



PRODUCT CATALOGUE

Ductile
Fittings



INTRODUCTION

ABOUT EKF FOUNDERY

With over 40 years of expertise in the casting industry, EKF Foundry has established itself as a trusted and renowned manufacturer of ductile cast iron products. Our reputation is built on three core values: **quality, competitive pricing, and timely delivery.**

Backed by advanced facilities and a highly experienced engineering team—some with more than three decades of industry knowledge—we are equipped to meet the diverse demands of modern infrastructure projects. Our major facilities include two electrical induction furnaces, a dedicated pattern workshop, and two chemical analysis laboratories. Alongside traditional hand molding, we operate two fully automated molding lines, ensuring superior surface finishes and dimensional accuracy. To guarantee reliability, our production process also includes multiple hydrostatic testing presses.

Backed by advanced facilities and a highly experienced engineering team—some with more than three decades of industry knowledge—we are equipped to meet the diverse demands of modern infrastructure projects. Our major facilities include two electrical induction furnaces, a dedicated pattern workshop, and two chemical analysis laboratories. Alongside traditional hand molding, we operate two fully automated molding lines, ensuring superior surface finishes and dimensional accuracy. To guarantee reliability, our production process also includes multiple hydrostatic testing presses.



Our product range covers diameters from **DN65 to DN1800** mm, with nominal pressure ratings of **PN6, PN10, PN16, and PN25**. With this extensive offering, EKF Foundry proudly supports infrastructure requirements across the water supply and wastewater sectors.

Guided by our vision, we strive to become the leading global supplier of ductile cast iron fittings and valves. Our reach already extends to international markets, with successful exports to countries including Algeria and Saudi Arabia.

Cast Iron

Cast iron is a ferrous alloy with carbon content higher than 2%, either loose as graphite OR as iron carbide Fe_3C (cementite). The former is called Grey Iron and the latter white iron. While grey iron is to be preferred to make manhole covers and gratings, white iron is very fragile and hard, so it is not suitable to make utensils.

Grey iron can be either lamellar or ductile cast iron:

Lamellar Cast Iron:

Lamellar cast iron is made up of thousands of plates which interrupt the continuity of the metal matrix and consequently jeopardize its mechanical resistance and make it subject to possible cracking OR braking.

Ductile Cast Iron:

Ductile cast iron is made up of spheroids achieved by introducing suitable quantity of magnesium into the bath before the casting, This gives the product a high breaking load as well as remarkable elasticity.

A comparison between lamellar cast iron and ductile cast iron shows that:

- Ductile cast iron has a higher breaking safety coefficient, since it follows any deformation due to loads without breaking (unlike lamellar cast iron), then returning the original condition after stress.
- To manufacture a product in lamellar cast iron with the same load class as a ductile cast-iron product, you need more mass.
So the product will be heavier with higher shipment and handling costs.
- Ductile cast iron is therefore a very valuable building material: it has as many benefits as lamellar cast iron but it does not have some of its defects. Its mechanical characteristics are similar to those of good-quality steel.

LAMELLAR CAST IRON



DUCTILE CAST IRON



Our Vision

To be the leading global supplier of high-quality ductile cast iron fittings and valves, providing innovative and reliable solutions that meet the growing infrastructure needs of the water supply and wastewater sectors worldwide.

Our Mission

- To manufacture and deliver durable, precise, and cost-effective ductile cast iron products that exceed customer expectations.
- To continuously enhance our production capabilities through advanced technology and skilled expertise.
- To expand our presence in international markets by building long-term partnerships based on trust, quality, and timely delivery.
- To uphold the highest standards of safety, sustainability, and operational excellence in every stage of our business.

Major alloys produced:

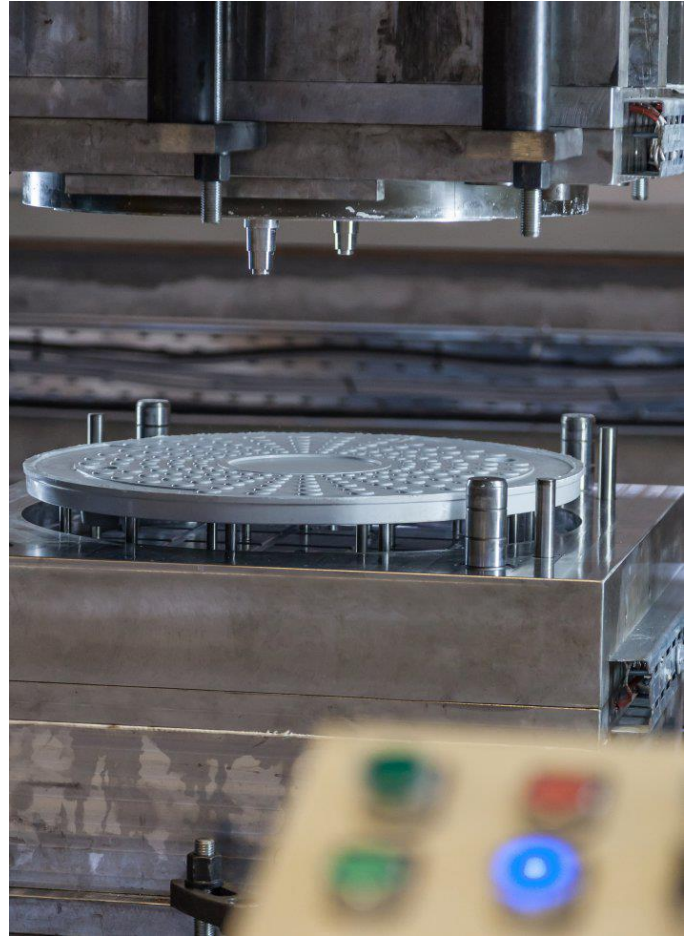
Gary Cast Iron GG15; GG20
Ductile GGG40; GGG45; GGG50, and GGG60

Production Capacity:

- 280 working days Per year & 2 shifts per day.
- Molten metal capacity per year 14K tons 8Ktons of Castings per year.
- We design, manufacture and supply a full range of ductile iron, engineering parts from grey & ductile iron for domestic use, fabricated products for commercial and industrial use,

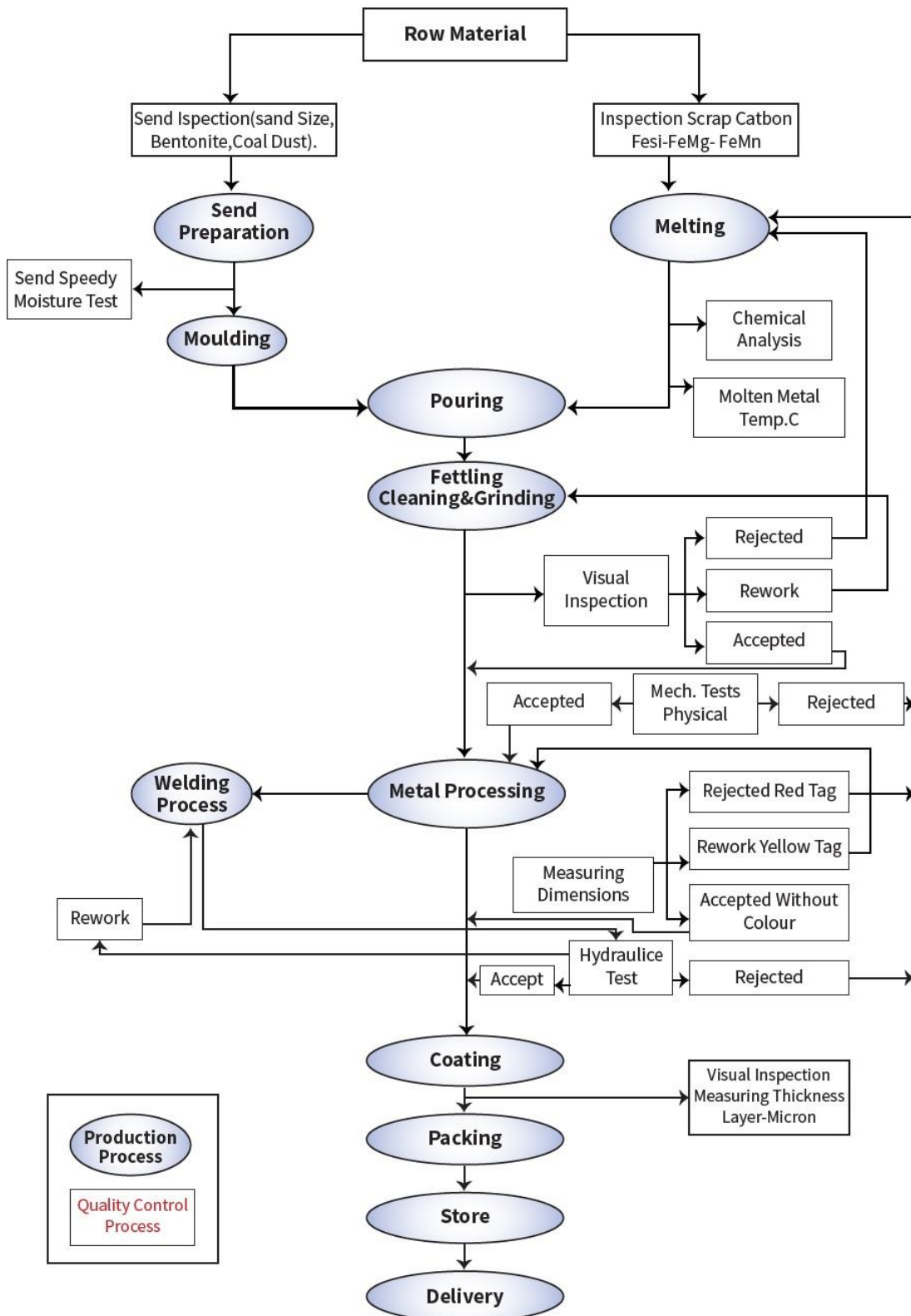
OUR FACTORY

Qalyoub – Qalyoubia - Egypt



Products Range :-

- **Flanged pipe Fitting**
- **Flanged socket and spigot ductile pipe fittings**
- **Flanged socket and spigot UPVC pipe fittings**
- **Dismantling joints**
- **Penstocks**
- **Valves**
- **Fire hydrant**
- **Cast iron manhole covers**
- **GRP Manhole covers**
- **Gully gratings , surface boxes and manhole steps**



Customer Service Delivery

Hydrostatic test pressure:

Nominal Diameter	Minimum Works test pressure in Bars		
(DN) mm	Pipes		Fittings
	K<9	K=9	All Thickness Classes
40 to 300	$0.5(K+1)^2$	50	25
350 to 600	$0.5 K^2$	40	16
700 to 1000	$0.5(K-1)^2$	32	10
1100 to 2000	$0.5(K-2)^2$	25	10
2200 to 2600	$0.5(K-3)^2$	18	10
1) The works hydrostatic test pressure for fittings is less than that for pipes because the shape of the fittings makes it difficult to provide sufficient restraint to high internal pressure during the test			
2) 16 Bar for pipes and fittings with PN 10 flanges			

Coating & Lining Materials

External Lining

- The purpose of an external coating is to provide a durable protection against corrosive soils.
- EKF offers a complete range of external coatings to meet all cases of corrosive soils.

Internal Lining

- The purpose of an internal protection is to guarantee that the hydraulic performance of the pipe is maintained long term and prevent any risk of interne attack by the waters carried.
- EKF offers a complete range of internal protection to meet all types of water carried.

Laboratory and Testing Facilities

1. Spectrometer: ARL (Swiss) make with ARL net facility. 16 element: analyzing capacity.
2. Image analyzer: With camera attached to the microscope.
3. UTM: 40 Tons capacity ADmET make Universal Testing Machine for Tensile strength,
4. Yield strength and Elongation.
5. Hardness tester: 3000 KGs ADITYA make Brinell Hardness Testing machine.
6. Sand testing: All the necessary sand testing equipments.
7. Thickness Tester: All the necessary thickness testing instrument for internal and external coating.

Quality control:

- Quality Assurance - With professional knowledge & techniques, up-to-date equipments and solid systems, our quality assurance is rather integral from incoming
- raw material to the finished products and the final goal of our quality control is (Customers satisfaction)
- Thermal Analysis: To check the temperature of the metal throughout the process and also determine the Carbon and Silicon content which affects the strength of the material.
- Metal Graphic examination: Determination of microstructure of metal by metallurgical microscope the microstructure of the metal defines the grade of the castings.



Management System Certification Body No. MSCB-105

CERTIFICATE

No. 23-A-5620 Rev. 0

ELEKHLAS FOUNDRY

**EZBET ABU SENA, BEHIND ESKANIA, QULIOUB, QULIUBIYA -
EGYPT.**

Company Reg. No.: NA

has documented and implemented system in compliance with the requirements of

ISO 9001:2015
Quality Management System
for
Casting of Metal

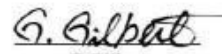
IAF Code: 17

The certificate is issued on the basis of the results mentioned in the pertinent audit report.
Validity of the certificate is conditionally limited by positive results of surveillance audits,
which the certified company is committed to undergo.

This certificate can be invalid if the certificate holder does not fulfill the conditions set out in
the certification agreement.

Initial issue date: Jun. 08. 2023
Re-issue date: Jun. 08. 2024
Expire date: Jun. 07. 2026




G. Gilbert
Head of Certification Body

Rm. 501, Daeryung techno town, 638, Seobusaet-gil,
Geumcheon-gu, Seoul, Republic of Korea
www.igcert.org





Management System Certification Body No. MSCB-105

CERTIFICATE

No. 23-D-1478 Rev. 0

ELEKHLAS FOUNDRY

**EZBET ABU SENA, BEHIND ESKANIA, QULIOUB, QULIUBIYA -
EGYPT.**

Company Reg. No.: NA

has documented and implemented system in compliance with the requirements of

ISO 45001:2018

Occupational Health and Safety Management System

for

Casting of Metal

IAF Code: 17

The certificate is issued on the basis of the results mentioned in the pertinent audit report.
Validity of the certificate is conditionally limited by positive results of surveillance audits,
which the certified company is committed to undergo.

This certificate can be invalid if the certificate holder does not fulfill the conditions set out in
the certification agreement.

