

## Chiave di codifica

Codification key

**-UM12-**

**-UM12-** Standard

**-UM22-** Con regolatore -  
With pressure regulator

**040**

Diametro - *Diameter*

**040** mm

**063** mm

**100** mm

**RC1.2**

Rapporto di compressione - *Pressure ratio*

**1.2** ( out Pmax = 20 bar)

**1.3** ( out Pmax = 30 bar )

**1.4** ( out Pmax = 40 bar )



## Dati Tecnici

Technical data

Fluido: aria filtrata, lubrificata\* o (preferibilmente) non lubrificata.

Pressione di alimentazione: 3 ÷ 10 bar.

Temperature ambiente: -20°C ÷ +50°C.

Posizione di montaggio: si suggerisce il montaggio con l'alimentazione dall'alto.

\*ATTENZIONE: tutti gli elementi scorrevoli e le guarnizioni, sono prelubrificati con grasso speciale ad alte prestazioni. Nel caso si iniziasse a lubrificare con olio nebulizzato, ciò dovrà perdurare in maniera costante.

*Fluid: filtered air, lubricated\* or (preferred) non lubricated.*

*Inlet pressure: 3 ÷ 10 bar.*

*Ambient temperature: -20°C ÷ +50°C.*

*Mounting position: it is suggested mounting with the inlet connection above.*

*\*ATTENTION: all the sliding elements and the seals, are lubricated with special high performance grease. If you began to lubricate with oil mist, you will have to lubricate continuously.*

### Caratteristiche componenti - *Components specifications*

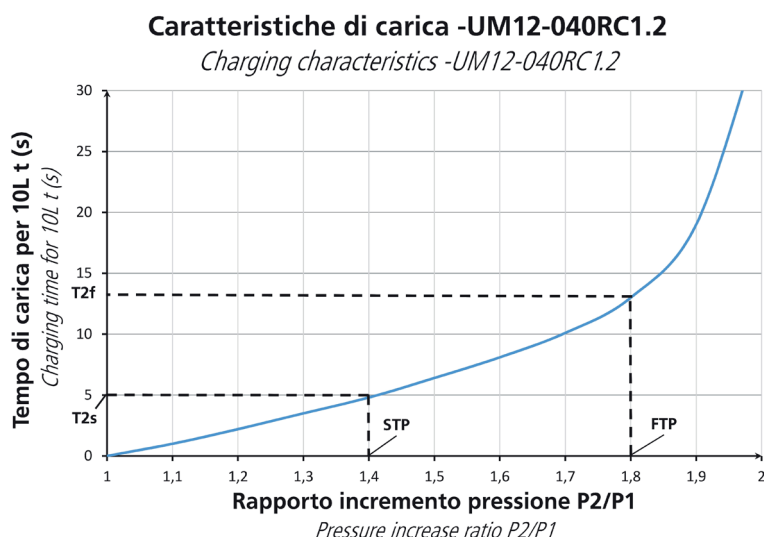
DESCRIZIONE - <i>DESCRIPTION</i>	MATERIALE - <i>MATERIAL</i>	TRATTAMENTO - <i>TREATMENT</i>
Corpo fondelli - <i>Body caps</i>	Lega 11s - <i>Allumium 2011</i>	Anodizzazione - <i>Anodized</i>
Pistoni - <i>Pistons</i>	Lega 11s - <i>Allumium 2011</i>	
Stelo - <i>Rod</i>	Acciaio cromato - <i>Chromated steel</i>	
Viti di fissaggio - <i>Fixing screws</i>	Acciaio - <i>Steel</i>	Zincatura - <i>Galvanized</i>
Spole valvole - <i>Valves spools</i>	Acciaio inox, OT58 - <i>Stainless steel, Brass</i>	
Elementi di tenuta - <i>Seals</i>	NBR, Poliuretano - <i>NBR, Polyurethane</i>	

# Dimensionamento del serbatoio

## Tank sizing

Esempio di calcolo del tempo di riempimento di un serbatoio da 50 litri ad una pressione iniziale di 7 bar che deve essere portata a 9 bar con un moltiplicatore -UM12-040RC1.2 alimentato con una pressione di rete di 5 bar, ( Per il dimensionamento con altri moltiplicatori confrontare diagrammi da pag. 6 a pag.11).

