TIROLER ROHRE GmbH

Ductile cast iron pipe systems for

sewage

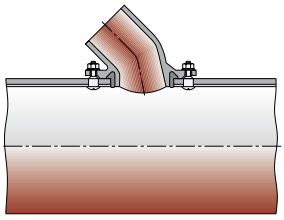
- Resistant to root penetration
- Long-lived
- Able to carry high static loads
- Extensive range of fittings
- Can be used for gravity and pressure pipelines

Ductile iron sewer pipes and fittings

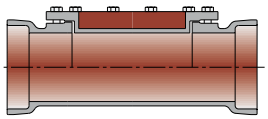
for gravity and pressure sewage pipelines

Ductile iron sewer pipes

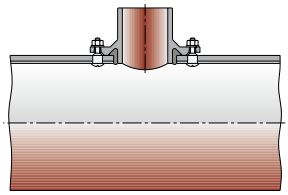
45° saddles (SI 45)



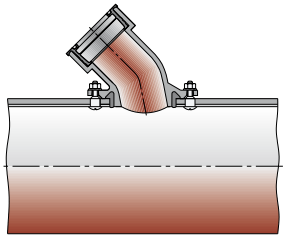
Socket cleanout fittings (RRM)



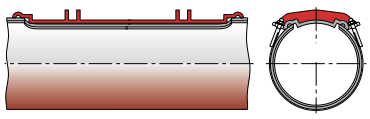
90° saddles (SI 90)



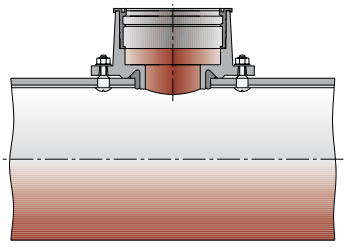
45° saddles (SM 45)



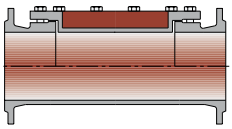
Cleanout covers (RD)



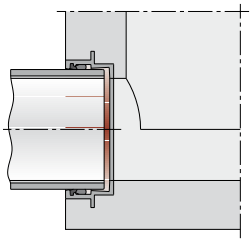
90° saddles (SM 90)



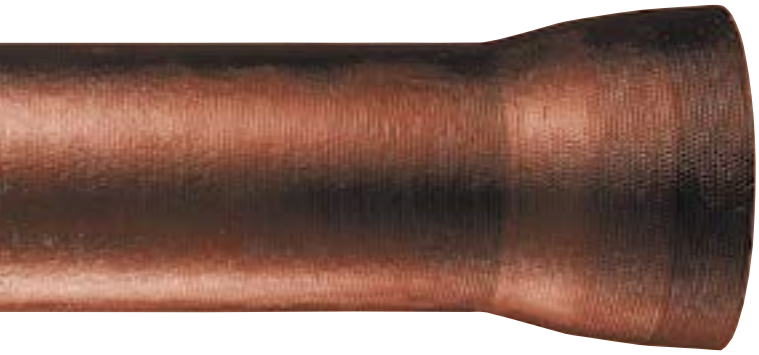
Flanged cleanout fittings (RRF)



Manhole connectors (SCH)



Arguments to convince you



You need to be certain that sewage will arrive safely at the point where it is going to be treated. By using ductile iron sewer pipes you have this certainty and safety.

Why are ductile iron sewer pipes safe? Because they are fully sealed.

Groundwater cannot get into the sewer. The sewage cannot escape and contaminate the ground because the material and the joints stop it from doing so. It is easy for sewer pipes to carry the high external loads generated by soil pressure and traffic loads.

Sewage is corrosive – but that is no problem for Duktus ductile iron pipes because the lining of high-alumina cement mortar means that the pipes are armed even against severe biogenic sulphuric acid attack. Even acid, highly lime-dissolving or sulphate-rich sewage cannot do anything to the pipes or joints. The lining maintains its abrasion resistance even at high rates of flow such as may occur in steep sections of the pipeline.

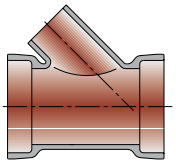
Put your money on ductile iron, this innovative material, when the safety of your sewers is at stake.

Ductile iron pipes have long been state of the art for transporting drinking water, our most valuable nutritional resource – just one more proof of the material's outstanding properties

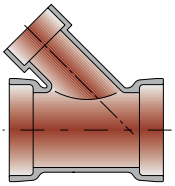
Duktus ductile iron sewer pipes and fittings can be used almost anywhere, including for gravity pipelines and for pipelines running through water protection zones. And Duktus sewer pipes will also provide the right system-based solution for almost all special applications.

