

These charts provide an easy selection guide for Victor equipment. Torches have been grouped by function: Heavy, Medium and Light Duty, and provide a quick reference allowing you to select the proper torch handle, welding or heating nozzle, tip ends, plus cutting attachment and cutting tip series to meet your needs.

Heavy Duty Equipment User Guide

Torch Handle	Welding Nozzles	Fuel Gas	Heating Nozzles	Fuel Gas	Cutting Attachment	Head Angle	Fuel Gas	Tip Series	Special Attachments
315FC	RTE, W, ET	A/H	MFA	A/H	CA 2460	90°	All	1	TE
					CA 2461	75°		1	TEN
H 315FC	RTEN	NG/P	MFN	NG/P	CA 2462	180°		1	TEMFA
			Type 55	*ALL	CA 2470	90°		3	TEMFN

RTE, RTEN welding nozzles use tip ends.
 *Type 55 heating nozzle - uses H 315FC or 315FC torch handle. All fuel gases except acetylene.

Medium Duty Equipment User Guide

Torch Handle	Welding Nozzles	Fuel Gas	Heating Nozzles	Fuel Gas	Cutting Attachment	Head Angle	Fuel Gas	Tip Series	Special Attachments
100FC	ET, ET-1, FE-1, UN-1, W-1	A/H	MFA-1	A	CA 1350	90°	All	3	TE
					CA 1351	75°		3	TEN
	UN-1	NG/P	MFN-1	NG/P	CA 1352	180°		3	TEMFA TEMFN

UN-1, FE-1 welding nozzles use tip ends.

Light Duty Equipment User Guide

Torch Handle	Welding Nozzles	Fuel Gas	Cutting Attachment	Head Angle	Fuel Gas	Tip Series	Special Attachments
J-28	ET, FE-J, UN-J, W-J	A/H	CA 1260	90°	All	3	TE
J-40	UN-J, UNN-J	NG/P					TEN
TEMFA TEMFN							

UN-J, UNN-J, FE-J welding nozzles use tip ends.

MFA - For Use with HD 310C Series Torch Handle.

Type MFA – for use with Acetylene					
Tip Size	Oxygen Pressure (PSIG)	Acetylene Pressure (PSIG)	Oxygen Consumption (SCFH)	Acetylene Consumption (SCFH)	BTU Per Hour
12	50/60	12/15	66/165	60/150	See Below
15	50/60	12/15	99/244	90/220	

MFN - For Use with HD 310C Series Torch Handle.

Type MFN – for use with all fuel gases except Acetylene					
Tip Size	Oxygen Pressure (PSIG)	Fuel Pressure (PSIG)	Oxygen Consumption (SCFH)	Fuel Consumption (SCFH)	BTU Per Hour
12	30/125	15/25	120/640	30/160	See Below
15	30/125	15/25	200/800	50/200	
20	40/135	15/25	300/1000	75/250	

WARNING: Not for use with acetylene.

Type 55 - For Use with HD 310C Series Torch Handle.

Type 55 – for use with all fuel gases except Acetylene					
Tip Size	Oxygen Pressure (PSIG)	Fuel Pressure (PSIG)	Oxygen Consumption (SCFH)	Fuel Consumption (SCFH)	BTU Per Hour
10	70/100	15/25	356/460	150/200	See Below
15	90/120	20/35	600/800	250/350	
20	100/150	30/50	900/1150	400/500	

WARNING: Not for use with acetylene.

To approximate gross BTU output, multiply flow rate by BTU value listed below.	
Acetylene.....	1470
Propane.....	2498
Methane.....	1000
Natural Gas.....	1000
Butane.....	3374
Propylene.....	2371

- WARNING:**
- Use flashback arrestors.
 - Although built to Victor’s quality and safety standards, due to the cutting capacity and/or design of each torch, flashback arrestors are not manufactured into these Victor heavy industry torches.
 - To reduce the risk of personal injury, death and/or property damage, use sufficient capacity flashback arrestors with all Victor heavy industry torch products.
 - Alternative fuel gas only refers to propane, natural gas, propylene gases. Acetylene, hydrogen and gasoline are NOT included as an alternative gas.

MFA / MFA-1 – For Use with 100 and 300 Series Torch Handles.

Type MFA, MFA-1 – for use with Acetylene					
Tip Size	Oxygen Pressure (PSIG)	Acetylene Pressure (PSIG)	Oxygen Consumption (SCFH)	Acetylene Consumption (SCFH)	BTU Per Hour
2	4/8	4/8	3/10	3/9	See Below
4	8/12	6/10	7/22	6/20	
6	10/15	8/12	15/44	14/40	
8	20/30	10/15	33/88	30/80	
10	30/40	12/15	44/110	40/100	

MFN / MFN-1 – For Use with 100 and 300 Series Torch Handles.

