

LINEAR GRILLES THIN FRAME WITH FIXED BLADES

UF6 UF9
SERIES

OVERVIEW TECHNICAL CHARACTERISTICS

CHARACTERISTICS :

The UF6 and UF9 linear grilles with fixed blades are used in the ventilation and air conditioning systems, both for ceiling and wall installation.

They are suitable for floor mounting and for application on fan-coils as they are appropriate for both ventilation and extraction, it is possible to maintain the same structure for each application. Moreover, the possibility of composition for versions with non-removable blades, is another important characteristic that allows to obtain continuous air flow in large environments without changing the aesthetic figure.

TECHNICAL CHARACTERISTICS :

The fixed blades of the UF6 and UF9 linear grilles can have two different profiles: with 0° degree deflection or 15° degree deflection, which allow to obtain different air flows. For this reason this type of grille can be furnished with a second row of individually adjustable blades.

REMOVABLE BLADES:

The UF6 series grilles can have the row of fixed removable blades for inspection and cleaning.

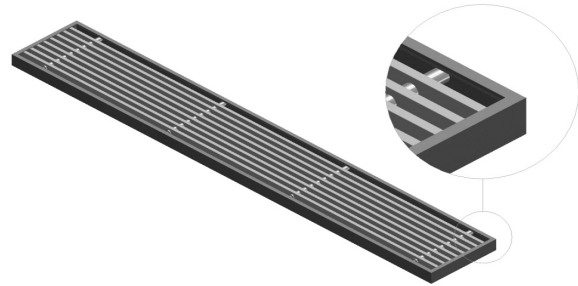
POSSIBLE DIMENSIONS :

Base from 200mm up to 1500mm

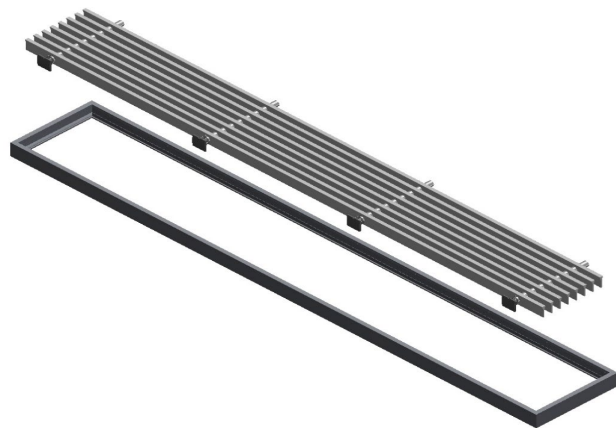
Height from 50mm up to 400mm

UNSUITABLE ENVIRONMENTS

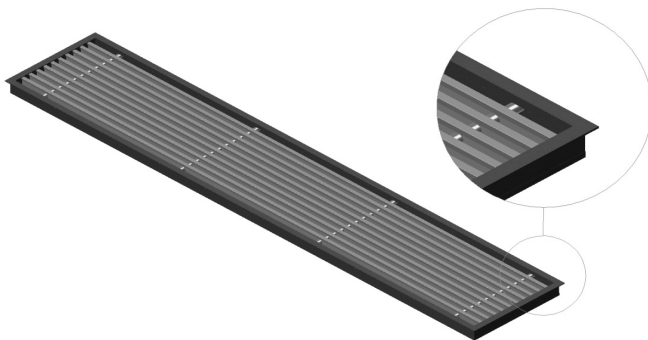
The aluminum products are not suitable for installation in environments with an atmosphere containing corrosive substances for this material and in particular containing chlorine, such as swimming pools, spas and some types of food industries.



UF6 frame without border



UF6 frame without border and removable blades



UF9 frame with border

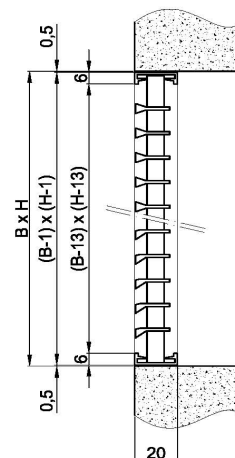
LINEAR GRILLES THIN FRAME WITH FIXED BLADES

POSSIBLE VERSIONS

UF6 UF9
SERIES

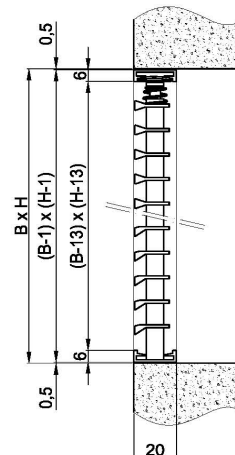
UF6 ... SF ... N

Grille with frame without border
one row of non removable fixed blades



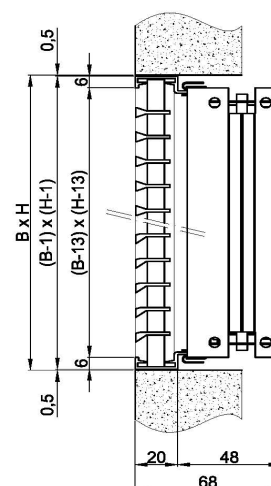
UF6 ... SE ... N

Grille with frame without border
one row of removable fixed blades



UF6 ... DF ... S

Grille with frame without border
one row of non removable fixed blades
prepared for damper



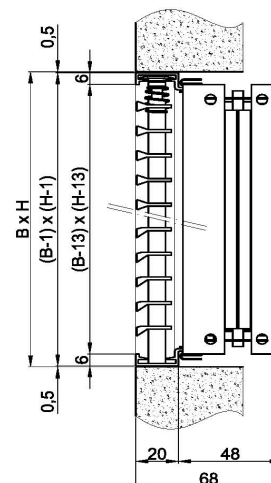
LINEAR GRILLES THIN FRAME WITH FIXED BLADES

POSSIBLE VERSIONS

UF6 UF9
SERIES

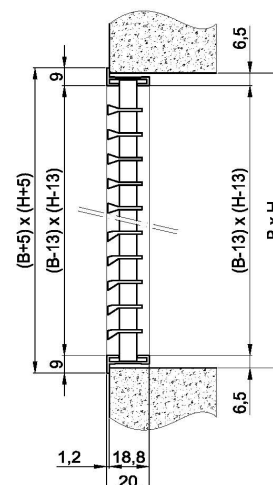
UF6 ... DE ... S

Grille with frame without border
one row of removable fixed blades
prepared for damper



