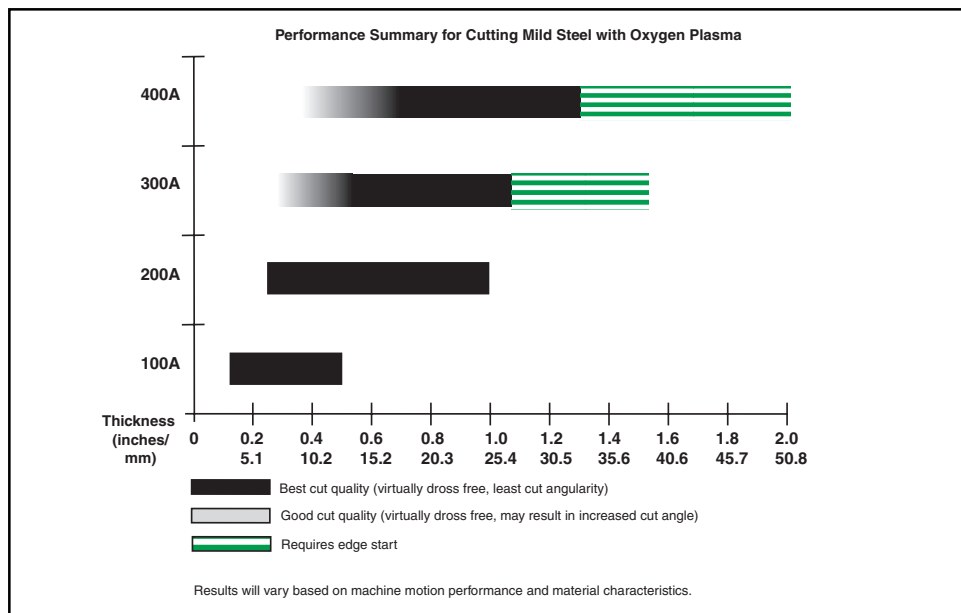


Cut Charts


The HT4400 provides a wide travel-speed operating range: usually ± 10 ipm (± 254 mm/min) on most materials. The data listed in the charts are for making drop cuts with minimal dross.

Note: **Cutting with the torch at water level or above water is recommended.** Underwater cutting may cause occasional torch misfiring, rough cut edge, and increased dross formation.

Caution: Before cutting, check all settings and adjustments and check for damaged torch parts and worn consumable parts.

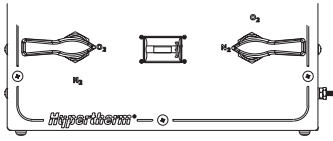


CUT CHART AND CONSUMABLE PARTS INDEX

Metal	Amps	Plasma Gas/ Shield Gas	Retaining Cap	Nozzle	Swirl Ring	Electrode	Page	
 CUTTING	Mild Steel	400	O ₂ / O ₂ -N ₂	120786	120934	120939	120810	4-14
		300	O ₂ / O ₂ -N ₂	120786	120794	120913	120802	4-15
		200	O ₂ / O ₂ -N ₂	120786	120787	120791	120793	4-16
		100	O ₂ / O ₂ -N ₂	120786	120777	120783	120785	4-17
Stainless Steel	400	N ₂ /N ₂	120786	120856	120853	120855	4-18	
	200	N ₂ /O ₂ -N ₂	120786	120794	120853	120855	4-19	
Aluminum	400	N ₂ /N ₂	120786	120856	120853	120855	4-20	
	200	N ₂ /O ₂ -N ₂	120786	120794	120853	120855	4-21	
BEVEL CUTTING	Mild Steel	400	O ₂ / O ₂ -N ₂	120786	120934	120939	120810	4-14

Water tube used for above processes: 120025 

Note: If using the Command THC with ohmic contact or other ohmic contact sensing device, use retaining cap with IHS tab, 120907.