*Calculation example about filling time of a 50 litres volume tank from starting pressure of 7 bar to final pressure of 9 bar using a pressure intensifier -UM12-040RC1.2 with a inlet pressure of a 5 bar, (for sizing with other boosters compare diagrams from page 6 to page 11).*



### Dati da conoscere - *Known data*

Pressione di alimentazione - *inlet pressure*:  $P_1 = 5$  bar ;  
Pressione iniziale serbatoio - *Starting tank pressure*:  $STP = 7$  bar ;  
Pressione finale serbatoio - *Final tank pressure*:  $FTP = 9$  bar ;  
Volume serbatoio - *Tank volume*:  $V = 50$  L ;

### Istruzioni per il calcolo del serbatoio - *Tank calculation instruction*

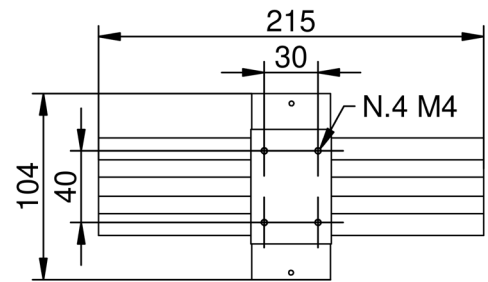
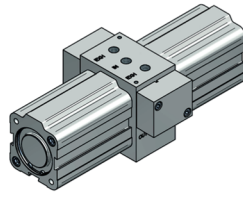
- 1) Calcolare  $STP/P_1$  e  $FTP/P_1$  ;
  - 2) Ricavare dal grafico relativo al moltiplicatore i valori del tempo
  - 3) Il tempo di riempimento di un serbatoio da 10 litri con le pressioni iniziali e finali di cui sopra è  $t = T_{2f} - T_{2s}$  ;
  - 4) Il tempo di riempimento di un serbatoio da 50 litri è  $T_{tot} = t * V / 10$ .
- 1) Calculate  $STP/P_1$  and  $FTP/P_1$  ;
  - 2) Get in the chart the time values corresponding to the
  - 3) The filling time of a 10 litres tank with initial and final pressure above indicated is  $t = T_{2f} - T_{2s}$  ;
  - 4) The filling time of a 50 litres tank is  $T_{tot} = t * V / 10$ .

### Calcolo - *Calculation*

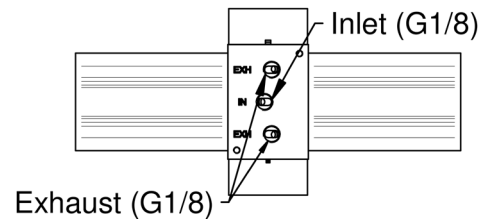
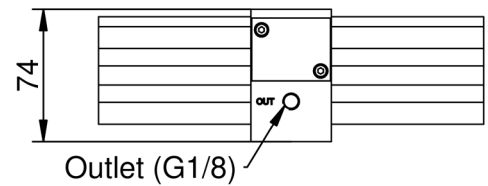
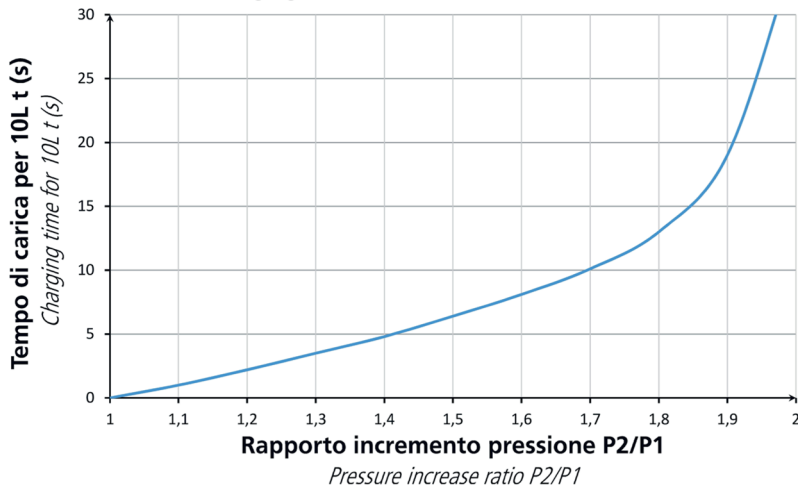
- 1)  $STP / P_1 = 7 / 5 = 1,4$  Entro nel grafico con  $P_2/P_1 = 1,4$  e trovo  $T_{2s} = 5s$  - *in the chart i find  $T_{2s} = 5s$  with  $P_2/P_1 = 1,4$  ;*
- 2)  $FTP / P_1 = 9 / 5 = 1,8$  Entro nel grafico con  $P_2/P_1 = 1,8$  e trovo  $T_{2f} = 13s$  - *In the chart i find  $T_{2f} = 13s$  with  $P_2/P_1 = 1,8$  ;*
- 3) Calcolo  $t = T_{2f} - T_{2s} = 13 - 5 = 8s$  - *Calculate  $t = T_{2f} - T_{2s} = 13 - 5 = 8s$  ;*
- 4) Il tempo di riempimento di un serbatoio da 50 litri è  $T_{tot} = 8 * 50 / 10 = 40s$  - *The filling time of a 50 litres volume tank is  $T_{tot} = 8 * 50 / 10 = 40s$ .*

