

# PNEUMATIC LOCATING PIN UNITS

Pneumatic retractable locating pin unit, typically used in welding applications to locate metal sheets in a definite position.

Available version with hand lever and toggle-joint mechanism

- Metal rod scraper on single shaft only
- Antirotation system
- Electronic sensor with M12 swivel connector or pneumatic sensor



**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



## REDUCED DIMENSIONS



## DOUBLE GUIDE

Precision





## COMPACT SIZE 32

Pneumatic pin unit with very compact overall dimensions

- Pneumatic with side or rear sensor  $\varnothing 32$  mm



## SINGLE AND DOUBLE ROD

Standard range of pin units offering many version combinations with single or double rod and equipped with hand lever for manual operations

- Pneumatic  $\varnothing 40-50-63$  mm
- Pneumatic with hand lever  $\varnothing 50$  mm
- Manual 50 mm
- Wide range of shaft-ends



## IRREVERSIBLE

Pin units equipped with toggle-joint mechanism to maintain the position even with lack of air

- Single and double rod  $\varnothing 40-50$  mm
- With hand lever  $\varnothing 40-50$  mm



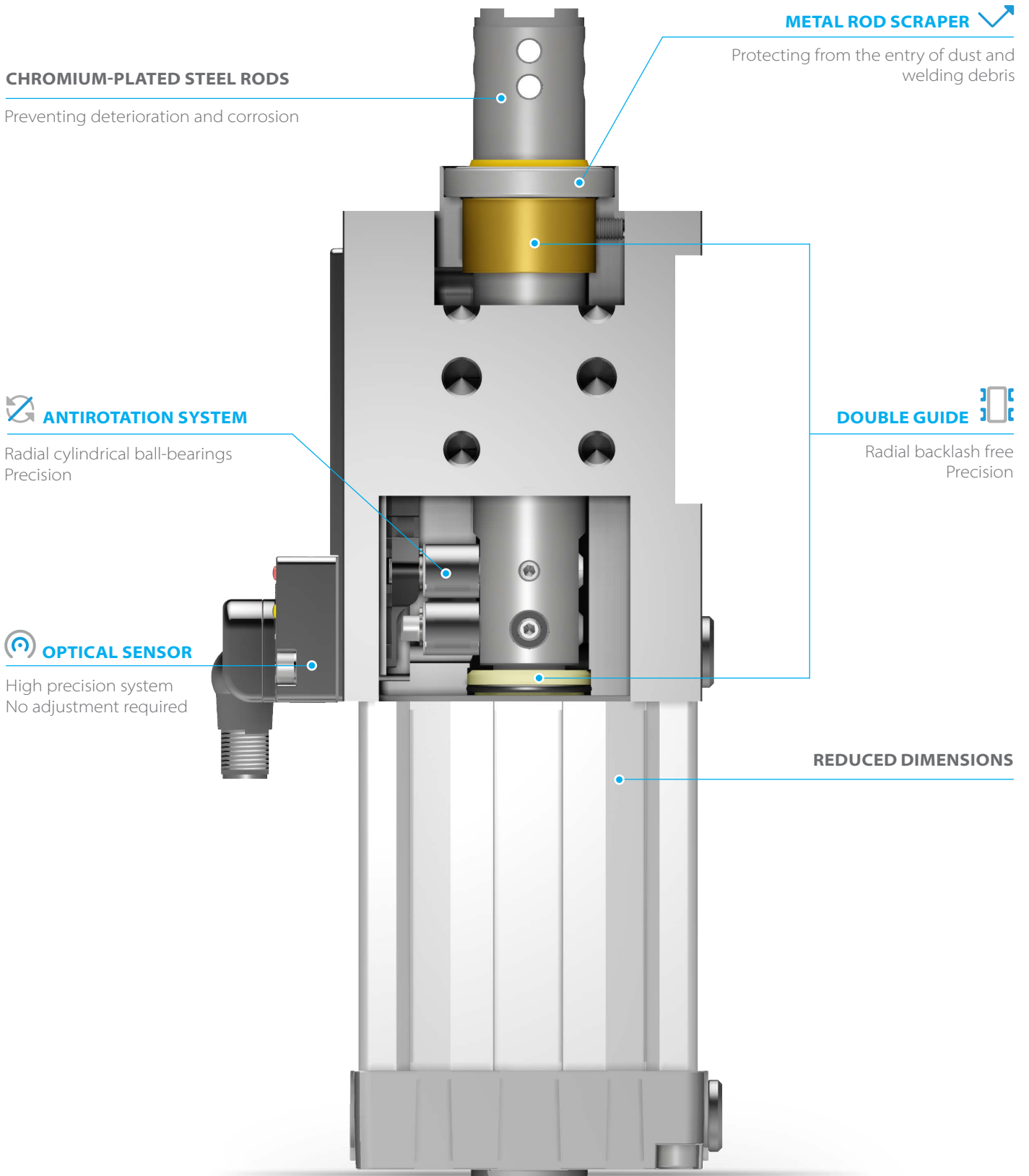
## CNOMO STANDARD

Pin unit construction meeting CNOMO Standard

- Single rod  $\varnothing 50-63$  mm
- With hand lever  $\varnothing 50$  mm

# LOCATING PIN UNITS FEATURES

## SINGLE ROD VERSION



## DOUBLE ROD VERSION

**180° ORIENTABLE RODS**

Possibility to self-orientate the rods 180°  
Stock reduction

**METAL ROD SCRAPER**

Protecting from the entry of dust and  
welding debris

**OPTICAL SENSOR**

High precision system  
No adjustment required

**CHROMIUM-PLATED STEEL RODS**

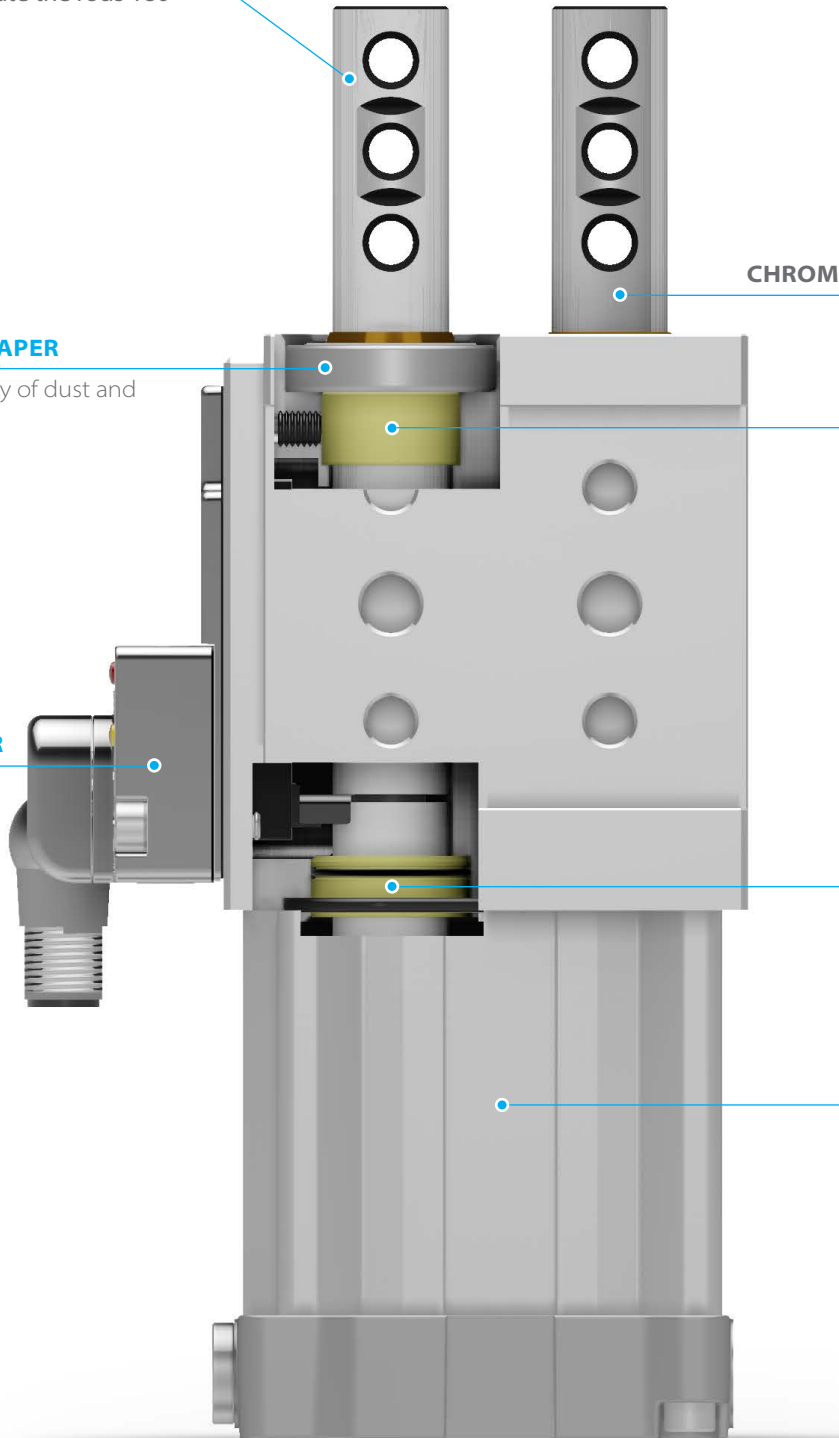
Preventing deterioration  
and corrosion

