

**LIGADOR CILÍNDRICO VERTICAL + OR**  
 FIXED CYLINDRICAL STRAIGHT + OR



| REF.     | MODELO/ MODEL | A - B     |    | € |
|----------|---------------|-----------|----|---|
| 050104M5 | ---           | 04 - M5M  | 10 |   |
| 050104M6 | ---           | 04 - M6M  | 10 |   |
| 05010418 | B250/1        | 04 - 1/8M | 10 |   |
| 05010414 | B250/6        | 04 - 1/4M | 10 |   |
| 050106M5 | ---           | 06 - M5M  | 10 |   |
| 050106M6 | ---           | 06 - M6M  | 10 |   |
| 05010618 | B250/2        | 06 - 1/8M | 10 |   |
| 05010614 | B250/7        | 06 - 1/4M | 10 |   |
| 05010638 | B250/11       | 06 - 3/8M | 10 |   |
| 05010612 | B250/16       | 06 - 1/2M | 10 |   |
| 05010818 | B250/3        | 08 - 1/8M | 10 |   |
| 05010814 | B250/8        | 08 - 1/4M | 10 |   |
| 05010838 | B250/12       | 08 - 3/8M | 10 |   |
| 05010812 | B250/17       | 08 - 1/2M | 10 |   |
| 05011018 | B250/4        | 10 - 1/8M | 10 |   |
| 05011014 | B250/9        | 10 - 1/4M | 10 |   |
| 05011038 | B250/13       | 10 - 3/8M | 10 |   |
| 05011012 | B250/18       | 10 - 1/2M | 10 |   |
| 05011218 | B250/5        | 12 - 1/8M | 05 |   |
| 05011214 | B250/10       | 12 - 1/4M | 05 |   |
| 05011238 | B250/14       | 12 - 3/8M | 05 |   |
| 05011212 | B250/19       | 12 - 1/2M | 05 |   |
| 05011438 | B250/15       | 14 - 3/8M | 05 |   |
| 05011412 | B250/20       | 14 - 1/2M | 05 |   |
| 05011512 | B250/21       | 15 - 1/2M | 05 |   |
| 05011638 | ---           | 16 - 3/8M | 05 |   |
| 05011612 | B250/22       | 16 - 1/2M | 05 |   |

**LIGADOR FÊMEA**  
 STRAIGHT FEMALE



| REF.     | MODELO/ MODEL | A - B     |    | € |
|----------|---------------|-----------|----|---|
| 050204M5 | ---           | 04 - M5F  | 10 |   |
| 050204M6 | ---           | 04 - M6F  | 10 |   |
| 05020418 | B252/1        | 04 - 1/8F | 10 |   |
| 05020414 | B252/6        | 04 - 1/4F | 10 |   |
| 050206M5 | ---           | 06 - M5F  | 10 |   |
| 050206M6 | ---           | 06 - M6F  | 10 |   |
| 05020618 | B252/2        | 06 - 1/8F | 10 |   |
| 05020614 | B252/7        | 06 - 1/4F | 10 |   |
| 05020638 | B252/11       | 06 - 3/8F | 10 |   |
| 05020612 | B252/16       | 06 - 1/2F | 10 |   |
| 05020818 | B252/3        | 08 - 1/8F | 10 |   |
| 05020814 | B252/8        | 08 - 1/4F | 10 |   |
| 05020838 | B252/12       | 08 - 3/8F | 10 |   |
| 05020812 | B252/17       | 08 - 1/2F | 10 |   |
| 05021018 | B252/4        | 10 - 1/8F | 10 |   |
| 05021014 | B252/9        | 10 - 1/4F | 10 |   |
| 05021038 | B252/13       | 10 - 3/8F | 10 |   |
| 05021012 | B252/18       | 10 - 1/2F | 10 |   |
| 05021218 | B252/5        | 12 - 1/8F | 05 |   |
| 05021214 | B252/10       | 12 - 1/4F | 05 |   |
| 05021238 | B252/14       | 12 - 3/8F | 05 |   |
| 05021212 | B252/19       | 12 - 1/2F | 05 |   |
| 05021438 | B252/15       | 14 - 3/8F | 05 |   |
| 05021412 | B252/20       | 14 - 1/2F | 05 |   |
| 05021512 | B252/21       | 15 - 1/2F | 05 |   |
| 05021638 | ---           | 16 - 3/8F | 05 |   |
| 05021612 | B252/22       | 16 - 1/2F | 05 |   |

