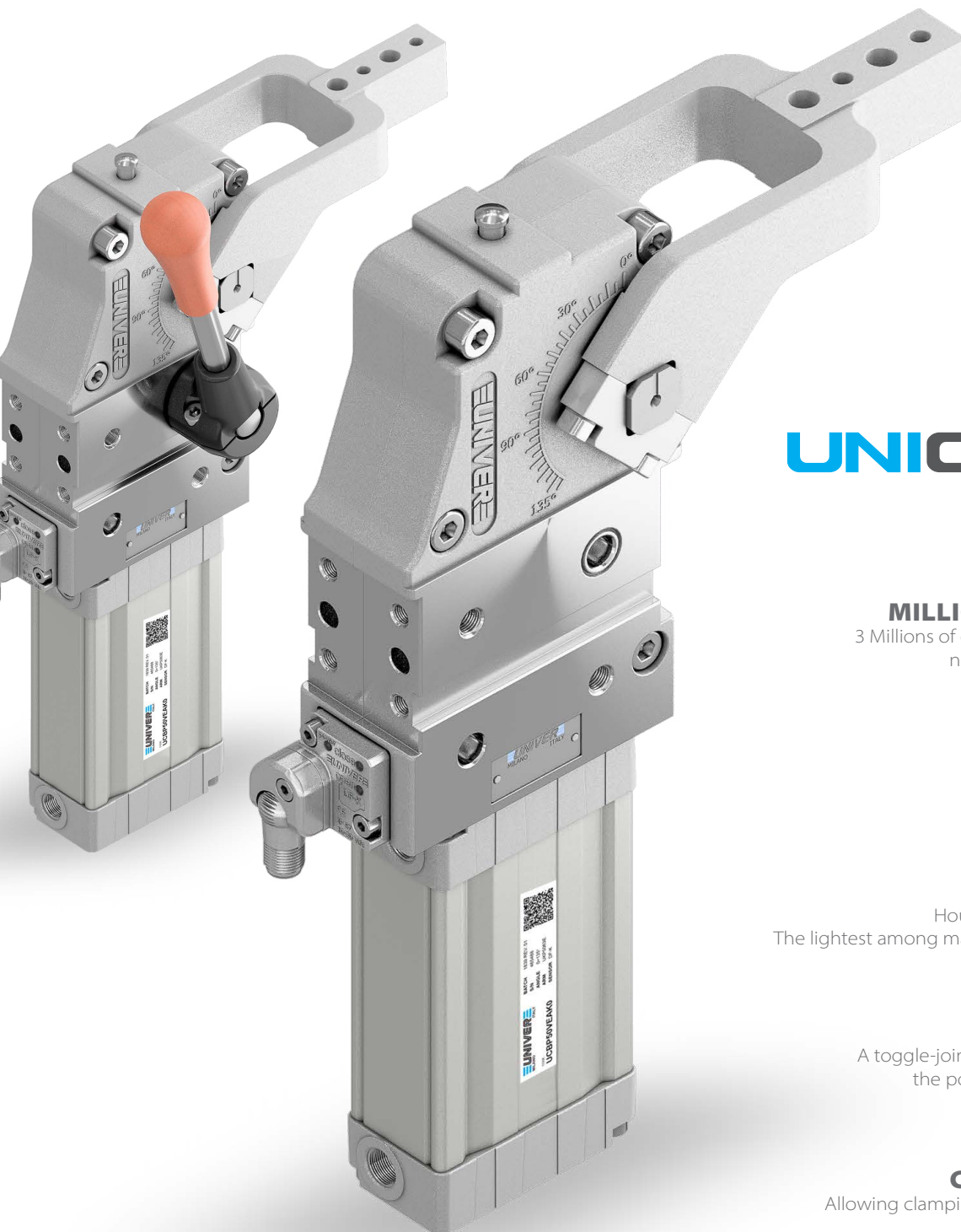


PNEUMATIC POWER CLAMPS


Pneumatic power clamps with compensation system, toggle-joint mechanism and stepless adjustable opening angle, typically 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



