



















### 協 羽 機 材 工 業 股 份 有 限 公 司 SHIE YU MACHINE PARTS INDUSTRIAL CO., LTD.



#### 公 司/台中市清水區海濱路336-16號

HEAD OFFICE No.336-16 Hai pin Rd., Ching Shui Chen Taichung Taiwan R.O.C. Tel: 886-4-2626 6926(代表號)

Fax: 886-4-2626 7169 / 886-4-2627 3692

E-mail: sale02@shvalve.com.tw/shvalve@shvalve.com.tw

http://www.shieyu-valve.com.tw



#### 台 北 分 公 司/台北市八德路二段382號

TAIPEI OFFICE No.382 Pa-der Rd., Sec. 2, Taipei Taiwan R.O.C.

Tel: 886-2-2778 2186 Fax: 886-2-2711 0218 / 886-2-2731 8358

E-mail: asiav@shvalve.com.tw



#### 高 雄 分 公 司/高雄市大發工業區華中路19號

KAOHSUING No.19, Hwa-Chung Road, Ta-Fa Industrial Park Kaohsiung Taiwan R.O.C. Tel: 886-7-788 8678 Fax: 886-7-787 7869 / 886-7-787 0109









#### 經營理念

協羽成立於西元1973年,為台灣第一家從 開發設計到製造塑膠閥門的公司。多年來一 直致力於產品的研究創新,以最先進製程技 術,力求產品質量領先。建廠40餘年來,產 品行銷海內外40餘國家,廣泛應用於各種管 路系統,品質深獲客戶的好評與肯定。

協羽人始終競競業業,秉持公司創廠五大信念:誠信、敬業、責任、禮貌、榮譽。立足業界40餘年,擁有堅實的經營層,專業負責的工作團隊,進而獲得廣大客戶的支持。在持續壯大事業體的同時,更致力於產品的創新設計及品質的提升,先後獲得NSF美國產品衛生認證,ISO9001英國Lloyd's及BSI品質



董事長 蔡添壽

President TSAI TIEN-SHOU

管理系統認證,台灣正字標記(CNS)及通過環保標章認證合格廠,確保提供全球客戶高品質可靠的工業產品。

基於提供市場更齊全的產品,特增設世界級超大型電腦全自動射出專用成型機,尤其是生產CPVC原料一次可射出成126公斤及各超大型配件,進而不斷擴充相關產品群,滿足客戶一次性採購的服務理念。進而生產各種材質、尺寸齊全的塑膠閥門、直管及配件的專業製造商。配合市場需求從產品供應、配合安裝、整廠承包工程,一系列完整性服務。

協羽人不斷自我期許,追求更精良產品,以客戶滿意為宗旨。同時,我們期盼您寶貴的意見,更隨時歡迎您的蒞臨指導, 協羽團隊將持續研發創新,再接再厲,為業界打拼,進而獲得市場的肯定與禮讚。





#### 產品四大特色

我們不斷增強現有產品群,競競業業的運用先進技術改變製程。 已突破生產大尺寸塑膠蝶閥、逆止閥等及管材、配件,擁有業界需 求完整的產品群。藉結合市場知識及我們的專業經驗、設計規劃及 精確的製程能力,持續提供客戶最佳的產品,本公司產品擁有四大 特色:

、生產材質最齊全:有生產UPVC, HIW-PVC, CPVC(HT-PVC) ,HD-PE,PP-H,ABS,PVDF等7種原料製造。不同原料、不同 生產設備在同一生產廠生產目前世界唯-

、生產尺寸規格最大最齊全:生產尺寸UPVC1/2"~24"、 HIW-PVC1/2"~24" \ CPVC(HT-PVC)1/2"~24" \ HD-PE § 12~ § 1200mm \ PPH § 12~ § 1200mm \ ABS § 12~ § 630mm \ PVDF § 12~ § 800 mm,生產規格符合世界標準規格各國使用,如日本 規格JIS、美國規格ANSI、SCH80、SCH40、德國規格DIN PN2.5 至PN30,英國 BS 規格,或由客戶指定之特殊規格均可供應。

三、直管、配件及閥門為同一家生產廠全方位產品鏈供應,目前是 市場上最齊全的供應商,能滿足業界一次性最佳的服務。

- 1.全世界超大型塑膠蝶閥28".32".36".40".48"製造採一體成型生產 。並獲得台灣專利權及中國、日本、美國、韓國專利申請中。
- 2. UPVC.CPVC SCH80 14".16".18" 90L.45L、三通、直接射出成

經過多方面技術超越提升,將塑膠閥壓力等級大大提高。部分產 品由原來使用壓力10kg,提高至使用壓力15kg,對市場使用上-大創舉。

#### Four main product features

At the same time, we are continually adding to our existing comprehensive product line, actively taking advantage of advanced technique to improve process • We have made a breakthrough in production of large-sized thermoplastic valves, check valves, and pipes, fittings, making us the most complete product line for the industry demands. Our products own the 4 distinctive features:

The first feature: The complete production materials. Offering UPVC, HIW-PVC, CPVC, (HT-PVC), HD-PE, PP-H, ABS, PVDF several material products. The only company in the world which run the 7 different materials in one production

The second feature : The complete production sizes and the largest production size: The available production size : UPVC 1/2"-24", HIW-PVC: 1/2"-24", CPVC(HT-PVC): 1/2"-24", HD-PE :  $\oint$  1200mm, PPH :  $\oint$  1200mm, ABS, PVDF:  $\oint$  12~  $\oint$  800mm. The production dimension standards : JIS (Japanese), ANSI SCH80, SCH40(American), DIN PN2.5~PN30(European), BS (British), and customer appointed special dimension is also available.

The third feature: One stop manufacturing supplier – Pipe, fittings and valves in manufacturer. We are providing the full customer demands.

The forth feature: Our product has the following special characters:

1. The world largest thermoplastic butterfly by one-piece molded for the sizes: 28", 32", 36", 40", 48" and owned patent in Taiwan, and under applying China, Japan, America, and Korea patent.

2. The largest UPVC, CPVC SCH80 14", 16"18"90D elbow, 45D elbow, Tee are in one-piece molded. Enhance our all around techniques, upgrade the thermoplastic valve pressure resistant rates. Some products have been up from 10\text{Volcom} to 15\text{Volcom} to 15\tex 10kgf/cm to 15kgf/cm2. This is the pioneering task.

We provide our customers with the best products by integration of knowledge in today's marketplace, our business experience, innovation and precise

production techniques.





#### 連接技術

一向以"產品齊全、材質齊全、尺寸及規格齊全","品質第一","技術領先"、 "客戶滿意"為宗旨,由專業生產閥門到配門 及直管一系列完整服務,進而受到設計公司司 業界選用指定的第一品牌,要求達整廠產品供 應及技術教學及施作,進而「心技合一」的 透業目標連結,為達此目標, 實務產品並提升整體工程人員技法、 等 的施工技術、嚴密的品質管理及負責任的態度 ,整廠完整性服務。

工程横跨各業界如化工業、半導體業、重大公共工程、電力相關工程、潛鑽工程、自來水工程、環境保護工程、廢水處理工程、鋼鐵酸洗業、及各式特殊工程等。產品精良齊全, 為業界選用的第一品牌。

#### **Technical Connection**

The SHIE YU Group's principles – Full Completed Products, Full Completed Materials, the full completed dimension & standards, Quality First, Technique leading, we are from the professional valve manufacture then to the fittings and pipes the whole system materials as the No. 1 appointed brand by the engineering design companies and the supplier for the whole-plant materials, technical teaching and operations. Building the engineering installation company input the installation techniques and service to the business goals. We are taking care on the products and advance the engineers techniques, Introduce new techniques and professional opinions in order to reach the reasonable product cost , high standard installation techniques, strict quality management and responsible working attitude.

Our engineering works is covering of Chemical industries, Semi-conductor industries, public constructions, electricity constructions, digging constructions, and potable water industry, environmental protection engineering, waster water treatment, and steel acid-washing and etc special engineering. The most completed products and the top No.1 brand in the industry.



BATTENFIELD公司等先進精良機械設備;及特 別擁有世界第一超大型電腦全自動射出成型 機,尤其生產CPVC原料一次成型可達126公斤 ;我們慎選優良品質原料,對原料加以分析 測試,確定符合規範標準方可上線生產。我 們實驗室有最齊全的檢測設備,可以將原物 料,產品的物性做完全的檢測判定,做為選 用之依據,出貨前品質的掌握及產品出貨後 品質確保,一達全面優良產品為目標。

production line from Austria's CICINNATI and advanced machinery equipment from German's BATTENFIELD. Further, we also possess the world's largest Further, we also possess the world's largest computer-based Automatic Injection Machine, which can yield 126kg of CPVC material in one molding process. The materials selected by us are superior in quality, and are analyzed and tested to ensure they meet specification standards before putting into production. Our laboratory has a complete set of testing / inspection equipments to test, inspect and judge the product properties in comprehensive manner so that they may be used as the basis of selection. We control quality before delivery and ensure quality after, to guarantee superior products are delivered.



#### 產品認證 產品通過認證如下: · 全生產廠全部通過ISO 9001認證合格 美國衛生協會認證NSF合格廠 新產品技術國際研討會議 行政院環保署環保標章合格廠 The International New Product Technique Discussion Meeting 取得國家標準9項CNS正字標記產品認證如下:

#### CNS編號 類號 品 名 稱 4053-1 K3033-1 自來水用聚氯乙烯塑膠硬質管 1298 K3004 聚氯乙烯塑膠硬質管 1302 K3006 導電線用聚氯乙烯塑膠管 K3114 14345 耐衝擊硬質聚氯乙烯塑膠管 14664 K3121 氯化聚氯乙烯(CPVC)塑膠管 2456-2 K3012 自來水用聚氯乙烯塑膠管 K3013 2456-2 一般用高密度聚乙烯塑膠管 12835 K3097 天然氣用聚乙烯塑膠管 自來水用丙烯-丁二烯-苯乙烯(ABS) K3102 13158 塑膠管







#### **Product Certification**

Listed below are certifications honored for our products:

- · All our factories have been honored with ISO 9001 Certification.
- · One factory qualified for NSF certification.
- · One factory honored with the environmental.
- Protection badge by the Environmental Protection Administration of the Executive Yuen.
- · Listed below are 9 authentic marks certified by CNS:

CNS General Number	Category Number	Product Name			
4053-1	K3033-1	Tap Water Hardened PVC Pipe			
1298	K3004	Hardened PVC Pipe			
1302	K3006	Conductive Wire Hardened PVC Pipe			
14345	K3114	Impact-resistant Hardened PVC Pipe			
14664	K3121	CPVC Pipe			
2456-2	K3012-2	Tap Water PE Pipe			
2456-2	K3013-2	General Purpose HDPE Pipe			
12835	K3097	Natural Gas PE Pipe			
13158	K3102	Tap Water ABS Pipe			

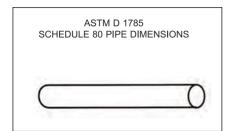


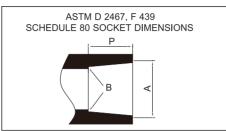


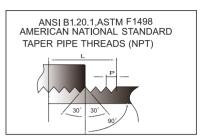
## UPVC-&-CPVC=録索引

公司簡介 COMPANY PROFILE	1	兩片法蘭(塑膠環/鐵片環) Van Stone Style Flange (Plastic ring / Steel ring)	34
目錄索引 CATALOGUE INDEX	6	TS法蘭 TS FLANGE	35
ASTM標準 ASTM STANDARDS	7	焊接法蘭 WELDING FLANGE	36
UPVC & CPVC管物理特性 UPVC & CPVC MATERIAL PROPERTIES	8	盲法蘭 BLIND FLANGE	37
UPVC SCH40管 UPVC SCH40 PIPE	9	伸縮接頭(牙口) EXPANSION JOINT REPAIR COUPLING(THREADED)	38
UPVC SCH80管 UPVC SCH80 PIPE	10	伸縮接頭(法蘭/插管) EXPANSION JOINT REPAIR COUPLINGS(FLANGE/SOCKET)	39
CPVC SCH40管 CPVC SCH40 PIPE	11	CPVC CTS管及接頭 CPVC CTS PIPE & FITTING	41
CPVC SCH80管 CPVC SCH80 PIPE	12	CPVC CTS接頭 CPVC CTS FITTING	42
CLEAR PVC SCH40 透明管 CLEAR PVC SCH40 PIPE	13	油任接頭 UNION	43
三通 TEE	14	CPVC球閥 CPVC CTS COMPACT BALL VALVE	44
異三通 REDUCING TEE	15	雙油任球閥 TRUE UNION(DOUBLE UNION) BALL VALVE	45
異徑三通(手工平接頭式) REDUCING TEE (FABRICATED SOCKET TYPE)	16	緊密型球閥 COMPACT BALL VALVE	47
三通牙口 + 90度彎頭牙口 TEE(Fipt)+90°ELL(Fipt)	18	油任式隔膜閥 TRUE UNION DIAPHRAGM VALVE	49
90度彎頭 90°ELL	19	隔膜凡而 DIAPHRAGM VALVE(FLANGE TYPE)	51
45度彎頭 45°ELL	20	通用型碟閥 BUTTERFLY VALVE Universal Type	53
Y型三通 WYE	21	旋轉凡而(手把式) DIAPHRAGM VALVE (LEVER HANDLE TYPE)	55
異徑Y型三通(手工平接頭式) WYE (FABRICATED SOCKET TYPE)	22	旋轉凡而全法蘭齒輪式 BUTTERFLY VALVE GEAR OPERATOR-FULL FLANGED TYPE	57
四通 CROSS	24	超大型旋轉凡而 SUPER LARGE SIZED BUTTERFLY VALVE	59
卜申 REDUCER BUSHING	25	球逆止閥 BALL CHECK VALVE	61
內牙卜申 REDUCER BUSHING	27	單片逆止閥 WATER CHECK VALVE	63
大小頭 REDUCER COUPLING	28	單片逆止閥轉接頭 SPACER CONNECTOR	64
平接頭 COUPLING	29	擺動式逆止凡而 CHECK VALVE / HORIZATIONAL TYPE	65
內牙、外牙閥接頭 FEMALE、MALE ADAPTER	30	Y型過濾器 Y-SEDIMENT STRAINERS	67
管帽 CAP	31	快速接頭 COMPRESSION COUPING	69
內牙管帽 + 牙口單片法蘭 CAP(Fipt)+One Piece Flang(Fipt)	32	技術資料 ENGINEERING DATA	70
 單片法蘭 One Piece Flange (Slip)	33		

#### **ASTM STANDARDS**







單位(unit):inch

Pitch of Thread Ρ 0.03704 0.05556 0.05556 0.07143 0.07143 0.08696 0.08696 0.08696 0.08696 0.12500 0.12500 0.12500 0.12500 0.12500 0.12500

												車1四(
	Nominal Pipe Size in.	Mean Outside Diameter in.	O.D. Tolerance in.	Minimum Wall Thickness in.	Nominal Size in.	Entrance A	Diameter Bottom B	Tolerance in.	Socket Length minimum	Nominal Pipe Size in.	Threads Per in.	Effective Thread Length
	1/8	0.405	± 0.004	0.095	1/8	0.417	0.401	± 0.004	0.500	1/8	27.0	0.2639
	1/4	0.540	± 0.004	0.093	1/4	0.552	0.536	± 0.004	0.625	1/4	18.0	0.2039
	3/8	0.675	± 0.004	0.119	3/8	0.687	0.671	± 0.004	0.023	3/8	18.0	0.4075
	1/2	0.840	± 0.004	0.120	1/2	0.848	0.836	± 0.004	0.730	1/2	14.0	0.4073
	3/4	1.050	± 0.004	0.147	3/4	1.058	1.045	± 0.004	1.000	3/4	14.0	0.5357
	1	1.315	± 0.005	0.134	1	1.325	1.310	± 0.005	1.125	1	11.5	0.6828
	1-1/4	1.660	± 0.005	0.179	1-1/4	1.670	1.655	± 0.005	1.250	1-1/4	11.5	0.7068
	1-1/2	1.900	± 0.006	0.200	1-1/2	1.912	1.894	± 0.006	1.375	1-1/2	11.5	0.7000
	2	2.375	± 0.006	0.200	2	2.387	2.369	± 0.006	1.500	2	11.5	0.7565
			_	_				_				
	2-1/2	2.875	<u>+</u> 0.007	0.276	2-1/2	2.889	2.868	<u>+</u> 0.007	1.750	2-1/2	8.0	1.1375
	3	3.500	<u>+</u> 0.008	0.300	3	3.516	3.492	<u>+</u> 0.008	1.875	3	8.0	1.2000
	4	4.500	<u>+</u> 0.009	0.337	4	4.518	4.491	<u>+</u> 0.009	2.250	4	8.0	1.3000
	5	5.563	<u>+</u> 0.010	0.375	5	5.583	5.553	<u>+</u> 0.010	2.625	5	8.0	1.4063
•	6	6.625	<u>+</u> 0.011	0.432	6	6.647	6.614	<u>+</u> 0.011	3.000	6	8.0	1.5125
•	8	8.625	<u>+</u> 0.015	0.500	8	8.665	8.655	<u>+</u> 0.015	4.000	8	8.0	1.7125
	10	10.750	<u>+</u> 0.015	0.593	10	10.780	10.735	<u>+</u> 0.015	5.000			
	12	12.750	<u>+</u> 0.015	0.687	12	12.780	12.735	<u>+</u> 0.015	6.000			
	14	14.000	<u>+</u> 0.015	0.750	14	14.039	13.984	<u>+</u> 0.015	7.000			
	16	16.000	<u>+</u> 0.019	0.843	16	16.039	15.982	<u>+</u> 0.019	8.000			

#### STANDARDS COMPARISONS

17.980

19.980

23.973

<u>+</u> 0.019

±0.023

<u>+</u> 0.031

9.000

10.042

12.2

IPS-to-Metric transion chart are listed by nominal size. The chart below compares nominal and actual pipe O.D. for each size according to the designated standard.

0.937

1.031

1.218

18

20

24

18.038

20.038

24.077

單位(unit):inch

	JIS K6741 (mm)		DIN 8062 ( mm)		ASTMD1785 (in)		NPT-ANSIB 1.2 0.1** Tapered Thread		BSP ISO 7/1 ** Parallel Thread	
Nominal	Actual *	O.D.	Actual *	Nominal	Actual *	Designation	Threads in	Designation	Threads 25.4mm	
16	22	20	20	1/2	0.840	1/2	14.0	1/2	14	
20	26	25	25	3/4	1.050	3/4	14.0	3/4	14	
25	32	32	32	1	1.315	1	11.5	1	11	
30	38	40	40	1-1/4	1.660	1-1/4	11.5	1-1/4	11	
40	748	50	50	1-1/2	1.900	1-1/2	11.5	1-1/2	11	
50	60	63	63	2	2.375	2	11.5	2	11	
75	89	90	90	3	3.500	3	8.00	3	11	
100	114	110	110	4	4.500	4	8.00	4	11	

Specified dimension, certain tolerances apply

18

20

24

18.000

20.000

24.000

± 0.019

± 0.023

<u>+</u> 0.031

<sup>\*\*</sup> NPT and BSP have different thread angles and are not compatible

## Rigid Poly Vinyl Chlorides (UPVC) and Chlorinated Poly Vinyl Chlorides (CPVC)

#### Compounds:

#### UPVC, CPVC原料物性表

Property and Unit 原料物性及單位	Test Method (測試方法)	UPVC	CPVC
Impact Resistance(Izod) 耐衝擊強度 J/m of notch ft*lb/in. of notch	ASTM D256	<34.7 <0.65	<80.1 <1.5
Tensile strength (min.)拉伸強度(最小值) MPa psi	ASTM D638	<34.5 <5000	<48.3 <7000
Modulus of elasticity in tension(min) 拉伸彈性係數(最小值) MPa psi	ASTM D638	<1930 <280 000	<2482 <360 000
DeflectionTemperature under load, min. 1.82MPa(264pis)熱變形溫度, 分 °C °F	ASTM D648	<70 <158	<100 <212
Flmmebility 燃性(平均測試時間<10s,燃燒<25mm)	ASTM D635	*	*

Note: \* -All compounds covered by this specification when tested in accordance with Test Method D635. 所有原料依據 ASTM D635方法測試

#### **UPVC** schedule 40 pipe

Scope :This specification covers requirements for schedule 40 UPVC pressure pipe as described in ASTM D-1785.

Material: UPVC used is Type I, Grade I compound, cell classification 12454-B per ASTM D-1784.

Dimensions: Dimensions and tolerances shall be as shown in the following tables when measured

according to Method D-2122. Tolerances for outof-roundness shall apply only to pipe prior to shipment.

Marking: Indicates manufacturer's name, material designation code, nominal pipe size, schedule size with pressure rating in PSI for water at 73°F, ASTM designation number D-1785.

#### Schedule 40 Dimensions

單位(unit):inch

Nom Pipe Size(in).	O.D.	Average I.D.	Min. Wa <b>ll</b>	Nom. Wt./Ft.	Max W.P. PSI	code
1/8	0.405	0.249	0.068	0.051	810	11-PIO-04-0003
1/4	0.540	0.344	0.088	0.086	780	11-PIO-04-0008
3/8	0.675	0.473	0.091	0.115	620	11-PIO-04-0010
1/2	0.840	0.602	0.109	0.170	600	11-PIO-04-0015
3/4	1.050	0.804	0.113	0.226	480	11-PIO-04-0020
1	1.315	1.029	0.133	0.333	450	11-PIO-04-0025
1-1/4	1.660	1.360	0.140	0.450	370	11-PIO-04-0032
1-1/2	1.900	1.590	0.145	0.537	330	11-PIO-04-0040
2	2.375	2.047	0.154	0.720	280	11-PIO-04-0050
2-1/2	2.875	2.445	0.203	1.136	300	11-PIO-04-0065
3	3.500	3.042	0.216	1.488	260	11-PIO-04-0080
3-1/2	4.000	3.521	0.226	1.789	240	11-PIO-04-0090
4	4.500	3.998	0.237	2.118	220	11-PIO-04-0100
5	5.563	5.016	0.258	2.874	190	11-PIO-04-0125
6	6.625	6.031	0.280	3.733	180	11-PIO-04-0150
8	8.625	7.942	0.322	5.619	160	11-PIO-04-0200
10	10.750	9.975	0.365	7.966	140	11-PIO-04-0250
12	12.750	11.889	0.406	10.534	130	11-PIO-04-0300
14	14.000	13.073	0.437	12.462	130	11-PIO-04-0350
16	16.000	14.940	0.500	16.286	130	11-PIO-04-0400
18	18.000	16.809	0.562	20.587	130	11-PIO-04-0450
20	20.000	18.743	0.593	24.183	120	11-PIO-04-0500
24	24.000	22.544	0.687	33.652	120	11-PIO-04-0600

#### **UPVC** schedule 80 pipe

Scope :This specification covers requirements for schedule 80 UPVC pressure pipe as described in ASTM D-1785.

Material: UPVC used is Type I, Grade I compound, cell classification 12454-B per ASTM D-1784.

Dimensions: Dimensions and tolerances shall be as shown in the following tables when measured

according to Method D-2122. Tolerances for outof-roundness shall apply only to pipe prior to shipment.

Marking: Indicates manufacturer's name, material designation code, nominal pipe size, schedule size with pressure rating in PSI for water at 73°F, ASTM designation number D-1785.

#### Schedule 80 Dimensions

單位(unit):inch

Nom Pipe Size(in).	O.D.	Average I.D.	Min. Wall	Nom. Wt./Ft.	Max W.P. PSI	code
1/8	0.405	0.195	0.095	0.063	1230	11-PIO-08-0003
1/4	0.540	0.282	0.119	0.105	1130	11-PIO-08-0008
3/8	0.675	0.403	0.126	0.146	920	11-PIO-08-0010
1/2	0.840	0.526	0.147	0.213	850	11-PIO-08-0015
3/4	1.050	0.722	0.154	0.289	690	11-PIO-08-0020
1	1.315	0.936	0.179	0.424	630	11-PIO-08-0025
1-1/4	1.660	1.255	0.191	0.586	520	11-PIO-08-0032
1-1/2	1.900	1.476	0.200	0.711	470	11-PIO-08-0040
2	2.375	1.913	0.218	0.984	400	11-PIO-08-0050
2-1/2	2.875	2.290	0.276	1.500	420	11-PIO-08-0065
3	3.500	2.864	0.300	2.010	370	11-PIO-08-0080
3-1/2	4.000	3.326	0.318	2.452	350	11-PIO-08-0090
4	4.500	3.786	0.337	2.983	320	11-PIO-08-0100
5	5.563	4.768	0.375	4.078	290	11-PIO-08-0125
6	6.625	5.709	0.432	5.610	280	11-PIO-08-0150
8	8.625	7.565	0.500	8.522	250	11-PIO-08-0200
10	10.750	9.493	0.593	12.635	230	11-PIO-08-0250
12	12.750	11.294	0.687	17.384	230	11-PIO-08-0300
14	14.000	12.410	0.750	20.852	220	11-PIO-08-0350
16	16.000	14.231	0.843	26.810	220	11-PIO-08-0400
18	18.000	16.014	0.937	33.544	220	11-PIO-08-0450
20	20.000	17.814	1.031	41.047	220	11-PIO-08-0500
24	24.000	21.418	1.218	58.233	210	11-PIO-08-0600

#### **CPVC** schedule 40 pipe

Scope :This specification covers requirements for schedule 40 CPVC pressure pipe as described in ASTM F-441.

Material: CPVC used is Type IV, Grade I compound, cell classification 23447-B per ASTM D-1784.

Dimensions: Dimensions and tolerances shall be as shown in the following tables when measured

according to Method D-2122. Tolerances for outof-roundness shall apply only to pipe prior to shipment.

Marking: Indicates manufacturer's name, material designation code, nominal pipe size, schedule size with pressure rating in PSI for water at 73°F, ASTM designation number F-441.

#### Schedule 40 Dimensions

						車位(unit):Inch
Nom Pipe Size(in).	O.D.	Average I.D.	Min. Wa <b>ll</b>	Nom. Wt./Ft.	Max W.P. PSI	code
1/4	0.540	0.344	0.088	0.096	780	41-PIO-04-0008
3/8	0.675	0.473	0.091	0.128	620	41-PIO-04-0010
1/2	0.840	0.602	0.109	0.190	600	41-PIO-04-0015
3/4	1.050	0.804	0.113	0.253	480	41-PIO-04-0020
1	1.315	1.029	0.133	0.371	450	41-PIO-04-0025
1-1/4	1.660	1.360	0.140	0.502	370	41-PIO-04-0032
1-1/2	1.900	1.590	0.145	0.599	330	41-PIO-04-0040
2	2.375	2.047	0.154	0.803	280	41-PIO-04-0050
2-1/2	2.875	2.445	0.203	1.267	300	41-PIO-04-0065
3	3.500	3.042	0.216	1.660	260	41-PIO-04-0080
3-1/2	4.000	3.521	0.226	1.996	240	41-PIO-04-0090
4	4.500	3.998	0.237	2.363	220	41-PIO-04-0100
5	5.563	5.016	0.258	2.874	190	41-PIO-04-0125
6	6.625	6.031	0.280	4.164	180	41-PIO-04-0150
8	8.625	7.942	0.322	6.286	160	41-PIO-04-0200
10	10.750	9.975	0.365	8.886	140	41-PIO-04-0250
12	12.750	11.889	0.406	11.751	130	41-PIO-04-0300
14	14.000	13.073	0.437	13.916	130	41-PIO-04-0350
16	16.000	14.940	0.500	18.167	130	41-PIO-04-0400
18	18.000	16.809	0.562	22.965	130	41-PIO-04-0450
20	20.000	18.743	0.593	29.976	120	41-PIO-04-0500
24	24.000	22.544	0.687	37.539	120	41-PIO-04-0600

#### **CPVC** schedule 80 pipe

Scope :This specification covers requirements for schedule 80 CPVC pressure pipe as described in ASTM F-441.

Material: CPVC used is Type IV, Grade I compound, cell classification 23447-B per ASTM D-1784.

Dimensions: Dimensions and tolerances shall be as shown in the following tables when measured

according to Method D-2122. Tolerances for outof-roundness shall apply only to pipe prior to shipment.

Marking: Indicates manufacturer's name, material designation code, nominal pipe size, schedule size with pressure rating in PSI for water at 73°F, ASTM designation number F-441.