Ø40 Rc=1:2

-UM12-040RC1.2

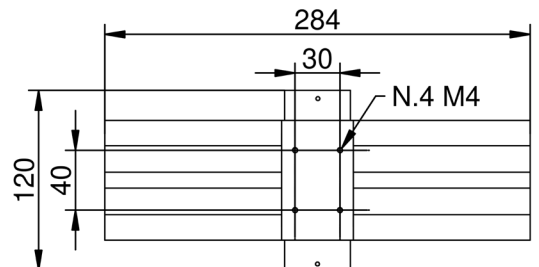
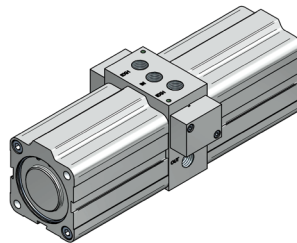


**Caratteristiche di carica -UM12-040RC1.2**  
*Charging characteristics -UM12-040RC1.2*

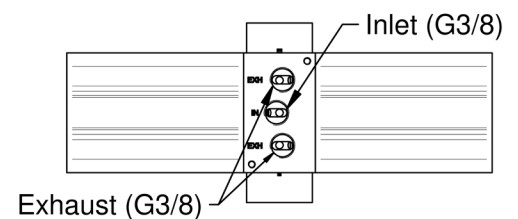
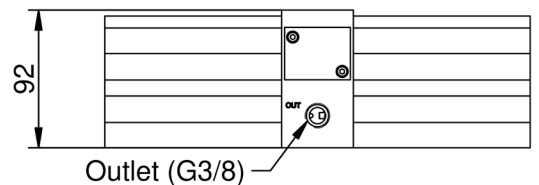
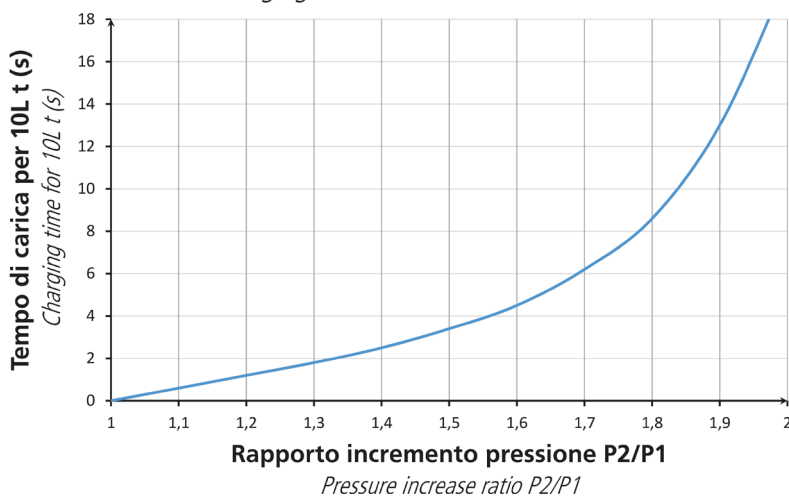


