

## Type 55/55-1 Multi-Flame Heating Nozzles

Use with 300, HD 310C Series Torch Handles

### Victor® Heavy Industry

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 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, and priming
- LP Gases

**WARNING: NOT FOR USE WITH ACETYLENE**

Part No.	Type	Available size	Available Length	Series
0323-0326	55	20*	28" (711.2 mm)	HD 310C
0323-0325	55	15*	28" (711.2 mm)	HD 310C
0323-0324	55	10*	28" (711.2 mm)	HD 310C
0323-0328	55	8	11" (279.4 mm)	HD 310C / 300
0323-0327	55	6	11" (279.4 mm)	300
0324-0188	55-1	6	11" (279.4 mm)	100

\*Size 10, 15 and 20 Type 55 heating nozzles must be used with HD 310C torch handle and 3/8" (9.5 mm) hose.

### TYPE 55 – FOR USE WITH PROPYLENE BASED FUEL GASES, METHANE, PROPANE, BUTANE, & PRESSURIZED NATURAL GAS

Tip Size	Oxygen Pressure (psig)	Fuel Pressure (psig)	Oxygen Consumption (SCFH)	Fuel Consumption (SCFH)	BTU Per Hour
20	100/150	30/50	900/1150	400/500	See Chart
15	90/120	20/35	600/800	250/350	
10	70/100	15/25	356/460	150/200	
8	70/85	15/25	220	85	
6	70/80	15/20	160	65	

### BTU Per Hour

To approximate gross BTU output, multiply flow rate by BTU value listed below:

Propane	2498
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 the 310C Series 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

## 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.



**0328-0012 & 0328-0013**  
Mixer and Nut Assembly

**WARNING: NOT FOR USE WITH ACETYLENE**

Part No.	Available Size	Application/Description	Available Length	Available Angles	Series
0311-0232	20*	Multi-Flame Heads	--	--	HD 310C
0311-0231	15*	Multi-Flame Heads	--	--	HD 310C
0311-0230	10*	Multi-Flame Heads	--	--	HD 310C
0311-0241	8	Multi-Flame Heads	--	--	HD 310C / 300
0311-0240	6	Multi-Flame Heads	--	--	300
0304-0002	--	Multi-Flame Elbows	14" (355.6 mm)	65°	HD 310C / 300
0304-0095	--	Multi-Flame Elbows	16" (406.4 mm)	180°	HD 310C / 300
0304-0011	--	Multi-Flame Elbows	26" (660.4 mm)	65°	HD 310C / 300
0328-0012		Mixer and nut assembly, for use with pressures from 10 psig and up.			HD 310C / 300
0328-0013		Mixer and nut assembly, for use with pressures from 2 - 10 psig.			HD 310C / 300
0312-0064		Extension Adapter - Thread specifications: 1/4" - 18 NPT(F) X 1/2" - 27 UNS(F)"			HD 310C / 300

\*Size 10, 15 and 20 Type 55 heating nozzles must be used with HD 310C torch handle and 3/8" (9.5 mm) hose.



# Welding & Heating Nozzles/Tips

MFN/MFN-1 & MFA/MFA-1 HEATING NOZZLES

## MFN/MFN-1 Heating Nozzles

For Use with 100, 300 & HD310C Series Torch Handles

### Victor® Heavy Industry

- Multi-flame heating head for preheating, priming and straightening
- LP Gases



**WARNING: NOT FOR USE WITH ACETYLENE**

Part No.	Type	Size	Tip End Replacement	Length	Series
0323-0303	MFN	12*	--	17.5" (444.5 mm)	HD 310C
0323-0304	MFN	15*	--	17.5" (444.5 mm)	HD 310C
0323-0305	MFN	20*	--	17.5" (444.5 mm)	HD 310C
0323-0292	MFN	8	--	12.0" (304.8 mm)	300
0323-0302	MFN	10	--	17.5" (444.5 mm)	300
0324-0117	MFN-1	6	0311-0611	12.0" (304.8 mm)	100
0324-0118	MFN-1	8	0311-0612	12.0" (304.8 mm)	100

\*Size 12, 15 and 20 MFN heating nozzles must be used with HD 310C torch handle and 3/8" (9.5 mm) hose.

### 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 Chart
8	10/20	10/15	40/140	10/35	
10	10/30	12/20	80/320	20/80	
12	30/125	15/25	120/640	30/160	
15	30/125	15/25	200/800	50/200	
20	40/135	15/25	300/1000	75/250	

### BTU Per Hour

To approximate gross BTU output, multiply flow rate by BTU value listed below:

Propane	2498
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 the 310C Series 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 Heating Nozzles

For Use with J, 100, 300 & HD310C Series Torch Handles

### Victor Heavy Industry

- Multi-flame heating head for heat treating, straightening and priming
- Acetylene / Hydrogen



