

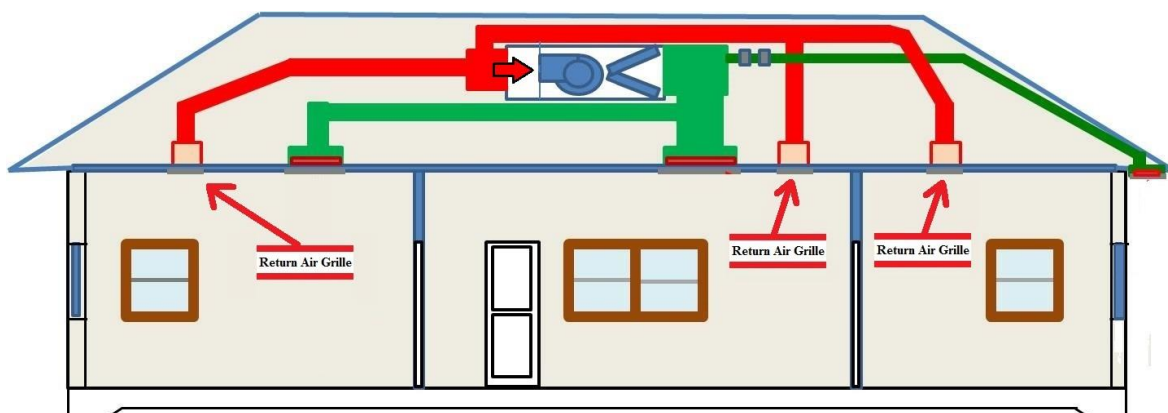
SINGLE DEFLECTION GRILLE

Rev.02
26-05-2015



GMC SDG-001 PRODUCT SPECIFICATIONS:

- Standard Material: Aluminum. Used for return air ducts.
- Aerodynamic blades are easily adjustable.
- Mounted with 4 mm screws on frame. Optional: Clips or Plate-spring applications.
- On request, damper can be added to control air flow rate.
- Low pressure loss.
- Standard frame: Grilles with 22mm or 32mm.
- Eloxal, anodizing or electrostatic powder coating with the color from RAL catalogue.