Ø063 Rc=1:2

-UM12-063RC1.2

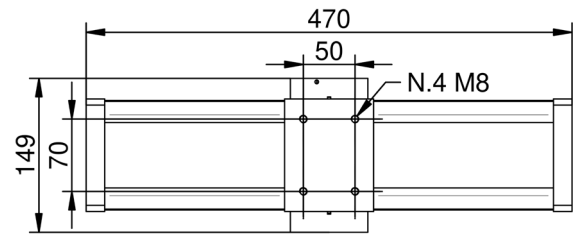
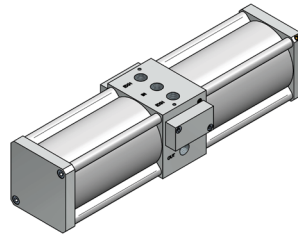


**Caratteristiche di carica -UM12-063RC1.2**  
*Charging characteristics -UM12-063RC1.2*



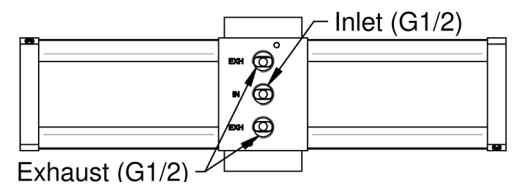
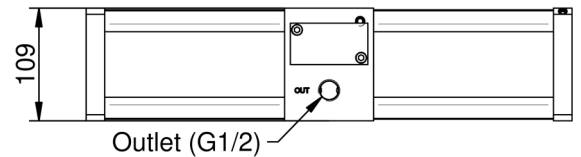
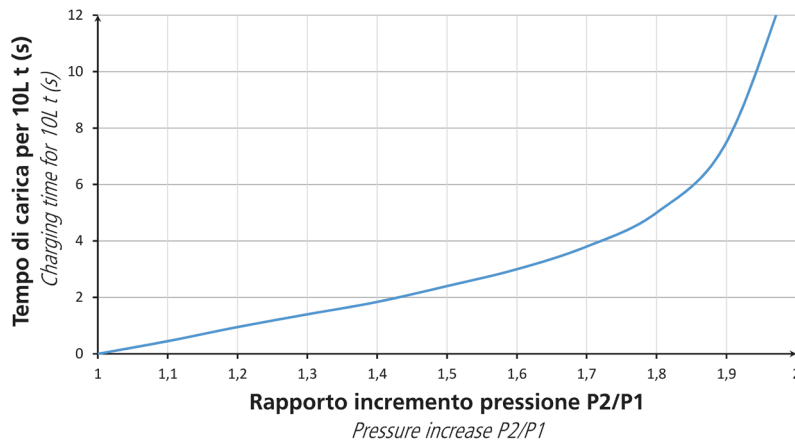
Ø100 Rc=1:2

-UM12-100RC1.2



**Caratteristiche di carica -UM12-100RC1.2**

*Charging characteristics -UM12-100RC1.2*



**Accessori - Accessories**

-UM12-040KT01

Kit ricambio guarnizioni e o-ring -  
*Gasket and o-ring replacement kit*

-UM12-063KT01

Kit ricambio guarnizioni e o-ring -  
*Gasket and o-ring replacement kit*

-UM12-100KT01

Kit ricambio guarnizioni e o-ring -  
*Gasket and o-ring replacement kit*

-UM-13040

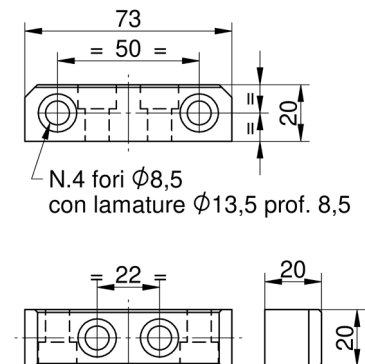
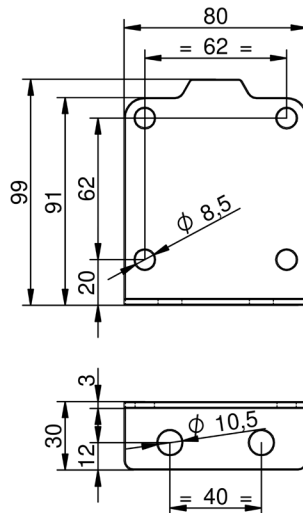
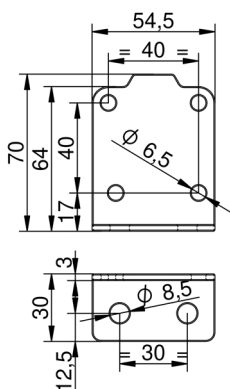
Coppia staffe di fissaggio -  
*Paris of fixing brackets*

