

* Range is limited by power source rating, module rating, or feeder configuration

Type	Size	Procedure	Waveform	Gas Type	Mode #	Arc Control	Max. Range (*)	
All	All	GMAW CV	STD CV		5	Pinch	10 — 45	V
		GMAW Power	Power Mode®		40	Pinch	0.1 — 9.00	kW
Steel	0.8 mm	GMAW CV	CV	CO ₂	93	Pinch	75 — 700	ipm (1.91 — 17.78 m/min)
				Argon Mix	94		75 — 700	ipm (1.91 — 17.78 m/min)
		GMAW Pulse	Pulse	Argon Mix	95	UltimArc®	65 — 700	ipm (1.65 — 17.78 m/min)
				Argon Mix	410		100 — 600	ipm (2.54 — 15.24 m/min)
	0.9 mm	GMAW CV	CV	CO ₂	138	Pinch	50 — 700	ipm (1.27 — 17.78 m/min)
				Argon Mix	139		50 — 700	ipm (1.27 — 17.78 m/min)
		GMAW Pulse	Pulse	Argon Mix	140	UltimArc®	60 — 700	ipm (1.52 — 17.78 m/min)
				Argon Mix	141		75 — 700	ipm (1.91 — 17.78 m/min)
	GMAW Pulse	RapidArc®	Argon Mix	411	UltimArc®	100 — 600	ipm (2.54 — 15.24 m/min)	
			Argon Mix	411		100 — 600	ipm (2.54 — 15.24 m/min)	
	1.0 mm	GMAW CV	CV	CO ₂	10	Pinch	50 — 630	ipm (1.27 — 16 m/min)
				Argon Mix	11		50 — 520	ipm (1.27 — 13.21 m/min)
		GMAW Pulse	Pulse	Argon Mix	12	UltimArc®	75 — 485	ipm (1.91 — 12.32 m/min)
				Argon Mix	13		60 — 600	ipm (1.52 — 15.24 m/min)
	GMAW Pulse	RapidArc®	Argon Mix	412	UltimArc®	75 — 600	ipm (1.91 — 15.24 m/min)	
			Argon Mix	412		75 — 600	ipm (1.91 — 15.24 m/min)	
	1.2 mm	GMAW CV	CV	CO ₂	20	Pinch	50 — 420	ipm (1.27 — 10.67 m/min)
				Argon Mix	21		50 — 355	ipm (1.27 — 9.02 m/min)
GMAW Pulse		Pulse	Argon Mix	22	UltimArc®	60 — 405	ipm (1.52 — 10.29 m/min)	
			Argon Mix	18		60 — 465	ipm (1.52 — 11.81 m/min)	
GMAW Pulse	RapidArc®	Argon Mix	413	UltimArc®	75 — 450	ipm (1.91 — 11.43 m/min)		
		Argon Mix	413		75 — 450	ipm (1.91 — 11.43 m/min)		
Stainless	0.8 mm	GMAW CV	CV	Argon Mix	61	Pinch	100 — 700	ipm (2.54 — 17.78 m/min)
				Ar He CO ₂	63		100 — 700	ipm (2.54 — 17.78 m/min)
		GMAW Pulse	Pulse	Argon Mix	64	UltimArc®	100 — 700	ipm (2.54 — 17.78 m/min)
	Argon Mix	66	100 — 700	ipm (2.54 — 17.78 m/min)				
	0.9 mm	GMAW CV	CV	Argon Mix	29	Pinch	75 — 700	ipm (1.91 — 17.78 m/min)
				Argon Mix	30		60 — 700	ipm (1.52 — 17.78 m/min)
		GMAW Pulse	Pulse	Argon Mix	421	UltimArc®	100 — 600	ipm (2.54 — 15.24 m/min)
	Argon Mix	421	100 — 600	ipm (2.54 — 15.24 m/min)				
	1.0 mm	GMAW CV	CV	Argon Mix	31	Pinch	75 — 700	ipm (1.91 — 17.78 m/min)
				Ar He CO ₂	33		75 — 595	ipm (1.91 — 15.11 m/min)
		GMAW Pulse	Pulse	Ar He CO ₂	34	UltimArc®	60 — 690	ipm (1.52 — 17.53 m/min)
				Argon Mix	36		60 — 690	ipm (1.52 — 17.53 m/min)
GMAW Pulse	Precision Pulse™	Argon Mix	422	UltimArc®	60 — 600	ipm (1.52 — 15.24 m/min)		
		Argon Mix	422		60 — 600	ipm (1.52 — 15.24 m/min)		
1.2 mm	GMAW CV	CV	Argon Mix	41	Pinch	75 — 410	ipm (1.91 — 10.41 m/min)	
			Ar He CO ₂	43		75 — 395	ipm (1.91 — 10.03 m/min)	
	GMAW Pulse	Pulse	Ar He CO ₂	44	UltimArc®	50 — 390	ipm (1.27 — 9.91 m/min)	
			Argon Mix	46		50 — 405	ipm (1.27 — 10.29 m/min)	
GMAW Pulse	Precision Pulse™	Argon Mix	423	UltimArc®	50 — 400	ipm (1.27 — 10.16 m/min)		
Argon Mix	423	50 — 400	ipm (1.27 — 10.16 m/min)					
Metal Core	1.2 mm	GMAW CV	CV	Argon Mix	81	Pinch	50 — 410	ipm (1.27 — 10.41 m/min)
		GMAW Pulse	Pulse	Argon Mix	82		UltimArc®	50 — 425
	1.4 mm	GMAW Pulse	Pulse	Argon Mix	84	UltimArc®	50 — 285	ipm (1.27 — 7.24 m/min)

