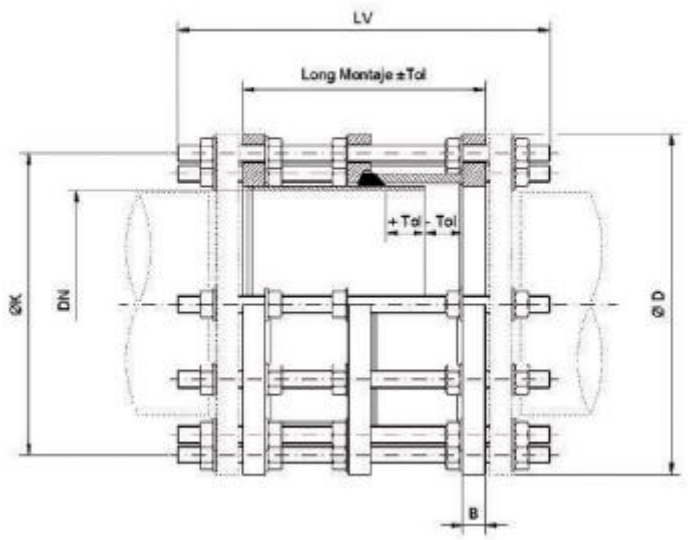
TELESCOPIC DISMOUNTING REEL MODEL

CDTA *Construction features*



Long Montaje ± Tol= Spool Length and Mounting Tolerance (mm)
Ø D = Flange outside diameter DIN (mm)
DN = nominal reel diameter (mm)
Ø K = core diameter for flange drilling (mm)

N= number of holes for screws
M= mounting rod metrics
LV= length for mounting rod (mm)
LT= length for mounting screws (mm)
B= width for DIN flange (mm)

Dimensions and weights type CDTA PN10

DN	Long Montaje	ØD	ØK	N	M	LV	LT	B	Peso
50	180±30	165	125	4	16	310	70	18	13
65	180±30	185	145	4	16	310	70	18	15
80	180±30	200	160	8	16	310	70	20	21
100	180±30	220	180	8	16	310	70	20	22
125	180±30	250	210	8	16	310	70	22	28
150	200±30	285	240	8	20	330	80	22	37
200	230±40	340	295	8	20	380	80	24	53
250	230±40	395	350	12	20	380	80	26	72
300	230±40	445	400	12	20	380	80	26	81
350	250±40	505	460	16	20	430	80	28	109
400	250±40	565	515	16	24	420	100	32	150
450	250±50	615	565	20	24	420	100	38	180
500	300±50	670	620	20	24	500	100	38	206
600	300±50	780	725	20	27	520	120	38	264
700	330±50	895	840	24	27	550	120	40	329
800	370±60	1015	950	24	30	630	140	44	454
900	370±60	1115	1050	28	30	630	140	48	537

1000	400±60	1230	1160	28	33	660	150	50	674
1100	450±70	1330	1270	28	36	730	160	50	810
1200	450±70	1455	1380	32	36	730	160	52	947
1300	450±70	1575	1490	32	39	730	160	52	1148
1400	500±75	1675	1590	36	39	780	160	52	1349
1500	500±75	1785	1700	36	39	780	160	52	1623
1600	500±75	1915	1820	40	45	790	180	54	1809
1800	600±80	2115	2020	44	45	930	180	54	2023
2000	600±80	2325	2230	48	45	930	180	58	2229

Dimensions and weights type CDTA PN16

DN	Long Montaje	ØD	ØK	N	M	LV	LT	B	Peso
50	180±30	165	125	4	16	330	70	18	10
65	180±30	185	145	4	16	330	70	18	12
80	180±30	200	160	8	16	330	70	20	14
100	180±30	220	180	8	16	330	70	20	12
125	180±30	250	210	8	16	330	70	22	20
150	200±30	285	240	8	20	330	80	22	24
200	230±40	340	295	12	20	430	80	24	31
250	230±40	405	355	12	24	450	100	26	42
300	230±40	460	410	12	24	450	100	28	53
350	250±40	520	470	16	24	450	100	32	78
400	250±40	580	525	16	27	450	120	38	82
450	250±50	640	585	20	27	450	120	42	95
500	300±50	715	650	20	30	550	140	44	136
600	300±50	840	770	20	33	550	150	48	166
700	330±50	910	840	24	33	550	150	48	210
800	370±60	1025	950	24	36	670	160	48	308
900	370±60	1125	1050	28	36	670	160	50	350
1000	400±60	1255	1170	28	39	670	160	50	412
1100	450±70	1370	1280	32	39	750	160	50	461
1200	450±70	1485	1390	32	45	750	180	50	610
1300	450±70	1585	1490	32	45	750	180	52	675
1400	500±75	1685	1590	36	45	800	180	52	767
1500	500±75	1820	1710	36	52	830	180	58	852
1600	500±75	1930	1820	40	52	830	180	58	955
1800	600±80	2130	2020	44	52	930	200	62	1132
2000	600±80	2345	2230	48	56	950	200	66	1373

