

Acrobat 250 Welding Parameters

CURRENT AS OF
09/01/2023

Product Line & Material	Pipe Size	Initial Melt Pressure (psi)	Bead Height	Melt Pressure	Heatsoak Time	Changeover Time	Welding Pressure (psi)	Cooling Time
Air-Pro® (PE)	2" (63mm) SDR7	61	2 mm	Almost Zero	86 seconds	7 seconds	61	8.9 min
Air-Pro® (PE)	3" (90mm) SDR7	115	2 mm	Almost Zero	123 seconds	8 seconds	115	12.3 min
Air-Pro® (PE)	4" (110mm) SDR7	166	2 mm	Almost Zero	151 seconds	9 seconds	166	14.7 min
Air-Pro® (PE)	6" (160mm) SDR11	255	2 mm	Almost Zero	146 seconds	9 seconds	255	14.2 min
Air-Pro® (PE)	8" (200mm) SDR11	382	2 mm	Almost Zero	182 seconds	10 seconds	382	17.3 min
Air-Pro® (PE)	10" (250mm) SDR11	598	2.5 mm	Almost Zero	227 seconds	11 seconds	598	21.2 min
Asahitec™ Solid Wall (PP-RCT)	2" (63mm) SDR11	30	0.5 mm	Almost Zero	79 seconds	6 seconds	30	6.3 min
Asahitec™ Solid Wall (PP-RCT)	2-1/2" (75mm) SDR11	38	0.5 mm	Almost Zero	79 seconds	6 seconds	38	7.3 min
Asahitec™ Solid Wall (PP-RCT)	4" (110mm) SDR11	64	1 mm	Almost Zero	113 seconds	7 seconds	64	10.2 min
Asahitec™ Solid Wall (PP-RCT)	5" (125mm) SDR11	89	1 mm	Almost Zero	129 seconds	7 seconds	89	11.5 min
Asahitec™ Solid Wall (PP-RCT)	8" (200mm) SDR11	102	1 mm	Almost Zero	198 seconds	9 seconds	102	17.3 min
Asahitec™ Solid Wall (PP-RCT)	10" (250mm) SDR11	166	1.5 mm	Almost Zero	240 seconds	10 seconds	166	21.2 min



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)	2" (63mm) SDR7	43	1 mm	Almost Zero	98 seconds	6 seconds	407	8.9 min
Asahitec™ Solid Wall (PP-RCT)	2-1/2" (75mm) SDR7	64	1 mm	Almost Zero	117 seconds	7 seconds	5.0 bar	10.5 min
Asahitec™ Solid Wall (PP-RCT)	3" (90mm) SDR7	76	1 mm	Almost Zero	117 seconds	7 seconds	76	12.3 min
Asahitec™ Solid Wall (PP-RCT)	4" (110mm) SDR7	115	1 mm	Almost Zero	166 seconds	8 seconds	115	14.7 min
Asahitec™ Solid Wall (PP-RCT)	5" (125mm) SDR7	153	1 mm	Almost Zero	187 seconds	8 seconds	153	16.4 min
Chem Proline® (PE)	2" (63mm) SDR11	43	1.5 mm	Almost Zero	58 seconds	6 seconds	43	6.3 min
Chem Proline® (PE)	3" (90mm) SDR11	89	1.5 mm	Almost Zero	82 seconds	6 seconds	89	8.6 min
Chem Proline® (PE)	4" (110mm) SDR11	127	1.5 mm	Almost Zero	100 seconds	7 seconds	127	10.2 min
Chem Proline® (PE)	6" (160mm) SDR11	255	2 mm	Almost Zero	146 seconds	9 seconds	255	14.2 min
Chem Proline® (PE)	8" (200mm) SDR11	382	2 mm	Almost Zero	182 seconds	10 seconds	382	17.3 min
Chem Proline® (PE)	10" (250mm) SDR11	598	2 mm	Almost Zero	227 seconds	11 seconds	598	21.2 min
Climatec™ (PP-RCT)	2" (63mm) SDR11	30	0.5 mm	Almost Zero	68 seconds	6 seconds	30	6.3 min



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:

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Climatec™ (PP-RCT)	2-1/2" (75mm) SDR11	38	0.5 mm	Almost Zero	79 seconds	6 seconds	38	7.3 min
Climatec™ (PP-RCT)	3" (90mm) SDR11	64	1 mm	Almost Zero	94 seconds	6 seconds	64	8.6 min
Climatec™ (PP-RCT)	4" (110mm) SDR11	89	1 mm	Almost Zero	113 seconds	7 seconds	89	10.2 min
Climatec™ (PP-RCT)	5" (125mm) SDR11	102	1 mm	Almost Zero	129 seconds	7 seconds	102	11.5 min
Climatec™ (PP-RCT)	6" (160mm) SDR17	166	1 mm	Almost Zero	161 seconds	8 seconds	166	14.2 min
Climatec™ (PP-RCT)	8" (200mm) SDR11	255	1 mm	Almost Zero	198 seconds	9 seconds	255	17.3 min
Climatec™ (PP-RCT)	10" (250mm) SDR11	407	1.5 mm	Almost Zero	240 seconds	10 seconds	407	21.2 min
Proline® PRO150 (PP)	3" (90mm) SDR11	64	1 mm	Almost Zero	94 seconds	6 seconds	64	8.6 min
Proline® PRO150 (PP)	4" (110mm) SDR11	89	1 mm	Almost Zero	113 seconds	7 seconds	89	10.2 min
Proline® PRO150 (PP)	6" (160mm) SDR11	166	1 mm	Almost Zero	161 seconds	8 seconds	166	14.2 min
Proline® PRO150 (PP)	7" (180mm) SDR11	216	1 mm	Almost Zero	180 seconds	8 seconds	216	15.8 min
Proline® PRO150 (PP)	8" (200mm) SDR11	255	1 mm	Almost Zero	198 seconds	9 seconds	255	17.3 min



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

Acrobat 250 Welding Parameters

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Product Line & Material	Pipe Size	Initial Melt Pressure (psi)	Bead Height	Melt Pressure	Heatsoak Time	Changeover Time	Welding Pressure (psi)	Cooling Time
Proline® PRO150 (PP)	9" (225mm) SDR11	331	1.5 mm	Almost Zero	220 seconds	9 seconds	331	19.3 min
Proline® PRO150 (PP)	10" (250mm) SDR11	407	1.5 mm	Almost Zero	240 seconds	10 seconds	407	21.2 min
Proline® PRO90 (PP)	2-1/2" (75mm) SDR17.6	25	0.5 mm	Almost Zero	51 seconds	5 seconds	25	5.0 min
Proline® PRO90 (PP)	3" (90mm) SDR17.6	38	0.5 mm	Almost Zero	60 seconds	5 seconds	38	5.4 min
Proline® PRO90 (PP)	4" (110mm) SDR17.6	51	0.5 mm	Almost Zero	73 seconds	6 seconds	51	6.5 min
Proline® PRO90 (PP)	4-1/2" (125mm) SDR17.6	76	1 mm	Almost Zero	82 seconds	6 seconds	76	7.4 min
Proline® PRO90 (PP)	5" (140mm) SDR17.6	89	1 mm	Almost Zero	92 seconds	6 seconds	89	8.2 min
Proline® PRO90 (PP)	6" (160mm) SDR17.6	115	1 mm	Almost Zero	104 seconds	6 seconds	115	9.2 min
Proline® PRO90 (PP)	7" (180mm) SDR17.6	140	1 mm	Almost Zero	116 seconds	7 seconds	140	10.2 min
Proline® PRO90 (PP)	8" (200mm) SDR17.6	166	1 mm	Almost Zero	129 seconds	7 seconds	166	11.3 min
Proline® PRO90 (PP)	9" (225mm) SDR17.6	216	1 mm	Almost Zero	143 seconds	7 seconds	216	12.4 min
Proline® PRO90 (PP)	10" (250mm) SDR17.6	267	1 mm	Almost Zero	157 seconds	8 seconds	267	13.5 min



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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Product Line & Material	Pipe Size	Initial Melt Pressure (psi)	Bead Height	Melt Pressure	Heatsoak Time	Changeover Time	Welding Pressure (psi)	Cooling Time
Proline® PRO45 (PP)	4" (110mm) SDR33	38	0.5 mm	Almost Zero	40 seconds	5 seconds	38	5.0 min
Proline® PRO45 (PP)	4-1/2" (125mm) SDR33	38	0.5 mm	Almost Zero	46 seconds	5 seconds	38	5.0 min
Proline® PRO45 (PP)	5" (140mm) SDR33	51	0.5 mm	Almost Zero	51 seconds	5 seconds	51	5.0 min
Proline® PRO45 (PP)	6" (160mm) SDR33	64	0.5 mm	Almost Zero	57 seconds	5 seconds	64	5.4 min
Proline® PRO45 (PP)	7" (180mm) SDR33	76	0.5 mm	Almost Zero	64 seconds	5 seconds	76	6.0 min
Proline® PRO45 (PP)	8" (200mm) SDR33	102	0.5 mm	Almost Zero	72 seconds	6 seconds	102	6.7 min
Proline® PRO45 (PP)	9" (225mm) SDR33	127	0.5 mm	Almost Zero	80 seconds	6 seconds	127	7.4 min
Proline® PRO45 (PP)	10" (250mm) SDR33	153	1 mm	Almost Zero	89 seconds	6 seconds	153	8.1 min
Super Proline® (PVDF)	2-1/2" (75mm) SDR21	25	0.5 mm	Almost Zero	76 seconds	3 seconds	25	6.5 min
Super Proline® (PVDF)	3" (90mm) SDR21	38	0.5 mm	Almost Zero	83 seconds	3 seconds	38	7.0 min
Super Proline® (PVDF)	4" (110mm) SDR21	51	0.5 mm	Almost Zero	93 seconds	3 seconds	51	8.5 min
Super Proline® (PVDF)	6" (160mm) SDR21	102	0.7 mm	Almost Zero	117 seconds	4 seconds	102	11.0 min



