

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



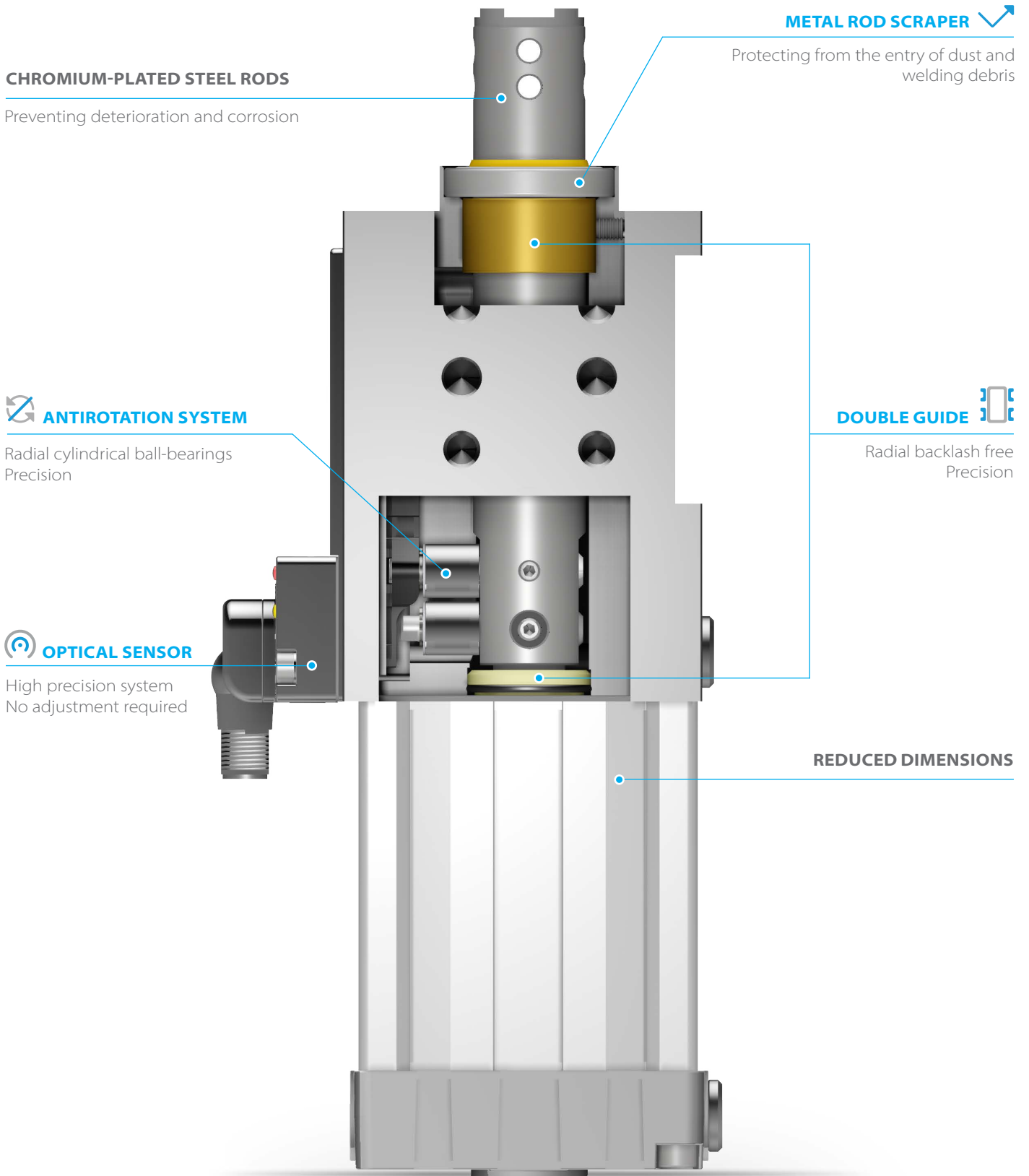
CNOMO STANDARD

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

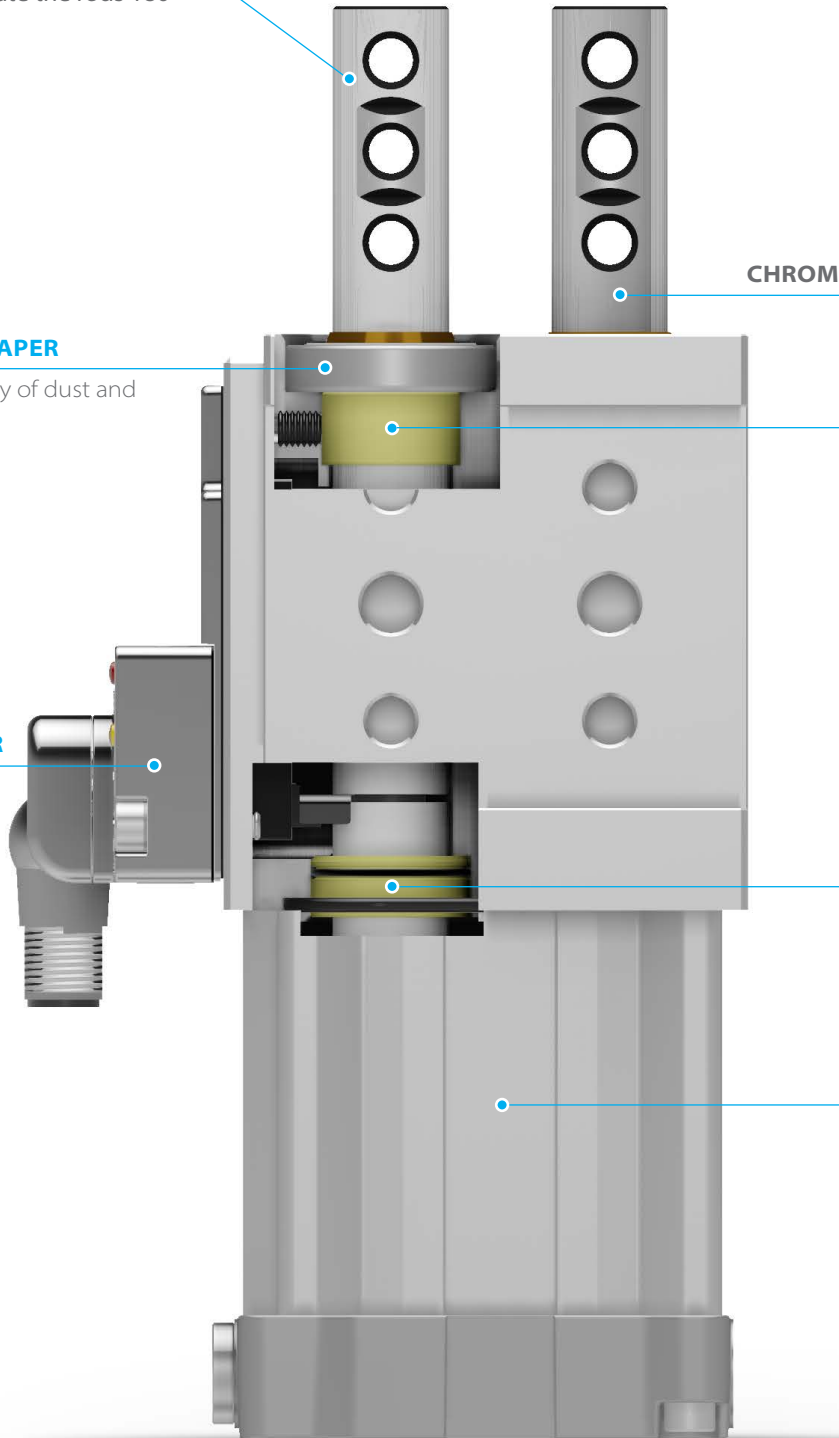
Preventing deterioration
and corrosion

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°
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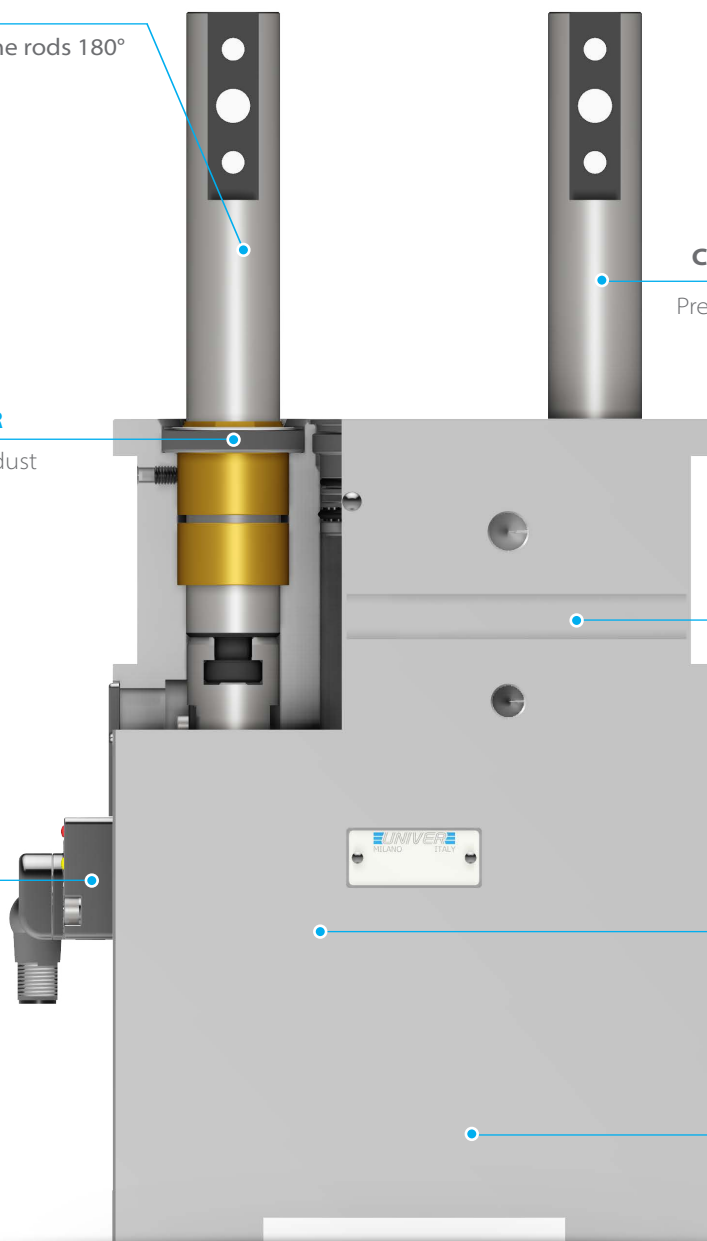
DOUBLE GUIDE

Radial backlash free
Precision

COMPACT DIMENSIONS

TOGGLE-JOINT

Irreversible rod extend position
High trust force





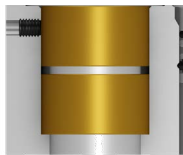
 **METAL ROD SCRAPER**

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



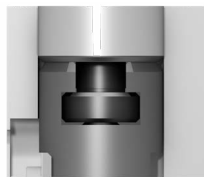
 **ANTIROTATION SYSTEM**

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



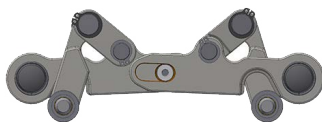
 **DOUBLE GUIDE**

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

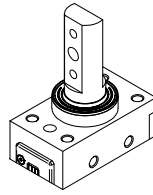
No set up

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

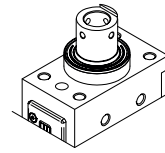
Insensitive to high magnetic fields, typical of new and modern welding systems like aluminium welding

