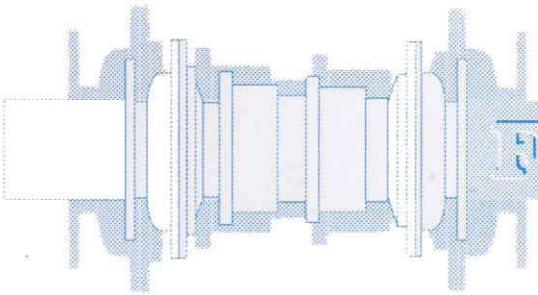
DYNAFLEX

Flexible Pipe Joint

BS 4504 PN 16 & PN 25



Flexible Pipe Joint

SPECIFICATION:規格

Type型式	Size尺寸	Extension伸縮量	Distortion偏位量
Small Globe螺紋型	25～ 100m/m 1" ～ 4"	±25 ～±50m/m 1" ～ 2"	40 ～ 80 m/m 1 1/2"～3"
Single Globe單球型	75～1000m/m 3" ～ 36"	-50 ～ +150m/m -2" ～ 6"	
Double Globes雙球型	75～1000m/m 3" ～ 36"	-150 ～ +250m/m -6" ～ 10"	100～400m/m 4" ～ 16"
Pipe (Burying)鋼管長型	700～3200m/m	-130 ～ +360m/m	100 ～200 m/m
Pipe (Bridge)鋼管短型	300～3200m/m	-100 ～ +140m/m	5 0 ～ 100 m/m
Slide 建築用滑型	50 ～ 300m/m	-50 ～ +50m/m	25 ～ 100 m/m
Multi Fuction多功能型	50 ～ 300m/m	(-9～+60m/m)×n	15° ∠× n

*Special SIZES would be made to orders,additional extension , Distortion and pressure capability can be added when ordering.
特殊規格，壓力或增加伸縮量及偏位量皆可訂製.

MATERIAL：材質

Ductile iron as per ASTM A536 or JIS G 5527.
延性鑄鐵符合美國ASTM A536 或日本JIS G 5527之規範。
Structure Steel as SS41.
構造鋼材爲SS41。

GASKET & SEALS：墊圈及膠封

As per AWWA C111 (ANSI A21.11) or JIS 6353.
符合美國AWWA C111或日本JIS 6353之規範。

COATING：塗裝

Minimum of 15 mils of fusion bonded or powder Epoxy.
Material as per ANSI/AWWA C213 or JWWA G 112.
以符合美國AWWA C213或日本JWWA G 112規範之粉體環氧樹脂塗料塗佈15mils以上。

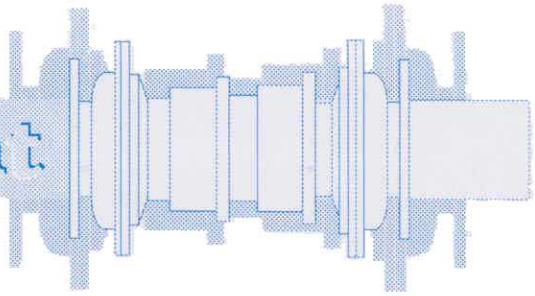
END CONNECTIONS：凸緣接頭

Mechanical Joint connections follow the dimensions of ANSI/AWWA C110/A221.10 or JIS G 5527.
機械凸緣接端符合美國AWWA C110或日本JIS G 5527之尺寸。

PRESSURE：壓力

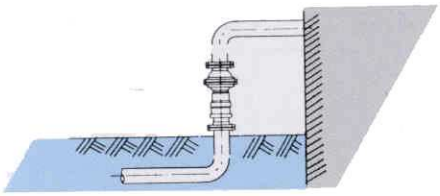
Sizes 1"(25m/m)～24"(600m/m) are rated for 350 P.S.I.(25 kgf/c㎡) working water pressure, sizes larger then 24"(600m/m) are rated for 250 P.S.I.(17.5kgf/c㎡) working water pressure.
直徑1"(25m/m)～24"(600m/m)壓力測試達350 P.S.I.(25kgf/c㎡)，直徑"(600m/m)以上壓力測試達250P.S.I.(17.5kgf/c㎡)。

