

Field 10 (Butt) Welding Parameters

CURRENT AS OF
04/05/2023

Product Line & Material	Pipe Size	Initial Melt Pressure	Bead Height	Melt Pressure	Heatsoak Time	Changeover Time	Welding Pressure	Cooling Time
Air-Pro® (PE)	3" (90mm) SDR7	9.0 bar	2 mm	Almost Zero	123 seconds	8 seconds	9.0 bar	12.3 min
Air-Pro® (PE)	4" (110mm) SDR7	13.0 bar	2 mm	Almost Zero	151 seconds	9 seconds	13.0 bar	14.7 min
Air-Pro® (PE)	6" (160mm) SDR11	20.0 bar	2 mm	Almost Zero	146 seconds	9 seconds	20.0 bar	14.2 min
Air-Pro® (PE)	8" (200mm) SDR11	30.0 bar	2 mm	Almost Zero	182 seconds	10 seconds	30.0 bar	17.3 min
Air-Pro® (PE)	10" (250mm) SDR11	47.0 bar	2.5 mm	Almost Zero	227 seconds	11 seconds	47.0 bar	21.2 min
Asahitec™ Solid Wall (PP-RCT)	2-1/2" (75mm) SDR11	3.0 bar	0.5 mm	Almost Zero	79 seconds	6 seconds	3.0 bar	7.3 min
Asahitec™ Solid Wall (PP-RCT)	3" (90mm) SDR11	5.0 bar	1 mm	Almost Zero	94 seconds	6 seconds	5.0 bar	8.6 min
Asahitec™ Solid Wall (PP-RCT)	4" (110mm) SDR11	7.0 bar	1 mm	Almost Zero	113 seconds	7 seconds	7.0 bar	10.2 min
Asahitec™ Solid Wall (PP-RCT)	5" (125mm) SDR11	8.0 bar	1 mm	Almost Zero	129 seconds	7 seconds	8.0 bar	11.5 min
Asahitec™ Solid Wall (PP-RCT)	6" (160mm) SDR11	13.0 bar	1 mm	Almost Zero	161 seconds	8 seconds	13.0 bar	14.2 min
Asahitec™ Solid Wall (PP-RCT)	8" (200mm) SDR11	20.0 bar	1 mm	Almost Zero	198 seconds	9 seconds	20.0 bar	17.3 min
Asahitec™ Solid Wall (PP-RCT)	10" (250mm) SDR11	32.0 bar	1.5 mm	Almost Zero	240 seconds	10 seconds	32.0 bar	21.2 min
Asahitec™ Solid Wall (PP-RCT)	2-1/2" (75mm) SDR7	5.0 bar	1 mm	Almost Zero	117 seconds	7 seconds	5.0 bar	10.5 min



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Welding Temperatures

PP: 393°F - 410°F (200°C - 210°C)
 PE: 420°F - 446°F (215°C - 230°C)
 PVDF: 436°F - 446°F (225°C - 230°C)
 ECTFE: 527°F - 536°F (275°C - 280°C)

A reduction in the cooling time of up to 50%, i.e. removal of the welded part from the welding machine, is permitted in the following circumstances:

- the joint connection was created under workshop conditions and
- the removal of the part from the welding machine and its temporary storage until the complete cooling time according to the Cooling Time column causes negligible loading of the joint