Dimensions and weights type CDTA PN25

DN	Long Montaje	ØD	ØK	N	M	LV	B	Peso
50	200±30	165	125	4	16	330	20	12
65	200±30	185	145	8	16	330	22	14
80	200±30	200	160	8	16	330	24	16
100	220±30	235	190	8	20	360	24	18
125	240±30	270	220	8	24	400	28	24
150	240±30	300	250	8	24	400	30	28
200	280±40	360	310	12	24	450	30	39
250	280±40	425	370	12	27	450	32	52
300	280±40	485	430	16	27	450	34	65

350	320±40	555	490	16	30	530	38	92
400	320±40	620	550	16	33	530	40	102
450	350±40	670	600	20	33	580	44	128
500	350±40	730	660	20	33	580	44	148

COMEVAL VALVE SYSTEMS reserves the right to modify the data at any time at its discretion and without prior notice.

GENERAL PROVISIONS

Description

The telescopic dismantling reel is a union of flanged pipes which, due to its design, makes it possible to compensate for the dimensional deviations that occur in the manufacture of any type of hydraulic installation made using rigid pipe.





The main use of this type installed next to valves, pumps, filters and other network equipment, is to facilitate their subsequent disassembly in maintenance and installation work.

Conditions for use

These equipments are only designed for the water supply of irrigation and sanitary networks. They are not intended to be used for any other fluid than water.

The choice of one equipment or another will depend mainly on the nominal pressure to which the installation is subjected, which should not be exceeded under any circumstances, for the indicated NP.

Working principle of a CDTA reel

This equipment is designed and manufactured to be installed in all types of pressure networks (irrigation, supply, drinking water, etc.)

They are made up of a male movable part and a female part with one of its two intermediate flanges welded to it.

Between both parts there is an intermediate crazy flange, which is responsible for the closing when the faces come into contact with the seal and this in turn with the inner ferrule.

Technical characteristics of the reel

Description

The range of products is very wide, but in general the telescopic reel is a union of flanged tubes which, due to its design and dimensions, allows the displacement of the external flanges giving the assembly a greater or lesser external length.

Elements of a dismantling reel CDTA

Part Male 1

Intermediate Screws 2.1/2.2/2.3

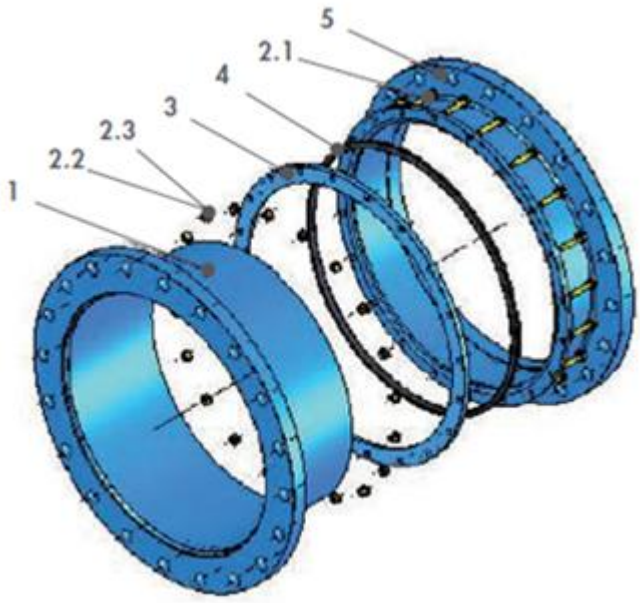
Intermediate Flange 3

Sealing Ring 4

Female Part 5

Nominal Diameter 50-3000

Standard Nominal Pressure, PN 10/16



CDTA Model

Building Materials

Telescopic Reel Body:

Flanges, Made of Carbon Steel S-235 JR, according to DIN 2576/2502

Flange faces: Flat for IBC joint or full face

Ferrule Parts Male: Manufactured in AISI-304 Stainless Steel. Thickness defined according to requirements ASME Code section VIII div 1. Minimum thickness ratio = 0.007XDN