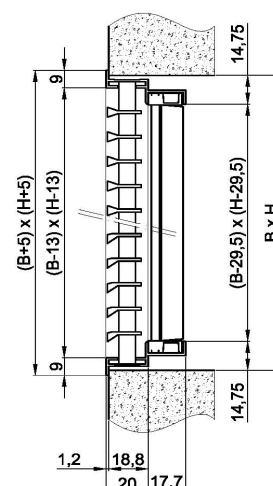
UF9 ... SF ... N

Grille with frame with border
one row of non removable fixed blades



UF9 ... VF ... N

Grille with frame with border
one row of non removable fixed blades
second row of individually adjustable blades
prepared for damper

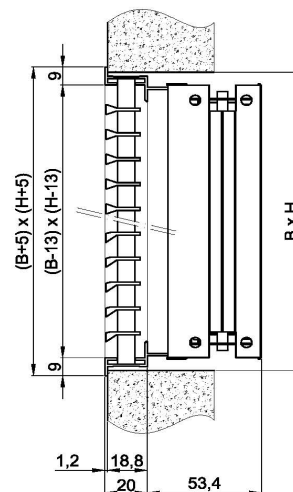


LINEAR GRILLES
THIN FRAME
WITH FIXED BLADES
POSSIBLE VERSIONS

UF6 UF9
SERIES

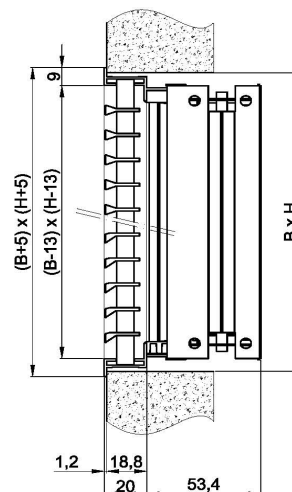
UF9 ... DF ... S

Grille with frame with border
one row of non removable fixed blades
prepared for damper



UF9 ... VF ... S

Grille with frame with border
one row of non removable fixed blades
and second row of individually adjustable blades
with damper



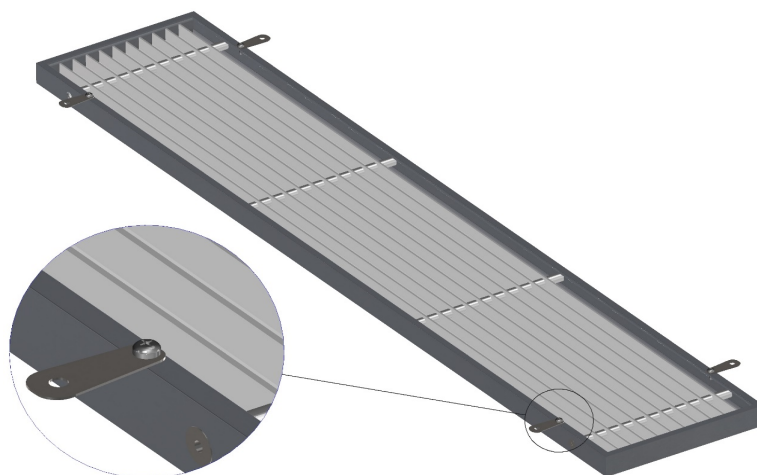
LINEAR GRILLES
THIN FRAME
WITH FIXED BLADES

UF6
SERIES

FIXING METODS

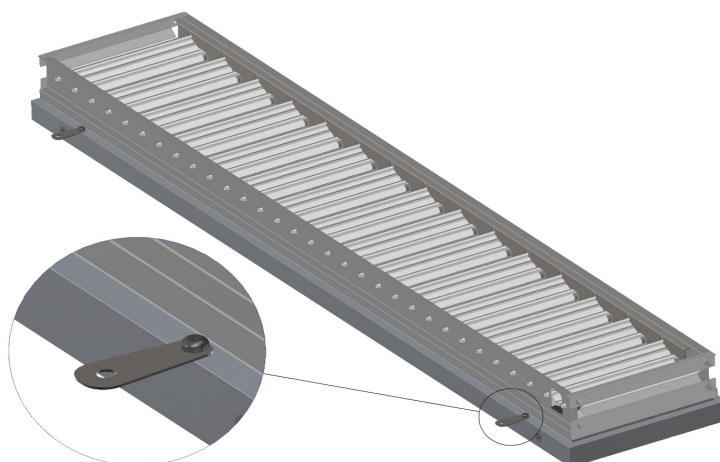
UF6 ... SFNN non removable blades
UF6 ... SENN removable blades
with fixing brakets

Kit 4 fixing brakets code UF6-9FIX



UF6 ... DFNS non removable blades
UF6 ... DENS removable blades
with regulation damper
with fixing brakets

