

# Technical Information

AQUASTAR 105 W



AQUAFIX BELGIUM BVBA  
Tel. 013 66 83 03, WWW.AQUAFIX.BE



AQUAFIX MILIEU B.V.  
Tel. 0297 26 29 29, WWW.AQUAFIX.NL

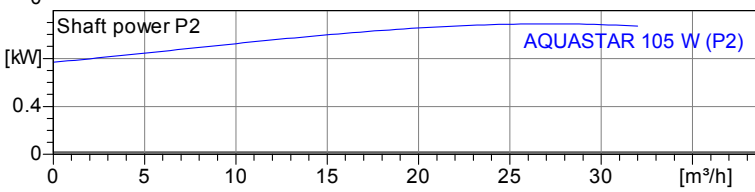
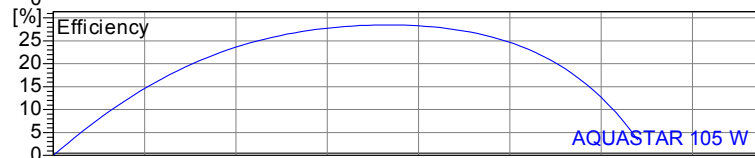
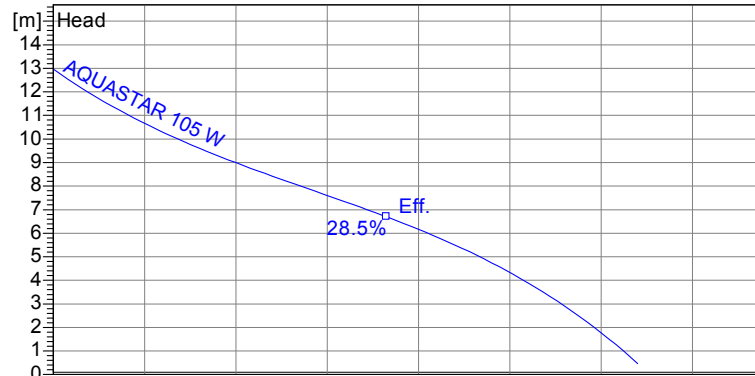
|                       |                     |
|-----------------------|---------------------|
| <b>Operating data</b> |                     |
| Flow                  | 0 m <sup>3</sup> /h |
| Head                  | 0 m                 |
| Shaft power P2        |                     |
| Pump efficiency       | s %                 |
| Required pump NPSH    |                     |
| Pumpe type            | Single head pump    |
| No. of pumps          | 1                   |
| Fluid                 | Water, clean        |

|                |                     |
|----------------|---------------------|
| <b>Pump</b>    |                     |
| Pump Code      | AQUASTAR 105 W      |
| Impeller       | Vortex impeller 133 |
| Impeller size  | mm                  |
| Solid size     | 40 mm               |
| Discharge port | DN80                |
| Suction port   | s                   |

|                      |          |
|----------------------|----------|
| <b>Motor</b>         |          |
| Rated voltage        | 230 V    |
| Frequency            | 50 Hz Hz |
| Rated power P2       | 1.1 kW   |
| Rated speed          | 2900 rpm |
| Number of poles      | 2        |
| Efficiency           | 69 % %   |
| Rated current        | 7 A      |
| Degree of protection | IP 68    |

|                  |                           |
|------------------|---------------------------|
| <b>Materials</b> |                           |
| Pressure cover   | Grey cast iron EN-GJL-250 |
| Motor housing    | Grey cast iron EN-GJL-250 |
| Impeller         | Grey cast iron GG25       |
| Collecting tank  | Polyethylene              |
| Motor shaft      | Stainless steel 1.4104    |
| Bolts            | Stainless steel           |
| O-Rings          | Nitrile Rubber            |
| Lip seals        | Nitrile Rubber            |
| Lower Bearing    | Deep Groove Ball Bearing  |
| Upper Bearing    | Deep Groove Ball Bearing  |

