



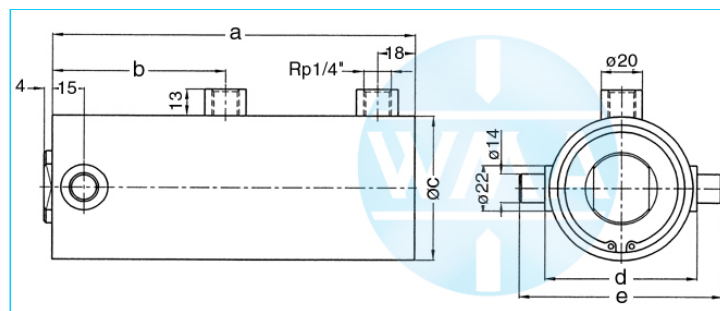
# Welding cylinder

## Pivot pin

Version: 2011-01

unilateral air connection,  
double-stage pressurized

undamped



### Nominal size 038

Stroke	a	b	c	d	e	Force*	Order-number
36	173	82	48	50	75	0.2 kN	104.110.121.038.036.
50	201	96	48	50	75	0.2 kN	104.110.121.038.050.
65	231	111	48	50	75	0.2 kN	104.110.121.038.065.
80	261	126	48	50	75	0.2 kN	104.110.121.038.080.
100	301	146	48	50	75	0.2 kN	104.110.121.038.100.
130	361	176	48	50	75	0.2 kN	104.110.121.038.130.
150	401	196	48	50	75	0.2 kN	104.110.121.038.150.

\* at 1 bar pressure

### Nominal size 044

Stroke	a	b	c	d	e	Force*	Order-number
36	173	82	55	58	83	0.28 kN	104.110.121.044.036.
50	201	96	55	58	83	0.28 kN	104.110.121.044.050.
65	231	111	55	58	83	0.28 kN	104.110.121.044.065.
80	261	126	55	58	83	0.28 kN	104.110.121.044.080.
100	301	146	55	58	83	0.28 kN	104.110.121.044.100.
130	361	176	55	58	83	0.28 kN	104.110.121.044.130.
150	401	196	55	58	83	0.28 kN	104.110.121.044.150.

\* at 1 bar pressure

### Nominal size 058

Stroke	a	b	c	d	e	Force*	Order-number
36	173	82	70	74	99	0.5 kN	104.110.121.058.036.
50	201	96	70	74	99	0.5 kN	104.110.121.058.050.
65	231	111	70	74	99	0.5 kN	104.110.121.058.065.
80	261	126	70	74	99	0.5 kN	104.110.121.058.080.
100	301	146	70	74	99	0.5 kN	104.110.121.058.100.
130	361	176	70	74	99	0.5 kN	104.110.121.058.130.
150	401	196	70	74	99	0.5 kN	104.110.121.058.150.

\* at 1 bar pressure

Complete the Order-number:

**Example:** 104.110.121.058.036.??? No. Force connection (S.6).?? No. Cylinder rod (S.7)!

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Cylinder-pivot pin-1



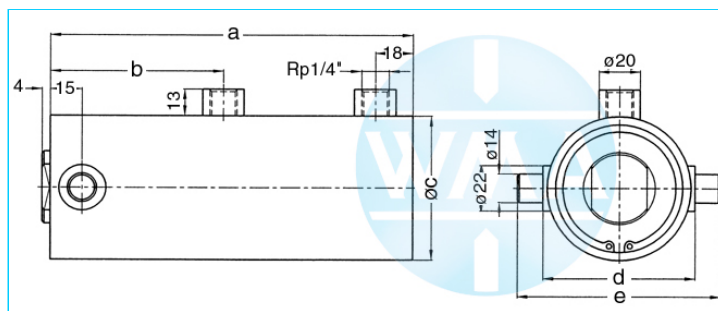
# Welding cylinder

## Pivot pin

Version: 2011-01

unilateral air connection,  
double-stage pressurized

end position damped



### Nominal size 044

Stroke	a	b	c	d	e	Force*	Order-number
36	201	96	55	58	83	0.28 kN	104.110.122.044.036.
50	231	111	55	58	83	0.28 kN	104.110.122.044.050.
65	261	126	55	58	83	0.28 kN	104.110.122.044.065.
80	301	146	55	58	83	0.28 kN	104.110.122.044.080.
100	361	176	55	58	83	0.28 kN	104.110.122.044.100.
130	401	196	55	58	83	0.28 kN	104.110.122.044.130.

