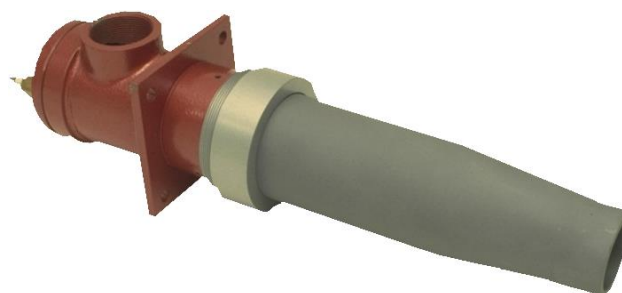


Multiplex MP Series

20 kW-12 MW



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 450°C, standard stainless steel material can be used for the combustion tunnel. For high temperature applications up to 900°C, a high quality heat resistant stainless steel is available.

SILICON CARBIDE TUNNELS

For high temperature applications up to 1300°C, ceramic fibre-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 1450°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



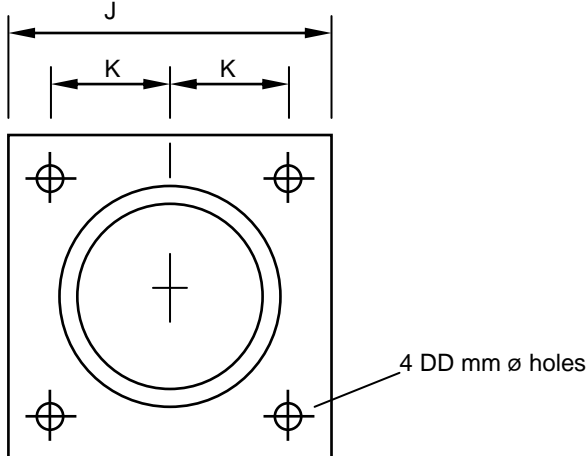
NOMINAL RATINGS

See the following chart for nominal ratings of burners operating at 10 mbar gas and air pressure at the burner inlet. This assumes balanced chamber conditions.

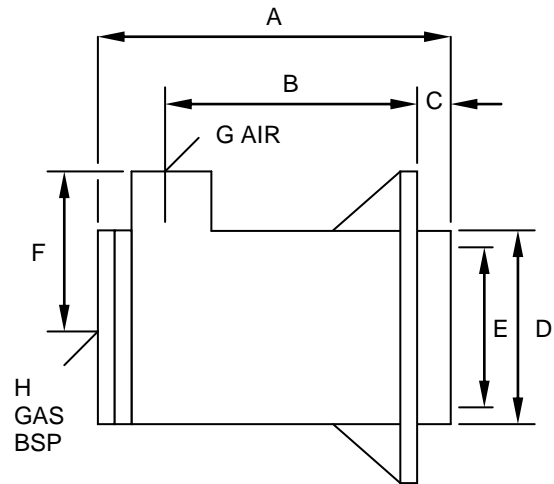
| GAS | MP2 | MP4 | MP6 | MP10 | MP15 | MP25 | MP40 | MP60 | MP100 | MP150 | MP250 | MP400 |
|---------------|-----|-----|-----|------|--------|--------|--------|--------|---------|---------|---------|---------|
| OIL | N/A | N/A | N/A | N/A | MPO 15 | MPO 25 | MPO 40 | MPO 60 | MPO 100 | MPO 150 | MPO 250 | MPO 400 |
| kW | 60 | 120 | 175 | 295 | 440 | 730 | 1170 | 1750 | 2950 | 4400 | 7300 | 11700 |
| 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 10 mbar, with additional gas and air pressures, over-firing rates of up to 50% can be achieved. Refer to Nu-way for advice.

MP LEADING DIMENSIONS

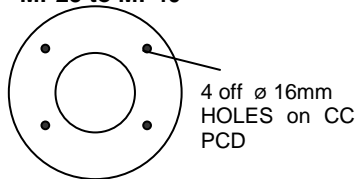


BASIC BURNER MP2 - MP400

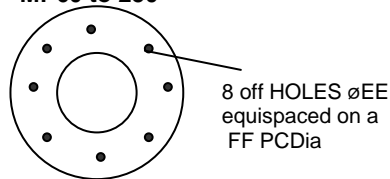


ALTERNATIVE AIR INLETS (TABLE 'D' FLANGE)