Testnorm: ISO9906 Sect. 4.4.2



Dry well installation  
Dimensions in mm,

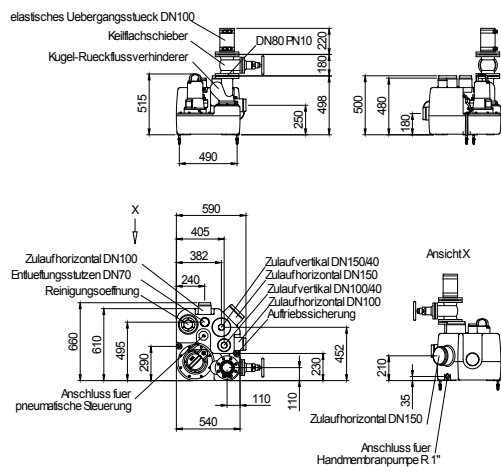


Table Dimensions ( mm )

|         |              |             |         |
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2.3.7 - 14/03/2012 (Build 345)

# Performance Curve

AQUASTAR 105 W



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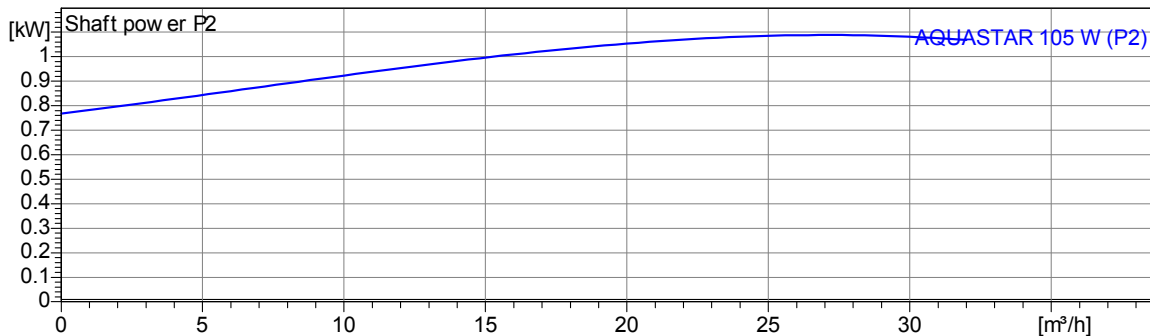
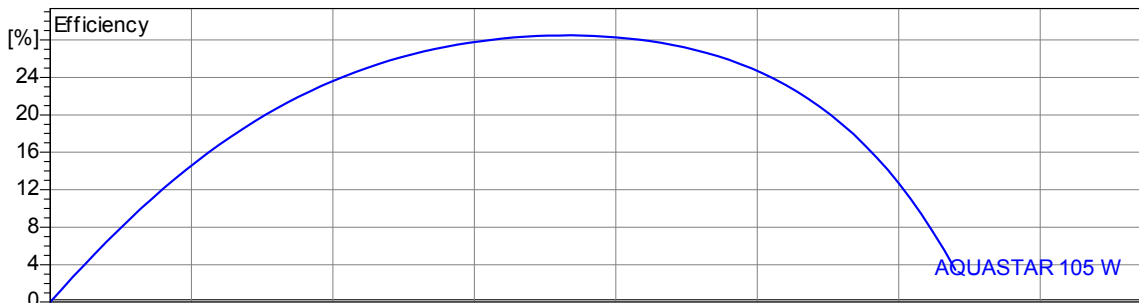
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| Impeller                          |                     |    |                   |                   |                   |  |
|-----------------------------------|---------------------|----|-------------------|-------------------|-------------------|--|
| Impeller type:<br>Vortex impeller | Solid size<br>40 mm | Ø: | Max. Ø:<br>133 mm | Min. Ø:<br>133 mm | Sel. Ø:<br>133 mm |  |

| Operating data            |                            |                                  |                |                 |                                |
|---------------------------|----------------------------|----------------------------------|----------------|-----------------|--------------------------------|
| Speed:<br><b>2900 rpm</b> | Frequency:<br><b>50 Hz</b> | Duty point:<br><b>Q = 0 m³/h</b> | <b>H = 0 m</b> | Shaft power P2: | Discharge port:<br><b>DN80</b> |