Industry-recognized, tested and proven sensor

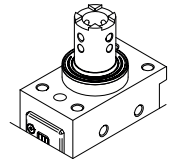
LOCATING PIN UNITS RODS



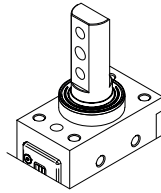
Rod for off-set pins



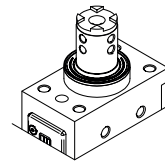
Profiled end



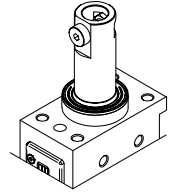
Cross-profiled $\varnothing 16$



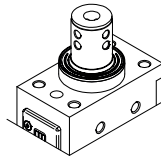
Oversized dowel holes



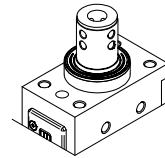
Cross-profiled $\varnothing 10$



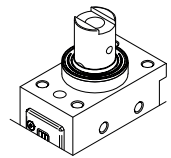
NAAMS COMPATIBLE $\varnothing 16$



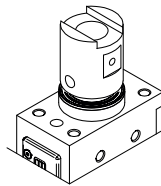
Flat $\varnothing 10$



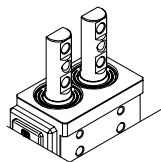
FLAT $\varnothing 12$



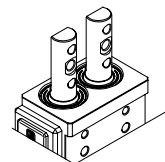
CNOMO $\varnothing 12$



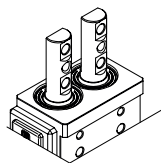
CNOMO $\varnothing 20$



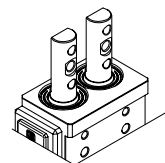
ROD FOR OFFSET PINS
2 SCREWS - 1 DOWEL



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

ULL 50

Manual retractable locating pin unit, Ø50 mm with hand lever

Manual retractable locating pin unit, single rod, with hand lever typically used in welding applications to locate metal sheets in a definite position.

- Metal rod scraper
- Antirotation system
- Electronic sensor
- Many rod end styles available
- Ergonomic hand lever



3

CHARACTERISTICS

| | |
|------------------------------|----------------------|
| Operating temperature | 5° ÷ 45° C |
| Min./Max. operating pressure | 0,4 / 0,6 MPa |
| Bore Ø | 50 mm |
| Max. Torque (6 Nm) | ± 0,06 mm |
| Max. Deflection (7,5 Nm) | ± 0,03 mm |
| Weight | 2,5 Kg |
| Sensor | electronic (optical) |
| Supply voltage | 10 ÷ 30 Vdc |
| IP code | IP 65 |

CODIFICATION KEY

UL | L | 50 | 040 | C | X | K | 0 | |

1 2 3 4 5 6 7 8 9

OPTICAL SENSOR

METAL SCRAPER

ANTI ROTATION

1 SERIES
UL = UNICLAMP locating pin unit

2 VERSION
L = Manual with hand lever

3 SIZE
50 = Ø50 mm

4 STROKE
040 = 40 mm

5 ROD END STYLE
 A = Rod for offset pins
 B = Rod with profiled end
 C = Rod with cross-profiled end inner Ø 16 mm
 D = Rod for offset pins with oversized dowel holes
 E = Rod with cross profiled end inner Ø 10 mm
 F = Compatible with NAAMS, inner Ø 16
 H = Rod with flat end, inner Ø10 mm
 I = Rod with flat end, inner Ø12 mm
 L* = Rod with inner Ø12 mm
 M* = Rod with inner Ø 20 mm
 *compatible with CNOMO standard