-UM-13063

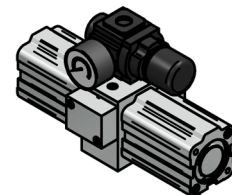
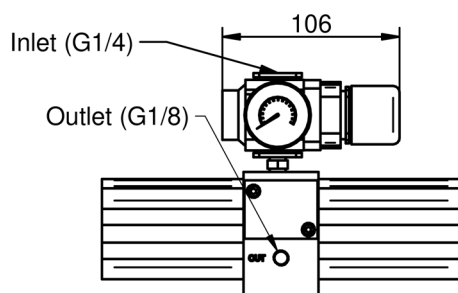
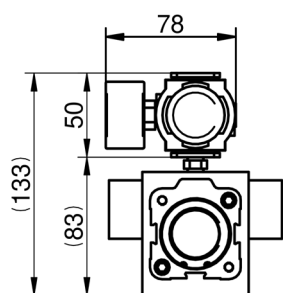
Coppia staffe di fissaggio -  
*Paris of fixing brackets*

-UM-13100

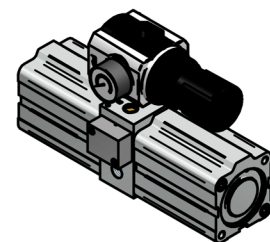
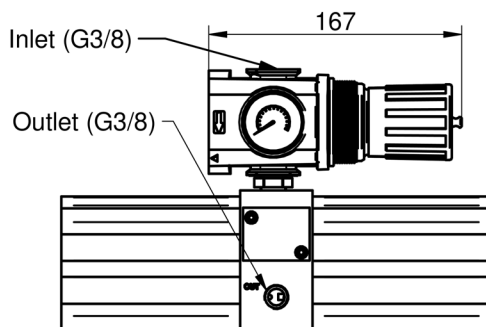
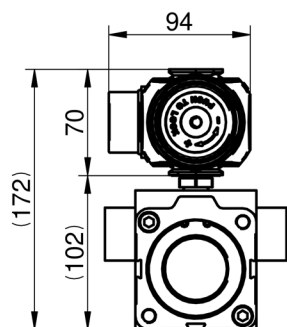
Coppia staffe di fissaggio -  
*Paris of fixing brackets*



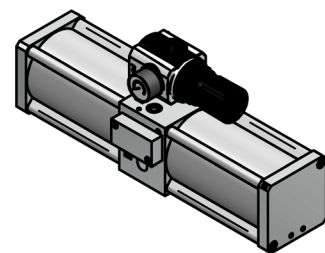
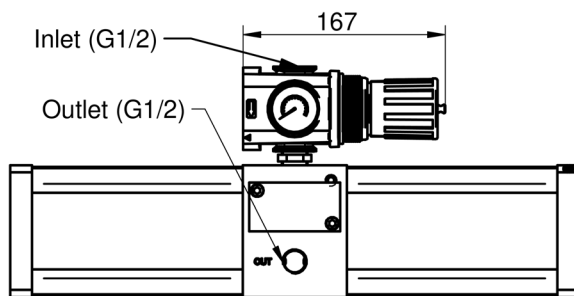
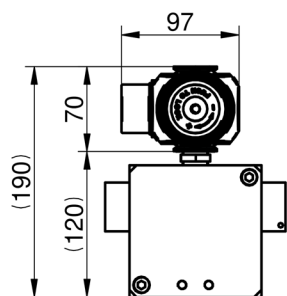
-UM22-040RC1.2 ( con regolatore ) - ( *Whit pressure regulator* )



-UM22-063RC1.2 ( con regolatore ) - ( *Whit pressure regulator* )



