



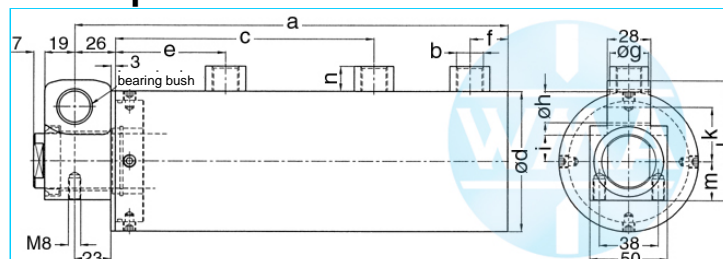
Welding cylinder

Lateral hinge, retract and working stroke

Version: 2011-01

unilateral air connection,
double-stage pressurized

undamped



Nominal size 044

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	393	Rp1/4"	252	55	124	18	20	16	16	30	68	25	13	0.28 kN	106.111.124.044.050.
60	20	403	Rp1/4"	252	55	124	18	20	16	16	30	68	25	13	0.28 kN	106.111.124.044.060.
70	30	453	Rp1/4"	292	55	144	18	20	16	16	30	68	25	13	0.28 kN	106.111.124.044.070.
80	20	463	Rp1/4"	292	55	144	18	20	16	16	30	68	25	13	0.28 kN	106.111.124.044.080.
90	40	533	Rp1/4"	352	55	174	18	20	16	16	30	68	25	13	0.28 kN	106.111.124.044.090.
100	30	543	Rp1/4"	352	55	174	18	20	16	16	30	68	25	13	0.28 kN	106.111.124.044.100.
110	40	593	Rp1/4"	392	55	194	18	20	16	16	30	68	25	13	0.28 kN	106.111.124.044.110.

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	393	Rp1/4"	252	70	124	18	20	16	16	30	68	25	13	0.5 kN	106.111.124.058.050.
60	20	403	Rp1/4"	252	70	124	18	20	16	16	30	68	25	13	0.5 kN	106.111.124.058.060.
70	30	453	Rp1/4"	292	70	144	18	20	16	16	30	68	25	13	0.5 kN	106.111.124.058.070.
80	20	463	Rp1/4"	292	70	144	18	20	16	16	30	68	25	13	0.5 kN	106.111.124.058.080.
90	40	533	Rp1/4"	352	70	174	18	20	16	16	30	68	25	13	0.5 kN	106.111.124.058.090.
100	30	543	Rp1/4"	352	70	174	18	20	16	16	30	68	25	13	0.5 kN	106.111.124.058.100.
110	40	593	Rp1/4"	392	70	194	18	20	16	16	30	68	25	13	0.5 kN	106.111.124.058.110.

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	441	Rp3/8"	288	90	138	24	25	20	17	35	77	25	16	0.72 kN	106.111.124.070.050.
60	20	451	Rp3/8"	288	90	138	24	25	20	17	35	77	25	16	0.72 kN	106.111.124.070.060.
70	30	501	Rp3/8"	328	90	158	24	25	20	17	35	77	25	16	0.72 kN	106.111.124.070.070.
80	20	511	Rp3/8"	328	90	158	24	25	20	17	35	77	25	16	0.72 kN	106.111.124.070.080.
90	40	581	Rp3/8"	388	90	188	24	25	20	17	35	77	25	16	0.72 kN	106.111.124.070.090.
100	30	591	Rp3/8"	388	90	188	24	25	20	17	35	77	25	16	0.72 kN	106.111.124.070.100.
110	40	641	Rp3/8"	428	90	208	24	25	20	17	35	77	25	16	0.72 kN	106.111.124.070.110.

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

Complete the Order-number:

Example: 106.111.124.058.050.??? No. Force connection (S.5).?? No. Cylinder rod (S.6)!

