



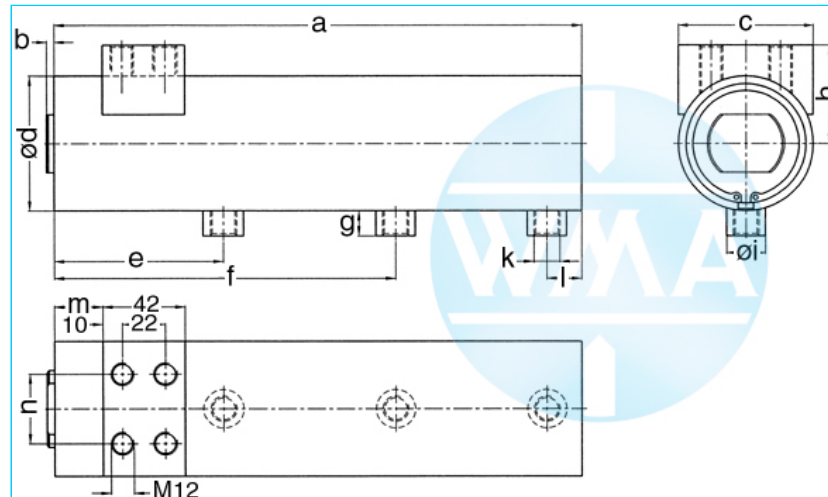
Welding cylinder

Lateral flange, retract and working stroke

Version: 2011-01

unilateral air connection,
double-stage pressurized

undamped



Nominal size 038

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	369	4	48	48	126	254	13	40	20	Rp1/4"	18	25	24	0.2 kN	105.115.124.038.050.
60	20	379	4	48	48	126	254	13	40	20	Rp1/4"	18	25	24	0.2 kN	105.115.124.038.060.
70	30	429	4	48	48	146	294	13	40	20	Rp1/4"	18	25	24	0.2 kN	105.115.124.038.070.
80	20	439	4	48	48	146	294	13	40	20	Rp1/4"	18	25	24	0.2 kN	105.115.124.038.080.
90	40	509	4	48	48	176	354	13	40	20	Rp1/4"	18	25	24	0.2 kN	105.115.124.038.090.
100	30	519	4	48	48	176	354	13	40	20	Rp1/4"	18	25	24	0.2 kN	105.115.124.038.100.
110	40	569	4	48	48	196	394	13	40	20	Rp1/4"	18	25	24	0.2 kN	105.115.124.038.110.

S = retract, WS = working stroke, *at 1 bar pressure

Nominal size 044

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	369	4	55	55	126	254	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.124.044.050.
60	20	379	4	55	55	126	254	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.124.044.060.
70	30	429	4	55	55	146	294	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.124.044.070.
80	20	439	4	55	55	146	294	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.124.044.080.
90	40	509	4	55	55	176	354	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.124.044.090.
100	30	519	4	55	55	176	354	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.124.044.100.
110	40	569	4	55	55	196	394	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.124.044.110.

S = retract, WS = working stroke, *at 1 bar pressure

Complete the Order-number:

Example: **105.115.124.044.060.???** No. Force connection (S.7).?? No. Cylinder rod (S.8)

