

**CARACTERÍSTICAS**

|                               |                                                                                                                       |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Temperatura                   | -20 ÷ 80 °C                                                                                                           |
| Fluido                        | ar comprimido, vácuo                                                                                                  |
| Pressão Máx                   | 16 bar (dependem do tipo de tubo utilizado)                                                                           |
| Pressão de trabalho           | -0,99 ÷ 10 bar                                                                                                        |
| Corpo                         | latão niquelado                                                                                                       |
| Elemento de fixação           | latão niquelado com O-ring em NBR na versão cilíndrica (padrão)<br>revestimento em teflon na versão cônica (a pedido) |
| Pinça de travamento           | aço inox AISI 316                                                                                                     |
| Anel de segurança             | latão niquelado                                                                                                       |
| Aplicações                    | circuitos pneumáticos                                                                                                 |
| Tubos de conexão aconselhados | poliamida PA 10.12, poliuretano Sh.A98, co-poliuretano Sh.55D                                                         |

**HB04**

Conexão metálica reta macho



| Ø        | conexão | Ø        | conexão |
|----------|---------|----------|---------|
| HB0403M3 | 3 M3    | HB040514 | 5 G1/4  |
| HB0403M5 | 3 M5    | HB040414 | 4 G1/4  |
| HB0404M5 | 4 M5    | HB041438 | 14 G3/8 |
| HB0405M5 | 5 M5    | HB041238 | 12 G3/8 |
| HB0406M5 | 6 M5    | HB041038 | 10 G3/8 |
| HB041018 | 10 G1/8 | HB040838 | 8 G3/8  |
| HB040818 | 8 G1/8  | HB040638 | 6 G3/8  |
| HB040618 | 6 G1/8  | HB041412 | 14 G1/2 |
| HB040518 | 5 G1/8  | HB041212 | 12 G1/2 |
| HB040418 | 4 G1/8  | HB041012 | 10 G1/2 |
| HB041214 | 12 G1/4 | HB040812 | 8 G1/2  |
| HB041014 | 10 G1/4 |          |         |
| HB040814 | 8 G1/4  |          |         |
| HB040614 | 6 G1/4  |          |         |

**HB07**

Conexão metálica reta fêmea



| Ø        | conexão | Ø | conexão |
|----------|---------|---|---------|
| HB0704M5 | 4 M5    |   |         |
| HB070418 | 4 G1/8  |   |         |
| HB070518 | 5 G1/8  |   |         |
| HB070618 | 6 G1/8  |   |         |
| HB070818 | 8 G1/8  |   |         |
| HB071038 | 10 G3/8 |   |         |
| HB070414 | 4 G1/4  |   |         |
| HB070514 | 5 G1/4  |   |         |
| HB070614 | 6 G1/4  |   |         |
| HB070814 | 8 G1/4  |   |         |
| HB071014 | 10 G1/4 |   |         |

**HB08**

Conexão giratória em "L" fêmea



| Ø        | conexão |
|----------|---------|
| HB080418 | 4 G1/8  |
| HB080618 | 6 G1/8  |
| HB080818 | 8 G1/8  |
| HB080414 | 4 G1/4  |
| HB080614 | 6 G1/4  |
| HB080814 | 8 G1/4  |

**HB10**

Conexão giratória em "L" macho



| Ø        | conexão | Ø        | conexão |
|----------|---------|----------|---------|
| HB1004M5 | 4 M5    | HB100838 | 8 G3/8  |
| HB1005M5 | 5 M5    | HB101038 | 10 G3/8 |
| HB1006M5 | 6 M5    | HB101238 | 12 G3/8 |
| HB100418 | 4 G1/8  | HB101438 | 14 G3/8 |
| HB100518 | 5 G1/8  | HB101012 | 10 G1/2 |
| HB100618 | 6 G1/8  | HB101212 | 12 G1/2 |
| HB100818 | 8 G1/8  | HB101412 | 14 G1/2 |
| HB100414 | 4 G1/4  |          |         |
| HB100514 | 5 G1/4  |          |         |
| HB100614 | 6 G1/4  |          |         |
| HB100814 | 8 G1/4  |          |         |
| HB101014 | 10 G1/4 |          |         |
| HB101214 | 12 G1/4 |          |         |
| HB100638 | 6 G3/8  |          |         |

