

台灣第一品牌 HD-PE

HD-PE
高密度聚乙烯管·配件
PIPE / FITTING / VALVE

PRODUCTS ARE GOOD AT CORRASION / CHEMICAL RESISTANCE.





高密度聚乙烯管·配件 PIPE / FITTING / VALVE 2016

HI-TECH'S

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

總　公　司／台中市清水區海濱路336-16號
HEAD OFFICE　No.336-16 Hai pin Rd., Ching Shui Dist., 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：asiav01@shvalve.com.tw

高 雄 分 公 司／高雄市大發工業區華中路19號
KAOHSUING OFFICE　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

昆 山 協 羽／江蘇省昆山市成功路158號
KUNSHAN OFFICE　No.158 Chenggong Road, Kunshan City Jiangsu Province China
Tel：86-512-5777 5296　Fax：86-512-5777 5299
E-mail：shie-yu@far-east.net

ISO 9001

THE HI-TECH's, HI-QUALITLY's PROUDCTS RANG

DURA FLOW

SHIE. YU



集團總裁 蔡添壽　　Chairman　TSAI TIEN-SHOU

經營理念

大發管材工業股份有限公司是屬於協羽工業集團旗下子公司，專業製造生產各種塑膠管及配件及閥門，協羽集團成立於1972年，一向致力於化學工業、電子業及公共工程等, 品質技術均達到國際水準。大發公司目前擁有二個工廠，全體員工246人，全集團生產廠均通過ISO9001認證及美國衛生協會認證之NSF合格廠。並取得國家標準9項CNS　正字標記產品認證及行政院環保署環保標章合格廠。確保提供全球客戶高品質可靠的工業產品。

大發公司一向以”品質第一”、”技術領先”、客戶滿意”為宗旨，DFP的產品銷售全世界均有完善服務團隊，因此我們希望在塑膠管、配件及閥們的專業領域上，能提供更完整的產品系列促進最佳選擇。客戶的需求是我們最大的前動力，我們以達成客戶滿意為最大目標，因此國內外客戶及各大知名工程公司及民營企業均成為我們長期客戶，並與國際知名品牌廠商建立OEM良好合作關係並大量生產供應。我們職志將 DFP 產品成為國際各種塑膠管、配件及閥門的優良品牌。產品群將滿足客戶獲得市場的肯定與禮讚。

創新研發

大發人本著精益求精精神，對現有產品持續改良，並也依據產品不同的使用場合的需要條件，對產品的材質作研發改善及結構的研發創新，以求使產品達到最佳的適用性以及客戶的滿意。特別我們擁有模具廠，內有完整的全套開模，硬體設備，更配合設計軟體及專業技術人員，配合研發團隊以快速精確模具設計以滿足客戶及市場的需求。再則我們也持續對研發相關配備、人員擴充，使我們的研發工作得以達到國際的水準。





Operation Philosophy

Dura Flow(DFP), a subsidiary of Shie Yu Machine, specializes in the production of valves, fittings, and pipes. Founded in 1972, Shie Yu has been devoting to chemical industry, electronic industry as well as public construction. Our production technology meets the international standard. Dura Flow currently has two manufacturing factories containing a total of 246 employees. To provide high quality of products to customers, all of our factories are certified by ISO(International Standard Organization) 9001, NSF(National Sanitation Foundation), and CNS(Chinese National Standards). In addition, Dura Flow is dedicated to being a global green service provider, so our factories are certified with the Green Mark.

With the principles of providing superior quality products and innovative technology as well as to satisfying the demands of our customers, Dura Flow provides perfect after-sales service and a variety of products in valves, fittings, and pipes to the customers in all of the world. Based on the professional knowledges on the pipes, fittings and valves to enhance the comprehensive chose to the customers.

Because of the sincere attitude and service, many famous engineering companies are willing to establish a long-term business relationship and also build the OEM cooperation with many world-brands to have the massive production supply. Our aim is to have +DFP+ become internationally well-known brand on the plastic pipes, fittings and vales. Dura Flow resolves to develop a superior service brand (DFP). We believe our products will be satisfied to customers and be gained a foothold in the market.

Innovation and R&D

The Dura Flow people based on the desire to provide better products, we continue to improve our existing products, and do R&D work on materials, innovation of product structure to meet the requirements for a wide variety of applications. We have our own in-house tooling department employing staff of experienced and skilled tool and die makers, and equipped with sophisticated and precise CAD/CAM machines for today's ever-changing market. In addition, we are dedicated to workforce performance and R&D work on related fittings to keep up with innovation.



大發營運總部
Dura Flow Oprational Headruarters.

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：

一、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一。

二、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。

四、產品特點
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、直接射出成型品。

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，對市場使用上一大創舉。

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 site.

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 : ϕ 12~ ϕ 1200mm, PPH : ϕ 12~ ϕ 1200mm, ABS, PVDF: ϕ 12~ ϕ 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 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.



TECHNICAL CONNECTION



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件及直管一系列完整服務，進而受到設計公司及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」的增加工程公司安裝施工團隊，將施工的技術及服務內容加入營業目標連結，為達此目標，重視實務產品並提升整體工程人員技法、提供新技術或專業意見等，以合理的產品成本、高水準的施工技術、嚴密的品質管理及負責任的態度，整廠完整性服務。

工程橫跨各業界如化工業、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.



化學工業
Chemical Industry

電子半導體
Electronic / Semiconductor Idustry

國際參展
International Exhibitors

海水碼頭
Seawater Wharf

HD-PE自來水管
HD-PE Portable Water Relining

海水養殖場
Sea Farming Industry

火力發電廠使用
Thermal Power Plant





ADVANCED EQUIPMENT

先進生產設備，精良實驗儀器

優良的產品要有精密機械設備及原物料，本公司引進先進國家奧地利CICINNATI公司全自動押出成型機生產線、德國品牌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。

Advanced Production Equipment Sophisticated Experimental Instruments

Excellent products derive from precision machinery equipment and raw materials. For this purpose, we have introduced the Fully-automated Extrusion Machine production line from Austria's CICINNATI and advanced machinery equipment from German's BATTENFIELD. 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.


1200Ø HD-PE管 全自動擠管生產線
1200Ø HD-PE Pipe Auto-extrusion Production Line

PRODUCT CERTIFICATION



新產品技術國際研討會議
The International New Product Technique Discussion Meeting

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
- 行政院環保署環保標章合格廠
- 取得國家標準9項CNS正字標記產品認證如下：

CNS編號	類號	產品名稱
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
14345	K3114	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
2456-2	K3013	一般用高密度聚乙烯塑膠管
12835	K3097	天然氣用聚乙烯塑膠管
13158	K3102	自來水用丙烯-丁二烯-苯乙烯(ABS)塑膠管





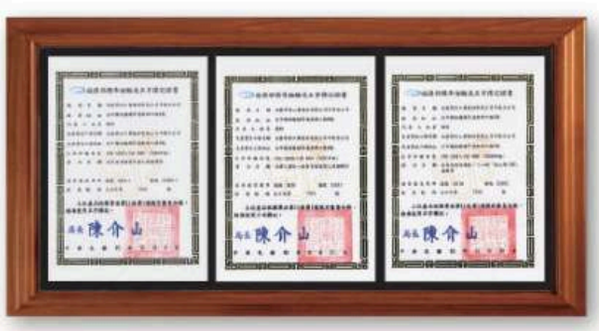


Product Certification

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





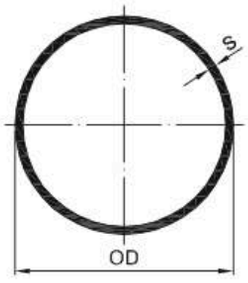
HD-PE 目錄索引

公司簡介 Company Profile	1	法蘭鐵片 DIN BACKING RINGS (DIN)	48
目錄索引 Catalogue Index	6	法蘭鐵片 ANSI BACKING RINGS (ANSI)	49
HD-PE 80管 HD-PE 80 Pipe	7	法蘭鐵片 JIS BACKING RINGS (JIS)	50
HD-PE100管 HD-PE100 Pipe	9	對接內牙、外牙閥接頭 FEMALE、MALE ADAPTOR (b/w)	51
HD-PE 80瓦斯管(公制) HD-PE 80 Gas Pipe (Metric)	11	套接三通、平接頭 TEE、COUPLING (s/w)	52
HD-PE瓦斯管 ASTM(美規) HD-PE Gas Pipe ASTM (USA)	12	套接90度、45度彎頭 ELBOWS 90°、ELBOWS 45° (s/w)	53
HD-PE瓦斯管 JIS(日規)、電信用管 HD-PE Gas Pipe JIS (Japan)、Communication Pipe	13	套接大小頭 REDUCER COUPLING (s/w)	54
對接長型三通 TEE (b/w)	14	套接內牙、外牙閥接頭 FEMALE、MALE ADAPTOR (s/w)	55
對接短型三通 TEE (b/w)	15	套接法蘭接頭、套接管帽 STUB FLANGES、ENDCAP (s/w)	56
對接異徑三通 REDUCED TEE (b/w)	16	對接油任、套接油任 UNION (b/w)、UNION (s/w)	57
對接長型90度彎頭 BENDS 90° (b/w)	20	鎖緊式接頭 COMPRESSION FITTINGS	58
對接短型90度彎頭 BENDS 90° (b/w)	21	電焊套 ELECTROFUSION COUPLING	59
對接45度彎頭 ELBOWS 45° (b/w)	22	圓棒、焊條 ROUND BARS、WELDING ROD	60
對接30度彎頭 ELBOWS 30° (b/w)	23	伸縮接頭 EXPANSION JOING REPAIR COUPLINGS (FLANGE / SOCKET)	61
手工對接15度彎頭 ELBOWS 15° (b/w)	24	過牆管、圓型陰井蓋 WALL-STOP PIPE、DRAIN-WELL COVER	63
手工對接45度Y型三通 45° Y-TEE (b/w)	25	強力型球閥 STRONG UNION BALL VALVE	64
手工對接30度Y型三通 30° Y-TEE (b/w)	26	通用型碟閥 BUTTERFLY VALVE-Universal Type	65
手工對接60度Y型三通 60° Y-TEE (b/w)	27	旋轉凡而(齒輪式) BUTTERFLY VALVE GEAR OPERATOR FULL FLANGED TYPE	67
手工對接異徑Y三通(45度) 45° REDUCED Y-TEE (b/w)	28	大型旋轉凡而 SUPER LARGE SIZED BUTTERFLY VALVE	69
手工對接異徑Y三通(30度) 30° REDUCED Y-TEE (b/w)	32	特性、使用場合 Properties & Applications	71
手工對接異徑Y三通(60度) 60° REDUCED Y-TEE (b/w)	36	原料物性表 Material Properties	72
手工對接四通 CROSS (b/w)	40	HDPE和各種材料的連接法 HDPE Connection with different PORTS	73
對接塔型大小頭 REDUCER CONCENTRIC (b/w)	41	焊接法介紹 Welding Instruction	74
對接大小頭 REDUCER COUPLING (b/w)	42	套焊接法 Socket Fusion Welding	75
對接管帽 ENDCAP (b/w)	45	對接法 Butt Welding	76
對接長型法蘭接頭 STUB FLANGES (b/w)	46	對接法程序 Butt welding Process	77
對接短型法蘭接頭 STUB FLANGES (b/w)	47	支架標準 Standard of Bracket Supporting	78

HD-PE 80-PIPE

DIN 8074/8075
Storage length:5m
(Special lengths on request)

直管HD-PE 80
DFP PIO

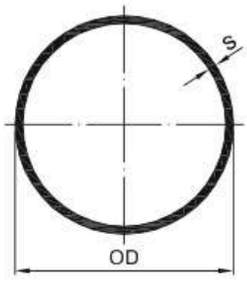


OD (mm)	Ventilation				SDR41 ISO S20 PN2.5			SDR33 ISO S16 PN3.2			SDR26 ISO S12.5 PN4			內白外黑
	S (mm)	Weight (kg/m)	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)	黑色厚度 (mm)
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8～1.2
25	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8～1.2
32	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8～1.2
40	-	-	-	-	-	-	-	-	-	-	32-PIO-26-0040	1.8	0.227	1.2～1.8
50	-	-	-	-	-	-	-	32-PIO-33-0050	1.8	0.287	32-PIO-26-0050	2.0	0.314	1.2～1.8
63	-	-	-	-	32-PIO-41-0063	1.8	0.364	32-PIO-33-0063	2.0	0.399	32-PIO-26-0063	2.5	0.494	1.2～1.8
75	-	-	-	-	32-PIO-41-0075	1.9	0.457	32-PIO-33-0075	2.3	0.551	32-PIO-26-0075	2.9	0.675	1.2～1.8
90	-	-	-	-	32-PIO-41-0090	2.2	0.643	32-PIO-33-0090	2.8	0.791	32-PIO-26-0090	3.5	0.978	1.4～2.0
110	-	-	-	-	32-PIO-41-0110	2.7	0.943	32-PIO-33-0110	3.4	1.17	32-PIO-26-0 110	4.2	1.43	1.4～2.0
125	-	-	-	-	32-PIO-41-0125	3.1	1.23	32-PIO-33-0125	3.9	1.51	32-PIO-26-0125	4.8	1.84	1.4～2.0
140	-	-	-	-	32-PIO-41-0140	3.5	1.54	32-PIO-33-0140	4.3	1.88	32-PIO-26-0140	5.4	2.32	1.4～2.0
160	-	-	-	-	32-PIO-41-0160	4.0	2.00	32-PIO-33-0160	4.9	2.42	32-PIO-26-0160	6.2	3.04	1.4～2.0
180	-	-	-	-	32-PIO-41-0180	4.4	2.49	32-PIO-33-0180	5.5	3.07	32-PIO-26-0180	6.9	3.79	1.4～2.0
200	-	-	-	-	32-PIO-41-0200	4.9	3.05	32-PIO-33-0200	6.2	3.84	32-PIO-26-0200	7.7	4.69	2.0～3.0
225	-	-	-	-	32-PIO-41-0225	5.5	3.86	32-PIO-33-0225	6.9	4.77	32-PIO-26-0225	8.6	5.89	2.0～3.0
250	-	-	-	-	32-PIO-41-0250	6.2	4.83	32-PIO-33-0250	7.7	5.92	32-PIO-26-0250	9.6	7.30	2.0～3.0
280	-	-	-	-	32-PIO-41-0280	6.9	5.98	32-PIO-33-0280	8.6	7.40	32-PIO-26-0280	10.7	9.10	2.0～3.0
315	-	-	-	-	32-PIO-41-0315	7.7	7.52	32-PIO-33-0315	9.7	9.37	32-PIO-26-0315	12.1	11.6	2.0～3.0
355	-	-	-	-	32-PIO-41-0355	8.7	9.55	32-PIO-33-0355	10.9	11.8	32-PIO-26-0355	13.6	14.6	3.0～4.0
400	8.0	9.9	-	-	32-PIO-41-0400	9.8	12.1	32-PIO-33-0400	12.3	15.1	32-PIO-26-0400	15.3	18.6	3.0～4.0
450	8.0	11.2	-	-	32-PIO-41-0450	11.0	15.3	32-PIO-33-0450	13.8	19.0	32-PIO-26-0450	17.2	23.5	-
500	8.0	11.7	10.0	15.5	32-PIO-41-0500	12.3	19.0	32-PIO-33-0500	15.3	23.4	32-PIO-26-0500	19.1	28.9	-
560	10.0	15.5	-	-	32-PIO-41-0560	13.7	23.6	32-PIO-33-0560	17.2	29.4	32-PIO-26-0560	21.4	36.2	-
630	10.0	19.6	-	-	32-PIO-41-0630	15.4	29.9	32-PIO-33-0630	19.3	37.1	32-PIO-26-0630	24.1	45.9	-
710	12.0	26.4	-	-	32-PIO-41-0710	17.4	38.0	32-PIO-33-0710	21.8	47.2	32-PIO-26-0710	27.2	58.4	-
800	12.0	29.8	-	-	32-PIO-41-0800	19.6	48.1	32-PIO-33-0800	24.5	59.7	32-PIO-26-0800	30.6	73.9	-
900	15.0	42.0	-	-	32-PIO-41-0900	22.0	60.9	32-PIO-33-0900	27.6	75.6	32-PIO-26-0900	34.4	93.4	-
1000	15.0	46.7	-	-	32-PIO-41-1000	24.5	75.2	32-PIO-33-1000	30.6	93.1	32-PIO-26-1000	38.2	115.0	-
1200	18.0	67.1	-	-	32-PIO-41-1200	29.4	108.0	32-PIO-33-1200	36.7	134.0	32-PIO-26-1200	45.9	166.0	-

HD-PE 80-PIPE

DIN 8074/8075
Storage length:5m
(Special lengths on request)

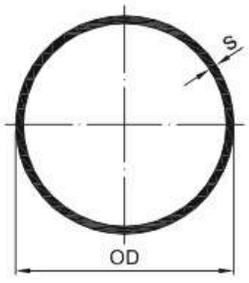
直管HD-PE 80
DFP PIO



OD (mm)	Ventilation				SDR17.6 ISO S8.3 PN6			SDR11 ISO S5 PN10			SDR7.4 ISO S3.2 PN16			內白外黑
	S (mm)	Weight (kg/m)	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)	黑色厚度 (mm)
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	32-PIO-07-0012	1.8	0.060	-
16	-	-	-	-	-	-	-	-	-	-	32-PIO-07-0016	2.2	0.099	-
20	-	-	-	-	-	-	-	32-PIO-11-0020	1.9	0.112	32-PIO-07-0020	2.8	0.154	0.8~1.2
25	-	-	-	-	-	-	-	32-PIO-11-0025	2.3	0.171	32-PIO-07-0025	3.5	0.240	0.8~1.2
32	-	-	-	-	32-PIO-17-0032	1.8	0.179	32-PIO-11-0032	2.9	0.272	32-PIO-07-0032	4.4	0.386	0.8~1.2
40	-	-	-	-	32-PIO-17-0040	2.3	0.285	32-PIO-11-0040	3.7	0.430	32-PIO-07-0040	5.5	0.600	1.2~1.8
50	-	-	-	-	32-PIO-17-0050	2.9	0.440	32-PIO-11-0050	4.6	0.666	32-PIO-07-0050	6.9	0.936	1.2~1.8
63	-	-	-	-	32-PIO-17-0063	3.6	0.688	32-PIO-11-0063	5.8	1.05	32-PIO-07-0063	8.6	1.47	1.2~1.8
75	-	-	-	-	32-PIO-17-0075	4.3	0.976	32-PIO-11-0075	6.8	1.47	32-PIO-07-0075	10.3	2.09	1.2~1.8
90	-	-	-	-	32-PIO-17-0090	5.1	1.39	32-PIO-11-0090	8.2	2.12	32-PIO-07-0090	12.3	3.00	1.4~2.0
110	-	-	-	-	32-PIO-17-0110	6.3	2.08	32-PIO-11-0110	10.0	3.14	32-PIO-07-0110	15.1	4.49	1.4~2.0
125	-	-	-	-	32-PIO-17-0125	7.1	2.66	32-PIO-11-0125	11.4	4.08	32-PIO-07-0125	17.1	5.77	1.4~2.0
140	-	-	-	-	32-PIO-17-0140	8.0	3.34	32-PIO-11-0140	12.7	5.08	32-PIO-07-0140	19.2	7.25	1.4~2.0
160	-	-	-	-	32-PIO-17-0160	9.1	4.35	32-PIO-11-0160	14.6	6.67	32-PIO-07-0160	21.9	9.44	1.4~2.0
180	-	-	-	-	32-PIO-17-0180	10.2	5.48	32-PIO-11-0180	16.4	8.42	32-PIO-07-0180	24.6	11.9	1.4~2.0
200	-	-	-	-	32-PIO-17-0200	11.4	6.79	32-PIO-11-0200	18.2	10.4	32-PIO-07-0200	27.4	14.8	2.0~3.0
225	-	-	-	-	32-PIO-17-0225	12.8	8.55	32-PIO-11-0225	20.5	13.1	32-PIO-07-0225	30.8	18.6	2.0~3.0
250	-	-	-	-	32-PIO-17-0250	14.2	10.6	32-PIO-11-0250	22.7	16.2	32-PIO-07-0250	34.2	23.0	2.0~3.0
280	-	-	-	-	32-PIO-17-0280	15.9	13.2	32-PIO-11-0280	25.4	20.3	32-PIO-07-0280	38.3	28.9	2.0~3.0
315	-	-	-	-	32-PIO-17-0315	17.9	16.7	32-PIO-11-0315	28.6	25.6	32-PIO-07-0315	43.1	36.5	2.0~3.0
355	-	-	-	-	32-PIO-17-0355	20.1	21.2	32-PIO-11-0355	32.2	32.5	32-PIO-07-0355	48.5	46.3	3.0~4.0
400	8.0	9.9	-	-	32-PIO-17-0400	22.7	26.9	32-PIO-11-0400	36.3	41.3	32-PIO-07-0400	54.7	58.8	3.0~4.0
450	8.0	11.2	-	-	32-PIO-17-0450	25.5	34.0	32-PIO-11-0450	40.9	52.3	-	-	-	-
500	8.0	11.7	10.0	15.5	32-PIO-17-0500	28.4	42.0	32-PIO-11-0500	45.4	64.5	-	-	-	-
560	10.0	15.5	-	-	32-PIO-17-0560	31.7	52.5	32-PIO-11-0560	50.8	80.8	-	-	-	-
630	10.0	19.6	-	-	32-PIO-17-0630	35.7	66.5	-	-	-	-	-	-	-
710	12.0	26.4	-	-	32-PIO-17-0710	40.2	84.4	-	-	-	-	-	-	-
800	12.0	29.8	-	-	32-PIO-17-0800	45.3	107.0	-	-	-	-	-	-	-
900	15.0	42.0	-	-	32-PIO-17-0900	51.0	136.0	-	-	-	-	-	-	-
1000	15.0	46.7	-	-	32-PIO-17-1000	56.7	167.0	-	-	-	-	-	-	-
1200	18.0	67.1	-	-	32-PIO-17-1200	68.0	241.0	-	-	-	-	-	-	-

HD-PE 100-PIPE

DIN 8074/8075 ISO 4427
CNS 2456 K3012 Storge length:5m
(Special lengths on request)



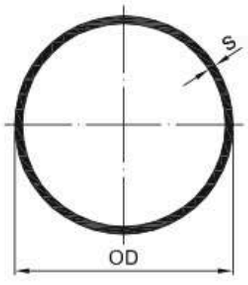
直管HD-PE100

DFP PIO

OD (mm)	SDR41 ISO S20 PN4			SDR27.6 ISO S13.3 PN6			SDR21 ISO S10 PN8			SDR17 ISO S8 PN10			ELECTRICITY CABLE USE		內白外黑	
															一般管	加厚管
	Code	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)	S (mm)	Weight (kg/m)	黑色厚度 (mm)	黑色厚度 (mm)
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8~1.2	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8~1.2	0.8~1.4
32	-	-	-	-	-	-	-	-	-	31-PIO-17-0032	2.0	0.187	-	-	0.8~1.2	0.8~1.8
40	-	-	-	-	-	-	31-PIO-21-0040	2.0	0.239	31-PIO-17-0040	2.4	0.295	-	-	1.2~1.8	1.2~2.7
50	-	-	-	-	-	-	31-PIO-21-0050	2.4	0.374	31-PIO-17-0050	3.0	0.453	-	-	1.2~1.8	1.2~3.6
63	-	-	-	31-PIO-27-0063	2.3	0.444	31-PIO-21-0063	3.0	0.580	31-PIO-17-0063	3.8	0.721	-	-	1.2~1.8	1.2~4.8
75	-	-	-	31-PIO-27-0075	2.7	0.625	31-PIO-21-0075	3.6	0.828	31-PIO-17-0075	4.5	1.020	-	-	1.2~1.8	1.2~5.8
90	-	-	-	31-PIO-27-0090	3.3	0.906	31-PIO-21-0090	4.3	1.180	31-PIO-17-0090	5.4	1.460	-	-	1.4~2.0	1.4~7.1
110	31-PIO-41-0110	2.7	0.943	31-PIO-27-0110	4.0	1.360	31-PIO-21-0110	5.3	1.770	31-PIO-17-0110	6.6	2.170	10.0	3.140	1.4~2.0	1.4~7.1
125	31-PIO-41-0125	3.1	1.230	31-PIO-27-0125	4.6	1.780	31-PIO-21-0125	6.0	2.270	31-PIO-17-0125	7.4	2.760	-	-	1.4~2.0	1.4~8.2
140	31-PIO-41-0140	3.5	1.540	31-PIO-27-0140	5.1	2.210	31-PIO-21-0140	6.7	2.830	31-PIO-17-0140	8.3	3.460	-	-	1.4~2.0	1.4~8.2
160	31-PIO-41-0160	4.0	2.000	31-PIO-27-0160	5.8	2.860	31-PIO-21-0160	7.7	3.720	31-PIO-17-0160	9.5	4.520	-	-	1.4~2.0	1.4~8.7
180	31-PIO-41-0180	4.4	2.490	31-PIO-27-0180	6.6	3.660	31-PIO-21-0180	8.6	4.670	31-PIO-17-0180	10.7	5.710	-	-	1.4~2.0	1.4~9.8
200	31-PIO-41-0200	4.9	3.050	31-PIO-27-0200	7.3	4.500	31-PIO-21-0200	9.6	5.780	31-PIO-17-0200	11.9	7.050	-	-	2.0~3.0	2.5~10.9
225	31-PIO-41-0225	5.5	3.860	31-PIO-27-0225	8.2	5.680	31-PIO-21-0225	10.8	7.300	31-PIO-17-0225	13.4	8.930	-	-	2.0~3.0	2.5~12
250	31-PIO-41-0250	6.2	4.830	31-PIO-27-0250	9.1	6.990	31-PIO-21-0250	11.9	8.930	31-PIO-17-0250	14.8	11.000	30.0	20.175	2.0~3.0	2.5~13
280	31-PIO-41-0280	6.9	5.980	31-PIO-27-0280	10.2	8.770	31-PIO-21-0280	13.4	11.300	31-PIO-17-0280	16.6	13.700	45.5	34.333	2.0~3.0	2.5~15
315	31-PIO-41-0315	7.7	7.520	31-PIO-27-0315	11.4	11.020	31-PIO-21-0315	15.0	14.200	31-PIO-17-0315	18.7	17.400	-	-	2.0~3.0	2.5~16
355	31-PIO-41-0355	8.7	9.550	31-PIO-27-0355	12.9	14.040	31-PIO-21-0355	16.9	18.000	31-PIO-17-0355	21.1	22.100	-	-	2.0~3.0	3.5~18
400	31-PIO-41-0400	9.8	12.100	31-PIO-27-0400	14.5	17.770	31-PIO-21-0400	19.1	22.900	31-PIO-17-0400	23.7	28.000	-	-	2.0~3.0	3.5~20
450	31-PIO-41-0450	11.0	15.300	31-PIO-27-0450	16.3	22.460	31-PIO-21-0450	21.5	28.900	31-PIO-17-0450	26.7	35.400	-	-	-	-
500	31-PIO-41-0500	12.3	19.000	31-PIO-27-0500	18.1	27.690	31-PIO-21-0500	23.9	35.700	31-PIO-17-0500	29.7	43.800	-	-	-	-
560	31-PIO-41-0560	13.7	23.600	31-PIO-27-0560	20.3	34.770	31-PIO-21-0560	26.7	44.700	31-PIO-17-0560	33.2	54.800	-	-	-	-
630	31-PIO-41-0630	15.4	29.900	31-PIO-27-0630	22.8	43.910	31-PIO-21-0630	30.0	56.400	31-PIO-17-0630	37.4	69.400	-	-	-	-
710	31-PIO-41-0710	17.4	38.000	31-PIO-27-0710	25.7	55.750	31-PIO-21-0710	33.9	71.800	31-PIO-17-0710	42.1	88.100	-	-	-	-
800	31-PIO-41-0800	19.6	48.100	31-PIO-27-0800	29.0	70.860	31-PIO-21-0800	38.1	91.100	31-PIO-17-0800	47.4	112.00	-	-	-	-
900	31-PIO-41-0900	22.0	60.900	31-PIO-27-0900	32.6	89.580	31-PIO-21-0900	42.9	115.00	31-PIO-17-0900	53.3	141.00	-	-	-	-
1000	31-PIO-41-1000	24.5	75.200	31-PIO-27-1000	36.2	110.50	31-PIO-21-1000	47.7	142.00	31-PIO-17-1000	59.3	175.00	-	-	-	-
1200	31-PIO-41-1200	29.4	108.00	31-PIO-27-1200	43.5	157.00	31-PIO-21-1200	57.2	205.00	31-PIO-17-1200	67.9	255.00	-	-	-	-

HD-PE 100-PIPE

DIN 8074/8075 ISO 4427
CNS 2456 K3012 Storge length:5m
(Special lengths on request)



直管HD-PE100

DFP PIO

OD (mm)	SDR13.6 ISO S6.3 PN12.5			SDR11 ISO S5 PN16			SDR9 ISO S4 PN20			SDR7.4 ISO S3.2 PN25			SDR6 ISO S2.5 PN32		
	Code	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)	Code	S (mm)	Weight (kg/m)
20	-	-	-	31-PIO-11-0020	2.0	0.115	31-PIO-09-0020	2.3	0.133	31-PIO-07-0020	2.8	0.154	31-PIO-06-0020	3.4	0.180
25	31-PIO-13-0025	1.9	0.144	31-PIO-11-0025	2.3	0.171	31-PIO-09-0025	2.8	0.200	31-PIO-07-0025	3.5	0.240	31-PIO-06-0025	4.2	0.278
32	31-PIO-13-0032	2.4	0.232	31-PIO-11-0032	2.9	0.272	31-PIO-09-0032	3.6	0.327	31-PIO-07-0032	4.4	0.386	31-PIO-06-0032	5.4	0.454
40	31-PIO-13-0040	3.0	0.356	31-PIO-11-0040	3.7	0.430	31-PIO-09-0040	4.5	0.509	31-PIO-07-0040	5.5	0.600	31-PIO-06-0040	6.7	0.701
50	31-PIO-13-0050	3.7	0.549	31-PIO-11-0050	4.6	0.666	31-PIO-09-0050	5.6	0.788	31-PIO-07-0050	6.9	0.936	31-PIO-06-0050	8.3	1.090
63	31-PIO-13-0063	4.7	0.873	31-PIO-11-0063	5.8	1.050	31-PIO-09-0063	7.1	1.260	31-PIO-07-0063	8.6	1.470	31-PIO-06-0063	10.5	1.730
75	31-PIO-13-0075	5.6	1.240	31-PIO-11-0075	6.8	1.470	31-PIO-09-0075	8.4	1.760	31-PIO-07-0075	10.3	2.090	31-PIO-06-0075	12.5	2.440
90	31-PIO-13-0090	6.7	1.770	31-PIO-11-0090	8.2	2.012	31-PIO-09-0090	10.1	2.540	31-PIO-07-0090	12.3	3.000	31-PIO-06-0090	15.0	3.510
110	31-PIO-13-0110	8.1	2.620	31-PIO-11-0110	10.0	3.140	31-PIO-09-0110	12.3	3.780	31-PIO-07-0110	15.1	4.490	31-PIO-06-0110	18.3	5.240
125	31-PIO-13-0125	9.2	3.370	31-PIO-11-0125	11.4	4.080	31-PIO-09-0125	14.0	4.870	31-PIO-07-0125	17.1	5.770	31-PIO-06-0125	20.8	6.750
140	31-PIO-13-0140	10.3	4.220	31-PIO-11-0140	12.7	5.080	31-PIO-09-0140	15.7	6.110	31-PIO-07-0140	19.2	7.250	31-PIO-06-0140	23.3	8.470
160	31-PIO-13-0160	11.8	5.500	31-PIO-11-0160	14.6	6.670	31-PIO-09-0160	17.9	7.960	31-PIO-07-0160	21.9	9.440	31-PIO-06-0160	26.6	11.000
180	31-PIO-13-0180	13.3	6.980	31-PIO-11-0180	16.4	8.420	31-PIO-09-0180	20.1	10.100	31-PIO-07-0180	24.6	11.900	31-PIO-06-0180	29.9	14.000
200	31-PIO-13-0200	14.7	8.560	31-PIO-11-0200	18.2	10.400	31-PIO-09-0200	22.4	12.400	31-PIO-07-0200	27.4	14.800	31-PIO-06-0200	33.2	17.200
225	31-PIO-13-0225	16.6	10.900	31-PIO-11-0225	20.5	13.100	31-PIO-09-0225	25.2	15.800	31-PIO-07-0225	30.8	18.600	31-PIO-06-0225	37.4	21.800
250	31-PIO-13-0250	18.4	13.400	31-PIO-11-0250	22.7	16.200	31-PIO-09-0250	27.9	19.400	31-PIO-07-0250	34.2	23.000	31-PIO-06-0250	41.6	27.000
280	31-PIO-13-0280	20.6	16.800	31-PIO-11-0280	25.4	20.300	31-PIO-09-0280	31.3	24.300	31-PIO-07-0280	38.3	28.900	31-PIO-06-0280	46.5	33.800
315	31-PIO-13-0315	23.2	21.200	31-PIO-11-0315	28.6	25.600	31-PIO-09-0315	35.2	30.800	31-PIO-07-0315	43.1	36.500	31-PIO-06-0315	52.3	42.700
355	31-PIO-13-0355	26.1	26.900	31-PIO-11-0355	32.2	32.500	31-PIO-09-0355	39.7	39.100	31-PIO-07-0355	48.5	46.300	31-PIO-06-0355	59.0	54.300
400	31-PIO-13-0400	29.4	34.100	31-PIO-11-0400	36.3	41.300	31-PIO-09-0400	44.7	49.600	31-PIO-07-0400	54.7	58.800	31-PIO-06-0400	66.5	68.900
450	31-PIO-13-0450	33.1	43.200	31-PIO-11-0450	40.9	52.300	31-PIO-09-0450	50.3	62.700	31-PIO-07-0450	61.5	74.400	31-PIO-06-0450	75.0	90.000
500	31-PIO-13-0500	36.8	53.300	31-PIO-11-0500	45.4	64.500	31-PIO-09-0500	55.8	77.300	31-PIO-07-0500	68.3	91.800	-	-	-
560	31-PIO-13-0560	41.2	66.900	31-PIO-11-0560	50.8	80.800	31-PIO-09-0560	62.5	97.000	31-PIO-07-0560	75.7	117.00	-	-	-
630	31-PIO-13-0630	46.3	84.600	31-PIO-11-0630	57.2	102.00	31-PIO-09-0630	70.3	125.00	-	-	-	-	-	-
710	31-PIO-13-0710	52.2	107.00	31-PIO-11-0710	64.5	130.00	-	-	-	-	-	-	-	-	-
800	31-PIO-13-0800	58.8	136.00	31-PIO-11-0800	72.6	169.00	-	-	-	-	-	-	-	-	-
900	31-PIO-13-0900	66.2	172.00	31-PIO-11-0900	81.7	212.85	-	-	-	-	-	-	-	-	-
1000	31-PIO-13-1000	72.5	218.00	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

HD-PE 80 瓦斯管(公制)

(HD-PE80 GAS PIPE)