Mild Steel

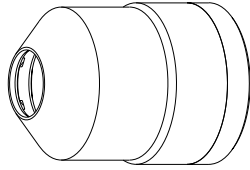
O₂ Plasma / O₂-N₂ Shield

400 Amps

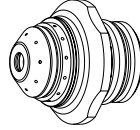
Flow Rates @ 140 psi / 9.6 bar (scfh / scfh)		
	N2	O2
Preflow	192.4 / 5448	61.2 / 1733
Cut-flow	152.5 / 4318	125.8 / 3562

Straight and Bevel Cutting to 45°

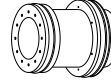
Note: Cut charts display straight cutting (90°) parameters



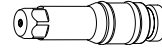
120786
Retaining Cap



120934***
Nozzle



120939***
Swirl Ring



120810
Electrode

ENGLISH

Material Thickness (inches)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	in.	mm	ipm	mmm	in.	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7												
3/8**	68	4	6	8	25		34	40	33	48	64	43	130	.125	3	195	4950	.250	6	0.4
1/2**	68	4	6	8	25		34	40					135	.157	4	160	4060	.314	8	0.5
5/8**	68	4	6	8	25		34	40					135	.157	4	120	3050	.314	8	0.6
3/4	68	4	6	8	25		34	40					140	.157	4	95	2413	.314	8	0.7
7/8	68	4	6	8	25		34	40					145	.188	5	80	2032	.375	10	0.8
1	68	4	6	8	25		34	40					145	.188	5	70	1778	.375	10	1
1-1/8	68	4	6	8	25		34	40					145	.188	5	60	1520	.375	10	1.2
1-1/4	68	4	6	8	25		34	40					150	.188	5	55	1400	.375	10	1.7
1-1/2	68	4	6	8	25		34	40					155	.188	5	40	1020	*	*	*
2	68	4	6	8	25		34	40					170	.250	6	15	381	*	*	*

METRIC

Material Thickness (mm)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	mm	in.	mmm	ipm	mm	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7												
10**	68	4	6	8	25		34	40	33	48	64	43	130	3	.125	4718	186	6	.250	0.4
12**	68	4	6	8	25		34	40					135	4	.157	4301	169	8	.314	0.5
15**	68	4	6	8	25		34	40					135	4	.157	3320	131	8	.314	0.6
20	68	4	6	8	25		34	40					140	4	.157	2298	91	8	.314	0.7
22	68	4	6	8	25		34	40					145	5	.188	2053	81	10	.375	0.8
25	68	4	6	8	25		34	40					145	5	.188	1806	71	10	.375	1
30	68	4	6	8	25		34	40					145	5	.188	1468	58	10	.375	1.2
32	68	4	6	8	25		34	40					150	5	.188	1386	55	10	.375	1.7
35	68	4	6	8	25		34	40					155	5	.188	1204	47	10	.375	1.7
40	68	4	6	8	25		34	40					155	5	.188	929	37	*	*	*
50	68	4	6	8	25		34	40	170	6	.250	421	17	*	*	*				

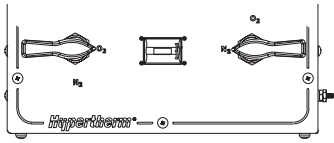
* Piercing not recommended

** Cuts on these thicknesses may result in increased cut angle variation.

*** Nozzle and swirl ring are not interchangeable with earlier 400 A O₂ consumables.

Minimum inlet pressures remain at one setting of 140 psi (9.6 bar) for all material thicknesses.

Approximate pressures while cutting in RUN mode: **PG1 74**
PG2 43

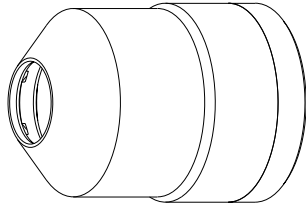


Mild Steel

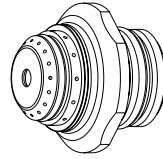
O₂ Plasma / O₂-N₂ Shield

300 Amps

Flow Rates @ 140 psi / 9.6 bar (scfh / sclh)		
	N2	O2
Preflow	194.2 / 5499	56.9 / 1611
Cut-flow	173.4 / 4910	115.6 / 3273



