

### CARATTERISTICHE TECNICHE

Corpo: ottone nichelato.  
Elemento di fissaggio: in ottone nichelato con O-ring in NBR nella versione cilindrica.  
Pinza di aggraffaggio: acciaio inox AISI 316.  
Anello di sgancio: ottone nichelato.  
Applicazioni: circuiti pneumatici.  
Tubi di collegamento consigliati: Rilsan/Elastollan.  
Pressione max.: 16 bar.  
Pressione di lavoro:  $-0,99 \pm 12$  bar.  
Temperature consentite:  $-20 \div 70^{\circ}\text{C}$  (dipendenti dal tipo di tubo impiegato).

### TECHNICAL CHARACTERISTICS

Body: nickel-plated brass.  
Fixing element: nickel-plated brass with O-ring in NBR in parallel version.  
Clamping collet: stainless steel AISI 316.  
Release ring: nickel-plated brass.  
Application fields: pneumatic circuits.  
Recommended hoses: Rilsan/Elastollan.  
Max. pressure: 16 bar.  
Working pressure:  $-0,99 \pm 12$  bar.  
Max. temperature range:  $-20^{\circ} \div 70^{\circ}\text{C}$ .  
(depending on the type of tube used).

### TECHNISCHE MERKMALE

Körper: vernickeltes Messing.  
Befestigungselement: aus vernickeltem Messing mit O-Ring aus NBR in der zylinderförmigen Version.  
Klemmzange: aus Edelstahl AISI 316.  
Auslösering: vernickeltes Messing.  
Anwendungen: Druckluftkreise.  
Empfohlene Verbindungsrohre: Rilsan/Elastollan.  
Druckbereich: 16 bar max.  
Betriebsdruck:  $-0,99 \pm 12$  bar.  
Zulässige Temperatur:  $-20^{\circ} \div 70^{\circ}\text{C}$  (abhängig vom verwendeten Rohrtyp).

### CARACTÉRISTIQUES TECHNIQUES

Corps: laiton nickelé  
Élément de fixation: en laiton nickelé avec joint en NBR dans la version cylindrique.  
Pince d'agrafage: en acier inox AISI 316.  
Anneau de déclenchement: laiton nickelé.  
Applications: circuits pneumatiques.  
Tubes de raccordement conseillés: Rilsan/Elastollan.  
Pression max: 16 bar.  
Pression de travail:  $-0,99 \pm 12$  bar.  
Température d'utilisation:  $-20^{\circ} \div 70^{\circ}\text{C}$  (en fonction du type de tube utilisé).

### CARACTERISTICAS TECNICAS

Cuerpo: latón niquelado.  
Elemento de fijación: en latón niquelado con junta en NBR en la versión cilíndrica.  
Pinzas de agarre: acero inox AISI 316.  
Anillo de extracción: latón niquelado.  
Aplicaciones: circuitos neumáticos.  
Tubos de conexionado aconsejados: Rilsan/Elastollan.  
Presión max.: 16 bar.  
Presión de trabajo:  $-0,99 \pm 10$  bar.  
Temperatura de trabajo:  $-20 \div 70^{\circ}\text{C}$  (dependiendo del tipo de tubo utilizado).

### ISTRUZIONI DI MONTAGGIO

- ➔ Tagliare il tubo a  $90^{\circ}$  (servendosi della pinza tagliatubo) verificando l'assenza di bave interne ed esterne e facendo attenzione che il tubo non si presenti ovalizzato dopo il taglio.
- ➔ Inserire il tubo nel raccordo spingendolo fino in battuta.
- ➔ Estrazione del tubo: esercitare una leggera pressione sull'anello estrattore, estraendo contemporaneamente il tubo dal corpo del raccordo.

### ASSEMBLY INSTRUCTIONS

- ➔ Cut the tube square (by means of a hose cutter) making sure that no burrs inside and outside are left and that the tube does not have an oval shape.
- ➔ Insert the tube into the fitting until it bottoms.
- ➔ Tube release: while slightly pressing on the release ring, pull out the tube from the body of the fitting.