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Asahitec™ Solid Wall (PP-RCT)	3" (90mm) SDR7	6.0 bar	1 mm	Almost Zero	138 seconds	7 seconds	6.0 bar	12.3 min
Asahitec™ Solid Wall (PP-RCT)	4" (110mm) SDR7	9.0 bar	1 mm	Almost Zero	166 seconds	8 seconds	9.0 bar	14.7 min
Asahitec™ Solid Wall (PP-RCT)	5" (125mm) SDR7	12.0 bar	1 mm	Almost Zero	187 seconds	8 seconds	12.0 bar	16.4 min
Chem Proline® (PE)	3" (90mm) SDR11	7.0 bar	1.5 mm	Almost Zero	82 seconds	6 seconds	7.0 bar	8.6 min
Chem Proline® (PE)	4" (110mm) SDR11	10.0 bar	1.5 mm	Almost Zero	100 seconds	7 seconds	10.0 bar	10.2 min
Chem Proline® (PE)	6" (160mm) SDR11	20.0 bar	2 mm	Almost Zero	146 seconds	9 seconds	20.0 bar	14.2 min
Chem Proline® (PE)	8" (200mm) SDR11	30.0 bar	2 mm	Almost Zero	182 seconds	10 seconds	30.0 bar	17.3 min
Chem Proline® (PE)	10" (250mm) SDR11	47.0 bar	2.5 mm	Almost Zero	227 seconds	11 seconds	47.0 bar	21.2 min
Climatec™ (PP-RCT)	2-1/2" (75mm) SDR11	3.0 bar	0.5 mm	Almost Zero	79 seconds	6 seconds	3.0 bar	7.3 min
Climatec™ (PP-RCT)	3" (90mm) SDR11	5.0 bar	1 mm	Almost Zero	94 seconds	6 seconds	5.0 bar	8.6 min
Climatec™ (PP-RCT)	4" (110mm) SDR11	7.0 bar	1 mm	Almost Zero	113 seconds	7 seconds	7.0 bar	10.2 min
Climatec™ (PP-RCT)	5" (125mm) SDR11	8.0 bar	1 mm	Almost Zero	129 seconds	7 seconds	8.0 bar	11.5 min
Climatec™ (PP-RCT)	6" (160mm) SDR17	9.0 bar	1 mm	Almost Zero	108 seconds	6 seconds	9.0 bar	9.8 min



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Climatec™ (PP-RCT)	8" (200mm) SDR17	14.0 bar	1 mm	Almost Zero	134 seconds	7 seconds	14.0 bar	11.9 min
Climatec™ (PP-RCT)	10" (250mm) SDR17	22.0 bar	1 mm	Almost Zero	163 seconds	8 seconds	22.0 bar	14.4 min
Proline® PRO150 (PP)	2-1/2" (75mm) SDR11	3.0 bar	0.5 mm	Almost Zero	79 seconds	6 seconds	3.0 bar	7.3 min
Proline® PRO150 (PP)	3" (90mm) SDR11	5.0 bar	1 mm	Almost Zero	94 seconds	6 seconds	5.0 bar	8.6 min
Proline® PRO150 (PP)	4" (110mm) SDR11	7.0 bar	1 mm	Almost Zero	113 seconds	7 seconds	7.0 bar	10.2 min
Proline® PRO150 (PP)	4-1/2" (125mm) SDR11	8.0 bar	1 mm	Almost Zero	129 seconds	7 seconds	8.0 bar	11.5 min
Proline® PRO150 (PP)	5" (140mm) SDR11	10.0 bar	1 mm	Almost Zero	142 seconds	7 seconds	10.0 bar	12.6 min
Proline® PRO150 (PP)	6" (160mm) SDR11	13.0 bar	1 mm	Almost Zero	161 seconds	8 seconds	13.0 bar	14.2 min
Proline® PRO150 (PP)	7" (180mm) SDR11	17.0 bar	1 mm	Almost Zero	180 seconds	8 seconds	17.0 bar	15.8 min
Proline® PRO150 (PP)	8" (200mm) SDR11	20.0 bar	1 mm	Almost Zero	198 seconds	9 seconds	20.0 bar	17.3 min
Proline® PRO150 (PP)	9" (225mm) SDR11	26.0 bar	1.5 mm	Almost Zero	220 seconds	9 seconds	26.0 bar	19.3 min
Proline® PRO150 (PP)	10" (250mm) SDR11	32.0 bar	1.5 mm	Almost Zero	240 seconds	10 seconds	32.0 bar	21.2 min
Proline® PRO90 (PP)	2-1/2" (75mm) SDR17.6	2.0 bar	0.5 mm	Almost Zero	51 seconds	5 seconds	2.0 bar	5.0 min



