

## HBFX (F400+ATEX)



Axial fan 400°C/2h

### MANUFACTURING FEATURES

- Axial fan with circular reinforced frame.
- Modular motor-impeller assembly.
- Cast aluminium impeller with variable pitch angle. Polyester powder finishing coat.
- Standard asynchronous squirrel cage motor with IP-55 protection and Class H insulation certified 400°C/2h and ATEX Zone 2: fan: Ex h IIB T3 Gc and motor: Ex ec IIC T3 Gc. Standard voltages 400V(Y) 50Hz in three phase motors up to 3kW and 400V 50Hz for higher powers and 2 speed motors. IE3 efficiency motor from 0,75kW up to 45kW in single speed

### APPLICATIONS

Designed for wall or duct installation, they are suitable for:

- Smoke emergency exhaust with motor inside the hazardous area and high pressures needed.
- Maximum working temperature: 60°C.

### UNDER REQUEST

- B Form impeller (air flow from impeller to motor).
- 100% reversible impeller.

Official homologation by the European laboratory APPLUS according to EN 12101-3:2015

Certification Nr: 0370-CPR-0914

## Accessories



**AC**



**BA-400**



**BAD**



**INT**



**INT  
400**



**INT  
ATEX**



**JE 45**



**MC HB**



**PC2**



**RP0**



**RP1**



**SFC**

## Technical data

### Three-phase motor / 4 poles

| Code | Model                   | Angle       | Min.<br>Rated<br>power<br>kW | Max.<br>Rated<br>power<br>kW | Max.<br>Airflow<br>m³/h | Sound<br>db (A)** | Weight<br>kg | Connect.<br>diagram |
|------|-------------------------|-------------|------------------------------|------------------------------|-------------------------|-------------------|--------------|---------------------|
|      | HBFX 45 T4 (A5:6) F400  | 20º - 42,5º | 0,75                         | 0,75                         | 6.170                   | 51                | 12           | 1                   |
|      | HBFX 50 T4 (A5:6) F400  | 25º - 45º   | 0,75                         | 0,75                         | 9.180                   | 55                | 17           | 1                   |
|      | HBFX 56 T4 (A5:6) F400  | 20º - 45º   | 0,75                         | 1,50                         | 14.480                  | 70                | 19           | 1                   |
|      | HBFX 63 T4 (A5:6) F400  | 20º - 45º   | 0,75                         | 2,20                         | 20.110                  | 74                | 22           | 1                   |
|      | HBFX 71 T4 (A5:6) F400  | 20º - 45º   | 0,75                         | 3,00                         | 27.220                  | 79                | 25           | 1                   |
|      | HBFX 80 T4 (A5:6) F400  | 20º - 45º   | 2,20                         | 4,00                         | 37.370                  | 76                | 32           | 1                   |
|      | HBFX 90 T4 (A3:4) F400  | 20º - 42º   | 3,00                         | 15,00                        | 48.110                  | 67                | 78           | 1                   |
|      | HBFX 90 T4 (A3:8) F400  | 20º - 42º   | 3,00                         | 15,00                        | 54.810                  | 72                | 83           | 1                   |
|      | HBFX 100 T4 (A3:4) F400 | 20º - 42º   | 5,50                         | 22,00                        | 67.210                  | 72                | 95           | 1                   |
|      | HBFX 100 T4 (A3:8) F400 | 20º - 42º   | 5,50                         | 22,00                        | 77.810                  | 81                | 101          | 1                   |
|      | HBFX 112 T4 (A3:4) F400 | 20º - 42º   | 7,50                         | 37,00                        | 92.110                  | 76                | 113          | 1                   |
|      | HBFX 112 T4 (A3:8) F400 | 20º - 42º   | 7,50                         | 37,00                        | 104.010                 | 83                | 119          | 1                   |
|      | HBFX 125 T4 (A3:4) F400 | 20º - 42º   | 11,00                        | 45,00                        | 124.010                 | 83                | 125          | 1                   |
|      | HBFX 125 T4 (A3:8) F400 | 20º - 42º   | 11,00                        | 45,00                        | 141.010                 | 89                | 131          | 1                   |

### Three-phase motor / 6 poles

| Code | Model                   | Angle     | Min.<br>Rated<br>power<br>kW | Max.<br>Rated<br>power<br>kW | Max.<br>Airflow<br>m³/h | Sound<br>db (A)** | Weight<br>kg | Connect.<br>diagram |
|------|-------------------------|-----------|------------------------------|------------------------------|-------------------------|-------------------|--------------|---------------------|
|      | HBFX 45 T6 (A5:6) F400  | 25º - 45º | 0,75                         | 0,75                         | 4.060                   | 42                | 12           | 1                   |
|      | HBFX 50 T6 (A5:6) F400  | 25º - 45º | 0,75                         | 0,75                         | 5.950                   | 46                | 17           | 1                   |
|      | HBFX 56 T6 (A5:6) F400  | 20º - 45º | 0,75                         | 0,75                         | 9.660                   | 67                | 19           | 1                   |
|      | HBFX 63 T6 (A5:6) F400  | 20º - 45º | 0,75                         | 0,75                         | 13.410                  | 71                | 22           | 1                   |
|      | HBFX 71 T6 (A5:6) F400  | 20º - 45º | 0,75                         | 0,75                         | 18.150                  | 76                | 25           | 1                   |
|      | HBFX 80 T6 (A5:6) F400  | 20º - 45º | 0,75                         | 2,20                         | 24.910                  | 72                | 32           | 1                   |
|      | HBFX 90 T6 (A3:4) F400  | 20º - 42º | 1,50                         | 5,50                         | 31.210                  | 57                | 78           | 1                   |
|      | HBFX 90 T6 (A3:8) F400  | 20º - 42º | 1,50                         | 5,50                         | 35.510                  | 62                | 83           | 1                   |
|      | HBFX 100 T6 (A3:4) F400 | 20º - 42º | 3,00                         | 7,50                         | 43.610                  | 63                | 95           | 1                   |
|      | HBFX 100 T6 (A3:8) F400 | 20º - 42º | 3,00                         | 7,50                         | 50.410                  | 71                | 101          | 1                   |
|      | HBFX 112 T6 (A3:4) F400 | 20º - 42º | 3,00                         | 11,00                        | 59.710                  | 66                | 113          | 1                   |
|      | HBFX 112 T6 (A3:8) F400 | 20º - 42º | 3,00                         | 11,00                        | 67.610                  | 73                | 119          | 1                   |
|      | HBFX 125 T6 (A3:4) F400 | 20º - 42º | 3,00                         | 15,00                        | 80.610                  | 73                | 125          | 1                   |
|      | HBFX 125 T6 (A3:8) F400 | 20º - 42º | 3,00                         | 15,00                        | 91.410                  | 80                | 131          | 1                   |

## 2 speed motor / 4/8 poles

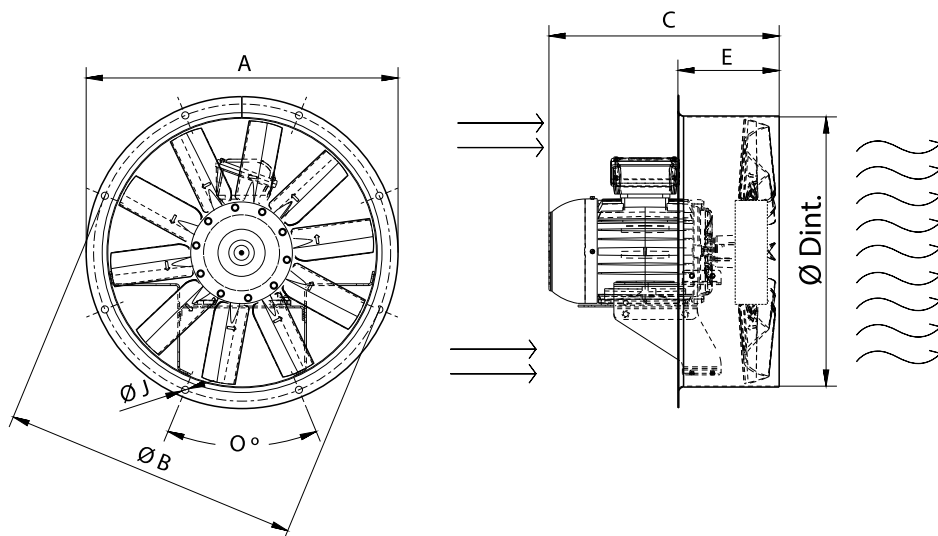
| Code | Model                      | Angle     | Min.<br>Rated<br>power<br>kW | Max.<br>Rated<br>power<br>kW | Max.<br>Airflow<br>w<br>m³/h | Sound<br>db<br>(A)** | Weight<br>kg | Connect.<br>diagram |
|------|----------------------------|-----------|------------------------------|------------------------------|------------------------------|----------------------|--------------|---------------------|
|      | HBFX 45 T4/T8 (A5:6) F400  | 20° - 45° | 0,60                         | 1,60                         | 6.170                        | 48                   | 12           | 1                   |
|      | HBFX 50 T4/T8 (A5:6) F400  | 25° - 45° | 0,60                         | 1,60                         | 9.180                        | 55                   | 17           | 1                   |
|      | HBFX 56 T4/T8 (A5:6) F400  | 20° - 45° | 0,60                         | 2,80                         | 14.480                       | 70                   | 19           | 2                   |
|      | HBFX 63 T4/T8 (A5:6) F400  | 20° - 45° | 0,60                         | 2,80                         | 20.110                       | 74                   | 22           | 2                   |
|      | HBFX 71 T4/T8 (A5:6) F400  | 20° - 45° | 0,60                         | 4,00                         | 27.220                       | 79                   | 25           | 2                   |
|      | HBFX 80 T4/T8 (A5:6) F400  | 20° - 45° | 1,20                         | 4,00                         | 37.370                       | 76                   | 32           | 2                   |
|      | HBFX 90 T4/T8 (A3:4) F400  | 20° - 42° | 2,80                         | 17,00                        | 48.110                       | 67                   | 78           | 2                   |
|      | HBFX 90 T4/T8 (A3:8) F400  | 20° - 42° | 5,50                         | 17,00                        | 54.810                       | 72                   | 83           | 2                   |
|      | HBFX 100 T4/T8 (A3:4) F400 | 20° - 42° | 5,50                         | 20,00                        | 67.210                       | 72                   | 95           | 2                   |
|      | HBFX 100 T4/T8 (A3:8) F400 | 20° - 42° | 5,50                         | 20,00                        | 77.810                       | 81                   | 101          | 2                   |
|      | HBFX 112 T4/T8 (A3:4) F400 | 20° - 42° | 5,50                         | 37,00                        | 92.110                       | 76                   | 113          | 2                   |
|      | HBFX 112 T4/T8 (A3:8) F400 | 20° - 42° | 5,50                         | 37,00                        | 104.010                      | 83                   | 119          | 2                   |
|      | HBFX 125 T4/T8 (A3:4) F400 | 20° - 42° | 11,00                        | 44,00                        | 124.010                      | 83                   | 125          | 2                   |
|      | HBFX 125 T4/T8 (A3:8) F400 | 20° - 42° | 11,00                        | 44,00                        | 141.010                      | 89                   | 131          | 2                   |

### Notes:

\* The motor is not included in fan weight

\*\* Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

## Dimensions



| Model                     | C (Mot. T.63) | C (Mot. T.71) | C (Mot. T.80) | C (Mot. T.90L) | C (Mot. T.90S) | C (Mot. T.100L) | C (Mot. T.112) | C (Mot. T.112M) | C (Mot. T.132) |
|---------------------------|---------------|---------------|---------------|----------------|----------------|-----------------|----------------|-----------------|----------------|
| HBFX 45 T4 (A5:6) F400    | 328           | 328           | 347           | 387            | 362            | 418             | -              | -               | -              |
| HBFX 45 T6 (A5:6) F400    | 328           | 328           | 347           | 387            | 362            | 418             | -              | -               | -              |
| HBFX 45 T4/T8 (A5:6) F400 | 328           | 328           | 347           | 387            | 362            | 418             | -              | -               | -              |
| HBFX 50 T4 (A5:6) F400    | -             | 338           | 350           | 387            | 362            | 421             | -              | -               | -              |
| HBFX 50 T6 (A5:6) F400    | -             | 338           | 350           | 387            | 362            | 421             | -              | -               | -              |
| HBFX 50 T4/T8 (A5:6) F400 | -             | 338           | 350           | 387            | 362            | 421             | -              | -               | -              |
| HBFX 56 T4 (A5:6) F400    | -             | 338           | 352           | 387            | 362            | 423             | -              | -               | -              |
| HBFX 56 T6 (A5:6) F400    | -             | 338           | 352           | 387            | 362            | 423             | -              | -               | -              |
| HBFX 56 T4/T8 (A5:6) F400 | -             | 338           | 352           | 387            | 362            | 423             | -              | -               | -              |
| HBFX 63 T4 (A5:6) F400    | -             | -             | 352           | 411            | 386            | 442             | -              | 463             | -              |
| HBFX 63 T6 (A5:6) F400    | -             | -             | 352           | 411            | 386            | 442             | -              | 463             | -              |
| HBFX 63 T4/T8 (A5:6) F400 | -             | -             | 352           | 411            | 386            | 442             | -              | 463             | -              |
| HBFX 71 T4 (A5:6) F400    | -             | -             | 357           | 416            | 391            | 447             | -              | 468             | -              |
| HBFX 71 T6 (A5:6) F400    | -             | -             | 357           | 416            | 391            | 447             | -              | 468             | -              |
| HBFX 71 T4/T8 (A5:6) F400 | -             | -             | 357           | 416            | 391            | 447             | -              | 468             | -              |
| HBFX 80 T4 (A5:6) F400    | -             | -             | -             | 427            | 427            | 463             | -              | 469             | -              |
| HBFX 80 T6 (A5:6) F400    | -             | -             | -             | 427            | 427            | 463             | -              | 469             | -              |
| HBFX 80 T4/T8 (A5:6) F400 | -             | -             | -             | 427            | 427            | 463             | -              | 469             | -              |
| HBFX 90 T4 (A3:4) F400    | -             | -             | -             | -              | -              | 658             | 658            | -               | 658            |
| HBFX 90 T4 (A3:8) F400    | -             | -             | -             | -              | -              | 658             | 658            | -               | 658            |
| HBFX 90 T6 (A3:4) F400    | -             | -             | -             | -              | -              | 658             | 658            | -               | 658            |

| Model                      | C (Mot. T.63) | C (Mot. T.71) | C (Mot. T.80) | C (Mot. T.90L) | C (Mot. T.90S) | C (Mot. T.100L) | C (Mot. T.112) | C (Mot. T.112M) | C (Mot. T.132) |
|----------------------------|---------------|---------------|---------------|----------------|----------------|-----------------|----------------|-----------------|----------------|
| HBFX 90 T6 (A3:8) F400     | -             | -             | -             | -              | -              | 658             | 658            | -               | 658            |
| HBFX 90 T4/T8 (A3:4) F400  | -             | -             | -             | -              | -              | 658             | 658            | -               | 658            |
| HBFX 90 T4/T8 (A3:8) F400  | -             | -             | -             | -              | -              | 658             | 658            | -               | 658            |
| HBFX 100 T4 (A3:4) F400    | -             | -             | -             | -              | -              | -               | -              | -               | 653            |
| HBFX 100 T4 (A3:8) F400    | -             | -             | -             | -              | -              | -               | -              | -               | 653            |
| HBFX 100 T6 (A3:4) F400    | -             | -             | -             | -              | -              | -               | -              | -               | 653            |
| HBFX 100 T6 (A3:8) F400    | -             | -             | -             | -              | -              | -               | -              | -               | 653            |
| HBFX 100 T4/T8 (A3:4) F400 | -             | -             | -             | -              | -              | -               | -              | -               | 653            |
| HBFX 100 T4/T8 (A3:8) F400 | -             | -             | -             | -              | -              | -               | -              | -               | 653            |
| HBFX 112 T4 (A3:4) F400    | -             | -             | -             | -              | -              | -               | -              | -               | 760            |
| HBFX 112 T4 (A3:8) F400    | -             | -             | -             | -              | -              | -               | -              | -               | 760            |
| HBFX 112 T6 (A3:4) F400    | -             | -             | -             | -              | -              | -               | -              | -               | 760            |
| HBFX 112 T6 (A3:8) F400    | -             | -             | -             | -              | -              | -               | -              | -               | 760            |
| HBFX 112 T4/T8 (A3:4) F400 | -             | -             | -             | -              | -              | -               | -              | -               | 760            |
| HBFX 112 T4/T8 (A3:8) F400 | -             | -             | -             | -              | -              | -               | -              | -               | 760            |
| HBFX 125 T4 (A3:4) F400    | -             | -             | -             | -              | -              | -               | -              | -               | 759            |
| HBFX 125 T4 (A3:8) F400    | -             | -             | -             | -              | -              | -               | -              | -               | 759            |
| HBFX 125 T6 (A3:4) F400    | -             | -             | -             | -              | -              | -               | -              | -               | 759            |
| HBFX 125 T6 (A3:8) F400    | -             | -             | -             | -              | -              | -               | -              | -               | 759            |
| HBFX 125 T4/T8 (A3:4) F400 | -             | -             | -             | -              | -              | -               | -              | -               | 759            |
| HBFX 125 T4/T8 (A3:8) F400 | -             | -             | -             | -              | -              | -               | -              | -               | 759            |

| Model                     | C (Mot. T.132M) | C (Mot. T.132S) | C (Mot. T.160L) | C (Mot. T.160M) | C (Mot. T.180L) | C (Mot. T.180M) | C (Mot. T.200) | C (Mot. T.225) | E   |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|-----|
| HBFX 45 T4 (A5:6) F400    | -               | -               | -               | -               | -               | -               | -              | -              | 165 |
| HBFX 45 T6 (A5:6) F400    | -               | -               | -               | -               | -               | -               | -              | -              | 165 |
| HBFX 45 T4/T8 (A5:6) F400 | -               | -               | -               | -               | -               | -               | -              | -              | 165 |
| HBFX 50 T4 (A5:6) F400    | -               | -               | -               | -               | -               | -               | -              | -              | 165 |
| HBFX 50 T6 (A5:6) F400    | -               | -               | -               | -               | -               | -               | -              | -              | 165 |
| HBFX 50 T4/T8 (A5:6) F400 | -               | -               | -               | -               | -               | -               | -              | -              | 165 |
| HBFX 56 T4 (A5:6) F400    | -               | -               | -               | -               | -               | -               | -              | -              | 175 |
| HBFX 56 T6 (A5:6) F400    | -               | -               | -               | -               | -               | -               | -              | -              | 175 |
| HBFX 56 T4/T8 (A5:6) F400 | -               | -               | -               | -               | -               | -               | -              | -              | 175 |
| HBFX 63 T4 (A5:6) F400    | -               | -               | -               | -               | -               | -               | -              | -              | 185 |
| HBFX 63 T6 (A5:6) F400    | -               | -               | -               | -               | -               | -               | -              | -              | 185 |
| HBFX 63 T4/T8 (A5:6) F400 | -               | -               | -               | -               | -               | -               | -              | -              | 185 |
| HBFX 71 T4 (A5:6) F400    | -               | -               | -               | -               | -               | -               | -              | -              | 190 |
| HBFX 71 T6 (A5:6) F400    | -               | -               | -               | -               | -               | -               | -              | -              | 190 |
| HBFX 71 T4/T8 (A5:6) F400 | -               | -               | -               | -               | -               | -               | -              | -              | 190 |
| HBFX 80 T4 (A5:6) F400    | 563             | 525             | -               | -               | -               | -               | -              | -              | 220 |

| Model                      | C (Mot. T.132M) | C (Mot. T.132S) | C (Mot. T.160L) | C (Mot. T.160M) | C (Mot. T.180L) | C (Mot. T.180M) | C (Mot. T.200) | C (Mot. T.225) | E   |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|-----|
| HBFX 80 T6 (A5:6) F400     | 563             | 525             | -               | -               | -               | -               | -              | -              | 220 |
| HBFX 80 T4/T8 (A5:6) F400  | 563             | 525             | -               | -               | -               | -               | -              | -              | 220 |
| HBFX 90 T4 (A3:4) F400     | -               | -               | 742             | 721             | 787             | 778             | -              | -              | 340 |
| HBFX 90 T4 (A3:8) F400     | -               | -               | 742             | 721             | 787             | 778             | -              | -              | 340 |
| HBFX 90 T6 (A3:4) F400     | -               | -               | 742             | 721             | 787             | 778             | -              | -              | 340 |
| HBFX 90 T6 (A3:8) F400     | -               | -               | 742             | 721             | 787             | 778             | -              | -              | 340 |
| HBFX 90 T4/T8 (A3:4) F400  | -               | -               | 742             | 721             | 787             | 778             | -              | -              | 340 |
| HBFX 90 T4/T8 (A3:8) F400  | -               | -               | 742             | 721             | 787             | 778             | -              | -              | 340 |
| HBFX 100 T4 (A3:4) F400    | -               | -               | 738             | 716             | 792             | 776             | -              | -              | 340 |
| HBFX 100 T4 (A3:8) F400    | -               | -               | 738             | 716             | 792             | 776             | -              | -              | 340 |
| HBFX 100 T6 (A3:4) F400    | -               | -               | 738             | 716             | 792             | 776             | -              | -              | 340 |
| HBFX 100 T6 (A3:8) F400    | -               | -               | 738             | 716             | 792             | 776             | -              | -              | 340 |
| HBFX 100 T4/T8 (A3:4) F400 | -               | -               | 738             | 716             | 792             | 776             | -              | -              | 340 |
| HBFX 100 T4/T8 (A3:8) F400 | -               | -               | 738             | 716             | 792             | 776             | -              | -              | 340 |
| HBFX 112 T4 (A3:4) F400    | -               | -               | 760             | 760             | 780             | 761             | 864            | 949            | 340 |
| HBFX 112 T4 (A3:8) F400    | -               | -               | 760             | 760             | 780             | 761             | 864            | 949            | 340 |
| HBFX 112 T6 (A3:4) F400    | -               | -               | 760             | 760             | 780             | 761             | 864            | 949            | 340 |
| HBFX 112 T6 (A3:8) F400    | -               | -               | 760             | 760             | 780             | 761             | 864            | 949            | 340 |
| HBFX 112 T4/T8 (A3:4) F400 | -               | -               | 760             | 760             | 780             | 761             | 864            | 949            | 340 |
| HBFX 112 T4/T8 (A3:8) F400 | -               | -               | 760             | 760             | 780             | 761             | 864            | 949            | 340 |
| HBFX 125 T4 (A3:4) F400    | -               | -               | 759             | 759             | 779             | 760             | 863            | 948            | 340 |
| HBFX 125 T4 (A3:8) F400    | -               | -               | 759             | 759             | 779             | 760             | 863            | 948            | 340 |
| HBFX 125 T6 (A3:4) F400    | -               | -               | 759             | 759             | 779             | 760             | 863            | 948            | 340 |
| HBFX 125 T6 (A3:8) F400    | -               | -               | 759             | 759             | 779             | 760             | 863            | 948            | 340 |
| HBFX 125 T4/T8 (A3:4) F400 | -               | -               | 759             | 759             | 779             | 760             | 863            | 948            | 340 |
| HBFX 125 T4/T8 (A3:8) F400 | -               | -               | 759             | 759             | 779             | 760             | 863            | 948            | 340 |

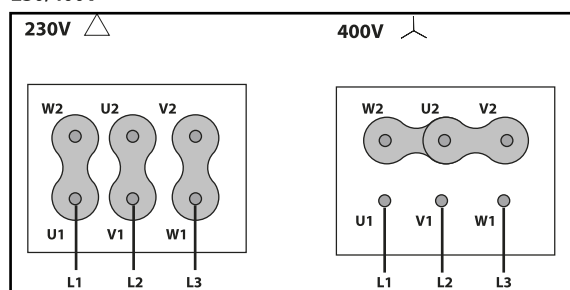
| Model                     | O      | ØA  | ØB  | ØD  | ØJ |
|---------------------------|--------|-----|-----|-----|----|
| HBFX 45 T4 (A5:6) F400    | 8X45º  | 525 | 500 | 452 | 12 |
| HBFX 45 T6 (A5:6) F400    | 8X45º  | 525 | 500 | 452 | 12 |
| HBFX 45 T4/T8 (A5:6) F400 | 8X45º  | 525 | 500 | 452 | 12 |
| HBFX 50 T4 (A5:6) F400    | 12x30º | 600 | 560 | 504 | 12 |
| HBFX 50 T6 (A5:6) F400    | 12x30º | 600 | 560 | 504 | 12 |
| HBFX 50 T4/T8 (A5:6) F400 | 12x30º | 600 | 560 | 504 | 12 |
| HBFX 56 T4 (A5:6) F400    | 12X30º | 646 | 620 | 559 | 12 |
| HBFX 56 T6 (A5:6) F400    | 12X30º | 646 | 620 | 559 | 12 |
| HBFX 56 T4/T8 (A5:6) F400 | 12X30º | 646 | 620 | 559 | 12 |
| HBFX 63 T4 (A5:6) F400    | 12X30º | 725 | 690 | 633 | 12 |
| HBFX 63 T6 (A5:6) F400    | 12X30º | 725 | 690 | 633 | 12 |
| HBFX 63 T4/T8 (A5:6) F400 | 12X30º | 725 | 690 | 633 | 12 |

| Model                      | O        | ØA   | ØB   | ØD    | ØJ |
|----------------------------|----------|------|------|-------|----|
| HBFX 71 T4 (A5:6) F400     | 16x22,5º | 802  | 770  | 715   | 12 |
| HBFX 71 T6 (A5:6) F400     | 16x22,5º | 802  | 770  | 715   | 12 |
| HBFX 71 T4/T8 (A5:6) F400  | 16x22,5º | 802  | 770  | 715   | 12 |
| HBFX 80 T4 (A5:6) F400     | 16x22,5º | 892  | 860  | 801   | 12 |
| HBFX 80 T6 (A5:6) F400     | 16x22,5º | 892  | 860  | 801   | 12 |
| HBFX 80 T4/T8 (A5:6) F400  | 16x22,5º | 892  | 860  | 801   | 12 |
| HBFX 90 T4 (A3:4) F400     | 16x22,5º | 1000 | 970  | 903.5 | 12 |
| HBFX 90 T4 (A3:8) F400     | 16x22,5º | 1000 | 970  | 903.5 | 12 |
| HBFX 90 T6 (A3:4) F400     | 16x22,5º | 1000 | 970  | 903.5 | 12 |
| HBFX 90 T6 (A3:8) F400     | 16x22,5º | 1000 | 970  | 903.5 | 12 |
| HBFX 90 T4/T8 (A3:4) F400  | 16x22,5º | 1000 | 970  | 903.5 | 12 |
| HBFX 90 T4/T8 (A3:8) F400  | 16x22,5º | 1000 | 970  | 903.5 | 12 |
| HBFX 100 T4 (A3:4) F400    | 16x22,5º | 1115 | 1070 | 1013  | 12 |
| HBFX 100 T4 (A3:8) F400    | 16x22,5º | 1115 | 1070 | 1013  | 12 |
| HBFX 100 T6 (A3:4) F400    | 16x22,5º | 1115 | 1070 | 1013  | 12 |
| HBFX 100 T6 (A3:8) F400    | 16x22,5º | 1115 | 1070 | 1013  | 12 |
| HBFX 100 T4/T8 (A3:4) F400 | 16x22,5º | 1115 | 1070 | 1013  | 12 |
| HBFX 100 T4/T8 (A3:8) F400 | 16x22,5º | 1115 | 1070 | 1013  | 12 |
| HBFX 112 T4 (A3:4) F400    | 16x22,5º | 1234 | 1190 | 1132  | 12 |
| HBFX 112 T4 (A3:8) F400    | 16x22,5º | 1234 | 1190 | 1132  | 12 |
| HBFX 112 T6 (A3:4) F400    | 16x22,5º | 1234 | 1190 | 1132  | 12 |
| HBFX 112 T6 (A3:8) F400    | 16x22,5º | 1234 | 1190 | 1132  | 12 |
| HBFX 112 T4/T8 (A3:4) F400 | 16x22,5º | 1234 | 1190 | 1132  | 12 |
| HBFX 112 T4/T8 (A3:8) F400 | 16x22,5º | 1234 | 1190 | 1132  | 12 |
| HBFX 125 T4 (A3:4) F400    | 20x18º   | 1365 | 1320 | 1263  | 15 |
| HBFX 125 T4 (A3:8) F400    | 20x18º   | 1365 | 1320 | 1263  | 15 |
| HBFX 125 T6 (A3:4) F400    | 20x18º   | 1365 | 1320 | 1263  | 15 |
| HBFX 125 T6 (A3:8) F400    | 20x18º   | 1365 | 1320 | 1263  | 15 |
| HBFX 125 T4/T8 (A3:4) F400 | 20x18º   | 1365 | 1320 | 1263  | 15 |
| HBFX 125 T4/T8 (A3:8) F400 | 20x18º   | 1365 | 1320 | 1263  | 15 |

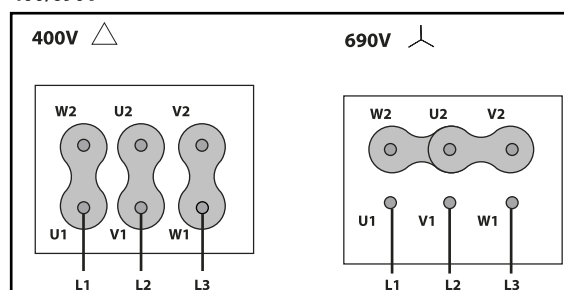
## Wiring diagram

### Wiring diagram N° 1

230/400V

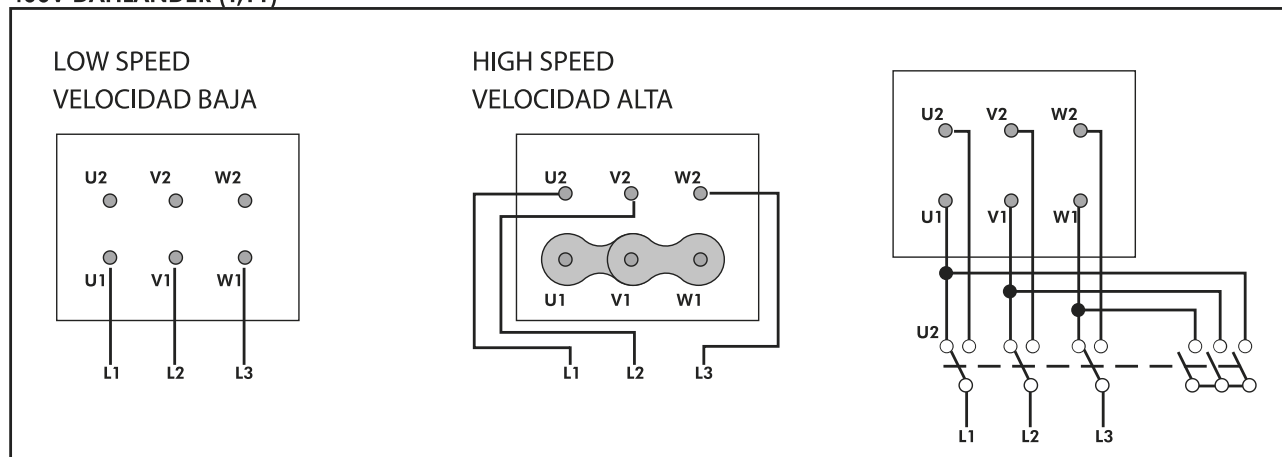


400/690V



### Wiring diagram N° 2

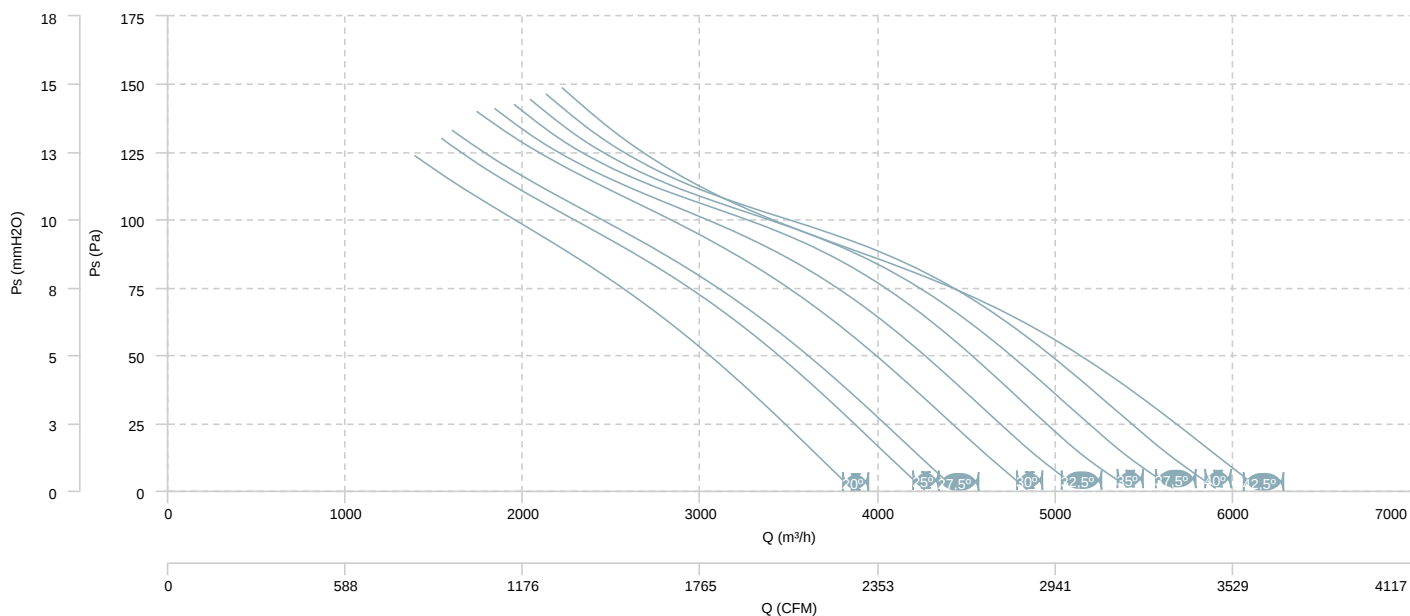
400V DAHLANDER (Y,YY)



