

Table for PE



Basis: DVS data sheets 2207, 2208 - State 2016

Field of application: **4000 / 4001 / 4002 (with 2. cylinder)**

1 bar on pressure gauge: **36** N (Effective surface of cylinder: 362 mm² / 0,56 inch²)

The heating element temperature is 220° C ± 10° C / 428° F ± 18° F.

The change-over time should be kept as low as possible.

The joining pressure build-up time should be recognized as maximum value and may be underrun by up to 50%.

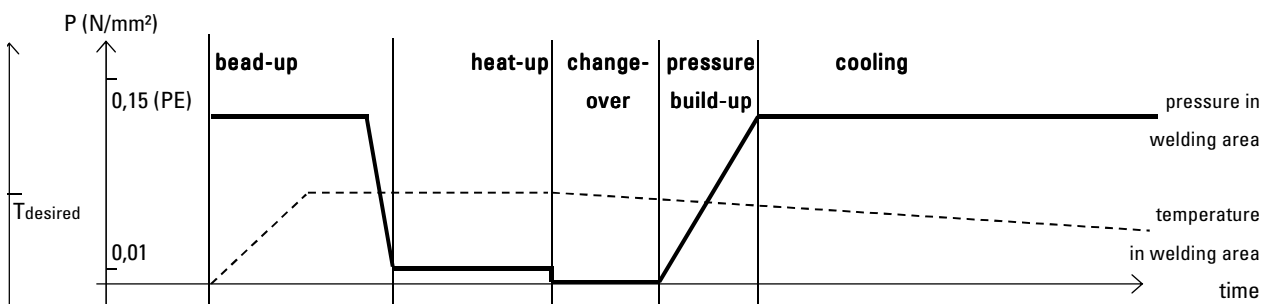
You must add the motion pressure of the welding machine to the indicated bead-up and cooling pressure in each case!

The maximum pressure of the welding machine is to be observed.

1 These cooling times are only valid under the following conditions:

- Welding connection is produced under workshop conditions
- Removal from the welding machine and temporary storage until complete cooling time elapses only cause minor strain for the welding connection

All information without guarantee



pipe wall (s)	SDR degree	bead-up pressure	circular bead height min.	heat-up time	max. change-over time	pressure build-up time	welding pressure	cooling time for ambient temperature			special cooling time 1
								< 15°C < 59°F	15-25°C 59-77°F	> 25°C > 77°F	
[mm]		[bar]	[mm]	[min:s]	[s]	[s]	[bar]	[min:s]	[min:s]	[min:s]	[min:s]
DA 90											
2,2	41	3	0,5	00:22	5	5	3	04:00	05:00	06:30	03:30
2,8	33	4	0,5	00:28	5	5	4	04:00	05:00	06:30	03:30
3,5	26	4	0,5	00:35	5	5	4	04:00	05:00	06:30	03:30
4,3	21	5	0,5	00:43	5	5	5	04:00	05:00	06:30	03:30
5,1	17,6	6	1	00:51	5	5	6	04:29	05:36	07:13	03:52
5,4	17	6	1	00:54	5	5	6	04:43	05:54	07:35	04:02
6,7	13,6	8	1	01:07	6	6	8	05:46	07:12	09:08	04:49
8,2	11	9	1,5	01:22	6	6	9	06:50	08:35	10:56	05:43
10,1	9	11	1,5	01:41	7	7	11	08:10	10:17	13:13	06:52
12,3	7,4	13	2	02:03	8	8	13	09:42	12:15	15:52	08:10
DA 110											
2,7	41	4	0,5	00:27	5	5	4	04:00	05:00	06:30	03:30
3,4	33	5	0,5	00:34	5	5	5	04:00	05:00	06:30	03:30
4,2	26	6	0,5	00:42	5	5	6	04:00	05:00	06:30	03:30
5,3	21	8	1	00:53	5	5	8	04:38	05:48	07:28	03:59
6,3	17,6	9	1	01:03	6	6	9	05:26	06:48	08:40	04:35
6,6	17	9	1	01:06	6	6	9	05:41	07:06	09:01	04:46
8,1	13,6	11	1,5	01:21	6	6	11	06:46	08:29	10:49	05:40
10,0	11	14	1,5	01:40	7	7	14	08:06	10:12	13:06	06:48
12,3	9	16	2	02:03	8	8	16	09:42	12:15	15:52	08:10
15,1	7,4	19	2	02:31	9	9	19	11:30	14:39	19:16	09:46