Kit 4 fixing brakets code UF6-9FIX



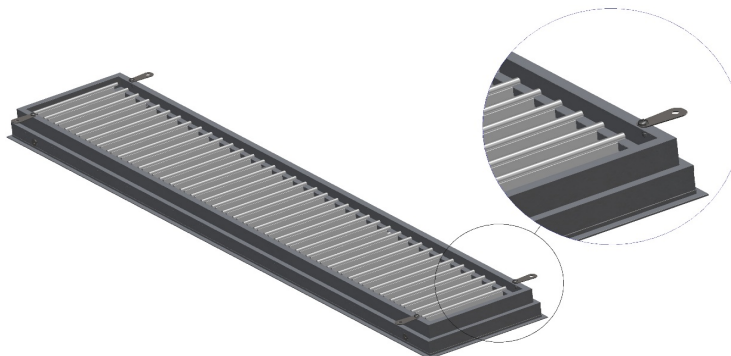
LINEAR GRILLES THIN FRAME WITH FIXED BLADES

UF9
SERIES

FIXING METODS

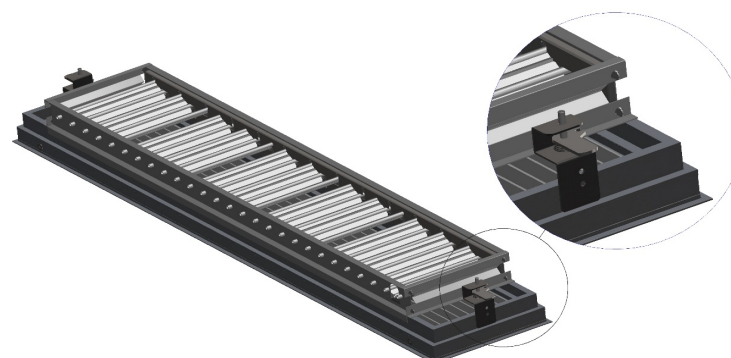
UF9 ... SFNN single row
UF9 ... VFNN two rows
with fixing brakets

Kit 4 fixing brakets code UF6-9FIX



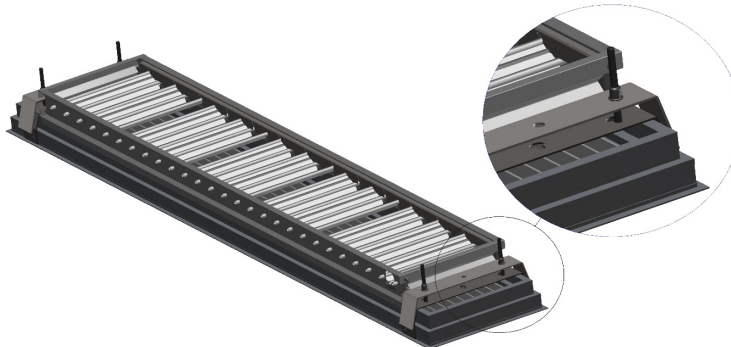
UF9 ... DFUN single row
UF9 ... VFUN two rows
UF9 ... DFUU sinle row and damper
UF9 ... VFUU two rows and damper

with U-FIX joust mounted



UF9 ... SFPN single row
UF9 ... VFPN two rows
UF9 ... DFPU single row and damper
UF9 ... VFPU two rows and damper

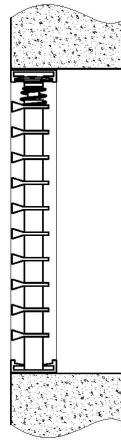
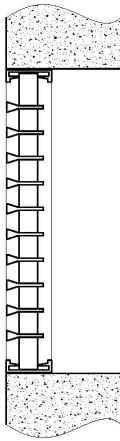
with mounting bridges jous mounted



**LINEAR GRILLES
THIN FRAME
WITH FIXED BLADES**

EFFECTIVE AREA A_k

**UF6
SERIES**



UF6 ... SF ... N

UF6 ... SE ... N

		Base									
		200	250	300	350	400	450	500	550	600	650
Height	50	0,0064	0,0082	0,0099	0,0116	0,0133	0,0150	0,0168	0,0185	0,0202	0,0219
	75	0,0108	0,0137	0,0165	0,0194	0,0223	0,0252	0,0281	0,0310	0,0338	0,0367
	100	0,0151	0,0192	0,0232	0,0273	0,0313	0,0354	0,0394	0,0434	0,0475	0,0515
	150	0,0238	0,0302	0,0366	0,0429	0,0493	0,0557	0,0620	0,0684	0,0748	0,0812
	200	0,0325	0,0412	0,0499	0,0586	0,0673	0,0760	0,0847	0,0934	0,1021	0,1108
	250	0,0412	0,0522	0,0633	0,0743	0,0853	0,0963	0,1073	0,1184	0,1294	0,1404
	300	0,0499	0,0633	0,0766	0,0899	0,1033	0,1166	0,1300	0,1433	0,1567	0,1700
	350	0,0586	0,0743	0,0899	0,1056	0,1213	0,1370	0,1526	0,1683	0,1840	0,1996
	400	0,0673	0,0853	0,1033	0,1213	0,1393	0,1573	0,1753	0,1933	0,2113	0,2293

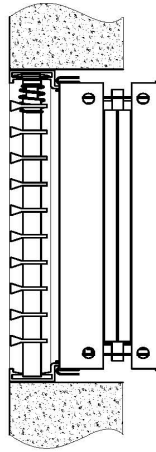
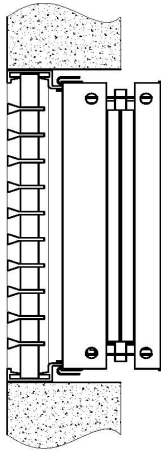
		Base									
		700	750	800	850	900	950	1000	1050	1100	1200
Height	50	0,0236	0,0254	0,0271	0,0288	0,0305	0,0322	0,0340	0,0357	0,0374	0,0408
	75	0,0396	0,0425	0,0454	0,0483	0,0511	0,0540	0,0569	0,0598	0,0627	0,0684
	100	0,0556	0,0596	0,0637	0,0677	0,0718	0,0758	0,0799	0,0839	0,0879	0,0960
	150	0,0875	0,0939	0,1003	0,1066	0,1130	0,1194	0,1258	0,1321	0,1385	0,1512
	200	0,1195	0,1282	0,1369	0,1456	0,1543	0,1630	0,1716	0,1803	0,1890	0,2064
	250	0,1514	0,1624	0,1735	0,1845	0,1955	0,2065	0,2175	0,2286	0,2396	0,2616
	300	0,1834	0,1967	0,2101	0,2234	0,2367	0,2501	0,2634	0,2768	0,2901	0,3168
	350	0,2153	0,2310	0,2467	0,2623	0,2780	0,2937	0,3093	0,3250	0,3407	0,3720
	400	0,2473	0,2653	0,2832	0,3012	0,3192	0,3372	0,3552	0,3732	0,3912	0,4272

