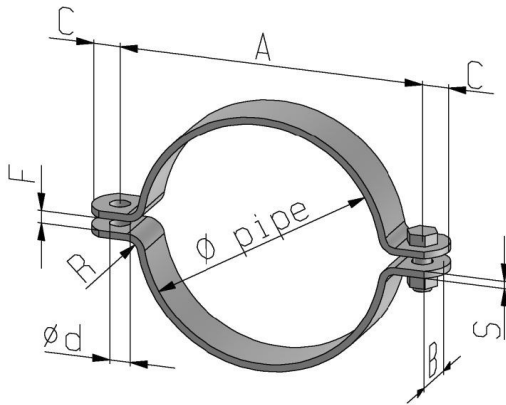


PIPE CLAMP



**Pipe clamp
Type RA
DN 15 - DN 1200**



Pipe clamp - type RA

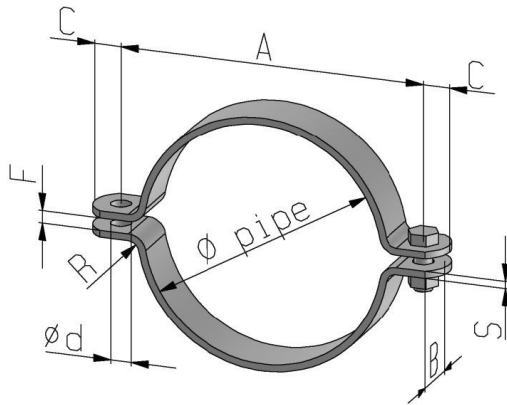
DN 50 - DN 1200

Material	S235JR DIN EN 10025-2, for temperatures up to 300°C
Surface	To DIN 3567 Form A (DN20-500), Other sizes based on DIN 3567, excl. Bolts and nuts.

Ø Pipe	BxS	A	C	F	R	D	Bolt	Hanging load [kN] 50°C	Type without bolt and nuts	Weight kg		
21,3	30 x 5	56	15	7	10	11,5	10 x 40	7,2	RA-022-R	0,20		
25,0	30 x 5	62	15	7	10	11,5	10 x 40	6,7	RA-025-R	0,22		
26,9	30 x 5	66	15	7	10	11,5	10 x 40	6,3	RA-027-R	0,23		
30,0	30 x 5	68	15	7	10	11,5	10 x 40	5,9	RA-030-R	0,24		
33,7	30 x 5	72	15	7	10	11,5	10 x 40	5,2	RA-034-R	0,25		
38,0	30 x 5	76	15	7	10	11,5	10 x 40	4,9	RA-038-R	0,26		
42,4	30 x 5	82	15	7	10	11,5	10 x 40	4,4	RA-043-R	0,28		
44,5	30 x 5	84	15	7	10	11,5	10 x 40	4,4	RA-045-R	0,29		
48,3	30 x 5	88	15	7	10	11,5	10 x 40	4,1	RA-049-R	0,30		
57,0	40 x 6	104	18	9	12	14,0	12 x 50	6,7	RA-057-R	0,56		
60,3	40 x 6	108	18	9	12	14,0	12 x 50	6,4	RA-061-R	0,58		
76,1	40 x 6	122	18	9	12	14,0	12 x 50	5,7	RA-077-R	0,69		
88,9	40 x 6	136	18	9	12	14,0	12 x 50	5,0	RA-089-R	0,75		
108,0	50 x 8	172	24	11	16	18,0	16 x 65	10,0	RA-108-R	1,59		
114,3	50 x 8	178	24	11	16	18,0	16 x 65	9,5	RA-115-R	1,63		
133,0	50 x 8	196	24	11	16	18,0	16 x 65	8,8	RA-133-R	1,79		
139,7	50 x 8	204	24	11	16	18,0	16 x 65	8,3	RA-140-R	1,83		
159,0	50 x 8	222	24	11	16	18,0	16 x 65	7,7	RA-159-R	2,00		
168,3	50 x 8	232	24	11	16	18,0	16 x 65	7,2	RA-169-R	2,08		
193,7	50 x 8	258	24	11	16	18,0	16 x 65	6,4	RA-194-R	2,42		
219,1	50 x 8	284	24	11	16	18,0	16 x 65	5,7	RA-220-R	2,64		
267,0	60 x 8	342	30	14	16	23,0	20 x 70	5,5	RA-267-R	3,85		
273,0	60 x 8	348	30	14	16	23,0	20 x 70	5,4	RA-273-R	3,91		
323,9	60 x 8	398	30	14	16	23,0	20 x 70	4,7	RA-324-R	4,49		
355,6	60 x 8	432	30	14	16	23,0	20 x 70	4,4	RA-356-R	5,09		
368,0	60 x 8	444	30	14	16	23,0	20 x 70	4,4	RA-368-R	5,30		
406,4	70 x 10	498	36	18	20	27,0	24 x 90	7,1	RA-407-R	8,52		
419,0	70 x 10	510	36	18	20	27,0	24 x 90	7,0	RA-419-R	8,75		
457,0	70 x 10	550	36	18	20	27,0	24 x 90	6,5	RA-457-R	9,17		
508,0	70 x 10	600	36	18	20	27,0	24 x 90	6,0	RA-508-R	10,2		
521,0	70 x 10	614	36	18	20	27,0	24 x 90	6,0	RA-521-R	10,5		
610,0	70 x 10	717	36	18	20	27,0	24 x 90	5,9	RA-609-R	11,9		
610,0	90 x 15	740	45	25	30	33,0	30 x 120	14,6	RA-610-R	24,0		
711,0	70 x 10	812	36	18	20	27,0	24 x 90	5,3	RA-711-R	13,7		
711,0	90 x 15	850	45	25	30	33,0	30 x 120	12,7	RA-712-R	27,5		
813,0	70 x 15	913	36	18	20	27,0	24 x 90	4,2	RA-812-R	15,4		
813,0	90 x 15	950	45	25	30	33,0	30 x 120	11,9	RA-813-R	31,0		
914,0	90 x 15	1050	45	25	30	33,0	30 x 120	9,4	RA-914-R	34,0		
1016,0	90 x 15	1140	45	25	30	33,0	30 x 120	8,7	RA-1016-R	37,3		
1220,0	90 x 15	1360	45	25	30	33,0	30 x 120	7,7	RA-1220-R	49,3		

Notes: Other dimensions on request

**Pipe clamp
Type RA
DN 15 - DN 1200**



Pipe clamp - type RA

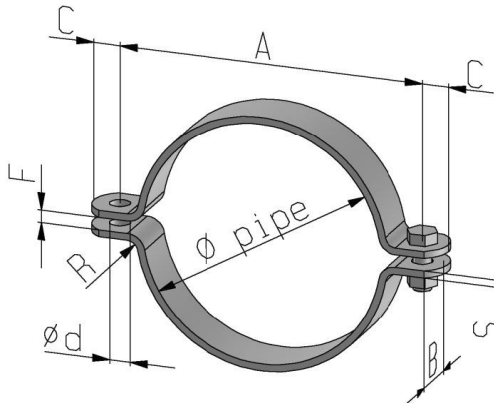
DN 15 - DN 1200

Material	16Mo3 EN 10028-2, for temperatures up to 450°C
Surface	To DIN 3567 Form A (DN20-500), other sizes based on DIN 3567, excl. bolts and nuts. Bolt and nuts after DIN ISO 4017/4032 - GA/G (DIN EN ISO 10269)

Ø Pipe	BxS	A	C	F	R	D	Bolt	Hanging load [kN] 350°C	Type without bolt and nuts	Weight kg	Type with bolt and nuts	Weight kg
21,3	30 x 5	56	15	7	10	11,5	10 x 40	6,3	RA-022-M	0,20	RA-022-M-GAL	0,29
25,0	30 x 5	62	15	7	10	11,5	10 x 40	5,7	RA-025-M	0,22	RA-025-M-GAL	0,31
26,9	30 x 5	66	15	7	10	11,5	10 x 40	5,2	RA-027-M	0,23	RA-027-M-GAL	0,32
30,0	30 x 5	68	15	7	10	11,5	10 x 40	4,8	RA-030-M	0,24	RA-030-M-GAL	0,33
33,7	30 x 5	72	15	7	10	11,5	10 x 40	4,5	RA-034-M	0,25	RA-034-M-GAL	0,34
38,0	30 x 5	76	15	7	10	11,5	10 x 40	4,1	RA-038-M	0,26	RA-038-M-GAL	0,35
42,4	30 x 5	82	15	7	10	11,5	10 x 40	3,8	RA-043-M	0,28	RA-043-M-GAL	0,37
44,5	30 x 5	84	15	7	10	11,5	10 x 40	3,8	RA-045-M	0,29	RA-045-M-GAL	0,38
48,3	30 x 5	88	15	7	10	11,5	10 x 40	3,4	RA-049-M	0,30	RA-049-M-GAL	0,39
57,0	40 x 6	104	18	9	12	14,0	12 x 50	5,7	RA-057-M	0,56	RA-057-M-GAL	0,70
60,3	40 x 6	108	18	9	12	14,0	12 x 50	5,4	RA-061-M	0,58	RA-061-M-GAL	0,72
76,1	40 x 6	122	18	9	12	14,0	12 x 50	4,8	RA-077-M	0,69	RA-077-M-GAL	0,83
88,9	40 x 6	136	18	9	12	14,0	12 x 50	4,3	RA-089-M	0,75	RA-089-M-GAL	0,89
108,0	50 x 8	172	24	11	16	18,0	16 x 65	8,6	RA-108-M	1,59	RA-108-M-GAL	1,90
114,3	50 x 8	178	24	11	16	18,0	16 x 65	8,3	RA-115-M	1,63	RA-115-M-GAL	1,94
133,0	50 x 8	196	24	11	16	18,0	16 x 65	7,4	RA-133-M	1,79	RA-133-M-GAL	2,10
139,7	50 x 8	204	24	11	16	18,0	16 x 65	7,0	RA-140-M	1,83	RA-140-M-GAL	2,14
159,0	50 x 8	222	24	11	16	18,0	16 x 65	6,5	RA-159-M	2,00	RA-159-M-GAL	2,31
168,3	50 x 8	232	24	11	16	18,0	16 x 65	6,1	RA-169-M	2,08	RA-169-M-GAL	2,39
193,7	50 x 8	258	24	11	16	18,0	16 x 65	5,4	RA-194-M	2,42	RA-194-M-GAL	2,73
219,1	50 x 8	284	24	11	16	18,0	16 x 65	4,8	RA-220-M	2,64	RA-220-M-GAL	2,95
267,0	60 x 8	342	30	14	16	23,0	20 x 70	4,7	RA-267-M	3,85	RA-267-M-GAL	4,41
273,0	60 x 8	348	30	14	16	23,0	20 x 70	4,5	RA-273-M	3,91	RA-273-M-GAL	4,47
323,9	60 x 8	398	30	14	16	23,0	20 x 70	4,1	RA-324-M	4,49	RA-324-M-GAL	5,05
355,6	60 x 8	432	30	14	16	23,0	20 x 70	3,8	RA-356-M	5,09	RA-356-M-GAL	5,65
368,0	60 x 8	444	30	14	16	23,0	20 x 70	3,6	RA-368-M	5,30	RA-368-M-GAL	5,86
406,4	70 x 10	498	36	18	20	27,0	24 x 90	6,1	RA-407-M	8,52	RA-407-M-GAL	9,53
419,0	70 x 10	510	36	18	20	27,0	24 x 90	5,9	RA-419-M	8,75	RA-419-M-GAL	9,76
457,0	70 x 10	550	36	18	20	27,0	24 x 90	5,6	RA-457-M	9,17	RA-457-M-GAL	10,2
508,0	70 x 10	600	36	18	20	27,0	24 x 90	5,2	RA-508-M	10,2	RA-508-M-GAL	11,2
521,0	70 x 10	614	36	18	20	27,0	24 x 90	5,0	RA-521-M	10,5	RA-521-M-GAL	11,5
610,0	70 x 10	717	36	18	20	27,0	24 x 90	5,0	RA-609-M	11,9	RA-609-M-GAL	12,9
610,0	90 x 15	740	45	25	30	33,0	30 x 120	12,4	RA-610-M	24,0	RA-610-M-GAL	26,1
711,0	70 x 10	812	36	18	20	27,0	24 x 90	4,5	RA-711-M	13,7	RA-711-M-GAL	14,7
711,0	90 x 15	850	45	25	30	33,0	30 x 120	10,8	RA-712-M	27,5	RA-712-M-GAL	29,6
813,0	70 x 15	913	36	18	20	27,0	24 x 90	3,5	RA-812-M	15,4	RA-812-M-GAL	16,4
813,0	90 x 15	950	45	25	30	33,0	30 x 120	9,9	RA-813-M	31,0	RA-813-M-GAL	33,1
914,0	90 x 15	1050	45	25	30	33,0	30 x 120	9,5	RA-914-M	34,0	RA-914-M-GAL	36,1
1016,0	90 x 15	1140	45	25	30	33,0	30 x 120	9,5	RA-1016-M	37,3	RA-1016-M-GAL	39,4
1220,0	90 x 15	1360	45	25	30	33,0	30 x 120	7,9	RA-1220-M	49,3	RA-1220-M-GAL	51,4

