



GREENDEC® 50 Sanitized® Type Connectdec anti-cold bridge ACOUSTICALLY AND THERMAL INSULATED DUCTING

Features Inner duct:

This high Tech-inner core material is protected with the antimicrobial **Sanitized®** hygiene function to reduce microbial growth and unpleasant odors on the surface. The thermal insulation on connect is suitable for preventing condensation and minimizing heat loss and loss of cold. The connecting fitting on both sides of this thermal/acoustic insulated silencer are insulated with a high performance cellular foam. The cellular foam encircling the connection fittings is to prevent dew point. However, the dew point avoidance must be calculated by stating, among other things, air intake temperature, ambient temperature of the installed silencer, relative humidity air velocity, diameter and several other factors. For avoidance of doubt contact DEC's reseller or DEC technical department for assistance in the calculation for avoiding dew point.

ANTI-MICROBE PROTECTION

Image Non- **Sanitized®** cloth:

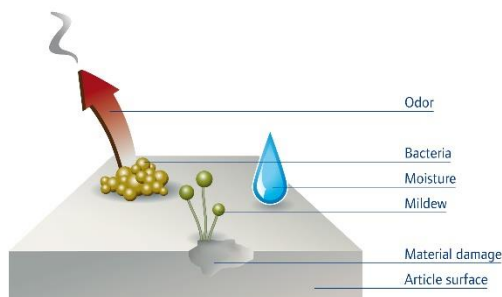
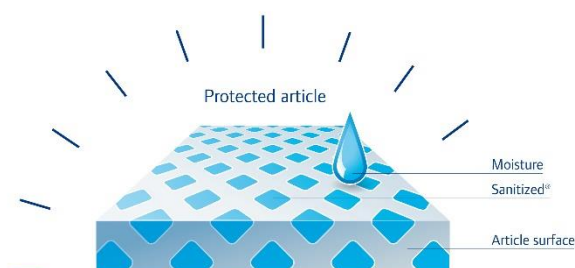


Image **Sanitized®** protection of Innerduct of Polypropylene cloth:



GREENDEC® Sanitized® consists of a **Polypropylene fabric cloth inner duct**, protected with the antimicrobial **Sanitized®** hygienic function to reduce bacteria growth, it reduces odor-causing bacteria, protecting the material permanently for peace of mind and more freshness.

Properties GREENDEC® self-stretching Inner duct:

- **Sanitized®** Polypropylene fabric cloth inner duct code: ZNW 70 FRABG-01
- The integrated antimicrobial Sanitized® hygiene function helps to keep everyday items, surfaces, and appliances clean and offers 24/7 protection against bacteria and odors. BPR PT9 compliant for more information see: www.sanitized.com
- Properties are not subject to aging and or temperature influences
- Vapor pressure Hydrophobic
- Odorless
- Tested and approved according to ISO 184 table 2 in method A of growth intensity 0 and in method C of growth intensity 0. (Test certificates: W-354476e-22-Ho und W-354477e-22-Ho dated 06.01.22)

This means that the inner material with code ZNW 70 FRABG-01: forms no nutrient basis for the development of microorganisms.

The tested material therefore meets the requirements with respect to microbial metabolism based on VDI 6022, sheet 1 (01/2018) "Hygiene requirements and room technology systems and devices".

Further material requirements according to VDI 6022, Sheet 1 must be checked separately.

APPLICATION

- Cleanrooms
- Hospitals
- Heat recovery units
- Air-conditioning systems
- Air supply systems
- Preventing condensation in air ventilation systems
- ALL HVAC systems



LIABILITY:

The information contained in this brochure was current on the publication date. DEC INTERNATIONAL reserves the right to make changes in detail at any time without prior notice. In order to avoid misunderstandings, any interested party is advised to contact DEC INTERNATIONAL checking for any changes in materials and/or information after this brochure was published.

PLEASE NOTICE:

The consultant is responsible for the actual installation and mounting of the product. The mentioned values with respect to temperatures are not appropriate to be used to determine the physical properties. These properties are also dependent on humidity and the temperature of the air inside and outside of the H.V.A.C. system.

TRADEMARKS:

The DEC logo and DEC International are trademarks, or registered trademarks of Dutch Environment Corporation BV in the Netherlands and/or other countries.

RESTRICTIONS:

The SONODEC ducts are not suitable for discharging combustion products from open fireplaces and oil-fired boilers. Neither are the ducts suitable for transporting air with a high concentration of acid and base.





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SPECIFICATIONS

Article code: **CO35CBSBGAB{Ø}/L**
 Temperature range:
 Inside: -30 °C to 90 °C
 Outside: -30 °C to 140 °C
 Operating pressure: up to +2000 Pa
 Operating air velocity: max. 30 m/s
 Min. bending radius: $0.54 \times \text{Ø} + 25\text{mm}$
 Diameter range: 100 - 200 mm
 Standard length: 0,5 ; 0,6 ; 1,0 ; 1,2 mtr
 Appearance: Aluminum