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

© by WMA Schmidt & Bittner GmbH, Baumwaide 23, D-74360 Illfeld-Auenstein, Tel. +49 7062 9066-0, Fax +49 7062 9066-20

info@wma-sb.de or wma-sb@t-online.de, http://www.wma-sb.de

Cylinder-Lateral hinge-1



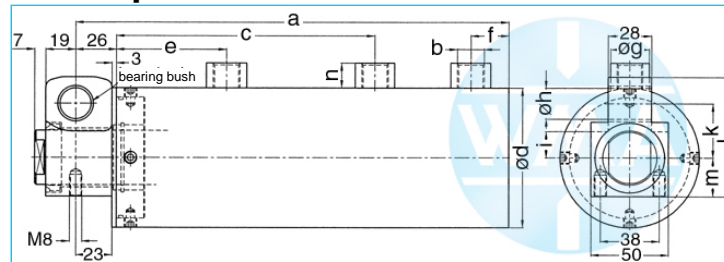
Welding cylinder

Lateral hinge, 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	441	Rp3/8"	288	100	138	24	25	20	17	35	77	25	16	0.95 kN	106.111.124.080.050.
60	20	451	Rp3/8"	288	100	138	24	25	20	17	35	77	25	16	0.95 kN	106.111.124.080.060.
70	30	501	Rp3/8"	328	100	158	24	25	20	17	35	77	25	16	0.95 kN	106.111.124.080.070.
80	20	511	Rp3/8"	328	100	158	24	25	20	17	35	77	25	16	0.95 kN	106.111.124.080.080.
90	40	581	Rp3/8"	388	100	188	24	25	20	17	35	77	25	16	0.95 kN	106.111.124.080.090.
100	30	591	Rp3/8"	388	100	188	24	25	20	17	35	77	25	16	0.95 kN	106.111.124.080.100.
110	40	641	Rp3/8"	428	100	208	24	25	20	17	35	77	25	16	0.95 kN	106.111.124.080.110.

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	441	Rp3/8"	288	110	138	24	25	20	17	35	77	25	16	1.2 kN	106.111.124.090.050.
60	20	451	Rp3/8"	288	110	138	24	25	20	17	35	77	25	16	1.2 kN	106.111.124.090.060.
70	30	501	Rp3/8"	328	110	158	24	25	20	17	35	77	25	16	1.2 kN	106.111.124.090.070.
80	20	511	Rp3/8"	328	110	158	24	25	20	17	35	77	25	16	1.2 kN	106.111.124.090.080.
90	40	581	Rp3/8"	388	110	188	24	25	20	17	35	77	25	16	1.2 kN	106.111.124.090.090.
100	30	591	Rp3/8"	388	110	188	24	25	20	17	35	77	25	16	1.2 kN	106.111.124.090.100.
110	40	641	Rp3/8"	428	110	208	24	25	20	17	35	77	25	16	1.2 kN	106.111.124.090.110.

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

Complete the Order-number:

Example: 106.111.124.080.050.??? No. Force connection (S.5).?? No. Cylinder rod (S.6)!

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

© by WMA Schmidt & Bittner GmbH, Baumwaide 23, D-74360 Illfeld-Auenstein, Tel. +49 7062 9066-0, Fax +49 7062 9066-20

info@wma-sb.de or wma-sb@t-online.de, http://www.wma-sb.de

Cylinder-Lateral hinge-2



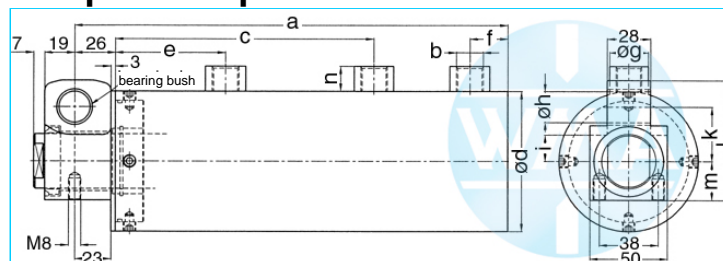
Welding cylinder

Lateral hinge, 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	393	Rp1/4"	252	55	124	18	20	16	16	30	68	25	13	0.28 kN	106.111.125.044.050.
60	20	403	Rp1/4"	252	55	124	18	20	16	16	30	68	25	13	0.28 kN	106.111.125.044.060.
70	30	453	Rp1/4"	292	55	144	18	20	16	16	30	68	25	13	0.28 kN	106.111.125.044.070.
80	20	463	Rp1/4"	292	55	144	18	20	16	16	30	68	25	13	0.28 kN	106.111.125.044.080.
90	40	533	Rp1/4"	352	55	174	18	20	16	16	30	68	25	13	0.28 kN	106.111.125.044.090.
100	30	543	Rp1/4"	352	55	174	18	20	16	16	30	68	25	13	0.28 kN	106.111.125.044.100.
110	40	593	Rp1/4"	392	55	194	18	20	16	16	30	68	25	13	0.28 kN	106.111.125.044.110.

