

FLANGES

STEEL & STAINLESS

DAERYUK_KS&JIS STANDARD

Certificated of the Korean Industrial Standards  mark

Certificated of the Japanese Industrial Standards  mark

Certificated of ISO 9001 Quality Management System 

Certificated of ISO 14001 Environmental Management System 

Certificated of Works Approval 

Certificated of new Technology 



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최고의 품질과 기술로

DAERYUK KS & JIS STANDARD

- 한국산업규격실시 인증업체 / 강제 용접식 플랜지(KS B 1503) / 스테인리스 강제 용접식 플랜지(KS B 1506)
- 일본공업규격표시 인증업체 / 강제 용접식 관 플랜지(JIS B 2220)
- BV선급승인공장 / KS, JIS, ANSI, JPI

<p>생산 및 취급품목</p> <ul style="list-style-type: none"> ▶▶ KS / JIS 플랜지 ▶▶ ANSI / API / MSS 플랜지 ▶▶ DIN / JPI /AWWA 플랜지 	<p>품질에서 앞서갑니다.</p> <p style="text-align: right;"> 大陸프랜지工業株式會社 DAERYUK FLANGE IND. CO., LTD.</p>
	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> KS B1503 KS B1506</div> <div style="text-align: center;"> 벤처기업</div> <div style="text-align: center;"> 신기술인증</div> <div style="text-align: center;"> JIS B 2220</div> <div style="text-align: center;"> BV선급승인공장</div> <div style="text-align: center;"> ISO 9001</div> <div style="text-align: center;"> ISO 9001</div> </div>



大陸프랜지工業株式會社
DAERYUK FLANGE IND. CO., LTD.

 **본사 및 공장 :**
경남 김해시 상동면 매리 151번지 Tel : 055.331.9020 Fax : 055.331.9030~1

 **서울 영업소 :**
서울시 금천구 시흥 984-490 Tel : 02.893.4335~6 Fax : 02.893.4337
Homepage : www.drcco.com E.mail : daeryuk@drcco.com

FOREWORD

인사말

It is a great pleasure for us to have this opportunity to introduce our Daeryuk Flange Ind. Co., Ltd.

Since its establishment in 1987, Daeryuk Flange Ind. Co., Ltd. has supplied all kind of high quality Flange for shipbuilding business, petroleum chemical, power facilities, industrial facilities and plant construction fields based on the rich experience and accumulated techniques with modern facilities and equipment.

As resuets of such efforts, we acquired an approval of K.S(KOREAN INDUSTRIAL STANDARD) mark from KOREA government in August, 1988.

Also We have approved JIS mark from Japanese government in september, 1988 and we certified ISO 9002 Quality Management system Standard from BV-QI in JUNE, 1999.

And we acquired the KS certification for stainless flange as the first company in Korea in October, 1999 so that we will do our best to provide the flange of good quality at best prices.

Since in 1994, we are exporting our product to Japan and its customers around world and we are recognized among customers for the excellent quality and technology.

We, Daeryuk flange Ind. co., Ltd. will continue to devote ourselves to meet with satisfaction of the customers by providing you with highest Quality and best service.

We are also expecting you to support and encourage us continually in future with best Regards.

대륙프랜지 공업 주식회사를 고객 여러분에게 소개 드릴 수 있게 되어 큰 기쁨으로 생각합니다.

저희 회사는 1987년 설립 이래 현대화된 장비 및 시설을 갖추고 풍부한 경험과 축적된 기술을 기초로 하여 조선, 석유화학, 발전설비, 산업설비 및 플랜트 분야에 고품질의 다양한 프랜지를 공급해 왔습니다. 이러한 노력의 결과로 당사는 1988년도 8월에 한국산업규격(KS)을 획득한 이후 전직원의 부단한 품질혁신 의지로 1988년 9월에는 일본공업규격(JIS)을, 1999년 6월에는 ISO 9002 품질경영 시스템을 인증받았습니다.

