

# TECHNICAL DATA



CONNECTING WORLDS

// EDITION MAY 2017

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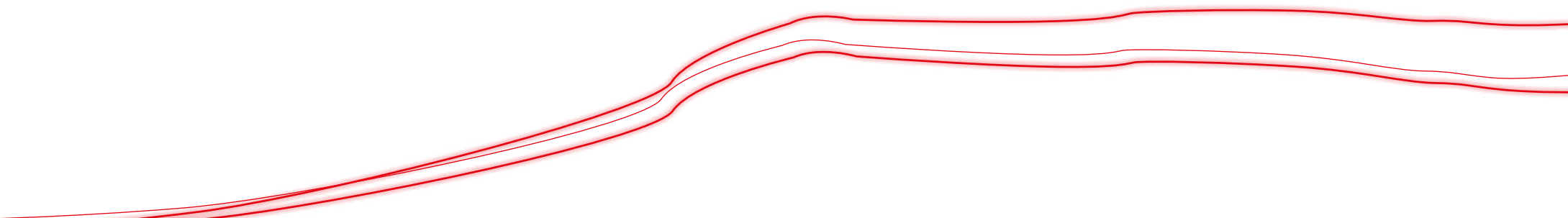
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# TECHNICAL DATA

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## // DEFINITIONS

This publication, referring to the UNI, EN and ISO standards, uses the following geometrical definitions:

|                       |  |   |
|-----------------------|--|---|
| <b>d<sub>n</sub></b>  | <b>NOMINAL OUTSIDE DIAMETER</b>            | specified outside diameter, in millimeters, of a PE pipe or fitting                                   |
| <b>e<sub>n</sub></b>  | <b>NOMINAL WALL THICKNESS</b>              | numerical designation of the wall thickness, in millimeters, of a PE pipe or fitting                  |
| <b>d<sub>e</sub></b>  | <b>OUTSIDE DIAMETER</b>                    | external diameter, in millimeters, measured at any point of the circumference of a PE pipe or fitting |
| <b>d<sub>em</sub></b> | <b>MEAN OUTSIDE DIAMETER</b>               | dimension value of the external circumference of a PE pipe/fitting divided by $\pi$ , in millimeters  |
| <b>SDR</b>            | <b>STANDARD DIMENSION RATIO</b>            | relationship between the outside nominal pipe diameter $d_n$ and the nominal wall thickness $e_n$     |
| <b>D</b>              | <b>NOMINAL OUTSIDE DIAMETER STEEL PIPE</b> | nominal outside diameter, in inches, of a steel pipe  |
| <b>G</b>              | <b>GAS THREAD DIAMETER</b>                 | dimension, in inches, of the thread part  |

## // POLYETHYLENE CLASSIFICATION

The polyethylene classification, defined by the ISO and the EN standards is issued depending on the parameter MRS = MINIMUM REQUIRED STRENGTH, that is the minimum resistance that the polyethylene must guarantee after 50 working years at the reference temperature of 20 °C.

Each MRS has a design stress value sigma ( $\sigma_s$ ), derived by MRS dividing it with the design coefficient (C). In case of water distribution the UNI EN 12201 standard defines equal to 1,25.

| DESIGNATION | MPa  |                     |
|-------------|------|---------------------|
|             | MRS  | $\sigma_s$ (C=1,25) |
| PE 80       | 8,0  | 6,3                 |
| PE 100      | 10,0 | 8,0                 |

The choice of the polyethylene type determines the nominal pressure PN of the pipe/fitting. For water distribution corresponds to the maximum allowable operating pressure (PFA) in bar which can be borne at the temperature of 20°C for a period of 50 years, based on the design coefficient.

# // MATERIALS

| CHARACTERISTICS                         | TYPICAL VALUES       | UNITS   | TEST METHODS |
|---|----------------------|---|--------------|
| DENSITY                                 | 958 – 959            | $\frac{\text{kg}}{\text{m}^3}$                      | ISO 1183     |
| MELT MASS FLOW RATE (MFI)<br>5 KG/190°C | 0,23 – 0,45          | g/10 min  | ISO 1133     |
| TENSILE STRENGTH<br>AT BREAK            | 35                   | MPa   | ISO 527      |
| TENSILE STRENGTH<br>AT YIELD            | 23 – 25              | MPa   | ISO 527      |
| TENSILE ELONGATION AT<br>BREAK          | 700                  | %   | ISO 527      |
| CARBON BLACK<br>CONTENT                 | 2,0 – 2,5            | %   | ISO 6964     |
| LINEAR THERMAL<br>EXPANSION COEFFICIENT | $2,0 \times 10^{-4}$ | $\frac{\text{m}}{\text{m} \text{ } ^\circ\text{C}}$ |              |
| BRITTLINESS TEMPERATURE                 | - 80                 | °C  | ASTM D746    |

All fittings in the EUROSTANDARD range are injection moulded using polyethylene compounds type PE 100 and PE 100-RC suitable for pipelines for the distribution of gas, water and other fluids under pressure.

The characteristics are in conformity with the standards EN 1555, EN 12201 and EN ISO 15494. The compounds used, normally added at the origin with carbon black for the UV stabilization, are suitable for drinking water and foodstuffs as provided in the DM 21 March 1973 and the DM n. 174 dated 6 April 2004.

EUROSTANDARD fittings are weldable with PE 80 and 100 pipes and fittings having melt mass-flow rate 0,2 - 1,4 g/10 min (ISO 1133 5 kgs - 190°C).

PE 100 fittings are weldable with PE 80 pipes/fittings and viceversa, either using buttfusion (if only of the same thickness and diameter) or using electrofusion.

# // PRODUCT TESTINGS

EUROSTANDARD fittings are continuously monitored throughout the entire production process in accordance with the internal testing programs in compliance with the standards EN 1555, EN 12201 and EN ISO 15494.

The testing activities are continuously carried out following up the complete observance of the reference standards and foresee tests of mechanical and physical type, either on the fittings and on the raw material.

Particularly, the production is subjected to the following tests:

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## MELT MASS FLOW RATE (MFR)

**UNI EN ISO 1133-1**

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## DIMENSIONAL CONTROL – APPEARANCE TEST – MARKING CONTROL – ELECTRICAL WIRE RESISTANCE

**UNI EN 1555**

**UNI EN 12201**

**UNI EN ISO 15494**

**UNI EN ISO 3126**

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## RESISTANCE TO HYDROSTATIC INTERNAL PRESSURE AT 20°C AND 80°C

**UNI EN ISO 1167**

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## TENSILE STRENGTH ON BUTTFUSION FITTINGS

**ISO 13953**

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## IMPACT RESISTANCE ON ELECTROFUSION SADDLES

**UNI EN 1716**

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## DECOHESIVE RESISTANCE ON ELECTROFUSION FITTINGS (PEEL TEST AND CRUSH TEST)

**ISO 13954**

**ISO 13955**

**ISO 13956**

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## OXIDATION INDUCTION TIME (OIT)

**ISO 11357-6**



## // MARKING

EUROSTANDARD fittings have the following information stated on the fitting and/or on a label:

|   |  |
|---|--|
|  | producer identification                              |
| <b>W17001 01/17</b>   | batch reference and/or month and year of manufacture |
| <b>PN _</b>   | nominal pressure rating at 20°C for water            |
| <b>S _</b>  | gas series of pipe                                   |
| <b>SDR _</b>  | standard dimension ratio                             |
| <b>d _</b>  | nominal size of the fitting (mm)                     |
| <b>PE 100</b>   | raw material type used                               |
| <b>UNI _ EN _ ISO _</b>   | product standard                                     |
| <b>RINA</b>   | conformity marking                                   |
| <b>GRADO B</b>  | dimensional tolerance                                |

The barcode label is applied on the electrofusion fittings containing the welding parameters according to standard ISO 13950 and the traceability data of the fitting according to standard ISO 12176-4.

## // LABORATORY ACCREDITATION

The EUROLAB Laboratory, belonging to Eurostandard, operates in accordance to the standard EN ISO/IEC 17025:2005 and is accredited from ACCREDIA - Italian Accreditation Body with accreditation number LAB N° 0740.

The accreditation certifies the technical qualification of the Laboratory relatively to the testings detailed in the enclosed sheets to the certificate - download on the website [accredia.it](http://accredia.it). The in-force status of the accreditation can be checked on the same website.

# // CONFORMITY MARKINGS

Eurostandard is authorized to use the RINA Quality Marking with reference to the standards UNI EN 12201-3, EN 12201-3, UNI EN 1555-3, EN 1555-3, UNI EN ISO 15494 for the fittings as detailed in the enclosed papers to the Conformity Certificates.

For information on the validity of the Conformity Certificates, visit the website [rina.org](http://rina.org). **Download of Certificates of Conformity and relevant enclosures on website [eurostandard.it](http://eurostandard.it)**



Eurostandard is also authorized to use several conformity markings of primary international certification bodies operating in the relevant sector. Here below are some examples. For information on the validity of the Conformity Certificates and the applicability to each fitting, please contact Eurostandard.



# // QUALITY SYSTEM CERTIFICATION

## UNI EN ISO 9001

The **EUROSTANDARD QUALITY MANAGEMENT SYSTEM** involves and manages all activities within the Company in order to achieve the optimum level of the quality standards. That is on the basis of the directions imposed in the ISO 9001 standard, which points out the requirements for the supplier to show its capability in checking the processes which determine the conformity of the finished product.

The codified and controlled management of the company activities are described in the documents which form the system manual and the relative managing and technical procedures.

The quality assurance guarantees the integration of the various activities which determine the quality of the system itself.

The correct management of all documents allows the tracing of the product through the batch reference number or other codes assigned during the production.

The Eurostandard policy is published on the website [eurostandard.it](http://eurostandard.it)



# // ENVIRONMENTAL CERTIFICATION

## UNI EN ISO 14001

The **EUROSTANDARD ENVIRONMENTAL MANAGEMENT SYSTEM** involves and manages all activities within the Company in order to render to the minimum the environmental impacts deriving from themselves and avoid pollution. This happens in conformity to the prescriptions of the standard ISO 14001, which specifies the requisites which allow to the organization to actuate a policy and establish the aims, taking also into consideration legislative prescriptions and informations relating to the affecting environmental impacts.

The management and control methodologies of the firm activities are described in details in the System Manual and in the environmental procedures.

The Eurostandard policy for environment is published on the website [eurostandard.it](http://eurostandard.it)



## // PIPE-FITTINGS DIMENSIONS

UNI EN 12201  
UNI EN 1555  
UNI EN ISO 15494

| PE 100         | SDR 17                                | SDR 11                                | SDR 7,4                               |
|----------------|---------------------------------------|---------------------------------------|---------------------------------------|
|                | PN 10                                 | PN 16                                 | PN 25                                 |
| d <sub>n</sub> | wall thickness<br>e <sub>n</sub> (mm) | wall thickness<br>e <sub>n</sub> (mm) | wall thickness<br>e <sub>n</sub> (mm) |
| 20             | 1,8 3,0 ★                             | 2,0 3,0 ★                             | 3,0                                   |
| 25             | 1,8 3,0 ★                             | 2,3 3,0 ★                             | 3,5                                   |
| 32             | 2,0 3,0 ★                             | 3,0                                   | 4,4                                   |
| 40             | 2,4 3,0 ★                             | 3,7                                   | 5,5                                   |
| 50             | 3,0                                   | 4,6                                   | 6,9                                   |
| 63             | 3,8                                   | 5,8                                   | 8,6                                   |
| 75             | 4,5                                   | 6,8                                   | 10,3                                  |
| 90             | 5,4                                   | 8,2                                   | 12,3                                  |
| 110            | 6,6                                   | 10,0                                  | 15,1                                  |
| 125            | 7,4                                   | 11,4                                  | 17,1                                  |
| 140            | 8,3                                   | 12,7                                  | 19,2                                  |
| 160            | 9,5                                   | 14,6                                  | 21,9                                  |
| 180            | 10,7                                  | 16,4                                  | 24,6                                  |
| 200            | 11,9                                  | 18,2                                  | 27,4                                  |
| 225            | 13,4                                  | 20,5                                  | 30,8                                  |
| 250            | 14,8                                  | 22,7                                  | 34,2                                  |
| 280            | 16,6                                  | 25,4                                  | 38,3                                  |
| 315            | 18,7                                  | 28,6                                  | 43,1                                  |
| 355            | 21,1                                  | 32,2                                  | 48,5                                  |
| 400            | 23,7                                  | 36,3                                  | 54,7                                  |
| 450            | 26,7                                  | 40,9                                  | 61,5                                  |
| 500            | 29,7                                  | 45,4                                  |                                       |
| 560            | 33,2                                  | 50,8                                  |                                       |
| 630            | 37,4                                  | 57,2                                  |                                       |
| 710            | 42,1                                  | 64,5                                  |                                       |

★ minimum thickness outlined by UNI 9034 for gas distribution

## // OPERATING PRESSURES OF PE PIPELINES FOR WATER SUPPLY

UNI EN 12201

| °C | MAXIMAL OPERATING PRESSURE (bar) ACCORDING TO TEMPERATURE OF THE CARRIED FLUID |       |         |       |       |       |
|----|--|-------|---------|-------|-------|-------|
|    | PN 8   | PN 10 | PN 12,5 | PN 16 | PN 20 | PN 25 |
| 20 | 8,0  | 10,0  | 12,5    | 16,0  | 20,0  | 25,0  |
| 30 | 7,0  | 8,7   | 10,9    | 13,9  | 17,4  | 21,8  |
| 40 | 5,9  | 7,4   | 9,3     | 11,8  | 14,8  | 18,5  |

## // OPERATING PRESSURES OF PE PIPELINES FOR GASEOUS FUELS SUPPLY

D.M. 16.04.2008

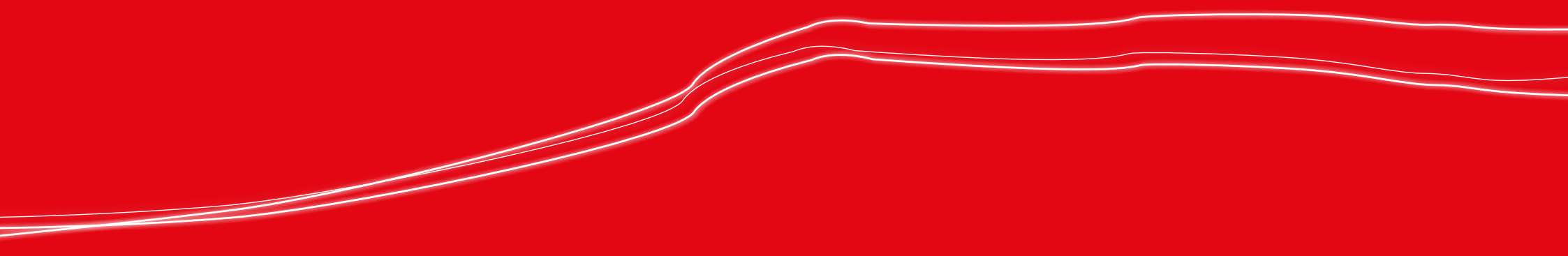
| SDR ★ | ALLOWED DIAMETERS (mm) | PE 80 PRESSURE (bar) | PE 100 PRESSURE (bar) |
|-------|------------------------|----------------------|-----------------------|
| 17    | ≥ 50                   | 3,1                  | 3,8                   |
| 11    | ≥ 16 ★                 | 5                    | 5                     |

★ minimum thickness outlined by UNI 9034

## // DIMENSIONS

All dimensions are in millimeters and are intended as nominal and standard sizes; weights are in grams.

EUROSTANDARD reserves the right to change geometries and dimensions of any product.

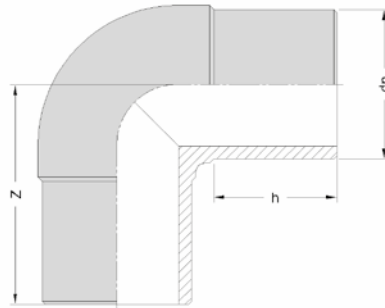




# BUTTFUSION FITTINGS

90° ELBOW // 45° ELBOW // 90° AND 45° SEGMENT BEND // 90° TEE //  
90° REDUCED TEE MOULDED // 90° REDUCED TEE ASSEMBLED // STUB END //  
CAP // REDUCER //

**COD. 20.10**  
**90° ELBOW**



16

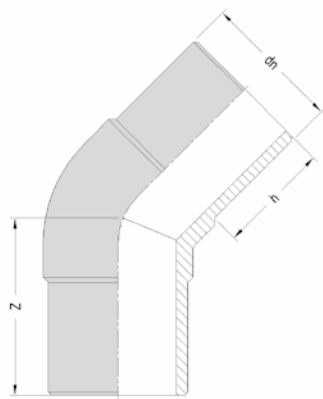
| DIMENSIONS |     |     | WEIGHTS |        |         |
|------------|-----|-----|---------|--------|---------|
| dn         | h   | Z   | SDR 17  | SDR 11 | SDR 7,4 |
|            |     |     | PN 10   | PN 16  | PN 25   |
| 20         | 49  | 75  |         | 30     |         |
| 25         | 53  | 80  |         | 50     |         |
| 32         | 59  | 89  |         | 55     | 65      |
| 40         | 59  | 85  |         | 75     | 100     |
| 50         | 60  | 89  |         | 120    | 175     |
| 63         | 68  | 103 |         | 235    | 310     |
| 75         | 75  | 130 |         | 385    | 540     |
| 90         | 84  | 147 | 470     | 640    | 875     |
| 110        | 86  | 160 | 780     | 1050   | 1460    |
| 125        | 89  | 159 | 915     | 1310   | 1800    |
| 140        | 94  | 172 | 1250    | 1795   | 2500    |
| 160        | 115 | 225 | 2155    | 3000   | 4100    |
| 180        | 121 | 235 | 2675    | 3985   |         |
| 200        | 127 | 252 | 3335    | 5100   |         |
| 225        | 138 | 274 | 5600    | 7720   |         |
| 250        | 143 | 300 | 7400    | 10350  |         |
| 280        |     |     | •       | •      |         |
| 315        | 180 | 392 | 12440   | 18750  |         |
| 355        |     |     | •       | •      |         |
| 400        |     |     | •       | •      |         |
| 500        |     |     | •       | •      |         |

• on request

- Moulded in PE 100 with long collar
- Buttfusion unadvised for diam. < 63 mm



## COD. 20.15 45° ELBOW

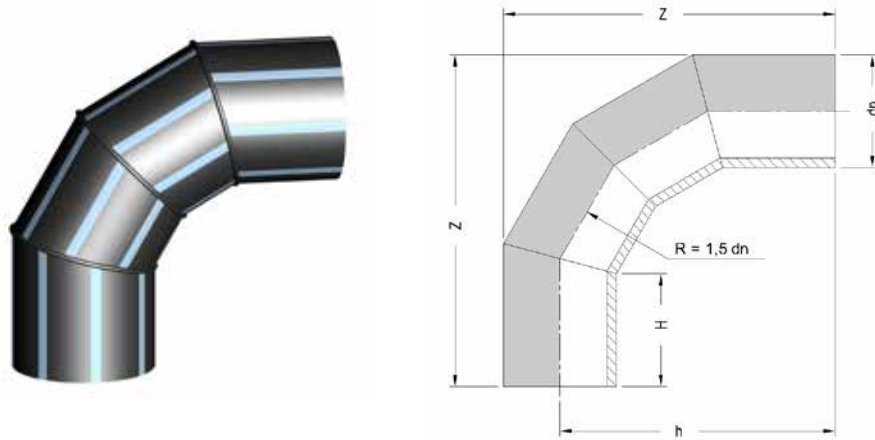


| DIMENSIONS |     |     | WEIGHTS |        |         |
|------------|-----|-----|---------|--------|---------|
| dn         | h   | Z   | SDR 17  | SDR 11 | SDR 7,4 |
|            |     |     | PN 10   | PN 16  | PN 25   |
| 32         | 50  | 64  |         | 40     | 50      |
| 40         | 59  | 71  |         | 65     | 100     |
| 50         | 60  | 74  |         | 105    | 150     |
| 63         | 68  | 85  |         | 190    | 255     |
| 75         | 73  | 92  |         | 290    | 400     |
| 90         | 83  | 106 | 350     | 480    | 640     |
| 110        | 84  | 112 | 495     | 720    | 1000    |
| 125        | 89  | 125 | 740     | 1045   | 1500    |
| 140        | 95  | 128 | 970     | 1390   | 1950    |
| 160        | 100 | 142 | 1365    | 1990   | 2800    |
| 180        | 125 | 183 | 2300    | 3355   |         |
| 200        | 131 | 197 | 3150    | 4385   |         |
| 225        | 134 | 213 | 4360    | 6110   |         |
| 250        | 142 | 232 | 5750    | 8140   |         |
| 280        |     |     | •       | •      |         |
| 315        | 210 | 318 | 11980   | 17000  |         |
| 355        |     |     | •       | •      |         |
| 400        |     |     | •       | •      |         |
| 500        |     |     | •       | •      |         |

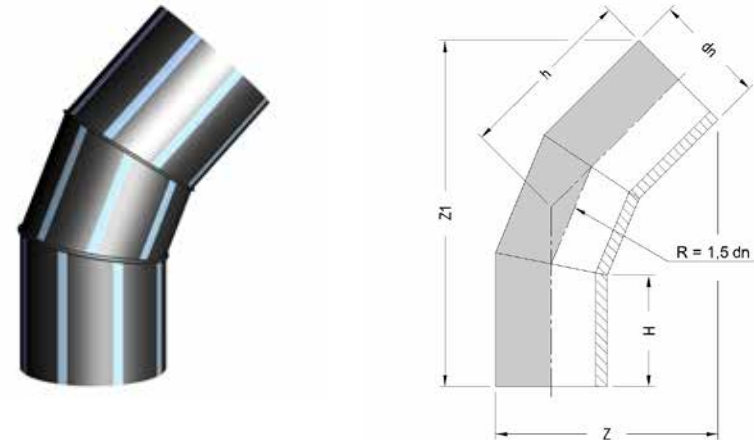
• on request

- Moulded in PE 100 with long collar
- Buttfusion unadvised for diam. < 63 mm

**COD. 20.12**  
**90° SEGMENT BEND**



**COD. 20.17**  
**45° SEGMENT BEND**



| DIMENSIONS * |     |      |      |     | WEIGHTS |        |
|--------------|-----|------|------|-----|---------|--------|
| dn           | H   | Z    | h    | R   | SDR 17  | SDR 11 |
|              |     |      |      |     | PN 10   | PN 16  |
| 280          | 200 | 685  | 545  | 420 | 17000   | 24000  |
| 355          | 300 | 913  | 737  | 533 | 31200   | 45900  |
| 400          | 300 | 992  | 792  | 600 | 45100   | 66600  |
| 450          | 300 | 1079 | 854  | 675 | 60700   | 89600  |
| 500          | 300 | 1166 | 916  | 750 | 75000   | 110600 |
| 560          | 350 | 1319 | 1039 | 840 | 110500  | 163000 |
| 630          | 350 | 1441 | 1126 | 945 | 147000  | 217000 |