**UNIÃO DUPLA**  
INTERMEDIATE STRAIGHT



| REF.     | MODELO/ MODEL | A - B   |    | € |
|----------|---------------|---------|----|---|
| 05030404 | B251/1        | 04 - 04 | 10 |   |
| 05030604 | B265/1        | 06 - 04 | 10 |   |
| 05030606 | B251/2        | 06 - 06 | 10 |   |
| 05030804 | ---           | 08 - 04 | 10 |   |
| 05030806 | B265/2        | 08 - 06 | 10 |   |
| 05030808 | B251/3        | 08 - 08 | 10 |   |
| 05031006 | ---           | 10 - 06 | 10 |   |
| 05031008 | B265/3        | 10 - 08 | 10 |   |
| 05031010 | B251/4        | 10 - 10 | 10 |   |
| 05031208 | ---           | 12 - 08 | 05 |   |
| 05031210 | B265/4        | 12 - 10 | 05 |   |
| 05031212 | B251/5        | 12 - 12 | 05 |   |
| 05031412 | B265/5        | 14 - 12 | 05 |   |
| 05031414 | B251/6        | 14 - 14 | 05 |   |
| 05031515 | B251/7        | 15 - 15 | 05 |   |
| 05031612 | ---           | 16 - 12 | 05 |   |
| 05031614 | B265/6        | 16 - 14 | 05 |   |
| 05031616 | B251/8        | 16 - 16 | 05 |   |

**LIGADOR "JOELHO"**  
INTERMEDIATE ELBOW



| REF.     | MODELO/ MODEL | A - A   |    | € |
|----------|---------------|---------|----|---|
| 05040404 | B254/1        | 04 - 04 | 10 |   |
| 05040606 | B254/2        | 06 - 06 | 10 |   |
| 05040808 | B254/3        | 08 - 08 | 10 |   |
| 05041010 | B254/4        | 10 - 10 | 10 |   |
| 05041212 | B254/5        | 12 - 12 | 05 |   |
| 05041414 | B254/6        | 14 - 14 | 05 |   |
| 05041515 | B254/7        | 15 - 15 | 05 |   |
| 05041616 | B254/8        | 16 - 16 | 05 |   |

**LIGADOR "T"**  
INTERMEDIATE TEE



| REF.     | MODELO/ MODEL | A - A - B    |    | € |
|----------|---------------|--------------|----|---|
| 05050404 | B259/1        | 04 - 04 - 04 | 10 |   |
| 05050604 | B269/1        | 06 - 06 - 04 | 10 |   |
| 05050606 | B259/2        | 06 - 06 - 06 | 10 |   |
| 05050804 | B269/2        | 08 - 08 - 04 | 10 |   |
| 05050806 | B269/3        | 08 - 08 - 06 | 10 |   |
| 05050808 | B259/3        | 08 - 08 - 08 | 10 |   |
| 05051006 | B269/4        | 10 - 10 - 06 | 10 |   |
| 05051008 | ---           | 10 - 10 - 08 | 10 |   |
| 05051010 | B259/4        | 10 - 10 - 10 | 10 |   |
| 05051210 | ---           | 12 - 12 - 10 | 05 |   |
| 05051212 | B259/5        | 12 - 12 - 12 | 05 |   |
| 05051414 | B259/6        | 14 - 14 - 14 | 05 |   |
| 05051515 | B259/7        | 15 - 15 - 15 | 05 |   |
| 05051612 | ---           | 16 - 16 - 12 | 05 |   |
| 05051616 | B259/8        | 16 - 16 - 16 | 05 |   |

**REDUÇÃO FIXA**  
**FIXED REDUCTION**



| REF.     | MODELO/ MODEL | A - B   |    | € |
|----------|---------------|---------|----|---|
| 05080604 | ---           | 06 - 04 | 10 |   |
| 05080804 | ---           | 08 - 04 | 10 |   |
| 05080806 | ---           | 08 - 06 | 10 |   |
| 05081006 | ---           | 10 - 06 | 10 |   |
| 05081008 | ---           | 10 - 08 | 10 |   |
| 05081208 | ---           | 12 - 08 | 05 |   |
| 05081210 | ---           | 12 - 10 | 05 |   |

**ESTANCADOR**  
**BULKHEAD STRAIGHT**



| REF.     | MODELO/ MODEL | A - A - B         |    | € |
|----------|---------------|-------------------|----|---|
| 05100404 | ---           | 04 - 04 - M12 x 1 | 10 |   |
| 05100606 | ---           | 06 - 06 - M14 x 1 | 10 |   |
| 05100808 | ---           | 08 - 08 - M16 x 1 | 10 |   |
| 05101010 | ---           | 10 - 10 - M20 x 1 | 10 |   |
| 05101212 | ---           | 12 - 12 - M22 x 1 | 05 |   |
| 05101414 | ---           | 14 - 14 - M24 x 1 | 05 |   |
| 05101616 | ---           | 16 - 16 - M27 x 1 | 05 |   |