6 ROD ORIENTATION
X = Symmetrical

E* = East

O* = West

N* = North

S* = South

*only with "A" and "D" rod style

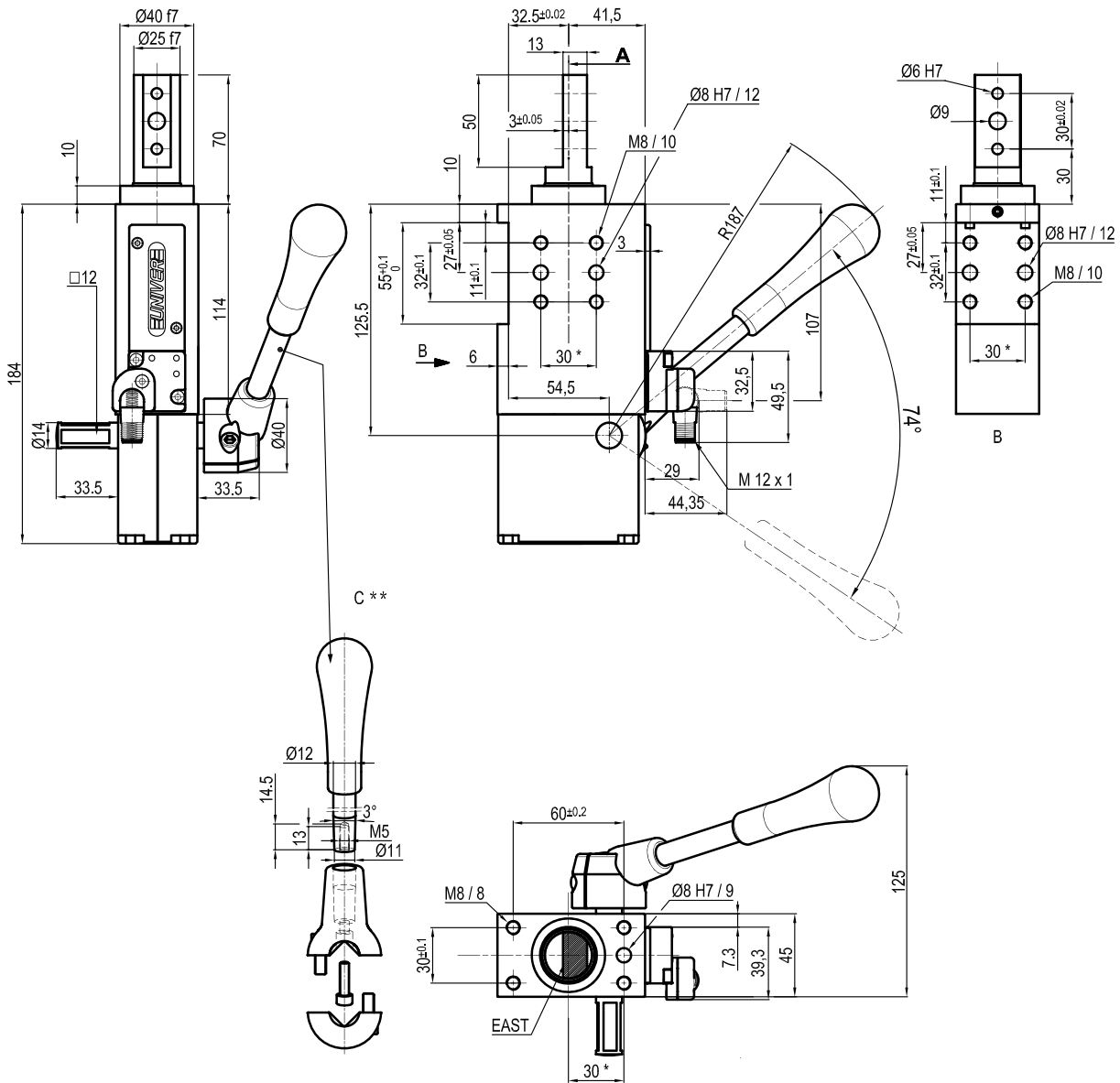
7 SENSOR
 N = No sensor (with protection plate)
 K = Electronic sensor PNP, M12 (DF-K)
 D = Pneumatic sensor (DF-UPNW)
 J = Electronic sensor NPN, optical (DF-J)
 Y = Electronic sensor PNP, M12 (DF-Y) white LED