Table for PE



Basis: DVS data sheets 2207, 2208 - State 2016

Field of application: **4000 / 4001 / 4002 (with 2. cylinder)**

1 bar on pressure gauge: **36** N (Effective surface of cylinder: 362 mm² / 0,56 inch²)

The heating element temperature is 220° C ± 10° C / 428° F ± 18° F.

The change-over time should be kept as low as possible.

The joining pressure build-up time should be recognized as maximum value and may be underrun by up to 50%.

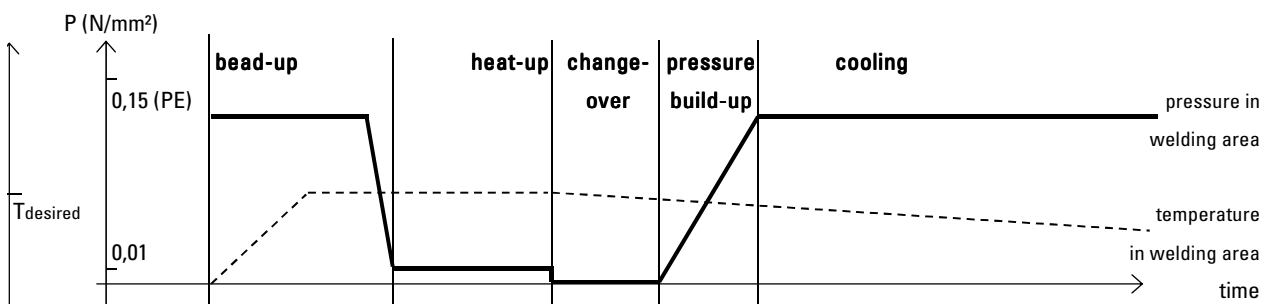
You must add the motion pressure of the welding machine to the indicated bead-up and cooling pressure in each case!

The maximum pressure of the welding machine is to be observed.

1 These cooling times are only valid under the following conditions:

- Welding connection is produced under workshop conditions
- Removal from the welding machine and temporary storage until complete cooling time elapses only cause minor strain for the welding connection

All information without guarantee



pipe wall (s)	SDR degree	bead-up pressure	circular bead height min.	heat-up time	max. change-over time	pressure build-up time	welding pressure	cooling time for ambient temperature			special cooling time 1
								< 15°C < 59°F	15-25°C 59-77°F	> 25°C > 77°F	
[mm]		[bar]	[mm]	[min:s]	[s]	[s]	[bar]	[min:s]	[min:s]	[min:s]	[min:s]
DA 125											
3,1	41	5	0,5	00:31	5	5	5	04:00	05:00	06:30	03:30
3,9	33	7	0,5	00:39	5	5	7	04:00	05:00	06:30	03:30
4,8	26	8	1	00:48	5	5	8	04:14	05:18	06:52	03:41
6,0	21	10	1	01:00	6	6	10	05:12	06:30	08:18	04:24
7,1	17,6	11	1,5	01:11	6	6	11	06:04	07:35	09:37	05:04
7,4	17	12	1,5	01:14	6	6	12	06:17	07:52	09:59	05:14
9,2	13,6	14	1,5	01:32	7	7	14	07:32	09:29	12:08	06:19
11,4	11	17	1,5	01:54	8	8	17	09:05	11:28	14:47	07:38
14,0	9	21	2	02:20	9	9	21	10:47	13:43	17:56	09:09
17,1	7,4	25	2	02:51	9	10	25	12:47	16:22	21:42	10:55
DA 140											
3,5	41	7	0,5	00:35	5	5	7	04:00	05:00	06:30	03:30
4,3	33	8	0,5	00:43	5	5	8	04:00	05:00	06:30	03:30
5,4	26	10	1	00:54	5	5	10	04:43	05:54	07:35	04:02
6,7	21	12	1	01:07	6	6	12	05:46	07:12	09:08	04:49
8,0	17,6	14	1,5	01:20	6	6	14	06:42	08:24	10:42	05:36
8,3	17	15	1,5	01:23	7	7	15	06:55	08:40	11:04	05:47
10,3	13,6	18	1,5	01:43	7	7	18	08:19	10:28	13:28	06:59
12,7	11	22	2	02:07	8	8	22	09:57	12:36	16:21	08:24
15,7	9	26	2	02:37	9	10	26	11:53	15:10	20:00	10:07
19,2	7,4	31	2,5	03:12	10	11	31	14:09	18:10	24:14	12:07

