

Ø32-63mm

USP32	2
USP50	5
USP63	9

#### Orientable hook Ø50mm

USS50	11

#### High compensation Ø63mm

USS63		14

#### Laser beam applications Ø50mm

USSL50			

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17

#### Compact Ø40mm

USC40	20
USR40	22

#### Vanishing hook Ø50mm

UST50	25

#### Horizontal Ø50mm

USP50U	27
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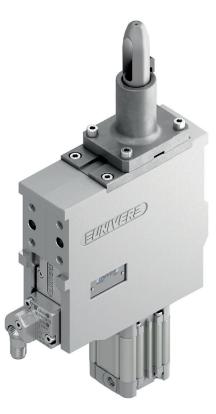
#### Vanishing hook and pin Ø63mm

LUP63	29

#### Manual Ø50mm

USL50		31





IRREVERSIBLE

LIGHTWEIGHT

COMPENSATION

METAL SCRAPER

OPTICAL SENSOR

HIGH REPEATABILITY

# **USP 32**

Pneumatic pin clamp Ø32 mm

Pneumatic pin clamps mainly designed for centring and clamping metal sheets in BIW underbody applications.

- Integrated compensation up to 1,2 mm
- Double metal scraper for protection against dust and welding debris
- Toggle-joint mechanism
- High repeatability
- High wear resistance steel pin
- Electronic sensor
- · Available version with plate machined from solid (no shimming)

#### CHARACTERISTICS

Operating temperature	5° ÷ 45° C
Min./Max. Operating pressure	0,4 / 0,6 MPa
Bore Ø	32 mm
Clamping force	1500 N
Weight (without plate, pin and hook)	2,6 kg
Pneumatic supply ports	G1/8
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP 65

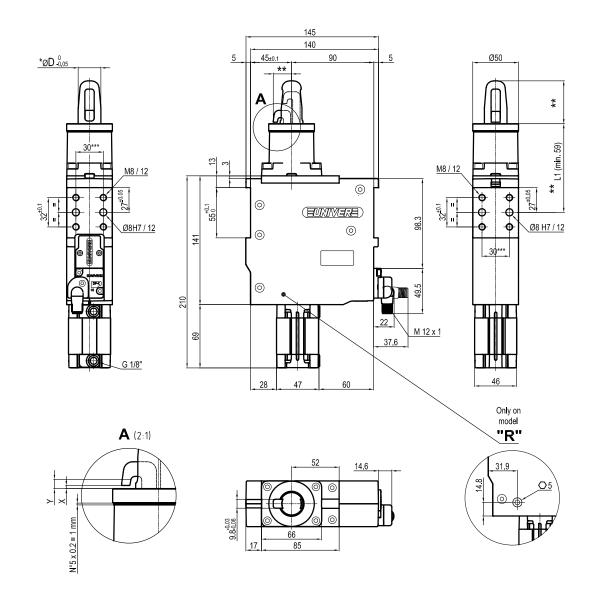
#### CODIFICATION KEY

U	S   P   32   <b>J   3   1</b>   -   <b>K</b>   0
1	1 2 3 4 5 6 7 8 9 10
1	SERIES6LOCATING PINUS = UNICLAMP Pin clamp with compensation0 = Locating pin not included 1 = Locating pin included
2	VERSION     7     PROGRESSIVE NUMBERING       P = Pneumatic     Progressive numbers for special products are assigned by the Sales Department
3	SIZE 32 = Ø32 mm 8 SENSOR N = No sensor (with protection plate)
4	MODEL       K = No Sensol (with plate)         J = Standard       K = Electronic sensor PNP, M12 (DF-K)         R = With mechanical       J = Electronic sensor PNP, M12 (DF-Y) white L         locking/unlocking device       Y = Electronic sensor PNP, M12 (DF-Y) white L
5	PIN DIAMETER     PRODUCT REVISION       1< = Ø18 mm
	2 = Ø20 mmATEX3 = Ø25 mm104 = Ø30 mmX = ATEX option5 = Ø35 mmSee ATEX Catalogue for types and versions6 = Ø40 mmSee ATEX Catalogue for types and versions
	For pin Ø outside the mentioned range, please contact our sales department

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	*Pin Option	ØD
	1	18
	2	20
X = Metal sheet	3	25
Y = Clamping range (X + 1,2 mm Max.)	4	30
VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST ** MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS	5	35
*** TOLERANCE BETWEEN DOWEL HOLES ± 0,02, BETWEEN SCREW HOLES ± 0,1	6	40

#### Sensors



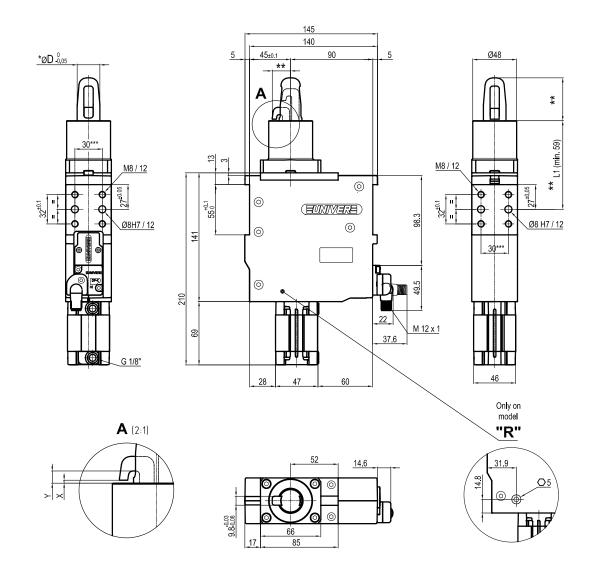
Electronic (optical)

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

Subject to change



#### Version with plate machined from solid (no shimming)



	*Pin Option	ØD
	1	18
	2	20
X = Metal sheet	3	25
Y = Clamping range (X + 1,2 mm Max.)	4	30
VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST ** MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS	5	35
*** TOLERANCE BETWEEN DOWEL HOLES $\pm$ 0,02, BETWEEN SCREW HOLES $\pm$ 0,1	6	40

#### Sensors



Electronic (optical)

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



# **USP 50**

Pneumatic pin clamp Ø50 mm

Pneumatic pin clamps mainly designed for centring and clamping metal sheets in BIW underbody applications.

- Integrated compensation up to 2,3 mm
- Double metal scraper for protection against dust and welding debris
- Toggle-joint mechanism
- High repeatability
- High wear resistance steel pin
- Electronic sensor
- Available version with plate machined from solid (no shimming)

#### CHARACTERISTICS

Operating temperature	5° ÷ 45° C
Min./Max. Operating pressure	0,4 / 0,6 MPa
Bore Ø	50 mm
Clamping force	3500 N
Weight (without plate, pin and hook)	2,9 kg
Pneumatic supply ports	G1/4 on both sides
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP 65