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Proline® PRO90 (PP)	3" (90mm) SDR17.6	3.0 bar	0.5 mm	Almost Zero	60 seconds	5 seconds	3.0 bar	5.4 min
Proline® PRO90 (PP)	4" (110mm) SDR17.6	4.0 bar	0.5 mm	Almost Zero	73 seconds	6 seconds	4.0 bar	6.5 min
Proline® PRO90 (PP)	4-1/2" (125mm) SDR17.6	6.0 bar	1 mm	Almost Zero	82 seconds	6 seconds	6.0 bar	7.4 min
Proline® PRO90 (PP)	5" (140mm) SDR17.6	7.0 bar	1 mm	Almost Zero	92 seconds	6 seconds	7.0 bar	8.2 min
Proline® PRO90 (PP)	6" (160mm) SDR17.6	9.0 bar	1 mm	Almost Zero	104 seconds	6 seconds	9.0 bar	9.2 min
Proline® PRO90 (PP)	7" (180mm) SDR17.6	11.0 bar	1 mm	Almost Zero	116 seconds	7 seconds	11.0 bar	10.2 min
Proline® PRO90 (PP)	8" (200mm) SDR17.6	13.0 bar	1 mm	Almost Zero	129 seconds	7 seconds	13.0 bar	11.3 min
Proline® PRO90 (PP)	9" (225mm) SDR17.6	17.0 bar	1 mm	Almost Zero	143 seconds	7 seconds	17.0 bar	12.4 min
Proline® PRO90 (PP)	10" (250mm) SDR17.6	21.0 bar	1 mm	Almost Zero	157 seconds	8 seconds	21.0 bar	13.5 min
Proline® PRO45 (PP)	4" (110mm) SDR33	3.0 bar	0.5 mm	Almost Zero	40 seconds	5 seconds	3.0 bar	5.0 min
Proline® PRO45 (PP)	4-1/2" (125mm) SDR33	3.0 bar	0.5 mm	Almost Zero	46 seconds	5 seconds	3.0 bar	5.0 min
Proline® PRO45 (PP)	5" (140mm) SDR33	4.0 bar	0.5 mm	Almost Zero	51 seconds	5 seconds	4.0 bar	5.0 min
Proline® PRO45 (PP)	6" (160mm) SDR33	5.0 bar	0.5 mm	Almost Zero	57 seconds	5 seconds	5.0 bar	5.4 min



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Proline® PRO45 (PP)	7" (180mm) SDR33	6.0 bar	0.5 mm	Almost Zero	64 seconds	5 seconds	6.0 bar	6.0 min
Proline® PRO45 (PP)	8" (200mm) SDR33	8.0 bar	0.5 mm	Almost Zero	72 seconds	6 seconds	8.0 bar	6.7 min
Proline® PRO45 (PP)	9" (225mm) SDR33	10.0 bar	0.5 mm	Almost Zero	80 seconds	6 seconds	10.0 bar	7.4 min
Proline® PRO45 (PP)	10" (250mm) SDR33	12.0 bar	1 mm	Almost Zero	89 seconds	6 seconds	12.0 bar	8.1 min
Super Proline® (PVDF)	2-1/2" (75mm) SDR21	2.0 bar	0.5 mm	Almost Zero	76 seconds	3 seconds	2.0 bar	6.5 min
Super Proline® (PVDF)	3" (90mm) SDR21	3.0 bar	0.5 mm	Almost Zero	83 seconds	3 seconds	3.0 bar	7.0 min
Super Proline® (PVDF)	4" (110mm) SDR21	4.0 bar	0.5 mm	Almost Zero	93 seconds	3 seconds	4.0 bar	8.5 min
Super Proline® (PVDF)	6" (160mm) SDR21	8.0 bar	0.7 mm	Almost Zero	117 seconds	4 seconds	8.0 bar	11.0 min
Super Proline® (PVDF)	8" (200mm) SDR21	12.0 bar	1 mm	Almost Zero	136 seconds	4 seconds	12.0 bar	13.5 min
Super Proline® (PVDF)	10" (250mm) SDR21	18.0 bar	1.1 mm	Almost Zero	159 seconds	4 seconds	18.0 bar	16.5 min
Super Proline® (PVDF)	2-1/2" (75mm) SDR33	2.0 bar	0.5 mm	Almost Zero	63 seconds	3 seconds	2.0 bar	5.0 min
Super Proline® (PVDF)	3" (90mm) SDR33	2.0 bar	0.5 mm	Almost Zero	68 seconds	3 seconds	2.0 bar	5.5 min
Super Proline® (PVDF)	4" (110mm) SDR33	3.0 bar	0.5 mm	Almost Zero	74 seconds	3 seconds	3.0 bar	6.0 min



