



C.03

Synthetic duct and fitting

ISDR

Insulated ducts PP **Ducts**

Insulated ducts type ISDR

ISDR is an innovative and durable insulated ducting system. This high quality solution is developed to satisfy the increasing demands concerning thermal insulation and noise levels in living areas for aero-technical installations with heat recovery.

Application

- Installation with heat recoveryEasy to install by means of flexible rubber connections with "tooth-groove" system
- Easy to shorten precisely with few rest waist
- The flexible connections guarantee an air tightness of the highest level
- Conical connection pieces for connection between any heat recovery unit with roof or wall passages
- 160/125 (according to DIN-EN-ISO 51235:1999)
- High thermal insulation value to prevent condensation A minimal amount of suspension clamps have to be used for mounting: install a suspension clamp every 2 metres

Composition

- Outer sheath made of Polyethylene (HDPE)
- Inner sheath made of insulating Polyolefin foam, vapour-tight with closed cellular structure
- No risk of corrosion, mosses or mould thanks to the hydrophobic inner sheath
 Temperature range from -80°C to +95°C (according to EN 14707)
 Thermal conductivity coefficient 0,040 W/mK

Accessories

- Insulated bend, type ISDR BD90/45°
- Connection piece, type **ISDR M** Wall passage, type **ISDR BLR**

- Wall passage, type ISDR DDI
 Roof passage, type ISDR DDI
 Aluminium roof collar, type ISDR PP
 OBMC 160 clamp for duct mounting with an external diameter of 160 mm
 OBMC 200 clamp for duct mounting with an external diameter of 200 mm
 OBMC 200 clamp for duct mounting with an external diameter of 200 mm
- OBMC 250 clamp for duct mounting with an external diameter of 250 mm



Order example

ISDR 200/170 Explanation: ISDR = duct type 200 = diameter of outer sheath 170 = diameter of inner sheath

Technical data											
Qv [m³/h]	100	150	200	250	300	350	400	450	500	550	600
	Ps/m [Pa]										
ISDR 160/125	0,6	1,3	2,4	3,5	5						
ISDR 200/170		0,2	0,5	0,8	1,2	1,5	2	2,6	3	3,7	4,3
ISDR 250/200			0,2	0,3	0,4	0,5	0,7	1	1,2	1,4	1,7

Text for tender

- The connection to the heat recovery units is done by means of a pre-insulated ducting system in black plastic that contributes to an improvement in efficiency in modern residential constructions. The ducts retain their shape due to a ribbed outer sheath and a smooth inner sheath made of polyethylene (HDPE) with a polyolefin, closed-cell insulation foam contained between the sheaths. The use of the ducts prevents condensation thanks to the thermal insulation with a water-repellent closed cell structure and with very good acoustic properties. The ducts can be mounted very easily, safely and completely airtight according to the highest tightness class by using external rubber (EPDM) connections. The duct parts can be shortened very easily and precisely, whereby residual pieces are reduced to a minimum and thermal bridges can be avoided. The ductwork is preferably fixed with mounting brackets and can be provided with specially developed roof and wall passages. Special tapered sleeves are provided for the airtight connection to the heat recovery units. The ducts can be used with temperatures from -40°C to +95°C and have a thermal conductivity coefficient of 0.040 W/mK at 40°C.
- CAIROX type ISDR

