

# **TEFPASS®**

## **FLEXIBLE HOSE**



01110001-0000



# **ALLIED SUPREME CORP.**

基於半導體工業逐漸蓬勃發展，半導體製程對於氟素樹脂要求的質量與日俱增，上品公司開發製作PFA管、PFA內襯直管管件和PTFE內襯EL桶槽，並增設多套無塵室，最高等級為Class 1000，所以我們半導體製品都能符合半導體製程的潔淨要求。

我們為了進一步提供更高級產品服務，特別開發製作TEFPASS軟管以提供半導體工業高純度要求，特別是可耐高溫與耐全真空的SHPT type軟管，優異的性能深獲客戶支持與使用。

我們以企業的永續經營為理念，非常重視客戶需求與品質的滿意度，在追求速度的二十一世紀，這樣的內部動力不斷地提升我們的技術、品質與新產品開發能力，進而我們和客戶之間都能達到互助互利的良好關係。

## 前言



## Preface

Owing to the prosperous development of semi-conductor industry, the requirements of quality fluorocarbon resin products keep increasing. We have developed PFA tube, pipe & fitting and PTFE lined EL tank. According to the high purity demand in semi-conductor industry, we built several clean rooms with the highest standard is Class 1000.

We further offer the superior performance of "TEFPASS Teflon flexible hose". The main purpose is to meet high purity for semi-conductor industry in chemical delivering. Specially, the "SHPT" type hose can be used in high temperature, full vacuum resistance. It has been largely applied and fully supported by our customers.

Our policy is to offer the best quality product and do every effort to satisfy customer. In the speeding 21 century, the concept encourages us to upgrade our know-how, product quality and R&D ability continuously. Through all the above efforts, we have established good relationship and built the mutual benefits between our company and customers.

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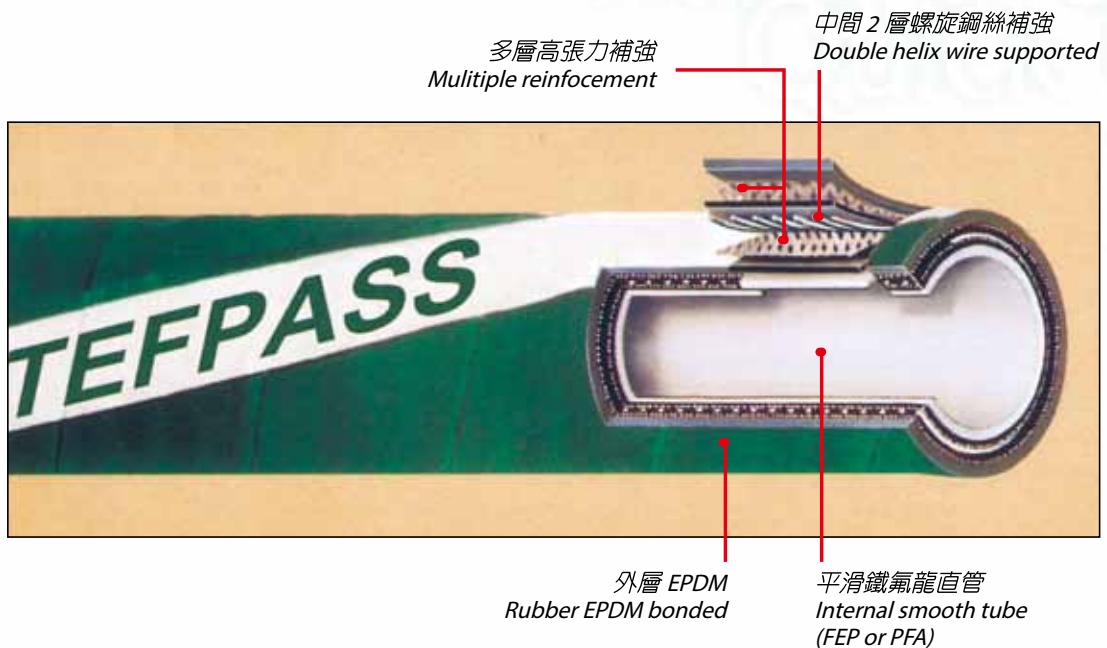


