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PE 100 Fittings for Gas & Water Transmission Systems  
*PE 100 Gaz ve Su Fiting Sistemleri*

**NTG Plastik San. ve Tic. A.Ş.**

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Product Catalogue  
Ürün Kataloğu **2010**

## Export Countries / İhracat Yapılan Ülkeler



▶ Armenia / Ermenistan  
 Bulgaria / Bulgaristan  
 Cyprus / K.K.T.C.  
 Denmark / Danimarka  
 Egypt / Mısır  
 England / İngiltere  
 Georgia / Gürcistan  
 Germany / Almanya  
 Greece / Yunanistan  
 Iraq / Irak  
 Iran / İran  
 Italy / İtalya  
 Kazakhstan / Kazakistan  
 Kenya / Kenya  
 Libya / Libya  
 Macedonia / Makedonya  
 Netherlands / Hollanda  
 Pakistan / Pakistan  
 Poland / Polonya  
 Portugal / Portekiz  
 Romania / Romanya  
 Russia / Rusya  
 Saudi Arabia / Suudi Arabistan  
 Singapore / Singapur  
 Spain / İspanya  
 Syria / Suriye  
 Switzerland / İsviçre  
 Turkmenistan / Türkmenistan  
 U.A.E. / B.A.E.  
 Ukraine / Ukrayna



Plastic Injection Section / Plastik Enjeksiyon Bölümü



Laboratory / Laboratuvar

Warehouse / Stok



Mould Design & Production Section / Kalıp Tasarım & İmalat Bölümü

NTG was established in 2005 to produce fittings for water and gas applications and have been supplying PE100 mould injected fittings to the industry since 2006. Our 5 years experience with our vision of producing consistently top quality and reliable products, being competitive in the international market will bring more success to NTG in the future.

NTG is ISO 9001:2000 recognised and follows international standards, such as EN, DIN, TSE based on 1555-3 and 12201-3. 65% of the whole production already goes to the export market. Our target is to establish an international reputation by holding worldwide approvals and certificates like TSE, DVGW, SKZ, TZW, GOST. NTG is represented by agencies in 13 countries and exporting to over 30.

With our own mould design and production facility this gives greater flexibility and allows us to meet new demands coming from the market. The philosophy of being customer oriented gives reputation as well as competitiveness to our team. The production already covers a wide range of fittings by placing us within both national and international known producers. The market never stops asking for new fittings allowing NTG to always increase the product list.

Team work, effective quality assurance systems, standing aside of the customer, being on time, being cost effective and inventive are just some issues that the NTG team strives to go further.

Our partners are always pleased to hear about new products coming from NTG over the past years, this will never stop and NTG will further innovate and develop safe, functional and cost-effective pipe fittings to national and international market as one of the most reliable suppliers.

Su ve gaz alt yapı sistemlerine boru ek parçaları üretimi ile 2005 yılında yola çıkan NTG 2006 yılından bu yana sektöre PE100 kalıp enjeksiyon ürünlerini sunmaktadır. En üst kalite düzeyinde, güvenilir ve uluslararası rekabet gücüne sahip üretim anlayışı ile 5 yılda edinilen tecrübe ve bilgi birikimi gelecek yıllarda NTG'yi daha ileri götürecektir.

NTG kurulduğu günden bu yana ISO 9001:2000 kalite yönetim sistem belgesine sahip olup uluslararası standartlarda üretimi benimsemiştir. EN, DIN, TSE kapsamında ilgili 1555-3 ve 12201-3 ana standartlarına uygun üretim ile ihracatta önemli gelişme kaydedilerek bugün üretimin %65'i ihraç edilir konuma gelinmiştir. TSE, DVGW, SKZ, TZW, GOST, ve çeşitli ülkelerden kalite sertifikaları ve ürün tescili olan NTG dünya pazarlarında tanınırlığını arttırmayı hedeflemiştir. 2009 sonu itibarı ile 13 ülkede temsilciliği olup satış yaptığı ülke sayısı 30'un üzerindedir.

NTG kendi bünyesinde bulunan kalıp imalatı ile kısa sürede yeni taleplere cevap verir konumdadır. Müşteri odaklı çalışmayı benimsemiş olması ile de haklı olarak sektörde saygın bir yer elde etmektedir. Bugünkü konumu itibarı ile yalnız Türkiye'de değil dünya pazarında da aynı sektörde bulunan rakiplerine göre önemli bir ürün gamına ulaşılmıştır. Projelerin, dolayısı ile müşterilerin yeni ürün taleplerinin bitmeyeceği gerçek olduğu gibi NTG'nin de ürün gamını genişleterek bu taleplere cevap vermeyi hedeflediği de bir gerçektir.

Ekip çalışması, etkili kalite kontrol sistemi, müşteri ile yan yana durmak, zamanında ve kabul edilebilir maliyet seviyelerinde olmak, ileriye ve yalnız daha ileriye gitmek NTG'nin tüm çalışanlarınca benimsendiği konulardan sadece birkaçıdır.

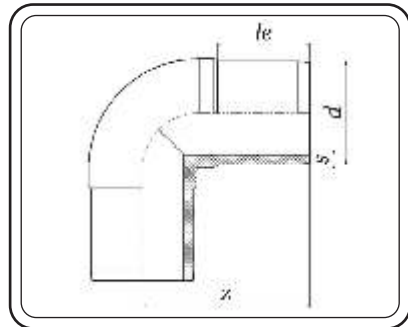
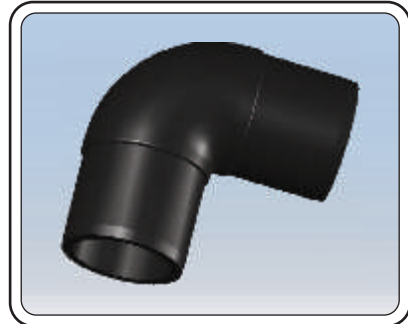
Müşterilerimiz NTG'den her zaman yeni ürün haberi almaya alışmıştır ve NTG bu özelliğini ileriki yıllarda da sürdürecektir ve fitting konusunda yeni ve gelişmiş ürünleri pazara sunar hale gelecektir.



Injection mould fittings from 20mm up to 315mm  
20mm'den 315mm'ye kadar enjeksiyon fitting üretimi

## 90° Elbow Spigot, Injection

### 90° Dirsek, Enjeksiyon


**PE 100**
**SDR 11**
**PN 16**

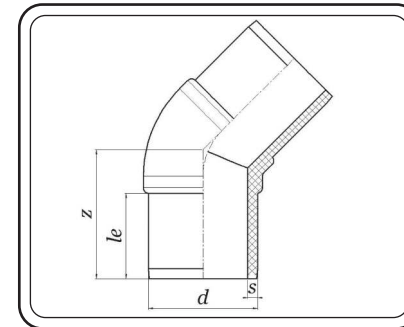
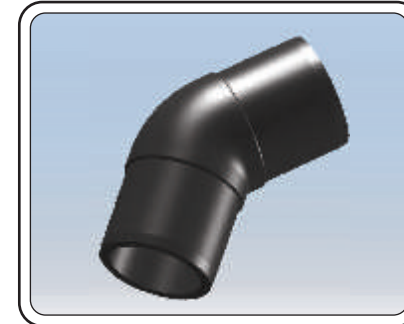
| d<br>mm | article no<br>ürün kodu | le<br>mm | z<br>mm | s<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
|---------|-------------------------|----------|---------|---------|-------------------------|----------------------|
| 20      | 01 117 021 0020         | 41       | 62      | 3,0     | 0,022                   | 60                   |
| 25      | 01 117 021 0025         | 41       | 65      | 3,0     | 0,026                   | 60                   |
| 32      | 01 117 021 0032         | 44       | 71      | 3,0     | 0,043                   | 50                   |
| 40      | 01 117 021 0040         | 49       | 80      | 3,7     | 0,072                   | 42                   |
| 50      | 01 117 021 0050         | 55       | 96      | 4,6     | 0,132                   | 25                   |
| 63      | 01 117 021 0063         | 63       | 118     | 5,8     | 0,274                   | 30                   |
| 75      | 01 117 021 0075         | 70       | 133     | 6,8     | 0,420                   | 30                   |
| 90      | 01 117 021 0090         | 79       | 148     | 8,2     | 0,660                   | 20                   |
| 110     | 01 117 021 0110         | 82       | 152     | 10,0    | 1,310                   | 12                   |
| 125     | 01 117 021 0125         | 87       | 175     | 11,4    | 1,450                   | 12                   |
| 140     | 01 117 021 0140         | 92       | 207     | 12,7    | 2,120                   | 8                    |
| 160     | 01 117 021 0160         | 98       | 210     | 14,6    | 2,860                   | 4                    |
| 180     | 01 117 021 0180         | 105      | 226     | 16,4    | 4,000                   | 4                    |
| 200     | 01 117 021 0200         | 112      | 253     | 18,2    | 5,900                   | 4                    |
| 225     | 01 117 021 0225         | 120      | 270     | 20,5    | 7,200                   | 2                    |
| 250     | 01 117 021 0250         | 129      | 300     | 22,7    | 10,400                  | 1                    |
| 280     | 01 117 021 0280         | 139      | 348     | 25,4    | 16,000                  | 1                    |
| 315     | 01 117 021 0315         | 150      | 380     | 28,6    | 20,950                  | 1                    |

**PE 100**
**SDR 17**
**PN 10**

| d<br>mm | article no<br>ürün kodu | le<br>mm | z<br>mm | s<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
|---------|-------------------------|----------|---------|---------|-------------------------|----------------------|
| 63      | 01 115 021 0063         | 63       | 118     | 3,8     | 0,205                   | 30                   |
| 75      | 01 115 021 0075         | 70       | 133     | 4,5     | 0,315                   | 30                   |
| 90      | 01 115 021 0090         | 79       | 148     | 5,4     | 0,470                   | 20                   |
| 110     | 01 115 021 0110         | 82       | 152     | 6,6     | 1,040                   | 12                   |
| 125     | 01 115 021 0125         | 87       | 175     | 7,4     | 1,035                   | 12                   |
| 140     | 01 115 021 0140         | 92       | 207     | 8,3     | 1,460                   | 8                    |
| 160     | 01 115 021 0160         | 98       | 210     | 9,5     | 2,025                   | 4                    |
| 180     | 01 115 021 0180         | 105      | 226     | 10,7    | 2,820                   | 4                    |
| 200     | 01 115 021 0200         | 112      | 253     | 11,9    | 4,245                   | 4                    |
| 225     | 01 115 021 0225         | 120      | 270     | 13,4    | 5,025                   | 2                    |
| 250     | 01 115 021 0250         | 129      | 300     | 14,8    | 7,600                   | 1                    |
| 280     | 01 115 021 0280         | 139      | 348     | 16,6    | 11,700                  | 1                    |
| 315     | 01 115 021 0315         | 150      | 380     | 18,7    | 15,700                  | 1                    |

## 45° Elbow Spigot, Injection

### 45° Dirsek, Enjeksiyon


**PE 100**
**SDR 11**
**PN 16**

| d<br>mm | article no<br>ürün kodu | le<br>mm | z<br>mm | s<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
|---------|-------------------------|----------|---------|---------|-------------------------|----------------------|
| 20      | 01 117 022 0020         | 41       | 70      | 3,0     | 0,025                   | 60                   |
| 25      | 01 117 022 0025         | 41       | 75      | 3,0     | 0,035                   | 50                   |
| 32      | 01 117 022 0032         | 44       | 80      | 3,0     | 0,055                   | 50                   |
| 40      | 01 117 022 0040         | 49       | 85      | 3,7     | 0,090                   | 32                   |
| 50      | 01 117 022 0050         | 55       | 90      | 4,6     | 0,135                   | 62                   |
| 63      | 01 117 022 0063         | 63       | 95      | 5,8     | 0,219                   | 42                   |
| 75      | 01 117 022 0075         | 70       | 105     | 6,8     | 0,325                   | 30                   |
| 90      | 01 117 022 0090         | 79       | 120     | 8,2     | 0,570                   | 24                   |
| 110     | 01 117 022 0110         | 82       | 130     | 10,0    | 0,965                   | 18                   |
| 125     | 01 117 022 0125         | 87       | 140     | 11,4    | 1,270                   | 12                   |
| 140     | 01 117 022 0140         | 92       | 150     | 12,7    | 1,690                   | 12                   |
| 160     | 01 117 022 0160         | 98       | 160     | 14,6    | 2,365                   | 9                    |
| 180     | 01 117 022 0180         | 105      | 170     | 16,4    | 3,310                   | 4                    |
| 200     | 01 117 022 0200         | 112      | 185     | 18,2    | 4,490                   | 4                    |
| 225     | 01 117 022 0225         | 120      | 200     | 20,5    | 5,920                   | 2                    |
| 250     | 01 117 022 0250         | 129      | 217     | 22,7    | 8,020                   | 2                    |
| 280     | 01 117 022 0280         | 139      | 238     | 25,4    | 11,230                  | 1                    |
| 315     | 01 117 022 0315         | 150      | 256     | 28,6    | 15,000                  | 1                    |

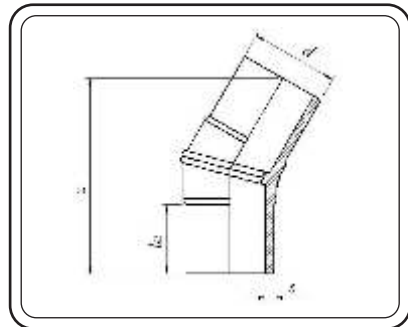
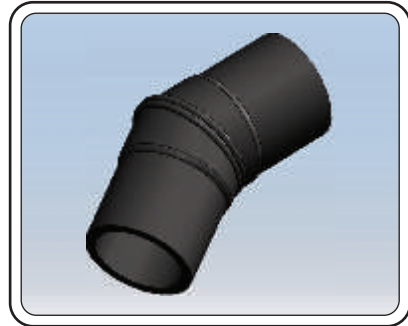
**PE 100**
**SDR 17**
**PN 10**

| d<br>mm | article no<br>ürün kodu | le<br>mm | z<br>mm | s<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
|---------|-------------------------|----------|---------|---------|-------------------------|----------------------|
| 63      | 01 115 022 0063         | 63       | 95      | 3,8     | 0,180                   | 42                   |
| 75      | 01 115 022 0075         | 70       | 105     | 4,5     | 0,240                   | 30                   |
| 90      | 01 115 022 0090         | 79       | 120     | 5,4     | 0,415                   | 24                   |
| 110     | 01 115 022 0110         | 82       | 130     | 6,6     | 0,680                   | 18                   |
| 125     | 01 115 022 0125         | 87       | 140     | 7,4     | 0,900                   | 12                   |
| 140     | 01 115 022 0140         | 92       | 150     | 8,3     | 1,160                   | 12                   |
| 160     | 01 115 022 0160         | 98       | 160     | 9,5     | 1,750                   | 9                    |
| 180     | 01 115 022 0180         | 105      | 170     | 10,7    | 2,330                   | 4                    |
| 200     | 01 115 022 0200         | 112      | 185     | 11,9    | 3,190                   | 4                    |
| 225     | 01 115 022 0225         | 120      | 200     | 13,4    | 4,220                   | 2                    |
| 250     | 01 115 022 0250         | 129      | 217     | 14,8    | 5,800                   | 2                    |
| 280     | 01 115 022 0280         | 139      | 238     | 16,6    | 8,040                   | 1                    |
| 315     | 01 115 022 0315         | 150      | 256     | 18,7    | 11,000                  | 1                    |



