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









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

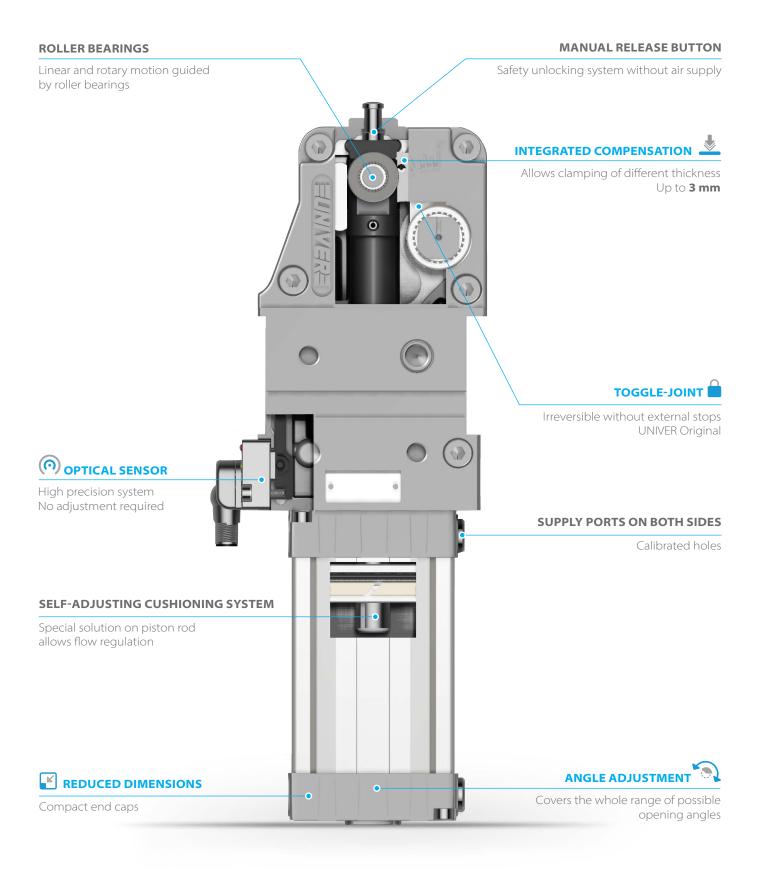




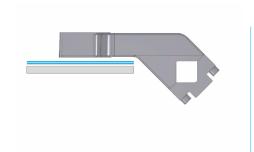
Air saving power clamps assuring a relevant reduction in air consumption without affecting the standard performances required from the market:

- 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



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





UABP 50

Air saving pneumatic power clamps size 50

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 35%
- Reduced dimensions compared to standard power clamps
- Integrated compensation
- 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°
Size	50
Cylinder bore Ø	40 mm
Holding moment	1250 Nm
Clamping moment (0,5 MPa)	170 Nm
Weight (clamping arm not included)	2,3 Kg
Pneumatic supply ports	G1/4 on both sides
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP65

 $^{{}^*\!} The opening angle range may vary according to the arm position and style.$

CODIFICATION KEY

	AIR SAVING
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COMPENSATION



LIGHTWEIGHT



IRREVERSIBLE



ANGLE ADJUSTMENT



OPTICAL SENSOR



COMPACT

UA	В	P	50	0	E	Α	K	0	
1	2	3	4	5	6	7	8	9	10

SERIES UA = BLUECLAMP Power clamps air saving

STANDARD 2

B = European standard

VERSION 3

P = Pneumatic

SIZE

50 = Size 50 (Cylinder Ø40 mm)

ARM POSITION

 $V = 90^{\circ}$

 $0 = 180^{\circ}$

N = No arm

ARM STYLE 6

C = Central, 15 mm offset

D = Right, 15 mm offset

S = Right, 15 mm offset

E = Central, 45 mm offset F = Central, 45 mm offset

L = Central, 45 mm offset

N = No arm

For other versions contact our Sales Dept.