		Base					
		1250	1300	1350	1400	1450	1500
Height	50	0,0426	0,0443	0,0460	0,0477	0,0494	0,0512
	75	0,0713	0,0742	0,0771	0,0800	0,0829	0,0857
	100	0,1001	0,1041	0,1082	0,1122	0,1163	0,1203
	150	0,1576	0,1640	0,1703	0,1767	0,1831	0,1895
	200	0,2151	0,2238	0,2325	0,2412	0,2499	0,2586
	250	0,2726	0,2837	0,2947	0,3057	0,3167	0,3277
	300	0,3302	0,3435	0,3569	0,3702	0,3835	0,3969
	350	0,3877	0,4034	0,4190	0,4347	0,4504	0,4660
	400	0,4452	0,4632	0,4812	0,4992	0,5172	0,5352

**LINEAR GRILLES
THIN FRAME
WITH FIXED BLADES**

EFFECTIVE AREA A_k

**UF6
SERIES**



UF6 ... DF ... S

UF6 ... DE ... S

The values of pressure drop and sound power shown in the diagrams refer to the condition of completely open damper

		Base									
		200	250	300	350	400	450	500	550	600	650
Height	50	0,0053	0,0068	0,0083	0,0097	0,0112	0,0127	0,0142	0,0156	0,0171	0,0186
	75	0,0096	0,0122	0,0148	0,0175	0,0201	0,0227	0,0254	0,0280	0,0306	0,0332
	100	0,0138	0,0176	0,0214	0,0252	0,0290	0,0328	0,0365	0,0403	0,0441	0,0479
	150	0,0222	0,0283	0,0345	0,0406	0,0467	0,0528	0,0589	0,0651	0,0712	0,0773
	200	0,0307	0,0391	0,0476	0,0560	0,0644	0,0729	0,0813	0,0898	0,0982	0,1067
	250	0,0391	0,0499	0,0607	0,0714	0,0822	0,0930	0,1037	0,1145	0,1253	0,1360
	300	0,0476	0,0607	0,0737	0,0868	0,0999	0,1130	0,1261	0,1392	0,1523	0,1654
	350	0,0560	0,0714	0,0868	0,1023	0,1177	0,1331	0,1485	0,1639	0,1794	0,1948
	400	0,0644	0,0822	0,0999	0,1177	0,1354	0,1532	0,1709	0,1887	0,2064	0,2241

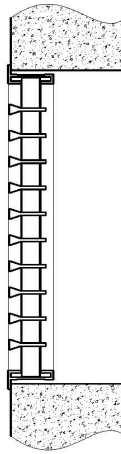
		Base									
		700	750	800	850	900	950	1000	1050	1100	1200
Height	50	0,0200	0,0215	0,0230	0,0244	0,0259	0,0274	0,0288	0,0303	0,0318	0,0347
	75	0,0359	0,0385	0,0411	0,0438	0,0464	0,0490	0,0517	0,0543	0,0569	0,0622
	100	0,0517	0,0555	0,0593	0,0631	0,0669	0,0707	0,0745	0,0783	0,0821	0,0897
	150	0,0834	0,0895	0,0957	0,1018	0,1079	0,1140	0,1201	0,1263	0,1324	0,1446
	200	0,1151	0,1236	0,1320	0,1404	0,1489	0,1573	0,1658	0,1742	0,1827	0,1996
	250	0,1468	0,1576	0,1683	0,1791	0,1899	0,2007	0,2114	0,2222	0,2330	0,2545
	300	0,1785	0,1916	0,2047	0,2178	0,2309	0,2440	0,2571	0,2702	0,2833	0,3094
	350	0,2102	0,2256	0,2410	0,2565	0,2719	0,2873	0,3027	0,3181	0,3336	0,3644
	400	0,2419	0,2596	0,2774	0,2951	0,3129	0,3306	0,3484	0,3661	0,3838	0,4193

		Base					
		1250	1300	1350	1400	1450	1500
Height	50	0,0362	0,0377	0,0391	0,0406	0,0421	0,0435
	75	0,0648	0,0675	0,0701	0,0727	0,0754	0,0780
	100	0,0935	0,0973	0,1011	0,1048	0,1086	0,1124
	150	0,1507	0,1569	0,1630	0,1691	0,1752	0,1813
	200	0,2080	0,2164	0,2249	0,2333	0,2418	0,2502
	250	0,2653	0,2760	0,2868	0,2976	0,3083	0,3191
	300	0,3225	0,3356	0,3487	0,3618	0,3749	0,3880
	350	0,3798	0,3952	0,4106	0,4261	0,4415	0,4569
	400	0,4371	0,4548	0,4726	0,4903	0,5081	0,5258

**LINEAR GRILLES
THIN FRAME
WITH FIXED BLADES**

EFFECTIVE AREA A_k

**UF9
SERIES**



UF9 ... SF ... N

		Base									
		200	250	300	350	400	450	500	550	600	650
Height	50	0,0065	0,0082	0,0099	0,0117	0,0134	0,0151	0,0169	0,0186	0,0203	0,0220
	75	0,0108	0,0137	0,0166	0,0195	0,0224	0,0253	0,0282	0,0311	0,0340	0,0369
	100	0,0152	0,0192	0,0233	0,0273	0,0314	0,0355	0,0395	0,0436	0,0476	0,0517
	150	0,0239	0,0303	0,0366	0,0430	0,0494	0,0558	0,0622	0,0685	0,0749	0,0813
	200	0,0326	0,0413	0,0500	0,0587	0,0674	0,0761	0,0848	0,0935	0,1022	0,1109
	250	0,0413	0,0523	0,0634	0,0744	0,0854	0,0964	0,1075	0,1185	0,1295	0,1406
	300	0,0500	0,0634	0,0767	0,0901	0,1034	0,1168	0,1301	0,1435	0,1568	0,1702
	350	0,0587	0,0744	0,0901	0,1057	0,1214	0,1371	0,1528	0,1685	0,1841	0,1998
	400	0,0674	0,0854	0,1034	0,1214	0,1394	0,1574	0,1754	0,1934	0,2114	0,2295

