

IFD INLINE FOAM DAMPER

AIR MANAGEMENT SYSTEMS



IFD (DINØRP) is an inline damper for circular ducts. It is completely made from soft elastic plastic foam with good damping abilities.

The damper has a number of oval openings equipped with releasable plugs. The pressure drop across the damper is adjusted by varying the number of open holes. Due to the special material and the design of the holes, sound generation will be low even at large pressure drops. The damper is equipped with a measurement outlet to make adjustment faster. The stable plastic foam has an open cellular structure and high density, which makes for an extraordinary ability to absorb sound.

Because of this, the damper acts as a simple silencer. By placing several dampers after one another in a duct, the silencing is increased further. Sound problems, such as overhearing between rooms, can often be solved.

FIRECLASS Flame retardant (EN ISO 11925-2:2002).

MATERIAL The Foam damper is mainly made from a flexible polyurethane foam on one side Protective PU-foil.

ACOUSTIC DATA Sound power level $L_w = L_{wa} + K_w / \text{Table } K_w$

Size	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
80	6	4	3	0	-9	-10	-17	-24
100	6	4	3	0	-9	-10	-17	-24
125	4	2	1	0	-8	-10	-18	-24
160	5	4	3	0	-9	-10	-18	-22
200	4	2	5	-4	-10	-15	-20	-25
250	5	4	3	0	-9	-10	-18	-22
315	4	2	5	-4	-10	-15	-20	-25

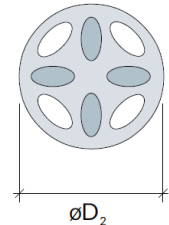
SOUND ATTENUATION The sound attenuation without end reflection. Number of open holes

Size	openHoles	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
80	2	2.5	2	3	4.5	6	9	10	16
	3	3	3.5	2.5	5.5	8.5	8.5	15	19
100	5	1.5	2.5	1.5	3.5	6	6.5	12	17
	3	5	6	5	5	12	13	19	21
125	8	1	1.5	1.5	2.5	6	6	11	18
	1	6.5	7	4	9.5	13	16	18	22
160	5	3	3.5	2.5	5.5	8.5	8.5	15	20
	2	4	6.5	2.5	5.5	13	14	18	16
200	8	2	2	1	1.5	7	7	13	14
	3	5	4	3	7	13	19	18	17
250	10	2	3	1.5	2.5	7.5	11	14	13
	4	5	5	3	6	12	15	16	18
315	14	2	2	1	1.5	7	8	10	13

Dimensions

Size	ØD1	ØD2	S
80	80	82	50
100	100	102	50
125	125	127	50
160	160	162	50
200	200	202	50
250	250	252	75
315	315	318	75

ØD1 = diameter of the duct



The damper is incredibly easy to install which makes it an ideal choice for use with existing installations. Simply insert the damper in the duct opening from the room side. No tools are needed. The formable damper will seal tightly against the duct wall. The damper can be easily cleaned with a vacuum during duct cleaning.

A (mm) B (mm)

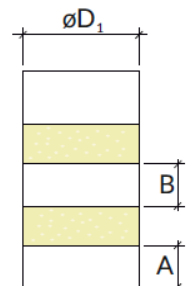
Supply air > 50-350 50-250

Exhaust air > 0-50 50-250

ØD1 = Diameter of the duct

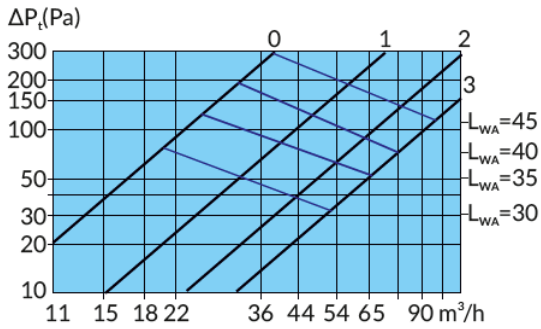
A = Minimum distance between duct opening and the first damper