Flexible Pipe Joint

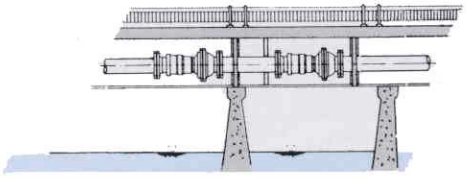


APPLICATIONS用途:

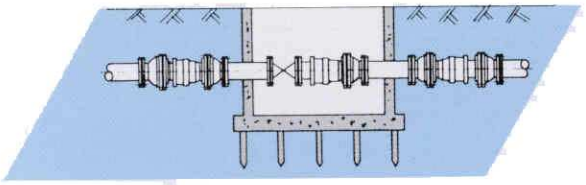
1.VERTICAL DISTRIBUTION:垂直配管



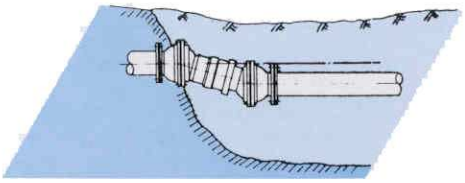
2.WATER PIPE BRIDGE:水管橋

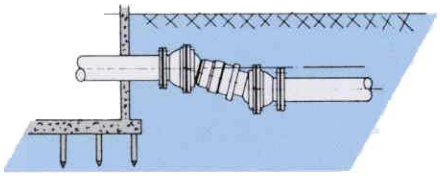


3.WATER PIPE PIT:水管坑



4.STRATA CROSSING:地層之交界線

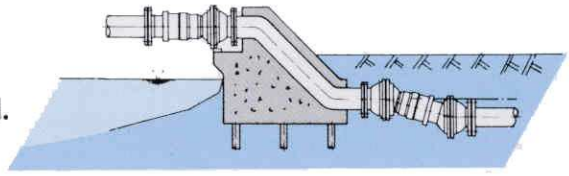


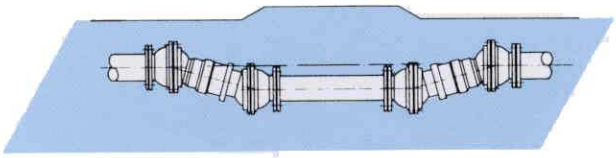


5.VARIOUS STRUCTURE ENVIRONMENT:
各種構造物的環境

water reservoir of water purifying plant, sedimental pool, sludge pond, water distribution pool etc.
淨水場之蓄水池、沉澱池、污泥池、配水池.....等等。

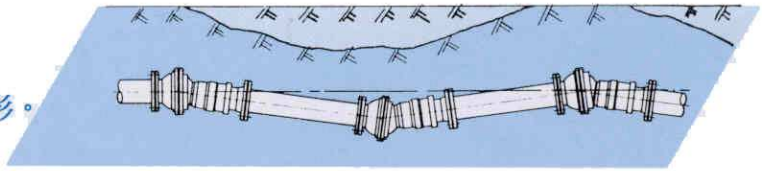
6.BRIDGE PIER INSTALLATION PORTION:
橋墩安裝部**safety model for protrusion outside bridge pier and buried underground.**
露出橋墩外面及埋設在地下之安裝範例。





7.BURIED DISTRIBUTION PIPE:埋設配管
road, river, track cross section.
道路、河川、軌道橫斷面。

8.BURY CONDITION FOR SOFT EARTH CRUST TO ABSORB DIFFERENT SINK-ING STRATUM:
對軟弱地盤吸收不同下沉地層之埋設情形。



