





Fire Damper YD143





DESCRIPTION:

YD143 fire dampers designed to prevent spreading of fire from the nearby zones in ventilating systems. Mounting on rectangular and circular ducts specially fire zones. As mounting on ventilation ducts, the dampers can be used on brick and concrete walls.

MATERIAL:

Galvanized Metal Sheet

Start and stop handle:Zamak casting Outer structure and cover:1,5mm galvanized sheet Cover walls space:Air-conditioning plate of 2,5cm insulation wool and 50kg/m³ density.

APPLICATIONS:

At wall connections as split seperators of air-conditioning systems and also related ducts installed at locations exposing fire. It prevents spreading of any fire in the building into closer locations and helps for extinguishing fire by closing any ventilation systems. An optional alarm switch is used to stop air conditioning ducts.

FUNCTION:

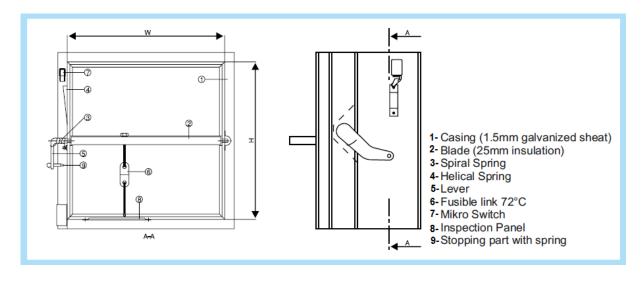
- They are made from galvanised sheet body and single blade.
- Moving blades are made from double walled galvanised sheet and between the walls insulation material is used.
- Between blade and body there are fireproof sealing.
- Fusible link (72°C)
- Spring return actuator can be usable which will close the damper by a signal from fire panel.
- Pneumatic applications are also avaiable.
- Damper casing made with universal 25 mm or 35mm flanges as a standard.
- When the damper will be mounted on kitchen walls 92°C fusible link is used.



STANDARD SIZES (mm):

| AVAILABLE SIZES (mm) - Always width x height | | | | | | | | | | | |
|--|-------|-----|-----|-----|-----|-----|-----|-----|--|--|--|
| | WIDHT | | | | | | | | | | |
| HEIGHT | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | | | |
| 200 | Х | Х | Х | X | Х | Х | Х | Х | | | |
| 300 | Х | Х | Х | Х | Х | Х | Х | Х | | | |
| 400 | Х | Х | Х | Х | Х | Х | Х | Х | | | |
| 500 | Х | Χ | X | Х | Х | Х | Х | Х | | | |
| 600 | Х | Х | Х | Х | Х | Х | Х | Х | | | |
| 700 | Х | χ | Х | Х | Х | Х | Х | χ | | | |
| 800 | Х | Х | X | X | X | Х | Х | Х | | | |
| 900 | Х | χ | X | Х | X | Х | X | χ | | | |
| 1000 | Х | Х | X | X | Х | Х | Х | Х | | | |
| 1100 | Х | Χ | Χ | Χ | Χ | Χ | Χ | Χ | | | |
| 1200 | Х | Х | Х | Х | Х | Х | Х | Х | | | |
| 1300 | Х | Х | Χ | Х | Х | Х | Х | Χ | | | |
| 1400 | Х | Х | Х | Х | Х | Х | Х | Х | | | |
| 1500 | Х | Χ | Χ | Χ | Х | Χ | Х | Χ | | | |

DRAWING





SELECTION TABLES

EFFECTIVE AREA TABLE (m2)

