



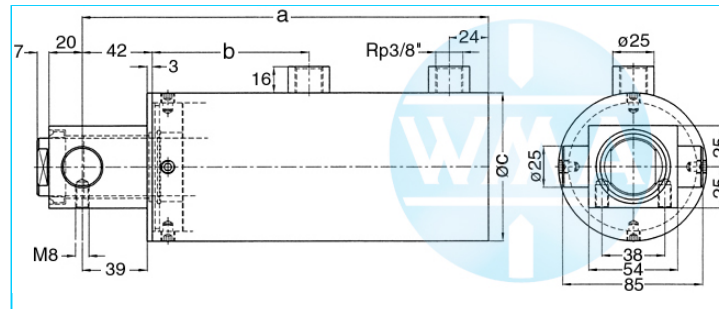
# Welding cylinder

## Pivot pin

Version: 2011-01

unilateral air connection,  
double-stage pressurized

undamped



### Nominal size 070

Stroke	a	b	c	Force*	Order-number
36	246	94	90	0.72 kN	104.114.121.070.036.
50	274	108	90	0.72 kN	104.114.121.070.050.
65	304	123	90	0.72 kN	104.114.121.070.065.
80	334	138	90	0.72 kN	104.114.121.070.080.
100	374	158	90	0.72 kN	104.114.121.070.100.
130	434	188	90	0.72 kN	104.114.121.070.130.
150	474	208	90	0.72 kN	104.114.121.070.150.

\* at 1 bar pressure

### Nominal size 080

Stroke	a	b	c	Force*	Order-number
36	246	94	100	0.95 kN	104.114.121.080.036.
50	274	108	100	0.95 kN	104.114.121.080.050.
65	304	123	100	0.95 kN	104.114.121.080.065.
80	334	138	100	0.95 kN	104.114.121.080.080.
100	374	158	100	0.95 kN	104.114.121.080.100.
130	434	188	100	0.95 kN	104.114.121.080.130.
150	474	208	100	0.95 kN	104.114.121.080.150.

\* at 1 bar pressure

### Nominal size 090

Stroke	a	b	c	Force*	Order-number
36	246	94	110	1.2 kN	104.114.121.090.036.
50	274	108	110	1.2 kN	104.114.121.090.050.
65	304	123	110	1.2 kN	104.114.121.090.065.
80	334	138	110	1.2 kN	104.114.121.090.080.
100	374	158	110	1.2 kN	104.114.121.090.100.
130	434	188	110	1.2 kN	104.114.121.090.130.
150	474	208	110	1.2 kN	104.114.121.090.150.

\* at 1 bar pressure

Complete the Order-number:

**Example: 104.114.121.090.050.???. No. Force connection (S.6).???. No. Cylinder rod (S.7)**

We reserve the right to make changes which are in the interest of technical progress.

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Cylinder-pivot pin-1





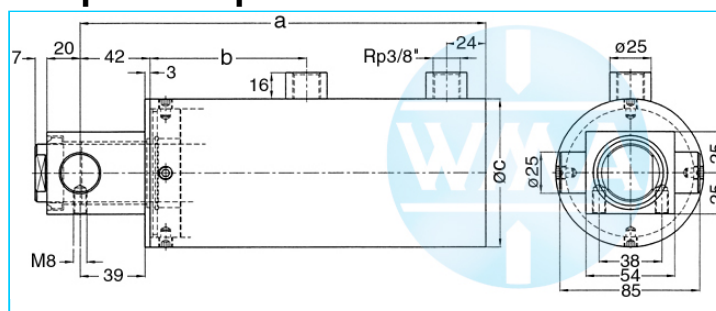
# Welding cylinder

## Pivot pin

Version: 2011-01

unilateral air connection,  
double-stage pressurized

damped independent of stroke



### Nominal size 070

Stroke	a	b	c	Force*	Order-number
36	246	94	90	0.72 kN	104.114.123.070.036.
50	274	108	90	0.72 kN	104.114.123.070.050.
65	304	123	90	0.72 kN	104.114.123.070.065.
80	334	138	90	0.72 kN	104.114.123.070.080.
100	374	158	90	0.72 kN	104.114.123.070.100.
130	434	188	90	0.72 kN	104.114.123.070.130.
150	474	208	90	0.72 kN	104.114.123.070.150.