\* at 1 bar pressure

### Nominal size 058

Stroke	a	b	c	d	e	Force*	Order-number
36	201	96	70	74	99	0.5 kN	104.110.122.058.036.
50	231	111	70	74	99	0.5 kN	104.110.122.058.050.
65	261	126	70	74	99	0.5 kN	104.110.122.058.065.
80	301	146	70	74	99	0.5 kN	104.110.122.058.080.
100	361	176	70	74	99	0.5 kN	104.110.122.058.100.
130	401	196	70	74	99	0.5 kN	104.110.122.058.130.

\* at 1 bar pressure

Complete the Order-number:

**Example: 104.110.122.058.036.???** No. Force connection (S.6)?? No. Cylinder rod (S.7)!

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Cylinder-pivot pin-2



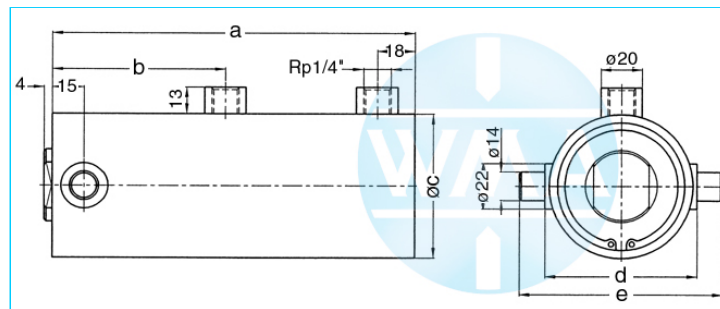
# Welding cylinder

## Pivot pin

Version: 2011-01

unilateral air connection,  
double-stage pressurized

damped independent of stroke



### Nominal size 044

Stroke	a	b	c	d	e	Force*	Order-number
36	173	82	55	58	83	0.28 kN	104.110.123.044.036.
50	201	96	55	58	83	0.28 kN	104.110.123.044.050.
65	231	111	55	58	83	0.28 kN	104.110.123.044.065.
80	261	126	55	58	83	0.28 kN	104.110.123.044.080.
100	301	146	55	58	83	0.28 kN	104.110.123.044.100.
130	361	176	55	58	83	0.28 kN	104.110.123.044.130.
150	401	196	55	58	83	0.28 kN	104.110.123.044.150.

\* at 1 bar pressure

### Nominal size 058

Stroke	a	b	c	d	e	Force*	Order-number
36	173	82	70	74	99	0.5 kN	104.110.123.058.036.
50	201	96	70	74	99	0.5 kN	104.110.123.058.050.
65	231	111	70	74	99	0.5 kN	104.110.123.058.065.
80	261	126	70	74	99	0.5 kN	104.110.123.058.080.
100	301	146	70	74	99	0.5 kN	104.110.123.058.100.
130	361	176	70	74	99	0.5 kN	104.110.123.058.130.
150	401	196	70	74	99	0.5 kN	104.110.123.058.150.

\* at 1 bar pressure

Complete the Order-number:

**Example: 104.110.123.058.036.???** No. Force connection (S.6).?? No. Cylinder rod (S.7)!

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Cylinder-pivot pin-3



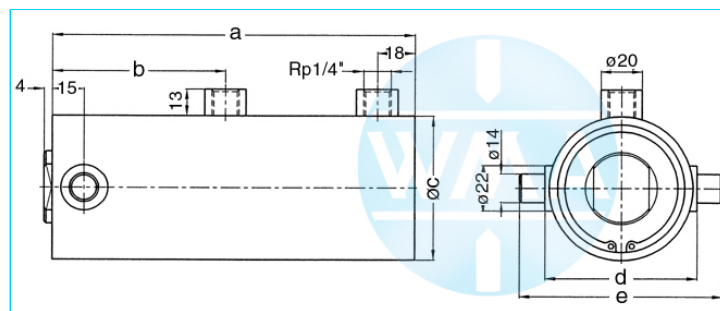
# Welding cylinder

## Pivot pin

Version: 2011-01

unilateral air connection,  
three-stage pressurized

undamped



### Nominal size 038

Stroke	a	b	c	d	e	Force*	Order-number
36	232	141	48	50	75	0,28 kN	104.110.131.038.036.
50	274	169	48	50	75	0,28 kN	104.110.131.038.050.
65	319	199	48	50	75	0,28 kN	104.110.131.038.065.
80	364	229	48	50	75	0,28 kN	104.110.131.038.080.
100	424	269	48	50	75	0,28 kN	104.110.131.038.100.
130	514	329	48	50	75	0,28 kN	104.110.131.038.130.
150	574	369	48	50	75	0,28 kN	104.110.131.038.150.

