

# Grade AO General Purpose Dry Particulate Filter

## Filtration Performance

| Filtration Grade | Filter Type     | Particle Reduction (inc water & oil aerosols) | Max Remaining Oil Content at 21°C (70°F) | Filtration Efficiency | Change Element Every | Precede with Filtration Grade |
|------------------|-----------------|-----------------------------------------------|------------------------------------------|-----------------------|----------------------|-------------------------------|
| AO               | Dry Particulate | Down to 1 micron                              | Not Applicable                           | 99.925%               | 12 months            | Not Applicable                |

## Technical Data

| Filtration Grade | Filter Models                | Min Operating Pressure |       | Max Operating Pressure |       | Min Operating Temperature |    | Max Operating Temperature |     |
|------------------|------------------------------|------------------------|-------|------------------------|-------|---------------------------|----|---------------------------|-----|
|                  |                              | bar g                  | psi g | bar g                  | psi g | °C                        | °F | °C                        | °F  |
| AO               | PX010 - PX055 (Float Drain)  | 1.5                    | 22    | 16                     | 232   | 2                         | 35 | 65                        | 149 |
| AO               | PX010 - PX055 (Manual Drain) | 1                      | 15    | 20                     | 290   | 2                         | 35 | 80                        | 176 |

## Flow Rates

Stated flows are for operation at 7 bar (g) (102 psi g) with reference to 20°C, 1 bar (a), 0% relative water vapour pressure.

| Model    | Pipe Size            | L/S | m³/min | m³/hr | cfm  | Replacement Element | No. | Initial Dry Differential Pressure |     |          |     |          |     |          |     |
|----------|----------------------|-----|--------|-------|------|---------------------|-----|-----------------------------------|-----|----------|-----|----------|-----|----------|-----|
|          |                      |     |        |       |      |                     |     | 100% Flow                         |     | 75% Flow |     | 50% Flow |     | 25% Flow |     |
|          |                      |     |        |       |      |                     |     | mbar                              | psi | mbar     | psi | mbar     | psi | mbar     | psi |
| AOPX010A | <div>G</div> MX ¼"   | 10  | 0.6    | 36    | 21   | P010AO              | 1   | 61                                | 0.9 | 40       | 0.6 | 20       | 0.3 | 9        | 0.1 |
| AOPX010B | <div>G</div> MX ⅜"   | 10  | 0.6    | 36    | 21   | P010AO              | 1   | 63                                | 0.9 | 43       | 0.6 | 22       | 0.3 | 11       | 0.2 |
| AOPX010C | <div>G</div> MX ½"   | 10  | 0.6    | 36    | 21   | P010AO              | 1   | 58                                | 0.8 | 35       | 0.5 | 20       | 0.3 | 11       | 0.2 |
| AOPX015B | <div>G</div> MX ⅜"   | 20  | 1.2    | 72    | 42   | P015AO              | 1   | 60                                | 0.9 | 38       | 0.6 | 23       | 0.3 | 12       | 0.2 |
| AOPX015C | <div>G</div> MX ½"   | 20  | 1.2    | 72    | 42   | P015AO              | 1   | 27                                | 0.4 | 15       | 0.2 | 10       | 0.1 | 5        | 0.1 |
| AOPX020C | <div>G</div> MX ½"   | 30  | 1.8    | 108   | 64   | P020AO              | 1   | 58                                | 0.8 | 35       | 0.5 | 15       | 0.2 | 8        | 0.1 |
| AOPX020D | <div>G</div> MX ¾"   | 30  | 1.8    | 108   | 64   | P020AO              | 1   | 38                                | 0.6 | 20       | 0.3 | 10       | 0.1 | 5        | 0.1 |
| AOPX025D | <div>G</div> MX ¾"   | 60  | 3.6    | 216   | 127  | P025AO              | 1   | 54                                | 0.8 | 39       | 0.6 | 21       | 0.3 | 8        | 0.1 |
| AOPX025E | <div>G</div> MX 1"   | 60  | 3.6    | 216   | 127  | P025AO              | 1   | 22                                | 0.3 | 15       | 0.2 | 9        | 0.1 | 5        | 0.1 |
| AOPX030E | <div>G</div> MX 1"   | 110 | 6.6    | 396   | 233  | P030AO              | 1   | 56                                | 0.8 | 38       | 0.6 | 20       | 0.3 | 7        | 0.1 |
| AOPX030G | <div>G</div> MX 1 ½" | 110 | 6.6    | 396   | 233  | P030AO              | 1   | 42                                | 0.6 | 26       | 0.4 | 12       | 0.2 | 6        | 0.1 |
| AOPX035G | <div>G</div> MX 1 ½" | 160 | 9.6    | 576   | 339  | P035AO              | 1   | 19                                | 0.3 | 9        | 0.1 | 5        | 0.1 | 2        | 0.0 |
| AOPX040H | <div>G</div> MX 2"   | 220 | 13.2   | 792   | 466  | P040AO              | 1   | 31                                | 0.4 | 19       | 0.3 | 16       | 0.2 | 7        | 0.1 |
| AOPX045H | <div>G</div> MX 2"   | 330 | 19.8   | 1188  | 699  | P045AO              | 1   | 51                                | 0.7 | 36       | 0.5 | 18       | 0.3 | 8        | 0.1 |
| AOPX045I | <div>G</div> MX 2 ½" | 330 | 19.8   | 1188  | 699  | P045AO              | 1   | 40                                | 0.6 | 27       | 0.4 | 12       | 0.2 | 6        | 0.1 |
| AOPX050I | <div>G</div> MX 2 ½" | 430 | 25.9   | 1548  | 911  | P050AO              | 1   | 36                                | 0.5 | 23       | 0.3 | 16       | 0.2 | 7        | 0.1 |
| AOPX055I | <div>G</div> MX 2 ½" | 620 | 37.3   | 2232  | 1314 | P055AO              | 1   | 38                                | 0.6 | 25       | 0.4 | 17       | 0.2 | 10       | 0.1 |
| AOPX055J | <div>G</div> MX 3"   | 620 | 37.3   | 2232  | 1314 | P055AO              | 1   | 51                                | 0.7 | 32       | 0.5 | 17       | 0.2 | 8        | 0.1 |