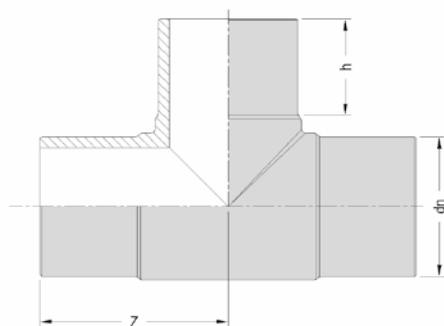
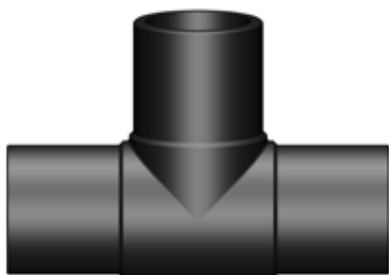
| DIMENSIONS * |     |     |      |     |     | WEIGHTS |        |
|--------------|-----|-----|------|-----|-----|---------|--------|
| dn           | H   | Z   | Z1   | h   | R   | SDR 17  | SDR 11 |
|              |     |     |      |     |     | PN 10   | PN 16  |
| 280          | 200 | 461 | 634  | 313 | 420 | 12600   | 18500  |
| 355          | 300 | 621 | 893  | 449 | 533 | 21640   | 31820  |
| 400          | 300 | 674 | 944  | 470 | 600 | 28470   | 42060  |
| 450          | 300 | 731 | 996  | 490 | 675 | 37860   | 55890  |
| 500          | 300 | 788 | 1048 | 510 | 750 | 48540   | 71570  |
| 560          | 350 | 892 | 1197 | 585 | 840 | 70770   | 104320 |
| 630          | 350 | 973 | 1273 | 615 | 945 | 92430   | 136320 |

\* DIMENSIONS AND WEIGHTS MAY BE CHANGED

\_ On request 90° and 45° segment bend SDR 7,4 PN 25

\_ A derating factor of 0,8 shall be applied to the indicated PN (of the pipe): maximum allowable operating pressure = PN x 0,8

**COD. 20.20**  
**90° TEE**



| DIMENSIONS |     |     | WEIGHTS |        |         |
|------------|-----|-----|---------|--------|---------|
| dn         | h   | Z   | SDR 17  | SDR 11 | SDR 7,4 |
|            |     |     | PN 10   | PN 16  | PN 25   |
| 20         | 59  | 80  |         | 45     |         |
| 25         | 60  | 76  |         | 55     |         |
| 32         | 60  | 82  |         | 75     | 100     |
| 40         | 59  | 84  |         | 115    | 150     |
| 50         | 60  | 89  |         | 180    | 250     |
| 63         | 67  | 103 |         | 320    | 460     |
| 75         | 74  | 126 |         | 540    | 750     |
| 90         | 80  | 135 | 580     | 850    | 1170    |
| 110        | 95  | 162 | 975     | 1495   | 2000    |
| 125        | 90  | 185 | 1540    | 2230   | 2650    |
| 140        | 95  | 182 | 1790    | 2688   | 3500    |
| 160        | 106 | 216 | 2919    | 4244   | 5150    |
| 180        | 124 | 243 | 4140    | 5840   |         |
| 200        | 130 | 259 | 5150    | 7485   |         |
| 225        | 136 | 282 | 7250    | 9700   |         |
| 250        | 142 | 307 | 10080   | 13870  |         |
| 280        |     |     | •       | •      |         |
| 315        | 178 | 388 | 19800   | 27650  |         |
| 355        |     |     | •       | •      |         |
| 400        |     |     | •       | •      |         |
| 500        |     |     | •       | •      |         |

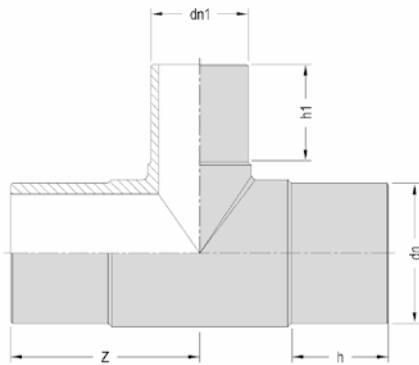
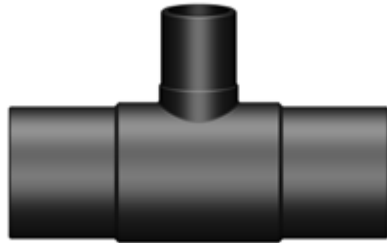
• on request

- Moulded in PE 100 with long collar
- Buttfusion unadvised for diam. < 63 mm

**COD. 20.21**

# 90° REDUCED TEE MOULDED

20



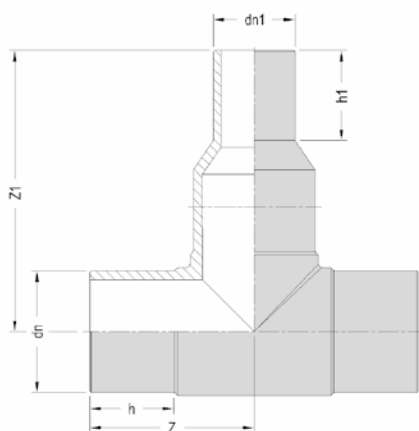
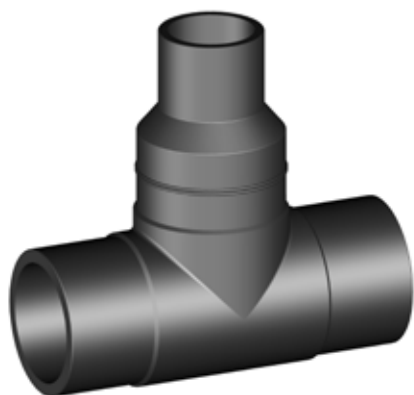
| DIMENSIONS |     |     |     |     | WEIGHTS |        |
|------------|-----|-----|-----|-----|---------|--------|
| dn         | dn1 | h   | h1  | Z   | SDR 17  | SDR 11 |
|            |     |     |     |     | PN 10   | PN 16  |
| 90         | 63  | 90  | 74  | 147 |         | 830    |
| 110        | 63  | 95  | 80  | 161 |         | 1200   |
| 110        | 90  | 95  | 89  | 162 |         | 1375   |
| 125        | 63  | 95  | 80  | 185 |         | ■      |
| 125        | 90  | 95  | 85  | 185 | ■       | 2000   |
| 125        | 110 | 95  | 95  | 185 | ■       | 2120   |
| 160        | 90  | 106 | 85  | 216 | 2500    | 3630   |
| 160        | 110 | 106 | 95  | 216 | 3570    | 3730   |
| 200        | 63  | 130 | 80  | 258 |         | ■      |
| 200        | 110 | 130 | 90  | 258 | ■       | ■      |
| 200        | 160 | 130 | 115 | 258 | ■       | ■      |

■ in preparation

- Moulded in PE 100 with long collar
- Alternative electrofusion solution: spigot saddle (cod. 21.20)

**COD. 20.21**

# 90° REDUCED TE ASSEMBLED



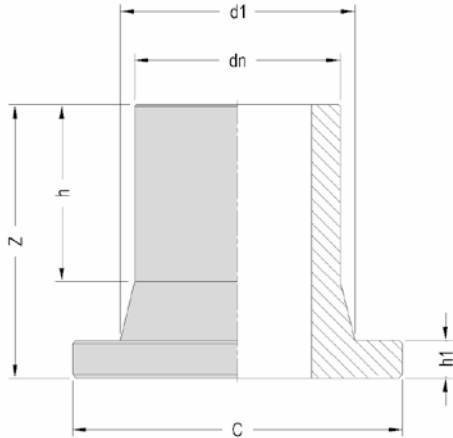
| DIMENSIONS |     |    |    |     |     | WEIGHTS |        |         |
|------------|-----|----|----|-----|-----|---------|--------|---------|
| dn         | dn1 | h  | h1 | Z   | Z1  | SDR 17  | SDR 11 | SDR 7,4 |
|            |     |    |    |     |     | PN 10   | PN 16  | PN 25   |
| 63         | 32  | 67 | 61 | 103 | 180 |         | 370    | 570     |
| 63         | 40  | 67 | 52 | 103 | 175 |         | 365    | 590     |
| 63         | 50  | 67 | 57 | 103 | 173 |         | 440    | 545     |
| 75         | 40  | 74 | 60 | 126 | 202 |         | 640    | 871     |
| 75         | 50  | 74 | 59 | 126 | 208 |         | 625    | 895     |
| 75         | 63  | 74 | 67 | 126 | 208 |         | 660    | 935     |
| 90         | 50  | 80 | 61 | 135 | 216 | 700     | 975    | 1490    |
| 90         | 63  | 80 | 68 | 135 | 224 | 715     |        | 1370    |
| 90         | 75  | 80 | 71 | 135 | 217 | 780     | 1015   | 1600    |
| 110        | 50  | 95 | 57 | 162 | 252 | 1705    | 1635   |         |
| 110        | 63  | 95 | 69 | 162 | 263 | 1115    |        | 2430    |
| 110        | 75  | 95 | 72 | 162 | 251 | 1705    | 1705   | 2490    |
| 110        | 90  | 95 | 81 | 162 | 257 | 1170    |        | 2370    |
| 125        | 75  | 90 | 78 | 185 | 257 | 1630    | 2180   | 2680    |
| 125        | 90  | 90 | 81 | 185 | 255 |         |        | 2771    |
| 125        | 110 | 90 | 84 | 185 | 256 |         |        | 2910    |
| 140        | 90  | 95 | 80 | 182 | 293 | 3045    | 2900   | 4630    |
| 140        | 110 | 95 | 83 | 182 | 282 | 2255    | 2920   | 4685    |
| 140        | 125 | 95 | 89 | 182 | 286 | 2300    | 3030   | 4850    |

| DIMENSIONS |     |     |     |     |     | WEIGHTS |        |         |
|------------|-----|-----|-----|-----|-----|---------|--------|---------|
| dn         | dn1 | h   | h1  | Z   | Z1  | SDR 17  | SDR 11 | SDR 7,4 |
|            |     |     |     |     |     | PN 10   | PN 16  | PN 25   |
| 160        | 110 | 106 | 86  | 216 | 317 |         |        | 5725    |
| 160        | 125 | 106 | 91  | 216 | 308 | 3365    | 4470   | 6970    |
| 160        | 140 | 106 | 92  | 216 | 306 | 3435    | 5005   | 7100    |
| 180        | 125 | 124 | 88  | 243 | 357 | 5120    | 6510   |         |
| 180        | 140 | 124 | 96  | 243 | 360 | 5190    | 6645   |         |
| 180        | 160 | 124 | 101 | 243 | 361 | 5295    | 6760   |         |
| 200        | 140 | 130 | 95  | 259 | 376 | 6380    | 8360   |         |
| 200        | 180 | 130 | 109 | 259 | 379 | 6510    | 9400   |         |
| 225        | 90  | 136 | 89  | 282 | 451 |         | 10700  |         |
| 225        | 125 | 136 | 99  | 282 | 462 | 8780    | 10995  |         |
| 225        | 160 | 136 | 120 | 282 | 442 | 8950    | 11825  |         |
| 225        | 180 | 136 | 125 | 282 | 436 | 9030    | 11960  |         |
| 225        | 200 | 136 | 130 | 282 | 428 | 9230    | 12865  |         |
| 250        | 160 | 142 | 120 | 307 | 487 | 20000   | 22000  |         |
| 250        | 180 | 142 | 124 | 307 | 474 | 11700   | 15775  |         |
| 250        | 200 | 142 | 130 | 307 | 469 | 11450   | 17420  |         |
| 250        | 225 | 142 | 134 | 307 | 466 | 12120   | 16185  |         |
| 315        | 160 | 178 | 110 | 388 | 641 | 21500   | 30585  |         |
| 315        | 200 | 178 | 130 | 388 | 608 | 22815   | 32595  |         |
| 315        | 225 | 178 | 138 | 388 | 605 | 24980   | 30400  |         |
| 315        | 250 | 178 | 150 | 388 | 597 | 28600   | 31400  |         |

- On request other diameters assembled by butt fusion system with a reducer on the central exit
- Alternative electrofusion solution: spigot saddle (cod. 21.20)
- Delivery times to be agreed according to quantity

**COD. 20.30**  
**STUB END**

22



| dn  | DIMENSIONS |       |       |       |       |       |       |       |       | WEIGHTS |     |        |        |         |
|-----|------------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-----|--------|--------|---------|
|     | h          |       |       | h1    |       |       | Z     |       |       | d1      | C   | SDR 17 | SDR 11 | SDR 7,4 |
|     | PN 10      | PN 16 | PN 25 | PN 10 | PN 16 | PN 25 | PN 10 | PN 16 | PN 25 |         |     | PN 10  | PN 16  | PN 25   |
| 20  |            |       | 45    |       |       | 7     |       |       | 67    | 27      | 45  |        |        | 25      |
| 25  |            | 48    | 50    |       | 9     | 10    |       | 75    | 75    | 33      | 58  |        | 40     | 45      |
| 32  |            | 68    | 69    |       | 10    | 11    |       | 96    | 95    | 40      | 68  |        | 65     | 80      |
| 40  | 63         | 62    | 69    | 11    | 11    | 12    | 87    | 87    | 94    | 50      | 78  | 70     | 80     | 100     |
| 50  | 62         | 61    | 66    | 12    | 12    | 13    | 88    | 95    | 94    | 61      | 88  | 100    | 120    | 150     |
| 63  | 66         | 86    | 65    | 14    | 14    | 16    | 98    | 120   | 96    | 75      | 102 | 145    | 180    | 255     |
| 75  | 74         | 94    | 68    | 16    | 16    | 18    | 116   | 130   | 109   | 89      | 122 | 250    | 285    | 400     |
| 90  | 98         | 97    | 81    | 17    | 17    | 20    | 140   | 140   | 121   | 105     | 138 | 350    | 405    | 610     |
| 110 | 112        | 112   | 87    | 18    | 18    | 21    | 155   | 153   | 128   | 125     | 158 | 485    | 610    | 875     |
| 125 | 93         | 122   | 107   | 18    | 25    | 28    | 131   | 167   | 161   | 132     | 158 | 505    | 820    | 1225    |
| 140 | 104        | 108   | 105   | 18    | 25    | 29    | 154   | 156   | 159   | 155     | 187 | 895    | 1140   | 1650    |
| 160 | 109        | 106   | 104   | 18    | 30    | 29    | 156   | 159   | 160   | 175     | 212 | 1035   | 1520   | 2060    |
| 180 | 118        | 145   | 114   | 20    | 30    | 36    | 169   | 196   | 175   | 180     | 212 | 1140   | 1940   | 2400    |
| 200 | 116        | 112   | 112   | 24    | 32    | 36    | 181   | 182   | 188   | 232     | 268 | 2120   | 3000   | 3830    |
| 225 | 125        | 152   | 143   | 24    | 32    | 36    | 190   | 219   | 209   | 235     | 268 | 2130   | 3140   | 4200    |
| 250 | 134        | 133   | 123   | 25    | 35    | 40    | 205   | 205   | 203   | 285     | 320 | 3370   | 4695   | 5000    |
| 280 | 165        | 165   | 164   | 25    | 35    | 40    | 220   | 230   | 234   | 291     | 320 | 3400   | 5170   | 5300    |
| 315 | 202        | 205   | 143   | 25    | 35    | 45    | 267   | 275   | 228   | 335     | 370 | 5300   | 9200   | 7000    |
| 355 | 200        | 200   |       | 30    | 40    |       | 270   | 280   |       | 373     | 430 | 7200   | 10700  |         |
| 400 | 230        | 230   |       | 38    | 48    |       | 308   | 310   |       | 427     | 482 | 10500  | 15150  |         |
| 450 |            |       |       |       |       |       |       |       |       |         |     | •      | •      |         |
| 500 |            |       |       |       |       |       |       |       |       |         |     | •      | •      |         |
| 560 |            |       |       |       |       |       |       |       |       |         |     | •      | •      |         |
| 630 |            |       |       |       |       |       |       |       |       |         |     | •      | •      |         |

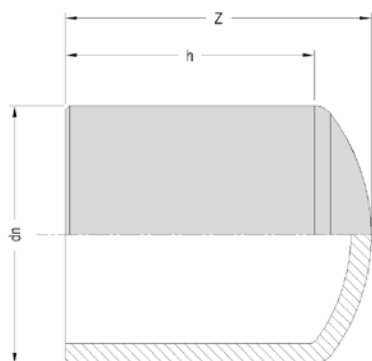
Stub end complete with NBR gasket

• on request

- Moulded in PE 100 with long collar
- Buttfusion unadvised for diam. < 63 mm

# COD. 20.35

## CAP

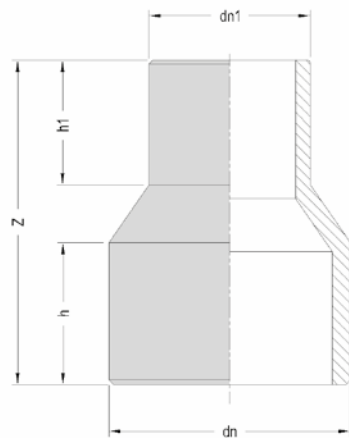


| DIMENSIONS |     |     | WEIGHTS |        |         |
|------------|-----|-----|---------|--------|---------|
| dn         | h   | Z   | SDR 17  | SDR 11 | SDR 7,4 |
|            |     |     | PN 10   | PN 16  | PN 25   |
| 20         | 54  | 59  |         |        | 15      |
| 25         | 60  | 68  |         | 15     | 20      |
| 32         | 53  | 59  |         | 20     | 40      |
| 40         | 57  | 68  | 31      | 35     | 42      |
| 50         | 61  | 74  | 37      | 50     | 76      |
| 63         | 64  | 80  | 65      | 85     | 115     |
| 75         | 74  | 89  | 100     | 150    | 200     |
| 90         | 82  | 100 | 165     | 230    | 340     |
| 110        | 91  | 118 | 270     | 405    | 600     |
| 125        | 102 | 122 | 350     | 570    | 790     |
| 140        | 103 | 125 | 450     | 780    | 1150    |
| 160        | 101 | 134 | 665     | 960    | 1500    |
| 180        | 114 | 150 | 970     | 1450   |         |
| 200        | 119 | 163 | 1310    | 1890   |         |
| 225        | 124 | 180 | 1750    | 2660   |         |
| 250        | 132 | 179 | 2275    | 3355   |         |
| 280        |     |     | •       | •      |         |
| 315        | 175 | 298 | 5100    | 7540   |         |

• on request

- Moulded in PE 100 with long collar
- Buttfusion unadvised for diam. < 63 mm

**COD. 20.50**  
**REDUCER**



● on request    ■ in preparation

- Moulded in PE 100 with long collar
- Buttfusion unadvised for diam. < 63 mm

| DIMENSIONS |     |    |    |     | WEIGHTS |        |         |
|------------|-----|----|----|-----|---------|--------|---------|
| dn         | dn1 | h  | h1 | Z   | SDR 17  | SDR 11 | SDR 7,4 |
|            |     |    |    |     | PN 10   | PN 16  | PN 25   |
| 25         | 20  | 49 | 50 | 113 |         | 20     | 20      |
| 32         | 20  | 55 | 52 | 124 |         | 30     |         |
| 32         | 25  | 61 | 59 | 130 |         | 30     | 30      |
| 40         | 20  | 59 | 52 | 130 |         | 40     |         |
| 40         | 25  | 59 | 54 | 128 |         | 40     |         |
| 40         | 32  | 61 | 48 | 125 | 40      | 45     | 70      |
| 50         | 25  | 60 | 50 | 135 |         | 60     | 80      |
| 50         | 32  | 60 | 47 | 134 |         | 65     | 90      |
| 50         | 40  | 60 | 62 | 134 | 55      | 75     | 110     |
| 63         | 25  | 64 | 57 | 140 |         | 90     |         |
| 63         | 32  | 64 | 61 | 143 | 70      | 100    | 130     |
| 63         | 40  | 68 | 52 | 139 | 70      | 105    | 150     |
| 63         | 50  | 63 | 57 | 132 | 80      | 120    | 150     |
| 75         | 40  | 72 | 60 | 147 | 105     | 165    | 230     |
| 75         | 50  | 72 | 59 | 153 | 110     | 165    | 240     |
| 75         | 63  | 73 | 67 | 154 | 135     | 200    | 280     |
| 90         | 50  | 82 | 61 | 162 | 180     | 260    | 345     |
| 90         | 63  | 80 | 68 | 169 | 180     | 280    | 400     |
| 90         | 75  | 83 | 71 | 164 | 205     | 305    | 445     |
| 110        | 50  | 88 | 57 | 177 | 280     | 400    |         |
| 110        | 63  | 87 | 69 | 188 | 285     | 410    | 555     |
| 110        | 75  | 85 | 72 | 173 | 285     | 425    | 620     |
| 110        | 90  | 86 | 81 | 181 | 330     | 485    | 690     |
| 125        | 63  | 96 | 68 | 199 |         | 600    |         |
| 125        | 75  | 95 | 78 | 191 | 385     | 610    | 790     |
| 125        | 90  | 96 | 81 | 191 | 430     | 625    | 855     |
| 125        | 110 | 96 | 84 | 192 | 460     | 720    | 985     |
| 140        | 90  | 95 | 80 | 205 | 555     | 815    | 1145    |
| 140        | 110 | 94 | 83 | 193 | 560     | 870    | 1215    |
| 140        | 125 | 95 | 89 | 198 | 590     | 990    | 1380    |

| DIMENSIONS |     |     |     |     | WEIGHTS |        |         |
|------------|-----|-----|-----|-----|---------|--------|---------|
| dn         | dn1 | h   | h1  | Z   | SDR 17  | SDR 11 | SDR 7,4 |
|            |     |     |     |     | PN 10   | PN 16  | PN 25   |
| 160        | 90  | 101 | 82  | 221 | 775     | 1040   |         |
| 160        | 110 | 101 | 103 | 270 | 950     |        |         |
| 160        | 110 | 101 | 86  | 218 |         | 1160   | 1565    |
| 160        | 125 | 101 | 91  | 208 | 735     | 1155   | 1645    |
| 160        | 140 | 101 | 92  | 206 | 835     | 1235   | 1780    |
| 180        | 90  | 110 | 90  | 260 | ■       | ■      |         |
| 180        | 125 | 107 | 88  | 220 | 1040    | 1515   |         |
| 180        | 140 | 105 | 96  | 221 | 1060    | 1610   |         |
| 180        | 140 | 130 | 100 | 245 |         |        | 2300    |
| 180        | 160 | 107 | 101 | 224 | 1165    | 1725   |         |
| 180        | 160 | 130 | 103 | 245 |         |        | 2700    |
| 200        | 110 | 130 | 100 | 275 | 1300    | 1900   |         |
| 200        | 140 | 115 | 95  | 231 | 1330    | 1940   |         |
| 200        | 140 | 123 | 100 | 251 |         |        | 3100    |
| 200        | 160 | 116 | 101 | 252 | 1430    | 2155   |         |
| 200        | 160 | 131 | 99  | 250 |         |        | 3100    |
| 200        | 180 | 117 | 109 | 236 | 1460    | 2300   |         |
| 200        | 180 | 126 | 113 | 251 |         |        | 3100    |
| 225        | 90  | 125 | 89  | 299 | 1860    | ■      |         |
| 225        | 125 | 130 | 99  | 299 | 1930    | ■      |         |
| 225        | 160 | 132 | 120 | 292 | 2040    | 3085   |         |
| 225        | 180 | 132 | 125 | 285 | 2180    | 3010   |         |
| 225        | 200 | 132 | 130 | 277 | 2380    | 3465   |         |
| 250        | 160 | 135 | 115 | 315 | 2670    |        |         |
| 250        | 160 | 140 | 120 | 320 |         | 4110   |         |
| 250        | 180 | 138 | 124 | 304 | 2700    | 3950   |         |
| 250        | 200 | 140 | 130 | 301 | 2450    | 4420   |         |
| 250        | 225 | 137 | 134 | 296 | 2855    | 4630   |         |
| 280        | 200 | 172 | 123 | 340 | 4800    | 5400   |         |
| 280        | 225 | 168 | 138 | 334 | 4700    | 5200   |         |
| 280        | 250 | 158 | 148 | 322 | 4500    | 5000   |         |
| 315        | 160 | 98★ | 110 | 351 | 3800    | 5690   |         |
| 315        | 200 | 170 | 130 | 388 | 5100    | 7700   |         |
| 315        | 225 | 173 | 138 | 389 | 5180    | 8030   |         |
| 315        | 250 | 173 | 150 | 381 | 5200    | 8250   |         |
| 315        | 280 | 164 | 164 | 346 | 6000    | 7600   |         |
| 355        | 250 |     |     |     | ●       | ●      |         |
| 355        | 280 |     |     |     | ●       | ●      |         |
| 355        | 315 |     |     |     | ●       | ●      |         |
| 400        | 280 |     |     |     | ●       | ●      |         |
| 400        | 315 |     |     |     | ●       | ●      |         |
| 400        | 355 |     |     |     | ●       | ●      |         |

