

Installation instructions – NordicFlow® Grooved couplings



1. Control the pipe end, gasket seating surface and the groove and make sure that there are no bumps, nicks, surface defects, dirt or loose particles. If so, remove them first to prevent leaks.



2. Unscrew the pre-assembled couplings using an impact wrench.



3. Apply a thin layer of neutral lubricant onto the sealing lips of the gasket. Also apply lubricant to the interior side of the housings.



4. Slide the gasket over the end of the pipe and make sure that it covers the end completely.



5. Bring the two pipe ends together and push the gasket over the end of the pipe. Make sure that the gasket is in the middle and that it covers both pipe ends.

6. The outer diameter of the housing and the groove diameter must match the specifications; please review the table on the next page.



7. Place one housing around the gasket. Once it is placed over the gasket, you shall see that the housing fits in the groove.

8. Stick a bolt through the housing. Make sure that the head of the bolt perfectly fits in the housing.



9. Place the second housing over the bolt and turn the nut finger-tight on the bolt. Then place the second bolt and tighten it finger-tight.



10. Tighten both bolts alternately using an impact wrench with a suitable socket wrench until the coupling is completely closed. You can optionally tighten the bolts to the specified torque using a torque wrench. Applying a higher torque will not improve the sealing and can damage the coupling.

General Notes:

- Pressure ratings listed are CWP (cold working pressure) or maximum working pressure within the service temperature range of the gasket used in the coupling. This rating may occasionally differ from maximum working pressure listed and/or approved by UL and/or FM, as testing conditions and test pipes differ.
- Maximum working pressure and end loads listed are total of internal and external pressures and loads, based Sch.40 steel pipe with grooved couplings according to ANSI/AWWA C606-97 specifications. With NordicFlow® thin wall pipes maximum pressure is 16 bar.
- For one time field test only, the maximum joint working pressure may be increased one and a half times the figure shown.
- Warning: Piping systems must always be depressurized and drained before attempting disassembly and/or removal of any components.
- Enexia Oy reserves the right to change specifications, designs and/or standard equipment without notice and without incurring in any obligations.

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NOTE: For proper sealing, torque standards must be respected. A torque too big will not improve the sealing property of the coupling, on the contrary, it may damage the bolts and housing, even cause disconnections. A torque too small will lead to leakage. Both disconnections and leakage may cause injuries or loss.

Other Instructions:

1. Always make sure that the rubber gasket is clean, undamaged and suitable for the intended use. Contact Enexia if you notice that something is not right.
2. The outer diameter of the pipe and the size of the groove must conform to the specifications in the table below.
3. The outer diameter of the pipe must match grooved couplings. Couplings with the wrong specifications can and must not be connected to the pipe.

Bolt	Torque (N*M)
M8 (1/4")	20 ~ 30
M10 (3/8")	60 ~ 70
M12 (1/2")	90 ~ 100
M14 (9/16")	135 ~ 150
M16 (5/8")	200 ~ 230
M20 (3/4")	270 ~ 300

Nominal diameter (mm)	Outer diameter (mm)	Angular deviation *
32	42,4	2,3
40	48,3	2,3
50	60,3	2,3
65	76,1	1,9
80	88,9	1,6
100	114,3	1,6
125	139,7	1,3
150	168,3	1,1
200	219,1	0,8
250	273	0,7

* Applies to flexible couplings

General Notes:

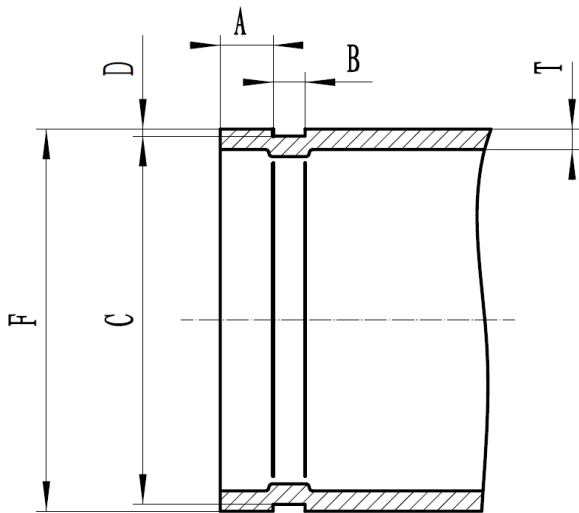
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Pipes

Roll grooved or cut grooved pipes may be used with NordicFlow grooved couplings and fittings. The outer diameter must be suitable for the intended application. Make sure that the size of the groove is within specifications. Wall Thickness T in the table below is according to NordicFlow® Thin Wall Pipes.

Groove Dimensions



Nominal pipe size		Outer diameter of pipe			Gasket seating surface A	Groove width B	Groove bottom diameter C		Groove depth D*	Wall thickness T	Pipe end diameter F
Tuuma	DN	Koko (mm)	+ mm	- mm	± 0,76 mm	± 0,76 mm	Koko	mm	mm	mm	mm
1	25	33,7	0,41	0,68	15,88	7,14	30,2	-0,38	1,6	2,0	34,5
1¼	32	42,4	0,5	0,6	15,88	7,14	38,99	-0,38	1,6	2,0	43,3
1½	40	48,3	0,44	0,52	15,88	7,14	45,09	-0,38	1,6	2,0	49,4
2	50	60,3	0,61	0,61	15,88	8,74	57,15	-0,37	1,6	2,0	62,2
2½	65	76,1	0,76	0,76	15,88	8,74	72,26	-0,46	1,98	2,0	77,7
3	80	88,9	0,89	0,79	15,88	8,74	84,94	-0,46	1,98	2,0	90,6
4	100	114,3	1,14	0,79	15,88	8,74	110,08	-0,51	2,11	2,3	116,2
5	125	139,7	1,4	0,79	15,88	8,74	135,48	-0,51	2,11	2,9	141,7
6	150	168,3	1,6	0,79	15,88	8,74	163,96	-0,56	2,16	3,2	170,7
8	200	219,1	1,6	0,79	19,05	11,91	214,4	-0,64	2,39	3,6	221,5

* Groove depth D is only a reference dimension. Groove bottom diameter C has to be followed.

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