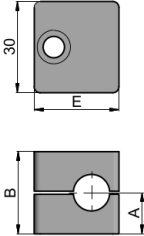
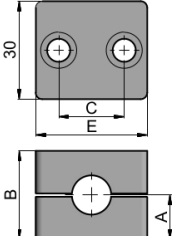


Pipe clamps



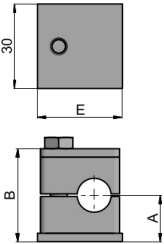
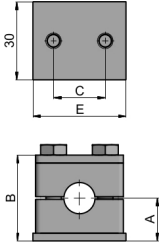
Design type	Bracket for pipes, shock- and vibration-damping
Material	Clamps Polypropylene Mounting parts Galvanized steel, Weld-on plates Steel
Operating temperature	-30...+90°C
Tube holding force	see table and Definition Tube holding force
Special version	Material Polyamide or rather Aluminium

Pipe clamp halves Series RAP, Standard series

	Clamp size	Tube outside diameter [mm]	A	B	C	E	Type
 (1)	0	6	13,5	27	-	28	RAP-006
	0	8	13,5	27	-	28	RAP-008
	0	10	13,5	27	-	28	RAP-010
	0	12	13,5	27	-	28	RAP-012
	1	6	13,5	27	20	34	RAP-106
	1	8	13,5	27	20	34	RAP-108
	1	10	13,5	27	20	34	RAP-110
	1	12	13,5	27	20	34	RAP-112
	2	14	16,5	33	26	40	RAP-214
	2	15	16,5	33	26	40	RAP-215
	2	16	16,5	33	26	40	RAP-216
	2	18	16,5	33	26	40	RAP-218
 (2)	3	20	17,5	35	33	48	RAP-320
	3	22	17,5	35	33	48	RAP-322
	3	25	17,5	35	33	48	RAP-325
	4	28	21	42	40	57	RAP-428
	4	30	21	42	40	57	RAP-430
	5	35	29	58	52	70	RAP-535
	5	38	29	58	52	70	RAP-538
	5	42	29	58	52	70	RAP-542

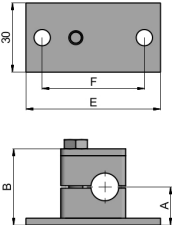
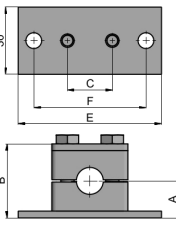


Pipe clamps Series RAP3, Standard series, Weld-on plate short

		Clamp size	Tube outside diameter [mm]	Tightening torque [Nm]	Tube holding force F [kN]	A	B	C	E	Type
 (1)		0	6	8	0,6	16,5	33	-	30	RAP3-006
		0	8	8	0,6	16,5	33	-	30	RAP3-008
		0	10	8	0,6	16,5	33	-	30	RAP3-010
		0	12	8	0,6	16,5	33	-	30	RAP3-012
		1	6	8	1,1	16,5	33	20	36	RAP3-106
		1	8	8	1,1	16,5	33	20	36	RAP3-108
		1	10	8	1,1	16,5	33	20	36	RAP3-110
		1	12	8	1,1	16,5	33	20	36	RAP3-112
		2	14	8	1,2	19,5	39	26	42	RAP3-214
		2	15	8	1,2	19,5	39	26	42	RAP3-215
		2	16	8	1,2	19,5	39	26	42	RAP3-216
		2	18	8	1,2	19,5	39	26	42	RAP3-218
 (2)		3	20	8	1,4	20,5	41	33	50	RAP3-320
		3	22	8	1,4	20,5	41	33	50	RAP3-322
		3	25	8	1,4	20,5	41	33	50	RAP3-325
		4	28	8	1,5	24	48	40	59	RAP3-428
		4	30	8	1,5	24	48	40	59	RAP3-430
		5	35	8	1,9	32	64	52	72	RAP3-535
		5	38	8	1,9	32	64	52	72	RAP3-538
		5	42	8	1,9	32	64	52	72	RAP3-542
(1)...Clamp size 0, (2)...Clamp size 1-5										

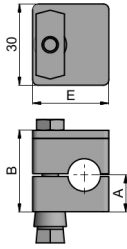
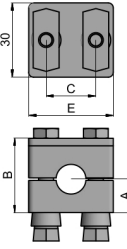
Pipe clamps Series RAP6, Standard series, Weld-on plate long



