

LTDF

Slot diffuser - Filter



Slot diffuser

LTDF



Description

LTDF is a linear slot diffuser made of aluminium and equipped with a filter FP-15 G3. Used for extract air, and to keep an aesthetic design, the diffuser can be equipped with aluminium blade deflectors. The LTDF has a hinged openable face plate, which makes changing of the filter and maintenance from the room side very easy. LTDF is delivered with the plenum boxes GBPF, JBPF, NBPF or KBPF, always mounted from the factory.

- Design linear slot diffuser
- Suitable for extract
- Easy access to the filter

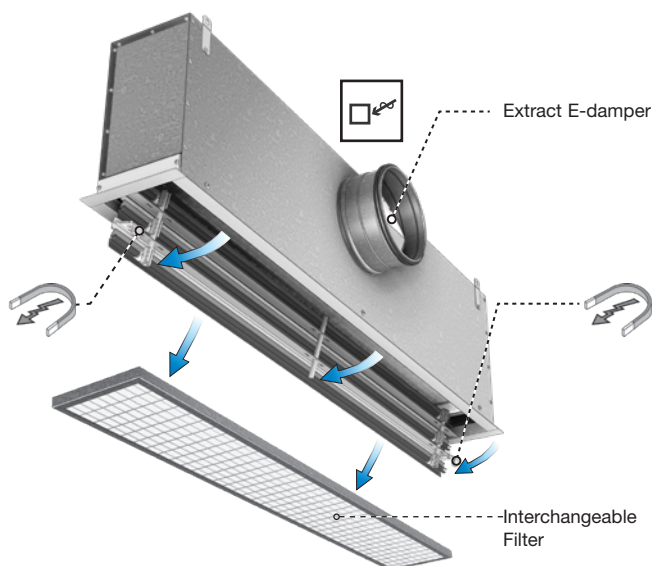
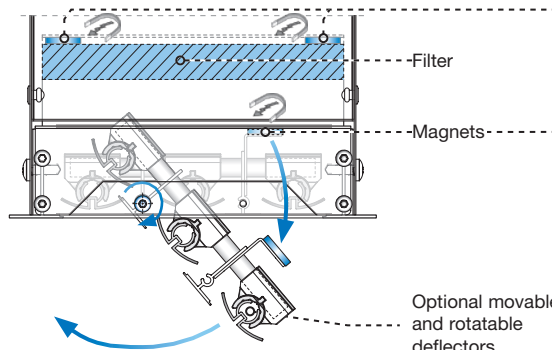
Order code

Product	LTDF 25 a bbbb cc dd ee ff									
Type	LTDF									
Nominal slot width	25									
Number of slots	3, 4, 5, 6									
Length	600-1200 (In steps of 50 mm)									
Colour of profiles	S0 - Anodized aluminium S1 White RAL 9010, gloss 30 S2 White RAL 9003, gloss 30									
Colour of deflectors	D0 Black RAL 9005, gloss 30 D1 White RAL 9010, gloss 30 D2 White RAL 9003, gloss 30 D3 - No deflectors D4 - Anodized aluminium									
Plenum box	GBPF, JBPF, NBPF, KBPF									
Damper type	E Extract air x No damper									

Example 1: LTDF-25-4-1000-S0-D3-GBPF-x

Example 2: LTDF-25-3-1000-S1-D1-KBPF-E

Features



Maintenance

Thanks to the hinged openable diffuser face plate you have easy access to the filter and plenum box for cleaning and maintenance process. See [installation instruction](#). The visible parts of the diffuser can be wiped with a damp cloth.

Materials & finish

Slot profiles: Aluminium
Blade deflectors: Aluminium

Standard finishing:
Slot profiles : Anodized aluminium
RAL 9010 gloss 30
RAL 9003 gloss 30

Blade deflectors: Black 9005 gloss 30, aluminium
White 9010 gloss 30, aluminium
White 9003 gloss 30, aluminium
Anodized aluminium

The linear slot diffuser LTDF is available in other colours. Please contact Lindab's sales department for further information.

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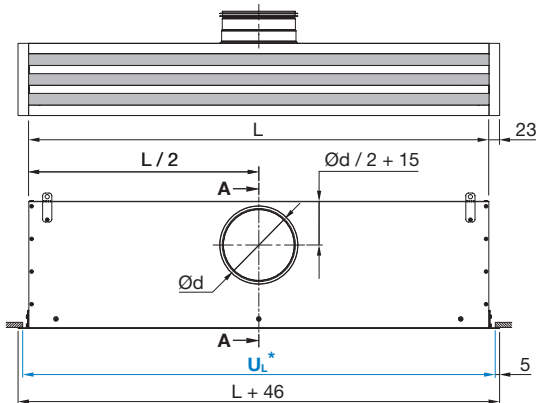
Dimensions

LTDF is always delivered mounted in one of the 4 plenum box variants.

