

High performance filter plenum

Product description

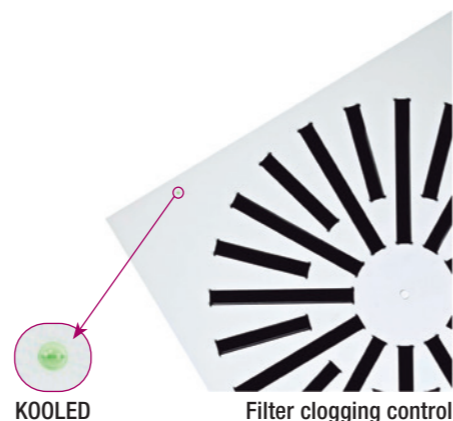
Plenum and diffusion element set for high-performance filtering. Are available in different sizes and allowing executions including different types of diffuser (swirl, square, perforated plate, ...) Ceiling and wall installation. Plenum manufactured in galvanised steel plate painted on the inside and outside in gloss RAL 9010 or RAL to be defined. Incorporates a pressure connection to measure filter clogging.

Other models

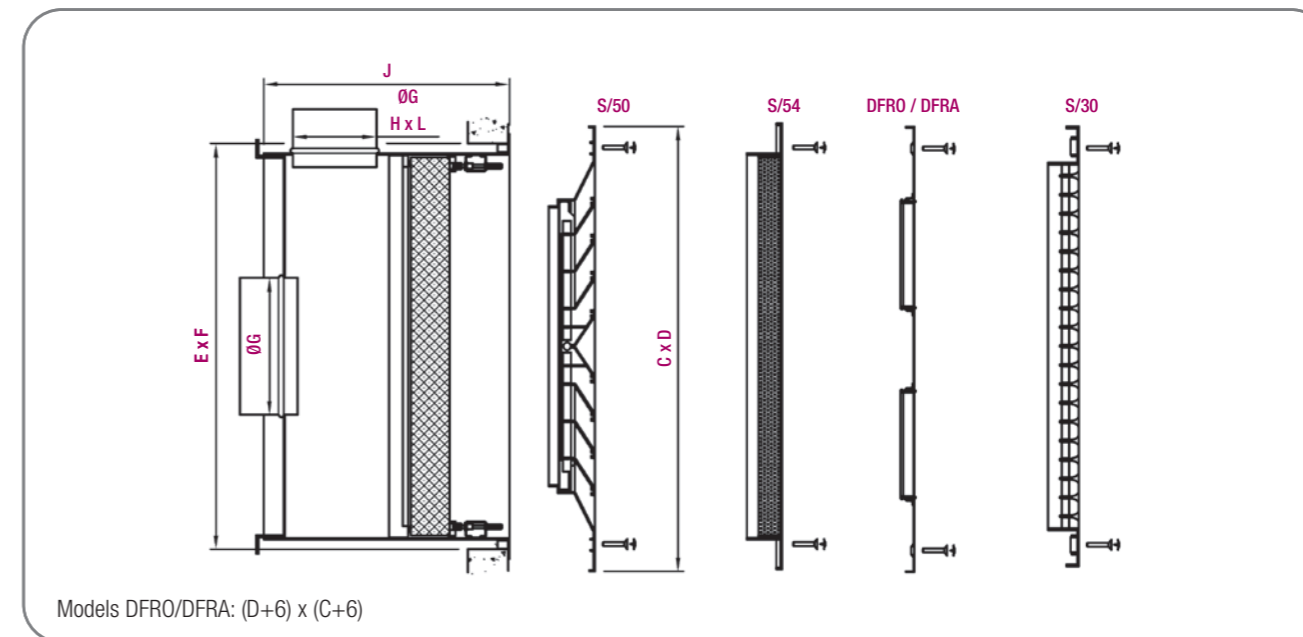
- KPA - PDS.** Circular top entry plenum.
- KPA - PDL.** Circular side entry plenum.
- KPA - PDLR.** Rectangular side entry plenum.