8 PRODUCT REVISION
Assigned by UNIVER

9 ATEX
 X = ATEX option
 See ATEX Catalogue for types and versions

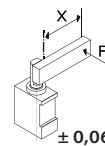
A Rod for offset pins

3



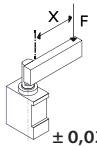
East West North South

*TOLERANCE BETWEEN DOWELS $\pm 0,02$ BETWEEN SCREW HOLES $\pm 0,1$
 **DIMENSIONS TO BE RESPECTED IN CASE OTHER MANUAL LEVERS ARE USED



$\pm 0,06$ mm

Max. Torque
6 Nm
X = 100 mm



$\pm 0,03$ mm

Max. deflection
moment 7,5 Nm
X = 100 mm

Sensors



Electronic (optical)

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



Pneumatic

DF-UPNW

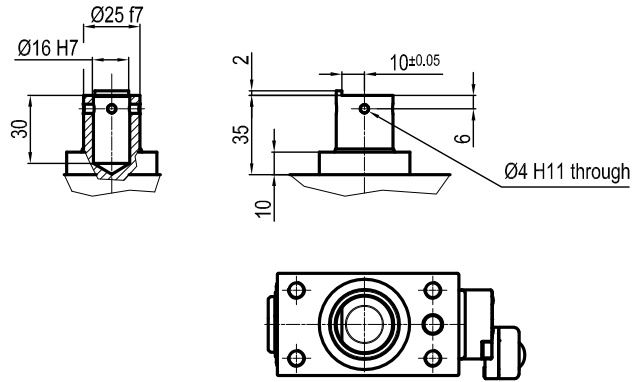
Accessories



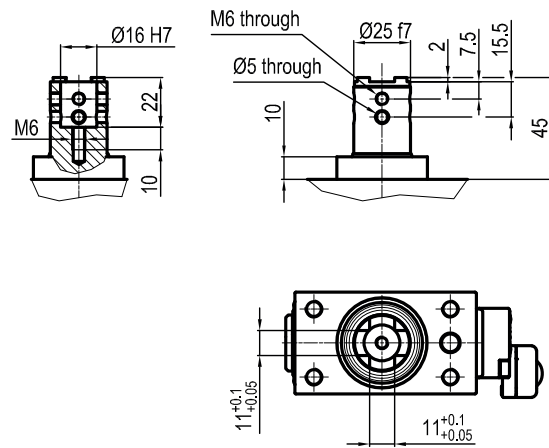
Handlever

UBF255063

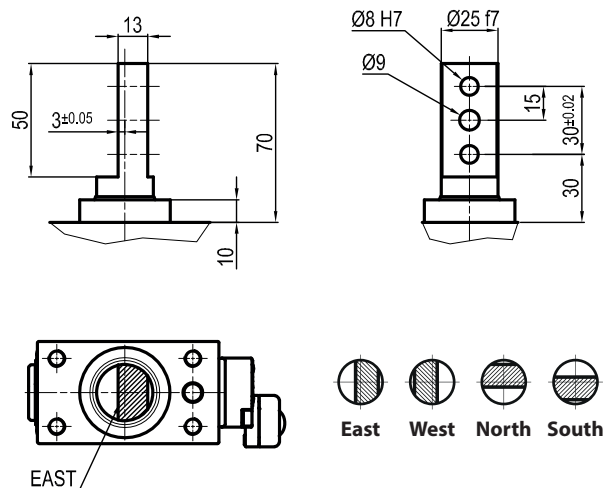
B Rod with profiled end



C Rod with cross-profiled end
Inner Ø16 mm



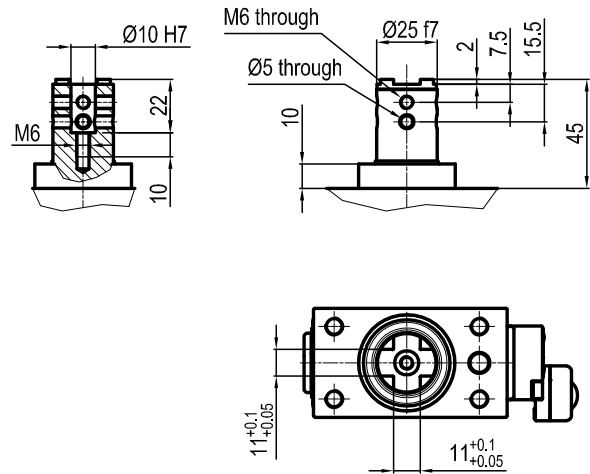
D Rod for offset pins
Oversized dowel holes



