# MASTERMANG

## MANGUEIRAS E CONEXÕES

# CATÁLOGO DE PRODUTOS

CATALOGUE OF PRODUCTS

CATÁLOGO DE PRODUCTOS

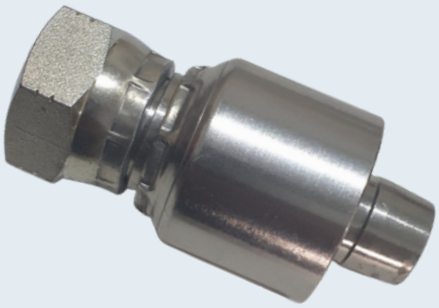
## ORFS SERIES

# Terminais Pré Prewnsados

MANGUEIRAS 2 TA 4TA

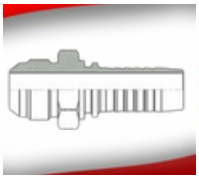
# Terminais Pré Prewnsados

## MANGUEIRAS 2 TA 4TA



# TERMINAIS PRENSÁVEIS

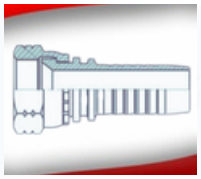
## LINHA UNF JIC - Cone de Vedação 37°



### Macho Fixo Reto

MM100MJ

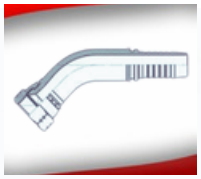
| Rosca | Pol. | Bitola | MMMMMM100MJ- |
|---|---|---|---|
| 7/16"-20 | 1/4" | 4 | 04-04 |
| 1/2"-20 | 1/4" | 4 | MM100MJ-05-04 |
| 9/16"-18 | 1/4" | 4 | MM100MJ-06-04 |
| 9/16"-18 | 3/8" | 6 | MM100MJ-06-06 |
| 9/16"-18 | 1/2" | 8 | MM100MJ-06-08 |
| 3/4"-16 | 3/8" | 6 | MM100MJ-08-06 |
| 3/4"-16 | 1/2" | 8 | MM100MJ-08-08 |
| 7/8"-14 | 3/8" | 6 | MM100MJ-10-06 |
| 7/8"-14 | 1/2" | 8 | MM100MJ-10-08 |
| 7/8"-14 | 5/8" | 10 | MM100MJ-10-10 |
| 1.1/16"-12 | 1/2" | 8 | MM100MJ-12-08 |
| 1.1/16"-12 | 5/8" | 10 | MM100MJ-12-10 |
| 1.1/16"-12 | 3/4" | 12 | MM100MJ-12-12 |
| 1.5/16"-12 | 3/4" | 12 | MM100MJ-16-12 |
| 1.5/16"-12 | 1" | 16 | MM100MJ-16-16 |
| 1.5/8"-12 | 1" | 16 | MM100MJ-20-16 |
| 1.5/8"-12 | 1.1/4" | 20 | MM100MJ-20-20 |
| | 1.1/2" | 24 | MM100MJ-24-24 |
| 1.7/8" -12 | 2" | 32 | MM100MJ-32-32 |
| 2.1/2" -12 | | | |



### Fêmea Giratória Reta JIC

MM100FJ

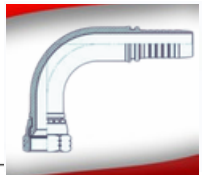
| Rosca | Pol. | Bitola | Código |
|---|---|---|---|
| 7/16"-20 | 1/4" | 4 | MM100FJ-04-04 |
| 7/16"-20 | 3/8" | 6 | MM100FJ-04-06 |
| 1/2"-20 | 1/4" | 4 | MM100FJ-05-04 |
| 9/16"-18 | 1/4" | 4 | MM100FJ-06-04 |
| 9/16"-18 | 5/16" | 5 | MM100FJ-06-05 |
| 9/16"-18 | 3/8" | 6 | MM100FJ-06-06 |
| 9/16"-18 | 1/2" | 8 | MM100FJ-06-08 |
| 3/4"-16 | 1/4" | 4 | MM100FJ-08-04 |
| 3/4"-16 | 3/8" | 6 | MM100FJ-08-06 |
| 3/4"-16 | 1/2" | 8 | MM100FJ-08-08 |
| 3/4"-16 | 5/8" | 10 | MM100FJ-08-10 |
| 7/8"-14 | 3/8" | 6 | MM100FJ-10-06 |
| 7/8"-14 | 1/2" | 8 | MM100FJ-10-08 |
| 7/8"-14 | 5/8" | 10 | MM100FJ-10-10 |
| 7/8"-14 | 3/4" | 12 | MM100FJ-10-12 |
| 1.1/16"-12 | 1/2" | 8 | MM100FJ-12-08 |
| 1.1/16"-12 | 5/8" | 10 | MM100FJ-12-10 |
| 1.1/16"-12 | 3/4" | 12 | MM100FJ-12-12 |
| 1.1/16"-12 | 1" | 16 | MM100FJ-12-16 |
| 1.5/16"-12 | 3/4" | 12 | MM100FJ-16-12 |
| 1.5/16"-12 | 1" | 16 | MM100FJ-16-16 |
| 1.5/8"-12 | 1" | 16 | MM100FJ-20-16 |
| 1.5/8"-12 | 1.1/4" | 20 | MM100FJ-20-20 |
| 1.7/8"-12 | 1.1/4" | 20 | MM100FJ-24-20 |
| 1.7/8"-12 | 1.1/2" | 24 | MM100FJ-24-24 |
| 2.1/2"-12 | 2" | 32 | MM100FJ-32-32 |
| | | | |
| | | | |



### Fêmea Giratória 45° JIC

MM145FJ

| Rosca | Pol. | Bitola | Código |
|---|---|---|---|
| 7/16"-20 | 1/4" | 4 | MM145FJ04-04 |
| 1/2"-20 | 1/4" | 4 | MM145FJ05-04 |
| 9/16"-18 | 1/4" | 4 | MM145FJ06-04 |
| 9/16"-18 | 3/8" | 6 | MM145FJ06-06 |
| 3/4"-16 | 3/8" | 6 | MM145FJ08-06 |
| 3/4"-16 | 1/2" | 8 | MM145FJ08-08 |
| 7/8"-14 | 1/2" | 8 | MM145FJ10-08 |
| 7/8"-14 | 5/8" | 10 | MM145FJ10-10 |
| 1.1/16"-12 | 5/8" | 10 | MM145FJ12-10 |
| 1.1/16"-12 | 3/4" | 12 | MM145FJ12-12 |
| 1.5/16"-12 | 3/4" | 12 | MM145FJ16-12 |
| 1.5/16"-12 | 1" | 16 | MM145FJ16-16 |
| 1.5/8"-12 | 1" | 16 | MM145FJ20-16 |
| 1.5/8"-12 | 1.1/4" | 20 | MM145FJ20-20 |
| 1.7/8"-12 | 1.1/2" | 24 | MM145FJ24-24 |
| | 2" | 32 | MM145FJ32-32 |
| 2.1/2" -12 | | | |

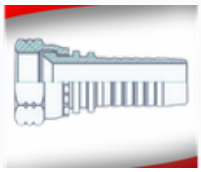


### Fêmea Giratória 90° JIC

MM190FJ

| Rosca | Pol. | Bitola | Código |
|---|---|---|---|
| 7/16"-20 | 1/4" | 4 | MM190FJ-04-04 |
| 7/16"-20 | 1/4" | 4 | MM190FJ-04-04-L |
| 1/2"-20 | 1/4" | 4 | MM190FJ-05-04 |
| 9/16"-18 | 1/4" | 4 | MM190FJ-06-04 |
| 9/16"-18 | 1/4" | 4 | MM190FJ-06-04-L |
| 9/16"-18 | 3/8" | 6 | MM190FJ-06-06 |
| 9/16"-18 | 3/8" | 6 | MM190FJ-06-06-L |
| 9/16"-18 | 1/2" | 8 | MM190FJ-06-08 |
| 3/4"-16 | 3/8" | 6 | MM190FJ-08-06 |
| 3/4"-16 | 3/8" | 6 | MM190FJ-08-06-L |
| 3/4"-16 | 1/2" | 8 | MM190FJ-08-08 |
| 3/4"-16 | 1/2" | 8 | MM190FJ-08-08-L |
| 3/4"-16 | 1/2" | 10 | MM190FJ-08-10 |
| 7/8"-14 | 3/8" | 6 | MM190FJ-10-06 |
| 7/8"-14 | 1/2" | 8 | MM190FJ-10-08 |
| 7/8"-14 | 1/2" | 8 | MM190FJ-10-08-L |
| 7/8"-14 | 5/8" | 10 | MM190FJ-10-10 |
| 7/8"-14 | 3/4" | 12 | MM190FJ-10-12 |
| 1.1/16"-12 | 1/2" | 8 | MM190FJ-12-08 |
| 1.1/16"-12 | 5/8" | 10 | MM190FJ-12-10 |
| 1.1/16"-12 | 5/8" | 10 | MM190FJ-12-10-L |
| 1.1/16"-12 | 3/4" | 12 | MM190FJ-12-12 |
| 1.1/16"-12 | 3/4" | 12 | MM190FJ-12-12-L |
| 1.1/16"-12 | 3/4" | 16 | MM190FJ-12-16 |
| 1.5/16"-12 | 1" | 12 | MM190FJ-16-12 |
| 1.5/16"-12 | 3/4" | 16 | MM190FJ-16-16 |
| 1.5/16"-12 | 1" | 16 | MM190FJ-16-16-L |
| 1.5/16"-12 | 1" | 16 | MM190FJ-20-16 |
| 1.5/8"-12 | 1" | 20 | MM190FJ-20-20 |
| 1.5/8"-12 | 1.1/4" | 24 | MM190FJ-24-24 |
| 1.7/8"-12 | 1.1/2" | 32 | MM190FJ-32-32 |
| 2.1/2"-12 | 2" | | |
| | | | |
| | | | |

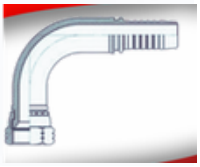
## LINHA UNF JIC - Cone de Vedação 45°



### Fêmea Giratória Reta UNF JIC 45°

MM100FS

| Rosca | Pol. | Bitola | MM100FS- |
|---|---|---|---|
| 5/8"-6 | 3/3" | 6 | 06-06 |

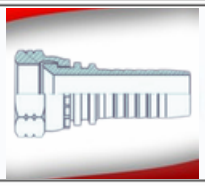


### Fêmea Giratória 90° UNF JIC 45°

MM190FS

| Rosca | Pol. | Bitola | MM100FS- |
|---|---|---|---|
| 5/8"-6 | 3/8" | 6 | 06-06 |

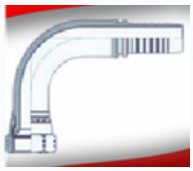
## LINHA BSP JIC



### Fêmea Giratória Reta BSP JIC

MM100FBJ

| Rosca | Pol. | Bitola | Código |
|---|---|---|---|
| 1/4"-19 | 1/4" | 4 | MMMM100FBJ-04-04 |
| 3/8"-19 | 1/4" | 4 | MMMM100FBJ-06-04 |
| 3/8"-19 | 3/8" | 6 | MMMM100FBJ-06-06 |
| 1/2"-14 | 3/8" | 6 | MMMM100FBJ-08-06 |
| 1/2"-14 | 1/2" | 8 | MMMM100FBJ-08-08 |
| 3/4"-14 | 3/4" | 12 | MMMM100FBJ-12-12 |
| 1"-11 | 1" | 16 | MMMM100FBJ-16-16 |
| | | | |

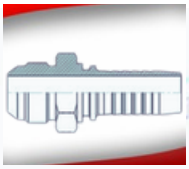


### Fêmea Giratória 90° BSP JIC

MM190FBJ

| Rosca | Pol. | Bitola | Código |
|---|---|---|---|
| 1/4"-19 | 1/4" | 4 | MMMM190FBJ-04-04 |
| 3/8"-19 | 3/8" | 6 | MMMM190FBJ-06-06 |
| 1/2"-14 | 3/8" | 6 | MMMM190FBJ-08-06 |
| 1/2"-14 | 1/2" | 8 | MMMM190FBJ-08-08 |
| 3/4"-14 | 3/4" | 12 | MMMM190FBJ-12-12 |
| 1"-11 | 1" | 16 | MMMM190FBJ-16-16 |

## LINHA UNF JIC - Cone de Vedação 45°



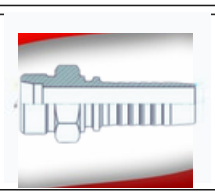
### Macho Fixo Reto UNF JIC 45°

MM100MS

| Rosca | Pol. | Bitola | MM100MS- |
|---|---|---|---|
| 5/8" - 6 | 3/8" | 6 | 06-06 |

# TERMINAIS PRENSÁVEIS

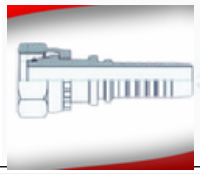
## LINHA Métrica



Macho Fixo Reto Rosca Métrica, Vedação Cone 24°

MM100MM

| Rosca | Pol. | Bitola 6 | |
|---|---|---|---|
| M12 | 1/4" | 6 8 | MM100MM-12-04-T06 |
| M14 | 1/4" | | MM100MM-14-04-T06 |
| M14 | 1/4" | 10 | MM100MM-14-04-T08 |
| M16 | 1/4" | 10 | MM100MM-16-04-T10 |
| M16 | 3/8" | 12 | MM100MM-16-06-T10 |
| M18 | 3/8" | 12 | MM100MM-18-06-T12 |
| M18 | 1/2" | 12 | MM100MM-18-08-T12 |
| M20 | 3/8" | 12 | MM100MM-20-06-T12 |
| M20 | 1/2" | 14 | MM100MM-20-08-T12 |
| M22 | 3/8" | 15 | MM100MM-22-06-T14 |
| M22 | 3/8" | 14 | MM100MM-22-06-T15 |
| M22 | 1/2" | 15 | MM100MM-22-08-T14 |
| M22 | 1/2" | 16 | MM100MM-22-08-T15 |
| M24 | 3/8" | 16 | MM100MM-24-06-T16 |
| M24 | 1/2" | 16 | MM100MM-24-08-T16 |
| M24 | 5/8" | 18 | MM100MM-24-10-T16 |
| M26 | 1/2" | 18 | MM100MM-26-08-T18 |
| M26 | 5/8" | 19 | MM100MM-26-10-T18 |
| M28 | 5/8" | 20 | MM100MM-28-10-T19 |
| M30 | 5/8" | 21 | MM100MM-30-10-T20 |
| M30 | 5/8" | 20 | MM100MM-30-10-T21 |
| M30 | 3/4" | 22 | MM100MM-30-12-T20 |
| M30 | 3/4" | 25 | MM100MM-30-12-T22 |
| M34 | 3/4" | 25 | MM100MM-34-12-T25 |
| M34 | 1" | 25 | MM100MM-34-16-T25 |
| M36 | 3/4" | 28 | MM100MM-36-12-T25 |
| M36 | 3/4" | 25 | MM100MM-36-12-T28 |
| M36 | 1" | 28 | MM100MM-36-16-T25 |
| M36 | 1" | 30 | MM100MM-36-16-T28 |
| M42 | 1" | 32 | MM100MM-42-16-T30 |
| M42 | 1" | 35 | MM100MM-42-16-T32 |
| M45 | 1.1/4" | 38 | MM100MM-45-20-T35 |
| M48 | 1.1/4" | 38 | MM100MM-48-20-T38 |
| M52 | 1.1/4" | 42 | MM100MM-52-20-T38 |
| M52 | 1.1/4" | 38 | MM100MM-52-20-T42 |
| M52 | 1.1/2" | 42 | MM100MM-52-24-T38 |
| M52 | 1.1/2" | | MM100MM-52-24-T42 |
| | | | |
| | | | |



Fêmea Reta DKO-DIN2353 - Métrica

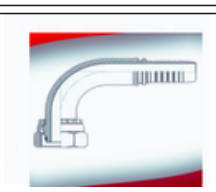
MM100FD

| Rosca | Bitola | Tubo | Código |
|---|---|---|---|
| M12 | 1/4" | 6 | MM100FD-12-04-T06 |
| M14 | 1/4" | 6 | MM100FD-14-04-T06 |
| M14 | 1/4" | 8 | MM100FD-14-04-T08 |
| M16 | 1/4" | 8 | MM100FD-16-04-T08 |
| M16 | 1/4" | 10 | MM100FD-16-04-T10 |
| M16 | 3/8" | 8 | MM100FD-16-06-T08 |
| M16 | 3/8" | 10 | MM100FD-16-06-T10 |
| M18 | 1/4" | 12 | MM100FD-18-04-T12 |
| M18 | 3/8" | 12 | MM100FD-18-06-T12 |
| M18 | 1/2" | 12 | MM100FD-18-08-T12 |
| M20 | 3/8" | 12 | MM100FD-20-06-T12 |
| M20 | 1/2" | 12 | MM100FD-20-08-T12 |
| M22 | 3/8" | 14 | MM100FD-22-06-T14 |
| M22 | 3/8" | 15 | MM100FD-22-06-T15 |
| M22 | 1/2" | 14 | MM100FD-22-08-T14 |
| M22 | 1/2" | 14 | MM100FD-22-08-T15 |
| M24 | 3/8" | 16 | MM100FD-24-06-T16 |
| M24 | 1/2" | 16 | MM100FD-24-08-T16 |
| M24 | 5/8" | 16 | MM100FD-24-10-T16 |
| M26 | 1/2" | 18 | MM100FD-26-08-T18 |
| M26 | 5/8" | 18 | MM100FD-26-10-T18 |
| M28 | 5/8" | 19 | MM100FD-28-10-T19 |
| M30 | 5/8" | 20 | MM100FD-30-10-T20 |
| M30 | 5/8" | 21 | MM100FD-30-10-T21 |
| M30 | 3/4" | 20 | MM100FD-30-12-T20 |
| M30 | 3/4" | 22 | MM100FD-30-12-T22 |
| M34 | 3/4" | 25 | MM100FD-34-12-T25 |
| M34 | 1" | 25 | MM100FD-34-16-T25 |
| M36 | 3/4" | 25 | MM100FD-36-12-T25 |
| M36 | 3/4" | 28 | MM100FD-36-12-T28 |
| M36 | 1" | 25 | MM100FD-36-16-T25 |
| M36 | 1" | 28 | MM100FD-36-16-T28 |
| M42 | 1" | 30 | MM100FD-42-16-T30 |
| M42 | 1" | 32 | MM100FD-42-16-T32 |
| M42 | 1.1/4" | 30 | MM100FD-42-20-T30 |
| M45 | 1.1/4" | 35 | MM100FD-45-20-T35 |
| M48 | 1.1/4" | 38 | MM100FD-48-20-T38 |
| M52 | 1.1/4" | 38 | MM100FD-52-20-T38 |
| M52 | 1.1/4" | 42 | MM100FD-52-20-T42 |
| M52 | 1.1/2" | 38 | MM100FD-52-24-T38 |
| M52 | 1.1/2" | 42 | MM100FD-52-24-T42 |
| | | | |
| | | | |
| | | | |

Fêmea 45° DKO-DIN2353 - Métrica

MM145FD

| Rosca | Bitola | Tubo | Código |
|---|---|---|---|
| M12 | 1/4" | 6 | MM145FD-12-04-T06 |
| M14 | 1/4" | 8 | MM145FD-14-04-T08 |
| M16 | 1/4" | 8 | MM145FD-16-04-T08 |
| M16 | 1/4" | 10 | MM145FD-16-04-T10 |
| M16 | 3/8" | 10 | MM145FD-16-06-T10 |
| M18 | 3/8" | 12 | MM145FD-18-06-T12 |
| M20 | 3/8" | 12 | MM145FD-20-06-T12 |
| M20 | 1/2" | 12 | MM145FD-20-08-T12 |
| M22 | 3/8" | 14 | MM145FD-22-06-T14 |
| M22 | 3/8" | 15 | MM145FD-22-06-T15 |
| M22 | 1/2" | 14 | MM145FD-22-08-T14 |
| M22 | 1/2" | 15 | MM145FD-22-08-T15 |
| M24 | 1/2" | 16 | MM145FD-24-08-T16 |
| M26 | 5/8" | 18 | MM145FD-26-10-T18 |
| M28 | 5/8" | 19 | MM145FD-28-10-T19 |
| M30 | 5/8" | 20 | MM145FD-30-10-T20 |
| M30 | 3/4" | 20 | MM145FD-30-12-T20 |
| M30 | 3/4" | 22 | MM145FD-30-12-T22 |
| M36 | 3/4" | 25 | MM145FD-36-12-T25 |
| M36 | 3/4" | 28 | MM145FD-36-12-T28 |
| M36 | 1" | 25 | MM145FD-36-16-T25 |
| M36 | 1" | 28 | MM145FD-36-16-T28 |
| M42 | 1" | 30 | MM145FD-42-16-T30 |
| M42 | 1" | 32 | MM145FD-42-16-T32 |
| M42 | 1.1/4" | 30 | MM145FD-42-20-T30 |
| M45 | 1.1/4" | 35 | MM145FD-45-20-T35 |
| M48 | 1.1/4" | 38 | MM145FD-48-20-T38 |
| M52 | 1.1/4" | 38 | MM145FD-52-20-T38 |
| M52 | 1.1/4" | 20 | MM145FD-52-20-T42 |
| M52 | 1.1/2" | 38 | MM145FD-52-24-T38 |
| M52 | 1.1/2" | 42 | MM145FD-52-24-T42 |
| | | | |
| | | | |

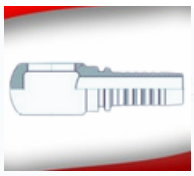


Fêmea 90° DKO-DIN2353 - Métrica

MM190FD

| Rosca | Bitola | Tubo | Código |
|---|---|---|---|
| M12 | 1/4" | 6 | MM190FD-12-04-T06 |
| M14 | 1/4" | 4 | MM190FD-14-04-T06 |
| M14 | 1/4" | 8 | MM190FD-14-04-T08 |
| M16 | 1/4" | 8 | MM190FD-16-04-T08 |
| M16 | 1/4" | 10 | MM190FD-16-04-T10 |
| M16 | 3/8" | 8 | MM190FD-16-06-T08 |
| M16 | 3/8" | 10 | MM190FD-16-06-T10 |
| M18 | 3/8" | 12 | MM190FD-18-06-T12 |
| M18 | 1/2" | 12 | MM190FD-18-08-T12 |
| M20 | 3/8" | 12 | MM190FD-20-06-T12 |
| M20 | 1/2" | 12 | MM190FD-20-08-T12 |
| M22 | 3/8" | 6 | MM190FD-22-06-T14 |
| M22 | 3/8" | 6 | MM190FD-22-06-T15 |
| M22 | 1/2" | 14 | MM190FD-22-08-T14 |
| M22 | 1/2" | 15 | MM190FD-22-08-T15 |
| M24 | 3/8" | 16 | MM190FD-24-06-T16 |
| M24 | 1/2" | 16 | MM190FD-24-08-T16 |
| M24 | 5/8" | 16 | MM190FD-24-10-T16 |
| M26 | 1/2" | 18 | MM190FD-26-08-T18 |
| M26 | 5/8" | 18 | MM190FD-26-10-T18 |
| M28 | 5/8" | 19 | MM190FD-28-10-T19 |
| M30 | 5/8" | 20 | MM190FD-30-10-T20 |
| M30 | 3/4" | 20 | MM190FD-30-12-T20 |
| M30 | 3/4" | 22 | MM190FD-30-12-T22 |
| M34 | 3/4" | 25 | MM190FD-34-12-T25 |
| M34 | 1" | 25 | MM190FD-34-16-T25 |
| M36 | 3/4" | 25 | MM190FD-36-12-T25 |
| M36 | 3/4" | 28 | MM190FD-36-12-T28 |
| M36 | 1" | 25 | MM190FD-36-16-T25 |
| M36 | 1" | 28 | MM190FD-36-16-T28 |
| M42 | 1" | 28 | MM190FD-42-16-T30 |
| M42 | 1" | 30 | MM190FD-42-20-T30 |
| M42 | 1.1/4" | 30 | MM190FD-42-16-T32 |
| M42 | 1" | 32 | MM190FD-45-20-T35 |
| M45 | 1.1/4" | 35 | MM190FD-48-20-T38 |
| M48 | 1.1/4" | 38 | MM190FD-52-20-T38 |
| M52 | 1.1/4" | 38 | MM190FD-52-20-T42 |
| M52 | 1.1/4" | 20 | MM190FD-52-24-T38 |
| M52 | 1.1/2" | 38 | MM190FD-52-24-T42 |
| M52 | 1.1/2" | 42 | |
| | | | |
| | | | |

## LINHA Banjo Métrico (Olhal)



Banjo Métrico Reto

MM100BM

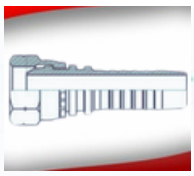
| Rosca | Bitola | |
|---|---|---|
| M10 | 1/4" | MM100BM-10-04 |
| M12 | 1/4" | MM100BM-12-04 |
| M12 | 3/8" | MM100BM-12-06 |
| M14 | 1/4" | MM100BM-14-04 |
| M14 | 3/8" | MM100BM-14-06 |
| M16 | 1/4" | MM100BM-16-04 |
| M16 | 3/8" | MM100BM-16-06 |
| M18 | 3/8" | MM100BM-18-06 |
| M18 | 1/2" | MM100BM-18-08 |

Banjo Métrico 90°

MM190BM

| Rosca | Bitola | |
|---|---|---|
| M14 | 1/4" | MM190BM-14-04 |
| M16 | 3/8" | MM190BM-16-06 |
| M18 | 3/8" | MM190BM-18-06 |

## LINHA Métrica Boleada



Fêmea Reta Giratória Boleada

MM100FM

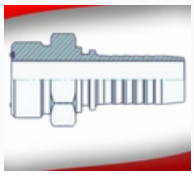
| Rosca | Bitola | Tubo | |
|---|---|---|---|
| M12 | 1/4" | 4 | MM100FM-12-04 |
| M14 | 1/4" | 4 | MM100FM-14-04 |
| M16 | 1/4" | 4 | MM100FM-16-04 |
| M16 | 3/8" | 6 | MM100FM-16-06 |
| M18 | 3/8" | 6 | MM100FM-18-06 |
| M20 | 3/8" | 6 | MM100FM-20-06 |
| M22 | 3/8" | 6 | MM100FM-22-06 |
| M22 | 1/2" | 8 | MM100FM-22-08 |
| M24 | 1/2" | 8 | MM100FM-24-08 |
| M26 | 5/8" | 10 | MM100FM-26-10 |

Fêmea 90° Giratória Boleada

MM190FM

| Rosca | Bitola | Tubo | |
|---|---|---|---|
| M12 | 1/4" | 4 | MM100FM-12-04 |
| M14 | 1/4" | 4 | MM190FM-14-04 |
| M16 | 1/4" | 4 | MM190FM-16-04 |
| M16 | 3/8" | 6 | MM190FM-16-06 |
| M18 | 3/8" | 6 | MM190FM-18-06 |
| M20 | 3/8" | 6 | MM190FM-20-06 |
| M22 | 1/2" | 8 | MM190FM-22-08 |
| M24 | 1/2" | 8 | MM190FM-24-08 |