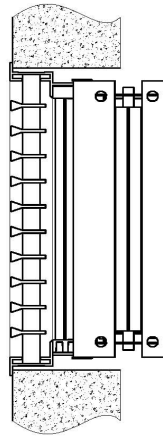
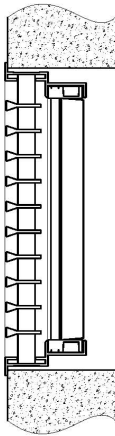
		Base									
		700	750	800	850	900	950	1000	1050	1100	1200
Height	50	0,0238	0,0255	0,0272	0,0290	0,0307	0,0324	0,0342	0,0359	0,0376	0,0411
	75	0,0398	0,0426	0,0455	0,0484	0,0513	0,0542	0,0571	0,0600	0,0629	0,0687
	100	0,0557	0,0598	0,0638	0,0679	0,0719	0,0760	0,0801	0,0841	0,0882	0,0963
	150	0,0877	0,0941	0,1004	0,1068	0,1132	0,1196	0,1260	0,1323	0,1387	0,1515
	200	0,1196	0,1283	0,1370	0,1458	0,1545	0,1632	0,1719	0,1806	0,1893	0,2067
	250	0,1516	0,1626	0,1737	0,1847	0,1957	0,2067	0,2178	0,2288	0,2398	0,2619
	300	0,1835	0,1969	0,2103	0,2236	0,2370	0,2503	0,2637	0,2770	0,2904	0,3171
	350	0,2155	0,2312	0,2469	0,2625	0,2782	0,2939	0,3096	0,3253	0,3409	0,3723
	400	0,2475	0,2655	0,2835	0,3015	0,3195	0,3375	0,3555	0,3735	0,3915	0,4275

		Base					
		1250	1300	1350	1400	1450	1500
Height	50	0,0428	0,0445	0,0463	0,0480	0,0497	0,0515
	75	0,0716	0,0745	0,0774	0,0802	0,0831	0,0860
	100	0,1003	0,1044	0,1084	0,1125	0,1166	0,1206
	150	0,1579	0,1642	0,1706	0,1770	0,1834	0,1898
	200	0,2154	0,2241	0,2328	0,2415	0,2502	0,2589
	250	0,2729	0,2840	0,2950	0,3060	0,3170	0,3281
	300	0,3305	0,3438	0,3572	0,3705	0,3839	0,3972
	350	0,3880	0,4037	0,4193	0,4350	0,4507	0,4664
	400	0,4455	0,4635	0,4815	0,4995	0,5175	0,5355

**LINEAR GRILLES
THIN FRAME
WITH FIXED BLADES**

EFFECTIVE AREA A_k

**UF9
SERIES**



UF9 ... DF ... S

UF9 ... VF ... S

The values of pressure drop and sound power shown in the diagrams refer to the condition of completely open damper and second row of blades in vertical position

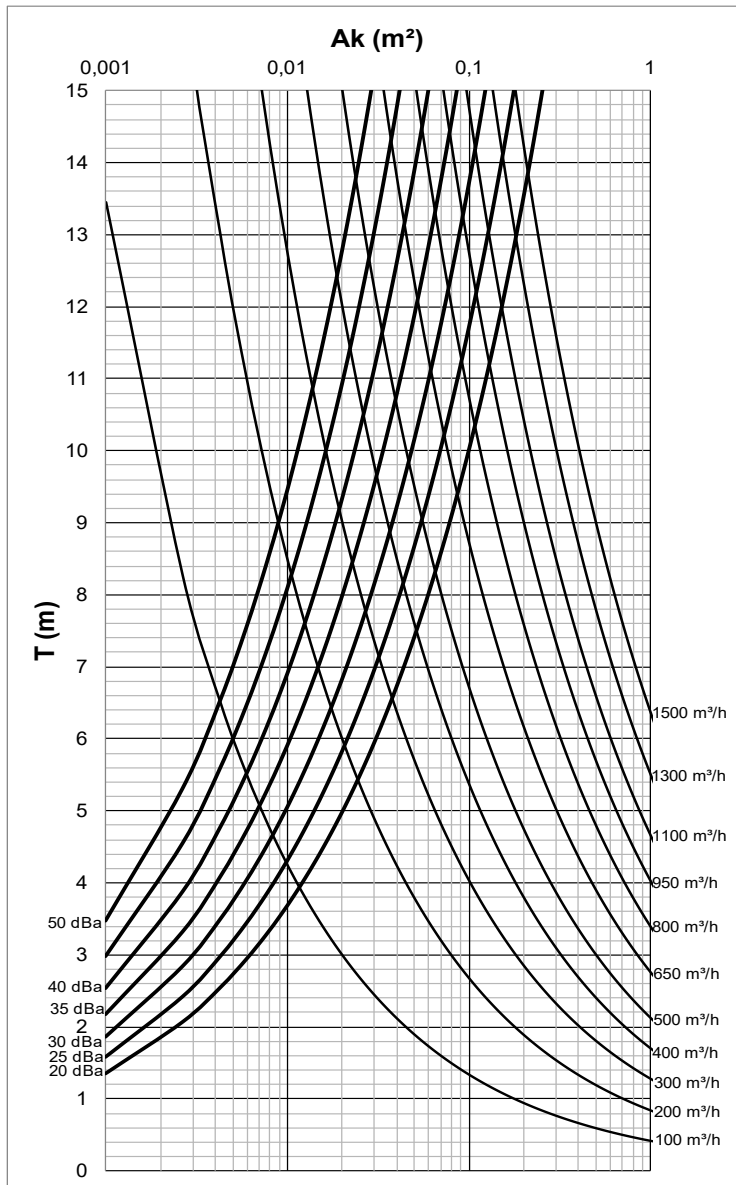
		Base									
		200	250	300	350	400	450	500	550	600	650
Height	50	0,0033	0,0042	0,0052	0,0061	0,0071	0,0081	0,0090	0,0100	0,0109	0,0119
	75	0,0072	0,0094	0,0115	0,0136	0,0157	0,0178	0,0200	0,0221	0,0242	0,0263
	100	0,0112	0,0145	0,0178	0,0210	0,0243	0,0276	0,0309	0,0342	0,0375	0,0407
	150	0,0191	0,0247	0,0303	0,0360	0,0416	0,0472	0,0528	0,0584	0,0640	0,0696
	200	0,0271	0,0350	0,0429	0,0509	0,0588	0,0667	0,0747	0,0826	0,0905	0,0985
	250	0,0350	0,0453	0,0555	0,0658	0,0760	0,0863	0,0965	0,1068	0,1171	0,1273
	300	0,0429	0,0555	0,0681	0,0807	0,0933	0,1058	0,1184	0,1310	0,1436	0,1562
	350	0,0509	0,0658	0,0807	0,0956	0,1105	0,1254	0,1403	0,1552	0,1701	0,1850
	400	0,0588	0,0760	0,0933	0,1105	0,1277	0,1450	0,1622	0,1794	0,1967	0,2139