**"T" CILÍNDRICO GIRATÓRIO + OR**  
**SWIVEL CYLINDRICAL + OR STUD BRANCH TEE**



| REF.     | MODELO/ MODEL | A - B          |    | € |
|----------|---------------|----------------|----|---|
| 052004M5 | ---           | 04 - 04 - M5M  | 10 |   |
| 052004M6 | ---           | 04 - 04 - M6M  | 10 |   |
| 05200418 | B255/1        | 04 - 04 - 1/8M | 10 |   |
| 05200414 | B255/6        | 04 - 04 - 1/4M | 10 |   |
| 052006M5 | ---           | 06 - 06 - M5M  | 10 |   |
| 052006M6 | ---           | 06 - 06 - M6M  | 10 |   |
| 05200618 | B255/2        | 06 - 06 - 1/8M | 10 |   |
| 05200614 | B255/7        | 06 - 06 - 1/4M | 10 |   |
| 05200638 | B255/11       | 06 - 06 - 3/8M | 10 |   |
| 05200612 | B255/16       | 06 - 06 - 1/2M | 10 |   |
| 05200818 | B255/3        | 08 - 08 - 1/8M | 10 |   |
| 05200814 | B255/8        | 08 - 08 - 1/4M | 10 |   |
| 05200838 | B255/12       | 08 - 08 - 3/8M | 10 |   |
| 05200812 | B255/17       | 08 - 08 - 1/2M | 10 |   |
| 05201018 | B255/4        | 10 - 10 - 1/8M | 10 |   |
| 05201014 | B255/9        | 10 - 10 - 1/4M | 10 |   |
| 05201038 | B255/13       | 10 - 10 - 3/8M | 10 |   |
| 05201012 | B255/18       | 10 - 10 - 1/2M | 10 |   |
| 05201218 | B255/5        | 12 - 12 - 1/8M | 05 |   |
| 05201214 | B255/10       | 12 - 12 - 1/4M | 05 |   |
| 05201238 | B255/14       | 12 - 12 - 3/8M | 05 |   |
| 05201212 | B255/19       | 12 - 12 - 1/2M | 05 |   |
| 05201438 | B255/15       | 14 - 14 - 3/8M | 05 |   |
| 05201412 | B255/20       | 14 - 14 - 1/2M | 05 |   |
| 05201512 | B255/21       | 15 - 15 - 1/2M | 05 |   |
| 05201638 | ---           | 16 - 16 - 3/8M | 05 |   |
| 05201612 | B255/22       | 16 - 16 - 1/2M | 05 |   |

UNIÃO DUPLA  
INTERMEDIATE STRAIGHT



| REF.     | MODELO/ MODEL | A - B          |    | € |
|----------|---------------|----------------|----|---|
| 052104M5 | ---           | 04 - 04 - M5M  | 10 |   |
| 052104M6 | ---           | 04 - 04 - M6M  | 10 |   |
| 05210418 | B256/1        | 04 - 04 - 1/8M | 10 |   |
| 05210414 | B256/6        | 04 - 04 - 1/4M | 10 |   |
| 052106M5 | ---           | 06 - 06 - M5M  | 10 |   |
| 052106M6 | ---           | 06 - 06 - M6M  | 10 |   |
| 05210618 | B256/2        | 06 - 06 - 1/8M | 10 |   |
| 05210614 | B256/7        | 06 - 06 - 1/4M | 10 |   |
| 05210638 | B256/11       | 06 - 06 - 3/8M | 10 |   |
| 05210612 | B256/16       | 06 - 06 - 1/2M | 10 |   |
| 05210818 | B256/3        | 08 - 08 - 1/8M | 10 |   |
| 05210814 | B256/8        | 08 - 08 - 1/4M | 10 |   |
| 05210838 | B256/12       | 08 - 08 - 3/8M | 10 |   |
| 05210812 | B256/17       | 08 - 08 - 1/2M | 10 |   |
| 05211018 | B256/4        | 10 - 10 - 1/8M | 10 |   |
| 05211014 | B256/9        | 10 - 10 - 1/4M | 10 |   |
| 05211038 | B256/13       | 10 - 10 - 3/8M | 10 |   |
| 05211012 | B256/18       | 10 - 10 - 1/2M | 10 |   |
| 05211218 | B256/5        | 12 - 12 - 1/8M | 05 |   |
| 05211214 | B256/10       | 12 - 12 - 1/4M | 05 |   |
| 05211238 | B256/14       | 12 - 12 - 3/8M | 05 |   |
| 05211212 | B256/19       | 12 - 12 - 1/2M | 05 |   |
| 05211438 | B256/15       | 14 - 14 - 3/8M | 05 |   |
| 05211412 | B256/20       | 14 - 14 - 1/2M | 05 |   |
| 05211512 | B256/21       | 15 - 15 - 1/2M | 05 |   |
| 05211638 | ---           | 16 - 16 - 3/8M | 05 |   |
| 05211612 | B256/22       | 16 - 16 - 1/2M | 05 |   |