Table for PE



Basis: DVS data sheets 2207, 2208 - State 2016

Field of application: **4000 / 4001 / 4002 (with 2. cylinder)**

1 bar on pressure gauge: **36** N (Effective surface of cylinder: 362 mm² / 0,56 inch²)

The heating element temperature is 220° C ± 10° C / 428° F ± 18° F.

The change-over time should be kept as low as possible.

The joining pressure build-up time should be recognized as maximum value and may be overrun by up to 50%.

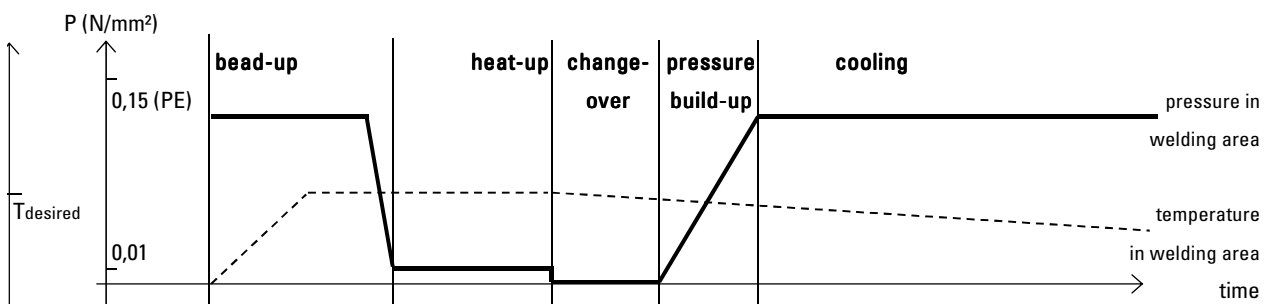
You must add the motion pressure of the welding machine to the indicated bead-up and cooling pressure in each case!

The maximum pressure of the welding machine is to be observed.

1 These cooling times are only valid under the following conditions:

- Welding connection is produced under workshop conditions
- Removal from the welding machine and temporary storage until complete cooling time elapses only cause minor strain for the welding connection

