

### 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 ÷ 12 bar.  
**Temperature consentite:** -20 ÷ 70°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 ÷ 12 bar.  
**Max. temperature range:** -20° ÷ 70°C.  
 (depending on the type of tube used).

### TECHNISCHE MERKMALE

**Körper:** vernickeltes Messing.  
**Befestigungselement:** aus vernickeltem Messing mit O-Ring aus NBR in zylinderförmiger Version.  
**Spannring:** aus Edelstahl AISI 316.  
**Auslösering:** vernickeltes Messing.  
**Anwendungen:** Druckluftkreise.  
**Empfohlene Verbindungsrohre:** Rilsan/Elastollan.  
**Druckbereich:** 16 bar max.  
**Betriebsdruck:** -0,99 ÷ 12 bar.  
**Zulässige Temperatur:** -20° ÷ 70°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 ÷ 12 bar.  
**Température d'utilisation:** -20° ÷ 70°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 ÷ 10 bar.  
**Temperatura de trabajo:** -20 ÷ 70°C (dependiendo del tipo de tubo utilizado).

### ISTRUZIONI DI MONTAGGIO

- ➔ Tagliare il tubo a 90° (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

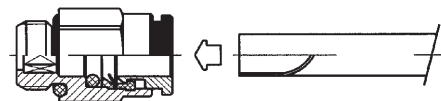
- ➔ *das Rohr auf 90° schneiden (unter Verwendung der Rohrschneidezange), wobei zu kontrollieren ist, ob innen oder aussen eine Gratbildung stattgefunden hat und darauf geachtet werden muss, dass das Rohr nach dem Schnitt keinen ovalen Charakter hat.*
- ➔ *das Rohr bis zum Anschlag in die Verschraubung 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° (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° (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	Ø	D1	UNIVER
3	M3	HB0403M3	6	G1/4	HB040614
3	M5	HB0403M5	6	G3/8	HB040638
4	M5	HB0404M5	8	G1/8	HB040818
4	G1/8	HB040418	8	G1/4	HB040814
4	G1/4	HB040414	8	G3/8	HB040838
5	M5	HB0405M5	8	G1/2	HB040812
5	G1/8	HB040518	10	G1/8	HB041018
5	G1/4	HB040514	10	G1/4	HB041014
6	M5	HB0406M5	10	G3/8	HB041038
6	G1/8	HB040618	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	Ø	D1	UNIVER
4	M5	HB0704M5	4	G1/8	HB070418
4	G1/8	HB070418	4	G1/4	HB070414
5	G1/8	HB070518	5	G1/8	HB070518
5	G1/4	HB070514	5	G1/4	HB070514
6	G1/8	HB070618	6	G1/8	HB070618
6	G1/4	HB070614	8	G1/8	HB070818
8	G1/8	HB070818	8	G1/4	HB070814
10	G1/4	HB071014	10	G1/4	HB071014
10	G3/8	HB071038	10	G3/8	HB071038

## HB08 ....

### Gomito girevole femmina

Swivel elbow (female thread)

*Winklig, drehbarer Aufschraubanschluss*

*Coude tournant femelle*

Codo orientable hembra



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

## HB09 ....

### Gomito girevole maschio conico

Swivel elbow (taper male)

*Winklig, drehbar, Aussengewinde konisch*

*Coude tournant, mâle conique*

Codo orientable macho cónico



Ø	D1	UNIVER	Ø	D1	UNIVER
4	G1/4	HB090414	4	G1/8	HB090418
4	G1/8	HB090418	6	G1/4	HB090614
6	G1/4	HB090614	6	G1/8	HB090618
6	G1/8	HB090618	8	G1/4	HB090814
8	G1/4	HB090814	8	G1/8	HB090818
8	G3/8	HB090838	8	G3/8	HB090838
10	G1/4	HB091014	10	G1/4	HB091014
10	G3/8	HB091038	10	G3/8	HB091038
12	G1/2	HB091212	12	G1/2	HB091212
12	G3/8	HB091238	12	G3/8	HB091238
14	G1/2	HB091412	14	G1/2	HB091412
14	G3/8	HB091438	14	G3/8	HB091438

## HB10 ....

### Gomito girevole maschio cilindrico

Swivel elbow (parallel male)