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

IRREVERSIBLE 
A toggle-joint mechanism maintains
the position even with air lack

COMPENSATION 
Allowing clamping of different thickness



UNICLAMP[®]

next generation

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



GLOBAL STANDARD COMPONENTS

NAAMS



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



BLUECLAMP

air saving

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

ROLLER BEARINGS

Linear and rotary motion guided by roller bearings

MANUAL RELEASE BUTTON

Safety unlocking system without air supply

INTEGRATED COMPENSATION

Allows clamping of different thickness
Up to **3 mm**

TOGGLE-JOINT

Irreversible without external stops
UNIVER Original

OPTICAL SENSOR

High precision system
No adjustment required

SUPPLY PORTS ON BOTH SIDES

Calibrated holes

SELF-ADJUSTING CUSHIONING SYSTEM

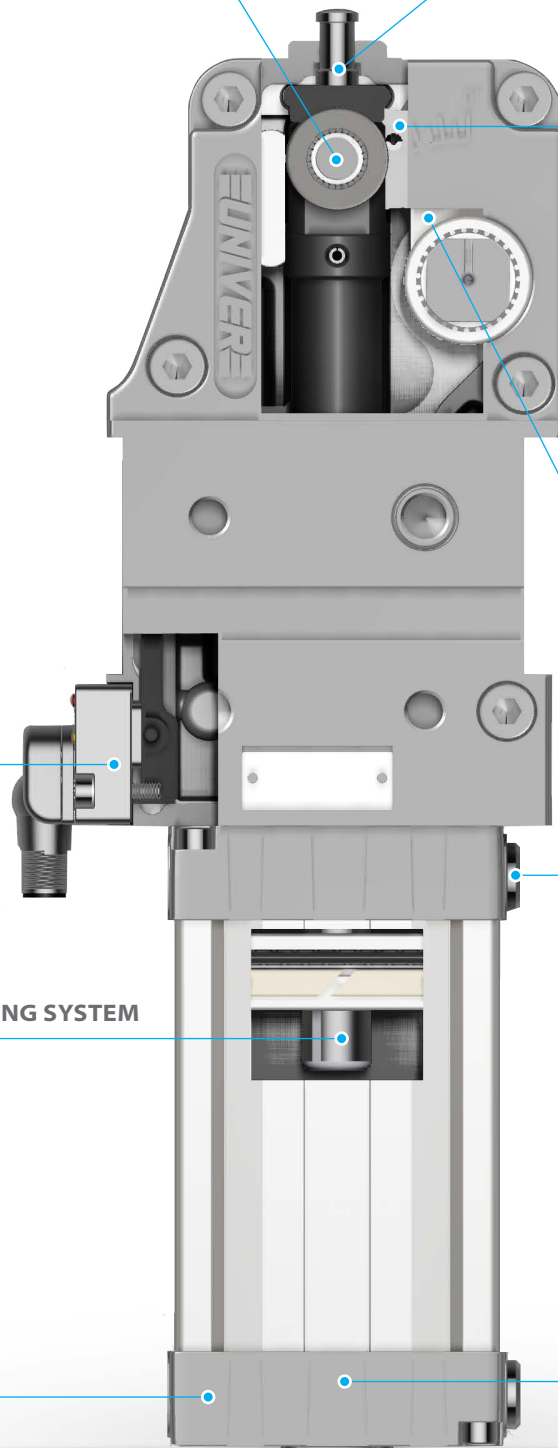
Special solution on piston rod
allows flow regulation

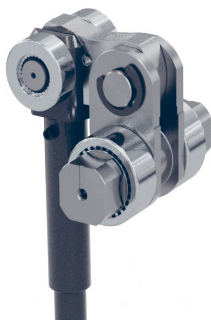
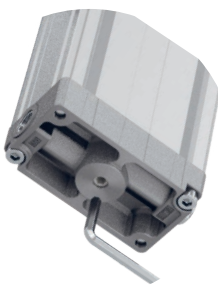
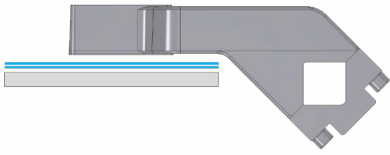
REDUCED DIMENSIONS

