

cmatic[®]
P N E U M A T I C F I T T I N G S

英制/NPT DOT快插接头
DOT Push-in Fittings, Inch/NPT



机动车辆应用的快插接头，符合DOT FMVSS §571.106, SAE J2493-3 和 SAE J1131 标准要求



Push in fittings for Vehicles applications complying with DOT FMVSS §571.106, SAE J2493-3 and SAE J1131 specs.

PT

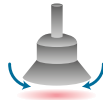
1 - 2	3	4	5	6		
本体与释放环 Body and Release Ring	支撑环 Holding Ring	卡爪 Gripping collet	保护环 Protection Ring	密封圈 Seals		
镀镍黄铜 UNI EN 12164 CW614N - UNI EN 12165 CW617N Brass UNI EN 12164 CW614N - UNI EN 12165 CW617N Nickel Plated	树脂 Resin	(PEI) (PEI)	AISI 301 不锈钢 Stainless steel AISI 301	树脂 Resin	(PEI) (PEI)	HNBR HNBR



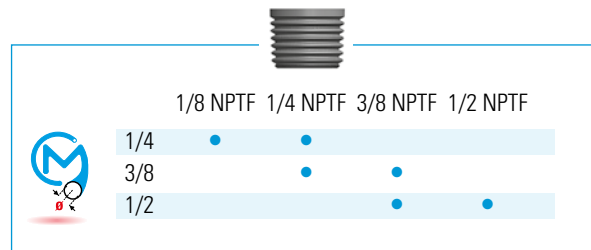
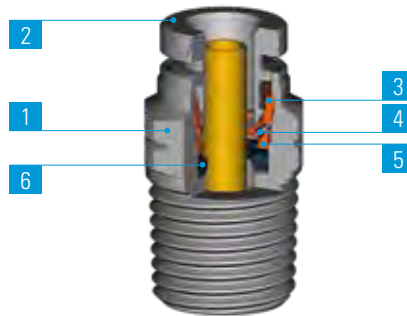
-50°C - 120°C



最大 20 bar



-99 KPa



技术规格

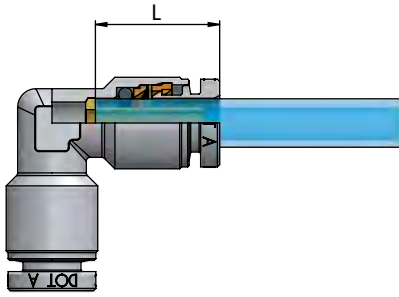
建议的连接管路：
符合 SAE (DOT) 规范的 PA 管路。

应用领域：
用于车辆和拖车的气动回路：悬挂、制动系统、变速箱、门窗闭合、座椅调整、仪表、空调系统、喇叭、雨刮器电机、阀门、气缸及配件。

DATA SHEET

Recommended tubings:
PA Tubings complying with SAE (DOT).

Application fields:
Application Fields: Pneumatic circuits for truck and Trailers : Air Suspension, Braking Systems, Transmissions, locking doors and windows, Seat adjustment, Instrumentation, Air conditioning systems, horn, wiper motors, valves, cylinders and accessories.



管径 \varnothing_e	L
1/4	17.6
3/8	19.3
1/2	20.5

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。
- 2.将管路插入接头,到底为止。

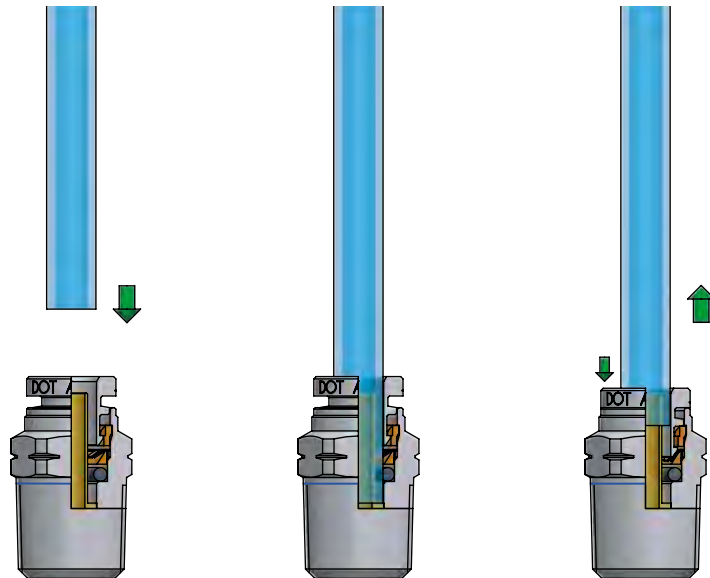
1. Cut the tube square (by means of a hose cutter i.e. our TCUT) making sure that no burrs are left and that the tube is not oval.
2. Insert the tube into the fitting until it bottoms.