All fittings for drinking water can be used for sewer pipelines.
– Just change the gaskets into NBR –

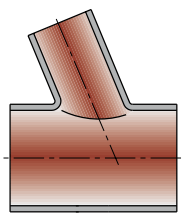
Manhole connectors (SCH)



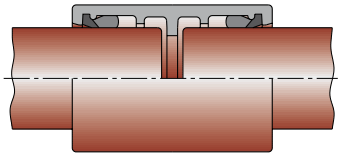
Double socket 45° angle branches (MMM)



Plain ended 67° angle branches (ICI)

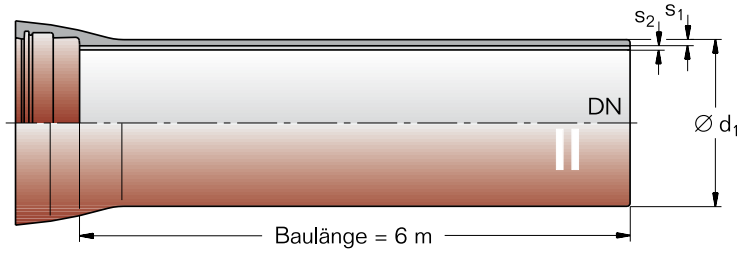


TYTON® couplings (MM)



Ductile iron sewer pipes

with TYTON® push-in joints



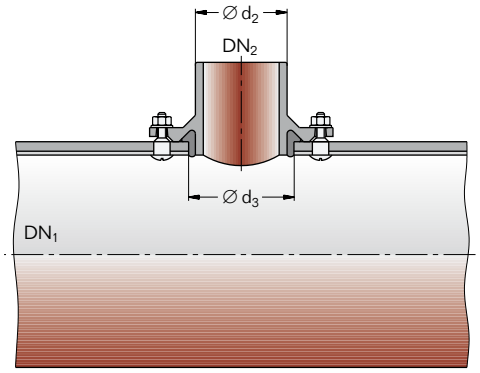
DN	Dimensions [mm]			PFA [1] water [bar]	Weight [kg] [2]	
	Ø d_1	cast s_1	CML s_2		1 m pipe with socket section	one pipe 6 m inst. length
80	98	4.8	4	40	14.8	88,5
100	118	4.8	4	40	18.1	109
125	144	4.8	4	40	22.5	135
150	170	4.8	4	40	26.5	160
200	222	4.9	4	40	35.5	212
250	274	5.3	4	38	44	265
300	326	5.6	4	35	56	334
350	378	6.0	5	32	72.5	433
400	429	6.3	5	30	86.5	517
500	532	7.0	5	28	118	705
600	635	7.7	5	26	153	917
700	738	9.6	6	29	198	1184
800	842	10.4	6	28	242	1453
900	945	11.2	6	27	291	1745
1000	1048	12.0	6	26	344	2063

1) PFA: Allowable operating pressure in bar
2) including CM-lining

SI 90

90° saddles

nach DIN EN 598
PEA 2,4 bar
Innen und außen Epoxidharz-Beschichtung Glattende
passend für Muffen duktiler Abwasserrohre bzw. STZ-Rohre

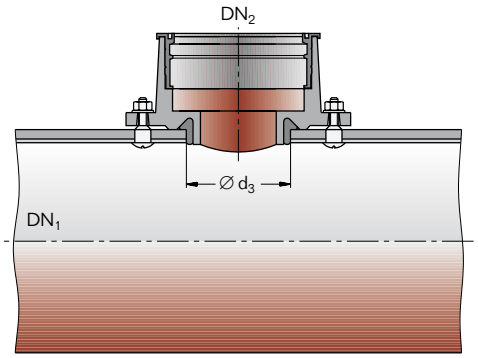


DN_1	DN_2	Dimensions [mm]			Weight [kg] ~	
		Ø d_2		Ø d_3 of bore in pipe	cast	Vitrified clay
		cast	Vitrified clay			
250-300	150	170	186	172	9.1	10.0
300	200	222	242	232	15.3	16.4
350	200	–	242	232	–	15.8
400	200	222	242	232	14.1	15.3
400-600	150	170	186	172	7.2	8.4
500-600	200	222	242	232	13.2	14.4
700-800	200	222	242	232	12.6	13.8
700-1200	150	170	186	172	6.6	7.5
900-1200	200	222	242	232	13.0	15.0

