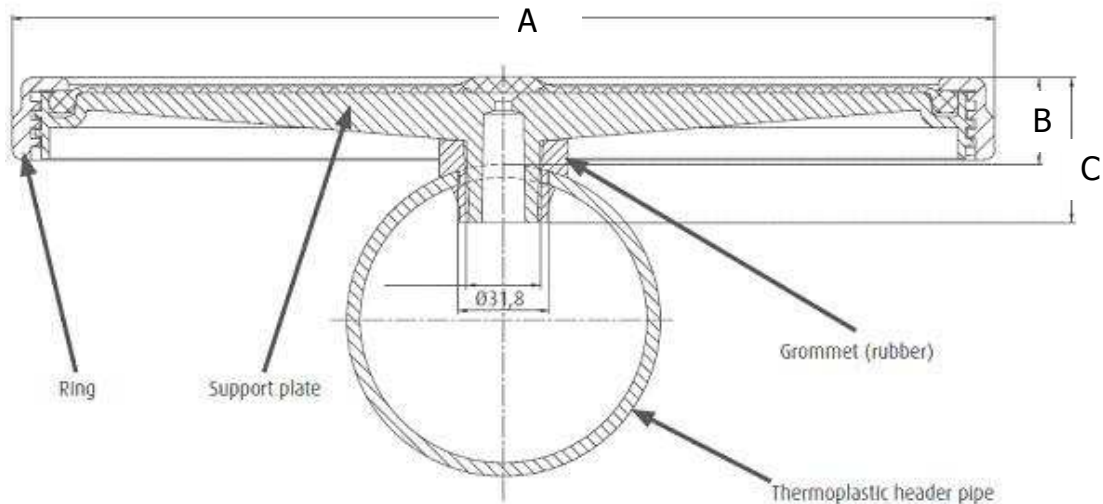




**Data Sheet**  
**JetFlex<sup>®</sup> Disc Diffuser - HD270 R<sup>3/4</sup>**  
EPDM F053 J27



### Installation Drawing<sup>1</sup> for Standard Thread R<sup>3</sup>/<sub>4</sub>



### Dimensions

| Height (C) | Diameter Total (A) / Effective | Mounting height (B) | Active Area       | Ø Orifice | Non-Return Valve | Thread <sup>2</sup>              |
|------------|--------------------------------|---------------------|-------------------|-----------|------------------|----------------------------------|
| [mm]       | [mm]                           | [mm]                | [m <sup>2</sup> ] | [mm]      |                  |                                  |
| 60         | 268\218                        | 30                  | 0,037             | 6         | Optional         | R <sup>3</sup> / <sub>4</sub> ET |

### Operating Conditions

| Air Flow                           | Max. overload/ maintenance airflow rate | Operating Temperature | Mode                      | Application            |
|------------------------------------|---|-----------------------|---------------------------|------------------------|
| [m <sup>3</sup> <sub>N</sub> / h ] | [m <sup>3</sup> <sub>N</sub> / h ]      | [°C]                  |                           |                        |
| 2-6                                | 10                                      | 5 – 60                | continuous / intermittent | residential wastewater |

- Shutdown of operation is highly recommended for air flow rates lower than minimum rate.
- Do not apply overload air flow rate (e.g. cleaning) for more than 10 minutes each day
- Numbers are for guidance only. Operating diffusers at too high or too low an airflow rate may reduce lifetime or performance. See Technical Report `Slit size for aeration membranes´ for details.

<sup>1</sup> This is an exemplary concept for R<sup>3</sup>/<sub>4</sub> external thread only. Not all commercially available sockets may be suitable for the thread provided with our disc diffuser. Always test in advance or use our clamp or glue-on saddles with R<sup>3</sup>/<sub>4</sub> internal thread.

<sup>2</sup> Always check in advance suitability of thread provided with our disc and sockets existing at the construction site.



### Connecting to Header Pipes

| Type  | Wall Thickness | Opening in Header | Material       | Colour            |
|---|----------------|-------------------|----------------|-------------------|
| <b>R<sup>3/4</sup> external thread only</b> | <b>[mm]</b>    | <b>[mm]</b>       |                |                   |
| ▪ <b>Universal Saddle</b>                   | <b>4 – 8</b>   | <b>32</b>         | <b>EPDM 75</b> | <b>black</b>      |
| ▪ <b>Glue-on Saddle 90 mm</b>               | <b>&gt; 2</b>  | <b>35</b>         | <b>PVC</b>     | <b>grey/white</b> |
| ▪ <b>Glue-on Saddle 110 mm</b>              | <b>&gt; 2</b>  | <b>35</b>         | <b>PVC</b>     | <b>grey/white</b> |

Various saddle-clamps available. See our brochure "Accessories" for details.

