



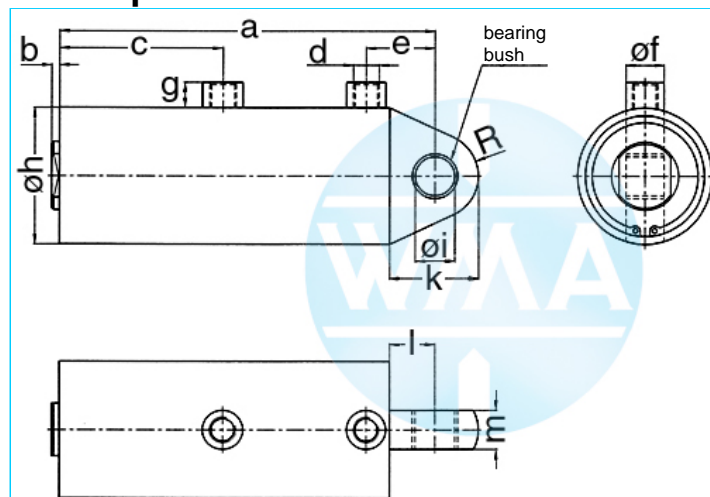
Welding cylinder

Ground hinge

Version: 2011-01

unilateral air connection,
double-stage pressurized

undamped



Nominal size 038

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	190	4	82	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.2 kN	100.110.121.038.036.
50	218	4	96	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.2 kN	100.110.121.038.050.
65	248	4	111	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.2 kN	100.110.121.038.065.
80	278	4	126	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.2 kN	100.110.121.038.080.
100	318	4	146	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.2 kN	100.110.121.038.100.
130	378	4	176	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.2 kN	100.110.121.038.130.
150	418	4	196	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.2 kN	100.110.121.038.150.

* at 1 bar pressure, S = stroke

Nominal size 044

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	190	4	82	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.121.044.036.
50	218	4	96	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.121.044.050.
65	248	4	111	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.121.044.065.
80	278	4	126	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.121.044.080.
100	318	4	146	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.121.044.100.
130	378	4	176	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.121.044.130.
150	418	4	196	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.121.044.150.

* at 1 bar pressure, S = stroke

Nominal size 058

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	190	4	82	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.121.058.036.
50	218	4	96	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.121.058.050.
65	248	4	111	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.121.058.065.
80	278	4	126	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.121.058.080.
100	318	4	146	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.121.058.100.
130	378	4	176	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.121.058.130.
150	418	4	196	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.121.058.150.

* at 1 bar pressure, S = stroke

Complete the Order-number:

Example: 100.110.121.038.036.??? No. Force connection (S.11).?? No. Cylinder rod (S.12)

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Cylinder-ground hinge-1



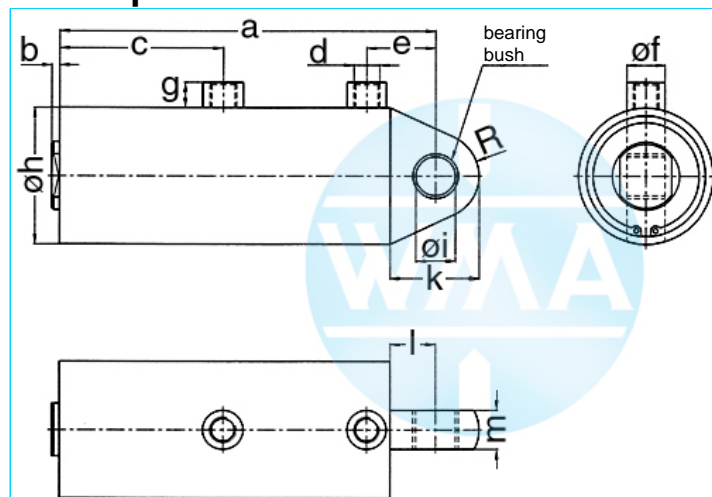
Welding cylinder

Ground hinge

Version: 2011-01

unilateral air connection,
double-stage pressurized

undamped



Nominal size 070

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	243	4	99	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.121.070.036.
50	271	4	113	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.121.070.050.
65	301	4	128	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.121.070.065.
80	331	4	143	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.121.070.080.
100	371	4	163	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.121.070.100.
130	431	4	193	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.121.070.130.
150	471	4	213	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.121.070.150.