Select 

G

 for BSPP Threads / Select 

N

 for NPT Threads

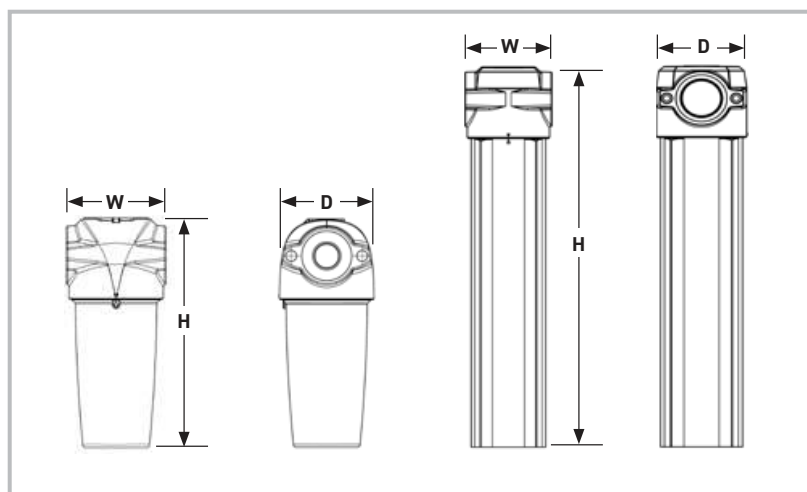
When selecting a coalescing filter for pressures above 16 bar g (232 psi g), use manual drain version and fit an external automatic drain.

## Product Selection & Correction Factors

- To correctly select a filter model, the flow rate of the filter must be adjusted for the minimum operating (inlet) pressure at the point of installation.
1. Obtain the minimum operating (inlet) pressure and maximum compressed air flow rate at the inlet of the filter.
  2. Select the correction factor for minimum inlet pressure from the CFMIP table (always round down e.g. for 5.3 bar, use 5 bar correction factor)
  3. Calculate the minimum filtration capacity. Minimum Filtration Capacity = Compressed Air Flow Rate x CFMIP
  4. Using the minimum filtration capacity, select a filter model from the flow rate tables above (filter selected must have a flow rate equal to or greater than the minimum filtration capacity).

## CFMIP - Correction Factor Minimum Inlet Pressure

| Minimum Inlet Pressure | bar g | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   |
|------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                        | psi g | 15   | 29   | 44   | 58   | 73   | 87   | 100  | 116  | 131  | 145  | 160  | 174  | 189  | 203  | 218  | 232  | 248  | 263  | 277  | 290  |
| Correction Factor      |       | 2.65 | 1.87 | 1.53 | 1.32 | 1.18 | 1.08 | 1.00 | 0.94 | 0.88 | 0.84 | 0.80 | 0.76 | 0.73 | 0.71 | 0.68 | 0.66 | 0.64 | 0.62 | 0.61 | 0.59 |

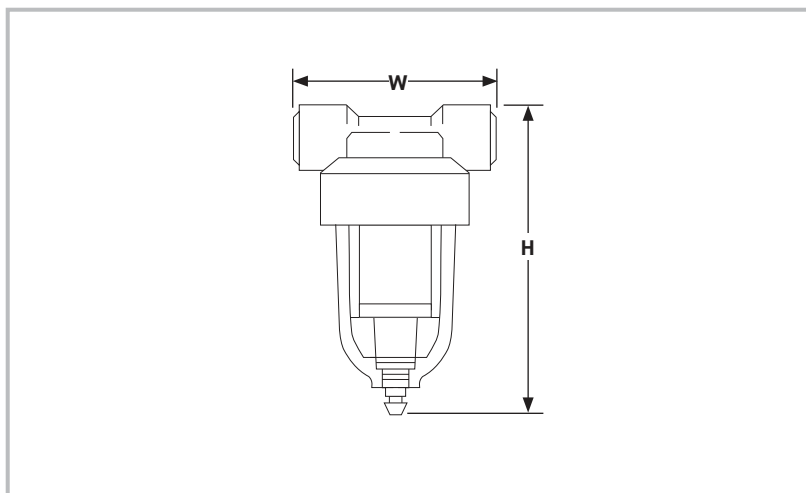


## Weight & Dimensions

| Model | Height (H) |       | Width (W) |      | Depth (D) |      | Weight |       |
|-------|------------|-------|-----------|------|-----------|------|--------|-------|
|       | mm         | ins   | mm        | ins  | mm        | ins  | kg     | lbs   |
| 010   | 180        | 7.09  | 76        | 2.99 | 65        | 2.56 | 0.81   | 1.78  |
| 015   | 238        | 9.37  | 89        | 3.50 | 84        | 3.31 | 1.41   | 3.10  |
| 020   | 238        | 9.37  | 89        | 3.50 | 84        | 3.31 | 1.41   | 3.10  |
| 025   | 277        | 10.91 | 120       | 4.72 | 115       | 4.53 | 2.66   | 5.86  |
| 030   | 367        | 14.45 | 120       | 4.72 | 115       | 4.53 | 3.01   | 6.63  |
| 035   | 440        | 17.32 | 164       | 6.46 | 157       | 6.18 | 6.87   | 15.14 |
| 040   | 532        | 20.94 | 164       | 6.46 | 157       | 6.18 | 7.18   | 15.82 |
| 045   | 532        | 20.94 | 164       | 6.46 | 157       | 6.18 | 7.18   | 15.82 |
| 050   | 654        | 25.75 | 192       | 7.56 | 183       | 7.20 | 10.18  | 22.43 |
| 055   | 844        | 33.23 | 192       | 7.56 | 183       | 7.20 | 15.78  | 34.78 |

