

Airtight shutoff dampers **DATL/DAT**



Description

The DATL/DAT dampers are designed for cladding with up to 50 mm thick insulation.

The DATL/DAT dampers are a good choice when the ductwork closure must be airtight. The damper closure position can be read on the 0° to 90° dial of the control handle. The damper closure opening ratio can be fixed with a screw.

DAT — airtight shutoff damper

DATL — airtight shutoff damper with gaskets at flanged ends

All DATL/DAT dampers of diameter 355 mm or greater have the damper closure pivot provided with extra bracing.

All DATL/DAT dampers of diameter 450 mm or greater are supplied with the KIT-DS-H damper mechanism control lever. Standard dampers are made from galvanized steel sheet.

Available materials — Product code examples

DATL-... — galvanized steel sheet

DATL/DAT-... — 1.4301/304 stainless steel sheet

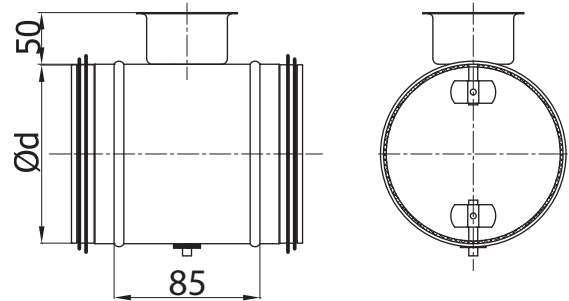
Product code example

Product code: **DATL - aaa**

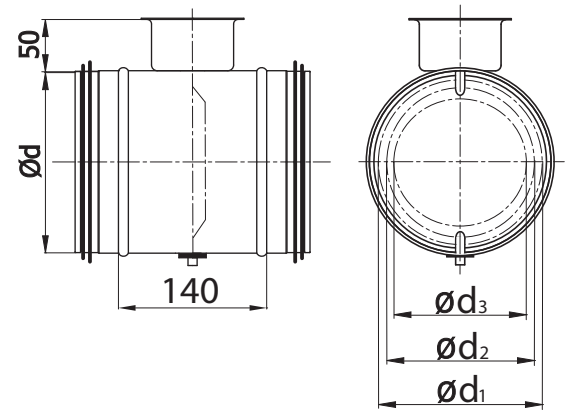
type _____
 $\varnothing d_1$ _____

Dimensions

For $d_1 < 355$, the damper closure pivot is mounted on two short rods.



For $d_1 \geq 355$, the damper closure pivot is mounted on a single long bar.



$\varnothing d_{nom}$ (mm)	$\varnothing d_{1 nom}$ (mm)	$\varnothing d_{2 nom}$ (mm)	$\varnothing d_{3 nom}$ (mm)	Weight (kg)
80	-	-	-	0.40
100	-	-	-	0.45
125	-	-	-	0.55
140	-	-	-	0.60
150	-	-	-	0.65
160	-	-	-	0.70
180	-	-	-	0.75
200	-	-	-	0.80
224	-	-	-	0.90
250	-	-	-	1.20
280	-	-	-	1.40
300	-	-	-	1.50
315	-	-	-	1.60
355*	330	295	295	2.70
400*	330	295	295	3.30
450*	370	337	293	4.50
500*	370	337	293	5.00
560*	490	457	413	6.30
600*	490	457	413	6.70
630*	490	457	413	7.20

* with a damper closure & pivot bracing

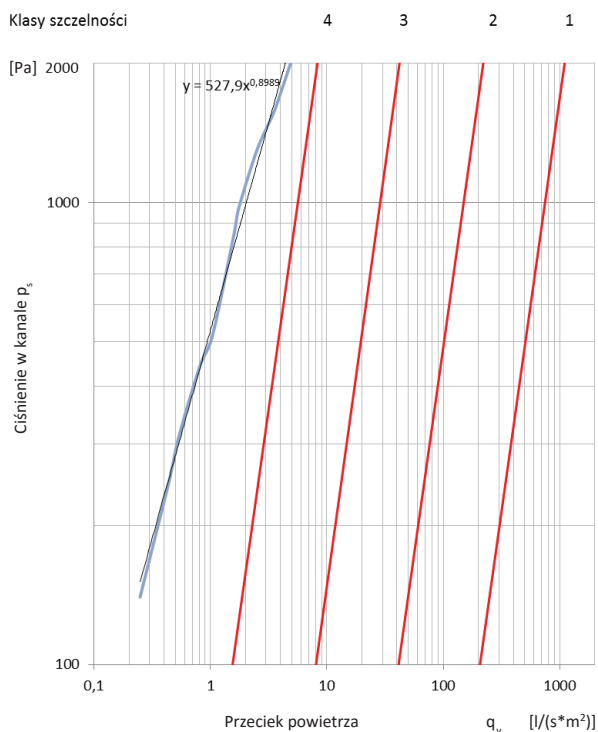
Airtight shutoff dampers

DATL/DAT

Air tightness testing

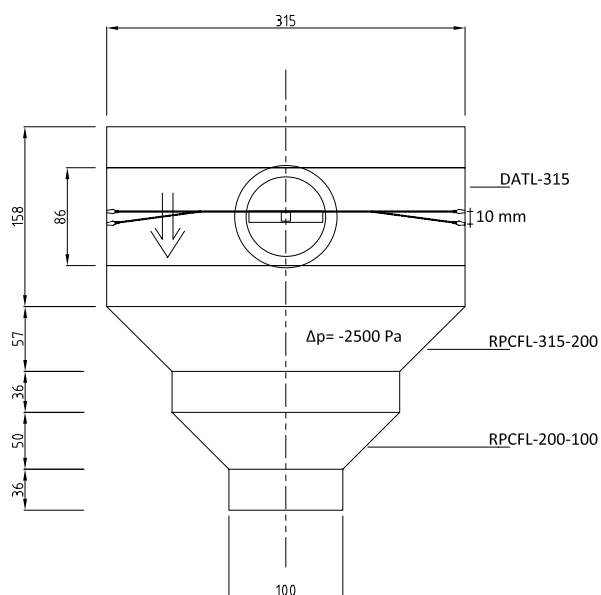
Based on the tests and the calculation results shown in Chart 1, the DATL-315 damper was found to meet air tightness class 4. The EN 1751 test method was applied.

Chart 1. Air flow leaks through a closed DATL-315 damper.



The damper closure deformation test was done at 2,000 Pa. The test duration was 120 seconds. The DATL-315 damper closure deflection was 2 cm. After the test, when the damper was opened and closed again, the damper closure returned to the original, non-deflected shape.

Vacuum deformation:



Overpressure deformation:

