

Pneumatic power clamps UNICLAMP series

UNIVER S.p.A. Headquarters 20128 Milano Via Eraclito, 31 Tel. +39 02 25298.1 Fax +39 02 2575254 info@univer-group.com www.univer-group.com

The handling, positioning as well as the maintenance operations have to be carried out only by authorized personnel when the system is disconnected and by observing all the conditions that guarantee the security of the staff. The residual risks regarding the sole maintenance phase consist in the squashing of the upper parts of the operator's body. As a preventive measure an appropriate signal must alert the operator.

>Clamping arm mounting

Tighten moderately the fixing screws; then tighten completely the corresponding pairs of screws, one on the right and the other on the left clamping arm.

Clamping arm Fixing bosses YES NOT

Do not insert the dowels in the clamping arm when it is assembled on the clamp

Screw	Tightening torque (Nm)		
	Min.	Max	
M4	6	7	
M5	9	11	
M6	16	18	
M8	25	30	
M10	33	35	

>Opening angle adjustment

WITHOUT AIR



WITH AIR



1. Set the clamping arm in the open position

- 2. Insert and push the allen wrench until the adjusting nut has engaged with the adjusting screw
- Keep the key pushed in its site and rotate it clockwisely to increase the opening angle or counterclockwisely to reduce the opening angle
- 4. After setting the desired angle remove the key

>Opening angle adjustment for double arm clamps



1. Set the clamping arm in the closed position

2. Insert and push the allen wrench until the adjusting nut has engaged with the adjusting screw

- 3. After setting the angle remove the key
- 4. Set the clamping arm in open position to check the set angle

>Single arm clamp unlock

In case of air loss, the clamp can be unlocked through the manual release button placed on the top of the clamp housing. Hit the button with a hammer to release the toggle-joint system and make the clamp open.



>Fixing instructions

The fixing of the unit to the equipment can be carrde part of the housing of the clamp.



Fixing to the front or rear surface

- Insert two hardened and grinded pins into the special seats such as to locate the clamp to the tooling:

Series	Ø dowels
UCB_25	5
UCB_32; UCB_40	6
UCI_40; UCB_50-63; UCN_50-63; UCDP40-63	8
UCB_80; UCN_80	8

- Fix it steadily by using the indicated screws, limiting the tightening torque:

Series	Screws	Thread	Tightening torque
UCB_25; UCB_32	M5	8 mm	5 Nm
UCB_40	M6	10 mm	8 Nm
UCB_50-63; UCN_50-63; UCDP63	M8	12 mm	15 Nm
UCB_80; UCN_80	M10	15 mm	25 Nm
UCI_40	M8	10 mm	15 Nm
UCDP40	M8	11 mm	15 Nm

Fixing to the side part of the housing of the clamp

- Insert two hardened and grinded pins into the special seats such as to locate the clamp to the tooling:

Series	Ø dowels
UCB_32	6
UCB_40; UCDP40	6
UCB_50; UCB_63; UCN_63	10
UCB_80; UCDP63; UCN_80	12
UCN_50	8

- Fix it steadily by using the indicated screws, limiting the tightening torque:

Series	Screws	Thread	Tightening torque
UCB_32	M5	8 mm	5 Nm
UCBT40; UCBP40	M6	10 mm	8 Nm
UCBM40	M6	8 mm	8 Nm
UCDP40	M6	11 mm	8 Nm
UCB_50; UCB_63; UCDP63	M10	12 mm	25 Nm
UCBP80	M12	15 mm	45 Nm
UCBM80	M12	10 mm	45 Nm
UCN_50	M8	8 mm	15 Nm
UCN_63	M10	10 mm	25 Nm
UCN_80	M12	12 mm	45 Nm

>Instructions for the connection of the clamp to its energy source

Connect the sensor of the clamp to its electric supply unit.

