ACESSÓRIOS ELETROSOLDÁVEIS FITTINGS





Os acessórios eletrosoldáveis Fusion Fusamatic® comercializados pela Gastrade, são inspecionados individualmente utilizando um sistema de monitorização automático através de uma avançada tecnologia de código de barras. O Código de barras permite uma rastreabilidade individual do acessório até ao lote da matéria prima utilizada no fabrico de cada acessório.

The Fusion FUSAMATIC® electrofusion fittings commercialized by Gastrade are individually inspected using a computerised monitoring system that uses an advanced barcode technology. The barcode provides full individual fitting traceability to the raw material batch used on the production of that fitting.

A utilização de acessórios eletrosoldáveis em sistemas de polietileno permite criar redes de tubo monobloco totalmente soldadas. A qualidade de produção, a fiabilidade e a flexibilidade dos acessórios eletrosoldáveis Fusion Fusamatic® garantem assim uma soldadura sem fuga assegurando o correto funcionamento do sistema para futuro.

The use of electrofusion fittings in polyethylene systems makes it possible to create fully welded monoblock pipe networks. The production quality, reliability and flexibility of Fusion Fusamatic® electrofusion fittings guarantee leak-free welding, ensuring that the system will function correctly in the future.

Dimensões Sizes

As dimensões variam desde d20 a d1200. Size range from d20 to d1200.

Níveis de Pressão Pressure Ratings

Todos os acessórios são fabricados em polietileno preto virgem PE100 e pressão nominal até 10 bar para transporte de gás e 16/25 bar para transporte de água, salvo indicação em contrário. All tittings are manufactured in virgin PE100 black polyethylene and pressure rated up to 10 bar for gas applications and 16/25 bar for water applications, unless stated otherwise.

Certificações Certification

(UNI/INSTA SBC) EN1555-3 / (UNI/INSTA SBC) EN12201-3 / WRAS / DVGW GW335-B2B1 / KIWA BRL-K17105 / ACS / (UNI) ISO15494 / AS/ NZS4129, WATERMARK AND ISO TYPE 5 / KITEMARK GIS/PL2-4 / KITEMARK GIS/PL2-6 /

Classificação SDR SDR Rating

Os acessórios Fusion FUSAMATICTM® são fabricados para aplicação em redes de polietileno de SDR26 a SDR11 (Acessórios eletrosoldáveis igualmente disponíveis em SDR7.4).

Fusion FUSAMATICTM® fittings are manufactured for application in polyethylene pipes from SDR26 to SDR11 (Electrofusion fittings also available in SDR7.4)











A. Pino Fusamatic®

O pino Fusamatic® fornece um método totalmenteautomático para aarantir a leitura dos parâmetros de soldadura corretos. Dentro de cada pino existe um sensor que armazena os parâmetros de soldadura de cada acessório. Quando o equipamento de eletrosoldadura é ligado ao terminal o pino permite identificar automaticamente o tempo de fusão/ tensão/tempo de arrefecimento necessários para uma correta soldadura.

A. Fusamatic® pin The Fusamatic® pin provides a totally automatic method for ensuring the correct welding parameters are used. Within each pin is a sensor. When the electrofusion box is connected to the fitting, the pin enables it to automatically identify the correct fusion/cool time and voltage required to make the joint.

B. Testemunhos de Soldadura

A pressão gerada
pelo plástico fundido
em expansão na
área da soldadura
(dentro do acessório)
durante o processo
de eletrosoldadura,
forçará os terminais
indicadores a surgir.
Este é um sinal de que
a pressão necessária à
soldadura foi atingida
dentro do acessório no
decorrer do processo
de fusão.

B. Indicators

Pressure, created by

the expanding molten

plastic in the jointing

area (inside the fitting)

during the electrofusion process, will force out the indicator lugs. This is a visible sign that the necessary jointing pressure has been achieved.

are pin ion the les

C. Marcação dos parâmetros de soldadura

Os parâmetros de soldadura manual estão marcados no corpo de todos os acessórios. A informação fornecida inclui material (PE100), SDR do tubo compatível, parâmetros de soldadura e valores nominais de pressão para aplicações em gás e água.

C. Moulded-in welding parameters

Manual welding parameters are moulded into the body of all fittings. Information provided includes fitting size, material (PE100), applicable pipe SDRs, weld parameters, and pressure ratings for gas and water applications

D. Marcação permanente do número do lote

O número do lote marcado durante o fabrico do acessório é apenas um dos identificadores de controlo de qualidade de cada acessório. Este número é também reproduzido no código de barras do acessório.

D. Permanently marked batch number

The injection moulded batch number is just one of numerous quality control identifiers on each Fusamatic fitting. That number is also replicated on the fitting's barcode.

E. Código de Barras/Código QR

O controlo de aualidade é fundamental para aarantir a fiabilidade dos acessórios. A configuração do código de barras, incluindo o código QR, proporcionam uma rastreabilidade total da matéria-prima utilizada na produção de cada acessório em concreto. Para além disso, a etiqueta contém um código de acesso aos parâmetros de soldadura, transmitidos ao equipamento de eletrosoldadura através de uma leitura ótica.

E. Barcode / QR Code

Quality control is crucial to the success of these fittings. The unique barcode configuration, including QR code, provides full traceability of raw material for each individual fitting and welding information when used in conjunction with electrofusion boxes equipped with a barcode scanner.



Certificate of Conformity

Awarded to:

FUSION GROUP LTD

Head Office and Operative Site:

Smeckley Wood Close – Chesterfield S41 9PZ – United Kingdom

Bureau Veritas Italia S.p.A. certifies that the following products:

Fittings in (PE)

| Raw material | Dimensiona groups | SDR Groups of fittings | | Products |
|--------------|-------------------|------------------------|--|----------|
| | | See Annex 1/1 | | |

Brand:

FUSAMATIC

Compound code:

E03(1), N20(1), N21(1), H17(1)

(1)For raw materials details please check www.traccoding.com

Have been evaluated and found in accordance with the requirements of the standard:

EN 12201-3:2011+A1:2012

Plastics piping systems for water supply, and for drainage and sewerage under pressure Polyethylene (PE) – Part 3: Fittings

Certificate issued in conformity to: IT-QHSE-REG-02_ENG.TQR Bureau Veritas – Regulation for the certification of product / process / service and IND-REP-49_CP Particular regulation for the certification of plastic fluid conduction systems - Flexible scope.

Original Emission date: 09/03/2022
Current Emission date: 26/04/2023
Expiration date: 28/04/2026

The validity of this certificate is subject to a constant periodical surveillance and it can be checked on the following website: **www.bureauveritas.it** - Further clarifications regarding the scope of this certificate and the applicability of standard's requirements may be obtained by consulting the organisation.

(Fabio Pes - Scheme Technical Manager)

Certificate N°: **559/003**



PRD N° 009B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC mutual Recognition Agreements



Technical Data Sheet
Annex 1/1 to Certificate of Conformity
Bureau Veritas Italia S.p.A.
N° 559/003 of 26/04/2023

Awarded to:

FUSION GROUP LTD

Head office and Operative Site: Smeckley Wood Close – Chesterfield S41 9PZ – United Kingdom

| Raw material | Dimensional groups | SDR | Groups of fittings | Products |
|--------------|--------------------|-----|--------------------|--|
| PE 100 | 1,2,3 | (1) | Α | Electrofusion elbows, degrees 22.5 °-45 °-90 ° |
| PE 100 | 1,2,3 | (1) | Α | Electrofusion tees |
| PE 100 | 1,2,3 | (1) | Α | Electrofusion reducers |
| PE 100 | 1,2,3 | (1) | Α | Electrofusion couplers |
| PE 100 | 2 | (1) | Α | Electrofusion couplers (low pressure) |
| PE 100 | 1,2,3 | (1) | Α | Electrofusion couplers with end caps |
| PE 100 | 1,2,3 | (1) | Α | Electrofusion transition couplers |
| PE 100 | 1,2,3 | (1) | Α | Electrofusion transition elbow 45° - 90° |
| PE 100 | 1,2,3 | (1) | В | Electrofusion tapping tees |
| PE 100 | 1,2,3 | (1) | В | Electrofusion multiseal tapping tees |
| PE 100 | 1,2,3 | (1) | В | Electrofusion flex tee saddles |
| PE 100 | 1,2,3 | (1) | В | Electrofusion branch saddles |
| PE 100 | 1,2,3 | (1) | В | Electrofusion flanged branch saddles |
| PE 100 | 1,2,3 | (1) | В | Electrofusion balloon saddles |
| PE 100 | 1,2,3 | (1) | В | Electrofusion transition saddles |
| PE 100 | 1,2,3 | (1) | В | Electrofusion tapping valve saddles |

(1) All applicable SDR



Certificate of Conformity

Awarded to:

FUSION GROUP LTD

Head Office and Operative Site:

Smeckley Wood Close – Chesterfield S41 9PZ – United Kingdom

Bureau Veritas Italia S.p.A. certifies that the following products:

Fittings in (PE)

| Raw material Dimensiona groups | | SDR | Groups of fittings | Products |
|--------------------------------|--|---------------|-----------------------|----------|
| | | See Annex 1/1 | | |

Brand:

FUSAMATIC

Compound code:

E03 $^{(1)}$, E13 $^{(1)}$, N20 $^{(1)}$, N21 $^{(1)}$,H17 $^{(1)}$

(1)For raw materials details please check www.traccoding.com

Have been evaluated and found in accordance with the requirements of the standard:

EN 1555-3:2021

Plastics piping systems for the supply of gaseous fuels Polyethylene (PE) – Part 3: Fittings

Certificate issued in conformity to: IT-QHSE-REG-02_ENG.TQR Bureau Veritas – Regulation for the certification of product / process / service and IND-REP-49_CP Particular regulation for the certification of plastic fluid conduction systems - Flexible scope.