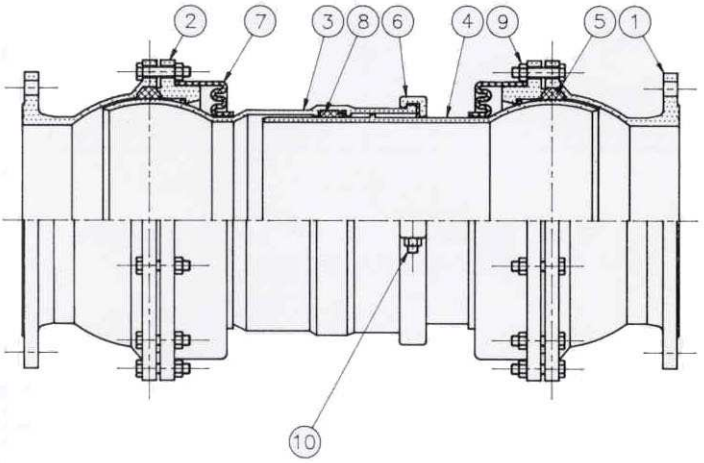
SUITABLE FOR:適合於
applicable enterprise equipments such as upper and lower channels, industrial water, agricultural water, electricity, teleconnumunications,gas, oil distribution pipe and factories piping etc.
上下水道、工業用水、農業用水、電氣、電信、瓦斯、輸油管及工廠用管等事業設備之應用。

可撓伸縮管

Ductile Iron Double Globes Type Flexible Pipe Joint

Model Type : DFF 雙球型

CONSTRUCTION AND MATERIAL:結構與材質



NO.	PARTS 名 稱	MATERIAL 材 質
1	Pivot holder 旋轉座	Ductile cast-iron FCD40
2	Fixing ring 固定環	Ductile cast-iron FCD40
3	Pivot pipe A 旋動管 A	Ductile cast-iron FCD40
4	Pivot pipe B 旋動管 B	Ductile cast-iron FCD40
5	Pivot packing 旋動迫緊	Rubber
6	Clamp ring 防脫夾頭	Ductile cast-iron FCD40
7	Dust cover 防塵套	Rubber
8	Slide packing 滑動迫緊	Rubber
9	Bolt & nut 螺栓及螺帽	Stainless steel SUS304
10	Bolt & nut 螺栓及螺帽	Stainless steel SUS304

CHARACTERISTIC:特點

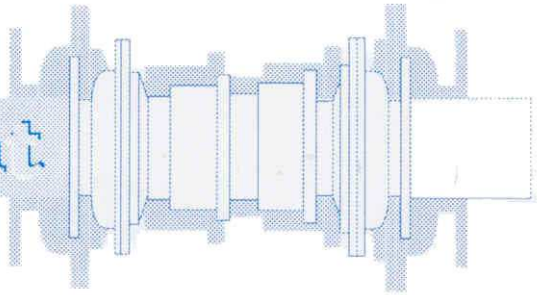
SINGLE GLOBE FLEXIBLE PIPE JOINT is ideally applied for the protection of pumps and valves installation in a pipe line and will deflect at least 15° in any direction.
單球式可撓伸縮管適用於管路系統中泵及閥之保護，其可撓角度至少有15度。

DUBLE GLOBES FLEXIBLE PIPE JOINT offers the unique ability to accommodate a considerable degree of close-coupled vertical subsidence and will deflect at least 30° in any direction.
雙球型可撓伸縮管提供無與倫比的多方位管路保護，在任何方向之可撓角度可達30度。