#### CODIFICATION KEY

<ul> <li>3 SIZE</li> <li>50 = Ø50 mm</li> <li>4 MODEL</li> <li>J = Standard</li> <li>8 SENSOR</li> <li>N = No sensor (with protection plate)</li> <li>K = Electronic sensor PNP, M12 (DF-K)</li> <li>J = Electronic sensor NPN, optical (DF-J)</li> </ul>	U	IS   P   50   <b>J   3   1</b>   -   <b>K</b>	0	
US = UNICLAMP Pin clamp with compensation       0       Executive HV         0 = Locating pin not included       1 = Locating pin not included         1 = Locating pin included       1 = Locating pin included         2       VERSION       7         P = Pneumatic       7       PROGRESSIVE NUMBERING         3       SIZE       50 = Ø50 mm         4       MODEL       7         J = Standard       8         R = With mechanical locking/unlocking device       9         PRODUCT REVISION       Assigned by UNIVER         1       = Ø30 mm         3 = Ø25 mm       10         ATEX       X = ATEX option         5       PIN DIAMETER         1       = Ø30 mm         2       Ø30 mm         5       PIN DIAMETER         1       ATEX         7       PRODUCT REVISION         1       Se ATEX Catalogue for types and versions		1 2 3 4 5 6 7 8	9	
<ul> <li>P = Pneumatic</li> <li>SIZE</li> <li>S0 = Ø50 mm</li> <li>SIZE</li> <li>S0 = Ø50 mm</li> <li>MODEL</li> <li>J = Standard</li> <li>R = With mechanical locking/unlocking device</li> <li>PIN DIAMETER</li> <li>I &lt;= Ø18 mm</li> <li>2 = Ø20 mm</li> <li>S = Ø25 mm</li> <li>S = Ø25 mm</li> <li>S = Ø25 mm</li> <li>S = Ø25 mm</li> <li>S = Ø35 mm<th>1</th><th>US = UNICLAMP Pin clamp with</th><th>6</th><th>0 = Locating pin not included</th></li></ul>	1	US = UNICLAMP Pin clamp with	6	0 = Locating pin not included
J       Joint 1000000000000000000000000000000000000		P = Pneumatic	7	Progressive numbers for special products are
<ul> <li>MODEL J = Standard R = With mechanical locking/unlocking device</li> <li>PIN DIAMETER 1 &lt;= Ø18 mm 2 = Ø20 mm 3 = Ø25 mm 4 = Ø30 mm 5 = Ø35 mm 6 = Ø40 mm For pin Ø outside the mentioned range,</li> <li>K = Electronic sensor PNP, M12 (DF-K) J = Electronic sensor PNP, M12 (DF-Y) white PRODUCT REVISION A seigned by UNIVER 1 &lt;= ATEX X = ATEX option See ATEX Catalogue for types and versions</li> </ul>	3		8	
5       PIN DIAMETER       Assigned by UNIVER         1<= Ø18 mm	4	J = Standard R = With mechanical		K = Electronic sensor PNP, M12 (DF-K)
2 = Ø20 mm       ATEX         3 = Ø25 mm       10         4 = Ø30 mm       X = ATEX option         5 = Ø35 mm       See ATEX Catalogue for types and versions         6 = Ø40 mm       For pin Ø outside the mentioned range,	5		9	
		2 = Ø20 mm 3 = Ø25 mm 4 = Ø30 mm 5 = Ø35 mm	10	<b>X</b> = ATEX option
		For pin $\varnothing$ outside the mentioned range,		

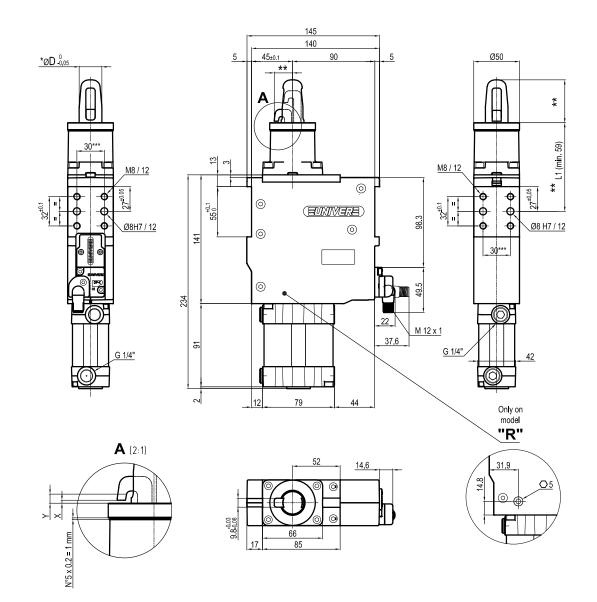


IRREVERSIBLE

Subject to change







	*Pin Option	ØD
	1	18
	2	20
$\mathbf{X} = Metal sheet$	3	25
Y = Clamping range (X + 2,3 mm Max.)	4	30
VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST ** MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS	5	35
*** TOLERANCE BETWEEN DOWEL HOLES $\pm$ 0,02, BETWEEN SCREW HOLES $\pm$ 0,1	6	40

#### Sensors



Electronic (optical)

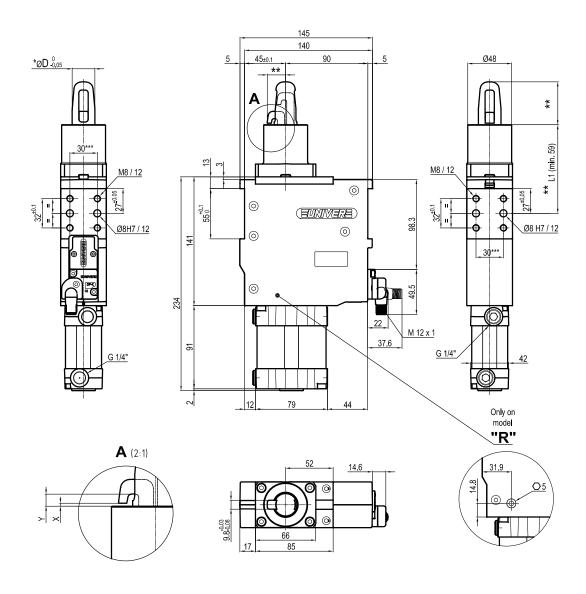
DF-K PNP M12 DF-J NPN M12 DF-Y PNP M12 White LED

<mark>6</mark> 6

UNICLAMP Pneumatic Pin Clamps



#### Version with plate machined from solid (no shimming)



	*Pin Option	ØD
	1	18
	2	20
$\mathbf{X} = Metal sheet$	3	25
Y = Clamping range (X + 2,3 mm Max.)	4	30
VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST ** MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS	5	35
*** TOLERANCE BETWEEN DOWEL HOLES $\pm$ 0,02, BETWEEN SCREW HOLES $\pm$ 0,1	6	40

#### Sensors



Electronic (optical)

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



IRREVERSIBLE

LIGHTWEIGHT

COMPENSATION

METAL SCRAPER

OPTICAL SENSOR

HIGH REPEATABILITY

# **USP 63**

#### Pneumatic pin clamp Ø63 mm, high compensation

Pneumatic pin clamps with high compensation system mainly designed for centering and clamping metal sheets in BIW underbody applications.