### MONTAGEANWEISUNGEN

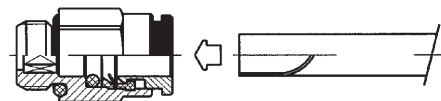
- ➔ das Rohr auf  $90^{\circ}$  schneiden (unter Verwendung der Rohrschneidezange), wobei zu kontrollieren ist, ob innen oder aussen eine Gratbildung stattgefunden hat und darauf geachtet werden muss, dass das Rohr nach dem Schnitt keinen ovalen Charakter hat.
- ➔ das Rohr bis zum Anschlag in die Verschraubung schieben.
- ➔ Herausziehen des Rohres: einen leichten Druck auf den Ausziehring ausüben, und gleichzeitig das Rohr aus dem Verschraubungskörper herausziehen.

### INSTRUCTIONS DE MONTAGE

- ➔ Couper le tube à  $90^{\circ}$  (en se servant de la pince coupe-tube) et vérifier l'absence de bavures intérieures et extérieures en faisant attention que le tube ne se présente pas ovalisé après la coupe.
- ➔ Introduire le tube dans le raccord en le poussant jusqu'à la butée.
- ➔ Extraction du tube : exercer une légère pression sur l'anneau extracteur en retirant en même temps le tube du corps du raccord.

### ISTRUCCIONES DE MONTAJE

- ➔ Cortar el tubo a  $90^{\circ}$  (utilizando el útil cortatubos) verificando la ausencia de rebabas internas y externas y comprobando que el tubo no se ha ovalado tras el corte.
- ➔ Insertar el tubo en el racor empujándolo hasta el tope.
- ➔ Extracción del tubo: ejercer una ligera presión sobre el anillo extractor, extrayendo al mismo tiempo el tubo del cuerpo del racor.



## HB04 ....

### Diritto maschio cilindrico

Male stud coupling (parallel thread)

**Gerade Aussengewinde zylindrisch**

*Droit mâle cylindrique*

**Recto macho cilíndrico**



Ø	D1	UNIVER
3	M3	HB0403M3
3	M5	HB0403M5
4	M5	HB0404M5
4	G1/8	HB040418
4	G1/4	HB040414
5	M5	HB0405M5
5	G1/8	HB040518
5	G1/4	HB040514
6	M5	HB0406M5
6	G1/8	HB040618
6	G1/4	HB040614
6	G3/8	HB040638
8	G1/8	HB040818
8	G1/4	HB040814
8	G3/8	HB040838
8	G1/2	HB040812
10	G1/8	HB041018
10	G1/4	HB041014
10	G3/8	HB041038
10	G1/2	HB041012
12	G1/4	HB041214
12	G3/8	HB041238
12	G1/2	HB041212
14	G3/8	HB041438
14	G1/2	HB041412

## HB07 ....

### Diritto femmina

Female stud (parallel thread)

**Gerade Aufnahmestück**

*Droit femelle*

**Recto hembra**



Ø	D1	UNIVER
4	M5	HB0704M5
4	G1/8	HB070418
4	G1/4	HB070414
5	G1/8	HB070518
5	G1/4	HB070514
6	G1/8	HB070618
6	G1/4	HB070614
8	G1/8	HB070818
8	G1/4	HB070814
10	G1/4	HB071014
10	G3/8	HB071038

## HB08 ....

### Gomito girevole femmina

Swivel elbow (female thread)

**Winklig drehbar Aufnahmestück**

*Coude tournant femelle*

**Codo orientable hembra**



Ø	D1	UNIVER
4	G1/8	HB080418
4	G1/4	HB080414
6	G1/8	HB080618
6	G1/4	HB080614
8	G1/8	HB080818
8	G1/4	HB080814

## HB10 ....

### Gomito girevole maschio cilindrico

Swivel elbow (parallel male)