-UM22-100RC1.2 ( con regolatore ) - ( *Whit pressure regulator* )



## Serbatoi orizzontali con staffe - *horizontal tanks with brackets*

### - Caratteristiche generali - *General characteristics:*

Omologazione - *Approval* =

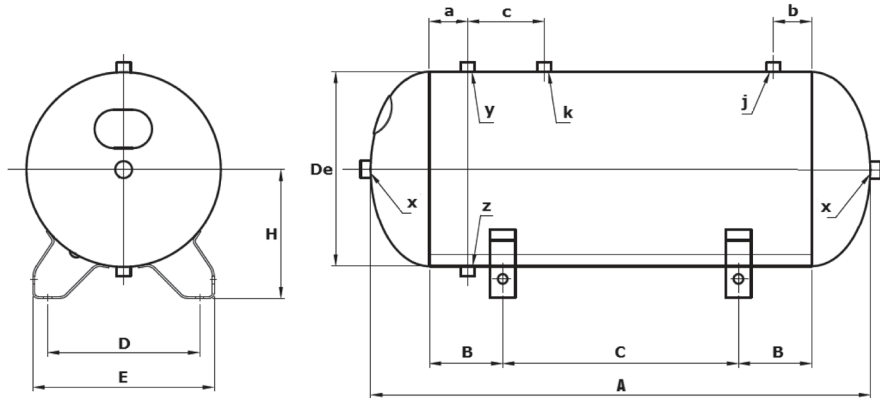
CE = 2009/105/CE

Materiale - *Material* =

Acciaio al Carbonio - *Carbon steel*

Trattamento superficiale - *Surface treatment* =

Verniciato azzurro, (a richiesta zincato) - *Blue painted, on request galvanized*



## Serbatoi standard - *standard tanks*

Capacità (l)	Codice verniciato	Pressione (bar)	De (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	H (mm)	a (mm)	b (mm)	c (mm)	x	j	y	k	z
10	-XB-00010V	11	169	506	105/66	240	172	205	114,5	49	66	-	1"	3/8"	-	-	3/8"
15	-XB-00015V	11	196	522	96/74	240	172	205	135	64	67	-	1"	3/8"	-	-	3/8"
24	-XB-00024V	11	240	592	50/11	290	180	235	165	94	34	-	1"	3/8"	-	-	3/8"
50	-XB-00050V	11	286	766	114/66	420	240	290	188,5	59	59	-	1"	3/8"	-	-	3/8"
50	-XB-00050V/15	15	305	784	100	400	236	285	202,5	100*	100	-	1/2"	1/2"	1/2"	-	1/2"

\* 300mm per il manicotto di scarico "Z" (posto al centro) - *300mm for the "Z" drain sleeve (in the center).*

\* Per serbatoi con caratteristiche differenti sono disponibili su richiesta - *For tanks with different characteristics are available on request.*

## Riduttori di alta pressione - *High pressure regulators*

### - Caratteristiche generali - *General characteristics:*

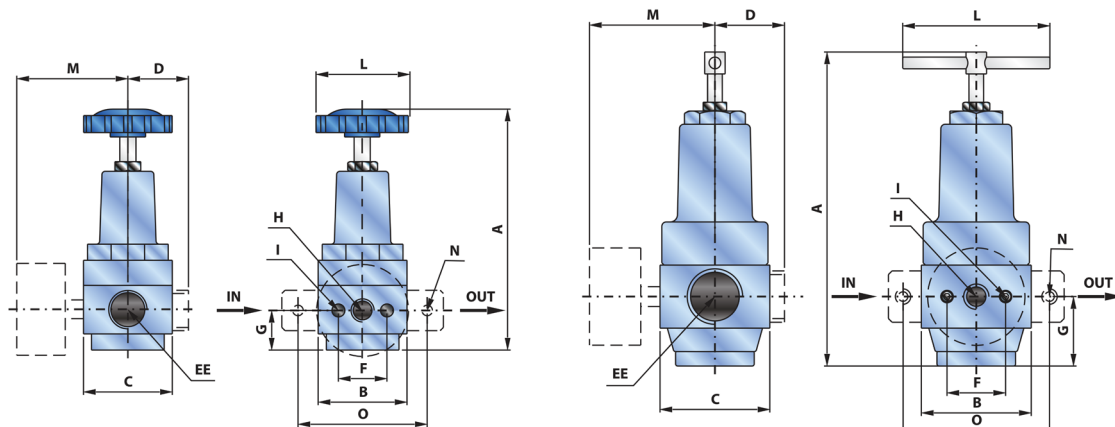
Codice Code	*Portata nominale *Nominal flow (Nl/min)	Campo di regolazione Adjustment range (bar)	Massa Mass (Kg)	Pressione max esercizio Max working pressure (bar)	Temperatura di esercizio Temperature range (°C)	Minima sovrappressione relieving Overpressure relieving (bar)
-AI-JHR.12	550	2 - 35	0,56	40	5 / +60	5
-AI-JHR.1	4000	2 - 35	1,40	40	5 / +60	5