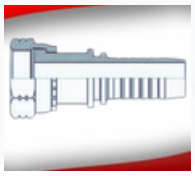
## LINHA ORFS



Macho Fixo Reto ORFS

MM100MO

| Rosca | Pol. | Bitola | |
|---|---|---|---|
| 9/16"-18 | 1/4" | 4 | MM100MO-04-04 |
| 11/16"-18 | 3/8" | 6 | MM100MO-06-06 |
| 13/16"-16 | 3/8" | 6 | MM100MO-08-06 |
| 13/16"-16 | 1/2" | 8 | MM100MO-08-08 |
| 1"-14 | 1/2" | 8 | MM100MO-10-08 |
| 1"-14 | 5/8" | 10 | MM100MO-10-10 |
| 1.3/16"-12 | 5/8" | 10 | MM100MO-12-10 |
| 1.3/16"-12 | 3/4" | 12 | MM100MO-12-12 |
| 1.7/16"-12 | 3/4" | 12 | MM100MO-16-12 |
| 1.7/16"-12 | 1" | 16 | MM100MO-16-16 |



Fêmea Giratória Reta ORFS

MM100FO

| Rosca | Pol. | Bitola | |
|---|---|---|---|
| 9/16"-18 | 1/4" | 4 | MM100FO-04-04 |
| 9/16"-18 | 3/8" | 6 | MM100FO-04-06 |
| 11/16"-18 | 1/4" | 4 | MM100FO-06-04 |
| 11/16"-18 | 3/8" | 6 | MM100FO-06-06 |
| 11/16" -18 | 1/2" | 8 | MM100FO-06-08 |
| 13/16"-16 | 3/8" | 6 | MM100FO-08-06 |
| 13/16"-16 | 1/2" | 8 | MM100FO-08-08 |
| 13/16"-16 | 5/8" | 10 | MM100FO-08-10 |
| 1"-14 | 1/2" | 8 | MM100FO-10-08 |
| 1"-14 | 5/8" | 10 | MM100FO-10-10 |
| 1"-14 | 5/8" | 12 | MM100FO-10-12 |
| 1.3/16"-12 | 1/2" | 8 | MM100FO-12-08 |
| 1.3/16"-12 | 5/8" | 10 | MM100FO-12-10 |
| 1.3/16"-12 | 3/4" | 12 | MM100FO-12-12 |
| 1.3/16"-12 | 3/4" | 12 | MM100FO-12-16 |
| 1.7/16"-12 | 3/4" | 12 | MM100FO-16-12 |
| 1.7/16"-12 | 1" | 16 | MM100FO-16-16 |
| 1.11/16"-12 | 1.1/4" | 16 | MM100FO-20-16 |
| 1.11/16"-12 | 1.1/4" | 20 | MM100FO-20-20 |
| 2"-12 | 1.1/2" | 24 | MM100FO-24-24 |
| | | | |

Fêmea Giratória 45° ORFS

MM145FO

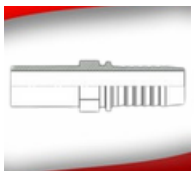
| Rosca | Pol. | Bitola | |
|---|---|---|---|
| 9/16"-18 | 1/4" | 4 | MM100FO-04-04 |
| 11/16"-18 | 1/4" | 4 | MM145FO-06-04 |
| 11/16"-18 | 3/8" | 6 | MM145FO-06-06 |
| 13/16"-16 | 3/8" | 6 | MM145FO-08-06 |
| 13/16"-16 | 1/2" | 8 | MM145FO-08-08 |
| 13/16"-16 | 5/8" | 10 | MM145FO-08-10 |
| 1"-14 | 1/2" | 8 | MM145FO-10-08 |
| 1"-14 | 5/8" | 10 | MM145FO-10-10 |
| 1.3/16"-12 | 5/8" | 10 | MM145FO-12-10 |
| 1.3/16"-12 | 3/4" | 12 | MM145FO-12-12 |
| 1.7/16"-12 | 3/4" | 12 | MM145FO-16-12 |
| 1.7/16"-12 | 1" | 16 | MM145FO-16-16 |
| 1.11/16"-12 | 1.1/4" | 16 | MM145FO-20-16 |
| 1.11/16"-12 | 1.1/4" | 20 | MM145FO-20-20 |
| 2"-12 | 1.1/2" | 24 | MM145FO-24-24 |
| | | | |

Fêmea Giratória 90° ORFS

MM190FO

| Rosca | Pol. | Bitola | |
|---|---|---|---|
| 9/16"-18 | 1/4" | 4 | MM100FO-04-04 |
| 11/16"-18 | 1/4" | 4 | MM190FO-06-04 |
| 11/16"-18 | 3/8" | 6 | MM190FO-06-06 |
| 11/16"-18 | 3/8" | 6 | MM190FO-06-06-L |
| 11/16"-18 | 1/2" | 8 | MM190FO-06-08 |
| 13/16"-16 | 3/8" | 6 | |
| 13/16"-16 | 1/2" | 8 | MM190FO-08-06 |
| 13/16"-16 | 1/2" | 8 | MM190FO-08-08 |
| 13/16"-16 | 5/8" | 10 | MM190FO-08-08-L |
| 1"-14 | 1/2" | 8 | MM190FO-08-10 |
| 1"-14 | 5/8" | 10 | MM190FO-10-08 |
| 1"-14 | 5/8" | 10 | MM190FO-10-10 |
| 1.3/16"-12 | 3/4" | 10 | MM190FO-10-10-L |
| 1.3/16"-12 | 1/2" | 12 | MM190FO-10-12 |
| 1.3/16"-12 | 5/8" | 10 | MM190FO-12-08 |
| 1.3/16"-12 | 3/4" | 12 | MM190FO-12-10 |
| 1.3/16"-12 | 3/4" | 12 | MM190FO-12-12 |
| 1.3/16"-12 | 1/2" | 12 | MM190FO-12-12-L |
| 1.3/16"-12 | 1" | 8 | MM190FO-12-08 |
| 1.7/16"-12 | 1" | 16 | MM190FO-12-16 |
| 1.7/16"-12 | 3/4" | 12 | MM190FO-16-12 |
| 1.7/16"-12 | 1" | 16 | MM190FO-16-16 |
| | 1" | 16 | MM190FO-16-16-L |
| 1.11/16"-12 | 1" | 16 | MM190FO-20-16 |
| 1.11/16"-12 | 1.1/4" | 20 | MM190FO-20-20 |
| 2"-12 | 1.1/2" | 24 | MM190FO-24-24 |
| | | | |

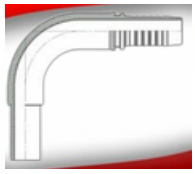
## LINHA Métrica Ponta Lisa



Ponta Lisa Reta para montagem com Anilha e Porca.

MM100PL

| Pol. | Bitola | Tubo | |
|---|---|---|---|
| 1/4" | 4 | 6 | MM100PL-06-04 |
| 1/4" | 4 | 8 | MM100PL-08-04 |
| 1/4" | 4 | 10 | MM100PL-10-04 |
| 3/8" | 6 | 10 | MM100PL-10-06 |
| 3/8" | 6 | 12 | MM100PL-12-06 |
| 1/2" | 8 | 12 | MM100PL-12-08 |
| 1/2" | 8 | 14 | MM100PL-14-08 |
| 1/2" | 8 | 15 | MM100PL-15-08 |
| 1/2" | 8 | 16 | MM100PL-16-08 |
| 5/8" | 10 | 18 | MM100PL-18-10 |
| 3/4" | 12 | 20 | MM100PL-20-12 |
| 3/4" | 12 | 22 | MM100PL-22-12 |
| 3/4" | 12 | 25 | MM100PL-25-12 |
| 1" | 16 | 30 | MM100PL-30-16 |

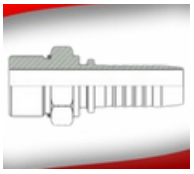


Ponta Lisa 90° para montagem com Anilha e Porca.

MM190PL

| Pol. | Bitola | Tubo | |
|---|---|---|---|
| 1/4" | 4 | 6 | MM100PL-06-04 |
| 1/4" | 4 | 8 | MM190PL-08-04 |
| 1/4" | 4 | 10 | MM190PL-10-04 |
| 3/8" | 6 | 10 | MM190PL-10-06 |
| 3/8" | 6 | 12 | MM190PL-12-06 |
| 1/2" | 8 | 12 | MM190PL-12-08 |
| 1/2" | 8 | 15 | MM190PL-14-08 |
| 1/2" | 8 | 15 | MM190PL-15-08 |
| 1/2" | 8 | 16 | MM190PL-16-08 |
| 5/8" | 10 | 18 | MM190PL-18-10 |
| 3/4" | 12 | 20 | MM190PL-20-12 |
| 3/4" | 12 | 22 | MM190PL-22-12 |
| 3/4" | 12 | 25 | MM190PL-25-12 |
| 1" | 16 | 30 | MM190PL-30-16 |

## LINHA UNF Paralelo

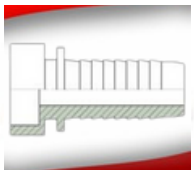


Macho UNF Paralelo

MM100MP

| Rosca | Pol. | Bitola | |
|---|---|---|---|
| 3/4"-16 | 1/2" | 8 | MM100MP-08-08 |
| 7/8"-14 | 1/2" | 8 | MM100MP-10-08 |
| 1.1/16"-12 | 3/4" | 12 | MM100MP-12-12 |
| 1.5/16"-12 | 1" | 16 | MM100MP-16-16 |

## LINHA Salva Vida

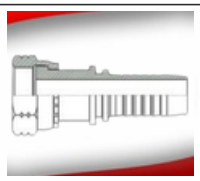


SOS - Salva Vida

MM100SV

| Pol. | Interno | |
|---|---|---|
| 1/4" | 8 | MM100SV-08-04 |
| 1/4" | 11 | MM100SV-11-04 |
| 3/8" | 12 | MM100SV-12-06 |
| 1/2" | 16 | MM100SV-16-08 |
| 5/8" | 18 | MM100SV-18-10 |
| 3/4" | 22 | MM100SV-22-12 |
| 1" | 28 | MM100SV-28-16 |
| 1.1/4" | 35 | MM100SV-35-20 |

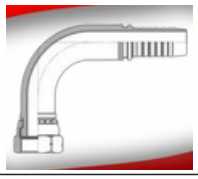
## LINHA Métrica ORFS



Fêmea Giratória Reta Métrica ORFS

MM100FMP

| Ros ca | Bitola | Bitola | |
|---|---|---|---|
| M12 | 1/4' | 4 | MM100FMP-12-04 |
| M14 | 1/4" | 4 | MM100FMP-14-04 |
| M16 | 3/8" | 6 | MM100FMP-16-06 |
| M18 | 3/8" | 6 | MM100FMP-18-06 |
| M20 | 3/8" | 6 | MM100FMP-20-06 |

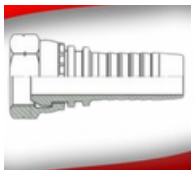


Fêmea Giratória 90° Métrica ORFS

MM190FMP

| Ros ca | Bitola | Bitola | |
|---|---|---|---|
| M12 | 1/4' | 4 | MM100FMP-12-04 |
| M14 | 1/4" | 4 | MM190FMP-14-04 |
| M16 | 3/8" | 6 | MM190FMP-16-06 |
| M18 | 3/8" | 6 | MM190FMP-18-06 |
| M20 | 3/8" | 6 | MM190FMP-20-06 |

## LINHA BSP Boleada 60o



### Fêmea Giratória Reta BSP - Vedação Boleada

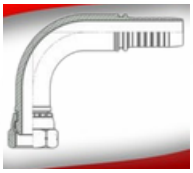
MM100FB

| Rosca | Pol. | Bitola | Código |
|---|---|---|---|
| 1/4" - 19 | 1/4" | 4 | MM100FB-04-04 |
| 1/4" - 19 | 3/8" | 6 | MM100FB-04-06 |
| 3/8" - 19 | 1/4" | 4 | MM100FB-06-04 |
| 3/8" - 19 | 3/8" | 6 | MM100FB-06-06 |
| 1/2" - 14 | 3/8" | 6 | MM100FB-08-06 |
| 1/2" - 14 | 1/2" | 8 | MM100FB-08-08 |
| 5/8" - 14 | 1/2" | 8 | MM100FB-10-08 |
| 5/8" - 14 | 5/8" | 10 | MM100FB-10-10 |
| 3/4" - 14 | 5/8" | 10 | MM100FB-12-10 |
| 3/4" - 14 | 3/4" | 12 | MM100FB-12-12 |
| 1" - 11 | 3/4" | 12 | MM100FB-16-12 |
| 1" - 11 | 1" | 16 | MM100FB-16-16 |
| 1.1/4" - 11 | 1.1/4" | 20 | MM100FB-20-20 |
| 1.1/2" - 11 | 1.1/2" | 24 | MM100FB-24-24 |
| 2" | 2" | 32 | MM100FB-32-32 |

### Fêmea Giratória 45° BSP - Vedação Boleada

MM145FB

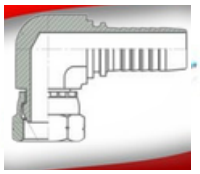
| Rosca | Pol. | Bitola | |
|---|---|---|---|
| 1/4" - 19 | 1/4" | 4 | MM145FB-04-04 |
| 3/8" - 19 | 3/8" | 6 | MM145FB-06-06 |
| 1/2" - 14 | 1/2" | 8 | MM145FB-08-08 |
| 5/8" - 14 | 1/2" | 8 | MM145FB-10-08 |
| 5/8" - 14 | 5/8" | 10 | MM145FB-10-10 |
| 3/4" - 14 | 5/8" | 10 | MM145FB-12-10 |
| 3/4" - 14 | 3/4" | 12 | MM145FB-12-12 |
| 1" - 11 | 3/4" | 12 | MM145FB-16-12 |
| 1" - 11 | 1" | 16 | MM145FB-16-16 |
| 1.1/4" - 11 | 1.1/4" | 20 | MM145FB-20-20 |
| 1.1/2" - 11 | 1.1/2" | 20 | MM145FB-24-24 |
| 2" | 2" | 32 | MM145FB-32-32 |



### Fêmea Giratória 90° BSP - Vedação Boleada

MM190FB

| Rosca | Pol. | Bitola | |
|---|---|---|---|
| 1/4" - 19 | 1/4" | 4 | MM100FB-04-04 |
| 1/4" - 19 | 3/8" | 6 | MM190FB-04-06 |
| 3/8" - 19 | 1/4" | 4 | MM190FB-06-04 |
| 3/8" - 19 | 3/8" | 6 | MM190FB-06-06 |
| 1/2" - 14 | 3/8" | 6 | MM190FB-08-06 |
| 1/2" - 14 | 1/2" | 8 | MM190FB-08-08 |
| 5/8" - 14 | 1/2" | 8 | MM190FB-10-08 |
| 5/8" - 14 | 5/8" | 10 | MM190FB-10-10 |
| 3/4" - 14 | 5/8" | 10 | MM190FB-12-10 |
| 3/4" - 14 | 3/4" | 12 | MM190FB-12-12 |
| 1" - 11 | 3/4" | 12 | MM190FB-16-12 |
| 1" - 11 | 1" | 16 | MM190FB-16-16 |
| 1.1/4" - 11 | 1.1/4" | 20 | MM190FB-20-20 |
| 1.1/2" - 11 | 1.1/2" | 24 | MM190FB-24-24 |
| 2" | 2" | 32 | MM190FB-32-32 |

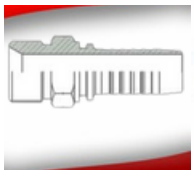


### Fêmea Giratória 90° BSP Boleada 60° Compact

MM190FBC

| Rosca | Pol. | Bitola | Código |
|---|---|---|---|
| 1/4"-19 | 1/4" | 4 | MM190FBC-04-04 |
| 3/8"-19 | 3/8" | 6 | MM190FBC-06-06 |
| 1/2"-14 | 1/2" | 8 | MM190FBC-08-08 |

## LINHA BSP Boleado 60°

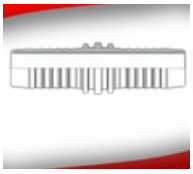


### Macho Reto BSP - Vedação Boleada

MM100MB

| Rosca | Pol. | Bitola | Código |
|---|---|---|---|
| 1/4" | 1/4" | 4 | MM100MB-04-04 |
| 3/8" | 3/8" | 6 | MM100MB-06-06 |
| 1/2" | 1/2" | 8 | MM100MB-08-08 |
| 5/8" | 5/8" | 10 | MM100MB-10-10 |
| 3/4" | 3/4" | 12 | MM100MB-12-12 |
| 1" | 1" | 16 | MM100MB-16-16 |

## LINHA Emendas

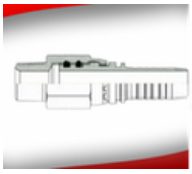


### Emenda para Mangueiras "Espigão"

MM100EM

| Pol. | Bitola | |
|---|---|---|
| 1/4" | 4 | MM100EM-04-04 |
| 5/16" | 5 | MM100EM-05-05 |
| 3/8" | 6 | MM100EM-06-06 |
| 1/2" | 8 | MM100EM-08-08 |
| 5/8" | 10 | MM100EM-10-10 |
| 3/4" | 12 | MM100EM-12-12 |
| 1" | 16 | MM100EM-16-16 |
| 1.1/4" | 20 | MM100EM-20-20 |
| 1.1/2" | 24 | MM100EM-24-24 |

## LINHA NPTF Macho Giratório

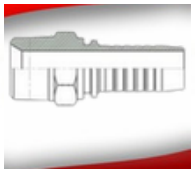


### Macho Giratório Reto Rosca NPTF (Cônica)

MM100MG

| Rosca | Pol. | Bitola | |
|---|---|---|---|
| 1/8" - 27 | 1/4" | 4 | MM100MG-02-04 |
| 1/4" | 1/4" | 4 | MM100MG-04-04 |

## LINHA NPTF Macho Fixo

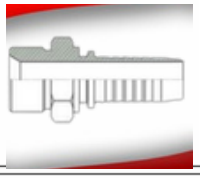


### Macho Fixo Reto Rosca NPTF (Cônica)

100MN

| Rosca | Pol. | Bitola | MM100MN- |
|---|---|---|---|
| 1/8" - 27 | 1/4" | 4 | 02-04 |
| 1/4" - 18 | 1/4" | 4 | 100MN-04-04 |
| 1/4" - 18 | 3/8" | 6 | 100MN-04-06 |
| 3/8" - 18 | 1/4" | 4 | 100MN-06-04 |
| 3/8" - 18 | 3/8" | 6 | 100MN-06-06 |
| 3/8" - 18 | 1/2" | 8 | 100MN-06-08 |
| 1/2" - 14 | 1/4" | 4 | 100MN-08-04 |
| 1/2" - 14 | 3/8" | 6 | 100MN-08-06 |
| 1/2" - 14 | 1/2" | 8 | 100MN-08-08 |
| 1/2" - 14 | 5/8" | 10 | 100MN-08-10 |
| 1/2" - 14 | 3/4" | 12 | 100MN-08-12 |
| 3/4" - 14 | 1/2" | 8 | 100MN-12-08 |
| 3/4" - 14 | 5/8" | 10 | 100MN-12-10 |
| 3/4" - 14 | 3/4" | 12 | 100MN-12-12 |
| 3/4" - 14 | 1" | 16 | 100MN-12-16 |
| 1" - 11.5 | 3/4" | 12 | 100MN-16-12 |
| 1" - 11.5 | 1" | 16 | 100MN-16-16 |
| 1.1/4" - 11.5 | 1" | 16 | 100MN-20-16 |
| 1.1/4" - 11.5 | 1.1/4" | 20 | 100MN-20-20 |
| 1.1/2" - 11.5 | 1.1/4" | 20 | 100MN-24-20 |
| 1.1/2" - 11.5 | 1.1/2" | 24 | 100MN-24-24 |
| 2" - 11.5 | 1.1/2" | 24 | 100MN-32-24 |
| 2" - 11.5 | 2" | 32 | 100MN-32-32 |

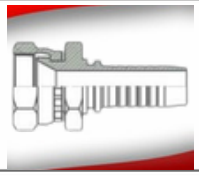
## LINHA Komatsu



### Macho Fixo Reto Komatsu

MM100MK

| Rosca | Pol. | Bitola | |
|---|---|---|---|
| M24 x 1.5 | 5/8" | 10 | MM100MK-24-10 |

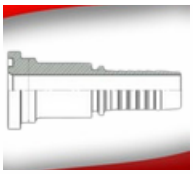


### Fêmea Giratória Reta Métrica JIC (Komatsu)

MM100FK

| Rosca | Pol. | Bitola | |
|---|---|---|---|
| M14 x 1.5 | 1/4" | 4 | MM100FK-14-04 |
| M16 x 1.5 | 3/8" | 6 | MM100FK-16-06 |
| M18 x 1.5 | 3/8" | 6 | MM100FK-18-06 |
| M20 x 1.5 | 3/8" | 6 | MM100FK-20-06 |
| M22 x 1.5 | 3/8" | 6 | MM100FK-22-06 |
| M22 x 1.5 | 1/2" | 8 | MM100FK-22-08 |
| M24 x 1.5 | 5/8" | 10 | MM100FK-24-10 |
| M24 x 1.5 | 3/4" | 12 | MM100FK-24-12 |
| M30 x 1.5 | 5/8" | 10 | MM100FK-30-10 |
| M30 x 1.5 | 3/4" | 12 | MM100FK-30-12 |
| M33 x 1.5 | 1" | 16 | MM100FK-33-16 |

## LINHA Flange (3000 LBS)



Flange Reto 3000PSI

MM100F3

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 30.2 | 1.3/16" | 1/2" | MM100F3-08-08 |
| 38.1 | 1.1/2" | 1/2" | MM100F3-12-08 |
| 38.1 | 1.1/2" | 5/8" | MM100F3-12-10 |
| 38.1 | 1.1/2" | 3/4" | MM100F3-12-12 |
| 38.1 | 1.1/2" | 1" | MM100F3-12-16 |
| 44.4 | 1.3/4" | 3/4" | MM100F3-16-12 |
| 44.4 | 1.3/4" | 1" | MM100F3-16-16 |
| 44.4 | 1.3/4" | 1.1/4" | MM100F3-16-20 |
| 50.8 | 2" | 1" | MM100F3-20-16 |
| 50.8 | 2" | 1.1/4" | MM100F3-20-20 |
| 60.3 | 2.3/8" | 1.1/4" | MM100F3-24-20 |
| 60.3 | 2.3/8" | 1.1/2" | MM100F3-24-24 |
| 71.4 | 2.13/16" | 1.1/2" | MM100F3-32-24 |
| 71.4 | 2.13/16" | 2" | MM100F3-32-32 |
| | | | |

Flange 30o 3000PSI

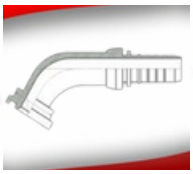
MM130F3

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 38.1 | 1.1/2" | 3/4" | MM130F3-12-12 |
| 44.4 | 1.3/4" | 1" | MM130F3-16-16 |

Flange 45o 3000PSI

MM145F3

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 30.2 | 1.3/16" | 1/2" | MM145F3-08-08 |
| 38.1 | 1.1/2" | 1/2" | MM145F3-12-08 |
| 38.1 | 1.1/2" | 5/8" | MM145F3-12-10 |
| 38.1 | 1.1/2" | 3/4" | MM145F3-12-12 |
| 44.4 | 1.3/4" | 3/4" | MM145F3-16-12 |
| 44.4 | 1.3/4" | 1" | MM145F3-16-16 |
| 50.8 | 2" | 1" | MM145F3-20-16 |
| 50.8 | 2" | 1.1/4" | MM145F3-20-20 |
| 60.3 | 2.3/8" | 1.1/4" | MM145F3-24-20 |
| 60.3 | 2.3/8" | 1.1/2" | MM145F3-24-24 |
| 71.4 | 2.13/16" | 1.1/2" | MM145F3-32-24 |
| 71.4 | 2.13/16" | 2" | MM145F3-32-32 |
| | | | |

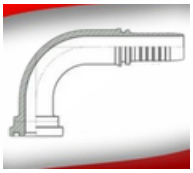


Flange 60o 3000PSI

MM160F3

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 38.1 | 1.1/2" | 3/4" | MM160F3-12-12 |

## LINHA Flange (3000 LBS)

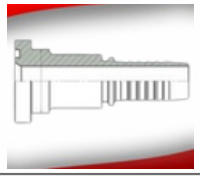


Flange 90o 3000PSI

MM190F3

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 30.2 | 1.3/16" | 1/2" | MM190F3-08-08 |
| 38.1 | 1.1/2" | 1/2" | MM190F3-12-08 |
| 38.1 | 1.1/2" | 5/8" | MM190F3-12-10 |
| 38.1 | 1.1/2" | 3/4" | MM190F3-12-12 |
| 38.1 | 1.1/2" | 3/4" | MM190F3-12-12-L |
| 38.1 | 1.1/2" | 1" | MM190F3-12-16 |
| 44.4 | 1.3/4" | 3/4" | MM190F3-16-12 |
| 44.4 | 1.3/4" | 3/4" | MM190F3-16-12-L |
| 44.4 | 1.3/4" | 1" | MM190F3-16-16 |
| 44.4 | 1.3/4" | 1" | MM190F3-16-16-L |
| 44.4 | 1.3/4" | 1.1/4" | MM190F3-16-20 |
| 50.8 | 2" | 1" | MM190F3-20-16 |
| 50.8 | 2" | 1.1/4" | MM190F3-20-20 |
| 60.3 | 2.3/8" | 1.1/4" | MM190F3-24-20 |
| 60.3 | 2.3/8" | 1.1/2" | MM190F3-24-24 |
| 71.4 | 2.13/16" | 1.1/2" | MM190F3-32-24 |
| 71.4 | 2.13/16" | 2" | MM190F3-32-32 |
| | | | |

## LINHA Flange (6000 LBS)



Flange Reto 6000PSI

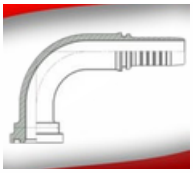
MM100F6

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 41.3 | 1.5/8" | 3/4" | MM100F6-12-12 |
| 47.6 | 1.7/8" | 3/4" | MM100F6-16-12 |
| 47.6 | 1.7/8" | 1" | MM100F6-16-16 |
| 54 | 2.1/8" | 1" | MM100F6-20-16 |
| 54 | 2.1/8" | 1.1/4" | MM100F6-20-20 |
| 63.5 | 2.1/2" | 1.1/4" | MM100F6-24-20 |
| 63.5 | 2.1/2" | 1.1/2" | MM100F6-24-24 |
| | | | |