* at 1 bar pressure, S = stroke

Nominal size 080

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	243	4	99	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.121.080.036.
50	271	4	113	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.121.080.050.
65	301	4	128	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.121.080.065.
80	331	4	143	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.121.080.080.
100	371	4	163	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.121.080.100.
130	431	4	193	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.121.080.130.
150	471	4	213	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.121.080.150.

* at 1 bar pressure, S = stroke

Nominal size 090

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	243	4	99	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.121.090.036.
50	271	4	113	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.121.090.050.
65	301	4	128	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.121.090.065.
80	331	4	143	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.121.090.080.
100	371	4	163	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.121.090.100.
130	431	4	193	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.121.090.130.
150	471	4	213	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.121.090.150.

* at 1 bar pressure, S = stroke

Complete the Order-number:

Example: 100.110.121.070.036.??? No. Force connection (S.11).?? No. Cylinder rod (S.12)

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Cylinder-ground hinge-2



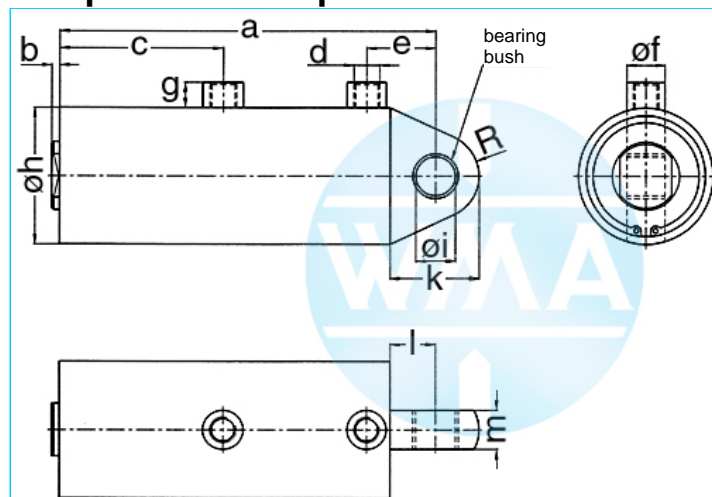
Welding cylinder

Ground hinge

Version: 2011-01

unilateral air connection,
double-stage pressurized

end position damped



Nominal size 044

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	218	4	96	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.122.044.036.
50	248	4	111	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.122.044.050.
65	278	4	126	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.122.044.065.
80	318	4	146	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.122.044.080.
100	378	4	176	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.122.044.100.
130	418	4	196	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.122.044.130.

* at 1 bar pressure, S = stroke

Nominal size 058

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	218	4	96	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.122.058.036.
50	248	4	111	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.122.058.050.
65	278	4	126	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.122.058.065.
80	318	4	146	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.122.058.080.
100	378	4	176	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.122.058.100.
130	418	4	196	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.122.058.130.

* at 1 bar pressure, S = stroke

Nominal size 070

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	271	4	113	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.122.070.036.
50	301	4	128	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.122.070.050.
65	331	4	143	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.122.070.065.
80	371	4	163	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.122.070.080.
100	431	4	193	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.122.070.100.
130	471	4	213	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.122.070.130.

* at 1 bar pressure, S = stroke

Complete the Order-number:

Example: 100.110.122.044.036.??? No. Force connection (S.11).?? No. Cylinder rod (S.12)

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Cylinder-ground hinge-3



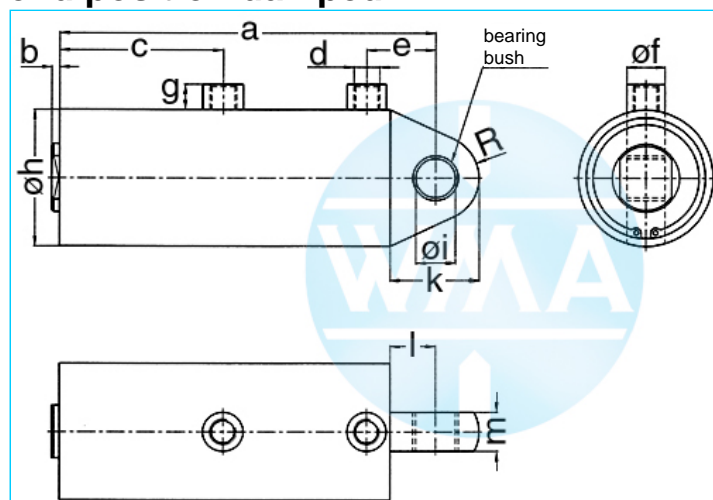
Welding cylinder

Ground hinge

Version: 2011-01

**unilateral air connection,
double-stage pressurized**

end position damped



Nominal size 080

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	271	4	113	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.122.080.036.
50	301	4	128	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.122.080.050.
65	331	4	143	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.122.080.065.
80	371	4	163	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.122.080.080.
100	431	4	193	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.122.080.100.
130	471	4	213	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.122.080.130.

