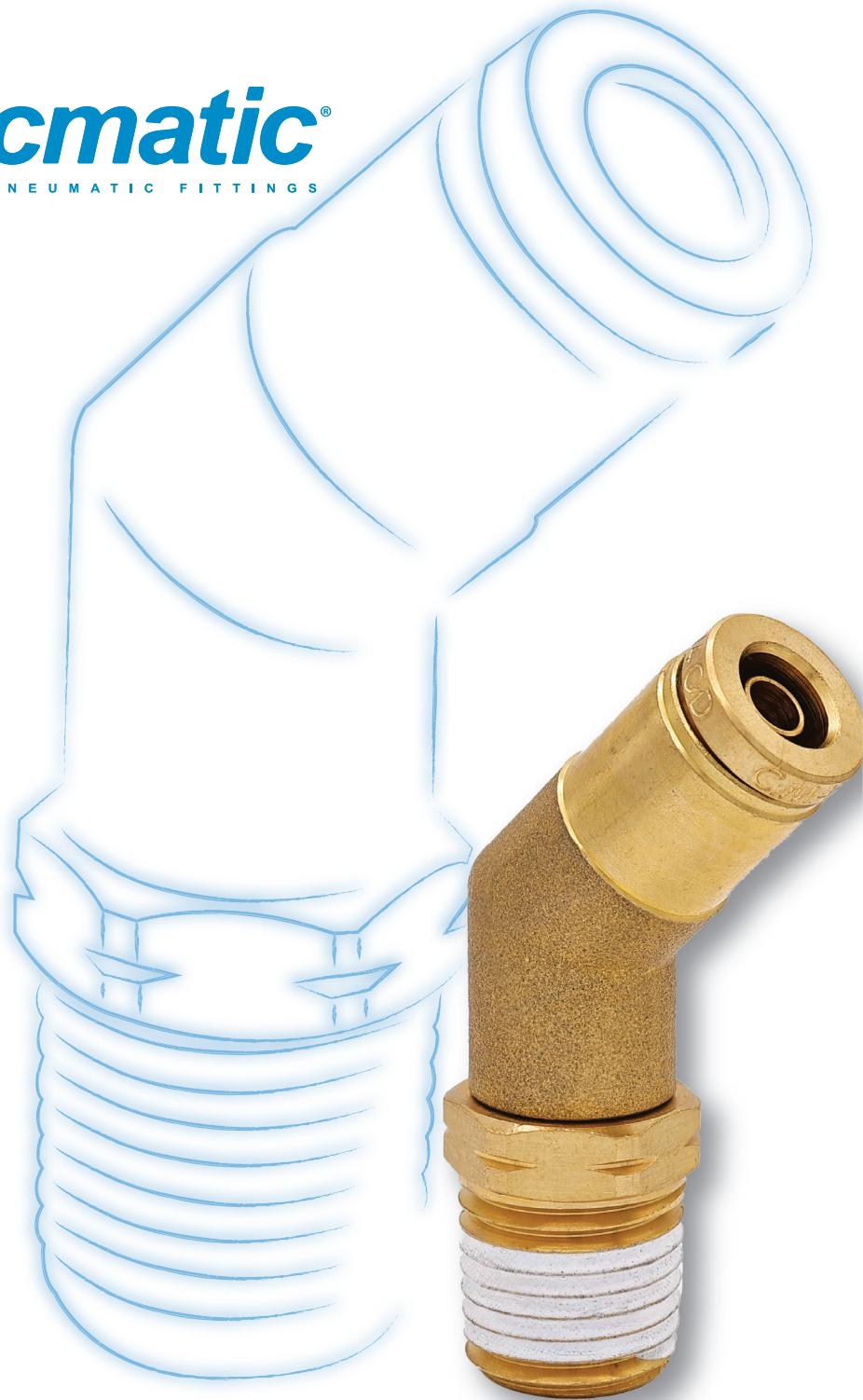
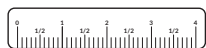


cmatic[®]
PNEUMATIC FITTINGS



INCH



PT LINE



CN

英制/NPT DOT快插接头

适用于车辆应用的快插式管接头，符合SAE J2494-4与SAE J1131规范。
Cmatic PT系列专为车辆气动回路和组件设计，但不适用于车架与车轴之间或牵引车与被牵引车之间的连接。该系列同时符合美国交通部FMVSS 517.106标准要求。

EN

DOT Push-in Fittings, Inch/NPT

Push in fittings for Vehicles applications complying with SAE J2494-4 and SAE J1131 specs.