Part No. Boxed	Part No. Clamshell	Type	Size	Tip End Replacement	Length	Series
0323-0261	0387-0064	MFA	12	0311-0540	17.5" (444.5 mm)	HD 310C
0323-0262	0387-0065	MFA	15	--	17.5" (444.5 mm)	HD 310C
0323-0250	0387-0060	MFA	4	0311-0536	12.0" (304.8 mm)	300
0323-0251	0387-0061	MFA	6	0311-0537	12.0" (304.8 mm)	300
0323-0252	0387-0062	MFA	8	0311-0538	12.0" (304.8 mm)	300
0323-0260	0387-0063	MFA	10	0311-0539*	12.0" (304.8 mm)	300
0324-0108	--	MFA-1	2	0311-0598	12.0" (304.8 mm)	100
0324-0109	0387-0071	MFA-1	4	0311-0599	12.0" (304.8 mm)	100
0324-0110	0387-0072	MFA-1	6	0311-0600	12.0" (304.8 mm)	100
0324-0111	0387-0073	MFA-1	8	0311-0601	12.0" (304.8 mm)	100
0325-0104	--	MFA-J	2	--	--	J
0325-0105	--	MFA-J	4	--	--	J
0325-0106	0387-0077	MFA-J	6	--	--	J

\*Size 12, 20 and MFA heating nozzles must be used with HD 310C torch handle and 3/8" (9.5 mm) hose.

### 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 Chart
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	
12	50/60	12/15	66/165	60/150	
15	50/60	12/15	99/244	90/220	

### BTU Per Hour

To approximate gross BTU output, multiply flow rate by BTU value listed below:

Acetylene	1470
Methane	1000

#### 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.

NOZZLES

### Series 1 Heating Tips



#### 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

\*Use 3/8" (9.5 m) hose and straight torch  
Required pressures: 12/15 Acetylene; 70/80 psig Oxygen  
Size 8 is maximum size for use with cutting attachments

### Series 1 Heating Tips



#### 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

### CHT Adaptor

(0312-0089)

Concentrated Heating Tip Adaptor for straightening, bending and forming of plate

- For Use with Alternate Fuels
- Use with HPP or HPN size 5 cutting tip, multi-flame elbow, or mixer and nut assembly



### Welding Nozzles

#### W Series

For use with  
300 Series torch handles



#### W-1 Series

For use with  
100 Series torch handles



#### W-J Series

For use with  
J Series torch handles



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

Model	Size	Part No.		Series
		Boxed	Clamshell	
W	000	0323-0110	–	300
	00	0323-0111	0387-0019	300
	0	0323-0112	0387-0020	300
	1	0323-0120	0387-0021	300
	2	0323-0121	0387-0022	300
	3	0323-0122	0387-0023	300
	4	0323-0130	0387-0024	300
	5	0323-0131	–	300
	6	0323-0132	–	300
	7	0323-0140	–	300
W-1	8	0323-0141	–	300
	10	0323-0142	–	300
	000	0324-0068	0387-0028	100
	00	0324-0069	0387-0029	100
	0	0324-0070	0387-0030	100
	1	0324-0071	0387-0031	100
	2	0324-0072	0387-0032	100
	3	0324-0073	0387-0033	100
	4	0324-0074	0387-0034	100
	5	0324-0075	–	100
W-J	6	0324-0076	–	100
	000	0325-0081	–	J
	00	0325-0082	0387-0039	J
	0	0325-0083	0387-0040	J
	1	0325-0084	0387-0041	J
	2	0325-0085	0387-0042	J
	3	0325-0086	0387-0043	J
	5	0325-0088	–	J
	6	0325-0089	–	J
	7	0325-0090	–	J

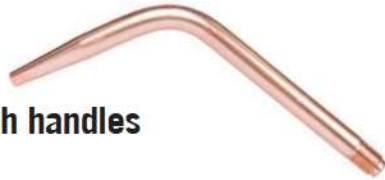
# Welding & Heating Nozzles/Tips

ELBOW TIPS, UM SERIES, RTE & RTEN SERIES

## Elbow Tips

### ET Series

For use with  
300 Series torch handles



### ET-1 Series

For use with  
100 Series torch handles



### ET-J Series

For use with  
J Series torch handles



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

Model	Size	Part No.	Series
ET	000	0311-0055	300
	00	0311-0056	300
	0	0311-0057	300
	1	0311-0058	300
	2	0311-0059	300
	3	0311-0572	300
	4	0311-0573	300
	5	0311-0574	300
	6	0311-0575	300
	7	0311-0576	300
ET-1	8	0311-0577	300
	10	0311-0073	300
	3	0311-0345	100
	4	0311-0340	100
ET-J	5	0311-0602	100
	6	0311-0603	100
	000	0311-0123	J
	00	0311-0124	J
	0	0311-0125	J
	1	0311-0126	J
	2	0311-0127	J
	3	0311-0128	J
	4	0311-0129	J

## 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
4-UM-1	0328-0005	Oxy-Acetylene	000-2 ET, 3 ET-1, 4 ET-1	1.75" (44.5 mm)	100
7-UM-1	0328-0009	Oxy-Acetylene	5 ET-1, 6 ET-1	1.75" (44.5 mm)	100