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Super Proline® (PVDF)	6" (160mm) SDR33	5.0 bar	0.5 mm	Almost Zero	89 seconds	3 seconds	5.0 bar	8.0 min
Super Proline® (PVDF)	8" (200mm) SDR33	8.0 bar	0.6 mm	Almost Zero	102 seconds	4 seconds	8.0 bar	9.5 min
Super Proline® (PVDF)	10" (250mm) SDR33	12.0 bar	0.7 mm	Almost Zero	117 seconds	4 seconds	12.0 bar	11.0 min
Watertec™ (PP-RCT)	2-1/2" (75mm) SDR7	5.0 bar	1 mm	Almost Zero	117 seconds	7 seconds	5.0 bar	10.5 min
Watertec™ (PP-RCT)	3" (90mm) SDR9	5.0 bar	1 mm	Almost Zero	114 seconds	7 seconds	5.0 bar	10.3 min
Watertec™ (PP-RCT)	4" (110mm) SDR9	8.0 bar	1 mm	Almost Zero	138 seconds	7 seconds	8.0 bar	12.3 min
Watertec™ (PP-RCT)	5" (125mm) SDR9	10.0 bar	1 mm	Almost Zero	155 seconds	8 seconds	10.0 bar	13.7 min
Watertec™ (PP-RCT)	6" (160mm) SDR11	13.0 bar	1 mm	Almost Zero	161 seconds	8 seconds	13.0 bar	14.2 min
Watertec™ (PP-RCT)	8" (200mm) SDR11	20.0 bar	1 mm	Almost Zero	198 seconds	9 seconds	20.0 bar	17.3 min
Watertec™ (PP-RCT)	10" (250mm) SDR11	32.0 bar	1.5 mm	Almost Zero	240 seconds	10 seconds	32.0 bar	21.2 min
Duo-Pro® PRO150X150 (PP)	3" X 6" (90mm X 160mm) SDR11X11	18.0 bar	1 mm	Almost Zero	161 seconds	8 seconds	18.0 bar	14.2 min
Duo-Pro® PRO150X150 (PP)	4" X 8" (110mm X 200mm) SDR11X11	27.0 bar	1 mm	Almost Zero	198 seconds	9 seconds	27.0 bar	17.3 min
Duo-Pro® PRO150X150 (PP)	6" X 10" (160mm X 250mm) SDR11X11	45.0 bar	1.5 mm	Almost Zero	240 seconds	10 seconds	45.0 bar	21.2 min