Cmatic PT Line is designed for use on all pneumatic circuits and assemblies except between the frame and axle, or between a towed and towing vehicle. PT also complies with DOT FMVSS 517.106 standard.

PT Line

- 1** 本体
Body

黄铜镀镍 UNI EN 12164 CW614N - UNI EN 12165 CW617N
Brass UNI EN 12164 CW614N - UNI EN 12165 CW617N
- 2** 释放环
Release ring
- 3** 支撑环
Holding ring

树脂
Resin
- 4** 卡爪
Gripping ring

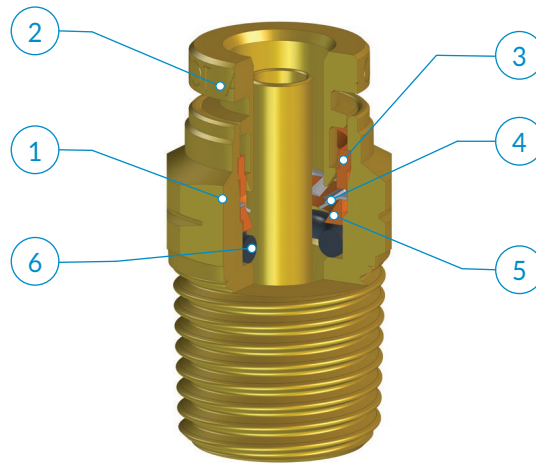
(PEI)
(PEI)

AISI 301 不锈钢
Stainless steel AISI 301
- 5** 保护环
Protection ring

树脂
Resin
- 6** 密封圈
Seals

(PEI)
(PEI)

NBR (低温型)
NBR (Low temperature)



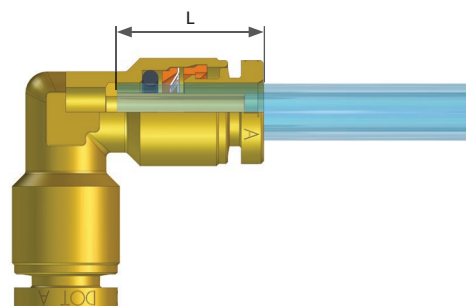
	1/8 NPTF	1/4 NPTF	3/8 NPTF	1/2 NPTF	3/4 NPTF
5/32	●	●			
1/4	●	●	●		
3/8	●	●	●	●	
1/2		●	●	●	
5/8			●	●	●
3/4			●	●	●

建议的连接管路:
符合SAE (DOT) 规范的PA管路。

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

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。
专为所有气动回路和组件设计, 但不适用于车架与车轴之间或牵引车与被牵引车之间的连接。

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.
PT line is suitable for all air assisted applications except those designed for use between frame and axle or between towed and towing vehicles.