**DOUBLE GUIDE**

Radial backlash free  
Precision

**REDUCED DIMENSIONS**

Compact end covers



# LOCATING PIN UNITS FEATURES

## IRREVERSIBLE VERSION

### **ORIENTABLE ROD**

Possibility to self-orientate the rods 180°  
Stock reduction

### **METAL ROD SCRAPER**

Protecting from the entry of dust  
and welding debris

### **OPTICAL SENSOR**

High precision system  
No adjustment required

### **CHROMIUM-PLATED STEEL RODS**

Preventing deterioration and corrosion

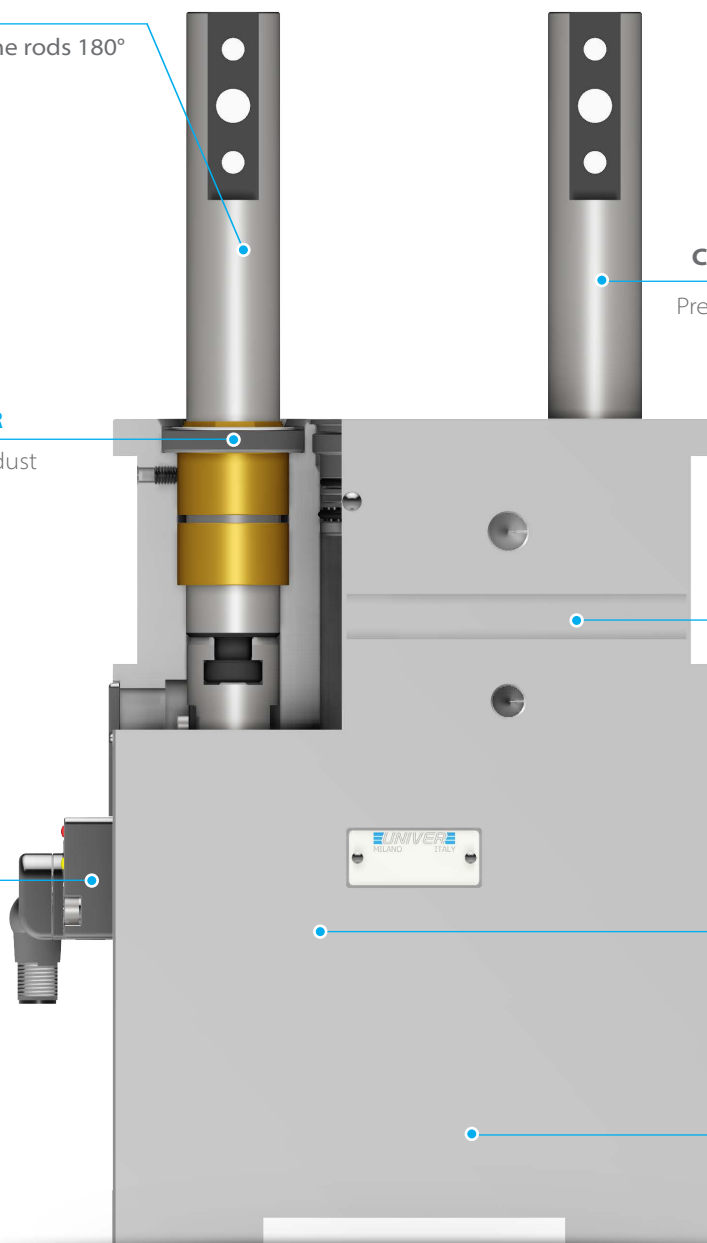
### **DOUBLE GUIDE**

Radial backlash free  
Precision

### **COMPACT DIMENSIONS**

### **TOGGLE-JOINT**

Irreversible rod extend position  
High trust force





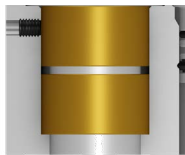
 **METAL ROD SCRAPER**

To prevent dust and welding debris entering the unit body, each piston rod is equipped with a metal rod scraper



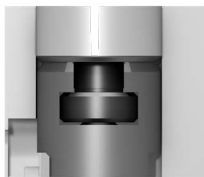
 **ANTIROTATION SYSTEM**

Radial cylindrical ball-bearings enable the shaft not to rotate axially and guarantee positioning precision



 **DOUBLE GUIDE**

Internal piston rod double guide assures zero radial backlash and positioning precision



 **ORIENTABLE RODS**

The piston rods on double rod models are 180° orientable by the user to offer installation flexibility and stock reduction