- Integrated compensation up to 6 mm
- Double metal scraper for protection against dust and welding debris
- Toggle-joint mechanism
- High repeatability
- High wear resistance steel pin
- Electronic sensor
- · Available version with plate machined from solid (no shimming)

#### CHARACTERISTICS

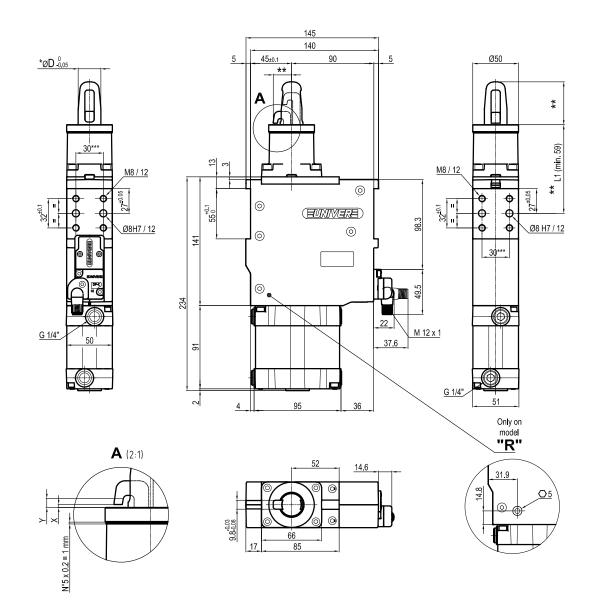
Operating temperature	5° ÷ 45° C
Min./Max. Operating pressure	0,4 / 0,6 MPa
Bore Ø	63 mm
Clamping force	3500 N
Weight (without plate, pin and hook)	3,1kg
Pneumatic supply ports	G1/4 on both sides
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP 65

#### CODIFICATION KEY

U	S   P	63	J	3	1	-	K	0	
1	2	3	4	5	6	7	8	9	10
1	SERIES US = UN compe			lamp	with			6	LOCATING PIN 0 = Locating pin not included 1 = Locating pin included
2	VERSIO P = Pne							7	PROGRESSIVE NUMBERING Progressive numbers for special products are assigned by the Sales Department
3	SIZE 63 = Ø6	i3 mm						8	SENSOR
4	MODEL J = Stan R = With locking,	idard n mech		evice					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 LE
5		MFTF	R					9	PRODUCT REVISION Assigned by UNIVER
J	$1 < = \emptyset 1$ $2 = \emptyset 20$ $3 = \emptyset 25$ $4 = \emptyset 30$ $5 = \emptyset 35$ $6 = \emptyset 40$	8 mm mm mm mm mm						10	ATEX X = ATEX option See ATEX Catalogue for types and versions
	For pin Ø please co					ge,			

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	*Pin Option	ØD
	1	18
	2	20
X = Metal sheet	3	25
$\mathbf{Y} = Clamping range (X + 6 mm Max.)$	4	30
VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST ** MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS	5	35
*** TOLERANCE BETWEEN DOWEL HOLES ± 0,02, BETWEEN SCREW HOLES ± 0,1	6	40

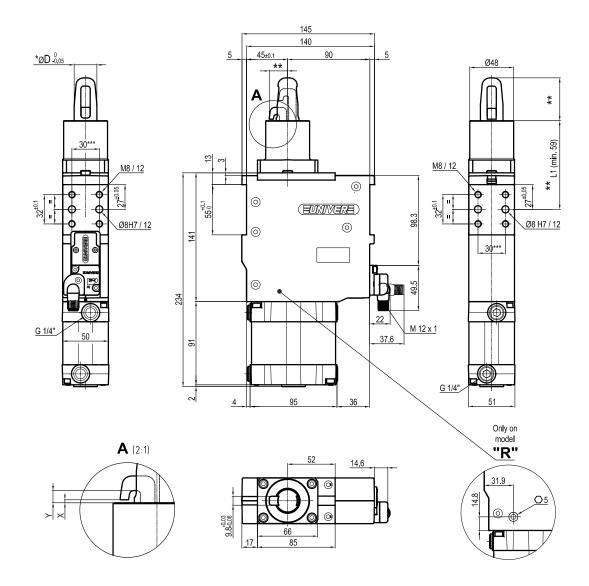
#### Sensors



Electronic (optical)

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

#### Version with plate machined from solid (no shimming)



	*Pin Option	ØD
	1	18
	2	20
X = Metal sheet	3	25
$\mathbf{Y} = Clamping range (X + 6 mm Max.)$	4	30
VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST ** MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS	5	35
*** TOLERANCE BETWEEN DOWEL HOLES ± 0,02, BETWEEN SCREW HOLES ± 0,1	6	40

#### Sensors



Electronic (optical)

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





IRREVERSIBLE

LIGHTWEIGHT

COMPENSATION

METAL SCRAPER

OPTICAL SENSOR

HIGH REPEATABILI

0/180°

# **USS 50**

Pneumatic pin clamp Ø50 mm, orientable hook

Pneumatic pin clamps with orientable hook position and high compensation system mainly designed for centering and clamping metal sheets in BIW underbody applications.

- Integrated compensation up to 2,3 mm •
  - Double metal scraper for protection against dust and welding debris
- Toggle-joint mechanism
- •
- High repeatability High wear resistance steel pin •
- Electronic sensor .
- Hook position: 0/180° .
- Available version with plate machined from solid (no shimming)

#### CHARACTERISTICS

Operating temperature	5° ÷ 45° C
Min./Max. Operating pressure	0,4 / 0,6 MPa
Bore Ø	50 mm
Clamping force	3500 N
Weight (without plate, pin and hook)	2,9 kg
Pneumatic supply ports	G1/4 on both sides
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP 65

#### CODIFICATION KEY

U	S   S   50   <b>J</b>   <b>B</b>   <b>1</b>   <b>0</b>   -	<b>K</b> 0
1	2 3 4 5 6 7 8	9 10 11
1	<b>SERIES</b> <b>US</b> = UNICLAMP Pin clamp with compensation	<ul> <li>7 LOCATING PIN</li> <li>0 = Locating pin not included</li> <li>1 = Locating pin included</li> </ul>
2	VERSION S = Pneumatic with orientable hook	8 PROGRESSIVE NUMBERING Progressive numbers for special products assigned by the Sales Department
3	<b>SIZE</b> <b>50</b> = Ø50 mm	9 SENSOR
4	MODEL J = Standard R = With mechanical locking/unlocking device	<ul> <li>N = No sensor (with protection plate)</li> <li>K = Electronic sensor PNP, M12 (DF-K)</li> <li>J = Electronic sensor NPN, optical (DF-J)</li> <li>Y = Electronic sensor PNP, M12 (DF-Y) white</li> </ul>
5	HOOK POSITION	10 PRODUCT REVISION Assigned by UNIVER
	B = Standard C = Rotated by 180°	11 $\begin{vmatrix} ATEX \\ X = ATEX \text{ option} \end{vmatrix}$
6	PIN DIAMETER $1 < = \emptyset 18 \text{ mm}$ $2 = \emptyset 20 \text{ mm}$ $3 = \emptyset 25 \text{ mm}$ $4 = \emptyset 30 \text{ mm}$ $5 = \emptyset 35 \text{ mm}$ $6 = \emptyset 40 \text{ mm}$ For pin $\emptyset$ outside the mentioned range,	See ATEX Catalogue for types and versions