#### Schedule 80 Dimensions

單位(unit):inch

Nom Pipe Size(in).	O.D.	Average I.D.	Min. Wall	Nom. Wt./Ft.	Max W.P. PSI	code
1/4	0.540	0.282	0.119	0.117	1130	41-PIO-08-0008
3/8	0.675	0.403	0.126	0.162	920	41-PIO-08-0010
1/2	0.840	0.526	0.147	0.238	850	41-PIO-08-0015
3/4	1.050	0.722	0.154	0.322	690	41-PIO-08-0020
1	1.315	0.936	0.179	0.473	630	41-PIO-08-0025
1-1/4	1.660	1.255	0.191	0.654	520	41-PIO-08-0032
1-1/2	1.900	1.476	0.200	0.793	470	41-PIO-08-0040
2	2.375	1.913	0.218	1.097	400	41-PIO-08-0050
2-1/2	2.875	2.290	0.276	1.674	420	41-PIO-08-0065
3	3.500	2.864	0.300	2.242	370	41-PIO-08-0080
3-1/2	4.000	3.326	0.318	2.735	350	41-PIO-08-0090
4	4.500	3.786	0.337	3.277	320	41-PIO-08-0100
5	5.563	4.768	0.375	4.078	290	41-PIO-08-0125
6	6.625	5.709	0.432	6.258	280	41-PIO-08-0150
8	8.625	7.565	0.500	9.506	250	41-PIO-08-0200
10	10.750	9.493	0.593	14.095	230	41-PIO-08-0250
12	12.750	11.294	0.687	19.392	230	41-PIO-08-0300
14	14.000	12.410	0.750	23.261	220	41-PIO-08-0350
16	16.000	14.213	0.843	29.891	220	41-PIO-08-0400
18	18.000	16.014	0.937	35.419	220	41-PIO-08-0450
20	20.000	17.814	1.031	45.879	220	41-PIO-08-0500
24	24.000	21.418	1.281	64.959	210	41-PIO-08-0600

#### **CLEAR PVC SCH40 PIPE**

(美規40透明管)



#### **Dimensions and Pressure Ratings**

單位(unit):inch

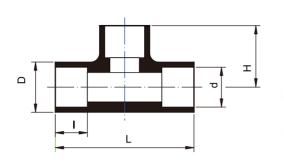
					单应(diff t).filch
Nominal			Sched	ule 40	
Pipe Size Size(in.)	O.D.	Average I.D.	Minimum Wall	Nominal Weight Lbs./ft	code
1/2	0.840	0.608	0.109	0.161	12-PIO-04-0015
3/4	1.050	0.810	0.113	0.214	12-PIO-04-0020
1	1.315	1.033	0.133	0.315	12-PIO-04-0025
1-1/4	1.660	1.364	0.140	0.426	12-PIO-04-0032
1-1/2	1.900	1.592	0.145	0.509	12-PIO-04-0040
2	2.375	2.049	0.154	0.682	12-PIO-04-0050
2-1/2	2.875	2.445	0.203	1.076	12-PIO-04-0065
3	3.500	3.042	0.216	1.409	12-PIO-04-0080
4	4.500	3.998	0.237	2.006	12-PIO-04-0100
6	6.625	6.031	0.280	3 535	12-PIO-04-0150
8	8.625	7.943	0.322	5.305	12-PIO-04-0200
10	10.750	9.975	0.365	7.966	12-PIO-04-0250
12	12.750	11.889	0.406	10.534	12-PIO-04-0300

#### UPVC ECO CLEAR PIPE

	(Thinwall)									
	DIMENSION									
INCH	OD		Thickn	code						
		tolerance	min	tolerance						
1/2"	0.840	<u>+</u> 0.004	0.0826	+0.0197	12-PIO-DA-0015					
3/4"	1.050	<u>+</u> 0.004	0.0826	+0.0197	12-PIO-DA-0020					
1"	1.315	<u>+</u> 0.005	0.0980	+0.0197	12-PIO-DA-0025					
1-1/4"	1.660	<u>+</u> 0.005	0.1102	+0.0197	12-PIO-DA-0032					
1-1/2"	1.900	<u>+</u> 0.006	0.1181	+0.0197	12-PIO-DA-0040					
2"	2.375	<u>+</u> 0.006	0.1378	+0.0197	12-PIO-DA-0050					
2-1/2"	2.875	<u>+</u> 0.007	0.1654	+0.0236	12-PIO-DA-0065					
3"	3.500	<u>+</u> 0.008	0.1850	+0.0236	12-PIO-DA-0080					
4"	4.500	<u>+</u> 0.009	0.1969	+0.0276	12-PIO-DA-0100					
6"	6.625	<u>+</u> 0.110	0.2283	+0.0394	12-PIO-DA-0150					
8"	8.625	<u>+</u> 0.015	0.2677	+0.0394	12-PIO-DA-0200					
10"	10.750	<u>+</u> 0.015	0.3150	+0.0591	12-PIO-DA-0250					
12"	12.750	<u>+</u> 0.015	0.3150	+0.0591	12-PIO-DA-0300					

<sup>\*</sup> NOT CONFORM TO ASTM STANDARD \* NOT FOR USE WITH COMPERSSED AIR OR GAS

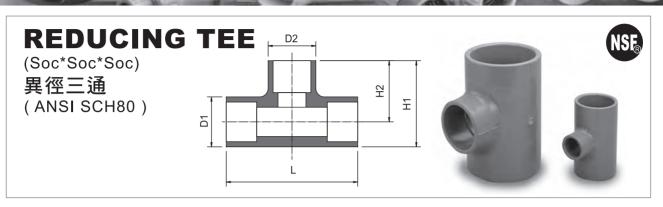






單位(unit):inch

	1	1				1	
Size	D	d	Н	I	L	UPVC code no.	CPVC code no.
1/2	1-11/64	27/32	1-15/32	7/8	2-61/64	11-TT5-08-0015	41-TT5-08-0015
3/4	1-27/64	1-1/16	1-45/64	31/32	3-27/64	11-TT5-08-0020	41-TT5-08-0020
1	1-11/16	1-5/16	2	1-1/8	4-1/64	11-TT5-08-0025	41-TT5-08-0025
1-1/4	2-3/32	1-21/32	2-1/8	1-1/4	4-9/32	11-TT5-08-0032	41-TT5-08-0032
1-1/2	2-5/16	1-29/32	2-9/16	1-13/32	5-9/64	11-TT5-08-0040	41-TT5-08-0040
2	2-7/8	2-13/32	2-53/64	1-17/32	5-45/64	11-TT5-08-0050	41-TT5-08-0050
2-1/2	3-15/32	2-29/32	3-1/2	1-3/4	7-1/32	11-TT5-08-0065	41-TT5-08-0065
3	4-5/32	3-17/32	3-31/32	1-29/32	7-61/64	11-TT5-08-0080	41-TT5-08-0080
4	5-15/64	4-1/2	4-23/32	2-1/4	9-31/64	11-TT5-08-0100	41-TT5-08-0100
5	6-3/8	5-1/4	5-41/64	2-31/32	11-1/4	11-TT5-08-0125	41-TT5-08-0125
6	7-33/64	6-21/32	6-3/4	2-31/32	13-1/2	11-TT5-08-0150	41-TT5-08-0150
8	9-41/64	8-21/32	8-13/16	3-31/32	17-41/64	11-TT5-08-0200	41-TT5-08-0200
10	12-15/32	10-7/8	11-17/32	5-17/32	22-29/32	11-TT5-08-0250	41-TT5-08-0250
12	14-9/16	12-13/16	13-9/32	6-5/16	26-27/64	11-TT5-08-0300	41-TT5-08-0300
14	15-39/64	14-1/32	14-9/16	7	29-3/64	11-TT5-08-0350	41-TT5-08-0350
16	17-11/16	16-1/32	17-3/64	8-1/32	34-3/32	11-TT5-08-0400	41-TT5-08-0400
18	19-7/8	18-1/32	19-9/32	8-31/32	38-37/64	11-TT5-08-0450	41-TT5-08-0450
* 20	22-11/64	20-1/16	22-41/64	10	45-9/32	11-TT5-08-0500	41-TT5-08-0500
* 24	26-41/64	24-5/64	41-63/64	12	57-21/64	11-TT5-08-0600	41-TT5-08-0600
		1	1	1			·



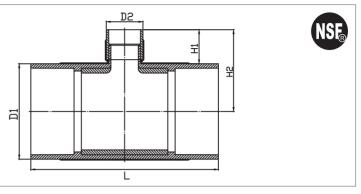
單位(unit):inch

Size	D1	D2	H1	H2	L	UPVC code no.	CPVC code no.
3/4x3/4x1/2	1-1/2	1-13/64	2-1/16	1-5/16	3-5/16	11-TR4-08-020015	41-TR4-08-020015
1x1x1/2	1-11/16	1-13/64	2-19/32	1-23/32	3-7/16	11-TR4-08-025015	41-TR4-08-025015
1x1x3/4	1-49/64	1-3/8	2-3/4	1-29/32	3-11/16	11-TR4-08-025020	41-TR4-08-025020
1-1/4x1-1/4x3/4	2-3/32	1-3/8	3-1/8	2-3/32	3-13/16	11-TR4-08-032020	41-TR4-08-032020
1-1/4x1-1/4x1	2-3/32	1-47/64	3-1/8	2-2/32	4-41/64	11-TR4-08-032025	41-TR4-08-032025
1-1/2×1-1/2×3/4	2-5/16	1-3/8	3-13/16	2-1/32	4-1/8	11-TR4-08-040020	41-TR4-08-040020
1-1/2x1-1/2x1	2-3/8	1-3/4	3-15/32	2-15/16	4-1/2	11-TR4-08-040025	41-TR4-08-040025
1-1/2x1-1/2x1-1/4	2-23/64	2-3/32	3-1/2	2-11/32	5-1/8	11-TR4-08-040032	41-TR4-08-040032
2x2x1/2	3	1-5/16	3-3/4	2-5/16	4-5/16	11-TR4-08-050015	41-TR4-08-050015
2x2x3/4	3	1-1/2	3-7/8	2-7/16	4-1/2	11-TR4-08-050020	41-TR4-08-050020
2x2x1	2-7/8	1-3/4	4-1/32	2-5/8	4-3/4	11-TR4-08-050025	41-TR4-08-050025
2x2x1-1/2	2-7/8	2-3/8	4-1/4	2-27/32	5-3/8	11-TR4-08-050040	41-TR4-08-050040
2-1/2×2-1/2×2	3-29/64	2-57/64	4-5/8	2-29/32	7	11-TR4-08-065050	41-TR4-08-065050
3×3×2	4-3/16	2-7/8	5-11/32	3-9/32	6-5/8	11-TR4-08-080050	41-TR4-08-080050
4x4x2	5-3/16	2-7/8	6-7/16	3-7/8	7-3/8	11-TR4-08-100050	41-TR4-08-100050
4x4x3	5-1/4	4-3/16	6-27/32	4-7/32	8-11/16	11-TR4-08-100080	41-TR4-08-100080
6×6×2	7-19/32	2-7/8	8-31/32	4-31/32	11-7/32	11-TR4-08-150050	41-TR4-08-150050
6×6×3	7-19/32	4-5/32	9-1/8	5-3/8	11-7/32	11-TR4-08-150080	41-TR4-08-150080
6×6×4	7-19/32	5-1/4	9-13/32	5-19/32	11-7/32	11-TR4-08-150100	41-TR4-08-150100
8×8×6	9-41/64	7-9/16	13-9/16	8-3/4	15-35/64	11-TR4-08-200150	41-TR4-08-200150
10x10x4	12-1/16	5-3/16	14-3/32	8-1/16	22-1/16	11-TR4-08-250100	41-TR4-08-250100
10x10x6	12-1/16	7-1/2	14-7/8	8-27/32	22-1/16	11-TR4-08-250150	41-TR4-08-250150
10x10x8	12-1/16	9-11/16	15-7/8	9-27/32	22-1/16	11-TR4-08-250200	41-TR4-08-250200
12x12x6	14-1/4	7-1/2	17-5/32	10-1/32	25-31/32	11-TR4-08-300150	41-TR4-08-300150
12x12x8	14-1/4	9-11/16	18-5/32	11-1/32	25-31/32	11-TR4-08-300200	41-TR4-08-300200
12x12x10	14-1/4	12-1/16	18-27/32	11-23/32	25-31/32	11-TR4-08-300250	41-TR4-08-300250
△ 14×14×12	15-39/64	14-9/16	25-17/32	17-3/4	36-1/2	11-TR4-08-350300	41-TR4-08-350300
△ 16×16×14	17-11/16	17-19/32	28-5/16	19-1/2	34-3/32	11-TR4-08-400350	41-TR4-08-400350
△ 18×18×16	19-7/8	19-49/64	27-15/16	18	38-37/64	11-TR4-08-450400	41-TR4-08-450400
* 20x20x14	22-1/8	15-17/32	29-31/32	18-57/64	40	11-TR4-08-500350	41-TR4-08-500350
* 20x20x16	22-1/8	17-23/32	31-9/64	20-3/16	42	11-TR4-08-500400	41-TR4-08-500400
* 20x20x18	22-1/8	19-29/33	35-19/32	24-1/2	45-55/64	11-TR4-08-500450	41-TR4-08-500450
* 24x24x16	26-41/64	17-47/64	35-3/8	22-3/64	48-47/64	11-TR4-08-500400	41-TR4-08-500400
* 24x24x18	26-41/64	19-59/64	36-5/32	22-27/32	48-3/4	11-TR4-08-600450	41-TR4-08-600450
* 24x20x20	26-41/64	22-1/8	37-47/64	24-27/64	50-3/4	11-TR4-08-600500	41-TR4-08-600500

△轉接品(Transition) \*手工製品(Fabricated)

#### **REDUCING TEE**

(Soc\*Soc\*Soc) **異徑三通** (手工平接頭式) (ANSI SCH80) (Fabricated Socket Type)

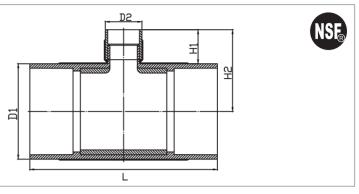


單位(unit):inch

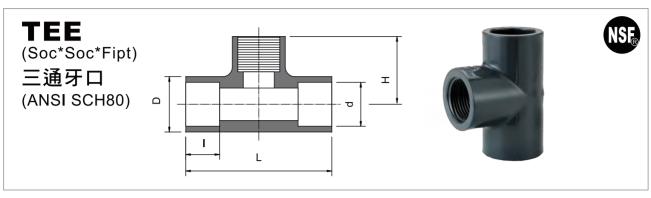
Size	D1	D2	H1	H2	L	UPVC	CPVC
10x10x2	12-3/64	2-61/64	5-61/64	11-29/32	21-5/64	code.no 11-TR5-08-250050	code.no 41-TR5-08-250050
10x10x3	12-3/64	4-1/4	5-61/64	11-29/32	21-5/64	11-TR5-08-250080	41-TR5-08-250080
10x10x4	12-3/64	5-9/32	5-61/64	11-29/32	21-5/64	11-TR5-08-250100	41-TR5-08-250100
10x10x6	12-3/64	7-41/64	10-57/64	16-57/64	21-5/64	11-TR5-08-250150	41-TR5-08-250150
10x10x8	12-3/64	9-47/64	10-57/64	16-57/64	21-5/64	11-TR5-08-250200	41-TR5-08-250200
12x12x2	14-3/8	2-61/64	5-61/64	13-5/32	26-37/64	11-TR5-08-300050	41-TR5-08-300050
12x12x3	14-3/8	4-1/4	5-61/64	13-5/32	26-37/64	11-TR5-08-300080	41-TR5-08-300080
12x12x4	14-3/8	5-9/32	5-61/64	13-5/32	26-37/64	11-TR5-08-300100	41-TR5-08-300100
12x12x6	14-3/8	7-41/64	12-57/64	20-1/8	26-37/64	11-TR5-08-300150	41-TR5-08-300150
12x12x8	14-3/8	9-47/64	12-57/64	20-1/8	26-37/64	11-TR5-08-300200	41-TR5-08-300200
12x12x10	14-3/8	12-3/64	12-57/64	20-1/8	26-37/64	11-TR5-08-300250	41-TR5-08-300250
14x14x2	15-1/2	2-61/64	5-61/64	13-45/64	28-49/64	11-TR5-08-350050	41-TR5-08-350050
14x14x3	15-1/2	4-1/4	5-61/64	13-45/64	28-49/64	11-TR5-08-350080	41-TR5-08-350080
14x14x4	15-1/2	5-9/32	5-61/64	13-45/64	28-49/64	11-TR5-08-350100	41-TR5-08-350100
14x14x6	15-1/2	7-41/64	12-57/64	20-21/32	28-49/64	11-TR5-08-350150	41-TR5-08-350150
14x14x8	15-1/2	9-47/64	12-57/64	20-21/32	28-49/64	11-TR5-08-350200	41-TR5-08-350200
14x14x10	15-1/2	12-3/64	12-57/64	20-21/32	28-49/64	11-TR5-08-350250	41-TR5-08-350250
14x14x12	15-1/2	14-3/8	15-9/16	23-5/16	28-49/64	11-TR5-08-350300	41-TR5-08-350300
16x16x2	17-57/64	2-61/64	5-61/64	14-59/64	34-21/32	11-TR5-08-400050	41-TR5-08-400050
16x16x3	17-57/64	4-1/4	5-61/64	14-59/64	34-21/32	11-TR5-08-400080	41-TR5-08-400080
16x16x4	17-57/64	5-9/32	5-61/64	14-59/64	34-21/32	11-TR5-08-400100	41-TR5-08-400100
16x16x6	17-57/64	7-41/64	12-57/64	21-27/32	34-21/32	11-TR5-08-400150	41-TR5-08-400150
16x16x8	17-57/64	9-47/64	12-57/64	21-27/32	34-21/32	11-TR5-08-400200	41-TR5-08-400200
16x16x10	17-57/64	12-3/64	12-57/64	21-27/32	34-21/32	11-TR5-08-400250	41-TR5-08-400250
16x16x12	17-57/64	14-3/8	17-33/64	26-15/32	34-21/32	11-TR5-08-400300	41-TR5-08-400300
16x16x14	17-57/64	15-1/2	17-33/64	26-15/32	34-21/32	11-TR5-08-400450	41-TR5-08-400450

#### **REDUCING TEE**

(Soc\*Soc\*Soc) **異徑三通** (手工平接頭式) ( ANSI SCH80 ) (Fabricated Socket Type)

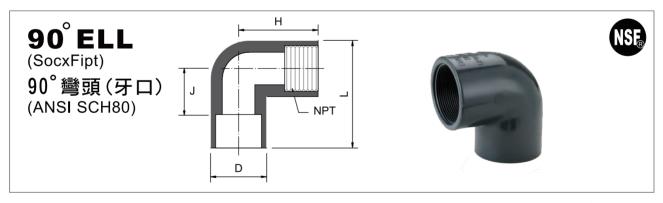


Size	D1	D2	H1	H2	L	UPVC code.no	CPVC code.no
18x18x2	19-7/8	2-61/64	5-61/64	15-29/32	39-3/64	11-TR5-08-450050	41-TR5-08-250050
18x18x3	19-7/8	4-1/4	5-61/64	15-29/32	39-3/64	11-TR5-08-450080	41-TR5-08-450080
18x18x4	19-7/8	5-9/32	5-61/64	15-29/32	39-3/64	11-TR5-08-450100	41-TR5-08-450100
18x18x6	19-7/8	7-41/64	12-57/64	22-27/32	39-3/64	11-TR5-08-450150	41-TR5-08-450150
18x18x8	19-7/8	9-47/64	12-57/64	22-27/32	39-3/64	11-TR5-08-450200	41-TR5-08-450200
18x18x10	19-7/8	12-3/64	12-57/64	22-27/32	39-3/64	11-TR5-08-450250	41-TR5-08-450250
18x18x12	19-7/8	14-3/8	21-13/32	31-11/32	39-3/64	11-TR5-08-450300	41-TR5-08-450300
18x18x14	19-7/8	15-1/2	21-13/32	31-11/32	39-3/64	11-TR5-08-450350	41-TR5-08-450350
18x18x16	19-7/8	17-57/64	21-13/32	31-11/32	39-3/64	11-TR5-08-450400	41-TR5-08-450400
20x20x2	22-15/64	2-61/64	5-61/64	17-1/64	43-1/32	11-TR5-08-500050	41-TR5-08-500050
20x20x3	22-15/64	4-1/4	5-61/64	17-1/64	43-1/32	11-TR5-08-500080	41-TR5-08-500080
20x20x4	22-15/64	5-9/32	5-61/64	17-1/64	43-1/32	11-TR5-08-500100	41-TR5-08-500100
20x20x6	22-15/64	7-41/64	12-57/64	23-31/32	43-1/32	11-TR5-08-500150	41-TR5-08-500150
20x20x8	22-15/64	9-47/64	12-57/64	23-31/32	43-1/32	11-TR5-08-500200	41-TR5-08-500200
20x20x10	22-15/64	12-3/64	12-57/64	23-31/32	43-1/32	11-TR5-08-500250	41-TR5-08-500250
20x20x12	22-15/64	14-3/8	22-11/16	33-23/32	43-1/32	11-TR5-08-500300	41-TR5-08-500300
20x20x14	22-15/64	15-1/2	22-11/16	33-23/32	43-1/32	11-TR5-08-500350	41-TR5-08-500350
20x20x16	22-15/64	17/57/64	22-11/16	33-23/32	43-1/32	11-TR5-08-500400	41-TR5-08-500400
20x20x18	22-15/64	19-7/8	22-11/16	33-23/32	43-1/32	11-TR5-08-500450	41-TR5-08-500450



單位(unit):inch

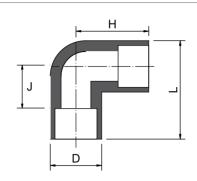
Size	D	d	Н	ı	L	UPVC code no.	CPVC code no.
1/2	1-1/4	27/32	1-13/32	7/8	2-51/64	11-TT6-08-0015	41-TT6-08-0015
3/4	1-1/2	1-1/16	1-9/16	31/32	3-7/64	11-TT6-08-0020	41-TT6-08-0020
1	1-13/16	1-21/64	1-55/64	1-1/8	3-23/32	11-TT6-08-0025	41-TT6-08-0025
1-1/4	2-1/16	1-21/32	3-5/32	1-1/4	4-1/4	11-TT6-08-0032	41-TT6-08-0032
1-1/2	2-11/32	1-29/32	3-3/4	1-13/32	5-5/32	11-TT6-08-0040	41-TT6-08-0040
2	2-7/8	2-13/32	4-9/32	1-17/32	5-11/16	11-TT6-08-0050	41-TT6-08-0050



單位(unit):inch

Size	D	J	Н	L	UPVC code no.	CPVC code no.
1/2	1-5/32	19/32	15/16	2-1/64	11-L98-08-0015	41-L98-08-0015
3/4	1-27/64	5/8	1-39/64	2-21/64	11-L98-08-0020	41-L98-08-0020
1	1-45/64	25/32	1-29/32	2-3/4	11-L98-08-0025	41-L98-08-0025
1-1/4	2-3/32	1	2-17/64	3-5/16	11-L98-08-0032	41-L98-08-0032
1-1/2	2-23/64	1-5/32	2-17/32	3-23/32	11-L98-08-0040	41-L98-08-0040
2	2-7/8	1-23/64	2-55/64	4-19/64	11-L98-08-0050	41-L98-08-0050









單位(unit):inch

CPVC ode no. 15-08-0015 15-08-0020 15-08-0025 15-08-0032 15-08-0040 15-08-0050
15-08-0020 15-08-0025 15-08-0032 15-08-0040
5-08-0025 5-08-0032 5-08-0040
5-08-0032
5-08-0040
5-08-0050
5-08-0065
5-08-0080
5-08-0100
5-08-0125
5-08-0150
5-08-0200
5-08-0250
5-08-0300
5-08-0350
5-08-0400
5-08-0450
5-08-0500
5-08-0600

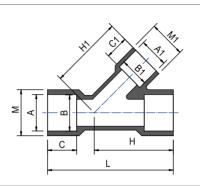
**45°ELL** (Soc\*Soc) **45°**彎頭 (ANSI SCH80)



單位(unit):inch

					, ,
Size	D	н	J	UPVC code no.	CPVC code no.
1/2	1-13/64	27/32	5/16	11-L48-08-0015	41-L48-08-0015
3/4	1-25/64	1-3/8	7/16	11-L48-08-0020	41-L48-08-0020
1	1-49/64	1-5/32	13/32	11-L48-08-0025	41-L48-08-0025
1-1/4	2-3/32	1-7/16	7/16	11-L48-08-0032	41-L48-08-0032
1-1/2	2-13/32	1-43/64	9/16	11-L48-08-0040	41-L48-08-0040
2	2-7/8	2-3/64	23/32	11-L48-08-0050	41-L48-08-0050
2-1/2	3-15/32	2-13/32	3/4	11-L48-08-0065	41-L48-08-0065
3	4-11/64	2-57/64	1-1/32	11-L48-08-0080	41-L48-08-0080
4	5-9/32	3-27/64	1-3/16	11-L48-08-0100	41-L48-08-0100
6	7-39/64	4-23/32	1-17/32	11-L48-08-0150	41-L48-08-0150
8	9-41/64	6-1/16	2-1/16	11-L48-08-0200	41-L48-08-0200
10	12-23/64	8-1/8	2-19/32	11-L48-08-0250	41-L48-08-0250
12	14-17/32	10-13/16	4-11/32	11-L48-08-0300	41-L48-08-0300
14	15-39/64	11-49/64	4-25/32	11-L48-08-0350	41-L48-08-0350
16	17-11/16	13-1/2	5-17/32	11-L48-08-0400	41-L48-08-0400
18	19-7/8	15	6	11-L48-08-0450	41-L48-08-0450
* 20	22-17/64	17-9/32	9-3/16	11-L48-08-0500	41-L48-08-0500
* 24	26-41/64	22-29/64	10-1/4	11-L48-08-0600	41-L48-08-0600

#### WYE (Soc\*Soc\*Soc) Y型三通 (ANSI SCH80)







單位(unit):inch

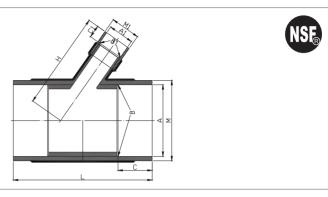
													華區(diff t) . Inicii
Size	e A	В	A1	B1	С	C1	Н	H1	М	M1	L	UPVC code no.	CPVC code no.
1/2	27/32	27/32	27/32	27/32	7/8	7/8	2	2-5/64	1-7/32	1-7/32	3-15/64	11-TY3-08-0015	41-TY3-08-0015
3/4	1-3/16	1-1/16	1-3/16	1-1/16	1	1	2-19/64	2-3/8	1-29/64	1-29/64	3-45/64	11-TY3-08-0020	41-TY3-08-0020
1	1-21/64	1-5/16	1-21/64	1-5/16	1-1/8	1-1/8	2-5/64	2-7/8	1-25/32	1-25/32	4-11/32	11-TY3-08-0025	41-TY3-08-0025
1-1/-	1 1-43/64	1-21/32	1-43/64	1-21/32	1-1/4	1-1/4	3-23/64	3-7/16	2-5/32	2-5/32	5-3/64	11-TY3-08-0032	41-TY3-08-0032
1-1/:	2 1-29/32	1-29/32	1-29/32	1-29/32	1-3/8	1-3/8	3-15/16	3-15/16	2-15/32	2-15/32	5-3/4	11-TY3-08-0040	41-TY3-08-0040
2	2-25/64	2-3/8	2-25/64	2-3/8	1-1/2	1-1/2	4-3/4	4-41/64	3-1/32	3-1/32	6-57/64	11-TY3-08-0050	41-TY3-08-0050
2-1/2	2 2-57/64	2-7/8	2-57/64	2-7/8	1-3/4	1-3/4	5-25/32	5-25/32	3-1/2	3-1/2	8-1/4	11-TY3-08-0065	41-TY3-08-0065
3	3-33/64	3-1/2	3-33/64	3-1/2	1-7/8	1-7/8	6-13/16	6-13/16	4-19/64	4-19/64	9-5/8	11-TY3-08-0080	41-TY3-08-0080
4	4-33/64	4-1/2	4-33/64	4-1/2	2-1/4	2-1/4	8-1/4	8-1/4	5-23/64	5-23/64	11-11/16	11-TY3-08-0100	41-TY3-08-0100
4x4x	2 4-33/64	4-1/2	2-25/64	2-3/8	2-1/4	1-1/2	8-1/4	8-1/4	5-23/64	3-1/32	11-11/16	11-TY3-08-100050	41-TY3-08-100050
4x4x	3 4-33/64	4-1/2	3-33/64	3-1/2	2-1/4	1-7/8	8-3/64	7-7/8	5-23/64	4-19/64	10-19/64	11-TY3-08-100080	41-TY3-08-100080
6	6-41/64	6-5/8	6-41/64	6-5/8	3	3	11-3/64	11-25/32	7-23/32	7-23/32	15-7/8	11-TY3-08-0150	41-TY3-08-0150
△ 6x6x	2 6-41/64	6-5/8	2-25/64	2-3/8	3	1-1/2	11-3/64	11-25/32	7-23/32	3-1/32	13-5/16	11-TY3-08-150050	41-TY3-08-150050
△ 6x6x	3 6-41/64	6-5/8	3-33/64	3-1/2	3	1-7/8	11-3/64	11-25/32	7-23/32	4-19/64	13-5/16	11-TY3-08-150080	41-TY3-08-150080
6x6x	6-41/64	6-5/8	4-33/64	4-1/2	3	2-1/4	10-5/16	10-5/16	7-23/32	5-23/64	13-5/16	11-TY3-08-150100	41-TY3-08-150100
8	8-21/32	8-5/8	8-21/32	8-5/8	4	4	17-1/8	17-11/64	10-5/32	10-5/32	23-5/8	11-TY3-08-0200	41-TY3-08-0200
△ 8x8x	2 8-21/32	8-5/8	2-25/64	2-3/8	4-11/32	1-1/2	17-1/8	17-11/64	10-5/32	3-1/32	23-5/8	11-TY3-08-200050	41-TY3-08-200050
△ 8x8x	8-21/32	8-5/8	3-33/64	3-1/2	4-11/32	1-7/8	17-1/8	17-11/64	10-5/32	4-19/64	23-5/8	11-TY3-08-200080	41-TY3-08-200080
△ 8x8x	4 8-21/32	8-5/8	4-33/64	4-1/2	4-11/32	2-1/4	17-1/8	17-11/64	10-5/32	5-23/64	23-5/8	11-TY3-08-200100	41-TY3-08-200100
△ 8x8x	8-21/32	8-5/8	6-41/64	6-5/8	4-11/32	3	17-1/8	17-11/64	10-5/32	7-23/32	23-5/8	11-TY3-08-200150	41-TY3-08-200150
* 10	10-25/32	10-3/4	10-25/32	10-3/4	5-33/64	5-33/64	22	23-1/2	12-3/64	12-3/64	33	11-TY3-08-0250	41-TY3-08-0250
* 10x10	(3 10-25/32	10-3/4	3-33/64	3-1/2	5	7	14-21/64	18-1/2	12-3/64	4-19/64	21-5/64	11-TY3-08-250080	41-TY3-08-250080
* 10x10	<4 10-25/32	10-3/4	4-33/64	4-1/2	5	2-1/4	14-21/64	18-1/2	12-3/64	5-23/64	21-5/64	11-TY3-08-250100	41-TY3-08-250100
* 10x10	(6 10-25/32	10-3/4	6-41/64	6-5/8	5	3	14-21/64	18-1/2	12-3/64	7-41/64	21-5/64	11-TY3-08-250150	41-TY3-08-250150
* 10x10	(8 10-25/32	10-3/4	8-21/32	8-5/8	5	4	16-7/64	21-17/32	12-3/64	10-5/32	25	11-TY3-08-250200	41-TY3-08-250200
* 12	12-25/32	12-3/4	12-25/32	12-25/32	5-63/64	5-63/64	25-25/32	26-31/32	14-7/32	14-7/32	38	11-TY3-08-0300	41-TY3-08-0300
* 12x12	(2   12-25/32	12-3/4	2-25/64	2-3/8	6-7/64	1-1/2	16-11/32	17-19/32	14-7/32	3-1/32	24-51/64	11-TY3-08-300050	41-TY3-08-300050
* 12x12	(3 12-25/32	12-3/4	3-33/64	3-1/2	6-7/64	1-7/8	16-11/32	17-19/32	14-7/32	4-19/64	24-51/64	11-TY3-08-300080	41-TY3-08-300080
* 12x12	(4 12-25/32	12-3/4	4-33/64	4-1/2	6-7/64	2-1/4	16-11/32	17-19/32	14-7/32	5-23/64	24-51/64	11-TY3-08-300100	41-TY3-08-300100
* 12x12	(6 12-25/32	12-3/4	6-21/32	6-5/8	6-7/64	3	17-11/32	26-3/8	14-7/32	7-23/32	26-49/64	11-TY3-08-300150	41-TY3-08-300150
* 12x12	(8 12-25/32	12-3/4	8-21/32	8-5/8	6-7/64	4	16-23/64	23-57/64	14-7/32	10-5/32	24-51/64	11-TY3-08-300200	41-TY3-08-300200
* 12x12x	10 12-25/32	12-3/4	10-25/32	10-3/4	6-7/64	5	18-21/64	26-25/32	14-7/32	12-3/64	28-47/64	11-TY3-08-300250	41-TY3-08-300250
* 14	14-1/32	13-29/32	14-1/32	13-29/32	7	7	30-1/2	30-1/2	15-1/2	15-1/2	47	11-TY3-08-0350	41-TY3-08-0350
* 16	16-2/32	15-29/32	16-2/32	15-29/32	8	8	33-3/8	33-3/8	17-3/4	17-3/4	50-3/4	11-TY3-08-0400	41-TY3-08-0400
* 18	18-2/32	17-29/32	18-2/32	17-29/32	9	9	37	37	19-7/8	19-7/8	56	11-TY3-08-0450	41-TY3-08-0450
* 20	20-2/32	19-29/32	20-3/32	19-29/32	10	10	41-5/8	41-5/8	22-1/8	22-1/8	63-1/4	11-TY3-08-0500	41-TY3-08-0500
* 24	24-1/8	23-15/16	24-1/8	23-15/16	12	12	50-1/2	50-1/2	26-1/2	26-1/2	76-1/2	11-TY3-08-0600	41-TY3-08-0600
			•									#### D /T \	・ ナチ丁制 ロ /Eabricated

△轉接品(Transition) \*手工製品(Fabricated)

## OCO PIPE FITTING VALVE

#### **WYE**

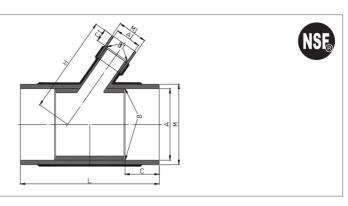
(Soc\*Soc\*Soc) **異徑Y型三通** (手工平接頭式) ( ANSI SCH80 ) (Fabricated Socket Type)