## Parker Catalogue Numbers (BSPP Models)

| Model  | General Purpose Coalescing Filters | General Purpose Dry Particulate Filters | High Efficiency Coalescing Filters | High Efficiency Dry Particulate Filters |
|--------|------------------------------------|-----------------------------------------|------------------------------------|-----------------------------------------|
| PX010A | AOPX010AGFX                        | AOPX010AGMX                             | AAPX010AGFX                        | AAPX010AGMX                             |
| PX010B | AOPX010BGFX                        | AOPX010BGMX                             | AAPX010BGFX                        | AAPX010BGMX                             |
| PX010C | AOPX010CGFX                        | AOPX010CGMX                             | AAPX010CGFX                        | AAPX010CGMX                             |
| PX015C | AOPX015CGFX                        | AOPX015CGMX                             | AAPX015CGFX                        | AAPX015CGMX                             |
| PX020C | AOPX020CGFX                        | AOPX020CGMX                             | AAPX020CGFX                        | AAPX020CGMX                             |
| PX020D | AOPX020DGFX                        | AOPX020DGMX                             | AAPX020DGFX                        | AAPX020DGMX                             |
| PX025D | AOPX025DGFX                        | AOPX025DGMX                             | AAPX025DGFX                        | AAPX025DGMX                             |
| PX025E | AOPX025EGFX                        | AOPX025EGMX                             | AAPX025EGFX                        | AAPX025EGMX                             |
| PX030G | AOPX030GGFX                        | AOPX030GGMX                             | AAPX030GGFX                        | AAPX030GGMX                             |
| PX035G | AOPX035GGFX                        | AOPX035GGMX                             | AAPX035GGFX                        | AAPX035GGMX                             |
| PX040H | AOPX040HGFX                        | AOPX040HGMX                             | AAPX040HGFX                        | AAPX040HGMX                             |
| PX045I | AOPX045IGFX                        | AOPX045IGMX                             | AAPX045IGFX                        | AAPX045IGMX                             |
| PX050I | AOPX050IGFX                        | AOPX050IGMX                             | AAPX050IGFX                        | AAPX050IGMX                             |
| PX055I | AOPX055IGFX                        | AOPX055IGMX                             | AAPX055IGFX                        | AAPX055IGMX                             |
| PX055J | AOPX055JGFX                        | AOPX055JGMX                             | AAPX055JGFX                        | AAPX055JGMX                             |



## Weight & Dimensions

| Model | Height (H) |     | Width (W) |     | Depth (D) |     | Weight |     |
|-------|------------|-----|-----------|-----|-----------|-----|--------|-----|
|       | mm         | ins | mm        | ins | mm        | ins | kg     | lbs |
| 0003G | 89         | 3.5 | 58        | 2.3 | 56        | 2.2 | 0.1    | 0.2 |

## Parker Catalogue Numbers

| Model | Catalogue Number<br>General Purpose<br>Coalescing Filters | Catalogue Number<br>General Purpose<br>Dry Particulate Filters |
|-------|-----------------------------------------------------------|----------------------------------------------------------------|
| 0003G | AO-0003G                                                  | AA-0003G                                                       |

# OIL-X Filter Accessories

## Filter Wall Mount Brackets

(for single filters)

| Part Number | Filter Model / Number of |
|-------------|--------------------------|
| MBK1-1      | 010 x 1                  |
| MBK2-1      | 015-020 x 1              |
| MBK3-1      | 025-030 x 1              |
| MBK4-1      | 035-045 x 1              |
| MBK5-1      | 050-055 x 1              |

## Automatic Float and Manual Drains

| Part Number | Description                                                   |
|-------------|---------------------------------------------------------------|
| M12.FD.0001 | Float Auto 010-055                                            |
| EM1         | Manual Drain 010-055<br>(Maximum Operating Pressure 20 bar g) |
| HDF120A     | Float Auto 060                                                |
| 605006470   | Manual Drain 060                                              |

## Filter Wall Mount Brackets

(for 2 or 3 in series)

| Part Number | Filter Model / Number of |
|-------------|--------------------------|
| MBK1-2      | 010 x 2 and x 3          |
| MBK2-2      | 015-020 x 2 and x 3      |
| MBK3-2      | 025 - 030 x 2 and x 3    |
| MBK4-2      | 035 - 045 x 2 and x 3    |
| MBK5-2      | 050 - 055 x 2 and x 3    |

## Zero Loss ED Electronic Drains

| Part Number | Filter Model                |
|-------------|-----------------------------|
| ED3002-G230 | 010 to 030                  |
| ED3004-G230 | 035 to 055                  |
| ED3007-G230 | 60                          |
| MK-G15-G10I | ED3002 Mounting kit G½      |
| MK-G25-G15  | ED3004-3100 Mounting kit G½ |

Unless stated otherwise all differential pressure monitors, gauges and drains have a maximum operating pressure of 16 bar g.

## Tie Rods

(for 2 or 3 in series)

| Part Number | Filter Model / Number of |
|-------------|--------------------------|
| TRK1-2      | 010 x 2 and x 3          |
| TRK3-2      | 015 to 020 x 2 and x 3   |
| TRK2-2      | 025 to 030 x 2 and x 3   |
| TRK4-2      | 035 to 045 x 2 and x 3   |
| TRK5-2      | 050 to 055 x 2 and x 3   |

# KA-MT Small Flow Heatless Adsorption Dryers

## Dryer Performance

| Dryer Models | Dewpoint (Standard) |     | ISO8573-1:2010 Classification (Standard) | Dewpoint (Option 1) |      | ISO8573-1:2010 Classification (Option 1) | Dewpoint (Option 2) |     | ISO8573-1:2010 Classification (Option 2) |
|--------------|---------------------|-----|------------------------------------------|---------------------|------|------------------------------------------|---------------------|-----|------------------------------------------|
|              | °C                  | °F  |                                          | °C                  | °F   |                                          | °C                  | °F  |                                          |
| KA-MT 1 - 8  | -40                 | -40 | Class 2.2.1                              | -70                 | -100 | Class 2.1.1                              | -25                 | -13 | Class 2.3.1                              |