Power data referred to:  
Water, clean [100%]; 20°C; 998.3kg/m³; 1.005mm²/s

Testnorm: ISO9906 Sect. 4.4.2



2.3.7 - 14/03/2012 (Build 345)

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# Dimensions

AQUASTAR 105 W



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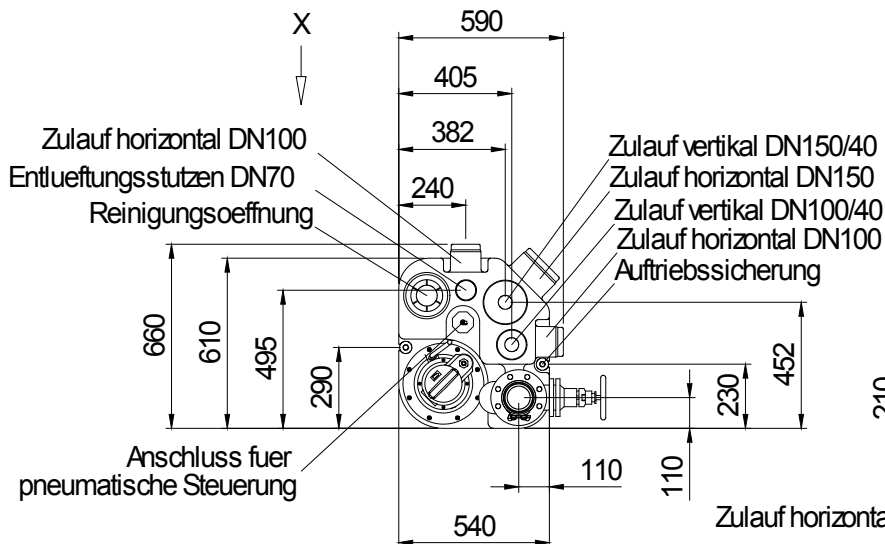
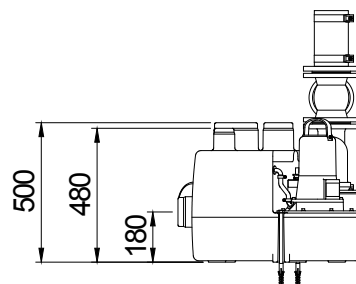
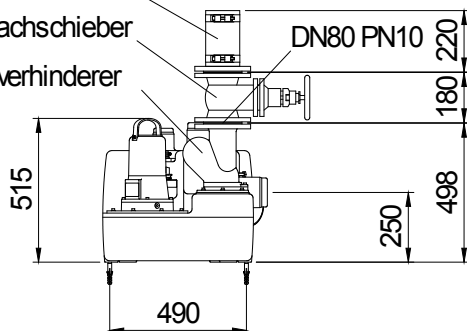
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Dry well installation  
Dimensions in mm, le

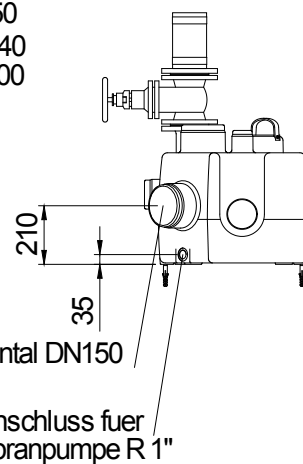
elastisches Uebergangsstueck DN100

Keilflachschieber

Kugel-Rueckflussverhinderer



Ansicht X



Zulauf horizontal DN100

Entlueftungsstutzen DN70

Reinigungsöffnung

Anschluss fuer pneumatische Steuerung

Zulauf vertikal DN150/40

Zulauf horizontal DN150

Zulauf vertikal DN100/40

Zulauf horizontal DN100

Auftriebssicherung

Zulauf horizontal DN150

Anschluss fuer Handmembranpumpe R 1"