\* at 1 bar pressure

### Nominal size 080

Stroke	a	b	c	Force*	Order-number
36	246	94	100	0.95 kN	104.114.123.080.036.
50	274	108	100	0.95 kN	104.114.123.080.050.
65	304	123	100	0.95 kN	104.114.123.080.065.
80	334	138	100	0.95 kN	104.114.123.080.080.
100	374	158	100	0.95 kN	104.114.123.080.100.
130	434	188	100	0.95 kN	104.114.123.080.130.
150	474	208	100	0.95 kN	104.114.123.080.150.

\* at 1 bar pressure

### Nominal size 090

Stroke	a	b	c	Force*	Order-number
36	246	94	110	1.2 kN	104.114.123.090.036.
50	274	108	110	1.2 kN	104.114.123.090.050.
65	304	123	110	1.2 kN	104.114.123.090.065.
80	334	138	110	1.2 kN	104.114.123.090.080.
100	374	158	110	1.2 kN	104.114.123.090.100.
130	434	188	110	1.2 kN	104.114.123.090.130.
150	474	208	110	1.2 kN	104.114.123.090.150.

\* at 1 bar pressure

Complete the Order-number:

**Example: 104.114.121.090.050.???. No. Force connection (S.6).???. No. Cylinder rod (S.7)**

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Cylinder-pivot pin-3



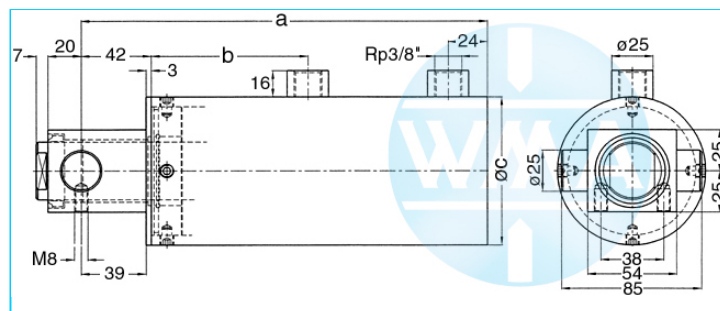
# Welding cylinder

## Pivot pin

Version: 2011-01

unilateral air connection,  
three-stage pressurized

undamped



### Nominal size 070

Stroke	a	b	c	Force*	Order-number
36	314	164	90	1.04 kN	104.114.131.070.036.
50	356	192	90	1.04 kN	104.114.131.070.050.
65	401	222	90	1.04 kN	104.114.131.070.065.
80	446	252	90	1.04 kN	104.114.131.070.080.
100	506	292	90	1.04 kN	104.114.131.070.100.
130	596	352	90	1.04 kN	104.114.131.070.130.
150	656	392	90	1.04 kN	104.114.131.070.150.

\* at 1 bar pressure

### Nominal size 080

Stroke	a	b	c	Force*	Order-number
36	314	164	100	1.4 kN	104.114.131.080.036.
50	356	192	100	1.4 kN	104.114.131.080.050.
65	401	222	100	1.4 kN	104.114.131.080.065.
80	446	252	100	1.4 kN	104.114.131.080.080.
100	506	292	100	1.4 kN	104.114.131.080.100.
130	596	352	100	1.4 kN	104.114.131.080.130.
150	656	392	100	1.4 kN	104.114.131.080.150.

\* at 1 bar pressure

### Nominal size 090

Stroke	a	b	c	Force*	Order-number
36	246	94	110	1.8 kN	104.114.131.090.036.
50	356	192	110	1.8 kN	104.114.131.090.050.
65	401	222	110	1.8 kN	104.114.131.090.065.
80	446	252	110	1.8 kN	104.114.131.090.080.
100	506	292	110	1.8 kN	104.114.131.090.100.
130	596	352	110	1.8 kN	104.114.131.090.130.
150	656	392	110	1.8 kN	104.114.131.090.150.