**Winklig drehbar Aussengewinde zylindrisch**

*Coude tournant mâle cylindrique*

**Codo orientable macho cilíndrico**



Ø	D1	UNIVER
5	G1/8	HB100518
5	G1/4	HB100514
6	M5	HB1006M5
6	G1/8	HB100618
6	G1/4	HB100614
6	G3/8	HB100638
8	G1/8	HB100818
8	G1/4	HB100814
8	G3/8	HB100838
10	G1/4	HB101014
10	G3/8	HB101038
10	G1/2	HB101012
12	G1/4	HB101214
12	G3/8	HB101238
12	G1/2	HB101212
14	G3/8	HB101438
14	G1/2	HB101412

## HB12 ....

### Gomito girevole prolungato maschio cilindrico

Swivel elbow (extended male parallel thread)

**Winklig drehbar verlängert Aussengewinde zylindrisch**

*Coude tournant prolongé mâle cylindrique*

**Codo orientable elevado macho cilíndrico**



Ø	D1	UNIVER
4	M5	HB1204M5
4	G1/8	HB120418
4	G1/4	HB120414
6	M5	HB1206M5
6	G1/8	HB120618
6	G1/4	HB120614
8	G1/8	HB120818
8	G1/4	HB120814
8	G3/8	HB120838
10	G1/4	HB121014
10	G3/8	HB121038

## HB14 ....

### T laterale maschio cilindrico

Lateral Tee (parallel thread)

**T-förmig seitlich Aussengewinde zylindrisch**

*T latéral mâle cylindrique*

**Te rosca lateral macho cilíndrico**



Ø	D1	UNIVER
4	M5	HB1404M5
4	G1/8	HB140418
4	G1/4	HB140414
6	G1/8	HB140618
6	G1/4	HB140614
8	G1/8	HB140818
8	G1/4	HB140814
8	G3/8	HB140838
10	G1/4	HB141014
10	G3/8	HB141038
12	G1/4	HB141214
12	G3/8	HB141238
14	G1/2	HB141412

## HB16 ....

**T centrale maschio cilindrico**

Male Tee (parallel thread)

**T-förmig zentral Aussengewinde zylindrisch**

T central mâle cylindrique

**Te rosca central macho cilíndrica**



Ø	D1	UNIVER
4	M5	HB1604M5
4	G1/8	HB160418
4	G1/4	HB160414
6	G1/8	HB160618
6	G1/4	HB160614
8	G1/8	HB160818
8	G1/4	HB160814
8	G3/8	HB160838
10	G1/4	HB161014
10	G3/8	HB161038
12	G1/4	HB161214
12	G3/8	HB161238
14	G1/2	HB161412

## HB19 ....

**Diritto intermedio**

Straight connector

**Gerade Zwischenstück**

Droit intermédiaire

**Unión intermedia**



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

## HB20 ....

**Intermedio a L**

Equal elbow

**L-förmig Zwischenstück**

Coude en L

**Codo intermedio**



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

## HB21 ....

**Intermedio a T**

Equal Tee

**T-förmig Zwischenstück**

Raccord en té

**Te intermedia**



Ø*	Ø**	UNIVER
3	3	HB210300
4	4	HB210400
5	5	HB210500
6	6	HB210600
6	4	HB210604
8	8	HB210800
8	6	HB210806
10	10	HB211000
10	8	HB211008
12	12	HB211200
14	14	HB211400

\* laterale/lateral/lateral/lateral  
\*\* centrale/central/Zentral/central

## HB24 ....

**Riduzione**

Reducer

**Reduzierstück**

Réduction

**Reducción**



Ø	D1	UNIVER
4	12	HB240412
4	14	HB240414
5	6	HB240506
5	8	HB240508
6	4	HB240604
6	8	HB240608
6	10	HB240610
6	12	HB240612
6	14	HB240614
8	6	HB240806
8	10	HB240810
8	12	HB240812
8	14	HB240814
10	12	HB241012
10	14	HB241014
12	14	HB241214

Ø	D1	UNIVER
4	5	HB240405
4	6	HB240406
4	8	HB240408

## HB26 ....

**Tappo**

Plug

**Stöpsel**

Bouchon

**Tapón**



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

## HB27 ....

**Gomito girevole maschio cilindrico testa con attacco chiave incassato**

Banjo swivel elbow (parallel male thread)