### Material Properties

#### Elastomeric Membrane

|  |   |                               |
|--|---|-------------------------------|
| Type                                       |   | EPDM F053                     |
| Colour                                     |   | black                         |
| Polymer                                    |   | 33%                           |
| Carbon Black                               |   | 31%                           |
| Plasticizer                                |   | 33%                           |
| Residue                                    |   | 3%                            |
| Density                                    | DIN EN ISO 1183                             | 1,08 ± 0,03 g/cm <sup>3</sup> |
| Tensile Strength                           | DIN 53504 (comparable to ISO 37)            | > 10 MPa                      |
| Elongation at Break                        | DIN 53504 (comparable to ISO 37)            | > 400%                        |
| Tear Resistance                            | DIN ISO 34<br>(comparable to ASTM D 624 T)  | > 7 N/mm                      |
| Hardness                                   | DIN 53505<br>(comparable to DIN EN ISO 868) | 53± 5 Shore A                 |
| Tension Set<br>(100% Elongation; 24 h; RT) | ISO 2285                                    | < 7%                          |
| Ozone Resistance                           | ISO 1431                                    | Grade 0 (no cracks)           |

#### Plastic Parts

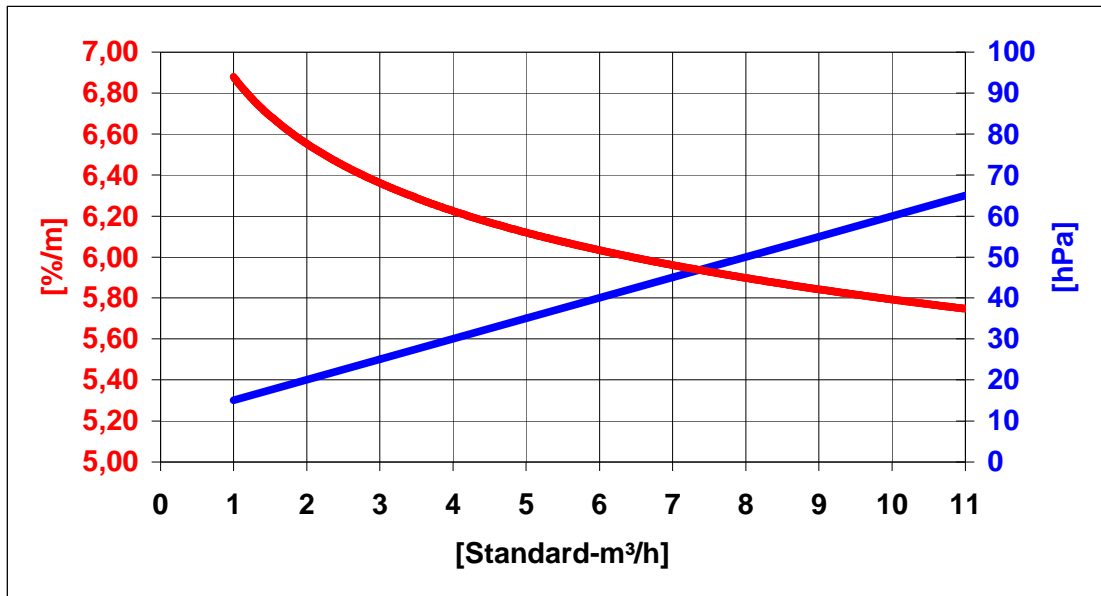
| Material  | Colour | Additional Colours      | Logo                |
|-----------|--------|-------------------------|---------------------|
| PP 30% GF | black  | minimum quantity 5,000+ | upon request 5,000+ |

### Logistics

| Shipping Unit | Dimensions  | Weight per carton | Cartons per Pallet | Pallet size (LWH) | Weight      |
|---------------|-------------|-------------------|--------------------|-------------------|-------------|
|               | [mm]        | [kg]              |                    | [mm]              | [kg]        |
| 50 pc/Carton  | 800*600*360 | 35                | 1 – 3              | 800*600*1200      | Max. 117 kg |
| 50 pc/Carton  | 800*600*360 | 35                | 2 – 8              | 1200*800*1550     | Max. 287 kg |



**SSOTE [%/m<sub>imm</sub>.]<sup>3</sup> (red) and Headloss (blue) versus Airflow per Diffuser for Disc Diffuser JetFlex® HD270 EPDM F053 J27**



**Storage:**

- Diffuser and/or rubber sleeves must be stored factory-packed in a dark, dry, ventilated and dust-free storage space according to DIN 7716. Avoid frost, heat, UV/radiation, dust and working which can cause damage of diffuser and/or packing.
- Do not store outdoors! The storage of rubber parts until installation/starting operation should not exceed one year. At on-site delivery, all rubber and plastic parts must be stored in their original packaging. Crates exposed to direct sunlight must be covered with tarpaulin to protect against UV-radiation.

**Maintenance:**

Regular maintenance on a yearly basis is mandatory. Inspect diffusers visually after emptying tanks and cleaning diffusers. Removing deposits will increase lifetime significantly. Formic acid cleaning works against scaling only. Flushing diffusers at maximum short-term airflow will keep diffusers in good condition over a long period of time. Please refer to data sheets and O&M manuals for details.

**Membrane lifetime:**

More than 5 years in municipal waste water treatment plants, depending on waste water influent and operation condition.

*Disclaimer: This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Any existing industrial property rights must be observed. The quality of our products is guaranteed under our General Condition of Sale.*

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<sup>3</sup> Aggregated data for all disc sizes. Observe all air flow restrictions. Lab conditions only; no liability assumed; SSOTE according to DWA-M 209: Specific Standard Oxygen Transfer Efficiency. Contact Jaeger for a detailed lay-out & design for your individual plant.