Welding Temperatures

PP: 393°F - 410°F (200°C - 210°C)
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 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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Product Line & Material	Pipe Size	Initial Melt Pressure (psi)	Bead Height	Melt Pressure	Heatsoak Time	Changeover Time	Welding Pressure (psi)	Cooling Time
Super Proline® (PVDF)	8" (200mm) SDR21	153	1 mm	Almost Zero	136 seconds	4 seconds	153	13.5 min
Super Proline® (PVDF)	10" (250mm) SDR21	229	1.1 mm	Almost Zero	159 seconds	4 seconds	229	16.5 min
Super Proline® (PVDF)	2-1/2" (75mm) SDR33	25	0.5 mm	Almost Zero	63 seconds	3 seconds	25	5.0 min
Super Proline® (PVDF)	3" (90mm) SDR33	25	0.5 mm	Almost Zero	68 seconds	3 seconds	25	5.5 min
Super Proline® (PVDF)	4" (110mm) SDR33	38	0.5 mm	Almost Zero	74 seconds	3 seconds	38	6.0 min
Super Proline® (PVDF)	6" (160mm) SDR33	64	0.5 mm	Almost Zero	89 seconds	3 seconds	64	8.0 min
Super Proline® (PVDF)	8" (200mm) SDR33	102	0.6 mm	Almost Zero	102 seconds	4 seconds	102	9.5 min
Super Proline® (PVDF)	10" (250mm) SDR33	153	0.7 mm	Almost Zero	117 seconds	4 seconds	153	11.0 min
Watertec™ (PP-RCT)	2-1/2" (75mm) SDR7	64	1 mm	Almost Zero	117 seconds	7 seconds	64	10.5 min
Watertec™ (PP-RCT)	3" (90mm) SDR9	64	1 mm	Almost Zero	114 seconds	7 seconds	64	10.3 min
Watertec™ (PP-RCT)	4" (110mm) SDR9	102	1 mm	Almost Zero	138 seconds	7 seconds	102	12.3 min
Watertec™ (PP-RCT)	5" (125mm) SDR9	127	1 mm	Almost Zero	155 seconds	8 seconds	127	13.7 min



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:
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Acrobat 250 Welding Parameters

CURRENT AS OF
09/01/2023

Product Line & Material	Pipe Size	Initial Melt Pressure (psi)	Bead Height	Melt Pressure	Heatsoak Time	Changeover Time	Welding Pressure (psi)	Cooling Time
Watertec™ (PP-RCT)	6" (160mm) SDR11	166	1 mm	Almost Zero	161 seconds	8 seconds	166	14.2 min
Watertec™ (PP-RCT)	8" (200mm) SDR11	255	1 mm	Almost Zero	198 seconds	9 seconds	255	17.3 min
Watertec™ (PP-RCT)	10" (250mm) SDR11	407	1.5 mm	Almost Zero	240 seconds	10 seconds	407	21.2 min
Duo-Pro® PRO150X150 (PP)	3" X 6" (90mm X 160mm) SDR11X11	229	1 mm	Almost Zero	161 seconds	8 seconds	229	14.2 min
Duo-Pro® PRO150X150 (PP)	4" X 8" (110mm X 200mm) SDR11X11	344	1 mm	Almost Zero	198 seconds	9 seconds	344	17.3 min
Duo-Pro® PRO150X150 (PP)	6" X 10" (160mm X 250mm) SDR11X11	573	1.5 mm	Almost Zero	240 seconds	10 seconds	573	21.2 min
Duo-Pro® PRO150X150 (PP)	2" X 6" (63mm X 160mm) SDR11X11	196	1 mm	Almost Zero	161 seconds	8 seconds	196	14.2 min
Duo-Pro® PRO150X45 (PP)	3" X 6" (90mm X 160mm) SDR11X33	127	0.5 mm	Almost Zero	94 seconds	6 seconds	127	8.6 min
Duo-Pro® PRO150X45 (PP)	4" X 8" (110mm X 200mm) SDR11X33	191	0.5 mm	Almost Zero	113 seconds	7 seconds	191	10.2 min
Duo-Pro® PRO150X45 (PP)	6" X 10" (160mm X 250mm) SDR11X33	318	1 mm	Almost Zero	161 seconds	8 seconds	318	14.2 min
Duo-Pro® PRO150X45 (PP)	2" X 6" (63mm X 160mm) SDR11X33	94	0.5 mm	Almost Zero	68 seconds	6 seconds	94	6.3 min
Duo-Pro® PRO45X45 (PP)	4" X 8" (110mm X 200mm) SDR33X33	140	0.5 mm	Almost Zero	72 seconds	6 seconds	140	6.7 min