Table Dimensions ( mm )

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

# Technical Data

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| Operating data  |                     |                   |                    |       |                    |
|-----------------|---------------------|-------------------|--------------------|-------|--------------------|
| Flow            | 0 m <sup>3</sup> /h | m <sup>3</sup> /h | Head               | 0     | m                  |
| Shaft power P2  |                     | kW                | Geodetic head      | 0     | m                  |
| Pump efficiency | s                   | %                 | Required pump NPSH |       | m                  |
| Pumpe type      | Single head pump    |                   | No. of pumps       | 1     |                    |
| Fluid           | Water, clean        |                   | Temperature        | 20 °C |                    |
| Density         | 998.3               | kg/m <sup>3</sup> | Kin. viscosity     | 1.005 | mm <sup>2</sup> /s |

| Pump           |                 |    |                              |        |                        |
|----------------|-----------------|----|------------------------------|--------|------------------------|
| Pump Code      | AQUASTAR 105 W  |    | Speed                        | 2900   | rpm                    |
| Suction port   |                 |    | Head                         | Max.   | 13.0 m                 |
| Discharge port | DN80            |    |                              | Min.   | 0.5 m                  |
| Impeller type  | Vortex impeller |    | Flow                         | Max.   | 32.0 m <sup>3</sup> /h |
| Solid size     | 40              | mm | Pump efficiency max.         | 28.5 % |                        |
| Impeller Ø     | 133             | mm | Required rated power max. P2 | 1.1    | kW                     |

| Motor                             |                                   |      |                          |       |      |
|-----------------------------------|-----------------------------------|------|--------------------------|-------|------|
| Motor version                     | Submersible motor                 |      | Insulation class         | H     |      |
| Motor name                        | AM 120TM.1,6/2 W                  |      | Degree of protection     | IP 68 |      |
| Frequency                         | 50                                | Hz   | Temperature class        |       |      |
| Rated power P1                    | 1.6                               | kW   |                          |       |      |
| Rated power P2                    | 1.1                               | kW   | Explosion protection     |       |      |
| Rated speed                       | 2900                              | rpm  | Efficiency               | 100%  | 69 % |
| Rated voltage                     | 230                               | V 1~ | at % rated power         | 75%   | %    |
| Rated current                     | 7.0                               | A    |                          | 50%   | %    |
| Starting current, direct starting | 42.0                              | A    | cos phi                  | 100%  | 0.99 |
| Starting current, star-delta      | 14                                | A    | at % rated power         | 75%   |      |
| Starting mode                     | Directly                          |      |                          | 50%   |      |
| Power cable                       | 7G1,5                             |      | Control cable            |       |      |
| Type of power cable               | H07RN-F                           |      | Type of control cable    |       |      |
| Cable length                      | 3 m                               |      | Service factor           | 1.15  |      |
| Shaft seal                        | Lip seals                         |      | Nitrile Rubber           |       |      |
| Bearing                           | Lower Bearing                     |      | Deep Groove Ball Bearing |       |      |
|                                   | Upper Bearing                     |      | Deep Groove Ball Bearing |       |      |
| Remarks                           | Start-/ Runcapacitor: - µF / 30µF |      |                          |       |      |

| Materials / Weight |                           |         |                 |
|--------------------|---------------------------|---------|-----------------|
| Pressure cover     | Grey cast iron EN-GJL-250 | Bolts   | Stainless steel |
| Impeller           | Grey cast iron GG25       | O-Rings | Nitrile Rubber  |
| Motor housing      | Grey cast iron EN-GJL-250 |         |                 |
| Collecting tank    | Polyethylene              |         |                 |
| Motor shaft        | Stainless steel 1.4104    |         |                 |
| Weight aggregat    | 64 kg                     |         |                 |

|         |              |             |            |
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