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	393	Rp1/4"	252	70	124	18	20	16	16	30	68	25	13	0.5 kN	106.111.125.058.050.
60	20	403	Rp1/4"	252	70	124	18	20	16	16	30	68	25	13	0.5 kN	106.111.125.058.060.
70	30	453	Rp1/4"	292	70	144	18	20	16	16	30	68	25	13	0.5 kN	106.111.125.058.070.
80	20	463	Rp1/4"	292	70	144	18	20	16	16	30	68	25	13	0.5 kN	106.111.125.058.080.
90	40	533	Rp1/4"	352	70	174	18	20	16	16	30	68	25	13	0.5 kN	106.111.125.058.090.
100	30	543	Rp1/4"	352	70	174	18	20	16	16	30	68	25	13	0.5 kN	106.111.125.058.100.
110	40	593	Rp1/4"	392	70	194	18	20	16	16	30	68	25	13	0.5 kN	106.111.125.058.110.

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	441	Rp3/8"	288	90	138	24	25	20	17	35	77	25	16	0.72 kN	106.111.125.070.050.
60	20	451	Rp3/8"	288	90	138	24	25	20	17	35	77	25	16	0.72 kN	106.111.125.070.060.
70	30	501	Rp3/8"	328	90	158	24	25	20	17	35	77	25	16	0.72 kN	106.111.125.070.070.
80	20	511	Rp3/8"	328	90	158	24	25	20	17	35	77	25	16	0.72 kN	106.111.125.070.080.
90	40	581	Rp3/8"	388	90	188	24	25	20	17	35	77	25	16	0.72 kN	106.111.125.070.090.
100	30	591	Rp3/8"	388	90	188	24	25	20	17	35	77	25	16	0.72 kN	106.111.125.070.100.
110	40	641	Rp3/8"	428	90	208	24	25	20	17	35	77	25	16	0.72 kN	106.111.125.070.110.

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

Complete the Order-number:

Example: 106.111.125.058.050.??? No. Force connection (S.5).?? No. Cylinder rod (S.6)!

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

© by WMA Schmidt & Bittner GmbH, Baumwaide 23, D-74360 Illfeld-Auenstein, Tel. +49 7062 9066-0, Fax +49 7062 9066-20

info@wma-sb.de or wma-sb@t-online.de, http://www.wma-sb.de

Cylinder-Lateral hinge-3



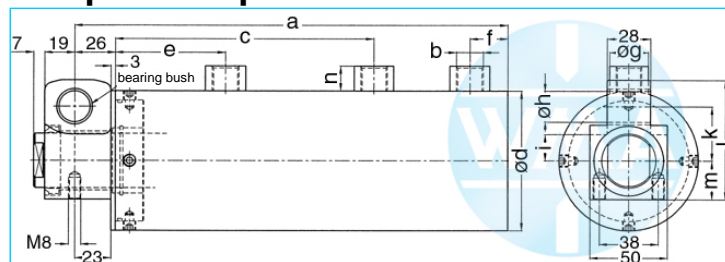
Welding cylinder

Lateral hinge, retract and working stroke

Version: 2011-01

unilateral air connection,
double-stage pressurized

damped independent of stroke



Nominal size 080

S	WS	a	b	c	d	e	f	g	h	i	k	l	m	n	Force*	Order-number
50	30	441	Rp3/8"	288	100	138	24	25	20	17	35	77	25	16	0.95 kN	106.111.125.080.050.
60	20	451	Rp3/8"	288	100	138	24	25	20	17	35	77	25	16	0.95 kN	106.111.125.080.060.
70	30	501	Rp3/8"	328	100	158	24	25	20	17	35	77	25	16	0.95 kN	106.111.125.080.070.
80	20	511	Rp3/8"	328	100	158	24	25	20	17	35	77	25	16	0.95 kN	106.111.125.080.080.
90	40	581	Rp3/8"	388	100	188	24	25	20	17	35	77	25	16	0.95 kN	106.111.125.080.090.
100	30	591	Rp3/8"	388	100	188	24	25	20	17	35	77	25	16	0.95 kN	106.111.125.080.100.
110	40	641	Rp3/8"	428	100	208	24	25	20	17	35	77	25	16	0.95 kN	106.111.125.080.110.