Type MFN, MFN-1 – for use with Propane & Natural Gas					
Tip Size	Oxygen Pressure (PSIG)	Fuel Pressure (PSIG)	Oxygen Consumption (SCFH)	Fuel Consumption (SCFH)	BTU Per Hour
6	8/20	2/10	20/80	5.5/20	See Below
8	10/20	10/15	40/140	10/35	
10	10/30	12/20	80/320	20/80	

WARNING: Not for use with acetylene.

Type 55 – For Use with 300 Series Torch Handles.

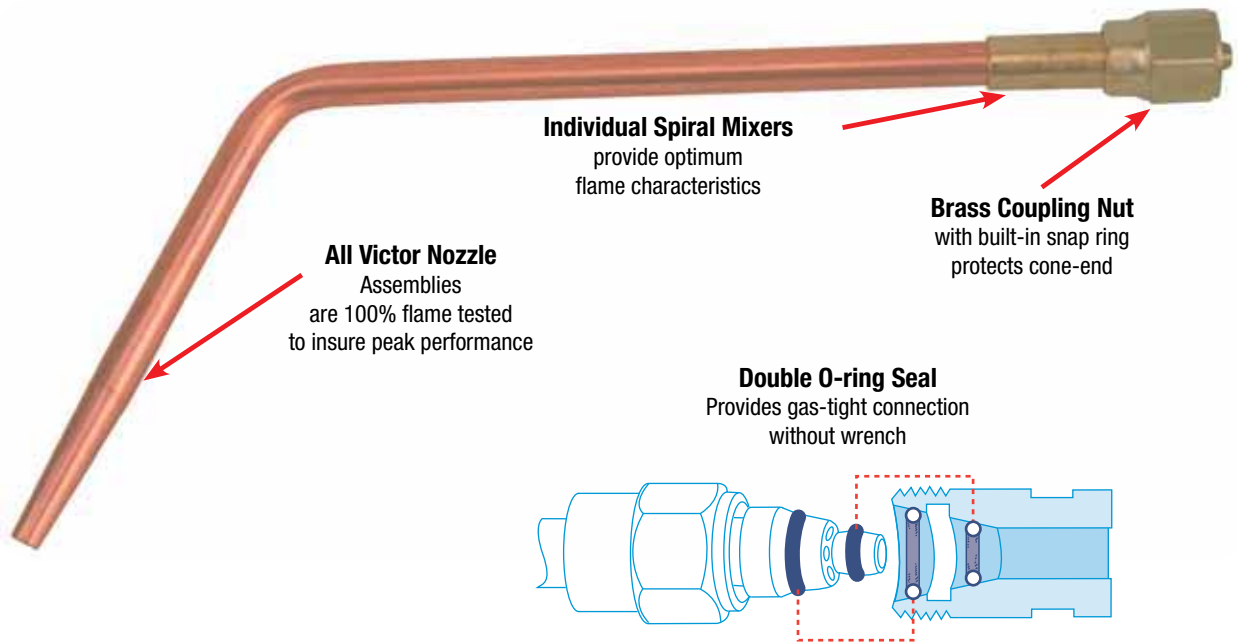
Type 55 – for use with Propylene based fuel gases, Methane, Propane, Butane, Liquid Air Fuel gases, pressurized Natural Gas					
Tip Size	Oxygen Pressure (PSIG)	Fuel Pressure (PSIG)	Oxygen Consumption (SCFH)	Fuel Consumption (SCFH)	BTU Per Hour
6	70/80	15/20	160	65	See Below
8	70/85	15/25	220	85	

WARNING: Not for use with acetylene.

Approximate Gross BTU Content Per Cubic Foot.

Acetylene 1470	Natural Gas ... 1000
Propane 2498	Butane 3374
Methane 1000	Propylene 2371

WARNING: At no time should the withdrawal rate of an individual acetylene cylinder exceed 1/7 of the cylinder contents per hour. If additional flow capacity is required use an acetylene manifold system of sufficient size to supply the necessary volume.



Exclusive “OPTIMIZED” nozzles with a large choice of types and sizes, plus uniformity of tip orifice and size for all series

Victor offers a complete range of nozzles, tips and elbows with a size for every application including: welding, brazing, heating, descaling, hard facing, flame priming, etc.