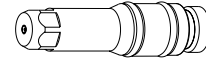
120786
Retaining Cap



120794
Nozzle



120913
Swirl Ring



120802
Electrode

ENGLISH

Material Thickness (inches)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	in.	mm	ipm	mmm	in.	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7					seconds							
1/4**	47	2	8	8	13		40	40	17	47	45	47	120	.062	2	190	4830	.125	3	0.3
3/8**	47	2	8	8	13		40	40					125	.125	3	160	4060	.250	6	0.5
1/2	47	2	8	8	13		40	40					130	.157	4	120	3050	.314	8	0.7
5/8	47	2	8	8	13		40	40					135	.188	5	100	2540	.375	10	0.9
3/4	47	2	8	8	13		40	40					140	.188	5	80	2030	.375	10	1.1
7/8	47	2	8	8	13		40	40					145	.188	5	70	1780	.375	10	1.3
1	47	2	8	8	13		40	40					145	.188	5	55	1400	.375	10	1.5
1-1/8	47	2	8	8	13		40	40					150	.188	5	50	1270	*	*	*
1-1/4	47	2	8	8	13		40	40					155	.250	6	45	1140	*	*	*
1-1/2	47	2	8	8	13		40	40					155	.250	6	35	890	*	*	*

METRIC

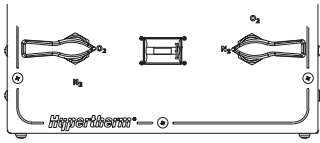
Material Thickness (mm)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	mm	in.	mmm	ipm	mm	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7					seconds							
6**	47	2	8	8	13		40	40	17	47	45	47	120	2	.062	5108	201	3	.125	0.3
10**	47	2	8	8	13		40	40					125	3	.125	3871	153	6	.250	0.5
12	47	2	8	8	13		40	40					130	4	.157	3226	127	8	.314	0.7
15	47	2	8	8	13		40	40					135	5	.188	2681	106	10	.375	0.9
20	47	2	8	8	13		40	40					140	5	.188	1935	76	10	.375	1.1
22	47	2	8	8	13		40	40					145	5	.188	1796	71	10	.375	1.3
25	47	2	8	8	13		40	40					145	5	.188	1419	56	10	.375	1.5
30	47	2	8	8	13		40	40					150	5	.188	1213	48	*	*	*
32	47	2	8	8	13		40	40					155	6	.250	1134	45	*	*	*
35	47	2	8	8	13		40	40					155	6	.250	1014	40	*	*	*

* Piercing not recommended

** Cuts on these thicknesses may result in increased cut angle variation.

Minimum inlet pressures remain at one setting of 140 psi (9.6 bar) for all material thicknesses.

Approximate pressures while cutting in RUN mode: **PG1 72**
PG2 43

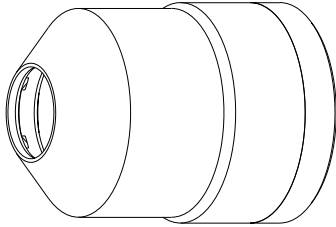


Mild Steel

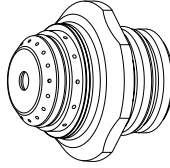
O₂ Plasma / O₂-N₂ Shield

200 Amps

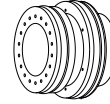
Flow Rates @ 140 psi / 9.6 bar (scfh / sch)		
	N2	O2
Preflow	202.4 / 5731	60.4 / 1710
Cut-flow	140.6 / 3981	111.4 / 3154



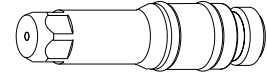
120786
Retaining Cap



120787
Nozzle



120791
Swirl Ring



120793
Electrode

ENGLISH

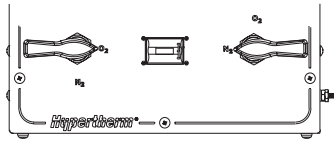
Material Thickness (inches)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	in.	mm	ipm	mm	in.	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7					seconds							
1/4	37	3	5	7	18		27	38	23	44	35	37	120	.125	3	160	4060	.250	6	0.5
3/8	37	3	5	7	18		27	38					120	.125	3	100	2540	.250	6	0.5
1/2	37	3	5	7	18		27	38					125	.157	4	80	2030	.314	8	0.7
5/8	37	3	5	7	18		27	38					130	.157	4	70	1780	.314	8	0.9
3/4	37	3	5	7	18		27	38					135	.188	5	55	1400	.375	10	1.2
7/8	37	3	5	7	18		27	38					135	.25	6	45	1140	.500	13	1.5
1	37	3	5	7	18		27	38					140	.25	6	35	889	.500	13	2.5