* at 1 bar pressure, S = stroke

Nominal size 090

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	243	4	99	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.122.090.036.
50	271	4	113	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.122.090.050.
65	301	4	128	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.122.090.065.
80	331	4	143	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.122.090.080.
100	371	4	163	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.122.090.100.
130	431	4	193	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.122.090.130.
150	471	4	213	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.122.090.150.

* at 1 bar pressure, S = stroke

Complete the Order-number:

Example: 100.110.122.080.036.??? No. Force connection (S.11).?? No. Cylinder rod (S.12)

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Cylinder-ground hinge-4



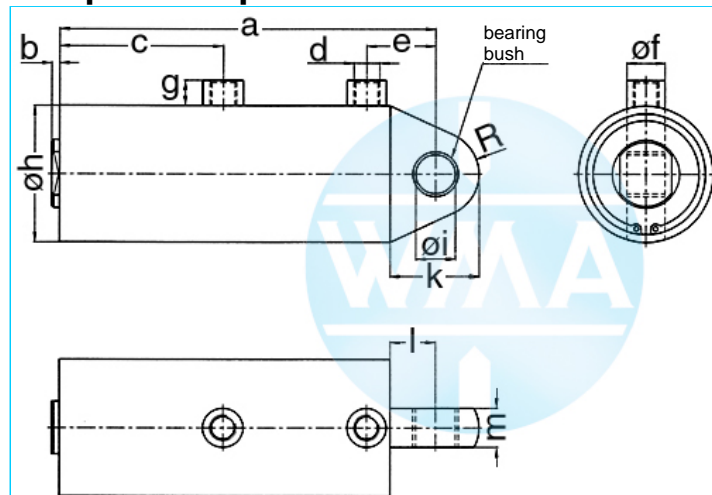
Welding cylinder

Ground hinge

Version: 2011-01

unilateral air connection,
double-stage pressurized

damped independent of stroke



Nominal size 044

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	190	4	82	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.123.044.036.
50	218	4	96	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.123.044.050.
65	248	4	111	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.123.044.065.
80	278	4	126	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.123.044.080.
100	318	4	146	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.123.044.100.
130	378	4	176	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.123.044.130.
150	418	4	196	Rp1/4"	35	20	13	55	16	42	22	20	20	0.28 kN	100.110.123.044.150.

* at 1 bar pressure, S = stroke

Nominal size 058

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	190	4	82	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.123.058.036.
50	218	4	96	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.123.058.050.
65	248	4	111	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.123.058.065.
80	278	4	126	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.123.058.080.
100	318	4	146	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.123.058.100.
130	378	4	176	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.123.058.130.
150	418	4	196	Rp1/4"	35	20	13	70	20	45	23	20	22	0.5 kN	100.110.123.058.150.

* at 1 bar pressure, S = stroke

Nominal size 070

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	243	4	99	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.123.070.036.
50	271	4	113	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.123.070.050.
65	301	4	128	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.123.070.065.
80	331	4	143	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.123.070.080.
100	371	4	163	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.123.070.100.
130	431	4	193	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.123.070.130.
150	471	4	213	Rp3/8"	54	25	16	90	25	67	37	25	30	0.72 kN	100.110.123.070.150.

* at 1 bar pressure, S = stroke

Complete the Order-number:

Example: 100.110.123.044.036.??? No. Force connection (S.11).?? No. Cylinder rod (S.12)