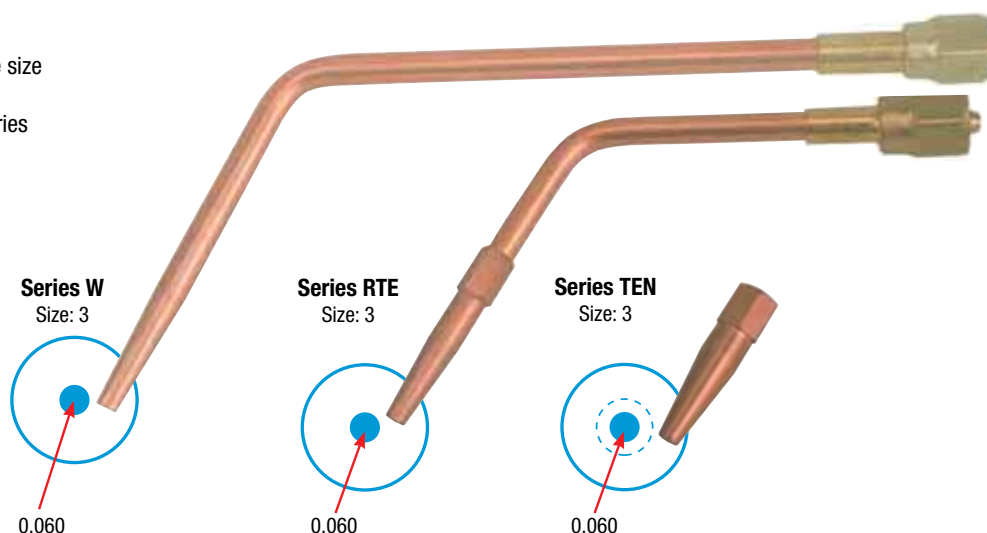
Nozzles designed for “optimum” performance - Each complete nozzle has its own built-in spiral mixer, individually designed for each tip size and flame characteristic. Each nozzle is individually swaged to insure proper alignment for uniform flame, sizing and free-flow contour.

Orifice sizes are common for all series - Regardless of nozzle series (300FC, 100FC, J), flame characteristic or fuel gas used. The uniformity of orifice sizes simplifies nozzle selection, eliminates chances of ordering and wrong size when changing from one type of nozzle to another.

Heating Tip

Type	Fuel Gas
MFTA	A

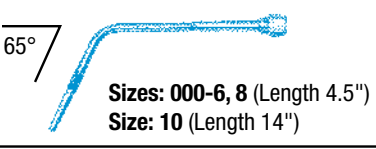
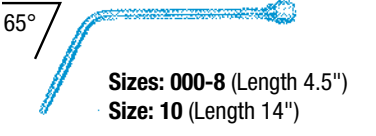
Flame orifice size
the same for
all nozzle series



Welding Nozzle Operational Data/Acetylene Covers Series W (Heavy Duty), W-1 (Medium Duty) And W-J (Light Duty) Series

OPERATIONAL & PERFORMANCE DATA						
Metal IN	Thickness MM	Tip Size	Drill Size	Oxygen (PSIG)	Acetylene (PSIG)	Acetylene (SCFH)
1/32"	0.8	000	75 (0.022)	3 / 5	3 / 5	1 / 2
3/64"	1.2	00	70 (0.028)	3 / 5	3 / 5	1.5 / 3
5/64"	1.9	0	65 (0.035)	3 / 5	3 / 5	2 / 4
3/32"	2.4	1	60 (0.040)	3 / 5	3 / 5	3 / 6
1/8"	3.2	2	56 (0.046)	3 / 5	3 / 5	5 / 10
3/16"	4.8	3	53 (0.060)	4 / 7	3 / 6	8 / 18
1/4"	6.4	4	49 (0.073)	5 / 10	4 / 7	10 / 25
1/2"	12.7	5	43 (0.089)	6 / 12	5 / 8	15 / 35
3/4"	19.0	6	36 (0.106)	7 / 14	6 / 9	25 / 45
1.25"	32.0	7	30 (0.128)	8 / 16	8 / 10	30 / 60
2"	51.0	8	29 (0.136)	10 / 19	9 / 12	35 / 75
3"	76.2	10	27 (0.144)	12 / 24	12 / 15	50 / 100

WARNING: At no time should the withdrawal rate of an individual acetylene cylinder exceed 1/7 of the cylinder contents per hour. If additional flow capacity is required use an acetylene manifold system of sufficient size to supply the necessary volume. Oxygen consumption (SCFH) is 1.1 times the acetylene under neutral flame conditions.