Female Part: Made of AISI-304 Stainless Steel. Thickness defined according to requirements ASME Code section VIII div 1. Minimum thickness ratio = 0.007XdnS-235 JR Carbon Steel Intermediate Flange

Seal Natural rubber of EPDM quality, O-ring section of hardness according to ISO-48 (50-60 Shore)

Screws Supplied with Intermediate Flanges screws, Zinc finish treatment and 8.8 qualityWelded joints

Procedure ASME CODE APPROVED Section IX. Filler material Stainless steels ER-309-L

Bichromated Extraction Screws quality 8.8

Stainless steel A-2 (AISI 304)

Stainless steel A-4 (AISI 316)

Bichromate guides quality F-1 140

Approach / AISI 303 quality stainless

Extraction

Paint treatment

Paint Epoxy + polyester powder coating, oven polymerized

Construction materials (Special on request)

Telescopic Reel Body:

Flanges, Manufactured according to ASA / ANSI

Materials:Stainless steel AISI-316

Flange faces:Tongue and Groove / Male and Female / Flat and Female / API Ring / RTJ Ring

Virolas: Ferrule Part Male: Thickness defined according to requirements ASME Code section VIII div 1. Minimum thickness ratio = 0.007xDN

Materials:Carbon Steel S-235 JR Stainless steel AISI-316

Female part: Thickness defined according to requirements ASME Code section VIII div 1. Minimum thickness ratio = 0.007xDN

Materials: Stainless steel AISI-316

Special Mechanized Intermediate Flange for O-ring minimum thickness 15mm

Materials: Stainless steel AISI-304 / AISI-316

Screws Finishing treatment Zinc and yellow chromate (bichromate)

Qualities: 8.8 / 10.9 / 12.9

Stainless steel A-2 (AISI 304)

Stainless steel A-4 (AISI 316)

Welded joints ASME CODE APPROVED procedure Section IX

Filler material Carbon Steels ER-70S-6

Finishing treatment (Special on request)

Shot blasting grade SA 21/2, according to UNE 48.302

Coatings External epoxy paint in blue colour RAL 5015 thickness 200 microns and food grade epoxy paint 200 microns.

Installation

Its installation will be carried out using threaded rods with a maximum of 50% of the holes in the flanges, which must extend to the flange of the valve or accessory, next to which the disassembly spool is installed.

The bolts used for assembly on site must correspond to the quantity and metric of the DIN flange used.

Its length must be sufficient so that the ends of the flange protrude at least 1 cm from the outer nuts.

At the time of installation we must follow the following process:

It is advisable to check that the final assembly length to be given to the reel is as close as possible to its nominal size, to facilitate assembly and disassembly.





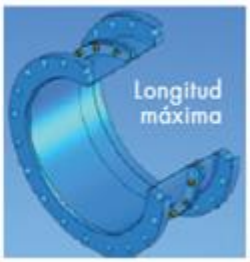


Table 1

DN (mm)	Installation length (mm)	Mounting Tolerance ± (mm)
50 a 150	200	30
200 a 300	230	40
350 a 450	250	40
500 a 600	300	50
700	330	50
800 a 900	370	60
1000	400	60
1100 a 1300	450	70
1400 a 1600	500	75

Table 1 shows the mounting lengths for reels with PN10 and PN16.

The correct placement for mounting the reel will be, downstream the female part and upstream the male part.



Direction of flow

Note: For pipes in which the fulcrum has both directions (discharge pipes) the reel will make the watertightness in both directions being the opposite to the assembly the one that will penalize the hydraulic performances of the installation.

Loosen the nuts that tighten the intermediate flanges, check that the sliding of the male with the female is smooth and that there is no pulling or rubbing between the fixed and mobile parts (O-ring, male and female).

Position the reel in its final location ensuring that the arrangement of the flange drilling coincides with the arrangement of the holes in the elements to be connected (check the concentricity of the holes in the flanges of the boiler to be connected).

Note: the maximum permissible angular deviations for the flanges (parallelism). Of the boiler flanges to be connected as a general rule they should not exceed the following value 0.25º x 1000/DN as the connection will be made by means of passing rods and does not allow greater deviation than that caused by the rods with the holes in the flanges.

Fit the sealing rings on the flat faces of the flanges to be connected.

Note: When seating a gasket it must be able to overcome minor flange imperfections such as: non-parallel flanges, channel deformation, wavy surface, surface notches or other surface imperfections.