Notes: Other dimensions on request

**Pipe clamp
Type RA
DN 15 - DN 1200**



Pipe clamp - type RA

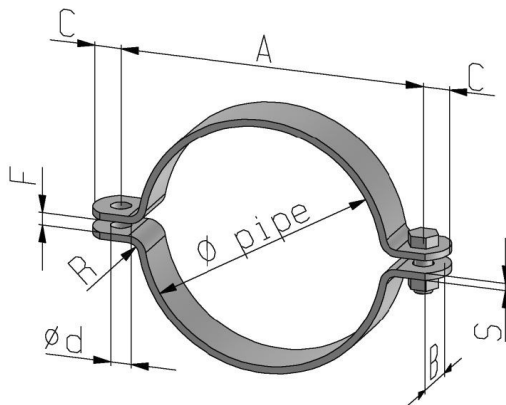
DN 15 - DN 1200

Material	13CrMo4-5 EN 10028-2, for temperatures up to 560°C
Surface	To DIN 3567 Form A (DN20-500), other sizes based on DIN 3567, excl. bolts and nuts. Bolt and nuts after DIN ISO 4017/4032 - GA/KG high temperatures (DIN 267-13)

Ø Pipe	BxS	A	C	F	R	D	Bolt	Hanging load [kN] 500°C	Type without bolt and nuts	Weight kg	Type with bolt and nuts	Weight kg
21,3	30 x 5	56	15	7	10	11,5	10 x 40	3,5	RA-022-C	0,20	RA-022-C-GAL	0,29
25,0	30 x 5	62	15	7	10	11,5	10 x 40	3,2	RA-025-C	0,22	RA-025-C-GAL	0,31
26,9	30 x 5	66	15	7	10	11,5	10 x 40	2,9	RA-027-C	0,23	RA-027-C-GAL	0,32
30,0	30 x 5	68	15	7	10	11,5	10 x 40	2,7	RA-030-C	0,24	RA-030-C-GAL	0,33
33,7	30 x 5	72	15	7	10	11,5	10 x 40	2,5	RA-034-C	0,25	RA-034-C-GAL	0,34
38,0	30 x 5	76	15	7	10	11,5	10 x 40	2,3	RA-038-C	0,26	RA-038-C-GAL	0,35
42,4	30 x 5	82	15	7	10	11,5	10 x 40	2,1	RA-043-C	0,28	RA-043-C-GAL	0,37
44,5	30 x 5	84	15	7	10	11,5	10 x 40	2,1	RA-045-C	0,29	RA-045-C-GAL	0,38
48,3	30 x 5	88	15	7	10	11,5	10 x 40	1,9	RA-049-C	0,30	RA-049-C-GAL	0,39
57,0	40 x 6	104	18	9	12	14,0	12 x 50	3,2	RA-057-C	0,56	RA-057-C-GAL	0,70
60,3	40 x 6	108	18	9	12	14,0	12 x 50	3,0	RA-061-C	0,58	RA-061-C-GAL	0,72
76,1	40 x 6	122	18	9	12	14,0	12 x 50	2,7	RA-077-C	0,69	RA-077-C-GAL	0,83
88,9	40 x 6	136	18	9	12	14,0	12 x 50	2,4	RA-089-C	0,75	RA-089-C-GAL	0,89
108,0	50 x 8	172	24	11	16	18,0	16 x 65	4,8	RA-108-C	1,59	RA-108-C-GAL	1,90
114,3	50 x 8	178	24	11	16	18,0	16 x 65	4,6	RA-115-C	1,63	RA-115-C-GAL	1,94
133,0	50 x 8	196	24	11	16	18,0	16 x 65	4,1	RA-133-C	1,79	RA-133-C-GAL	2,10
139,7	50 x 8	204	24	11	16	18,0	16 x 65	3,9	RA-140-C	1,83	RA-140-C-GAL	2,14
159,0	50 x 8	222	24	11	16	18,0	16 x 65	3,6	RA-159-C	2,00	RA-159-C-GAL	2,31
168,3	50 x 8	232	24	11	16	18,0	16 x 65	3,4	RA-169-C	2,08	RA-169-C-GAL	2,39
193,7	50 x 8	258	24	11	16	18,0	16 x 65	3,0	RA-194-C	2,42	RA-194-C-GAL	2,73
219,1	50 x 8	284	24	11	16	18,0	16 x 65	2,7	RA-220-C	2,64	RA-220-C-GAL	2,95
267,0	60 x 8	342	30	14	16	23,0	20 x 70	2,6	RA-267-C	3,85	RA-267-C-GAL	4,41
273,0	60 x 8	348	30	14	16	23,0	20 x 70	2,5	RA-273-C	3,91	RA-273-C-GAL	4,47
323,9	60 x 8	398	30	14	16	23,0	20 x 70	2,3	RA-324-C	4,49	RA-324-C-GAL	5,05
355,6	60 x 8	432	30	14	16	23,0	20 x 70	2,1	RA-356-C	5,09	RA-356-C-GAL	5,65
368,0	60 x 8	444	30	14	16	23,0	20 x 70	2,0	RA-368-C	5,30	RA-368-C-GAL	5,86
406,4	70 x 10	498	36	18	20	27,0	24 x 90	3,4	RA-407-C	8,52	RA-407-C-GAL	9,53
419,0	70 x 10	510	36	18	20	27,0	24 x 90	3,3	RA-419-C	8,75	RA-419-C-GAL	9,76
457,0	70 x 10	550	36	18	20	27,0	24 x 90	3,1	RA-457-C	9,17	RA-457-C-GAL	10,2
508,0	70 x 10	600	36	18	20	27,0	24 x 90	2,9	RA-508-C	10,2	RA-508-C-GAL	11,2
521,0	70 x 10	614	36	18	20	27,0	24 x 90	2,8	RA-521-C	10,5	RA-521-C-GAL	11,5
610,0	70 x 10	717	36	18	20	27,0	24 x 90	2,8	RA-609-C	11,9	RA-609-C-GAL	12,9
610,0	90 x 15	740	45	25	30	33,0	30 x 120	6,9	RA-610-C	24,0	RA-610-C-GAL	26,1
711,0	70 x 10	812	36	18	20	27,0	24 x 90	2,5	RA-711-C	13,7	RA-711-C-GAL	14,7
711,0	90 x 15	850	45	25	30	33,0	30 x 120	6,0	RA-712-C	27,5	RA-712-C-GAL	29,6
813,0	70 x 15	913	36	18	20	27,0	24 x 90	2,0	RA-812-C	15,4	RA-812-C-GAL	16,4
813,0	90 x 15	950	45	25	30	33,0	30 x 120	5,5	RA-813-C	31,0	RA-813-C-GAL	33,1
914,0	90 x 15	1050	45	25	30	33,0	30 x 120	4,7	RA-914-C	34,0	RA-914-C-GAL	36,1
1016,0	90 x 15	1140	45	25	30	33,0	30 x 120	4,8	RA-1016-C	37,3	RA-1016-C-GAL	39,4
1220,0	90 x 15	1360	45	25	30	33,0	30 x 120	3,9	RA-1220-C	49,3	RA-1220-C-GAL	51,4

Notes: Other dimensions on request

**Pipe clamp
Type RA
DN 15 - DN 350**



Pipe clamp - type RA

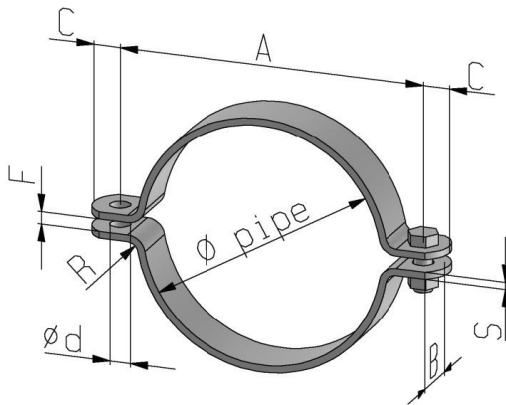
DN 15 - DN 350

Material	1.4541 EN 10088-3, for temperatures up to 400°C
Surface	To DIN 3567 Form A (DN20-500), other sizes based on DIN 3567, excl. bolts and nuts.

