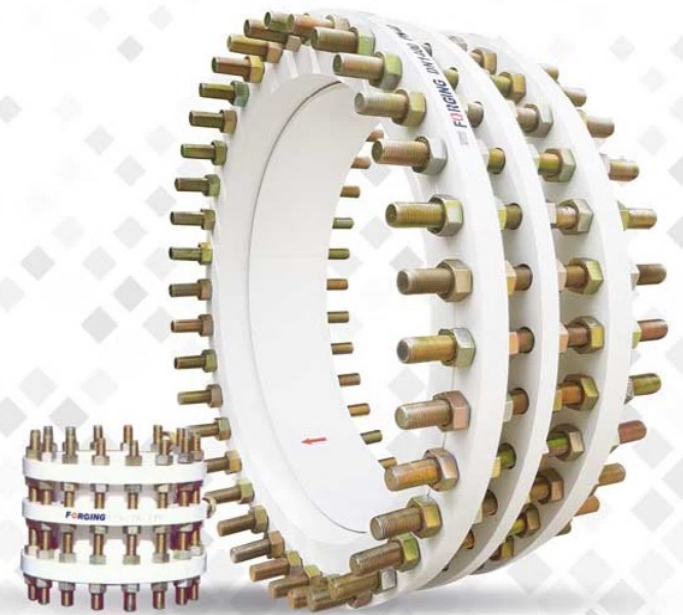


فورجینگ

شیرآلات صنعتی و اتصالات فولادی

FORGING
VALVES & FITTINGS



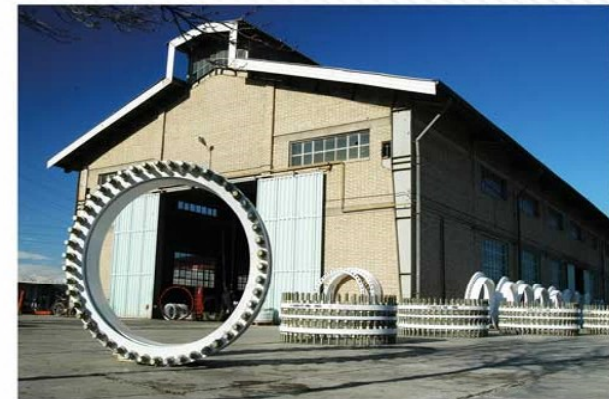
www.FORGINGco.ir

DISMANTLING JOINT
FLEXIBLE COUPLING
EXPANSION JOINT

Index

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نگاهی به واحد تولیدی و صنعتی فورجینگ

این واحد به عنوان اولین مرکز در زمینه ساخت انواع فلنج و اتصالات فولادی مورد نیاز در منابع نفت، گاز و آب در سال ۱۳۴۹ در ایران تاسیس شد و در حال حاضر پیشرفته ترین و بزرگترین تولیدکننده تجهیزات فولادی مذکور بشمار می رود. این مجموعه با استفاده از تجربیات دیرینه خود و بهره گیری از مراکز علمی مورد تایید و استانداردهای معتبر جهانی و بهره وری از نیروهای متخصص، دستگاه های مدرن تراش با کنترل کامپیوتری (C.N.C)، پرس های آهنگری و فورمینگ، ماشین های ساخت زانو، وسایل تست و کنترل کیفی و دیگر امکانات لازم در مکانی با طراحی و ساختار مناسب توانسته است تولیدات خود را با کیفیتی مطلوب و در حد استانداردهای بین المللی ارائه نماید. واحد تولیدی و صنعتی **فورجینگ** هم اکنون بزرگترین مرکز تامین فلنج، اتصالات و تجهیزات فولادی مربوطه در سطح کشور محسوب شده و با در اختیار داشتن تکنولوژی لازم در این زمینه قادر است در امور مشاوره فنی، طراحی، ساخت و نصب پروژه های مورد نیاز، خدمات مورد نظر را ارائه و اجرا نماید.

FORGING Co. at Glance

FORGING Co. a leading and the biggest supplier of flanges and fittings in Iran was established in 1969. It has been meeting the national need to these products in all water, wastewater, petroleum and natural gas industries. Our experience over these years has made our company the most advanced in Iran. The company enjoys a wealth of long experience, the expertise knowledge of experts, support from scientific centers, and modern computer controlled lathes (C.N.C), Pipe bending and metal forming machinery. The company owes its fame and success to these assets and strict adherence to international standards.

We are proud to declare our share in the booming economy of present-day Iran. It will be our pleasure to play more of our role and use more of our technology and resources in engineering consultation, project design and erection, equipment installation and various other technical services you might need. **FORGING** Co. is always ready everywhere.

DISMANTLING JOINT



تجهیزات فولادی

با توجه به تنوع تولیدات این کارخانه طیف وسیعی از اتصالات و تجهیزات مر بوطه شامل فلنج، زانو، تبدیل، سه راهی، در دو نوع ساده و فلنج دار، اتصال مفصلدار، فلنج کور (در پوش)، عدسی، انواع کلکتور همچنین شیرهای پروانه ای در اندازه های مختلف با مواد و فولادهای گوناگون را بر حسب سفارش تولید می نماید.