Flange 45o 6000PSI

MM145F6

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 41.3 | 1.5/8" | 3/4" | MM145F6-12-12 |
| 47.6 | 1.7/8" | 3/4" | MM145F6-16-12 |
| 47.6 | 1.7/8" | 1" | MM145F6-16-16 |
| 54 | 2.1/8" | 1" | MM145F6-20-16 |
| 54 | 2.1/8" | 1.1/4" | MM145F6-20-20 |
| | | | |

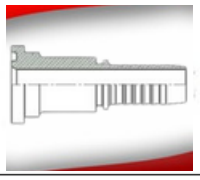


Flange 90o 6000PSI

MM190F6

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 41.3 | 1.5/8" | 3/4" | MM190F6-12-12 |
| 47.6 | 1.7/8" | 3/4" | MM190F6-16-12 |
| 47.6 | 1.7/8" | 1" | MM190F6-16-16 |
| 47.6 | 1.7/8" | 1" | MM190F6-16-16-L |
| 54 | 2.1/8" | 1" | MM190F6-20-16 |
| 54 | 2.1/8" | 1.1/4" | MM190F6-20-20 |
| 54 | 2.1/8" | 1.1/4" | MM190F6-20-20-L |
| 63.5 | 2.1/2" | 1.1/4" | MM190F6-24-20 |
| | | | |

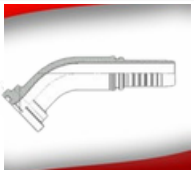
## Flange (9000 LBS) - Super Cat 14 mm



Flange Reto 9000PSI - Super Cat 14 mm

MM100F9

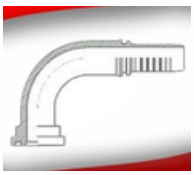
| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 41.3 | 1.5/8" | 3/4" | MM100F9-12-12 |
| 47.6 | 1.7/8" | 3/4" | MM100F9-16-12 |
| 47.6 | 1.7/8" | 1" | MM100F9-16-16 |
| 54 | 2.1/8" | 1" | MM100F9-20-16 |
| 54 | 2.1/8" | 1.1/4" | MM100F9-20-20 |
| 63.5 | 2.1/2" | 1.1/2" | MM100F9-24-24 |



Flange 45° 9000PSI - Super Cat 14 mm

MM145F9

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 41.3 | 1.5/8" | 3/4" | MM145F9-12-12 |
| 47.6 | 1.7/8" | 3/4" | MM145F9-16-12 |
| 47.6 | 1.7/8" | 1" | MM145F9-16-16 |
| 54 | 2.1/8" | 1" | MM145F9-20-16 |
| 54 | 2.1/8" | 1.1/4" | MM145F9-20-20 |
| 63.5 | 2.1/2" | 1.1/2" | MM145F9-24-24 |

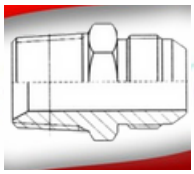


Flange 90° 9000PSI - Super Cat 14 mm

MM190F9

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 41.3 | 1.5/8" | 3/4" | MM190F9-12-12 |
| 41.3 | 1.5/8" | 3/4" | MM190F9-12-12-L |
| 47.6 | 1.7/8" | 3/4" | MM190F9-16-12 |
| 47.6 | 1.7/8" | 3/4" | MM190F9-16-12-L |
| 47.6 | 1.7/8" | 1" | MM190F9-16-16 |
| 47.6 | 1.7/8" | 1" | MM190F9-16-16-L |
| 54 | 2.1/8" | 1" | MM190F9-20-16 |
| 54 | 2.1/8" | 1" | MM190F9-20-16-L |
| 54 | 2.1/8" | 1.1/4" | MM190F9-20-20 |
| 54 | 2.1/8" | 1.1/4" | MM190F9-20-20-L |
| 54 | 2.1/8" | 1.1/4" | MM190F9-24-24 |
| 63.5 | 2.1/2" | 1.1/2" | |
| | | | |

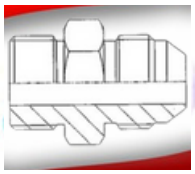
## NPT, JIC, Oring, BSP e Métrico



### Macho NPT x Macho JIC

MM200NJ

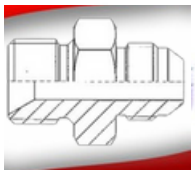
| Traço | Dimensões | | Código |
|---|---|---|---|
| | NPT | JIC 37O | |
| | 1/8" | 7/16" | MM200NJ-02-04 |
| | 1/8" | 9/16" | MM200NJ-02-06 |
| | 1/4" | 7/16" | MM200NJ-04-04 |
| | 1/4" | 1/2" | MM200NJ-04-05 |
| | 1/4" | 9/16" | MM200NJ-04-06 |
| | 1/4" | 3/4" | MM200NJ-04-08 |
| | 3/8" | 7/16" | MM200NJ-06-04 |
| | 3/8" | 9/16" | MM200NJ-06-06 |
| | 3/8" | 3/4" | MM200NJ-06-08 |
| | 1/2" | 7/8" | MM200NJ-06-10 |
| | 1/2" | 9/16" | MM200NJ-08-06 |
| | 1/2" | 3/4" | MM200NJ-08-08 |
| | 3/4" | 7/8" | MM200NJ-08-10 |
| | 3/4" | 1.1/16" | MM200NJ-08-12 |
| | 3/4" | 3/4" | MM200NJ-12-08 |
| | 3/4" | 7/8" | MM200NJ-12-10 |
| | 1" | 1.1/16" | MM200NJ-12-12 |
| | 1" | 1.5/16" | MM200NJ-12-16 |
| | 1 1/4" | 1.1/16" | MM200NJ-16-12 |
| | 1 1/4" | 1.5/16" | MM200NJ-16-16 |
| | 1 1/2" | 1.5/8" | MM200NJ-16-20 |
| | 1 1/2" | 1.5/16" | MM200NJ-20-16 |
| | 2" | 1.5/8" | MM200NJ-20-20 |
| | 2" | 1.7/8" | MM200NJ-20-24 |
| | | 1.5/8" | MM200NJ-24-20 |
| | | 1.7/8" | MM200NJ-24-24 |
| | | 2.1/2" | MM200NJ-24-32 |
| | | 1.7/8" | MM200NJ-32-24 |
| | | 2.1/2" | MM200NJ-32-32 |



### Macho O-Ring x Macho JIC

MM200OJ

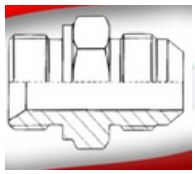
| Traço | Dimensões | | Código |
|---|---|---|---|
| | O-Ring | JIC 37O | |
| 04-04 | 7/16" | 7/16" | MM200OJ-04-04 |
| 04-06 | 7/16" | 9/16" | MM200OJ-04-06 |
| 05-05 | 1/2" | 1/2" | MM200OJ-05-05 |
| 05-06 | 1/2" | 9/16" | MM200OJ-05-06 |
| 06-06 | 9/16" | 9/16" | MM200OJ-06-06 |
| 06-08 | 9/16" | 3/4" | MM200OJ-06-08 |
| 06-10 | 9/16" | 7/8" | MM200OJ-06-10 |
| 08-06 | 3/4" | 1.1/16" | MM200OJ-08-06 |
| 08-08 | 3/4" | 9/16" | MM200OJ-08-08 |
| 08-10 | 3/4" | 3/4" | MM200OJ-08-10 |
| 08-12 | 7/8" | 7/8" | MM200OJ-08-12 |
| 10-06 | 7/8" | 1.1/16" | MM200OJ-10-06 |
| 10-08 | 7/8" | 1.5/16" | MM200OJ-10-08 |
| 10-10 | 7/8" | 3/4" | MM200OJ-10-10 |
| 10-12 | 7/8" | 7/8" | MM200OJ-10-12 |
| 10-16 | 1.1/16" | 1.1/16" | MM200OJ-10-16 |
| 12-08 | 1.1/16" | 1.5/16" | MM200OJ-12-08 |
| 12-10 | 1.1/16" | 7/8" | MM200OJ-12-10 |
| 12-12 | 1.5/16" | 1.1/16" | MM200OJ-12-12 |
| 12-16 | 1.5/16" | 1.5/16" | MM200OJ-12-16 |
| 16-10 | 1.5/16" | 1.5/8" | MM200OJ-16-10 |
| 16-12 | 1.5/16" | 1.5/16" | MM200OJ-16-12 |
| 16-16 | 1.5/8" | 1.5/8" | MM200OJ-16-16 |
| 16-20 | 1.5/8" | 1.7/8" | MM200OJ-16-20 |
| 20-16 | 1.5/8" | | MM200OJ-20-16 |
| 20-20 | 1.7/8" | | MM200OJ-20-20 |
| 20-24 | | | MM200OJ-20-24 |
| 24-24 | | | MM200OJ-24-24 |



### Macho BSP x Macho JIC

MM200BJ

| Traço | Dimensões | | Código |
|---|---|---|---|
| | BSP | JIC 37O | |
| 04-04 | 1/4" | 7/16" | MM200BJ-04-04 |
| 04-06 | 1/4" | 9/16" | MM200BJ-04-06 |
| 06-06 | 3/8" | 9/16" | MM200BJ-06-06 |
| 06-08 | 3/8" | 3/4" | MM200BJ-06-08 |
| 06-10 | 3/8" | 7/8" | MM200BJ-06-10 |
| 08-06 | 1/2" | 9/16" | MM200BJ-08-06 |
| 08-08 | 1/2" | 3/4" | MM200BJ-08-08 |
| 08-10 | 1/2" | 7/8" | MM200BJ-08-10 |
| 08-12 | 1/2" | 1.1/16" | MM200BJ-08-12 |
| 12-10 | 3/4" | 7/8" | MM200BJ-12-10 |
| 12-12 | 3/4" | 1.1/16" | MM200BJ-12-12 |
| 12-16 | 3/4" | 1.5/16" | MM200BJ-12-16 |
| 16-12 | 1" | 1.1/16" | MM200BJ-16-12 |
| 16-16 | 1" | 1.5/16" | MM200BJ-16-16 |
| 20-20 | 1.1/4" | 1.5/8" | MM200BJ-20-20 |

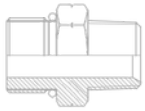


### Macho Métrico x Macho JIC

MM200MJ

| Traço | Dimensões | | Código |
|---|---|---|---|
| | Métrico | JIC 37O | |
| 12-04 | M12 | 7/16" | MM200MJ-12-04 |
| 14-04 | M14 | 7/16" | MM200MJ-14-04 |
| 16-06 | M16 | 9/16" | MM200MJ-16-06 |
| 16-08 | M16 | 3/4" | MM200MJ-16-08 |
| 18-06 | M18 | 9/16" | MM200MJ-18-06 |
| 18-08 | M18 | 3/4" | MM200MJ-18-08 |
| 20-06 | M20 | 9/16" | MM200MJ-20-06 |
| 20-08 | M20 | 3/4" | MM200MJ-20-08 |
| 22-10 | M22 | 7/8" | MM200MJ-22-10 |
| 22-12 | M22 | 1.1/16" | MM200MJ-22-12 |

### O-ring,NPT

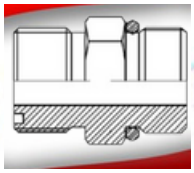


### Macho O-Ring x Macho NPT

MM200ON

| Traço | Dimensões | | Código |
|---|---|---|---|
| | O-Ring | NPT | |
| 08-08 | 3/4" | 1/2" | 200ON-08-08 |
| 10-08 | 7/8" | 1/2" | 200ON-10-08 |
| 12-08 | 1.1/16" | 1/2" | 200ON-12-08 |

## ORFS e O-Ring

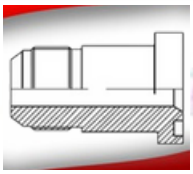


### Macho ORFS x Macho O-Ring

MM200OO

| Traço | Dimensões | | Código |
|---|---|---|---|
| | ORFS | O-Ring | |
| 06-06 | 11/16" | 9/16" | MM200OO-06-06 |
| 08-08 | 13/16" | 3/4" | MM200OO-08-08 |
| 10-08 | 1" | 3/4" | MM200OO-10-08 |
| 10-10 | 1" | 7/8" | MM200OO-10-10 |
| 12-12 | 1.3/16" | 1.1/16" | MM200OO-12-12 |

## Flange e Solda



### Macho JIC x Flange 3000 PSI

MM200JF

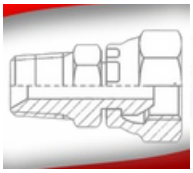
| Traço | Dimensões | | Código |
|---|---|---|---|
| | JIC 37° | Flange | |
| 12-12 | 1.1/16" | 3/4" | MM200JF-12-12 |
| 16-16 | 1.5/16" | 1" | MM200JF-16-16 |

### Macho JIC x Solda

MMMM240JS

| Traço | Dimensões | Código |
|---|---|---|
| | JIC 37° | |
| 4 | 7/16" | MMMM240J |
| 6 | 3/8" | |
| 8 | 1/2" | S-04 |
| 10 | 5/8" | 04M-0M6M M240J |
| 12 | 3/4" | MMMM240J |
| 16 | 1" | |
| | | S-08 |
| | | 06M-1M0M M240J |
| | | MMMM240J |
| | | S-12 |
| | | 08M-1M6M M240J |

## NPT, JIC



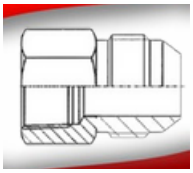
### Macho NPT x Fêmea JIC

MMMM201NJ

| Traço | Dimensões | | Código |
|---|---|---|---|
| | NPT | JIC 37O | |
| 04-06 | 1/4" | 9/16" | MMMM201NJ- |
| 06-06 | 3/8" | 9/16" | |
| 06-08 | 3/8" | 3/4" | 04-06 |
| 08-08 | 1/2" | 3/4" | 06M-0M6 M201NJ- |
| 08-10 | 1/2" | 7/8" | MMMM201NJ- |
| 12-12 | 3/4" | 1.1/16" | |
| 12-16 | 3/4" | 1.5/16" | 06-08 |
| 16-12 | 1" | 1.1/16" | 08M-0M8 M201NJ- |
| 16-16 | 1" | 1.5/16" | MMMM201NJ- |
| | | | 08-10 |
| | | | 12M-1M2 M201NJ- |
| | | | MMMM201NJ- |
| | | | 12-16 |
| | | | 16M-1M2 M201NJ- |
| | | | MMMM201NJ- |
| | | | 16-16 |

# ADAPTADORES

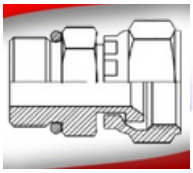
## NPT, JIC, O-Ring E Bucha de Redução



Fêmea Fixa NPT x Macho JIC

MM212NJ

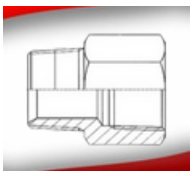
| Traço | Dimensões NPT | Dimensões JIC 37O | Código |
|---|---|---|---|
| 02-04 | 1/8" | 7/16" | MM212NJ-02-04 |
| 04-02 | 1/4" | 5/16" | MM212NJ-04-02 |
| 04-06 | 1/4" | 9/16" | MM212NJ-04-06 |
| 06-04 | 3/8" | 7/16" | MM212NJ-06-04 |
| 06-08 | 3/8" | 3/4" | MM212NJ-06-08 |
| 06-10 | 3/8" | 7/8" | MM212NJ-06-10 |
| 08-06 | 1/2" | 9/16" | MM212NJ-08-06 |
| 08-08 | 1/2" | 3/4" | MM212NJ-08-08 |
| 08-10 | 1/2" | 7/8" | MM212NJ-08-10 |
| 12-12 | 3/4" | 1.1/16" | MM212NJ-12-12 |
| 12-16 | 3/4" | 1.5/16" | MM212NJ-12-16 |
| 16-12 | 1" | 1.1/16" | MM212NJ-16-12 |
| 16-16 | 1" | 1.5/16" | MM212NJ-16-16 |



Macho O-Ring x Fêmea JIC

MM201OJ

| Traço | Dimensões O-Ring | Dimensões JIC 37O | Código |
|---|---|---|---|
| 08-08 | 3/4" | 3/4" | MM201OJ-08-08 |
| 08-10 | 3/4" | 7/8" | MM201OJ-08-10 |
| 10-10 | 7/8" | 7/8" | MM201OJ-10-10 |
| 12-12 | 1.1/16" | 1.1/16" | MM201OJ-12-12 |
| 16-16 | 1.5/16" | 1.5/16" | MM201OJ-16-16 |

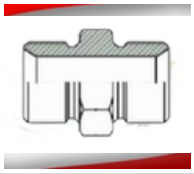


Bucha de Redução NPT

MM201N

| Traço | Dimensões NPT | | Código |
|---|---|---|---|
| 04-02 | 1/4" | 1/8" | MM201N-04-02 |
| 06-02 | 3/8" | 1/8" | MM201N-06-02 |
| 06-04 | 3/8" | 1/4" | MM201N-06-04 |
| 08-02 | 1/2" | 1/8" | MM201N-08-02 |
| 08-04 | 1/2" | 1/4" | MM201N-08-04 |
| 08-06 | 1/2" | 3/8" | MM201N-08-06 |
| 12-06 | 3/4" | 3/8" | MM201N-12-06 |
| 12-08 | 3/4" | 1/2" | MM201N-12-08 |
| 16-08 | 1" | 1/2" | MM201N-16-08 |
| 16-12 | 1" | 3/4" | MM201N-16-12 |

## Niples



| Traço | Dimensões BSP | Código |
|---|---|---|
| 02-02 | 1/8" | MM210B-02-02 |
| 04-04 | 1/4" | MM210B-04-04 |
| 06-06 | 3/8" | MM210B-06-06 |
| 08-08 | 1/2" | MM210B-08-08 |
| 12-12 | 3/4" | MM210B-12-12 |
| 16-16 | 1" | MM210B-16-16 |

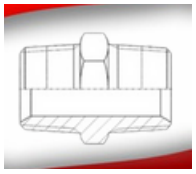
## Luva

Luvas NPT

MM211N

| Traço | Dimensões NPT | Código |
|---|---|---|
| 2 | 1/8" | MM211N-02 |
| 4 | 1/4" | MM211N-04 |
| 6 | 3/8" | MM211N-06 |
| 8 | 1/2" | MM211N-08 |
| 12 | 3/4" | MM211N-12 |
| 16 | 1" | MM211N-16 |
| 20 | 1.1/4" | MM211N-20 |
| 24 | 1.1/2" | MM211N-24 |
| 32 | 2" | MM211N-32 |

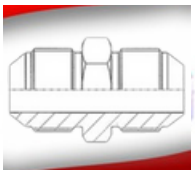
## N iples



Niple D uplo NPT

MM210N

| Traço | Dimens ões NPT | Dimens ões NPT | C ódigo |
|---|---|---|---|
| 02-02 | 1/8" | 1/8" | MM210N-02-02 |
| 04-02 | 1/4" | 1/8" | MM210N-04-02 |
| 04-04 | 1/4" | 1/4" | MM210N-04-04 |
| 06-04 | 3/8" | 1/4" | MM210N-06-04 |
| 06-06 | 3/8" | 3/8" | MM210N-06-06 |
| 08-04 | 1/2" | 1/4" | MM210N-08-04 |
| 08-06 | 1/2" | 3/8" | MM210N-08-06 |
| 08-08 | 1/2" | 1/2" | MM210N-08-08 |
| 12-08 | 3/4" | 1/2" | MM210N-12-08 |
| 12-12 | 3/4" | 3/4" | MM210N-12-12 |
| 16-16 | 1" | 1" | MM210N-16-16 |
| 20-20 | 1.1/4" | 1.1/4" | MM210N-20-20 |
| 24-24 | 1.1/2" | 1.1/2" | MM210N-24-24 |
| 32-32 | 2" | 2" | MM210N-32-32 |



Niple D uplo JI C

MM210J

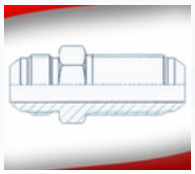
| Traço | Dimens ões JIC 37O | C ódigo |
|---|---|---|
| 04-04 | 7/16" | MM210J-04-04 |
| 06-06 | 9/16" | MM210J-06-06 |
| 08-08 | 3/4" | MM210J-08-08 |
| 10-10 | 7/8" | MM210J-10-10 |
| 12-12 | 1.1/16" | MM210J-12-12 |
| 16-16 | 1.5/16" | MM210J-16-16 |
| 20-20 | 1.5/8" | MM210J-20-20 |
| 24-24 | 1.7/8" | MM210J-24-24 |

Macho JI C X Fêmea JI C

MM201J

| Traço | Dimens ões JIC | | C ódigo |
|---|---|---|---|
| 04-04 | 7/16" | 7/16" | MM201J-04-04 |
| 04-06 | 7/16" | 9/16" | MM201J-04-06 |
| 06-04 | 9/16" | 7/16" | MM201J-06-04 |
| 06-06 | 9/16" | 9/16" | MM201J-06-06 |
| 06-08 | 9/16" | 3/4" | MM201J-06-08 |
| 06-10 | 9/16" | 7/8" | MM201J-06-10 |
| 08-06 | 3/4" | 9/16" | MM201J-08-06 |
| 08-08 | 3/4" | 3/4" | MM201J-08-08 |
| 08-10 | 3/4" | 7/8" | MM201J-08-10 |
| 08-12 | 3/4" | 1.1/16" | MM201J-08-12 |
| 10-06 | 7/8" | 9/16" | MM201J-10-06 |
| 10-08 | 7/8" | 3/4" | MM201J-10-08 |
| 10-10 | 7/8" | 7/8" | MM201J-10-10 |
| 10-12 | 7/8" | 1.1/16" | MM201J-10-12 |
| 12-08 | 1.1/16" | 3/4" | MM201J-12-08 |
| 12-10 | 1.1/16" | 7/8" | MM201J-12-10 |
| 12-12 | 1.1/16" | 1.1/16" | MM201J-12-12 |
| 12-16 | 1.1/16" | 1.5/16" | MM201J-12-16 |
| 16-12 | 1.5/16" | 1.1/16" | MM201J-16-12 |
| 16-16 | 1.5/16" | 1.5/16" | MM201J-16-16 |

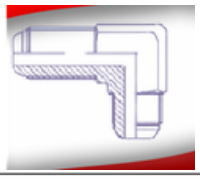
## UCA JIC e ORFS



UCA JIC - União Painel Cumprida JIC

MM210UCA

| Traço | Dimensões JIC | Código |
|---|---|---|
| 4 | 7/16" | MM210UCA-04 |
| 6 | 9/16" | MM210UCA-06 |
| 8 | 3/4" | MM210UCA-08 |
| 10 | 7/8" | MM210UCA-10 |
| 12 | 1.1/16" | MM210UCA-12 |
| 16 | 1.5/16" | MM210UCA-16 |
| 20 | 1.5/8" | MM210UCA-20 |



UCA JIC - Cotovelo Painel Cumprido JIC

MM220UCA

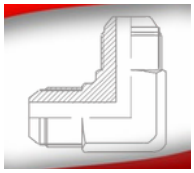
| Traço | Dimensões JIC | Código |
|---|---|---|
| 8 | 3/4" | MM220UCA-08-08 |
| 10 | 7/8" | MM220UCA-10-10 |
| 12 | 1.1/16" | MM220UCA-12-12 |
| 16 | 1.5/16" | MM220UCA-16-16 |

UCA ORFS - União Cumprida ORFS

MM210UCO

| Traço | Dimensões ORFS | Código |
|---|---|---|
| 6 | 11/16" | MM210UCO-06 |
| 8 | 13/16" | MM210UCO-08 |
| 10 | 1" | MM210UCO-10 |
| 12 | 1.3/16" | MM210UCO-12 |
| 16 | 1.7/16" | MM210UCO-16 |

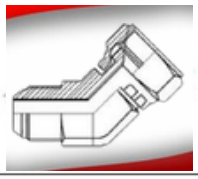
## Cotovelo



MM220J

| Traço | Dimensões JIC 37O | Código |
|---|---|---|
| 04-04 | 7/16" | MM220J-04-04 |
| 06-06 | 9/16" | MM220J-06-06 |
| 08-08 | 3/4" | MM220J-08-08 |
| 10-10 | 7/8" | MM220J-10-10 |
| 12-12 | 1.1/16" | MM220J-12-12 |
| 16-16 | 1.5/16" | MM220J-16-16 |

## Cotovelo 45°

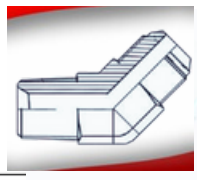


Cotovelo Macho e Fêmea JIC 45°

MM246J

| Traço | Dimensões JIC 37O | Código |
|---|---|---|
| 04-04 | 1/4" | MM246J-04-04 |
| 06-06 | 9/16" | MM246J-06-06 |
| 08-08 | 3/4" | MM246J-08-08 |
| 10-10 | 7/8" | MM246J-10-10 |
| 12-12 | 1.1/16" | MM246J-12-12 |
| 16-16 | 1.5/16" | MM246J-16-16 |

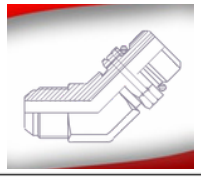
## Cotovelo 45°



Cotovelo Macho NPT x Macho JIC 45°

MM245NJ

| Traço | Dimensões NPT | Dimensões JIC 37° | Código |
|---|---|---|---|
| 04-05 | 1/4" | 1/2" | 245NJ-04-05 |
| 04-06 | 1/4" | 9/16" | 245NJ-04-06 |
| 06-06 | 3/8" | 3/8" | 245NJ-06-06 |
| 06-08 | 3/8" | 1/2" | 245NJ-06-08 |
| 08-08 | 1/2" | 3/4" | 245NJ-08-08 |
| 08-10 | 1/2" | 7/8" | 245NJ-08-10 |
| 12-12 | 3/4" | 1.1/16" | 245NJ-12-12 |
| 16-16 | 1" | 1.5/16" | 245NJ-16-16 |

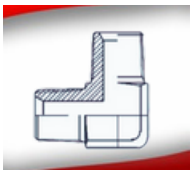


Cotovelo Macho O-Ring x Macho JIC 45°

MM245OJ

| Traço | Dimensões O-Ring | Dimensões JIC 37° | Código |
|---|---|---|---|
| 04-04 | 7/16" | 7/16" | 245OJ-04-04 |
| 04-06 | 7/16" | 9/16" | 245OJ-04-06 |
| 05-05 | 1/2" | 1/2" | 245OJ-05-05 |
| 06-06 | 9/16" | 9/16" | 245OJ-06-06 |
| 06-08 | 9/16" | 3/4" | 245OJ-06-08 |
| 08-06 | 3/4" | 9/16" | 245OJ-08-06 |
| 08-08 | 3/4" | 3/4" | 245OJ-08-08 |
| 08-10 | 3/4" | 7/8" | 245OJ-08-10 |
| 10-10 | 7/8" | 7/8" | 245OJ-10-10 |
| 10-12 | 7/8" | 1.1/16" | 245OJ-10-12 |
| 12-10 | 1.1/16" | 7/8" | 245OJ-12-10 |
| 12-12 | 1.1/16" | 1.1/16" | 245OJ-12-12 |
| 12-16 | 1.1/16" | 1.5/16" | 245OJ-12-16 |
| 16-12 | 1.5/16" | 1.1/16" | 245OJ-16-12 |
| 16-16 | 1.5/16" | 1.5/16" | 245OJ-16-16 |