METRIC

Material Thickness (mm)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	mm	in.	mm	ipm	mm	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7					seconds							
6	37	3	5	7	18		27	38	23	44	35	37	120	3	.125	4301	169	6	.250	0.5
10	37	3	5	7	18		27	38					120	3	.125	2419	95	6	.250	0.5
12	37	3	5	7	18		27	38					125	4	.157	2151	85	8	.314	0.7
15	37	3	5	7	18		27	38					130	4	.157	1851	73	8	.314	0.9
20	37	3	5	7	18		27	38					135	5	.188	1331	52	10	.375	1.2
22	37	3	5	7	18		27	38					135	6	.25	1155	46	13	.500	1.5
25	37	3	5	7	18		27	38					140	6	.25	903	36	13	.500	2.5

Minimum inlet pressures remain at one setting of 140 psi (9.6 bar) for all material thicknesses.

Approximate pressures while cutting in RUN mode: **PG1 59**
PG2 33

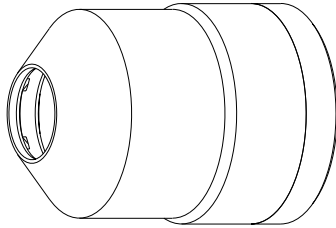


Mild Steel

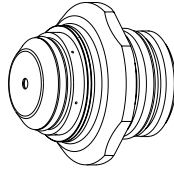
O₂ Plasma / O₂-N₂ Shield

100 Amps

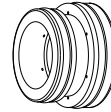
Flow Rates @ 140 psi / 9.6 bar (scfh / sclh)		
	N2	O2
Preflow	134.3 / 3803	35.7 / 1011
Cut-flow	87.1 / 2466	68.9 / 1951



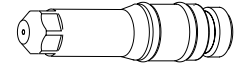
120786
Retaining Cap



120777
Nozzle



120783
Swirl Ring



120785
Electrode

ENGLISH

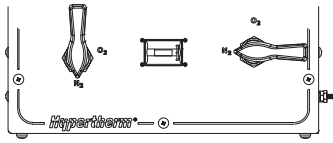
Material Thickness (inches)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	in.	mm	ipm	mmm	in.	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7												
1/8	43	4	2	3	24		13	17	31	23	43	17	125	.094	2	240	6100	.188	5	0.3
3/16	43	4	2	3	24		13	17					125	.125	3	180	4570	.250	6	0.5
1/4	43	4	2	3	24		13	17					130	.125	3	120	3050	.250	6	0.7
3/8	43	4	2	3	24		13	17					135	.157	4	85	2160	.314	8	0.9
1/2	43	4	2	3	24		13	17					135	.157	4	60	1520	.314	8	1.5

METRIC

Material Thickness (mm)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	mm	in.	mmm	ipm	mm	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7												
3	43	4	2	3	24		13	17	31	23	43	17	125	2	.094	6462	255	5	.188	0.3
5	43	4	2	3	24		13	17					125	3	.125	4355	172	6	.250	0.5
6	43	4	2	3	24		13	17					130	3	.125	3226	127	6	.250	0.7
10	43	4	2	3	24		13	17					135	4	.157	2056	81	8	.314	0.9
12	43	4	2	3	24		13	17					135	4	.157	1613	64	8	.314	1.5

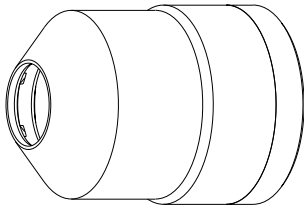
Minimum inlet pressures remain at one setting of 140 psi (9.6 bar) for all material thicknesses.