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Cylinder-lateral flange-1



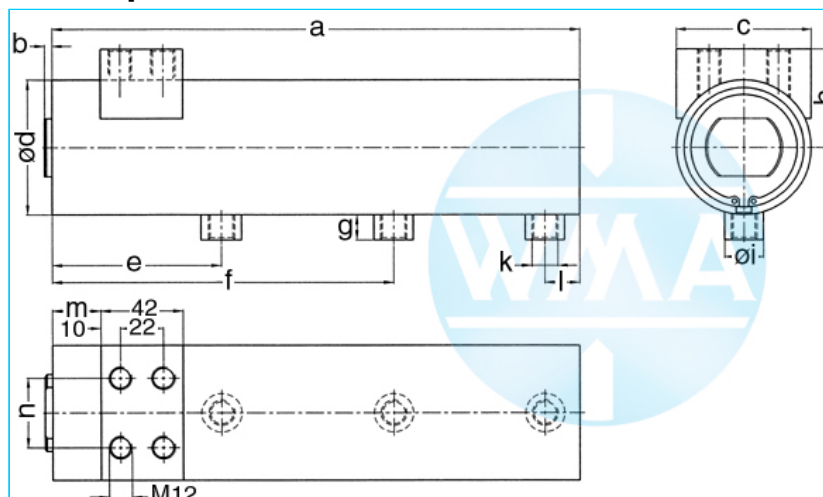
Welding cylinder

Lateral flange, retract and working stroke

Version: 2011-01

unilateral air connection,
double-stage pressurized

undamped



Nominal size 058

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	369	4	70	70	126	254	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.124.058.050.
60	20	379	4	70	70	126	254	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.124.058.060.
70	30	429	4	70	70	146	294	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.124.058.070.
80	20	439	4	70	70	146	294	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.124.058.080.
90	40	509	4	70	70	176	354	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.124.058.090.
100	30	519	4	70	70	176	354	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.124.058.100.
110	40	569	4	70	70	196	394	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.124.058.110.

S = retract, WS = working stroke, *at 1 bar pressure

Nominal size 070

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	419	4	90	90	143	293	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.124.070.050.
60	20	429	4	90	90	143	293	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.124.070.060.
70	30	479	4	90	90	163	333	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.124.070.070.
80	20	489	4	90	90	163	333	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.124.070.080.
90	40	559	4	90	90	193	393	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.124.070.090.
100	30	569	4	90	90	193	393	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.124.070.100.
110	40	619	4	90	90	213	433	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.124.070.110.

S = retract, WS = working stroke, *at 1 bar pressure

Complete the Order-number:

Example: **105.115.124.058.080.???** No. Force connection (S.7).?? No. Cylinder rod (S.8)

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Cylinder-lateral flange-2



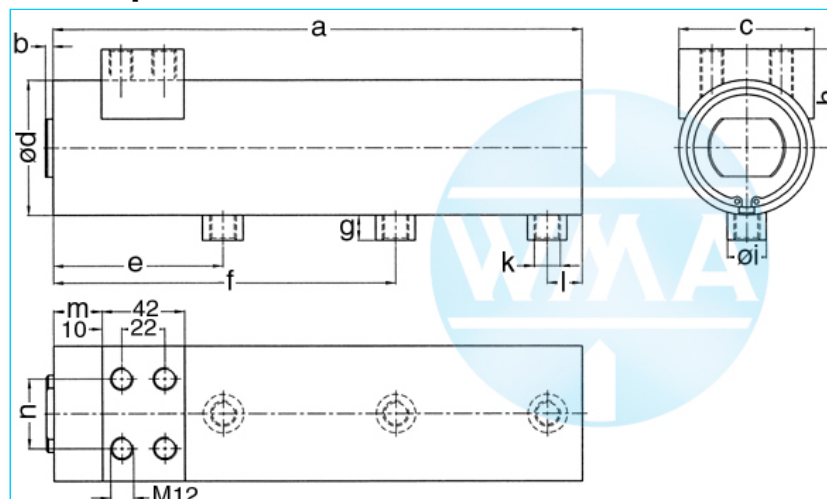
Welding cylinder

Lateral flange, retract and working stroke

Version: 2011-01

unilateral air connection,
double-stage pressurized

undamped



Nominal size 080

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	419	4	100	100	143	293	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.124.080.050.
60	20	429	4	100	100	143	293	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.124.080.060.
70	30	479	4	100	100	163	333	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.124.080.070.
80	20	489	4	100	100	163	333	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.124.080.080.
90	40	559	4	100	100	193	393	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.124.080.090.
100	30	569	4	100	100	193	393	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.124.080.100.
110	40	619	4	100	100	213	433	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.124.080.110.