OD	L
5/32	13,9
1/4	16,3
3/8	18,3
1/2	19,7
5/8	23,3
3/4	25,1

安装说明

ASSEMBLY INSTRUCTIONS

1

沿管路垂直切割 (使用TCUT切管刀),确认内外管壁没有毛刺,同时注意避免管路截面呈椭圆形。

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

将管路插入接头,到底为止。

2

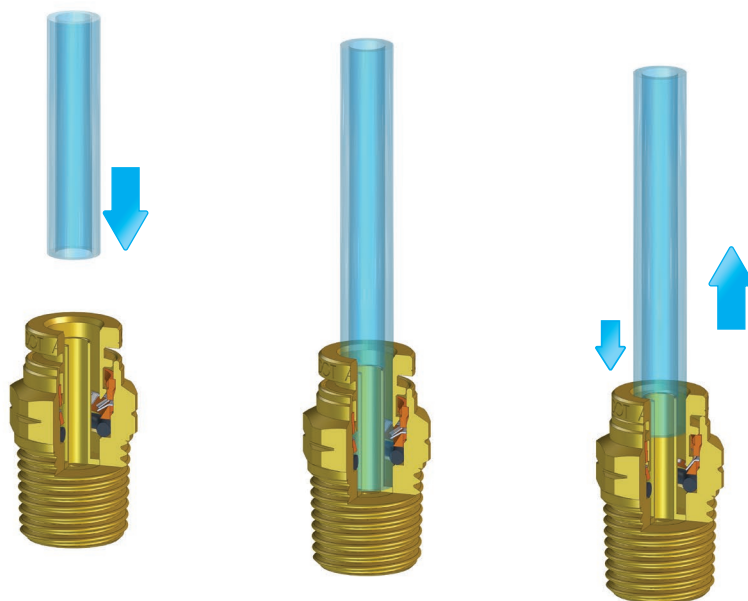
Insert the tube into the fitting until it bottoms.

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376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10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 376).

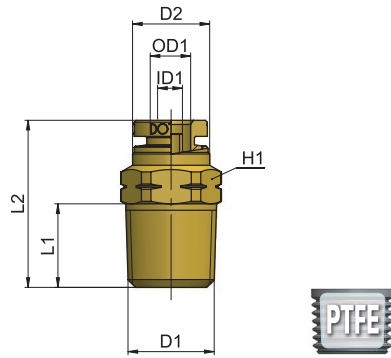
To prevent any accidental tube release, no components have to come in touch with the release ring and exercise any unwanted pressure on the same. Indeed however lateral, any load on the release ring may cause the tube disconnection.

To tighten threads, please check out our tightening torque chart illustrated at page 10.

PT 11

外锥螺纹直接头

Taper straight, male

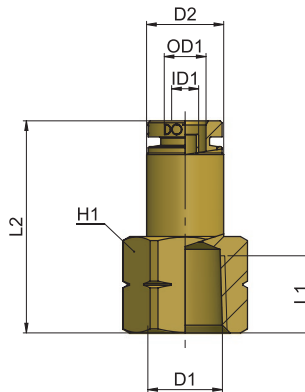


类型	OD1	ID1	D1	D2	L1	L2	H1	g Δ
11 5/32 1/8	5/32	2,2	1/8 NPTF	9,5	8,5	21	7/16	9,8
11 5/32 1/4	5/32	2,2	1/4 NPTF	9,5	13	25,5	9/16	21,1
11 1/4 1/8	1/4	4,2	1/8 NPTF	12	8,5	23,5	1/2	11,8
11 1/4 1/4	1/4	4,2	1/4 NPTF	12	13	26	9/16	19,8
11 1/4 3/8	1/4	4,2	3/8 NPTF	12	13	27	11/16	33,4
11 3/8 1/8	3/8	6,2	1/8 NPTF	16	8,5	29,5	11/16	24,0
11 3/8 1/4	3/8	6,2	1/4 NPTF	16	13	33	11/16	30,5
11 3/8 3/8	3/8	6,2	3/8 NPTF	16	13	26,5	11/16	28,4
11 3/8 1/2	3/8	6,2	1/2 NPTF	16	17	31,5	7/8	60,3
11 1/2 1/4	1/2	9,2	1/4 NPTF	20	13	35,7	13/16	40,4
11 1/2 3/8	1/2	9,2	3/8 NPTF	20	13	30,7	13/16	34,8
11 1/2 1/2	1/2	9,2	1/2 NPTF	20	17	31,7	7/8	50,9
11 5/8 3/8	5/8	11	3/8 NPTF	23,5	13	39,5	1	68,5
11 5/8 1/2	5/8	11	1/2 NPTF	23,5	17	38	1	63,0
11 3/4 3/8	3/4	14,2	3/8 NPTF	26,5	13	43,5	1 1/16	73,0
11 3/4 1/2	3/4	14,2	1/2 NPTF	26,5	17	45,5	1 1/16	85,9
11 3/4 3/4	3/4	14,2	3/4 NPTF	26,5	17	39	1 1/16	88,2