# MCT & CT type SHPT type



# SHPT type

## 結構 / Structure



## 橡膠包覆PFA/FEP高壓軟管

- 純淨的PFA/FEP內管。
- 優良的耐化學性。
- 易清洗。
  1. 無任何物質生長析出。
  2. 平滑抗黏的表面結構。
  3. 可用蒸氣、化學溶劑或其他清潔劑清洗。
- 耐全真空。
- 有最大彎曲、平滑的內管設計。

## 耐溫性

- 適用於-40℃ (-40°F) ~177℃ (350°F)，軟管能完整地通過280℃ (406°F) 蒸氣測試。

## 認證

- F.D.A (美國食品藥品檢驗局)。
- 藥類等級VI。

### Rubber covered smooth bore PFA/FEP hose

- High purity PFA/FEP tube.
- Excellent chemical resistance.
- Easy to clean
  1. Assured sterility.
  2. Non-stick smooth tube.
  3. Can be clean with steam, caustics, solvents or other cleaning agents.
- Durable, kink resistant with no external wire reinforcement to potentially fray.
- Full vacuum rated.
- The most flexible, smooth tube design.

### Temperature Rating

- -40°C (-40 °F ) to 177°C (350 °F ) . Hose has successfully passed internal steam tests at 208°C (406 °F ).

### Approvals

- F.D.A. (Food and Drug Administration)
- Pharmacopoeia Class VI.

### 標準規格 / Specification

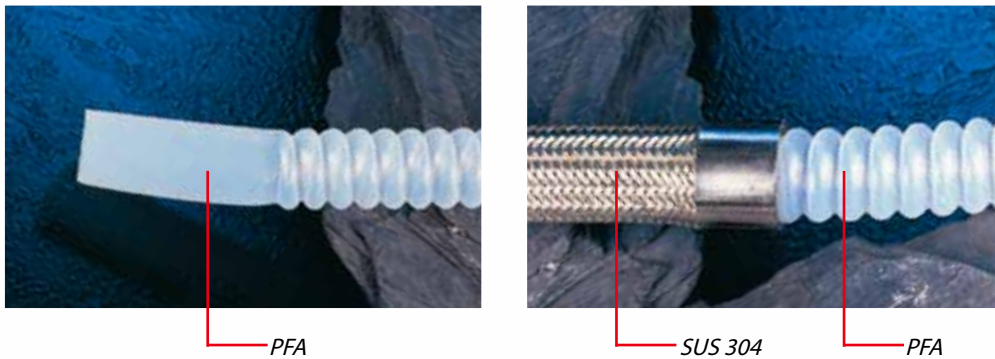
Size I.D. (Inches) (mm)		Size Nominal O.D. Inches	Recommended Working Pressure (P.S.I.) (bar)		Test Pressure (P.S.I.) (bar)		Minimum Burst Pressure (P.S.I.) (bar)		Minimum Recommended Bend Radius (Inches) (MM)		Approximate Weight Per Ft. (Lbs.)
1/2"	15	0.91	500	35.0	750	52.5	2100	147	2.5	63.5	0.35
3/4"	20	1.25	500	35.0	750	52.5	2100	147	3.25	82.5	0.62
1"	25	1.50	450	31.5	675	47.5	1800	126	4.75	120.6	0.75
1-1/4"	32	1.75	320	22.4	480	33.6	1600	112	7.0	177.8	0.98
1-1/2"	40	2.05	300	21.0	450	31.5	1350	94	9.0	228.6	1.20
2"	50	2.65	250	17.5	375	26.5	1200	84	11.5	292.1	1.50
2-1/2"	65	3.20	200	14.0	300	21.0	900	63	18.0	457.2	2.35
3"	80	3.70	150	10.5	225	15.8	700	49	22.0	558.8	2.50
4"	100	4.70	150	10.5	200	14.0	600	42	34.0	863.3	3.60





# MCT & CT type

## 結構 / Structure



### PFA軟管

- 優良的耐化學藥品性。
- 螺旋狀的open-pitch設計。
  1. 易清潔。
  2. 抗黏性。
  3. 可用蒸氣、化學溶劑或其他清潔劑清洗。
  4. 無任何物質生長析出。
- 不因連續的彎曲或氯化物的使用，而產生針孔或龜裂。