**HB12**

Conexão giratória estendida macho cilíndrica



| Ø        | conexão |
|----------|---------|
| HB1204M5 | 4 M5    |
| HB1206M5 | 6 M5    |
| HB120418 | 4 G1/8  |
| HB120618 | 6 G1/8  |
| HB120818 | 8 G1/8  |
| HB120414 | 4 G1/4  |
| HB120614 | 6 G1/4  |
| HB120814 | 8 G1/4  |
| HB121014 | 10 G1/4 |

**HB14**

T lateral macho



| Ø        | conexão |
|----------|---------|
| HB1404M5 | 4 M5    |
| HB140418 | 4 G1/8  |
| HB140618 | 6 G1/8  |
| HB140818 | 8 G1/8  |
| HB140414 | 4 G1/4  |
| HB140614 | 6 G1/4  |
| HB140814 | 8 G1/4  |
| HB141014 | 10 G1/4 |
| HB141214 | 12 G1/4 |
| HB140838 | 8 G3/8  |
| HB141038 | 10 G3/8 |
| HB141238 | 12 G3/8 |
| HB141412 | 14 G1/2 |

**HB16**

T central macho



| Ø        | conexão |
|----------|---------|
| HB1604M5 | 4 M5    |
| HB160418 | 4 G1/8  |
| HB160618 | 6 G1/8  |
| HB160818 | 8 G1/8  |
| HB160414 | 4 G1/4  |
| HB160614 | 6 G1/4  |
| HB160814 | 8 G1/4  |
| HB161014 | 10 G1/4 |
| HB161214 | 12 G1/4 |
| HB160838 | 8 G3/8  |
| HB161038 | 10 G3/8 |
| HB161238 | 12 G3/8 |
| HB161412 | 14 G1/2 |

**HB19**

Conexão reta



| Ø1       | Ø2    |
|----------|-------|
| HB190303 | 3 3   |
| HB190404 | 4 4   |
| HB190505 | 5 5   |
| HB190604 | 6 4   |
| HB190606 | 6 6   |
| HB190806 | 8 6   |
| HB190808 | 8 8   |
| HB191008 | 10 8  |
| HB191010 | 10 10 |
| HB191210 | 12 10 |
| HB191212 | 12 12 |
| HB191412 | 14 12 |
| HB191414 | 14 14 |

**HB20**  
Conexão tipo "cotovelo"



|          | Ø  |
|----------|----|
| HB200300 | 3  |
| HB200400 | 4  |
| HB200500 | 5  |
| HB200600 | 6  |
| HB200800 | 8  |
| HB201000 | 10 |
| HB201200 | 12 |
| HB201400 | 14 |

**HB21**  
Conexão tipo "T"



|          | Ø1 | Ø2 |
|----------|----|----|
| HB210300 | 3  | 3  |
| HB210400 | 4  | 4  |
| HB210500 | 5  | 5  |
| HB210600 | 6  | 6  |
| HB210604 | 6  | 4  |
| HB210800 | 8  | 8  |
| HB210806 | 8  | 6  |
| HB211000 | 10 | 10 |
| HB211008 | 10 | 8  |
| HB211200 | 12 | 12 |
| HB211400 | 14 | 14 |

**HB24**  
Redução



|          | Ø1 | Ø2 |          | Ø1 | Ø2 |
|----------|----|----|----------|----|----|
| HB240405 | 4  | 5  | HB240612 | 6  | 12 |
| HB240406 | 4  | 6  | HB240614 | 6  | 14 |
| HB240408 | 4  | 8  | HB240806 | 8  | 6  |
| HB240412 | 4  | 12 | HB240810 | 8  | 10 |
| HB240414 | 4  | 14 | HB240812 | 8  | 12 |
| HB240506 | 5  | 6  | HB240814 | 8  | 14 |
| HB240508 | 5  | 8  | HB241012 | 10 | 12 |
| HB240604 | 6  | 4  | HB241014 | 10 | 14 |
| HB240608 | 6  | 8  | HB241214 | 12 | 14 |
| HB240610 | 6  | 10 |          |    |    |