Initial issue date: Jun. 08. 2023
Re-issue date: Jun. 08. 2024
Expire date: Jun. 07. 2026



G. Gilbert
G. Gilbert

Head of Certification Body

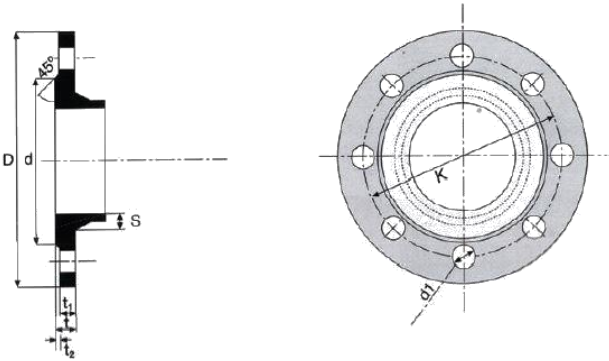


Rm. 501, Daeryung techno town, 638, Seobusae-gil,
Geumcheon-gu, Seoul, Republic of Korea
www.igcert.org



FLANGED TYPE FITTINGS

INTEGRAL FLANGE

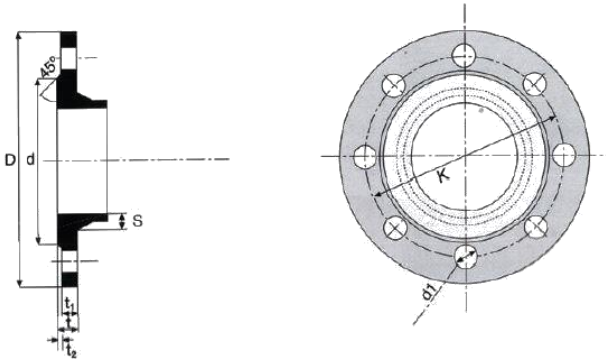


PN 10

DN	Dimensions							Holes		Bolts	
	D	d	T	t ₁	t ₂	S	k	NO.	d ₁	diameter	Length
80	200	132	19	16	3	15	160	8	19	M16	65
100	220	156	19	16	3	15	180	8	19	M16	65
125	250	184	19	16	3	15	210	8	19	M16	70
150	285	211	19	16	3	15	240	8	23	M20	70
200	340	266	20	17	3	16	295	8	23	M20	80
250	400	319	22	19	3	17.5	350	12	23	M20	80
300	455	370	24.5	20.5	4	19.5	400	12	23	M20	80
350	505	429	24.5	20.5	4	19.5	460	16	23	M20	85
400	565	480	24.5	20.5	4	19.5	515	16	28	M24	85
450	615	527	25.5	21.5	4	20.5	565	20	28	M24	90
500	670	582	26.5	22.5	4	21	620	20	28	M24	100
600	780	682	30	25	5	24	725	20	31	M27	110
700	895	794	32.5	27.5	5	24	840	24	31	M27	110
800	1015	901	35	30	5	24.5	950	24	34	M30	120
900	1115	1011	37.5	32.5	5	26.5	1050	28	34	M30	130
1000	1230	1112	40	35	5	28	1160	28	37	M33	130
1100	1340	1215	42.5	37.5	5	29.5	1270	32	37	M33	140
1200	1455	1328	45	40	5	31.5	1380	32	40	M36	140
1400	1675	1530	46	41	5	32	1590	36	43	M39	160
1500	1785	1640	47.5	42.5	5	33	1700	36	43	M39	150
1600	1915	1750	49	44	5	34.5	1820	40	49	M45	160
1800	2115	1950	52	47	5	36.5	2020	44	49	M45	160

Dimensions in mm.

INTEGRAL FLANGE

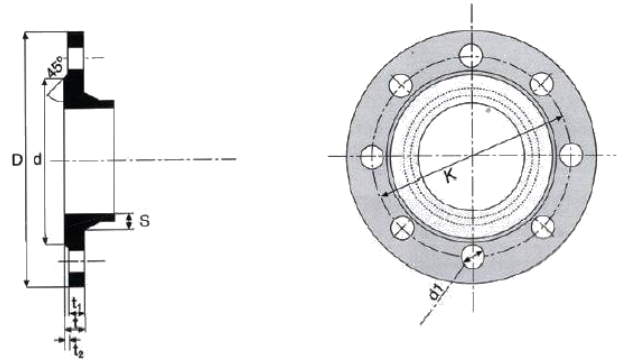


PN 16

DN	Dimensions							Holes		Bolts	
	D	d	T	t ₁	t ₂	S	k	NO.	d ₁	diameter	Length
80	200	132	19	16	3	15	160	8	19	M16	65
100	220	156	19	16	3	15	180	8	19	M16	65
125	250	184	19	16	3	15	210	8	19	M16	70
150	285	211	19	16	3	15	240	8	23	M20	70
200	340	266	20	17	3	16	295	12	23	M20	70
250	400	319	22	19	3	17.5	355	12	28	M24	85
300	455	370	24.5	20.5	4	19.5	410	12	28	M24	85
350	520	429	26.5	22.5	4	21	470	16	28	M24	85
400	558	480	28	24	4	22.5	525	16	31	M27	100
450	640	544	30	26	4	23.5	585	20	31	M27	100
500	715	609	31.5	27.5	4	25	650	20	34	M30	110
600	840	720	36	34	5	29	770	20	37	M33	120
700	910	794	39.5	34.5	5	29	840	24	37	M33	130
800	1025	901	43	38	5	30	950	24	40	M36	140
900	1125	1001	46.5	41.5	5	32.5	1050	28	40	M36	140
1000	1255	1112	50	45	5	35	1170	28	43	M39	160
1100	1355	1215	53.5	48.5	5	38	1270	32	43	M39	160
1200	1485	1328	57	52	5	40	1390	32	49	M45	160
1400	1685	1530	60	55	5	42	1590	36	49	M45	180
1500	1820	1640	62.5	57.5	5	43.5	1710	36	56	M52	180
1600	1930	1750	65	60	5	45.5	1820	40	56	M52	200
1800	2130	1950	70	65	5	49	2020	44	56	M52	200

Dimensions in mm.

Flanged & Gaskets



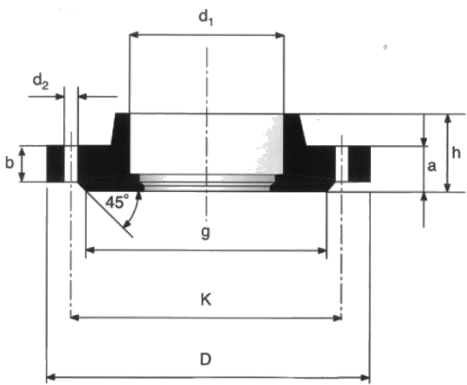
PN 25

DN	Dimensions							Holes		Bolts	
	D	d	t	t ₁	t ₂	S	k	NO.	d ₁	diameter	Length
80	200	132	19	16	3	15	160	8	19	M16	64
100	235	156	19	16	3	15	190	8	23	M20	64
125	270	184	19	16	3	15	220	8	28	M24	64
150	300	211	20	17	3	16	250	8	28	M24	68
200	360	274	22	19	3	17.5	310	12	28	M24	76
250	425	330	24.5	21.5	3	19.5	370	12	31	M27	86
300	485	389	27.5	23.5	4	22	430	16	31	M27	94
350	555	448	30	26	4	24	490	16	34	M30	104
400	620	503	32	28	4	25.5	550	16	37	M33	112
450	670	553	34.5	30.5	4	27.5	600	20	37	M33	122
500	730	609	36.5	32.5	4	29	660	20	37	M33	130
600	845	720	42	37	5	33.5	770	20	40	M36	148

Dimensions in mm.

FABRICATED PIPES

PN 10 NECK FLANGES



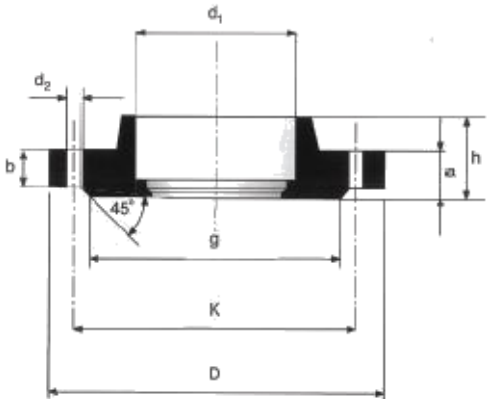
PN 10

DN	Dimensions						Bolts Holes Details			Bolts Sizes		
	D	d ₁	G	a	b	h	K	NO.	d ₂	diameter	Length	Mass (kg)
80	200	98	132	19	16	15	160	8	19	M16	65	3
100	220	118	156	19	16	15	180	8	19	M16	65	4
150	285	170	211	19	16	15	240	8	23	M20	70	6.1
200	340	222	266	20	17	15	295	8	23	M20	80	8.5
250	400	274	319	22	19	16	350	12	23	M20	80	11.8
300	455	326	370	24.5	20.5	17.5	400	12	23	M20	80	15.6
350	505	378	429	24.5	20.5	19.5	460	16	23	M20	85	17.6
400	565	429	480	24.5	20.5	21	515	16	28	M24	85	20.5
450	615	480	527	25.5	21.5	22.5	565	20	28	M24	90	26
500	670	532	582	26.5	22.5	23.5	620	20	28	M24	100	27.6
600	780	635	682	30	25	25	725	20	31	M27	110	38.4
700	895	738	794	32.5	27.5	29	840	24	31	M27	110	50.2
800	1015	842	901	35	30	29	950	24	34	M30	120	66.7
900	1115	945	1001	37.5	32.5	30	1050	28	34	M30	130	78.7
1000	1230	1048	1112	40	35	32.5	1160	28	37	M33	130	98.6
1100	1340	1152	1215	42.5	37.5	35	1270	32	37	M33	140	125
1200	1455	1255	1328	45	40	38	1380	32	40	M36	140	144.2
1400	1675	1462	1530	46	41	40	1590	36	43	M39	160	178.2
1500	1785	1565	1640	47.5	42.5	42	1700	36	43	M39	160	220
1600	1915	1668	1750	49	44	43.5	1820	40	49	M45	160	244.7
1800	2115	1875	1950	52	47	45.5	2020	44	49	M45	160	283.5

Dimensions in mm.

FABRICATED PIPES

PN 16 NECK FLANGES

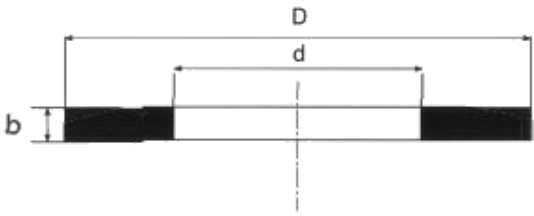


PN 16

DN	Dimensions						Bolts Holes Details			Bolts Sizes		
	D	d ₁	G	a	b	h	K	NO.	d ₂	diameter	Length	Mass (kg)
80	200	98	132	19	16	43	160	8	19	M16	65	3
100	220	118	156	19	16	45	180	8	19	M16	65	4
150	285	170	211	19	16	50	240	8	23	M20	70	6.1
200	340	222	266	20	17	55	295	12	23	M20	70	8.3
250	400	274	319	22	19	60	355	12	28	M24	85	11.4
300	455	326	370	24.5	20.5	65	410	12	28	M24	85	15.2
350	520	378	429	26.5	22.5	70	470	16	28	M24	85	20.7
400	580	429	480	28	24	75	525	16	31	M27	100	26.1
450	640	480	544	30	26	80	585	20	31	M27	100	35
500	715	532	609	31.5	27.5	85	650	20	34	M30	110	42.8
600	840	635	720	36	31	95	770	20	37	M33	120	64.9
700	910	738	794	39.5	34.5	105	840	24	37	M33	130	65.3
800	1025	842	901	43	38	115	950	24	40	M36	140	85.9
900	1125	945	1001	46.5	41.5	125	1050	28	40	M36	140	102.6
1000	1255	1048	1112	50	45	135	1170	28	43	M39	160	140.1
1100	1355	1152	1215	53.5	48.5	145	1270	32	43	M39	160	180
1200	1485	1255	1328	57	52	155	1390	32	49	M45	160	208.5
1400	1685	1462	1530	60	55	165	1590	36	49	M45	180	246.3
1500	1820	1565	1640	62.5	57.5	175	1710	36	56	M52	180	261
1600	1930	1668	1750	65	60	185	1820	40	56	M52	200	346.7
1800	2130	1875	1950	70	65	195	2020	44	56	M52	200	409.4

Dimensions in mm.

Fabricated Pipes



PN 10

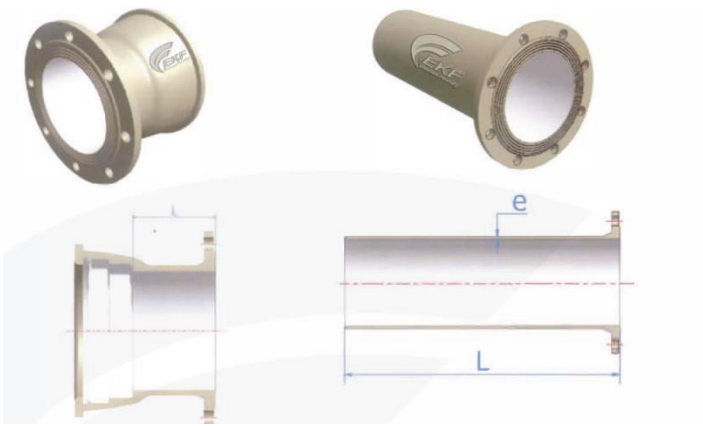
DN	D	d	b	Mass (ap-prox.)
80	200	98	19	3.3
100	220	118	19	3.7
150	285	170	19	5.6
200	340	222	20	7.4
250	400	274	22	10.5
300	455	326	24.5	13.8
350	505	378	24.5	15.4
400	565	429	24.5	18.5
450	615	480	25.5	21
500	670	532	26.5	24.5
600	780	635	30	34.4
700	895	738	32.5	46.5
800	1015	842	35	62.7
900	1115	945	37.5	73.2
1000	1230	1048	40	92.5
1100	1340	1152	42.5	111
1200	1455	1255	45	136
1400	1675	1462	46	171.4
1500	1785	1565	47.5	195.2
1600	1915	1668	49	241.7
1800	2115	1875	52	277.6

PN 16

DN	D	d	b	Mass (ap-prox.)
80	200	98	19	3.3
100	220	118	19	3.7
150	285	170	19	5.6
200	340	222	20	7.4
250	400	274	22	10.5
300	455	326	24.5	13.8
350	520	378	26.5	18.9
400	580	429	28	23.8
450	640	480	30	30
500	715	532	31.5	40
600	840	635	36	60.7
700	910	738	39.5	62.5
800	1025	842	43	81.9
900	1125	945	46.5	96.6
1000	1255	1048	50	132.9
1100	1355	1152	53.5	151.8
1200	1485	1255	57	200.3
1400	1685	1462	60	234.7
1500	1820	1565	62.5	300.7
1600	1930	1668	65	341.6
1800	2130	1875	70	398.5

Dimensions in mm.

SOCKET & STRAIGHT SPIGOT



DN	e	L	Mass (ap-prox.) Kg.	
			PN10	PN16
65	7	125	6.4	6.4
80	7	130	7.4	7.4
100	7.2	130	9	9
125	7.5	135	11.5	11.5
150	7.8	135	14.2	14.2
200	8.4	140	20.5	20
250	9	145	28	27.5
300	9.6	150	37	36.5
350	10.2	155	45	48
400	10.8	160	55	60
450	11.4	165	70	80
500	12	170	78	93
600	13.2	180	108	135
700	14.4	190	144	159
800	15.6	200	189	209
900	16.8	210	235	258
1000	18	220	293	324

DN	e	L	Mass (ap-prox.) Kg.	
			PN10	PN16
65	7	345	6.5	6.5
80	7	350	7.8	7.8
100	7.2	360	9.6	9.6
125	7.5	370	12.4	12.4
150	7.8	380	15.6	15.6
200	8.4	400	22.5	22.5
250	9	420	32	31.5
300	9.6	440	43	42.5
350	10.2	460	52	55
400	10.8	480	64	70
500	12	520	94	109
600	13.2	560	133	159
700	14.4	600	179	194
800	15.6	600	226	245
900	16.8	600	272	295
1000	18	600	328	369

Dimensions in mm.