All information without guarantee



pipe wall (s)	SDR degree	bead-up pressure	circular bead height min.	heat-up time	max. change-over time	pressure build-up time	welding pressure	cooling time for ambient temperature			special cooling time 1
								< 15°C < 59°F	15-25°C 59-77°F	> 25°C > 77°F	
[mm]		[bar]	[mm]	[min:s]	[s]	[s]	[bar]	[min:s]	[min:s]	[min:s]	[min:s]
DA 160											
4,0	41	9	0,5	00:40	5	5	9	04:00	05:00	06:30	03:30
4,9	33	10	1	00:49	5	5	10	04:19	05:24	06:59	03:44
6,2	26	13	1	01:02	6	6	13	05:22	06:42	08:32	04:31
7,7	21	16	1,5	01:17	6	6	16	06:29	08:08	10:20	05:25
9,1	17,6	18	1,5	01:31	7	7	18	07:28	09:23	12:01	06:16
9,5	17	19	1,5	01:35	7	7	19	07:45	09:45	12:30	06:30
11,8	13,6	23	1,5	01:58	8	8	23	09:22	11:49	15:16	07:53
14,6	11	28	2	02:26	9	9	28	11:10	14:14	18:39	09:29
17,9	9	34	2	02:59	10	11	34	13:18	17:03	22:40	11:22
21,9	7,4	40	2,5	03:39	11	12	40	16:04	20:29	27:19	13:39
DA 180											
4,4	41	11	0,5	00:44	5	5	11	04:00	05:00	06:30	03:30
5,5	33	13	1	00:55	5	5	13	04:48	06:00	07:42	04:06
6,9	26	16	1	01:09	6	6	16	05:55	07:24	09:23	04:56
8,6	21	20	1,5	01:26	7	7	20	07:07	08:56	11:25	05:58
10,2	17,6	23	1,5	01:42	7	7	23	08:14	10:23	13:20	06:55
10,7	17	24	1,5	01:47	7	7	24	08:35	10:50	13:56	07:13
13,3	13,6	30	2	02:13	8	9	30	10:20	13:07	17:05	08:45
16,4	11	36	2	02:44	9	10	36	12:20	15:46	20:51	10:31
20,1	9	43	2,5	03:21	10	11	43	14:47	18:57	25:15	12:38
24,6	7,4	51	2,5	04:06	12	13	51	18:00	22:48	30:24	15:12

Table for PE



Basis: DVS data sheets 2207, 2208 - State 2016

Field of application: **4000 / 4001 / 4002 (with 2. cylinder)**

1 bar on pressure gauge: **36** N (Effective surface of cylinder: 362 mm² / 0,56 inch²)

The heating element temperature is 220° C ± 10° C / 428° F ± 18° F.

The change-over time should be kept as low as possible.

The joining pressure build-up time should be recognized as maximum value and may be underrun by up to 50%.

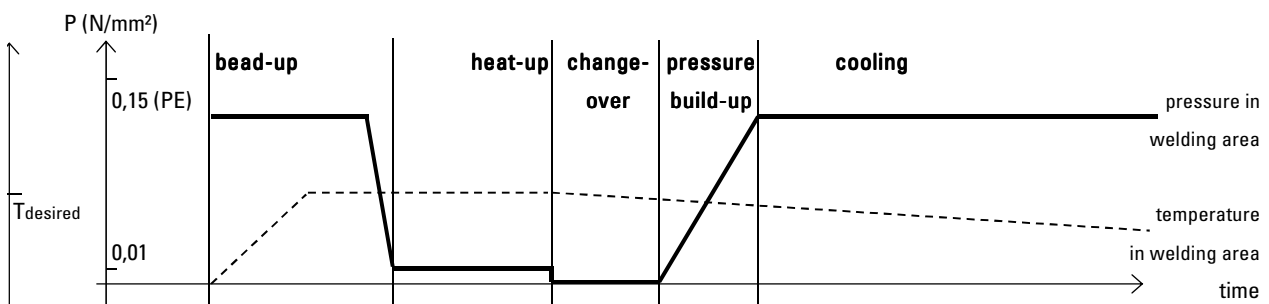
You must add the motion pressure of the welding machine to the indicated bead-up and cooling pressure in each case!

The maximum pressure of the welding machine is to be observed.