**HB26**  
Tampão



|          | Ø  |
|----------|----|
| HB260400 | 4  |
| HB260500 | 5  |
| HB260600 | 6  |
| HB260800 | 8  |
| HB261000 | 10 |
| HB261200 | 12 |
| HB261400 | 14 |

**HB27**  
Conexão giratória cilíndrica cabeça chave embutida



|          | Ø | conexão |          | Ø  | conexão |
|----------|---|---------|----------|----|---------|
| HB2703M3 | 3 | M3      | HB270614 | 6  | G1/4    |
| HB2703M5 | 3 | M5      | HB270814 | 8  | G1/4    |
| HB2704M5 | 4 | M5      | HB271014 | 10 | G1/4    |
| HB2705M5 | 5 | M5      | HB271214 | 12 | G1/4    |
| HB270418 | 4 | G1/8    | HB270838 | 8  | G3/8    |
| HB270518 | 5 | G1/8    | HB271038 | 10 | G3/8    |
| HB270618 | 6 | G1/8    | HB271238 | 12 | G3/8    |
| HB270818 | 8 | G1/8    |          |    |         |

**HB33**  
Conexão tipo união para painel



|          | Ø  |
|----------|----|
| HB330004 | 4  |
| HB330005 | 5  |
| HB330006 | 6  |
| HB330008 | 8  |
| HB330010 | 10 |
| HB330012 | 12 |
| HB330014 | 14 |

**HB34**  
Conexão tipo união para painel com rosca



|          | Ø | conexão |
|----------|---|---------|
| HB340418 | 4 | G1/8    |
| HB340618 | 6 | G1/8    |
| HB340818 | 8 | G1/8    |
| HB340614 | 6 | G1/4    |
| HB340814 | 8 | G1/4    |

**HB35**  
Conexão giratória em "L"



|          | Ø  |
|----------|----|
| HB350004 | 4  |
| HB350006 | 6  |
| HB350008 | 8  |
| HB350010 | 10 |

**HB38**  
Cotovelo haste macho



|          | Ø1 | Ø2 |
|----------|----|----|
| HB380400 | 4  | 4  |
| HB380406 | 4  | 6  |
| HB380600 | 6  | 6  |
| HB380608 | 6  | 8  |
| HB380800 | 8  | 8  |
| HB381000 | 10 | 10 |
| HB381200 | 12 | 12 |

**HB39**  
Cotovelo haste alto macho



|          | Ø1 | Ø2 |
|----------|----|----|
| HB390400 | 4  | 4  |
| HB390406 | 4  | 6  |
| HB390600 | 6  | 6  |
| HB390608 | 6  | 8  |
| HB390800 | 8  | 8  |

**HB40**

Conexão tipo banjo



|          | Ø  | haste |
|----------|----|-------|
| HB4004M5 | 4  | M5    |
| HB4005M5 | 5  | M5    |
| HB4006M5 | 6  | M5    |
| HB400418 | 4  | G1/8  |
| HB400518 | 5  | G1/8  |
| HB400618 | 6  | G1/8  |
| HB400818 | 8  | G1/8  |
| HB400614 | 6  | G1/4  |
| HB400814 | 8  | G1/4  |
| HB401014 | 10 | G1/4  |
| HB401214 | 12 | G1/4  |
| HB400838 | 8  | G3/8  |
| HB401038 | 10 | G3/8  |
| HB401238 | 12 | G3/8  |

**HB41**

Conexão tipo banjo dupla



|          | Ø  | haste |
|----------|----|-------|
| HB4104M5 | 4  | M5    |
| HB4105M5 | 5  | M5    |
| HB410418 | 4  | G1/8  |
| HB410518 | 5  | G1/8  |
| HB410618 | 6  | G1/8  |
| HB410818 | 8  | G1/8  |
| HB410614 | 6  | G1/4  |
| HB410814 | 8  | G1/4  |
| HB411014 | 10 | G1/4  |
| HB410838 | 8  | G3/8  |
| HB411038 | 10 | G3/8  |
| HB411238 | 12 | G3/8  |