FLANGED TYPE FITTINGS

FLANGED BENDS



11.25°Double flanged Band

DN	B	MASS(KG)		
		PN10	PN16	PN25
80	105	9.4	9.4	9.4
100	110	11.5	11.5	12.5
150	109	18.7	18.7	19.4
200	131	27.9	27.9	31.6
250	190	56	56	62.8
300	210	76	79	89
350	210	79	84	99.9
400	239	97	109	131
450	349	122	138	160
500	375	146	177	200
600	426	216	268	297
700	478	300	330	-
800	529	409	447	-
900	581	526	577	-
1000	632	677	760	-
1100	683	877	947	-
1200	735	1054	1183	-
1400	835	1498	1632	-
1500	886	1838	2014	-
1600	940	2120	2324	-
1800	480	1549	1801	-



22.50°Double Flanged Bend

DN	B	MASS(KG)		
		PN10	PN16	PN25
80	113	9.5	9.5	9.5
100	115	11.5	11.5	12.5
150	113	18.7	18.7	20.6
200	132	27.9	27.9	31.6
250	165	55.9	55.9	63.3
300	175	77.8	78	89.5
350	191	79.3	83.6	100.4
400	205	97.2	108.4	131
450	349	123	139	160
500	375	147	177.6	200.8
600	426	216	270	299
700	478	301	332	-
800	529	412	449	-
900	581	529	577	-
1000	632	681	764	-
1100	683	882	952	-
1200	735	1060	1189	-
1400	835	1507	1612	-
1500	885	1849	2025	-
1600	940	2132	2337	-
1800	345	1251	1279	-

FLANGED BENDS



90°Double Flanged Bend

DN	B	MASS(KG)		
		PN10	PN16	PN25
80	165	9.6	9.6	9.6
100	180	11.9	11.9	12.9
150	220	20	20	22
200	260	31	31	34
250	350	50	50	57
300	400	70	70	81
350	450	90	96	113
400	500	116	127	149
450	550	147	163	184
500	600	181	211	235
600	700	272	325	353
700	800	386	416	-
800	900	533	572	-
900	1000	698	745	-
1000	1100	907	990	-
1100	1200	1164	1234	-
1200	1300	1452	1562	-
1400	1350	1948	2062	-
1500	1400	2273	2449	-
1600	1411	2663	2841	-
1800	1500	3348	3572	-



45°Double Flanged Bend

DN	B	MASS(KG)		
		PN10	PN16	PN25
80	130	9.3	9.3	9.3
100	140	11.3	11.3	12.4
150	160	18.5	18.5	20.5
200	180	27.5	27.5	31
250	350	55	55	62
300	400	76	78	88
350	300	78	83	89
400	325	96	107	129
450	350	120	135	157
500	375	145	175	198
600	425	212	266	294
700	480	296	326	-
800	530	403	442	-
900	580	519	567	-
1000	630	668	751	-
1100	695	857	927	-
1200	750	1050	1178	-
1400	775	1388	1524	-
1500	810	1677	1853	-
1600	845	1915	2119	-
1800	910	2465	2717	-

Dimensions in mm.

DUCK FOOT BEND



90° Degrees Duck Foot Bend.

DN	Dimensions			MASS(KG)		
	L	C	d	PN10	PN16	PN25
80	165	110	180	14.1	14.1	14.1
100	180	125	200	17.8	17.8	18.8
150	220	160	250	30	30	32
200	260	190	300	46	46.5	50.5
250	350	225	350	75	75	82
300	400	255	400	105	106	116
350	450	290	450	139	145	162
400	500	320	500	178	189	212
450	550	355	550	245	261	283
500	600	385	600	283	313	337
600	700	450	700	428	481	509
700	300	515	300	684	708	-
800	900	580	900	944	974	-
900	1000	625	1000	1252	1290	-
1000	1100	710	1100	1629	1698	-
1100	1200	840	1300	2080	2150	-
1200	1300	-	-	2599	2709	-
1400	1350	-	-	-	-	-
1500	1400	1055	1550	-	-	-
1600	1411	-	-	-	-	-
1800	1500	-	-	-	-	-

Dimensions in mm.

Note: For sizes up to DN700, the supporting duck foot is integrally casted, for bigger seizes the supporting duck foot is fabricated from steel and jointed by welding

All Flanged Tee



Nominal size		Dimensions		Mass(kg)		
DN	dn	L	H	PN10	PN16	PN25
80	80	330	165	15.6	15.6	15.6
100	80	360	175	18.4	18.4	19.5
100	100	360	180	19.4	19.4	21
125	80	400	190	23	23	24.5
125	100	400	195	24	24	26
125	125	400	200	25.5	25.5	27.5
150	80	440	205	28.5	28.5	31
150	100	440	210	29.5	29.5	32
150	150	440	220	32.5	32.5	36
200	80	520	235	42	42	46
200	100	520	240	43	43	47.5
200	150	520	250	46	46	51
200	200	520	260	49	49	56
250	80	700	270	62	66	74
250	100	700	275	63	67	75
250	150	700	325	73.5	78	81
250	200	700	325	76	80	85
250	250	700	350	82	86	93
300	80	800	300	93	97	104
300	100	800	300	94	98	105
300	150	800	320	99	104	110
300	200	800	350	102	106	114
300	250	800	375	114	120	129
300	300	800	400	116	122	131
350	80	850	325	114	120	137
350	100	850	325	116	122	139
350	150	850	325	120	126	143
350	200	850	325	121	128	146
350	250	850	325	138	143	164
350	300	850	425	140	145	166
350	350	850	425	142	151	176
400	80	900	350	141	153	175
400	100	900	350	143	154	177
400	150	900	350	149	158	181
400	200	900	350	152	161	184
400	250	900	450	166	175	202
400	300	900	450	168	177	204
400	350	900	450	172	189	223
400	400	900	450	174	191	225

Nominal size		Dimensions		Mass(kg)		
DN	dn	L	H	PN10	PN16	PN25
450	100	950	375	177	193	215
450	150	950	375	180	196	219
450	200	950	375	183	199	222
450	250	950	475	197	213	240
450	300	950	475	199	215	242
450	350	950	475	207	227	260
450	400	950	475	210	230	263
450	450	950	475	216	240	272
500	100	1000	400	210	241	265
500	150	1000	400	218	245	267
500	200	1000	400	222	249	271
500	250	1000	500	234	261	288
500	300	1000	500	237	264	291
500	350	1000	500	239	273	308
500	400	1000	500	242	276	311
500	450	1000	500	249	294	329
500	500	1000	500	252	297	332
600	100	1100	450	305	358	388
600	150	1100	450	305	358	388
600	200	1100	450	305	358	388
600	250	1100	550	325	372	401
600	300	1100	550	328	375	404
600	350	1100	550	337	384	424
600	400	1100	550	340	387	427
600	450	1100	550	349	428	471
600	500	1100	550	352	431	474
600	600	1100	550	355	434	477
700	100	650	525	258	298	-
700	150	650	555	315	338	-
700	200	650	525	258	298	-
700	250	870	555	315	338	-
700	300	870	555	319	342	-

Dimensions in mm.

ALL FLANGED TEE



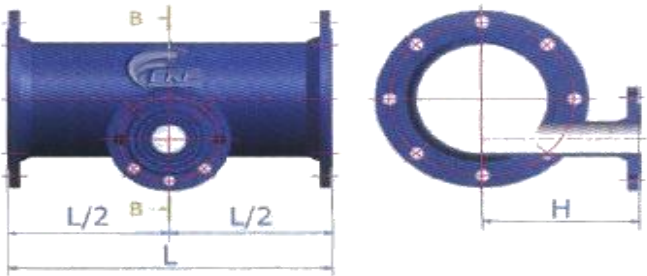
Nominal size		Dimensions		Mass(kg)	
DN	dn	L	H	PN10	PN16
700	350	870	555	340	375
700	400	870	555	343	379
700	450	1200	600	470	517
700	500	1200	600	473	520
700	600	1200	600	476	523
700	700	1200	600	477	523
800	100	690	585	352	390
800	150	690	615	410	440
800	200	690	585	352	390
800	250	910	615	410	440
800	300	910	615	413	443
800	350	910	615	438	481
800	400	910	615	441	484
800	450	1350	645	607	671
800	500	1350	645	610	675
800	600	1350	645	613	678
800	700	1350	675	654	714
800	800	1350	675	657	715
900	100	730	645	436	484
900	150	730	675	514	572
900	200	730	645	436	484
900	250	950	675	514	572
900	300	950	675	524	580
900	350	950	675	535	588
900	400	950	675	541	594
900	450	1500	705	770	846
900	500	1500	705	780	853
900	600	1500	705	787	860
900	700	1500	750	854	910
900	800	1500	750	860	913
900	900	1500	750	873	926
1000	100	770	705	546	629
1000	150	770	705	546	629
1000	200	770	705	546	629
1000	250	990	735	640	725
1000	300	990	735	650	735
1000	350	990	735	660	745
1000	400	990	735	668	755
1000	450	1650	765	940	1021
1000	500	1650	765	979	1097

Nominal size		Dimensions		Mass(kg)	
DN	dn	L	H	PN10	PN16
1000	600	1650	765	1007	1116
1000	700	1650	825	1034	1142
1000	800	1650	825	1085	1168
1000	900	1650	825	1095	1205
1000	1000	1650	825	1105	1229
1100	600	1210	825	990	1083
1100	800	1470	855	1160	1245
1100	1000	1800	885	1345	1450
1100	1100	1800	900	1450	1555
1200	100	850	810	-	-
1200	150	850	810	-	-
1200	200	850	830	920	-
1200	250	850	830	-	-
1200	300	850	845	-	-
1200	350	850	845	-	-
1200	400	850	860	940	-
1200	450	850	860	-	-
1200	500	850	870	-	-
1200	600	1240	885	1101	1256
1200	700	1470	915	1196	1348
1200	800	1470	915	1291	1439
1200	900	1950	945	1393	1552
1200	1000	1950	945	1494	1664
1200	1200	1950	945	1806	1970
1400	100	950	910	-	-
1400	150	950	910	-	-
1400	200	950	925	-	-
1400	250	950	925	-	-
1400	300	950	940	-	-
1400	350	950	940	-	-
1400	400	950	955	-	-
1400	450	950	955	-	-

Dimensions in mm.

ALL FLANGED TEE

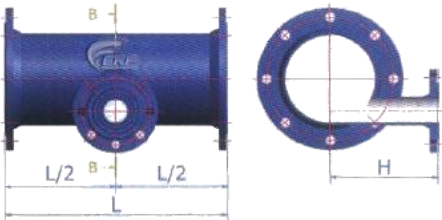
Nominal size		Dimensions		Mass(kg)	
DN	dn	L	H	PN10	PN16
1400	500	950	970	-	-
1400	600	1550	980	1555	1818
1400	700	1760	1010	1721	1930
1400	800	1760	1010	1886	2041
1400	900	1760	1040	2010	2175
1400	1000	2015	1040	2131	2309
1400	1200	2015	1040	2262	2431
1400	1400	2015	1040	2545	2715
1500	100	1100	965	-	-
1500	150	1100	965	-	-
1500	200	1100	980	-	-
1500	250	1100	980	-	-
1500	300	1100	995	-	-
1500	350	1100	995	-	-
1500	400	1100	1010	-	-
1500	450	1100	1010	-	-
1500	500	1100	1020	-	-
1500	600	1575	1035	1762	1951
1500	700	2040	1095	1882	2072
1500	800	2040	1095	2002	2193
1500	900	2040	1095	2133	2335
1500	1000	2040	1095	2263	2474
1500	1200	2040	1095	2552	2782
1500	1400	2040	1095	2851	3084
1600	1500	2040	1095	3021	3284
1500	100	1250	1020	-	-
1600	150	1250	1020	-	-
1600	200	1250	1035	-	-
1600	250	1250	1035	-	-
1600	300	1250	1040	-	-
1600	350	1250	1040	-	-



Nominal size		Dimensions		Mass(kg)	
DN	dn	L	H	PN10	PN16
1600	400	1250	1065	-	-
1600	450	1250	1065	-	-
1600	500	1250	1075	-	-
1600	600	1600	1090	2167	2398
1600	700	1835	1120	2355	2537
1600	800	1835	1120	2542	2675
1600	900	2065	1150	2641	2831
1600	1000	2065	1150	2740	2986
1600	1200	2300	1180	3058	3327
1600	1400	2300	1180	3208	3444
1600	1500	2300	1180	3388	3649
1600	1600	2300	1180	3568	3854
1800	100	1300	1130	-	-
1800	150	1300	1130	-	-
1800	200	1300	1145	-	-
1800	250	1300	1145	-	-
1800	300	1300	1160	-	-
1800	350	1300	1160	-	-
1800	400	1300	1175	-	-
1800	450	1300	1175	-	-
1800	500	1300	1185	-	-
1800	600	1655	1200	2694	2972
1800	700	1885	1230	2860	3136
1800	800	1885	1230	3023	3299
1800	900	2120	1260	3200	3485
1800	1000	2120	1260	3375	3669
1800	1200	2350	1290	3740	4056
1800	1400	2350	1290	3910	4190
1800	1500	2350	1290	4120	4416
1800	1600	2350	1290	4328	4641
1800	1800	2350	1290	4750	5086

Dimensions in mm.