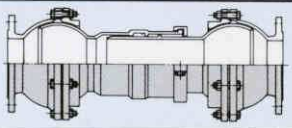
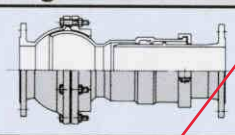
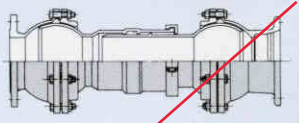
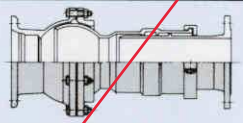
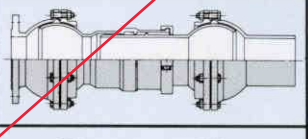
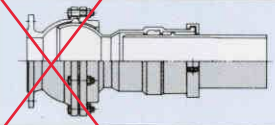
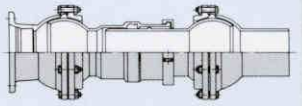
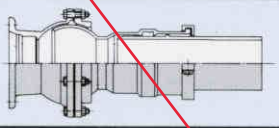
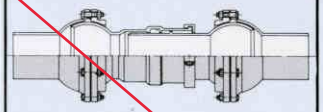
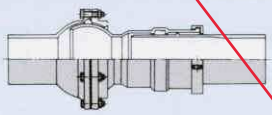
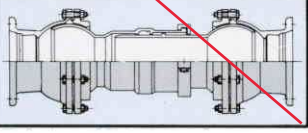
REMARKS:備註

Additional EXPANSION and DISTORTION capability or SPECIAL SIZE FLEXIBLE PIPE JOINT can be made to orders.
特殊尺寸或規格之可撓伸縮管皆可依客戶需求訂製。

Flexible Pipe Joint

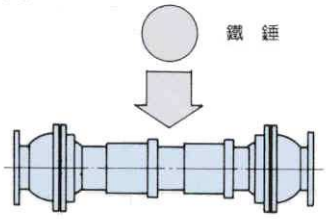


CONNECTION METHOD:接合方式

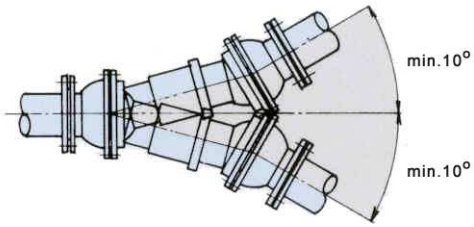
FORM形式	MARK記號	Duble Globe雙球型	MARK記號	Single Globe單球型
Flange+Flange 法蘭口+法蘭口	DFF		SFF	
Flange+Socket 法蘭口+承口	DFU		SFU	
Flange+Spigot 法蘭口+插口	DFS		SFS	
Socket+Spigot 承口+插口	DUS		SUS	
Spigot+Spigot 插口+插口	DSS		SSS	
Socket+Socket 承口+承口	DUU			

CHARACTERISTIC：特點

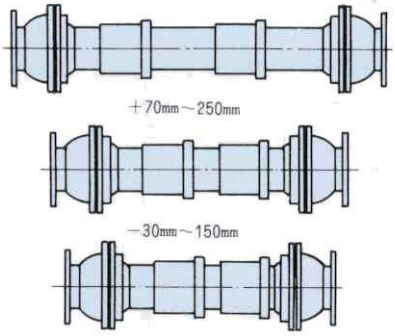
1、High impact absorbing.
優越抗衝擊力。



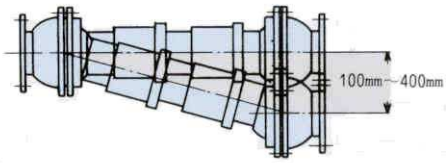
2、Flexibility and wide bending degree.
具有充份之可撓角度。