محمولات تولید شده در این کارخانه با رنگ پودری اپوکسی به روش الکترواستاتیک مقاوم در برابر آب با ضخامت استاندارد رنگ آمیزی می گردند. کلیه تولیدات کارخانه **فورجینگ** به منظور استفاده در پروژه های انتقال آب و فاضلاب، ایستگاه های پمپاژ، پالایشگاه های نفت و گاز، تصفیه خانه ها، تاسیسات حرارتی و برودتی، بخار و بطور کلی تمام سیستم های لوله کشی بکار می رود.

A full set of pipe fitting for a wide RANGE of APPLICATIONS

To meet a full spectrum of piping needs, **FORGING** manufactures a wide variety of fittings, including flange, elbow, tee, reducer, blind flange, collector, dismantling joints and recently industrial valve in an extensive range of sizes, materials and types all together, **FORGING** Co.'S product lines are used in a broad range of application in water treatment, Both heavy and light industry equipment, pumping station, sewage treatment plants, hydroelectric and fossil power plants, water transmissions and storage pipelines.



اتصال قابل پیاده کردن

یکی دیگر از اتصالات پر مصرف و مورد اهمیت در تمام شبکه های انتقال سیال که به منظور فضا سازی برای نصب و تعویض دیگر تجهیزات به کار می آید اتصالات قابل پیاده کردن می باشد. این محصول که در کارخانه **فورجینگ** با کیفیت و دقت در حد مطلوب تولید می گردد به هنگام نصب دارای عملکرد سریع و دقیق می باشد.

به دلیل اهمیت بسیار زیاد عملیات جوشکاری در پروسه تولید بخش عمده بازرسی ها بر روی فرآیند جوشکاری انجام می گیرد. کلیه جوشکارانی که در این بخش فعالیت دارند توسط شرکت لویدز انگلستان تعیین صلاحیت شده و دارای گواهینامه جوشکاری می باشند.

همچنین برای انواع اتصالات جوش دستور عمل های جوشکاری WPS تهیه گردیده که آزمایش تایید آن PQR توسط شرکت لویدز انجام گرفته است.

تست های پرتونگاری Xray کشش Tensile test، ضرب به Impact test و سختی سنجی Hardness test از جمله مواردی است که بر روی پروسه جوشکاری انجام می گردد.

DISMANTLING JOINT

Dismantling Joint

One of the most important productions is manufacturing of dismantling joint for pressures of 10,16,25,40 and 64 bars. High quality machining of all spaces matched by seal will make possible easy and quick installation. Dismantling joints are installed very near and adjacent to the heavy equipment parts of pumping stations or any liquid supply systems such as the valves, the flow meters, etc... to provide the space needed for dismantling and displacement.



Flexible Coupling

The advantage of steel, excellent elasticity and expansion properties permit economical fitting design which can be used everywhere, where high standards are imposed as regards service life and reliability of fittings.

Today **FORGING** Co. Supplies steel fittings for a wide variety of industrial requirement and / or individual customer requirements always being taken into account. The advantage of the **FORGING**'S Flexible Coupling as most advanced example of the sleeve type of coupling are well known:

1. Simplicity of assembly
2. Provision of angular deflection.
3. Allowance for movement due to expansion and contraction.

FORGING Flexible Coupling is used with standard steel, cast iron, spun iron, concrete, and rigid GPR pipes.

Pipe ends must be round, and within the relevant tolerances.



اتصال قابل انعطاف

این محصول که یکی از تجهیزات حائز اهمیت بشمار میرود به منظور خنثی سازی اثرات انبساط و انقباض لوله‌ها در اثر بروز اختلاف دما و حرکت‌های طولی در شبکه‌ها مورد استفاده قرار می‌گیرد. کیفیت مطلوب، نصب سریع و آسان و زاویه پذیری از ویژگی‌های اتصالات قابل انعطاف ساخت این کارخانه می‌باشد که بر اساس استاندارد موجود برای لوله‌های فولادی، چدن خاکستری و داکتیل، آزرست، پلی اتیلن و GRP ساخته می‌شوند.



DISMANTLING JOINT



Test & Inspection

The **FORGING** complex by taking advantage of the world updated technology and increase our production rate to 30000 tons by sharing the knowledge and profession of the experts.

Corporation in production of steel equipments for the largest project of country which its honor laid on us.

Fitting and Dismantling Units

Dismantling Joint - rigid

DN 100 - 3000

PN 10

FORGING Dismantling joint for installation and removal of valve with thread through bolt extending over both ends. the dimensions of the both connection flanges are the same.

Design and Materials

Flange connection size in accordance with DIN 2501 - 2632 / DIN EN 1092-1

Flange pieces St. 37-2
Sealing Wedge-shaped, made of EPDM or NBR
Bolts and nuts Steel, electrogalvanized
Coating Electro Static Epoxy Powder inside and outside



