# SMART JOINT wide range couplings and flange adaptors with end restraint system





VERSIONS	SMPLE / SMFPLE	
	STANDARD	OPTIONS
NOMINAL SIZES	50 - 300	
PN	From PN 6 to PN 16	
MEDIUM	Potable and raw water	
BODY	Ductile iron	
COMPRESSION RINGS	Ductile iron	
SEALING GASKETS	EPDM rubber	
BOLTS	Steel with dacromet coating	Grade 304/316 stainless steel
END RESTRAINT GRIPPERS	Tempered steel with dacromet coating	
COATING	Rilsan Nylon 11	
ANGULAR DEFLECTION	From DN50 to DN300 = $+/-4^{\circ}$ on each side with coupling ends*	
	*average datum in the middle of the range, before tightening the end restraint system	

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## DESIGN FEATURES OF SMART JOINT COUPLINGS AND FLANGE ADAPTORS WITH END RESTRAINT SYSTEM



(8)



#### $\bigcirc$ Central body

Ductile iron central body conveniently built in order to allow a perfect insertion of the gasket inside its dedicated conical seat.

#### 2 Compression ring

Ductile iron compression rings which allow compression of the gasket onto the pipe surface upon tightening the bolts.

#### 3 Gasket

Truncated-cone sealing gasket which can be perfectly inserted between the central body of the coupling and the circumference of the pipe. It allows a complete hydraulic seal and up to 26 mm tolerance range on the pipe OD.

#### ④ Bolt holes

Round or square holes for the bolt insertion.

#### **(5)** Compression bolts

The compression bolts allow the approaching of the compression flanges and the consequent compression of the gasket onto the pipe.

# 6 Radial set of pull-out resistance grippers

Manufactured in C40 tempered steel, they allow the total locking of the pipe. End restraint grippers, which can be used on PE, steel, DCI and PVC pipelines, guarantee a pull-out resistance action during the installation and their special design allows an easy assembly and disassembly of the coupling without damaging the Rilsan coating.

## $\bigcirc$ End restraint containing ring

Manufactured in ductile iron, it optimizes the pull-out resistance action, also avoiding the rotation of the grippers during the tightening phase.

### 8 Connection flange (Flanged version)

Ductile iron flange.