## 30° Elbow Spigot, Injection - Welded design (\*)

### 30° Dirsek, Enjeksiyon - Kaynaklı tasarım (\*)



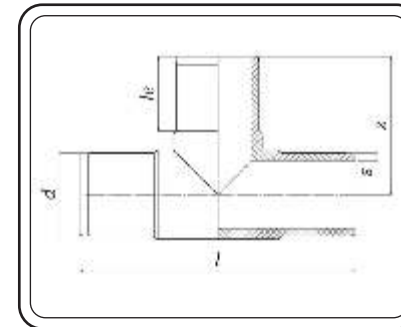
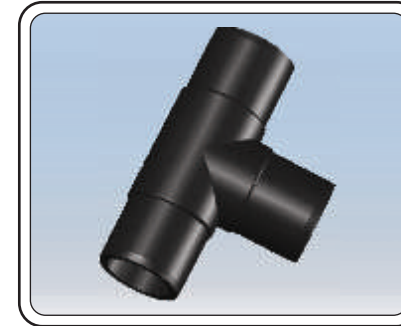
| PE 100  |                         | SDR 11   |         | PN 16   |                         |                      |  |
|---------|-------------------------|----------|---------|---------|-------------------------|----------------------|--|
| d<br>mm | article no<br>ürün kodu | le<br>mm | z<br>mm | s<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |  |
| 90      | 01 117 027 0090         | 79       | 206     | 8,2     | 0,550                   | 24                   |  |
| 110     | 01 117 027 0110         | 82       | 224     | 10,0    | 0,890                   | 18                   |  |
| 125     | 01 117 027 0125         | 87       | 243     | 11,4    | 1,230                   | 12                   |  |
| 140     | 01 117 027 0140         | 92       | 262     | 12,7    | 1,640                   | 12                   |  |
| 160     | 01 117 027 0160         | 98       | 280     | 14,6    | 2,290                   | 9                    |  |
| 180     | 01 117 027 0180         | 105      | 299     | 16,4    | 3,070                   | 4                    |  |
| 200     | 01 117 027 0200         | 112      | 327     | 18,2    | 4,100                   | 4                    |  |
| 225     | 01 117 027 0225         | 120      | 355     | 20,5    | 5,580                   | 2                    |  |
| 250     | 01 117 027 0250         | 129      | 387     | 22,7    | 7,420                   | 2                    |  |
| 280     | 01 117 027 0280         | 139      | 426     | 25,4    | 10,160                  | 1                    |  |
| 315     | 01 117 027 0315         | 150      | 460     | 28,6    | 13,800                  | 1                    |  |

| PE 100  |                         | SDR 17   |         | PN 10   |                         |                      |  |
|---------|-------------------------|----------|---------|---------|-------------------------|----------------------|--|
| d<br>mm | article no<br>ürün kodu | le<br>mm | z<br>mm | s<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |  |
| 90      | 01 115 027 0090         | 79       | 206     | 5,4     | 0,390                   | 24                   |  |
| 110     | 01 115 027 0110         | 82       | 224     | 6,6     | 0,630                   | 18                   |  |
| 125     | 01 115 027 0125         | 87       | 243     | 7,4     | 0,860                   | 12                   |  |
| 140     | 01 115 027 0140         | 92       | 262     | 8,3     | 1,150                   | 12                   |  |
| 160     | 01 115 027 0160         | 98       | 280     | 9,5     | 1,590                   | 9                    |  |
| 180     | 01 115 027 0180         | 105      | 299     | 10,7    | 2,135                   | 4                    |  |
| 200     | 01 115 027 0200         | 112      | 327     | 11,9    | 2,850                   | 4                    |  |
| 225     | 01 115 027 0225         | 120      | 355     | 13,4    | 3,875                   | 2                    |  |
| 250     | 01 115 027 0250         | 129      | 387     | 14,8    | 5,135                   | 2                    |  |
| 280     | 01 115 027 0280         | 139      | 426     | 16,6    | 7,025                   | 1                    |  |
| 315     | 01 115 027 0315         | 150      | 460     | 18,7    | 9,530                   | 1                    |  |

\* Welded design elbows can be supplied at any other degrees.  
 \* Kaynaklı tasarım dirsekler her açıda verilebilir.

## Equal Tee Spigot, Injection

### Eşit-T, Enjeksiyon

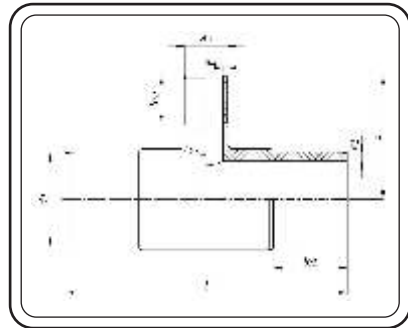
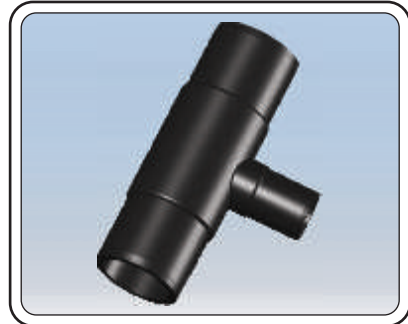


| PE 100  |                         | SDR 11  |          | PN 16   |         |                         |                      |
|---------|-------------------------|---------|----------|---------|---------|-------------------------|----------------------|
| d<br>mm | article no<br>ürün kodu | l<br>mm | le<br>mm | z<br>mm | s<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
| 20      | 01 117 041 0020         | 135     | 41       | 69      | 3,0     | 0,035                   | 50                   |
| 25      | 01 117 041 0025         | 145     | 41       | 74      | 3,0     | 0,050                   | 40                   |
| 32      | 01 117 041 0032         | 157     | 44       | 80      | 3,0     | 0,080                   | 30                   |
| 40      | 01 117 041 0040         | 183     | 49       | 93      | 3,7     | 0,130                   | 50                   |
| 50      | 01 117 041 0050         | 222     | 55       | 113     | 4,6     | 0,210                   | 47                   |
| 63      | 01 117 041 0063         | 239     | 63       | 123     | 5,8     | 0,380                   | 36                   |
| 75      | 01 117 041 0075         | 273     | 70       | 139     | 6,8     | 0,570                   | 22                   |
| 90      | 01 117 041 0090         | 301     | 79       | 153     | 8,2     | 0,910                   | 14                   |
| 110     | 01 117 041 0110         | 337     | 82       | 171     | 10,0    | 1,580                   | 14                   |
| 125     | 01 117 041 0125         | 367     | 87       | 186     | 11,4    | 2,215                   | 8                    |
| 140     | 01 117 041 0140         | 384     | 92       | 195     | 12,7    | 2,735                   | 6                    |
| 160     | 01 117 041 0160         | 428     | 98       | 217     | 14,6    | 4,070                   | 4                    |
| 180     | 01 117 041 0180         | 472     | 105      | 239     | 16,4    | 5,750                   | 3                    |
| 200     | 01 117 041 0200         | 488     | 112      | 247     | 18,2    | 7,375                   | 2                    |
| 225     | 01 117 041 0225         | 534     | 120      | 270     | 20,5    | 10,140                  | 2                    |
| 250     | 01 117 041 0250         | 597     | 129      | 302     | 22,7    | 14,100                  | 2                    |
| 280     | 01 117 041 0280         | 698     | 139      | 353     | 25,4    | 21,550                  | 1                    |
| 315     | 01 117 041 0315         | 726     | 150      | 388     | 28,6    | 27,000                  | 1                    |

| PE 100  |                         | SDR 17  |          | PN 10   |         |                         |                      |
|---------|-------------------------|---------|----------|---------|---------|-------------------------|----------------------|
| d<br>mm | article no<br>ürün kodu | l<br>mm | le<br>mm | z<br>mm | s<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
| 63      | 01 115 041 0063         | 239     | 63       | 123     | 3,8     | 0,295                   | 36                   |
| 75      | 01 115 041 0075         | 273     | 70       | 139     | 4,5     | 0,425                   | 22                   |
| 90      | 01 115 041 0090         | 301     | 79       | 153     | 5,4     | 0,660                   | 14                   |
| 110     | 01 115 041 0110         | 337     | 82       | 171     | 6,6     | 1,190                   | 14                   |
| 125     | 01 115 041 0125         | 367     | 87       | 186     | 7,4     | 1,585                   | 8                    |
| 140     | 01 115 041 0140         | 384     | 92       | 195     | 8,3     | 1,990                   | 6                    |
| 160     | 01 115 041 0160         | 428     | 98       | 217     | 9,5     | 2,940                   | 4                    |
| 180     | 01 115 041 0180         | 472     | 105      | 239     | 10,7    | 4,025                   | 3                    |
| 200     | 01 115 041 0200         | 488     | 112      | 247     | 11,9    | 5,250                   | 2                    |
| 225     | 01 115 041 0225         | 534     | 120      | 270     | 13,4    | 7,480                   | 2                    |
| 250     | 01 115 041 0250         | 597     | 129      | 302     | 14,8    | 9,900                   | 2                    |
| 280     | 01 115 041 0280         | 698     | 139      | 353     | 16,6    | 15,700                  | 1                    |
| 315     | 01 115 041 0315         | 726     | 150      | 388     | 18,7    | 19,000                  | 1                    |

## Reduced Tee Spigot, Injection

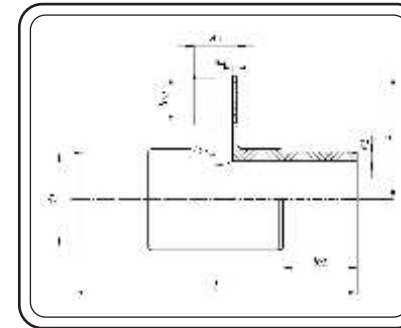
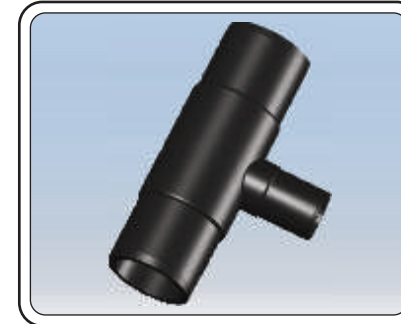
*İnegal-T, Enjeksiyon*



| PE 100  |                 | SDR 11 |     | PN 16 |     |      |      | weight  |           |  |
|---------|-----------------|--------|-----|-------|-----|------|------|---------|-----------|--|
| d1-d2   | article no      | l      | le1 | le2   | z   | s1   | s2   | ağırlık | pcs/box   |  |
| mm      | ürün kodu       | mm     | mm  | mm    | mm  | mm   | mm   | kg      | adet/kutu |  |
| 50-40   | 01 117 042 0051 | 222    | 55  | 49    | 98  | 5,8  | 3,7  | 0,198   | 32        |  |
| 50-32   | 01 117 042 0052 | 222    | 55  | 44    | 92  | 5,8  | 3,0  | 0,192   | 32        |  |
| 50-25   | 01 117 042 0053 | 222    | 55  | 41    | 85  | 5,8  | 3,0  | 0,185   | 32        |  |
| 63-50   | 01 117 042 0064 | 239    | 63  | 55    | 111 | 5,8  | 4,6  | 0,330   | 36        |  |
| 63-40   | 01 117 042 0065 | 239    | 63  | 49    | 104 | 5,8  | 3,7  | 0,312   | 36        |  |
| 63-32   | 01 117 042 0066 | 239    | 63  | 44    | 98  | 5,8  | 3,0  | 0,305   | 36        |  |
| 75-63   | 01 117 042 0076 | 273    | 70  | 63    | 126 | 6,8  | 5,8  | 0,500   | 22        |  |
| 75-50   | 01 117 042 0077 | 273    | 70  | 55    | 118 | 6,8  | 4,6  | 0,480   | 22        |  |
| 75-40   | 01 117 042 0078 | 273    | 70  | 49    | 111 | 6,8  | 3,7  | 0,465   | 22        |  |
| 75-32   | 01 117 042 0079 | 273    | 70  | 44    | 105 | 6,8  | 3,0  | 0,460   | 22        |  |
| 90-75   | 01 117 042 0091 | 301    | 79  | 70    | 144 | 8,2  | 6,8  | 0,840   | 14        |  |
| 90-63   | 01 117 042 0092 | 301    | 79  | 63    | 137 | 8,2  | 5,8  | 0,785   | 14        |  |
| 90-50   | 01 117 042 0093 | 301    | 79  | 55    | 129 | 8,2  | 4,6  | 0,755   | 14        |  |
| 110-90  | 01 117 042 0111 | 337    | 82  | 79    | 167 | 10,0 | 8,2  | 1,420   | 14        |  |
| 110-75  | 01 117 042 0112 | 337    | 82  | 70    | 160 | 10,0 | 6,8  | 1,380   | 14        |  |
| 110-63  | 01 117 042 0113 | 337    | 82  | 63    | 154 | 10,0 | 5,8  | 1,330   | 14        |  |
| 110-50  | 01 117 042 0114 | 337    | 82  | 55    | 152 | 10,0 | 4,6  | 1,275   | 14        |  |
| 125-110 | 01 117 042 0126 | 367    | 87  | 82    | 181 | 11,4 | 10,0 | 2,080   | 8         |  |
| 125-90  | 01 117 042 0127 | 367    | 87  | 79    | 177 | 11,4 | 8,2  | 1,950   | 8         |  |
| 140-125 | 01 117 042 0141 | 384    | 92  | 87    | 190 | 12,7 | 11,4 | 2,630   | 6         |  |
| 140-110 | 01 117 042 0142 | 384    | 92  | 82    | 185 | 12,7 | 10,0 | 2,490   | 6         |  |
| 140-90  | 01 117 042 0143 | 384    | 92  | 79    | 180 | 12,7 | 8,2  | 2,380   | 6         |  |
| 160-125 | 01 117 042 0162 | 428    | 98  | 87    | 206 | 14,6 | 11,4 | 3,710   | 4         |  |
| 160-110 | 01 117 042 0163 | 428    | 98  | 82    | 201 | 14,6 | 10,0 | 3,620   | 4         |  |
| 160-90  | 01 117 042 0164 | 428    | 98  | 79    | 197 | 14,6 | 8,2  | 3,480   | 5         |  |
| 160-75  | 01 117 042 0165 | 428    | 98  | 70    | 188 | 14,6 | 6,8  | 3,435   | 5         |  |
| 160-63  | 01 117 042 0166 | 428    | 98  | 63    | 181 | 14,6 | 5,8  | 3,385   | 5         |  |
| 180-160 | 01 117 042 0181 | 472    | 105 | 98    | 232 | 16,4 | 14,6 | 5,360   | 3         |  |
| 180-125 | 01 117 042 0183 | 472    | 105 | 87    | 221 | 16,4 | 11,4 | 5,100   | 3         |  |
| 180-110 | 01 117 042 0184 | 472    | 105 | 82    | 216 | 16,4 | 10,0 | 4,930   | 3         |  |
| 180-90  | 01 117 042 0185 | 472    | 105 | 79    | 212 | 16,4 | 8,2  | 4,860   | 3         |  |
| 200-160 | 01 117 042 0202 | 488    | 112 | 98    | 233 | 18,2 | 14,6 | 6,760   | 3         |  |
| 200-125 | 01 117 042 0204 | 488    | 112 | 87    | 232 | 18,2 | 11,4 | 6,500   | 3         |  |
| 200-110 | 01 117 042 0205 | 488    | 112 | 82    | 217 | 18,2 | 10,0 | 6,350   | 3         |  |
| 200-90  | 01 117 042 0206 | 488    | 112 | 79    | 213 | 18,2 | 8,2  | 6,200   | 3         |  |
| 200-63  | 01 117 042 0208 | 488    | 112 | 63    | 197 | 18,2 | 5,8  | 6,150   | 3         |  |
| 225-160 | 01 117 042 0228 | 534    | 120 | 98    | 249 | 20,5 | 14,6 | 9,070   | 2         |  |
| 225-125 | 01 117 042 0230 | 534    | 120 | 87    | 246 | 20,5 | 11,4 | 8,950   | 2         |  |
| 225-110 | 01 117 042 0231 | 534    | 120 | 82    | 233 | 20,5 | 10,0 | 8,800   | 2         |  |
| 225-90  | 01 117 042 0232 | 534    | 120 | 79    | 229 | 20,5 | 8,2  | 8,600   | 2         |  |
| 250-225 | 01 117 042 0251 | 597    | 129 | 120   | 292 | 22,7 | 20,5 | 12,970  | 2         |  |
| 250-160 | 01 117 042 0254 | 597    | 129 | 98    | 270 | 22,7 | 14,6 | 12,000  | 2         |  |
| 250-125 | 01 117 042 0256 | 597    | 129 | 87    | 259 | 22,7 | 11,4 | 11,640  | 2         |  |
| 250-110 | 01 117 042 0257 | 597    | 129 | 82    | 254 | 22,7 | 10,0 | 11,600  | 2         |  |
| 250-90  | 01 117 042 0258 | 597    | 129 | 79    | 250 | 22,7 | 8,2  | 11,460  | 2         |  |
| 280-250 | 01 117 042 0281 | 698    | 139 | 129   | 342 | 25,4 | 22,7 | 20,500  | 1         |  |
| 280-225 | 01 117 042 0282 | 698    | 139 | 120   | 332 | 25,4 | 20,5 | 19,760  | 1         |  |
| 280-200 | 01 117 042 0283 | 698    | 139 | 112   | 324 | 25,4 | 18,2 | 19,100  | 1         |  |
| 280-160 | 01 117 042 0285 | 698    | 139 | 98    | 310 | 25,4 | 14,6 | 18,550  | 1         |  |
| 280-110 | 01 117 042 0288 | 698    | 139 | 82    | 294 | 25,4 | 10,0 | 18,400  | 1         |  |
| 315-250 | 01 117 042 0317 | 726    | 150 | 129   | 345 | 28,6 | 22,7 | 25,100  | 1         |  |
| 315-225 | 01 117 042 0318 | 726    | 150 | 120   | 335 | 28,6 | 20,5 | 24,800  | 1         |  |
| 315-200 | 01 117 042 0319 | 726    | 150 | 112   | 327 | 28,6 | 18,2 | 24,500  | 1         |  |
| 315-160 | 01 117 042 0321 | 726    | 150 | 98    | 313 | 28,6 | 14,6 | 23,800  | 1         |  |
| 315-110 | 01 117 042 0324 | 726    | 150 | 82    | 297 | 28,6 | 10,0 | 22,600  | 1         |  |