Compact end caps

ANGLE ADJUSTMENT

Covers the whole range of possible
opening angles





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

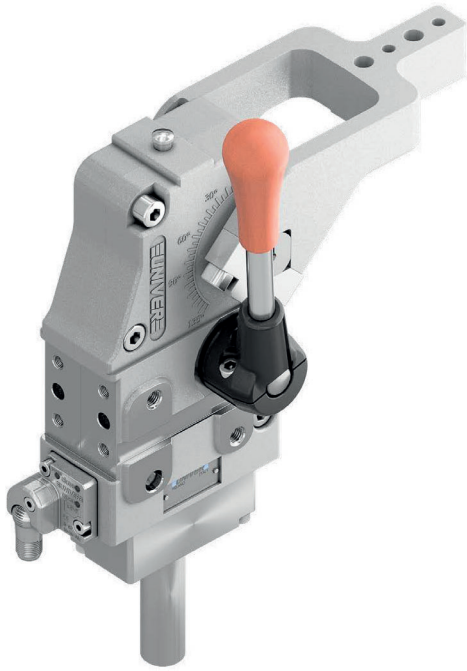
Ergonomic design
Welding debris resistant

UCBL 463

Manual power clamps Ø63 mm

Manual power clamps size Ø63 mm with compensation system, toggle-joint mechanism and stepless adjustable opening angle, typically used for handling and holding metal sheets in welding applications

- Lightweight aluminium construction
- Integrated compensation system up to 2,7 mm
- Hand lever mount on both sides
- Fully optical electronic sensor or pneumatic sensor
- Fixing pattern on 4 sides
- Manual unlocking
- Integrated self-holding system for open position
- Clamping arm in aluminium or steel



2

CHARACTERISTICS

Operating temperature	5° ÷ 45° C
Opening angle*	0° ÷ 135°
Bore Ø	63 mm
Holding moment	1750 Nm
Clamping moment (0,5 MPa)	420 Nm
Weight (clamping arm not included)	2,95 Kg
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

