

**cmatic**<sup>®</sup>  
PNEUMATIC FITTINGS

食品行业用高性能黄铜快插接头  
Brass Push-in Fittings for Food and High Performance Applications



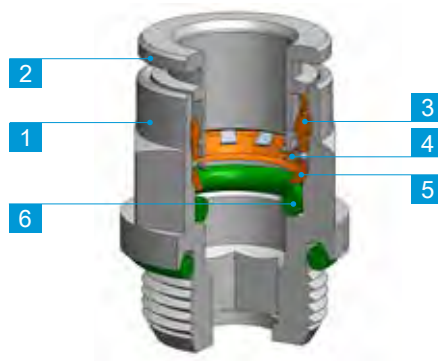
AV系列接头，黄铜化学镀镍表面处理，该产品源自符合NSF169的产品家族，是食品和化学工业的理想选择，对腐蚀和高温工作环境，具有良好的耐受性-  
所有AV系列产品材质为黄铜化学镀镍，符合NSF51规范。



The push-in fittings of the AV line are made of brass, chemical nickel plated. This product family is NSF 169 certified and as such the right product for the food and chemical industry, with a good resistance in corrosive environments and any high temperature applications.  
All AV Fittings are made of brass and are chemical nickel-plated certified NSF 51.

# AV

1 - 2	3	4	5	6
本体和释放环 Body and Release Ring	支撑环 Holding Ring	卡爪 Gripping Collet	保护环 Protection Ring	密封圈 Seals
黄铜UNI EN 12164 CW614N - UNI EN 12165 CW617N化学镀镍 Brass UNI EN 12164 CW614N - UNI EN 12165 CW617N chemical Nickel Plated	树脂 Resin (PEI) (PEI)	AISI 301不锈钢 Stainless steel AISI 301	树脂 Resin (PEI) (PEI)	FPM符合FDA FPM compliant with FDA



	M5x0.8	G1/8	G1/4	G3/8	G1/2
4	•	•	•		
6	•	•	•		
8		•	•	•	
10			•	•	•
12				•	•

## 技术规格

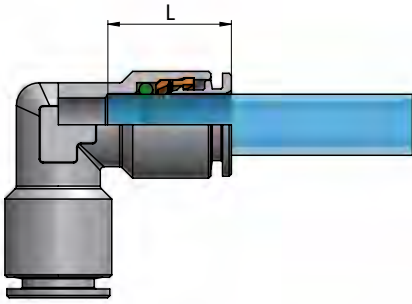
建议的连接管路：  
PA11、PA12、PA6、PE聚乙烯、PU聚氨酯（98 Shore A）。  
可接受的管路公差：  
+/- 0.07 mm，最大直径 10 mm  
+/- 0.1 mm，直径从12到 14 mm。

应用领域：  
气动系统。

## DATA SHEET

Recommended tubings:  
PA11, PA12, PA6, Polyethylene PE, Polyurethane PU (98 Shore A).  
Acceptable Tolerances on the tubings:  
+/- 0,07 mm up to Ø 10 mm  
+/- 0,1 mm from Ø 12 up to Ø 14 mm.

Application fields:  
Pneumatic circuits.



管径 $\varnothing_e$	L
3	9.8
4	13.2
6	16.1
8	16.2
10	18.3
12	19.5
14	22.5

安装说明

ASSEMBLY INSTRUCTIONS

1.沿管路垂直切割 (使用TCUT管路切刀),确认内外管壁没有毛刺,同时注意避免管路截面呈椭圆形。使用硬管路连接时,需要通过专用设备 (TINC) 在管路上开槽。开槽尺寸需要考虑管路直径,以保证可靠的连接。

1. Cut the tube square (by means of a hose cutter i.e. our TCUT) making sure that no burrs are left and that the tube is not oval.