HVAC Systems and Equipments Co.
4640 Hedgcoxe Road 227 Plano, TX 75024 – US

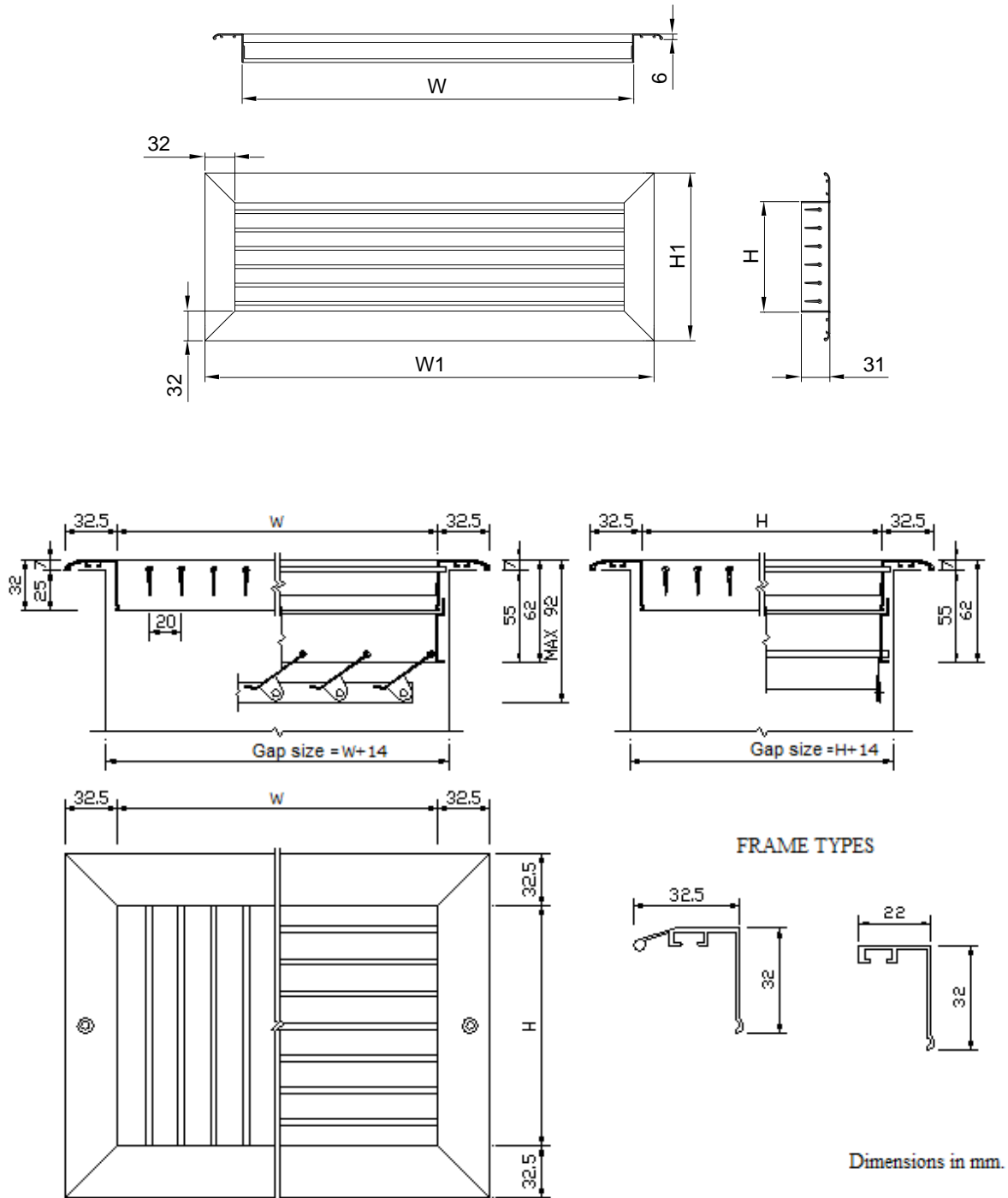
www.gmcair.com

SINGLE DEFLECTION GRILLE

Rev.02
26-05-2015



TECHNICAL DETAILS



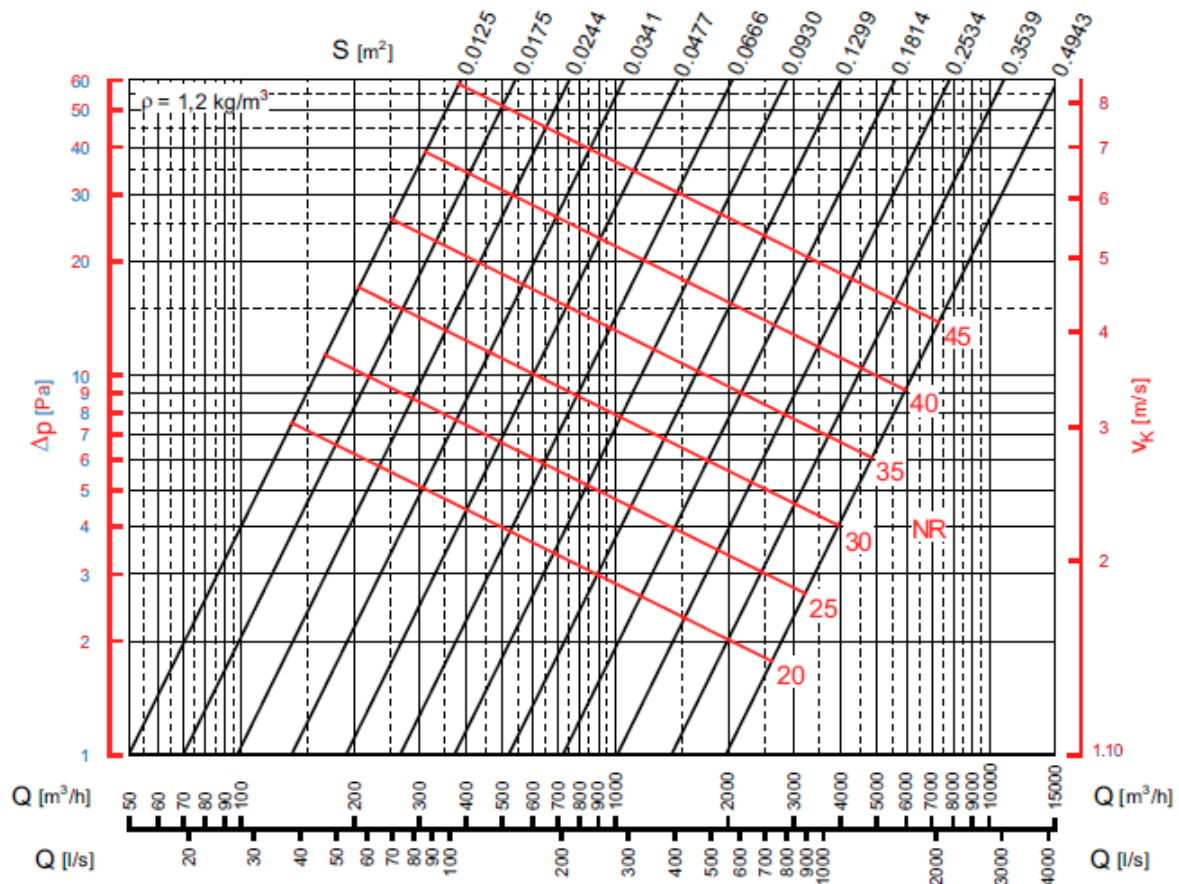
SINGLE DEFLECTION GRILLE

Rev.02
26-05-2015



DATA DIAGRAMS

SDG-001, PRESSURE DROP AND NOISE LEVELS



Q [m ³ /h]	supply air flow rate
S [m ²]	effective outlet area