ALL FLANGED LEVEL INVERTTEE



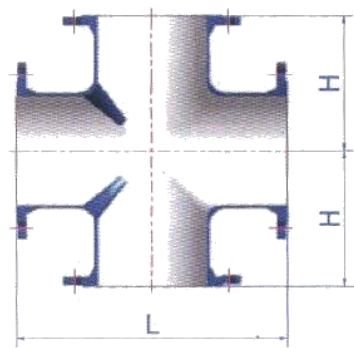
Nominal size		Dimensions		Mass(kg)		
DN	dn	L	H	PN10	PN16	PN25
100	80	360	195	19.5	19.5	21
150	80	440	220	29.5	29.5	32
200	80	520	250	42.5	42.5	47
200	100	520	250	43.5	43.5	48
250	80	700	275	66	71	76
250	100	700	275	68	73	79
250	150	700	275	-	-	-
300	80	800	305	92	97	104
300	100	800	305	95.5	99	105
300	150	800	305	99	104	-
350	80	850	340	121	127	144
350	100	850	340	123	129	146
350	150	850	340	128	134	151
350	200	950	340	-	-	-
400	80	900	365	153	165	187
400	100	900	365	156	167	190
400	150	900	365	162	171	194
400	200	900	365	167	176	199
450	80	950	380	188	204	226
450	100	950	380	189	205	227
450	150	950	380	197	213	236
450	200	950	380	202	202	241
500	80	1000	380	237	268	292
500	100	1000	400	241	272	296
500	150	1000	400	248	275	297
500	200	1000	400	255	282	304
600	80	1100	400	350	403	433
600	100	1100	435	351	404	434
600	150	1100	450	360	413	443
600	200	1100	450	370	423	453
700	100	650	500	-	-	-
700	150	650	500	262	302	-

Nominal size		Dimensions		Mass(kg)	
DN	dn	L	H	PN10	PN16
700	200	650	500	268	308
800	100	690	540	-	-
800	150	690	540	379	417
800	200	690	540	388	426
900	100	730	580	-	-
900	150	730	580	481	529
900	200	730	580	483	531
1000	150	770	630	625	708
1000	200	770	630	627	710
1000	250	990	735	-	-
1000	300	990	735	-	-
1000	350	990	735	-	-
1200	100	850	700	-	-
1200	150	850	700	910	1039
1200	200	850	700	945	1074
1200	250	850	750	-	-
1200	300	850	750	-	-
1200	400	850	780	-	-
1400	150	1000	800	-	-
1400	200	1000	800	-	-
1400	250	1000	800	-	-
1400	300	1000	800	-	-
1500	150	1100	900	-	-
1500	200	1100	900	-	-
1500	250	1100	900	-	-
1500	300	1100	900	-	-
1600	200	1250	950	-	-
1600	250	1250	950	-	-
1600	300	1250	950	-	-
1600	350	1250	950	-	-
1600	400	1250	950	-	-
1600	500	1250	1000	-	-

Dimensions in mm.

Flanged Type Fittings

All Flanged Cross



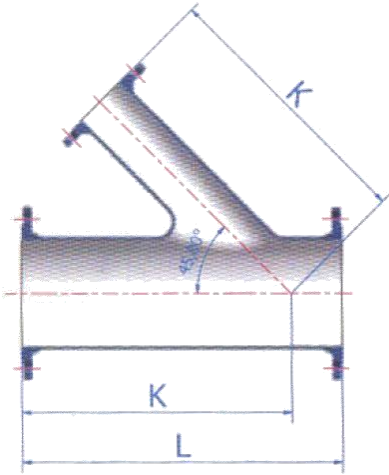
DN	e	L	Mass (ap-prox.) Kg.	
			PN10	PN16
65	7	125	6.4	6.4
80	7	130	7.4	7.4
100	7.2	130	9	9
125	7.5	135	11.5	11.5
150	7.8	135	14.2	14.2
200	8.4	140	20.5	20
250	9	145	28	27.5
300	9.6	150	37	36.5
350	10.2	155	45	48
400	10.8	160	55	60
450	11.4	165	70	80
500	12	170	78	93
600	13.2	180	108	135
700	14.4	190	144	159
800	15.6	200	189	209
900	16.8	210	235	258
1000	18	220	293	324

Dimensions in mm.

ALL FLANGED ANGLE BRANCH

Nominal size		Dimensions	
DN	dn	k	l
30	30	375	500
100	80	390	540
100	100	405	540
150	80	480	640
150	100	430	640
150	150	480	640
200	800	535	735
200	100	535	735
200	150	560	735
200	200	560	735
250	80	585	825
250	100	610	825
250	150	635	825
250	200	635	325
250	250	635	325
300	80	610	300
300	100	610	800
300	150	660	800
300	200	685	925
300	250	710	925
300	300	710	925
350	100	635	850
350	150	660	850
350	200	710	850
350	250	740	1000
350	300	790	1000
350	350	790	1000
400	100	710	900
400	150	740	900
400	200	760	900
400	250	820	1100
400	300	870	1100
400	350	870	1100
400	400	870	1100
450	100	710	950
450	150	760	950
450	200	790	950
450	250	820	950
450	300	900	1200
450	350	950	1200
450	400	950	1200
450	450	950	1200
500	150	765	1000

Nominal size		Dimensions	
DN	dn	k	l
500	200	810	1000
500	250	840	1000
500	300	865	1275
500	350	950	1275
500	400	1025	1275
500	450	1025	1275
500	500	1025	1275
600	150	340	1100
600	200	890	1100
600	250	915	1100
600	300	965	1250
600	350	1000	1250
600	400	1035	1250
600	450	1070	1500
600	500	1180	1500
600	600	1180	1500
700	200	1015	1200
700	250	1040	1200
700	300	1090	1400
700	350	1125	1400
700	400	1160	1400
700	450	1195	1500
700	500	1240	1500
700	600	1370	1725
700	700	1370	1725
800	250	1150	1350
800	300	1170	1350
800	350	1205	1500
800	400	1240	1500
800	450	1270	1500
800	500	1305	1700
800	600	1370	1700
900	700	1450	2000
900	800	1520	2000
900	300	1245	1500
900	350	1280	1500
900	400	1315	1500
900	450	1350	1775
900	500	1390	1775
900	600	1475	1775
900	700	1540	2000
900	800	1610	2000
900	900	1630	2130



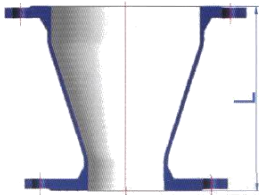
Nominal size		Dimensions	
DN	dn	L	H
1000	350	1380	1650
1000	400	1415	1650
1000	450	1425	1650
1000	500	1510	2000
1000	600	1575	2000
1000	700	1640	2000
1000	800	1700	2500
1000	900	1975	2500
1000	1000	1980	2500
1200	450	1700	2000
1200	500	1750	2000
1200	600	1855	2300
1200	700	1920	2300
1200	800	1990	2500
1200	900	2050	2500
1200	1000	2280	3000
1200	1200	2280	3000

Dimensions in mm.

Dimensions in mm.

FLANGED REDUCERS

Nominal Size		L	Mass(kg)		
DN	Dn		PN10	PN16	PN25
80	65	200	9	9	9.5
100	80	200	9.3	9.3	9.8
125	100	200	11.3	11.3	12.5
150	80	200	16.4	16.4	17.4
150	100	200	15.3	15.3	16.8
150	125	200	14	14	15.5
200	65	600	-	-	-
200	80	600	-	-	-
200	100	600	27.5	27.5	30
200	125	300	-	-	-
200	150	300	22	21.5	25
250	150	600	39	39	43.5
250	200	300	30	30	35.5
300	100	700	-	-	-
300	125	650	-	-	-
300	150	650	48.5	48.5	55
300	200	600	52	52	59
300	250	300	40.5	40.5	49
350	200	650	61.5	64	74
350	250	600	65.5	67.5	79
350	300	300	49.5	52.5	66
400	200	700	73.5	77.5	90.5
400	250	650	77	81.5	96
400	300	600	80.5	85	101
400	350	300	58	67	86
450	250	700	89.5	97	112
450	300	650	93.5	101	117
450	350	600	95.6	106	126
450	400	300	70.5	83	105
500	250	700	-	-	-
500	300	700	109	122	138
500	350	650	111	127	145
500	400	600	110	130	153
500	450	300	83	104	126
600	300	800	190	-	-
600	350	750	147	174	193



Concentric / Eccentric

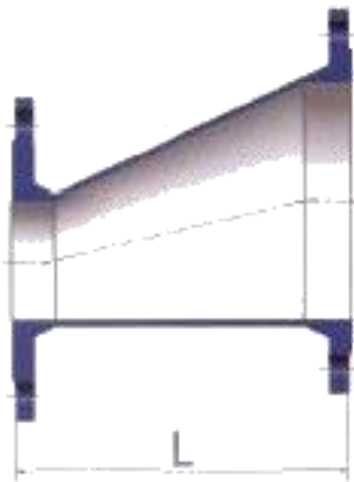
Nominal Size		L	Mass(kg)		
DN	dn		PN10	PN16	PN25
600	400	700	150	178	-
600	450	650	151	183	-
600	500	600	149	190	-
700	350	900	-	-	-
700	400	800	196	212	-
700	450	750	197	217	-
700	500	700	200	255	-
700	600	600	195	236	-
800	400	1000	-	-	-
800	450	900	263	286	-
800	500	800	256	284	-
800	600	700	260	298	-
800	700	600	250	285	-
800	450	1100	-	-	-
900	500	1000	338	370	-
900	600	800	318	360	-
900	700	700	321	352	-
900	800	600	308	352	-
1000	500	1200	-	-	-
1000	600	1000	422	490	-
1000	700	800	396	442	-
1000	800	700	399	448	-
1000	900	600	373	438	-
1200	600	1450	-	-	-
1200	700	1345	711	111	-
1200	800	1160	688	758	-
1200	900	975	652	726	-
1200	1000	790	586	692	-
1400	800	1590	1034	1105	-
1400	900	1405	998	1074	-
1400	1000	1220	961	1052	-
1400	1200	850	814	947	-
1500	900	1620	1211	1317	-
1500	1000	1435	1174	1297	-
1500	1200	1065	1074	1216	-
1500	1400	695	914	1058	-

Dimensions in mm.

FLANGED REDUCERS

Concentric / Eccentric

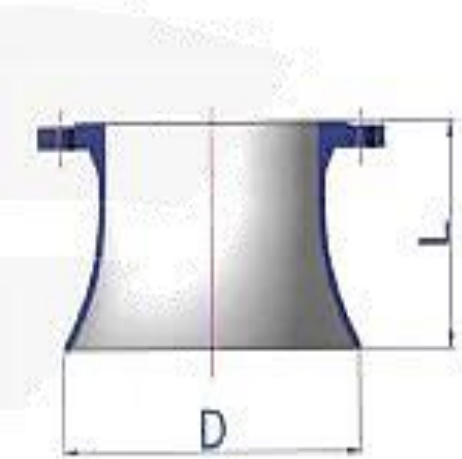
Nominal Size		L	Mass(kg)	
DN	dn		PN10	PN16
1600	1000	1650	1424	1547
1600	1200	1280	1324	1468
1600	1400	910	1103	1273
1600	1500	725	1073	1250
1800	1200	1710	1858	2024
1800	1400	1340	1701	1870
1800	1500	1155	1610	1810
1800	1600	970	1436	1664



Dimensions in mm.

FLANGED TYPE FITTINGS BELL MOUTH

Nominal Size		L	Mass(kg)		
DN	dn		PN10	PN16	PN25
80	150	130	5.2	5.2	5.2
100	175	135	6.2	6.2	6.7
150	230	150	10.1	10.1	11.1
200	290	170	15	14.8	16.8
250	345	183	21	20.5	24.5
300	405	205	28	28.5	33.5
350	460	220	35	38.5	46
400	520	240	45	49.5	60.5
450	575	255	54	62	73
500	635	275	67	80	91
600	750	310	96	120	132
700	865	345	135	146	-
800	980	380	182	197	-
900	1095	415	231	250	-
1000	1210	450	297	331	-
1100	1325	485	370	405	-
1200	1440	520	457	512	-
1400	1670	590	646	702	-
1500	1780	625	763	851	-
1600	1900	660	906	995	-
1800	2130	730	1185	1297	-



Dimensions in mm.

BLANK FLANGE

PN10

DN	Dimensions				Mass (Kg)
	D	a	b	C	
100	220	19	16	3	4.3
150	285	19	16	3	7.2
200	340	20	17	3	11
250	400	22	19	3	16.9
300	455	24.5	20.5	4	24
350	505	24.5	20.5	4	29.5
400	565	24.5	20.5	4	36.5
500	670	26.5	22.5	4	56
600	780	30	25	5	85
700	895	32.5	27.5	5	123
800	1015	35	30	5	172
900	1115	37.5	32.5	5	224
1000	1230	40	35	5	293
1200	1455	45	40	5	575
1400	1675	46	41	5	739
1600	1915	49	44	5	1239
1800	2115	52	47	5	1717

PN16

DN	Dimensions				Mass (Kg)
	D	A	b	C	
100	220	19	16	3	4.3
150	285	19	16	3	7.2
200	340	20	17	3	10.8
250	400	22	19	3	16.6
300	455	24.5	20.5	4	23.5
350	520	26.5	22.5	4	33.5
400	580	28	24	4	44.5
500	715	31.5	27.5	4	77
600	840	36	31	5	121
700	910	39.5	34.5	5	156
800	1025	43	38	5	218
900	1125	46.5	41.5	5	286
1000	1255	50	45	5	387
1200	1485	57	52	5	662
1400	1685	60	55	5	994
1600	1930	65	60	5	1409
1800	2130	70	65	5	1858

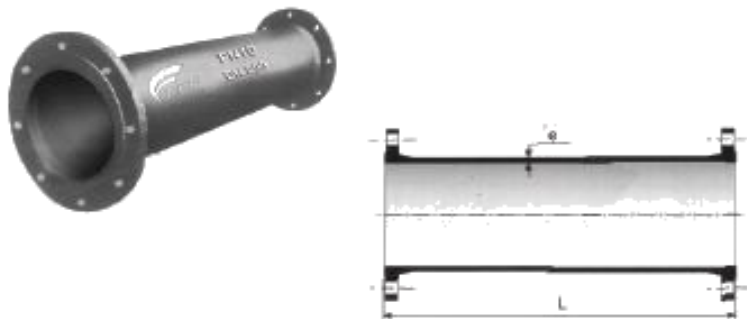
PN25

DN	Dimensions				Mass (Kg)
	D	a	b	C	
100	235	19	16	3	4.8
150	300	20	17	3	8.3
200	360	22	19	3	13.3
250	425	24.5	21.5	3	21
300	485	27.5	23.5	4	30
350	555	30	25	4	43.5
400	620	32	28	4	58
500	730	36.5	32.5	4	94
600	845	42	37	5	144



Dimensions in mm.

DOUBLE FLANGED PIPES



DN	PN10 Double Flanged Pipe with Puddle Mass (KG) for L			PN16 Double Flanged Pipe with Puddle Mass (Kg) for L		
	1000	1500	2000	1000	1500	2000
100	27	X	X	27	X	X
150	42	X	X	42	X	X
200	60	100	X	60	100	X
250	81	113	X	81	113	X
300	104	143	182	104	143	182
350	125	174	222	131	180	228
400	149	208	266	160	218	276
450	178	247	316	194	263	332
500	204	284	364	235	316	396
600	273	379	484	326	432	538
700	349	483	616	380	515	650
800	442	608	774	480	646	812
900	530	730	930	578	779	980
1000	641	881	1120	724	964	1204
1100	786	1066	1346	856	1136	1416
1200	891	1216	1540	1019	1343	1666
1400	1141	1564	1986	1278	1702	2126
1500	1357	1834	2310	1533	2010	2486
1600	1480	2014	2548	1684	2218	2752
1800	1787	2445	3102	2039	2697	3354

Dimensions in mm.

