

Technical Data Sheet –

# Shaft Natural Damper – Residential (SND-R)



Shaft Natural Damper – Residential (SND-R), are multi-zone smoke control dampers and designed for use in natural smoke ventilation systems. They are typically installed into smoke control ducts to provide extract ventilation to corridors and lobbies in residential and commercial buildings.

### **Specific Features**

- Certified to BS EN 12101-8:2011
- Classified to EN 13501-4:2016
- Tested to EN 1366-2 and EN 1366-10
- Fire resistance class EIS 120
- Suitable for smoke control in multi-zone smoke ventilation systems
- May be used for environmental ventilation
- Available up to 1.20m<sup>2</sup> maximum geometric area
- Manufactured with steel fire protected housing for installation directly into smoke shaft apertures
- Hinged white linear grill internally provides a neat finish whilst enabling quick access for commissioning and service
- Remote signalling of both open and closed positions

### **Product Description**

Shaft Natural Damper – Residential (SND-R), are multizone smoke control dampers and designed for use in natural smoke ventilation systems. They are typically installed into shafts to provide extract ventilation to corridors and into smoke control ducts in residential and commercial buildings.

They are certified to BS EN 12101-8:2011 and have a fire resistance class of EIS 120. They may be used in multi-compartmented smoke control ducts and have an integrity and insulation of 120 minutes. In addition they have been tested for reliability up to 10,000 cycles and may be used for environmental ventilation.

They are manufactured with a steel casing, and fire rated multi-blade louvres and operate by a drive open/drive close 24V AC/DC Belimo actuator. They are supplied with a hinged white linear grill internally which provides a neat finish whilst enabling quick access for commissioning and service.

# Shaft Natural Damper – Residential (SND-R)

# Classification according to BS EN 12101-8

Maximum size Width X Height (mm)	969 x 2041		
Response time/closure time	30s/60s		
Operational reliability	10,000		
Fire resistance – integrity	E120		
Fire resistance – insulation	1120		
Smoke Leakage – 500PA	S500		
Activation	AA		
Multi Compartment	Multi		
Mounting Position	VEW		
Testing Position	i⇔0		

## Actuator technical data

Data	Value		
Manufacturer/Type	Belimo/BE24		
Voltage	24V AC/DC		
Power Consumption	0.3 Amp		
Degree of Protection	IP54		
Ambient Temperature	-30 to +50°C		
Power Consumption in Operation	12W		
Power Consumption in Rest	0.5W		
Nominal Torque	40Nm		
Sound Power Level	62dB		
Connection Supply/Control	3 x 0.75mm <sup>2</sup>		
Connection Auxiliary Switch	6 x 0.75mm <sup>2</sup>		
Switching Points	3°/87°		

# **Linear Grille**

The SND-R linear grille comprises of an extruded frame and fixed aluminium linear blades at 0 degrees. They are polyester coated to RAL 9010 white 20% gloss as standard. Other colours are available on request. The linear grille functions as an air transfer and access door. The grille is framed and hinged and held closed by colour coded screws.



# Wiring Details

Actuator Control	External Connections
Fire Actuator	Fire Fire Actuator Actuator Closed Opened
0001 2 0011 2 0011 1	

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# Shaft Natural Damper – Residential (SND-R)

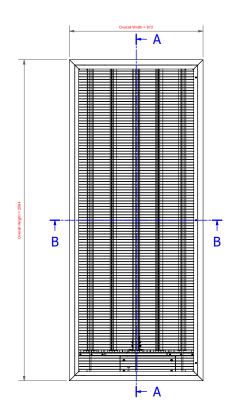
# Size Range

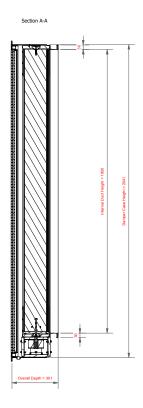
Туре	Overall Width (mm)	Overall Height (mm)	Geometric Area (m²)	Free Area* (m²)	Velocity (m/s)	Pressure Drop (Pa) (incl. grille)
SND-R.75.185	819	2041	1.388	1.03	4	7
				6	15	
					8	26
					10	45
SND-R.90.155	969 1	1741 1.395	1.03	4	7	
					6	14
					8	25
					10	44
SND-R.90.185 969	969	969 2041	1.665	1.23	4	7
				6	14	
					8	25
					10	44

\*Area between blades

# Drawings

SND-R.75.185



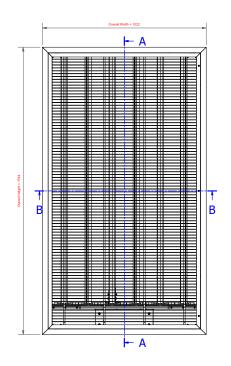


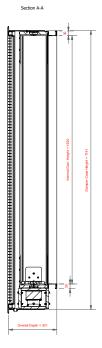
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# Shaft Natural Damper – Residential (SND-R)

## Drawings (cont.)

SND-R.90.155





#### SND-R.90.185