 **IRREVERSIBLE**

Models equipped with the UNIVER original toggle-joint mechanism guarantee irreversibility of the extended piston rod and high thrust force

Irreversible even with lack of air and without external stops



 **OPTICAL SENSOR**

Fully metal body

One single sensor for the whole range of products

IP67 protection

M12 swivel connector (0-90°)

High precision

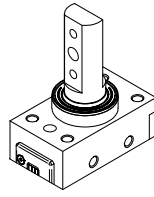
No set up

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

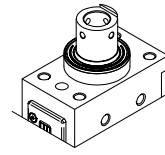
Insensitive to high magnetic fields, typical of new and modern welding systems like aluminium welding

Industry-recognized, tested and proven sensor

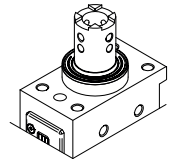
# LOCATING PIN UNITS RODS



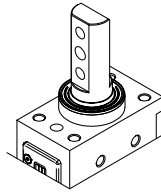
Rod for off-set pins



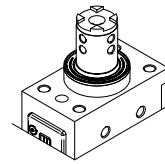
Profiled end



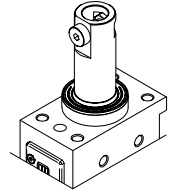
Cross-profiled Ø16



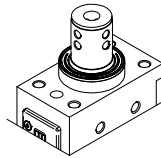
Oversized dowel holes



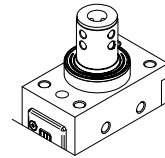
Cross-profiled Ø10



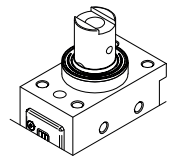
NAAMS COMPATIBLE Ø16



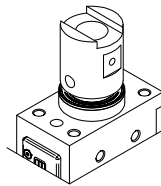
Flat Ø10



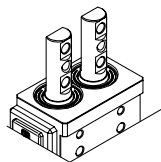
FLAT Ø12



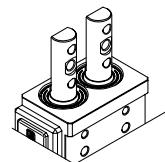
CNOMO Ø12



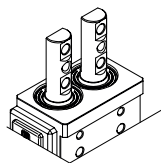
CNOMO Ø20



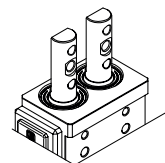
ROD FOR OFFSET PINS  
2 SCREWS - 1 DOWEL



ROD FOR OFFSET PINS  
1 SCREW - 2 DOWELS



ROD FOR OFFSET PINS  
(ROD PLANE MATCHING  
BODY MIDDLE AXIS)  
2 SCREWS - 1 DOWEL



ROD FOR OFFSET PINS  
(ROD PLANE MATCHING  
BODY MIDDLE AXIS)  
1 SCREW - 2 DOWELS

# COMPLEMENTARY PRODUCTS



## **PNEUMATIC** SENSOR

- Compact design
- Fully metal body
- Easy to be replaced
- One-piece construction



## **HAND** LEVER

- Ergonomic design
- Welding debris resistant

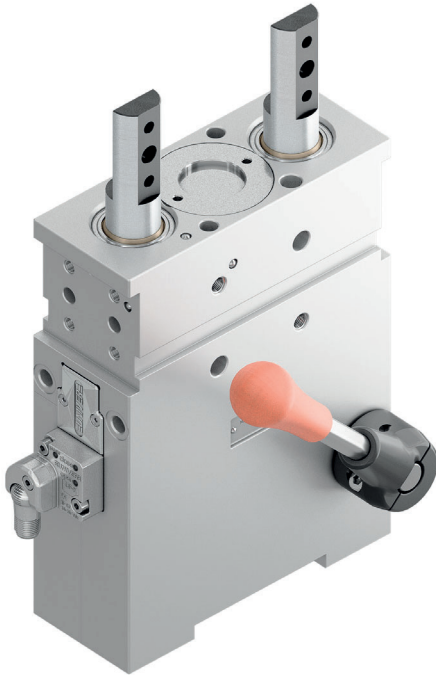


# ULX 50

Irreversible pneumatic retractable locating pin unit, double rod, Ø50mm with hand lever

Irreversible pneumatic retractable locating pin unit, double rod, typically used in welding applications to locate metal sheets in a definite position.

- Metal rod scraper
- Optical sensor
- Rod orientation adjustable by the user



## CHARACTERISTICS

Operating temperature	5° ÷ 45° C
Min./Max. operating pressure	0,4 / 0,6 MPa
Bore Ø	50 mm
Min. Pull force (0,5 MPa)	500 N
Max Push force (0,5 MPa)**	7150 N
Max. Torque (20 Nm)	± 0,1 mm
Max. Deflection (20 Nm)	± 0,07 mm
Max. side load	400 N
Max. deflection (40 mm stroke at max. load)	0,1 mm
Max. offset (from middle point)	200 mm
Weight	7,3 Kg
Pneumatic supply ports	G1/8
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP 65

\*\*Max. push force at end stroke position

## CODIFICATION KEY

UL | X | 50 | 040 | G | K | 0 | |

1 2 3 4 5 6 7 8



IRREVERSIBLE



OPTICAL SENSOR

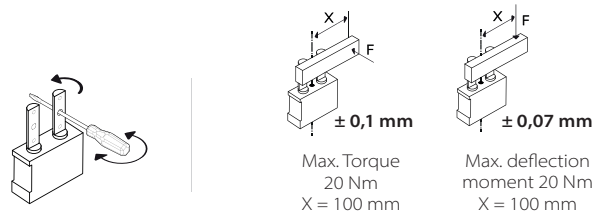
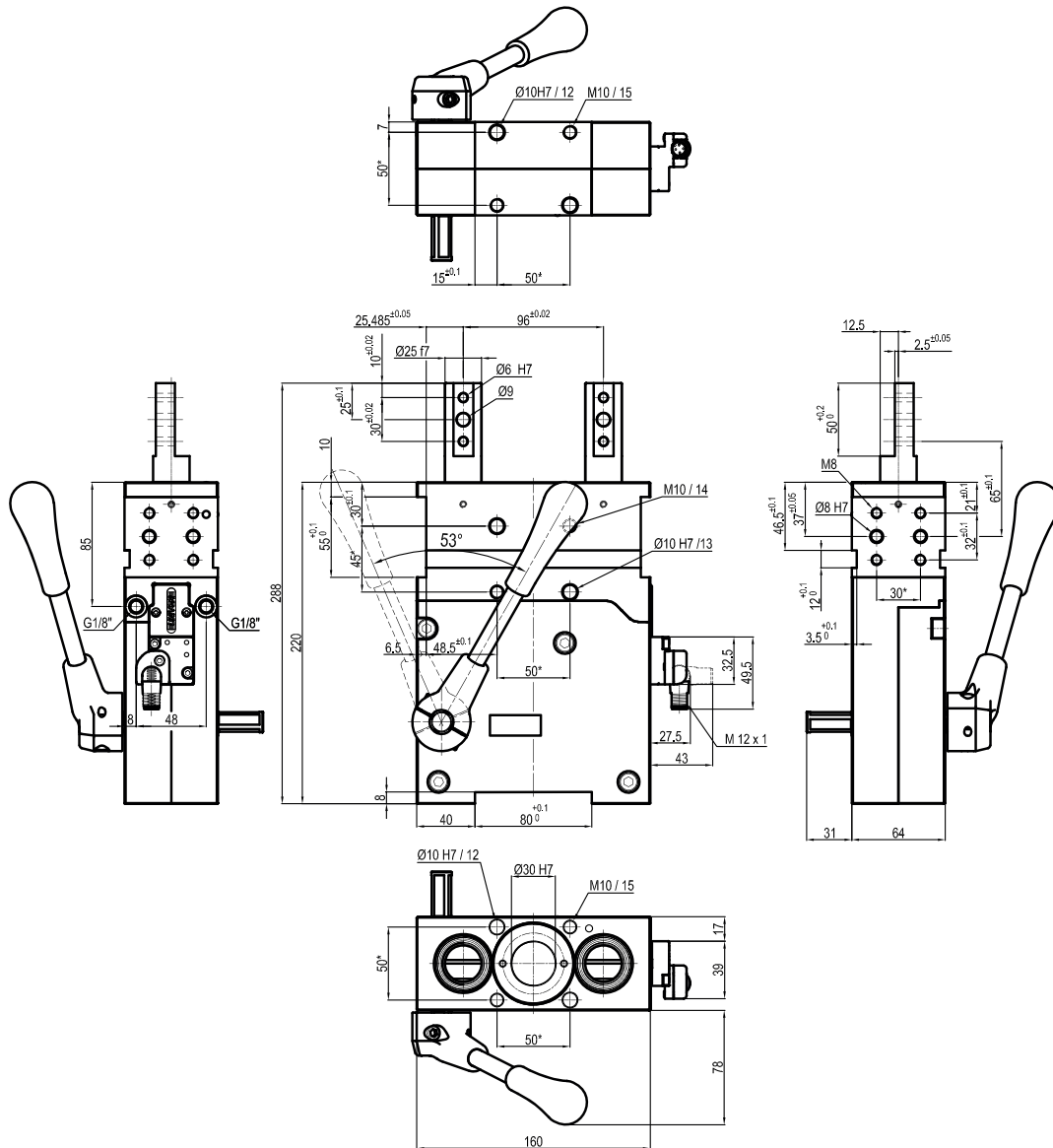


METAL SCRAPER

1	<b>SERIES</b> UL = UNICLAMP locating pin unit	6	<b>SENSOR</b> 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
2	<b>VERSION</b> X = Pneumatic, with toggle-joint mechanism double orientable rod and hand lever	7	<b>PRODUCT REVISION</b> Assigned by UNIVER
3	<b>SIZE</b> 50 = Ø50 mm	8	<b>ATEX</b> X = ATEX option See ATEX Catalogue for types and versions
4	<b>STROKE</b> 040 = 40 mm		
5	<b>ROD END STYLE</b> A = Rod for offset pins G = Rod for offset pins (rod plane matching body middle axis)		

**A** Rod for offset pins

3



\*TOLERANCE BETWEEN DOWELS ± 0,02 BETWEEN SCREW HOLES ± 0,1

**Sensors**



Electronic (optical)