또한 1999년 10월, 국내 플랜지 업계 최초로 스테인레스 플랜지 한국산업규격(KS)을 획득함으로써 양질의 스테인레스 플랜지를 내수시장에 공급 할 수 있도록 기반을 조성하였습니다. 1994년 이래 플랜지 제품의 수출을 통하여 당사는 일본 및 해외 고객으로부터 우수한 품질과 기술력을 갖춘 최고의 플랜지 제조 업체로 인정받아 왔습니다. 저희 직원일동은 이에 만족하지 않고 충족시킬 수 있도록 끊임없는 노력을 경주하겠습니다. 또한 여러분과 지속적인 동반자가 될 수 있도록 지원과 격려가 있으시길 기대합니다.

Sincerely yours

Yoon Ok Choi
YOON OK, CHOI
PRESIDENT

PRESS LINE

절단라인



CNC MACHING PROCESS

CNC 가공



DRILLING MACHING PROCESS

드릴가공



자동다축드릴



직립다축드릴



레디알 드릴



MCT 드릴(머시닝센터)

MARKING

마킹



LICENSE / 주요인허가증



환경경영시스템인증서



품질경영시스템인증서



일본공업규격표시인증서



제품인증서



기술혁신형 중소기업확인서



수출유망중소기업지정증



특허증



실용신안등록증

- 특허 제 0531434호 / 제 0531435호
- 특허 제 0553612호 / 제 0553613호

- 등록 제 0349542호 / 제 0349543호
- 등록 제 0351099호 / 제 0351493호

KS · JIS STANDARD

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DIN STANDARD

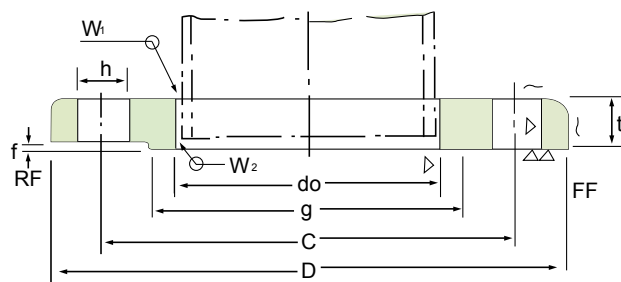
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COMPANY HISTORY

