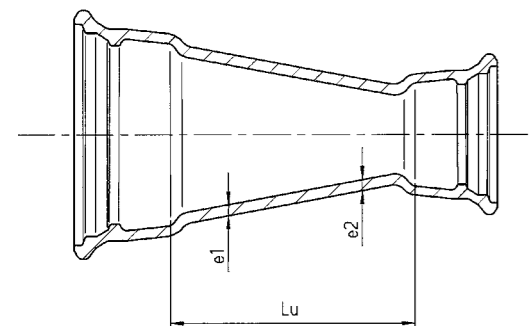


Double socket tapers – MMR

DN 1	DN 2	Lu mm	e1 mm	e2 mm
100	80*	90	7,2	7,0
150	80*	190	7,8	7,0
	100	150		7,2
200	80	290	8,4	7,0
	100	250		7,2
	150	150		7,8
250	80*	390	9,0	7,0
	100	350		7,2
	150	250		7,8
	200	150		8,4
300	80*	490	9,6	7,0
	100	450		7,2
	150	350		7,8
	200	250		8,4
	250*	150		9,0

* acc. to manufacturer's standard



FITTINGS AND VALVES

FITTINGS AND VALVES

DRAINAGE TECHNOLOGY

ENGINEERING

GLASS LINING TECHNOLOGIES

JOBGING FOUNDRY



Düker ductile cast iron fittings

with rotatable flange and mechanical joint



Düker GmbH & Co. KGaA
Hauptstraße 39 - 41
D-63846 Laufach
Germany

Phone +49 6093 87-250
Fax +49 6093 87-246

Internet: www.dueker.de
E-Mail: info@dueker.de

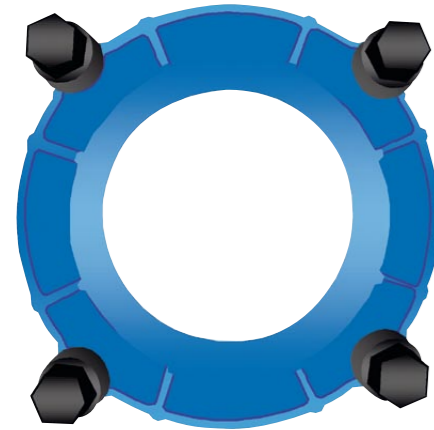
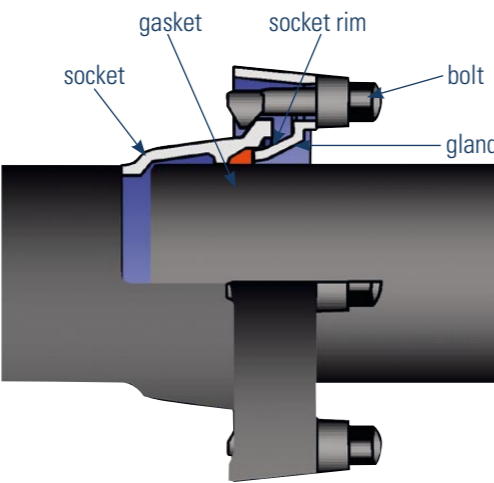
732735 / 01.09 Specifications subject to change without notice.

Mechanical joint

Description

The ductile cast iron gland of the mechanical joint exerts pressure on an elastomere gasket, which expands and seals itself against the pipe or fitting spigot. The necessary pressure is obtained by tightening the bolts that grip in the socket rim.

The fittings are available with an inside and outside fusion bonded epoxy coating according to DIN EN 14901. Special coatings are available on request.



Dimensions	as per ISO 2531, EN 545 or factory standard
Working Pressure	PFA16 – higher pressures on request

The advantages of this jointing system are:

- the mechanical joint allows considerable angular deflection and tolerances on insertion length
- inserting the pipe or fitting into the socket requires relatively little effort
- during installation the pipes or fittings inserted into the socket can easily be turned or removed