Welding Temperatures

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 ECTFE: 527°F - 536°F (275°C - 280°C)

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Product Line & Material	Pipe Size	Initial Melt Pressure (psi)	Bead Height	Melt Pressure	Heatsoak Time	Changeover Time	Welding Pressure (psi)	Cooling Time
Duo-Pro® PRO45X45 (PP)	6" X 10" (160mm X 250mm) SDR33X33	216	1 mm	Almost Zero	89 seconds	6 seconds	216	6.7 min
Duo-Pro® PVDFXPVDF (PVDF)	2" X 4" (63mm X 110mm) SDR21X33	53	0.5 mm	Almost Zero	74 seconds	3 seconds	53	6.0 min
Duo-Pro® PVDFXPVDF (PVDF)	3" X 6" (90mm X 160mm) SDR33X33	89	0.5 mm	Almost Zero	89 seconds	3 seconds	89	8.0 min
Duo-Pro® PVDFXPVDF (PVDF)	4" X 8" (110mm X 200mm) SDR33X33	140	0.6 mm	Almost Zero	102 seconds	4 seconds	140	9.5 min
Duo-Pro® PVDFXPVDF (PVDF)	6" X 10" (160mm X 250mm) SDR33X33	216	0.7 mm	Almost Zero	117 seconds	4 seconds	216	11.0 min
Duo-Pro® PVDFXPVDF (PVDF)	2" X 6" (63mm X 160mm) SDR21X33	82	0.5 mm	Almost Zero	89 seconds	3 seconds	82	8.0 min
Fluidlok (IPS) (PE)	3" X 6" SDR11X17	173	0.5 mm	Almost Zero	65 seconds	5 seconds	173	10.0 min
Fluidlok (IPS) (PE)	4" X 8" SDR11X17	303	0.6 mm	Almost Zero	86 seconds	5 seconds	303	12.0 min
Poly-Flo® PE100RC (PE)	2" X 3" (63mm X 90mm) SDR11X17	71	1 mm	Almost Zero	35 seconds	5 seconds	71	8.0 min
Poly-Flo® PE100RC (PE)	4" X 6" (110mm X 160mm) SDR11X17	243	1.5 mm	Almost Zero	80 seconds	7 seconds	243	14.0 min
Poly-Flo® PPR (PP)	2" X 3" (63mm X 90mm) SDR11X17	65	0.5 mm	Almost Zero	80 seconds	6 seconds	65	9.0 min
Poly-Flo® PPR (PP)	4" X 6" (110mm X 160mm) SDR11X17	201	1 mm	Almost Zero	150 seconds	7 seconds	201	17.0 min



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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
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Acrobat 250 Welding Parameters

CURRENT AS OF
01/30/2024

Product Line & Material	Pipe Size	Initial Melt Pressure (psi)	Bead Height	Melt Pressure	Heatsoak Time	Changeover Time	Welding Pressure (psi)	Cooling Time
Chem Prolok SDR11x33 (PE100-RC)	2" X 4" (63mm X 110mm) SDR11X33	90	0.5 mm	Almost Zero	34 seconds	6 seconds	90	6.3 min
Chem Prolok SDR11x33 (PE100-RC)	3" X 6" (90mm X 160mm) SDR11X33	178	1 mm	Almost Zero	49 seconds	6 seconds	178	8.6 min
Chem Prolok SDR11x33 (PE100-RC)	4" X 8" (110mm X 200mm) SDR11X33	267	1 mm	Almost Zero	62 seconds	7 seconds	267	10.2 min
Chem Prolok SDR11x33 (PE100-RC)	6" X 10" (160mm X 250mm) SDR11X33	738	1.5 mm	Almost Zero	77 seconds	9 seconds	738	14.2 min



Welding Temperatures

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