S = retract, WS = working stroke, *at 1 bar pressure

Nominal size 090

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	419	4	110	110	143	293	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.124.090.050.
60	20	429	4	110	110	143	293	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.124.090.060.
70	30	479	4	110	110	163	333	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.124.090.070.
80	20	489	4	110	110	163	333	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.124.090.080.
90	40	559	4	110	110	193	393	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.124.090.090.
100	30	569	4	110	110	193	393	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.124.090.100.
110	40	619	4	110	110	213	433	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.124.090.110.

S = retract, WS = working stroke, *at 1 bar pressure

Complete the Order-number:

Example: **105.115.124.080.100.???** No. Force connection (S.7).?? No. Cylinder rod (S.8)

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Cylinder-lateral flange-3



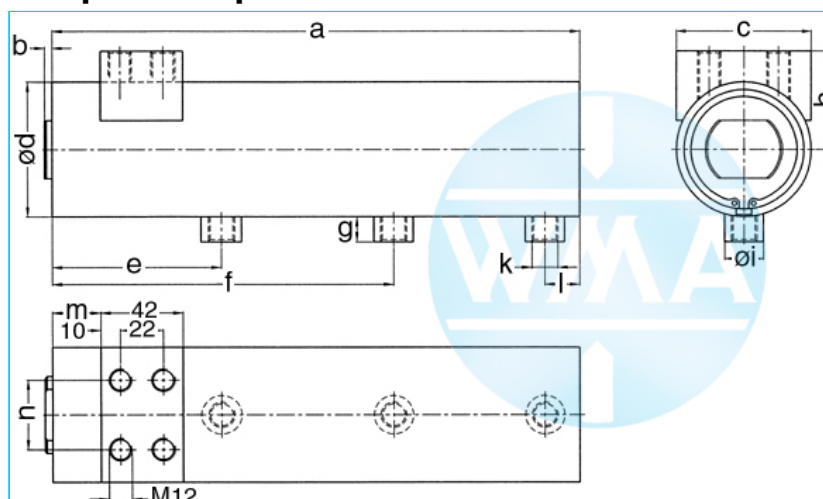
Welding cylinder

Lateral flange, retract and working stroke

Version: 2011-01

unilateral air connection,
double-stage pressurized

damped independent of stroke



Nominal size 044

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	369	4	55	55	126	254	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.125.044.050.
60	20	379	4	55	55	126	254	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.125.044.060.
70	30	429	4	55	55	146	294	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.125.044.070.
80	20	439	4	55	55	146	294	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.125.044.080.
90	40	509	4	55	55	176	354	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.125.044.090.
100	30	519	4	55	55	176	354	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.125.044.100.
110	40	569	4	55	55	196	394	13	44	20	Rp1/4"	18	25	24	0.28 kN	105.115.125.044.110.

S = retract, WS = working stroke, *at 1 bar pressure

Nominal size 058

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	369	4	70	70	126	254	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.125.058.050.
60	20	379	4	70	70	126	254	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.125.058.060.
70	30	429	4	70	70	146	294	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.125.058.070.
80	20	439	4	70	70	146	294	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.125.058.080.
90	40	509	4	70	70	176	354	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.125.058.090.
100	30	519	4	70	70	176	354	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.125.058.100.
110	40	569	4	70	70	196	394	13	51	20	Rp1/4"	18	25	36	0.5 kN	105.115.125.058.110.