Original Emission date: 08/11/2010
Current Emission date: 26/04/2023
Expiration date: 28/04/2026

The validity of this certificate is subject to a constant periodical surveillance and it can be checked on the following website: www.bureauveritas.it - Further clarifications regarding the scope of this certificate and the applicability of standard's requirements may be obtained by consulting the organisation.

ACCREDIA T

(Fabio Pes - Scheme Technical Manager)

Certificate N°: **559/002**

PRD N° 009B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC mutual Recognition Agreements



Technical Data Sheet
Annex 1/1 to Certificate of Conformity
Bureau Veritas Italia S.p.A.
N° 559/002 of 26/04/2023

Awarded to:

FUSION GROUP LTD

Head office and Operative Site: Smeckley Wood Close – Chesterfield S41 9PZ – United Kingdom

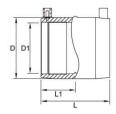
| Raw material | Dimensional groups | SDR | Groups of fittings | Products |
|--------------|--------------------|-----|--------------------|--|
| PE 100 | 1,2,3 | (1) | A | Electrofusion elbows, degrees 22.5 °-45 °-90 ° |
| PE 100 | 1,2,3 | (1) | Α | Electrofusion tees |
| PE 100 | 1,2,3 | (1) | Α | Electrofusion reducers |
| PE 100 | 1,2,3 | (1) | Α | Electrofusion couplers |
| PE 100 | 2 | (1) | Α | Electrofusion couplers (low pressure) |
| PE 100 | 1,2,3 | (1) | Α | Electrofusion couplers with end caps |
| PE 100 | 1,2,3 | (1) | Α | Electrofusion transition couplers |
| PE 100 | 1,2,3 | (1) | Α | Electrofusion transition elbow 45° - 90° |
| PE 100 | 1,2,3 | (1) | В | Electrofusion tapping tees |
| PE 100 | 1,2,3 | (1) | В | Electrofusion multiseal tapping tees |
| PE 100 | 1,2,3 | (1) | В | Electrofusion flex tee saddles |
| PE 100 | 1,2,3 | (1) | В | Electrofusion branch saddles |
| PE 100 | 1,2,3 | (1) | В | Electrofusion flanged branch saddles |
| PE 100 | 1,2,3 | (1) | В | Electrofusion balloon saddles |
| PE 100 | 1,2,3 | (1) | В | Electrofusion transition saddles |
| PE 100 | 1,2,3 | (1) | В | Electrofusion tapping valve saddles |

(1) All applicable SDR









| Ref. | D1 | D | L1 | L | PN |
|-------------|-----|-------|---------------|-----|---------|
| Ker. | mm | mm | mm | mm | bar |
| CBKA20 | 20 | 29 | 3 <i>7</i> .5 | 77 | 10 16 |
| CBKA25 | 25 | 33.5 | 3 <i>7</i> .5 | 77 | 10 16 |
| CBKA32 | 32 | 43 | 3 <i>7</i> .5 | 77 | 10 16 |
| CBKA40 | 40 | 51.5 | 44 | 90 | 10 16 |
| CBKA50 | 50 | 61.5 | 44 | 91 | 10 16 |
| CBKA5025 | 50 | 68 | 49 | 100 | 25 |
| CBKA63 | 63 | 78 | 50 | 102 | 10 16 |
| CBKA6325 | 63 | 82 | 57 | 118 | 25 |
| CBKA75 | 75 | 92.5 | 59.5 | 122 | 10 16 |
| CBKA7525 | 75 | 97 | 62 | 126 | 25 |
| CBKA90 | 90 | 109.5 | 60 | 122 | 10 16 |
| CBKA9025 | 90 | 117 | 73 | 148 | 25 |
| CBKA110 | 110 | 133 | 70 | 144 | 10 16 |
| CBKA 11 025 | 110 | 140 | 80 | 163 | 25 |
| CBKA 125 | 125 | 151 | 75 | 154 | 10 16 |
| CBKA12525 | 125 | 157 | 97 | 173 | 25 |
| CBKA 140 | 140 | 176 | 89 | 181 | 10 16 |
| CBKA 160 | 160 | 195 | 86 | 175 | 10 16 |
| CBKA16025 | 160 | 198 | 97 | 198 | 25 |
| CBKA180 | 180 | 219 | 92 | 187 | 10 16 |
| CBKA18025 | 180 | 224 | 104 | 212 | 25 |
| CBKA200 | 200 | 242 | 92 | 187 | 10 16 |
| CBKA20025 | 200 | 249 | 110 | 223 | 25 |
| CBKA225 | 225 | 270 | 109 | 222 | 10 16 |
| CBKA22525 | 225 | 280 | 118 | 240 | 25 |
| CBKA250 | 250 | 300 | 108 | 222 | 10 16 |
| CBKA25025 | 250 | 310 | 127 | 256 | 25 |
| CBKA280 | 280 | 345 | 130 | 280 | 10 16 |

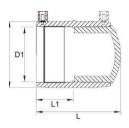
| 2.6 | D1 | D | L1 | L | PN |
|------------|-------|------|-------|-----|---------|
| Ref. | mm | mm | mm | mm | bar |
| CBKA280 | 280 | 341 | 135 | 274 | 25 |
| CBKA315 | 315 | 385 | 130 | 260 | 10 16 |
| CBKA31525 | 315 | 381 | 140 | 284 | 25 |
| CBKA355 | 355 | 432 | 132.5 | 265 | 10 16 |
| CBKA400 | 400 | 486 | 145 | 290 | 10 16 |
| CBKA450 | 450 | 521 | 160 | 320 | 10 |
| CBKA450 | 450 | 560 | 160 | 320 | 16 |
| CBKA500* | 500* | 579 | 180 | 360 | 10 |
| CBKA500* | 500* | 621 | 180 | 360 | 16 |
| CBKA560* | 560* | 639 | 195 | 390 | 10 |
| CBKA560* | 560* | 695 | 195 | 390 | 16 |
| CBKA630* | 630* | 723 | 215 | 430 | 10 |
| CBKA630* | 630* | 780 | 215 | 430 | 16 |
| CBKA710* | 710* | 819 | 237.5 | 475 | 10 |
| CBKA710* | 710* | 882 | 237.5 | 475 | 16 |
| CBKA800* | 800* | 921 | 260 | 520 | 10 |
| CBKA800* | 800* | 993 | 260 | 520 | 16 |
| CBKA900* | 900* | 1035 | 275 | 550 | 10 |
| CBKA900* | 900* | 1115 | 275 | 550 | 16 |
| CBKA1000* | 1000* | 1149 | 300 | 600 | 10 |
| CBKA1000* | 1000* | 1238 | 300 | 600 | 16 |
| CBKA1100* | 1100* | 1296 | 310 | 620 | 10 |
| CBKA1100* | 1100* | 1385 | 310 | 520 | 16 |
| CBKA 1200* | 1200* | 1376 | 325 | 650 | 10 |
| CBKA 1200* | 1200* | 1483 | 325 | 650 | 16 |
| CBKA1400* | 1400* | 1603 | 275 | 550 | 10 |

^{*} As uniões de diâmetro superior a 500mm requerem dois cidos de eletrosoldadura (disparo duplo), um para cada extremidade do encaixe.

^{*} Couplers greater than 500mm in diameter require two electrofusion cycles (dual shot), one for each end of the fitting.







| D (| D1 | D | L1 | L | PN |
|-----------|------|------|------|-----|---------|
| Ref. | mm | mm | mm | mm | bar |
| ECBKA20 | 20 | 29 | 37.5 | 82 | 10 16 |
| ECBKA25 | 25 | 33.5 | 37.5 | 82 | 10 16 |
| ECBKA32 | 32 | 43 | 37.5 | 84 | 10 16 |
| ECBKA40 | 40 | 51.5 | 44 | 97 | 10 16 |
| ECBKA50 | 50 | 61.5 | 44 | 101 | 10 16 |
| ECBKA63 | 63 | 77 | 49 | 115 | 10 16 |
| ECBKA75 | 75 | 92 | 59 | 133 | 10 16 |
| ECBKA90 | 90 | 110 | 60 | 138 | 10 16 |
| ECBKA110 | 110 | 133 | 70 | 164 | 10 16 |
| ECBKA125 | 125 | 151 | 75 | 175 | 10 16 |
| ECBKA140 | 140 | 172 | 79 | 236 | 10 16 |
| ECBKA160 | 160 | 195 | 86 | 202 | 10 16 |
| ECBKA180 | 180 | 220 | 91 | 214 | 10 16 |
| ECBKA200 | 200 | 243 | 92 | 215 | 10 16 |
| ECBKA225 | 225 | 270 | 109 | 222 | 10 16 |
| ECBKA250 | 250 | 295 | 108 | 220 | 10 16 |
| ECBKA280 | 280 | 340 | 134 | 396 | 10 16 |
| ECBKA315 | 315 | 387 | 184 | 405 | 10 16 |
| ECBKA355* | 355* | 443 | 140 | 515 | 10 16 |
| ECBKA400* | 400* | 499 | 148 | 355 | 10 16 |
| ECBKA450* | 450* | 560 | 155 | 380 | 10 16 |
| ECBKA500* | 500* | 621 | 158 | 390 | 10 16 |
| ECBKA560* | 560* | 695 | 168 | 420 | 10 16 |
| ECBKA630* | 630* | 780 | 185 | 475 | 10 16 |