\* at 1 bar pressure

### Nominal size 044

Stroke	a	b	c	d	e	Force*	Order-number
36	232	141	55	58	83	0,39 kN	104.110.131.044.036.
50	274	169	55	58	83	0,39 kN	104.110.131.044.050.
65	319	199	55	58	83	0,39 kN	104.110.131.044.065.
80	364	229	55	58	83	0,39 kN	104.110.131.044.080.
100	424	269	55	58	83	0,39 kN	104.110.131.044.100.
130	514	329	55	58	83	0,39 kN	104.110.131.044.130.
150	574	369	55	58	83	0,39 kN	104.110.131.044.150.

\* at 1 bar pressure

### Nominal size 058

Stroke	a	b	c	d	e	Force*	Order-number
36	232	141	70	74	99	0,72 kN	104.110.131.058.036.
50	274	169	70	74	99	0,72 kN	104.110.131.058.050.
65	319	199	70	74	99	0,72 kN	104.110.131.058.065.
80	364	229	70	74	99	0,72 kN	104.110.131.058.080.
100	424	269	70	74	99	0,72 kN	104.110.131.058.100.
130	514	329	70	74	99	0,72 kN	104.110.131.058.130.
150	574	369	70	74	99	0,72 kN	104.110.131.058.150.

\* at 1 bar pressure

Complete the Order-number:

**Example:** 104.110.131.058.036.??? No. Force connection (S.6).?? No. Cylinder rod (S.7)!

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Cylinder-pivot pin-4



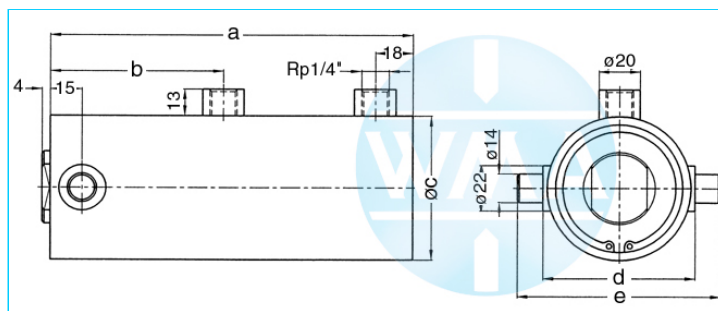
# Welding cylinder

## Pivot pin

Version: 2011-01

unilateral air connection,  
three-stage pressurized

undamped



### Nominal size 044

Stroke	a	b	c	d	e	Force*	Order-number
36	232	141	55	58	83	0.39 kN	104.110.132.044.036.
50	274	169	55	58	83	0.39 kN	104.110.132.044.050.
65	319	199	55	58	83	0.39 kN	104.110.132.044.065.
80	364	229	55	58	83	0.39 kN	104.110.132.044.080.
100	424	269	55	58	83	0.39 kN	104.110.132.044.100.
130	514	329	55	58	83	0.39 kN	104.110.132.044.130.
150	574	369	55	58	83	0.39 kN	104.110.132.044.150.

\* at 1 bar pressure

### Nominal size 058

Stroke	a	b	c	d	e	Force*	Order-number
36	232	141	70	74	99	0.72 kN	104.110.132.058.036.
50	274	169	70	74	99	0.72 kN	104.110.132.058.050.
65	319	199	70	74	99	0.72 kN	104.110.132.058.065.
80	364	229	70	74	99	0.72 kN	104.110.132.058.080.
100	424	269	70	74	99	0.72 kN	104.110.132.058.100.
130	514	329	70	74	99	0.72 kN	104.110.132.058.130.
150	574	369	70	74	99	0.72 kN	104.110.132.058.150.

\* at 1 bar pressure

Complete the Order-number:

**Example:** 104.110.132.058.036.??? No. Force connection (S.6).?? No. Cylinder rod (S.7)!

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Cylinder-pivot pin-5



# Welding cylinder

## Pivot pin

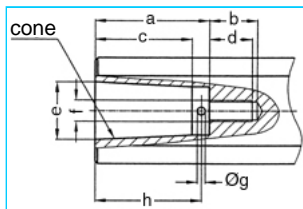
Version: 2011-01

### Force connection

Write the number (with point) from the selected Force connection direct behind the Order-number of the cylinder and complete the whole Order-number with the chosen number of the Cylinder rod.