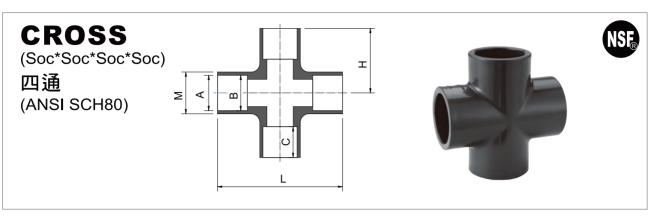
Size	С	C1	А	A1	М	M1	В	B1	Н	L	UPVC code no.	CPVC code no.
10x10x10	5	5	10-23/32	10-23/32	12-3/64	12-3/64	10-47/64	10-47/64	23-13/16	27-27/32	11-TY5-08-250250	41-TY5-08-250250
10x10x2	5	1-1/2	10-23/32	2-13/32	12-3/64	2-61/64	10-47/64	2-3/8	18-33/64	21-1/16	11-TY5-08-250050	41-TY5-08-250050
10x10x3	5	1-7/8	10-23/32	3-33/64	12-3/64	4-1/4	10-47/64	3-33/64	18-33/64	21-1/16	11-TY5-08-250080	41-TY5-08-250080
10x10x4	5	2-1/4	10-23/32	4-17/32	12-3/64	5-9/32	10-47/64	4-1/2	18-33/64	21-1/16	11-TY5-08-250100	41-TY5-08-250100
10x10x6	5	3	10-23/32	6-21/32	12-3/64	7-41/64	10-47/64	6-5/8	18-33/64	21-5/64	11-TY5-08-250150	41-TY5-08-250150
10x10x8	5	4	10-23/32	8-21/32	12-3/64	9-47/64	10-47/64	8-5/8	21-17/32	25	11-TY5-08-250200	41-TY5-08-250200
12x12x12	6	6	12-25/32	12-25/32	14-3/8	14-3/8	12-47/64	12-47/64	28-61/64	33-25/64	11-TY5-08-300300	41-TY5-08-300300
12x12x2	6	1-1/2	12-25/32	2-13/32	14-3/8	2-61/64	12-47/64	2-3/8	17-39/64	24-51/64	11-TY5-08-300050	41-TY5-08-300050
12x12x3	6	1-7/8	12-25/32	3-33/64	14-3/8	4-1/4	12-47/64	3-33/64	17-39/64	24-51/64	11-TY5-08-300080	41-TY5-08-300080
12x12x4	6	2-1/4	12-25/32	4-17/32	14-3/8	5-9/32	12-47/64	4-1/2	17-39/64	24-51/64	11-TY5-08-300100	41-TY5-08-300100
12x12x6	6	3	12-25/32	6-21/32	14-3/8	7-41/64	12-47/64	6-5/8	23-57/64	24-51/64	11-TY5-08-300150	41-TY5-08-300150
12x12x8	6	4	12-25/32	8-21/32	14-3/8	9-47/64	12-47/64	8-5/8	23-57/64	24-51/64	11-TY5-08-300200	41-TY5-08-300200
12x12x10	6	5	12-25/32	10-23/32	14-3/8	12-3/64	12-47/64	10-47/64	26-49/64	28-47/64	11-TY5-08-300250	41-TY5-08-300250
14x14x14	7	7	14-5/64	14-5/64	15-1/2	15-1/2	13-63/64	13-63/64	31-45/64	37-57/64	11-TY5-08-350350	41-TY5-08-350350
14x14x2	7	1-1/2	14-5/64	2-13/32	15-1/2	2-61/64	13-63/64	2-3/8	19-17/64	28-47/64	11-TY5-08-350050	41-TY5-08-350050
14x14x3	7	1-7/8	14-5/64	3-33/64	15-1/2	4-1/4	13-63/64	3-33/64	19-17/64	28-47/64	11-TY5-08-350080	41-TY5-08-350080
14x14x4	7	2-1/4	14-5/64	4-17/32	15-1/2	5-9/32	13-63/64	4-1/2	19-17/64	28-47/64	11-TY5-08-350100	41-TY5-08-350100
14x14x6	7	3	14-5/64	6-21/32	15-1/2	7-41/64	13-63/64	6-5/8	20-27/32	28-47/64	11-TY5-08-350150	41-TY5-08-350150
14x14x8	7	4	14-5/64	8-21/32	15-1/2	9-47/64	13-63/64	8-5/8	20-27/32	28-47/64	11-TY5-08-350200	41-TY5-08-350200
14x14x10	7	5	14-5/64	10-23/32	15-1/2	12-3/64	13-63/64	10-47/64	26-3/16	34-11/32	11-TY5-08-350250	41-TY5-08-350250
14x14x12	7	6	14-5/64	12-25/32	15-1/2	14-3/8	13-63/64	12-3/4	31-15/32	36-23/32	11-TY5-08-350300	41-TY5-08-350300
16x16x16	8	8	16-3/64	16-3/64	17-57/64	17-57/64	15-63/64	15-63/64	38-23/32	47-49/64	11-TY5-08-400400	41-TY5-08-400400
16x16x2	8	1-1/2	16-3/64	2-13/32	17-57/64	2-61/64	15-63/64	2-3/8	22-47/64	34-19/32	11-TY5-08-400050	41-TY5-08-400050
16x16x3	8	1-7/8	16-3/64	3-33/64	17-57/64	4-1/4	15-63/64	3-33/64	22-47/64	34-19/32	11-TY5-08-400080	41-TY5-08-400080
16x16x4	8	2-1/4	16-3/64	4-17/32	17-57/64	5-9/32	15-63/64	4-1/2	22-47/64	34-19/32	11-TY5-08-400100	41-TY5-08-400100

#### **WYE**

(Soc\*Soc\*Soc) **異徑Y型三通** (手工平接頭式) ( ANSI SCH80 ) (Fabricated Socket Type)



Size	С	C1	А	A1	М	M1	В	B1	Н	L	UPVC code no.	CPVC code no.
16x16x6	8	3	16-3/64	6-21/32	17-57/64	7-41/64	15-63/64	6-5/8	27-5/32	34-19/32	11-TY5-08-400150	41-TY5-08-400150
16x16x8	8	4	16-3/64	8-21/32	17-57/64	9-47/64	15-63/64	8-5/8	27-5/32	34-19/32	11-TY5-08-400200	41-TY5-08-400200
16x16x10	8	5	16-3/64	10-23/32	17-57/64	12-3/64	15-63/64	10-47/64	28-23/32	34-19/32	11-TY5-08-400250	41-TY5-08-400250
16x16x12	8	6	16-3/64	12-25/32	17-57/64	14-3/8	15-63/64	12-47/64	34-19/64	40-51/64	11-TY5-08-400300	41-TY5-08-400300
16x16x14	8	7	16-3/64	14-5/64	17-57/64	15-1/2	15-63/64	13-57/64	34-19/64	40-51/64	11-TY5-08-400350	41-TY5-08-400350
18x18x18	9	9	18-3/64	18-3/64	19-7/8	19-7/8	17-29/32	17-29/32	40-1/8	49-45/64	11-TY5-08-450450	41-TY5-08-450450
18x18x2	9	1-1/2	18-3/64	2-13/32	19-7/8	2-61/64	17-29/32	2-3/8	21-39/64	39-3/64	11-TY5-08-450050	41-TY5-08-250050
18x18x3	9	1-7/8	18-3/64	3-33/64	19-7/8	4-1/4	17-29/32	3-33/64	21-39/64	39-3/64	11-TY5-08-450080	41-TY5-08-450080
18x18x4	9	2-1/4	18-3/64	4-17/32	19-7/8	5-9/32	17-29/32	4-1/2	21-39/64	39-3/64	11-TY5-08-450100	41-TY5-08-450100
18x18x6	9	3	18-3/64	6-21/32	19-7/8	7-41/64	17-29/32	6-5/8	33-45/64	39-3/64	11-TY5-08-450150	41-TY5-08-450150
18x18x8	9	4	18-3/64	8-21/32	19-7/8	9-47/64	17-29/32	8-5/8	33-45/64	39-3/64	11-TY5-08-450200	41-TY5-08-450200
18x18x10	9	5	18-3/64	10-23/32	19-7/8	12-3/64	17-29/32	10-3/4	33-45/64	39-3/64	11-TY5-08-450250	41-TY5-08-450250
18x18x12	9	6	18-3/64	12-25/32	19-7/8	14-3/8	17-29/32	12-47/64	43-5/64	48-55/64	11-TY5-08-450300	41-TY5-08-450300
18x18x14	9	7	18-3/64	14-5/64	19-7/8	15-1/2	17-29/32	13-57/64	43-5/64	48-55/64	11-TY5-08-450350	41-TY5-08-450350
18x18x16	9	8	18-3/64	16-3/64	19-7/8	17-57/64	17-29/32	15-63/64	43-5/64	48-55/64	11-TY5-08-450400	41-TY5-08-450400
20x20x20	10	10	20-3/64	20-3/64	22-15/64	22-15/64	19-63/64	19-63/64	47-1/6	53-39-64	11-TY5-08-500500	41-TY5-08-500500
20x20x2	10	1-1/2	20-3/64	2-13/32	22-15/64	2-61/64	19-63/64	2-3/8	36-17/64	43-1/32	11-TY5-08-500050	41-TY5-08-500050
20x20x3	10	1-7/8	20-3/64	3-33/64	22-15/64	4-1/4	19-63/64	3-33/64	36-17/64	43-1/32	11-TY5-08-500080	41-TY5-08-500080
20x20x4	10	2-1/4	20-3/64	4-17/32	22-15/64	5-9/32	19-63/64	4-1/2	36-17/64	43-1/32	11-TY5-08-500100	41-TY5-08-500100
20x20x6	10	3	20-3/64	6-21/32	22-15/64	7-41/64	19-63/64	6-5/8	31-23/32	43-1/32	11-TY5-08-500150	41-TY5-08-500150
20x20x8	10	4	20-3/64	8-21/32	22-15/64	9-47/64	19-63/64	8-5/8	31-23/32	43-1/32	11-TY5-08-500200	41-TY5-08-500200
20x20x10	10	5	20-3/64	10-23/32	22-15/64	12-3/64	19-63/64	10-3/4	31-23/32	43-1/32	11-TY5-08-500250	41-TY5-08-500250
20x20x12	10	6	20-3/64	12-25/32	22-15/64	14-3/8	19-63/64	12-47/64	44-47/64	53-35/64	11-TY5-08-500300	41-TY5-08-500300
20x20x14	10	7	20-3/64	14-5/64	22-15/64	15-1/2	19-63/64	13-57/64	44-47/64	53-35/64	11-TY5-08-500350	41-TY5-08-500350
20x20x16	10	8	20-3/64	16-3/64	22-15/64	17-57/64	19-63/64	15-63/64	44-47/64	53-35/64	11-TY5-08-500400	41-TY5-08-500400
20x20x18	10	9	20-3/64	18-3/64	22-15/64	19-7/8	19-63/64	17-29/32	44-47/64	53-35/64	11-TY5-08-500450	41-TY5-08-500450

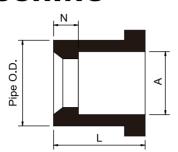


單位(unit):inch

Size	А	В	С	Н	М	L	UPVC code no.	CPVC code no.
1/2	27/32	27/32	7/8	1-23/64	1-3/16	2-23/32	11-TZ1-08-0015	41-TZ1-08-0015
3/4	1-1/16	1-1/16	1	1-5/8	1-3/8	3-1/	11-TZ1-08-0020	41-TZ1-08-0020
1	1-11/32	1-5/16	1-1/8	2-3/32	1-11/16	4-3/16	11-TZ1-08-0025	41-TZ1-08-0025
1-1/4	1-11/16	1-21/32	1-1/8	2-11/32	2-1/16	4-43/64	11-TZ1-08-0032	41-TZ1-08-0032
1-1/2	1-29/32	1-29/32	1-3/8	2-5/8	2-7/16	5-1/4	11-TZ1-08-0040	41-TZ1-08-0040
2	2-13/32	2-3/8	1-1/2	3	3-1/16	6	11-TZ1-08-0050	41-TZ1-08-0050
2-1/2	2-29/32	2-7/8	1-3/4	3-7/16	3-19/32	6-7/8	11-TZ1-08-0065	41-TZ1-08-0065
3	3-17/32	3-1/2	1-7/8	3-15/16	4-19/64	7-7/8	11-TZ1-08-0080	41-TZ1-08-0080
4	4-17/32	4-1/2	2-1/4	4-7/8	5-1/4	9-3/4	11-TZ1-08-0100	41-TZ1-08-0100
6	6-5/8	6-19/32	3	10-1/2	7-17/32	21	11-TZ1-08-0150	41-TZ1-08-0150
8	8-21/32	8-19/32	3-31/32	12-1/8	10-5/32	24-1/4	11-TZ1-08-0200	41-TZ1-08-0200
* 10	10-7/8	10-25/32	5-17/32	14-1/2	12	29	11-TZ1-08-0250	41-TZ1-08-0250
* 12	12-13/16	12-11/16	6-5/16	16-7/16	14-1/8	32-7/8	11-TZ1-08-0300	41-TZ1-08-0300
* 14	14-1/32	13-29/32	7	19-1/4	15-1/2	38-1/2	11-TZ1-08-0350	41-TZ1-08-0350
* 16	16-1/16	15-29/32	8-15/32	21-1/8	17-11/16	42-1/4	11-TZ1-08-0400	41-TZ1-08-0400
* 18	18-1/16	17-7/8	9	23-1/2	20	47	11-TZ1-08-0450	41-TZ1-08-0450
* 20	20-3/32	19-29/32	10	24-7/8	22-1/8	49-3/4	11-TZ1-08-0500	41-TZ1-08-0500
* 24	24-1/8	23-15/16	11-1/32	28-3/4	26-1/2	57-1/2	11-TZ1-08-0600	41-TZ1-08-0600

#### **REDUCER BUSHING**

(SipgxSoc) (Flush Style) 卜申 (ANSI SCH80)





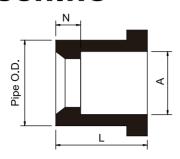




					單位(unit):inch
Size	N	L	А	UPVC code no.	CPVC code no.
3/4x1/2	25/64	1-17/64	27/32	11-RB1-08-020015	41-RB1-08-020015
1x1/2	1/2	1-3/8	27/32	11-RB1-08-025015	41-RB1-08-025015
1x3/4	25/64	1-3/8	1-1/16	11-RB1-08-025020	41-RB1-08-025020
1-1/4x1/2	11/16	1-9/16	27/32	11-RB1-08-032015	41-RB1-08-032015
1-1/4x3/4	9/16	1-9/16	1-1/16	11-RB1-08-032020	41-RB1-08-032020
1-1/4x1	29/64	1-9/16	1-21/64	11-RB1-08-032025	41-RB1-08-032025
1-1/2x1/2	7/8	1-45/64	27/32	11-RB1-08-040015	41-RB1-08-040015
1-1/2x3/4	47/64	1-45/64	1-1/16	11-RB1-08-040020	41-RB1-08-040020
1-1/2x1	5/8	1-45/64	1-21/64	11-RB1-08-040025	41-RB1-08-040025
1-1/2x1-1/4	29/64	1-45/64	1-43/64	11-RB1-08-040032	41-RB1-08-040032
2x1/2	63/64	1-29/32	27/32	11-RB1-08-050015	41-RB1-08-050015
2x3/4	29/32	1-29/32	1-1/16	11-RB1-08-050020	41-RB1-08-050020
2x1	25/32	1-29/32	1-21/64	11-RB1-08-050025	41-RB1-08-050025
2x1-1/4	21/32	1-29/32	1-43/64	11-RB1-08-050032	41-RB1-08-050032
2x1-1/2	35/64	1-29/32	1-29/32	11-RB1-08-050040	41-RB1-08-050040
2-1/2x2	53/64	2-11/32	2-25/64	11-RB1-08-065050	41-RB1-08-065050
3x1	1-13/64	2-5/16	1-21/64	11-RB1-08-080025	41-RB1-08-080025
3x1-1/2	15/16	2-5/16	1-29/32	11-RB1-08-080040	41-RB1-08-080040
3x2	13/16	2-5/16	2-25/64	11-RB1-08-080050	41-RB1-08-080050
3x2-1/2	9/32	2-5/16	2-57/64	11-RB1-08-080065	41-RB1-08-080065
4x2	1-5/32	2-21/32	2-25/64	11-RB1-08-100050	41-RB1-08-100050
4x3	25/32	2-21/32	3-33/64	11-RB1-08-100080	41-RB1-08-100080
5x3	1-5/32	3-1/32	3-33/64	11-RB1-08-125080	41-RB1-08-125080

#### **REDUCER BUSHING**

(SipgxSoc) (Flush Style) 卜申 (ANSI SCH80)







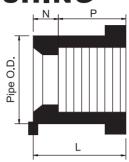


單位(unit):inch

					里位(unit):inch
Size	N	L	А	UPVC code no.	CPVC code no.
5x4	49/64	3-1/32	4-33/64	11-RB1-08-125100	41-RB1-08-125100
6x2	1-31/32	3-15/32	2-25/64 11-RB1-08-150050		41-RB1-08-150050
6x3	1-45/64	3-35/64	3-33/64	11-RB1-08-150080	41-RB1-08-150080
6x4	1-9/32	3-35/64	4-33/64	11-RB1-08-150100	41-RB1-08-150100
6x5	27/32	3-15/32	5-37/64	11-RB1-08-150125	41-RB1-08-150125
8x2	3-1/64	4-33/64	2-25/64	11-RB1-08-200050	41-RB1-08-200050
8x3	2-41/64	4-33/64	3-33/64	11-RB1-08-200080	41-RB1-08-200080
8x4	2-1/4	4-33/64	4-33/64	11-RB1-08-200100	41-RB1-08-200100
8x5	1-7/8	4-33/64	5-37/64	11-RB1-08-200125	41-RB1-08-200125
8x6	1-33/64	4-33/64	6-21/32	11-RB1-08-200150	41-RB1-08-200150
10x3	3-47/64	5-39/64	3-33/64	11-RB1-08-250080	41-RB1-08-250080
10x4	3-11/32	5-39/64	4-33/64	11-RB1-08-250100	41-RB1-08-250100
10x6	2-19/32	5-5/8	6-21/32	11-RB1-08-250150	41-RB1-08-250150
10x8	1-39/64	5-41/64	8-21/32	11-RB1-08-250200	41-RB1-08-250200
12x4	4-7/16	6-45/64	4-33/64	11-RB1-08-300100	41-RB1-08-300100
12x6	3-45/64	6-45/64	6-21/32	11-RB1-08-300150	41-RB1-08-300150
12x8	2-45/64	6-1/2	8-21/32	11-RB1-08-300200	41-RB1-08-300200
12x10	1-45/64	6-1/2	10-55/64	11-RB1-08-300250	41-RB1-08-300250
14x8	3-49/64	7-25/32	8-21/32	11-RB1-08-350200	41-RB1-08-350200
14x12	1-25/32	7-25/32	12-25/32	11-RB1-08-350300	41-RB1-08-350300
16x14	1-59/64	8-59/64	14-1/32	11-RB1-08-400350	41-RB1-08-400350
18x16	1-15/16	9-15/16	16-1/32	11-RB1-08-450400	41-RB1-08-450400
* 20x18	2-1/32	11-1/32	18-1/32	11-RB1-08-500450	41-RB1-08-500450
* 24x20	3-7/16	13-1/2	20-1/32	11-RB1-08-600500	41-RB1-08-600500
	•			•	ルギエ制口 (エート・・:゚+-ハ)

#### **REDUCER BUSHING**

(SpigxFipt) (Flush Style) **內牙卜申** (ANSI SCH80)





單位(unit):inch

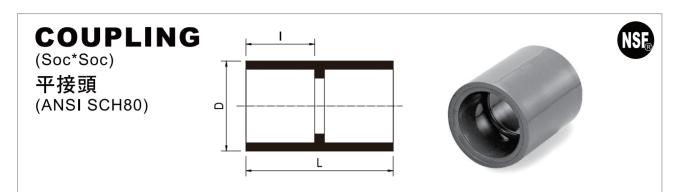
					丰位(dill t/:1		
Size	Size N		Р	UPVC code no.	CPVC code no.		
3/8 x 1/4	3/8	1	5/8	11-RB2-08-010008	41-RB2-08-010008		
1/2 x 1/8	11/16	1-1/16	3/8	11-RB2-08-015003	41-RB2-08-015003		
1/2 x 1/4	7/16	1-7/64	5/8	11-RB2-08-015008	41-RB2-08-015008		
1/2 x 3/8	29/64	1-7/64	9/16	11-RB2-08-015010	41-RB2-08-015010		
3/4 x 1/4	33/64	1-9/32	37/64	11-RB2-08-020008	41-RB2-08-020008		
3/4 x 1/2	33/64	1-9/32	37/64		41-RB2-08-020008		
				11-RB2-08-020015	_		
1 x 3/8	13/16	1-3/8	9/16	11-RB2-08-025010	41-RB2-08-025010		
1 x 1/2	41/64	1-29/64	39/64	11-RB2-08-025015	41-RB2-08-025015		
1 x 3/4	41/64	1-15/32	45/64	11-RB2-08-025020	41-RB2-08-025020		
1-1/4 x 1/2	13/16	1-9/16	3/4	11-RB2-08-032015	41-RB2-08-032015		
1-1/4 x 3/4	3/4	1-9/16	13/16	11-RB2-08-032020	41-RB2-08-032020		
1-1/4 x 1	5/8	1-9/16	15/16	11-RB2-08-032025	41-RB2-08-032025		
1-1/2 x 1/2	1	1-11/16	11/16	11-RB2-08-040015	41-RB2-08-040015		
1-1/2 x 3/4	19/32	1-47/64	45/64	11-RB2-08-040020	41-RB2-08-040020		
1-1/2 x 1	19/32	1-47/64	25/32	11-RB2-08-040025	41-RB2-08-040025		
1-1/2 x 1-1/4	11/16	1-11/16	1	11-RB2-08-040032	41-RB2-08-040032		
2 x 1/2	1-1/8	1-15/16	13/16	11-RB2-08-050015	41-RB2-08-050015		
2 x 3/4	1-5/32	1-7/8	23/32	11-RB2-08-050020	41-RB2-08-050020		
2 x 1	15/16	1-7/8	15/16	11-RB2-08-050025	41-RB2-08-050025		
2 x 1-1/4	29/32	1-7/8	31/32	11-RB2-08-050032	41-RB2-08-050032		
2 x 1-1/2	7/8	1-7/8	1	11-RB2-08-050040	41-RB2-08-050040		
2-1/2 x 1/2	1-11/16	2-3/8	11/16	11-RB2-08-065015	41-RB2-08-065015		
2-1/2 x 3/4	1-5/8	2-7/16	13/16	11-RB2-08-065020	41-RB2-08-065020		
2-1/2 x 1	1-3/8	2-7/16	1-1/16	11-RB2-08-065025	41-RB2-08-065025		
2-1/2 x 1-1/4	1-3/8	2-3/8	1	11-RB2-08-065032	41-RB2-08-065032		
2-1/2 x 1-1/2	1-3/8	2-3/8	1	11-RB2-08-065040	41-RB2-08-065040		
2-1/2 x 2	1-5/16	2-3/8	1-1/16	11-RB2-08-065050	41-RB2-08-065050		
3 x 3/4	1-7/8	2-7/16	9/16	11-RB2-08-080020	41-RB2-08-080020		
3 x 1	1-3/8	2-7/16	1-1/16	11-RB2-08-080025	41-RB2-08-080025		
3 x 1-1/4	1-3/8	2-7/16	1-1/16	11-RB2-08-080032	41-RB2-08-080032		
3 x 1-1/2	1-3/8	2-7/16	1-1/16	11-RB2-08-080040	41-RB2-08-080040		
3 x 2	1-3/8	2-3/8	1	11-RB2-08-080050	41-RB2-08-080050		
3 x 2-1/2	13/16	2-3/8	1-9/16	11-RB2-08-080065	41-RB2-08-080065		
4 x 2	1-1/2	2-5/8	1-1/8	11-RB2-08-100050	41-RB2-08-100050		
4 x 2-1/2	1-1/8	2-11/16	1-9/16	11-RB2-08-100065	41-RB2-08-100065		
4 x 3	1-1/16	2-11/16	1-5/8	11-RB2-08-100080	41-RB2-08-100080		
6 x 2	2-15/16	4-1/16	1-1/8	11-RB2-08-150050	41-RB2-08-150050		
6 x 3	2-3/8	4	1-5/8	11-RB2-08-150080	41-RB2-08-150080		
6 x 4	2-1/4	4	1-3/4	11-RB2-08-150100	41-RB2-08-150100		

# REDUCER COUPLING (SocxSoc) 大小頭 (ANSI SCH80)

單位(unit):inch

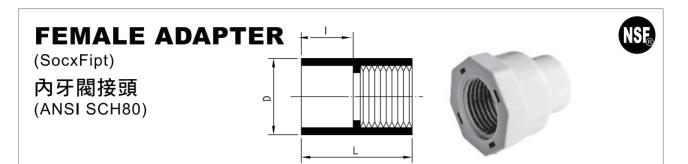
						事应(diff t). Hich
Size	D	d	N	L	UPVC code no.	CPVC code no.
3/4x1/2	1-3/8	27/32	11/32	2-1/8	11-RC1-08-020015	41-RC1-08-020015
1x1/2	1-11/16	27/32	7/32	2-3/16	11-RC1-08-025015	41-RC1-08-025015
1x3/4	1-11/16	1-3/64	5/16	2-11/32	11-RC1-08-025020	41-RC1-08-025020
1-1/4x3/4	2-7/64	1-3/64	13/32	2-1/2	11-RC1-08-032020	41-RC1-08-032020
1-1/4x1	2-7/64	1-21/64	5/16	2-11/16	11-RC1-08-032025	41-RC1-08-032025
1-1/2x1/2	2-23/64	27/32	21/32	2-25/32	11-RC1-08-040015	41-RC1-08-040015
1-1/2x3/4	2-23/64	1-3/64	1/4	2-1/2	11-RC1-08-040020	41-RC1-08-040020
1-1/2x1	2-23/64	1-21/64	1/4	2-5/8	11-RC1-08-040025	41-RC1-08-040025
1-1/2x1-1/4	2-23/64	1-43/64	9/32	2-13/16	11-RC1-08-040032	41-RC1-08-040032
2x1/2	2-55/64	55/64	15/16	2-31/32	11-RC1-08-050015	41-RC1-08-050015
2x3/4	2-55/64	1-3/64	5/16	2-31/32	11-RC1-08-050020	41-RC1-08-050020
2x1	2-55/64	1-21/64	5/16	3-5/32	11-RC1-08-050025	41-RC1-08-050025
2x1-1/2	2-55/64	1-29/32	19/32	3-7/32	11-RC1-08-050040	41-RC1-08-050040
3x2	4-1/8	2-25/64	13/32	3-9/16	11-RC1-08-080050	41-RC1-08-080050
4x2	5-9/32	2-25/64	13/32	3-15/16	11-RC1-08-100050	41-RC1-08-100050
4x3	5-9/32	3-1/2	15/32	4-11/32	11-RC1-08-100080	41-RC1-08-100080
5x4	6-3/8	4-33/64	1/2	5-3/8	11-RC1-08-125100	41-RC1-08-125100
6x4	7-17/32	4-33/64	17/32	6-11/16	11-RC1-08-150100	41-RC1-08-150100
6x5	7-17/32	5-33/64	9/16	6-21/32	11-RC1-08-150125	41-RC1-08-150125
8x6	9-21/32	6-21/32	11/16	8	11-RC1-08-200150	41-RC1-08-200150
10x8	12-5/64	8-11/16	1-1/8	10-31/32	11-RC1-08-250200	41-RC1-08-250200
12x10	14-21/64	10-55/64	1-1/2	12-3/4	11-RC1-08-300250	41-RC1-08-300250
	15-1/2	12-25/32	3/8	15-11/64	11-RC1-08-350300	41-RC1-08-350300
	17-23/32	14-1/32	1-19/64	18-3/16	11-RC1-08-400350	41-RC1-08-400350
	19-7/8	16-3/64	1-17/32	20-31/64	11-RC1-08-450400	41-RC1-08-450400
* 20x18	22-1/8	18-1/32	5-49/64	24-13/16	11-RC1-08-500450	41-RC1-08-500450
* 24x20	26-41/64	20-1/16	6-7/64	26-23/64	11-RC1-08-600500	41-RC1-08-600500

△轉接品(Transition) \*手工製品(Fabricated)



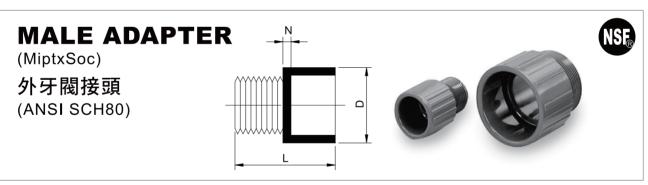
單位(unit):inch

Size	D	ı	L	UPVC code no.	CPVC code no.
1/2	1-9/32	29/32	1-15/16	11-CL2-08-0015	41-CL2-08-0015
3/4	1-1/2	1	2-11/64	11-CL2-08-0020	41-CL2-08-0020
1	1-47/64	1-1/8	2-1/2	11-CL2-08-0025	41-CL2-08-0025
1-1/4	2-3/16	1-1/4	2-45/64	11-CL2-08-0032	41-CL2-08-0032
1-1/2	2-31/64	1-3/8	2-31/32	11-CL2-08-0040	41-CL2-08-0040
2	2-61/64	1-1/2	3-5/16	11-CL2-08-0050	41-CL2-08-0050
2-1/2	3-9/16	1-25/32	3-27/32	11-CL2-08-0065	41-CL2-08-0065
3	4-1/4	1-7/8	4-1/64	11-CL2-08-0080	41-CL2-08-0080
4	5-9/32	2-1/4	4-3/4	11-CL2-08-0100	41-CL2-08-0100
5	6-3/8	2-21/32	5-33/64	11-CL2-08-0125	41-CL2-08-0125
6	7-41/64	2-31/32	6-15/64	11-CL2-08-0150	41-CL2-08-0150
8	9-47/64	3-15/16	8-27/64	11-CL2-08-0200	41-CL2-08-0200
10	12-3/64	5-1/32	10-35/64	11-CL2-08-0250	41-CL2-08-0250
12	14-3/8	6-1/32	12-13/32	11-CL2-08-0300	41-CL2-08-0300
14	15-1/2	7	14-3/8	11-CL2-08-0350	41-CL2-08-0350
16	17-57/64	8	18-17/64	11-CL2-08-0400	41-CL2-08-0400
18	19-7/8	9	19-17/32	11-CL2-08-0450	41-CL2-08-0450
20	22-15/64	10-13/64	21-17/32	11-CL2-08-0500	41-CL2-08-0500
* 24	26-37/64	12-13/64	30-23/32	11-CL2-08-0600	41-CL2-08-0600

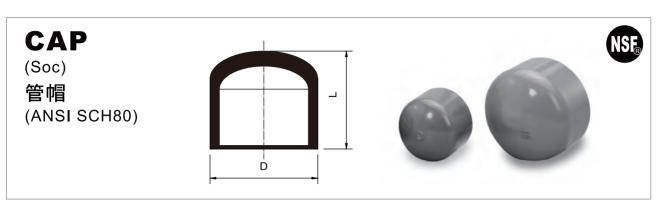


單位(unit):inch

					1 .— ,
Size	D	ı	L	UPVC code no.	CPVC code no.
1/2	1-3/16	7/8	1-25/32	11-FD3-08-0015	41-FD3-08-0015
3/4	1-3/8	1	1-57/64	11-FD3-08-0020	41-FD3-08-0020
1	1-47/64	1-7/64	2-15/64	11-FD3-08-0025	41-FD3-08-0025
1-1/4	2-3/16	1-1/4	2-3/8	11-FD3-08-0032	41-FD3-08-0032
1-1/2	2-5/16	1-3/8	2-1/2	11-FD3-08-0040	41-FD3-08-0040
2	3	1-1/2	2-11/16	11-FD3-08-0050	41-FD3-08-0050
2-1/2	3-1/2	1-3/4	3-17/32	11-FD3-08-0065	41-FD3-08-0065
3	4-5/32	1-7/8	3-27/32	11-FD3-08-0080	41-FD3-08-0080
4	5-13/64	2-1/4	4-11/32	11-FD3-08-0100	41-FD3-08-0100

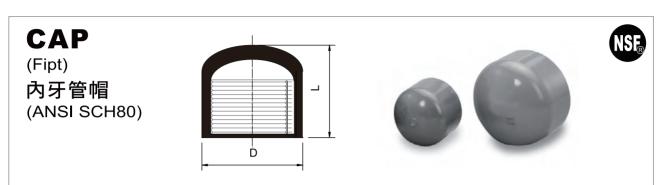


Size	D	N	L	UPVC code no.	CPVC code no.
1/2	1-19/64	1/4	1-7/8	11-MD3-08-0015	41-MD3-08-0015
3/4	1-3/8	9/32	2-3/32	11-MD3-08-0020	41-MD3-08-0020
1	1-47/64	17/64	2-3/8	11-MD3-08-0025	41-MD3-08-0025
1-1/4	2-7/64	17/64	2-1/2	11-MD3-08-0032	41-MD3-08-0032
1-1/2	2-3/8	19/64	2-11/16	11-MD3-08-0040	41-MD3-08-0040
2	2-7/8	5/16	2-7/8	11-MD3-08-0050	41-MD3-08-0050
2-1/2	3-33/64	5/16	3-11/16	11-MD3-08-0065	41-MD3-08-0065
3	4-11/64	3/8	3-15/16	11-MD3-08-0080	41-MD3-08-0080
4	5-13/64	7/16	4-27/64	11-MD3-08-0100	41-MD3-08-0100



單位(unit):inch

				華歴 (dill t) . Illoii
Size	D	L	UPVC code no.	CPVC code no.
1/2	1-3/16	1-17/64	11-CP4-08-0015	41-CP4-08-0015
3/4	1-3/8	1-25/64	11-CP4-08-0020	41-CP4-08-0020
1	1-11/16	1-21/32	11-CP4-08-0025	41-CP4-08-0025
1-1/4	2	1-27/32	11-CP4-08-0032	41-CP4-08-0032
1-1/2	2-19/64	2-3/64	11-CP4-08-0040	41-CP4-08-0040
2	3-1/32	2-7/16	11-CP4-08-0050	41-CP4-08-0050
2-1/2	3-37/64	2-21/64	11-CP4-08-0065	41-CP4-08-0065
3	4-19/64	2-23-32	11-CP4-08-0080	41-CP4-08-0080
4	5-15/64	3-1/32	11-CP4-08-0100	41-CP4-08-0100
6	7-9/16	4-59/64	11-CP4-08-0150	41-CP4-08-0150
8	9-9/16	6-7/32	11-CP4-08-0200	41-CP4-08-0200
10	12-19/64	8-3/16	11-CP4-08-0250	41-CP4-08-0250
12	14-23/64	9-17/32	11-CP4-08-0300	41-CP4-08-0300
* 14	15-1/2	7-3/8	11-CP4-08-0350	41-CP4-08-0350
* 16	17-23/32	8-1/2	11-CP4-08-0400	41-CP4-08-0400
* 18	20	9-1/4	11-CP4-08-0450	41-CP4-08-0450
* 20	22-1/8	14	11-CP4-08-0500	41-CP4-08-0500
* 24	26-41/64	18	11-CP4-08-0600	41-CP4-08-0600