3、Long extension.
伸縮量大。

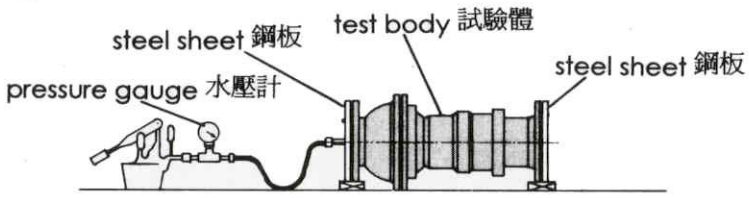


4、Large distortion.
超大偏位量。



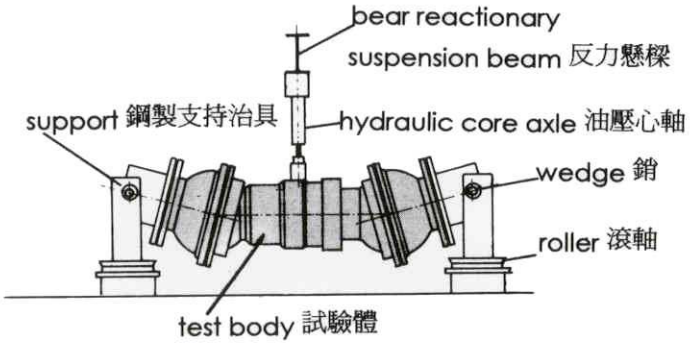
TESTING PERFORMANCE：測試數據

● HORIZONTALLY PRESSURE TEST:水平壓力試驗



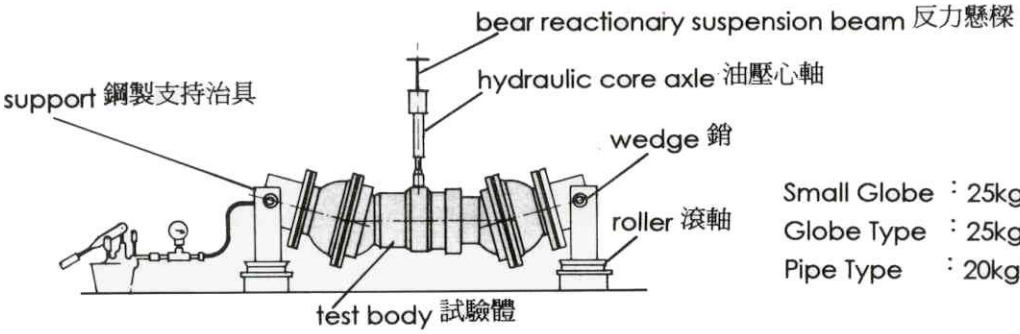
Small Globe ：25kgf/cm²
Globe Type ：25kgf/cm²
Pipe Type ：20kgf/cm²

●BENDING TEST：彎曲度測試



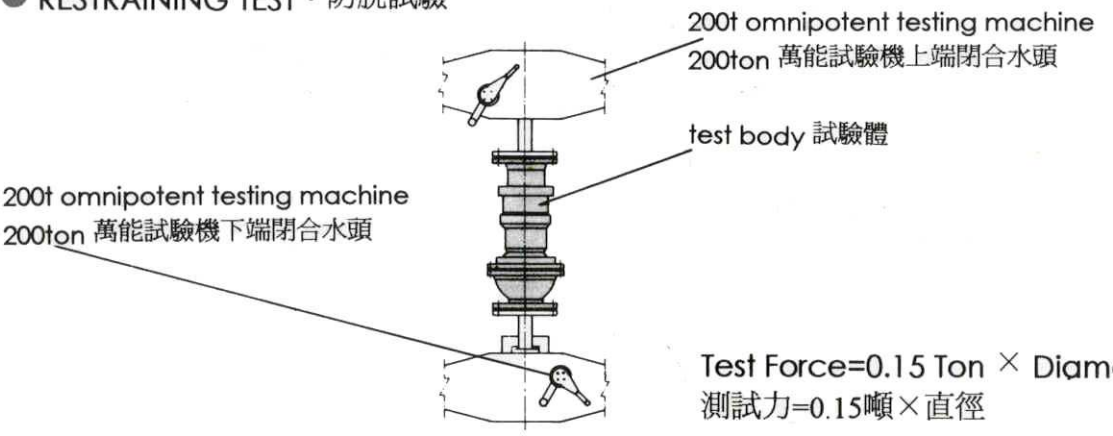
h	Bending degree	
	Globe type	Pipe type
100	15°	6°
200	15°	7°
300	15°	7°
400	15°	7°