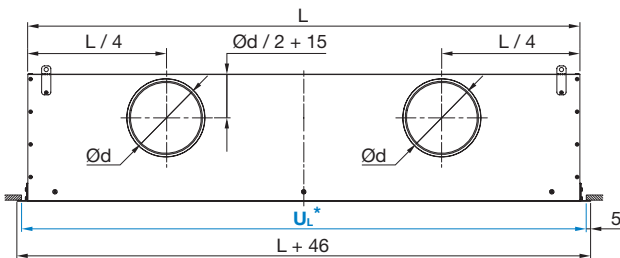
- GBPF – without insulation
- JBPF – 5 mm inside thermal insulation
- NBPF – 5 mm outside thermal insulation
- KBPF – 15 mm inside acoustic insulation

Length: 600 - 1200 mm in steps of 50 mm

LTDF - GBPF / NBPF / JBPF / KBPF one connection

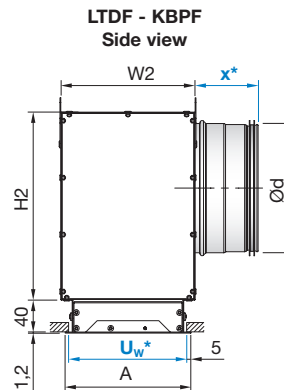
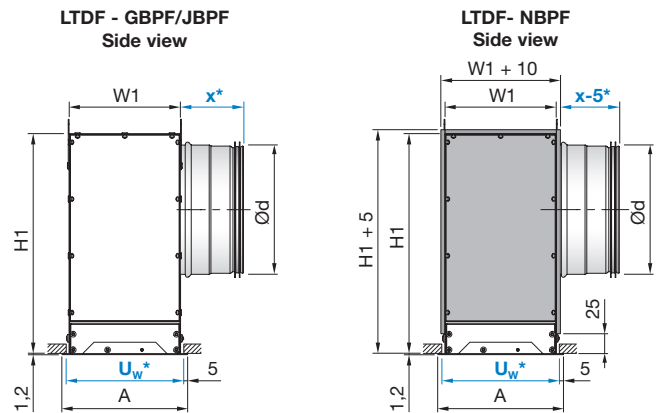


LTDF - GBPF / NBPF / JBPF / KBPF two connections



LTDF-25+box

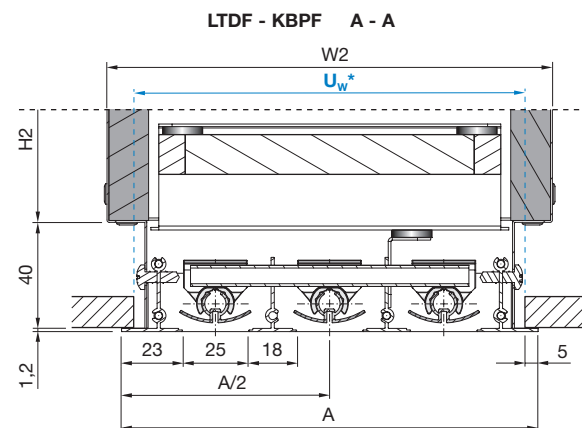
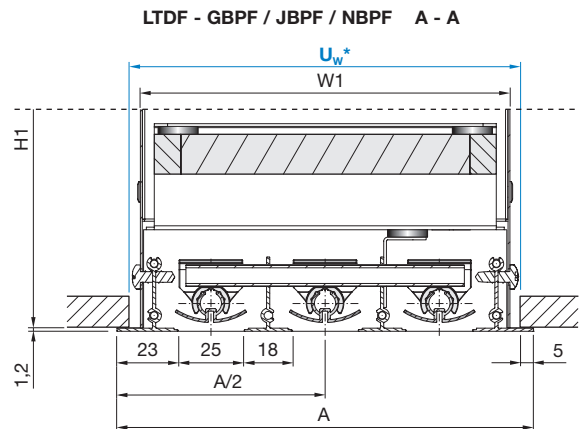
No. of slots	W1 mm	W2 mm	A mm	Ød mm	No. of conn.	H1 mm	H2 mm	L mm
3	140	168	157	160	1	275	235	600 - 1100
3	140	168	157	160	2	275	235	1101 - 1200
4	183	208	200	200	1	315	275	600 - 800
4	183	208	200	250	1	365	325	801 - 1100
4	183	208	200	250	2	365	325	1101 - 1200
5	226	254	243	200	1	315	275	600 - 700
5	226	254	243	250	1	365	325	701 - 1100
5	226	254	243	250	2	365	325	1101 - 1200
6	269	297	286	250	1	365	325	600 - 1100
6	269	297	286	250	2	365	325	1101 - 1200