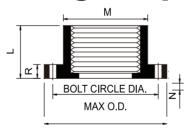


單位(unit):inch

Size	D	L	UPVC code no.	CPVC code no.
1/2	1-3/16	1-17/64	11-CP3-08-0015	41-CP3-08-0015
3/4	1-3/8	1-25/64	11-CP3-08-0020	41-CP3-08-0020
1	1-11/16	1-21/32	11-CP3-08-0025	41-CP3-08-0025
1-1/4	2-7/32	1-57/64	11-CP3-08-0032	41-CP3-08-0032
1-1/2	2-5/16	2-3/64	11-CP3-08-0040	41-CP3-08-0040
2	3-1/32	2-31/64	11-CP3-08-0050	41-CP3-08-0050
2-1/2	3-37/64	2-23/64	11-CP3-08-0065	41-CP3-08-0065
3	4-9/32	2-3/4	11-CP3-08-0080	41-CP3-08-0080
4	5-15/64	3-17/64	11-CP3-08-0100	41-CP3-08-0100

#### **One-Piece Flange--Fipt**

牙口法蘭 (ANSI)







Size	MAX. O.D.	L	М	N	R	Bolt Circle Dia.	No.of Bolt Holes	Bolt Size	Min. Bolt Length	UPVC code no.	CPVC code no.
1/2	3-1/2	47/64	1-3/8	9/32	35/64	2-3/8	4	5/8	2	11-FTA-08-0015	41-FTA-08-0015
3/4	3-31-32	29/32	1-31/64	5/16	11/16	2-3/4	4	5/8	2	11-FTA-08-0020	41-FTA-08-0020
1	4-21/64	15/16	2-3/64	11/32	11/16	3-1/8	4	5/8	2-1/4	11-FTA-08-0025	41-FTA-08-0025
1-1/4	4-11/16	63/64	2-3/8	7/32	39/64	3-1/2	4	5/8	2-1/4	11-FTA-08-0032	41-FTA-08-0032
1-1/2	5-1/32	1-1/32	2-47/64	1/4	25/32	3-7/8	4	5/8	2-1/2	11-FTA-08-0040	41-FTA-08-0040
2	6-9/64	1-1/4	3-1/8	5/16	55/64	4-3/4	4	3/4	3	11-FTA-08-0050	41-FTA-08-0050
2-1/2	6-63/64	1-7/64	4-3/16	5/16	25/32	5-1/2	4	3/4	3-1/4	11-FTA-08-0065	41-FTA-08-0065
3	7-17/32	1-17/64	4-45/64	3/8	29/32	6	4	3/4	3-1/4	11-FTA-08-0080	41-FTA-08-0080
4	9-3/64	1-27/64	5-17/32	9/16	29/32	7-1/2	8	3/4	3-1/2	11-FTA-08-0100	41-FTA-08-0100

## One-Piece Flange--Slip 單片式法蘭 (ANSI) BOLT CIRCLE DIA. MAX O.D.

單位(unit):inch

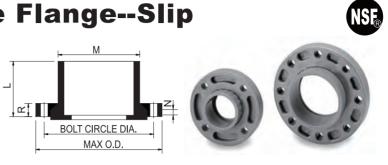
											单位(unit):Inch
Size	MAX. O.D.	L	М	N	R	Bolt Circle Dia.	No.of Bolt Holes	Bolt Size	Min. Bolt Length	UPVC code no.	CPVC code no.
1/2	3-1/2	13/16	1-17/64	1/8	15/32	2-3/8	4	1/2	2	11-FT4-08-0015	41-FT4-08-0015
3/4	3-7/8	1-1/8	1-11/2	1/8	33/64	2-3/4	4	1/2	2	11-FT4-08-0020	41-FT4-08-0020
1	4-9/32	1-17/64	1-53/64	1/8	39/64	3-1/8	4	1/2	2-1/4	11-FT4-08-0025	41-FT4-08-0025
1-1/4	4-37/64	1-11/32	2-11/64	5/32	39/64	3-1/2	4	1/2	2-1/4	11-FT4-08-0032	41-FT4-08-0032
1-1/2	5	1-37/64	2-1/2	5/32	21/32	3-7/8	4	1/2	2-1/2	11-FT4-08-0040	41-FT4-08-0040
2	6	1-21/32	3-3/64	1/8	23/32	4-3/4	4	5/8	3	11-FT4-08-0050	41-FT4-08-0050
2-1/2	7	2-9/64	3-1/2	3/8	61/64	5-1/2	4	5/8	3-1/4	11-FT4-08-0065	41-FT4-08-0065
3	7-3/64	2-9/32	4-3/8	17/64	55/64	6	4	5/8	3-1/4	11-FT4-08-0080	41-FT4-08-0080
4	9-3/64	2-3/8	5-25/64	5/32	1-7/64	7-1/2	8	5/8	3-1/2	11-FT4-08-0100	41-FT4-08-0100
5	10-1/16	3-7/8	6-3/8	1/4	1	8-1/2	8	3/4	3-3/4	11-FT4-08-0125	41-FT4-08-0125
6	10-63/64	3-13/64	7-37/64	13/64	1-15/64	9-1/2	8	3/4	4	11-FT4-08-0150	41-FT4-08-0150
8	13-1/2	6-1/2	9-3/8	35/64	1-9/64	11-3/4	8	3/4	4-1/2	11-FT4-08-0200	41-FT4-08-0200
10	16	5-9/16	12	9/16	1-11/32	14-1/4	12	15/16	5	11-FT4-08-0250	41-FT4-08-0250
12	19	6-5/8	14-1/2	5/8	1-7/16	17	12	31/32	5	11-FT4-08-0300	41-FT4-08-0300
* 14	21	7-5/8	15-3/4	5/8	1-1/2	18-3/4	12	1-5/64	5-1/2	11-FT4-08-0350	41-FT4-08-0350
* 16	23-1/2	8-23/32	17-11/16	23/32	1-19/32	21-1/4	16	1-3/32	6-1/2	11-FT4-08-0400	41-FT4-08-0400
* 18	25	9-23/32	20	23/32	1-21/32	22-3/4	16	1-1/8	6-1/2	11-FT4-08-0450	41-FT4-08-0450
* 20	27-1/2	10-25/32	22-1/8	3/4	1-3/4	25	20	1-9/32	5-15/16	11-FT4-08-0500	41-FT4-08-0500
* 24	32	12-19/32	26-1/2	3/4	1-13/16	29-1/2	20	1-3/8	6-9/32	11-FT4-08-0600	41-FT4-08-0600

#### **Van Stone Style Flange--Slip**

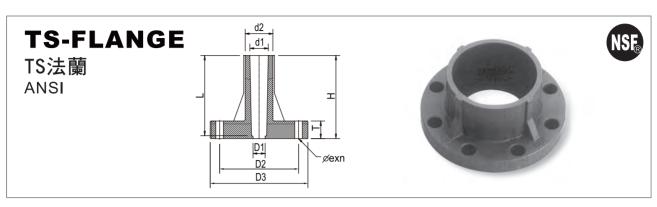
(Two-Piece) (with plastic ring) 1/2"~20" 二片式法蘭(塑膠環)

(Two-Piece) (with steel ring) 24" 二片式法蘭(金屬環)

(ANSI)



											平区 (dill t): Illon
Size	MAX. O.D.	L	М	Ν	R	Bolt Circle Dia.	No.of Bolt Holes	Bolt Size	Min. Bolt Length	UPVC code no.	CPVC code no.
1/2	3 -1/2	31/32	1 -7/32	1/8	33/64	2 - 3/8	4	1/2	2	11-FT5-08-0015	41-FT5-08-0015
3/4	3 -7/8	1-5/64	1-7/16	1/8	17/32	2 - 3/4	4	1/2	2	11-FT5-08-0020	41-FT5-08-0020
1	4-1/4	1-15/64	1-3/4	1/8	21/32	3 -1/8	4	1/2	2 -1/4	11-FT5-08-0025	41-FT5-08-0025
1-1/4	4 -9/16	1-23/64	2-3/32	1/8	21/32	3 -1/2	4	1/2	2 -1/4	11-FT5-08-0032	41-FT5-08-0032
1-1/2	4 -15/16	1-29/64	2 -3/8	1/8	23/32	3 - 7/8	4	1/2	2 - 1/2	11-FT5-08-0040	41-FT5-08-0040
2	5 -7/8	1 -39/64	2-7/8	1/8	3/4	4 - 3/4	4	5/8	3	11-FT5-08-0050	41-FT5-08-0050
2-1/2	6 -15/16	1-39/64	3-39/64	3/16	15/16	5 - 1/2	4	5/8	3 - 1/4	11-FT5-08-0065	41-FT5-08-0065
3	7 -1/2	2-13/64	4-7/32	1/4	1	6	8	5/8	3 - 1/4	11-FT5-08-0080	41-FT5-08-0080
4	9-1/16	2-7/16	5 -1/4	1/4	1-3/32	7 - 1/2	8	5/8	3 - 1/2	11-FT5-08-0100	41-FT5-08-0100
5	10 -1/8	2-7/8	6-23/64	1/4	1-9/64	8 - 1/2	8	3/4	3 - 3/4	11-FT5-08-0125	41-FT5-08-0125
6	11 -7/32	3-9/32	7 -9/16	3/8	1-11/32	9 -17/32	8	3/4	4	11-FT5-08-0150	41-FT5-08-0150
8	13 -1/2	4-9/16	9 -17/32	1/4	1-13/32	11-21/32	8	3/4	4 - 1/2	11-FT5-08-0200	41-FT5-08-0200
10	16-1/8	5-21/32	11 -47/64	3/8	1 -11/16	14-7/32	12	7/8	5	11-FT5-08-0250	41-FT5-08-0250
12	19 -3/32	7-9/32	13-45/64	9/16	1 -11/16	16-15/16	12	7/8	5	11-FT5-08-0300	41-FT5-08-0300
14	21 -1/16	7-31/64	15-29/64	7/16	2-1/64	18-13/16	12	1	5 - 1/2	11-FT5-08-0350	41-FT5-08-0350
16	23-1/2	8-27/64	17-23/32	7/16	2-23/64	21- 5/16	16	1	6 - 1/2	11-FT5-08-0400	41-FT5-08-0400
18	25	9-27/64	20-9/64	1/4	2-21/64	22-3/4	16	1-1/4	6-1/2	11-FT5-08-0450	41-FT5-08-0450
20	27-1/2	10-5/16	22-25/64	1/4	2-13/32	25	20	1-1/4	7-7/16	11-FT5-08-0500	41-FT5-08-0500
24	32	12-54/64	26-7/16	1/4	1-3/8	29-1/2	20	1-3/8	8-5/16	11-FT5-08-0600	41-FT5-08-0600



單位(unit):inch

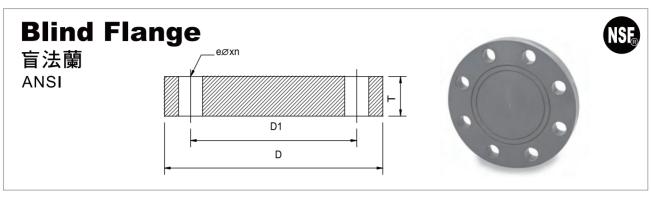
Size	d1	D2	D3	D1	d2	L	Т	Н	n	<b>ø</b> e	UPVC code no.	CPVC code no.
1/2	7/8	2- 3/8	3- 1/2	23/32	1- 1/4	1- 7/32	19/32	1- 7/16	4	5/8	11-FT9-08-0015	41-FT9-08-0015
3/4	1-1/16	2-3/4	3- 7/8	27/32	1- 3/8	1- 17/32	19/32	1- 11/16	4	5/8	11-FT9-08-0020	41-FT9-08-0020
1	1- 11/32	3- 1/8	4- 1/4	1- 1/32	1- 11/16	1- 21/32	5/8	1- 27/32	4	5/8	11-FT9-08-0025	41-FT9-08-0025
1-1/4	1- 11/16	3- 1/2	4- 5/8	1- 3/8	2- 1/32	1- 31/32	21/32	2- 3/16	4	5/8	11-FT9-08-0032	41-FT9-08-0032
1-1/2	1- 15/16	3- 7/8	5	1- 3/4	2- 13/32	2- 3/8	25/32	2- 19/32	4	5/8	11-FT9-08-0040	41-FT9-08-0040
2	2- 13/32	4- 3/4	6	2- 1/16	2- 29/32	2- 17/32	25/32	2- 25/32	4	3/4	11-FT9-08-0050	41-FT9-08-0050
2-1/2	2- 29/32	5- 1/2	7	2- 21/32	3- 1/2	2- 13/16	25/32	2- 23/32	4	3/4	11-FT9-08-0065	41-FT9-08-0065
3	3- 17/32	6	7- 1/2	3- 3/32	4- 5/64	2- 7/8	13/16	3- 5/32	4	3/4	11-FT9-08-0080	41-FT9-08-0080
4	4- 17/32	7- 1/2	9	3- 15/16	5- 7/32	3- 5/16	29/32	3- 19/32	8	3/4	11-FT9-08-0100	41-FT9-08-0100
5	5- 19/32	8- 1/2	10	4- 15/16	6- 1/4	3- 31/32	31/32	4- 13/32	8	7/8	11-FT9-08-0125	41-FT9-08-0125
6	6- 21/32	9- 1/2	11- 23/32	5- 29/32	7- 5/16	5- 3/32	31/32	5- 17/32	8	7/8	11-FT9-08-0150	41-FT9-08-0150
8	8-21/32	11-3/4	13- 1/2	7- 11/16	9-13/32	5-29/32	1- 1/8	6- 15/32	8	7/8	11-FT9-08-0200	41-FT9-08-0200
10	10-7/8	14-1/4	16	9-23/32	11-1/2	7-1/4	1-3/16	7-13/16	12	1	11-FT9-08-0250	41-FT9-08-0250
12	12-25/32	17	19	9-27/32	13-23/32	7-1/4	1-3/16	7-7/8	12	1	11-FT9-08-0300	41-FT9-08-0300
* 14	14-1/32	18-3/4	21	13-23/32	14-31/32	9-1/16	1-1/4	9-21/32	12	1-1/8	11-FT9-08-0350	41-FT9-08-0350
* 16	16-3/4	21-1/4	23-1/2	15-3/4	16-31/32	9-15/32	1-1/4	10-1/32	16	1-1/8	11-FT9-08-0400	41-FT9-08-0400
* 18	18-1/32	22-3/4	25	17-17/32	18-31/32	10-1/32	1-1/4	10-5/8	16	1-1/4	11-FT9-08-0450	41-FT9-08-0450
* 20	20-1/32	25	27-1/2	19-11/16	20-31/32	12	1-3/8	12-19/32	20	1-1/4	11-FT9-08-0500	41-FT9-08-0500
* 24	24-3/32	29-1/2	32	23-5/8	25-1/4	13-31/32	1-3/8	14-9/16	20	1-3/8	11-FT9-08-0600	41-FT9-08-0600

# WELDING-FLANGE 焊接法蘭 ANSI

單位(unit):inch

Non Size	D1	D2	D3	Т	е	n	UPVC code no.	CPVC code no.
1/2	27/32	2-3/8	3-1/2	5/8	5/8	4	11-FT8-08-0015	41-FT8-08-0015
3/4	1-1/16	2-3/4	3-7/8	9/16	5/8	4	11-FT8-08-0020	41-FT8-08-0020
1	1-5/16	3-1/8	4-1/4	23/32	5/8	4	11-FT8-08-0025	41-FT8-08-0025
1-1/4	1-21/32	3-1/2	4-5/8	23/32	5/8	4	11-FT8-08-0032	41-FT8-08-0032
1-1/2	1-29/32	3-7/8	5	3/4	5/8	4	11-FT8-08-0040	41-FT8-08-0040
2	2-3/8	4-3/4	5-31/32	3/4	3/4	4	11-FT8-08-0050	41-FT8-08-0050
2-1/2	2-7/8	5-17/32	7	3/4	3/4	4	11-FT8-08-0065	41-FT8-08-0065
3	3-1/2	5-31/32	7-17/32	29/32	3/4	4	11-FT8-08-0080	41-FT8-08-0080
4	4-1/2	7-17/32	9-1/32	29/32	3/4	8	11-FT8-08-0100	41-FT8-08-0100
5	5-9/16	8-1/2	10	29/32	7/8	8	11-FT8-08-0125	41-FT8-08-0125
6	6-5/8	9-1/2	10-31/32	29/32	7/8	8	11-FT8-08-0150	41-FT8-08-0150
8	8-5/8	11-3/4	13-1/2	29/32	7/8	8	11-FT8-08-0200	41-FT8-08-0200
10	10-3/4	14-1/4	15-31/32	27/32	31/32	12	11-FT8-08-0250	41-FT8-08-0250
12	12-3/4	17	19-1/32	27/32	31/32	12	11-FT8-08-0300	41-FT8-08-0300
14	14	18-3/4	20-31/32	1-1/8	1-5/32	12	11-FT8-08-0350	41-FT8-08-0350
16	16	21-9/32	23-1/2	1-1/8	1-5/32	16	11-FT8-08-0400	41-FT8-08-0400
18	18	22-3/4	25	1-1/8	1-9/32	16	11-FT8-08-0450	41-FT8-08-0450
20	20	25	27-17/32	1-1/8	1-9/32	20	11-FT8-08-0500	41-FT8-08-0500
24	24	29-1/2	32	1-1/8	1-3/8	20	11-FT8-08-0600	41-FT8-08-0600

# UPVC / CPVC PIPE FITTING VALVE

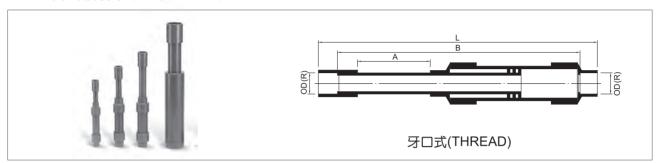


單位(unit):inch

Size	D	D1	Т	Øe	N	UPVC code no.	CPVC code no.
1/2	3-1/2	2-3/8	5/8	5/8	4	11-FT7-08-0015	41-FT7-08-0015
3/4	3-7/8	2-3/4	11/16	5/8	4	11-FT7-08-0020	41-FT7-08-0020
1	4-1/4	3-1/8	11/16	5/8	4	11-FT7-08-0025	41-FT7-08-0025
1-1/4	4-5/8	3-1/2	3/4	5/8	4	11-FT7-08-0032	41-FT7-08-0032
1-1/2	5	3-7/8	3/4	5/8	4	11-FT7-08-0040	41-FT7-08-0040
2	6	4-3/4	7/8	13/16	4	11-FT7-08-0050	41-FT7-08-0050
2-1/2	6-15/16	5-1/2	13/16	13/16	4	11-FT7-08-0065	41-FT7-08-0065
3	7-1/2	6	15/16	13/16	4	11-FT7-08-0080	41-FT7-08-0080
4	9	7-1/2	15/16	13/16	8	11-FT7-08-0100	41-FT7-08-0100
5	10	8-1/2	1	7/8	8	11-FT7-08-0125	41-FT7-08-0125
6	11-1/8	9-1/2	1	7/8	8	11-FT7-08-0150	41-FT7-08-0150
8	13-9/16	11-3/4	1-1/8	7/8	8	11-FT7-08-0200	41-FT7-08-0200
10	16	14-1/4	1-3/16	15/16	12	11-FT7-08-0250	41-FT7-08-0250
12	19	17	1-5/16	15/16	12	11-FT7-08-0300	41-FT7-08-0300
14	20-15/16	18-3/4	1-5/16	1-1/8	12	11-FT7-08-0350	41-FT7-08-0350
16	23-1/2	21-1/4	1-7/16	1-1/8	16	11-FT7-08-0400	41-FT7-08-0400
18	25	22-3/4	1-1/8	1-1/4	16	11-FT7-08-0450	41-FT7-08-0450
20	27-1/2	25	1-1/8	1-1/4	20	11-FT7-08-0500	41-FT7-08-0500
24	32-1/16	29-1/2	1-1/8	1-1/4	20	11-FT7-08-0600	41-FT7-08-0600

# **EXPANSION JOINT REPAIR COUPINGS**

(伸縮接頭牙口式)



Linear expansion and contraction from temperature fluctuations can be a major problem in thermoplastic piping system.

Expansion joints consist of two telescoping tubes with internal o'ring seals. For proper operation, the outer tube should be firmly anchored to allow free movement of the inner tube or piston. Support and thrust block the system to direct movement squarely into the expansion joint. Alignment is critical, axial

guides should be installed to ensure straight movement into expansion joint.

Protect the cylinder shaft from scratches, damage and debris to prevent leaks.

General rule: For UPVC systems, allow 3/8" expansion for every 10F change in temperature per 100 feet of pipe. For CPVC systems, allow 1/2" expansion for every 10F change in temperature per 100 feet of pipe.

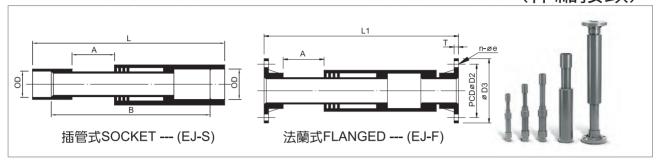
單位(unit):mm

Cina	JIS	ANSI	DIN		6" TRAVEL			12" TRAVE	EL
Size	R	R	R	А	L	В	А	L	В
1/2"	PT 1/2"	NPT 1/2"	R 1/2"	76	364	320	152	593	549
3/4"	PT 3/4"	NPT 3/4"	R 3/4"	76	376	325	152	605	554
1"	PT 1"	NPT 1"	R 1"	76	388	330	152	617	559
1-1/4"	PT 1-1/4"	NPT 1-1/4"	R 1-1/4"	76	399	335	152	628	564
1-1/2"	PT 1-1/2"	NPT 1-1/2"	R 1-1/2"	76	408	338	152	637	567
2"	PT 2"	NPT 2"	R 2"	76	436	360	152	665	589
2-1/2"	PT 2-1/2"	NPT 2-1/2"	R 2-1/2"	76	460	370	152	689	599
3"	PT 3"	NPT 3"	R 3"	76	472	370	152	701	599
4"	PT 4"	NPT 4"	R 4"	76	545	445	152	775	675

#### THREAD CODE NUMBER

0.	J	S	AN	ISI	D	IN
Size	6" TRAVEL	12" TRAVEL	6" TRAVEL	12" TRAVEL	6" TRAVEL	12" TRAVEL
1/2"	11-EJ3-08-015J	11-EJ4-08-015J	11-EJ3-08-015A	11-EJ4-08-015A	11-EJ3-08-015D	11-EJ4-08-015D
3/4"	11-EJ3-08-020J	11-EJ4-08-020J	11-EJ3-08-020A	11-EJ4-08-020A	11-EJ3-08-020D	11-EJ4-08-020D
1"	11-EJ3-08-025J	11-EJ4-08-025J	11-EJ3-08-025A	11-EJ4-08-025A	11-EJ3-08-025D	11-EJ4-08-025D
1-1/4"	11-EJ3-08-032J	11-EJ4-08-032J	11-EJ3-08-032A	11-EJ4-08-032A	11-EJ3-08-032D	11-EJ4-08-032D
1-1/2"	11-EJ3-08-040J	11-EJ4-08-040J	11-EJ3-08-040A	11-EJ4-08-040A	11-EJ3-08-040D	11-EJ4-08-040D
2"	11-EJ3-08-050J	11-EJ4-08-050J	11-EJ3-08-050A	11-EJ4-08-050A	11-EJ3-08-050D	11-EJ4-08-050D
2-1/2"	11-EJ3-08-065J	11-EJ4-08-065J	11-EJ3-08-065A	11-EJ4-08-065A	11-EJ3-08-065D	11-EJ4-08-065D
3"	11-EJ3-08-080J	11-EJ4-08-080J	11-EJ3-08-080A	11-EJ4-08-080A	11-EJ3-08-080D	11-EJ4-08-080D
4"	11-EJ3-08-100J	11-EJ4-08-100J	11-EJ3-08-100A	11-EJ4-08-100A	11-EJ3-08-100D	11-EJ4-08-100D

# **EXPANSION JOINT REPAIR COUPINGS**(伸縮接頭)



JIS 單位(unit):mm 6" TRAVEL 12" TRAVEL Size OD D2 D3 Т EJ-F EJ-S EJ-F n EJ-S Α Α В L1 В L1 1/2" 22.20 95 40 3/4" 26.55 99.30 1" 32.55 124.6 1-1/4 38.65 134.8 1-1/2 48.90 139.8 2" 60.80 156.0 2-1/2 76.80 173.8 3" 89.60 184.5 4" 114.70 210.0 5" 140.85 250.0 6" 166.00 280.0 8" 218.00 330.0 

ANSI 單位(unit):mm

400.0

445.0

268.00

10'

12"

			6" TF	RAVEL			12"	TRAVEL						
Size	OD	^	E.	J-S	EJ-F	Α	E	J-S	EJ -F	D2	D3	Т	е	n
		A	L	В	L1	_ ^	L	В	L1					
1/2"	21.64	76	360	317	397	152	579	535	616	60	89	13	16	4
3/4"	26.99	76	380	330	423	152	602	552	645	70	98	14	16	4
1"	33.78	76	396	340	443	152	624	568	671	79	108	15	16	4
1-1/4"	42.55	76	404	342	446	152	632	570	674	89	117	16	16	4
1-1/2"	48.72	76	424	354	480	152	652	582	708	98	127	18	16	4
2"	60.78	76	447	371	510	152	675	599	738	121	152	19	19	4
2-1/2"	73.56	76	482	392	542	152	710	620	770	140	178	25	19	4
3"	89.51	76	492	396	553	152	720	624	781	152	191	25	19	4
4"	114.99	76	537	422	627	152	765	650	855	190.5	228.6	25	19	8
5"	142.06	76	579	445	691	152	807	673	919	216.0	254.0	26	22.2	8
6"	169.09	76	640	488	781	152	868	716	1009	241.3	279.4	32	22.2	8
8"	219.07	76	733	529	895	152	-	-	1123	298.0	343.0	30	22.0	8
10"	273.81	76	856	606	1056	152			1284	362.0	406.0	33	25.0	12
12"	_	76		_	1073	152	_		1301	431.8	482.6	35	25.0	12

DIN 單位(unit):mm

			6" TF	RAVEL			12"	TRAVEL						
Size	OD	^	E	J-S	EJ-F	Α	E.	J-S EJ -F		D2	D3	Т	е	n
		A	L	В	L1	_ ^	L	В	L1					
1/2"	20	76	360	317	397	152	579	535	616	65	95	12.8	14	4
3/4"	25	76	380	330	423	152	602	552	645	75	105	12.8	14	4
1"	32	76	396	340	443	152	624	568	671	85	115	14.8	14	4
1-1/4"	40	76	404	342	446	152	632	570	674	100	140	15.8	18	4
1-1/2"	50	76	424	354	480	152	652	582	708	110	150	16.8	18	4
2"	63	76	447	371	510	152	675	599	738	125	165	18.8	18	4
2-1/2"	75	76	482	392	542	152	710	620	770	145	185	19.8	18	4
3"	90	76	492	396	553	152	720	624	781	160	200	20.8	18	8
4"	110	76	537	422	627	152	765	650	855	180	220	22.8	18	8
5"	140	76	579	445	691	152	807	673	919	210	250	23.0	18	8
6"	160	76	640	488	781	152	868	716	1009	240	289	23.0	23	8
8"	226	76	733	529	895	152	_	_	1123	295	331	23.0	23	8
10"	281	76	856	606	1056	152	_	_	1284	350	416	25.0	23	12
12"	_	76	_	_	1073	152	_	_	1301	400	445	25.0	23	12

# **EXPANSION JOINT REPAIR COUPINGS**

(伸縮接頭插管/法蘭產品代號)



# SOCKET CODE NUMBER (EJ-S) 插管產品代號

		, , , , , , , ,				
0:	J	IS	AN	ISI	DI	N
Size	6" TRAVEL	12" T RAVEL	6" TRAVEL	12" T RAVEL	6" TRAVEL	12" T RAVEL
1/2"	11-EJ5-08-015J	11-EJ6-08-015J	11-EJ5-08-015A	11-EJ6-08-015A	11-EJ5-08-015D	11-EJ6-08-015D
3/4"	11-EJ5-08-020J	11-EJ6-08-020J	11-EJ5-08-020A	11-EJ6-08-020A	11-EJ5-08-020D	11-EJ6-08-020D
1"	11-EJ5-08-025J	11-EJ6-08-025J	11-EJ5-08-025A	11-EJ6-08-025A	11-EJ5-08-025D	11-EJ6-08-025D
1-1/4"	11-EJ5-08-032J	11-EJ6-08-032J	11-EJ5-08-032A	11-EJ6-08-032A	11-EJ5-08-032D	11-EJ6-08-032D
1-1/2"	11-EJ5-08-040J	11-EJ6-08-040J	11-EJ5-08-040A	11-EJ6-08-040A	11-EJ5-08-040D	11-EJ6-08-040D
2"	11-EJ5-08-050J	11-EJ6-08-050J	11-EJ5-08-050A	11-EJ6-08-050A	11-EJ5-08-050D	11-EJ6-08-050D
2-1/2"	11-EJ5-08-065J	11-EJ6-08-065J	11-EJ5-08-065A	11-EJ6-08-065A	11-EJ5-08-065D	11-EJ6-08-065D
3"	11-EJ5-08-080J	11-EJ6-08-080J	11-EJ5-08-080A	11-EJ6-08-080A	11-EJ5-08-080D	11-EJ6-08-080D
4"	11-EJ5-08-100J	11-EJ6-08-100J	11-EJ5-08-100A	11-EJ6-08-100A	11-EJ5-08-100D	11-EJ6-08-100D
5"	11-EJ5-08-125J	11-EJ6-08-125J	11-EJ5-08-125A	11-EJ6-08-125A	11-EJ5-08-125D	11-EJ6-08-125D
6"	11-EJ5-08-150J	11-EJ6-08-150J	11-EJ5-08-150A	11-EJ6-08-150A	11-EJ5-08-150D	11-EJ6-08-150D
8"	11-EJ5-08-200J	_	11-EJ5-08-200A	-	11-EJ5-08-200D	_
10"	11-EJ5-08-250J	_	11-EJ5-08-250A	-	11-EJ5-08-250D	_
12"	_	_	_	_	_	_

# FLANGED CODE NUMBER (EJ-F) 法蘭產品代號

0:	JI	IS	AN	ISI	DI	IN
Size	6" TRAVEL	12" T RAVEL	6" TRAVEL	12" T RAVEL	6" TRAVEL	12" T RAVEL
1/2"	11-EJ7-08-015J	11-EJ8-08-015J	11-EJ7-08-015A	11-EJ8-08-015A	11-EJ7-08-015D	11-EJ8-08-015D
3/4"	11-EJ7-08-020J	11-EJ8-08-020J	11-EJ7-08-020A	11-EJ8-08-020A	11-EJ7-08-020D	11-EJ8-08-020D
1"	11-EJ7-08-025J	11-EJ8-08-025J	11-EJ7-08-025A	11-EJ8-08-025A	11-EJ7-08-025D	11-EJ8-08-025D
1-1/4"	11-EJ7-08-032J	11-EJ8-08-032J	11-EJ7-08-032A	11-EJ8-08-032A	11-EJ7-08-032D	11-EJ8-08-032D
1-1/2"	11-EJ7-08-040J	11-EJ8-08-040J	11-EJ7-08-040A	11-EJ8-08-040A	11-EJ7-08-040D	11-EJ8-08-040D
2"	11-EJ7-08-050J	11-EJ8-08-050J	11-EJ7-08-050A	11-EJ8-08-050A	11-EJ7-08-050D	11-EJ8-08-050D
2-1/2"	11-EJ7-08-065J	11-EJ8-08-065J	11-EJ7-08-065A	11-EJ8-08-065A	11-EJ7-08-065D	11-EJ8-08-065D
3"	11-EJ7-08-080J	11-EJ8-08-080J	11-EJ7-08-080A	11-EJ8-08-080A	11-EJ7-08-080D	11-EJ8-08-080D
4"	11-EJ7-08-100J	11-EJ8-08-100J	11-EJ7-08-100A	11-EJ8-08-100A	11-EJ7-08-100D	11-EJ8-08-100D
5"	11-EJ7-08-125J	11-EJ8-08-125J	11-EJ7-08-125A	11-EJ8-08-125A	11-EJ7-08-125D	11-EJ8-08-125D
6"	11-EJ7-08-150J	11-EJ8-08-150J	11-EJ7-08-150A	11-EJ8-08-150A	11-EJ7-08-150D	11-EJ8-08-150D
8"	11-EJ7-08-200J	11-EJ8-08-200J	11-EJ7-08-200A	11-EJ8-08-200A	11-EJ7-08-200D	11-EJ8-08-200D
10"	11-EJ7-08-250J	11-EJ8-08-250J	11-EJ7-08-250A	11-EJ8-08-250A	11-EJ7-08-250D	11-EJ8-08-250D
12"	11-EJ7-08-300J	11-EJ8-08-300J	11-EJ7-08-300A	11-EJ8-08-300A	11-EJ7-08-300D	11-EJ8-08-300D