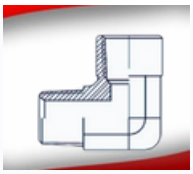
## Cotovelos



Cotovelo Macho NPT

MM220N

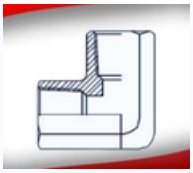
| Traço | Dimensões NPT | Código |
|---|---|---|
| 04-04 | 1/4" | MM220N-04-04 |
| 06-06 | 3/8" | MM220N-06-06 |
| 08-08 | 1/2" | MM220N-08-08 |
| 12-12 | 3/4" | MM220N-12-12 |
| 16-16 | 1" | MM220N-16-16 |
| 20-20 | 1.1/4" | MM220N-20-20 |



Cotovelo Macho e Fêmea NPT

MM221N

| Traço | Dimensões NPT | Código |
|---|---|---|
| 04 | 1/4" | MM221N-04 |
| 06 | 3/8" | MM221N-06 |
| 08 | 1/2" | MM221N-08 |
| 12 | 3/4" | MM221N-12 |
| 16 | 1" | MM221N-16 |



Cotovelo Fêmea NPT

MM221FN

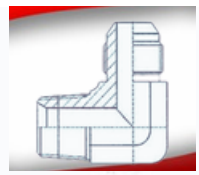
| Traço | Dimensões NPT | Código |
|---|---|---|
| 04 | 1/4" | MM221FN-04 |
| 06 | 3/8" | MM221FN-06 |
| 08 | 1/2" | MM221FN-08 |
| 12 | 3/4" | MM221FN-12 |
| 16 | 1" | MM221FN-16 |
| 20 | 1.1/4" | MM221FN-20 |
| 24 | 1.1/2" | MM221FN-24 |
| 32 | 2" | MM221FN-32 |

## Cotovelos

Cotovelo Macho O-Ring x Macho JI C

MM220OJ

| Traço | Dimens ões O-Ring | Dimens ões JIC 37O | Código |
|---|---|---|---|
| 10-08 | 7/8" | 3/4" | MM220OJ-10-08 |
| 04-04 | 7/16" | 7/16" | MM220OJ-04-04 |
| 04-06 | 7/16" | 9/16" | MM220OJ-04-06 |
| 05-05 | 1/2" | 1/2" | MM220OJ-05-05 |
| 05-06 | 1/2" | 9/16" | MM220OJ-05-06 |
| 06-06 | 9/16" | 9/16" | MM220OJ-06-06 |
| 06-08 | 9/16" | 3/4" | MM220OJ-06-08 |
| 08-06 | 3/4" | 9/16" | MM220OJ-08-06 |
| 08-08 | 3/4" | 3/4" | MM220OJ-08-08 |
| 08-10 | 3/4" | 7/8" | MM220OJ-08-10 |
| 10-10 | 7/8" | 7/8" | MM220OJ-10-10 |
| 10-12 | 7/8" | 1.1/16" | MM220OJ-10-12 |
| 12-12 | 1.1/16" | 1.1/16" | MM220OJ-12-12 |
| 12-16 | 1.1/16" | 1.5/16" | MM220OJ-12-16 |
| 16-12 | 1.5/16" | 1.1/16" | MM220OJ-16-12 |
| 16-16 | 1.5/16" | 1.5/16" | MM220OJ-16-16 |
| 20-20 | 1.5/8" | 1.5/8" | MM220OJ-20-20 |



Cotovelo Macho NPT x Macho JI C

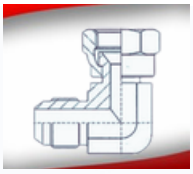
MM220NJ

| Traço | Dimens ões NPT | Dimens ões JIC 37O | Código |
|---|---|---|---|
| 02-04 | 1/8" | 7/16" | MMMM220NJ-02-04 |
| 04-04 | 1/4" | 7/16" | MMMM220NJ-04-04 |
| 04-06 | 1/4" | 9/16" | MMMM220NJ-04-06 |
| 06-06 | 3/8" | 9/16" | MMMM220NJ-06-06 |
| 06-08 | 3/8" | 3/4" | MMMM220NJ-06-08 |
| 08-06 | 1/2" | 9/16" | MMMM220NJ-08-06 |
| 08-08 | 1/2" | 3/4" | MMMM220NJ-08-08 |
| 08-10 | 1/2" | 7/8" | MMMM220NJ-08-10 |
| 12-08 | 3/4" | 3/4" | MMMM220NJ-12-08 |
| 12-10 | 3/4" | 7/8" | MMMM220NJ-12-10 |
| 12-12 | 3/4" | 1.1/16" | MMMM220NJ-12-12 |
| 12-16 | 3/4" | 1.5/16" | MMMM220NJ-12-16 |
| 16-12 | 1" | 1.1/16" | MMMM220NJ-16-12 |
| 16-16 | 1" | 1.5/16" | MMMM220NJ-16-16 |
| 20-20 | 1.1/4" | 1.5/8" | MMMM220NJ-20-20 |

Cotovelo Macho JI C x Flange 3000 PSI

MM220JF

| Traço | Dimens ões JIC 37O | Dimens ões Flange | Código |
|---|---|---|---|
| 12-12 | 1.1/16" | 3/4" | MMMM220JF-12-12 |
| 16-16 | 1.5/16" | 1" | MMMM220JF-16-16 |

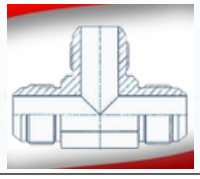


Cotovelo Macho e Fêmea JI C

MM221J

| Traço | Dimens ões JIC 37O | Código |
|---|---|---|
| 04-04 | 7/16" | MM221J-04-04 |
| 06-06 | 9/16" | MM221J-06-06 |
| 08-08 | 3/4" | MM221J-08-08 |
| 10-10 | 7/8" | MM221J-10-10 |
| 12-12 | 1.1/16" | MM221J-12-12 |
| 16-16 | 1.5/16" | MM221J-16-16 |
| 20-20 | 1.5/8" | MM221J-20-20 |

## Tees



Tee Macho JIC

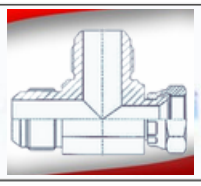
MM230J

| Traço | Dimensões JIC 37 | Código |
|---|---|---|
| 4 | 7/16" | MM230J-04 |
| 6 | 9/16" | MM230J-06 |
| 8 | 3/4" | MM230J-08 |
| 10 | 7/8" | MM230J-10 |
| 12 | 1.1/16" | MM230J-12 |
| 16 | 1.5/16" | MM230J-16 |
| 20 | 1.5/8" | MM230J-20 |

Tee JIC Fêmea Central

MM230JFC

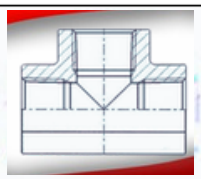
| Traço | Dimensões JIC 37o | Código |
|---|---|---|
| 4 | 7/16" | MM230JFC-04 |
| 6 | 9/16" | MM230JFC-06 |
| 8 | 3/4" | MM230JFC-08 |
| 10 | 7/8" | MM230JFC-10 |
| 12 | 1.1/16" | MM230JFC-12 |
| 16 | 1.5/16" | MM230JFC-16 |
| 20 | 1.5/8" | MM230JFC-20 |



Tee JIC Fêmea Lateral

MM230JFL

| Traço | Dimensões JIC 37o | Código |
|---|---|---|
| 4 | 7/16" | MM230JFL-04 |
| 6 | 9/16" | MM230JFL-06 |
| 8 | 3/4" | MM230JFL-08 |
| 10 | 7/8" | MM230JFL-10 |
| 12 | 1.1/16" | MM230JFL-12 |
| 16 | 1.5/16" | MM230JFL-16 |
| 20 | 1.5/8" | MM230JFL-20 |



Tee NPT Fêmea

MM231N

| Traço | Dimensões NPT | Código |
|---|---|---|
| 2 | 1/8" | MM231N-02-02 |
| 4 | 1/4" | MM231N-04-04 |
| 6 | 3/8" | MM231N-06-06 |
| 8 | 1/2" | MM231N-08-08 |
| 12 | 3/4" | MM231N-12-12 |
| 16 | 1" | MM231N-16-16 |
| 20 | 1.1/4" | MM231N-20-20 |
| 24 | 1.1/2" | MM231N-24-24 |
| 32 | 2" | MM231N-32-32 |

## Bujão

Bujão Macho JIC

MM240J

| Traço | Dimensões JIC 37 | Código |
|---|---|---|
| 4 | 7/16" | MM240J-04 |
| 5 | 1/2" | MM240J-05 |
| 6 | 9/16" | MM240J-06 |
| 8 | 3/4" | MM240J-08 |
| 10 | 7/8" | MM240J-10 |
| 12 | 1.1/16" | MM240J-12 |
| 16 | 1.5/16" | MM240J-16 |
| 20 | 1.5/8" | MM240J-20 |

Bujão Macho NPT

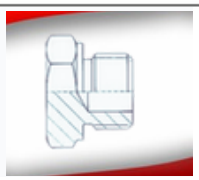
MM240N

| Traço | Dimensões NPT | Código |
|---|---|---|
| 2 | 1/8" | MM240N-02 |
| 4 | 1/4" | MM240N-04 |
| 6 | 3/8" | MM240N-06 |
| 8 | 1/2" | MM240N-08 |

Bujão Macho BSP Sextavado Interno

MM240BS

| Traço | Dimensões BSP | Código |
|---|---|---|
| 4 | 1/4" | MM240BS-04 |
| 6 | 3/8" | MM240BS-06 |
| 8 | 1/2" | MM240BS-08 |
| 12 | 3/4" | MM240BS-12 |
| 16 | 1" | MM240BS-16 |



Bujão Macho BSP

240B

| Traço | Dimensões BSP | Código |
|---|---|---|
| 4 | 1/4" | MM240B-04 |
| 6 | 3/8" | MM240B-06 |
| 8 | 1/2" | MM240B-08 |
| 12 | 3/4" | MM240B-12 |

## Bujão

Bujão Macho ORFS

MM240O

| Traço | Dimensões ORFS | Código |
|---|---|---|
| 04 | 9/16" | MM240O-04 |
| 06 | 11/16" | MM240O-06 |
| 08 | 13/16" | MM240O-08 |
| 10 | 1" | MM240O-10 |
| 12 | 1.3/16" | MM240O-12 |
| 16 | 1.7/16" | MM240O-16 |

Bujão Macho O-Ring Sextavado Interno

MM240OS

| Traço | Dimensões O-Ring | Código |
|---|---|---|
| 04 | 7/16" | MM240OS-04 |
| 05 | 1/2" | MM240OS-05 |
| 06 | 9/16" | MM240OS-06 |
| 08 | 3/4" | MM240OS-08 |
| 10 | 7/8" | MM240OS-10 |
| 12 | 1.1/16" | MM240OS-12 |
| 16 | 1.5/16" | MM240OS-16 |
| 20 | 1.5/8" | MM240OS-20 |

Bujão Fêmea JIC

MMMM241

J

| Traço | Dimensões JIC 37O | Código |
|---|---|---|
| 4 | 7/16" | MM241J-04 |
| 5 | 1/2" | MM241J-05 |
| 6 | 9/16" | MM241J-06 |
| 8 | 3/4" | MM241J-08 |
| 10 | 7/8" | MM241J-10 |
| 12 | 1.1/16" | MM241J-12 |
| 16 | 1.5/16" | MM241J-16 |
| 20 | 1.5/8" | MM241J-20 |

Bujão Fêmea ORFS

MM241O

| Traço | Dimensões ORFS | Código |
|---|---|---|
| 04 | 9/16" | MM241O-04 |
| 06 | 11/16" | MM241O-06 |
| 08 | 13/16" | MM241O-08 |
| 10 | 1" | MM241O-10 |
| 12 | 1.3/16" | MM241O-12 |
| 16 | 1.7/16" | MM241O-16 |

## Bujão

Bujão Macho NPT Sextavado Interno

MM240NS

| Traço | Dimensões NPT | Código |
|---|---|---|
| 2 | 1/8" | MM240NS-02 |
| 4 | 1/4" | MM240NS-04 |
| 6 | 3/8" | MM240NS-06 |
| 8 | 1/2" | MM240NS-08 |
| 12 | 3/4" | MM240NS-12 |

## Flange Bipartido

Flanges Bipartido 3.000 PSI

MM250F3

| Bitola | Código |
|---|---|
| 1/2" | MM250F3-08 |
| 3/4" | MM250F3-12 |
| 1" | MM250F3-16 |
| 1.1/4" | MM250F3-20 |
| 1.1/2" | MM250F3-24 |
| 2" | MM250F3-32 |

Flanges Bipartido 6.000 PSI

MM250F6

| Bitola | Código |
|---|---|
| 3/4" | MM250F6-12 |
| 1" | MM250F6-16 |
| 1.1/4" | MM250F6-20 |
| 1.1/2" | MM250F6-24 |

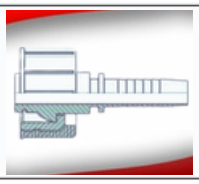
## Lavação

Porca Plástica Karcher

MM900PP

| Rosca | Código |
|---|---|
| M22 | MM900PP-22 |

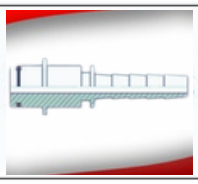
## Lavação



Fêmea Karcher

MM900 FK

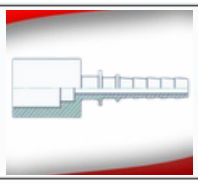
| Bitola | Código |
|---|---|
| 1/4" | MM900FK-22-04 |
| 3/8" | MM900FK-22-06 |



Pino Mini Karcher

MM900 PK

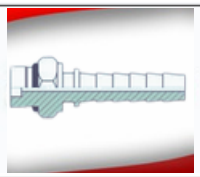
| Bitola | Código |
|---|---|
| 1/4" | MM900PK-10-04 |
| 1/4" | MM900PK-14-04 |
| 1/4" | MM900PK-15-04 |



Copinho Karcher

MM900 CK

| Bitola | Código |
|---|---|
| 1/4" -(interno 10 mm) | MM900CK-10-04 |
| 1/4" | MM900CK-11-04 |

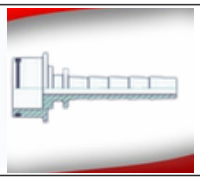


Macho WAP 14 MM

MM900 MW

| Bitola | Código |
|---|---|
| 1/4" | MM900MW-14-04 |

## Lavação / Graxa



Fêmea Mini WAP

MM900FW

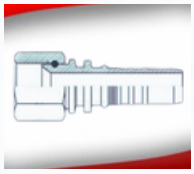
| Bitola | Código |
|---|---|
| 1/4" | MM900FW-04-04 |

Fêmea Fixa Graxa

MM900FG

| Bitola | Código |
|---|---|
| 1/8" | MM900FG-02-04 |
| 1/4" | MM900FG-04-04 |

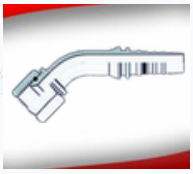
## LINHA UNF JIC - Cone de Vedação 37° Interlock



Fêmea Giratória Reta JIC Interlock

MM600 FJ

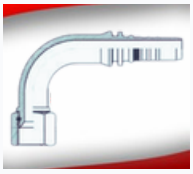
| Rosca | Pol. | Bitola | Código |
|---|---|---|---|
| 1.1/16"-12 | 3/4" | 12 | MMMM600FOJ-12-12 |
| 1.5/16"-12 | 1" | 16 | MMMM600FOJ-16-16 |
| 1.5/8"-12 | 1.1/4" | 20 | MMMM600FOJ-20-20 |
| 1.7/8"-12 | 1.1/2" | 24 | MMMM600FOJ-24-24 |
| 2.1/2"-12 | 2" | 32 | MMMM600FOJ-32-32 |



Fêmea Giratória 45° JIC Interlock

MM645 FJ

| Rosca | Pol. | Bitola | |
|---|---|---|---|
| 1.1/16"-12 | 3/4" | 12 | MMMM645FJ-12-12 |
| 1.5/16"-12 | 1" | 16 | MM645FJ-16-16 |
| 1.5/8"-12 | 1.1/4" | 20 | MM645FJ-20-20 |
| 1.7/8"-12 | 1.1/2" | 24 | MM645FJ-24-24 |
| 2.1/2"-12 | 2" | 32 | MM645FJ-32-32 |

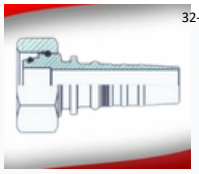


Fêmea Giratória 90° JIC Interlock

MM690 FJ

| Rosca | Pol. | Bitola | |
|---|---|---|---|
| 1.1/16"-12 | 3/4" | 12 | MMMM690FJ-12-12 |
| 1.5/16"-12 | 1" | 16 | MM690FJ-16-16 |
| 1.5/8"-12 | 1.1/4" | 20 | MM690FJ-20-20 |
| 1.7/8"-12 | 1.1/2" | 24 | MM690FJ-24-24 |
| 2.1/2"-12 | 2" | 32 | MM690FJ-32-32 |

## LINHA METRICA INTERLOCK



Fêmea Reta DKO - DIN 2353 - Métrica Interlo

MM600 FD

| Rosca | Bitola | Tubo | Código |
|---|---|---|---|
| M30 | 3/4" | 20 | MM600 FD - 30 - 12 - T20 |
| M36 | 3/4" | 25 | MM600 FD - 36 - 12 - T25 |
| M36 | 1" | 25 | MM600 FD - 36 - 16 - T25 |
| M42 | 1" | 30 | MM600 FD - 42 - 16 - T30 |
| M42 | 1.1/4" | 30 | MM600 FD - 42 - 20 - T30 |
| M52 | 1.1/4" | 38 | MM600 FD - 52 - 20 - T38 |
| M52 | 1.1/2" | 38 | MM600 FD - 52 - 24 - T38 |
| M52 | 1.1/2" | 42 | MM600 FD - 52 - 24 - T42 |

Fêmea 45° DKO - DIN 2353 - Métrica Interloc

MM645FD

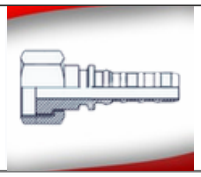
| Rosca | Bitola | Tubo | Código |
|---|---|---|---|
| M30 | 3/4" | 20 | MM645FD - 30 - 12 - T20 |
| M36 | 3/4" | 25 | MM645FD - 36 - 12 - T25 |
| M36 | 1" | 25 | MM645FD - 36 - 16 - T25 |
| M42 | 1" | 30 | MM645FD - 42 - 16 - T30 |
| M42 | 1.1/4" | 30 | MM645FD - 42 - 20 - T30 |
| M52 | 1.1/4" | 38 | MM645FD - 52 - 20 - T38 |
| M52 | 1.1/2" | 38 | MM645FD - 52 - 24 - T38 |

Fêmea 90° DKO - DIN 2353 - Métrica Interloc

MM645FD

| Rosca | Bitola | Tubo | Código |
|---|---|---|---|
| M30 | 3/4" | 20 | MM645FD - 30 - 12 - T20 |
| M36 | 3/4" | 25 | MM645FD - 36 - 12 - T25 |
| M36 | 1" | 25 | MM645FD - 36 - 16 - T25 |
| M42 | 1" | 30 | MM645FD - 42 - 16 - T30 |
| M42 | 1.1/4" | 30 | MM645FD - 42 - 20 - T30 |
| M52 | 1.1/4" | 38 | MM645FD - 52 - 20 - T38 |
| M52 | 1.1/2" | 38 | MM645FD - 52 - 24 - T38 |
| M52 | 1.1/2" | 42 | MM645FD - 52 - 24 - T42 |

## LINHA ORFS Interlock



Fêmea Giratória Reta ORFS

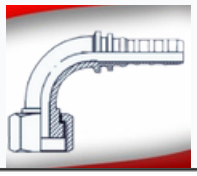
MM600FOO

| Rosca | Pol. | Bitola | |
|---|---|---|---|
| 1.3/16"-12 | 3/4" | 12 | MM600FOO-12-12 |
| 1.7/16"-12 | 1" | 16 | MM600FOO-16-16 |
| 1.11/16"-12 | 1.1/4" | 20 | MM600FOO-20-20 |

Fêmea Giratória 45° ORFS

MM645FO

| Rosca | Pol. | Bitola | Código |
|---|---|---|---|
| 1.3/16"-12 | 3/4" | 12 | MM645FO-12-12 |
| 1.7/16"-12 | 1" | 16 | MM645FO-16-16 |
| 1.11/16"-12 | 1.1/4" | 20 | MM645FO-20-20 |



Fêmea Giratória 90° ORFS

MM690FO

| Rosca | Pol. | Bitola | Código |
|---|---|---|---|
| 1.3/16" | 3/4" | 12 | MM690FO-12-12 |
| 1.7/16" | 1" | 16 | MM690FO-16-16 |
| 1.11/16" | 1.1/4" | 20 | MM690FO-20-20 |

## LINHA Emendas Interlock

Emenda para Mangueiras Interlock "Espigão"

MM600EM

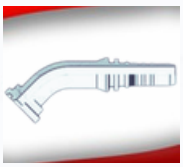
| Pol. | Bitola | |
|---|---|---|
| 3/4" | 12 | MM600EM-12-12 |
| 1" | 16 | MM600EM-16-16 |
| 1.1/4" | 20 | MM600EM-20-20 |

## LINHA Flange Interlock (3000 LBS)

Flange Reto 3000PSI Interlock

MM600F3

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 38.1 | 1.1/2" | 3/4" | MM600F3-12-12 |
| 44.4 | 1.3/4" | 3/4" | MM600F3-16-12 |
| 44.4 | 1.3/4" | 1" | MM600F3-16-16 |
| 50.8 | 2" | 1" | MM600F3-20-16 |
| 50.8 | 2" | 1.1/4" | MM600F3-20-20 |
| 60.3 | 2.3/8" | 1.1/2" | MM600F3-24-24 |



Flange 45° 3000PSI Interlock

MM645F3

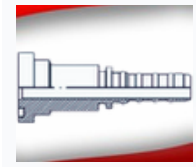
| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 38.1 | 1.1/2" | 3/4" | MM645F3-12-12 |
| 44.4 | 1.3/4" | 3/4" | MM645F3-16-12 |
| 44.4 | 1.3/4" | 1" | MM645F3-16-16 |
| 50.8 | 2" | 1" | MM645F3-20-16 |
| 50.8 | 2" | 1.1/4" | MM645F3-20-20 |
| 60.3 | 2.3/8" | 1.1/2" | MM645F3-24-24 |

Flange 90° 3000PSI Interlock

MM690F3

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 38.1 | 1.1/2" | 3/4" | MM690F3-12-12 |
| 44.4 | 1.3/4" | 3/4" | MM690F3-16-12 |
| 44.4 | 1.3/4" | 1" | MM690F3-16-16 |
| 50.8 | 2" | 1" | MM690F3-20-16 |
| 50.8 | 2" | 1.1/4" | MM690F3-20-20 |
| 60.3 | 2.3/8" | 1.1/2" | MM690F3-24-24 |

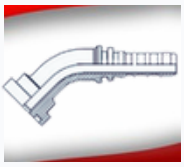
## LINHA Flange Interlock (6000 LBS)



Flange Reto 6000PSI Interlock

MM600F6

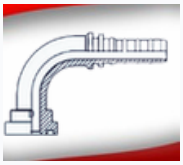
| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 41.3 | 1.5/8" | 3/4" | MM600F6-12-12 |
| 47.6 | 1.7/8" | 3/4" | MM600F6-16-12 |
| 47.6 | 1.7/8" | 1" 1" | MM600F6-16-16 |
| 54 | 2.1/8" | | MM600F6-20-16 |
| 54 | 2.1/8" | 1.1/4" | MM600F6-20-20 |
| 63.5 | 2.1/2" | 1.1/2" | MM600F6-24-24 |



Flange 45 ° 6000PSI Interlock

MM645F6

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 41.3 | 1.5/8" | 3/4" | MM645F6-12-12 |
| 47.6 | 1.7/8" | 3/4" | MM645F6-16-12 |
| 47.6 | 1.7/8" | 1" | MM645F6-16-16 |
| 54 | 2.1/8" | 1" | MM645F6-20-16 |
| 54 | 2.1/8" | 1.1/4" | MM645F6-20-20 |
| 63.5 | 2.1/2" | 1.1/2" | MM645F6-24-24 |



Flange 90 ° 6000PSI Interlock

MM690F6

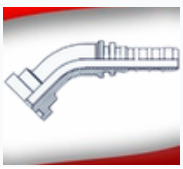
| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 41.3 | 1.5/8" | 3/4" | 690F6-12-12 |
| 47.6 | 1.7/8" | 3/4" | 690F6-16-12 |
| 47.6 | 1.7/8" | 1" | 690F6-16-16 |
| 54 | 2.1/8" | 1" | 690F6-20-16 |
| 54 | 2.1/8" | 1.1/4" | 690F6-20-20 |
| 54 | 2.1/8" | 1.1/4" | 690F6-20-20-L |
| 63.5 | 2.1/2" | 1.1/2" | 690F6-24-24 |

## LINHA Flange Super Cat 14 mm - Interlock (9000 LBS)

Flange Reto 9000PSI - Super Cat Interlock

MM600F9

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 41.3 | 1.5/8" | 3/4" | MM600F9-12-12 |
| 47.6 | 1.7/8" | 3/4" | MM600F9-16-12 |
| 47.6 | 1.7/8" | 1" | MM600F9-16-16 |
| 54 | 2.1/8" | 1" | MM600F9-20-16 |
| 54 | 2.1/8" | 1.1/4" | MM600F9-20-20 |



Flange 45 9000PSI - Super Cat Interlock

MM645F9

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 41.3 | 1.5/8" | 3/4" | 645F9-12-12 |
| 47.6 | 1.7/8" | 3/4" | 645F9-16-12 |
| 47.6 | 1.7/8" | 1" | 645F9-16-16 |
| 54 | 2.1/8" | 1" | 645F9-20-16 |
| 54 | 2.1/8" | 1.1/4" | 645F9-20-20 |

Flange 90 9000PSI - Super Cat Interlock

MM690F9

| Flange | | Pol. Mang. | Código |
|---|---|---|---|
| mm | Pol. | | |
| 41.3 | 1.5/8" | 3/4" | 690F9-12-12 |
| 41.3 | 1.5/8" | 3/4" | 690F9-12-12-L |
| 47.6 | 1.7/8" | 3/4" | 690F9-16-12 |
| 47.6 | 1.7/8" | 3/4" | 690F9-16-12-L |
| 47.6 | 1.7/8" | 1" | 690F9-16-16 |
| 47.6 | 1.7/8" | 1" | 690F9-16-16-L |
| 54 | 2.1/8" | 1" | 690F9-20-16 |
| 54 | 2.1/8" | 1" | 690F9-20-16-L |
| 54 | 2.1/8" | 1.1/4" | 690F9-20-20 |
| 54 | 2.1/8" | 1.1/4" | 690F9-20-20-L |