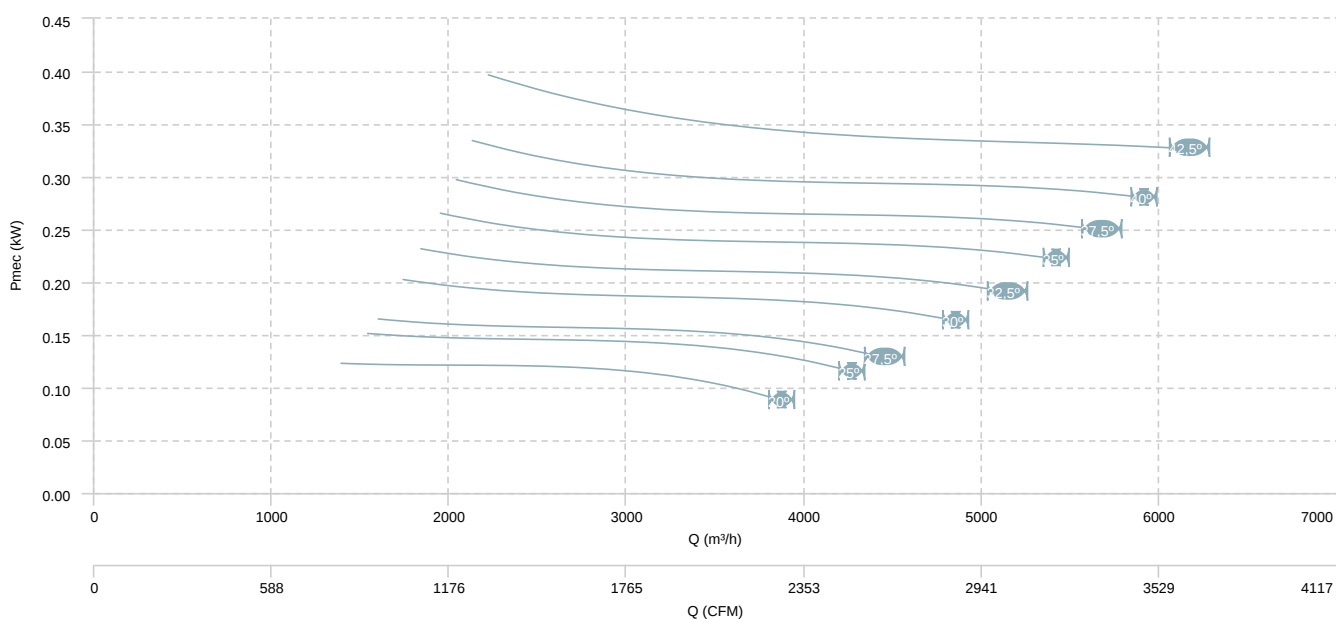
## CHARACTERISCTIC CURVE

HBFX 45 T4 (A5:6) F400

### AIR FLOW - PRESSURE

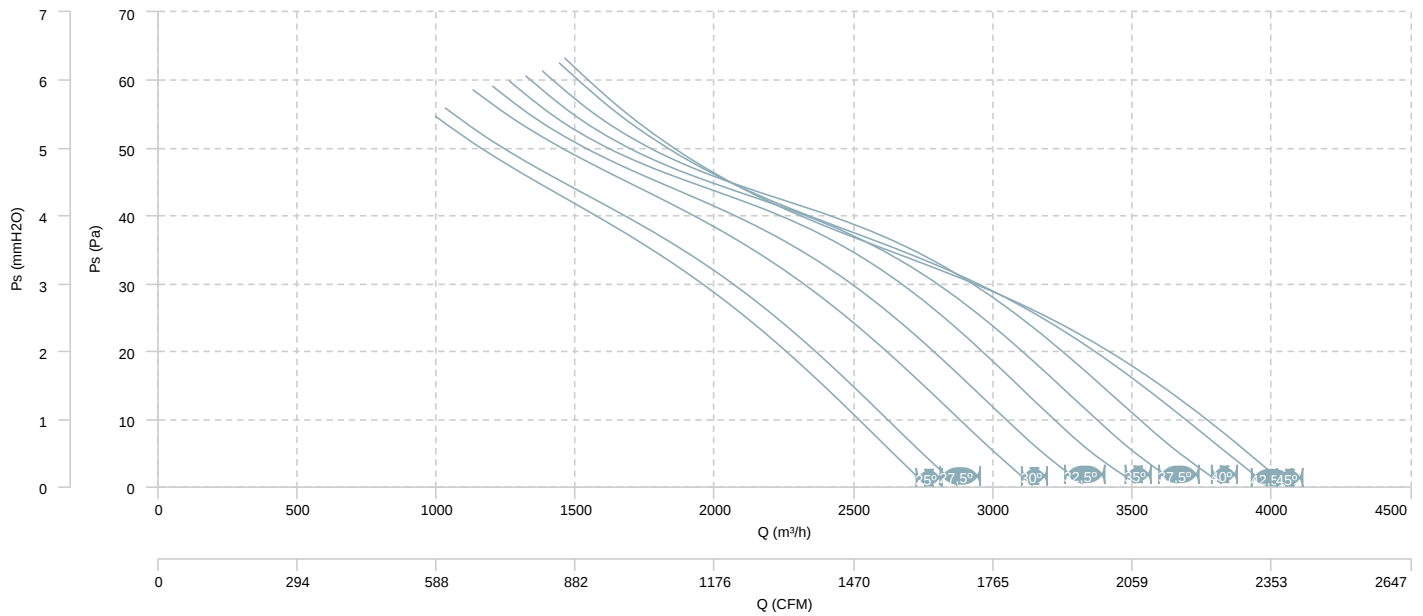


### AIR FLOW - MECHANICAL POWER

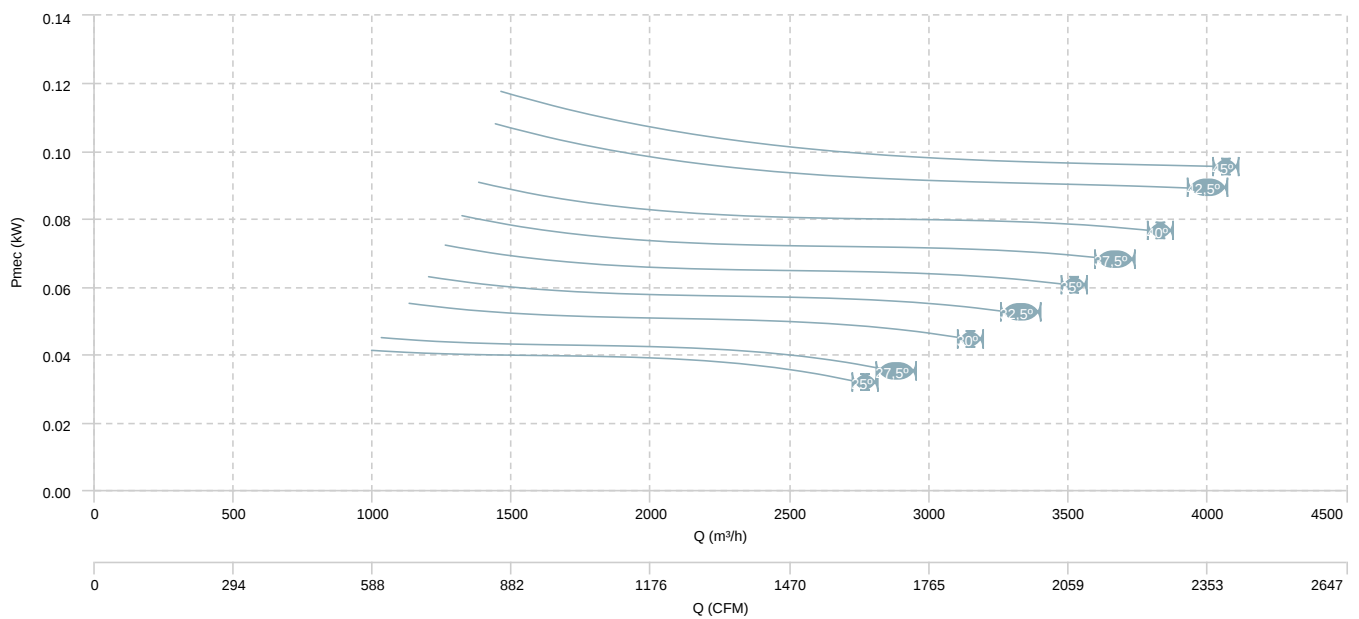


HBFX 45 T6 (A5:6) F400

## AIR FLOW - PRESSURE

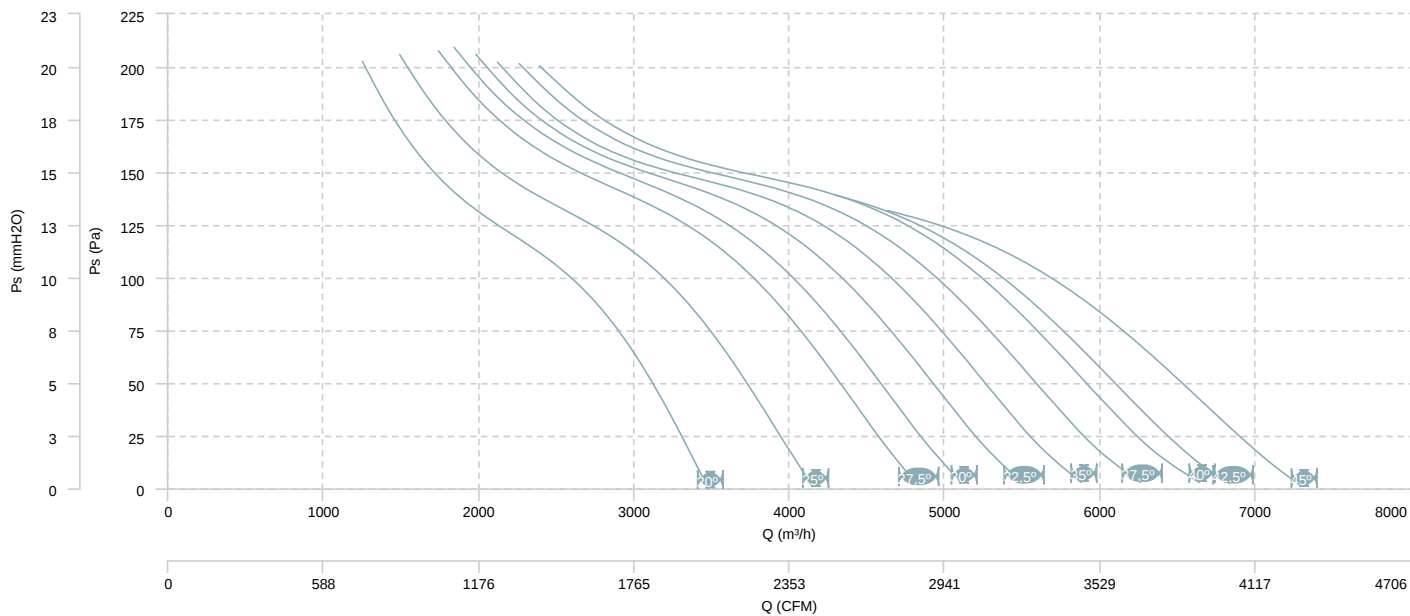


## AIR FLOW - MECHANICAL POWER

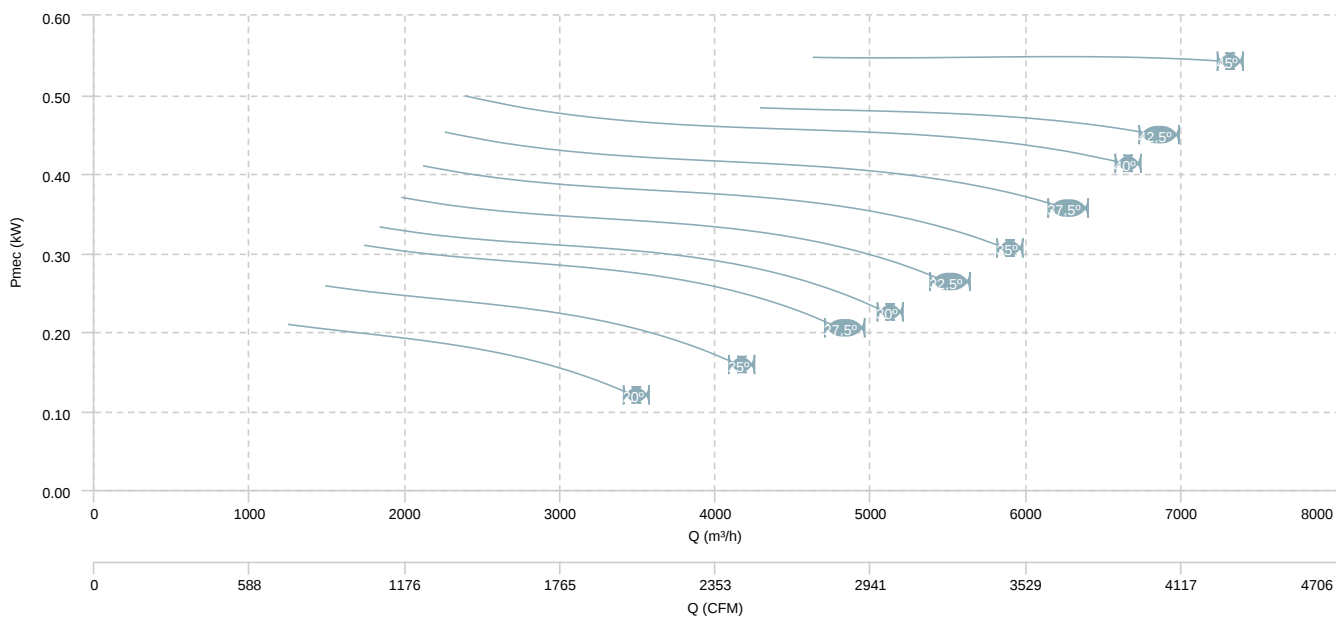


HBFX 45 T4/T8 (A5:6) F400

**AIR FLOW - PRESSURE (4 poles)**

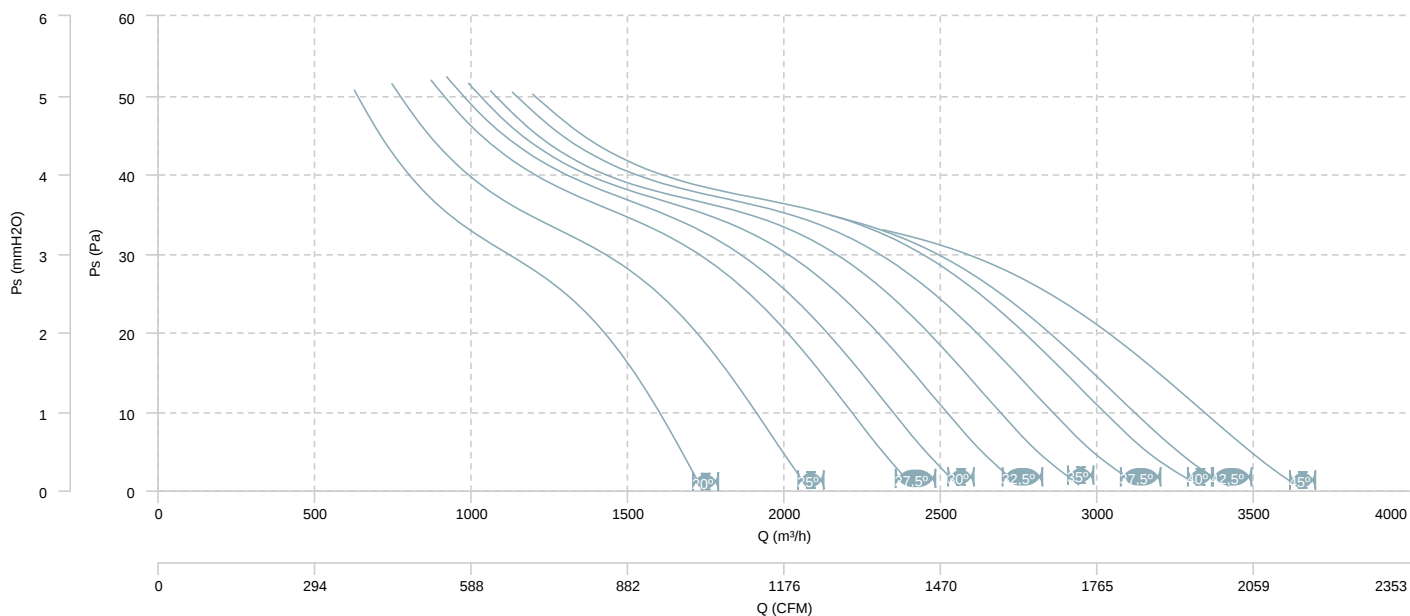


**AIR FLOW - MECHANICAL POWER (4 poles)**

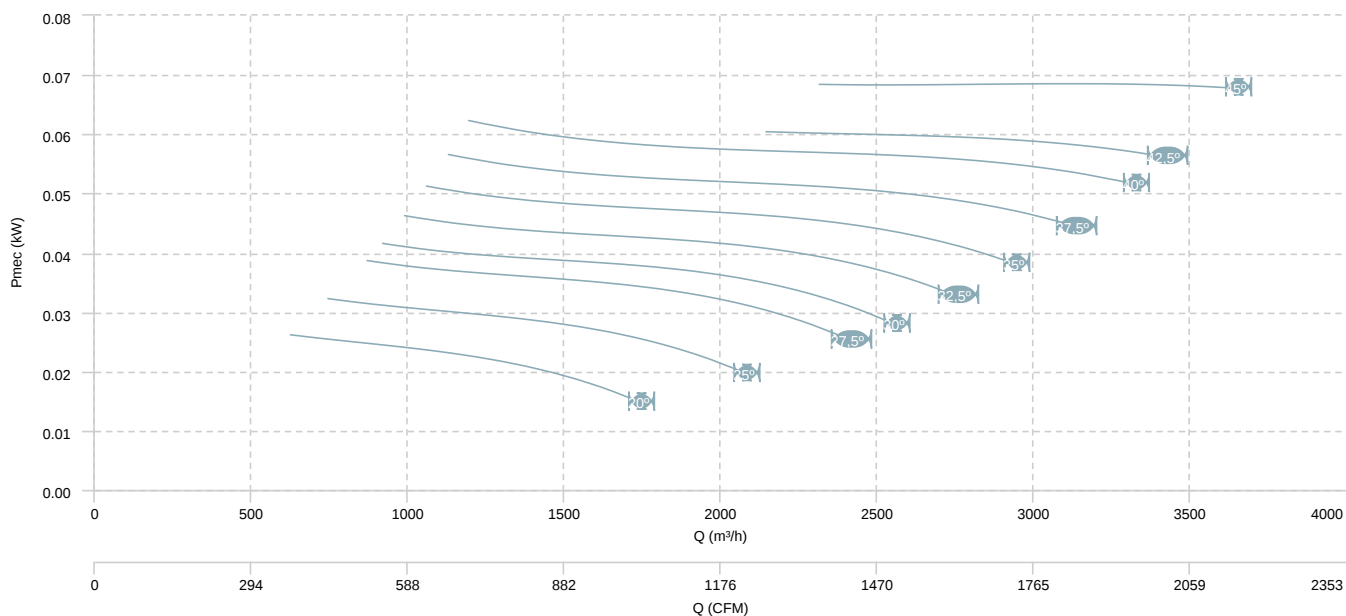


HBFX 45 T4/T8 (A5:6) F400

**AIR FLOW - PRESSURE (8 poles)**

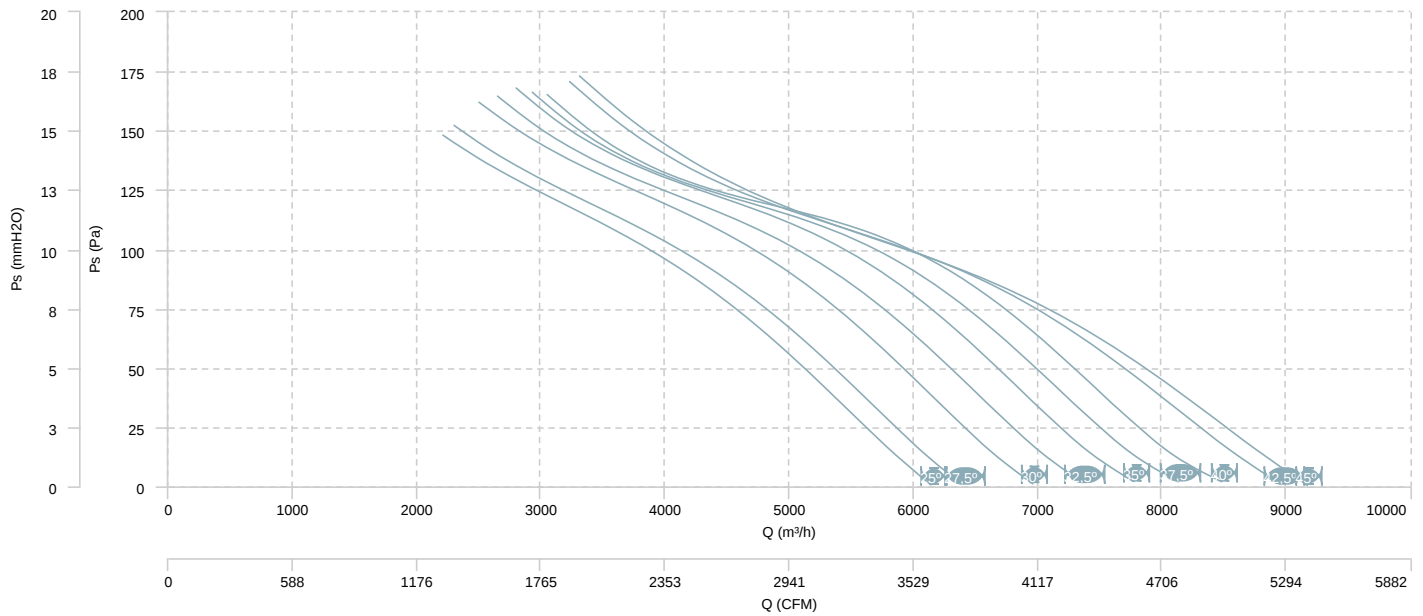


**AIR FLOW - MECHANICAL POWER (8 poles)**

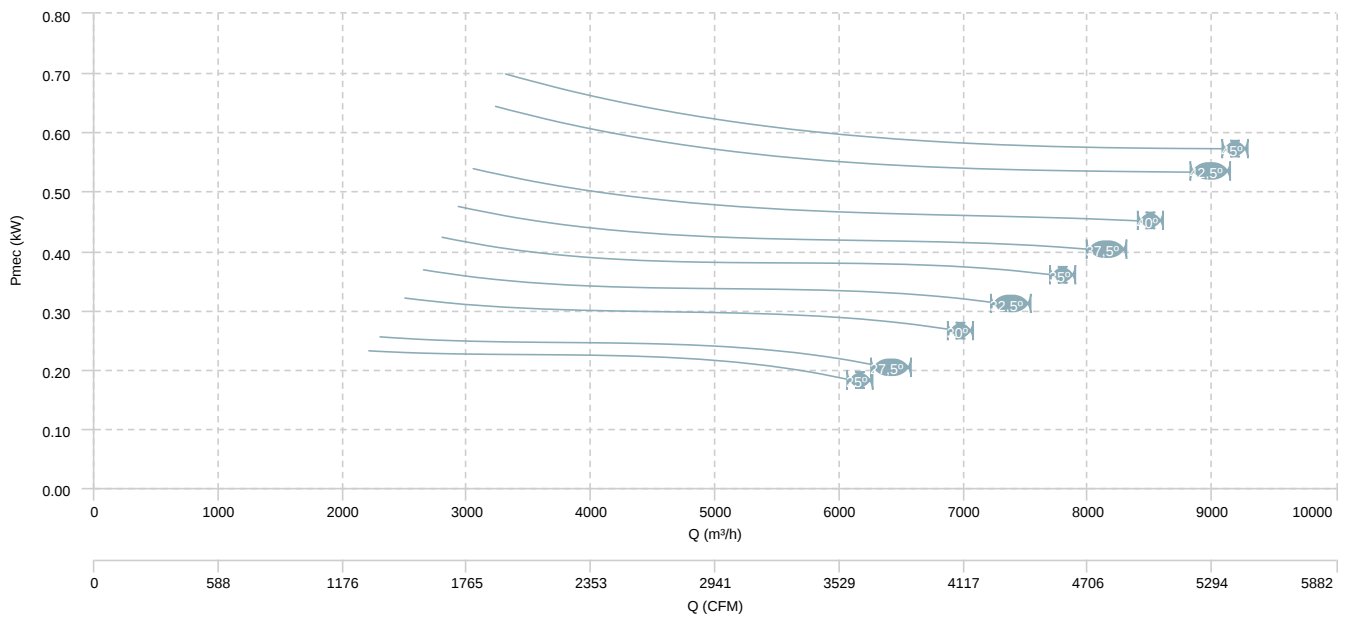


HBFX 50 T4 (A5:6) F400

## AIR FLOW - PRESSURE

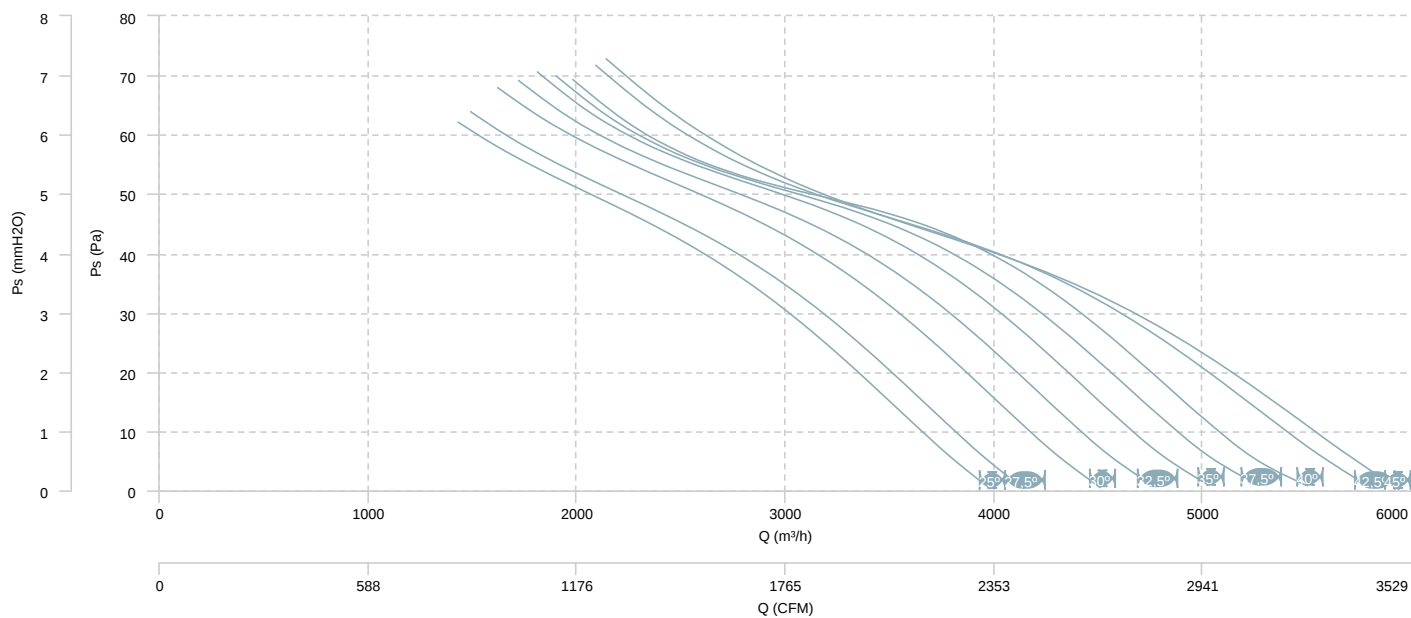


## AIR FLOW - MECHANICAL POWER

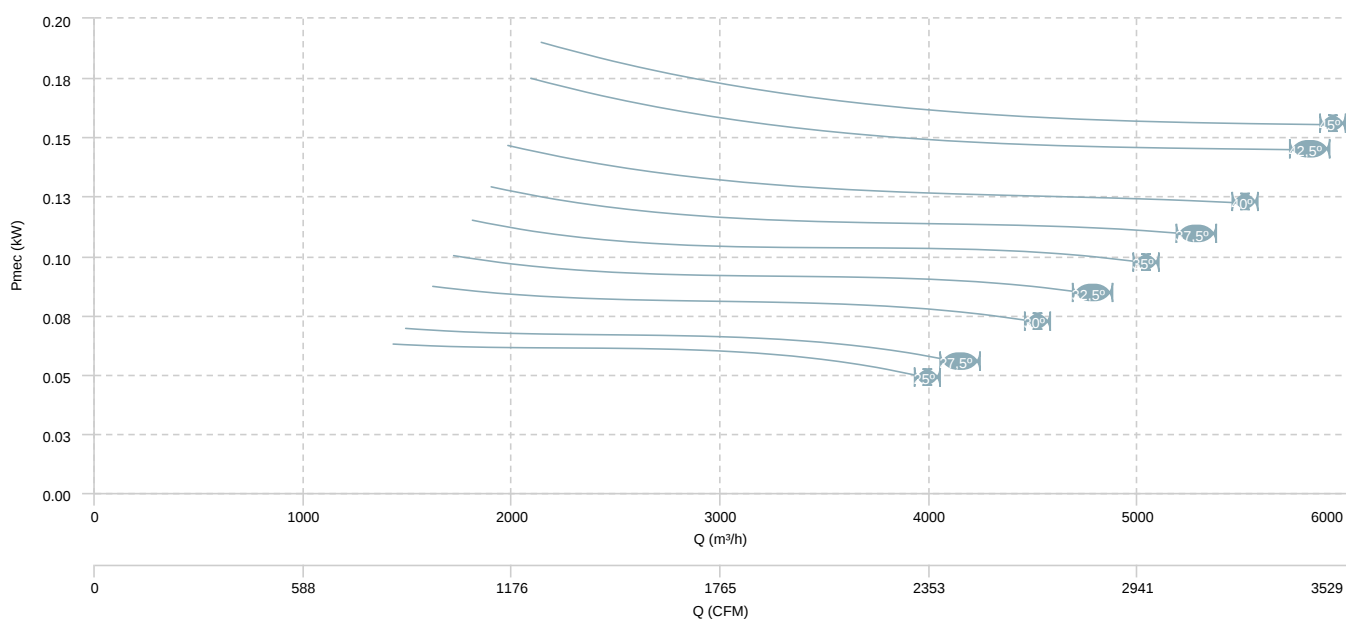


HBFX 50 T6 (A5:6) F400

## AIR FLOW - PRESSURE



## AIR FLOW - MECHANICAL POWER



HBFX 50 T4/T8 (A5:6) F400

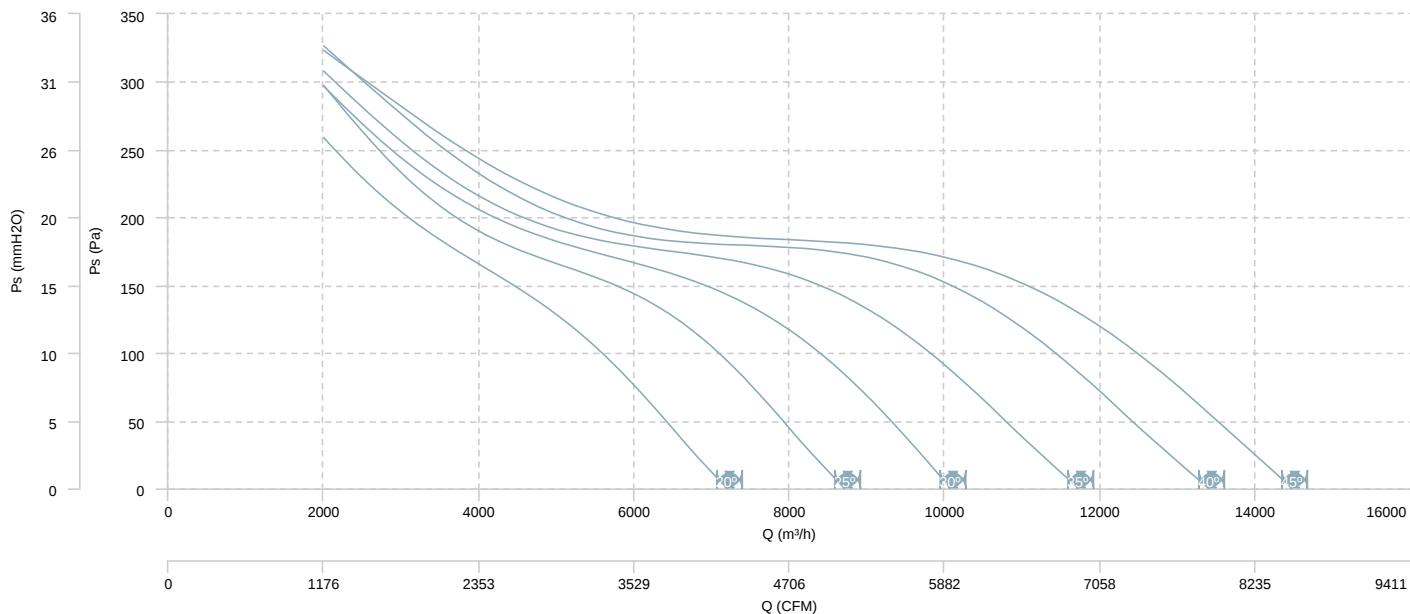
**AIR FLOW - PRESSURE (4 poles)**

HBFX 50 T4/T8 (A5:6) F400

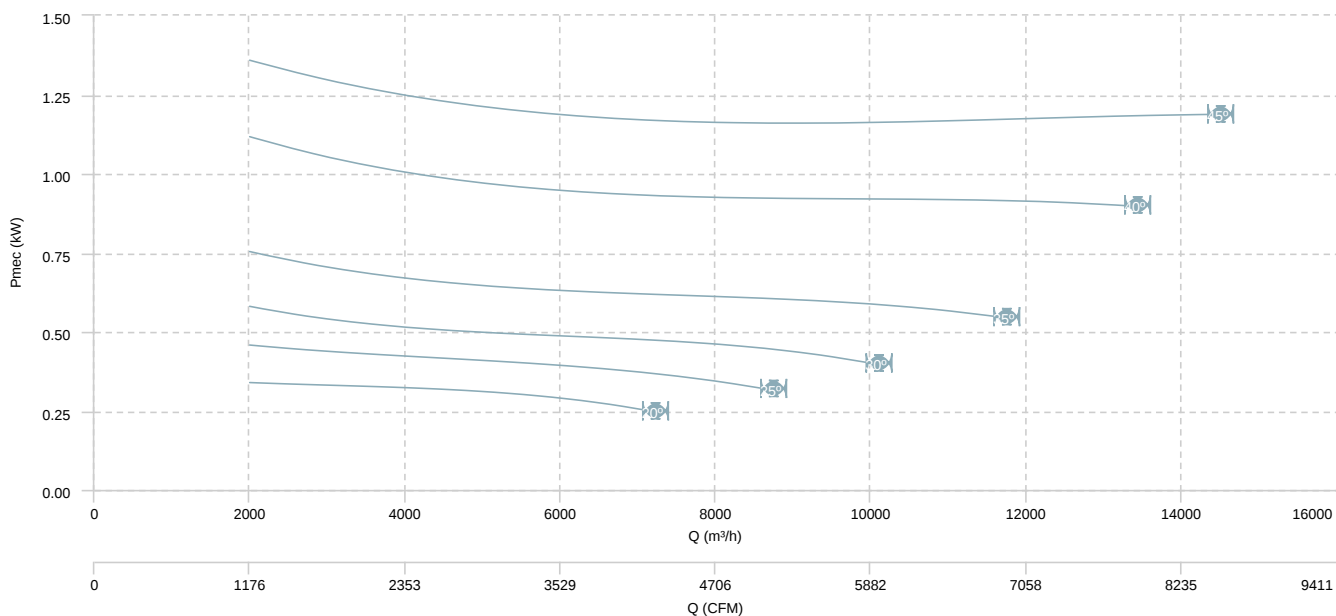
**AIR FLOW - PRESSURE (8 poles)**

HBFX 56 T4 (A5:6) F400

## AIR FLOW - PRESSURE

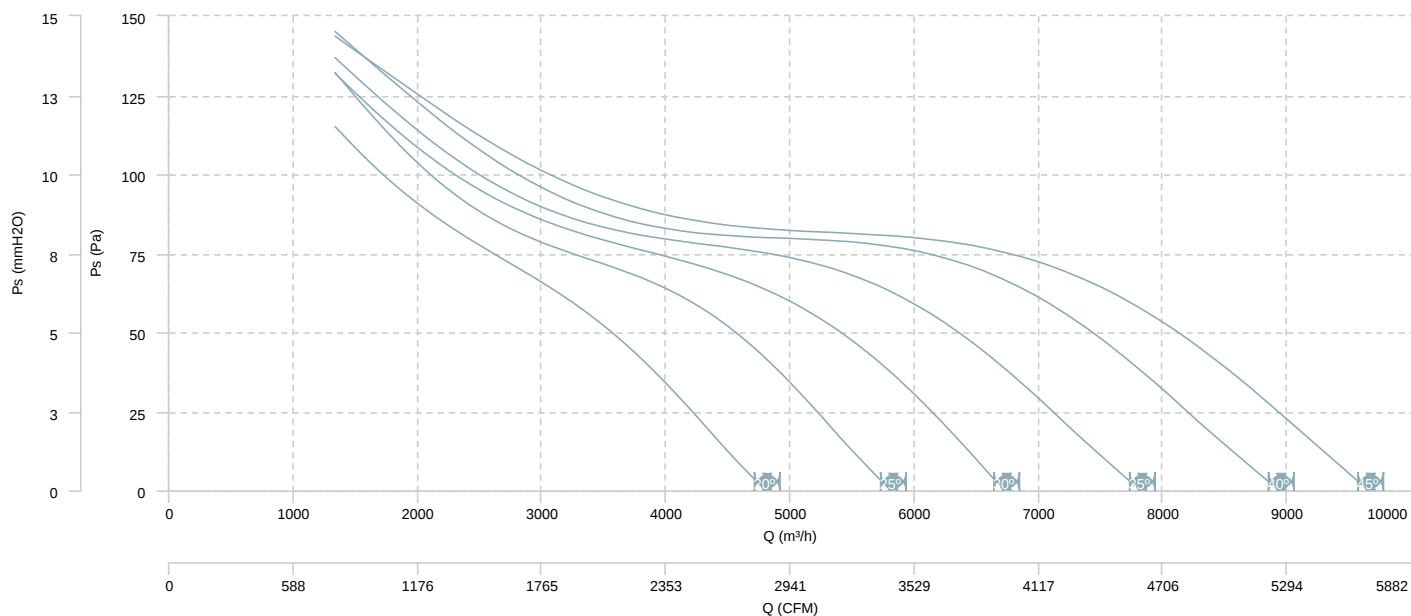


## AIR FLOW - MECHANICAL POWER

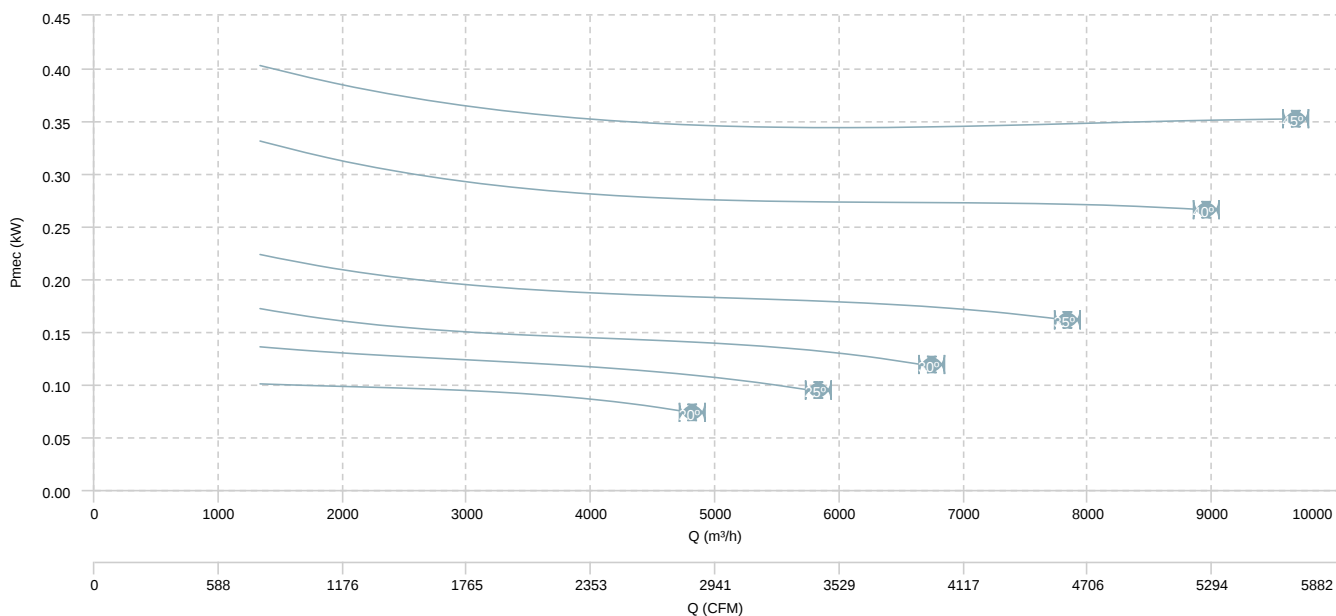


HBFX 56 T6 (A5:6) F400

**AIR FLOW - PRESSURE**

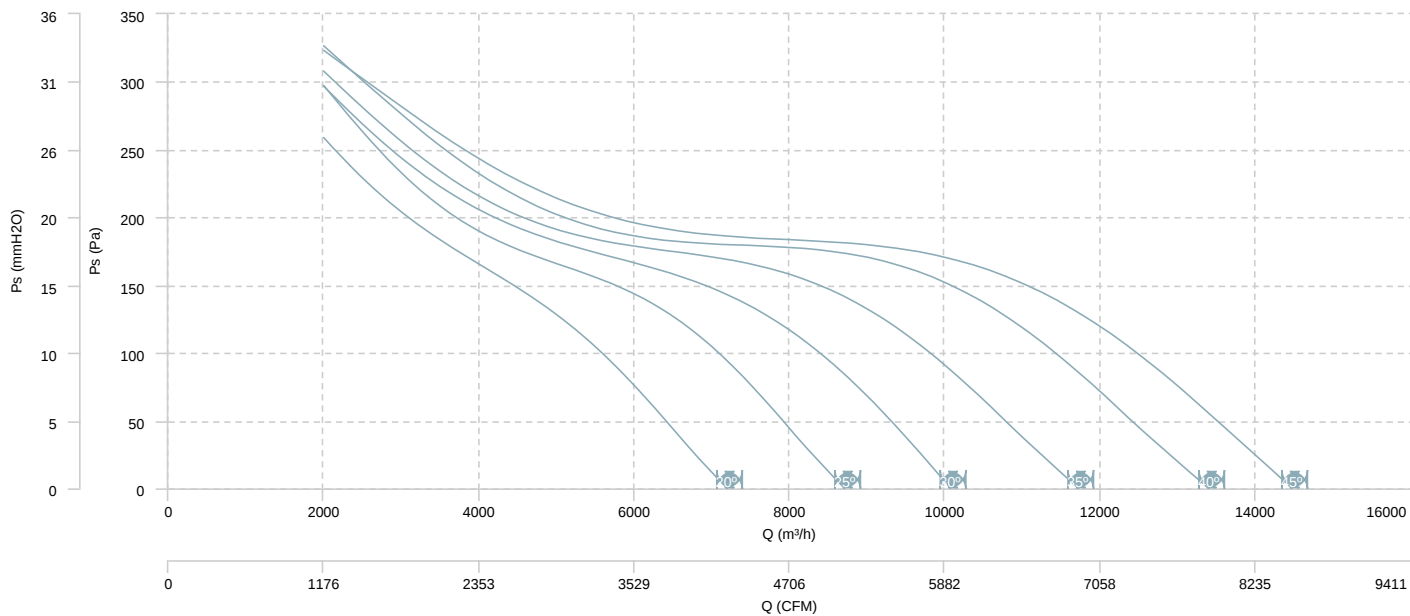


**AIR FLOW - MECHANICAL POWER**

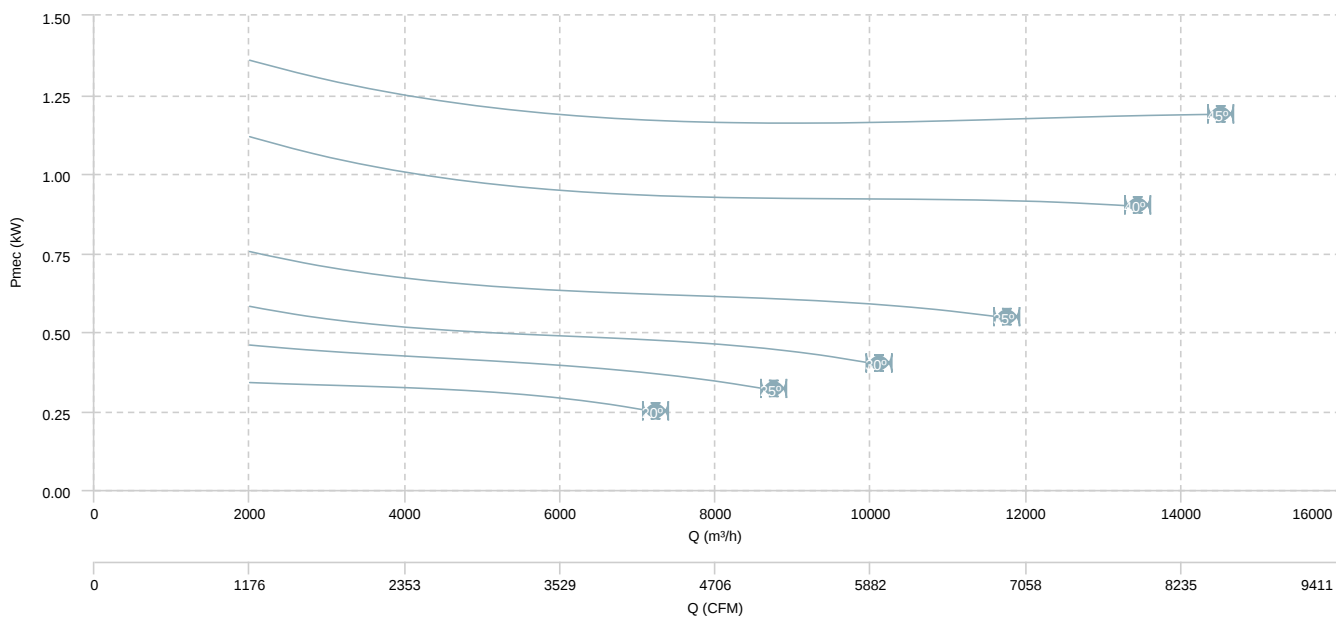


HBFX 56 T4/T8 (A5:6) F400

**AIR FLOW - PRESSURE (4 poles)**

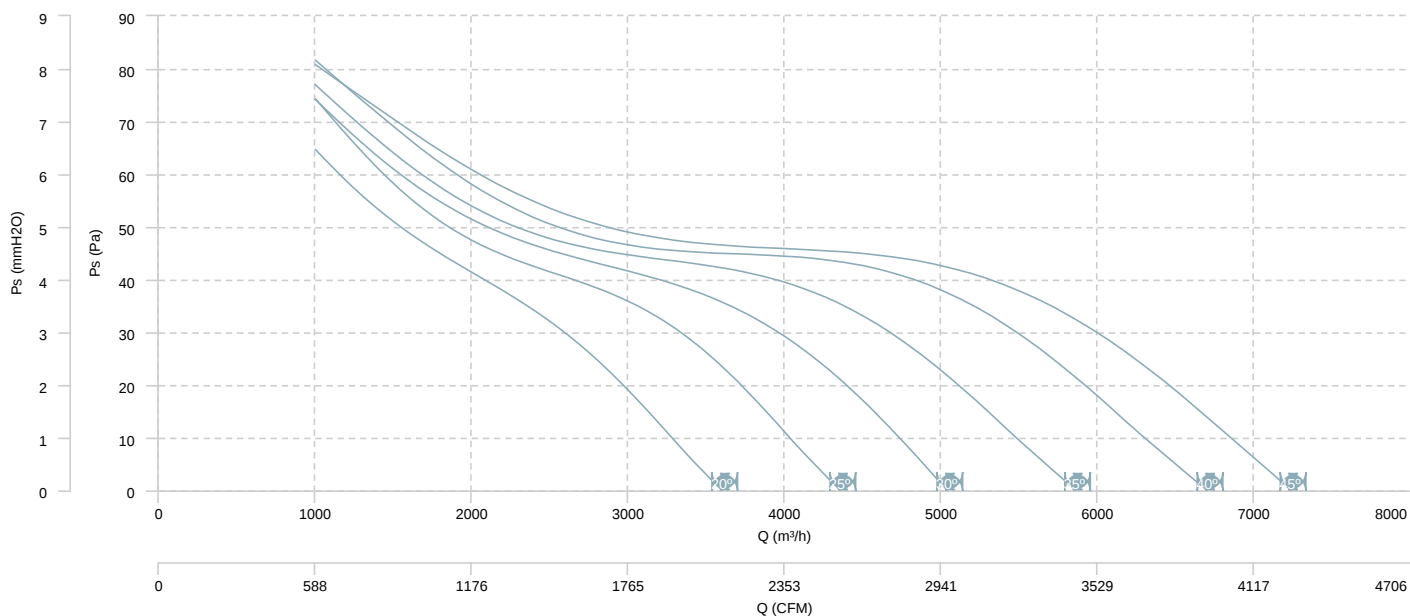


**AIR FLOW - MECHANICAL POWER (4 poles)**

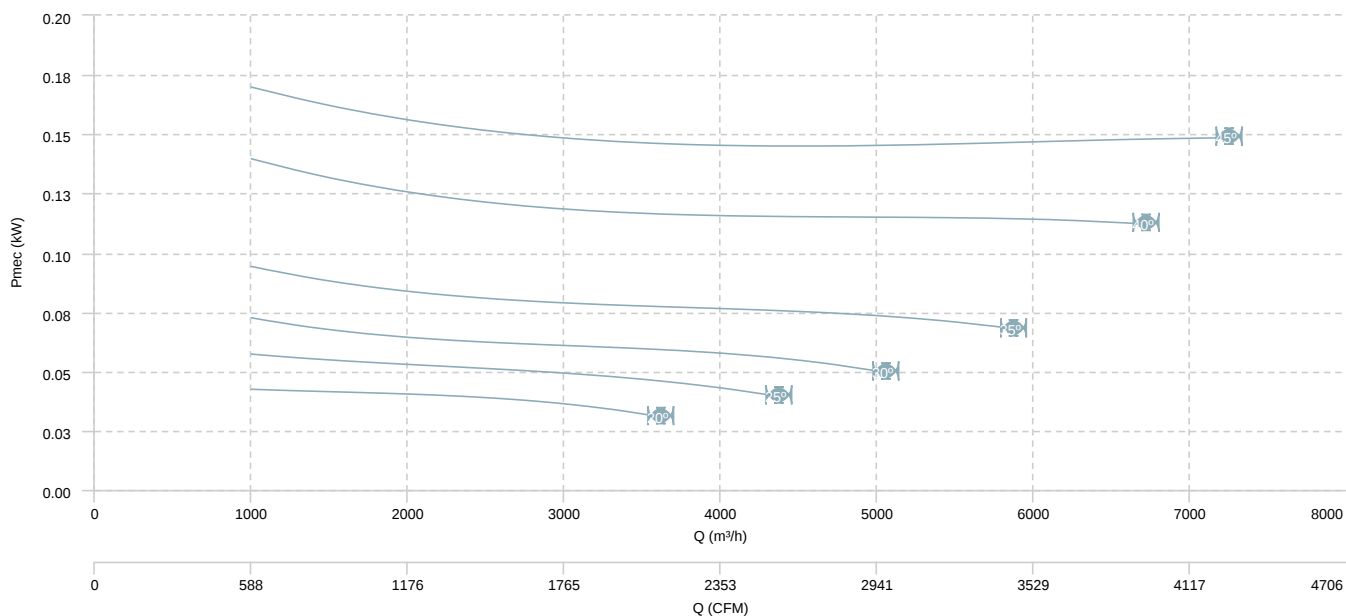


HBFX 56 T4/T8 (A5:6) F400

### AIR FLOW - PRESSURE (8 poles)

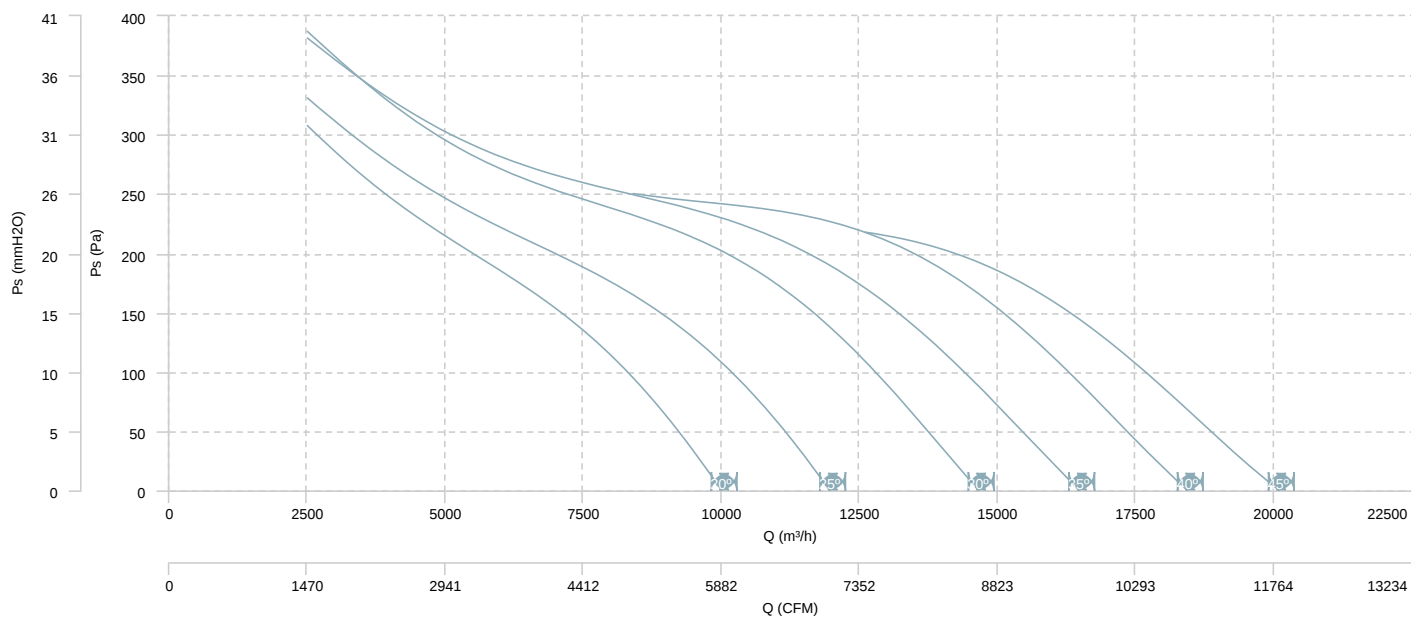


### AIR FLOW - MECHANICAL POWER (8 poles)

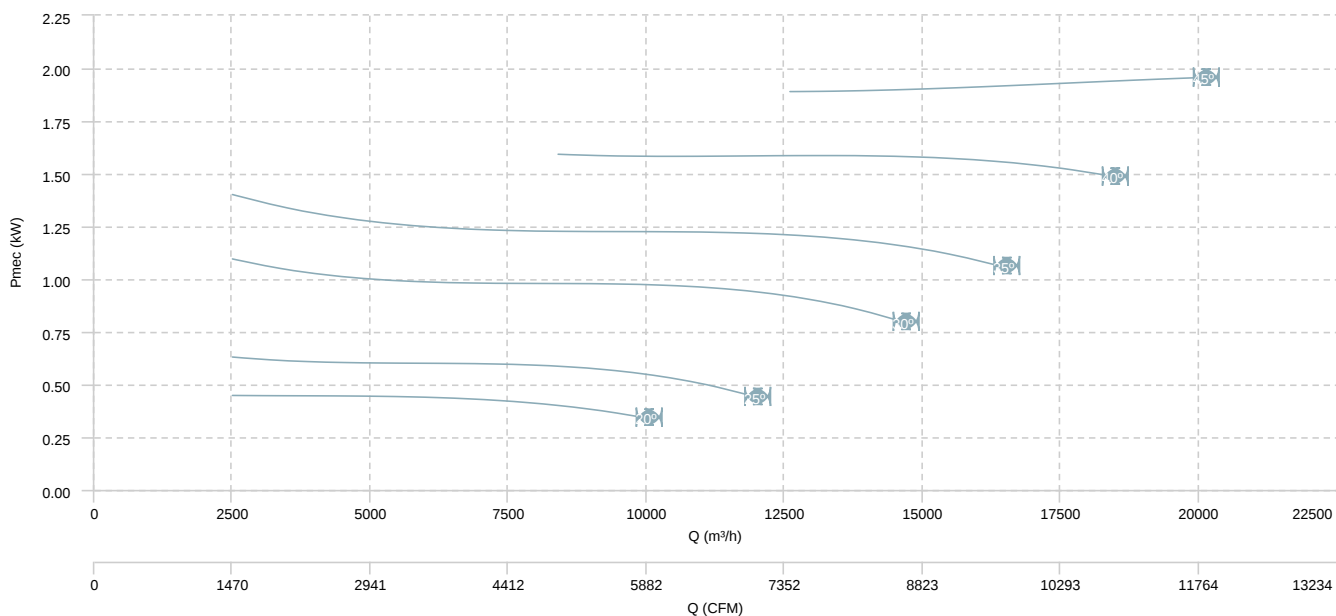


HBFX 63 T4 (A5:6) F400

## AIR FLOW - PRESSURE

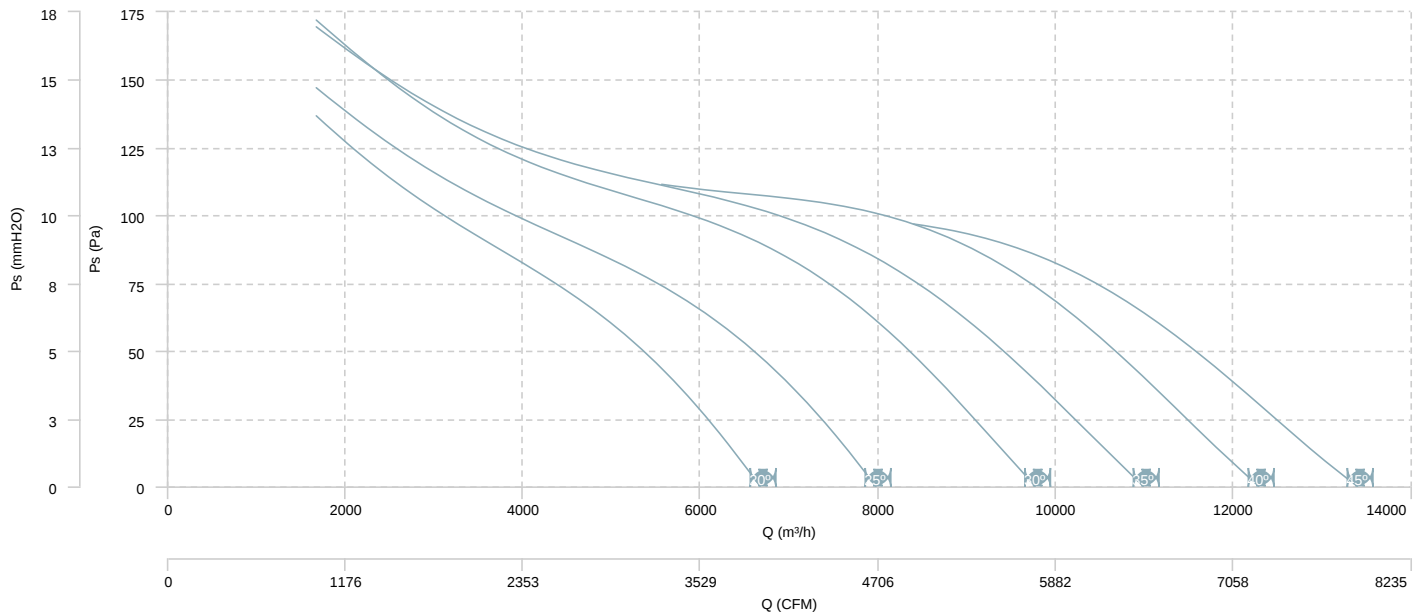


## AIR FLOW - MECHANICAL POWER

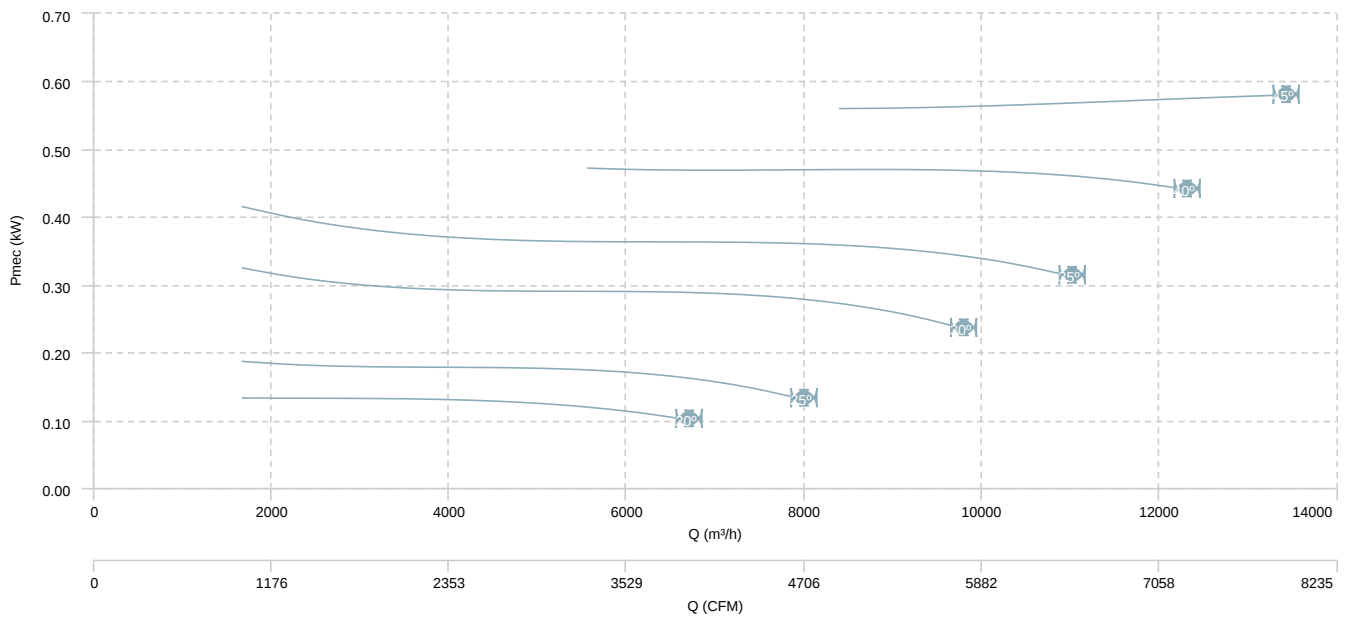


HBFX 63 T6 (A5:6) F400

**AIR FLOW - PRESSURE**

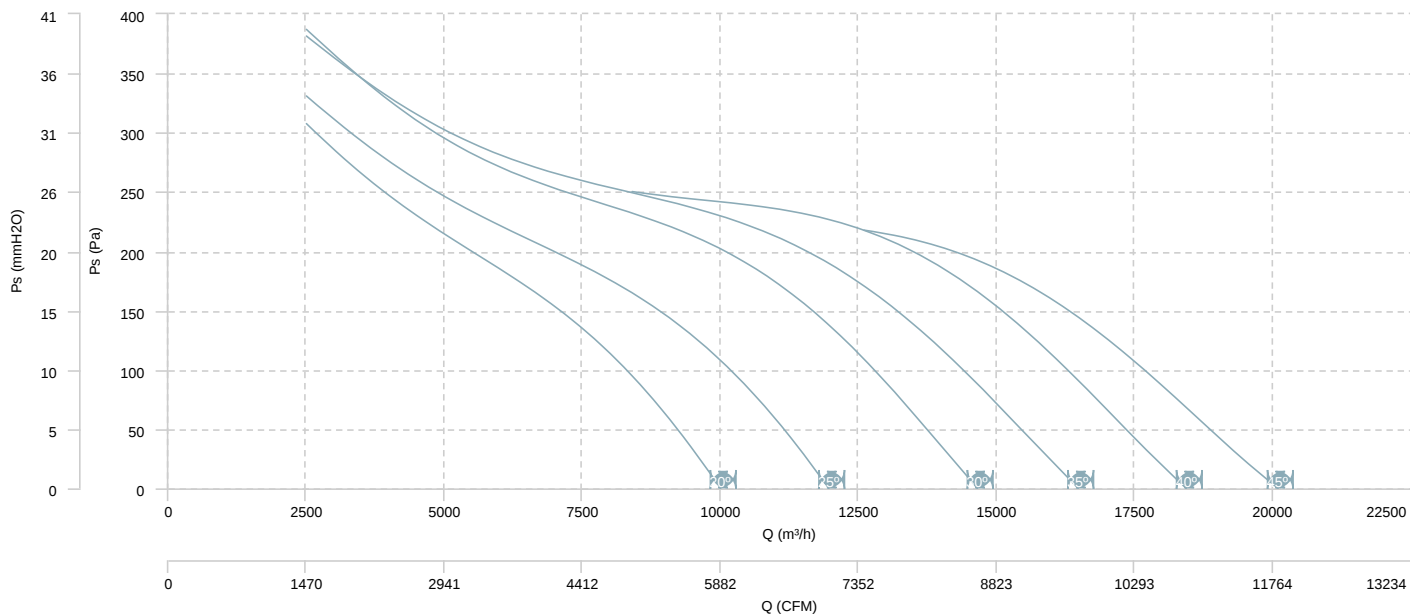


**AIR FLOW - MECHANICAL POWER**

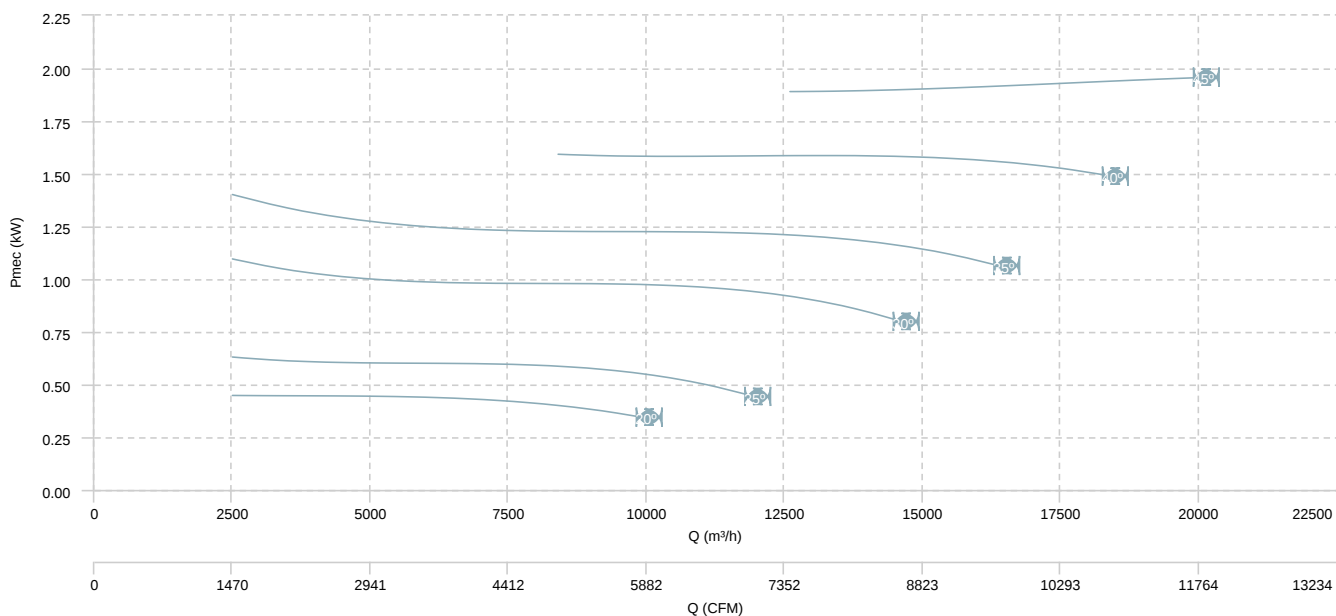


HBFX 63 T4/T8 (A5:6) F400

**AIR FLOW - PRESSURE (4 poles)**

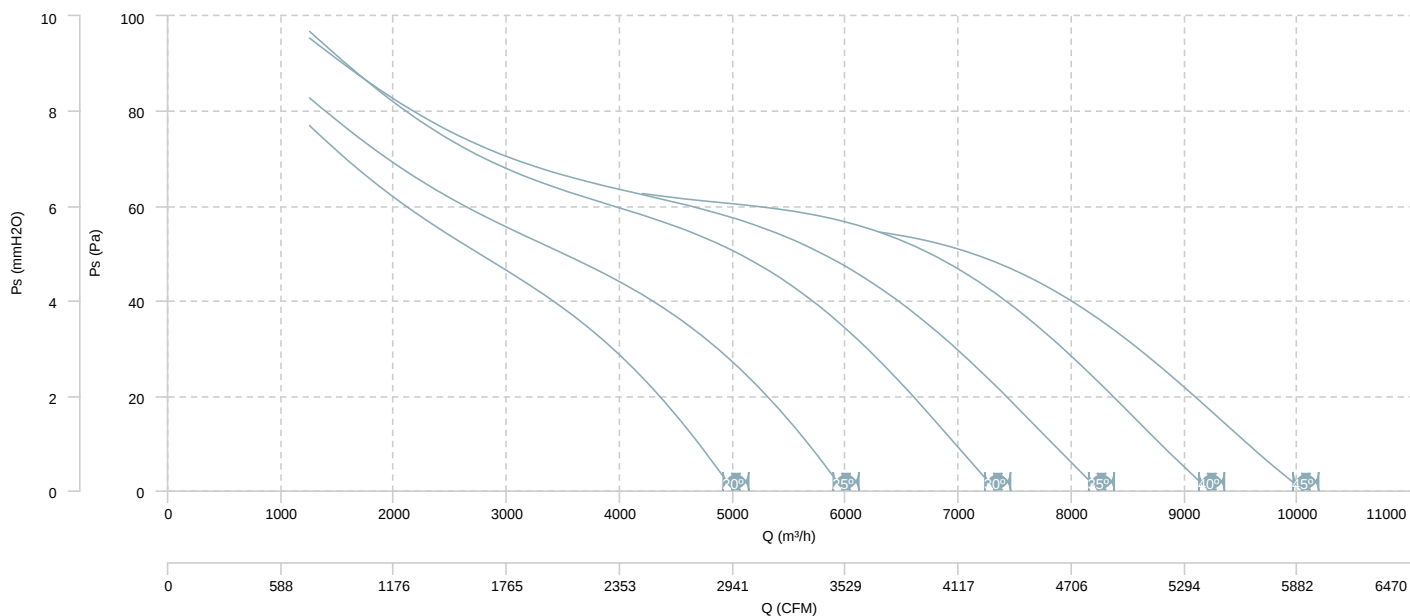


**AIR FLOW - MECHANICAL POWER (4 poles)**

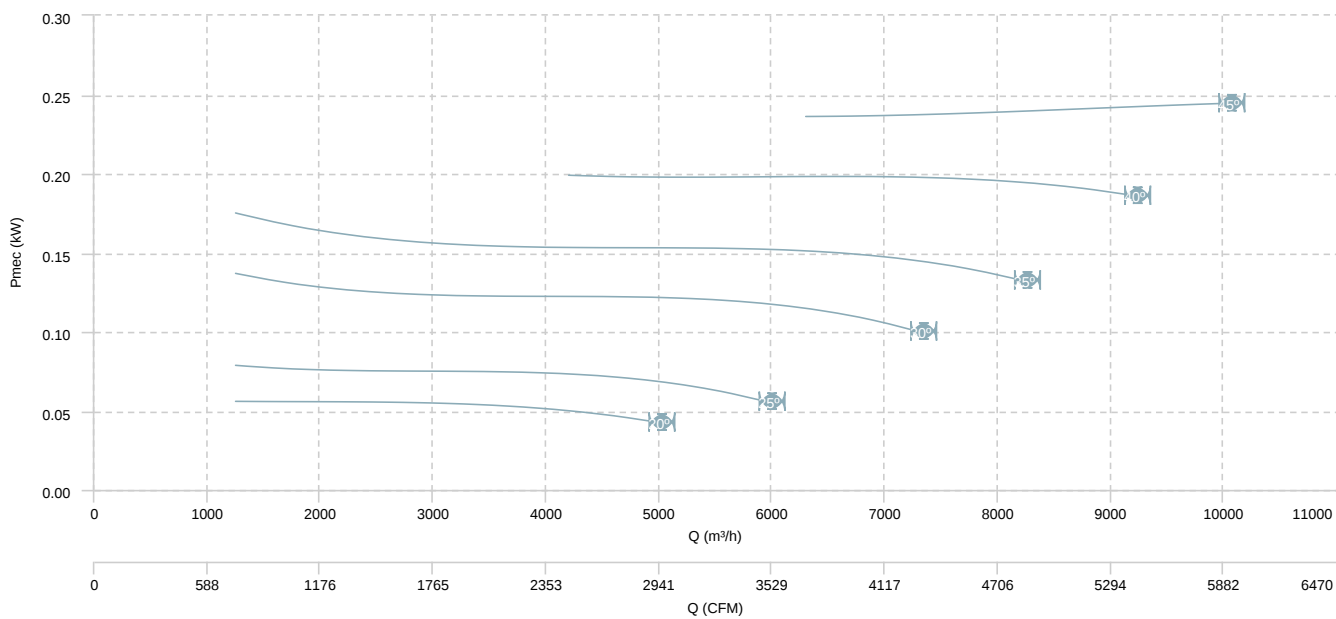


HBFX 63 T4/T8 (A5:6) F400

**AIR FLOW - PRESSURE (8 poles)**

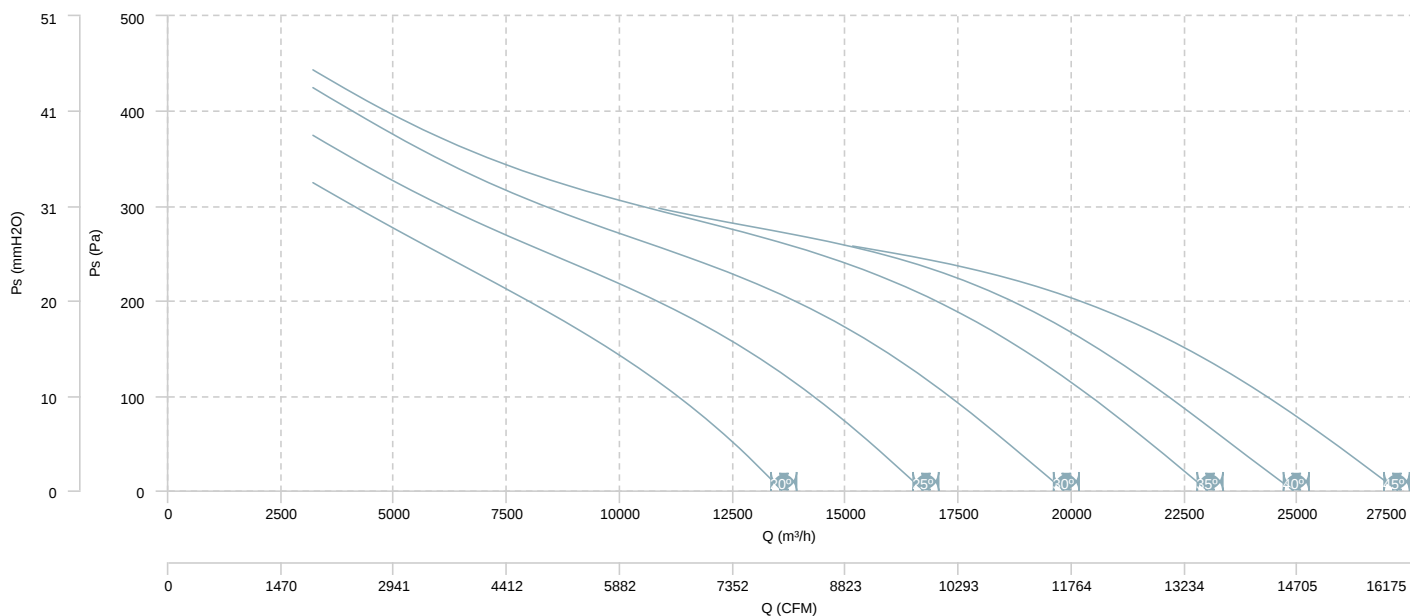


**AIR FLOW - MECHANICAL POWER (8 poles)**

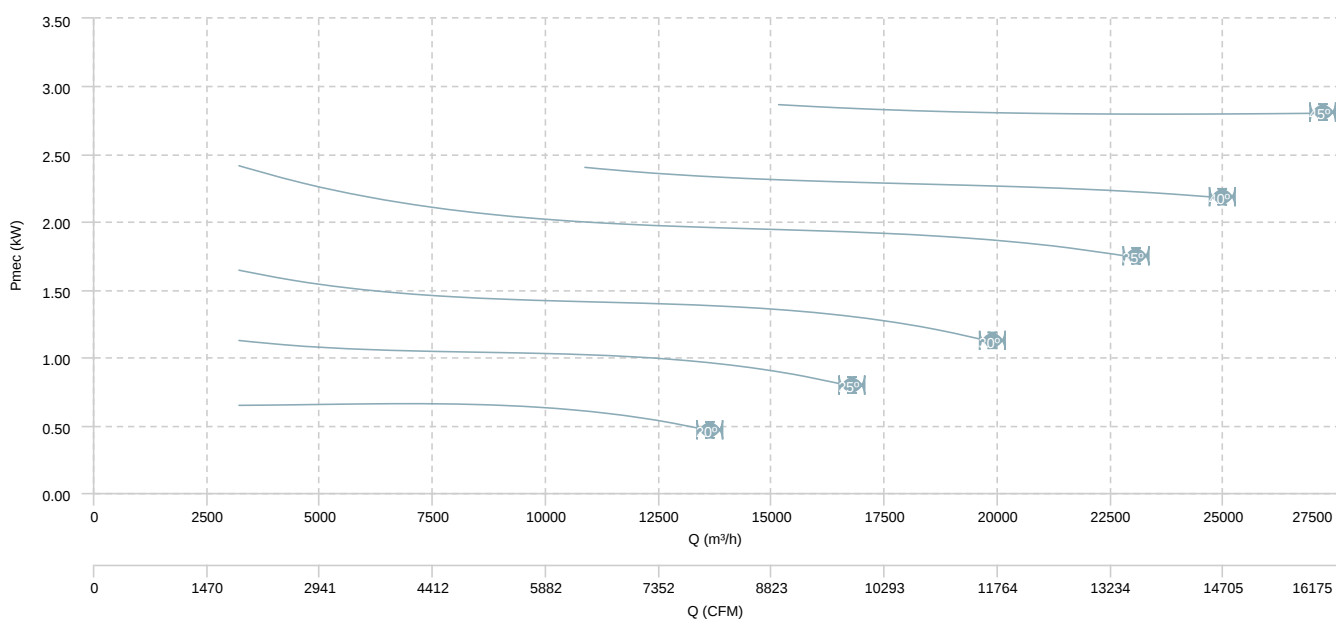


HBFX 71 T4 (A5:6) F400

## AIR FLOW - PRESSURE

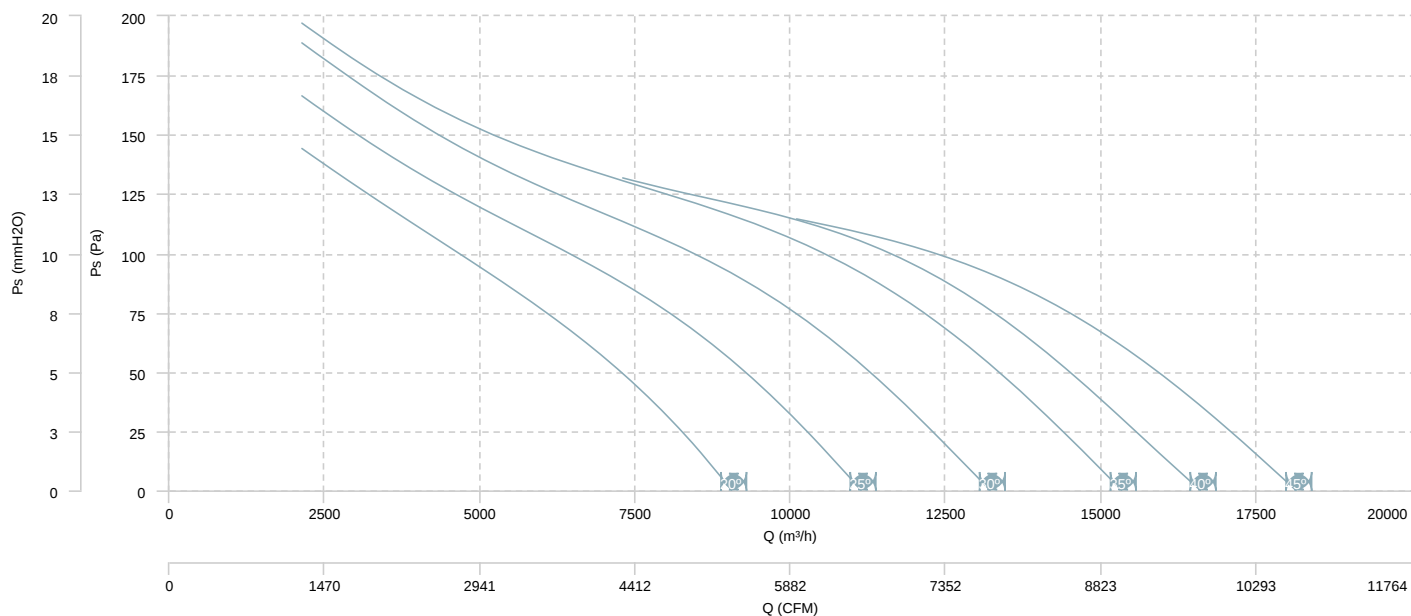


## AIR FLOW - MECHANICAL POWER

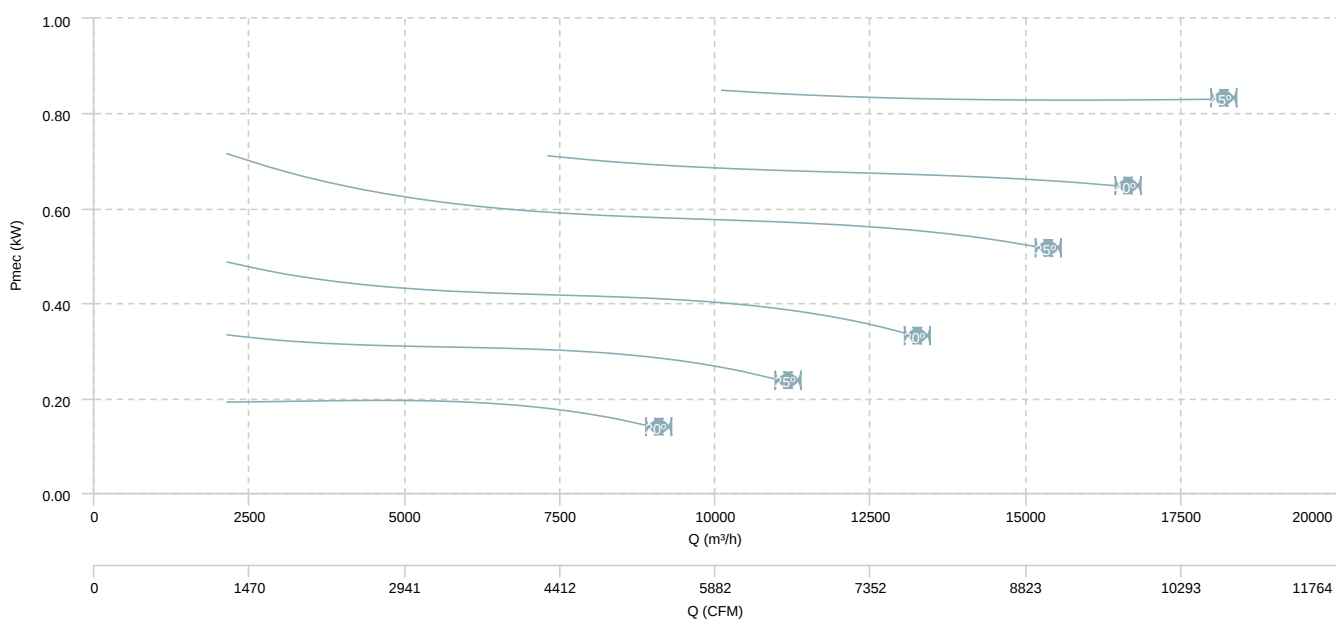


HBFX 71 T6 (A5:6) F400

## AIR FLOW - PRESSURE

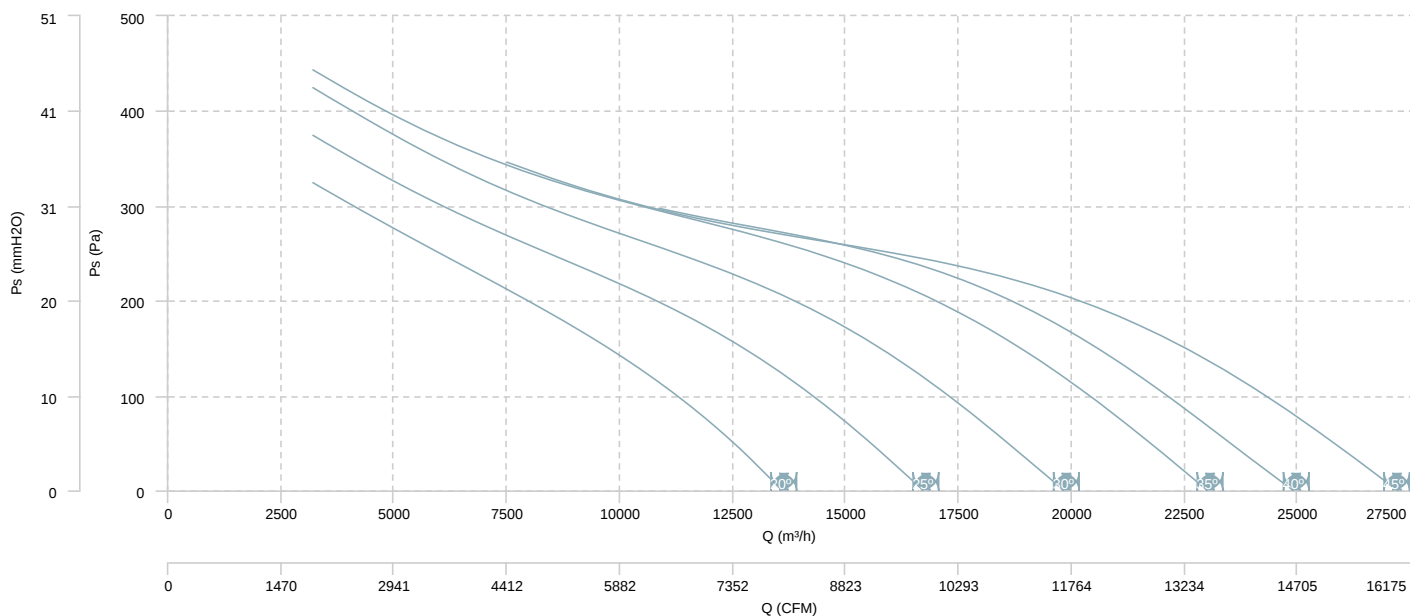


## AIR FLOW - MECHANICAL POWER

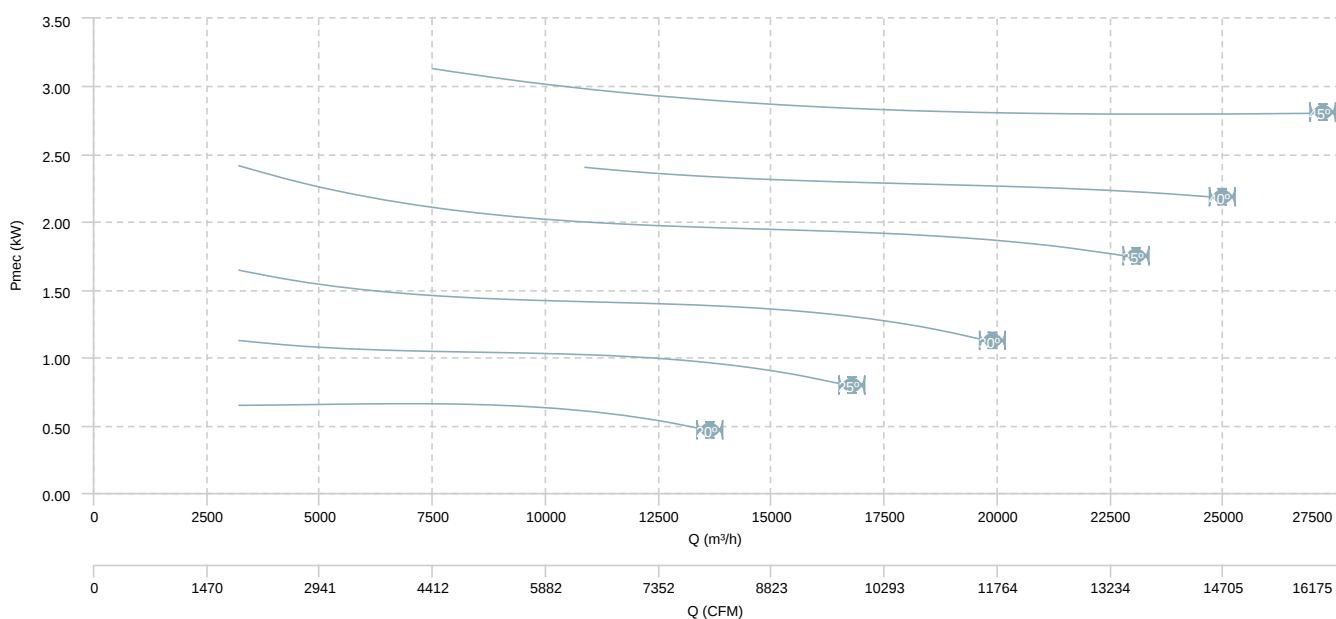


HBFX 71 T4/T8 (A5:6) F400

**AIR FLOW - PRESSURE (4 poles)**

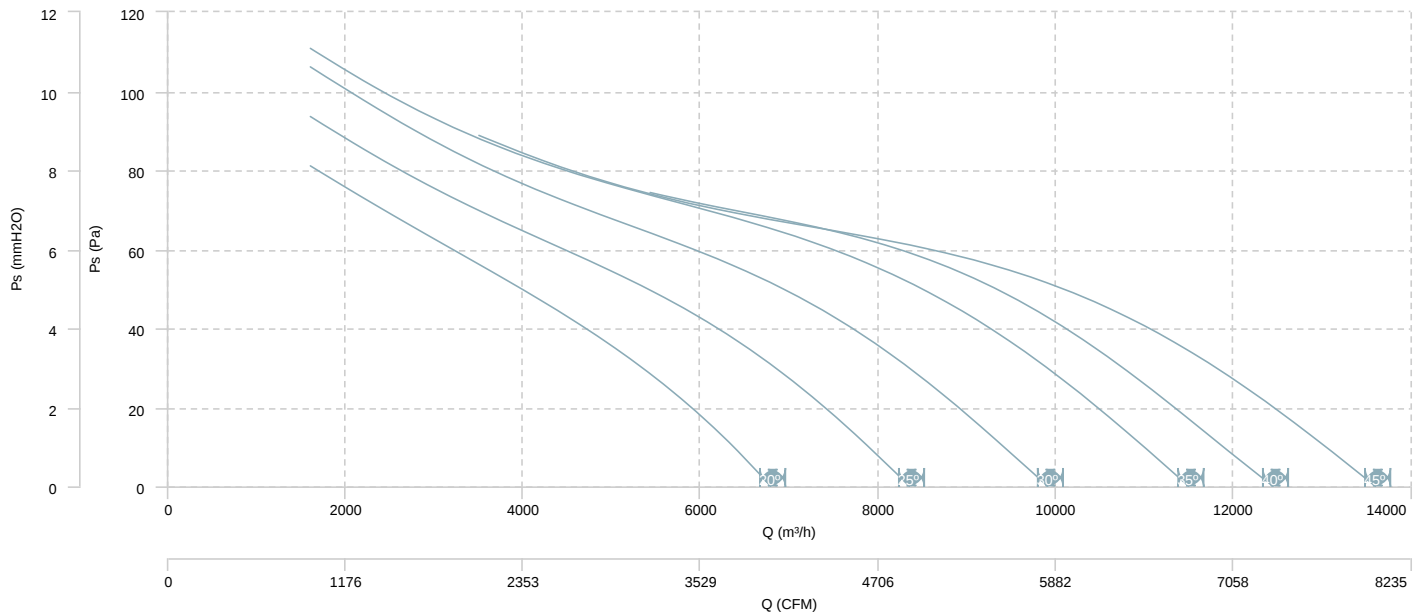


**AIR FLOW - MECHANICAL POWER (4 poles)**

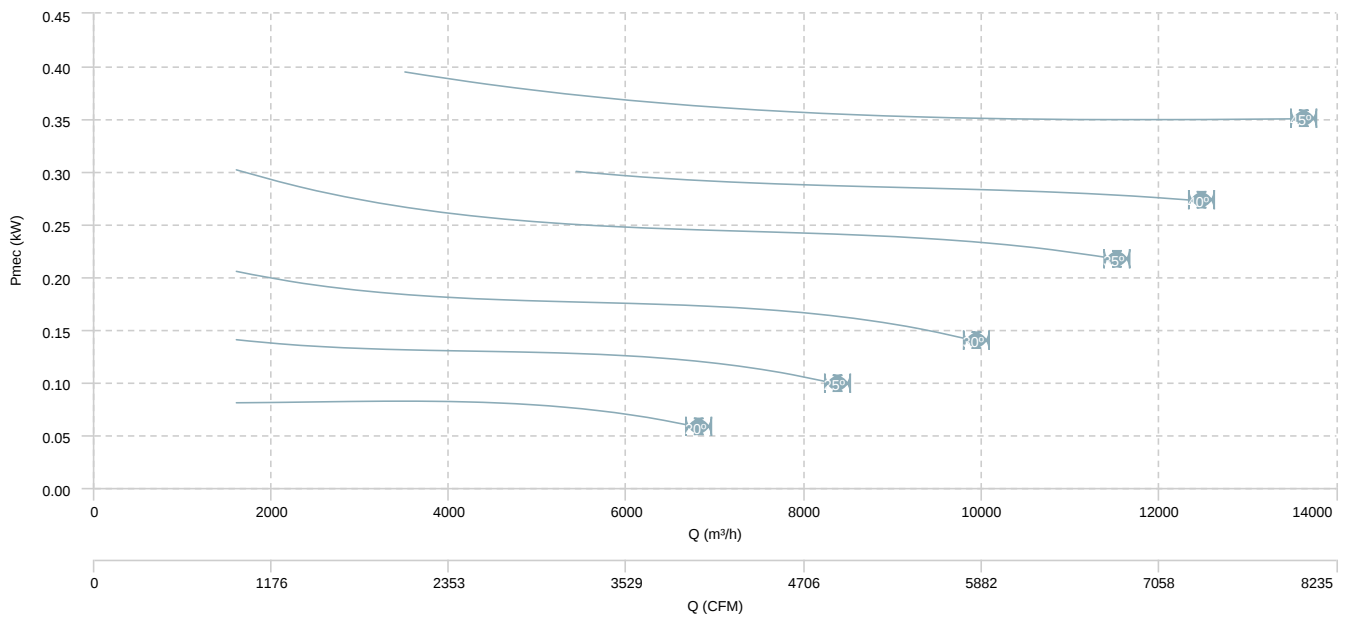


HBFX 71 T4/T8 (A5:6) F400

**AIR FLOW - PRESSURE (8 poles)**

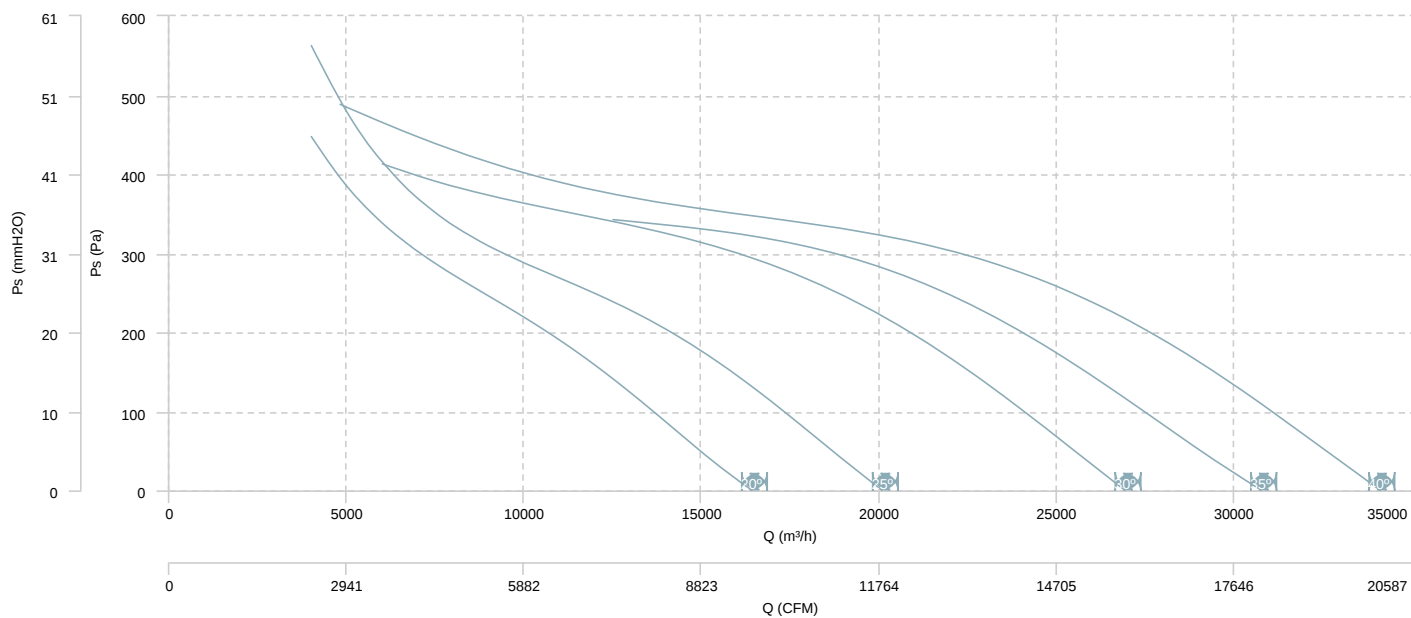


**AIR FLOW - MECHANICAL POWER (8 poles)**

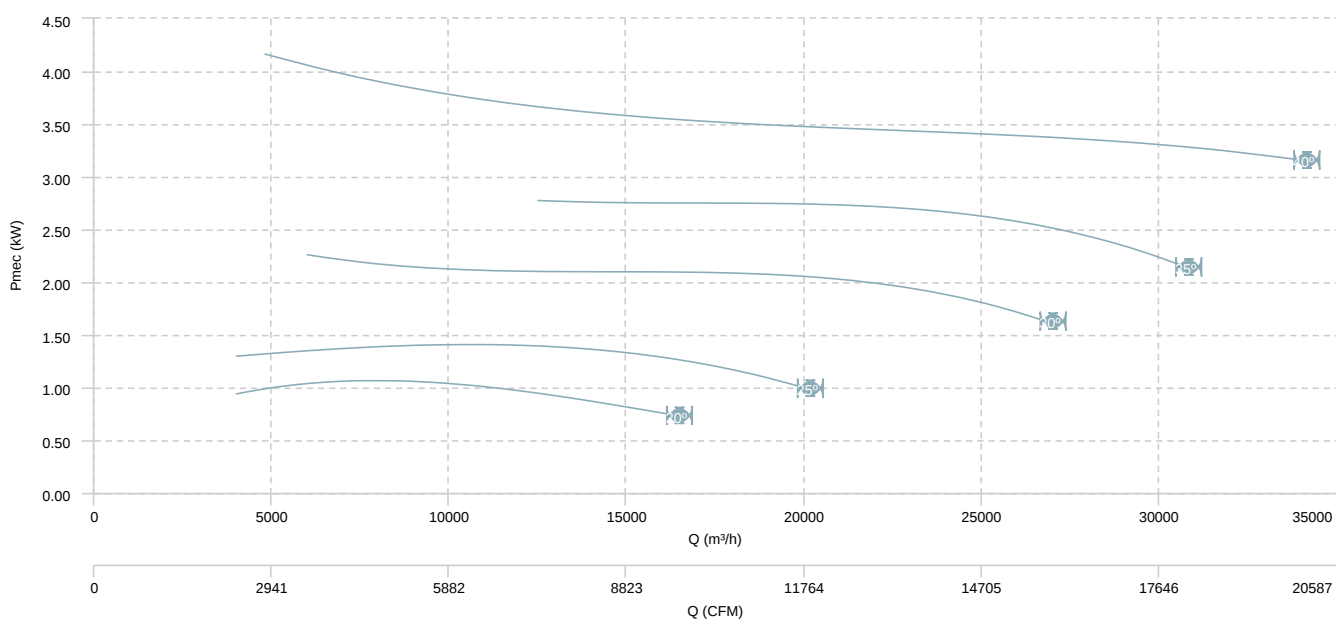


HBFX 80 T4 (A5:6) F400

## AIR FLOW - PRESSURE

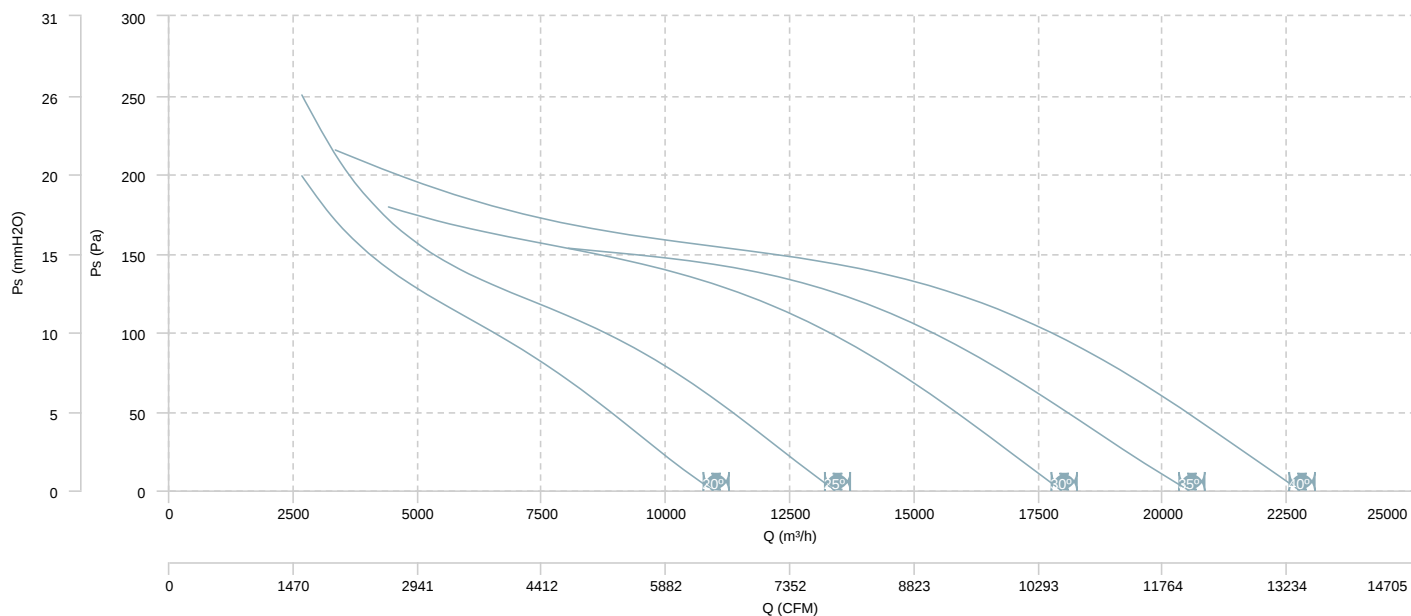


## AIR FLOW - MECHANICAL POWER

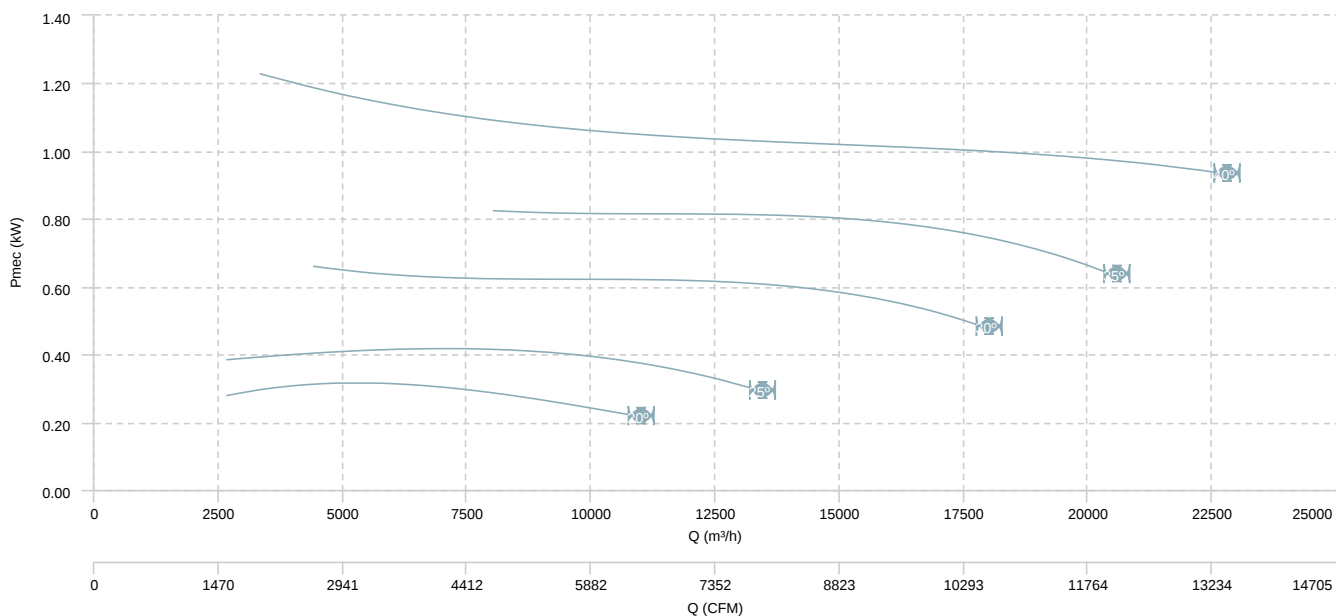


HBFX 80 T6 (A5:6) F400

## AIR FLOW - PRESSURE

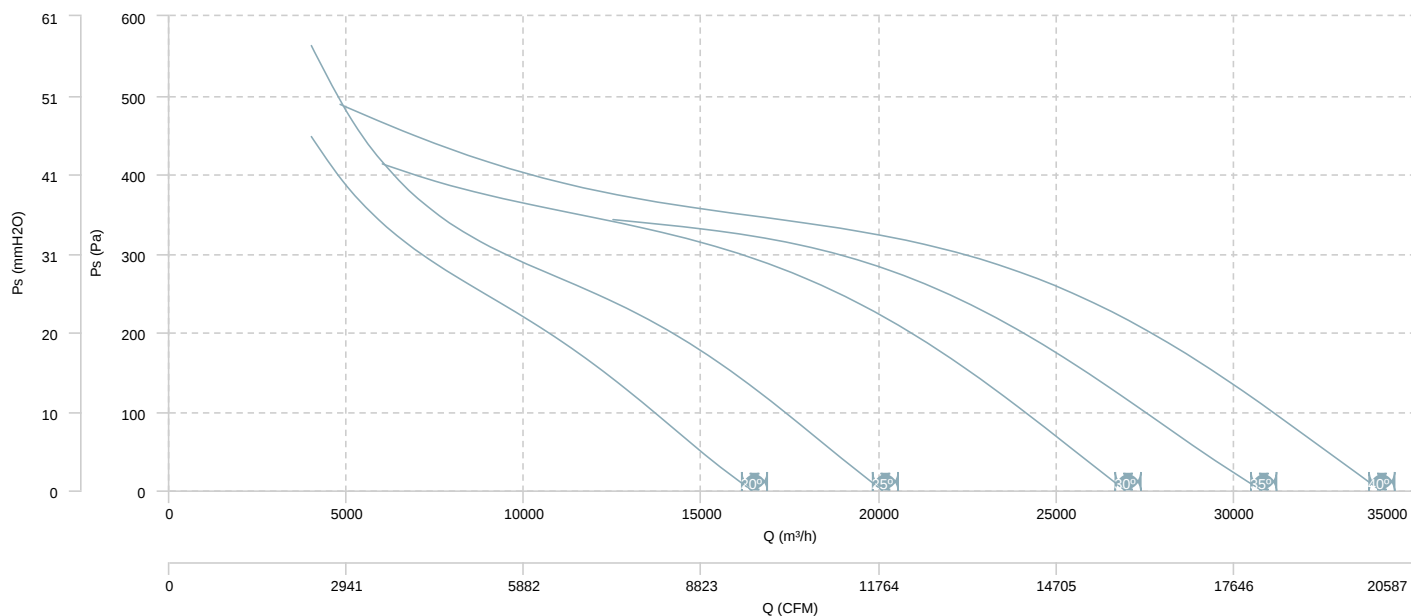


## AIR FLOW - MECHANICAL POWER

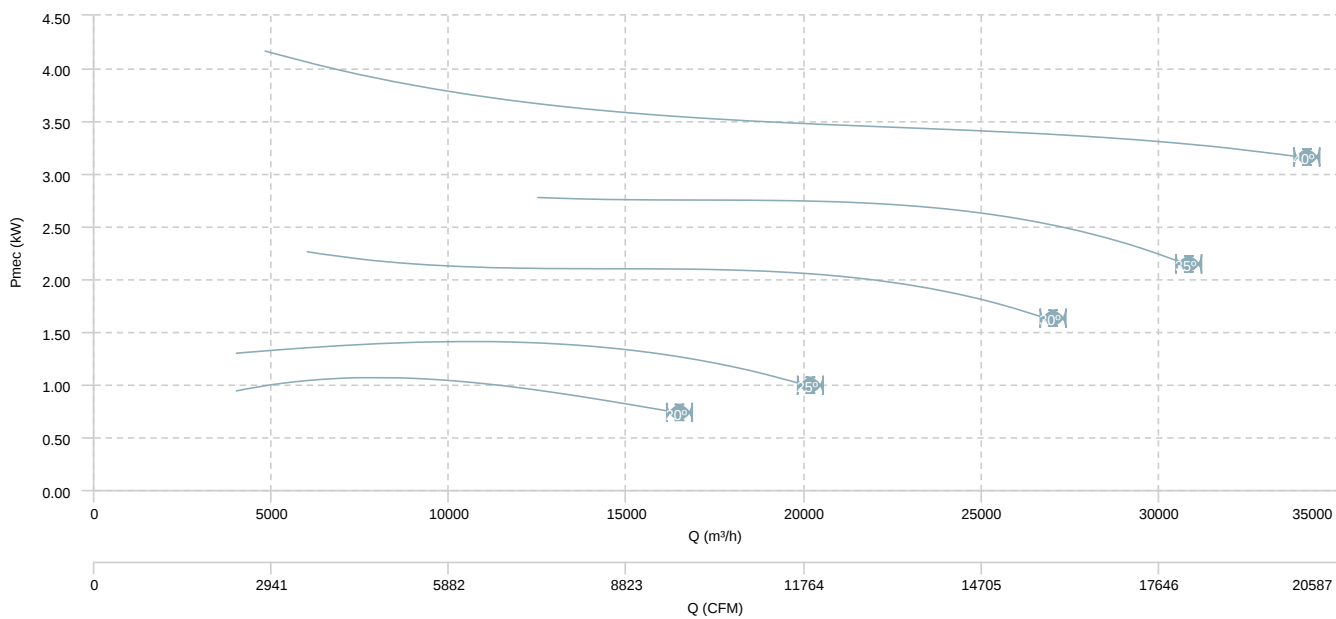


HBFX 80 T4/T8 (A5:6) F400

**AIR FLOW - PRESSURE (4 poles)**

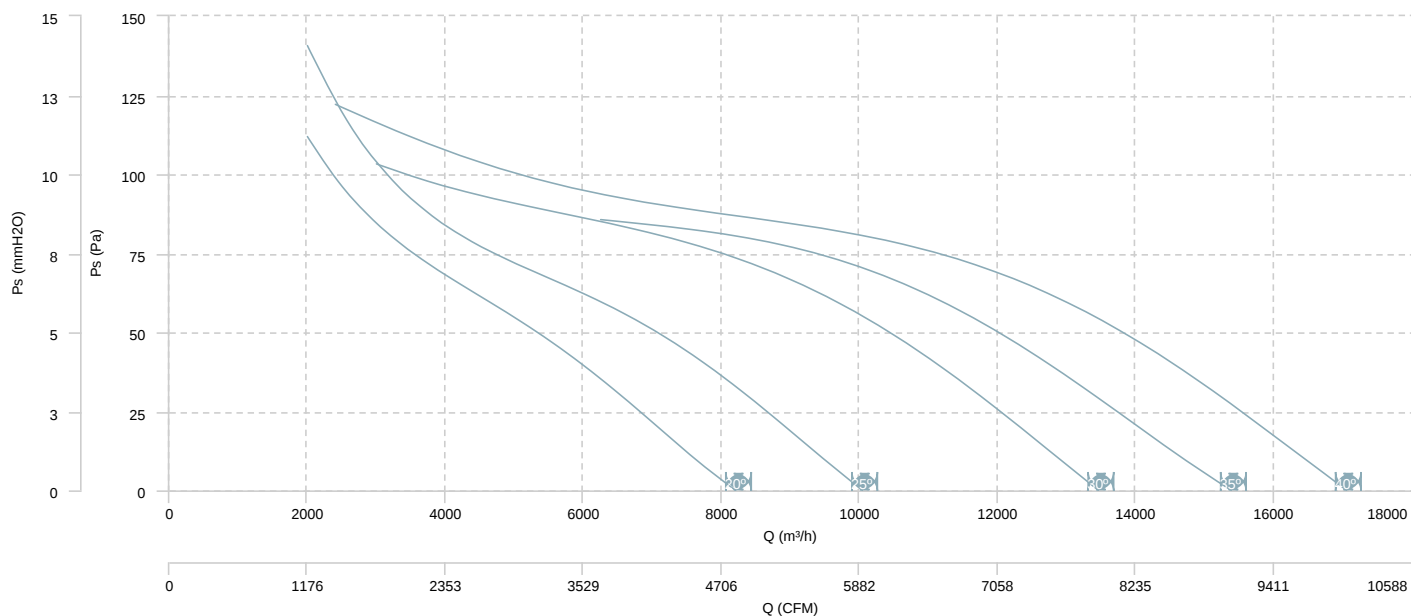


**AIR FLOW - MECHANICAL POWER (4 poles)**

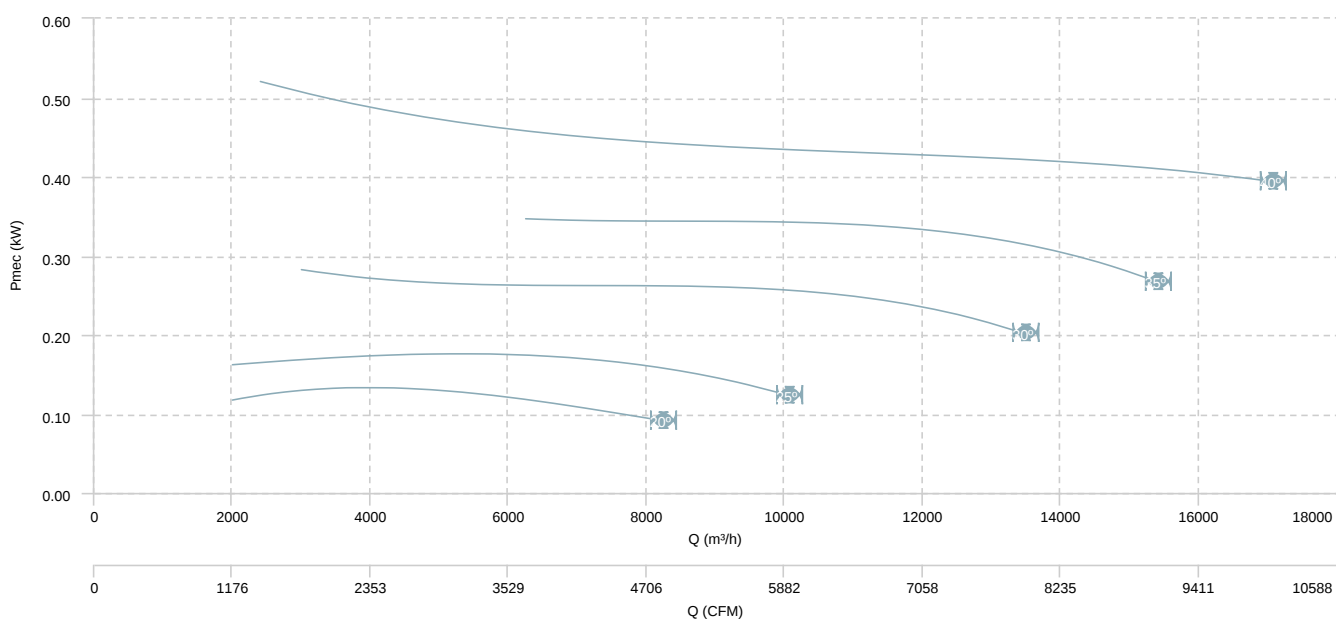


HBFX 80 T4/T8 (A5:6) F400

**AIR FLOW - PRESSURE (8 poles)**

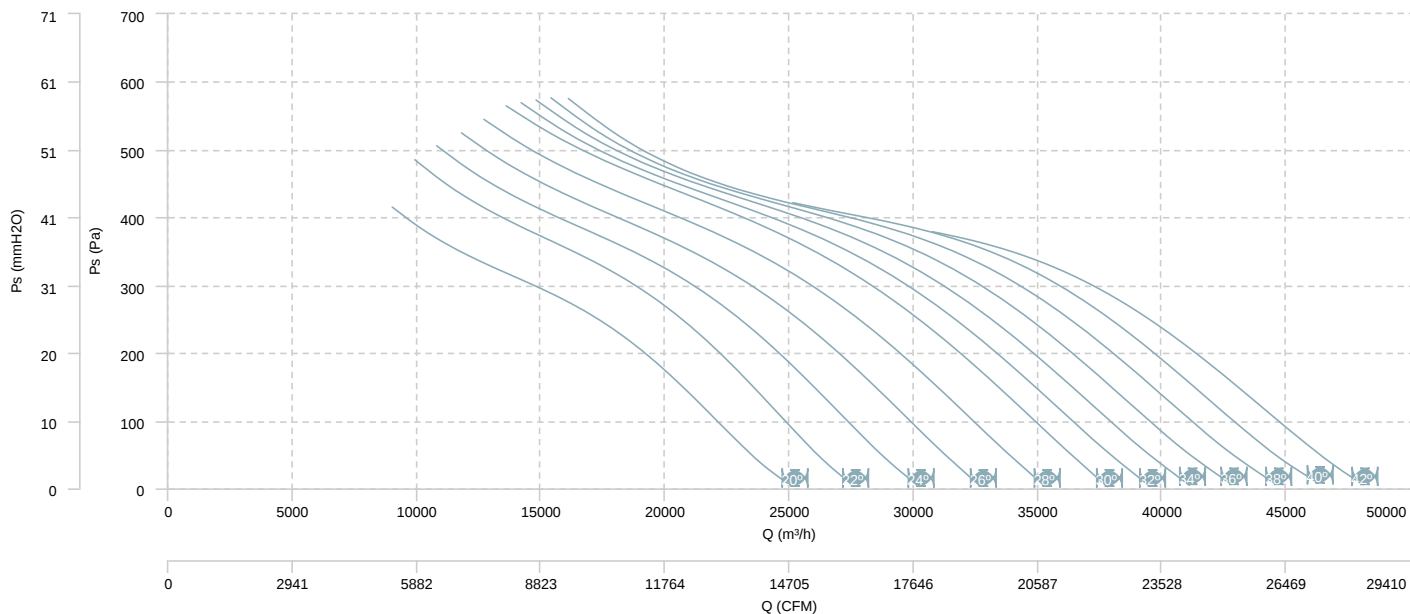


**AIR FLOW - MECHANICAL POWER (8 poles)**

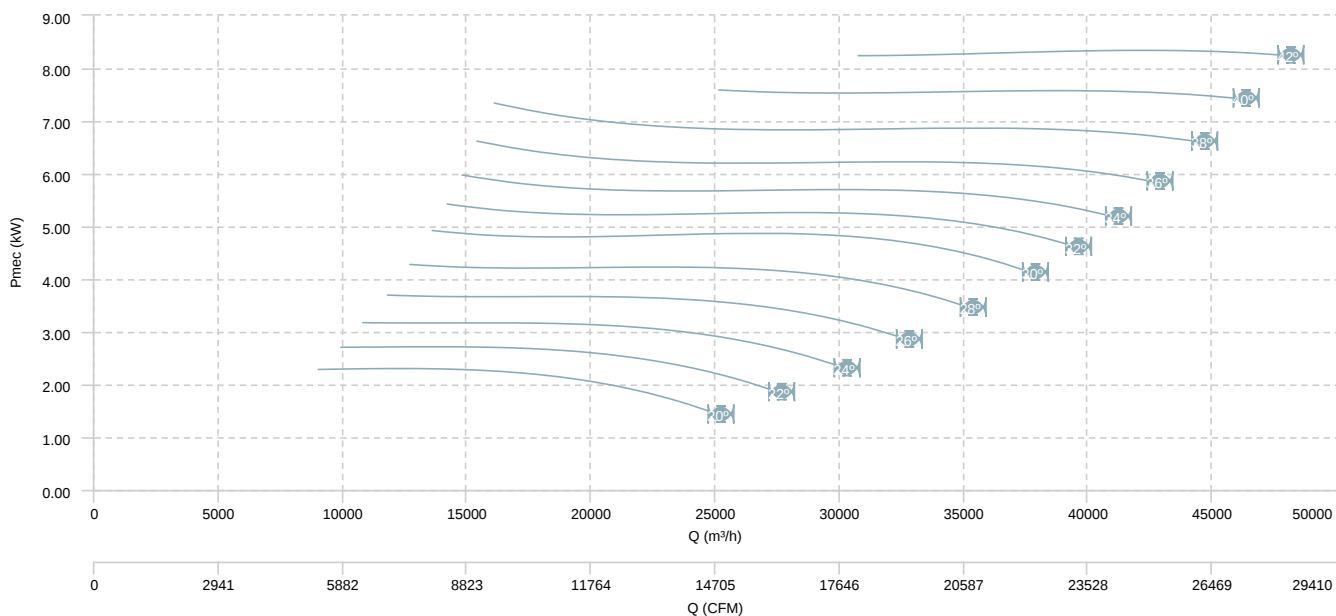


HBFX 90 T4 (A3:4) F400

## AIR FLOW - PRESSURE

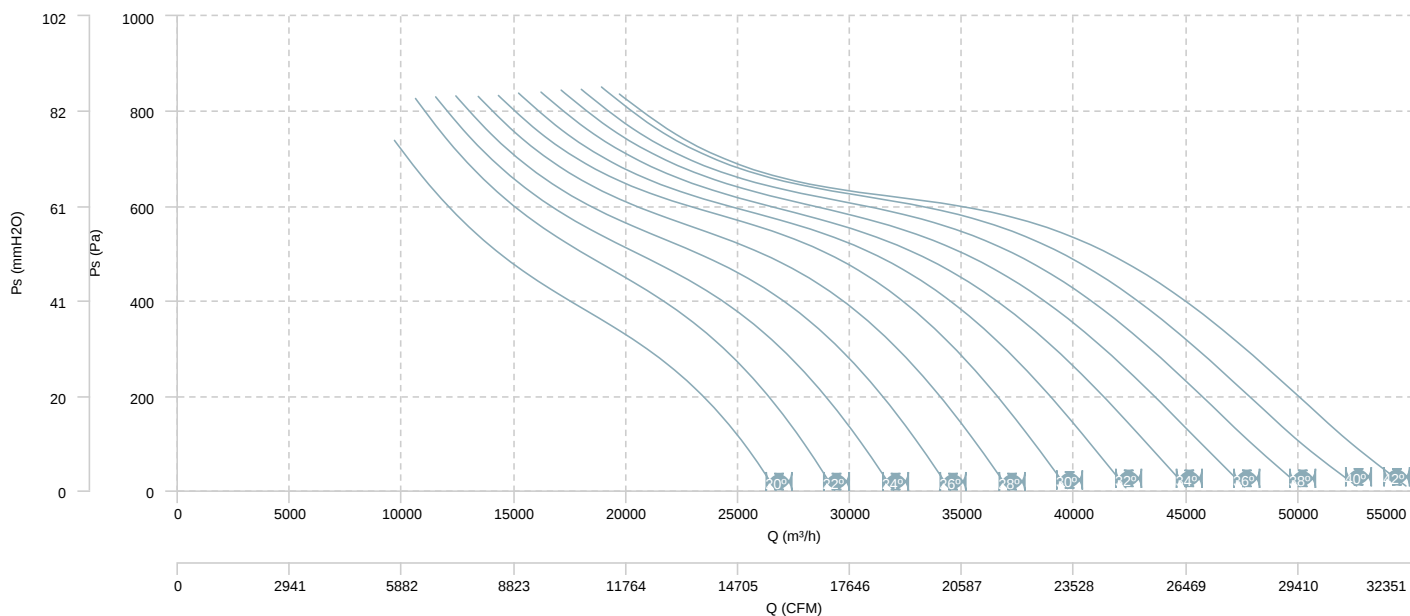


## AIR FLOW - MECHANICAL POWER

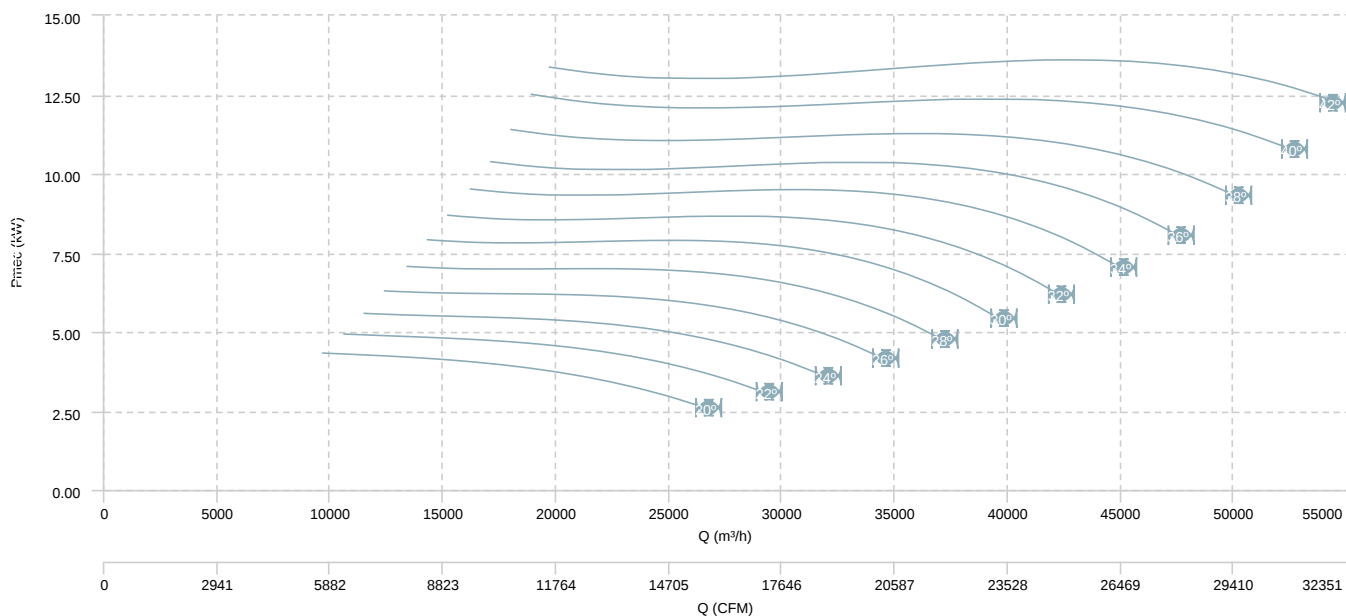


HBFX 90 T4 (A3:8) F400

## AIR FLOW - PRESSURE

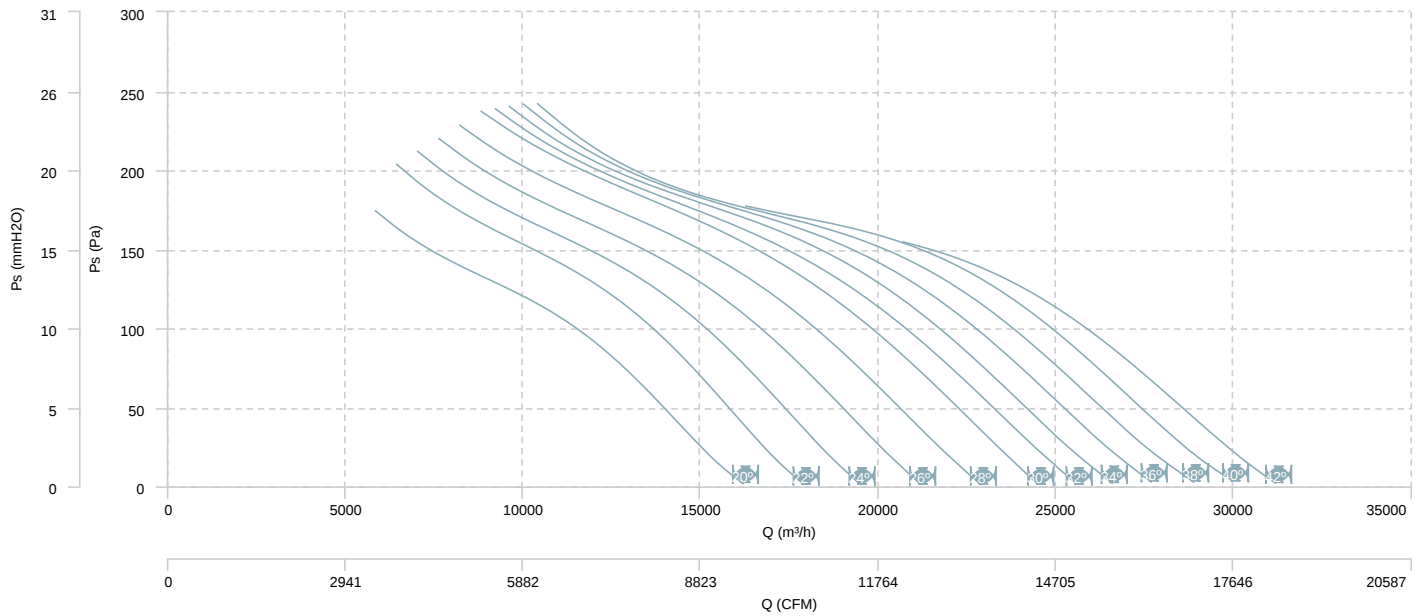


## AIR FLOW - MECHANICAL POWER

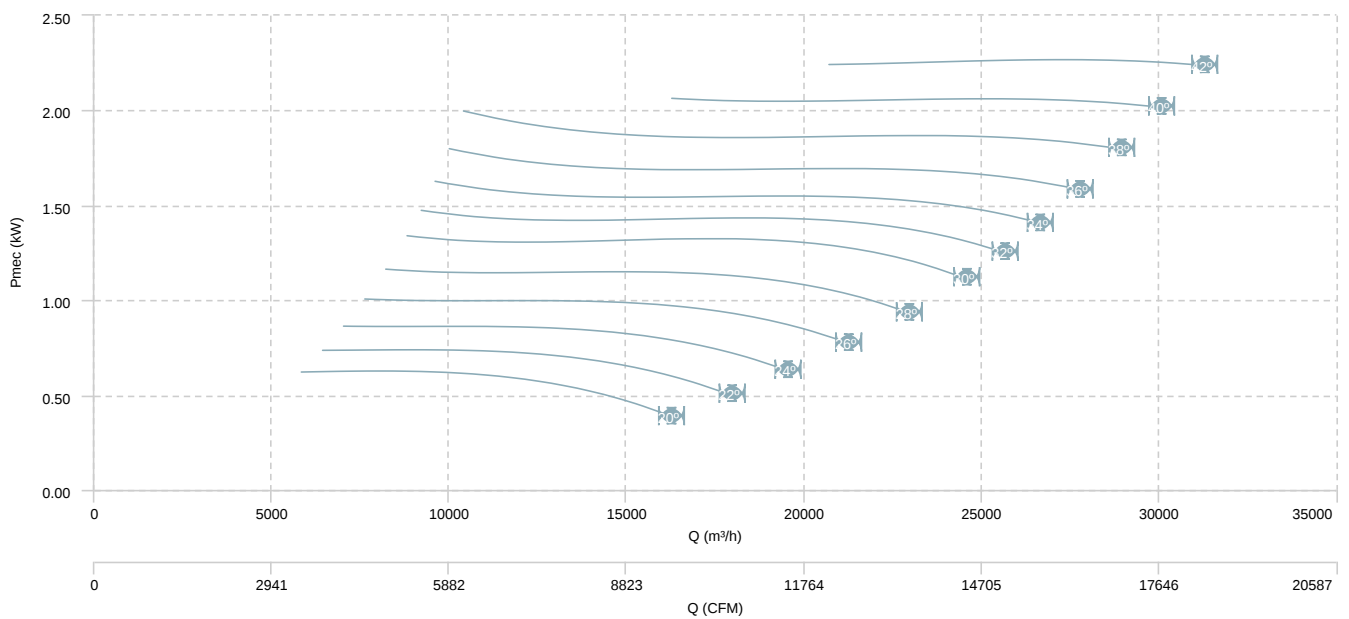


HBFX 90 T6 (A3:4) F400

## AIR FLOW - PRESSURE

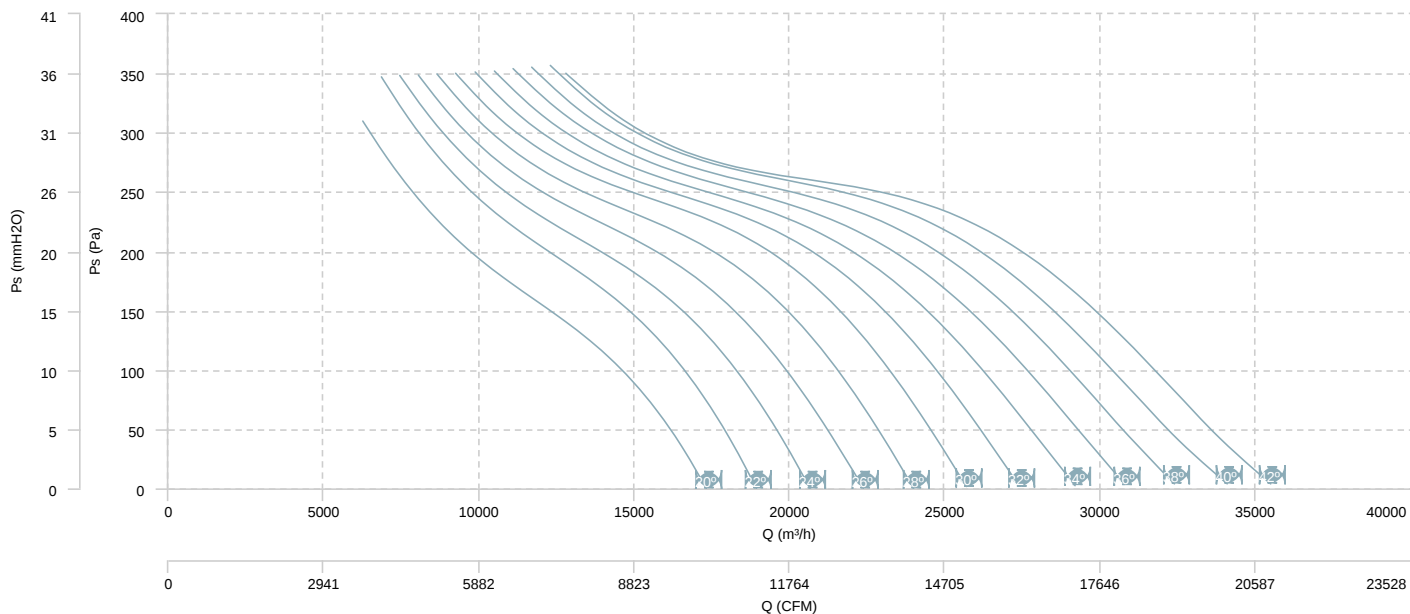


## AIR FLOW - MECHANICAL POWER

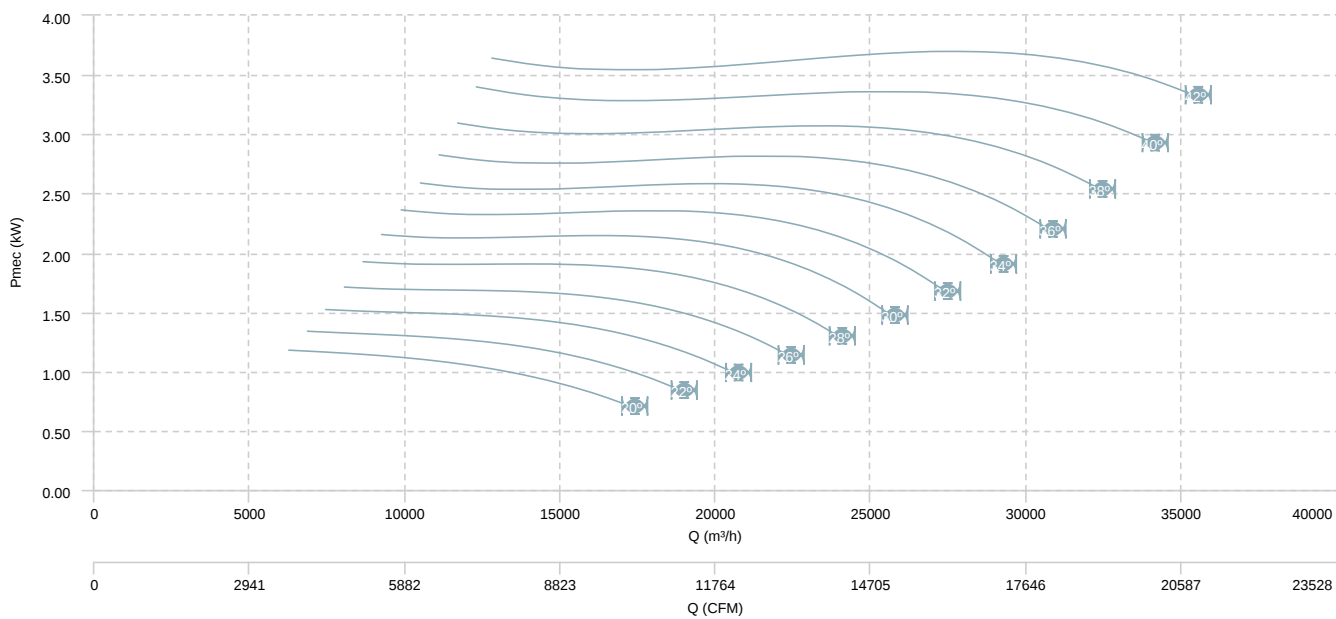


HBFX 90 T6 (A3:8) F400

## AIR FLOW - PRESSURE

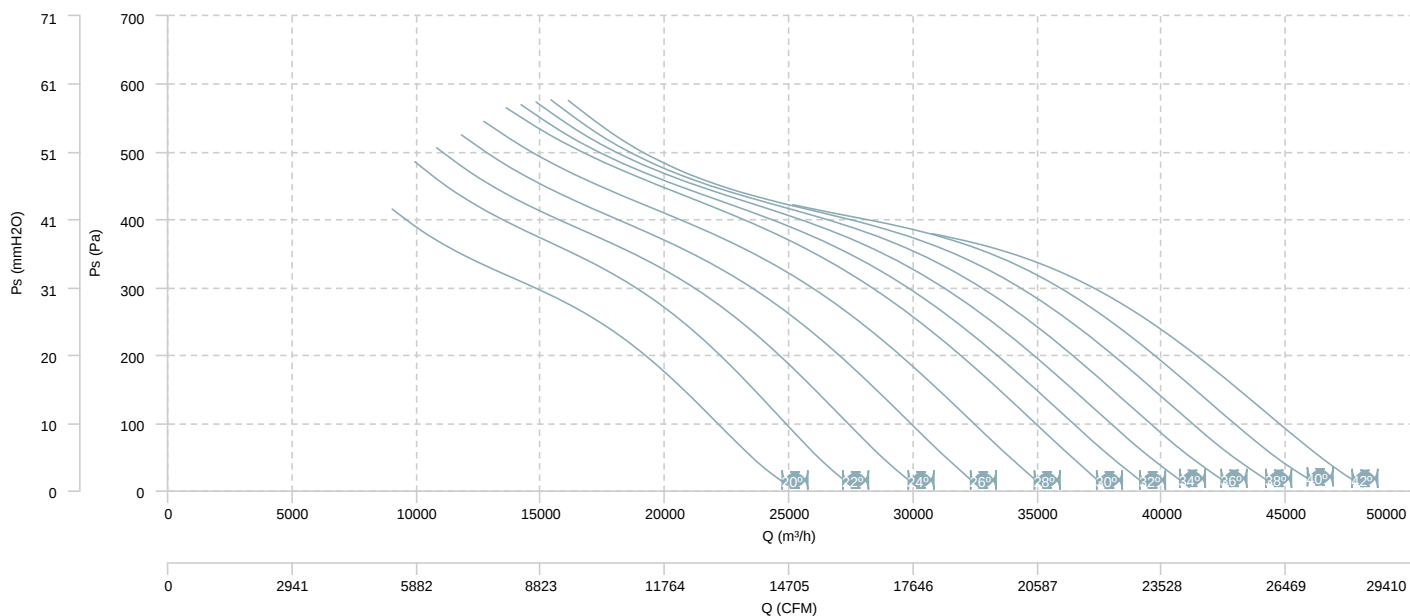


## AIR FLOW - MECHANICAL POWER

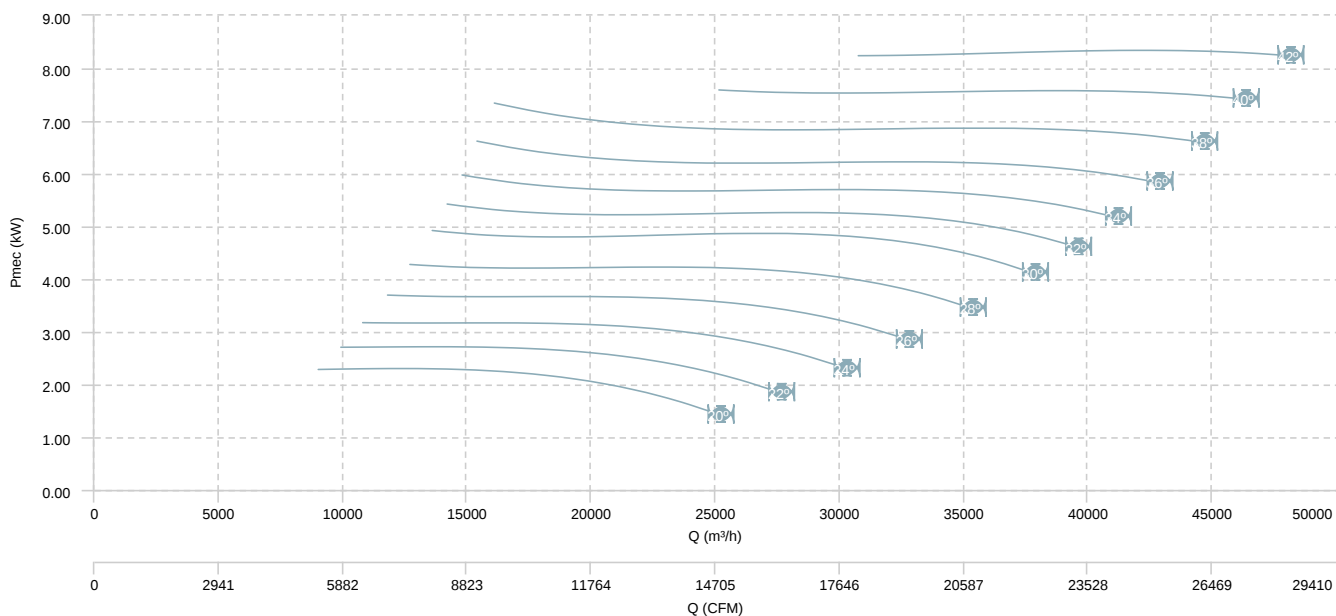


HBFX 90 T4/T8 (A3:4) F400

**AIR FLOW - PRESSURE (4 poles)**

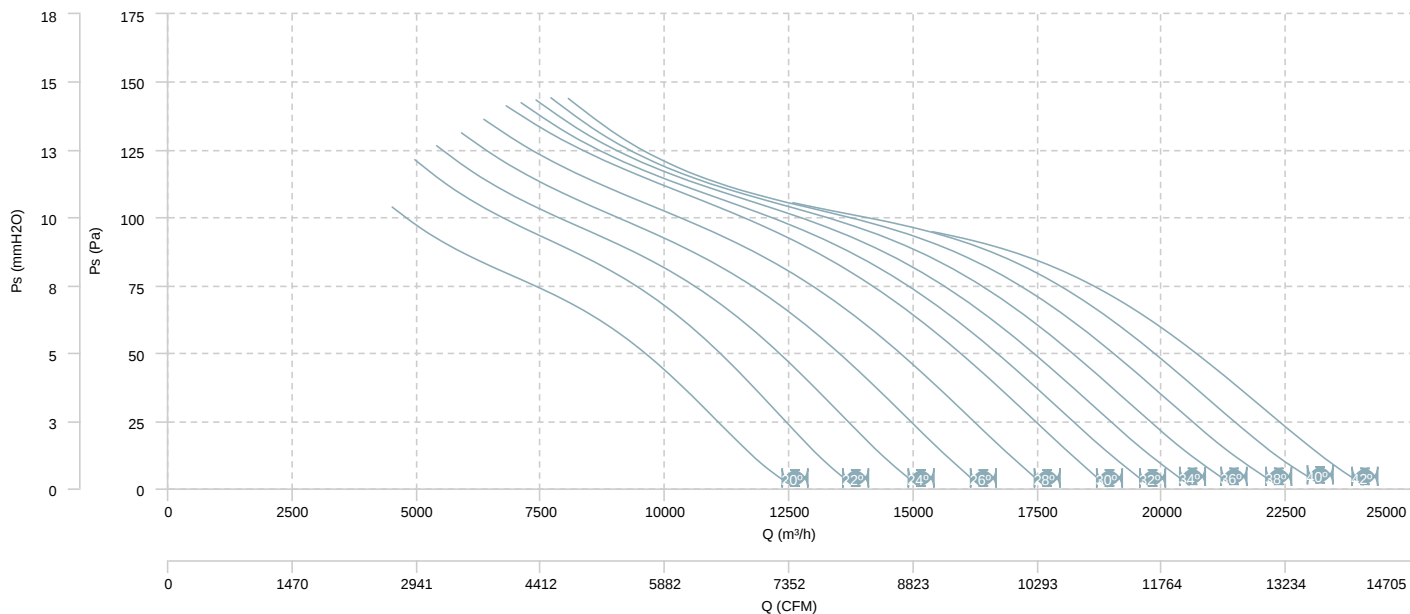


**AIR FLOW - MECHANICAL POWER (4 poles)**

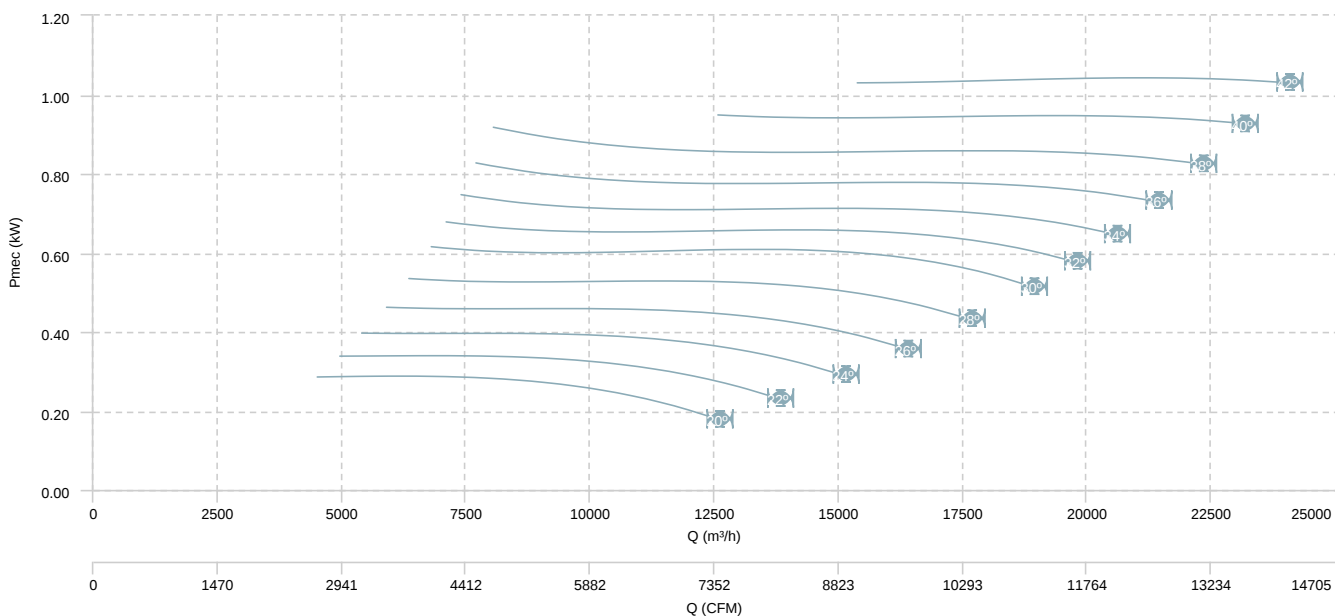


HBFX 90 T4/T8 (A3:4) F400

**AIR FLOW - PRESSURE (8 poles)**

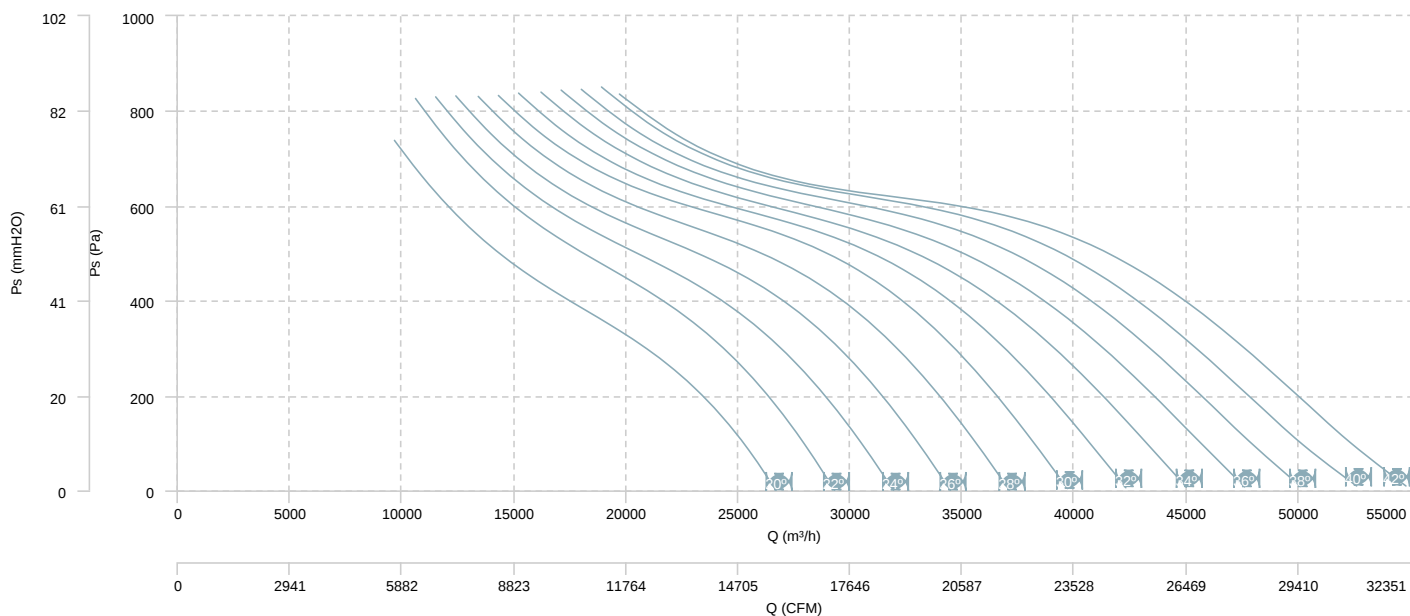


**AIR FLOW - MECHANICAL POWER (8 poles)**

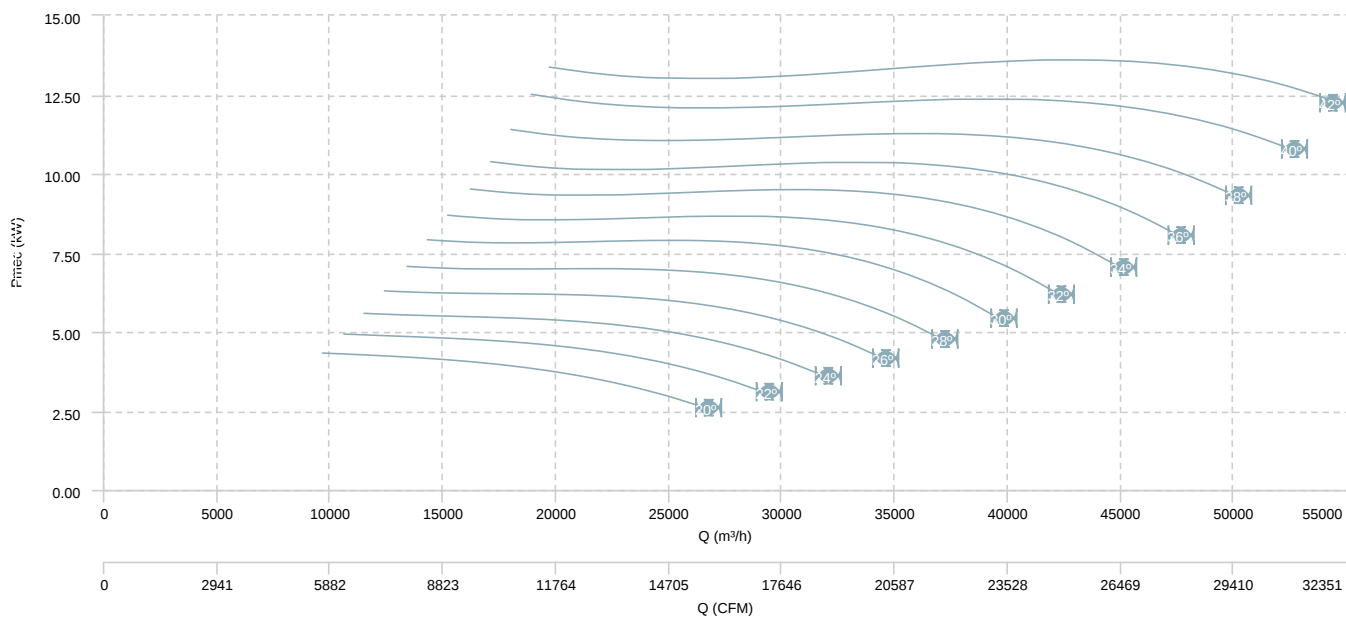


HBFX 90 T4/T8 (A3:8) F400

**AIR FLOW - PRESSURE (4 poles)**

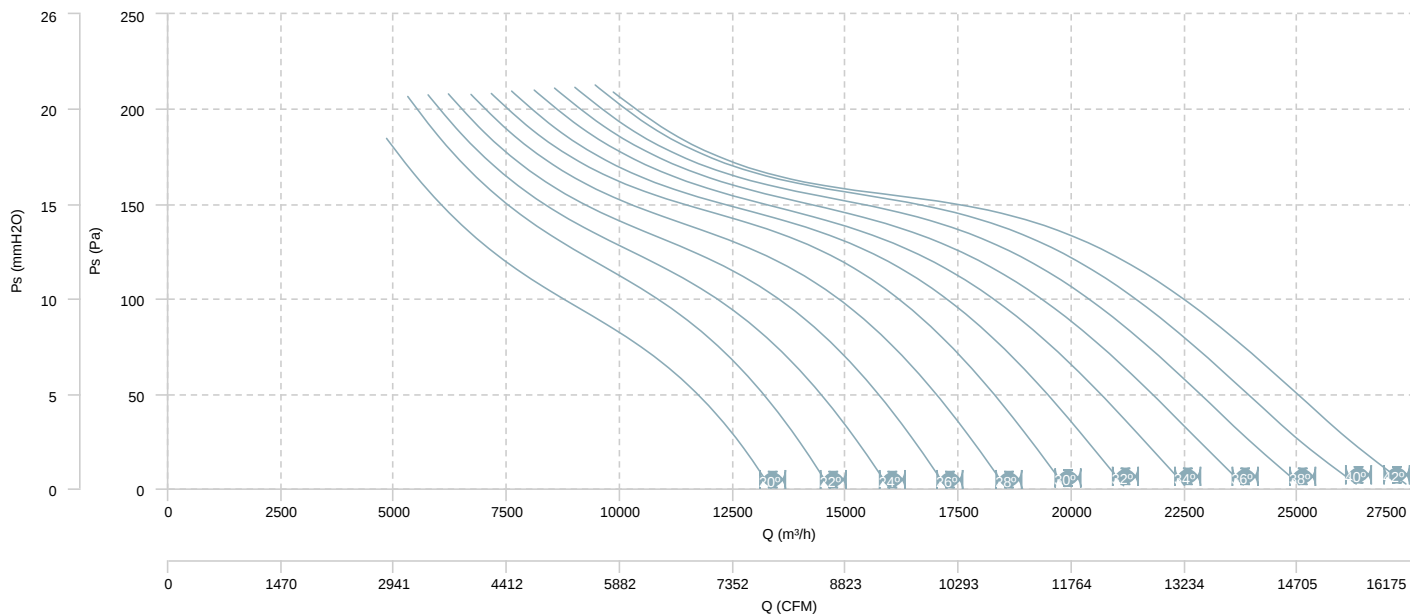


**AIR FLOW - MECHANICAL POWER (4 poles)**

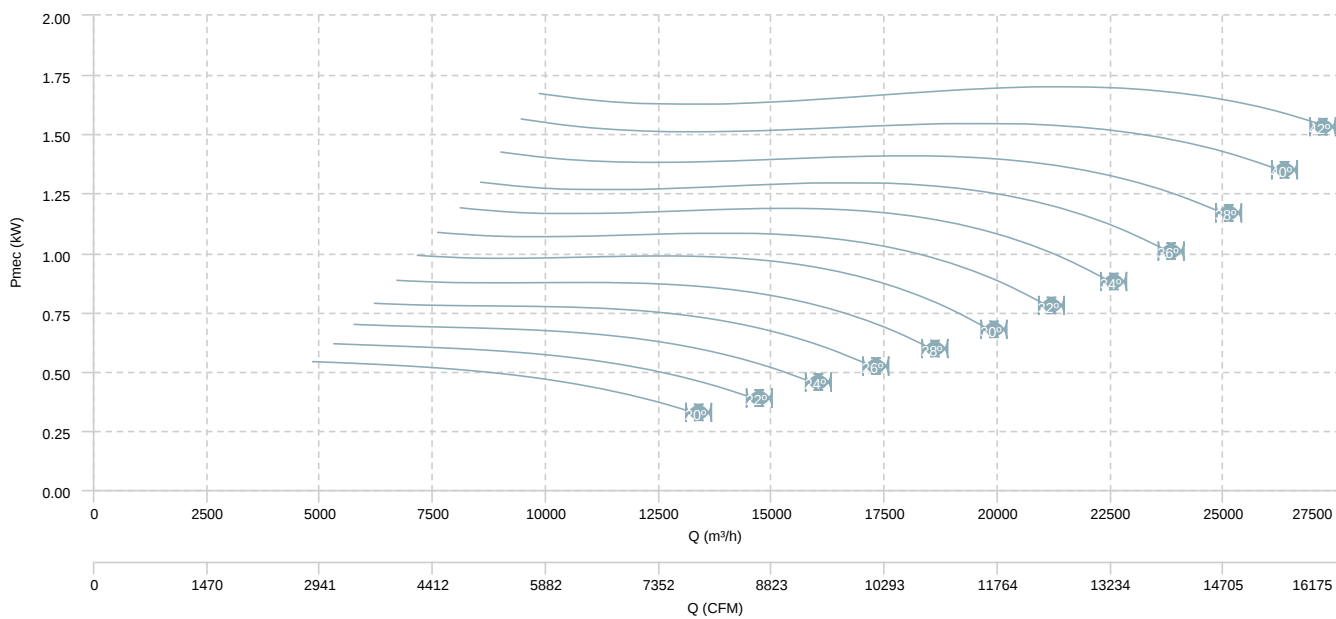


HBFX 90 T4/T8 (A3:8) F400

**AIR FLOW - PRESSURE (8 poles)**

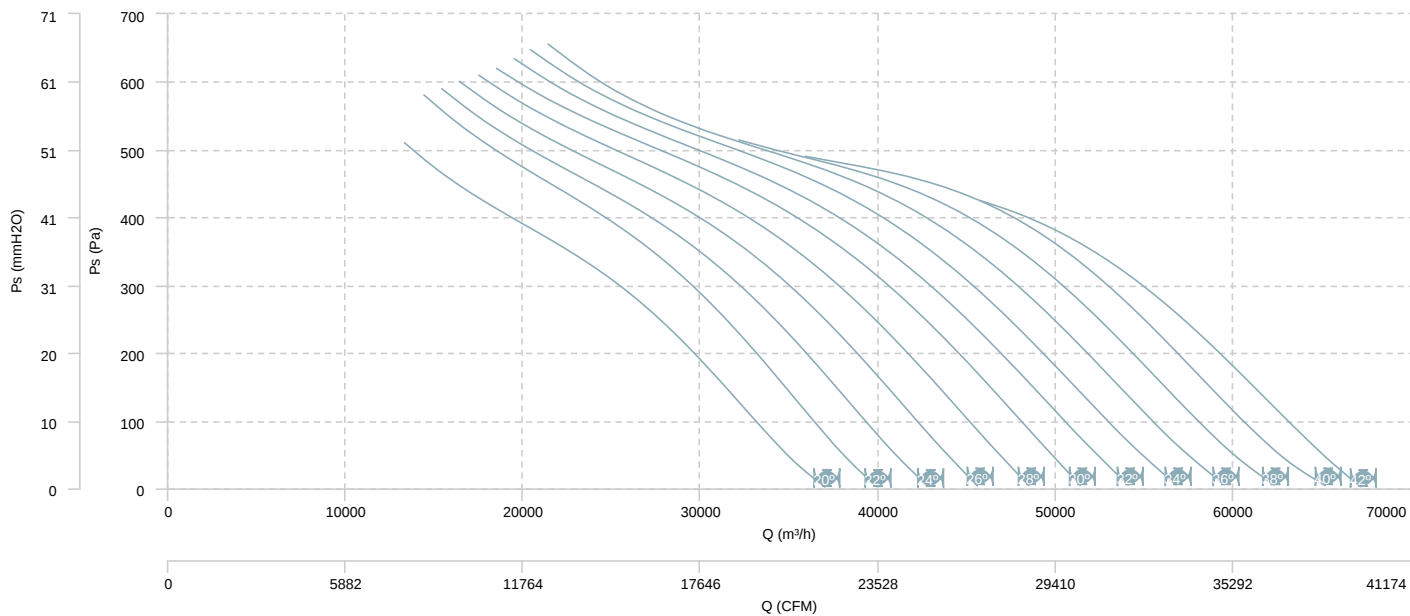


**AIR FLOW - MECHANICAL POWER (8 poles)**

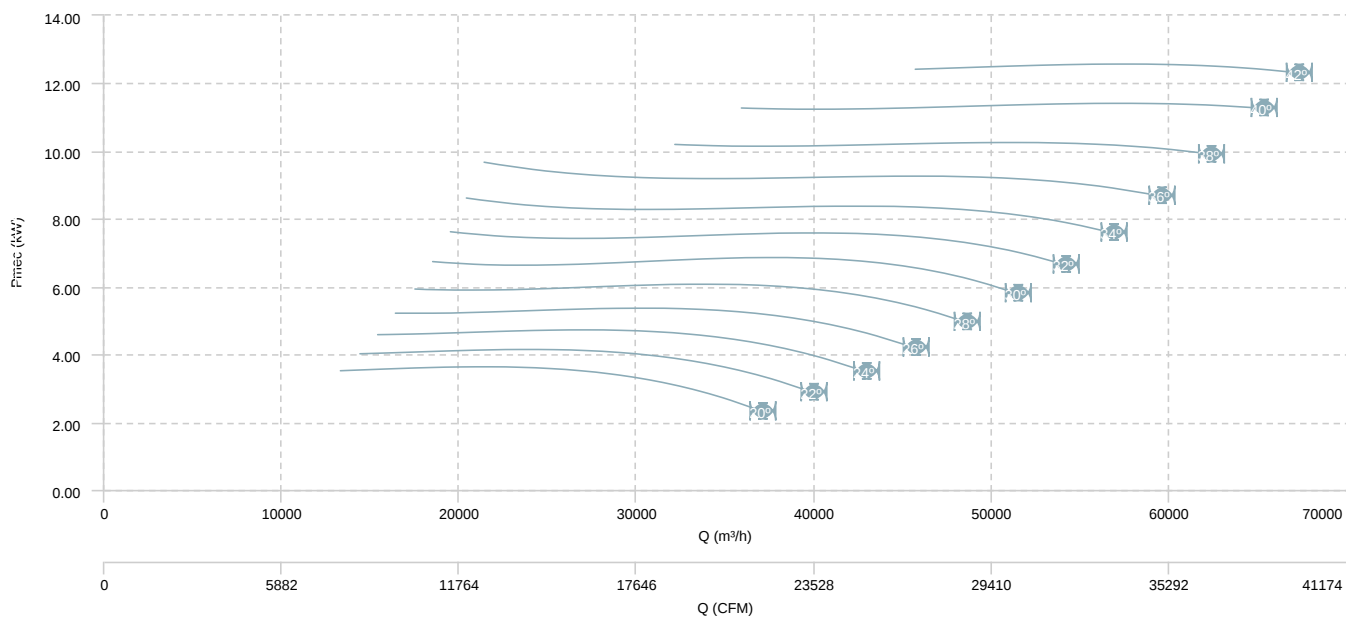


HBFX 100 T4 (A3:4) F400

## AIR FLOW - PRESSURE

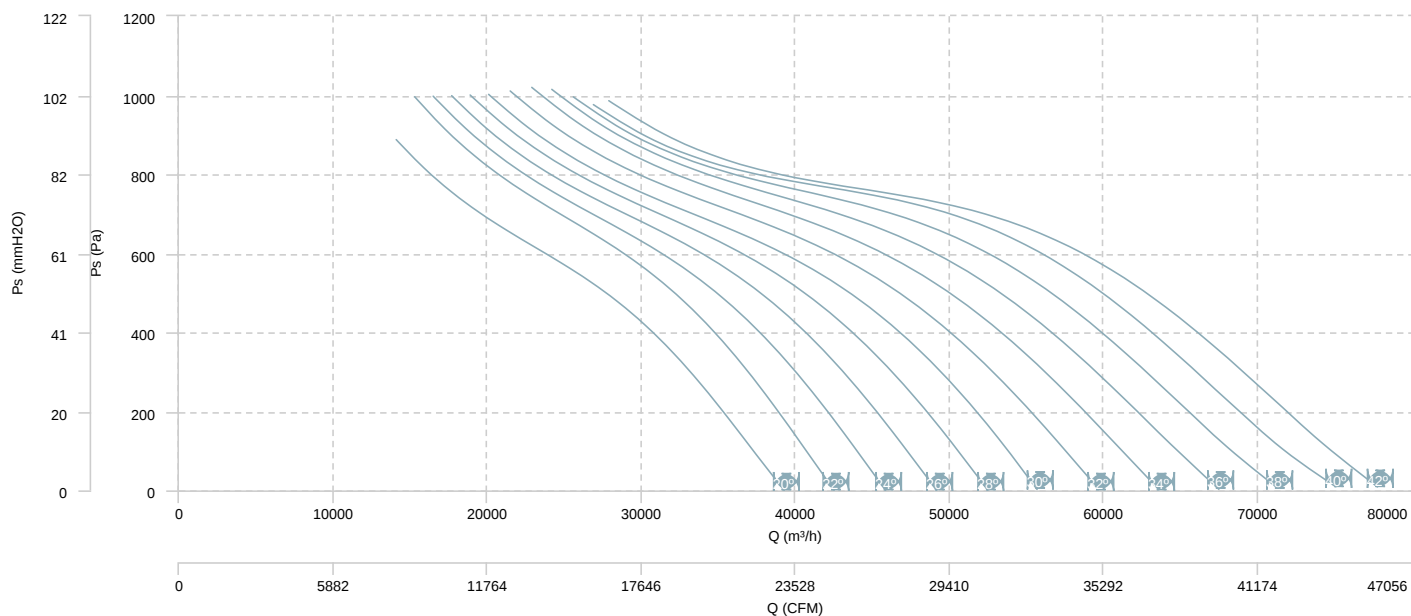


## AIR FLOW - MECHANICAL POWER

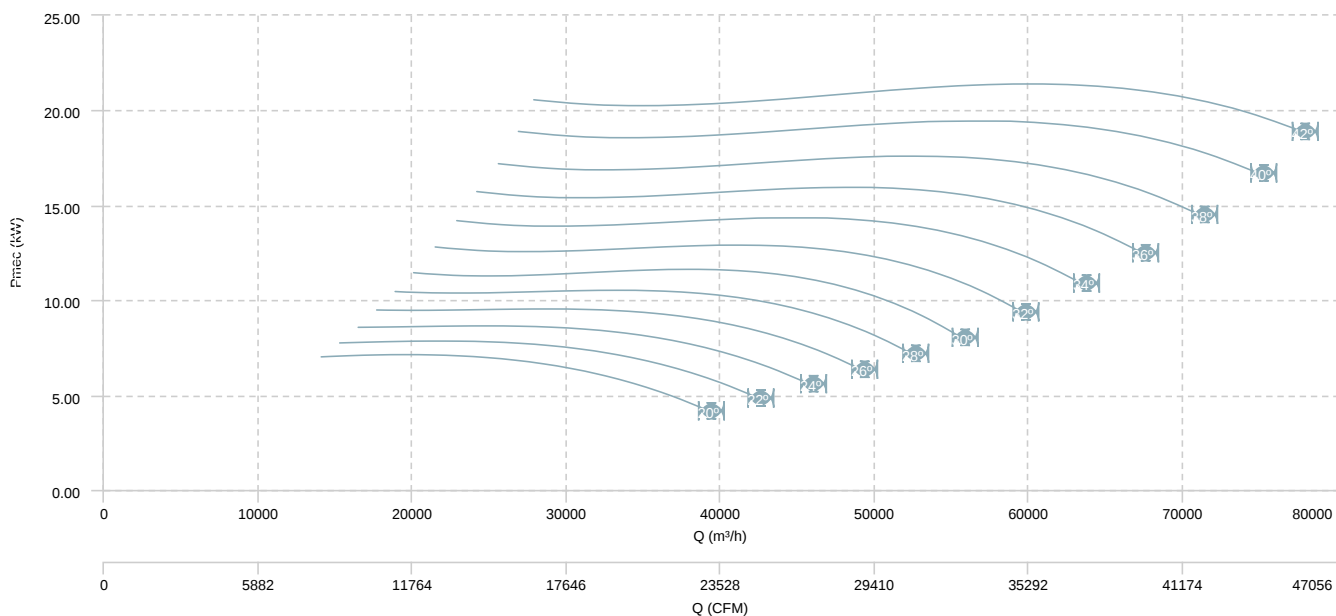


HBFX 100 T4 (A3:8) F400

## AIR FLOW - PRESSURE

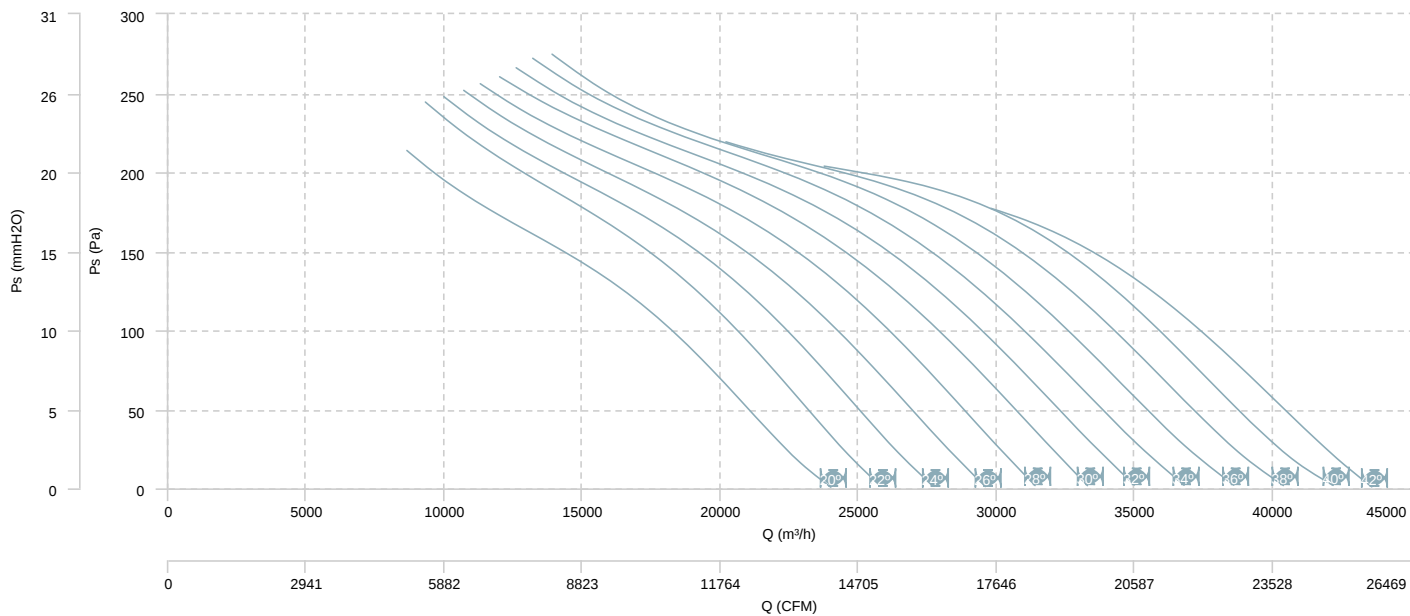


## AIR FLOW - MECHANICAL POWER

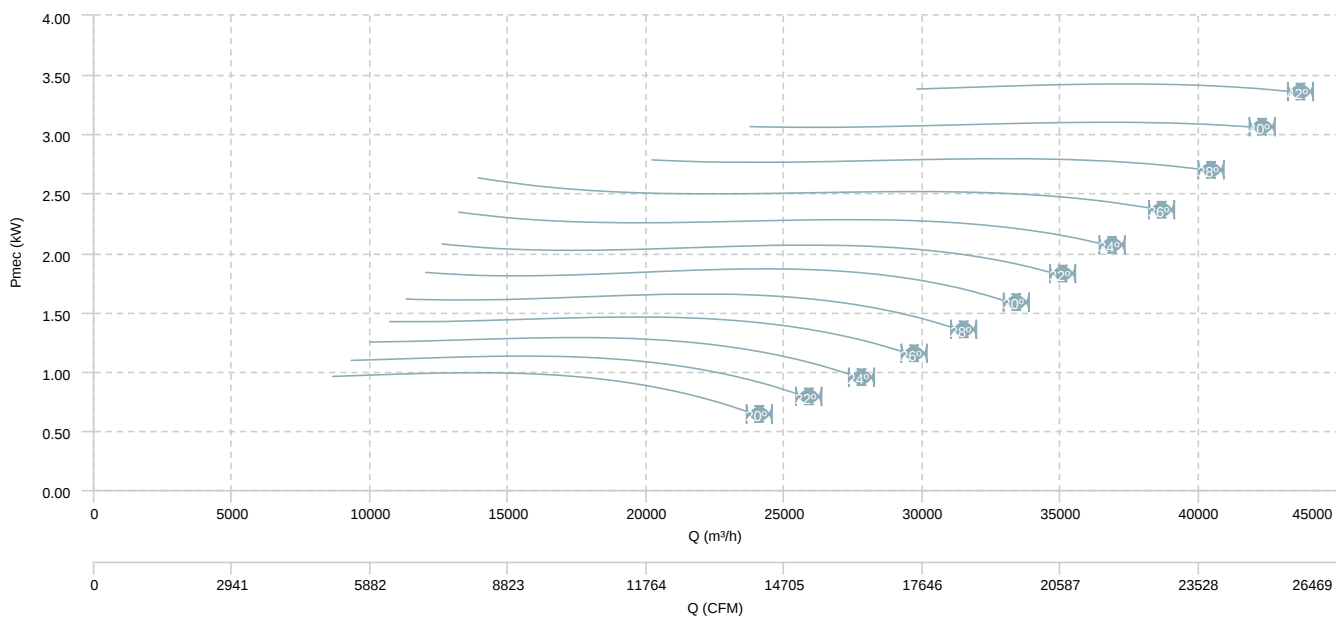


HBFX 100 T6 (A3:4) F400

## AIR FLOW - PRESSURE

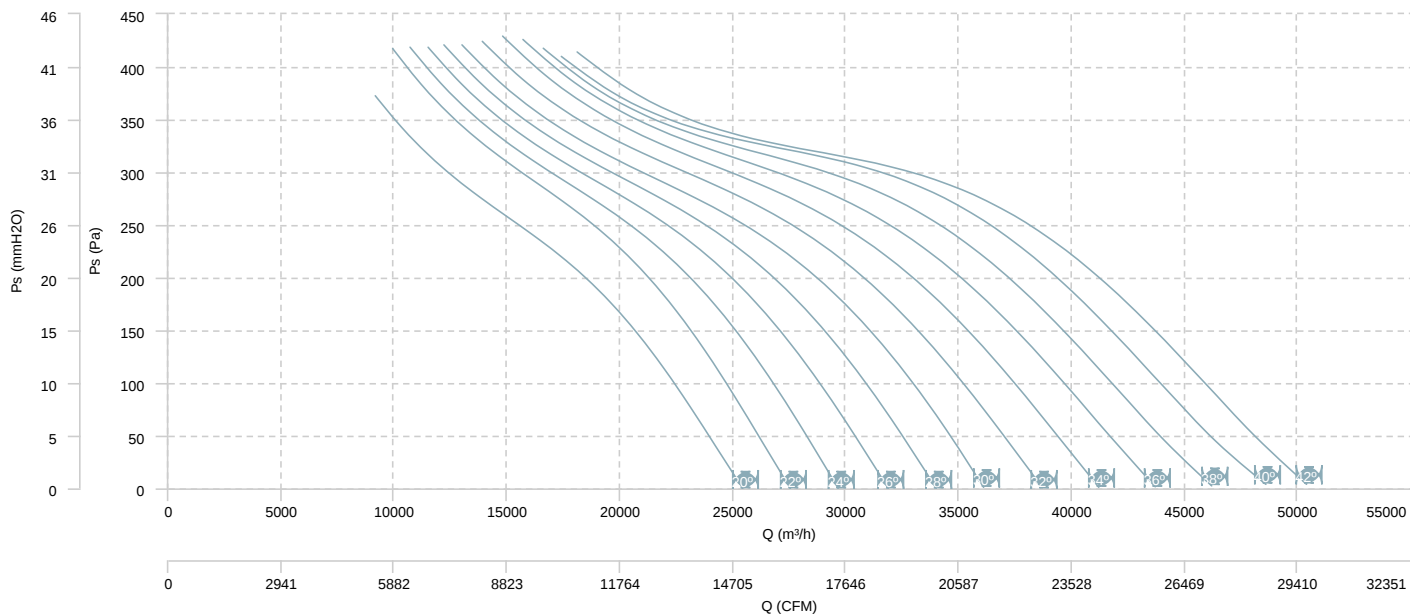


## AIR FLOW - MECHANICAL POWER

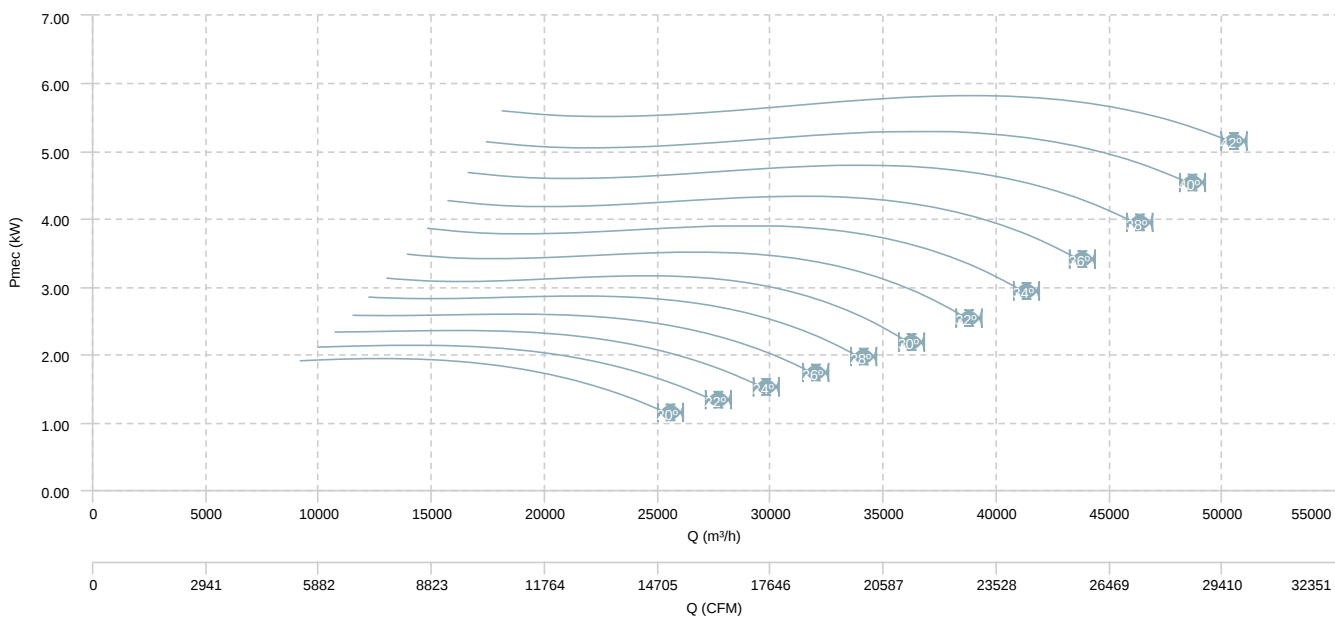


HBFX 100 T6 (A3:8) F400

**AIR FLOW - PRESSURE**

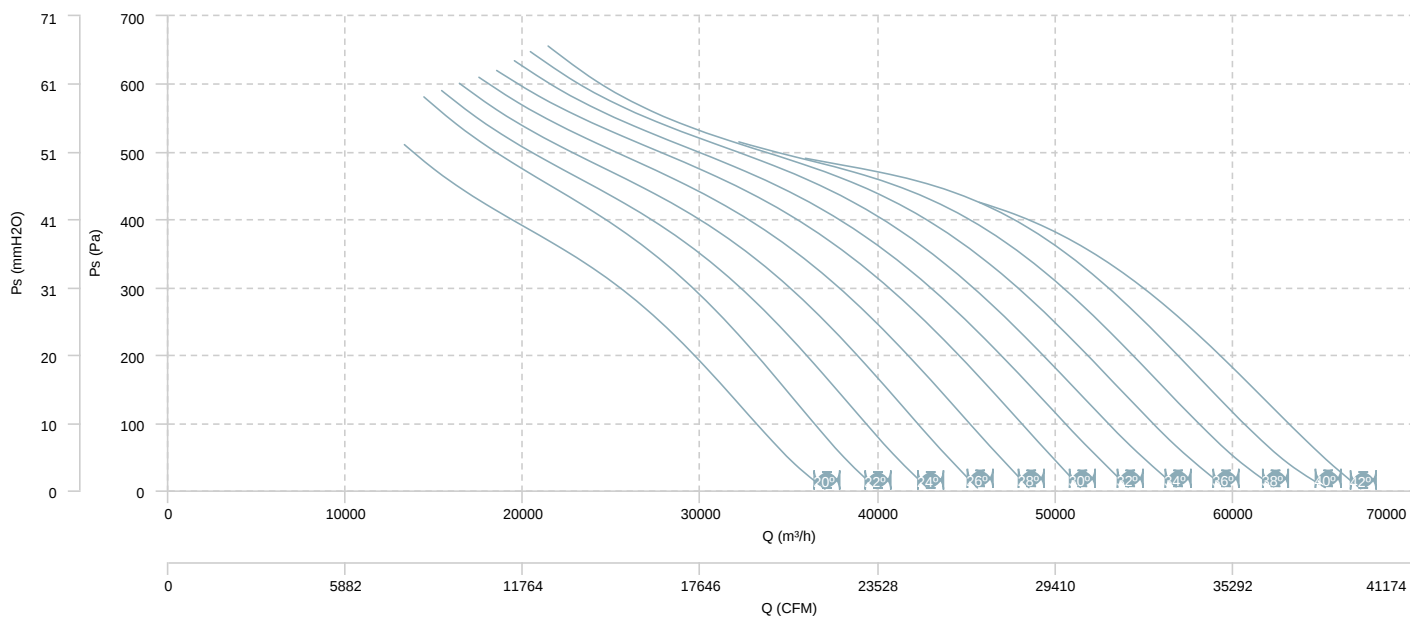


**AIR FLOW - MECHANICAL POWER**

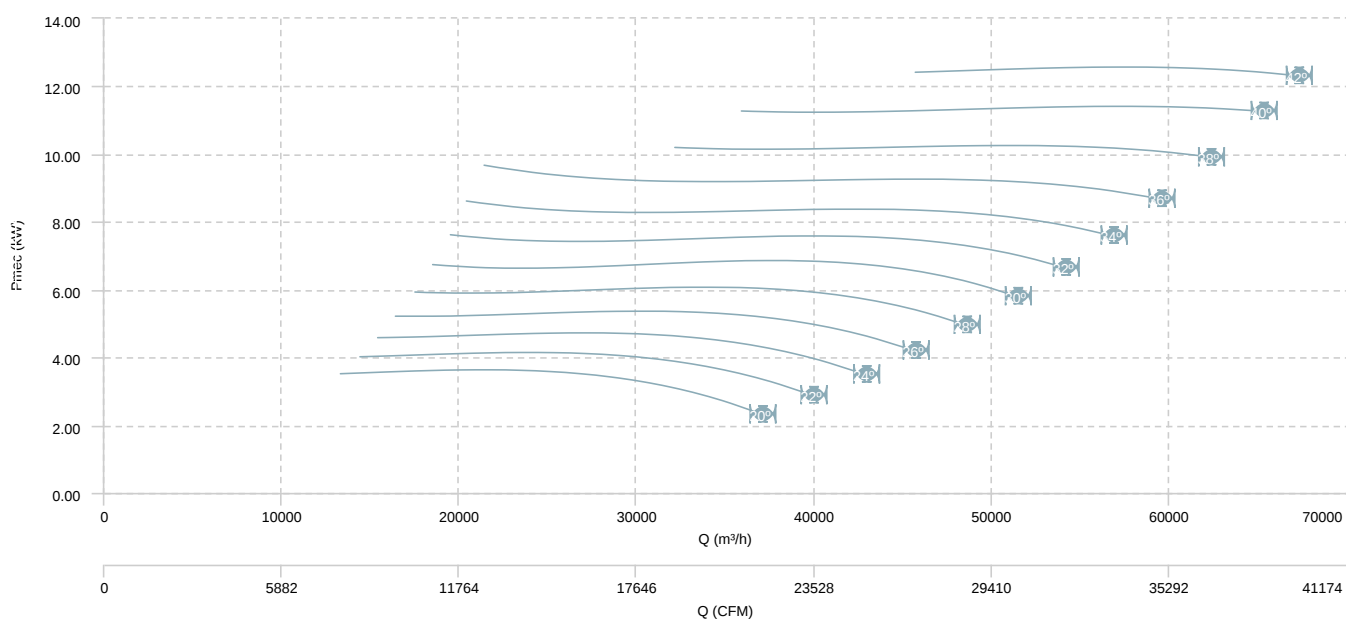


HBFX 100 T4/T8 (A3:4) F400

**AIR FLOW - PRESSURE (4 poles)**

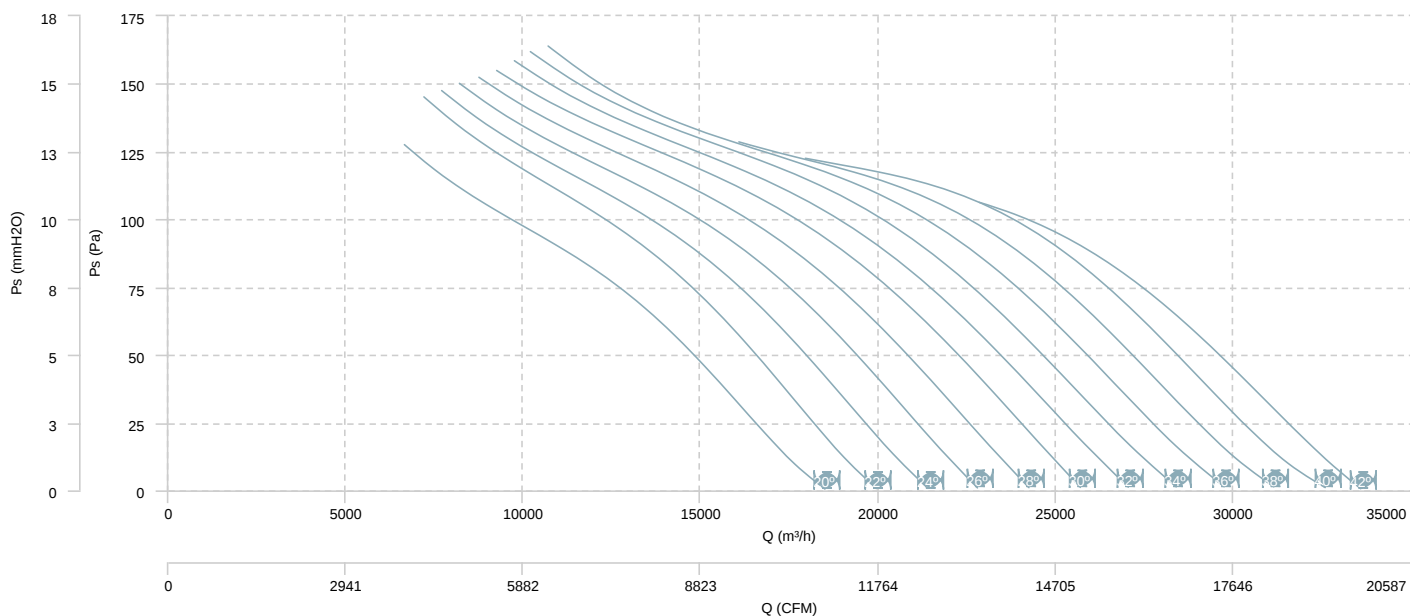


**AIR FLOW - MECHANICAL POWER (4 poles)**

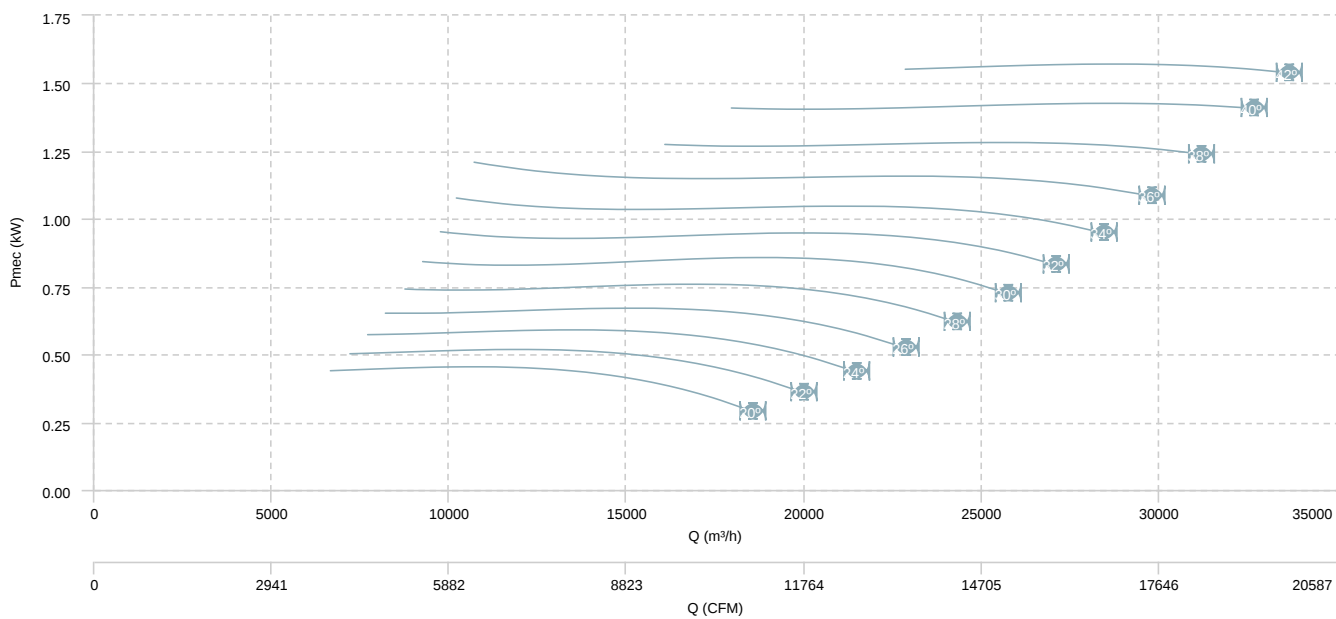


HBFX 100 T4/T8 (A3:4) F400

**AIR FLOW - PRESSURE (8 poles)**

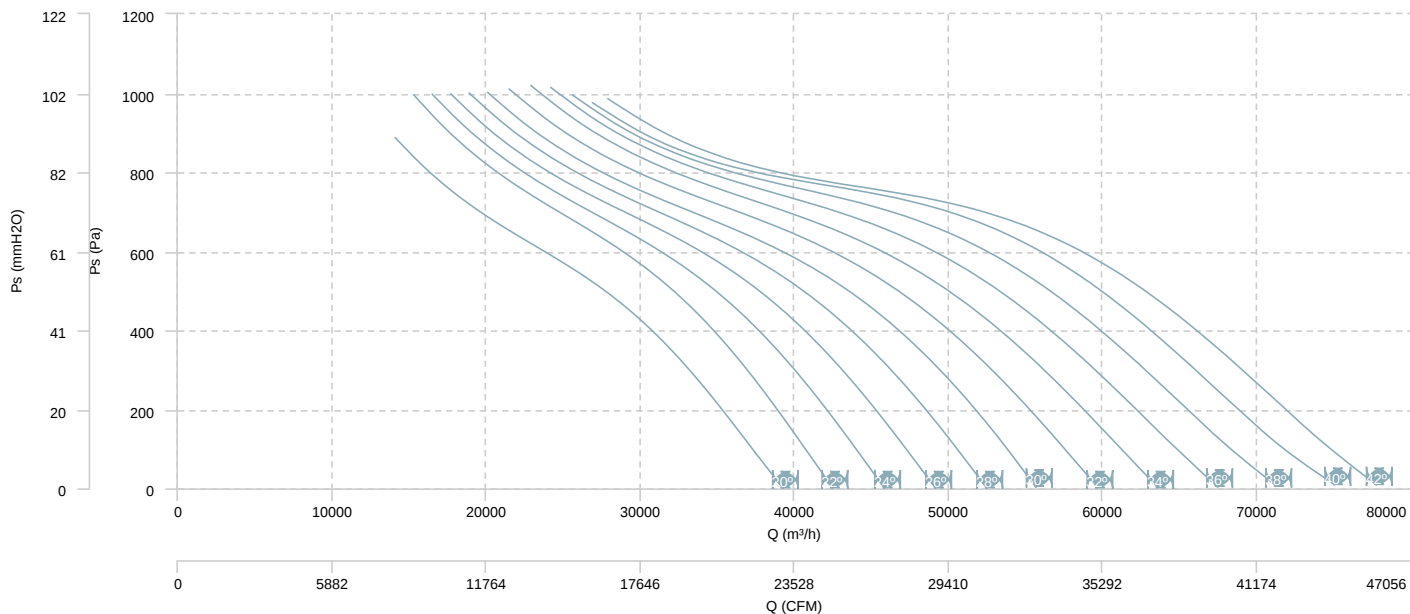


**AIR FLOW - MECHANICAL POWER (8 poles)**

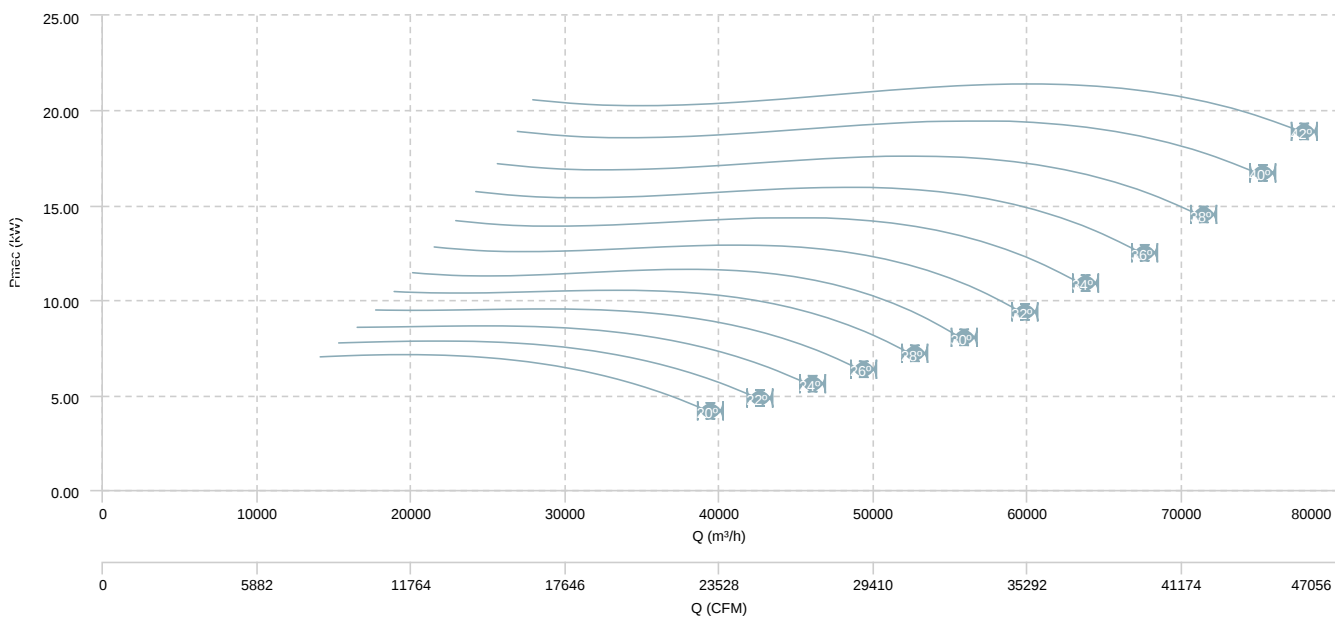


HBFX 100 T4/T8 (A3:8) F400

**AIR FLOW - PRESSURE (4 poles)**

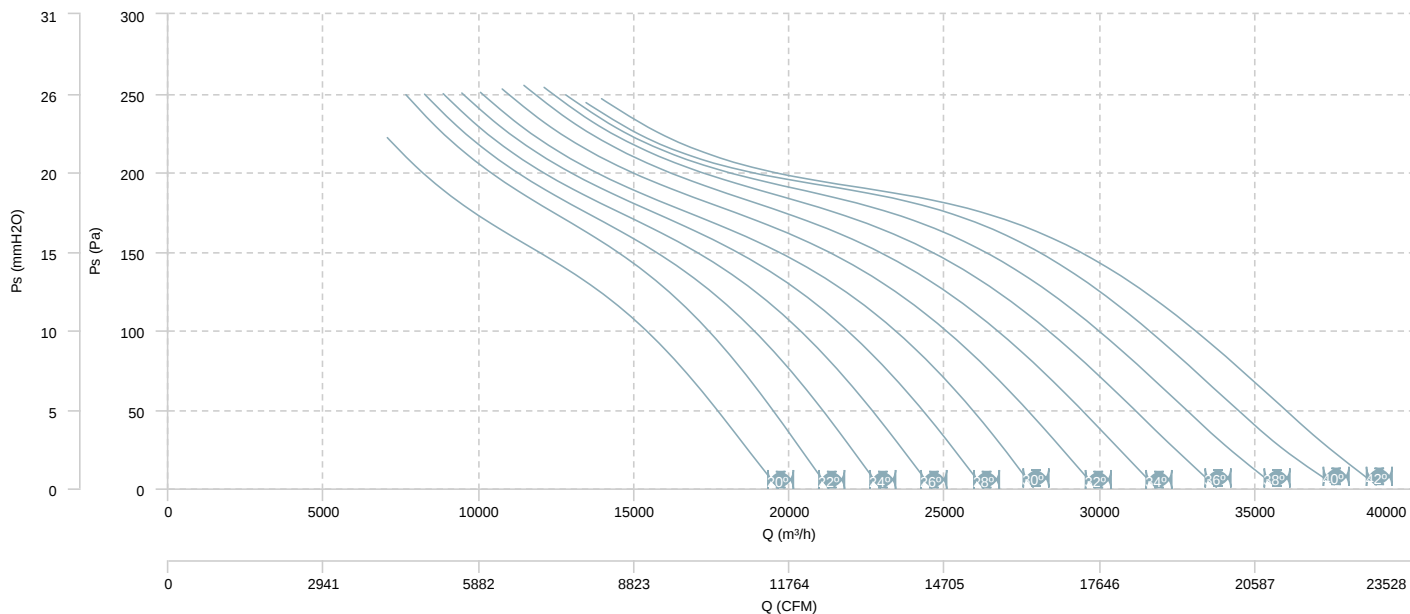


**AIR FLOW - MECHANICAL POWER (4 poles)**

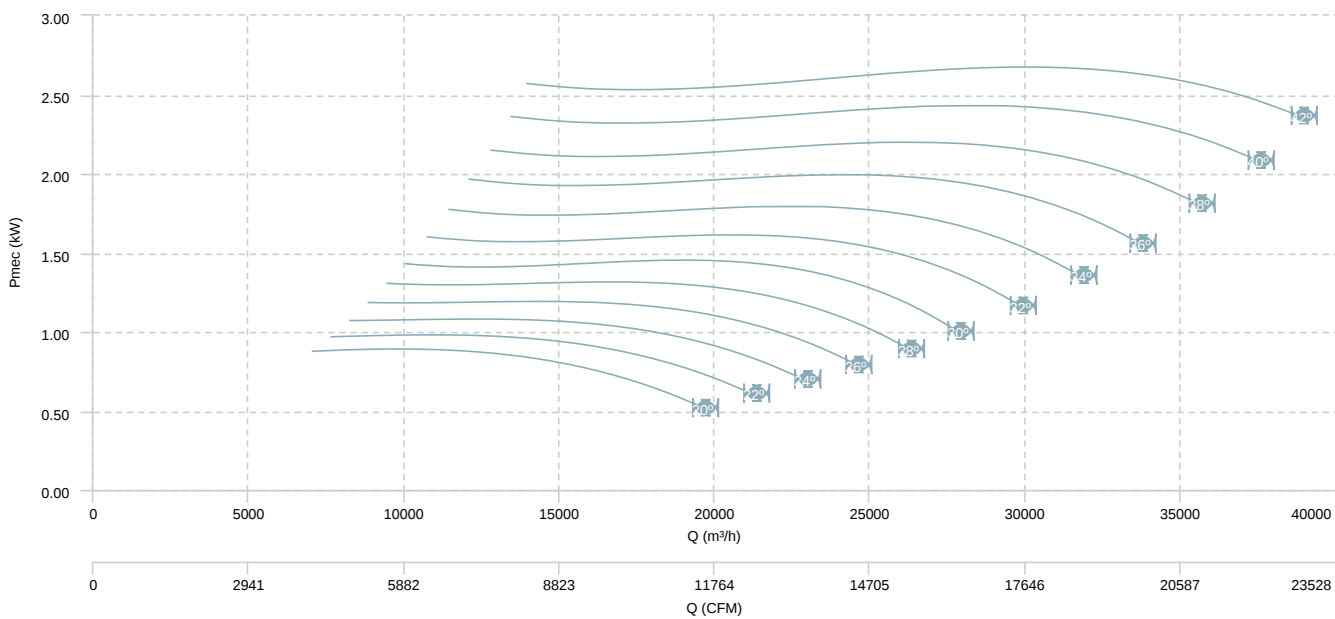


HBFX 100 T4/T8 (A3:8) F400

**AIR FLOW - PRESSURE (8 poles)**

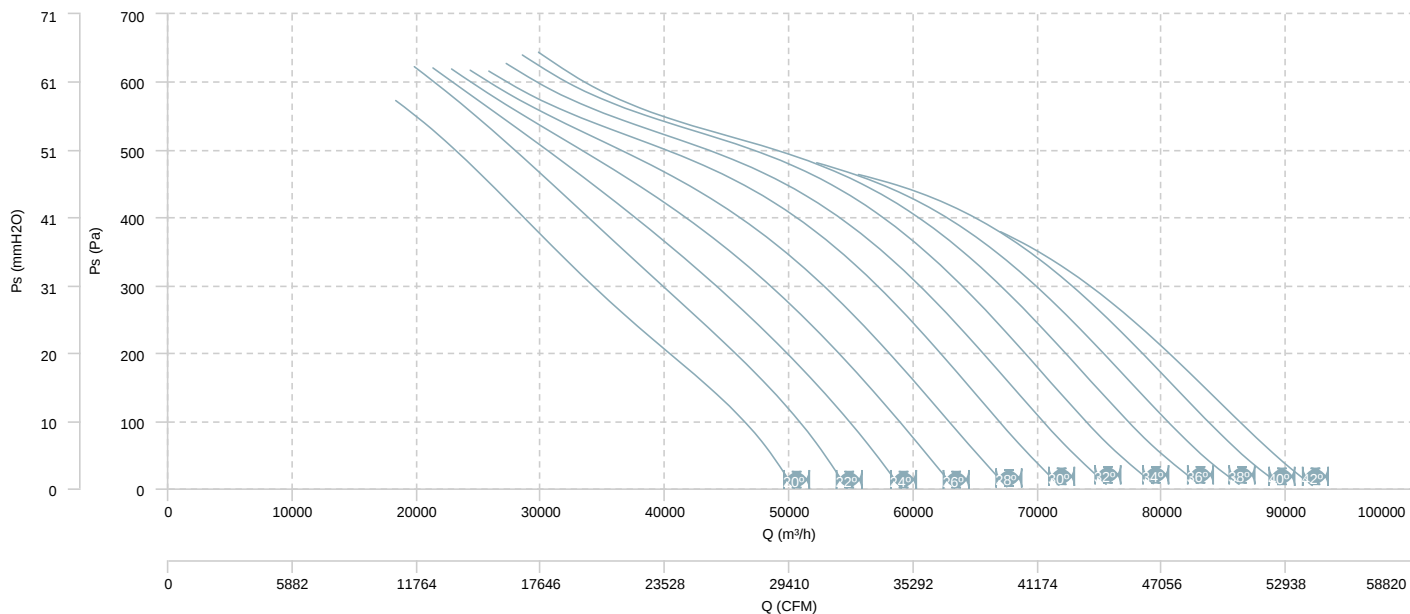


**AIR FLOW - MECHANICAL POWER (8 poles)**

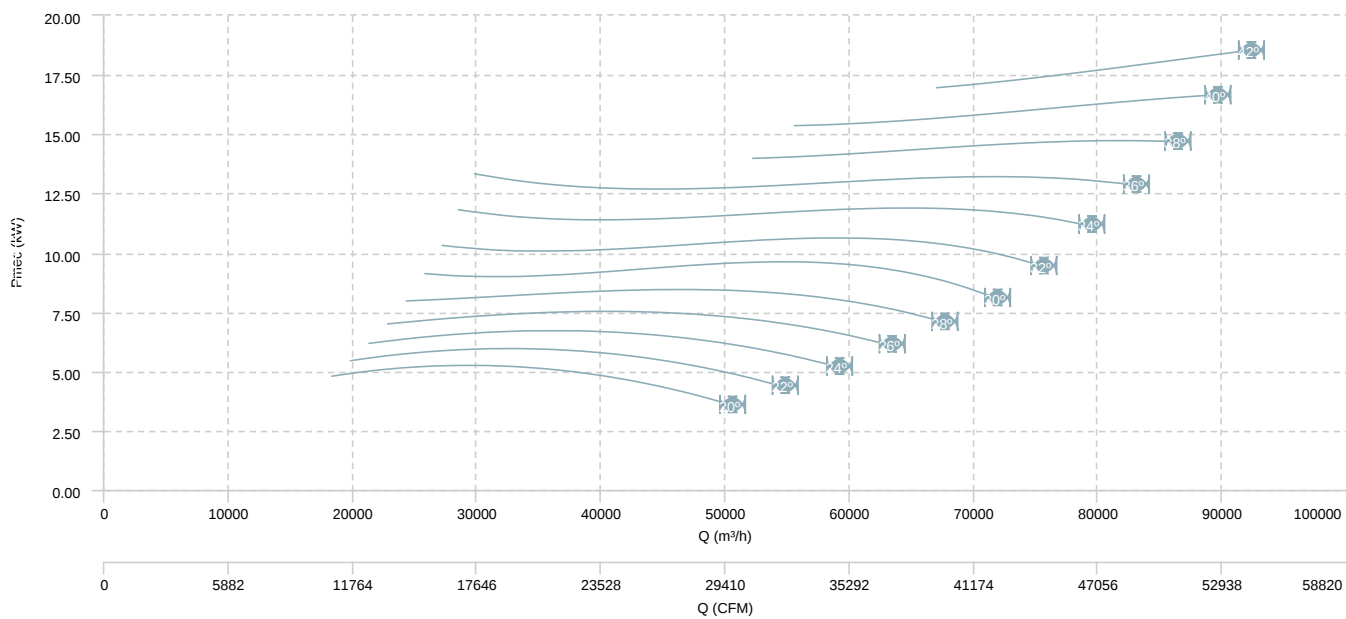


HBFX 112 T4 (A3:4) F400

**AIR FLOW - PRESSURE**

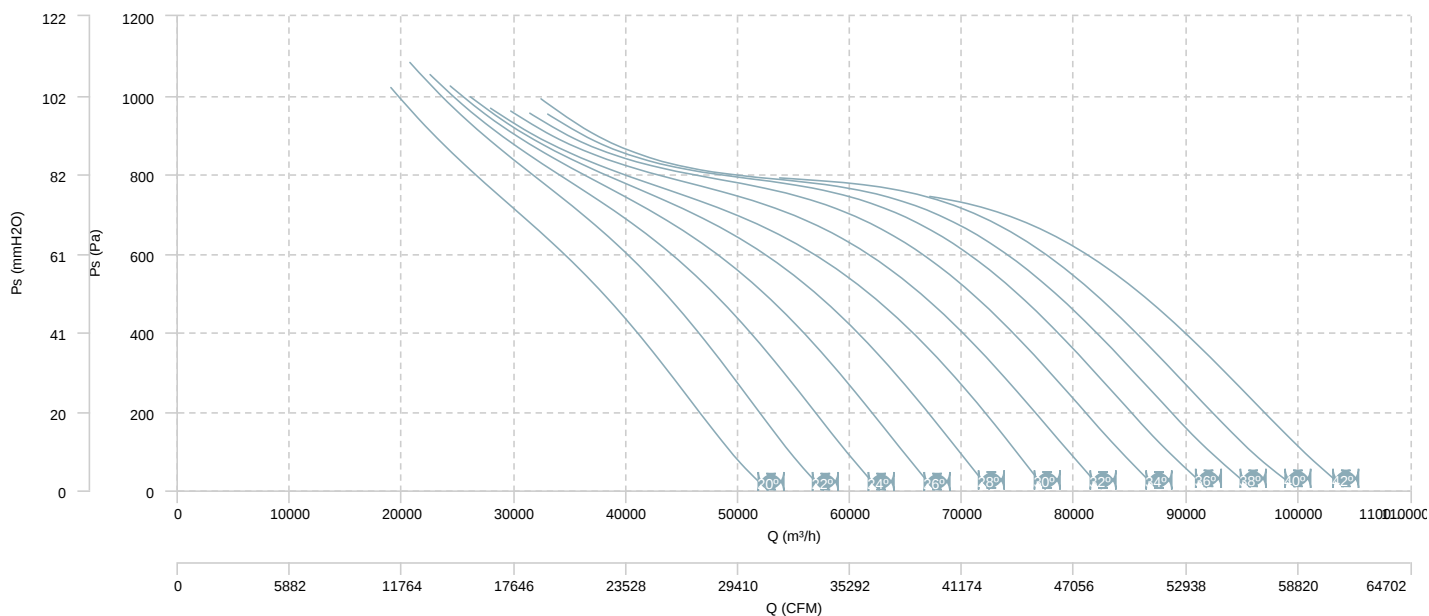


**AIR FLOW - MECHANICAL POWER**

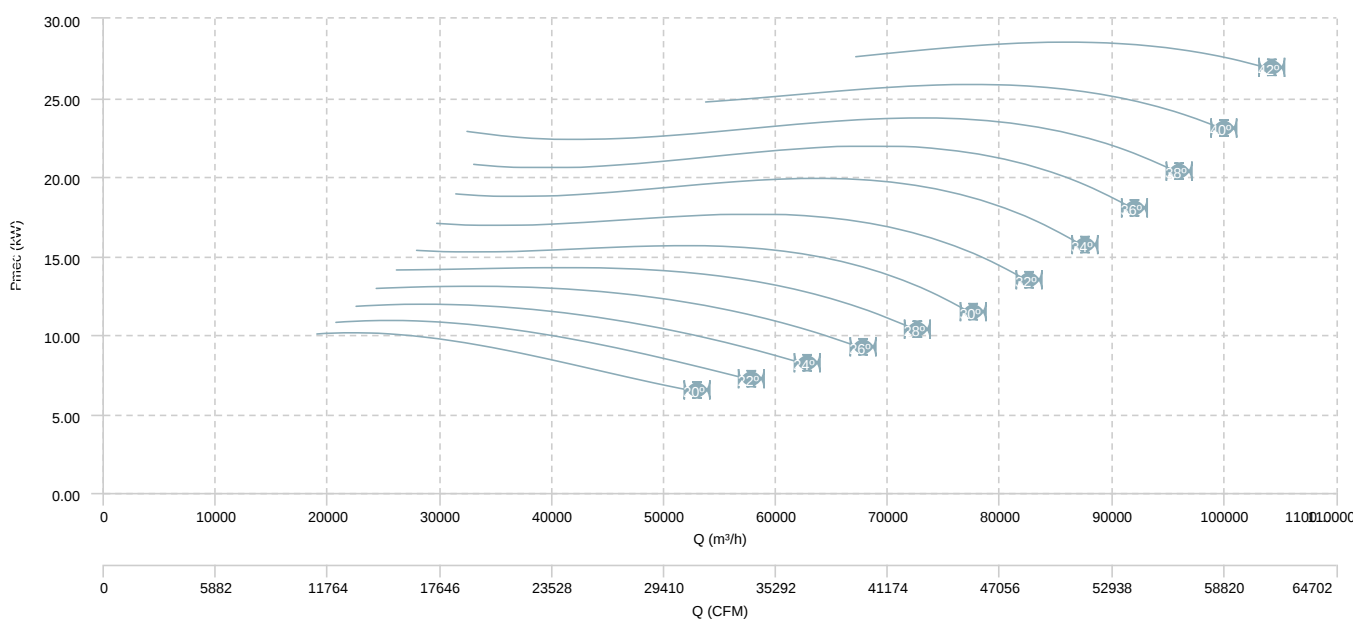


HBFX 112 T4 (A3:8) F400

## AIR FLOW - PRESSURE

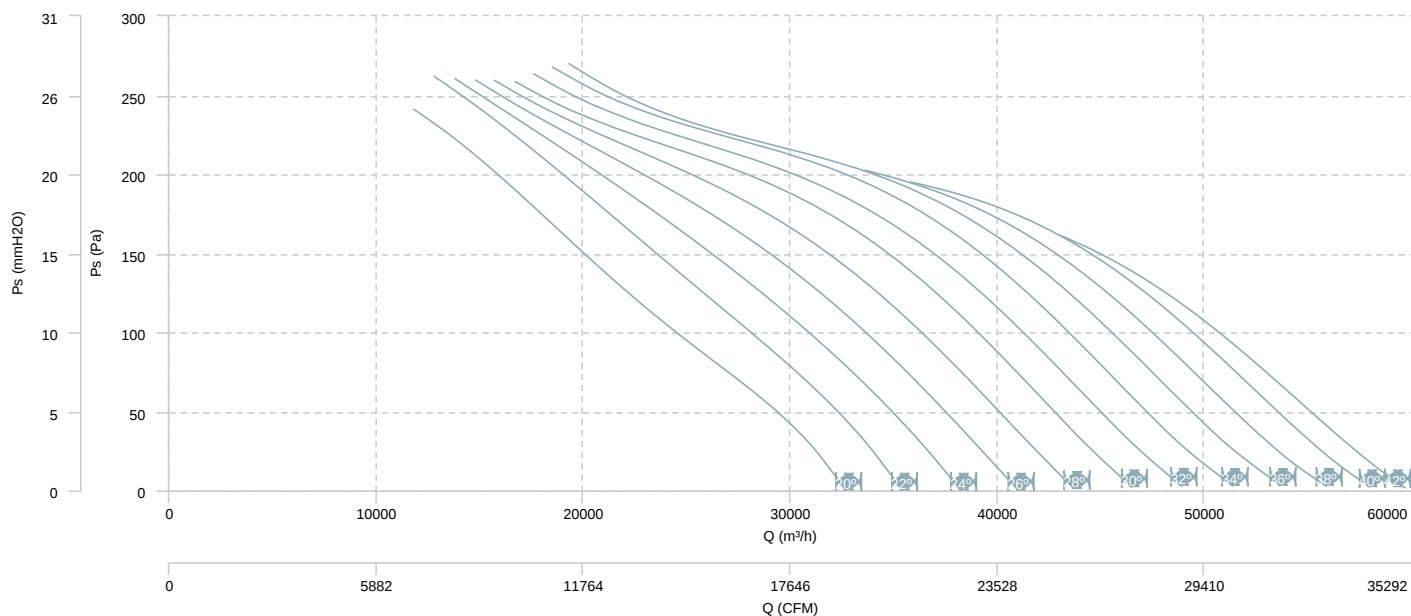


## AIR FLOW - MECHANICAL POWER

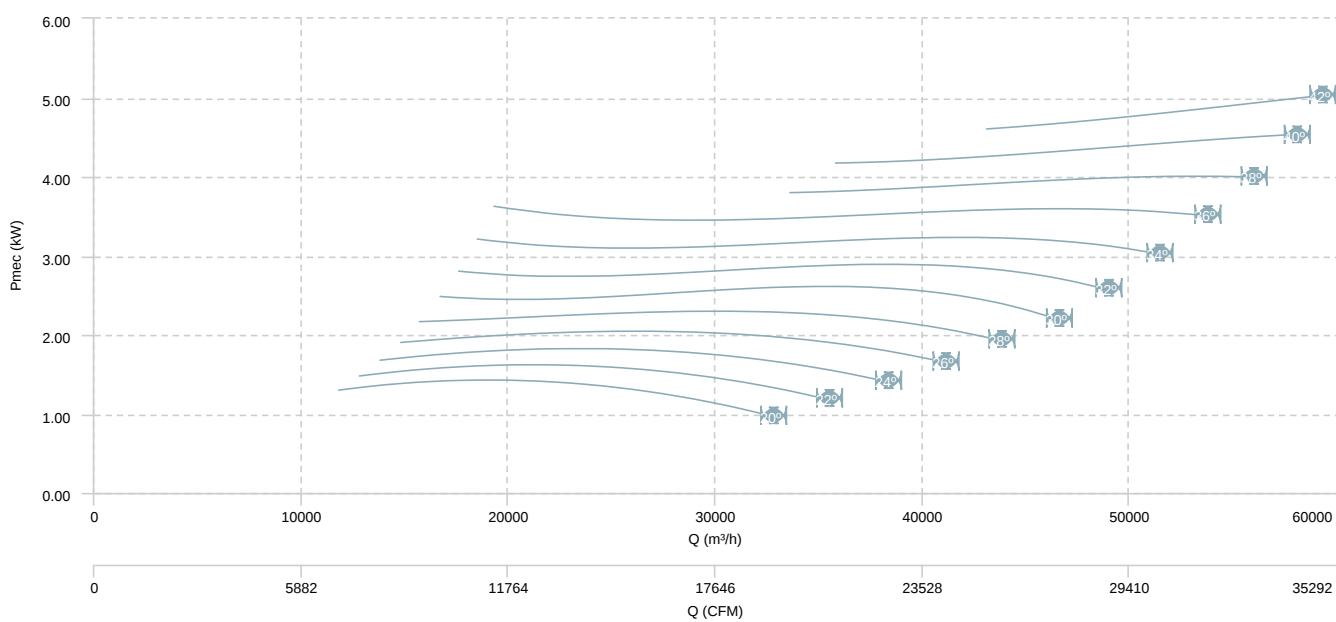


HBFX 112 T6 (A3:4) F400

## AIR FLOW - PRESSURE

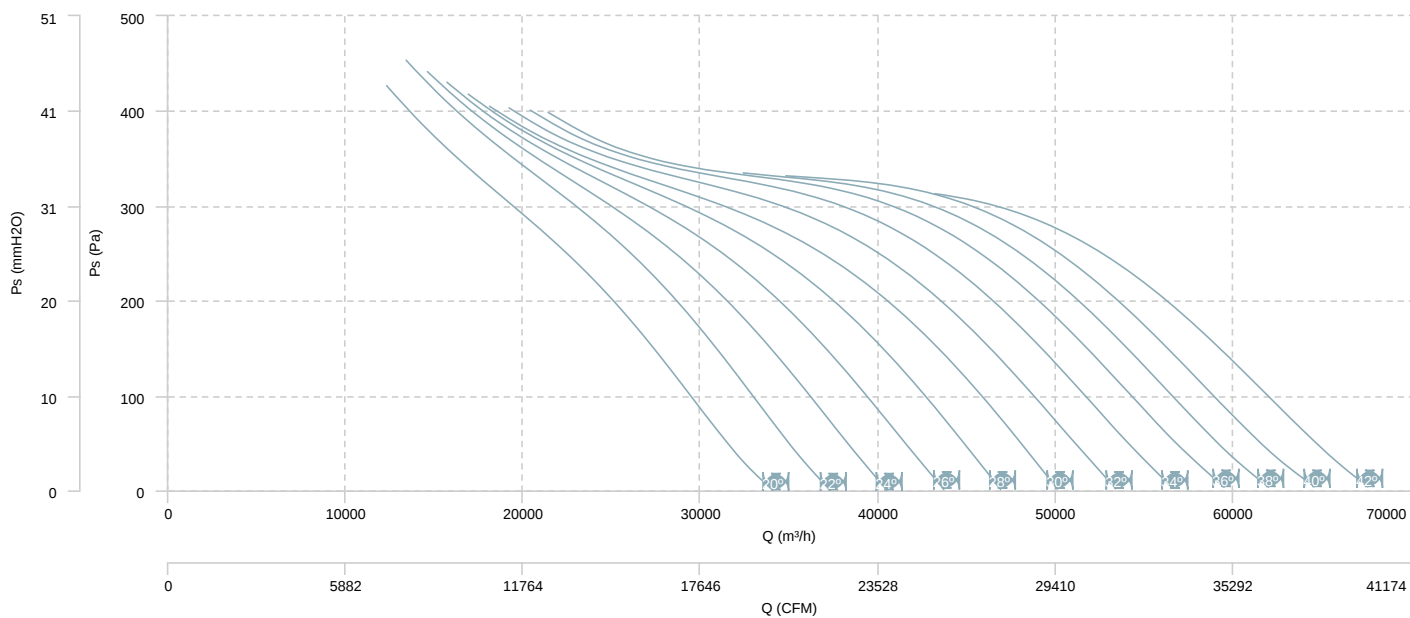


## AIR FLOW - MECHANICAL POWER

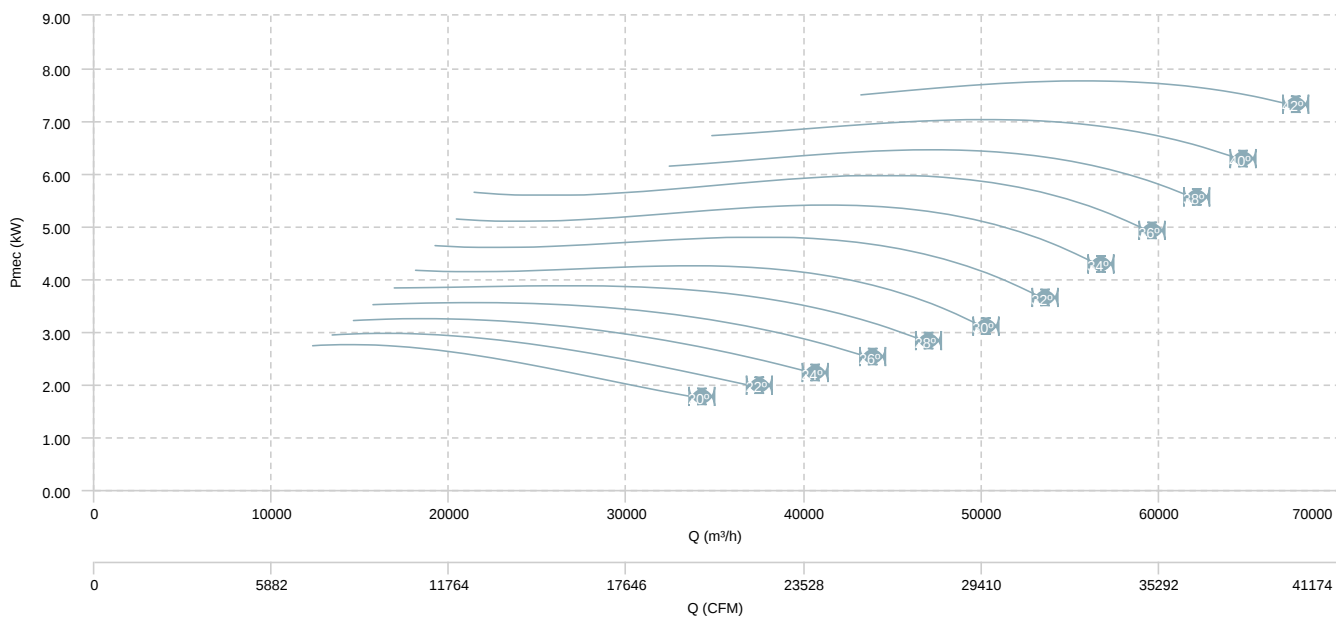


HBFX 112 T6 (A3:8) F400

## AIR FLOW - PRESSURE

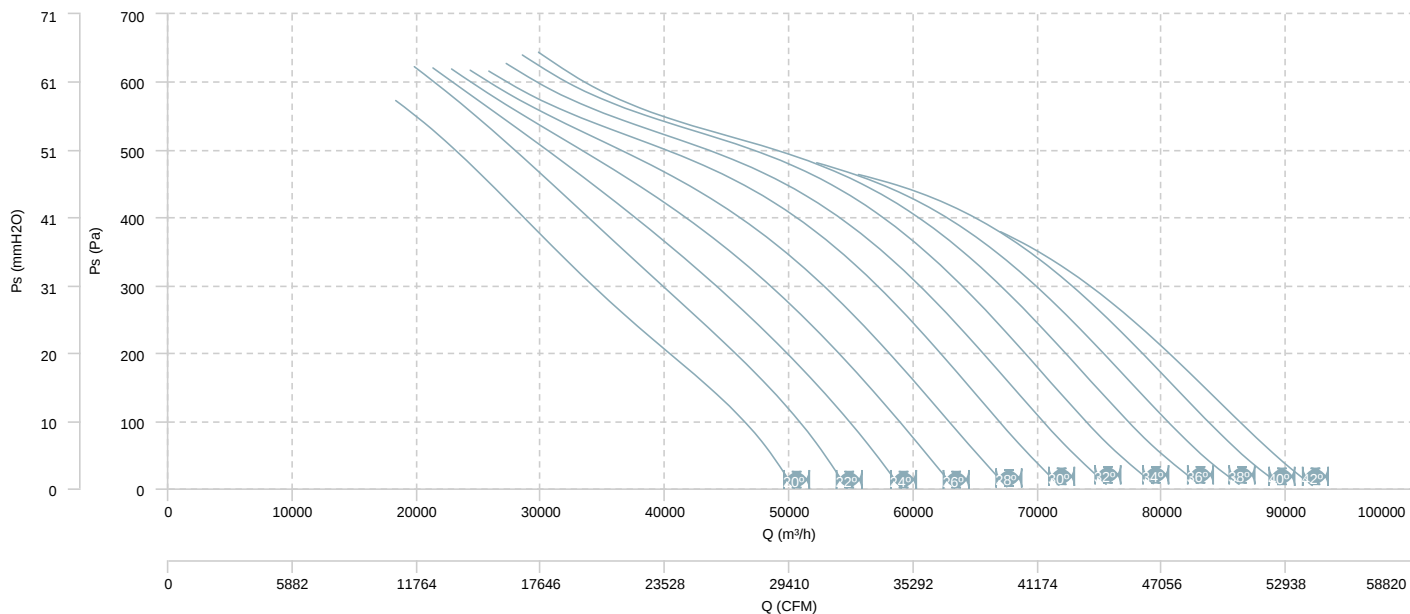


## AIR FLOW - MECHANICAL POWER

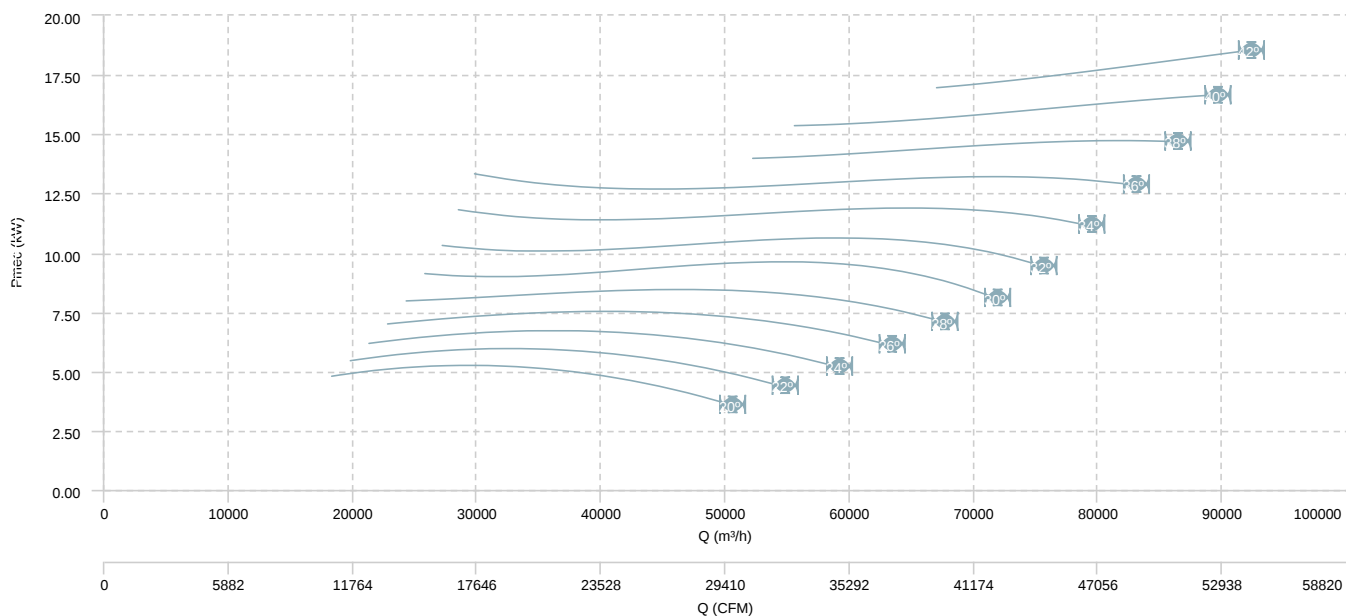


HBFX 112 T4/T8 (A3:4) F400

**AIR FLOW - PRESSURE (4 poles)**

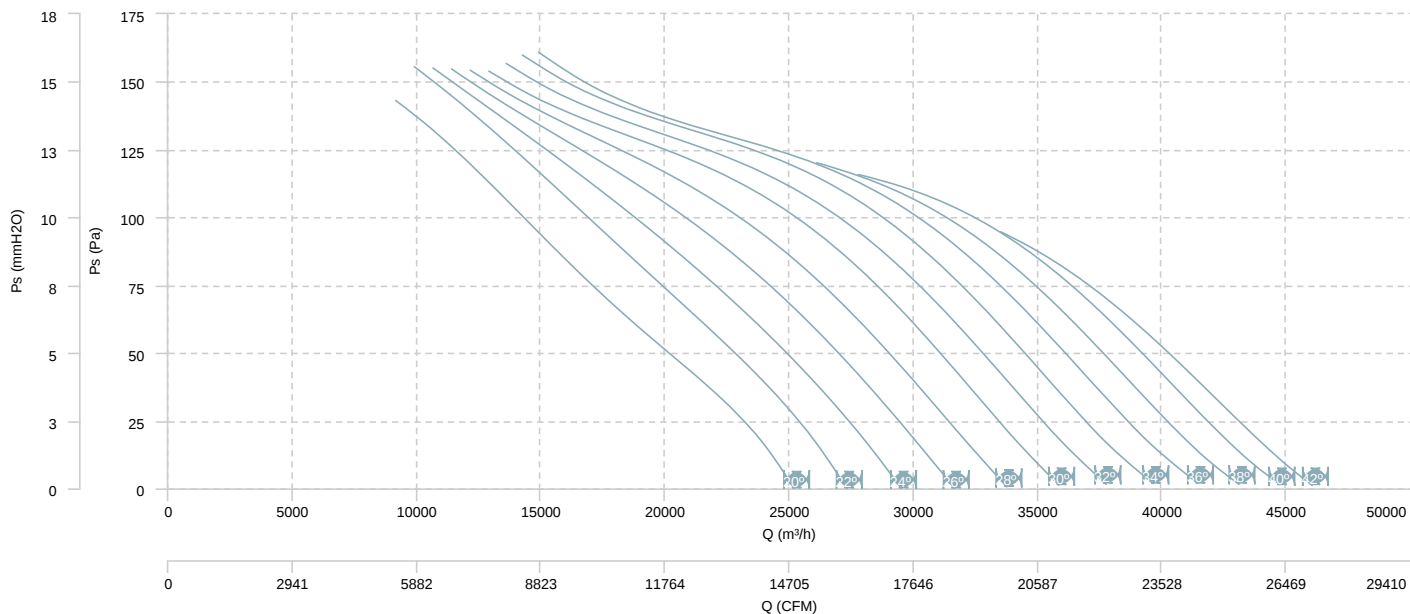


**AIR FLOW - MECHANICAL POWER (4 poles)**

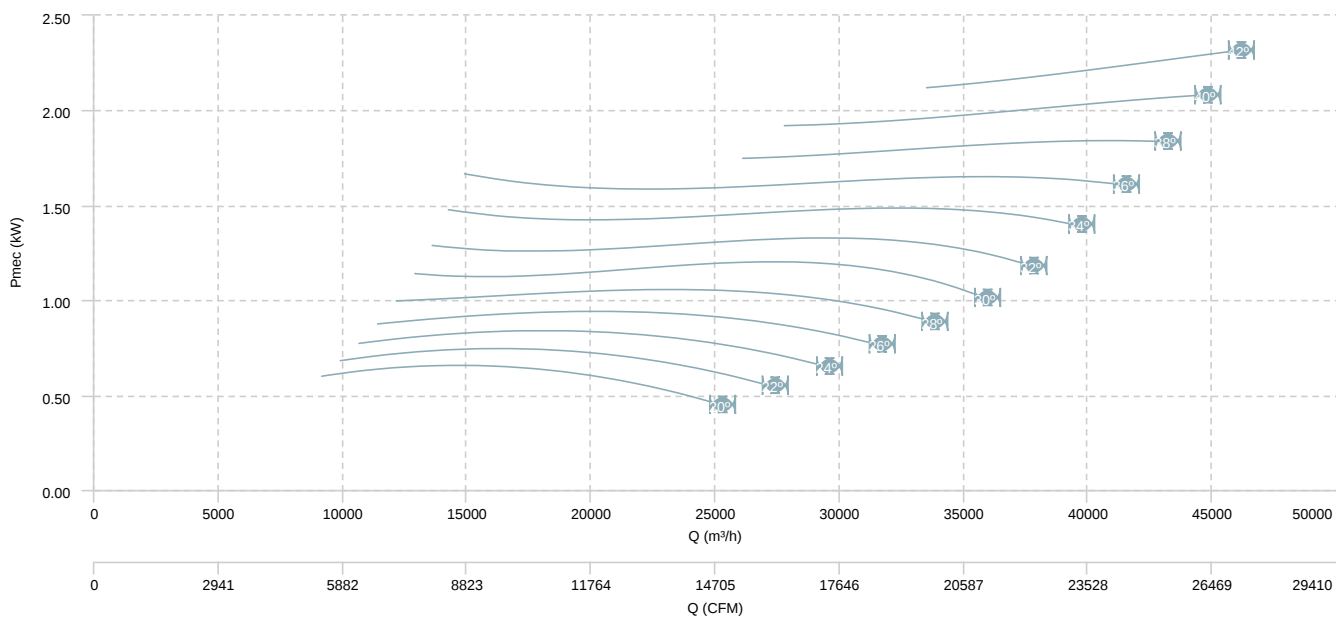