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Cylinder-ground hinge-5



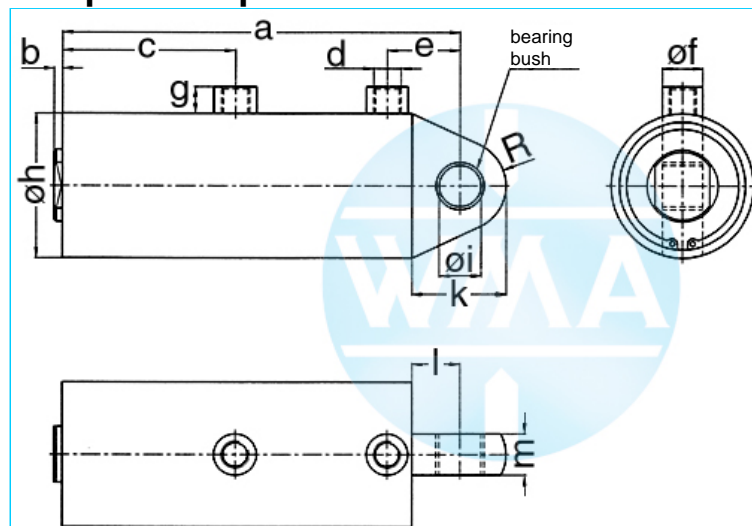
Welding cylinder

Ground hinge

Version: 2011-01

unilateral air connection,
double-stage pressurized

damped independent of stroke



Nominal size 080

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	243	4	99	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.123.080.036.
50	271	4	113	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.123.080.050.
65	301	4	128	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.123.080.065.
80	331	4	143	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.123.080.080.
100	371	4	163	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.123.080.100.
130	431	4	193	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.123.080.130.
150	471	4	213	Rp3/8"	54	25	16	100	25	67	37	25	30	0.95 kN	100.110.123.080.150.

* at 1 bar pressure, S = stroke

Nominal size 090

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	243	4	99	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.123.090.036.
50	271	4	113	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.123.090.050.
65	301	4	128	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.123.090.065.
80	331	4	143	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.123.090.080.
100	371	4	163	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.123.090.100.
130	431	4	193	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.123.090.130.
150	471	4	213	Rp3/8"	54	25	16	110	25	67	37	25	30	1.2 kN	100.110.123.090.150.

* at 1 bar pressure, S = stroke

Complete the Order-number:

Example: 100.110.123.080.036.??? No. Force connection (S.11).?? No. Cylinder rod (S.12)

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Cylinder-ground hinge-6



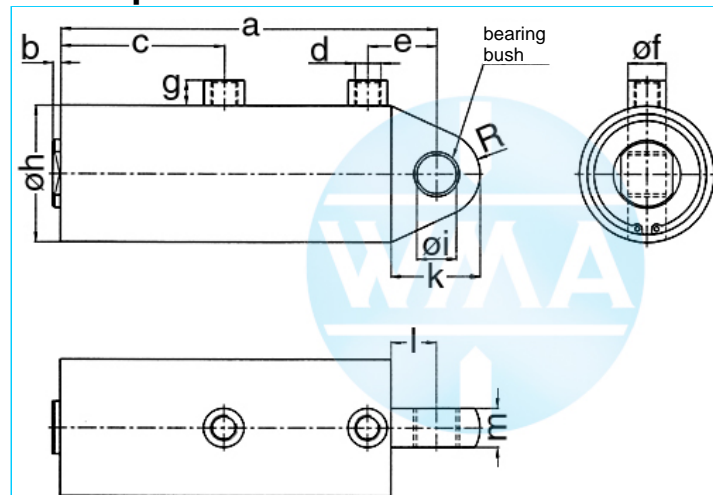
Welding cylinder

Ground hinge

Version: 2011-01

unilateral air connection,
three-stage pressurized

undamped



Nominal size 038

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	249	4	141	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.28 kN	100.110.131.038.036.
50	291	4	169	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.28 kN	100.110.131.038.050.
65	336	4	199	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.28 kN	100.110.131.038.065.
80	381	4	229	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.28 kN	100.110.131.038.080.
100	441	4	269	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.28 kN	100.110.131.038.100.
130	531	4	329	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.28 kN	100.110.131.038.130.
150	591	4	369	Rp1/4"	35	20	13	48	16	39.5	22	20	17.5	0.28 kN	100.110.131.038.150.

* at 1 bar pressure, S = stroke

Nominal size 044

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	249	4	141	Rp1/4"	35	20	13	55	16	42	22	20	20	0.39 kN	100.110.131.044.036.
50	291	4	169	Rp1/4"	35	20	13	55	16	42	22	20	20	0.39 kN	100.110.131.044.050.
65	336	4	199	Rp1/4"	35	20	13	55	16	42	22	20	20	0.39 kN	100.110.131.044.065.
80	381	4	229	Rp1/4"	35	20	13	55	16	42	22	20	20	0.39 kN	100.110.131.044.080.
100	441	4	269	Rp1/4"	35	20	13	55	16	42	22	20	20	0.39 kN	100.110.131.044.100.
130	531	4	329	Rp1/4"	35	20	13	55	16	42	22	20	20	0.39 kN	100.110.131.044.130.
150	591	4	369	Rp1/4"	35	20	13	55	16	42	22	20	20	0.39 kN	100.110.131.044.150.