		Base									
		700	750	800	850	900	950	1000	1050	1100	1200
Height	50	0,0128	0,0138	0,0148	0,0157	0,0167	0,0176	0,0186	0,0196	0,0205	0,0224
	75	0,0284	0,0306	0,0327	0,0348	0,0369	0,0390	0,0412	0,0433	0,0454	0,0496
	100	0,0440	0,0473	0,0506	0,0539	0,0572	0,0604	0,0637	0,0670	0,0703	0,0769
	150	0,0752	0,0808	0,0864	0,0920	0,0976	0,1033	0,1089	0,1145	0,1201	0,1313
	200	0,1064	0,1143	0,1223	0,1302	0,1381	0,1461	0,1540	0,1619	0,1699	0,1857
	250	0,1376	0,1478	0,1581	0,1684	0,1786	0,1889	0,1991	0,2094	0,2196	0,2402
	300	0,1688	0,1813	0,1939	0,2065	0,2191	0,2317	0,2443	0,2568	0,2694	0,2946
	350	0,1999	0,2149	0,2298	0,2447	0,2596	0,2745	0,2894	0,3043	0,3192	0,3490
	400	0,2311	0,2484	0,2656	0,2828	0,3001	0,3173	0,3345	0,3518	0,3690	0,4035

		Base					
		1250	1300	1350	1400	1450	1500
Height	50	0,0234	0,0243	0,0253	0,0263	0,0272	0,0282
	75	0,0518	0,0539	0,0560	0,0581	0,0602	0,0624
	100	0,0801	0,0834	0,0867	0,0900	0,0933	0,0966
	150	0,1369	0,1425	0,1481	0,1537	0,1593	0,1649
	200	0,1937	0,2016	0,2095	0,2175	0,2254	0,2333
	250	0,2504	0,2607	0,2709	0,2812	0,2914	0,3017
	300	0,3072	0,3198	0,3323	0,3449	0,3575	0,3701
	350	0,3639	0,3788	0,3937	0,4087	0,4236	0,4385
	400	0,4207	0,4379	0,4552	0,4724	0,4896	0,5069

**LINEAR GRILLES
THIN FRAME
WITH FIXED BLADES
VERTICAL THROW - SUPPLY
PERFORMANCE**

**UF6 UF9
SERIES**



Ak Effective area (m²)
Q Air Flow (m³/h)
T Throw (m) for V_t=0,2 m/s
V_k Velocity (m/s) in section Ak

$$V_k = Q/3600/Ak$$

Aeraulic data measured in isothermal conditions in accordance with international standard:

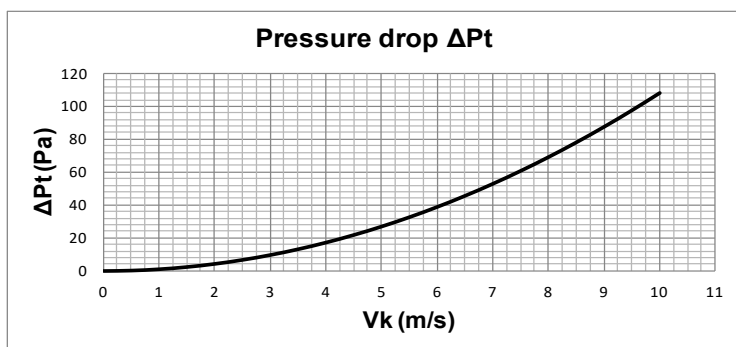
ISO 5219 1984: Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.

Acoustic data measured in reverberation room in accordance with international standard:

ISO 3741 1999: Acoustic - determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms

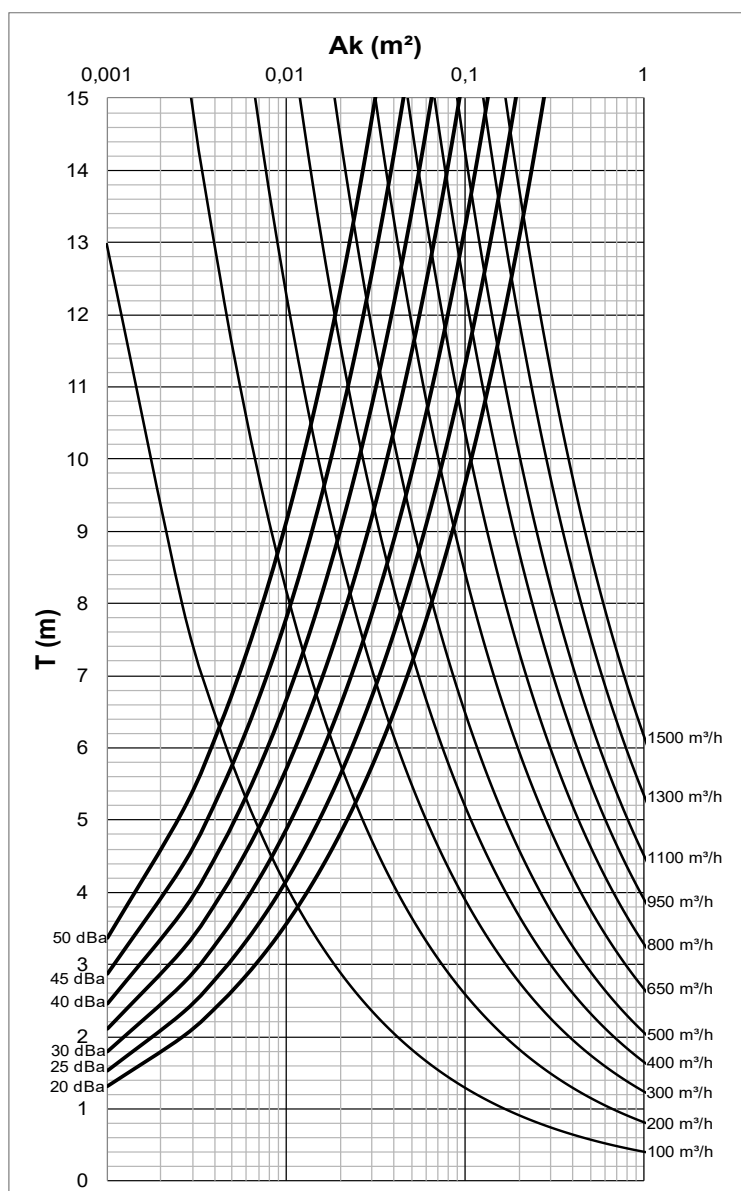
ISO 5135 1997: Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.

The data in the diagrams does not consider the attenuation due to the installation environment. This attenuation is usually between 6 and 10 dBA and is determined by the size and shape of the environment and the characteristics of the furnishings.



**LINEAR GRILLES
THIN FRAME
WITH FIXED BLADES
ANGLED THROW - SUPPLY
PERFORMANCE**

**UF6 UF9
SERIES**



A_k Effective area (m²)
 Q Air Flow (m³/h)
 T Throw (m) for $V_t=0,2$ m/s
 V_k Velocity (m/s) in section A_k

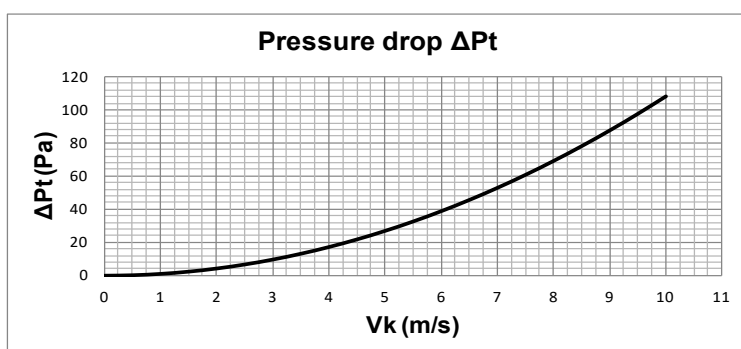
$$V_k = Q/3600/A_k$$

Aeraulic data measured in isothermal conditions in accordance with international standard:
ISO 5219 1984: Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.

Acoustic data measured in reverberation room in accordance with international standard:
ISO 3741 1999: Acoustic - determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms

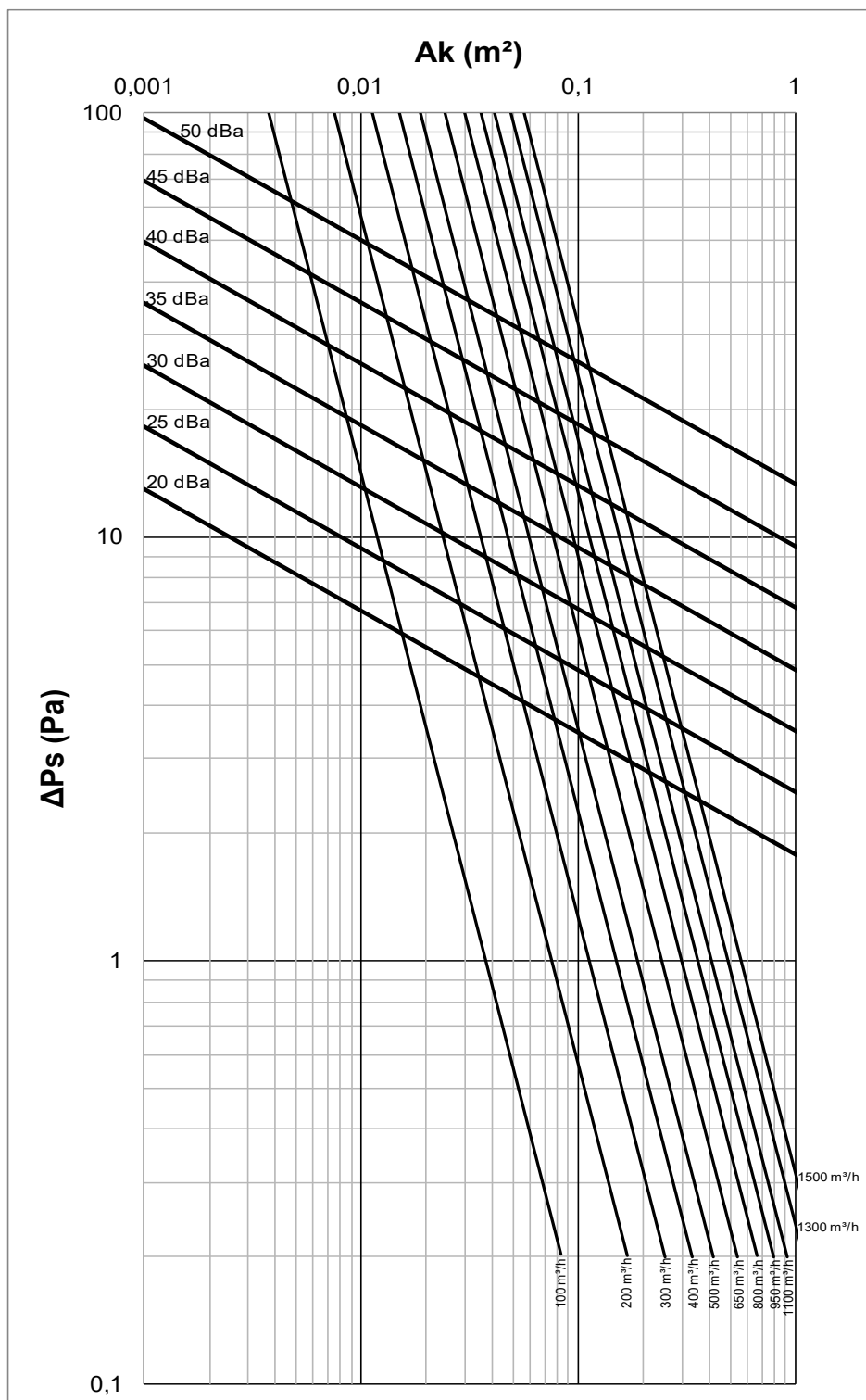
ISO 5135 1997: Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.