OXY-ACETYLENE & OXY-HYDROGEN				
Application	Torch Series	Nozzle Type	Available Sizes	Illustration
General purpose welding & heating. Uses replaceable tip ends. Flame characteristic - Long cone.	315FC H 315FC	RTE	000-6, 8, 10	
	315FC 100FC	W W-1	000-8, 10 000-7	
General purpose welding and preheating. Swaged one-piece copper elbow. Flame characteristic - Long cone.	J-28 J-40	W-J	000-4	



Size	Part No.	Length	Fuel Gas Usage
8	0323-0328	28" (711.2mm)	ALL, except Acetylene
10	0323-0324		
15	0323-0325		
20	0323-0326		

Type 55 Multi-Flame Heating Nozzles

The Type 55 Series multi-flame heating nozzles feature a raised center point on the head to prevent bumping the plate and compressing the flame. The center point and the unique mixer design combine to provide greater resistance to sustained backfire and improved flow performance. Type 55s can be ordered as a complete assembly or as individual components.

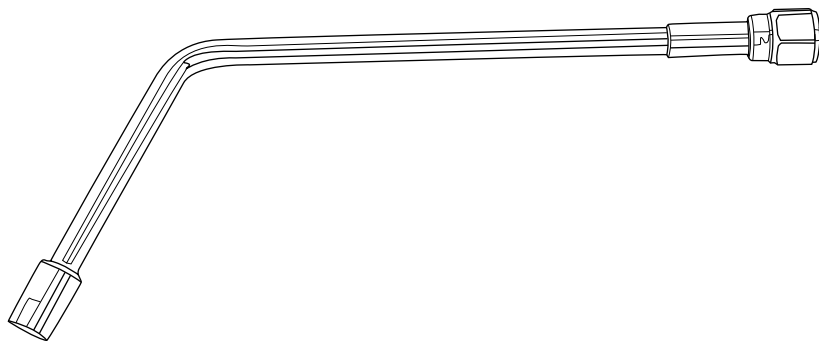
- High capacity heating head for heat treating, straightening, & priming.

WARNING: Type 55 for all alternative fuel gases.
 Type 55 - use HD 310C and 3/8" (9.5mm) hose.
 Not for use with acetylene.

Application/Description	Available Size	Available Length	Available Angles	Part No.
Multi-Flame Heads (Only)	8	-	-	0311-0241
	10	-	-	0311-0230
	15	-	-	0311-0231
	20	-	-	0311-0232
Multi-Flame Elbows	-	14" (355.6mm)	65°	0304-0002
	-	16" (406.4mm)	180°	0304-0095
	-	26" (660.4mm)	65°	0304-0011
	-	28" (711.2mm)	180°	0304-0094
Mixer and nut assembly, for use with pressures from 10 PSIG and up.				0328-0012
Extension Adapter - Thread specifications 1/4" - 18 NPT(F) x 1/2" - 27 UNS(F).				0312-0064
All Type 55 heating nozzles must be used with HD 310C torch handle and 3/8" (9.5mm) hose.				

Type 55 Components

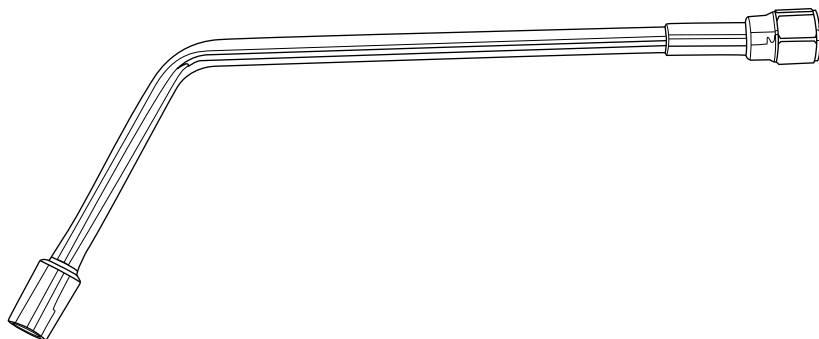
The Type 55 Series multi-flames are available as components. Threaded elbows give you the flexibility to easily service or extend the length of the nozzles. By using the special extension adapter you can build the length to suit your customer's needs.