PT 13

内螺纹直接头

Female straight

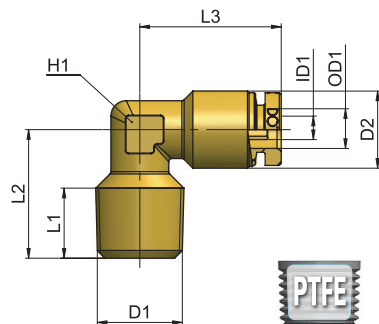


类型	OD1	ID1	D1	D2	L1	L2	H1	g Δ
13 5/32 1/8	5/32	2,2	1/8 NPTF	9,5	8,5	26,5	1/2	12,0
13 1/4 1/8	1/4	4,2	1/8 NPTF	12	8,5	28,5	1/2	16,0
13 1/4 1/4	1/4	4,2	1/4 NPTF	12	12	33	11/16	28,5
13 3/8 1/4	3/8	4,2	1/4 NPTF	16	12	35	11/16	22,0
13 3/8 3/8	3/8	6,2	3/8 NPTF	16	12,5	35	13/16	40,3
13 3/8 1/2	3/8	6,2	1/2 NPTF	16	13,5	38,5	1	62,1
13 1/2 1/4	1/2	9,2	1/4 NPTF	20	12	35,2	13/16	56,6
13 1/2 3/8	1/2	9,2	3/8 NPTF	20	12,5	36,7	13/16	51,8
13 1/2 1/2	1/2	9,2	1/2 NPTF	20	13,5	39,2	1	69,0

PT 14

外锥螺纹弯管接头

Taper elbow fitting, male

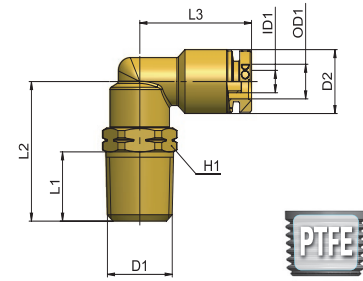


类型	OD1	ID1	D1	D2	L1	L2	L3	H1	g Δ
14 5/32 1/8	5/32	2,2	1/8 NPTF	9,5	8,4	16	19	10	12,0
14 1/4 1/8	1/4	4,2	1/8 NPTF	12	8,4	16	22	10	14,7
14 1/4 1/4	1/4	4,2	1/4 NPTF	12	11	20	22	10	18,6
14 3/8 1/4	3/8	6,2	1/4 NPTF	16	12	22,5	26	14	32,5
14 3/8 3/8	3/8	6,2	3/8 NPTF	16	11	22,5	26	14	35,7