## PARA PRENSAGEM EM MANGUEIRAS HIDRÁULICAS DE 1, 2 E 4 TRAMAS DE AÇO

### Capas No SKIVE p/ mangueiras - 1 Trama

Não precisa descascar a cobertura da mangueira na área de prensagem

**MM300t1**

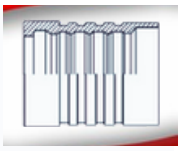
| Qtde Tramas | Pol. | Bitola | L | Código |
|---|---|---|---|---|
| 1 | 3/16" | 3 | 27 | 300T1-03 |
| 1 | 1/4" | 4 | 30 | 300T1-04 |
| 1 | 5/16" | 5 | 32 | 300T1-05 |

### Capas No SKIVE p/ mangueiras SAE 100 R1AT e R2AT (1 e 2 Tramas)

Não precisa descascar a cobertura da mangueira na área de prensagem

**MM300t2**

| Qtde Tramas | Pol. | Bitola | L | Código |
|---|---|---|---|---|
| 1 e 2 | 1/4" | 4 | 30 | 300T2-04 |
| 1 e 2 | 1/4" | 4 | 28 | 300T2-04A |
| 1 e 2 | 5/16" | 5 | 30 | 300T2-05 |
| 1 e 2 | 3/8" | 6 | 32 | 300T2-06 |
| 1 e 2 | 1/2" | 8 | 34 | 300T2-08 |
| 1 e 2 | 5/8" | 10 | 37 | 300T2-10 |
| 1 e 2 | 3/4" | 12 | 42 | 300T2-12 |
| 1 e 2 | 1" | 16 | 51 | 300T2-16 |
| 1 e 2 | 1.1/4" | 20 | 59 | 300T2-20 |
| 1 e 2 | 1.1/2" | 24 | 67 | 300T2-24 |
| 1 e 2 | 2" | 32 | 72 | 300T2-32 |



### Capas SKIVE p/ mangueiras SAE 100 R12 e 4SP (4 Tramas)

É necessário descascar a cobertura da mangueira na área de prensagem

**MM300t4**

| Qtde Tramas | Pol. | Bitola | L | Código |
|---|---|---|---|---|
| 4 | 3/8" | 6 | 33 | 300T4-06 |
| 4 | 1/2" | 8 | 34 | 300T4-08 |
| 4 | 5/8" | 10 | 39 | 300T4-10 |
| 4 | 3/4" | 12 | 40 | 300T4-12 |
| 4 | 1" | 16 | 51 | 300T4-16 |
| 4 | 1.1/4" | 20 | 60 | 300T4-20 |
| 4 | 1.1/2" | 24 | 70 | 300T4-24 |
| 4 | 2" | 32 | 72 | 300T4-32 |

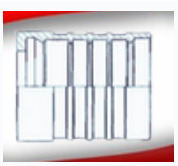
## PARA PRENSAGEM EM MANGUEIRAS HIDRÁULICAS DE 4 TRAMAS DE AÇO E INTERLOCK

### Capas SKIVE p/ mangueiras 4SH (4 Tramas)

É necessário descascar a cobertura da mangueira na área de prensagem

**MM300ts**

| Qtde Tramas | Pol. | Bitola | L | Código |
|---|---|---|---|---|
| 4 | 1/2" | 8 | 34 | 300TS-08 |
| 4 | 5/8" | 10 | 42 | 300TS-10 |
| 4 | 3/4" | 12 | 51 | 300TS-12 |
| 4 | 1" | 16 | 61.5 | 300TS-16 |
| 4 | 1.1/4" | 20 | 67.5 | 300TS-20 |
| 4 | 1.1/2" | 24 | 75 | 300TS-24 |
| 4 | 2" | 32 | 79 | 300TS-32 |



### Capas SKIVE Interlock p/ Mangueiras R15 (6 Tramas)

É necessário descascar a cobertura da mangueira na área de prensagem

**MM300t6**

| Qtde Tramas | Pol. | Bitola | L 53 | Código |
|---|---|---|---|---|
| 6 | 3/4" | 12 | 66 | 300T6-12 |
| 6 | 1" | 16 | 88 | 300T6-16 |
| 6 | 1.1/4" | 20 | 102 | 300T6-20 |
| 6 | 1.1/2" | 24 | 108 | 300T6-24 |
| 6 | 2" | 32 | | 300T6-32 |

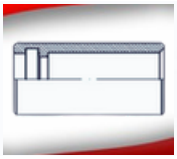
### Capas SKIVE p/ mangueiras 4SH (4 Tramas)

É necessário descascar a cobertura da mangueira na área de prensagem

**MM301ts**

| Qtde Tramas | Pol. | Bitola | L | Código |
|---|---|---|---|---|
| 4 | 1.1/4" | 20 | 67.5 | 301TS-20 |

## PARA PRENSAGEM EM MANGUEIRAS R7 E TEFLON



### Capas No SKIVE p/ mangueiras de Teflon

Não precisa descascar a cobertura da mangueira na área de prensagem

MM300TF

| Pol. | Bitola | L | Código |
|---|---|---|---|
| 1/4" | 4 | 31 | 300TF-04 |
| 5/16" | 5 | 30.6 | 300TF-05 |
| 3/8" | 6 | 32 | 300TF-06 |
| 1/2" | 8 | 34.5 | 300TF-08 |
| 5/8" | 10 | 37 | 300TF-10 |
| 3/4" | 12 | 43 | 300TF-12 |

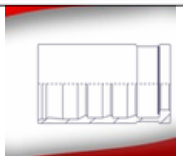
### Capas No SKIVE p/ mangueiras SAE 100 R7 e R8

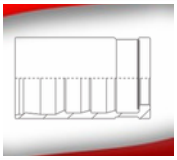
Não precisa descascar a cobertura da mangueira na área de prensagem

MM300R7

| Qtde Tramas | Pol. | Bitola | L | Código |
|---|---|---|---|---|
| 1 | 1/4" | 4 | 29 | 300R7-04 |
| 1 | 3/8" | 6 | 31 | 300R7-06 |
| 1 | 1/2" | 8 | 34 | 300R7-08 |

## PARA MANGUEIRAS HIDRÁULICAS TRAÇADO TEXTIL





### Capas No SKIVE p/ Mangueiras R3

Não precisa descascar a cobertura da mangueira na área de prensagem

MM300r3

| Qtde Tramas | Pol. | Bitola | L | |
|---|---|---|---|---|
| 2 | 1" | 16 | 49 | MM300r3-16 |

### Capas No SKIVE p/ Mangueiras R6

Não precisa descascar a cobertura da mangueira na área de prensagem

MM300r6

| Qtde Tramas | Pol. | Bitola | L | |
|---|---|---|---|---|
| 1 | 3/8" | 6 | 33 | MM300r6-06 |
| 1 | 1/2" | 8 | 34 | MM300R6-08 |
| 1 | 5/8" | 10 | 36 | MM300R6-10 |
| 1 | 3/4" | 12 | 42 | MM300R6-12 |
| 1 | 1" | 16 | 50 | MM300R6-16 |

# ARGUS 1TE/R6 HF

## SAE 100 R6 - EN 854 R6 (até 3/4”)
## EXCEDE EN 854 1TE

**Tubo: borracha sintética resistente a**
**Ró elefor.ço: uma trama têxtil de alta resistência. Cobertura: borracha sintética resistente a ozônio, hidro carbono e abrasão.**
**A plicação: linhas hidráulicas de baixa pressão, combustível,**

solução antigelo, água e ar. Especialmente projetado para uso em aplicações "PUSH ON".

**composto livre de halogênio**
**Operação constante:** -40 °C +100 °C (-40 °F +212 °F)
ar máx. T = +70 °C (+160 °F)
**Comprimento:** qualquer.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Código do item | Traço | milímetros | em | milímetros | em | MPA | psi | MPA | psi | milímetros | em | kg/m | lb/C pés |
| 1001385 | -4 | 6 | 1/4 | 12,7 | 0,5 | 2,8 | 400 | 11 | 1600 | 64 | 2,6 | 0,13 | 9 |
| 1001386 | -5 | 8 | 5/16 | 14,3 | 0,56 | 2,8 | 400 | 11 | 1600 | 76 | 3 3 | 0,13 | 9 |
| 1001387 | -6 | 10 | 3/8 | 15,9 | 0,63 | 2,8 | 400 | 11 | 1600 | 76 | 4,1 | 0,17 | 11 |
| 1001388 | -8 | 13 | 1/2 | 19,8 | 0,78 | 2,8 | 400 | 11 | 1600 | 102 | 4,3 | 0,23 | 15 |
| 1001389 | -10 | 16 | 5/8 | 23 | 0,91 | 2,4 | 350 | 10 | 1400 | 107 | 6,1 | 0,27 | 18 |
| 1001390 | -12 | 19 | 3/4 | 26,9 | 1,06 | 2,1 | 300 | 8 | 1200 | 152 | 8,1 | 0,37 | 25 |
| 1001391 | -16 | 25 | 1 | 33,4 | 1,31 | 1,7 | 250 | 7 | 1000 | 203 | | 0,49 | 33 |

# FLEXOR 1SN - R1AT (HF)

## ISO 1436-1 - SAE 100 R1AT/R1S
## EN 853 1SN

**Tubo:** borracha sintética resistente a óleo.
**Reforço:** uma trama de aço de alta resistência (1B).
**Cobertura:** borracha sintética resistente a ozônio, hidro carbono e abrasão.
**Aplicação:** linhas hidráulicas de alta pressão, combustível, solução antigelo, água e ar.

**halogen free compound**
**Operação constante:** -40 °C +100 °C (-40 °F +212 °F)
air max T = +70 °C (+160 °F)
**Comprimento:** qualquer até 1" - 40 m máximo 1"1/4.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item Code | Dash | mm | in | mm | in | Mpa | psi | Mpa | psi | mm | in | kg/m | lb/C ft |
| 1001330 | -3 | 5 | 3/16 | 11,6 | 0,46 | 25 | 3630 | 100 | 14520 | 90 | 3,6 | 0,18 | 12 |
| 1001331 | -4 | 6 | 1/4 | 13,2 | 0,52 | 22,5 | 3270 | 90 | 13080 | 100 | 4 | 0,22 | 15 |
| 1001332 | -5 | 8 | 5/16 | 14,7 | 0,58 | 21,5 | 3120 | 86 | 12480 | 115 | 4,6 | 0,25 | 17 |
| 1001333 | -6 | 10 | 3/8 | 17,1 | 0,67 | 18 | 2610 | 72 | 10460 | 130 | 5,2 | 0,32 | 22 |
| 1001334 | -8 | 13 | 1/2 | 20,2 | 0,80 | 16 | 2320 | 64 | 9280 | 180 | 7,2 | 0,41 | 27 |
| 1001335 | -10 | 16 | 5/8 | 23,2 | 0,91 | 13 | 1890 | 52 | 7560 | 200 | 8 | 0,50 | 33 |
| 1001336 | -12 | 19 | 3/4 | 27,4 | 1,08 | 10,5 | 1530 | 42 | 6120 | 240 | 9,6 | 0,61 | 42 |
| 1001337 | -16 | 25 | 1 | 35,4 | 1,39 | 8,8 | 1280 | 35 | 5120 | 300 | 12 | 0,91 | 62 |
| 1001338 | -20 | 32 | 1.1/4 | 42,8 | 1,69 | 6,3 | 920 | 25 | 3680 | 420 | 16,8 | 1,18 | 79 |
| 1001339 | -24 | 38 | 1.1/2 | 49,9 | 1,96 | 5 | 730 | 20 | 2920 | 500 | 20 | 1,46 | 98 |
| 1001340 | -32 | 51 | 2 | 63,2 | 2,49 | 4 | 580 | 16 | 2320 | 630 | 25,2 | 1,98 | 132 |

# FLEXOR 2SN - R2AT (HF)

## ISO 1436-1 - SAE 100 R2AT/R2S
## EN 853 2SN

**Tubo:** borracha sintética resistente a óleo.
**Reforço:** duas tramas de aço de alta resistência (2B).
**Cobertura:** borracha sintética resistente a ozônio, hidro carbono e abrasão.
**Aplicação:** linhas hidráulicas de alta pressão, combustível, solução antigelo, água e ar.

**halogen free compound**
**Operação constante:** -40 °C +100 °C (-40 °F +212 °F)
air max T = +70 °C (+160 °F)
**Comprimento:** qualquer até 1" - 40 m máximo 1"1/4.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item Code | Dash | mm | in | mm | in | Mpa | psi | Mpa | psi | mm | in | kg/m | lb/C ft |
| 1001341 | -3 | 5 | 3/16 | 13,1 | 0,52 | 42 | 6000 | 168 | 24000 | 90 | 3,6 | 0,28 | 19 |
| 1001342 | -4 | 6 | 1/4 | 14,6 | 0,57 | 40 | 5800 | 160 | 23200 | 100 | 4 | 0,35 | 23 |
| 1001343 | -5 | 8 | 5/16 | 16,2 | 0,64 | 35 | 5000 | 140 | 20000 | 115 | 4,6 | 0,41 | 27 |
| 1001344 | -6 | 10 | 3/8 | 18,5 | 0,73 | 33 | 4800 | 132 | 19200 | 125 | 5 | 0,49 | 33 |
| 1001345 | -8 | 13 | 1/2 | 21,5 | 0,85 | 27,5 | 4000 | 110 | 16000 | 175 | 7 | 0,62 | 42 |
| 1001346 | -10 | 16 | 5/8 | 24,7 | 0,97 | 25 | 3630 | 100 | 14520 | 200 | 8 | 0,72 | 49 |
| 1001347 | -12 | 19 | 3/4 | 29 | 1,14 | 21,5 | 3120 | 86 | 12480 | 240 | 9,6 | 0,90 | 60 |
| 1001348 | -16 | 25 | 1 | 36,9 | 1,45 | 16,5 | 2400 | 66 | 9600 | 300 | 12 | 1,28 | 85 |
| 1001349 | -20 | 32 | 1.1/4 | 46,5 | 1,83 | 12,5 | 1820 | 50 | 7280 | 420 | 16,8 | 1,86 | 124 |
| 1001350 | -24 | 38 | 1.1/2 | 53,7 | 2,11 | 9 | 1310 | 36 | 5240 | 500 | 20 | 2,37 | 158 |
| 1001351 | -32 | 51 | 2 | 66,5 | 2,62 | 8 | 1160 | 32 | 4640 | 630 | 25,2 | 2,92 | 195 |

# FLEXOR 4SP - MINETUFF

## SAE 100 R10 - EN 856 4SP

**Tubo:**borracha sintética resistente a óleo.
**Reforço:** quatro espirais de aço de alta resistência (4S)
**Cobertura:** borracha sintética resistente a ozônio, hidro carbono e abrasão.

**msha approved**

**Aplicação:** linhas hidráulicas de altíssima pressão, combustível, soluções antigelo, água e ar
**Operação constante:** -40 °C +100 °C (-40 °F +212 °F)
**Comprimento:** qualquer.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item Code | Dash | mm | in | mm | in | Mpa | psi | Mpa | psi | mm | in | kg/m | lb/C ft |
| 1000236 | -4 | 6 | 1/4 | 17,9 | 0,7 | 45 | 6550 | 180 | 26200 | 150 | 6 | 0,58 | 39 |
| 1000237 | -6 | 10 | 3/8 | 21,4 | 0,84 | 44,5 | 6450 | 178 | 25800 | 180 | 7,2 | 0,74 | 50 |
| 1000238 | -8 | 13 | 1/2 | 24,6 | 0,97 | 41,5 | 6000 | 166 | 24000 | 230 | 9,2 | 0,88 | 59 |
| 1000239 | -10 | 16 | 5/8 | 28,2 | 1,11 | 35 | 5000 | 140 | 20000 | 250 | 10 | 1,05 | 71 |
| 1000240 | -12 | 19 | 3/4 | 32,2 | 1,27 | 38 | 5510 | 152 | 22040 | 300 | 12 | 1,44 | 96 |
| 1000241 | -16 | 25 | 1 | 39,7 | 1,56 | 32 | 4640 | 128 | 18560 | 340 | 13,6 | 1,96 | 131 |

# FLEXOR 4SH - MINETUFF

## EN 856 4Sh

**Tubo:**borracha sintética resistente a óleo.

**Reforço:** quatro espirais de aço de alta resistência (4S) **Cobertura:** borracha sintética resistente a ozônio, hidro carbono e abrasão.

**msha approved**

**Aplicação:** linhas hidráulicas de altíssima pressão, combustível, soluções antigelo, água e ar.
**Operação constante:** - 4 **:** 0 °C +100 °C (-40 °F +212 °F)
**Comprimento:** qualquer até 1" - 40 m máximo 1".

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item Code | Dash | mm | in | mm | in | Mpa | psi | Mpa | psi | mm | in | kg/m | lb/C ft |
| 1000245 | -12 | 19 | 3/4 | 32,2 | 1,27 | 42 | 6000 | 168 | 24000 | 280 | 11,2 | 1,57 | 106 |
| 1000246 | -16 | 25 | 1 | 38,7 | 1,52 | 38 | 5500 | 152 | 22000 | 340 | 13,6 | 1,95 | 131 |
| 1000247 | -20 | 32 | 1.1/4 | 45,5 | 1,79 | 35 | 5000 | 140 | 20000 | 460 | 18,4 | 2,47 | 165 |
| 1000248 | -24 | 38 | 1.1/2 | 53,5 | 2,11 | 29 | 4200 | 116 | 16800 | 560 | 22,4 | 3,27 | 219 |
| 1000249 | -32 | 51 | 2 | 68,1 | 2,68 | 25 | 3650 | 110 | 14600 | 700 | 28 | 4,67 | 313 |

PARA PRENSAGEM EM MANGUEIRAS HIDRÁULICAS DE 1, 2 E 4 TRAMAS DE AÇO

Capas No SKIVE p/ mangueiras - 1 Trama

Não precisa descascar a cobertura da mangueira na área de prensagem

MM300t1

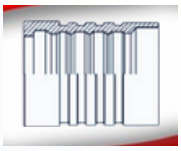
| Qtde Tramas | Pol. | Bitola | L | Código |
|---|---|---|---|---|
| 1 | 3/16" | 3 | 27 | 300T1-03 |
| 1 | 1/4" | 4 | 30 | 300T1-04 |
| 1 | 5/16" | 5 | 32 | 300T1-05 |

Capas No SKIVE p/ mangueiras SAE 100 R1AT e R2AT
(1 e 2 Tramas)

Não precisa descascar a cobertura da mangueira na área de prensagem

MM300t2

| Qtde Tramas | Pol. | Bitola | L | Código |
|---|---|---|---|---|
| 1 e 2 | 1/4" | 4 | 30 | 300T2-04 |
| 1 e 2 | 1/4" | 4 | 28 | 300T2-04A |
| 1 e 2 | 5/16" | 5 | 30 | 300T2-05 |
| 1 e 2 | 3/8" | 6 | 32 | 300T2-06 |
| 1 e 2 | 1/2" | 8 | 34 | 300T2-08 |
| 1 e 2 | 5/8" | 10 | 37 | 300T2-10 |
| 1 e 2 | 3/4" | 12 | 42 | 300T2-12 |
| 1 e 2 | 1" | 16 | 51 | 300T2-16 |
| 1 e 2 | 1.1/4" | 20 | 59 | 300T2-20 |
| 1 e 2 | 1.1/2" | 24 | 67 | 300T2-24 |
| 1 e 2 | 2" | 32 | 72 | 300T2-32 |



Capas SKIVE p/ mangueiras SAE 100 R12 e 4SP
(4 Tramas)

É necessário descascar a cobertura da mangueira na área de prensagem

MM300t4

| Qtde Tramas | Pol. | Bitola | L | Código |
|---|---|---|---|---|
| 4 | 3/8" | 6 | 33 | 300T4-06 |
| 4 | 1/2" | 8 | 34 | 300T4-08 |
| 4 | 5/8" | 10 | 39 | 300T4-10 |
| 4 | 3/4" | 12 | 40 | 300T4-12 |
| 4 | 1" | 16 | 51 | 300T4-16 |
| 4 | 1.1/4" | 20 | 60 | 300T4-20 |
| 4 | 1.1/2" | 24 | 70 | 300T4-24 |
| 4 | 2" | 32 | 72 | 300T4-32 |

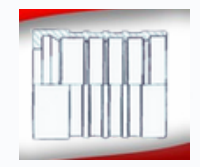
PARA PRENSAGEM EM MANGUEIRAS HIDRÁULICAS DE 4 TRAMAS DE AÇO E INTERLOCK

Capas SKIVE p/ mangueiras 4SH
(4 Tramas)

É necessário descascar a cobertura da mangueira na área de prensagem

MM300ts

| Qtde Tramas | Pol. | Bitola | L | Código |
|---|---|---|---|---|
| 4 | 1/2" | 8 | 34 | 300TS-08 |
| 4 | 5/8" | 10 | 42 | 300TS-10 |
| 4 | 3/4" | 12 | 51 | 300TS-12 |
| 4 | 1" | 16 | 61.5 | 300TS-16 |
| 4 | 1.1/4" | 20 | 67.5 | 300TS-20 |
| 4 | 1.1/2" | 24 | 75 | 300TS-24 |
| 4 | 2" | 32 | 79 | 300TS-32 |



Capas SKIVE Interlock p/ Mangueiras R15 (6 Tramas)

É necessário descascar a cobertura da mangueira na área de prensagem

MM300t6

| Qtde Tramas | Pol. | Bitola | L | Código |
|---|---|---|---|---|
| 6 | 3/4" | 12 | 53 | 300T6-12 |
| 6 | 1" | 16 | 66 | 300T6-16 |
| 6 | 1.1/4" | 20 | 88 | 300T6-20 |
| 6 | 1.1/2" | 24 | 102 | 300T6-24 |
| 6 | 2" | 32 | 108 | 300T6-32 |

Capas SKIVE p/ mangueiras 4SH
(4 Tramas)

É necessário descascar a cobertura da mangueira na área de prensagem

MM301ts

| Qtde Tramas | Pol. | Bitola | L | Código |
|---|---|---|---|---|
| 4 | 1.1/4" | 20 | 67.5 | 301TS-20 |

# Alfatech - gama alta pressão

ALFAGOMMA alfabiotech

NEW EXTRA FLEXIBLE
BIO OIL RESISTANT
HOSE RANGE

## AT6K - MINETUFF

**1,000,000ciclos testados.**

**Tubo:** borracha sintética resistente a óleo.
**Reforço:** quatro/seis espirais de aço de alta resistência (4S/6S)
**Cober tura:** borracha sintética resistente a ozônio, hidro carbono e abrasão.
**Aprovação MSHA**
**Aplicação:** linhas hidráulicas de altíssima pressão, combustível, soluções antigelo, água e ar.
**Operação constante:** -40 ºC + 121 ºC (-40 ºF + 250 ºF).
**Comprimento:** qualquer até 1" - 40 m máximo 1"
**Nota:** Especificações

SAE 100 R15
EN 856 4SP (1/4, 3/8, 1/2)
EN 856 4SH (3/4)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item Code | Constr. | Dash | mm | in | mm | in | Mpa | psi | Mpa | psi | mm | in | kg/m | lb/C ft |
| 1000236 | 4S | -4 | 6 | 1/4 | 17,9 | 0,7 | 45 | 6550 | 180 | 26200 | 150 | 6 | 0,58 | 39 |
| 1000237 | 4S | -6 | 10 | 3/8 | 21,4 | 0,84 | 44,5 | 6450 | 178 | 25800 | 180 | 7,2 | 0,74 | 50 |
| 1000238 | 4S | -8 | 13 | 1/2 | 24,6 | 0,97 | 42 | 6000 | 168 | 24000 | 230 | 9,2 | 0,88 | 59 |
| 1000254 | 4S | -10 | 16 | 5/8 | 28,6 | 1,13 | 42 | 6000 | 168 | 24000 | 250 | 10 | 1,32 | 88 |
| 1000245 | 4S | -12 | 19 | 3/4 | 32,2 | 1,27 | 42 | 6000 | 168 | 24000 | 267 | 10,7 | 1,62 | 109 |
| 1000179 | 4S | -16 | 25 | 1 | 38,7 | 1,52 | 42 | 6000 | 168 | 24000 | 280 | 11,2 | 2,2 | 147 |
| 1000180 | 6S | -20 | 32 | 1.1/4 | 49,8 | 1,96 | 42 | 6000 | 168 | 24000 | 280 | 11,2 | 3,59 | 241 |
| 1000189 | 6S | -24 | 38 | 1.1/2 | 57,3 | 2,26 | 42 | 6000 | 168 | 24000 | 315 | 12,6 | 5 | 335 |
| 1000344 | 6S | -32 | 51 | 2 | 72 | 2,83 | 42 | 6000 | 168 | 24000 | 600 | 24 | 7,08 | 474 |

ALFAGOMMA alfabiotech

NEW EXTRA FLEXIBLE
BIO OIL RESISTANT
HOSE RANGE

## ALFABIOTECH 4000 - MINETUFF

**Tubo:**borracha sintética resistente a óleo e fluídos hidraúlicos biodegradáveis.
**Reforço:** quatro espirais de aço de alta resistência (4S)
**Cobertura:** borracha sintética resistente a ozônio, hidro carbono e abrasão.
**MShA APPROVED**
**Aplicação:** desenvolvido para suportar condições extremas, alta performance em relação à pressão, pulsação e flexão.
**Designed and tested according to ISO 18752**
**Operação constante:** -40 °C +121 °C (-40 °F +250 °F)
**Comprimento :** qualquer até 1" - 61 m de 1 1/4" a 2"

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item code | DN | inch | Dash | mm | inch | Mpa | psi | Mpa | psi | mm | inch | kg/m | lb/C ft |
| 1001691 | 20 | 3/4 | -12 | 28,8 | 1,13 | 28 | 4000 | 112 | 16000 | 120 | 4,72 | 1,228 | 82 |
| 1001692 | 25 | 1 | -16 | 35,2 | 1,38 | 28 | 4000 | 112 | 16000 | 150 | 5,90 | 1,644 | 110 |

# FLEXOR R4 644 HT

## SAE 100 R4
## EXTRA FIEXIBIE - hIGh TEMP

**Tubo:** borracha sintética resistente a óleo.
**Reforço:** cordão têxtil de alta resistência com fio de aço incorporado.
**Cobertura:** borracha sintética resistente a ozônio, hidro carbono e abrasão.

**msha approved**

**Aplicação:** Sucção de fluídos de combustível oleos hidráulicos e distribuição com 50% de maximo conteúdo aromático. Especificamente desenhado para linha de retorno de óleo hidráulico que requer um raio de dobra apertado.