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	GMAW	Aluminum (AISI)	1.0 mm	GMAW CV	CV	Argon	148	Pinch	125 – 700 ipm
GMAW Pulse				Pulse	Argon	149	UltimArc®	125 – 700 ipm	(3.18 – 17.78 m/min)
				CC Pulse	Argon	150		125 – 700 ipm	(3.18 – 17.78 m/min)
GMAW Pulse on Pulse			Pulse on Pulse	Argon	98	Frequency	100 – 500 ipm	(2.54 – 12.7 m/min)	
1.2 mm			GMAW CV	CV	Argon	71	Pinch	125 – 500 ipm	(3.18 – 12.7 m/min)
			GMAW Pulse	Pulse	Argon	72	UltimArc®	85 – 565 ipm	(2.16 – 14.35 m/min)
		CC Pulse		Argon	69	85 – 565 ipm		(2.16 – 14.35 m/min)	
GMAW Pulse on Pulse		Pulse on Pulse	Argon	99	Frequency	85 – 500 ipm	(2.16 – 12.7 m/min)		
Aluminum (A1Mg)		1.0 mm	GMAW CV	CV	Argon	151	Pinch	175 – 700 ipm	(4.45 – 17.78 m/min)
			GMAW Pulse	Pulse	Argon	152	UltimArc®	125 – 700 ipm	(3.18 – 17.78 m/min)
				CC Pulse	Argon	153		125 – 700 ipm	(3.18 – 17.78 m/min)
		GMAW Pulse on Pulse	Pulse on Pulse	Argon	101	Frequency	140 – 700 ipm	(3.56 – 17.78 m/min)	
		1.2 mm	GMAW CV	CV	Argon	75	Pinch	125 – 700 ipm	(3.18 – 17.78 m/min)
			GMAW Pulse	Pulse	Argon	76	UltimArc®	85 – 700 ipm	(2.16 – 17.78 m/min)
CC Pulse				Argon	70	85 – 700 ipm		(2.16 – 17.78 m/min)	
GMAW Pulse on Pulse	Pulse on Pulse	Argon	102	Frequency	100 – 600 ipm	(2.54 – 15.24 m/min)			
SiBr	1.0mm	GMAW Pulse	Pulse	Argon	192	UltimArc®	80 – 650 ipm	(2.03 – 16.51 m/min)	
	1.2mm	GMAW Pulse	Pulse	Argon	191	UltimArc®	50 – 470 ipm	(1.27 – 11.94 m/min)	
Cu	1.0mm	GMAW Pulse	Pulse	Ar He	198	UltimArc®	75 – 500 ipm	(1.91 – 12.7 m/min)	
	1.2mm	GMAW Pulse	Pulse	Ar He	196	UltimArc®	75 – 430 ipm	(1.91 – 10.92 m/min)	
NiCr	1.0mm	GMAW Pulse	Pulse	Ar He	170	UltimArc®	75 – 700 ipm	(1.91 – 17.78 m/min)	
	1.2mm	GMAW Pulse	Pulse	Ar He	175	UltimArc®	75 – 650 ipm	(1.91 – 16.51 m/min)	
FCAW	Flux Core	All	FCAW-S	Self Shield CV	NA	6	Pinch	10 – 45 V	
			FCAW-G	Gas Shield CV		7	Pinch	10 – 45 V	
	Cored Wire	1.2 mm	FCAW-G	CV	CO ₂	90	Pinch	175 – 600 ipm	(4.45 – 15.24 m/min)
					Argon Mix	91		175 – 565 ipm	(4.45 – 14.35 m/min)
SMAW	NA	NA	DCEP SMAW	SMAW Soft	NA	1	Arc Force, Hot Start	15 – 295 A	
				SMAW Crisp	NA	2	Arc Force, Hot Start	15 – 295 A	
				SMAW Pipe	NA	4	Arc Force	50 – 250 A	
GTAW	NA	NA	DCEN GTAW	Touch Start TIG	Argon	3	Hot Start	5 – 300 A	
				Touch Start TIG Pulse	Argon	8	Frequency, Background, Hot Start	5 – 300 A	
CAG	NA	NA	CAG	Arc Gouge	Compressed Air	9		60 – 300 A	