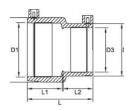
| Ref. | D1 | D | L1 | L | PN |
|------------|-------|------|-----|-------------|---------|
| ker. | mm | mm | mm | mm | bar |
| ECBKA710* | 710* | 882 | 200 | 520 | 10 16 |
| ECBKA800* | 800* | 993 | 210 | 555 | 10 16 |
| ECBKA900* | 900* | 1035 | 205 | 535 | 10 |
| ECBKA1000* | 1000* | 1149 | 220 | 580 | 10 |
| ECBKA1200* | 1200* | 1376 | 238 | <i>7</i> 90 | 10 |

 $^{^{*}}$ Fornecimento composto por acessório topo a topo acoplado com união eletrosoldável

^{*} Spigot fitting with electrofusion coupler supplied.







| MAIERIAL | : PE 100 | | | | | | | |
|---------------|----------|-------------|-----|-----|--------------|------------|----|---------|
| Ref. | D1 | D | D2 | D3 | L | L1 | L2 | PN |
| кет. | mm | mm | mm | mm | mm | mm | mm | bar |
| RBKA20X16 | 20 | 36 | 36 | 16 | 71 | 35 | 36 | 10 16 |
| RBKA25X20 | 25 | 34 | 29 | 20 | 77 | 39 | 37 | 10 16 |
| RBKA32X20 | 32 | 43 | 29 | 20 | 77 | 39 | 37 | 10 16 |
| RBKA32X25 | 32 | 43 | 34 | 25 | 77 | 39 | 37 | 10 16 |
| RBKA40X32 | 40 | 52 | 44 | 32 | 91 | 46 | 43 | 10 16 |
| RBKA50X32 | 50 | 62 | 44 | 32 | 91 | 47 | 41 | 10 16 |
| RBKA50X40 | 50 | 62 | 52 | 40 | 91 | 46 | 43 | 10 16 |
| RBKA63X32 | 63 | 78 | 44 | 32 | 102 | 52 | 44 | 10 16 |
| RBKA63X40 | 63 | <i>7</i> 8 | 52 | 40 | 102 | 52 | 45 | 10 16 |
| RBKA63X50 | 63 | <i>7</i> 8 | 62 | 50 | 102 | 52 | 48 | 10 16 |
| RBKA75X63 | 75 | 98 | 82 | 63 | 126 | 61 | 57 | 10 16 |
| RBKA90X50 | 90 | 116 | 69 | 50 | 143 | <i>7</i> 1 | 49 | 10 16 |
| RBKA90X63 | 90 | 110 | 79 | 63 | 123 | 61 | 55 | 10 16 |
| RBKA90X75 | 90 | 116 | 98 | 75 | 143 | <i>7</i> 1 | 61 | 10 16 |
| RBKA 110X63 | 110 | 140 | 98 | 63 | 137 | <i>7</i> 5 | 54 | 10 16 |
| RBKA 110X90 | 110 | 134 | 112 | 90 | 137 | 68 | 62 | 10 16 |
| RBKA 125X90 | 125 | 152 | 112 | 90 | 145 | 75 | 63 | 10 16 |
| RBKA 125X 110 | 125 | 158 | 141 | 110 | 1 <i>7</i> 1 | 85 | 78 | 10 16 |
| RBKA 160X90 | 160 | 18 <i>7</i> | 116 | 90 | 1 <i>7</i> 5 | 92 | 68 | 10 16 |
| RBKA 160X 110 | 160 | 200 | 140 | 110 | 184 | 89 | 73 | 10 16 |
| RBKA 160X 125 | 160 | 199 | 158 | 125 | 195 | 94 | 85 | 10 16 |
| RBKA 180X 125 | 180 | 216 | 157 | 125 | 221 | 101 | 83 | 10 16 |

Diâmetros de 200 - 1400 mm disponíveis como artigo composto (acessório topo a topo + uniões eletrosoldáveis).

Diameters from 200 - 1400 mm available as a kit (spigot fittings + electrofusion couplers)









MATERIAL: PE 100

| Ref | D1 | D | L1 | L |
|--------------|-----|-----|------------|-----|
| Kei | mm | mm | mm | mm |
| EBKA90X225 | 90 | 113 | 72 | 214 |
| EBKA110X225 | 110 | 143 | <i>7</i> 1 | 232 |
| EBKA 125X225 | 125 | 165 | 86 | 274 |
| EBKA160X225 | 160 | 209 | 86 | 302 |
| EBKA 180X225 | 180 | 244 | 105 | 391 |

Diâmetros de 200 - 1400 mm disponíveis como artigo composto (acessório topo a topo + uniões eletrosoldáveis).

Diameters from 200 - 1400 mm available as a kit (spigot fittings + electrofusion couplers)





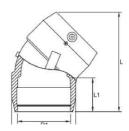
Os sistemas de polietileno são 100% recicláveis mesmo após cumprimento do tempo de serviço que se estima ser de 100 anos.

The polyethilene systems are 100% recycable even after its lifetime that is estimated to be 100 years.









| Ref. | D1 | D | L1 | L | PN |
|-------------|-----|------|------|-------------|---------|
| rei. | mm | mm | mm | mm | bar |
| EBKA32X45 | 32 | 44 | 40 | 99 | 10 16 |
| EBKA40X45 | 40 | 53 | 41.5 | 108 | 10 16 |
| EBKA50X45 | 50 | 63 | 44.5 | 124 | 10 16 |
| EBKA63X45 | 63 | 78.5 | 50 | 137 | 10 16 |
| EBKA75X45 | 75 | 94 | 53 | 153 | 10 16 |
| EBKA90X45 | 90 | 117 | 60 | 1 <i>77</i> | 10 16 |
| EBKA 110X45 | 110 | 137 | 75 | 213 | 10 16 |
| EBKA 125X45 | 125 | 154 | 79 | 240 | 10 16 |
| EBKA160X45 | 160 | 201 | 89 | 283 | 10 16 |
| EBKA180X45 | 180 | 222 | 90 | 299 | 10 16 |
| EBKA200X45 | 200 | 200 | 112 | 472 | 10 16 |
| EBKA225X45 | 225 | 225 | 120 | 520 | 10 16 |
| EBKA250X45 | 250 | 250 | 129 | 571 | 10 16 |

Diâmetros de 315 - 1400mm disponíveis como artigo composto [acessório topo a topo injetado (315-630mm) / segmentado (315-1400mm) + uniões eletrosoldáveis].

Diameters from 315 - 1400mm available as a kit [spigot fittings injected (315-630mm) / fabricated (315-1400mm)+ electrofusion couplers].













| Ref. | D1 | D | L | L1 | L2 | PN |
|-------------|-----|-----|-----|-----|-----|---------|
| Ket. | mm | mm | mm | mm | mm | bar |
| EBKA20X90 | 20 | 30 | 77 | 40 | 62 | 10 16 |
| EBKA25X90 | 25 | 35 | 76 | 41 | 60 | 10 16 |
| EBKA32X90 | 32 | 44 | 84 | 40 | 62 | 10 16 |
| EBKA40X90 | 40 | 52 | 91 | 42 | 65 | 10 16 |
| EBKA50X90 | 50 | 63 | 103 | 45 | 72 | 10 16 |
| EBKA63X90 | 63 | 81 | 123 | 50 | 84 | 10 16 |
| EBKA75X90 | 75 | 95 | 141 | 53 | 92 | 10 16 |
| EBKA90X90 | 90 | 113 | 165 | 60 | 109 | 10 16 |
| EBKA 110X90 | 110 | 137 | 204 | 73 | 135 | 10 16 |
| EBKA 125X90 | 125 | 154 | 228 | 78 | 152 | 10 16 |
| EBKA160X90 | 160 | 201 | 305 | 87 | 205 | 10 16 |
| EBKA180X90 | 180 | 222 | 308 | 90 | 197 | 10 16 |
| EBKA200X90 | 200 | 262 | 449 | 112 | 213 | 10 16 |
| EBKA225X90 | 225 | 295 | 498 | 121 | 239 | 10 16 |
| EBKA250X90 | 250 | 327 | 550 | 130 | 257 | 10 16 |

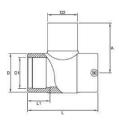
Diâmetros de 315 - 1400mm disponíveis como artigo composto [acessório topo a topo injetado (315-630mm) / segmentado (315-1400mm) + uniões eletrosoldáveis].

Diameters from 315 - 1400mm available as a kit [spigot fittings injected (315-630mm) / fabricated (315-1400mm)+ electrofusion couplers].