## Technical Data

| Dryer Models | Minimum Operating Pressure |       | Maximum Operating Pressure |       | Minimum Operating Temperature |    | Maximum Operating Temperature |     | Maximum Ambient Temperature |     | Electrical Supply (Standard) | Electrical Supply (Optional) | Thread Type | Noise Level |
|--------------|----------------------------|-------|----------------------------|-------|-------------------------------|----|-------------------------------|-----|-----------------------------|-----|------------------------------|------------------------------|-------------|-------------|
|              | bar g                      | psi g | bar g                      | psi g | °C                            | °F | °C                            | °F  | °C                          | °F  |                              |                              |             | dB(A)       |
| KA-MT 1 - 8  | 4                          | 58    | 16                         | 232   | 5                             | 41 | 50                            | 122 | 50                          | 122 | 230V 1ph 50/60Hz             | 115V 1ph 50/60Hz or 24V DC   | BSPP        | 65-86       |

## Flow Rates

| Model   | Pipe Size BSPP | Inlet Flow Rate |        |       |     |
|---------|----------------|-----------------|--------|-------|-----|
|         |                | L/s             | m³/min | m³/hr | cfm |
| KA-MT 1 | 1/4            | 2               | 0.13   | 8     | 5   |
| KA-MT 2 | 1/4            | 4               | 0.25   | 15    | 9   |
| KA-MT 3 | 1/4            | 7               | 0.42   | 25    | 15  |
| KA-MT 4 | 1/4            | 10              | 0.58   | 35    | 21  |
| KA-MT 6 | 1/2            | 16              | 0.93   | 56    | 33  |
| KA-MT 7 | 1/2            | 20              | 1.2    | 72    | 42  |
| KA-MT 8 | 3/4            | 24              | 1.43   | 86    | 51  |

Inlet flow rate relating to 1 bar(a) and 20 °C; relating to the suction performance of the compressor, compression at 7 bar(g) and 35 °C dryer inlet temperature, at 25 °C ambient temperature, 60 % relative humidity.

## Product Selection & Correction Factors

For correct operation, compressed air dryers must be sized using for the maximum (summer) inlet temperature, maximum (summer) ambient temperature, minimum inlet pressure, required outlet dewpoint and maximum flow rate of the installation.

To select a dryer, first calculate the MDC (Minimum Drying Capacity) using the formula below then select a dryer from the flow rate table above with a flow rate equal to or above the MDC.

**Minimum Drying Capacity = System Flow x CFIT x CFAT x CFMIP x CFOD**

### CFIT - Correction Factor Maximum Inlet Temperature

| Maximum Inlet Temperature | °C | 25   | 30   | 35   | 40   | 45   | 50   |
|---------------------------|----|------|------|------|------|------|------|
|                           | °F | 77   | 86   | 95   | 104  | 113  | 122  |
| Correction Factor         |    | 0.94 | 0.95 | 1.00 | 1.15 | 1.22 | 1.28 |

### CFAT - Correction Factor Maximum Ambient Temperature

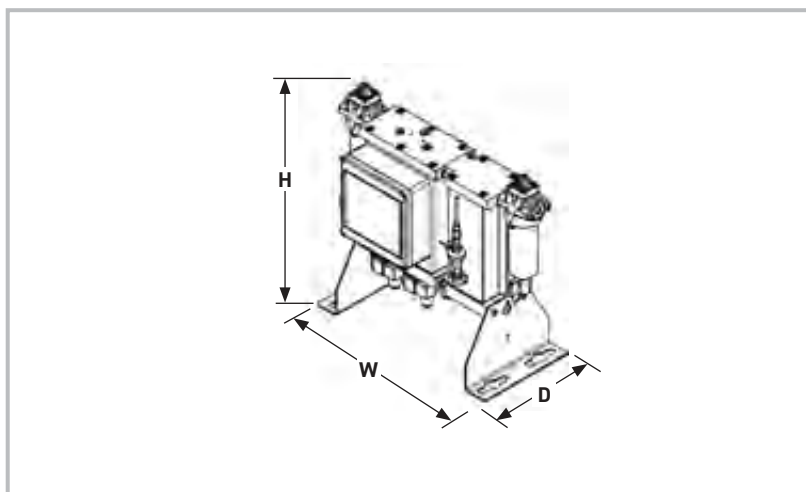
| Maximum Ambient Temperature | °C | 25   | 30   | 35   | 40   | 45   | 50   |
|-----------------------------|----|------|------|------|------|------|------|
|                             | °F | 77   | 86   | 95   | 104  | 113  | 122  |
| Correction Factor           |    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

### CFMIP - Correction Factor Minimum Inlet Pressure

| Minimum Inlet Pressure | bar g | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   |
|------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                        | psi g | 58   | 73   | 87   | 100  | 116  | 131  | 145  | 160  | 174  | 189  | 203  | 218  | 232  |
| Correction Factor      |       | 1.60 | 1.33 | 1.12 | 1.00 | 0.88 | 0.79 | 0.76 | 0.74 | 0.67 | 0.62 | 0.59 | 0.56 | 0.53 |

### CFOD - Correction Factor Outlet Dewpoint

| Outlet Dewpoint   | °C | -25  | -40  | -70  |
|-------------------|----|------|------|------|
|                   | °F | -13  | -40  | -100 |
| Correction Factor |    | 1.00 | 1.00 | 2.00 |