## Reduced Tee Spigot, Injection

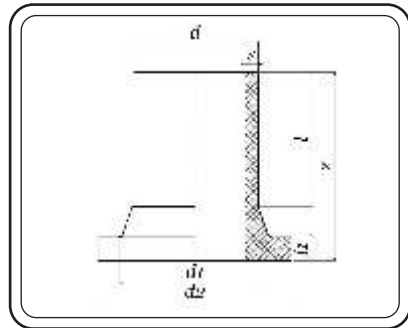
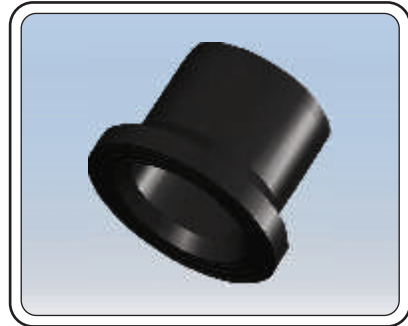
*İnegal-T, Enjeksiyon*



| PE 100  |                 | SDR 17 |     | PN 10 |     |      |      | weight  |           |  |
|---------|-----------------|--------|-----|-------|-----|------|------|---------|-----------|--|
| d1-d2   | article no      | l      | le1 | le2   | z   | s1   | s2   | ağırlık | pcs/box   |  |
| mm      | ürün kodu       | mm     | mm  | mm    | mm  | mm   | mm   | kg      | adet/kutu |  |
| 75-63   | 01 115 042 0076 | 273    | 70  | 63    | 126 | 4,5  | 3,8  | 0,390   | 22        |  |
| 90-75   | 01 115 042 0091 | 301    | 79  | 70    | 144 | 5,4  | 4,5  | 0,610   | 14        |  |
| 90-63   | 01 115 042 0092 | 301    | 79  | 63    | 137 | 5,4  | 3,8  | 0,600   | 14        |  |
| 110-90  | 01 115 042 0111 | 337    | 82  | 79    | 167 | 6,6  | 5,4  | 1,090   | 14        |  |
| 110-75  | 01 115 042 0112 | 337    | 82  | 70    | 160 | 6,6  | 4,5  | 1,050   | 14        |  |
| 110-63  | 01 115 042 0113 | 337    | 82  | 63    | 154 | 6,6  | 3,8  | 1,010   | 14        |  |
| 125-110 | 01 115 042 0126 | 367    | 87  | 82    | 181 | 7,4  | 6,6  | 1,510   | 8         |  |
| 125-90  | 01 115 042 0127 | 367    | 87  | 79    | 177 | 7,4  | 5,4  | 1,420   | 8         |  |
| 140-125 | 01 115 042 0141 | 384    | 92  | 87    | 190 | 8,3  | 7,4  | 1,845   | 6         |  |
| 140-110 | 01 115 042 0142 | 384    | 92  | 82    | 185 | 8,3  | 6,6  | 1,760   | 6         |  |
| 140-90  | 01 115 042 0143 | 384    | 92  | 79    | 180 | 8,3  | 5,4  | 1,630   | 6         |  |
| 160-125 | 01 115 042 0162 | 428    | 98  | 87    | 206 | 9,5  | 7,4  | 2,740   | 4         |  |
| 160-110 | 01 115 042 0163 | 428    | 98  | 82    | 201 | 9,5  | 6,6  | 2,620   | 4         |  |
| 160-90  | 01 115 042 0164 | 428    | 98  | 79    | 197 | 9,5  | 5,4  | 2,570   | 5         |  |
| 160-75  | 01 115 042 0165 | 428    | 98  | 70    | 188 | 9,5  | 4,5  | 2,520   | 5         |  |
| 160-63  | 01 115 042 0166 | 428    | 98  | 63    | 181 | 9,5  | 3,8  | 2,480   | 5         |  |
| 180-160 | 01 115 042 0181 | 472    | 105 | 98    | 232 | 10,7 | 9,5  | 3,850   | 3         |  |
| 180-125 | 01 115 042 0183 | 472    | 105 | 87    | 221 | 10,7 | 7,4  | 3,700   | 3         |  |
| 180-110 | 01 115 042 0184 | 472    | 105 | 82    | 216 | 10,7 | 6,6  | 3,590   | 3         |  |
| 180-90  | 01 115 042 0185 | 472    | 105 | 79    | 212 | 10,7 | 5,4  | 3,545   | 3         |  |
| 200-160 | 01 115 042 0202 | 488    | 112 | 98    | 233 | 11,9 | 9,5  | 4,850   | 3         |  |
| 200-125 | 01 115 042 0204 | 488    | 112 | 87    | 232 | 11,9 | 7,4  | 4,760   | 3         |  |
| 200-110 | 01 115 042 0205 | 488    | 112 | 82    | 217 | 11,9 | 6,6  | 4,620   | 3         |  |
| 200-90  | 01 115 042 0206 | 488    | 112 | 79    | 213 | 11,9 | 5,4  | 4,600   | 3         |  |
| 200-63  | 01 115 042 0208 | 488    | 112 | 63    | 197 | 11,9 | 3,8  | 4,450   | 3         |  |
| 225-160 | 01 115 042 0228 | 534    | 120 | 98    | 249 | 13,4 | 9,5  | 6,600   | 2         |  |
| 225-125 | 01 115 042 0230 | 534    | 120 | 87    | 246 | 13,4 | 7,4  | 6,500   | 2         |  |
| 225-110 | 01 115 042 0231 | 534    | 120 | 82    | 233 | 13,4 | 6,6  | 6,400   | 2         |  |
| 225-90  | 01 115 042 0232 | 534    | 120 | 79    | 229 | 13,4 | 5,4  | 6,330   | 2         |  |
| 250-225 | 01 115 042 0251 | 597    | 129 | 120   | 292 | 14,8 | 13,4 | 9,450   | 2         |  |
| 250-160 | 01 115 042 0254 | 597    | 129 | 98    | 270 | 14,8 | 9,5  | 8,740   | 2         |  |
| 250-125 | 01 115 042 0256 | 597    | 129 | 87    | 259 | 14,8 | 7,4  | 8,600   | 2         |  |
| 250-110 | 01 115 042 0257 | 597    | 129 | 82    | 254 | 14,8 | 6,6  | 8,420   | 2         |  |
| 250-90  | 01 115 042 0258 | 597    | 129 | 79    | 250 | 14,8 | 5,4  | 8,360   | 2         |  |
| 280-250 | 01 115 042 0281 | 698    | 139 | 129   | 342 | 16,6 | 14,8 | 15,100  | 1         |  |
| 280-225 | 01 115 042 0282 | 698    | 139 | 120   | 332 | 16,6 | 13,4 | 14,580  | 1         |  |
| 280-200 | 01 115 042 0283 | 698    | 139 | 112   | 324 | 16,6 | 11,9 | 14,170  | 1         |  |
| 280-160 | 01 115 042 0285 | 698    | 139 | 98    | 310 | 16,6 | 9,5  | 13,650  | 1         |  |
| 280-110 | 01 115 042 0288 | 698    | 139 | 82    | 294 | 16,6 | 6,6  | 13,250  | 1         |  |
| 315-250 | 01 115 042 0317 | 726    | 150 | 129   | 345 | 18,7 | 14,8 | 18,000  | 1         |  |
| 315-225 | 01 115 042 0318 | 726    | 150 | 120   | 335 | 18,7 | 13,4 | 17,500  | 1         |  |
| 315-200 | 01 115 042 0319 | 726    | 150 | 112   | 327 | 18,7 | 11,9 | 16,960  | 1         |  |
| 315-160 | 01 115 042 0321 | 726    | 150 | 98    | 313 | 18,7 | 9,5  | 16,500  | 1         |  |
| 315-110 | 01 115 042 0324 | 726    | 150 | 82    | 297 | 18,7 | 6,6  | 16,420  | 1         |  |

## Flange Adaptor, Injection

### Flanş Adaptörü, Enjeksiyon



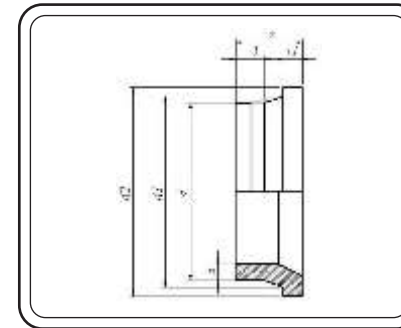
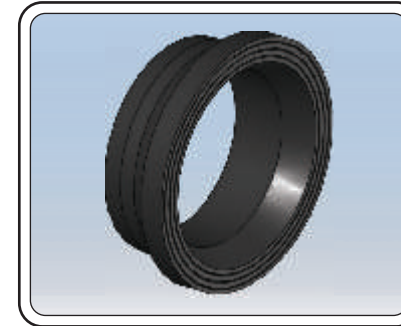
| PE 100 |                 | SDR 11 |     | PN 16 |    |     |      | weight  | pcs/box   |
|--------|-----------------|--------|-----|-------|----|-----|------|---------|-----------|
| d      | article no      | d1     | d2  | l     | l1 | z   | s    | ağırlık |           |
| mm     | ürün kodu       | mm     | mm  | mm    | mm | mm  | mm   | kg      | adet/kutu |
| 20     | 01 117 100 0020 | 28     | 45  | 41    | 7  | 76  | 3,0  | 0,025   | 100       |
| 25     | 01 117 100 0025 | 34     | 58  | 41    | 9  | 81  | 3,0  | 0,040   | 50        |
| 32     | 01 117 100 0032 | 42     | 68  | 44    | 10 | 85  | 3,0  | 0,060   | 40        |
| 40     | 01 117 100 0040 | 48     | 78  | 49    | 11 | 88  | 3,7  | 0,085   | 70        |
| 50     | 01 117 100 0050 | 58     | 88  | 55    | 12 | 92  | 4,6  | 0,125   | 50        |
| 63     | 01 117 100 0063 | 78     | 102 | 63    | 14 | 100 | 5,8  | 0,190   | 60        |
| 75     | 01 117 100 0075 | 92     | 122 | 70    | 16 | 120 | 6,8  | 0,300   | 60        |
| 90     | 01 117 100 0090 | 108    | 138 | 79    | 17 | 132 | 8,2  | 0,455   | 45        |
| 110    | 01 117 100 0110 | 128    | 158 | 82    | 18 | 157 | 10,0 | 0,690   | 24        |
| 125    | 01 117 100 0125 | 135    | 158 | 87    | 25 | 170 | 11,4 | 0,880   | 16        |
| 140    | 01 117 100 0140 | 158    | 188 | 92    | 25 | 175 | 12,7 | 1,320   | 12        |
| 160    | 01 117 100 0160 | 178    | 212 | 98    | 25 | 180 | 14,6 | 1,630   | 12        |
| 180    | 01 117 100 0180 | 188    | 212 | 105   | 30 | 190 | 16,4 | 2,020   | 12        |
| 200    | 01 117 100 0200 | 235    | 268 | 112   | 32 | 200 | 18,2 | 2,680   | 4         |
| 225    | 01 117 100 0225 | 238    | 268 | 120   | 32 | 200 | 20,5 | 3,150   | 4         |
| 250    | 01 117 100 0250 | 288    | 320 | 129   | 35 | 205 | 22,7 | 4,030   | 2         |
| 280    | 01 117 100 0280 | 294    | 320 | 139   | 35 | 215 | 25,4 | 4,750   | 2         |
| 315    | 01 117 100 0315 | 338    | 370 | 150   | 35 | 220 | 28,6 | 6,650   | 2         |
| 355    | 01 117 100 0355 | 376    | 430 | 164   | 40 | 243 | 32,3 | 9,050   | 1         |
| 400    | 01 117 100 0400 | 430    | 480 | 179   | 46 | 259 | 36,4 | 11,920  | 1         |
| * 450  | 01 117 100 0450 | 517    | 585 | 195   | 60 | 301 | 40,9 | 22,000  | 1         |
| * 500  | 01 117 100 0500 | 533    | 585 | 212   | 60 | 314 | 45,5 | 25,000  | 1         |
| * 560  | 01 117 100 0560 | 618    | 685 | 235   | 72 | 345 | 50,9 | 36,800  | 1         |
| * 630  | 01 117 100 0630 | 645    | 685 | 255   | 65 | 360 | 57,3 | 42,250  | 1         |

| PE 100 |                 | SDR 17 |      | PN 10 |    |     |      | weight  | pcs/box   |
|--------|-----------------|--------|------|-------|----|-----|------|---------|-----------|
| d      | article no      | d1     | d2   | l     | l1 | z   | s    | ağırlık |           |
| mm     | ürün kodu       | mm     | mm   | mm    | mm | mm  | mm   | kg      | adet/kutu |
| 63     | 01 115 100 0063 | 78     | 102  | 63    | 14 | 98  | 3,8  | 0,165   | 60        |
| 75     | 01 115 100 0075 | 92     | 122  | 70    | 16 | 107 | 4,5  | 0,262   | 60        |
| 90     | 01 115 100 0090 | 108    | 138  | 79    | 17 | 116 | 5,4  | 0,400   | 45        |
| 110    | 01 115 100 0110 | 128    | 158  | 82    | 17 | 128 | 6,6  | 0,560   | 24        |
| 125    | 01 115 100 0125 | 135    | 158  | 87    | 18 | 132 | 7,4  | 0,690   | 16        |
| 140    | 01 115 100 0140 | 158    | 188  | 92    | 18 | 142 | 8,3  | 1,060   | 12        |
| 160    | 01 115 100 0160 | 178    | 212  | 98    | 18 | 145 | 9,5  | 1,170   | 12        |
| 180    | 01 115 100 0180 | 188    | 212  | 105   | 20 | 150 | 10,7 | 1,490   | 12        |
| 200    | 01 115 100 0200 | 235    | 268  | 112   | 24 | 174 | 11,9 | 1,980   | 4         |
| 225    | 01 115 100 0225 | 238    | 268  | 120   | 24 | 179 | 13,4 | 2,280   | 4         |
| 250    | 01 115 100 0250 | 288    | 320  | 129   | 25 | 195 | 14,8 | 3,400   | 2         |
| 280    | 01 115 100 0280 | 294    | 320  | 139   | 25 | 205 | 16,6 | 3,850   | 2         |
| 315    | 01 115 100 0315 | 338    | 370  | 150   | 25 | 216 | 18,7 | 4,700   | 2         |
| 355    | 01 115 100 0355 | 376    | 430  | 164   | 30 | 233 | 21,1 | 6,250   | 1         |
| 400    | 01 115 100 0400 | 430    | 480  | 179   | 33 | 246 | 23,7 | 8,750   | 1         |
| * 450  | 01 115 100 0450 | 517    | 585  | 195   | 46 | 287 | 26,7 | 15,300  | 1         |
| * 500  | 01 115 100 0500 | 533    | 585  | 212   | 46 | 300 | 29,7 | 17,040  | 1         |
| * 560  | 01 115 100 0560 | 618    | 685  | 235   | 50 | 330 | 33,2 | 23,850  | 1         |
| * 630  | 01 115 100 0630 | 645    | 685  | 255   | 50 | 340 | 37,4 | 28,250  | 1         |
| * 710  | 01 115 100 0710 | 740    | 800  | 255   | 60 | 350 | 42,1 | 38,050  | 1         |
| * 800  | 01 115 100 0800 | 843    | 900  | 255   | 60 | 350 | 47,4 | 48,800  | 1         |
| * 900  | 01 115 100 0900 | 947    | 1000 | 255   | 65 | 355 | 53,3 | 62,500  | 1         |
| * 1000 | 01 115 100 1000 | 1050   | 1113 | 255   | 70 | 360 | 59,3 | 81,000  | 1         |

\* Injected short type,  
supplied with pipe extention  
\* Enjeksiyon kısa tip, manşon boyu  
boru ekli olarak verilir.

