

BELLMOUTH SPIGOT

General Product Specifications

Description:

Designed for use as a general purpose take off/outlet for use with airconditioning and extraction systems, the spigot is pressed from prime galvanised steel and formed with a radiused "bellmouth" design to allow highly efficient entry of air to the spigot from the main supply duct with minimal turbulence, noise and pressure loss.

Construction:

Manufactured from prime quality galvanised steel grade G2 with coating weight Z275 and total nominal coated thickness of 0.6mm (24 gauge) up to 300mm diameter and 0.75mm (22 gauge) for the larger sizes. The bellmouth design is formed with a 16mm radius and the 65mm long "lead" allows ample room for secure attachments of flexible or spiral duct. All spigots are made with an overall height of 130mm +/- 5mm, and are formed to provide a sturdy product with excellent strength and stability.

Blade and Control Quadrants:

Blades are manufactured from 0.75mm (22 gauge) prime galvanised steel as specified above. The operating quadrant arrangement is an all metal zinc die-cast construction, and fitted with three washers and a secure locking screw which prevents blade "flutter" or rattles in service conditions, together with an indicator arrow to show blade position. Spigots over 350mm in size are fitted with a double quadrant arrangement for extra strength in high air flow situations. The quadrants are a "25mm offset" design which allows insulation to be positioned right to the base of the spigot and thus prevent condensation on the outside of the spigot when used in airconditioning systems in particularly humid environments.

Installation:

The recommended method of fixing the spigot to ductwork or the like is by the use of blind steel rivets with a grip capacity of 4.8mm, or by spot-welding if suitable equipment is available. In either fixing method, the spacing of the rivets or spot-welds is not considered critical as the bottom of the flange of the spigot is very rigid - as a general guide, however, a maximum spacing of 110mm measured around the flange diameter is suggested. Rivets and spot welds should be placed approximately 5mm from the outer edge of the flange.



Reference Dimensions:

The following dimensions are for use as a general guide.

Nominal Size	Outlet Diam. (1)	Base Flange Diam. (2)	Hole Cut Size (3)
125	123	175	150
150	148	200	175
175	173	225	200
200	198	250	225
225	223	275	250
250	248	300	275
300	298	350	325
350	348	400	375
400	398	450	425
450	448	500	475
500	498	550	525

Notes: All dimensions are in millimetres.

(1) Reference tolerance +/- 2mm, up to 350mm size, then +/- 4mm thereafter.

(2) Reference tolerance +/- 1.5mm.

(Dimension not considered critical)

(3) Reference tolerance minus zero mm/+5mm.

Where rivets are used, it is generally good practice (particularly in high pressure systems) to apply a bead of fire retardant sealant close to the edge of the cut hole immediately prior to positioning the spigot. After riveting, sealant should also be applied to the outer edge of the rim (which has a slight upturned edge to allow sealant entry) and finished off to a smooth finish with a brush or cloth. Where spot welding is being used to affix the spigot, sealant placed under the rim may interfere with the spot welding process and thus only the outer bead of sealant should be used in these cases.

Where spigots are fitted with blades, care should be taken to ensure that the spigot is always installed with the axis of the blade parallel to the air flow direction to achieve optimum results.