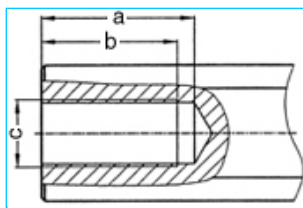
**Example: 104.110.132.058.036.103.?? No. Cylinder rod (S.12)**

#### Internal cone



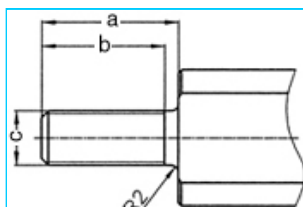
a	b	c	d	e	cone	f	g	h	No.
33	18	27.0	16	17.780	MK2	M8	3	30	101.
42	18	35.5	16	21.806	MK3	M8	3	39	102.
42	18	35.5	16	21.750	1:10	M8	3	39	103.

#### Female thread



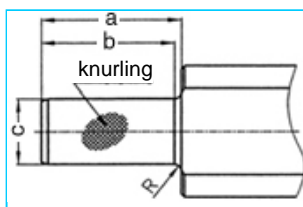
a	b	c	No.
45	40	M20 x 1.5	201.
62	58	M20 x 1.5	202.

#### Male thread



a	b	c	No.
40	36	M16 x 1.5	301.
40	36	M20 x 1.5	302.
40	36	M24 x 1.5	303.

#### Knurl



a	b	c	Knurling	R	No.
42	40	20 <sup>17</sup>	1 x 0.2 DIN 82	2	401.
42	42	25 <sup>17</sup>	1 x 0.2 DIN 82	-	402.

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Cylinder-pivot pin-6



# Welding cylinder

Pivot pin

Version: 2011-01

## Cylinder rod

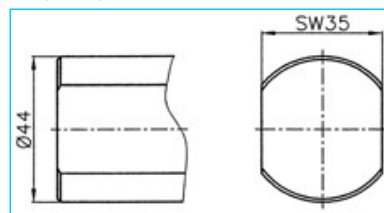
flattened and rotation locked

Complete the Order-number with the selected number of the chosen cylinder rod.