CNS 12835 K3097

SDR值 工作壓力	SDR 17.6 PN 8		SDR 13.6 PN 10		SDR 11 PN 12.5		SDR 9 PN 16		SDR 7.4 PN 20	
管外徑 (mm)	厚度 S (mm)	公斤/米 (kg/m)	厚度 S (mm)	公斤/米 (kg/m)	厚度 S (mm)	公斤/米 (kg/m)	厚度 S (mm)	公斤/米 (kg/m)	厚度 S (mm)	公斤/米 (kg/m)
20	-	-	-	-	-	-	-	-	3.0	0.160
25	-	-	-	-	-	-	3.0	0.221	3.5	0.250
32	-	-	-	-	3.0	0.280	3.6	0.340	4.4	0.400
40	-	-	3.0	0.360	3.7	0.430	4.5	0.530	5.5	0.630
50	3.0	0.460	3.7	0.570	4.6	0.670	5.6	0.820	6.9	0.980
63	3.8	0.730	4.7	0.910	5.8	1.060	7.1	1.310	8.6	1.540
75	4.5	1.020	5.6	1.290	6.8	1.500	8.4	1.840	10.3	2.190
90	5.4	1.470	6.7	1.850	8.2	2.140	10.1	2.650	-	-
110	6.6	2.180	8.1	2.740	10.0	3.170	12.3	3.950	-	-
125	7.4	2.780	9.2	3.530	11.4	4.100	14.0	5.100	-	-
140	8.3	3.490	10.3	4.410	12.7	5.150	15.7	6.410	-	-
160	9.5	4.550	11.8	5.740	14.6	6.710	17.9	8.350	-	-
180	10.7	5.760	13.3	7.300	16.4	8.400	20.1	10.550	-	-
200	11.9	7.120	14.7	8.950	18.2	10.450	22.4	13.060	-	-
225	13.4	9.010	16.6	11.360	20.5	13.220	25.2	16.530	-	-
250	14.8	11.040	18.4	13.980	22.7	16.310	27.9	20.340	-	-
280	16.6	13.860	20.6	17.530	25.5	20.440	31.3	25.560	-	-
315	18.7	17.570	23.2	22.190	28.6	25.860	35.2	32.330	-	-
355	21.1	23.160	26.1	28.180	32.2	34.120	39.7	41.090	-	-
400	23.7	29.280	29.4	35.780	36.3	43.340	44.7	52.140	-	-
450	26.7	37.100	33.1	45.290	40.9	54.940	50.3	66.000	-	-
500	29.7	45.860	36.8	55.910	45.4	67.760	55.8	81.370	-	-
560	33.2	57.420	41.2	70.140	50.8	84.920	62.2	101.680	-	-
630	37.4	72.760	46.3	88.760	57.2	107.560	-	-	-	-
710	42.1	92.310	57.2	112.740	64.5	136.770	-	-	-	-
800	47.4	117.110	58.8	143.130	-	-	-	-	-	-

ASTM美規HD-PE瓦斯管規格表
(ASTM HD-PE GAS PIPE)

SDR值			SDR 11.5	SDR 11
標稱管徑		管外徑(OD) (mm)	厚度 S (mm)	厚度 S (mm)
(inch)	(mm)			
3/4"	20	26.7	-	2.41
1"	25	33.4	-	3.02
1-1/4"	30	42.1	-	3.84
2"	50	60.3	-	5.49
3"	75	88.9	7.72	8.08
4"	100	114.3	9.93	10.39
6"	150	168.3	14.63	15.29
8"	200	219.1	19.05	19.94
10"	250	273.0	23.75	24.84
12"	300	323.8	28.17	29.46
14"	350	355.6	30.90	32.30
16"	400	406.4	35.30	36.95
18"	450	457.2	39.80	41.60
20"	500	508.0	44.20	46.20
22"	550	558.8	48.60	50.80
24"	600	609.6	53.00	55.40
26"	650	660.4	57.40	60.00
28"	700	711.2	61.80	64.70
30"	750	762.0	66.30	69.30
32"	800	812.8	70.70	73.90

JIS日規HD-PE管規格表
(JIS HD-PE PIPE)

等級數			一般用管	壓力用管	內白外黑管
工作壓力 SDR值			4-8kgf/cm^2 SDR 13-26	10kgf/cm^2 SDR 11	
標稱管徑		管外徑(OD) (mm)	厚度 S (mm)	厚度 S (mm)	黑色厚度 (mm)
(inch)	(mm)				
1/2"	16	21.5	2.0	2.5	0.8 ～ 1.2
3/4"	20	27.0	2.0	3.0	0.8 ～ 1.2
1"	25	34.0	2.3	3.5	0.8 ～ 1.2
1-1/4"	30	42.0	2.5	4.0	1.2 ～ 1.8
1-1/2"	40	48.0	3.0	4.5	1.2 ～ 1.8
2"	50	60.0	3.5	5.0 (5.5)	1.2 ～ 1.8
2-1/2"	65	76.0	4.0	6.6	1.2 ～ 1.8
3"	75	89.0	5.0	8.1	1.2 ～ 1.8
4"	100	114.0	5.5	10.4	1.2 ～ 1.8
5"	125	140.0	6.5	12.7	1.2 ～ 1.8
6"	150	165.0	7.0	15.3	1.2 ～ 1.8
8"	200	216.0	8.0	19.5	2.0 ～ 3.0
10"	250	267.0	9.0	24.3	2.0 ～ 3.0
12"	300	318.0	10.0	28.9	2.0 ～ 3.0
14"	355	370.0	14.2	33.6	3.0 ～ 4.0
16"	400	420.0	16.2	38.2	3.0 ～ 4.0
18"	450	457.2	17.6	41.6	-
20"	500	508.0	19.5	46.2	-
22"	550	558.8	21.5	50.8	-
24"	600	609.6	23.4	55.4	-
28"	-	-	-	-	-
30"	-	-	-	-	-
32"	-	-	-	-	-
36"	-	-	-	-	-
40"	-	-	-	-	-
44"	-	-	-	-	-
48"	-	-	-	-	-

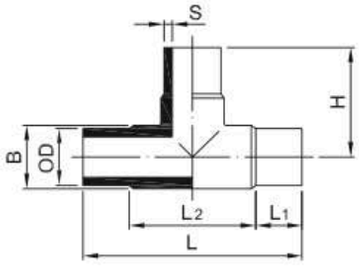
HD-PE電信用管中管規格表

標稱管徑		厚度 S (mm)
(inch)	(mm)	
3/4"	25	2.0
1"	34	2.0
1"	36	2.1
1-1/4"	38	-

HD-PE TEE

Elongated
for butt welding
molded from PE100

對接長型正三通
DFP TT2

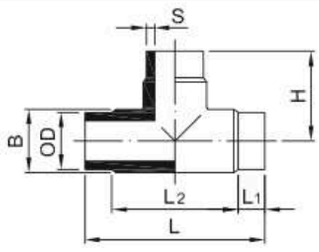




OD (mm)	H (mm)	L (mm)	L1 (mm)	L2 (mm)	B (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
						Code	S (mm)	Code	S (mm)	Code	S (mm)
20	64	128	41	46	22	-	-	-	-	31-TT2-11-0020	2.0
25	69	138	41	56	27	-	-	-	-	31-TT2-11-0025	2.3
32	77	154	46	62	34	-	-	-	-	31-TT2-11-0032	2.9
40	89	178	51	76	43	-	-	-	-	31-TT2-11-0040	3.7
50	99	198	57	84	54	-	-	31-TT2-17-0050	3.0	31-TT2-11-0050	4.6
63	115	224	65	100	67	31-TT2-27-0063	2.3	31-TT2-17-0063	3.8	31-TT2-11-0063	5.8
75	131	263	71	118	-	31-TT2-27-0075	2.7	31-TT2-17-0075	4.5	31-TT2-11-0075	6.8
90	140	284	78	124	-	31-TT2-27-0090	3.3	31-TT2-17-0090	5.4	31-TT2-11-0090	8.2
110	160	324	86	148	-	31-TT2-27-0110	4.0	31-TT2-17-0110	6.6	31-TT2-11-0110	10.0
125	175	355	92	169	-	31-TT2-27-0125	4.6	31-TT2-17-0125	7.4	31-TT2-11-0125	11.4
140	174	346	83	182	-	31-TT2-27-0140	5.1	31-TT2-17-0140	8.3	31-TT2-11-0140	12.7
160	185	365	83	204	-	31-TT2-27-0160	5.8	31-TT2-17-0160	9.5	31-TT2-11-0160	14.6
180	257	520	133.5	247	-	31-TT2-27-0180	6.6	31-TT2-17-0180	10.7	31-TT2-11-0180	16.4
200	246	492	113	266	-	31-TT2-27-0200	7.3	31-TT2-17-0200	11.9	31-TT2-11-0200	18.2
225	240	480	110	260	-	31-TT2-27-0225	8.2	31-TT2-17-0225	13.4	31-TT2-11-0225	20.5
250	314	624	148	328	-	31-TT2-27-0250	9.1	31-TT2-17-0250	14.8	31-TT2-11-0250	22.7
280	347	694	160	374	-	31-TT2-27-0280	10.2	31-TT2-17-0280	16.6	31-TT2-11-0280	25.4
315	375	750	170	410	-	31-TT2-27-0315	11.4	31-TT2-17-0315	18.7	31-TT2-11-0315	28.6

HD-PE TEE

reinforced
for butt welding
molded from PE100
對接正三通
DFP TT1

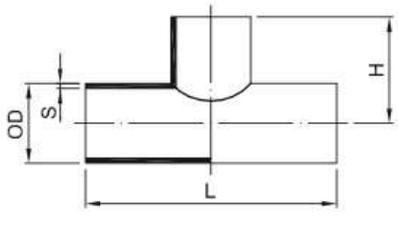




OD (mm)	H (mm)	L (mm)	L1 (mm)	L2 (mm)	B (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
						Code	S (mm)	Code	S (mm)	Code	S (mm)
20	35.3	70	13.5	43.0	21.0	-	-	-	-	31-TT1-11-0020	2.0
25	40.3	80	13.0	50.0	26.0	-	-	-	-	31-TT1-11-0025	2.3
32	45.5	89	15.0	59.0	33.4	-	-	-	-	31-TT1-11-0032	2.9
40	43.8	85	10.0	65.0	42.0	-	-	-	-	31-TT1-11-0040	3.7
50	52	97.5	12.0	73.5	52.0	-	-	31-TT1-17-0050	3.0	31-TT1-11-0050	4.6
63	65.5	126	15.0	96.0	65.0	31-TT1-27-0063	2.3	31-TT1-17-0063	3.8	31-TT1-11-0063	5.8
75	75.3	148.5	13.5	121.5	76.8	31-TT1-27-0075	2.7	31-TT1-17-0075	4.5	31-TT1-11-0075	6.8
90	103.5	201	31.0	139.0	93.5	31-TT1-27-0090	3.3	31-TT1-17-0090	5.4	31-TT1-11-0090	8.2
110	117	240	48.0	144.0	114.0	31-TT1-27-0110	4.0	31-TT1-17-0110	6.6	31-TT1-11-0110	10.0
125	175	353	92.0	169.0	133.0	31-TT1-27-0125	4.6	31-TT1-17-0125	7.4	31-TT1-11-0125	11.4
140	174	348	83.0	182.0	150.0	31-TT1-27-0140	5.1	31-TT1-17-0140	8.3	31-TT1-11-0140	12.7
160	185	370	83.0	204.0	170.0	31-TT1-27-0160	5.8	31-TT1-17-0160	9.5	31-TT1-11-0160	14.6
180	257	514	133.5	247.0	190.0	31-TT1-27-0180	6.6	31-TT1-17-0180	10.7	31-TT1-11-0180	16.4
200	240	492	113.0	266.0	210.0	31-TT1-27-0200	7.3	31-TT1-17-0200	11.9	31-TT1-11-0200	18.2
225	240	480	110.0	260.0	235.0	31-TT1-27-0225	8.2	31-TT1-17-0225	13.4	31-TT1-11-0225	20.5
250	312	624	148.0	328.0	262.0	31-TT1-27-0250	9.1	31-TT1-17-0250	14.8	31-TT1-11-0250	22.7
280	347	694	160.0	374.0	284.0	31-TT1-27-0280	10.2	31-TT1-17-0280	16.6	31-TT1-11-0280	25.4
315	375	750	170.0	410.0	331.0	31-TT1-27-0315	11.4	31-TT1-17-0315	18.7	31-TT1-11-0315	28.6

HD-PE TEE

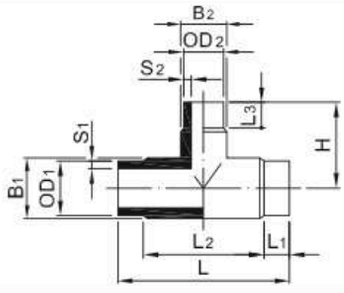
(Fabricated)
for butt welding
molded from PE100
手工正三通
DFP TT4



OD (mm)	H (mm)	L (mm)	SDR41 ISO S41 PN4		SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S (mm)	Code	S (mm)	Code	S (mm)	Code	S (mm)
355	362.5	725	31-TT4-41-0355	8.7	31-TT4-27-0355	12.9	31-TT4-17-0355	21.1	31-TT4-11-0355	32.2
400	410	820	31-TT4-41-0400	9.8	31-TT4-27-0400	14.5	31-TT4-17-0400	23.7	31-TT4-11-0400	36.3
450	460	920	31-TT4-41-0450	11.0	31-TT4-27-0450	16.3	31-TT4-17-0450	26.7	31-TT4-11-0450	40.9
500	510	1020	31-TT4-41-0500	12.3	31-TT4-27-0500	18.1	31-TT4-17-0500	29.7	31-TT4-11-0500	45.4
560	570	1140	31-TT4-41-0560	13.7	31-TT4-27-0560	20.3	31-TT4-17-0560	33.2	31-TT4-11-0560	50.8
630	640	1280	31-TT4-41-0630	15.4	31-TT4-27-0630	22.8	31-TT4-17-0630	37.4	31-TT4-11-0630	57.2
710	720	1440	31-TT4-41-0710	17.5	31-TT4-27-0710	25.7	31-TT4-17-0710	42.1	31-TT4-11-0710	64.5
800	810	1620	31-TT4-41-0800	19.6	31-TT4-27-0800	29.0	31-TT4-17-0800	47.4	31-TT4-11-0800	72.8
900	910	1820	31-TT4-41-0900	22.0	31-TT4-27-0900	32.6	31-TT4-17-0900	53.3	31-TT4-11-0900	81.8
1000	1020	2040	31-TT4-41-1000	24.4	31-TT4-27-1000	36.2	31-TT4-17-1000	59.3	-	-
1200	1220	2440	31-TT4-41-1200	29.3	31-TT4-27-1200	43.5	31-TT4-17-1200	70.6	-	-

HD-PE REDUCED TEE

for butt welding
molded from PE100
對接異徑三通
DFP TR1



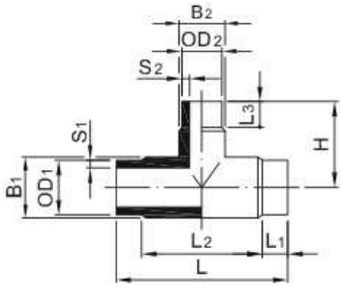


OD1/OD2 (mm)	H (mm)	L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	B1 (mm)	B2 (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SD11 ISO S5 PN16	
								Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
63-32	68.5	124	26	72	26	65.0	33.4	31-TR1-27-063032	2.3/2.0	31-TR1-17-063032	3.8/2.0	31-TR1-11-063032	5.8/2.9
63-50	68.5	124	26	72	26	65.0	52.0	31-TR1-27-063050	2.3/2.3	31-TR1-17-063050	3.8/3.0	31-TR1-11-063050	5.8/4.6
75-50	74.5	127	26	75	26	76.8	52.0	31-TR1-27-075050	2.7/2.3	31-TR1-17-075050	4.5/3.0	31-TR1-11-075050	6.8/4.6
75-63	74.5	127	26	75	26	76.8	65.0	31-TR1-27-075063	2.7/2.3	31-TR1-17-075063	4.5/3.8	31-TR1-11-075063	6.8/5.8
90-63	85.2	153.8	26	101.8	26	93.5	65.0	31-TR1-27-090063	3.3/2.3	31-TR1-17-090063	5.4/3.8	31-TR1-11-090063	8.2/5.8
90-75	85.2	153.8	26	101.8	26	93.5	76.8	31-TR1-27-090075	3.3/2.7	31-TR1-17-090075	5.4/4.5	31-TR1-11-090075	8.2/6.8
▲ 110-32	140	346	-	-	-	-	-	31-TR1-27-110032	4.0/2.0	31-TR1-17-110032	6.6/2.0	31-TR1-11-110032	10.0/2.9
▲ 110-40	140	346	-	-	-	-	-	31-TR1-27-110040	4.0/2.0	31-TR1-17-110040	6.6/2.4	31-TR1-11-110040	10.0/3.7
▲ 110-50	140	346	-	-	-	-	-	31-TR1-27-110050	4.0/2.0	31-TR1-17-110050	6.6/3.0	31-TR1-11-110050	10.0/4.6
110-63	140	346	94	123.5	65	114	65.0	31-TR1-27-110063	4.0/2.3	31-TR1-17-110063	6.6/3.8	31-TR1-11-110063	10.0/5.8
▲ 110-75	155	346	-	-	-	-	-	31-TR1--27-110075	4.0/2.7	31-TR1-17-110075	6.6/4.5	31-TR1-11-110075	10.0/6.8
110-90	155	346	94	123.5	84	114	93.5	31-TR1-27-110090	4.0/3.3	31-TR1-17-110090	6.6/5.4	31-TR1-11-110090	10.0/8.2
▲ 125-40	106	214	-	-	-	-	-	31-TR1-27-125040	4.6/2.0	31-TR1-17-125040	7.4/2.4	31-TR1-11-125040	11.4/3.7
▲ 125-50	106	214	-	-	-	-	-	31-TR1-27-125050	4.6/2.3	31-TR1-17-125050	7.4/3.0	31-TR1-11-125050	11.4/4.6
▲ 125-63	106	214	35	144	26	130	65.0	31-TR1-27-125063	4.6/2.3	31-TR1-17-125063	7.4/3.8	31-TR1-11-125063	11.4/5.8
125-75	106	214	35	144	26	130	76.8	31-TR1-27-125075	4.6/2.7	31-TR1-17-125075	7.4/4.5	31-TR1-11-125075	11.4/6.8
125-90	106	214	35	144	26	130	93.5	31-TR1--27125090	4.6/3.3	31-TR1-17-125090	7.4/5.4	31-TR1-11-125090	11.4/8.2
125-110	106	214	35	144	30	130	114	31-TR1-27-125110	4.6/4.0	31-TR1-17-125110	7.4/6.6	31-TR1-11-125110	11.4/10.0
▲ 140-50	114	214	-	-	-	-	-	31-TR1-27-140050	5.1/2.3	31-TR1-17-140050	8.3/3.0	31-TR1-11-140050	12.7/4.6
▲ 140-63	114	214	35	144	26	146	65.0	31-TR1-27-140063	5.1/2.3	31-TR1-17-140063	8.3/3.8	31-TR1-11-140063	12.7/5.8
140-75	114	214	35	144	26	146	76.8	31-TR1-27-140075	5.1/2.7	31-TR1-17-140075	8.3/4.5	31-TR1-11-140075	12.7/6.8
140-90	114	214	35	144	26	146	93.5	31-TR1-27-140090	5.1/3.3	31-TR1-17-140090	8.3/5.4	31-TR1-11-140090	12.7/8.2
140-110	114	214	35	144	30	146	114	31-TR1-27-140110	5.1/4.0	31-TR1-17-140110	8.3/6.6	31-TR1-11-140110	12.7/10.0
▲140-125	114	214	-	-	-	-	-	31-TR1-27-140125	5.1/4.6	31-TR1-17-140125	8.3/7.4	31-TR1-11-140125	12.7/11.4
160-63	165	436	110	216	65	167	65.0	31-TR1-27-160063	5.8/2.3	31-TR1-17-160063	9.5/3.8	31-TR1-11-160063	14.6/5.8
▲ 160-75	191	436	-	-	-	-	-	31-TR1-27-160075	5.8/2.7	31-TR1-17-160075	9.5/4.5	31-TR1-11-160075	14.6/6.8
160-90	191	436	110	216	84	167	93.5	31-TR1-27-160090	5.8/3.3	31-TR1-17-160090	9.5/5.4	31-TR1-11-160090	14.6/8.2
160-110	198	436	110	216	94	167	114	31-TR1-27-160110	5.8/4.0	31-TR1-17-160110	9.5/6.6	31-TR1-11-160110	14.6/10.0
160-125	198	436	-	-	-	-	-	31-TR1-27-160125	5.8/4.6	31-TR1-17-160125	9.5/7.4	31-TR1-11-160125	14.6/11.4
160-140	198	436	-	-	-	-	-	31-TR1-27-160140	5.8/5.1	31-TR1-17-160140	9.5/8.3	31-TR1-11-160140	14.6/12.7
▲ 180-63	144	220	35	150	26	188	65.0	31-TR1-27-180063	6.6/2.3	31-TR1-17-180063	10.7/3.8	31-TR1-11-180063	16.4/5.8
▲ 180-75	144	220	35	150	26	188	76.8	31-TR1--27180075	6.6/2.7	31-TR1-17-180075	10.7/4.5	31-TR1-11-180075	16.4/6.8
180-90	144	220	35	150	26	188	93.5	31-TR1-27-180090	6.6/3.3	31-TR1-17-180090	10.7/5.4	31-TR1-11-180090	16.4/8.2
180-110	144	220	35	150	30	188	114	31-TR1--27-180110	6.6/4.0	31-TR1-17-180110	10.7/6.6	31-TR1-11-180110	16.4/10.0
180-125	144	220	35	150	35	188	130	31-TR1-27-180125	6.6/4.6	31-TR1-17-180125	10.7/7.4	31-TR1-11-180125	16.4/11.4
▲180-140	144	220	-	-	-	-	-	31-TR1-27-180140	6.6/5.1	31-TR1-17-180140	10.7/8.3	31-TR1-11-180140	16.4/12.7
▲180-160	144	220	-	-	-	-	-	31-TR1-27-180160	6.6/5.8	31-TR1-17-180160	10.7/9.5	31-TR1-11-180160	16.4/14.6

▲轉接品(Transition)

HD-PE REDUCED TEE

for butt welding
molded from PE100
對接異徑三通
DFP TR1





OD1/OD2 (mm)	H (mm)	L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	B1 (mm)	B2 (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
								Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
▲ 200-63	157	273	35	203	26	208	65.0	31-TR1-27-200063	7.3/2.3	31-TR1-17-200063	11.9/3.8	31-TR1-11-200063	18.2/5.8
▲ 200-90	157	273	35	203	26	208	93.5	31-TR1-27-200090	7.3/3.3	31-TR1-17-200090	11.9/4.5	31-TR1-11-200090	18.2/8.2
200-110	157	273	35	203	30	208	114	31-TR1-27-200110	7.4/4.0	31-TR1-17-200110	11.9/5.4	31-TR1-11-200110	18.2/10.0
200-125	157	273	35	203	35	208	130	31-TR1-27-200125	7.4/4.6	31-TR1-17-200125	11.9/6.6	31-TR1-11-200125	18.2/11.4
200-140	157	273	35	203	35	208	146	31-TR1-27-200140	7.4/5.1	31-TR1-17-200140	11.9/7.4	31-TR1-11-200140	18.2/12.7
200-160	157	273	35	203	35	208	167	31-TR1-27-200160	7.4/5.8	31-TR1-17-200160	11.9/8.3	31-TR1-11-200160	18.2/14.6
▲200-180	157	273	-	-	-	-	-	31-TR1-27-200180	7.4/6.6	31-TR1-17-200180	11.9/9.5	31-TR1-11-200180	18.2/16.4
▲ 225-75	171.5	306	40	226	26	235	76.8	31-TR1-27-225075	8.2/2.7	31-TR1-17-225075	13.4/4.5	31-TR1-11-225075	20.5/6.8
▲ 225-90	171.5	306	40	226	26	235	93.5	31-TR1-27-225090	8.2/3.3	31-TR1-17-225090	13.4/5.4	31-TR1-11-225090	20.5/8.2
▲225-110	171.5	306	40	226	30	235	114	31-TR1-27-225110	8.2/4.0	31-TR1-17-225110	13.4/6.6	31-TR1-11-225110	20.5/10.0
225-125	171.5	306	40	226	35	235	130	31-TR1-27-225125	8.2/4.6	31-TR1-17-225125	13.4/7.4	31-TR1-11-225125	20.5/11.4
▲225-140	171.5	306	-	-	-	-	-	31-TR1-27-225140	8.2/5.1	31-TR1-17-225140	13.4/8.3	31-TR1-11-225140	20.5/12.7
225-160	171.5	306	40	226	35	235	167	31-TR1-27-225160	8.2/5.8	31-TR1-17-225160	13.4/9.5	31-TR1-11-225160	20.5/14.6
225-180	171.5	306	40	226	35	235	188	31-TR1-27-225180	8.2/6.6	31-TR1-17-225180	13.4/10.7	31-TR1-11-225180	20.5/16.4
▲225-200	171.5	306	-	–	–	–	-	31-TR1-27-225200	8.2/7.3	31-TR1-17-225200	13.4/11.9	31-TR1-11-225200	20.5/18.2
▲250-110	188	325	45	235	30	260	114	31-TR1-27-250110	9.1/4.0	31-TR1-17-250110	14.8/6.6	31-TR1-11-250110	22.7/10.0
▲250-125	188	325	-	-	-	-	-	31-TR1-27-250125	9.1/4.6	31-TR1-17-250125	14.8/7.4	31-TR1-11-250125	22.7/11.4
▲250-140	188	325	45	235	35	260	146	31-TR1-27-250140	9.1/5.1	31-TR1-17-250140	14.8/8.3	31-TR1-11-250140	22.7/12.7
250-160	188	325	45	235	35	260	167	31-TR1-27-250160	9.1/5.8	31-TR1-17-250160	14.8/9.5	31-TR1-11-250160	22.7/14.6
▲250-180	188	325	-	-	-	-	-	31-TR1-27-250180	9.1/6.6	31-TR1-17-250180	14.8/10.7	31-TR1-11-250180	22.7/16.4
250-200	188	325	45	235	35	260	208	31-TR1-27-250200	9.1/7.3	31-TR1-17-250200	14.8/11.9	31-TR1-11-250200	22.7/18.2
250-225	188	325	45	235	40	260	235	31-TR1-27-250225	9.1/8.2	31-TR1-17-250225	14.8/13.4	31-TR1-11-250225	22.7/20.5
＊ 280-140	230	440	-	-	-	-	-	31-TR1-27-280140	10.2/5.1	31-TR1-17-280140	16.6/8.3	31-TR1-11-280140	25.4/12.7
＊ 280-160	240	460	-	-	-	-	-	31-TR1-27-280160	10.2/5.8	31-TR1-17-280160	16.6/9.5	31-TR1-11-280160	25.4/14.6
＊ 280-180	240	480	-	-	-	-	-	31-TR1-27-280180	10.2/6.6	31-TR1-17-280180	16.6/10.7	31-TR1-11-280180	25.4/16.4
＊ 280-200	250	500	-	-	-	-	-	31-TR1-27-280200	10.2/7.3	31-TR1-17-280200	16.6/11.9	31-TR1-11-280200	25.4/18.2
＊ 280-225	260	525	-	-	-	-	-	31-TR1-27-280225	10.2/8.2	31-TR1-17-280225	16.6/13.4	31-TR1-11-280225	25.4/20.5
＊ 280-250	275	550	-	-	-	-	-	31-TR1-27-280250	10.2/9.1	31-TR1-17-280250	16.6/14.8	31-TR1-11-280250	25.4/22.7
＊ 315-160	257.5	500	-	-	-	-	-	31-TR1-27-315160	11.4/5.8	31-TR1-17-315160	18.7/9.5	31-TR1-11-315160	28.6/14.6
＊ 315-180	257.5	520	-	-	-	-	-	31-TR1-27-315180	11.4/6.6	31-TR1-17-315180	18.7/10.7	31-TR1-11-315180	28.6/16.4
＊ 315-200	267.5	540	-	-	-	-	-	31-TR1-27-315200	11.4/7.3	31-TR1-17-315200	18.7/11.9	31-TR1-11-315200	28.6/18.2
＊ 315-225	277.5	565	-	-	-	-	-	31-TR1-27-315225	11.4/8.2	31-TR1-17-315225	18.7/13.4	31-TR1-11-315225	28.6/20.5
＊ 315-250	292.5	595	-	-	-	-	-	31-TR1-27-315250	11.4/9.1	31-TR1-17-315250	18.7/14.8	31-TR1-11-315250	28.6/22.7
＊ 315-280	307.5	620	-	-	-	-	-	31-TR1-27-315280	11.4/10.2	31-TR1-17-315280	18.7/16.6	31-TR1-11-315280	28.6/25.4

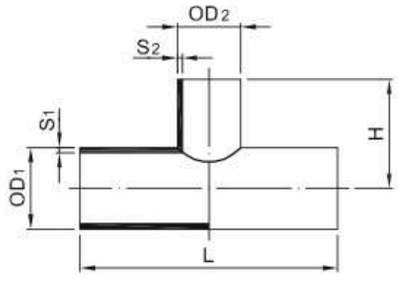
▲轉接品(Transition)　＊手工製品(Fabricated)

HD-PE REDUCED TEE

(Fabricated)
for butt welding
molded from PE100

手工對接異徑三通

DFP TR1



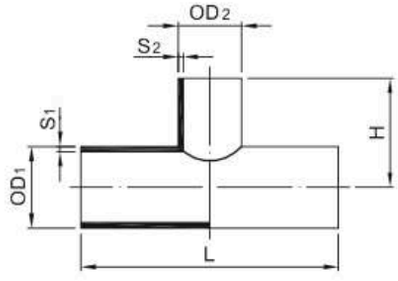
OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
355-180	277.5	550	31-TR3-27-355180	12.9/6.6	31-TR3-17-355180	21.1/10.7	31-TR3-11-355180	32.2/16.4
355-200	287.5	570	31-TR3-27-355200	12.9/7.3	31-TR3-17-355200	21.1/11.9	31-TR3-11-355200	32.2/18.2
355-225	297.5	595	31-TR3-27-355225	12.9/8.2	31-TR3-17-355225	21.1/13.4	31-TR3-11-355225	32.2/20.5
355-250	312.5	620	31-TR3-27-355250	12.9/9.1	31-TR3-17-355250	21.1/14.8	31-TR3-11-355250	32.2/22.7
355-280	327.5	650	31-TR3-27-355280	12.9/10.2	31-TR3-17-355280	21.1/16.6	31-TR3-11-355280	32.2/25.4
355-315	347.5	685	31-TR3-27-355315	12.9/11.4	31-TR3-17-355315	21.1/18.7	31-TR3-11-355315	32.2/28.6
400-200	310	620	31-TR3-27-400200	14.5/7.3	31-TR3-17-400200	23.7/11.9	31-TR3-11-400200	36.3/18.2
400-225	320	645	31-TR3-27-400225	14.5/8.2	31-TR3-17-400225	23.7/13.4	31-TR3-11-400225	36.3/20.5
400-250	335	670	31-TR3-27-400250	14.5/9.1	31-TR3-17-400250	23.7/14.8	31-TR3-11-400250	36.3/22.7
400-280	350	700	31-TR3-27-400280	14.5/10.2	31-TR3-17-400280	23.7/16.6	31-TR3-11-400280	36.3/25.4
400-315	370	735	31-TR3-27-400315	14.5/11.4	31-TR3-17-400315	23.7/18.7	31-TR3-11-400315	36.3/28.6
400-355	385	775	31-TR3-27-400355	14.5/12.9	31-TR3-17-400355	23.7/21.1	31-TR3-11-400355	36.3/32.2
450-225	345	695	31-TR3-27-450225	16.3/8.2	31-TR3-17-450225	26.7/13.4	31-TR3-11-450225	40.9/20.5
450-250	360	720	31-TR3-27-450250	16.3/9.1	31-TR3-17-450250	26.7/14.8	31-TR3-11-450250	40.9/22.7
450-280	375	750	31-TR3-27-450280	16.3/10.2	31-TR3-17-450280	26.7/16.6	31-TR3-11-450280	40.9/25.4
450-315	395	785	31-TR3-27-450315	16.3/11.4	31-TR3-17-450315	26.7/18.7	31-TR3-11-450315	40.9/28.6
450-355	410	825	31-TR3-27-450355	16.3/12.9	31-TR3-17-450355	26.7/21.1	31-TR3-11-450355	40.9/32.2
450-400	435	870	31-TR3-27-450400	16.3/14.5	31-TR3-17-450400	26.7/23.7	31-TR3-11-450400	40.9/36.3
500-250	385	770	31-TR3-27-500250	18.1/9.1	31-TR3-17-500250	29.7/14.8	31-TR3-11-500250	45.4/22.7
500-280	400	800	31-TR3-27-500280	18.1/10.2	31-TR3-17-500280	29.7/16.6	31-TR3-11-500280	45.4/25.4
500-315	420	835	31-TR3-27-500315	18.1/11.4	31-TR3-17-500315	29.7/18.7	31-TR3-11-500315	45.4/28.6
500-355	435	875	31-TR3-27-500355	18.1/12.9	31-TR3-17-500355	29.7/21.1	31-TR3-11-500355	45.4/32.2
500-400	460	920	31-TR3-27-500400	18.1/14.5	31-TR3-17-500400	29.7/23.7	31-TR3-11-500400	45.4/36.3
500-450	485	970	31-TR3-27-500450	18.1/16.3	31-TR3-17-500450	29.7/26.7	31-TR3-11-500450	45.4/40.9
560-280	430	860	31-TR3-27-560280	20.3/10.2	31-TR3-17-560280	33.2/16.6	31-TR3-11-560280	50.8/25.4
560-315	450	895	31-TR3-27-560315	20.3/11.4	31-TR3-17-560315	33.2/18.7	31-TR3-11-560315	50.8/28.6
560-355	465	935	31-TR3-27-560355	20.3/12.9	31-TR3-17-560355	33.2/21.1	31-TR3-11-560355	50.8/32.2
560-400	490	980	31-TR3-27-560400	20.3/14.5	31-TR3-17-560400	33.2/23.7	31-TR3-11-560400	50.8/36.3
560-450	515	1030	31-TR3-27-560450	20.3/16.3	31-TR3-17-560450	33.2/26.7	31-TR3-11-560450	50.8/40.9
560-500	540	1080	31-TR3-27-560500	20.3/18.1	31-TR3-17-560500	33.2/29.7	31-TR3-11-560500	50.8/45.4
630-315	485	965	31-TR3-27-630315	22.8/11.4	31-TR3-17-630315	37.4/18.7	31-TR3-11-630315	57.2/28.6
630-355	500	1005	31-TR3-27-630355	22.8/12.9	31-TR3-17-630355	37.4/21.1	31-TR3-11-630355	57.2/32.2
630-400	525	1050	31-TR3-27-630400	22.8/14.5	31-TR3-17-630400	37.4/23.7	31-TR3-11-630400	57.2/36.3
630-450	550	1100	31-TR3-27-630450	22.8/16.3	31-TR3-17-630450	37.4/26.7	31-TR3-11-630450	57.2/40.9
630-500	575	1150	31-TR3-27-630500	22.8/18.1	31-TR3-17-630500	37.4/29.7	31-TR3-11-630500	57.2/45.4
630-560	605	1210	31-TR3-27-630560	22.8/20.3	31-TR3-17-630560	37.4/33.2	31-TR3-11-630560	57.2/50.8