1 These cooling times are only valid under the following conditions:

- Welding connection is produced under workshop conditions
- Removal from the welding machine and temporary storage until complete cooling time elapses only cause minor strain for the welding connection

All information without guarantee



pipe wall (s)	SDR degree	bead-up pressure	circular bead height min.	heat-up time	max. change-over time	pressure build-up time	welding pressure	cooling time for ambient temperature			special cooling time 1
								< 15°C < 59°F	15-25°C 59-77°F	> 25°C > 77°F	
[mm]		[bar]	[mm]	[min:s]	[s]	[s]	[bar]	[min:s]	[min:s]	[min:s]	[min:s]
DA 200											
4,9	41	13	1	00:49	5	5	13	04:19	05:24	06:59	03:44
6,2	33	16	1	01:02	6	6	16	05:22	06:42	08:32	04:31
7,7	26	20	1,5	01:17	6	6	20	06:29	08:08	10:20	05:25
9,6	21	24	1,5	01:36	7	7	24	07:49	09:50	12:37	06:34
11,4	17,6	29	1,5	01:54	8	8	29	09:05	11:28	14:47	07:38
11,9	17	30	1,5	01:59	8	8	30	09:26	11:55	15:23	07:56
14,7	13,6	36	2	02:27	9	9	36	11:14	14:19	18:47	09:33
18,2	11	44	2	03:02	10	11	44	13:29	17:19	23:02	11:33
22,4	9	53	2,5	03:44	11	12	53	16:26	20:55	27:53	13:57
27,4	7,4	62	3	04:34	13	15	62	20:01	25:16	33:39	16:53
DA 225											
5,5	41	16	1	00:55	5	5	16	04:48	06:00	07:42	04:06
6,9	33	20	1	01:09	6	6	20	05:55	07:24	09:23	04:56
8,6	26	25	1,5	01:26	7	7	25	07:07	08:56	11:25	05:58
10,8	21	31	1,5	01:48	8	8	31	08:40	10:55	14:04	07:17
12,8	17,6	36	2	02:08	8	8	36	10:01	12:41	16:28	08:27
13,4	17	38	2	02:14	8	9	38	10:24	13:12	17:12	08:48
16,6	13,6	46	2	02:46	9	10	46	12:27	15:57	21:05	10:38
20,5	11	55	2,5	03:25	10	12	55	15:04	19:17	25:43	12:51
25,2	9	66	2,5	04:12	12	14	66	18:26	23:19	31:05	15:33
30,8	7,4	79	3	05:08	14	16	79	22:29	28:22	37:40	19:03

Table for PE



Basis: DVS data sheets 2207, 2208 - State 2016

Field of application: **4000 / 4001 / 4002 (with 2. cylinder)**

1 bar on pressure gauge: **36** N (Effective surface of cylinder: 362 mm² / 0,56 inch²)

The heating element temperature is 220° C ± 10° C / 428° F ± 18° F.

The change-over time should be kept as low as possible.

The joining pressure build-up time should be recognized as maximum value and may be underrun by up to 50%.

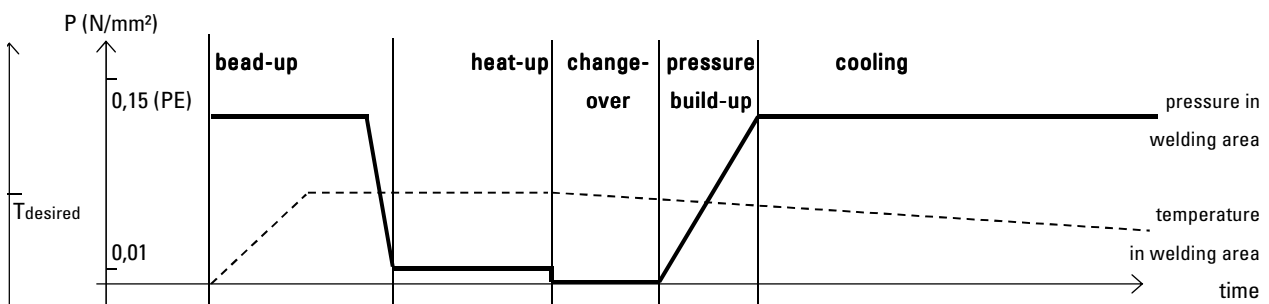
You must add the motion pressure of the welding machine to the indicated bead-up and cooling pressure in each case!