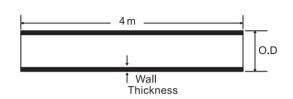
# **CPVC CTS PIPE & FITTING**

(CPVC CTS 管和配件)

# PIPE(管材)

單位(unit):inch

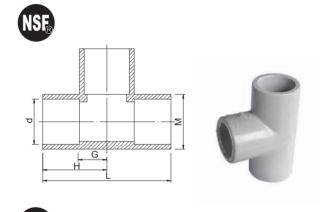
Nominal Pipe Size	Mean Outside Diameter	O.D. Tolerance	Minimum Wall Thickness	code
1/2"	0.625	±0.003	0.068	44-PIO-08-0015
3/4"	0.875	±0.003	0.080	44-PIO-08-0020
1"	1.125	±0.003	0.102	44-PIO-08-0025
1-1/4"	1.375	±0.003	0.125	44-PIO-08-0032
1-1/2"	1.625	±0.004	0.148	44-PIO-08-0040
2"	2.125	±0.004	0.193	44-PIO-08-0050



# TEE正三通

單位(unit):inch

Size	d	G	Н	L	М	code
1/2"	0.633	7/16	15/16	1-7/8	13/16	44-TT5-08-0015
3/4"	0.884	17/32	1-1/4	2-1/2	1-3/32	44-TT5-08-0020
1"	1.135	11/16	1-19/32	3-5/32	1-11/32	44-TT5-08-0025
1-1/4"	1.386	13/16	1-29/32	3-25/32	1-21/32	44-TT5-08-0032
1-1/2"	1.840	15/16	2-1/4	4-15/32	1-31/32	44-TT5-08-0040
2"	2.141	1-3/16	2-29/32	5-25/32	2-9/16	44-TT5-08-0050



# 90°ELL 彎頭

單位(unit):inch

Size	d	G	Н	M	code
1/2"	0.633	3/8	15/16	7/8	44-L95-08-0015
3/4"	0.883	9/16	1-1/4	1-1/8	44-L95-08-0020
1"	1.135	11/16	1-9/16	1-3/8	44-L95-08-0025
1-1/4"	1.386	13/16	1-29/32	1-21/32	44-L95-08-0032
1-1/2"	1.840	15/16	2-1/4	1-31/32	44-L95-08-0040
2"	2.141	1-3/16	2-29/32	2-9/16	44-L95-08-0050



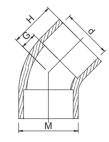


# 45<sup>°</sup>ELL 彎頭

單位(unit):inch

Size	d	G	Н	М	code
1/2"	0.633	3/4	3/16	13/18	44-L48-08-0015
3/4"	0.884	1	5/16	1-1/16	44-L48-08-0020
1"	1.135	1-1/4	11/32	1-11/32	44-L48-08-0025
1-1/4"	1.386	1-1/2	13/32	1-21/32	44-L48-08-0032
1-1/2"	1.840	1-3/4	7/16	1-31/32	44-L48-08-0040
2"	2.141	2-1/4	17/32	2-9/16	44-L48-08-0050





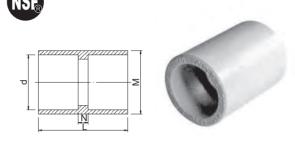


# **CPVC CTS PIPE & FITTING**

# COUPLING平接頭

單位(unit):inch

Size	d	L	М	N	code
1/2"	0.633	1-5/32	27/32	3/32	44-CL2-08-0015
3/4"	0.884	1-9/16	1-1/16	1/8	44-CL2-08-0020
1"	1.135	1-15/16	1-3/8	1/8	44-CL2-08-0025
1-1/4"	1.386	2-3/8	1-21/32	3/16	44-CL2-08-0032
1-1/2"	1.840	2-3/4	1-31/32	1/4	44-CL2-08-0040
2"	2.141	3-9/16	2-9/16	1/4	44-CL2-08-0050

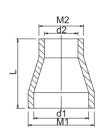


# REDUCER COUPLING(大小頭)

單位(unit):inch

Size	d1	d2	L	M1	M2	code
3/4 * 1/2	0.884	0.633	1-38	1-3/32	27/32	44-RC3-08-020015
1 * 1/2	1.135	0.633	1-3/4	1-11/32	27/32	44-RC3-08-025015
1 * 3/4	1.135	0.884	1-3/4	1-11/32	1-3/32	44-RC3-08-025020
1-1/4 * 1/2	1.386	0.633	2-5/8	1-21/32	27/32	44-RC3-08-032015
1-1/4 * 3/4	1.386	0.884	2-5/8	1-21/32	1-3/32	44-RC3-08-032020
1-1/4 * 1	1 1.386 1.135		2-5/8	1-21/32	1-11/32	44-RC3-08-032025





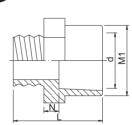


# MALE ADAPTER(外牙閥接頭)

單位(unit):inch

Size	d	L	M1	М	code
1/2"	0.633	1-1/4	7/8	3/16	44-MD3-08-0015
3/4"	0.884	1-19/32	1-3/32	7/32	44-MD3-08-0020
1"	1.135	1-7/8	1-11/32	7/32	44-MD3-08-0025
1-1/4"	1.386	2-9/32	1-21/32	5/16	44-MD3-08-0032
1-1/2"	1.840	2-15/32	1-31/32	5/16	44-MD3-08-0040
2"	2.141	2-29/32	2-9/16	5/16	44-MD3-08-0050





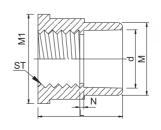


# FEMALE ADAPTER(內牙閥接頭)

單位(unit):inch

Size	d	L	М	M1	N	code
1/2"	0.633	1-11/32	27/32	1-3/16	7/32	44-FD3-08-0015
3/4"	0.884	1-9/16	1-3/32	1-3/8	7/32	44-FD3-08-0020
1"	1.135	1-15/16	1-3/8	1-11/16	5/16	44-FD3-08-0025

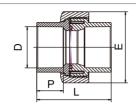
NSF





# **UNION**

油任接頭 (SocxSoc) ANSI





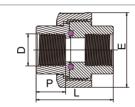


單位(unit):inch

Size	Е	D		L		UPV	'C code	CPVC code					
Size			S	TS	Р	s	TS	s	TS				
1/2	1-27/32	27/32	2-3/16	2-1/4	7/8	11-EU3-08-0010	11-EU4-08-0010	41-EU3-08-0010	41-EU4-08-0010				
3/4	2-13/32	1-1/16	2-11/16	2-17/32	1	11-EU3-08-0020	11-EU4-08-0020	41-EU3-08-0020	41-EU4-08-0020				
1	2-3/4	1-5/16	2-31/32	2-27/32	1-1/8	11-EU3-08-0025 11-EU4-08-0025		41-EU3-08-0025	41-EU4-08-0025				
1-1/4	3-7/32	1-21/32	3-3/16	3-3/16	1-1/4	11-EU3-08-0032	11-EU4-08-0032	41-EU3-08-0032	41-EU4-08-0032				
1-1/2	3-1/2	1-29/32	3-9/16	3-9/16	1-3/8	11-EU3-08-0040	11-EU4-08-0040	41-EU3-08-0040	41-EU4-08-0040				
2	3-31/32	2-3/8	4-1/32	4-1/32	1-1/2	11-EU3-08-0050	11-EU4-08-0050	41-EU3-08-0050	41-EU4-08-0050				
2-1/2	5-29/32	2-7/8	3-7/16	4-17/32	1-3/4	11-EU3-08-0065	11-EU4-08-0065	41-EU3-08-0065	41-EU4-08-0065				
3	7-1/4	3-1/2	4-21/32	5-3/8	1-7/8	11-EU3-08-0080	11-EU4-08-0080	41-EU3-08-0080	41-EU4-08-0080				
4	7-27/32	4-1/2	6-5/32	6-5/32	2-1/4	11-EU3-08-0100	EU3-08-0100 11-EU4-08-0100		J3-08-0100 11-EU4-08-0100 41-EU3-08-0100		41-EU4-08-0400		

# **UNION**

油任接頭 (FiptxFip) ANSI





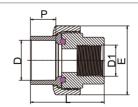


單位(unit):inch

Size	Е	D -		L	-	UPV	C code	CPVC code			
Size		D	S	TS	Р	S	TS	S	TS		
1/2	1-27/32	NPT 1/2	2-3/16	2-1/4	7/8	11-EU5-08-0010	11-EU6-08-0010	41-EU5-08-0010	41-EU6-08-0010		
3/4	2-13/32	NPT 3/4	2-11/16	2-17/32	1	11-EU5-08-0020	11-EU6-08-0020	41-EU5-08-0020	41-EU6-08-0020		
1	2-3/4	NPT 1	2-31/32	2-27/32	1-1/8	11-EU5-08-0025	11-EU6-08-0025	41-EU5-08-0025	41-EU6-08-0025		
1-1/4	3-7/32	NPT 1-1/4	3-3/16	3-3/16	1-1/4	11-EU5-08-0032	11-EU6-08-0032	41-EU5-08-0032	41-EU6-08-0032		
1-1/2	3-1/2	NPT 1-1/2	3-9/16	3-9/16	1-3/8	11-EU5-08-0040	11-EU6-08-0040	41-EU5-08-0040	41-EU6-08-0040		
2	3-31/32	NPT 2	4-1/32	4-1/32	1-1/2	11-EU5-08-0050	11-EU6-08-0050	41-EU5-08-0050	41-EU6-08-0050		
2-1/2	5-29/32	NPT 2-1/2	3-7/16	4-17/32	1-3/4	11-EU5-08-0065	11-EU6-08-0065	41-EU5-08-0060	41-EU6-08-0065		
3	7-1/4	NPT 3	4-21/32	5-3/8	1-7/8	11-EU5-08-0080	1-EU5-08-0080 11-EU6-08-0080		41-EU6-08-0080		
4	7-27/32	NPT 4	6-5/32	6-5/32	2-1/4	11-EU5-08-0100	11-EU5-08-0100 11-EU6-08-0100		41-EU6-08-0400		

# UNION

油任接頭 (SocxFipt) ANSI







單位(unit):inch

0:	_	)	D4		L		UPV	C code	CPV	C code
Size	E	D	D1	S	TS	P	S	TS	S	TS
1/2	1-27/32	27/32	NPT 1/2	2-3/16	2-1/4 7/8		11-EU7-08-0010	11-EU8-08-0010	41-EU7-08-0010	41-EU8-08-0010
3/4	2-13/32	1-1/16	NPT 3/4	2-11/16	2-17/32	1	11-EU7-08-0020	11-EU8-08-0020	41-EU7-08-0020	41-EU8-08-0020
1	2-3/4	1-5/16	NPT 1	2-31/32	2-27/32	1-1/8	11-EU7-08-0025	11-EU8-08-0025	41-EU7-08-0025	41-EU8-08-0025
1-1/4	3-7/32	1-21/32	NPT 1-1/4	3-3/16	3-3/16	1-1/4	11-EU7-08-0032	11-EU8-08-0032	41-EU7-08-0032	41-EU3-08-0032
1-1/2	3-1/2	1-29/32	NPT 1-1/2	3-9/16	3-9/16	1-3/8	11-EU7-08-0040	11-EU8-08-0040	41-EU7-08-0040	41-EU8-08-0040
2	3-31/32	2-3/8	NPT 2	4-1/32	4-1/32	1-1/2	11-EU7-08-0050	11-EU8-08-0050	41-EU7-08-0050	41-EU8-08-0050
2-1/2	5-29/32	2-7/8	NPT 2-1/2	3-7/16	4-17/32	1-3/4	11-EU7-08-0065	11-EU8-08-0065	41-EU7-08-0065	41-EU8-08-0065
3	7-1/4	3-1/2	NPT 3	4-21/32	5-3/8	1-7/8	11-EU7-08-0080	11-EU8-08-0080	41-EU7-08-0080	41-EU8-08-0080
4	7-27/32	4-1/2	NPT 4	6-5/32	6-5/32	2-1/4	11-EU7-08-0100	11-EU8-08-0100	41-EU7-08-0100	41-EU8-08-0400

# **CPVC-CTS COMPACT BALL VALVE**

緊密型球閥(熱水銅管用)

**CTS100 SOCKET** 

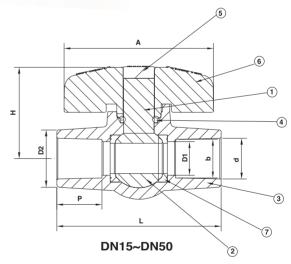
Size: 1/2"- 2" (Copper Tube Size)





# **MATERIALS OF CONSTRUCTION**

Item	Parts	Pcs	Materials
1	Stem	1	CPVC
2	Ball	1	CPVC
3	Body	1	CPVC
4	Stem O'ring	2	EPDM
5	Cap	2	ABS
6	Handle	1	ABS
7	Seat	2	PTFE



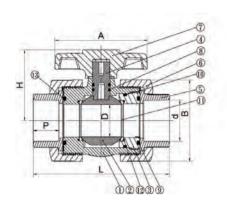
Standards				DIMENS	IONS			Uniti:inch
Nom, Size DN-Inch	Α	н	L	d	b	Р	D1	D2
15(1/2")	2.441	1.327	2.701	0.633	0.619	0.709	0.504	0.965
20(3/4")	2.809	1.791	3.120	0.884	0.870	0.882	0.742	1.248
25(1")	2,988	2.185	3,551	1.135	1.121	1.020	0.756	1,512
32(1-1/4")	3.528	2.402	4.024	1.386	1.372	1.102	0.961	1.740
40(1-1/2")	4.098	2.539	4.598	1.640	1.622	1.299	1.260	2.134
50(2")	4.378	2.894	5.110	2.141	2.123	1.496	1.496	2.563

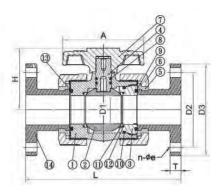


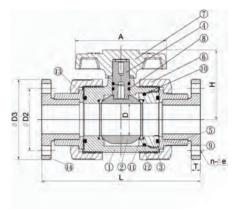
# **MATERIALS OF CONSTRUCTION**

Item	Parts	Pcs	Materials	Item	Parts	Pcs	Materials
1	BODY	1	UPVC,PP,CPVC,PVDF	8	STEM O'RING	2	EPDM,VITON
2	BALL	1	UPVC,PP,CPVC,PVDF	9	END'S O'RING	1	EPDM,VITON
3	SEAT CARRIER	1	UPVC,PP,CPVC,PVDF	10	BODY O'RING	1	EPDM,VITON
4	STEM	1	UPVC,PP,CPVC,PVDF	11	SE AT	1	PTFE
5	END CONNECTOR	2	UPVC,PP,CPVC,PVDF	12	SOLID CARRIER O'RING	2	EPDM,VITON
6	UNION NUT	2	UPVC,PP,CPVC,PVDF	13	SOLID END O'RING	1	EPDM,VITON
7	HANDLE	1	ABS	14	FLANGE	2	UPVC,PP,CPVC,PVDF

								JIS								U	Jnit:mm			
Nom Size	D1	D2	D3	c	d			d		n	Р		L		Α	т	н	В	Testpress	Working press
DN-inch				Socket	Thread			-	Socket	Thread	Flange					(kgf/cm <sup>2</sup> )	(kgf/cm <sup>2</sup> )			
15(1/2")	15	70	95	22	PT1/2	15	4	22.2	112	112	152	82.5	15	61	47	22.5	15			
20(3/4")	20	75	100	26	PT3/4	15	4	25.4	130	130	170	101	15	64	61	22.5	15			
25(1")	25	90	125	32	PT1	19	4	28.6	144	144	189	111	17	65	70	22.5	15			
32(1-1/4")	38	100	135	38	PT1-1/4	19	4	31.8	167	167	211	111	17	89	93	22.5	15			
40(1-1/2")	38	105	140	48	PT1-1/2	19	4	34.9	185	185	232	128.3	17	88.7	93	22.5	15			
50(2")	48	120	155	60	PT2	19	4	38.1	198	198	250	152.5	20	108.5	113	22.5	15			
65(2-1/2")	65	140	175	76	PT2-1/2	19	4	44.5	228	228	279	190	20	140	150	15	10			
80(3")	78	150	185	89	PT3	19	8	47.6	273	273	328	230	23	165	184	15	10			
100(4")	102	175	210	114	PT4	19	8	57.2	323	323	387	274	23	172	226	15	10			







SOCKET & SCREW TYPE

15A-50A FLANGE TYPE

65A-100A FLANGE TYPE

# **DIMENSIONS TABLE**

								ANS	SI								Unit:inch
Nominal	D1	D2	D3	d	1	е	n	Р		L			т	н	В	Test Press	Working
Pipe Size				Socket	Thread			Socket	Thread	Flange					(lb/in <sup>2</sup> )	(lb/in²)	
15(1/2")	0.59	2.375	3.500	0.848	NPT1/2	0.625	4	0.875	4.528	4.528	5.984	3.03	0.591	2.17	2.17	353	235
20(3/4")	0.748	2.750	3.875	1.058	NPT3/4	0.625	4	1.000	4.961	4.961	6.457	3.35	0.630	2.36	2.56	353	235
25(1")	0.98	3.125	4.250	1.325	NPT1	0.625	4	1.125	5.709	5.709	7.441	3.86	0.669	2.80	2.87	353	235
32(1-1/4")	1.496	3.500	4.625	1.670	NPT1-1/4	0.625	4	1.250	6.574	6.574	8.307	4.29	0.669	2.95	3.19	353	235
40(1-1/2")	1.496	3.875	5.000	1.912	NPT1-1/2	0.625	4	1.375	7.165	7.165	9.055	4.65	0.709	3.74	3.86	353	235
50(2")	1.89	4.750	6.000	2.387	NPT2	0.750	4	1.500	7.953	7.953	10.000	5.39	0.787	4.09	4.72	353	235
65(2-1/2")	2.56	5.500	7.000	2.889	NPT2-1/2	0.750	4	1.750	8.937	8.937	10.984	7.48	0.787	5.51	5.90	235	150
80(3")	3.07	6.000	7.500	3.515	NPT3	0.750	4	1.875	10.748	10.748	12.914	9.06	0.90	6.50	7.24	235	150
100(4")	4.01	7.500	9.000	4.518	NPT4	0.750	8	2.250	12.716	12.716	15.236	10.79	0.90	6.77	8.897	235	150

	<b>DIN</b> Unit:mm																
Nominal	D1	D2	D3	d		е	n	Р		L		A	т	н	В	Test Press	Working
Pipe Size				Socket	Thread				Socket	Thread	Flange					(bar)	(bar)
15(1/2")	15	65	95	20	R1/2	14	4	16.0	115	115	152	77	15	55	54	24	16
20(3/4")	19	75	105	25	R3/4	14	4	18.5	126	126	164	85	16	60	65	24	16
25(1")	25	85	115	32	R1	14	4	22.0	145	145	189	98	17	71	73	24	16
32(1-1/4")	38	100	140	40	R1-1/4	18	4	26.0	167	167	211	109	17	75	81	24	16
40(1-1/2")	38	110	150	50	R1-1/2	18	4	31.0	182	182	230	118	18	95	98	24	16
50(2")	48	125	165	63	R2	18	4	37.5	202	202	254	137	20	104	120	24	16
65(2-1/2")	65	145	185	75	R2-1/2	18	4	43.5	227	227	279	190	20	140	150	15	10
80(3")	78	160	200	90	R3	18	8	51.0	273	273	328	230	23	165	184	15	10
100(4")	102	180	220	110	R4	18	8	61.0	323	323	387	274	23	172	226	15	10

<sup>※</sup> 本尺表以 PVC 材質為準,本表試壓值以 PVC PVDF材質為基準,PP材質試壓值為本表試壓值之 70%.

The dimension table is calculated based on PVC material.

<sup>※</sup> 法蘭長度公差依據 EN558-1:1995 標準

The valve of test pressure is calculated based on PVC PVDF materials. The valve of test pressure for PP material is 70% based on the table.

The flanged length tolerance is according to EN558-1:1995.

# **COMPACT BALL VALVE**

緊密型球閥

CC100 SOCKET/ CC200 THREAD Size:DN8~DN150





# **Compact Ball Valves Torque Value**

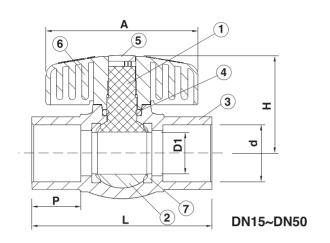
		Torque Va	lue(kgf/cm <sup>2</sup> )	
	EPD	M-SEAT	PTFE	-SEAT
SIZE	OPEN	CLOSE	OPEN	CLOSE
1/2"	12-22	12-22	10-20	20-30
3/4"	20-30	30-40	20-30	25-35
1"	26-36	43-53	30-40	30-40
1-1/4"	44-59	44-59	50-65	70-85
1-1/2"	50-65	60-75	47-62	60-75
2"	50-70	100-120	60-80	120-140
2-1/2"	80-100	70-90	-	-
3"	140-160	130-150	-	-
4"	160-180	150-170	-	-
5"	-	-	195-215	235-255
6"	-	-	195-215	235-255

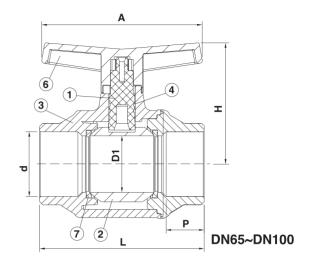
1Kg.cm=0.0981N.m

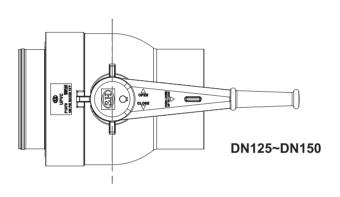
# **MATERIALS OF CONSTRUCTION**

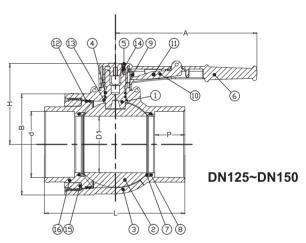
Item	Parts	Pcs	Materials	Item	Parts	Pcs	Materials	Item	Parts	Pcs	Materials
1	Stem	1	UPVC	7	Seat	2	PTFE	13	Washer	1	PP
2	Ball	1	UPVC	8	Body O'ring	2	EPDM	14	Bolt $(\frac{3}{4}"x \frac{3}{16}")$	1	SUS 304
3	Body	1	UPVC	9	Activities Jumper	1	PVDF	15	Seat Carrier	1	UPVC
4	Stem O'ring	2	EPDM	10	Handle Lever	1	PP	16	End Connector	1	UPVC
5	Сар	1	PP	11	Jumper	1	ABS				
6	Handle	1	ABS	12	Seat Carrier O'ring	2	EPDM				

# UPVC / CPVC PIPE FITTING VALVE









Standards					JIS			U	nit:mm				ΑN	ISI			Unit:i	nch				D	IN			Unit:	:mm
Nom.Size			d					Test	Working press			d					1631	Working press		d						Test	Workin press
DN-inch	D1	Socket	Thread	Р	L	Н	Α	Press. (kgf/cm²)	(kgf/cm <sup>2</sup> )	D1	Socket	Thread	Р	L	Н	Α	Press. (lb/in²)		D1		Thread	Р	L	Н	Α	Press. (bar)	(bar)
15(1/2")	15	22	PT1/2	22.2	79	47	70	15	10	0.591	0.840	NPT1/2	0.875	3.110	1.850	2.756	225	150	15	20	R1/2	16.0	79	47	70	15	10
20(3/4")	20	26	PT 3/4	25.4	90.5	57	77	15	10	0.787	1.050	NPT3/4	1.000	3.562	2.244	3.031	225	150	20	25	R3/4	18.5	90.5	57	77	15	10
25(1")	25	32	PT1	28.6	106.5	61	89	15	10	0.984	1.315	NPT1	1.125	4.173	2.402	3.504	225	150	25	32	R1	22.0	106.5	61	89	15	10
32(1-1/4")	32	38	PT1-1/4	31.8	123	66	89	15	10	1.260	1.660	NPT1-1/4	1.250	4.842	2.598	3.504	225	150	32	40	R1-1/4	26.0	123	66	89	15	10
40(1-1/2")	39	48	PT1-1/2	34.9	129	74	111	15	10	1.535	1.900	NPT1-1/2	1.375	5.098	2.913	4.370	225	150	39	50	R1-1/2	31.0	129	74	111	15	10
50(2")	50	60	PT2	38.1	150.5	80	139	15	10	1.969	2.375	NPT2	1.500	5.925	3.150	5.472	225	150	50	63	R2	37.5	150.5	80	139	15	10
*65(2-1/2")	66	76	PT2-1/2	44.5	194	141	190	15	10	2.598	2.875	NPT2-1/2	1.750	7.638	5.550	7.48	225	150	66	75	R2-1/2	43.5	194	141	190	15	10
*80(3")	78	89	PT3	47.6	233	154	230	15	10	3.071	3.500	NPT3	1.875	9.173	6.063	9.005	225	150	78	90	R3	51.0	233	154	230	15	10
*100(4")	100	114	PT4	57.6	280	170	274	15	10	3.94	4.500	NPT4	2.250	11.00	6.7	10.79	225	150	100	110	R4	61.0	280	170	274	15	10
*125(5")	144.5	168.5	PT5	77	384.6	207	261.5	15	10	5.69	6.65	NPT5	3.03	15.14	7.17	8.15	225	150	144.5	166	R5	77	384.6	207	361.5	15	10
*150(6")	144.5	168.5	PT6	77	357	207	361.5	15	10	5.69	6.65	NPT6	3.03	14.05	7.17	8.15	225	150	144.5	166	R6	77	357	207	361.5	15	10

# TRUE UNION DIAPHRAGM VALVE

油任式隔膜閥(插管式、牙口式) DF100/DF200

DE100/DE200 PVDF3 LAYS DIAPHRAGM VALVE

適用於高腐蝕流體的氣化渗透、電解液等耐酸碱專用

Suitable to the protect diaphragm from the gas permeation in the corrosion resistance and electrolytic chlorine gas.



## MATERIALS OF CONSTRUCTION

Item	Parts	Pcs	Materials	Item	Parts	Pcs	Materials
1	Shaft	1	BRASS	9	Gauge Cover	1	PC
2	Diaphragm	1	EPDM, TEFLON, PVDF 3 LAYS	10	O'ring	2	EPDM, VITON
3	Body	1	UPVC, PP, CPVC, PVDF	11	Compressor	1	15A-25A PVDF 32A-50A PPG
4	Sleeve	1	BRASS	12	Indicator	1	PE
5	Union Nut	2	UPVC, PP, CPVC, PVDF	13	Bolt	4	SUS304
6	Handle	1	ABS	14	Nut	4	SUS304
7	End Connector	2	UPVC, PP, CPVC, PVDF	15	Washer spring washer	8	SUS304
8	Bonnet	1	UPVC, PP, CPVC, PVDF				
8-1	Bonnet Board	1	SUS304				

# UPVC / CPVC PIPE FITTING VALVE

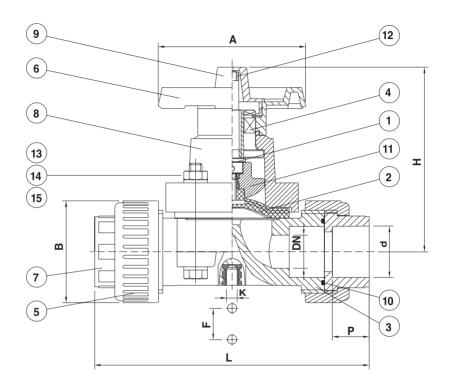
# TORQUE VALUE(扭力值)

SIZE	Kg.cm	N.m
1/2"-3/4"	60	5.88
1"	100	9.81
1-1/2"	140	13.72
2"	210	20.58

1Kg.cm=0.0981N.m

# **CV VALUE**

CV值【GMF	CV值【GMP/(1lbf/in²) <sup>1/2</sup> 】								
OPENING:100%									
尺寸	CV值								
1/2"	3.27								
3/4"	5.29								
1"	8.87								
1-1/2"	31.09								
2	43.15								



DN15~DN50

# **DIMENSIONS TABLE**

Standards		JIS Unit:								nit: ı	mm				Þ	NS				U	Init: ir	ıch				С	OIN				Un	nit: n	nm
Nom.		d	P	В	_	н	Α	F	K		t Press /cm²)		d	P	В		н	A	F	K	Test (Ib/i	Press n²)	(	d	P	В	L	н	Α	F	K		:Press ar)
ω \	Socket	Thread	-	В.	_	=	^			Ptfe dia,	Rubber Dia,	Socket	Thread	_	ם	_	•••	^		K		Rubber Dia,	Socket	Thread	F	D	_	11	^			Ptfe dia,	Rubber Dia,
15(1/2")	22	PT1/2	22.2	54	166	107.5	81	25	8	10	10	0,84	NPT1/2	0.875	2,126	6.53	4.23	3,189	0.984	0.315	150	150	20	R1/2	16.0	54	166	107.5	81	25	8	10	10
20(3/4")	26	PT3/4	25.4	54	166	107.5	81	25	8	10	10	1.05	NPT3/4	1.000	2,126	6.53	4.23	3.189	0.984	0.315	150	150	25	R3/4	18.5	54	166	107.5	81	25	8	10	10
25(1")	32	PT1	28.6	63	183	116	91	25	8	10	10	1.32	NPT1	1.125	2.480	7.2	4.567	3.583	0.984	0.315	150	150	32	R1	22.0	63	183	116	91	25	8	10	10
32(1-1/4")	38	PT11/4	31.8	89	238	142	117	45	8	10	10	1.66	NPT1-1/4	1.250	3.5	9.37	5.591	4.606	1,772	0.315	150	150	40	R1-1/4	26.0	89	238	142	117	45	8	10	10
40(1-1/2")	48	PT11/2	34.9	89	238	142	117	45	8	10	10	1,90	NPT1-1/2	1.375	3,5	9.37	5,591	4.606	1.772	0.315	150	150	50	R1-1/2	31.0	89	238	142	117	45	8	10	10
50(2")	60	PT2	38.1	101	273	176	150	45	8	10	10	2.38	NPT2	1.500	3.97	10.74	6.929	5.906	1.772	0.315	150	150	63	R2	37.5	101	273	176	150	45	8	10	10

# **DIAPHRAGM VALVE / Flanged type**

隔膜凡而(法蘭式)

DF300 Size: DN15~DN250 DE300 PVDF 3 LAYS DIAPHRAGM VALVE 適用於高腐蝕流體的氣化渗透、電解液等耐酸碱專用

Suitable to the protect diaphragm from the gas permeation in the corrosion resistance and electrolytic chlorine gas.



## **MATERIALS OF CONSTRUCTION**

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Mate	erials		
1	Body	1	UPVC, PP, CPVC, PPG, PVDF	10	Name Plate	1	PVC			
2	Bonnet	1	UPVC,CPVC, PPG, PVDF	11	Grease Nipple	1	SUS304			
3	Compressor	1	15A-25A PVDF 40A-250A FC20	12	Stud Bolt & Nut		····· 15A-25A ····· 40A-50A	SUS304		
4	Hand Wheel	1	ABS	13	Inserted Nut		····· 65A-125A ····· 150A	BSBM		
5	Sleeve	1	15A-50A BSBM 65A-250A FCD45	14	Bolt Nut & Washer		····· 200A ···· 250A	SUS304		
6	Stem	1	15A-50A BSBM 65A-250A SUS304	15	thrust Bearing	1	Standardized 80A	-250A USED ONL		
7	Diaphragm	1	EPDM,HYPALON TEFLON,PVDF 3 lays	16	Stopper	1	SS-41 BSBM SU	JS304		
7-1	Upper Board	1	SUS304	17	Set Nut	1	SS41 BSBM SU	S304		
7-2	Down Board	2	SUS304	18	Gauge Cover	1	PC			
8	Сар	1	15A-25A BSBM 40A-250A PVC	19	Sheet Ring	1	1 EPDM			
9	Compressor Pin	1	SUS-304	20	Washer	1	1 SUS304			

Note: 1. SUS 304 ......Stainless Steel AISI 304 4. FC 20.....Grav Cast Iron SS 41 .....Rolled steel for General Structure
 SUP.....Steel for Spring ASTM A-230-68

3. BSBM .....Free Cutting Brass Bar

※第3、5、6、12、14項材質如用SUS-304或SUS-316為特殊規格,價格另計。

%PVDF隔膜閥上蓋(BONNET)標準材質用PPG,如須使用PVDF上蓋為特殊規格,價格另計。

The standard material to bonnet : PPG.