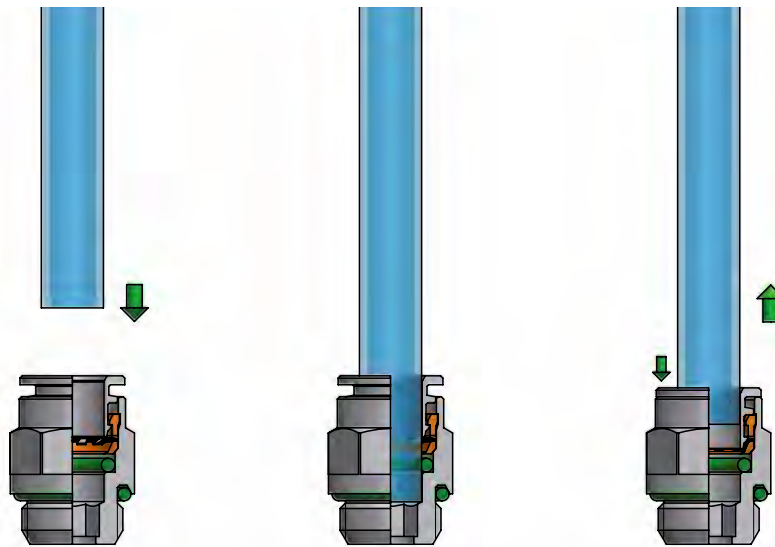
In case of use with metal hoses, make a groove all around the tube diameter with a suitable tool (TINC). The groove must be made according to the tube diameter so that the fitting collect can better grip onto it.


2.将管路插入接头,到底为止。


2. Insert the tube into the Fitting until it bottoms.

拔出管路:  
垂直按压释放环,同时拔出管路即可。

Tube release  
While pressing on the release Ring, pull out the tube from the Fitting.



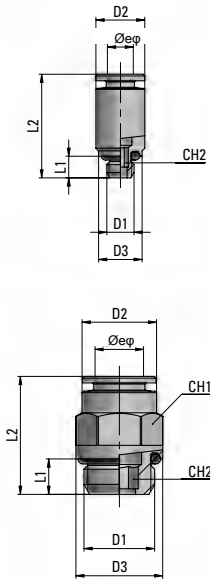
 完成连接后,请确保管路上不承受外力;此外,请确保管路连接的最小弯曲半径符合本样册第335页之规定。为了避免管路意外松脱,任何物体均不要接触释放环。作用在释放环上任何外力,包括侧向力,均可能导致管路意外松脱。螺纹拧紧时,请参考第六页列出的建议扭矩。

 Once the tubing is connected to the Fitting, make sure that the tubing is not subject to any tensile strength and that the min. recommended bending radius stated in the tubing section of this catalogue is complied with (see page 335). To prevent any accidental tube release, no components have to come in touch with the release ring and exercise any unwanted pressure on the same. Indeed however lateral, any load on the release ring may cause the tube disconnection. To tighten threads, please check out our tightening torque chart illustrated at page 6.

## AV 12

### 直螺纹直管接头

### Parallel Straight, male

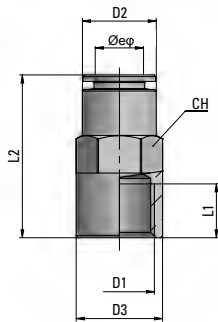


类型	管径 $\varnothing_e$	D1	D2	D3	L1	L2	CH1	CH2	g $\Delta$
12 04 M5	4	M5x0.8	9	8	4	19	-	2.5	4.6
12 06 M5	6	M5x0.8	12	8	4	22	-	2.5	8.6
12 04 18	4	G1/8	9	13	5	16.5	9	3	6
12 04 14	4	G1/4	9	16	6.5	18.5	9	3	12
12 06 18	6	G1/8	12	13.5	5	19.5	12	4	9
12 06 14	6	G1/4	12	16	6.5	19.5	12	4	12.7
12 08 18	8	G1/8	14	13	5	23.5	13	6	11.5
12 08 14	8	G1/4	14	16	6.5	21.5	14	6	13.5
12 08 38	8	G3/8	14	20	7	21	14	6	20.1
12 10 14	10	G1/4	16	16	6.5	27.5	15	8	17.4
12 10 38	10	G3/8	16	20	7	25	16	8	22.6
12 10 12	10	G1/2	16	25	8.5	25.5	16	8	34.5
12 12 14	12	G1/4	19	16	6.5	28.5	19	8	26.2
12 12 38	12	G3/8	19	20	7	28.5	19	10	29
12 12 12	12	G1/2	19	25	8.5	26.5	19	10	36.1