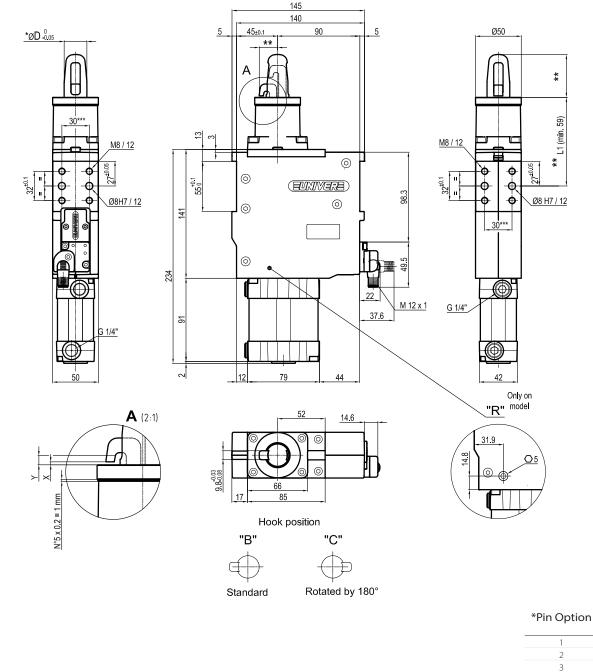


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Subject to change

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X = Metal sheet Y = Clamping range (X + 2,3 mm Max.) VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST \*\* MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS \*\*\* TOLERANCE BETWEEN DOWEL HOLES ± 0,02, BETWEEN SCREW HOLES ± 0,1

#### Sensors



Electronic (optical)

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

6 12 UNICLAMP Pneumatic Pin Clamps ØD

18 20

25

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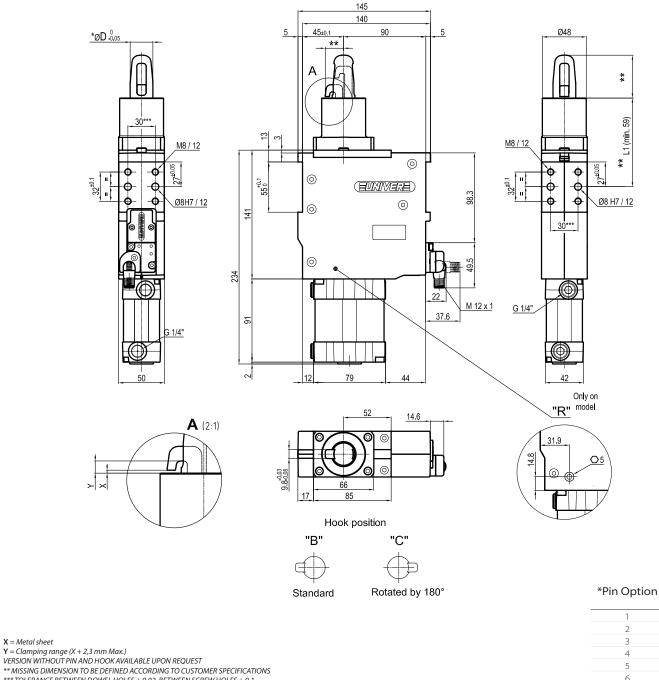
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#### Version with plate machined from solid (no shimming)



\*\*\* TOLERANCE BETWEEN DOWEL HOLES  $\pm$  0,02, BETWEEN SCREW HOLES  $\pm$  0,1

#### Sensors



Electronic (optical)

DF-K PNP M12 DF-J NPN M12 DF-Y PNP M12 White LED 6

ØD

18 20

25

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35



# **USS 63**

#### Pneumatic pin clamp Ø63 mm, orientable hook, high compensation

Pneumatic pin clamps with orientable hook position and high compensation system mainly designed for centering and clamping metal sheets in BIW underbody applications.

- Integrated compensation up to 6 mm
- Double metal scraper for protection against dust and welding debris
- Toggle-joint mechanism
- High repeatability •
- High wear resistance steel pin
- Electronic sensor •
- Hook position: 0/180° •
- Available version with plate machined from solid (no shimming) •

#### CHARACTERISTICS

Operating temperature	5° ÷ 45° C
Min./Max. Operating pressure	0,4 / 0,6 MPa
Bore Ø	63 mm
Clamping force	3500 N
Weight (without plate, pin and hook)	3,1 kg
Pneumatic supply ports	G1/4 on both sides
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP 65

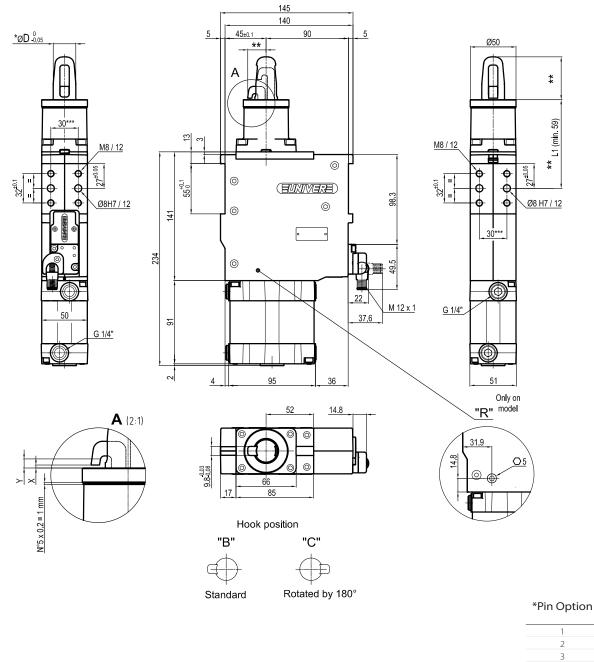
#### CODIFICATION KEY

IRREVERSIBLE	U	S       G3       J       B       1       0       -         2       3       4       5       6       7       8	· · ·	<b>O</b>     10 11
LIGHTWEIGHT	1	SERIES US = UNICLAMP Pin clamp with compensation	7	LOCATING PIN 0 = Locating pin not included 1 = Locating pin included
	2	VERSION S = Pneumatic with orientable hook	8	<b>PROGRESSIVE NUMBERING</b> Progressive numbers for special products are assigned by the Sales Department
COMPENSATION	3	<b>SIZE</b> <b>63</b> = Ø63 mm	9	SENSOR N = No sensor (with protection plate)
METAL SCRAPER	4	MODEL J = Standard R = With mechanical locking/unlocking device		<ul> <li>K = NO Sensor (With plotection plate)</li> <li>K = Electronic sensor PNP, M12 (DF-K)</li> <li>J = Electronic sensor NPN, optical (DF-J)</li> <li>Y = Electronic sensor PNP, M12 (DF-Y) white LED</li> </ul>
	5	HOOK POSITION	10	PRODUCT REVISION Assigned by UNIVER
OPTICAL SENSOR		B = Standard C = Rotated by 180°	11	ATEX X = ATEX option
HIGH REPEATABILITY	6	PIN DIAMETER 1< = Ø18 mm 2 = Ø20 mm 3 = Ø25 mm 4 = Ø30 mm 5 = Ø35 mm 6 = Ø40 mm		See ATEX Catalogue for types and versions
0/180°		For pin Ø outside the mentioned range, please contact our sales department		

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 $\begin{array}{l} \textbf{X} = \textit{Metal sheet} \\ \textbf{Y} = \textit{Clamping range (X + 6 mm Max.)} \\ \textit{VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST} \\ ** \textit{MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS} \\ *** TOLERANCE BETWEEN DOWEL HOLES \pm 0,02, BETWEEN SCREW HOLES \pm 0,1 \\ \end{array}$ 

#### Sensors



Electronic (optical)