The maximum pressure of the welding machine is to be observed.

1 These cooling times are only valid under the following conditions:

- Welding connection is produced under workshop conditions
- Removal from the welding machine and temporary storage until complete cooling time elapses only cause minor strain for the welding connection

All information without guarantee



pipe wall (s)	SDR degree	bead-up pressure	circular bead height min.	heat-up time	max. change-over time	pressure build-up time	welding pressure	cooling time for ambient temperature			special cooling time 1
								< 15°C < 59°F	15-25°C 59-77°F	> 25°C > 77°F	
[mm]		[bar]	[mm]	[min:s]	[s]	[s]	[bar]	[min:s]	[min:s]	[min:s]	[min:s]
DA 250											
6,2	41	20	1	01:02	6	6	20	05:22	06:42	08:32	04:31
7,7	33	25	1,5	01:17	6	6	25	06:29	08:08	10:20	05:25
9,6	26	31	1,5	01:36	7	7	31	07:49	09:50	12:37	06:34
11,9	21	38	1,5	01:59	8	8	38	09:26	11:55	15:23	07:56
14,2	17,6	44	2	02:22	9	9	44	10:55	13:53	18:10	09:15
14,8	17	46	2	02:28	9	9	46	11:18	14:24	18:54	09:36
18,4	13,6	56	2	03:04	10	11	56	13:37	17:29	23:16	11:39
22,7	11	68	2,5	03:47	11	13	68	16:39	21:10	28:14	14:07
27,9	9	82	3	04:39	13	15	82	20:23	25:44	34:15	17:13
34,2	7,4	97	3	05:42	15	18	97	24:58	31:27	41:41	21:13
DA 280											
6,9	41	25	1	01:09	6	6	25	05:55	07:24	09:23	04:56
8,6	33	31	1,5	01:26	7	7	31	07:07	08:56	11:25	05:58
10,7	26	38	1,5	01:47	7	7	38	08:35	10:50	13:56	07:13
13,4	21	47	2	02:14	8	9	47	10:24	13:12	17:12	08:48
15,9	17,6	55	2	02:39	9	10	55	12:00	15:21	20:14	10:14
16,6	17	58	2	02:46	9	10	58	12:27	15:57	21:05	10:38
20,6	13,6	70	2,5	03:26	10	12	70	15:09	19:22	25:50	12:55
25,4	11	85	2,5	04:14	12	14	85	18:34	23:29	31:19	15:39
31,3	9	102	3	05:13	14	16	102	22:51	28:49	38:16	19:22
38,3	7,4	122	3,5	06:23	16	20	122	27:54	35:12	46:36	23:48

Table for PE



Basis: DVS data sheets 2207, 2208 - State 2016

Field of application: **4000 / 4001 / 4002 (with 2. cylinder)**

1 bar on pressure gauge: **36** N (Effective surface of cylinder: 362 mm² / 0,56 inch²)

The heating element temperature is 220° C ± 10° C / 428° F ± 18° F.

The change-over time should be kept as low as possible.

The joining pressure build-up time should be recognized as maximum value and may be underrun by up to 50%.