**Example: 104.110.132.058.036.103.01**

### For piston diameter

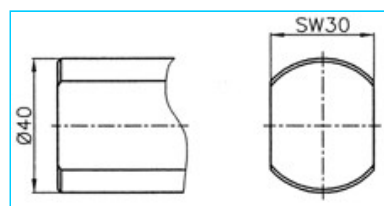
70, 80, 90



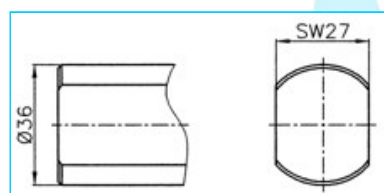
**No. 00**

### For piston diameter

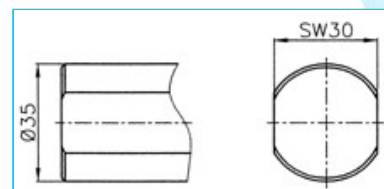
38, 44, 58



**No. 01**



**No. 02**



**No. 03**

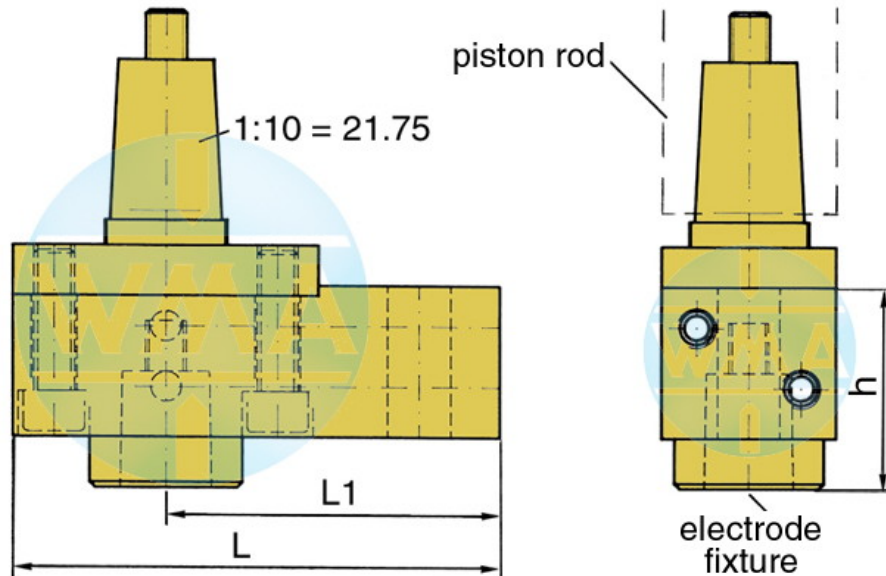


# Welding cylinder

## Pivot pin

Version: 2011-01

### Electrode holder for welding cylinders



Piston Ø	L	L1	Water connection
38	95	65	possible on both sides
44	95	65	possible on both sides
58	110	80	possible on both sides
70	110	80	possible on both sides
80	120	90	possible on both sides
90	120	90	possible on both sides

### Available cones for the electrode fixture

cone	Ø d	h
1 : 10	9.8	39
1 : 10	12.0	39
1 : 10	12.7	39
1 : 10	15.5	39
1 : 10	15.75	39
1 : 10	17.75	50
1 : 10	19.0	50
MK 1	12.065	39
MK 2	17.781	50

Further cones available on request!



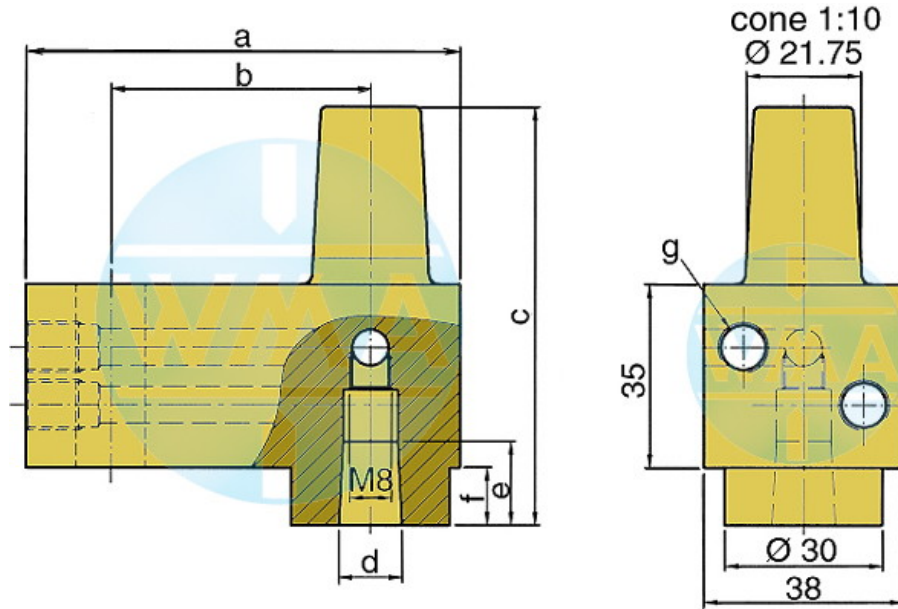


# Welding cylinder

## Pivot pin

Version: 2011-01

### Electrode holder



This electrode holder is main used in welding machines with variable and fast-change electrode shafts.

a	b	c	d	e	f	g	Order-number	
82	49	80	1:10=12.00	16	16	11	M10 x 1 or R 1/8"	L60051080-000
82	49	80	MK1	16	16	11	M10 x 1 or R 1/8"	L60091080-000
82	49	80	1:10=15.75	20	20	11	M10 x 1 or R 1/8"	L60131080-001
82	49	80	1:10=18	20	20	11	M10 x 1 or R 1/8"	L60061080-000
82	49	80	MK2	20	20	11	M10 x 1 or R 1/8"	L60101080-000
82	49	90	1:10=21.75	31	31	21	M10 x 1 or R 1/8"	L60221080-000
82	49	90	MK3	31	31	21	M10 x 1 or R 1/8"	L60111080-000
97	64	90	1:10=21.75	31	31	21	M10 x 1 or R 1/8"	L60221090-000
97	64	90	MK3	31	31	21	M10 x 1 or R 1/8"	L60111090-000
107	74	90	1:10=21.75	31	31	21	M10 x 1 or R 1/8"	L60221090-001
107	74	90	MK3	31	31	21	M10 x 1 or R 1/8"	L60111090-001

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Cylinder-pivot pin-9