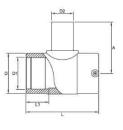




MATERIAL: PE 100

| D (| D1 | D | D2 | L | L1 | Α | PN |
|-----------|-----|-----|-----|--------------|-----|-------------|---------|
| Ref. | mm | mm | mm | mm | mm | mm | bar |
| ETBKA20 | 20 | 30 | 20 | 98 | 30 | 86 | 10 16 |
| ETBKA25 | 25 | 35 | 25 | 98 | 30 | 88,5 | 10 16 |
| ETBKA32 | 32 | 44 | 32 | 98 | 30 | 93 | 10 16 |
| ETBKA40 | 40 | 52 | 40 | 131 | 44 | 91 | 10 16 |
| ETBKA50 | 50 | 63 | 50 | 141 | 43 | 104 | 10 16 |
| ETBKA63 | 63 | 82 | 63 | 156 | 50 | 114 | 10 16 |
| ETBKA75 | 75 | 100 | 75 | 1 <i>7</i> 4 | 55 | 134 | 10 16 |
| ETBKA90 | 90 | 115 | 90 | 206 | 64 | 143 | 10 16 |
| ETBKA110 | 110 | 139 | 110 | 239 | 73 | 15 <i>7</i> | 10 16 |
| ETBKA125 | 125 | 156 | 125 | 264 | 80 | 182 | 10 16 |
| ETBKA 160 | 160 | 200 | 160 | 313 | 89 | 211 | 10 16 |
| ETBKA180 | 180 | 222 | 180 | 334 | 90 | 232 | 10 16 |
| ETBKA200 | 200 | 242 | 200 | 451 | 90 | 260 | 10 16 |
| ETBKA225 | 225 | 271 | 225 | 494 | 105 | 285 | 10 16 |
| ETBKA250 | 250 | 303 | 250 | 538 | 105 | 314 | 10 16 |





OPÇÃO SAÍDA FLANGEADA FLANGED OUTLET



MATERIAL: PE 100

| D (| D1 | D2 | D | L | L1 | Α | PN |
|--------------|-----|----|-----|-----|----|-----|---------|
| Ref. | mm | mm | mm | mm | mm | mm | bar |
| RTBKA20X32 | 20 | 32 | 44 | 98 | 35 | 78 | 10 16 |
| RTBKA25X20 | 25 | 20 | 44 | 104 | 39 | 66 | 10 16 |
| RTBKA25X32 | 25 | 32 | 44 | 98 | 35 | 78 | 10 16 |
| RTBKA32X20 | 32 | 20 | 44 | 104 | 39 | 66 | 10 16 |
| RTBKA32X25 | 32 | 25 | 44 | 104 | 39 | 66 | 10 16 |
| RTBKA40X20 | 40 | 20 | 56 | 120 | 43 | 72 | 10 16 |
| RTBKA40X25 | 40 | 25 | 56 | 120 | 43 | 72 | 10 16 |
| RTBKA40X32 | 40 | 32 | 56 | 120 | 43 | 75 | 10 16 |
| RTBKA50X20 | 50 | 20 | 68 | 139 | 48 | 78 | 10 16 |
| RTBKA50X25 | 50 | 25 | 68 | 139 | 48 | 78 | 10 16 |
| RTBKA50X32 | 50 | 32 | 68 | 139 | 48 | 86 | 10 16 |
| RTBKA50X40 | 50 | 40 | 67 | 144 | 49 | 101 | 10 16 |
| RTBKA63X20 | 63 | 20 | 82 | 167 | 49 | 85 | 10 16 |
| RTBKA63X32 | 63 | 20 | 82 | 167 | 58 | 93 | 10 16 |
| RTBKA63X40 | 63 | 40 | 81 | 154 | 34 | 108 | 10 16 |
| RTBKA63X50 | 63 | 50 | 83 | 157 | 51 | 118 | 10 16 |
| RTBKA75X63 | 75 | 63 | 96 | 196 | 63 | 122 | 10 16 |
| RTBKA90X63 | 90 | 63 | 116 | 206 | 63 | 138 | 10 16 |
| RTBKA 110X63 | 110 | 63 | 142 | 239 | 73 | 147 | 10 16 |
| RTBKA110X90 | 110 | 90 | 139 | 239 | 73 | 162 | 10 16 |





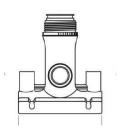
| Ref. | D1 | D2 | D | L | L1 | Α | PN |
|--------------|-----|-----|-----|-----|------------|-----|---------|
| Ket. | mm | mm | mm | mm | mm | mm | bar |
| RTBKA125X63 | 125 | 63 | 157 | 266 | 79 | 500 | 10 16 |
| RTBKA125X90 | 125 | 90 | 156 | 264 | 80 | 196 | 10 16 |
| RTBKA125X110 | 125 | 110 | 156 | 262 | <i>7</i> 6 | 359 | 10 16 |
| RTBKA160X63 | 160 | 63 | 210 | 365 | 112 | 385 | 10 16 |
| RTBKA160X90 | 160 | 90 | 210 | 365 | 112 | 385 | 10 16 |
| RTBKA160X110 | 160 | 110 | 200 | 313 | 89 | 202 | 10 16 |
| RTBKA160X125 | 160 | 125 | 213 | 365 | 112 | 410 | 10 16 |
| RTBKA 180X90 | 180 | 90 | 245 | 422 | 106 | 200 | 10 16 |
| RTBKA180X110 | 180 | 110 | 245 | 422 | 106 | 219 | 10 16 |
| RTBKA180X125 | 180 | 125 | 222 | 330 | 90 | 222 | 10 16 |
| RTBKA180X140 | 180 | 140 | 245 | 422 | 106 | 237 | 10 16 |
| RTBKA180X160 | 180 | 160 | 245 | 422 | 106 | 250 | 10 16 |
| RTBKA200X90 | 200 | 90 | 261 | 451 | 114 | 205 | 10 16 |
| RTBKA200X110 | 200 | 110 | 261 | 451 | 114 | 210 | 10 16 |
| RTBKA225X90 | 225 | 90 | 293 | 494 | 122 | 220 | 10 16 |
| RTBKA225X110 | 225 | 110 | 293 | 494 | 122 | 225 | 10 16 |
| RTBKA250X90 | 250 | 90 | 326 | 538 | 129 | 250 | 10 16 |
| RTBKA250X110 | 250 | 110 | 326 | 538 | 129 | 240 | 10 16 |

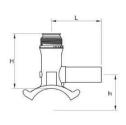
Diâmetros de 315 - 1400mm disponíveis como artigo composto [acessório topo a topo injetado (315-630mm) / segmentado (315-1400mm) + uniões eletrosoldáveis].

Diameters from 315 - 1400mm available as a kit [spigot fittings injected (315-630mm) / fabricated (315-1400mm)+ eletrofusion couplers].









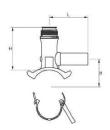
| Ref. | D | L | Н | h | W | PN |
|-------------|----------|-----|-------------|-----|-----|---------|
| Ker. | mm | mm | mm | mm | mm | bar |
| MTBKA63X20 | 63 x 20 | 105 | 119 | 62 | 120 | 10 16 |
| MTBKA63X25 | 63 x 25 | 105 | 119 | 62 | 120 | 10 16 |
| MTBKA63X32 | 63 x 32 | 105 | 119 | 62 | 120 | 10 16 |
| MTBKA75X20 | 75 x 20 | 105 | 110 | 77 | 120 | 10 16 |
| MTBKA75X25 | 75 x 25 | 105 | 110 | 77 | 120 | 10 16 |
| MTBKA75X32 | 75 x 32 | 105 | 110 | 77 | 120 | 10 16 |
| MTBKA90X20 | 90 x 20 | 105 | 110 | 77 | 120 | 10 16 |
| MTBKA90X25 | 90 x 25 | 105 | 110 | 77 | 120 | 10 16 |
| MTBKA90X32 | 90 x 32 | 105 | 110 | 77 | 120 | 10 16 |
| MTBKA110X20 | 110 x 20 | 105 | 117 | 87 | 120 | 10 16 |
| MTBKA110X25 | 110 x 25 | 105 | 117 | 87 | 120 | 10 16 |
| MTBKA110X32 | 110 x 32 | 105 | 117 | 87 | 120 | 10 16 |
| MTBKA125X20 | 125 x 20 | 105 | 11 <i>7</i> | 95 | 120 | 10 16 |
| MTBKA125X25 | 125 x 25 | 105 | 117 | 95 | 120 | 10 16 |
| MTBKA125X32 | 125 x 32 | 105 | 117 | 95 | 120 | 10 16 |
| MTBKA160X20 | 160 x 20 | 105 | 122 | 112 | 120 | 10 16 |
| MTBKA160X25 | 160 x 25 | 105 | 122 | 112 | 120 | 10 16 |
| MTBKA160X32 | 160 x 32 | 105 | 122 | 112 | 120 | 10 16 |
| MTBKA180X20 | 180 x 20 | 105 | 122 | 122 | 120 | 10 16 |
| MTBKA180X25 | 180 x 25 | 105 | 122 | 122 | 120 | 10 16 |
| MTBKA180X32 | 180 x 32 | 105 | 122 | 122 | 120 | 10 16 |
| MTBKA200X20 | 200 x 20 | 105 | 122 | 132 | 120 | 10 16 |
| MTBKA200X25 | 200 x 25 | 105 | 122 | 132 | 120 | 10 16 |
| MTBKA200X32 | 200 x 32 | 105 | 122 | 132 | 120 | 10 16 |
| MTBKA225X20 | 225 x 20 | 105 | 122 | 145 | 120 | 10 16 |
| MTBKA225X25 | 225 x 25 | 105 | 122 | 145 | 120 | 10 16 |