## Flange Adaptor - Short type, Injection

### Flanş Adaptörü - Kısa tip, Enjeksiyon

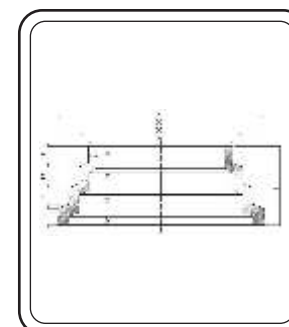


| PE 100 |                 | SDR 11 |     | PN 16 |    |     |      | weight  | pcs/box   |
|--------|-----------------|--------|-----|-------|----|-----|------|---------|-----------|
| d      | article no      | d1     | d2  | l     | l1 | z   | s    | ağırlık |           |
| mm     | ürün kodu       | mm     | mm  | mm    | mm | mm  | mm   | kg      | adet/kutu |
| 450    | 01 117 101 0450 | 517    | 585 | 45    | 60 | 140 | 40,9 | 11,930  | 1         |
| 500    | 01 117 101 0500 | 533    | 585 | 50    | 60 | 140 | 45,5 | 11,250  | 1         |
| 560    | 01 117 101 0560 | 618    | 685 | 41    | 72 | 165 | 50,9 | 17,700  | 1         |
| 630    | 01 117 101 0630 | 645    | 685 | 50    | 65 | 140 | 57,3 | 15,950  | 1         |

| PE 100 |                 | SDR 17 |      | PN 10 |    |     |      | weight  | pcs/box   |
|--------|-----------------|--------|------|-------|----|-----|------|---------|-----------|
| d      | article no      | d1     | d2   | l     | l1 | z   | s    | ağırlık |           |
| mm     | ürün kodu       | mm     | mm   | mm    | mm | mm  | mm   | kg      | adet/kutu |
| 450    | 01 115 101 0450 | 517    | 585  | 50    | 46 | 120 | 26,7 | 8,330   | 1         |
| 500    | 01 115 101 0500 | 533    | 585  | 50    | 46 | 120 | 29,7 | 7,750   | 1         |
| 560    | 01 115 101 0560 | 618    | 685  | 50    | 50 | 130 | 33,2 | 10,900  | 1         |
| 630    | 01 115 101 0630 | 645    | 685  | 50    | 50 | 120 | 37,4 | 10,460  | 1         |
| 710    | 01 115 101 0710 | 740    | 800  | 50    | 60 | 140 | 42,1 | 15,470  | 1         |
| 800    | 01 115 101 0800 | 843    | 900  | 50    | 60 | 140 | 47,4 | 20,120  | 1         |
| 900    | 01 115 101 0900 | 947    | 1000 | 50    | 65 | 155 | 53,3 | 26,270  | 1         |
| 1000   | 01 115 101 1000 | 1050   | 1113 | 50    | 70 | 170 | 59,3 | 36,280  | 1         |

## Step Reducer Spigot - Short type, Injection

### Kademeli Redüksiyon - Kısa tip, Enjeksiyon



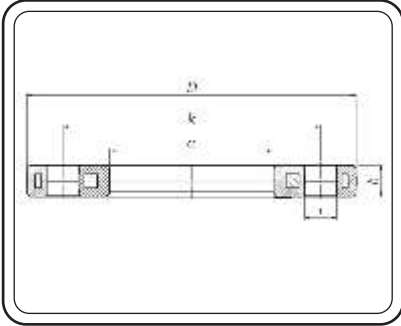
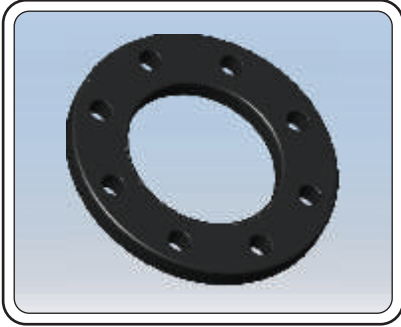
| PE 100  |                 | SDR 11 |    | PN16 |     |    |      | weight  | pcs/box   |
|---------|-----------------|--------|----|------|-----|----|------|---------|-----------|
| d1-d4   | article no      | D1     | L1 | E1   | D2  | L2 | E2   | ağırlık |           |
| mm      | ürün kodu       | mm     | mm | mm   | mm  | mm | mm   | kg      | adet/kutu |
| 160-225 | 01 117 081 0228 | 160    | 36 | 14,6 | 180 | 36 | 16,4 | 200,0   | 36        |
| 225-315 | 01 117 081 0318 | 225    | 36 | 20,5 | 250 | 36 | 22,7 | 280,0   | 36        |
| 315-450 | 01 117 081 0453 | 315    | 36 | 28,6 | 355 | 36 | 32,3 | 400,0   | 36        |
| 450-630 | 01 117 081 0633 | 450    | 36 | 40,9 | 500 | 36 | 45,5 | 560,0   | 36        |

| PE 100  |                 | SDR 17 |    | PN10 |     |    |      | weight  | pcs/box   |
|---------|-----------------|--------|----|------|-----|----|------|---------|-----------|
| d1-d4   | article no      | D1     | L1 | E1   | D2  | L2 | E2   | ağırlık |           |
| mm      | ürün kodu       | mm     | mm | mm   | mm  | mm | mm   | kg      | adet/kutu |
| 160-225 | 01 115 081 0228 | 160    | 36 | 9,5  | 180 | 36 | 10,7 | 200,0   | 36        |
| 225-315 | 01 115 081 0318 | 225    | 36 | 13,4 | 250 | 36 | 14,8 | 280,0   | 36        |
| 315-450 | 01 115 081 0453 | 315    | 36 | 18,7 | 355 | 36 | 21,1 | 400,0   | 36        |
| 450-630 | 01 115 081 0633 | 450    | 36 | 26,7 | 500 | 36 | 29,7 | 560,0   | 36        |
| 630-900 | 01 115 081 0903 | 630    | 36 | 37,4 | 710 | 36 | 42,1 | 800,0   | 36        |



## PP (30% fiberglass-reinforced) Flange with Steel Core

PP (%30 camelyaf katkılı) kaplı Çelik Flanş



### PP / ST37 PN16

| d<br>mm | article no<br>ürün kodu | D<br>mm | a<br>mm | k<br>mm | b<br>mm | l<br>mm | SC<br>mm | DS | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
|---------|-------------------------|---------|---------|---------|---------|---------|----------|----|-------------------------|----------------------|
| 20      | 05 117 120 0020         | 95      | 28      | 65      | 12      | 14      | M12      | 4  | 0,244                   | 85                   |
| 25      | 05 117 120 0025         | 105     | 34      | 75      | 12      | 14      | M12      | 4  | 0,308                   | 68                   |
| 32      | 05 117 120 0032         | 115     | 42      | 85      | 16      | 14      | M12      | 4  | 0,555                   | 52                   |
| 40      | 05 117 120 0040         | 140     | 51      | 100     | 16      | 18      | M16      | 4  | 0,835                   | 20                   |
| 50      | 05 117 120 0050         | 150     | 62      | 110     | 18      | 18      | M16      | 4  | 1,015                   | 15                   |
| 63      | 05 117 120 0063         | 165     | 78      | 125     | 18      | 18      | M16      | 4  | 1,174                   | 15                   |
| 75      | 05 117 120 0075         | 188     | 92      | 145     | 18      | 18      | M16      | 4  | 1,506                   | 15                   |
| 90      | 05 117 120 0090         | 204     | 108     | 160     | 20      | 18      | M16      | 8  | 1,673                   | 10                   |
| 110     | 05 117 120 0110         | 224     | 128     | 180     | 20      | 18      | M16      | 8  | 1,940                   | 10                   |
| 125     | 05 117 120 0125         | 224     | 135     | 180     | 20      | 18      | M16      | 8  | 1,785                   | 10                   |
| 140     | 05 117 120 0140         | 252     | 158     | 210     | 24      | 18      | M16      | 8  | 2,981                   | 6                    |
| 160     | 05 117 120 0160         | 285     | 178     | 240     | 24      | 22      | M20      | 8  | 3,898                   | 6                    |
| 180     | 05 117 120 0180         | 285     | 188     | 240     | 24      | 22      | M20      | 8  | 3,560                   | 6                    |
| 200     | 05 117 120 0200         | 340     | 235     | 295     | 27      | 22      | M20      | 12 | 5,401                   | 4                    |
| 225     | 05 117 120 0225         | 340     | 238     | 295     | 27      | 22      | M20      | 12 | 5,268                   | 4                    |
| 250     | 05 117 120 0250         | 419     | 288     | 355     | 32      | 26      | M24      | 12 | 10,530                  | 2                    |
| 280     | 05 117 120 0280         | 419     | 294     | 355     | 32      | 26      | M24      | 12 | 9,995                   | 2                    |
| 315     | 05 117 120 0315         | 478     | 338     | 410     | 34      | 26      | M24      | 12 | 13,650                  | 2                    |
| 355     | 05 117 120 0355         | 532     | 376     | 470     | 42      | 26      | M24      | 16 | 22,203                  | 1                    |
| 400     | 05 117 120 0400         | 592     | 430     | 525     | 46      | 30      | M27      | 16 | 28,084                  | 1                    |

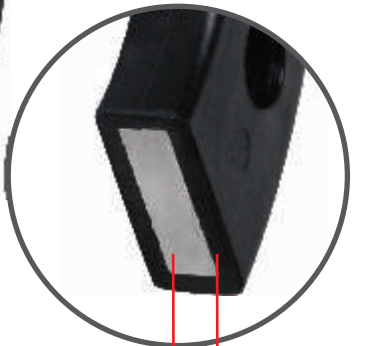
### PP / ST37 PN10

| d<br>mm | article no<br>ürün kodu | D<br>mm | a<br>mm | k<br>mm | b<br>mm | l<br>mm | SC<br>mm | DS | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
|---------|-------------------------|---------|---------|---------|---------|---------|----------|----|-------------------------|----------------------|
| 200     | 05 115 120 0200         | 340     | 235     | 295     | 27      | 22      | M20      | 8  | 5,713                   | 4                    |
| 225     | 05 115 120 0225         | 340     | 238     | 295     | 27      | 22      | M20      | 8  | 5,630                   | 4                    |
| 250     | 05 115 120 0250         | 395     | 288     | 350     | 30      | 22      | M20      | 12 | 7,727                   | 4                    |
| 280     | 05 115 120 0280         | 395     | 294     | 350     | 30      | 22      | M20      | 12 | 7,354                   | 4                    |
| 315     | 05 115 120 0315         | 445     | 338     | 400     | 34      | 22      | M20      | 12 | 9,826                   | 2                    |
| 355     | 05 115 120 0355         | 514     | 376     | 460     | 40      | 22      | M20      | 16 | 19,472                  | 1                    |
| 400     | 05 115 120 0400         | 571     | 430     | 515     | 40      | 26      | M24      | 16 | 21,583                  | 1                    |
| 450     | 05 115 120 0450         | 678     | 517     | 620     | 45      | 26      | M24      | 20 | 35,012                  | 1                    |
| 500     | 05 115 120 0500         | 688     | 533     | 620     | 45      | 26      | M24      | 20 | 34,629                  | 1                    |
| 560     | 05 115 120 0560         | 799     | 618     | 725     | 50      | 30      | M27      | 20 | 49,763                  | 1                    |
| 630     | 05 115 120 0630         | 799     | 645     | 725     | 50      | 30      | M27      | 20 | 41,084                  | 1                    |

DS: Number of holes  
DS: Delik sayısı

## ► Against rust and corrosion

Paslanma ve korozyona karşı



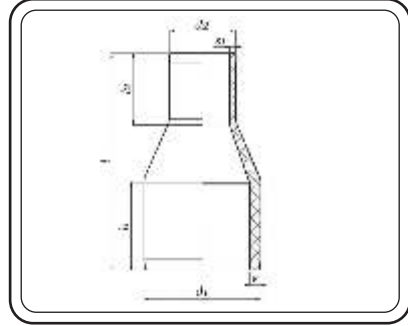
Steel PP  
Çelik PP

- Coating operation with fiberglass-reinforced polypropylene with injection protects the steel core from corrosion.
- Coating of steel with fiberglass-reinforced polypropylene enables a very high bending resistance.
- These flanges have a wide range of application areas such as;  
Usage with the flange adaptors, Pipe connection purposes, Usage with fire hydrants, In all areas of the chemical industry, In machine productions, In all applications of the mechanical engineering.
- At application places where high safety factor is needed under continuous load.
- Places where zero deformation is required at a controlled torque.
- Usage at high temperature service points till 80° C without problem.
- Successful applications at salty and acidic environments.
- Lower priced comparing to stainless steel.

- Enjeksiyonla camelyaf takviyeli polipropilen kaplama çelik çekirdeği korozyona karşı korur.
- Çelik üzerine cam elyaf takviyeli polipropilen ile kaplanmış olup eğilme mukavemeti yüksektir.
- Flanşlar çok çeşitli uygulama alanlarına sahiptir;  
Flanş adaptörlerinde, boru bağlantı ağzlarında, yangın hidrantlarında, kimya sektörünün tüm alanlarında, makine imalatlarında, makine mühendisliğinin tüm uygulamalarında kullanılır.
- Daimi yük altında yüksek çalışma güvenliği sağlar.
- Kontrollü burkma durumunda deformasyona uğramaz.
- + 80° C sıcaklığa kadar dayanır.
- Deniz suyu ve asidik ortamlarda başarılıdır.
- Paslanmaz çeliğe göre fiyat avantajı vardır.