Accessories

RE. With pressure device.
KOOLED. Filter clogging control device with KOOLED indicator. Indicates the level of fouling of the filter by measuring the pressure difference across the filter unit (H13, H14, U15, U16). Standard downstream filter clogging pressure of 600 Pa; other downstream pressures configurable on request.



General dimensions



Custom plenums available to suit reduced heights above false ceilings and air flow per unit. Consult Technical Dept.

Filter	C	D	E	F	PDLR			PDL		PDS	
					L	H	J	Ø G	J	Ø G	J
305 x 305 x 68	369	369	355	355	150	100	363	123	405	123	265
305 x 305 x 90	369	369	355	355	150	100	385	123	427	123	287
345 x 345 x 68	409	409	395	395	150	100	363	123	405	123	265
345 x 345 x 90	409	409	395	395	150	100	385	158	462	158	287
305 x 610 x 68	369	669	355	655	200	100	363	158	440	158	265
305 x 915 x 68	369	969	355	959	250	100	363	198	480	198	265
457 x 457 x 68	519	519	505	505	200	100	363	158	440	158	265
457 x 457 x 90	519	519	505	505	300	100	385	198	502	198	287
545 x 545 x 68	594	594	584	584	300	100	363	198	480	198	265
545 x 545 x 90	594	594	584	584	400	100	385	248	552	248	287
545 x 545 x 292	594	594	584	584	500	250	737	-	-	-	-
610 x 610 x 68	669	669	655	655	350	100	363	198	480	198	265
610 x 610 x 90	669	669	655	655	500	100	385	248	552	248	287
610 x 610 x 292	669	669	655	655	600	250	737	-	-	-	-
610 x 915 x 68	669	969	655	959	500	100	363	248	530	248	265
610 x 1220 x 68	669	1274	655	1264	700	100	363	313	595	313	265
762 x 762 x 68	827	827	810	810	550	100	363	248	530	248	265
762 x 762 x 90	827	827	810	810	500	150	435	313	617	313	287
762 x 762 x 292	827	827	810	810	700	350	837	-	-	-	-
915 x 915 x 68	969	969	955	955	700	100	363	313	595	313	265
915 x 915 x 90	969	969	955	955	700	150	435	313	617	313	287

Unit mm

Other sizes of filters available

PDS. Optional to fit custom-made rectangular top connection for wall installation and/or air extract with 292 mm high capacity grilles and filters.

TURBULENT FLOW

KPA-DFRO

KOOLAIR terminal unit with high-efficiency air filter, model KPA-DFRO. Incorporates LxWxH mm high efficiency particulate air filter (H13, H14, U15, U16), adjustable blade swirl diffuser model DFRO, size__, filter holder plenum with either lateral or top, rectangular or circular connection, manufactured in galvanised sheet steel with painted interior and exterior, integrated differential pressure connection. Painted finish in RAL defined by Project Management.



DFRO / DFRA / DFRA-AS											
FILTER	DIFFUSER	Q (m³/h)		ΔP _{filter} (Pa)		ΔP _{diffuser} (Pa)		ΔP _{total} (Pa)		L _{wa} [dB(A)]	
		max	min	max	min	max	min	max	min	max	min
305x305x68	DFRO/DFRA-12	215	125	160	85	33	11	193	96	36	20
345x345x68	DFRO/DFRA-16	280	180	160	100	15	6	175	106	32	20
457x457x68	DFRO/DFRA-20	485	250	160	75	27	8	187	83	38	20
545x545x68	DFRO/DFRA-24	695	360	160	75	27	7	187	82	40	20
610x610x68	DFRO/DFRA-32	870	420	160	70	35	8	195	78	43	20
762x762x68	DFRO/DFRA-40	1355	550	160	60	52	9	212	69	48	20
915x915x68	DFRO/DFRA-48	1620	700	130	50	50	9	180	59	48	20
305x305x90	DFRO/DFRA-12	250	125	160	60	45	11	205	71	40	20
345x345x90	DFRO/DFRA-16	320	180	160	70	20	6	180	76	36	20
457x457x90	DFRO/DFRA-20	55	250	160	55	36	8	196	63	42	20
545x545x90	DFRO/DFRA-24	795	360	160	55	35	7	195	62	44	20
610x610x90	DFRO/DFRA-32	990	420	160	50	45	8	205	58	46	20
610x610x90	DFRA-AS-32	990	520	160	65	21	6	181	71	38	20
762x762x90	DFRO/DFRA-48	1550	550	160	40	45	9	205	49	46	20
915x915x90	DFRO/DFRA-48	1620	700	100	30	50	9	150	39	48	20