HBFX 112 T4/T8 (A3:4) F400

**AIR FLOW - PRESSURE (8 poles)**

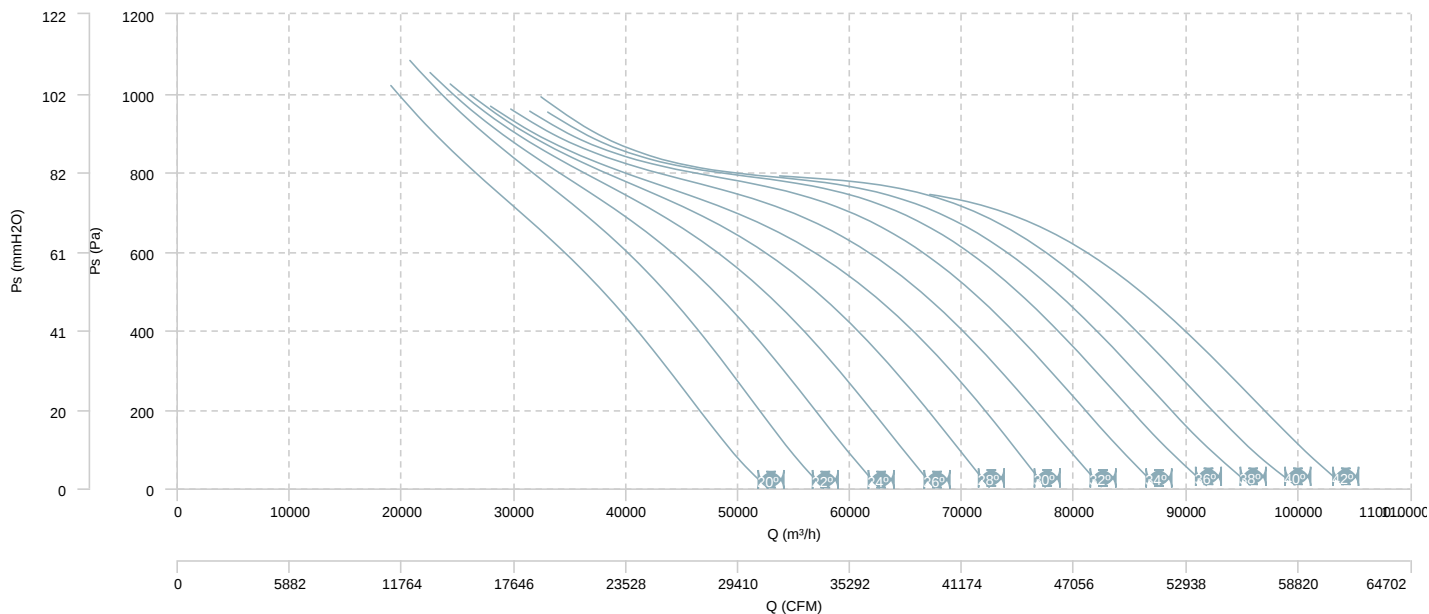


**AIR FLOW - MECHANICAL POWER (8 poles)**

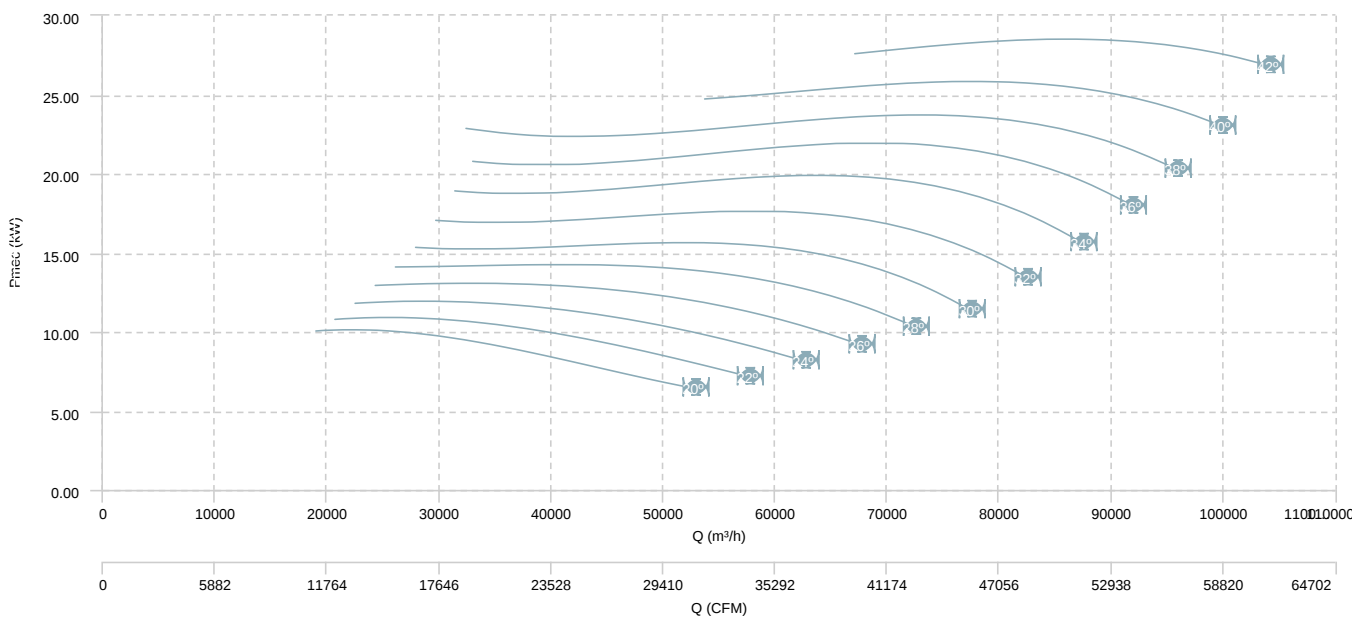


HBFX 112 T4/T8 (A3:8) F400

**AIR FLOW - PRESSURE (4 poles)**

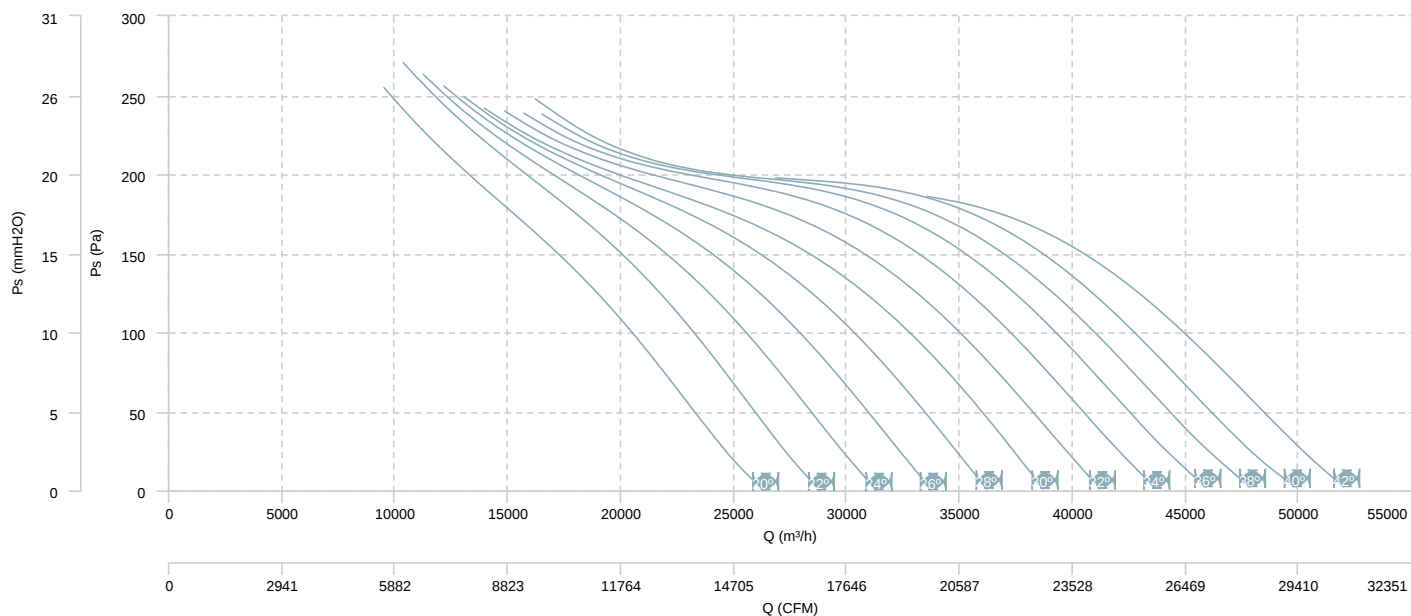


**AIR FLOW - MECHANICAL POWER (4 poles)**

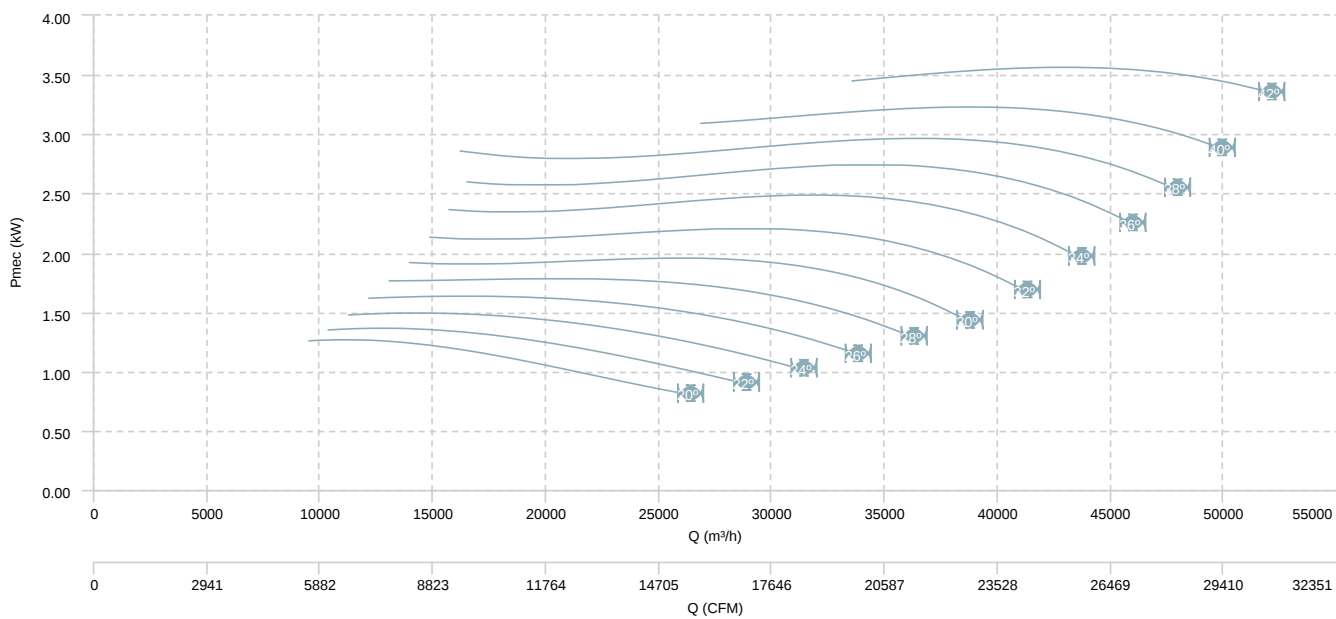


HBFX 112 T4/T8 (A3:8) F400

**AIR FLOW - PRESSURE (8 poles)**

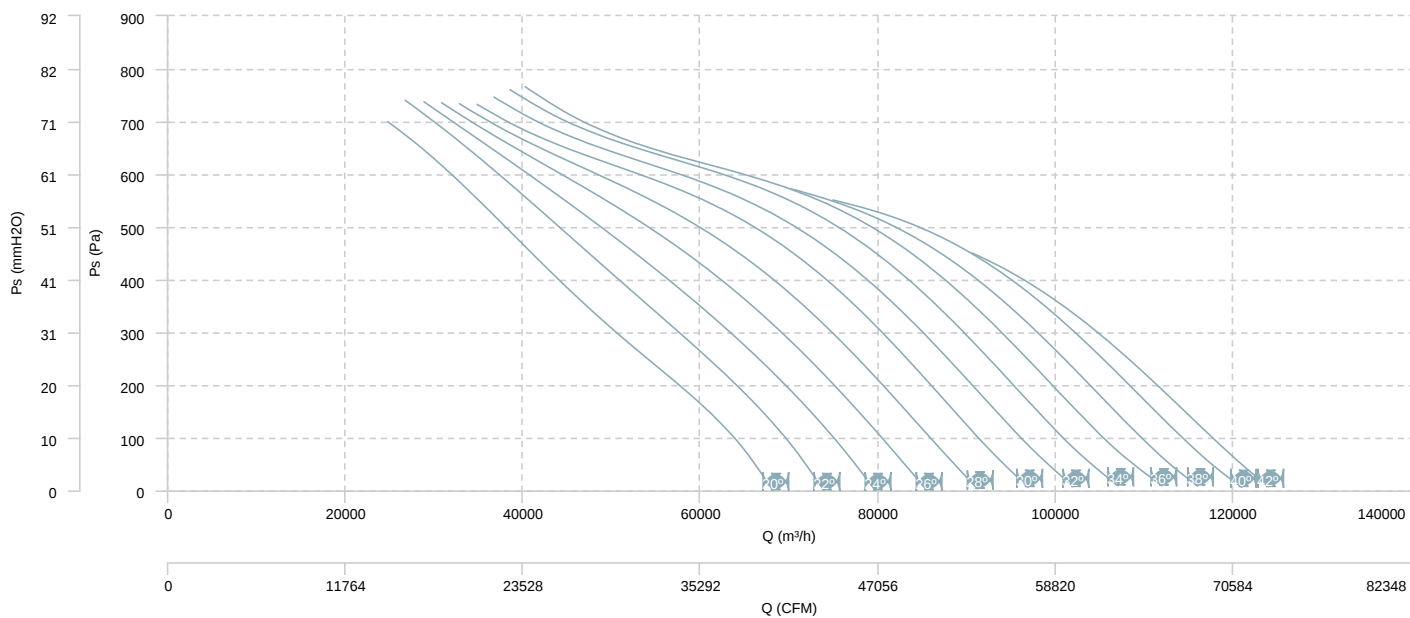


**AIR FLOW - MECHANICAL POWER (8 poles)**

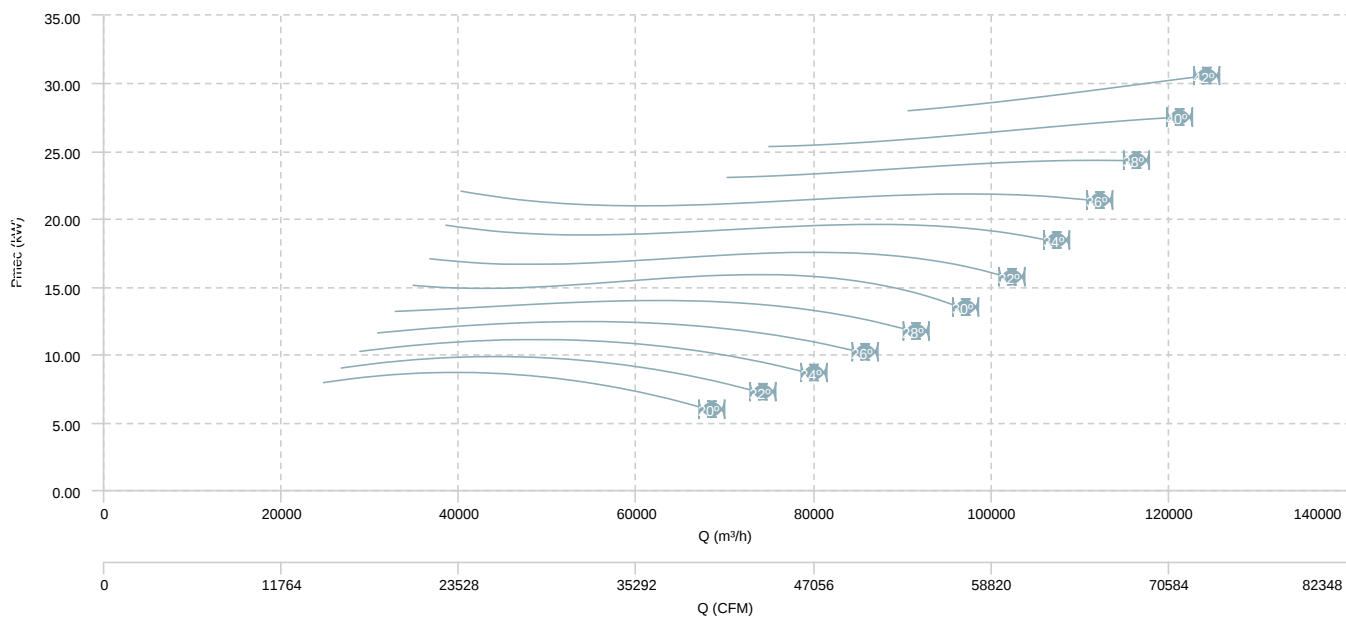


HBFX 125 T4 (A3:4) F400

## AIR FLOW - PRESSURE

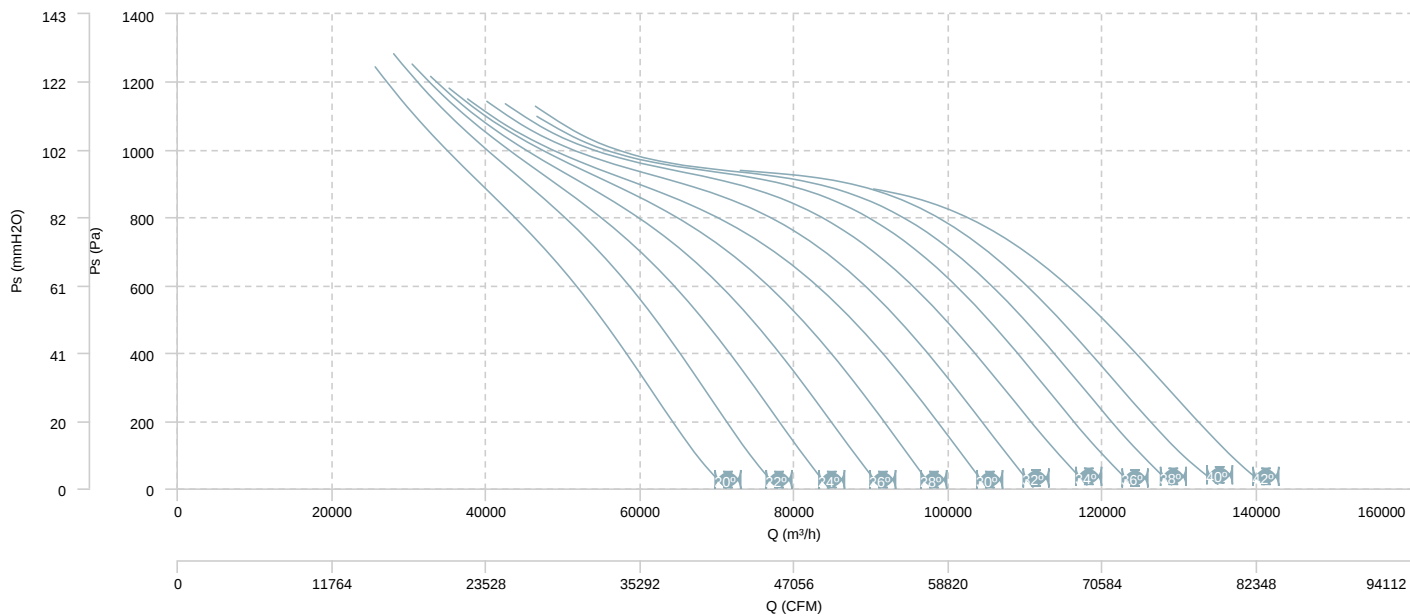


## AIR FLOW - MECHANICAL POWER

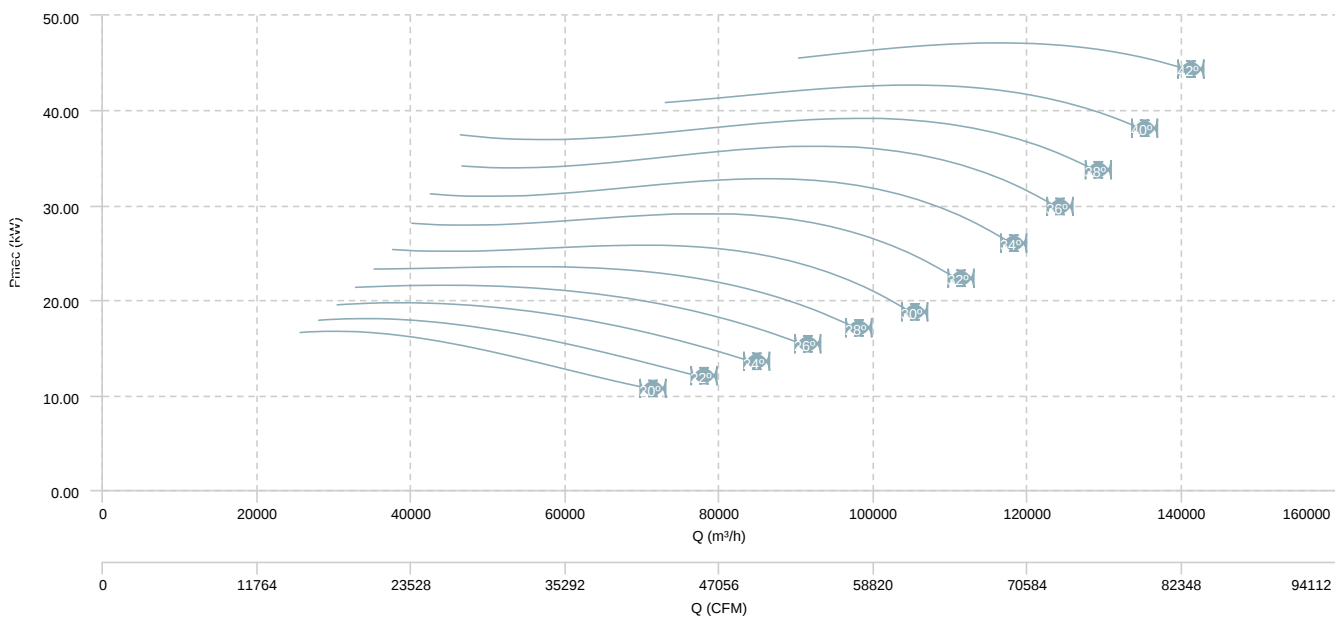


HBFX 125 T4 (A3:8) F400

## AIR FLOW - PRESSURE

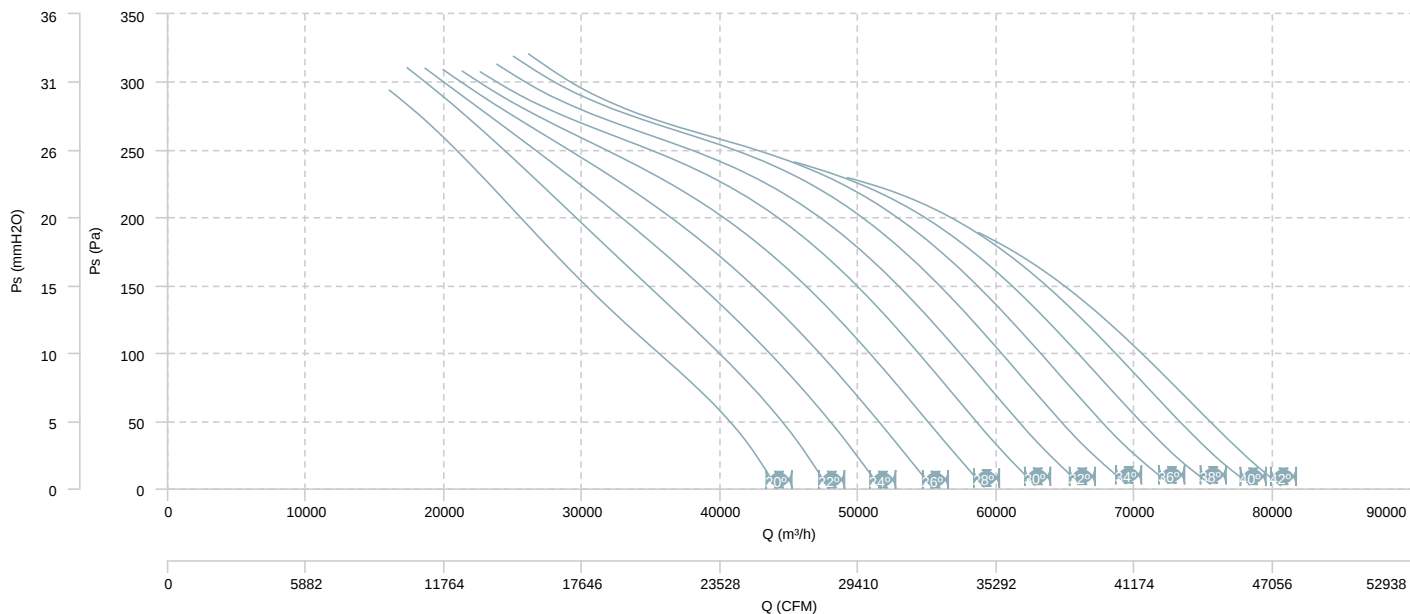


## AIR FLOW - MECHANICAL POWER

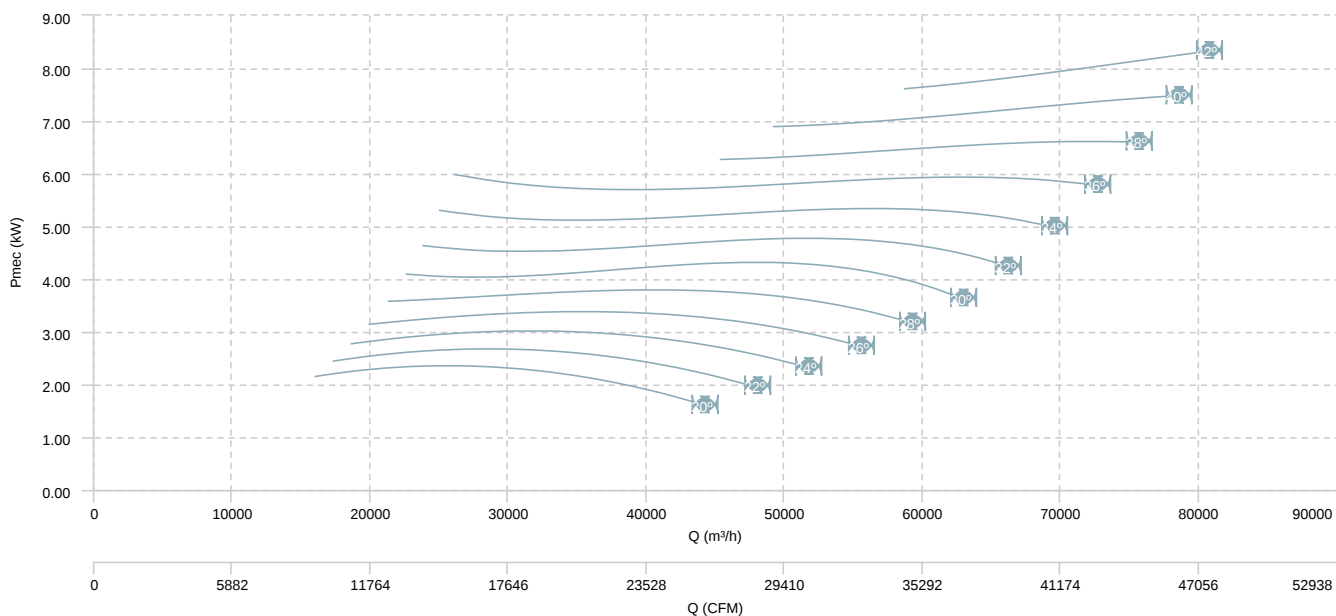


HBFX 125 T6 (A3:4) F400

## AIR FLOW - PRESSURE

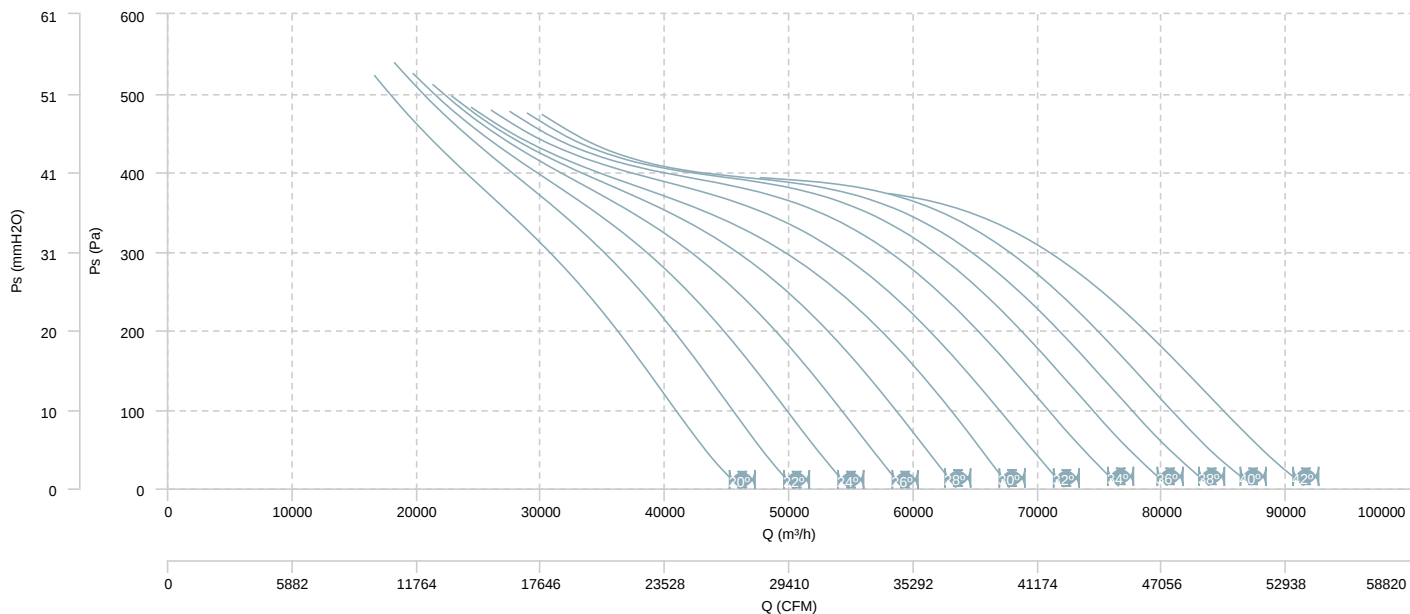


## AIR FLOW - MECHANICAL POWER

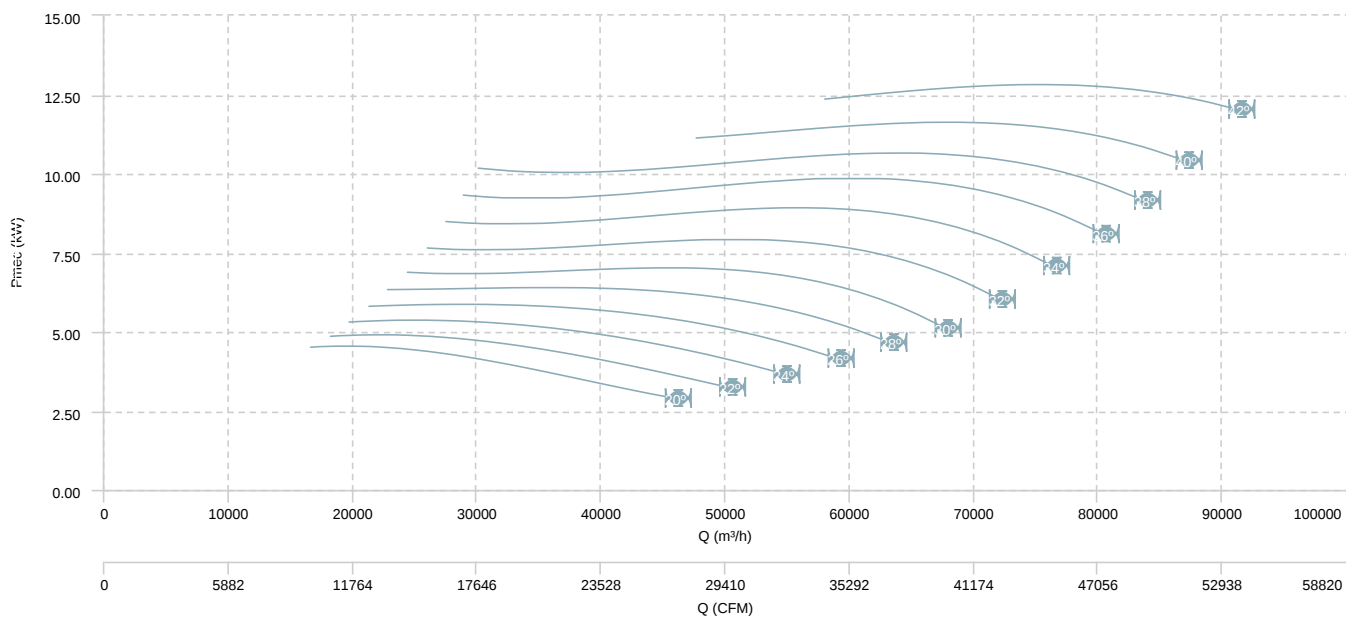


HBFX 125 T6 (A3:8) F400

**AIR FLOW - PRESSURE**

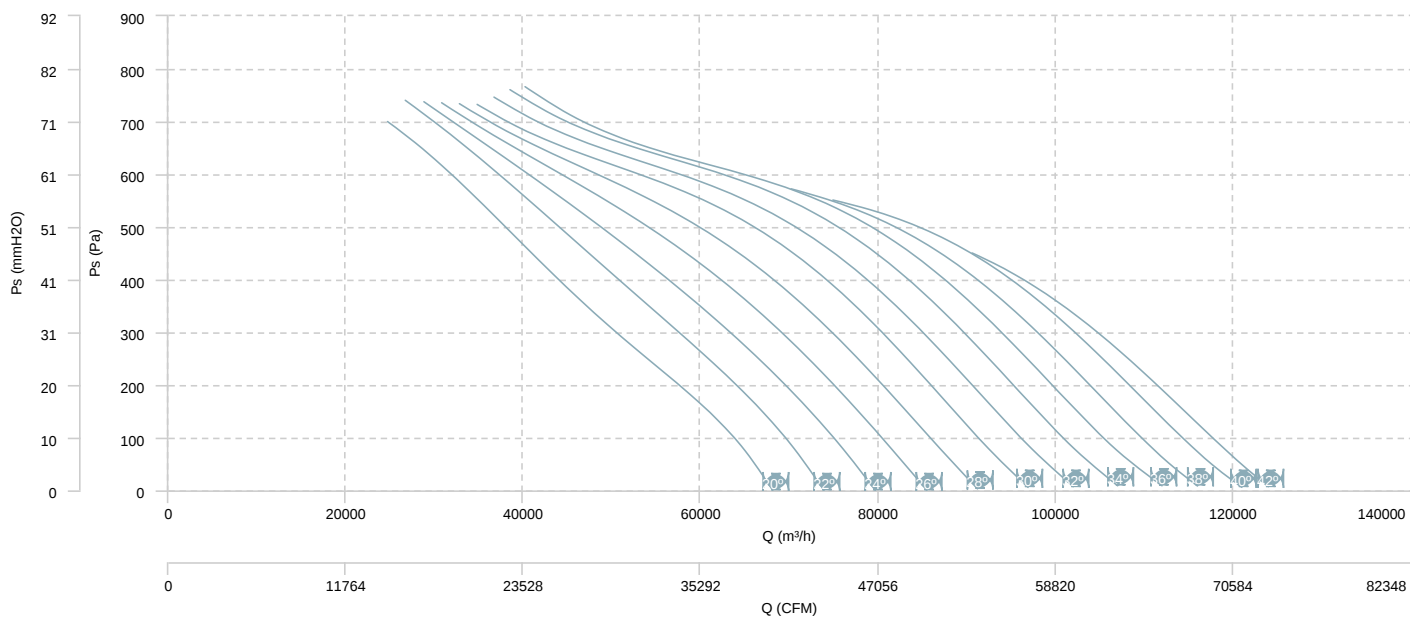


**AIR FLOW - MECHANICAL POWER**

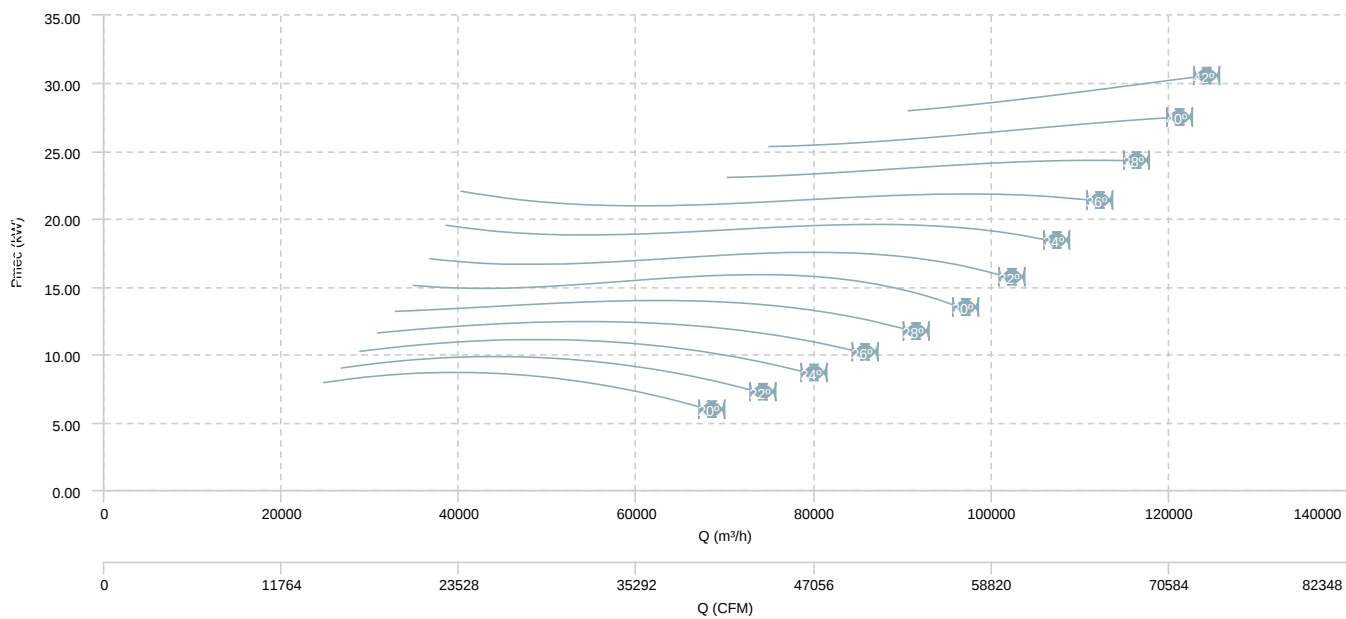


HBFX 125 T4/T8 (A3:4) F400

**AIR FLOW - PRESSURE (4 poles)**

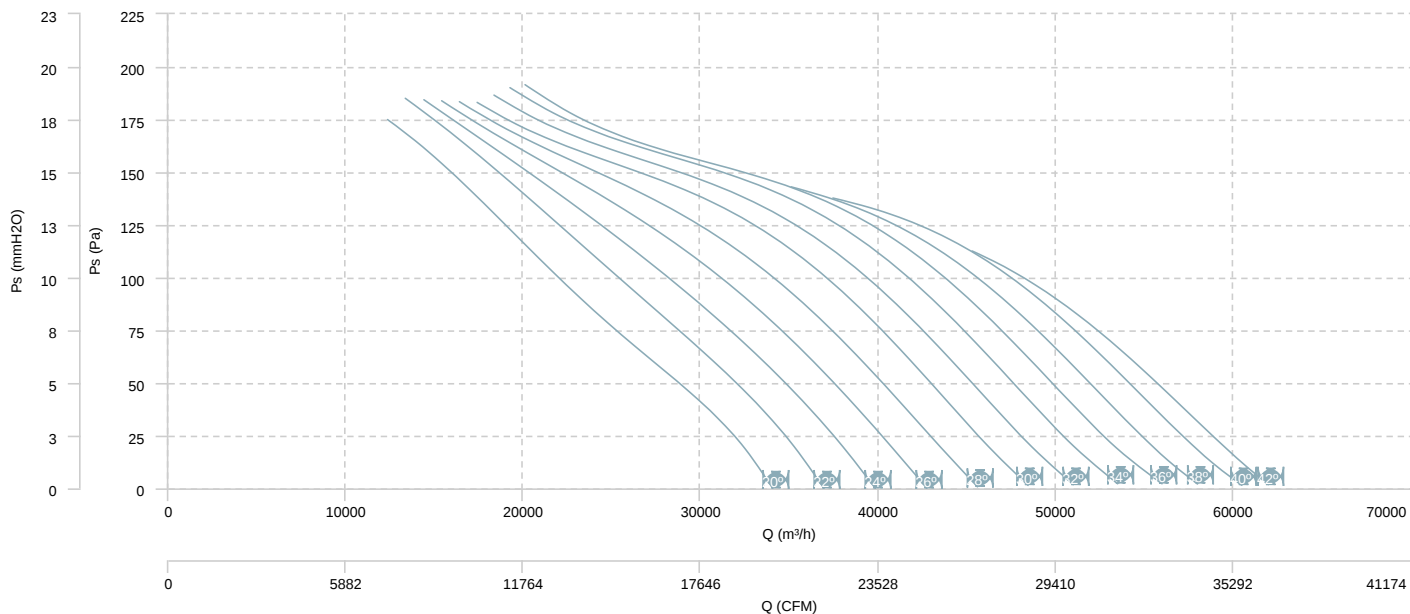


**AIR FLOW - MECHANICAL POWER (4 poles)**

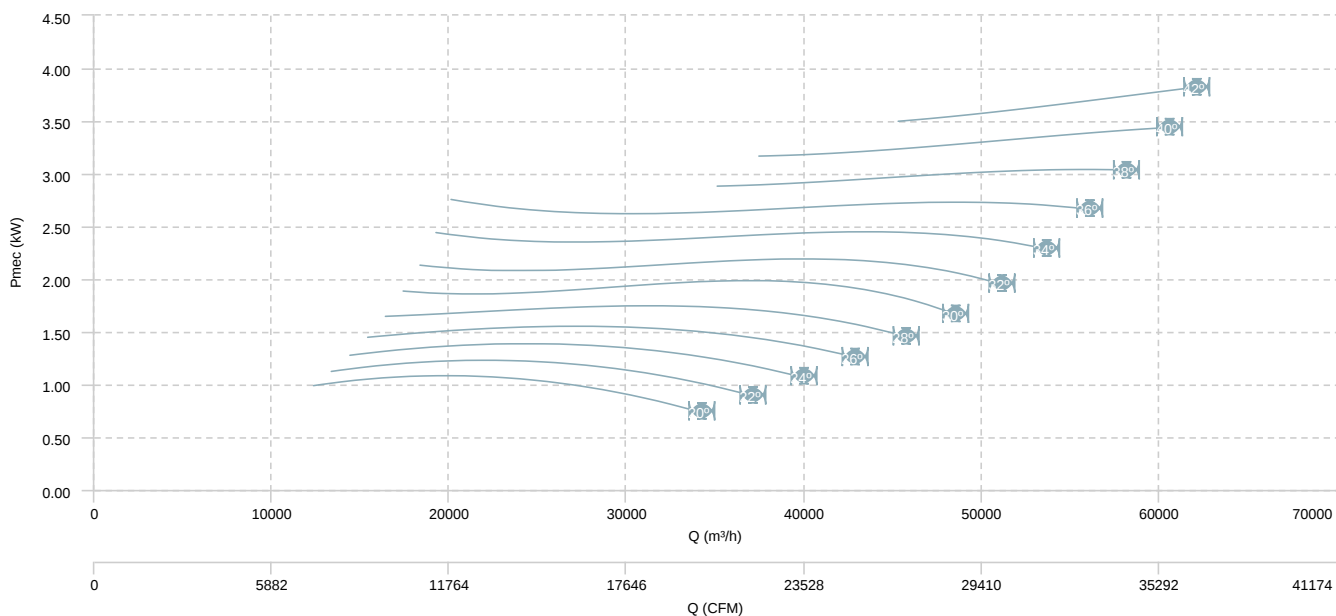


HBFX 125 T4/T8 (A3:4) F400

**AIR FLOW - PRESSURE (8 poles)**

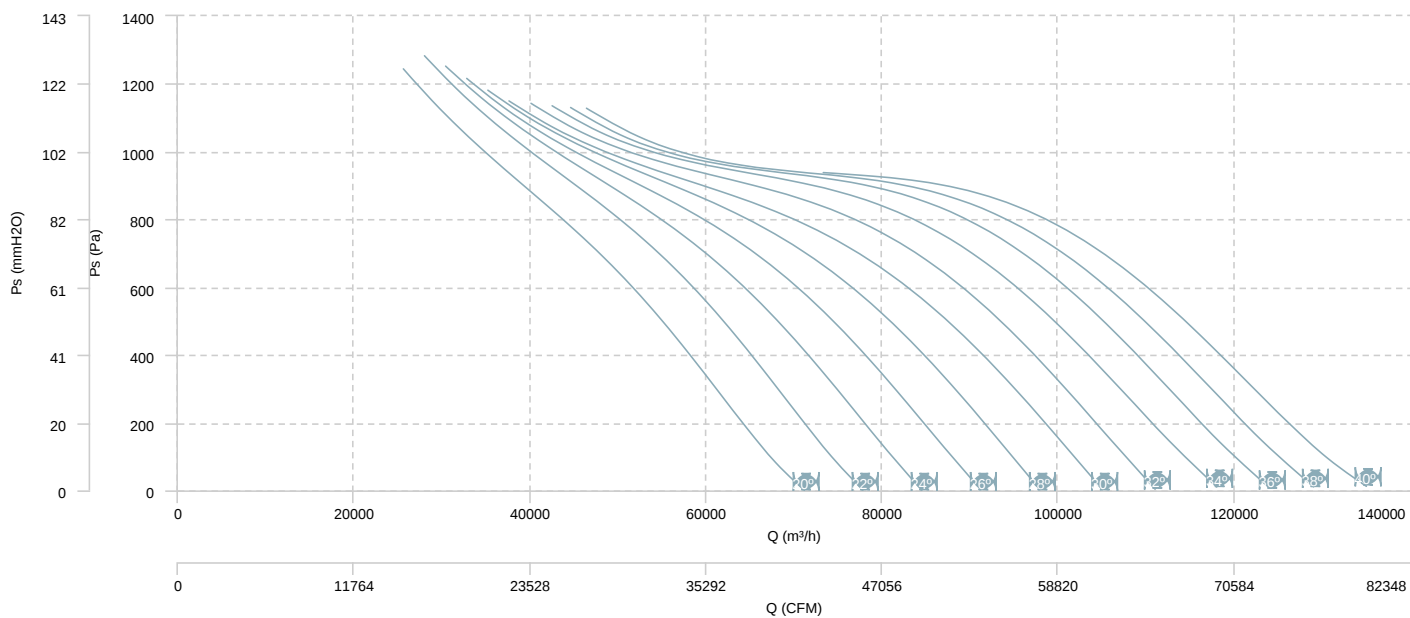


**AIR FLOW - MECHANICAL POWER (8 poles)**

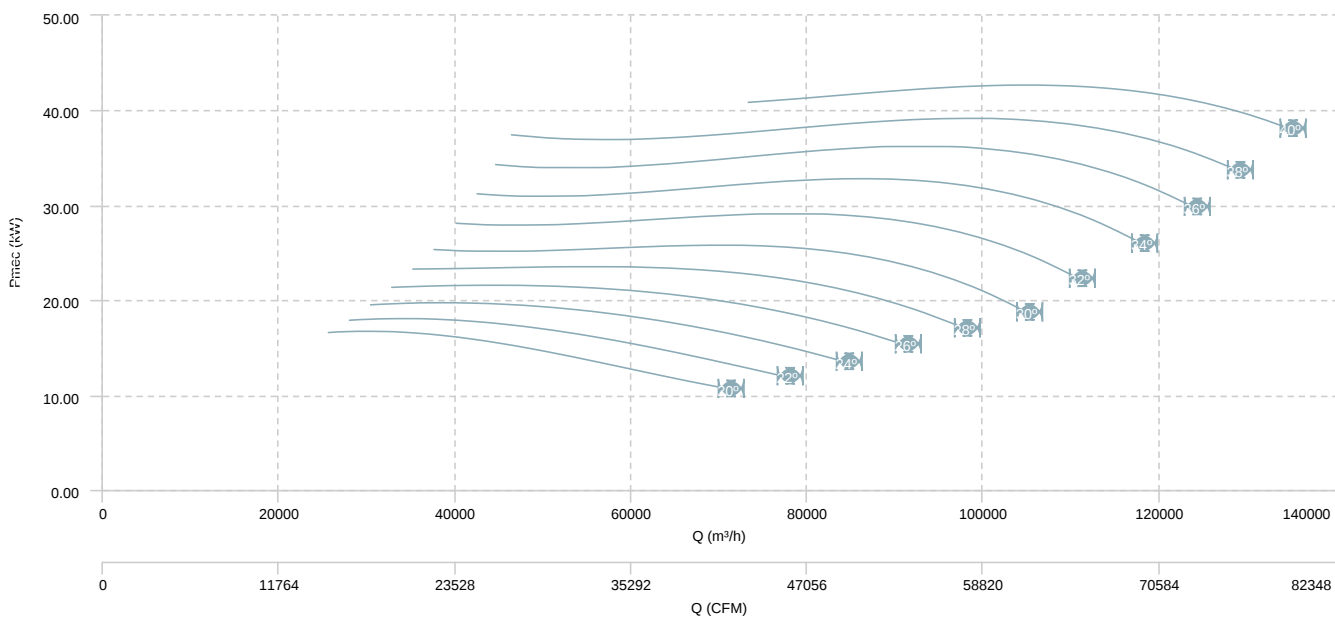


HBFX 125 T4/T8 (A3:8) F400

**AIR FLOW - PRESSURE (4 poles)**

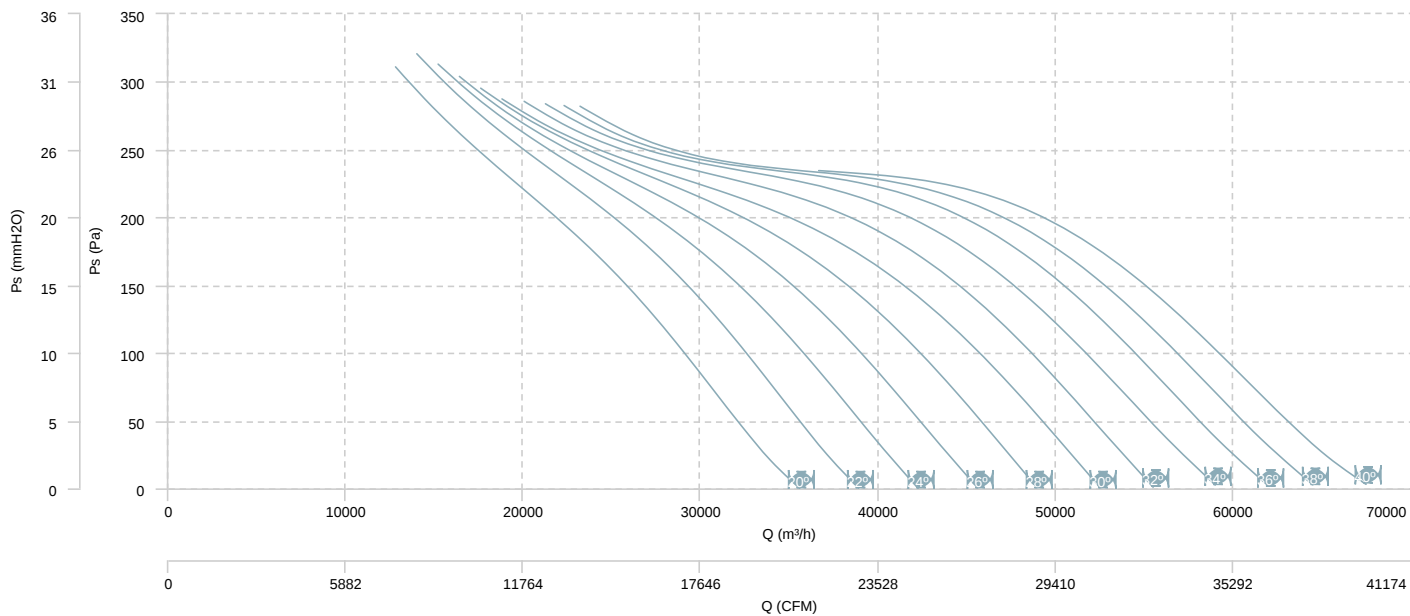


**AIR FLOW - MECHANICAL POWER (4 poles)**

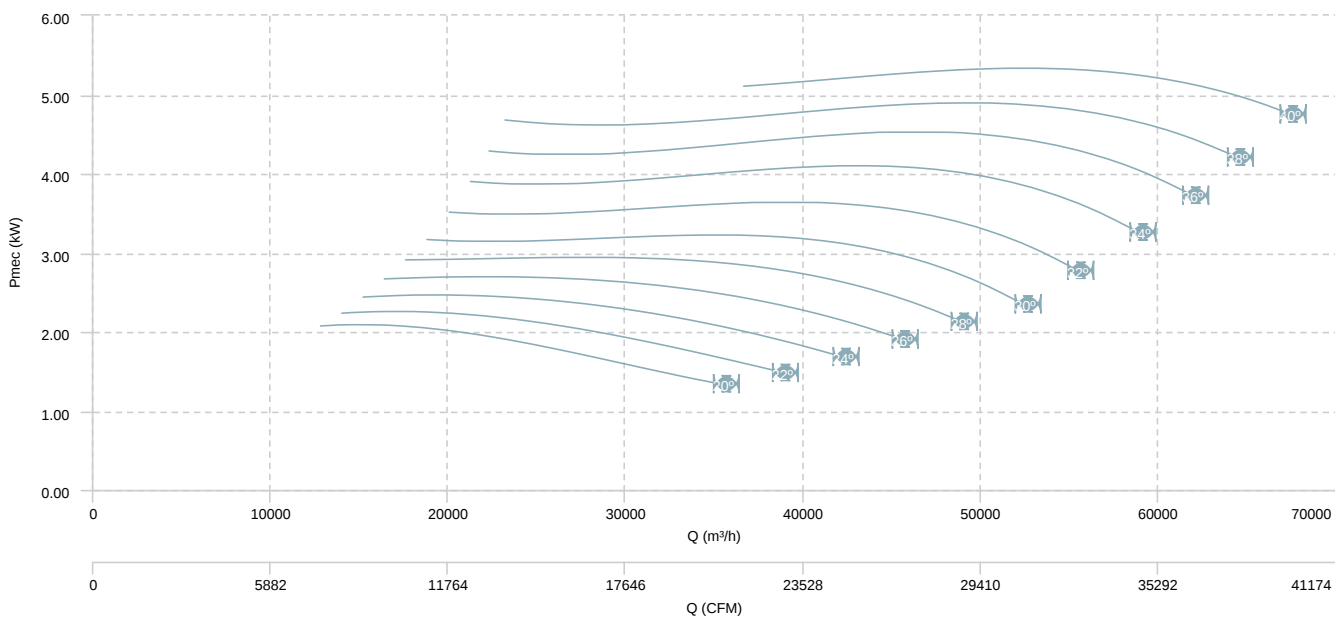


HBFX 125 T4/T8 (A3:8) F400

**AIR FLOW - PRESSURE (8 poles)**



**AIR FLOW - MECHANICAL POWER (8 poles)**



## Sound data

### Sound / 4 poles

| Sound power Lw dB (A)          |       |       |        |        |        |         |         |         |         |       |
|--------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                          |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 45 T4 (A5:6) F400 (20º)   | Inlet | 44    | 50     | 56     | 65     | 61      | 63      | 65      | 59      | 70    |
| HBFX 45 T4 (A5:6) F400 (25º)   | Inlet | 46    | 51     | 58     | 65     | 64      | 65      | 67      | 59      | 72    |
| HBFX 45 T4 (A5:6) F400 (27,5º) | Inlet | 47    | 52     | 59     | 65     | 65      | 66      | 67      | 59      | 72    |
| HBFX 45 T4 (A5:6) F400 (30º)   | Inlet | 49    | 54     | 61     | 65     | 67      | 68      | 69      | 60      | 74    |
| HBFX 45 T4 (A5:6) F400 (32,5º) | Inlet | 50    | 54     | 62     | 64     | 67      | 68      | 69      | 60      | 74    |
| HBFX 45 T4 (A5:6) F400 (35º)   | Inlet | 50    | 54     | 62     | 63     | 68      | 68      | 70      | 59      | 74    |
| HBFX 45 T4 (A5:6) F400 (37,5º) | Inlet | 52    | 55     | 64     | 65     | 69      | 69      | 71      | 61      | 76    |
| HBFX 45 T4 (A5:6) F400 (40º)   | Inlet | 53    | 57     | 65     | 67     | 70      | 70      | 72      | 63      | 77    |
| HBFX 45 T4 (A5:6) F400 (42,5º) | Inlet | 53    | 57     | 65     | 67     | 71      | 71      | 73      | 64      | 77    |
| HBFX 50 T4 (A5:6) F400 (25º)   | Inlet | 45    | 52     | 57     | 62     | 65      | 67      | 69      | 61      | 73    |
| HBFX 50 T4 (A5:6) F400 (27,5º) | Inlet | 46    | 53     | 58     | 63     | 66      | 68      | 70      | 62      | 74    |
| HBFX 50 T4 (A5:6) F400 (30º)   | Inlet | 48    | 53     | 60     | 64     | 67      | 68      | 71      | 62      | 75    |
| HBFX 50 T4 (A5:6) F400 (32,5º) | Inlet | 49    | 54     | 61     | 66     | 69      | 70      | 72      | 63      | 76    |
| HBFX 50 T4 (A5:6) F400 (35º)   | Inlet | 50    | 55     | 62     | 68     | 70      | 71      | 73      | 64      | 78    |
| HBFX 50 T4 (A5:6) F400 (37,5º) | Inlet | 50    | 57     | 62     | 68     | 70      | 71      | 73      | 64      | 78    |
| HBFX 50 T4 (A5:6) F400 (40º)   | Inlet | 50    | 57     | 62     | 68     | 70      | 71      | 73      | 64      | 78    |
| HBFX 50 T4 (A5:6) F400 (42,5º) | Inlet | 53    | 60     | 65     | 72     | 73      | 73      | 76      | 67      | 80    |
| HBFX 50 T4 (A5:6) F400 (45º)   | Inlet | 53    | 60     | 65     | 73     | 74      | 74      | 76      | 68      | 81    |
| HBFX 56 T4 (A5:6) F400 (20º)   | Inlet | 66    | 73     | 78     | 79     | 80      | 78      | 76      | 68      | 86    |
| HBFX 56 T4 (A5:6) F400 (25º)   | Inlet | 53    | 62     | 67     | 73     | 75      | 75      | 76      | 67      | 82    |
| HBFX 56 T4 (A5:6) F400 (30º)   | Inlet | 62    | 72     | 79     | 81     | 81      | 79      | 77      | 69      | 87    |
| HBFX 56 T4 (A5:6) F400 (35º)   | Inlet | 50    | 62     | 67     | 73     | 74      | 75      | 76      | 68      | 81    |
| HBFX 56 T4 (A5:6) F400 (40º)   | Inlet | 56    | 69     | 79     | 85     | 84      | 78      | 76      | 67      | 89    |
| HBFX 56 T4 (A5:6) F400 (45º)   | Inlet | 60    | 73     | 88     | 94     | 91      | 80      | 76      | 67      | 96    |
| HBFX 63 T4 (A5:6) F400 (20º)   | Inlet | 69    | 76     | 81     | 82     | 83      | 80      | 79      | 72      | 89    |
| HBFX 63 T4 (A5:6) F400 (25º)   | Inlet | 54    | 63     | 68     | 73     | 77      | 76      | 76      | 70      | 83    |
| HBFX 63 T4 (A5:6) F400 (30º)   | Inlet | 57    | 65     | 75     | 82     | 80      | 79      | 79      | 72      | 87    |
| HBFX 63 T4 (A5:6) F400 (35º)   | Inlet | 53    | 65     | 70     | 74     | 78      | 77      | 79      | 72      | 84    |
| HBFX 63 T4 (A5:6) F400 (40º)   | Inlet | 54    | 66     | 77     | 89     | 86      | 81      | 79      | 71      | 92    |
| HBFX 63 T4 (A5:6) F400 (45º)   | Inlet | 55    | 66     | 82     | 100    | 92      | 84      | 79      | 71      | 100   |
| HBFX 71 T4 (A5:6) F400 (20º)   | Inlet | 71    | 78     | 83     | 85     | 85      | 83      | 82      | 75      | 92    |
| HBFX 71 T4 (A5:6) F400 (25º)   | Inlet | 58    | 68     | 74     | 78     | 81      | 82      | 82      | 73      | 88    |
| HBFX 71 T4 (A5:6) F400 (30º)   | Inlet | 60    | 68     | 75     | 81     | 82      | 81      | 81      | 72      | 87    |
| HBFX 71 T4 (A5:6) F400 (35º)   | Inlet | 53    | 65     | 70     | 75     | 78      | 79      | 80      | 71      | 84    |
| HBFX 71 T4 (A5:6) F400 (40º)   | Inlet | 57    | 68     | 83     | 92     | 88      | 83      | 81      | 72      | 95    |

| Sound power Lw dB (A)         |       |       |        |        |        |         |         |         |         |       |
|-------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                         |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 71 T4 (A5:6) F400 (45º)  | Inlet | 61    | 70     | 92     | 105    | 96      | 87      | 83      | 72      | 105   |
| HBFX 80 T4 (A5:6) F400 (20º)  | Inlet | 74    | 81     | 86     | 88     | 88      | 86      | 85      | 78      | 94    |
| HBFX 80 T4 (A5:6) F400 (25º)  | Inlet | 61    | 68     | 74     | 79     | 81      | 81      | 82      | 74      | 88    |
| HBFX 80 T4 (A5:6) F400 (30º)  | Inlet | 61    | 72     | 79     | 89     | 87      | 85      | 85      | 77      | 93    |
| HBFX 80 T4 (A5:6) F400 (35º)  | Inlet | 58    | 70     | 76     | 84     | 89      | 87      | 87      | 78      | 94    |
| HBFX 80 T4 (A5:6) F400 (40º)  | Inlet | 59    | 72     | 88     | 93     | 90      | 86      | 84      | 76      | 97    |
| HBFX 80 T4 (A5:6) F400 (45º)  | Inlet | 60    | 74     | 97     | 100    | 91      | 86      | 82      | 75      | 102   |