Approximate pressures while cutting in RUN mode: **PG1 88**
PG2 16

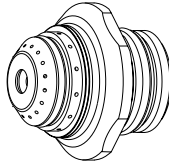


Stainless Steel N₂ Plasma / N₂ Shield 400 Amps

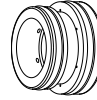
Flow Rates @ 140 psi / 9.6 bar (scfh / scmh)	
N2	
Preflow	235.9 / 6680
Cut-flow	237.7 / 6731



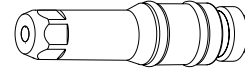
120786
Retaining Cap



120856
Nozzle



120853
Swirl Ring



120855
Electrode

ENGLISH

Material Thickness (inches)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	in.	mm	ipm	mm	in.	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7												
1/4	60	43	35	40	0		0	0	34	36	49	30	140	.125	3	195	4953	.250	6	0.3
3/8	60	43	35	40	0		0	0					140	.125	3	170	4320	.250	6	0.5
1/2	60	43	35	40	0		0	0					145	.157	4	140	3560	.314	8	0.7
5/8	60	43	35	40	0		0	0					150	.157	4	95	2410	.314	8	1
3/4	60	43	35	40	0		0	0					155	.188	5	70	1780	.375	10	1.5
7/8	60	43	35	40	0		0	0					160	.188	5	55	1400	.375	10	2
1	60	43	35	40	0		0	0					165	.188	5	40	1020	.375	10	2.5
1-1/4	60	43	35	40	0		0	0					170	.250	6	30	760	*	*	*
1-1/2	60	43	35	40	0		0	0					180	.250	6	25	630	*	*	*
2	60	43	35	40	0		0	0					185	.250	6	13	330	*	*	*

METRIC

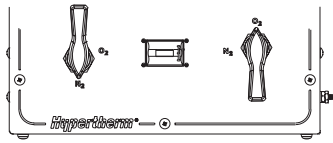
Material Thickness (mm)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	mm	in.	mm	ipm	mm	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7												
6	60	43	35	40	0		0	0	34	36	49	30	140	3	.125	5242	207	6	.250	0.3
10	60	43	35	40	0		0	0					140	3	.125	4113	162	6	.250	0.5
12	60	43	35	40	0		0	0					145	4	.157	3763	148	8	.314	0.7
15	60	43	35	40	0		0	0					150	4	.157	2713	107	8	.314	1
20	60	43	35	40	0		0	0					155	5	.188	1694	67	10	.375	1.5
22	60	43	35	40	0		0	0					160	5	.188	1411	56	10	.375	2
25	60	43	35	40	0		0	0					165	5	.188	1032	41	10	.375	2.5
35	60	43	35	40	0		0	0					170	6	.250	697	27	*	*	*
40	60	43	35	40	0		0	0					180	6	.250	585	23	*	*	*
50	60	43	35	40	0		0	0					185	6	.250	349	14	*	*	*

* Piercing not recommended

Minimum inlet pressures remain at one setting of 140 psi (9.6 bar) for all material thicknesses.

Approximate pressures while cutting in RUN mode:

PG1 59
PG2 28

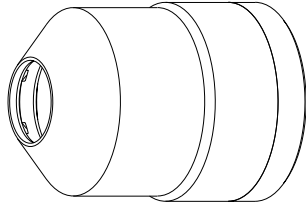


Stainless Steel

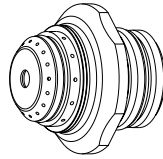
N₂ Plasma / O₂-N₂ Shield

200 Amps

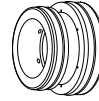
Flow Rates @ 140 psi / 9.6 bar (scfh / scih)		
	N2	O2
Preflow	211.4 / 5986	56.1 / 1589
Cut-flow	200.6 / 5680	36.6 / 1036



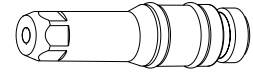
120786
Retaining Cap



120794
Nozzle



120853
Swirl Ring



120855
Electrode

ENGLISH

Material Thickness (inches)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	in.	mm	ipm	mmm	in.	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7												
3/16	43	34	30	40	0		5	8	27	45	37	36	130	.125	3	135	3430	.250	6	0.4
1/4	43	34	30	40	0		5	8					135	.125	3	120	3050	.250	6	0.5
3/8	43	34	30	40	0		5	8					135	.125	3	100	2540	.250	6	1
1/2	43	34	30	40	0		5	8					140	.157	4	75	1900	.314	8	2
5/8	43	34	30	40	0		5	8					140	.157	4	60	1520	.314	8	2
3/4	43	34	30	40	0		5	8					145	.188	5	45	1140	.375	10	2.5
7/8	43	34	30	40	0		5	8					145	.250	6	35	890	.500	12	3.0
1	43	34	30	40	0		5	8					150	.250	6	20	510	*	*	*
1-1/4	43	34	30	40	0		5	8					160	.250	6	15	380	*	*	*