B = Minimum distance between dampers

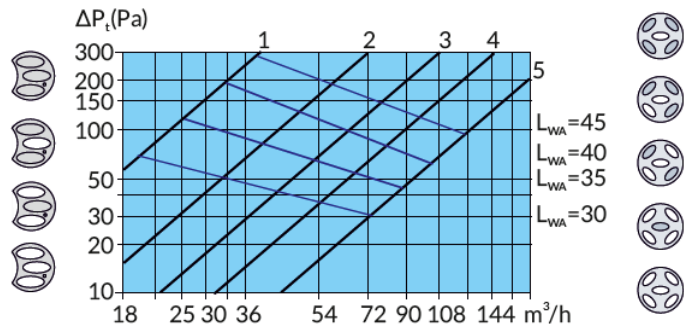


AIR FLOW RATE & PRESSURE LOSS L = Sound power level in the duct dB(A). ΔP_t (Pa)= Total pressure loss

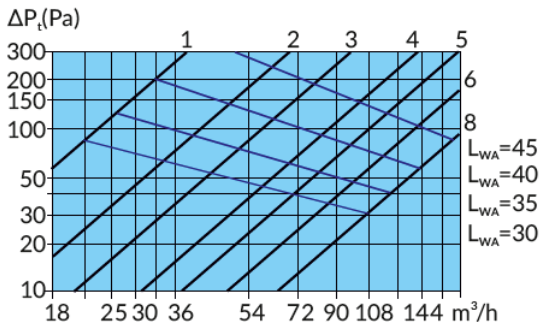
DIN080RP



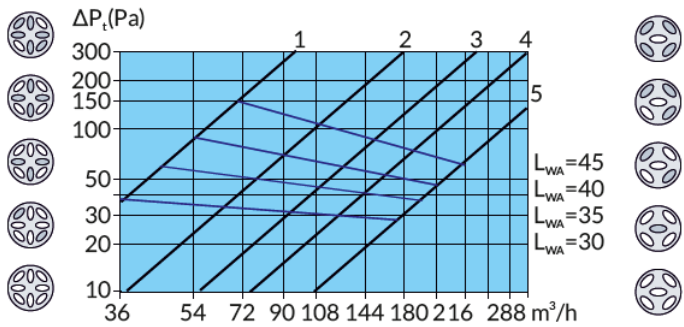
DIN100RP



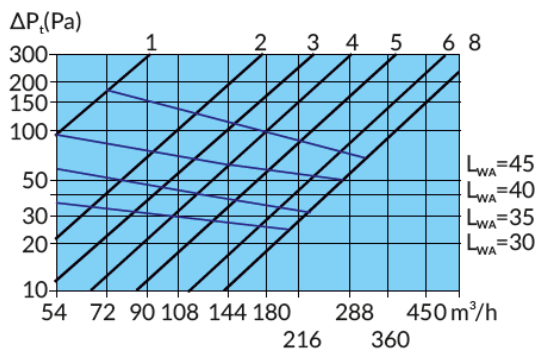
DIN125RP



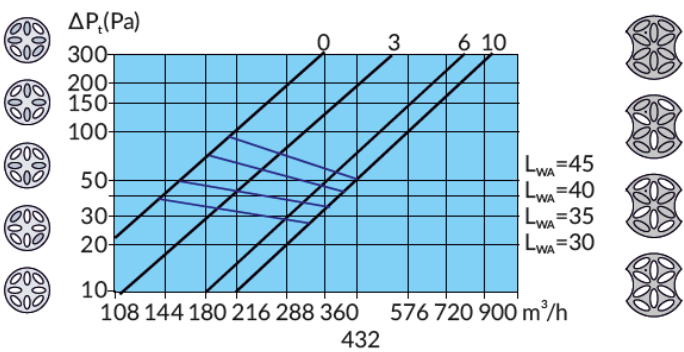
DIN160RP



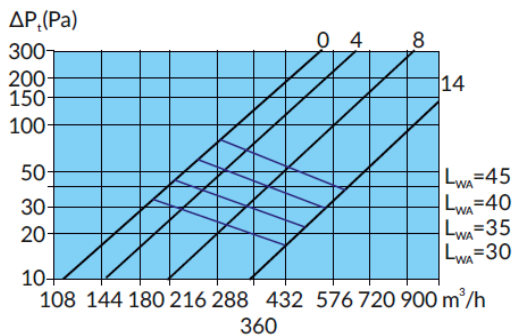
DIN200RP




DIN250RP



DIN315RP



The symbol  shows the number of open holes. The curved in the diagram are keyed with a number. The number shows how many holes are open