Ø Pipe	BxS	A	C	F	R	D	Bolt	Hanging load [kN] 50°C	Type without bolt and nuts	Weight kg		
21,3	30 x 5	56	15	7	10	11,5	10 x 40	7,2	RA-022-B	0,20		
25,0	30 x 5	62	15	7	10	11,5	10 x 40	6,7	RA-025-B	0,22		
26,9	30 x 5	66	15	7	10	11,5	10 x 40	6,3	RA-027-B	0,23		
30,0	30 x 5	68	15	7	10	11,5	10 x 40	5,9	RA-030-B	0,24		
33,7	30 x 5	72	15	7	10	11,5	10 x 40	5,2	RA-034-B	0,25		
38,0	30 x 5	76	15	7	10	11,5	10 x 40	4,9	RA-038-B	0,26		
42,4	30 x 5	82	15	7	10	11,5	10 x 40	4,4	RA-043-B	0,28		
44,5	30 x 5	84	15	7	10	11,5	10 x 40	4,4	RA-045-B	0,29		
48,3	30 x 5	88	15	7	10	11,5	10 x 40	4,1	RA-049-B	0,30		
54,0	40 x 6	98	18	9	12	14,0	12 x 50	7,6	RA-054-B	0,55		
57,0	40 x 6	104	18	9	12	14,0	12 x 50	6,7	RA-057-B	0,56		
60,3	40 x 6	108	18	9	12	14,0	12 x 50	6,4	RA-061-B	0,58		
70,0	40 x 6	119	18	9	12	14,0	12 x 50	5,9	RA-070-B	0,67		
76,1	40 x 6	122	18	9	12	14,0	12 x 50	5,7	RA-077-B	0,69		
84,0	40 x 6	130	18	9	12	14,0	12 x 50	5,3	RA-084-B	0,73		
88,9	40 x 6	136	18	9	12	14,0	12 x 50	5,0	RA-089-B	0,75		
101,6	50 x 8	165	24	11	16	18,0	16 x 65	10,6	RA-102-B	1,53		
108,0	50 x 8	172	24	11	16	18,0	16 x 65	10,0	RA-108-B	1,59		
114,3	50 x 8	178	24	11	16	18,0	16 x 65	9,5	RA-115-B	1,63		
129,0	50 x 8	190	24	11	16	18,0	16 x 65	9,1	RA-129-B	1,75		
133,0	50 x 8	196	24	11	16	18,0	16 x 65	8,8	RA-133-B	1,79		
139,7	50 x 8	204	24	11	16	18,0	16 x 65	8,3	RA-140-B	1,83		
154,0	50 x 8	217	24	11	16	18,0	16 x 65	8,1	RA-154-B	1,95		
159,0	50 x 8	222	24	11	16	18,0	16 x 65	7,7	RA-159-B	2,00		
168,3	50 x 8	232	24	11	16	18,0	16 x 65	7,2	RA-169-B	2,08		
193,7	50 x 8	258	24	11	16	18,0	16 x 65	6,4	RA-194-B	2,42		
205,0	50 x 8	275	24	11	16	18,0	16 x 65	6,2	RA-205-B	2,50		
219,1	50 x 8	284	24	11	16	18,0	16 x 65	5,7	RA-220-B	2,64		
255,0	60 x 8	325	30	14	16	23,0	20 x 70	5,8	RA-255-B	3,72		
267,0	60 x 8	342	30	14	16	23,0	20 x 70	5,5	RA-267-B	3,85		
273,0	60 x 8	348	30	14	16	23,0	20 x 70	5,4	RA-273-B	3,91		
306,0	60 x 8	381	30	14	16	23,0	20 x 70	5,0	RA-306-B	4,20		
323,9	60 x 8	398	30	14	16	23,0	20 x 70	4,7	RA-324-B	4,49		
355,6	60 x 8	432	30	14	16	23,0	20 x 70	4,4	RA-356-B	5,09		
368,0	60 x 8	444	30	14	16	23,0	20 x 70	4,4	RA-368-B	5,30		

Notes: Other dimensions on request

**Pipe clamp
Type RA
DN 15 - DN 350**



Pipe clamp - type RA

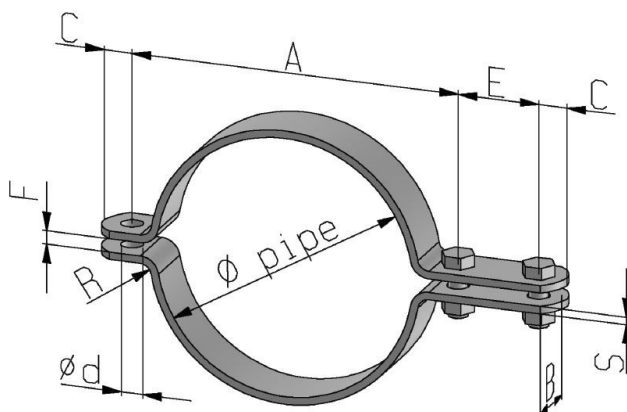
DN 15 - DN 350

Material	1.4571 EN 10088-3, for temperatures up to 400°C
Surface	To DIN 3567 Form A, other sizes based on DIN 3567, excl. bolts and nuts.

Ø Pipe	BxS	A	C	F	R	D	Bolt	Hanging load [kN] 50°C	Type without bolt and nuts	Weight kg		
21,3	30 x 5	56	15	7	10	11,5	10 x 40	7,9	RA-022-V	0,20		
25,0	30 x 5	62	15	7	10	11,5	10 x 40	7,3	RA-025-V	0,22		
26,9	30 x 5	66	15	7	10	11,5	10 x 40	6,9	RA-027-V	0,23		
30,0	30 x 5	68	15	7	10	11,5	10 x 40	6,4	RA-030-V	0,24		
33,7	30 x 5	72	15	7	10	11,5	10 x 40	5,7	RA-034-V	0,25		
38,0	30 x 5	76	15	7	10	11,5	10 x 40	5,4	RA-038-V	0,26		
42,4	30 x 5	82	15	7	10	11,5	10 x 40	4,8	RA-043-V	0,28		
44,5	30 x 5	84	15	7	10	11,5	10 x 40	4,8	RA-045-V	0,29		
48,3	30 x 5	88	15	7	10	11,5	10 x 40	4,5	RA-049-V	0,30		
54,0	40 x 6	98	18	9	12	14,0	12 x 50	8,3	RA-054-V	0,55		
57,0	40 x 6	104	18	9	12	14,0	12 x 50	7,3	RA-057-V	0,56		
60,3	40 x 6	108	18	9	12	14,0	12 x 50	7,0	RA-061-V	0,58		
70,0	40 x 6	119	18	9	12	14,0	12 x 50	6,5	RA-070-V	0,67		
76,1	40 x 6	122	18	9	12	14,0	12 x 50	6,2	RA-077-V	0,69		
84,0	40 x 6	130	18	9	12	14,0	12 x 50	5,8	RA-084-V	0,73		
88,9	40 x 6	136	18	9	12	14,0	12 x 50	5,2	RA-089-V	0,75		
101,6	50 x 8	165	24	11	16	18,0	16 x 65	11,5	RA-102-V	1,53		
108,0	50 x 8	172	24	11	16	18,0	16 x 65	10,9	RA-108-V	1,59		
114,3	50 x 8	178	24	11	16	18,0	16 x 65	10,4	RA-115-V	1,63		
129,0	50 x 8	190	24	11	16	18,0	16 x 65	9,9	RA-129-V	1,75		
133,0	50 x 8	196	24	11	16	18,0	16 x 65	9,6	RA-133-V	1,79		
139,7	50 x 8	204	24	11	16	18,0	16 x 65	9,1	RA-140-V	1,83		
154,0	50 x 8	217	24	11	16	18,0	16 x 65	8,8	RA-154-V	1,95		
159,0	50 x 8	222	24	11	16	18,0	16 x 65	8,4	RA-159-V	2,00		
168,3	50 x 8	232	24	11	16	18,0	16 x 65	7,9	RA-169-V	2,08		
193,7	50 x 8	258	24	11	16	18,0	16 x 65	7,0	RA-194-V	2,42		
205,0	50 x 8	275	24	11	16	18,0	16 x 65	6,7	RA-205-V	2,50		
219,1	50 x 8	284	24	11	16	18,0	16 x 65	6,2	RA-220-V	2,64		
255,0	60 x 8	325	30	14	16	23,0	20 x 70	6,3	RA-255-V	3,72		
267,0	60 x 8	342	30	14	16	23,0	20 x 70	6,0	RA-267-V	3,85		
273,0	60 x 8	348	30	14	16	23,0	20 x 70	5,9	RA-273-V	3,91		
306,0	60 x 8	381	30	14	16	23,0	20 x 70	5,4	RA-306-V	4,20		
323,9	60 x 8	398	30	14	16	23,0	20 x 70	5,1	RA-324-V	4,49		
355,6	60 x 8	432	30	14	16	23,0	20 x 70	4,8	RA-356-V	5,09		
368,0	60 x 8	444	30	14	16	23,0	20 x 70	4,8	RA-368-V	5,30		

Notes: Other dimensions on request

**Pipe clamp
Type RB
DN 15 - DN 800**



Pipe clamp - type RB

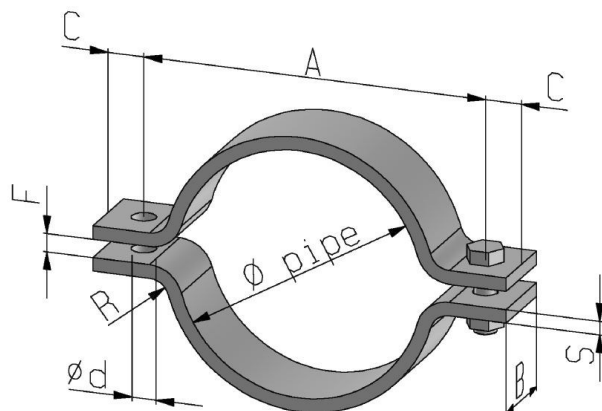
DN 50 - DN 800

Material	S235JR EN 10025-2, for temperatures up to 300°C
Surface	To DIN 3567 Form B (DN20-500), other sizes based on DIN 3567, excl. bolts and nuts.