회사연혁

DATE(일자)	CONTENT(내용)	DATE(일자)	CONTENT(내용)
1980.05.02	DAERYUK CO., LTD. 대륙공업사 설립(최윤옥사장 취임)	1999.05.	Certificate of ISO 9002 Quality Management System ISO 9002 인증획득(BV-QI)
1987.06.	Founded DAERYUK, IND.CO.,LTD. 대륙프랜지공업(주)설립	1999.01.	Approde K,S(Korea industrial standard)Mark KS마크 승인(국립품질기술원)-KS B1506 / 스테인리스 강제 용접식 플랜지
1988.08.	Approved K,S(Korea industrial standard)Mark KS마크 승인(국립품질기술원)-KS B 1503 / 강제 용접식 플랜지	2001.05.	Certificate of New Techology 한국 신기술(NT)인증 (국립품질기술원)-플랜지 가공용 전조기
1990.12.	Head Office and factory construction(SamrakDong, Busan) 본사 및 공장 건립(부산 삼락동)	2002.06.	Establishment of the corporation "신대륙산업" in Osaka 일본(OSAKA)판매법인 설립(신대륙산업)
1990.12	Accomplishment exporting \$800,000 수출 800,000 달성	2002.08.	Certificate of ISO 9001 Quality Management System ISO 9001인증(KSA)
1991.12.	Installed auto press M/C 3 set 자동 프레스기 3대(1,000ton)설치	2003.06.	Registration a patent for The Flange form rolling M/C 플랜지 가공용 전조기 특허등록(특허청장)
1993.01.	Registration of Hyundai Samho Heavy Industries Co., Ltd. Cooperating Enterprise. 현대삼호중공업 협력업체 등록	2005.11	Registration a patent for The Feeding M/C and Making process Flange 소재공급 장치 및 이를 이용한 플랜지 성형 방법 특허등록(특허청장)
1994.	Registration of Hanjin Heavy Industries Co., Ltd. Cooperating Enterprise. 한진중공업 협력업체 등록	2005.11.	Registration a patent for The automatic Pressure Flatness M/C 프레스 자동평탄장치 특허등록(특허청장)
1994.01.	Installed auto press M/C 3 set 자동 프레스기 3대(1,000ton)설치	2006.02.	Registration a patent for The Flange automatic Marking M/C 플랜지용 자동마킹기 특허등록(특허청장)
1994.12.	Accomplishment exporting \$5,000,000 수출\$5,000,000달성	2006.02.	Registration a patent for The Flange automatic Drilling M/C 플랜지용 자동드릴머신 특허등록(특허청장)
1995.	Registration of Samaung Heavy Industries Co., Ltd. Cooperating Enterprise. 삼성중공업 협력업체 등록	2007.01.10.	Founded The Second factory 제2공장 신축 대지 7,22㎡, 공장면적 5,704㎡
1995.02.	KIMHAE factory construction(SangDong, KimHae) 김해공장 건축(김해 상동)	2008.	Registration of Hyundai Heavy Industries Co., Ltd. Cooperating Enterprise. 현대중공업 협력업체 등록
1995.06.	Installed auto press M/C 3 set 자동 프레스기 3대(1,350ton)설치	2008.01.30.	Being selected as a INNO-BIZ small and medium enterprises 기술혁신형 중소기업 선정-경남지방중소기업청
1996.04.	Installed Robot CNC lathe M/C 2 set 로봇 CNC 선반 2조 설치	2008.08.10.	Certificate of ISO 9001 Quality Management System ISO 9001갱신(KSA)
1996.08.	Installed auto Drilling M/C 14 set 자동 드릴링기 14조 설치	2008.10.08.	Approved JIS(Japanese industrial standard)Mark 신JIS마크 최초인증(KSA)-JIS B 2220 / 강제용접식 플랜지
1996.12.	Installed CNC lathe M/C 3 set CNC 선반 3대 설치	2008.09.01	Certificate of ISO 14001 environmental Management System ISO 14001 최초인증(KSA)
1997.05.	Head office and factory moval(SangDong, Kimhae) 본사 및 공장 이동(김해상동)	2008.12.01	Promising Export Firm by the small&Medium Business Administration 수출유망중소기업지정-경남중소기업수출지원 센터
1998.	Registration of Daewoo Heavy Industries Co., Ltd. Cooperating Enterprise. 대우중공업 협력업체 등록		
1998.09.	Approved JIS(Japanese industrial standard) Mark JIS마크 승인(일본통상성)-JIS B 2220 / 강제용접식 플랜지		
1998.11.	Certificate of work Approval(BV classification of ship) BV 공장승인 획득(적용범위 : KS, JIS, ANSI, JPI)		

2K (JIS B 2210-1984)



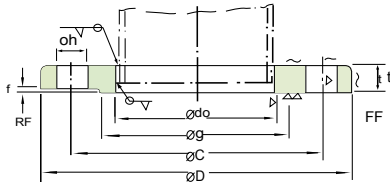
Unit : mm

Nominal Bore of Flange	Outside Dia. of Steel Pipe	Inside Dia. of Flange d_o	Sectional Dimensions		Bolt Hole			Nominal Bolt Size
			t	D	C	h	N	
450A	457,2	460	22	605	555	23	16	M20
550A	508,0	511	22	655	605	23	20	M20
550A	558,8	562	24	720	665	25	20	M22
600A	609,6	613	24	770	715	25	20	M22
650A	660,4	664	24	825	770	25	24	M22
700A	711,2	715	24	875	820	25	24	M22
750A	762,0	766	24	945	880	27	24	M24
800A	812,8	817	24	995	930	27	24	M24
(850A)	863,6	868	24	1045	980	27	24	M24
900A	914,4	919	24	1095	1030	27	24	M24
1000A	1016,0	1021	26	1195	1130	27	28	M24
(1100A)	1117,6	1123	26	1305	1240	27	28	M24
1200A	1219,2	1224	26	1420	1350	27	32	M24
1350A	1371,6	1377	26	1575	1505	27	32	M24
1500A	1524,0	1529	28	1730	1660	27	36	M24