● PRESSURIZED BENDING TEST：彎管試驗



Small Globe ：25kgf/cm² at 15° ∠
Globe Type ：25kgf/cm² at 15° ∠
Pipe Type ：20kgf/cm² at 6° ∠

● RESTRAINING TEST：防脫試驗



Test Force=0.15 Ton × Diameter (m/m)
測試力=0.15噸×直徑

Flexible Pipe Joint

Our various FLEXIBLE PIPE JOINT are installed in a lot of engineerings of public utility.
本公司各種"可撓伸縮管"業已在各項公共工程中大量使用。

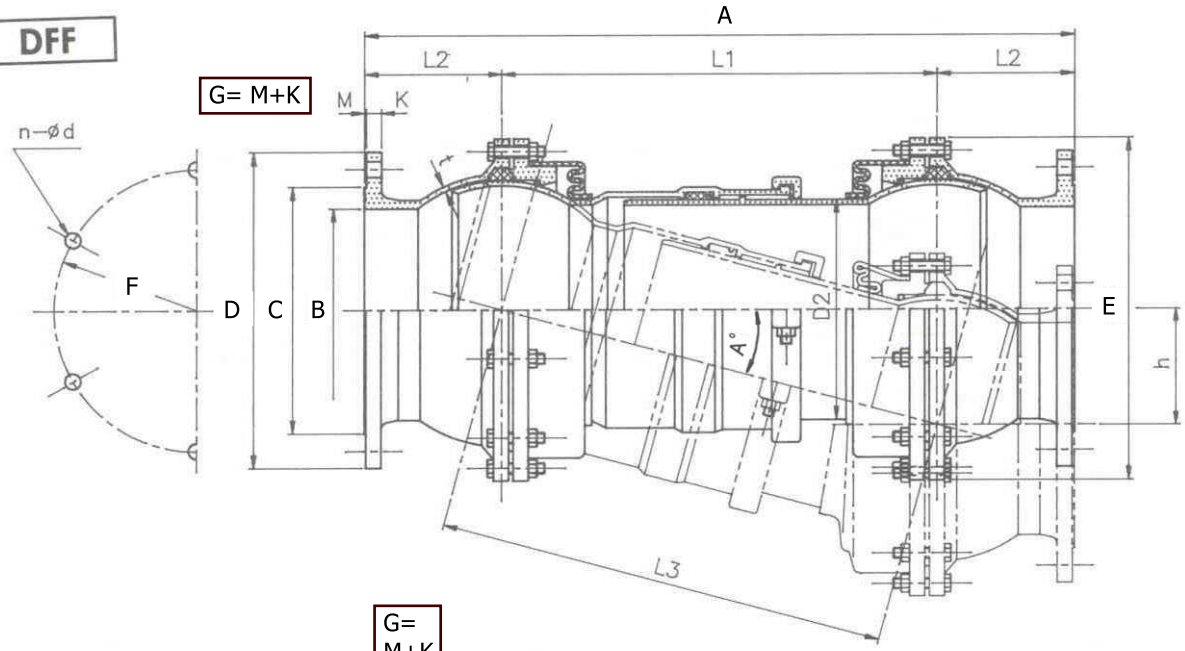
1、Our FLEXIBLE PIPE JOINT (800m/m) served in MUDAN Dam.
牡丹水庫沿線下游工程，皆採用本公司800m/m鋼製可撓管。

2、Our 800m/m FLEXIBLE PIPE JOINT is applied in the pipe bridge of Hwa-Shing Bridge in Chung-Cheng University.
嘉義國立中正大學華興橋輸水幹線，採用800m/m鋼製可撓管。