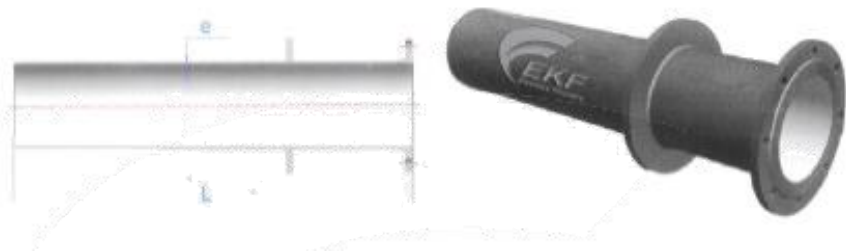
DOUBLE FLANGED PIPE WITH PUDDLE



DN	PN10 Double Flanged Pipe with Puddle Mass (KG) for L			PN16 Double Flanged Pipe with Puddle Mass (Kg) for L		
	1000	1500	2000	1000	1500	2000
100	30	X	X	30	X	X
150	47	X	X	47	110	X
200	67	110	X	67	X	X
250	90	122	X	90	122	X
300	117	156	195	117	156	195
350	139	188	236	148	197	245
400	165	224	282	182	240	298
450	198	267	336	222	291	360
500	226	306	386	272	353	433
600	304	410	515	383	489	595
700	390	524	657	435	570	705
800	497	663	829	554	720	886
900	595	795	995	666	867	1068
1000	722	962	1201	846	1086	1326
1100	899	1179	1459	1004	1284	1564
1200	1012	1337	1661	1205	1529	1852
1400	1289	1712	2134	1493	1917	2341
1500	1559	2036	2512	1823	2300	2776
1600	1686	2220	2754	1992	2526	3060
1800	2023	2681	3338	2401	3059	3716

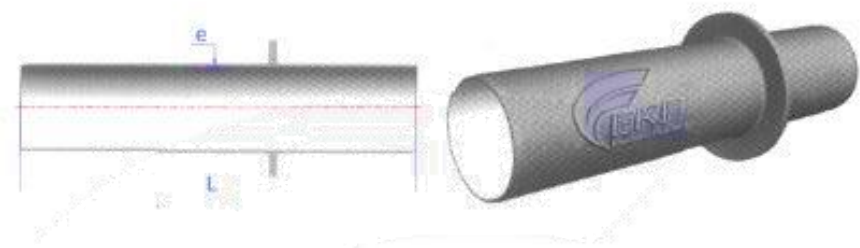
Dimensions in mm.

LANGED SPIGOT PIPE WITH PUDDLE CAST PIPES



DN	PN10 Flanged Spigot Pipe with Puddle Mass (KG) for L			PN16 Flanged Spigot Pipe with Puddle Mass (Kg) for L		
	1000	1500	2000	1000	1500	2000
100	27	X	X	27	X	X
150	42	X	X	42	X	X
200	60	X	X	60	X	X
250	81	113	X	81	113	X
300	104	143	182	104	143	182
350	125	174	222	131	180	228
400	149	208	266	160	218	276
450	178	247	316	194	263	332
500	204	284	364	235	316	396
600	273	379	484	326	432	538
700	349	483	616	380	515	650
800	442	608	774	480	646	812
900	530	730	930	578	779	980
1000	641	881	1120	724	964	1204
1100	786	1066	1346	856	1136	1416
1200	891	1216	154	1019	1343	1666
1400	1141	1564	1986	1278	1702	2126
1500	1357	1834	2310	1533	2010	2486
1600	1480	2014	2548	1684	2218	2752
1800	1787	2445	3102	2039	2697	3354

CAST PIPES



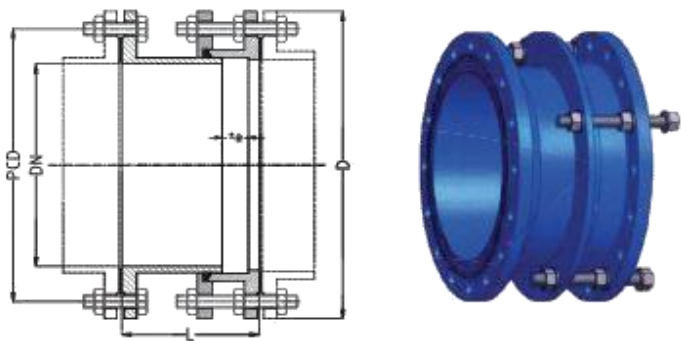
DN	PN10 Double Spigot Pipe with Puddle Mass (KG) for L			PN16 Flanged Socket Pipe with Puddle Mass (KG) for L		
	1000	1500	2000	1000	1500	2000
100	24	X	X	24	X	X
150	37	X	X	37	X	X
200	53	X	X	53	X	X
250	72	104	X	72	104	X
300	91	130	169	91	131	170
350	111	160	208	114	163	211
400	133	192	250	138	196	254
450	158	227	296	166	235	304
500	182	262	342	198	279	359
600	242	348	453	269	375	481
700	308	442	575	325	460	595
800	387	553	719	406	572	738
900	465	665	865	490	691	892
1000	560	800	1039	602	842	1082
1100	673	953	1233	708	988	1268
1200	700	1095	1419	833	1157	1480
1400	993	1416	1838	1063	1487	1911
1500	1155	1632	2108	1243	1720	2196
1600	1274	1808	2342	1376	1910	2444
1800	1551	2209	2866	1677	2335	2992

CAST PIPES



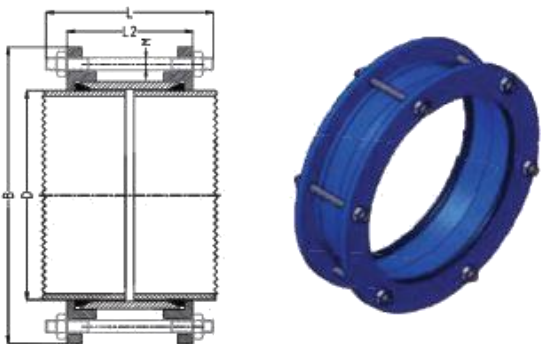
DN	PN10 Flanged Socket Pipe with Puddle Mass (KG) for L			PN16 Flanged Socket Pipe with Puddle Mass (Kg) for L		
	1000	1500	2000	1000	1500	2000
100	31	X	X	31	X	X
150	49	X	X	49	X	X
200	70	X	X	70	X	X
250	95	127	X	95	127	X
300	122	161	200	122	161	200
350	148	197	245	154	203	251
400	178	237	295	189	247	305
450	214	283	352	230	299	368
500	247	327	407	278	359	439
600	332	438	543	385	491	597
700	429	563	696	460	595	730
800	544	710	876	582	748	914
900	660	860	1060	708	909	1110
1000	802	1042	1281	885	1125	1365
1100	991	1271	1551	1061	1341	1621
1200	1129	1454	1778	1257	1581	1904
1400	1421	1844	226	1558	1982	2406
1500	1835	2312	2788	2011	2488	2964
1600	1964	2498	3032	2168	2702	3236
1800	2277	2935	3592	2529	3187	3844

FLEXIBLE DISMANTLING JOINT DIMENSIONS



DN	L	e	Pressure 10 Bar			Pressure 16 Bar		
			D	PCD	N	D	PCD	N
80	230	50	200	160	8	200	160	8
100	230	50	220	180	8	220	180	8
125	230	50	250	210	8	250	210	8
150	230	50	285	240	8	285	240	8
200	260	50	340	295	8	340	295	12
250	260	50	400	350	12	400	355	12
300	265	50	455	400	12	455	410	12
350	265	50	505	460	16	520	470	16
400	265	50	565	515	16	580	525	16
450	265	50	615	565	20	640	585	20
500	265	50	670	620	20	715	650	20
600	285	50	780	725	20	840	770	20
700	285	50	895	840	24	910	840	24
800	340	50	1015	950	24	1025	950	24
900	340	50	1115	1050	28	1125	1050	28
1000	340	50	1230	1160	28	1255	1170	28
1200	370	50	1455	1380	32	1485	1390	32
1400	370	50	1675	1590	36	1685	1590	36
1500	370	50	1785	1700	36	1820	1710	36
1600	400	50	1915	1820	40	1930	182	40
1800	400	50	2115	2020	44	2130	2020	44

FLEXIBLE JOINT (GIBAULT)



DN	B	D	L	L2	M
100	220	116.8	140	90	12
150	285	168.2	150	100	12
200	340	219.6	160	115	12
250	400	271	175	130	12
300	455	322.4	200	140	16
350	505	373.8	200	140	16
400	565	425.2	210	150	16
450	615	476.6	220	160	16
500	670	528	230	170	16
600	780	630.8	260	200	16
700	895	733.6	270	210	16
800	1015	836.4	280	220	16
900	1115	939.2	315	235	20
1000	1230	1042.2	235	250	20
1200	1455	1247.6	245	260	20
1400	1675	1453.2	270	270	20
1500	1785	1556	450	300	24
1600	1915	1658.8	460	310	24
1800	2115	1864.4	470	320	24

SOCKET FITTINGS

SOCKET TYPE FITTINGS



Double Socket Bend

DN	e	t	Mass (Kg)
80	7	100	8.6
100	7.2	120	11.4
125	7.5	145	15.7
150	7.8	170	20.5
200	8.4	220	33
250	9	270	48.5
300	9.6	320	68
350	10.2	370	97.5
400	10.8	420	124
450	11.4	470	156
500	12	520	193
600	13.2	620	280
700	14.4	720	455
800	15.6	820	605
900	16.8	920	813
1000	18	1020	1054
1200	20.4	1220	1663
1400	22.8	1220	2220
1600	25.2	1290	3050
1800	28.8	1320	3229



45° Double Socket Bend

DN	e	t	Mass (Kg)
80	7	55	7.7
100	7.2	65	10
125	7.5	75	13.6
150	7.8	85	17.4
200	8.4	110	27
250	9	130	38.5
300	9.6	150	53
350	10.2	175	70
400	10.8	195	89
450	11.4	220	117
500	12	240	139
600	13.2	285	202
700	14.4	330	282
800	15.6	370	378
900	16.8	415	496
1000	18	460	635
1200	20.4	550	986
1400	22.8	515	1273
1600	25.2	565	1740
1800	28.8	610	2296

SOCKET TYPE FITTINGS



22.15°Double Socket Bend

DN	e	t	Mass(Kg)
80	7	40	7.3
100	7.2	40	9.3
125	7.5	50	12.6
150	7.8	55	15.9
200	8.4	65	24
250	9	75	33.5
300	9.6	85	44.5
350	10.2	95	58
400	10.8	110	74
450	11.4	120	95
500	12	130	111
600	13.2	150	157
700	14.4	175	217
800	15.6	195	287
900	16.8	220	373
1000	18	240	470
1200	20.4	285	716
1400	22.8	260	933
1600	25.2	280	1259
1800	28.8	305	1663

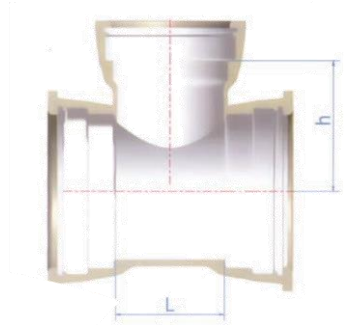


11.25° Double Socket Bend

DN	e	t	Mass(Kg)
80	7	30	7.1
100	7.2	30	8.9
125	7.5	35	11.9
150	7.8	35	14.8
200	8.4	40	22
250	9	50	30.5
300	9.6	55	40.5
350	10.2	60	52
400	10.8	65	65
450	11.4	70	83.5
500	12	75	96
600	13.2	85	134
700	14.4	95	181
800	15.6	110	239
900	16.8	120	305
1000	18	130	381
1200	20.4	150	568
1400	22.8	130	747
1600	25.2	140	1007
1800	28.8	155	1331

Dimensions in mm.

TEE SOCKET FITTINGS



Size		Dimensions		Mass (kg)
DN	dn	L	h	T-Type
80	80	170	85	12.8
100	80	170	95	14.8
100	100	190	95	16.1
150	80	170	120	21.5
150	100	195	120	23.5
150	150	255	125	28
200	80	175	145	30
200	100	200	145	32
200	150	255	150	37
200	200	315	155	43
250	80	180	170	-
250	100	200	170	59
250	150	260	175	-
250	200	315	180	72
250	250	375	190	81
300	100	205	195	67.5
300	150	260	200	-
300	200	320	205	79.5
300	250	375	210	-
300	300	435	220	116
350	80	325	260	-
350	100	325	260	81
350	150	325	270	98
350	200	325	270	-
350	250	495	280	-
350	300	495	285	-
350	350	495	290	142
400	80	325	280	-
400	100	325	285	131
400	150	325	295	-

Size		Dimensions		Mass (kg)
DN	dn	L	h	T-Type
400	200	325	295	145
400	250	560	300	-
400	300	560	310	-
400	350	560	315	-
400	400	560	320	165
450	80	330	310	-
450	100	330	315	-
450	150	330	320	-
450	200	330	325	-
450	250	445	330	-
450	300	445	335	-
450	350	445	340	-
450	400	620	345	-
450	450	620	350	-
500	80	330	335	-
500	100	330	340	221
500	150	330	345	-
500	200	330	345	188
500	250	450	350	-
500	300	450	360	201
500	350	680	365	-
500	400	680	370	-
500	450	680	375	-
500	500	680	380	335
600	80	340	385	-
600	100	340	390	-
600	150	340	395	248
600	200	340	395	328
600	250	570	400	-
600	300	570	405	-

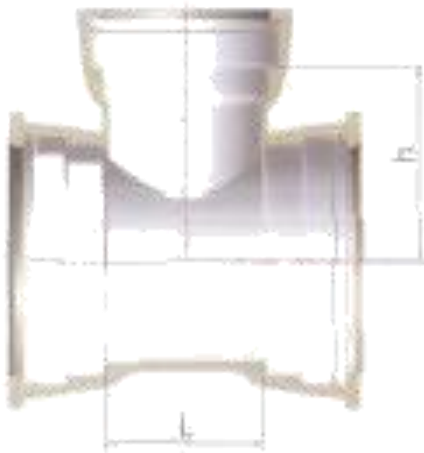
Size		Dimensions		Mass (kg)
DN	dn	L	h	T-Type
600	350	570	410	-
600	400	570	420	-
600	450	800	425	-
600	500	800	430	-
600	600	800	440	474
700	80	345	435	-
700	100	345	440	-
700	150	345	445	-
700	200	345	450	309
700	250	575	455	-
700	300	575	460	-
700	350	575	465	-
700	400	575	470	403
700	450	810	480	-
700	500	810	485	-
700	600	810	490	-
700	700	925	500	580
800	80	350	485	-
800	100	350	485	-
800	150	350	490	-
800	200	350	495	332
800	250	500	500	-
800	300	500	510	-
800	350	500	515	-
800	400	500	520	382
800	450	815	525	-
800	500	815	530	-
800	600	815	540	493
800	700	1045	550	-
800	800	1045	565	747

Dimensions in mm.