UC	B	L	4	63	V	E	A	K	0	
1	2	3	4	5	6	7	8	9	10	11



COMPENSATION



LIGHTWEIGHT



IRREVERSIBLE



ANGLE ADJUSTMENT



OPTICAL SENSOR

1 SERIES
UC = UNICLAMP Power clamps

2 STANDARD
B = European standard

3 VERSION
L = Manual power clamp with hand lever

4 FIXING
4 = On 4 sides

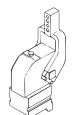
5 SIZE
63 = Ø 63 mm

6 ARM POSITION

V = 90°



O = 180°



N = No arm



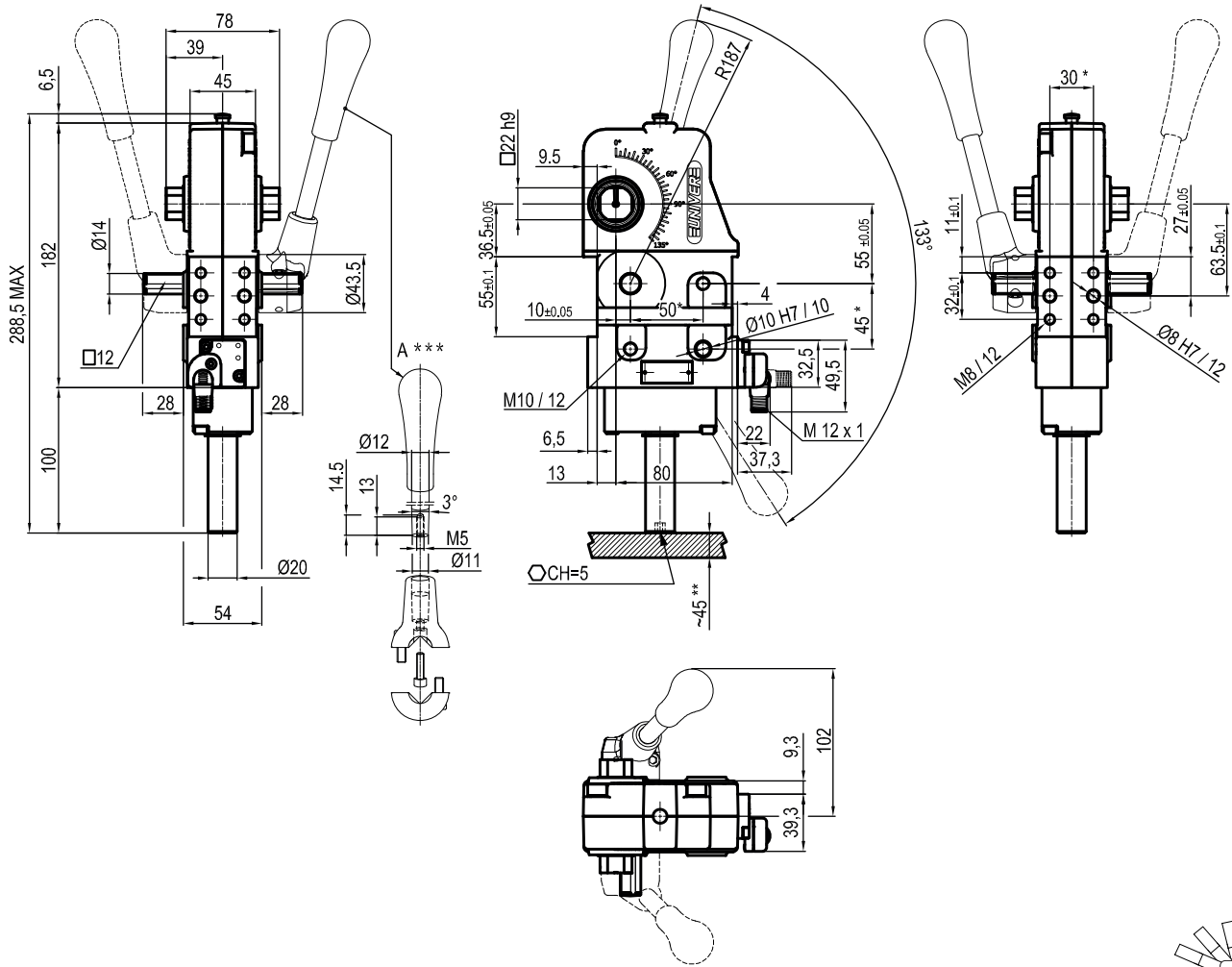
7 ARM STYLE
C = Central, 15 mm offset
D = Right, 15 mm offset
S = Left, 15 mm offset
E = Central, 45 mm offset
F = Right, 45 mm offset
L = Left, 45 mm offset
N = No arm
For other versions contact our Sales Dept.

8 ARM TYPE
A = Aluminium
S = Steel
N = No arm

9 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

10 PRODUCT REVISION
Assigned by UNIVER

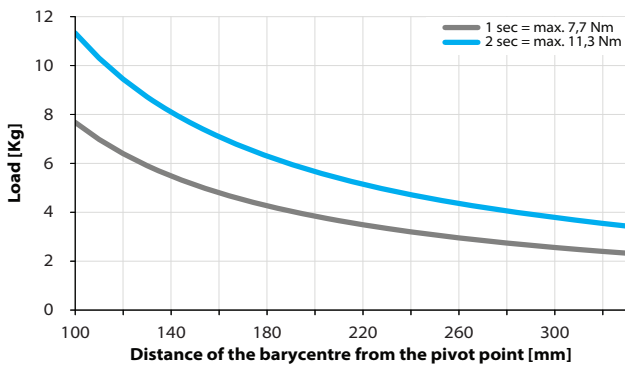
11 ATEX
X = ATEX option
See ATEX Catalogue for types and versions