**Operação constante:** -40 °C +135 °C (-40 °F +275 °F)
**Comprimento:** máximo 61m.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item Code | Dash | mm | in | mm | in | Mpa | psi | Mpa | psi | mm | in | kg/m | lb/C ft |
| 1001277 | -12 | 19 | 3/4 | 29 | 1,14 | 2,5 | 375 | 10 | 1500 | 38 | 1,50 | 0,55 | 37 |
| 1001274 | -16 | 25 | 1 | 35 | 1,38 | 2,0 | 300 | 8 | 1200 | 50 | 1,97 | 0,68 | 46 |
| 1001196 | -20 | 32 | 1.1/4 | 42 | 1,65 | 1,7 | 250 | 6,8 | 1000 | 64 | 2,52 | 0,84 | 56 |
| 1001279 | -24 | 38 | 1.1/2 | 48 | 1,89 | 1,0 | 150 | 4 | 600 | 76 | 2,99 | 0,99 | 66 |
| 1001281 | -32 | 51 | 2 | 61 | 2,40 | 0,7 | 100 | 2,8 | 400 | 102 | 4,02 | 1,29 | 87 |
| 1001283 | -40 | 63 | 2.1/2 | 75 | 2,95 | 0,5 | 75 | 2 | 300 | 126 | 4,96 | 2,19 | 147 |
| 1001285 | -48 | 76 | 3 | 88 | 3,46 | 0,5 | 75 | 2 | 300 | 152 | 5,98 | 2,59 | 174 |
| 1001290 | -64 | 102 | 4 | 116 | 4,57 | 0,5 | 75 | 2 | 300 | 204 | 8,03 | 3,55 | 238 |

# Oil return lines

# FLEXOR R4 604

## SAE 100 R4

**Tubo:** borracha sintética resistente a óleo.
**Reforço:** cordão têxtil de alta resistência com fio de aço incorporado.
**Cobertura:** borracha sintética resistente a ozônio, hidro carbono e abrasão.
**Aplicação:** Sucção de fluídos de combustível oleos hidráulicos e distribuição com 50% de maximo conteúdo aromático. Especificamente desenhado para linha de retorno de óleo hidráulico.
**Operação constante:** -40 °C +100 °C (-40 °F +212 °F)

**Comprimento:** Máximo 61m

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item Code | Dash | mm | in | mm | in | Mpa | psi | Mpa | psi | mm | in | kg/m | lb/C ft |
| 1000486 | -12 | 19 | 3/4 | 29 | 1,14 | 2,1 | 300 | 8,4 | 1200 | 57 | 2,24 | 0,60 | 40 |
| 1000487 | -16 | 25 | 1 | 35 | 1,38 | 1,7 | 250 | 6,8 | 1000 | 75 | 2,95 | 0,74 | 50 |
| 1000488 | -20 | 32 | 1.1/4 | 42 | 1,65 | 1,4 | 200 | 5,6 | 800 | 96 | 3,78 | 0,89 | 60 |
| 1000489 | -24 | 38 | 1.1/2 | 48 | 1,89 | 1,0 | 150 | 4 | 600 | 114 | 4,49 | 1,03 | 69 |
| 1000490 | -32 | 51 | 2 | 61 | 2,40 | 0,7 | 100 | 2,8 | 400 | 153 | 6,02 | 1,32 | 89 |
| 1000491 | -40 | 63 | 2.1/2 | 75 | 2,95 | 0,4 | 62 | 1,6 | 248 | 189 | 7,44 | 2,07 | 139 |
| 1000492 | -48 | 76 | 3 | 88 | 3,46 | 0,4 | 56 | 1,6 | 224 | 228 | 8,98 | 2,47 | 166 |
| 1000493 | -56 | 90 | 3.1/2 | 104 | 4,09 | 0,3 | 45 | 1,2 | 180 | 270 | 10,63 | 3,04 | 204 |
| 1000494 | -64 | 102 | 4 | 116 | 4,57 | 0,2 | 30 | 0,8 | 120 | 306 | 12,05 | 3,39 | 228 |

# FLEXOR R4 634

## SAE 100 R4
## Extra flexible

**Tubo:** borracha sintética resistente a óleo.
**Reforço:** cordão têxtil de alta resistência com fio de aço incorporado. **Cobertura:** borracha sintética resistente a ozônio, hidro carbono e abrasão.
**Aplicação:** Sucção de fluídos de combustível oleos hidráulicos e distribuição com 50% de maximo conteúdo aromático. Especificamente desenhado para linha de retorno de óleo hidráulico que requer um raio de dobra apertado.
**Operação constante:** -40 °C +100 °C (-40 °F +212 °F)
**Comprimento:** Máximo 61m

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item Code | Dash | mm | in | mm | in | Mpa | psi | Mpa | psi | mm | in | kg/m | lb/C ft |
| 1001272 | -12 | 19 | 3/4 | 29 | 1,14 | 2,5 | 375 | 10 | 1500 | 38 | 1,50 | 0,51 | 34 |
| 1001273 | -16 | 25 | 1 | 35 | 1,38 | 2,0 | 300 | 8 | 1200 | 50 | 1,97 | 0,63 | 42 |
| 1001275 | -20 | 32 | 1.1/4 | 42 | 1,65 | 1,7 | 250 | 6,8 | 1000 | 64 | 2,52 | 0,78 | 52 |
| 1001278 | -24 | 38 | 1.1/2 | 48 | 1,89 | 1,0 | 150 | 4 | 600 | 76 | 2,99 | 0,92 | 62 |
| 1001280 | -32 | 51 | 2 | 61 | 2,40 | 0,7 | 100 | 2,8 | 400 | 102 | 4,02 | 1,20 | 81 |
| 1001282 | -40 | 63 | 2.1/2 | 75 | 2,95 | 0,5 | 75 | 2 | 300 | 126 | 4,96 | 2,08 | 140 |
| 1001284 | -48 | 76 | 3 | 88 | 3,46 | 0,5 | 75 | 2 | 300 | 152 | 5,98 | 2,46 | 165 |
| 1001288 | -64 | 102 | 4 | 116 | 4,57 | 0,5 | 75 | 2 | 300 | 204 | 8,03 | 3,38 | 227 |

| CÓD | DIÂM NOMINAL | | | DIÂM INT (DI) mm | | DIÂM EXT (DE) mm | | PRESSÃO DE TRABALHO | |
|---|---|---|---|---|---|---|---|---|---|
| REF. | mm | TRAÇO | POL. | MÁX. | MÍN. | MÁX. | MÍN. | Bar | Psi |
| 1402 | 3 | -3 | 1/8. | 36 | 28 | 68 | 53 | 105 | 1525 |
| 1403 | 5 | -4 | 3/16. | 52 | 44 | 82 | 71 | 105 | 1525 |
| 1404 | 6 | -5 | 1/4. | 69 | 6 | 101 | 89 | 105 | 1525 |
| 1405 | 8 | -6 | 5/16 | 84 | 75 | 116 | 104 | 105 | 1525 |
| 1406 | 10 | -7 | 5/16. | 10 | 91 | 134 | 122 | 105 | 1525 |
| 1407 | 11 | -8 | 13/32 | 109 | 99 | 143 | 129 | 70 | 1015 |
| 1408 | 12 | -10 | 1/2. | 133 | 123 | 168 | 153 | 56 | 815 |
| 1410 | 16 | -12 | 5/8. | 165 | 153 | 201 | 186 | 56 | 815 |
| 1412 | 19 | -14 | 3/4. | 196 | 184 | 233 | 213 | 56 | 815 |
| 1414 | 22 | -16 | 7/8. | 23 | 214 | 269 | 246 | 56 | 815 |
| 1416 | 25 | -18 | 1 | 262 | 246 | 298 | 278 | 56 | 815 |

mastermang@mastermang.com.br - Tel 16-3627-6346 whatsapp 16-993057262

# Mangueira TBT

**Construção**
Tubo interno borracha sintética
Reforço um trançado de fios texteis
Revestido c/ aço galvanizado.

**Utilização**
Condução de óleos e ar em baixa presão
Temperatura óleos minerais -40°C até +100°C
Ar comprimido -40°C até +70°C

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | psi Pressão de trabalho | | psi Pressão de ruptura |
| Item Code | Dash | mm | in | mm | | | | |
| TBT | -04 | 06 | 1/4 | 12,7 | | | 1500 | 1200 |
| TBT | -06 | 10 | 3/8 | 15,9 | | | 1250 | 1000 |
| TBT | -08 | 13 | 1/2 | 19,9 | | | 1125 | 800 |
| TBT | -10 | 16 | 5/8 | 23,0 | | | 1000 | 600 |
| TBT | -12 | 20 | 3/4 | 28,5 | | | 875 | 400 |
| TBT | -16 | 25 | 1" | 34,9 | | | 625 | 248 |

# Produtos

## CASEIH JOHN DEERE

CASEIH
00210000
00210001
00400159
00400160
00400162
00400165
00401675
00401862
00404090
00405844
00942399
00947344
00948752
22777
412122A1
JOHN DEERE
0070005195
0070005674
0071348556
CB01510041
X6-2FTX
X8FTX-S

Adaptador
JIC x NPT

# Produtos

## CASEIH JOHN DEERE

CASEIH
00210000
00210001
00400159
00400160
00400162
00400165
00401675
00401862
00404090
00405844
00942399
00947344
00948752
22777
412122A1
JOHN DEERE
0070005195
0070005674
0071348556
CB01510041
X6-2FTX
X8FTX-S

Adaptador
JIC x NPT

# Produtos

## CASEIH JOHN DEERE

| CASEIH | JOHN DEERE |
|---|---|
| 00400073 | 0070005735 |
| 00400074 | 0070005755 |
| 00400093 | 0070005759 |
| 00400223 | 0070005769 |
| 00400224 | 0070006572 |
| 00400225 | 0070006612 |
| 00400227 | 0070006655 |
| 00400228 | 0070013431 |
| 00400229 | 0070014343 |
| 00400230 | 0070019443 |
| 00400231 | 0070028691 |
| 00400232 | 0070033020 |
| 00400233 | 0070034014 |
| 00400234 | 0071341070 |
| 00400235 | 0071341071 |
| 00400236 | 0071341072 |
| 00400237 | 0071341073 |
| 00401868 | 0071341074 |
| 00402235 | 0071341118 |
| 128812 | 0071341520 |
| 81827427 | 0071341813 |
| 128817 128819 | 0071342216 |
| 233705 | 0071345232 |
| 322896 | 0071349607 |
| 378970 | 00713470702 |
| 444074A1 | 0090031581 |
| 525646 | AT143902 |
| 570180 76350 | AW21857 |
| 84384 | R27212 |
| 86624009 | R27237 |
| 8730330 | R27267 |
| 87329794 | |

Adaptador
JIC x UNF

# Produtos

## CASEIH JOHN DEERE

Adaptador
ORFS x UNF

CASEIH
201-105
87559470
9480535

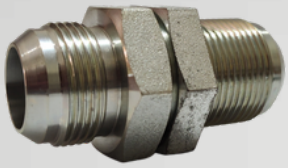
Adaptador
ORFS x UNF

JOHN DEERE
38H1164
38H3162
38H3180
38H3194
38H3595

# Produtos

## CASEIH JOHN DEERE

Adaptador Painel
JIC x JIC



CASEIH
00400067
00400068
00400069
00400070
9862007

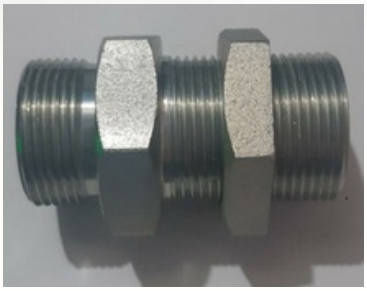
Adaptador Painel
JIC x JIC

JOHN DEERE
0071341067

Cotovelo Macho
x Femea ORFS

CASE
84989412
JOHN DEERE
38H5282

Adaptador Painel
ORFS x ORFS



CASEIH
00410307
86639060

Adaptador Painel
ORFS x ORFS

JOHN DEERE
38H1207
38H5219

Adaptador ORFS
x Milimetrico

JOHN DEERE
38H5005

# Produtos

## CASEIH JOHN DEERE

Cotovelo 90°
JIC x UNF

Cotovelo 90°
JIC x UNF

Cotovelo 90°
JIC x UNF

**CASEIH**
00400096
00400097
00400238
00400239
00400240
00400242
00400243
00400246
00402475
00405242
00407832
00410299
00943054
00948071
128830
216773
268277
322894
76344
76347
86512936
86513938
87329785
87393628

**JOHN DEERE**
CB01510017
AXT13852
AW22821
AT35123
AT32332
AT32331
AT26724
713417993
70027856
71349609
71347726
71346396
71341811
71341603
71341536
71341524
71341082
71341080
71341079
71341078

**JOHN DEERE**
70011490
70011488
70005708
70031627
70028756
70028747

# Produtos

## CASEIH JOHN DEERE

Cotovelo 45°
JIC x UNF

**CASEIH**
86977688
445054A1
330345
00947941
00947582
00404791
00410134

Cotovelo 45°
JIC x UNF

**JOHN DEERE**
AT48506
AT32338
71349751
71349608
71342364
71341604
71341467
71341086
71341085
X8-12C5OX

# Produtos

## CASEIH JOHN DEERE

Cotovelo 90°
JIC M x JIC F

CASEIH
86629586
86512933
248974
182977
00405078
00402879
00402451
00400222
00400221

Cotovelo 90°
JIC M x JIC F

JOHN DEERE
AT75164
AH75164
AE24616
71349610
71341101
71341100
71304688
70032935
CB01510010

# Produtos

## CASEIH JOHN DEERE

Cotovelo 45°
JIC M x JIC F

**CASEIH**
00404300
00404511
00405173
00948758
00948762
248992
219605
86512959
86512960

Cotovelo 45°
JIC M x JIC F

**JOHN DEERE**
71341107
71341108
71341465
71341634
71341782
71341795
71349613
AT28379
AU43156
CB01510012
R37145
X8V6X

# Produtos

## CASEIH JOHN DEERE

Cotovelo painel 90°
JIC M x JIC M

CASEIH
00404781
00409554
00947992
00948054
86513091
248995
253559

Cotovelo painel 90°
JIC M x JIC M

JOHN DEERE
71341089
71341090
71348528
71349615
N111995
PMH1256

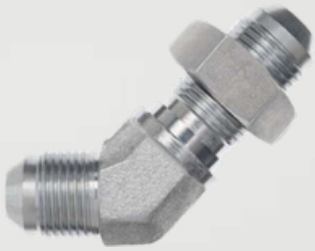
# Produtos

## CASEIH JOHN DEERE

Cotovelo painel 90°
MILIMETRICO

CASEIH
84014046

Cotovelo painel 45°
JIC M x JIC M



JOHN DEERE
70020913
71341088
71341461
71341911
71342165
71349616
PMH1241

Cotovelo 90°
MILIMETRICO

CASEIH
16503914

ADAPTADOT
MILIMETRICO

CASEIH
504081275

# Produtos

## CASEIH JOHN DEERE

Cotovelo painel
90° ORFS

CASEIH
48061861

Cotovelo painel
90° ORFS

JOHN DEERE
38H5199
38H52823

Cotovelo painel
45° ORFS

CASEIH
47413576

Cotovelo painel
45° ORFS

JOHN DEERE
CB01424413
PMH180

# Produtos

CASEIH JOHN DEERE

## Adaptador curvo 90° longo M jic F jic

| Case | John deere |
|---|---|
| 86333900 | 71341059 |
| | 71341529 |
| | 71342104 |
| | 71344317 |
| | X41T3-12-12 |
| | X41T3-16-16 |
| | 71341058 |

## Adaptador curvo 90° M jic X F jic

| Case | John deere |
|---|---|
| 00403944 | 71341056 |
| 00407045 | 71341057 |
| 00407516 | 71349611 |
| 00408451 | 71341328 |

# Produtos

## CASEIH JOHN DEERE

### Adaptador curvo 90°
### M jic X flange 61

| Case |
|---|
| 00409933 |
| 00403854 |

### Adaptador curvo 45°
### M jic X flange 61

| Case | John deere |
|---|---|
| 00407240 | 71342246 |
| 00408418 | |
| 00409950 | |
| 00948789 | |

### Adaptador curvo 45°
### M jic X flange 62

| Case | John deere |
|---|---|
| 71341060 | |
| 00403854 | |
| 70037450 | |

### Adaptador curvo 45°
### M orfs X flange 62

| Case |
|---|
| 84475000 |

# Produtos

## CASEIH JOHN DEERE

### Adaptador curvo 90°
### F orfs X M orfs

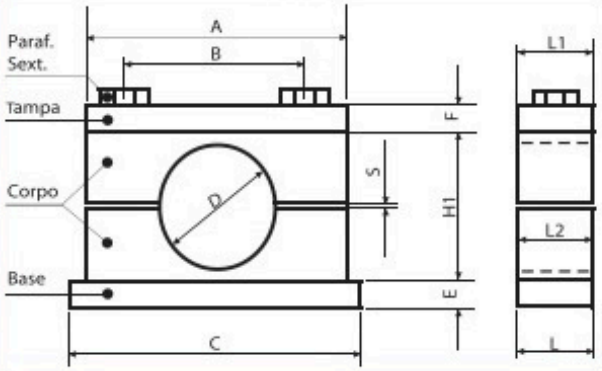
| Case | John deere |
|---|---|
| 00410306 | |

### Adaptador curvo 90°
### M orfs X flange 62

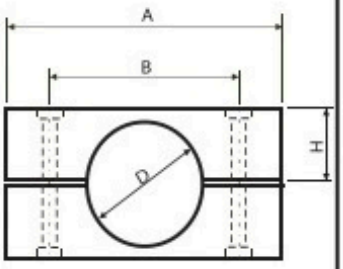
| Case | John deere |
|---|---|
| 00410305 | CB11494760 |
| | AT124775 |
| | AT337436 |

# BRAÇADEIRA - LINHA STANDARD

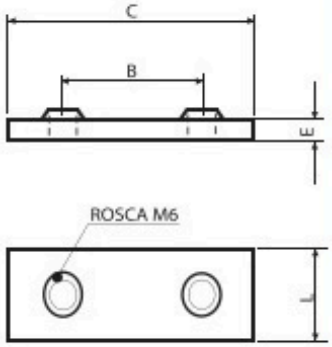
## CONJUNTO



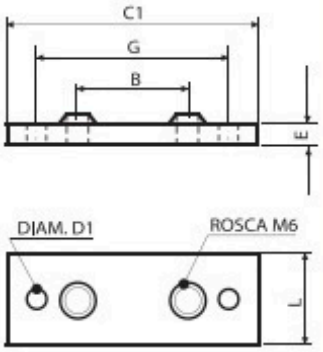

## CORPO



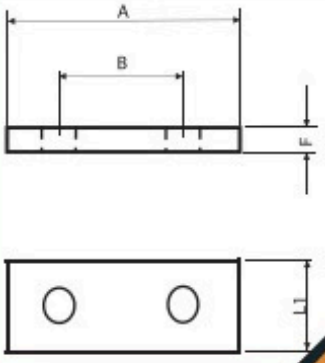

## BASE 1 PARA SOLDA



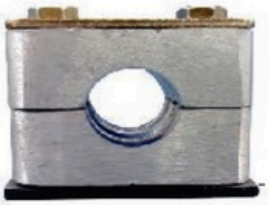

## BASE 2 ALONGADA




## TAMPA



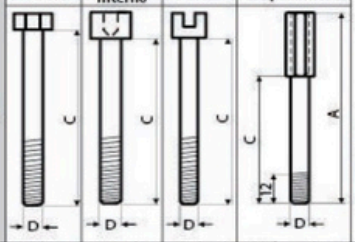
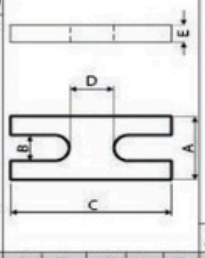
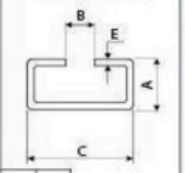
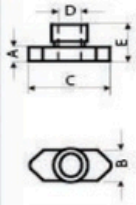
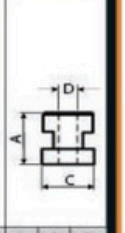

| GRUPO | DIAM. D (TUBO) | DIMENSÕES | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A | B | C | C1 | D1 | E | F | G | H | H1 | L | L1 | L2 | S | PARAF. SEXT. |
| 1 | 6 9,5/10<br>8 12 | 36 | 20 | 39 | 70 | 6,5 | 3 | 2 | 54 | 13 | 27 | 30 | 30 | 30 | 1 | M6x30 |
| 2 | 12,7 16<br>14 18<br>15 | 43 | 26 | 45 | 76 | 6,5 | 3 | 2 | 60 | 16 | 33 | 30 | 30 | 30 | 1 | M6x35 |
| 3 | 19 22<br>20 25 | 50 | 33 | 53 | 83 | 6,5 | 3 | 2 | 67 | 18 | 37 | 30 | 30 | 30 | 1 | M6x40 |
| 4 | 26,7/28 30 | 57 | 39 | 58 | 89 | 6,5 | 3 | 3 | 73 | 21 | 43 | 30 | 30 | 30 | 1 | M6x50 |
| 5 | 32 38<br>33,4/34 40<br>35 42 | 70 | 52 | 72 | 101 | 6,5 | 3 | 3 | 85 | 30 | 61 | 30 | 30 | 30 | 1 | M6x65 |
| 6 | 44,5 50,8<br>48,3 54,4 | 94 | 66 | 96 | 129 | 6,5 | 3 | 3 | 115 | 32 | 65 | 30 | 30 | 30 | 1 | M6x70 |
| 7 | 57,2 70<br>60,5 73<br>63,5 76,2 | 121 | 94 | 125 | 157 | 6,5 | 5 | 3 | 144 | 46 | 93 | 30 | 30 | 30 | 1 | M6x100 |



Braçadeira com corpo em alumínio e base para soldar.

Braçadeira com corpo em polipropileno e base para parafusar.

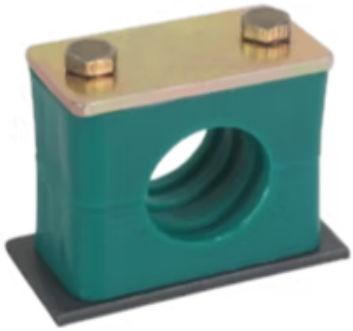
Braçadeira com corpo em polipropileno com porca trava para montar em trilho.

| BRAÇADEIRA STANDARD | | PARAFUSOS | | | | | | | | | PLACA TRAVA | | | | | TRILHO | | | | | PORCA TRAVA | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sextavado | | Sextavado Interno | | Fenda | | Empilhamento | | | | | | | | TR28X13X1m TR28X13X2m TR28X14X1m | | | | | Alumínio | | | | | Inox | | |
| | |  | | | | | | | | |  | | | | |  | | | | |  | | | | |  | | |
| | | | | | | | | | | | | | | | | Aço | Inox | | | | | | | | | | | |
| GRUPO | TUBO | C | D | C | D | C | D | A | C | D | A | B | C | D | E | A | A | B | C | E | A | B | C | D | E | A | C | D |
| 1 | 6 a 12 | 30 | M6 | 20 | M6 | 20 | M6 | 34 | 20 | M6 | 30 | 11,5 | 36 | 6 | 3 | 13 | 14 | 12,5 | 28 | 1,5 | 5 | 11 | 26 | M6 | 15 | 11 | 16 | M6 |
| 2 | 12,7 a 18 | 35 | M6 | 25 | M6 | 25 | M6 | 38 | 26 | M6 | 30 | 11,5 | 44 | 11 | 3 | 13 | 14 | 12,5 | 28 | 1,5 | 5 | 11 | 26 | M6 | 15 | 11 | 16 | M6 |
| 3 | 19 a 25 | 40 | M6 | 30 | M6 | 30 | M6 | 44 | 30 | M6 | 30 | 11,5 | 51 | 18 | 3 | 13 | 14 | 12,5 | 28 | 1,5 | 5 | 11 | 26 | M6 | 15 | 11 | 16 | M6 |
| 4 | 26,7 a 30 | 45 | M6 | 35 | M6 | 35 | M6 | 48 | 35 | M6 | 30 | 11,5 | 57 | 24 | 3 | 13 | 14 | 12,5 | 28 | 1,5 | 5 | 11 | 26 | M6 | 15 | 11 | 16 | M6 |
| 5 | 32 a 42 | 65 | M6 | 55 | M6 | 55 | M6 | 64 | 50 | M6 | 30 | 11,5 | 70 | 37 | 3 | 13 | 14 | 12,5 | 28 | 1,5 | 5 | 11 | 26 | M6 | 15 | 11 | 16 | M6 |
| 6 | 44,5 a 54,4 | 70 | M6 | 60 | M6 | 60 | M6 | 80 | 64 | M6 | 30 | 11,5 | 94 | 48 | 3 | 13 | 14 | 12,5 | 28 | 1,5 | 5 | 11 | 26 | M6 | 15 | 11 | 16 | M6 |
| 7 | 57,2 a 76,2 | 100 | M6 | 90 | M6 | 90 | M6 | 100 | 85 | M6 | 30 | 11,5 | 122 | 75 | 3 | 13 | 14 | 12,5 | 28 | 1,5 | 5 | 11 | 26 | M6 | 15 | 11 | 16 | M6 |

CASEIH
00405071
00405072
00405107
00405108
00405541
00408313
00408314
00408317
00408516
00408650
00409345
00409571
00409577
00409573
00409574
00409575
00409579
00409580
00409583
00409584
00409585
00409798

CASEIH
00409829
00942371
00943177
00943206
00943208
00943352
434095A1
47940193
511331671
511346323
84528836

John Deere
CB01478377
CB11478436
H14432
H150222
0511329160
0511331397



## Linha standard

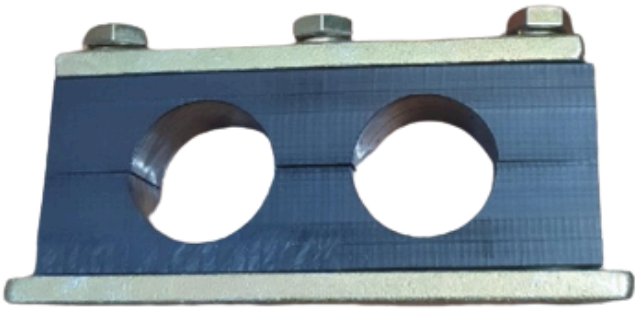
**Abraçadeira Fabricada com corpo em polipropileno ou aluminio Diam de 06mm a 76mm**