* at 1 bar pressure, S = stroke

Nominal size 058

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	249	4	141	Rp1/4"	35	20	13	70	20	45	23	20	22	0.72 kN	100.110.131.058.036.
50	291	4	169	Rp1/4"	35	20	13	70	20	45	23	20	22	0.72 kN	100.110.131.058.050.
65	336	4	199	Rp1/4"	35	20	13	70	20	45	23	20	22	0.72 kN	100.110.131.058.065.
80	381	4	229	Rp1/4"	35	20	13	70	20	45	23	20	22	0.72 kN	100.110.131.058.080.
100	441	4	269	Rp1/4"	35	20	13	70	20	45	23	20	22	0.72 kN	100.110.131.058.100.
130	531	4	329	Rp1/4"	35	20	13	70	20	45	23	20	22	0.72 kN	100.110.131.058.130.
150	591	4	369	Rp1/4"	35	20	13	70	20	45	23	20	22	0.72 kN	100.110.131.058.150.

* at 1 bar pressure, S = stroke

Complete the Order-number:

Example: 100.110.131.044.036.??? No. Force connection (S. 11).?? No. Cylinder rod (S. 12)

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Cylinder-ground hinge-7



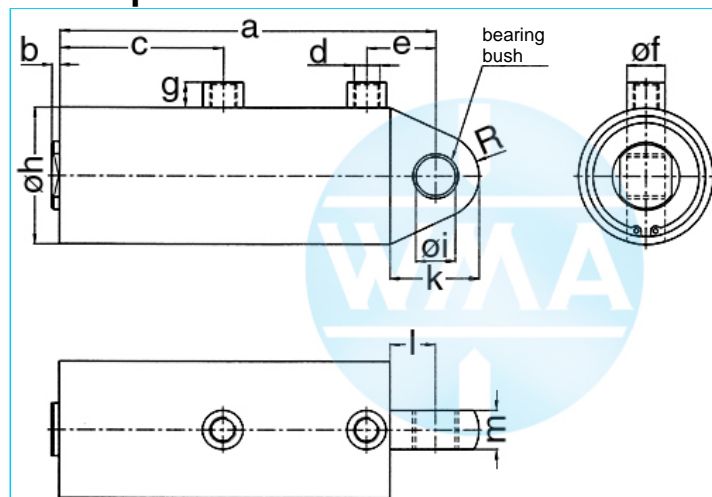
Welding cylinder

Ground hinge

Version: 2011-01

unilateral air connection,
three-stage pressurized

undamped



Nominal size 070

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	313	4	169	Rp3/8"	54	25	16	90	25	67	37	25	30	1.04 kN	100.110.131.070.036.
50	355	4	197	Rp3/8"	54	25	16	90	25	67	37	25	30	1.04 kN	100.110.131.070.050.
65	400	4	227	Rp3/8"	54	25	16	90	25	67	37	25	30	1.04 kN	100.110.131.070.065.
80	445	4	257	Rp3/8"	54	25	16	90	25	67	37	25	30	1.04 kN	100.110.131.070.080.
100	505	4	297	Rp3/8"	54	25	16	90	25	67	37	25	30	1.04 kN	100.110.131.070.100.
130	595	4	357	Rp3/8"	54	25	16	90	25	67	37	25	30	1.04 kN	100.110.131.070.130.
150	655	4	397	Rp3/8"	54	25	16	90	25	67	37	25	30	1.04 kN	100.110.131.070.150.

* at 1 bar pressure, S = stroke

Nominal size 080

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	313	4	169	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.131.080.036.
50	355	4	197	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.131.080.050.
65	400	4	227	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.131.080.065.
80	445	4	257	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.131.080.080.
100	505	4	297	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.131.080.100.
130	595	4	357	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.131.080.130.
150	655	4	397	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.131.080.150.

* at 1 bar pressure, S = stroke

Nominal size 090

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	313	4	169	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.131.090.036.
50	355	4	197	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.131.090.050.
65	400	4	227	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.131.090.065.
80	445	4	257	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.131.090.080.
100	505	4	297	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.131.090.100.
130	595	4	357	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.131.090.130.
150	655	4	397	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.131.090.150.

