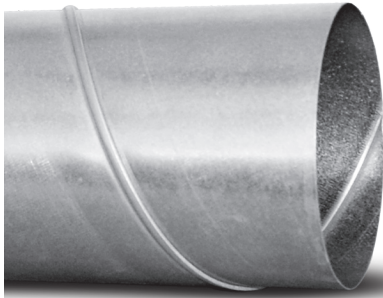


Spiral ventilation ducts

SPR



Description

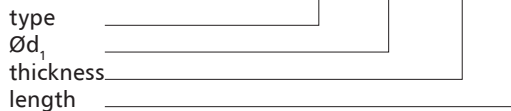
Round spiral ducts are available in diameters from 80 mm to 1600 mm. The ducts are available as made of 0.4 mm to 1.8 mm thick metal sheet; the ducts in diameters of DN 160 mm or greater are also available with corrugation for improved stiffness and vacuum strength. The corrugations are available as a standard feature for diameters of DN 250 mm to DN 1600 mm. All spiral ducts made from galvanized steel sheet, stainless steel sheet or aluminium sheet meet requirements of air tightness class D according to EN 12237.

Available materials — Product code example

- SPR-C-... — galvanized steel sheet
- SPR-K-... — 1.4301/304 stainless steel sheet
- SPR-K-...-...-316L — 1.4404/316L stainless steel sheet, molybdenum-enriched
- SPR-A-.... — AW-1050A H24 aluminium sheet
- SPR-CU-.... — M1E z4 copper sheet

Product code example:

Product code: **SPR-C - aaa - bbb - ccc**

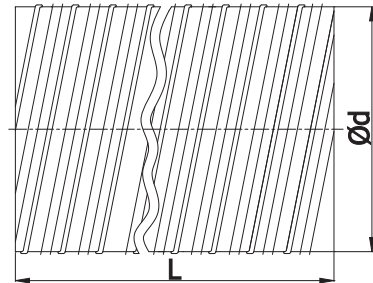
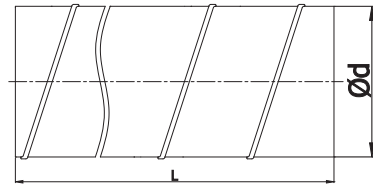


Product certified by TÜV Rheinland Polska Monitoring + Testing



Dimensions

corrugated

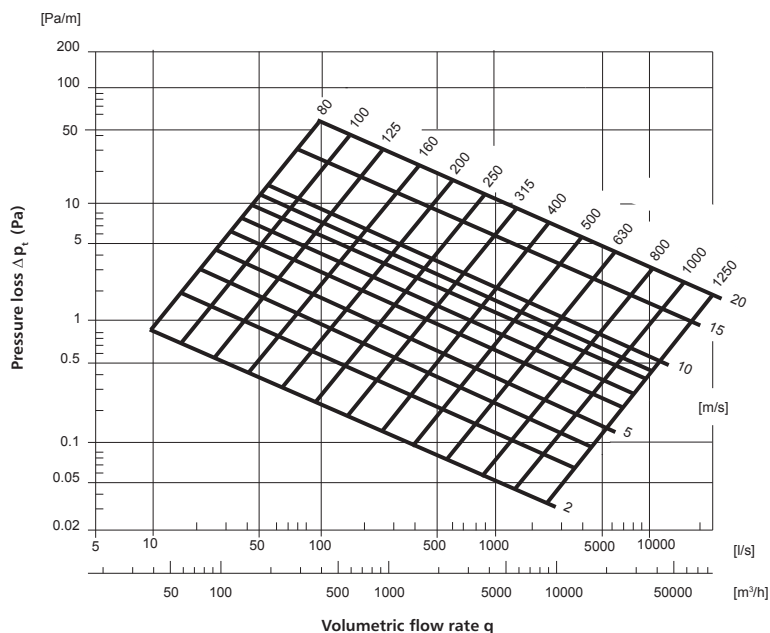


$\varnothing d_{nom}$ (mm)	πd (m)	$\frac{\pi d^2}{4}$ (m ²)
80	0.251	0.005
100	0.314	0.008
125	0.393	0.012
140	0.440	0.015
150	0.471	0.018
160	0.502	0.020
180	0.565	0.025
200	0.628	0.031
224	0.703	0.039
250	0.785	0.049
280	0.879	0.062
300	0.942	0.071
315	0.989	0.078
355	1.115	0.099
400	1.256	0.126
450	1.413	0.159
500	1.570	0.196
560	1.758	0.246
600	1.884	0.283
630	1.978	0.312
710	2.229	0.396
800	2.512	0.503
900	2.826	0.636
1000	3.140	0.785
1120	3.517	0.985
1250	3.925	1.227
1400	4.396	1.539
1600	5.024	2.010

Spiral ventilation ducts

SPR

Technical specifications



Vacuum

Ventilation systems operated at high vacuum are exposed to a high risk of ductwork deformation which usually begins at the structurally weakest parts of the ductwork, e.g. at the points of dents incurred during transport, handling or installation. Therefore it is of critical importance to properly choose the design and size of ducts according to the pre-defined operating vacuum. The following table shows the maximum operating vacuum (Pa) levels for specific types of ducts.

L (mm)	Ød (mm)	t=0.5 (mm)		t=0.6 (mm)		t=0.7 (mm)		t=0.9 (mm)		t=1.25 (mm)	
			corrugated		corrugated		corrugated		corrugated		corrugated
6	80	27000		46700							
	100	21000		36300		38000		42000			
	125	15000		25900		31000		35000			
	160	8300		18000		23000		27000			
	200	5000		14500		17500		20000	23500		
	250	2300	5000	7000	16000	10000	21000	15300	23000	17000	26000
	315			2000	10500	6000	14000	10200	21000	14000	24000
	400				4500		9000		12100		16000
	500				3000		5500		7200		10000
3	630					3900		6000		8500	
	800					1500		2600		5600	
	1000							1000		2200	
	1250							800		1200	