v_k [m/s]	velocity relating to the effective outlet area S
v_m [m/s]	terminal velocity relating to the throw axis
Δp [Pa]	total pressure loss
NR	noise rating (ISO standard, in relation to 10^{-12} W) taking no account of attenuation of the room
D [°]	angle of deflection of the fins



SINGLE DEFLECTION GRILLE

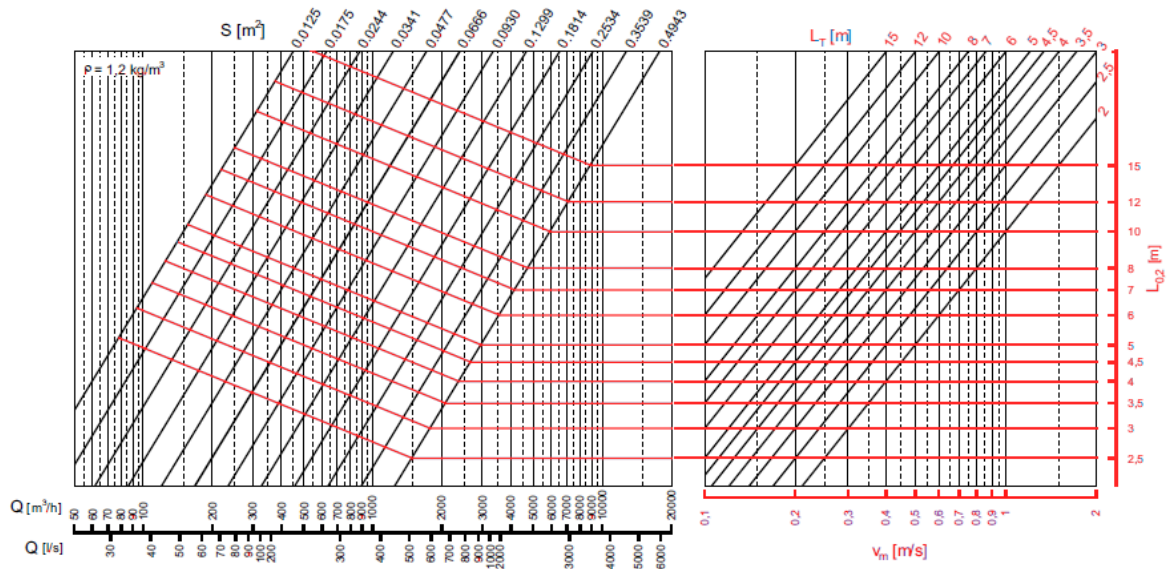
Rev.02
26-05-2015



SDG-001, EFFECTIVE AREA TABLE (m²)