HD-PE REDUCED TEE

(Fabricated)
for butt welding
molded from PE100

手工對接異徑三通

DFP TR1



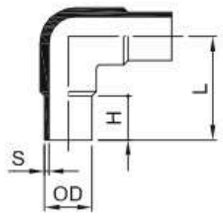
OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
710-355	540	1085	31-TR3-27-710355	25.7/12.9	31-TR3-17-710355	42.1/21.1	31-TR3-11-710355	64.5/32.2
710-400	565	1130	31-TR3-27-710400	25.7/14.5	31-TR3-17-710400	42.1/23.7	31-TR3-11-710400	64.5/36.3
710-450	590	1180	31-TR3-27-710450	25.7/16.3	31-TR3-17-710450	42.1/26.7	31-TR3-11-710450	64.5/40.9
710-500	615	1230	31-TR3-27-710500	25.7/18.1	31-TR3-17-710500	42.1/29.7	31-TR3-11-710500	64.5/45.4
710-560	645	1290	31-TR3-27-710560	25.7/20.3	31-TR3-17-710560	42.1/33.2	31-TR3-11-710560	64.5/50.8
710-630	680	1360	31-TR3-27-710630	25.7/22.8	31-TR3-17-710630	42.1/37.4	31-TR3-11-710630	64.5/57.2
800-400	610	1220	31-TR3-27-800400	29.0/14.5	31-TR3-17-800400	47.4/23.7	31-TR3-11-800400	72.8/36.3
800-450	635	1270	31-TR3-27-800450	29.0/16.3	31-TR3-17-800450	47.4/26.7	31-TR3-11-800450	72.8/40.9
800-500	660	1320	31-TR3-27-800500	29.0/18.1	31-TR3-17-800500	47.4/29.7	31-TR3-11-800500	72.8/45.4
800-560	690	1380	31-TR3-27-800560	29.0/20.3	31-TR3-17-800560	47.4/33.2	31-TR3-11-800560	72.8/50.8
800-630	725	1450	31-TR3-27-800630	29.0/22.8	31-TR3-17-800630	47.4/37.4	31-TR3-11-800630	72.8/57.2
800-710	765	1530	31-TR3-27-800710	29.0/25.7	31-TR3-17-800710	47.4/42.1	31-TR3-11-800710	72.8/64.5
900-450	685	1370	31-TR3-27-900450	32.6/16.3	31-TR3-17-900450	53.3/26.7	31-TR3-11-900450	81.8/40.9
900-500	710	1420	31-TR3-27-900500	32.6/18.1	31-TR3-17-900500	53.3/29.7	31-TR3-11-900500	81.8/45.4
900-560	740	1480	31-TR3-27-900560	32.6/20.3	31-TR3-17-900560	53.3/33.2	31-TR3-11-900560	81.8/50.8
900-630	775	1550	31-TR3-27-900630	32.6/22.8	31-TR3-17-900630	53.3/37.4	31-TR3-11-900630	81.8/57.2
900-710	815	1630	31-TR3-27-900710	32.6/25.7	31-TR3-17-900710	53.3/42.1	31-TR3-11-900710	81.8/64.5
900-800	860	1720	31-TR3-27-900800	32.6/29.0	31-TR3-17-900800	53.3/47.4	31-TR3-11-900800	81.8/72.8
1000-500	760	1540	31-TR3-27-100500	36.2/18.1	31-TR3-17-100500	59.3/29.7	-	-
1000-560	790	1600	31-TR3-27-100560	36.2/20.3	31-TR3-17-100560	59.3/33.2	-	-
1000-630	825	1670	31-TR3-27-100630	36.2/22.8	31-TR3-17-100630	59.3/37.4	-	-
1000-710	865	1750	31-TR3-27-100710	36.2/25.7	31-TR3-17-100710	59.3/42.1	-	-
1000-800	910	1840	31-TR3-27-100800	36.2/29.0	31-TR3-17-100800	59.3/47.4	-	-
1000-900	960	1940	31-TR3-27-100900	36.2/32.6	31-TR3-17-100900	59.3/53.3	-	-
1200-560	890	1800	31-TR3-27-120560	43.5/20.3	31-TR3-17-120560	67.9/33.2	-	-
1200-630	925	1870	31-TR3-27-120630	43.5/22.8	31-TR3-17-120630	67.9/37.4	-	-
1200-710	965	1950	31-TR3-27-120710	43.5/25.7	31-TR3-17-120710	67.9/42.1	-	-
1200-800	1010	2040	31-TR3-27-120800	43.5/29.0	31-TR3-17-120800	67.9/47.4	-	-
1200-900	1060	2140	31-TR3-27-120900	43.5/32.6	31-TR3-17-120900	67.9/53.3	-	-
1200-1000	1120	2240	31-TR3-27-120100	43.5/36.2	31-TR3-17-120100	67.9/59.3	-	-

HD-PE 90° BEND

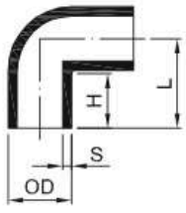
Elongated
for butt welding
molded from PE100

對接長型90°彎頭

DFP L93



(∅20~∅110, 140, 160, 225, 280)



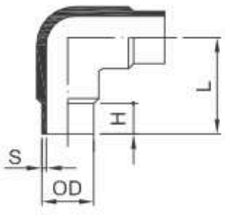
(∅125, 180, 200, 250, 315)

OD (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S (mm)	Code	S (mm)	Code	S (mm)
20	41.0	64.0	-	-	-	-	31-L93-17-0020	2.0
25	41.0	69.0	-	-	-	-	31-L93-17-0025	2.3
32	46.0	77.0	-	-	-	-	31-L93-17-0032	2.9
40	51.0	89.0	-	-	-	-	31-L93-17-0040	3.7
50	57.0	99.0	-	-	31-L93-17-0050	3.0	31-L93-17-0050	4.6
63	65.0	115.0	31-L93-27-0063	2.3	31-L93-17-0063	3.8	31-L93-17-0063	5.8
75	45.0	125.0	31-L93-27-0075	2.7	31-L93-17-0075	4.5	31-L93-17-0075	6.8
90	84.0	158.5	31-L93-27-0090	3.3	31-L93-17-0090	5.4	31-L93-17-0090	8.2
110	91.0	175.5	31-L93-27-0110	4.0	31-L93-17-0110	6.6	31-L93-17-0110	10.0
125	102.0	164.5	31-L93-27-0125	4.6	31-L93-17-0125	7.4	31-L93-17-0125	11.4
140	90.0	185.0	31-L93-27-0140	5.1	31-L93-17-0140	8.3	31-L93-17-0140	12.7
160	92.0	190.0	31-L93-27-0160	5.8	31-L93-17-0160	9.5	31-L93-17-0160	14.6
180	136.5	226.5	31-L93-27-0180	6.6	31-L93-17-0180	10.7	31-L93-17-0180	16.4
200	119.5	219.5	31-L93-27-0200	7.3	31-L93-17-0200	11.9	31-L93-17-0200	18.2
225	100.0	240.0	31-L93-27-0225	8.2	31-L93-17-0225	13.4	31-L93-17-0225	20.5
250	148.0	402.5	31-L93-27-0250	9.1	31-L93-17-0250	14.8	31-L93-17-0250	22.7
280	196.0	336.0	31-L93-27-0280	10.2	31-L93-17-0280	16.6	31-L93-17-0280	25.4
315	212.0	365.0	31-L93-27-0315	11.4	31-L93-17-0315	18.7	31-L93-17-0315	28.6

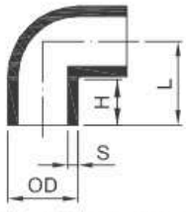
HD-PE 90° BEND

for butt welding
molded from PE100

對接90°彎頭
DFP L91



(∅20~∅110, 140, 160, 225, 280)



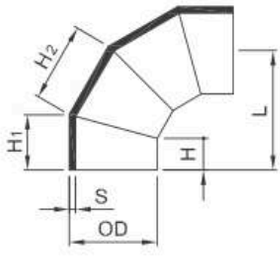
(∅125, 180, 200, 250, 315)

OD (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S_1/S_2 (mm)	Code	S_1/S_2 (mm)	Code	S_1/S_2 (mm)
20	15.5	37.0	-	-	-	-	31-L93-17-0020	2.0
25	15.5	42.5	-	-	-	-	31-L93-17-0025	2.3
32	17.5	48.0	-	-	-	-	31-L93-17-0032	2.9
40	12.0	49.0	-	-	-	-	31-L93-17-0040	3.7
50	14.0	56.0	-	-	31-L93-17-0050	3.0	31-L93-17-0050	4.6
63	18.0	72.6	31-L93-27-0063	2.3	31-L93-17-0063	3.8	31-L93-17-0063	5.8
75	15.0	80.5	31-L93-27-0075	2.7	31-L93-17-0075	4.5	31-L93-17-0075	6.8
90	38.5	111.0	31-L93-27-0090	3.3	31-L93-17-0090	5.4	31-L93-17-0090	8.2
110	49.0	130.0	31-L93-27-0110	4.0	31-L93-17-0110	6.6	31-L93-17-0110	10.0
125	102.0	164.5	31-L93-27-0125	4.6	31-L93-17-0125	7.4	31-L93-17-0125	11.4
140	90.0	185.0	31-L93-27-0140	5.1	31-L93-17-0140	8.3	31-L93-17-0140	12.7
160	92.0	190.0	31-L93-27-0160	5.8	31-L93-17-0160	9.5	31-L93-17-0160	14.6
180	136.5	226.5	31-L93-27-0180	6.6	31-L93-17-0180	10.7	31-L93-17-0180	16.4
200	119.5	219.5	31-L93-27-0200	7.3	31-L93-17-0200	11.9	31-L93-17-0200	18.2
225	100.0	240.0	31-L93-27-0225	8.2	31-L93-17-0225	13.4	31-L93-17-0225	20.5
250	148.0	402.5	31-L93-27-0250	9.1	31-L93-17-0250	14.8	31-L93-17-0250	22.7
280	196.0	336.0	31-L93-27-0280	10.2	31-L93-17-0280	16.6	31-L93-17-0280	25.4
315	212.0	365.0	31-L93-27-0315	11.4	31-L93-17-0315	18.7	31-L93-17-0315	28.6

HD-PE 90° ELBOW

(Fabricated)
for butt welding
molded from PE100

手工90°彎頭
DFP L94

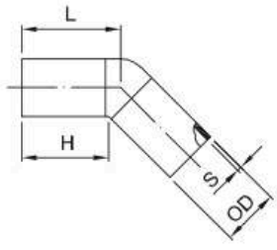


OD (mm)	H (mm)	H_1 (mm)	H_2 (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
					Code	S_1/S_2 (mm)	Code	S_1/S_2 (mm)	Code	S_1/S_2 (mm)
355	185	280	375	615	31-L94-27-0355	12.9	31-L94-17-0355	21.1	31-L94-11-0355	32.2
400	210	317	424	697	31-L94-27-0400	14.5	31-L94-17-0400	23.7	31-L94-11-0400	36.3
450	235	356	476	781	31-L94-27-0450	16.3	31-L94-17-0450	26.7	31-L94-11-0450	40.9
500	260	394	528	865	31-L94-27-0500	18.1	31-L94-17-0500	29.7	31-L94-11-0500	45.4
560	290	440	589	966	31-L94-27-0560	20.3	31-L94-17-0560	33.2	31-L94-11-0560	50.8
630	325	494	663	1084	31-L94-27-0630	22.8	31-L94-17-0630	37.4	31-L94-11-0630	57.2
710	365	555	745	1219	31-L94-27-0710	25.7	31-L94-17-0710	42.1	31-L94-11-0710	64.5
800	410	625	838	1370	31-L94-27-0800	29.0	31-L94-17-0800	47.4	31-L94-11-0800	72.8
900	460	701	942	1539	31-L94-27-0900	32.6	31-L94-17-0900	53.3	31-L94-11-0900	81.8
1000	520	788	1058	1731	31-L94-27-1000	36.2	31-L94-17-1000	59.3	-	-
1200	620	942	1263	2067	31-L94-27-1200	43.5	31-L94-17-1200	67.9	-	-

HD-PE 45° ELBOW

for butt welding
molded from PE100

對接45°彎頭
DFP L45



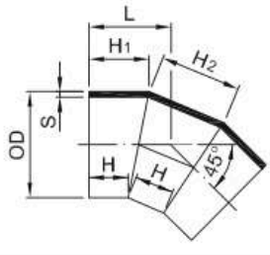


OD (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S (mm)	Code	S (mm)	Code	S (mm)
20	41.5	54.0	-	-	-	-	31-L45-11-0020	2.0
25	41.0	57.0	-	-	-	-	31-L45-11-0025	2.3
32	46.0	61.0	-	-	-	-	31-L45-11-0032	2.9
40	51.0	68.5	-	-	-	-	31-L45-11-0040	3.7
50	57.0	73.5	-	-	31-L45-17-0050	3.0	31-L45-11-0050	4.6
63	65.0	95.0	31-L45-27-0063	2.3	31-L45-17-0063	3.8	31-L45-11-0063	5.8
75	70.0	90.0	31-L45-27-0075	2.7	31-L45-17-0075	4.5	31-L45-11-0075	6.8
90	79.0	101.0	31-L45-27-0090	3.3	31-L45-17-0090	5.4	31-L45-11-0090	8.2
110	82.0	108.0	31-L45-27-0110	4.0	31-L45-17-0110	6.6	31-L45-11-0110	10.0
125	99.5	130.5	31-L45-27-0125	4.6	31-L45-17-0125	7.4	31-L45-11-0125	11.4
140	108.5	145.0	31-L45-27-0140	5.1	31-L45-17-0140	8.3	31-L45-11-0140	12.7
160	116.5	156.5	31-L45-27-0160	5.8	31-L45-17-0160	9.5	31-L45-11-0160	14.6
180	133.5	178.5	31-L45-27-0180	6.6	31-L45-17-0180	10.7	31-L45-11-0180	16.4
200	122.0	172.0	31-L45-27-0200	7.3	31-L45-17-0200	11.9	31-L45-11-0200	18.2
225	138.0	185.0	31-L45-27-0225	8.2	31-L45-17-0225	13.4	31-L45-11-0225	20.5
250	157.0	217.0	31-L45-27-0250	9.1	31-L45-17-0250	14.8	31-L45-11-0250	22.7
280	167.0	238.0	31-L45-27-0280	10.2	31-L45-17-0280	16.6	31-L45-11-0280	25.4
315	177.0	251.0	31-L45-27-0315	11.4	31-L45-17-0315	18.7	31-L45-11-0315	28.6

HD-PE 45° ELBOW

(Fabricated)
for butt welding
molded from PE100

手工對接45°彎頭
DFP L47

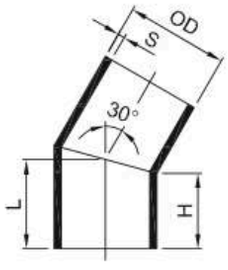


OD (mm)	H (mm)	H1 (mm)	H2 (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
					Code	S (mm)	Code	S (mm)	Code	S (mm)
355	185	256	326	359	31-L47-27-0355	12.9	31-L47-17-0355	21.1	31-L47-11-0355	32.2
400	210	289	370	407	31-L47-27-0400	14.5	31-L47-17-0400	23.7	31-L47-11-0400	36.3
450	235	325	413	455	31-L47-27-0450	16.3	31-L47-17-0450	26.7	31-L47-11-0450	40.9
500	260	360	458	504	31-L47-27-0500	18.1	31-L47-17-0500	29.7	31-L47-11-0500	45.4
560	290	402	512	563	31-L47-27-0560	20.3	31-L47-17-0560	33.2	31-L47-11-0560	50.8
630	325	450	576	631	31-L47-27-0630	22.8	31-L47-17-0630	37.4	31-L47-11-0630	57.2
710	365	506	648	710	31-L47-27-0710	25.7	31-L47-17-0710	42.1	31-L47-11-0710	64.5
800	410	569	729	798	31-L47-27-0800	29.0	31-L47-17-0800	47.4	31-L47-11-0800	72.8
900	460	639	818	895	31-L47-27-0900	32.6	31-L47-17-0900	53.3	31-L47-11-0900	81.8
1000	520	719	918	1009	31-L47-27-1000	36.2	31-L47-17-1000	59.3	-	-
1200	620	858	1099	1204	31-L47-27-1200	43.5	31-L47-17-1200	67.9	-	-

HD-PE 30° ELBOW

(Fabricated)
for butt welding
molded from PE100

手工對接30° 彎頭
DFP L30

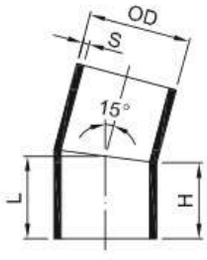


OD (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S (mm)	Code	S (mm)	Code	S (mm)
63	70	78	31-L30-27-0063	2.3	31-L30-17-0063	3.8	31-L30-11-0063	5.8
90	70	82	31-L30-27-0090	3.3	31-L30-17-0090	5.4	31-L30-11-0090	8.2
110	80	95	31-L30-27-0110	4.0	31-L30-17-0110	6.6	31-L30-11-0110	10.0
125	90	107	31-L30-27-0125	4.6	31-L30-17-0125	7.4	31-L30-11-0125	11.4
140	90	108	31-L30-27-0140	5.1	31-L30-17-0140	8.3	31-L30-11-0140	12.7
160	100	121	31-L30-27-0160	5.8	31-L30-17-0160	9.5	31-L30-11-0160	14.6
180	100	124	31-L30-27-0180	6.6	31-L30-17-0180	10.7	31-L30-11-0180	16.4
200	110	137	31-L30-27-0200	7.3	31-L30-17-0200	11.9	31-L30-11-0200	18.2
225	120	150	31-L30-27-0225	8.2	31-L30-17-0225	13.4	31-L30-11-0225	20.5
250	135	169	31-L30-27-0250	9.1	31-L30-17-0250	14.8	31-L30-11-0250	22.7
280	150	188	31-L30-27-0280	10.2	31-L30-17-0280	16.6	31-L30-11-0280	25.4
315	170	212	31-L30-27-0315	11.4	31-L30-17-0315	18.7	31-L30-11-0315	28.6
355	185	232	31-L30-27-0355	12.9	31-L30-17-0355	21.1	31-L30-11-0355	32.2
400	210	264	31-L30-27-0400	14.5	31-L30-17-0400	23.7	31-L30-11-0400	36.3
450	235	295	31-L30-27-0450	16.3	31-L30-17-0450	26.7	31-L30-11-0450	40.9
500	260	327	31-L30-27-0500	18.1	31-L30-17-0500	29.7	31-L30-11-0500	45.4
560	290	365	31-L30-27-0560	20.3	31-L30-17-0560	33.2	31-L30-11-0560	50.8
630	325	409	31-L30-27-0630	22.8	31-L30-17-0630	37.4	31-L30-11-0630	57.2
710	365	460	31-L30-27-0710	25.7	31-L30-17-0710	42.1	31-L30-11-0710	64.5
800	410	517	31-L30-27-0800	29.0	31-L30-17-0800	47.4	31-L30-11-0800	72.8
900	460	580	31-L30-27-0900	32.6	31-L30-17-0900	53.3	31-L30-11-0900	81.8
1000	520	654	31-L30-27-1000	36.2	31-L30-17-1000	59.3	-	-
1200	620	781	31-L30-27-1200	43.5	31-L30-17-1200	67.9	-	-

HD-PE 15° ELBOW

(Fabricated)
for butt welding
molded from PE100

手工對接15°彎頭
DFP L15

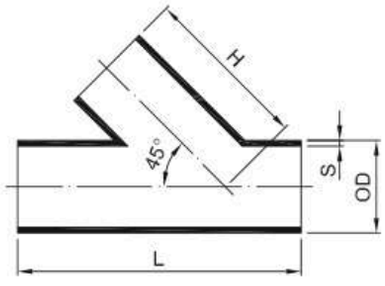


OD (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S (mm)	Code	S (mm)	Code	S (mm)
63	70	74	31-L15-27-0063	2.3	31-L15-17-0063	3.8	31-L15-11-0063	5.8
90	70	75	31-L15-27-0090	3.3	31-L15-17-0090	5.4	31-L15-11-0090	8.2
110	80	87	31-L15-27-0110	4.0	31-L15-17-0110	6.6	31-L15-11-0110	10.0
125	90	98	31-L15-27-0125	4.6	31-L15-17-0125	7.4	31-L15-11-0125	11.4
140	90	99	31-L15-27-0140	5.1	31-L15-17-0140	8.3	31-L15-11-0140	12.7
160	100	110	31-L15-27-0160	5.8	31-L15-17-0160	9.5	31-L15-11-0160	14.6
180	100	112	31-L15-27-0180	6.6	31-L15-17-0180	10.7	31-L15-11-0180	16.4
200	110	123	31-L15-27-0200	7.3	31-L15-17-0200	11.9	31-L15-11-0200	18.2
225	120	135	31-L15-27-0225	8.2	31-L15-17-0225	13.4	31-L15-11-0225	20.5
250	135	152	31-L15-27-0250	9.1	31-L15-17-0250	14.8	31-L15-11-0250	22.7
280	150	169	31-L15-27-0280	10.2	31-L15-17-0280	16.6	31-L15-11-0280	25.4
315	170	191	31-L15-27-0315	11.4	31-L15-17-0315	18.7	31-L15-11-0315	28.6
355	185	208	31-L15-27-0355	12.9	31-L15-17-0355	21.1	31-L15-11-0355	32.2
400	210	237	31-L15-27-0400	14.5	31-L15-17-0400	23.7	31-L15-11-0400	36.3
450	235	264	31-L15-27-0450	16.3	31-L15-17-0450	26.7	31-L15-11-0450	40.9
500	260	293	31-L15-27-0500	18.1	31-L15-17-0500	29.7	31-L15-11-0500	45.4
560	290	327	31-L15-27-0560	20.3	31-L15-17-0560	33.2	31-L15-11-0560	50.8
630	325	366	31-L15-27-0630	22.8	31-L15-17-0630	37.4	31-L15-11-0630	57.2
710	365	412	31-L15-27-0710	25.7	31-L15-17-0710	42.1	31-L15-11-0710	64.5
800	410	462	31-L15-27-0800	29.0	31-L15-17-0800	47.4	31-L15-11-0800	72.8
900	460	519	31-L15-27-0900	32.6	31-L15-17-0900	53.3	31-L15-11-0900	81.8
1000	520	586	31-L15-27-1000	36.2	31-L15-17-1000	59.3	-	-
1200	620	699	31-L15-27-1200	43.5	31-L15-17-1200	67.9	-	-

HD-PE 45° Y-TEE

(Fabricated)
for butt welding
molded from PE100

手工對接45°Y型三通
DFP TY3

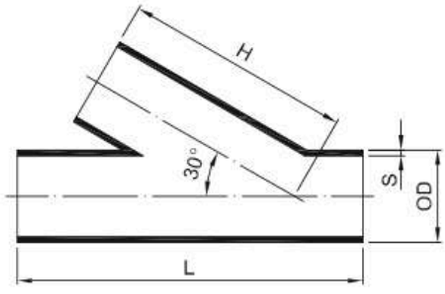


OD (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S (mm)	Code	S (mm)	Code	S (mm)
63	146	279	31-TY3-27-0063	2.3	31-TY3-17-0063	3.8	31-TY3-11-0063	5.8
90	179	317	31-TY3-27-0090	3.3	31-TY3-17-0090	5.4	31-TY3-11-0090	8.2
110	213	372	31-TY3-27-0110	4.0	31-TY3-17-0110	6.6	31-TY3-11-0110	10.0
125	241	420	31-TY3-27-0125	4.6	31-TY3-17-0125	7.4	31-TY3-11-0125	11.4
140	259	441	31-TY3-27-0140	5.1	31-TY3-17-0140	8.3	31-TY3-11-0140	12.7
160	293	496	31-TY3-27-0160	5.8	31-TY3-17-0160	9.5	31-TY3-11-0160	14.6
180	317	526	31-TY3-27-0180	6.6	31-TY3-17-0180	10.7	31-TY3-11-0180	16.4
200	351	582	31-TY3-27-0200	7.3	31-TY3-17-0200	11.9	31-TY3-11-0200	18.2
225	392	643	31-TY3-27-0225	8.2	31-TY3-17-0225	13.4	31-TY3-11-0225	20.5
250	437	719	31-TY3-27-0250	9.1	31-TY3-17-0250	14.8	31-TY3-11-0250	22.7
280	488	802	31-TY3-27-0280	10.2	31-TY3-17-0280	16.6	31-TY3-11-0280	25.4
315	550	905	31-TY3-27-0315	11.4	31-TY3-17-0315	18.7	31-TY3-11-0315	28.6
355	614	1003	31-TY3-27-0355	12.9	31-TY3-17-0355	21.1	31-TY3-11-0355	32.2
400	693	1134	31-TY3-27-0400	14.5	31-TY3-17-0400	23.7	31-TY3-11-0400	36.3
450	778	1271	31-TY3-27-0450	16.3	31-TY3-17-0450	26.7	31-TY3-11-0450	40.9
500	864	1411	31-TY3-27-0500	18.1	31-TY3-17-0500	29.7	31-TY3-11-0500	45.4
560	966	1577	31-TY3-27-0560	20.3	31-TY3-17-0560	33.2	31-TY3-11-0560	50.8
630	1086	1771	31-TY3-27-0630	22.8	31-TY3-17-0630	37.4	31-TY3-11-0630	57.2
710	1222	1993	31-TY3-27-0710	25.7	31-TY3-17-0710	42.1	31-TY3-11-0710	64.5
800	1376	2240	31-TY3-27-0800	29.0	31-TY3-17-0800	47.4	31-TY3-11-0800	72.8
900	1547	2518	31-TY3-27-0900	32.6	31-TY3-17-0900	53.3	31-TY3-11-0900	81.8
1000	1727	2821	31-TY3-27-1000	36.2	31-TY3-17-1000	59.3	-	-
1200	2069	3375	31-TY3-27-1200	43.5	31-TY3-17-1200	67.9	-	-

HD-PE 30° Y-TEE

(Fabricated)
for butt welding
molded from PE100

手工對接30°Y型三通
DFP TY4

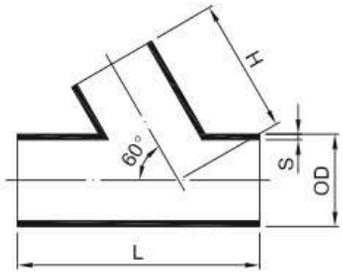


OD (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S (mm)	Code	S (mm)	Code	S (mm)
63	188	327	31-TY4-27-0063	2.3	31-TY4-17-0063	3.8	31-TY4-11-0063	5.8
90	238	380	31-TY4-27-0090	3.3	31-TY4-17-0090	5.4	31-TY4-11-0090	8.2
110	285	449	31-TY4-27-0110	4.0	31-TY4-17-0110	6.6	31-TY4-11-0110	10.0
125	323	508	31-TY4-27-0125	4.6	31-TY4-17-0125	7.4	31-TY4-11-0125	11.4
140	351	538	31-TY4-27-0140	5.1	31-TY4-17-0140	8.3	31-TY4-11-0140	12.7
160	399	607	31-TY4-27-0160	5.8	31-TY4-17-0160	9.5	31-TY4-11-0160	14.6
180	436	645	31-TY4-27-0180	6.6	31-TY4-17-0180	10.7	31-TY4-11-0180	16.4
200	483	715	31-TY4-27-0200	7.3	31-TY4-17-0200	11.9	31-TY4-11-0200	18.2
225	540	794	31-TY4-27-0225	8.2	31-TY4-17-0225	13.4	31-TY4-11-0225	20.5
250	602	886	31-TY4-27-0250	9.1	31-TY4-17-0250	14.8	31-TY4-11-0250	22.7
280	672	990	31-TY4-27-0280	10.2	31-TY4-17-0280	16.6	31-TY4-11-0280	25.4
315	758	1117	31-TY4-27-0315	11.4	31-TY4-17-0315	18.7	31-TY4-11-0315	28.6
355	847	1240	31-TY4-27-0355	12.9	31-TY4-17-0355	21.1	31-TY4-11-0355	32.2
400	956	1402	31-TY4-27-0400	14.5	31-TY4-17-0400	23.7	31-TY4-11-0400	36.3
450	1075	1573	31-TY4-27-0450	16.3	31-TY4-17-0450	26.7	31-TY4-11-0450	40.9
500	1193	1745	31-TY4-27-0500	18.1	31-TY4-17-0500	29.7	31-TY4-11-0500	45.4
560	1335	1951	31-TY4-27-0560	20.3	31-TY4-17-0560	33.2	31-TY4-11-0560	50.8
630	1501	2191	31-TY4-27-0630	22.8	31-TY4-17-0630	37.4	31-TY4-11-0630	57.2
710	1690	2466	31-TY4-27-0710	25.7	31-TY4-17-0710	42.1	31-TY4-11-0710	64.5
800	1903	2775	31-TY4-27-0800	29.0	31-TY4-17-0800	47.4	31-TY4-11-0800	72.8
900	2139	3117	31-TY4-27-0900	32.6	31-TY4-17-0900	53.3	31-TY4-11-0900	81.8
1000	2386	3489	31-TY4-27-1000	36.2	31-TY4-17-1000	59.3	-	-
1200	2859	4177	31-TY4-27-1200	43.5	31-TY4-17-1200	67.9	-	-

HD-PE 60° Y-TEE

(Fabricated)
for butt welding
molded from PE100

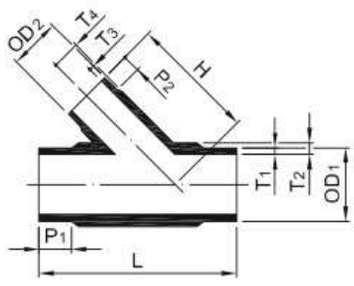
手工對接60°Y型三通
DFP TY5



OD (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S (mm)	Code	S (mm)	Code	S (mm)
63	125	248	31-TY5-27-0063	2.3	31-TY5-17-0063	3.8	31-TY5-11-0063	5.8
90	148	279	31-TY5-27-0090	3.3	31-TY5-17-0090	5.4	31-TY5-11-0090	8.2
110	175	327	31-TY5-27-0110	4.0	31-TY5-17-0110	6.6	31-TY5-11-0110	10.0
125	198	370	31-TY5-27-0125	4.6	31-TY5-17-0125	7.4	31-TY5-11-0125	11.4
140	211	387	31-TY5-27-0140	5.1	31-TY5-17-0140	8.3	31-TY5-11-0140	12.7
160	239	435	31-TY5-27-0160	5.8	31-TY5-17-0160	9.5	31-TY5-11-0160	14.6
180	256	456	31-TY5-27-0180	6.6	31-TY5-17-0180	10.7	31-TY5-11-0180	16.4
200	283	504	31-TY5-27-0200	7.3	31-TY5-17-0200	11.9	31-TY5-11-0200	18.2
225	315	560	31-TY5-27-0225	8.2	31-TY5-17-0225	13.4	31-TY5-11-0225	20.5
250	352	624	31-TY5-27-0250	9.1	31-TY5-17-0250	14.8	31-TY5-11-0250	22.7
280	392	699	31-TY5-27-0280	10.2	31-TY5-17-0280	16.6	31-TY5-11-0280	25.4
315	443	789	31-TY5-27-0315	11.4	31-TY5-17-0315	18.7	31-TY5-11-0315	28.6
355	492	873	31-TY5-27-0355	12.9	31-TY5-17-0355	21.1	31-TY5-11-0355	32.2
400	556	987	31-TY5-27-0400	14.5	31-TY5-17-0400	23.7	31-TY5-11-0400	36.3
450	625	1107	31-TY5-27-0450	16.3	31-TY5-17-0450	26.7	31-TY5-11-0450	40.9
500	693	1228	31-TY5-27-0500	18.1	31-TY5-17-0500	29.7	31-TY5-11-0500	45.4
560	775	1372	31-TY5-27-0560	20.3	31-TY5-17-0560	33.2	31-TY5-11-0560	50.8
630	871	1540	31-TY5-27-0630	22.8	31-TY5-17-0630	37.4	31-TY5-11-0630	57.2
710	980	1733	31-TY5-27-0710	25.7	31-TY5-17-0710	42.1	31-TY5-11-0710	64.5
800	1103	1947	31-TY5-27-0800	29.0	31-TY5-17-0800	47.4	31-TY5-11-0800	72.8
900	1239	2188	31-TY5-27-0900	32.6	31-TY5-17-0900	53.3	31-TY5-11-0900	81.8
1000	1386	2455	31-TY5-27-1000	36.2	31-TY5-17-1000	59.3	-	-
1200	1659	2936	31-TY5-27-1200	43.5	31-TY5-17-1200	67.9	-	-

HD-PE REDUCED Y-TEE

for butt welding
molded from PE100
對接異徑Y型三通
DFP TY1



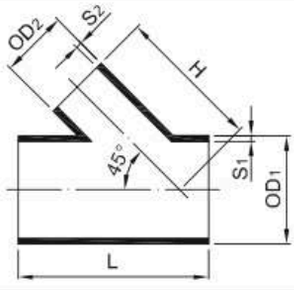


OD1/OD2 (mm)	H (mm)	L (mm)	P1 (mm)	P2 (mm)	SDR17.6 ISO S8.3 PN6				
					T1 (mm)	T2 (mm)	T3 (mm)	T4 (mm)	Code
63-63	150	253	31	31	3.6	7.8	3.6	7.8	31-TY1-17-063063
90-63	153.53	242	53	31	5.1	11.1	3.6	7.8	31-TY1-17-090063
90-90	214	348	53	53	5.1	11.1	5.1	11.1	31-TY1-17-090090
110-63	172.50	273	65	31	6.3	13.1	3.6	7.8	31-TY1-17-110063
110-110	245	414	65	65	6.3	13.1	6.3	13.1	31-TY1-17-110110
160-110	265.05	374	84	65	9.1	15.8	6.3	13.0	31-TY1-17-160110
160-160	330	530	84	84	9.1	15.8	9.1	15.8	31-TY1-17-160160

OD1/OD2 (mm)	H (mm)	L (mm)	P1 (mm)	P2 (mm)	SDR11 ISO S5 PN10				
					T1 (mm)	T2 (mm)	T3 (mm)	T4 (mm)	Code
63-63	150	253	31	31	6.0	10.0	6.0	10.0	31-TY1-11-063063
90-63	153.53	242	53	31	8.2	14.2	6.0	10.0	31-TY1-11-090063
90-90	214	348	53	53	8.5	14.2	8.5	14.2	31-TY1-11-090090
110-63	172.50	273	65	31	10.0	16.8	6.0	10.0	31-TY1-11-110063
110-90	207.35	316.25	65	53	10.0	16.8	8.5	14.2	31-TY1-11-110090
110-110	245	414	65	65	10.0	16.8	10.0	16.8	31-TY1-11-110110
160-90	248.04	356.50	84	53	14.6	21.3	8.3	14.2	31-TY1-11-160090
160-110	265.05	374	84	65	14.6	21.3	10.4	16.7	31-TY1-11-160110
160-160	330	530	84	84	14.6	21.3	14.6	21.3	31-TY1-17-160160

HD-PE REDUCED 45° Y-TEE

(Fabricated)
with reduced branch
for butt welding
molded from PE100
手工對接異徑45°Y型三通
DFP TY6

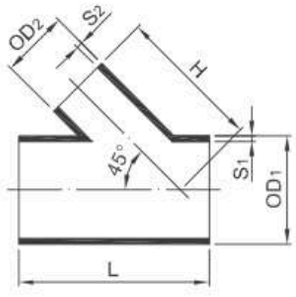


OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
110-32	174	262	-	-	31-TY6-17-110032	6.6/2.0	31-TY6-11-110032	10.0/2.9
110-40	178	273	-	-	31-TY6-17-110040	6.6/2.4	31-TY6-11-110040	10.0/3.7
110-50	183	287	-	-	31-TY6-17-110050	6.6/3.0	31-TY6-11-110050	10.0/4.6
110-75	195	323	31-TY6-27-110075	4.0/2.7	31-TY6-17-110075	6.6/4.5	31-TY6-11-110075	10.0/6.8
125-40	198	300	-	-	31-TY6-17-125040	7.4/2.4	31-TY6-11-125040	11.4/3.7
125-50	203	314	-	-	31-TY6-17-125050	7.4/3.0	31-TY6-11-125050	11.4/4.6
125-63	220	333	31-TY6-27-125063	4.6/2.3	31-TY6-17-125063	7.4/3.8	31-TY6-11-125063	11.4/5.8
125-75	216	350	31-TY6-27-125075	4.6/2.7	31-TY6-17-125075	7.4/4.5	31-TY6-11-125075	11.4/6.8
125-90	223	371	31-TY6-27-125090	4.6/3.3	31-TY6-17-125090	7.4/5.4	31-TY6-11-125090	11.4/8.2
125-110	233	399	31-TY6-27-125110	4.6/4.0	31-TY6-17-125110	7.4/6.6	31-TY6-11-125110	11.4/10.0