## Reducer Spigot, Injection

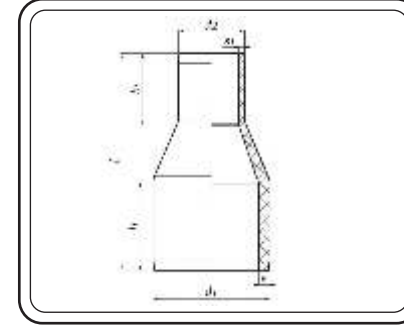
### Redüksiyon, Enjeksiyon



| PE 100  |                 | SDR 11 |     | PN16 |      |      |  | weight  |           |
|---------|-----------------|--------|-----|------|------|------|--|---------|-----------|
| d1-d2   | article no      | l      | l1  | l2   | s1   | s2   |  | ağırlık | pcs/box   |
| mm      | ürün kodu       | mm     | mm  | mm   | mm   | mm   |  | kg      | adet/kutu |
| 25-20   | 01 117 080 0026 | 123    | 41  | 41   | 3,0  | 3,0  |  | 0,021   | 80        |
| 32-25   | 01 117 080 0033 | 133    | 44  | 41   | 3,0  | 3,0  |  | 0,032   | 50        |
| 32-20   | 01 117 080 0034 | 125    | 44  | 41   | 3,0  | 3,0  |  | 0,028   | 50        |
| 40-32   | 01 117 080 0041 | 133    | 49  | 44   | 3,7  | 3,0  |  | 0,050   | 50        |
| 40-25   | 01 117 080 0042 | 133    | 49  | 41   | 3,7  | 3,0  |  | 0,041   | 50        |
| 50-40   | 01 117 080 0051 | 144    | 55  | 49   | 4,6  | 3,7  |  | 0,080   | 40        |
| 50-32   | 01 117 080 0052 | 144    | 55  | 44   | 4,6  | 3,0  |  | 0,075   | 40        |
| 50-25   | 01 117 080 0053 | 144    | 55  | 41   | 4,6  | 3,0  |  | 0,065   | 40        |
| 63-50   | 01 117 080 0064 | 155    | 63  | 55   | 5,8  | 4,6  |  | 0,140   | 20        |
| 63-40   | 01 117 080 0065 | 155    | 63  | 49   | 5,8  | 3,7  |  | 0,120   | 20        |
| 63-32   | 01 117 080 0066 | 155    | 63  | 44   | 5,8  | 3,0  |  | 0,115   | 20        |
| 63-25   | 01 117 080 0067 | 155    | 63  | 41   | 5,8  | 3,0  |  | 0,105   | 20        |
| 75-63   | 01 117 080 0076 | 175    | 70  | 63   | 6,8  | 5,8  |  | 0,230   | 36        |
| 75-50   | 01 117 080 0077 | 175    | 70  | 55   | 6,8  | 4,6  |  | 0,200   | 36        |
| 75-40   | 01 117 080 0078 | 175    | 70  | 49   | 6,8  | 3,7  |  | 0,170   | 36        |
| 75-32   | 01 117 080 0079 | 175    | 70  | 44   | 6,8  | 3,0  |  | 0,155   | 36        |
| 90-75   | 01 117 080 0091 | 195    | 79  | 70   | 8,2  | 6,8  |  | 0,380   | 36        |
| 90-63   | 01 117 080 0092 | 195    | 79  | 63   | 8,2  | 5,8  |  | 0,325   | 36        |
| 90-50   | 01 117 080 0093 | 195    | 79  | 55   | 8,2  | 4,6  |  | 0,285   | 36        |
| 110-90  | 01 117 080 0111 | 213    | 82  | 79   | 10,0 | 8,2  |  | 0,610   | 30        |
| 110-75  | 01 117 080 0112 | 213    | 82  | 70   | 10,0 | 6,8  |  | 0,540   | 30        |
| 110-63  | 01 117 080 0113 | 213    | 82  | 63   | 10,0 | 5,8  |  | 0,485   | 30        |
| 125-110 | 01 117 080 0126 | 220    | 87  | 82   | 11,4 | 10,0 |  | 0,850   | 18        |
| 125-90  | 01 117 080 0127 | 220    | 87  | 79   | 11,4 | 8,2  |  | 0,740   | 24        |
| 125-75  | 01 117 080 0128 | 220    | 87  | 70   | 11,4 | 6,8  |  | 0,654   | 24        |
| 125-63  | 01 117 080 0129 | 220    | 87  | 63   | 11,4 | 5,8  |  | 0,615   | 24        |
| 140-125 | 01 117 080 0141 | 231    | 92  | 87   | 12,7 | 11,4 |  | 1,075   | 16        |
| 140-110 | 01 117 080 0142 | 231    | 92  | 82   | 12,7 | 10,0 |  | 1,012   | 16        |
| 140-90  | 01 117 080 0143 | 231    | 92  | 79   | 12,7 | 8,2  |  | 0,835   | 16        |
| 140-75  | 01 117 080 0144 | 231    | 92  | 70   | 12,7 | 6,8  |  | 0,835   | 16        |
| 160-140 | 01 117 080 0161 | 251    | 98  | 92   | 14,6 | 12,7 |  | 1,475   | 16        |
| 160-125 | 01 117 080 0162 | 251    | 98  | 87   | 14,6 | 11,4 |  | 1,450   | 16        |
| 160-110 | 01 117 080 0163 | 251    | 98  | 82   | 14,6 | 10,0 |  | 1,310   | 16        |
| 160-90  | 01 117 080 0164 | 251    | 98  | 79   | 14,6 | 8,2  |  | 1,250   | 16        |
| 180-160 | 01 117 080 0181 | 261    | 105 | 98   | 16,4 | 14,6 |  | 2,080   | 6         |
| 180-140 | 01 117 080 0182 | 261    | 105 | 92   | 16,4 | 12,7 |  | 1,835   | 6         |
| 180-125 | 01 117 080 0183 | 261    | 105 | 87   | 16,4 | 11,4 |  | 1,650   | 6         |
| 180-110 | 01 117 080 0184 | 261    | 105 | 82   | 16,4 | 10,0 |  | 1,530   | 6         |
| 200-180 | 01 117 080 0201 | 282    | 112 | 105  | 18,2 | 16,4 |  | 2,640   | 8         |
| 200-160 | 01 117 080 0202 | 282    | 112 | 98   | 18,2 | 14,6 |  | 2,375   | 8         |
| 200-140 | 01 117 080 0203 | 282    | 112 | 92   | 18,2 | 12,7 |  | 2,375   | 8         |
| 200-110 | 01 117 080 0205 | 274    | 112 | 82   | 18,2 | 10,0 |  | 2,200   | 8         |
| 225-200 | 01 117 080 0226 | 292    | 120 | 112  | 20,5 | 18,2 |  | 3,690   | 5         |
| 225-180 | 01 117 080 0227 | 292    | 120 | 105  | 20,5 | 16,4 |  | 3,410   | 5         |
| 225-160 | 01 117 080 0228 | 292    | 120 | 98   | 20,5 | 14,6 |  | 3,030   | 4         |
| 225-110 | 01 117 080 0231 | 292    | 120 | 82   | 20,5 | 10,0 |  | 2,280   | 4         |
| 250-225 | 01 117 080 0251 | 312    | 129 | 120  | 22,7 | 20,5 |  | 4,740   | 2         |
| 250-200 | 01 117 080 0252 | 307    | 129 | 112  | 22,7 | 18,2 |  | 4,340   | 2         |
| 250-180 | 01 117 080 0253 | 307    | 129 | 105  | 22,7 | 16,4 |  | 4,235   | 2         |
| 250-160 | 01 117 080 0254 | 295    | 129 | 98   | 22,7 | 14,6 |  | 3,625   | 2         |
| 280-250 | 01 117 080 0281 | 350    | 139 | 129  | 25,4 | 22,7 |  | 6,930   | 2         |
| 280-225 | 01 117 080 0282 | 344    | 139 | 120  | 25,4 | 20,5 |  | 5,950   | 2         |
| 280-200 | 01 117 080 0283 | 344    | 139 | 112  | 25,4 | 18,7 |  | 5,800   | 2         |
| 280-180 | 01 117 080 0284 | 344    | 139 | 105  | 25,4 | 26,4 |  | 5,350   | 2         |
| 315-280 | 01 117 080 0316 | 345    | 150 | 139  | 28,6 | 25,4 |  | 8,400   | 2         |
| 315-250 | 01 117 080 0317 | 385    | 150 | 129  | 28,6 | 22,7 |  | 8,300   | 2         |
| 315-225 | 01 117 080 0318 | 385    | 150 | 120  | 28,6 | 20,5 |  | 7,750   | 2         |

## Reducer Spigot, Injection

### Redüksiyon, Enjeksiyon

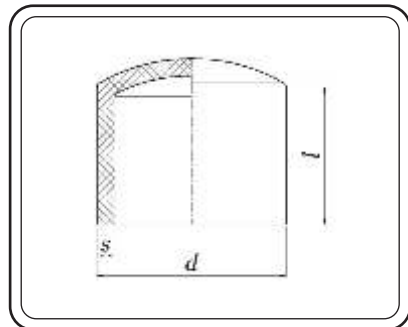
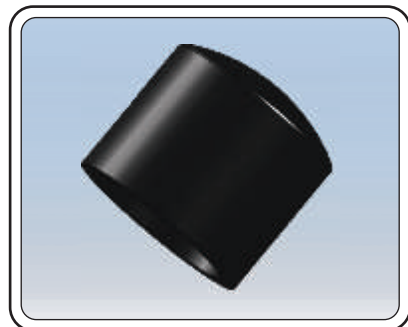


| PE 100  |                 | SDR 17 |     | PN10 |      |      |  | weight  |           |
|---------|-----------------|--------|-----|------|------|------|--|---------|-----------|
| d1-d2   | article no      | l      | l1  | l2   | s1   | s2   |  | ağırlık | pcs/box   |
| mm      | ürün kodu       | mm     | mm  | mm   | mm   | mm   |  | kg      | adet/kutu |
| 75-63   | 01 115 080 0076 | 175    | 70  | 63   | 4,5  | 3,8  |  | 0,177   | 36        |
| 90-75   | 01 115 080 0091 | 195    | 79  | 70   | 5,4  | 4,5  |  | 0,295   | 36        |
| 90-63   | 01 115 080 0092 | 195    | 79  | 63   | 5,4  | 3,8  |  | 0,251   | 36        |
| 110-90  | 01 115 080 0111 | 213    | 82  | 79   | 6,6  | 5,4  |  | 0,476   | 30        |
| 110-75  | 01 115 080 0112 | 213    | 82  | 70   | 6,6  | 4,5  |  | 0,427   | 30        |
| 110-63  | 01 115 080 0113 | 213    | 82  | 63   | 6,6  | 3,8  |  | 0,383   | 30        |
| 125-110 | 01 115 080 0126 | 220    | 87  | 82   | 7,4  | 6,6  |  | 0,653   | 18        |
| 125-90  | 01 115 080 0127 | 220    | 87  | 79   | 7,4  | 5,4  |  | 0,572   | 24        |
| 125-75  | 01 115 080 0128 | 220    | 87  | 70   | 7,4  | 4,5  |  | 0,506   | 24        |
| 125-63  | 01 115 080 0129 | 220    | 87  | 63   | 7,4  | 3,8  |  | 0,478   | 24        |
| 140-125 | 01 115 080 0141 | 231    | 92  | 87   | 8,3  | 7,4  |  | 0,809   | 16        |
| 140-110 | 01 115 080 0142 | 231    | 92  | 82   | 8,3  | 6,6  |  | 0,780   | 16        |
| 140-90  | 01 115 080 0143 | 231    | 92  | 79   | 8,3  | 5,4  |  | 0,632   | 16        |
| 140-75  | 01 115 080 0144 | 231    | 92  | 70   | 8,3  | 4,5  |  | 0,652   | 16        |
| 160-140 | 01 115 080 0161 | 251    | 98  | 92   | 9,5  | 8,3  |  | 1,112   | 16        |
| 160-125 | 01 115 080 0162 | 251    | 98  | 87   | 9,5  | 7,4  |  | 1,122   | 16        |
| 160-110 | 01 115 080 0163 | 251    | 98  | 82   | 9,5  | 6,6  |  | 1,016   | 16        |
| 160-90  | 01 115 080 0164 | 251    | 98  | 79   | 9,5  | 5,4  |  | 0,985   | 16        |
| 180-160 | 01 115 080 0181 | 261    | 105 | 98   | 10,7 | 9,5  |  | 1,581   | 6         |
| 180-140 | 01 115 080 0182 | 261    | 105 | 92   | 10,7 | 8,3  |  | 1,398   | 6         |
| 180-125 | 01 115 080 0183 | 261    | 105 | 87   | 10,7 | 7,4  |  | 1,248   | 6         |
| 180-110 | 01 115 080 0184 | 261    | 105 | 82   | 10,7 | 6,6  |  | 1,163   | 6         |
| 200-180 | 01 115 080 0201 | 282    | 112 | 105  | 11,9 | 10,7 |  | 1,979   | 8         |
| 200-160 | 01 115 080 0202 | 282    | 112 | 98   | 11,9 | 9,5  |  | 1,788   | 8         |
| 200-140 | 01 115 080 0203 | 282    | 112 | 92   | 11,9 | 8,3  |  | 1,850   | 8         |
| 200-110 | 01 115 080 0205 | 274    | 112 | 82   | 11,9 | 6,6  |  | 1,744   | 8         |
| 225-200 | 01 115 080 0226 | 292    | 120 | 112  | 13,4 | 11,9 |  | 2,806   | 5         |
| 225-180 | 01 115 080 0227 | 292    | 120 | 105  | 13,4 | 10,7 |  | 2,615   | 5         |
| 225-160 | 01 115 080 0228 | 292    | 120 | 98   | 13,4 | 9,5  |  | 2,309   | 4         |
| 225-110 | 01 115 080 0231 | 292    | 120 | 82   | 13,4 | 6,6  |  | 1,690   | 4         |
| 250-225 | 01 115 080 0251 | 312    | 129 | 120  | 14,8 | 13,4 |  | 3,554   | 2         |
| 250-200 | 01 115 080 0252 | 307    | 129 | 112  | 14,8 | 11,9 |  | 3,288   | 2         |
| 250-180 | 01 115 080 0253 | 307    | 129 | 105  | 14,8 | 10,7 |  | 3,272   | 2         |
| 250-160 | 01 115 080 0254 | 295    | 129 | 98   | 14,8 | 9,5  |  | 2,736   | 2         |
| 280-250 | 01 115 080 0281 | 350    | 139 | 129  | 16,6 | 14,8 |  | 5,343   | 2         |
| 280-225 | 01 115 080 0282 | 344    | 139 | 120  | 16,6 | 13,4 |  | 4,531   | 2         |
| 280-200 | 01 115 080 0283 | 344    | 139 | 112  | 16,6 | 11,9 |  | 4,485   | 2         |
| 280-180 | 01 115 080 0284 | 344    | 139 | 105  | 16,6 | 10,7 |  | 3,652   | 2         |
| 315-280 | 01 115 080 0316 | 345    | 150 | 139  | 18,7 | 16,6 |  | 6,247   | 2         |
| 315-250 | 01 115 080 0317 | 385    | 150 | 129  | 18,7 | 14,8 |  | 6,380   | 2         |
| 315-225 | 01 115 080 0318 | 385    | 150 | 120  | 18,7 | 13,4 |  | 5,998   | 2         |



## End Cap Spigot, Injection

### Kör Tapa, Enjeksiyon



#### PE 100 SDR 11 PN 16

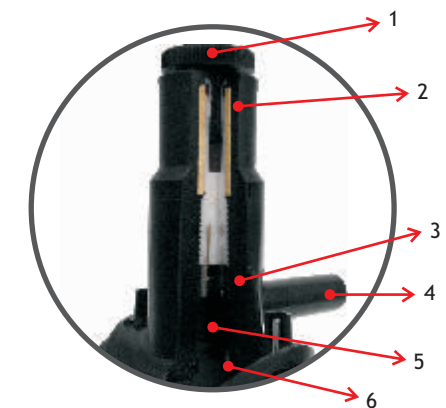
| d<br>mm | article no<br>ürün kodu | l<br>mm | s<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
|---------|-------------------------|---------|---------|-------------------------|----------------------|
| 20      | 01 117 140 0020         | 41      | 3,0     | 0,008                   | 100                  |
| 25      | 01 117 140 0025         | 41      | 3,0     | 0,012                   | 100                  |
| 32      | 01 117 140 0032         | 44      | 3,0     | 0,016                   | 100                  |
| 40      | 01 117 140 0040         | 49      | 3,7     | 0,028                   | 60                   |
| 50      | 01 117 140 0050         | 55      | 4,6     | 0,052                   | 50                   |
| 63      | 01 117 140 0063         | 63      | 5,8     | 0,088                   | 36                   |
| 75      | 01 117 140 0075         | 70      | 6,8     | 0,142                   | 27                   |
| 90      | 01 117 140 0090         | 79      | 8,2     | 0,235                   | 60                   |
| 110     | 01 117 140 0110         | 82      | 10,0    | 0,370                   | 36                   |
| 125     | 01 117 140 0125         | 87      | 11,4    | 0,520                   | 24                   |
| 140     | 01 117 140 0140         | 92      | 12,7    | 0,745                   | 22                   |
| 160     | 01 117 140 0160         | 98      | 14,6    | 1,025                   | 15                   |
| 180     | 01 117 140 0180         | 105     | 16,4    | 1,342                   | 8                    |
| 200     | 01 117 140 0200         | 112     | 18,2    | 1,795                   | 10                   |
| 225     | 01 117 140 0225         | 120     | 20,5    | 2,540                   | 4                    |
| 250     | 01 117 140 0250         | 129     | 22,7    | 3,260                   | 4                    |
| 280     | 01 117 140 0280         | 139     | 25,4    | 4,460                   | 3                    |
| 315     | 01 117 140 0315         | 150     | 28,6    | 6,195                   | 2                    |
| 355     | 01 117 140 0355         | 164     | 32,3    | 8,910                   | 1                    |
| 400     | 01 117 140 0400         | 179     | 36,4    | 12,440                  | 1                    |

#### PE 100 SDR 17 PN 10

| d<br>mm | article no<br>ürün kodu | l<br>mm | s<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
|---------|-------------------------|---------|---------|-------------------------|----------------------|
| 63      | 01 115 140 0063         | 63      | 3,8     | 0,070                   | 36                   |
| 75      | 01 115 140 0075         | 70      | 4,5     | 0,110                   | 27                   |
| 90      | 01 115 140 0090         | 79      | 5,4     | 0,182                   | 60                   |
| 110     | 01 115 140 0110         | 82      | 6,6     | 0,289                   | 36                   |
| 125     | 01 115 140 0125         | 87      | 7,4     | 0,404                   | 24                   |
| 140     | 01 115 140 0140         | 92      | 8,3     | 0,594                   | 22                   |
| 160     | 01 115 140 0160         | 98      | 9,5     | 0,813                   | 15                   |
| 180     | 01 115 140 0180         | 105     | 10,7    | 1,056                   | 8                    |
| 200     | 01 115 140 0200         | 112     | 11,9    | 1,420                   | 10                   |
| 225     | 01 115 140 0225         | 120     | 13,4    | 2,031                   | 4                    |
| 250     | 01 115 140 0250         | 129     | 14,8    | 2,583                   | 4                    |
| 280     | 01 115 140 0280         | 139     | 16,6    | 3,550                   | 3                    |
| 315     | 01 115 140 0315         | 150     | 18,7    | 4,952                   | 2                    |
| 355     | 01 115 140 0355         | 164     | 21,1    | 7,178                   | 1                    |
| 400     | 01 115 140 0400         | 179     | 23,7    | 10,024                  | 1                    |