S = retract, WS = working stroke, *at 1 bar pressure

Complete the Order-number:

Example: **105.115.125.058.080.???** No. Force connection (S.7).?? No. Cylinder rod (S.8)

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Cylinder-lateral flange-4



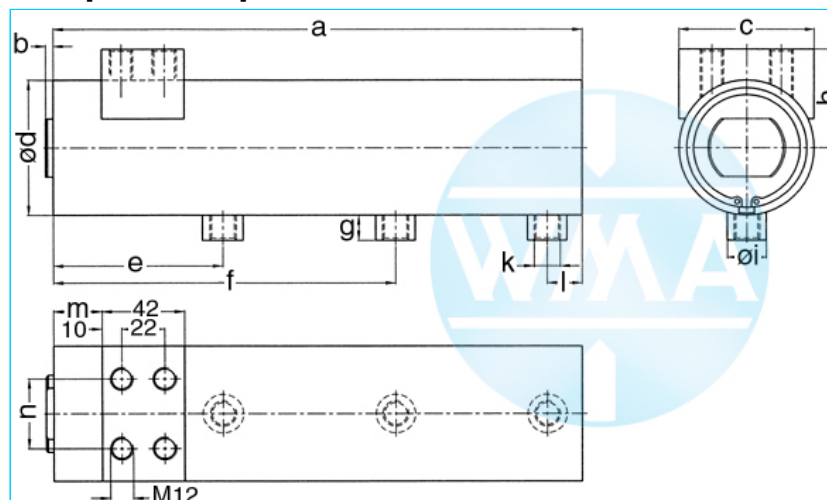
Welding cylinder

Lateral flange, retract and working stroke

Version: 2011-01

unilateral air connection,
double-stage pressurized

damped independent of stroke



Nominal size 070

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	419	4	90	90	143	293	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.125.070.050.
60	20	429	4	90	90	143	293	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.125.070.060.
70	30	479	4	90	90	163	333	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.125.070.070.
80	20	489	4	90	90	163	333	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.125.070.080.
90	40	559	4	90	90	193	393	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.125.070.090.
100	30	569	4	90	90	193	393	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.125.070.100.
110	40	619	4	90	90	213	433	16	60	25	Rp3/8"	24	29	66	0.72 kN	105.115.125.070.110.

S = retract, WS = working stroke, *at 1 bar pressure

Nominal size 080

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	419	4	100	100	143	293	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.125.080.050.
60	20	429	4	100	100	143	293	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.125.080.060.
70	30	479	4	100	100	163	333	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.125.080.070.
80	20	489	4	100	100	163	333	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.125.080.080.
90	40	559	4	100	100	193	393	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.125.080.090.
100	30	569	4	100	100	193	393	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.125.080.100.
110	40	619	4	100	100	213	433	16	65	25	Rp3/8"	24	29	76	0.95 kN	105.115.125.080.110.

S = retract, WS = working stroke, *at 1 bar pressure

Complete the Order-number:

Example: **105.115.125.070.110.???** No. Force connection (S.7).?? No. Cylinder rod (S.8)