"JOELHO" GIRATÓRIO + OR  
SWIVEL ELBOW CYLINDRICAL + OR



| REF.     | MODELO/ MODEL | A - B     |    | € |
|----------|---------------|-----------|----|---|
| 052204M5 | ---           | 04 - M5M  | 10 |   |
| 052204M6 | ---           | 04 - M6M  | 10 |   |
| 05220418 | B253/1        | 04 - 1/8M | 10 |   |
| 05220414 | B253/6        | 04 - 1/4M | 10 |   |
| 052206M5 | ---           | 06 - M5M  | 10 |   |
| 052206M6 | ---           | 06 - M6M  | 10 |   |
| 05220618 | B253/2        | 06 - 1/8M | 10 |   |
| 05220614 | B253/7        | 06 - 1/4M | 10 |   |
| 05220638 | B253/11       | 06 - 3/8M | 10 |   |
| 05220612 | B253/16       | 06 - 1/2M | 10 |   |
| 05220818 | B253/3        | 08 - 1/8M | 10 |   |
| 05220814 | B253/8        | 08 - 1/4M | 10 |   |
| 05220838 | B253/12       | 08 - 3/8M | 10 |   |
| 05220812 | B253/17       | 08 - 1/2M | 10 |   |
| 05221018 | B253/4        | 10 - 1/8M | 10 |   |
| 05221014 | B253/9        | 10 - 1/4M | 10 |   |
| 05221038 | B253/13       | 10 - 3/8M | 10 |   |
| 05221012 | B253/18       | 10 - 1/2M | 10 |   |
| 05221218 | B253/5        | 12 - 1/8M | 05 |   |
| 05221214 | B253/10       | 12 - 1/4M | 05 |   |
| 05221238 | B253/14       | 12 - 3/8M | 05 |   |
| 05221212 | B253/19       | 12 - 1/2M | 05 |   |
| 05221438 | B253/15       | 14 - 3/8M | 05 |   |
| 05221412 | B253/20       | 14 - 1/2M | 05 |   |
| 05221512 | B253/21       | 15 - 1/2M | 05 |   |
| 05221638 | ---           | 16 - 3/8M | 05 |   |
| 05221612 | B253/22       | 16 - 1/2M | 05 |   |

**LIGADOR "Y"**  
**INTERMEDIATE-Y**



| REF.     | MODELO/ MODEL | A - B - B    |    | € |
|----------|---------------|--------------|----|---|
| 05230404 | B262/1        | 04 - 04 - 04 | 10 |   |
| 05230604 | B267/1        | 06 - 04 - 04 | 10 |   |
| 05230606 | B262/2        | 06 - 06 - 06 | 10 |   |
| 05230804 | ---           | 08 - 04 - 04 | 10 |   |
| 05230806 | B267/2        | 08 - 06 - 06 | 10 |   |
| 05230808 | B262/3        | 08 - 08 - 08 | 10 |   |
| 05231006 | ---           | 10 - 06 - 06 | 10 |   |
| 05231008 | B267/3        | 10 - 08 - 08 | 10 |   |
| 05231010 | B262/4        | 10 - 10 - 10 | 10 |   |
| 05231208 | ---           | 12 - 08 - 08 | 05 |   |
| 05231210 | B267/4        | 12 - 10 - 10 | 05 |   |
| 05231212 | B262/5        | 12 - 12 - 12 | 05 |   |
| 05231414 | B262/6        | 15 - 15 - 15 | 05 |   |
| 05231515 | B262/7        | 14 - 14 - 14 | 05 |   |
| 05231616 | B262/8        | 16 - 16 - 16 | 05 |   |