★ size diam. 315 with short collar







## TRANSITION FITTINGS

STEEL/PE COUPLING // STEEL/PE COUPLING WITH EXTENSION AND THREAD //  
COPPER/PE COUPLING // EF TRANSITION SOCKET //  
TRANSITION INSERT // EF TRANSITION 90° AND 45° ELBOW //  
EF TRANSITION SOCKET WITH FREE NUT //  
EF TRANSITION 90° AND 45° ELBOW WITH FREE NUT //  
EF TRANSITION SPIGOT SADDLE //  
EF SPIGOT SADDLE FOR SHUT-OFF EQUIPMENT //  
STEEL PP COVERED FLANGE // ALUMINIUM FLANGE // STEEL FLANGE //  
BLANK STEEL FLANGE // STUB END/PP FLANGE SYSTEM //

COD. 20.60

## STEEL/PE COUPLING

SDR 11 - PN 16

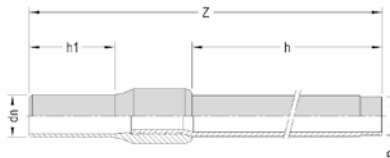
type A



type F



type H



## CLEARLY SPECIFY THE REQUESTED VERSION

- \_ 20.60 A galvanized
- \_ 20.60 F galvanized with thread
- \_ 20.60 H galvanized coated with thread

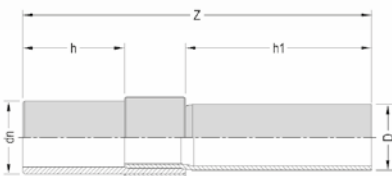
| dn  | D    | DIMENSIONS              |                 |     |     |     | WEIGHTS |        |        |
|-----|------|-------------------------|-----------------|-----|-----|-----|---------|--------|--------|
|     |      | STEEL EXTERNAL DIAMETER | STEEL THICKNESS | h   | h1  | Z   | TYPE A  | TYPE F | TYPE H |
| 25  | ¾"   | 26,9                    | 2,6             | 300 | 97  | 495 | 635     | 635    | 640    |
| 32  | 1"   | 33,7                    | 3,2             | 300 | 103 | 499 | 945     | 945    | 1005   |
| 40  | 1" ¼ | 42,4                    | 3,2             | 300 | 106 | 508 | 1220    | 1220   | 1250   |
| 50  | 1" ½ | 48,3                    | 3,2             | 300 | 117 | 516 | 1430    | 1430   | 1545   |
| 63  | 2"   | 60,3                    | 3,6             | 300 | 135 | 545 | 2120    | 2120   | 2270   |
| 75  | 2" ½ | 76,1                    | 3,6             | 300 | 165 | 580 | 2900    | 2900   | 3000   |
| 90  | 3"   | 88,9                    | 4,0             | 300 | 162 | 590 | 3450    | 3450   | 3860   |
| 110 | 4"   | 114,3                   | 4,5             | 300 | 203 | 635 | 5650    | 5650   | 5980   |
| 125 | 4"   | 114,3                   | 4,5             | 300 | 205 | 630 | 5950    | 5950   | 6180   |

- \_ Do not cut the steel part as it could origin deformations on PE collar due to overheating
- \_ Suitable for gas 🔥 and water 💧 pipelines
- \_ Steel pipe according to UNI EN ISO 3183 and galvanized according to UNI EN 10240 A.1 ("lead free galvanized pipe")
- \_ On request type galvanized coated pipe for welding
- \_ Buttfusion unadvised for diam < 63 mm

COD. 20.65

## STEEL/PE COUPLING

SDR 11 - PN 16



| DIMENSIONS |     |                         |                 |     |     |     | WEIGHTS |
|------------|-----|-------------------------|-----------------|-----|-----|-----|---------|
| dn         | D   | STEEL EXTERNAL DIAMETER | STEEL THICKNESS | h   | h1  | Z   |         |
| 140        | 5"  | 139,7                   | 4,8             | 310 | 240 | 690 | 13205   |
| 160        | 6"  | 168,3                   | 4,8             | 310 | 270 | 720 | 10500   |
| 180        | 6"  | 168,3                   | 4,8             | 310 | 270 | 720 | 18065   |
| 200        | 8"  | 219,1                   | 6,4             | 310 | 310 | 785 | 16500   |
| 225        | 8"  | 219,1                   | 6,4             | 310 | 310 | 785 | 29800   |
| 250        | 10" | 273,0                   | 6,3             | 310 | 310 | 800 | 24100   |
| 280        | 10" | 273,0                   | 5,6             |     |     |     | •       |
| 315        | 10" | 273,0                   | 5,6             |     |     |     | •       |
| 315        | 12" | 323,9                   | 6,3             |     |     |     | •       |

• on request

- Suitable for gas 🔥 and water 💧 pipelines
- Steel pipe according to UNI EN 10208-1 or API 5L gr. B and galvanized according to UNI EN 10240 A.1 ("lead free galvanized pipe")
- Galvanizing removed on the welding end

**COD. 20.61**

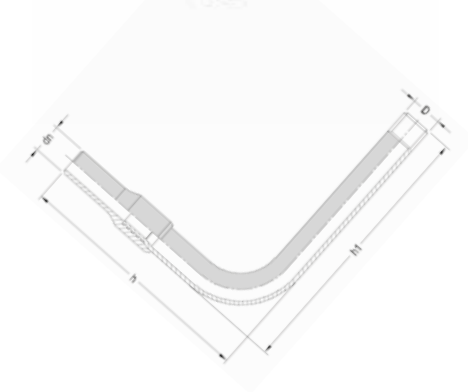
**STEEL/PE COUPLING WITH EXTENSION AND THREAD**

SDR 11 - PN 16

type A



type R



**CLEARLY SPECIFY THE REQUESTED VERSION**

- \_ 20.61 A galvanized
- \_ 20.61 R galvanized coated

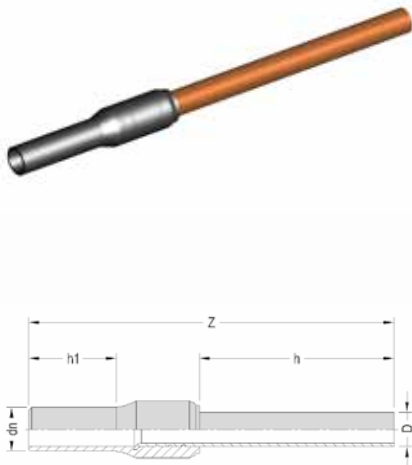
| DIMENSIONS |      |                         |                 |     |     | WEIGHTS |        |
|------------|------|-------------------------|-----------------|-----|-----|---------|--------|
| dn         | D    | STEEL EXTERNAL DIAMETER | STEEL THICKNESS | h   | h1  | TYPE A  | TYPE R |
| 25         | ¾"   | 26,9                    | 2,6             | 520 | 820 | 1720    | 2020   |
| 32         | 1"   | 33,7                    | 3,2             | 530 | 825 | 2750    | 2900   |
| 40         | 1" ¼ | 42,4                    | 3,2             | 555 | 835 | 3120    | 3500   |
| 50         | 1" ½ | 48,3                    | 3,2             | 640 | 760 | 3850    | 4450   |
| 63         | 2"   | 60,3                    | 3,6             | 780 | 700 | 5800    | 6150   |

- \_ Steel pipe according to UNI EN ISO 3183 and galvanized according to UNI EN 10240 A.1 ("lead free galvanized pipe")
- \_ Suitable for gas 🔥 and water 💧 pipelines
- \_ Buttfusion unadvised for diam < 63 mm
- \_ For gas networks according to standard UNI 7129-1
- \_ On request type for welding

COD. 20.62

## COPPER/PE COUPLING

SDR 11 - PN 16



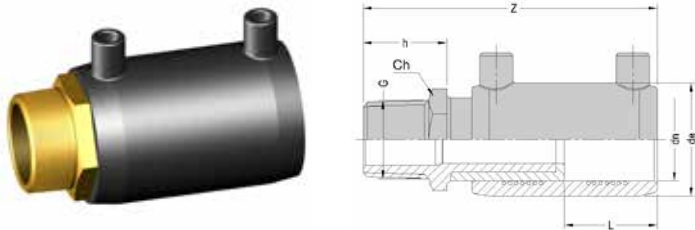
| DIMENSIONS |    |                  |     |     |     | WEIGHTS |
|------------|----|------------------|-----|-----|-----|---------|
| dn         | D  | COPPER THICKNESS | h   | h1  | Z   |         |
| 25         | 18 | 1,5              | 300 | 97  | 495 | 335     |
| 25         | 22 | 1,5              | 300 | 97  | 495 | 375     |
| 32         | 22 | 1,5              | 300 | 103 | 500 | 425     |
| 32         | 28 | 1,5              | 300 | 103 | 500 | 490     |

- Copper pipe according to standard UNI EN 1057
- Suitable for gas 🔥 and water 💧 pipelines
- Buttfusion welding unadvised
- For gas networks according to standard UNI 7129-1

**COD. 21.61 - COD. 21.62**

# ELECTROFUSION TRANSITION SOCKET WITH BRASS INSERT

**MALE SDR 7,4 - PN 25**



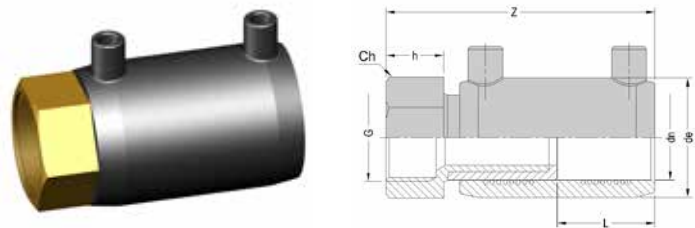
| DIMENSIONS |        |     |    |    |     |     | WEIGHTS |
|------------|--------|-----|----|----|-----|-----|---------|
| dn         | G      | de  | L  | h  | Z   | Ch  |         |
| 20         | 1/2"   | 33  | 33 | 20 | 96  | 22  | 75      |
| 25         | 3/4"   | 38  | 33 | 21 | 97  | 27  | 100     |
| 32         | 1"     | 46  | 38 | 26 | 111 | 34  | 229     |
| 40         | 1 1/4" | 56  | 44 | 29 | 124 | 42  | 363     |
| 50         | 1 1/2" | 68  | 49 | 33 | 139 | 52  | 532     |
| 63         | 2"     | 82  | 54 | 37 | 158 | 65  | 889     |
| 75         | 2 1/2" | 99  | 60 | 43 | 173 | 86  | 1431    |
| 90         | 3"     | 116 | 65 | 46 | 190 | 97  | 2085    |
| 110        | 4"     | 145 | 70 | 52 | 204 | 125 | 3110    |

Ch = tightening key size

| WELDABILITY ON PIPE/FITTING PE 100 |        |        |       |         |
|------------------------------------|--------|--------|-------|---------|
| dn                                 | SDR 17 | SDR 11 | SDR 9 | SDR 7,4 |
| 20                                 |        | ● ▲    | ● ▲   | ●       |
| 25                                 |        | ● ▲    | ●     | ●       |
| 32                                 | ● ▲    | ●      | ●     | ●       |
| 40                                 | ● ▲    | ●      | ●     | ●       |
| 50                                 | ●      | ●      | ●     | ●       |
| 63                                 | ●      | ●      | ●     | ●       |
| 75                                 | ●      | ●      | ●     | ●       |
| 90                                 | ●      | ●      | ●     | ●       |
| 110                                | ●      | ●      | ●     | ●       |

● weldable only with monovalent welding units Series Euro  
▲ minimum weldable thickness 3 mm

**FEMALE SDR 7,4 - PN 25**



| DIMENSIONS |        |     |    |    |     |     | WEIGHTS |
|------------|--------|-----|----|----|-----|-----|---------|
| dn         | G      | de  | L  | h  | Z   | Ch  |         |
| 20         | 1/2"   | 33  | 33 | 18 | 94  | 27  | 136     |
| 25         | 3/4"   | 38  | 33 | 20 | 96  | 34  | 186     |
| 32         | 1"     | 46  | 38 | 22 | 107 | 40  | 256     |
| 40         | 1 1/4" | 56  | 44 | 27 | 122 | 50  | 465     |
| 50         | 1 1/2" | 68  | 49 | 27 | 133 | 55  | 560     |
| 63         | 2"     | 82  | 54 | 33 | 154 | 67  | 882     |
| 75         | 2 1/2" | 99  | 60 | 39 | 169 | 86  | 1445    |
| 90         | 3"     | 116 | 65 | 42 | 186 | 97  | 1990    |
| 110        | 4"     | 145 | 70 | 48 | 200 | 125 | 3170    |

Ch = tightening key size

| WELDABILITY ON PIPE/FITTING PE 100 |        |        |       |         |
|------------------------------------|--------|--------|-------|---------|
| dn                                 | SDR 17 | SDR 11 | SDR 9 | SDR 7,4 |
| 20                                 |        | ● ▲    | ● ▲   | ●       |
| 25                                 |        | ● ▲    | ●     | ●       |
| 32                                 | ● ▲    | ●      | ●     | ●       |
| 40                                 | ● ▲    | ●      | ●     | ●       |
| 50                                 | ●      | ●      | ●     | ●       |
| 63                                 | ●      | ●      | ●     | ●       |
| 75                                 | ●      | ●      | ●     | ●       |
| 90                                 | ●      | ●      | ●     | ●       |
| 110                                | ●      | ●      | ●     | ●       |

● weldable only with monovalent welding units Series Euro  
▲ minimum weldable thickness 3 mm

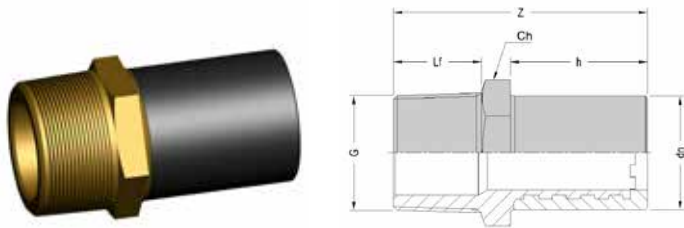
- During the screwing, lock the metallic hexagon to avoid any stress on the PE part
- Suitable for gas and water pipelines
- Do not remove the insert



COD. 21.77 - COD. 21.78

# TRANSITION INSERT IN BRASS

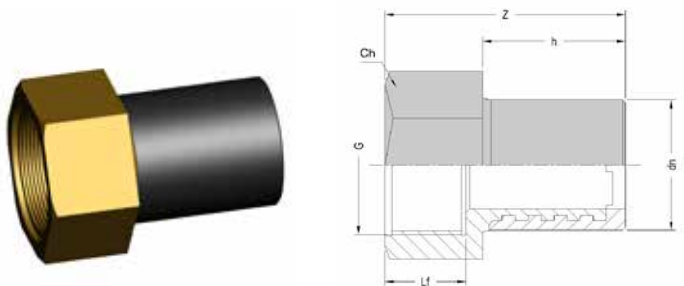
MALE SDR 7,4 - PN 25



| DIMENSIONS |        |    |    |     |     | WEIGHTS |
|------------|--------|----|----|-----|-----|---------|
| dn         | G      | Lf | h  | Z   | Ch  |         |
| 20         | 1/2"   | 15 | 41 | 61  | 22  | 30      |
| 25         | 3/4"   | 16 | 41 | 62  | 27  | 45      |
| 32         | 1"     | 19 | 44 | 70  | 34  | 140     |
| 40         | 1" 1/4 | 21 | 49 | 78  | 42  | 250     |
| 50         | 1" 1/2 | 23 | 55 | 88  | 52  | 377     |
| 63         | 2"     | 26 | 63 | 100 | 65  | 650     |
| 75         | 2" 1/2 | 31 | 70 | 113 | 86  | 1060    |
| 90         | 3"     | 34 | 79 | 125 | 97  | 1595    |
| 110        | 4"     | 40 | 82 | 134 | 125 | 2240    |

Ch = tightening key size

FEMALE SDR 7,4 - PN 25



| DIMENSIONS |        |    |    |     |     | WEIGHTS |
|------------|--------|----|----|-----|-----|---------|
| dn         | G      | Lf | h  | Z   | Ch  |         |
| 20         | 1/2"   | 15 | 41 | 59  | 27  | 100     |
| 25         | 3/4"   | 17 | 41 | 61  | 34  | 130     |
| 32         | 1"     | 19 | 44 | 66  | 40  | 180     |
| 40         | 1" 1/4 | 21 | 49 | 76  | 50  | 345     |
| 50         | 1" 1/2 | 21 | 55 | 82  | 55  | 405     |
| 63         | 2"     | 28 | 63 | 96  | 67  | 660     |
| 75         | 2" 1/2 | 34 | 70 | 109 | 86  | 1070    |
| 90         | 3"     | 37 | 79 | 121 | 97  | 1500    |
| 110        | 4"     | 43 | 82 | 130 | 125 | 2310    |

Ch = tightening key size

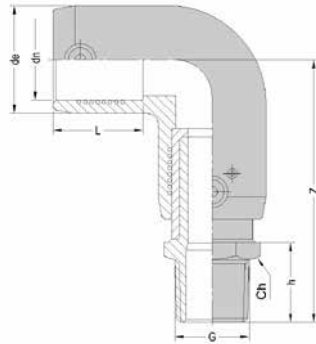
- Weldable with electrofusion EURO fittings, in case of use with other brand fittings, please contact EUROSTANDARD in advance
- Extension of the metallic overmoulded part on the whole length
- Suitable for gas 🔥 and water 💧 pipelines

- Measure and respect the insertion depth inside the electrofusion fitting
- Weld only using electrofusion fittings
- Scraping of the PE end is compulsory
- During the screwing, lock the metallic hexagon to avoid any stress on the PE part

**COD. 21.65 - COD. 21.66**

# ELECTROFUSION TRANSITION 90° ELBOW WITH BRASS INSERT

**MALE SDR 7,4 - PN 25**



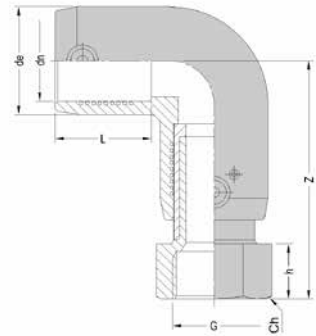
| DIMENSIONS |        |     |    |    |     |     | WEIGHTS |
|------------|--------|-----|----|----|-----|-----|---------|
| dn         | G      | de  | L  | h  | Z   | Ch  |         |
| 20         | 1/2"   | 34  | 33 | 20 | 81  | 22  | 105     |
| 25         | 3/4"   | 38  | 33 | 21 | 83  | 27  | 125     |
| 32         | 1"     | 46  | 39 | 26 | 106 | 34  | 285     |
| 40         | 1 1/4" | 56  | 48 | 29 | 114 | 42  | 455     |
| 50         | 1 1/2" | 68  | 54 | 33 | 129 | 52  | 705     |
| 63         | 2"     | 83  | 52 | 37 | 151 | 65  | 1120    |
| 75         | 2 1/2" | 97  | 64 | 43 | 169 | 86  | 1725    |
| 90         | 3"     | 116 | 70 | 46 | 190 | 97  | 2635    |
| 110        | 4"     | 142 | 76 | 52 | 210 | 125 | 3865    |

Ch = tightening key size

| WELDABILITY ON PIPE/FITTING PE 100 |        |        |       |         |
|------------------------------------|--------|--------|-------|---------|
| dn                                 | SDR 17 | SDR 11 | SDR 9 | SDR 7,4 |
| 20                                 |        | ● ▲    | ● ▲   | ●       |
| 25                                 |        | ● ▲    | ●     | ●       |
| 32                                 | ● ▲    | ●      | ●     | ●       |
| 40                                 | ● ▲    | ●      | ●     | ●       |
| 50                                 | ●      | ●      | ●     | ●       |
| 63                                 | ●      | ●      | ●     | ●       |
| 75                                 | ●      | ●      | ●     | ●       |
| 90                                 | ●      | ●      | ●     | ●       |
| 110                                | ●      | ●      | ●     | ●       |

● weldable only with monovalent welding units Series Euro  
▲ minimum weldable thickness 3 mm

**FEMALE SDR 7,4 - PN 25**



| DIMENSIONS |        |     |    |    |     |     | WEIGHTS |
|------------|--------|-----|----|----|-----|-----|---------|
| dn         | G      | de  | L  | h  | Z   | Ch  |         |
| 20         | 1/2"   | 34  | 33 | 18 | 79  | 27  | 160     |
| 25         | 3/4"   | 38  | 33 | 20 | 82  | 34  | 220     |
| 32         | 1"     | 46  | 39 | 22 | 102 | 40  | 310     |
| 40         | 1 1/4" | 56  | 48 | 27 | 111 | 50  | 525     |
| 50         | 1 1/2" | 68  | 54 | 27 | 121 | 55  | 735     |
| 63         | 2"     | 83  | 52 | 33 | 147 | 67  | 1105    |
| 75         | 2 1/2" | 97  | 64 | 39 | 165 | 86  | 1735    |
| 90         | 3"     | 116 | 70 | 42 | 186 | 97  | 2575    |
| 110        | 4"     | 142 | 76 | 48 | 206 | 125 | 4125    |

Ch = tightening key size

| WELDABILITY ON PIPE/FITTING PE 100 |        |        |       |         |
|------------------------------------|--------|--------|-------|---------|
| dn                                 | SDR 17 | SDR 11 | SDR 9 | SDR 7,4 |
| 20                                 |        | ● ▲    | ● ▲   | ●       |
| 25                                 |        | ● ▲    | ●     | ●       |
| 32                                 | ● ▲    | ●      | ●     | ●       |
| 40                                 | ● ▲    | ●      | ●     | ●       |
| 50                                 | ●      | ●      | ●     | ●       |
| 63                                 | ●      | ●      | ●     | ●       |
| 75                                 | ●      | ●      | ●     | ●       |
| 90                                 | ●      | ●      | ●     | ●       |
| 110                                | ●      | ●      | ●     | ●       |

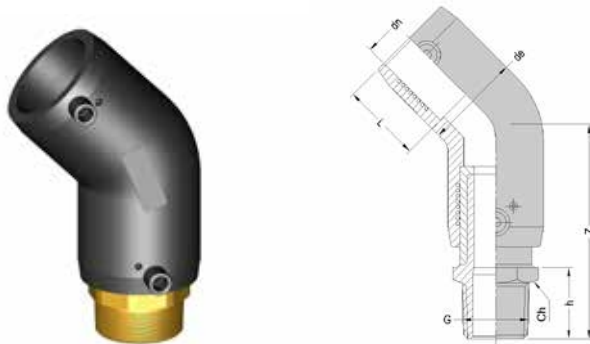
● weldable only with monovalent welding units Series Euro  
▲ minimum weldable thickness 3 mm

- During the screwing, lock the metallic hexagon to avoid any stress on the PE part
- Suitable for gas and water pipelines
- Do not remove the insert