HD-PE REDUCED 45° Y-TEE

(Fabricated)
with reduced branch
for butt welding
molded from PE100

手工對接異徑45°Y型三通
DFP TY7

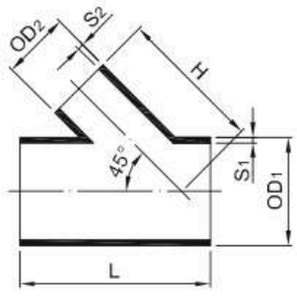


OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
140-50	214	314	-	-	31-TY6-17-140050	8.3/3.0	31-TY6-11-140050	12.7/4.6
140-63	220	333	31-TY6-27-140063	5.1/2.3	31-TY6-17-140063	8.3/3.8	31-TY6-11-140063	12.7/5.8
140-75	226	350	31-TY6-27-140075	5.1/2.7	31-TY6-17-140075	8.3/4.5	31-TY6-11-140075	12.7/6.8
140-90	234	371	31-TY6-27-140090	5.1/3.3	31-TY6-17-140090	8.3/5.4	31-TY6-11-140090	12.7/8.2
140-110	244	399	31-TY6-27-140110	5.1/4.0	31-TY6-17-140110	8.3/6.6	31-TY6-11-140110	12.7/10.0
140-125	251	420	31-TY6-27-140125	5.1/4.6	31-TY6-17-140125	8.3/7.4	31-TY6-11-140125	12.7/11.4
160-63	245	360	31-TY6-27-160063	5.8/2.3	31-TY6-17-160063	9.5/3.8	31-TY6-11-160063	14.6/5.8
160-75	251	377	31-TY6-27-160075	5.8/2.7	31-TY6-17-160075	9.5/4.5	31-TY6-11-160075	14.6/6.8
160-125	276	447	31-TY6-27-160125	5.8/4.6	31-TY6-17-160125	9.5/7.4	31-TY6-11-160125	14.6/11.4
160-140	283	469	31-TY6-27-160140	5.8/5.1	31-TY6-17-160140	9.5/8.3	31-TY6-11-160140	14.6/12.7
180-75	265	377	31-TY6-27-180075	6.6/2.7	31-TY6-17-180075	10.7/4.5	31-TY6-11-180075	16.4/6.8
180-90	272	398	31-TY6-27-180090	6.6/3.3	31-TY6-17-180090	10.7/5.4	31-TY6-11-180090	16.4/8.2
180-110	300	426	31-TY6-27-180110	6.6/4.0	31-TY6-17-180110	10.7/6.6	31-TY6-11-180110	16.4/10.0
180-125	290	447	31-TY6-27-180125	6.6/4.6	31-TY6-17-180125	10.7/7.4	31-TY6-11-180125	16.4/11.4
180-140	297	469	31-TY6-27-180140	6.6/5.1	31-TY6-17-180140	10.7/8.3	31-TY6-11-180140	16.4/12.7
180-160	307	497	31-TY6-27-180160	6.6/5.8	31-TY6-17-180160	10.7/9.5	31-TY6-11-180160	16.4/14.6
200-90	296	425	31-TY6-27-200090	7.3/3.3	31-TY6-17-200090	11.9/5.4	31-TY6-11-200090	18.2/8.2
200-110	306	453	31-TY6-27-200110	7.3/4.0	31-TY6-17-200110	11.9/6.6	31-TY6-11-200110	18.2/10.0
200-125	338	475	31-TY6-27-200125	7.3/4.6	31-TY6-17-200125	11.9/7.4	31-TY6-11-200125	18.2/11.4
200-140	321	496	31-TY6-27-200140	7.3/5.1	31-TY6-17-200140	11.9/8.3	31-TY6-11-200140	18.2/12.7
200-160	331	524	31-TY6-27-200160	7.3/5.8	31-TY6-17-200160	11.9/9.5	31-TY6-11-200160	18.2/14.6
200-180	341	552	31-TY6-27-200180	7.3/6.6	31-TY6-17-200180	11.9/10.7	31-TY6-11-200180	18.2/16.4
225-110	334	482	31-TY6-27-225110	8.2/4.0	31-TY6-17-225110	13.4/6.6	31-TY6-11-225110	20.5/10.0
225-125	342	502	31-TY6-27-225125	8.2/4.6	31-TY6-17-225125	13.4/7.4	31-TY6-11-225125	20.5/11.4
225-140	349	523	31-TY6-27-225140	8.2/5.1	31-TY6-17-225140	13.4/8.3	31-TY6-11-225140	20.5/12.7
225-160	359	551	31-TY6-27-225160	8.2/5.8	31-TY6-17-225160	13.4/9.5	31-TY6-11-225160	20.5/14.6
225-180	369	579	31-TY6-27-225180	8.2/6.6	31-TY6-17-225180	13.4/10.7	31-TY6-11-225180	20.5/16.4
225-200	379	608	31-TY6-27-225200	8.2/7.3	31-TY6-17-225200	13.4/11.9	31-TY6-11-225200	20.5/18.2
250-125	374	542	31-TY6-27-250125	9.1/4.6	31-TY6-17-250125	14.8/7.4	31-TY6-11-250125	22.7/11.4
250-140	382	563	31-TY6-27-250140	9.1/5.1	31-TY6-17-250140	14.8/8.3	31-TY6-11-250140	22.7/12.7
250-160	392	592	31-TY6-27-250160	9.1/5.8	31-TY6-17-250160	14.8/9.5	31-TY6-11-250160	22.7/14.6
250-180	402	620	31-TY6-27-250180	9.1/6.6	31-TY6-17-250180	14.8/10.7	31-TY6-11-250180	22.7/16.4
250-200	412	648	31-TY6-27-250200	9.1/7.3	31-TY6-17-250200	14.8/11.9	31-TY6-11-250200	22.7/18.2
250-225	424	684	31-TY6-27-250225	9.1/8.2	31-TY6-17-250225	14.8/13.4	31-TY6-11-250225	22.7/20.5
280-140	418	632	31-TY6-27-280140	10.2/5.1	31-TY6-17-280140	16.6/8.3	31-TY6-11-280140	25.4/12.7
280-160	428	632	31-TY6-27-2801606	10.2/5.8	31-TY6-17-280160	16.6/9.5	31-TY6-11-280160	25.4/14.6
280-180	439	661	31-TY6-27-280180	10.2/6.6	31-TY6-17-280180	16.6/10.7	31-TY6-11-280180	25.4/16.4
280-200	448	689	31-TY6-27-280200	10.2/7.3	31-TY6-17-280200	16.6/11.9	31-TY6-11-280200	25.4/18.2
280-225	460	724	31-TY6-27-280225	10.2/8.2	31-TY6-17-280225	16.6/13.4	31-TY6-11-280225	25.4/20.5
280-250	473	760	31-TY6-27-280250	10.2/9.1	31-TY6-17-280250	16.6/14.8	31-TY6-11-280250	25.4/22.7

HD-PE REDUCED 45° Y-TEE

(Fabricated)
with reduced branch
for butt welding
molded from PE100

手工對接異徑45°Y型三通
DFP TY7

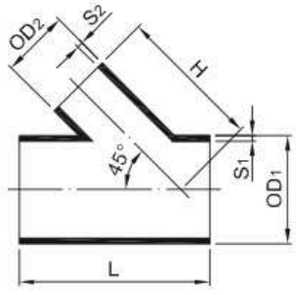


OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
315-160	473	686	31-TY6-27-315160	11.4/5.8	31-TY6-17-315160	18.7/9.5	31-TY6-11-315160	28.6/14.6
315-180	483	715	31-TY6-27-315180	11.4/6.6	31-TY6-17-315180	18.7/10.7	31-TY6-11-315180	28.6/16.4
315-200	491	743	31-TY6-27-315200	11.4/7.3	31-TY6-17-315200	18.7/11.9	31-TY6-11-315200	28.6/18.2
315-225	505	772	31-TY6-27-315225	11.4/8.2	31-TY6-17-315225	18.7/13.4	31-TY6-11-315225	28.6/20.5
315-250	518	814	31-TY6-27-315250	11.4/9.1	31-TY6-17-315250	18.7/14.8	31-TY6-11-315250	28.6/22.7
355-280	576	897	31-TY6-27-355280	12.9/10.2	31-TY6-17-355280	21.1/16.6	31-TY6-11-355280	32.2/25.4
355-315	583	946	31-TY6-27-355315	12.9/11.4	31-TY6-17-355315	21.1/18.7	31-TY6-11-355315	32.2/28.6
400-200	593	851	31-TY6-27-400200	14.5/7.3	31-TY6-17-400200	23.7/11.9	31-TY6-11-400200	36.3/18.2
400-225	605	879	31-TY6-27-400225	14.5/8.2	31-TY6-17-400225	23.7/13.4	31-TY6-11-400225	36.3/20.5
400-250	611	922	31-TY6-27-400250	14.5/9.1	31-TY6-17-400250	23.7/14.8	31-TY6-11-400250	36.3/22.7
400-280	633	964	31-TY6-27-400280	14.5/10.2	31-TY6-17-400280	23.7/16.6	31-TY6-11-400280	36.3/25.4
400-315	650	1014	31-TY6-27-400315	14.5/11.4	31-TY6-17-400315	23.7/18.7	31-TY6-11-400315	36.3/28.6
400-355	670	1071	31-TY6-27-400355	14.5/12.9	31-TY6-17-400355	23.7/21.1	31-TY6-11-400355	36.3/32.2
450-225	666	954	31-TY6-27-450225	16.3/8.2	31-TY6-17-450225	26.7/13.4	31-TY6-11-450225	40.9/20.5
450-250	678	990	31-TY6-27-450250	16.3/9.1	31-TY6-17-450250	26.7/14.8	31-TY6-11-450250	40.9/22.7
450-280	693	1034	31-TY6-27-450280	16.3/10.2	31-TY6-17-450280	26.7/16.6	31-TY6-11-450280	40.9/25.4
450-315	711	1082	31-TY6-27-450315	16.3/11.4	31-TY6-17-450315	26.7/18.7	31-TY6-11-450315	40.9/28.6
450-355	731	1138	31-TY6-27-450355	16.3/12.9	31-TY6-17-450355	26.7/27.1	31-TY6-11-450355	40.9/32.2
450-400	753	1202	31-TY6-27-450400	16.3/14.5	31-TY6-17-450400	26.7/23.7	31-TY6-11-450400	40.9/36.3
500-250	739	1057	31-TY6-27-500250	18.1/9.1	31-TY6-17-500250	29.7/14.8	31-TY6-11-500250	45.4/22.7
500-280	754	1100	31-TY6-27-500280	18.1/10.2	31-TY6-17-500280	29.7/16.6	31-TY6-11-500280	45.4/25.4
500-315	775	1149	31-TY6-27-500315	18.1/11.4	31-TY6-17-500315	29.7/18.7	31-TY6-11-500315	45.4/28.6
500-355	791	1206	31-TY6-27-500355	18.1/12.9	31-TY6-17-500355	29.7/21.1	31-TY6-11-500355	45.4/32.2
500-400	814	1269	31-TY6-27-500400	18.1/14.5	31-TY6-17-500400	29.7/23.7	31-TY6-11-500400	45.4/36.3
500-450	839	1340	31-TY6-27-500450	18.1/16.3	31-TY6-17-500450	29.7/26.7	31-TY6-11-500450	45.4/40.9
560-280	826	1181	31-TY6-27-560280	20.3/10.2	31-TY6-17-560280	33.2/16.6	31-TY6-11-560280	50.8/25.4
560-315	843	1231	31-TY6-27-560315	20.3/11.4	31-TY6-17-560315	33.2/18.7	31-TY6-11-560315	50.8/28.6
560-355	871	1287	31-TY6-27-560355	20.3/12.9	31-TY6-17-560355	33.2/21.1	31-TY6-11-560355	50.8/32.2
560-400	886	1351	31-TY6-27-560400	20.3/14.5	31-TY6-17-560400	33.2/23.7	31-TY6-11-560400	50.8/36.3
560-450	911	1422	31-TY6-27-560450	20.3/16.3	31-TY6-17-560450	33.2/26.7	31-TY6-11-560450	50.8/40.9
560-500	936	1493	31-TY6-27-560500	20.3/18.1	31-TY6-17-560500	33.2/29.7	31-TY6-11-560500	50.8/45.4
630-315	928	1325	31-TY6-27-630315	22.8/11.4	31-TY6-17-630315	37.4/18.7	31-TY6-11-630315	57.2/28.6
630-355	948	1382	31-TY6-27-630355	22.8/12.9	31-TY6-17-630355	37.4/21.1	31-TY6-11-630355	57.2/32.2
630-400	970	1445	31-TY6-27-630400	22.8/14.5	31-TY6-17-630400	37.4/23.7	31-TY6-11-630400	57.2/36.3

HD-PE REDUCED 45° Y-TEE

(Fabricated)
with reduced branch
for butt welding
molded from PE100

手工對接異徑45°Y型三通
DFP TY7

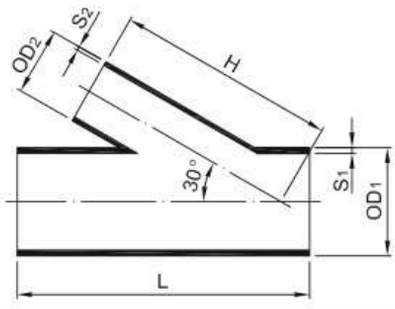


OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
630-450	995	1516	31-TY6-27-630450	22.8/16.3	31-TY6-17-630450	37.4/26.7	31-TY6-11-630450	57.2/40.9
630-500	1020	1587	31-TY6-27-630500	22.8/18.1	31-TY6-17-630500	37.4/29.7	31-TY6-11-630500	57.2/45.4
630-560	1050	1672	31-TY6-27-630560	22.8/20.3	31-TY6-17-630560	37.4/33.2	31-TY6-11-630560	57.2/50.8
710-355	1045	1490	31-TY6-27-710355	25.7/12.9	31-TY6-17-710355	42.1/21.1	31-TY6-11-710355	64.5/32.2
710-400	1067	1554	31-TY6-27-710400	25.7/14.5	31-TY6-17-710400	42.1/23.7	31-TY6-11-710400	64.5/36.3
710-450	1091	1626	31-TY6-27-710450	25.7/16.3	31-TY6-17-710450	42.1/26.7	31-TY6-11-710450	64.5/40.9
710-500	1117	1695	31-TY6-27-710500	25.7/18.1	31-TY6-17-710500	42.1/29.7	31-TY6-11-710500	64.5/45.4
710-560	1147	1808	31-TY6-27-710560	25.7/20.3	31-TY6-17-710560	42.1/33.2	31-TY6-11-710560	64.5/50.8
710-630	1182	1879	31-TY6-27-710630	25.7/22.8	31-TY6-17-710305	42.1/37.4	31-TY6-11-710305	64.5/57.2
800-400	1176	1676	31-TY6-27-800400	29.0/14.5	31-TY6-17-800400	47.4/23.7	31-TY6-11-800400	72.8/36.3
800-450	1201	1746	31-TY6-27-800450	29.0/16.3	31-TY6-17-800450	47.4/26.7	31-TY6-11-800450	72.8/40.9
800-500	1226	1817	31-TY6-27-800500	29.0/18.1	31-TY6-17-800500	47.4/29.7	31-TY6-11-800500	72.8/45.4
800-560	1256	1902	31-TY6-27-800560	29.0/20.3	31-TY6-17-800560	47.4/33.2	31-TY6-11-800560	72.8/50.8
800-630	1291	2001	31-TY6-27-800630	29.0/22.8	31-TY6-17-800630	47.4/37.4	31-TY6-11-800630	72.8/57.2
800-710	1331	2114	31-TY6-27-800710	29.0/25.7	31-TY6-17-800710	47.4/42.1	31-TY6-11-800710	72.8/64.5
900-450	1321	1882	31-TY6-27-900450	32.6/16.3	31-TY6-17-900450	53.3/26.7	31-TY6-11-900450	81.8/40.9
900-500	1346	1952	31-TY6-27-900500	32.6/18.1	31-TY6-17-900500	53.3/29.7	31-TY6-11-900500	81.8/45.4
900-560	1374	2041	31-TY6-27-900560	32.6/20.3	31-TY6-17-900560	53.3/33.2	31-TY6-11-900560	81.8/50.8
900-630	1411	2138	31-TY6-27-900630	32.6/22.8	31-TY6-17-900630	53.3/37.4	31-TY6-11-900630	81.8/57.2
900-710	1451	2246	31-TY6-27-900710	32.6/25.7	31-TY6-17-900710	53.3/42.1	31-TY6-11-900710	81.8/64.5
900-800	1496	2378	31-TY6-27-900800	32.6/29.0	31-TY6-17-900800	53.3/47.4	31-TY6-11-900800	81.8/72.8
1000-500	1477	2115	31-TY6-27-100500	36.2/18.1	31-TY6-17-100500	59.3/29.7	-	-
1000-560	1507	2200	31-TY6-27-100560	36.2/20.3	31-TY6-17-100560	59.3/33.2	-	-
1000-630	1548	2294	31-TY6-27-100630	36.2/22.8	31-TY6-17-100630	59.3/37.4	-	-
1000-710	1580	2406	31-TY6-27-100710	36.2/25.7	31-TY6-17-100710	59.3/42.1	-	-
1000-800	1625	2537	31-TY6-27-100800	36.2/29.0	31-TY6-17-100800	59.3/47.4	-	-
1000-900	1675	2674	31-TY6-27-100900	36.2/32.6	31-TY6-17-100900	59.3/53.3	-	-
1200-560	1749	2470	31-TY6-27-120560	43.5/20.3	31-TY6-17-120560	67.9/33.2	-	-
1200-630	1784	2570	31-TY6-27-120630	43.5/22.8	31-TY6-17-120630	67.9/37.4	-	-
1200-710	1824	2682	31-TY6-27-120710	43.5/25.7	31-TY6-17-120710	67.9/42.1	-	-
1200-800	1869	2810	31-TY6-27-120800	43.5/29.0	31-TY6-17-120800	67.9/47.4	-	-
1200-900	1919	2951	31-TY6-27-120900	43.5/32.6	31-TY6-17-120900	67.9/53.3	-	-
1200-1000	1969	3093	31-TY6-27-120100	43.5/36.2	31-TY6-17-120100	67.9/59.3	-	-

HD-PE REDUCED 30° Y-TEE

(Fabricated)
with reduced branch
for butt welding
molded from PE100

手工對接異徑30°Y型三通
DFP TY8

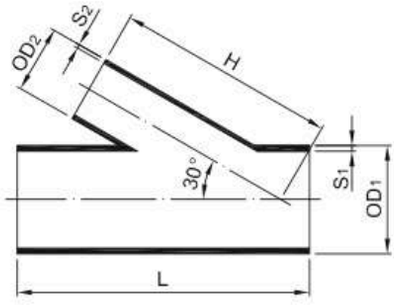


OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
110-32	218	293	-	-	31-TY8-17-110032	6.6/2.0	31-TY8-11-110032	10.0/2.9
110-40	225	309	-	-	31-TY8-17-110040	6.6/2.4	31-TY8-11-110040	10.0/3.7
110-50	233	329	-	-	31-TY8-17-110050	6.6/3.0	31-TY8-11-110050	10.0/4.6
110-63	245	355	31-TY8-27-110063	4.0/2.3	31-TY8-17-110063	6.6/3.8	31-TY8-11-110063	10.0/5.8
110-75	255	379	31-TY8-27-110075	4.0/2.7	31-TY8-17-110075	6.6/4.5	31-TY8-11-110075	10.0/6.8
110-90	290	409	31-TY8-27-110090	4.0/3.3	31-TY8-17-110090	6.6/5.4	31-TY8-11-110090	10.0/8.2
125-40	250	338	-	-	31-TY8-17-125040	7.4/2.4	31-TY8-11-125040	11.4/3.7
125-50	258	358	-	-	31-TY8-17-125050	7.4/3.0	31-TY8-11-125050	11.4/4.6
125-63	270	384	31-TY8-27-125063	4.6/2.3	31-TY8-17-125063	7.4/3.8	31-TY8-11-125063	11.4/5.8
125-75	280	408	31-TY8-27-125075	4.6/2.7	31-TY8-17-125075	7.4/4.5	31-TY8-11-125075	11.4/6.8
125-90	293	438	31-TY8-27-125090	4.6/3.3	31-TY8-17-125090	7.4/5.4	31-TY8-11-125090	11.4/8.2
125-110	310	478	31-TY8-27-125110	4.6/4.0	31-TY8-17-125110	7.4/6.6	31-TY8-11-125110	11.4/10.0
140-50	273	360	-	-	31-TY8-17-140050	8.3/3.0	31-TY8-11-140050	12.7/4.6
140-63	285	384	31-TY8-27-140063	5.1/2.3	31-TY8-17-140063	8.3/3.8	31-TY8-11-140063	12.7/5.8
140-75	295	408	31-TY8-27-140075	5.1/2.7	31-TY8-17-140075	8.3/4.5	31-TY8-11-140075	12.7/6.8
140-90	308	438	31-TY8-27-140090	5.1/3.3	31-TY8-17-140090	8.3/5.4	31-TY8-11-140090	12.7/8.2
140-110	325	478	31-TY8-27-140110	5.1/4.0	31-TY8-17-140110	8.3/6.6	31-TY8-11-140110	12.7/10.0
140-125	338	508	31-TY8-27-140125	5.1/4.6	31-TY8-17-140125	8.3/7.4	31-TY8-11-140125	12.7/11.4
160-63	315	413	31-TY8-27-160063	5.8/2.3	31-TY8-17-160063	9.5/3.8	31-TY8-11-160063	14.6/5.8
160-75	325	437	31-TY8-27-160075	5.8/2.7	31-TY8-17-160075	9.5/4.5	31-TY8-11-160075	14.6/6.8
160-90	338	467	31-TY8-27-160090	5.8/3.3	31-TY8-17-160090	9.5/5.4	31-TY8-11-160090	14.6/8.2
160-110	355	507	31-TY8-27-160110	5.8/4.0	31-TY8-17-160110	9.5/6.6	31-TY8-11-160110	14.6/10.0
160-125	368	537	31-TY8-27-160125	5.8/4.6	31-TY8-17-160125	9.5/7.4	31-TY8-11-160125	14.6/11.4
160-140	381	567	31-TY8-27-160140	5.8/5.1	31-TY8-17-160140	9.5/8.3	31-TY8-11-160140	14.6/12.7
180-75	345	437	31-TY8-27-180075	6.6/2.7	31-TY8-17-180075	10.7/4.5	31-TY8-11-180075	16.4/6.8
180-90	358	467	31-TY8-27-180090	6.6/3.3	31-TY8-17-180090	10.7/5.4	31-TY8-11-180090	16.4/8.2
180-110	375	507	31-TY8-27-180110	6.6/4.0	31-TY8-17-180110	10.7/6.6	31-TY8-11-180110	16.4/10.0
180-125	388	537	31-TY8-27-180125	6.6/4.6	31-TY8-17-180125	10.7/7.4	31-TY8-11-180125	16.4/11.4
180-140	401	567	31-TY8-27-180140	6.6/5.1	31-TY8-17-180140	10.7/8.3	31-TY8-11-180140	16.4/12.7
180-160	419	607	31-TY8-27-180160	6.6/5.8	31-TY8-17-180160	10.7/9.5	31-TY8-11-180160	16.4/14.6
200-90	388	495	31-TY8-27-200090	7.3/3.3	31-TY8-17-200090	11.9/5.4	31-TY8-11-200090	18.2/8.2
200-110	405	535	31-TY8-27-200110	7.3/4.0	31-TY8-17-200110	11.9/6.6	31-TY8-11-200110	18.2/10.0
200-125	418	565	31-TY8-27-200125	7.3/4.6	31-TY8-17-200125	11.9/7.4	31-TY8-11-200125	18.2/11.4

HD-PE REDUCED 30° Y-TEE

(Fabricated)
with reduced branch
for butt welding
molded from PE100

手工對接異徑30°Y型三通
DFP TY8

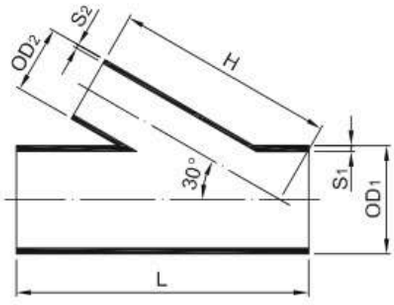


OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
200-140	431	595	31-TY8-27-200140	7.3/5.1	31-TY8-17-200140	11.9/8.3	31-TY8-11-200140	18.2/12.7
200-160	449	635	31-TY8-27-200160	7.3/5.8	31-TY8-17-200160	11.9/9.5	31-TY8-11-200160	18.2/14.6
200-180	466	675	31-TY8-27-200180	7.3/6.6	31-TY8-17-200180	11.9/10.7	31-TY8-11-200180	18.2/16.4
225-110	440	564	31-TY8-27-225110	8.2/4.0	31-TY8-17-225110	13.4/6.6	31-TY8-11-225110	20.5/10.0
225-125	453	594	31-TY8-27-225125	8.2/4.6	31-TY8-17-225125	13.4/7.4	31-TY8-11-225125	20.5/11.4
225-140	466	624	31-TY8-27-225140	8.2/5.1	31-TY8-17-225140	13.4/8.3	31-TY8-11-225140	20.5/12.7
225-160	484	664	31-TY8-27-225160	8.2/5.8	31-TY8-17-225160	13.4/9.5	31-TY8-11-225160	20.5/14.6
225-180	501	704	31-TY8-27-225180	8.2/6.6	31-TY8-17-225180	13.4/10.7	31-TY8-11-225180	20.5/16.4
225-200	518	744	31-TY8-27-225200	8.2/7.3	31-TY8-17-225200	13.4/11.9	31-TY8-11-225200	20.5/18.2
250-125	493	640	31-TY8-27-250125	9.1/4.6	31-TY8-17-250125	14.8/7.4	31-TY8-11-250125	22.7/11.4
250-140	506	667	31-TY8-27-250140	9.1/5.1	31-TY8-17-250140	14.8/8.3	31-TY8-11-250140	22.7/12.7
250-160	524	707	31-TY8-27-250160	9.1/5.8	31-TY8-17-250160	14.8/9.5	31-TY8-11-250160	22.7/14.6
250-180	541	747	31-TY8-27-250180	9.1/6.6	31-TY8-17-250180	14.8/10.7	31-TY8-11-250180	22.7/16.4
250-200	558	787	31-TY8-27-250200	9.1/7.3	31-TY8-17-250200	14.8/11.9	31-TY8-11-250200	22.7/18.2
250-225	580	837	31-TY8-27-250225	9.1/8.2	31-TY8-17-250225	14.8/13.4	31-TY8-11-250225	22.7/20.5
280-140	551	710	31-TY8-27-280140	10.2/5.1	31-TY8-17-280140	16.6/8.3	31-TY8-11-280140	25.4/12.7
280-160	569	750	31-TY8-27-280160	10.2/5.8	31-TY8-17-280160	16.6/9.5	31-TY8-11-280160	25.4/14.6
280-180	586	790	31-TY8-27-280180	10.2/6.6	31-TY8-17-280180	16.6/10.7	31-TY8-11-280180	25.4/16.4
280-200	603	830	31-TY8-27-280200	10.2/7.3	31-TY8-17-280200	16.6/11.9	31-TY8-11-280200	25.4/18.2
280-225	625	880	31-TY8-27-280225	10.2/8.2	31-TY8-17-280225	16.6/13.4	31-TY8-11-280225	25.4/20.5
280-250	647	930	31-TY8-27-280250	10.2/9.1	31-TY8-17-280250	16.6/14.8	31-TY8-11-280250	25.4/22.7
315-160	624	807	31-TY8-27-315160	11.4/5.8	31-TY8-17-315160	18.7/9.5	31-TY8-11-315160	28.6/14.6
315-180	641	847	31-TY8-27-315180	11.4/6.6	31-TY8-17-315180	18.7/10.7	31-TY8-11-315180	28.6/16.4
315-200	658	887	31-TY8-27-315200	11.4/7.3	31-TY8-17-315200	18.7/11.9	31-TY8-11-315200	28.6/18.2
315-225	680	937	31-TY8-27-315225	11.4/8.2	31-TY8-17-315225	18.7/13.4	31-TY8-11-315225	28.6/20.5
315-250	702	987	31-TY8-27-315250	11.4/9.1	31-TY8-17-315250	18.7/14.8	31-TY8-11-315250	28.6/22.7
315-280	728	1047	31-TY8-27-315280	11.4/10.2	31-TY8-17-315280	18.7/16.6	31-TY8-11-315280	28.6/25.4
355-180	696	890	31-TY8-27-355180	12.9/6.6	31-TY8-17-355180	21.1/10.7	31-TY8-11-355180	32.2/16.4
355-200	713	930	31-TY8-27-355200	12.9/7.3	31-TY8-17-355200	21.1/11.9	31-TY8-11-355200	32.2/18.2
355-225	735	980	31-TY8-27-355225	12.9/8.2	31-TY8-17-355225	21.1/13.4	31-TY8-11-355225	32.2/20.5
355-250	757	1030	31-TY8-27-355250	12.9/9.1	31-TY8-17-355250	21.1/14.8	31-TY8-11-355250	32.2/22.7
355-280	782	1090	31-TY8-27-355280	12.9/10.2	31-TY8-17-355280	21.1/16.6	31-TY8-11-355280	32.2/25.4
355-315	813	1160	31-TY8-27-355315	12.9/11.4	31-TY8-17-355315	21.1/18.7	31-TY8-11-355315	32.2/28.6

HD-PE REDUCED 30° Y-TEE

(Fabricated)
with reduced branch
for butt welding
molded from PE100

手工對接異徑30°Y型三通
DFP TY8

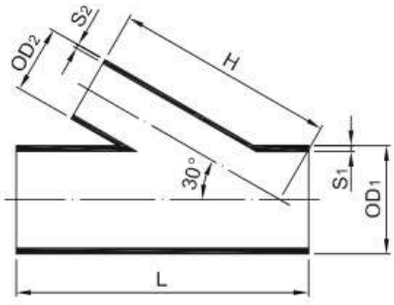


OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
400-200	783	1002	31-TY8-27-400200	14.5/7.3	31-TY8-17-400200	23.7/11.9	31-TY8-11-400200	36.3/18.2
400-225	805	1052	31-TY8-27-400225	14.5/8.2	31-TY8-17-400225	23.7/13.4	31-TY8-11-400225	36.3/20.5
400-250	827	1102	31-TY8-27-400250	14.5/9.1	31-TY8-17-400250	23.7/14.8	31-TY8-11-400250	36.3/22.7
400-280	852	1162	31-TY8-27-400280	14.5/10.2	31-TY8-17-400280	23.7/16.6	31-TY8-11-400280	36.3/25.4
400-315	883	1232	31-TY8-27-400315	14.5/11.4	31-TY8-17-400315	23.7/18.7	31-TY8-11-400315	36.3/28.6
400-355	917	1312	31-TY8-27-400355	14.5/12.9	31-TY8-17-400355	23.7/21.1	31-TY8-11-400355	36.3/32.2
450-225	880	1124	31-TY8-27-450225	16.3/8.2	31-TY8-17-450225	26.7/13.4	31-TY8-11-450225	40.9/20.5
450-250	902	1174	31-TY8-27-450250	16.3/9.1	31-TY8-17-450250	26.7/14.8	31-TY8-11-450250	40.9/22.7
450-280	927	1234	31-TY8-27-450280	16.3/10.2	31-TY8-17-450280	26.7/16.6	31-TY8-11-450280	40.9/25.4
450-315	958	1304	31-TY8-27-450315	16.3/11.4	31-TY8-17-450315	26.7/18.7	31-TY8-11-450315	40.9/28.6
450-355	992	1384	31-TY8-27-450355	16.3/12.9	31-TY8-17-450355	26.7/21.1	31-TY8-11-450355	40.9/32.2
450-400	1031	1474	31-TY8-27-450400	16.3/14.5	31-TY8-17-450400	26.7/23.7	31-TY8-11-450400	40.9/36.3
500-250	977	1245	31-TY8-27-500250	18.1/9.1	31-TY8-17-500250	29.7/14.8	31-TY8-11-500250	45.4/22.7
500-280	1002	1305	31-TY8-27-500280	18.1/10.2	31-TY8-17-500280	29.7/16.6	31-TY8-11-500280	45.4/25.4
500-315	1033	1375	31-TY8-27-500315	18.1/11.4	31-TY8-17-500315	29.7/18.7	31-TY8-11-500315	45.4/28.6
500-355	1067	1455	31-TY8-27-500355	18.1/12.9	31-TY8-17-500355	29.7/21.1	31-TY8-11-500355	45.4/32.2
500-400	1106	1545	31-TY8-27-500400	18.1/14.5	31-TY8-17-500400	29.7/23.7	31-TY8-11-500400	45.4/36.3
500-450	1150	1645	31-TY8-27-500450	18.1/16.3	31-TY8-17-500450	29.7/26.7	31-TY8-11-500450	45.4/40.9
560-280	1092	1391	31-TY8-27-560280	20.3/10.2	31-TY8-17-560280	33.2/16.6	31-TY8-11-560280	50.8/25.4
560-315	1123	1461	31-TY8-27-560315	20.3/11.4	31-TY8-17-560315	33.2/18.7	31-TY8-11-560315	50.8/28.6
560-355	1157	1541	31-TY8-27-560355	20.3/12.9	31-TY8-17-560355	33.2/21.1	31-TY8-11-560355	50.8/32.2
560-400	1196	1628	31-TY8-27-560400	20.3/14.5	31-TY8-17-560400	33.2/23.7	31-TY8-11-560400	50.8/36.3
560-450	1240	1731	31-TY8-27-560450	20.3/16.3	31-TY8-17-560450	33.2/26.7	31-TY8-11-560450	50.8/40.9
560-500	1283	1831	31-TY8-27-560500	20.3/18.1	31-TY8-17-560500	33.2/29.7	31-TY8-11-560500	50.8/45.4
630-315	1228	1561	31-TY8-27-630315	22.8/11.4	31-TY8-17-630315	37.4/18.7	31-TY8-11-630315	57.2/28.6
630-355	1262	1641	31-TY8-27-630355	22.8/12.9	31-TY8-17-630355	37.4/21.1	31-TY8-11-630355	57.2/32.2
630-400	1301	1731	31-TY8-27-630400	22.8/14.5	31-TY8-17-630400	37.4/23.7	31-TY8-11-630400	57.2/36.3
630-450	1345	1831	31-TY8-27-630450	22.8/16.3	31-TY8-17-630450	37.4/26.7	31-TY8-11-630450	57.2/40.9
630-500	1388	1931	31-TY8-27-630500	22.8/18.1	31-TY8-17-630500	37.4/29.7	31-TY8-11-630500	57.2/45.4
630-560	1437	2056	31-TY8-27-630560	22.8/20.3	31-TY8-17-630560	37.4/33.2	31-TY8-11-630560	57.2/50.8

