

HDPE 100 - 80 - 63 PIPE & FITTING SYSTEMS



#1 HDPE PIPE TECHNOLOGY IN THE WORLD



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MEGA-THERM[®] HDPE PIPE & FITTINGS

Middle East's leading producer of HDPE pipes

Ulkumen Ardila is a manufacturer and supplier of High and Low Density Polyethylene and Polypropylene extruded pipe. Our products enjoy widespread acceptance in Civil Engineering, Agricultural, Mining and Domestic applications.

Ulkumen Ardila is one of only 3 manufacturers countrywide who have been able to produce up to 630mm HDPE pipes and in the near future the company's aim is to be able to produce HDPE pipes up to 1200mm.

Mega-Therm brand accredited pipes are manufactured at our Iskenderun factory and we provide a countrywide delivery service through our competent sales and distribution network as well as exports to Middle Eastern, North African, CIS & Balkan countries due to her strategic location.

Ulkumen Ardila has 80 staff and selected bilingual personnel, trained to serve our clients with the best of the products & services. Founded on the principle of giving our customers the best possible goods and attention, we are assured of continued progress and expansion. This guiding business principle and one -other, top management's dedication to the success of our companies – has propelled ULKUMEN GROUP firms into a state of continuous growth and made a leading brand in Turkey, Middle East, North Africa, CIS countries and Eastern Europe

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HDPE Pressure Pipe Systems

High density polyethylene pipe has been used extensively around the world since the 1950's. The unique properties of High density polyethylene pipe have offered an alternative to traditional material like steel and copper and also in non pressure applications where clay and fibre cement pipes were used.

The material has been developed internationally from PE 80 to today's PE 100 material which has shown a saving of approximately 30% on the wall thickness from the early days of Polyethylene. This mass saving relates back to a cost saving and a better performance as the internal diameter of the pipe is bigger. In many cases, because of the excellent flow characteristics of Polyethylene, pipes could be down sized while still performing within the expected parameters.

The pipes' properties such as impact resistance and resistance to abrasion have made HDPE pipe the obvious choice in the Infrastructure, Civil Engineering, Mining and Industrial markets.

Piping made from polyethylene is a cost effective solution for a broad range of piping applications in the municipal, water networks, industrial, marine, mining, landfill, duct and agricultural industries. It has been tested and proven effective for above ground, surface, buried, slip-lined, floating and sub-surface marine applications.

High-density polyethylene pipe (HDPE) can carry clean water, potable water, wastewater, slurries, chemicals, hazardous wastes, and compressed gases. In fact, polyethylene pipe has a long and distinguished history of service in the gas, oil, mining and other industries. It has the lowest repair frequency per kilometer of pipe per year compared with all other pressure pipe materials used for urban gas distribution.

Polyethylene is a strong, extremely tough, very durable product which offers long service and trouble-free installation.

Applications



High Density Polyethylene pressure pipes are specified with confidence in the following applications:

- **Civil engineering.** Water mains and reticulation systems
- **Building.** House connections and water reticulation systems
- **Agriculture.** Irrigation and water supply schemes
- **Industrial.** Conveyance of chemicals and water in most industrial plants
- **Mining.** Conveyance of water and air in underground operations. Used extensively in treatment and recovery plants.

HDPE is generally used for high pressure applications ranging from 3.2 to 25 Bar, in conjunction with compression, butt weld or electrofusion fittings.

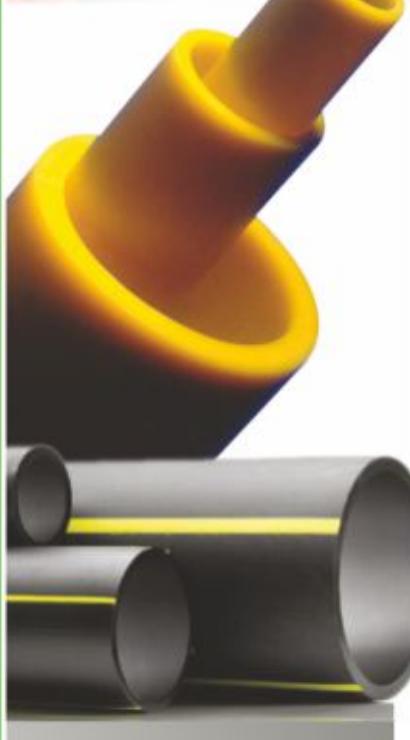
MEGA-THERM HDPE piping conforms to the TSE ISO 4427-1:2007 specification.

Quality



HDPE pipe is manufactured to the relevant TSE ISO 4427-1:2007 and international quality specifications.





Characteristics of HDPE pipe

HDPE Material

Polyethylene pressure pipe systems offer many advantages when compared to traditional products, namely:

- Weather resistance in above ground applications
- Highly corrosion resistant
- Ease of handling and installation, exceptional toughness
- Excellent abrasion resistance
- Manufactured in long lengths and coils
- Manufactured to internationally accepted standards
- Service performance in excess of 50 years

Resistance to weather degradation

Carbon black in the formulation of the pipe raw material enables HDPE pipe to resist degradation by ultraviolet rays. The pipe is impervious to rain and wind conditions.

Chemical resistance

HDPE pipes are chemically inert but there are some chemicals which could affect the pipe. As the product is also not electrically conductive, reactions cannot take place within the pipe and affect its performance.

HDPE has excellent corrosion resistance and is virtually inert so it does not need expensive cathodic protection. It offers better resistance to corrosive acids, bases and salts than most piping materials and also has good resistance to many organic substances such as solvents and fuels.

Natural soil chemicals cannot degrade the pipe in any way.

Ease of handling

Conventional materials are much heavier than HDPE and will require cranes and lifting gear. Handling of the

product can often be done by hand allowing ease of installation in confined spaces and difficult terrain.

High strength and flexibility

HDPE material has a high degree of impact resistance and is robust and ductile. Pipes can bend quite easily allowing for savings in design as less critical angle changes can be made without bends. HDPE pipe can be laid across uneven surfaces and in narrow trenches. Pipe can be joined outside of the trench before installation into the trench. The ability to absorb pressure surges makes the product superior to other plastic pipe materials.

Even in sub zero temperatures HDPE can still perform to expectation.

Resistance to abrasion

Where very abrasive mediums have to be transported HDPE has proved itself to be the pipe product of choice. HDPE outperforms traditional pipe materials such as steel and steel with sacrificial layers (rubber lined steel).

The product is used extensively in mine tailings and washing plants.

Co-efficient of friction

The smooth internal surface of the pipe and the impermeability of HDPE allows a greater flow capacity and minimal friction loss. It has less drag and a lower tendency for turbulence at high velocity. Its superior chemical resistance and non-stick surface combines to eliminate scaling and pitting. This preserves the excellent hydraulic characteristics throughout the pipe's service life.

When designing pipelines, use the Hazen-Williams C factor of 150 and an n factor of 0.009, when using the Manning formula.

Specifications

The TS 418 / EN 12201 1-2, ISO 4427, DIN8074-D1N 8075 specification has been superseded in part by the adoption of the TS 418 / EN 12201 1-2, ISO 4427, DIN8074-D1N 8075 for HDPE pipe systems.

The following table shows which specifications are currently applicable for LDPE and HDPE pipe systems:

TSE 418 / EN 12201 1-2	ISO 4427 - 1 / 2007
Part 1: LDPE Type I	-
Part 2: HDPE Type IV	PE 63 HDPE
Part 3: HDPE Type V	PE 80 HDPE
-	PE 100 HDPE



Notes:

- The HDPE pipe dimensions and pressure classes in the TSE ISO 4427-1/2007 specification remain unchanged when compared to the 533: Parts 2 and 3 specification, except where calculated in terms of ISO 4065.
- The adoption of the ISO 4427-1/2007 specification has resulted in the change of notation for HDPE piping from Types IV and V to PE 63 and 80. The 63, 80 and 100 refer to various grades of HDPE polymer and their design stresses.
- The TSE 418/EN 12201 1-2 Part 1 specification remains in force and is applicable to LDPE systems only.

Product range

HDPE PE 80 (Type V) is based on a design stress value of 6.3MPa, which results in the manufacturing of pipe with a thinner wall, and consequently greater ID than the PE 63 (Type IV) specification. This results in material savings and improved flow characteristics.

HDPE PE 100 pipe is based on a design stress value of 8.0MPa, which results in an even thinner pipe wall thickness than PE 80 pipe due to the higher grade of material.

	PE 100	PE 80 (Type V)	PE 63 (Type IV)
Pressure classes	PN 4, 6.3, 8, 10, 12.5, 16, 20 and 25	PN 3.2, 4, 6.3, 8, 10, 12.5, 16 and 20	PN 3.2, 4, 6.3, 8, 10, 12.5 and 16
Working pressures	400, 630, 800, 1000, 1250, 1600, 2000 & 2500 kPa	320, 400, 630, 800, 1000, 1250, 1600 & 2000 kPa	320, 400, 630, 800, 1000, 1250 & 1600 kPa
Design stress	8.0 MPa	6.3 MPa	5.0 MPa

Pipe size	Pipe lengths							
16 to 63mm	6m	9m	12m	30m	-	50m	100m	400m
75 and 110mm	6m	9m	12m	30m	-	50m	100m on request. Not standard	
110mm to 630mm	6m	9m	12m	-	13.5m	-	24m on request only. Transport dependant	

Jointing systems

HDPE pipes can be joined using the following methods:

Compression fittings	
Size	16 to 160mm
Pressure	PN 16 (16 to 110mm) PN 10 (160mm)
Range	Complete range of elbows, couplings and flange adaptors

Stub flange and backing ring	
Size	50 to 630mm
Drilling	TD T10 to 16 and ASA 150

Electrofusion and butt weld fittings	
Size	20 to 630mm
Pressure	PN 4 - PN 25
Range	Complete range of elbows, couplings and adaptors

Takstubs and victaulic stubs	
Size	63 to 315mm
Pressure	PN 16 (Takstubs) PN 10 (Victaulic)
Range	Fitted to either coils or straight lengths

HDPE pipe dimensions



PE 63 Nominal working Pressure HDS 5MPa								(Class) PN 3.2				(Class) PN 4			
PE 80 Nominal working Pressure HDS 6.3MPa				(Class) PN 3.2				(Class) PN 4							
PE 100 Nominal working Pressure HDS 8MPa				(Class) PN 4								(Class 6) PN 6.3			
Standard diameter ratio				SDR 41				SDR 33				SDR 26			
Nominal size mm	Mean outside diameter		Maximum out of roundness	Wall thickness t		Pipe ID and mass		Wall thickness t		Pipe ID and mass		Wall thickness t		Pipe ID and mass	
	Min	Max	Ovality	Min	Max	ID	Kg/m	Min	Max	ID	Kg/m	Min	Max	ID	Kg/m
16	16	16.3	1.20												
20	20	20.3	1.20												
25	25	25.3	1.20												
32	32	32.3	1.30									1.6	1.9	29	0.16
40	40	40.4	1.40									1.6	1.9	37	0.20
50	50	50.5	1.40	1.6	1.9	47	0.25	1.6	1.9	47	0.25	1.9	2.3	46	0.30
63	63	63.6	1.50	1.6	1.9	60	0.32	1.9	2.2	59	0.38	2.4	2.8	58	0.48
75	75	75.7	1.60	1.8	2.1	71	0.43	2.3	2.6	70	0.53	2.9	3.3	69	0.67
90	90	90.9	1.80	2.2	2.5	86	0.62	2.7	3.1	85	0.77	3.5	4.0	83	0.97
110	110	111.0	2.20	2.7	3.1	105	0.93	3.3	3.8	103	1.15	4.2	4.9	101	1.45
125	125	126.2	2.50	3.0	3.5	119	1.20	3.8	4.4	117	1.48	4.8	5.5	115	1.87
140	140	141.3	2.80	3.4	3.9	133	1.51	4.2	4.9	132	1.86	5.4	6.2	129	2.34
160	160	161.5	3.20	3.9	4.4	152	1.94	4.8	5.4	150	2.40	6.2	6.9	148	3.02
180	180	181.7	3.60	4.4	4.9	172	2.46	5.5	6.1	169	3.04	6.9	7.8	166	3.82
200	200	201.8	4.00	4.9	5.5	191	3.03	6.1	6.8	188	3.75	7.7	8.6	185	4.71
225	225	227.1	4.50	5.5	6.1	214	3.83	6.8	7.6	212	4.73	8.7	9.6	208	5.95
250	250	252.3	5.00	6.1	6.8	238	4.73	7.6	8.4	235	5.84	9.6	10.7	231	7.35
280	280	282.6	9.80	6.8	7.6	267	5.94	8.5	9.5	263	7.33	10.8	12.0	259	9.22
315	315	317.9	11.10	7.7	8.6	300	7.51	9.5	10.6	296	9.27	12.1	13.5	291	11.67
355	355	358.2	12.50	8.7	9.7	338	9.54	10.8	12.0	334	11.78	13.7	15.2	328	14.82
400	400	403.6	14.00	9.8	10.9	381	12.11	12.1	13.5	376	14.95	15.4	17.2	369	18.81
450	450	454.1	15.60	11.0	12.2	429	15.29	13.6	15.1	423	18.88	17.3	19.2	416	23.75
500	500	504.5	17.50	12.2	13.5	477	18.88	15.2	16.8	470	23.31	19.2	21.3	462	29.32
560	560	565.0	19.60	13.7	15.2	534	23.68	17.0	18.8	527	29.24	21.5	23.9	517	36.78
630	630	635.7	22.10	15.4	17.1	600	29.98	19.1	21.2	593	37.01	24.2	26.9	582	46.56

PE 63 Nominal working Pressure HDS 5MPa								(Class 6) PN 6.3				(Class) PN 8			
PE 80 Nominal working Pressure HDS 6.3MPa				(Class 6) PN 6.3				(Class) PN 8				(Class) PN 10			
PE 100 Nominal working Pressure HDS 8MPa				(Class) PN 8				(Class) PN 10				(Class) PN 12.5			
Standard diameter ratio				SDR 21				SDR 17				SDR 13.6			
Nominal size mm	Mean outside diameter		Maximum out of roundness	Wall thickness t		Pipe ID and mass		Wall thickness t		Pipe ID and mass		Wall thickness t		Pipe ID and mass	
	Min	Max	Ovality	Min	Max	ID	Kg/m	Min	Max	ID	Kg/m	Min	Max	ID	Kg/m
16	16	16.3	1.20												
20	20	20.3	1.20									1.6	1.9	17	0.10
25	25	25.3	1.20					1.6	1.9	22	0.12	1.8	2.2	21	0.14
32	32	32.3	1.30	1.6	1.9	29	0.16	1.9	2.2	28	0.18	2.4	2.8	27	0.23
40	40	40.4	1.40	1.9	2.2	36	0.24	2.4	2.8	35	0.29	2.9	3.4	34	0.35
50	50	50.5	1.40	2.4	2.8	45	0.37	2.9	3.4	44	0.45	3.7	4.3	42	0.55
63	63	63.6	1.50	3.0	3.5	57	0.59	3.7	4.3	55	0.72	4.6	5.4	53	0.88
75	75	75.7	1.60	3.6	4.1	68	0.82	4.4	5.1	66	1.00	5.5	6.3	63	1.23
90	90	90.9	1.80	4.3	4.9	81	1.19	5.3	6.1	79	1.45	6.6	7.6	76	1.78
110	110	111.0	2.20	5.2	6.0	99	1.77	6.5	7.4	97	2.16	8.1	9.3	93	2.66
125	125	126.2	2.50	6.0	6.8	113	2.29	7.4	8.5	110	2.79	9.2	10.6	106	3.43
140	140	141.3	2.80	6.7	7.7	126	2.87	8.2	9.5	123	3.50	10.3	11.8	119	4.30
160	160	161.5	3.20	7.6	8.5	145	3.70	9.4	10.5	141	4.51	11.8	13.2	136	5.55
180	180	181.7	3.60	8.6	9.6	163	4.68	10.6	11.9	158	5.71	13.2	14.8	153	7.02
200	200	201.8	4.00	9.5	10.7	181	5.78	11.8	13.2	176	7.05	14.7	16.5	170	8.66
225	225	227.1	4.50	10.7	11.9	203	7.30	13.2	14.8	198	8.90	16.5	18.4	191	10.95
250	250	252.3	5.00	11.9	13.3	226	9.01	14.7	16.4	220	10.99	18.4	20.5	212	13.51
280	280	282.6	9.80	13.3	14.9	253	11.30	16.5	18.4	246	13.79	20.6	23.0	238	16.95
315	315	317.9	11.10	15.0	16.7	285	14.30	18.5	20.7	277	17.45	23.2	25.8	267	21.45
355	355	358.2	12.50	16.9	18.8	321	18.16	20.9	23.3	312	22.16	26.1	29.1	301	27.24
400	400	403.6	14.00	19.0	21.2	352	23.06	23.5	26.2	352	28.13	29.4	32.8	340	34.58
450	450	454.1	15.60	21.4	23.8	407	29.12	26.5	29.4	396	35.52	33.1	33.7	382	43.68
500	500	504.5	17.50	23.8	26.4	452	35.94	29.4	32.6	440	43.85	36.8	40.8	425	53.92
560	560	565.0	19.60	26.7	29.6	506	45.08	32.9	36.6	493	55.00	41.2	45.7	476	67.63
630	630	635.7	22.10	30.0	33.3	570	57.07	37.1	41.1	555	69.62	46.3	51.4	535	85.60

HDPE pipe dimensions (cont.)



PE 63 Nominal working Pressure HDS 5MPa				(Class) PN 10				(Class) PN 12.5				(Class) PN 16			
PE 80 Nominal working Pressure HDS 6.3MPa				(Class) PN 12.5				(Class) PN 16				(Class) PN 20			
PE 100 Nominal working Pressure HDS 8MPa				(Class) PN 16				(Class) PN 20				(Class) PN 25			
Standard diameter ratio				SDR 11				SDR 9				SDR 7.4			
Nominal size mm	Mean outside diameter		Maximum out of roundness	Wall thickness t		Pipe ID and mass		Wall thickness t		Pipe ID and mass		Wall thickness t		Pipe ID and mass	
	Min	Max	Ovality	Min	Max	ID	Kg/m	Min	Max	ID	Kg/m	Min	Max	ID	Kg/m
16	16	16.3	1.20	1.6	1.9	13	0.08	1.8	2.1	12	0.08	2.2	2.5	11	0.10
20	20	20.3	1.20	1.8	2.1	16	0.11	2.2	2.6	15	0.13	2.7	3.2	14	0.15
25	25	25.3	1.20	2.3	2.7	20	0.17	2.8	3.3	19	0.20	3.4	4.0	18	0.24
32	32	32.3	1.30	2.9	3.4	26	0.27	3.6	4.2	24	0.33	4.3	5.1	23	0.39
40	40	40.4	1.40	3.6	4.3	32	0.43	4.4	5.2	31	0.51	5.4	6.3	28	0.60
50	50	50.5	1.40	4.5	5.3	40	0.67	5.6	6.5	38	0.80	6.8	7.9	36	0.94
63	63	63.6	1.50	5.7	6.7	51	1.06	7.0	8.2	48	1.27	8.5	10.0	45	1.50
75	75	75.7	1.60	6.8	7.8	61	1.50	8.3	9.6	57	1.78	10.1	11.7	54	2.11
90	90	90.9	1.80	8.2	9.4	73	2.16	10.0	11.5	69	2.57	12.2	14.0	64	3.04
110	110	111.0	2.20	10.0	11.5	89	3.22	12.2	14.1	84	3.84	14.9	17.1	79	4.53
125	125	126.2	2.50	11.4	13.1	101	4.16	13.9	16.0	96	4.96	16.9	19.4	89	5.86
140	140	141.3	2.80	12.7	14.6	113	5.21	15.6	17.9	107	6.22	18.9	21.8	100	7.34
160	160	161.5	3.20	14.5	16.3	130	6.72	17.8	19.9	123	8.02	21.6	24.2	115	9.48
180	180	181.7	3.60	16.4	18.3	146	8.51	20.0	22.4	138	10.16	24.3	27.2	129	12.00
200	200	201.8	4.00	18.2	20.4	162	10.50	22.2	24.9	154	12.53	27.0	30.3	144	14.81
225	225	227.1	4.50	20.5	22.8	183	13.27	25.0	27.9	173	15.83	30.4	33.9	162	18.71
250	250	252.3	5.00	22.7	25.3	203	16.38	27.8	31.0	192	19.55	33.8	37.7	180	23.10
280	280	282.6	9.80	25.5	28.4	227	20.54	31.1	34.7	216	24.52	37.8	42.2	201	28.97
315	315	317.9	11.10	28.6	31.9	256	26.00	35.0	39.0	242	31.03	42.6	47.5	226	36.67
355	355	358.2	12.50	32.3	36.0	288	33.01	39.4	44.0	273	39.41	48.0	53.5	255	46.56
400	400	403.6	14.00	36.4	40.5	325	41.91	44.4	49.6	308	50.03	54.1	60.3	287	59.11
450	450	454.1	15.60	40.9	45.4	366	52.94	50.0	55.5	347	63.19	60.8	67.5	324	74.67
500	500	504.5	17.50	45.5	50.5	406	65.36	55.6	61.7	385	78.01				
560	560	565.0	19.60	50.9	56.5	455	81.97								
630	630	635.7	22.10	57.3	63.6	512	103.75								

Temperature / Pressure derating

The rated working pressure of an HDPE pipe is determined at 20° C. Where the operating temperature of the fluid in the pipe exceeds 20°C, the pressure rating of the pipe has to be de-rated in order to maintain the designed safety factors of the pipe.

HDPE pipe is not recommended in applications where the fluid temperature exceeds 50°C.

Temperature of fluid in the pipe	Derating factor apply to maximum working pressure
0 - 20	1,0
20 - 25	0,9
25 - 30	0,8
30 - 35	0,7
35 - 40	0,6
40 - 45	0,5
45 - 50	0,4



Design guidelines

Physical and mechanical properties of HDPE

Physical properties	Units	HDPE
Density	kg/m ³	0.958 x 10 ³
Co-efficient of linear expansion	K ⁻¹	16 x 10 ⁻⁵
Thermal conductivity at 20°C	W/m/K	0.50
Specific heat	J/kg/K	2.3 x 10 ³
Softening point (Vicat)	°C	67
Flammability	-	Flammable

Mechanical properties	Units	HDPE
Tensile strength at yield	MPa	26
Elongation at yield	%	10
Modulus of elasticity	MPa	900
Rockwell hardness (Shore)	-	61
Dielectric strength	kV/mm	70

Codes of Practice

Handling

Pipes manufactured in HDPE are strong, durable and easy-to-handle. In common with most construction materials, they should nevertheless be handled with care to avoid damage being caused to the pipes.

Storage

Pipes should be stored on level, flat ground, free of stones or sharp protrusions. The height of the stacked pipe should not exceed 5 coils. Normal exposure to direct sunlight during the contract will not damage the pipe.

Cutting

Carefully cut the pipe ends square using a fine-toothed hand saw. Remove burrs and cutting debris.

