

GENERALS

Insulated joints are almost universally needed in cathodically protected pipelines or distribution main systems. In the case of transmission lines they are used to electrically isolate the pipeline from tee-off, terminal facilities, compressor or pumping stations, etc. They are also extensively used to limit stray current from electric railway or other D.C. traction systems. In the case of cathodically protected small pipes, insulated joints are fitted at the meter to avoid loss of current to the other house of building services.

GENERAL CHARACTERISTICS

- They are completely internally coated with a lining of epoxy resin, or to customer's specification.
- They are also able to withstand hydraulic testing in the field, including yield testing.
- Glass fibre laminate is used as insulating material with the lowest available water absorption figure.
- Lugs are provided for cathodic protection site testing purposes.

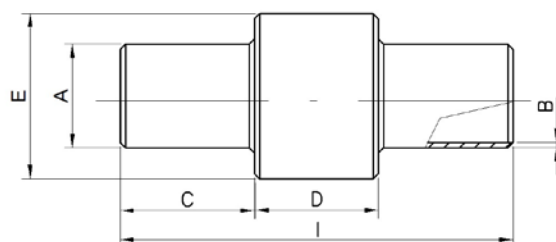
MAIN CHARACTERISTICS

MATERIAL: Pipe to API standards or to customer specification.
INSULATED RESISTANCE: 5 MΩ minimum at 1000 Vac after water filled hydraulic test and in dry air.
ELECTRICAL BREAKDOWN VOLTAGE: 3 KV guaranteed minimum, 2,5KV for the small services.
HYDRAULIC TEST: In accordance with ANSI requirements.
MAXIMUM SERVICE TEMPERATURE: Standard grade 70°C, High temperature 120°C

SMALL SERVICE PIPE INSULATING JOINTS

They are completely similar to insulating joints necessary for main pipelines and maintain the same mechanical and dielectric characteristics. The types of end connections are the following:

- MM (male x male).
- FF (female x female).
- FM (female x male).
- FS (female x welding).
- MS (male x welding).
- SS (welding x welding).



ND inc	DN	A	PN 25 - ANSI 150						PN 100 - ANSI 600					
			B	C	D	E	I	Kg	B	C	D	E	I	Kg
1/2	15	21,3	3,6	107	34	49	229	0,6	3,2	95	59	60	250	1,4
3/4	20	26,7	3,9	104	35	51	245	1	3,2	95	60	65	250	1,6
1	25	33,4	3,9	102	48	65	250	1,3	3,4	95	60	75	250	2
1 1/4	32	42,4	3,9	125	50	76	300	1,4	3,6	113	68	83	300	2,8
1 1/2	40	48,3	3,9	122	55	83	300	2,3	3,7	110	86	95	300	4
2	50	60,3	3,9	145	60	88	350	3,4	3,9	129	104	114	350	6
2 1/2	65	76,1	4,8	144	65	113	350	5	5,5	124	117	132	350	8,5
3	80	88,9	4,8	167	65	125	400	7	5,5	190	123	155	500	16
4	100	114,3	4,8	167	75	150	400	9	6,0	182	128	190	500	23
5	125	141,3	4,8	214	92	191	500	14	6,5	220	148	217	600	35
6	150	168,3	5,6	210	97	215	500	20	7,1	215	161	248	600	49
8	200	219,1	6,4	198	106	273	500	31	8,2	205	183	297	600	83
10	250	273	6,4	287	116	323	700	57	9,3	293	211	368	800	131
12	300	323,8	6,4	280	154	382	700	77	9,5	283	232	440	800	188
14	350	355,6	7,1	360	180	426	900	119	12,7	375	231	455	1000	235
16	400	406,4	7,1	355	175	470	900	150	12,7	365	280	540	1000	323
18	450	457,2	7,1	345	200	518	900	185	14,3	355	290	600	1000	394
20	500	508	7,1	394	220	605	1000	210	15,9	450	308	684	1200	310*
22	550	558,8	8	386	232	660	1000	247	17,5	440	342	730	1200	370*
24	600	609,6	8,8	376	250	726	1000	310	19	430	405	810	1200	450*
26	650	660,4	8,8	376	255	766	1000	340	19	425	388	845	1200	523*
28	700	711,2	8,8	416	275	830	1200	410	19	470	400	890	1300	603*
30	750	762	8,8	**	275	870	1200	**	19	**	421	970	1300	**

** = To be defined by the Client on request of order.

* = At this weight is to be added the weight of the pipe ends.

- Special executions are available on order.