Circular duct



Description

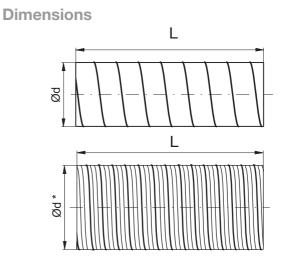
Circular duct.

Ducts are always produced locally and can therefore have different thicknesses and other specifications per country.

The ducts in \emptyset 80 – 315 can be produced both with and without click function (notches). Please specify when ordering.

Available in Recycled Steel in selected countries.





Ød std nom	Ο πd m	Α πd²/4 m²	L std [mm]	m std kg/m
63	0,198	0,003	3000	0,85
80	0,251	0,005	3000	0,82
100	0,314	0,008	3000	1,02
112	0,352	0,010	3000	1,14
125	0,393	0,012	3000	1,28
140	0,440	0,015	3000	1,43
150	0,471	0,018	3000	1,53
160	0,503	0,020	3000	1,64
180	0,565	0,025	3000	2,04
200	0,628	0,031	3000	2,27
224	0,704	0,039	3000	2,54
250 *	0,785	0,049	3000	2,84
280 *	0,880	0,062	3000	3,58
300 *	0,942	0,071	3000	3,83
315 *	0,990	0,078	3000	4,02
355 *	1,11	0,099	3000	4,54
400 *	1,25	0,126	3000	6,01
450 *	1,41	0,159	3000	7,03
500 *	1,57	0,196	3000	7,81
560 *	1,75	0,246	3000	8,74
600 *	1,88	0,283	3000	9,37
630 *	1,97	0,312	3000	9,84
710 *	2,23	0,396	3000	13,1
800 *	2,51	0,503	3000	14,8
900 *	2,82	0,636	3000	21,7
1000 *	3,14	0,785	3000	24,1
1120 *	3,51	0,985	3000	27,0
1250 *	3,92	1,22	3000	30,2
1400 *	4,39	1,53	2400	47,5
1500 *	4,71	1,76	2400	50,9
1600 *	5,02	2,01	2400	54,3
1800 *	5,65	2,54	2400	63,1
2000 *	6,28	3,14	2400	71,9

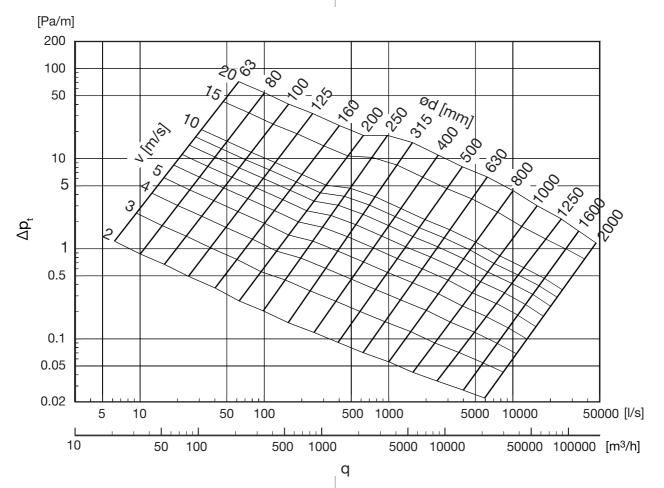
* With outturned stiffening corrugation.





Circular duct

Technical data



Special versions

- We can supply ducts with the following special designs:
- In intermediate dimensions
- Extra tight, with nitrile rubber seal in the fold

In other sheet metal thicknesses

Extra tight, with fold seal

When extremely good sealing is required in the spiral fold, the ducts can also be supplied with a special rubber seal in the fold.

This seal is very effective at stopping leakage of vegetable oils and greases, and most petroleum products including white spirit.

Other sheet metal thicknesses

If extra stability is needed in ducts, because of high negative pressure etc., they can be supplied with thicker sheet metal than standard. Remember that the thickness increase always reduces the inner diameter. Fittings for such special ducts must be specified separately and sometimes have to be made specially.

Reinforcement corrugations

Ducts of Ø250 mm and above are normally given stiffening corrugations to increase radial stiffness.





Circular duct

Technical data

Strength

Positive pressure

In case of high positive pressure, the rubber gaskets lips will first start to whistle. At considerably higher pressure, the joints between the ducts will be forced apart. The high pressures needed for this to happen are not relevant to ventilation installations.

Negative pressure

In installations with high negative pressure, there is a risk that the ducts could collapse.

This phenomenon is referred to as buckling, and can suddenly happen at the weakest point in the system. Buckling wanders along the duct, which can be completely flattened. The weakest point is frequently a "transport dent" on a duct. For this reason, only use undamaged ducts in systems which are close to the critical pressure!

Strength and leakage

The performance of the gasket ability for tightness is different from the pressure limits and is shown in the table below.

In exceptional cases, additional strong ducts and fittings are needed. Lindab has developed a system that can withstand down to 5000 Pascal's negative pressure. To minimize costs and to be sure of the performance of the specific system, contact Lindab for precise dimensioning.

	Witho	ithout stiffening corrugations					With stiffening corrugations										
Diameter		63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000
Negative pre	essure	; 		-21,0	-12,5	-6,5	-5,1	-3,8	-4,0	-3.0	-2,5	-1,8	-1,4	-1,0	-0,8	-1,1	-0,85
[kPa]		-47,0	-40,4 '	r	* Co	lapse	e not	achie	ved								

Collapsing pressure

	Min Dim nom	Max Dim nom	Max Negative pressure [Pa]	Max Positive pressure [Pa]
Safe Gasket stabillity	63	1600	-5000	3000
Duct system Eurovent certified	63	315	-3800	2000
Duct system Eurovent certified	400	1250	-750	2000
Duct system according to EN 12237	63	1250	-750	2000
Duct system - Strong solution on request	63	1600	-5000	3000