## 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 Series

- 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	Acetylene, Hydrogen	300
	1	0323-0309	Acetylene, Hydrogen	300
	2	0323-0310	Acetylene, Hydrogen	300
	3	0323-0311	Acetylene, Hydrogen	300
	4	0323-0312	Acetylene, Hydrogen	300
	5	0323-0313	Acetylene, Hydrogen	300
	6	0323-0314	Acetylene, Hydrogen	300
	8	0323-0316	Acetylene, Hydrogen	300
	10	0323-0317	Acetylene, Hydrogen	300
RTEN	6	0323-0284	Natural Gas, Propane	300

NOZZLES

### FE Series Flexible Elbow



- Flexible elbow for special welding, brazing, and heating needs
- Multi-fuel gas service
- Uses replaceable 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, TEMF	11.5" (292.1 mm)	300
FE-1	0324-0066	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN, TEMF	11.5" (292.1 mm)	100
FE-J	0325-0102	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN, TEMF	11.5" (292.1 mm)	J

### UN Series Universal Nozzle

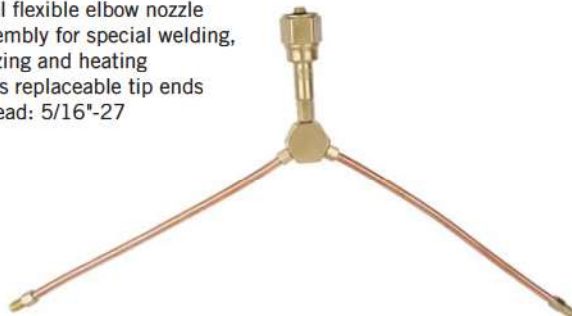


- Standard bend nozzle for welding, brazing and heating
- Uses replaceable tip ends
- 65° tip angle
- Thread: 5/16"-27

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

### DFE Series Dual Flexible Elbows

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



Type	Part No.	Fuel Gas Usage	Tip End Replacements	Length	Series
DFE	0323-0192	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN, TEMF	-	300
DFE-1	0324-0092	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN, TEMF	-	100
DFE-J	0325-0108	Multi-Gas Fuel Service	TE, TEN, TEMFA, TEMFN, TEMF	-	J

### Replaceable Tip Ends

#### TE, TEN, TEMFA, TEMFN & TEMF 300, 100 & J Series

For All Nozzles Using Replaceable Tip Ends			
Type	Application, Description	Fuel Gas	Illustration
TE	Welding, brazing Flame – long Cone One piece	Acetylene	
TEN	Brazing, silver brazing Flame – long Cone One piece	Natural Gas, Propane	
TEMFA	Brazing, silver brazing, heating Flame – multi-flame One piece	Acetylene	
TEMFN	Brazing, silver brazing, heating Flame – multi-flame One piece	All Fuel Gases Except Acetylene	
TEMF	Brazing, soldering, heating Flame – multi-flame Two piece	All Fuel Gases Except Acetylene	

Type	Size(s)	Tip Size, Length, Thread Size		Part No.	
		Length	Thread		
TE	000	1.5" (38.1 mm)	5/16"-27	0311-0471	
	00	1.5" (38.1 mm)	5/16"-27	0311-0472	
	0	1.5" (38.1 mm)	5/16"-27	0311-0473	
	1	1.5" (38.1 mm)	5/16"-27	0311-0474	
	2	1.5" (38.1 mm)	5/16"-27	0311-0475	
	3	1.63" (41.4 mm)	5/16"-27	0311-0587	
	4	1.88" (47.8 mm)	5/16"-27	0311-0588	
	5	2" (50.8 mm)	5/16"-27	0311-0589	
	6	2.25" (57.2 mm)	0.393-27	*0311-0590	
	8	2.75" (69.9 mm)	0.393-27	*0311-0592	
TEN	10	3" (76.2 mm)	0.440-27	*0311-0593	
	0	1.5" (38.1 mm)	5/16"-27	0311-0483	
	2	1.5" (38.1 mm)	5/16"-27	0311-0485	
	3	1.63" (41.4 mm)	5/16"-27	0311-0486	
	4	1.88" (47.8 mm)	5/16"-27	0311-0487	
	5	2" (50.8 mm)	5/16"-27	0311-0488	
	6	2.25" (57.2 mm)	0.393-27	*0311-0585	
	TEMFA	1	1.5" (38.1 mm)	5/16"-27	0311-0215
		2	1.5" (38.1 mm)	5/16"-27	0311-0216
		3	1.5" (38.1 mm)	5/16"-27	0311-0217
4		1.5" (38.1 mm)	5/16"-27	0311-0218	
5		1.5" (38.1 mm)	5/16"-27	0311-0219	
TEMFN	3	1.5" (38.1 mm)	5/16"-27	0311-0306	
	4	1.5" (38.1 mm)	5/16"-27	0311-0307	
	5	1.5" (38.1 mm)	5/16"-27	0311-0308	
TEMF	6	1.5" (38.1 mm)	5/16"-27	0311-0676	
	7	1.5" (38.1 mm)	5/16"-27	0311-0677	
	8	1.5" (38.1 mm)	5/16"-27	0311-0678	
	9	1.5" (38.1 mm)	5/16"-27	0311-0679	
	10	1.5" (38.1 mm)	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