PT 15

可调向外锥螺纹弯管接头

Taper swivelling elbow fitting, male

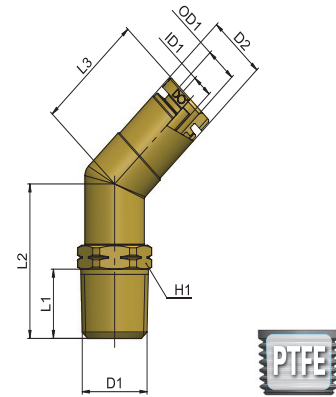


类型	OD1	ID1	D1	D2	L1	L2	L3	H1	g Δ
15 5/32 1/8	5/32	2,2	1/8 NPTF	9	8,5	18,5	19	7/16	18,5
15 5/32 1/4	5/32	2,2	1/4 NPTF	9	13	26,2	21	9/16	24,2
15 1/4 1/8	1/4	4,2	1/8 NPTF	12	8,5	21,2	23,5	1/2	21,0
15 1/4 1/4	1/4	4,2	1/4 NPTF	12	13	26,2	23,5	9/16	26,0
15 1/4 3/8	1/4	4,2	3/8 NPTF	12	13	26,7	23,5	11/16	32,4
15 3/8 1/8	3/8	6,2	1/8 NPTF	16	8,5	24	27	11/16	41,4
15 3/8 1/4	3/8	6,2	1/4 NPTF	16	13	28,5	27	11/16	44,3
15 3/8 3/8	3/8	6,2	3/8 NPTF	16	13	28,5	27	11/16	45,7
15 3/8 1/2	3/8	6,2	1/2 NPTF	16	17	34	27	7/8	64,0
15 1/2 1/4	1/2	9,2	1/4 NPTF	20	13	32	29,7	13/16	73,5
15 1/2 3/8	1/2	9,2	3/8 NPTF	20	13	32	29,7	13/16	68,3
15 1/2 1/2	1/2	9,2	1/2 NPTF	20	17	36,5	29,7	7/8	81,6
15 5/8 3/8	5/8	11	3/8 NPTF	24	13	35,5	36	7/8	102,8
15 5/8 1/2	5/8	11	1/2 NPTF	24	17	39,5	36	7/8	108,4
15 5/8 3/4	5/8	11	3/4 NPTF	24	17	39,5	36	1 1/16	124,9
15 3/4 3/8	3/4	14,2	3/8 NPTF	27	13	35,5	38	7/8	124,3
15 3/4 1/2	3/4	14,2	1/2 NPTF	27	17	39,5	38	7/8	130,0
15 3/4 3/4	3/4	14,2	3/4 NPTF	27	17	39,5	38	1 1/16	146,9

PT 15-45

可调向45°外螺纹接头

Swivelling elbow fitting, male 45°

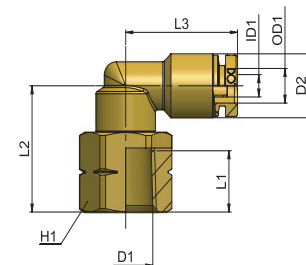


类型	OD1	ID1	D1	D2	L1	L2	L3	H1	g Δ
15 1/4 1/8 45°	1/4	4,2	1/8 NPTF	12	8,5	23	22,5	1/2	1/2
15 1/4 1/4 45°	1/4	4,2	1/4 NPTF	12	13	28	22,5	9/16	9/16
15 3/8 1/4 45°	3/8	6,2	1/4 NPTF	16	13	29	26	11/16	11/16
15 3/8 3/8 45°	3/8	6,2	3/8 NPTF	16	13	29,5	26	11/16	11/16
15 3/8 1/2 45°	3/8	6,2	1/2 NPTF	16	17	35	26	7/8	7/8
15 1/2 3/8 45°	1/2	9,2	3/8 NPTF	20	13	32	28,7	13/16	13/16
15 1/2 1/2 45°	1/2	9,2	1/2 NPTF	20	17	36,5	28,7	7/8	7/8

PT 17

可调向内螺纹直角接头

Swivelling elbow fitting, female



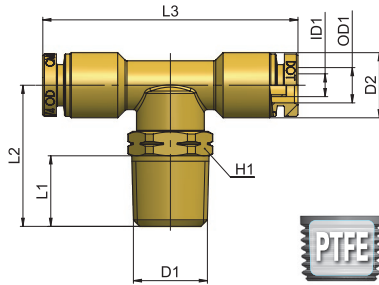
类型	OD1	ID1	D1	D2	L1	L2	L3	H1	g Δ
17 5/32 1/8	5/32	2,2	1/8 NPTF	9	7,5	19,7	19	9/16	22,5
17 5/32 1/4	5/32	2,2	1/4 NPTF	9	11,5	23,7	21	11/16	31,5
17 1/4 1/8	1/4	4,2	1/8 NPTF	12	7,5	19,7	23,5	9/16	25,0
17 1/4 1/4	1/4	4,2	1/4 NPTF	12	11,5	23,7	23,5	11/16	34,1
17 3/8 1/4	3/8	6,2	1/4 NPTF	16	11,5	25,5	27	11/16	47,4
17 3/8 3/8	3/8	6,2	3/8 NPTF	16	11,5	25,5	27	13/16	51,1
17 1/2 3/8	1/2	9,2	3/8 NPTF	20	11,5	28	29,7	13/16	69,1
17 1/2 1/2	1/2	9,2	1/2 NPTF	20	13,5	31	29,7	1	88,2