HD-PE REDUCED 30° Y-TEE

(Fabricated)
with reduced branch
for butt welding
molded from PE100

手工對接異徑30°Y型三通
DFP TY8

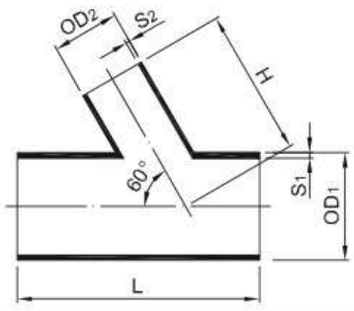


OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
710-355	1382	1756	31-TY8-27-710355	25.7/12.9	31-TY8-17-710355	42.1/21.1	31-TY8-11-710355	64.5/32.2
710-400	1421	1846	31-TY8-27-710400	25.7/14.5	31-TY8-17-710400	42.1/23.7	31-TY8-11-710400	64.5/36.3
710-450	1465	1946	31-TY8-27-710450	25.7/16.3	31-TY8-17-710450	42.1/26.7	31-TY8-11-710450	64.5/40.9
710-500	1508	2046	31-TY8-27-710500	25.7/18.1	31-TY8-17-710500	42.1/29.7	31-TY8-11-710500	64.5/45.4
710-560	1560	2166	31-TY8-27-710560	25.7/20.3	31-TY8-17-710560	42.1/33.2	31-TY8-11-710560	64.5/50.8
710-630	1621	2306	31-TY8-27-710630	25.7/22.8	31-TY8-17-710305	42.1/37.4	31-TY8-11-710305	64.5/57.2
800-400	1556	1975	31-TY8-27-800400	29.0/14.5	31-TY8-17-800400	47.4/23.7	31-TY8-11-800400	72.8/36.3
800-450	1600	2075	31-TY8-27-800450	29.0/16.3	31-TY8-17-800450	47.4/26.7	31-TY8-11-800450	72.8/40.9
800-500	1643	2175	31-TY8-27-800500	29.0/18.1	31-TY8-17-800500	47.4/29.7	31-TY8-11-800500	72.8/45.4
800-560	1695	2295	31-TY8-27-800560	29.0/20.3	31-TY8-17-800560	47.4/33.2	31-TY8-11-800560	72.8/50.8
800-630	1756	2432	31-TY8-27-800630	29.0/22.8	31-TY8-17-800630	47.4/37.4	31-TY8-11-800630	72.8/57.2
800-710	1825	2595	31-TY8-27-800710	29.0/25.7	31-TY8-17-800710	47.4/42.1	31-TY8-11-800710	72.8/64.5
900-450	1750	2218	31-TY8-27-900450	32.6/16.3	31-TY8-17-900450	53.3/26.7	31-TY8-11-900450	81.8/40.9
900-500	1793	2318	31-TY8-27-900500	32.6/18.1	31-TY8-17-900500	53.3/29.7	31-TY8-11-900500	81.8/45.4
900-560	1845	2438	31-TY8-27-900560	32.6/20.3	31-TY8-17-900560	53.3/33.2	31-TY8-11-900560	81.8/50.8
900-630	1906	2578	31-TY8-27-900630	32.6/22.8	31-TY8-17-900630	53.3/37.4	31-TY8-11-900630	81.8/57.2
900-710	1975	2738	31-TY8-27-900710	32.6/25.7	31-TY8-17-900710	53.3/42.1	31-TY8-11-900710	81.8/64.5
900-800	2053	2918	31-TY8-27-900800	32.6/29.0	31-TY8-17-900800	53.3/47.4	31-TY8-11-900800	81.8/72.8
1000-500	1953	2490	31-TY8-27-100500	36.2/18.1	31-TY8-17-100500	59.3/29.7	-	-
1000-560	2005	2610	31-TY8-27-100560	36.2/20.3	31-TY8-17-100560	59.3/33.2	-	-
1000-630	2066	2750	31-TY8-27-100630	36.2/22.8	31-TY8-17-100630	59.3/37.4	-	-
1000-710	2135	2910	31-TY8-27-100710	36.2/25.7	31-TY8-17-100710	59.3/42.1	-	-
1000-800	2213	3087	31-TY8-27-100800	36.2/29.0	31-TY8-17-100800	59.3/47.4	-	-
1000-900	2299	3290	31-TY8-27-100900	36.2/32.6	31-TY8-17-100900	59.3/53.3	-	-
1200-560	2286	2897	31-TY8-27-120560	43.5/20.3	31-TY8-17-120560	67.9/33.2	-	-
1200-630	2366	3037	31-TY8-27-120630	43.5/22.8	31-TY8-17-120630	67.9/37.4	-	-
1200-710	2435	3197	31-TY8-27-120710	43.5/25.7	31-TY8-17-120710	67.9/42.1	-	-
1200-800	2513	3376	31-TY8-27-120800	43.5/29.0	31-TY8-17-120800	67.9/47.4	-	-
1200-900	2599	3577	31-TY8-27-120900	43.5/32.6	31-TY8-17-120900	67.9/53.3	-	-
1200-1000	2686	3777	31-TY8-27-120100	43.5/36.2	31-TY8-17-120100	67.9/59.3	-	-

HD-PE REDUCED 60° Y-TEE

(Fabricated)
with reduced branch
for butt welding
molded from PE100

手工對接異徑60° Y型三通
DFP TY9

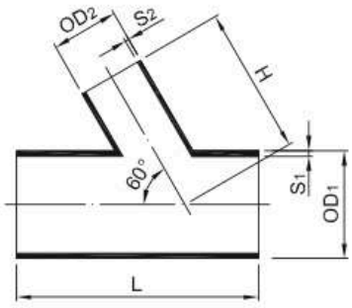


OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
110-32	153	237	-	-	31-TY9-17-110032	6.6/2.0	31-TY9-11-110032	10.0/2.9
110-40	155	246	-	-	31-TY9-17-110040	6.6/2.4	31-TY9-11-110040	10.0/3.7
110-50	158	258	-	-	31-TY9-17-110050	6.6/3.0	31-TY9-11-110050	10.0/4.6
110-63	162	273	31-TY9-27-110063	4.0/2.3	31-TY9-17-110063	6.6/3.8	31-TY9-11-110063	10.0/5.8
110-75	165	287	31-TY9-27-110075	4.0/2.7	31-TY9-17-110075	6.6/4.5	31-TY9-11-110075	10.0/6.8
110-90	169	304	31-TY9-27-110090	4.0/3.3	31-TY9-17-110090	6.6/5.4	31-TY9-11-110090	10.0/8.2
125-40	174	271	-	-	31-TY9-17-125040	7.4/2.4	31-TY9-11-125040	11.4/3.7
125-50	177	283	-	-	31-TY9-17-125050	7.4/3.0	31-TY9-11-125050	11.4/4.6
125-63	180	298	31-TY9-27-125063	4.6/2.3	31-TY9-17-125063	7.4/3.8	31-TY9-11-125063	11.4/5.8
125-75	184	312	31-TY9-27-125075	4.6/2.7	31-TY9-17-125075	7.4/4.5	31-TY9-11-125075	11.4/6.8
125-90	188	329	31-TY9-27-125090	4.6/3.3	31-TY9-17-125090	7.4/5.4	31-TY9-11-125090	11.4/8.2
125-110	194	352	31-TY9-27-125110	4.6/4.0	31-TY9-17-125110	7.4/6.6	31-TY9-11-125110	11.4/10.0
140-50	185	283	-	-	31-TY9-17-140050	8.3/3.0	31-TY9-11-140050	12.7/4.6
140-63	189	298	31-TY9-27-140063	5.1/2.3	31-TY9-17-140063	8.3/3.8	31-TY9-11-140063	12.7/5.8
140-75	192	312	31-TY9-27-140075	5.1/2.7	31-TY9-17-140075	8.3/4.5	31-TY9-11-140075	12.7/6.8
140-90	197	329	31-TY9-27-140090	5.1/3.3	31-TY9-17-140090	8.3/5.4	31-TY9-11-140090	12.7/8.2
140-110	203	352	31-TY9-27-140110	5.1/4.0	31-TY9-17-140110	8.3/6.6	31-TY9-11-140110	12.7/10.0
140-125	207	369	31-TY9-27-140125	5.1/4.6	31-TY9-17-140125	8.3/7.4	31-TY9-11-140125	12.7/11.4
160-63	211	323	31-TY9-27-160063	5.8/2.3	31-TY9-17-160063	9.5/3.8	31-TY9-11-160063	14.6/5.8
160-75	214	337	31-TY9-27-160075	5.8/2.7	31-TY9-17-160075	9.5/4.5	31-TY9-11-160075	14.6/6.8
160-90	218	354	31-TY9-27-160090	5.8/3.3	31-TY9-17-160090	9.5/5.4	31-TY9-11-160090	14.6/8.2
160-110	224	377	31-TY9-27-160110	5.8/4.0	31-TY9-17-160110	9.5/6.6	31-TY9-11-160110	14.6/10.0
160-125	228	394	31-TY9-27-160125	5.8/4.6	31-TY9-17-160125	9.5/7.4	31-TY9-11-160125	14.6/11.4
160-140	233	412	31-TY9-27-160140	5.8/5.1	31-TY9-17-160140	9.5/8.3	31-TY9-11-160140	14.6/12.7
180-75	226	337	31-TY9-27-180075	6.6/2.7	31-TY9-17-180075	10.7/4.5	31-TY9-11-180075	16.4/6.8
180-90	230	354	31-TY9-27-180090	6.6/3.3	31-TY9-17-180090	10.7/5.4	31-TY9-11-180090	16.4/8.2
180-110	236	377	31-TY9-27-180110	6.6/4.0	31-TY9-17-180110	10.7/6.6	31-TY9-11-180110	16.4/10.0
180-125	240	394	31-TY9-27-180125	6.6/4.6	31-TY9-17-180125	10.7/7.4	31-TY9-11-180125	16.4/11.4
180-140	244	412	31-TY9-27-180140	6.6/5.1	31-TY9-17-180140	10.7/8.3	31-TY9-11-180140	16.4/12.7
180-160	250	435	31-TY9-27-180160	6.6/5.8	31-TY9-17-180160	10.7/9.5	31-TY9-11-180160	16.4/14.6
200-90	251	379	31-TY9-27-200090	7.3/3.3	31-TY9-17-200090	11.9/5.4	31-TY9-11-200090	18.2/8.2
200-110	257	402	31-TY9-27-200110	7.3/4.0	31-TY9-17-200110	11.9/6.6	31-TY9-11-200110	18.2/10.0
200-125	262	419	31-TY9-27-200125	7.3/4.6	31-TY9-17-200125	11.9/7.4	31-TY9-11-200125	18.2/11.4

HD-PE REDUCED 60° Y-TEE

(Fabricated)
with reduced branch
for butt welding
molded from PE100

手工對接異徑60° Y型三通
DFP TY9

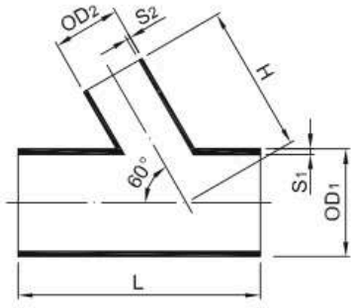


OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
200-140	266	437	31-TY9-27-200140	7.3/5.1	31-TY9-17-200140	11.9/8.3	31-TY9-11-200140	18.2/12.7
200-160	272	460	31-TY9-27-200160	7.3/5.8	31-TY9-17-200160	11.9/9.5	31-TY9-11-200160	18.2/14.6
200-180	277	483	31-TY9-27-200180	7.3/6.6	31-TY9-17-200180	11.9/10.7	31-TY9-11-200180	18.2/16.4
225-110	282	427	31-TY9-27-225110	8.2/4.0	31-TY9-17-225110	13.4/6.6	31-TY9-11-225110	20.5/10.0
225-125	286	444	31-TY9-27-225125	8.2/4.6	31-TY9-17-225125	13.4/7.4	31-TY9-11-225125	20.5/11.4
225-140	290	462	31-TY9-27-225140	8.2/5.1	31-TY9-17-225140	13.4/8.3	31-TY9-11-225140	20.5/12.7
225-160	296	485	31-TY9-27-225160	8.2/5.8	31-TY9-17-225160	13.4/9.5	31-TY9-11-225160	20.5/14.6
225-180	302	508	31-TY9-27-225180	8.2/6.6	31-TY9-17-225180	13.4/10.7	31-TY9-11-225180	20.5/16.4
225-200	308	531	31-TY9-27-225200	8.2/7.3	31-TY9-17-225200	13.4/11.9	31-TY9-11-225200	20.5/18.2
250-125	315	482	31-TY9-27-250125	9.1/4.6	31-TY9-17-250125	14.8/7.4	31-TY9-11-250125	22.7/11.4
250-140	320	499	31-TY9-27-250140	9.1/5.1	31-TY9-17-250140	14.8/8.3	31-TY9-11-250140	22.7/12.7
250-160	326	522	31-TY9-27-250160	9.1/5.8	31-TY9-17-250160	14.8/9.5	31-TY9-11-250160	22.7/14.6
250-180	331	545	31-TY9-27-250180	9.1/6.6	31-TY9-17-250180	14.8/10.7	31-TY9-11-250180	22.7/16.4
250-200	337	568	31-TY9-27-250200	9.1/7.3	31-TY9-17-250200	14.8/11.9	31-TY9-11-250200	22.7/18.2
250-225	344	597	31-TY9-27-250225	9.1/8.2	31-TY9-17-250225	14.8/13.4	31-TY9-11-250225	22.7/20.5
280-140	352	537	31-TY9-27-280140	10.2/5.1	31-TY9-17-280140	16.6/8.3	31-TY9-11-280140	25.4/12.7
280-160	358	560	31-TY9-27-280160	10.2/5.8	31-TY9-17-280160	16.6/9.5	31-TY9-11-280160	25.4/14.6
280-180	364	583	31-TY9-27-280180	10.2/6.6	31-TY9-17-280180	16.6/10.7	31-TY9-11-280180	25.4/16.4
280-200	370	606	31-TY9-27-280200	10.2/7.3	31-TY9-17-280200	16.6/11.9	31-TY9-11-280200	25.4/18.2
280-225	377	635	31-TY9-27-280225	10.2/8.2	31-TY9-17-280225	16.6/13.4	31-TY9-11-280225	25.4/20.5
280-250	384	664	31-TY9-27-280250	10.2/9.1	31-TY9-17-280250	16.6/14.8	31-TY9-11-280250	25.4/22.7
315-160	398	610	31-TY9-27-315160	11.4/5.8	31-TY9-17-315160	18.7/9.5	31-TY9-11-315160	28.6/14.6
315-180	404	633	31-TY9-27-315180	11.4/6.6	31-TY9-17-315180	18.7/10.7	31-TY9-11-315180	28.6/16.4
315-200	410	656	31-TY9-27-315200	11.4/7.3	31-TY9-17-315200	18.7/11.9	31-TY9-11-315200	28.6/18.2
315-225	417	685	31-TY9-27-315225	11.4/8.2	31-TY9-17-315225	18.7/13.4	31-TY9-11-315225	28.6/20.5
315-250	424	714	31-TY9-27-315250	11.4/9.1	31-TY9-17-315250	18.7/14.8	31-TY9-11-315250	28.6/22.7
315-280	433	748	31-TY9-27-315280	11.4/10.2	31-TY9-17-315280	18.7/16.6	31-TY9-11-315280	28.6/25.4
355-180	442	670	31-TY9-27-355180	12.9/6.6	31-TY9-17-355180	21.1/10.7	31-TY9-11-355180	32.2/16.4
355-200	448	693	31-TY9-27-355200	12.9/7.3	31-TY9-17-355200	21.1/11.9	31-TY9-11-355200	32.2/18.2
355-225	455	722	31-TY9-27-355225	12.9/8.2	31-TY9-17-355225	21.1/13.4	31-TY9-11-355225	32.2/20.5
355-250	462	751	31-TY9-27-355250	12.9/9.1	31-TY9-17-355250	21.1/14.8	31-TY9-11-355250	32.2/22.7
355-280	471	786	31-TY9-27-355280	12.9/10.2	31-TY9-17-355280	21.1/16.6	31-TY9-11-355280	32.2/25.4
355-315	481	826	31-TY9-27-355315	12.9/11.4	31-TY9-17-355315	21.1/18.7	31-TY9-11-355315	32.2/28.6

HD-PE REDUCED 60° Y-TEE

(Fabricated)
with reduced branch
for butt welding
molded from PE100

手工對接異徑60° Y型三通
DFP TY9

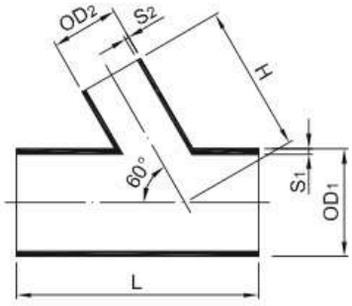


OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
400-200	499	756	31-TY9-27-400200	14.5/7.3	31-TY9-17-400200	23.7/11.9	31-TY9-11-400200	36.3/18.2
400-225	506	785	31-TY9-27-400225	14.5/8.2	31-TY9-17-400225	23.7/13.4	31-TY9-11-400225	36.3/20.5
400-250	513	814	31-TY9-27-400250	14.5/9.1	31-TY9-17-400250	23.7/14.8	31-TY9-11-400250	36.3/22.7
400-280	522	848	31-TY9-27-400280	14.5/10.2	31-TY9-17-400280	23.7/16.6	31-TY9-11-400280	36.3/25.4
400-315	532	889	31-TY9-27-400315	14.5/11.4	31-TY9-17-400315	23.7/18.7	31-TY9-11-400315	36.3/28.6
400-355	543	935	31-TY9-27-400355	14.5/12.9	31-TY9-17-400355	23.7/21.1	31-TY9-11-400355	36.3/32.2
450-225	560	847	31-TY9-27-450225	16.3/8.2	31-TY9-17-450225	26.7/13.4	31-TY9-11-450225	40.9/20.5
450-250	567	876	31-TY9-27-450250	16.3/9.1	31-TY9-17-450250	26.7/14.8	31-TY9-11-450250	40.9/22.7
450-280	576	911	31-TY9-27-450280	16.3/10.2	31-TY9-17-450280	26.7/16.6	31-TY9-11-450280	40.9/25.4
450-315	586	951	31-TY9-27-450315	16.3/11.4	31-TY9-17-450315	26.7/18.7	31-TY9-11-450315	40.9/28.6
450-355	597	997	31-TY9-27-450355	16.3/12.9	31-TY9-17-450355	26.7/21.1	31-TY9-11-450355	40.9/32.2
450-400	610	1049	31-TY9-27-450400	16.3/14.5	31-TY9-17-450400	26.7/23.7	31-TY9-11-450400	40.9/36.3
500-250	621	939	31-TY9-27-500250	18.1/9.1	31-TY9-17-500250	29.7/14.8	31-TY9-11-500250	45.4/22.7
500-280	630	973	31-TY9-27-500280	18.1/10.2	31-TY9-17-500280	29.7/16.6	31-TY9-11-500280	45.4/25.4
500-315	640	1014	31-TY9-27-500315	18.1/11.4	31-TY9-17-500315	29.7/18.7	31-TY9-11-500315	45.4/28.6
500-355	651	1063	31-TY9-27-500355	18.1/12.9	31-TY9-17-500355	29.7/21.1	31-TY9-11-500355	45.4/32.2
500-400	664	1118	31-TY9-27-500400	18.1/14.5	31-TY9-17-500400	29.7/23.7	31-TY9-11-500400	45.4/36.3
500-450	679	1170	31-TY9-27-500450	18.1/16.3	31-TY9-17-500450	29.7/26.7	31-TY9-11-500450	45.4/40.9
560-280	694	1048	31-TY9-27-560280	20.3/10.2	31-TY9-17-560280	33.2/16.6	31-TY9-11-560280	50.8/25.4
560-315	704	1089	31-TY9-27-560315	20.3/11.4	31-TY9-17-560315	33.2/18.7	31-TY9-11-560315	50.8/28.6
560-355	716	1135	31-TY9-27-560355	20.3/12.9	31-TY9-17-560355	33.2/21.1	31-TY9-11-560355	50.8/32.2
560-400	729	1187	31-TY9-27-560400	20.3/14.5	31-TY9-17-560400	33.2/23.7	31-TY9-11-560400	50.8/36.3
560-450	743	1245	31-TY9-27-560450	20.3/16.3	31-TY9-17-560450	33.2/26.7	31-TY9-11-560450	50.8/40.9
560-500	758	1302	31-TY9-27-560500	20.3/18.1	31-TY9-17-560500	33.2/29.7	31-TY9-11-560500	50.8/45.4
630-315	780	1176	31-TY9-27-630315	22.8/11.4	31-TY9-17-630315	37.4/18.7	31-TY9-11-630315	57.2/28.6
630-355	791	1222	31-TY9-27-630355	22.8/12.9	31-TY9-17-630355	37.4/21.1	31-TY9-11-630355	57.2/32.2
630-400	804	1269	31-TY9-27-630400	22.8/14.5	31-TY9-17-630400	37.4/23.7	31-TY9-11-630400	57.2/36.3
630-450	819	1332	31-TY9-27-630450	22.8/16.3	31-TY9-17-630450	37.4/26.7	31-TY9-11-630450	57.2/40.9
630-500	833	1390	31-TY9-27-630500	22.8/18.1	31-TY9-17-630500	37.4/29.7	31-TY9-11-630500	57.2/45.4
630-560	850	1459	31-TY9-27-630560	22.8/20.3	31-TY9-17-630560	37.4/33.2	31-TY9-11-630560	57.2/50.8

HD-PE REDUCED 60° Y-TEE

(Fabricated)
with reduced branch
for butt welding
molded from PE100

手工對接異徑60° Y型三通
DFP TY9

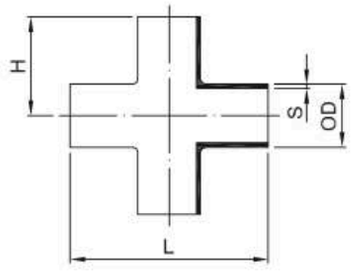


OD1/OD2 (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
			Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
710-355	877	1322	31-TY9-27-710355	25.7/12.9	31-TY9-17-710355	42.1/21.1	31-TY9-11-710355	64.5/32.2
710-400	890	1374	31-TY9-27-710400	25.7/14.5	31-TY9-17-710400	42.1/23.7	31-TY9-11-710400	64.5/36.3
710-450	904	1432	31-TY9-27-710450	25.7/16.3	31-TY9-17-710450	42.1/26.7	31-TY9-11-710450	64.5/40.9
710-500	919	1490	31-TY9-27-710500	25.7/18.1	31-TY9-17-710500	42.1/29.7	31-TY9-11-710500	64.5/45.4
710-560	937	1554	31-TY9-27-710560	25.7/20.3	31-TY9-17-710560	42.1/33.2	31-TY9-11-710560	64.5/50.8
710-630	957	1640	31-TY9-27-710630	25.7/22.8	31-TY9-17-710305	42.1/37.4	31-TY9-11-710305	64.5/57.2
800-400	987	1487	31-TY9-27-800400	29.0/14.5	31-TY9-17-800400	47.4/23.7	31-TY9-11-800400	72.8/36.3
800-450	1002	1545	31-TY9-27-800450	29.0/16.3	31-TY9-17-800450	47.4/26.7	31-TY9-11-800450	72.8/40.9
800-500	1016	1602	31-TY9-27-800500	29.0/18.1	31-TY9-17-800500	47.4/29.7	31-TY9-11-800500	72.8/45.4
800-560	1034	1672	31-TY9-27-800560	29.0/20.3	31-TY9-17-800560	47.4/33.2	31-TY9-11-800560	72.8/50.8
800-630	1054	1752	31-TY9-27-800630	29.0/22.8	31-TY9-17-800630	47.4/37.4	31-TY9-11-800630	72.8/57.2
800-710	1077	1840	31-TY9-27-800710	29.0/25.7	31-TY9-17-800710	47.4/42.1	31-TY9-11-800710	72.8/64.5
900-450	1110	1670	31-TY9-27-900450	32.6/16.3	31-TY9-17-900450	53.3/26.7	31-TY9-11-900450	81.8/40.9
900-500	1124	1728	31-TY9-27-900500	32.6/18.1	31-TY9-17-900500	53.3/29.7	31-TY9-11-900500	81.8/45.4
900-560	1141	1797	31-TY9-27-900560	32.6/20.3	31-TY9-17-900560	53.3/33.2	31-TY9-11-900560	81.8/50.8
900-630	1161	1878	31-TY9-27-900630	32.6/22.8	31-TY9-17-900630	53.3/37.4	31-TY9-11-900630	81.8/57.2
900-710	1185	1971	31-TY9-27-900710	32.6/25.7	31-TY9-17-900710	53.3/42.1	31-TY9-11-900710	81.8/64.5
900-800	1210	2075	31-TY9-27-900800	32.6/29.0	31-TY9-17-900800	53.3/47.4	31-TY9-11-900800	81.8/72.8
1000-500	1242	1874	31-TY9-27-100500	36.2/18.1	31-TY9-17-100500	59.3/29.7	-	-
1000-560	1259	1949	31-TY9-27-100560	36.2/20.3	31-TY9-17-100560	59.3/33.2	-	-
1000-630	1279	2030	31-TY9-27-100630	36.2/22.8	31-TY9-17-100630	59.3/37.4	-	-
1000-710	1302	2122	31-TY9-27-100710	36.2/25.7	31-TY9-17-100710	59.3/42.1	-	-
1000-800	1328	2226	31-TY9-27-100800	36.2/29.0	31-TY9-17-100800	59.3/47.4	-	-
1000-900	1357	2342	31-TY9-27-100900	36.2/32.6	31-TY9-17-100900	59.3/53.3	-	-
1200-560	1475	2197	31-TY9-27-120560	43.5/20.3	31-TY9-17-120560	67.9/33.2	-	-
1200-630	1495	2277	31-TY9-27-120630	43.5/22.8	31-TY9-17-120630	67.9/37.4	-	-
1200-710	1518	2365	31-TY9-27-120710	43.5/25.7	31-TY9-17-120710	67.9/42.1	-	-
1200-800	1544	2474	31-TY9-27-120800	43.5/29.0	31-TY9-17-120800	67.9/47.4	-	-
1200-900	1573	2590	31-TY9-27-120900	43.5/32.6	31-TY9-17-120900	67.9/53.3	-	-
1200-1000	1601	2705	31-TY9-27-120100	43.5/36.2	31-TY9-17-120100	67.9/59.3	-	-

HD-PE CROSS

(Fabricated)
for butt welding
molded from PE100

手工四通
DFP TZ1

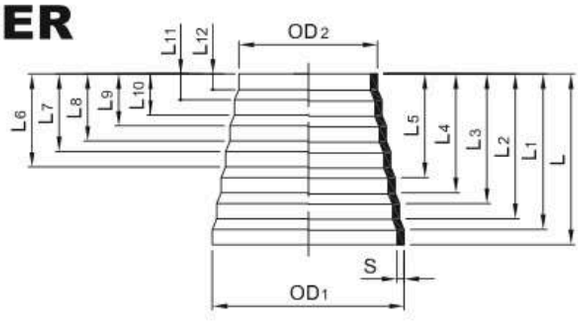


OD (mm)	H (mm)	L (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10	
			Code	S (mm)	Code	S (mm)
63	101.5	203	31-TZ1-27-0063	2.3	31-TZ1-17-0063	3.8
90	115.0	230	31-TZ1-27-0090	3.3	31-TZ1-17-0090	5.4
110	135.0	270	31-TZ1-27-0110	4.0	31-TZ1-17-0110	6.6
125	152.5	305	31-TZ1-27-0125	4.6	31-TZ1-17-0125	7.4
140	160.0	320	31-TZ1-27-0140	5.1	31-TZ1-17-0140	8.3
160	180.0	360	31-TZ1-27-0160	5.8	31-TZ1-17-0160	9.5
180	190.0	380	31-TZ1-27-0180	6.6	31-TZ1-17-0180	10.7
200	210.0	420	31-TZ1-27-0200	7.3	31-TZ1-17-0200	11.9
225	232.5	465	31-TZ1-27-0225	8.2	31-TZ1-17-0225	13.4
250	260.0	520	31-TZ1-27-0250	9.1	31-TZ1-17-0250	14.8
280	290.0	580	31-TZ1-27-0280	10.2	31-TZ1-17-0280	16.6
315	327.5	655	31-TZ1-27-0315	11.4	31-TZ1-17-0315	18.7
355	362.5	725	31-TZ1-27-0355	12.9	31-TZ1-17-0355	21.1
400	410.0	820	31-TZ1-27-0400	14.5	31-TZ1-17-0400	23.7
450	460.0	920	31-TZ1-27-0450	16.3	31-TZ1-17-0450	26.7
500	510.0	1020	31-TZ1-27-0500	18.1	31-TZ1-17-0500	29.7
560	570.0	1140	31-TZ1-27-0560	20.3	31-TZ1-17-0560	33.2
630	640.0	1280	31-TZ1-27-0630	22.8	31-TZ1-17-0630	37.4
710	720.0	1440	31-TZ1-27-0710	25.7	31-TZ1-17-0710	42.1
800	810.0	1620	31-TZ1-27-0800	29.0	31-TZ1-17-0800	47.4
900	910.0	1820	31-TZ1-27-0900	32.6	31-TZ1-17-0900	53.3
1000	1020.0	2040	31-TZ1-27-1000	36.2	31-TZ1-17-1000	59.3
1200	1220.0	2440	31-TZ1-27-1200	43.5	31-TZ1-17-1200	67.9

HD-PE REDUCER CONCENTRIC

for butt welding
molded from PE100

對接塔型大小頭
DFP TW1





OD1/OD2 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	L5 (mm)	L6 (mm)	L7 (mm)	L8 (mm)	L9 (mm)	L10 (mm)	L11 (mm)	L12 (mm)
63/16	70.5	62.5	53.5	46.5	38.5	33.0	25.0	21	15	12	7	5
75/32	62.5	54.5	45.5	37.5	28.5	21.5	13.5	8	-	-	-	-
110/63	57.0	47.0	36.0	28.0	17.0	9.0	-	-	-	-	-	-
125/75	63.0	53.0	40.0	30.0	19.0	11.0	-	-	-	-	-	-
160/110	74.0	62.0	48.0	37.0	23.0	13.0	-	-	-	-	-	-
225/160	87.0	71.0	55.0	42.0	26.0	14.0	-	-	-	-	-	-
315/225	109.0	89.0	70.0	54.0	35.0	19.0	-	-	-	-	-	-
450/315	148.0	118.0	92.0	68.0	44.0	24.0	-	-	-	-	-	-
630/450	214.0	178.0	132.0	100.0	62.0	32.0	-	-	-	-	-	-

PN10	16	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630
S	-	-	-	2.0	2.4	3.0	3.8	4.5	5.4	6.6	7.4	8.3	9.5	10.7	11.9	13.4	14.8	16.6	18.7	21.1	23.7	26.7	29.7	33.2	37.4
PN16	16	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630
S	-	2.0	2.3	2.9	3.7	4.6	5.8	6.8	8.2	10.0	11.4	12.7	14.6	16.4	18.2	20.5	22.7	25.4	28.6	32.2	36.6	40.9	45.4	50.8	57.2

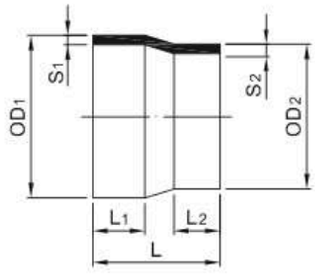
OD1/OD2 (mm)	L (mm)	SDR17 ISO S8 PN10	SDR11 ISO S5 PN16
		Code	Code
63/16	79.5	31-TW1-17-063016	31-TW1-11-063016
75/32	73.5	31-TW1-17-075032	31-TW1-11-075032
110/63	70.0	31-TW1-17-110063	31-TW1-11-110063
125/75	77.0	31-TW1-17-125075	31-TW1-11-125075
160/110	88.0	31-TW1-17-160110	31-TW1-11-160110
225/160	106.0	31-TW1-17-225160	31-TW1-11-225160
315/225	133.0	31-TW1-17-315225	31-TW1-11-315225
450/315	180.0	31-TW1-17-450315	31-TW1-11-450315
630/450	276.0	31-TW1-17-630450	31-TW1-11-630450

HD-PE REDUCER

concentric,elongated
for butt welding
molded from PE100

對接大小頭

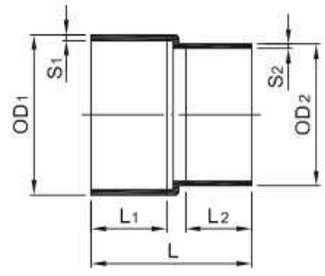
DFP RC1



OD1/OD2 (mm)	L (mm)	L1 (mm)	L2 (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
				Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
25-20	50	20	20	-	-	-	-	31-RC1-11-025020	2.3/2.0
32-20	50	20	20	-	-	-	-	31-RC1-11-032020	2.9/2.0
32-25	50	20	20	-	-	-	-	31-RC1-11-032025	2.9/2.3
40-20	55	20	20	-	-	-	-	31-RC1-11-040020	3.7/2.0
40-25	55	20	20	-	-	-	-	31-RC1-11-040025	3.7/2.3
40-32	55	20	20	-	-	-	-	31-RC1-11-040032	3.7/2.9
50-20	60	24	20	-	-	-	-	31-RC1-11-050020	4.6/2.0
50-25	60	24	20	-	-	-	-	31-RC1-11-050025	4.6/2.3
50-32	60	24	20	-	-	31-RC1-17-050032	3.0/2.0	31-RC1-11-050032	4.6/2.9
50-40	60	24	20	-	-	31-RC1-17-050040	3.0/2.4	31-RC1-11-050040	4.6/3.7
63-25	65	25	20	-	-	-	-	31-RC1-11-063025	5.8/2.3
63-32	65	25	22	-	-	31-RC1-17-063032	3.8/2.0	31-RC1-11-063032	5.8/2.9
63-40	65	25	22	-	-	31-RC1-17-063040	3.8/2.4	31-RC1-11-063040	5.8/3.7
63-50	65	25	22	-	-	31-RC1-17-063050	3.8/3.0	31-RC1-11-063050	5.8/4.6
75-40	68	25	24	-	-	31-RC1-17-075040	4.5/2.4	31-RC1-11-075040	6.8/3.7
75-50	68	25	24	-	-	31-RC1-17-075050	4.5/3.0	31-RC1-11-075050	6.8/4.6
75-63	68	25	24	31-RC1-27-075063	2.7/2.3	31-RC1-17-075063	4.5/3.8	31-RC1-11-075063	6.8/5.8
90-50	75	30	26	-	-	31-RC1-17-090050	5.4/3.0	31-RC1-11-090050	8.2/4.6
90-63	75	30	26	31-RC1-27-090063	3.3/2.3	31-RC1-17-090063	5.4/3.8	31-RC1-11-090063	8.2/5.8
90-75	75	30	26	31-RC1-27-090075	3.3/2.7	31-RC1-17-090075	5.4/4.5	31-RC1-11-090075	8.2/6.8
110-63	90	35	30	31-RC1-27-110063	4.0/2.3	31-RC1-17-110063	6.6/3.8	31-RC1-11-110063	10.0/5.8
110-75	90	35	30	31-RC1-27-110075	4.0/2.7	31-RC1-17-110075	6.6/4.5	31-RC1-11-110075	10.0/6.8
110-90	90	35	30	31-RC1-27-110090	4.0/3.3	31-RC1-17-110090	6.6/5.4	31-RC1-11-110090	10.0/8.2
125-110	100	40	35	31-RC1-27-125110	4.6/4.0	31-RC1-17-125110	7.4/6.6	31-RC1-11-125110	11.4/10.0
140-125	110	45	40	31-RC1-27-140125	5.1/4.6	31-RC1-17-140125	8.3/7.4	31-RC1-11-140125	12.7/11.4
160-110	130	60	40	31-RC1-27-160110	5.8/4.0	31-RC1-17-160110	9.5/6.6	31-RC1-11-160110	14.6/10.0
160-140	130	60	40	31-RC1-27-160140	5.8/5.1	31-RC1-17-160140	9.5/8.3	31-RC1-11-160140	14.6/12.7
180-160	130	60	40	31-RC1-27-180160	6.6/5.8	31-RC1-17-180160	10.7/9.5	31-RC1-11-180160	16.4/14.6
200-160	140	60	40	31-RC1-27-200160	7.3/5.8	31-RC1-17-200160	11.9/9.5	31-RC1-11-200160	18.2/14.6
225-160	150	60	40	31-RC1-27-225160	8.2/5.8	31-RC1-17-225160	13.4/9.5	31-RC1-11-225160	20.5/14.6
225-200	150	60	50	31-RC1-27-225200	8.2/7.3	31-RC1-17-225200	13.4/11.9	31-RC1-11-225200	20.5/18.2
250-225	170	70	60	31-RC1-27-250225	9.1/8.2	31-RC1-17-250225	14.8/13.4	31-RC1-11-250225	22.7/20.5
280-250	180	80	60	31-RC1-27-280250	10.2/9.1	31-RC1-17-280250	16.6/14.8	31-RC1-11-280250	25.4/22.7
315-280	220	90	80	31-RC1-27-315280	11.4/10.2	31-RC1-17-315280	18.7/16.6	31-RC1-11-315280	28.6/25.4

HD-PE REDUCER

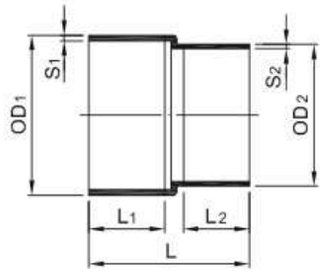
(Fabricated)
concentric,elongated
for butt welding
molded from PE100
手工對接大小頭
DFP RC1