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

Maximum Applicable Load

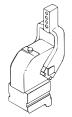
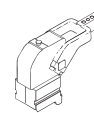
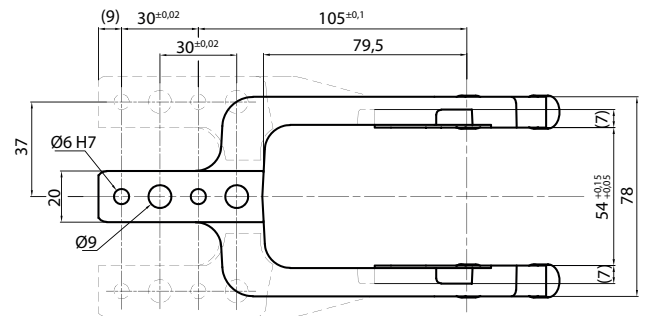
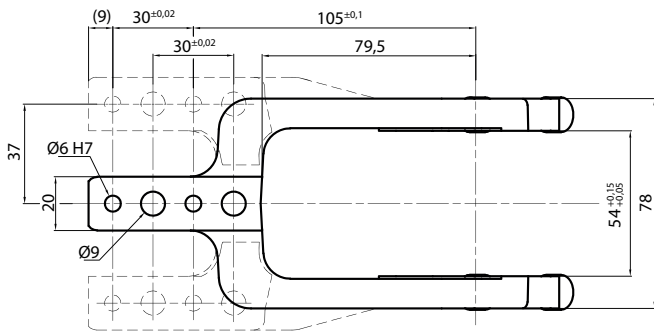
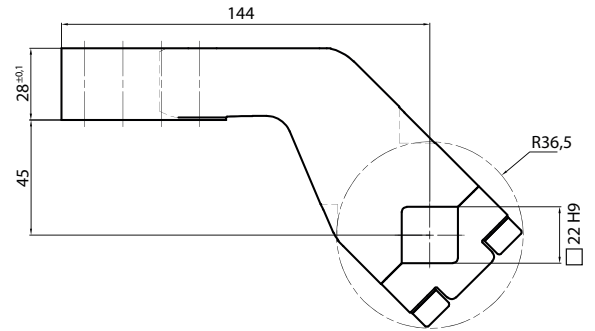
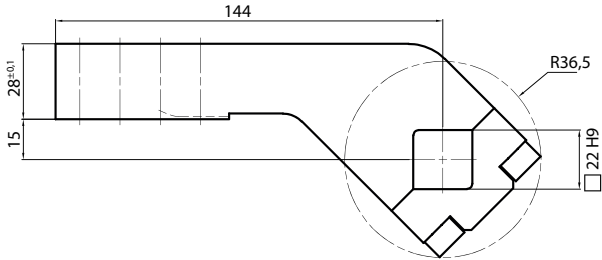
Pressure: 5 bar - 90° cycle time (Open - Close)



Clamping Arms

Arm Offset 15mm

Arm Offset 45mm



Armcode	Offset	Material	Arm style	Weight (Kg)	Opening angle (90°)	Opening angle (180°)
UP310151441A	15	ALUMINIUM	CENTRAL	0,3	0÷135°	0÷110°
UP310151442A	15	ALUMINIUM	RIGHT	0,3	0÷135°	0÷110°
UP310151443A	15	ALUMINIUM	LEFT	0,3	0÷135°	0÷110°
UP310151441G	15	STEEL	CENTRAL	1,2	0÷135°	0÷110°
UP310151442G	15	STEEL	RIGHT	1,2	0÷135°	0÷110°
UP310151443G	15	STEEL	LEFT	1,2	0÷135°	0÷110°
UP310451441A	45	ALUMINIUM	CENTRAL	0,3	0÷135°	0÷135°
UP310451442A	45	ALUMINIUM	RIGHT	0,3	0÷135°	0÷135°
UP310451443A	45	ALUMINIUM	LEFT	0,3	0÷135°	0÷135°
UP310451441G	45	STEEL	CENTRAL	1,4	0÷135°	0÷135°
UP310451442G	45	STEEL	RIGHT	1,4	0÷135°	0÷135°
UP310451443G	45	STEEL	LEFT	1,4	0÷135°	0÷135°

Sensors



Electronic (optical)

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



Pneumatic

DF-UPNW

Accessories



Handlever

UBF255063