Size	Part No.	Length	Fuel Gas Usage
12	0323-0261	17.5" (444.5mm)	Acetylene, Hydrogen
15	0323-0262		

MFA

- Multi-flame heating head for heat treating, straightening & priming
- For use with HD 310C torch handle and 3/8" (9.5mm) hose



Size	Part No.	Length	Fuel Gas Usage
12	0323-0303	17.5" (444.5mm)	Propane, Natural Gas
15	0323-0304		
20	0323-0305		

MFN

- Multi-flame heating head preheating, priming, straightening, etc.
- For use with HD 310C torch handle and 3/8" (9.5mm) hose



Size	Part No.	Length	Fuel Gas Usage
6	0323-0327	11" (279.4mm)	Fuel Gas Usage - ALL, except Acetylene
8	0323-0328	11" (279.4mm)	

Type 55 Multi-Flame Heating Nozzles

300 SERIES

The Type 55 Series multi-flame heating nozzles feature a raised center point on the head to prevent bumping the plate and compressing the flame. The center point and improved mixer design combine to provide greater resistance to flashback and improved performance. Type 55s can be ordered in a complete assembly or individual components.

Application /Description	Available Size	Available Length	Available Angles	Part No.
Multi-Flame Heads	6	-	-	0311-0240
	8	-	-	0311-0241
Multi-Flame Elbows	-	14" (355.6mm)	65°	0304-0002
	-	16" (406.4mm)	180°	0304-0095
	-	26" 660.4mm)	65°	0304-0011
	-	28" (711.2mm)	180°	0304-0094
Mixer and nut assembly, for use with pressures from 10 PSIG and up.				0328-0012
Extension Adapter - Thread specifications 1/4"-18 NPT(F) x 1/2"-27 UNS(F).				0312-0064
Not for use with acetylene.				

Type 55 Components

300 SERIES

Type 55 Series multi-flames are available as components. Threaded elbows give you the flexibility to easily service or extend the length of the nozzles. Use the special extensions adapter to extend the tip tube to the required length.

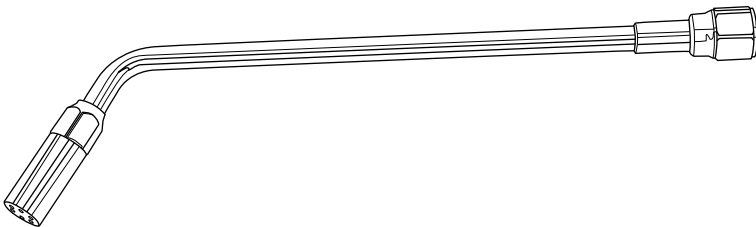


MFA

Multi-flame heating head for heat treating, straightening & priming.

- Fuel gas usage - acetylene, hydrogen

Model	Size	Part No.		Length	Tip End Replacement	Series
		Boxed	Clamshell			
MFA	4	0323-0250	0387-0060	12.0" (304.8mm)	-	300
	6	0323-0251	0387-0061			
	8	0323-0252	0387-0062			
	10	0323-0260	0387-0063	17.5" (444.5mm)		
MFA-1	2	0324-0108	-	12.0" (304.8mm)	0311-0598	100
	4	0324-0109	0387-0071		0311-0599	
	6	0324-0110	0387-0072		0311-0600	
	8	0324-0111	0387-0073		0311-0611	



MFN

Multi-flame heating head for preheating priming, straightening, etc.

- Fuel gas usage - propane, natural gas

Model	Size	Part No.	Length	Tip End Replacement	Series
MFN	8	0323-0292	12.0" (304.8mm)	-	300
	10	0323-0302	17.5" (444.5mm)		
MFN-1	4	-	-	0311-0610	100
	6	0324-0117	12.0" (304.8mm)	0311-0611	
	8	0324-1118		0311-0612	

Victor Professional

Series 1 TYPE MFTA



Acetylene

For preheating before welding, descaling and paint burning etc.

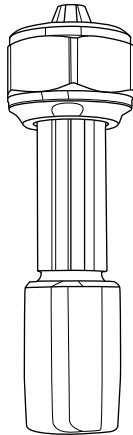
Size	Part No.
6	0330-0527
8	0330-0528
*10	0330-0523
*12	0330-0524

Required pressures:

12/15 Acet.; 70/80 PSIG Oxy.

Size: 8 is maximum size for use with cutting attachments.

*Use 3/8" (9.5m) hose straight torch.



Series 1 TYPE MFTN

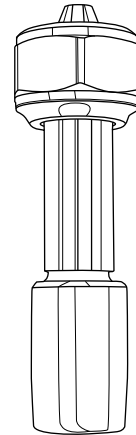


LP (Propane/Natural Gas)

For preheating before welding, descaling and paint burning etc.

