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RUBBER JOINTS

FEATURES AND PARTICULARS

FLANGED RUBBER JOINTS:

The flanged rubber joints are build with SINGLE SPHERE or DOUBLE SPHERE flexible rubber body, reinforced with nylon textile cord, that give back them more resisting to the stress and external/internal forces and working pressure.
These rubber joints have carbon steel wires strand for contact with flanges, for a good guarantee of usage.

The flanged rubber joints that we can to offer at our custmers are:

- **GT A-FLEX** in EPDM, NBR, NEOPRENE, HYPALON, VITON. Temperatures: -20 ÷ 100°C.
- **GT A-FLEX-S** in EPDM, NBR, NEOPRENE, HYPALON, VITON. Temperatures: -20 ÷ 100°C.
- **GT A-FLEX-V** in EPDM, NBR, NEOPRENE, HYPALON, VITON. Temperatures: -20 ÷ 100°C.
- **GT D-FLEX (double sphere):** EPDM, NITRILE, NEOPRENE, HYPALON, VITON.
- **GT SPOOL TYPE (with rubber flange):** EPDM, NITRILE, NEOPRENE, HYPALON, VITON.
- **Special**: P.T.F.E., WHITE NBR (for food usage).

We can to supply all flanges dimensions, UNI PN 10 and PN 16 in carbon steel are ready to delivery; for all other (ANSI 150, 300, 600 etc. or UNI PN 2,5 - PN 6 – PN 25 - PN 40) in carbonio steel and stainless steel AISI 304 or AISI 316, will be ready in 5 days from order. With the flanged rubber joints we can to supplì also LIMIT RODS, for the situations where the movements are beyond the allowable of the joints and with pumps or others machines without anchors or without supports. The standard range diameters available is from DN 25 to DN 1000, but is possible to supply also diameters since DN 3000.

UNION THREAD ENDS RUBBER JOINTS:

Union thread ends rubber joints are build with DOUBLE SPHERE flexible rubber body, reinforced with nylon textile cord, that give back them more resisting to the stress and external/internal forces and working pressure. These joints are connected with UNION THREAD ENDS with GAS conical threaded in CAST IRON, STAINLESS STEEL, BRONZE or BRASS material.
The standard range diameters available are from DN 1/2" to DN 3".

- **GT B-FLEX** (EPDM, NBR, NEOPRENE, HYPALON, VITON). Temperatures: -20 ÷ 100°C.

PIPE METAL CONNECTORS:

The EPDM PIPE METAL CONNECTORS **GT C-FLEX**, are build with EPDM rubber body and internal flanges in aluminium, with fillett holes. The standard dimensions are UNI PN 16 (for model with code **"EP16"**) and UNI PN 10 (for model with code **"EP10"**).
The difference from flanged rubber joints that have also axial, angular and lateral movements, this PIPE METAL CONNECTOR can be normally used with pumps, valves ecc., with only function of little antivibrations. The standard range diameters available is from DN 20 to DN 200.

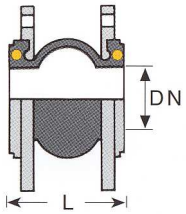
- **GT C-FLEX** (EPDM). Temperatures: -20 ÷ 100°C.

The GT A-FLEX, GT A-FLEX-S e GT B-FLEX in EPDM rubber (Etilene/Propilene Polimer), are certified from Italian Sanity Ministry Directive n° 102 del 2/12/1978 Sez. 2 Part A, for contact with drinking water.

TECHNICAL AND DIMENSIONAL DETAILS

GT A-FLEX

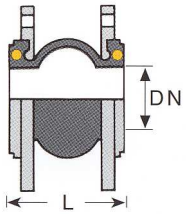
(Values referred to temperature of 21°C / Lengths tolerances are ±5%)