COD. 21.67 - COD. 21.68

# ELECTROFUSION TRANSITION 45° ELBOW WITH BRASS INSERT

MALE SDR 7,4 - PN 25



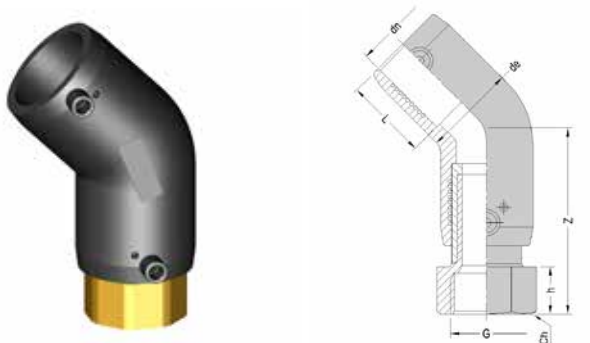
| DIMENSIONS |      |     |    |    |     |     | WEIGHTS |
|------------|------|-----|----|----|-----|-----|---------|
| dn         | G    | de  | L  | h  | Z   | Ch  |         |
| 25         | ¾"   | 39  | 33 | 21 | 76  | 27  | 125     |
| 32         | 1"   | 46  | 39 | 26 | 88  | 34  | 260     |
| 40         | 1" ¼ | 56  | 48 | 29 | 104 | 42  | 425     |
| 50         | 1" ½ | 68  | 54 | 33 | 114 | 52  | 650     |
| 63         | 2"   | 82  | 52 | 37 | 133 | 65  | 1050    |
| 75         | 2" ½ | 97  | 64 | 43 | 151 | 86  | 1680    |
| 90         | 3"   | 116 | 70 | 46 | 170 | 97  | 2500    |
| 110        | 4"   | 142 | 76 | 52 | 178 | 125 | 3630    |

Ch = tightening key size

| WELDABILITY ON PIPE/FITTING PE 100 |        |        |       |         |
|------------------------------------|--------|--------|-------|---------|
| dn                                 | SDR 17 | SDR 11 | SDR 9 | SDR 7,4 |
| 25                                 |        | ● ▲    | ●     | ●       |
| 32                                 | ● ▲    | ●      | ●     | ●       |
| 40                                 | ● ▲    | ●      | ●     | ●       |
| 50                                 | ●      | ●      | ●     | ●       |
| 63                                 | ●      | ●      | ●     | ●       |
| 75                                 | ●      | ●      | ●     | ●       |
| 90                                 | ●      | ●      | ●     | ●       |
| 110                                | ●      | ●      | ●     | ●       |

● weldable only with monovalent welding units Series Euro  
▲ minimum weldable thickness 3 mm

FEMALE SDR 7,4 - PN 25



| DIMENSIONS |      |     |    |    |     |     | WEIGHTS |
|------------|------|-----|----|----|-----|-----|---------|
| dn         | G    | de  | L  | h  | Z   | Ch  |         |
| 25         | ¾"   | 39  | 33 | 20 | 75  | 34  | 210     |
| 32         | 1"   | 46  | 39 | 22 | 84  | 40  | 300     |
| 40         | 1" ¼ | 56  | 48 | 27 | 101 | 50  | 520     |
| 50         | 1" ½ | 68  | 54 | 27 | 108 | 55  | 685     |
| 63         | 2"   | 82  | 52 | 33 | 129 | 67  | 1030    |
| 75         | 2" ½ | 97  | 64 | 39 | 147 | 86  | 1725    |
| 90         | 3"   | 116 | 70 | 42 | 166 | 97  | 2405    |
| 110        | 4"   | 142 | 76 | 48 | 174 | 125 | 3725    |

Ch = tightening key size

| WELDABILITY ON PIPE/FITTING PE 100 |        |        |       |         |
|------------------------------------|--------|--------|-------|---------|
| dn                                 | SDR 17 | SDR 11 | SDR 9 | SDR 7,4 |
| 25                                 |        | ● ▲    | ●     | ●       |
| 32                                 | ● ▲    | ●      | ●     | ●       |
| 40                                 | ● ▲    | ●      | ●     | ●       |
| 50                                 | ●      | ●      | ●     | ●       |
| 63                                 | ●      | ●      | ●     | ●       |
| 75                                 | ●      | ●      | ●     | ●       |
| 90                                 | ●      | ●      | ●     | ●       |
| 110                                | ●      | ●      | ●     | ●       |

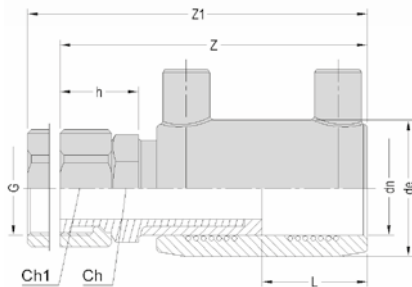
● weldable only with monovalent welding units Series Euro  
▲ minimum weldable thickness 3 mm

- During the screwing, lock the metallic hexagon to avoid any stress on the PE part
- Suitable for gas 🔥 and water 💧 pipelines
- Do not remove the insert

**COD. 21.70**

# ELECTROFUSION TRANSITION SOCKET WITH BRASS INSERT AND FREE NUT

SDR 7.4 - PN 25



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| DIMENSIONS |      |    |    |    |     |     |    |     | WEIGHTS |  |
|------------|------|----|----|----|-----|-----|----|-----|---------|--|
| dn         | G    | de | L  | h  | Z   | Z1  | Ch | Ch1 |         |  |
| 20         | ½"   | 33 | 33 | 22 | 98  | 108 | 22 | 27  | 110     |  |
| 25         | ¾"   | 38 | 33 | 22 | 98  | 108 | 27 | 30  | 132     |  |
| 32         | 1"   | 46 | 38 | 27 | 112 | 120 | 32 | 36  | 270     |  |
| 40         | 1" ¼ | 56 | 44 | 30 | 125 | 141 | 42 | 50  | 313     |  |
| 50         | 1" ½ | 68 | 49 | 32 | 137 | 152 | 52 | 58  | 495     |  |
| 63         | 2"   | 82 | 54 | 39 | 160 | 183 | 65 | 67  | 805     |  |

Ch, Ch1 = tightening key size

| WELDABILITY ON PIPE/FITTING PE 100 |        |        |       |         |
|------------------------------------|--------|--------|-------|---------|
| dn                                 | SDR 17 | SDR 11 | SDR 9 | SDR 7,4 |
| 20                                 |        | ● ▲    | ● ▲   | ●       |
| 25                                 |        | ● ▲    | ●     | ●       |
| 32                                 | ● ▲    | ●      | ●     | ●       |
| 40                                 | ● ▲    | ●      | ●     | ●       |
| 50                                 | ●      | ●      | ●     | ●       |
| 63                                 | ●      | ●      | ●     | ●       |

● weldable only with monovalent welding units Series Euro  
▲ minimum weldable thickness 3 mm

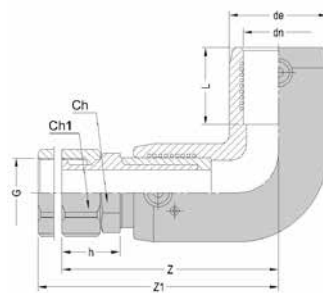
- During the screwing, lock the metallic hexagon to avoid any stress on the PE part
- Suitable for gas 🔥 and water 💧 pipelines
- Do not remove the insert

**COD. 21.71**

**ELECTROFUSION TRANSITION  
90° ELBOW**

WITH BRASS INSERT AND FREE NUT

SDR 7,4 - PN 25



| DIMENSIONS |      |    |    |    |     |     | WEIGHTS |     |      |  |
|------------|------|----|----|----|-----|-----|---------|-----|------|--|
| dn         | G    | de | L  | h  | Z   | Z1  | Ch      | Ch1 |      |  |
| 25         | ¾"   | 38 | 33 | 22 | 84  | 94  | 27      | 30  | 200  |  |
| 32         | 1"   | 46 | 39 | 27 | 106 | 114 | 32      | 36  | 262  |  |
| 40         | 1" ¼ | 56 | 48 | 30 | 114 | 130 | 42      | 50  | 393  |  |
| 50         | 1" ½ | 68 | 54 | 32 | 126 | 141 | 52      | 58  | 640  |  |
| 63         | 2"   | 83 | 52 | 39 | 153 | 176 | 65      | 67  | 1030 |  |

Ch, Ch1 = tightening key size

| dn | WELDABILITY ON<br>PIPE/FITTING PE 100 |        |       |         |
|----|---------------------------------------|--------|-------|---------|
|    | SDR 17                                | SDR 11 | SDR 9 | SDR 7,4 |
| 25 |                                       | ● ▲    | ●     | ●       |
| 32 | ● ▲                                   | ●      | ●     | ●       |
| 40 | ● ▲                                   | ●      | ●     | ●       |
| 50 | ●                                     | ●      | ●     | ●       |
| 63 | ●                                     | ●      | ●     | ●       |

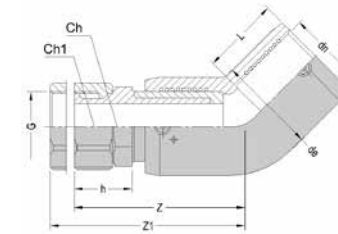
- weldable only with monovalent welding units Series Euro
- ▲ minimum weldable thickness 3 mm

**COD. 21.72**

**ELECTROFUSION TRANSITION  
45° ELBOW**

WITH BRASS INSERT AND FREE NUT

SDR 7,4 - PN 25



| DIMENSIONS |      |    |    |    |     |     | WEIGHTS |     |     |
|------------|------|----|----|----|-----|-----|---------|-----|-----|
| dn         | G    | de | L  | h  | Z   | Z1  | Ch      | Ch1 |     |
| 32         | 1"   | 46 | 39 | 27 | 89  | 97  | 32      | 36  | 242 |
| 40         | 1" ¼ | 56 | 48 | 30 | 104 | 120 | 42      | 50  | 378 |
| 50         | 1" ½ | 68 | 54 | 32 | 112 | 127 | 52      | 58  | 600 |
| 63         | 2"   | 82 | 52 | 39 | 135 | 158 | 65      | 67  | 970 |

Ch, Ch1 = tightening key size

| dn | WELDABILITY ON<br>PIPE/FITTING PE 100 |        |       |         |
|----|---------------------------------------|--------|-------|---------|
|    | SDR 17                                | SDR 11 | SDR 9 | SDR 7,4 |
| 32 | ● ▲                                   | ●      | ●     | ●       |
| 40 | ● ▲                                   | ●      | ●     | ●       |
| 50 | ●                                     | ●      | ●     | ●       |
| 63 | ●                                     | ●      | ●     | ●       |

- weldable only with monovalent welding units Series Euro
- ▲ minimum weldable thickness 3 mm

- During the screwing, lock the metallic hexagon to avoid any stress on the PE part
- Suitable for gas 🔥 and water 💧 pipelines
- Do not remove the insert

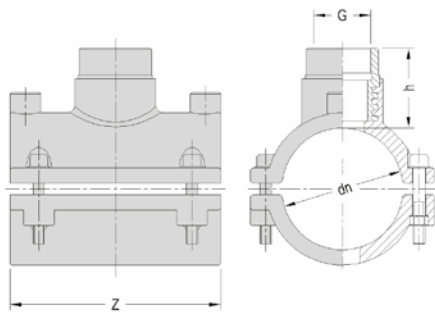
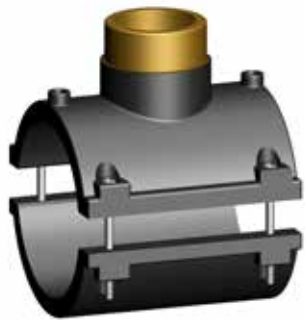
**COD. 21.63**

# ELECTROFUSION TRANSITION SPIGOT SADDLE WITH BRASS INSERT

SDR 11 - PN 16

**FEMALE**

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| DIMENSIONS |      |    |     | WEIGHTS |
|------------|------|----|-----|---------|
| dn         | G    | h  | Z   |         |
| 110        | 1" ½ | 50 | 160 | 1300    |
| 110        | 2"   | 71 | 160 | 1555    |
| 125        | 1" ½ | 47 | 160 | 1415    |
| 125        | 2"   | 68 | 160 | 1680    |
| 140        | 1" ½ | 47 | 160 | 1565    |
| 140        | 2"   | 68 | 160 | 1850    |
| 160        | 1" ½ | 50 | 160 | 1750    |
| 160        | 2"   | 72 | 160 | 2020    |

| WELDABILITY<br>ON PIPE/FITTING PE 100 |        |        |        |
|---------------------------------------|--------|--------|--------|
| dn                                    | SDR 26 | SDR 17 | SDR 11 |
| 110x                                  |        | •      | •      |
| 125x                                  |        | •      | •      |
| 140x                                  |        | •      | •      |
| 160x                                  | •      | •      | •      |

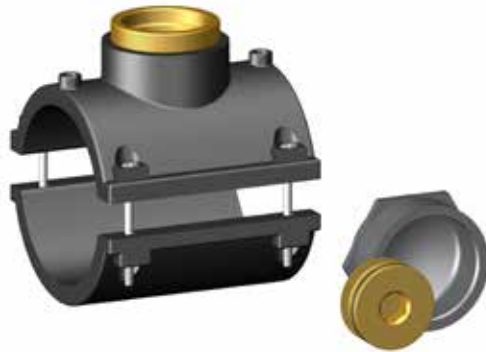
- weldable only with monovalent welding units Series Euro

- During the screwing, avoid any stress on the PE part
- Suitable for gas 🔥 and water 💧 pipelines

COD. 21.64

# ELECTROFUSION SPIGOT SADDLE FOR SHUT-OFF EQUIPMENT WITH BRASS INSERT

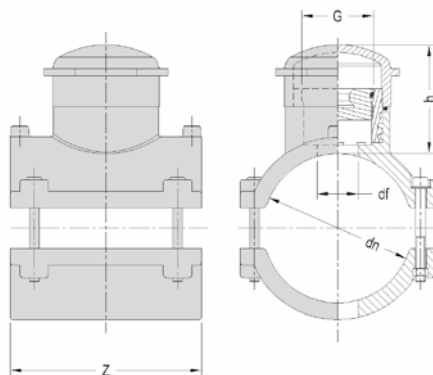
SDR 11 - PN 16



| DIMENSIONS |    |    |    |     | WEIGHTS |
|------------|----|----|----|-----|---------|
| dn         | G  | h  | df | Z   |         |
| 110        | 2" | 90 | 54 | 160 | 2200    |
| 125        | 2" | 91 | 54 | 160 | 2315    |
| 140        | 2" | 92 | 54 | 160 | 2465    |
| 160        | 2" | 93 | 54 | 160 | 2655    |

df = maximum thickness pipe boring

| WELDABILITY<br>ON PIPE/FITTING PE 100 |        |        |
|---------------------------------------|--------|--------|
| dn                                    | SDR 17 | SDR 11 |
| 110x                                  | •      | •      |
| 125x                                  | •      | •      |
| 140x                                  | •      | •      |
| 160x                                  | •      | •      |

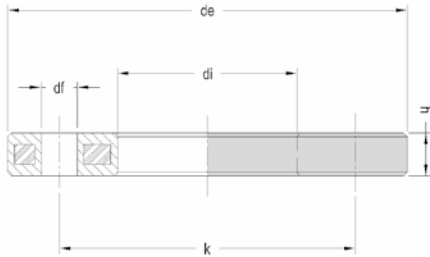


- Suitable for gas pipeline 🔥
- Brass closing cap with hexagonal key
- Suitable for all normal commercial shut-off equipment
- PVC external cap with O-ring seal

COD. 20.49

## STEEL FLANGE COVERED PP

40



| dn  | DIMENSIONS |     |     |    |     |    | HOLES N. | WEIGHTS |       |       |
|-----|------------|-----|-----|----|-----|----|----------|---------|-------|-------|
|     | D STEEL    | de  | k   | h  | di  | df |          | PN      | PN 10 | PN 16 |
| 25  | 20         | 105 | 75  | 12 | 34  | 14 | 4        | PN10/16 | 308   |       |
| 32  | 25         | 115 | 85  | 16 | 42  | 14 | 4        | PN10/16 | 555   |       |
| 40  | 32         | 140 | 100 | 18 | 51  | 18 | 4        | PN10/16 | 700   |       |
| 50  | 40         | 150 | 110 | 18 | 62  | 18 | 4        | PN10/16 | 810   |       |
| 63  | 50         | 165 | 125 | 18 | 78  | 18 | 4        | PN10/16 | 1090  |       |
| 75  | 65         | 188 | 145 | 18 | 92  | 18 | 4        | PN10/16 | 1380  |       |
| 90  | 80         | 204 | 160 | 20 | 108 | 18 | 8        | PN10/16 | 1310  |       |
| 110 | 100        | 224 | 180 | 20 | 128 | 18 | 8        | PN10/16 | 1370  |       |
| 125 | 100        | 224 | 180 | 20 | 135 | 18 | 8        | PN10/16 | 1370  |       |
| 140 | 125        | 252 | 210 | 24 | 158 | 18 | 8        | PN10/16 | 2060  |       |
| 160 | 150        | 285 | 240 | 24 | 178 | 22 | 8        | PN10/16 | 2840  |       |
| 180 | 150        | 285 | 240 | 24 | 188 | 22 | 8        | PN10/16 | 2800  |       |
| 200 | 200        | 340 | 295 | 26 | 235 | 22 | 8        | PN10    | 3470  |       |
| 225 | 200        | 340 | 295 | 26 | 238 | 22 | 8        | PN10    | 3520  |       |
| 250 | 250        | 395 | 350 | 29 | 288 | 22 | 12       | PN10    | 5100  |       |
| 280 | 250        | 395 | 350 | 29 | 294 | 22 | 12       | PN10    | 4170  |       |
| 315 | 300        | 445 | 400 | 33 | 338 | 22 | 12       | PN10    | 7360  |       |
| 355 | 350        | 514 | 460 | 50 | 376 | 22 | 16       | PN10    | 19972 |       |
| 400 | 400        | 571 | 515 | 54 | 430 | 26 | 16       | PN10    | 21500 |       |
| 450 | 450/500    | 678 | 620 | 45 | 517 | 26 | 20       | PN10    | •     |       |
| 500 | 500        | 688 | 620 | 45 | 533 | 26 | 20       | PN10    | •     |       |
| 560 | 600        | 799 | 725 | 50 | 618 | 30 | 20       | PN10    | •     |       |
| 630 | 600        | 799 | 725 | 50 | 645 | 30 | 20       | PN10    | •     |       |
| 200 | 200        | 340 | 295 | 26 | 235 | 22 | 12       | PN16    |       | 4500  |
| 225 | 200        | 340 | 295 | 26 | 238 | 22 | 12       | PN16    |       | 4500  |
| 250 | 250        | 419 | 355 | 32 | 288 | 26 | 12       | PN16    |       | 4780  |
| 280 | 250        | 419 | 355 | 32 | 294 | 26 | 12       | PN16    |       | 4700  |
| 315 | 300        | 478 | 410 | 33 | 338 | 26 | 12       | PN16    |       | 8150  |
| 355 | 350        | 532 | 470 | 50 | 376 | 26 | 16       | PN16    |       | 26000 |
| 400 | 400        | 592 | 525 | 54 | 430 | 30 | 16       | PN16    |       | 28080 |

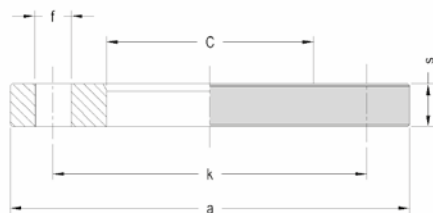
• on request

- Flanges according to standard DIN 16963-4 and internal diameter according to standard ISO 9624
- The pipeline diameter identifies the choice of the flange



COD. 20.40

## ALUMINIUM FLANGE



| dn  | DIMENSIONS  |     |    |     |     |    | HOLES N. | WEIGHTS  |       |       |
|-----|-------------|-----|----|-----|-----|----|----------|----------|-------|-------|
|     | D ALUMINIUM | C   | s  | a   | k   | f  |          | PN       | PN 10 | PN 16 |
| 25  | 20          | 38  | 12 | 105 | 75  | 14 | 4        | PN 10/16 | 250   |       |
| 32  | 25          | 45  | 12 | 115 | 85  | 14 | 4        | PN 10/16 | 250   |       |
| 40  | 32          | 55  | 16 | 140 | 100 | 18 | 4        | PN 10/16 | 500   |       |
| 50  | 40          | 66  | 16 | 150 | 110 | 18 | 4        | PN 10/16 | 550   |       |
| 63  | 50          | 78  | 20 | 165 | 125 | 18 | 4        | PN 10/16 | 690   |       |
| 75  | 65          | 92  | 20 | 185 | 145 | 18 | 4        | PN 10/16 | 880   |       |
| 90  | 80          | 108 | 22 | 200 | 160 | 18 | 8        | PN 10/16 | 980   |       |
| 110 | 100         | 128 | 22 | 220 | 180 | 18 | 8        | PN 10/16 | 1130  |       |
| 125 | 100         | 135 | 22 | 220 | 180 | 18 | 8        | PN 10/16 | 1030  |       |
| 140 | 125         | 158 | 22 | 250 | 210 | 18 | 8        | PN 10/16 | 1350  |       |
| 160 | 150         | 178 | 24 | 285 | 240 | 22 | 8        | PN 10/16 | 1820  |       |
| 180 | 150         | 188 | 24 | 285 | 240 | 22 | 8        | PN 10/16 | 1640  |       |
| 200 | 200         | 235 | 26 | 340 | 295 | 22 | 8        | PN10     | 2300  |       |
| 225 | 200         | 238 | 26 | 340 | 295 | 22 | 8        | PN10     | 2250  |       |
| 250 | 250         | 288 | 28 | 395 | 350 | 22 | 12       | PN10     | 3030  |       |
| 280 | 250         | 294 | 28 | 395 | 350 | 22 | 12       | PN10     | 2840  |       |
| 315 | 300         | 338 | 28 | 445 | 400 | 22 | 12       | PN10     | 3500  |       |
| 355 | 350         | 376 | 22 | 505 | 460 | 22 | 16       | PN10     | 3500  |       |
| 400 | 400         | 430 | 25 | 565 | 515 | 25 | 16       | PN10     | 6500  |       |
| 450 | 500         | 533 | 28 | 670 | 620 | 25 | 20       | PN10     | •     |       |
| 500 | 500         | 533 | 28 | 670 | 620 | 25 | 20       | PN10     | •     |       |
| 560 | 600         | 633 | 30 | 780 | 725 | 30 | 20       | PN10     | •     |       |
| 630 | 600         | 645 | 30 | 780 | 725 | 30 | 20       | PN10     | •     |       |
| 200 | 200         | 235 | 26 | 340 | 295 | 22 | 12       | PN16     |       | 2420  |
| 225 | 200         | 238 | 26 | 340 | 295 | 22 | 12       | PN16     |       | 2310  |
| 250 | 250         | 288 | 28 | 405 | 355 | 25 | 12       | PN16     |       | 3500  |
| 280 | 250         | 294 | 28 | 405 | 355 | 25 | 12       | PN16     |       | 3420  |
| 315 | 300         | 338 | 32 | 460 | 410 | 25 | 12       | PN16     |       | 5000  |

not reinforced

• on request

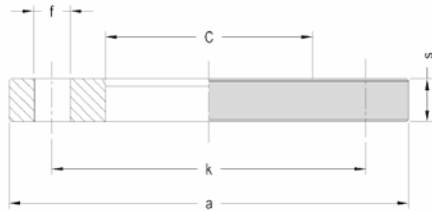
\_ According to standard ISO 9624

\_ Flanges suitable both PN 10 and PN 16 up to diam 180 mm, for larger diameters they are different for holes number, thickness and distance between holes