1. Flanges of parenthesized nominal diameter had letter not be used.

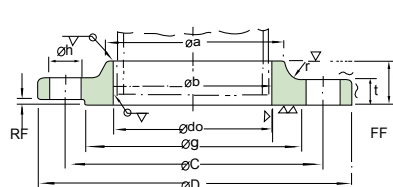
5K (JIS B 2220-2001)

판 플랜지(SLIP ON FLANGE)
10-1500



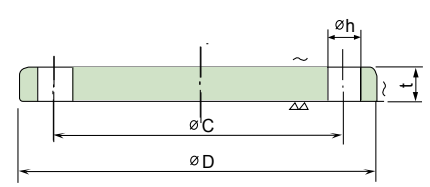
SOP

허브 플랜지(HUB FLANGE)
450-1500



SOH

블랭크 플랜지(BLANK FLANGE)
10-1500



BL

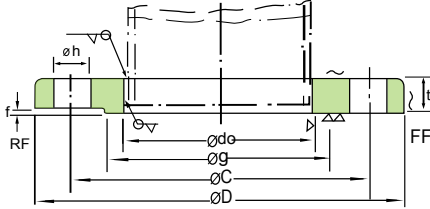
Unit : mm

Nominal Dia. of Flange	Outside Dia. of Steel Pipe	Inside Dia. of Flange do	Outside Dia. of Flange D	Sectional Dimensions of Flange							Bolt Hole			Nominal Bolt Sizzle	Approx. Weight (kg)			
				t	T	Dia. of Hub		r	Dia. of Face f	Dia. of Raised Face g	Bolt Circle Dia.	Number of Bolt Holes	Hole Dia h			SOP	BL	SOH
						a	b											
10	17.3	17.8	75	9	·	·	·	·	1	39	55	4	12	M10	0.26	0.28	·	
15	21.7	22.2	80	9	·	·	·	·	1	44	60	4	12	M10	0.30	0.32	·	
20	27.2	27.7	85	10	·	·	·	·	1	49	65	4	12	M10	0.36	0.41	·	
25	34.0	34.5	95	10	·	·	·	·	1	59	75	4	12	M10	0.45	0.52	·	
32	42.7	43.2	115	12	·	·	·	·	2	70	90	4	15	M12	0.77	0.91	·	
40	48.6	49.1	120	12	·	·	·	·	2	75	95	4	15	M12	0.82	1.00	·	
50	60.5	61.1	130	14	·	·	·	·	2	85	105	4	15	M12	1.06	1.38	·	
65	76.3	77.1	155	14	·	·	·	·	2	110	130	4	15	M12	1.48	2.00	·	
80	89.1	90.0	180	14	·	·	·	·	2	121	145	4	19	M16	1.97	2.67	·	
(90)	101.6	102.6	190	14	·	·	·	·	2	131	155	4	19	M16	2.08	2.99	·	
100	114.3	115.4	200	16	·	·	·	·	2	141	165	8	19	M16	2.35	3.66	·	
125	139.8	141.2	235	16	·	·	·	·	2	176	200	8	19	M16	3.20	5.16	·	
150	165.2	166.6	265	18	·	·	·	·	2	206	230	8	19	M16	4.39	7.47	·	
(175)	190.7	192.1	300	18	·	·	·	·	2	232	260	8	23	M20	5.42	9.52	·	
200	216.3	218.0	320	20	·	·	·	·	2	252	280	8	23	M20	6.24	12.1	·	
(225)	241.8	243.7	345	20	·	·	·	·	2	277	305	12	23	M20	6.57	13.9	·	