ARM TYPE

A = Aluminium

S = Steel

N = No arm

SENSOR

8

N = No sensor (with protection plate)

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

J = Electronic sensor NPN (optical) (DF-J)

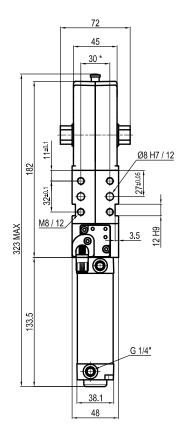
Y = Electronic sensor PNP (M12) (DF-Y) white LED

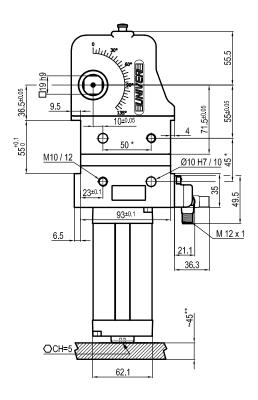
PRODUCT REVISION 9 Assigned by UNIVER

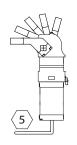
ATEX 10

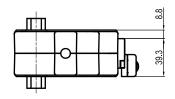
X = ATEX option

See ATEX Catalogue for types and versions



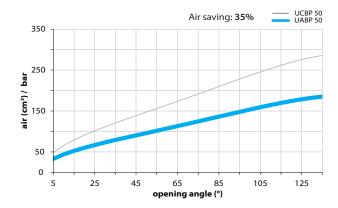






Air Consumption per Cycle

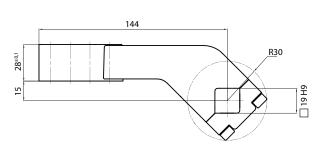
Compared with standard version

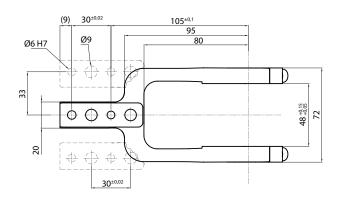


^{*}TOLERANCE BETWEEN DOWELS \pm 0,02 BETWEEN SCREW HOLES \pm 0,1 **AREA TO ACCESS ANGLE ADJUSTMENT

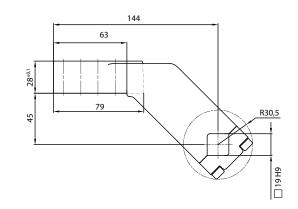
Clamping Arms

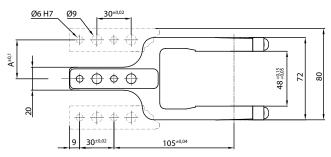
Arm Offset 15mm





Arm Offset 45mm









Armcode	Offset	Material	Arm style	Weight (Kg)	Opening angle (90°)	Opening angle (180°)
LKP00CL	15	ALUMINIUM	CENTRAL	0,4	0÷135°	0÷105°
LKP00DL	15	ALUMINIUM	RIGHT	0,4	0÷135°	0÷105°
LKP00SL	15	ALUMINIUM	LEFT	0,4	0÷135°	0÷105°
UP210151441G	15	STEEL	CENTRAL	0,8	0÷135°	0÷105°
UP210151442G	15	STEEL	RIGHT	0,8	0÷135°	0÷105°
UP210151443G	15	STEEL	LEFT	0,8	0÷135°	0÷105°
UKP5063E	45	ALUMINIUM	CENTRAL	0,45	0÷135°	0÷135°
UKP50F	45	ALUMINIUM	RIGHT	0,45	0÷135°	0÷135°
UKP50L	45	ALUMINIUM	LEFT	0,45	0÷135°	0÷135°
UKP5063ES	45	STEEL	CENTRAL	1,16	0÷135°	0÷135°
UKP50FS	45	STEEL	RIGHT	1,16	0÷135°	0÷135°
UKP50LS	45	STEEL	LEFT	1,16	0÷135°	0÷135°

Sensors



Electronic (optical)

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

Accessories



Self holding system

UBK46P19