3、A series of our ductile globe FLEXIBLE PIPE JOINT and steel FLEXIBLE PIPE JOINT size from 600m/m to 2200m/m are used in water supply system of HAN-HUA Dam.
南化水庫沿線下游工程 ，採用本公司600m/m~2200m/m DI製及鋼製可撓管。

Double Globes雙球型

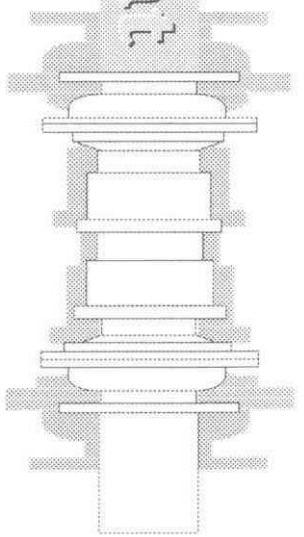
DFF



(BS4504 PN16)

G= M+K

Pipe Size 標稱口徑	B	D2	C	F	D	E	M	K	t	n	d	L2	A°	h=100 A	h=100 L1	h=100 L3	Extension 伸縮量	h=200 A	h=200 L1	h=200 L3	Extension 伸縮量	h=300 A	h=300 L1	h=300 L3	Extension 伸縮量
80	76	93	132	160	200	246	3	16	9	8	19	135	20	730	460	489		950	680	723		1220	950	1010	
100	101	118	156	180	220	276	3	16	9	8	19	150	20	800	500	532		1020	720	766		1270	970	1032	
150	151	169	211	240	285	333	3	16	9	8	23	150	20	830	530	564	+70 −30	1060	760	808	+150 −50	1310	1010	1074	+200 −100
200	198	220	266	295	340	389	3	17	9	12	23	160	20	890	570	606		1110	790	840		1360	1040	1106	
250	247.6	271.6	319	355	405	440	3	19	9	12	28	170	20	940	600	638		1150	810	861		1400	1060	1128	
300	297.8	322.8	370	410	460	502	4	20.5	9	12	28	200	18	1030	630	662		1280	880	925		1530	1130	1188	
Pipe Size 標稱口徑	B	D2	C	F	D	E	M	K	t	n	d	L2	A°	h=200 A	h=200 L1	h=200 L3	Extension 伸縮量	h=300 A	h=300 L1	h=300 L3	Extension 伸縮量	h=400 A	h=400 L1	h=400 L3	Extension 伸縮量
350	348	374	429	470	520	573	4	22.5	11	16	28	230	15	1360	900	931		1620	1160	1200		1870	1410	1459	
400	397.6	425.6	480	525	580	627	4	24	11	16	31	240	15	1400	920	952		1650	1170	1211		1980	1500	1552	
450	447.8	476.8	548	585	640	681	4	26	11	20	31	260	15	1460	940	973		1720	1200	1242		1970	1450	1501	
500	498	528	609	650	715	735	4	28	11	20	34	280	15	1520	960	993		1780	1220	1263		2060	1500	1552	
600	598.8	630.8	720	770	840	842	5	31	12	20	37	290	14	1570	990	1020	+150 −50	1830	1250	1288	+200 −100	2190	1610	1659	+250 −150
700	699	733	794	840	910	1079	5	34.5	15	24	37	380	14	1980	1220	1257		2240	1480	1525		2490	1730	1782	
800	800	836	901	950	1025	1180	5	38	16	24	40	400	14	2050	1250	1288		2310	1510	1556		2560	1760	1813	
900	901	939	1001	1050	1125	1283	5	41.5	17	28	40	420	13	2125	1285	1318		2850	1545	1585		2635	1795	1842	
1000	1001	1041	1112	1170	1255	1385	5	45	17	28	43	440	13	2185	1305	1339		2445	1565	1606		2695	1815	1862	

(Unit:mm)

Shop Drawing