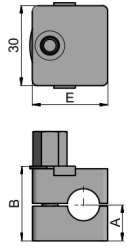
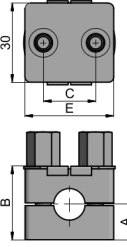
		Clamp size	Tube outside diameter [mm]	Tightening torque [Nm]	Tube holding force F [kN]	A	B	C	E	F	Type
 (1)		0	6	8	0,6	16,5	33	-	58	44	RAP6-006
		0	8	8	0,6	16,5	33	-	58	44	RAP6-008
		0	10	8	0,6	16,5	33	-	58	44	RAP6-010
		0	12	8	0,6	16,5	33	-	58	44	RAP6-012
		1	6	8	1,1	16,5	33	20	64	50	RAP6-106
		1	8	8	1,1	16,5	33	20	64	50	RAP6-108
		1	10	8	1,1	16,5	33	20	64	50	RAP6-110
		1	12	8	1,1	16,5	33	20	64	50	RAP6-112
		2	14	8	1,2	19,5	39	26	70	56	RAP6-214
		2	15	8	1,2	19,5	39	26	70	56	RAP6-215
 (2)		2	16	8	1,2	19,5	39	26	70	56	RAP6-216
		2	18	8	1,2	19,5	39	26	70	56	RAP6-218
		3	20	8	1,4	20,5	41	33	78	64	RAP6-320
		3	22	8	1,4	20,5	41	33	78	64	RAP6-322
		3	25	8	1,4	20,5	41	33	78	64	RAP6-325
		4	28	8	1,5	24	48	40	87	73	RAP6-428
		4	30	8	1,5	24	48	40	87	73	RAP6-430
		5	35	8	1,9	32	64	52	100	86	RAP6-535
		5	38	8	1,9	32	64	52	100	86	RAP6-538
		5	42	8	1,9	32	64	52	100	86	RAP6-542
(1)...Clamp size 0, (2)...Clamp size 1-5											



Pipe clamps Series RAP12, Standard series, DIN rail nut

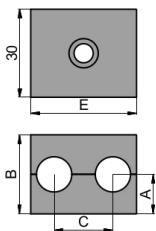
		Clamp size	Tube outside diameter [mm]	Tightening torque [Nm]	Tube holding force F [kN]	A	B	C	E	Type
 (1)		0	6	8	0,6	13,5	30	-	28	RAP12-006
		0	8	8	0,6	13,5	30	-	28	RAP12-008
		0	10	8	0,6	13,5	30	-	28	RAP12-010
		0	12	8	0,6	13,5	30	-	28	RAP12-012
		1	6	8	1,1	13,5	30	20	34	RAP12-106
		1	8	8	1,1	13,5	30	20	34	RAP12-108
		1	10	8	1,1	13,5	30	20	34	RAP12-110
		1	12	8	1,1	13,5	30	20	34	RAP12-112
		2	14	8	1,2	16,5	36	26	40	RAP12-214
		2	15	8	1,2	16,5	36	26	40	RAP12-215
		2	16	8	1,2	16,5	36	26	40	RAP12-216
		2	18	8	1,2	16,5	36	26	40	RAP12-218
 (2)		3	20	8	1,4	17,5	38	33	48	RAP12-320
		3	22	8	1,4	17,5	38	33	48	RAP12-322
		3	25	8	1,4	17,5	38	33	48	RAP12-325
		4	28	8	1,5	21	45	40	57	RAP12-428
		4	30	8	1,5	21	45	40	57	RAP12-430
		5	35	8	1,9	29	61	52	70	RAP12-535
		5	38	8	1,9	29	61	52	70	RAP12-538
		5	42	8	1,9	29	61	52	70	RAP12-542
(1)...Clamp size 0, (2)...Clamp size 1-5										