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	441	Rp3/8"	288	110	138	24	25	20	17	35	77	25	16	1.2 kN	106.111.125.090.050.
60	20	451	Rp3/8"	288	110	138	24	25	20	17	35	77	25	16	1.2 kN	106.111.125.090.060.
70	30	501	Rp3/8"	328	110	158	24	25	20	17	35	77	25	16	1.2 kN	106.111.125.090.070.
80	20	511	Rp3/8"	328	110	158	24	25	20	17	35	77	25	16	1.2 kN	106.111.125.090.080.
90	40	581	Rp3/8"	388	110	188	24	25	20	17	35	77	25	16	1.2 kN	106.111.125.090.090.
100	30	591	Rp3/8"	388	110	188	24	25	20	17	35	77	25	16	1.2 kN	106.111.125.090.100.
110	40	641	Rp3/8"	428	110	208	24	25	20	17	35	77	25	16	1.2 kN	106.111.125.090.110.

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

Complete the Order-number:

Example: 106.111.125.080.050.??? No. Force connection (S.5).?? No. Cylinder rod (S.6)!

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

© by WMA Schmidt & Bittner GmbH, Baumwaide 23, D-74360 Illfeld-Auenstein, Tel. +49 7062 9066-0, Fax +49 7062 9066-20

info@wma-sb.de or wma-sb@t-online.de, http://www.wma-sb.de

Cylinder-Lateral hinge-4



Welding cylinder

Lateral hinge, retract and working stroke

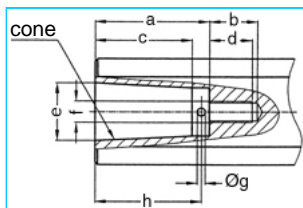
Version: 2011-01

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.

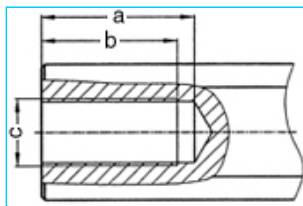
Example: 106.111.125.058.050.402.?? No. Cylinder rod (S.6)

Internal cone



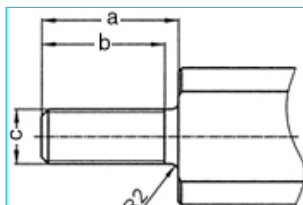
a	b	c	d	e	cone	f	g	h	No.
33	18	27.0	16	17.780	MK2	M8	3	30	101.
42	18	35.5	16	21.806	MK3	M8	3	39	102.
42	18	35.5	16	21.750	1:10	M8	3	39	103.

Female thread



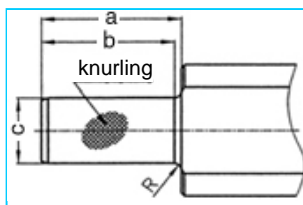
a	b	c	No.
45	40	M20 x 1.5	201.
62	58	M20 x 1.5	202.

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.

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

© by WMA Schmidt & Bittner GmbH, Baumwaide 23, D-74360 Illfeld-Auenstein, Tel. +49 7062 9066-0, Fax +49 7062 9066-20