PN 10

Unit: mm

DN (mm)	Average Length	Adjustability $\pm X$	External Flange diameter mm	Flange bolt hole circle diameter	Bolt Thread	Holes No.	Lenght anchor thread bolt	Seal Profile size	Approx Weight in Kg
100	200	25	220	180	M16	8	310	1	21
125	200	25	250	210	M16	8	310	2	26
150	200	25	285	240	M20	8	320	2	35
200	220	25	340	295	M20	8	340	2	44
250	220	25	395	350	M20	12	360	2	65
300	220	25	445	400	M20	12	360	3	73
350	230	25	505	460	M20	16	360	3	97
400	230	25	565	515	M24	16	370	3	125
450	250	25	615	565	M24	20	390	3	140
500	260	25	670	620	M24	20	410	4	162
550	260	25	730	675	M27	20	410	4	195
600	260	25	780	725	M27	20	410	4	205
650	260	25	835	780	M27	24	410	4	237
700	260	25	895	840	M27	24	410	4	260
800	290	25	1015	950	M30	24	460	4	355
900	290	25	1115	1050	M30	28	460	4	408
1000	290	25	1230	1160	M33	28	480	4	450
1100	300	25	1340	1270	M33	32	480	5	585
1200	320	25	1455	1380	M36	32	520	5	750
1300	340	25	1575	1490	M39	32	530	5	912
1400	360	25	1675	1590	M39	36	560	5	1035
1500	380	25	1785	1700	M39	36	590	5	1162
1600	390	25	1915	1820	M45	40	600	5	1520
1800	400	25	2115	2020	M45	44	630	5	1830
2000	410	25	2325	2230	M45	48	640	6	2280
2200	430	25	2550	2440	M52	52	700	6	2790
2400	440	25	2760	2650	M52	56	710	6	3510
2600	460	35	2960	2850	M52	60	760	6	4050
2800	480	35	3180	3070	M52	64	780	6	4680
3000	500	35	3405	3290	M56	68	820	6	5350

FORGING reserve the right to introduce modification in the interests of technical progress.

Fitting and Dismantling Units

Dismantling Joint - rigid

DN 100 - 2200

PN 16

FORGING Dismantling joint for installation and removal of valve with thread through bolt extending over both ends. the dimensions of the both connection flanges are the same.

Design and Materials

Flange connection size in accordance with DIN 2501 - 2633 / DIN EN 1092-1

Flange pieces	St. 37-2
Sealing	Wedge-shaped, made of EPDM or NBR
Bolts and nuts	Steel, electrogalvanized
Coating	Electro Static Epoxy Powder inside and outside



Fitting and Dismantling Units

Dismantling Joint - rigid

DN 100 - 2000

PN 25

FORGING Dismantling joint for installation and removal of valve with thread through bolt extending over both ends. the dimensions of the both connection flanges are the same.

Design and Materials

Flange connection size in accordance with DIN 2501 - 2634 / DIN EN 1092-1

Flange pieces	St. 37-2
Sealing	Wedge-shaped, made of EPDM or NBR
Bolts and nuts	Steel, electrogalvanized
Coating	Electro Static Epoxy Powder inside and outside



PN 16

Unit: mm

DN (mm)	Average Length	Adjustability ± X	External Flange diameter mm	Flange bolt hole circle diameter	Bolt Thread	Holes No.	Length anchor thread bolt	Seal Profile size	Approx Weight in Kg
100	200	25	220	180	M16	8	310	1	22
125	200	25	250	210	M16	8	310	2	27
150	200	25	285	240	M20	8	320	2	36
200	220	25	340	295	M20	12	340	2	53
250	230	25	405	355	M24	12	370	2	78
300	250	25	460	410	M24	12	410	3	94
350	260	25	520	470	M24	16	410	3	130
400	270	25	580	525	M27	16	430	3	162
450	270	25	640	585	M27	20	430	3	190
500	280	25	715	650	M30	20	440	3	240
550	280	25	775	710	M30	20	440	4	265
600	300	25	840	770	M33	20	480	4	335
650	300	25	860	790	M33	24	480	4	350
700	300	25	910	840	M33	24	480	4	370
800	320	25	1025	950	M36	24	520	4	480
900	320	25	1125	1050	M36	28	520	4	550
1000	340	25	1255	1170	M39	28	560	4	720
1100	340	25	1355	1270	M39	32	560	5	820
1200	360	25	1485	1390	M45	32	600	5	1110
1300	370	25	1585	1490	M45	32	610	5	1230
1400	380	25	1685	1590	M45	36	630	5	1360
1600	420	25	1930	1820	M52	40	690	5	1980
1800	440	35	2130	2020	M52	44	740	6	2430
2000	460	35	2345	2230	M56	48	790	6	2970
2200	480	35	2555	2440	M56	52	840	6	3650

FORGING reserve the right to introduce modification in the interests of technical progress.

PN 25

Unit: mm

DN (mm)	Average Length	Adjustability ± X	External Flange diameter mm	Flange bolt hole circle diameter	Bolt Thread	Holes No.	Length anchor thread bolt	Seal Profile size	Approx Weight in Kg
100	220	25	235	190	M20	8	340	1	33
125	200	25	270	220	M24	8	370	2	46
150	230	25	300	250	M24	8	370	2	54
200	230	25	360	310	M24	12	370	2	78
250	250	25	425	370	M27	12	410	2	105
300	260	25	485	430	M27	16	410	3	140
350	270	25	555	490	M30	16	440	3	196
400	280	25	620	550	M33	16	480	3	248
450	280	25	670	600	M33	20	480	3	281
500	300	25	730	660	M33	20	480	3	327
550	300	25	785	710	M33	20	520	4	380
600	320	25	845	770	M36	20	520	4	436
650	320	25	895	820	M36	24	520	4	510
700	340	25	960	875	M39	24	530	4	580
800	360	25	1085	990	M45	24	600	4	800
900	380	25	1185	1090	M45	28	600	4	920
1000	400	25	1320	1210	M52	28	650	4	1280
1200	450	25	1530	1420	M52	32	720	5	1870
1400	460	25	1755	1640	M56	36	840	5	2520
1600	480	25	1975	1860	M56	40	890	5	3270
1800	520	35	2195	2070	M64	44	960	6	3820
2000	550	35	2425	2300	M64	48	1020	6	4390

FORGING reserve the right to introduce modification in the interests of technical progress.