**Winklig drehbar Aussengewinde zylindrisch Kopf mit Sechskantschlüssel**

*Coude tournant mâle cylindrique tête avec empreinte hexagonale*

**Orientable macho cilíndrico cabeza allen**



Ø	D1	UNIVER
4	M5	HB2704M5
4	G1/8	HB270418
5	M5	HB2705M5
5	G1/8	HB270518
6	G1/8	HB270618
6	G1/4	HB270614
8	G1/8	HB270818
8	G1/4	HB270814
8	G3/8	HB270838
10	G1/4	HB271014
10	G3/8	HB271038
12	G1/4	HB271214
12	G3/8	HB271238

Ø	D1	UNIVER
3	M3	HB2703M3
3	M5	HB2703M5

## HB34 ....

**Passaparete con connessione filettata**

Bulkhead connector with threaded connection

**Wanddurchbohrungsstück mit Gewindeanschluss**

*Traversée de cloison avec connexion fileté*

**Pasatabiques conexión roscada**



Ø	UNIVER
4	HB340418
6	HB340618
6	HB340614
8	HB340818
8	HB340814

## HB38 ....

**Gomito innestabile**

Stem elbow

**Winklig schaltbar**

*Coude encliquetage*

**Codo enclavable**



Ø	D1	UNIVER
4	4	HB380400
4	6	HB380406
6	6	HB380600
6	8	HB380608
8	8	HB380800
10	10	HB381000
12	12	HB381200

## HB33 ....

**Passaparete**

Bulkhead connector

**Wanddurchbohrungsstück**

*Traversée de cloison*

**Pasatabiques**



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

## HB35 ....

**Passaparete con raccordo a gomito**

Bulkhead connector with union elbow

**Wanddurchbohrungsstück mit Winkelverschraubung**

*Traversée de cloison avec raccord à coude*

**Pasatabiques en codo**



Ø	UNIVER
4	HB350004
6	HB350006
8	HB350008
10	HB350010

## HB39 ....

**Gomito innestabile alto**

Extended stem elbow

**Winklig hoch schaltbar**

*Coude encliquetage prolongé*

**Codo enclavable elevado**



Ø	D1	UNIVER
4	4	HB390400
4	6	HB390406
6	6	HB390600
6	8	HB390608
8	8	HB390800

## HB40 ....

### Anello singolo

Single banjo elbow (without bolt)

#### Ring einfach

Banjo simple

Orientable simple



Ø	D1	UNIVER
4	M5	HB4004M5
4	G1/8	HB400418
5	M5	HB4005M5
5	G1/8	HB400518
6	M5	HB4006M5
6	G1/8	HB400618
6	G1/4	HB400614
8	G1/8	HB400818
8	G1/4	HB400814
8	G3/8	HB400838
10	G1/4	HB401014
10	G3/8	HB401038
12	G1/4	HB401214
12	G3/8	HB401238

## HB41 ....

### Anello doppio

Double banjo elbow (without bolt)

#### Ring doppelt

Banjo double

Orientable double



Ø	D1	UNIVER
4	M5	HB4104M5
4	G1/8	HB410418
5	M5	HB4105M5
5	G1/8	HB410518
6	G1/8	HB410618
6	G1/4	HB410614
8	G1/8	HB410818
8	G1/4	HB410814
8	G3/8	HB410838
10	G1/4	HB411014
10	G3/8	HB411038
12	G3/8	HB411238