Fusion & Jointing

The principle behind heat fusion is to heat two surfaces to a designated temperature, and then fuse them together by application of a sufficient force. This applied force causes the melted materials to flow and mix, resulting in a permanent, monolithic fusion joint. When fused according to the recommended procedures, the fusion or joint becomes as strong as or stronger than the pipe itself in both tensile and pressure properties. MEGA-THERM fusion procedures require specific tools and equipment for the fusion type and for the sizes of pipe and fittings to be joined.

- **Butt Fusion** – This technique consists of heating the squared ends of two pipes, a pipe and fitting, or two fittings by holding them against a heated plate, removing the plate when the proper melt is obtained, promptly bringing the ends together and allowing the joint to cool while maintaining the appropriate applied force.

Saddle Fusion – This technique involves melting the concave surface of the base of a saddle fitting, while simultaneously melting a matching pattern on the surface of the pipe, bringing the two melted surfaces together and allowing the joint to cool while maintaining the appropriate applied force.

- **Socket Fusion** – This technique involves simultaneously heating the outside surface of a pipe end and the inside of a fitting socket, which is sized to be smaller than the smallest outside diameter of the pipe. After the proper melt has been generated at each face to be mated, the two components are joined by inserting one component into the other. The fusion is formed at the interface resulting from the interference fit. The melts from the two components flow together and fuse as the joint cools.
- **Electrofusion Fittings** - Electrofusion fittings have a separate set of jointing instructions. Ensure that you obtain and follow the specific information when you purchase them.
- **Compression Fittings** - Clean the pipe end, lightly lubricate both the interior of the fittings and the pipe end. Slacken the nut and insert the pipe fully into the fitting. Tighten the nut - hand tight and a quarter turn with a strap wrench or nut spanner.

NOTE: Do not overtighten. Overtightening may cause the assembly to leak.

Properly fused polyethylene joints do not leak. If a leak is detected during hydrostatic testing, it is possible for a system failure to occur. Caution should be exercised in approaching a pressurized pipeline and any attempts to correct the leak should not be made until the system has been depressurized.

Note: Polyethylene cannot be joined by solvent bonding or threading. Extrusion welding or hot air welding is not recommended for pressure applications.

Inclement Weather

Polyethylene has reduced impact resistance in sub-freezing conditions. Additional care should be exercised while handling in sub-freezing conditions. In addition, polyethylene pipe will be harder to bend or uncoil.

In inclement weather and especially in windy conditions, the fusion operation should be shielded to avoid precipitation or blowing snow and excessive heat loss from wind chill. The heating tool should also be stored in an insulated container to prevent excessive heat loss. Remove all frost, snow or ice from the OD and ID of the pipe; all surfaces must be clean and dry prior to fusing.

The time required to obtain the proper melt may increase when fusing in cold weather. The following recommendations should be followed:

1. Maintain the specified heating tool surface temperature. **Do not increase the tool surface temperature.**
2. Do not apply pressure during zero pressure butt fusion heating steps.
3. Do not increase the butt fusion joining pressure.

In butt fusion, melt bead size determines heating time; therefore, the procedure automatically compensates when cold pipe requires longer time to form the proper melt size. The outside diameter of polyethylene pipe and fittings will contract in cold weather conditions. This can result in loose or slipping cold rings. For best results, clamp one cold ring in its normal position adjacent to the depth gage. Shim around the pipe behind the clamp with paper, tape, etc., and place a second cold ring over this area. This cold ring will prevent slippage while the inner cold ring will allow for the pipe to expand during the heating cycle of the fusion process.

The proper cycle time for any particular condition can be determined by making a melt pattern on a piece of scrap pipe using the recommended standard heating time. If the melt pattern is incomplete, increase the heating time by three (3) second intervals until a complete melt pattern is established. Each time the procedure is repeated, a new piece of scrap pipe should be used.

For additional information concerning cold weather procedures, refer to ASTM D2657-07, Standard Practice for Heat Fusion Joining of Polyolefin Pipe and Fittings Plastic Pipe Institute PPI TN-42: Recommended Minimum Training Guidelines for PE Pipe Butt Fusion Joining Operators for Municipal & Industrial Projects.

Notes On Fusion Confidence

Reliable fusion joints of polyethylene piping systems can be accomplished under reasonable latitude of conditions. The following is a listing of general notes to help ensure proper equipment and techniques are utilized:

1. **The fusion operator must have adequate training and understanding of the equipment and tools and the fusion procedure**
Improper understanding of the operation of the equipment and tools can produce a fusion of poor quality. The operator must understand thoroughly how to use the equipment and tools, their function and operation. The operator should adhere to the equipment manufacturer's instructions.
Contact pressures and heating/cooling cycles may vary dramatically according to pipe size and wall thickness. Operators should not rely exclusively on automated fusion equipment for joint qualification. In addition, visual inspection and qualification should always be made. If necessary, test fusions should be made to determine correct pressures and heat/cool cycle times. Destructive test methods, such as bend back tests, may be necessary to formulate correct pressures and heat/cool cycle times (refer to Qualification Procedures).
2. **Pipe and fitting surfaces must be clean and properly prepared**
Any contaminants present on the surfaces or poor preparation of the surfaces cannot produce a quality fusion joint. Ensure that all pipe and fitting surfaces are clean. If surfaces are reintroduced to contaminants, they should be cleaned again.
3. **Heater plates must be clean, undamaged and the correct surface temperature.**
Heater surfaces are usually coated with a non-stick material. Cleaning techniques should be used accordingly. If a solvent is deemed necessary, do not use gasoline or other petroleum products. Refer to the equipment manufacturer's instructions for proper cleaning products.
Recommended heating tool temperatures are specified for each procedure. This temperature is indicative of the surface temperature, not the heating tool thermometer. The surface temperature should be verified daily by using a surface pyrometer. If a crayon indicator (melt stick) is used, it should not be used in an area that will be in contact with the pipe or fitting.
If the heater plate is not in use, it is recommended that it be stored in an insulated holder. This not only protects the heater surfaces from contaminants, but it can also prevent inadvertent contact, which can result in serious injuries.
4. **Proper equipment and condition of tools and equipment for the job**
Each type of fusion requires special tools and equipment. Fusions performed with the incorrect fusion equipment, materials or tools can result in a poor fusion.

Fusion Checklist

Inspect pipe lengths and fittings for unacceptable cuts, gouges, deep scratches or other defects. Damaged products should not be used. Refer to InfoBrief No. 4 for allowable surface damage according to the Plastics Pipe Institute (PPI) and the American Gas Association (AGA).

Any surface damage at pipe ends that could compromise the joining surfaces or interfere with fusion tools and equipment should be removed.

Be sure all required tools and equipment are on site and in proper working order.

Pipe and fitting surfaces where tools and equipment are fitted must be clean and dry. Use **clean**, dry, non-synthetic (cotton) cloths or paper towels to remove dirt, snow, water and other contaminants.

Shield heated fusion equipment and surfaces from inclement weather and winds. A temporary shelter over fusion equipment and the operation may be required.

Relieve tension in the line before making connections.

When joining coiled pipe, making an S-curve between pipe coils can relieve tension. In some cases, it may be necessary to allow pipe to equalize to the temperature of its surroundings. Allow pulled-in pipes to relax for several hours to recover from tensile stresses.

Pipes must be correctly aligned before making connections.

Trial fusions.

A trial fusion, preferably at the beginning of the day, can verify the fusion procedure and equipment settings for the actual jobsite conditions. Refer to Qualification Procedures for detailed information on the bend back test procedure.

Butt Fusion

Heater Surface Temperature: Minimum 400 F – Maximum 450 F (204 – 232 °C) Heating tool surfaces must be to temperature before you begin. All points on both heating tool surfaces where the heating tool surfaces will contact the pipe or fitting ends must be within the prescribed minimum and maximum temperatures and the maximum temperature difference between any two points on the heating tool fusion surfaces must not exceed 20 F (11 °C) for equipment for pipe smaller than 18" diameter, or 35 F (19 °C) for larger equipment. Heating tool surfaces must be clean.

Interface pressure : Minimum 60 psi – Maximum 90 psi (4.14 – 6.21 kPa; 4.16 – 6.21 bar)

Interface pressure is used to calculate a fusion joining pressure value for hydraulic butt fusion machines or manual machines equipped with force reading capability. The interface pressure is constant for all pipe sizes and all butt fusion machines. However, fusion joining pressure settings are calculated for each butt fusion machine, which are dependent upon the OD and DR (Dimension Ratio).

For hydraulic machines, the interface pressure, the fusion surface area, the machine's effective piston area and frictional resistance, and if necessary, the pressure needed to overcome external drag resistance, are used to calculate hydraulic fusion joining pressure

gauge settings (refer to Appendix A). The equipment manufacturer's instructions are used to calculate this value. The proper amount of force should be verified by visual inspection of the joint.

NOTE: The interface pressure and the hydraulic gauge pressure are not the same.

For manual machines without force reading capability, the correct fusion joining force is the force required to roll the melt beads over to the pipe surface during joining.

Procedure

1. **Secure**

Clean the inside and outside of the component, pipe or fitting ends by wiping with a clean, dry, lint-free cloth or paper towel. Remove all foreign matter. Align the components of the machine, place them in the clamps, and then close the clamps. **Do not force pipes into alignment against open fusion clamps.** Component ends should protrude past the clamps enough so that facing will be complete. Bring the ends together and check high-low alignment. Adjust alignment as necessary by tightening the high side down.

2. **Face**

Place the facing tool between the component ends, and face them to establish smooth, clean, parallel mating surfaces. Complete facing produces continuous circumferential shavings from both ends. Face until there is minimal distance between the fixed and moveable clamps. If the machine is equipped with facing stops, face down to the stops. Stop the facer before moving the pipe ends away from the facer. Remove the facing tool, and clear all shavings and pipe chips from the component ends. **Do not touch the component ends with your hands after facing.**

3. **Align**

Bring the component ends together, check alignment and check for slippage against fusion pressure. Look for complete contact all around both ends with no detectable gaps, and outside diameters in high-low alignment. If necessary, adjust the high side by tightening the high side clamp. Do not loosen the low side clamp because components may slip during fusion. Re-face if high-low alignment is adjusted.

4. **Melt**

Verify that the contact surface of the heating tool is maintaining the correct temperature. Place the heating tool between the component ends, and move the ends against the heating tool. Bring the component ends together under pressure to ensure full contact. The initial contact pressure should be held very briefly and released without breaking contact. Pressure should be reduced when evidence of melt appears on the circumference of the pipe. Hold the ends against the heating tool **without force** (drag force may be necessary to ensure contact). Beads of melted polyethylene will form against the heating tool at the component ends. When the proper melt bead size is formed, quickly separate the ends, and remove the heating tool. The proper bead size is dependent upon the size of the component. Approximate values are shown in Table I.

Table I **Approximate Melt Bead Size**

Approximate Wall Thickness , inches		Melt Bead Size* (Approximate)	
≤ 0,15	3,8 mm and smaller	1/32" – 1/16"	1 - 2 mm
0,15 - 0,30	3,8 mm - 7,6 mm	1/16"	2 mm
Above 0,30-0,75	Above 7,6 mm - 19 mm	1/8" – 3/16"	3 - 5 mm
Above 0,75-1,15	Above 19 mm - 29,2 mm	3/16" – 1/4"	5 - 6 mm
Above 1,15-1,60	Above 29,2 mm - 40,6 mm	1/4" – 5/16"	6 - 8 mm
Above 1,60-2,20	Above 40,6 mm - 55,9 mm	5/16" - 7/16"	8 -11 mm
Above 2,20-3,00	Above 55,9 mm - 76,2 mm	7/16" - 9/16"	11 mm

**The appearance of the melt swell zone may vary depending on the pipe material. The melt bead width is to be determined by measuring the distance from the heater plate to the melt swell origin.*

During heating, the melt bead will expand out flush to the heating tool surface, or may curl slightly away from the surface. If the melt bead curls significantly away from the heating tool surface, unacceptable pressure during heating may have occurred.

5. Join

Immediately after the heating tool is removed, **quickly** inspect the melted ends, which should be flat, smooth and completely melted. If the melt surfaces are acceptable, immediately and in a continuous motion, bring the ends together and apply the correct joining force (or fusion pressure). The correct fusion pressure will form a double bead that is rolled over to the surface on both ends.

A concave melt surface is unacceptable; it indicates pressure during heating. Do not continue. Allow the component ends to cool and start over with Step 1.

6. Hold

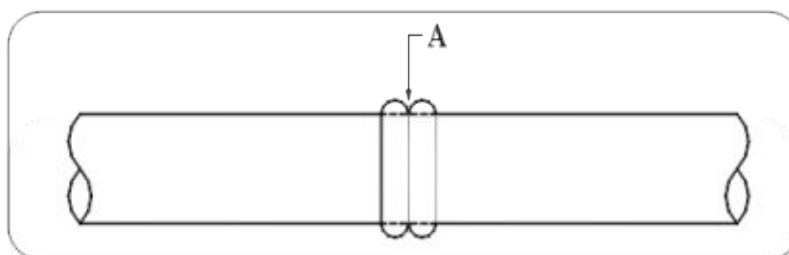
Hold joining force against the ends until the joint is cool. The joint is cool enough for **gentle** handling when the double bead is cool to the touch. Cool for about 30 – 90 seconds per inch of pipe diameter. *Do not try to decrease the cooling time by applying water, wet cloths or the like.*

Avoid pulling, installation, pressure testing and rough handling for at least an additional 30 minutes. Heavier wall thickness pipes require longer cooling times.

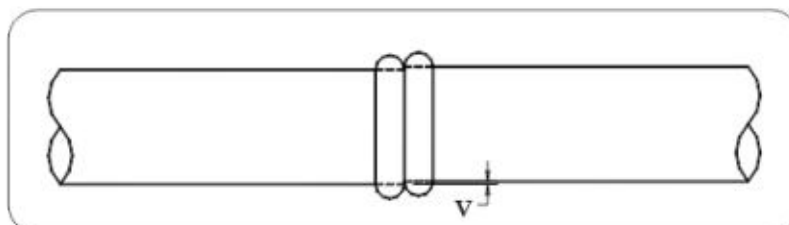
7. Inspection

On both sides, the double bead should be rolled over to the surface, and be uniformly rounded and consistent in size all around the joint.

1. The gap (A) between the two single beads must not be below the fusion surface throughout the entire circumference of the butt joint.



2. The displacement (V) between the fused ends must not exceed 10% of the pipe/fitting minimum wall thickness.



3. Refer to Table II for general guidelines for bead width, B, for each respective wall thickness.

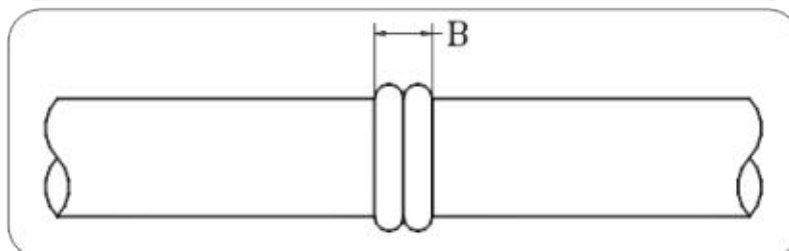


Table II **Bead Widths per Wall Thickness**

Minimum Wall Thickness, in.	Approximate Bead Width (B), in.		Minimum Wall Thickness, in.	Approximate Bead Width (B), in.	
	Minimum	Maximum		Minimum	Maximum
.118	5/32	1/4	1.06	19/32	25/32
.157	5/32	9/32	1.18	5/8	13/16
.197	3/16	5/16	1.34	21/32	7/8
.246	1/4	11/32	1.57	11/16	29/32
.315	9/32	3/8	1.77	25/32	1
.354	5/16	7/16	1.97	7/8	1-1/16
.433	11/32	1/2	2.16	15/16	1-3/16
.512	3/8	9/16	2.36	1	1-1/4
.630	7/16	19/32	2.56	1-1/8	1-7/16
.710	1/2	5/8	2.76	1-3/16	1-1/2
.750	1/2	11/16	2.95	1-1/4	1-9/16
.870	1/2	11/16	3.15	1-5/16	1-11/16
.940	9/16	3/4	3.35	1-3/8	1-3/4
			3.54	1-1/2	1-13/16

Instructions:

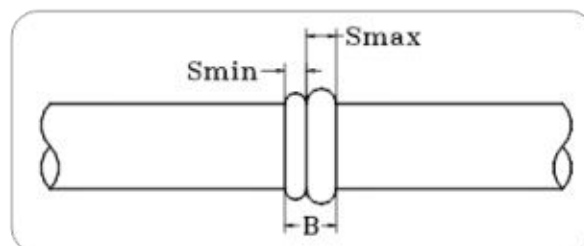
Determine the wall thickness of the pipe/fitting. Find the wall thickness above. If the exact wall thickness is not shown, use the next lowest wall thickness for determination of bead width.

4. The size differential ($S_{\max} - S_{\min}$) between two single beads shall not exceed X% of the actual bead width (B).

$$X = \frac{S}{B} \cdot 100$$

Where

- X = Percent difference of bead width, %
 Pipe to pipe, maximum X = 10%
 Pipe to fitting, maximum X = 20%
 Fitting to fitting, maximum X = 20%
 S = $S_{\max} - S_{\min}$, inches
 B = Width of bead, inches



NOTE: When butt fusing to molded fittings, the fitting side bead may have an irregular appearance. This is acceptable provided the pipe side bead is correct.

Qualification

1. Prepare a sample joint. Sample lengths should be at least 6" or 15 times the minimum wall thickness (see Figure I).
2. Observe the fusion process and verify the recommended procedure for butt fusion is being followed.
3. Visually inspect the sample joint for quality.
4. Allow the joint to cool completely (minimum of one hour).
5. Prepare the sample as shown in Figure I. The sample should be cut lengthwise into at least three longitudinal straps with a minimum of 1" or 1.5 times the wall thickness in width.

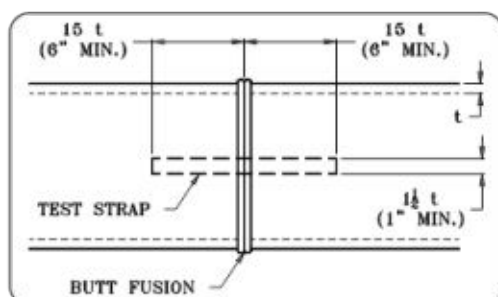
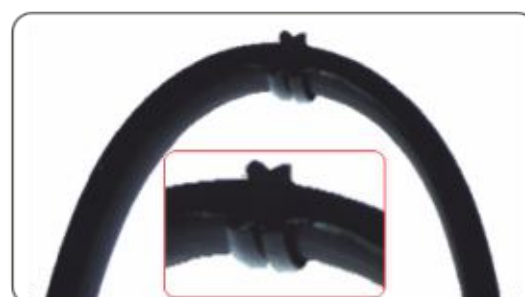


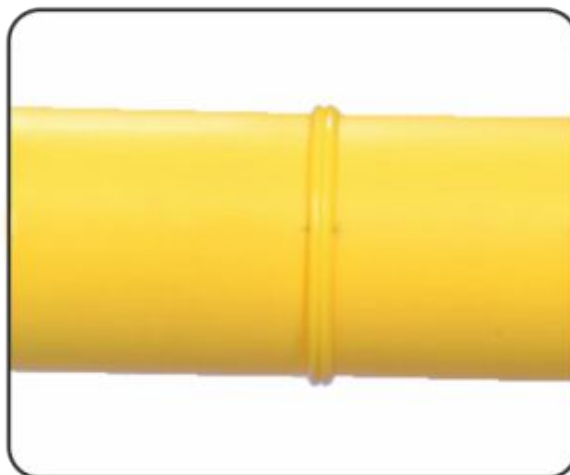
Figure I - Butt Fusion Bent Strap Test Specimen
(Reference ASTM D2657)



Bend back testing. No gaps or voids. (See Figure I)

6. Visually inspect the cut joint for any indications of voids, gaps, misalignment or surfaces that have not been properly bonded.
7. Bend each sample at the weld with the inside of the pipe facing out until the ends touch. The inside bend radius should be less than the minimum wall thickness of the pipe. In order to successfully complete the bend back, a vise may be needed. For thick wall pipe, a hydraulic assist may be required.
8. The sample must be free of cracks and separations within the weld location. If failure does occur at the weld in any of the samples, then the fusion procedure should be reviewed and corrected. After correction, another sample weld should be made per the new procedure and re-tested.

ACCEPTABLE FUSIONS



Proper alignment and double roll-back bead.

Butt Fusion

UNACCEPTABLE FUSIONS



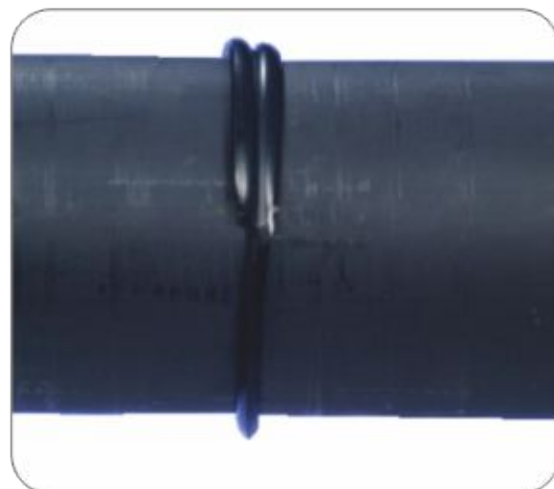
Melt bead too small due to insufficient heat time.



Melt bead too large due to excessive heating and/or over-pressurizing of joint.



Misalignment.

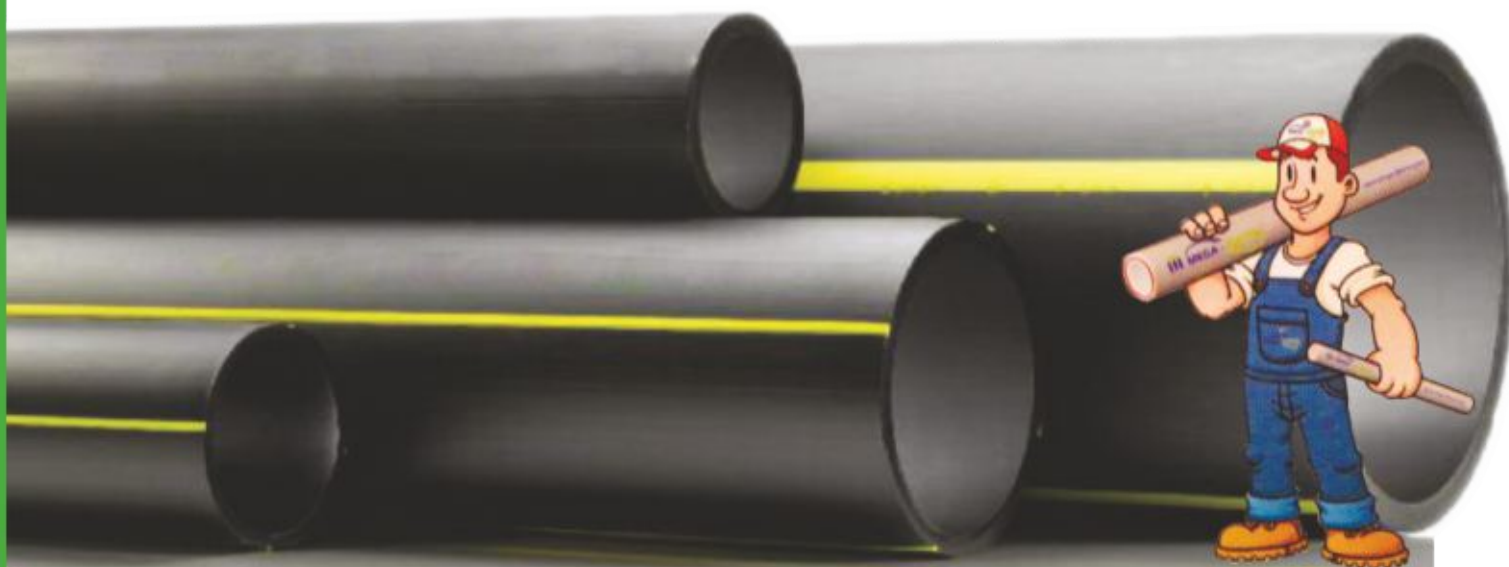


Incomplete facing.