DN	Total Length "L"	Compr.	Extens.	Angular	Lateral	Pressure	Vacuum	Weight
mm	mm	mm	mm	degree	mm	Bars	mm Hg	Kg
25	152	13	9,5	15	13	16	650	2,02
32	152	13	9,5	15	13	16	650	3,27
40	152	13	9,5	15	13	16	650	3,77
50	152	13	9,5	15	13	16	650	4,39
65	152	13	9,5	15	13	16	650	5,62
80	152	13	9,5	15	13	16	650	6,49
100	152	16	9,5	15	13	16	650	7,40
125	152	16	9,5	15	13	16	650	9,54
150	152	16	9,5	15	13	16	650	12,80
200	152	16	9,5	15	13	16	650	17,30
250	203	16	13	15	19	16	650	25,55
300	203	19	13	15	19	16	650	31,35
350	203	19	13	15	19	8	650	40,50
400	203	19	13	15	19	8	650	47,50
450	203	19	13	15	19	8	650	59,40
500	203	19	13	15	19	8	650	67,90
600	254	19	13	15	19	8	650	86,00
700	254	19	13	15	19	8	650	105,00
800	260	25	16	15	22	6	650	180,00
900	260	25	16	15	22	6	650	250,00
1000	260	25	16	15	22	6	650	300,00

GT A-FLEX-S

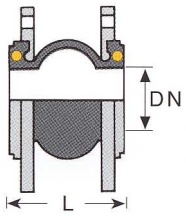
(Values referred to temperature of 21°C / Lengths tolerances are ±5%)



DN	Total Length "L"	Compr.	Extens.	Angular	Lateral	Pressure	Vacuum	Weight
mm	mm	mm	mm	degree	mm	Bars	mm Hg	Kg
25	130	12	9	15	12	16	650	1,99
32	130	12	9	15	12	16	650	3,23
40	130	12	9	15	12	16	650	3,73
50	130	12	9	15	12	16	650	4,34
65	130	12	9	15	12	16	650	5,55
80	130	12	9	15	12	16	650	6,41
100	130	14	9	15	14	16	650	7,26
125	130	14	9	15	14	16	650	9,37
150	130	14	9	15	14	16	650	12,59
200	130	14	9	15	14	16	650	16,98
250	130	14	9	15	14	16	650	24,17
300	130	16	9	15	16	16	650	29,55

GT A-FLEX-V

(Values referred to temperature of 21°C / Lengths tolerances are ±5%)



DN	Total Length "L"	Compr.	Extens.	Angular	Lateral	Pressure	Vacuum	Weight
mm	mm	mm	mm	degree	mm	Bars	mm Hg	Kg
25	95	8	4	15	8	16	650	2,75
32	95	8	4	15	8	15	650	2,95
40	95	8	4	15	8	15	650	3,45
50	105	8	5	15	8	15	650	3,81
65	115	12	6	15	10	15	650	5,37
80	130	12	6	15	10	15	650	6,41
100	135	18	10	15	12	15	650	6,90
125	170	18	10	15	12	15	650	10,84
150	180	18	10	15	12	15	650	13,80
200	205	25	14	15	22	15	650	20,61
250	240	25	14	15	22	15	650	24,65
300	260	25	14	15	22	15	650	37,65
350	265	25	16	15	22	8	650	49,30
400	265	25	16	15	22	8	650	59,16
450	265	25	16	15	22	8	650	69,03
500	265	25	16	15	22	8	650	87,40

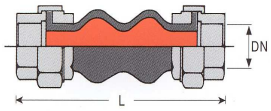
GT D-FLEX

(Values referred to temperature of 21°C / Lengths tolerances are ±5%)

DN	Total Length "L"	Compr.	Extens.	Angular	Lateral	Pressure	Vacuum	Weight
mm	mm	mm	mm	gradi	mm	Bar	mm Hg	Kg
40	175	50	30	35	45	15	650	
50	175	50	30	35	45	15	650	
65	175	50	30	35	45	15	650	
80	175	50	30	35	45	15	650	
100	225	50	35	35	40	15	650	
125	225	50	35	35	40	15	650	
150	225	50	35	35	40	15	650	
200	325	60	35	30	35	15	650	
250	325	60	35	30	35	15	650	
300	325	60	35	30	35	15	650	
350	350	40	30	20	30	8	650	
400	350	40	30	20	30	8	650	
450	350	40	30	20	30	8	650	
500	350	40	30	20	30	8	650	
600	350	40	30	20	30	8	650	