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

18 20

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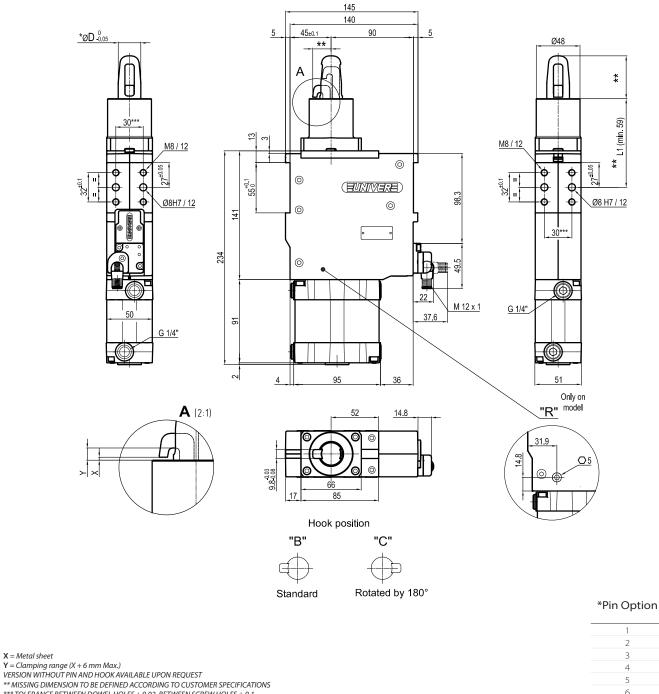
4

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6

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#### Version with plate machined from solid (no shimming)



\*\*\* TOLERANCE BETWEEN DOWEL HOLES  $\pm$  0,02, BETWEEN SCREW HOLES  $\pm$  0,1

#### Sensors



Electronic (optical)

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

6 16

UNICLAMP Pneumatic Pin Clamps

ØD

18 20

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# **USSL 50**

Pneumatic pin clamp for laser beam applications, orientable hook, Ø50 mm

Pneumatic pin clamps for laser beam applications mainly designed for centering and clamping metal sheets in BIW underbody applications where the detection of the position is done by a laser beam instead of a position sensor

- Integrated compensation up to 2,3 mm
- Double metal scraper for protection against dust and welding debris
- Toggle-joint mechanism
- High wear resistance steel pin
- Electronic sensor •
- Hook position: 0/180° •
- Available version with plate machined from solid (no shimming)

#### CHARACTERISTICS

5° ÷ 45° C
0,4 / 0,6 MPa
50 mm
3500 N
3,1 kg
G1/4 on both sides
10 ÷ 30 Vdc
IP 65

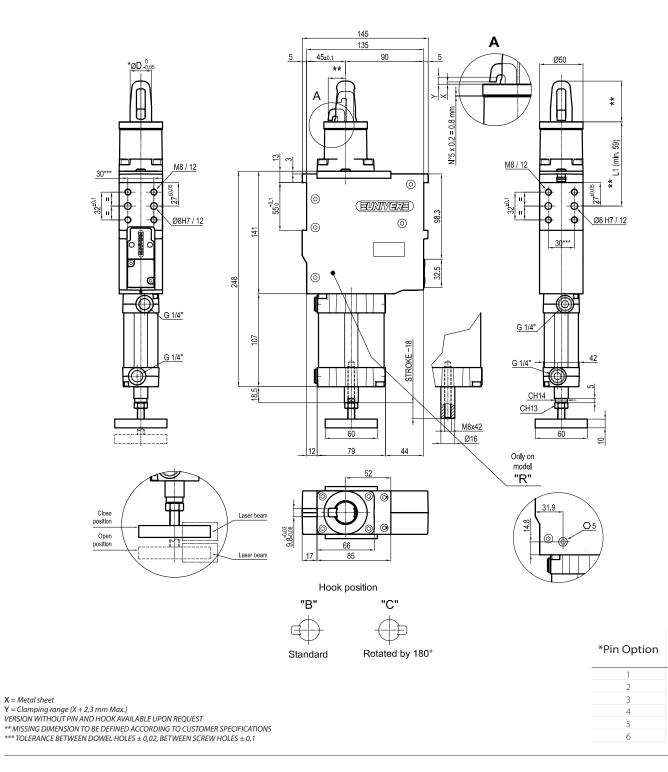
#### CODIFICATION KEY

IRREVERSIBLE	US         SL         50         J         B         3         1         -         N         0         -           1         2         3         4         5         6         7         8         9         10         11	
LIGHTWEIGHT	1       SERIES       6       PIN DIAMETER         US = UNICLAMP Pin clamp with compensation       1< = Ø18 mm	
COMPENSATION	<ul> <li>2 VERSION</li> <li>SL = Pneumatic for laser beam applications, orientable hook</li> <li>3 SIZE</li> <li>4 = Ø35 mm</li> <li>5 = Ø35 mm</li> <li>6 = Ø40 mm</li> <li>For pin Ø outside the mentioned range, please contact our sales department</li> </ul>	
METAL SCRAPER	50 = Ø50 mm     7     LOCATING PIN       4     MODEL     0 = Locating pin not included       J = Standard     1 = Locating pin included	
	R = With mechanical locking/unlocking device     8     PROGRESSIVE NUMBERING       5     HOOK POSITION     Progressive numbers for special pro assigned by the Sales Department	oducts are
OPTICAL SENSOR	B = Standard     9     SENSOR       C = Rotated by 180°     N = No sensor (with protection plate)	:e)
HIGH REPEATABILITY	10 PRODUCT REVISION Assigned by UNIVER 10 ATEX	
0/180°	X = ATEX option See ATEX Catalogue for types and versio	ons

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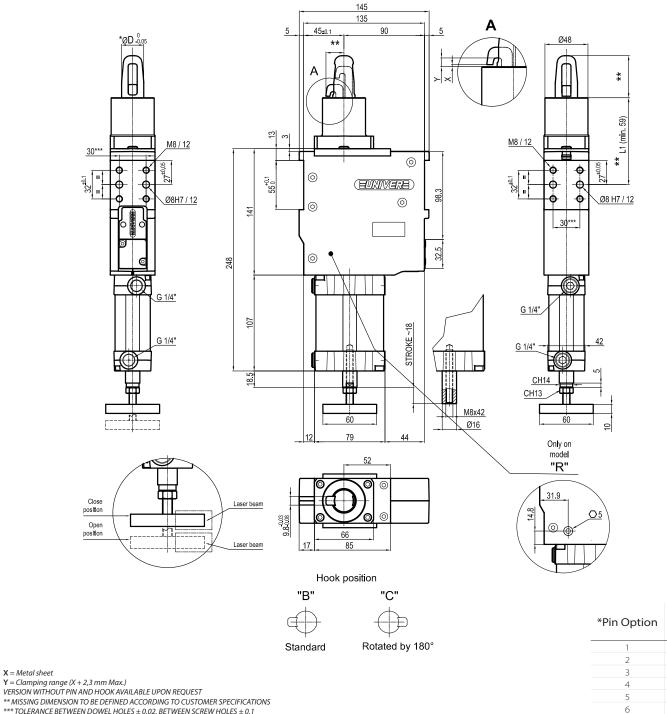




ØD



#### Version with plate machined from solid (no shimming)



ØD

18 20

25

30

35

40

6

\*\*\* TOLERANCE BETWEEN DOWEL HOLES  $\pm$  0,02, BETWEEN SCREW HOLES  $\pm$  0,1



# **USC 40**

#### Compact retractable pin clamp with clamping fingers, Ø40 mm

Compact Pin Clamp with retractable clamping fingers for centering and clamping. The compact and lightweight constuction make this unit suitable for mounting on grippers for handling pieces through a centering hole.