KPA-50-FR-4

KOOLAIR terminal unit with high-efficiency filter, model KPA-50FR4. Incorporates LxWxH mm high efficiency particulate air filter (H13, H14, U15, U16), square diffuser model 50-FR-4, size__, filter holder plenum with either lateral or top, rectangular or circular connection, manufactured in galvanised sheet steel with painted interior and exterior, integrated differential pressure connection. Painted finish in RAL defined by Project Management.



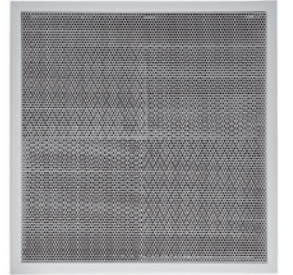
50-FR-4											
FILTER	DIFFUSER	Q (m³/h)		ΔP _{filter} (Pa)		ΔP _{diffuser} (Pa)		ΔP _{total} (Pa)		L _{wa} [dB(A)]	
		max	min	max	min	max	min	max	min	max	min
305x305x68	50-FR-4 150x150	215	100	160	65	21	11	181	76	40	20
457x457x68	50-FR-4 225x225	485	180	160	50	21	8	181	58	44	20
545x545x68	50-FR-4 300x300	695	300	160	60	14	7	174	67	41	20
610x610x68	50-FR-4 375x375	870	440	160	70	9	8	169	78	38	20
762x762x68	50-FR-4 450x450	1355	580	160	60	10	9	170	69	41	20
915x915x68	50-FR-4 525x525	1950	750	160	50	11	9	171	59	44	20
305x305x90	50-FR-4 150x150	250	100	160	45	28	11	188	56	44	20
457x457x90	50-FR-4 225x225	555	180	160	35	28	8	188	43	47	20
545x545x90	50-FR-4 300x300	795	300	160	40	18	7	178	47	44	20
610x610x90	50-FR-4 375x375	990	440	160	50	11	8	171	58	41	20
762x762x90	50-FR-4 450x450	1550	580	160	40	13	9	173	49	44	20
915x915x90	50-FR-4 525x525	2250	750	160	35	15	9	175	44	47	20

LEGEND

- Q (m³/h): Air flow.
- L_{wa} [dB(A)]: Power noise level.
- ΔP_{filter} (Pa): Pressure loss in the filter.
- ΔP_{diffuser} (Pa): Pressure loss in the diffuser.
- ΔP_{total} (Pa): Total pressure loss.

KPA-54-FR-I-4

KOOLAIR terminal unit with high-efficiency filter, model KPA-54FR-I-4. Incorporates LxWxH mm high efficiency particulate air filter (H13, H14, U15, U16), square diffuser made from perforated sheet metal with deflecting mesh for air supply in 4 directions model 54-FR-I-4, size__, filter holder plenum with either lateral or top, rectangular or round connection, manufactured in galvanised sheet steel with painted interior and exterior, integrated differential pressure connection. Painted finish in RAL defined by Project Management.