## Weights & Dimensions

| Model   | Dimensions |     |           |     |           |     | Weight |     |
|---------|------------|-----|-----------|-----|-----------|-----|--------|-----|
|         | Height (H) |     | Width (W) |     | Depth (D) |     |        |     |
|         | mm         | ins | mm        | ins | mm        | ins | kg     | lbs |
| KA-MT 1 | 403        | 16  | 486       | 19  | 210       | 8   | 15     | 33  |
| KA-MT 2 | 578        | 23  | 477       | 19  | 210       | 8   | 20     | 44  |
| KA-MT 3 | 828        | 33  | 577       | 23  | 210       | 8   | 28     | 62  |
| KA-MT 4 | 1078       | 42  | 577       | 23  | 210       | 8   | 35     | 77  |
| KA-MT 6 | 1133       | 45  | 692       | 27  | 300       | 12  | 68     | 150 |
| KA-MT 7 | 1358       | 53  | 692       | 27  | 300       | 12  | 81     | 179 |
| KA-MT 8 | 1558       | 61  | 692       | 27  | 300       | 12  | 92     | 203 |

## Included Filtration

| Model   | Dryer Inlet            | Dryer Outlet                           |                                                 |
|---------|------------------------|----------------------------------------|-------------------------------------------------|
|         | High Efficiency Filter | General Purpose Dry Particulate Filter | High Efficiency Dry Particulate Filter (Option) |
| KA-MT 1 | AAPX010A               | AOPX010A                               | AAPX010A                                        |
| KA-MT 2 | AAPX010A               | AOPX010A                               | AAPX010A                                        |
| KA-MT 3 | AAPX010A               | AOPX010A                               | AAPX010A                                        |
| KA-MT 4 | AAPX010A               | AOPX010A                               | AAPX010A                                        |
| KA-MT 6 | AAPX015C               | AOPX015C                               | AAPX015C                                        |
| KA-MT 7 | AAPX015C               | AOPX015C                               | AAPX015C                                        |
| KA-MT 8 | AAPX020D               | AOPX020D                               | AAPX020D                                        |

## Parker Catalogue Numbers 230V/1ph/50Hz-60Hz

| For Dryer Model | Catalogue Number No Dewpoint Sensor | Catalogue Number With Dewpoint Sensor |
|-----------------|-------------------------------------|---------------------------------------|
| KA-MT 1         | K1/16DA3-G230M                      | K1/16DA3-G230MT                       |
| KA-MT 2         | K2/16DA3-G230M                      | K2/16DA3-G230MT                       |
| KA-MT 3         | K3/16DA3-G230M                      | K3/16DA3-G230MT                       |
| KA-MT 4         | K4/16DA3-G230M                      | K4/16DA3-G230MT                       |
| KA-MT 6         | K6/16DA3-G230M                      | K6/16DA3-G230MT                       |
| KA-MT 7         | K7/16DA3-G230M                      | K7/16DA3-G230MT                       |
| KA-MT 8         | K8/16DA3-G230M                      | K8/16DA3-G230MT                       |

# KA-MT Large Flow Heatless Adsorption Dryers

## Dryer Performance

| Dryer Models  | Dewpoint (Standard) |     | ISO8573-1:2010 Classification (Standard) | Dewpoint (Option 1) |      | ISO8573-1:2010 Classification (Option 1) | Dewpoint (Option 2) |     | ISO8573-1:2010 Classification (Option 2) |
|---------------|---------------------|-----|------------------------------------------|---------------------|------|------------------------------------------|---------------------|-----|------------------------------------------|
|               | °C                  | °F  |                                          | °C                  | °F   |                                          | °C                  | °F  |                                          |
| KA-MT 10 - 95 | -40                 | -40 | Class 2.2.1                              | -70                 | -100 | Class 2.1.1                              | -25                 | -13 | Class 2.3.1                              |

ISO8573-1 Classifications when used with Parker domnick hunter OIL-X pre / post filtration

## Technical Data

| Dryer Models  | Minimum Operating Pressure |       | Maximum Operating Pressure |       | Minimum Operating Temperature |    | Maximum Operating Temperature |     | Maximum Ambient Temperature |     | Electrical Supply (Standard) | Electrical Supply (Optional) | Thread Type | Noise Level |
|---------------|----------------------------|-------|----------------------------|-------|-------------------------------|----|-------------------------------|-----|-----------------------------|-----|------------------------------|------------------------------|-------------|-------------|
|               | bar g                      | psi g | bar g                      | psi g | °C                            | °F | °C                            | °F  | °C                          | °F  |                              |                              |             | dB(A)       |
| KA-MT 10 - 95 | 4                          | 58    | 16                         | 232   | 5                             | 41 | 50                            | 122 | 50                          | 122 | 230V 1ph 50/60Hz             | 115V 1ph 50/60Hz or 24V DC   | BSPP        | 65-86       |

## Flow Rates

| Model    | Pipe Size BSPP | Inlet Flow Rate |        |      |     |
|----------|----------------|-----------------|--------|------|-----|
|          |                | L/s             | m³/min | m³/h | cfm |
| KA-MT 10 | 1"             | 30              | 1.8    | 105  | 62  |
| KA-MT 15 | 1"             | 40              | 2.4    | 145  | 85  |
| KA-MT 20 | 1"             | 56              | 3.3    | 200  | 118 |
| KA-MT 25 | 1½"            | 70              | 4.3    | 255  | 150 |
| KA-MT 35 | 1½"            | 97              | 5.8    | 350  | 206 |
| KA-MT 45 | 1½"            | 117             | 7      | 420  | 247 |
| KA-MT 60 | 2"             | 172             | 10.3   | 620  | 365 |
| KA-MT 75 | 2"             | 208             | 12.5   | 750  | 441 |
| KA-MT 95 | 2½"            | 261             | 15.7   | 940  | 553 |

Inlet flow rate relating to 1 bar(a) and 20 °C; relating to the suction performance of the compressor, compression at 7 bar(g) and 35 °C dryer inlet temperature, at 25 °C ambient temperature, 60 % relative humidity.

## Product Selection & Correction Factors

For correct operation, compressed air dryers must be sized using for the maximum (summer) inlet temperature, maximum (summer) ambient temperature, minimum inlet pressure, required outlet dewpoint and maximum flow rate of the installation.