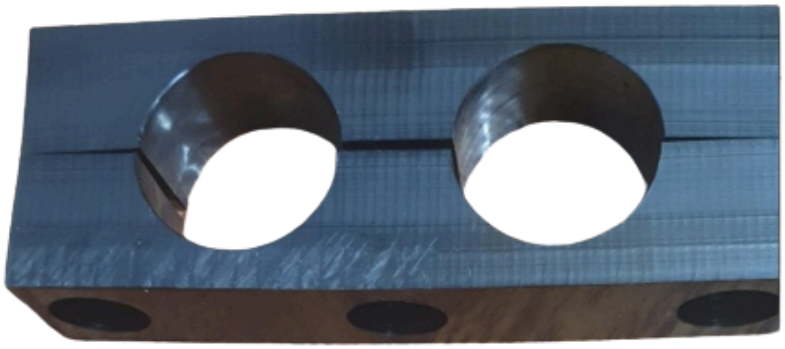
## Linha Pesada

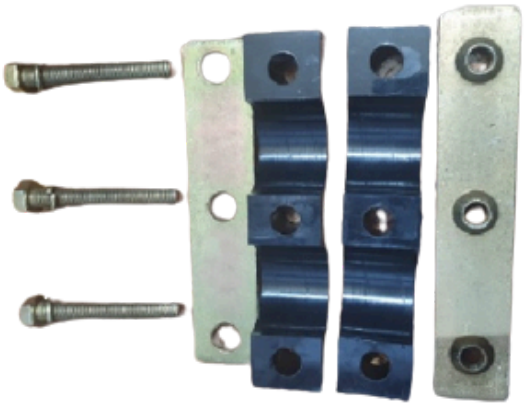
**Abraçadeira Fabricada com corpo em polipropileno ou aluminio Diam de 06mm a 219mm**

## Linha Dupla

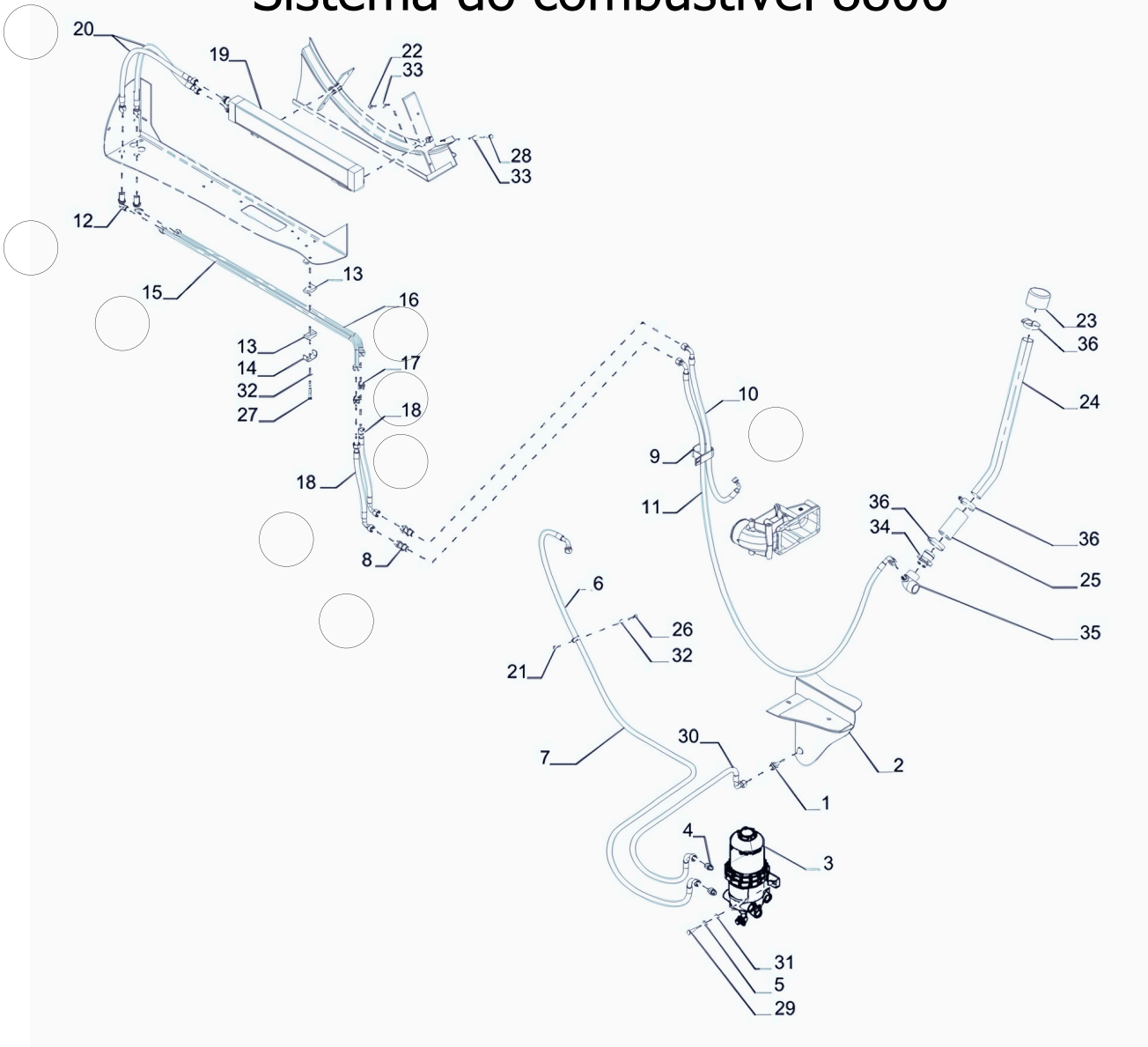
**Abraçadeira Fabricada com corpo em polipropileno ou aluminio Diam de 06mm a 42mm**





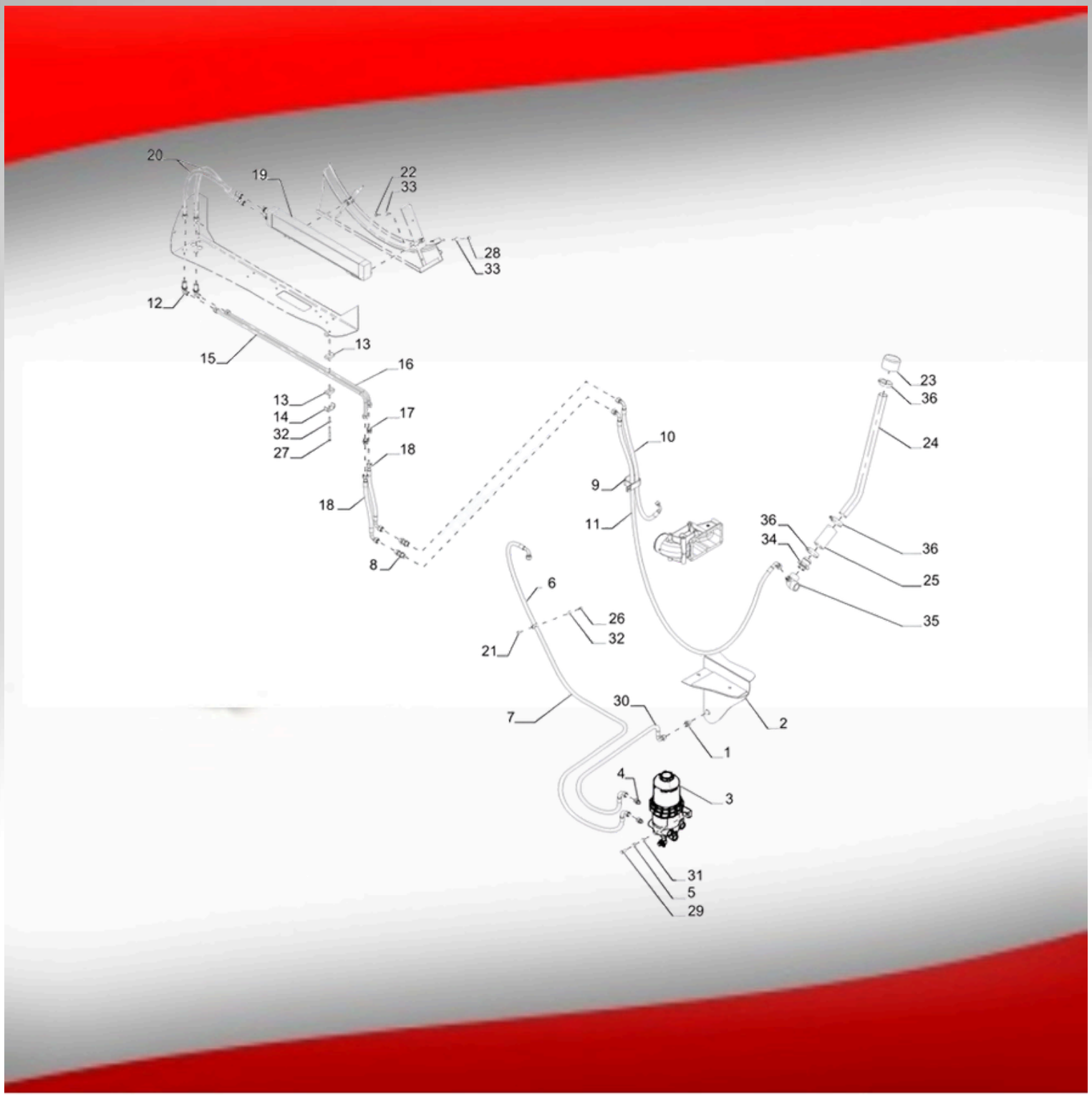


# Sistema do combustivel 8800




| Item | Qtde | Código | Obs: |
|---|---|---|---|
| 07 | 1 | 84515652 | Mangueira |
| 30 | 1 | 84515636 | Mangueira |
| 10 | 1 | 84539092 | Mangueira |
| 11 | 1 | 84544512 | Mangueira |
| 18 | 2 | 84334784 | Mangueira |
| 20 | 2 | 87651419 | Mangueira |
| 25 | 1 | 87235399 | Mangueira |
| 16 | 1 | 87651416 | Tubo |
| 15 | 1 | 87651418 | Tubo |

| Item | Qtde | Código | Obs: |
|---|---|---|---|
| 04 | 2 | 84548909 | Adaptador |
| 01 | 1 | 521872 | Adaptador |
| 08 | 2 | 87653572 | Adaptador |
| 17 | 2 | 150018 | Adaptador |
| 12 | 2 | 84014046 | Cotovelo |
| 36 | 2 | 82039348 | Abraçadeira |
| | | | |
| | | | |
| | | | |


20
19
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3
31
5
29

# 504218108

48147685
MASTERMANG

48147679
MASTERMANG

# 51655587

51655585

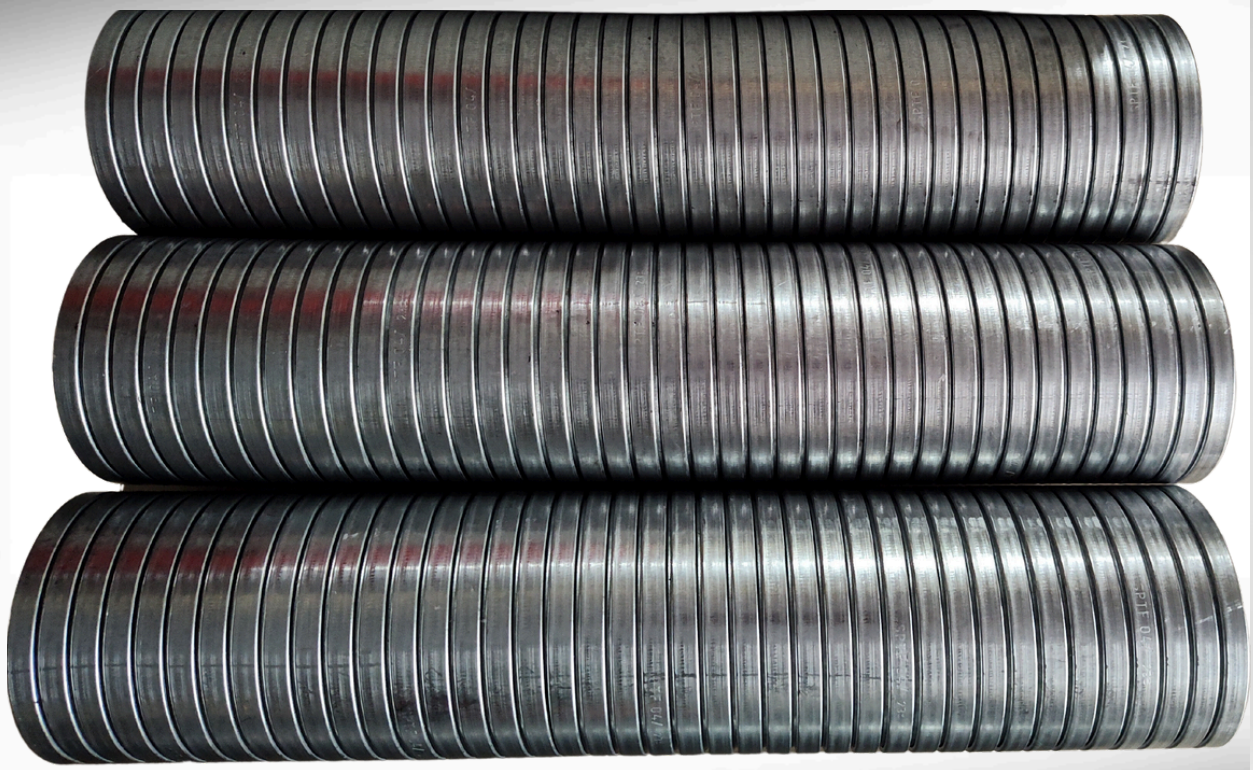
51415992

51655590

51655588

51415992

# Tubo de escapamento



# Abraçadeira 00181118

# Mangueiras montadas!
# Conexões e adaptadores !
# Abraçadeiras e acessórios

Frete para todo Brasil

PRODUTO EM ESTOQUE

CASE/CNH

COLSULTE COM OS CÓDIGOS

Abraçadeiras e acessórios

# Fone 16-3627-6346

# whatsapp 16-99305-7262

**https://www.mastermang.com.br**

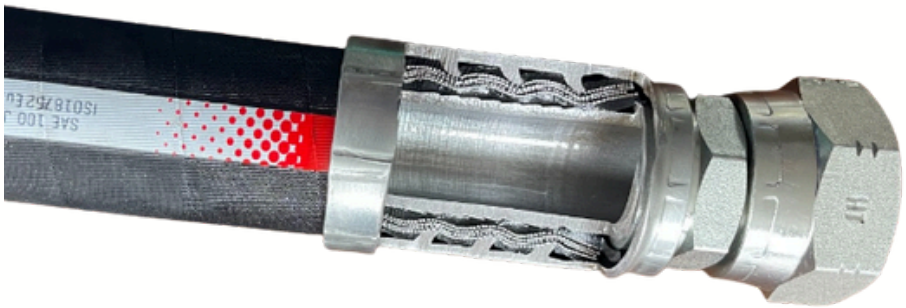
**Rua Elias Dib,927 Cep-14092-080**

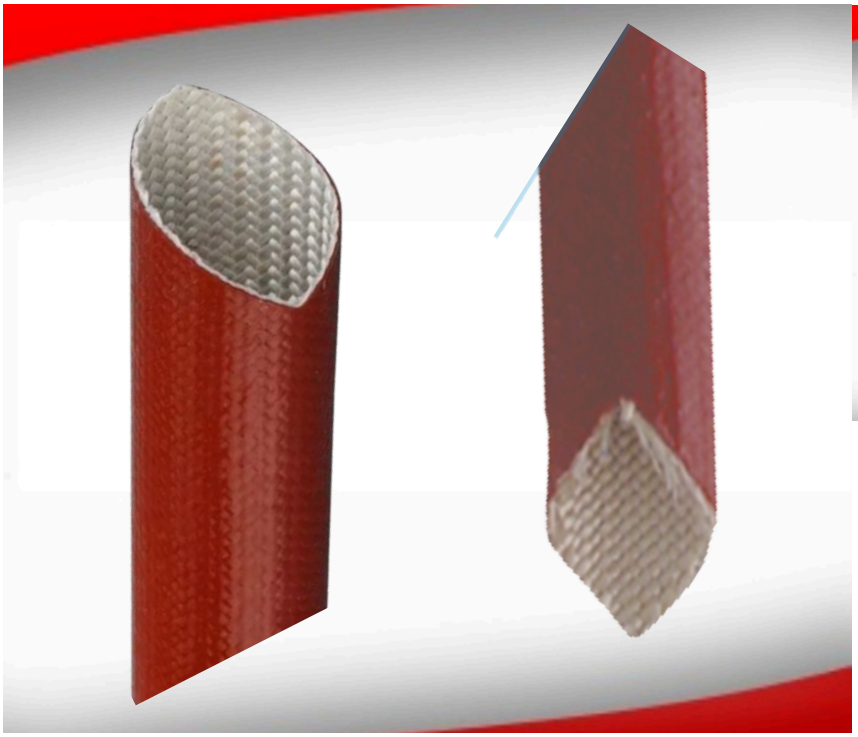
**Ribeirão Preto SP**

**Consulte com os códigos Link abaixo:**

https://www.mastermang.com.br/detalhes.php?relacao-de-produtos-cnh-case-john-deere&id=25688

# MASTERMANG





**Composta por : Fibra de Vidro + Silicone**
**Temperatura de Serviço : 180ºC**
**Rigidez Dielétrica : 3,0 kV**
**Diâmetro : 1,0 a 32,0mm**
**Cores : Marrom**
**Embalagem : Barra/ Rolo / Carretel**
**Anti-chama : Sim**

**Aplicação: Equipamentos e produtos a proteger do calor em alta temperatura,**

| Dimensões Ø Interno (mm) | Tolerância Ø Interno (mm) | Espessura de Parede (mm) | Tolerância +/- (mm) |
|---|---|---|---|
| 1,0 | +0,3 | 0,5 | 0,2 |
| 2,0 | +0,4 | 0,5 | 0,2 |
| 3,0 | +0,4 | 0,6 | 0,2 |
| 4,0 | +0,5 | 0,6 | 0,2 |
| 5,0 | +0,5 | 0,7 | 0,3 |
| 6,0 | +0,5 | 0,7 | 0,3 |
| 8,0 | +0,6 | 0,7 | 0,3 |
| 10,0 | +0,6 | 0,7 | 0,3 |
| 12,0 | +0,6 | 0,8 | 0,3 |
| 14,0 | +0,8 | 0,8 | 0,3 |
| 16,0 | +0,8 | 0,8 | 0,3 |
| 18,0 | +0,8 | 0,8 | 0,3 |
| 20,0 | +0,8 | 0,8 | 0,3 |
| 25,0 | +1,0 | 1,0 | 0,3 |
| 32,0 | +1,0 | 1,0 | 0,3 |

# Tomador de pressão 48156833 7/16-20f unf

Dimensões e medidas revestimento em poliester/polipropileno

| | | | | |
|---|---|---|---|---|
| 3 | número da peça | Largura plana | diâmetro interno | medidor para carretel |
| 4 | | milímetros | milímetros | metro |
| 5 | pps-20 | 20 | 12 | 100 |
| 6 | pps-25 | 25 | 15 | 100 |
| 7 | pps-30 | 30 | 18 | 100 |
| 8 | pps-35 | 35 | 21 | 50. |
| 9 | pps-40 | 40. | 24 | 50. |
| 10 | pps-45 | 45 | 28. | 50. |
| 11 | pps-50 | 50. | 31 | 50. |
| 12 | pps-60 | 60 | 37. | 50. |
| 13 | pps-70 | 70 | 44 | 50. |
| 14 | pps-80 | 80 | 50. | 50. |
| 15 | pps-90 | 90 | 56. | 50. |
| 16 | pps-100 | 100 | 62 | 50. |
| 17 | pps-115 | 115 | 72 | 50. |
| 18 | pps-145 | 145 | 90 | 50. |
| 19 | pps-176 | 176 | 110 | 50. |

# 5802727555

# 5802727555

5801672969

5801672964

# 48172871

# 48172871

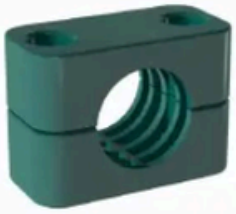
# CXT22862

# CXT22862

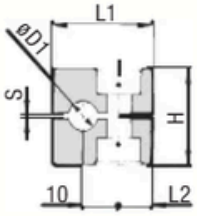
# Modelo simples

## Corpo de abraçadeira ▪ Versão com ranhuras

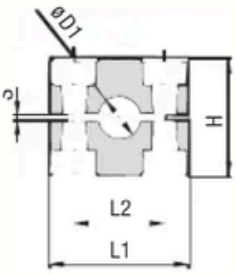
**Superfície interna com ranhuras para absorver tensão**



**com ranhuras**




STAUFF Grupo 1




STAUFF Grupo 1A até 8

### Código para pedido

**Corpo de abraçadeira** — *1*06-*PP
Corpo de abraçadeira, STAUFF Grupo 1A — *1*06A-*PP

Um corpo de abraçadeira é composto por duas metades.

- * STAUFF Grupo — 1
- * Diâmetro externo Ø D1 (mm) — 06
- * Código material (ver abaixo) — PP

### Materiais padrão

**Polipropileno**
Cor: verde
Código do Material: **PP**

**Polipropileno**
Cor: Preta
Código do material: **PP-BK**

**Poliamida**
Cor: Preta
Código do material: **PA**

**Elastômero termoplástico** (87 Shore-A)
Cor: Preta

| STAUFF Grupo | STAUFF DIN | Diâmetro Externo Tubo Ø D1 (mm) | (pol.) | Diâmetro nominal Polegada do tubo (pol.) | Tubo de cobre ASTM B88 (pol.) | Código para pedido (2 metades) (** = Material) | Dimensões (mm/pol.) L1 | L2 | H | S min. | Largura |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 6 | | | | 106-** | | | | | |
| | | 6,4 | 1/4 | | | 106.4-** | | | | | |
| | | 8 | 5/16 | | | 108-** | 28 | 9,5 | 27 | 0,4 | 30 |
| | | 9,5 | 3/8 | | 1/4 | 109.5-** | 1.10 | .37 | 1.06 | .02 | 1.18 |
| | | 10 | | 1/8 | | 110-** | | | | | |
| | | 12 | | | | 112-** | | | | | |
| 1A | 1 | 6 | | | | 106A-** | | | | | |
| | | 6,4 | 1/4 | | | 106.4A-** | | | | | |
| | | 8 | 5/16 | | | 108A-** | 37 | 20 | 27 | 0,4 | 30 |
| | | 9,5 | 3/8 | | 1/4 | 109.5A-** | 1.46 | .79 | 1.06 | .02 | 1.18 |
| | | 10 | | 1/8 | | 110A-** | | | | | |
| | | 12 | | | | 112A-** | | | | | |
| 2 | 2 | 12,7 | 1/2 | | 3/8 | 212.7-** | | | | | |
| | | 13,5 | | 1/4 | | 213.5-** | | | | | |
| | | 14 | | | | 214-** | 42 | 26 | 33 | 0,6 | 30 |
| | | 15 | | | | 215-** | 1.65 | 1.02 | 1.30 | .02 | 1.18 |
| | | 16 | 5/8 | | 1/2 | 216-** | | | | | |
| | | 17,2 | | 3/8 | | 217.2-** | | | | | |
| | | 18 | | | | 218-** | | | | | |
| 3 | 3 | 19 | 3/4 | | | 319-** | | | | | |
| | | 20 | | | | 320-** | | | | | |
| | | 21,3 | | 1/2 | | 321.3-** | 50 | 33 | 36 | 0,6 | 30 |
| | | 22 | 7/8 | | 3/4 | 322-** | 1.97 | 1.30 | 1.42 | .02 | 1.18 |
| | | 25 | | | | 325-** | | | | | |
| | | 25,4 | 1 | | | 325.4-** | | | | | |
| 4 | 4 | 26,9 | | 3/4 | | 426.9-** | | | | | |
| | | 28 | | | | 428-** | 59 | 40 | 42 | 0,6 | 30 |
| | | 28,6 | | | 1 | 428.6-** | 2.32 | 1.57 | 1.65 | .02 | 1.18 |
| | | 30 | | | | 430-** | | | | | |
| | | 32 | | | | 432-** | | | | | |
| 5 | 5 | 32 | 1-1/4 | | | 532-** | | | | | |
| | | 33,7 | | 1 | | 533.7-** | | | | | |
| | | 35 | | | 1-1/4 | 535-** | 71 | 52 | 58 | 0,8 | 30 |
| | | 38 | 1-1/2 | | | 538-** | 2.80 | 2.05 | 2.28 | .03 | 1.18 |
| | | 40 | | | | 540-** | | | | | |
| | | 41,3 | | | 1-1/2 | 541.3-** | | | | | |
| | | 42 | | 1-1/4 | | 542-** | | | | | |
| 6 | 6 | 44,5 | 1-3/4 | | | 644.5-** | | | | | |
| | | 48,3 | | 1-1/2 | | 648.3-** | 86 | 66 | 66 | 0,8 | 30 |
| | | 50,8 | 2 | | | 650.8-** | 3.39 | 2.60 | 2.60 | .03 | 1.18 |
| | | 54 | | | 2 | 654-** | | | | | |
| 7 | 7 | 57,2 | 2-1/4 | | | 757.2-** | | | | | |
| | | 60,3 | | 2 | | 760.3-** | | | | | |
| | | 63,5 | 2-1/2 | | | 763.5-** | 121 | 94 | 93 | 0,8 | 30 |
| | | 70 | 2-3/4 | | | 770-** | 4.76 | 3.70 | 3.66 | .03 | 1.18 |
| | | 73 | | 2-1/2 (ANSI B 36-10) | | 773-** | | | | | |
| | | 76,1 | 3 | 2-1/2 (DIN EN 10220) | | 776.1-** | | | | | |
| 8 | 8 | 88,9 | | 3 | | 888.9-** | 147 | 120 | 118 | 0,8 | 30 |
| | | 102 | 4 | 3-1/2 | | 8102L-** | 5.79 | 4.72 | 4.65 | .03 | 1.18 |

**Alumínio**
Cor: Alumínio
Código do material: **AL** (STAUFF Grupo 1A até 6)

As características do material e outros dados técnicos podem ser consultados nas páginas 154/ 155.

### Materiais especiais

**Contate a STAUFF para mais informações relativas a materiais especiais retardadores de chama para corpos de abraçadeira em conformidade com os padrões internacionais (p. ex., BS 6853, EN 45545-2, UL 94).**

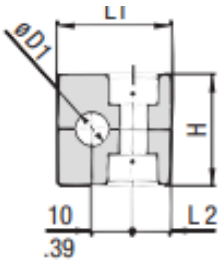
**As características do material e outros dados técnicos podem ser consultados nas páginas 156/ 157.**

### Características do produto

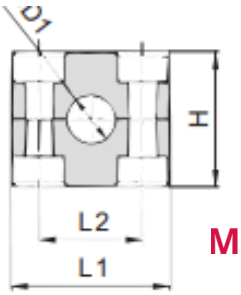
- Testado e aprovado em diversos mercados
- Recomendado para uma fixação segura de tubulações
- Disponível para os diâmetros externos convencionais
- Proteção ambiental graças às características antivibração e antirruídos
- Excelente resistência a intempéries, mesmo em condições extremas

Diâmetros externos alternativos disponíveis sob consulta. Contate a STAUFF para mais informações.