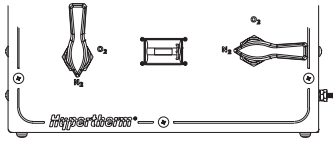
METRIC

Material Thickness (mm)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	mm	in.	mmm	ipm	mm	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7												
5	43	34	30	40	0		5	8	27	45	37	36	130	3	.125	3266	129	6	.250	0.4
6	43	34	30	40	0		5	8					135	3	.125	3226	127	6	.250	0.5
10	43	34	30	40	0		5	8					135	3	.125	2419	95	6	.250	1
12	43	34	30	40	0		5	8					140	4	.157	2016	79	6	.314	2
15	43	34	30	40	0		5	8					140	4	.157	1628	64	8	.314	2
20	43	34	30	40	0		5	8					145	5	.188	1089	43	10	.375	2.5
22	43	34	30	40	0		5	8					145	6	.250	898	35	12	.500	3.0
25	43	34	30	40	0		5	8					150	6	.250	516	20	*	*	*
30	43	34	30	40	0		5	8					160	6	.250	415	16	*	*	*

* Piercing not recommended

Minimum inlet pressures remain at one setting of 140 psi (9.6 bar) for all material thickness.

Approximate pressures while cutting in RUN mode: **PG1 49**
PG2 33

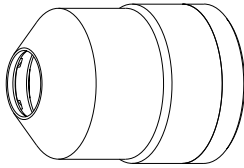


Aluminum

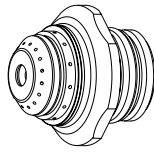
N₂ Plasma / N₂ Shield

400 Amps

Flow Rates @ 140 psi / 9.6 bar (scfh / sclh)	
N2	
Preflow	235.9 / 6680
Cut-flow	237.7 / 6731



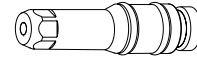
120786
Retaining Cap



120856
Nozzle



120853
Swirl Ring



120855
Electrode

ENGLISH

Material Thickness (inches)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	in.	mm	ipm	mmm	in.	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7												
1/4	60	43	35	40	0		0	0	34	36	49	30	135	.125	3	220	5588	.250	6	0.3
3/8	60	43	35	40	0		0	0					140	.125	3	195	4953	.250	6	0.5
1/2	60	43	35	40	0		0	0					145	.157	4	150	3810	.314	8	0.7
5/8	60	43	35	40	0		0	0					150	.157	4	105	2667	.314	8	1
3/4	60	43	35	40	0		0	0					155	.188	5	80	2032	.375	10	1.5
7/8	60	43	35	40	0		0	0					160	.188	5	65	1651	.375	10	2
1	60	43	35	40	0		0	0					165	.188	5	50	1270	.375	10	2.5
1-1/4	60	43	35	40	0		0	0					170	.250	6	40	1016	*	*	*
1-1/2	60	43	35	40	0		0	0					180	.250	6	30	762	*	*	*
2	60	43	35	40	0		0	0					185	.250	6	15	381	*	*	*

