

Technical declaration: dry installation of IBG[®] PVC-U fittings

Praher Plastics Austria GmbH, Poneggenstraße 5, 4311 Schwertberg declares herewith that all manufactured IBG[®] PVC-U fittings are produced according to the standard ISO 727 and the thereby specified tolerances and ovality.

IBG[®] PVC-U fitting range is therefore in conformity to the respectively national valid standards.

Praher Plastics Austria GmbH guarantees that, by using adhesive manufactured according to international standard, all IBG[®] PVC-U fittings can be glued with pipes, which are produced according to international accepted standards.

In addition, IBG[®] PVC-U fittings range is optimized for the process of dry installation. To facilitate this process and according to the requirements of the standard ISO 727, IBG[®] PVC-U fittings are manufactured with a tight and optimized tolerance.

A premise for dry installation of IBG[®] PVC-U fittings is the use of IBG[®] PVC-U pipes, which are also produced with a tight and optimized tolerance (see table 1 at attachment).

Respecting this, optimal conditions will be fulfilled for a good and easy dry installation.

However, even when IBG[®] PVC-U fittings are used in connection with tolerance-optimized IBG[®] PVC-U pipes, interfering factors might complicate or hinder a dry installation.

Some examples of interfering factors:

- the use of a non-deburred pipe,
- transport and storage conditions,
- pipe ovality (see table 2 at attachment),
- use of a non-corresponding pipe.

All of these interfering factors can lead to an overlap of tolerance zones for IBG[®] PVC-U fittings and IBG[®] PVC-U pipes and therewith to hinder the dry installation (see example at attachment).


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Attachment / additional information:

OUTSIDE DIAMETER		
Ø	STANDARD	IBG®
20	20,00 – 20,20 mm	20,00 – 20,10 mm
25	25,00 – 25,20 mm	25,00 – 25,10 mm
32	32,00 – 32,20 mm	32,00 – 32,10 mm
40	40,00 – 40,20 mm	40,00 – 40,10 mm
50	50,00 – 50,20 mm	50,00 – 50,10 mm
63	63,00 – 63,30 mm	63,00 – 63,15 mm
75	75,00 – 75,30 mm	75,00 – 75,15 mm
90	90,00 – 90,30 mm	90,00 – 90,15 mm

Table 1 – special outer diameter for IBG® PVC-U pipes

OVALITY PN6			OVALITY PN10 / PN16		
Ø	STANDARD	IBG®	Ø	STANDARD	IBG®
20	-	-	20	0,50 mm	0,45 mm
25	-	-	25	0,50 mm	0,45 mm
32	-	-	32	0,50 mm	0,40 mm
40	1,40 mm	0,80 mm	40	0,50 mm	0,40 mm
50	1,40 mm	0,80 mm	50	0,60 mm	0,50 mm
63	1,50 mm	0,90 mm	63	0,80 mm	0,70 mm
75	1,60 mm	1,00 mm	75	0,90 mm	0,70 mm
90	1,80 mm	1,20 mm	90	1,10 mm	0,90 mm

Table 2 – special allowable ovality for IBG® PVC-U pipes

Example: Overlapping tolerance zones

	IBG® PVC-U pipe d50 PN10		IBG® PVC-U fitting d50 PN10
	without considering the ovality	with considering the ovality (= total of 0,5 mm)	without considering the ovality
smallest permissible diameter	50,00 mm	49,75 mm	50,10 mm
largest permissible diameter	50,10 mm	50,35 mm	50,30 mm

One IBG® PVC-U fittings manufactured at the maximum tolerance (**50,30 mm**) will not smoothly fit into one IBG® PVC-U pipe manufactured at the allowed diameter of **50,35 mm**, therefore a dry installation will be hindered.