* at 1 bar pressure, S = stroke

Complete the Order-number:

Example: 100.110.131.070.036.??? No. Force connection (S.11).?? No. Cylinder rod (S.12)

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Cylinder-ground hinge-8



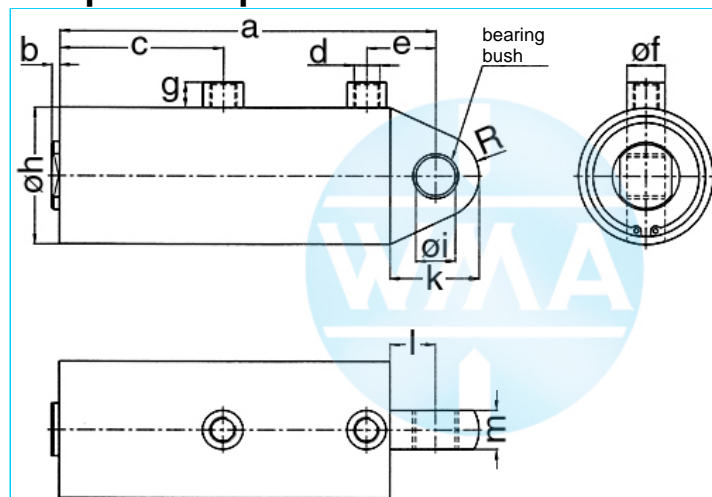
Welding cylinder

Ground hinge

Version: 2011-01

unilateral air connection,
three-stage pressurized

damped independent of stroke



Nominal size 044

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	249	4	141	Rp1/4"	35	20	13	55	16	42	22	20	20	0,39 kN	100.110.132.044.036.
50	291	4	169	Rp1/4"	35	20	13	55	16	42	22	20	20	0,39 kN	100.110.132.044.050.
65	336	4	199	Rp1/4"	35	20	13	55	16	42	22	20	20	0,39 kN	100.110.132.044.065.
80	381	4	229	Rp1/4"	35	20	13	55	16	42	22	20	20	0,39 kN	100.110.132.044.080.
100	441	4	269	Rp1/4"	35	20	13	55	16	42	22	20	20	0,39 kN	100.110.132.044.100.
130	531	4	329	Rp1/4"	35	20	13	55	16	42	22	20	20	0,39 kN	100.110.132.044.130.
150	591	4	369	Rp1/4"	35	20	13	55	16	42	22	20	20	0,39 kN	100.110.132.044.150.

* at 1 bar pressure, S = stroke

Nominal size 058

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	249	4	141	Rp1/4"	35	20	13	70	20	45	23	20	22	0,72 kN	100.110.132.058.036.
50	291	4	169	Rp1/4"	35	20	13	70	20	45	23	20	22	0,72 kN	100.110.132.058.050.
65	336	4	199	Rp1/4"	35	20	13	70	20	45	23	20	22	0,72 kN	100.110.132.058.065.
80	381	4	229	Rp1/4"	35	20	13	70	20	45	23	20	22	0,72 kN	100.110.132.058.080.
100	441	4	269	Rp1/4"	35	20	13	70	20	45	23	20	22	0,72 kN	100.110.132.058.100.
130	531	4	329	Rp1/4"	35	20	13	70	20	45	23	20	22	0,72 kN	100.110.132.058.130.
150	591	4	369	Rp1/4"	35	20	13	70	20	45	23	20	22	0,72 kN	100.110.132.058.150.

* at 1 bar pressure, S = stroke

Nominal size 070

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	313	4	169	Rp3/8"	54	25	16	90	25	67	37	25	30	1,04 kN	100.110.132.070.036.
50	355	4	197	Rp3/8"	54	25	16	90	25	67	37	25	30	1,04 kN	100.110.132.070.050.
65	400	4	227	Rp3/8"	54	25	16	90	25	67	37	25	30	1,04 kN	100.110.132.070.065.
80	445	4	257	Rp3/8"	54	25	16	90	25	67	37	25	30	1,04 kN	100.110.132.070.080.
100	505	4	297	Rp3/8"	54	25	16	90	25	67	37	25	30	1,04 kN	100.110.132.070.100.
130	595	4	357	Rp3/8"	54	25	16	90	25	67	37	25	30	1,04 kN	100.110.132.070.130.
150	655	4	397	Rp3/8"	54	25	16	90	25	67	37	25	30	1,04 kN	100.110.132.070.150.

