

GROUTING FITTINGS – MK4 POST-TENSIONING SYSTEM

INTRODUCTION

Protection of the PT system is essential. The protection of the post-tensioning system is directly related to the overall durability and life span of the structure. The concrete that forms the structural member, the duct and the grout are all that separates the PT system from exposure to air and weather. The high-strength steel of the PT system is highly susceptible to corrosion and must be protected from exposure to moist and salt-laden air. Additionally, the grout transfers the prestressing force to the structural member in an internal bonded post-tensioning system.

WHY IS SO IMPORTANT:

Grout is the primary protection for the PT system; therefore, careful attention must be given to the grouting process. Cementitious grout provides an alkaline environment that passivates the surface of the steel which inhibits the corrosion process. The grout must surround and be bonded with the steel to be effective.

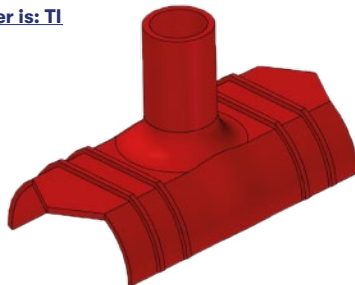
Specially blended grout materials, correctly mixed and effectively pumped into the tendon, are key to a successful grouting operation.

The durability of the structure is directly effected by the quality of the grouting. It is essential to use the right fittings, to achieve an adequate grouting.

1. MK4 GROUT VENT:

The grout vent, either inlet or outlet, is attached to the ducts. This is where the grout is pumped into the tendon and where air and excess water are expelled as the duct fills with grout. They are attached to the external ducts during their assembly at the construction site.

MK4 code to order is: TI

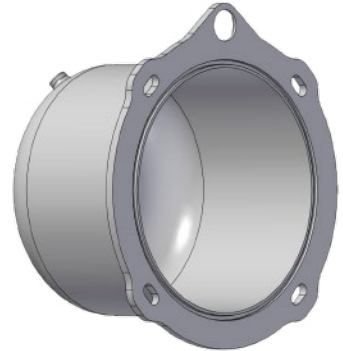


2. MK4 GROUT CAP:

The plastic grout cap is used to encapsulate the external face or uncover face of the post-tensioning on multistrand anchorages. It prevents the entrance of moisture and protects the anchor plate, the tendon tail and wedges from corrosion.

See in the following table the sizes available for MK4 TK system:

| MK4 CODE | Product Description |
|------------|---------------------|
| 112-05-640 | TK5 Plastic Cap |
| 112-07-640 | TK7 Plastic Cap |
| 112-09-640 | TK9 Plastic Cap |
| 112-12-640 | TK12 Plastic Cap |
| 112-15-640 | TK15 Plastic Cap |
| 112-19-640 | TK19 Plastic Cap |
| 112-24-640 | TK24 Plastic Cap |
| 112-31-640 | TK31 Plastic Cap |
| 112-37-640 | TK37 Plastic Cap |
| 112-43-640 | TK43 Plastic Cap |



MK4 code to order is on the first column of the above table.

3. MK4 TRUMPET ADAPTOR (20mm)

It is a plastic fitting that provides a watertight connection between the trumpet of the anchorage and the grout pipe.

MK4 code to order is: 304-006