		H (mm)												
		100	150	200	250	300	350	400	450	500	600	700	800	900
W (mm)	100	0,008	0,012	0,16	0,020	0,024	0,028	0,032	0,036	0,040	0,048	0,056	0,064	0,072
	150	0,012	0,018	0,025	0,030	0,037	0,042	0,049	0,054	0,061	0,073	0,085	0,097	0,109
	200	0,016	0,024	0,033	0,040	0,049	0,056	0,065	0,072	0,081	0,097	0,113	0,129	0,145
	250	0,020	0,031	0,041	0,051	0,061	0,071	0,081	0,091	0,101	0,121	0,141	0,161	0,181
	300	0,024	0,037	0,049	0,061	0,073	0,085	0,097	0,109	0,121	0,145	0,169	0,193	0,217
	350	0,028	0,043	0,057	0,071	0,085	0,099	0,113	0,127	0,141	0,169	0,197	0,225	0,253
	400	0,032	0,049	0,066	0,081	0,098	0,113	0,130	0,145	0,162	0,194	0,226	0,258	0,290
	450	0,036	0,055	0,074	0,091	0,110	0,127	0,146	0,163	0,182	0,218	0,254	0,290	0,326
	500	0,040	0,061	0,082	0,101	0,122	0,141	0,162	0,181	0,202	0,242	0,282	0,322	0,362
	600	0,048	0,073	0,098	0,121	0,146	0,169	0,194	0,217	0,242	0,290	0,338	0,386	0,434
	700	0,056	0,085	0,115	0,141	0,171	0,197	0,227	0,253	0,283	0,339	0,395	0,451	0,507
	800	0,064	0,098	0,131	0,162	0,195	0,226	0,259	0,290	0,323	0,387	0,451	0,515	0,579
900	0,072	0,110	0,148	0,182	0,220	0,254	0,292	0,326	0,364	0,436	0,508	0,580	0,652	
1000	0,080	0,122	0,164	0,202	0,244	0,282	0,324	0,362	0,404	0,484	0,564	0,644	0,724	
1100	0,088	0,134	0,180	0,222	0,268	0,310	0,356	0,398	0,444	0,532	0,620	0,708	0,796	
1200	0,096	0,146	0,197	0,242	0,293	0,338	0,389	0,434	0,485	0,581	0,677	0,773	0,869	

SDG-001, THROW DISTANCES (m)



- Q [m³/h] supply air flow rate
- S [m²] effective outlet area
- v_k [m/s] velocity relating to the effective outlet area S
- v_m [m/s] terminal velocity relating to the throw axis
- D [°] angle of deflection of the fins
- LT [m] horizontal isothermal throw with ceiling effect angle of deflection D = 0



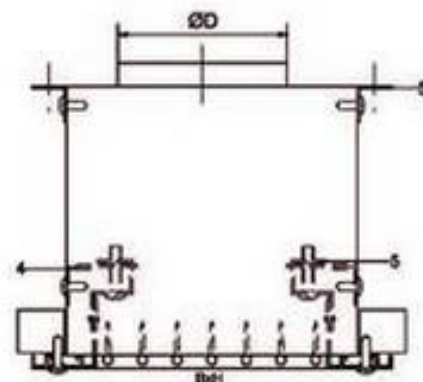
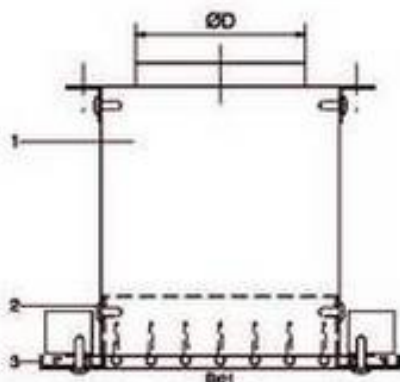
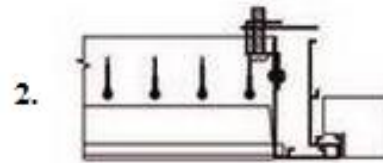
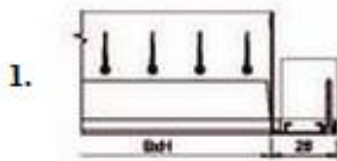
SINGLE DEFLECTION GRILLE

Rev.02
26-05-2015



MOUNTING DETAILS

1. Screw Mounting Detail
2. Clips with hidden blind-frame Mounting Detail
3. Safety catch with hidden blind-frame Mounting Detail
4. Plenum Box (Overhead Access) Mounting Details



SINGLE DEFLECTION GRILLE

Rev.02
26-05-2015



ORDER PARAMETERS:

SDG-001	FL	22	PFD	OD9010	SM	N 300X200
00: No-Accessory FL: with Filter PL: with Plenum Box				N: Neck Size F: Frame Size		
22: Frame=22mm 32: Frame=32mm				00: No Mounting BF: Blind Frame SM: Screw Mounting CM: Clips Mounting PM: Plate-spring Mounting		
000: Without Damper OFD: Opposite Flap Damper PFD: Parallel Flap Damper				00: No coating EX: Eloxal Coating OD----: Oven Drying Coating		