Separate the flanged ends of the reel, up to their contact position with the flanges of the elements to be connected.

Carry out the assembly of the screws in a circular arrangement of all the rods, (with a maximum of 50% of the holes of the external flanges).

Note: Never use fewer rods or screws than the number determined for the flange.

Tighten the outer nuts and lock nuts on the same flange in a diagonal pattern, using the values in Table 3 as a guide for maximum torque.

Note: The best performance of the screws/rods is achieved within their elastic region.

For gasket/screw/flange system connections refer to ASME Code - section 8.

Tighten the nuts of the intermediate flange in the same arrangement as above, taking the values of table 3 as maximum values of tightening torque at 85% of the elastic tension of the fasteners to be used.

Steps to follow for the tightening:

First tighten the nuts by hand, leaving a gap, according to the cross-tightening pattern, then tighten them evenly by hand.

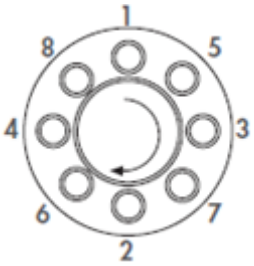
Using a torque wrench, turn all screws to a maximum of 30% of the total torque, according to the cross-tightening pattern. Check that the flange is evenly supported on the gasket.

Turn up to a maximum of 60% of the total torque, according to the cross-tightening pattern.

Turn to full torque according to the cross-tightening pattern.

Final turn to full torque, clockwise on adjacent bolts.

Example of diagonal layout:



1st order Position 1-2

2nd order Position 3-4

3rd order Position 5-6

4th order Position 7-8

Once the installation is in service and with the established working pressure, it will be checked for water leaks in its sealing joints, making the appropriate tightening of the screws until these leaks are eliminated.

Table 2

DIN 272 normal	Tightening torque in Nm				
Métrica	Cal: 5.6	Cal: 6.8	Cal: 8.8	Cal: 10.9	Cal: 12.9
M 10	21,58	42,17	50,01	70,61	85,32
M 12	38,25	73,55	87,25	122,6	147.1
M 14	60,8	116,7	138,3	194,2	235,4
M 16	93,16	178,5	210,8	299,1	357,9
M 18	127,5	245,5	289,3	411,9	490,3
M 20	180,45	384,1	411,9	578,6	696,3
M 22	245,16	470,7	559	784,5	941,3
M 24	308,91	598,2	711	1.000,00	1.196,00
M 27	460,9	887,5	1.049,00	1.481,00	1.775,00
M 30	622,72	1.206,00	1.422,00	2.010,00	2.403,00
M 33	848,3	1.628,00	1.932,00	2.716,00	3.266,00
M 36	1.089,00	2.099,00	2.481,00	3.491,00	4.197,00
M 39	1.412,00	2.716,00	3.226,00	4.531,00	5.443,00
M 42	1.746,00	3.364,00	3.991,00	5.609,00	6.727,00
M 45	2.177,00	4.207,00	4.992,00	7.012,00	8.414,00
M 48	2.683,00	5.080,00	6.021,00	8.473,00	10.150,00
M 52	3.393,00	6.541,00	7.747,00	10.885,00	13.092,00
M 56	4.227,00	8.149,00	9.650,00	13.582,00	16.279,00
M 60	5.247,00	10.101,00	11.964,00	16.867,00	20.202,00
M 64	6.306,00	12.160,00	14.416,00	20.300,00	24.320,00
M 68	8.257,00	14.863,00	17.615,00	24.771,00	29.725,00
M 72	9.882,00	17.787,00	21.081,00	29.645,00	35.575,00
M 76	11.706,00	21.071,00	24.973,00	35.118,00	42.141,00
M 80	13.741,00	24.733,00	29.314,00	41.222,00	49.467,00
M 90	19.934,00	35.880,00	42.525,00	59.801,00	71.761,00

Table 2 shows the tightening torque.

Transport and identification

Transport

The equipment will be transported assembled with all the elements that make up the set, fixing its assembly length and preventing the mobility of the elements once assembled.

The equipment will be perfectly packaged to avoid possible damage that affects or alters the quality of its surface treatment.

Unless otherwise indicated by the customer, the pallet format used will be the European type, measuring 800x1200 mm.

Identification



This card is found in every piece of equipment supplied. It shows the registration and control data of the reel. If a request for a spare part is necessary, reference shall be made to the indications on this card.