

## Semi-flexible aluminum duct



### Description

Semi FLEX ducts are made from 60-mm wide aluminium foil strip spiral coils. The ducts are designed for flexible connections between specific ventilation system components, e.g. the main ventilation ducts and plenum boxes. They can also be used for hot air exhaust connections between fireplace fireboxes and for building air heating ductwork.

**Packaging:** 3-metre sections compressed to 1000–1300 mm.

**Flexibility:** The minimum duct bending radius is 1.5 times the duct diameter ( $R = 1.5D$ )

**Temperature range:**  $-30^{\circ}\text{C}$  to  $+250^{\circ}\text{C}$

**Max. humidity:** 95%

**Maximum acceptable static pressure:** 2000 Pa

**Maximum acceptable static vacuum:** 1000 Pa

**Flow rate:**

Recommended operating velocity: max. 7 m/s

Maximum flow velocity: 25 m/s

**Fire resistance:** non-flammable

**Available materials — Product code example**

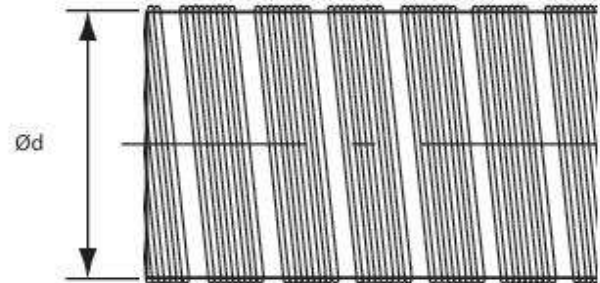
AF-AL-... — aluminium sheet

**Product code example**

Product code: **AF-AL - aaa**

type \_\_\_\_\_  
 $\varnothing d$  \_\_\_\_\_

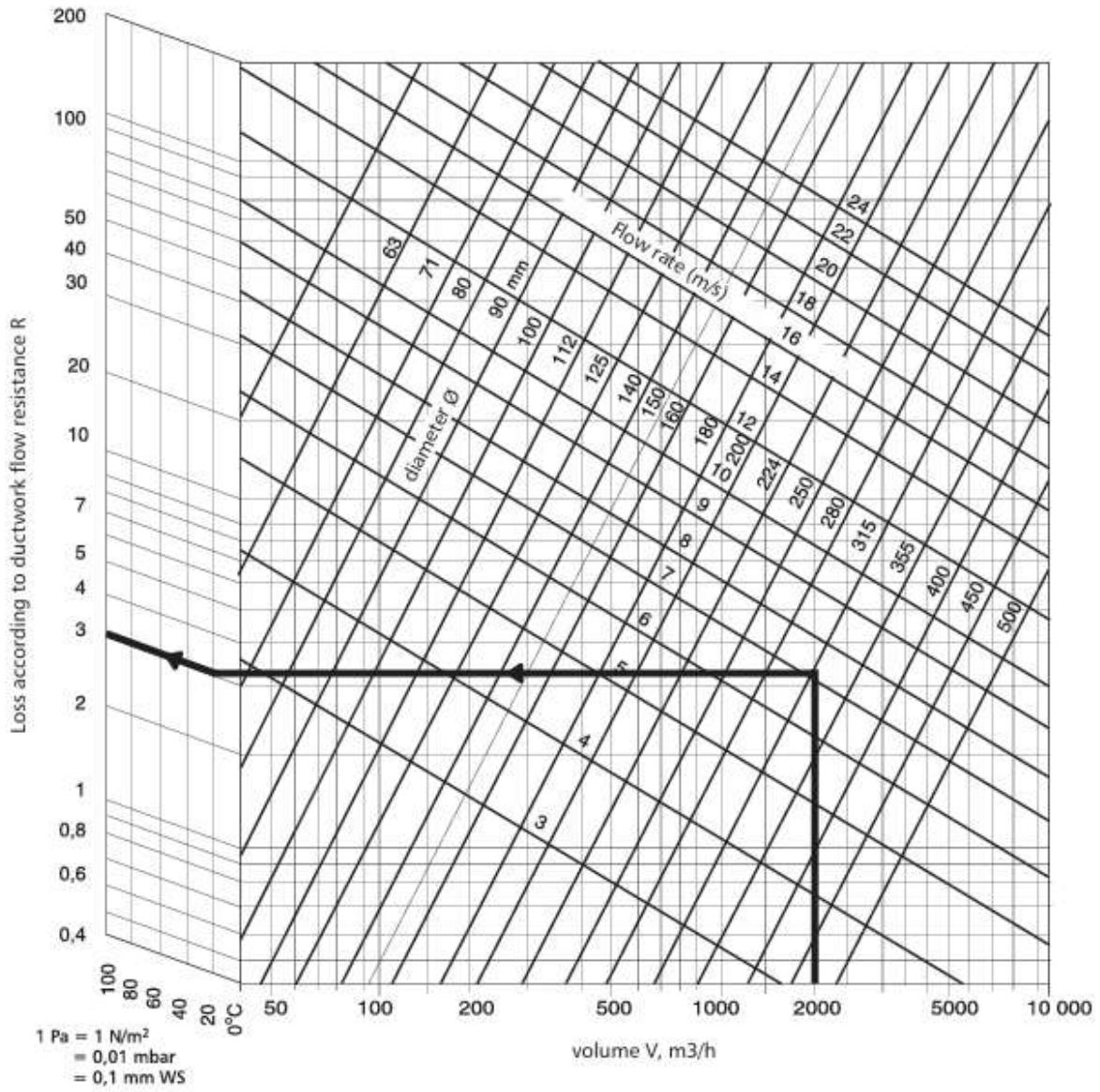
## Dimensions



$\varnothing d_{1\text{nom}}$ (mm)	$\varnothing d_{2\text{nom}}$ (mm)	Length L (mm)	Weight (kg)
80	83	3000	0.34
85	88	3000	0.36
90	93	3000	0.38
100	103	3000	0.42
110	113	3000	0.47
115	118	3000	0.49
120	123	3000	0.51
125	128	3000	0.53
130	133	3000	0.55
133	136	3000	0.57
135	138	3000	0.58
140	143	3000	0.59
150	154	3000	0.63
160	164	3000	0.68
180	184	3000	0.76
200	204	3000	0.90
250	254	3000	1.13
300	304	3000	1.35
315	319	3000	1.42
355	359	3000	1.60
400	406	3000	1.80
450	456	3000	2.14
500	506	3000	2.25

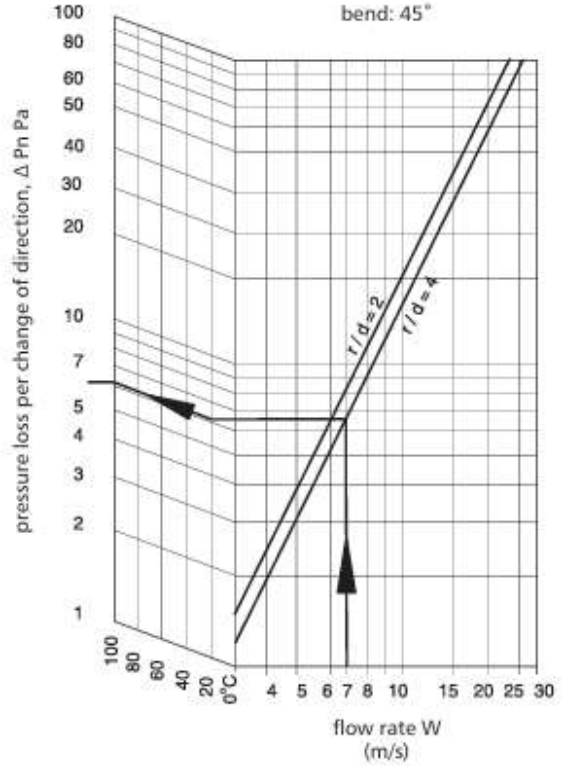
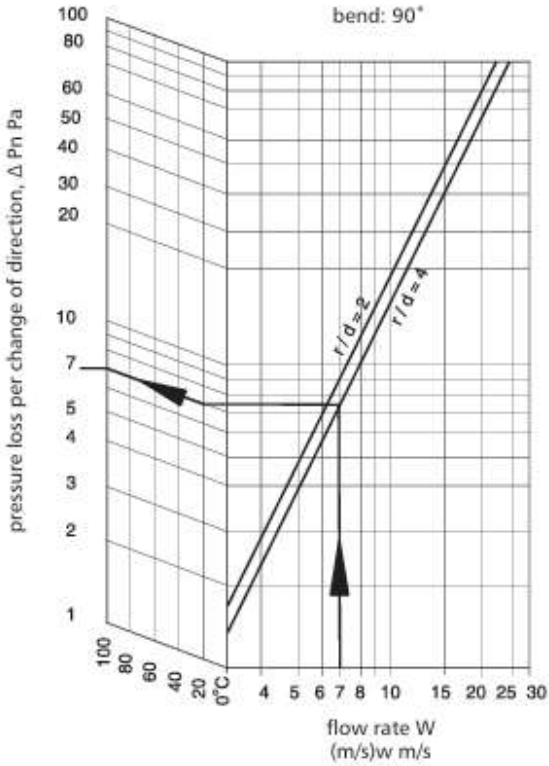
## Technical specifications