\_ The pipeline diameter identifies the choice of the flange

# COD. 20.45 STEEL FLANGE

42



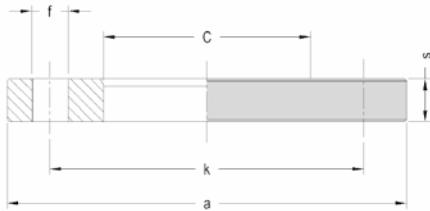
| dn  | D STEEL | C   | DIMENSIONS |       |       |       |       |       |       |       |       |       |       |       | HOLES N. | WEIGHTS |       |       |
|-----|---------|-----|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|---------|-------|-------|
|     |         |     | s          |       |       | a     |       |       | k     |       |       | f     |       |       |          | PN 10   | PN 16 | PN 25 |
|     |         |     | PN 10      | PN 16 | PN 25 | PN 10 | PN 16 | PN 25 | PN 10 | PN 16 | PN 25 | PN 10 | PN 16 | PN 25 |          |         |       |       |
| 32  | 25      | 45  | 16         | 16    | 16    | 115   | 115   | 115   | 85    | 85    | 85    | 14    | 14    | 14    | 4        | •       | •     | •     |
| 40  | 32      | 55  | 18         | 18    | 18    | 140   | 140   | 140   | 100   | 100   | 100   | 18    | 18    | 18    | 4        | •       | •     | •     |
| 50  | 40      | 66  | 18         | 18    | 18    | 150   | 150   | 150   | 110   | 110   | 110   | 18    | 18    | 18    | 4        | •       | •     | •     |
| 63  | 50      | 78  | 20         | 20    | 20    | 165   | 165   | 165   | 125   | 125   | 125   | 18    | 18    | 18    | 4        | •       | •     | •     |
| 75  | 65      | 92  | 20         | 20    | 22    | 185   | 185   | 185   | 145   | 145   | 145   | 18    | 18    | 18    | 4        | •       | •     | 3000  |
| 90  | 80      | 108 | 20         | 20    | 24    | 200   | 200   | 200   | 160   | 160   | 160   | 18    | 18    | 18    | 8        | •       | •     | 4000  |
| 110 | 100     | 128 | 22         | 22    | 26    | 220   | 220   | 235   | 180   | 180   | 190   | 18    | 18    | 22    | 8        | •       | •     | 5300  |
| 125 | 100     | 135 | 22         | 22    | 26    | 220   | 220   | 235   | 180   | 180   | 190   | 18    | 18    | 22    | 8        | •       | •     | 5300  |
| 140 | 125     | 158 | 22         | 22    | 28    | 250   | 250   | 270   | 210   | 210   | 220   | 18    | 18    | 26    | 8        | •       | •     | 7400  |
| 160 | 150     | 178 | 24         | 24    | 30    | 285   | 285   | 300   | 240   | 240   | 250   | 22    | 22    | 26    | 8        | •       | •     | 8900  |
| 180 | 150     | 188 | 24         | 24    | 30    | 285   | 285   | 300   | 240   | 240   | 250   | 22    | 22    | 26    | 8        | •       | •     | 10000 |
| 200 | 200     | 235 | 24         | 26    | 32    | 340   | 340   | 360   | 295   | 295   | 310   | 22    | 22    | 26    | 8        | 8410    | 8790  | 12000 |
| 225 | 200     | 238 | 24         | 26    | 32    | 340   | 340   | 360   | 295   | 295   | 310   | 22    | 22    | 26    | 8        | 8200    | 8570  | 12000 |
| 250 | 250     | 288 | 26         | 29    | 35    | 395   | 405   | 425   | 350   | 355   | 370   | 22    | 26    | 30    | 12       | 10840   | 13220 | 18000 |
| 280 | 250     | 294 | 26         | 29    | 35    | 395   | 405   | 425   | 350   | 355   | 370   | 22    | 26    | 30    | 12       | 10280   | 12590 | 20000 |
| 315 | 300     | 338 | 26         | 32    | 38    | 445   | 460   | 485   | 400   | 410   | 430   | 22    | 26    | 30    | 12       | 12560   | 17810 | 24000 |
| 355 | 350     | 376 | 30         | 35    |       | 505   | 520   |       | 460   | 470   |       | 22    | 26    |       | 16       | 12560   | 25430 |       |
| 400 | 400     | 430 | 32         | 38    |       | 565   | 580   |       | 515   | 525   |       | 26    | 30    |       | 16       | 38000   | 44000 |       |
| 450 | 450/500 |     |            |       |       |       |       |       |       |       |       |       |       |       |          | •       | •     |       |
| 500 | 500     |     |            |       |       |       |       |       |       |       |       |       |       |       |          | •       | •     |       |
| 560 | 600     |     |            |       |       |       |       |       |       |       |       |       |       |       |          | •       | •     |       |
| 630 | 600     |     |            |       |       |       |       |       |       |       |       |       |       |       |          | •       | •     |       |

• on request

- According to standard UNI EN 1092-1
- Internal diameter according to standard ISO 9624
- Flanges suitable both PN 10 and PN 16 up to diam 180 mm, for larger diameters they are different for holes number, thickness and distance between holes
- The pipeline diameter identifies the choice of the flange

COD. 20.46

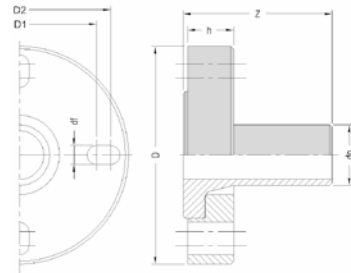
## BLANK STEEL FLANGE



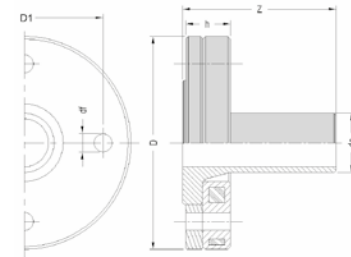
| DIMENSIONS |         |    |     |     |    |          | WEIGHTS  |       |
|------------|---------|----|-----|-----|----|----------|----------|-------|
| dn         | D STEEL | s  | a   | k   | f  | HOLES N. | PN       |       |
| 32         | 25      | 16 | 115 | 85  | 14 | 4        | PN 10/16 | 1200  |
| 40         | 32      | 16 | 140 | 100 | 18 | 4        | PN 10/16 | 1800  |
| 50         | 40      | 16 | 150 | 110 | 18 | 4        | PN 10/16 | 2100  |
| 63         | 50      | 18 | 165 | 125 | 18 | 4        | PN 10/16 | 2900  |
| 75         | 65      | 18 | 185 | 145 | 18 | 4        | PN 10/16 | 3600  |
| 90         | 80      | 20 | 200 | 160 | 18 | 8        | PN 10/16 | 4500  |
| 110/125    | 100     | 20 | 220 | 180 | 18 | 8        | PN 10/16 | 5100  |
| 140        | 125     | 22 | 250 | 210 | 18 | 8        | PN 10/16 | 6700  |
| 160/180    | 150     | 22 | 285 | 240 | 22 | 8        | PN 10/16 | 8500  |
| 200/225    | 200     | 24 | 340 | 295 | 22 | 8        | PN 10    | 13700 |
| 250/280    | 250     | 26 | 395 | 350 | 22 | 12       | PN 10    | 20600 |
| 315        | 300     | 26 | 445 | 400 | 22 | 12       | PN 10    | 30600 |

# COD. 20.47 STUB END/PP FLANGE SYSTEM

44



type A - stub end and PP flange



type B - stub end, steel-PP covered flange and PP ring

| dn  | DIMENSIONS |     |     |     |    |     |    |          | WEIGHTS |      |       |
|-----|------------|-----|-----|-----|----|-----|----|----------|---------|------|-------|
|     | D STEEL    | D   | D1  | D2  | h  | Z   | df | HOLES N. | PN      | TYPE |       |
| 40  | 32/40      | 150 | 100 | 110 | 24 | 87  | 18 | 4        | PN16    | A    | 320   |
| 50  | 40/50      | 165 | 110 | 125 | 28 | 95  | 18 | 4        | PN16    | A    | 430   |
| 63  | 50/60/65   | 183 | 125 | 145 | 30 | 94  | 18 | 4        | PN16    | A    | 590   |
| 75  | 60/65/80   | 198 | 135 | 160 | 33 | 107 | 18 | 8        | PN16    | A    | 780   |
| 90  | 80         | 198 | 160 |     | 33 | 113 | 18 | 8        | PN16    | A    | 875   |
| 110 | 100        | 219 | 180 |     | 35 | 128 | 18 | 8        | PN16    | A    | 1135  |
| 125 | 100        | 220 | 180 |     | 35 | 153 | 18 | 8        | PN16    | A    | 1365  |
| 140 | 125        | 252 | 210 |     | 48 | 156 | 18 | 8        | PN16    | B    | 4191  |
| 160 | 150        | 285 | 240 |     | 53 | 159 | 22 | 8        | PN16    | B    | 5501  |
| 180 | 150        | 285 | 240 |     | 53 | 196 | 22 | 8        | PN16    | B    | 5880  |
| 200 | 200        | 340 | 295 |     | 58 | 182 | 22 | 12       | PN16    | B    | 7641  |
| 225 | 200        | 340 | 295 |     | 58 | 319 | 22 | 12       | PN16    | B    | 8931  |
| 250 | 250        | 419 | 355 |     | 66 | 205 | 26 | 12       | PN16    | B    | 11425 |
| 280 | 250        | 419 | 355 |     | 66 | 235 | 26 | 12       | PN16    | B    | 11700 |
| 315 | 300        | 478 | 410 |     | 68 | 275 | 26 | 12       | PN16    | B    | 19450 |
| 200 | 200        | 340 | 295 |     | 58 | 182 | 22 | 8        | PN10    | B    | 7331  |
| 225 | 200        | 340 | 295 |     | 58 | 219 | 22 | 8        | PN10    | B    | 7831  |
| 250 | 250        | 395 | 350 |     | 64 | 205 | 22 | 12       | PN10    | B    | 11430 |
| 280 | 250        | 395 | 350 |     | 64 | 235 | 22 | 12       | PN10    | B    | 10500 |
| 315 | 300        | 445 | 400 |     | 68 | 275 | 22 | 12       | PN10    | B    | 18460 |

stub end complete with NBR gasket

- For the correct assembling use NBR gaskets
- Maximum tightness guarantee
- No deformation
- Tightening of the thread bar/bolts according to cross sequence





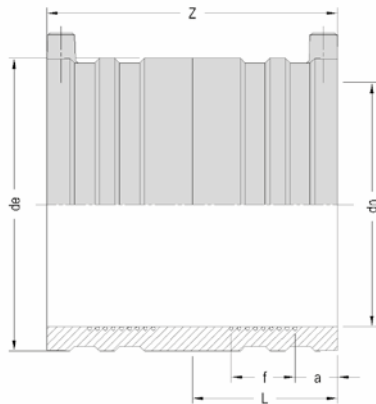
# ELECTROFUSION FITTINGS

SOCKET // 90° ELBOW // 45° ELBOW //  
90° TEE // 90° REDUCED TEE // CAP // REDUCER //  
SPIGOT SADDLE // TAPPING SADDLE //  
TAPPING SADDLE WITH VALVE //

COD. 21.00.10

## ELECTROFUSION SOCKET

SDR 17 - PN 10



48

| DIMENSIONS |     |     |    |    |     | WEIGHTS |
|------------|-----|-----|----|----|-----|---------|
| dn         | de  | L   | f  | a  | Z   |         |
| 32         | 46  | 38  | 19 | 12 | 80  | 75      |
| 40         | 56  | 44  | 22 | 13 | 90  | 110     |
| 50         | 68  | 49  | 23 | 14 | 100 | 155     |
| 63         | 82  | 54  | 26 | 18 | 111 | 225     |
| 110        | 137 | 70  | 36 | 18 | 140 | 680     |
| 125        | 153 | 76  | 39 | 18 | 152 | 1060    |
| 160        | 198 | 86  | 39 | 22 | 172 | 1520    |
| 180        | 223 | 100 | 41 | 25 | 200 | 2120    |
| 200        | 233 | 106 | 41 | 32 | 212 | 2000    |
| 225        | 262 | 114 | 41 | 34 | 227 | 2800    |
| 250        | 292 | 122 | 45 | 41 | 244 | 3900    |
| 280        | 341 | 133 | 42 | 44 | 265 | 7100    |
| 315        | 369 | 138 | 47 | 44 | 275 | 7000    |
| 355        | 430 | 156 | 40 | 47 | 312 | 11750   |
| 400        | 461 | 170 | 60 | 41 | 340 | 14150   |

| WELDABILITY<br>ON PIPE/FITTING PE 100 |        |        |        |
|---------------------------------------|--------|--------|--------|
| dn                                    | SDR 33 | SDR 26 | SDR 17 |
| 32                                    |        |        | •      |
| 40                                    |        |        | •      |
| 50                                    |        |        | •      |
| 63                                    |        |        | •      |
| 110                                   |        | •      | •      |
| 125                                   |        | •      | •      |
| 160                                   |        | •      | •      |
| 180                                   |        | •      | •      |
| 200                                   | •      | •      | •      |
| 225                                   | •      | •      | •      |
| 250                                   | •      | •      | •      |
| 280                                   | •      | •      | •      |
| 315                                   | •      | •      | •      |
| 355                                   | •      | •      | •      |
| 400                                   | •      | •      | •      |

- weldable only with:
  - universal ef units
  - monovalent ef unit Series Euro S1 plus
  - monovalent ef unit Series Euro S1 prior updating
- weldable only with monovalent welding units Series Euro

— Moulded in PE 100-RC

— Absolutely compulsory the use of aligning clamp for all diameters

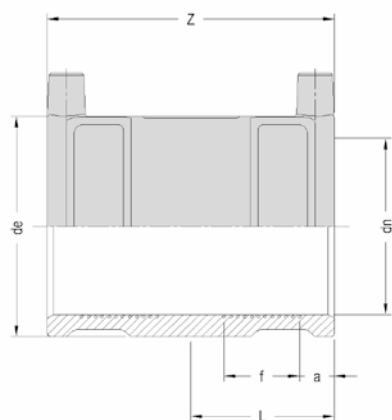
— Absolutely compulsory the pipes/fittings scraping



COD. 21.00.16

## ELECTROFUSION SOCKET

SDR 11 - PN 16



| DIMENSIONS |     |     |    |    |     | WEIGHTS |
|------------|-----|-----|----|----|-----|---------|
| dn         | de  | L   | f  | a  | Z   |         |
| 20         | 33  | 33  | 15 | 13 | 70  | 45      |
| 25         | 38  | 33  | 15 | 12 | 70  | 55      |
| 32         | 46  | 38  | 19 | 12 | 80  | 75      |
| 40         | 56  | 44  | 22 | 13 | 90  | 110     |
| 50         | 68  | 49  | 23 | 14 | 100 | 155     |
| 63         | 82  | 54  | 26 | 18 | 111 | 225     |
| 75         | 93  | 60  | 32 | 18 | 121 | 260     |
| 90         | 113 | 65  | 31 | 20 | 131 | 420     |
| 110        | 137 | 70  | 32 | 22 | 140 | 630     |
| 125        | 152 | 76  | 38 | 18 | 152 | 820     |
| 140        | 170 | 80  | 49 | 17 | 161 | 1060    |
| 160        | 198 | 86  | 45 | 22 | 172 | 1520    |
| 180        | 223 | 100 | 51 | 25 | 200 | 2120    |
| 200        | 245 | 105 | 43 | 32 | 210 | 3020    |
| 225        | 277 | 112 | 48 | 36 | 225 | 3980    |
| 250        | 305 | 122 | 53 | 33 | 244 | 5430    |
| 280        | 341 | 133 | 55 | 38 | 265 | 7100    |
| 315        | 391 | 138 | 51 | 47 | 277 | 10620   |
| 355        | 430 | 156 | 60 | 45 | 312 | 11750   |
| 400        | 492 | 172 | 53 | 64 | 344 | 20056   |

| WELDABILITY<br>ON PIPE/FITTING PE 100 |        |        |        |
|---------------------------------------|--------|--------|--------|
| dn                                    | SDR 26 | SDR 17 | SDR 11 |
| 20                                    |        |        | ● ▲    |
| 25                                    |        |        | ● ▲    |
| 32                                    |        | ● ▲    | ●      |
| 40                                    |        | ● ▲    | ●      |
| 50                                    |        | ●      | ●      |
| 63                                    |        | ●      | ●      |
| 75                                    |        | ●      | ●      |
| 90                                    | ●      | ●      | ●      |
| 110                                   | ●      | ●      | ●      |
| 125                                   | ●      | ●      | ●      |
| 140                                   | ●      | ●      | ●      |
| 160                                   | ●      | ●      | ●      |
| 180                                   | ●      | ●      | ●      |
| 200                                   | ●      | ●      | ●      |
| 225                                   | ●      | ●      | ●      |
| 250                                   | ●      | ●      | ●      |
| 280                                   | ●      | ●      | ●      |
| 315                                   | ●      | ●      | ●      |
| 355                                   | ●      | ●      | ●      |
| 400                                   | ●      | ●      | ●      |

— Moulded in PE 100-RC

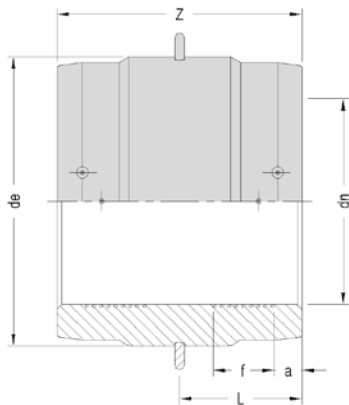
- Absolutely compulsory the use of aligning clamp for all diameters
- Absolutely compulsory the pipes/fittings scraping

- weldable only with:
  - universal ef units
  - monovalent ef unit Series Euro S1 plus
  - monovalent ef unit Series Euro S1 prior updating
- weldable only with monovalent welding units Series Euro
- ▲ minimum weldable thickness 3 mm

COD. 21.10.10

## ELECTROFUSION SOCKET

SDR 13,6 - PN 12,5



| DIMENSIONS |     |     |    |    |     | WEIGHTS |
|------------|-----|-----|----|----|-----|---------|
| dn         | de  | L   | f  | a  | Z   |         |
| 450        | 527 | 175 | 59 | 45 | 350 | 20000   |
| 500        | 585 | 179 | 76 | 47 | 359 | 22000   |
| 560        | 656 | 195 | 90 | 50 | 390 | 32200   |
| 630        | 736 | 210 | 99 | 50 | 420 | 46850   |

Supplied with pre-pulled belts  
(no need of regulation)  
to avoid any expansion

| WELDABILITY<br>ON PIPE/FITTING PE 100 |        |        |        |
|---------------------------------------|--------|--------|--------|
| dn                                    | SDR 26 | SDR 17 | SDR 11 |
| 450                                   | •      | •      | •      |
| 500                                   | •      | •      | •      |
| 560                                   | •      | •      | •      |
| 630                                   | •      | •      | •      |

- weldable only with:
  - universal ef units
  - monovalent ef unit Series Euro S1 plus
  - monovalent ef unit Series Euro S1 prior updating

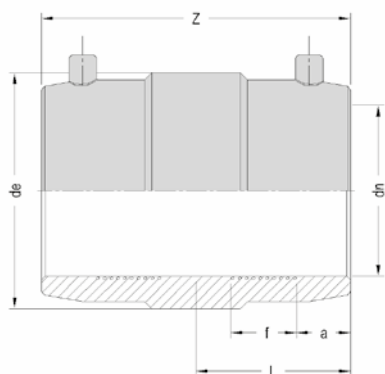
- \_ Moulded in PE 100-RC
- \_ EF SOCKET d. 500 - 560 - 630 mm: two separate fusion zones and electrically independent
- \_ Absolutely compulsory the use of aligning clamp for all diameters
- \_ Absolutely compulsory the pipes/fittings scraping

ON REQUEST ELECTROFUSION SOCKET VERSION SDR 11 - PN 16

COD. 21.00.25

## ELECTROFUSION SOCKET

SDR 7,4 - PN 25



| DIMENSIONS |     |     |    |    |     | WEIGHTS |
|------------|-----|-----|----|----|-----|---------|
| dn         | de  | L   | f  | a  | Z   |         |
| 20         | 33  | 33  | 15 | 13 | 70  | 45      |
| 25         | 38  | 33  | 15 | 12 | 70  | 55      |
| 32         | 46  | 38  | 19 | 12 | 80  | 75      |
| 40         | 56  | 44  | 22 | 13 | 90  | 110     |
| 50         | 68  | 49  | 23 | 14 | 100 | 155     |
| 63         | 82  | 54  | 26 | 18 | 111 | 225     |
| 75         | 99  | 60  | 36 | 14 | 120 | 330     |
| 90         | 116 | 65  | 37 | 14 | 130 | 490     |
| 110        | 145 | 70  | 36 | 18 | 140 | 800     |
| 125        | 163 | 76  | 39 | 18 | 151 | 1060    |
| 140        | 183 | 81  | 48 | 18 | 161 | 1440    |
| 160        | 207 | 86  | 53 | 20 | 172 | 1855    |
| 180        | 240 | 96  | 51 | 27 | 193 | 3100    |
| 200        | 265 | 101 | 50 | 31 | 203 | 4100    |
| 225        | 301 | 111 | 60 | 29 | 223 | 5850    |
| 250        | 332 | 122 | 54 | 38 | 243 | 6550    |
| 315        | 416 | 142 | 64 | 43 | 283 | 12400   |

| WELDABILITY<br>ON PIPE/FITTING PE 100 |        |        |        |       |         |
|---------------------------------------|--------|--------|--------|-------|---------|
| dn                                    | SDR 26 | SDR 17 | SDR 11 | SDR 9 | SDR 7,4 |
| 20                                    |        |        | ● ▲    | ● ▲   | ●       |
| 25                                    |        |        | ● ▲    | ●     | ●       |
| 32                                    |        | ● ▲    | ●      | ●     | ●       |
| 40                                    |        | ● ▲    | ●      | ●     | ●       |
| 50                                    |        | ●      | ●      | ●     | ●       |
| 63                                    |        | ●      | ●      | ●     | ●       |
| 75                                    |        | ●      | ●      | ●     | ●       |
| 90                                    | ●      | ●      | ●      | ●     | ●       |
| 110                                   | ●      | ●      | ●      | ●     | ●       |
| 125                                   | ●      | ●      | ●      | ●     | ●       |
| 140                                   | ●      | ●      | ●      | ●     | ●       |
| 160                                   | ●      | ●      | ●      | ●     | ●       |
| 180                                   | ●      | ●      | ●      | ●     | ●       |
| 200                                   | ●      | ●      | ●      | ●     | ●       |
| 225                                   | ●      | ●      | ●      | ●     | ●       |
| 250                                   | ●      | ●      | ●      | ●     | ●       |
| 315                                   | ●      | ●      | ●      | ●     | ●       |

● weldable only with monovalent welding units Series Euro

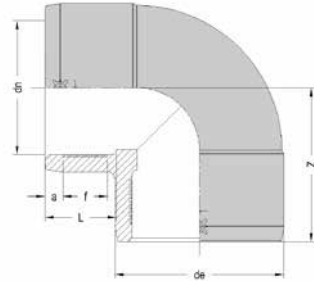
▲ minimum weldable thickness 3 mm

- Moulded in PE 100-RC
- Absolutely compulsory the use of aligning clamp for all diameters
- Absolutely compulsory the pipes/fittings scraping