x^* : $\text{Ød} \leq 200 \Rightarrow x = 79 \text{ mm}$
 $\text{Ød} > 200 \Rightarrow x = 119 \text{ mm}$

U_w^* : Width cutout dimension in ceiling. 5 mm overlap of flanges.
 $\Rightarrow U_w = A - (2 \times 5 \text{ mm})$

U_L^* : length cutout dimension in ceiling. 5 mm overlap of flanges.
 $\Rightarrow U_L = L + 46 - (2 \times 5 \text{ mm})$

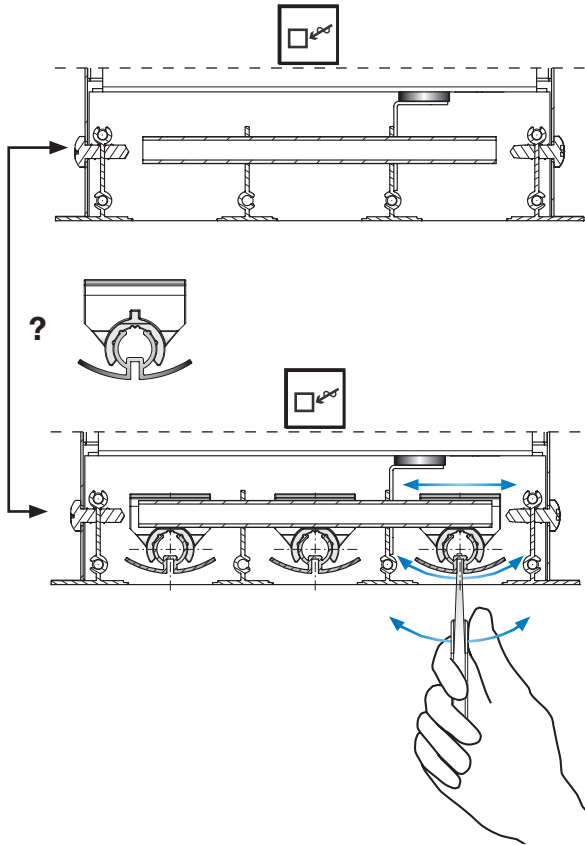


Slot diffuser

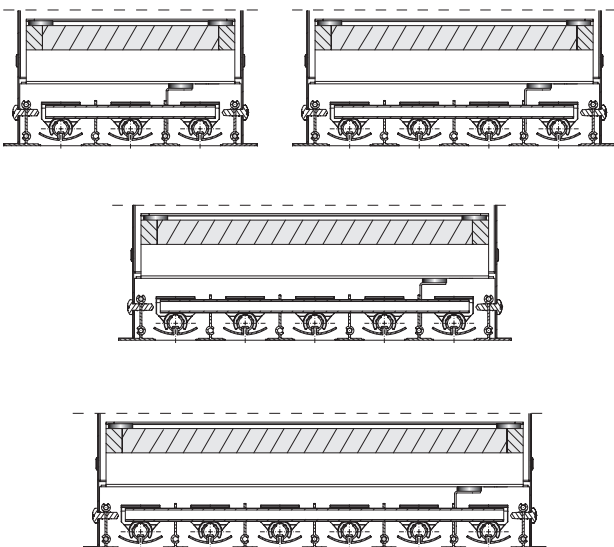
LTDF

Extract air

Used for extract air, the moveable/rotatable deflectors are not necessary, but to keep the aesthetic design, the diffuser can still be equipped with the aluminium blade deflectors.



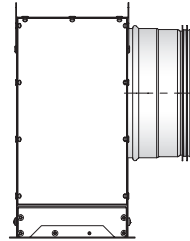
LTDF, 3 - 6 number of slots



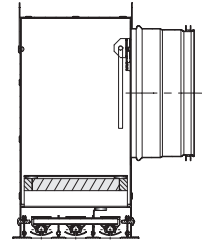
Plenum box insulation

LTDF-GBPF - Without insulation

LTDF-GBPF, 3-6 slots
Side-view

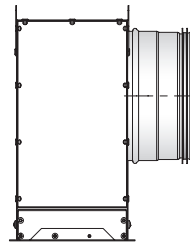


LTDF-GBPF, 3-6 slots
A - A

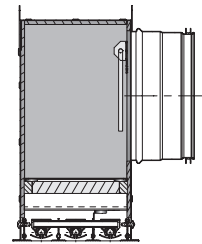


LTDF-JBPF - 5 mm internal insulation, Thermal.