| HBFX 90 T4 (A3:4) F400 (20º)  | Inlet | 56    | 68     | 73     | 83     | 88      | 88      | 86      | 78      | 93    |
| HBFX 90 T4 (A3:4) F400 (22º)  | Inlet | 60    | 69     | 74     | 83     | 87      | 87      | 85      | 77      | 92    |
| HBFX 90 T4 (A3:4) F400 (24º)  | Inlet | 63    | 70     | 75     | 83     | 86      | 86      | 85      | 77      | 91    |
| HBFX 90 T4 (A3:4) F400 (26º)  | Inlet | 64    | 71     | 77     | 83     | 85      | 85      | 84      | 76      | 91    |
| HBFX 90 T4 (A3:4) F400 (28º)  | Inlet | 65    | 72     | 78     | 82     | 83      | 84      | 84      | 76      | 90    |
| HBFX 90 T4 (A3:4) F400 (30º)  | Inlet | 66    | 73     | 79     | 82     | 82      | 83      | 83      | 75      | 89    |
| HBFX 90 T4 (A3:4) F400 (32º)  | Inlet | 66    | 73     | 78     | 82     | 83      | 83      | 83      | 74      | 89    |
| HBFX 90 T4 (A3:4) F400 (34º)  | Inlet | 65    | 72     | 78     | 81     | 83      | 84      | 82      | 74      | 89    |
| HBFX 90 T4 (A3:4) F400 (36º)  | Inlet | 66    | 73     | 78     | 81     | 84      | 84      | 82      | 74      | 90    |
| HBFX 90 T4 (A3:4) F400 (38º)  | Inlet | 67    | 74     | 79     | 82     | 85      | 85      | 83      | 75      | 91    |
| HBFX 90 T4 (A3:4) F400 (40º)  | Inlet | 68    | 75     | 80     | 82     | 87      | 85      | 84      | 77      | 91    |
| HBFX 90 T4 (A3:4) F400 (42º)  | Inlet | 69    | 76     | 82     | 84     | 88      | 86      | 84      | 78      | 93    |
| HBFX 90 T4 (A3:8) F400 (20º)  | Inlet | 69    | 81     | 90     | 91     | 93      | 88      | 88      | 78      | 98    |
| HBFX 90 T4 (A3:8) F400 (22º)  | Inlet | 69    | 80     | 88     | 90     | 92      | 88      | 88      | 78      | 97    |
| HBFX 90 T4 (A3:8) F400 (24º)  | Inlet | 69    | 79     | 86     | 89     | 91      | 88      | 88      | 78      | 96    |
| HBFX 90 T4 (A3:8) F400 (26º)  | Inlet | 69    | 77     | 84     | 88     | 90      | 88      | 87      | 79      | 95    |
| HBFX 90 T4 (A3:8) F400 (28º)  | Inlet | 69    | 76     | 82     | 87     | 89      | 88      | 87      | 79      | 94    |
| HBFX 90 T4 (A3:8) F400 (30º)  | Inlet | 68    | 75     | 80     | 86     | 88      | 88      | 87      | 79      | 94    |
| HBFX 90 T4 (A3:8) F400 (32º)  | Inlet | 67    | 74     | 80     | 85     | 87      | 88      | 86      | 78      | 93    |
| HBFX 90 T4 (A3:8) F400 (34º)  | Inlet | 66    | 74     | 79     | 84     | 86      | 87      | 85      | 77      | 92    |
| HBFX 90 T4 (A3:8) F400 (36º)  | Inlet | 67    | 74     | 80     | 83     | 86      | 87      | 85      | 77      | 92    |
| HBFX 90 T4 (A3:8) F400 (38º)  | Inlet | 69    | 76     | 81     | 83     | 87      | 87      | 84      | 77      | 92    |
| HBFX 90 T4 (A3:8) F400 (40º)  | Inlet | 70    | 77     | 83     | 84     | 88      | 87      | 84      | 77      | 93    |
| HBFX 90 T4 (A3:8) F400 (42º)  | Inlet | 70    | 78     | 83     | 84     | 88      | 88      | 85      | 78      | 93    |
| HBFX 100 T4 (A3:4) F400 (20º) | Inlet | 66    | 76     | 81     | 88     | 91      | 92      | 93      | 90      | 98    |
| HBFX 100 T4 (A3:4) F400 (22º) | Inlet | 66    | 76     | 82     | 88     | 91      | 92      | 93      | 90      | 98    |
| HBFX 100 T4 (A3:4) F400 (24º) | Inlet | 67    | 76     | 81     | 87     | 91      | 92      | 93      | 89      | 98    |
| HBFX 100 T4 (A3:4) F400 (26º) | Inlet | 67    | 75     | 81     | 87     | 90      | 91      | 93      | 88      | 97    |
| HBFX 100 T4 (A3:4) F400 (28º) | Inlet | 67    | 75     | 81     | 86     | 90      | 91      | 93      | 87      | 97    |
| HBFX 100 T4 (A3:4) F400 (30º) | Inlet | 68    | 74     | 81     | 86     | 90      | 91      | 93      | 86      | 97    |
| HBFX 100 T4 (A3:4) F400 (32º) | Inlet | 68    | 74     | 81     | 86     | 89      | 90      | 92      | 86      | 96    |
| HBFX 100 T4 (A3:4) F400 (34º) | Inlet | 69    | 73     | 81     | 85     | 88      | 90      | 91      | 85      | 96    |

| Sound power Lw dB (A)         |       |       |        |        |        |         |         |         |         |       |
|-------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                         |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 100 T4 (A3:4) F400 (36º) | Inlet | 69    | 73     | 81     | 86     | 88      | 90      | 91      | 85      | 96    |
| HBFX 100 T4 (A3:4) F400 (38º) | Inlet | 68    | 74     | 81     | 86     | 89      | 90      | 92      | 85      | 96    |
| HBFX 100 T4 (A3:4) F400 (40º) | Inlet | 68    | 75     | 81     | 87     | 90      | 91      | 92      | 86      | 97    |
| HBFX 100 T4 (A3:4) F400 (42º) | Inlet | 69    | 77     | 83     | 88     | 92      | 92      | 93      | 87      | 98    |
| HBFX 100 T4 (A3:8) F400 (20º) | Inlet | 72    | 81     | 92     | 102    | 100     | 99      | 100     | 95      | 107   |
| HBFX 100 T4 (A3:8) F400 (22º) | Inlet | 72    | 80     | 91     | 100    | 99      | 98      | 99      | 94      | 106   |
| HBFX 100 T4 (A3:8) F400 (24º) | Inlet | 72    | 79     | 89     | 97     | 97      | 97      | 98      | 93      | 104   |
| HBFX 100 T4 (A3:8) F400 (26º) | Inlet | 72    | 79     | 88     | 95     | 96      | 96      | 97      | 92      | 103   |
| HBFX 100 T4 (A3:8) F400 (28º) | Inlet | 72    | 79     | 87     | 93     | 96      | 95      | 96      | 91      | 102   |
| HBFX 100 T4 (A3:8) F400 (30º) | Inlet | 72    | 79     | 86     | 91     | 95      | 95      | 96      | 90      | 101   |
| HBFX 100 T4 (A3:8) F400 (32º) | Inlet | 71    | 79     | 84     | 90     | 93      | 94      | 95      | 89      | 100   |
| HBFX 100 T4 (A3:8) F400 (34º) | Inlet | 71    | 78     | 83     | 88     | 92      | 93      | 94      | 88      | 99    |
| HBFX 100 T4 (A3:8) F400 (36º) | Inlet | 70    | 77     | 82     | 87     | 91      | 93      | 94      | 87      | 99    |
| HBFX 100 T4 (A3:8) F400 (38º) | Inlet | 71    | 78     | 83     | 88     | 92      | 94      | 94      | 88      | 99    |
| HBFX 100 T4 (A3:8) F400 (40º) | Inlet | 71    | 79     | 84     | 89     | 92      | 94      | 95      | 89      | 100   |
| HBFX 100 T4 (A3:8) F400 (42º) | Inlet | 72    | 79     | 84     | 89     | 93      | 94      | 95      | 89      | 100   |
| HBFX 112 T4 (A3:4) F400 (20º) | Inlet | 66    | 78     | 83     | 90     | 94      | 94      | 96      | 92      | 101   |
| HBFX 112 T4 (A3:4) F400 (22º) | Inlet | 68    | 79     | 84     | 90     | 94      | 95      | 96      | 92      | 102   |
| HBFX 112 T4 (A3:4) F400 (24º) | Inlet | 69    | 78     | 83     | 90     | 93      | 94      | 96      | 91      | 101   |
| HBFX 112 T4 (A3:4) F400 (26º) | Inlet | 70    | 78     | 83     | 89     | 93      | 94      | 95      | 90      | 100   |
| HBFX 112 T4 (A3:4) F400 (28º) | Inlet | 71    | 78     | 83     | 89     | 92      | 93      | 95      | 89      | 99    |
| HBFX 112 T4 (A3:4) F400 (30º) | Inlet | 71    | 78     | 83     | 88     | 92      | 93      | 94      | 88      | 99    |
| HBFX 112 T4 (A3:4) F400 (32º) | Inlet | 70    | 77     | 82     | 88     | 91      | 92      | 94      | 87      | 98    |
| HBFX 112 T4 (A3:4) F400 (34º) | Inlet | 70    | 76     | 82     | 87     | 90      | 92      | 93      | 86      | 98    |
| HBFX 112 T4 (A3:4) F400 (36º) | Inlet | 71    | 76     | 83     | 87     | 90      | 92      | 93      | 86      | 98    |
| HBFX 112 T4 (A3:4) F400 (38º) | Inlet | 71    | 77     | 83     | 88     | 91      | 92      | 93      | 87      | 98    |
| HBFX 112 T4 (A3:4) F400 (40º) | Inlet | 72    | 79     | 84     | 89     | 91      | 93      | 94      | 87      | 99    |
| HBFX 112 T4 (A3:4) F400 (42º) | Inlet | 72    | 79     | 84     | 89     | 92      | 94      | 94      | 88      | 99    |