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Cylinder-lateral flange-5



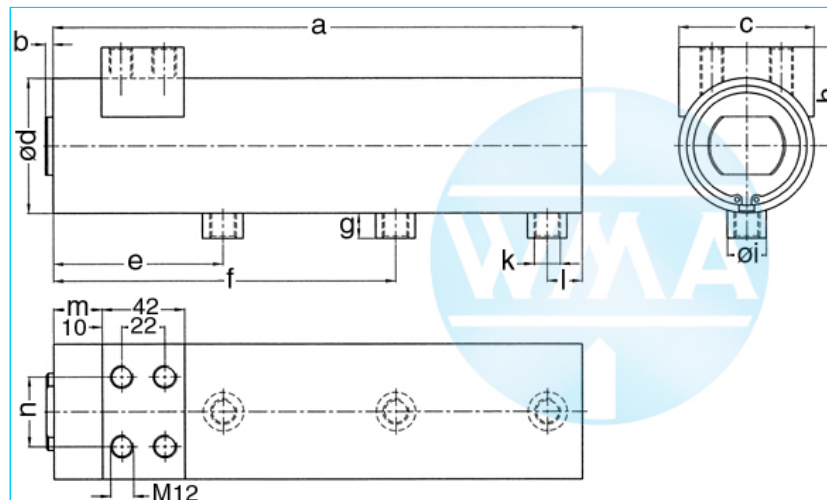
Welding cylinder

Lateral flange, retract and working stroke

Version: 2011-01

unilateral air connection,
double-stage pressurized

damped independent of stroke



Nominal size 090

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	419	4	110	110	143	293	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.125.090.050.
60	20	429	4	110	110	143	293	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.125.090.060.
70	30	479	4	110	110	163	333	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.125.090.070.
80	20	489	4	110	110	163	333	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.125.090.080.
90	40	559	4	110	110	193	393	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.125.090.090.
100	30	569	4	110	110	193	393	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.125.090.100.
110	40	619	4	110	110	213	433	16	70	25	Rp3/8"	24	29	86	1.2 kN	105.115.125.090.110.

S = retract, WS = working stroke, *at 1 bar pressure

Complete the Order-number:

Example: **105.115.125.090.100.???** No. Force connection (S.7).?? No. Cylinder rod (S.8)

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Cylinder-lateral flange-6



Welding cylinder

Lateral flange, retract and working stroke

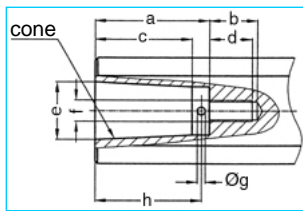
Version: 2011-01

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.

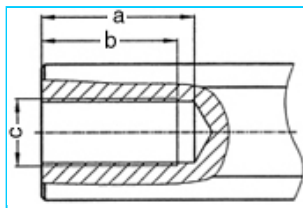
Example: 105.111.125.070.110.201.?? No. Cylinder rod (S.8)

Internal cone



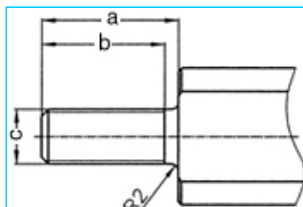
a	b	c	d	e	cone	f	g	h	No.
33	18	27.0	16	17.780	MK2	M8	3	30	101.
42	18	35.5	16	21.806	MK3	M8	3	39	102.
42	18	35.5	16	21.750	1:10	M8	3	39	103.

Female thread



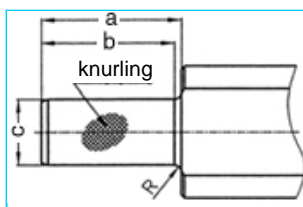
a	b	c	No.
45	40	M20 x 1.5	201.
62	58	M20 x 1.5	202.

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	2017	1 x 0.2 DIN 82	2	401.
42	42	2517	1 x 0.2 DIN 82	-	402.