Optional PVDF bonnet material for PVDF diaphragm valve.

Optional materials on request for part no. 4.5.6.12.14.: SUS 304 or SUS 316.

®VITION & TEFLON are tradmarks of E.I. Du Pont

					JIS	6					Unit:	mm		PRE	ESS 1	Test f	or As	semb	oly (a	t <b>20</b> °	C)	
															Te	st Pre	ssure	Unit:	kgf/cn	n²		
Nom Size	D1	D2	D3	е	n No. of	D4	D5	Lift	L	т	н			Rubbe	r Diap	hragm	1		Teflo	n Diap	hragm	
m/m(inch)					holes		20	е	_	•		•	UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF
15(1/2")	16	70	91.5	15	4	58x51	94	13	110	15	101	140	10	10	10	10	10	10	10	10	10	10
20(3/4")	20	75	97	15	4	70x60	94	13	120	17	106	152	10	10	10	10	10	10	10	10	10	10
25(1")	25	90	125	19	4	79x65	94	14	130	17	113	158	10	10	10	10	10	10	10	10	10	10
40(1-1/2")	41	105	135	19	4	123	147	24	180	19	133	193	10	10	10	10	10	10	10	10	10	10
50(2")	52	120	151	19	4	148	147	28	210	19	145	210	10	10	10	10	10	10	10	10	10	10
65(2-1/2")	68	140	185	19	4	183	202	32	250	24	197	276	10	10	10	10	10	10	7	7	10	10
80(3")	78	150	183.5	19	8	201	202	34	280	23	218	293	10	10	10	10	10	10	7	7	10	10
100(4")	100	175	210	19	8	250	241	54	340	24	261	370	10	10	10	10	10	10	7	7	10	10
125(5")	125	210	250	23	8	321	274	72	410	26	308	412	10	7	7	10	10	7	7	7	7	7
150(6")	148	240	282	23	8	382	395	72	480	33	334	471	10	7	7	10	10	7	7	7	7	7
200(8")	198	290	337	23	12	431	395	96	570	33	419	625	7	5	5	7	7	5	5	5	5	5
250(10")	248	355	397	25	12	529	555	132	680	38	510	750	7	5	5	7	7	5	5	5	5	5

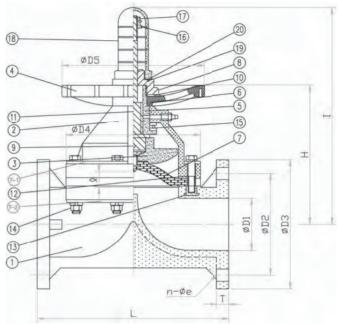
# **CV VALUE**

CV值【GMP/	/(1lbf/in <sup>2</sup> ) <sup>1/2</sup> ]
Fu <b>ll</b> Ope	n: 100%
尺寸	CV值
1/2"	3.27
3/4"	5.29
1"	8.87
1-1/2"	31.09
2"	43.15
2-1/2"	90.68
3"	116.79
4"	186.78
6"	345.26

# **BOLTS TORQUE VALUE**

SIZE	Kg.m	N.m
1/2"	90	8.83
3/4"	110	10.79
1"	110	10.79
1-1/2"	150	14.72
2"	220	21.58
2-1/2"	220	21.58
3"	280	27.47
4"	280	27.47
6"	280	27.47

1Kg.cm=0.0981N.m



					Α	NSI					Unit	: inch		PRES	SS Te	st fo	r Ass	embl	y ( at	20°C	)	
																Test F	ressu	re Uni	t: psi			
Nom. Size	D1	D2	D3	е	n No. of	D4	D5	Lift	L	т	н	1	ı	Rubbe	r Diap	hragm			Teflon	Diaph	ıragm	
m/m(inch)					holes			e				•	UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF
15(1/2")	0.63	2.38	3.50	0.63	4	2.28x2	3.70	0.51	4.25	0.59	3.98	5.51	150	150	150	150	150	150	150	150	150	150
20(3/4")	0.79	2.76	3.86	0.63	4	2.76x2.36	3.70	0.51	5.90	0.63	4.17	5.98	150	150	150	150	150	150	150	150	150	150
25(1")	0.98	3.13	4.25	0.63	4	3.11x2.56	3.70	0.55	5.90	0.63	4.45	6.22	150	150	150	150	150	150	150	150	150	150
40(1-1/2")	1.61	3.88	5.00	0.63	4	4.84	5.79	0.94	6.95	0.67	5.24	7.60	150	150	150	150	150	150	150	150	150	150
50(2")	2.05	4.74	5.98	0.75	4	5.83	5.79	1.10	7.95	0.67	5.71	8.27	150	150	150	150	150	150	150	150	150	150
65 (2-1/2")	2.68	5.49	7.01	0.75	4	7.20	7.95	1.26	9.85	0.87	7.76	10.87	150	150	150	150	150	150	105	105	150	150
80(3")	3.07	6.00	7.52	0.75	4	7.91	7.95	1.34	10.40	0.75	8.50	11.54	150	150	150	150	150	150	105	105	150	150
100(4")	3.94	7.50	9.17	0.75	8	9.84	9.49	2.13	12.95	0.91	10.28	14.57	150	150	150	150	150	150	105	105	150	150
125(5")	4.92	8.50	10.00	0.87	8	12.64	10.79	2.83	16.14	0.94	12.13	16.22	150	105	105	150	150	105	105	105	105	150
150(6")	5.83	9.51	10.98	0.87	8	15.04	15.55	2.83	18.90	1.18	13.15	18.54	150	105	105	150	150	105	105	105	105	150
200(8")	7.80	11.75	13.50	0.87	8	16.97	15.55	3.78	22.44	1.26	16.40	24.61	105	75	75	105	105	75	75	75	75	105
250(10")	9.76	14.25	15.98	0.98	12	20.83	21.85	5.20	26.77	1.26	20.08	29.53	105	75	75	105	105	75	75	75	75	105

					DII	N					Unit	: mm		PR	ESS	Test 1	for As	seml	bly (a	t 20°	C)	
Nom. Size			-		n No. of			Lift		_			R	ubber			essure		•	) Diaphr	agm	
m/m(inch)	D1	D2	D3	е	holes	D4	D5	e	L	Т	Н	'	UPVC	PP	PPG	CPVC	PVDF	UPVC	PP	PPG	CPVC	PVDF
15(1/2")	16	65	95	14	4	58x51	94	13	130	23	101	140	10	10	10	10	10	10	10	10	10	10
20(3/4")	20	75	105	14	4	70x60	94	13	150	23	106	152	10	10	10	10	10	10	10	10	10	10
25(1")	25	85	125	14	4	79x65	94	14	160	23	113	158	10	10	10	10	10	10	10	10	10	10
40 (1-1/2")	41	110	150	18	4	123	147	24	200	23	133	193	10	10	10	10	10	10	10	10	10	10
50(2")	52	125	165	18	4	148	147	28	230	21	145	210	10	10	10	10	10	10	10	10	10	10
65 (2-1/2")	68	145	185	18	4	183	202	32	290	22	197	276	10	10	10	10	10	10	7	7	10	10
80(3")	78	160	200	18	8	201	202	34	310	22	218	293	10	10	10	10	10	10	7	7	10	10
100(4")	100	180	210	18	8	250	241	54	350	25	261	370	10	10	10	10	10	10	7	7	7	10
125(5")	125	210	250	18	8	321	274	72	400	24	308	412	10	7	7	10	10	7	7	7	7	7
150(6")	148	240	285	23	8	382	395	72	480	30	334	471	10	7	7	10	10	7	7	7	7	7
200(8")	198	295	340	23	8	431	395	96	600	32	419	625	7	5	5	7	7	5	5	5	5	5
250(10")	248	350	395	23	12	529	555	132	680	32	510	750	7	5	5	7	7	5	5	5	5	5

<sup>※</sup> 本尺表以 PVC 材質為準

<sup>※</sup> 法蘭長度公差依據 EN558-1:1995 標準

The dimension table is calculated based on PVC material.

The flanged length tolerance is according to EN558-1:1995.

# **BUTTERFLY VALVE-Universal Type** (With actuator direct mounting pad) Lever Handle Type



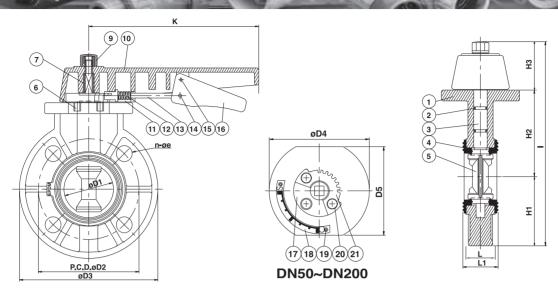
BE300 Size: 2"- 8"

End Type: Flanged
Test Pressure: 225 PSI
Working Pressure: 150 PSI

- Corrosion resistance.
- Excellent flow characteristics.
- Lower flow loss.
- Compact and lightweight designs in an energy-saving and cost-efficient Butterfly Valve.
- With clear indication of disc opening degree.
- Ideally suited for flow control in a minimum piping space.

# **MATERIALS OF CONSTRUCTION**

No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials
1	Body	1	UPVC, PP, CPVC, PVDF	11	Spring	1	SUS 304
2	Stem O'ring	2	EPDM, VITON	12	Lever	1	SUS 304
3	Stem	1	SUS 410, SUS 316	13	Setpin(Short)	1	SUS 304
4	Seat	1	EPDM, VITON, NBR	14	Setpin(Long)	1	SUS 304
5	Disc	1	UPVC, PP, CPVC, PVDF	15	Lever	1	ABS
6	Bolt	1	BRASS, SUS 304	16	Positioner	1	UPVC
7	Handle Insert	1	FC 0208	17	Indicator	1	SUS 304
8	Stem Bolt	1	UPVC, BRASS	18	Bolt	2	SUS 304
9	Handle	1	ABS	19	Bolt	3	SUS 304
10	Handle Cap	1	ABS	20	Teeth Plate	1	SUS 304



# The Torque Values

				AT Wate	r			
	W/O Press	ure (Kgf.m)	Pressure at 5	OPSI (Kgf.m)	Pressure at 10	00PSI (Kgf.m)	Pressure at	150PSI (Kgf.m)
	Open	Close	Open	Close	Open	Close	Open	Close
2"	0.80	0.80	0.80	1.00	0.80	1.00	1.00	1.00
3"	2.50	2.50	3.00	3.00	2.50	2.50	3.00	3.00
4"	2.50	3.00	3.00	3.00	3.00	3.00	3.00	3.00
6"	8.00	9.00	8.00	8.00	7.50	8.00	6.00	7.00
8"	10.00	11.00	11.00	11.00	10.50	10.50	9.50	9.50

								JIS								nit: mm
Nom. size DN(inch)	D1	D2	D3	n	L	L1	D4	H1	H2	НЗ	- 1	K	D5	Test Press Body	s(kgf/cm²) Seat	Working Press (kgf/cm <sup>2</sup> )
40(1-1/2")	44	105	149	4	36.1	43.5	105	73	98	63	234	202	93	15	12	10
50(2")	55	120	164	4	36.1	43.5	105	82.0	107	63	252	202	93	15	12	10
65(2-1/2")	69.6	140	185	4	40	46.4	105	92	115	63	270	202	95.5	15	12	10
80(3")	78	150	196	8	40	47.4	127	98	123	63	284	202	95	15	12	10
100(4")	100	175	225	8	48	52.4	134	112.5	139.5	68	320	253	100	15	12	10
125(5")	128	210	254	8	51.2	58.8	169.5	127	160	86	373	297	100.8	15	12	10
150(6")	152	240	286	8	51	57	170	143	178	86	407	297	101	15	12	10
200(8")	200	290	344	12	61	67.5	191	172	212	86	470	297	110	15	12	10

								ANSI							Ur	nit: inch
Nom. size DN(inch)	D1	D2	D3	n	L	L1	D4	H1	H2	НЗ	I	K	D5	Test Pres Body	s (lb/in²) Seat	Working Press (lb/in²)
40(1-1/2")	1.73	3.88	5.87	4	1.42	1.71	4.13	2.87	3.86	2.48	9.21	7.95	3.66	235	180	150
50(2")	2.16	4.75	6.46	4	1.42	1.71	4.13	3.23	4.21	2.48	9.92	7.95	3.66	235	180	150
65(2-1/2")	2.74	5.5	7.28	4	1.57	1.83	5.04	3.62	4.53	2.48	10.63	7.95	3.76	235	180	150
80(3")	3.07	6.0	7.72	4	1.57	1.87	5.00	3.86	4.84	2.48	11.18	7.95	3.74	235	180	150
100(4")	3.94	7.5	8.85	8	1.89	2.06	5.27	4.43	5.49	2.68	12.60	9.96	3.94	235	180	150
125(5")	5.04	8.5	10.0	8	2.02	2.31	6.673	5.00	6.30	3.39	14.69	11.69	3.97	235	180	150
150(6")	5.98	9.5	11.26	8	2.01	2.24	6.69	5.63	7.00	3.39	16.02	11.69	3.98	235	180	150
200(8")	7.87	11.75	13.54	8	2.40	2.66	7.52	6.77	8.35	3.39	18.5	11.69	4.31	235	180	150

							DIN	I							Ur	nit: mm
Nom. size DN(inch)	D1	D2	D3	n	L	L1	D4	H1	H2	Н3	I	K	D5	Test Pres Body	s (bar) Seat	Working Press (bar)
40(1-1/2")	44	110	149	4	36.1	43.5	105	73	98	63	234	202	93	15	12	10
50(2")	55	125	164	4	36.1	43.5	105	82.0	107	63	252	202	93	15	12	10
65(2-1/2")	69.6	145	185	4	40	46.4	128	92	115	63	270	202	95.5	15	12	10
80(3")	78	160	196	8	40	47.4	127	98	123	63	284	202	95	15	12	10
100(4")	100	180	225	8	48	52.4	134	112.5	139.5	68	320	253	100	15	12	10
125(5")	128	210	254	8	51.2	58.8	169.5	127	160	86	373	297	100.8	15	12	10
150(6")	152	240	286	8	51	57	170	143	178	86	407	297	101	15	12	10
200(8")	200	295	344	8	61	67.5	191	172	212	86	470	297	110	15	12	10

<sup>※</sup> 法蘭長度公差依據 EN558-1:1995 標準 ※ L 長度為安裝後建議參考值

Standard dimensions based on PVC material.

The flanged length tolerance is according to EN558-1:1995.

X L : The suggested length of the valve as installed on pipeline.

# **BUTTERFLY VALVE / Lever handle type**

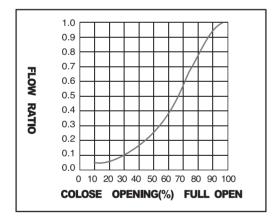
旋轉凡而(手把式)

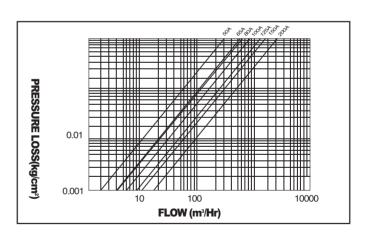
**BB300** 

Size: 2"-8"

options:8"(DN200) GEAR OPERATOR TYPE

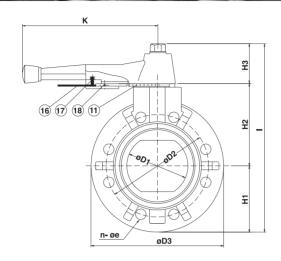


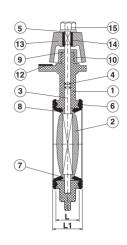




# **MATERIALS OF CONSTRUCTION**

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC,PP,PPG,PVDF,CPVC	10	Reatainer Cap	1	UPVC,PP,PVDF
2	Disc	1	UPVC,PP,PPG,PVDF,CPVC	11	Positioner	1	SUS304
3	Stem	1	SUS410,SUS316,SUS304	12	Screw	3DN50-200 4DN200	SUS304
4	Stem O-ring	2	EPDM,VITON	13	Handle	1	ABS
5	Washer	1	SUS304	14	Inserted Metal Of Handle	1	FC0208
6	Seat	1	EPDM,VITON,NBR, HYPALON	15	Nut	1	PVC COATED BRASS,SUS304
7	Disc O'ring(1)	2	EPDM,VITON	16	Handle Lever	1	SUS304
8	Disc O'ring(2)	2	EPDM,VITON	17	Spring	1	SUS304
9	Stem Retainer	1	SUS304	18	Set Pin	1	BSBM





## DN50~DN200

# TORQUE VALUES (1kgf/m= 9.8N.m)

BF-V'S Size	Torque Under Without Any Water Pressure	Under Water	Testing Press	ure(Kg/cm²)	BF-V'S Size	Torque Under Without Any Water Pressure	Under Water	Testing Press	sure(Kg/cm²)
DI 100120	(Kgf/m)	Water Pressure(Kgf/cm²)	Open Torque(Kgf/m)	Close Torque(Kgf/m)	Di VO GIZC		Water Pressure(Kgt/cm )	Open Torque(Kgf/m)	Close Torque(Kgf/m)
2"	1.5	15	0.5	0.5	10"	17.0	8	7	10
2-1/2"	1.5	15	0.5	0.5	12"	27.0	6	14	18
3"	2.0	15	1	1.5	14"	37.0	6	25	28
4"	2.0	12	1	1.5	16"	42.0	-	-	-
5"	5.0	12	2.5	4.5	18"	52.0	-	-	-
6"	6.5	12	4	7	20"	65.0	-	-	-
8"	10.0	10	6	8.5	24"	76.0	-	-	-

						JIS									Unit: mm
Nom. Size DN(inch)	D1	D2	D3	øe	n	L	L1	H1	H2	НЗ	ı	K	Test (kgf/d	Press cm²) Seat	Working Press (kgf/cm <sup>2</sup> )
50(2")	57	120	165	19	4	36.5	40.5	82.5	102	63	253	220	15.0	12.0	10.0
65(2-1/2")	72	140	184	19	4	40.5	44.5	92	110	63	270	220	15.0	12.0	10.0
80(3")	80	150	200	19	8	40.5	44.5	100	118	63	286	220	15.0	12.0	10.0
100(4")	100	175	230	19	8	50.5	56.5	115	134	63	312	220	15.0	12.0	10.0
125(5")	130	210	256	23	8	60.5	66.5	128	160	96	391	310	15.0	12.0	10.0
150(6")	150	240	288	23	8	66	71	144	177	96	418	310	15.0	12.0	10.0
200(8")	203	290	348	23	12	82	87	174	204	93	476	414	15.0	12.0	10.0

						ANSI									Unit: inch
Nom. Size	D1	D2	D3	øe	n	L	L1	H1	H2	НЗ	ı	K		Press /in²)	Working Press
DN(inch)													Body	Seat	(lb/in²)
50(2")	2.24	4.75	6.50	0.75	4	1.44	1.59	3.25	4.01	2.48	9.96	8.66	235	180	150
65(2-1/2")	2.83	5.50	7.24	0.75	4	1.59	1.75	3.62	4.33	2.48	10.63	8.66	235	180	150
80(3")	3.15	6.00	7.87	0.75	4	1.59	1.75	3.94	4.64	2.48	11.26	8.66	235	180	150
100(4")	3.93	7.50	9.06	0.75	8	1.99	2.22	4.53	5.28	2.48	12.48	8.66	235	180	150
125(5")	5.12	8.50	10.07	0.87	8	2.38	2.62	5.00	6.30	3.78	15	12.20	235	180	150
150(6")	5.90	9.50	11.34	0.87	8	2.60	2.80	5.67	6.97	3.78	16.46	12.20	235	180	150
200(8")	7.99	11.75	13.70	0.87	8	3.23	3.43	6.85	8.03	3.66	18.74	16.30	235	180	150

						DIN									Unit: mm
Nom. Size DN(inch)	D1	D2	D3	øe	n	L	L1	H1	H2	НЗ	ı	К		Press ar) Seat	Working Press (bar)
50(2")	57	125	165	18	4	36.5	40.5	82.5	102	63	253	220	15.0	12.0	10.0
65(2-1/2")	72	145	184	18	4	40.5	44.5	92	110	63	270	220	15.0	12.0	10.0
80(3")	80	160	200	18	8	40.5	44.5	100	118	63	286	220	15.0	12.0	10.0
100(4")	100	180	230	18	8	50.5	56.5	115	134	63	312	220	15.0	12.0	10.0
125(5")	130	210	256	18	8	60.5	66.5	128	160	96	391	310	15.0	12.0	10.0
150(6")	150	240	288	23	8	66	71	144	177	96	418	310	15.0	12.0	10.0
200(8")	203	295	348	23	8	82	87	174	204	93	476	414	15.0	12.0	10.0

<sup>※</sup> 法蘭長度公差依據 EN558-1:1995 標準

- Standard dimensions based on PVC material.
   The flanged length tolerance is according to EN558-1:1995.
   L : The suggested length of the valve as installed on pipeline.

<sup>※</sup> L 長度為安裝後建議參考値

# BUTTERFLY VALVE GEAR OPERATOR FULL FLANGED TYPE

旋轉凡而全法蘭齒輪式

**BF300** 

Size: 8"- 24"

\*OPTION: 8"(DN200)Lever type.

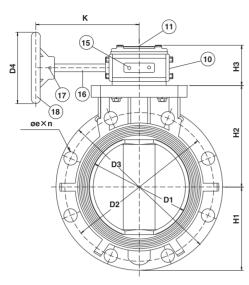


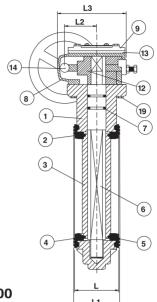
# **MATERIALS OF CONSTRUCTION**

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP,CPVC, PPG, PVDF	11	Inicator Plate	1	UPVC
2	Seat	1	EPDM, VITON, NBR, HYPALON	12	Gear	1	FCD45
3	Disc	1	UPVC, PP,CPVC, PPG, PVDF	13	Oil Seal	1	EPDM
4	Disc O'ring(A)	2	EPDM, VITON	14	Bearing	1	SMCM220/420/810
5	Disc O'ring(B)	2	EPDM, VITON	15	Adjuatable Bolt	2	SS41
6	Stem	1	SUS410, SUS304, SUS316	16	Gearing	1	SS41
7	Stem O'ring	2	EPDM, VITON	17	Set Pin	1	K7
8	Gear Box	1	FC25	18	Hand Wheel	1	FCD45
9	Gear Box Cap	1	FC25	19	Tightening Bolt	4	SCM3,SUS304
10	Side Cap	1	FC25				

# Torque Values (1kgf/m=9.8N.m)

BF-V'S Size	Torque Under Without Any Water Pressure	Under Water	Testing Pressu	re(Kg/cm²)	BF-V'S Size	Torque Under Without Any Water Pressure	Under Water T	esting Pressur	e(Kg/cm²)
DI -V 3 312E	(Kgf/m)	Water Pressure(Kgf/cm²)	Open Torque(Kgf/m)	Close Torque(Kgf/m)	DI -V 3 3126	(Kgf/m)	Water Pressure(Kgf/cm )	Open Torque(Kgf/m)	Close Torque(Kgf/m)
2"	1.5	15	0.5	0.5	12"	27.0	6	14	18
2-1/2"	1.5	15	0.5	0.5	14"	37.0	6	25	28
3"	2.0	15	1	1.5	16"	42.0	_	_	_
4"	2.0	12	1	1.5	18"	52.0	_	_	_
5"	5.0	12	2.5	4.5	20"	65.0	_	_	_
6"	6.5	12	4	7	24"	76.0	_	_	_
8"	10.0	10	6	8.5					
10"	17.0	8	7	10					





## DN200~DN600

	JIS														Unit: mm		
Nom. Size DN(inch)	D1	D2	n	øe	D3	L	L1	H1	H2	НЗ	K	L2	L3	D4		Press /cm²)	Working Press (kgf/cm²)
200(8")	203	290	12	23	348	82	87	174	2112	108	175	51	136	180	15.0	12.0	10.0
250(10")	255	355	12	25	412	102	108	206	242.7	83	195	51	136	180	15.0	12.0	10.0
300(12")	312	400	16	25	493	120	126	247	289	110	210	72	189	305	12.0	10.0	8.0
350(14")	355	445	16	25	540	123	129	270	305	110	210	72	189	305	10.5	8.5	7.0
400(16")	398	510	16	27	615	163	170	307.5	353	130	330	72	189	356	9.0	7.0	6.0
450(18")	451	565	20	27	640	175	182	325	365	130	330	116	285	406	9.0	6.0	5.0
500(20")	500	620	20	27	730	183	190	373	405	130	330	116	285	457	9.0	6.0	5.0
600(24")	600	730	24	33	844	205	218	435	460	175	350	116	285	508	7.5	6.0	5.0

	ANSI														Unit:inch		
Nom. Size DN(inch)	D1	D2	n	øe	D3	L	L1	H1	H2	НЗ	K	L2	L3	D4		Press in <sup>2</sup> ) Seat	Working Press (lb/in²)
200(8")	7.99	11.75	8	0.88	13.70	3.23	3.43	6.85	8.31	4.25	6.89	2.01	5.35	7.09	225	180	150
250(10")	10	14.25	12	0.98	16.22	4.02	4.25	8.11	9.56	3.27	7.68	2.01	5.35	7.09	225	180	150
300(12")	12.28	17.00	12	0.98	19.41	4.72	4.96	9.72	11.38	4.33	8.27	2.83	7.44	12.01	180	150	120
350(14")	13.97	18.75	12	1.14	21.26	4.84	5.08	10.63	12.01	4.33	8.27	2.83	7.44	12.01	155	125	105
400(16")	15.69	21.25	16	1.14	24.21	6.42	6.69	12.11	13.90	5.12	12.99	2.83	7.44	14.02	133	100	88
450(18")	17.75	22.75	16	1.26	25.20	6.89	7.17	12.80	14.37	5.12	12.99	4.57	11.22	15.98	133	90	75
500(20")	19.70	25.00	20	1.26	28.74	7.20	7.48	14.69	15.94	5.12	12.99	4.57	11.22	17.99	133	90	75
600(24")	23.66	29.50	20	1.38	33.23	8.07	8.58	17.13	18.11	6.89	13.78	4.57	11.22	20.00	111	90	75

	DIN														Unit: mm		
Nom. Size	D1	D2	n	øe	D3	L	L1	H1	H2	НЗ	K	L2	L3	D4	(b	Press ar)	Working Press
Dis(inion)															Body	Seat	(bar)
200(8")	203	295	8	23	348	82	87	174	211.2	108	175	51	136	180	15.0	12.0	10.0
250(10")	255	350	12	25	412	102	108	206	242.7	83	195	51	136	180	15.0	12.0	10.0
300(12")	312	400	12	25	493	120	126	247	289	110	210	72	189	305	12.0	10.0	8.0
350(14")	355	460	16	25	540	123	129	270	305	110	210	72	189	305	10.5	8.5	7.0
400(16")	398	515	16	27	615	163	170	307.5	363	130	330	72	189	356	9.0	7.0	6.0
450(18")	451	565	20	27	640	175	182	325	365	130	330	116	285	406	9.0	6.0	5.0
500(20")	500	620	20	27	730	183	190	373	405	130	330	116	285	457	9.0	6.0	5.0
600(24")	600	725	20	30	844	205	218	435	460	175	350	116	285	508	7.5	6.0	5.0

<sup>※</sup> 法蘭長度公差依據 EN558-1:1995 標準 ※ L 長度為安裝後建議參考値

Standard dimensions based on PVC material.
 The flanged length tolerance is according to EN558-1:1995.
 L: The suggested length of the valve as installed on pipeline.

SUPER LARGE SIZED BUTTERFLY VALVE

超大型旋轉凡而



Size: Ø700(28") ~ Ø1200(48")

MATERIAL: UPVC, PP, CPVC, PPG, PVDF

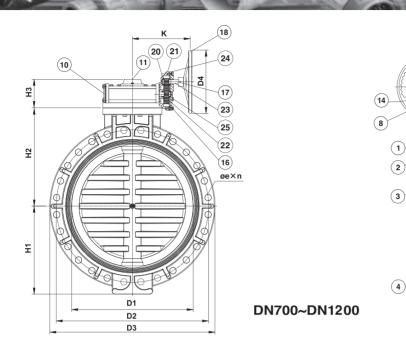
MODEL: Gear operated type(齒輪式), Chaining type(鏈條式) Hydraulic type(油壓式), Pneumatin type(氣壓式)

#### **FEATURES:**

- Fullport allowing max. fluid flow.全□徑、流量足
- ECONOMIC EQUIPMENT:Fluid control plate conealed in piping system, space saved,設備經濟、控制流量的活版、隱藏於管路中、佔管路配置極小的空間。
- EASY OPERATION-90° open and close, long duration,操作簡便,90° 開關使用壽命長。
- WIDE APPLICATION RANGE-Acid &aik all resistance, anti-corrosion, and suitable for fluid and air use.用途極廣,可耐強酸,強鹼並適用於液體及氣體。

#### MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	PP, PPG	14	Bearing	1	STEEL
2	Seat	1	EPDM, VITON, NBR, HYPALON	15	Adjustable Bolt	2	STEEL
3	Disc	1	UPVC,PP,CPVC,PPG,PVDF	16	WORM SHAFT	1	STEEL
4	Disc O'ring(A)	2	EPDM,VITON	17	Set Pin	1	K7
5	Disc O'ring(B)	2	EPDM,VITON	18	Hand Wheel	1	CAST IRON
6	Stem	1	SUS410,SUS304,SUS316	19	Tightening Bolt	4	SUS304
7	Stem O'ring	2	EPDM,VITON	20	Bearing	4	COPPER
8	Gear Box	1	CAST IRON	21	SPUR GEAR BODY	1	CAST IRON
9	Gear Box Cap	1	CAST IRON	22	SPUR GEAR	1	STEEL
10	Side Cap	1	CAST IRON	23	SPUR GEAR SHAFT	1	STEEL
11	Inicator Plate	1	CAST IRON	24	SPUR GEAR COVER	1	CAST IRON
12	Gear	1	DUCTILE IRON	25	BOLT	6	STEEL
13	Oil Seal	1	EPDM				



# ● TORQUE VALUES (1Kgf/m=9.8 N.m)

BF-V'S Size	700(28")	800(32")	900(36")	1000(40")	1200(48")
Torque Under Without Any Water Pressure (Kgf/m)	4480	5850	7400	10300	10300

# DIMENSIONS TABLE

							,	JIS						Unit: mm
Nom. size DN(inch)	D1	D2	D3	n	е	H1	H2	Н3	K	D4	L	L1	Test Press (kgf/cm²)	Working Press (kgf/cm²)
700(28")	680	840	942	24	33	498	563	138	325	356	203	210	4	3
800(32")	780	950	1068	28	33	503	630	132	372	406	241	248	4	3
900(36")	870	1050	1185	28	33	621	694	132	372	406	241	248	4	3
1000(40")	970	1160	1290	28	39	683	762	210	471	508	300	307	4	3
1200(48")	1170	1380	1512	32	39	776	876	210	471	508	300	307	3	2

							Α	NSI						Unit: inch
Nom. size DN(inch)	D1	D2	D3	n	е	H1	H2	Н3	K	D4	L	L1	Test Press (Ib/in²)	Working Press (lb/in²)
700(28")	26.77	33.99	37.09	24	1.37	19.60	22.17	5.40	12.57	14.02	7.99	8.26	60	45
800(32")	30.70	38.50	42.05	24	1.61	19.80	24.80	5.18	14.59	15.98	9.48	9.76	60	45
900(36")	34.25	42.75	46.65	32	1.62	24.45	27.32	5.18	14.59	15.98	9.48	9.76	60	45
1000(40")	38.18	46.25	50.88	32	1.62	26.89	30.00	8.27	18.54	20	11.81	12.08	60	45
1200(48")	46.06	56.00	59.52	44	1.62	30.55	34.48	8.27	18.54	20	11.81	12.08	45	30

								DIN						Unit: mm
Nom. size DN(inch)	D1	D2	D3	n	е	H1	H2	НЗ	K	D4	L	L1	Test Press (bar)	Working Press (bar)
700(28")	680	840	942	24	30	498	563	138	325	356	203	210	4	3
800(32")	780	950	1068	24	33	503	630	132	372	406	241	248	4	3
900(36")	870	1050	1185	28	33	621	694	132	372	406	241	248	4	3
1000(40")	970	1175	1290	28	36	683	762	210	471	508	300	307	4	3
1200(48")	1170	1380	1512	32	39	776	876	210	471	508	300	307	3	2

<sup>※</sup> 法蘭長度公差依據 EN558-1:1995 標準

(9)

(13)

(15)

(12)

(19)

7

6 (5)

<sup>※</sup> L長度為安裝後建議參考値

Standard dimensions based on PP material.

The flanged length tolerance is according to EN558-1:1995.

L: The suggested length of the valve as installed on pipeline.