Fitting and Dismantling Units

Dismantling Joint - rigid

DN 100 - 1600

PN 40

FORGING Dismantling joint for installation and removal of valve with thread through bolt extending over both ends. the dimensions of the both connection flanges are the same.



Design and Materials

Flange connection size in accordance with
DIN 2501 - 2635 / DIN EN 1092-1

Flange pieces	St. 37-2
Sealing	Wedge-shaped, made of EPDM or NBR
Bolts and nuts	Steel, electrogalvanized
Coating	Electro Static Epoxy Powder inside and outside

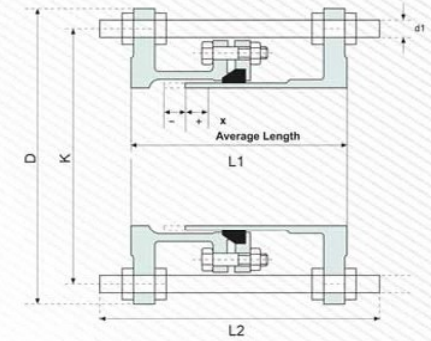
Dismantling Joint - Type 2

Dismantling Joint - rigid

DN 100 - 3000

PN 10

FORGING Dismantling joint for installation and removal of valve with thread through bolt extending over both ends. the dimensions of the both connection flanges are the same.



Design and Materials

Flange connection size in accordance with
DIN 2501 - 2632 / DIN EN 1092-1

Flange pieces	St. 37-2
Sealing	Wedge-shaped, made of EPDM or NBR
Bolts and nuts	Steel, electrogalvanized
Coating	Electro Static Epoxy Powder inside and outside

PN 40

Unit: mm

DN (mm)	Average Length	Adjustability ± X	External Flange diameter mm	Flange bolt hole circle diameter	Bolt Thread	Holes No.	Lenght anchor thread bolt	Seal Profile size	Approx Weight in Kg
100	220	25	235	190	M20	8	340	2	33
125	220	25	270	220	M24	8	370	2	46
150	230	25	300	250	M24	8	370	2	54
200	250	25	375	320	M27	12	400	2	85
250	280	25	450	385	M30	12	450	3	119
300	280	25	515	450	M30	16	450	3	159
350	310	25	580	510	M33	16	480	3	240
400	360	25	660	585	M36	16	520	3	305
500	370	25	755	670	M39	20	580	3	470
600	380	25	890	795	M45	20	620	4	630
700	400	25	995	900	M45	24	640	4	760
800	430	25	1140	1030	M52	24	720	4	990
900	440	25	1250	1140	M52	28	720	4	1140
1000	460	25	1360	1250	M52	28	760	4	1590
1200	480	25	1575	1460	M56	32	860	5	2390
1400	510	25	1795	1680	M56	36	920	5	3100
1600	540	25	2025	1900	M64	40	960	5	4250

FORGING reserve the right to introduce modification in the interests of technical progress.

PN 10

Unit: mm

Size (DN)	Average Length	± X	External Flange Diameter D	Flange Bolt Hole Circle Diameter K	Flange Socket Bolts No & Dimension			Bolt Thread d1	Lenght of stud bolt L2	Holes No.	Weight (kg)
					No	Size	Lenght				
50	195	25	165	125	4	M12	100	M16	310	4	10
65	195	25	185	145	4	M12	100	M16	310	4	12
80	195	25	200	160	4	M12	100	M16	310	8	15
100	200	25	220	180	4	M12	100	M16	310	8	18
125	200	25	250	210	4	M12	100	M16	310	8	22
150	200	25	285	240	4	M12	100	M20	320	8	30
200	220	25	340	295	4	M12	100	M20	340	8	37
250	220	25	395	350	6	M16	100	M20	360	12	55
300	220	25	445	400	6	M16	100	M20	360	12	62
350	230	25	505	460	8	M16	100	M20	360	16	82
400	230	25	565	515	8	M16	100	M24	370	16	106
450	250	25	615	585	10	M16	100	M24	390	20	119
500	260	25	670	620	10	M16	100	M24	410	20	138
600	260	25	780	725	10	M16	120	M27	410	20	174
700	260	25	895	840	12	M16	120	M27	410	24	221
800	290	25	1015	950	12	M16	120	M30	460	24	302
900	290	25	1115	1050	14	M16	120	M30	460	28	347
1000	290	25	1230	1160	14	M16	120	M33	480	28	382
1200	320	25	1455	1380	16	M16	120	M36	520	32	637
1400	360	25	1675	1590	18	M16	120	M39	560	36	878
1600	390	25	1915	1820	20	M16	120	M45	600	40	1292
1800	400	25	2115	2020	22	M16	120	M45	630	44	1555
2000	410	25	2325	2230	24	M16	120	M45	640	48	1938

FORGING reserve the right to introduce modification in the interests of technical progress.