Pipe clamps Series RAP18, Standard series, Mounting clamp

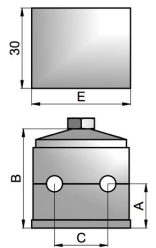
		Clamp size	Tube outside diameter [mm]	Tightening torque [Nm]	Tube holding force F [kN]	A	B	C	E	Type
 (1)		0	6	8	0,6	13,5	28	-	28	RAP18-006
		0	8	8	0,6	13,5	28	-	28	RAP18-008
		0	10	8	0,6	13,5	28	-	28	RAP18-010
		0	12	8	0,6	13,5	28	-	28	RAP18-012
		1	6	8	1,1	13,5	28	20	34	RAP18-106
		1	8	8	1,1	13,5	28	20	34	RAP18-108
		1	10	8	1,1	13,5	28	20	34	RAP18-110
		1	12	8	1,1	13,5	28	20	34	RAP18-112
		2	14	8	1,2	16,5	34	26	40	RAP18-214
		2	15	8	1,2	16,5	34	26	40	RAP18-215
		2	16	8	1,2	16,5	34	26	40	RAP18-216
		2	18	8	1,2	16,5	34	26	40	RAP18-218
 (2)		3	20	8	1,4	17,5	36	33	48	RAP18-320
		3	22	8	1,4	17,5	36	33	48	RAP18-322
		3	25	8	1,4	17,5	36	33	48	RAP18-325
		4	28	8	1,5	21	43	40	57	RAP18-428
		4	30	8	1,5	21	43	40	57	RAP18-430
		5	35	8	1,9	29	59	52	70	RAP18-535
		5	38	8	1,9	29	59	52	70	RAP18-538
		5	42	8	1,9	29	59	52	70	RAP18-542
(1)...Clamp size 0, (2)...Clamp size 1-5										



Two-pipe clamp halves Series RBP, Standard series

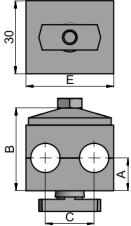
	Clamp size	Tube outside diameter [mm]	A	B	C	E	Type
	1	6	13,5	27	20	36	RBP-106
	1	8	13,5	27	20	36	RBP-108
	1	10	13,5	27	20	36	RBP-110
	1	12	13,5	27	20	36	RBP-112
	2	14	13	26	29	53	RBP-214
	2	15	13	26	29	53	RBP-215
	2	16	13	26	29	53	RBP-216
	2	18	13	26	29	53	RBP-218
	3	20	18,5	37	36	67	RBP-320
	3	22	18,5	37	36	67	RBP-322
	3	25	18,5	37	36	67	RBP-325
	4	28	21	42	45	82	RBP-428
	4	30	21	42	45	82	RBP-430
	5	35	27	54	56	106	RBP-535
	5	38	27	54	56	106	RBP-538
	5	42	27	54	56	106	RBP-542

Twin-pipe clamps Series RBP1, Standard series, Weld-on plate

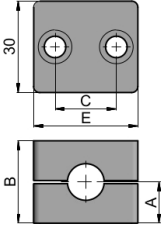
	Clamp size	Tube outside diameter [mm]	Tightening torque [Nm]	Tube holding force F [kN]	A	B	C	E	Type
	1	6	8	1,1	16,5	37	20	37	RBP1-106
	1	8	8	1,1	16,5	37	20	37	RBP1-108
	1	10	8	1,1	16,5	37	20	37	RBP1-110
	1	12	8	1,1	16,5	37	20	37	RBP1-112
	2	15	8	1,2	18	38	29	55	RBP1-215
	2	16	8	1,2	18	38	29	55	RBP1-216
	2	18	8	1,2	18	38	29	55	RBP1-218
	3	20	8	1,4	23,5	49	36	70	RBP1-320
	3	22	8	1,4	23,5	49	36	70	RBP1-322
	3	25	8	1,4	23,5	49	36	70	RBP1-325
	4	28	8	1,5	26	54	45	85	RBP1-428
	4	30	8	1,5	26	54	45	85	RBP1-430
	5	35	8	1,9	32	66	56	110	RBP1-535
	5	38	8	1,9	32	66	56	110	RBP1-538
	5	42	8	1,9	32	66	56	110	RBP1-542