**HB42**

Parafuso 1 cavidade



|          | conexão |
|----------|---------|
| HB4200M5 | M5      |
| HB420018 | G1/8    |
| HB420014 | G1/4    |
| HB420038 | G3/8    |

**HB43**

Parafuso 2 cavidades



**HB44**

Parafuso 3 cavidades



|          | conexão |
|----------|---------|
| HB430018 | G1/8    |
| HB430014 | G1/4    |
| HB430038 | G3/8    |

|          | conexão |
|----------|---------|
| HB440018 | G1/8    |
| HB440014 | G1/4    |
| HB440038 | G3/8    |

**HB45**

T central giratório macho cabeça conexão chave embutida



|          | Ø  | conexão |
|----------|----|---------|
| HB4504M5 | 4  | M5      |
| HB4505M5 | 5  | M5      |
| HB450418 | 4  | G1/8    |
| HB450518 | 5  | G1/8    |
| HB450618 | 6  | G1/8    |
| HB450818 | 8  | G1/8    |
| HB450614 | 6  | G1/4    |
| HB450814 | 8  | G1/4    |
| HB451014 | 10 | G1/4    |
| HB450838 | 8  | G3/8    |
| HB451038 | 10 | G3/8    |
| HB451238 | 12 | G3/8    |

**HB47**

Duplo cotovelo giratório macho cabeça conexão chave embutida



|          | Ø  | conexão |
|----------|----|---------|
| HB470418 | 4  | G1/8    |
| HB470618 | 6  | G1/8    |
| HB470818 | 8  | G1/8    |
| HB470614 | 6  | G1/4    |
| HB470814 | 8  | G1/4    |
| HB471014 | 10 | G1/4    |
| HB471214 | 12 | G1/4    |

**HB48**

Tripla cotovelo giratório macho cilíndrico cabeça com conexão chave embutida



|          | Ø  | conexão |
|----------|----|---------|
| HB480418 | 4  | G1/8    |
| HB480618 | 6  | G1/8    |
| HB480818 | 8  | G1/8    |
| HB480614 | 6  | G1/4    |
| HB480814 | 8  | G1/4    |
| HB481014 | 10 | G1/4    |
| HB481214 | 12 | G1/4    |

**HB49**

Junção dupla



|          | Ø  |
|----------|----|
| HB490400 | 4  |
| HB490500 | 5  |
| HB490600 | 6  |
| HB490800 | 8  |
| HB491000 | 10 |
| HB491200 | 12 |
| HB491400 | 14 |

**HB51**

Adaptador macho cilíndrico



|          | Ø  | conexão |          | Ø  | conexão |
|----------|----|---------|----------|----|---------|
| HB5104M5 | 4  | M5      | HB510614 | 6  | G1/4    |
| HB5105M5 | 5  | M5      | HB510814 | 8  | G1/4    |
| HB5106M5 | 6  | M5      | HB511014 | 10 | G1/4    |
| HB510418 | 4  | G1/8    | HB511214 | 12 | G1/4    |
| HB510518 | 5  | G1/8    | HB510838 | 8  | G3/8    |
| HB510618 | 6  | G1/8    | HB511038 | 10 | G3/8    |
| HB510818 | 8  | G1/8    | HB511238 | 12 | G3/8    |
| HB511018 | 10 | G1/8    | HB511438 | 14 | G3/8    |
| HB510414 | 4  | G1/4    | HB511212 | 12 | G1/2    |
| HB510514 | 5  | G1/4    | HB511412 | 14 | G1/2    |

**HB53**

Conexão metálica fixa cotovelo macho



|          | Ø  | conexão |
|----------|----|---------|
| HB530418 | 4  | R1/8    |
| HB530518 | 5  | R1/8    |
| HB530618 | 6  | R1/8    |
| HB530818 | 8  | R1/8    |
| HB530614 | 6  | R1/4    |
| HB530814 | 8  | R1/4    |
| HB531014 | 10 | R1/4    |