

IP-4 DUCT SYSTEM

DS 280 F 0321



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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 with protection levels PL 1 – PL 3 requirements
Norm	Design and Material comply to fib 'bulletin 75' recommendations PL 1 – PL 3, PTI, FDOT
Materials	<ul style="list-style-type: none"> 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

Sizes	IP-4 M					IP-4 S				
	Model	Type	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
	86/101	round	99	85	2,5	86/101	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 75 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.

Discover PESTEC. Discover our ideas.

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