AP 55
AR 63
AV 221
CO 157
CX 255
EV 217
GU 119
GU Safety 135
GX 281
GX Safety 291
HP 317
MA 27
MB 41
MC 83
MF 235
MM 333
MO 93
MP 323
MT 339
MV 171
MX 241
MY 229
OX 261
PA 113
PE 79
PM 329
PN 67
PT 347
PU 131
PU Safety 149
PUX 287
PV 203
PVX 311
PX 249
QO 363
RA 101
RF 269
RT 355
RX 275
Tools 369
Tubings 375
VF 295
VT 359
VX 299

PT 20

可调向锥螺纹正T型三通接头

Swivelling T fitting, taper

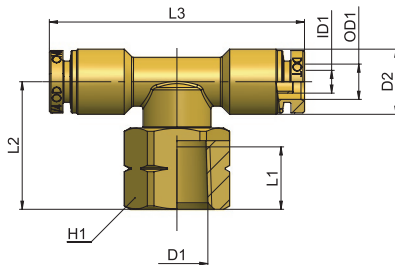


类型	OD1	ID1	D1	D2	L1	L2	L3	H1	g Δ
20 5/32 1/8	5/32	2,2	1/8 NPTF	9	8,5	21,2	42	1/2	23,7
20 5/32 1/4	5/32	2,2	1/4 NPTF	9	13	26,2	42	9/16	29,0
20 1/4 1/8	1/4	4,2	1/8 NPTF	12	8,5	21,2	47	1/2	28,8
20 1/4 1/4	1/4	4,2	1/4 NPTF	12	13	26,2	47	9/16	33,6
20 1/4 3/8	1/4	4,2	3/8 NPTF	12	13	26,7	47	11/16	40,2
20 3/8 1/8	3/8	6,2	1/8 NPTF	16	8,5	24	54	11/16	57,4
20 3/8 1/4	3/8	6,2	1/4 NPTF	16	13	28,5	54	11/16	59,8
20 3/8 3/8	3/8	6,2	3/8 NPTF	16	13	28,5	54	11/16	61,2
20 3/8 1/2	3/8	6,2	1/2 NPTF	16	17	34	54	7/8	61,2
20 1/2 1/4	1/2	9,2	1/4 NPTF	20	13	32	59,4	13/16	95,6
20 1/2 3/8	1/2	9,2	3/8 NPTF	20	13	32	59,4	13/16	90,3
20 1/2 1/2	1/2	9,2	1/2 NPTF	20	17	36,5	59,4	7/8	103,0

PT 20-F

可调向正T型内螺纹接头

Swivelling T fitting, female

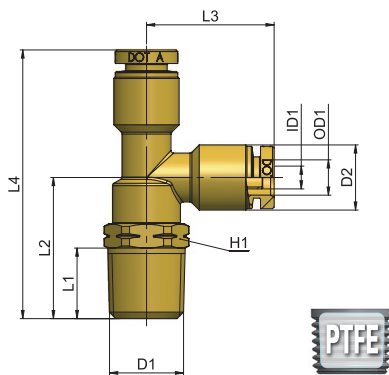


类型	OD1	ID1	D1	D2	L1	L2	L3	H1	g Δ
20 1/4 1/4 F	1/4	4,2	1/4 NPTF	12	11,5	23,7	47	11/16	41,8
20 3/8 1/4 F	3/8	6,2	1/4 NPTF	16	11,5	25,5	54	11/16	62,9
20 3/8 3/8 F	3/8	6,2	3/8 NPTF	16	11,5	25,5	54	13/16	66,7
20 1/2 3/8 F	1/2	9,2	3/8 NPTF	20	11,5	28	59,4	13/16	91,8
20 1/2 1/2 F	1/2	9,2	1/2 NPTF	20	13,5	31	59,4	1	110,5