* at 1 bar pressure, S = stroke

Complete the Order-number:

Example: 100.110.132.058.036.??? No. Force connection (S.11).?? No. Cylinder rod (S.12)

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Cylinder-ground hinge-9



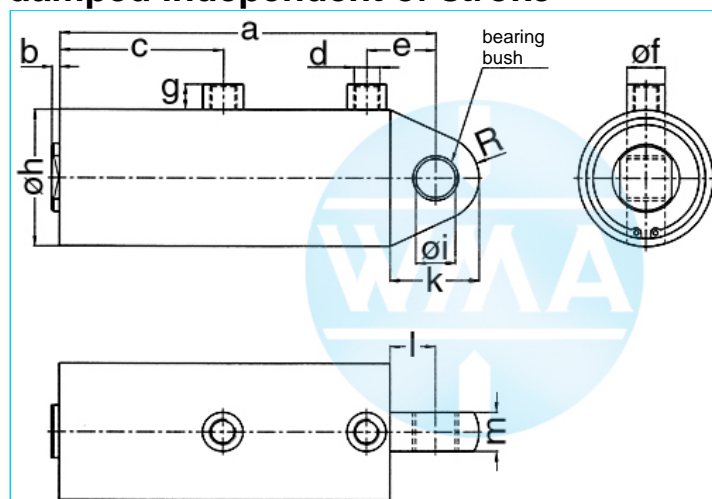
Welding cylinder

Ground hinge

Version: 2011-01

unilateral air connection,
three-stage pressurized

damped independent of stroke



Nominal size 080

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	313	4	169	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.132.080.036.
50	355	4	197	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.132.080.050.
65	400	4	227	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.132.080.065.
80	445	4	257	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.132.080.080.
100	505	4	297	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.132.080.100.
130	595	4	357	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.132.080.130.
150	655	4	397	Rp3/8"	54	25	16	100	25	67	37	25	30	1.4 kN	100.110.132.080.150.

* at 1 bar pressure, S = stroke

Nominal size 090

S	a	b	c	d	e	f	g	h	i	k	l	m	R	Force*	Order-number
36	313	4	169	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.123.090.036.
50	355	4	197	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.123.090.050.
65	400	4	227	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.123.090.065.
80	445	4	257	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.123.090.080.
100	505	4	297	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.123.090.100.
130	595	4	357	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.123.090.130.
150	655	4	397	Rp3/8"	54	25	16	110	25	67	37	25	30	1.8 kN	100.110.123.090.150.

* at 1 bar pressure, S = stroke

Complete the Order-number:

Example: 100.110.132.080.036.??? No. Force connection (S.11).?? No. Cylinder rod (S.12)

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Cylinder-ground hinge-10



Welding cylinder

Ground hinge

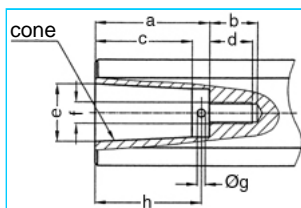
Version: 2011-01

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.

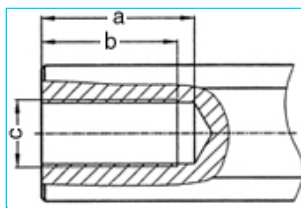
Example: 100.110.121.080.036.103.?? No. Cylinder rod (S.12)

Internal cone



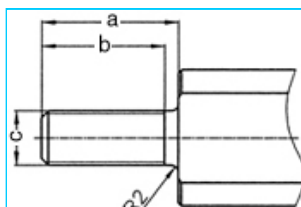
a	b	c	d	e	cone	f	g	h	No.
33	18	27.0	16	17.780	MK2	M8	3	30	101.
42	18	35.5	16	21.806	MK3	M8	3	39	102.
42	18	35.5	16	21.750	1:10	M8	3	39	103.

Female thread



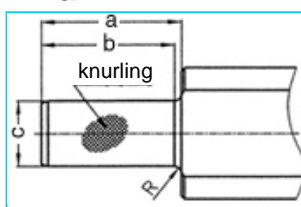
a	b	c	No.
45	40	M20 x 1.5	201.
62	58	M20 x 1.5	202.

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 ¹⁷	1 x 0.2 DIN 82	2	401.
42	42	25 ¹⁷	1 x 0.2 DIN 82	-	402.