| Ref. | D | L | Н | h | W | PN |
|-------------------|--------------|-----|-----|-----------|-----|---------|
| ker. | mm | mm | mm | mm | mm | bar |
| MTBKA225X32 | 225 x 32 | 105 | 122 | 145 | 120 | 10 16 |
| MTBKA250X20 | 250 x 20 | 105 | 122 | 158 | 120 | 10 16 |
| MTBKA250X25 | 250 x 25 | 105 | 122 | 158 | 120 | 10 16 |
| MTBKA250X32 | 250 x 32 | 105 | 122 | 158 | 120 | 10 16 |
| MTBKA280X20 | 280 x 20 | 105 | 122 | 176 | 120 | 10 16 |
| MTBKA280X25 | 280 x 25 | 105 | 122 | 176 | 120 | 10 16 |
| MTBKA280X32 | 280 x 32 | 105 | 122 | 176 | 120 | 10 16 |
| MTBKA315X20 | 315 x 20 | 105 | 122 | 194 | 120 | 10 16 |
| MTBKA315X25 | 315 x 25 | 105 | 122 | 194 | 120 | 10 16 |
| MTBKA315X32 | 315 x 32 | 105 | 122 | 194 | 120 | 10 16 |
| MTBKA355X20 | 355 x 20 | 105 | 122 | 214 | 120 | 10 16 |
| MTBKA355X25 | 355 x 25 | 105 | 122 | 214 | 120 | 10 16 |
| MTBKA355X32 | 355 x 32 | 105 | 122 | 214 | 120 | 10 16 |
| MTBKA250X63 | 250 x 63 | 165 | 183 | 182 | 120 | 10 16 |
| MTBKA280X63 | 280 x 63 | 165 | 184 | 196 | 120 | 10 16 |
| MTBKA315X63 | 315 x 63 | 165 | 187 | 217 | 120 | 10 16 |
| MTBKA355X63 | 355 x 63 | 165 | 187 | 238 | 120 | 10 16 |
| MTBKA400/450 x 63 | 400/450 x 63 | 165 | 185 | 258 / 283 | 120 | 10 16 |

Acessório com saída a 40 e 50 mm disponíveis sob pedido 40 and 50 mm Outlet available upon request





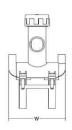


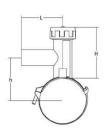
MATERIAL: PE 100

| D (| D | L | Н | h | W | PN |
|-------------|----------|-----|-------------|-----|-----|---------|
| Ref. | mm | mm | mm | mm | mm | bar |
| MTBKA40X20 | 40 x 20 | 105 | 110 | 50 | 120 | 10 16 |
| MTBKA40X25 | 40 x 25 | 105 | 110 | 50 | 120 | 10 16 |
| MTBKA40X32 | 40 x 32 | 105 | 110 | 50 | 120 | 10 16 |
| MTBKA50X20 | 50 x 20 | 105 | 110 | 50 | 120 | 10 16 |
| MTBKA50X25 | 50 x 25 | 105 | 110 | 50 | 120 | 10 16 |
| MTBKA50X32 | 50 x 32 | 105 | 110 | 50 | 120 | 10 16 |
| MTBKA63X20 | 63 x 20 | 105 | 119 | 62 | 120 | 10 16 |
| MTBKA63X25 | 63 x 25 | 105 | 119 | 62 | 120 | 10 16 |
| MTBKA63X32 | 63 x 32 | 105 | 119 | 62 | 120 | 10 16 |
| MTBKA63X40 | 63 x 40 | 165 | 155 | 60 | 146 | 10 16 |
| MTBKA63X50 | 63 x 50 | 165 | 155 | 60 | 146 | 10 16 |
| MTBKA63X63 | 63 × 63 | 165 | 155 | 60 | 146 | 10 16 |
| MTBKA75X20 | 75 x 20 | 105 | 110 | 77 | 120 | 10 16 |
| MTBKA75X25 | 75 x 25 | 105 | 110 | 77 | 120 | 10 16 |
| MTBKA75X32 | 75 x 32 | 105 | 110 | 77 | 120 | 10 16 |
| MTBKA75X40 | 75 x 40 | 165 | 152 | 57 | 146 | 10 16 |
| MTBKA75X50 | 75 x 50 | 165 | 152 | 57 | 146 | 10 16 |
| MTBKA75X63 | 75 x 63 | 165 | 152 | 57 | 146 | 10 16 |
| MTBKA90X20 | 90 x 20 | 105 | 110 | 77 | 120 | 10 16 |
| MTBKA90X25 | 90 x 25 | 105 | 110 | 77 | 120 | 10 16 |
| MTBKA90X32 | 90 x 32 | 105 | 110 | 77 | 120 | 10 16 |
| MTBKA90X40 | 90 x 40 | 165 | 152 | 57 | 146 | 10 16 |
| MTBKA90X50 | 90 x 50 | 165 | 152 | 57 | 146 | 10 16 |
| MTBKA90X63 | 90 x 63 | 165 | 152 | 57 | 146 | 10 16 |
| MTBKA110X20 | 110 x 20 | 105 | 11 <i>7</i> | 87 | 120 | 10 16 |
| MTBKA110X25 | 110 x 25 | 105 | 117 | 87 | 120 | 10 16 |
| MTBKA110X32 | 110 x 32 | 105 | 11 <i>7</i> | 87 | 120 | 10 16 |
| MTBKA110X40 | 110 x 40 | 165 | 176 | 105 | 146 | 10 16 |
| MTBKA110X50 | 110 x 50 | 165 | 176 | 105 | 146 | 10 16 |

| MTBKA110X63 | 110 x 63 | 165 | 176 | 105 | 146 | 10 16 |
|-------------|----------|--------------|-------------|-------------|-----|---------|
| MTBKA125X20 | 125 x 20 | 105 | 117 | 95 | 120 | 10 16 |
| MTBKA125X25 | 125 x 25 | 105 | 117 | 95 | 120 | 10 16 |
| MTBKA125X32 | 125 x 32 | 105 | 117 | 95 | 120 | 10 16 |
| MTBKA125X40 | 125 x 40 | 165 | 178 | 112 | 146 | 10 16 |
| MTBKA125X50 | 125 x 50 | 165 | 178 | 112 | 146 | 10 16 |
| MTBKA125X63 | 125 x 63 | 165 | 178 | 112 | 146 | 10 16 |
| MTBKA140X32 | 140 x 32 | 132 | 1 <i>77</i> | 126 | 120 | 10 16 |
| MTBKA140X40 | 140 x 40 | 142 | 1 <i>77</i> | 130 | 146 | 10 16 |
| MTBKA140X50 | 140 x 50 | 123 | 177 | 134 | 146 | 10 16 |
| MTBKA140X63 | 140 x 63 | 1 <i>7</i> 5 | 1 <i>77</i> | 134 | 146 | 10 16 |
| MTBKA160X20 | 160 x 20 | 105 | 122 | 112 | 120 | 10 16 |
| MTBKA160X25 | 160 x 25 | 105 | 122 | 112 | 120 | 10 16 |
| MTBKA160X32 | 160 x 32 | 105 | 122 | 112 | 120 | 10 16 |
| MTBKA160X40 | 160 x 40 | 165 | 182 | 137 | 146 | 10 16 |
| MTBKA160X50 | 160 x 50 | 165 | 182 | 137 | 146 | 10 16 |
| MTBKA160X63 | 160 x 63 | 165 | 182 | 137 | 146 | 10 16 |
| MTBKA180X20 | 180 x 20 | 105 | 122 | 122 | 120 | 10 16 |
| MTBKA180X25 | 180 x 25 | 105 | 122 | 122 | 120 | 10 16 |
| MTBKA180X32 | 180 x 32 | 105 | 122 | 122 | 120 | 10 16 |
| MTBKA180X40 | 180 x 40 | 165 | 183 | 147 | 146 | 10 16 |
| MTBKA180X50 | 180 x 50 | 165 | 183 | 147 | 146 | 10 16 |
| MTBKA180X63 | 180 x 63 | 165 | 183 | 147 | 146 | 10 16 |
| MTBKA200X20 | 200 x 20 | 105 | 122 | 132 | 120 | 10 16 |
| MTBKA200X25 | 200 x 25 | 105 | 122 | 132 | 120 | 10 16 |
| MTBKA200X32 | 200 x 32 | 105 | 122 | 132 | 120 | 10 16 |
| MTBKA200X40 | 200 x 40 | 165 | 183 | 157 | 146 | 10 16 |
| MTBKA200X50 | 200 x 50 | 165 | 183 | 15 <i>7</i> | 146 | 10 16 |
| MTBKA200X63 | 200 x 63 | 165 | 183 | 157 | 146 | 10 16 |
| MTBKA225X20 | 225 x 20 | 105 | 122 | 145 | 120 | 10 16 |
| MTBKA225X25 | 225 x 25 | 105 | 122 | 145 | 120 | 10 16 |
| MTBKA225X32 | 225 x 32 | 105 | 122 | 145 | 120 | 10 16 |
| MTBKA225X40 | 225 x 40 | 165 | 183 | 169 | 146 | 10 16 |
| MTBKA225X50 | 225 x 50 | 165 | 183 | 169 | 146 | 10 16 |
| MTBKA225X63 | 225 x 63 | 165 | 183 | 169 | 146 | 10 16 |
| MTBKA250X20 | 250 x 20 | 125 | 1 <i>77</i> | 175 | 120 | 10 16 |
| MTBKA250X32 | 250 × 32 | 132 | 1 <i>77</i> | 181 | 120 | 10 16 |
| MTBKA250X40 | 250 x 40 | 142 | 1 <i>77</i> | 185 | 146 | 10 16 |
| MTBKA250X50 | 250 × 50 | 123 | 1 <i>77</i> | 189 | 146 | 10 16 |
| MTBKA250X63 | 250 x 63 | 1 <i>7</i> 5 | 1 <i>77</i> | 189 | 146 | 10 16 |
| | | | | | | |