## AV 13

### 内螺纹直管接头

### Female Straight

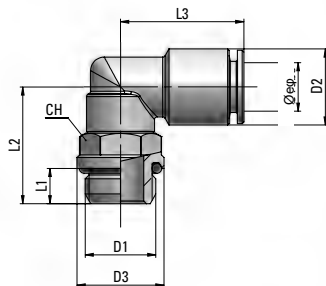


类型	管径 $\varnothing_e$	D1	D2	D3	L1	L2	CH	g $\Delta$
13 04 18	4	G1/8	9	13	7.5	23.5	9	10
13 06 18	6	G1/8	12	14	7.5	26	12	15.1
13 06 14	6	G1/4	12	16	11	30	12	18.5
13 08 18	8	G1/8	14	13	7.5	26	14	17.5
13 08 14	8	G1/4	14	16	11	30	14	20.2
13 10 14	10	G1/4	16	16	11	32	16	24.4

## AV 16

### 可调向直外螺纹弯管接头

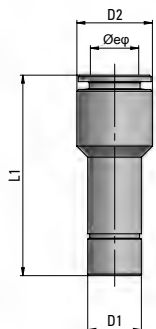
### Parallel Swivelling Elbow Fitting, male



类型	管径 $\varnothing_e$	D1	D2	D3	L1	L2	L3	CH	g $\Delta$
16 04 M5	4	M5x0.8	9	10	4	14	17.5	9	8.8
16 04 18	4	G1/8	9	14.5	5	18	19.5	13	15.7
16 04 14	4	G1/4	9	16	6.5	21.5	19.5	13	19
16 06 M5	6	M5x0.8	12	10	4	14	20.5	9	11.9
16 06 18	6	G1/8	12	14.5	5	18	22	13	18.5
16 06 14	6	G1/4	12	16	6.5	21.5	22	13	21.8
16 08 18	8	G1/8	14	14.5	5	18	22.5	13	22
16 08 14	8	G1/4	14	16	6.5	21.5	22.5	13	25.3
16 08 38	8	G3/8	14	20	7	25.5	23	16	37.7
16 10 14	10	G1/4	16	16	6.5	22	26	16	34
16 10 38	10	G3/8	16	20	7	25.5	26	16	39.5
16 10 12	10	G1/2	16	25	8.5	27.5	26	16	43.2
16 12 14	12	G1/4	19	16	6.5	25.5	28.5	20	58.5
16 12 38	12	G3/8	19	20	7	26	28.5	20	57
16 12 12	12	G1/2	19	25	8.5	30.5	28.5	20	65.1

## AV 25

### 减径接头

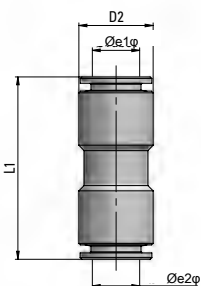


### Reducer

类型	管径Øe	D1	D2	L1	g $\Delta\Delta$
25 04 06	4	6	9	33.5	7
25 06 08	6	8	12	35	11.5
25 08 10	8	10	14	37	15
25 10 12	10	12	16	42	20

