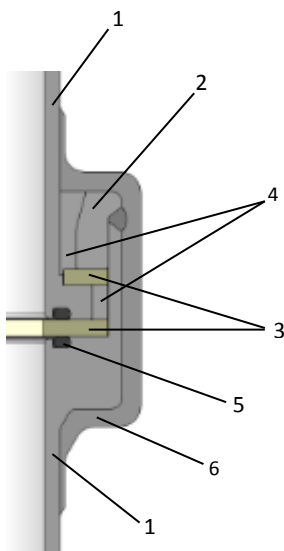


MONOLITHIC INSULATING JOINT

Insulating joints are used for cathodic protection. They electrically insulate 2 sections of pipeline for transportation of hydrocarbon, gas or water. These joints are monoblock, they cannot be dismantled and they do not require any maintenance.

Our insulating joints are qualified by **TOTAL (E&P)**, **STORENGY** and **TIGF**.

Our insulating joints are produced in conformity with your specifications (material, diameter) they can then be adapted to any kind of pipeline. Our insulating joints are made of two pipes (1) joint together with a closing piece (2) butt-welded on the external piece. Two insulating washers in composite material (3) and resin (4) are placed between the different metallic parts of the system to ensure a perfect electrical insulation. Fluid-tightness is made by two O-rings (5). Finally, the external coating is made with insulating resin (6) or an adapted paint.



- The monoblock joint cannot be dismantled and do not require any maintenance.
- A very large range of material is proposed :
 - Forged (SA 350 LF2 ; P355QH-P420QH ; A694 F52/F65/...
 - Tubes (API 5L Gr.B X52/X65/... ; L245/L290/L360/L415 ; SA333 Gr.6 ; 304L/316L)
 - Others on request
- A large range of dimension (1/2''-36'')
- A large rating of pressure (Class 150- Class 2500)
- Insulating gasket from 1/2'' to 8'' Class 600 are stocked.
- All devices are electrically and hydraulically tested.

Non contractual presentation



PETROLE GAZ MAINTENANCE EQUIPEMENTS



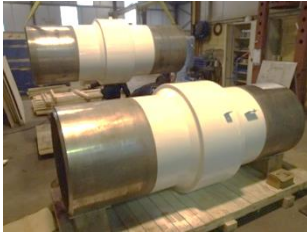
10" Class 600 à brides



1" Class 600



3" - 6" Class 600



30" Class 900



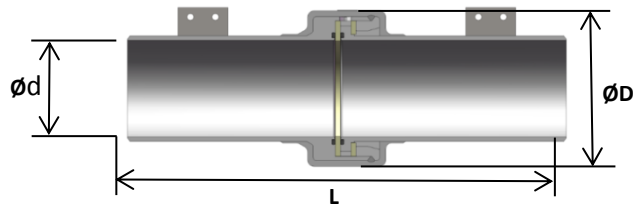
1/2" Class 900 NPT F



32" Class 600 + Té 20"

SPECIFICATIONS		
	Standard	On Request
Dimension range	1/2" - 16" DN15 - DN400	16" - 36" DN400 - DN900
Pressure rating	Class 150 - Class 900 PN20 - PN150	Class 1500 - Class 2500 PN250 - PN420
Product design code	CODAP	ASME ; CODETI
Welding code	EN15614-1	ASME IX / API 1104 / ISO 13847-1
Design Temperature	-20°C / +85°C	-45°C / +120°C
Isolation voltage	5.5 kV	11kV
Resistance	100MΩ / 500V DC	>10MΩ
Connection	Butt-welded BW	Flange-mounted RF / RTJ / NPT
Tightness	FKM O-rings	AED 25/90, NBR, EPDM .. O-rings
External coating	AXSON 12885	DAMIVAL – Paint

This is a non-exhaustive list, any request is studied



STANDARDS								
ø d			< Class 600 (PN100)			Class 900 (PN150)		
DN	Inch	mm	øD (mm)	L (mm)	Weight (kg)	øD (mm)	L (mm)	Weight (kg)
15	1/2"	21.3	83	300	2	83	300	2
25	1"	33.4	79	315	3	79	315	3
50	2"	60.3	125	350	5	125	350	5
80	3"	88.9	159	350	10	159	350	11
100	4"	114.3	169	350	14	188	350	16
150	6"	168.3	238	460	33	238	460	36
200	8"	219.1	300	570	63	300	570	72
250	10"	273	375	700	97	375	700	111
300	12"	323.9	414	700	123	414	700	140
350	14"	355.6	473	700	160	473	700	185
400	16"	406.4	504	1000	211	504	1000	245