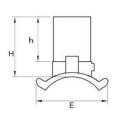


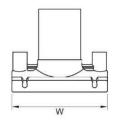




| D. (| D | L | Н | h | W | PN |
|---------------|----------|----|-----|------|-----|---------|
| Ref. | mm | mm | mm | mm | mm | bar |
| FLTBKA40X20 | 40 x 20 | 83 | 100 | 45.5 | 112 | 10 16 |
| FLTBKA40X25 | 40 x 25 | 83 | 100 | 45.5 | 112 | 10 16 |
| FLTBKA40X32 | 40 x 32 | 83 | 100 | 45.5 | 112 | 10 16 |
| FLTBKA50X20 | 50 x 20 | 83 | 100 | 51.5 | 112 | 10 16 |
| FLTBKA50X25 | 50 x 25 | 83 | 100 | 51.5 | 112 | 10 16 |
| FLTBKA50X32 | 50 x 32 | 83 | 100 | 51.5 | 112 | 10 16 |
| FLTBKA63X20 | 63 x 20 | 82 | 100 | 59.5 | 119 | 10 16 |
| FLTBKA63X25 | 63 x 25 | 82 | 100 | 59.5 | 119 | 10 16 |
| FLTBKA63X32 | 63 x 32 | 82 | 100 | 59.5 | 119 | 10 16 |
| FLTBKA75X20 | 75 x 20 | 82 | 100 | 65.5 | 119 | 10 16 |
| FLTBKA75X25 | 75 x 25 | 82 | 100 | 65.5 | 119 | 10 16 |
| FLTBKA75X32 | 75 x 32 | 82 | 100 | 65.5 | 119 | 10 16 |
| FLTBKA90X20 | 90 x 20 | 82 | 100 | 73 | 119 | 10 16 |
| FLTBKA90X25 | 90 x 25 | 82 | 100 | 73 | 119 | 10 16 |
| FLTBKA90X32 | 90 x 32 | 82 | 100 | 73 | 119 | 10 16 |
| FLTBKA 110X20 | 110 x 20 | 92 | 100 | 83 | 119 | 10 16 |
| FLTBKA 110X25 | 110 x 25 | 92 | 100 | 83 | 119 | 10 16 |
| FLTBKA110X32 | 110 x 32 | 92 | 100 | 83 | 119 | 10 16 |
| FLTBKA 125X20 | 125 x 20 | 92 | 100 | 90.5 | 119 | 10 16 |
| FLTBKA 125X25 | 125 x 25 | 92 | 100 | 90.5 | 119 | 10 16 |
| FLTBKA 125X32 | 125 x 32 | 92 | 100 | 90.5 | 119 | 10 16 |
| FLTBKA 160X20 | 160 x 20 | 92 | 100 | 108 | 119 | 10 16 |
| FLTBK160X25 | 160 x 25 | 92 | 100 | 108 | 119 | 10 16 |
| FLTBKA 160X32 | 160 x 32 | 92 | 100 | 108 | 119 | 10 16 |
| FLTBKA 180X20 | 180 x 20 | 92 | 100 | 118 | 119 | 10 16 |
| FLTBKA 180X25 | 180 x 25 | 92 | 100 | 118 | 119 | 10 16 |
| FLTBKA 180X32 | 180 x 32 | 92 | 100 | 118 | 119 | 10 16 |



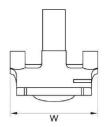


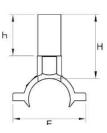


| Ref. | D | Н | h | W | Е | PN |
|----------------|--------------|-----|----|-----|-----|---------|
| Ker. | mm | mm | mm | mm | mm | bar |
| BBKA250X63 | 250 x 63 | 125 | 75 | 146 | 122 | 10 16 |
| BBKA280X63 | 280 x 63 | 140 | 75 | 146 | 122 | 10 16 |
| BBKA315X63 | 315 x 63 | 140 | 75 | 146 | 122 | 10 16 |
| BBKA355X63 | 355 x 63 | 140 | 75 | 146 | 122 | 10 16 |
| BBKA400/450X63 | 400/450 x 63 | 146 | 72 | 146 | 152 | 10 16 |





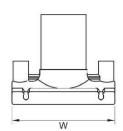


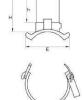


MATERIAL: PE 100

| p-t | D | Н | h | W | PN |
|-----------|---------|-----|----|-----|---------|
| Ref. | mm | mm | mm | mm | bar |
| BBKA40X20 | 40 x 20 | 93 | 51 | 103 | 10 16 |
| BBKA40X25 | 40 x 25 | 90 | 52 | 103 | 10 16 |
| BBKA40X32 | 40 x 32 | 90 | 57 | 103 | 10 16 |
| BBKA63X20 | 63 x 20 | 90 | 50 | 122 | 10 16 |
| BBKA63X25 | 63 x 25 | 106 | 59 | 122 | 10 16 |
| BBKA63X32 | 63 x 32 | 106 | 59 | 122 | 10 16 |
| BBKA90X20 | 90 x 20 | 91 | 51 | 136 | 10 16 |
| BBKA90X25 | 90 x 25 | 91 | 51 | 136 | 10 16 |
| BBKA90X32 | 90 x 32 | 91 | 51 | 136 | 10 16 |
| BBKA90X40 | 90 x 40 | 105 | 69 | 136 | 10 16 |
| BBKA90X50 | 90 x 50 | 105 | 82 | 136 | 10 16 |
| BBKA90X63 | 90 x 63 | 105 | 88 | 136 | 10 16 |



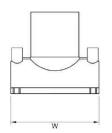


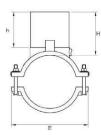


| BBKA63X40 | 63 x 40 | 115 | <i>7</i> 5 | 147 | 10 16 |
|-----------|---------|-----|------------|-----|---------|
| BBKA63X50 | 63 × 50 | 115 | 75 | 147 | 10 16 |
| BBKA63X63 | 63 x 63 | 115 | 75 | 147 | 10 16 |
| BBKA75X40 | 75 x 40 | 115 | 75 | 147 | 10 16 |
| BBKA75X50 | 75 x 50 | 115 | 75 | 147 | 10 16 |
| BBKA75X63 | 75 x 63 | 115 | 75 | 147 | 10 16 |
| BBKA90X40 | 90 x 40 | 115 | 75 | 147 | 10 16 |
| BBKA90X50 | 90 x 50 | 115 | 75 | 147 | 10 16 |

| BBKA90X63 | 90 x 63 | 115 | 75 | 147 | 10 16 |
|------------|----------|-----|----|-----|---------|
| BBKA110X50 | 110 x 40 | 118 | 75 | 147 | 10 16 |
| BBKA110X41 | 110 x 50 | 118 | 75 | 147 | 10 16 |
| BBKA110X63 | 110 x 63 | 118 | 75 | 147 | 10 16 |
| BBKA125X40 | 125 x 40 | 118 | 75 | 147 | 10 16 |
| BBKA125X50 | 125 x 50 | 118 | 75 | 147 | 10 16 |
| BBKA125X63 | 125 x 63 | 118 | 75 | 147 | 10 16 |
| BBKA160X40 | 160 x 40 | 125 | 75 | 147 | 10 16 |
| BBKA160X50 | 160 x 50 | 125 | 75 | 147 | 10 16 |
| BBKA160X63 | 160 x 63 | 125 | 75 | 147 | 10 16 |
| BBKA180X40 | 180 x 40 | 125 | 75 | 147 | 10 16 |
| BBKA180X50 | 180 x 50 | 125 | 75 | 147 | 10 16 |
| BBKA180X63 | 180 x 63 | 125 | 75 | 147 | 10 16 |
| BBKA200X40 | 200 x 40 | 125 | 75 | 147 | 10 16 |
| BBKA200X50 | 200 x 50 | 125 | 75 | 147 | 10 16 |
| BBKA200X63 | 200 x 63 | 125 | 75 | 147 | 10 16 |
| BBKA225X40 | 225 x 40 | 125 | 75 | 147 | 10 16 |
| BBKA225X50 | 225 x 50 | 125 | 75 | 147 | 10 16 |
| BBKA225X63 | 225 x 63 | 125 | 75 | 147 | 10 16 |







| BBKA90X90 | 90 x 90 | 124 | 84 | 144 | 10 16 |
|-------------|-----------|-----|----|-----|---------|
| BBKA 110X90 | 110 x 90 | 121 | 84 | 165 | 10 16 |
| BBKA125X90 | 125 x 90 | 114 | 84 | 165 | 10 16 |
| BBKA160X90 | 160 x 90 | 110 | 84 | 215 | 10 16 |
| BBKA180X90 | 180 x 90 | 100 | 84 | 215 | 10 16 |
| BBKA200X90 | 200 x 90 | 115 | 84 | 165 | 10 16 |
| BBKA225X90 | 225 x 90 | 113 | 84 | 165 | 10 16 |
| BBKA250X90 | 250 x 90 | 120 | 84 | 165 | 10 16 |
| BBKA160X110 | 160 x 110 | 131 | 98 | 217 | 10 16 |
| BBKA180X110 | 180 x 110 | 121 | 98 | 217 | 10 16 |
| BBKA180X125 | 180 x 125 | 121 | 98 | 217 | 10 16 |
| BBKA225X125 | 225 x 125 | 123 | 98 | 310 | 10 16 |
| BBKA250X125 | 250 x 125 | 110 | 98 | 310 | 10 16 |