# **BALL CHECK VALVE(VERTICAL TYPE)**

球型逆止凡而(直式)

SOCKET JB100 / THREAD JB200 / FLANGED JB300

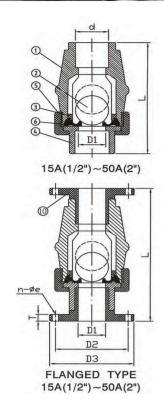
SIZE: 1/2"-10"

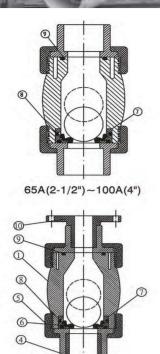


# **MATERIALS OF CONSTRUCTION**

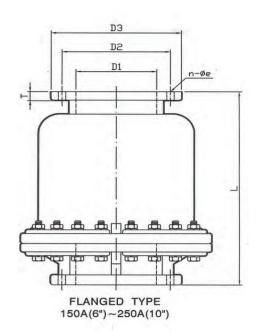
No.	Parts	Pcs.	Materials		
1	Body	1	UPVC,PP,CPVC,PVDF		
2	Ball	1	UPVC,CPVC,PVDF,PPG		
3	Washer	1	UPVC,PP,CPVC,PVDF		
4	End Connector	1DN15-50 2DN65-100	UPVC,PP,CPVC,PVDF		
5	Union Nut	1DN15-50 2DN65-100	UPVC,PP,CPVC,PVDF		
6	Seat	1	EPDM,VITON		
7	Seat Carrier	1	UPVC,PP,CPVC,PVDF		
8	Seat Carrier O'ring	1	EPDM,VITON		
9	Solid End O'ring	1	EPDM,VITON		
10	Flanged End	2DN15-100 1DN150-250	UPVC,PP,CPVC,PVDF		
11	Reinforcement Plate	4DN150 8DN250	SUS304(150A-250A)		
12	Bolts on Reinforcement Plate	10DN150 20DN250	SUS304		

Min.O	pen Close Pr kgf/cm² (bar)	essure
Size	Open	Close
1/2"	0.05	0.2
3/4"	0.05	0.3
1"	0.05	0.3
1-1/4"	0.1	0.3
1-1/2"	0.1	0.3
2"	0.1	0.3
2-1/2"	0.1	0.3
3"	0.1	0.2
4"	0.1	0.2
6"		
10"		





FLANGED TYPE 65A(2-1/2")~100A(4")



**SPECIFICATIONS:** 

1.Test Press: ① {15mm(1/2")~100mm(4") : 15kgf/cm²(bar)(225lb/in²)}	2.Working Press: ① {15mm(1/2")~100mm(4") : 10kgf/cm²(bar(150lb/in²)}
② {150mm(6") : 10kgf/cm² (bar) (150lb/in²) }	② {150mm(6") : 7kgf/cm² (bar)(100lb/in²) }
③ {250mm(10") : 5kgf/cm² (bar) (75lb/in²) }	③ {250mm(10") : 3kgf/cm² (bar) (45lb/in²) }

# **DIMENSIONS TABLE**

					JIS	;			ı	Jnit:m	m					ANS	SI			U	nit:ind	ch					D	NI			U	nit:mn	1
Nom. Size DN-inch	D1	C	ł	מח	D3	n	~~		L		т	D1		d	D2	D3	n	<i>~</i>		L		т	D1	c	ı	מח	D3	n	~~		L		т
	וט	Screw	Socket	DZ.	D3	"	ØЕ	Screw	Socket	Flange				Socket	DZ	D3	"		Screw	Socket	Flange		וט	Screw	Socket	DZ	<b>D</b> 3	"	ЮE	Screw	Socket	Flange	Ľ
15(1/2")	15	PT	22	70	95	4	15	96	96	135	15	0.59	NPT	0.84	2.375	3.500	4	0.63	3.78	3.78	5.32	0.59	15	R1/2	20	65	95	4	14	96	96	135	15
20(3/4")	20	РТ	26	75	100	4	15	118	118	157	16	0.79	NPT	1.05	2.750	3.785	4	0.63	4.65	4.65	6.18	0.59	20	R3/4	25	75	105	4	14	118	118	157	15
25(1")	26	PT	32	90	125	4	19	124	124	167	17	0.98	NPT	1.32	3 125	4.250	4	0.63	4.88	4.88	6.58	0.66	26	R1	32	85	115	4	14	124	124	167	17
32(1-1/4")	36	РТ	38	100	135	4	19	151	151	197	16	1.42	NPT	1.67	3.500	4.625	4	0.63	5.94	5.94	7.77	0.67	36	R1-1/4	40	100	140	4	18	151	151	197	17
40(1-1/2")	36	PT	48	105	145	4	19	151	151	199	18	1.57	NPT	1.91	3.875	5.000	4	0.63	5.94	5.94	7.84	0.7	36	R1-1/2	50	110	150	4	18	151	151	199	17
50(2")	50	PT	60	120	155	4	19	180	180	231	21	1.96	NPT	2.38	4.750	6.000	4	0.75	7.09	7.09	9.09	0.78	50	R2	63	125	165	4	18	180	180	231	20
65(2-1/2")	65	PT	76	140	175	4	19	222	222	275	20	2.36	NPT	2.88	5.500	7.000	4	0.75	8.74	8.74	10.83	0.8	65	R2-1/2	75	145	185	4	18	222	222	275	20
80(3")	80	PT	89	150	185	8	19	275	275	330	23	3.15	NPT	3.51	6.000	7.500	4	0.75	10.83	10.83	12.99	0.91	80	R3	90	160	200	8	18	275	275	330	23
100(4")	100	PT	114	175	210	8	19	361	361	415	20	3.74	NPT	4.51	7.500	9.000	8	0.75	14.21	14.21	16.34	0.92	100	R4	110	180	220	8	18	361	361	415	20
150(6")	150	-	-	240	280	8	23	-	-	485	23	-	-	-	9.500	11.000	8	0.88	-	-	19.09	0.87	150	-	-	240	285	8	23	-	-	485	23
250(10")	250	-	-	355	400	12	25	-	-	668	25	-	-	-	14.250	16.000	12	1.00	-	-	26.3	0.94	250	-	-	350	395	12	23	-	-	668	25

<sup>※</sup> 本尺表以 PVC 材質為準,本表試壓值以 PVC、PVDF材質為基準,PP材質試壓值為本表試壓值之 70%.

The dimension table is calculated based on PVC material.

The valve of test pressure is calculated based on PVC PVDF materials.

The valve of test pressure for PP material is 70% based on the table. The flanged length tolerance is according to EN558-1:1995.

<sup>※</sup> 法蘭長度公差依據 EN558-1:1995 標準

# **WAFER CHECK VALVE**

單片逆止閥

Size: DN40  $\sim$  DN600



(W/0 Spring) (無彈簧)

**JT 300** 



(W/ Spring) (有彈簧)

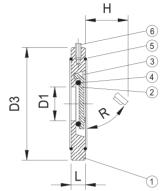
**JT 300S** 

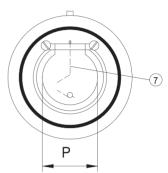
Applications(使用場合):

- Water and waste water treatment
- Chemical Industrial
- Enviromental Industrial
- Process Industrial - Systems engineering

水及廢水處理 化工工業 環境工程

加工生產工程 管路系統工程





Features (特點):

- Require little space in piping system 產品造型簡潔
- Economica Simple and durable construction 經濟簡單,結構耐用
- Easy Installation- Wafer Body to slip between standard flanges 安裝簡單,夾示裝在一般法蘭和法蘭間
- Light Weight 重量輕

- Chemical Resistant

- No corrosion 抗腐蝕

# **MATERIALS OF CONSTRUCTION**

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC.PP.CPVC.PVDF	5	Packing	2	EPDM.VITON
2	Flapper	1	UPVC.PP.CPVC.PVDF	6	Installation device	1	SUS304, SUS316
3	Flapper mounting screw	2	PP,PVDF	7	Spring	1	SUS304, SUS316
4	O'ring	1	EPDM.VITON				

Nom, Size		,	JIS	Un	nit:mm		F	NSI	Un	it:inch			DIN	U	nit:mm	Test press		Mini E	
DN(inch)	D1	D3	Р	L	Н	D1	D3	Р	L	Н	D1	D3	Р	L	Н	(kgf/cm²) (bar)	(kgf/cm²) (bar)	Pressure ps	
40(1-1/2")	23	86	35	16	25	0.89	3.25	1.38	0.63	0.99	23	92	35	16	25	15	10	0.2	0.3
50(2")	32	101	47	20	46	1.26	4.00	1.85	0.79	1.80	32	107	47	20	46	15	10	0.2	0.3
65(2-1/2")	40	121	57	20	51	1.57	4.75	2.24	0.79	2.00	40	127	57	20	51	15	10	0.2	0.3
80(3")	54	131	72	20	74	2.13	5.25	2.83	0.79	2.90	54	142	72	20	74	15	10	0.25	0.3
100(4")	70	156	90	22	91	2.76	6.75	3.54	0.87	3.60	70	162	90	22	91	15	10	0.25	0.3
125(5")	92	187	114	22	96	3.64	7.63	4.48	0.87	3.77	92	187	114	22	96	15	10	0.25	0.3
150(6")	112	217	134	26	147	4.40	8.63	5.27	1.02	5.80	112	217	134	26	147	15	10	0.25	0.3
200(8")	150	267	179	35	191	5.90	10.88	7.04	1.38	7.50	150	272	179	35	191	10	7	0.3	0.3
250(10")	190	330	226	40	229	7.48	13.27	8.89	1.57	9.00	190	327	226	40	229	9	6	0.3	0.3
300(12")	216	375	264	45	259	8.62	16.01	10.39	1.77	10.20	216	375	264	45	259	9	6	0.3	0.3
350(14")	266	420	311	49	245	10.47	17.61	12.24	1.93	9.64	266	430	311	49	245	9	6	0.5	0.5
400(16")	310	483	354	65	285	12.20	20.11	13.93	2.56	11.22	310	488	354	65	285	7	5	0.7	0.6
450(18")	350	538	396	68	330	13.78	21.49	15.59	2.67	13.00	350	538	396	68	330	5	3.5	1.0	0.8
500(20")	400	593	437	78	385	15 75	23.74	17.2	3.07	15.15	400	593	437	78	385	5	3.5	1.1	1.0

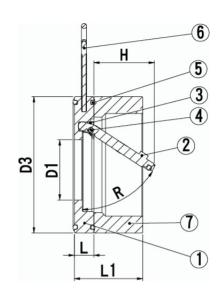
- ※ 本尺表以 PVC 材質為準,本表試壓值以 PVC、PVDF材質為基準,PP材質試壓值為本表試壓值之 70%.
- ※ 法蘭長度公差依據 EN558-1:1995 標準
- ※ 本產品有生產6"以上 加強型,價格另詢。

- The dimension table is calculated based on PVC material.
- The valve of test pressure is calculated based on PVC PVDF materials. The valve of test pressure is calculated based on FVOT Vot The valve of test pressure for PP material is 70% based on the table. The flanged length tolerance is according to EN558-1:1995.

# **SPACER CONNECTOR**

單片式逆止閥轉接頭





# **MATERIALS OF CONSTRUCTION**

Item	Parts	Pcs	Material
1	Body	1	UPVC, CPVC, PP, PVDF
2	Flapper	1	UPVC, CPVC, PP, PVDF
3	Flapper Mounting Screw	2	UPVC, CPVC, PVDF
4	O'ring	1	EPDM, VITON
5	Body O'ring	2	EPDM, VITON
6	Installation Device	1	SUS 316(350~600 NO)
7	Adaptors	1	UPVC, CPVC, PP, PVDF(350~600 NO)
8	Spring	1	SUS 316

Nom.			JIS	(DIN)			Unit:mm			ANS	SI			Unit:inch
Size	D1	D3	Р	L	Н	L1	R	D1	D3	Р	L	Н	L1	R
40(1-1/2")	23	82	35	16	25	38.2	56.0	0.90	3.23	1.38	0.63	0.98	1.50	56.0
50(2")	32	101	45	20	46	46.2	45.0	1.26	3.98	1.77	0.79	1.81	1.82	45.0
65(2-1/2")	38	119	60	20.2	51	59.4	38.0	1.50	4.69	2.36	0.80	2.00	2.34	38.0
80(3")	54	129	72	20	74	67.2	57.0	2.13	5.08	2.83	0.79	2.91	2.65	57.0
100(4")	68	154.4	90	22	91	77.2	57.0	2.68	6.08	3.54	0.87	3.58	3.04	57.0
125(5")	90	187	109	22	96	90.7	45.0	3.54	7.36	4.29	0.87	3.78	3.57	45.0
150(6")	110	210	132	26	113	110.2	45.0	4.33	8.27	5.20	1.02	4.45	4.34	45.0
200(8")	150	262	176	35	153	118.2	45.0	5.90	10.30	6.96	1.38	6.02	4.65	45.0
250(10")	190	321.4	222	42	188	175.2	45.0	7.48	12.65	8.74	1.65	7.40	6.90	45.0
300(12")	216	376	260	45	259	186.2	62.0	8.50	14.80	10.24	1.77	10.20	7.33	62.0

# **CHECK VALVE/ HORIZATIONAL TYPE**

擺動逆止球閥凡而/橫式

JW300

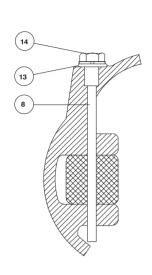
SIZE: 1"-8"

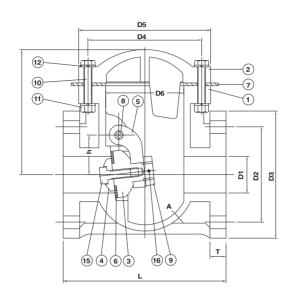


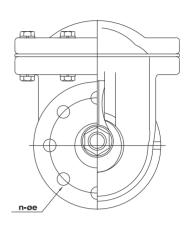
# **MATERIALS OF CONSTRUCTION**

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.		Materials
1	Body	1	UPVC, PP, CPVC, PPG, PVDF	9	Disc Holder	1	PP,P	VDF
2	Bonnet	1	UPVC, CPVC, PPG, PVDF	10	Bolts	6DN	15-50	SUS304
3	Disc	1	UPVC, PP, CPVC, PPG, PVDF	11	Nuts	8DN 10Dl	65-125 N150	SUS304
4	Sheet Gasket Holder	1	UPVC, PP, CPVC, PPG, PVDF	12	Washers	12DI	N200	SUS304
5	Swing Arms	1	UPVC, PP, CPVC, PPG, PVDF	13	O'ring	1	EPD	M,VITON
6	Disc Gasket	1	EPDM, VITON , TEFLON	14	Shaft Holder	1	PVD	F
7	Bonnet Gasket	1	EPDM, VITON, TEFLON	15	Set Bolts		15-80 100-125 150-200	
8	Shoft	1	PP, PVDF	16	Set Pin	1		SUS304 1/2"~1-1/2" PVDF 2"~8"

								JIS									Unit: mm
Nom. Size DN(inch)	D1	D2	D3	е	n No. of holes	D4	D5	D6	L	т	A	h	н	D	Test Press (kgf/cm²)	Working Press (kgf/cm²)	Mini Back Pressure Rates (kgf/cm <sup>2</sup> )
25(1")	25	90	126	19	4	110	130	75	160	15	6	40	129	8	15	10	0.34
40(1-1/2")	41	105	151	19	4	125	145	85	180	18	8	45	141	8	15	10	0.50
50(2")	52	120	166	19	4	155	180	105	200	18	8	55	165	10	15	10	0.50
65(2-1/2")	80	140	187	19	4	181	205	130	260	20	9	70	180	12	15	10	0.6
80(3")	80	150	201	19	8	181	205	130	260	20	9	70	180	12	15	10	0.6
100(4")	100	175	232	19	8	235	265	170	300	24	10	90	216	16	10	7	0.68
125(5")	125	210	254	23	8	285	330	210	350	24	14	110	239.5	18	10	7	0.68
150(6")	150	240	288	23	8	330	370	250	400	30	16	135	273	20	10	7	0.84
200(8")	200	290	348	23	12	390	425	300	500	30	18	170	310	20	10	7	0.84







#### DN25~DN200

								ANS	SI							U	nit: inch
Nom. Size DN(inch)	D1	D2	D3	е	n No. of holes	D4	D5	D6	L	т	Α	h	н	D	Test Press (lb/in²)	Working Press (lb/in²)	Mini Back Pressure Rates (PSI)
25(1")	1.00	3.13	4.96	0.63	4	4.34	5.13	2.97	6.31	0.59	0.24	1.56	5.07	0.31	222	150	5
40(1-1/2")	1.63	3.88	5.94	0.63	4	4.94	5.72	3.34	7.09	0.70	0.31	1.78	5.55	0.31	222	150	7.5
50(2")	2.06	4.75	6.54	0.75	4	6.09	7.09	4.13	7.88	0.70	0.31	2.16	6.50	0.41	222	150	7.5
65(2-1/2")	3.15	5.50	7.36	0.75	4	7.13	8.06	5.13	10.25	0.79	0.35	2.75	7.09	0.47	222	150	8.5
80(3")	3.15	6.00	7.91	0.75	4	7.13	8.06	5.13	10.25	0.79	0.35	2.75	7.09	0.47	222	150	8.5
100(4")	3.94	7.50	9.13	0.75	8	9.25	10.44	6.69	11.82	0.94	0.39	3.53	8.50	0.63	222	150	10
125(5")	4.94	8.50	10.0	0.88	8	11.22	13.00	8.28	13.78	0.94	0.55	4.34	9.43	0.72	150	100	10
150(6")	5.90	9.50	11.33	0.88	8	13.00	14.56	9.84	15.75	1.18	0.63	5.31	10.75	0.78	150	100	12.5
200(8")	7.88	11.75	13.70	0.88	8	15.31	16.71	11.81	19.69	1.18	0.71	6.69	12.21	0.78	150	100	12.5

								DIN								Uı	nit: mm
Nom. Size DN(inch)	D1	D2	D3	е	n No. of holes	D4	D5	D6	L	т	A	h	н	D	Test Press (bar)	Working Press (bar)	Mini Back Pressure Rates (bar)
25(1")	25	85	126	14	4	110	130	75	160	15	6	40	129	8	15	10	0.34
40(1-1/2")	41	110	151	18	4	125	145	85	180	18	8	45	141	8	15	10	0.5
50(2")	52	125	166	18	4	155	180	105	200	18	8	55	165	10	15	10	0.5
65(2-1/2")	80	145	187	18	4	181	205	130	260	20	9	70	180	12	15	10	0.6
80(3")	80	160	201	18	8	181	205	130	260	20	9	70	180	12	15	10	0.6
100(4")	100	180	232	18	8	235	265	170	300	24	10	90	216	16	15	10	0.68
125(5")	125	210	254	18	8	285	330	210	350	24	14	110	239.5	18	10	7	0.68
150(6")	150	240	288	23	8	330	370	250	400	30	16	135	273	20	10	7	0.84
200(8")	200	295	348	23	8	390	425	300	500	30	18	170	310	20	10	7	0.84

<sup>※</sup> 本尺表以 PVC 材質為準,本表試壓值以 PVC、PVDF材質為基準,PP材質試壓值為本表試壓值之 70%.

<sup>※</sup> 法蘭長度公差依據 EN558-1:1995 標準

The dimension table is calculated based on PVC material.

The valve of test pressure is calculated based on PVC PVDF materials.

The valve of test pressure for PP material is 70% based on the table.

The flanged length tolerance is according to EN558-1:1995.

# **Y-SEDIMENT STRAINERS**

Y型過濾器

SOCKET EY100 / THREAD EY 200 / FLANGE EY 300

Size: 1/2"- 4"

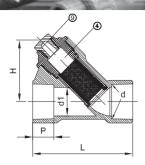


# **MATERIALS OF CONSTRUCTION**

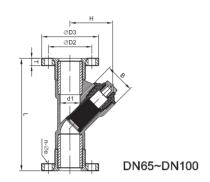
No.	Parts	Pcs.	Materials
1	Body	1	UPVC,CPVC
2	Lid	1	UPVC,CPVC
3	Screen	1	PE
4	Body O'ring	1	EPDM,VITON
5	Connector	2	UPVC,CPVC
6	Union Nut	2	UPVC,CPVC
7	Union O'ring	2	EPDM,VITON
8	Flange	2	UPVC,CPVC
9	Bolt O'ring	1	EPDM,VITON

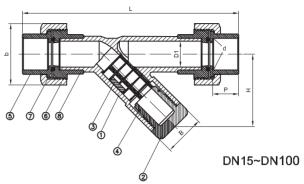
# UPVC / CPVC

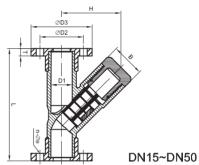
# PIPE FITTING VALVE



DN65~DN100 (ANSI 專用)







								J	ıs								Unit:mm
Nom. Size DN-inch	D1	D2	D3	SOCKET	THREAD	Øe	n	Р	SOCKET	L	FLANGE	В	т	н	b	Test Press	Working Press ( kgf/cm² )
15(1/2")	15.0	70	95	22	PT 1/2"	15	4	22.2	205.0	205.0	146.0	35.0	15	70.0	46	15	10
20(3/4")	20.0	75	100	26	PT 3/4"	15	4	25.4	234.0	234.0	170.0	39.0	15	80.0	61	15	10
25(1")	26.0	90	125	32 (CNS) 34	PT 1"	19	4	28.6	250.0	250.0	174.0	47.0	17	95.0	70 67	15	10
32(1-1/4")	32.0	100	135	38 (CNS) 42	PT 1-1/4"	19	4	31.8	283.0	283.0	200.0	55.0	17	110.0	81 89	15	10
40(1-1/2")	40.0	105	140	48	PT 1-1/2"	19	4	34.9	312.0	312.0	218.0	70.0	17	132.0	89	15	10
50(2")	50.0	120	155	60	PT 2"	19	4	38.1	352.0	352.0	238.0	81.0	20	155.0	101	15	10
65(2-1/2")	60.6	140	175	76	PT 2-1/2"	19	4	44.5	445.0	445.0	312.0	89.5	20	137.1	150	15	10
80(3")	80.0	150	185	89	PT 3"	19	8	47.6	516.0	516.0	360.0	109.3	23	163.8	184	15	10
100(4")	100.0	175	210	114	PT 4"	19	8	57.1	602.0	602.0	408.0	136.1	23	199.2	199	15	10

								AN	ISI								Unit:inch
Nom. Size	D1	D2	D3		d	Øe n			L		ВТ		н	b	Test Press	Working Press	
DN-inch	וטו	DZ	D3	SOCKET	THREAD	Юe	n	n P SOCKET		THREAD	FLANGE	В	•		В	(lb/in²)	(lb/in²)
15(1/2")	0.59	2.38	3.50	0.84	NPT 1/2"	0.63	4	0.88	8.07	8.07	5.75	1.37	0.59	2.76	1.81	235	150
20(3/4")	0.79	2.75	3.88	1.05	NPT 3/4"	0.63	4	1.00	9.21	9.21	6.69	1.53	0.63	3.15	2.40	235	150
25(1")	1.02	3.13	4.25	1.31	NPT 1"	0.63	4	1.13	9.84	9.84	6.85	1.85	0.67	3.74	2.76	235	150
32(1-1/4")	1.26	3.50	4.63	1.66	NPT 1-1/4"	0.63	4	1.25	11.14	11.14	7.87	2.16	0.67	4.33	3.19	235	150
40(1-1/2")	1.57	3.88	5.00	1.89	NPT 1-1/2"	0.63	4	1.38	12.28	12.28	8.58	2.75	0.71	5.20	3.50	235	150
50(2")	1.97	4.75	6.00	2.37	NPT 2"	0.75	4	1.50	13.86	13.86	9.37	3.18	0.79	6.10	3.98	235	150
65(2-1/2")	2.39	5.50	7.00	2.87	NPT 2-1/2"	0.75	4	1.75	8.25	8.25	12.28	3.52	0.79	5.40	5.91	235	150
80(3")	3.15	6.00	7.50	3.49	NPT 3"	0.75	4	1.88	9.63	9.63	14.17	4.30	0.90	6.45	7.24	235	150
100(4")	3.94	7.50	9.00	4.49	NPT 4"	0.75	8	2.25	11.69	11.69	16.06	5.36	0.90	7.84	7.83	235	150

	DIN													Unit:mm			
Nom. Size DN-inch	D1	D2	D3	SOCKET	THREAD	Øe	n	Р	SOCKET	L	FLANGE	В	т	н	b	Test Press (bar)	Working Press (bar)
15(1/2")	15.0	65	95	20	R 1/2"	14	4	16.0	205.0	205.0	146.0	35.0	15	70.0	46	15	10
20(3/4")	20.0	75	105	25	R 3/4"	14	4	18.5	234.0	234.0	170.0	39.0	16	80.0	61	15	10
25(1")	26.0	85	115	32	R1"	14	4	22.0	250.0	250.0	174.0	47.0	17	95.0	70	15	10
32(1-1/4")	32.0	100	140	40	R1-1/4"	18	4	26.0	283.0	283.0	200.0	55.0	17	110.0	81	15	10
40(1-1/2")	40.0	110	150	50	R1-1/2"	18	4	31.0	312.0	312.0	218.0	70.0	17	132.0	88	15	10
50(2")	50.0	125	165	63	R2"	18	4	37.5	352.0	352.0	238.0	81.0	20	155.0	101	15	10
65(2-1/2")	60.6	145	185	75	R2-1/2"	18	4	43.5	445.0	445.0	312.0	89.5	20	137.1	150	15	10
80(3")	80.0	160	200	90	R3"	18	8	51.0	516.0	516.0	360.0	109.3	23	163.8	184	15	10
100(4")	100.0	180	220	110	R4"	18	8	61.0	602.0	602.0	408.0	136.1	23	199.2	199	15	10

<sup>※</sup> 法蘭長度公差依據 EN558-1:1995 標準

<sup>\*</sup> The flanged length tolerance is according to EN558-1:1995.

# COMPRESSION COUPLING (Soc\*Soc) 快速接頭

# **EC100**

Size: 1/2" to 4"

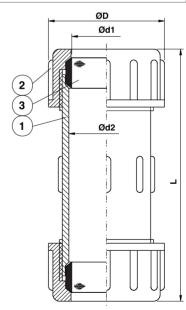
- For use in any general piping applications, metal, plastic or copper pipe.
- Easy to operate for instant and emergency piping.

# **MATERIALS OF CONSTRUCTION**

NO.	Parts	Materials	Pcs
1	BODY	UPVC	1
2	UNION NUT	UPVC	2
3	SEAL	NBR , EPDM	2

# **C.T.S DIMENSIONS**

	1/2"	3/4"	1"
D	35.00	43.60	49.00
d1	16.08	22.45	28.83
d2	18.00	24.00	30.00
L	114.5	121.0	128.0



DN15~DN100

Noi	SIZE m.	13mm (3/8")	15mm (1/2")	20mm (3/4")	25mm (1")	32mm (1-1/4")	40mm (1-1/2")	50mm (2")	65mm (2-1/2")	80mm (3")	100mm (4")
	D	35.0	43.6	49.0	57.0	66.9	73.2	88.6	110.0	130.0	160.5
	JIS	18.0	21.4	25.5	32.2	38.0	48.3	60.3	75.2	89.1	114.5
d1	ANSI	18.0	21.4	26.7	33.5	42.2	48.3	60.3	73.2	89.1	114.5
ai	DIN	16.1	20.3	25.5	32.2	40.5	50.4	63.4	75.2	90.5	110.5
	BS	18.0	20.3	26.7	33.2	42.2	48.3	60.3	75.2	89.1	114.5
	d2	19.2	22.7	27.7	34.9	43.3	49.2	63.8	76.8	92.4	116.3
	L	114.0	121.0	128.0	133.0	151.0	168.0	175.0	252.0	277.0	310.0

安裝

# 膠合劑黏合作業的基本原理

熱塑料管及接頭的膠合劑黏合連接為塑膠管安裝的最後重要的連結。整體而言,它可表示系統是成功或失敗。因此,如其他的系統元件一樣也需有專業的管理及注意。有許多出版的文件上説明了如何製作膠合劑黏合接頭,及其逐步程序的黏合技巧。但我們認為若對於相關的原理加以解釋、説明並讓人了解,將對於符合特定應用、温度狀況及管與接頭尺寸及安裝的變化等所需的技巧會有更多的了解。

應隨時注意良好的安全措施。管及接頭使用的膠合劑為易燃物,因此在工作場所或儲存區域不可抽煙或放置其他熱源或產生火花。僅可在通風良好的空間內工作,並避免皮膚與各種溶劑的接觸。

為持續製作良好的接合,應詳細了解以下各點:

- 1. 連接面必須軟化且使其成為半流體狀。
- 2. 應使用充足的膠合劑填入管與接頭之間的縫 隙。
- 3. 當表面仍未乾且為流體狀時進行管與接頭的 組裝。
- 4. 當膠合劑變乾後會展現出接頭的強度。在接頭緊密的部分,接觸面有融接的傾向,而在 鬆的部分膠合劑會將表面膠黏一起。
- ▲ 注意 安裝人員應確認可在變動情況下仍可製作出合格的接合,且應接受安裝及安全程序的訓練。

#### 軟化及穿透

此區域必須軟化且可穿透。可使用膠合劑本身,及使用適當的清潔劑,或使用清潔劑與膠合劑兩者達到此結果。適當的清潔劑通常比單獨關合劑可更快穿透並軟化接觸面。

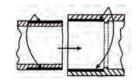
### 塗抹充足的膠合劑

在接頭鬆的間隙部分應 填入足量的膠合劑。除 填入間隙外,充足的膠 合劑層將穿透接合面並 在裝上接頭前仍保持流 體狀。

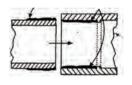
組裝時若管子及接頭上 的膠合劑塗層仍未乾頭 保持流體狀時,它們會 有一起流動的傾向並形 成一個層面。,它下方 個份然是軟的,且接頭 緊密部分的軟化表面將 有融接一起的傾向。

當溶劑蒸發後,膠合劑 層及軟化的表面將開始 硬化,且逐漸增加接頭 的強度。良好的接合 必須遠在接頭完全乾燥 且達到最終強度之前, 加上一定的工作壓力。

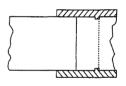
標線區域必須 軟化且可穿透

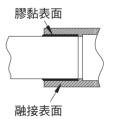


足夠厚度的 膠合劑塗層



必須在表面仍未乾 且軟時進行組裝





在接頭的緊密(融接)部分,強度的進展比在接頭鬆(膠黏)的部分更快速。可索取膠合劑黏合接頭膠黏強度進展的相關資訊。

▲ 警告: 1. 本產品禁止使用壓縮的空氣或瓦斯在塑膠的管配件上。

2. 禁止使用壓縮的氣體或瓦斯測試塑膠管路系統。

# 安裝

#### 炎熱天氣

以膠合劑黏合的管線產品在很多情況下將無法避免處於95°F(35°C)或以上的温度,但若採取一些特別的預防措施將可避免問題的產生。膠合劑含有高温時蒸發速度更快的高強度溶劑,此種情況尤其在炎夏熱風吹拂下更為明顯。若管子直接暴露於陽光直射一段時間後,表面的温度可能比空氣温度高出20°F-30°F。尤其在接頭內,溶劑侵襲這些高熱表面的速度會更快,也更深。因此很重要的一點是,不可在接頭管套填滿太多膠合劑,且必須將外部過多的膠合劑擦拭乾淨。

#### 膠合劑在高溫時應遵守的一些提示:

- 膠合劑使用前,應存放在陰涼或有遮蔭的區域。
- 可能的話,將接頭或管子,或至少把即將以溶 劑接合的管子一端在黏合前存放在遮蔭的區域
- 以沾濕的布擦拭即將接合的表面使其温度降低 。在塗上膠合劑前應確定接合的表面為乾的。
- 4. 應試圖在早上較涼爽的時候進行膠合劑黏合作業。
- 5. 將兩接合面接合前,應確定表面上的膠合劑仍 是濕的。

#### 寒冷天氣

溶劑黏合劑產品具有優異的低温穩定性,且其配方即使在零下温度下也具有良好均衡的乾燥特性。若運用正確的管理及少許的普通常識即可在極低温條件下製作良好的膠合劑黏合接合。在寒冷天氣時,膠合劑穿透及軟化表面的速度比暖和天氣時要緩慢。塑膠較能抵抗膠合劑的侵襲,因此預先軟化表面變得更重要。因為蒸發速度較慢,因此需要更長的固化時間。

# 膠合劑在低溫時應遵守的一些提示:

- 1. 在加熱的工作區域儘可能將系統預先製作。
- 2. 膠合劑不使用時應存放在較暖和的區域, 並確定仍保持液體狀態。
- 3. 應特別注意去除水分,包括結冰及雪片。
- 4. 應特別注意確保接合表面已充分軟化,可 能需塗幾次膠合劑。
- 5. 系統使用前應延長黏合劑固化的時間。 壓力測試前,應遵守適當的凝固及固化時間。

