Multiplex MP Series

70,000 Btu/Hr -40,000,000 Btu/Hr



Gas, Oil and Dual Fuel Burner

- Exceptional flame stability
- Low air and gas pressure requirements
- Combustion tunnel options, heat resistant metal, refractory, silicon carbide
- Wide turndown (up to 30:1 on Gas)
- Inner assembly easily removed
- · Low, medium and high velocity options
- Range of extended projections available

OPERATION

The MULTIPLEX burner has been designed to achieve a high degree of stability over a wide turndown range from relatively low service inlet pressures. Gas and air flows may be controlled by a gas proportionator and air butterfly valves, or for maximum turndown, controlled by a mechanical or electronic ratio control system. For high excess air operation the air valve would normally be left fully open and controlled by the gas valve only, thus providing a relatively constant volume of combustion products in the furnace throughout the operating range.

BASIC BURNER

The basic burner is supplied without a combustion tunnel. It is suitable for mounting directly to the wall of the application, the combustion tunnel being formed by a suitable hole in the furnace wall.

FUEL

Burners can be supplied for all commercial gases, (light) oil, or dual fuel.

COMBUSTION TUNNELS

Multiplex burners are available with a number of combustion tunnel materials and the following is intended only for general guidance. All sizes, in all materials, can be supplied with extended projection.

METAL COMBUSTION TUNNELS

For low temperature applications up to 850°F, standard stainless steel material can be used for the combustion tunnel. For high temperature applications up to 1650°F, a high quality heat resistant stainless steel is available.

SILICON CARBIDE TUNNELS

For high temperature applications up to 2375°F, ceramic fiber-lined furnaces and kilns, silicon carbide combustion tunnels are available subject to the following:-

High velocity up to MP10 only, medium velocity up to MP15 only, low velocity not available.

REFRACTORY COMBUSTION TUNNELS

For high temperature applications up to 2650° C, conventional refractory quarls, together with holders are available. These quarls can be cased in heat-resisting stainless steel if required.

Note: Burner ratings are based on gross CV.



For more information on all Nu-way products please visit www.nu-way.co.uk or www.metroservicesinc.com



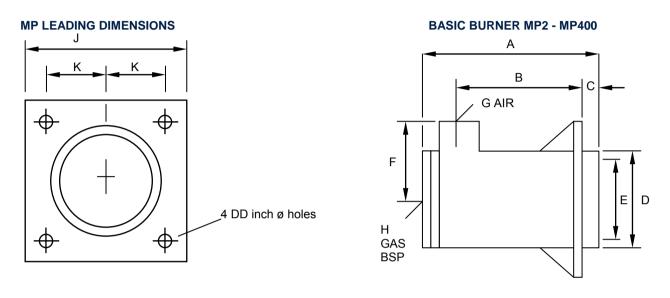


NOMINAL RATINGS

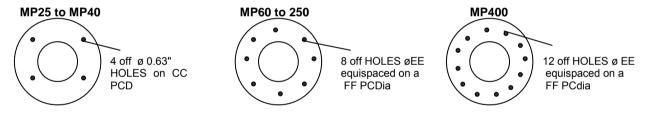
See the following chart for nominal ratings of burners operating at 4"wc gas and air pressure at the burner inlet. This assumes balanced chamber conditions.

GAS	MP2	MP4	MP6	MP10	MP15	MP25	MP40	MP60	MP100	MP150	MP250	MP400
OIL	N/A	N/A	N/A	N/A	MPO 15	MPO 25	MPO 40	MPO 60	MPO 100	MPO 150	MPO 250	MPO 400
1000 BTU/Hr	200	400	600	1000	1500	2500	4000	6000	10000	15000	25000	40000
Therms/h	2	4	6	10	15	25	40	60	100	150	250	400
Kcal x 1000/h	50	100	150	250	375	625	1000	1500	2500	3750	6250	10000

Gas and air pressure for nominal rating are 4"wc, with additional gas and air pressures, over-firing rates of up to 50% can be achieved. Refer to Nu-way for advice.



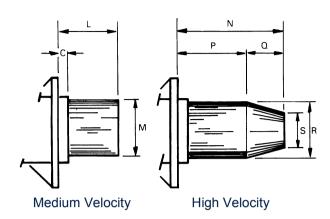
ALTERNATIVE AIR INLETS (TABLE 'D' FLANGE)