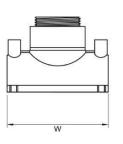
| Ref. | D | Н | h | W | PN |
|-------------|-----------|-----|-----|-----|---------|
| кет. | mm | mm | mm | mm | bar |
| BBKA315X110 | 315 x 110 | 242 | 150 | 300 | 10 16 |
| BBKA315X125 | 315 x 125 | 242 | 150 | 300 | 10 16 |
| BBKA315X160 | 315 x 160 | 194 | 150 | 300 | 10 16 |
| BBKA315X180 | 315 x 180 | 194 | 150 | 300 | 10 16 |
| BBKA355X110 | 355 x 110 | 242 | 150 | 300 | 10 16 |
| BBKA355X125 | 355 x 125 | 216 | 150 | 300 | 10 16 |
| BBKA355X160 | 355 x 160 | 188 | 150 | 300 | 10 16 |
| BBKA355X180 | 355 x 180 | 188 | 150 | 300 | 10 16 |
| BBKA400X110 | 400 x 110 | 193 | 150 | 300 | 10 16 |
| BBKA400X125 | 400 x 125 | 190 | 150 | 300 | 10 16 |
| BBKA400X160 | 400 x 160 | 190 | 150 | 300 | 10 16 |
| BBKA400X180 | 400 x 180 | 190 | 150 | 300 | 10 16 |
| BBKA500X110 | 500 x 110 | 190 | 150 | 300 | 10 16 |
| BBKA500X125 | 500 x 125 | 190 | 150 | 300 | 10 16 |
| BBKA500X160 | 500 x 160 | 190 | 150 | 300 | 10 16 |
| BBKA500X180 | 500 x 180 | 190 | 150 | 300 | 10 16 |
| BBKA630X110 | 630 x 110 | 193 | 150 | 300 | 10 16 |
| BBKA630X125 | 630 x 125 | 193 | 150 | 300 | 10 16 |
| BBKA630X160 | 630 x 160 | 193 | 150 | 300 | 10 16 |
| BBKA630X180 | 630 x 180 | 193 | 150 | 300 | 10 16 |

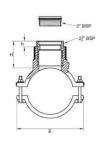
Opção com saída flangeada, disponíveis sob pedido.

Flanged Branch Saddle, available on request.



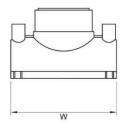


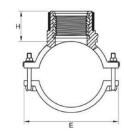




| D (| | D | Н | h | W | E | PN |
|-----|---------------|-----------|------------|----|-----|-----|---------|
| | Ref. | mm | mm | mm | mm | mm | bar |
| | XBBKA90X21/2 | 90 X 2½″ | <i>7</i> 1 | 15 | 167 | 154 | 10 16 |
| | XBBKA110X21/2 | 110 X 2½″ | 72 | 15 | 166 | 180 | 10 16 |
| | XBBKA125X21/2 | 125 X 2½″ | 72.5 | 15 | 166 | 180 | 10 16 |
| | XBBKA140X21/2 | 140 X 2½" | 84 | 15 | 215 | 236 | 10 16 |
| | XBBKA160X21/2 | 160 X 2½″ | 84 | 15 | 215 | 236 | 10 16 |
| | XBBKA180X21/2 | 180 X 2½" | 74 | 15 | 215 | 263 | 10 16 |
| | XBBKA200X21/2 | 200 X 2½″ | 82 | 15 | 166 | 263 | 10 16 |
| | XBBKA225X21/2 | 225 X 2½″ | 80 | 15 | 166 | 291 | 10 16 |
| | XBBKA250X21/2 | 250 X 2½″ | 86 | 15 | 166 | 317 | 10 16 |







| n-f | D | Н | W | Е |
|---------------|----------------|----|-----|--------------|
| Ref. | mm | mm | mm | mm |
| XBBKA63X11/4 | 63 X 1¼″ | 90 | 118 | 102 |
| XBBKA75X11/4 | 75 X 1¼" | 53 | 118 | 117 |
| XBBKA90X11/4 | 90 X 1¼″ | 57 | 167 | 156 |
| XBBKA90X11/2 | 90 X 1½″ | 57 | 167 | 156 |
| XBBKA90X2 | 90 X 2″ | 57 | 167 | 156 |
| XBBKA110X11/4 | 110 X 1 ¼" | 56 | 166 | 180 |
| XBBKA110X11/2 | 110 X 1 ½″ | 56 | 166 | 180 |
| XBBKA 110X2 | 110 X 2" | 56 | 166 | 180 |
| XBBKA125X11/4 | 125 X 1 ¼″ | 58 | 166 | 180 |
| XBBKA125X11/2 | 125 X 1½″ | 58 | 166 | 180 |
| XBBKA 125X2 | 125 X 2" | 58 | 166 | 180 |
| XBBKA140X11/2 | 140 X 1½" | 53 | 118 | 175 |
| XBBKA140X2 | 140 X 2" | 76 | 176 | 1 <i>7</i> 4 |
| XBBKA160X11/4 | 160 X 11/4" | 84 | 215 | 236 |
| XBBKA160X11/2 | 160 X 1½″ | 84 | 215 | 236 |
| XBBKA160X2 | 160 X 2" | 84 | 215 | 236 |
| XBBKA180X11/4 | 180 X 1 ¼″ | 74 | 215 | 236 |
| XBBKA180X11/2 | 180 X 1½" | 74 | 215 | 236 |
| XBBKA180X2 | 180 X 2" | 74 | 215 | 236 |
| XBBKA200X2 | 200 X 2" | 82 | 166 | 263 |
| XBBKA225X2 | 225 X 2″ | 80 | 166 | 300 |
| XBBKA250X2 | 250 X 2" | 86 | 166 | 317 |
| XBBKA(DN)X2 | 280 - 400 X 2" | 77 | 306 | 300 |
| xbbka(dn)x2 | 450 - 710 X 2" | 77 | 314 | 300 |

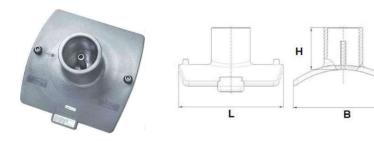








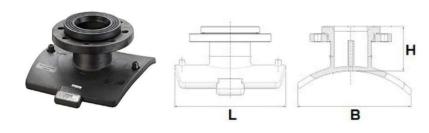
<mark>Tomada de derivação Simples Xl</mark> XL Branch Saddle



MATERIAL: PE 100

| Ref | D | В | Н | L | PN |
|----------------|-----------------|-----|-----|-----|---------|
| Kei | mm | mm | mm | mm | bar |
| BBKA(DN)X90XL | 250 - 400 X 90 | 305 | 115 | 300 | 10 16 |
| BBKA(DN)X110XL | 250 - 400 X 110 | 305 | 117 | 300 | 10 16 |
| BBKA(DN)X125XL | 250 - 400 X 125 | 305 | 121 | 300 | 10 16 |
| BBKA(DN)X160XL | 250 - 400 X 160 | 305 | 132 | 300 | 10 16 |
| BBKA(DN)X90XL | 450 - 800 X 90 | 315 | 117 | 300 | 10 16 |
| BBKA(DN)X110XL | 450 - 800 X 110 | 315 | 117 | 300 | 10 16 |
| BBKA(DN)X125XL | 450 - 800 X 125 | 315 | 117 | 300 | 10 16 |
| BBKA(DN)X160XL | 450 - 800 X 160 | 315 | 130 | 300 | 10 16 |

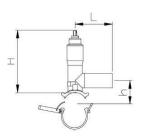
TOMADA DE DERIVAÇÃO FLANGEADA XL KL FLANGED BRANCH SADDLE



MATERIAL: PE 100

| Ref. | D | В | Н | L | PN |
|----------------|--------------------|-----|-------------|-----|---------|
| Ker. | mm | mm | mm | mm | bar |
| BBKA(DN)X80XL | 250 - 400 X DN80 | 305 | 115 | 300 | 10 16 |
| BBKA(DN)X100XL | 250 - 400 X DN 100 | 305 | 117 | 300 | 10 16 |
| BBKA(DN)X150XL | 250 - 400 X DN 150 | 305 | 121 | 300 | 10 16 |
| BBKA(DN)X80XL | 450 - 800 X DN80 | 315 | 11 <i>7</i> | 300 | 10 16 |
| BBKA(DN)X100XL | 450 - 800 X DN 100 | 315 | 11 <i>7</i> | 300 | 10 16 |
| BBKA(DN)X150XL | 450 - 800 X DN 150 | 315 | 11 <i>7</i> | 300 | 10 16 |