SM 90

90° saddles

in accordance with DIN EN 598
PEA 2.4 bars
Epoxy coated internally and externally
Socket to fit vitrified clay pipes (socket L)
NBR cup gasket

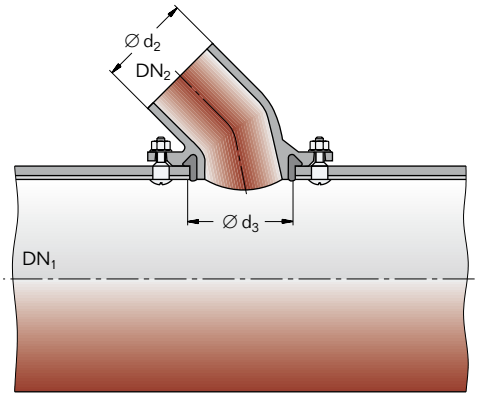


DN_1	DN_2	Dimensions [mm]		Weight [kg] ~
		To fit spigot end of vitrified clay pipes	Ø d_3 of bore in pipe	
250-300	150	186	172	10.3
350				9.8
400-600				9.3
700-1200				8.5

SI 45

45° saddles

in accordance with DIN EN 598
PEA 2.4 bars
Epoxy coated internally and externally
Plain end to fit sockets of ductile iron sewer pipes

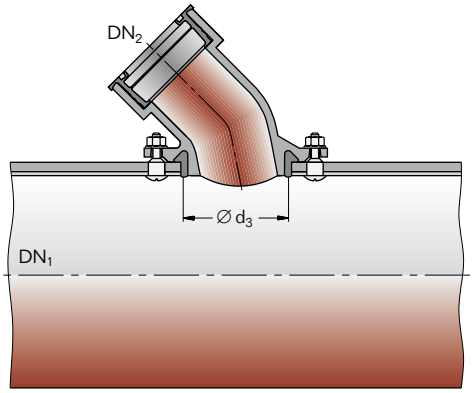


DN_1	DN_2	Dimensions [mm]		Weight [kg]
		Ø d_2 cast	Ø d_3 of bore in pipe	
250-300	150	170	172	14

SM 45

45° saddles

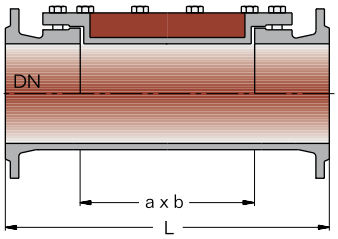
in accordance with DIN EN 598
PEA 2.4 bars
Epoxy coated internally and externally
Socket to fit vitrified clay pipes (socket L)
NBR cup gasket



DN_1	DN_2	Dimensions [mm]		Weight [kg]
		To fit spigot end of vitrified clay pipes	Ø d_3 of bore in pipe	
250-300 350-400	150	186	172	16

RRF
Cleanout fittings

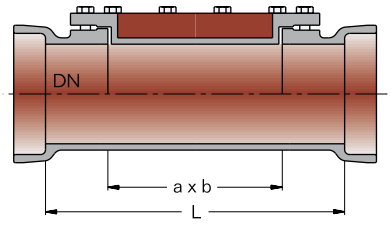
in accordance with works standard
Flanged joints to DIN EN 1092-2, PN 10
Epoxy coated internally and externally



DN	Dimensions [mm]			Weight [kg]
	L	a	b	
100	500	250	100	50
125	550	300	125	70
150	550	300	150	90
200	650	350	200	150
250	700	400	250	200
300	750	450	300	290
350	800	500	350	380
400	900	550	400	450
500	900	550	500	530

RRM
Cleanout fittings

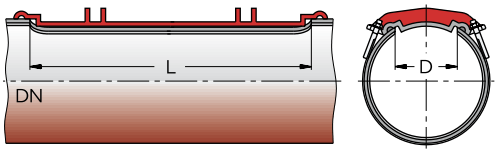
in accordance with works standard
PFA 10 bars
TYTON® push-in joints to DIN 28 603
Epoxy coated internally and externally



DN	Dimensions [mm]			Angular deflection per socket [°]	Weight [kg] ~
	L	a	b		
100	450	250	100	5	48
125	500	300	125		60
150	550	300	150		85
200	600	350	200		130
250	650	400	250		180
300	700	450	300		260
350	750	500	350	4	340
400	850	550	400		400
500	900	550	500	3	480

