



# Instructionsheet

## **Dielectric fitting**

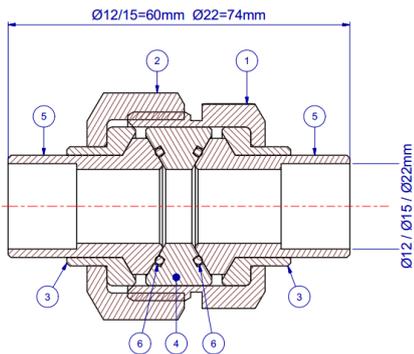
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**Before using / installing the dielectric fitting these instructions must be read carefully.**

### General

The "PD" dielectric fitting has been developed especially for medical gas pipeline systems. It creates a galvanic interruption in pipeline systems and can be applied in medical gas pipeline systems that lead to rooms with K3 classification according to NEN1010:2007.

### Technical specifications



### **Materials**

|   |                 |          |
|---|-----------------|----------|
| 1 | threaded nipple | : brass  |
| 2 | gland           | : brass  |
| 3 | insulation ring | : POM    |
| 4 | middle ring     | : POM    |
| 5 | brazing nipple  | : bronze |
| 6 | O-ring          | : EPDM   |

### **Specifications**

|                       |                                      |
|-----------------------|--------------------------------------|
| Temperature           | : -20°C .. 60°C                      |
| Max. working pressure | : 15 bar (at a temperature of +20°C) |
| Min. resistance       | : 10 MΩ at 10Volt                    |
| Connection            | : brazing nipples                    |
| Cleaning              | :                                    |
| Package               | : individually sealed in plastic     |

### Installation

The fittings are assembled (hand-tight tightened) when delivered and ready for installation. It is possible to braze them. As they are free of oil and grease and suitable for medical gases, it is important to keep them clean and dry.

The insulating effect of the coupling is realized by the polyoxymethylene (POM) rings that are placed between the brass and bronze parts. Make sure the temperature around the POM rings does not exceed 60°C whilst installing the fitting.

Prepare the copper tube as usual for brazing. After loosening the fitting, slide the insulation ring and threaded nipple to one side of the tube. Next, slide the insulation ring and gland to the other side of the tube. Place the brazing nipples on the tube so they can be brazed.

### Brazing / welding

**Make sure the temperature around the POM rings does not exceed 60°C.**

Cool the tube between the nipples and insulation ring or create sufficient distance between the braze joint and insulation ring. After completing the joints, slide the insulation rings on the brazing nipples and install the fitting. Check if the O-rings are correctly positioned in the middle ring, place the middle ring in the threaded nipple before screwing the gland, see drawing above. Tighten the fitting hand-tight and "tension free" and then tighten it with a wrench approximately a 1/4 turn.

Subsequently, test the leak tightness of the fitting in the same way as the other components in the system are tested.





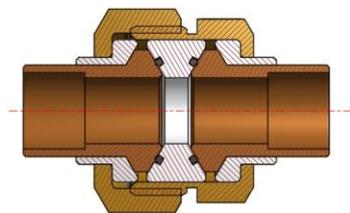
Maintenance

Basically the fittings do not need maintenance. When contained, the O-rings will last for approximately 6 - 8 years. In the unlikely event a fitting does leak, replacing the O-rings will solve the problem. Make sure to use the correct spare part kit. By both internal and external contamination the insulation capacity can deteriorate. Considering the application, internal contamination is unlikely. External contamination can be removed without disassembling the fitting. When disassembled, the O-rings need to be replaced, they cannot be reused.

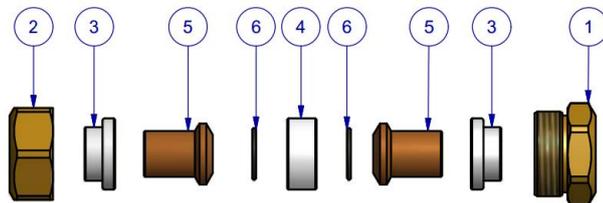
Spare parts

| Artikelno. | Description              | To be used for  |
|------------|--------------------------|-----------------|
| PNN221     | Middle ring / O-ring set | PNN223 / PNN224 |
| PNN222     | Middle ring / O-ring set | PNN225          |

Lay-out



Sectional drawing



Exploded view