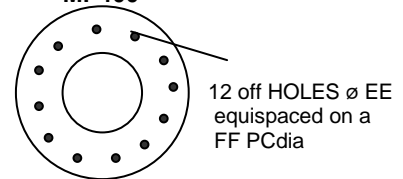
MP25 to MP40



MP60 to 250



MP400



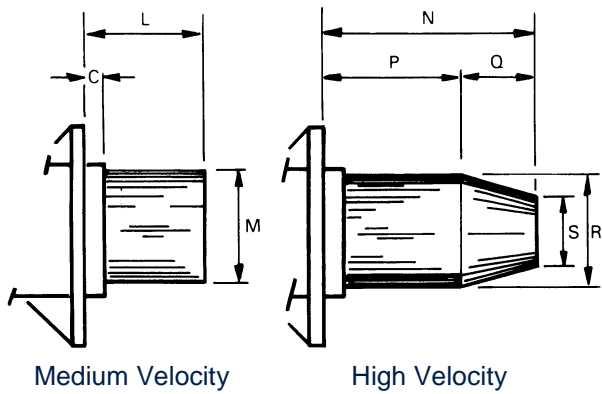
| | A | B | C | D | E | F | G | H | J | K | AA | BB | CC | DD | EE dia | FF pcd |
|-------|------|-----|----|-----|-----|-----|------|------|------|-----|-----|-----|-----|----|--------|--------|
| MP2 | 152 | 73 | 0 | 72 | 50 | 55 | 1½" | 3/8" | 102 | 40 | - | - | - | 13 | - | - |
| MP4 | 174 | 60 | 45 | 86 | 73 | 65 | 2" | 3/4" | 130 | 49 | - | - | - | 13 | - | - |
| MP6 | 192 | 73 | 45 | 102 | 83 | 70 | 2" | 1" | 140 | 54 | - | - | - | 13 | - | - |
| MP10 | 275 | 143 | 45 | 133 | 108 | 94 | 2½" | 1¼" | 187 | 78 | - | - | - | 13 | - | - |
| MP15 | 307 | 165 | 40 | 160 | 135 | 100 | 3" | 1½" | 200 | 80 | - | - | - | 13 | - | - |
| MP25 | 343 | 200 | 51 | 185 | 161 | 124 | 3"F | 2" | 248 | 98 | 184 | 90 | 146 | 16 | - | - |
| MP40 | 374 | 211 | 51 | 235 | 211 | 147 | 4"F | 3" | 294 | 121 | 216 | 114 | 178 | 16 | - | - |
| MP60 | 561 | 315 | 50 | 297 | 265 | 210 | 6"F | 1½" | 440 | - | 279 | 165 | - | 22 | 22 | 235 |
| MP100 | 696 | 415 | 50 | 357 | 325 | 250 | 8"F | 3" | 475 | - | 336 | 214 | - | 18 | 18 | 292 |
| MP150 | 965 | 535 | 50 | 456 | 425 | 300 | 10"F | 3" | 650 | - | 406 | 267 | - | 22 | 22 | 355 |
| MP250 | 1065 | 647 | 65 | 592 | 549 | 400 | 14"F | 3" | 850 | - | 527 | 344 | - | 34 | 34 | 470 |
| MP400 | 1132 | 699 | 60 | 750 | 695 | 490 | 16"F | 3" | 1020 | - | 576 | 396 | - | 45 | 45 | 520 |

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

For mounting information on larger burners refer to Nu-way.

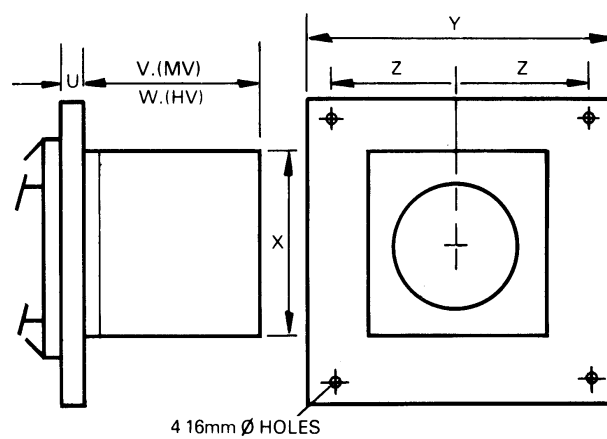
COMBUSTION TUNNELS

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 | 80 | 60 | 175 | 80 | 95 | 60 | 33 |
| MP4 | 187 | 73 | 260 | 180 | 80 | 70 | 40 |
| MP6 | 200 | 90 | 350 | 200 | 150 | 90 | 45 |
| MP10 | 217 | 114 | 350 | 217 | 133 | 114 | 58 |
| MP15 | 265 | 141 | 405 | 265 | 140 | 141 | 72 |
| MP25 | 290 | 169 | 430 | 290 | 140 | 169 | 88 |
| MP40 | 355 | 219 | 550 | 355 | 195 | 219 | 112 |
| MP60 | 338 | 269 | - | - | - | 269 | - |
| MP100 | 373 | 329 | - | - | - | 329 | - |
| MP150 | 380 | 429 | - | - | - | 431 | - |
| MP250 | 550 | 550 | - | - | - | - | - |
| MP400 | - | - | - | - | - | - | - |