Table III

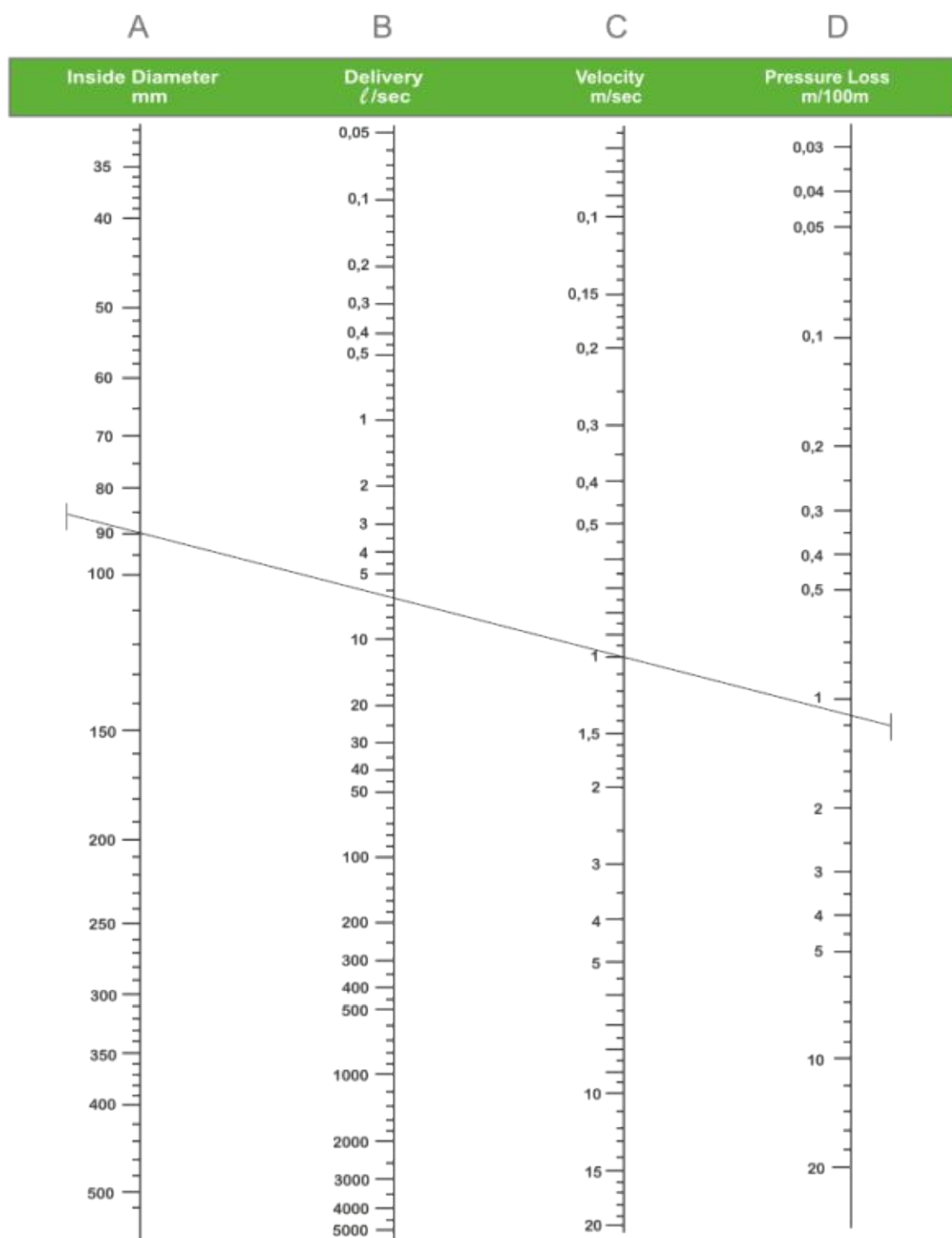
Butt Fusion Troubleshooting Guide

Observed Condition	Possible Cause
☐ Excessive double bead width	☐ Overheating ☐ Excessive joining force
☐ Double bead v-groove too deep	☐ Excessive joining force ☐ Insufficient heating ☐ Pressure during heating
☐ Flat top on bead	☐ Excessive joining force ☐ Overheating
☐ Non-uniform bead size around pipe	☐ Misalignment ☐ Defective heating tool ☐ Worn equipment ☐ Incomplete facing
☐ One bead larger than the other	☐ Misalignment ☐ Component slipped in clamp ☐ Worn equipment ☐ Heating iron does not move freely in the axial direction ☐ Defective heating tool ☐ Incomplete facing
☐ Beads too small	☐ Insufficient heating ☐ Insufficient joining force
☐ Bead not rolled over to surface	☐ Shallow v-groove – Insufficient heating & insufficient joining force ☐ Deep v-groove – Insufficient heating & excessive joining force
☐ Beads too large	☐ Excessive heating time
☐ Square type outer bead edge	☐ Pressure during heating
☐ Rough, sandpaper-like, bubbly, or pockmarked melt bead surface	☐ Hydrocarbon (gasoline vapors, spray paint fumes, etc.) contamination



Flow/friction loss chart

For use with PE 63, 80 and 100



Use of flow chart

Example: HDPE 110 Class 10 pipe,
PE63 (Type IV)

1. Determine inside diameter: $DIA - (2 \times \text{wall thickness})$
 $110 - (2 \times 10.0) = 90.0\text{mm}$
2. Select the velocity: Say 1.0 metres per second
3. Method: Place ruler on 90 in Column A and on 1.0 in column C. The delivery and friction loss are read from Columns B and D.

Chemical resistance table

The following chart rates the resistance of unplasticised polyvinylchloride, polyethylene, polypropylene and two commonly used rubber seal rings to various chemicals at various concentrations and temperatures. The chart is intended as a guide only and should not be regarded as

applicable to all working conditions. Should there be any doubt about the behaviour of the pipe under specific conditions, please contact the Technical Department.

Use the index below as a reference guide to the tables which follow.

Abbreviations	Material	Maximum permissible temperatures (water)		Remarks
		Constant	Short Term	
		°C	°C	
PVC-U	Unplasticised polyvinylchloride	60	60	Good resistance to most solutions of acids, alkalis and salts, and to solvents miscible with water. Not resistant to aromatic and chlorinated hydrocarbons.
PE	Polyethylene (High Density)	60	80	Good resistance to solutions of acids, alkalis and salts, as well as to large numbers of organic solvents. Unsuitable for concentrated oxidising acids.
PP	Polypropylene	90	110	Chemical resistance similar to that of PE, but suitable for higher temperatures.
CR	Chloroprene Rubber (Neoprene)	80	110	Chemical resistance similar to that of PVC-U and between that of Nitrile and Butyl Rubber
NR	Natural Rubber	70	110	Unsuitable with oil and oxidizing media.

			Chemical Resistance				
Medium	Concentration	°C	PVC-U	PE	PP	NR	CR
Acetic acid, aqueous	Up to 25%	40	▼	▼	▼	▼	Ø
	Up to 25%	60	Ø	▼	▼	▼	Ø
	80%	40	Ø	Ø	▼	▼	Ø
	80%	100	-	-	-	-	-
	85%	80	-	-	Ø	-	-
Ammonia water	85%	100	-	-	-	-	-
	Warm saturated	40	▼	▼	▼	▼	▼
	Warm saturated	60	Ø	▼	▼	▼	▼
	Warm saturated	80	-	Ø	Ø	-	▼
Battery acid	Saturated	100	-	-	Ø	-	Ø
		60	▼	▼	▼	Ø	▼
Benzene	Technically pure	20	-	-	-	-	-
Benzine (Petrol)	Technically pure	60	▼	▼	-	-	-
Butane gaseous	50 %	20	▼	▼	▼	-	▼
Carbon dioxide, dry	100%	60	▼	▼	▼	▼	▼
	100%	80	-	Ø	▼	-	▼
Carbon monoxide	100%	60	▼	▼	▼	▼	▼
Caustic soda solution	Up to 40%	60	▼	▼	▼	▼	▼
	50 / 60%	60	▼	▼	▼	▼	▼
Chlorine, gaseous, dry	100%	20	▼	Ø	Ø	-	-
Chlorine, liquid		20	-	-	-	-	▼
Chlorine water	Saturated	20	Ø	-	-	Ø	-
Citric acid, aqueous	Up to 10%	40	▼	▼	▼	▼	▼
	Up to 10%	60	Ø	▼	▼	▼	▼
	Saturated	60	Ø	▼	▼	▼	▼
Coconut oil	Technically pure	60	▼	Ø	Ø	-	Ø
Corn oil		20	Ø	▼	▼	-	Ø
Cyclohexanol	Technically pure	20	-	▼	▼	-	Ø
Diesel Oil		60	Ø	Ø	Ø	-	▼
Ethyl alcohol, denatured (with 2% toluene)	95%	20	▼	Ø	Ø	▼	▼
Ethylene glycol	Technically pure	20	▼	▼	▼	▼	▼
	Technically pure	60	Ø	▼	▼	Ø	▼
	Technically pure	60	▼	Ø	Ø	-	▼
Fatty acids	Technically pure	60	▼	Ø	Ø	-	▼
Formaldehyde, aqueous	Diluted	40	▼	▼	▼	▼	▼
	Diluted	60	▼	▼	▼	▼	▼
	40%	60	▼	▼	▼	▼	▼
Fruit juices	Usual concentration	60	▼	▼	▼	▼	▼
		100	-	Ø	▼	-	▼
Fuel oil		20	Ø	Ø	Ø	-	▼
Hydrochloric acid, aqueous	Up to 30%	40	▼	▼	▼	-	▼
	Up to 30%	60	Ø	▼	▼	-	▼
	Over 30%	20	▼	▼	▼	-	Ø
	Over 30%	60	▼	Ø	▼	-	Ø

Chemical Resistance Table (continued)

Medium	Concentration	°C	Chemical Resistance				
			PVC-U	PE	PP	NR	CR
Hydrochloric acid, aqueous	Over 30 %	80	-	-	-	-	Ø
Hydrogen	100 %	60	▼	▼	▼	▼	▼
	100 %	100	-	-	-	-	▼
Linseed oil	Technically pure	80	Ø	Ø	▼	Ø	▼
	Technically pure	100	-	-	▼	-	-
Lubricating oils	Technically pure	20	▼	-	Ø	-	▼
Methyl alcohol	Technically pure	40	▼	▼	▼	▼	▼
	Technically pure	60	Ø	▼	▼	-	Ø
	Technically pure	65	-	Ø	Ø	-	Ø
Milk	Usual commercial	20	▼	▼	▼	▼	▼
Mixed acids 1 (sulphuric acid/nitric acid/water)	48 / 49 / 3 %	20	▼	-	-	-	Ø
	48 / 49 / 3 %	40	Ø	-	-	-	Ø
	50 / 50 / 0 %	20	Ø	-	-	-	Ø
	50 / 50 / 0 %	40	-	-	-	-	Ø
	10 / 87 / 3 %	20	Ø	-	-	-	Ø
	50 / 31 / 19 %	30	▼	-	-	-	Ø
Motor oils	Usual commercial	60	Ø	Ø	Ø	-	▼
Nitric acid, aqueous	Up to 30 %	50	▼	▼	▼	-	Ø
	30 / 50 %	50	▼	Ø	-	-	Ø
	40 %	70	-	-	-	-	Ø
	40 %	90	-	-	-	-	Ø
	48 %	80	-	-	-	-	Ø
	70 %	20	▼	Ø	-	-	Ø
	70 %	60	Ø	-	-	-	Ø
	98 %	20	-	-	-	-	Ø
	98 %	60	-	-	-	-	Ø
Oleum	10 %	20	-	-	-	-	-
Oxygen	All	60	▼	▼	-	Ø	▼
Palm oil		20	-	▼	▼	-	Ø
		60	-	Ø	Ø	-	Ø
Paraffin		60	▼	Ø	▼	-	▼
Paraffin oil		60	▼	Ø	▼	-	▼
Petroleum	Technically pure	60	Ø	Ø	▼	-	▼
Sea water		40	▼	▼	▼	Ø	▼
		60	▼	▼	▼	Ø	▼
		100	-	-	Ø	-	▼
Soap solution, aqueous	Concentrated	20	▼	▼	▼	▼	▼
	Concentrated	60	▼	▼	▼	▼	▼
Soda, aqueous	Diluted	40	▼	▼	▼	▼	▼
	Diluted	60	▼	▼	▼	▼	▼
	Saturated	60	▼	▼	▼	▼	▼
Starch, aqueous	All	40	▼	▼	▼	▼	▼
	All	60	▼	▼	▼	▼	▼
Sulphuric acid, aqueous	Up to 40 %	40	▼	▼	▼	▼	▼
	Up to 40 %	60	Ø	▼	▼	Ø	▼
	70 %	20	▼	▼	▼	-	-
	70 %	60	Ø	Ø	Ø	-	-
	80 – 90 %	40	▼	Ø	Ø	-	-
	96 %	20	▼	Ø	Ø	-	-
	96 %	60	Ø	Ø	-	-	-
Toluene	Technically pure	20	-	-	▼	-	-
Turpentine oil	Technically pure	60	Ø	Ø	-	-	-
Urine	Normal	40	▼	▼	▼	▼	▼
	Normal	60	▼	▼	▼	▼	▼
Vinegar (wine vinegar)	Usual commercial	40	▼	▼	▼	▼	▼
	Usual commercial	100	-	-	-	-	-
Water, distilled		40	▼	▼	▼	▼	▼
		100	-	Ø	▼	-	▼
Water, potable, chlorinated see Water distilled							

Explanation of symbols:

▼ Resistant

Ø Conditionally resistant (more favourable at temperatures lower than those quoted)

- Not Recommended

MEGA - THERM Injection Fittings

Enjeksiyon Ek Parçaları



www.mega-therm.com



"We carry the world's water"

PE Metal Transition Piece (Internal Threaded)

PE Metal Geçiş Adaptörü (İç Dişli)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	L	Z	NET AĞ
(MM) INCH					
20 1/2"	PN-16	MT205 02 160020 000	70	46	0,053
25 3/4"	PN-16	MT205 02 160025 000	71	45	0,073
32 1"	PN-16	MT205 02 160032 000	81	47	0,136
40 1 1/2"	PN-16	MT205 02 160040 000	100	56	0,305
50 1 1/2"	PN-16	MT205 02 160050 000	116	68	0,293
63 2"	PN-16	MT205 02 160063 000	116	68	0,493
75 2 1/2"	PN-16	MT205 02 160075 000	122	75	0,745
90 3"	PN-16	MT205 02 160090 000	142	80	1,155
110 4"	PN-16	MT205 02 160110 000	138	83	1,141
125 4"	PN-16	MT205 02 160125 000			

PE - Metal Transition Piece (Male Threaded)

PE-Metal Geçiş Adaptörü (Diş Dişli)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	L	Z	NET AĞ
MM INCH					
20 - 1/2"	PN-16	MT205 16 160020 000	83	45	0,085
25 - 1/2"	PN-16	MT205 16 160025 020	83	45	0,098
25 - 3/4"	PN-16	MT205 16 160025 000	83	45	0,100
32 - 3/4"	PN-16	MT205 16 160032 025	89	51	0,117
32 - 1"	PN-16	MT205 16 160032 000	96	47	0,157
40 - 1 1/4"	PN-16	MT205 16 160040 000	118	56	0,430
50 - 1 1/2"	PN-16	MT205 16 160050 000	119	58	0,551
63 - 2"	PN-16	MT205 16 160063 000	138	68	0,603
75 - 2 1/2"	PN-16	MT205 16 160075 000	145	74	0,933
90 - 3"	PN-16	MT205 16 160090 000	165	83	1,196
110 - 4"	PN-16	MT205 16 160110 000	168	84	1,782

PE-To Metal Transition Piece (Transition)

PE-Çelik Geçiş (Kaynak Ağızlı)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L1	L2	NET AĞ
MM INCH						
20 - 1/2"	PN-16	MT206 01 160020 000	320	190	76	0,350
25 - 3/4"	PN-16	MT206 01 160025 000	335	185	85	0,522
32 - 1"	PN-16	MT206 01 160032 000	350	175	95	0,842
40 - 1 1/4"	PN-16	MT206 01 160040 000	355	177	100	0,881
50 - 1 1/2"	PN-16	MT206 01 160050 000	355	172	100	1,117
63 - 2"	PN-16	MT206 01 160063 000	365	167	110	1,773
75 - 2 1/2"	PN-16	MT206 01 160075 000	393	167	120	3,288
90 - 3"	PN-16	MT206 01 160090 000	440	178	145	3,145
110 - 4"	PN-16	MT206 01 160110 000	505	228	160	5,850

PE-To Metal Transition Piece (Transition)

PE-Çelik Geçiş (Kaynak Ağızlı)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L1	L2	NET AĞ
MM INCH						
125 4"	PN-16	MT206 01 160125 000	520	310	100	8,600
160 6"	PN-16	MT206 01 160160 000	580	310	120	10,560
180 6"	PN-16	MT206 01 160180 000	580	310	130	18,000
200 8"	PN-16	MT206 01 160200 000	600	310	130	28,700
225 8"	PN-16	MT206 01 160225 000	600	310	130	31,500
250 10"	PN-16	MT206 01 160250 000	620	310	160	38,000
280 10"	PN-16	MT206 01 160280 000	620	310	160	52,000
315 12"	PN-16	MT206 01 160315 000	620	310	160	57,000
355	PN-16	MT206 01 160355 000	630	310	220	107,660
400 16"	PN-16	MT206 01 160400 000	640	310	220	120,000
450	PN-16	MT206 01 160450 000	640	310	220	
500 20"	PN-16	MT206 01 160500 000	640	310	220	171,000



Elbow 45°(Injection)

Dirsek 45°(Enjeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	E	NET AĞ.
d						
20	PN 16	MT202 01 160020 000	70	52	3,00	0,020
25	PN 16	MT202 01 160025 000	75	52	3,00	0,030
32	PN 16	MT202 01 160032 000	78	54	3,00	0,043
40	PN 16	MT202 01 160040 000	85	57	3,70	0,080
50	PN 16	MT202 01 160050 000	90	63	4,60	0,120
63	PN 16	MT202 01 160063 000	95	63	5,80	0,210
75	PN 16	MT202 01 160075 000	105	70	6,80	0,310
90	PN 16	MT202 01 160090 000	120	81	8,20	0,510
110	PN 16	MT202 01 160110 000	130	86	10,00	0,810
125	PN 16	MT202 01 160125 000	135	90	11,40	1,170
140	PN 16	MT202 01 160140 000	140	98	12,70	1,390
160	PN 16	MT202 01 160160 000	160	100	14,60	2,240
180	PN 10	MT202 01 100180 000	170	107	10,70	2,160
	PN 16	MT202 01 160180 000	170	107	16,40	2,960
200	PN 10	MT202 01 100200 000	183	118	11,90	3,980
	PN 16	MT202 01 160200 000	200	123	13,40	4,005
225	PN 10	MT202 01 100225 000	200	123	20,50	3,940
	PN 16	MT202 01 160225 000	220	130	14,80	5,320
250	PN 10	MT202 01 100250 000	220	130	22,70	5,260
	PN 16	MT202 01 160250 000	230	139	16,60	7,200
280	PN 10	MT202 01 100280 000	230	139	25,40	7,120
	PN 16	MT202 01 160280 000	250	150	18,70	9,760
315	PN 10	MT202 01 100315 000	250	150	28,60	9,600
	PN 16	MT202 01 160315 000	250	150	28,60	12,740

Elbow 90°(Injection)

Dirsek 90°(Enjeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSUR BAR	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	E	NET AĞ.
d						
20	PN 16	MT 202 02 160020	70	50	3,00	0,022
25	PN 16	MT 202 02 160025	75	52	3,00	0,033
32	PN 16	MT 202 02 160032	80	54	3,00	0,046
40	PN 16	MT 202 02 160040	85	55	3,70	0,082
50	PN 16	MT 202 02 160050	105	60	4,60	0,133
63	PN 16	MT 202 02 160063	110	65	5,80	0,244
75	PN 16	MT 202 02 160075	120	70	6,80	0,364
90	PN 16	MT 202 02 160090	145	80	8,20	0,670
110	PN 10	MT 202 02 100110	150	86	6,60	0,750
	PN 16	MT 202 02 160110	150	86	10,00	1,056
125	PN 16	MT 202 02 160125	155	93	11,40	1,422
140	PN 16	MT 202 02 160140	170	118	12,70	1,679
160	PN 10	MT 202 02 100160	179	103	9,50	2,176
	PN 16	MT 202 02 160160	179	103	14,60	2,970
180	PN 10	MT 202 02 100180	200	107	10,70	3,650
	PN 16	MT 202 02 160180	200	107	16,40	3,800
200	PN 10	MT 202 02 100200	215	117	11,90	5,145
	PN 16	MT 202 02 160200	215	117	18,20	5,300
225	PN 10	MT 202 02 100225	230	122	13,40	5,080
	PN 16	MT 202 02 160225	230	122	20,50	6,620
250	PN 10	MT 202 02 100250	292	130	14,80	6,780
	PN 16	MT 202 02 160250	292	130	22,70	8,740
280	PN 10	MT 202 02 100280	320	139	16,60	9,200
	PN 16	MT 202 02 160280	320	139	25,40	12,280
315	PN 10	MT 202 02 100315	300	143	18,70	13,400
	PN 16	MT 202 02 160315	300	143	28,60	17,350

Equal TEE 90°(Injection)