- Compact dimensions
- Integrated compensation up to 3 mm
- High wear resistance steel pin
- Protection against welding debris and dust
- Toggle-joint system
- Electronic sensor

#### CHARACTERISTICS

Operating temperature	5° ÷ 45° C
Min./Max. Operating pressure	0,4 / 0,6 MPa
Bore Ø	40 mm
Clamping force	900 N
Weight (without plate and pin)	1,3 kg
Pneumatic supply ports	G1/8 on both sides
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP 65

#### CODIFICATION KEY

<b>U</b> 1	S       C       40       J       3       1       -       K       0         2       3       4       5       6       7       8       9	10
1	SERIES US = UNICLAMP Pin clamp with compensation	5 LOCATING PIN 1 = Locating pin included
2	VERSION C = Pneumatic compact with clamping fingers	7 PROGRESSIVE NUMBERING Progressive numbers for special products an assigned by the Sales Department
3	SIZE 40 = ∅40 mm	<ul> <li>SENSOR</li> <li>N = No sensor (with protection plate)</li> <li>K = Electronic sensor PNP, M12 (DF-K)</li> </ul>
4	MODEL J = Standard B = With mechanical	J = Electronic sensor NPN, optical (DF-J) Y = Electronic sensor PNP, M12 (DF-Y) white
	locking/unlocking device	PRODUCT REVISION Assigned by UNIVER
5	PIN DIAMETER         1< = Ø15,8 mm	ATEX X = ATEX option See ATEX Catalogue for types and versions
	For pin Ø outside the mentioned range, please contact our sales department	



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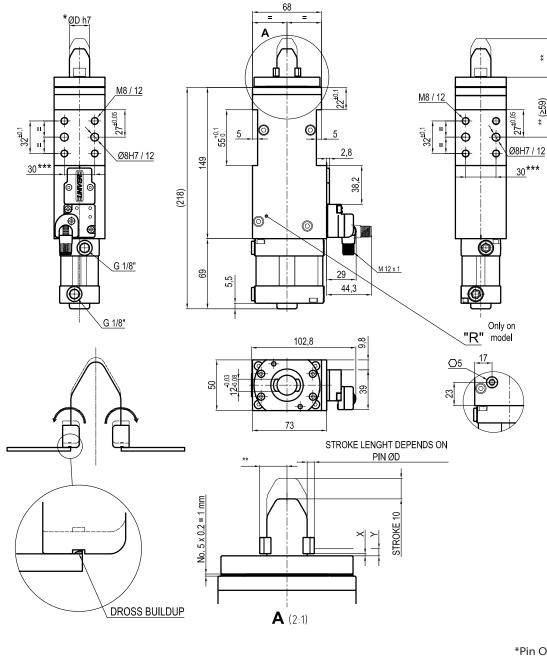






METAL SCRAPER





	*Pin Option	ØD	
$\mathbf{X}$ = Metal sheet	1	15,8	
Y = Clamping range (X + 3 mm Max.) VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST	2	20 25	
** MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS	4	30	
*** TOLERANCE BETWEEN DOWEL HOLES ± 0,02, BETWEEN SCREW HOLES ± 0,1			

#### Sensors



Electronic (optical)

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



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# **USR 40**

#### Compact pin clamp with single or double hook, Ø40 mm

Compact pin clamp with single or double hook for centering and clamping. The compact and lightweight construction make this unit suitable for mounting on grippers and in applications where reduced dimensions are required

- Compact dimensions
- Integrated compensation up to 3 mm
- High wear resistance steel pin
- Protection agaisnt welding debris and dust •
- Toggle-joint system .
- Version with single or double hook •
- Electronic sensor .

#### CHARACTERISTICS

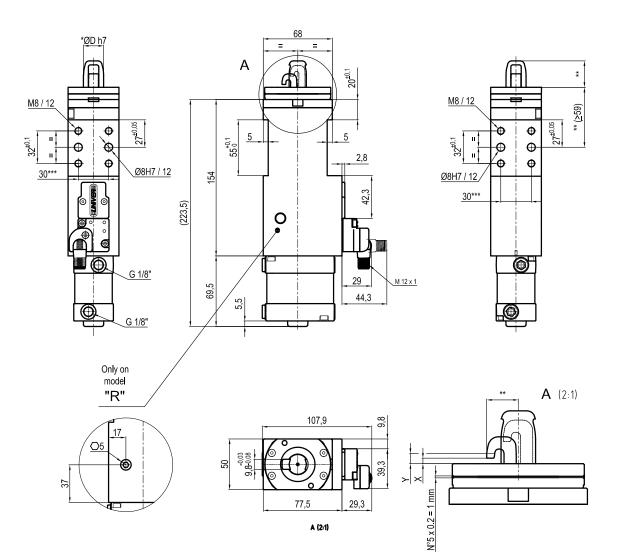
Operating temperature	5° ÷ 45° C
Min./Max. Operating pressure	0,4 / 0,6 MPa
Bore Ø	40 mm
Clamping force	900 N
Weight (without plate, pin and hook)	1,9 kg
Pneumatic supply ports	G1/8 on both sides
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP 65

#### CODIFICATION KEY

IRREVERSIBLE	US     R     40     J     3     1     S     -     K     0       1     2     3     4     5     6     7     8     9     10     11
LIGHTWEIGHT	SERIES US = UNICLAMP Pin clamp6LOCATING PIN 0 = Locating pin not included 1 = Locating pin included
	2 VERSION R = Pneumatic compact 7 HOOK S = Single hook D = Double hook, standard without
COMPENSATION	3     SIZE 40 = Ø40 mm     compensation* (model F)       *For version with compensation please contact our sales department
COMPACT	4     MODEL     8     PROGRESSIVE NUMBERING       J = Standard     Progressive numbers for special products are assigned by the Sales Department       F = Without compensation     F = Without compensation
OPTICAL SENSOR	9SENSOR5PIN DIAMETER 1<= Ø19 mm 2 = Ø20 mm 3 = Ø25 mm 4 = Ø30 mmN = 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
HIGH REPEATABILITY	5 = Ø35 mm     10     PRODUCT REVISION       6 = Ø40 mm     10     Assigned by UNIVER       For pin Ø outside the mentioned range, please contact our sales department     Assigned by UNIVER
METAL SCRAPER	ATEXX = ATEX optionSee ATEX Catalogue for types and versions



#### **S** Single hook



	*Pin Option	ØD
X = Metal sheet	1	15,8
A = imetar sincet Y = Clamping range (X + 3 mm Max.)	2	20
VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST	3	25
** MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS	4	30
*** TOLERANCE BETWEEN DOWEL HOLES ± 0,02, BETWEEN SCREW HOLES ± 0,1		

#### Sensors

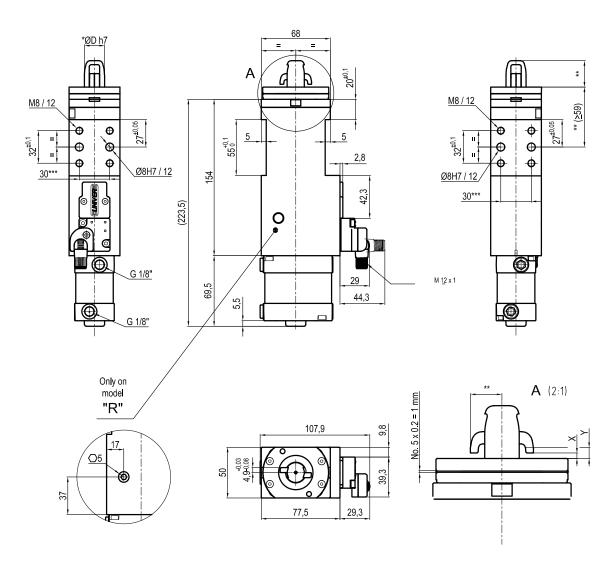


Electronic (optical)