# 工作開始

- ●檢視安全預防措施
- ●檢視膠合劑罐上的標籤
- ●檢視組裝指示
- ●使用前將接合的管子及接頭調整至相同的温 度狀態

## 使用前檢查

管子及接頭在實際安裝前必須檢查是否有損壞。管子或接頭若有切痕、凹洞、刮痕、裂開或其他因不當搬運或儲存造成的損壞跡象,則不應再使用。可利用裁切熱塑料管正確的技能將損壞的一段管子切除。

#### 檢查材料

確定即將連接的接頭、閥及管子都是相同的塑膠材質產品(即,UPVC或CPVC)。應確定正確的清潔劑及膠合劑用於正確的管子及接頭上。切勿使用CPVC膠合劑於類型I的UPVC管子上,相反的,切勿使用UPVC膠合劑於CPVC管子及接頭上。使用前應確認使用期限已戳印在膠合劑及清潔劑容器上(通常可在容器的底部找到日期碼)。

#### 膠合劑的處理

不使用膠合劑時應將容器的蓋子蓋好。若膠合劑容 器的蓋子未蓋上而使膠合劑暴露於空氣較長的時間 時,罐內的膠合劑會變厚及黏稠或成為膠狀物。這 種情況是因為內含的四氫喃 (Tetra hydro furan (THF))溶劑蒸發的結果。若此情況發生時,膠合 劑將不可再使用。請勿添加並攪拌稀釋劑試圖恢復 膠合劑的性質。基於此原因,建議使用較小而非較 大容器的膠合劑,特別是在暖和或炎熱的天氣使用 時更應如此。在使用未開封的膠合劑容器前,可以 劇烈的搖動以確保樹脂及溶劑可以均匀的擴散分配 。應記住UPVC膠合劑內的溶劑具有高度的易燃性 ,因此不可在明火附近使用。膠合劑使用的區域應 有充足的通風,且應避免長時間吸入膠合劑蒸氣, 以及接觸皮膚及眼部。所有的UPVC膠合劑都應以 處理快乾清漆相同的方式處理。使用前應確定在膠 合劑及清潔劑的容器上有使用期限的戳印。

# 安裝

#### 1. 裁切

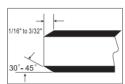
使用適當的工具裁切管子。 為確保管子切平整垂直,當 使用鋸子時必須使用輔鋸箱 (miter box)。將管子儘可 能鋸平整垂直可提供管面有



最大的膠黏區域。UPVC及CPVC管可使用輪型塑膠切管器。若使用棘齒輪式的切刀時,特別在低於50°F(10°C)以下時應注意不可使管子裂開。若有任何損壞的跡象,或裂痕很明顯時,可在離裂痕至少2"處切除。重要的一點是所使用的裁切工具必須專為塑膠管而設計使用的。

# 2. 斜切/去毛邊





#### 3. 接合準備

- A.檢查與清潔管件一組裝前,應檢查所有管件 是否有損壞或異狀。應檢查接合管件以確定 公差及接合可相容。請勿使用有異狀或不可 完全接合的管件。請洽出現問題的管件產品 製造商以決定其是否可用。使用乾淨的乾 擦拭接頭管套及管口的灰塵與水分。水分會 減緩固化時間,在此組裝階段時,過多的水 將會降低接合的強度,並造成接著失敗。
- B.檢查乾燥的接合一管子應可輕易地進入接頭 管套1/2至3/4段。若管口末端在接頭內受到 阻擾時,使用額外的膠合劑來接合。
- C.量測管套深度-量測接頭的管套長度,並且 在管口以此距離作記號。此參考記號在組裝 時可確定接合時的管口已完全進入接頭內。
- D. 將管子及接頭定位以供對準。

#### 4 塗上清潔劑

塗上膠合劑之前,以及進行 往後組裝前必須在黏合區域 先使用清潔劑。重要的是使 用適當的塗佈器、天然鬃毛 刷、或約管徑1/2的滾輪。



不可使用布塊。清潔劑必須塗抹於管子外表及接頭上。在接頭管套上塗上清潔劑,然後在管

口外部塗上清潔劑,必要時塗佈器再沾一次 清潔劑以確定整個表面是濕的。必要時可再 重複塗抹。

# 5. 塗抹膠合劑

管子及接頭乾淨 後才可塗抹膠合 劑,且必須在清 潔劑仍黏稠時迅



速塗抹。使用塗抹器、天然鬃毛刷或約管徑 1/2 的滾輪在接合面上塗抹膠合劑。在管口外部,接頭管套的長度上塗抹厚重、均匀的膠合劑塗層。塗抹的量應超過足夠填補任何縫隙的量。在接頭管套上塗上中量塗層。避免攪動膠合劑。檢查乾燥的接合處若有極少(或無)阻擾物時,可在管口上再第二次塗抹膠合劑。

#### 6. 組裝

當兩個接合面的膠合劑仍然 未乾時,應立即將管子插入 接頭管套並將管子轉動1/4 圈。管口底部必須完全接觸 到接頭底部。此時應適當地 對準接頭進行安裝。握住組



件約30秒以確定初期膠黏。因為在配件底部 (interference fit)處為錐形,在初期膠黏時若未在接合處穩定握住,管子可能會退出接頭底部。若在管及管套接合處四周漏出層劑珠粒則表示有此情況發生。若在管顏明和與實膠合劑的珠粒擠出,則可顯原鄉接合處切除丟棄,再重新開始。可使用布塊擦拭過多的膠合劑珠粒。

#### 7. 凝固及固化時間

膠合劑的凝固及固化時間隨 使用的膠合劑類型、管尺寸 、温度、相對溼度及接合的 鬆緊度而改變。在乾燥的環 境下、較小的管尺寸、高温



、較緊密的接合情況,有更快的乾燥時間。 必須讓組件在接合處未受到壓力的情況下凝 固1-5分鐘,視管尺寸及温度而定。在初期 凝固時間後,可以小心地處理組件避免在接 合處受到壓力。進行壓力測試前,必須讓膠 合劑黏合的組件適當地固化。

在此所提供的一般逐步指示係根據傳統 Schedule 40及Schedule 80 UPVC & CPVC工業管線產品在正常安裝條件下使用,不可視為其可適用於各種可能的現場條件組合。

安裝

# 膠合劑的預估數量

UPVC及CPVC 膠合劑的預估數量將隨安裝條件、公差變化、管套深度而不同。組合式(fabricated)及擴口式(belled)接頭通常需要較多的數量。若已認知並遵照指示所述的注意事項,則可多用些數量而不是給量不足。安裝時可能會發生以前未碰過的現場情況或各種因素的組合情況。因此可考慮以下所列的資訊作為基本的建議,但不是作為保證。組合式接頭的管套深度可隨製造商,或壓力額定的

接頭而有不同。這些所示尺寸的膠合劑需求係以所示的管套深度為基礎。若管套深度較短,則使,用較少量的膠合劑。例如,若12"接頭的管套深度僅5",則膠合劑量為所示每一接合用量的5/8.5。若12"接頭的管套深度為9",則膠合劑量為所示用量的的9/8.5。

P-70清潔劑的平均需求量為膠合劑量的1/3。

#### 根據管徑每品脫(pint)及夸脫(quart)尺寸的預估接合數

	,							
		品脫(pint)				管套接名	s 夸脫(quar	t)
接頭尺寸 (英吋)	接合數	平接頭或90° 彎頭數量	T型管數	振口管 接合數	接合數	平接頭或90° 彎頭數量	T型管數	擴口管 接合數
1/2	190	95	64	N/A	380	190	127	N/A
3/4	120	60	40	N/A	240	120	80	N/A
1	100	50	33	N/A	200	100	66	N/A
1-1/4	70	35	24	N/A	140	70	48	N/A
1-1/2	50	25	17	N/A	100	50	33	N/A
2	30	15	10	25	60	30	20	50
2-1/2	25	12	8	20	50	24	16	40
3	20	10	6	16	40	20	12	32
4	12	6	4	9	24	12	8	18
5	9	4.5	3	-	18	9	6	-
6	5	2.5	1.7	3	10	5	3.3	6
8	2.5	1	0.8	2	5	2.1	1.6	4

#### 管套接合

尺寸(英吋)	管套深度	膠合劑*夸脱/接合
10	8	.75
12	8.5	1.00
14	9	1.25
16	10	1.50
18	12	2.00
20	12	2.25
24	14	3.25

# 墊圈管(潤滑劑)

標稱管尺寸 (英吋)	每品脱平均接合數 (1磅)潤滑劑容器
2	0 7
5 . 2	0 6
3	0 5
4	5 3
6	0 2
8	4 1
0 1	0 1
2 1	7
4 1	5
6 1	3
8 1	2
0 2	5 . 1
4 2	1

# 膠合劑組裝指示

#### 一般指示

▲ 注意 塗抹底料及黏合劑前,應採取適當的安的安全預防措施。清潔劑及膠合劑應存放在 40°F-110°F(4°C-43°C)的遮蔭處。消除所有的火花源,避免吸入蒸氣。僅在通風良好的地方使用。建議使用防爆型機械式通風或局部抽風裝置,以保持蒸氣濃度低於建議的暴露限制。在全密閉或部分密閉的區域,建議使用NIOSH核准的有機蒸氣罐且可完全覆蓋臉部的呼吸器。不使用時應將容器關緊,而使用時也應儘可能蓋起來。避免與皮膚經常接觸;建議戴上PVA塗層的保護手套,及不透液體的圍裙。避免與眼部接觸;建議戴上DVA塗層的保護手套,及不透液體的圍裙。避免與眼部接觸;建議戴上防噴濺的眼罩。使用前應確認有效期限的日期已戳印在膠合劑及清潔劑容器上。

**物件準備:**使用前將管子與接頭調整至相同的温度 狀態。用於接合的所有管子、接頭及工具在接合前 及接合過程中必須乾淨,無灰塵、水分、油脂或其 他污染物。

安裝

# 凝固及固化時間

! 註 以下的凝固及固化時間為平均時間,係根據IPS Weld-On p-70(或 38 Callibre) 清潔劑及IPS Weld-on #717(45 Callibre)及/或IPS Weld-On#719(50 Callibre) 膠合劑接合Schedule 40及 Schedule 80 UPVC管件;及IPS Weld-On #714(45 Callibre)接合Schedule 40及Schedule 80 CPVC管件。實際的凝固及固化時間將視管材質及所使用的膠合劑系統、管尺寸、溫度、相對溼度、壓力及接合鬆緊度而定。

凝固時間:以下所示的初始凝固時間為處理新組裝接合前的建議等候時間。在初始凝固時間後,接合處可支撐正常安裝的壓力。(不當對準的安裝將在接合處、管及接頭處引起過多的壓力)

#### 平均凝固時間

温度 範圍	管尺寸 1/2"-1-1/4"	管尺寸 1-1/2"-2"	管尺寸 2-1/2"-8"	管尺寸 10"-15"	管尺寸 16"-24"
60°-100°F	2 分鐘	5 分鐘	30分鐘	2 小時	4 小時
40°-60°F	5 分鐘	10分鐘	2 小時	8 小時	16小時
0°-40°F	10分鐘	15分鐘	12小時	24小時	48小時

固化時間: 固化時間為新組裝接合處進行施壓前的建議等候時間。這時間將隨使用的膠合劑類型、管尺寸、接合、温度、溼度及壓力而定。應謹慎地遵照適當的固化時間。在高溼度及/或寒冷天氣下應有較長的固化時間。

應避免在接頭及管內攪動膠合劑及清潔劑,以免引起材料過度軟化,且可能造成產品損壞。

## 炎熱天氣

以膠合劑黏合的管線產品在很多情況下將無法避免會處於95°F(35°C)或以上的温度,但若採取一些特別的預防措施將可避免問題的產生。膠合劑含有高温時蒸發速度更快的高強度溶劑,此種情況尤其在炎夏熱風吹拂下更為明顯。若管子直接暴露於陽光直射一段時間後,表面的温度可能比空氣温度高出20°F-30°F。尤其在接頭內,膠合

劑侵襲這些高熱表面的速度會更快,也更深。因此 很重要的一點是,不可在接頭管套填滿太多膠合劑 ,且必須將外部過多的膠合劑擦拭乾淨。

#### 膠合劑在高溫時應遵守的一些提示:

- 1. 膠合劑使用前,應存放在陰涼或有遮蔭的區域。
- 2. 可能的話,將接頭或管子,或至少把即將以膠 合劑接合的管子一端在黏合前存放在遮蔭的區 域。
- 3. 以沾濕的布擦拭即將接合的表面使其温度降低。在塗上膠合劑前應確定接合的表面為乾的。
- **4.** 應試圖在早上較涼爽的時候進行膠合劑黏合作業。

#### 寒冷天氣

膠合劑產品具有優異的低温穩定性,且其配方即使 在零下温度下也具有良好均衡的乾燥特性。若運用 正確的管理及少許的普通常識即可在極低温條件下 製作良好的膠合劑黏合接合。在寒冷天氣時,膠合 劑穿透及軟化表面的速度比暖和天氣時要緩慢。塑 膠有較能抵抗膠合劑的侵襲,因此預先軟化表面變 得更重要。因為蒸發速度較慢,因此需要更長的固 化時間。

#### 膠合劑在低溫時應遵守的一些提示:

- 1. 在加熱的工作區域儘可能將系統預先製作。
- 2. 膠合劑不使用時應存放在較暖和的區域,並確 定仍保持液體狀態。
- 3. 應特別注意去除水分,包括結冰及雪片。
- 4. 應特別注意確保接合表面已充分軟化,可能需 塗幾次膠合劑。
- 5. 系統使用前應延長膠合劑固化的時間。 壓力測試前,應遵守適當的凝固及固化時間。

#### 平均固化時間

相對溼度 60%或以下*	管尺 1/2"一 <i>1</i>	` 3	管凡 1 <b>-</b> 1/2	` 3	管尺 <b>2-1/2</b>	"一8"	管尺寸 10"-15"	管尺寸 16"-24"
組裝及固化時間時 的温度範圍	達160psi	160 <del>-</del> 370psi	達160psi	160 <del>-</del> 370psi	達160psi	160 — 315psi	達 100psi	達 100psi
60°-100°F	15分鐘	6小時	30分鐘	12小時	1-1/2小時	24小時	48小時	72小時
40°-60°F	20分鐘	12小時	45分鐘	24小時	4小時	48小時	96小時	6 ⊟
0°-40°F	30分鐘	48小時	1 小時	96小時	72小時	8 🖯	8 🖯	14 ⊟

■ 註 在潮濕或溼 度大的天氣時可容許增加50%的固化時間。以上所示的時間僅為一種好意且建議僅供參考。此為根據實驗室的測試資料,不可視為所有膠合劑製造商的建議。應遵守所使用的特定膠合劑之個別膠合劑製造商的建議。以上的固化時間係依據Net Fit 接頭的實驗室測試資料(NET FIT=在乾接合時,管底在接頭管套內適度接合但未接觸到止動處)。 更多資訊請洽膠合劑製造商。重要!安裝人員確認在各種變動情況下可製作合格的接合,並且應接受安裝及安全注意事項的訓練。

安裝

# 法蘭連接

法蘭接合可用於需經常拆卸的應用上。在內插套管、外插套管及各種不同款式的螺紋組態上提供有UPVC及CPVC法蘭,包括單片式法蘭及兩片式VanStone式法蘭,此處螺栓環可在套殼內自由旋轉,使得組裝時容易對準螺栓孔。大多數的塑膠法蘭都可承受最大150 psi 於73°F 水中的工作壓力額定值。應注意選擇適當的墊圈材料,以確定其與輸送液體可相容。

法蘭螺栓應有足夠的緊度可稍微壓住墊圈,造成良好的密封,但不可太緊以避免法蘭變形。在螺栓頭與螺帽間應使用適當的墊片。應以對角線上的螺栓交替順序安裝。應遵照法蘭製造商組件指示,建議的螺栓扭力值,以及螺栓上緊的順序。

#### 塑膠法蘭建議的法蘭螺栓扭力

土ルシルリ刺り	生成ればなり	リンポリエリエノノ		
法蘭尺寸 (英吋)	螺栓孔數	螺栓直徑 (英吋)	螺栓的最 短長度 (英吋)	扭力 ft-lb PSI
1/2	4	1/2	2	10-15
3/4	4	1/2	2	10-15
1	4	1/2	2-1/4	10-15
1-1/4	4	1/2	2-1/4	10-15
1-1/2	4	1/2	2-1/2	20-30
2	4	5/8	3	20-30
2-1/2	4	5/8	3-1/4	20-30
3	4	5/8	3-1/4	20-30
4	8	5/8	3-1/2	20-30
6	8	3/4	4	30-50
8	8	3/4	4-1/2	30-50
10	12	7/8	5	50-80
12	12	7/8	5	80-100
14	12	1	5-1/2	100-120
16	16	1	6-1/2	100-120
18	16	1-1/8	4-1/8	100-120
20	20	1-1/8	5-1/2	100-120
24	20	1-1/4	5-1/2	100-120

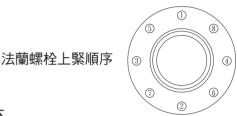
# 螺栓扭力

建議的螺栓扭力如上所示。螺紋應保持乾淨且有良好的潤滑。實際的現場情況可能需改變這些建議值

# ▲ 注意 沒有必要的過度上緊將會破壞法蘭。

# 墊圏

建議使用整面,1/8"厚度的彈性體並有雙股凸緣成型墊圈,且具有Shore「A」硬度測定計約70。



# 法蘭補充

應遵照法蘭與管接合時適當的膠合劑黏合及/或 螺紋管件的程序。當法蘭與管接合後,接合兩個 法蘭的方法如下:

- A. 與法蘭接合的管線必須在直線位置上對準法 蘭安裝,以避免因未對準而在法蘭上產生壓 力。管線必須固定及支撐,以避免橫向移動 而產生壓力造成法蘭損壞。
- B. 墊圈放入定位後,轉動環至定位以對準接合 法蘭的螺栓孔。
- C. 插入所有螺栓、墊片(每個螺栓兩個標準的平墊片)及螺帽。
- D. 確定接合面的表面在使用螺栓固定法蘭之前 與墊圈齊平。
- E. 先用手上緊螺帽,並根據標示的螺帽上緊順序圖(以180度對面方向順序上緊),以5ft-Ib 扭力增量上緊螺栓,使得法蘭面上可建立均匀的壓力。
- F. 當法蘭與「突出面」法蘭接合或與夾式 (wafer-style) 閥連接時,應注意避免「彎曲 」法蘭。請勿使用螺栓將不當接合的法蘭固 定。

指定的螺栓最小長度係根據公司製造的兩個法蘭、兩個標準平墊片、標準螺帽及1/8"厚度整面墊圈的使用。與其他廠牌的法蘭或配件可能需改變此長度。法蘭供應時並不隨附螺栓及墊圈。實際的現場狀況可能需改變這些建議值。以上的建議值視為一般的使用且僅供參考。應遵照法蘭管件製造商的組件指示,以確保最高的系統完整性。

安裝

# 地面上安裝

# 熱漲冷縮

系統必須經過設計且安裝時必須彌補因熱漲冷縮所 造成的移動,這對於室外應用的安裝及在環境温度 起伏較為明顯的無人居住建物內應用更需注意此熱 漲冷縮的效應。例如,系統安裝於冬天月份內無人 居住(亦即無暖氣)的建物,當温度上升時將會明 顯地膨脹。反之,若系統安裝於較高的環境温度, 安裝後温度可能會大幅下降。此現象必須在正確的 系統設計時列入考慮,以彌補管線因熱漲冷縮造成 的移動現象。

# 室外應用

UPVC及CPVC在遵守正確的建議下都能在室外應用上得到滿意的結果。與其他管線一樣,在較低氣温下應用時,必須保護系統避免結凍。可使用許多標準的低温氣候的管線設計與安裝措施來保護系統以避免結凍,如使用管線包覆隔熱、加入抗凍液及熱追蹤帶等。使用前應洽詢這些產品的製造商以了解其產品是否適合或與UPVC及CPVC產品可相容。建議UPVC及CPVC產品若暴露於陽光直射(紫外線輻射)下,應塗上一層與UPVC/CPVC產品可化學性相容的淡色的壓克力或乳膠漆。應與油漆製造商確認產品的相容性。不建議使用油性漆。塗上漆後可明顯降低陽光直射的效應,但仍應考慮室外應用時因吸熱所產生的熱漲冷縮效果。使用淡色、反光漆塗層可降低此種效果,但系統設計及安裝方式仍需考慮熱漲的移動。

# 吊鉤與支架

# 吊鉤支架間距

適當的支架選擇及間距對於避免因重量負荷、彎曲應力、熱漲冷縮的效應產生的應力集中區域及限制管移動(下垂)很關鍵。與其他所有熱塑材料一樣,適當的管支架間距需視管尺寸、位置及集中的重量負荷大小,以及材料拉力及壓縮強度之温度效應下所需的系統操作温度而定。温度增加時則需額外的支架。當於或靠近最高的建議温度限制下操作時,則使用無粗糙或尖鋭邊緣的結構角或槽,提供系統連續支撐較為經濟。安裝前也應諮詢當地建築法規以了解適用的規定。

適當的支架間距可用類似金屬系統,用連續簡單 的橫樑計算求得。使用材料最大的纖維應力,及 根據材料長期模組在所選温度下的變形為限制因 素時可達成上述需求。

# 吊鉤選擇

許多為金屬管所設計的吊鉤適用於熱塑膠材料,但所使用的吊鉤及支架必須提供足夠的負荷承受表面,此表面必須平滑且無可能損壞管子的粗糙或尖鋭邊緣。使用不當的支架可能使管子過度下垂而造成系統失效。必須考慮因温度變化產生熱漲冷縮導致管子移動,以及因壓力變化所造成的移動,以確保正確的吊鉤選擇及配置。所使用的吊鉤及支架必須容許系統軸向上的移動,不會壓縮管子,否則將限制此方向的移動。

# 配置

在管接頭各側兩英呎內安裝適合的吊鉤為一般的做法;在方向改變時應儘可能靠近接頭的地方放置支架以減少拉伸的壓力。較重的系統管件如閥、法蘭組件、T型接管及其他集中應力負荷的其他形式必須獨立支撐。此外,閥必須使用扥架充分支撐以避免因操作扭力而導致移動/應力負荷。也應考慮管線內有可能聚積固體微粒的某些過程。

# 安裝

# UPVC管支架間距(英呎)

管尺寸		SCH	HEDULE	E 40			SCH	HEDUL	E 80			SCH	IEDULE	E 120	
(英吋)	60°F	80°F	100°F	120°F	140°F	60°F	80°F	100°F	120°F	140°F	60°F	80°F	100°F	120°F	140°F
1/4	4	3-1/2	3-1/2	2	2	4	4	3-1/2	2-1/2	2					
3/8	4	4	3-1/2	2-1/2	2	4-1/2	4-1/2	4	2-1/2	2-1/2					
1/2	4-1/2	4-1/2	4	2-1/2	2-1/2	5	4-1/2	4-1/2	3	2-1/2	5	5	4-1/2	3	2-1/2
3/4	5	1/2	4	2-1/2	2-1/2	5-1/2	5	4-1/2	3	2-1/2	5-1/2	5	4-1/2	3	3
1	5-1/2	5	4-1/2	3	2-1/2	6	5-1/2	5	3-1/2	3	6	5-1/2	5	3-1/2	3
1-1/4	5-1/2	5-1/2	5	3	3	6	6	5-1/2	3-1/2	3	6-1/2	6	5-1/2	3-1/2	3-1/2
1-1/2	6	5-1/2	5	3-1/2	3	6-1/2	6	5-1/2	3-1/2	3-1/2	6-1/2	6-1/2	6	4	3-1/2
2	6	5-1/2	5	3-1/2	3	7	6-1/2	6	4	3-1/2	7-1/2	7	6-1/2	4	3-1/2
2-1/2	7	6-1/2	6	4	3-1/2	7-1/2	7-1/2	6-1/2	4-1/2	4	8	7-1/2	7	7-1/2	4
3	7	7	6	4	3-1/2	8	7-1/2	7	4-1/2	4	8-1/2	8	7-1/2	5	4-1/2
3-1/2	7-1/2	7	6-1/2	4	4	8-1/2	8	7-1/2	5	4-1/2	9	8-1/2	7-1/2	5	4-1/2
4	7-1/2	7	6-1/2	4-1/2	4	9	8-1/2	7-1/2	5	4-1/2	9-1/2	9	8-1/2	5-1/2	5
5	8	7-1/2	7	4-1/2	4	9-1/2	9	8	5-1/2	5	10-1/2	10	9	6	5-1/2
6	8-1/2	8	7-1/2	5	4-1/2	10	9-1/2	9	6	5	11-1/2	10-1/2	9-1/2	6-1/2	6
8	9	8-1/2	8	5	4-1/2	11	10-1/2	9-1/2	6-1/2	5-1/2					
10	10	9	8-1/2	5-1/2	5	12	11	10	7	6					
12	11-1/2	10-1/2	9-1/2	6-1/2	5-1/2	13	12	10-1/2	7-1/2	6-1/2					
14	12	11	10	7	6	13-1/2	13	11	8	7					
16	12-1/2	11-1/2	10-1/2	7-1/2	6-1/2	14	13-1/2	11-1/2	8-1/2	7-1/2					
18	13	12	11	8	7	14-1/2	14	12	11	9					
20	14	12-1/2	11-1/2	10	8-1/2	15-1/2	14-1/2	12-1/2	11-1/2	9-1/2					
24	15	13	12-1/2	11	9-1/2	17	15	14	12-1/2	10-1/2					
		SDR 41						SDR 26	5						
18	13	12	11	8	7	14-1/2	14	12	9	8					
20	13-1/2	12-1/2	11-1/2	8-1/2	7-1/2	15	14-1/2	12-1/2	9-1/2	8-1/2					
24	4	13	12	9	8	15-1/2	15	13	10	9					

■ 註 雖然顯示的支架間距為UPVC在140°F下的數據,但應考慮CPVC的使用或超過120°F的連續性支架。温度超過一般工作温度的可能性及成本因素,可能更需有其他的替代方式。本表係以連續跨距以及未隔熱管線輸送比重達1.00的液體為基礎。

# CPVC管支架間距(英呎)

管尺寸	SCHEDULE 40						SCHEDULE 80					
(英吋)	73°F	100°F	120°F	140°F	160°F	180°F	73°F	100°F	120°F	140°F	160°F	180°F
1/2	5	4-1/2	4-1/2	4	2-1/2	2-1/2	5-1/2	5	4-1/2	4-1/2	3	2-1/2
3/4	5	5	4-1/2	4	2-1/2	2-1/2	5-1/2	5-1/2	5	4-1/2	3	2-1/2
1	5-1/2	5-1/2	5	4-1/2	3	2-1/2	6	6	5-1/2	5	3-1/2	3
1-1/4	5-1/2	5-1/2	5-1/2	5	3	3	6-1/2	6	6	5-1/2	3-1/2	3
1-1/2	6	6	5-1/2	5	3-1/2	3	7	6-1/2	6	5-1/2	3-1/2	3-1/2
2	6	6	5-1/2	5	3-1/2	3	7	7	6-1/2	6	4	3-1/2
2-1/2	7	7	6-1/2	6	4	3-1/2	8	7-1/2	7-1/2	6-1/2	4-1/2	4
3	7	7	7	6	4	3-1/2	8	8	7-1/2	7	4-1/2	4
3-1/2	7-1/ 2	7-1/2	7	6-1/2	4	4	8-1/2	8-1/2	8	7-1/2	5	4-1/2
4	7-1/2	7-1/2	7	6-1/2	4-1/2	4	8-1/2	9	8-1/2	7-1/2	5	4-1/2
6	8-1/2	8	7-1/2	7	5	4-1/2	10	9-1/2	9	8	5-1/2	5
8	9-1/2	9	8-1/2	7-1/2	5-1/2	5	11	10-1/2	10	9	6	5-1/2
10	10-1/2	10	9-1/2	8	6	5-1/2	11-1/2	11	10-1/ 2	9-1/2	6-1/2	6
12	11-1/2	10-1/2	10	8-1/2	6-1/2	6	12-1/2	12	11-1/ 2	10-1/ 2	7-1/2	6-1/2
14	12	11	10	9	8	6	15	13-1/2	12-1/ 2	11	9-1/2	8
16	13	12	11	9-1/2	8-1/2	7	16	15	13-1/ 2	12	10	8-1/2

■ 註 雖然顯示的支架間距為UPVC在140°F下的數據,但應考慮CPVC的使用或超過120°F的連續性支架。温度超過一般工作温度的可能性及成本因素,可能更需有其他的替代方式。本表係以連續跨距以及未隔熱管線輸送比重達1.00的液體為基礎。

工程與設計資料

# 溫度限制

# **UPVC**

UPVC管產品係從I型,等級I的UPVC複合物與依ASTM D1784 之單元(cell)分類製造而成。UPVC Schedule 40及Schedule 80管以此材料製造完全符合ASTM D1785,並且在材料、製造工藝、尺寸、壓力維持、爆破壓力、抗扁平及擠壓品質上持續符合或超越該標準的要求。

符合標準的UPVC管其最高操作温度為140°F。與其他所有熱塑料一樣,温度升高將會增加衝擊強度,降低抗拉強度及管子的韌度,因此需降低管子的額定值。符合上述參考標準的UPVC管的機械性質,依適用的ASTM材料進行例行性測試標準,以73°F進行測試並加以紀錄。當在較高的温度下使用時,需使用適當的温度降低額定因數以求得可容許的最大壓力。當在較高的温度下作業時,產品於73°F時的工作壓力額定值需使用下列温度降低額定因數加以修正:

將所選管子在73°F時的工作壓力額定值乘以適當的降低額定因數,以求得管子在所選用的較高溫度下的最大工作壓力。例:10"UPVC SCHEDULE 80@120°F=?230 psi x 0.40 = 92 psi 最大@120°FUPVC 的最高使用溫度為140°F

溫度 (°F)	工作 降低額定因數
73	1.00
80	0.88
90	0.75
100	0.62
110	0.51
120	0.40
130	0.31
140	0.22

當於最高溫度或接近最高溫度下作業時,應使用黏合接頭。不建議超過110°F溫度時,UPVC管使用螺紋接頭。在高溫下必須拆卸的情況下,則應使用法蘭接頭、連接由令或壓接喉套(roll grooved couplings)。

文件上記載,當溫度低於73°F時抗拉強度及管子韌度值增加,因此可增加管子的耐壓能力及耐彎曲變形能力。但如同大多數材料一樣,抗衝擊及延展性在較冷溫度下會降低。此外,溫度降低將會引起管線收縮,此點在正確的系統設計上應列入考慮。因為UPVC的熱膨脹係數,20英呎的管子當溫度從95°F下降至-5°F時,管子將收縮約3/4"。

因為耐壓能力不隨溫度下降而降低,若液體介質 已避免結凍、熱漲冷縮的影響已列入考慮、搬運 時特別注意及管理、系統的安裝及操作可避免因 衝擊或其他機械力造成的實體損壞等情況下, UPVC管則適合於較低的溫度下使用。

應注意定期執行PVC管產品於73°F及32°F溫度下的摔落衝擊試驗。UPVC管於32°F相對於73°F的抗衝擊能力,將視管徑及產品的管壁而定。據我們所知,尚未執行確定試驗(definitive testing)以建立在較低溫度下,UPVC管尺寸/外觀尺寸整個範圍實際衝擊強度降低的精確比。

# **CPVC**

CPVC管產品係從IV型,等級I的CPVC複合物與依ASTM D1784 之單元(cell)分類製造而成。CPVC Schedule 40及Schedule 80管以此材料製造完全符合ASTM F441,並且在材料、製造工藝、尺寸、壓力維持、爆破壓力、抗壓平及擠壓品質上持續符合或超越該標準的要求。

符合標準的CPVC管其最高操作温度為200°F。與其他所有熱塑料一樣,温度升高將會增加衝擊強度,降低抗拉強度及管子的韌度,因此降低管子的額定值。符合上述參考標準的CPVC管的機械性質,均依適用的ASTM材料測試標準,以73°F進行例行性測試並加以紀錄。當在較高的温度下應用時,則需使用適當的温度降低額定因數,以求得可容許的最大壓力。當在較高的温度下作業時,產品於73°F時的工作壓力額定值需使用下列温度降低額定因數加以修正:

將所選管子在73°F時的工作 壓力額定值乘以適當的降低	温度 (°F)	工作 降低額定因數
額定因數,以求得管子在所	73-80	1.00
選用的較高溫度下的最大工	90	0.91
作壓力。	100	0.82
例:10" CPVC SCHEDULE-	110	0.72
	120	0.65
80@ 120°F =230 psi x 0.65 =	130	0.57
149.5 psi 最大@120°F	140	0.50
CPVC的最高使用溫度為200°F-	150	0.42
	160	0.40
	170	0.29
	180	0.25
	200	0.20