| HBFX 112 T4 (A3:8) F400 (20º) | Inlet | 73    | 82     | 92     | 101    | 101     | 103     | 103     | 97      | 109   |
| HBFX 112 T4 (A3:8) F400 (22º) | Inlet | 73    | 81     | 91     | 99     | 100     | 102     | 102     | 96      | 107   |
| HBFX 112 T4 (A3:8) F400 (24º) | Inlet | 73    | 81     | 90     | 97     | 99      | 101     | 101     | 95      | 106   |
| HBFX 112 T4 (A3:8) F400 (26º) | Inlet | 74    | 81     | 89     | 96     | 98      | 100     | 100     | 94      | 106   |
| HBFX 112 T4 (A3:8) F400 (28º) | Inlet | 74    | 81     | 88     | 94     | 98      | 99      | 99      | 94      | 105   |
| HBFX 112 T4 (A3:8) F400 (30º) | Inlet | 74    | 80     | 87     | 93     | 97      | 99      | 99      | 93      | 104   |
| HBFX 112 T4 (A3:8) F400 (32º) | Inlet | 74    | 81     | 86     | 91     | 96      | 97      | 97      | 91      | 103   |
| HBFX 112 T4 (A3:8) F400 (34º) | Inlet | 73    | 80     | 85     | 90     | 94      | 96      | 96      | 89      | 101   |
| HBFX 112 T4 (A3:8) F400 (36º) | Inlet | 73    | 80     | 85     | 90     | 93      | 95      | 95      | 89      | 101   |
| HBFX 112 T4 (A3:8) F400 (38º) | Inlet | 73    | 80     | 85     | 90     | 94      | 96      | 95      | 89      | 101   |
| HBFX 112 T4 (A3:8) F400 (40º) | Inlet | 74    | 81     | 86     | 90     | 94      | 96      | 95      | 90      | 102   |

| Sound power Lw dB (A)         |       |       |        |        |        |         |         |         |         |       |
|-------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                         |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 112 T4 (A3:8) F400 (42º) | Inlet | 73    | 80     | 85     | 91     | 94      | 96      | 95      | 89      | 101   |
| HBFX 125 T4 (A3:4) F400 (20º) | Inlet | 72    | 85     | 90     | 98     | 102     | 102     | 104     | 101     | 109   |
| HBFX 125 T4 (A3:4) F400 (22º) | Inlet | 75    | 86     | 91     | 98     | 102     | 103     | 105     | 101     | 109   |
| HBFX 125 T4 (A3:4) F400 (24º) | Inlet | 75    | 85     | 90     | 96     | 100     | 101     | 103     | 98      | 107   |
| HBFX 125 T4 (A3:4) F400 (26º) | Inlet | 76    | 84     | 89     | 94     | 98      | 99      | 101     | 96      | 106   |
| HBFX 125 T4 (A3:4) F400 (28º) | Inlet | 75    | 82     | 87     | 93     | 96      | 98      | 99      | 93      | 104   |
| HBFX 125 T4 (A3:4) F400 (30º) | Inlet | 74    | 81     | 86     | 91     | 95      | 96      | 97      | 91      | 102   |
| HBFX 125 T4 (A3:4) F400 (32º) | Inlet | 74    | 81     | 86     | 90     | 94      | 96      | 96      | 90      | 102   |
| HBFX 125 T4 (A3:4) F400 (34º) | Inlet | 73    | 80     | 85     | 90     | 93      | 95      | 96      | 88      | 101   |
| HBFX 125 T4 (A3:4) F400 (36º) | Inlet | 74    | 81     | 86     | 90     | 93      | 95      | 96      | 88      | 101   |
| HBFX 125 T4 (A3:4) F400 (38º) | Inlet | 74    | 81     | 86     | 91     | 93      | 95      | 96      | 89      | 101   |
| HBFX 125 T4 (A3:4) F400 (40º) | Inlet | 75    | 82     | 87     | 91     | 93      | 96      | 96      | 89      | 102   |
| HBFX 125 T4 (A3:4) F400 (42º) | Inlet | 75    | 82     | 87     | 92     | 94      | 96      | 96      | 90      | 102   |
| HBFX 125 T4 (A3:8) F400 (20º) | Inlet | 78    | 86     | 93     | 103    | 108     | 111     | 110     | 105     | 115   |
| HBFX 125 T4 (A3:8) F400 (22º) | Inlet | 79    | 86     | 93     | 102    | 107     | 110     | 109     | 104     | 114   |
| HBFX 125 T4 (A3:8) F400 (24º) | Inlet | 78    | 85     | 92     | 100    | 106     | 108     | 108     | 102     | 113   |
| HBFX 125 T4 (A3:8) F400 (26º) | Inlet | 78    | 85     | 91     | 98     | 104     | 106     | 106     | 100     | 111   |
| HBFX 125 T4 (A3:8) F400 (28º) | Inlet | 78    | 84     | 91     | 97     | 102     | 105     | 105     | 98      | 110   |
| HBFX 125 T4 (A3:8) F400 (30º) | Inlet | 77    | 83     | 90     | 96     | 101     | 103     | 104     | 97      | 108   |
| HBFX 125 T4 (A3:8) F400 (32º) | Inlet | 77    | 83     | 89     | 95     | 99      | 102     | 102     | 94      | 107   |
| HBFX 125 T4 (A3:8) F400 (34º) | Inlet | 77    | 83     | 89     | 94     | 97      | 99      | 100     | 92      | 105   |
| HBFX 125 T4 (A3:8) F400 (36º) | Inlet | 77    | 83     | 89     | 93     | 96      | 98      | 98      | 91      | 104   |
| HBFX 125 T4 (A3:8) F400 (38º) | Inlet | 76    | 83     | 88     | 93     | 96      | 98      | 97      | 91      | 104   |
| HBFX 125 T4 (A3:8) F400 (40º) | Inlet | 76    | 83     | 88     | 93     | 96      | 98      | 97      | 90      | 103   |
| HBFX 125 T4 (A3:8) F400 (42º) | Inlet | 76    | 83     | 88     | 93     | 96      | 98      | 96      | 90      | 103   |

## Sound / 6 poles

| Sound power Lw dB (A)          |       |       |        |        |        |         |         |         |         |       |
|--------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                          |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 45 T6 (A5:6) F400 (25º)   | Inlet | 37    | 42     | 49     | 55     | 54      | 55      | 57      | 50      | 62    |
| HBFX 45 T6 (A5:6) F400 (27,5º) | Inlet | 38    | 43     | 50     | 55     | 55      | 56      | 58      | 50      | 63    |
| HBFX 45 T6 (A5:6) F400 (30º)   | Inlet | 40    | 44     | 52     | 55     | 57      | 58      | 59      | 50      | 64    |
| HBFX 45 T6 (A5:6) F400 (32,5º) | Inlet | 40    | 44     | 52     | 55     | 58      | 58      | 60      | 50      | 65    |
| HBFX 45 T6 (A5:6) F400 (35º)   | Inlet | 41    | 45     | 53     | 54     | 59      | 59      | 60      | 50      | 65    |
| HBFX 45 T6 (A5:6) F400 (37,5º) | Inlet | 42    | 46     | 54     | 56     | 60      | 60      | 61      | 52      | 66    |
| HBFX 45 T6 (A5:6) F400 (40º)   | Inlet | 44    | 47     | 56     | 57     | 61      | 61      | 63      | 54      | 67    |
| HBFX 45 T6 (A5:6) F400 (42,5º) | Inlet | 43    | 47     | 55     | 58     | 62      | 62      | 63      | 55      | 68    |

| Sound power Lw dB (A)          |       |       |        |        |        |         |         |         |         |       |
|--------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                          |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 45 T6 (A5:6) F400 (45º)   | Inlet | 43    | 47     | 55     | 58     | 62      | 62      | 63      | 55      | 68    |
| HBFX 50 T6 (A5:6) F400 (25º)   | Inlet | 36    | 43     | 48     | 53     | 55      | 58      | 60      | 52      | 64    |
| HBFX 50 T6 (A5:6) F400 (27,5º) | Inlet | 37    | 43     | 49     | 53     | 56      | 58      | 61      | 52      | 64    |
| HBFX 50 T6 (A5:6) F400 (30º)   | Inlet | 39    | 44     | 51     | 55     | 58      | 59      | 62      | 53      | 66    |
| HBFX 50 T6 (A5:6) F400 (32,5º) | Inlet | 40    | 45     | 52     | 57     | 59      | 60      | 63      | 54      | 67    |
| HBFX 50 T6 (A5:6) F400 (35º)   | Inlet | 40    | 45     | 52     | 59     | 61      | 62      | 64      | 55      | 68    |
| HBFX 50 T6 (A5:6) F400 (37,5º) | Inlet | 41    | 48     | 53     | 59     | 61      | 62      | 64      | 55      | 68    |
| HBFX 50 T6 (A5:6) F400 (40º)   | Inlet | 41    | 48     | 53     | 59     | 61      | 62      | 64      | 55      | 68    |
| HBFX 50 T6 (A5:6) F400 (42,5º) | Inlet | 43    | 50     | 55     | 62     | 63      | 64      | 66      | 58      | 71    |
| HBFX 50 T6 (A5:6) F400 (45º)   | Inlet | 44    | 51     | 56     | 64     | 65      | 65      | 67      | 59      | 72    |
| HBFX 56 T6 (A5:6) F400 (20º)   | Inlet | 63    | 70     | 75     | 76     | 77      | 75      | 73      | 65      | 82    |
| HBFX 56 T6 (A5:6) F400 (25º)   | Inlet | 50    | 59     | 64     | 70     | 72      | 72      | 73      | 64      | 78    |