## COD. 21.11.16

# ELECTROFUSION 90° ELBOW

SDR 11 - PN 16



| DIMENSIONS |     |     |    |    |     | WEIGHTS |
|------------|-----|-----|----|----|-----|---------|
| dn         | de  | L   | f  | a  | Z   |         |
| 20         | 34  | 33  | 15 | 10 | 55  | 75      |
| 25         | 38  | 33  | 15 | 9  | 57  | 80      |
| 32         | 46  | 39  | 18 | 10 | 75  | 130     |
| 40         | 56  | 48  | 25 | 11 | 80  | 190     |
| 50         | 68  | 54  | 27 | 12 | 89  | 300     |
| 63         | 83  | 52  | 27 | 13 | 104 | 450     |
| 75         | 97  | 64  | 29 | 18 | 116 | 665     |
| 90         | 116 | 70  | 37 | 18 | 130 | 1040    |
| 110        | 142 | 76  | 39 | 20 | 146 | 1615    |
| 125        | 162 | 79  | 42 | 19 | 152 | 2130    |
| 140        | 174 | 85  | 38 | 20 | 166 | 2700    |
| 160        | 206 | 89  | 45 | 20 | 180 | 4050    |
| 180        | 226 | 116 | 50 | 23 | 215 | 4800    |
| 200        | 251 | 118 | 55 | 23 | 229 | 6450    |
| 225        | 281 | 120 | 48 | 36 | 251 | 9300    |
| 250        | 310 | 127 | 53 | 33 | 272 | 11600   |
| 315        | 397 | 145 | 51 | 47 | 321 | 23000   |

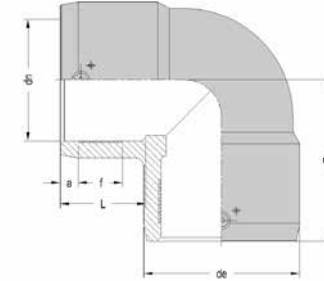
| dn  | WELDABILITY ON PIPE/FITTING PE 100 |        |
|-----|------------------------------------|--------|
|     | SDR 17                             | SDR 11 |
| 20  |                                    | ● ▲    |
| 25  |                                    | ● ▲    |
| 32  | ● ▲                                | ●      |
| 40  | ● ▲                                | ●      |
| 50  | ●                                  | ●      |
| 63  | ●                                  | ●      |
| 75  | ●                                  | ●      |
| 90  | ●                                  | ●      |
| 110 | ●                                  | ●      |
| 125 | ●                                  | ●      |
| 140 | ●                                  | ●      |
| 160 | ●                                  | ●      |
| 180 | ●                                  | ●      |
| 200 | ●                                  | ●      |
| 225 | ●                                  | ●      |
| 250 | ●                                  | ●      |
| 315 | ●                                  | ●      |

- weldable only with universal ef units
- weldable only with monovalent welding units Series Euro
- ▲ minimum weldable thickness 3 mm

## COD. 21.11.25

# ELECTROFUSION 90° ELBOW

SDR 7,4 - PN 25



| DIMENSIONS |     |    |    |    |     | WEIGHTS |
|------------|-----|----|----|----|-----|---------|
| dn         | de  | L  | f  | a  | Z   |         |
| 20         | 34  | 33 | 15 | 10 | 55  | 75      |
| 25         | 38  | 33 | 15 | 9  | 57  | 80      |
| 32         | 46  | 39 | 18 | 10 | 75  | 130     |
| 40         | 56  | 48 | 25 | 11 | 80  | 190     |
| 50         | 68  | 54 | 27 | 12 | 89  | 300     |
| 63         | 83  | 52 | 27 | 13 | 104 | 450     |
| 75         | 97  | 64 | 29 | 18 | 116 | 665     |
| 90         | 116 | 70 | 37 | 18 | 130 | 1040    |
| 110        | 142 | 76 | 39 | 20 | 146 | 1615    |
| 125        | 162 | 79 | 42 | 19 | 152 | 2130    |
| 160        | 206 | 89 | 45 | 20 | 180 | 4050    |

| dn  | WELDABILITY ON PIPE/FITTING PE 100 |        |       |         |
|-----|------------------------------------|--------|-------|---------|
|     | SDR 17                             | SDR 11 | SDR 9 | SDR 7,4 |
| 20  |                                    | ● ▲    | ● ▲   | ●       |
| 25  |                                    | ● ▲    | ●     | ●       |
| 32  | ● ▲                                | ●      | ●     | ●       |
| 40  | ● ▲                                | ●      | ●     | ●       |
| 50  | ●                                  | ●      | ●     | ●       |
| 63  | ●                                  | ●      | ●     | ●       |
| 75  | ●                                  | ●      | ●     | ●       |
| 90  | ●                                  | ●      | ●     | ●       |
| 110 | ●                                  | ●      | ●     | ●       |
| 125 | ●                                  | ●      | ●     | ●       |
| 160 | ●                                  | ●      | ●     | ●       |

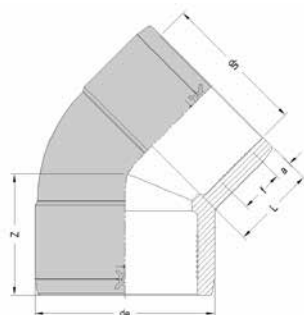
- weldable only with universal ef units
- weldable only with monovalent welding units Series Euro
- ▲ minimum weldable thickness 3 mm

- \_ Moulded in PE 100-RC
- \_ Absolutely compulsory the use of aligning clamp for all diameters
- \_ Absolutely compulsory the pipes/fittings scraping

COD. 21.16.16

## ELECTROFUSION 45° ELBOW

SDR 11 - PN 16



| DIMENSIONS |     |     |    |    |     | WEIGHTS |
|------------|-----|-----|----|----|-----|---------|
| dn         | de  | L   | f  | a  | Z   |         |
| 25         | 39  | 33  | 15 | 10 | 55  | 80      |
| 32         | 46  | 39  | 18 | 10 | 57  | 110     |
| 40         | 56  | 48  | 25 | 11 | 70  | 175     |
| 50         | 68  | 54  | 27 | 12 | 75  | 260     |
| 63         | 82  | 52  | 27 | 13 | 86  | 390     |
| 75         | 97  | 64  | 29 | 18 | 98  | 610     |
| 90         | 116 | 70  | 37 | 18 | 110 | 905     |
| 110        | 142 | 76  | 39 | 20 | 114 | 1415    |
| 125        | 162 | 79  | 42 | 19 | 119 | 1830    |
| 140        | 177 | 86  | 39 | 20 | 134 | 2200    |
| 160        | 206 | 89  | 45 | 20 | 134 | 3400    |
| 180        | 223 | 105 | 50 | 28 | 165 | 4300    |
| 200        | 250 | 112 | 55 | 29 | 171 | 5300    |
| 225        | 281 | 120 | 48 | 36 | 185 | ■       |
| 250        | 310 | 127 | 53 | 33 | 199 | ■       |
| 315        | 397 | 145 | 51 | 48 | 230 | ■       |

| dn  | WELDABILITY<br>ON PIPE/FITTING PE 100 |        |
|-----|---------------------------------------|--------|
|     | SDR 17                                | SDR 11 |
| 25  |                                       | ● ▲    |
| 32  | ● ▲                                   | ●      |
| 40  | ● ▲                                   | ●      |
| 50  | ●                                     | ●      |
| 63  | ●                                     | ●      |
| 75  | ●                                     | ●      |
| 90  | ●                                     | ●      |
| 110 | ●                                     | ●      |
| 125 | ●                                     | ●      |
| 140 | ●                                     | ●      |
| 160 | ●                                     | ●      |
| 180 | ●                                     | ●      |
| 200 | ●                                     | ●      |
| 225 | ●                                     | ●      |
| 250 | ●                                     | ●      |
| 315 | ●                                     | ●      |

- weldable only with universal ef units
- weldable only with monovalent welding units Series Euro
- ▲ minimum weldable thickness 3 mm

■ in preparation

\_ Moulded in PE 100-RC

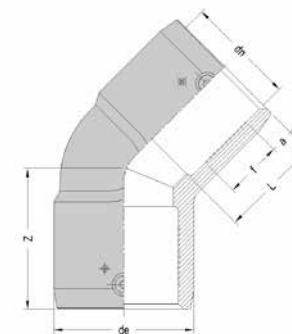
\_ Absolutely compulsory the use of aligning clamp for all diameters

\_ Absolutely compulsory the pipes/fittings scraping

COD. 21.16.25

## ELECTROFUSION 45° ELBOW

SDR 7,4 - PN 25



| DIMENSIONS |     |    |    |    |     | WEIGHTS |
|------------|-----|----|----|----|-----|---------|
| dn         | de  | L  | f  | a  | Z   |         |
| 25         | 39  | 33 | 15 | 10 | 55  | 80      |
| 32         | 46  | 39 | 18 | 10 | 57  | 110     |
| 40         | 56  | 48 | 25 | 11 | 70  | 175     |
| 50         | 68  | 54 | 27 | 12 | 75  | 260     |
| 63         | 82  | 52 | 27 | 13 | 86  | 390     |
| 75         | 97  | 64 | 29 | 18 | 98  | 610     |
| 90         | 116 | 70 | 37 | 18 | 110 | 905     |
| 110        | 142 | 76 | 39 | 20 | 114 | 1415    |
| 125        | 162 | 79 | 42 | 19 | 119 | 1830    |
| 160        | 206 | 89 | 45 | 20 | 134 | 3400    |

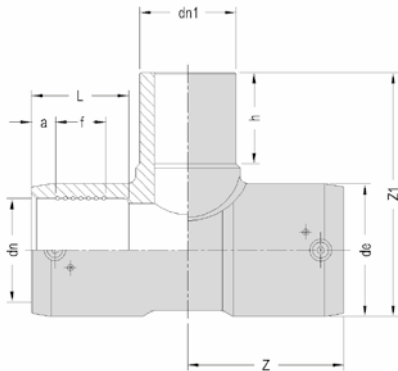
| dn  | WELDABILITY<br>ON PIPE/FITTING PE 100 |        |       |         |
|-----|---------------------------------------|--------|-------|---------|
|     | SDR 17                                | SDR 11 | SDR 9 | SDR 7,4 |
| 25  |                                       | ● ▲    | ●     | ●       |
| 32  | ● ▲                                   | ●      | ●     | ●       |
| 40  | ● ▲                                   | ●      | ●     | ●       |
| 50  | ●                                     | ●      | ●     | ●       |
| 63  | ●                                     | ●      | ●     | ●       |
| 75  | ●                                     | ●      | ●     | ●       |
| 90  | ●                                     | ●      | ●     | ●       |
| 110 | ●                                     | ●      | ●     | ●       |
| 125 | ●                                     | ●      | ●     | ●       |
| 160 | ●                                     | ●      | ●     | ●       |

- weldable only with universal ef units
- weldable only with monovalent welding units Series Euro
- ▲ minimum weldable thickness 3 mm

COD. 21.21.16

## ELECTROFUSION 90° TEE

SDR 11 - PN 16



54

| DIMENSIONS |     |     |     |    |    |     |     |     | WEIGHTS |
|------------|-----|-----|-----|----|----|-----|-----|-----|---------|
| dn         | dn1 | de  | L   | f  | a  | h   | Z   | Z1  |         |
| 25         | 25  | 39  | 33  | 15 | 11 | 60  | 53  | 111 | 95      |
| 32         | 32  | 44  | 44  | 28 | 10 | 48  | 64  | 94  | 105     |
| 40         | 40  | 54  | 49  | 37 | 11 | 57  | 73  | 112 | 175     |
| 50         | 50  | 66  | 55  | 36 | 12 | 62  | 81  | 128 | 300     |
| 63         | 63  | 81  | 61  | 32 | 13 | 72  | 94  | 153 | 420     |
| 75         | 75  | 96  | 64  | 29 | 18 | 75  | 113 | 176 | 700     |
| 90         | 90  | 116 | 70  | 37 | 18 | 85  | 125 | 202 | 1170    |
| 110        | 110 | 141 | 76  | 39 | 20 | 84  | 141 | 233 | 1725    |
| 125        | 125 | 161 | 79  | 42 | 19 | 100 | 156 | 269 | 2800    |
| 140        | 140 | 174 | 85  | 38 | 20 | 121 | 150 | 308 | 3200    |
| 160        | 160 | 206 | 89  | 51 | 20 | 127 | 184 | 350 | 5570    |
| 180        | 180 | 227 | 105 | 48 | 23 | 130 | 188 | 368 | 5810    |
| 200        | 200 | 252 | 112 | 55 | 23 | 135 | 205 | 400 | 7590    |

| WELDABILITY<br>ON PIPE/FITTING PE 100 |        |        |
|---------------------------------------|--------|--------|
| dn                                    | SDR 17 | SDR 11 |
| 25                                    |        | ● ▲    |
| 32                                    | ● ▲    | ●      |
| 40                                    | ● ▲    | ●      |
| 50                                    | ●      | ●      |
| 63                                    | ●      | ●      |
| 75                                    | ●      | ●      |
| 90                                    | ●      | ●      |
| 110                                   | ●      | ●      |
| 125                                   | ●      | ●      |
| 140                                   | ●      | ●      |
| 160                                   | ●      | ●      |
| 180                                   | ●      | ●      |
| 200                                   | ●      | ●      |

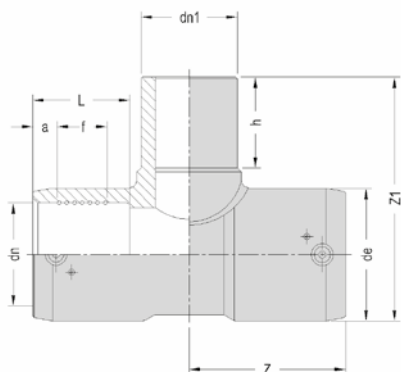
- weldable only with monovalent welding units Series Euro
- ▲ minimum weldable thickness 3 mm

- Moulded in PE 100-RC
- Absolutely compulsory the use of aligning clamp for all diameters
- Absolutely compulsory the pipes/fittings scraping

COD. 21.22.16

## ELECTROFUSION REDUCED 90° TEE

SDR 11 - PN 16



| DIMENSIONS |     |     |    |    |    |    |     |     | WEIGHTS |
|------------|-----|-----|----|----|----|----|-----|-----|---------|
| dn         | dn1 | de  | L  | f  | a  | h  | Z   | Z1  |         |
| 90         | 63  | 116 | 70 | 37 | 18 | 75 | 125 | 197 | ■       |
| 110        | 63  | 141 | 76 | 39 | 20 | 75 | 141 | 221 | ■       |
| 110        | 90  | 141 | 76 | 39 | 20 | 84 | 141 | 231 | ■       |
| 160        | 63  | 206 | 89 | 51 | 20 | 75 | 184 | 294 | ■       |
| 160        | 90  | 206 | 89 | 51 | 20 | 84 | 184 | 304 | ■       |
| 160        | 110 | 206 | 89 | 51 | 20 | 85 | 184 | 305 | ■       |

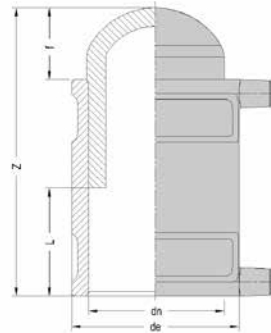
| WELDABILITY<br>ON PIPE/FITTING PE 100 |     |        |        |
|---------------------------------------|-----|--------|--------|
| dn                                    | dn1 | SDR 17 | SDR 11 |
| 90                                    | 63  | ●      | ●      |
| 110                                   | 63  | ●      | ●      |
| 110                                   | 90  | ●      | ●      |
| 160                                   | 63  | ●      | ●      |
| 160                                   | 90  | ●      | ●      |
| 160                                   | 110 | ●      | ●      |

■ in preparation

- Moulded in PE 100-RC
- Absolutely compulsory the use of aligning clamp for all diameters
- Absolutely compulsory the pipes/fittings scraping

# COD. 21.36.16 ELECTROFUSION CAP

SDR 11 - PN 16



| DIMENSIONS |     |    |     |     | WEIGHTS |
|------------|-----|----|-----|-----|---------|
| dn         | de  | f  | L   | Z   |         |
| 32         | 46  | 31 | 38  | 98  | 97      |
| 40         | 56  | 29 | 44  | 114 | 145     |
| 50         | 68  | 32 | 49  | 127 | 205     |
| 63         | 82  | 49 | 55  | 136 | 310     |
| 75         | 93  | 41 | 61  | 162 | 420     |
| 90         | 113 | 42 | 66  | 174 | 655     |
| 110        | 137 | 49 | 70  | 189 | 1050    |
| 125        | 152 | 42 | 76  | 194 | 1440    |
| 140        | 170 | 51 | 82  | 214 | 1900    |
| 160        | 198 | 48 | 86  | 220 | 2460    |
| 180        | 223 | 50 | 100 | 249 | 3635    |
| 200        |     |    |     |     | ●       |

| dn  | WELDABILITY ON PIPE/FITTING PE 100 |        |        |
|-----|------------------------------------|--------|--------|
|     | SDR 26                             | SDR 17 | SDR 11 |
| 32  |                                    | ● ▲    | ●      |
| 40  |                                    | ● ▲    | ●      |
| 50  |                                    | ●      | ●      |
| 63  |                                    | ●      | ●      |
| 75  |                                    | ●      | ●      |
| 90  | ●                                  | ●      | ●      |
| 110 | ●                                  | ●      | ●      |
| 125 | ●                                  | ●      | ●      |
| 140 | ●                                  | ●      | ●      |
| 160 | ●                                  | ●      | ●      |
| 180 | ●                                  | ●      | ●      |
| 200 | ●                                  | ●      | ●      |

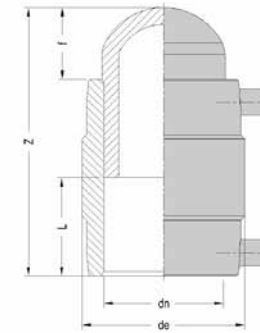
- weldable only with monovalent welding units Series Euro
- ▲ minimum weldable thickness 3 mm

● on request

- \_ Moulded in PE 100-RC
- \_ Absolutely compulsory the pipes/fittings scraping

# COD. 21.36.25 ELECTROFUSION CAP

SDR 7,4 - PN 25



| DIMENSIONS |     |    |    |     | WEIGHTS |
|------------|-----|----|----|-----|---------|
| dn         | de  | f  | L  | Z   |         |
| 20         | 33  | 30 | 33 | 100 | 60      |
| 25         | 38  | 27 | 33 | 104 | 75      |
| 32         | 46  | 31 | 38 | 98  | 104     |
| 40         | 56  | 29 | 44 | 114 | 155     |
| 50         | 68  | 32 | 49 | 127 | 250     |
| 63         | 82  | 49 | 55 | 136 | 360     |
| 75         | 99  | 41 | 60 | 164 | 550     |
| 90         | 116 | 52 | 65 | 164 | 850     |
| 110        | 145 | 61 | 70 | 187 | 1400    |
| 125        | 163 | 42 | 76 | 198 | 1800    |
| 140        | 183 | 51 | 81 | 207 | 2400    |
| 160        | 207 | 45 | 86 | 211 | 3355    |
| 180        |     |    |    |     | ●       |
| 200        |     |    |    |     | ●       |

| dn  | WELDABILITY ON PIPE/FITTING PE 100 |        |        |       |         |
|-----|------------------------------------|--------|--------|-------|---------|
|     | SDR 26                             | SDR 17 | SDR 11 | SDR 9 | SDR 7,4 |
| 20  |                                    |        | ● ▲    | ● ▲   | ●       |
| 25  |                                    |        | ● ▲    | ●     | ●       |
| 32  |                                    | ● ▲    | ●      | ●     | ●       |
| 40  |                                    | ● ▲    | ●      | ●     | ●       |
| 50  |                                    | ●      | ●      | ●     | ●       |
| 63  |                                    | ●      | ●      | ●     | ●       |
| 75  |                                    | ●      | ●      | ●     | ●       |
| 90  | ●                                  | ●      | ●      | ●     | ●       |
| 110 | ●                                  | ●      | ●      | ●     | ●       |
| 125 | ●                                  | ●      | ●      | ●     | ●       |
| 140 | ●                                  | ●      | ●      | ●     | ●       |
| 160 | ●                                  | ●      | ●      | ●     | ●       |
| 180 | ●                                  | ●      | ●      | ●     | ●       |
| 200 | ●                                  | ●      | ●      | ●     | ●       |

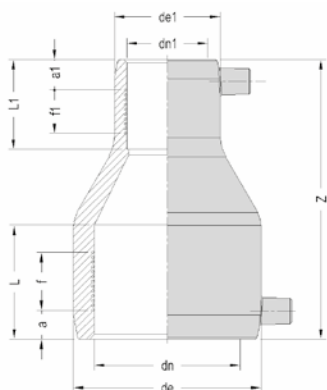
- weldable only with monovalent welding units Series Euro
- ▲ minimum weldable thickness 3 mm



COD. 21.51

## ELECTROFUSION REDUCER

SDR 11 - PN 16



■ in preparation

| DIMENSIONS |     |     |     |     |    |    |    |    |    |     | WEIGHTS |      |
|------------|-----|-----|-----|-----|----|----|----|----|----|-----|---------|------|
| dn         | dn1 | de  | de1 | L   | L1 | f  | f1 | a  | a1 | Z   |         |      |
| 25         | 20  | 37  | 32  | 40  | 40 | 21 | 23 | 10 | 10 | 86  | ■       |      |
| 32         | 20  | 44  | 32  | 46  | 38 | 34 | 22 | 10 | 10 | 105 |         | 61   |
| 32         | 25  | 45  | 36  | 44  | 45 | 31 | 21 | 10 | 10 | 103 |         | 63   |
| 40         | 20  | 55  | 33  | 49  | 39 | 27 | 22 | 11 | 10 | 120 |         | 83   |
| 40         | 25  | 55  | 36  | 48  | 40 | 27 | 21 | 11 | 10 | 114 |         | 84   |
| 40         | 32  | 55  | 44  | 54  | 50 | 30 | 29 | 11 | 10 | 109 |         | 85   |
| 50         | 25  | 67  | 37  | 49  | 40 | 27 | 21 | 12 | 10 | 126 |         | 120  |
| 50         | 32  | 66  | 44  | 53  | 49 | 30 | 29 | 12 | 10 | 121 |         | 122  |
| 50         | 40  | 66  | 54  | 55  | 54 | 33 | 33 | 12 | 11 | 119 |         | 126  |
| 63         | 32  | 81  | 46  | 62  | 44 | 31 | 24 | 15 | 12 | 156 |         | 187  |
| 63         | 40  | 81  | 54  | 63  | 54 | 29 | 20 | 15 | 13 | 137 |         | 198  |
| 63         | 50  | 81  | 66  | 62  | 54 | 26 | 23 | 16 | 16 | 131 |         | 218  |
| 75         | 50  | 97  | 68  | 70  | 55 | 34 | 29 | 18 | 18 | 154 |         | 365  |
| 75         | 63  | 97  | 81  | 75  | 62 | 34 | 33 | 13 | 13 | 160 |         | 405  |
| 90         | 50  | 117 | 66  | 79  | 55 | 45 | 25 | 18 | 16 | 185 |         | 555  |
| 90         | 63  | 115 | 81  | 77  | 62 | 45 | 33 | 15 | 13 | 160 |         | 515  |
| 90         | 75  | 115 | 97  | 81  | 60 | 39 | 30 | 18 | 18 | 159 |         | 550  |
| 110        | 63  | 144 | 83  | 79  | 63 | 40 | 33 | 20 | 15 | 201 |         | 905  |
| 110        | 90  | 141 | 115 | 87  | 77 | 41 | 39 | 19 | 18 | 181 |         | 860  |
| 125        | 90  | 162 | 118 | 78  | 68 | 42 | 34 | 22 | 17 | 177 |         | 1100 |
| 125        | 110 | 162 | 144 | 79  | 73 | 33 | 36 | 22 | 20 | 164 |         | 1225 |
| 160        | 90  | 209 | 119 | 90  | 79 | 50 | 50 | 23 | 17 | 233 |         | 2340 |
| 160        | 110 | 208 | 144 | 95  | 82 | 48 | 37 | 25 | 20 | 218 |         | 2400 |
| 160        | 125 | 208 | 162 | 98  | 87 | 47 | 30 | 26 | 21 | 208 |         | 2505 |
| 180        | 125 | 229 | 165 | 103 | 79 | 46 | 39 | 29 | 15 | 254 |         | 3140 |
| 200        | 160 | 254 | 228 | 110 | 96 | 45 | 38 | 35 | 29 | 265 |         | 4000 |