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



#### **D** Double hook



	*Pin Option	ØD
X = Metal sheet	1	15,8
$\mathbf{x} = imetai sitest$ $\mathbf{y} = Clamping range (\mathbf{x} + 3 mm Max.)$	2	20
VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST	3	25
** MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS	4	30
*** TOLERANCE BETWEEN DOWEL HOLES ± 0,02, BETWEEN SCREW HOLES ± 0,1		

#### Sensors



Electronic (optical)

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

6

**24** UNICLAMP Pneumatic Pin Clamps



# UST 50

Pneumatic pin clamp with vanishing hook, Ø50 mm

Pneumatic pin clamp with vanishing hook, mainly designed for centering and clamping metal sheets in BIW underbody applications

- Integrated compensation up to 1,5 mm
- Irreversible
- Protection against welding debris and dust
- High repeatability
- Electronic sensor

#### CHARACTERISTICS

CODIFICATION KEY

please contact our sales department

Operating temperature	5° ÷ 45° C
Min./Max. Operating pressure	0,4 / 0,6 MPa
Bore Ø	50 mm
Clamping force	3500 N
Weight (without plate, pin and hook)	3,0 kg
Pneumatic supply ports	G1/4 on both sides
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP 65

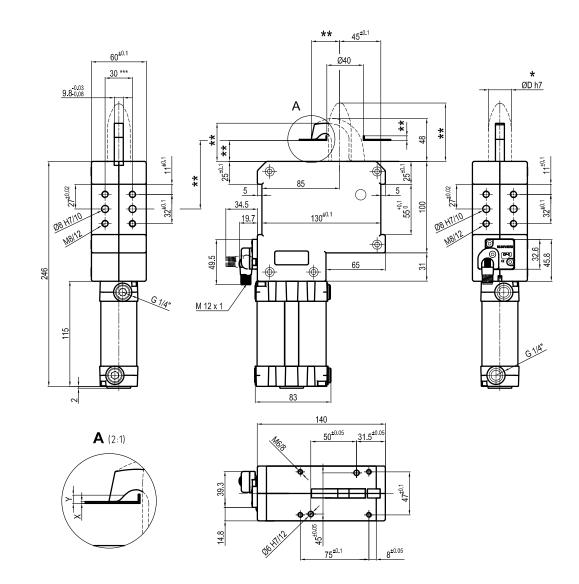
# IRREVERSIBLE IIGHTWEIGHT COMPENSATION



HIGH REPEATABILITY

#### US 50 2 0 Κ т 2 8 9 10 3 4 5 6 7 SERIES 1 LOCATING PIN 6 US = UNICLAMP Pin clamp with $\mathbf{0} = \mathsf{Locating} \mathsf{pin} \mathsf{not} \mathsf{included}$ compensation 1 = Locating pin included VERSION 2 PROGRESSIVE NUMBERING 7 T = Pneumatic Progressive numbers for special products are assigned by the Sales Department 3 SIZE **50** = Ø50 mm 8 SENSOR N = No sensor (with protection plate) MODEL K = Electronic sensor PNP, M12 (DF-K) 4 J = Electronic sensor NPN, optical (DF-J) T = With vanishing hook Y = Electronic sensor PNP, M12 (DF-Y) white LED PIN DIAMETER 5 PRODUCT REVISION 9 **1**< = Ø19 mm Assigned by UNIVER **2** = Ø20 mm **3** = Ø25 mm **4** = Ø30 mm ATEX 11 **5** = Ø35 mm X = ATEX option**6** = Ø40 mm For pin Ø outside the mentioned range, See ATEX Catalogue for types and versions





	*Pin Option	ØD
	1	<=19
	2	20
$\mathbf{X} = Metal sheet$	3	25
Y = Clamping range (X + 1,5 mm Max.)	4	30
VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST ** MISSING DIMENSIONS TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS	5	35
*** TOLERANCE BETWEEN DOWEL HOLES ± 0,02, BETWEEN SCREW HOLES ± 0,1	6	40

#### Sensors



Electronic (optical)

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



Pneumatic pin clamp - Horizontal shape, Ø50 mm

Pneumatic pin clamp with horizontal shape, mainly designed for centering and clamping metal sheets in BIW underbody applications. Thanks to the flat shape it is widely used in applications where the installation space is very small

- Integrated compensation up to 0,5 mm
- Protection against welding debris and dust
- Toggle-joint mechanism
- High repeatability
- Two sided sensor mounting
- Electronic sensor

#### CHARACTERISTICS

CODIFICATION KEY

Operating temperature	5° ÷ 45° C
Min./Max. Operating pressure	0,4 / 0,6 MPa
Bore Ø	50 mm
Clamping force	2500 N
Weight (without plate, pin and hook)	2,2 kg
Pneumatic supply ports	G1/8 on both sides
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP 65

# IRREVERSIBLE Ilightweight Metal scraper Optical sensor

HIGH REPEATABILITY

U	S   P	50	U	3	1	L	-	<b>K</b>	
1	2	3	4	5	6	7	8	9	10 11
1	SERIES US = UN compe		P Pin c	lamp	with			6	LOCATING PIN 0 = Locating pin not included 1 = Locating pin included
2	VERSIC P = Pne							7	SENSOR POSITION L = Left side R = Right side
3	SIZE 50 = Ø5	i0 mm						8	PROGRESSIVE NUMBERING Progressive numbers for special products are
4	MODEI U = Hor	_	shape						assigned by the Sales Department
5	PIN DIA $1 < = \emptyset 1$ $2 = \emptyset 20$ $3 = \emptyset 25$ $4 = \emptyset 30$ $5 = \emptyset 35$	9 mm mm mm mm	3					9	SENSOR 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
	For pin Ø please co					⊇,		10	Assigned by UNIVER
								11	ATEX

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

Subject to change

5

30

 $45^{+0.1}_{0}$ 

q

9.8

12

65

79.7

119

213

75

5

37

49.5

M12x1

22



₹ØD Ø54

\*\*

\*

\*\*

Ø8 H7/11.5

<u>G1/4"</u>

А

\*\* <u>>12±0.05</u>

27

**69.5±0.02** 

\*\* ±0.02

 $15^{\pm 0.05}$ 

ŧ

30<u>to</u>

50 <u>25 \*\*\*</u>

0

 $\oplus$ 

FO

 $15^{\pm 0.05}$ 7.5

<u>M8/9</u>

75

30±0.1



2



40

<=19 20 2 25 3 4 30 5 35

6

\*\* MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS \*\*\* TOLERANCE BETWEEN DOWEL HOLES  $\pm$  0,02, BETWEEN SCREW HOLES  $\pm$  0,1 THE SENSOR CAN BE MOUNTED ON EITHER RIGHT OR LEFT SIDE

#### Sensors



Electronic (optical)