Dismantling Joint - Type 2

Dismantling Joint - rigid

DN 100 - 2200

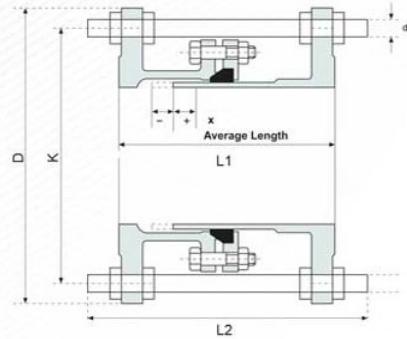
PN 16

FORGING Dismantling joint for installation and removal of valve with thread through bolt extending over both ends, the dimensions of the both connection flanges are the same.

Design and Materials

Flange connection size in accordance with DIN 2501 - 2633 / DIN EN 1092-1

Flange pieces St. 37-2
Sealing Wedge-shaped, made of EPDM or NBR
Bolts and nuts Steel, electrogalvanized
Coating Electro Static Epoxy Powder inside and outside



Dismantling Joint - Type 2

Dismantling Joint - rigid

DN 100 - 2000

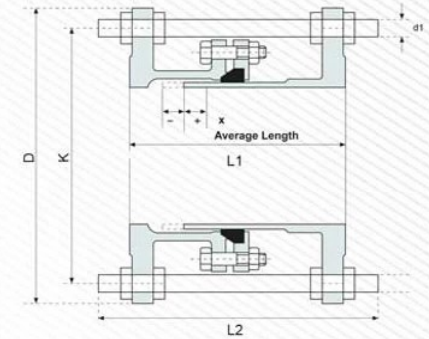
PN 25

FORGING Dismantling joint for installation and removal of valve with thread through bolt extending over both ends, the dimensions of the both connection flanges are the same.

Design and Materials

Flange connection size in accordance with DIN 2501 - 2634 / DIN EN 1092-1

Flange pieces St. 37-2
Sealing Wedge-shaped, made of EPDM or NBR
Bolts and nuts Steel, electrogalvanized
Coating Electro Static Epoxy Powder inside and outside



PN 16

Unit: mm

Size (DN)	Average Length L1	± X	External Flange Diameter D	Flange Bolt Hole Circle Diameter K	Flange Socket Bolts No & Dimension			Bolt Thread d1	Length of stud bolt L2	Holes No.	Weight (kg)
					No	Size	Length				
50	195	25	165	125	4	M12	100	M16	310	4	10
65	195	25	185	145	4	M12	100	M16	310	4	12
80	195	25	200	160	4	M12	100	M16	310	8	15
100	200	25	220	180	4	M12	100	M16	310	8	18
125	200	25	250	210	4	M12	100	M16	310	8	22
150	200	25	285	240	4	M12	100	M20	320	8	30
200	220	25	340	295	6	M12	100	M20	340	12	42
250	230	25	405	355	6	M16	100	M24	370	12	66
300	250	25	460	410	6	M16	100	M24	410	12	80
350	260	25	520	470	8	M16	100	M24	410	16	110
400	270	25	580	525	8	M16	100	M27	430	16	138
450	270	25	640	585	10	M16	100	M27	430	20	161
500	280	25	715	650	10	M16	100	M30	440	20	204
600	300	25	850	770	10	M16	120	M33	480	20	285
700	300	25	910	840	12	M16	120	M33	480	24	314
800	320	25	1025	950	12	M16	120	M36	520	24	408
900	320	25	1125	1050	14	M16	120	M36	520	28	467
1000	340	25	1255	1170	14	M16	120	M39	560	28	612
1200	360	25	1485	1390	16	M16	120	M45	600	32	943
1400	380	25	1685	1590	18	M16	120	M45	630	36	1156
1600	420	25	1930	1820	20	M16	120	M52	690	40	1683
1800	440	35	2130	2020	22	M16	120	M52	740	44	2065
2000	460	35	2345	2230	24	M16	120	M56	790	48	2524

FORGING reserve the right to introduce modification in the interests of technical progress.