# Modelo simples



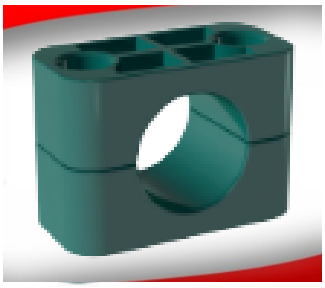

STAUFF Group 1




STAUFF Group 1A to 8

Smooth Inside Surface Without Tension Clearance

Modelo Lisa



| Group STAUFF | DIN | Outside Diameter Hose Ø D1 (mm) | (in) | Ordering Codes (2 Clamp Halves) (✱✱-H = Material) | Dimensions (mm/in) L1 | L2 | H | Width |
|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 6 | | 106-✱✱-H | | | | |
| | | 6,4 | 1/4 | 106.4-✱✱-H | | | | |
| | | 8 | 5/16 | 108-✱✱-H | 28 | 9,5 | 26 | 30 |
| | | 9,5 | 3/8 | 109.5-✱✱-H | 1.10 | .37 | 1.02 | 1.18 |
| | | 10 | | 110-✱✱-H | | | | |
| | | 12 | | 112-✱✱-H | | | | |
| 1A | 1 | 6 | | 106A-✱✱-H | | | | |
| | | 6,4 | 1/4 | 106.4A-✱✱-H | | | | |
| | | 8 | 5/16 | 108A-✱✱-H | 37 | 20 | 26 | 30 |
| | | 9,5 | 3/8 | 109.5A-✱✱-H | 1.46 | .79 | 1.02 | 1.18 |
| | | 10 | | 110A-✱✱-H | | | | |
| | | 12 | | 112A-✱✱-H | | | | |
| 2 | 2 | 12,7 | 1/2 | 212.7-✱✱-H | | | | |
| | | 13,5 | | 213.5-✱✱-H | | | | |
| | | 14 | | 214-✱✱-H | 42 | 26 | 32 | 30 |
| | | 15 | | 215-✱✱-H | 1.65 | 1.02 | 1.26 | 1.18 |
| | | 16 | 5/8 | 216-✱✱-H | | | | |
| | | 17,2 | | 217.2-✱✱-H | | | | |
| | | 18 | | 218-✱✱-H | | | | |
| 3 | 3 | 19 | 3/4 | 319-✱✱-H | | | | |
| | | 20 | | 320-✱✱-H | | | | |
| | | 21,3 | | 321.3-✱✱-H | 50 | 33 | 35,5 | 30 |
| | | 22 | 7/8 | 322-✱✱-H | 1.97 | 1.30 | 1.40 | 1.18 |
| | | 25 | | 325-✱✱-H | | | | |
| | | 25,4 | 1 | 325.4-✱✱-H | | | | |
| 4 | 4 | 26,9 | | 426.9-✱✱-H | | | | |
| | | 28 | | 428-✱✱-H | 59 | 40 | 41,5 | 30 |
| | | 30 | | 430-✱✱-H | 2.32 | 1.57 | 1.63 | 1.18 |
| | | 32 | | 432-✱✱-H | | | | |
| 5 | 5 | 32 | 1-1/4 | 532-✱✱-H | | | | |
| | | 33,7 | | 533.7-✱✱-H | | | | |
| | | 35 | | 535-✱✱-H | 71 | 52 | 56,5 | 30 |
| | | 38 | 1-1/2 | 538-✱✱-H | 2.80 | 2.05 | 2.22 | 1.18 |
| | | 40 | | 540-✱✱-H | | | | |
| | | 42 | | 542-✱✱-H | | | | |
| 6 | 6 | 44,5 | 1-3/4 | 644.5-✱✱-H | | | | |
| | | 48,3 | | 648.3-✱✱-H | 86 | 66 | 64,5 | 30 |
| | | 50,8 | 2 | 650.8-✱✱-H | 3.39 | 2.60 | 2.54 | 1.18 |
| | | 54 | | 654-✱✱-H | | | | |
| 7 | 7 | 57,2 | 2-1/4 | 757.2-✱✱-H | | | | |
| | | 60,3 | | 760.3-✱✱-H | | | | |
| | | 63,5 | 2-1/2 | 763.5-✱✱-H | 121 | 94 | 92 | 30 |
| | | 70 | 2-3/4 | 770-✱✱-H | 4.76 | 3.70 | 3.62 | 1.18 |
| | | 73 | | 773-✱✱-H | | | | |
| | | 76,1 | 3 | 776.1-✱✱-H | | | | |
| 8 | 8 | 88,9 | | 888.9-✱✱-H | 147 | 120 | 116 | 30 |
| | | 102 | 4 | 8102L-✱✱-H | 5.79 | 4.72 | 4.57 | 1.18 |

Additional outside diameters are available upon request. Please contact STAUFF for further information.

## Ordering Codes

**Clamp Body** *1*06-*PP-H
Clamp Body, STAUFF Group 1A *1*06A-*PP-H

One clamp body is consisting of two clamp halves.

- * STAUFF Group 1
- * Exact outside diameter Ø D1 (mm) 06
- * Material code (see below) PP-H

## Standard Materials

**Polypropylene**
Colour: Green
Material code: **PP-H**

**Polypropylene**
Colour: Black
Material code: **PP-H-BK**

**Polyamide**
Colour: Black
Material code: **PA-H**

**Thermoplastic Elastomer** (87 Shore-A)
Colour: Black
Material code: **SA87-H**

See pages 178 / 179 for material properties and technical information.

## Special Materials

**Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).**

**See pages 180 / 181 for material properties and technical information.**

## Product Features

- Proven, tested and trusted product in various markets
- Recommended for the safe installation of hoses and cables
- Chamfered edges avoid damaging of the hoses and cables
- Available for all commonly used hose and cable outside diameters
- Excellent weathering resistance, even under extreme conditions

**Acessorios p/abraç simples abaixo**

**Clamp Body**
Profiled Inside Surface with Tension Clearance 38

**Clamp Body**
Smooth Inside Surface without Tension Clearance 40

**Clamp Body with Elastomer Insert** 42

**Noise Reduction Clamp** 43

**Weld Plate for Single Clamps**
SPAL 44

**Weld Plate for Double Clamps**
SPAS 44

**Elongated Weld Plate for Single Clamps**
SPAL-DUEB 45

**Elongated Weld Plate for Double Clamps**
SPAS-DUEB 45

**Mounting Rail Nut**
GMV 46

**Mounting Rail**
STSV 46

**Channel Rail Adaptor**
CRA 47

**Cover Plate for Single Clamps**
DPAL 50

**Cover Plate for Double Clamps**
DPAS 50

**Hexagon Head Bolt**
AS 51

**Socket Cap Screw**
IS 51

**Safety Washer (DIN 93)**
SI 52

**Safety Washer (DIN 463)**
SI 52

**Safety Locking Plate**
SIP 53

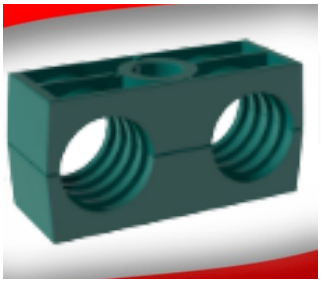
**Stacking Bolt**
AF 53

**Clamp Assemblies** 54

# Modelo dupla

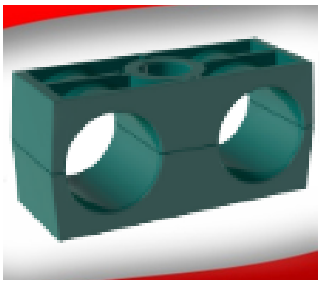
## Clamp Body ▪ Profiled Design

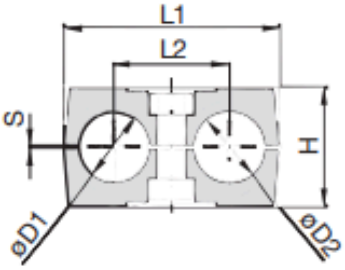
**Profiled Inside Surface with Tension Clearance**



## Clamp Body ▪ Type H

**Smooth Inside Surface w/o Tension Clearance**






### Ordering Codes

**Clamp Body** ***1*06/06*-PP**

One clamp body is consisting of two clamp halves.

| | |
|---|---|
| * 1st Part of STAUFF Group | 1 |
| * Exact outside diameters Ø D1 / Ø D2 (mm) | 06/06 |
| * Material code (see below) | PP |

### Designs & Standard Materials

**Polypropylene ▪ Profiled Design**
Profiled inside surface with tension clearance
Colour: Green
Material code: **PP**

**Polypropylene ▪ Profiled Design**
Profiled inside surface with tension clearance
Colour: Black
Material code: **PP-BK**

**Polypropylene ▪ Type H**
Smooth inside surface without tension clearance
Colour: Green
Material code: **PP-H**

**Polypropylene ▪ Type H**
Smooth inside surface without tension clearance
Colour: Black
Material code: **PP-H-BK**

**Polyamide ▪ Profiled Design**
Profiled inside surface with tension clearance
Colour: Black
Material code: **PA**

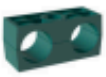
**Polyamide ▪ Type H**
Smooth inside surface without tension clearance
Colour: Black
Material code: **PA-H**

See pages 178 / 179 for properties and technical information.

| Group STAUFF | Group DIN | Outside Diameter Pipe / Tube / Hose Ø D1 / Ø D2 (mm) | (in) | Nominal Bore Pipe (in) | Copper Tube ASTM B88 (in) | Ordering Codes (2 Clamp Halves) (✱✱-✱ = Material) | Dimensions (mm/in) L1 | L2 | Profiled Design H | S min. | Type H H | Width |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1D | 1 | 6 | | | | 106/06-✱✱-✱ | | | | | | |
| | | 6,4 | 1/4 | | | 106.4/06.4-✱✱-✱ | | | | | | |
| | | 8 | 5/16 | | | 108/08-✱✱-✱ | 36 | 20 | 27 | 0,6 | 26,5 | 30 |
| | | 9,5 | 3/8 | | 1/4 | 109.5/09.5-✱✱-✱ | 1.42 | .79 | 1.06 | .02 | 1.04 | 1.18 |
| | | 10 | | 1/8 | | 110/10-✱✱-✱ | | | | | | |
| | | 12 | | | | 112/12-✱✱-✱ | | | | | | |
| 2D | 2 | 12,7 | 1/2 | | 3/8 | 212.7/12.7-✱✱-✱ | | | | | | |
| | | 13,5 | | 1/4 | | 213.5/13.5-✱✱-✱ | | | | | | |
| | | 14 | | | | 214/14-✱✱-✱ | 53 | 29 | 27 | 0,7 | 26 | 30 |
| | | 15 | | | | 215/15-✱✱-✱ | 2.09 | 1.14 | 1.06 | .03 | 1.02 | 1.18 |
| | | 16 | 5/8 | | 1/2 | 216/16-✱✱-✱ | | | | | | |
| | | 17,2 | | 3/8 | | 217.2/17.2-✱✱-✱ | | | | | | |
| | | 18 | | | | 218/18-✱✱-✱ | | | | | | |
| 3D | 3 | 19 | 3/4 | | | 319/19-✱✱-✱ | | | | | | |
| | | 20 | | | | 320/20-✱✱-✱ | | | | | | |
| | | 21,3 | | 1/2 | | 321.3/21.3-✱✱-✱ | 67 | 36 | 37 | 0,7 | 36,5 | 30 |
| | | 22 | 7/8 | | 3/4 | 322/22-✱✱-✱ | 2.64 | 1.42 | 1.46 | .03 | 1.44 | 1.18 |
| | | 25 | | | | 325/25-✱✱-✱ | | | | | | |
| | | 25,4 | 1 | | | 325.4/25.4-✱✱-✱ | | | | | | |
| 4D | 4 | 26,9 | | 3/4 | | 426.9/26.9-✱✱-✱ | | | | | | |
| | | 28 | | | | 428/28-✱✱-✱ | 80 | 45 | 40 | 0,7 | 38 | 30 |
| | | 30 | | | | 430/30-✱✱-✱ | 3.15 | 1.77 | 1.57 | .03 | 1.46 | 1.18 |
| 5D | 5 | 32 | 1-1/4 | | | 532/32-✱✱-✱ | | | | | | |
| | | 33,7 | | 1 | | 533.7/33.7-✱✱-✱ | | | | | | |
| | | 35 | | | 1-1/4 | 535/35-✱✱-✱ | 106 | 56 | 53 | 0,7 | 52 | 30 |
| | | 38 | 1-1/2 | | | 538/38-✱✱-✱ | 4.17 | 2.20 | 2.09 | .03 | 2.04 | 1.18 |
| | | 40 | | | | 540/40-✱✱-✱ | | | | | | |
| | | 42 | | 1-1/4 | | 542/42-✱✱-✱ | | | | | | |

**acessorios p/ abraçadeira dupla abaixo**

**Clamp Body**
Profiled Inside Surface with Tension Clearance 60



**Clamp Body**
Smooth Inside Surface without Tension Clearance 60

**Single Weld Plate**
SP 61

**Elongated Weld Plate**
SPV 61

**Group Weld Plate**
RAP 62

**Hexagon Rail Nut**
SM 63

**Mounting Rail**
TS 63

**Fastening Adaptor**
SWG-MRA 64

**Channel Rail Adaptor**
CRA 65

**Cover Plate**
GD 68

**Hexagon Head Bolt**
AS 68

**Socket Cap Screw**
IS 69

**Safety Locking Plate**
SI 70

**Safety Locking Plate**
SIV 70

**Stacking Bolt**
AF 71

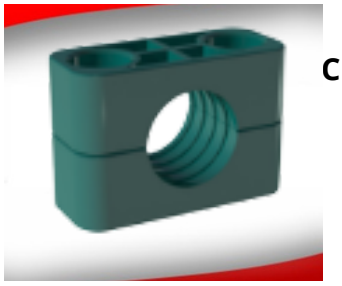
**Clamp Assemblies** 72

# Modelo STD Pesado

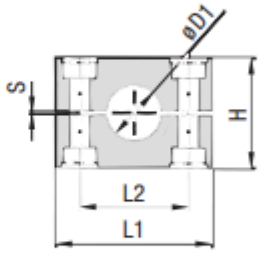
**Série pesada conforme DIN 3015, parte 2**

## Corpo de abraçadeira ▪ Versão com ranhuras

**Com superfície interna com ranhuras e pré-tensão**



**Com ranhuras**




### Código para pedido

**Corpo de abraçadeira** ***3*006-*PP**

Um corpo de abraçadeira é composto por duas metades.

- ★ STAUFF Grupo 3 — **3**
- ★ Diâmetro Externo Ø D1 (mm) — **006**
- ★ Código material (veja abaixo) — **PP**

### Materiais padrão

**Polipropileno**
Cor: Verde
Código material: **PP**

**Polipropileno**
Cor: Preta
Código material: **PP-BK**

**Poliamida**
Cor: Preta
Código material: **PA**

**Elastômero Termoplástico** (87 Shore-A)
Cor: Preta
Código material: **SA**

**Alumínio**
Cor: Alumínio
Código material: **AL**

As características do material e outros dados técnicos podem ser consultados nas páginas 154/ 155.

### Materiais Especiais

**Contate a STAUFF para mais informações sobre materiais especiais retardadores de chama para corpos de abraçadeira em conformidade com os padrões internacionais (p. ex., BS 6853, EN 45545-2, UL 94).**

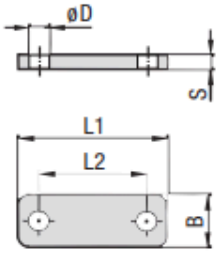
As características do material e outros dados técnicos podem ser consultados nas páginas 156/ 157.

| STAUFF Grupo | DIN | Diâmetro Externo Tubo / Mangueira Ø D1 (mm) | (pol.) | Furo nominal Tubo (pol.) | Tubo de cobre ASTM B88 (pol.) | Código para pedido (2 Metades) (✱✱ = Material) | Dimensões (mm/pol.) L1 PP/PA/SA | L1 AL | L2 | H | S min. | Largura |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3S | 1 | 6 | | | | 3006-✱✱ | | | | | | |
| | | 6,4 | 1/4 | | | 3006.4-✱✱ | | | | | | |
| | | 8 | 5/16 | | | 3008-✱✱ | | | | | | |
| | | 9,5 | 3/8 | | 1/4 | 3009.5-✱✱ | | | | | | |
| | | 10 | | 1/8 | | 3010-✱✱ | | | | | | |
| | | 12 | | | | 3012-✱✱ | | | | | | |
| | | 12,7 | 1/2 | | 3/8 | 3012.7-✱✱ | 55 | 56 | 33 | 32 | 0,6 | 30,5 |
| | | 13,5 | | 1/4 | | 3013.5-✱✱ | 2.16 | 2.20 | 1.30 | 1.26 | .02 | 1.20 |
| | | 14 | | | | 3014-✱✱ | | | | | | |
| | | 15 | | | | 3015-✱✱ | | | | | | |
| | | 16 | 5/8 | | 1/2 | 3016-✱✱ | | | | | | |
| | | 17,2 | | 3/8 | | 3017.2-✱✱ | | | | | | |
| | | 18 | | | | 3018-✱✱ | | | | | | |
| | | 20 | | | | 3020-✱✱ | | | | | | |
| 4S | 2 | 19 | 3/4 | | | 4019-✱✱ | | | | | | |
| | | 20 | | | | 4020-✱✱ | | | | | | |
| | | 21,3 | | 1/2 | | 4021.3-✱✱ | | | | | | |
| | | 22 | 7/8 | | 3/4 | 4022-✱✱ | 70 | 70 | 45 | 48 | 0,6 | 30,5 |
| | | 25 | | | | 4025-✱✱ | 2.76 | 2.76 | 1.77 | 1.89 | .02 | 1.20 |
| | | 25,4 | 1 | | | 4025.4-✱✱ | | | | | | |
| | | 26,9 | | 3/4 | | 4026.9-✱✱ | | | | | | |
| | | 28 | | | | 4028-✱✱ | | | | | | |
| | | 30 | | | | 4030-✱✱ | | | | | | |
| 5S | 3 | 30 | | | | 5030-✱✱ | | | | | | |
| | | 32 | 1-1/4 | | | 5032-✱✱ | | | | | | |
| | | 33,7 | | 1 | | 5033.7-✱✱ | | | | | | |
| | | 35 | | | 1-1/4 | 5035-✱✱ | 85 | 85 | 60 | 60 | 0,6 | 30.5 |
| | | 38 | 1-1/2 | | | 5038-✱✱ | 3.35 | 3.35 | 2.36 | 2.36 | .02 | 1.20 |
| | | 40 | | | | 5040-✱✱ | | | | | | |
| | | 41,3 | | | 1-1/2 | 5041.3-✱✱ | | | | | | |
| | | 42 | | 1-1/4 | | 5042-✱✱ | | | | | | |
| 6S | 4 | 38 | 1-1/2 | | | 6038-✱✱ | | | | | | |
| | | 42 | | 1-1/4 | | 6042-✱✱ | | | | | | |
| | | 44,5 | 1-3/4 | | | 6044.5-✱✱ | | | | | | |
| | | 48,3 | | 1-1/2 | | 6048.3-✱✱ | | | | | | |
| | | 50,8 | 2 | | | 6050.8-✱✱ | | | | | | |
| | | 54 | | | 2 | 6054-✱✱ | 115 | 120 | 90 | 89 | 2 | 45 |
| | | 55 | | | | 6055-✱✱ | 4.53 | 4.72 | 3.54 | 3.50 | .08 | 1.77 |
| | | 57 | | | | 6057-✱✱ | | | | | | |
| | | 57,2 | 2-1/4 | | | 6057.2-✱✱ | | | | | | |
| | | 60,3 | | 2 | | 6060.3-✱✱ | | | | | | |
| | | 63,5 | 2-1/2 | | | 6063.5-✱✱ | | | | | | |
| | | 65 | | | | 6065-✱✱ | | | | | | |
| | | 70 | 2-3/4 | | | 6070-✱✱ | | | | | | |

**Acessórios p/ mod pesado Abaixo**

## Série pesada conforme DIN 3015, parte 2

### Placa de cobertura, simples
### Tipo DPAL




### Código para pedido

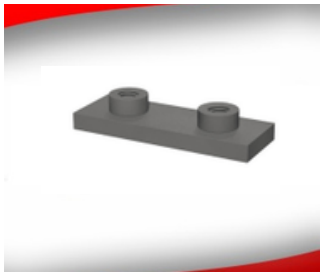
**Placa de cobertura** ***DPAL-*3S-*W2**

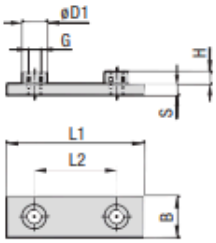
| | | |
|---|---|---|
| * Placa de cobertura, simples | | DPAL |
| * STAUFF Grupo | | 3S |
| * Material | Aço Carbono, sem tratamento | W1 |
| | Aço carbono fosfatizado | W2 |
| | Aço carbono revestido zinco/níquel | W3 |
| | Aço inoxidável V2A 1.4301 / 1.4305 (AISI 304 / 303) | W4 |
| | Aço inoxidável V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) | W5 |
| | Alumínio EN AW-6060 (apenas para o grupo 3S até 5S) | W85 |

| STAUFF Grupo | DIN | Dimensões (mm/pol.) L1 | L2 | B | S | ØD | Código para pedido (Fornecimento padrão) |
|---|---|---|---|---|---|---|---|
| 3S | 1 | 55 | 33 | 30 | 8 | 11 | DPAL-3S-W2 |
| | | 2.16 | 1.30 | 1.18 | .31 | .43 | |
| 4S | 2 | 70 | 45 | 30 | 8 | 11 | DPAL-4S-W2 |
| | | 2.76 | 1.77 | 1.18 | .31 | .43 | |
| 5S | 3 | 85 | 60 | 30 | 8 | 11 | DPAL-5S-W2 |
| | | 3.35 | 2.36 | 1.18 | .31 | .43 | |
| 6S | 4 | 115 | 90 | 45 | 10 | 14 | DPAL-6S-W2 |
| | | 4.53 | 3.54 | 1.77 | .39 | .55 | |
| 7S | 5 | 152 | 122 | 60 | 10 | 19 | DPAL-7S-W2 |
| | | 5.98 | 4.80 | 2.36 | .39 | .75 | |
| 8S | 6 | 206 | 168 | 80 | 15 | 22 | DPAL-8S-W1 |
| | | 8.11 | 6.61 | 3.15 | .59 | .87 | |
| 9S | 7 | 251 | 205 | 90 | 15 | 26 | DPAL-9S-W1 |
| | | 9.88 | 8.07 | 3.54 | .59 | 1.02 | |
| 10S | 8 | 320 | 265 | 120 | 25 | 35 | DPAL-10S-W1 |
| | | 12.60 | 10.43 | 4.72 | .98 | 1.38 | |
| 11S | 9 | 470 | 395 | 160 | 30 | 35 | DPAL-11S-W1 |
| | | 18.50 | 15.55 | 6.30 | 1.18 | 1.38 | |
| 12S | 10 | 630 | 534 | 180 | 30 | 35 | DPAL-12S-W1 |
| | | 24.80 | 21.02 | 7.09 | 1.18 | 1.38 | |

## Série pesada conforme DIN 3015, parte 2

### Base de solda, simples
### Tipo SPAL






### Código para pedido

**Base de solda** ***SPAL-*3S-*M-*W2**

| | | |
|---|---|---|
| * Base de solda, simples | | SPAL |
| * STAUFF Grupo | | 3S |
| * Código Rosca | Rosca métrica ISO | M |
| | Rosca UNC | U |
| * Material | Aço Carbono, sem tratamento | W1 |
| | Aço carbono fosfatizado | W2 |
| | Aço carbono revestido zinco/níquel | W3 |
| | Aço inoxidável V2A 1.4301 / 1.4305 (AISI 304 / 303) | W4 |
| | Aço inoxidável V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) | W5 |

| STAUFF Grupo | DIN | Dimensões (mm/pol.) L1 | L2 | B | S | H | Rosca G | ØD1 | Código para pedido (Fornecimento padrão) |
|---|---|---|---|---|---|---|---|---|---|
| 3S | 1 | 74 | 33 | 30 | 8 | 8 | M10 | 18 | SPAL-3S-M-W2 |
| | | 2.91 | 1.30 | 1.18 | .31 | .31 | 3/8–16 UNC | .71 | SPAL-3S-U-W2 |
| 4S | 2 | 86 | 45 | 30 | 8 | 8 | M10 | 18 | SPAL-4S-M-W2 |
| | | 3.39 | 1.77 | 1.18 | .31 | .31 | 3/8–16 UNC | .71 | SPAL-4S-U-W2 |
| 5S | 3 | 100 | 60 | 30 | 8 | 8 | M10 | 18 | SPAL-5S-M-W2 |
| | | 3.94 | 2.36 | 1.18 | .31 | .31 | 3/8–16 UNC | .71 | SPAL-5S-U-W2 |
| 6S | 4 | 140 | 90 | 45 | 10 | 8 | M12 | 20 | SPAL-6S-M-W2 |
| | | 5.51 | 3.54 | 1.77 | .39 | .31 | 7/16–14 UNC | .78 | SPAL-6S-U-W2 |
| 7S | 5 | 180 | 122 | 60 | 10 | 12 | M16 | 24 | SPAL-7S-M-W2 |
| | | 7.09 | 4.80 | 2.36 | .39 | .47 | 5/8–11 UNC | .94 | SPAL-7S-U-W2 |
| 8S | 6 | 226 | 168 | 80 | 15 | 18 | M20 | 30 | SPAL-8S-M-W1 |
| | | 8.90 | 6.61 | 3.15 | .59 | .71 | 3/4–10 UNC | 1.18 | SPAL-8S-U-W1 |
| 9S | 7 | 270 | 205 | 90 | 15 | 21 | M24 | 35 | SPAL-9S-M-W1 |
| | | 10.63 | 8.07 | 3.54 | .59 | .83 | 7/8–9 UNC | 1.38 | SPAL-9S-U-W1 |
| 10S | 8 | 340 | 265 | 120 | 25 | 21 | M30 | 45 | SPAL-10S-M-W1 |
| | | 13.39 | 10.43 | 4.72 | .98 | .83 | 1-1/8–7 UNC | 1.77 | SPAL-10S-U-W1 |
| 11S | 9 | 520 | 395 | 160 | 30 | 38 | M30 | 50 | SPAL-11S-M-W1 |
| | | 20.47 | 15.55 | 6.30 | 1.18 | 1.50 | 1-1/4–7 UNC | 1.97 | SPAL-11S-U-W1 |
| 12S | 10 | 680 | 534 | 180 | 30 | 38 | M30 | 50 | SPAL-12S-M-W1 |
| | | 27.16 | 21.02 | 7.09 | 1.18 | 1.50 | 1-1/4–7 UNC | 1.97 | SPAL-12S-U-W1 |

Todas as peças roscadas estão disponíveis tanto com rosca métrica ISO, como com rosca UNC (ver tabela das dimensões).
Outros materiais, tratamentos superficiais e diâmetros sob consulta. Contate a STAUFF para maiores informações.

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