Straight-line pressure drop chart



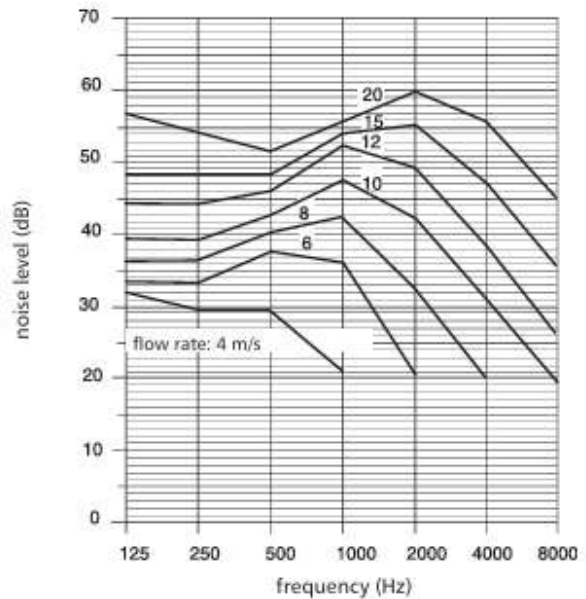
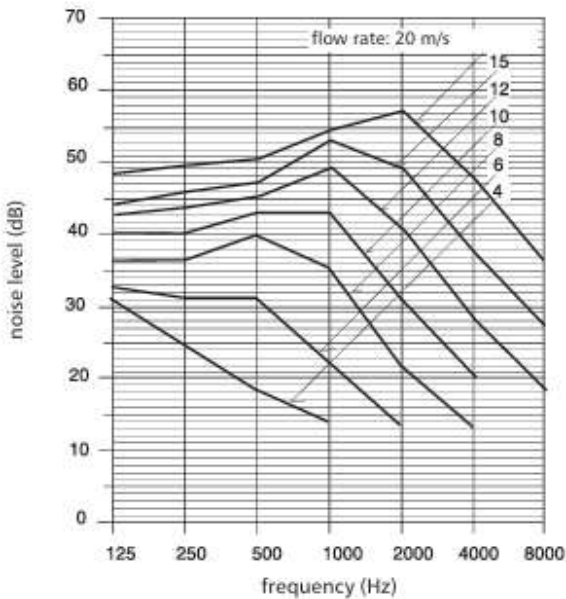
## Technical specifications

Pressure drop chart for 90° and 45° ductwork bends



1 Pa = 1 N/m<sup>2</sup>  
 = 0,01 mbar  
 = 0,1 mm WS

Noise level in ALNOR FLEX and STAL FLEX ducts, standard diameters from 100 mm to 300 mm



Noise level in ALNOR FLEX and STAL FLEX ducts  
 Straight run

Noise level in ALNOR FLEX and STAL FLEX ducts  
 Bend, 90°, r = d