Then connect the pneumatic tube by means of suitable pneumatic fittings according to the specification below:

- Series UCB_25 -> M5 fittings

- Series UCB_32, UCB_40, UCI_40, UCDP40, UCBT40 -> G1/8" fittings
- Series UCB_50, UCB_63, UCB_80, UCDP63, UCN_50, UCN_63, UCN_80 -> G1/4" fittings NAAMS Series with NPT threads -> 1/4 NPT

Operating pressure from 4 to 6 bar

>Electronic sensor

TECHNICAL CHARACTERISTICS

Supply voltage	10-30 V DC
Supply current without load	<25 mA
Rated operational current	30 mA
Voltage drop	<3,5 V DC
Output logic	PNP N.O.
Led- supply	green (power)
Led- close position	red (close)
Led- open position	yellow (open)
Protection class	IP 67
Weight	64 gr
No Reset	





Male contacts Micro C M12









Change of the sensor

Unscrew the screws on the sensor base and replace the sensor

Connector orientation

- Unscrew the screw of the connector
- Rotate the connector (0° or 90°)
- Tighten the screw

>Type and frequency of controls and/or maintenance work

The unit has a life cycle of 3 million cycles and has been designed and constructed in such a way that specific programmed maintenance is not necessary. A monthly external cleaning of the welding deposits with suitable, not aggressive and not corrosive detergents is recommended.



Pneumatic power clamps BLUECLAMP series

UNIVER S.p.A. Headquarters 20128 Milano Via Eraclito, 31 Tel. +39 02 25298.1 Fax +39 02 2575254 info@univer-group.com www.univer-group.com

The handling, positioning as well as the maintenance operations have to be carried out only by authorized personnel when the system is disconnected and by observing all the conditions that guarantee the security of the staff. The residual risks regarding the sole maintenance phase consist in the squashing of the upper parts of the operator's body. As a preventive measure an appropriate signall must alert the operator.

>Clamping arm mounting

Tighten moderately the fixing screws; then tighten completely the corresponding pairs of screws, one on the right and the other on the left clamping arm.

Clamping arm Fixing bosses YES NOT

Do not insert the dowels in the clamping arm when it is assembled on the clamp

Screw	Tightening torque (Nm)		
	Min.	Max	
M5	9	11	
M6	16	18	
M8	25	30	
M10	33	35	

>Opening angle adjustment

WITHOUT AIR



WITH AIR



1. Set the clamping arm in the open position

- 2. Insert and push the allen wrench until the adjusting nut has engaged with the adjusting screw
- Keep the key pushed in its site and rotate it clockwisely to increase the opening angle or counterclockwisely to reduce the opening angle
- 4. After setting the desired angle remove the key

>Clamp unlock

In case of air loss, the clamp can be unlocked through the manual release button placed on the top of the clamp housing. Hit the button with a hammer to release the toggle-joint system and make the clamp open.





>Fixing instructions

The fixing of the unit to the equipment can be carried out by using the front, rear or side part of the housing of the clamp.



Fixing to the front or rear surface

- Insert two hardened and grinded pins into the special seats such as to locate the clamp to the tooling:

Series	Ø dowels
UABP32; UAB_40	6
UAB_50-63; UAN_50; UAN_63	8
UAB_80; UAN_80	8

- Fix it steadily by using the indicated screws, limiting the tightening torque:

Series	Screws	Thread	Tightening torque
UABP32	M5	8 mm	5 Nm
UAB_40	M6	10 mm	8 Nm
UAB_50-63; UAN_50-63	M8	12 mm	15 Nm
UAB_80; UAN_80	M10	15 mm	25 Nm

Fixing to the side part of the housing of the clamp

- Insert two hardened and grinded pins into the special seats such as to locate the clamp to the tooling:

Series	Ø dowels
UABP32	6
UAB_40	6
UAB_50-63; UAN_63	10
UAN_50	8
UAB_80; UAN_80	12

- Fix it steadily by using the indicated screws, limiting the tightening torque:

Series	Screws	Thread	Tightening torque
UABP32	M5	8 mm	5 Nm
UABP40	M6	10 mm	8 Nm
UABM40	M6	8 mm	8 Nm
UAB_50-63	M10	12 mm	25 Nm
UABP80	M12	15 mm	45 Nm
UAN_50	M8	8 mm	15 Nm
UAN_63	M10	10 mm	25 Nm
UABM80, UANM80	M12	10 mm	45 Nm
UANP80	M12	12 mm	45 Nm

>Instructions for the connection of the clamp to its energy source

Connect the sensor of the clamp to its electric supply unit.