PN 25

Unit: mm

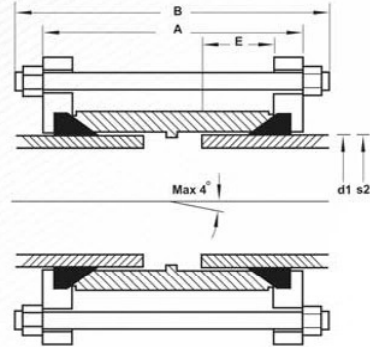
Size (DN)	Average Length L1	± X	External Flange Diameter D	Flange Bolt Hole Circle Diameter K	Flange Socket Bolts No & Dimension			Bolt Thread d1	Length of stud bolt L2	Holes No.	Weight (kg)
					No	Size	Length				
50	200	25	165	125	4	M12	100	M16	320	4	12
65	200	25	185	145	4	M12	100	M16	320	4	15
80	200	25	200	160	4	M16	100	M16	320	8	18
100	220	25	235	190	4	M16	100	M20	340	8	28
125	220	25	270	220	4	M16	100	M24	370	8	39
150	230	25	300	250	4	M16	100	M24	370	8	46
200	230	25	360	310	6	M16	100	M24	370	12	66
250	250	25	425	370	6	M16	100	M27	410	12	89
300	260	25	485	430	8	M16	100	M27	410	16	119
350	270	25	555	490	8	M16	100	M30	440	16	167
400	280	25	620	550	8	M16	100	M33	480	16	211
450	280	25	670	600	10	M16	100	M33	480	20	239
500	300	25	730	660	10	M20	100	M33	480	20	278
600	320	25	845	770	10	M20	120	M36	520	20	371
700	340	25	960	875	12	M20	120	M39	530	24	493
800	360	25	1085	990	12	M20	120	M45	600	24	680
900	380	25	1185	1090	14	M20	120	M45	600	28	782
1000	400	25	1320	1210	14	M20	120	M52	650	28	1088
1200	450	25	1530	1420	16	M20	120	M52	720	32	1589
1400	460	25	1755	1640	18	M20	120	M56	840	36	2142
1600	480	25	1975	1860	20	M20	120	M56	890	40	2780
1800	520	35	2195	2070	22	M20	120	M64	960	44	3247
2000	550	35	2425	2300	24	M20	120	M64	1020	48	3731

FORGING reserve the right to introduce modification in the interests of technical progress.

Flexible Coupling & Dismantling Units

Loose Connection
DN 100-2200

FORGING Flexible coupling for possible length compensation, easy installation and provision of angular deflection up to 4° with double side forcing cones used with standard steel and cast iron pipes.
Couplings can be supplied with or without center register.



Design and Materials

Flange pieces St. 37 - 2
Sealing Wedge-shaped, made of EPDM or NBR
Bolts and nuts Steel electrogalvanized
Coating Electro Static Epoxy Powder inside and outside

DN	Outside diameter of pipe			Dimensions			Max. Working pressure (bar)	Unit: mm Mass (Kg)
	d 1	s 2	3	A	B	E		
100	118	114		160	210	40	40	10
150	170	168						13
200	222	219						15
250	274	274						21
300	326	324		200	260	50	25	
350	378	355					34	
400	429	406					50	
450	480	457					55	
500	532	508		240	310	60	62	
600	632	609					104	
700	738	711					120	
750	740	762					132	
800	842	813		260	340	70	144	
900	945	914					160	
1000	1.048	1.016					168	
1100		1.118					243	
1200	1.255	1.219		280	370	100	20	
1400	1.482	1.422					332	
1600	1.668	1.626					390	
1800		1.829					450	
2000		2.032		10			500	
2200		2.235			560			
					610			

FORGING reserve the right to introduce modification in the interests of technical progress.

- 1) Outside diameter of cast iron pipe.
- 2) Outside diameter of steel pipe.
- 3) Please indicate the OD for other type of pipes.

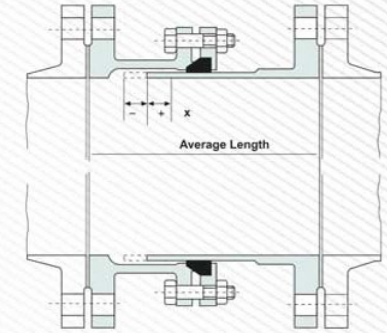
We reserve the right to introduce modification in the interests of technical progress.

Fitting & Dismantling Units

Expansion Joints (non rigid)

Loose Connection
DN 50-2400
PN 10

FORGING fitting pieces are used for installation and removal of valves or other equipments. The possible length compensation is $\pm X$. The fitting pieces compensate eventual extension and can be distorted up to 4°.



Design and Materials

Flange connection size in accordance with
DIN 2501 - 2632 / DIN EN 1092-1

Flange pieces
Sealing
Bolts and nuts
Coating

St. 37 - 2
Wedge-shaped, made of EPDM or NBR
Steel, electrogalvanized
Electro Static Epoxy Powder inside and outside

PN 10
Unit: mm

DN	Average Length	Adjustability $\pm X$	External Flange diameter	External bolt hole circle diameter	Holes off	Number of Holes	Seal Profile size	Approx. Weight in Kg
50	250	40	165	125	18	4	1	11
65	250	40	185	145	18	4	1	13
80	250	40	200	160	18	8	1	16
100	300	40	220	180	18	8	1	20
125	300	40	250	210	18	8	2	26
150	300	40	285	240	23	8	2	32
200	300	40	340	295	23	8	2	46
250	350	50	395	350	23	12	2	70
300	350	50	445	400	23	12	3	83
350	350	50	505	460	23	16	3	98
400	380	50	565	515	27	16	3	122
450	380	50	615	565	27	20	3	130
500	380	50	670	620	27	20	3	147
550	380	50	730	675	30	20	4	163
600	380	50	780	725	30	20	4	195
650	380	50	835	780	30	24	4	219
700	380	50	895	840	30	24	4	244
800	380	50	1015	950	33	24	4	304
900	380	50	1115	1050	33	28	4	348
1000	380	50	1230	1160	36	28	4	403
1100	380	50	1340	1270	36	32	5	480
1200	400	50	1455	1380	39	32	5	616
1300	400	50	1575	1490	42	32	5	710
1400	400	50	1675	1590	42	36	5	821
1500	400	50	1785	1700	42	36	5	923
1600	400	50	1915	1820	48	40	5	1055
1800	450	50	2115	2020	48	44	5	1320
2000	450	50	2325	2230	48	48	6	1740
2200	450	50	2550	2440	56	52	6	2190
2400	450	50	2760	2650	56	56	6	2650

FORGING reserve the right to introduce modification in the interests of technical progress.