Ø Pipe	BxS	A	C	F	R	E	d	Bolt	Type without bolt and nuts	Weight kg		
21,3	30 x 5	56	15	7	10	46	11,5	10 x 40	RA-022-C	0,30		
25,0	30 x 5	62	15	7	10	46	11,5	10 x 40	RA-025-C	0,32		
26,9	30 x 5	66	15	7	10	46	11,5	10 x 40	RA-027-C	0,33		
30,0	30 x 5	68	15	7	10	46	11,5	10 x 40	RA-030-C	0,34		
33,7	30 x 5	72	15	7	10	46	11,5	10 x 40	RA-034-C	0,35		
38,0	30 x 5	76	15	7	10	46	11,5	10 x 40	RA-038-C	0,37		
42,4	30 x 5	82	15	7	10	46	11,5	10 x 40	RA-043-C	0,38		
44,5	30 x 5	84	15	7	10	46	11,5	10 x 40	RA-045-C	0,39		
48,3	30 x 5	88	15	7	10	46	11,5	10 x 40	RA-049-C	0,41		
57,0	40 x 6	104	18	9	12	54	14,0	12 x 50	RA-057-C	0,77		
60,3	40 x 6	108	18	9	12	54	14,0	12 x 50	RA-061-C	0,78		
76,1	40 x 6	122	18	9	12	54	14,0	12 x 50	RA-077-C	0,86		
88,9	40 x 6	136	18	9	12	54	14,0	12 x 50	RA-089-C	0,95		
108,0	50 x 8	172	24	11	16	70	18,0	16 x 65	RA-108-C	2,03		
114,3	50 x 8	178	24	11	16	70	18,0	16 x 65	RA-115-C	2,07		
133,0	50 x 8	196	24	11	16	70	18,0	16 x 65	RA-133-C	2,20		
139,7	50 x 8	204	24	11	16	70	18,0	16 x 65	RA-140-C	2,26		
159,0	50 x 8	222	24	11	16	70	18,0	16 x 65	RA-159-C	2,40		
168,3	50 x 8	232	24	11	16	70	18,0	16 x 65	RA-169-C	2,52		
193,7	50 x 8	258	24	11	16	70	18,0	16 x 65	RA-194-C	2,82		
219,1	50 x 8	284	24	11	16	86	23,0	20 x 70	RA-220-C	3,09		
267,0	60 x 8	342	30	14	16	86	23,0	20 x 70	RA-267-C	4,45		
273,0	60 x 8	348	30	14	16	86	23,0	20 x 70	RA-273-C	4,52		
323,9	60 x 8	398	30	14	16	86	23,0	20 x 70	RA-324-C	5,11		
355,6	60 x 8	432	30	14	16	86	23,0	20 x 70	RA-356-C	5,72		
368,0	60 x 8	444	30	14	16	104	27,0	24 x 90	RA-368-C	6,00		
406,4	70 x 10	498	36	18	20	104	27,0	24 x 90	RA-407-C	9,63		
419,0	70 x 10	510	36	18	20	104	27,0	24 x 90	RA-419-C	9,80		
457,0	70 x 10	550	36	18	20	104	27,0	24 x 90	RA-457-C	10,7		
508,0	70 x 10	600	36	18	20	104	27,0	24 x 90	RA-508-C	11,4		
521,0	70 x 10	614	36	18	20	104	27,0	24 x 90	RA-521-C	11,6		
559,0	90 x 15	690	45	25	30	104	33,0	30 x 120	RA-559-C	23,5		
610,0	90 x 15	740	45	25	30	104	33,0	30 x 120	RA-610-C	25,5		
711,0	90 x 15	850	45	25	30	104	33,0	30 x 120	RA-711-C	28,0		
813,0	90 x 15	950	45	25	30	104	33,0	30 x 120	RA-813-C	32,5		

Notes: Other dimensions on request

**Pipe clamp
Type RM
DN 50 - DN 1200**



Pipe clamp - type RM for higher load

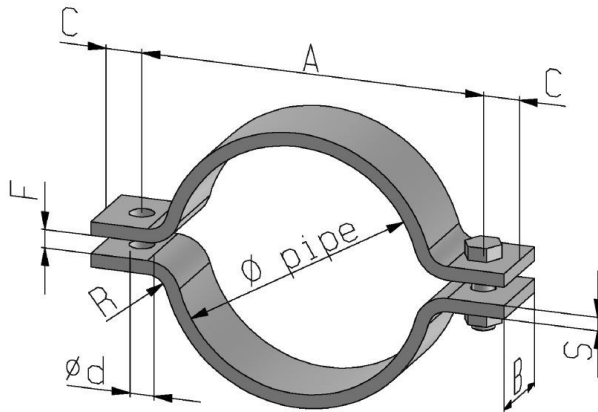
DN 50 - DN 1200

Material	S235JR DIN EN 10025-2, for temperatures up to 300°C
Surface	To DIN 3567 Form A (DN20-500), other sizes based on DIN 3567, excl. bolts and nuts.

Ø Pipe	BxS	A	C	F	R	d	Bolt	Hanging load [kN] 50°C	Type without bolt and nuts	Weight kg		
57,0	40 x 8	110	25	12	16	18,0	16 x 65	12,8	RM-057-R	0,85		
60,3	40 x 8	120	25	12	16	18,0	16 x 65	11,5	RM-061-R	0,90		
76,1	40 x 8	140	25	12	16	18,0	16 x 65	9,4	RM-077-R	1,00		
88,9	40 x 8	150	25	12	16	18,0	16 x 65	8,6	RM-089-R	1,20		
108,0	50 x 10	180	35	12	20	23,0	20 x 70	16,2	RM-108-R	2,30		
114,3	50 x 10	190	35	15	20	23,0	20 x 70	14,6	RM-115-R	2,40		
133,0	60 x 10	210	35	15	20	23,0	20 x 70	16,2	RM-133-R	3,00		
139,7	60 x 10	220	35	15	20	23,0	20 x 70	15,1	RM-140-R	3,20		
159,0	60 x 10	240	35	15	20	23,0	20 x 70	13,6	RM-159-R	3,50		
168,3	70 x 10	250	35	15	20	23,0	20 x 70	15,1	RM-169-R	4,20		
193,7	70 x 15	300	40	15	30	27,0	24 x 90	28,6	RM-194-R	7,50		
219,1	70 x 15	320	40	20	30	27,0	24 x 90	28,1	RM-220-R	8,00		
267,0	80 x 15	370	40	20	30	27,0	24 x 90	27,8	RM-267-R	10,5		
273,0	90 x 15	380	40	20	30	27,0	24 x 90	29,8	RM-273-R	12,0		
323,9	90 x 15	430	40	20	30	27,0	24 x 90	26,5	RM-324-R	14,0		
355,6	100 x 15	470	40	20	30	27,0	24 x 90	26,3	RM-356-R	16,5		
368,0	100 x 15	480	40	20	30	27,0	24 x 90	26,1	RM-368-R	17,0		
406,4	130 x 20	550	50	20	40	33,0	30 x 120	53,5	RM-407-R	33,5		
419,0	140 x 20	570	50	25	40	33,0	30 x 120	53,8	RM-419-R	37,0		
457,0	140 x 20	600	50	25	40	33,0	30 x 120	53,0	RM-457-R	40,0		
508,0	150 x 20	660	50	25	40	33,0	30 x 120	50,4	RM-508-R	46,5		
521,0	150 x 20	680	50	25	40	33,0	30 x 120	44,4	RM-521-R	47,5		
610,0	150 x 20	760	50	25	40	33,0	30 x 120	41,8	RM-610-R	55,2		
711,0	150 x 20	860	50	25	40	33,0	30 x 120	38,2	RM-711-R	62,9		
813,0	150 x 20	960	50	25	40	33,0	30 x 120	35,3	RM-813-R	70,6		
914,0	150 x 20	1060	50	25	40	33,0	30 x 120	28,4	RM-914-R	78,3		
1016,0	150 x 20	1160	50	25	40	33,0	30 x 120	25,9	RM-1016-R	86,0		
1220,0	150 x 20	1370	50	25	40	33,0	30 x 120	23,4	RM-1220-R	101,0		

Notes: Other dimensions on request

**Pipe clamp
Type RM
DN 50 - DN 1200**



Pipe clamp - type RM for higher load

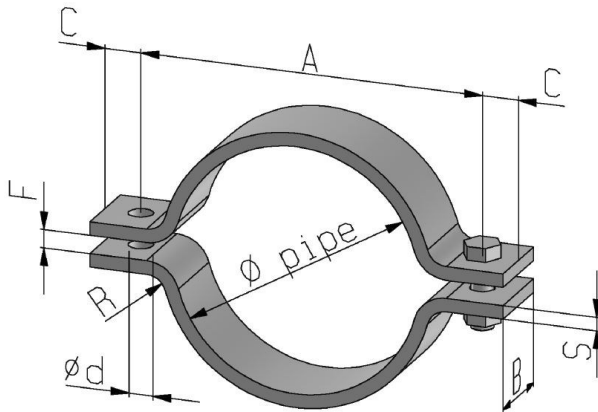
DN 50 - DN 1200

Material	16Mo3 DIN EN 10028-2, for temperatures up to 450°C
Surface	To DIN 3567 Form A (DN20-500), other sizes based on DIN 3567, excl. bolts and nuts. Bolt and nuts after DIN ISO 4017/4032 - GA/KG high temperatures (DIN 267-13)