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

6

# **A** (3:1)

30 \*\*\*

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Φ

No 2x0,5 = 1 mmNo 5x0.2 = 1 mm

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θ

♠

M8/9

Ø8 H7/12





METAL SCRAPER

# LUP 63

#### Pneumatic pin clamp with vanishing hook and pin, Ø63 mm

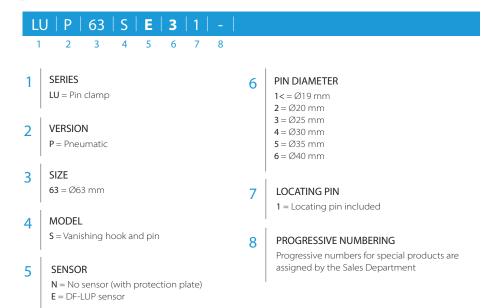
Pneumatic pin clamp with vanishing hook and pin, mainly designed for centering and clamping metal sheets in BIW underbody applications with no need to raisea and lower the metal sheet during positioning operations

- Protection against welding debris and dust
- Irreversible
- High repeatability
- High wear resistance steel pin
- Electronic sensor with 2 cables and M12 connectors to detect the position of both the pin
   and hook

#### CHARACTERISTICS

Operating temperature	5° ÷ 45° C
Min./Max. Operating pressure	0,4 / 0,6 MPa
Bore Ø	63 mm
Clamping force	1500 N
Weight (without plate, pin and hook)	3,0 kg
Pneumatic supply ports	G1/8
Sensor	electronic with 2xM12 cables
Supply voltage	10 ÷ 30 Vdc
IP code	IP 65

#### CODIFICATION KEY



6



MAX STROKE 51

2

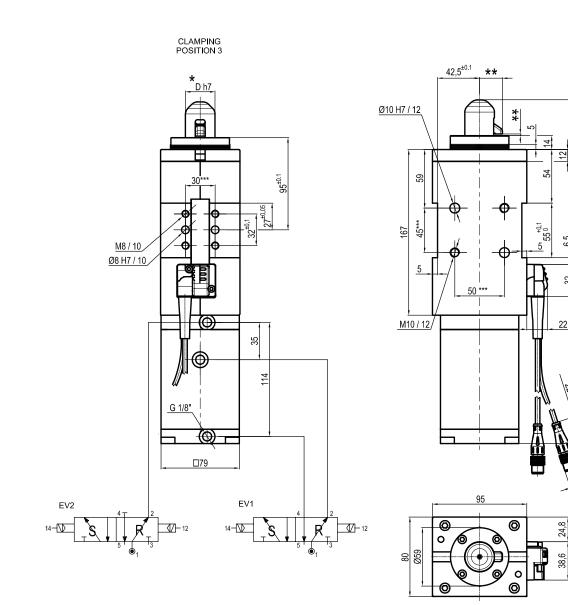
6,5

32

22

296

M12



** MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS *** TOLERANCE BETWEEN DOWEL HOLES ± 0,02, BETWEEN SCREW HOLES ± 0,1	*Pin Option	ØD
	1	<=19
	2	20
	3	25
Rest position —— Locating position —— Clamping position —— Unblocking position	4	30
EV1 EV2 EV1 EV2 EV1 EV2 EV1 EV2	5	35
RR SR SS SR	6	40

#### Sensors



Electronic

DF-LUP



# **USL 50**

Manual pin clamp, Ø50 mm

Manual pin clamp mainly designed for centering and clamping metal sheets in BIW underbody applications

- Integrated compensation up to 2,3 mm •
  - Double metal scraper for protection against dust and welding debris
- Toggle-joint mechanism .
- High wear resistance steel pin •

. Electronic sensor

- Hook position: 0/180° •
- Ergonomic hand lever .
- Available version with plate machined from solid (no shimming) •

#### CHARACTERISTICS

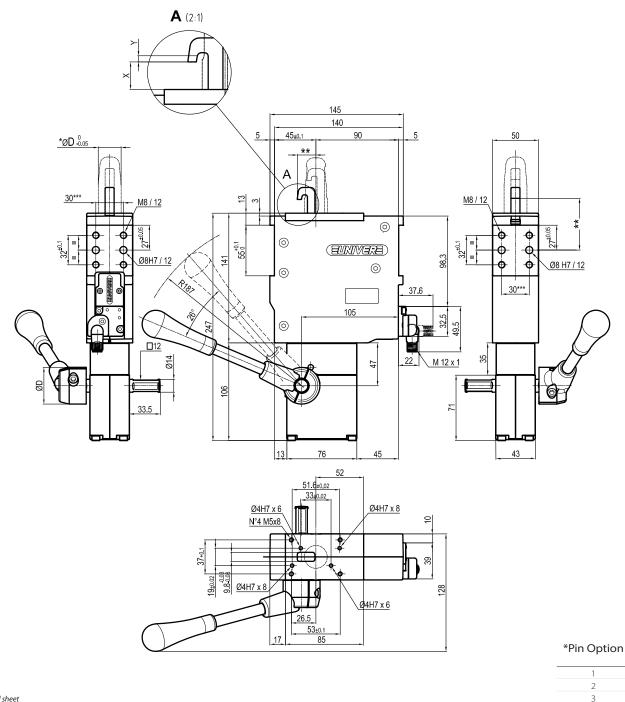
Operating temperature	5° ÷ 45° C
Bore Ø	50 mm
Clamping force	3500 N
Weight (without plate, pin and hook)	3,6 kg
Sensor	electronic (optical)
Supply voltage	10 ÷ 30 Vdc
IP code	IP 65

#### CODIFICATION KEY

	US	5   L	50	၂	3	1	-	K	0	
IRREVERSIBLE	1	2	3	4	5	6	7	8	9	10
LIGHTWEIGHT	1	SERIES US = UN comper		P Pin c	lamp	with			6	LOCATING PIN 0 = Locating pin not included 1 = Locating pin included
	2	VERSIO L = Man		n hanc	d lever				7	PROGRESSIVE NUMBERING Progressive numbers for special products are assigned by the Sales Department
COMPENSATION	3	SIZE 50 = Ø5	0 mm						8	SENSOR N = No sensor (with protection plate)
METAL SCRAPER	4	MODEL J = Stan	-							K = Restronic sensor PNP, M12 (DF-K)         J = Electronic sensor NPN, optical (DF-J)         Y = Electronic sensor PNP, M12 (DF-Y) white LED
OPTICAL SENSOR	5	PIN DIA 1< = Ø1 2 = Ø20 3 = Ø25	8 mm mm mm	2					9	PRODUCT REVISION Assigned by UNIVER
	<ul> <li>4 = Ø30 mm</li> <li>5 = Ø35 mm</li> <li>6 = Ø40 mm</li> <li>For pin Ø outside the mentioned range,</li> </ul>								10	ATEX X = ATEX option See ATEX Catalogue for types and versions
HIGH REPEATABILITY		please co	ntact ou	ır sales	departr	ment				



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X = Metal sheet Y = Clamping range (X + 2,3 mm Max.) VERSION WITHOUT PIN AND HOOK AVAILABLE UPON REQUEST \*\* MISSING DIMENSION TO BE DEFINED ACCORDING TO CUSTOMER SPECIFICATIONS \*\*\* TOLERANCE BETWEEN DOWEL HOLES ± 0,02, BETWEEN SCREW HOLES ± 0,1

#### Sensors



Electronic (optical)

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

6

#### Accessories



Handlever

UBF255063

ØD

18 20

25

30

35

40

4

5