To select a dryer, first calculate the MDC (Minimum Drying Capacity) using the formula below then select a dryer from the flow rate table above with a flow rate equal to or above the MDC.

Minimum Drying Capacity = System Flow x CFIT x CFAT x CFMIP x CFOD

### CFIT - Correction Factor Maximum Inlet Temperature

| Maximum Inlet Temperature | °C | 25   | 30   | 35   | 40   | 45   | 50   |
|---------------------------|----|------|------|------|------|------|------|
|                           | °F | 77   | 86   | 95   | 104  | 113  | 122  |
| Correction Factor         |    | 0.94 | 0.95 | 1.00 | 1.15 | 1.22 | 1.28 |

### CFAT - Correction Factor Maximum Ambient Temperature

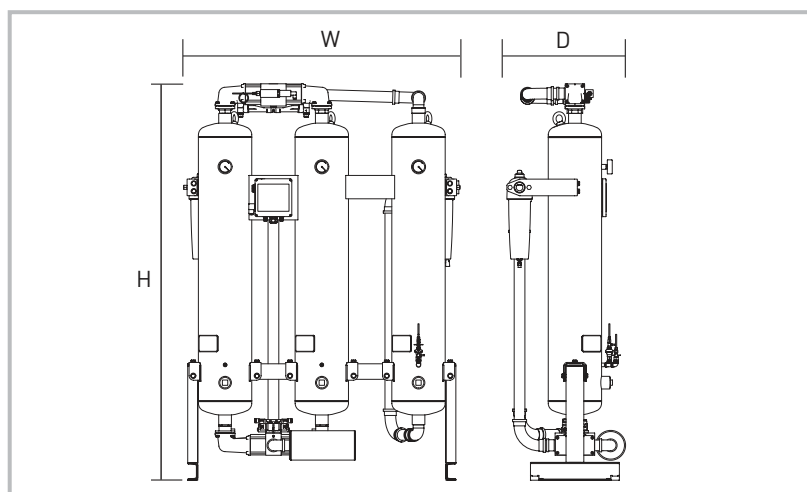
| Maximum Ambient Temperature | °C | 25   | 30   | 35   | 40   | 45   | 50   |
|-----------------------------|----|------|------|------|------|------|------|
|                             | °F | 77   | 86   | 95   | 104  | 113  | 122  |
| Correction Factor           |    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

### CFMIP - Correction Factor Minimum Inlet Pressure

| Minimum Inlet Pressure | bar g | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   |
|------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                        | psi g | 58   | 73   | 87   | 100  | 116  | 131  | 145  | 160  | 174  | 189  | 203  | 218  | 232  |
| Correction Factor      |       | 1.60 | 1.33 | 1.12 | 1.00 | 0.88 | 0.79 | 0.76 | 0.74 | 0.67 | 0.62 | 0.59 | 0.56 | 0.53 |

### CFOD - Correction Factor Outlet Dewpoint

| Outlet Dewpoint   | °C | -25  | -40  | -70  |
|-------------------|----|------|------|------|
|                   | °F | -13  | -40  | -100 |
| Correction Factor |    | 1.00 | 1.00 | 2.00 |



## Weights & Dimensions

| Model    | Dimensions |     |           |     |           |     | Weight |      |
|----------|------------|-----|-----------|-----|-----------|-----|--------|------|
|          | Height (H) |     | Width (W) |     | Depth (D) |     |        |      |
|          | mm         | ins | mm        | ins | mm        | ins | kg     | lbs  |
| KA-MT 10 | 1411       | 56  | 1118      | 44  | 466       | 18  | 161    | 355  |
| KA-MT 15 | 1739       | 68  | 1118      | 44  | 466       | 18  | 193    | 425  |
| KA-MT 20 | 1515       | 60  | 949       | 37  | 466       | 18  | 193    | 425  |
| KA-MT 25 | 1735       | 68  | 926       | 36  | 506       | 20  | 234    | 516  |
| KA-MT 35 | 1783       | 70  | 1213      | 47  | 534       | 21  | 283    | 624  |
| KA-MT 45 | 1808       | 71  | 1245      | 49  | 555       | 22  | 334    | 736  |
| KA-MT 60 | 1859       | 73  | 1292      | 51  | 607       | 24  | 428    | 944  |
| KA-MT 75 | 1980       | 78  | 1447      | 57  | 628       | 25  | 555    | 1224 |
| KA-MT 95 | 2001       | 79  | 1493      | 59  | 658       | 26  | 698    | 1539 |

## Included Filtration

| Model    | Dryer Inlet            | Dryer Outlet                           |                                                 |
|----------|------------------------|----------------------------------------|-------------------------------------------------|
|          | High Efficiency Filter | General Purpose Dry Particulate Filter | High Efficiency Dry Particulate Filter (Option) |
| KA-MT 10 | AAPX025E               | AOPX025E                               | AAPX025E                                        |
| KA-MT 15 | AAPX025E               | AOPX025E                               | AAPX025E                                        |
| KA-MT 20 | AAPX025E               | AOPX025E                               | AAPX025E                                        |
| KA-MT 25 | AAPX030G               | AOPX030G                               | AAPX030G                                        |
| KA-MT 35 | AAPX030G               | AOPX030G                               | AAPX030G                                        |
| KA-MT 45 | AAPX035G               | AOPX035G                               | AAPX035G                                        |
| KA-MT 60 | AAPX040H               | AOPX040H                               | AAPX040H                                        |
| KA-MT 75 | AAPX040H               | AOPX040H                               | AAPX040H                                        |
| KA-MT 95 | AAPX045I               | AOPX045I                               | AAPX045I                                        |

**Included in standard scope of supply:**  
 Prefilter (AA) including float drain.  
 Afterfilter (AO) including manual drain.