| HBFX 56 T6 (A5:6) F400 (30º)   | Inlet | 58    | 68     | 75     | 77     | 78      | 76      | 74      | 66      | 83    |
| HBFX 56 T6 (A5:6) F400 (35º)   | Inlet | 47    | 58     | 63     | 69     | 70      | 71      | 72      | 64      | 78    |
| HBFX 56 T6 (A5:6) F400 (40º)   | Inlet | 53    | 66     | 76     | 81     | 81      | 75      | 73      | 64      | 85    |
| HBFX 56 T6 (A5:6) F400 (45º)   | Inlet | 57    | 69     | 84     | 90     | 88      | 77      | 73      | 63      | 93    |
| HBFX 63 T6 (A5:6) F400 (20º)   | Inlet | 66    | 73     | 78     | 79     | 80      | 77      | 76      | 69      | 85    |
| HBFX 63 T6 (A5:6) F400 (25º)   | Inlet | 51    | 60     | 65     | 70     | 74      | 73      | 73      | 67      | 79    |
| HBFX 63 T6 (A5:6) F400 (30º)   | Inlet | 54    | 62     | 72     | 79     | 77      | 76      | 76      | 69      | 83    |
| HBFX 63 T6 (A5:6) F400 (35º)   | Inlet | 50    | 62     | 67     | 71     | 75      | 74      | 76      | 69      | 81    |
| HBFX 63 T6 (A5:6) F400 (40º)   | Inlet | 51    | 63     | 74     | 86     | 83      | 78      | 76      | 68      | 88    |
| HBFX 63 T6 (A5:6) F400 (45º)   | Inlet | 52    | 63     | 79     | 96     | 88      | 81      | 76      | 67      | 97    |
| HBFX 71 T6 (A5:6) F400 (20º)   | Inlet | 68    | 75     | 80     | 82     | 82      | 80      | 79      | 72      | 88    |
| HBFX 71 T6 (A5:6) F400 (25º)   | Inlet | 55    | 65     | 71     | 75     | 78      | 79      | 79      | 70      | 84    |
| HBFX 71 T6 (A5:6) F400 (30º)   | Inlet | 57    | 65     | 71     | 77     | 78      | 78      | 77      | 68      | 84    |
| HBFX 71 T6 (A5:6) F400 (35º)   | Inlet | 49    | 61     | 66     | 71     | 74      | 75      | 76      | 67      | 81    |
| HBFX 71 T6 (A5:6) F400 (40º)   | Inlet | 54    | 64     | 79     | 89     | 85      | 80      | 78      | 68      | 91    |
| HBFX 71 T6 (A5:6) F400 (45º)   | Inlet | 57    | 66     | 88     | 101    | 92      | 83      | 79      | 69      | 102   |
| HBFX 80 T6 (A5:6) F400 (20º)   | Inlet | 71    | 78     | 83     | 85     | 85      | 83      | 82      | 75      | 91    |
| HBFX 80 T6 (A5:6) F400 (25º)   | Inlet | 58    | 65     | 71     | 76     | 78      | 78      | 79      | 71      | 84    |
| HBFX 80 T6 (A5:6) F400 (30º)   | Inlet | 58    | 69     | 76     | 86     | 84      | 82      | 82      | 74      | 90    |
| HBFX 80 T6 (A5:6) F400 (35º)   | Inlet | 55    | 67     | 73     | 81     | 86      | 84      | 84      | 75      | 90    |
| HBFX 80 T6 (A5:6) F400 (40º)   | Inlet | 56    | 69     | 85     | 90     | 87      | 83      | 81      | 73      | 93    |
| HBFX 80 T6 (A5:6) F400 (45º)   | Inlet | 56    | 70     | 93     | 96     | 87      | 82      | 79      | 71      | 98    |
| HBFX 90 T6 (A3:4) F400 (20º)   | Inlet | 47    | 58     | 64     | 74     | 78      | 78      | 77      | 68      | 83    |
| HBFX 90 T6 (A3:4) F400 (22º)   | Inlet | 51    | 59     | 65     | 74     | 77      | 77      | 76      | 68      | 83    |
| HBFX 90 T6 (A3:4) F400 (24º)   | Inlet | 53    | 60     | 66     | 73     | 76      | 76      | 75      | 67      | 82    |
| HBFX 90 T6 (A3:4) F400 (26º)   | Inlet | 55    | 62     | 67     | 73     | 75      | 75      | 75      | 67      | 81    |
| HBFX 90 T6 (A3:4) F400 (28º)   | Inlet | 56    | 63     | 68     | 73     | 74      | 74      | 74      | 66      | 81    |

| Sound power Lw dB (A)         |       |       |        |        |        |         |         |         |         |       |
|-------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                         |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 90 T6 (A3:4) F400 (30º)  | Inlet | 57    | 64     | 69     | 73     | 73      | 73      | 74      | 66      | 80    |
| HBFX 90 T6 (A3:4) F400 (32º)  | Inlet | 56    | 63     | 69     | 72     | 73      | 74      | 73      | 65      | 80    |
| HBFX 90 T6 (A3:4) F400 (34º)  | Inlet | 56    | 63     | 68     | 72     | 74      | 75      | 73      | 64      | 80    |
| HBFX 90 T6 (A3:4) F400 (36º)  | Inlet | 56    | 63     | 69     | 72     | 75      | 75      | 73      | 65      | 80    |
| HBFX 90 T6 (A3:4) F400 (38º)  | Inlet | 57    | 64     | 70     | 72     | 76      | 75      | 74      | 66      | 81    |
| HBFX 90 T6 (A3:4) F400 (40º)  | Inlet | 58    | 66     | 71     | 73     | 77      | 75      | 74      | 67      | 82    |
| HBFX 90 T6 (A3:4) F400 (42º)  | Inlet | 60    | 67     | 72     | 74     | 78      | 77      | 75      | 68      | 83    |
| HBFX 90 T6 (A3:8) F400 (20º)  | Inlet | 59    | 72     | 81     | 82     | 84      | 78      | 79      | 68      | 88    |
| HBFX 90 T6 (A3:8) F400 (22º)  | Inlet | 60    | 70     | 79     | 81     | 83      | 78      | 78      | 69      | 87    |
| HBFX 90 T6 (A3:8) F400 (24º)  | Inlet | 60    | 69     | 77     | 80     | 82      | 78      | 78      | 69      | 86    |
| HBFX 90 T6 (A3:8) F400 (26º)  | Inlet | 60    | 68     | 75     | 79     | 81      | 79      | 78      | 69      | 86    |
| HBFX 90 T6 (A3:8) F400 (28º)  | Inlet | 60    | 67     | 73     | 78     | 80      | 79      | 78      | 69      | 85    |
| HBFX 90 T6 (A3:8) F400 (30º)  | Inlet | 58    | 65     | 71     | 77     | 79      | 79      | 78      | 70      | 84    |
| HBFX 90 T6 (A3:8) F400 (32º)  | Inlet | 58    | 65     | 70     | 75     | 78      | 78      | 77      | 69      | 84    |
| HBFX 90 T6 (A3:8) F400 (34º)  | Inlet | 57    | 64     | 70     | 74     | 77      | 78      | 76      | 68      | 83    |
| HBFX 90 T6 (A3:8) F400 (36º)  | Inlet | 58    | 65     | 70     | 74     | 77      | 78      | 75      | 67      | 83    |
| HBFX 90 T6 (A3:8) F400 (38º)  | Inlet | 59    | 66     | 72     | 74     | 78      | 78      | 75      | 68      | 83    |
| HBFX 90 T6 (A3:8) F400 (40º)  | Inlet | 61    | 68     | 73     | 74     | 78      | 78      | 75      | 68      | 83    |
| HBFX 90 T6 (A3:8) F400 (42º)  | Inlet | 61    | 68     | 74     | 75     | 79      | 79      | 75      | 68      | 84    |
| HBFX 100 T6 (A3:4) F400 (20º) | Inlet | 56    | 67     | 72     | 78     | 82      | 83      | 84      | 81      | 89    |
| HBFX 100 T6 (A3:4) F400 (22º) | Inlet | 57    | 67     | 72     | 78     | 82      | 83      | 84      | 80      | 89    |
| HBFX 100 T6 (A3:4) F400 (24º) | Inlet | 57    | 66     | 72     | 78     | 82      | 82      | 84      | 79      | 89    |
| HBFX 100 T6 (A3:4) F400 (26º) | Inlet | 57    | 66     | 71     | 77     | 81      | 82      | 83      | 78      | 88    |
| HBFX 100 T6 (A3:4) F400 (28º) | Inlet | 58    | 65     | 71     | 77     | 81      | 81      | 83      | 78      | 88    |
| HBFX 100 T6 (A3:4) F400 (30º) | Inlet | 58    | 65     | 71     | 77     | 80      | 81      | 83      | 77      | 87    |
| HBFX 100 T6 (A3:4) F400 (32º) | Inlet | 59    | 64     | 71     | 76     | 79      | 81      | 83      | 76      | 87    |
| HBFX 100 T6 (A3:4) F400 (34º) | Inlet | 59    | 63     | 71     | 76     | 79      | 80      | 82      | 76      | 86    |
| HBFX 100 T6 (A3:4) F400 (36º) | Inlet | 59    | 64     | 71     | 76     | 79      | 80      | 82      | 76      | 86    |
| HBFX 100 T6 (A3:4) F400 (38º) | Inlet | 59    | 65     | 72     | 77     | 80      | 81      | 82      | 76      | 87    |
| HBFX 100 T6 (A3:4) F400 (40º) | Inlet | 59    | 66     | 72     | 77     | 81      | 81      | 83      | 76      | 87    |
| HBFX 100 T6 (A3:4) F400 (42º) | Inlet | 60    | 67     | 73     | 79     | 82      | 82      | 83      | 78      | 89    |
| HBFX 100 T6 (A3:8) F400 (20º) | Inlet | 63    | 71     | 83     | 92     | 91      | 89      | 90      | 86      | 97    |
| HBFX 100 T6 (A3:8) F400 (22º) | Inlet | 63    | 71     | 82     | 90     | 89      | 88      | 89      | 85      | 96    |