WELDABILITY  
ON PIPE/FITTING PE 100

| dn  | dn1 | SDR 17 | SDR 11 |
|-----|-----|--------|--------|
| 25  | 20  |        | ● ▲    |
| 32  | 20  |        | ● ▲    |
| 32  | 25  |        | ● ▲    |
| 40  | 20  |        | ● ▲    |
| 40  | 25  |        | ● ▲    |
| 40  | 32  | ● ▲    | ●      |
| 50  | 25  |        | ● ▲    |
| 50  | 32  | ● ▲    | ●      |
| 50  | 40  | ● ▲    | ●      |
| 63  | 32  | ● ▲    | ●      |
| 63  | 40  | ● ▲    | ●      |
| 63  | 50  | ●      | ●      |
| 75  | 50  |        | ●      |
| 75  | 63  |        | ●      |
| 90  | 50  | ●      | ●      |
| 90  | 63  | ●      | ●      |
| 90  | 75  | ●      | ●      |
| 110 | 63  |        | ●      |
| 110 | 90  | ●      | ●      |
| 125 | 90  | ●      | ●      |
| 125 | 110 | ●      | ●      |
| 160 | 90  | ●      | ●      |
| 160 | 110 | ●      | ●      |
| 160 | 125 | ●      | ●      |
| 180 | 125 | ●      | ●      |
| 200 | 160 | ●      | ●      |

- weldable only with universal ef units
- weldable only with monovalent welding units Series Euro
- ▲ minimum weldable thickness 3 mm

\_ Moulded in PE 100-RC

\_ Absolutely compulsory the use of aligning clamp for all diameters

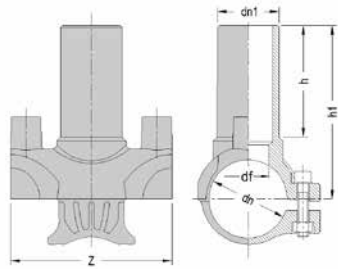
\_ Absolutely compulsory the pipes/fittings scraping

COD. 21.20A

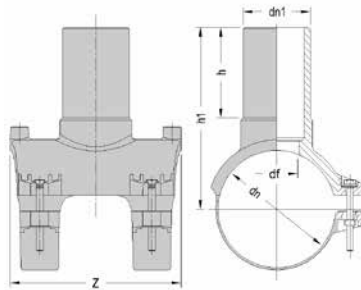
## ELECTROFUSION SPIGOT SADDLE MONOBLOC

SDR 11 - PN 16

58



diam. 40x



diam. 63x, 90x, 110x

| DIMENSIONS |     |    |     |     |    | WEIGHTS |
|------------|-----|----|-----|-----|----|---------|
| dn         | dn1 | h  | h1  | Z   | df |         |
| 40         | 20  | 65 | 99  | 84  | 13 | 100     |
| 40         | 25  | 65 | 100 | 84  | 17 | 100     |
| 40         | 32  | 65 | 101 | 84  | 25 | 100     |
| 63         | 20  | 60 | 110 | 110 | 13 | 130     |
| 63         | 25  | 60 | 110 | 110 | 17 | 140     |
| 63         | 32  | 65 | 112 | 110 | 25 | 150     |
| 63         | 40  | 65 | 115 | 110 | 32 | 170     |
| 63         | 50  | 80 | 135 | 110 | 38 | 180     |
| 90         | 20  | 60 | 122 | 125 | 13 | 230     |
| 90         | 25  | 60 | 127 | 125 | 17 | 235     |
| 90         | 32  | 65 | 131 | 125 | 25 | 240     |
| 90         | 40  | 65 | 131 | 125 | 32 | 245     |
| 90         | 50  | 80 | 151 | 125 | 38 | 270     |
| 90         | 63  | 85 | 160 | 125 | 48 | 320     |
| 110        | 25  | 60 | 137 | 162 | 17 | 338     |
| 110        | 32  | 65 | 141 | 162 | 25 | 350     |
| 110        | 40  | 65 | 141 | 162 | 32 | 350     |
| 110        | 50  | 80 | 161 | 162 | 38 | 385     |
| 110        | 63  | 85 | 170 | 162 | 48 | 435     |

df = cutter diameter

WELDABILITY  
ON PIPE/FITTING PE 100

| dn   | SDR 17 | SDR 11 |
|------|--------|--------|
| 40x  |        | ●      |
| 63x  | ●      | ●      |
| 90x  | ●      | ●      |
| 110x | ●      | ●      |

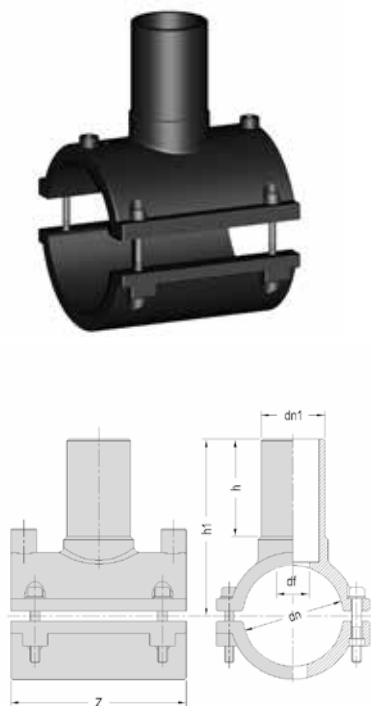
- weldable only with monovalent welding units Series Euro
- weldable only with:
  - universal ef units
  - monovalent ef unit Series Euro S1 plus
  - monovalent ef unit Series Euro S1 prior updating

- \_ Boring after cooling is completed
- \_ Absolutely compulsory the pipe scraping in the welding area
- \_ Use steel cutter suitable for the largest inside branch diameter

COD. 21.20

## ELECTROFUSION SPIGOT SADDLE

SDR 11 - PN 16



| DIMENSIONS |     |     |     |     |    | WEIGHTS |
|------------|-----|-----|-----|-----|----|---------|
| dn         | dn1 | h   | h1  | Z   | df |         |
| 50         | 20  | 52  | 159 | 101 | 13 | 200     |
| 50         | 25  | 59  | 165 | 101 | 17 | 200     |
| 50         | 32  | 110 | 170 | 101 | 25 | 250     |
| 63         | 63  | 88  | 153 | 125 | 48 | 380     |
| 75         | 25  | 65  | 123 | 125 | 17 | 400     |
| 75         | 32  | 65  | 123 | 125 | 25 | 400     |
| 75         | 40  | 70  | 128 | 125 | 32 | 450     |
| 75         | 50  | 80  | 144 | 125 | 38 | 450     |
| 75         | 63  | 90  | 159 | 125 | 48 | 500     |
| 125        | 25  | 56  | 143 | 160 | 17 | 900     |
| 125        | 32  | 57  | 143 | 160 | 25 | 900     |
| 125        | 40  | 62  | 147 | 160 | 32 | 950     |
| 125        | 50  | 67  | 158 | 160 | 38 | 950     |
| 125        | 63  | 75  | 173 | 160 | 48 | 1000    |
| 125        | 90  | 93  | 191 | 190 | 72 | 1200    |
| 140        | 25  | 65  | 159 | 160 | 17 | 1050    |
| 140        | 32  | 65  | 159 | 160 | 25 | 1050    |
| 140        | 40  | 70  | 163 | 160 | 32 | 1050    |
| 140        | 50  | 80  | 179 | 160 | 38 | 1100    |
| 140        | 63  | 90  | 194 | 160 | 48 | 1150    |
| 160        | 25  | 65  | 169 | 160 | 17 | 700     |
| 160        | 32  | 65  | 169 | 160 | 25 | 700     |
| 160        | 40  | 73  | 173 | 160 | 32 | 700     |
| 160        | 50  | 80  | 189 | 160 | 38 | 750     |
| 160        | 63  | 90  | 204 | 160 | 48 | 800     |
| 160        | 90  | 90  | 206 | 190 | 72 | 1570    |
| 160        | 110 | 96  | 218 | 190 | 88 | 1950    |

df = cutter diameter

| DIMENSIONS |     |    |     |     |    | WEIGHTS |
|------------|-----|----|-----|-----|----|---------|
| dn         | dn1 | h  | h1  | Z   | df |         |
| 180        | 25  | 56 | 221 | 160 | 17 | 1850    |
| 180        | 32  | 65 | 179 | 160 | 25 | 1550    |
| 180        | 40  | 70 | 183 | 160 | 32 | 1600    |
| 180        | 50  | 80 | 199 | 160 | 38 | 1650    |
| 180        | 63  | 90 | 214 | 160 | 48 | 1650    |
| 180        | 90  | 93 | 218 | 190 | 72 | 2050    |
| 180        | 110 | 94 | 226 | 190 | 88 | 2350    |
| 200        | 25  | 65 | 189 | 160 | 17 | 1900    |
| 200        | 32  | 65 | 189 | 160 | 25 | 1800    |
| 200        | 40  | 70 | 193 | 160 | 32 | 1800    |
| 200        | 50  | 80 | 210 | 160 | 38 | 1850    |
| 200        | 63  | 90 | 225 | 160 | 48 | 1850    |
| 200        | 90  | 93 | 229 | 190 | 72 | 2350    |
| 200        | 110 | 93 | 237 | 190 | 88 | 1930    |
| 225        | 25  | 65 | 201 | 160 | 17 | 2100    |
| 225        | 32  | 65 | 201 | 160 | 25 | 2000    |
| 225        | 40  | 70 | 206 | 160 | 32 | 2000    |
| 225        | 50  | 80 | 222 | 160 | 38 | 2050    |
| 225        | 63  | 90 | 237 | 160 | 48 | 2100    |
| 225        | 90  | 93 | 241 | 190 | 72 | 2500    |
| 225        | 110 | 98 | 249 | 190 | 88 | 2700    |
| 250        | 32  | 58 | 205 | 190 | 25 | 2550    |
| 250        | 40  | 63 | 210 | 190 | 32 | 2550    |
| 250        | 50  | 68 | 221 | 190 | 38 | 2600    |
| 250        | 63  | 77 | 234 | 190 | 48 | 2650    |
| 250        | 90  | 93 | 254 | 190 | 72 | 3100    |
| 250        | 110 | 98 | 262 | 190 | 88 | 3300    |
| 315        | 32  |    |     |     |    | ■       |
| 315        | 63  |    |     |     |    | ■       |
| 315        | 110 |    |     |     |    | ■       |

with reinforce steel clip

| WELDABILITY<br>ON PIPE/FITTING PE 100 |        |        |        |
|---------------------------------------|--------|--------|--------|
| dn                                    | SDR 26 | SDR 17 | SDR 11 |
| 50x                                   |        |        | ●      |
| 63x                                   |        |        | ●      |
| 75x                                   |        | ●      | ●      |
| 125x                                  |        | ●      | ●      |
| 140x                                  |        | ●      | ●      |
| 160x                                  | ●      | ●      | ●      |
| 180x                                  | ●      | ●      | ●      |
| 200x                                  | ●      | ●      | ●      |
| 225x                                  | ●      | ●      | ●      |
| 250x                                  | ●      | ●      | ●      |

- weldable only with monovalent welding units Series Euro
- weldable only with universal ef units

■ in preparation

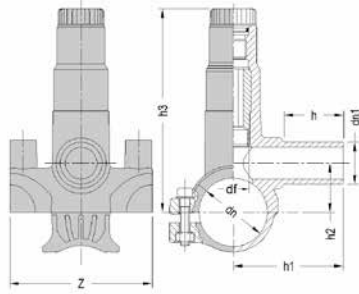
- Boring after cooling is completed
- Absolutely compulsory the pipe scraping in the welding area
- Use steel cutter suitable for the largest inside branch diameter

COD. 21.30A

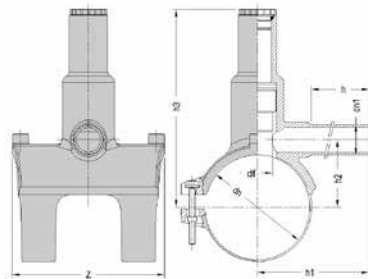
## ELECTROFUSION TAPPING SADDLE MONOBLOC

SDR 11 - PN 16

60



diam. 40x



diam. 63x, 90x, 110x

- \_ Boring after cooling is completed
- \_ Suitable for application on pipelines under pressure gas and water
- \_ Absolutely compulsory the pipe scraping in the welding area
- \_ No leakage from the cutter during the boring phase (except dia. 40x)
- \_ Cutter supplied with upper stroke end
- \_ Seal closing possible with electrofusion cap (except dia. 40x)

| DIMENSIONS |     |     |     |    |     |     |    | WEIGHTS |
|------------|-----|-----|-----|----|-----|-----|----|---------|
| dn         | dn1 | h   | h1  | h2 | h3  | Z   | df |         |
| 40         | 20  | 66  | 96  | 29 | 110 | 84  | 18 | 200     |
| 40         | 25  | 66  | 96  | 29 | 110 | 84  | 18 | 200     |
| 40         | 32  | 66  | 96  | 29 | 110 | 84  | 18 | 200     |
| 63         | 20  | 77  | 114 | 43 | 157 | 110 | 25 | 315     |
| 63         | 25  | 77  | 114 | 43 | 157 | 110 | 25 | 330     |
| 63         | 32  | 77  | 114 | 43 | 157 | 110 | 25 | 335     |
| 63         | 40  | 77  | 118 | 48 | 157 | 110 | 30 | 370     |
| 63         | 50  | 81  | 122 | 48 | 157 | 110 | 30 | 390     |
| 63         | 63  | 95  | 124 | 48 | 157 | 110 | 30 | 430     |
| 90         | 20  | 77  | 130 | 60 | 195 | 126 | 32 | 415     |
| 90         | 25  | 77  | 130 | 60 | 195 | 126 | 32 | 435     |
| 90         | 32  | 77  | 135 | 60 | 195 | 126 | 32 | 445     |
| 90         | 40  | 77  | 138 | 60 | 195 | 126 | 32 | 470     |
| 90         | 50  | 81  | 143 | 60 | 195 | 126 | 32 | 490     |
| 90         | 63  | 113 | 145 | 60 | 195 | 126 | 32 | 530     |
| 110        | 20  | 77  | 130 | 71 | 208 | 162 | 32 | 583     |
| 110        | 25  | 77  | 130 | 71 | 208 | 162 | 32 | 587     |
| 110        | 32  | 77  | 135 | 71 | 208 | 162 | 32 | 593     |
| 110        | 40  | 77  | 139 | 71 | 208 | 162 | 32 | 619     |
| 110        | 50  | 81  | 144 | 71 | 208 | 162 | 32 | 647     |
| 110        | 63  | 113 | 148 | 71 | 208 | 162 | 32 | 675     |

df = cutter diameter

WELDABILITY  
ON PIPE/FITTING PE 100

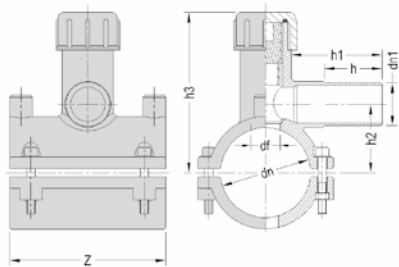
| dn   | SDR 17 | SDR 11 |
|------|--------|--------|
| 40x  |        | ●      |
| 63x  | ●      | ●      |
| 90x  | ●      | ●      |
| 110x | ●      | ●      |

- weldable only with monovalent welding units Series Euro
- weldable only with:
  - universal ef units
  - monovalent ef unit Series Euro S1 plus
  - monovalent ef unit Series Euro S1 prior updating

COD. 21.30

## ELECTROFUSION TAPPING SADDLE

SDR 11 - PN 16



| DIMENSIONS |     |    |     |     |     |     |    | WEIGHTS |
|------------|-----|----|-----|-----|-----|-----|----|---------|
| dn         | dn1 | h  | h1  | h2  | h3  | Z   | df |         |
| 50         | 20  | 50 | 54  | 71  | 131 | 101 | 16 | 300     |
| 50         | 25  | 54 | 54  | 71  | 131 | 101 | 16 | 300     |
| 50         | 32  | 60 | 78  | 40  | 102 | 102 | 18 | 300     |
| 75         | 20  | 70 | 90  | 63  | 133 | 125 | 25 | 600     |
| 75         | 25  | 70 | 90  | 63  | 133 | 125 | 25 | 600     |
| 75         | 32  | 70 | 107 | 74  | 133 | 125 | 25 | 600     |
| 75         | 40  | 72 | 120 | 63  | 133 | 125 | 25 | 650     |
| 75         | 50  | 72 | 120 | 63  | 160 | 125 | 30 | 750     |
| 75         | 63  | 93 | 120 | 63  | 160 | 125 | 30 | 850     |
| 125        | 20  | 70 | 90  | 87  | 165 | 160 | 25 | 1100    |
| 125        | 25  | 70 | 90  | 87  | 165 | 160 | 25 | 1100    |
| 125        | 32  | 70 | 108 | 84  | 165 | 160 | 25 | 1100    |
| 125        | 40  | 72 | 120 | 87  | 165 | 160 | 25 | 1200    |
| 125        | 50  | 72 | 120 | 87  | 187 | 160 | 30 | 1300    |
| 125        | 63  | 83 | 120 | 87  | 187 | 160 | 30 | 1350    |
| 140        | 20  | 70 | 90  | 96  | 165 | 160 | 25 | 1200    |
| 140        | 25  | 70 | 90  | 96  | 165 | 160 | 25 | 1250    |
| 140        | 32  | 70 | 105 | 96  | 165 | 160 | 25 | 1250    |
| 140        | 40  | 72 | 120 | 96  | 165 | 160 | 25 | 1250    |
| 140        | 50  | 72 | 120 | 96  | 167 | 160 | 30 | 1400    |
| 140        | 63  | 73 | 120 | 96  | 167 | 160 | 30 | 1450    |
| 160        | 20  | 70 | 90  | 108 | 184 | 160 | 25 | 850     |
| 160        | 25  | 70 | 90  | 104 | 184 | 160 | 25 | 850     |
| 160        | 32  | 70 | 106 | 105 | 185 | 160 | 25 | 900     |
| 160        | 40  | 72 | 120 | 104 | 185 | 160 | 25 | 950     |
| 160        | 50  | 72 | 120 | 104 | 208 | 160 | 30 | 1050    |
| 160        | 63  | 72 | 120 | 104 | 208 | 160 | 30 | 1100    |

■ in preparation

- Boring after cooling is completed
- Suitable for application on pipelines under pressure gas and water
- Absolutely compulsory the pipe scraping in the welding area
- Do not remove the cutter after boring

| DIMENSIONS |     |    |     |     |     |     |    | WEIGHTS |
|------------|-----|----|-----|-----|-----|-----|----|---------|
| dn         | dn1 | h  | h1  | h2  | h3  | Z   | df |         |
| 180        | 20  | 70 | 90  | 110 | 192 | 160 | 25 | 1750    |
| 180        | 25  | 70 | 90  | 110 | 192 | 160 | 25 | 1750    |
| 180        | 32  | 70 | 105 | 110 | 192 | 160 | 25 | 1750    |
| 180        | 40  | 72 | 120 | 110 | 192 | 160 | 25 | 1800    |
| 180        | 50  | 72 | 120 | 110 | 194 | 160 | 30 | 1900    |
| 180        | 63  | 72 | 120 | 110 | 194 | 160 | 30 | 1950    |
| 200        | 20  | 70 | 90  | 126 | 204 | 160 | 25 | 1850    |
| 200        | 25  | 70 | 90  | 126 | 204 | 160 | 25 | 1850    |
| 200        | 32  | 70 | 105 | 126 | 204 | 160 | 25 | 1850    |
| 200        | 40  | 72 | 120 | 126 | 204 | 160 | 25 | 1900    |
| 200        | 50  | 72 | 120 | 126 | 194 | 160 | 30 | 2000    |
| 200        | 63  | 64 | 120 | 126 | 194 | 160 | 30 | 2100    |
| 225        | 20  | 70 | 90  | 140 | 216 | 160 | 25 | 2000    |
| 225        | 25  | 70 | 90  | 140 | 216 | 160 | 25 | 2050    |
| 225        | 32  | 70 | 105 | 140 | 216 | 160 | 25 | 2050    |
| 225        | 40  | 72 | 120 | 140 | 216 | 160 | 25 | 2100    |
| 225        | 50  | 72 | 120 | 140 | 218 | 160 | 30 | 2250    |
| 225        | 63  | 64 | 120 | 140 | 218 | 160 | 30 | 2300    |
| 250        | 20  | 70 | 90  | 151 | 264 | 160 | 25 | 2450    |
| 250        | 25  | 70 | 90  | 151 | 264 | 160 | 25 | 2450    |
| 250        | 32  | 70 | 105 | 151 | 266 | 160 | 30 | 2600    |
| 250        | 40  | 72 | 120 | 151 | 266 | 160 | 30 | 2650    |
| 250        | 50  | 72 | 120 | 151 | 266 | 160 | 30 | 2650    |
| 250        | 63  | 64 | 120 | 151 | 266 | 160 | 30 | 2700    |
| 315        | 32  |    |     |     |     |     |    | ■       |
| 315        | 63  |    |     |     |     |     |    | ■       |

df = cutter diameter

| WELDABILITY<br>ON PIPE/FITTING PE 100 |        |        |        |
|---------------------------------------|--------|--------|--------|
| dn                                    | SDR 26 | SDR 17 | SDR 11 |
| 50x                                   |        |        | ●      |
| 75x                                   |        | ●      | ●      |
| 125x                                  |        | ●      | ●      |
| 140x                                  |        | ●      | ●      |
| 160x                                  | ●      | ●      | ●      |
| 180x                                  | ●      | ●      | ●      |
| 200x                                  | ●      | ●      | ●      |
| 225x                                  | ●      | ●      | ●      |
| 250x                                  | ●      | ●      | ●      |

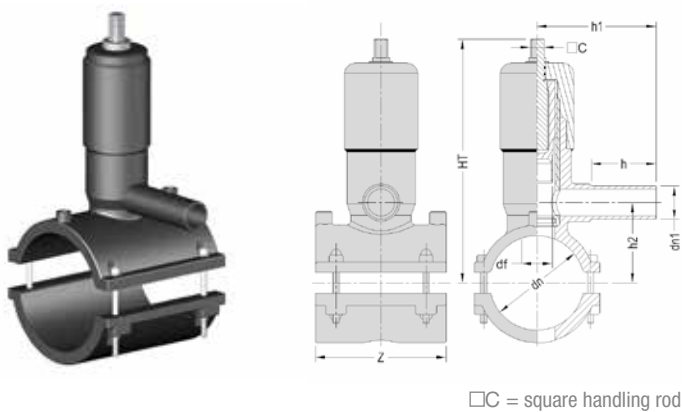
- weldable only with monovalent welding units Series Euro