TEE SOCKET FITTINGS

Size		Dimensions		Mass (kg)
DN	dn	L	h	T-Type
900	80	355	540	-
900	100	355	540	-
900	150	355	545	-
900	200	355	545	826
900	250	590	550	-
900	300	590	555	-
900	350	590	560	-
900	400	590	570	464
900	450	820	580	-
900	500	820	585	-
900	600	820	590	592
900	700	1170	600	-
900	800	1170	615	-
900	900	1170	625	943
1000	80	360	590	-
1000	100	360	590	-
1000	150	360	595	-
1000	200	360	595	1051
1000	250	595	600	-
1000	300	595	610	-
1000	350	595	615	-
1000	400	595	620	940
1000	450	825	625	-
1000	500	825	630	-
1000	600	825	640	1009
1000	700	1290	650	-
1000	800	1290	665	-
1000	900	1290	675	-
1000	1000	1290	685	1644
1200	400	605	720	978
1200	500	840	730	-
1200	600	840	740	1139
1200	700	840	750	-
1200	800	1070	765	-
1200	900	1070	775	-
1200	1000	1500	785	-
1200	1200	1500	805	1900
1400	400	800	820	-
1400	500	1030	830	-

Size		Dimensions		Mass (kg)
DN	dn	L	h	T-Type
1400	600	1030	840	-
1400	700	1030	850	-
1400	800	1300	865	-
1400	900	1300	875	-
1400	1000	1300	885	-
1400	1200	1850	905	-
1400	1400	1850	930	-
1500	400	805	850	-
1500	500	1035	870	-
1500	600	1035	890	-
1500	700	1035	900	-
1500	800	1350	915	-
1500	900	1350	925	-
1500	1000	1350	935	-
1500	1200	1900	955	-
1500	1400	1900	980	-
1500	1500	1900	990	-
1600	400	810	910	-
1600	500	1040	925	-
1600	600	1040	940	-
1600	700	1040	955	-
1600	800	1390	965	-
1600	900	1390	975	-
1600	1000	1390	985	-
1600	1200	1900	1010	-
1600	1400	1900	1030	-
1600	1500	1900	1040	-
1600	1600	1900	1050	-
1800	800	1400	1065	-
1800	900	1400	1075	-
1800	1000	1400	1085	-
1800	1200	1900	1110	-
1800	1400	1900	1130	-
1800	1500	1900	1140	-
1800	1600	2215	1150	-
1800	1800	2445	1175	-

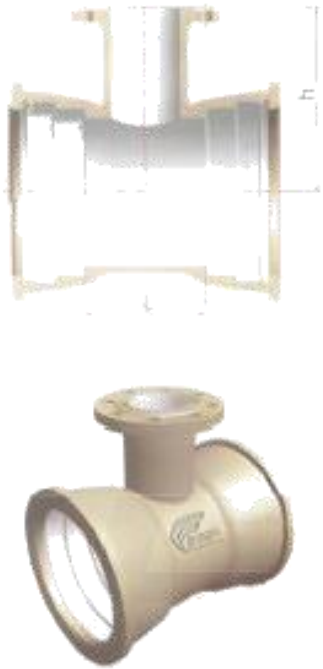


Dimensions in mm.

DOUBLE SOCKET TEE WITH FLANGED BRANCH

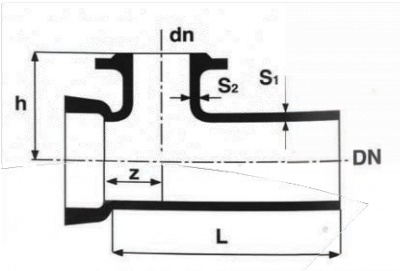
Size		Dimensions		Mass T-type	
DN	dn	L	h	PN10	PN16
80	80	170	165	13.5	13.5
100	80	170	175	15.8	15.8
100	100	190	180	17.2	17.2
150	80	170	205	23	23
150	100	195	210	24.5	24.5
150	150	255	220	29.5	29.5
200	80	175	235	31.5	31.5
200	100	200	240	33.5	33.5
200	150	255	250	39	39
200	200	315	260	45.6	46
250	80	180	265	37.5	-
250	100	200	270	43.5	44
250	150	260	280	50	-
250	200	315	290	57	57
250	250	375	300	65	66
300	80	180	295	50	-
300	100	205	300	55	55
300	150	260	310	66	-
300	200	320	320	71	71
300	250	435	330	-	-
300	300	435	340	89	91
350	80	205	330	59.5	-
350	100	205	330	68	68
350	150	325	350	79	-
350	200	325	350	86	86
350	250	440	360	90	-
350	300	440	370	95	-
350	350	495	380	117	120
400	80	185	355	75	-
400	100	210	360	83	83
400	150	270	370	97.5	-
400	200	325	380	103	103
400	250	440	390	110	-
400	300	440	400	120	-
400	350	560	410	-	-
400	400	560	420	150	156

Size		Dimensions		Mass T-type	
DN	dn	L	h	PN10	PN16
450	100	215	390	90	-
450	150	270	400	115	-
450	200	330	410	121	-
450	250	390	420	-	-
450	300	445	430	150	-
450	350	560	440	170	-
450	400	560	450	-	-
450	450	620	460	-	-
500	100	215	420	116	116
500	150	330	440	137	-
500	200	330	440	142	142
500	250	450	450	155	-
500	300	450	450	-	-
500	350	450	460	160	-
500	400	565	480	199	205
500	450	680	490	-	-
500	500	680	500	232	247
600	100	350	500	-	-
600	150	350	500	-	-
600	200	340	500	189	189
600	250	455	510	-	-
600	300	455	520	190	200
600	350	570	530	210	220
600	400	570	540	258	263
600	450	800	560	-	-
600	500	800	570	-	-
600	600	800	580	340	366
700	100	345	525	-	-
700	150	345	525	-	-
700	200	345	525	300	310
700	250	575	530	-	-
700	300	575	540	-	-
700	350	575	550	-	-
700	400	575	555	320	325
700	450	810	565	-	-
700	500	810	575	-	-



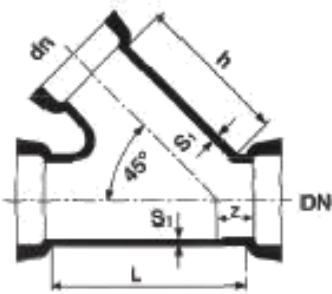
Dimensions in mm.

Socket pipe with Flanged Branch (WORKSNORM)



Nominal size		L	h	z	s1	S2	Mass (approx.)kg	
DN	dn						PN10	PN16
100	80	400	175	85	8.4	8.1	16	16
	100		180	95		8.4	17	17
150	80	500	205	85	9.1	8.1	26.5	26.5
	100		210	97.5		8.4	27.5	27.5
	150		220	127.5		9.1	30.5	30.5
200	80	500	235	87.5	9.8	8.1	36	36
	100		240	100		8.4	37	37
	150	580	250	127.5		9.1	43.5	43.5
	200		260	157.5		9.8	47.5	47

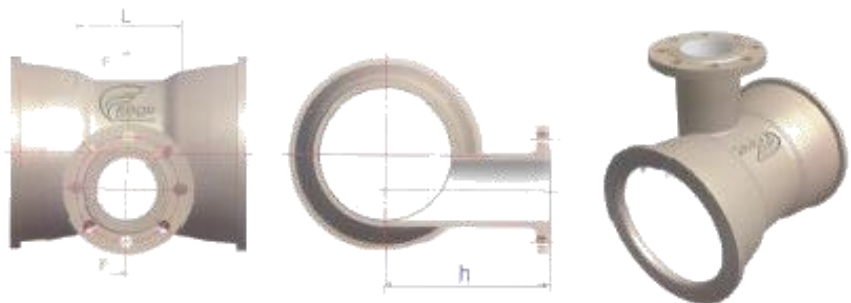
All Socket 45 angel Branch (Work snorm)



Nominal size		L	H	z	s1	Mass (approx.) kg
DN	dn					PN10
100	100	400	305	95	8.4	27
150	150	495	380	115	9.1	44
200	200	590	455	135	9.8	68
250	250	685	530	155	10.5	100
300	300	775	605	175	11.2	145
400	400	970	755	215	12.6	287

Dimensions in mm.

DOUBLE SOCKET LEVEL INVERT TEE WITH FLANGED BRANCH



Size		Dimension		Mass T-Type	
DN	dn	L	H	PN10	PN16
100	80	190	195	-	-
150	80	195	220	35	35
200	80	200	250	40	40
200	100	200	250	-	-
250	80	200	275	50	50
250	100	200	275	52	52
300	80	205	305	62	62
300	100	205	305	64	64
300	150	260	305	70	-
350	80	205	340	-	-
350	100	205	340	83	83
350	150	325	340	-	-
400	80	210	365	-	-
400	100	210	365	98	98
400	150	325	365	-	-
400	200	325	365	-	-
450	80	215	380	-	-
450	100	215	380	115	115
450	150	330	380	-	-
450	200	330	380	-	-

Size		Dimension		Mass T-Type	
DN	dn	L	H	PN10	PN16
500	80	215	400	-	-
500	100	215	400	134	134
500	150	330	400	145	-
500	200	330	400	-	-
600	80	340	435	-	-
600	100	340	435	173	173
600	150	340	450	-	-
600	200	340	450	-	-
700	150	345	500	-	-
700	200	345	500	300	300
800	150	350	540	-	-
800	200	350	540	370	370
900	150	355	580	-	-
900	200	355	580	475	475
1000	150	360	630	-	-
1000	200	360	630	570	570
1200	200	445	750	840	840
1400	200	460	850	-	-
1500	200	465	900	-	-
1600	400	700	950	-	-

Dimensions in mm.

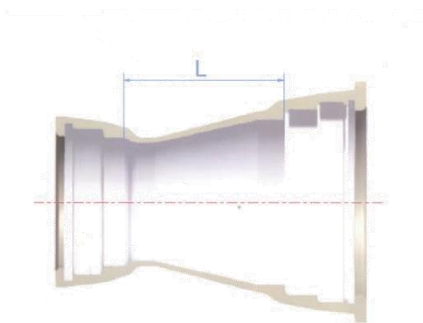
SOCKET TYPE FITTINGS REDUCER

DN	d	L	Mass (kg)
100	80	90	-
150	80	190	-
	100	150	18
200	100	250	25
	150	150	26
250	150	250	35
	200	150	34
300	150	350	49
	200	250	47
350	250	150	46
	200	360	-
400	300	160	-
450	200	460	82
	250	360	80
	300	260	87
500	300	360	99
	400	160	92
	450	460	111
600	400	260	103
	500	160	98
	400	460	156
700	500	260	131
	600	680	-
	500	480	-
800	600	280	-
	500	680	-
	600	480	252
	700	280	229



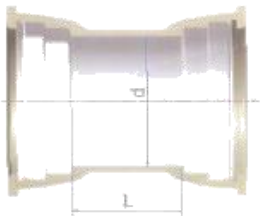
Double Socket Reducer

DN	d	L
900	500	800
	600	680
	700	480
	800	280
1000	600	840
	700	680
	800	480
	900	280
1200	700	1020
	800	870
	900	670
	1000	480
1400	800	760
	900	660
	1000	560
1500	1200	360
	1400	660
	1000	460
	1400	360
1600	1000	760
	1200	560
	1400	360
	1500	260
1800	1200	760
	1400	560
	1600	360



Dimensions in mm.

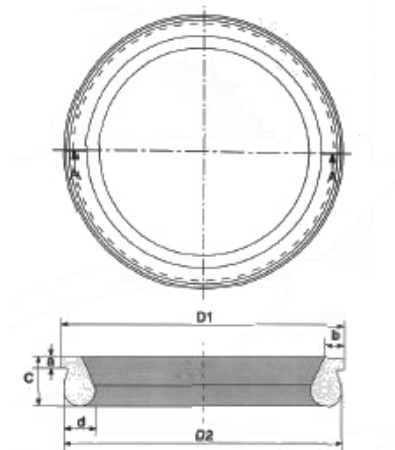
COLLAR



DN	d	L	Mass (kg)
80	109	160	7.9
100	130	160	9.9
150	183	165	15.9
200	235	170	23
250	288	175	31.5
300	340	180	41
350	393	185	52
400	445	190	64
450	498	195	88
500	550	200	93
600	655	210	129
700	760	220	172
800	865	230	223
900	970	240	282
1000	1075	250	349
1100	1180	260	479
1200	1285	270	560
1400	1477	340	816
1500	1580	350	974
1600	1683	360	1094
1800	1889	380	1427

Dimensions in mm.

SOCKET TYPE FITTING



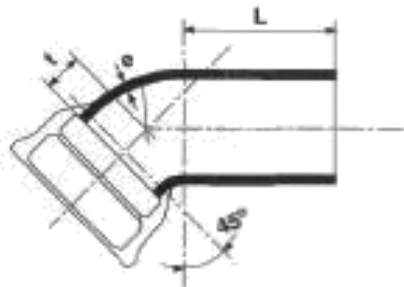
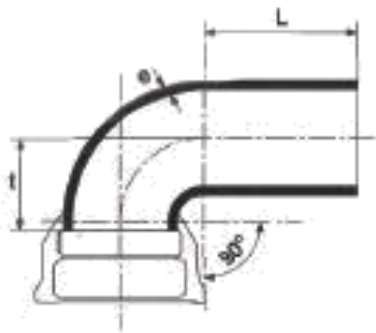
DN	DIMENSIONS					
	D1	D2	b	c	d	e
80	128	126	10	26	15	6.5
100	148	146	10	26		6.5
150	202	200	10	26	16	6.5
200	258	256	11	30	18	6.5
250	313	310	11	32	18.5	6.5
300	369	366	12	34	19.5	7
350	424	420	12	34	19.5	8
400	479	475	13	36	21	8
450	532	528	13	38	21.5	8
500	588	583	14.5	44	24	9
600	697	692	15.5	47	26	10
700	795	790	19	54	31.5	12
800	919	913	21	60	35.5	13
900	1026	1020	22.5	65	37.5	14
1000	1133	1127	22.5	70	39.5	14
1200	1357	1351	22	68	39	13.5
1400	1581	1561	22	64	38.5	13.5

Dimensions in mm.



UPVC FITTINGS

SOCKET SPIGOT BEND



Socket Spigot 90° Bend

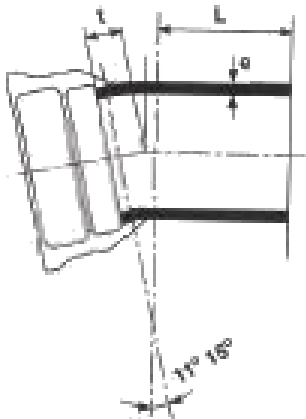
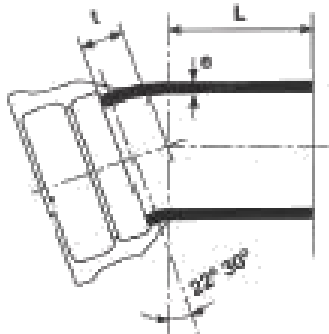
DN	e	t	L	Mass (Approx.) KG PN10/16
80	7	100	280	9.2
100	7.2	120	395	12.4
150	7.8	170	325	22.5
200	8.4	220	355	39
300	9.6	320	355	81
400	10.8	420	400	175
500	12	520	400	197
600	13.2	620	500	270

Socket Spigot 45° Bend

DN	e	t	L	Mass (Approx.) KG PN10/16
80	7	55	280	8.3
100	7.2	65	295	13
150	7.8	85	325	22
200	8.4	110	355	32
300	9.6	150	355	60
400	10.8	195	400	100
500	12	240	400	152
600	13.2	285	500	235

Dimensions in mm.