The data in the diagrams does not consider the attenuation due to the installation environment. This attenuation is usually between 6 and 10 dBA and is determined by the size and shape of the environment and the characteristics of the furnishings.



LINEAR GRILLES
THIN FRAME
WITH FIXED BLADES
ANGLED THROW - EXTRACTION
PERFORMANCE

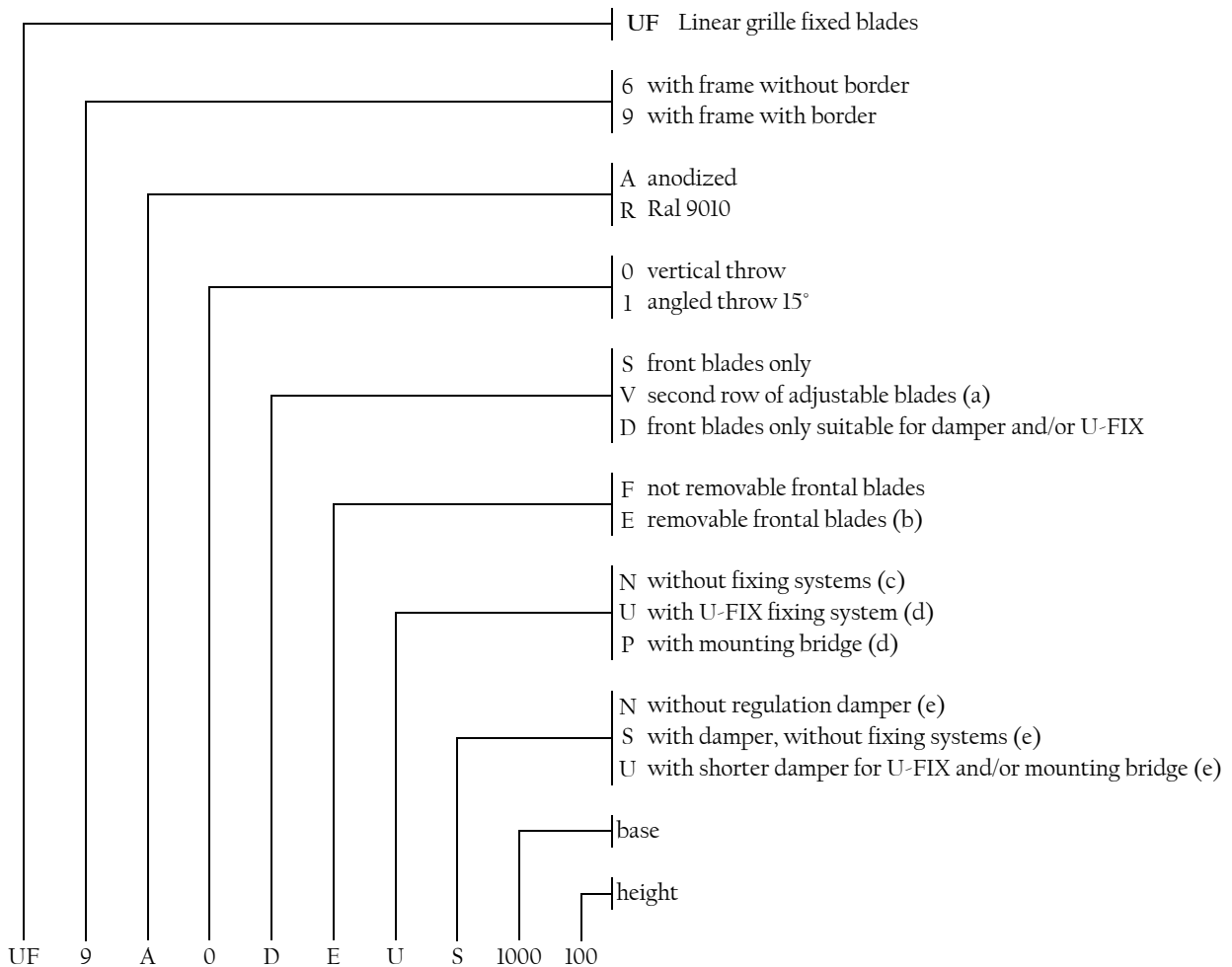
UF60 UF90
UF61 UF91
SERIES



LINEAR GRILLES THIN FRAME WITH FIXED BLADES

UF6 UF9
SERIES

HOW TO ORDER



UF6-9FIX Kit 4 fixing brackets

Standard base length from 200mm to 1500mm step 50mm

Standard height length from 50mm to 150mm step 25mm - from 150mm to 400mm step 50mm

- (a) UF9 model only minimum height 75mm
- (b) UF6 model only - for installation in vertical wall - springs on the upper side
minimum height 100mm maximum size 1200x300
- (c) fixing systems, except brackets UF6-9FIX, cannot be supplied after the delivery of the grille
- (d) UF9 model only - fixing systems cannot be supplied after the delivery of the grille
- (e) the regulation damper cannot be supplied after the delivery of the grille
minimum height version with damper 75mm