## ► Safe and easy to use

### Emniyetli ve kolay uygulama



- 1- Seal cap
- 2- O-ring for leakage free
- 3- Cutter - Stainless steel
- 4- Longer outlet for easy fixing
- 5- Wide tapping area
- 6- Wide welding surface

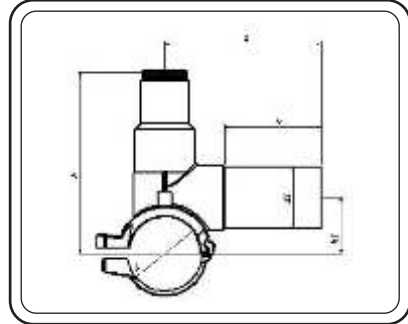
- 1- Sızdırmazlık kapağı
- 2- Sızdırmazlık için O-ring
- 3- Kesici uç - paslanmaz çelik
- 4- Montaj kolaylığı sağlayan uzun çıkış
- 5- Geniş kesim alanı
- 6- Geniş kaynak yüzeyi

- Tapping without leakage
- Quick and easy application - requires no special tools for mounting
- Usable with standard electrofusion welding machines, fusion info with barcode or magnetic card
- Wide welding area to ensure highest security
- Conformity to TS EN 1555/TS 418 EN 12201 standards

- Sızıntı olmadan bağlantı alma
- Özel montaj malzemesi gerekmeden hızlı ve kolay uygulama
- Standart kaynak makinaları ile kullanabilme, barkod veya manyetik kart ile okuma kolaylığı
- En yüksek emniyet için geniş kaynak yüzeyi
- TS EN 1555/TS 418 EN 12201 normlarına uygunluk

## EF Tapping Saddle - Monoblock, Injection

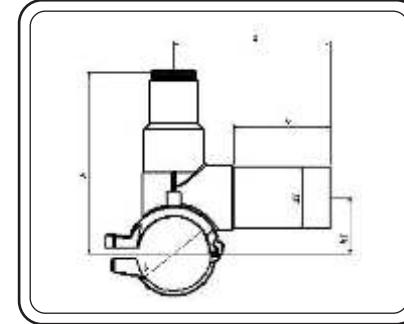
### EF Servis-T - Monoblok, Enjeksiyon



| PE 100     |                         | SDR 11   |         | PN16     |         |                         |                      |
|------------|-------------------------|----------|---------|----------|---------|-------------------------|----------------------|
| d-d1<br>mm | article no<br>ürün kodu | le<br>mm | h<br>mm | h1<br>mm | z<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
| 40-20      | 01 117 071 0043         | 75       | 130,0   | 37,0     | 117     | 0,330                   | 20                   |
| 40-25      | 01 117 071 0042         | 75       | 130,0   | 37,0     | 117     | 0,335                   | 20                   |
| 40-32      | 01 117 071 0041         | 76       | 130,0   | 37,0     | 118     | 0,340                   | 20                   |
| 50-20      | 01 117 071 0054         | 75       | 135,0   | 42,0     | 117     | 0,330                   | 20                   |
| 50-25      | 01 117 071 0053         | 75       | 135,0   | 42,0     | 117     | 0,335                   | 20                   |
| 50-32      | 01 117 071 0052         | 76       | 135,0   | 42,0     | 118     | 0,340                   | 20                   |
| 63-20      | 01 117 071 0068         | 75       | 187,5   | 51,0     | 124     | 0,565                   | 20                   |
| 63-25      | 01 117 071 0067         | 75       | 187,5   | 51,0     | 124     | 0,570                   | 20                   |
| 63-32      | 01 117 071 0066         | 76       | 187,5   | 51,0     | 125     | 0,585                   | 20                   |
| 63-40      | 01 117 071 0065         | 85       | 187,5   | 51,0     | 134     | 0,590                   | 20                   |
| 63-50      | 01 117 071 0064         | 92       | 187,5   | 51,0     | 146     | 0,630                   | 20                   |
| 63-63      | 01 117 071 0063         | 100      | 187,5   | 51,0     | 157     | 0,670                   | 18                   |
| 75-20      | 01 117 071 0081         | 75       | 193,5   | 57,0     | 124     | 0,580                   | 15                   |
| 75-25      | 01 117 071 0080         | 75       | 193,5   | 57,0     | 124     | 0,590                   | 15                   |
| 75-32      | 01 117 071 0079         | 76       | 193,5   | 57,0     | 125     | 0,605                   | 15                   |
| 75-40      | 01 117 071 0078         | 85       | 193,5   | 57,0     | 137     | 0,615                   | 15                   |
| 75-50      | 01 117 071 0077         | 92       | 193,5   | 57,0     | 149     | 0,645                   | 15                   |
| 75-63      | 01 117 071 0076         | 100      | 193,5   | 57,0     | 161     | 0,705                   | 15                   |
| 90-20      | 01 117 071 0097         | 75       | 195,0   | 65,0     | 124     | 0,685                   | 12                   |
| 90-25      | 01 117 071 0096         | 75       | 195,0   | 65,0     | 124     | 0,690                   | 12                   |
| 90-32      | 01 117 071 0095         | 76       | 195,0   | 65,0     | 125     | 0,695                   | 12                   |
| 90-40      | 01 117 071 0094         | 85       | 195,0   | 65,0     | 140     | 0,780                   | 12                   |
| 90-50      | 01 117 071 0093         | 92       | 195,0   | 65,0     | 152     | 0,800                   | 12                   |
| 90-63      | 01 117 071 0092         | 100      | 195,0   | 65,0     | 165     | 0,825                   | 12                   |
| 110-20     | 01 117 071 0118         | 75       | 205,0   | 75,0     | 124     | 0,745                   | 10                   |
| 110-25     | 01 117 071 0117         | 75       | 205,0   | 75,0     | 124     | 0,755                   | 10                   |
| 110-32     | 01 117 071 0116         | 76       | 205,0   | 75,0     | 131     | 0,765                   | 10                   |
| 110-40     | 01 117 071 0115         | 85       | 205,0   | 75,0     | 144     | 0,795                   | 10                   |
| 110-50     | 01 117 071 0114         | 92       | 205,0   | 75,0     | 156     | 0,815                   | 10                   |
| 110-63     | 01 117 071 0113         | 100      | 205,0   | 75,0     | 170     | 0,845                   | 10                   |
| 125-20     | 01 117 071 0134         | 75       | 212,5   | 82,5     | 124     | 0,775                   | 8                    |
| 125-25     | 01 117 071 0133         | 75       | 212,5   | 82,5     | 124     | 0,780                   | 8                    |
| 125-32     | 01 117 071 0132         | 76       | 212,5   | 82,5     | 133     | 0,785                   | 8                    |
| 125-40     | 01 117 071 0131         | 85       | 212,5   | 82,5     | 147     | 0,850                   | 8                    |
| 125-50     | 01 117 071 0130         | 92       | 212,5   | 82,5     | 160     | 0,870                   | 8                    |
| 125-63     | 01 117 071 0129         | 100      | 212,5   | 82,5     | 174     | 0,885                   | 8                    |
| 140-20     | 01 117 071 0150         | 75       | 238,0   | 95,0     | 124     | 0,840                   | 6                    |
| 140-25     | 01 117 071 0149         | 75       | 238,0   | 95,0     | 125     | 0,845                   | 6                    |
| 140-32     | 01 117 071 0148         | 76       | 238,0   | 95,0     | 134     | 0,850                   | 6                    |
| 140-40     | 01 117 071 0147         | 85       | 238,0   | 95,0     | 149     | 0,895                   | 6                    |
| 140-50     | 01 117 071 0146         | 92       | 238,0   | 95,0     | 164     | 0,920                   | 6                    |
| 140-63     | 01 117 071 0145         | 100      | 238,0   | 95,0     | 180     | 0,980                   | 6                    |

## EF Tapping Saddle - Monoblock, Injection

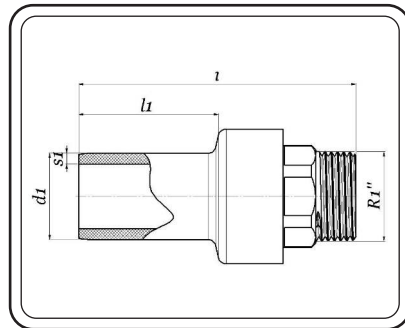
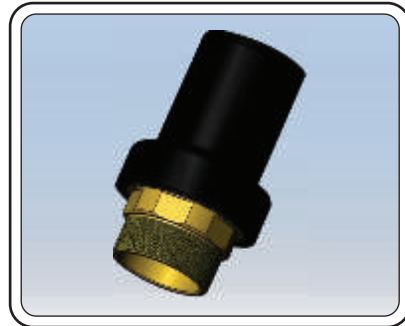
### EF Servis-T - Monoblok, Enjeksiyon



| PE 100     |                         | SDR 11   |         | PN16     |         |                         |                      |
|------------|-------------------------|----------|---------|----------|---------|-------------------------|----------------------|
| d-d1<br>mm | article no<br>ürün kodu | le<br>mm | h<br>mm | h1<br>mm | z<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
| 160-20     | 01 117 071 0171         | 75       | 248,0   | 105,0    | 124     | 0,875                   | 6                    |
| 160-25     | 01 117 071 0170         | 75       | 248,0   | 105,0    | 125     | 0,880                   | 6                    |
| 160-32     | 01 117 071 0169         | 76       | 248,0   | 105,0    | 140     | 0,885                   | 6                    |
| 160-40     | 01 117 071 0168         | 85       | 248,0   | 105,0    | 154     | 0,940                   | 6                    |
| 160-50     | 01 117 071 0167         | 92       | 248,0   | 105,0    | 169     | 0,980                   | 6                    |
| 160-63     | 01 117 071 0166         | 100      | 248,0   | 105,0    | 183     | 1,040                   | 6                    |
| 180-20     | 01 117 071 0192         | 75       | 258,0   | 115,0    | 124     | 0,910                   | 5                    |
| 180-25     | 01 117 071 0191         | 75       | 258,0   | 115,0    | 125     | 0,920                   | 5                    |
| 180-32     | 01 117 071 0190         | 76       | 258,0   | 115,0    | 142     | 0,900                   | 5                    |
| 180-40     | 01 117 071 0189         | 85       | 258,0   | 115,0    | 157     | 0,950                   | 5                    |
| 180-50     | 01 117 071 0188         | 92       | 258,0   | 115,0    | 173     | 1,000                   | 5                    |
| 180-63     | 01 117 071 0187         | 100      | 258,0   | 115,0    | 187     | 1,060                   | 5                    |
| 200-20     | 01 117 071 0213         | 75       | 268,0   | 125,0    | 125     | 0,985                   | 4                    |
| 200-25     | 01 117 071 0212         | 75       | 268,0   | 125,0    | 136     | 0,995                   | 4                    |
| 200-32     | 01 117 071 0211         | 76       | 268,0   | 125,0    | 144     | 1,015                   | 4                    |
| 200-40     | 01 117 071 0210         | 85       | 268,0   | 125,0    | 160     | 1,040                   | 4                    |
| 200-50     | 01 117 071 0209         | 92       | 268,0   | 125,0    | 178     | 1,065                   | 4                    |
| 200-63     | 01 117 071 0208         | 100      | 268,0   | 125,0    | 192     | 1,155                   | 4                    |
| 225-20     | 01 117 071 0239         | 75       | 280,5   | 137,5    | 125     | 1,030                   | 4                    |
| 225-25     | 01 117 071 0238         | 75       | 280,5   | 137,5    | 138     | 1,045                   | 4                    |
| 225-32     | 01 117 071 0237         | 76       | 280,5   | 137,5    | 147     | 1,060                   | 4                    |
| 225-40     | 01 117 071 0236         | 85       | 280,5   | 137,5    | 163     | 1,110                   | 4                    |
| 225-50     | 01 117 071 0235         | 92       | 280,5   | 137,5    | 180     | 1,155                   | 4                    |
| 225-63     | 01 117 071 0234         | 100      | 280,5   | 137,5    | 195     | 1,215                   | 4                    |

**PE/Brass Transition Fittings, Male thread - For water applications**

*PE/Pirinç Geçiş Adaptörü, Dış dişli - Su uygulamaları için*

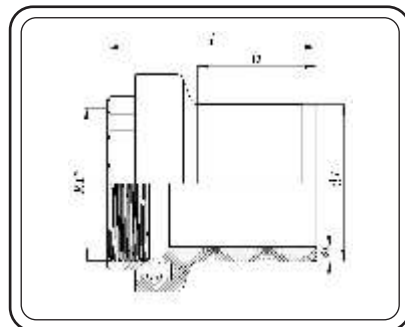
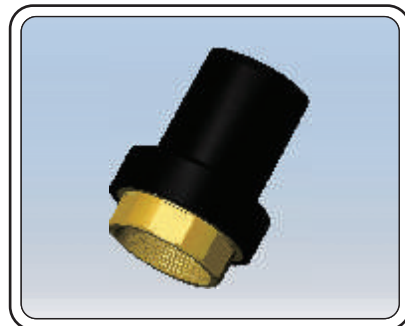


**PE100 SDR11 PN16 / MS58 Brass**

| d1-R1<br>mm-inch | article no<br>ürün kodu | l<br>mm | l1<br>mm | s1<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
|------------------|-------------------------|---------|----------|----------|-------------------------|----------------------|
| 20x1/2"          | 01 117 200 0020         | 84      | 41       | 3,0      | 0,082                   | 100                  |
| 20x3/4"          | 01 117 200 2001         | 85      | 41       | 3,0      | 0,095                   | 75                   |
| 25x3/4"          | 01 117 200 0025         | 90      | 41       | 3,0      | 0,098                   | 75                   |
| 32x1"            | 01 117 200 0032         | 103     | 44       | 3,0      | 0,223                   | 50                   |
| 40x1 1/4"        | 01 117 200 0040         | 122     | 49       | 3,7      | 0,510                   | 25                   |
| 50x1 1/2"        | 01 117 200 0050         | 122     | 55       | 4,6      | 0,511                   | 25                   |
| 63x2"            | 01 117 200 0063         | 140     | 63       | 5,8      | 0,690                   | 10                   |
| 75x2 1/2"        | 01 117 200 0075         | 146     | 70       | 6,8      | 0,980                   | 9                    |
| 90x3"            | 01 117 200 0090         | 168     | 79       | 8,2      | 1,425                   | 5                    |
| 110x4"           | 01 117 200 0110         | 179     | 82       | 10,0     | 2,155                   | 2                    |
| 125x4"           | 01 117 200 0125         | 186     | 87       | 11,4     | 2,295                   | 2                    |

**PE/Brass Transition Fittings, Female thread - For water applications**

*PE/Pirinç Geçiş Adaptörü, İç dişli - Su uygulamaları için*

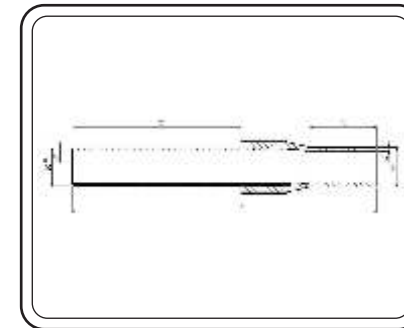
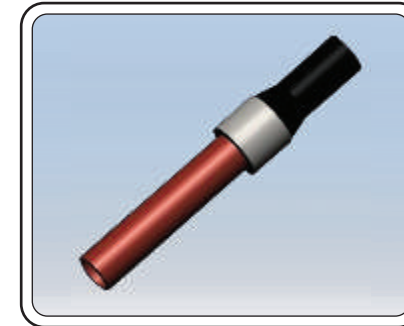