\* at 1 bar pressure

Complete the Order-number:

**Example: 104.114.131.090.050.???. No. Force connection (S.6).???. No. Cylinder rod (S.7)**

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Cylinder-pivot pin-4



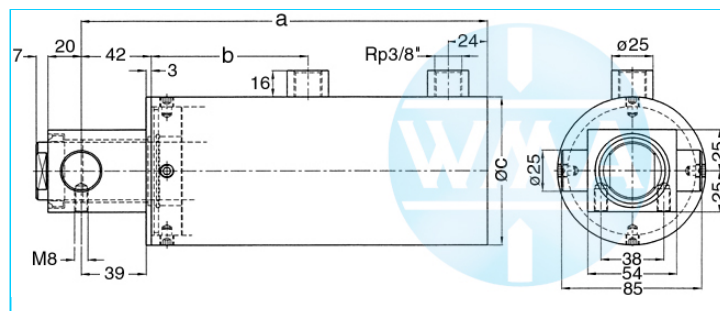
# Welding cylinder

## Pivot pin

Version: 2011-01

unilateral air connection,  
three-stage pressurized

damped independent of stroke



### Nominal size 070

Stroke	a	b	c	Force*	Order-number
36	314	164	90	1.04 kN	104.114.132.070.036.
50	356	192	90	1.04 kN	104.114.132.070.050.
65	401	222	90	1.04 kN	104.114.132.070.065.
80	446	252	90	1.04 kN	104.114.132.070.080.
100	506	292	90	1.04 kN	104.114.132.070.100.
130	596	352	90	1.04 kN	104.114.132.070.130.
150	656	392	90	1.04 kN	104.114.132.070.150.

\* at 1 bar pressure

### Nominal size 080

Stroke	a	b	c	Force*	Order-number
36	314	164	100	1.4 kN	104.114.132.080.036.
50	356	192	100	1.4 kN	104.114.132.080.050.
65	401	222	100	1.4 kN	104.114.132.080.065.
80	446	252	100	1.4 kN	104.114.132.080.080.
100	506	292	100	1.4 kN	104.114.132.080.100.
130	596	352	100	1.4 kN	104.114.132.080.130.
150	656	392	100	1.4 kN	104.114.132.080.150.

\* at 1 bar pressure

### Nominal size 090

Stroke	a	b	c	Force*	Order-number
36	246	94	110	1.8 kN	104.114.132.090.036.
50	356	192	110	1.8 kN	104.114.132.090.050.
65	401	222	110	1.8 kN	104.114.132.090.065.
80	446	252	110	1.8 kN	104.114.132.090.080.
100	506	292	110	1.8 kN	104.114.132.090.100.
130	596	352	110	1.8 kN	104.114.132.090.130.
150	656	392	110	1.8 kN	104.114.132.090.150.

\* at 1 bar pressure

Complete the Order-number:

**Example: 104.114.132.080.050.???. No. Force connection (S.6).???. No. Cylinder rod (S.7)**

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Cylinder-pivot pin-5



# Welding cylinder

## Pivot pin

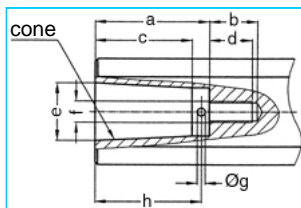
Version: 2011-01

### 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.

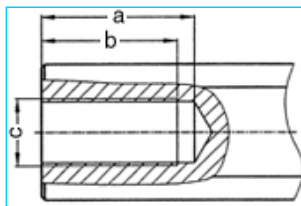
**Example: 104.114.132.080.050.401.?? No. Cylinder rod (S.7)**

#### Internal cone



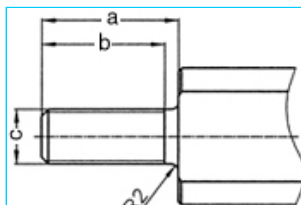
a	b	c	d	e	cone	f	g	h	No.
33	18	27.0	16	17.780	MK2	M8	3	30	101.
42	18	35.5	16	21.806	MK3	M8	3	39	102.
42	18	35.5	16	21.750	1:10	M8	3	39	103.

#### Female thread



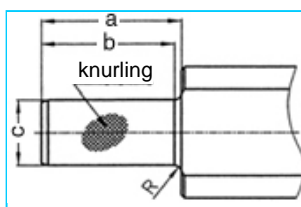
a	b	c	No.
45	40	M20 x 1.5	201.
62	58	M20 x 1.5	202.