Ø Pipe	BxS	A	C	F	R	d	Bolt	Hanging load [kN] 350°C	Type without bolt and nuts	Weight kg	Type with bolt and nuts	Weight kg
57,0	40 x 8	110	25	12	16	18,0	16 x 65	10,9	RM-057-M	0,85	RM-057-M-GAL	1,16
60,3	40 x 8	120	25	12	16	18,0	16 x 65	9,8	RM-061-M	0,90	RM-061-M-GAL	1,21
76,1	40 x 8	140	25	12	16	18,0	16 x 65	8,0	RM-077-M	1,00	RM-077-M-GAL	1,31
88,9	40 x 8	150	25	12	16	18,0	16 x 65	7,3	RM-089-M	1,20	RM-089-M-GAL	1,51
108,0	50 x 10	180	35	12	20	23,0	20 x 70	13,8	RM-108-M	2,30	RM-108-M-GAL	2,86
114,3	50 x 10	190	35	15	20	23,0	20 x 70	12,6	RM-115-M	2,40	RM-115-M-GAL	2,96
133,0	60 x 10	210	35	15	20	23,0	20 x 70	13,7	RM-133-M	3,00	RM-133-M-GAL	3,56
139,7	60 x 10	220	35	15	20	23,0	20 x 70	12,8	RM-140-M	3,20	RM-140-M-GAL	3,76
159,0	60 x 10	240	35	15	20	23,0	20 x 70	11,5	RM-159-M	3,50	RM-159-M-GAL	4,06
168,3	70 x 10	250	35	15	20	23,0	20 x 70	12,8	RM-169-M	4,20	RM-169-M-GAL	4,76
193,7	70 x 15	300	40	15	30	27,0	24 x 90	24,7	RM-194-M	7,50	RM-194-M-GAL	8,51
219,1	70 x 15	320	40	20	30	27,0	24 x 90	24,1	RM-220-M	8,00	RM-220-M-GAL	9,01
267,0	80 x 15	370	40	20	30	27,0	24 x 90	23,6	RM-267-M	10,5	RM-267-M-GAL	11,5
273,0	90 x 15	380	40	20	30	27,0	24 x 90	25,4	RM-273-M	12,0	RM-273-M-GAL	13,0
323,9	90 x 15	430	40	20	30	27,0	24 x 90	22,5	RM-324-M	14,0	RM-324-M-GAL	15,0
355,6	100 x 15	470	40	20	30	27,0	24 x 90	22,3	RM-356-M	16,5	RM-356-M-GAL	17,5
368,0	100 x 15	480	40	20	30	27,0	24 x 90	22,1	RM-368-M	17,0	RM-368-M-GAL	18,0
406,4	130 x 20	550	50	20	40	33,0	30 x 120	45,4	RM-407-M	33,5	RM-407-M-GAL	35,6
419,0	140 x 20	570	50	25	40	33,0	30 x 120	45,6	RM-419-M	37,0	RM-419-M-GAL	39,1
457,0	140 x 20	600	50	25	40	33,0	30 x 120	40,0	RM-457-M	40,0	RM-457-M-GAL	42,1
508,0	150 x 20	660	50	25	40	33,0	30 x 120	42,9	RM-508-M	46,5	RM-508-M-GAL	48,6
521,0	150 x 20	680	50	25	40	33,0	30 x 120	35,0	RM-521-M	47,5	RM-521-M-GAL	49,6
610,0	150 x 20	760	50	25	40	33,0	30 x 120	33,0	RM-610-M	55,2	RM-610-M-GAL	57,3
711,0	150 x 20	860	50	25	40	33,0	30 x 120	30,2	RM-711-M	62,9	RM-711-M-GAL	65,0
813,0	150 x 20	960	50	25	40	33,0	30 x 120	27,8	RM-813-M	70,6	RM-813-M-GAL	72,7
914,0	150 x 20	1060	50	25	40	33,0	30 x 120	28,9	RM-914-M	78,3	RM-914-M-GAL	80,4
1016,0	150 x 20	1160	50	25	40	33,0	30 x 120	26,3	RM-1016-M	86,0	RM-1016-M-GAL	88,1
1220,0	150 x 20	1370	50	25	40	33,0	30 x 120	23,7	RM-1220-M	101,0	RM-1220-M-GAL	103,1

Notes: Other dimensions on request

**Pipe clamp
Type RM
DN 50 - DN 1200**



Pipe clamp - type RM for higher load

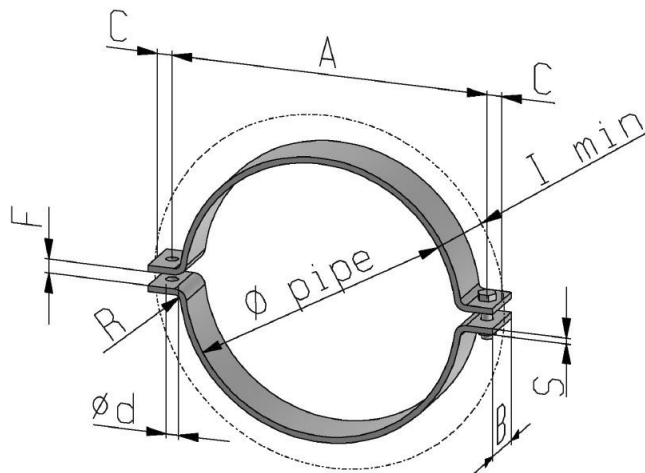
DN 50 - DN 1200

Material	13CrMo4-5 DIN EN 10028-2, for temperatures up to 560°C
Surface	To DIN 3567 Form A (DN20-500), other sizes based on DIN 3567, excl. bolts and nuts. Bolt and nuts after DIN ISO 4017/4032 - GA/KG high temperatures (DIN 267-13)

Ø Pipe	BxS	A	C	F	R	d	Bolt	Hanging load [kN] 500°C	Type without bolt and nuts	Weight kg	Type with bolt and nuts	Weight kg
57,0	40 x 8	110	25	12	16	18,0	16 x 65	9,3	RM-057-C	0,85	RM-057-C-GAL	1,16
60,3	40 x 8	120	25	12	16	18,0	16 x 65	8,3	RM-061-C	0,90	RM-061-C-GAL	1,21
76,1	40 x 8	140	25	12	16	18,0	16 x 65	6,8	RM-077-C	1,00	RM-077-C-GAL	1,31
88,9	40 x 8	150	25	12	16	18,0	16 x 65	6,2	RM-089-C	1,20	RM-089-C-GAL	1,51
108,0	50 x 10	180	35	12	20	23,0	20 x 70	7,7	RM-108-C	2,30	RM-108-C-GAL	2,86
114,3	50 x 10	190	35	15	20	23,0	20 x 70	7,0	RM-115-C	2,40	RM-115-C-GAL	2,96
133,0	60 x 10	210	35	15	20	23,0	20 x 70	7,6	RM-133-C	3,00	RM-133-C-GAL	3,56
139,7	60 x 10	220	35	15	20	23,0	20 x 70	7,1	RM-140-C	3,20	RM-140-C-GAL	3,76
159,0	60 x 10	240	35	15	20	23,0	20 x 70	6,4	RM-159-C	3,50	RM-159-C-GAL	4,06
168,3	70 x 10	250	35	15	20	23,0	20 x 70	7,1	RM-169-C	4,20	RM-169-C-GAL	4,76
193,7	70 x 15	300	40	15	30	27,0	24 x 90	13,7	RM-194-C	7,50	RM-194-C-GAL	8,51
219,1	70 x 15	320	40	20	30	27,0	24 x 90	13,4	RM-220-C	8,00	RM-220-C-GAL	9,01
267,0	80 x 15	370	40	20	30	27,0	24 x 90	13,1	RM-267-C	10,5	RM-267-C-GAL	11,5
273,0	90 x 15	380	40	20	30	27,0	24 x 90	14,1	RM-273-C	12,0	RM-273-C-GAL	13,0
323,9	90 x 15	430	40	20	30	27,0	24 x 90	12,5	RM-324-C	14,0	RM-324-C-GAL	15,0
355,6	100 x 15	470	40	20	30	27,0	24 x 90	12,4	RM-356-C	16,5	RM-356-C-GAL	17,5
368,0	100 x 15	480	40	20	30	27,0	24 x 90	12,3	RM-368-C	17,0	RM-368-C-GAL	18,0
406,4	130 x 20	550	50	20	40	33,0	30 x 120	25,2	RM-407-C	33,5	RM-407-C-GAL	35,6
419,0	140 x 20	570	50	25	40	33,0	30 x 120	25,3	RM-419-C	37,0	RM-419-C-GAL	39,1
457,0	140 x 20	600	50	25	40	33,0	30 x 120	25,0	RM-457-C	40,0	RM-457-C-GAL	42,1
508,0	150 x 20	660	50	25	40	33,0	30 x 120	23,8	RM-508-C	46,5	RM-508-C-GAL	48,6
521,0	150 x 20	680	50	25	40	33,0	30 x 120	19,4	RM-521-C	47,5	RM-521-C-GAL	49,6
610,0	150 x 20	760	50	25	40	33,0	30 x 120	18,3	RM-610-C	55,2	RM-610-C-GAL	57,3
711,0	150 x 20	860	50	25	40	33,0	30 x 120	16,7	RM-711-C	62,9	RM-711-C-GAL	65,0
813,0	150 x 20	960	50	25	40	33,0	30 x 120	15,5	RM-813-C	70,6	RM-813-C-GAL	72,7
914,0	150 x 20	1060	50	25	40	33,0	30 x 120	14,4	RM-914-C	78,3	RM-914-C-GAL	80,4
1016,0	150 x 20	1160	50	25	40	33,0	30 x 120	13,1	RM-1016-C	86,0	RM-1016-C-GAL	88,1
1220,0	150 x 20	1370	50	25	40	33,0	30 x 120	11,8	RM-1220-C	101,0	RM-1220-C-GAL	103,1

Notes: Other dimensions on request

**Pipe clamp
Type RD
DN 15 - DN 400**



Pipe clamp - type RD for piping with thin isolation

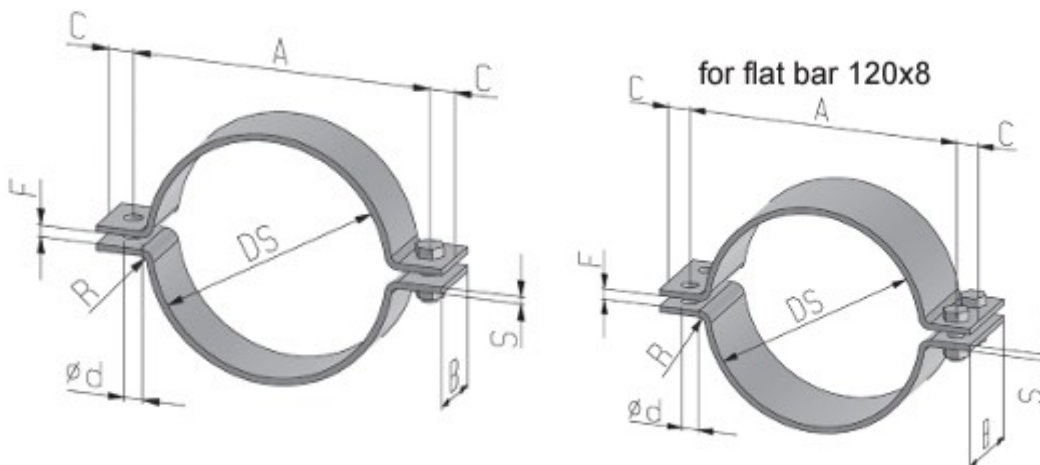
DN 15 - DN 400

Material	S235JR DIN EN 10025-2, for temperatures up to 300°C
Surface	To DIN 3567 Form A (DN20-500), other sizes based on DIN 3567, excl. bolts and nuts.