**PE100 SDR11 PN16 / MS58 Brass**

| d1-R1<br>mm-inch | article no<br>ürün kodu | l<br>mm | l1<br>mm | s1<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
|------------------|-------------------------|---------|----------|----------|-------------------------|----------------------|
| 20x1/2"          | 01 117 201 0020         | 70      | 41       | 3,0      | 0,055                   | 100                  |
| 20x3/4"          | 01 117 201 2001         | 72      | 41       | 3,0      | 0,072                   | 98                   |
| 25x3/4"          | 01 117 201 0025         | 72      | 41       | 3,0      | 0,075                   | 98                   |
| 32x1"            | 01 117 201 0032         | 84      | 44       | 3,0      | 0,166                   | 48                   |
| 40x1 1/4"        | 01 117 201 0040         | 98      | 49       | 3,7      | 0,345                   | 18                   |
| 50x1 1/2"        | 01 117 201 0050         | 101     | 55       | 4,6      | 0,395                   | 18                   |
| 63x2"            | 01 117 201 0063         | 115     | 63       | 5,8      | 0,574                   | 16                   |
| 75x2 1/2"        | 01 117 201 0075         | 129     | 70       | 6,8      | 0,835                   | 9                    |
| 90x3"            | 01 117 201 0090         | 144     | 79       | 8,2      | 1,140                   | 5                    |
| 110x4"           | 01 117 201 0110         | 147     | 82       | 10,0     | 1,750                   | 4                    |
| 125x4"           | 01 117 201 0125         | 153     | 87       | 11,4     | 1,820                   | 2                    |

**PE-Steel transition fittings, Weld end**

*PE-Çelik geçiş adaptörü, Kaynak ağızlı*



**PE100 SDR11 PN16 / Grade-B Steel**

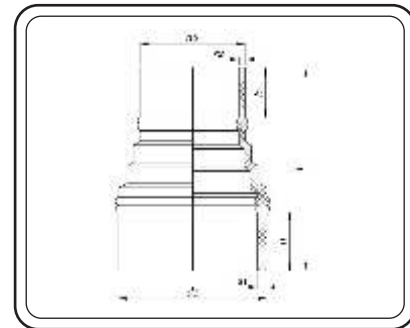
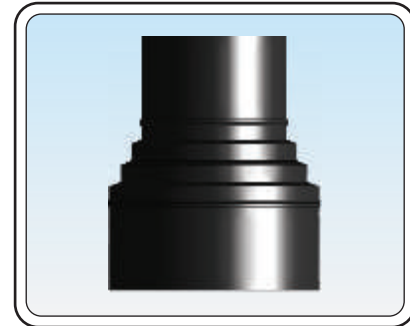
| d1-R1<br>mm-inch | article no<br>ürün kodu | l1<br>mm | l2<br>mm | l<br>mm | s1<br>mm | s2<br>mm | weight<br>ağırlık<br>kg | pcs/box<br>adet/kutu |
|------------------|-------------------------|----------|----------|---------|----------|----------|-------------------------|----------------------|
| 32x1"            | 01 117 180 0032         | 100      | 320      | 440     | 3,0      | 3,4      |                         |                      |
| 63x2"            | 01 117 180 0063         | 106      | 340      | 483     | 5,8      | 3,9      |                         |                      |
| 75x2 1/2"        | 01 117 180 0075         | 120      | 350      | 502     | 6,8      | 5,2      |                         |                      |
| 90x3"            | 01 117 180 0090         | 136      | 365      | 535     | 8,2      | 5,5      |                         |                      |
| 110x4"           | 01 117 180 0110         | 156      | 393      | 600     | 10,0     | 6,0      |                         |                      |
| 125x4"           | 01 117 180 0125         | 170      | 393      | 604     | 11,4     | 6,0      |                         |                      |
| 125x6"           | 01 117 180 1256         | 170      | 424      | 666     | 11,4     | 7,1      |                         |                      |
| 160x6"           | 01 117 180 0160         | 192      | 424      | 668     | 14,6     | 7,1      |                         |                      |
| * 180x6"         | 01 117 180 0180         |          |          |         | 16,4     | 7,1      |                         |                      |
| * 200x8"         | 01 117 180 0200         |          |          |         | 18,2     | 8,2      |                         |                      |
| * 225x8"         | 01 117 180 0225         |          |          |         | 20,5     | 8,2      |                         |                      |
| * 250x10"        | 01 117 180 0250         |          |          |         | 22,7     | 9,3      |                         |                      |
| * 280x10"        | 01 117 180 0280         |          |          |         | 25,4     | 9,3      |                         |                      |
| * 315x12"        | 01 117 180 0315         |          |          |         | 28,6     | 10,3     |                         |                      |

\* Available on request.  
\* Sipariş üzerine imal edilir.



## Reducer, Fabricated (\*)

### Redüksiyon, Konfeksiyon (\*)



#### PE100

| d1-d2<br>(mm) | article no<br>ürün kodu<br>SDR17 PN10 | article no<br>ürün kodu<br>SDR11 PN16 | l<br>(mm) | l1<br>(mm) | l2<br>(mm) | weight<br>ağırlık(kg)<br>SDR17<br>PN10 | weight<br>ağırlık(kg)<br>SDR11<br>PN16 |
|---------------|---------------------------------------|---------------------------------------|-----------|------------|------------|----------------------------------------|----------------------------------------|
| 355-315       | 01 115 081 0356                       | 01 117 081 0356                       | 454       | 184        | 170        | 9,230                                  | 13,640                                 |
| 355-280       | 01 115 081 0357                       | 01 117 081 0357                       | 543       | 184        | 159        | 10,170                                 | 15,030                                 |
| 355-250       | 01 115 081 0358                       | 01 117 081 0358                       | 578       | 184        | 149        | 10,220                                 | 15,110                                 |
| 355-225       | 01 115 081 0359                       | 01 117 081 0359                       | 614       | 184        | 140        | 10,320                                 | 15,260                                 |
| 400-355       | 01 115 081 0401                       | 01 117 081 0401                       | 483       | 199        | 184        | 12,440                                 | 18,400                                 |
| 400-315       | 01 115 081 0402                       | 01 117 081 0402                       | 514       | 199        | 170        | 12,290                                 | 18,180                                 |
| 400-280       | 01 115 081 0403                       | 01 117 081 0403                       | 603       | 199        | 159        | 13,220                                 | 19,570                                 |
| 400-250       | 01 115 081 0404                       | 01 117 081 0404                       | 638       | 199        | 149        | 13,270                                 | 19,650                                 |
| 400-225       | 01 115 081 0405                       | 01 117 081 0405                       | 674       | 199        | 140        | 13,380                                 | 19,810                                 |
| 450-400       | 01 115 081 0451                       | 01 117 081 0451                       | 514       | 215        | 199        | 16,740                                 | 24,790                                 |
| 450-355       | 01 115 081 0452                       | 01 117 081 0452                       | 544       | 215        | 184        | 16,460                                 | 24,340                                 |
| 450-315       | 01 115 081 0453                       | 01 117 081 0453                       | 575       | 215        | 170        | 16,300                                 | 24,130                                 |
| 450-280       | 01 115 081 0454                       | 01 117 081 0454                       | 664       | 215        | 159        | 17,240                                 | 25,520                                 |
| 450-250       | 01 115 081 0455                       | 01 117 081 0455                       | 699       | 215        | 149        | 17,290                                 | 25,590                                 |
| 450-225       | 01 115 081 0456                       | 01 117 081 0456                       | 735       | 215        | 140        | 17,390                                 | 25,750                                 |
| 500-450       | 01 115 081 0501                       | 01 117 081 0501                       | 557       | 232        | 215        | 22,640                                 | 33,490                                 |
| 500-400       | 01 115 081 0502                       | 01 117 081 0502                       | 641       | 232        | 199        | 24,080                                 | 35,620                                 |
| 500-355       | 01 115 081 0503                       | 01 117 081 0503                       | 671       | 232        | 184        | 23,790                                 | 35,170                                 |
| 500-315       | 01 115 081 0504                       | 01 117 081 0504                       | 702       | 232        | 170        | 23,630                                 | 34,950                                 |
| 560-500       | 01 115 081 0561                       | 01 117 081 0561                       | 597       | 255        | 232        | 30,210                                 | 44,670                                 |
| 560-450       | 01 115 081 0562                       | 01 117 081 0562                       | 630       | 255        | 215        | 29,780                                 | 44,070                                 |
| 560-400       | 01 115 081 0563                       | 01 117 081 0563                       | 714       | 255        | 199        | 31,220                                 | 46,190                                 |
| 560-355       | 01 115 081 0564                       | 01 117 081 0564                       | 744       | 255        | 184        | 30,940                                 | 45,760                                 |
| 560-315       | 01 115 081 0565                       | 01 117 081 0565                       | 775       | 255        | 170        | 30,790                                 | 45,550                                 |
| 630-560       | 01 115 081 0631                       | 01 117 081 0631                       | 630       | 275        | 255        | 41,440                                 | 61,280                                 |
| 630-500       | 01 115 081 0632                       | 01 117 081 0632                       | 647       | 275        | 232        | 40,240                                 | 59,500                                 |
| 630-450       | 01 115 081 0633                       | 01 117 081 0633                       | 670       | 275        | 215        | 39,820                                 | 58,910                                 |
| 630-400       | 01 115 081 0634                       | 01 117 081 0634                       | 754       | 275        | 199        | 41,260                                 | 61,030                                 |
| 630-355       | 01 115 081 0635                       | 01 117 081 0635                       | 784       | 275        | 184        | 40,970                                 | 60,590                                 |
| 630-315       | 01 115 081 0636                       | 01 117 081 0636                       | 815       | 275        | 170        | 40,820                                 | 60,370                                 |
| 710-630       | 01 115 081 0711                       |                                       | 645       | 280        | 275        | 53,500                                 |                                        |
| 710-560       | 01 115 081 0712                       |                                       | 725       | 280        | 255        | 56,550                                 |                                        |
| 710-500       | 01 115 081 0713                       |                                       | 742       | 280        | 232        | 55,350                                 |                                        |
| 710-450       | 01 115 081 0714                       |                                       | 765       | 280        | 215        | 54,930                                 |                                        |
| 800-710       | 01 115 081 0801                       |                                       | 660       | 290        | 280        | 69,450                                 |                                        |
| 800-630       | 01 115 081 0802                       |                                       | 695       | 290        | 275        | 68,040                                 |                                        |
| 800-560       | 01 115 081 0803                       |                                       | 775       | 290        | 255        | 71,080                                 |                                        |
| 800-500       | 01 115 081 0804                       |                                       | 792       | 290        | 232        | 69,880                                 |                                        |
| 800-450       | 01 115 081 0805                       |                                       | 815       | 290        | 215        | 69,460                                 |                                        |
| 900-800       | 01 115 081 0901                       |                                       | 725       | 300        | 290        | 97,190                                 |                                        |
| 900-710       | 01 115 081 0902                       |                                       | 752       | 300        | 280        | 94,720                                 |                                        |
| 900-630       | 01 115 081 0903                       |                                       | 807       | 300        | 275        | 93,310                                 |                                        |

\* Mould injected step Reducer with pipe extension at both ends.  
\* Enjeksiyon kademeli Redüksiyon, her iki uç manşon boyu boru ekli

## Special Products

### Özel Ürünler

- Fabricated (segmented) fittings up to 1200mm  
1200mm'ye kadar konfeksiyon ürünler



## Special Applications

### Özel Uygulamalar

Technical support and production at custom designed products and special projects  
Projelere uygun ürün talepleriniz ve sistem çözümlerinizi teknik destek ve imalat

- Special design Tees with flanges  
Özel tasarım flanşlı T'ler



## Automatic Electrofusion Unit

### Otomatik Elektrofüzyon Kaynak Makinası



### Tiny (Data) M

#### Technical Data - Teknik bilgi

|                                               |                                                                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Class<br>ISO 12176-2 Sınıfı                   | P2 3 U S1 V AK (D) X                                                                                               |
| Input Voltage<br>Giriş Voltajı                | 230V ~ / AC, (185V-300V)                                                                                           |
| Input Current<br>Giriş Akımı                  | 16A                                                                                                                |
| Input Frequency<br>Giriş Frekansı             | 50Hz (40-70Hz)                                                                                                     |
| Power Factor<br>Güç Faktörü                   | cos φ < 0.6 - 0.9 (Phase Angle Control / Faz Açısı Kontrol)                                                        |
| Output Voltage<br>Çıkış Voltajı               | 8-48V                                                                                                              |
| Output Current<br>Çıkış Akımı                 | 60A (max.: 80A)                                                                                                    |
| Energy Adjustment<br>Enerji Ayarı             | Temperature Compensation - Sıcaklık Düzeltmesi                                                                     |
| Power Consumption<br>Güç İhtiyacı             | 3200VA                                                                                                             |
| Temperature Range<br>Sıcaklık Aralığı         | -10°C - +50°C                                                                                                      |
| Protection Class<br>Koruma Sınıfı             | IP54, Class 2 / Sınıf 2                                                                                            |
| Weight incl. Cables<br>Ağırlık kablolar dahil | 18kg                                                                                                               |
| Main Supply Cable<br>Enerji Kablosu           | 4,5 m (Euro-Plug - Avrupa fişi)                                                                                    |
| Welding Cable<br>Kaynak Kablosu               | 4m                                                                                                                 |
| Welding Terminals<br>Kaynak Terminalleri      | 4,0mm (4,7mm optional - isteğe bağlı)                                                                              |
| Display<br>Gösterge                           | 4 x 20 Characters (alphanumeric.), background lighting<br>4 x 20 Karakter (alfa-nümerik), arkaplan ışıklandırılmış |
| Dimension<br>Boyut                            | 440mm x 380mm x 320mm                                                                                              |

#### Monitoring Functions - Monitör Fonksiyonları

|                                                |                                                                                                                     |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Input<br>Giriş                                 | Voltage / Current / Frequency<br>Voltaj / Akım / Frekans                                                            |
| Output<br>Çıkış                                | Voltage / Resistance / Contact / Short circuit / Current Monitoring<br>Voltaj / Direnç / Kontak / Kısa Devre / Akım |
| Other<br>Diğer                                 | System / Working Temperature / Service<br>Sistem / Çalışma Sıcaklığı / Servis                                       |
| Error Messages<br>Hata Mesajları               | Plain Text / Acoustic Signal<br>Düz Yazı / Akustik Sinyal                                                           |
| Enclosed Parts<br>Teslimatla birlikte gelenler | Control Box, Adapter 4.0/4.7mm, Instructions Manual<br>Kontrol Kutusu, Adaptör 4.0/4.7mm, Kullanım Kılavuzu         |

## THE SERVICE LIFE OF PE 100 PIPING NETWORKS AT DIFFERENT OPERATING TEMPERATURES AND PRESSURES

### DEĞİŞİK SICAKLIK VE BASINÇ ŞARTLARINDA PE 100 ŞEBEKELERİNİN KULLANIM ÖMÜRLERİ

| Temperature / Sıcaklık<br>°C | Service life / İşletme ömrü<br>Year / Yıl | SDR 17<br>Bar / Bar | SDR 11<br>Bar / Bar |
|------------------------------|-------------------------------------------|---------------------|---------------------|
| 10°C                         | 5                                         | 12.6                | 20.2                |
|                              | 10                                        | 12.4                | 19.8                |
|                              | 25                                        | 12.1                | 19.3                |
|                              | 50                                        | 11.9                | 19.0                |
|                              | 100                                       | 11.6                | 18.7                |
| 20°C                         | 5                                         | 10.6                | 16.9                |
|                              | 10                                        | 10.4                | 16.6                |
|                              | 25                                        | 10.1                | 16.2                |
|                              | 50                                        | 10.0                | 16.0                |
|                              | 100                                       | 9.8                 | 15.7                |

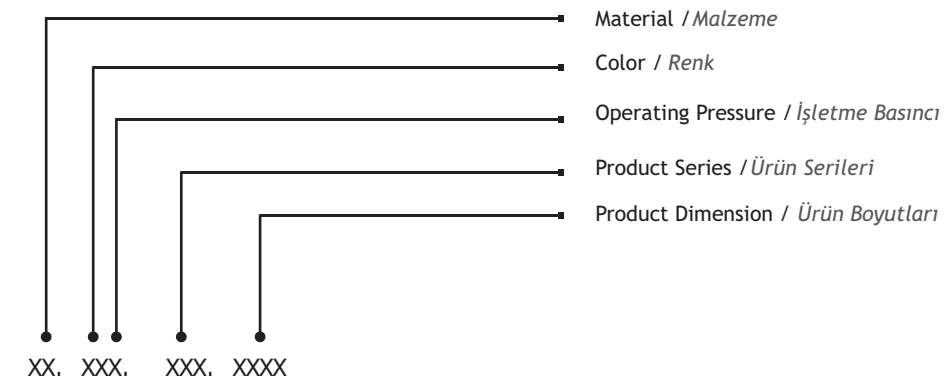
## TECHNICAL SPECIFICATIONS FOR THE RAW MATERIAL (HDPE 100-BLACK)