| W (mm) | | | | | | | | | | | | | | | |
|-----------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
| H (mm) | 150 Aeff f | 0,012 | 0,025 | 0,034 | 0,044 | 0,053 | 0,063 | 0,073 | 0,082 | 0,092 | 0,101 | 0,111 | 0,121 | 0,130 | 0,140 |
| | | 0,95 | 0,90 | 0,90 | 0,85 | 0,80 | 0,80 | 0,75 | 0,75 | 0,75 | 0,75 | 0,75 | 0,75 | 0,75 | 0,75 |
| | 200 Aeff f | 0,022 | 0,041 | 0,055 | 0,070 | 0,084 | 0,099 | 0,114 | 0,128 | 0,143 | 0,157 | 0,172 | 0,187 | 0,201 | 0,216 |
| | Aeff f | 1,00 | 0,90 | 0,90 | 0,85 | 0,80 | 0,80 | 0,75 | 0,75 | 0,75 | 0,75 | 0,75 | 0,75 | 0,75 | 0,75 |
| | 300 Aeff f | 0,040 | 0,068 | 0,093 | 0,118 | 0,142 | 0,167 | 0,191 | 0,216 | 0,241 | 0,265 | 0,290 | 0,314 | 0,339 | 0,364 |
| | Aeff f | 1,20 | 1,00 | 0,95 | 0,90 | 0,90 | 0,85 | 0,82 | 0,80 | 0,80 | 0,80 | 0,80 | 0,80 | 0,80 | 0,80 |
| | 300 Aeff f | 0,058 | 0,096 | 0,131 | 0,165 | 0,200 | 0,235 | 0,269 | 0,304 | 0,338 | 0,373 | 0,408 | 0,442 | 0,477 | 0,511 |
| | Aeff f | 1,30 | 1,10 | 1,00 | 0,95 | 0,92 | 0,90 | 0,85 | 0,85 | 0,85 | 0,85 | 0,85 | 0,80 | 0,80 | 0,80 |
| | 500 Aeff f | 0,075 | 0,124 | 0,169 | 0,213 | 0,258 | 0,302 | 0,347 | 0,392 | 0,436 | 0,481 | 0,525 | 0,570 | 0,615 | 0,659 |
| | | 1,40 | 1,20 | 1,10 | 1,00 | 0,95 | 0,92 | 0,90 | 0,90 | 0,85 | 0,85 | 0,80 | 0,80 | 0,80 | 0,80 |
| | 600 | 0,093 | 0,152 | 0,206 | 0,261 | 0,316 | 0,370 | 0,425 | 0,479 | 0,534 | 0,589 | 0,643 | 0,698 | 0,752 | 0,807 |
| | | 1,60 | 1,40 | 1,20 | 1,10 | 1,00 | 0,95 | 0,95 | 0,95 | 0,90 | 0,90 | 0,85 | 0,85 | 0,80 | 0,80 |
| | 700 | 0,111 | 0,180 | 0,244 | 0,309 | 0,373 | 0,438 | 0,503 | 0.567 | 0,632 | 0,696 | 0,761 | 0,826 | 0,890 | 0,955 |
| | | 1,70 | 1,45 | 1,30 | 1,20 | 1,10 | 1,00 | 1,00 | 0,95 | 0,90 | 0,90 | 0,85 | 0,85 | 0,85 | 0,85 |
| | | 0,129 | 0,207 | 0,282 | 0,357 | 0,431 | 0,506 | 0,580 | 0,655 | 0,730 | 0,804 | 0,879 | 0,953 | 1,028 | 1,103 |
| | 800 | 1,80 | 1,60 | 1,40 | 1,30 | 1,20 | 1,10 | 1,10 | 1,00 | 1,00 | 0,95 | 0,90 | 0,90 | 0,90 | 0,85 |

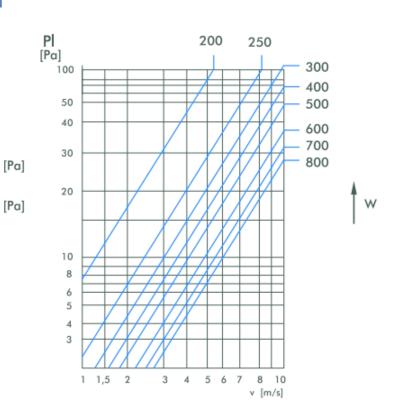
PRESSSURE LOSS DIAGRAM



Pt = Corrected pressure loss

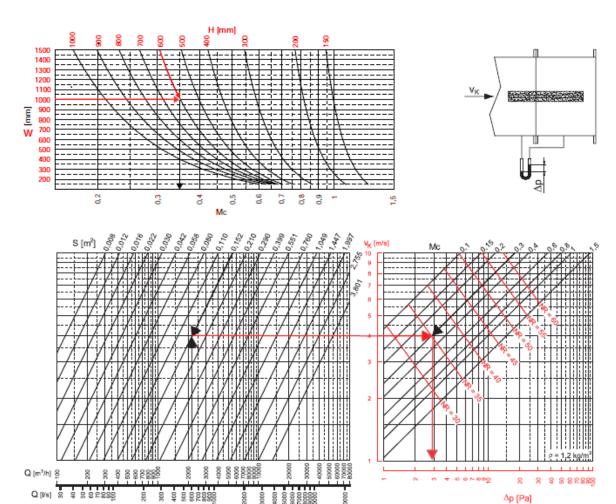
PI = Pressure loss on the diagram [Pa]

f = Pressure correction factor





PRESSURE DROP AND NOISE LEVELS



- Q [m³/h] [l/s] airflow rate

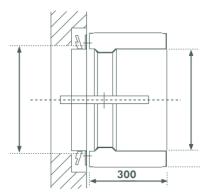
 $\begin{array}{cccc} & \cdot & V_k & [m/s] & & \text{air velocity} \\ & \cdot & S & [m^2] & & \text{free surface} \end{array}$

- Mc shape coefficient- ΔP [Pa] pressure loss

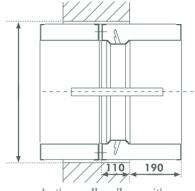
- NR noise rate (ISO standard, referred to 10⁻¹²) without considering the room attenuation



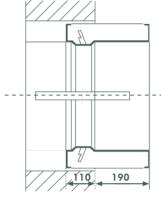
Installation & Assembly



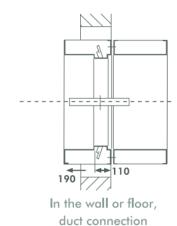
Against wall or floor with masonry subframe



In the wall or floor with addional casing



In the wall or floor





ORDER CODE