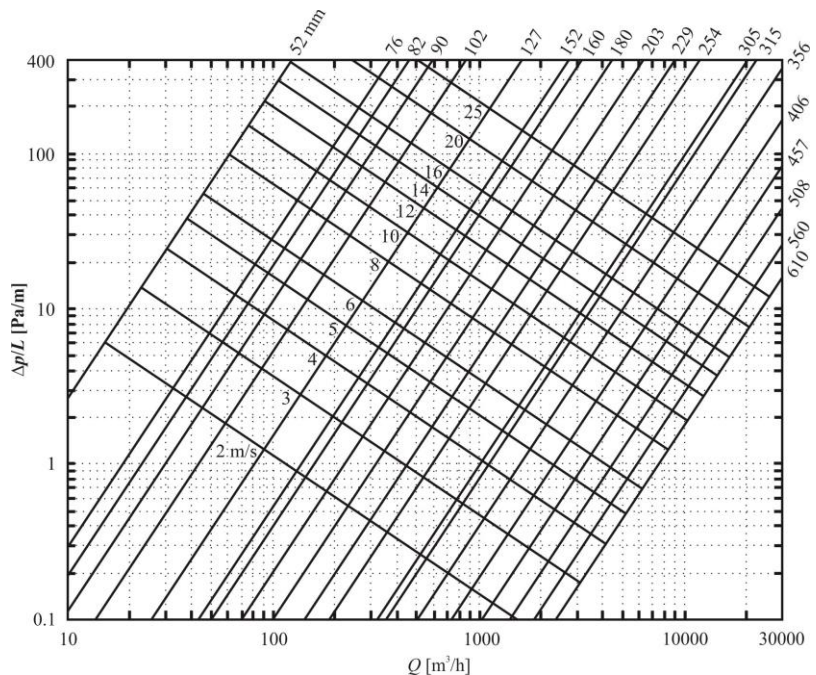
CONSTRUCTION

Inner duct: High-Tech non-woven polypropylene fabric cloth with **Sanitized®** treatment
 Glass wool blanket: 50mm, 16kg/m³
 R-value glass wool: 1.3m² K/W (ASTM C177-76)
 Outer jacket: Aluminum/polyester outerjacket
 Endcaps: Both sides Female

Cellular Foam Gasket:
 Thermal conductivity (λ) 0.038 W/m²K on +20°C:
 Thickness 50mm

Classification: According
 ISO 184 Method A: 0
 ISO 184 Method C: 0
 EU (EN 13501-1): B-s1d0

PRESSURE LOSS (STRAIGHT DUCT)



Regulation or protocol
 French VOC Regulation

Conclusion



Version of regulation or protocol
 Regulation of March and May 2011
 (DEVL1101903D and DEVL1104875A)

DIMENSIONS Metal sleeves

According to EN-1506		
D _{nom} (mm)	D _{female} (mm)	Tol.
100	100.5	+0 ; -0.5
125	125.5	+0 ; -0.5
160	160.6	+0 ; -0.6
180	180.7	+0 ; -0.7
200	200.7	+0 ; -0.7



The **Greendec® - type Connectdec®** fulfills all the requirements and are classified as specified within EN 13180: *Ventilation for buildings – Ductwork - Dimensions and mechanical requirements for flexible ducts.*

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Acoustical performances

SOUND

ATTENUATION

According to **ISO 7235**

± 2 dB

Insulation wool 50mm (Test report nr. A4700-3E Peutz bv - The Netherlands)									
D _n (mm)	L (m)	Attenuation, dB - Mid-frequency, Hz							
		63	125	250	500	1000	2000	4000	8000
100	1,0	15,7	16,1	35,5	41,2	39,7	46,5	53,0	33,8
125	1,0	20,5	22,7	39,6	32,8	32,7	41,2	37,7	23,7
160	1,0	14,2	14,2	27,6	34,7	34,8	43,1	24,2	16,8
200	1,0	13,4	16,8	25,4	36,5	39,7	36,1	17,3	16,1

Insulation wool 50mm (Test report nr. A4700-3E Peutz bv - The Netherlands)									
D _n (mm)	L (m)	Attenuation, dB - Mid-frequency, Hz							
		63	125	250	500	1000	2000	4000	8000
100	1,0	15,8	10,7	23,6	25,4	26,4	39,2	30,8	22,5
125	1,0	11,9	8,1	19,7	25,1	26,8	37,3	23,0	17,2
160	1,0	13,8	8,4	19,4	22,7	23,4	27,4	15,9	12,3
200	1,0	13,6	12,4	18,2	23,2	25,4	20,9	11,9	11,3

WALL

REDUCTION

According to **ISO 7235**

± 2 dB

Insulation wool 50mm (Test report nr. A4700-3E Peutz bv - The Netherlands)									
D _n (mm)	L (m)	Transmission loss, dB - Mid-frequency, Hz							
		63	125	250	500	1000	2000	4000	8000
100	1,0	27,7	26,4	20,9	17,0	13,8	13,9	17,6	23,5
125	1,0	23,6	20,9	14,5	11,0	9,7	11,7	14,5	20,5
160	1,0	25,7	22,2	16,7	13,5	11,5	12,8	15,4	20,2
200	1,0	23,2	20,2	16,5	13,2	12,1	14,1	17,4	21,8

Insulation wool 50mm (Test report nr. A4700-3E Peutz bv - The Netherlands)									
D _n (mm)	L (m)	Transmission loss, dB - Mid-frequency, Hz							
		63	125	250	500	1000	2000	4000	8000
100	1,0	25,9	24,0	19,7	14,6	12,4	13,7	17,0	23,5
125	1,0	25,0	22,3	17,0	13,4	11,5	14,2	17,2	22,8
160	1,0	26,9	20,3	16,6	13,6	11,0	12,5	15,7	20,5
200	1,0	26,5	20,1	16,3	13,4	12,1	13,8	17,6	22,3

Properties insulation



Reach/RoHs Compliant

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