| HBFX 100 T6 (A3:8) F400 (24º) | Inlet | 62    | 70     | 80     | 88     | 88      | 87      | 88      | 83      | 94    |
| HBFX 100 T6 (A3:8) F400 (26º) | Inlet | 62    | 70     | 79     | 86     | 87      | 87      | 87      | 82      | 93    |
| HBFX 100 T6 (A3:8) F400 (28º) | Inlet | 62    | 70     | 78     | 84     | 86      | 86      | 87      | 81      | 92    |
| HBFX 100 T6 (A3:8) F400 (30º) | Inlet | 62    | 69     | 77     | 82     | 85      | 86      | 86      | 80      | 92    |
| HBFX 100 T6 (A3:8) F400 (32º) | Inlet | 62    | 69     | 75     | 80     | 84      | 85      | 85      | 79      | 90    |
| HBFX 100 T6 (A3:8) F400 (34º) | Inlet | 61    | 68     | 73     | 78     | 82      | 84      | 85      | 78      | 89    |

| Sound power Lw dB (A)         |       |       |        |        |        |         |         |         |         |       |
|-------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                         |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 100 T6 (A3:8) F400 (36º) | Inlet | 61    | 68     | 73     | 78     | 82      | 84      | 84      | 78      | 89    |
| HBFX 100 T6 (A3:8) F400 (38º) | Inlet | 61    | 68     | 73     | 79     | 82      | 84      | 85      | 79      | 90    |
| HBFX 100 T6 (A3:8) F400 (40º) | Inlet | 62    | 69     | 74     | 79     | 83      | 85      | 85      | 79      | 90    |
| HBFX 100 T6 (A3:8) F400 (42º) | Inlet | 62    | 69     | 74     | 80     | 83      | 85      | 85      | 79      | 90    |
| HBFX 112 T6 (A3:4) F400 (20º) | Inlet | 56    | 68     | 73     | 80     | 84      | 85      | 87      | 82      | 91    |
| HBFX 112 T6 (A3:4) F400 (22º) | Inlet | 58    | 69     | 74     | 81     | 85      | 85      | 87      | 82      | 92    |
| HBFX 112 T6 (A3:4) F400 (24º) | Inlet | 59    | 69     | 74     | 80     | 84      | 85      | 86      | 81      | 91    |
| HBFX 112 T6 (A3:4) F400 (26º) | Inlet | 60    | 69     | 74     | 80     | 83      | 84      | 86      | 80      | 90    |
| HBFX 112 T6 (A3:4) F400 (28º) | Inlet | 61    | 69     | 74     | 79     | 83      | 84      | 85      | 79      | 90    |
| HBFX 112 T6 (A3:4) F400 (30º) | Inlet | 61    | 68     | 73     | 79     | 82      | 83      | 85      | 78      | 89    |
| HBFX 112 T6 (A3:4) F400 (32º) | Inlet | 61    | 67     | 73     | 78     | 81      | 83      | 84      | 78      | 89    |
| HBFX 112 T6 (A3:4) F400 (34º) | Inlet | 61    | 66     | 73     | 78     | 81      | 82      | 84      | 77      | 88    |
| HBFX 112 T6 (A3:4) F400 (36º) | Inlet | 61    | 67     | 73     | 78     | 81      | 82      | 84      | 77      | 88    |
| HBFX 112 T6 (A3:4) F400 (38º) | Inlet | 62    | 68     | 74     | 78     | 81      | 83      | 84      | 77      | 89    |
| HBFX 112 T6 (A3:4) F400 (40º) | Inlet | 63    | 69     | 75     | 79     | 82      | 84      | 84      | 78      | 89    |
| HBFX 112 T6 (A3:4) F400 (42º) | Inlet | 63    | 70     | 75     | 80     | 83      | 84      | 85      | 78      | 90    |
| HBFX 112 T6 (A3:8) F400 (20º) | Inlet | 64    | 72     | 82     | 91     | 91      | 93      | 93      | 88      | 99    |
| HBFX 112 T6 (A3:8) F400 (22º) | Inlet | 64    | 72     | 81     | 89     | 90      | 92      | 92      | 87      | 98    |
| HBFX 112 T6 (A3:8) F400 (24º) | Inlet | 64    | 71     | 80     | 88     | 90      | 91      | 91      | 86      | 96    |
| HBFX 112 T6 (A3:8) F400 (26º) | Inlet | 64    | 71     | 79     | 86     | 89      | 90      | 90      | 85      | 96    |
| HBFX 112 T6 (A3:8) F400 (28º) | Inlet | 64    | 71     | 79     | 85     | 89      | 90      | 90      | 84      | 95    |
| HBFX 112 T6 (A3:8) F400 (30º) | Inlet | 65    | 71     | 78     | 83     | 88      | 89      | 89      | 84      | 94    |
| HBFX 112 T6 (A3:8) F400 (32º) | Inlet | 64    | 71     | 77     | 82     | 86      | 88      | 88      | 82      | 93    |
| HBFX 112 T6 (A3:8) F400 (34º) | Inlet | 64    | 71     | 76     | 81     | 84      | 86      | 87      | 80      | 92    |
| HBFX 112 T6 (A3:8) F400 (36º) | Inlet | 63    | 70     | 75     | 80     | 84      | 86      | 86      | 79      | 91    |
| HBFX 112 T6 (A3:8) F400 (38º) | Inlet | 64    | 71     | 76     | 81     | 84      | 86      | 86      | 80      | 91    |
| HBFX 112 T6 (A3:8) F400 (40º) | Inlet | 64    | 71     | 76     | 81     | 85      | 87      | 86      | 80      | 92    |
| HBFX 112 T6 (A3:8) F400 (42º) | Inlet | 64    | 71     | 76     | 81     | 85      | 86      | 86      | 79      | 91    |
| HBFX 125 T6 (A3:4) F400 (20º) | Inlet | 63    | 76     | 81     | 89     | 92      | 92      | 94      | 91      | 99    |
| HBFX 125 T6 (A3:4) F400 (22º) | Inlet | 65    | 77     | 82     | 89     | 92      | 93      | 95      | 91      | 99    |
| HBFX 125 T6 (A3:4) F400 (24º) | Inlet | 66    | 75     | 80     | 87     | 90      | 91      | 93      | 88      | 98    |
| HBFX 125 T6 (A3:4) F400 (26º) | Inlet | 66    | 74     | 79     | 85     | 89      | 90      | 91      | 86      | 96    |
| HBFX 125 T6 (A3:4) F400 (28º) | Inlet | 66    | 73     | 78     | 83     | 87      | 88      | 89      | 84      | 94    |
| HBFX 125 T6 (A3:4) F400 (30º) | Inlet | 65    | 72     | 77     | 81     | 85      | 87      | 88      | 81      | 92    |
| HBFX 125 T6 (A3:4) F400 (32º) | Inlet | 64    | 71     | 76     | 81     | 84      | 86      | 87      | 80      | 92    |
| HBFX 125 T6 (A3:4) F400 (34º) | Inlet | 64    | 71     | 76     | 81     | 84      | 85      | 86      | 79      | 91    |
| HBFX 125 T6 (A3:4) F400 (36º) | Inlet | 64    | 71     | 76     | 81     | 83      | 85      | 86      | 79      | 91    |
| HBFX 125 T6 (A3:4) F400 (38º) | Inlet | 65    | 72     | 77     | 81     | 84      | 86      | 86      | 79      | 91    |
| HBFX 125 T6 (A3:4) F400 (40º) | Inlet | 65    | 72     | 77     | 82     | 84      | 86      | 87      | 80      | 92    |

| Sound power Lw dB (A)         |       |       |        |        |        |         |         |         |         |       |
|-------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                         |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 125 T6 (A3:4) F400 (42º) | Inlet | 66    | 73     | 78     | 82     | 85      | 87      | 87      | 81      | 92    |
| HBFX 125 T6 (A3:8) F400 (20º) | Inlet | 69    | 77     | 84     | 93     | 98      | 101     | 101     | 95      | 106   |
| HBFX 125 T6 (A3:8) F400 (22º) | Inlet | 69    | 77     | 84     | 92     | 97      | 100     | 99      | 94      | 105   |
| HBFX 125 T6 (A3:8) F400 (24º) | Inlet | 69    | 76     | 83     | 90     | 96      | 98      | 98      | 92      | 103   |
| HBFX 125 T6 (A3:8) F400 (26º) | Inlet | 69    | 75     | 82     | 89     | 94      | 97      | 96      | 90      | 102   |
| HBFX 125 T6 (A3:8) F400 (28º) | Inlet | 68    | 74     | 81     | 87     | 93      | 95      | 95      | 89      | 100   |
| HBFX 125 T6 (A3:8) F400 (30º) | Inlet | 68    | 74     | 80     | 86     | 91      | 93      | 94      | 87      | 98    |
| HBFX 125 T6 (A3:8) F400 (32º) | Inlet | 68    | 74     | 80     | 85     | 90      | 92      | 92      | 85      | 97    |
| HBFX 125 T6 (A3:8) F400 (34º) | Inlet | 68    | 74     | 80     | 84     | 88      | 90      | 90      | 83      | 95    |
| HBFX 125 T6 (A3:8) F400 (36º) | Inlet | 67    | 74     | 79     | 84     | 87      | 89      | 89      | 82      | 94    |
| HBFX 125 T6 (A3:8) F400 (38º) | Inlet | 67    | 74     | 79     | 84     | 87      | 89      | 88      | 81      | 94    |
| HBFX 125 T6 (A3:8) F400 (40º) | Inlet | 67    | 74     | 79     | 83     | 87      | 89      | 87      | 81      | 93    |
| HBFX 125 T6 (A3:8) F400 (42º) | Inlet | 67    | 74     | 79     | 84     | 87      | 88      | 87      | 81      | 93    |