Size	Part No.
10	0330-0521
12	0330-0522

Not for use with cutting attachments.



Model	Size	Part No.		Length	Series
		Boxed	Clamshell		
W	000	0323-0110	-	4.5"	300
	00	0323-0111	0387-0019		
	0	0323-0112	0387-0020		
	1	0323-0120	0387-0021		
	2	0323-0121	0387-0022		
	3	0323-0122	0387-0023		
	4	0323-0130	0387-0024		
	5	0323-0131	-		
	6	0323-0132	-		
	7	0323-0140	-		
	8	0323-0141	-		
	10	0323-0142	-	14"	
W-1	000	0324-0068	0387-0028	4.5"	100
	00	0324-0069	0387-0029		
	0	0324-0070	0387-0030		
	1	0324-0071	0387-0031		
	2	0324-0072	0387-0032		
	3	0324-0073	0387-0033		
	4	0324-0074	0387-0034		
	5	0324-0075	-		
6	0324-0076	0387-0036			
7	0324-0077	-			
W-J	000	0325-0081	-	4.5"	J
	00	0325-0082	0387-0039		
	0	0325-0083	0387-0040		
	1	0325-0084	0387-0041		
	2	0325-0085	0387-0042		
	3	0325-0086	0387-0043		
	4	0325-0087	-		
	5	0325-0088	-		
7	0325-0090	-			

W Series Welding Nozzles

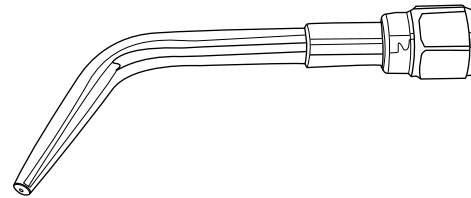
For use with 300 Series torch handles

- General purpose welding & preheating
- Fuel gas usage - acetylene, hydrogen
- 65° tip angle
- Long cone flame
- One piece copper elbow tip



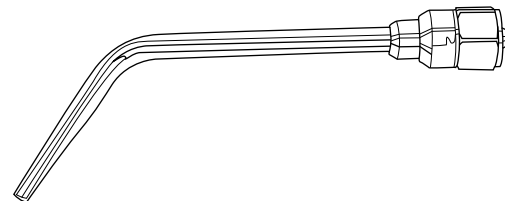
W-1

For use with 100 Series torch handles



W-J

For use with J Series torch handles

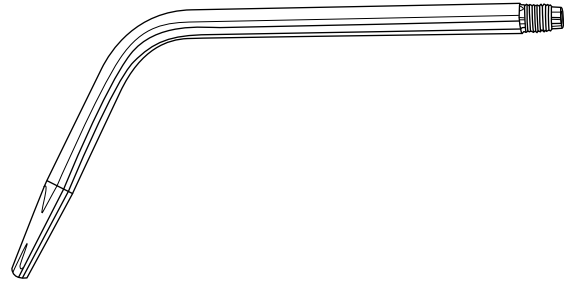


Model	Size	Part No.	Series
ET	000	0311-0055	300
	00	0311-0056	
	0	0311-0057	
	1	0311-0058	
	2	0311-0059	
	3	0311-0572	
	4	0311-0573	
	5	0311-0574	
	6	0311-0575	
ET-1	000	0311-0055	100
	00	0311-0056	
	0	0311-0057	
	1	0311-0058	
	2	0311-0059	
ET-1	3	0311-0345	J
	4	0311-0340	
	5	0311-0602	
	6	0311-0603	
ET-J	000	0311-0123	J
	00	0311-0124	
	0	0311-0125	
	1	0311-0126	
	2	0311-0127	
	3	0311-0128	
4	0311-0129		

ET Series Elbow Tips

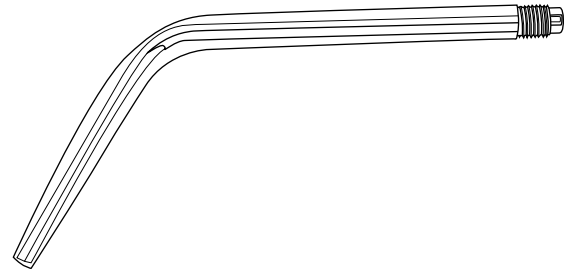
For use with 300 Series torch handles

- One piece copper elbow tip
- Long cone flame
- Fuel gas usage - acetylene, hydrogen