Fitting & Dismantling Units

Expansion Joints (non rigid)

Loose Connection
DN 50-2000
PN 16

FORGING fitting pieces are used for installation and removal of valves or other equipments. The possible length compensation is $\pm X$. The fitting pieces compensate eventual extension and can be distorted up to 4°.

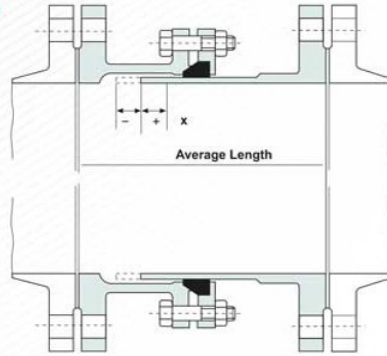
Design and Materials

Flange connection size in accordance with
DIN 2501 - 2633 / DIN EN 1092-1

Flange pieces
Sealing
Bolts and nuts
Coating

St. 37 - 2
Wedge-shaped, made of EPDM or NBR
Steel, electrogalvanized
Electro Static Epoxy Powder inside and outside

PN 16
Unit: mm



DN	Average Length	Adjustability $\pm X$	External Flange diameter	External bolt hole circle diameter	Holes off	Number of Holes	Seal Profile size	Approx. Weight in Kg
50	250	40	165	125	18	4	1	11
65	250	40	185	145	18	4	1	13
80	250	40	200	160	18	8	1	16
100	300	40	220	180	18	8	1	20
125	300	40	250	210	18	8	2	26
150	300	40	285	240	23	8	2	32
200	300	40	340	295	23	12	2	46
250	350	50	405	355	27	12	2	70
300	350	50	460	410	27	12	3	90
350	350	50	520	470	27	16	3	105
400	380	50	580	525	30	16	3	140
450	380	50	640	585	30	20	3	150
500	380	50	715	650	33	20	3	170
550	380	50	775	710	33	20	4	205
600	380	50	840	770	36	20	4	245
650	380	50	860	790	36	24	4	265
700	380	50	910	840	36	24	4	285
800	380	50	1025	950	39	24	4	330
900	390	50	1125	1050	39	28	4	390
1000	390	50	1255	1170	42	28	4	490
1100	400	50	1355	1270	42	32	5	540
1200	400	50	1485	1390	48	32	5	710
1300	400	50	1585	1490	48	32	5	820
1400	400	50	1685	1590	48	36	5	910
1600	400	50	1930	1820	56	40	5	1386
1800	450	50	2130	2020	56	44	6	1701
2000	450	50	2345	2230	64	48	6	2079

FORGING reserve the right to introduce modification in the interests of technical progress.
Supply of fitting pieces with single butt weld end (telescopic or socket pipe) is possible.
We reserve the right to introduce modification in the interests of technical progress.

Fitting & Dismantling Units

Expansion Joints (non rigid)

Loose Connection
DN 50-2000
PN 25

FORGING fitting pieces are used for installation and removal of valves or other equipments. The possible length compensation is $\pm X$. The fitting pieces compensate eventual extension and can be distorted up to 4°.

Design and Materials

Flange connection size in accordance with
DIN 2501 - 2634 / DIN EN 1092-1

Flange pieces
Sealing
Bolts and nuts
Coating

St. 37 - 2
Wedge-shaped, made of EPDM or NBR
Steel, electrogalvanized
Electro Static Epoxy Powder inside and outside

PN 25
Unit: mm



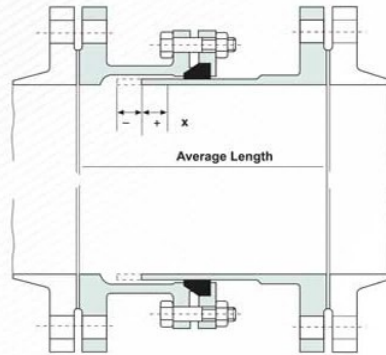
DN	Average Length	Adjustability $\pm X$	External Flange diameter	External bolt hole circle diameter	Holes off	Number of Holes	Seal Profile size	Approx. Weight in Kg
50	250	40	165	125	18	4	1	10
65	250	40	185	145	18	8	1	13
80	250	40	200	160	18	8	1	17
100	300	40	235	190	23	8	1	23
125	300	40	270	220	27	8	2	32
150	300	40	300	250	27	8	2	38
200	300	40	360	310	27	12	2	55
250	350	50	425	370	30	12	2	73
300	350	50	485	430	30	16	3	98
350	350	50	555	490	33	16	3	137
400	380	50	620	550	36	16	3	174
450	380	50	670	600	36	20	3	197
500	380	50	730	660	36	20	3	229
550	380	50	785	710	36	20	4	266
600	380	50	845	770	39	20	4	305
650	380	50	895	820	39	24	4	357
700	380	50	960	875	42	24	4	406
800	380	50	1085	990	48	24	4	560
900	390	50	1185	1090	48	28	4	644
1000	390	50	1320	1210	56	28	4	896
1200	400	50	1530	1420	56	32	5	1309
1400	400	50	1755	1640	64	36	5	1764
1600	400	50	1975	1860	64	40	5	2289
1800	450	50	2195	2070	72	44	6	2674
2000	450	50	2425	2300	72	48	6	3073

FORGING reserve the right to introduce modification in the interests of technical progress.