ϕ Pipe	BxS	A	C	F	lmin	R	d	Bolt	Type without bolt and nuts	Weight kg		
1/2"	21,3	40 x 5	62	15	10	35	7	12	10 x 40	RD-022-R	0,29	
3/4"	26,9	40 x 5	67	15	10	35	7	12	10 x 40	RD-027-R	0,32	
1"	33,7	40 x 5	73	15	10	35	7	12	10 x 40	RD-034-R	0,34	
1 1/2"	48,3	40 x 5	89	15	10	35	7	12	10 x 40	RD-049-R	0,41	
2"	60,3	40 x 5	104	15	10	35	7	12	10 x 40	RD-061-R	0,48	
3"	88,9	40 x 5	130	15	10	35	7	12	10 x 40	RD-089-R	0,60	
4"	114,3	40 x 5	156	15	11	35	7	12	10 x 40	RD-115-R	0,73	
6"	168,3	50 x 6	214	15	11	35	9	12	10 x 40	RD-169-R	1,49	
8"	219,1	50 x 6	264	15	11	35	9	12	10 x 40	RD-220-R	1,87	
10"	273,0	50 x 6	318	15	14	35	9	12	10 x 40	RD-273-R	2,25	
12"	323,9	60 x 8	380	18	14	40	12	14	12 x 50	RD-324-R	4,26	
14"	355,6	60 x 8	412	18	14	40	12	14	12 x 50	RD-356-R	4,66	
16"	406,4	60 x 8	462	18	18	40	12	14	12 x 50	RD-407-R	5,22	

Notes: Other dimensions on request

**Pipe clamp
Type GFK1
DN 25 - DN 300**



Pipe clamp - type GFK1 for nonmetallic piping

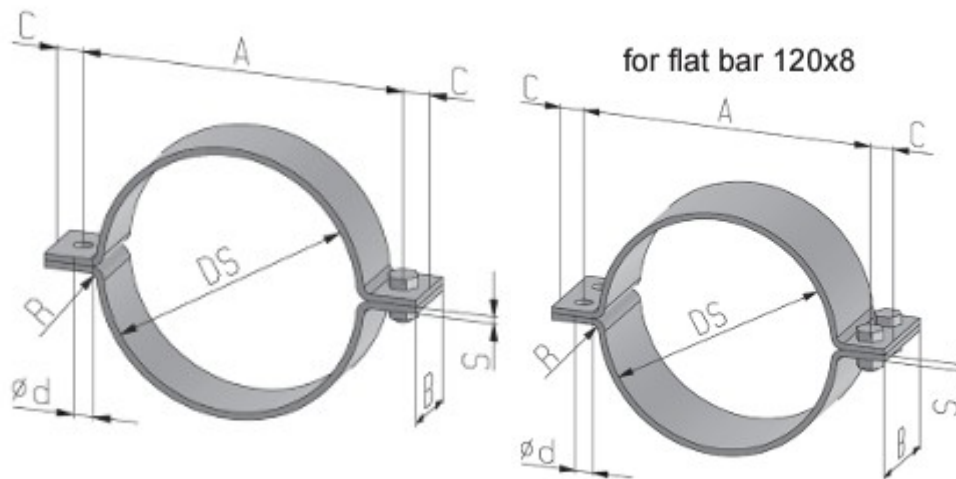
DN 25 - DN 300

Material	S235JR DIN EN 10025-2
Surface	The pipe clamp is to use with a rubber inlay of 5 mm thickness (see page 15 - 17) excl. bolts and nuts. The tube is fixed in the pipe clamps "for anchor" GRP pipes according publisher policy

Pipe clamp/Pipe ID / OD	BxS	A	C	F	R	d	Bolt	Type without bolt and nuts	Weight kg		
41	31	80 x 6	85	18	7	6	13,5	12 x 40	GFK1-041-R	1,01	
45	35	80 x 6	90	18	7	6	13,5	12 x 40	GFK1-045-R	1,06	
48	38	80 x 6	93	18	7	6	13,5	12 x 40	GFK1-048-R	1,09	
52	42	80 x 6	97	18	7	6	13,5	12 x 40	GFK1-052-R	1,14	
56	46	80 x 6	102	18	7	6	13,5	12 x 40	GFK1-056-R	1,19	
60	50	80 x 6	105	18	7	6	13,5	12 x 40	GFK1-060-R	1,22	
67	57	80 x 6	113	18	7	6	13,5	12 x 40	GFK1-067-R	1,31	
70	60	80 x 6	116	18	9	6	13,5	12 x 40	GFK1-070-R	1,34	
81	71	80 x 6	128	18	9	6	13,5	12 x 40	GFK1-081-R	1,47	
86	76	80 x 6	133	18	9	6	13,5	12 x 40	GFK1-086-R	1,53	
91	81	80 x 6	138	18	9	6	13,5	12 x 40	GFK1-091-R	1,59	
97	87	80 x 6	144	18	9	6	13,5	12 x 40	GFK1-097-R	1,65	
100	90	80 x 6	147	18	9	6	13,5	12 x 40	GFK1-100-R	1,68	
106	96	80 x 6	153	18	9	6	13,5	12 x 40	GFK1-106-R	1,76	
119	109	80 x 6	167	18	9	6	13,5	12 x 40	GFK1-119-R	1,91	
121	111	80 x 6	169	18	11	6	13,5	12 x 40	GFK1-121-R	1,93	
126	116	80 x 6	174	18	11	6	13,5	12 x 40	GFK1-126-R	1,99	
145	135	80 x 6	193	18	11	6	13,5	12 x 40	GFK1-145-R	2,22	
148	138	80 x 6	196	18	11	6	13,5	12 x 40	GFK1-148-R	2,25	
153	143	80 x 6	202	18	11	6	13,5	12 x 40	GFK1-153-R	2,31	
170	160	120 x 8	237	24	14	8	17,5	16 x 50	GFK1-170-R	5,41	
175	165	120 x 8	242	24	14	8	17,5	16 x 50	GFK1-175-R	5,53	
181	171	120 x 8	248	24	14	8	17,5	16 x 50	GFK1-181-R	5,67	
219	209	120 x 8	287	24	14	8	17,5	16 x 50	GFK1-219-R	6,58	
223	213	120 x 8	291	24	14	8	17,5	16 x 50	GFK1-223-R	6,67	
229	219	120 x 8	297	24	14	8	17,5	16 x 50	GFK1-229-R	6,81	
238	228	120 x 8	306	24	14	8	17,5	16 x 50	GFK1-238-R	7,03	
269	259	80 x 8	343	30	14	8	22,0	20 x 55	GFK1-269-R	5,35	
275	265	80 x 8	350	30	14	8	22,0	20 x 55	GFK1-275-R	5,44	
283	273	80 x 8	358	30	14	8	22,0	20 x 55	GFK1-283-R	5,57	
294	284	80 x 8	369	30	14	8	22,0	20 x 55	GFK1-294-R	5,74	
321	311	80 x 8	396	30	14	8	22,0	20 x 55	GFK1-321-R	6,17	
328	318	80 x 8	403	30	14	8	22,0	20 x 55	GFK1-328-R	6,28	
337	327	80 x 8	412	30	14	8	22,0	20 x 55	GFK1-337-R	6,42	
350	340	80 x 8	425	30	14	8	22,0	20 x 55	GFK1-350-R	6,63	

Notes: Other dimensions on request

**Pipe clamp
Type GFK2
DN 25 - DN 300 300**



Pipe clamp - type GFK2 for nonmetallic piping

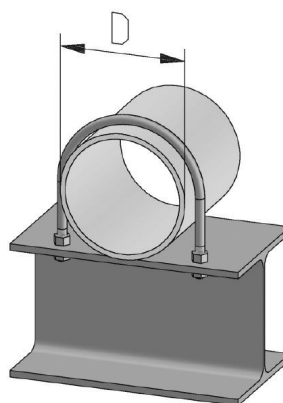
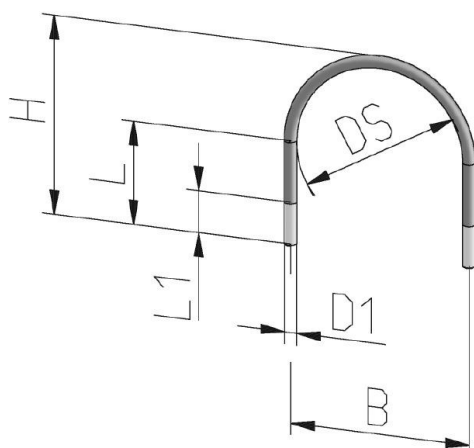
DN 25 - DN 300

Material	S235JR DIN EN 10025-2
Surface	The pipe clamp is to use with a HDPE-inlay (see page 15 - 17) excl. bolts and nuts. The tube slides in the pipe clamp "for anchor" GRP pipes according publisher policy