Twin-pipe clamps Series RBP4, Standard series, DIN rail nut

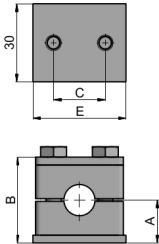
	Clamp size	Tube outside diameter [mm]	Tightening torque [Nm]	Tube holding force F [kN]	A	B	C	E	Type
	1	6	8	1,1	13,5	34	20	36	RBP4-106
	1	8	8	1,1	13,5	34	20	36	RBP4-108
	1	10	8	1,1	13,5	34	20	36	RBP4-110
	1	12	8	1,1	13,5	34	20	36	RBP4-112
	2	15	8	1,2	13	33	29	53	RBP4-215
	2	16	8	1,2	13	33	29	53	RBP4-216
	2	18	8	1,2	13	33	29	53	RBP4-218
	3	20	8	1,4	18,5	44	36	67	RBP4-320
	3	22	8	1,4	18,5	44	36	67	RBP4-322
	3	25	8	1,4	18,5	44	36	67	RBP4-325
	4	28	8	1,5	21	49	45	82	RBP4-428
	4	30	8	1,5	21	49	45	82	RBP4-430
	5	35	8	1,9	27	61	56	106	RBP4-535
	5	38	8	1,9	27	61	56	106	RBP4-538
	5	42	8	1,9	27	61	56	106	RBP4-542

Pipe clamp halves Series RCP, heavy-duty series

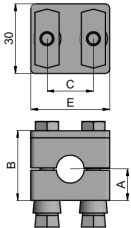
	Clamp size	Tube outside diameter [mm]	Tightening torque [Nm]	Tube holding force F [kN]	A	B	C	E	Type
	1	8	12	1,6	16	32	33	55	RCP-108
	1	10	12	1,6	16	32	33	55	RCP-110
	1	12	12	1,6	16	32	33	55	RCP-112
	1	14	12	1,6	16	32	33	55	RCP-114
	1	15	12	1,6	16	32	33	55	RCP-115
	1	16	12	1,6	16	32	33	55	RCP-116
	1	18	12	1,6	16	32	33	55	RCP-118
	2	20	12	2,9	24	48	45	70	RCP-220
	2	22	12	2,9	24	48	45	70	RCP-222
	2	25	12	2,9	24	48	45	70	RCP-225
	2	28	12	2,9	24	48	45	70	RCP-228
	3	30	15	3,3	30	60	60	85	RCP-330
	3	35	15	3,3	30	60	60	85	RCP-335
	3	38	15	3,3	30	60	60	85	RCP-338
	3	42	15	3,3	30	60	60	85	RCP-342



Pipe clamps Series RCP1, heavy-duty series, Weld-on plate

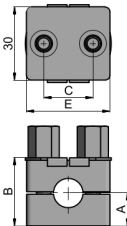
	Clamp size	Tube outside diameter [mm]	Tightening torque [Nm]	Tube holding force F [kN]	A	B	C	E	Type
	1	8	12	1,6	24	48	33	73	RCP1-108
	1	10	12	1,6	24	48	33	73	RCP1-110
	1	12	12	1,6	24	48	33	73	RCP1-112
	1	14	12	1,6	24	48	33	73	RCP1-114
	1	15	12	1,6	24	48	33	73	RCP1-115
	1	16	12	1,6	24	48	33	73	RCP1-116
	1	18	12	1,6	24	48	33	73	RCP1-118
	2	20	12	2,9	32	64	45	85	RCP1-220
	2	22	12	2,9	32	64	45	85	RCP1-222
	2	25	12	2,9	32	64	45	85	RCP1-225
	2	28	12	2,9	32	64	45	85	RCP1-228
	3	30	15	3,3	38	76	60	100	RCP1-330
	3	35	15	3,3	38	76	60	100	RCP1-335
	3	38	15	3,3	38	76	60	100	RCP1-338
	3	42	15	3,3	38	76	60	100	RCP1-342

Pipe clamps Series RCP3, heavy-duty series, DIN rail nut

	Clamp size	Tube outside diameter [mm]	Tightening torque [Nm]	Tube holding force F [kN]	A	B	C	E	Type
	1	8	12	1,6	16	40	33	55	RCP3-108
	1	10	12	1,6	16	40	33	55	RCP3-110
	1	12	12	1,6	16	40	33	55	RCP3-112
	1	14	12	1,6	16	40	33	55	RCP3-114
	1	15	12	1,6	16	40	33	55	RCP3-115
	1	16	12	1,6	16	40	33	55	RCP3-116
	1	18	12	1,6	16	40	33	55	RCP3-118
	2	20	12	2,9	24	56	45	70	RCP3-220
	2	22	12	2,9	24	56	45	70	RCP3-222
	2	25	12	2,9	24	56	45	70	RCP3-225
	2	28	12	2,9	24	56	45	70	RCP3-228
	3	30	15	3,3	30	68	60	85	RCP3-330
	3	35	15	3,3	30	68	60	85	RCP3-335
	3	38	15	3,3	30	68	60	85	RCP3-338
	3	42	15	3,3	30	68	60	85	RCP3-342



