Description

The TROX ‘PFS’ Diffuser is designed as a swirl diffuser with a perforated square face that fits onto a standard 600mm by 600mm T-bar ceiling, suitable for supply and return air application. It comes in only ONE size. But it can be supplied with blanking plates fitted to the rear of the diffuser face to reduce the air flow rate if required. This diffuser is designed to provide a radial air flow discharge pattern with high induction flow rate for supply air application only.

Constructions

The diffuser face can be detached from the plenum box by removing the screws at the diffuser face. The plenum box can be supplied with either top or side entry spigot. Volume control damper at the inlet spigot and internal lining in the plenum box can be provided as optional extras.

Materials

The diffuser face is manufactured from galvanized sheet steel with powder coating to RAL 9010 (matt white) as standard finish. Non-standard colour can be provided if requested. The swirl diffuser at the back of the diffuser face will be painted black to RAL 9005.

Plenum boxes are also made from galvanized sheet steel. If internal thermal insulation is required in the plenum box, this can be either in 6 mm thick rubber lining or 25 mm thick semi-rigid glass fibre insulation with marglass facing to prevent fibre erosion for air speed at up to 20 m/s.
### Performance Data

<table>
<thead>
<tr>
<th>Type</th>
<th>Air Flow (l/s)²</th>
<th>ΔP (Pa)</th>
<th>NC Level</th>
<th>SPL in dB(A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFS – V*</td>
<td>121</td>
<td>15</td>
<td>NC 33</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>140</td>
<td>20</td>
<td>NC 38</td>
<td>44</td>
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<td></td>
<td>149</td>
<td>25</td>
<td>NC 42</td>
<td>47</td>
</tr>
<tr>
<td>PFS – F*</td>
<td>139</td>
<td>15</td>
<td>NC 31</td>
<td>37</td>
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<td></td>
<td>161</td>
<td>20</td>
<td>NC 33</td>
<td>39</td>
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<tr>
<td></td>
<td>181</td>
<td>25</td>
<td>NC 39</td>
<td>44</td>
</tr>
</tbody>
</table>

**Notes:**
1. ‘V’ with “VDW/600-24” and ‘F’ with “FD/600” swirl diffuser, both for supply air application. For return air application the product type should read ‘PFS – 0’
2. The air flow data given above is ‘PFS’ diffuser without blanking plate.

### Order Code

- **Product Type:**
  - PFS - V
  - PFS - F

- **Blanking plate:**
  - 0 – None
  - 1 – Size 1
  - 2 – Size 2
  - 3 – Size 3
  - 4 – Size 4

- **Application:**
  - Z – Supply
  - A – Extract (i.e., Type ‘PFS – 0’)

- **Data not available at this moment:****

- **Powder coating finish:**
  - P1 – Non-standard colour
  - 0 – RAL 9010, matt white (Standard supply)

- **Internal Lining:**
  - I0 – Without internal lining (Standard supply)
  - I1 – 6 mm rubber foam
  - I2 – 25 mm fibre glass lining

- **M – With volume control damper**

- **V – Plenum with top inlet spigot**

- **H – Plenum with side inlet spigot**