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。



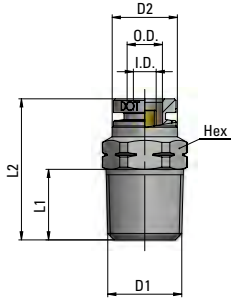
Once the tubing is connected to the fitting, make sure that the tubing is not subject to any tensile strength and that the min. recommended bending radius stated in the tubing section of this catalogue is complied with (see page 335).

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.

PT 11

锥螺纹直管接头

Taper Straight, male

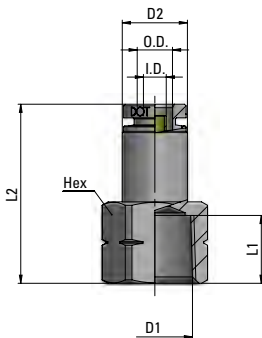


类型	OD管外径	ID管内径	D1 NPTF	D2	L1	L2	HEX	g	△
11 1/4 1/8	1/4"	4.2	1/8	12	8.5	23.5	1/2	-	-
11 1/4 1/4	1/4"	4.2	1/4	12	13	26	9/16	-	-
11 1/4 3/8	1/4"	4.2	3/8	12	13	27	11/16	-	-
11 3/8 1/8	3/8"	6.2	1/8	16	8.5	29.5	11/16	-	-
11 3/8 1/4	3/8"	6.2	1/4	16	13	33	11/16	-	-
11 3/8 3/8	3/8"	6.2	3/8	16	13	26.5	11/16	-	-
11 3/8 1/2	3/8"	6.2	1/2	16	17	31.5	7/8	-	-
11 1/2 1/4	1/2"	9.2	1/4	20	13	35.5	13/16	-	-
11 1/2 3/8	1/2"	9.2	3/8	20	13	30.5	13/16	-	-
11 1/2 1/2	1/2"	9.2	1/2	20	17	31.5	7/8	-	-

PT 13

内螺纹直管接头

Female Straight

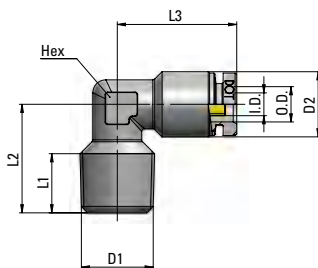


类型	OD管外径	ID管内径	D1 NPTF	D2	L1	L2	HEX	g	△
13 1/4 1/8	1/4"	4.2	1/8	12	8.5	28.5	1/2	-	-
13 1/4 1/4	1/4"	4.2	1/4	12	12.5	33	11/16	-	-
13 3/8 1/4	3/8"	6.2	1/4	16	12.5	35	11/16	-	-
13 3/8 3/8	3/8"	6.2	3/8	16	12.5	35	13/16	-	-

PT 14

锥外螺纹弯管接头

Taper Elbow Fitting, male

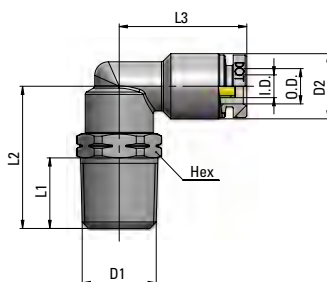


类型	OD管外径	ID管内径	D1 NPTF	D2	L1	L2	L3	HEX	g	△
14 1/4 1/8	1/4"	4.2	1/8	12	8.5	16	22	10	-	-
14 1/4 1/4	1/4"	4.2	1/4	12	11	20	22	10	-	-
14 3/8 1/4	3/8"	6.2	1/4	16	12	22.5	26	14	-	-
14 3/8 3/8	3/8"	6.2	3/8	16	11	22.5	26	14	-	-

