SiG AIR HANDLING

Fire resistant grilles type GE120XL

Rectangular fire resistant ventilation grilles **GE120XL** are applicable for fire compartimentation within buildings. The grille is made of blades, which swell at a temperature of approximately 100°C, thereby closing the opening. The fire resistant grilles are only applicable in systems without pressure (natural ventilation).

Application
- In fire resistant walls
- Fire resistant up to 2 hour
- Vertical installation only with blades in horizontal position
- Not suitable for outdoor use
- Maintenance-free

Material
- PVC lamellas and frame with intumescent material inside

Colour
- Grey PVC

Composition
- Grey PVC blades and frame with intumescent material inside

Mounting
- To be mounted in fire resistant walls by means of standard mortar, silicone **BMS** or plaster **BP**

Certification
- GE120XL grilles are tested and approved according to Europeen standard EN 1364-1
- Classified EI120(ve i<->o) according EN 13501-3 in rigid wall (aerated concrete ≥ 100 mm)

Accessories
- Fire resistant silicone, type **BMS**
- Fire resistant plaster, type **BP**
- Fire resistant PU foam, type **BAP**

SIG AIR HANDLING

Text for tender

- The fire resistant grilles will be of the type for rectangular openings in fireproof compartmentation walls. The grilles have a fire resistance of 2 hours and a free air passage of +/- 70%. The grilles can only be used in systems where in case of fire no pressure is being applied upon the grille.
- **SIG** type **GE120XL**

Order example

- **GE120XL, 800, 600**

Explanation
GE120XL = Type of fire resistant grill
800 = Length of grill
600 = Height of grill

Quick selection table

H/L [mm]	200	300	400	500	600	700	800	900	1000	1100	1200	
200								398.4	444.4	490.3	536.2	Q(Δp=2Pa)
								943.7	1047.7	1151.7	1255.7	Q(Δp=10Pa)
300								676.2	754.6	833	911.4	Q(Δp=2Pa)
								1572.7	1750.2	1927.8	2105.3	Q(Δp=10Pa)
400								930.2	1038.3	1146.4	1254.5	Q(Δp=2Pa)
								2147.8	2392.6	2637.3	2882.1	Q(Δp=10Pa)
500	224	364.6	505.2	645.7	786.3	926.9	1067.4	1208	1348.6	1489.1	1629.7	Q(Δp=2Pa)
	548.8	867.1	1185.4	1503.7	1822	2140.2	2458.5	2776.8	3095.1	3413.4	3731.7	Q(Δp=10Pa)
600	270.2	440.4	610.7	781	951.2	1121.5	1291.7	1462	1632.3	1802.5	1972.8	Q(Δp=2Pa)
	653.3	1038.8	1424.3	1809.9	2195.4	2580.9	2966.4	3351.9	3737.4	4123	4508.5	Q(Δp=10Pa)
700	316.3	516.3	716.2	916.2	1116.1	1316.1	1516	1716	1915.9	2115.9	2315.8	Q(Δp=2Pa)
	757.8	1210.5	1663.3	2116	2568.8	3021.5	3474.3	3927	4379.8	4832.5	5285.3	Q(Δp=10Pa)
800	366.8	599.2	831.7	1064.1	1296.5	1528.9	1761.4	1993.8	2226.2	2458.6	2691	Q(Δp=2Pa)
	872.1	1398.4	1924.6	2450.9	2977.2	3503.5	4029.8	4556	5082.3	5608.6	6134.9	Q(Δp=10Pa)

Symbols and specifications

- H/L [mm] = Height and Width of grille in mm
- Q [m³/h] = Air volume in m³/h
- Δp 2Pa = Pressure loss of 2 Pa over the grille
- Δp 10Pa = Pressure loss of 10 Pa over the grille

Free air passage

H/L [mm]	200	300	400	500	600	700	800	900	1000	1100	1200	
200								0.0779	0.087	0.0961	0.01052	Sn [m²]
								43.29	43.51	43.7	43.85	Sn [%]
300								0.133	0.1486	0.1641	0.1796	Sn [m²]
								49.26	49.52	49.73	49.9	Sn [%]
400								0.1834	0.2048	0.2262	0.2477	Sn [m²]
								50.94	51.2	51.42	51.6	Sn [%]
500	0.0433	0.0712	0.0991	0.127	0.1548	0.1827	0.2106	0.2385	0.2663	0.2942	0.3221	Sn [m²]
	43.33	47.47	49.54	50.78	51.61	52.2	52.65	52.99	53.27	53.49	53.68	Sn [%]
600	0.0525	0.0862	0.12	0.1538	0.1875	0.2213	0.2551	0.2888	0.3226	0.3564	0.3901	Sn [m²]
	43.73	47.91	50	51.26	52.09	52.69	53.14	53.49	53.77	53.99	54.18	Sn [%]
700	0.0616	0.1013	0.1409	0.1806	0.2202	0.2599	0.2995	0.3392	0.3788	0.4185	0.4582	Sn [m²]
	44.02	48.23	50.33	51.6	52.44	53.04	53.49	53.84	54.12	54.35	54.54	Sn [%]
800	0.0716	0.1177	0.1638	0.2099	0.256	0.3021	0.3482	0.3943	0.4404	0.4865	0.5326	Sn [m²]
	44.78	49.06	51.2	52.48	53.34	53.95	54.41	54.76	55.05	55.28	55.48	Sn [%]

Symbols and specifications

- H/L [mm] = Height and Width of grille in mm
- Sn [m²] = Free area given in m²
- Sn [%] = Free area given in %

H-5

L-5

100