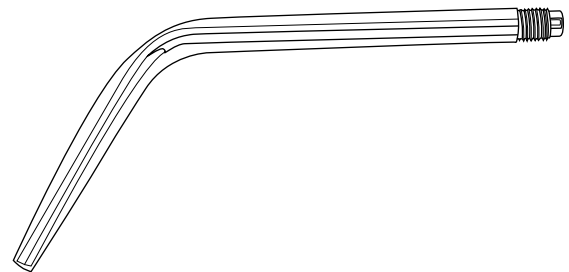
ET & ET-1

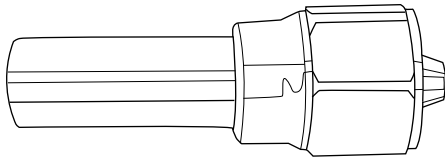
For use with 100 Series torch handles



ET-J

For use with J Series torch handles

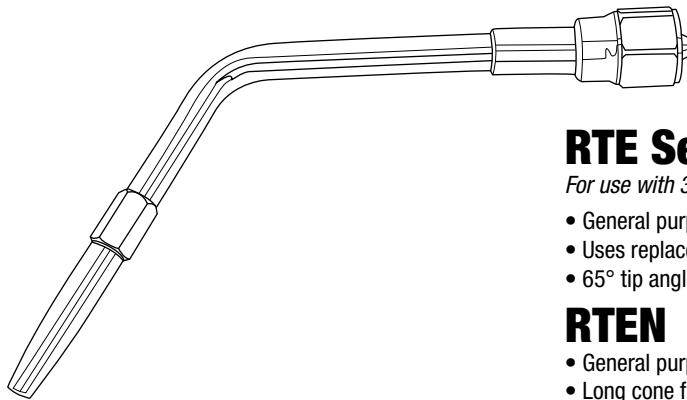




UM Series Universal Mixers

- Oxy-Acetylene universal mixers used when exact performance & Individual nozzles are not needed.

Type	Part No.	Fuel Gas Usage	Elbow Tips	Length	Series
UM	0328-0011	Oxy-Acetylene	000-2ET	2.5" (63.5mm)	300
4-UM	0328-0003		3 & 4 ET		
6-UM	0328-0008		5 & 6 ET		
10-UM	0328-0004		7 & 8 ET		
4-UM-1	0328-0005	Oxy-Acetylene	000-2 ET, 3 ET-1, 4 ET-1,	1.75" (44.5mm)	100
7-UM-1	0328-0009		5 ET-1, 6 ET-1		
UM-J	0328-0015	Oxy-Acetylene	000-4 ET-J	1.75" (44.5mm)	J



RTE Series Replaceable Tip Ends

For use with 300 Series torch handles

- General purpose welding & preheating
- Uses replacement tip ends (TE Series)
- 65° tip angle

RTEN

- General purpose brazing & preheating
- Long cone flame
- Uses TEN tip ends

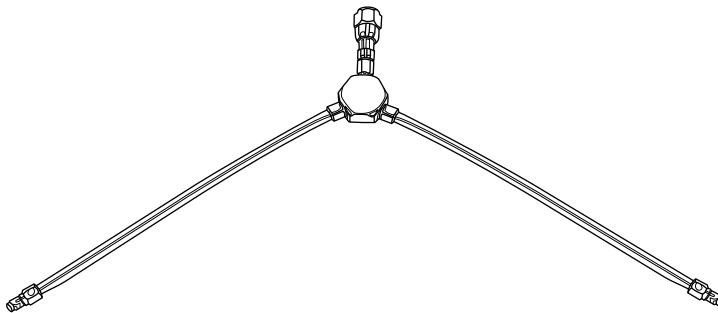
Model	Size	Part No.	Fuel Gas Usage	Series
RTE	00	0323-0307	Acetylene, Hydrogen	300
	0	0323-0308		
	1	0323-0309		
	2	0323-0310		
	3	0323-0311		
	4	0323-0312		
	5	0323-0313		
	6	0323-0314		
	8	0323-0316		
	10	0323-0317		
RTEN	6	0323-0284	N/G, Propane	



FE Series Flexible Elbow

- Flexible elbow for special welding, brazing, & heating needs
- Multi-fuel gas service
- Uses replacement tip ends
- Thread: 5/16"-27