PT 15

可调向锥外螺纹弯管接头

Taper Swivelling Elbow Fitting, male

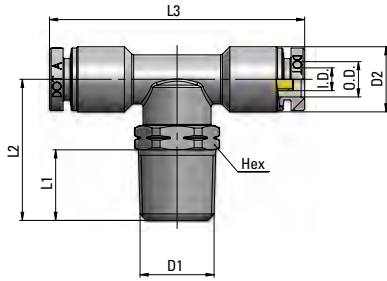


类型	OD管外径	ID管内径	D1 NPTF	D2	L1	L2	L3	HEX	g	△
15 1/4 1/8	1/4"	4.2	1/8	12	8.5	21	23.5	1/2	-	-
15 1/4 1/4	1/4"	4.2	1/4	12	13	26	23.5	9/16	-	-
15 1/4 3/8	1/4"	4.2	3/8	12	13	26.5	23.5	11/16	-	-
15 3/8 1/8	3/8"	6.2	1/8	16	8.5	24	27	11/16	-	-
15 3/8 1/4	3/8"	6.2	1/4	16	13	28.5	27	11/16	-	-
15 3/8 3/8	3/8"	6.2	3/8	16	13	28.5	27	11/16	-	-
15 3/8 1/2	3/8"	6.2	1/2	16	17	34	27	7/8	-	-
15 1/2 1/4	1/2"	9.2	1/4	20	13	32	30	13/16	-	-
15 1/2 3/8	1/2"	9.2	3/8	20	13	32	30	13/16	-	-
15 1/2 1/2	1/2"	9.2	1/2	20	17	36.5	30	7/8	-	-

PT 20

可调向锥螺纹正T型三通接头

Swivelling Tee Fitting, taper

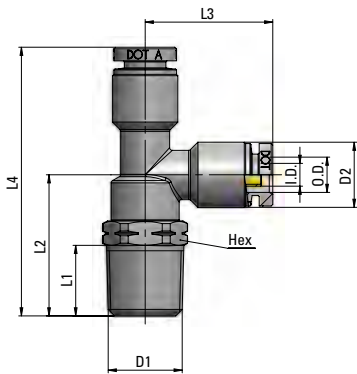


类型	OD管外径	ID管内径	D1 NPTF	D2	L1	L2	L3	HEX	g $\Delta\Delta$
20 1/4 1/8	1/4"	4.2	1/8	12	8.5	21	47	1/2	-
20 1/4 1/4	1/4"	4.2	1/4	12	13	26	47	9/16	-
20 3/8 1/4	3/8"	6.2	1/4	16	13	28.5	54	11/16	-
20 3/8 3/8	3/8"	6.2	3/8	16	13	28.5	54	11/16	-
20 1/2 3/8	1/2"	9.2	3/8	20	13	32	59.5	13/16	-
20 1/2 1/2	1/2"	9.2	1/2	20	17	36.5	59.5	7/8	-

PT 23

可调向锥螺纹直T型三通接头

Lateral Swivelling Tee Fitting, taper

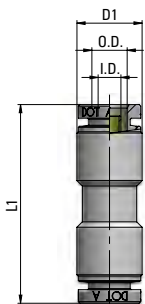


类型	OD管外径	ID管内径	D1 NPTF	D2	L1	L2	L3	L4	HEX	g $\Delta\Delta$
23 1/4 1/8	1/4"	4.2	1/8	12	8.5	21	23.5	44.5	1/2	-
23 1/4 1/4	1/4"	4.2	1/4	12	13	26	23.5	49.5	9/16	-
23 3/8 1/4	3/8"	6.2	1/4	16	13	28.5	27	55.5	11/16	-
23 3/8 3/8	3/8"	6.2	3/8	16	13	28.5	27	55.5	11/16	-
23 1/2 3/8	1/2"	9.2	3/8	20	13	32	30	62	13/16	-
23 1/2 1/2	1/2"	9.2	1/2	20	17	36.5	30	66	7/8	-

PT 26

对接接头

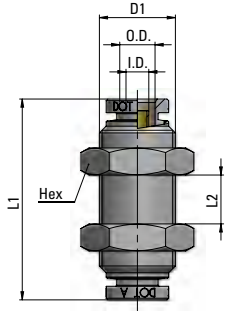
Union



类型	OD管外径	ID管内径	D2	L1	g $\Delta\Delta$
26 1/4 1/4	1/4"	4.2	12	36.5	-
26 3/8 3/8	3/8"	6.2	16	40.5	-
26 1/2 1/2	1/2"	9.2	20	43.5	-

PT 27

穿板对接接头

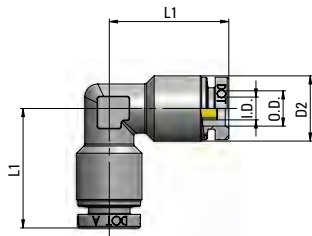


Bulkhead Union

类型	OD管外径	ID管内径 D1	L1	L2	HEX	g	ΔΔ
27 1/4 1/4	1/4"	4.2	M14x1	37	14.5	18	-
27 3/8 3/8	3/8"	6.2	M18x1	41	17.5	22	-
27 1/2 1/2	1/2"	9.2	M22x1.5	43.5	18.5	26	-