GT B-FLEX (GAS conical threaded)

(Values referred to temperature of 21°C / Lengths tolerances are ±5%)

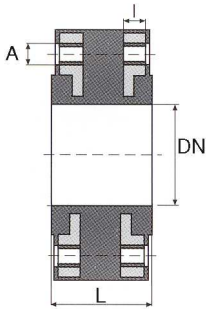


DN	Total Length "L" (*)	Compr.	Extens.	Angular	Lateral	Pressure	Vacuum	Weight
mm	mm	mm	mm	degree	mm	Bars	mm Hg	Kg
1/2"	203 (190)	22	6	30	22	10	400	0,50
3/4"	203 (190)	22	6	30	22	10	400	0,70
1"	203 (190)	22	6	25	22	10	400	1,00
1"1/4	203 (190)	22	6	25	22	10	400	1,40
1"1/2	203 (190)	22	6	20	22	10	400	1,90
2"	203 (190)	22	6	15	22	10	400	2,40
2"1/2	260 (225)	22	6	12	22	10	400	3,90
3"	240 (225)	22	6	10	22	10	400	5,30

(*) The lengths in brackets are formed on the model with stainless steel 304 unions.

GT C-FLEX (Flanged PN 16) (only in EPDM):

(Values referred to temperature of 21°C / Lengths tolerances are ±5%)



DN	Total Length "L"	Holes number "A"	Fillett "A"	Fillett length "I"	Pressure	Weight
mm	mm	N°	M	mm	Bar	Kg
20	70	4	M12	14	10	1,8
25	70	4	M12	16	10	2,4
32	70	4	M16	16	10	3,4
40	70	4	M16	16	10	3,9
50	70	4	M16	16	10	4,5
65	70	4	M16	16	10	5,5
80	70	8	M16	18	10	5,8
100	70	8	M16	18	10	6,9
125	70	8	M16	18	10	9,1
150	70	8	M20	18	10	11,3
200	90	12	M20	20	10	16,7

GT C-FLEX (Flanged PN 10) (only in EPDM):

(Values referred to temperature of 21°C / Lengths tolerances are ±5%)

DN	Total Length "L"	Holes number "A"	Fillett "A"	Fillett length "I"	Pressure	Weight
mm	mm	N°	M	mm	Bar	Kg
(Dimensions from DN 20 to DN 150 are the same of PN 16)						
200	90	8	M20	20	10	16,7

RUBBER TYPES CHEMICAL FEATURES

EPDM (EPDM): EPDM rubber guarantee very good resistance at: oxidation, ozone, hot ageing, not concetrate acids, etc. This rubber type is very good for: hot and cold water, sea water, discharge water slow acids, cooling water with ant-corrosive or deicing and air. EPDM rubber is very good to usage with drinking water like Italian Food and Drug Administration directive N° 102 del 2/12/1978 Sec. 2 Part A (*).

NBR (BUNA-N / NITRILE): NBR rubber guarantee very good resistance at natural gas and cooking gas, at mineral oils, fuels and lubricating, fuels with aromatic added components low to 30%. Very good resistance with methan gas, ethan gas, epthano gas ecc. with idrcarbons, fats, animals and vegetables oils (*).

NEOPRENE: NEOPRENE rubber is good for hot and cold water usage, sea water and compressed air, not aggressive acids, any solvents (*).

WHITE NBR (NBR FOR FOOD): WHITE NBR is normally used with food products, drinking water and in all situations where is necessari not toxic materials and food quality insurance (*).

HYPALON / VITON / P.T.F.E.: HYPALON rubber is normally used with acids, aggressive chemists, freon hydroxides, ozone, idrocarbons.
VITON rubber is the best solution for usage with acids and others chemists fluids, also for higher temperature, that EPDM and NBR cannot stand (near 180°C).
Only one "universal" rubber is P.T.F.E.: this rubber is only one that can to be used with all fluids! (*).

(*): These informations are generics. GT FLEX is not responsible for improper use by customers, that must verify the suitability of bought items with the passing fluid!