### HDPE 100 (SİYAH) HAMMADDE TEKNİK ÖZELLİKLERİ

|                                                        |                    | UNIT / BİRİM      | VALUE / DEĞER | TEST METHOD<br>TEST METODU |
|--------------------------------------------------------|--------------------|-------------------|---------------|----------------------------|
| PHYSICAL SPECIFICATIONS / FİZİKSEL ÖZELLİKLER          |                    |                   |               |                            |
| Density / Yoğunluk                                     |                    | g/cm <sup>3</sup> | 0,959         | ISO 1183                   |
| Melt Flow Rate / Erime Akışı                           | MFR 19 °C/5 kg     | G/10 min          | 0,2 - 0,45    | ISO 1133                   |
| Mechanical Specifications / Mekanik Özellikler         |                    |                   |               |                            |
| Elasticity Modulus / Elastik Modülü                    | 23°C CV=1mm / min  | MPa               | 1100          | ISO 527-2                  |
| Tensile Strength at Yield / Akmada Gerilme Dayanımı    | 23°C CV=50mm / min | MPa               | 25            | ISO 527-2                  |
| Elongation Strength at Break / Kopmada Uzama Gerilmesi | 23°C CV=50mm / min | %                 | >350          | ISO 527-2                  |
| THERMAL PROPERTIES / İSİSAL ÖZELLİKLER                 |                    |                   |               |                            |
| Vicat Softening Temperature / Vicat Yumuşama Sıcaklığı |                    | °C                | 128           | ISO 306                    |
| Thermal Stability / Termal Kararlılık                  | OIT, 210°C         | dakika            | >20           | ISO 10837                  |
| Pigment / Pigment                                      |                    |                   |               |                            |
| Carbon Black Content / Karbon Siyahı Muhtevası         |                    | %                 | 2 - 2,5       | ISO 6964                   |
| Carbon Black Distribution / Karbon Siyahı Dağılımı     |                    | Grade             | <3            | ISO 18553                  |

## NTG CODING

### NTG KODLAMA

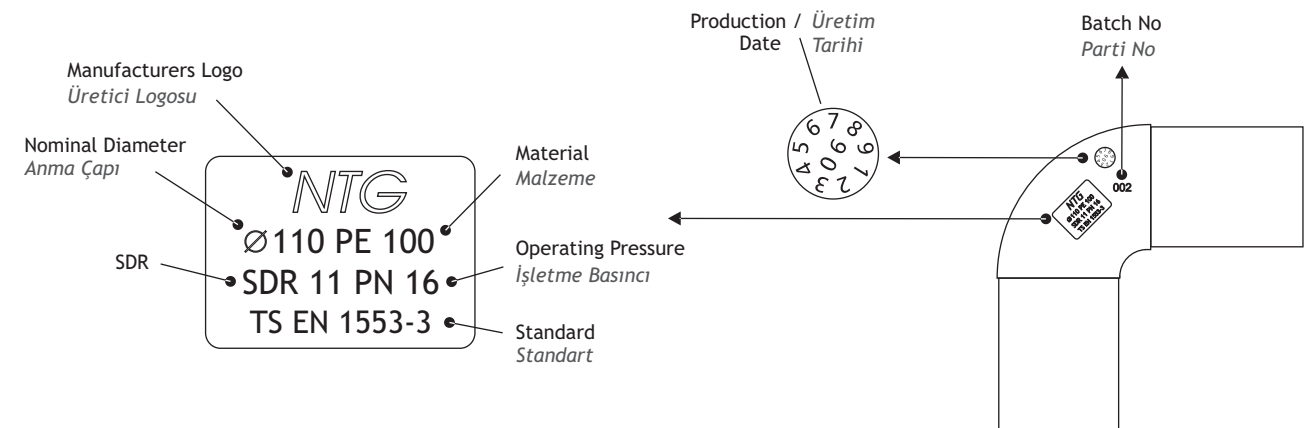


Order Sample  
PE100 SDR11 90° 110mm  
Code : 01.117.021.0110

Örnek Sipariş  
PE100 SDR11 90° 110mm  
Kodu : 01.117.021.0110

## NTG PRODUCT MARKING

### NTG ÜRÜN MARKALAMA



## PRESSURE RATINGS IN DIFFERENT STANDARDS

### PE 100 BORU VE FİTİNGLERİNİN BASINÇ SINIFLANDIRMALARI

| PIPE CLASSIFICATION / BORU SINIFI | ISO      | OPERATING PRESSURE / İŞLETME BASINCI |
|-----------------------------------|----------|--------------------------------------|
| SDR 6                             | ISO 2.5  | PN 32                                |
| SDR 7.4                           | ISO 3.2  | PN 25                                |
| SDR 9                             | ISO 4.0  | PN 20                                |
| SDR 11                            | ISO 5.0  | PN 16                                |
| SDR 13.6                          | ISO 6.3  | PN 12,5                              |
| SDR 17                            | ISO 8.0  | PN 10                                |
| SDR 21                            | ISO 10.0 | PN 8                                 |
| SDR 27.6                          | ISO 13.3 | PN 6                                 |
| SDR 33                            | ISO 16   | PN 5                                 |
| SDR 41                            | ISO 20   | PN 4                                 |



## Unit Weight of PE 100 Pipes PE 100 Boru Birim Ağırlıkları

MRS=10 Mpa C=1,25 Ó=8,0MPa

| PN       | 4      |           | 5      |           | 6      |           | 8      |           | 10     |           |
|----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|
| SDR      | 41     |           | 33     |           | 27,6   |           | 21     |           | 17     |           |
| Çap (mm) | s (mm) | m (kg/mt) | s (mm) | m (kg/mt) | s (mm) | m (kg/mt) | s (mm) | m (kg/mt) | s (mm) | m (kg/mt) |
| 16       |        |           |        |           |        |           |        |           |        |           |
| 20       |        |           |        |           |        |           |        |           |        |           |
| 25       |        |           |        |           |        |           |        |           | 2,0    | 0,140     |
| 32       |        |           |        |           |        |           |        |           | 2,0    | 0,190     |
| 40       |        |           |        |           |        |           | 2,0    | 0,240     | 2,4    | 0,280     |
| 50       |        |           |        |           | 2,0    | 0,300     | 2,4    | 0,360     | 3,0    | 0,440     |
| 63       |        |           | 2,0    | 0,380     | 2,3    | 0,440     | 3,0    | 0,570     | 3,8    | 0,710     |
| 75       | 2,0    | 0,460     | 2,3    | 0,530     | 2,9    | 0,660     | 3,6    | 0,810     | 4,5    | 1,000     |
| 90       | 2,3    | 0,640     | 2,8    | 0,770     | 3,3    | 0,900     | 4,3    | 1,160     | 5,4    | 1,440     |
| 110      | 2,7    | 0,910     | 3,4    | 1,140     | 4,0    | 1,340     | 5,3    | 1,750     | 6,6    | 2,150     |
| 125      | 3,1    | 1,190     | 3,9    | 1,490     | 4,6    | 1,740     | 6,0    | 2,250     | 7,4    | 2,740     |
| 140      | 3,5    | 1,510     | 4,3    | 1,840     | 5,1    | 2,170     | 6,7    | 2,810     | 8,3    | 3,440     |
| 160      | 4,0    | 1,970     | 4,9    | 2,390     | 5,8    | 2,820     | 7,7    | 3,690     | 9,5    | 4,500     |
| 180      | 4,4    | 2,430     | 5,5    | 3,020     | 6,5    | 3,550     | 8,6    | 4,640     | 10,7   | 5,710     |
| 200      | 4,9    | 3,010     | 6,2    | 3,790     | 7,3    | 4,430     | 9,6    | 5,760     | 11,9   | 7,050     |
| 225      | 5,5    | 3,800     | 6,9    | 4,740     | 8,2    | 5,600     | 10,8   | 7,290     | 13,4   | 8,930     |
| 250      | 6,2    | 4,760     | 7,7    | 5,880     | 9,1    | 6,910     | 11,9   | 8,930     | 14,8   | 10,970    |
| 280      | 6,9    | 5,940     | 8,6    | 7,350     | 10,2   | 8,670     | 13,4   | 11,250    | 16,6   | 13,770    |
| 315      | 7,7    | 7,450     | 9,7    | 9,330     | 11,4   | 10,900    | 15,0   | 14,180    | 18,7   | 17,450    |
| 355      | 8,7    | 9,490     | 10,9   | 11,820    | 12,9   | 13,900    | 16,9   | 18,000    | 21,1   | 22,190    |
| 400      | 9,8    | 12,050    | 12,3   | 15,020    | 14,5   | 17,610    | 19,1   | 22,920    | 23,7   | 28,090    |
| 450      | 11,0   | 15,210    | 13,8   | 18,960    | 16,3   | 22,270    | 21,5   | 29,020    | 26,7   | 35,600    |
| 500      | 12,3   | 18,900    | 15,3   | 23,360    | 18,1   | 27,480    | 23,9   | 35,850    | 29,7   | 44,000    |
| 560      | 13,7   | 23,580    | 17,2   | 29,410    | 20,3   | 34,510    | 26,7   | 44,860    | 33,2   | 55,100    |
| 630      | 15,4   | 29,820    | 19,3   | 37,130    | 22,8   | 43,610    | 30,0   | 56,700    | 37,4   | 69,820    |
| 710      | 17,4   | 37,960    | 21,8   | 47,260    | 25,7   | 55,400    | 33,9   | 72,200    | 42,1   | 88,580    |
| 800      | 19,6   | 48,190    | 24,5   | 59,850    | 29,0   | 70,440    | 38,1   | 91,450    | 47,4   | 112,380   |
| 900      | 22,0   | 60,850    | 27,6   | 75,850    | 32,6   | 89,080    | 42,9   | 115,830   | 53,3   | 142,170   |
| 1000     | 24,5   | 75,290    | 30,6   | 93,450    | 36,2   | 109,910   | 47,7   | 143,100   | 59,3   | 175,730   |
| 1200     | 29,4   | 108,420   | 36,7   | 134,490   | 43,5   | 158,480   | 57,2   | 205,930   | 70,6   | 251,190   |
| 1400     | 34,3   | 147,570   | 42,9   | 183,410   | 50,7   | 215,510   | 66,7   | 280,150   | 82,4   | 342,020   |
| 1600     | 39,2   | 192,740   | 49,0   | 239,420   | 58,0   | 281,740   | 76,2   | 365,790   | 94,1   | 446,410   |

s: Wall Thickness / Et Kalınlığı (mm) m: Unit Weight (kg/mt) / Birim Ağırlığı (kg/mt) c: Safety Coefficient / Emniyet Katsayısı  
MRS: Minimum Required Strength (Mpa) / Minimum Gerekli Mukavemet (MPa) Ó: Design Stress / Dizayn Gerilimi

## Unit Weight of PE 100 Pipes PE 100 Boru Birim Ağırlıkları

MRS=10 Mpa C=1,25 Ó=8,0MPa

| PN       | 12,5   |           | 16     |           | 20     |           | 25     |           | 32     |           |
|----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|
| SDR      | 13,6   |           | 11     |           | 9      |           | 7,4    |           | 6      |           |
| Çap (mm) | s (mm) | m (kg/mt) | s (mm) | m (kg/mt) | s (mm) | m (kg/mt) | s (mm) | m (kg/mt) | s (mm) | m (kg/mt) |
| 16       |        |           |        |           | 2,0    | 0,090     | 2,3    | 0,100     | 3,0    | 0,120     |
| 20       |        |           | 2,0    | 0,110     | 2,3    | 0,130     | 3,0    | 0,160     | 3,4    | 0,180     |
| 25       | 2,0    | 0,150     | 2,5    | 0,170     | 3,0    | 0,210     | 3,5    | 0,240     | 4,2    | 0,280     |
| 32       | 2,4    | 0,220     | 3,0    | 0,270     | 3,6    | 0,320     | 4,4    | 0,380     | 5,4    | 0,450     |
| 40       | 3,0    | 0,350     | 3,7    | 0,420     | 4,5    | 0,500     | 5,5    | 0,600     | 6,7    | 0,700     |
| 50       | 3,7    | 0,540     | 4,6    | 0,660     | 5,6    | 0,780     | 6,9    | 0,940     | 8,3    | 1,090     |
| 63       | 4,7    | 0,860     | 5,8    | 1,050     | 7,1    | 1,250     | 8,6    | 1,470     | 10,5   | 1,740     |
| 75       | 5,6    | 1,220     | 6,8    | 1,460     | 8,4    | 1,760     | 10,3   | 2,100     | 12,5   | 2,460     |
| 90       | 6,7    | 1,760     | 8,2    | 2,110     | 10,1   | 2,540     | 12,3   | 3,010     | 15,0   | 3,540     |
| 110      | 8,1    | 2,600     | 10,0   | 3,150     | 12,3   | 3,790     | 15,1   | 4,510     | 18,3   | 5,290     |
| 125      | 9,2    | 3,360     | 11,4   | 4,080     | 14,0   | 4,900     | 17,1   | 5,810     | 20,8   | 6,830     |
| 140      | 10,3   | 4,210     | 12,7   | 5,090     | 15,7   | 6,150     | 19,2   | 7,310     | 23,3   | 8,570     |
| 160      | 11,8   | 5,510     | 14,6   | 6,690     | 17,9   | 8,010     | 21,9   | 9,530     | 26,6   | 11,180    |
| 180      | 13,3   | 6,980     | 16,4   | 8,450     | 20,1   | 10,120    | 24,6   | 12,040    | 29,9   | 14,140    |
| 200      | 14,7   | 8,580     | 18,2   | 10,420    | 22,4   | 12,530    | 27,4   | 14,900    | 33,2   | 17,450    |
| 225      | 16,6   | 10,900    | 20,5   | 13,210    | 25,2   | 15,860    | 30,8   | 18,840    | 37,4   | 22,100    |
| 250      | 18,4   | 13,420    | 22,7   | 16,250    | 27,9   | 19,520    | 34,2   | 23,250    | 41,5   | 27,260    |
| 280      | 20,6   | 16,830    | 25,4   | 20,370    | 31,3   | 24,520    | 38,3   | 29,160    | 46,5   | 34,200    |
| 315      | 23,2   | 21,330    | 28,6   | 25,800    | 35,2   | 31,030    | 43,1   | 36,920    | 52,3   | 43,280    |
| 355      | 26,1   | 27,040    | 32,2   | 32,740    | 39,7   | 39,430    | 48,5   | 46,830    | 59,0   | 55,020    |
| 400      | 29,4   | 34,320    | 36,3   | 41,590    | 44,7   | 50,030    | 54,7   | 59,500    | 66,7   | 70,030    |
| 450      | 33,1   | 43,470    | 40,9   | 52,710    | 50,3   | 63,340    | 61,5   | 75,270    |        |           |
| 500      | 36,8   | 53,700    | 45,4   | 65,020    | 55,8   | 78,080    |        |           |        |           |
| 560      | 41,2   | 67,330    | 50,8   | 81,490    | 62,2   | 97,540    |        |           |        |           |
| 630      | 46,3   | 85,140    | 57,2   | 103,210   |        |           |        |           |        |           |
| 710      | 52,2   | 108,170   | 64,5   | 131,160   |        |           |        |           |        |           |
| 800      | 58,8   | 137,300   | 72,8   | 166,770   |        |           |        |           |        |           |
| 900      | 66,2   | 173,890   |        |           |        |           |        |           |        |           |
| 1000     | 73,5   | 214,520   |        |           |        |           |        |           |        |           |
| 1200     |        |           |        |           |        |           |        |           |        |           |
| 1400     |        |           |        |           |        |           |        |           |        |           |
| 1600     |        |           |        |           |        |           |        |           |        |           |

s: Wall Thickness / Et Kalınlığı (mm) m: Unit Weight (kg/mt) / Birim Ağırlığı (kg/mt) c: Safety Coefficient / Emniyet Katsayısı  
MRS: Minimum Required Strength (Mpa) / Minimum Gerekli Mukavemet (MPa) Ó: Design Stress / Dizayn Gerilimi

## Exhibitions / Fuarlar



Big 5 Show 2008 - Dubai / UAE



Aquatech 2008 - Amsterdam / Netherlands



Boru 2009 - Istanbul / Turkey



Mostra Convegno Expocomfort 2008 - Milan / Italy



Wasser Berlin 2009 - Berlin / Germany



ISH 2009 - Frankfurt / Germany

