

IP-4 DUCT SYSTEM

DS 280 E 0912



ABAN Prestressing



IP-4 DUCT SYSTEM

Technical Data

Duct System for corrosion protection of grouted post-tensioning tendons made from PP or HDPE polyolefin material.

- Kind of Duct** Thick wall corrugated duct with intermittent circular corrugation for improved corrosion protection of bonded post-tensioning tendons
- Norm** Design and Material comply to fib 'technical report bulletin 7' recommendations, PTI, FDOT
- Materials**
- Duct available in Polypropylen or Polyethylen material depending on project requirements and installation temperatures. HR-PP material for very low bending radii available on request.
 - Duct available in different wall thickness acc project requirements

IP-4 Duct IP-4 Duct is available in **IP-4 M** for fib compliance and economical **IP-4 S** for lower requirements

| Model | Type | IP-4 M | | | IP-4 S | | | | |
|---------|-------|--------|-----|------|---------|-------|-----|-----|------|
| | | OD | ID | Wall | Model | Type | OD | ID | Wall |
| 36/46 | round | 46 | 36 | 2,0 | | | | | |
| 58/74 | round | 74 | 58 | 2,5 | 58/74 | round | 74 | 58 | 2,0 |
| 76/92 | round | 92 | 76 | 2,5 | 76/92 | round | 92 | 76 | 2,0 |
| 85/99 | round | 99 | 85 | 2,5 | 85/99 | round | 99 | 85 | 2,0 |
| 100/116 | round | 116 | 100 | 3,0 | 100/116 | round | 116 | 100 | 2,5 |
| 115/131 | round | 131 | 115 | 3,0 | 115/131 | round | 131 | 115 | 2,5 |
| 130/146 | round | 146 | 130 | 3,0 | 130/146 | round | 146 | 130 | 2,5 |
| 140/157 | round | 157 | 140 | 3,0 | 140/157 | round | 157 | 140 | 2,5 |
| 72/21 | flat | 73 | 22 | 2,0 | 72/21 | flat | 73 | 23 | 1,5 |
| 90/22 | flat | 90 | 23 | 2,0 | 92/21 | flat | 90 | 24 | 1,5 |

Duct Length All sizes available in straight length standard 11,5 or 5,8 m. Other straight length on request.

Material Properties Polypropylen acc ASTM D 4101 PP 0340 B 44544 with density of 0,905 g/cm³ at 23°C
Polyethylen acc ASTM D 3350 PE 345444 E with density of >0,94 g/cm³ at 23°C

Colors PP black, grey or white, HDPE black or white

Product Properties Ducts have been successful tested acc fib 7 recommendations for following acceptance criteria: Flexural Behaviour, Duct Flexibility, Lateral Load Resistance, Longitudinal Load Resistance, Leak Tightness, Bond Behaviour, Friction Parameter, Wear Resistance for minimum rest-wall thickness of 1,5 mm after stressing. Minimum radii of curvature depend on pipe size and number of strands, see our TI 280-10.

Joining

- Butt welding
- PF coupler (additional Heat Shrink sleeve) if requested
- PFS coupler including integrated sealing for 0.3 bar pressure tightness
- SB coupler for segmental bridge connections

Fittings Port vents, Vent pipes, Valves, End caps, Shrink pipe couplers, Shrink sleeve couplers
PF coupler, PFS coupler with integrated sealing, Segmental Bridge Coupler

Grout Port Welding PESTEC Grout Ports weldable directly to the duct in economic, easy, professional, safe and pressure tight way using our special welding equipment.

Butt Welding Equipment Our small IP 4 Butt Welding Equipment is optimized for professional field welding of IP 4 ducts.

Contact us for more details.