#### 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

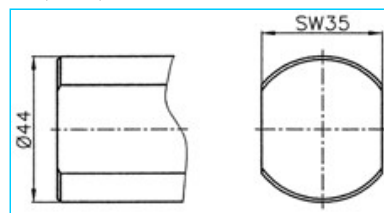
flattened and rotation locked

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

**Example: 104.114.132.080.050.401.00**

### For piston diameter

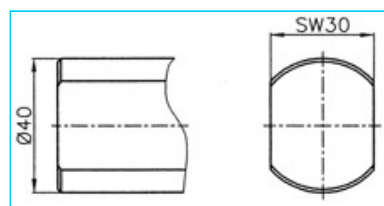
70, 80, 90



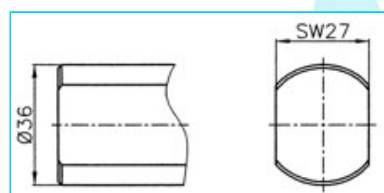
**No. 00**

### For piston diameter

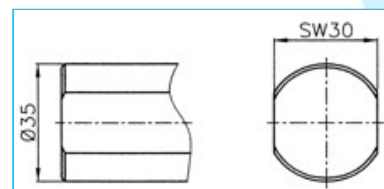
38, 44, 58



**No. 01**



**No. 02**



**No. 03**

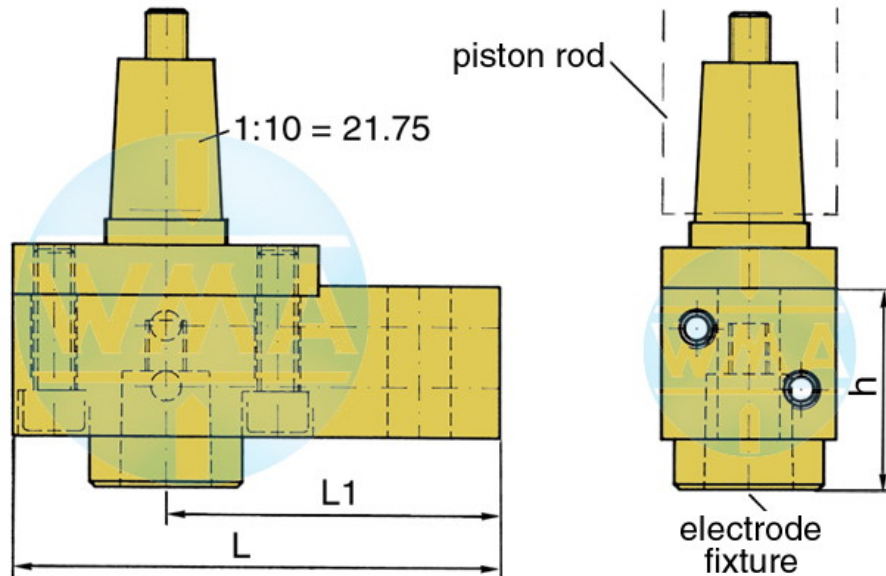


# Welding cylinder

## 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!

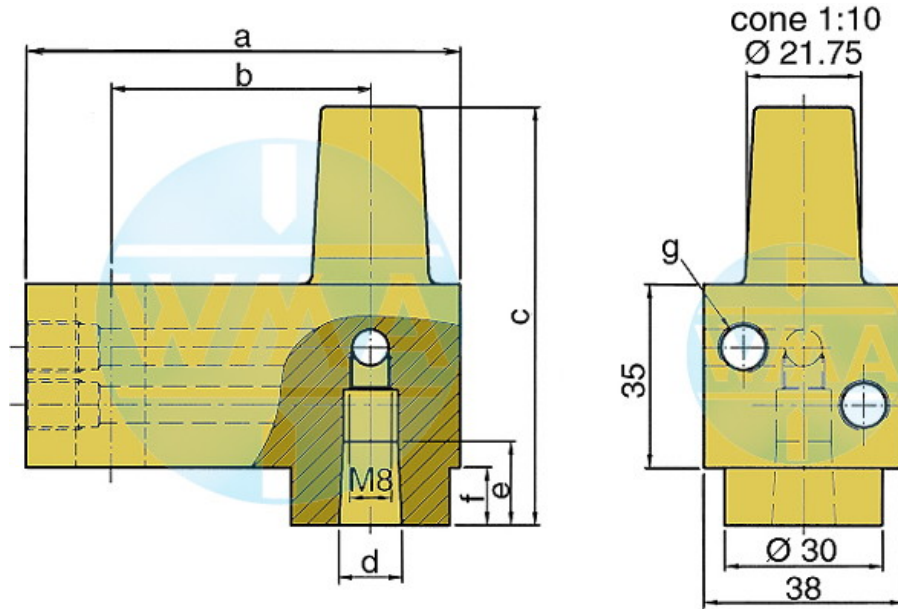


# Welding cylinder

## 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