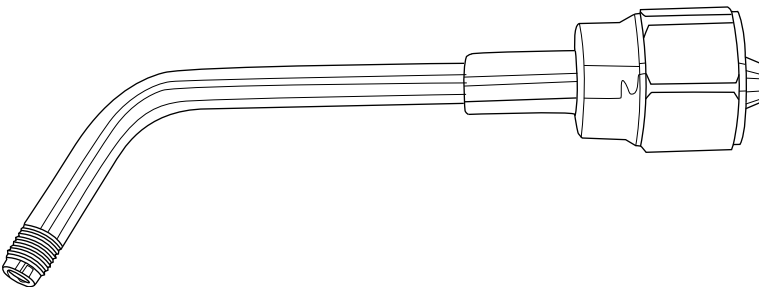
Type	Part No.	Fuel Gas Usage	Tip End Replacements	Length	Series
FE	0323-0191	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN	11.5" (292.1mm)	300
FE-1	0324-0066	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN	11.5" (292.1mm)	100
FE-J	0325-0102	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN	11.5" (292.1mm)	J



DFE Series Dual Flexible Elbows

- Dual flexible elbow nozzle assembly for special welding, brazing & heating
- Uses replacement tip ends
- Thread: 5/16"-27

Type	Part No.	Fuel Gas Usage	Tip End Replacements	Length	Series
DFE	0325-0192	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN	-	300
DFE-1	0325-0092	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN	-	100
DFE-J	0325-0108	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN	-	J



UN Series Universal Nozzle

- Standard bend nozzle for welding, brazing & heating
- Uses replacement tip ends
- 65° tip angle
- Thread: 5/16"-27

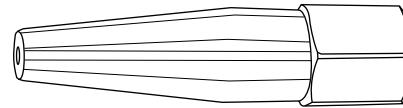
Type	Part No.	Fuel Gas Usage	Tip End Replacements	Length	Series
UN	0323-0242	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN	5" (127.0mm)	300
UN-1	0324-0094	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN	5" (127.0mm)	100
UN-J	0325-0101	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN	5" (127.0mm)	J

TIP ENDS INFORMATION		
Type	Application, Description	Fuel Gas
TE	Welding, Brazing	Acetylene
TEN	Brazing, Silver Brazing	Natural Gas, Propane
TEMFA	Brazing, Silver Brazing, Heating	Acetylene
TEMFN	Brazing, Silver Brazing, Heating	All Fuel Gases Except Acetylene

TE & TEN

300, 100 & J SERIES

Flame characteristic - Long Cone



TIP SIZE, LENGTH, THREAD SIZE				
Type	Size(s)	Length	Thread	Part No.
TE	000	1.5" (38.1mm)	5/16"-27	0311-0471
	00	1.5" (38.1mm)	5/16"-27	0311-0472
	0	1.5" (38.1mm)	5/16"-27	0311-0473
	1	1.5" (38.1mm)	5/16"-27	0311-0474
	2	1.5" (38.1mm)	5/16"-27	0311-0475
	3	1.63" (41.4mm)	5/16"-27	0311-0587
	4	1.88" (47.8mm)	5/16"-27	0311-0588
	5	2" (50.8mm)	5/16"-27	0311-0589
	6	2.25" (57.2mm)	0.393-27	*0311-0590
	8	2.75" (69.9mm)	0.393-27	*0311-0592
10	3" (76.2mm)	0.440-27	*0311-0593	
TEN	2	1.5" (38.1mm)	5/16"-27	0311-0485
	3	1.63" (41.4mm)	5/16"-27	0311-0486
	4	1.88" (47.8mm)	5/16"-27	0311-0487
	5	2" (50.8mm)	5/16"-27	0311-0488
	6	2.25" (57.2mm)	0.393-27	*0311-0585
TEMFA	1	1.5" (38.1mm)	5/16"-22	0311-0215
	2	1.5" (38.1mm)	5/16"-22	0311-0216
	3	1.5" (38.1mm)	5/16"-22	0311-0217
	4	1.5" (38.1mm)	5/16"-22	0311-0218
	5	1.5" (38.1mm)	5/16"-22	0311-0219
TEMFN	3	1.5" (38.1mm)	5/16"-22	0311-0306
	4	1.5" (38.1mm)	5/16"-22	0311-0307
	5	1.5" (38.1mm)	5/16"-22	0311-0308
	6	1.5" (38.1mm)	5/16"-27	0311-0676
	7	1.5" (38.1mm)	5/16"-27	0311-0677
	8	1.5" (38.1mm)	5/16"-27	0311-0678
	9	1.5" (38.1mm)	5/16"-27	0311-0679
10	1.5" (38.1mm)	5/16"-27	0311-0680	
Adapter for tip ends to fit tip tube: 5/16"-27(F) x 1/8"-27(M) 0312-0071 *Fit nozzles RTE Only.				

TEMFA & TEMFN

300, 100 & J SERIES

Flame characteristic - Multi-flame

