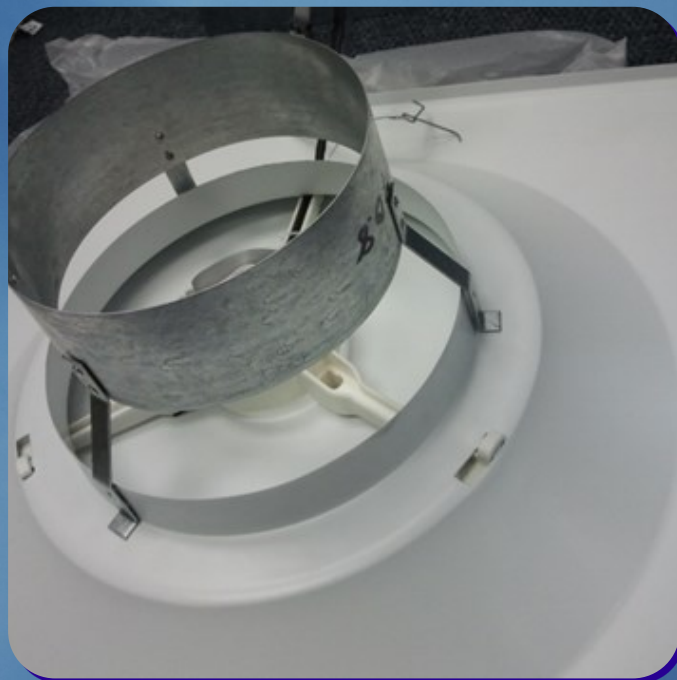


RELIEF RING FOR VSD/VCD/VRD DIFFUSERS

-  CONTROLS NECK TOTAL PRESSURE
-  USED WHEN DUCT PRESSURE IS NOT CONTROLLED
-  ENSURES EXCELLENT TEMPERATURE CONTROL
-  EASY INSTALLATION
-  JUBILEE CLAMP INCLUDED
-  SIZES 150 TO 300mm AVAILABLE
-  FITS DIFFUSERS 200 TO 350mm



FEATURES

Since VAV diffusers are pressure dependent devices, they work best when the pressure is controlled in the duct. In installations where the supply air pressure is not controlled or is inadequate, relief rings are an alternative to dampers or fan speed control. Rickard relief rings are easily fitted to the diffuser neck and spill excess air that is not required as the diffuser closes. Although this is an adequate pressure control option, no energy savings are realised with this method.

Pressure control is well maintained throughout the diffusers damper range. Accurate diffuser temperature control is therefore possible.

Each relief ring comes with a jubilee clamp for easy installation.

APPLICATION

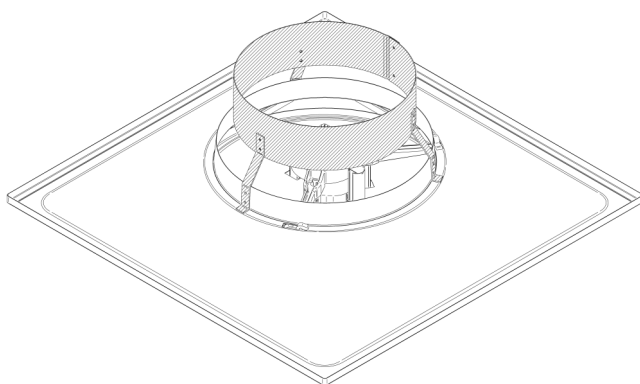
For use in installations where the duct pressure is not controlled through the use of fan speed control or dampers. The purpose of the relief ring is to provide pressure control at the diffuser by relieving excess pressure into the ceiling void. If no pressure relief is provided, the pressure in the ducting and diffuser will increase substantially as the control disk closes. This has the undesired effect of making the diffuser noisy, as well as not being able to control the air volume flow rate, and hence temperature, effectively.

OPERATION

Volume flow rate through the diffuser is not adversely affected at 100% damper position (as might be expected). There is minimal leakage through the annulus (opening between diffuser neck and relief ring spigot) when the damper is in this position. Excess air is only relieved through this opening as the diffuser closes down.

INSTALLATION

The relief ring has a spigot for the connection of the flexible duct and three legs for attachment to the diffuser (see images below).



The relief ring is attached to the diffuser with the jubilee clamp supplied with each diffuser. An additional jubilee clamp (supplied with the relief ring) is used to secure the flexible ducting to the inlet of the relief ring.

SELECTION

As a rule of thumb, when selecting diffusers according to the your required performance requirements, use the performance characteristics of a diffuser the same size as the relief ring e.g. if a 200mm diffuser is selected then assume the performance of a 150mm diffuser.

TYPES

Relief rings are one size smaller than the diffuser size they are fitted to. For this reason, they can only be fitted to diffuser neck sizes 200mm (8") to 350mm (14"). Relief ring sizes are 150mm (6") to 300mm (12").

See table below:

Part no.	Description	Diffuser Size (mm)	Diffuser Size (")	Relief Ring Size (mm)	Relief Ring Size (")
RING/0250/00100	Ring/Relief/150 for 200 mm	200	8	150	6
RING/0250/00150	Ring/Relief/200 for 250 mm	250	10	200	8
RING/0250/00200	Ring/Relief/250 for 300 mm	300	12	250	10
RING/0250/00250	Ring/Relief/300 for 350 mm	350	14	300	12