Eğil TE 90°(Enjeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	Z1	L	NET AĞ.
d						
20	PN 16	MT 202 03 160020 000	148	80	52	0,340
25	PN 16	MT 202 03 160025 000	156	85	52	0,047
32	PN 16	MT 202 03 160032 000	166	90	54	0,068
40	PN 16	MT 202 03 160040 000	188	95	55	0,113
50	PN 16	MT 202 03 160050 000	230	119	65	0,224
63	PN 16	MT 202 03 160063 000	230	120	65	0,341
75	PN 16	MT 202 03 160075 000	264	130	70	0,533
90	PN 10	MT 202 03 100090 000	272	135	82	0,805
	PN 16	MT 202 03 160090 000	272	135	82	0,911
110	PN 10	MT 202 03 100110 000	320	155	89	1,350
	PN 16	MT 202 03 160110 000	320	155	89	1,442
125	PN 16	MT 202 03 160125 000	364	180	97	2,077
140	PN 16	MT 202 03 160140 000	396	195	100	2,837
160	PN 10	MT 202 03 100160 000	425	210	102	2,940
	PN 16	MT 202 03 160160 000	425	210	102	3,910
180	PN 10	MT 202 03 100180 000	462	230	107	5,150
	PN 16	MT 202 03 160180 000	462	230	107	5,260
200	PN 10	MT 202 03 100200 000	498	245	115	5,490
	PN 16	MT 202 03 160200 000	498	245	115	7,160
225	PN 10	MT 202 03 100225 000	519	253	120	6,480
	PN 16	MT 202 03 160225 000	519	253	120	8,980
250	PN 10	MT 202 03 100250 000	560	280	130	8,850
	PN 16	MT 202 03 160250 000	560	280	130	11,680
280	PN 10	MT 202 03 100280 000	616	308	139	11,620
	PN 16	MT 202 03 160280 000	616	308	139	15,240
315	PN 10	MT 202 03 100315 000	690	345	150	15,500
	PN 16	MT 202 03 160315 000	690	345	150	21,820
355	PN 10	MT 202 03 100355 000	735	368	150	20,460
	PN 16	MT 202 03 160355 000	735	368	150	20,460
400	PN 10	MT 202 03 100400 000	800	400	150	41,300
	PN 16	MT 202 03 160400 000	800	400	150	41,300

Reduced TEE 90°(Injection)

İnegal TE 90°

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	E	NET AĞ.
d1-d2						
50-32	PN 16	MT 202 04 160050 032	192	81	51	0,210
63-25	PN 16	MT 202 04 160063 025	200	100	62	0,230
63-32	PN 16	MT 202 04 160063 032	200	100	62	0,230
63-40	PN 16	MT 202 04 160063 040	200	100	62	0,280
63-50	PN 16	MT 202 04 160063 050	200	100	62	0,250
75-32	PN 16	MT 202 04 160075 032	256	108	70	0,420
75-63	PN 16	MT 202 04 160075 063	263	115	72	0,467
90-25	PN 16	MT 202 04 160090 025	272	120	83	0,714
90-32	PN 16	MT 202 04 160090 032	272	120	83	0,714
90-50	PN 16	MT 202 04 160090 050	272	120	83	0,750
90-63	PN 16	MT 202 04 160090 063	272	120	83	0,771
90-75	PN 16	MT 202 04 160090 075	272	120	83	0,837
110-25	PN 10	MT 202 04 100110 025	318	68	143	1,075
	PN 16	MT 202 04 160110 025	318	68	143	1,095
110-32	PN 10	MT 202 04 100110 032	319	135	80	1,051
	PN 16	MT 202 04 160110 032	319	135	80	1,071



Reduced TEE 90°(Injection)

Inegal TE 90°

Material : HDPE (PE 100)
Standard : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	E	NET AĞ.
d1-d2						
110-40	PN 10	MT 202 04 100110 040	320	132	81	1,071
	PN 16	MT 202 04 160110 040	320	132	81	1,091
110-50	PN 10	MT 202 04 100110 050	320	132	81	1,098
	PN 16	MT 202 04 160110 050	320	132	81	1,118
110-63	PN 10	MT 202 04 100110 063	318	147	85	1,128
	PN 16	MT 202 04 160110 063	318	147	85	1,148
110-75	PN 10	MT 202 03 100110 075	320	151	85	1,161
	PN 16	MT 202 03 160110 075	320	151	85	1,181
110-90	PN 10	MT 202 03 100110 090	320	158	85	1,254
	PN 16	MT 202 03 160110 090	320	158	85	1,274
125-90	PN-16	MT 202 03 160125 090	366	170	98	1,751
125-110	PN 16	MT 202 03 160125 110	365	163	97	1,844
140-110	PN 16	MT 202 03 160140 110	396	170	97	2,600
160-32	PN 10	MT 202 03 100160 032	417	180	102	1,917
	PN 16	MT 202 03 160160 032	417	180	102	3,600
160-63	PN-10	MT202 03 100160 063	417	184	102	2,340
	PN-16	MT202 03 160160 063	417	184	102	3,210
160-75	PN-10	MT202 03 100160 075	417	185	102	3,360
	PN-16	MT202 03 160160 075	417	185	102	3,180
160-90	PN-10	MT202 03 100160 090	417	188	101	2,340
	PN-16	MT202 03 160160 090	417	188	101	2,930
160-110	PN-10	MT202 03 100160 110	417	195	101	2,400
	PN-16	MT202 03 160160 110	417	195	101	3,265
180-90	PN-16	MT202 03 160180 090	456	200	106	4,360
180-110	PN-16	MT202 03 160180 110	462	210	102	4,380
180-125	PN-16	MT202 03 160180 125	462	209	112	4,720
200-63	PN-16	MT202 03 160200 063	500	208	118	5,920
200-90	PN-10	MT202 03 100200 090	500	219	111	4,670
	PN-16	MT202 03 160200 090	500	219	111	6,010
200-110	PN-10	MT202 03 100200 110	500	215	115	5,980
	PN-16	MT202 03 160200 110	500	215	115	6,235
200-125	PN-16	MT202 03 160200 125	500	225	117	5,860
200-160	PN-10	MT202 03 100200 160	500	234	116	5,205
	PN-16	MT202 03 160200 160	500	234	116	6,235
225-110	PN-10	MT202 03 100225 110	520	244	120	5,640
	PN-16	MT202 03 160225 110	520	244	120	7,500
225-160	PN-10	MT-202 04 100225 160	520	253	120	6,000
	PN-16	MT202 04 160225 160	520	253	120	8,060
250-160	PN-10	MT202 04 100250 160	575	242	130	7,060
	PN-16	MT202 04 160250 160	575	242	130	9,540
250-200	PN-10	MT202 04 100250 200	575	261	127	7,540
	PN-16	MT202 04 160250 200	575	261	127	10,350
280-110	PN-10	MT202 04 100280 110	575	261	127	10,340
	PN-16	MT202 04 160280 110	575	261	127	13,300
280-160	PN-10	MT202 04 100280 160	575	261	127	10,440
	PN-16	MT202 04 160280 160	575	261	127	13,680
280-200	PN-10	MT202 04 100280 200	620	280	140	10,540
	PN-16	MT202 04 160280 200	620	280	140	14,440
315-110	PN-10	MT202 04 100315 110	680	295	150	13,900
	PN-16	MT202 04 160315 110	680	295	150	18,480
315-200	PN-10	MT202 04 100315 200	670	315	150	13,820
	PN-16	MT202 04 160315 200	670	315	150	19,660
315-250	PN-10	MT202 04 100315 250	680	315	150	14,000
	PN-16	MT202 04 160315 250	680	315	150	18,950
355-110	PN-10	MT202 04 100355 110	735	292	82	12,190
	PN-16	MT202 04 160355 110	735	292	82	17,920
355-160	PN-10	MT202 04 100355 160	735	312	102	13,430
	PN-16	MT202 04 160355 160	735	312	102	18,330
355-250	PN-10	MT202 04 100355 250	735	340	130	13,730
	PN-16	MT202 04 160355 250	735	340	130	20,200
400-110	PN-10	MT202 04 100400 110	800	315	82	22,650
	PN-16	MT202 04 160400 110	800	315	82	33,400
400-160	PN-10	MT202 04 100400 160	800	335	102	23,010
	PN-16	MT202 04 160400 160	800	335	102	33,940
400-250	PN-10	MT202 04 100400 250	800	363	130	24,193
	PN-16	MT-202 04 160400 250	800	363	130	35,681

Reducer (Injection)

Redüksiyon (Enjeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT
ÇAP	BASINÇ	KOD NO	Z	L	L1	NET AĞ.
d1-d2						
25-20	PN-16	MT202 05 160025 020	120	54	52	0,022
32-20	PN-16	MT202 05 160032 020	120	54	52	0,025
32-25	PN-16	MT202 05 160032 025	130	57	52	0,030
40-20	PN-16	MT202 05 160040 020	130	57	55	0,033
40-25	PN-16	MT202 05 160040 025	145	71	55	0,041
40-32	PN-16	MT-202 05 160040 032	145	73	55	0,048
50-25	PN-16	MT202 05 160050 025	148	70	53	0,068
50-32	PN-16	MT202 05 160050 032	148	70	51	0,075
50-40	PN-16	MT202 05 160050 040	148	70	51	0,077
63-25	PN-16	MT202 05 160063 025	148	62	51	0,090
63-32	PN-16	MT202 05 160063 032	148	62	51	0,101
63-40	PN-16	MT202 05 160063 040	147	62	56	0,108
63-50	PN-16	MT202 05 160063 050	147	69	63	0,122
75-32	PN-16	MT202 05 160075 032	170	70	55	0,155
75-40	PN-16	MT202 05 160075 040	170	69	65	0,165
75-50	PN-16	MT202 05 160075 050	170	70	62	0,182
75-63	PN-16	MT202 05 160075 063	170	70	65	0,201
90-50	PN-16	MT202 05 160090 050	187	81	60	0,275
90-63	PN-16	MT202 05 160090 063	187	77	60	0,285
90-75	PN-16	MT202 05 160090 075	187	80	66	0,329
110-32	PN-16	MT202 05 160110 032	195	90	60	0,390
110-50	PN-16	MT202 05 160110 050	195	90	60	0,410
110-63	PN-16	MT202 05 160110 063	195	90	60	0,425
110-75	PN-16	MT202 05 160110 075	177	90	70	0,452
110-90	PN-16	MT202 05 160110 090	180	86	80	0,506
125-63	PN-16	MT202 05 160125 063	210	91	60	0,550
125-75	PN-16	MT202 05 160125 075	210	92	66	0,586
125-90	PN-16	MT202 05 160125 090	210	92	77	0,615
125-110	PN-16	MT202 05 160125 110	210	90	82	0,713
140-75	PN-16	MT202 05 160140 075	222	91	71	0,761
140-90	PN-16	MT202 05 160140 090	218	92	80	0,824
140-110	PN-16	MT202 05 160140 110	217	90	80	0,915
140-125	PN-16	MT202 05 160140 125	217	95	85	1,020
160-90	PN-10	MT202 05 100160 090	220	99	69	0,713
	PN-16	MT202 05 160160 090	220	99	69	0,950
160-110	PN-10	MT202 05 100160 110	230	100	85	0,927
	PN-16	MT202 05 160160 110	230	100	85	1,135
160-125	PN-10	MT202 05 100160 125	227	98	87	0,848
	PN-16	MT202 05 160160 125	227	98	87	1,210
160-140	PN-10	MT202 05 100160 140	230	100	95	0,902
	PN-16	MT202 05 160160 140	230	100	95	1,330
180-90	PN-10	MT202 05 100180 090	250	105	84	0,830
	PN-16	MT202 05 160180 090	250	105	84	1,385
180-110	PN-10	MT202 05 100180 110	250	105	86	0,830
	PN-16	MT202 05 160180 110	250	105	86	1,355
180-125	PN-10	MT202 05 100180 125	250	105	86	0,945
	PN-16	MT202 05 160180 125	250	105	86	1,575
180-140	PN-10	MT202 05 100180 140	253	105	92	1,070
	PN-16	MT202 05 160180 140	253	105	92	1,690
180-160	PN-10	MT202 05 100180 160	247	105	94	1,238
	PN-16	MT202 05 160180 160	247	105	94	1,790
200-110	PN-10	MT202 05 100200 110	258	115	80	1,331
	PN-16	MT202 05 160200 110	258	115	80	1,901
200-125	PN-10	MT202 05 100200 125	265	118	83	1,515
	PN-16	MT202 05 160200 125	265	118	83	1,993
200-140	PN-10	MT202 05 100200 140	262	117	102	1,453
	PN-16	MT202 05 160200 140	262	117	102	2,800
200-160	PN-10	MT202 05 100200 160	287	133	120	1,970
	PN-16	MT202 05 160200 160	287	133	120	2,670
200-180	PN-10	MT202 05 100200 180	260	115	100	1,725
	PN-16	MT202 05 160200 180	260	115	100	2,417



Reducer (Injection)

Redüksiyon (Enjeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



225-110	PN-10	MT202 05 100225 110	285	125	82	1,751
	PN-16	MT202 05 160225 110	285	125	82	2,534
225-125	PN-10	MT202 05 100225 125	285	123	86	1,810
	PN-16	MT202 05 160225 125	285	123	86	2,680
225-140	PN-10	MT202 05 100225 140	285	123	105	2,830
	PN-16	MT202 05 160225 140	285	123	105	2,830
225-160	PN-10	MT202 05 100225 160	285	131	105	2,340
	PN-16	MT202 05 160225 160	285	131	105	3,010
225-180	PN-10	MT202 05 100225 180	270	115	91	2,100
	PN-16	MT202 05 160225 180	270	115	91	3,380
225-200	PN-10	MT202 05 100225 200	275	126	105	2,177
	PN-16	MT202 05 160225 200	275	126	105	3,500
250-160	PN-10	MT202 05 100250 160	291	113	95	2,431
	PN-16	MT202 05 160250 160	291	113	95	3,200
250-180	PN-10	MT202 05 100250 180	300	123	100	2,610
	PN-16	MT202 05 160250 180	300	123	100	4,000
250-200	PN-10	MT202 05 100250 200	305	125	105	2,680
	PN-16	MT202 05 160250 200	305	125	105	3,900
250-225	PN-10	MT202 05 100250 225	302	125	117	3,180
	PN-16	MT202 05 160250 225	302	125	117	4,300
280-200	PN-10	MT202 05 100280 200	328	140	105	3,450
	PN-16	MT202 05 160280 200	328	140	105	5,200
280-225	PN-10	MT202 05 100280 225	330	141	123	3,690
	PN-16	MT202 05 160280 225	330	141	123	5,220
280-250	PN-10	MT202 05 100280 250	327	140	125	4,100
	PN-16	MT202 05 160280 250	327	140	125	4,400
315-200	PN-10	MT202 05 100315 200	345	145	108	4,685
	PN-16	MT202 05 160315 200	345	145	108	6,350
315-225	PN-10	MT202 05 100315 225	344	145	113	4,800
	PN-16	MT202 05 160315 225	344	145	113	6,950
315-250	PN-10	MT202 05 100315 250	344	145	128	4,940
	PN-16	MT202 05 160315 250	344	145	128	7,540
315-280	PN-10	MT202 05 100315 280	380	153	128	6,300
	PN-16	MT202 05 160315 280	380	153	128	7,960
355-200	PN-10	MT202 05 100355 200	365	178	130	
	PN-16	MT202 05 160355 200	365	178	130	8,360
355-250	PN-10	MT202 05 100355 250	365	178	130	7,500
	PN-16	MT202 05 160355 250	365	178	130	8,900
355-280	PN-10	MT202 05 100355 280	365	178	139	
	PN-16	MT202 05 160355 280	365	178	139	
355-315	PN-10	MT202 05 100355 315	390	187	130	
	PN-16	MT202 05 160355 315	390	187	130	14,200
400-200	PN-10	MT202 05 100400 200	390	142	120	7,500
	PN-16	MT202 05 160400 200	390	142	120	9,800
400-250	PN-10	MT202 05 100400 250	390	144	125	7,620
	PN-16	MT202 05 160400 250	390	144	125	10,700
400-280	PN-10	MT202 05 100400 280	390	200	139	
	PN-16	MT202 05 160400 280	390	200	139	
400-315	PN-10	MT202 05 100400 315	390	145	130	8,080
	PN-16	MT202 05 160400 315	390	145	130	12,360
400-355	PN-10	MT203 08 100400 355	415	180	139	13,340
	PN-16	MT203 08 160400 355	415	180	139	19,660
450-315	PN-10	MT203 08 100450 315	415	178	150	21,190
	PN-16	MT203 08 160450 315	415	178	150	18,310
450-355	PN-10	MT203 08 100450 355	420	178	165	16,150
	PN-16	MT203 08 160450 355	420	178	165	23,830
710-450	PN-10	MT203 08 100710 450	600	300	220	79,600
	PN-16	MT203 08 160710 450	600	300	220	119,500
710-500	PN-10	MT203 08 100710 500	600	300	200	77,100
	PN-16	MT203 08 160710 500	600	300	200	113,710
710-560	PN-10	MT203 08 100710 560	600	300	200	63,740
	PN-16	MT203 08 160710 560	600	300	200	94,120
710-630	PN-10	MT203 08 100710 630	600	300	200	62,280
	PN-16	MT203 08 160710 630	600	300	200	71,500
800-560	PN-10	MT203 08 100800 560	600	300	200	98,280
800-630	PN-10	MT203 08 100800 630	600	300	200	75,480
800-710	PN-10	MT203 08 100800 710	600	300	200	57,200

Flange Adapter - Long Type (Injection)
Flanş Adaptörü - Uzun Tip (Enjeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	D1	D2	L1	L2	NET AĞ
D								
20	PN-16	MT202 06 160020 000	89	27	45	64	7	0,026
25	PN-16	MT202 06 160025 000	86	33	58	65	9	0,038
32	PN-16	MT202 06 160032 000	80	42	68	54	10	0,050
40	PN-16	MT202 06 160040 000	85	51	78	57	11	0,081
50	PN-16	MT202 06 160050 000	92	61	88	63	12	0,122
63	PN-16	MT202 06 160063 000	100	70	102	69	14	0,170
75	PN-16	MT202 06 160075 000	120	89	122	87	16	0,293
90	PN-10	MT202 06 100090 000	140	102	138	101	17	0,320
	PN-16	MT202 06 160090 000	140	106	138	101	17	0,396
110	PN-10	MT202 06 100110 000	160	124	158	120	18	0,536
	PN-16	MT202 06 160110 000	160	124	158	120	18	0,625
125	PN-10	MT202 06 100125 000	170	130	158	123	35	0,560
	PN-16	MT202 06 160125 000	170	130	158	123	35	0,719
140	PN-10	MT202 06 100140 000	191	150	188	130	35	0,726
	PN-16	MT202 06 160140 000	191	150	188	130	35	0,998
160	PN-10	MT202 06 100160 000	180	170	212	133	35	1,117
	PN-16	MT202 06 160160 000	180	170	212	133	35	1,405
180	PN-10	MT202 06 100180 000	190	180	212	160	30	1,115
	PN-16	MT202 06 160180 000	190	180	212	160	30	1,540
200	PN-10	MT202 06 100200 000	200	225	268	132	32	2,160
	PN-16	MT202 06 160200 000	200	225	268	132	32	2,605
225	PN-10	MT202 06 100225 000	200	235	268	138	32	2,150
	PN-16	MT202 06 160225 000	200	235	268	138	32	2,805
250	PN-10	MT202 06 100250 000	215	280	320	130	35	3,525
	PN-16	MT202 06 160250 000	215	280	320	130	35	4,365
280	PN-10	MT202 06 100280 000	228	291	320	145	35	3,365
	PN-16	MT202 06 160280 000	228	291	320	145	35	5,105
315	PN-10	MT202 06 100315 000	238	335	370	150	35	4,900
	PN-16	MT202 06 160315 000	238	335	370	150	35	6,380
355	PN-10	MT202 06 100355 000	258	373	430	165	40	6,325
	PN-16	MT202 06 160355 000	258	373	430	165	40	8,455
400	PN-10	MT202 06 100400 000	285	427	482	182	46	8,990
	PN-16	MT202 06 160400 000	285	427	482	182	46	11,530
450	PN-10	MT202 06 100450 000	250	460	535	150	60	12,310
	PN-16	MT202 06 160450 000	250	460	535	150	60	17,425
500	PN-10	MT202 06 100500 000	270	530	585	170	60	15,180
	PN-16	MT202 06 160500 000	270	530	585	170	60	21,000
560	PN-10	MT202 06 100560 000	280	598	685	180	60	22,905
	PN-16	MT202 06 160560 000	280	598	685	180	60	31,939
630	PN-10	MT202 06 100630 000	270	642	685	170	60	25,900
	PN-16	MT202 06 160630 000	270	642	685	170	60	37,205
710	PN-10	MT203 10 100710 000	280	737	800	180	60	37,340
	PN-16	MT203 10 160710 000	280	737	800	180	60	52,000
800	PN-10	MT203 10 100800 000	290	840	905	190	60	49,620
900	PN-10	MT203 10 100900 000	340	944	1,005	240	60	70,000
1000	PN-10	MT203 10 101000 000	350	1047	1,110	250	60	88,900
1200	PN-10	MT203 10 101200 000	400	1245	1,330	250	80	SPECIALLY PRODUCED UPON ORDER SİPARİŞ GÖRE ÖZEL ÜRETİLMİKTİR
1400	PN-10	MT203 10 101400 000	400	1450	1,535	230	100	
1600	PN-10	MT203 10 101600 000	400	1645	1,737	230	100	

Long Step Reducer(Injection)
Uzun Kademeli Redüksiyon (Enjeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	L	L1	L2	NET AĞ
D1-D2						
450-400	PN-10	MT202 05 100450 400	485	240	240	15,500
	PN-16	MT202 05 160450 400	485	240	240	21,500
500-400	PN-10	MT202 05 100500 400	545	240	240	21,000
	PN-16	MT202 05 160500 400	545	240	240	27,500
500-450	PN-10	MT202 05 100500 450	490	240	230	19,000
	PN-16	MT202 05 160500 450	490	240	230	26,000
560-400	PN-10	MT202 05 100560 400	602	240	240	29,000
	PN-16	MT202 05 160560 400	602	240	240	37,000
560-450	PN-10	MT202 05 100560 450	545	240	230	28,500
	PN-16	MT202 05 160560 450	545	240	230	37,500
560-500	PN-10	MT202 05 100560 500	500	240	240	26,000
	PN-16	MT202 05 160560 500	500	240	240	33,500
630-400	PN-10	MT202 05 100630 400	660	240	240	39,000
	PN-16	MT202 05 160630 400	660	240	240	48,000
630-450	PN-10	MT202 05 100630 450	605	240	240	37,500
	PN-16	MT202 05 160630 450	605	240	240	47,500
630-500	PN-10	MT202 05 100630 500	550	240	240	35,500
	PN-16	MT202 05 160630 500	550	240	240	46,000
630-560	PN-10	MT202 05 100630 560	500	240	240	32,500
	PN-16	MT202 05 160630 560	500	240	240	44,000



Welded Cap (Injection)

Kaynaklı Kör Tapa (Enjeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	NET WEIGHT
ÇAP	BASINÇ	KOD NO	L	NET AĞ
D				
335	PN-10	MT203 10 100355 000	190	37,340
	PN-16	MT203 10 160355 000	190	52,000
400	PN-10	MT203 10 100400 000	200	49,620
	PN-16	MT203 10 160400 000	200	
450	PN-10	MT203 10 100450 000	200	70,000
	PN-16	MT203 10 160450 000	200	
500	PN-10	MT203 10 100500 000	210	88,900
	PN-16	MT203 10 160500 000	210	
630	PN-10	MT203 10 100630 000	200	
	PN-16	MT203 10 160630 000	200	

Cap (Injection)

Kör Tapa (Enjeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3

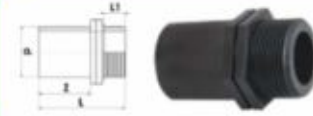


SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
DA	PN-16				
20	PN-16	MT202 07 160020 000	52	52	0,010
25	PN-16	MT202 07 160025 000	52	52	0,012
32	PN-16	MT202 07 160032 000	54	54	0,013
40	PN-16	MT202 07 160040 000	57	57	0,030
50	PN-16	MT202 07 160050 000	67	63	0,045
63	PN-16	MT202 07 160063 000	75	73	0,077
75	PN-16	MT202 07 160075 000	75	73	0,121
90	PN-16	MT202 07 160090 000	87	82	0,204
110	PN-16	MT202 07 160110 000	96	88	0,331
125	PN-16	MT202 07 160125 000	100	93	0,467
140	PN-16	MT202 07 160140 000	100	93	0,582
160	PN-16	MT202 07 160160 000	115	103	0,835
180	PN-16	MT202 07 160180 000	120	119	1,135
200	PN-16	MT202 07 160200 000	124	116	1,616
225	PN-16	MT202 07 160225 000	143	122	2,106
250	PN-16	MT202 07 160250 000	210	180	2,500
280	PN-16	MT202 07 160280 000	210	180	4,000
315	PN-16	MT202 07 160315 000	230	190	5,320

Male Threaded Adapter (Injection)

PE Diğ Diğli Adaptör

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	L1	NET AĞ
D-R						
20 (1/2")	PN-16	MT202 08 160020 000	34	60	17	0,011
25 (3/4")	PN-16	MT202 08 160025 000	34	65	19	0,018
32 (1")	PN-16	MT202 08 160032 000	42	76	21	0,032
40 (1 1/4")	PN-16	MT202 08 160040 000	43	82	23	0,052
50 (1 1/2")	PN-16	MT202 08 160050 000	48	87	23	0,073
63 (2")	PN-16	MT202 08 160063 000	56	103	28	0,136

MEGA - THERM Confection Fittings

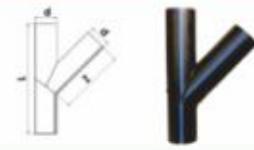
Konfeksiyon Ek Parçaları



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SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
D					
90	PN-10	MT203 11 100090 000	333	556	1,298
	PN-16	MT203 11 160090 000	333	556	1,864
110	PN-10	MT203 11 100110 000	333	556	1,930
	PN-16	MT203 11 160110 000	333	556	2,792
125	PN-10	MT203 11 100125 000	351	577	2,562
	PN-16	MT203 11 160125 000	351	577	3,786
140	PN-10	MT203 11 100140 000	369	598	3,346
	PN-16	MT203 11 160140 000	369	598	4,913
160	PN-10	MT203 11 100160 000	393	626	4,606
	PN-16	MT203 11 160160 000	393	626	6,975
180	PN-10	MT203 11 100180 000	417	655	6,121
	PN-16	MT203 11 160180 000	417	655	9,026
200	PN-10	MT203 11 100200 000	491	783	8,982
	PN-16	MT203 11 160200 000	491	783	13,273
225	PN-10	MT203 11 100225 000	522	818	11,966
	PN-16	MT203 11 160225 000	522	818	17,554
250	PN-10	MT203 11 100250 000	602	954	17,116
	PN-16	MT203 11 160250 000	602	954	25,297
280	PN-10	MT203 11 100280 000	638	996	22,386
	PN-16	MT203 11 160280 000	638	996	33,170
315	PN-10	MT203 11 100315 000	730	1145	32,625
	PN-16	MT203 11 160315 000	730	1145	48,000
355	PN-10	MT203 11 100355 000	779	1202	43,780
	PN-16	MT203 11 160355 000	779	1202	64,383
400	PN-10	MT203 11 100400 000	833	1266	88,631
	PN-16	MT203 11 160400 000	833	1266	86,689
450	PN-10	MT203 11 100450 000	893	1336	78,906
	PN-16	MT203 11 160450 000	893	1336	116,577
500	PN-10	MT203 11 100500 000	954	1407	103,412
	PN-16	MT203 11 160500 000	954	1407	152,285
560	PN-10	MT203 11 100560 000	1026	1492	137,987
	PN-16	MT203 11 160560 000	1026	1492	203,455
630	PN-10	MT203 11 100630 000	1110	1591	187,449
	PN-16	MT203 11 160630 000	1110	1591	275,000

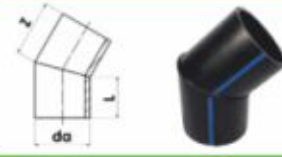


SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
D					
90	PN-10	MT203 12 100090 000	295	527	1,200
	PN-16	MT203 12 160090 000	295	527	1,742
110	PN-10	MT203 12 100110 000	295	527	1,784
	PN-16	MT203 12 160110 000	295	527	2,581
125	PN-10	MT203 12 100125 000	308	544	2,531
	PN-16	MT203 12 160125 000	308	544	3,477
140	PN-10	MT203 12 100140 000	321	562	3,056
	PN-16	MT203 12 160140 000	321	562	4,486
160	PN-10	MT203 12 100160 000	339	585	4,176
	PN-16	MT203 12 160160 000	339	585	6,163
180	PN-10	MT203 12 100180 000	356	608	5,505
	PN-16	MT203 12 160180 000	356	608	8,117
200	PN-10	MT203 12 100200 000	423	731	8,136
	PN-16	MT203 12 160200 000	423	731	12,000
225	PN-10	MT203 12 100225 000	445	760	10,761
	PN-16	MT203 12 160225 000	445	760	15,786
250	PN-10	MT203 12 100250 000	517	889	15,466
	PN-16	MT203 12 160250 000	517	889	22,777
280	PN-10	MT203 12 100280 000	543	923	22,084
	PN-16	MT203 12 160280 000	543	923	29,760
315	PN-10	MT203 12 100315 000	623	1064	29,374
	PN-16	MT203 12 160315 000	623	1064	43,187
355	PN-10	MT203 12 100355 000	658	1110	39,073
	PN-16	MT203 12 160355 000	658	1110	57,460
400	PN-10	MT203 12 100400 000	697	1162	52,052
	PN-16	MT203 12 160400 000	697	1162	76,777
450	PN-10	MT203 12 100450 000	740	1220	69,490
	PN-16	MT203 12 160450 000	740	1220	102,508
500	PN-10	MT203 12 100500 000	783	1277	90,228
	PN-16	MT203 12 160500 000	783	1277	132,871
560	PN-10	MT203 12 100560 000	835	1347	119,574
	PN-16	MT203 12 160560 000	835	1347	176,306
630	PN-10	MT203 12 100630 000	896	1427	161,216
	PN-16	MT203 12 160630 000	896	1427	136,946

Elbow 11° - 30°(Confection)

Dirsek 11° - 30°(Konfeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



ÇAP SIZE (MM)	BASINÇ PRESSURE (BAR)	KOD NO CODE NO	Z (MM)	L (MM)	NET AĞ NET WEIGHT (KG)
110	PN-10	MT203 01 100110 000	180	150	0,720
	PN-16	MT203 01 160110 000	180	150	1,040
125	PN-10	MT203 01 100125 000	185	150	0,940
	PN-16	MT203 01 160125 000	185	150	1,390
140	PN-10	MT203 01 100140 000	187	150	1,180
	PN-16	MT203 01 160140 000	187	150	1,730
160	PN-10	MT203 01 100160 000	193	150	1,580
	PN-16	MT203 01 160160 000	193	150	2,330
180	PN-10	MT203 01 100180 000	198	150	2,000
	PN-16	MT203 01 160180 000	198	150	2,950
200	PN-10	MT203 01 100200 000	203	150	2,540
	PN-16	MT203 01 160200 000	203	150	3,740
225	PN-10	MT203 01 100225 000	210	150	3,210
	PN-16	MT203 01 160225 000	210	150	4,720
250	PN-10	MT203 01 100250 000	267	200	5,170
	PN-16	MT203 01 160250 000	267	200	7,610
280	PN-10	MT203 01 100280 000	275	200	6,580
	PN-16	MT203 01 160280 000	275	200	9,740
315	PN-10	MT203 01 100315 000	284	200	8,530
	PN-16	MT203 01 160315 000	284	200	12,540
355	PN-10	MT203 01 100355 000	295	200	11,050
	PN-16	MT203 01 160355 000	295	200	16,250
400	PN-10	MT203 01 100400 000	307	250	17,080
	PN-16	MT203 01 160400 000	307	250	25,190
450	PN-10	MT203 01 100450 000	370	300	25,490
	PN-16	MT203 01 160450 000	370	300	37,660
500	PN-10	MT203 01 100500 000	434	300	32,410
	PN-16	MT203 01 160500 000	434	300	47,730
560	PN-10	MT203 01 100560 000	450	300	41,100
	PN-16	MT203 01 160560 000	450	300	60,600
630	PN-10	MT203 01 100630 000	469	300	53,400
	PN-16	MT203 01 160630 000	469	300	78,540
710	PN-10	MT203 01 100710 000	490	300	69,520
	PN-16	MT203 01 160710 000	490	300	102,700
800	PN-10	MT203 01 100800 000	515	300	76,500
900	PN-10	MT203 01 100900 000	691	450	105,200
1000	PN-10	MT203 01 101000 000	768	500	140,100
1200	PN-10	MT203 01 101200 000	SPECIALLY PRODUCED UPON ORDER SİPARİŞE GÖRE ÖZEL ÜRETİLMEKTEDİR.		
1400	PN-10	MT203 01 101400 000			
1600	PN-10	MT203 01 101600 000			



Elbow 45° (Confection)

Dirsek 45°(Konfeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
DA					
125	PN-10	MT203 02 100125 000	232	150	1,320
	PN-16	MT203 02 160125 000	232	150	1,960
140	PN-10	MT203 02 100140 000	236	150	1,700
	PN-16	MT203 02 160140 000	236	150	2,490
160	PN-10	MT203 02 100160 000	241	150	2,260
	PN-16	MT203 02 160160 000	241	150	3,340
180	PN-10	MT203 02 100180 000	247	150	2,860
	PN-16	MT203 02 160180 000	247	150	4,210
200	PN-10	MT203 02 100200 000	252	150	3,600
	PN-16	MT203 02 160200 000	252	150	5,300



Elbow 45° (Confection)

Dirsek 45° (Konfeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
225	PN-10	MT203 02 100225 000	258	150	4,640
	PN-16	MT203 02 16225 000	258	150	6,380
250	PN-10	MT203 02 100250 000	320	200	7,150
	PN-16	MT203 02 160250 000	320	200	10,530
280	PN-10	MT203 02 100280 000	327	200	9,180
	PN-16	MT203 02 160280 000	327	200	13,600
315	PN-10	MT203 02 100315 000	336	200	11,830
	PN-16	MT203 02 160315 000	336	200	17,410
355	PN-10	MT203 02 100355 000	347	200	15,470
	PN-16	MT203 02 160355 000	347	200	22,750
400	PN-10	MT203 02 100400 000	427	250	24,040
	PN-16	MT203 02 160400 000	427	250	35,520
450	PN-10	MT203 02 100450 000	511	300	36,460
	PN-16	MT203 02 160450 000	511	300	53,870
500	PN-10	MT203 02 100500 000	523	300	45,990
	PN-16	MT203 02 160500 000	523	300	67,730
560	PN-10	MT203 02 100560 000	539	300	59,180
	PN-16	MT203 02 160560 000	539	300	87,260
630	PN-10	MT203 02 100630 000	557	300	76,340
	PN-16	MT203 02 160630 000	557	300	102,000
710	PN-10	MT203 02 100710 000	582	300	100,320
	PN-16	MT203 02 160710 000	582	300	148,200
800	PN-10	MT203 02 100800 000	600	300	131,040
900	PN-10	MT203 02 100900 000	863	450	195,000
1000	PN-10	MT203 02 101000 000	881	500	335,000
1200	PN-10	MT203 02 101200 000	SPECIALLY PRODUCED UPON ORDER SİPARİŞE GÖRE ÖZEL ÜRETİLMEKTEDİR.		
1400	PN-10	MT203 02 101400 000			
1600	PN-10	MT203 02 101600 000			



Elbow 90° (Confection)

Dirsek 90° (Konfeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
DA					
225	PN-10	MT203 04 100225 000	440	150	6,610
	PN-16	MT203 04 160225 000	440	150	9,690
250	PN-10	MT203 04 100250 000	530	200	9,900
	PN-16	MT203 04 160250 000	530	200	14,580
280	PN-10	MT203 04 100280 000	545	200	12,600
	PN-16	MT203 04 160280 000	545	200	18,680
315	PN-10	MT203 04 100315 000	562	200	16,700
	PN-16	MT203 04 160315 000	562	200	24,580
355	PN-10	MT203 04 100355 000	582	200	21,880
	PN-16	MT203 04 160355 000	582	200	32,180
400	PN-10	MT203 04 100400 000	791	250	34,720
	PN-16	MT203 04 160400 000	791	250	51,210
450	PN-10	MT203 04 100450 000	866	300	52,040
	PN-16	MT203 04 160450 000	866	300	76,880
500	PN-10	MT203 04 100500 000	891	300	66,140
	PN-16	MT203 04 160500 000	891	300	97,400



Elbow 90°(Confection)

Dirsek 90°(Konfeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



560	PN-10	MT203 04 100560 000	921	300	89,940
	PN-16	MT203 04 160560 000	921	300	125,240
630	PN-10	MT203 04 100630 000	956	300	11,730
	PN-16	MT203 04 160630 000	956	300	164,220
710	PN-10	MT203 04 100710 000	996	300	146,960
	PN-16	MT203 04 160710 000	996	300	217,100
800	PN-10	MT203 04 100800 000	1042	300	196,000
900	PN-10	MT203 04 100900 000	1515	450	310,000
1000	PN-10	MT203 04 101000 000	1655	500	480,000
1200	PN-10	MT203 04 101200 000	SPECIALLY PRODUCED UPON ORDER SİPARİŞE GÖRE ÖZEL ÜRETİLMEKTEDİR.		
1400	PN-10	MT203 04 101400 000			
1600	PN-10	MT203 04 101600 000			

Elbow 45°(Confection)

Dirsek 45°(Konfeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
DA					
110	PN-10	MT203 03 100110 000	255	150	1,060
	PN-16	MT203 03 160110 000	255	150	1,540
125	PN-10	MT203 03 100125 000	261	150	1,380
	PN-16	MT203 03 160125 000	261	150	2,040
140	PN-10	MT203 03 100140 000	265	150	1,760
	PN-16	MT203 03 160140 000	265	150	2,590
160	PN-10	MT203 03 100160 000	271	150	2,350
	PN-16	MT203 03 160160 000	271	150	3,470
180	PN-10	MT203 03 100180 000	277	150	3,030
	PN-16	MT203 03 160180 000	277	150	4,460
200	PN-10	MT203 03 100200 000	283	150	3,810
	PN-16	MT203 03 160200 000	283	150	5,620
225	PN-10	MT203 03 100225 000	290	150	4,910
	PN-16	MT203 03 160225 000	290	150	7,210
250	PN-10	MT203 03 100250 000	359	200	7,590
	PN-16	MT203 03 160250 000	359	200	11,180
280	PN-10	MT203 03 100280 000	367	200	9,730
	PN-16	MT203 03 160280 000	367	200	14,410
315	PN-10	MT203 03 100315 000	378	200	12,700
	PN-16	MT203 03 160315 000	378	200	18,690
355	PN-10	MT203 03 100355 000	390	200	16,580
	PN-16	MT203 03 160355 000	390	200	24,380
400	PN-10	MT203 03 100400 000	480	250	25,760
	PN-16	MT203 03 160400 000	480	250	38,000
450	PN-10	MT203 03 100450 000	574	300	38,590
	PN-16	MT203 03 160450 000	574	300	57,010
500	PN-10	MT203 03 100500 000	588	300	49,060
	PN-16	MT203 03 160500 000	588	300	72,240
560	PN-10	MT203 03 100560 000	606	300	63,020
	PN-16	MT203 03 160560 000	606	300	92,920
630	PN-10	MT203 03 100630 000	626	300	82,590
	PN-16	MT203 03 160630 000	626	300	121,380



Equal TEE 90°(Confection)

Eğil TE 90° (Konfeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3

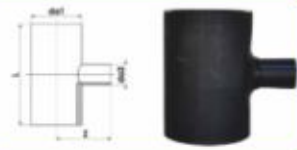


SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
da					
140	PN-10	MT203 05 100140 000	170	380	1,670
	PN-16	MT203 05 160140 000	170	380	2,438
160	PN-10	MT203 05 100160 000	230	460	2,758
	PN-16	MT203 05 160160 000	230	460	4,070
180	PN-10	MT203 05 100180 000	240	480	3,596
	PN-16	MT203 05 160180 000	240	480	5,303
200	PN-10	MT203 05 100200 000	250	500	4,590
	PN-16	MT203 05 160200 000	250	500	6,760
225	PN-10	MT203 05 100225 000	265	530	7,140
	PN-16	MT203 05 160225 000	265	530	10,480
250	PN-10	MT203 05 100250 000	375	750	12,430
	PN-16	MT203 05 160250 000	375	750	18,310
280	PN-10	MT203 05 100280 000	390	780	16,030
	PN-16	MT203 05 160280 000	390	780	23,750
315	PN-10	MT203 05 100315 000	460	920	24,010
	PN-16	MT203 05 160315 000	460	920	35,330
355	PN-10	MT203 05 100355 000	480	960	31,820
	PN-16	MT203 05 160355 000	480	960	46,800
400	PN-10	MT203 05 100400 000	500	1000	42,000
	PN-16	MT203 05 160400 000	500	1000	61,950
450	PN-10	MT203 05 100450 000	525	1050	55,930
	PN-16	MT203 05 160450 000	525	1050	82,630
500	PN-10	MT203 05 100500 000	600	1200	78,840
	PN-16	MT203 05 160500 000	600	1200	116,100
560	PN-10	MT203 05 100560 000	630	1260	103,570
	PN-16	MT203 05 160560 000	630	1260	152,710
630	PN-10	MT203 05 100630 000	665	1330	138,800
	PN-16	MT203 05 160630 000	665	1330	204,000
710	PN-10	MT203 05 100710 000	710	1410	193,600
	PN-16	MT203 05 160710 000	710	1410	286,000
800	PN-10	MT203 05 100800 000	750	1500	252,000
900	PN-10	MT203 05 100900 000	900	1800	317,000
1000	PN-10	MT203 05 101000 000	950	2000	429,000
1200	PN-10	MT203 05 101200 000	SPECIALLY PRODUCED UPON ORDER SİPARİŞE GÖRE ÖZEL ÜRETİLMEKTEDİR.		
1400	PN-10	MT203 05 101400 000			
1600	PN-10	MT203 05 101600 000			

Reduced TEE 90°(Confection)

İnegal TE 90° (Konfeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
DA1-DA2					
125-50	PN-10	MT203 06 100125 050	188	350	1,023
	PN-16	MT203 06 160125 050	188	350	1,512
125-63	PN-10	MT203 06 100125 063	188	363	1,092
	PN-16	MT203 06 160125 063	188	363	1,613
125-75	PN-10	MT203 06 100125 075	188	375	1,164
	PN-16	MT203 06 160125 075	188	375	1,715
125-90	PN-10	MT203 06 100125 090	188	390	1,260
	PN-16	MT203 06 160125 090	188	390	1,858
125-110	PN-10	MT203 06 100125 110	188	405	1,391
	PN-16	MT203 06 160125 110	188	405	2,048
140-50	PN-10	MT203 06 100140 050	195	350	1,267
	PN-16	MT203 06 160140 050	195	350	1,862



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
DA1-DA2					
140-63	PN-10	MT203 06 100140 063	195	363	1,346
	PN-16	MT203 06 160140 063	195	363	1,975
140-75	PN-10	MT203 06 100140 075	195	375	2,975
	PN-16	MT203 06 160140 075	195	375	2,089
140-90	PN-10	MT203 06 100140 090	195	390	1,532
	PN-16	MT203 06 160140 090	195	390	2,246
140-110	PN-10	MT203 06 100140 110	195	410	1,690
	PN-16	MT203 06 160140 110	195	410	2,476
140-125	PN-10	MT203 06 100140 125	195	420	1,798
	PN-16	MT203 06 160140 125	195	420	2,644
160-50	PN-10	MT203 06 100160 050	205	350	1,638
	PN-16	MT203 06 160160 050	205	350	3,419
160-63	PN-10	MT203 06 100160 063	205	463	1,713
	PN-16	MT203 06 160160 063	205	463	3,219
160-75	PN-10	MT203 06 100160 075	205	375	1,823
	PN-16	MT203 06 160160 075	205	375	2,685
160-90	PN-10	MT203 06 100160 090	205	390	1,946
	PN-16	MT203 06 160160 090	205	390	2,866
160-110	PN-10	MT203 06 100160 110	205	410	2,124
	PN-16	MT203 06 160160 110	205	410	3,128
160-125	PN-10	MT203 06 100160 125	205	425	2,266
	PN-16	MT203 06 160160 125	205	425	3,345
160-140	PN-10	MT203 06 100160 140	205	435	2,399
	PN-16	MT203 06 160160 140	205	435	3,536
180-50	PN-10	MT203 06 100180 050	240	350	2,067
	PN-16	MT203 06 160180 050	240	350	3,048
180-63	PN-10	MT203 06 100180 063	240	363	2,180
	PN-16	MT203 06 160180 063	240	363	3,124
180-75	PN-10	MT203 06 100180 075	240	375	2,294
	PN-16	MT203 06 160180 075	240	375	3,379
180-90	PN-10	MT203 06 100180 090	240	390	2,446
	PN-16	MT203 06 160180 090	240	390	3,602
180-110	PN-10	MT203 06 100180 110	240	410	2,667
	PN-16	MT203 06 160180 110	240	410	3,923
180-125	PN-10	MT203 06 100180 125	240	425	2,841
	PN-16	MT203 06 160180 125	240	425	4,191
180-140	PN-10	MT203 06 100180 140	240	440	3,031
	PN-16	MT203 06 160180 140	240	440	4,467
180-160	PN-10	MT203 06 100180 160	240	455	3,276
	PN-16	MT203 06 160180 160	240	455	4,831
200-50	PN-10	MT203 06 100200 050	250	350	2,536
	PN-16	MT203 06 1600200 050	250	350	5,200
200-63	PN-10	MT203 06 100200 063	250	363	2,667
	PN-16	MT203 06 160200 063	250	363	3,933
200-75	PN-10	MT203 06 100200 075	250	375	2,644
	PN-16	MT203 06 160200 075	250	375	4,120
200-90	PN-10	MT203 06 100200 090	250	390	2,969
	PN-16	MT203 06 160200 090	250	390	4,374
200-110	PN-10	MT203 06 100200 110	250	410	3,217
	PN-16	MT203 06 160200 110	250	410	4,735
200-125	PN-10	MT203 06 100200 125	250	425	3,410
	PN-16	MT203 06 160200 125	250	425	5,032
200-140	PN-10	MT203 06 100200 140	250	440	3,621
	PN-16	MT203 06 160200 140	250	440	5,338





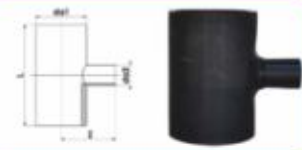
SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
DA1-DA2					
200-160	PN-10	MT203 06 100200 160	250	460	3,921
	PN-16	MT203 06 160200 160	250	460	5,875
200-180	PN-10	MT203 06 100200 180	250	480	4,241
	PN-16	MT203 06 160200 180	250	480	6,255
225-50	PN-10	MT203 06 100225 050	238	350	3,400
	PN-16	MT203 06 160225 050	238	350	4,860
225-63	PN-10	MT203 06 100225 063	238	363	3,540
	PN-16	MT203 06 160225 063	238	363	5,050
225-75	PN-10	MT203 06 100225 075	238	375	3,680
	PN-16	MT203 06 160225 075	238	375	5,240
225-90	PN-10	MT203 06 100225 090	238	390	4,010
	PN-16	MT203 06 160225 090	238	390	5,640
225-110	PN-10	MT203 06 100225 110	238	410	4,100
	PN-16	MT203 06 160225 110	238	410	6,000
225-125	PN-10	MT203 06 100225 125	238	425	4,360
	PN-16	MT203 06 160225 125	238	425	6,390
225-140	PN-10	MT203 06 100225 140	238	440	4,630
	PN-16	MT203 06 160225 140	238	440	6,780
225-160	PN-10	MT203 06 100225 160	238	460	5,020
	PN-16	MT203 06 100225 160	238	460	7,370
225-180	PN-10	MT203 06 100225 180	238	480	5,440
	PN-16	MT203 06 160225 180	238	480	7,980
225-200	PN-10	MT203 06 100225 200	238	500	8,550
	PN-16	MT203 06 160225 200	238	500	12,560
250-50	PN-10	MT203 06 100250 050	280	450	5,230
	PN-16	MT203 06 160250 050	280	450	7,970
250-63	PN-10	MT203 06 100250 063	280	460	5,360
	PN-16	MT203 06 160250 063	280	460	7,750
250-75	PN-10	MT203 06 100250 075	280	475	5,550
	PN-16	MT203 06 160250 075	280	475	8,020
250-90	PN-10	MT203 06 100250 090	280	490	5,920
	PN-16	MT203 06 160250 090	280	490	8,470
250-110	PN-10	MT203 06 100250 110	280	510	6,050
	PN-16	MT203 06 160250 110	280	510	8,890
250-125	PN-10	MT203 06 100250 125	280	525	6,340
	PN-16	MT203 06 160250 125	280	525	9,330
250-140	PN-10	MT203 06 100250 140	280	540	6,640
	PN-16	MT203 06 160250 140	280	540	9,770
250-160	PN-10	MT203 06 100250 160	280	560	7,070
	PN-16	MT203 06 160250 160	280	560	10,410
280-180	PN-10	MT203 06 100250 180	280	580	7,530
	PN-16	MT203 06 160250 180	280	580	11,090
250-200	PN-10	MT203 06 100250 200	300	600	8,010
	PN-16	MT203 06 160250 200	300	600	11,800
250-225	PN-10	MT203 06 100250 225	380	650	14,220
	PN-16	MT203 06 160250 225	380	650	20,930
280-50	PN-10	MT203 06 100280 050	290	450	6,240
	PN-16	MT203 06 160280 050	290	450	9,110
280-63	PN-10	MT203 06 100280 063	290	465	6,460
	PN-16	MT203 06 160280 063	290	465	9,430
280-75	PN-10	MT203 06 100280 075	290	475	6,840
	PN-16	MT203 06 160280 075	290	475	9,970
280-90	PN-10	MT203 06 100280 090	290	490	7,240
	PN-16	MT203 06 160280 090	290	490	10,480

Reduced TEE 90°(Confection)

İnegöl TE 90° (Konfeksiyon)

Material : HDPE (PE 100)

Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ.
DA1-DA2					
280-110	PN-10	MT203 06 100280 110	290	510	7,430
	PN-16	MT203 06 160280 110	290	510	10,980
280-125	PN-10	MT203 06 100280 125	290	525	7,750
	PN-16	MT203 06 160280 125	290	525	11,480
280-140	PN-10	MT203 06 100280 140	290	540	8,100
	PN-16	MT203 06 160280 140	290	540	11,980
280-160	PN-10	MT203 06 100280 160	290	560	8,580
	PN-16	MT203 06 160280 160	290	560	12,710
315-280	PN-10	MT203 06 100315 280	450	700	26,750
	PN-16	MT203 06 160315 280	450	700	39,390
355-50	PN-10	MT203 06 100355 050	330	450	9,780
	PN-16	MT203 06 160355 050	330	450	14,250
355-63	PN-10	MT203 06 100355 063	330	465	10,240
	PN-16	MT203 06 160355 063	330	465	14,920
355-75	PN-10	MT203 06 100355 075	330	475	10,720
	PN-16	MT203 06 160355 075	330	475	15,600
355-90	PN-10	MT203 06 100355 090	330	490	11,360
	PN-16	MT203 06 160355 090	330	490	16,450
355-110	PN-10	MT203 06 100355 110	330	510	11,710
	PN-16	MT203 06 160355 110	330	510	17,210
355-125	PN-10	MT203 06 100355 125	330	525	12,160
	PN-16	MT203 06 160355 125	330	525	17,880
355-140	PN-10	MT203 06 100355 140	330	540	12,630
	PN-16	MT203 06 160355 140	330	540	18,570
355-160	PN-10	MT203 06 100355 160	330	560	13,290
	PN-16	MT203 06 160355 160	330	560	19,540
355-180	PN-10	MT203 06 100355 180	330	580	13,970
	PN-16	MT203 06 160355 180	330	580	20,540
355-200	PN-10	MT203 06 100355 200	350	600	14,670
	PN-16	MT203 06 160355 200	350	600	21,580
355-225	PN-10	MT203 06 100355 225	350	625	15,600
	PN-16	MT203 06 160355 225	350	625	22,930
355-250	PN-10	MT203 06 100355 250	380	650	16,570
	PN-16	MT203 06 160355 250	380	650	24,370
355-280	PN-10	MT203 06 100355 280	380	680	17,770
	PN-16	MT203 06 160355 280	380	680	26,160
355-315	PN-10	MT203 06 100355 315	660	770	35,300
	PN-16	MT203 06 160355 315	660	770	51,920
400-50	PN-10	MT203 06 100400 050	350	450	12,880
	PN-16	MT203 06 160400 050	350	450	18,860
400-63	PN-10	MT203 06 100400 063	350	465	13,320
	PN-16	MT203 06 160400 063	350	465	19,500
400-75	PN-10	MT203 06 100400 075	350	480	13,770
	PN-16	MT203 06 160400 075	350	480	20,150
400-90	PN-10	MT203 06 100400 090	350	495	14,390
	PN-16	MT203 06 160400 090	350	495	20,970
400-110	PN-10	MT203 06 100400 110	350	510	14,720
	PN-16	MT203 06 160400 110	350	510	21,690
400-125	PN-10	MT203 06 100400 125	350	525	15,260
	PN-16	MT203 06 160400 125	350	525	22,500
400-140	PN-10	MT203 06 100400 140	350	540	15,820
	PN-16	MT203 06 160400 140	350	540	23,320
400-160	PN-10	MT203 06 100400 160	350	560	16,590
	PN-16	MT203 06 160400 160	350	560	24,470
400-180	PN-10	MT203 06 100400 180	350	580	17,390
	PN-16	MT203 06 160400 180	350	580	25,640
400-200	PN-10	MT203 06 100400 200	380	600	18,210
	PN-16	MT203 06 160400 200	380	600	26,860
400-225	PN-10	MT203 06 100400 225	380	625	19,290
	PN-16	MT203 06 160400 225	380	625	28,430





SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ.
DA1-DA2					
400-250	PN-10	MT203 06 100400 250	400	650	20,400
	PN-16	MT203 06 160400 250	400	650	30,090
400-280	PN-10	MT203 06 100400 280	400	680	21,780
	PN-16	MT203 06 160400 280	400	680	32,140
400-315	PN-10	MT203 06 100400 315	400	720	23,640
	PN-16	MT203 06 160400 315	400	720	34,860
400-355	PN-10	MT203 06 100400 355	400	760	46,420
	PN-16	MT203 06 160400 355	400	760	68,450
450-50	PN-10	MT203 06 100450 050	380	450	16,210
	PN-16	MT203 06 160450 050	380	450	23,810
450-63	PN-10	MT203 06 100450 063	380	465	16,890
	PN-16	MT203 06 160450 063	380	465	24,610
450-75	PN-10	MT203 06 100450 075	380	480	17,430
	PN-16	MT203 06 160450 075	380	480	25,540
450-90	PN-10	MT203 06 100450 090	380	495	18,050
	PN-16	MT203 06 160450 090	380	495	26,420
450-110	PN-10	MT203 06 100450 110	380	510	18,490
	PN-16	MT203 06 160450 110	380	510	27,300
450-125	PN-10	MT203 06 100450 125	380	525	19,150
	PN-16	MT203 06 160450 125	380	525	28,280
450-140	PN-10	MT203 06 100450 140	380	540	19,820
	PN-16	MT203 06 160450 140	380	540	29,260
450-160	PN-10	MT203 06 100450 160	380	560	20,730
	PN-16	MT203 06 160450 160	380	560	30,630
450-180	PN-10	MT203 06 100450 180	380	580	21,680
	PN-16	MT203 06 160450 180	380	580	32,020
450-200	PN-10	MT203 06 100450 200	390	600	22,650
	PN-16	MT203 06 160450 200	390	600	33,460
450-225	PN-10	MT203 06 100450 225	425	625	23,920
	PN-16	MT203 06 160450 225	425	625	35,310
450-250	PN-10	MT203 06 100450 250	425	650	25,210
	PN-16	MT203 06 160450 250	425	650	37,240
450-280	PN-10	MT203 06 100450 280	425	680	26,810
	PN-16	MT203 06 160450 280	425	680	39,620
450-315	PN-10	MT203 06 100450 315	425	715	28,790
	PN-16	MT203 06 160450 315	425	715	42,510
450-355	PN-10	MT203 06 100450 355	425	860	34,860
	PN-16	MT203 06 160450 355	425	860	51,480
450-355	PN-10	MT203 06 100450 355	425	860	34,860
	PN-16	MT203 06 160450 355	425	860	51,480
450-400	PN-10	MT203 06 100450 400	580	1000	61,530
	PN-16	MT203 06 160450 400	580	1000	90,890
500-50	PN-10	MT203 06 100500 050	400	450	19,990
	PN-16	MT203 06 160500 050	400	450	29,300
500-63	PN-10	MT203 06 100500 063	400	465	20,790
	PN-16	MT203 06 160500 063	400	465	34,420
500-75	PN-10	MT203 06 100500 075	400	480	21,460
	PN-16	MT203 06 160500 075	400	480	31,400
500-90	PN-10	MT203 06 100500 090	400	490	22,210
	PN-16	MT203 06 160500 090	400	490	32,460
500-110	PN-10	MT203 06 100500 110	400	510	22,780
	PN-16	MT203 06 160500 110	400	510	33,530
500-125	PN-10	MT203 06 100500 125	400	525	23,560
	PN-16	MT203 06 160500 125	400	525	34,680

Reduced TEE 90°(Confection)

İnegat TE 90° (Konfeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
DA1-DA2					
450-355	PN-10	MT203 06 100450 355	425	860	34,860
	PN-16	MT203 06 160450 355	425	860	51,480
450-400	PN-10	MT203 06 100450 400	580	1000	61,530
	PN-16	MT203 06 160450 400	580	1000	90,890
500-50	PN-10	MT203 06 100500 050	400	450	19,990
	PN-16	MT203 06 160500 050	400	450	29,300
500-63	PN-10	MT203 06 100500 063	400	465	20,790
	PN-16	MT203 06 160500 063	400	465	34,420
500-75	PN-10	MT203 06 100500 075	400	480	21,460
	PN-16	MT203 06 160500 075	400	480	31,400
500-90	PN-10	MT203 06 100500 090	400	490	22,210
	PN-16	MT203 06 160500 090	400	490	32,460
500-110	PN-10	MT203 06 100500 110	400	510	22,780
	PN-16	MT203 06 160500 110	400	510	33,530
500-125	PN-10	MT203 06 100500 125	400	525	23,560
	PN-16	MT203 06 160500 125	400	525	34,680
500-140	PN-10	MT203 06 100500 140	400	540	24,350
	PN-16	MT203 06 160500 140	400	540	35,850
500-160	PN-10	MT203 06 100500 160	400	560	25,440
	PN-16	MT203 06 160500 160	400	560	37,460
500-180	PN-10	MT203 06 100500 180	400	580	26,550
	PN-16	MT203 06 160500 180	400	580	39,100
500-200	PN-10	MT203 06 100500 200	450	600	27,690
	PN-16	MT203 06 160500 200	450	600	40,780
500-225	PN-10	MT203 06 100500 225	450	625	29,170
	PN-16	MT203 06 160500 225	450	625	42,930
500-250	PN-10	MT203 06 100500 250	450	650	30,670
	PN-16	MT203 06 160500 250	450	650	45,170
500-280	PN-10	MT203 06 100500 280	450	680	32,520
	PN-16	MT203 06 160500 280	450	680	47,920
500-315	PN-10	MT203 06 100500 315	450	715	34,800
	PN-16	MT203 06 160500 315	450	715	51,240
500-355	PN-10	MT203 06 100500 355	450	860	42,090
	PN-16	MT203 06 160500 355	450	860	61,970
500-400	PN-10	MT203 06 100500 400	450	900	45,020
	PN-16	MT203 06 160500 400	450	900	66,310
500-450	PN-10	MT203 06 100500 450	600	1060	55,318
	PN-16	MT203 06 160500 450	600	1060	86,675
560-50	PN-10	MT203 06 100560 050	480	450	24,940
	PN-16	MT203 06 160560 050	480	450	36,640
560-63	PN-10	MT203 06 100560 063	480	465	25,910
	PN-16	MT203 06 160560 063	480	465	38,000
560-75	PN-10	MT203 06 100560 075	480	480	26,740
	PN-16	MT203 06 160560 075	480	480	39,220
560-90	PN-10	MT203 06 100560 090	480	490	27,380
	PN-16	MT203 06 160560 090	480	490	40,120
560-110	PN-10	MT203 06 100560 110	480	510	28,390
	PN-16	MT203 06 160560 110	480	510	41,650
560-125	PN-10	MT203 06 100560 125	480	525	29,330
	PN-16	MT203 06 160560 125	480	525	42,980
560-140	PN-10	MT203 06 100560 140	480	540	30,290
	PN-16	MT203 06 160560 140	480	540	44,330
560-160	PN-10	MT203 06 100560 160	480	560	31,600
	PN-16	MT203 06 160560 160	480	560	46,160
560-180	PN-10	MT203 06 100560 180	480	580	32,930
	PN-16	MT203 06 160560 180	480	580	48,010
560-200	PN-10	MT203 06 100560 200	480	600	34,290
	PN-16	MT203 06 160560 200	480	600	49,890



Reduced TEE 90° (Confection)

İnegel TE 90° (Konfeksiyon)

Material : HDPE (PE 100)
Standard : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
DA1-DA2					
560-225	PN-10	MT203 06 100560 225	480	625	36,040
	PN-16	MT203 06 160560 225	480	625	52,290
560-250	PN-10	MT203 06 100560 250	480	650	37,820
	PN-16	MT203 06 160560 250	480	650	54,720
560-280	PN-10	MT203 06 100560 280	480	680	40,000
	PN-16	MT203 06 160560 280	480	680	57,680
560-315	PN-10	MT203 06 100560 315	480	715	42,660
	PN-16	MT203 06 160560 315	480	715	61,250
560-355	PN-10	MT203 06 100560 355	480	860	51,550
	PN-16	MT203 06 160560 355	480	860	73,910
560-400	PN-10	MT203 06 100560 400	480	900	54,920
	PN-16	MT203 06 160560 400	480	900	78,320
560-450	PN-10	MT203 06 100560 450	480	950	59,140
	PN-16	MT203 06 160560 450	480	950	83,840
560-500	PN-10	MT203 06 100560 500	480	1160	112,330
	PN-16	MT203 06 160560 500	480	1160	161,470
630-63	PN-10	MT203 06 100630 063	470	470	33,040
	PN-16	MT203 06 160630 063	470	470	48,370
630-75	PN-10	MT203 06 100630 075	470	480	33,750
	PN-16	MT203 06 160630 075	470	480	49,400
630-90	PN-10	MT203 06 100630 090	470	490	34,530
	PN-16	MT203 06 160630 090	470	490	50,510
630-110	PN-10	MT203 06 100630 110	470	510	35,830
	PN-16	MT203 06 160630 110	470	510	52,650
630-125	PN-10	MT203 06 100630 125	470	530	37,340
	PN-16	MT203 06 160630 125	470	530	54,880
630-140	PN-10	MT203 06 100630 140	500	540	38,180
	PN-16	MT203 06 160630 140	500	540	56,100
630-160	PN-10	MT203 06 100630 160	500	560	39,770
	PN-16	MT203 06 160630 160	500	560	58,460
630-180	PN-10	MT203 06 100630 180	500	580	41,400
	PN-16	MT203 06 160630 180	500	580	60,850
630-200	PN-10	MT203 06 100630 200	520	600	43,050
	PN-16	MT203 06 160630 200	520	600	63,280
630-225	PN-10	MT203 06 100630 225	520	630	45,510
	PN-16	MT203 06 160630 225	520	630	66,810
630-250	PN-10	MT203 06 100630 250	520	650	47,310
	PN-16	MT203 06 160630 250	520	650	69,540
630-280	PN-10	MT203 06 100630 280	520	680	49,330
	PN-16	MT203 06 160630 280	520	680	73,420
630-315	PN-10	MT203 06 100630 315	530	820	60,390
	PN-16	MT203 06 160630 315	530	820	88,760
630-355	PN-10	MT203 06 100630 355	530	860	64,100
	PN-16	MT203 06 160630 355	530	860	94,220
630-400	PN-10	MT203 06 100630 400	560	900	68,060
	PN-16	MT203 06 160630 400	560	900	100,060
630-450	PN-10	MT203 06 100630 450	600	950	73,010
	PN-16	MT203 06 160630 450	600	950	107,360
630-500	PN-10	MT203 06 100630 500	600	1100	85,100
	PN-16	MT203 06 160630 500	600	1100	125,100
630-560	PN-10	MT203 06 100630 560	760	1400	149,760
	PN-16	MT203 06 160630 560	760	1400	220,160
710-63	PN-10	MT203 06 100710 063	560	470	41,790
	PN-16	MT203 06 160710 063	560	470	61,590
710-75	PN-10	MT203 06 100710 075	560	480	42,680
	PN-16	MT203 06 160710 075	560	480	62,840
710-90	PN-10	MT203 06 100710 090	560	490	43,650
	PN-16	MT203 06 160710 090	560	490	64,230
710-110	PN-10	MT203 06 110710 110	560	510	45,320
	PN-16	MT203 06 160710 110	560	510	66,930
710-125	PN-10	MT203 06 100710 125	560	530	47,200
	PN-16	MT203 06 160710 125	560	530	69,720
710-140	PN-10	MT203 06 100710 140	560	540	48,220
	PN-16	MT203 06 160710 140	560	540	71,220
710-160	PN-10	MT203 06 100710 160	560	560	50,190
	PN-16	MT203 06 160710 160	560	560	70,140

Reduced TEE 90°(Confection)

İnegat TE 90° (Konfeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
DA1-DA2					
710-180	PN-10	MT203 06 100710 180	560	580	52,190
	PN-16	MT203 06 160710 180	560	580	77,090
710-200	PN-10	MT203 06 100710 200	600	600	54,210
	PN-16	MT203 06 160710 200	600	600	80,080
710-225	PN-10	MT203 06 100710 225	600	630	57,230
	PN-16	MT203 06 160710 225	600	630	84,520
710-250	PN-10	MT203 06 100710 250	600	660	59,400
	PN-16	MT203 06 160710 250	600	660	87,740
710-280	PN-10	MT203 06 100710 280	600	680	62,580
	PN-16	MT203 06 160710 280	600	680	92,460
710-315	PN-10	MT203 06 100710 315	600	820	75,640
	PN-16	MT203 06 160710 315	600	820	111,720
710-355	PN-10	MT203 06 100710 355	600	860	80,100
	PN-16	MT203 06 160710 355	600	860	118,300
710-400	PN-10	MT203 06 100710 400	600	900	84,800
	PN-16	MT203 06 160710 400	600	900	125,260
710-450	PN-10	MT203 06 100710 450	650	950	90,680
	PN-16	MT203 06 160710 450	650	950	133,960
710-500	PN-10	MT203 06 100710 500	650	1100	105,560
	PN-16	MT203 06 160710 500	650	1100	155,900
710-560	PN-10	MT203 06 100710 560	650	1160	113,040
	PN-16	MT203 06 160710 560	650	1160	166,960
710-630	PN-10	MT203 06 100710 630	950	1320	244,000
	PN-16	MT203 06 160710 630	950	1320	296,000
800-90	PN-10	MT203 06 100800 090	530	530	55,410
	PN-16	MT203 06 160800 090	530	530	91,330
800-110	PN-10	MT203 06 100800 110	550	550	57,560
	PN-16	MT203 06 160800 110	550	550	95,660
800-125	PN-10	MT203 06 100800 125	560	560	59,920
	PN-16	MT203 06 160800 125	560	560	97,980
800-140	PN-10	MT203 06 100800 140	580	580	68,180
	PN-16	MT203 06 160800 140	580	580	99,640
800-160	PN-10	MT203 06 100800 160	590	590	63,630
	PN-16	MT203 06 160800 160	590	590	102,960
800-180	PN-10	MT203 06 100800 180	600	600	66,110
	PN-16	MT203 06 160800 180	600	600	106,280
800-200	PN-10	MT203 06 100800 200	600	600	68,610
800-225	PN-10	MT203 06 100800 225	660	660	72,350
800-250	PN-10	MT203 06 100800 250	670	670	75,000
800-280	PN-10	MT203 06 100800 280	710	710	78,900
800-315	PN-10	MT203 06 100800 315	710	820	95,320
800-355	PN-10	MT203 06 100800 355	750	860	100,740
800-400	PN-10	MT203 06 100800 400	790	900	106,400
800-450	PN-10	MT203 06 100800 450	840	950	113,480
800-500	PN-10	MT203 06 100800 500	890	1100	131,960
800-560	PN-10	MT203 06 100800 560	920	1160	140,880
800-630	PN-10	MT203 06 100800 630	950	1230	151,640
800-710	PN-10	MT203 06 100800 710	980	1950	269,600
900-110	PN-10	MT203 06 100900 110	SPECIALLY PRODUCED UPON ORDER SİPARİŞE GÖRE ÖZEL ÜRETİLMEKTEDİR.		
900-125	PN-10	MT203 06 100900 125			
900-140	PN-10	MT203 06 100900 140			
900-160	PN-10	MT203 06 100900 160			
900-180	PN-10	MT203 06 100900 180			
900-200	PN-10	MT203 06 100900 200			
900-225	PN-10	MT203 06 100900 225			
900-250	PN-10	MT203 06 100900 250			
900-280	PN-10	MT203 06 100900 280			
900-315	PN-10	MT203 06 100900 315			
900-355	PN-10	MT203 06 100900 355			
900-400	PN-10	MT203 06 100900 400			
900-450	PN-10	MT203 06 100900 450			
900-500	PN-10	MT203 06 100900 500			



Reduced TEE 90°(Confection)

İnegat TE 90° (Konfeksiyon)

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	NET AĞ
DA1-DA2					
900-560	PN-10	MT203 06 100900 560			
900-630	PN-10	MT203 06 100900 630			
900-710	PN-10	MT203 06 100900 710			
900-800	PN-10	MT203 06 100900 800			
1000-110	PN-10	MT203 06 101000 110			
1000-125	PN-10	MT203 06 101000 125			
1000-140	PN-10	MT203 06 101000 140			
1000-160	PN-10	MT203 06 101000 160			
1000-180	PN-10	MT203 06 101000 180			
1000-200	PN-10	MT203 06 101000 200			
1000-225	PN-10	MT203 06 101000 225			
1000-250	PN-10	MT203 06 101000 250			
1000-280	PN-10	MT203 06 101000 280			
1000-315	PN-10	MT203 06 101000 315			
1000-355	PN-10	MT203 06 101000 355			
1000-400	PN-10	MT203 06 101000 400			
1000-450	PN-10	MT203 06 101000 450			
1000-500	PN-10	MT203 06 101000 500			
1000-560	PN-10	MT203 06 101000 560			
1000-630	PN-10	MT203 06 101000 630			
1000-710	PN-10	MT203 06 101000 710			
1000-800	PN-10	MT203 06 101000 800			
1000-900	PN-10	MT203 06 101000 900			
1200	PN-10	MT203 06 101200 000			
1400	PN-10	MT203 06 101400 000			
1600	PN-10	MT203 06 101600 000			

SPECIALLY PRODUCED UPON ORDER
SİPARİŞE GÖRE ÖZEL ÜRETİLMEKTEDİR.

Cross TEE 90°(Confection)

İstavroz TE 90° (Konfeksiyon)

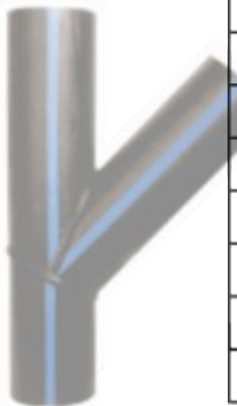
Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	I	NET AĞ
DA						
90	PN-16	MT203 07 100090 000	315	350	90	1,200
110	PN-10	MT203 07 100110 000	335	350	90	1,300
	PN-16	MT203 07 160110 000	335	350	90	1,920
125	PN-10	MT203 07 100125 000	350	350	90	2,220
	PN-16	MT203 07 160125 000	350	350	90	2,505
140	PN-10	MT203 07 100140 000	380	380	98	2,580
	PN-16	MT203 07 160140 000	380	380	98	2,945
160	PN-10	MT203 07 100160 000	460	460	150	4,160
	PN-16	MT203 07 160160 000	460	460	150	6,140
180	PN-10	MT203 07 100180 000	480	480	150	5,480
	PN-16	MT203 07 160180 000	480	480	150	8,080
200	PN-10	MT203 07 100200 000	500	500	150	7,050
	PN-16	MT203 07 160200 000	500	500	150	10,400
225	PN-10	MT203 07 100225 000	530	530	150	9,470
	PN-16	MT203 07 160225 000	530	530	150	13,890
250	PN-10	MT203 07 100250 000	750	750	250	16,500
	PN-16	MT203 07 160250 000	750	750	250	24,300
280	PN-10	MT203 07 100280 000	780	780	250	21,370
	PN-16	MT203 07 160280 000	780	780	250	31,670
315	PN-10	MT203 07 100315 000	920	920	300	32,020
	PN-16	MT203 07 160315 000	920	920	300	47,100
355	PN-10	MT 203 07 100355 000	960	960	300	42,430
	PN-16	MT203 07 160355 000	960	960	300	62,400
400	PN-10	MT203 07 100400 000	1000	1000	300	56,000
	PN-16	MT203 07 160400 000	1000	1000	300	82,600
450	PN-10	MT203 07 100450 000	1050	1050	300	74,340
	PN-16	MT203 07 160450 000	1050	1050	300	109,830
500	PN-10	MT203 07 100500 000	1200	1200	350	105,120
	PN-16	MT203 07 160500 000	1200	1200	350	154,800
560	PN-10	MT203 07 100560 000	1260	1260	350	138,100
	PN-16	MT203 07 160560 000	1260	1260	350	203,620
630	PN-10	MT203 07 100630 000	1350	1350	350	184,600
	PN-16	MT203 07 160630 000	1350	1350	350	271,320



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	I	NET AĞ
D1-D2						
125-50	PN-10	MT203 13 100125 050	315	350	125	1,079
	PN-16	MT203 13 160125 050	315	350	125	1,596
125-63	PN-10	MT203 13 100125 063	335	363	125	1,182
	PN-16	MT203 13 160125 063	335	363	125	1,744
125-75	PN-10	MT203 13 100125 075	350	375	125	1,292
	PN-16	MT203 13 160125 075	350	375	125	1,899
125-90	PN-10	MT203 13 100125 090	380	390	125	1,443
	PN-16	MT203 13 160125 090	380	390	125	2,123
140-50	PN-10	MT203 13 100140 050	390	350	125	1,323
	PN-16	MT203 13 160140 050	390	350	125	1,946
140-63	PN-10	MT203 13 100140 063	390	363	125	1,436
	PN-16	MT203 13 160140 063	390	363	125	2,106
140-75	PN-10	MT203 13 100140 075	390	375	125	3,103
	PN-16	MT203 13 160140 075	390	375	125	2,273
140-90	PN-10	MT203 13 100140 090	390	390	125	1,715
	PN-16	MT203 13 160140 090	390	390	125	2,511
140-110	PN-10	MT203 13 100140 110	390	410	125	1,961
	PN-16	MT203 13 160140 110	390	410	125	2,869
160-50	PN-10	MT203 13 100160 050	410	350	125	1,694
	PN-16	MT203 13 160160 050	410	350	125	2,503
160-63	PN-10	MT203 13 100160 063	410	463	125	1,803
	PN-16	MT203 13 160160 063	410	463	125	3,350
160-75	PN-10	MT203 13 100160 075	410	375	125	1,951
	PN-16	MT203 13 160160 075	410	375	125	2,869
160-90	PN-10	MT203 13 100160 090	410	390	125	2,129
	PN-16	MT203 13 160160 090	410	390	125	3,131
160-110	PN-10	MT203 13 100160 110	410	410	125	2,395
	PN-16	MT203 13 160160 110	410	410	125	3,521
160-125	PN-10	MT203 13 100160 125	410	425	125	2,611
	PN-16	MT203 13 160160 125	410	425	125	3,855
180-50	PN-10	MT203 13 100180 050	480	350	150	2,135
	PN-16	MT203 13 160180 050	480	350	150	3,149
180-63	PN-10	MT203 13 100180 063	480	363	150	2,288
	PN-16	MT203 13 160180 063	480	363	150	3,372
180-75	PN-10	MT203 13 100180 075	480	375	150	2,447
	PN-16	MT203 13 160180 075	480	375	150	3,600
180-90	PN-10	MT203 13 100180 090	480	390	150	2,665
	PN-16	MT203 13 160180 090	480	390	150	3,920
180-110	PN-10	MT203 13 100180 110	480	410	150	2,993
	PN-16	MT203 13 160180 110	480	410	150	4,394
180-125	PN-10	MT203 13 100180 125	480	425	150	3,255
	PN-16	MT203 13 160180 125	480	425	150	4,803
180-140	PN-10	MT203 13 100180 140	480	440	150	3,550
	PN-16	MT203 13 160180 140	480	440	150	5,229
200-50	PN-10	MT203 13 100200 050	500	350	150	2,604
	PN-16	MT203 13 160200 050	500	350	150	5,301
200-63	PN-10	MT203 13 100200 063	500	363	150	2,775
	PN-16	MT203 13 160200 063	500	363	150	4,091
200-75	PN-10	MT203 13 100200 075	500	375	150	2,797
	PN-16	MT203 13 160200 075	500	375	150	4,341
200-90	PN-10	MT203 13 100200 090	500	390	150	3,188
	PN-16	MT203 13 160200 090	500	390	150	4,692
200-110	PN-10	MT203 13 100200 110	500	410	150	3,543
	PN-16	MT203 13 160200 110	500	410	150	5,206
200-125	PN-10	MT203 13 100200 125	500	425	150	3,824
	PN-16	MT203 13 160200 125	500	425	150	5,644
200-140	PN-10	MT203 13 100200 140	500	440	150	4,140
	PN-16	MT203 13 160200 140	500	440	150	5,338
200-160	PN-10	MT203 13 100200 160	500	460	150	4,599
	PN-16	MT203 13 160200 160	500	460	150	6,786
225-50	PN-10	MT203 13 100225 050	476	350	126	3,457
	PN-16	MT203 13 160225 050	476	350	126	4,944
225-63	PN-10	MT203 13 100225 063	476	363	126	3,361
	PN-16	MT203 13 160225 063	476	363	126	5,182

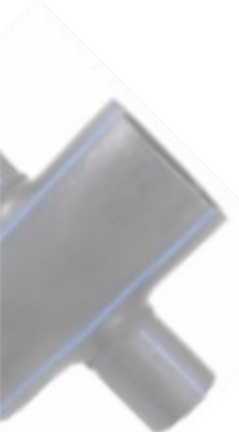




SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	I	NET AĞ
D1-D2						
225-75	PN-10	MT203 13 100225 075	476	375	126	3,809
	PN-16	MT203 13 160225 075	476	375	126	5,425
225-90	PN-10	MT203 13 100225 090	476	390	126	4,194
	PN-16	MT203 13 160225 090	476	390	126	5,907
225-110	PN-10	MT203 13 100225 110	476	410	126	4,373
	PN-16	MT203 13 160225 110	476	410	126	6,396
225-125	PN-10	MT203 13 100225 125	476	425	126	4,708
	PN-16	MT203 13 160225 125	476	425	126	6,904
225-140	PN-10	MT203 13 100225 140	476	440	126	5,066
	PN-16	MT203 13 160225 140	476	440	126	7,420
225-160	PN-10	MT203 13 100225 160	476	460	126	5,590
	PN-16	MT203 13 160225 160	476	460	126	8,210
225-180	PN-10	MT203 13 100225 180	476	480	126	6,160
	PN-16	MT203 13 160225 180	476	480	126	9,041
250-50	PN-10	MT203 13 100250 050	560	450	155	5,300
	PN-16	MT203 13 160250 050	560	450	155	8,074
250-63	PN-10	MT203 13 100250 063	560	460	155	5,472
	PN-16	MT203 13 160250 063	560	460	155	7,913
250-75	PN-10	MT203 13 100250 063	560	475	155	5,708
	PN-16	MT203 13 160250 075	560	475	155	8,248
250-90	PN-10	MT203 13 100250 090	560	490	155	6,146
	PN-16	MT203 13 160250 090	560	490	155	8,799
250-110	PN-10	MT203 13 100250 110	560	510	155	6,386
	PN-16	MT203 13 160250 110	560	510	155	9,377
250-125	PN-10	MT203 13 100250 125	560	525	155	6,768
	PN-16	MT203 13 160250 125	560	525	155	9,962
250-140	PN-10	MT203 13 100250 140	560	540	155	7,176
	PN-16	MT203 13 160250 140	560	540	155	10,557
250-160	PN-10	MT203 13 100250 160	560	560	155	7,771
	PN-16	MT203 13 160250 160	560	560	155	11,444
250-180	PN-10	MT203 13 100250 180	560	580	155	8,415
	PN-16	MT203 13 160250 180	560	580	155	12,395
250-200	PN-10	MT203 13 100250 200	600	600	155	9,103
	PN-16	MT203 13 160250 200	600	600	155	13,412
280-50	PN-10	MT203 13 100280 050	580	450	150	6,308
	PN-16	MT203 13 160280 050	580	450	150	9,211
280-63	PN-10	MT203 13 100280 063	580	465	150	6,568
	PN-16	MT203 13 160280 063	580	465	150	9,588
280-75	PN-10	MT203 13 100280 075	580	465	150	6,993
	PN-16	MT203 13 160280 075	580	465	150	10,191
280-90	PN-10	MT203 13 100280 090	580	490	150	7,459
	PN-16	MT203 13 160280 090	580	490	150	10,798
280-110	PN-10	MT203 13 100280 110	580	510	150	7,756
	PN-16	MT203 13 160280 110	580	510	150	11,451
280-125	PN-10	MT203 13 100280 125	580	525	150	8,164
	PN-16	MT203 13 160280 125	580	525	150	12,092
280-140	PN-10	MT203 13 100280 140	580	540	150	8,619
	PN-16	MT203 13 160280 140	580	540	150	12,742
280-160	PN-10	MT203 13 100280 160	580	560	150	9,258
	PN-16	MT203 13 160280 160	580	560	150	13,711
280-180	PN-10	MT203 13 100280 180	580	580	150	9,957
	PN-16	MT203 13 160280 180	580	580	150	14,273
280-200	PN-10	MT203 13 100280 200	640	600	180	10,899
	PN-16	MT203 13 160280 200	640	600	180	16,132
280-225	PN-10	MT203 13 100280 225	640	625	125	11,957
	PN-16	MT203 13 160280 225	640	625	125	17,668
315-50	PN-10	MT203 13 100315 050	566	450	125	7,816
	PN-16	MT203 13 160315 050	566	450	125	11,374
315-63	PN-10	MT203 13 100315 063	620	465	152	8,239
	PN-16	MT203 13 160315 063	620	465	152	11,980
315-75	PN-10	MT203 13 100315 075	630	475	157	8,670
	PN-16	MT203 13 160315 075	630	475	157	12,591
315-90	PN-10	MT203 13 100315 090	620	490	152	9,272
	PN-16	MT203 13 160315 090	620	490	152	13,992



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	I	NET AG
D1-D2						
315-110	PN-10	MT203 13 100315 110	620	510	152	9,640
	PN-16	MT203 13 160315 110	620	510	152	14,167
315-125	PN-10	MT203 13 100315 125	620	525	152	10,120
	PN-16	MT203 13 160315 125	620	525	152	14,880
315-140	PN-10	MT203 13 100315 140	620	540	152	10,676
	PN-16	MT203 13 160315 140	620	540	152	15,612
315-160	PN-10	MT203 13 100315 160	620	560	152	11,337
	PN-16	MT203 13 160315 160	620	560	152	16,694
315-180	PN-10	MT203 13 100315 180	620	580	152	12,108
	PN-16	MT203 13 160315 180	620	580	152	17,820
315-200	PN-10	MT203 13 100315 200	680	600	182	13,133
	PN-16	MT203 13 160315 200	680	600	182	19,333
315-225	PN-10	MT203 13 100315 225	680	625	180	14,277
	PN-16	MT203 13 160315 225	680	625	180	20,978
315-250	PN-10	MT203 13 100315 250	680	650	180	15,490
	PN-16	MT203 13 160315 250	680	650	180	22,796
355-50	PN-10	MT203 13 100355 050	660	450	152	9,848
	PN-16	MT203 13 160355 050	660	450	152	14,352
355-63	PN-10	MT203 13 100355 063	660	465	152	10,349
	PN-16	MT203 13 160355 063	660	465	152	15,080
355-75	PN-10	MT203 13 100355 075	660	475	152	10,875
	PN-16	MT203 13 160355 075	660	475	152	15,823
355-90	PN-10	MT203 13 100355 090	660	490	152	11,582
	PN-16	MT203 13 160355 090	660	490	152	16,772
355-110	PN-10	MT203 13 100355 110	660	510	152	12,040
	PN-16	MT203 13 160355 110	660	510	152	17,687
355-125	PN-10	MT203 13 100355 125	660	525	152	12,580
	PN-16	MT203 13 160355 125	660	525	152	18,500
355-140	PN-10	MT203 13 100355 140	660	540	152	16,156
	PN-16	MT203 13 160355 140	660	540	152	19,342
355-160	PN-10	MT203 13 100355 160	660	560	152	13,977
	PN-16	MT203 13 160355 160	660	560	152	20,554
355-180	PN-10	MT203 13 100355 180	660	580	152	14,838
	PN-16	MT203 13 160355 180	660	580	152	21,820
355-200	PN-10	MT203 13 100355 200	700	600	172	15,883
	PN-16	MT203 13 160355 200	700	600	172	23,369
355-225	PN-10	MT203 13 100355 225	700	625	172	17,136
	PN-16	MT203 13 160355 225	700	625	172	25,183
355-250	PN-10	MT203 13 100355 250	760	650	202	18,792
	PN-16	MT203 13 160355 250	760	650	202	27,642
355-280	PN-10	MT203 13 100355 280	760	680	202	20,537
	PN-16	MT203 13 160355 280	760	680	202	30,261
400-50	PN-10	MT203 13 100400 050	700	450	150	12,948
	PN-16	MT203 13 160400 050	700	450	150	18,961
400-63	PN-10	MT203 13 100400 063	700	465	150	13,428
	PN-16	MT203 13 160400 063	700	465	150	19,658
400-75	PN-10	MT203 13 100400 075	700	480	150	13,923
	PN-16	MT203 13 160400 075	700	480	150	20,371
400-90	PN-10	MT203 13 100400 090	700	495	150	14,609
	PN-16	MT203 13 160400 090	700	495	150	21,288
400-110	PN-10	MT203 13 100400 110	700	510	150	15,046
	PN-16	MT203 13 160400 110	700	510	150	22,161
400-125	PN-10	MT203 13 100400 125	700	525	150	15,674
	PN-16	MT203 13 160400 125	700	525	150	23,112
400-140	PN-10	MT203 13 100400 140	700	540	150	16,339
	PN-16	MT203 13 160400 140	700	540	150	24,082
400-160	PN-10	MT203 13 100400 160	700	560	150	17,268
	PN-16	MT203 13 160400 160	700	560	150	25,471
400-180	PN-10	MT203 13 100400 180	700	580	150	18,247
	PN-16	MT203 13 160400 180	700	580	150	26,903
400-200	PN-10	MT203 13 100400 200	760	600	180	19,479
	PN-16	MT203 13 160400 200	760	600	180	28,732
400-225	PN-10	MT203 13 100400 225	760	625	180	20,897
	PN-16	MT203 13 160400 225	760	625	180	30,788





SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	Z	L	I	NET AĞ
D1-D2						
400-250	PN-10	MT203 13 100400 250	800	650	200	32,600
	PN-16	MT203 13 160400 250	800	650	200	33,330
400-280	PN-10	MT203 13 100400 280	800	680	200	24,520
	PN-16	MT203 13 160400 280	800	680	200	36,200
400-315	PN-10	MT203 13 100400 315	800	720	200	27,120
	PN-16	MT203 13 160400 315	800	720	200	39,980
450-50	PN-10	MT203 13 100450 050	760	450	155	16,820
	PN-16	MT203 13 160450 050	760	450	126	23,914
450-63	PN-10	MT203 13 100450 063	760	465	126	17,002
	PN-16	MT203 13 160450 063	760	465	126	24,773
450-75	PN-10	MT203 13 100450 075	760	480	126	17,588
	PN-16	MT203 13 160450 075	760	480	126	25,768
450-90	PN-10	MT203 13 100450 090	760	495	126	18,276
	PN-16	MT203 13 160450 090	760	495	126	26,749
450-110	PN-10	MT203 13 100450 110	760	510	155	18,826
	PN-16	MT203 13 160450 110	760	510	155	27,787
450-125	PN-10	MT203 13 100450 125	760	525	155	19,578
	PN-16	MT203 13 160450 125	760	525	155	28,912
450-140	PN-10	MT203 13 100450 140	760	540	155	20,356
	PN-16	MT203 13 160450 140	760	540	155	30,047
450-160	PN-10	MT203 13 100450 160	760	560	155	21,431
	PN-16	MT203 13 160450 160	760	560	155	31,664
450-180	PN-10	MT203 13 100450 180	760	580	155	22,565
	PN-16	MT203 13 160450 180	760	580	155	33,325
450-200	PN-10	MT203 13 100450 200	780	600	165	23,813
	PN-16	MT203 13 160450 200	780	600	165	35,176
450-225	PN-10	MT203 13 100450 225	850	625	200	25,706
	PN-16	MT203 13 160450 225	850	625	200	37,930
450-250	PN-10	MT203 13 100450 250	850	650	200	27,410
	PN-16	MT203 13 160450 250	850	650	200	40,480
450-280	PN-10	MT203 13 100450 280	850	680	200	29,550
	PN-16	MT203 13 160450 280	850	680	200	43,680
450-315	PN-10	MT203 13 100450 315	850	715	200	32,270
	PN-16	MT203 13 160450 315	850	715	200	47,630
450-355	PN-10	MT203 13 100450 355	850	860	200	39,280
	PN-16	MT203 13 160450 355	850	860	200	57,980
500-50	PN-10	MT203 13 100500 050	800	450	150	20,058
	PN-16	MT203 13 160500 050	800	450	150	29,401
500-63	PN-10	MT203 13 100500 063	800	465	150	20,898
	PN-16	MT203 13 160500 063	800	465	150	30,578
500-75	PN-10	MT203 13 100500 075	800	480	150	21,613
	PN-16	MT203 13 160500 075	800	480	150	31,621
500-90	PN-10	MT203 13 100500 090	800	490	150	22,429
	PN-16	MT203 13 160500 090	800	490	150	32,778
500-110	PN-10	MT203 13 100500 110	800	510	150	23,106
	PN-16	MT203 13 160500 110	800	510	150	34,001
500-125	PN-10	MT203 13 100500 125	800	525	150	23,974
	PN-16	MT203 13 160500 125	800	525	150	35,292
500-140	PN-10	MT203 13 100500 140	800	540	150	24,869
	PN-16	MT203 13 160500 140	800	540	150	36,612
500-160	PN-10	MT203 13 100500 160	800	560	150	26,118
	PN-16	MT203 13 160500 160	800	560	150	38,461
500-180	PN-10	MT203 13 100500 180	800	580	150	27,407
	PN-16	MT203 13 160500 180	800	580	150	40,363
500-200	PN-10	MT203 13 100500 200	900	600	200	29,100
	PN-16	MT203 13 160500 200	900	600	200	42,860
500-225	PN-10	MT203 13 100500 225	900	625	250	31,403
	PN-16	MT203 13 160500 225	900	625	250	46,205
500-250	PN-10	MT203 13 100500 250	900	650	250	33,420
	PN-16	MT203 13 160500 250	900	650	250	49,220
500-280	PN-10	MT203 13 100500 280	900	680	250	35,945
	PN-16	MT203 13 160500 280	900	680	250	52,995
500-315	PN-10	MT203 13 100500 315	900	715	250	39,150
	PN-16	MT203 13 160500 315	900	715	250	57,640
500-355	PN-10	MT203 13 100500 355	900	860	250	47,615
	PN-16	MT203 13 160500 355	900	860	250	70,095
500-400	PN-10	MT203 13 100500 400	900	900	250	52,020
	PN-16	MT203 13 160500 400	900	900	250	76,635

MEGA - THERM Electrofusion Fittings

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"We carry the world's natural gas"

EF Reduced TEE 90°

İnegal TE 90°

Material : HDPE (PE 100)
Standard : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	D1	L	Z	H	NET AĞ
D							
32	PN-16	MT204 04 160032 000	44	102	67	40	0,085
40	PN-16	MT204 04 160040 000	54	120	78	46	0,141
50	PN-16	MT204 04 160050 000	66	135	86	49	0,222
63	PN-16	MT204 04 160063 000	80	152	98	55	0,344
75	PN-16	MT204 04 160075 000	98	187	124	67	0,602
90	PN-16	MT204 04 160090 000	115	205	143	76	0,883
110	PN-16	MT204 04 160110 000	140	253	164	85	1,581
125	PN-16	MT204 04 160125 000	153	256	175	88	1,902
160	PN-16	MT204 04 160160 000	198	325	207	98	1,750

EF Reducer

EF Redüksiyon

Material : HDPE (PE 100)
Standard : TS 418-3 EN 12201-3



ÇAP	BASINÇ	KOD NO	L	L1	D1	NET AĞ
SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
D-D2						
63-32	PN-16	MT204 06 160063 032	106	56	82	0,171
63-40	PN-16	MT204 06 160063 040	106	52	82	0,176
63-50	PN-16	MT204 06 160063 050	125	60	87	0,189
75-50	PN-16	MT204 06 160075 050	139	64	98	0,280
90-63	PN-16	MT204 06 160090 063	146	66	116	0,360
90-75	PN-16	MT204 06 160090 075	146	66	116	0,450
110-63	PN-16	MT204 06 160110 063	161	78	141	0,570
110-90	PN-16	MT204 06 160110 090	159	75	141	0,660
160-110	PN-16	MT204 06 160160 110	124	95	198	1,200

EF Equal TEE 90°

EF Egit TE 90°

Material : HDPE (PE 100)
Standard : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	D1	L	Z	H	NET AĞ
D-D2							
32-25	PN-16	MT204 05 160032 025	44	102	67		0,198
40-25	PN-16	MT204 05 160040 025	54	120	70	40	0,140
40-32	PN-16	MT204 05 160040 032	54	120	78	46	0,141
50-25	PN-16	MT204 05 160050 025	66	135	78	40	0,213
50-40	PN-16	MT204 05 160050 040	66	135	78		0,404
63-25	PN-16	MT204 05 160063 025	81	135	84	40	0,268
63-32	PN-16	MT204 05 160063 032	81	135	89	45	0,262
63-40	PN-16	MT204 05 160063 040	81	135	89	45	0,605
63-50	PN-16	MT204 05 160063 050	81	150	98	55	0,329
75-32	PN-16	MT204 05 160075 032	97	181	100	46	0,570
75-63	PN-16	MT204 05 160075 063	97	181	100	46	0,986
90-40	PN-16	MT204 05 160090 040	115	193	128	67	0,745
90-50	PN-16	MT204 05 160090 050	115	193	128	67	0,745
90-63	PN-16	MT204 05 160090 063	115	193	128	67	0,745
90-75	PN-16	MT204 05 160090 075	115	193	128	67	0,800
110-40	PN-16	MT204 05 160110 040	140	228	144	68	1,300
110-50	PN-16	MT204 05 160110 050	140	228	144	68	1,268
110-63	PN-16	MT204 05 160110 063	140	255	164	84	1,500
110-90	PN-16	MT204 05 160110 090	140	255	164	84	1,570
125-90	PN-16	MT204 05 160125 090	155	256	177	88	1,720
125-110	PN-16	MT204 05 160125 110	155	256	177	88	1,800
160-63	PN-16	MT204 05 160160 063	198	280	194	95	4,940
160-90	PN-16	MT204 05 160160 090	198	280	194	95	5,040
160-110	PN-16	MT204 05 160160 110	198	280	194	95	2,912

EF Coupler

EF Manşon

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	D	L	NET AĞ
DA					
25	PN-16	MT204 01 160025 000	36	68	0,050
32	PN-16	MT204 01 160032 000	44	72	0,053
40	PN-16	MT204 01 160040 000	54	80	0,082
50	PN-16	MT204 01 160050 000	66	88	0,126
63	PN-16	MT204 01 160063 000	81	96	0,180
75	PN-16	MT204 01 160075 000	97	110	0,295
90	PN-16	MT204 01 160090 000	115	125	0,375
110	PN-16	MT204 01 160110 000	140	145	0,705
125	PN-16	MT204 01 160125 000	155	158	0,950
140	PN-16	MT204 01 160140 000	180	190	1,159
160	PN-16	MT204 01 160160 000	198	180	1,782
180	PN-16	MT204 01 160180 000	222	164	2,294
200	PN-16	MT204 01 160200 000	246	208	2,747
225	PN-16	MT204 01 160225 000	276	224	4,292
250	PN-16	MT204 01 160250 000	308	244	5,085
280	PN-16	MT204 01 160280 000	345	252	7,010
315	PN-16	MT204 01 160315 000	392	220	7,092
355	PN-16	MT204 01 160355 000	437	260	12,300
400	PN-16	MT204 01 160400 000	492	280	16,300
450	PN-16	MT204 01 160450 000	552	300	22,500
500	PN-16	MT204 01 160500 000	614	300	32,300
560	PN-16	MT204 01 160560 000	687	300	41,700
630	PN-16	MT204 01 160630 000	785	400	63,400
710	PN-16	MT204 01 160710 000	880	400	79,350
800	PN-16	MT204 01 160800 000	985	400	
900	PN-16	MT204 01 160900 000			
1000	PN-16	MT204 01 161000 000			
1200	PN-16	MT204 01 161200 000			

SPECIALLY PRODUCED UPON ORDER
SİPARİŞE GÖRE ÖZEL ÜRETİLMEKTEDİR.

EF Elbow 45°

EF Dirsek 45°

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	D1	L	L1	Z	NET AĞ
D							
32	PN-16	MT204 02 160032 000	44	36	40	36	0,087
40	PN-16	MT204 02 160040 000	54	39	42	39	0,121
50	PN-16	MT204 02 160050 000	66	68	44	24	0,159
63	PN-16	MT204 02 160063 000	81	77	49	28	0,274
75	PN-16	MT204 02 160075 000	97	95	61	34	0,437
90	PN-16	MT204 02 160090 000	115	111	62	49	0,622
110	PN-16	MT204 02 160110 000	140	134	71	63	1,174
125	PN-16	MT204 02 160125 000	151	133	75	58	1,308
160	PN-16	MT204 02 160160 000	196	165	91	74	2,634

EF Elbow 90°

EF Dirsek 90°

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	D1	L	L1	Z	NET AĞ
D							
25	PN-16	MT204 03 160025 000	35	35	32	20	0,078
32	PN-16	MT204 03 160032 000	44	56	36	20	0,077
40	PN-16	MT204 03 160040 000	54	61	39	22	0,112
50	PN-16	MT204 03 160050 000	66	72	44	28	0,179
63	PN-16	MT204 03 160063 000	81	81	49	32	0,290
75	PN-16	MT204 03 160075 000	97	102	62	40	0,488
90	PN-16	MT204 03 160090 000	115	122	62	60	0,859
110	PN-16	MT204 03 160110 000	140	140	71	76	1,445
125	PN-16	MT204 03 160125 000	151	142	74	68	1,560
160	PN-16	MT204 03 160160 000	196	174	90	86	3,100



EF Tapping TEE (Without Valve)

EF Vanasız Servis TE

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	(MM)	(MM)	WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	H	H1	L	L1	Z	NET AĞ
D-01								
40-20	PN-16	MT204 09 160040 020	99	33	103	70	102	0,324
40-25	PN-16	MT204 09 160040 025	99	33	103	70	102	0,331
40-32	PN-16	MT204 09 160040 032	99	33	103	70	102	0,353
50-20	PN-16	MT204 09 160050 020	105	38	103	70	102	0,325
50-25	PN-16	MT204 09 160050 025	105	38	103	70	102	0,323
50-32	PN-16	MT204 09 160050 032	105	38	103	70	120	0,342

EF Tapping TEE (Without Valve)

EF Vanasız Servis TE

Material : HDPE (PE 100)
Standart : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	H	H1	L	L1	Z	NET AĞ
D-01								
63-20	PN-16	MT204 16 160063 020	188	106	161	70	126	0,69
63-25	PN-16	MT204 16 160063 025	188	106	161	70	126	0,650
63-32	PN-16	MT204 16 160063 032	188	106	161	75	126	0,650
63-40	PN-16	MT204 16 160063 040	188	106	161	81	135	0,700
63-50	PN-16	MT204 16 160063 050	235	123	161	94	161	0,950
63-63	PN-16	MT204 16 160063 063	235	123	161	97	157	0,990
75-20	PN-16	MT204 16 160075 020	188	106	161	70	126	0,780
75-25	PN-16	MT204 16 160075 025	188	106	161	70	126	0,780
75-32	PN-16	MT204 16 160075 032	188	106	161	75	135	0,780
75-40	PN-16	MT204 16 160075 040	188	106	161	81	161	0,790
75-50	PN-16	MT204 16 160075 050	235	106	161	94	157	1,040
75-63	PN-16	MT204 16 160075 063	235	123	161	97	126	1,080
90-20	PN-16	MT204 16 160090 020	186	105	161	70	126	0,740
90-25	PN-16	MT204 16 160090 025	187	105	161	70	126	0,750
90-32	PN-16	MT204 16 160090 032	187	105	161	75	126	0,750
90-40	PN-16	MT204 16 160090 040	187	105	161	81	135	0,760
90-50	PN-16	MT204 16 160090 050	234	122	161	94	161	1,000
90-63	PN-16	MT204 16 160090 063	234	122	161	97	157	1,050
110-20	PN-16	MT204 16 160110 020	194	111	161	70	126	0,850
110-25	PN-16	MT204 16 160110 025	194	111	161	70	126	0,850
110-32	PN-16	MT204 16 160110 032	194	111	161	75	126	0,830
110-40	PN-16	MT204 16 160110 040	194	111	161	81	135	0,860
110-50	PN-16	MT204 16 160110 050	240	128	161	94	161	1,110
110-63	PN-16	MT204 16 160110 063	240	128	161	97	157	1,160
125-20	PN-16	MT204 16 160125 020	190	109	161	70	126	0,850
125-25	PN-16	MT204 16 160125 025	190	109	161	70	126	0,850
125-32	PN-16	MT204 16 160125 032	190	109	161	75	126	0,850
125-40	PN-16	MT204 09 160125 040	190	109	161	81	135	0,860
125-50	PN-16	MT204 09 160125 050	237	123	161	94	161	1,110
125-63	PN-16	MT204 09 160125 063	237	123	161	97	157	1,160
140-20	PN-16	MT204 09 160140 020	180	98	161	70	126	0,850
140-25	PN-16	MT204 09 160140 025	180	98	161	70	126	0,850
140-32	PN-16	MT204 09 160140 032	180	98	161	75	126	0,850
140-40	PN-16	MT204 09 160140 040	180	98	161	81	135	0,850
140-50	PN-16	MT204 09 160140 050	225	128	161	94	161	1,100
140-63	PN-16	MT204 09 160140 063	225	128	161	97	157	1,150
160-20	PN-16	MT204 09 160160 020	177	96	161	70	126	0,830
160-25	PN-16	MT204 09 160160 025	177	96	161	70	126	0,830
160-32	PN-16	MT204 09 160160 032	177	96	161	75	126	0,830
160-40	PN-16	MT204 09 160160 040	177	96	161	81	135	0,840
160-50	PN-16	MT204 09 160160 050	223	128	161	94	161	1,090
160-63	PN-16	MT204 09 160160 063	223	128	161	97	157	1,140
180-20	PN-16	MT204 09 160180 020	173	92	162	70	126	0,900
180-25	PN-16	MT204 09 160180 025	173	92	162	70	126	0,900
180-32	PN-16	MT204 09 160180 032	173	92	162	75	126	0,900
180-40	PN-16	MT204 09 160180 040	173	92	162	81	135	0,920
180-50	PN-16	MT204 09 160180 050	222	129	162	94	161	1,170
180-63	PN-16	MT204 09 160180 063	222	129	162	97	157	1,210
200-20	PN-16	MT204 09 160200 020	172	90	162	70	126	0,900
200-25	PN-16	MT204 09 160200 025	172	90	162	70	126	0,900
200-32	PN-16	MT204 09 160200 032	172	90	162	75	126	0,900
200-40	PN-16	MT204 09 160200 040	172	90	162	81	135	0,920
200-50	PN-16	MT204 09 160200 050	220	129	162	94	161	1,170
200-63	PN-16	MT204 09 160200 063	220	129	162	97	157	1,210
225-20	PN-16	MT204 09 160225 020	170	87	162	70	126	0,930
225-25	PN-16	MT204 09 160225 025	170	87	162	70	126	0,930
225-32	PN-16	MT204 09 160225 032	170	87	162	75	126	0,940
225-40	PN-16	MT204 09 160225 040	172	90	162	81	135	0,920
225-50	PN-16	MT204 09 160225 050	220	129	162	94	161	1,170
225-63	PN-16	MT204 09 160225 063	220	129	162	97	157	1,210
250-20	PN-16	MT204 09 160250 020	165	84	162	70	126	0,950
250-25	PN-16	MT204 09 160250 025	165	84	162	70	126	0,950
250-32	PN-16	MT204 09 160250 032	165	84	162	75	126	0,950
250-40	PN-16	MT204 09 160250 040	165	84	162	81	135	0,960
250-50	PN-16	MT204 09 160250 050	212	129	162	94	161	1,200
250-63	PN-16	MT204 09 160250 063	212	129	162	97	157	1,250
280-20	PN-16	MT204 09 160280 020	165	84	162	70	126	0,950
280-25	PN-16	MT204 09 160280 025	165	84	162	70	126	0,950
280-32	PN-16	MT204 09 160280 032	165	84	162	75	126	0,950
280-40	PN-16	MT204 09 160280 040	165	84	162	81	135	0,960

EF Tapping TEE (Without Valve)

EF Variesız Servis TE

Material : HDPE (PE 100)
Standard : TS 418-3 EN 12201-3



280-50	PN-16	MT204 09 160280 050	212	129	162	94	161	1,200
280-63	PN-16	MT204 09 160280 063	212	129	162	97	157	1,250
315-20	PN-16	MT204 09 160315 020	165	80	162	70	126	1,030
315-25	PN-16	MT204 09 160315 025	165	80	162	70	126	1,030
315-32	PN-16	MT204 09 160315 032	165	80	162	75	126	1,030
315-40	PN-16	MT204 09 160315 040	165	80	162	81	135	1,040
315-50	PN-16	MT204 09 160315 050	213	129	162	94	161	1,040
315-63	PN-16	MT204 09 160315 063	213	129	162	97	157	1,040
355-20	PN-16	MT204 09 160355 020	165	80	162	70	126	1,090
355-25	PN-16	MT204 09 160355 025	165	80	162	70	126	1,090
355-32	PN-16	MT204 09 160355 032	165	80	162	75	126	1,090
355-40	PN-16	MT204 09 160355 040	165	80	162	81	135	1,100
355-50	PN-16	MT204 09 160355 050	213	129	162	94	161	1,400
355-63	PN-16	MT204 09 160355 063	213	129	162	97	157	1,410
400-20	PN-16	MT204 09 160400 020	165	80	162	70	126	1,250
400-25	PN-16	MT204 09 160400 025	165	80	162	70	126	1,250
400-32	PN-16	MT204 09 160400 032	165	80	162	75	126	1,250
400-40	PN-16	MT204 09 160400 040	165	80	162	81	135	1,260
400-50	PN-16	MT204 09 160400 050	213	129	162	94	157	1,510
400-63	PN-16	MT204 09 160400 063	213	129	162	97	161	1,600

EF Saddle

EF Serrier

Material : HDPE (PE 100)
Standard : TS 418-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	H	H1	L	NET AG
D-D1						
63-25	PN-16	MT204 08 160063 025	88	185	161	0,440
63-32	PN-16	MT204 08 160063 032	88	189	161	0,450
63-40	PN-16	MT204 08 160063 040	88	188	161	0,460
63-50	PN-16	MT204 08 160063 050	88	184	161	0,465
75-25	PN-16	MT204 08 160075 025	88	185	161	0,525
75-32	PN-16	MT204 08 160075 032	88	189	161	0,535
75-40	PN-16	MT204 08 160075 040	88	188	161	0,545
75-50	PN-16	MT204 08 160075 050	88	184	161	0,550
90-25	PN-16	MT204 08 160090 025	87	184	161	0,485
90-32	PN-16	MT204 08 160090 032	87	187	161	0,500
90-40	PN-16	MT204 08 160090 040	87	183	161	0,505
90-50	PN-16	MT204 08 160090 050	93	189	161	0,515
110-25	PN-16	MT204 08 160110 025	93	192	161	0,600
110-32	PN-16	MT204 08 160110 032	93	192	161	0,610
110-40	PN-16	MT204 08 160110 040	93	186	161	0,620
110-50	PN-16	MT204 08 160110 050	91	186	161	0,630
125-25	PN-16	MT204 08 160125 025	91	190	161	0,570
125-32	PN-16	MT204 08 160125 032	91	190	161	0,585
125-40	PN-16	MT204 08 160125 040	91	185	161	0,590
125-50	PN-16	MT204 08 160125 050	80	175	161	0,600
140-25	PN-16	MT204 08 160140 025	80	179	161	0,585
140-32	PN-16	MT204 08 160140 032	80	179	161	0,595
140-40	PN-16	MT204 08 160140 040	80	175	161	0,605
140-50	PN-16	MT204 08 160140 050	78	173	161	0,615
160-25	PN-16	MT204 08 160160 025	78	177	161	0,570
160-32	PN-16	MT204 08 160160 032	78	177	161	0,585
160-40	PN-16	MT204 08 160160 040	78	177	161	0,590
160-50	PN-16	MT204 08 160160 050	78	171	161	0,600
180-25	PN-16	MT204 08 160180 025	74	169	162	0,675
180-32	PN-16	MT204 08 160180 032	74	172	162	0,685
180-40	PN-16	MT204 08 160180 040	74	172	162	0,695
180-50	PN-16	MT204 08 160180 050	74	166	162	0,705
200-25	PN-16	MT204 08 160200 025	72	165	162	0,665
200-32	PN-16	MT204 08 160200 032	72	171	162	0,680
200-40	PN-16	MT204 08 160200 040	72	171	162	0,685
200-50	PN-16	MT204 08 160200 050	72	166	162	0,695
225-25	PN-16	MT204 08 160225 025	69	164	162	0,690
225-32	PN-16	MT204 08 160225 032	69	168	162	0,705
225-40	PN-16	MT204 08 160225 040	69	168	162	0,710
225-50	PN-16	MT204 08 160225 050	69	162	162	0,720
250-25	PN-16	MT204 08 160250 025	66	161	162	0,710
250-32	PN-16	MT204 08 160250 032	66	165	162	0,725
250-40	PN-16	MT204 08 160250 040	66	175	162	0,730
250-50	PN-16	MT204 08 160250 050	66	158	162	0,740
280-25	PN-16	MT204 08 160280 025	66	161	162	0,725
280-32	PN-16	MT204 08 160280 032	66	165	162	0,740
280-40	PN-16	MT204 08 160280 040	66	165	162	0,745
280-50	PN-16	MT204 08 160280 050	66	156	162	0,755



EF Cap

EF Kır Tapa

Material : HDPE (PE 100)
Standart : TS 416-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	D1	L	NET AĞ
D					
20	PN-16	MT204 07 160020 000	35	52	0,012
25	PN-16	MT204 07 160025 000	36	52	0,018
32	PN-16	MT204 07 160032 000	44	52	0,066
40	PN-16	MT204 07 160040 000	54	56	0,095
50	PN-16	MT204 07 160050 000	66	60	0,165
63	PN-16	MT204 07 160063 000	81	66	0,250
75	PN-16	MT204 07 160075 000	97	110	0,416
90	PN-16	MT204 07 160090 000	115	125	0,496
110	PN-16	MT204 07 160110 000	140	145	1,036
125	PN-16	MT204 07 160125 000	155	158	1,417
140	PN-16	MT204 07 160140 000	180	170	1,741
160	PN-16	MT204 07 160160 000	198	180	2,617
180	PN-16	MT204 07 160180 000	222	194	3,451
200	PN-16	MT204 07 160200 000	246	208	4,646
225	PN-16	MT204 07 160225 000	276	224	6,398
250	PN-16	MT204 07 160250 000			8,140
280	PN-16	MT204 07 160280 000			11,260
315	PN-16	MT204 07 160315 000			13,480

EF Saddle

EF Sırtar

Material : HDPE (PE 100)
Standart : TS 416-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	L	H	NET AĞ
D-D1					
63-63	PN-16	MT204 08 160063 063	161	88	0,425
75-63	PN-16	MT204 08 160075 063	161	88	0,510
90-63	PN-16	MT204 08 160090 063	161	87	0,475
110-63	PN-16	MT204 08 160110 063	161	93	0,585
125-63	PN-16	MT204 05 160125 063	161	91	0,550
140-63	PN-16	MT204 05 160140 063	161	80	0,570
160-63	PN-16	MT204 05 160160 063	161	78	0,560
180-63	PN-16	MT204 08 160180 063	162	74	0,640
200-63	PN-16	MT204 08 160200 063	162	72	0,640
225-63	PN-16	MT204 08 160225 063	162	69	0,665
250-63	PN-16	MT204 08 160250 063	162	66	0,685
280-63	PN-16	MT204 08 160280 063	162	66	0,705
315-63	PN-16	MT204 08 160315 063	162	62	0,760
355-63	PN-16	MT204 08 160355 063	162	62	0,760
400-63	PN-16	MT204 08 160400 063	162	62	0,700

EF Repair Saddle

EF Tamir Seli

Material : HDPE (PE 100)
Standart : TS 416-3 EN 12201-3



SIZE (MM)	PRESSURE (BAR)	CODE NO	(MM)	(MM)	NET WEIGHT (KG)
ÇAP	BASINÇ	KOD NO	L	H	NET AĞ
D					
63	PN-16	MT204 08 160063 000	161	111	0,425
75	PN-16	MT204 08 160075 000	161	110	0,510
90	PN-16	MT204 08 160090 000	161	110	0,475
110	PN-16	MT204 08 160110 000	161	114	0,580
125	PN-16	MT204 08 160125 000	161	112	0,580
140	PN-16	MT204 08 160140 000	161	110	0,570
160	PN-16	MT204 08 160160 000	161	109	0,570
180	PN-16	MT204 08 160180 000	162	95	0,635
200	PN-16	MT204 08 160200 000	162	93	0,640
225	PN-16	MT204 08 160225 000	162	90	0,660
250	PN-16	MT204 08 160250 000	162	87	0,715
280	PN-16	MT204 08 160280 000	162	87	0,720
315	PN-16	MT204 08 160315 000	162	84	0,755
355	PN-16	MT204 08 160355 000	162	84	0,970
400	PN-16	MT204 08 160400 000	162	84	0,970



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