Fitting & Dismantling Units

Expansion Joints (non rigid)

Loose Connection
DN 50-1600
PN 40



FORGING fitting pieces are used for installation and removal of valves or other equipments. The possible length compensation is $\pm X$. The fitting pieces compensate eventual extension and can be distorted up to 4°.

Design and Materials

Flange connection size in accordance with
DIN 2501 - 2635 / DIN EN 1092-1

Flange pieces
Sealing
Bolts and nuts
Coating

St. 37 - 2
Wedge-shaped, made of EPDM or NBR
Steel, electrogalvanized
Electro Static Epoxy Powder inside and outside

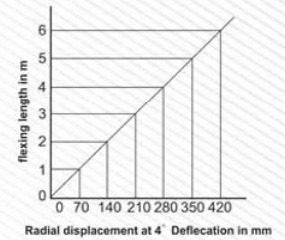
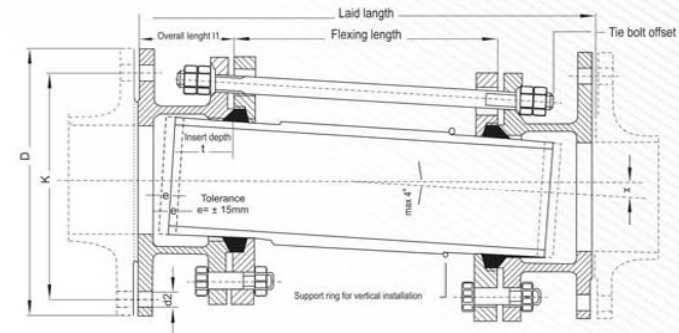
PN 40
Unit: mm

DN	Average Length	Adjustability $\pm X$	External Flange diameter	External bolt hole circle diameter	Holes off	Number of Holes	Seal Profile size	Approx. Weight in Kg
50	250	40	165	125	18	4	1	10
65	250	40	185	145	18	8	1	13
80	250	40	200	160	18	8	1	17
100	300	40	235	190	23	8	1	23
125	300	40	270	220	27	8	2	32
150	300	40	300	250	27	8	2	38
200	300	40	375	320	30	12	2	59
250	350	50	450	385	33	12	2	83
300	350	50	515	450	33	16	3	111
350	350	50	580	510	36	16	3	198
400	400	50	660	585	39	16	3	213
450	400	50	685	610	39	20	3	255
500	400	50	755	670	42	20	3	329
600	400	50	890	795	48	20	4	441
700	400	50	995	900	48	24	4	532
800	400	50	1140	1030	56	24	4	693
900	400	50	1250	1140	56	28	4	798
1000	400	50	1360	1250	56	28	4	1113
1200	450	50	1575	1460	64	32	5	1673
1400	450	50	1795	1680	64	36	5	2170
1600	450	50	2025	1900	72	40	5	2975

FORGING reserve the right to introduce modification in the interests of technical progress.

Articulated Pipe Connector Rigid & Non Rigid

DN 200 - 1600
PN 10 - 16



During operation move is possible in axial and or angular direction to fit the pipes in offset position and also for accomodating displacement of pipe work.

Diagram shows radial displacement at 4° deflection of pipe center in relation to flexing length.

Radial displacement = flexing length x 0.07 equals tan. 4° deflection.

Attention: Cover depth over 1 m and additional loads necessitate special precaution.

Unit: mm

DN	PN 10						PN 16					
	D	K	d2	No. of bolt	l1	t	D	K	d2	No. of bolt	l1	t
200	340	295	22	8	140	70	340	295	23	12	140	70
250	395	350	22	12	180	90	405	355	27	12	180	90
300	445	400	22	12	180	90	460	410	27	12	180	90
350	505	460	22	16	180	90	520	470	27	16	180	90
400	565	515	26	16	180	90	580	525	30	16	180	90
450	615	565	26	16	180	90	640	585	30	20	180	90
500	670	620	26	20	180	90	715	650	33	20	180	90
600	780	725	30	20	200	110	840	770	36	20	200	110
700	895	840	30	24	200	110	910	840	36	24	200	110
800	1015	950	33	24	200	110	1025	950	39	24	200	110
900	1115	1050	33	28	200	110	1125	1050	39	28	200	110
1000	1230	1160	36	28	200	110	1255	1170	42	28	200	110
1100	1340	1270	36	32	200	110	1355	1270	42	32	200	110
1200	1455	1380	39	32	250	140	1485	1390	48	32	250	140
1300	1575	1490	42	32	250	140	1585	1490	48	32	250	140
1400	1675	1590	42	36	250	140	1685	1590	48	36	250	140
1600	1915	1820	48	40	250	140	1930	1820	56	40	250	140

FORGING reserve the right to introduce modification in the interests of technical progress.

NOTE:



FORGING