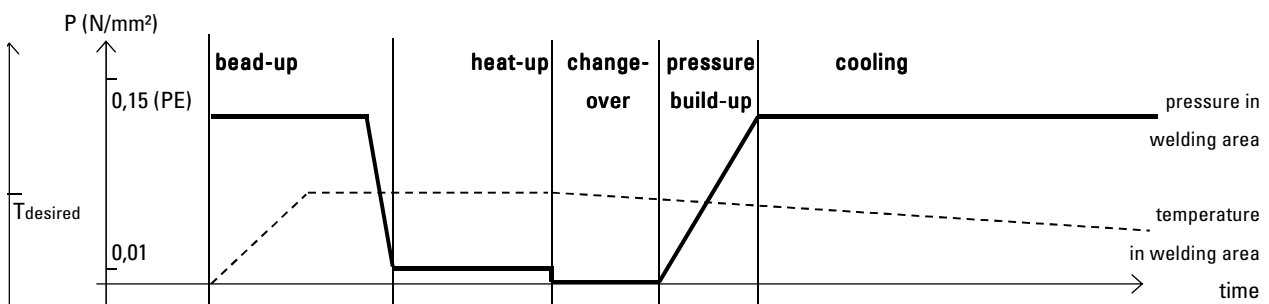
You must add the motion pressure of the welding machine to the indicated bead-up and cooling pressure in each case!

The maximum pressure of the welding machine is to be observed.

1 These cooling times are only valid under the following conditions:

- Welding connection is produced under workshop conditions
- Removal from the welding machine and temporary storage until complete cooling time elapses only cause minor strain for the welding connection

All information without guarantee



pipe wall (s)	SDR degree	bead-up pressure	circular bead height min.	heat-up time	max. change-over time	pressure build-up time	welding pressure	cooling time for ambient temperature			special cooling time 1
								< 15°C < 59°F	15-25°C 59-77°F	> 25°C > 77°F	
[mm]		[bar]	[mm]	[min:s]	[s]	[s]	[bar]	[min:s]	[min:s]	[min:s]	[min:s]
DA 315											
7,7	41	31	1,5	01:17	6	6	31	06:29	08:08	10:20	05:25
9,7	33	39	1,5	01:37	7	7	39	07:53	09:56	12:44	06:37
12,1	26	48	2	02:01	8	8	48	09:34	12:05	15:37	08:03
15,0	21	59	2	02:30	9	9	59	11:26	14:34	19:09	09:43
17,9	17,6	70	2	02:59	10	11	70	13:18	17:03	22:40	11:22
18,7	17	73	2	03:07	10	11	73	13:48	17:45	23:38	11:50
23,2	13,6	89	2,5	03:52	11	13	89	17:00	21:36	28:48	14:24
28,6	11	108	3	04:46	13	15	108	20:53	26:22	35:04	17:39
35,2	9	129	3	05:52	15	18	129	25:41	32:22	42:52	21:51
43,1	7,4	154	3,5	07:11	18	22	154	31:13	39:38	52:30	26:45
DA 355											
8,7	41	40	1,5	01:27	7	7	40	07:11	09:02	11:32	06:01
10,9	33	50	1,5	01:49	8	8	50	08:44	11:01	14:11	07:20
13,6	26	61	2	02:16	8	9	61	10:32	13:22	17:27	08:55
16,9	21	75	2	02:49	9	10	75	12:39	16:12	21:27	10:48
20,1	17,6	89	2,5	03:21	10	11	89	14:47	18:57	25:15	12:38
21,1	17	93	2,5	03:31	11	12	93	15:30	19:48	26:24	13:12
26,1	13,6	113	3	04:21	12	14	113	19:04	24:05	32:07	16:04
32,2	11	137	3	05:22	14	17	137	23:31	29:38	39:20	19:57
39,7	9	164	3,5	06:37	17	20	164	28:52	36:30	48:19	24:40
48,5	7,4	195	3,5	08:05	20	24	195	34:58	44:37	59:09	30:05

Table for PE



Basis: DVS data sheets 2207, 2208 - State 2016

Field of application: **4000 / 4001 / 4002 (with 2. cylinder)**

1 bar on pressure gauge: **36** N (Effective surface of cylinder: 362 mm² / 0,56 inch²)

The heating element temperature is 220° C ± 10° C / 428° F ± 18° F.

The change-over time should be kept as low as possible.

The joining pressure build-up time should be recognized as maximum value and may be overrun by up to 50%.

