TURBOLP310-315 - LOW PRESSURE

Reference: ASTM F 2620 (Standard)

Welding ranges:	3" 4" 6" 8"10" IPS			1 Mpa= 145 PSI = 10 Bar = 1 N/mm²
Pressure ranges:	**913.7 PSI**	6.3 Mpa	63 Bar	1mm=0.1cm=0.03937In=0.001217In²
Cylinder Area:	**3.1 In²**	20 cm²	TEPA	1mm² = 0.01 cm² = 0.00155 In²
IFP:	**75 PSI**	0.517 Mpa	Obtain a copy of the pipe manufacturer's Welding Parameters for the appropriate joining standard for the pipe being fused.	
Material:	HDPE			

Note: Add the (DRAG) 30 PSI = 0.20 Mpa = 0.20 N/mm² = 20.68 N/cm²

Drag pressure is the pressure to overcome the friction during machine carriage movement. It should be added to the total fusion pressure.

This machine has a max pressure of 913.7 PSI and a cylinder area of 3.1 In² if the pipe to weld exceed the max pressure, you need to use a higher pressure machine, which has more force due to a larger cylinder area.

Remember, the lower the pipe SDR the thicker the wall, which means more pressure to melt and more time to weld.

					P1		P2	T2	T3	T4	P5	T5
Pipe Size	OD	Wall Thickness	SDR	Heater Temp	Bead Up Force	(+30PSI Drag)	Heat Soak Force	Heat Soak time	Remove Heating tool	Start Fusion	Fuse/Cool Force	Cooling time
Inch	Inch	mm	SDR	°F	PSI	PSI	PSI	S	S	S	PSI	Min
10	10.8	1.54	7	450	**1075**	**1105**	30	16	4	4	1075	0.7
10	10.8	1.19	9	450	867	897	30	13	4	4	867	0.5
10	10.8	0.98	11	450	726	756	30	10	4	4	726	0.4
10	10.8	0.80	13.5	450	602	632	30	8	4	4	602	0.3
10	10.8	0.63	17	450	486	516	30	7	4	4	486	0.3
10	10.8	0.51	21	450	398	428	30	5	4	4	398	0.2
10	10.8	0.41	26	450	325	355	30	4	4	4	325	0.2
10	10.8	0.33	32.5	450	262	292	30	4	4	4	262	0.1

+ 30 PSI

					P1		P2	T2	T3	T4	P5	T5
Pipe Size	OD	Wall Thickness	SDR	Heater Temp	Bead Up Force	(+30PSI Drag)	Heat Soak Force	Heat Soak time	Remove Heating tool	Start Fusion	Fuse/Cool Force	Cooling time
Inch	Inch	mm	SDR	°F	PSI	PSI	PSI	S	S	S	PSI	Min
8	8.63	1.23	7	450	693	723	30	13	4	4	693	0.5
8	8.63	0.96	9	450	559	589	30	10	4	4	559	0.4
8	8.63	0.78	11	450	468	498	30	8	4	4	468	0.3
8	8.63	0.64	13.5	450	388	418	30	7	4	4	388	0.3
8	8.63	0.51	17	450	313	343	30	5	4	4	313	0.2
8	8.63	0.41	21	450	257	287	30	4	4	4	257	0.2
8	8.63	0.33	26	450	209	239	30	4	4	4	209	0.1
8	8.63	0.27	32.5	450	169	199	30	3	4	4	169	0.1

+ 30 PSI

					P1		P2	T2	T3	T4	P5	T5
Pipe Size	OD	Wall Thickness	SDR	Heater Temp	Bead Up Force	(+30PSI Drag)	Heat Soak Force	Heat Soak time	Remove Heating tool	Start Fusion	Fuse/Cool Force	Cooling time
Inch	Inch	mm	SDR	°F	PSI	PSI	PSI	S	S	S	PSI	Min
6	6.63	0.95	7	450	409	439	30	10	4	4	409	0.4
6	6.63	0.74	9	450	330	360	30	8	4	4	330	0.3
6	6.63	0.60	11	450	276	306	30	6	4	4	276	0.3
6	6.63	0.49	13.5	450	229	259	30	5	4	4	229	0.2
6	6.63	0.39	17	450	185	215	30	4	4	4	185	0.2
6	6.63	0.32	21	450	151	181	30	3	4	4	151	0.1
6	6.63	0.26	26	450	123	153	30	3	4	4	123	0.1
6	6.63	0.20	32.5	450	100	130	30	2	4	4	100	0.1

+ 30 PSI

					P1		P2	T2	T3	T4	P5	T5
Pipe Size	OD	Wall Thickness	SDR	Heater Temp	Bead Up Force	(+30PSI Drag)	Heat Soak Force	Heat Soak time	Remove Heating tool	Start Fusion	Fuse/Cool Force	Cooling time
Inch	Inch	mm	SDR	°F	PSI	PSI	PSI	S	S	S	PSI	Min
4	4.5	0.64	7	450	188	218	30	7	4	4	188	0.3
4	4.5	0.50	9	450	152	182	30	5	4	4	152	0.2
4	4.5	0.41	11	450	127	157	30	4	4	4	127	0.2
4	4.5	0.33	13.5	450	106	136	30	4	4	4	106	0.1
4	4.5	0.26	17	450	85	115	30	3	4	4	85	0.1
4	4.5	0.21	21	450	70	100	30	2	4	4	70	0.1
4	4.5	0.17	26	450	57	87	30	2	4	4	57	0.1
4	4.5	0.14	32.5	450	46	76	30	1	4	4	46	0.1

+ 30 PSI

					P1		P2	T2	T3	T4	P5	T5
Pipe Size	OD	Wall Thickness	SDR	Heater Temp	Bead Up Force	(+30PSI Drag)	Heat Soak Force	Heat Soak time	Remove Heating tool	Start Fusion	Fuse/Cool Force	Cooling time
Inch	Inch	mm	SDR	°F	PSI	PSI	PSI	S	S	S	PSI	Min
3	3.5	0.50	7	450	114	144	30	5	4	4	114	0.2
3	3.5	0.39	9	450	92	122	30	4	4	4	92	0.2
3	3.5	0.32	11	450	77	107	30	3	4	4	77	0.1
3	3.5	0.26	13.5	450	64	94	30	3	4	4	64	0.1
3	3.5	0.21	17	450	52	82	30	2	4	4	52	0.1
3	3.5	0.17	21	450	42	72	30	2	4	4	42	0.1
3	3.5	0.13	26	450	34	64	30	1	4	4	34	0.1
3	3.5	0.11	32.5	450	28	58	30	1	4	4	28	0.0