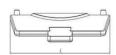




| D (| D | L | Н | h | PN |
|--------------|----------|-----|-----|-------------|---------|
| Ref. | mm | mm | mm | mm | bar |
| TVBKA63X32 | 63 x 32 | 165 | 250 | 59.5 | 10 16 |
| TVBKA63X40 | 63 x 40 | 165 | 250 | 59.5 | 10 16 |
| TVBKA63X50 | 63 x 50 | 165 | 250 | 59.5 | 10 16 |
| TVBKA63X63 | 63 x 63 | 165 | 250 | 59.5 | 10 16 |
| TVBKA75X32 | 75 x 32 | 165 | 250 | 57 | 10 16 |
| TVBKA75X40 | 75 x 40 | 165 | 250 | 57 | 10 16 |
| TVBKA75X50 | 75 x 50 | 165 | 250 | 57 | 10 16 |
| TVBKA75X63 | 75 x 63 | 165 | 250 | 57 | 10 16 |
| TVBKA90X32 | 90 x 32 | 165 | 250 | 57 | 10 16 |
| TVBKA90X40 | 90 x 40 | 165 | 250 | 57 | 10 16 |
| TVBKA90X50 | 90 x 50 | 165 | 250 | 57 | 10 16 |
| TVBKA90X63 | 90 x 63 | 165 | 250 | 57 | 10 16 |
| TVBKA110X32 | 110 x 32 | 165 | 269 | 105 | 10 16 |
| TVBKA110X40 | 110 x 40 | 165 | 269 | 105 | 10 16 |
| TVBKA 110X50 | 110 x 50 | 165 | 269 | 105 | 10 16 |
| TVBKA110X63 | 110 × 63 | 165 | 269 | 105 | 10 16 |
| TVBKA 125X32 | 125× 32 | 165 | 269 | 112 | 10 16 |
| TVBKA 125X40 | 125 x 40 | 165 | 269 | 112 | 10 16 |
| TVBKA 125X50 | 125 x 50 | 165 | 269 | 112 | 10 16 |
| TVBKA125X63 | 125 × 63 | 165 | 269 | 112 | 10 16 |
| TVBKA140X32 | 140 x 32 | 126 | 244 | 116 | 10 16 |
| TVBKA140X40 | 140 x 40 | 137 | 244 | 116 | 10 16 |
| TVBKA140X50 | 140 x 50 | 152 | 244 | 121 | 10 16 |
| TVBKA140X63 | 140 x 63 | 186 | 244 | 121 | 10 16 |
| TVBKA160X32 | 160 x 32 | 165 | 272 | 137 | 10 16 |
| TVBKA160X40 | 160 x 40 | 165 | 272 | 13 <i>7</i> | 10 16 |
| TVBKA160X50 | 160 x 50 | 165 | 272 | 137 | 10 16 |

| TVBKA160X63 | 160 x 63 | 165 | 272 | 13 <i>7</i> | 10 16 |
|-------------|----------|-----|-----|-------------|---------|
| TVBKA180X32 | 180 x 32 | 165 | 272 | 147 | 10 16 |
| TVBKA180X40 | 180 x 40 | 165 | 272 | 147 | 10 16 |
| TVBKA180X50 | 180 x 50 | 165 | 272 | 147 | 10 16 |
| TVBKA180X63 | 180 x 63 | 165 | 272 | 147 | 10 16 |
| TVBKA200X32 | 200 x 32 | 165 | 272 | 15 <i>7</i> | 10 16 |
| TVBKA200X40 | 200 x 40 | 165 | 272 | 157 | 10 16 |
| TVBKA200X50 | 200 x 50 | 165 | 272 | 157 | 10 16 |
| TVBKA200X63 | 200 x 63 | 165 | 272 | 157 | 10 16 |
| TVBKA225X32 | 225 x 32 | 165 | 272 | 169 | 10 16 |
| TVBKA225X40 | 225 x 40 | 165 | 272 | 169 | 10 16 |
| TVBKA225X50 | 225 x 50 | 165 | 272 | 169 | 10 16 |
| TVBKA225X63 | 225 x 63 | 165 | 272 | 169 | 10 16 |
| TVBKA250X32 | 250 x 32 | 126 | 244 | 171 | 10 16 |
| TVBKA250X40 | 250 x 40 | 137 | 244 | 171 | 10 16 |
| TVBKA250X50 | 250 x 50 | 152 | 244 | 176 | 10 16 |
| TVBKA250X63 | 250 x 63 | 186 | 244 | 176 | 10 16 |

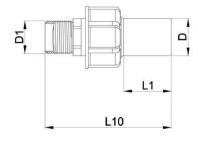






| Ref. | D1 | В | Н | L | PN |
|--------------|---------|-----|----|-----|----|
| Rel. | mm | mm | mm | mm | |
| ARBKA63 | 63 | 110 | 29 | 118 | 16 |
| ARBKA75 | 75 | 117 | 29 | 118 | 16 |
| ARBKA90 | 90 | 126 | 29 | 118 | 16 |
| ARBKA110 | 110 | 148 | 29 | 118 | 16 |
| ARBKA125 | 125 | 162 | 29 | 118 | 16 |
| ARBKA140 | 140 | 180 | 29 | 118 | 16 |
| ARBKA160 | 165 | 199 | 29 | 118 | 16 |
| ARBKA180 | 180 | 219 | 29 | 118 | 16 |
| ARBKA250-900 | 250-900 | 305 | 30 | 300 | 16 |

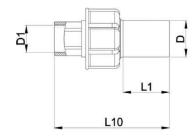




| Ref | D x D1 | L10 mm | L1 mm |
|----------------|-------------|-----------|----------|
| INSERT20X1/2M | 20 x 1/2" | 92 | 38 |
| INSERT25X3/4M | 25 x 3/4" | 99 | 40 |
| INSERT32X1M | 32 x 1" | 110 | 44 |
| INSERT40X1M | 40 x 1" | 110 | 49 |
| INSERT40X11/2M | 40 x 1 1/2" | 121 | 49 |
| INSERT40X11/4M | 40 x 1 1/4" | 121 | 49 |
| INSERT50X11/2M | 50 x 1 1/2" | 134 | 54 |
| INSERT63X11/2M | 63 x 1 1/2" | 465 | 73 |
| INSERT63X2M | 63 x 2" | 150 | 63 |
| INSERT75X21/2M | 75 x 2 1/2" | 165 | 73 |
| INSERT90X3 M | 90 x 3″ | 181 | 82 |
| INSERT 110X4M | 110 x 4" | 194 | 84 |
| INSERT125X4M | 125 x 4" | 202 | 92 |



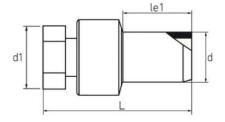




MATERIAL: PE 100

| 2.4 | D D1 | L10 | L1 |
|---------------|------------|-----|----|
| Ref. | D x D1 | mm | mm |
| INSERT20X1/2 | 20 x 1/2" | 82 | 38 |
| INSERT25X3/4 | 25 x 3/4" | 91 | 40 |
| INSERT32X1 | 32 x 1" | 100 | 44 |
| INSERT40X1 | 40 x 1" | 109 | 44 |
| INSERT40X11/2 | 40 x 11/2" | 109 | 49 |
| INSERT40X11/4 | 40 x 11/4" | 109 | 49 |
| INSERT50X11/2 | 50 x 11/2" | 124 | 54 |
| INSERT63X11/2 | 63 x 11/2" | 165 | 73 |
| INSERT63X2 | 63 x 2" | 141 | 63 |
| INSERT75X21/2 | 75 x 21/2" | 163 | 73 |
| INSERT90X3 | 90 x 3″ | 181 | 82 |
| INSERT110X4 | 110 x 4" | 190 | 84 |
| INSERT125X4 | 125 x 4" | 165 | 91 |





| Ref. | J J2 | L | le1 | PN |
|---------------|------------|-----|-----|---------|
| Ket. | d x d1 | mm | mm | bar |
| INSERT20X1/2 | 20 x 1/2" | 109 | 44 | 10 16 |
| INSERT25X1/2 | 25 x 1/2" | 109 | 46 | 10 16 |
| INSERT25X3/4 | 25 x 3/4" | 112 | 44 | 10 16 |
| INSERT32X3/4 | 32 x 3/4" | 116 | 51 | 10 16 |
| INSERT32X1 | 32 x 1" | 118 | 48 | 10 16 |
| INSERT40X1 | 40 x 1" | 123 | 55 | 10 16 |
| INSERT40X11/4 | 40 x 11/4" | 135 | 53 | 10 16 |
| INSERT50X11/2 | 50 x 11/2" | 145 | 61 | 10 16 |
| INSERT63X1 | 63 x 1" | 143 | 77 | 10 16 |
| INSERT63X2 | 63 x 2" | 162 | 69 | 10 16 |