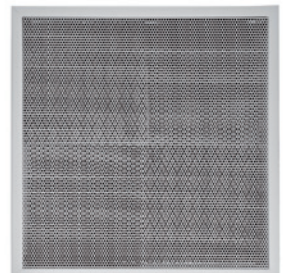


54-FR-I-4											
FILTER	DIFFUSER	Q (m³/h)		ΔP _{filter} (Pa)		ΔP _{diffuser} (Pa)		ΔP _{total} (Pa)		L _{wa} [dB(A)]	
		max	min	max	min	max	min	max	min	max	min
305x305x68	54-FR-I-4 369x369	215	120	160	80	6	2	166	82	23	20
345x345x68	54-FR-I-4 409x409	280	160	160	85	7	2	167	87	26	20
457x457x68	54-FR-I-4 519x519	485	250	160	75	7	2	167	77	27	20
545x545x68	54-FR-I-4 594x594	695	380	160	80	7	2	167	82	30	20
610x610x68	54-FR-I-4 669x669	870	480	160	80	11	2	171	82	37	20
762x762x68	54-FR-I-4 827x827	1355	780	160	85	5	2	165	87	28	20
915x915x68	54-FR-I-4 969x969	1950	1100	160	80	5	2	165	82	27	20
305x305x90	54-FR-I-4 369x369	250	120	160	60	8	2	168	62	28	20
345x345x90	54-FR-I-4 409x409	320	160	160	60	9	2	169	62	30	20
457x457x90	54-FR-I-4 519x519	555	250	160	50	9	2	169	52	32	20
545x545x90	54-FR-I-4 594x594	795	380	160	60	9	2	169	62	34	20
610x610x90	54-FR-I-4 669x669	990	480	160	60	9	2	169	62	34	20
762x762x90	54-FR-I-4 827x827	1550	780	160	60	7	2	167	62	33	20
915x915x90	54-FR-I-4 969x969	2250	1100	160	60	6	2	166	62	33	20

LAMINAR FLOW

KPA-54-FR-I-0

KOOLAIR terminal unit with high-efficiency filter, model KPA-54FR-I-0. Incorporates LxWxH mm high efficiency particulate air filter (H13, H14, U15, U16), square diffuser made from perforated sheet metal model 54-FR-I-0, size__, filter holder plenum with either lateral or top, rectangular or round connection, manufactured in galvanised sheet steel with painted interior and exterior, integrated differential pressure connection. Painted finish in RAL defined by Project Management.



54-FR-I-0											
FILTER	DIFFUSER	Q (m³/h)		ΔP _{filter} (Pa)		ΔP _{diffuser} (Pa)		ΔP _{total} (Pa)		L _{wa} [dB(A)]	
		max	min	max	min	max	min	max	min	max	min
305x305x68	54-FR-I-0 369x369	150	50	105	30	1	1	106	31	<20	<20
345x345x68	54-FR-I-0 409x409	195	65	105	30	1	1	106	31	<20	<20
457x457x68	54-FR-I-0 519x519	340	115	105	30	1	1	106	31	<20	<20
545x545x68	54-FR-I-0 594x594	480	160	105	30	1	1	106	31	<20	<20
610x610x68	54-FR-I-0 669x669	605	200	105	30	1	1	106	31	<20	<20
762x762x68	54-FR-I-0 827x827	940	315	105	30	2	1	107	31	<20	<20
915x915x68	54-FR-I-0 969x969	1355	655	105	30	1	1	106	31	<20	<20
610x305x68	54-FR-I-0 669x369	365	150	105	31	1	1	106	32	<20	<20
915x305x68	54-FR-I-0 969x369	620	250	105	30	1	1	106	31	<20	<20
915x610x68	54-FR-I-0 969x669	1100	440	105	30	1	1	106	31	<20	<20
1220x610x68	54-FR-I-0 1274x669	1460	585	105	30	1	1	106	31	<20	<20

LEGEND

- Q (m³/h): Air flow.
- L_{wa} [dB(A)]: Power noise level.
- ΔP_{filter} (Pa): Pressure loss in the filter.
- ΔP_{diffuser} (Pa): Pressure loss in the diffuser.
- ΔP_{total} (Pa): Total pressure loss.