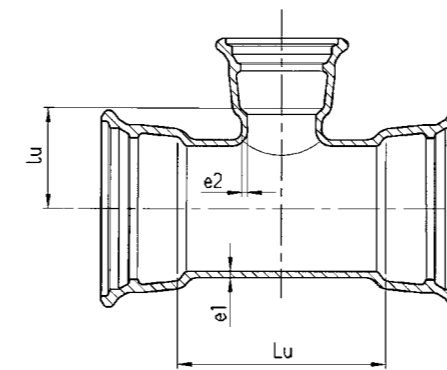
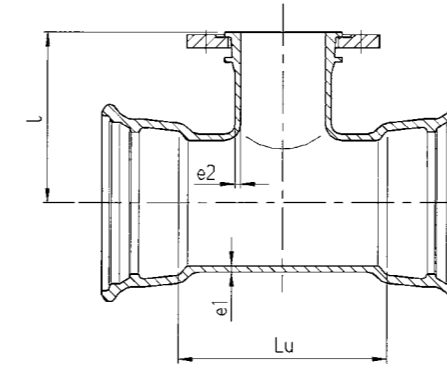
DN	No. of bolts	Size of bolts	Hexagon size	Torque Nm	Max. angular deflection
80	3	M22	30	120	5°
100	3	M22	30	120	5°
125	3	M22	30	120	5°
150	4	M22	30	120	5°
200	5	M22	30	120	4°
250	6	M22	30	120	4°
300	7	M22	30	120	4°
350	8	M22	30	120	3°
400	9	M22	30	120	3°
450	8	M27	36	300	3°
500	10	M27	36	300	3°
600	12	M27	36	300	3°

All dimensions are in mm

Double socket tees with flanged branch – MMA / All socket tees – MMB

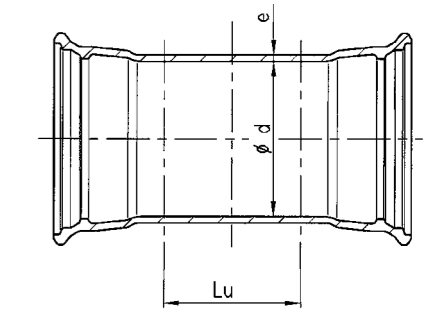
DN 1	DN 2	availability MMA	availability MMB	Lu mm	l MMA mm	lu MMB mm	e1 mm	e2 mm
80	80	x	x	170	165	85	7,0	7,0
100	80*	x	x	185	195	125	7,2	7,0
	100	x	x	210	200	125		7,2
150	80*	x	x	190	220	150	7,8	7,0
	100	x	x	210	230	150		7,2
	150	x	x	270	245	150		7,8
200	80	x	x	190	250	180	8,4	7,0
	100	x	x	315	255	180		7,2
	150	x	x	270	270	180		7,8
	200	x	x	330	275	180		8,4
250	80*	x	x	220	275	205	9,0	7,0
	100	x	x	220	285	210		7,2
	150	x	x	335	300	210		7,8
	200	x	x	335	305	210		8,4
	250	x	x	390	320	210		9,0
300	80*	x	x	220	305	235	9,6	7,0
	100	x	x	220	310	235		7,2
	150	x	x	335	325	235		7,8
	200	x	x	335	330	235		8,4
	250*	x	x	450	345	240		9,0
	300	x	x	450	360	240		9,6

* acc. to manufacturer's standard



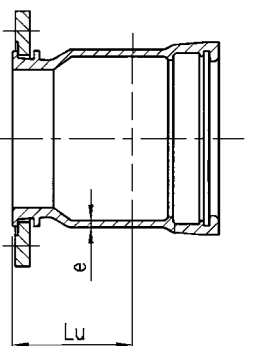
Collars – U

DN	Ø d mm	Lu mm	e mm
80	109	160	7,0
100	130	160	7,2
150	183	165	7,8
200	235	170	8,4
250	288	175	9,0
300	340	180	9,6