OD1/OD2 (mm)	L (mm)	L1 (mm)	L2 (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
				Code	S1/S2 (mm)	Code	S1/S2 (mm)	Code	S1/S2 (mm)
355-180	318	180	110	31-RC1-27-355180	12.9/6.6	31-RC1-17-355180	21.1/10.7	31-RC1-11-355180	32.2/16.4
355-200	328	180	120	31-RC1-27-355200	12.9/7.3	31-RC1-17-355200	21.1/11.9	31-RC1-11-355200	32.2/18.2
355-225	328	180	120	31-RC1-27-355225	12.9/8.2	31-RC1-17-355225	21.1/13.4	31-RC1-11-355225	32.2/20.5
355-250	338	180	130	31-RC1-27-355250	12.9/9.1	31-RC1-17-355250	21.1/14.8	31-RC1-11-355250	32.2/22.7
355-280	358	180	150	31-RC1-27-355280	12.9/10.2	31-RC1-17-355280	21.1/16.6	31-RC1-11-355280	32.2/25.4
355-315	368	180	160	31-RC1-27-355315	12.9/11.4	31-RC1-17-355315	21.1/18.7	31-RC1-11-355315	32.2/28.6
400-200	358	210	120	31-RC1-27-400200	14.5/7.3	31-RC1-17-400200	23.7/11.9	31-RC1-11-400200	36.3/18.2
400-225	358	210	120	31-RC1-27-400225	14.5/8.2	31-RC1-17-400225	23.7/13.4	31-RC1-11-400225	36.3/20.5
400-250	368	210	130	31-RC1-27-400250	14.5/9.1	31-RC1-17-400250	23.7/14.8	31-RC1-11-400250	36.3/22.7
400-280	388	210	150	31-RC1-27-400280	14.5/10.2	31-RC1-17-400280	23.7/16.6	31-RC1-11-400280	36.3/25.4
400-315	398	210	160	31-RC1-27-400315	14.5/11.4	31-RC1-17-400315	23.7/18.7	31-RC1-11-400315	36.3/28.6
400-355	418	210	180	31-RC1-27-400355	14.5/12.9	31-RC1-17-400355	23.7/21.1	31-RC1-11-400355	36.3/32.2
450-225	398	250	120	31-RC1-27-450225	16.3/8.2	31-RC1-17-450225	26.7/13.4	31-RC1-11-450225	40.9/20.5
450-250	408	250	130	31-RC1-27-450250	16.3/9.1	31-RC1-17-450250	26.7/14.8	31-RC1-11-450250	40.9/22.7
450-280	428	250	150	31-RC1-27-450280	16.3/10.2	31-RC1-17-450280	26.7/16.6	31-RC1-11-450280	40.9/25.4
450-315	438	250	160	31-RC1-27-450315	16.3/11.4	31-RC1-17-450315	26.7/18.7	31-RC1-11-450315	40.9/28.6
450-355	458	250	180	31-RC1-27-450355	16.3/12.9	31-RC1-17-450355	26.7/21.1	31-RC1-11-450355	40.9/32.2
450-400	488	250	210	31-RC1-27-450400	16.3/14.5	31-RC1-17-450400	26.7/23.7	31-RC1-11-450400	40.9/36.3
500-250	438	280	130	31-RC1-27-500250	18.1/9.1	31-RC1-17-500250	29.7/14.8	31-RC1-11-500250	45.4/22.7
500-280	458	280	150	31-RC1-27-500280	18.1/10.2	31-RC1-17-500280	29.7/16.6	31-RC1-11-500280	45.4/25.4
500-315	468	280	160	31-RC1-27-500315	18.1/11.4	31-RC1-17-500315	29.7/18.7	31-RC1-11-500315	45.4/28.6
500-355	488	280	180	31-RC1-27-500355	18.1/12.9	31-RC1-17-500355	29.7/21.1	31-RC1-11-500355	45.4/32.2
500-400	518	280	210	31-RC1-27-500400	18.1/14.5	31-RC1-17-500400	29.7/23.7	31-RC1-11-500400	45.4/36.3
500-450	558	280	250	31-RC1-27-500450	18.1/16.3	31-RC1-17-500450	29.7/26.7	31-RC1-11-500450	45.4/40.9
560-280	478	300	150	31-RC1-27-560280	20.3/10.2	31-RC1-17-560280	33.2/16.6	31-RC1-11-560280	50.8/25.4
560-315	488	300	160	31-RC1-27-560315	20.3/11.4	31-RC1-17-560315	33.2/18.7	31-RC1-11-560315	50.8/28.6
560-355	508	300	180	31-RC1-27-560355	20.3/12.9	31-RC1-17-560355	33.2/21.1	31-RC1-11-560355	50.8/32.2
560-400	538	300	210	31-RC1-27-560400	20.3/14.5	31-RC1-17-560400	33.2/23.7	31-RC1-11-560400	50.8/36.3
560-450	578	300	250	31-RC1-27-560450	20.3/16.3	31-RC1-17-560450	33.2/26.7	31-RC1-11-560450	50.8/40.9
560-500	608	300	280	31-RC1-27-560500	20.3/18.1	31-RC1-17-560500	33.2/29.7	31-RC1-11-560500	50.8/45.4
630-315	538	350	160	31-RC1-27-630315	22.8/11.4	31-RC1-17-630315	37.4/18.7	31-RC1-11-630315	57.2/28.6
630-355	558	350	180	31-RC1-27-630355	22.8/12.9	31-RC1-17-630355	37.4/21.1	31-RC1-11-630355	57.2/32.2
630-400	588	350	210	31-RC1-27-630400	22.8/14.5	31-RC1-17-630400	37.4/23.7	31-RC1-11-630400	57.2/36.3

HD-PE REDUCER

(Fabricated)
concentric,elongated
for butt welding
molded from PE100
手工對接大小頭
DFP RC1

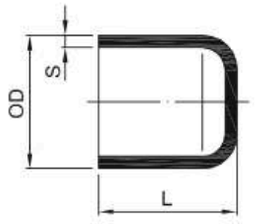


OD_1/OD_2 (mm)	L (mm)	L_1 (mm)	L_2 (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
				Code	S_1/S_2 (mm)	Code	S_1/S_2 (mm)	Code	S_1/S_2 (mm)
630-450	628	350	250	31-RC1-27-630450	22.8/16.3	31-RC1-17-630450	37.4/26.7	31-RC1-11-630450	57.2/40.9
630-500	658	350	280	31-RC1-27-630500	22.8/18.1	31-RC1-17-630500	37.4/29.7	31-RC1-11-630500	57.2/45.4
630-560	678	350	300	31-RC1-27-630560	22.8/20.3	31-RC1-17-630560	37.4/33.2	31-RC1-11-630560	57.2/50.8
710-355	608	400	180	31-RC1-27-710355	25.7/12.9	31-RC1-17-710355	42.1/21.1	31-RC1-11-710355	64.5/32.2
710-400	638	400	210	31-RC1-27-710400	25.7/14.5	31-RC1-17-710400	42.1/23.7	31-RC1-11-710400	64.5/36.3
710-450	678	400	250	31-RC1-27-710450	25.7/16.3	31-RC1-17-710450	42.1/26.7	31-RC1-11-710450	64.5/40.9
710-500	708	400	280	31-RC1-27-710500	25.7/18.1	31-RC1-17-710500	42.1/29.7	31-RC1-11-710500	64.5/45.4
710-560	728	400	300	31-RC1-27-710560	25.7/20.3	31-RC1-17-710560	42.1/33.2	31-RC1-11-710560	64.5/50.8
710-630	778	400	350	31-RC1-27-710630	25.7/22.8	31-RC1-17-710630	42.1/37.4	31-RC1-11-710630	64.5/57.2
800-400	688	450	210	31-RC1-27-800400	29.0/14.5	31-RC1-17-800400	47.4/23.7	31-RC1-11-800400	72.8/36.3
800-450	728	450	250	31-RC1-27-800450	29.0/16.3	31-RC1-17-800450	47.4/23.7	31-RC1-11-800450	72.8/40.9
800-500	758	450	280	31-RC1-27-800500	29.0/18.1	31-RC1-17-800500	47.4/29.7	31-RC1-11-800500	72.8/45.4
800-560	778	450	300	31-RC1-27-800560	29.0/20.3	31-RC1-17-800560	47.4/33.2	31-RC1-11-800560	72.8/50.8
800-630	828	450	350	31-RC1-27-800630	29.0/22.8	31-RC1-17-800630	47.4/37.4	31-RC1-11-800630	72.8/57.2
800-710	878	450	400	31-RC1-27-800710	29.0/25.7	31-RC1-17-800710	47.4/42.1	31-RC1-11-800710	72.8/64.5
900-450	778	500	250	31-RC1-27-900450	32.6/16.3	31-RC1-17-900450	53.3/26.2	31-RC1-11-900450	81.8/40.9
900-500	808	500	280	31-RC1-27-900500	32.6/18.1	31-RC1-17-900500	53.3/29.7	31-RC1-11-900500	81.8/45.4
900-560	828	500	300	31-RC1-27-900560	32.6/20.3	31-RC1-17-900560	53.3/33.2	31-RC1-11-900560	81.8/50.8
900-630	878	500	350	31-RC1-27-900630	32.6/22.8	31-RC1-17-900630	53.3/37.4	31-RC1-11-900630	81.8/57.2
900-710	928	500	400	31-RC1-27-900710	32.6/25.7	31-RC1-17-900710	53.3/42.1	31-RC1-11-900710	81.8/64.5
900-800	978	500	450	31-RC1-27-900800	32.6/29.0	31-RC1-17-900800	53.3/47.4	31-RC1-11-900800	81.8/72.8
1000-500	858	550	280	31-RC1-27-100500	36.2/18.1	31-RC1-17-100500	59.3/29.7	-	-
1000-560	878	550	300	31-RC1-27-100560	36.2/20.3	31-RC1-17-100560	59.3/33.2	-	-
1000-630	928	550	350	31-RC1-27-100630	36.2/22.8	31-RC1-17-100630	59.3/37.4	-	-
1000-710	978	550	400	31-RC1-27-100710	36.2/25.7	31-RC1-17-100710	59.3/42.1	-	-
1000-800	1028	550	450	31-RC1-27-100800	36.2/29.0	31-RC1-17-100800	59.3/47.4	-	-
1000-900	1078	550	500	31-RC1-27-100900	36.2/32.6	31-RC1-17-100900	59.3/29.7	-	-
1200-560	928	600	300	31-RC1-27-120560	43.5/20.3	31-RC1-17-120560	67.9/33.2	-	-
1200-630	978	600	350	31-RC1-27-120630	43.5/22.8	31-RC1-17-120630	67.9/37.4	-	-
1200-710	1028	600	400	31-RC1-27-120710	43.5/25.7	31-RC1-17-120710	67.9/42.1	-	-
1200-800	1078	600	450	31-RC1-27-120800	43.5/29.0	31-RC1-17-120800	67.9/47.4	-	-
1200-900	1128	600	500	31-RC1-27-120900	43.5/32.6	31-RC1-17-120900	67.9/53.3	-	-
1200-1000	1178	600	550	31-RC1-27-120100	43.5/36.2	31-RC1-17-120100	67.9/59.3	-	-

HD-PE END CAP

elongated
for butt welding
molded from PE100

對接管帽
DFP CP1

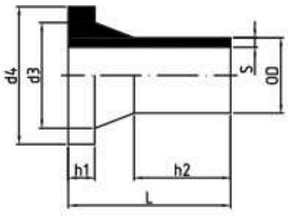


OD (mm)	L (mm)	L_1 (mm)	ØD (mm)	SDR27.6 ISO S13.3 PN6		SDR17 ISO S8 PN10		SDR11 ISO S5 PN16	
				Code	S (mm)	Code	S (mm)	Code	S (mm)
20	48.0	42.1	25.2	-	-	-	-	31-CP1-17-0020	2.0
25	50.0	42.0	30.2	-	-	-	-	31-CP1-17-0025	2.3
32	57.0	47.0	37.3	-	-	-	-	31-CP1-17-0032	2.9
40	64.0	52.2	46.0	-	-	-	-	31-CP1-17-0040	3.7
50	72.0	58.5	56.0	-	-	31-CP1-17-0050	3.0	31-CP1-17-0050	4.6
63	83.0	67.2	69.1	31-CP1-27-0063	2.3	31-CP1-17-0063	3.8	31-CP1-17-0063	5.8
75	89.5	74.0	82.5	31-CP1-27-0075	2.7	31-CP1-17-0075	4.5	31-CP1-17-0075	6.8
90	108.0	86.8	98.0	31-CP1-27-0090	3.3	31-CP1-17-0090	5.4	31-CP1-17-0090	8.2
110	123.0	95.8	119.5	31-CP1-27-0110	4.0	31-CP1-17-0110	6.6	31-CP1-17-0110	10.0
125	110.0	-	-	31-CP1-27-0125	4.6	31-CP1-17-0125	7.4	31-CP1-17-0125	11.4
140	144.0	-	-	31-CP1-27-0140	5.1	31-CP1-17-0140	8.3	31-CP1-17-0140	12.7
160	142.0	114.0	173.0	31-CP1-27-0160	5.8	31-CP1-17-0160	9.5	31-CP1-17-0160	14.6
180	192.0	-	-	31-CP1-27-0180	6.6	31-CP1-17-0180	10.7	31-CP1-17-0180	16.4
200	181.0	-	-	31-CP1-27-0200	7.3	31-CP1-17-0200	11.9	31-CP1-17-0200	18.2
225	210.0	-	-	31-CP1-27-0225	8.2	31-CP1-17-0225	13.4	31-CP1-17-0225	20.5
250	230.0	-	-	31-CP1-27-0250	9.1	31-CP1-17-0250	14.8	31-CP1-17-0250	22.7
280	257.0	-	-	31-CP1-27-0280	10.2	31-CP1-17-0280	16.6	31-CP1-17-0280	25.4
315	262.0	-	-	31-CP1-27-0315	11.4	31-CP1-17-0315	18.7	31-CP1-17-0315	28.6
355	130.0	-	-	31-CP1-27-0355	12.9	31-CP1-17-0355	21.1	31-CP1-17-0355	32.2
400	130.0	-	-	31-CP1-27-0400	14.5	31-CP1-17-0400	23.7	31-CP1-17-0400	36.3
450	130.0	-	-	31-CP1-27-0450	16.3	31-CP1-17-0450	26.7	31-CP1-17-0450	40.9
500	130.0	-	-	31-CP1-27-0500	18.1	31-CP1-17-0500	29.7	31-CP1-17-0500	45.4
560	130.0	-	-	31-CP1-27-0560	20.3	31-CP1-17-0560	33.2	31-CP1-17-0560	50.8
630	160.0	-	-	31-CP1-27-0630	22.8	31-CP1-17-0630	37.4	31-CP1-17-0630	57.2
710	160.0	-	-	31-CP1-27-0710	25.7	31-CP1-17-0710	42.1	31-CP1-17-0710	64.5
800	160.0	-	-	31-CP1-27-0800	29.0	31-CP1-17-0800	47.4	31-CP1-17-0800	72.8
900	180.0	-	-	31-CP1-27-0900	32.6	31-CP1-17-0900	53.3	31-CP1-17-0900	81.8
1000	180.0	-	-	31-CP1-27-1000	36.2	31-CP1-17-1000	59.3	-	-
1200	180.0	-	-	31-CP1-27-1200	43.5	31-CP1-17-1200	67.9	-	-

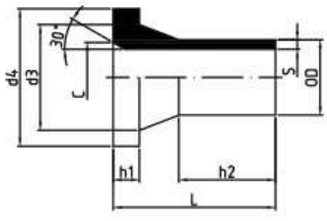
HD-PE STUB FLANGE

elongated
for butt welding
molded from PE100

對接長型中間法蘭
DFP FT3



OD20 ~ OD50



OD63 ~ OD315



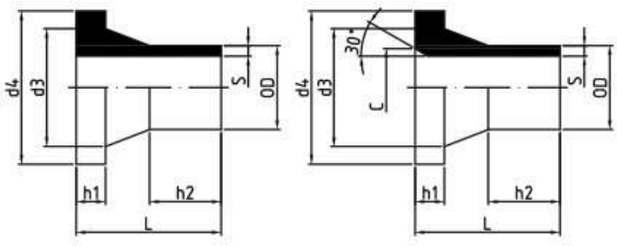
OD (mm)	L (mm)	d_3 (mm)	d_4 (mm)	h_2 (mm)	SDR17 ISO S8 PN10			SDR11 ISO S5 PN16		
					Code	S (mm)	h_1 (mm)	Code	S (mm)	h_1 (mm)
20	64.0	27.0	45.0	40.0	-	-	-	31-FT3-11-0032	2.0	7.2
25	64.0	34.0	45.0	39.0	-	-	-	31-FT3-11-0032	2.3	9.2
32	77.0	40.0	68.0	45.0	-	-	-	31-FT3-11-0032	2.9	10.0
40	83.0	50.0	78.0	52.0	-	-	-	31-FT3-11-0040	3.7	11.0
50	92.0	60.0	88.0	56.0	-	-	-	31-FT3-11-0050	4.6	12.2
63	107.0	73.0	102.0	63.0	31-FT3-17-0063	3.8	14.0	31-FT3-11-0063	5.8	14.0
75	108.0	87.0	122.0	70.0	31-FT3-17-0075	4.5	16.0	31-FT3-11-0075	6.8	16.1
90	126.0	104.0	138.0	82.0	31-FT3-17-0090	5.4	17.0	31-FT3-11-0090	8.2	17.0
110	139.0	125.0	158.0	95.0	31-FT3-17-0110	6.6	18.0	31-FT3-11-0110	10.0	18.2
125	175.0	131.5	157.9	100.0	31-FT3-17-0125	7.4	25.0	31-FT3-11-0125	11.4	25.5
140	197.1	155.0	191.0	129.7	31-FT3-17-0140	8.3	27.4	31-FT3-11-0140	12.7	27.4
160	160.0	175.0	211.0	108.0	31-FT3-17-0160	9.5	25.0	31-FT3-11-0160	14.6	26.2
180	180.0	186.0	217.0	125.0	31-FT3-17-0180	10.7	26.5	31-FT3-11-0180	16.4	26.5
200	213.0	229.0	271.0	141.5	31-FT3-17-0200	11.9	31.5	31-FT3-11-0200	18.2	31.5
225	213.0	237.0	268.0	145.0	31-FT3-17-0225	13.4	33.0	31-FT3-11-0225	20.5	33.0
250	273.0	284.0	320.0	202.0	31-FT3-17-0250	14.8	34.0	31-FT3-11-0250	22.7	34.0
280	375.0	292.0	320.0	302.0	31-FT3-17-0280	16.6	32.0	31-FT3-11-0280	25.4	32.0
315	379.0	334.0	370.0	302.0	31-FT3-17-0315	18.7	35.0	31-FT3-11-0315	28.6	35.0

HD-PE STUB FLANGE

acc. DIN 16962/16963
for butt welding
molded from PE100

對接中間法蘭

DFP FT1



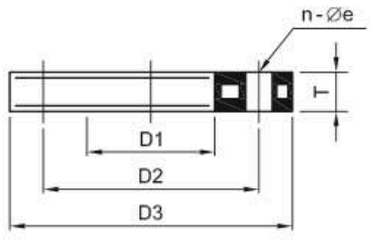
OD20 ~ OD50　　OD63 ~ OD1200

OD (mm)	L (mm)	d_3 (mm)	d_4 (mm)	h_2 (mm)	SDR17 ISO S8 PN10			SDR11 ISO S5 PN16		
					Code	S (mm)	h_1 (mm)	Code	S (mm)	h_1 (mm)
20	50.8	27.7	44.8	28.0	-	-	-	31-FT1-11-0020	2.0	7.2
25	51.0	32.5	57.9	30.0	-	-	-	31-FT1-11-0025	2.3	9.2
32	50.9	40.1	68.0	26.0	31-FT1-17-0032	2.0	10.0	31-FT1-11-0032	2.9	10.0
40	50.2	50.0	77.9	22.5	31-FT1-17-0040	2.4	11.0	31-FT1-11-0040	3.7	11.0
50	50.8	60.6	87.9	22.5	31-FT1-17-0050	3.0	12.2	31-FT1-11-0050	4.6	12.2
63	50.1	73.8	102.1	19.0	31-FT1-17-0063	3.8	14.0	31-FT1-11-0063	5.8	14.0
75	49.8	85.0	121.9	19.0	31-FT1-17-0075	4.5	16.1	31-FT1-11-0075	6.8	16.1
90	80.0	104.0	137.7	41.0	31-FT1-17-0090	5.4	17.0	31-FT1-11-0090	8.2	17.0
110	80.0	125.0	158.0	39.0	31-FT1-17-0110	6.6	18.2	31-FT1-11-0110	10.0	18.2
125	175.0	135.0	157.9	100.0	31-FT1-17-0125	7.4	25.5	31-FT1-11-0125	11.4	25.5
140	197.1	155.0	191.0	129.7	31-FT1-17-0140	8.3	27.4	31-FT1-11-0140	12.7	27.4
160	160.5	175.0	212.1	110.0	31-FT1-17-0160	9.5	26.2	31-FT1-11-0160	14.6	26.2
180	180.0	186.0	212.0	127.0	31-FT1-17-0180	10.7	26.5	31-FT1-11-0180	16.4	26.5
200	213.0	229.0	217.0	141.5	31-FT1-17-0200	11.9	31.5	31-FT1-11-0200	18.2	31.5
225	213.0	237.0	268.0	145.0	31-FT1-17-0225	13.4	33.0	31-FT1-11-0225	20.5	33.0
250	273.0	284.0	320.0	202.0	31-FT1-17-0250	14.8	34.0	31-FT1-11-0250	22.7	34.0
280	375.0	292.0	320.0	302.0	31-FT1-17-0280	16.6	32.0	31-FT1-11-0280	25.4	32.0
315	379.0	334.0	370.0	302.0	31-FT1-17-0315	18.7	35.0	31-FT1-11-0315	28.6	35.0
355	175.0	373.0	430.0	-	31-FT1-17-0355	21.1	40.0	31-FT1-11-0355	32.2	40.0
400	175.0	427.0	482.0	-	31-FT1-17-0400	23.7	40.0	31-FT1-11-0400	36.3	40.0
450	180.0	514.0	585.0	-	31-FT1-17-0450	26.7	50.0	31-FT1-11-0450	40.9	50.0
500	180.0	530.0	585.0	-	31-FT1-17-0500	29.7	50.0	31-FT1-11-0500	45.4	50.0
560	180.0	615.0	685.0	-	31-FT1-17-0560	33.2	55.0	31-FT1-11-0560	50.8	55.0
630	200.0	642.0	685.0	-	31-FT1-17-0630	37.4	55.0	31-FT1-11-0630	57.2	55.0
710	200.0	737.0	800.0	-	31-FT1-17-0710	42.1	55.0	31-FT1-11-0710	64.5	55.0
800	200.0	-	905.0	-	31-FT1-17-0800	47.4	60.0	31-FT1-11-0800	72.8	60.0
900	230.0	-	1005	-	31-FT1-17-0900	53.3	60.0	31-FT1-11-0900	81.8	60.0
1000	240.0	-	1110	-	31-FT1-17-1000	59.3	70.0	31-FT1-11-1000	90.9	70.0
1200	240.0	-	1330	-	31-FT1-17-1200	67.9	70.0	31-FT1-11-1200	109.1	70.0

BACKING RING

With steel insert
for steel beadings
acc.to DIN PN10
mold from PP grey PP black

法蘭鐵片
DFP FHD

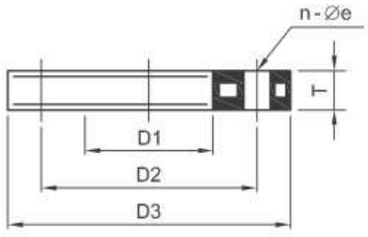


OD (mm)	D1 (mm)	D2 (mm)	D3 (mm)	T (mm)	e (mm)	n Number	SDR11 ISO S5 PN10 Code
20	28	65	95	12	14	4	31-FHD-11-0020
25	34	75	105	12	14	4	31-FHD-11-0025
32	42	85	115	16	14	4	31-FHD-11-0032
40	51	100	140	16	18	4	31-FHD-11-0040
50	62	110	150	18	18	4	31-FHD-11-0050
63	78	125	165	18	18	4	31-FHD-11-0063
75	92	145	185	18	18	4	31-FHD-11-0075
90	108	160	200	20	18	8	31-FHD-11-0090
110	128	180	220	20	18	8	31-FHD-11-0110
140	158	210	250	22	18	8	31-FHD-11-0140
160	178	240	285	22	23	8	31-FHD-11-0160
180	188	240	285	22	23	8	31-FHD-11-0180
200	235	295	340	24	23	8	31-FHD-11-0200
225	238	295	340	24	23	8	31-FHD-11-0225
250	288	350	390	26	23	12	31-FHD-11-0250
280	294	350	395	26	23	12	31-FHD-11-0280
315	338	400	445	26	23	12	31-FHD-11-0315
▲ 355	376	460	505	28	30	16	31-FHD-11-0355
▲ 400	430	515	565	28	30	16	31-FHD-11-0400
▲ 450	517	620	670	30	30	20	31-FHD-11-0450
▲ 500	533	620	670	30	30	20	31-FHD-11-0500
▲ 560	618	725	780	30	30	20	31-FHD-11-0560
▲ 630	645	725	780	30	30	20	31-FHD-11-0630
▲ 710	740	840	895	30	30	24	31-FHD-11-0710
▲ 800	840	950	1015	36	33	24	31-FHD-11-0800
▲ 900	950	1050	1115	38	33	28	31-FHD-11-0900
▲ 1000	1050	1160	1230	40	36	28	31-FHD-11-1000
▲ 1100	1155	-	1403	40	36	-	31-FHD-11-1100
▲ 1200	1260	1380	1455	40	39	32	31-FHD-11-1200

▲鋼鐵製品(Steel ones)

BACKING RING

acc.to ANSI standard
PP grey
法蘭鐵片150#
DFP FHA



OD (inch)	D1 (mm)	D2		D3 (mm)	e (mm)	n Number	T (mm)	SDR11 ISO S5 PN10
		(mm)	(inch)					Code
1/2"	28	60.50	2-3/8"	89	16	4	12	31-FHA-11-0020
3/4"	34	69.85	2-3/4"	98	16	4	12	31-FHA-11-0025
1"	42	79.25	3-1/8"	108	16	4	16	31-FHA-11-0032
1-1/4"	51	88.90	3-1/2"	117	16	4	16	31-FHA-11-0040
1-1/2"	62	98.55	3-7/8"	127	16	4	18	31-FHA-11-0050
2"	78	120.65	4-3/4"	152	19	4	18	31-FHA-11-0063
2-1/2"	92	139.70	5-1/2"	178	19	4	18	31-FHA-11-0075
3"	111	152.40	6"	191	19	4	20	31-FHA-11-0090
4"	133	190.50	7-1/2"	229	19	8	20	31-FHA-11-0110
5"	133	190.50	7-1/2"	254	22	8	20	31-FHA-11-0125
6"	178	241.00	9-1/2"	279	22	8	24	31-FHA-11-0160
8"	236	298.45	11-3/4"	343	22	8	28	31-FHA-11-0200
10"	288	361.95	14-1/4"	406	25	12	30	31-FHA-11-0250
12"	338	431.80	17"	483	25	12	32	31-FHA-11-0315
▲ 14"	376	476.25	18-3/4"	533	29	12	28	31-FHA-11-0355
▲ 16"	430	539.75	21-1/4"	597	29	16	28	31-FHA-11-0400
▲ 18"	517	577.85	22-3/4"	635	32	16	30	31-FHA-11-0450
▲ 20"	533	635.00	25"	699	32	20	30	31-FHA-11-0500
▲ 24"	645	749.30	29-1/2"	813	35	20	30	31-FHA-11-0630
▲ 28"	740	863.35	34"	928	35	24	30	31-FHA-11-0710
▲ 32"	840	977.90	38-1/2"	1060	41	24	36	31-FHA-11-0800
▲ 36"	950	1085.9	42-3/4"	1178	41	32	38	31-FHA-11-0900
▲ 40"	1050	1174.8	46-1/4"	1286	41	32	40	31-FHA-11-1000
▲ 44"	1155	1314.5	51-3/4"	1403	41	40	40	31-FHA-11-1100
▲ 48"	1260	1422.4	56"	1512	41	44	40	31-FHA-11-1200

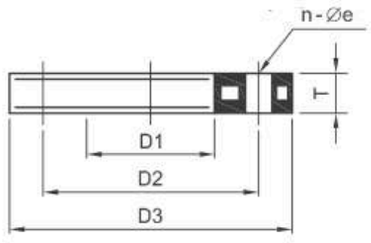
▲鋼鐵製品(Steel ones)

BACKING RING

acc.to JIS standard
PP grey

法蘭鐵片10K

DFP FHJ



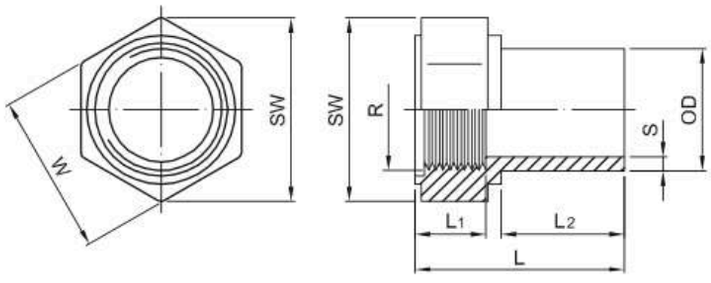
DN (inch)	D1 (mm)	D2 (mm)	D3 (mm)	e (mm)	n Number	T (mm)	SDR11 ISO S5 PN10 Code
1/2"	28	70	96	15	4	12	31-FHJ-11-0020
3/4"	34	75	100	15	4	14	31-FHJ-11-0025
1"	42	90	125	19	4	14	31-FHJ-11-0032
1-1/4"	51	100	135	19	4	14	31-FHJ-11-0040
1-1/2"	62	105	140	19	4	16	31-FHJ-11-0050
2"	78	120	155	19	4	16	31-FHJ-11-0063
2-1/2"	92	140	175	19	4	16	31-FHJ-11-0075
3"	110	150	185	19	8	18	31-FHJ-11-0090
4"	133	175	210	19	8	18	31-FHJ-11-0110
5"	160	210	250	23	8	20	31-FHJ-11-0140
6"	178	240	280	23	8	21	31-FHJ-11-0160
8"	238	290	330	23	12	21	31-FHJ-11-0225
10"	288	355	400	25	12	24	31-FHJ-11-0250
12"	338	400	445	25	16	26	31-FHJ-11-0315
▲ 14"	376	445	490	25	16	28	31-FHJ-11-0355
▲ 16"	430	510	560	27	16	28	31-FHJ-11-0400
▲ 18"	517	565	620	27	20	30	31-FHJ-11-0450
▲ 20"	533	620	675	27	20	30	31-FHJ-11-0500
▲ 24"	645	730	795	33	24	30	31-FHJ-11-0630
▲ 28"	740	840	905	33	24	30	31-FHJ-11-0710
▲ 32"	840	950	1020	33	28	36	31-FHJ-11-0800
▲ 36"	950	1050	1120	33	28	38	31-FHJ-11-0900
▲ 40"	1050	1160	1235	39	28	40	31-FHJ-11-1000
▲ 44"	1155	1275	1403	39	28	40	31-FHJ-11-1100
▲ 48"	1260	1380	1512	39	32	40	31-FHJ-11-1200

▲鋼鐵製品(Steel ones)

HD-PE ADAPTOR

with female thread
for butt welding
molded from PE100

對接內牙閥接頭
DFP FD1

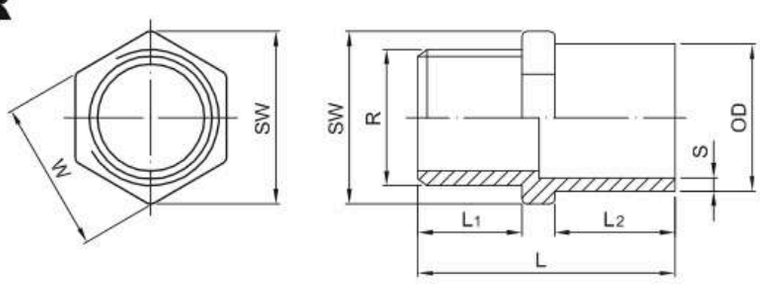


OD (mm)	L (mm)	L1 (mm)	L2 (mm)	S (mm)	R	WxSW (mm)	SDR11 ISO S5 PN16 Code
20	45.7	21.4	16.2	2.5	1/2" BSP	32.0x35.0	31-FD1-17-0020
25	50.8	25.5	17.0	2.8	3/4" BSP	40.5x44.6	31-FD1-17-0025
32	59.0	30.5	20.0	3.0	1" BSP	45.6x50.5	31-FD1-17-0032
40	62.5	30.0	24.0	3.7	1-1/4"BSP	54.0x59.5	31-FD1-17-0040
50	69.0	34.5	24.6	4.6	1-1/2"BSP	69.0x76.2	31-FD1-17-0050
63	75.0	36.5	28.2	5.8	2" BSP	83.6x93.0	31-FD1-17-0063

HD-PE ADAPTOR

with male thread
for butt welding
molded from PE100

對接外牙閥接頭
DFP MD1

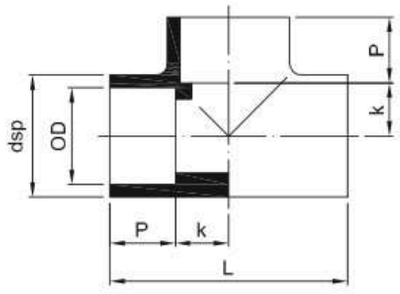


OD (mm)	L (mm)	L1 (mm)	L2 (mm)	S (mm)	R	WxSW (mm)	SDR11 ISO S5 PN16 Code
20	46.5	18.5	20.0	2.5	1/2" BSP	21.8x24.0	31-MD1-17-0020
25	51.8	20.5	23.0	2.7	3/4" BSP	26.7x29.6	31-MD1-17-0025
32	61.8	24.2	28.5	3.0	1" BSP	35.6x39.6	31-MD1-17-0032
40	67.7	27.2	30.0	3.7	1-1/4"BSP	45.7x50.7	31-MD1-17-0040
50	75.0	29.2	33.5	4.6	1-1/2"BSP	55.0x61.0	31-MD1-17-0050
63	80.0	32.0	35.7	5.8	2" BSP	64.3x71.3	31-MD1-17-0063

HD-PE TEE

for socket welding
molded from PE100

套接三通
DFP TT3

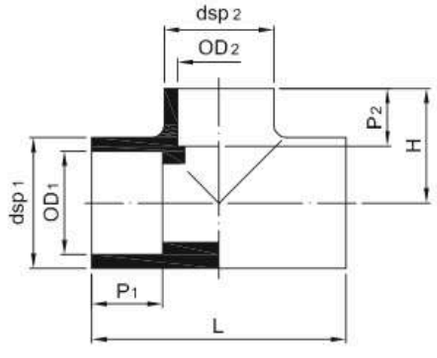


OD (mm)	L (mm)	dsp (mm)	k (mm)	P (mm)	SDR11 ISO S5 PN16	
					Code	Weight (kg/Pc.)
16	53.8	24.0	12.30	14.6	31-TT3-17-0016	0.035
20	59.5	29.0	14.35	15.4	31-TT3-17-0020	0.052
25	67.5	34.8	16.55	17.2	31-TT3-17-0025	0.078
32	79.5	42.5	20.15	19.6	31-TT3-17-0032	0.122
40	93.6	51.6	25.60	21.2	31-TT3-17-0040	0.198
50	106.7	63.7	29.35	24.0	31-TT3-17-0050	0.316
63	123.0	80.0	33.70	27.8	31-TT3-17-0063	0.548
75	151.2	91.6	43.20	32.4	31-TT3-17-0075	0.814
90	182.5	111.7	54.25	37.0	31-TT3-17-0090	1.465
110	206.8	133.4	60.55	43.0	31-TT3-17-0110	1.930