**COD. 21.73**

**ELECTROFUSION TAPPING SADDLE WITH VALVE**

SDR 11 - PN 16

62



□C = square handling rod

- Boring after cooling is completed
- Suitable for application on pipelines under pressure gas 🔥 and water 💧
- Absolutely compulsory the pipe scraping in the welding area
- Integrated closing valve
- Handling rod with square conical connection of 13/15 mm

| DIMENSIONS |     |    |     |    |      |     |    | WEIGHTS | WELDABILITY ON PIPE/FITTING PE 100 |        |        |
|------------|-----|----|-----|----|------|-----|----|---------|------------------------------------|--------|--------|
| dn         | dn1 | h  | h1  | h2 | HT   | Z   | df |         | dn                                 | SDR 17 | SDR 11 |
| 75         | 32  | 80 | 128 | 69 | 260  | 125 | 30 | 2100    | 75x                                | •      | •      |
| 75         | 63  | 93 | 147 | 69 | 260  | 125 | 30 | 2200    | 90x                                | •      | •      |
| 90         | 32  | 80 | 128 | 69 | 267  | 125 | 30 | 2150    | 110x                               | •      | •      |
| 90         | 63  | 93 | 147 | 69 | 2267 | 125 | 30 | 2250    | 125x                               | •      | •      |
| 110        | 32  | 80 | 128 | 69 | 278  | 160 | 30 | 2500    | 140x                               | •      | •      |
| 110        | 63  | 83 | 147 | 69 | 278  | 160 | 30 | 2600    | 160x                               | •      | •      |
| 125        | 32  | 80 | 128 | 69 | 285  | 160 | 30 | 2550    | 180x                               | •      | •      |
| 125        | 63  | 83 | 147 | 69 | 285  | 160 | 30 | 2700    | 200x                               | •      | •      |
| 140        | 32  | 83 | 128 | 69 | 293  | 160 | 30 | 2700    | 225x                               | •      | •      |
| 140        | 63  | 73 | 147 | 69 | 293  | 160 | 30 | 2800    | 250x                               | •      | •      |
| 160        | 32  | 80 | 128 | 69 | 303  | 160 | 30 | 2900    |                                    |        |        |
| 160        | 63  | 72 | 147 | 69 | 303  | 160 | 30 | 3000    |                                    |        |        |
| 180        | 32  | 80 | 128 | 69 | 313  | 160 | 30 | 3200    |                                    |        |        |
| 180        | 63  | 72 | 147 | 69 | 313  | 160 | 30 | 3350    |                                    |        |        |
| 200        | 32  | 80 | 128 | 69 | 216  | 160 | 30 | 3400    |                                    |        |        |
| 200        | 63  | 64 | 147 | 69 | 216  | 160 | 30 | 3450    |                                    |        |        |
| 225        | 32  | 80 | 128 | 69 | 243  | 160 | 30 | 3600    |                                    |        |        |
| 225        | 63  | 64 | 147 | 69 | 243  | 160 | 30 | 3650    |                                    |        |        |
| 250        | 32  | 80 | 128 | 69 | 265  | 160 | 30 | 4000    |                                    |        |        |
| 250        | 63  | 64 | 147 | 69 | 265  | 160 | 30 | 4100    |                                    |        |        |

df = cutter diameter

**COD. 21.73.50**

**FIXED HANDLING ROD WITH PROTECTION PIPE**



| LENGTH (m) |
|------------|
| 0,75       |
| 1,25       |
| 1,50       |

**COD. 21.73.60**

**TELESCOPIC HANDLING ROD WITH PROTECTION PIPE**



| LENGTH (m)  |
|-------------|
| 0,80 - 1,20 |
| 0,90 - 1,50 |
| 1,10 - 1,90 |
| 1,40 - 2,50 |







# ELECTROFUSION WELDING UNITS

MONOVALENT WELDING UNIT // POLYVALENT WELDING UNIT //

COD. 12.12 SIM

# MONOVALENT ELECTROFUSION UNIT EURO S1 PLUS



The electrofusion welding unit model Euro S1 plus is a monovalent unit suitable for the welding of all electrofusion fittings of the Euro Series. It allows to operator to work at safety voltage lower than 50 Volt, is manufactured according to UNI 10566 and ISO 12176-2 standards, as well as provided with CE mark.

The heating power is automatically fixed according to the type and diameter of the electrofusion fitting, to the SDR of the pipe/fitting to be welded and to the ambient temperature.

The welding unit moded Euro S1 plus adopts the switching technology, which permits to be light and compact.

A display and the intuitive keyboard guide the operator during all operative phases of the programming, displaying the evolution of ambient temperature, the welding voltage and current, the cycle time, the progressive number of weldings and the possible error or malfunctioning messages.

When switching-on the supply voltate is measured and displayed for proper control.

The welding unit model Euro S1 plus is enabled in the storing of the operator code, of the site location, of the welding data and hour and of the welding parameters.

The welding unit model Euro S1 plus is supplied with USB connection port (pen drive is included) and serial port for the transfer of the welding data to the PC which afterwards can be used with DBManager Cloud for the management of the printing and storing operations.

The welding unit must be submitted to periodic overhaul (biennial) according to UNI 10566 standard.

## CHARACTERISTICS

|                                      |   |
|--------------------------------------|---|
| <b>supply voltage</b>                | 230V -20% / +15%  |
| <b>frequency</b>                     | 50/60 Hz  |
| <b>output voltage</b>                | < 50 V  |
| <b>inrush current</b>                | 110 Amp   |
| <b>output current at 80%</b>         | 80 Amp  |
| <b>max power consumption</b>         | 4500 W  |
| <b>operating temperature</b>         | -10 °C +45 °C   |
| <b>port connections</b>              | USB/host - serial RS/232  |
| <b>protection</b>                    | IP 54   |
| <b>working modes</b>                 | manual with selection: fitting type, diameter, SDR fitting to be welded and SDR pipe to be welded |
| <b>welding cycle memory capacity</b> | n. 1600   |
| <b>connectors</b>                    | 4.0 mm  |
| <b>dimensions LxPxH</b>              | 32x26x38 cm   |
| <b>weight</b>                        | 14 kg   |

COD. 12.19 SPP

# POLYVALENT ELECTROFUSION UNIT EURO SP1 PLUS



The electrofusion welding unit model Euro SP1 plus is a polyvalent unit suitable for the welding of all electrofusion fittings up to diameter d. 710. It allows to operator to work at safety voltage lower than 50 Volt, is manufactured according to UNI 10566 and ISO 12176-2 standards, as well as provided with CE mark.

The heating power is **automatically** adjusted, reading of the barcode by means of a scanner or **manual** entering of the 24 digits shown under the barcode, or manually by setting of the welding voltage and time. Automatically (scanner or 24 digits) the heating power is adjusted by the ambient temperature.

The welding unit model Euro SP1 plus adopts the switching technology, which permits to be light and compact.

A display and the intuitive keyboard guide the operator during all operative phases of the programming, displaying the evolution of ambient temperature, the welding voltage and current, the cycle time, the progressive number of weldings and the possible error or malfunctioning messages.

When switching-on the supply voltage is measured and displayed for proper control.

The welding unit model Euro SP1 plus is enabled in the storing of the operator code, of the site location, of the welding data and hour and of the welding parameters.

The scanner is enabled for the reading of the raceability barcodes of fittings and pipes and allows the maximum operative ease in all site conditions.

The welding unit model Euro SP1 plus is supplied with USB connection port (pen drive is included) and serial port for the transfer of the welding data to the PC which afterwards can be used with DBManager Cloud for the management of the printing and storing operations.

The welding unit must be submitted to periodic overhaul (biennial) according to UNI 10566 standard.

## CHARACTERISTICS

|   |   |
|---|---|
| <b>supply voltage</b>                                   | 230V -20% / +15%  |
| <b>frequency</b>  | 50/60 Hz  |
| <b>output voltage</b>                                   | 8 ÷ 48 V  |
| <b>inrush current</b>                                   | 110 Amp   |
| <b>output current at 80%</b>                            | 80 Amp  |
| <b>max power consumption</b>                            | 4500 W  |
| <b>operating temperature</b>                            | -10 °C +45 °C   |
| <b>port connections</b>                                 | USB/host - serial RS/232  |
| <b>protection</b>                                       | IP 54   |
| <b>working range</b>                                    | 20 ÷ 710 mm   |
| <b>working modes</b>                                    | barcode reading and   |
| <b>welding barcodes according to ISO 13950</b>          | welding - interleaved 2.5/24 digit                                    |
| <b>traceability barcodes according to ISO 12176/3/4</b> | operator - interleaved 2.5/30 digit<br>traceability - 128/26/40 digit |
| <b>barcode reading system</b>                           | scanner   |
| <b>manual system</b>                                    | setting: time and voltage<br>or 24 digit barcode sequence             |
| <b>welding cycle capacity</b>                           | n. 1600   |
| <b>connectors</b>                                       | 4.0 mm  |
| <b>ancillary connectors</b>                             | 4.7 mm  |
| <b>dimensions LxPxH</b>                                 | 32x26x38 cm   |
| <b>weight</b>   | 17 kg   |
| <b>ancillary equipment on request</b>                   | GPS   |

COD. 12.19 JUN

## POLYVALENT ELECTROFUSION UNIT EURO JUNIOR



The electrofusion welding unit model Euro Junior is a polyvalent unit suitable for the welding of all electrofusion fittings up to diameter d. 160. It allows to operator to work at safety voltage lower than 50 Volt, is manufactured according to UNI 10566 and ISO 12176-2 standards, as well as provided with CE mark.

The heating power is **automatically** adjusted, reading of the barcode by means of a scanner or **manual** entering of the 24 digits shown under the barcode, or manually by setting of the welding voltage and time. Automatically (scanner or 24 digits) the heating power is adjusted by the ambient temperature.

A display and the intuitive keyboard guide the operator during all operative phases of the programming, displaying the evolution of ambient temperature, the welding voltage and current, the cycle time, the progressive number of weldings and the possible error or malfunctioning messages.

When switching-on the supply voltage is measured and displayed for proper control.

The welding unit model Euro Junior is enabled in the storing of the operator code, of the site location, of the welding data and hour and of the welding parameters.

The scanner is enabled for the reading of the raceability barcodes of fittings and pipes and allows the maximum operative ease in all site conditions.

The welding unit model Euro Junior is supplied with USB connection port (pen drive is included) to allow the transfer of the welding reports in PDF format to the PC.

The welding unit must be submitted to periodic overhaul (biennial) according to UNI 10566 standard.

## CHARACTERISTICS

|  |  |
|--|--|
| supply voltage                                   | 230V +/-15%  |
| frequency  | 50/60 Hz   |
| output voltage                                   | 8 ÷ 42 V   |
| inrush current                                   | 60 Amp   |
| output current at 60%                            | 27 Amp   |
| max power consumption                            | 2500 W   |
| operating temperature                            | -10 °C +45 °C  |
| port connections                                 | USB/host   |
| protection                                       | IP 54  |
| working range                                    | 20 ÷ 160 mm  |
| working modes                                    | barcode reading and manual setting                                 |
| welding barcodes according to ISO 13950          | welding - interleaved 2.5/24 digit                                 |
| traceability barcodes according to ISO 12176/3/4 | operator - interleaved 2.5/30 digit traceability - 128/26/40 digit |
| barcode reading system                           | scanner  |
| manual system                                    | setting: time and voltage or 24 digit barcode sequence             |
| welding cycle capacity                           | n. 500   |
| connectors                                       | 4.0 mm   |
| ancillary connectors                             | 4.7 mm   |
| dimensions LxPxH                                 | 24x17x25 cm  |
| weight   | 12 kg  |
| ancillary equipment on request                   | transport bag  |

## // WELDING BARCODE

The barcode is an universally recognized system to store up information and to allow their reading by proper systems such as scanner or light pen.

For the electrofusion system of polyethylene, the BARCODE type INTERLEAVED “2-in-5” with 24 digits with control character according to standard ISO 13950.

The information stored in the code, and carried on the label, allow the suitable control unit to understand automatically the characteristics of the fitting to be welded and to consequently work.

The code stores all information necessary for the electrofusion cycle: type of fitting, diameter, fusion time and cooling time, control character of a correct reading, identification key.

The main characteristic of this system is to avoid any possibility of errors in the fixing from the operator, who must only acquire the data from the barcode and confirm manually the correct reading.

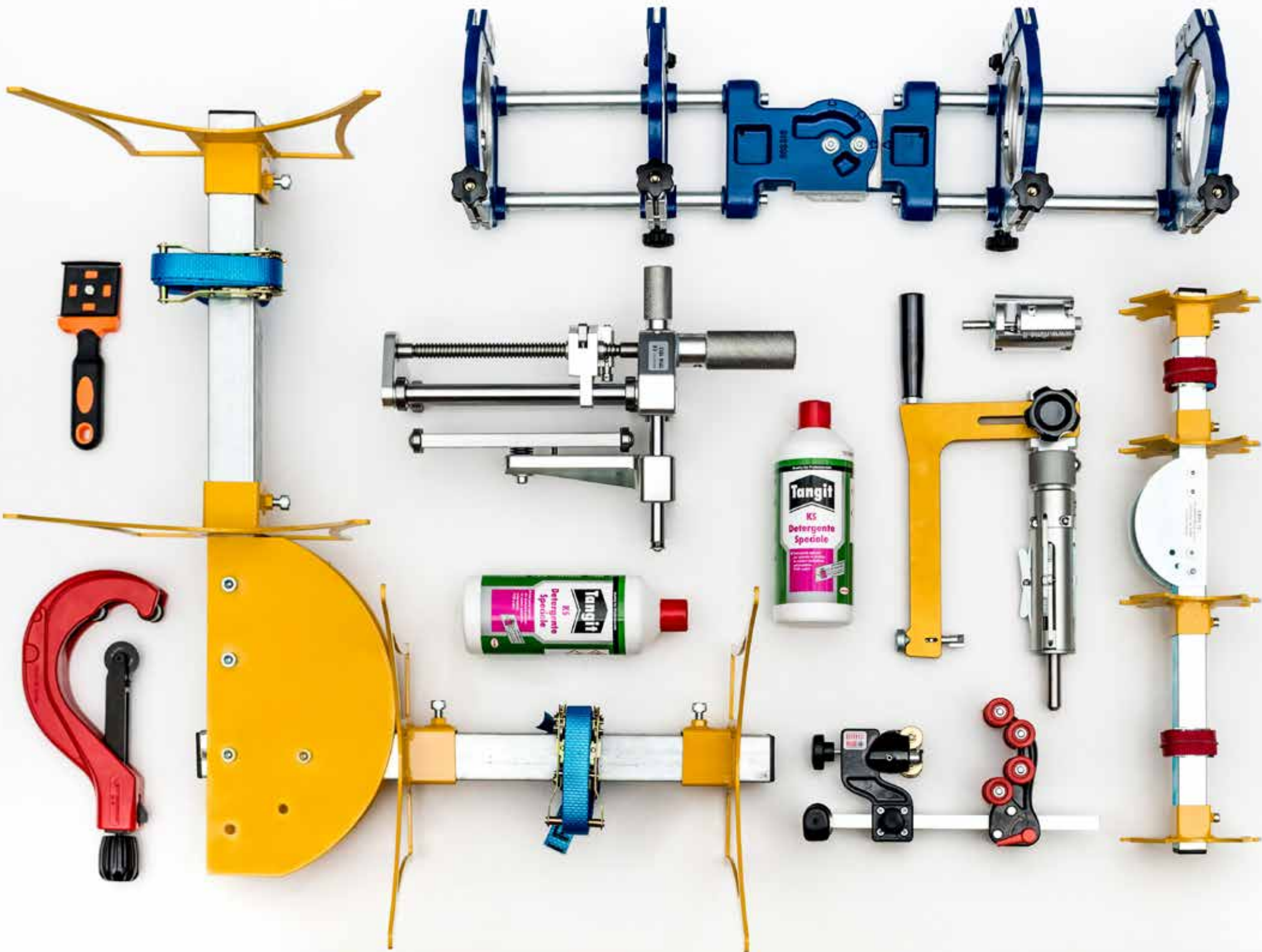
The guarantee of correct code reading is determined from the control character carried on the label.

Possible differences between the fitting connected to the control unit and the wrong reading of the code are shown on the display, which does not proceed in the memorized sequence.

## // TRACEABILITY BARCODE

It is an universally recognized system for “tracing” the information relative to the fitting and pipes welded (manufacturer, type of fitting, batch, raw material, production site, etc). All these information are stored in the BARCODE LABEL type CODE 128 with 26 digits with control character according to standard ISO 12176-4.

The reading of the barcode with optical pen/scanner on universal units allow to store all traceability data inside the ef unit and the subsequent transfer to PC, obtaining a complete traceability of the welding operations of the fittings.



# ACCESSORIES

ALIGNING CLAMP // PIPE CUTTER // PIPE SCRAPER // DETERGENT //

## // ALIGNING CLAMP

Protects the jointing, either during the electrofusion or the subsequent cooling, from external mechanical stresses, allows to revise possible off-centering between both ends to be welded and to recover the out-of-round of parts, if ovalized.

The aligning clamp is auxiliary to the control unit, its use is essential for the successful electrofusion jointing.

Simultaneous use of multiple aligning clamps will positively affect the speed of installation.



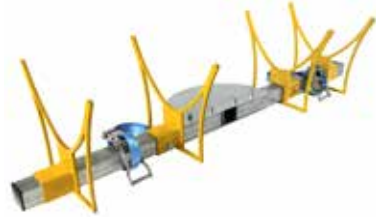
COD. 12.32/45/54



COD. 12.62



COD. 12.65/66



COD. 12.67

|                   |  |
|-------------------|--|
| <b>COD. 12.32</b> | alignng clamp with movable joint and 4 jaws<br>diam. 63 mm complete with reducing inserts diam. 20-25-32-40-50 mm                  |
| <b>COD. 12.45</b> | alignng clamp with movable joint and 4 jaws<br>diam. 125 mm<br>complete with reducing inserts diam. 20-25-32-40-50-63-75-90-110 mm |
| <b>COD. 12.54</b> | alignng clamp with movable joint and 4 jaws<br>diam. 225 mm  |
| <b>COD. 12.55</b> | series reducing inserts diam. 140  |
| <b>COD. 12.56</b> | series reducing inserts diam. 160  |
| <b>COD. 12.57</b> | series reducing inserts diam. 180  |
| <b>COD. 12.58</b> | series reducing inserts diam. 200  |
| <b>COD. 12.62</b> | aligning clamp with belt<br>diam. 140 - 630 mm   |
| <b>COD. 12.65</b> | aligning clamp with movable joint - type EASY-75<br>suitable for the welding of diam. 20 ÷ 75 mm                                   |
| <b>COD. 12.66</b> | aligning clamp with movable joint - type EASY-125<br>suitable for the welding of diam. 32 ÷ 125 mm                                 |
| <b>COD. 12.67</b> | aligning clamp with movable joint - type EASY-315<br>suitable for the welding of diam. 140 ÷ 315 mm                                |



## // PIPE CUTTER

A square cut of the pipe to be welded is carried by means of a pipe cutter, type with roller or with tool; choosing the type, it is important to verify the diameter according to the thickness of the pipe to be cut.



COD. 15.39/40/41

## // PIPE SCRAPER

For the removal of the oxide layer on pipes/fittings are used manual scrapers with straight interchangeable blade and pipe scrapers, type mechanical which are fastened on the pipe end.

The use of this equipment means the perfect flatness of the pipe end, which is only achieved with the pipe cutter.



COD. 15.44/46



COD. 15.42



COD. 15.47/48



COD. 15.54



COD. 15.49



COD. 15.51/52

### PIPE CUTTER

|            |  |
|------------|--|
| COD. 15.39 | diam. 20 - 63 mm (max cut thickness 7 mm)    |
| COD. 15.40 | diam. 50 - 125 mm (max cut thickness 13 mm)  |
| COD. 15.41 | diam. 110 - 160 mm (max cut thickness 16 mm) |

### MANUAL SCRAPER

|            |  |
|------------|--|
| COD. 15.42 | cutter usable on 4 sides by overturning on the central screw |
|------------|--|

### PIPE SCRAPER

|            |   |
|------------|---|
| COD. 15.47 | type PS-180 diam. 75 - 180 mm                           |
| COD. 15.48 | type PS-400 diam. 125 - 400 mm                          |
| COD. 15.44 | type RTC-315 diam. 75 - 315 mm                          |
| COD. 15.46 | type RTC-710 diam. 355 - 710 mm                         |
| COD. 15.54 | type ERT-500 diam. 110 - 500 mm suitable ONLY for pipes |

### PIPE SCRAPER EURO-DRILL

|               |             |
|---------------|-------------|
| COD. 15.49/20 | diam. 20 mm |
| COD. 15.49/25 | diam. 25 mm |
| COD. 15.49/32 | diam. 32 mm |
| COD. 15.49/40 | diam. 40 mm |
| COD. 15.49/50 | diam. 50 mm |
| COD. 15.49/63 | diam. 63 mm |

### ORBITAL PIPE SCRAPER

|            |   |
|------------|---|
| COD. 15.51 | type EURO 125 suitable for the pipe scraping from diam. 25 up to 125 mm |
| COD. 15.52 | type EURO 200 suitable for the pipe scraping from diam. 63 up to 200 mm |

# // DETERGENT

Special detergent for polyethylene (PE) and polypropylene (PP) weldings



COD. 15.50

|                         |                                       |
|-------------------------|---------------------------------------|
| <b>chemical feature</b> | mixture of aliphatic solvents         |
| <b>specific weight</b>  | ca. 0,7 g/cm <sup>3</sup>             |
| <b>packing</b>          | nr. 8 plastic bottles of 1 liter each |

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\_ Detergent suitable for the cleaning in the welding process of PE pipes and fittings





# // BUTTFUSION WELDING UNITS

The buttfusion welding unit model TE is built according to the UNI 10565 standard, is provided with CE marking and guarantees:

- a correct axial adjustment/movement of the pipes through the clamps;
- a proper and true facing of the pipes/fittings through the facer tool;
- an accurate control of the welding pressure and of the temperature of the heating plate;
- the conformity to the safety standard regulations.

Each machine can butt weld different diameters; according to the pipe diameter, the reducing inserts are fitted into the standard clamps.

The buttfusion machine consists of a supporting mounting with fixed and movable clamps. Those movable, hydraulically driven with manual or electrical control, are rolling on two guides. The machine is provided with an electrical facer tool, an electrically heating plate, an electro-hydraulic unit with distributor and pressure gauge with manometer. The heating plate guarantees uniform temperature on its whole surface. The temperature control is carried out with an adjustable thermostat which guarantees a maximal variation of  $\pm 2^{\circ}\text{C}$  of the stated temperature. The welding unit must be submitted to periodic overhaul (biennial) according to UNI 10565 standard.

The buttfusion units are provided with industrial plug, IEC standards protective measures, 2 poles + earth 16A - 220V.

| CHARACTERISTICS       | TE 160                 | TE 200 | TE 250 | TE 315 |
|-----------------------|------------------------|--------|--------|--------|
| <b>Maximal power</b>  |                        |        |        |        |
| Hydraulic unit        | 370 W                  | 370 W  | 370 W  | 750 W  |
| Facer tool            | 800 W                  | 800 W  | 1000 W | 1150 W |
| Heating plate         | 1000 W                 | 1420 W | 2300 W | 3000 W |
| <b>Weight (kg)</b>    |                        |        |        |        |
| Base mounting         | 35,0                   | 46,0   | 45,0   | 78,0   |
| Hydraulic unit        | 26,0                   | 26,0   | 26,0   | 28,0   |
| Facer tool            | 11,0                   | 13,0   | 14,5   | 27,0   |
| Heating plate         | 5,0                    | 6,5    | 10,0   | 13,0   |
| <b>Supply voltage</b> | 230V $\pm$ 10% - 50 Hz |        |        |        |





 **EURO**  
**STANDARD**

## FILIALI // BRANCHES

EUROSTANDARD CHILE SA  
Camino la Botella 499  
PUDAHUEL SANTIAGO  
CHILE

EUROMEGA MANUFACTURING SDN BHD  
no. 12 Jalan Bursa 23/G Section 23  
SHAH ALAM - SELANGOR  
MALAYSIA

SIA EUROSTANDARD NORDIC  
Katlakalna Iela, 9  
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