Pipe clamp/Pipe ID / OD	BxS	A	C	F	R	d	Bolt	Type without bolt and nuts	Weight kg		
40	31	80 x 6	85	18	0	6	13,5	12 x 40	GFK2-040-R	1,01	
44	35	80 x 6	90	18	0	6	13,5	12 x 40	GFK2-044-R	1,06	
47	38	80 x 6	93	18	0	6	13,5	12 x 40	GFK2-047-R	1,09	
51	42	80 x 6	97	18	0	6	13,5	12 x 40	GFK2-051-R	1,14	
55	46	80 x 6	102	18	0	6	13,5	12 x 40	GFK2-055-R	1,19	
60	50	80 x 6	105	18	0	6	13,5	12 x 40	GFK2-060-R	1,22	
66	57	80 x 6	113	18	0	6	13,5	12 x 40	GFK2-066-R	1,31	
69	60	80 x 6	116	18	0	6	13,5	12 x 40	GFK2-069-R	1,34	
80	71	80 x 6	128	18	0	6	13,5	12 x 40	GFK2-080-R	1,47	
85	76	80 x 6	133	18	0	6	13,5	12 x 40	GFK2-085-R	1,53	
90	81	80 x 6	138	18	0	6	13,5	12 x 40	GFK2-090-R	1,59	
96	87	80 x 6	144	18	0	6	13,5	12 x 40	GFK2-096-R	1,65	
99	90	80 x 6	147	18	0	6	13,5	12 x 40	GFK2-099-R	1,68	
105	96	80 x 6	153	18	0	6	13,5	12 x 40	GFK2-105-R	1,76	
118	109	80 x 6	167	18	0	6	13,5	12 x 40	GFK2-118-R	1,91	
120	111	80 x 6	169	18	0	6	13,5	12 x 40	GFK2-120-R	1,93	
125	116	80 x 6	174	18	0	6	13,5	12 x 40	GFK2-125-R	1,99	
144	135	80 x 6	193	18	0	6	13,5	12 x 40	GFK2-144-R	2,22	
147	138	80 x 6	196	18	0	6	13,5	12 x 40	GFK2-147-R	2,25	
152	143	80 x 6	202	18	0	6	13,5	12 x 40	GFK2-152-R	2,31	
169	160	120 x 8	237	24	0	8	17,5	16 x 50	GFK2-169-R	5,41	
174	165	120 x 8	242	24	0	8	17,5	16 x 50	GFK2-174-R	5,53	
180	171	120 x 8	248	24	0	8	17,5	16 x 50	GFK2-180-R	5,67	
219	209	120 x 8	287	24	0	8	17,5	16 x 50	GFK2-219-R	6,58	
223	213	120 x 8	291	24	0	8	17,5	16 x 50	GFK2-223-R	6,67	
229	219	120 x 8	297	24	0	8	17,5	16 x 50	GFK2-229-R	6,81	
238	228	120 x 8	306	24	0	8	17,5	16 x 50	GFK2-238-R	7,03	
269	259	80 x 8	343	30	0	8	22,0	20 x 55	GFK2-269-R	5,35	
275	265	80 x 8	350	30	0	8	22,0	20 x 55	GFK2-275-R	5,44	
283	273	80 x 8	358	30	0	8	22,0	20 x 55	GFK2-283-R	5,57	
294	284	80 x 8	369	30	0	8	22,0	20 x 55	GFK2-294-R	5,74	
321	311	80 x 8	396	30	0	8	22,0	20 x 55	GFK2-321-R	6,17	
328	318	80 x 8	403	30	0	8	22,0	20 x 55	GFK2-328-R	6,28	
337	327	80 x 8	412	30	0	8	22,0	20 x 55	GFK2-337-R	6,42	
350	340	80 x 8	425	30	0	8	22,0	20 x 55	GFK2-350-R	6,63	

Notes: Other dimensions on request

**U-bolts
Type RSB
DN 15 - DN 60**



U-bolts - type RSB

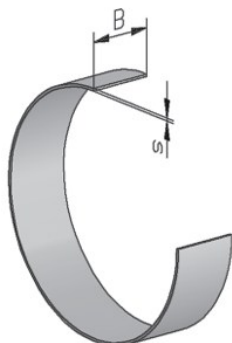
DN 15 - DN 600

Material	S235JR DIN EN 10025-2, for temperature up to 300°C
Surface	To DIN 3570, hot-dip galvanized / electro-galvanized, excl. nuts (Nuts in DIN ISO 4032-8 (DIN EN ISO 898) loose)
Material	A4 DIN EN 10028-7, for temperature up to 400°C
Surface	To DIN 3570, no surface treatment, excl. nuts (Nuts in DIN ISO 4032-A4 (ISO 3506-2))

For pipe with outer diameter	Nom. pipe	DS	B	L	H	Bolt	Type excl. nuts	Type excl. nuts	Weight kg
- 21,3	15	23	33	44	65	10 x 40	RSB-015-V	RSB-015-A4	0,11
25,0 - 26,9	20	30	40	45	70	10 x 40	RSB-020-V	RSB-020-A4	0,12
30,0 - 33,7	25	38	48	47	76	10 x 40	RSB-025-V	RSB-025-A4	0,13
38,0 - 42,4	32	46	56	53	86	10 x 50	RSB-032-V	RSB-032-A4	0,14
44,5 - 48,3	40	52	62	56	92	10 x 50	RSB-040-V	RSB-040-A4	0,15
57,0 - 60,3	50	64	76	65	107	12 x 50	RSB-050-V	RSB-050-A4	0,24
70,0 - 76,1	65	82	94	72	125	12 x 50	RSB-065-V	RSB-065-A4	0,27
84,0 - 88,9	80	94	106	79	138	12 x 50	RSB-080-V	RSB-080-A4	0,30
101,6 - 114,3	100	120	136	95	171	16 x 60	RSB-100-V	RSB-100-A4	0,67
133,0 - 139,7	125	148	164	101	191	16 x 60	RSB-125-V	RSB-125-A4	0,74
159,0 - 168,3	150	176	192	113	217	16 x 60	RSB-150-V	RSB-150-A4	0,83
- 193,7	175	202	218	138	249	16 x 60	RSB-175-V	RSB-175-A4	0,93
205,0 - 219,1	200	228	248	149	283	20 x 70	RSB-200-V	RSB-200-A4	1,66
267,0 - 273,0	250	282	302	173	334	20 x 70	RSB-250-V	RSB-250-A4	1,94
306,0 - 323,9	300	332	352	199	385	20 x 70	RSB-300-V	RSB-300-A4	2,20
355,6 - 368,0	350	378	402	222	435	24 x 70	RSB-350-V	RSB-350-A4	3,55
406,4 - 419,0	400	428	452	249	487	24 x 70	RSB-400-V	RSB-400-A4	3,94
- 457,0	450	476	500	280	542	24 x 70	RSB-450-V	RSB-450-A4	4,28
508,0 - 521,0	500	530	554	300	585	24 x 70	RSB-500-V	RSB-500-A4	4,70
- 609,0	600	628	652	362	700	24 x 70	RSB-600-V	RSB-600-A4	5,45

Notes: Other dimensions on request

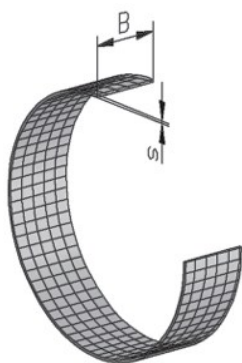
Inlay



Rubber Inlay

Material	EPDM-rubber, black
Characteristics	Hardness 55-65° shore A, good ozone and UV resistance *

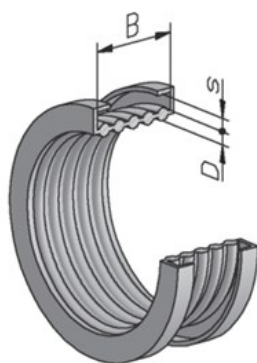
Type	Width B mm	Thickness s mm	Working temperature ** °C
S-s x 030-EPDM	30	2 / 3 / 5	(-30°C) - +110°C
S-s x 040-EPDM	40	2 / 3 / 5	(-30°C) - +110°C
S-s x 050-EPDM	50	2 / 3 / 5	(-30°C) - +110°C
S-s x 060-EPDM	60	2 / 3 / 5	(-30°C) - +110°C
S-s x 070-EPDM	70	2 / 3 / 5	(-30°C) - +110°C
S-s x 080-EPDM	80	2 / 3 / 5	(-30°C) - +110°C
S-s x 120-EPDM	120	2 / 3 / 5	(-30°C) - +110°C



Fibre ribbon

Material	Glass fabric tape
Characteristics	Good temperature stability *

Type	Width B mm	Thickness s mm	Working temperature ** °C
S-s x 030-GLAS	30	2 / 3	(-10°C) - +550°C
S-s x 040-GLAS	40	2 / 3	(-10°C) - +550°C
S-s x 050-GLAS	50	2 / 3	(-10°C) - +550°C
S-s x 060-GLAS	60	2 / 3	(-10°C) - +550°C
S-s x 070-GLAS	70	2 / 3	(-10°C) - +550°C
S-s x 080-GLAS	80	2 / 3	(-10°C) - +550°C
S-s x 120-GLAS	120	2 / 3	(-10°C) - +550°C



Rubber inlay for acoustic insulation

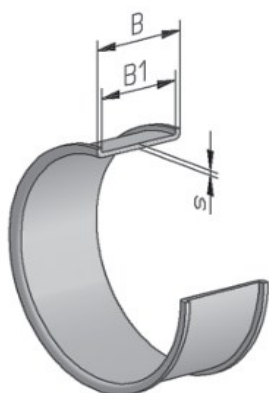
Material	ELAS-gummi, black
Characteristics	Hardness ~55° Shore A Seawater, oil and ozone resistance, halogen free *

Type	Width B mm	Thickness s mm	Roller-Ø D mm	Working temperature ** °C
STA-03 x 020-ELAS	20	3	6	(-30°C) - +110°C
STA-04 x 030-ELAS	30	4	6	(-30°C) - +110°C
STA-05 x 040-ELAS	40	5	6	(-30°C) - +110°C
STA-06 x 040-ELAS	40	6	6	(-30°C) - +110°C
STA-08 x 050-ELAS	50	8	6	(-30°C) - +110°C
STA-10 x 060-ELAS	60	10	6	(-30°C) - +110°C
STA-12 x 080-ELAS	80	12	6	(-30°C) - +110°C

* Notes For details, please request the product specific data sheets

** Notes The operating temperature, based on the plastic Paperback Saechtling, refer to the optimal application and can have a negative impact of environmental influences on the total life

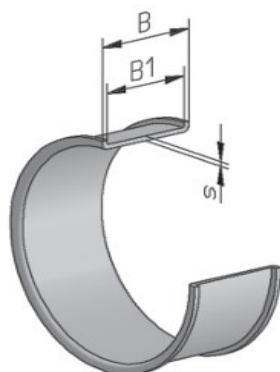
Inlay



Rubber Inlay

Material	NBR, black
Characteristics	Hardness 65° shore A ± 10° Shore A, oil, ozone and sea water resistance *

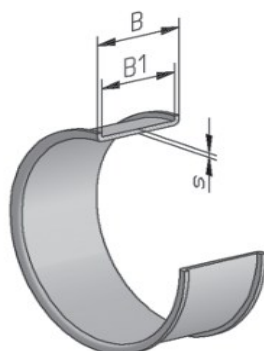
Type	Width B mm	Width B1 mm	Thickness s mm	Working temperature ** °C
U-02 x 042-EPDM	42	30	2	(-20°C) - +70°C
U-02 x 052-EPDM	52	40	2	(-20°C) - +70°C
U-02 x 062-EPDM	62	50	2	(-20°C) - +70°C
U-02 x 072-EPDM	72	60	2	(-20°C) - +70°C
U-02 x 082-EPDM	82	70	2	(-20°C) - +70°C



Rubber inlay

Material	EPDM-rubber, black
Characteristics	Hardness 55-65° Shore A, good ozone and UV resistance *