## Sound / 4/8 poles

| Sound power Lw dB (A)                    |       |       |        |        |        |         |         |         |         |       |
|------------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                    |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 45 T4/T8 (A5:6) F400 (±720 - 20º)   | Inlet | 28    | 33     | 40     | 47     | 49      | 51      | 49      | 41      | 56    |
| HBFX 45 T4/T8 (A5:6) F400 (±720 - 25º)   | Inlet | 29    | 35     | 42     | 47     | 50      | 50      | 50      | 41      | 56    |
| HBFX 45 T4/T8 (A5:6) F400 (±720 - 27,5º) | Inlet | 30    | 37     | 44     | 47     | 50      | 49      | 51      | 41      | 56    |
| HBFX 45 T4/T8 (A5:6) F400 (±720 - 30º)   | Inlet | 30    | 38     | 45     | 47     | 50      | 49      | 51      | 41      | 56    |
| HBFX 45 T4/T8 (A5:6) F400 (±720 - 32,5º) | Inlet | 28    | 38     | 45     | 46     | 49      | 48      | 50      | 41      | 55    |
| HBFX 45 T4/T8 (A5:6) F400 (±720 - 35º)   | Inlet | 26    | 37     | 46     | 46     | 47      | 46      | 49      | 40      | 54    |
| HBFX 45 T4/T8 (A5:6) F400 (±720 - 37,5º) | Inlet | 27    | 38     | 46     | 46     | 49      | 48      | 50      | 41      | 55    |
| HBFX 45 T4/T8 (A5:6) F400 (±720 - 40º)   | Inlet | 28    | 38     | 45     | 47     | 50      | 49      | 51      | 41      | 56    |
| HBFX 45 T4/T8 (A5:6) F400 (±720 - 42,5º) | Inlet | 29    | 38     | 45     | 47     | 51      | 50      | 51      | 41      | 57    |
| HBFX 45 T4/T8 (A5:6) F400 (±720 - 45º)   | Inlet | 30    | 37     | 43     | 47     | 52      | 52      | 52      | 41      | 58    |
| HBFX 45 T4/T8 (A5:6) F400 (1420 - 20º)   | Inlet | 45    | 50     | 57     | 64     | 66      | 67      | 66      | 57      | 72    |

| Sound power Lw dB (A)                    |       |       |        |        |        |         |         |         |         |       |
|------------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                    |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 45 T4/T8 (A5:6) F400 (1420 - 25°)   | Inlet | 46    | 52     | 59     | 64     | 66      | 67      | 67      | 58      | 72    |
| HBFX 45 T4/T8 (A5:6) F400 (1420 - 27,5°) | Inlet | 46    | 54     | 61     | 64     | 66      | 66      | 68      | 58      | 73    |
| HBFX 45 T4/T8 (A5:6) F400 (1420 - 30°)   | Inlet | 46    | 55     | 62     | 64     | 67      | 66      | 68      | 58      | 73    |
| HBFX 45 T4/T8 (A5:6) F400 (1420 - 32,5°) | Inlet | 45    | 54     | 62     | 63     | 65      | 64      | 67      | 57      | 72    |
| HBFX 45 T4/T8 (A5:6) F400 (1420 - 35°)   | Inlet | 43    | 54     | 62     | 62     | 64      | 63      | 66      | 57      | 71    |
| HBFX 45 T4/T8 (A5:6) F400 (1420 - 37,5°) | Inlet | 44    | 54     | 62     | 63     | 65      | 64      | 67      | 57      | 72    |
| HBFX 45 T4/T8 (A5:6) F400 (1420 - 40°)   | Inlet | 45    | 55     | 62     | 64     | 67      | 66      | 68      | 58      | 73    |
| HBFX 45 T4/T8 (A5:6) F400 (1420 - 42,5°) | Inlet | 45    | 54     | 61     | 64     | 67      | 67      | 68      | 58      | 73    |
| HBFX 45 T4/T8 (A5:6) F400 (1420 - 45°)   | Inlet | 47    | 54     | 60     | 64     | 69      | 69      | 69      | 58      | 74    |
| HBFX 50 T4/T8 (A5:6) F400 (25°)          | Inlet | 45    | 52     | 57     | 62     | 65      | 67      | 69      | 61      | 73    |
| HBFX 50 T4/T8 (A5:6) F400 (27, 5°)       | Inlet | 46    | 53     | 58     | 63     | 66      | 68      | 70      | 62      | 74    |
| HBFX 50 T4/T8 (A5:6) F400 (30°)          | Inlet | 48    | 53     | 60     | 64     | 67      | 68      | 71      | 62      | 75    |
| HBFX 50 T4/T8 (A5:6) F400 (32, 5°)       | Inlet | 49    | 54     | 61     | 66     | 69      | 70      | 72      | 63      | 76    |
| HBFX 50 T4/T8 (A5:6) F400 (35°)          | Inlet | 50    | 55     | 62     | 68     | 70      | 71      | 73      | 64      | 78    |
| HBFX 50 T4/T8 (A5:6) F400 (37, 5°)       | Inlet | 50    | 57     | 62     | 68     | 70      | 71      | 73      | 64      | 78    |
| HBFX 50 T4/T8 (A5:6) F400 (40°)          | Inlet | 50    | 57     | 62     | 68     | 70      | 71      | 73      | 64      | 78    |
| HBFX 50 T4/T8 (A5:6) F400 (42, 5°)       | Inlet | 53    | 60     | 65     | 72     | 73      | 73      | 76      | 67      | 80    |
| HBFX 50 T4/T8 (A5:6) F400 (45°)          | Inlet | 53    | 60     | 65     | 73     | 74      | 74      | 76      | 68      | 81    |
| HBFX 56 T4/T8 (A5:6) F400 (710 - 20°)    | Inlet | 50    | 57     | 62     | 63     | 64      | 62      | 60      | 52      | 70    |
| HBFX 56 T4/T8 (A5:6) F400 (710 - 25°)    | Inlet | 37    | 46     | 51     | 57     | 59      | 59      | 60      | 51      | 66    |
| HBFX 56 T4/T8 (A5:6) F400 (710 - 30°)    | Inlet | 46    | 56     | 63     | 65     | 65      | 63      | 61      | 53      | 71    |
| HBFX 56 T4/T8 (A5:6) F400 (710 - 35°)    | Inlet | 34    | 46     | 51     | 57     | 58      | 59      | 60      | 52      | 65    |
| HBFX 56 T4/T8 (A5:6) F400 (710 - 40°)    | Inlet | 40    | 53     | 63     | 69     | 68      | 62      | 60      | 51      | 73    |
| HBFX 56 T4/T8 (A5:6) F400 (710 - 45°)    | Inlet | 45    | 57     | 72     | 78     | 75      | 64      | 60      | 51      | 81    |

| Sound power Lw dB (A)                 |       |       |        |        |        |         |         |         |         |       |
|---------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                 |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 56 T4/T8 (A5:6) F400 (4p - 20°)  | Inlet | 66    | 73     | 78     | 79     | 80      | 78      | 76      | 68      | 86    |
| HBFX 56 T4/T8 (A5:6) F400 (4p - 25°)  | Inlet | 53    | 62     | 67     | 73     | 75      | 75      | 76      | 67      | 82    |
| HBFX 56 T4/T8 (A5:6) F400 (4p - 30°)  | Inlet | 62    | 72     | 79     | 81     | 81      | 79      | 77      | 69      | 87    |
| HBFX 56 T4/T8 (A5:6) F400 (4p - 35°)  | Inlet | 50    | 62     | 67     | 73     | 74      | 75      | 76      | 68      | 81    |
| HBFX 56 T4/T8 (A5:6) F400 (4p - 40°)  | Inlet | 56    | 69     | 79     | 85     | 84      | 78      | 76      | 67      | 89    |
| HBFX 56 T4/T8 (A5:6) F400 (4p - 45°)  | Inlet | 60    | 73     | 88     | 94     | 91      | 80      | 76      | 67      | 96    |
| HBFX 63 T4/T8 (A5:6) F400 (710 - 20°) | Inlet | 53    | 60     | 65     | 66     | 67      | 64      | 63      | 56      | 73    |
| HBFX 63 T4/T8 (A5:6) F400 (710 - 25°) | Inlet | 39    | 48     | 53     | 58     | 62      | 61      | 61      | 54      | 67    |
| HBFX 63 T4/T8 (A5:6) F400 (710 - 30°) | Inlet | 41    | 49     | 59     | 66     | 64      | 63      | 63      | 56      | 71    |
| HBFX 63 T4/T8 (A5:6) F400 (710 - 35°) | Inlet | 37    | 49     | 54     | 58     | 62      | 61      | 63      | 56      | 68    |
| HBFX 63 T4/T8 (A5:6) F400 (710 - 40°) | Inlet | 38    | 50     | 62     | 73     | 70      | 65      | 63      | 55      | 76    |
| HBFX 63 T4/T8 (A5:6) F400 (710 - 45°) | Inlet | 39    | 50     | 67     | 84     | 76      | 68      | 63      | 55      | 85    |
| HBFX 63 T4/T8 (A5:6) F400 (4p - 20°)  | Inlet | 69    | 76     | 81     | 82     | 83      | 80      | 79      | 72      | 89    |
| HBFX 63 T4/T8 (A5:6) F400 (4p - 25°)  | Inlet | 54    | 63     | 68     | 73     | 77      | 76      | 76      | 70      | 83    |
| HBFX 63 T4/T8 (A5:6) F400 (4p - 30°)  | Inlet | 57    | 65     | 75     | 82     | 80      | 79      | 79      | 72      | 87    |
| HBFX 63 T4/T8 (A5:6) F400 (4p - 35°)  | Inlet | 53    | 65     | 70     | 74     | 78      | 77      | 79      | 72      | 84    |
| HBFX 63 T4/T8 (A5:6) F400 (4p - 40°)  | Inlet | 54    | 66     | 77     | 89     | 86      | 81      | 79      | 71      | 92    |
| HBFX 63 T4/T8 (A5:6) F400 (4p - 45°)  | Inlet | 55    | 66     | 82     | 100    | 92      | 84      | 79      | 71      | 100   |
| HBFX 71 T4/T8 (A5:6) F400 (8p - 20°)  | Inlet | 56    | 63     | 68     | 70     | 70      | 68      | 67      | 60      | 76    |
| HBFX 71 T4/T8 (A5:6) F400 (8p - 25°)  | Inlet | 43    | 52     | 58     | 62     | 65      | 66      | 66      | 57      | 72    |
| HBFX 71 T4/T8 (A5:6) F400 (8p - 30°)  | Inlet | 44    | 53     | 59     | 65     | 66      | 66      | 65      | 56      | 72    |
| HBFX 71 T4/T8 (A5:6) F400 (8p - 35°)  | Inlet | 37    | 49     | 54     | 59     | 62      | 63      | 64      | 55      | 69    |

| Sound power Lw dB (A)                 |       |       |        |        |        |         |         |         |         |       |
|---------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                 |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 71 T4/T8 (A5:6) F400 (8p - 40°)  | Inlet | 41    | 52     | 67     | 76     | 72      | 68      | 66      | 56      | 79    |
| HBFX 71 T4/T8 (A5:6) F400 (8p - 45°)  | Inlet | 45    | 54     | 76     | 89     | 80      | 71      | 67      | 56      | 90    |
| HBFX 71 T4/T8 (A5:6) F400 (4p - 20°)  | Inlet | 71    | 78     | 83     | 85     | 85      | 83      | 82      | 75      | 92    |
| HBFX 71 T4/T8 (A5:6) F400 (4p - 25°)  | Inlet | 58    | 68     | 74     | 78     | 81      | 82      | 82      | 73      | 88    |
| HBFX 71 T4/T8 (A5:6) F400 (4p - 30°)  | Inlet | 60    | 68     | 75     | 81     | 82      | 81      | 81      | 72      | 87    |
| HBFX 71 T4/T8 (A5:6) F400 (4p - 35°)  | Inlet | 53    | 65     | 70     | 75     | 78      | 79      | 80      | 71      | 84    |
| HBFX 71 T4/T8 (A5:6) F400 (4p - 40°)  | Inlet | 57    | 68     | 83     | 92     | 88      | 83      | 81      | 72      | 95    |
| HBFX 71 T4/T8 (A5:6) F400 (4p - 45°)  | Inlet | 61    | 70     | 92     | 105    | 96      | 87      | 83      | 72      | 105   |
| HBFX 80 T4/T8 (A5:6) F400 (710 - 20°) | Inlet | 58    | 65     | 70     | 72     | 72      | 70      | 69      | 62      | 79    |
| HBFX 80 T4/T8 (A5:6) F400 (710 - 25°) | Inlet | 45    | 52     | 58     | 63     | 65      | 65      | 66      | 58      | 72    |
| HBFX 80 T4/T8 (A5:6) F400 (710 - 30°) | Inlet | 45    | 57     | 64     | 73     | 71      | 69      | 69      | 61      | 78    |
| HBFX 80 T4/T8 (A5:6) F400 (710 - 35°) | Inlet | 42    | 54     | 60     | 68     | 73      | 71      | 71      | 62      | 78    |
| HBFX 80 T4/T8 (A5:6) F400 (710 - 40°) | Inlet | 43    | 56     | 72     | 77     | 74      | 70      | 68      | 60      | 81    |
| HBFX 80 T4/T8 (A5:6) F400 (710 - 45°) | Inlet | 44    | 58     | 81     | 84     | 75      | 70      | 66      | 59      | 86    |
| HBFX 80 T4/T8 (A5:6) F400 (4p - 20°)  | Inlet | 74    | 81     | 86     | 88     | 88      | 86      | 85      | 78      | 94    |
| HBFX 80 T4/T8 (A5:6) F400 (4p - 25°)  | Inlet | 61    | 68     | 74     | 79     | 81      | 81      | 82      | 74      | 88    |
| HBFX 80 T4/T8 (A5:6) F400 (4p - 30°)  | Inlet | 61    | 72     | 79     | 89     | 87      | 85      | 85      | 77      | 93    |
| HBFX 80 T4/T8 (A5:6) F400 (4p - 35°)  | Inlet | 58    | 70     | 76     | 84     | 89      | 87      | 87      | 78      | 94    |
| HBFX 80 T4/T8 (A5:6) F400 (4p - 40°)  | Inlet | 59    | 72     | 88     | 93     | 90      | 86      | 84      | 76      | 97    |
| HBFX 80 T4/T8 (A5:6) F400 (4p - 45°)  | Inlet | 60    | 74     | 97     | 100    | 91      | 86      | 82      | 75      | 102   |
| HBFX 90 T4/T8 (A3:4) F400 (8p - 20°)  | Inlet | 41    | 52     | 57     | 67     | 72      | 72      | 70      | 62      | 77    |
| HBFX 90 T4/T8 (A3:4) F400 (8p - 22°)  | Inlet | 44    | 53     | 58     | 67     | 71      | 71      | 70      | 61      | 76    |

| Sound power Lw dB (A)                |       |       |        |        |        |         |         |         |         |       |
|--------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 90 T4/T8 (A3:4) F400 (8p - 24°) | Inlet | 47    | 54     | 60     | 67     | 70      | 70      | 69      | 61      | 75    |
| HBFX 90 T4/T8 (A3:4) F400 (8p - 26°) | Inlet | 48    | 55     | 61     | 67     | 69      | 69      | 68      | 60      | 75    |
| HBFX 90 T4/T8 (A3:4) F400 (8p - 28°) | Inlet | 49    | 56     | 62     | 67     | 68      | 68      | 68      | 60      | 74    |
| HBFX 90 T4/T8 (A3:4) F400 (8p - 30°) | Inlet | 50    | 57     | 63     | 66     | 67      | 67      | 67      | 59      | 74    |
| HBFX 90 T4/T8 (A3:4) F400 (8p - 32°) | Inlet | 50    | 57     | 62     | 66     | 67      | 67      | 67      | 59      | 74    |
| HBFX 90 T4/T8 (A3:4) F400 (8p - 34°) | Inlet | 49    | 56     | 62     | 65     | 67      | 68      | 66      | 58      | 74    |
| HBFX 90 T4/T8 (A3:4) F400 (8p - 36°) | Inlet | 50    | 57     | 62     | 65     | 68      | 69      | 67      | 58      | 74    |
| HBFX 90 T4/T8 (A3:4) F400 (8p - 38°) | Inlet | 51    | 58     | 63     | 66     | 69      | 69      | 67      | 60      | 75    |
| HBFX 90 T4/T8 (A3:4) F400 (8p - 40°) | Inlet | 52    | 59     | 65     | 67     | 71      | 69      | 68      | 61      | 76    |
| HBFX 90 T4/T8 (A3:4) F400 (8p - 42°) | Inlet | 53    | 60     | 66     | 68     | 72      | 70      | 69      | 62      | 77    |
| HBFX 90 T4/T8 (A3:4) F400 (4p - 20°) | Inlet | 56    | 68     | 73     | 83     | 88      | 88      | 86      | 78      | 93    |
| HBFX 90 T4/T8 (A3:4) F400 (4p - 22°) | Inlet | 60    | 69     | 74     | 83     | 87      | 87      | 85      | 77      | 92    |
| HBFX 90 T4/T8 (A3:4) F400 (4p - 24°) | Inlet | 63    | 70     | 75     | 83     | 86      | 86      | 85      | 77      | 91    |
| HBFX 90 T4/T8 (A3:4) F400 (4p - 26°) | Inlet | 64    | 71     | 77     | 83     | 85      | 85      | 84      | 76      | 91    |
| HBFX 90 T4/T8 (A3:4) F400 (4p - 28°) | Inlet | 65    | 72     | 78     | 82     | 83      | 84      | 84      | 76      | 90    |
| HBFX 90 T4/T8 (A3:4) F400 (4p - 30°) | Inlet | 66    | 73     | 79     | 82     | 82      | 83      | 83      | 75      | 89    |
| HBFX 90 T4/T8 (A3:4) F400 (4p - 32°) | Inlet | 66    | 73     | 78     | 82     | 83      | 83      | 83      | 74      | 89    |
| HBFX 90 T4/T8 (A3:4) F400 (4p - 34°) | Inlet | 65    | 72     | 78     | 81     | 83      | 84      | 82      | 74      | 89    |
| HBFX 90 T4/T8 (A3:4) F400 (4p - 36°) | Inlet | 66    | 73     | 78     | 81     | 84      | 84      | 82      | 74      | 90    |
| HBFX 90 T4/T8 (A3:4) F400 (4p - 38°) | Inlet | 67    | 74     | 79     | 82     | 85      | 85      | 83      | 75      | 91    |
| HBFX 90 T4/T8 (A3:4) F400 (4p - 40°) | Inlet | 68    | 75     | 80     | 82     | 87      | 85      | 84      | 77      | 91    |
| HBFX 90 T4/T8 (A3:4) F400 (4p - 42°) | Inlet | 69    | 76     | 82     | 84     | 88      | 86      | 84      | 78      | 93    |

| Sound power Lw dB (A)                |       |       |        |        |        |         |         |         |         |       |
|--------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 90 T4/T8 (A3:8) F400 (8p - 20°) | Inlet | 53    | 65     | 75     | 75     | 77      | 72      | 72      | 62      | 82    |
| HBFX 90 T4/T8 (A3:8) F400 (8p - 22°) | Inlet | 53    | 64     | 73     | 74     | 76      | 72      | 72      | 62      | 81    |
| HBFX 90 T4/T8 (A3:8) F400 (8p - 24°) | Inlet | 53    | 63     | 71     | 73     | 75      | 72      | 72      | 62      | 80    |
| HBFX 90 T4/T8 (A3:8) F400 (8p - 26°) | Inlet | 53    | 62     | 69     | 72     | 74      | 72      | 72      | 63      | 79    |
| HBFX 90 T4/T8 (A3:8) F400 (8p - 28°) | Inlet | 54    | 60     | 67     | 71     | 73      | 72      | 71      | 63      | 79    |
| HBFX 90 T4/T8 (A3:8) F400 (8p - 30°) | Inlet | 52    | 59     | 65     | 70     | 72      | 72      | 71      | 63      | 78    |
| HBFX 90 T4/T8 (A3:8) F400 (8p - 32°) | Inlet | 51    | 58     | 64     | 69     | 71      | 72      | 70      | 62      | 77    |
| HBFX 90 T4/T8 (A3:8) F400 (8p - 34°) | Inlet | 51    | 58     | 63     | 68     | 71      | 71      | 69      | 61      | 76    |
| HBFX 90 T4/T8 (A3:8) F400 (8p - 36°) | Inlet | 51    | 58     | 64     | 67     | 71      | 71      | 69      | 61      | 76    |
| HBFX 90 T4/T8 (A3:8) F400 (8p - 38°) | Inlet | 53    | 60     | 65     | 68     | 71      | 71      | 69      | 61      | 77    |
| HBFX 90 T4/T8 (A3:8) F400 (8p - 40°) | Inlet | 54    | 62     | 67     | 68     | 72      | 71      | 68      | 62      | 77    |
| HBFX 90 T4/T8 (A3:8) F400 (8p - 42°) | Inlet | 55    | 62     | 67     | 69     | 73      | 72      | 69      | 62      | 78    |
| HBFX 90 T4/T8 (A3:8) F400 (4p - 20°) | Inlet | 69    | 81     | 90     | 91     | 93      | 88      | 88      | 78      | 98    |
| HBFX 90 T4/T8 (A3:8) F400 (4p - 22°) | Inlet | 69    | 80     | 88     | 90     | 92      | 88      | 88      | 78      | 97    |
| HBFX 90 T4/T8 (A3:8) F400 (4p - 24°) | Inlet | 69    | 79     | 86     | 89     | 91      | 88      | 88      | 78      | 96    |
| HBFX 90 T4/T8 (A3:8) F400 (4p - 26°) | Inlet | 69    | 77     | 84     | 88     | 90      | 88      | 87      | 79      | 95    |
| HBFX 90 T4/T8 (A3:8) F400 (4p - 28°) | Inlet | 69    | 76     | 82     | 87     | 89      | 88      | 87      | 79      | 94    |
| HBFX 90 T4/T8 (A3:8) F400 (4p - 30°) | Inlet | 68    | 75     | 80     | 86     | 88      | 88      | 87      | 79      | 94    |
| HBFX 90 T4/T8 (A3:8) F400 (4p - 32°) | Inlet | 67    | 74     | 80     | 85     | 87      | 88      | 86      | 78      | 93    |
| HBFX 90 T4/T8 (A3:8) F400 (4p - 34°) | Inlet | 66    | 74     | 79     | 84     | 86      | 87      | 85      | 77      | 92    |
| HBFX 90 T4/T8 (A3:8) F400 (4p - 36°) | Inlet | 67    | 74     | 80     | 83     | 86      | 87      | 85      | 77      | 92    |
| HBFX 90 T4/T8 (A3:8) F400 (4p - 38°) | Inlet | 69    | 76     | 81     | 83     | 87      | 87      | 84      | 77      | 92    |

| Sound power Lw dB (A)                 |       |       |        |        |        |         |         |         |         |       |
|---------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                 |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 90 T4/T8 (A3:8) F400 (4p - 40º)  | Inlet | 70    | 77     | 83     | 84     | 88      | 87      | 84      | 77      | 93    |
| HBFX 90 T4/T8 (A3:8) F400 (4p - 42º)  | Inlet | 70    | 78     | 83     | 84     | 88      | 88      | 85      | 78      | 93    |
| HBFX 100 T4/T8 (A3:4) F400 (8p - 20º) | Inlet | 50    | 60     | 66     | 72     | 76      | 76      | 77      | 74      | 82    |
| HBFX 100 T4/T8 (A3:4) F400 (8p - 22º) | Inlet | 50    | 60     | 66     | 72     | 76      | 76      | 77      | 74      | 82    |
| HBFX 100 T4/T8 (A3:4) F400 (8p - 24º) | Inlet | 51    | 60     | 66     | 72     | 75      | 76      | 77      | 73      | 82    |
| HBFX 100 T4/T8 (A3:4) F400 (8p - 26º) | Inlet | 51    | 59     | 65     | 71     | 74      | 75      | 77      | 72      | 82    |
| HBFX 100 T4/T8 (A3:4) F400 (8p - 28º) | Inlet | 51    | 59     | 65     | 71     | 74      | 75      | 77      | 71      | 81    |
| HBFX 100 T4/T8 (A3:4) F400 (8p - 30º) | Inlet | 52    | 59     | 65     | 70     | 74      | 75      | 77      | 70      | 81    |
| HBFX 100 T4/T8 (A3:4) F400 (8p - 32º) | Inlet | 52    | 58     | 65     | 70     | 73      | 74      | 76      | 70      | 80    |
| HBFX 100 T4/T8 (A3:4) F400 (8p - 34º) | Inlet | 53    | 57     | 65     | 69     | 72      | 74      | 76      | 69      | 80    |
| HBFX 100 T4/T8 (A3:4) F400 (8p - 36º) | Inlet | 53    | 57     | 65     | 70     | 72      | 74      | 75      | 69      | 80    |
| HBFX 100 T4/T8 (A3:4) F400 (8p - 38º) | Inlet | 52    | 58     | 65     | 70     | 73      | 74      | 76      | 69      | 80    |
| HBFX 100 T4/T8 (A3:4) F400 (8p - 40º) | Inlet | 52    | 59     | 66     | 71     | 75      | 75      | 76      | 70      | 81    |
| HBFX 100 T4/T8 (A3:4) F400 (8p - 42º) | Inlet | 53    | 61     | 67     | 72     | 76      | 76      | 77      | 71      | 82    |
| HBFX 100 T4/T8 (A3:4) F400 (4p - 20º) | Inlet | 66    | 76     | 81     | 88     | 91      | 92      | 93      | 90      | 98    |
| HBFX 100 T4/T8 (A3:4) F400 (4p - 22º) | Inlet | 66    | 76     | 82     | 88     | 91      | 92      | 93      | 90      | 98    |
| HBFX 100 T4/T8 (A3:4) F400 (4p - 24º) | Inlet | 67    | 76     | 81     | 87     | 91      | 92      | 93      | 89      | 98    |
| HBFX 100 T4/T8 (A3:4) F400 (4p - 26º) | Inlet | 67    | 75     | 81     | 87     | 90      | 91      | 93      | 88      | 97    |
| HBFX 100 T4/T8 (A3:4) F400 (4p - 28º) | Inlet | 67    | 75     | 81     | 86     | 90      | 91      | 93      | 87      | 97    |
| HBFX 100 T4/T8 (A3:4) F400 (4p - 30º) | Inlet | 68    | 74     | 81     | 86     | 90      | 91      | 93      | 86      | 97    |
| HBFX 100 T4/T8 (A3:4) F400 (4p - 32º) | Inlet | 68    | 74     | 81     | 86     | 89      | 90      | 92      | 86      | 96    |
| HBFX 100 T4/T8 (A3:4) F400 (4p - 34º) | Inlet | 69    | 73     | 81     | 85     | 88      | 90      | 91      | 85      | 96    |

| Sound power Lw dB (A)                 |       |       |        |        |        |         |         |         |         |       |
|---------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                 |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 100 T4/T8 (A3:4) F400 (4p - 36°) | Inlet | 69    | 73     | 81     | 86     | 88      | 90      | 91      | 85      | 96    |
| HBFX 100 T4/T8 (A3:4) F400 (4p - 38°) | Inlet | 68    | 74     | 81     | 86     | 89      | 90      | 92      | 85      | 96    |
| HBFX 100 T4/T8 (A3:4) F400 (4p - 40°) | Inlet | 68    | 75     | 81     | 87     | 90      | 91      | 92      | 86      | 97    |
| HBFX 100 T4/T8 (A3:4) F400 (4p - 42°) | Inlet | 69    | 77     | 83     | 88     | 92      | 92      | 93      | 87      | 98    |
| HBFX 100 T4/T8 (A3:8) F400 (8p - 20°) | Inlet | 56    | 65     | 76     | 86     | 84      | 83      | 84      | 79      | 91    |
| HBFX 100 T4/T8 (A3:8) F400 (8p - 22°) | Inlet | 56    | 64     | 75     | 84     | 83      | 82      | 83      | 78      | 90    |
| HBFX 100 T4/T8 (A3:8) F400 (8p - 24°) | Inlet | 56    | 64     | 73     | 81     | 82      | 81      | 82      | 77      | 88    |
| HBFX 100 T4/T8 (A3:8) F400 (8p - 26°) | Inlet | 56    | 63     | 72     | 79     | 80      | 80      | 81      | 76      | 87    |
| HBFX 100 T4/T8 (A3:8) F400 (8p - 28°) | Inlet | 56    | 63     | 71     | 77     | 80      | 80      | 80      | 75      | 86    |
| HBFX 100 T4/T8 (A3:8) F400 (8p - 30°) | Inlet | 56    | 63     | 70     | 75     | 79      | 79      | 80      | 74      | 85    |
| HBFX 100 T4/T8 (A3:8) F400 (8p - 32°) | Inlet | 55    | 63     | 68     | 74     | 77      | 78      | 79      | 73      | 84    |
| HBFX 100 T4/T8 (A3:8) F400 (8p - 34°) | Inlet | 55    | 62     | 67     | 72     | 76      | 77      | 78      | 72      | 83    |
| HBFX 100 T4/T8 (A3:8) F400 (8p - 36°) | Inlet | 54    | 61     | 66     | 71     | 75      | 77      | 78      | 72      | 83    |
| HBFX 100 T4/T8 (A3:8) F400 (8p - 38°) | Inlet | 55    | 62     | 67     | 72     | 76      | 78      | 78      | 72      | 83    |
| HBFX 100 T4/T8 (A3:8) F400 (8p - 40°) | Inlet | 56    | 63     | 68     | 73     | 76      | 78      | 79      | 73      | 84    |
| HBFX 100 T4/T8 (A3:8) F400 (8p - 42°) | Inlet | 56    | 63     | 68     | 73     | 77      | 78      | 79      | 73      | 84    |
| HBFX 100 T4/T8 (A3:8) F400 (4p - 20°) | Inlet | 72    | 81     | 92     | 102    | 100     | 99      | 100     | 95      | 107   |
| HBFX 100 T4/T8 (A3:8) F400 (4p - 22°) | Inlet | 72    | 80     | 91     | 100    | 99      | 98      | 99      | 94      | 106   |
| HBFX 100 T4/T8 (A3:8) F400 (4p - 24°) | Inlet | 72    | 79     | 89     | 97     | 97      | 97      | 98      | 93      | 104   |
| HBFX 100 T4/T8 (A3:8) F400 (4p - 26°) | Inlet | 72    | 79     | 88     | 95     | 96      | 96      | 97      | 92      | 103   |
| HBFX 100 T4/T8 (A3:8) F400 (4p - 28°) | Inlet | 72    | 79     | 87     | 93     | 96      | 95      | 96      | 91      | 102   |
| HBFX 100 T4/T8 (A3:8) F400 (4p - 30°) | Inlet | 72    | 79     | 86     | 91     | 95      | 95      | 96      | 90      | 101   |

| Sound power Lw dB (A)                 |       |       |        |        |        |         |         |         |         |       |
|---------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                 |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 100 T4/T8 (A3:8) F400 (4p - 32º) | Inlet | 71    | 79     | 84     | 90     | 93      | 94      | 95      | 89      | 100   |
| HBFX 100 T4/T8 (A3:8) F400 (4p - 34º) | Inlet | 71    | 78     | 83     | 88     | 92      | 93      | 94      | 88      | 99    |
| HBFX 100 T4/T8 (A3:8) F400 (4p - 36º) | Inlet | 70    | 77     | 82     | 87     | 91      | 93      | 94      | 87      | 99    |
| HBFX 100 T4/T8 (A3:8) F400 (4p - 38º) | Inlet | 71    | 78     | 83     | 88     | 92      | 94      | 94      | 88      | 99    |
| HBFX 100 T4/T8 (A3:8) F400 (4p - 40º) | Inlet | 71    | 79     | 84     | 89     | 92      | 94      | 95      | 89      | 100   |
| HBFX 100 T4/T8 (A3:8) F400 (4p - 42º) | Inlet | 72    | 79     | 84     | 89     | 93      | 94      | 95      | 89      | 100   |
| HBFX 112 T4/T8 (A3:4) F400 (8p - 20º) | Inlet | 50    | 62     | 67     | 74     | 78      | 78      | 80      | 76      | 85    |
| HBFX 112 T4/T8 (A3:4) F400 (8p - 22º) | Inlet | 52    | 63     | 68     | 74     | 78      | 79      | 81      | 76      | 86    |
| HBFX 112 T4/T8 (A3:4) F400 (8p - 24º) | Inlet | 53    | 62     | 67     | 74     | 77      | 78      | 80      | 75      | 85    |
| HBFX 112 T4/T8 (A3:4) F400 (8p - 26º) | Inlet | 54    | 62     | 67     | 73     | 77      | 78      | 79      | 74      | 84    |
| HBFX 112 T4/T8 (A3:4) F400 (8p - 28º) | Inlet | 55    | 62     | 67     | 73     | 76      | 77      | 79      | 73      | 83    |
| HBFX 112 T4/T8 (A3:4) F400 (8p - 30º) | Inlet | 55    | 62     | 67     | 72     | 76      | 77      | 78      | 72      | 83    |
| HBFX 112 T4/T8 (A3:4) F400 (8p - 32º) | Inlet | 55    | 61     | 67     | 72     | 75      | 76      | 78      | 71      | 82    |
| HBFX 112 T4/T8 (A3:4) F400 (8p - 34º) | Inlet | 54    | 60     | 66     | 71     | 74      | 76      | 77      | 70      | 82    |
| HBFX 112 T4/T8 (A3:4) F400 (8p - 36º) | Inlet | 55    | 60     | 67     | 71     | 74      | 76      | 77      | 70      | 82    |
| HBFX 112 T4/T8 (A3:4) F400 (8p - 38º) | Inlet | 55    | 61     | 67     | 72     | 75      | 76      | 78      | 71      | 82    |
| HBFX 112 T4/T8 (A3:4) F400 (8p - 40º) | Inlet | 56    | 63     | 68     | 73     | 76      | 77      | 78      | 71      | 83    |
| HBFX 112 T4/T8 (A3:4) F400 (8p - 42º) | Inlet | 57    | 63     | 69     | 73     | 76      | 78      | 78      | 72      | 83    |
| HBFX 112 T4/T8 (A3:4) F400 (4p - 20º) | Inlet | 66    | 78     | 83     | 90     | 94      | 94      | 96      | 92      | 101   |
| HBFX 112 T4/T8 (A3:4) F400 (4p - 22º) | Inlet | 68    | 79     | 84     | 90     | 94      | 95      | 96      | 92      | 102   |
| HBFX 112 T4/T8 (A3:4) F400 (4p - 24º) | Inlet | 69    | 78     | 83     | 90     | 93      | 94      | 96      | 91      | 101   |
| HBFX 112 T4/T8 (A3:4) F400 (4p - 26º) | Inlet | 70    | 78     | 83     | 89     | 93      | 94      | 95      | 90      | 100   |

| Sound power Lw dB (A)                 |       |       |        |        |        |         |         |         |         |       |
|---------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                 |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 112 T4/T8 (A3:4) F400 (4p - 28°) | Inlet | 71    | 78     | 83     | 89     | 92      | 93      | 95      | 89      | 99    |
| HBFX 112 T4/T8 (A3:4) F400 (4p - 30°) | Inlet | 71    | 78     | 83     | 88     | 92      | 93      | 94      | 88      | 99    |
| HBFX 112 T4/T8 (A3:4) F400 (4p - 32°) | Inlet | 70    | 77     | 82     | 88     | 91      | 92      | 94      | 87      | 98    |
| HBFX 112 T4/T8 (A3:4) F400 (4p - 34°) | Inlet | 70    | 76     | 82     | 87     | 90      | 92      | 93      | 86      | 98    |
| HBFX 112 T4/T8 (A3:4) F400 (4p - 36°) | Inlet | 71    | 76     | 83     | 87     | 90      | 92      | 93      | 86      | 98    |
| HBFX 112 T4/T8 (A3:4) F400 (4p - 38°) | Inlet | 71    | 77     | 83     | 88     | 91      | 92      | 93      | 87      | 98    |
| HBFX 112 T4/T8 (A3:4) F400 (4p - 40°) | Inlet | 72    | 79     | 84     | 89     | 91      | 93      | 94      | 87      | 99    |
| HBFX 112 T4/T8 (A3:4) F400 (4p - 42°) | Inlet | 72    | 79     | 84     | 89     | 92      | 94      | 94      | 88      | 99    |
| HBFX 112 T4/T8 (A3:8) F400 (8p - 20°) | Inlet | 57    | 66     | 76     | 85     | 85      | 87      | 87      | 81      | 93    |
| HBFX 112 T4/T8 (A3:8) F400 (8p - 22°) | Inlet | 57    | 65     | 75     | 83     | 84      | 86      | 86      | 80      | 91    |
| HBFX 112 T4/T8 (A3:8) F400 (8p - 24°) | Inlet | 57    | 65     | 74     | 81     | 83      | 85      | 85      | 79      | 90    |
| HBFX 112 T4/T8 (A3:8) F400 (8p - 26°) | Inlet | 58    | 65     | 73     | 80     | 83      | 84      | 84      | 78      | 90    |
| HBFX 112 T4/T8 (A3:8) F400 (8p - 28°) | Inlet | 58    | 65     | 72     | 78     | 82      | 83      | 83      | 78      | 89    |
| HBFX 112 T4/T8 (A3:8) F400 (8p - 30°) | Inlet | 58    | 65     | 72     | 77     | 81      | 83      | 83      | 77      | 88    |
| HBFX 112 T4/T8 (A3:8) F400 (8p - 32°) | Inlet | 58    | 65     | 70     | 76     | 80      | 81      | 81      | 75      | 87    |
| HBFX 112 T4/T8 (A3:8) F400 (8p - 34°) | Inlet | 57    | 64     | 69     | 74     | 78      | 80      | 80      | 73      | 85    |
| HBFX 112 T4/T8 (A3:8) F400 (8p - 36°) | Inlet | 57    | 64     | 69     | 74     | 77      | 79      | 80      | 73      | 85    |
| HBFX 112 T4/T8 (A3:8) F400 (8p - 38°) | Inlet | 57    | 64     | 69     | 74     | 78      | 80      | 80      | 73      | 85    |
| HBFX 112 T4/T8 (A3:8) F400 (8p - 40°) | Inlet | 58    | 65     | 70     | 74     | 78      | 80      | 80      | 74      | 86    |
| HBFX 112 T4/T8 (A3:8) F400 (8p - 42°) | Inlet | 58    | 65     | 70     | 75     | 78      | 80      | 79      | 73      | 85    |
| HBFX 112 T4/T8 (A3:8) F400 (4p - 20°) | Inlet | 73    | 82     | 92     | 101    | 101     | 103     | 103     | 97      | 109   |
| HBFX 112 T4/T8 (A3:8) F400 (4p - 22°) | Inlet | 73    | 81     | 91     | 99     | 100     | 102     | 102     | 96      | 107   |

| Sound power Lw dB (A)                 |       |       |        |        |        |         |         |         |         |       |
|---------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                 |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 112 T4/T8 (A3:8) F400 (4p - 24°) | Inlet | 73    | 81     | 90     | 97     | 99      | 101     | 101     | 95      | 106   |
| HBFX 112 T4/T8 (A3:8) F400 (4p - 26°) | Inlet | 74    | 81     | 89     | 96     | 98      | 100     | 100     | 94      | 106   |
| HBFX 112 T4/T8 (A3:8) F400 (4p - 28°) | Inlet | 74    | 81     | 88     | 94     | 98      | 99      | 99      | 94      | 105   |
| HBFX 112 T4/T8 (A3:8) F400 (4p - 30°) | Inlet | 74    | 80     | 87     | 93     | 97      | 99      | 99      | 93      | 104   |
| HBFX 112 T4/T8 (A3:8) F400 (4p - 32°) | Inlet | 74    | 81     | 86     | 91     | 96      | 97      | 97      | 91      | 103   |
| HBFX 112 T4/T8 (A3:8) F400 (4p - 34°) | Inlet | 73    | 80     | 85     | 90     | 94      | 96      | 96      | 89      | 101   |
| HBFX 112 T4/T8 (A3:8) F400 (4p - 36°) | Inlet | 73    | 80     | 85     | 90     | 93      | 95      | 95      | 89      | 101   |
| HBFX 112 T4/T8 (A3:8) F400 (4p - 38°) | Inlet | 73    | 80     | 85     | 90     | 94      | 96      | 95      | 89      | 101   |
| HBFX 112 T4/T8 (A3:8) F400 (4p - 40°) | Inlet | 74    | 81     | 86     | 90     | 94      | 96      | 95      | 90      | 102   |
| HBFX 112 T4/T8 (A3:8) F400 (4p - 42°) | Inlet | 73    | 80     | 85     | 91     | 94      | 96      | 95      | 89      | 101   |
| HBFX 125 T4/T8 (A3:4) F400 (8p - 20°) | Inlet | 56    | 69     | 74     | 82     | 86      | 86      | 88      | 85      | 93    |
| HBFX 125 T4/T8 (A3:4) F400 (8p - 22°) | Inlet | 59    | 70     | 75     | 82     | 86      | 87      | 89      | 85      | 93    |
| HBFX 125 T4/T8 (A3:4) F400 (8p - 24°) | Inlet | 59    | 69     | 74     | 80     | 84      | 85      | 87      | 82      | 91    |
| HBFX 125 T4/T8 (A3:4) F400 (8p - 26°) | Inlet | 60    | 68     | 73     | 78     | 82      | 83      | 85      | 80      | 90    |
| HBFX 125 T4/T8 (A3:4) F400 (8p - 28°) | Inlet | 60    | 67     | 72     | 77     | 80      | 82      | 83      | 77      | 88    |
| HBFX 125 T4/T8 (A3:4) F400 (8p - 30°) | Inlet | 58    | 65     | 70     | 75     | 79      | 80      | 81      | 75      | 86    |
| HBFX 125 T4/T8 (A3:4) F400 (8p - 32°) | Inlet | 58    | 65     | 70     | 75     | 78      | 80      | 81      | 74      | 86    |
| HBFX 125 T4/T8 (A3:4) F400 (8p - 34°) | Inlet | 58    | 65     | 70     | 74     | 77      | 79      | 80      | 72      | 85    |
| HBFX 125 T4/T8 (A3:4) F400 (8p - 36°) | Inlet | 58    | 65     | 70     | 74     | 77      | 79      | 80      | 72      | 85    |
| HBFX 125 T4/T8 (A3:4) F400 (8p - 38°) | Inlet | 58    | 65     | 70     | 75     | 77      | 79      | 80      | 73      | 85    |
| HBFX 125 T4/T8 (A3:4) F400 (8p - 40°) | Inlet | 59    | 66     | 71     | 75     | 78      | 80      | 80      | 73      | 86    |
| HBFX 125 T4/T8 (A3:4) F400 (8p - 42°) | Inlet | 59    | 66     | 71     | 76     | 79      | 81      | 80      | 74      | 86    |

| Sound power Lw dB (A)                 |       |       |        |        |        |         |         |         |         |       |
|---------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                 |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 125 T4/T8 (A3:4) F400 (4p - 20º) | Inlet | 72    | 85     | 90     | 98     | 102     | 102     | 104     | 101     | 109   |
| HBFX 125 T4/T8 (A3:4) F400 (4p - 22º) | Inlet | 75    | 86     | 91     | 98     | 102     | 103     | 105     | 101     | 109   |
| HBFX 125 T4/T8 (A3:4) F400 (4p - 24º) | Inlet | 75    | 85     | 90     | 96     | 100     | 101     | 103     | 98      | 107   |
| HBFX 125 T4/T8 (A3:4) F400 (4p - 26º) | Inlet | 76    | 84     | 89     | 94     | 98      | 99      | 101     | 96      | 106   |
| HBFX 125 T4/T8 (A3:4) F400 (4p - 28º) | Inlet | 75    | 82     | 87     | 93     | 96      | 98      | 99      | 93      | 104   |
| HBFX 125 T4/T8 (A3:4) F400 (4p - 30º) | Inlet | 74    | 81     | 86     | 91     | 95      | 96      | 97      | 91      | 102   |
| HBFX 125 T4/T8 (A3:4) F400 (4p - 32º) | Inlet | 74    | 81     | 86     | 90     | 94      | 96      | 96      | 90      | 102   |
| HBFX 125 T4/T8 (A3:4) F400 (4p - 34º) | Inlet | 73    | 80     | 85     | 90     | 93      | 95      | 96      | 88      | 101   |
| HBFX 125 T4/T8 (A3:4) F400 (4p - 36º) | Inlet | 74    | 81     | 86     | 90     | 93      | 95      | 96      | 88      | 101   |
| HBFX 125 T4/T8 (A3:4) F400 (4p - 38º) | Inlet | 74    | 81     | 86     | 91     | 93      | 95      | 96      | 89      | 101   |
| HBFX 125 T4/T8 (A3:4) F400 (4p - 40º) | Inlet | 75    | 82     | 87     | 91     | 93      | 96      | 96      | 89      | 102   |
| HBFX 125 T4/T8 (A3:4) F400 (4p - 42º) | Inlet | 75    | 82     | 87     | 92     | 94      | 96      | 96      | 90      | 102   |
| HBFX 125 T4/T8 (A3:8) F400 (8p - 20º) | Inlet | 62    | 71     | 78     | 87     | 92      | 95      | 94      | 89      | 99    |
| HBFX 125 T4/T8 (A3:8) F400 (8p - 22º) | Inlet | 63    | 70     | 77     | 86     | 91      | 94      | 93      | 88      | 98    |
| HBFX 125 T4/T8 (A3:8) F400 (8p - 24º) | Inlet | 62    | 70     | 76     | 84     | 90      | 92      | 92      | 86      | 97    |
| HBFX 125 T4/T8 (A3:8) F400 (8p - 26º) | Inlet | 62    | 69     | 75     | 82     | 88      | 90      | 90      | 84      | 95    |
| HBFX 125 T4/T8 (A3:8) F400 (8p - 28º) | Inlet | 62    | 68     | 75     | 81     | 86      | 89      | 89      | 82      | 94    |
| HBFX 125 T4/T8 (A3:8) F400 (8p - 30º) | Inlet | 62    | 67     | 74     | 80     | 85      | 87      | 88      | 81      | 92    |
| HBFX 125 T4/T8 (A3:8) F400 (8p - 32º) | Inlet | 61    | 67     | 73     | 79     | 83      | 86      | 86      | 79      | 91    |
| HBFX 125 T4/T8 (A3:8) F400 (8p - 34º) | Inlet | 61    | 68     | 73     | 78     | 81      | 84      | 84      | 76      | 89    |
| HBFX 125 T4/T8 (A3:8) F400 (8p - 36º) | Inlet | 61    | 68     | 73     | 77     | 81      | 83      | 82      | 75      | 88    |
| HBFX 125 T4/T8 (A3:8) F400 (8p - 38º) | Inlet | 60    | 67     | 72     | 77     | 80      | 82      | 82      | 75      | 88    |

| Sound power Lw dB (A)                 |       |       |        |        |        |         |         |         |         |       |
|---------------------------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                                 |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| HBFX 125 T4/T8 (A3:8) F400 (8p - 40°) | Inlet | 60    | 67     | 72     | 77     | 80      | 82      | 81      | 74      | 87    |
| HBFX 125 T4/T8 (A3:8) F400 (8p - 42°) | Inlet | 60    | 67     | 72     | 77     | 80      | 82      | 80      | 74      | 87    |
| HBFX 125 T4/T8 (A3:8) F400 (4p - 20°) | Inlet | 78    | 86     | 93     | 103    | 108     | 111     | 110     | 105     | 115   |
| HBFX 125 T4/T8 (A3:8) F400 (4p - 22°) | Inlet | 79    | 86     | 93     | 102    | 107     | 110     | 109     | 104     | 114   |
| HBFX 125 T4/T8 (A3:8) F400 (4p - 24°) | Inlet | 78    | 85     | 92     | 100    | 106     | 108     | 108     | 102     | 113   |
| HBFX 125 T4/T8 (A3:8) F400 (4p - 26°) | Inlet | 78    | 85     | 91     | 98     | 104     | 106     | 106     | 100     | 111   |
| HBFX 125 T4/T8 (A3:8) F400 (4p - 28°) | Inlet | 78    | 84     | 91     | 97     | 102     | 105     | 105     | 98      | 110   |
| HBFX 125 T4/T8 (A3:8) F400 (4p - 30°) | Inlet | 77    | 83     | 90     | 96     | 101     | 103     | 104     | 97      | 108   |
| HBFX 125 T4/T8 (A3:8) F400 (4p - 32°) | Inlet | 77    | 83     | 89     | 95     | 99      | 102     | 102     | 94      | 107   |
| HBFX 125 T4/T8 (A3:8) F400 (4p - 34°) | Inlet | 77    | 83     | 89     | 94     | 97      | 99      | 100     | 92      | 105   |
| HBFX 125 T4/T8 (A3:8) F400 (4p - 36°) | Inlet | 77    | 83     | 89     | 93     | 96      | 98      | 98      | 91      | 104   |
| HBFX 125 T4/T8 (A3:8) F400 (4p - 38°) | Inlet | 76    | 83     | 88     | 93     | 96      | 98      | 97      | 91      | 104   |
| HBFX 125 T4/T8 (A3:8) F400 (4p - 40°) | Inlet | 76    | 83     | 88     | 93     | 96      | 98      | 97      | 90      | 103   |
| HBFX 125 T4/T8 (A3:8) F400 (4p - 42°) | Inlet | 76    | 83     | 88     | 93     | 96      | 98      | 96      | 90      | 103   |