Pipe clamps Series RCP5, heavy-duty series, Mounting clamp

	Clamp size	Tube outside diameter [mm]	Tightening torque [Nm]	Tube holding force F [kN]	A	B	C	E	Type
	1	8	12	1,6	16	40	33	55	RCP5-108
	1	10	12	1,6	16	40	33	55	RCP5-110
	1	12	12	1,6	16	40	33	55	RCP5-112
	1	14	12	1,6	16	40	33	55	RCP5-114
	1	15	12	1,6	16	40	33	55	RCP5-115
	1	16	12	1,6	16	40	33	55	RCP5-116
	1	18	12	1,6	16	40	33	55	RCP5-118
	2	20	12	2,9	24	56	45	70	RCP5-220
	2	22	12	2,9	24	56	45	70	RCP5-222
	2	25	12	2,9	24	56	45	70	RCP5-225
	2	28	12	2,9	24	56	45	70	RCP5-228
	3	30	15	3,3	30	68	60	85	RCP5-330
	3	35	15	3,3	30	68	60	85	RCP5-335
	3	38	15	3,3	30	68	60	85	RCP5-338
	3	42	15	3,3	30	68	60	85	RCP5-342

Mounting instructions

Mounting on weld-on plates

Weld-on plates weld onto a support matched to the load.
 Clamp the lower clamp half onto the weld-on plate, insert the pipe, fit the second clamp half and tighten with the screws.
 Do not weld with the plastic clamp fitted!
 Extended weld-on plates can be screwed to the base plate.
 Ensure preload (clamp halves must not touch after installation)!

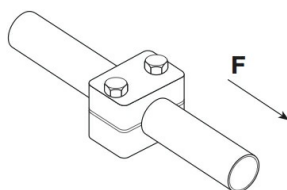
Mounting on DIN rails

DIN rails optionally supplied in 1 or 2 m lengths.
 Weld on mounting rails or screw on with mounting bracket.
 Insert the DIN rail nut into the rail and turn until it stops (ensure correct spacing).
 Clip on the lower clamp half, insert the pipe, fit the second clamp half and tighten with the screws.
 Ensure preload (clamp halves must not touch after installation)!

Sub-base mounting

Weld-on plate or weld on support rail or screw on with mounting bracket.
 Clip on lower clamp half, insert tube, place upper clamp half and tighten with mounting screws (mounting screw protrudes).
 By placing a locking plate on the upper clamp half, twisting of the mounting screw is prevented.
 Mount the second pipe clamp in the same way etc.

Definition tube holding force

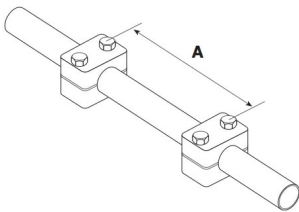


The axial tube holding force (according to DIN 3015 Part 10) is an average value determined from three tests at 23°C with a steel tube according to DIN 2448 made of St 37, assuming static friction.

When the clamp is subjected to the specified test force (F) in the axial pipe direction, the pipe does not slip in the clamp.



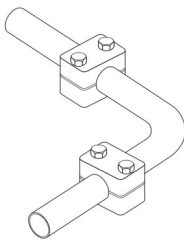
Recommended clamp spacing



The clamp spacings assigned to the corresponding pipe outside diameters are guideline values for static load.

Tube outside diameter [mm]	Clamp spacing A [m]
6,0...12,7	1,0
12,7...22,0	1,2
22,0...32,0	1,5
32,0...38,0	2,0
38,0...57,0	2,7
57,0...75,0	3,0
75,0...76,1	3,5
76,1...88,9	3,7
88,9...102,0	4,0
102,0...114,0	4,5
114,0...168,0	5,0
168,0...219,0	6,0

Pipe elbow mounting



Pipe bends must be secured with pipe clamps immediately before and after the bend.

Illustrations non-binding
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