PT 28

直角对接接头

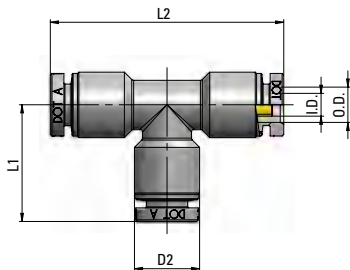


Union Elbow

类型	OD管外径	ID管内径 D2	L1	L2	g	ΔΔ
28 1/4 1/4	1/4"	4.2	12	22	-	-
28 3/8 3/8	3/8"	6.2	16	26	-	-
28 1/2 1/2	1/2"	9.2	20	28	-	-

PT 29

正T型三通接头



Union Tee

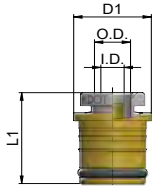
类型	OD管外径	ID管内径 D2	L1	L2	g	ΔΔ
29 1/4 1/4	1/4"	4.2	12	21.5	43	-
29 3/8 3/8	3/8"	6.2	16	25.5	51	-
29 1/2 1/2	1/2"	9.2	20	28	56	-

埋入式接头

PT 10埋入接头是Cmatic专为需要紧凑空间的应用而开发的产品方案，根据SAE J2494-4标准，可以安装在铝 T6061材质的基座上。其他材质基座，需要调整埋入孔尺寸，以使管路，埋入接头和基座的安装配合能够符合SAE J1131和SAE J2494-3的适用性测试。

Press-in Cartridge

PT10 is Cmatic push in cartridge solution developed for applications where compactness is required and designed to be installed into Aluminum T6061 cavities according to SAE J2494-4 Standard. Cavities made from materials other than T6061 T6 SHALL be adjusted dimensionally so that when installed the tube/cartridge/cavity assembly will pass the applicable tests in SAE J1131 and SAE J2494-3.

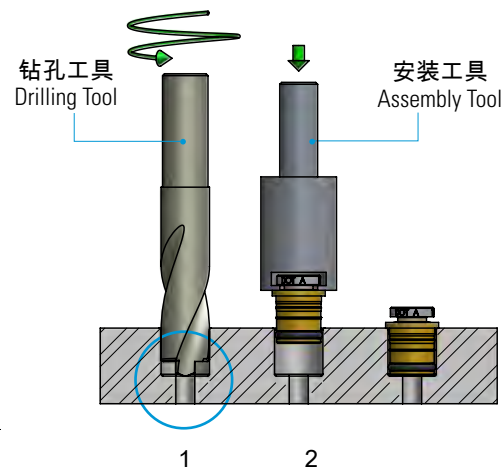
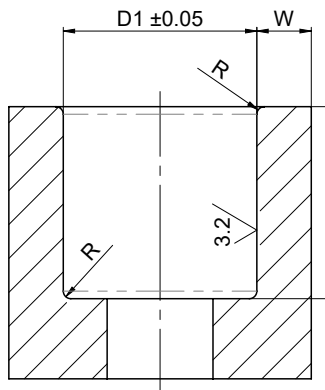


类型	O.D.管径	I.D.管径	D1	L1	g ΔΔ
10 5/32 00	5/32"	2,2	10	17,2	3,6
10 1/4 00	1/4"	4,2	14	18,5	6
10 3/8 00	3/8"	6,2	17,8	22,3	10,3

埋入孔尺寸依据SAE J2494-4标准要求

Cartridge Cavity Size according to SAE J2494-4

OD管径	D1	L1	W	R
5/32"	8,8	11,4	2	0,5
1/4"	12,8	12,7	2	0,5
3/8"	16,5	16,5	2	0,5



- 1.请依照给出的指导说明来进行埋入孔加工。
- 2.在把埋入接头压入埋入孔前，需要在其外部O型圈上涂抹润滑油
- 3.手动将接头按压入埋入孔，再使用埋入工具进行压装，直至底部，这样就确保了正确安装

可以根据需要提供转孔和安装工具

1. Drill the cartridge cavity seat, following the instructions given.
2. Before insert the cartridge into the cavity please apply some lubricant on the external cartridge o-ring
3. Manually press the cartridge into the seat and by means of the assembly tool push it all the way down until it bottoms; this will guarantee the proper cartridge assembly.

"Drilling and Assembly Tool" available upon request.