Type	Width B mm	Width B1 mm	Thickness s mm	Working temperature ** °C
U-05 x 082-EPDM	82	72	5	(-30°C) - +100°C
U-05 x 092-EPDM	92	82	5	(-30°C) - +100°C
U-05 x 112-EPDM	112	102	5	(-30°C) - +100°C
U-05 x 132-EPDM	132	122	5	(-30°C) - +100°C
U-05 x 152-EPDM	152	142	5	(-30°C) - +100°C
U-05 x 172-EPDM	172	162	5	(-30°C) - +100°C
U-05 x 212-EPDM	212	202	5	(-30°C) - +100°C



Plastic core

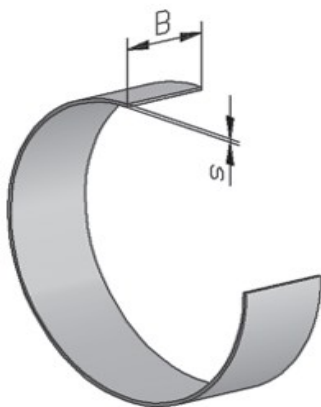
Material	PE-HD, black
Characteristics	Hardness ~64° Shore D, oil and gasoline resistance, induced resistance to ozone *

Type	Width B mm	Width B1 mm	Thickness s mm	Working temperature ** °C
U-02 x 044-PE	44	32	2	(-30°C) - +50°C
U-02 x 054-PE	54	42	2	(-30°C) - +50°C
U-02 x 064-PE	64	52	2	(-30°C) - +50°C
U-02 x 094-PE	94	82	2	(-30°C) - +50°C
U-02 x 114-PE	114	102	2	(-30°C) - +50°C
U-02 x 134-PE	134	122	2	(-30°C) - +50°C
U-02 x 154-PE	154	142	2	(-30°C) - +50°C
U-02 x 174-PE	174	162	2	(-30°C) - +50°C
U-02 x 212-PE	212	200	2	(-30°C) - +50°C

* Notes For details, please request the product specific data sheets

** Notes The operating temperature, based on the plastic Paperback Saechtling, refer to the optimal application and can have a negative impact of environmental influences on the total life

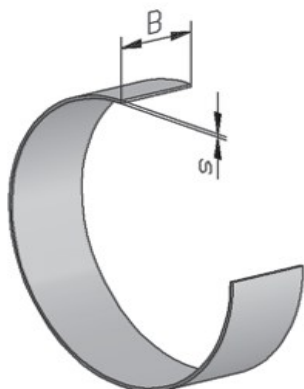
Inlay



Plastic inlay

Material	PTFE, white
Characteristics	Hardness 50-60° shore D, good ozone, oil, gasoline, acid and base resistance *

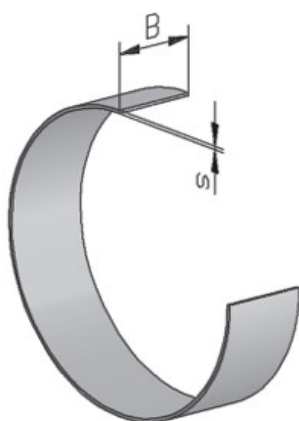
Type	Width B mm	Thickness s mm	Working temperature ** °C
S-s x 030-PTFE	30	0,5 / 1,0	(-35°C) - +80°C
S-s x 040-PTFE	40	0,5 / 1,0	(-35°C) - +80°C
S-s x 050-PTFE	50	0,5 / 1,0	(-35°C) - +80°C
S-s x 060-PTFE	60	0,5 / 1,0	(-35°C) - +80°C
S-s x 070-PTFE	70	0,5 / 1,0	(-35°C) - +80°C
S-s x 090-PTFE	90	0,5 / 1,0	(-35°C) - +80°C
S-s x 120-PTFE	120	0,5 / 1,0	(-35°C) - +80°C



Inlay

Material	Klingsil®, AFM34® or contrastable, grey/green
Characteristics	Good temperature stability, good gasoline and oil resistance *

Type	Width B mm	Thickness s mm	Working temperature ** °C
S-s x 030-Klingsil®	30	2 / 3	(-50°C) - +250°C
S-s x 040-Klingsil®	40	2 / 3	(-50°C) - +250°C
S-s x 050-Klingsil®	50	2 / 3	(-50°C) - +250°C
S-s x 060-Klingsil®	60	2 / 3	(-50°C) - +250°C
S-s x 070-Klingsil®	70	2 / 3	(-50°C) - +250°C
S-s x 090-Klingsil®	90	2 / 3	(-50°C) - +250°C
S-s x 120-Klingsil®	120	2 / 3	(-50°C) - +250°C



Silicone inlay

Material	Silicone VMQ, red
Characteristics	Hardness 55-65° Shore A, good ozone and UV resistance *

Type	Width B mm	Thickness s mm	Working temperature ** °C
S-s x 030-Silicone	30	2 / 3 / 5	(-60°C) - +230°C
S-s x 040-Silicone	40	2 / 3 / 5	(-60°C) - +230°C
S-s x 050-Silicone	50	2 / 3 / 5	(-60°C) - +230°C
S-s x 060-Silicone	60	2 / 3 / 5	(-60°C) - +230°C
S-s x 070-Silicone	70	2 / 3 / 5	(-60°C) - +230°C
S-s x 090-Silicone	90	2 / 3 / 5	(-60°C) - +230°C
S-s x 120-Silicone	120	2 / 3 / 5	(-60°C) - +230°C

* Notes For details, please request the product specific data sheets

** Notes The operating temperature, based on the plastic Paperback Saechtling, refer to the optimal application and can have a negative impact of environmental influences on the total life

Technical information

Expert advice

With our many years of experience as suppliers to the pipeline and plant construction industries we are well placed to assist you with expert advice on the design and detail for projects including. We can provide tailor made solutions for specific problems and applications.

Loads

The calculation loads mentioned in this document were made with statically models under certain conditions and parameters.

All possible care is taken: compliance and applicable technical regulations and applicable standards, guarantees are given against the loads for the static cases shown in the catalog, these are approximate values. Liabilities for the particular application cannot be derived. Any unauthorized variations or changes would invalidate any warranty and guarantee on our part.

Materials

The materials and characteristics are in accordance to the corresponding standards and should be used as a minimum requirement. For the characteristics and quality, Bernecker would only accept warranty in combination with an inspection certificate 3.1

Special design

For your individual requirements we also offer special pipe supports. Either as a variant production through the use of other:

- materials (e.g. P265GH, P275NL1)
 - coatings (e.g. Duplex)
 - diameter (e.g. RA-102-R)
 - lengths (e.g. GLY-200/324L500-RB3)
 - heights (e.g. GLY-75/324-RB3)
- or according to your specifications routines or static specification.

General tolerances

The general tolerances are for lengths, angles, shape and location in accordance with ISO 2768-cL and 13920-1-CG.

SI units (metric)

The physical quantities are stated in SI units as follows:

- Dimensions in **mm**
 - Loads in **kN**
 - Temperatures at **80°C**
 - Weights in **kg**
- if not stated otherwise.

Heat treatment

We can hot form and heat treat components to order, e.g. **stress-free annealing, normalizing or hardening** of high temperature materials. On request we supply a diagram of the heat treatment and temperature curve of the heat treated components supplied.

Corrosion protection and surface finishes

Components

- The corrosion protection of our components in accordance with DIN EN ISO 12944.
- Hot-dip galvanized components is standard galvanized to DIN EN ISO 1461 or ASTM 123.
- Prepare acc. to ISO 8501-3-P1 (Edges broken and burr free)
- According to your needs and specifications we can also provide our component parts with the following surface treatment: Blasting (acc. to 8501-1 SA2 1/2) pickling, oiling, basic coating, painting or galvanic surface treatment.

Complement

- Hot dip galvanized screwing acc. to DIN EN ISO 10684 (tZn)
- Galvanized Screwing acc. to ISO4042 (A2A or superior)
- The coatings tZn and A2A are chrome (IV)-free.

Prefabrication service supplied complete to site

As a specialist manufacturer in the field of pipe supports we can fabricate all supports and ancillaries for you ready to install, complete with labeling, to order. Pre-assembled components with hard stamped article-name can optimize the assembling process and allow time savings on site; however, it is an additional service.

Acceptance/Certificate

On request we can supply our pipe support products to **DIN EN 10204** with

- acceptance test certificates 3.1
 - certificate of compliance 2.2 / 2.1
- We can arrange for acceptance tests to be carried out by the TÜV or other inspectorate on our premises if required. Inspections by our customers can be arranged at any time.

Our safety is your guarantee

We operate in a quality assurance system that is certified to DIN ISO 9001. This is your guarantee that we will turn your specifications and requirements into a fully functional and reliable system that is right for the job.

Registrations (Status in 12/2017)

- **DIN ISO 9001:2008** (Quality management)
- **AD 2000 W-0** (Certification acc. to pressure equipment directive)
- **DIN EN 1090-1** (Requirements for conformity assessment of structural components)
- **DIN EN ISO 3834-2** (Comprehensive quality)

Legal notice

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Our general terms and conditions apply

Regular screwing AD 2000 / VGB R 510 L		
Material	Strenght i.a.w DIN 267-13 bolt / nut	Temp.
S235JR	8.8 / 8	≤ 300°C
S355J2+N	8.8 / 8	≤ 300°C
P265GH	KG / KG	≤ 450°C
16Mo3	KG / KG	≤ 500°C
13CrMo4-5	GA / GA	≤ 530°C
10CrMo9-10	GA / GA	≤ 580°C
X6CrNi 18 10	A4 / A4	≤ 580°C
X6CrNiMoTi 17-12-2	A4 / A4	≤ 580°C

Conversion factors for the loads given in the catalogue at other temperatures.

(Loads should only by converted for the same material, never from one material to another)

Material	No.	Standard	20°/50°	100°	150°	200°	250°	300°	350°	400°	450°	500°	520°	540°	560°
S235JR	1.0038	EN 10025-2	1,00	0,80	0,74	0,69	0,62	0,52							
16Mo3	1.5415	EN 10028-2	1,55	1,47	1,43	1,38	1,27	1,11	1,00	0,94	0,88				
13CrMo4-5	1.7335	EN 10028-2	1,77	1,70	1,65	1,60	1,48	1,36	1,25	1,19	1,14	1,00	0,67	0,41	0,27
10CrMo9-10	1.7380	EN 10028-2	1,42	1,39	1,35	1,32	1,26	1,21	1,16	1,11	1,05	1,00	0,77	0,56	0,38
X6CrNiTi 18 10	1.4541	DIN 17440	1,00	0,93	0,88	0,83	0,77	0,72	0,68	0,66					
X6CrNiMoTi 17-12-2	1.4571	DIN 17440	1,00	0,90	0,86	0,81	0,76	0,70	0,68	0,66					

Technical modifications reserved