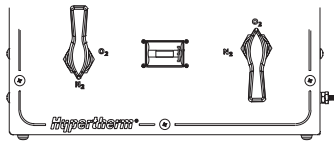
METRIC

Material Thickness (mm)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	mm	in.	mmm	ipm	mm	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7												
6	60	43	35	40	0		0	0	34	36	49	30	135	3	.125	5914	233	6	.250	0.3
10	60	43	35	40	0		0	0					140	3	.125	4718	186	6	.250	0.5
12	60	43	35	40	0		0	0					145	4	.157	4032	159	8	.314	0.7
15	60	43	35	40	0		0	0					150	4	.157	2968	117	8	.314	1
20	60	43	35	40	0		0	0					155	5	.188	1935	76	10	.375	1.5
22	60	43	35	40	0		0	0					160	5	.188	1668	66	10	.375	2
25	60	43	35	40	0		0	0					165	5	.188	1290	51	10	.375	2.5
30	60	43	35	40	0		0	0					170	6	.250	1085	43	*	*	*
40	60	43	35	40	0		0	0					180	6	.250	709	28	*	*	*
50	60	43	35	40	0		0	0					185	6	.250	405	16	*	*	*

* Piercing not recommended

Minimum inlet pressures remain at one setting of 140 psi (9.6 bar) for all material thicknesses.

Approximate pressures while cutting in RUN mode: **PG1 59**
PG2 28

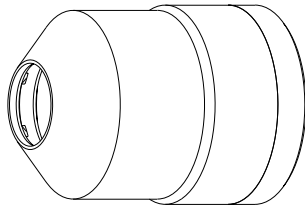


Aluminum

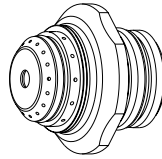
N₂ Plasma / O₂-N₂ Shield

200 Amps

Flow Rates @ 140 psi / 9.6 bar (scfh / scih)		
	N2	O2
Preflow	211.4 / 5986	56.1 / 1589
Cut-flow	200.6 / 5680	36.6 / 1036



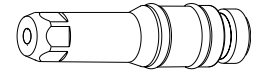
120786
Retaining Cap



120794
Nozzle



120853
Swirl Ring



120855
Electrode

ENGLISH

Material Thickness (inches)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	in.	mm	ipm	mm	in.	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7					seconds							
3/16	43	34	30	40	0		5	8	27	45	37	36	130	.125	3	180	4570	.250	6	0.5
1/4	43	34	30	40	0		5	8					135	.125	3	160	4060	.250	6	1
3/8	43	34	30	40	0		5	8					135	.125	3	120	4050	.250	6	1.5
1/2	43	34	30	40	0		5	8					140	.125	3	80	2030	.250	6	2
5/8	43	34	30	40	0		5	8					140	.157	4	70	1780	.314	8	2
3/4	43	34	30	40	0		5	8					150	.250	6	50	1270	.500	12	2.5
7/8	43	34	30	40	0		5	8					160	.250	6	35	890	.500	12	2.5
1	43	34	30	40	0		5	8					165	.250	6	25	630	*	*	*
1-1/4	43	34	30	40	0		5	8					175	.250	6	20	510	*	*	*

METRIC

Material Thickness (mm)	Test Preflow and Cut-flow Adjust (psi)								Test Preflow Verify (psi)		Test Cut-flow Verify (psi)		Arc Voltage	Torch-to-Work Distance		Cutting Speed		Initial Pierce Height		Pierce Delay Time
	Plasma		Shield		Plasma		Shield		PG1	PG2	PG1	PG2		Volts	mm	in.	mmm	ipm	mm	
	MV1	MV2	MV3	MV4	MV5		MV6	MV7					seconds							
5	43	34	30	40	0		5	8	27	45	37	36	130	3	.125	4355	172	6	.250	0.5
6	43	34	30	40	0		5	8					135	3	.125	4301	169	6	.250	1
10	43	34	30	40	0		5	8					135	3	.125	2903	114	6	.250	1.5
12	43	34	30	40	0		5	8					140	4	.157	2151	85	6	.250	2
15	43	34	30	40	0		5	8					140	4	.157	1851	73	8	.314	2
20	43	34	30	40	0		5	8					145	5	.188	1210	48	12	.500	2.5
22	43	34	30	40	0		5	8					145	6	.250	898	35	12	.500	2.5
25	43	34	30	40	0		5	8					150	6	.250	645	25	*	*	*
30	43	34	30	40	0		5	8					160	6	.250	543	21	*	*	*

* Piercing not recommended

Minimum inlet pressures remain at one setting of 140 psi (9.6 bar) for all material thicknesses.

Approximate pressures while cutting in RUN mode: **PG1 49**
PG2 33