**Optional:** (Delivered separately):  
 Oil vapour reduction filter (ACS)  
 High efficiency dry particulate filter (AA) including manual drain

## Parker Catalogue Numbers 230V/1ph/50Hz-60Hz

| For Dryer Model | Catalogue Number No Dewpoint Sensor | Catalogue Number With Dewpoint Sensor |
|-----------------|-------------------------------------|---------------------------------------|
| KA-MT 10        | K10/16DA3-G230M                     | K10/16DA3-G230MT                      |
| KA-MT 15        | K15/16DA3-G230M                     | K15/16DA3-G230MT                      |
| KA-MT 20        | K20/16DA3-G230M                     | K20/16DA3-G230MT                      |
| KA-MT 25        | K25/16DA3-G230M                     | K25/16DA3-G230MT                      |
| KA-MT 35        | K35/16DA3-G230M                     | K35/16DA3-G230MT                      |
| KA-MT 45        | K45/16DA3-G230M                     | K45/16DA3-G230MT                      |
| KA-MT 60        | K60/16DA3-G230M                     | K60/16DA3-G230MT                      |
| KA-MT 75        | K75/16DA3-G230M                     | K75/16DA3-G230MT                      |
| KA-MT 95        | K95/16DA3-G230M                     | K95/16DA3-G230MT                      |

# HDF & ED Level Sensing Condensate Drains

## Technical Data

| Drain Type               | Drain Models    | Minimum Operating Pressure |       | Maximum Operating Pressure |       | Minimum Operating Temperature |    | Maximum Operating Temperature |     |
|--------------------------|-----------------|----------------------------|-------|----------------------------|-------|-------------------------------|----|-------------------------------|-----|
|                          |                 | bar g                      | psi g | bar g                      | psi g | °C                            | °F | °C                            | °F  |
| External Float           | HDF120 - 220    | 1                          | 15    | 16                         | 232   | 2                             | 35 | 60                            | 140 |
| Electronic Level Sensing | ED3002 - ED3100 | 1                          | 15    | 16                         | 232   | 2                             | 35 | 60                            | 140 |
| Electronic Level Sensing | ED4100          | 16                         | 232   | 50                         | 725   | 2                             | 35 | 50                            | 122 |

## Flow Rates - Zero Air Loss External Float Drains

| Model                                         | Pipe Size |        | Compressed Air Flow Rate |        |       |      | Electrical Supply |
|-----------------------------------------------|-----------|--------|--------------------------|--------|-------|------|-------------------|
|                                               | Inlet     | Outlet | L/S                      | m³/min | m³/hr | cfm  |                   |
| HDF120-A                                      | ½"        | ½"     | 1500                     | 90     | 5400  | 3178 | -                 |
| HDF180-A                                      | 1"        | ½"     | 1667                     | 100    | 6000  | 3532 | -                 |
| HDF220-A                                      | 1"        | ½"     | 4167                     | 251    | 15000 | 8829 | -                 |
| External float drain (with built-in air vent) |           |        |                          |        |       |      |                   |

|                                         |    |    |      |     |       |      |   |
|-----------------------------------------|----|----|------|-----|-------|------|---|
| HDF120                                  | ½" | ½" | 1500 | 90  | 5400  | 3178 | - |
| HDF180                                  | 1" | ½" | 1667 | 100 | 6000  | 3532 | - |
| HDF220                                  | 1" | ½" | 4167 | 251 | 15000 | 8829 | - |
| External float drain (without air vent) |    |    |      |     |       |      |   |

|                                 |    |    |      |     |      |      |   |
|---------------------------------|----|----|------|-----|------|------|---|
| HDF220BE                        | 1" | ½" | 1806 | 109 | 6500 | 3826 | - |
| External float drains BioEnergy |    |    |      |     |      |      |   |

## Flow Rates - Zero Air Loss Electronic Level Sensing Drains

| Model       | Pipe Size |        | Compressed Air Flow Rate (Aftercooler / Air Receiver) |        |       |      | Compressed Air Flow Rate (Refrigeration Dryer) |        |       |      | Compressed Air Flow Rate (Filter) |        |       |       | Electrical Supply |
|-------------|-----------|--------|-------------------------------------------------------|--------|-------|------|------------------------------------------------|--------|-------|------|-----------------------------------|--------|-------|-------|-------------------|
|             | Inlet     | Outlet | L/S                                                   | m³/min | m³/hr | cfm  | L/S                                            | m³/min | m³/hr | cfm  | L/S                               | m³/min | m³/hr | cfm   |                   |
| ED3002-G230 | 1 x G½    | G¾     | -                                                     | -      | -     | -    | -                                              | -      | -     | -    | 200                               | 12     | 720   | 424   | 230/1/50-60       |
| ED3004-G230 | 1 x G½    | G¾     | 67                                                    | 4      | 240   | 141  | 133                                            | 8      | 480   | 283  | 667                               | 40     | 2400  | 1413  | 230/1/50-60       |
| ED3007-G230 | 2 x G½    | G¾     | 117                                                   | 7      | 420   | 247  | 233                                            | 14     | 840   | 494  | 1167                              | 70     | 4200  | 2472  | 230/1/50-60       |
| ED3030-G230 | 2 x G½    | G¾     | 500                                                   | 30     | 1800  | 1059 | 1000                                           | 60     | 3600  | 2119 | 5000                              | 301    | 18000 | 10595 | 230/1/50-60       |
| ED3100-G230 | 2 x G½    | G¾     | 1667                                                  | 100    | 6000  | 3532 | 3334                                           | 200    | 12000 | 7063 | 16668                             | 1002   | 60000 | 35316 | 230/1/50-60       |

230V/1PH/50-60Hz - 16 bar g (232 psi g)