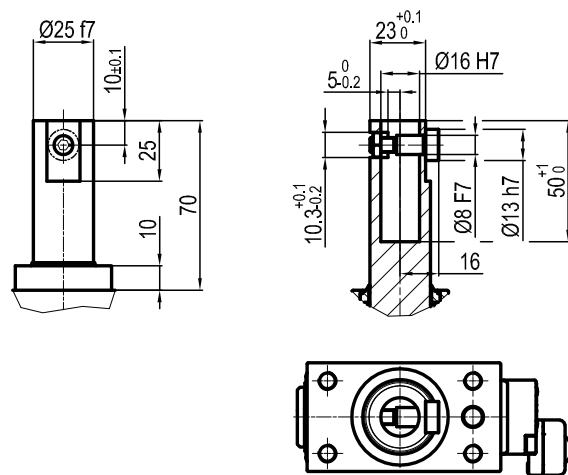
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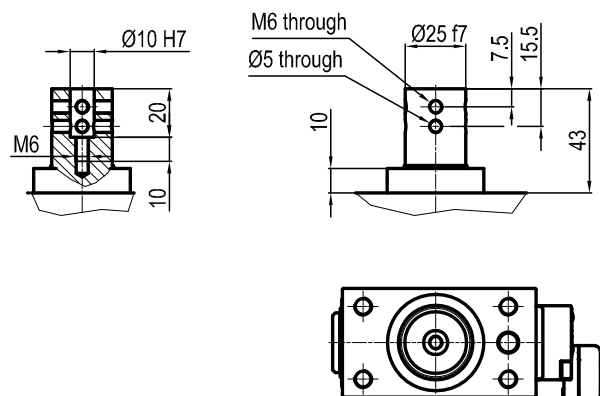
E Rod with cross-profiled end
Inner Ø10 mm



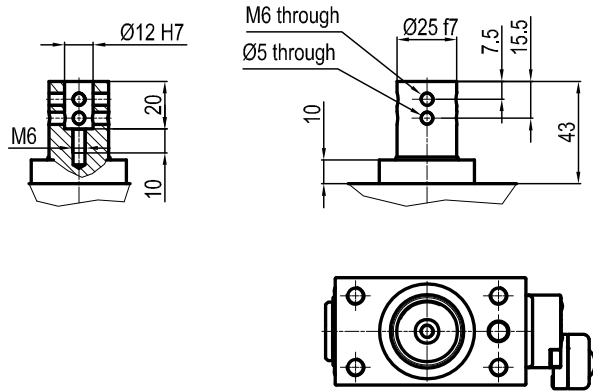
F Compatible with NAAMS
Inner Ø16 mm



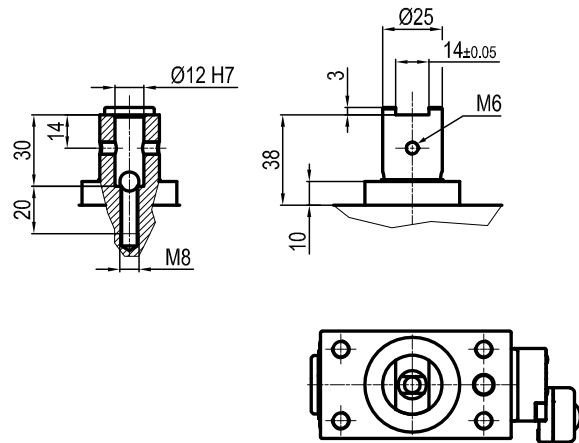
H Rod with flat end
Inner Ø10 mm



I Rod with flat end
Inner Ø12 mm



L Rod compatible with CNOMO standard
Inner Ø12 mm



M Rod compatible with CNOMO standard
Inner Ø20 mm