Then connect the pneumatic tube by means of suitable pneumatic fittings according to the specification below:

- Series UABP32 -> M5 fittings

- Series UAB_40; UAB_50; UAN_50 -> G1/8" fittings
- Series UAB_63; UAB_80 -> G1/4" fittings

- NAAMS Series with NPT threads UAN_63; UAN_80 -> 1/4 NPT

Operating pressure from 4 to 6 bar

>Electronic sensor

TECHNICAL CHARACTERISTICS

10-30 V DC
<25 mA
30 mA
<3,5 V DC
PNP N.O.
green (power)
red (close)
yellow (open)
IP 67
64 gr





Male contacts Micro C M12



0° 90°

Connector orientation

- Unscrew the screw of the connector
- Rotate the connector (0° or 90°)
- Tighten the screw

>Typ a frekvencia kontrol a/alebo údržbárskych prác

The unit has a life cycle of 3 million cycles and has been designed and constructed in such a way that specific programmed maintenance is not necessary. A monthly external cleaning of the welding deposits with suitable, not aggressive and not corrosive detergents is recommended.



Pneumatic power clamps UNIVERSAL series

UNIVER S.p.A. Headquarters 20128 Milano Via Eraclito, 31 Tel. +39 02 25298.1 Fax +39 02 2575254 info@univer-group.com www.univer-group.com

The handling, positioning as well as the maintenance operations have to be carried out only by authorized personnel when the system is disconnected and by observing all the conditions that guarantee the security of the staff. The residual risks regarding the sole maintenance phase consist in the squashing of the upper parts of the operator's body. As a preventive measure an appropriate signal must alert the operator.

>Clamping arm mounting

Tighten moderately the fixing screws; then tighten completely the corresponding pairs of screws, one on the right and the other on the left clamping arm.



Do not insert the dowels in the clamping arm when it is assembled on the clamp

Screw	Tightening torque (Nm)		
	Min.	Max	
M6	16	18	
M8	25	30	
M10	33	35	

>Opening angle adjustment

WITHOUT AIR



WITH AIR



1. Set the clamping arm in the open position

- 2. Insert and push the allen wrench until the adjusting nut has engaged with the adjusting screw
- Keep the key pushed in its site and rotate it clockwisely to increase the opening angle or counterclockwisely to reduce the opening angle
- 4. After setting the desired angle remove the key

>Clamp unlock

In case of air loss, the clamp can be unlocked through the manual release button placed on the top of the clamp housing. Hit the button with a hammer to release the toggle-joint system and make the clamp open.





>Fixing instructions

The fixing of the unit to the equipment can be carried out by using the front, rear or side part of the housing of the clamp.



Fixing to the front or rear surface

- Insert two hardened and grinded pins into the special seats such as to locate the clamp to the tooling:

Series	Ø dowels	
UB_50-63; UN_50-63	8	
UN_80	8	

- Fix it steadily by using the indicated screws, limiting the tightening torque:

Series	Screws	Thread	Tightening torque
UB_50-63; UN_50-63	M8	12 mm	15 Nm
UN_80	M10	15 mm	25 Nm

Fixing to the side part of the housing of the clamp

- Insert two hardened and grinded pins into the special seats such as to locate the clamp to the tooling:

Series	Ø dowels
UB_50; UB_63; UN_63	10
UN_80	12
UN_50	8

- Fix it steadily by using the indicated screws, limiting the tightening torque:

Series	Screws	Thread	Tightening torque
UB_50; UB_63	M10	12 mm	25 Nm
UN_50	M8	8 mm	15 Nm
UN_63	M10	10 mm	25 Nm
UN_80	M12	12 mm	45 Nm

>Instructions for the connection of the clamp to its energy source

Connect the sensor of the clamp to its electric supply unit.

Then connect the pneumatic tube by means of suitable pneumatic fittings according to the specification below:

- Series UB_50, UB_63, UN_50, UN_63, UN_80 -> G1/4" fittings - NAAMS Series with NPT threads -> 1/4 NPT

Operating pressure from 4 to 6 bar

0°

>Electronic sensor

TECHNICAL CHARACTERISTICS		CLOSE <
Supply voltage	10-30 V DC	
Supply current without load	<25 mA	OPEN <
Rated operational current	30 mA	
Voltage drop	<3,5 V DC	
Output logic	PNP N.O.	
Led- supply	green (power)	
Led- close position	red (close)	
Led- open position	yellow (open)	
Protection class	IP 67	
Weight	64 gr	
No Reset		





Male contacts Micro C M12



Dimensions

Connector orientation

- Unscrew the screw of the connector
- Rotate the connector (0° or 90°)
- Tighten the screw

> Type and frequency of controls and/or maintenance work

90°

The unit has a life cycle of 3 million cycles and has been designed and constructed in such a way that specific programmed maintenance is not necessary. A monthly external cleaning of the welding deposits with suitable, not aggressive and not corrosive detergents is recommended.