RD
Cleanout covers

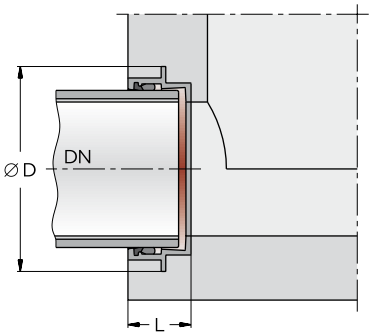
in accordance with DIN EN 598
PEA 2.4 bars
Epoxy coated internally and externally
Galvanized steel clamping clips



DN	Dimensions [mm]		Weight [kg]
	Ø D of bore in pipe	L	
150	107	359	7.5
200	142	394	9.2
250	172	622	17.0
300	212	662	20.0
400			18.0
500			17.8
600	290	640	28.5
700			29.5
800			30.0

SCH
Manhole connectors

in accordance with DIN EN 598
TYTON® push-in joint to DIN 28 603
Epoxy coated internally
Plain metal external surface



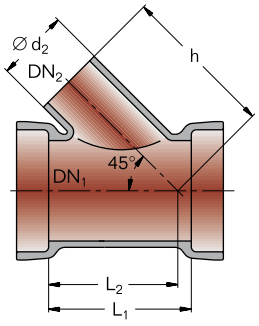
DN	Dimensions [mm]		Angular deflection per socket [°]	Weight [kg]
	Ø D	L		
150	260	100	5	6.0
200	310			7.5
250	360	110		9.5
300	415			12.0
350	465		4	14.5
400	520			16.0
500	635		3	19.5
600	730	120		28.0
700	845	160		54.0
800	950			57.0
900	1050	175		76.0
1000	1160	185		82.0

Larger DNs and bored-out abutting surfaces available to special order

MMI

Double socket 45° angle branches

in accordance with DIN EN 598
PEA 2.4 bars
TYTON® push-in joints to DIN 28 603
Epoxy coated internally and externally
Plain branch to fit sockets of vitrified clay pipes

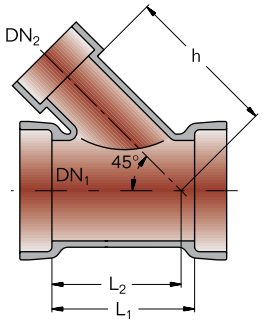


DN_1	DN_2	Dimensions [mm]				Angular deflection per socket [°]	Weight [kg]
		Ø d_2 vitrified clay pipes	L_1	L_2	h		
200	150	186	370	310	400	5	35

MMM

Double socket 45° angle branches

in accordance with DIN EN 598
PEA 2.4 bars
TYTON® push-in joints to DIN 28 603
Epoxy coated internally and externally
Socket to fit vitrified clay pipes (socket L); NBR cup gasket

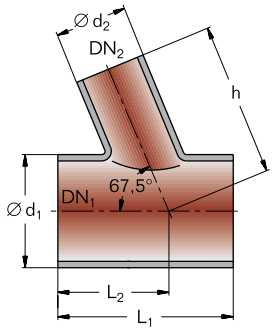


DN_1	DN_2	Dimensions [mm]				Angular deflection per socket [°]	Weight [kg]
		Ø d_2 vitrified clay pipes	L_1	L_2	h		
200	150	186	370	310	400	5	38

ICI

Plain ended 67° angle branches

in accordance with DIN EN 598
PEA 2.4 bars
For TYTON® push-in joints to DIN 28 603
Epoxy coated internally and externally
Plain ends to fit sockets of ductile iron sewer pipes

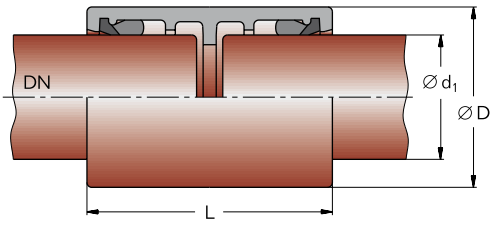


DN1	DN2	Dimensions [mm]					Weight [kg]
		Ø d1	Ø d2	L1	L2	h	
200	150	222	170	568	326	310	26,0

MM

TYTON® couplings

in accordance with DIN EN 598
PFA 6 bars*
TYTON® push-in joints to DIN 28 603
Epoxy coated internally and externally



DN	Dimensions [mm]			Angular deflection per socket [°]	Weight [kg]
	Ø d1	Ø D	L		
150	170	210	160	5	8.0
200	222	262	165		11.5
250	274	315	180		14.7
300	326	370	200		21.0
350	378	425	215	4	29.0
400	429	480	210		36.0
500	532	590	225	3	58.0
600	635	695	250		79.0
700	738	810	305		125.0

Higher pressures available to special order

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