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Cylinder-lateral flange-7



Welding cylinder

Lateral flange, retract and working stroke

Version: 2011-01

Cylinder rod

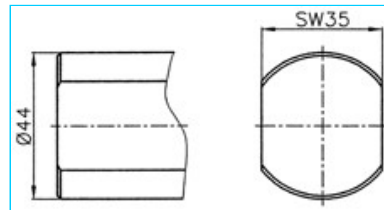
flattened and rotation locked

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

Example: 105.111.125.070.110.201.00

For piston diameter

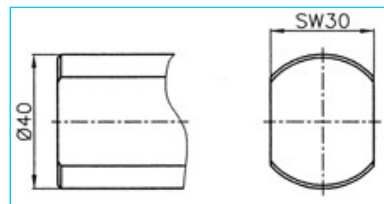
70, 80, 90



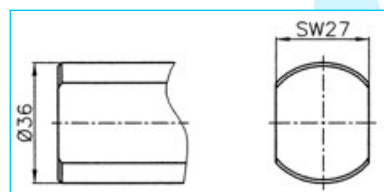
No. 00

For piston diameter

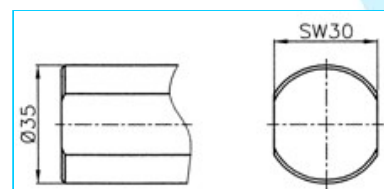
38, 44, 58



No. 01



No. 02



No. 03

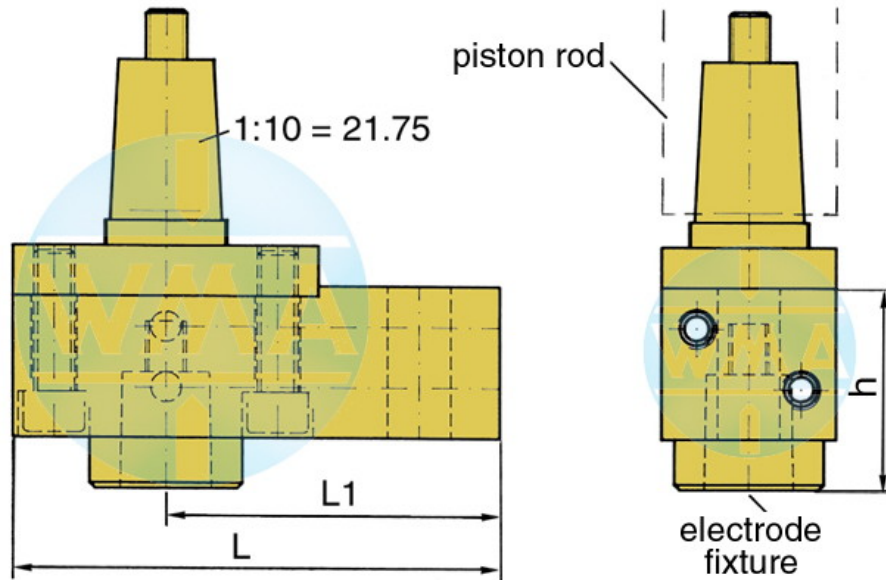


Welding cylinder

Lateral flange, retract and working stroke

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!

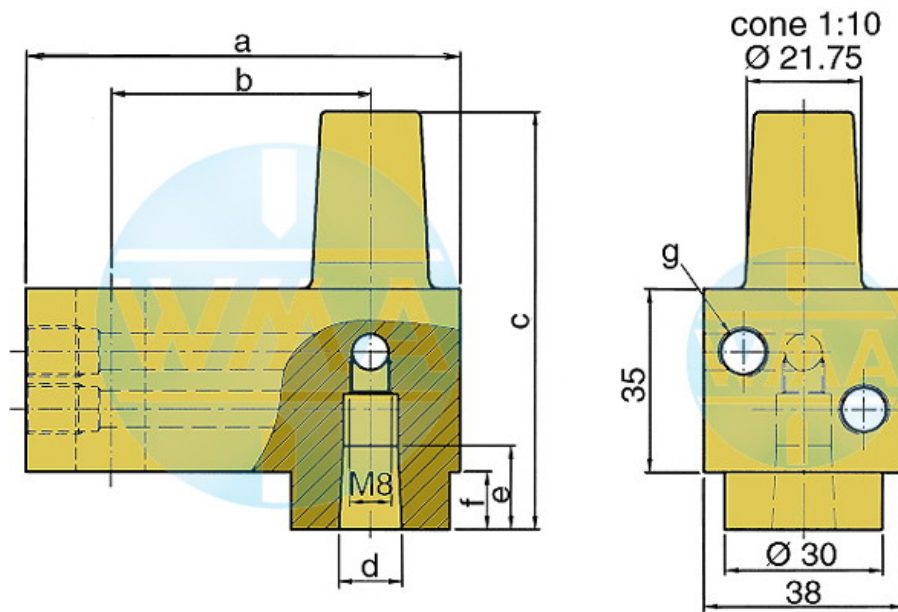


Welding cylinder

Lateral flange, retract and working stroke

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

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

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Cylinder-lateral flange-10