LTDF-JBPF, 3-6 slots
Side-view

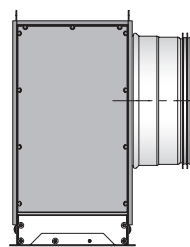


LTDF-JBPF, 3-6 slots
A - A

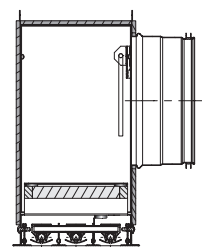


LTDF-NBPF - 5 mm external insulation, Thermal.

LTDF-NBPF, 3-6 slots
Side-view

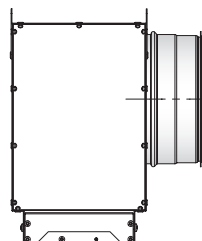


LTDF-NBPF, 3-6 slots
A - A

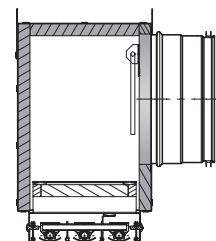


LTDF-KBPF - 15 mm internal insulation, acoustic.

LTDF-KBPF, 3-6 slots
Side-view



LTDF-KBPF, 3-6 slots
A - A



Slot diffuser

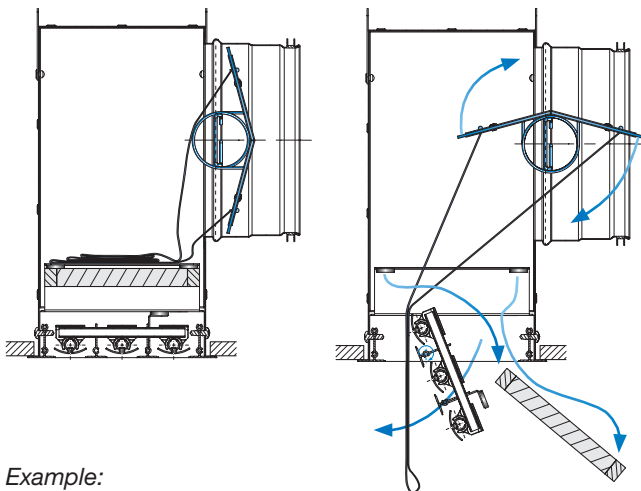
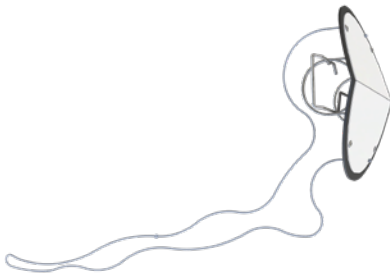
LTDF

Accessories

E-damper

Extract damper with rotating blade is:

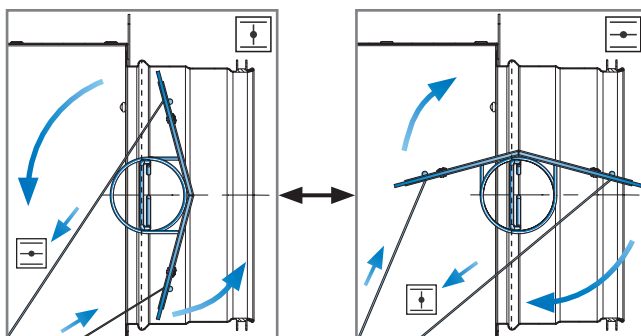
- Easy to mount and dismount into/from the plenum spigot.
- Equipped with a measuring system that allows adjustment of the pressure drop.
- Easy to adjust from the front side of the diffuser.



Example:

LTDF-GBPF with 3 slots and optional deflectors. Damper regulating-strings are stored inside plenum box. To regulate damper, open diffuser faceplate, take out filter and pull strings as indicated below. The damper can easily be taken out and reinserted, allowing easy maintenance and direct access to the duct system.

More details, see [installation instruction](#).



