contact our Sales Dept.

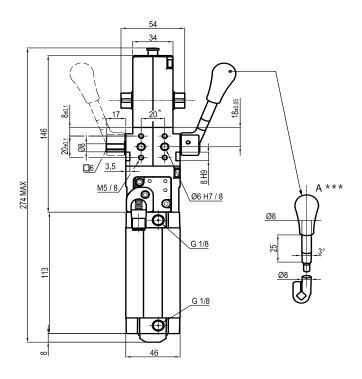
N = No sensor (with protection plate)

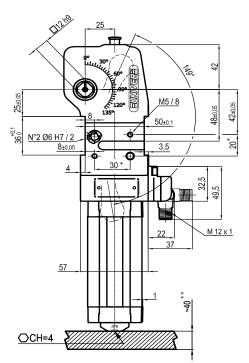
K = Electronic sensor PNP, M12 (DF-K)

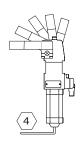
Y = Electronic sensor PNP, M12 (DF-Y) white LED J = Electronic sensor NPN, M12 (DF-J)

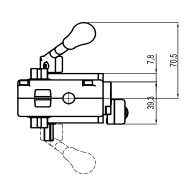
See ATEX Catalogue for types and versions







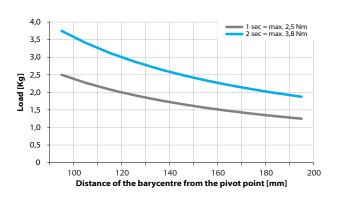




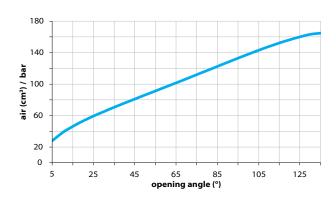
- \*TOLERANCE BETWEEN DOWELS ± 0,02, BETWEEN SCREW HOLES ± 0,1
  \*\*AREA TO ACCESS ANGLE ADJUSTMENT
  \*\*\*DIMENSIONS TO BE RESPECTED IN CASE OF OTHER MANUAL LEVERS ARE USED

#### Maximum Applicable Load

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



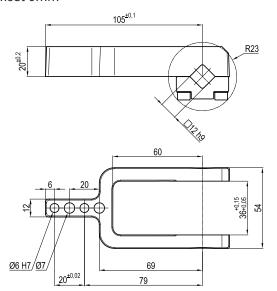
### Air Consumption per Cycle



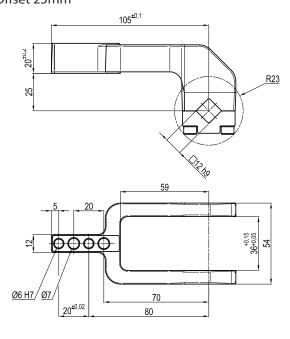


# **Clamping Arms**

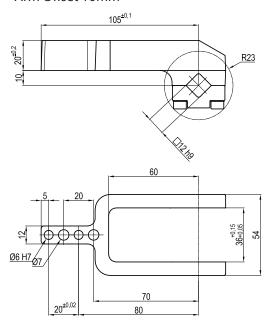
### Arm Offset 0mm



# Arm Offset 25mm



#### Arm Offset 10mm







Armcode	Offset	Material	Arm style	Weight (Kg)	Opening angle (90°)	Opening angle (180°)
LKP32B	0	ALUMINIUM	CENTRAL	0,15	0÷105°	0÷105°
LKP32C	10	ALUMINIUM	CENTRAL	0,15	0÷105°	0÷105°
LKP32E	25	ALUMINIUM	CENTRAL	0,15	0÷105°	0÷105°

### Sensors



Electronic (optical)

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

### Accessories





Handlever Self holding system

UBF252532 UBK46P12