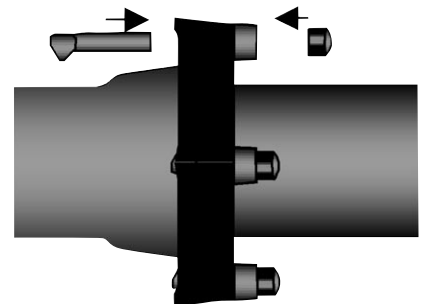
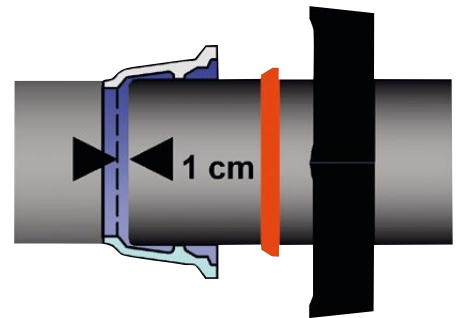
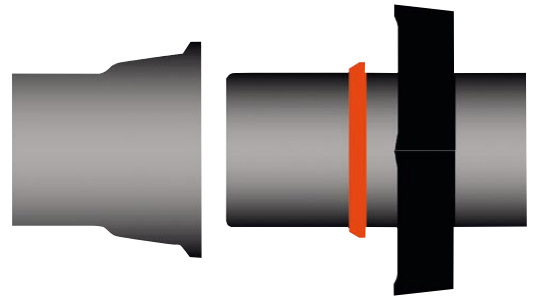
Flanged sockets – EU

DN	Lu mm	e mm
80	105	7,0
100	110	7,2
150	120	7,8
200	120	8,4
250	125	9,0
300	130	9,6



Installation instructions

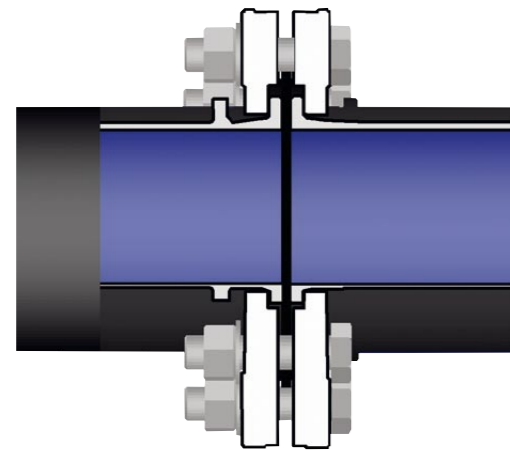
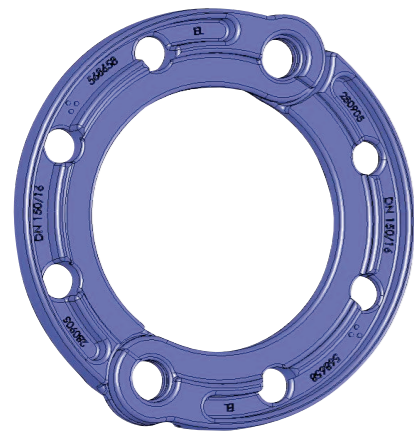
1. Clean socket chamber, particularly the gasket seat, the pipe or fitting spigot and the elastomere gasket. Check that the pipe or fitting spigot is in good condition.
2. Slide first the gland, then the gasket, over the pipe or fitting spigot. Make sure that both are placed in the right direction as shown on the illustration on the right.
3. Insert the pipe or fitting spigot into the socket down to the socket base and check the alignment. Then withdraw about 1 cm.
4. Carefully slide the elastomere gasket into its seat, then slide the gland into place so it touches the gasket. Insert the bolts and nuts and tighten them by hand until they are in touch with the gland. After checking the gland position, alternately tighten the nuts with a torque spanner, adhering to the torques stated in the table on the left.
5. After the pressure test, check and if necessary tighten the nuts.



Rotatable flange

Description

In comparison with usual cast-on flanges, rotatable flanges facilitate the orientation of fittings and the fitting of the bolts.



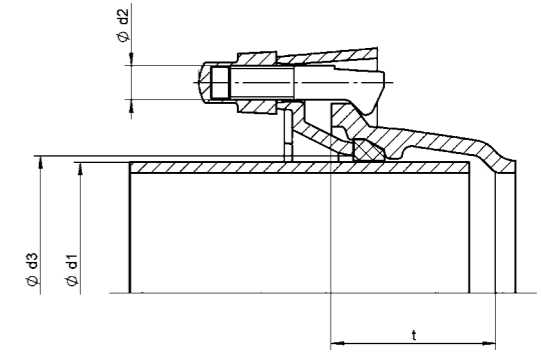
Installation Instructions

1. Clean the faces of the flange rests, the flanges and the gasket.
2. Align the pipes or fittings, leaving a small gap between the two flange rests. Insert the gasket between the flange rests and centre it. If necessary use a Neoprene adhesive to slightly fix it.
3. Place the two halves of one rotatable flange behind one of the flange rests, watching out that the recessed inside strip is placed against the rest. Insert the two bolts on the hinges to slightly fix it, then put the second flange into place opposite the first.
4. Slide through all bolts, insert the nuts and tighten them alternately crosswise.