**LIGADOR "Y" GIRATÓRIO + OR**  
**SWIVEL CYLINDRICAL-Y + OR**



| REF.     | MODELO/ MODEL | A - A - B      |    | € |
|----------|---------------|----------------|----|---|
| 052404M5 | ---           | 04 - 04 - M5M  | 10 |   |
| 052404M6 | ---           | 04 - 04 - M6M  | 10 |   |
| 05240418 | ---           | 04 - 04 - 1/8M | 10 |   |
| 05240414 | ---           | 04 - 04 - 1/4M | 10 |   |
| 052406M5 | ---           | 06 - 06 - M5M  | 10 |   |
| 052406M6 | ---           | 06 - 06 - M6M  | 10 |   |
| 05240618 | ---           | 06 - 06 - 1/8M | 10 |   |
| 05240614 | ---           | 06 - 06 - 1/4M | 10 |   |
| 05240638 | ---           | 06 - 06 - 3/8M | 10 |   |
| 05240612 | ---           | 06 - 06 - 1/2M | 10 |   |
| 05240818 | ---           | 08 - 08 - 1/8M | 10 |   |
| 05240814 | ---           | 08 - 08 - 1/4M | 10 |   |
| 05240838 | ---           | 08 - 08 - 3/8M | 10 |   |
| 05240812 | ---           | 08 - 08 - 1/2M | 10 |   |
| 05241018 | ---           | 10 - 10 - 1/8M | 10 |   |
| 05241014 | ---           | 10 - 10 - 1/4M | 10 |   |
| 05241038 | ---           | 10 - 10 - 3/8M | 10 |   |
| 05241012 | ---           | 10 - 10 - 1/2M | 10 |   |
| 05241214 | ---           | 12 - 12 - 1/4M | 05 |   |
| 05241238 | ---           | 12 - 12 - 3/8M | 05 |   |
| 05241212 | ---           | 12 - 12 - 1/2M | 05 |   |
| 05241438 | ---           | 14 - 14 - 3/8M | 05 |   |
| 05241412 | ---           | 14 - 14 - 1/2M | 05 |   |
| 05241638 | ---           | 16 - 16 - 3/8M | 05 |   |
| 05241612 | ---           | 16 - 16 - 1/2M | 05 |   |

ESTANCADOR FÊMEA  
BULKHEAD FEMALE



| REF.     | MODELO/ MODEL | A - B     |    | € |
|----------|---------------|-----------|----|---|
| 052504M5 | ---           | 04 - M5F  | 10 |   |
| 052504M6 | ---           | 04 - M6F  | 10 |   |
| 05250418 | ---           | 04 - 1/8F | 10 |   |
| 05250414 | ---           | 04 - 1/4F | 10 |   |
| 052506M5 | ---           | 06 - M5F  | 10 |   |
| 052506M6 | ---           | 06 - M6F  | 10 |   |
| 05250618 | ---           | 06 - 1/8F | 10 |   |
| 05250614 | ---           | 06 - 1/4F | 10 |   |
| 05250638 | ---           | 06 - 3/8F | 10 |   |
| 05250612 | ---           | 06 - 1/2F | 10 |   |
| 05250818 | ---           | 08 - 1/8F | 10 |   |
| 05250814 | ---           | 08 - 1/4F | 10 |   |
| 05250838 | ---           | 08 - 3/8F | 10 |   |
| 05250812 | ---           | 08 - 1/2F | 10 |   |
| 05251018 | ---           | 10 - 1/8F | 10 |   |
| 05251014 | ---           | 10 - 1/4F | 10 |   |
| 05251038 | ---           | 10 - 3/8F | 10 |   |
| 05251012 | ---           | 10 - 1/2F | 10 |   |
| 05251214 | ---           | 12 - 1/4F | 05 |   |
| 05251238 | ---           | 12 - 3/8F | 05 |   |
| 05251212 | ---           | 12 - 1/2F | 05 |   |
| 05251438 | ---           | 14 - 3/8F | 05 |   |
| 05251412 | ---           | 14 - 1/2F | 05 |   |
| 05251638 | ---           | 16 - 3/8F | 05 |   |
| 05251612 | ---           | 16 - 1/2F | 05 |   |

CRUZETA  
INTERMEDIATE TEE



| REF.     | MODELO/ MODEL | A - A - A - A     |    | € |
|----------|---------------|-------------------|----|---|
| 05270404 | B260/1        | 04 - 04 - 04 - 04 | 10 |   |
| 05270606 | B260/2        | 06 - 06 - 06 - 06 | 10 |   |
| 05270808 | B260/3        | 08 - 08 - 08 - 08 | 10 |   |
| 05271010 | B260/4        | 10 - 10 - 10 - 10 | 10 |   |
| 05271212 | B260/5        | 12 - 12 - 12 - 12 | 05 |   |