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

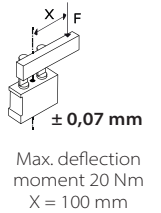
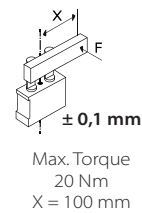
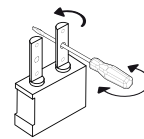
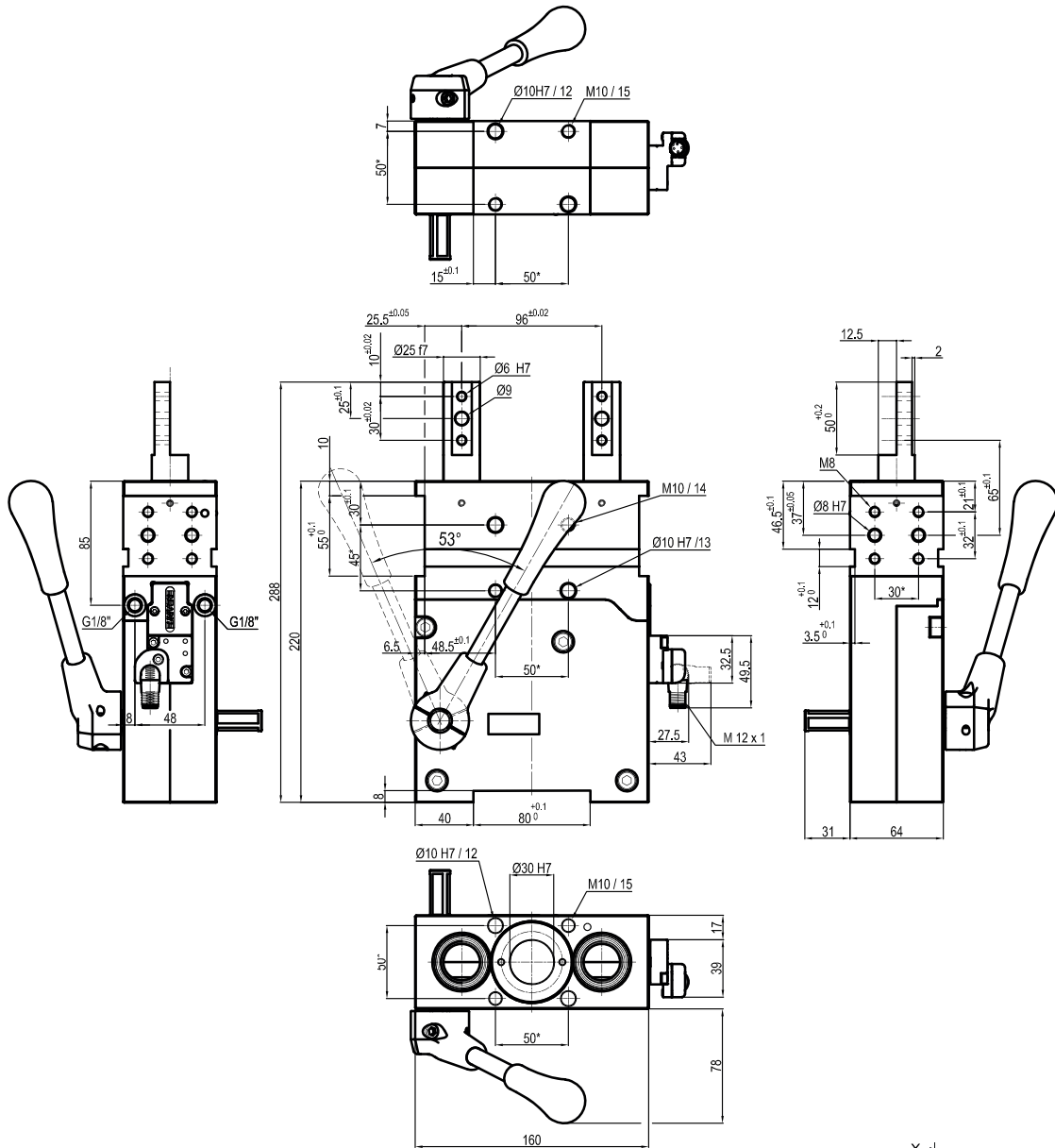
**Accessories**



Handlever

UBF255063

**G** Rod for offset pins  
Rod plane matching body middle axis



\*TOLERANCE BETWEEN DOWELS ± 0,02 BETWEEN SCREW HOLES ± 0,1

**Sensors**



Electronic (optical)

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

**Accessories**



Handlever

UBF255063