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Cylinder-ground hinge-11



Welding cylinder

Ground hinge

Version: 2011-01

Cylinder rod

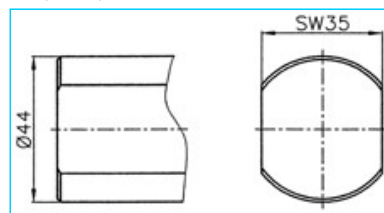
flattened and rotation locked

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

Example: 100.113.121.080.036.103.00

For piston diameter

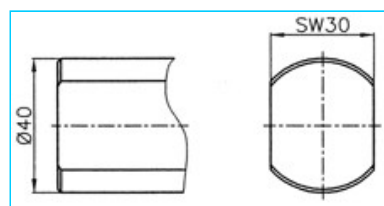
70, 80, 90



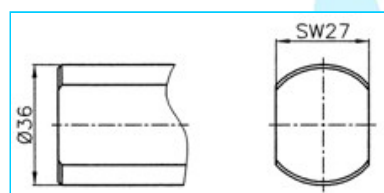
No. 00

For piston diameter

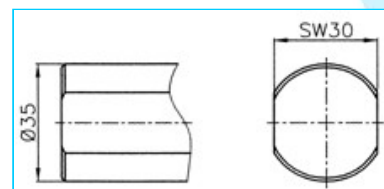
38, 44, 58



No. 01



No. 02



No. 03

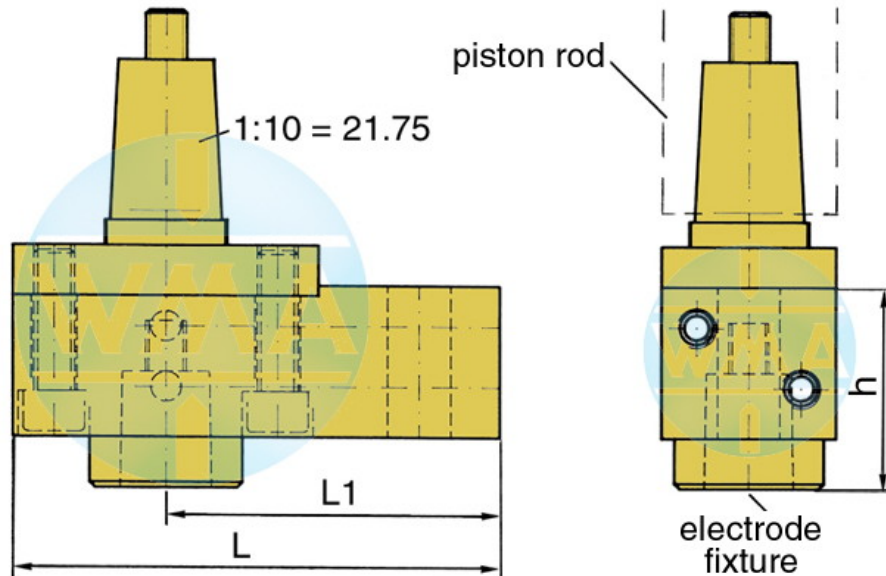


Welding cylinder

Ground hinge

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!

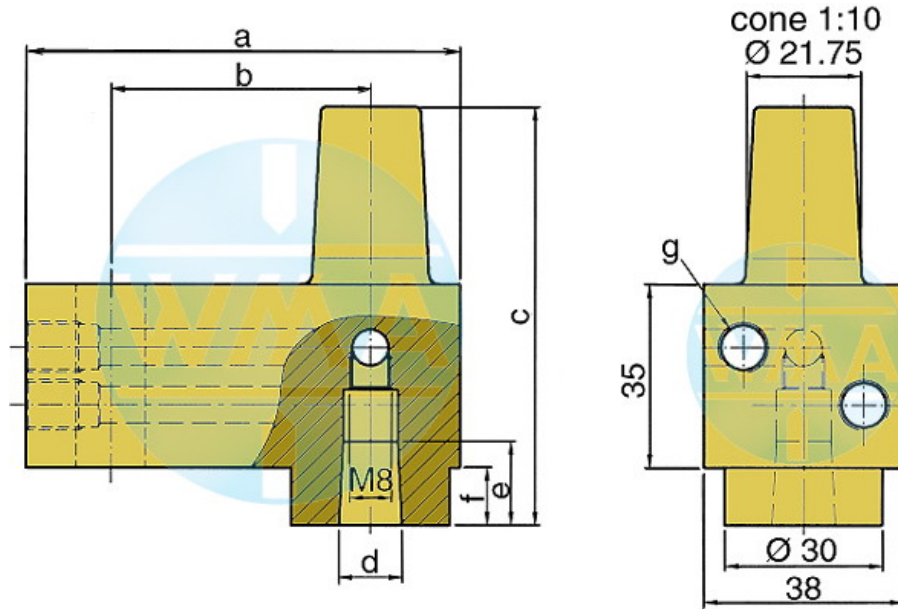


Welding cylinder

Ground hinge

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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