Fluido: aria filtrata 40 microm non lubrificata. Se l'impianto richiede un lubrificatore, montarlo a valle del regolatore.

*Fluid: filtered air 40 microm not lubricated. If the system requires lubricator, mount a lubricator after the precision regulator.*

\*Portata rilevata con una pressione d'ingresso di 7 bar ed una di pressione regolata di 5 bar.

*\*Flow rate measured with an inlet pressure of 7 bar and an outlet pressure of 5 bar.*

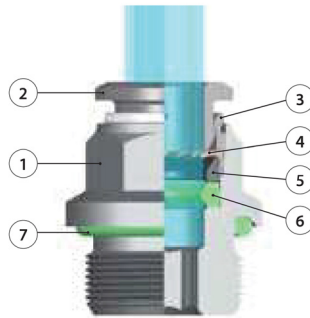


Codice Code	A	B	C	D	EE	F	G	H	I	L	M	N	O
-AI-JHR.12	140	55	55	62,5	G1/2	30	24	G1/4	M5x10	Ø59	37,5	6,5	80
-AI-JHR.1	219	75	75	71,5	G1	40	48	G1/4	M5x10	100	47,5	6,5	100



## Raccordi automatici metallici con guarnizioni FKM - *Metallic push-in fittings with FKM seal*

- Caratteristiche generali - *General characteristics:*



- Materiali e Componenti :

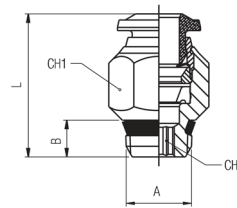
- 1 Corpo in ottone nichelato ;
- 2 Spintore sgancio tubo in ottone nichelato ;
- 3 Capsula in ottone nichelato ;
- 4 Pinza d'aggraffaggio in acciaio inox AISI 301 ;
- 5 Anello di posizionamento in tecnopolimero ;
- 6 Guarnizione sagomata in FKM ;
- 7 Guarnizione filetto in FKM ;

*Component Parts and Materials*

- 1 Nickel-plated brass Body ;
- 2 Nickel-plated brass Collet ;
- 3 Nickel-plated brass Capsule ;
- 4 Steel AISI 301 Clamping washer ;
- 5 Technopolymeric positioning ring ;
- 6 FKM Molded seal ;
- 7 FKM Thread packing ;

Pressioni <i>Pressure</i> (bar)	Temperature <i>Temperatures</i> (°C)	Fluidi compatibili <i>Fluids</i>
- 0,99 / 30	- 15 / +130	Aria Compressa / Vuoto / Acqua / Vapore

## Raccordo diretto maschio "universal short" - *Straight male adaptor "universal short"*



Codice <i>Code</i>	Tubo <i>Tube</i>	A	B	L	CH1	CH2	Pack.
-RC-40005V0 002	6	G1/8	5,5	21,5	13	4	10
-RC-40005V0 004	8	G1/8	5,5	24,5	14	5	10
-RC-40005V0 005	8	G1/4	7	22	14	6	10
-RC-40005V0 007	10	G1/4	7	28	17	7	10
-RC-40005V0 017	10	G1/2	9	26	21	8	10
-RC-40005V0 009	12	G1/4	7	31,5	20	7	10
-RC-40005V0 010	12	G3/8	7,5	29,5	20	9	10

\* Per raccordi con caratteristiche differenti sono disponibili su richiesta - *For fittings with different characteristics are available on request.*