SOCKET SPIGOT BEND



Socket Spigot 22.30° Bend

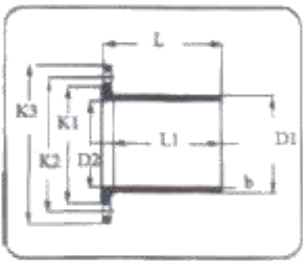
DN	e	t	L	Mass (Approx.) KG PN10/16
80	7	40	280	8
100	7.2	40	295	10.5
150	7.8	55	325	18
200	8.4	65	355	28
300	9.6	85	355	50
400	10.8	110	400	85
500	12	130	400	125
600	13.2	150	500	190

Socket Spigot 11.15° Bend

DN	e	t	L	Mass (Approx.) KG PN10/16
80	7	30	280	7.7
100	7.2	30	295	10
150	7.8	35	225	17
200	8.4	40	355	2617
300	9.6	55	335	47
400	10.8	65	400	67
500	12	75	400	110
600	13.2	85	500	167

Dimensions in mm.

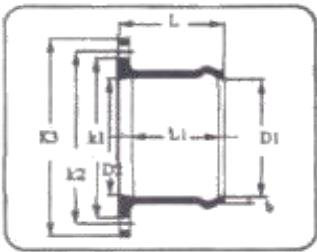
FLANGED SPIGOT



DN	D1	D2	L	L1	K1	K2 10 16	K3 10 16	Holes		B	Mas s (KG)
								PN10	PN 16		
63	63	47	115	95	95	125/135	175	4	4	8	4
75	75	61	135	115	115	125/135	185	4	4	8	4.5
90	90	72	140	120	135	160	200	4	8	9	6
110	110	92	158	130	150	180	200	8	8	9	8
125	125	106	160	135	180	210	250	8	8	9.5	10
140	140	12	172	150	185	210	250	8	8	10	10.5
160	160	140	180	160	205	240	285	8	8	10	13
200	200	178	185	145	260	295	340	8	12	11	21
225	225	203	227	200	270	295	340	8	12	11	21
250	250	226	180	150	310	350/355	395/405	12	12	12	31
280	280	256	185	150	315	350/355	395/405	12	12	12	32
315	315	289	235	205	355	400/410	445/460	12	12	15	37
355	355	300	270	240	365	400/415	445/460	12	12	16	58
355	355	327	270	240	415	460/470	505/520	16	16	16	62
400	400	380	290	255	476	515/525	565/580	16	16	18	67
450	450	410	305	265	480	515/525	565/580	16	16	18	92
500	500	445	325	276	525	565/585	615/640	20	20	20	122

Dimensions in mm.

FLANGED SOCKET



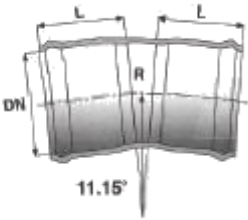
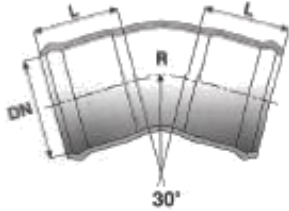
DN	D1	D2	L	L1	K1	K2 10 16	K3 10 16	Holes	
								PN10	PN16
63	65.5	50	120	100	100	125/135	175	4	4
75	77.3	65	120	100	115	125/135	185	4	4
90	92.3	80	120	100	135	160	200	4	8
110	112.6	100	125	105	150	180	220	8	8
125	128	115	164	141	180	210	250	8	8
140	143	125	145	110	185	210	250	8	8
160	163.5	150	145	120	205	240	285	8	8
200	203.5	195	148	160	263	295	340	8	12
225	228.5	200	190	140	270	295	340	8	12
250	253.5	235	210	175	315	350/355	395/405	12	12
280	283.5	250	225	195	315	350/355	395/405	12	12
315	318.5	300	424	210	355	400/410	455/460	12	12
355	358.5	300	265	225	360	400/410	455/460	12	12
355	358.5	330	265	225	415	460/470	505/520	16	16
400	404	360	260	220	460	515/525	565/580	16	16
450	445	400	290	250	470	515/525	565/580	16	16
500	405	455	315	275	530	565/585	615/640	20	20

Dimensions in mm.

Double Socket Bend

30° Double Socket Bend

DN	R	L	Mass(kg)
63	50	102	2.7
75	60	113	3.7
90	80	120.5	5
110	100	128	7.1
125	125	133.5	9.2
140	125	139.5	11.5
160	150	149.5	15.9
200	200	165.7	24.4
225	200	186	31.4
250	250	204	39.6
280	250	208	43
315	300	219	63.1



11.15° Double Socket Bend

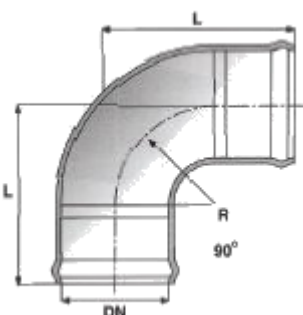
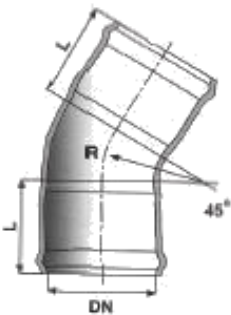
DN	R	L	Mass(kg)
63	50	102	2.5
75	60	113	3
90	80	120.5	5
110	100	128	6.5
125	125	133.5	8.5
140	125	139.5	10.1
160	150	149.5	15.5
200	200	165.7	20.8
225	200	186	32
250	250	204	33
280	250	208	41.7
315	300	219	45

22.50° Double Socket Bend

DN	R	L	Mass(kg)
63	50	102	2.5
75	60	113	3.3
90	80	120.5	4.8
110	100	128	6.5
125	125	133.5	8.8
140	125	139.5	11
160	150	149.5	15
200	200	165.7	23
225	200	186	35
250	250	204	36
280	250	208	45.5
315	300	219	59.5

Dimensions in mm.

DOUBLE SOCKET BEND



45°Double Socket Bend

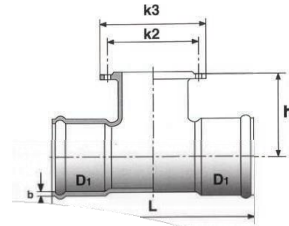
DN	R	L	MASS(KG)
63	50	102	2.8
75	60	113	4
90	80	120.5	5.5
110	100	128	7.5
125	125	133.5	10.3
140	125	139.5	13
160	150	149.5	17
200	200	165.7	26
225	200	186	36
250	250	204	43
280	250	208	49.5
315	300	219	70.5
355	350	227	88
400	400	234	120
500	505	244	165

90° Double Socket Bend

DN	R	L	MASS(KG)
63	50	152	3
75	60	173	4.5
90	80	200	5.7
110	100	228	9.2
125	125	258	11.5
140	125	264	15.5
160	150	299	21
200	200	365	31.5
225	200	386	39
250	250	445	52
280	250	458	53.2
315	300	519	92.5
355	350	577	110
400	400	634	180
500	505	749	245

Dimensions in mm.

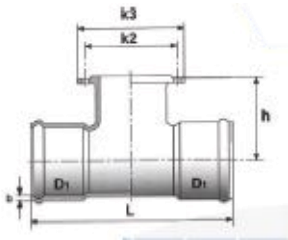
DOBLE SOCKET TEE WITH FLANGED BRANCH



DN*dn	D1	L	H	B	K2	K3	Holes		Mass(KG)
							PN 10	PN 16	
63*50/60	65.3	280	140	8	125/135	175	4	4	8
75*50/60	77.3	295	151	8	125/135	175	4	4	8.5
90*50/60	92.3	292	160	9	125/135	175	4	4	9
90*80	92.3	328	165	9	160	200	4	8	12
110*50/60	112.5	326	172	9	125/135	175	4	4	13
110*80	112.5	330	172	9	160	200	4	8	14
110*110	112.5	355	175	9	180	220	8	8	16
125*50/60	128	440	233	9.5	125/135	175	4	8	18
125*80	128	440	233	9.5	160	200	4	4	18
125*100	128	440	233	9.5	180	220	8	8	20
125*125	128	440	235	10	210	250	8	8	22
140*50/60	143.3	350	190	10	125/135	175	4	8	17
140*80	143.3	360	200	10	160	200	4	4	17
140*100	143.3	370	200	10	180	220	8	8	18
140*125	143.3	428	202	10	210	250	8	8	22
160*50/60	163.5	376	200	10	125/135	175	4	8	20
160*80	163.5	376	200	10	160	200	4	4	21
160*100	163.5	376	202	10	180	202	8	8	22
160*125	163.5	473	206	10	210	250	8	8	26
160*150	163.5	473	208	11	240	285	8	8	30
200*50*60	203.5	480	220	11	125/135	175	4	4	29
200*80	203.5	480	220	11	160	200	4	8	30
200*100	203.5	480	230	11	180	220	8	8	32
200*125	203.5	530	240	11	210	250	8	8	33
200*150	203.5	530	270	11	240	258	8	8	35
200*200	203.5	490	270	11	295	240	8	12	50
225*50/60	228.5	490	230	11	125/135	175	4	4	36
225*80	228.5	490	230	11	160	200	4	8	36
225*100	228.5	490	240	11	180	220	8	8	39
225*125	228.5	490	260	11	210	250	8	8	41
225*150	228.5	490	270	11	240	285	8	8	43
225*200	228.5	530	400	11	295	340	8	12	55
250*50/60	253.3	535	230	12	125/135	175	4	4	50
250*820	253.3	535	230	12	160	200	4	8	50

Dimensions in mm.

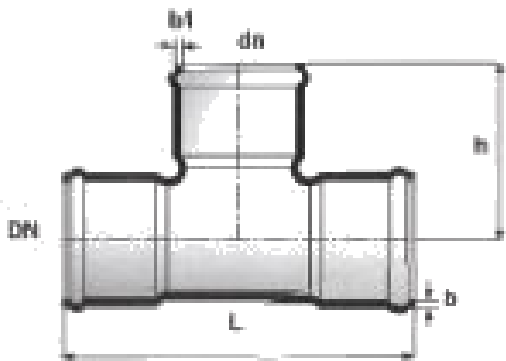
DOUBLE SOCKET TEE WITH FLANGED BRANCH



DN*dn	D1	L	H	B	K2	K3	Holes		Mass(KG)
							PN 10	PN 16	
250*100	254	535	230	12	180	220	8	8	50
250*125	254	535	240	12	210	250	8	8	54
250*150	254	535	240	12	240	285	8	8	54
250*200	254	655	250	12	295	340	8	12	75
250*250	254	655	250	12	350/355	395/405	12	12	78
280*80	284	542	240	12	160	200	4	8	52
280*100	284	542	240	12	180	220	8	8	58
280*125	284	542	240	12	210	250	8	8	62
280*150	284	542	240/270	12	240	285	8	8	66
280*200	284	710	270	12	295	340	8	12	75
280*250	284	710	250	12	250/355	395/405	12	12	77
315*80	319	490	250	9	160	200	4	8	55
315*100	319	490	250	9	180	220	8	8	57
315*125	319	490	250	9.5	210	250	8	8	61
315*150	319	490	250	10	240	285	8	8	62
315*200	319	600	270	11	295	340	8	12	110
315*250	319	600	270	12	350/355	295/405	12	12	110
315*300	319	600	280	9	400/410	245/480	12	12	110
355*100	359	600	310	9.5	180	220	8	8	75
355*125	359	600	310	10	210	250	8	8	76
355*150	359	600	310	11	240	285	8	8	77
355*200	359	840	340	12	295	340	8	12	105
355*250	359	840	340	14	350/355	395/405	12	12	115
355*300	359	840	350	9	400/410	400/460	12	12	122
400*100	404	710	310	9.5	180	220	16	8	100
400*125	404	710	310	10	210	250	8	8	102
400*150	404	710	310	11	240	285	8	8	105
400*200	404	880	340	12	295	340	8	12	118
400*250	404	880	340	12	350/355	395/405	12	12	125
400*300	405	880	350	14	400/410	455/460	12	12	135
400*350	405	880	350	14	460/470	505/520	16	16	140
500*100	404	710	400	9	180	220	8	8	150
500*125	404	710	400	9.5	210	250	8	8	145
500*150	404	710	400	10	240	285	8	8	158

Dimensions in mm.

ALL SOCKET TEE



DN*dn	L	H	B	B1	MASS(KG)
225*200	540	380	11	11	46
225*225	540	380	11	11	47
250*63-110	535	230	12	9	45
250*125-160	535	230	12	10	47
250*200-250	655	240	12	12	66
280*63-110	542	240	12	9	50
280*125-160	542	240	12	10	60
280*200-280	710	260	12	12	78
315*110-160	795	250	14	10	68
315*200-225	745	270	14	11	88
315*250-315	754	270	14	14	105
355*110-160	600	310	14	10	75
355*200-250	840	340	14	12	92
355*280-355	840	350	14	14	108
400*110-160	710	310	16	10	100
400*200-280	880	340	16	12	110
400*315-400	880	340	16	16	150
500*110-160	710	340	18	10	150

DN* dn	L	H	B	B1	MASS(KG)
63*63	280	137	8	8	4.8
75*63	295	147	8	8	6
75*75	295	149	8	8	6
90*63	302	149	9	8	7.8
90*75	302	149	9	8	8.2
90*90	328	164	9	9	8.8
110*63	326	158	9	8	10
110*75	326	158	9	8	11
110*90	352	173	9	9	11
110*110	372	186	9	9	12.5
125*63	440	180	9.5	8	15
125*75	440	180	9.5	8	15
125*90	440	190	9.5	9	16
125*110	440	200	9.5	9	17
125*125	440	220	9.5	9.5	18
140*63	350	171	10	8	13
140*75	350	171	10	8	14
140*90	378	186	10	9	16
140*110	398	199	10	9	17
140*125	428	210	10	9.5	18

DN*dn	L	H	B	B1	MASS(KG)
140*140	428	213	10	10	18.5
160*63	376	180	10	8	20
160*75	376	180	10	8	21
160*90	402	195	10	9	21
160*110	422	208	10	9	22
160*125	473	235	10	9.5	24
160*140	473	235	10	10	24
160*160	473	235	10	10	25
200*63-75	480	210	11	8	29
200*90	480	220	11	9	30
200*110	480	235	11	9	31
200*125	480	240	11	9.5	32
200*140	480	250	11	10	32
200*160	530	260	11	10	34
200*200	530	265	11	11	35
225*63-75	490	225	11	8	33
225*90-110	490	230	11	9	34
225*125	490	260	11	9.5	35
225*140	490	260	11	10	36
225*160	540	380	11	10	40

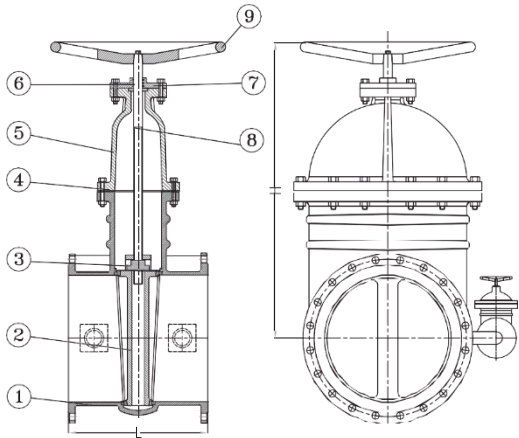
Dimensions in mm.