*Winklig, drehbar, Aussengewinde zylindrisch*

*Coude tournant mâle cylindrique*

Codo orientable macho cilíndrico



Ø	D1	UNIVER	Ø	D1	UNIVER
4	M5	HB1004M5	6	M5	HB1006M5
4	G1/8	HB100418	6	G1/8	HB100618
4	G1/4	HB100414	6	G1/4	HB100614
4	G1/4	HB100414	6	G3/8	HB100638
5	M5	HB1005M5	8	G1/8	HB100818
5	G1/8	HB100518	8	G1/4	HB100814
5	G1/4	HB100514	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	Ø	D1	UNIVER
4	M5	HB1204M5	4	G1/8	HB120418
4	G1/8	HB120418	4	G1/4	HB120414
4	G1/4	HB120414	6	M5	HB1206M5
6	M5	HB1206M5	6	G1/8	HB120618
6	G1/8	HB120618	6	G1/4	HB120614
6	G1/4	HB120614	8	G1/8	HB120818
8	G1/8	HB120818	8	G1/4	HB120814
8	G3/8	HB120838	8	G3/8	HB120838
10	G1/4	HB121014	10	G1/4	HB121014
10	G3/8	HB121038	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 cilíndrica



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, Verbinder*

*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 / *Laterale* / *Lateral* / *Lateral*

\*\* Centrale / Central / *Zentral* / *Central* / *Central*

## HB24 ....

### Riduzione

Reducer

*Reduzierstück*

*Réduction*

Reducción



Ø	D1	UNIVER
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
4	12	HB240412

## 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 eingelassenem Schlüsselanschluss**

*Coude tournant mâle cylindrique tête avec empreinte hexagonale*

**Orientable macho cilíndrico cabeza allen**



Ø	D1	UNIVER
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
4	M5	HB2704M5
4	G1/8	HB270418

## HB33 ....

**Passaparete**

Bulkhead connector

**Schottverbinder**

*Traversée de cloison*

**Pasatabiques**



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

## HB34 ....

**Passaparete con connessione filettata**

Bulkhead connector with threaded connection

**Aufschraub-Schottverbinder**

*Traversée de cloison avec connexion filetée*

**Pasatabiques conexión roscada**



Ø	D1	UNIVER
4	G1/8	HB340418
6	G1/8	HB340618
6	G1/4	HB340614
8	G1/8	HB340818
8	G1/4	HB340814

## HB35 ....

**Passaparete con raccordo a gomito**

Bulkhead connector with union elbow

**Winkel-Schottverbinder**

*Traversée de cloison avec raccord à coude*

**Pasatabiques en codo**



Ø	UNIVER
4	HB350004
6	HB350006
8	HB350008
10	HB350010

## 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

### 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)

*einfacher Ringanschluss*

*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)

*doppelter Ringanschluss*

*Banjo double*

**Orientable doble**



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

*einfache Hohlschraube*

*Vis banjo*

**Tornillo simple**



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

### HB43 ....

#### Asta doppia

Double banjo bolt

*doppelte Hohlschraube*

*Vis banjo double*

**Tornillo doble**



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

### HB44 ....

#### Asta tripla

Triple banjo bolt

*dreifache Hohlschraube*

*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, Aufschraubstück**

*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
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
5	G1/8	HB510518
5	G1/4	HB510514

## HB52 ....

**Adattatore maschio cilindrico prolungato**  
Extended adaptor (male thread)

**Adapter, Aussengewinde zylindrisch verlängert**

*Adaptateur mâle cylindrique prolongé*

**Adaptador prolongado macho cilíndrico**



Ø	D1	UNIVER
4	G1/8	HB520418
6	G1/8	HB520618
6	G1/4	HB520614
8	G1/8	HB520818
8	G1/4	HB520814
10	G1/4	HB521014

## HB53 ....

**Gomito fisso maschio conico**  
Fix elbow (male taper thread)

**Winklig, fest, Aussengewinde konisch**

*Coude fixe mâle conique*

**Codo fijo macho cónico**



Ø	D1	UNIVER
4	G1/8	HB530418
5	G1/8	HB530518
6	G1/8	HB530618
6	G1/4	HB530614
8	G1/8	HB530818
8	G1/4	HB530814
10	G1/4	HB531014