250	267.4	269.5	385	22	·	·	·	·	2	317	345	12	23	M20	9.39	19.2	·	
300	318.5	321.0	430	22	·	·	·	·	3	360	390	12	23	M20	10.2	24.2	·	
350	355.6	358.1	480	24	·	·	·	·	3	403	435	12	25	M22	14.0	33.0	·	
400	406.4	409.0	540	24	·	·	·	·	3	463	495	16	25	M22	16.9	41.7	·	
450	457.2	460.0	605	24	40	495	500	5	3	523	555	16	25	M22	21.4	52.7	24.9	
500	508.0	511.0	655	24	40	546	552	5	3	573	605	20	25	M22	23.0	61.6	27.0	
(550)	558.8	562.0	720	26	42	597	603	5	3	630	665	20	27	M24	30.1	80.8	34.5	
600	609.6	613.0	770	26	44	648	654	5	3	680	715	20	27	M24	32.5	92.7	37.8	
(650)	660.4	664.0	825	26(28)	48	702	708	5	3	735	770	24	27	M24	35.6	106(114)	43.2	
700	711.2	715.0	875	26(30)	48	751	758	5	3	785	820	24	27	M24	38.0	120(138)	45.8	
(750)	762.0	766.0	945	28(32)	52	802	810	5	3	840	880	24	33	M30	48.4	150(171)	57.7	
800	812.8	817.0	995	28(34)	52	854	862	5	3	890	930	24	33	M30	51.2	(202)	61.3	
(850)	863.6	868.0	1045	28(36)	54	904	912	5	3	940	980	24	33	M30	53.9	(237)	65.3	
900	914.4	919.0	1095	30(36)	56	956	964	5	3	990	1030	24	33	M30	60.7	(260)	73.1	
1000	1016.0	1021.0	1195	32(40)	60	1058	1066	5	3	1090	1130	28	33	M30	70.1	(345)	84.8	
1100	1117.6	1122.0	1305	32(44)	71	1158	1170	7	3	1200	1240	28	33	M30	81.6	(454)	105	
1200	1219.2	1224.0	1420	34(48)	77	1260	1272	7	3	1305	1350	32	33	M30	101	(586)	129	
1350	1371.6	1376.0	1575	34(54)	80	1414	1426	7	3	1460	1505	32	33	M30	116	(814)	151	
1500	1524.0	1529.0	1730	36(58)	86	1568	1580	7	3	1615	1660	36	33	M30	137	(1060)	180	

- Flanges of parenthesized nominal diameter had better not be used.
- In case of nominal diameter 650~1500, Blank flange(BL) is conform to parenthesized thickness.

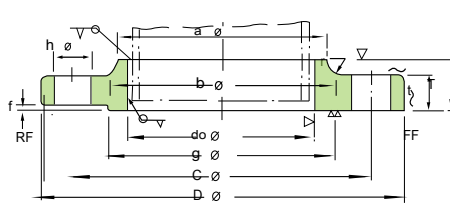
10K (JIS B 2220-2001)