## AV 26

### 对接接头

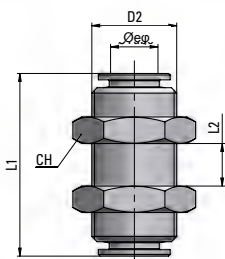


### Union

类型	管径1Øe	管径2Øe D2	L1	g $\Delta\Delta$	
26 04 04	4	4	9	28	6.8
26 06 06	6	6	12	33.5	15
26 06 04	6	4	12	31	14.7
26 08 08	8	8	14	34	18
26 08 06	8	6	14	34	21
26 10 10	10	10	16	38.5	22.5
26 10 08	10	8	16	36.5	25.2
26 12 12	12	12	19	41	36.6

## AV 27

### 穿板对接接头

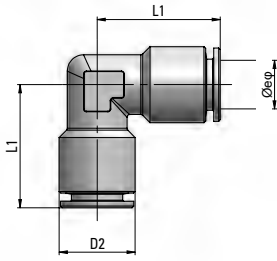


### Bulkhead Union

类型	管径Øe	D2	L1	L3 最大	CH	g $\Delta\Delta$
27 04 04	4	M12x1	28	11	16	23.5
27 06 06	6	M14x1	34	16	18	33
27 08 08	8	M16x1	34	17	20	39.5
27 10 10	10	M18x1	39	19	22	51.5
27 12 12	12	M20x1	41	20	24	60

## AV 28

### 直角对接接头

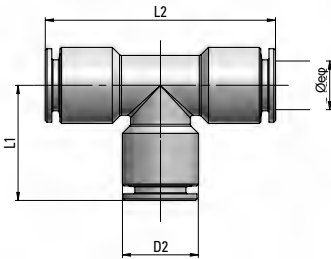


### Union Elbow

类型	管径Øe	D2	L1	g ΔΔ
28 04 04	4	9	17.5	9
28 06 06	6	12	20.5	16.5
28 08 08	8	14	22.5	22
28 10 10	10	16	25	29.5
28 12 12	12	19	26.5	48.5

## AV 29

### 正T型三通接头

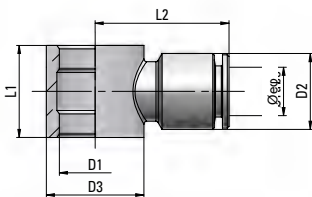


### Union Tee

类型	管径Øe	D2	L1	L2	g ΔΔ
29 04 04	4	9	17.5	35	12.5
29 06 06	6	12	20	40	22.5
29 08 08	8	14	21	42	28.4
29 10 10	10	16	24.5	49	39.2
29 12 12	12	19	26	52	61.3

## AV 35

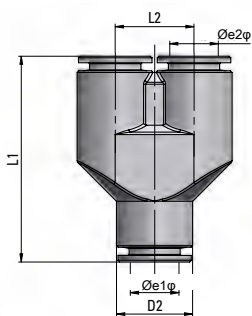
### 单通铰接接头本体



### Single Banjo Ring

类型	管径Øe	D1	D2	D3	L1	L2	g ΔΔ
35 04 M5	4	M5	9	10	10	18.5	7.7
35 04 18	4	1/8	9	14	15	20.5	13.5
35 06 M5	6	M5	12	10	10	21.5	10.9
35 06 18	6	1/8	12	14	15	22.5	15.5
35 06 14	6	1/4	12	18	17	24	21.6
35 08 18	8	1/8	14	14	15	23.5	16.7
35 08 14	8	1/4	14	18	17	24.5	22.8
35 10 14	10	1/4	16	18	17	27	27.2
35 10 38	10	3/8	16	22	20	29	39.5
35 12 38	12	3/8	19	22	20	29.5	38.8
35 12 12	12	1/2	19	27	24	31.5	56.9

/R = 仅用于流量调节器 - For flow controls only



类型	管径1Øe	管径2Øe	D2	L1	L2	g $\Delta$
37 04 04	4	4	9	29.5	9.5	13.5
37 06 06	6	6	12	36	12.5	32
37 08 08	8	8	14	37.5	14.5	42.5
37 10 10	10	10	16	44.5	16.5	62.7
37 12 12	12	12	19	49	19.5	95.8