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Duo-Pro® PRO150X150 (PP)	2" X 6" (63mm X 160mm) SDR11X11	15.4 bar	1 mm	Almost Zero	161 seconds	8 seconds	15.4 bar	14.2 min
Duo-Pro® PRO150X45 (PP)	3" X 6" (90mm X 160mm) SDR11X33	10.0 bar	0.5 mm	Almost Zero	57 seconds	6 seconds	10.0 bar	8.6 min
Duo-Pro® PRO150X45 (PP)	4" X 8" (110mm X 200mm) SDR11X33	15.0 bar	0.5 mm	Almost Zero	72 seconds	7 seconds	15.0 bar	10.2 min
Duo-Pro® PRO150X45 (PP)	6" X 10" (160mm X 250mm) SDR11X33	25.0 bar	1 mm	Almost Zero	89 seconds	8 seconds	25.0 bar	14.2 min
Duo-Pro® PRO150X45 (PP)	2" X 6" (63mm X 160mm) SDR11X33	7.4 bar	0.5 mm	Almost Zero	57 seconds	6 seconds	7.4 bar	6.3 min
Duo-Pro® PRO45X45 (PP)	4" X 8" (110mm X 200mm) SDR33X33	11.0 bar	0.5 mm	Almost Zero	72 seconds	6 seconds	11.0 bar	6.7 min
Duo-Pro® PRO45X45 (PP)	6" X 10" (160mm X 250mm) SDR33X33	17.0 bar	1 mm	Almost Zero	89 seconds	6 seconds	17.0 bar	6.7 min
Duo-Pro® PVDFXPVDF (PVDF)	2" X 4" (63mm X 110mm) SDR21X33	4.1 bar	0.5 mm	Almost Zero	74 seconds	3 seconds	4.1 bar	6.0 min
Duo-Pro® PVDFXPVDF (PVDF)	3" X 6" (90mm X 160mm) SDR33X33	7.0 bar	0.5 mm	Almost Zero	89 seconds	3 seconds	7.0 bar	8.0 min
Duo-Pro® PVDFXPVDF (PVDF)	4" X 8" (110mm X 200mm) SDR33X33	11.0 bar	0.6 mm	Almost Zero	102 seconds	4 seconds	11.0 bar	9.5 min
Duo-Pro® PVDFXPVDF (PVDF)	6" X 10" (160mm X 250mm) SDR33X33	17.0 bar	0.7 mm	Almost Zero	117 seconds	4 seconds	17.0 bar	11.0 min
Duo-Pro® PVDFXPVDF (PVDF)	2" X 6" (63mm X 160mm) SDR21X33	6.4 bar	0.5 mm	Almost Zero	89 seconds	3 seconds	6.4 bar	8.0 min
Fluidlok (IPS) (PE)	3" X 6" SDR11X17	13.6 bar	mm	Almost Zero	65 seconds	5 seconds	13.6 bar	10.0 min



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Fluidlok (IPS) (PE)	4" X 8" SDR11X17	23.8 bar	mm	Almost Zero	86 seconds	5 seconds	23.8 bar	12.0 min
Fluidlok (IPS) (PE)	6" X 10" SDR11X17	39.7 bar	mm	Almost Zero	105 seconds	6 seconds	39.7 bar	14.0 min
Poly-Flo® PE100RC (PE)	2" X 3" (63mm X 90mm) SDR11X17	5.6 bar	1 mm	Almost Zero	35 seconds	5 seconds	5.6 bar	8.0 min
Poly-Flo® PE100RC (PE)	4" X 6" (110mm X 160mm) SDR11X17	19.1 bar	1.5 mm	Almost Zero	80 seconds	7 seconds	19.1 bar	14.0 min
Poly-Flo® PPR (PP)	2" X 3" (63mm X 90mm) SDR11X17	5.1 bar	0.5 mm	Almost Zero	80 seconds	6 seconds	5.1 bar	9.0 min
Poly-Flo® PPR (PP)	4" X 6" (110mm X 160mm) SDR11X17	15.8 bar	1 mm	Almost Zero	150 seconds	7 seconds	15.8 bar	17.0 min



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- the removal of the part from the welding machine and its temporary storage until the complete cooling time according to the Cooling Time column causes negligible loading of the joint