PT 23

锥螺纹直T型三通接头

Lateral run T fitting, taper

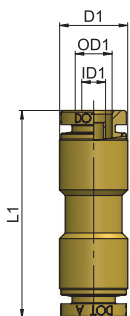


类型	OD1	ID1	D1	D2	L1	L2	L3	L4	H1	g Δ
23 5/32 1/8	5/32	2,2	1/8 NPTF	9	8,5	21,2	21	42	1/2	24,1
23 5/32 1/4	5/32	2,2	1/4 NPTF	9	13	26,2	21	47	9/16	29,5
23 1/4 1/8	1/4	4,2	1/8 NPTF	12	8,5	21,2	23,5	44,5	1/2	29,1
23 1/4 1/4	1/4	4,2	1/4 NPTF	12	13	26,2	23,5	49,5	9/16	33,8
23 1/4 3/8	1/4	4,2	3/8 NPTF	12	13	26,7	23,5	50	11/16	40,6
23 3/8 1/4	3/8	6,2	1/4 NPTF	16	13	28,5	27	55,5	11/16	54,5
23 3/8 3/8	3/8	6,2	3/8 NPTF	16	13	28,5	27	55,5	11/16	61,0
23 3/8 1/2	3/8	6,2	1/2 NPTF	16	17	34	27	61	7/8	80,5
23 1/2 1/4	1/2	9,2	1/4 NPTF	20	13	32	29,7	61,7	13/16	95,4
23 1/2 3/8	1/2	9,2	3/8 NPTF	20	13	32	29,7	61,7	13/16	91,1
23 1/2 1/2	1/2	9,2	1/2 NPTF	20	17	36,5	29,7	66,2	7/8	103,5

PT 26

对接接头

Union



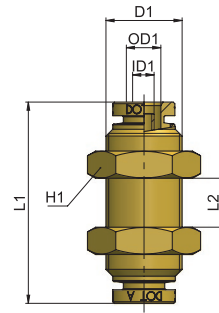
类型	OD1	ID1	D1	L1	g Δ
26 5/32 5/32	5/32	2,2	9	31	8,5
26 1/4 1/4	1/4	4,2	12	33,6	15,9
26 3/8 3/8	3/8	6,2	16	38,6	31,5
26 1/2 1/2	1/2	9,2	20	43,4	91,1
26 5/8 5/8	5/8	11	24	52	77,4
26 3/4 3/4	3/4	14,2	28	57	101,0

PT 27

穿板对接接头

Bulkhead union

类型	OD1	ID1	D1	L1	L2	H1	g	△
27 5/32 5/32	5/32	2,2	M12x1	31	14,5	18		25,0
27 1/4 1/4	1/4	4,2	M14x1	37	14,5	18		34,5
27 3/8 3/8	3/8	6,2	M18x1	41	17,5	22		60,1
27 1/2 1/2	1/2	9,2	M22x1,5	43,4	18,5	26		84,2
27 5/8 5/8	5/8	11	M26x1,5	52	22	32		151,5