DN	PN bar	No. of bolts	Size of bolts mm	Torque Nm
80	10/16	8	M16 x 80	35
100	10/16	8	M16 x 80	40
125	10/16	8	M16 x 90	50
150	10/16	8	M20 x 100	75
200	10	8	M20 x 100	70
	16	12	M20 x 100	
250	10	12	M20 x 110	105
	16	12	M24 x 110	
300	10	12	M20 x 120	125
	16	12	M24 x 120	
350	10	16	M20 x 130	130
	16	16	M24 x 130	
400	10	16	M24 x 140	160
	16	16	M27 x 140	
450	10	20	M24 x 140	160
	16	20	M27 x 140	
500	10	20	M24 x 150	230
	16	20	M30 x 150	
600	10	20	M27 x 160	345
	16	20	M33 x 160	

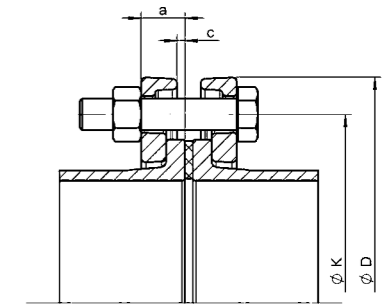
Mechanical joint sockets and glands

DN	Ø d1 mm	Ø d2 mm	Ø d3 mm	t mm	Weight gland kg
80	98	22	101	90	2,7
100	118	22	121	92	3,4
150	170	22	173	98	5,0
200	222	22	225	104	6,0
250	274	22	277	104	6,9
300	326	22	329	105	8,7



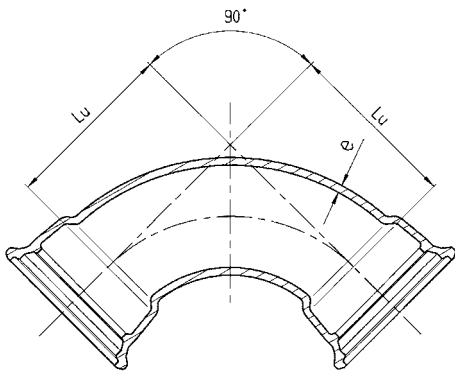
Rotatable flanges

DN	PN bar	D mm	a mm	c mm	Weight flange kg	K mm
80	10/16	200	23	3	2,0	160
100	10/16	220	23	3	2,2	180
150	10/16	285	26	3	4,2	240
200	10	340	29	3	6,2	295
	16	340	29	3	5,2	295
250	10	395	32	3	8,4	350
	16	400	32	3	7,6	355
300	10	455	36	4	10,8	400
	16	455	36	4	11,0	410



Range of products

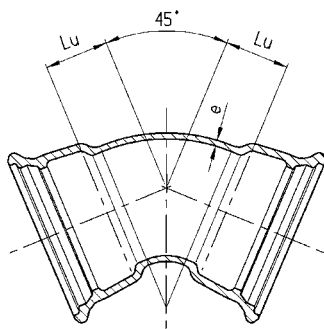
With mechanical joint and / or rotatable flange



Double socket bends 90° – MMQ

DN	Lu mm	e mm
80	100	7,0
100	120	7,2
150	170	7,8
200	220	8,4
250	270	9,0
300	320	9,6

* acc. to manufacturer's standard



Double Socket Bends 45° – MMK 45

Double Socket Bends 22 1/2° – MMK 22

Double Socket Bends 11 1/4° – MMK 11

DN	Lu MMK 45 mm	Lu MMK 22 mm	Lu MMK 11 mm	e mm
80	55	40	30	7,0
100	65	45	35	7,2
150	85	55	40	7,8
200	110	65	45	8,4
250	130	75	50	9,0
300	155	90	60	9,6

* acc. to manufacturer's standard