## HB42 ....

### Asta singola

Single banjo bolt

#### Stange einfach

Vis banjo

Tornillo simple



D1	UNIVER
M5	HB4200M5
G1/8	HB420018
G1/4	HB420014
G3/8	HB420038

## HB43 ....

### Asta doppia

Double banjo bolt

#### Stange doppelt

Vis banjo double

Tornillo doble



D1	UNIVER
G1/8	HB430018
G1/4	HB430014
G3/8	HB430038

## HB44 ....

### Asta tripla

Triple banjo bolt

#### Stange dreifach

Vis banjo triple

Tornillo triple



D1	UNIVER
G1/8	HB440018
G1/4	HB440014
G3/8	HB440038

## HB45 ....

### T centrale girevole maschio cilindrico testa con attacco chiave incassato

Parallel banjo Tee male (with allen key fixing) connection

**T-förmig zentral drehbar Aussengewinde zylindrisch mit eingelassenem Schlüsselanschluss**

Té banjo avec empreinte hexagonale

Orientable en te macho cilíndrico cabeza allen



Ø	D1	UNIVER
4	M5	HB4504M5
4	G1/8	HB450418
5	M5	HB4505M5
5	G1/8	HB450518
6	G1/8	HB450618
6	G1/4	HB450614
8	G1/8	HB450818
8	G1/4	HB450814
8	G3/8	HB450838
10	G1/4	HB451014
10	G3/8	HB451038
12	G3/8	HB451238



## HB46 ....

### T centrale femmina cilindrico

Threaded female Tee

### T-förmig zentral Aufnahmestück zylindrisch

T central femelle cylindrique

### Te rosca central hembra cilíndrica



Ø	D1	UNIVER
4	G1/4	HB460414
4	G1/8	HB460418
6	G1/4	HB460614
6	G1/8	HB460618
8	G1/4	HB460814
8	G1/8	HB460818

## HB47 ....

### Doppio gomito girevole maschio cilindrico testa con attacco chiave incassato

Double swivel banjo elbow (parallel thread) wrench connection

### Zweifach winklig drehbar Aussengewinde zylindrisch Kopf mit eingelassenem Schlüsselanschluss

Double coude tournant mâle cylindrique avec empreinte hexagonale

### Orientable doble macho cilíndrico cabeza allen



Ø	D1	UNIVER
4	G1/8	HB470418
6	G1/8	HB470618
6	G1/4	HB470614
8	G1/8	HB470818
8	G1/4	HB470814
10	G1/4	HB471014
12	G1/4	HB471214

## HB48....

### Triplo gomito girevole maschio cilindrico testa con attacco chiave incassato

Triple swivel banjo elbow (parallel thread) connection

### Dreifach winklig drehbar Aussengewinde zylindrisch Kopf mit eingelassenem Schlüsselanschluss

Triple coude tournant mâle cylindrique tête avec attaque clé encastrée

### Orientable triple macho cilíndrico cabeza allen



Ø	D1	UNIVER
4	G1/8	HB480418
6	G1/8	HB480618
6	G1/4	HB480614
8	G1/8	HB480818
8	G1/4	HB480814
10	G1/4	HB481014
12	G1/4	HB481214

## HB49 ....

### Giunzione doppia

Double stem

### Verbindungsstück zweifach

Jonction double

### Adaptador doble



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

## HB50 ....

### Giunzione per tubo in gomma

Hose stem connector

### Verbindungsstück für Gummirohr

Jonction pour tuyau en caoutchouc

### Adaptador con espiga tubo de goma



Ø	D1	UNIVER
6	6	HB500606
8	6	HB500806
8	8	HB500808
12	13	HB501213
14	14	HB501414

## HB51 ....

### Adattatore maschio cilindrico

Threaded stem connector (male)

### Adapter Aussengewinde zylindrisch

Adaptateur mâle cylindrique

### Adaptador macho cilíndrico



Ø	D1	UNIVER
5	G1/8	HB510518
5	G1/4	HB510514
6	M5	HB5106M5
6	G1/8	HB510618
6	G1/4	HB510614
8	G1/8	HB510818
8	G1/4	HB510814
8	G3/8	HB510838
10	G1/8	HB511018
10	G1/4	HB511014
10	G3/8	HB511038
12	G1/4	HB511214
12	G3/8	HB511238
12	G1/2	HB511212
14	G3/8	HB511438
14	G1/2	HB511412

Ø	D1	UNIVER
4	M5	HB5104M5
4	G1/8	HB510418
4	G1/4	HB510414
5	M5	HB5105M5