| | U | V | W | X | Y | Z |
|-------|------|-----|-----|-----|------|------|
| MP2 | 22 | 110 | 250 | 228 | 305 | 127 |
| MP4 | 10 | 228 | 338 | 228 | 305 | 127 |
| MP6 | 10 | 228 | 338 | 228 | 305 | 127 |
| MP10 | 10 | 228 | 338 | 228 | 305 | 127 |
| MP15 | 10 | 300 | 439 | 300 | 385 | 164 |
| MP25 | 10 | 345 | 540 | 347 | 450 | 196 |
| MP40 | 10 | 325 | 540 | 347 | 450 | 200 |
| MP60 | 12.5 | 325 | - | 400 | 500 | 225 |
| MP100 | 12.5 | 367 | - | 480 | 600 | 275 |
| MP150 | 20 | 360 | - | 580 | 800 | 720 |
| MP250 | 20 | 530 | - | 750 | 1060 | 960 |
| MP400 | 20 | 800 | - | 900 | 1230 | 1130 |

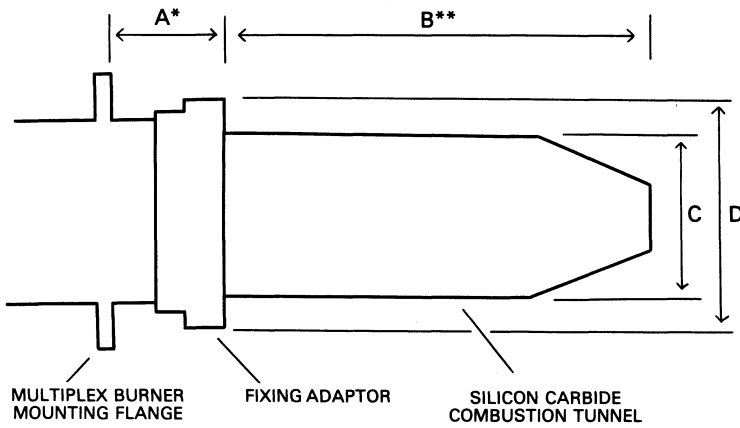
* Standard projection – range of extended projections available

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.

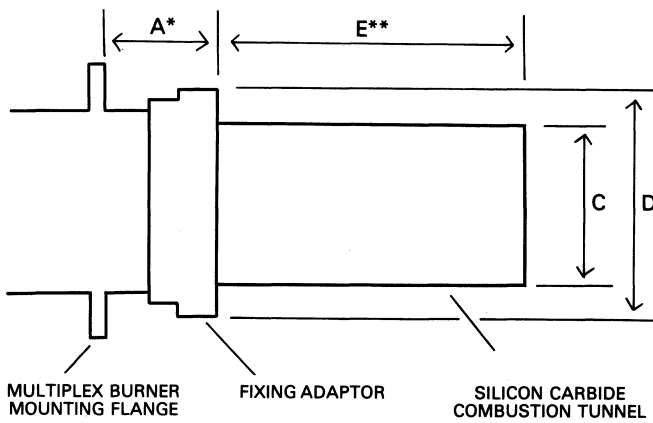
HIGH VELOCITY



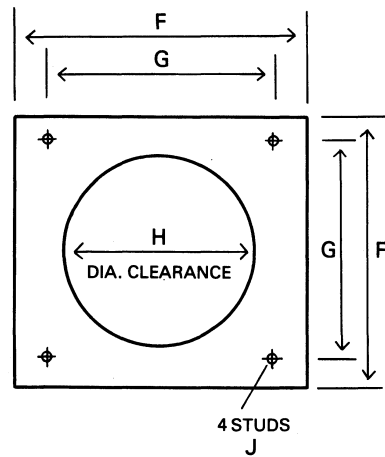
* This dimension can be increased if required

** 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 | B | C | D | E | F | G | H | J |
|-------------|----|-----|-----|-----|-----|-----|-----|-----|---------------|
| MP2 | 46 | 179 | 65 | 85 | 84 | 102 | 81 | 88 | M10 x 40 long |
| MP4 | 88 | 273 | 80 | 108 | 129 | 130 | 98 | 111 | M10 x 40 long |
| MP6 | 95 | 308 | 95 | 124 | 160 | 140 | 108 | 128 | M10 x 40 long |
| MP10 | 93 | 311 | 120 | 150 | 163 | 187 | 156 | 153 | M10 x 40 long |
| MP15 | 88 | - | 146 | 178 | 244 | 200 | 160 | 181 | M10 x 40 long |

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