### 耐溫性

- -73°C (-100°F) 到232°C (450°F)。

### PFA convoluted hose

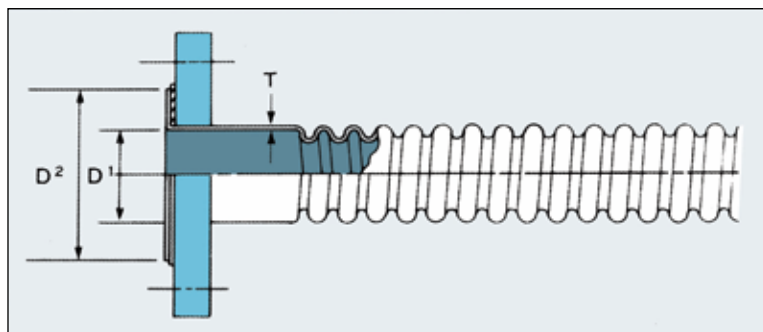
- Excellent chemical resistance.
- Spiral "Open-pitch" design.
  1. Easy cleaning.
  2. Non-stick.
  3. Can be cleaned by using steam, chemical, solvents or any kinds of detergent.
  4. Assured sterility.
- Will not cause pinhole or crack due to the continuous use of chloride or bending.

### Temperature

- -73°C(-100°F) to 232°C(450°F).



## 標準規格 / Specification



Hose size: 1/2"~ 4"

Unit: mm

Nominal A	15	20	25	32	40	50	65	80	100				
Size B	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	1/2"	3/4"	1"	1-1/2"
D1	19	25	33	33	39	50	65	77	100	10.70	15.85	22.20	33.75
D2	40	50	60	60	75	90	110	120	151	28	35	50	70
T	1.5	1.5	1.5	1.5	1.5	2	2	2	2	1	1.6	1.6	2.18
Max. Length	6M	6M	6M	6M	6M	6M	5M	5M	4M	2M	4M	4M	4M

## 耐壓性能 / Pressure Rating

Unit: kg/cm<sup>2</sup> G.

Nominal A	15	20	25	32	40	50	65	80	100				
Size B	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	1/2"	3/4"	1"	1-1/2"
CT Type	5	4	4	3.5	3.5	3	2.5	2	1.5	2	3	4	4
MCT Type	18	17	16	16	14	13	10	8	7				

上表所列壓力為常溫（25℃）下之最大允許使用壓力

## 容許最小曲率半徑 / Min. Bend Radius

Unit: mm

Size	15	20	25	32	40	50	65	80	100
Item	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
CT Type	50	100	100	100	150	150	200	250	300
MCT Type	100	150	150	150	200	200	250	300	400

## 法蘭式接頭 Flange Fittings

- 根據標準 ANSI B16.5/ANSI 150LBS, JIS 10K, DIN PN16 製作，任何其他規格法蘭，可依要求製作。
- 金屬補強網為 SUS 304，法蘭可依要求為 SUS 316、SUS 304 等要求製作。
- Flange: ANSI B16.5/ANSI 150LBS, JIS 10K and DIN PN16. As for other request, please consult with us for various custom-made flanges.
- Support stub end, crimp ring and braid are made of stainless steel 304. Stainless steel 304 and 316 flange are also available.



## 衛生接頭 Sanitary Fittings

- 根據 ISO 2852 和英國標準 BS 4825 要求製作。
- In compliance with ISO 2852 and British standard BS 4825.





# 快速接頭 Quick Connector

- 氟素樹脂內襯的設計，使得任何流體不與金屬有任何接觸的機會。
- 全面包覆式的氟素樹脂墊圈，在抗腐蝕、高純度與高溫環境（232°C / 450°F）中均相當優越。
- 接頭設計依據MIL-C-27487規格，全面完整氟素樹脂內襯的接頭設計，在操作上非常容易接合與止漏。

- The inner core of PFA hose is extended with the coupler support stem and flared behind the sealing gasket. Makes the chance of any chemical fluid that does not have any contact with metal.
- FEP encapsulated gasket: provide excellent purity demand, corrosive resistance and high temperature rating (up to 232°C/450°F)
- Coupler manufactured in compliance with MIL-C-27487 specification. PFA lined coupler is easy swivel and seal in operation.