	A	В	С	D	E	F	G	н	J	K	AA	ВВ	CC	DD	EE	FF
MP2	5.98	2.87	0.00	2.83	1.97	2.17	1 1/2"	3/8	4.02	1.57	=			0.51	25	G <u>1</u> E
MP4	6.85	2.36	1.77	3.39	2.87	2.56	2"	3/4	5.12	1.93	-	-	39	0.51	-	-
MP6	7.56	2.36	1.77	4.02	3.27	2.76	2"	1	5.51	2.13	-	-	84	0.51	-	19
MP10	10.83	5.63	1.77	5.24	4.25	3.70	2 1/2"	1 1/4"	7.36	3.07				0.51	-	870
MP15	12.09	6.50	1.57	6.30	5.31	3.94	3"	1 1/2"	7.87	3.15		-		0.51	-	_870
MP25	13.50	7.87	2.01	7.28	6.34	4.88	3"F	2"	9.76	3.86	7.24	3.54	5.75	0.63	-	
MP40	14.72	8.31	2.01	9.25	8.31	5.79	4"F	3"	11.57	4.76	8.50	4.49	7.01	0.63	,	1.5
MP60	22.09	12.40	1.97	11.69	10.43	8.27	6"F	3"	17.32	æ	10.98	6.50	70=0	0.87	0.87	9.25
MP100	27.40	16.34	1.97	14.06	12.80	9.84	8"F	3"	18.70		13.23	8.43	7(-)	0.71	0.71	11.50
MP150	37.99	21.06	1.97	17.95	16.73	11.81	10"F	3"	25.59		15.98	10.51	7(1 4 7)	0.87	0.87	13.98
MP250	41.93	25.47	2.56	23.31	21.61	15.75	14"F	3"	33.46	-	20.75	13.54	10-1	1.34	1.34	18.50
MP400	44.57	27.52	2.36	29.53	27.36	19.29	16"F	3"	40.16	-	22.68	15.59	30-2	1.77	1.77	20.47

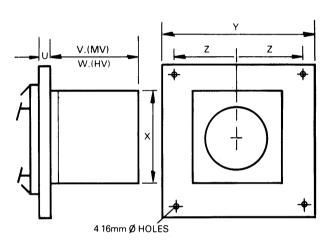
All dimensions are in inches. For guidance only. Refer to Nu-way for detailed information. For mounting information on larger burners refer to Nu-way.

Metal (MP2 - 400)



For all MULTIPLEX burners with stainless steel combustion tunnels dimensions given are for standard tunnel length. Tunnels may be extended to suit application requirements. Refractory tunnels can be extended to order.

Refractory (MP2 - 400)



	L*	M	N*	P	Q	R	S
MP2	3.15	2.36	6.89	3.15	3.74	2.36	1.30
MP4	7.36	2.87	10.24	7.09	3.15	2.76	1.57
MP6	7.87	3.54	13.78	7.87	5.91	3.54	1.77
MP10	8.54	4.49	13.78	8.54	5.24	4.49	2.28
MP15	10.43	5.55	15.94	10.43	5.51	5.55	2.83
MP25	11.42	6.65	16.93	11.42	5.51	6.65	3.46
MP40	13.98	8.62	21.65	13.98	7.68	8.62	4.41
MP60	13.31	10.59	-	-	-	10.59	-
MP100	14.69	12.95	-	-	-	12.95	-
MP150	14.96	16.89	-	-	-	16.97	-
MP250	21.65	21.65	-	•	16	-	-
MP400	-	-	-	-	-	-	-

	U	V	w	x	Y	z
MP2	0.87	4.33	9.84	8.98	12.01	5.00
MP4	0.39	8.98	13.31	8.98	12.01	5.00
MP6	0.39	8.98	13.31	8.98	12.01	5.00
MP10	0.39	8.98	13.31	8.98	12.01	5.00
MP15	0.39	11.81	17.28	11.81	15.16	6.46
MP25	0.39	13.58	21.26	13.66	17.72	7.72
MP40	0.39	12.80	21.26	13.66	17.72	7.87
MP60	0.49	12.80	-	15.75	19.69	8.86
MP100	0.49	14.45	-	18.90	23.62	10.83
MP150	0.79	14.17	-	22.83	31.50	28.35
MP250	0.79	20.87	-	29.53	41.73	37.80
MP400	0.79	31.50	-	35.43	48.43	44.49

^{*} Standard projection – range of extended projections available

Dimensions are for guidance only. Refer to Nu-way for detailed information.

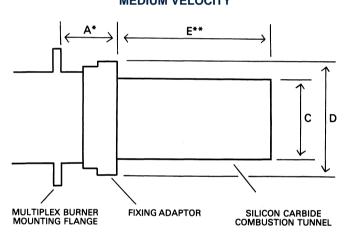
SILICON CARBIDE TUNNELS

For high temperature, ceramic fibre-lined furnaces and kilns, silicon carbide combustion tunnels are available.

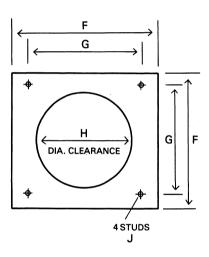
HIGH VELOCITY A* B** C D MULTIPLEX BURNER FIXING ADAPTOR SILICON CARBIDE COMBUSTION TUNNEL

- * This dimension can be increased if required
- If B + A or E + A is greater than wall thickness, then stand-off adaptors are available as optional extras

MEDIUM VELOCITY



MOUNTING DETAILS



	A	В	C	D	E	F	G	н	J
MP2	1.81	7.05	2.56	3.35	3.31	4.02	3.19	3.46	M10 X 40 LONG
мР4	3.46	10.75	3.15	4.25	5.08	5.12	3.86	4.37	M10 X 40 LONG
мР6	3.74	12.13	3.74	4.88	6.30	5.51	4.25	5.04	M10 X 40 LONG
MP10	3.66	12.24	4.72	5.91	6.42	7.36	6.14	6.02	M10 X 40 LONG
MP15	3.46	_	5.75	7.01	9.61	7.87	6.30	7.13	M10 X 40 LONG

Dimensions are for guidance only. Refer to Nu-way for detailed information.