info@wma-sb.de or wma-sb@t-online.de, <http://www.wma-sb.de>

Cylinder-Lateral hinge-5



Welding cylinder

Lateral hinge, retract and working stroke

Version: 2011-01

Cylinder rod

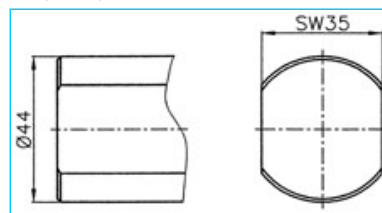
flattened and rotation locked

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

Example: 106.111.125.058.050.402.02

For piston diameter

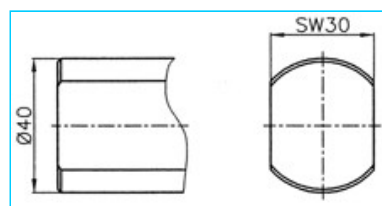
70, 80, 90



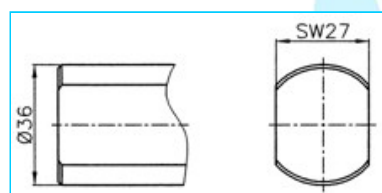
No. 00

For piston diameter

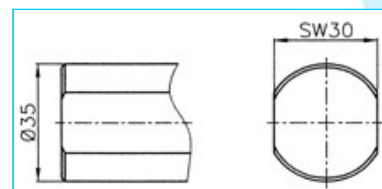
38, 44, 58



No. 01



No. 02



No. 03

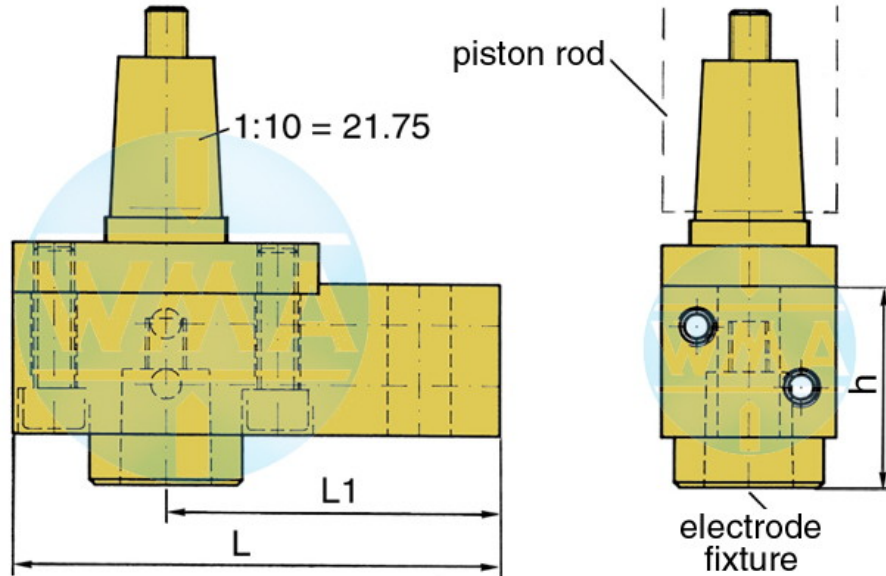


Welding cylinder

Lateral hinge, 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!

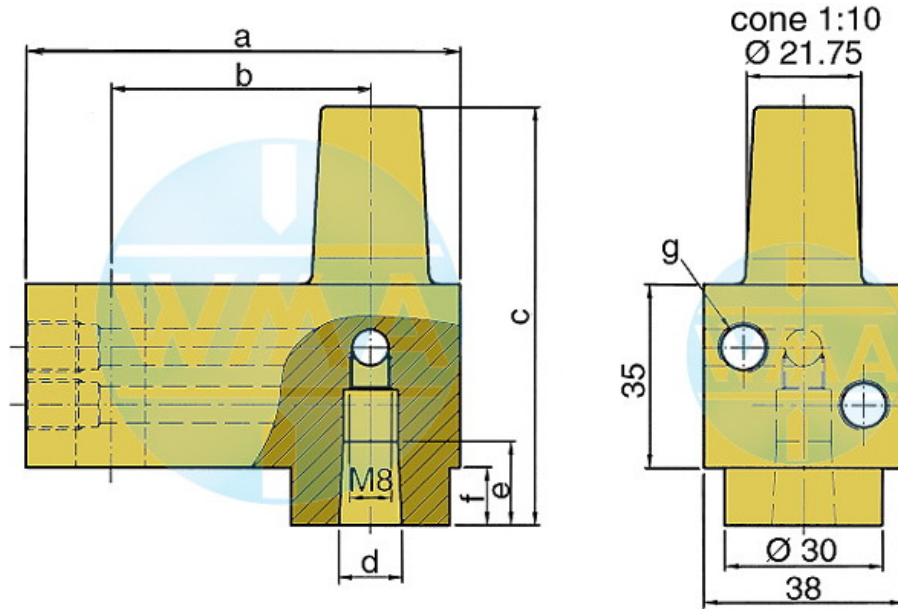


Welding cylinder

Lateral hinge, 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.

© by WMA Schmidt & Bittner GmbH, Baumwaide 23, D-74360 Illfeld-Auenstein, Tel. +49 7062 9066-0, Fax +49 7062 9066-20

info@wma-sb.de or wma-sb@t-online.de, <http://www.wma-sb.de>

Cylinder-Lateral hinge-8