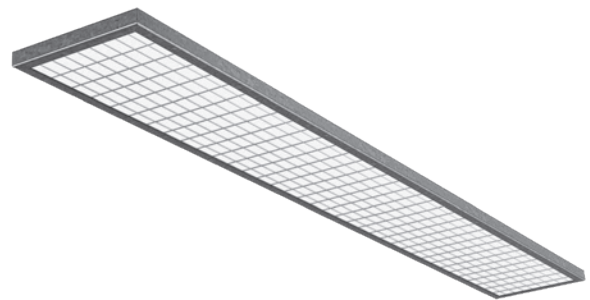
FP-15 filter

Flat filter, material 100% polyester fiber, with frame of galvanized steel.

Thickness 15 mm.

Filtration class according ISO 16890-3 : ISO coarse 65%, EN 779:2012 : class G3.

Reaction to fire according DIN 53438-3 : class F1.



Order code

Product	FP	15	LTDF	a	bbbb
Filter type	FP				
Filter thickness	15				
Usage for	LTDF				
Number of slots	3, 4, 5, 6				
Length	600-1200 (In steps of 50 mm)				

Example: FP-15-LTDF-4-1000

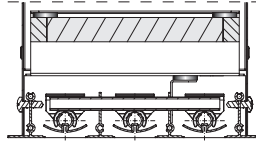
LindQST - Calculations

Use the advanced Lindab web tool LindQST to [calculate](#) the full range of slot diffusers and to find the suitable diffuser type and dimension for all applications. Product selection, room dimensioning and documentation search are available directly on web and mobile devices. Find this and much more on www.lindqst.com.

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Quick selection
Extract LTDF-25



[mm]			Airflow																
			m³/h	50	100	150	200	250	300	350	400	500	600	700	800	900	1000	1200	1400
			l/s	14	28	42	56	69	83	97	111	139	167	194	222	250	278	333	389
3 slots	600	L_{WA}	[dB(A)]		23	33	40												
		Δp_t	[Pa]		13	29	51												
	800	L_{WA}	[dB(A)]			27	34	40	44										
		Δp_t	[Pa]			16	29	45	65										
1000	L_{WA}	[dB(A)]			22	30	35	40	43										
	Δp_t	[Pa]			11	19	29	42	58										
1200	L_{WA}	[dB(A)]				26	31	36	40	43									
	Δp_t	[Pa]				13	20	29	39	51									
4 slots	600	L_{WA}	[dB(A)]			27	34	40	44										
		Δp_t	[Pa]			15	27	42	60										
	800	L_{WA}	[dB(A)]			21	28	34	38	42									
		Δp_t	[Pa]			9	15	24	34	47									
1000	L_{WA}	[dB(A)]				24	29	34	38	41									
	Δp_t	[Pa]				10	15	22	30	39									
1200	L_{WA}	[dB(A)]				20	26	30	34	37	43								
	Δp_t	[Pa]				7	10	15	20	27	42								
5 slots	600	L_{WA}	[dB(A)]			22	29	35	40	44									
		Δp_t	[Pa]			9	16	25	36	49									
	800	L_{WA}	[dB(A)]				23	29	34	38	41								
		Δp_t	[Pa]				9	14	20	28	36								
1000	L_{WA}	[dB(A)]					24	29	33	36	42								
	Δp_t	[Pa]					9	13	18	23	36								
1200	L_{WA}	[dB(A)]					20	25	29	32	38	43							
	Δp_t	[Pa]					6	9	12	16	25	36							
6 slots	600	L_{WA}	[dB(A)]				25	31	36	40	44								
		Δp_t	[Pa]				11	17	24	33	42								
	800	L_{WA}	[dB(A)]					24	29	33	37	43							
		Δp_t	[Pa]					9	14	18	24	38							
1000	L_{WA}	[dB(A)]						24	28	32	38	43							
	Δp_t	[Pa]						9	12	16	24	35							
1200	L_{WA}	[dB(A)]							20	24	28	34	39	43					
	Δp_t	[Pa]							6	8	11	17	24	33					

Data valid for extract with blade deflectors.
Without blades, other sizes and flows
Go to [LindQST Calculator](#)

$20 \leq L_{WA} < 30$

$30 \leq L_{WA} < 40$

$40 \leq L_{WA} < 45$



Most of us spend the majority of our time indoors. Indoor climate is crucial to how we feel, how productive we are and if we stay healthy.

We at Lindab have therefore made it our most important objective to contribute to an indoor climate that improves people's lives. We do this by developing energy-efficient ventilation solutions and durable building products. We also aim to contribute to a better climate for our planet by working in a way that is sustainable for both people and the environment.

[Lindab](#) | For a better climate