HD-PE REDUCED TEE

for socket welding
molded from PE100

套接異徑三通
DFP TR2

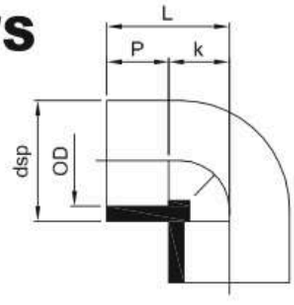


OD (mm)	H (mm)	L (mm)	dsp_1 (mm)	dsp_2 (mm)	P_1 (mm)	P_2 (mm)	SDR11 ISO S5 PN16	
							Code	Weight (kg/Pc.)
25/20	32.0	68.5	35.1	29.1	17.5	15.5	21-TR2-11-025020	0.04
32/20	40.0	80.5	43.1	29.1	19.6	15.5	21-TR2-11-032020	0.05
32/25	40.0	80.5	43.1	35.1	19.6	17.5	21-TR2-11-032025	0.06
40/20	45.0	90.5	52.2	29.1	21.6	15.5	21-TR2-11-040020	0.08
40/25	45.0	90.5	52.2	35.1	21.6	17.5	21-TR2-11-040025	0.08
40/32	45.0	91.5	52.2	43.1	21.6	19.6	21-TR2-11-040032	0.10
50/20	52.5	110.5	64.2	29.1	23.6	15.5	21-TR2-11-050020	0.16
50/25	52.5	110.5	64.2	35.1	23.6	17.5	21-TR2-11-050025	0.16
50/32	52.5	107.0	64.2	43.1	23.6	19.6	21-TR2-11-050032	0.17
50/40	52.5	107.0	64.2	52.2	23.6	21.6	21-TR2-11-050040	0.17
63/25	65.0	128.6	81.3	35.1	28.1	17.5	21-TR2-11-063025	0.27
63/32	64.5	128.6	81.3	43.1	28.1	19.6	21-TR2-11-063032	0.27
63/40	64.5	128.6	81.3	52.2	28.1	21.6	21-TR2-11-063040	0.28
63/50	64.5	128.6	81.3	64.2	28.1	23.6	21-TR2-11-063050	0.28

HD-PE 90° ELBOWS

for socket welding
molded from PE100

套接90°彎頭
DFP L92



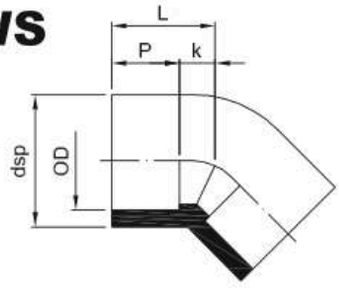


OD (mm)	L (mm)	dsp (mm)	k (mm)	P (mm)	SDR11 ISO S5 PN16	
					Code	Weight (kg/Pc.)
16	24.5	24.0	10.0	14.5	31-L92-11-0016	0.012
20	30.1	29.0	14.6	15.5	31-L92-11-0020	0.020
25	32.5	35.2	15.0	17.3	31-L92-11-0025	0.030
32	40.25	43.2	20.75	19.7	31-L92-11-0032	0.050
40	46.3	52.0	25.0	21.3	31-L92-11-0040	0.074
50	54.25	64.0	30.55	24.0	31-L92-11-0050	0.118
63	63.05	80.8	35.05	28.0	31-L92-11-0063	0.224
75	71.4	91.5	38.9	32.5	31-L92-11-0075	0.280
90	86.5	113.0	49.0	37.5	31-L92-11-0090	0.590
110	102.8	134.2	59.8	43.0	31-L92-11-0110	0.866

HD-PE 45° ELBOWS

for socket welding
molded from PE100

套接45°彎頭
DFP L46



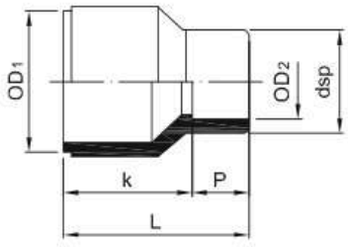


OD (mm)	L (mm)	dsp (mm)	k (mm)	P (mm)	SDR11 ISO S5 PN16	
					Code	Weight (kg/Pc.)
16	29.5	24.3	14.8	14.7	31-L46-11-0016	0.010
20	31.1	29.5	15.5	15.6	31-L46-11-0020	0.014
25	34.4	35.1	17.2	17.2	31-L46-11-0025	0.022
32	39.2	43.2	20.0	19.2	31-L46-11-0032	0.034
40	42.5	52.2	21.3	21.2	31-L46-11-0040	0.052
50	48.7	64.3	24.5	24.2	31-L46-11-0050	0.086
63	56.3	81.0	28.3	28.0	31-L46-11-0063	0.172
75	65.0	91.5	32.5	32.5	31-L46-11-0075	0.202
90	60.0	113.5	37.5	22.5	31-L46-11-0090	0.446
110	71.4	134.5	43.0	28.4	31-L46-11-0110	0.662

HD-PE REDUCER

for socket welding
molded from PE100

套接大小頭
DFP RC2



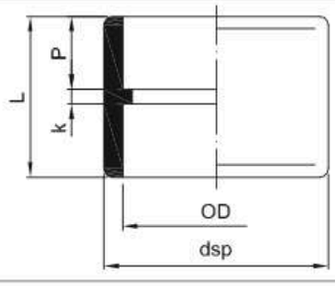


OD1/OD2 (mm)	L (mm)	dsp (mm)	k (mm)	P (mm)	SDR11 ISO S5 PN16	
					Code	Weight (kg/pc.)
20/16	35.0	23.7	20.5	14.5	31-RC2-17-020016	0.013
25/16	40.0	23.7	25.5	14.5	31-RC2-17-025016	0.017
25/20	39.7	29.0	24.3	15.4	31-RC2-17-025020	0.020
32/20	44.0	28.8	28.9	15.1	31-RC2-17-032020	0.028
32/25	44.0	34.7	26.7	17.3	31-RC2-17-032025	0.034
40/20	49.0	28.7	33.5	15.5	31-RC2-17-040020	0.040
40/25	49.0	34.7	31.6	17.4	31-RC2-17-040025	0.045
40/32	49.0	42.3	29.6	19.4	31-RC2-17-040032	0.052
50/20	54.8	28.6	39.7	15.1	31-RC2-17-050020	0.056
50/25	54.8	34.8	38.6	16.2	31-RC2-17-050025	0.065
50/32	54.5	42.6	35.1	19.4	31-RC2-17-050032	0.068
50/40	54.5	51.2	32.8	21.7	31-RC2-17-050040	0.078
63/25	64.0	34.9	46.8	17.2	31-RC2-17-063025	0.099
63/32	63.4	42.7	43.9	19.5	31-RC2-17-063032	0.101
63/40	63.7	51.8	42.0	21.7	31-RC2-17-063040	0.119
63/50	64.0	63.6	40.1	23.9	31-RC2-17-063050	0.140
75/63	64.0	80.7	36.1	27.9	31-RC2-17-075063	0.201
90/63	86.3	80.0	58.3	28.0	31-RC2-17-090063	0.333
90/75	86.2	91.4	54.0	32.2	31-RC2-17-090075	0.350
110/63	87.0	80.7	59.0	28.0	31-RC2-17-110063	0.449
110/90	86.5	111.8	50.3	36.2	31-RC2-17-110090	0.531

HD-PE SOCKET

for socket welding
molded from PE100

套接平接頭
DFP CL2

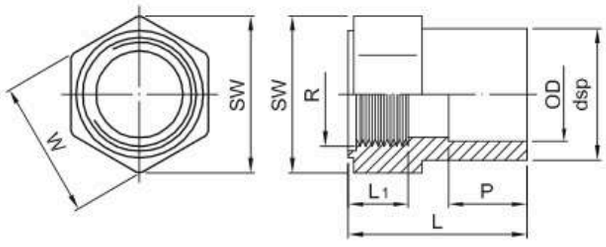


OD (mm)	L (mm)	dsp (mm)	k (mm)	P (mm)	SDR11 ISO S5 PN16	
					Code	Weight (kg/Pc.)
16	33.2	24.0	4.2	14.5	31-CL2-17-0016	0.016
20	35.0	28.9	4.0	15.5	31-CL2-17-0020	0.023
25	39.0	35.0	5.0	17.0	31-CL2-17-0025	0.035
32	43.0	43.0	4.0	19.5	31-CL2-17-0032	0.053
40	47.0	51.7	5.0	21.0	31-CL2-17-0040	0.077
50	53.0	63.7	5.0	24.0	31-CL2-17-0050	0.123
63	60.7	80.0	4.7	28.0	31-CL2-17-0063	0.221
75	69.5	91.0	5.5	32.0	31-CL2-17-0075	0.278
90	79.0	112.7	6.0	36.5	31-CL2-17-0090	0.532
110	91.8	132.5	6.8	42.5	31-CL2-17-0110	0.742

HD-PE ADAPTOR

with female thread
for socket welding
molded from PE100

套接內牙閥接頭
DFP FD2



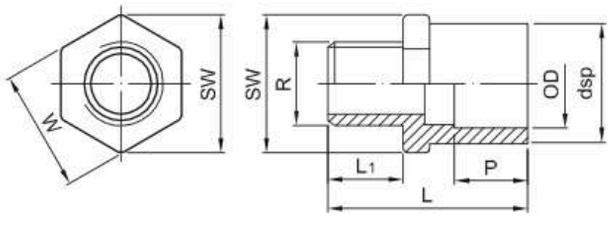


OD (mm)	L (mm)	L1 (mm)	dsp (mm)	P (mm)	R (mm)	WxSW (mm)	SDR11 ISO S5 PN16 Code
20	46.0	16.0	28.5	29.0	1/2" BSP	32.0x35.5	31-FD2-17-0020
25	51.0	17.0	34.4	33.5	3/4" BSP	40.5x45.0	31-FD2-17-0025
32	58.0	20.0	42.5	37.5	1" BSP	45.5x50.5	31-FD2-17-0032
40	63.0	24.0	51.5	38.5	1-1/4"BSP	54.5x60.0	31-FD2-17-0040
50	69.5	25.0	63.5	44.0	1-1/2"BSP	69.5x77.0	31-FD2-17-0050
63	75.0	28.5	79.5	46.0	2" BSP	84.0x94.0	31-FD2-17-0063

HD-PE ADAPTOR

with male thread
for socket welding
molded from PE100

套接外牙閥接頭
DFP MD2



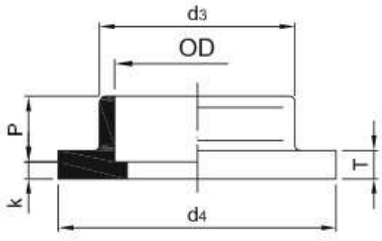


OD (mm)	L (mm)	L1 (mm)	dsp (mm)	P (mm)	R (mm)	WxSW (mm)	SDR11 ISO S5 PN16 Code
20	46.5	18.5	28.0	15.0	1/2" BSP	30.5x33.5	31-MD2-17-0020
25	51.5	21.0	34.0	17.5	3/4" BSP	37.0x41.0	31-MD2-17-0025
32	62.5	24.5	43.0	20.0	1" BSP	44.5x49.5	31-MD2-17-0032
40	67.0	27.5	51.5	21.6	1-1/4"BSP	53.5x59.0	31-MD2-17-0040
50	74.5	29.0	63.5	24.0	1-1/2"BSP	65.0x72.0	31-MD2-17-0050
63	80.0	32.0	79.0	28.0	2" BSP	81.1x91.0	31-MD2-17-0063

HD-PE FLANGE

ADAPTORS
for socket welding
molded from PE100

套接中間法蘭
DFP FT2



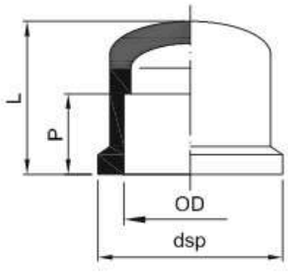


OD (mm)	d3 (mm)	d4 (mm)	T (mm)	k (mm)	P (mm)	SDR11 ISO S5 PN16	
						Code	Weight (kg/Pc.)
20	27.5	44.6	8.5	3.7	15.6	31-FT2-17-0020	0.240
25	33.0	57.4	9.2	3.4	18.3	31-FT2-17-0025	0.420
32	41.4	67.3	10.6	4.0	20.0	31-FT2-17-0032	0.640
40	50.5	77.2	10.3	5.0	22.5	31-FT2-17-0040	0.860
50	61.0	87.2	13.5	5.4	24.2	31-FT2-17-0050	0.128
63	75.8	100.7	13.7	5.0	28.0	31-FT2-17-0063	0.169
75	90.2	120.3	16.3	5.3	32.3	31-FT2-17-0075	0.282
90	107.8	136.0	17.5	5.2	35.3	31-FT2-17-0090	0.375
110	129.8	154.7	18.5	7.1	41.4	31-FT2-17-0110	0.531

HD-PE END CAP

for socket welding
molded from PE100

套接管帽
DFP CP2



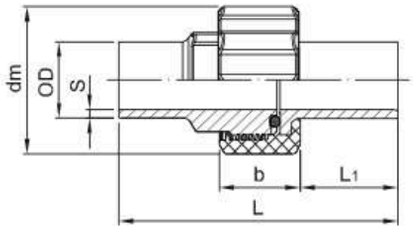


OD (mm)	dsp (mm)	L (mm)	P (mm)	SDR11 ISO S5 PN16	
				Code	Weight (kg/Pc.)
16	24.1	23.9	14.5	31-CP2-17-0016	0.012
20	29.2	26.9	15.5	31-CP2-17-0020	0.018
25	35.1	30.3	17.0	31-CP2-17-0025	0.029
32	43.4	35.0	19.5	31-CP2-17-0032	0.046
40	52.1	39.0	21.6	31-CP2-17-0040	0.069
50	64.0	49.0	24.0	31-CP2-17-0050	0.119
63	81.0	58.5	28.2	31-CP2-17-0063	0.236
75	92.0	65.5	33.0	31-CP2-17-0075	0.287
90	112.5	76.0	37.0	31-CP2-17-0090	0.535
110	132.5	92.0	42.7	31-CP2-17-0110	0.806

HD-PE UNION

with EPDM O-Ring gasket
with FPM O-Ring gasket
for butt welding
molded from PE100

對接油任
DFP EU1



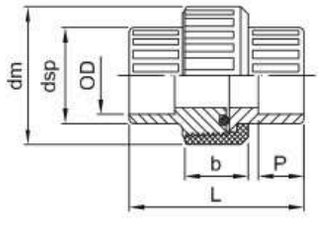


OD (mm)	L (mm)	L1 (mm)	S (mm)	dm (mm)	b (mm)	SDR11 ISO S5 PN16 Code
20	109	38	2.0	47	25	31-EU1-17-0020
25	117	39	2.3	56	26	31-EU1-17-0025
32	120	40	3.0	65	31	31-EU1-17-0032
40	128	42	3.7	79	31	31-EU1-17-0040
50	132	46	4.6	88	35	31-EU1-17-0050
63	141	46	5.8	109	39	31-EU1-17-0063

HD-PE UNION

with EPDM O-Ring gasket
with FPM O-Ring gasket
for socket welding
molded from PE100

套接油任
DFP EU2





OD (mm)	L (mm)	dsp (mm)	P (mm)	dm (mm)	b (mm)	SDR11 ISO S5 PN16 Code	Weight (kg/Pc.)
20	56	30	15	47	22	31-EU2-17-0020	0.042
25	63	39	19	60	27	31-EU2-17-0025	0.080
32	68	44	20	68	28	31-EU2-17-0032	0.105
40	80	51	24	80	30	31-EU2-17-0040	0.148
50	89	60	24	87	33	31-EU2-17-0050	0.179
63	102	72	26	100	40	31-EU2-17-0063	0.253
75	114	95	32	147	47	31-EU2-17-0075	0.713
90	134	111	36	180	64	31-EU2-17-0090	1.305
110	149	195	44	195	77	31-EU2-17-0110	1.792

鎖緊式接頭

鎖緊式接法 / COMPRESSION-FITTINGS

(適用口徑：20mm-110mm)

鎖式另件優點：

鎖緊式接頭可與符合CNS、JIS、ANSI、BS規格之剛性管材結合，而且安裝及拆裝容，施工工具僅需管鉗，1"以下可徒手接合，並可重複安裝使用，可以抵抗和管體本身相同的壓力和溫度。

鎖接步驟：

1. 使用一般鋸片或截管器進行切割管材，盡量使管端處垂直平整，再將接頭的本體、管子、止水O型環、推進環、帽蓋鎖等件依次序排。
2. 將管子和O型環塗上肥皂水或噴臘後增加其潤滑性，將管端插入接頭本體中，利用推進環盡量將 O型環推入接頭本體，並將帽蓋鎖盡量鎖入鎖緊。
3. 退開帽蓋將固定環套於緊臨推進環處。
4. 再將帽蓋鎖重新鎖入，直至曝露在外部的螺紋少於二牙紋。(管徑較大時可使用勾型板手協助鎖入)



TEE(三通)
20 25 32 40 50 63 75 90 110



REDUCING TEE(異徑三通)
25x20 32x25 40x32 50x40
63x50 75x63 90x75 110x90



90°ELBOW(90度彎頭)
20 25 32 40 50 63 75 90 110



COUPLING(直接頭)
20 25 32 40 50 63 75 90 110



MALE THREADED ADAPTOR
(外牙接頭)
20 25 32 40 50 63 75 90 110



REDUCING COUPLING(大小頭)
25x20 32x20 32x25 40x20 40x25 40x32
50x20 50x25 50x32 50x40 63x25 63x32
63x40 63x50 75x50 75x63 90x63 90x75
110x90



FLANGED(法蘭)
63 75 90 110

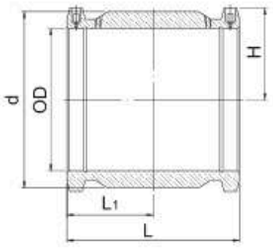


FEMALE THREADED ADAPTOR
(內牙接頭)
20 25 32 40 50 63 75 90 110

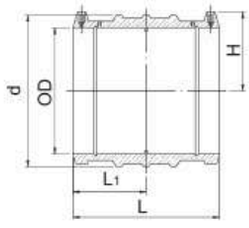
HD-PE ELECTROFUSION COUPLING

電焊套

DFP ES1



PN16



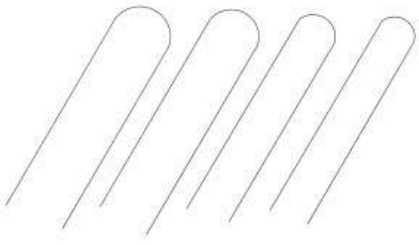
PN10

OD (mm)	L (mm)		L_1 (mm)		d (mm)		H (mm)		Code	
	PN10	PN16	PN10	PN16	PN10	PN16	PN10	PN16	SDR17 ISO S8 PN10	SDR11 ISO S5 PN16
20	-	71	-	35	-	36	-	38	-	31-ES2-16-0020
25	-	71	-	35	-	36	-	38	-	31-ES2-16-0025
32	-	80	-	39	-	44	-	42	-	31-ES2-16-0032
40	-	90	-	44	-	55	-	47	-	31-ES2-16-0040
50	-	100	-	49	-	68	-	52	-	31-ES2-16-0050
63	118	118	57	57	77	82	57	58	31-ES1-10-0063	31-ES2-16-0063
75	126	126	61	62	90	98	63	65	31-ES1-10-0075	31-ES2-16-0075
90	148	148	72	73	108	117	69	69	31-ES1-10-0090	31-ES2-16-0090
110	163	163	80	80	131	140	79	79	31-ES1-10-0110	31-ES2-16-0110
125	173	173	85	85	149	157	87	87	31-ES1-10-0125	31-ES2-16-0125
140	182	182	89	89	167	175	94	94	31-ES1-10-0140	31-ES2-16-0140
160	198	198	97	97	193	200	104	104	31-ES1-10-0160	31-ES2-16-0160
180	212	212	104	104	215	224	114	114	31-ES1-10-0180	31-ES2-16-0180
200	232	223	114	110	235	249	127	126	31-ES1-10-0200	31-ES2-16-0200
225	240	240	118	118	264	280	141	140	31-ES1-10-0225	31-ES2-16-0225
250	256	256	126	126	293	310	155	155	31-ES1-10-0250	31-ES2-16-0250
280	275	275	135	136	332	339	166	166	31-ES1-10-0280	31-ES2-16-0280
315	284	284	140	140	374	381	184	184	31-ES1-10-0315	31-ES2-16-0315
355	280	260	138	128	421	436	204	245	31-ES1-10-0355	31-ES2-16-0355
400	296	-	146	-	474	-	227	-	31-ES1-10-0400	31-ES2-16-0400
450	310	310	155	155	543	518	255	255	31-ES1-10-0450	31-ES2-16-0450
500	340	340	170	170	602.7	575.7	282.5	282.5	31-ES1-10-0500	31-ES2-16-0500
560	376	376	188	188	674	645	317	317	31-ES1-10-0560	31-ES2-16-0560

HD-PE ROUND BAR

molded form
acc.to DIN 16980
Storage length:1m
(Special lengths on request)

圓棒
DFP PR1



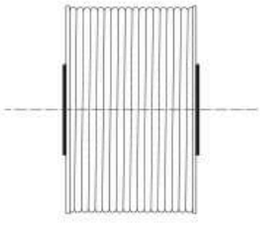
OD (mm)	Tolerance		Material	
	Minimum (mm)	Maximum (mm)	Weight (mm)	Code
10	+0.1	+0.6	0.080	32-PR1-0010
12	+0.1	+0.6	0.110	32-PR1-0012
15	+0.2	+0.7	0.185	32-PR1-0015
16	+0.2	+0.8	0.203	32-PR1-0016
20	+0.2	+1.0	0.317	32-PR1-0020
25	+0.2	+1.1	0.491	32-PR1-0025
30	+0.2	+1.2	0.703	32-PR1-0030
35	+0.2	+1.3	0.971	32-PR1-0035
40	+0.2	+1.5	1.240	32-PR1-0040
45	+0.3	+1.7	1.570	32-PR1-0045
50	+0.3	+2.0	1.950	32-PR1-0050
55	+0.3	+2.1	2.360	32-PR1-0055
60	+0.3	+2.3	2.800	32-PR1-0060
70	+0.3	+2.5	3.800	32-PR1-0070
75	+0.3	+2.5	4.350	32-PR1-0075

OD (mm)	Tolerance		Material	
	Minimum (mm)	Maximum (mm)	Weight (mm)	Code
80	+0.4	+2.5	4.94	32-PR1-0080
90	+0.5	+2.8	6.26	32-PR1-0090
100	+0.6	+3.0	7.73	32-PR1-0100
110	+0.7	+3.0	9.33	32-PR1-0110
125	+0.8	+3.5	12.1	32-PR1-0125
135	+0.8	+3.5	14.4	32-PR1-0135
140	+0.9	+4.0	15.1	32-PR1-0140
150	+1.0	+4.2	17.4	32-PR1-0150
160	+1.1	+4.5	19.8	32-PR1-0160
180	+1.2	+5.0	25.0	32-PR1-0180
200	+1.3	+5.5	31.3	32-PR1-0200
220	+1.3	+5.5	37.7	32-PR1-0220
250	+1.3	+6.0	48.6	32-PR1-0250
300	+1.3	+7.0	69.7	32-PR1-0300
315	+1.3	+8.0	74.3	32-PR1-0315

WELDING ROD

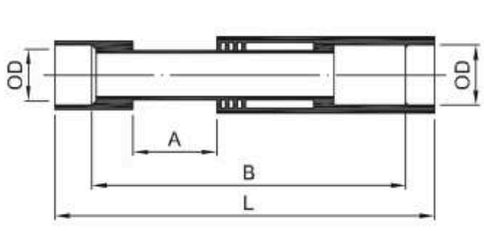
NATURAL

焊條
DFP PW1

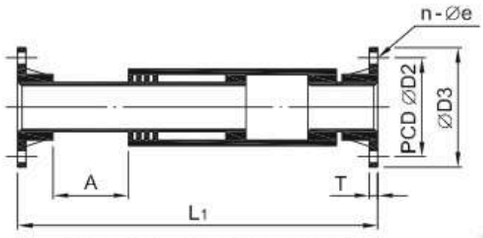


Design	Diameter (mm)	Weight (kg/coil)	Code
Welding rod extruded, round	Ø3	ca.4.5kg	32-PW1-0003
	Ø4	ca.4.5kg	32-PW1-0004

EXPANSION JOINT REPAIR COUPING（伸縮接頭）



插管式SOCKET (EJ-S)



法蘭式FLANGED (EJ-F)



JIS

單位(unit):mm

Size	OD	6" TRAVEL				12" TRAVEL				D2	D3	T	e	n
		A	EJ-S		EJ-F	A	EJ-S		EJ-F					
			L	B	L_1		L	B	L_1					
1/2"	22.20	76	360	317	397	152	579	535	616	70	95 40	15	15	4
3/4"	26.55	76	380	330	423	152	602	552	645	75	99.30	15	15	4
1"	32.55	76	396	340	443	152	624	568	671	90	124.6	15	19	4
1-1/4"	38.65	76	404	342	446	152	632	570	674	100	134.8	16	19	4
1-1/2"	48.90	76	424	354	480	152	652	582	708	105	139.8	17	19	4
2"	60.80	76	447	371	510	152	675	599	738	120	156.0	20	19	4
2-1/2"	76.80	76	482	392	542	152	710	620	770	140	173.8	20	19	4
3"	89.60	76	492	396	553	152	720	624	781	150	184.5	20	19	8
4"	114.70	76	537	422	627	152	765	650	855	175	210.0	23	19	8
5"	140.85	76	579	445	691	152	807	673	919	210	250.0	24	23	8
6"	166.00	76	640	488	781	152	868	716	1009	240	280.0	27	23	8
8"	218.00	76	733	529	895	152	-	-	1123	290	330.0	30	23	12
10"	268.00	76	856	606	1056	152	-	-	1284	355	400.0	33	25	12
12"	-	76	-	-	1073	152	-	-	1301	400	445.0	35	25	16

ANSI

單位(unit):mm

Size	OD	6" TRAVEL				12" TRAVEL				D2	D3	T	e	n
		A	EJ-S		EJ-F	A	EJ-S		EJ-F					
			L	B	L_1		L	B	L_1					
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

Size	OD	6" TRAVEL				12" TRAVEL				D2	D3	T	e	n
		A	EJ-S		EJ-F	A	EJ-S		EJ-F					
			L	B	L1		L	B	L_1					
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 COUPING
(伸縮接頭插管/法蘭產品代號)



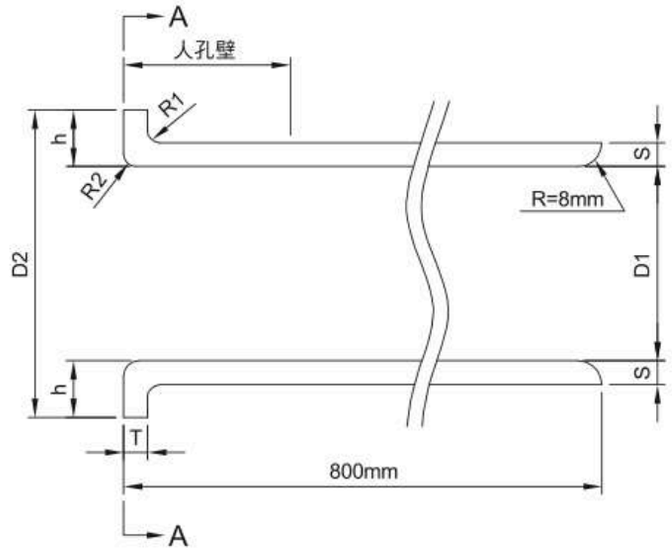
SOCKET CODE NUMBER (EJ-S) 插管產品代號

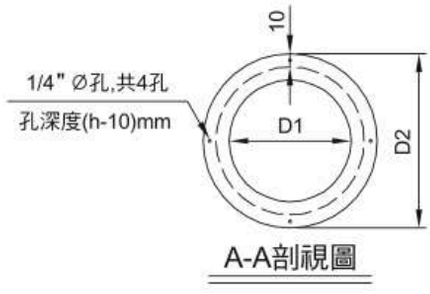
Size	JIS		ANSI		DIN	
	6" TRAVEL	12" TRAVEL	6" TRAVEL	12" TRAVEL	6" TRAVEL	12" TRAVEL
1/2"	11-EJ5-08-015J	11-EJ6-08-015J	11-EJ5-08-015A	11-EJ6-08-015A	11-EJ5-08-015D	11-EJ6-08-015D
3/4"	11-EJ5-08-020J	11-EJ6-08-020J	11-EJ5-08-020A	11-EJ6-08-020A	11-EJ5-08-020D	11-EJ6-08-020D
1"	11-EJ5-08-025J	11-EJ6-08-025J	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

Size	JIS		ANSI		DIN	
	6" TRAVEL	12" TRAVEL	6" TRAVEL	12" TRAVEL	6" TRAVEL	12" TRAVEL
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

HD-PE WALL-STOP PIPE
HD-PE 過牆管





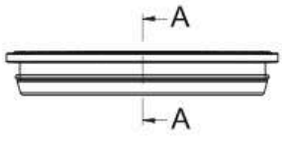
A-A剖視圖

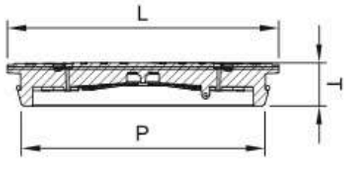
HDPE 過牆管尺寸一覽表　　單位：mm

標準管徑	厚度 (S)	近似內徑 (D1)	h	D2	R1	R2	T
110	10.0	90.0	34	158.0	15	10	9.5
225	20.5	184.0	42	268.0	15	10	20.0
250	22.7	204.6	45	294.6	15	10	22.0
280	25.4	229.2	50	339.6	15	10	24.5
280	45.5	189.0	65	319.0	15	10	44.0

HD-PE DRAIN-WELL ROUND COVER
HD-PE 圓形陰井蓋







剖視圖A-A



OD	L	P	T
660	660	591	104
780	780	690	114

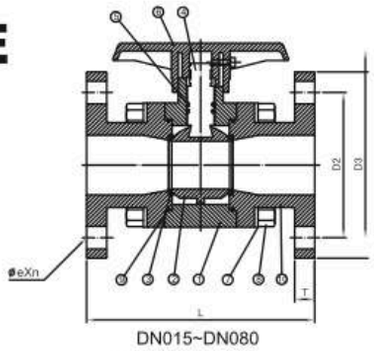
STRONG UNION BALL VALVE

強力型球閥

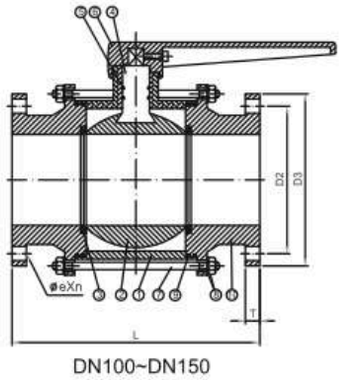
CG300

Size: DN15-DN150





DN015~DN080



DN100~DN150

SPECIFICATIONS:

1.Test Press: ①{15mm-1/2"~65mm-2 1/2"}:15kgf/cm² (bar)(235 lb/in²)
② {80mm-3"~150mm-6" } : 10kgf/cm² (bar)(150 lb/in²)

2.Working Press: ①{15mm-1/2"~65mm-2 1/2"}:10kgf/cm² (bar)(150 lb/in²)
② {80mm-3"~150mm-6" } : 7kgf/cm² (bar)(100 lb/in²)

MATERIALS OF CONSTRUCTION

No.	Parts	Pcs	Materials	No.	Parts	Pcs	Materials
1	Body	1	UPVC, CPVC, PP, PVDF	6	Handle	1	15A~150A.....ABS
2	Ball	1	UPVC, CPVC, PP, PVDF	7	Bolt	15A-32A 4	SUS-304
3	Seat	2	TEFLON	8	NUT&WASHER	40A-80A 6 100A 8 150A 10	40A-80A PVC COATED BRASS 15A-32A,100A-150A SUS-304
4	Shaft	1	UPVC, CPVC, PPG, PVDF	9	Flange O-Ring	15A-65A 2 80A-150A 4	EPDM, VITON
5	O-Ring	15A,20A 1 25A~150A 2	EPDM, VITON	10	Flange	2	UPVC, CPVC, PP, PVDF

DIMENSIONS TABLE

	JIS						ANSI						DIN					
	Unit:mm						Unit:inch						Unit:mm					
Standards Nom. Size DN(inch)	D3	D2	L Flange end	n	øe	T	D3	D2	L Flange end	n	øe	T	D3	D2	L Flange end	n	øe	T
15(1/2")	95	70	146	4	15	13	3.50	2.38	5.75	4	0.63	0.51	95	65	146	4	14	13
20(3/4")	100	75	152	4	15	15	3.88	2.76	5.98	4	0.63	0.59	105	75	152	4	14	15
25(1")	125	90	172	4	19	16	4.25	3.13	6.77	4	0.63	0.63	115	85	172	4	14	16
32(1-1/4")	135	100	175	4	19	16	4.62	3.50	6.89	4	0.71	0.63	140	100	175	4	18	16
40(1-1/2")	140	105	182	4	19	18	5.00	3.88	7.17	4	0.71	0.71	150	110	182	4	18	18
50(2")	155	120	189	4	19	18	6.00	4.74	7.44	4	0.71	0.71	165	125	189	4	18	18
65(2-1/2")	175	140	218	4	19	20	7.00	5.49	8.58	4	0.75	0.78	185	145	218	4	18	20
80(3")	185	150	244	8	19	20	7.50	6.00	9.61	4	0.75	0.78	200	160	244	8	18	20
100(4")	210	175	296	8	19	23	9.00	7.50	11.65	8	0.78	0.90	220	180	296	8	18	23
125(5")	250	210	390	8	23	24	10.00	8.50	15.35	8	0.87	0.94	250	210	390	8	18	24
150(6)	280	240	390	8	23	24	11.00	9.50	15.35	8	0.87	0.94	280	240	390	8	23	24

※ 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

※ The dimension table is calculably based on PVC material.
The valve of test pressure is calculably 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.