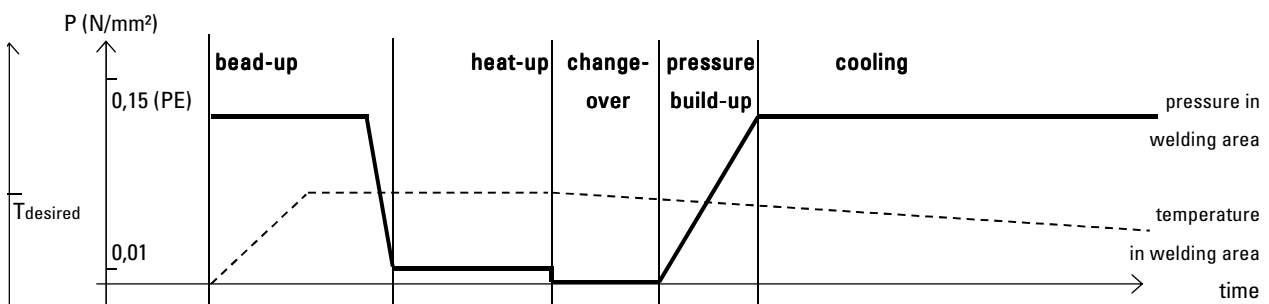
You must add the motion pressure of the welding machine to the indicated bead-up and cooling pressure in each case!

The maximum pressure of the welding machine is to be observed.

1 These cooling times are only valid under the following conditions:

- Welding connection is produced under workshop conditions
- Removal from the welding machine and temporary storage until complete cooling time elapses only cause minor strain for the welding connection

All information without guarantee



pipe wall (s)	SDR degree	bead-up pressure	circular bead height min.	heat-up time	max. change-over time	pressure build-up time	welding pressure	cooling time for ambient temperature			special cooling time 1
								< 15°C < 59°F	15-25°C 59-77°F	> 25°C > 77°F	
[mm]		[bar]	[mm]	[min:s]	[s]	[s]	[bar]	[min:s]	[min:s]	[min:s]	[min:s]
DA 400											
9,8	41	51	1,5	01:38	7	7	51	07:58	10:01	12:52	06:41
12,3	33	63	2	02:03	8	8	63	09:42	12:15	15:52	08:10
15,3	26	78	2	02:33	9	9	78	11:37	14:50	19:30	09:53
19,1	21	96	2,5	03:11	10	11	96	14:04	18:05	24:07	12:03
22,7	17,6	113	2,5	03:47	11	13	113	16:39	21:10	28:14	14:07
23,7	17	117	2,5	03:57	11	13	117	17:21	22:02	29:22	14:41
29,4	13,6	143	3	04:54	13	16	143	21:28	27:05	36:01	18:10
36,3	11	173	3	06:03	16	19	173	26:29	33:22	44:10	22:33
44,7	9	208	3,5	07:27	18	23	208	32:20	41:06	54:29	27:44
54,7	7,4	248	4	09:07	21	27	248	39:17	50:14	66:38	33:49
DA 450											
11,0	41	64	1,5	01:50	8	8	64	08:48	11:06	14:18	07:24
13,8	33	79	2	02:18	9	9	79	10:39	13:33	17:41	09:02
17,2	26	98	2	02:52	9	10	98	12:51	16:27	21:49	10:58
21,5	21	121	2,5	03:35	11	12	121	15:47	20:09	26:51	13:26
25,5	17,6	142	2,5	04:15	12	14	142	18:39	23:34	31:26	15:43
26,7	17	148	3	04:27	12	14	148	19:31	24:38	32:50	16:27
33,1	13,6	181	3	05:31	15	17	181	24:10	30:27	40:23	20:31
40,9	11	220	3,5	06:49	17	21	220	29:42	37:36	49:48	25:24
50,3	9	264	4	08:23	20	25	264	36:13	46:16	61:22	31:11
61,5	7,4	313	4	10:15	23	31	313	44:03	56:21	74:48	37:54