## 耐壓性能 / Pressure Rating

- Size 3/4"(20mm) to 2"(50mm): 250 psig
- Size 2-1/2"(65mm) to 3"(80mm): 150 psig

# 接頭 Fittings

## Pipe thread (N.P.T.)

1. Male Style 03
2. Male (PCTFE) Style 03
3. Female Style 06

## Sanitary

- Sanitary clamp Style 10

## Flanges

1. Lap joint flange Style 12
2. PFA encapsulated Style 12T
3. Flare-thru Style 12FT

## Quick connector

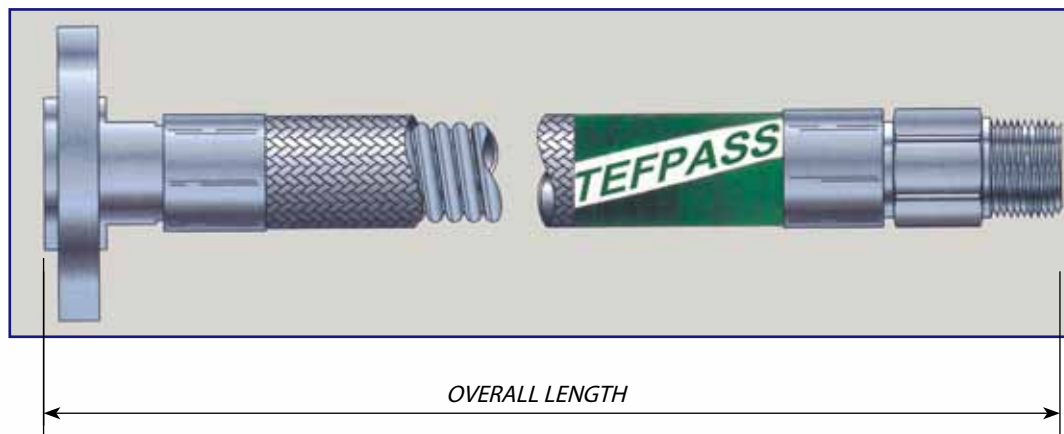
1. Female swivel type with PFA encapsulated  
Style 16T
2. Male with PFA encapsulated Style 17T
3. Male by flange adaptor PFA encapsulated  
Style 18T

## Special custom-made

Other special fittings are upon request



# 如何訂購 How to Order



**A — B — C(xx)D(xx) — Length (mm)**

A: Size(I.D.)		B: Hose Style	C: Fitting One End D: Fitting Other End	Fitting Material:
Inch	mm			1 <sup>st</sup> letter: Fitting Material 2 <sup>nd</sup> letter: Flange Material
1/2"	15	SHPTP	00 = Smooth Bore without Fitting.	4 = Stainless Steel 304
3/4"	20	(PFA)	03 = Male Pipe, NPT.	6 = Stainless Steel 316
1"	25		06 = Female Pipe, FNPT.	L = Stainless Steel 316L
1-1/4"	32	SHPTF	10 = Sanitary, Gasket Type.	C = Carbon Steel
1-1/2"	40	(FEP)	12 = Flange Retainer, Lap Retainer.	V = CPVC
2"	50		12T = Flange Retainer, PFA Encapsulated.	P = PCTFE
2-1/2"	65	MCT	12FT = Flange Retainer, Flare-thru.	H = Hastelloy C
3"	80		16 = Quick Connector, Female.	X = No fitting or flange
4"	100	CT	16T = Quick Connector, Female, PFA Encapsulated.	Y = Other material, please consulting our sales engineer.
			17 = Quick Connector, Male.	
			17T = Quick Connector, Male, PFA Encapsulated.	

Example: 1. 25-SHPTP-12T (66) 03 (PX)-6,000mm

1" SHPT type PFA hose, one end come with PFA encapsulated SS316 retainer and SS316 flange. Other end with PCTFE solid NPT male thread. Overall length is 6,000mm.

2. 50-MCT-12FT (44) 12FT (44)-4,000mm

2" MCT type PFA hose, come with outside SS304 braid, both ends with SS304 fittings and swivel flanges. PFA hose ends are flare-thru design. Overall length is 4,000mm.





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