VALVES & PENSTOCKS

GATE VALVE (NON-RISING STEM-BY BASS)

DN	L	H
400	525	925
450	550	1020
500	550	1120
600	600	1280
700	700	1450
800	750	1640
900	800	1850
1000	800	2030
1200	850	2200



NO	PART LIST	MATERIAL
1	BODY	GGG50
2	WEDGE	GGG50
3	Sealing Ring	BRONZE
4	Stem	STAINLESS STEEL
5	BONNET	GGG50
6	Packing	NBR
7	GALAND	GGG 50
8	Stem Support	STEEL
9	HAND WHEEL	GGG50
10	NAT	GGG50

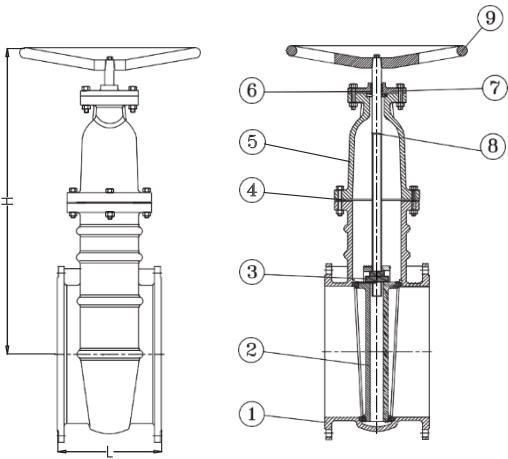
Face to Face From (100-1200mm)DIN
5725/1083
GATE GATE VALVE (NON-RISING STEM) –BY
BASS PN BAR/PN PAR

Dimensions in mm.

GATE VALVE

(NON – RISING STEM)

DN	L	H
50	150	200
65	150	200
80	180	250
100	190	270
150	210	400
200	230	490
250	250	580
300	270	735
350	290	830
400	310	925
450	330	1020
500	350	1120
600	390	1280
700	430	1450
800	470	1640
900	510	1850
1000	550	2030
1200	590	2200



NO	PART LIST	MATERIAL
1	BODY	GCG50
2	WEDGE	GCG50
3	NAT	BRONZE
4	GASKEG	ASBESTOS FREE
5	BONNET	GCG50
6	STEM SEAL	RABAER
7	GALAND	GCG 50
8	STEM	STAINLESS STEEL
9	HAND WHEEL	GCG50

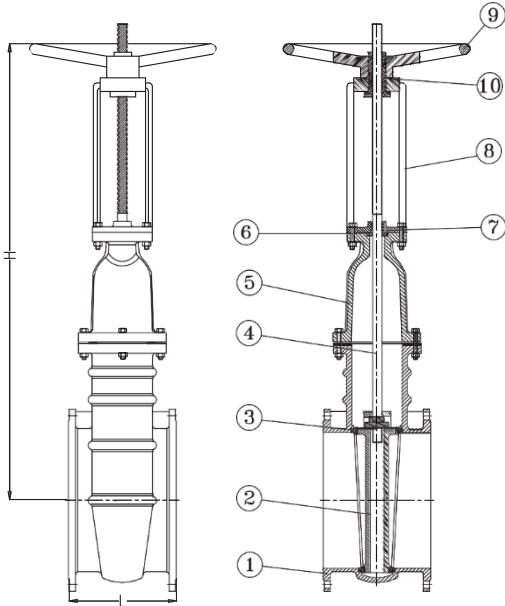
Face to Face From (50-1200mm)DIN
5725/1083
GATE VALVE (NON-RISING STEM) PN 10
BAR/PN16 PAR

The company its Rights For Modification With out notice

Dimensions in mm.

GATE VALVE (RISING STEM)

DN	L	H
100	190	470
150	210	650
200	230	790
250	250	930
300	270	1150
350	290	1320
400	310	1470
450	330	1620
500	350	1770
600	390	2030
700	430	2300
800	470	2600
900	510	2800
1000	550	3200
1200	590	3400



NO	PART LIST	MATERIAL
1	BODY	GGG50
2	WEDGE	GGG50
3	Sealing Ring	BRONZE
4	Stem	STAINLESS STEEL
5	BONNET	GGG50
6	Packing	NBR
7	GALAND	GGG 50
8	Stem Support	STEEL
9	HAND WHEEL	GGG50
10	NAT	GGG50

Face To Face is From (65-300mzn)
DIN5725/1083 GATE VALVE
(RISING STEM) PN 10 BAR/ PN 16
BAR

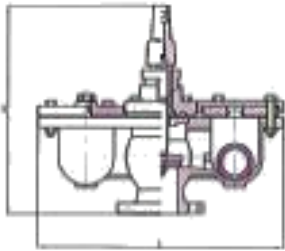
The Company its Rights for Modfication Without notice

Dimensions in mm.

DOUBLE BALL AIR VALVE

TYPE A – PN10/16

Size (DN)	L	H
50	468	388
65	468	388
80	468	388
100	555	472
150	742	550
200	850	620

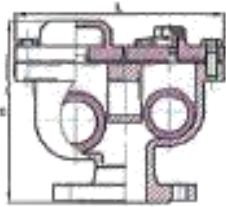


Material	
Body	Cast iron / Ductile Iron
Cover	Cast iron / Ductile Iron
Ball	NBR/ABS
Stem	Stainless Steel /Brass

Remark : Our design can be suitable for all standards (BS, DIN, ANSI, J IS standard etc.)

TYPE A – PN10/16

Size (DN)	L	H
50	240	211
65	256	211
80	305	261
100	328	269
150	392	320
200	455	370



Material	
Body	Cast iron / Ductile Iron
Cover	Cast iron / Ductile Iron
Ball	NBR/ABS

Remark : Our design can be suitable for all standards (BS, DIN, ANSI, J IS standard etc.)

The Company its Rights for Modifiction without notice

Dimensions in mm.

BUTTERFLY VALVES

SHORTER FACE TO FACE DIMENSIONS

According to Egyptian Standards 2134/1992 I.S.O.5752

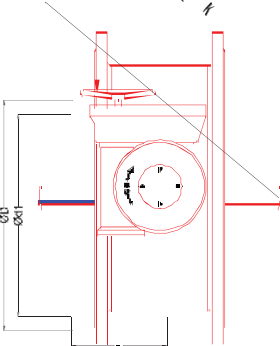
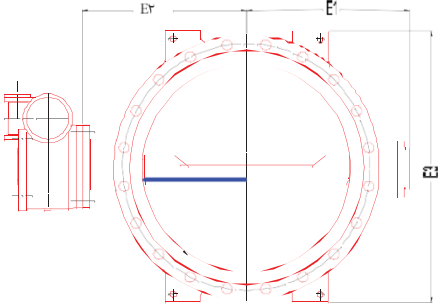
Short face to face dimension, double flanged ,
smaller space requirement , suitable for water works ,
with extended shaft for operating with gear box

Materials :

Body , disk	Ductile cast iron G G G 50
Main gasket	EPDM
Shafts Bearing	stainless steel Bronze
Retaining ring	Brass – cast iron

On request we can supply gearbox Master Gear

Body test	Seat tost	Note
Pressure (bar)	pressure (bar)	Table (4) of I.S.O.
10	6	5208-1992 (E) will be
16	10	considered on testing of
25	16	valves



Flange connection in accordance with E.S. 91-971
I.S.O. 1986-2531 , or any other international standard

Nominal Diameter	Len gth	Width		Dimensions and drilling of flanges for P.N10				Dimensions and drilling of flanges for P.N.16			
				O	O	NO OF HOLE S	O	O	O	NO OF HOLES	O
DN	L	O ₁	O ₂	D	K		I	D	K		I
300	178	235	273	455	400	12	23	455	410	12	28
350	190	260	313	505	460	16	23	520	470	16	28
400	216	303	345	565	515	16	28	580	525	16	31
500	229	372	415	670	620	20	28	715	650	20	34
600	267	425	465	780	725	20	31	840	770	20	37
700	292	480	505	895	840	24	31	910	840	24	37
800	318	520	575	1015	950	24	34	1025	950	24	40
900	330	600	660	1115	1050	28	34	1125	1050	28	40
1000	410	700	800	1230	1160	28	37	1255	1170	20	43
1100	450	755	840	1340	1270	28	37	1355	1270	28	43
1200	470	800	900	1455	1380	32	40	1485	1390	32	49
1300	530	880	985	1575	1500	32	40	1585	1490	32	49
1400	530	940	1045	1675	1590	36	43	1685	1590	36	49
1500	530	1005	1140	1785	1710	36	43	1820	1725	36	49

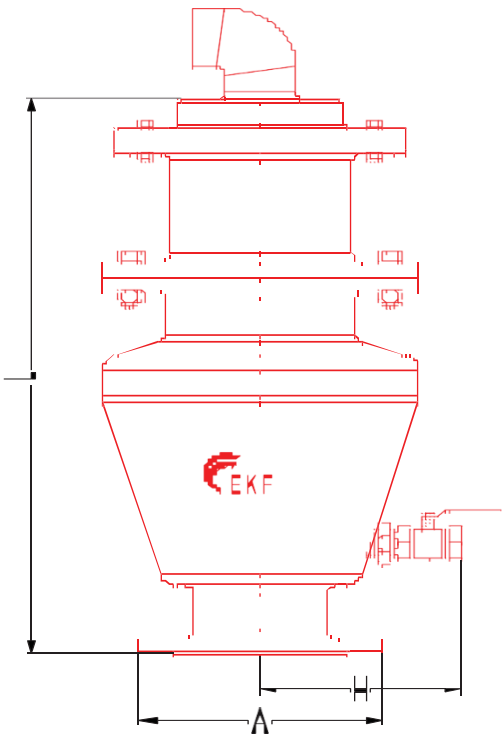
The Company its Rights for Modifiction without notice

Dimensions in mm.

SEWAGE AIR VALVE

Dimensions and weights

Nominal Diameter (ND)	A	L	H
100	220	600	190
150	285	850	243
200	340	850	243



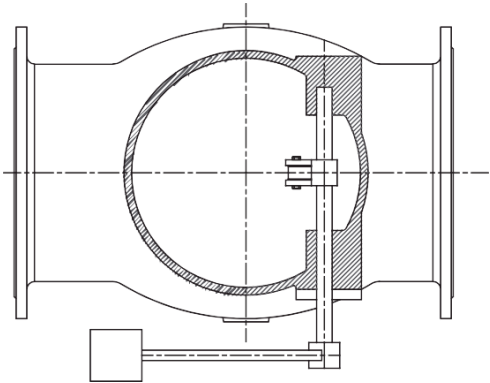
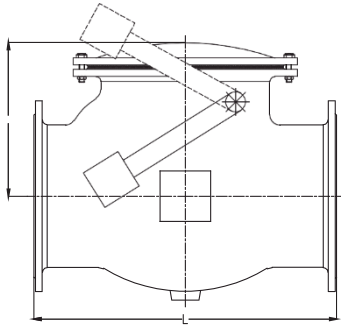
Material Table

Part Name	Material	Material number	Remark
Body / Cover	Ductile iron	ISO1083 grade 500-7	Equivalent to DIN 16393(GGG50)
Float and rood	ST.ST	AISI316	
Nozzle /gasket holder	ST.ST	AISI 316	
Nuts .bolts	ST.ST	A2	
Gaskets	NBR		
Sealing seat	bronze		

The Company its Rights for Modifiiction without notice

Dimensions in mm.

NON-RATURN VALVE



PN16

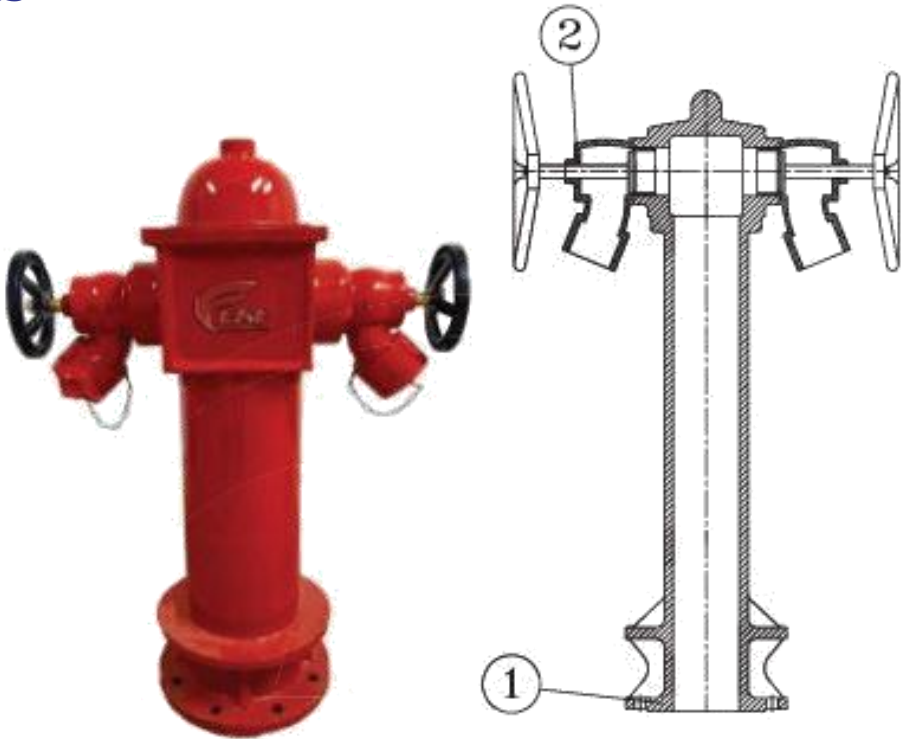
DN	L	H	HI
100	300	150	100
150	400	205	135
200	500	250	170
250	600	290	190
300	700	360	210
350	800	460	250
400	900	515	320
500	1000	570	370
600	1100	630	440
700	1200	680	490
800	1350	730	570
900	1500	820	660
1000	1650	950	740



Face To Face According to (3202) F6
Flanges According To ISO2531

The Company its Rights for Modification without notice

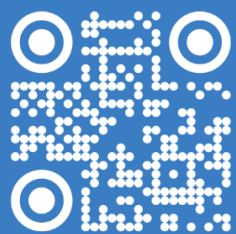
Fire hydrants



NO	PART LIST	MATERIAL
1	BODY	GGG/GG
2	COPPER VALVE OUT LET	BRONZE

According to the Egyptian Standard specifications
EN 14384-1561-7775

The Company its Rights for Modification without notice



Phone:

+02 2275 79 65
+02 01004101040
+02 01000091582

Mail:

info@2-pq.com

2PQ Headquarter:

52 Moez El-Dawla, Nasr City, Cairo

Factory:

Meet Halfa, Slow Road, Qalyub, Qalyubia, Egypt