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

通用型蝶閥



BE300
Size: 2"- 8"

End Type: Flanged

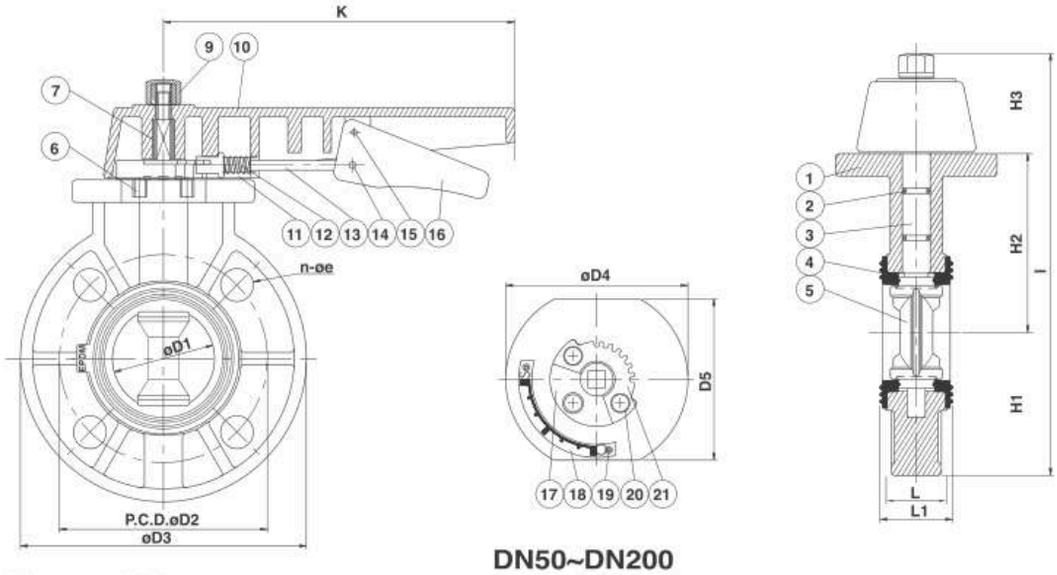
Test Pressure: 225 PSI

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	12	Spring	1	SUS 304
2	Stem O'ring	2	EPDM, VITON	13	Lever	1	SUS 304
3	Stem	1	SUS 410, SUS 316	14	Setpin(Short)	1	SUS 304
4	Seat	1	EPDM, VITON, NBR	15	Setpin(Long)	1	SUS 304
5	Disc	1	UPVC, PP, CPVC, PVDF	16	Lever	1	ABS
6	Bolt	1	BRASS, SUS 304	17	Positioner	1	UPVC
7	Handle Insert	1	FC 0208	18	Indicator	1	SUS 304
9	Stem Bolt	1	UPVC, BRASS	19	Bolt	2	SUS 304
10	Handle	1	ABS	20	Bolt	3	SUS 304
11	Handle Cap	1	ABS	21	Teeth Plate	1	SUS 304



DN50~DN200

The Torque Values

	AT Water							
	W/O Pressure (Kgf.m)		Pressure at 50PSI (Kgf.m)		Pressure at 100PSI (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

DIMENSIONS TABLE

JIS — Unit: mm

Nom. size DN(inch)	D1	D2	D3	n	L	L1	D4	H1	H2	H3	I	K	D5	Test Press(kgf/cm²) Body	Test Press(kgf/cm²) Seat	Working Press. (kgf/cm²)
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 — Unit: inch

Nom. size DN(inch)	D1	D2	D3	n	L	L1	D4	H1	H2	H3	I	K	D5	Test Press (lb/in²) Body	Test Press (lb/in²) Seat	Working Press (lb/in²)
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 — Unit: mm

Nom. size DN(inch)	D1	D2	D3	n	L	L1	D4	H1	H2	H3	I	K	D5	Test Press (bar) Body	Test Press (bar) Seat	Working Press (bar)
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

※ 法蘭長度公差依據 EN558-1:1995 標準
※ 蝶閥於安裝對鎖長度請參照目錄中 L 為標準長度施作

※ Standard dimensimns based on UPVC material
※ The flanged length tolerance is according to EN558-1:1995.
※ Please refer to the face-to-face (L)length as the butterfly valve standard installation's lay length.

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.

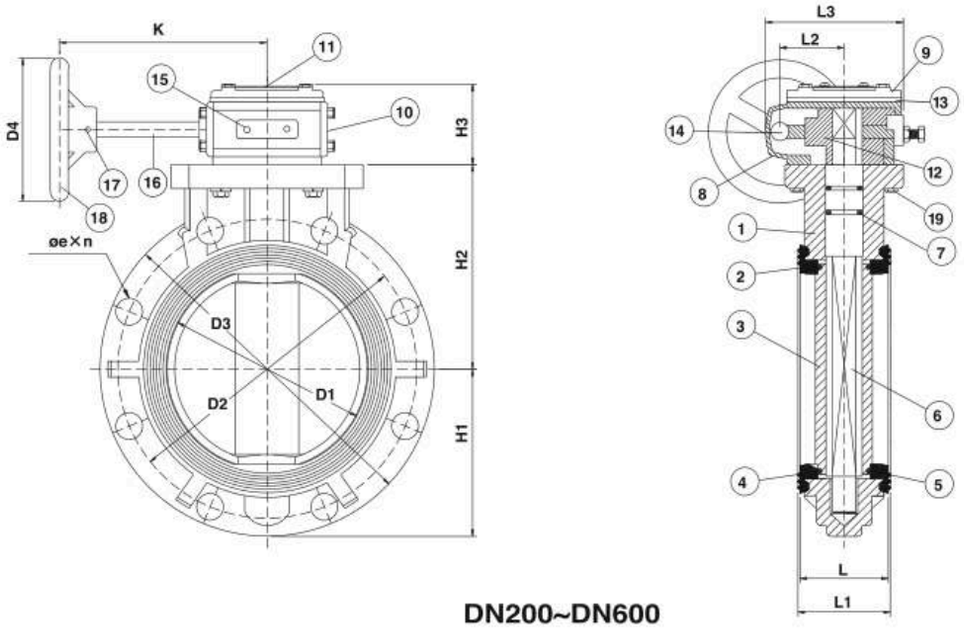


MATERIALS OF CONSTRUCTION

No.	Parts	Pcs.	Materials	No.	Parts	Pcs.	Materials
1	Body	1	UPVC, PP,CPVC, PPG, PVDF	11	Inicator Plate	1	PVC
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	SUS 410, SUS 304, SUS 316	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	FC25
9	Gear Box Cap	1	FC25	19	Tightening Bolt	4	SCM3,SUS 304
10	Side Cap	1	FC25				

Torque Values (1kgf/m=9.81N.m)

BF-V'S Size	Torque Under Without Any Water Pressure (kgf/m)	Under Water Test Pressure (kgf/cm²)			BF-V'S Size	Torque Under Without Any Water Pressure (kgf/m)	Under Water Test Pressure (kgf/cm²)		
		Water Pressure(kgf/cm²)	Open Torque(kgf/m)	Close Torque(kgf/m)			Water Pressure(kgf/cm²)	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

DIMENSIONS TABLE

JIS															Unit: mm		
Nom. Size DN(inch)	D1	D2	n	øe	D3	L	L1	H1	H2	H3	K	L2	L3	D4	Test Press (kgf/cm²) Body	Test Press (kgf/cm²) Seat	Working Press (kgf/cm²)
200(8")	203	290	12	23	348	72.6	81.5	174	211.2	108	175	51	136	180	15.0	12.0	10.0
250(10")	255	355	12	25	412	92	102	206	242.7	83	195	51	136	180	15.0	12.0	10.0
300(12")	312	400	16	25	493	112	120	247	289	110	210	72	189	305	12.0	10.0	8.0
350(14")	355	445	16	25	540	114	123	270	305	110	210	72	189	305	10.5	8.5	7.0
400(16")	398	510	16	27	615	152	163	307.5	353	130	330	72	189	356	9.0	7.0	6.0
450(18")	451	565	20	27	640	165	175	325	365	130	330	116	285	406	9.0	6.0	5.0
500(20")	500	620	20	27	730	175	183	373	405	130	330	116	285	457	9.0	6.0	5.0
600(24")	600	730	24	33	844	194	205	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	H3	K	L2	L3	D4	Test Press (lb/in²) Body	Test Press (lb/in²) Seat	Working Press (lb/in²)
200(8")	7.99	11.75	8	0.88	13.70	2.86	3.21	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	3.62	4.02	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	4.41	4.72	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	4.49	4.84	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	5.98	6.42	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	6.50	6.89	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	6.89	7.21	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	7.64	8.07	17.13	18.11	6.89	13.78	4.57	11.22	20.00	111	90	75

DIN															Unit: mm		
Nom. Size DN(inch)	D1	D2	n	øe	D3	L	L1	H1	H2	H3	K	L2	L3	D4	Test Press (bar) Body	Test Press (bar) Seat	Working Press (bar)
200(8")	203	295	8	23	348	72.6	81.5	174	211.2	108	175	51	136	180	15.0	12.0	10.0
250(10")	255	350	12	25	412	92	102	206	242.7	83	195	51	136	180	15.0	12.0	10.0
300(12")	312	400	12	25	493	112	120	247	289	110	210	72	189	305	12.0	10.0	8.0
350(14")	355	460	16	25	540	114	123	270	305	110	210	72	189	305	10.5	8.5	7.0
400(16")	398	515	16	27	615	152	163	307.5	363	130	330	72	189	356	9.0	7.0	6.0
450(18")	451	565	20	27	640	165	175	325	365	130	330	116	285	406	9.0	6.0	5.0
500(20")	500	620	20	27	730	175	183	373	405	130	330	116	285	457	9.0	6.0	5.0
600(24")	600	725	20	30	844	194	205	435	460	175	350	116	285	508	7.5	6.0	5.0

※ 法蘭長度公差依據 EN558-1:1995 標準
※ 蝶閥於安裝對鎖長度請參照目錄中 L 為標準長度施作

※ Standard dimensions based on PVC material.
※ The flanged length tolerance is according to EN558-1:1995.
※ Please refer to the face-to-face (L)length as the butterfly valve standard installation's lay length.

SUPER LARGE SIZED BUTTERFLY VALVE

超大型旋轉凡而



BS300

Size: Ø700(28")～Ø1200(48")

MATERIAL: UPVC, PP, CPVC, PPG, PVDF

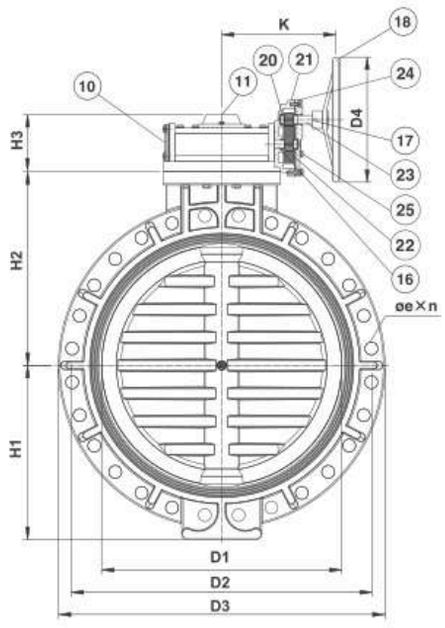
MODEL: Gear operated type(齒輪式)，Chaining type(鏈條式)
Hydraulic type(油壓式)，Pneumatin type(氣壓式)

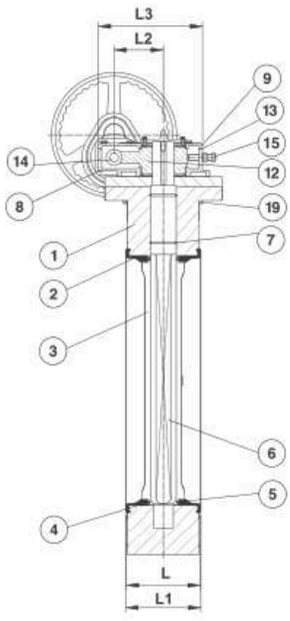
FEATURES:

- Fullport allowing max. fluid flow. 全口徑、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				





DN700~DN1200

TORQUE VALUES (11gf/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	e	H1	H2	H3	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

ANSI — Unit: inch

Nom. size DN(inch)	D1	D2	D3	n	e	H1	H2	H3	K	D4	L	L1	Test Press (lb/in²)	Working Press (lb/in²)
700(28")	26.77	33.99	37.09	24	1.37	19.69	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	e	H1	H2	H3	K	D4	L	L1	Test Press (kgf/cm²)	Working Press (kgf/cm²)
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

※ 法蘭長度公差依據 EN558-1:1995 標準
※ 蝶閥於安裝對鎖長度請參照目錄中 L 為標準長度施作

※ Standard dimensions based on PP material.
※ The flanged length tolerance is according to EN558-1:1995.
※ Please refer to the face-to-face (L)length as the butterfly valve standard installation's lay length.

HD-PE（高密度聚乙烯管）性能特點綜述：

1. 較長的使用壽命：依ISO 12622的使用溫度、壓力標準下，在正常使用下可耐用，50年以上。

2. 優越的耐腐蝕特能：除少數強氧化劑之外，可以耐多種化學介質的侵蝕及無電化學腐蝕。

3. 優異的抗磨損特性：在輸送礦砂泥漿時，HD-PE的耐磨損性鋼管的四倍以上，相同管徑下其輸送水量為金屬管的1.3倍。

4. 優良的環保特性：HD-PE在製作加工時，無任何重金屬添加物與化學安定劑，材質無毒性無結垢層，不滋生細菌，可回收，避免管材的二次污染。

5. 較好的耐衝擊特性：HD-PE韌性好，拉伸率PE80>700%　PE100>600%、耐壓力25kg/cm^{2}以上，耐衝擊性能高，重物壓過管道亦不會導致管道破裂。

6. 可靠的連接特性：HD-PE熱熔或電熔時，介面的強度高於管體本體，接縫處不會因土壤移動或活載荷的作用而斷裂。

7. 除透明無色管外，添加2.5%碳黑與其他色料(Master-batch)的HD-PE，皆可抵抗紫外線的照射，延長使用壽命。

8. 良好的施工性能：HD-PE管道質量輕，溶接及鎖接工藝簡單，搬運施工快速簡便。

9. 經濟快捷的盤捲方式：HD-PE小口徑管材可因需求長度捲繞成盤管，減少介面接點加快施作。

適用場所:

- ●自來水用管路系統
- ●電力、潛鑽用管
- ●海水輸送管路
- ●雨、污水排水用管
- ●瓦斯輸送管路
- ●電信、電力用管中管
- ●污水下水道用管
- ●光纖儀控用管

本公司HD-PE產品通過的認證如下：

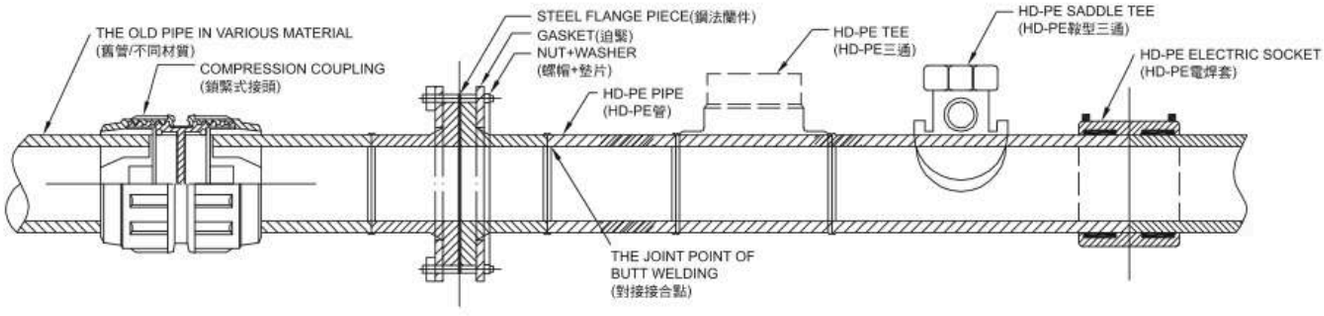
標準	產品名稱
CNS 2456	自來水用聚乙烯塑膠管 (HD-PE 100)
CNS 12835	天然氣用聚乙烯塑膠管 (HD-PE 80)
CNS 2458	化學工業及一般用高密度聚乙烯塑膠管
環保標章認證	產品名稱 自來水用聚乙烯塑膠管 (DFP-103) 化學工業及一般用高密度聚乙烯管 (DFP-102)

HD-PE (高密度聚乙烯) 物性表

Specific properties (technical data sheet) for polyethylene (reference values)

	Property (特性)	Standard (標準)	Unit (單位)	PE80	PE100
	Density at 23°C (密度)	DIN 53 479 ISO/R 1183	g/cm^3	0.953	0.96
	Melt flow index (熔融指數) MFI 190/5 Code T MFI 230/5 Code V MFI range	DIN 53 735 ISO 1133	g/10 min	0.4-0.5 11-17 T 005	0.3-0.55 12-18 T 005
Mechanical properties (機械特性)	Tensile stress at yield (變形拉伸強度)	DIN 53 455 ISO/R 527	N/mm^2	21	24-25
	Elongation at yield (變形拉伸率)	DIN 53 455 ISO/R 527	%	10	8
	Tensile stress at break (斷裂拉伸強度)	DIN 53 495 ISO/R 527	N/mm^2	30-33	37
	Elongation at break (斷裂拉伸率)	DIN 53 455 ISO/R 527	%	>600	>600
	Flexural stress at 3.5% strain (撓曲強度)	DIN 53 452 ISO/R 178	N/mm^2	19	23
	Modulus of elasticity (彈性係數) (tensile test 拉力測試)	DIN 53 457 ISO/R 178	N/mm^2	800	1000
	Modulus in shear (剪力係數)	DIN 53 455 ISO/R 537	N/mm^2	500-600	-
	Ball indentation hardness (球壓硬度)	DIN 53 456 ISO 2039	N/mm^2	40	46
	Charpy impact strength at 23°C notched (夏比衝擊強度/有缺口)	DIN 53 453 ISO 179/2C	kj/m^2	10	17-26
	Charpy impact strength at -30°C (夏比衝擊強度)	DIN 53 453 ISO 179/2D	kj/m^2	16	9-13
Thermal properties (熱性)	Cristallity melting temperate (熔點)	DIN 53 736	°C	128-133	128-135
	Vicat softening point (維卡軟化點) VST-A/50 VST-B/50	DIN 53 460 ISO/R 306	°C	- 67	127 68-77
	Deflection temperature under load (變形溫度) Methode A Methode B	DIN 53 461 ISO 75	°C	42 73	41 61
	Thermal conductivity (at 20°C) (熱傳導性)	DIN 53 612	W/mk	0.43	0.43
	Thermal expansion coefficient (熱膨脹係數)	DIN 53 752	1/ °C	$2.0*10^{-4}$	$2.0*10^{-4}$
	Flammability(易燃性)	DIN 4102 part 1 ONORM B 3800 part 1 UL 94	-	B2 B2 -	B2 B2 -
Electrical properties (電性)	Specific volume resistivity (比容電阻)	DIN 53 482, part 1 IEC Publ. 243	Ohm cm	10^{15}	$>10^{15}$
	Dielectric strength (絕緣強度)	DIN 53 481 IEC Publ. 93	KV/mm	53	22-53
	Surface resistivity (表面電阻係數)	DIN 53 482 IEC Publ. 167	Ohm	$>10^{15}$	$>10^{15}$
	colour (顏色)	-	-	black	black

The flange connecting type for HD-PE pipe with different material of fittings, electric sockets flanges.
(HD-PE法蘭、鎖緊式接合法與不同物料配件、電焊套與法蘭之接合)



Flange welding connection type

The flange welding connection type is used to connect with different material convery pipeline, valves, pumps, compressors.. etc equipment's with HD-PE pipes, or use on pipeline is designed for the future dismounting purpose.

Prepare a backing ring and a HD-PE stub flange for joint with steel flange.
Welding HD-PE stub flange on the HD-PE pipe end, please align the two pipeline which are going to connect with each other, put gasket between the backing rings, use bolt/ nuts to connect the flanges. Please be noted the bolts are not circular alignment, should be the corresponding alignment to tighten the bolts. Please be careful not to drag the pipeline when tighten the bolts to avoid the big electric charge occurrence.

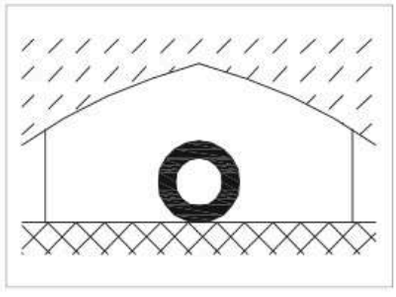
法蘭焊接接合法

法蘭焊接接合法用於HD-PE管與不同物料之運送管、閥門、泵浦、及壓縮機等物件之接合，或使用於未來有卸除目的之管件接合上。

準備一墊環及HD-PE塔型法蘭頭與鋼法蘭接合，將HD-PE塔型法蘭頭焊接於HD-PE管之一端，請將欲接合之二管排成一直線，並將緊迫置於墊環之間，而後使用螺栓與螺帽連接二法蘭。請注意螺栓並非環型排列一致，應是相對排列以使螺栓能鎖緊二法蘭。另外，在鎖緊螺栓時，應特別謹慎勿拉動管件以避免引起大電荷之發生。

WELDING INSTRUCTIONS Processing guidelines-heating element socket welding

Preparation of welding place (焊接地點的準備)



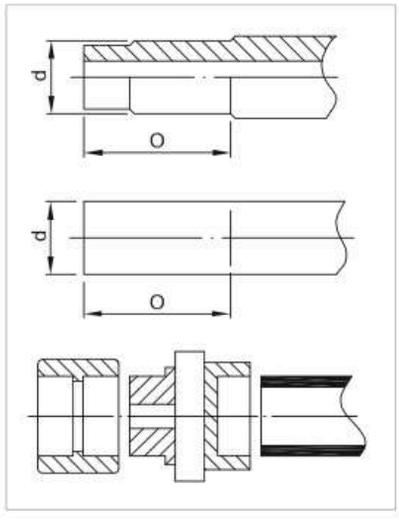
Assemble welding equipment (Prepare tools and machinery), control welding device.

組裝焊接設備(工具及機器)，控制冶具

Install welding tent or similar device.

安裝焊接帳篷或類似的裝備

Preparation of welding seam (at any rate immediately before starting the welding process) 焊接間隙的準備 (可以立即焊接動作)



Cut off pipe faces at right angles and remove flashes on the inside with a knife.Work the pipe faces with a scraper until the blades of the scraper flush with the pipe face. Thoroughly clean welding area of pipe and fittings with fluffless paper and cleansing agents (acetone or similar). If peeling is not necessary, work pipe surface with a scraper knife and mark the depth (t) on pipe.

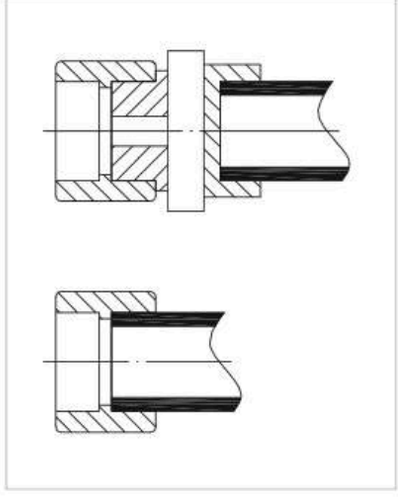
將管子正面角度切下，用刀將管內的屑片清除，用刮刀將管子表面刮除。
管子及配件表面用沒有絨毛的紙清潔，如果不需刮除表面，用刮刀再管子表面做深度記號(T)。

Preparations before welding (焊接前的準備)

Check temperature of heating element (on heating spigot and on heating socket).Thoroughly clean heating spigot and heating socket immediately before each welding process (with fluffless paper). At any rate be careful that possibly clogging melt residues are removed.

檢查電熱板的溫度(在內插口、及外插口)，在每管口焊完後要立即用無絨毛紙清潔內插口及外插口。注意可能黏住的焊殘餘要清除。

Performing of welding process (焊接過程的操作)



Quickly push fitting and pipe in axial direction onto the heating spigot or into the heating socket until the end stop (or marking). Let pass by pre-heating time according to table values. After the pre-heating time, pull fitting and pipe off the heating element with one heave and immediately fit them into each other without twisting them until both welding beads meet. Let the joint cool down, than remove clamps. Only after the cooling time, the joint may be stressed by further laying processes. On manual welding. Adjust the parts and hold them fast under pressure for at least one minute.

儘快的將管子和配件以向軸的方向推進內套或外套口直到停止處(或記號)。
依據表的數據經過預熱時間後將配件，管子移開電熱板立即將管及配件相互合在一起，直到互相產生焊珠，讓熔接溫度冷卻後，移開夾具，冷卻後，熔點有可能受隨後鋪設，手工焊接的應力。調整另件並壓力下至少保持住一分鐘。

Heating element socket welding (fllowing to DVS 2207, Part 1 for HD-PE)

Welding method (焊接方法)

On heating element socket welding, pipe and fittings are lap-welded. The pipe end and fitting socket are heated up to welding temperature by means of a socket-like or a spigot-like heating element and afterwards, thy are joined.
在熱插套焊中，管子和配件是交疊式焊法，管端和配件插口用內套及外套電熱板加熱到焊接溫度使管子和配件相熔接。

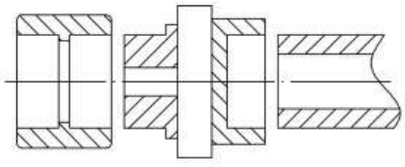
The dimensions of pipe end, heating element and fitting socket are coordinated so that a joining pressure builds up on joining (see schematic sketh).
管端尺寸、電熱板和配件插口是互相同等的，所以熔接壓力在熔接時建立起來(參看草圖)。

Heating element socket weldings may be manually performed up to pipe outside diameters of 40mm. Above that, use a welding device because of increasing joining forces.
熱插套焊可以用手動式操做到管子外境40mm，以上尺寸使用焊接工具來增加熔接力量。

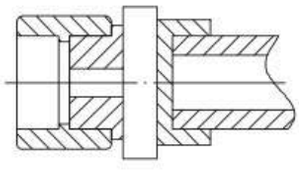
The guidelines of the DVS are to be adhered to during the whole welding process!
在整個焊接過程中需依據DVS規範的焊接溫度

Welding temperature(T) (焊接溫度)	
HE-PE 80	250/270°C

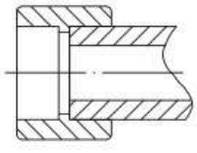
Schematic sketch of the welding process



PREPARATION OF THE WELDING



ALIGNMENT AND PRE-HEATING



JOINING AND COOLING

Pre-heating time AW
(sec)
PN6

Welding parameters (焊接係數)

Reference values for the heating element socket welding of PE 80 pipes and fittings at an outside temperature of about 20°C and low airspeed rates
以下數據為PE 80管、配件在室外溫度20°C以上的套和參考數據

Pipe outside diameter (管外徑(mm))	Welding temperature (焊接溫度(°C))	Pre-heating time tAW (預熱時間) (sec)(秒)		Adjusting time (調整時間) tu(sec)(秒)	Cooling time tAK (冷卻時間) (min)(分鐘)
		PN6	PN10		
16	250/270		5	4	2
20			5		
25		"	7		
32	250/270	"	8	6	4
40		"	12		
50		"	18		
63	250/270	"	24	8	6
75		15	30		
90		22	40		
110	250/270	30	50	10	8

*not recommended because of too low wall thickness
(不建議，因為管壁太薄)

WELDING INSTRUCTIONS（焊接方法）

Requirements on the welding device use for heating element butt welding

(following do DVS 2208, Part1)（使用焊接設備進行物件加熱對接之注意事項）

Clamping device

In order avoid high local stresses in the pipe and deformations, the clampling devices should surround at least the pipe casing as parallel as possible to the welding plane. By their high stability, it must be provided that the geometric circular from of the pipes will be maintained. They must not change their position in relation to the guide elements, even under the highest working force. For fittings, such as stub flanges and welding neck flanges, special clamping devices which prevent deformations of the workpiece have to be used.

The pipe clamped at the mobile machine side has eventually to be supported and exactly adjusted by means of easy-running dollies so that the working pressures and conditions required for welding can be maintained.

It is recommendable to use clamp elements adjustable in height to allow a better centering of the workpieces.

夾緊裝置

為了避免管內高壓與變形應力的產生，夾緊裝置應至少與焊接表面貼合。而藉由夾緊裝置的高穩定性，管口焊接表面將可維持幾何正圓。在焊接時即使承受高作業壓力，絕不可讓管子、配件、與閥門等物件改變與引導元件的相對位置。就配件而言，如塔型法蘭頭與焊接頸法蘭的接合作業中，夾緊裝置必須用來避免焊接元件的變形。安裝並夾緊於工作機器的管件最後將利用易於移動之滑車支撐與精密調整使焊接所需之工作壓力與條件能維持在一定範圍內。建議使用可調整高度之夾緊裝置使工作物件能得到精準之定位。

Guide elements

Together with the clamping devices,the guide elements have to ensure that the following maximum values for gap width (measured on cold joining surfaces) are not surpassed due to bending or beaming at the least favourable point in the respective working area of the machine at max. operating pressure and with wide pipe diameters:

Pipe outside diameter da[mm]	Gap width a[mm]
≤355	0.5
400÷<630	1.0
630÷<800	1.3
800÷≤1400	1.5

The gap width is measured by inserting a spacer at the point opposite to the guide while the plane-worked pipes are clamped. Guide elements have to be protected against corrosion at the sliding surfaces, e.g. by means of hard chrome plating.

引導元件

與夾緊裝置同時產生功用，當機器作業區域處於最高溫度與加工大尺寸管子時，引導元件用來確保最大間隙容忍寬度(於接合表面冷卻時測量)於焊接物件彎曲或輻射時不會被超過。

管口外徑 da[mm]	容許間隙寬度 a[mm]
≤355	0.5
400÷<630	1.0
630÷<800	1.3
800÷≤1400	1.5

間隙寬度是在引導元件與管件之間置入一間距量測器所測量出來，引導元件之滑動平面必須能夠抗腐蝕，如在該表面上鍍鉻抗氧化與抗腐蝕。

Heating elements

The heating element has to be plan-parallel with its effective area. Permissible deviations form plane-parallelity (measured at room temperature after heating the elements to maximum operating temperature at least once):

Pipe outside resp. edge lengty	Permissible deviation
÷250mm	≤ 0.2 mm
÷500mm	≤ 0.4 mm
>500mm	≤ 0.8 mm

For processing in a workshop, the heating element is in general permanently mounted to the device. In case of a not permanetly attached heating element, adequate devices have to be provided for its insertion (e.g. handles, hocks links).

If size and nature of the heating elements necessitates its machine-driven removal from the joining surfaces, adequate equipment has to be provided too. The power supply has to be protected against thermal damage within the range of heating elements. Likewise, the effective surface of the heating element has to be protected against damage.

Protecting devices are to be used for keeping the heating element during the intervals between the welding processes.

加熱元件

加熱元件必須與其有效區域的平面平行，容許誤差間距是判斷平面平行度的依據(將加熱元件加熱至最大工作溫度至少一次後，待溫度回復至室溫下測量)。

熔接邊長相當於管口徑	可允許誤差
÷250mm	≤ 0.2 mm
÷500mm	≤ 0.4 mm
>500mm	≤ 0.8 mm

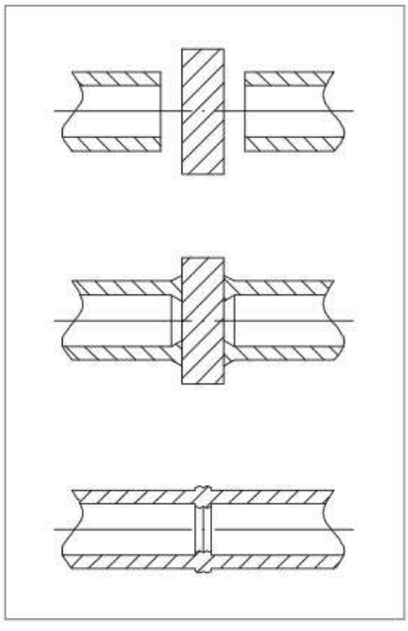
而在工作站的處理作業中，加熱元件通常持續與加熱設備安裝在一起，如果不是持續安裝在一起的加熱元件，則必須有足夠的設備來提供嵌入作業(如把手、勾鏈等)。

如果因電熱板尺寸其他原因需要用機器驅動離開焊接表面，需要有充分的設備。電源供應應避免被破壞，電熱板的表面也需予以保護免於損壞。

而在焊接過程中需使用對加熱板的保護工具。

Processing guidelines-HS-Heating element butt welding
（焊接過程的操作）

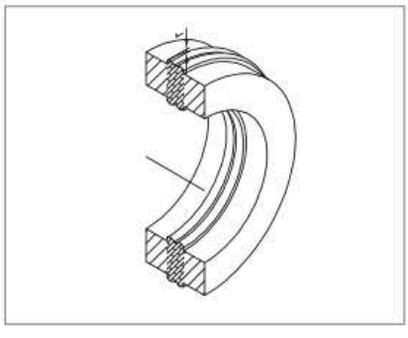
Performing of welding process(置入加熱板)



Insert heating element.(置入加熱板)
Impose required alignment pressure. The alignment pressure is maintained untiil the joining faces completely align onto the heating element. By this moment, a bead must have been created surrounding the whole circumference of both parts to be welded. Reduce adjusting pressure p=0.01 N/mm^2 and let pass by the pre-heating time according to reference values table.
Remove heating element and join the surfaces to be welded-keep adjusting time as short as possible. Continuously increase adjusting pressure for the joining process until the required value is reached. Maintain the adjusting pressure until the welding seam has cooled down (sudden cooling with the help of cooling agents is not permitted). Remove clamps after the required cooling time.

推進平行的需要壓力，平形壓力要保持到焊件表面完全和電熱板成一線，同時，在所有焊件周圍已產生焊珠。減少調整壓力(p=0.01 N/mm^2),依數據表經過預熱時間。將電熱移開焊件相熔後將調整時間儘量縮短，持續增加調整壓力直到焊道冷卻(不允許使用其它急速冷卻媒介物質)。冷卻時間過後移開夾具。

Visual control and finishing of welding joint (視覺控制及焊點表面)

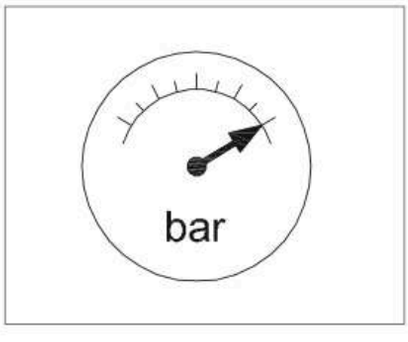


After joining, a bead surrounding the whole circumference must have been created. Furthermore, the welding bead has to be inspected with a view to the following:
* almost equally sized beads
* smooth bead surface
Possible differences in the formation of the beads may be justified by different flow behaviour of the joined materials. If the welding bead has to be removed for special reasons, this has to be done without leaving notches.

相熔後周圍必需產生焊珠。另外，焊珠必須能以下列方式檢查：
* 焊珠大小幾乎一樣
* 焊珠表面光滑

焊珠的成形的差別可以用來判定相熔物質不同的流動性。如果因特別原因焊珠需要去除，不要留下凹點。

Performing of pressure test (壓力測試)



Before the pressure testing, all welding joints have to be completely cooled down (as a rule, 1 hour after the last welding process). The pressure test has to be performed according to the relevant standard regulations (e.g. DVS 2210 Part 1, DVGW working sheet W210).
The hereby imposed maximum test pressure is 1.5x PN, whereby during the test period (10 minutes at least) no pressure drop is allowed. The piping system has to be protected against changes of the ambient temperature (UV-radiation).

壓力測試前，所有的焊點必需完全冷卻(規定來說，最後焊點後1小時)。壓力測試需依據相關標準 (DVS2210 part 1，DVGW working sheet W210)，至少須注入1.5x PN，時間至少10分鐘沒有壓力下降為核可。管路系統必須保護免於室溫的變化(紫外線)。

HD-PE管支撐距離
Support distances for pipes out of HD-PE

Conversion factors for pipes out of HD-PE HD-PE管支撐距離的計算如下：

The in the table stated support distances may be changed for other pressure ratings as follows: 本表會因壓力等級、支撐距離將作改變：

PN3.2	-25%
PN6	-9%
PN16	+7%

The support distances have to be reduced by 4% for fluids with a density of 1.0g/cm3 up to 1.25g/cm3 支撐距離會因流體比重在 1.0g/cm^3 到 1.25g/cm^3 下減少4%

At the transportation of gases with a density of <0.01g/cm3, the support distances can be increased as stated below: 瓦斯運輸上比重若小於 0.01g/cm^3 支撐距離可以增加如下：

PN3.2	+47%
PN6	+30%
PN16	+21%

Support distances for pipes out of HD-PE 80 (HD-PE 100) PN 10
HD-PE 80(HD-PE100)PN10管的支撐距離表

da (mm)	Support distances L in(cm) at °C				
	20°C	30°C	40°C	50°C	60°C
16	50	45	45	40	35
20	57	55	50	45	40
25	65	60	55	55	50
32	75	75	65	65	55
40	90	85	75	75	65
50	105	100	90	85	75
63	120	115	105	100	90
75	130	130	120	110	100
90	150	145	135	125	115
110	165	160	150	145	130
125	175	170	160	155	140
140	190	185	175	165	150
160	205	195	185	175	160
200	230	220	210	200	190
225	245	235	225	215	205
250	260	250	240	230	210
280	275	265	255	240	220
315	290	280	270	255	235
355	310	300	290	275	255
400	330	315	305	290	270