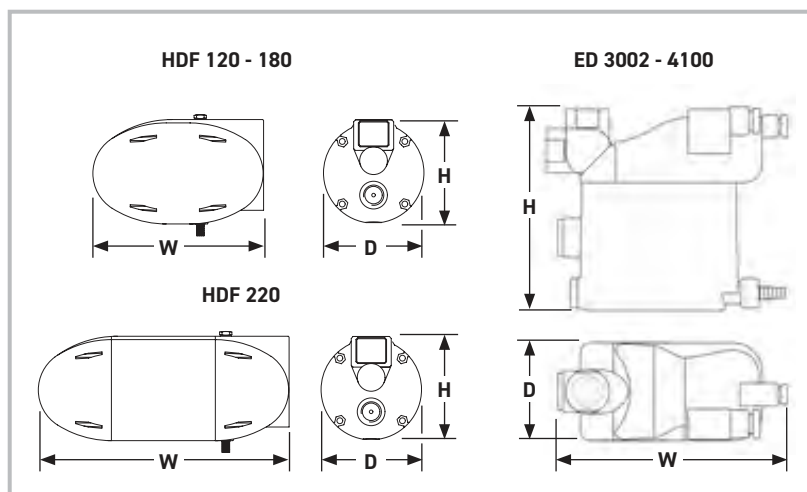
|             |        |    |      |     |      |      |      |     |       |      |       |      |       |       |        |
|-------------|--------|----|------|-----|------|------|------|-----|-------|------|-------|------|-------|-------|--------|
| ED3007-G24D | 2 x G½ | G¾ | 117  | 7   | 420  | 247  | 233  | 14  | 840   | 494  | 1167  | 70   | 4200  | 2472  | 24V DC |
| ED3030-G24D | 2 x G½ | G¾ | 500  | 30  | 1800 | 1059 | 1000 | 60  | 3600  | 2119 | 5000  | 301  | 18000 | 10595 | 24V DC |
| ED3100-G24D | 2 x G½ | G¾ | 1667 | 100 | 6000 | 3532 | 3334 | 200 | 12000 | 7063 | 16668 | 1002 | 60000 | 35316 | 24V DC |

24V DC - 16 bar g (232 psi g)

|                                         |    |    |      |     |      |      |      |     |       |      |       |      |       |       |             |
|-----------------------------------------|----|----|------|-----|------|------|------|-----|-------|------|-------|------|-------|-------|-------------|
| ED4100/50-G230                          | G½ | G¼ | 1667 | 100 | 6000 | 3532 | 3334 | 200 | 12000 | 7063 | 16668 | 1002 | 60000 | 35316 | 230/1/50-60 |
| 230V/1PH/50-60Hz - 50 bar g (725 psi g) |    |    |      |     |      |      |      |     |       |      |       |      |       |       |             |

|                               |    |    |      |     |      |      |      |     |       |      |       |      |       |       |        |
|-------------------------------|----|----|------|-----|------|------|------|-----|-------|------|-------|------|-------|-------|--------|
| ED4100/50-G24D                | G½ | G¼ | 1667 | 100 | 6000 | 3532 | 3334 | 200 | 12000 | 7063 | 16668 | 1002 | 60000 | 35316 | 24V DC |
| 24V DC - 50 bar g (725 psi g) |    |    |      |     |      |      |      |     |       |      |       |      |       |       |        |

Stated flows are for operation at max operating pressure shown above, ambient air 25°C (77°F) / 60% RH, compressor discharge temperature 35°C (95°F), refrigeration dryer pressure dewpoint +3°C, with reference to 20°C, 1 bar (a), 0% relative water vapour pressure. . Refrigeration dryer and filter flow rates assume adequate condensate drainage upstream.



## Weight & Dimensions

| Model    | Height (H) |     | Width (W) |      | Depth (D) |     | Weight |     |
|----------|------------|-----|-----------|------|-----------|-----|--------|-----|
|          | mm         | ins | mm        | ins  | mm        | ins | kg     | lbs |
| HDF120   | 111        | 4.4 | 156       | 6.1  | 108       | 4.3 | 0.9    | 2.0 |
| HDF180   | 111        | 4.4 | 156       | 6.1  | 108       | 4.3 | 0.9    | 2.0 |
| HDF220   | 111        | 4.4 | 266       | 10.5 | 108       | 4.3 | 1.9    | 4.2 |
| HDF220BE | 111        | 4.4 | 266       | 10.5 | 108       | 4.3 | 1.9    | 4.2 |
| ED3002   | 146        | 5.7 | 110       | 4.3  | 67        | 2.6 | 0.5    | 1.1 |
| ED3004   | 139        | 5.5 | 101       | 4.0  | 67        | 2.6 | 0.6    | 1.3 |
| ED3007   | 164        | 6.5 | 122       | 4.8  | 67        | 2.6 | 1      | 2.2 |
| ED3030   | 164        | 6.5 | 137       | 5.4  | 67        | 2.6 | 1      | 2.2 |
| ED3100   | 164        | 6.5 | 197       | 7.8  | 67        | 2.6 | 2      | 4.4 |
| ED4100   | 115        | 4.5 | 178       | 7.0  | 87        | 3.4 | 1.9    | 4.2 |

## Parker Catalogue Numbers (HDF Drains)

| Model  | Catalogue Number<br>BSPP / 16 bar g | Catalogue Number<br>BSPP/ 16 bar g + Vent | Catalogue Number<br>NPT / 16 bar g + Vent |
|--------|-------------------------------------|-------------------------------------------|-------------------------------------------|
| HDF120 | HDF120                              | HDF120A                                   | HDF120NPTA                                |
| HDF180 | HDF180                              | HDF180A                                   | HDF180NPTA                                |
| HDF220 | HDF220                              | HDF220A                                   | HDF220NPTA                                |

## Parker Catalogue Numbers (ED Drains)

| Model  | Catalogue Number<br>230V, 50-60 Hz / 16 bar g | Catalogue Number<br>24V DC / 16 bar g |
|--------|-----------------------------------------------|---------------------------------------|
| ED3002 | ED3002-G230                                   | -                                     |
| ED3004 | ED3004-G230                                   | -                                     |
| ED3007 | ED3007-G230                                   | ED3007-G24D                           |
| ED3030 | ED3030-G230                                   | ED3030-G24D                           |
| ED3100 | ED3100-G230                                   | ED3100-G24D                           |