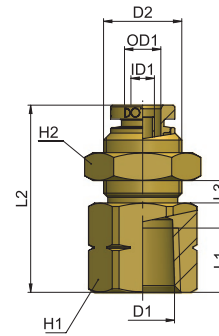


PT 27-F

内螺纹穿板接头

Bulkhead union female

类型	OD1	ID1	D1	D2	L1	L2	L3	H1	H2	g	△
27 5/32 1/4 F 5/32	2,2	1/4 NPTF	M12x1	11,5	31	7	11/16	16	32,2		
27 1/4 1/8 F 1/4	4,2	1/8 NPTF	M14x1	7,5	28,5	8	11/16	18	34,7		
27 1/4 1/4 F 1/4	4,2	1/4 NPTF	M14x1	11,5	33,5	8	11/16	18	37,7		
27 3/8 1/4 F 3/8	6,2	1/4 NPTF	M18x1	11,5	35	10	7/8	22	67,9		
27 3/8 3/8 F 3/8	6,2	3/8 NPTF	M18x1	11,5	36	10	7/8	22	61,8		
27 3/8 1/2 F 3/8	6,2	1/2 NPTF	M18x1	13,5	39	10	1	22	75,1		
27 1/2 3/8 F 1/2	9,2	3/8 NPTF	M22x1,5	11,5	37,2	12	1	24	89,0		
27 1/2 1/2 F 1/2	9,2	1/2 NPTF	M22x1,5	13,5	40,2	12	1	24	85,2		

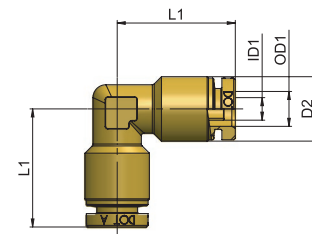


PT 28

直角对接接头

Union elbow

类型	OD1	ID1	D2	L1	g	△
28 5/32 5/32	5/32	2,2	9	19		10,4
28 1/4 1/4	1/4	4,2	12	22		18,1
28 3/8 3/8	3/8	6,2	16	26		38,2
28 1/2 1/2	1/2	9,2	20	28,2		61,3
28 5/8 5/8	5/8	11	24	35,5		103,2

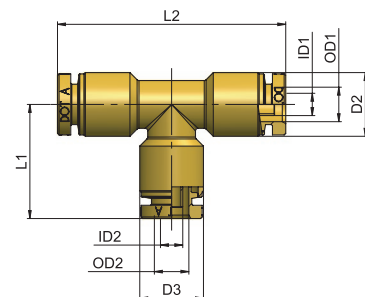


PT 29

正T型三通对接接头

Union T

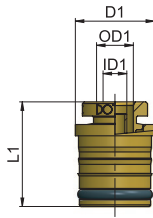
类型	OD1	ID1	OD2	ID2	D2	D3	L1	L2	g	△
29 5/32 5/32	5/32	2,2	5/32	2,2	9	9	19	38		14,9
29 1/4 1/4	1/4	4,2	1/4	4,2	12	12	21,5	43		25,0
29 3/8 3/8	3/8	6,2	3/8	6,2	16	16	25,5	51		52,5
29 3/8 1/4	3/8	6,2	1/4	4,2	16	12	24	51		47,1
29 1/2 1/2	1/2	9,2	1/2	9,2	20	20	27	56,4		83,6
29 1/2 1/4	1/2	9,2	1/4	4,2	20	12	26	56,4		74,4
29 1/2 3/8	1/2	9,2	3/8	6,2	20	16	28	56,4		80,0
29 5/8 5/8	5/8	11	5/8	11	24	24	35,5	71		144,9



AP 55
AR 63
AV 221
CO 157
CX 255
EV 217
GU 119
GU Safety 135
GX 281
GX Safety 291
HP 317
MA 27
MB 41
MC 83
MF 235
MM 333
MO 93
MP 323
MT 339
MV 171
MX 241
MY 229
OX 261
PA 113
PE 79
PM 329
PN 67
PT 347
PU 131
PU Safety 149
PUX 287
PV 203
PVX 311
PX 249
QO 363
RA 101
RF 269
RT 355
RX 275
Tools 369
Tubings 375
VF 295
VT 359
VX 299

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	OD1	ID1	D1	L1	g Δ
10 5/32 00	5/32	2,2	10	17,2	5,0
10 1/4 00	1/4	4,2	14	18,5	11,1
10 3/8 00	3/8	6,2	17,8	22,3	21,9

埋入孔尺寸依据SAE J2494-4标准要求

- 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
- 可以根据需要提供钻孔和安装工具

Cartridge cavity size according to SAE J2494-4

- 1 Drill the cartridge 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.

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