판 플랜지(SLIP ON FLANGE)
10-1500



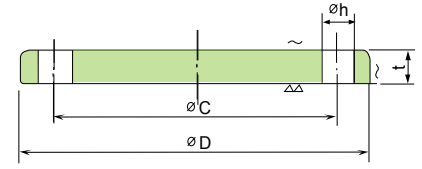
SOP

허브 플랜지(HUB FLANGE)
250-1500



SOH

블랭크 플랜지(BLANK FLANGE)
10-1500



BL

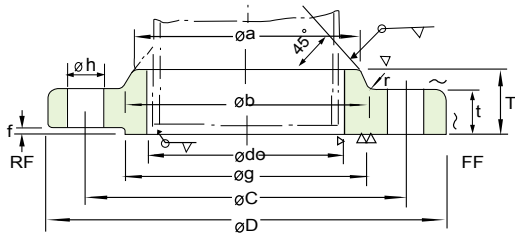
Unit : mm

Nominal Dia. of Flange	Outside Dia. of Steel Pipe	Inside Dia. of Flange do	Outside Dia. of Flange D	Sectional Dimensions of Flange							Bolt Hole			Nominal Bolt Size	Approx. Weight (kg)		
				t	T	Dia. of Hub		r	Dia. of Face f	Dia. of Raised Face g	Bolt Circle Dia	Number of Bolt Holes	Hole Dia h		SOP	BL	SOH
						a	b										
10	17.3	17.8	90	12	·	·	·	·	1	46	65	4	15	M12	0.51	0.53	·
15	21.7	22.2	95	12	·	·	·	·	1	51	70	4	15	M12	0.56	0.60	·
20	27.2	27.7	100	14	·	·	·	·	1	56	75	4	15	M12	0.72	0.79	·
25	34.0	34.5	125	14	·	·	·	·	1	67	90	4	19	M16	1.12	1.22	·
32	42.7	43.2	135	16	·	·	·	·	2	76	100	4	19	M16	1.47	1.66	·
40	48.6	49.1	140	16	·	·	·	·	2	81	105	4	19	M16	1.55	1.79	·
50	60.5	61.1	155	16	·	·	·	·	2	96	120	4	19	M16	1.86	2.23	·
65	76.3	77.1	175	18	·	·	·	·	2	116	140	4	19	M16	2.58	3.24	·
80	89.1	90.0	185	18	·	·	·	·	2	126	150	8	19	M16	2.58	3.48	·
(90)	101.6	102.6	195	18	·	·	·	·	2	136	160	8	19	M16	2.73	3.90	·
100	114.3	115.4	210	18	·	·	·	·	2	151	175	8	19	M16	3.10	4.57	·
125	139.8	141.2	250	20	·	·	·	·	2	182	210	8	23	M20	4.73	7.18	·
150	165.2	166.6	280	22	·	·	·	·	2	212	240	8	23	M20	6.30	10.1	·
(175)	190.7	192.1	305	22	·	·	·	·	2	237	265	12	23	M20	6.75	11.8	·
200	216.3	218.0	330	22	·	·	·	·	2	262	290	12	23	M20	7.46	13.9	·
(225)	241.8	243.7	350	22	·	·	·	·	2	282	310	12	23	M20	7.70	15.8	·
250	267.4	269.5	400	24	36	288	292	6	2	324	355	12	25	M22	11.8	22.6	12.7
300	318.5	321.0	445	24	38	340	346	6	3	368	400	16	25	M22	12.6	27.8	13.8
350	355.6	358.1	490	26	42	380	386	6	3	413	445	16	25	M22	16.3	36.9	18.2
400	406.4	409.0	560	28	44	436	442	6	3	475	510	16	27	M24	23.2	52.1	25.8
450	457.2	460.0	620	30	48	496	502	6	3	530	565	20	27	M24	29.3	68.4	33.4
500	508.0	511.0	675	30	48	548	554	6	3	585	620	20	27	M24	33.3	81.6	38.0
(550)	558.8	562.0	745	32(34)	52	604	610	6	3	640	680	20	33	M30	42.9	105(112)	49.4
600	609.6	613.0	795	32(36)	52	656	662	6	3	690	730	24	33	M30	45.4	120(134)	52.6
(650)	660.4	664.0	845	34(38)	56	706	712	6	3	740	780	24	33	M30	51.8	144(161)	60.2
700	711.2	715.0	905	34(40)	58	762	770	6	3	800	840	24	33	M30	59.0	176(196)	70.2
(750)	762.0	766.0	970	36(44)	62	816	824	6	3	855	900	24	33	M30	72.8	214(248)	86.5
800	812.8	817.0	1020	36(46)	64	868	876	6	3	905	950	28	33	M30	76.0	249(286)	92.0
(850)	863.6	868.0	1070	36(48)	66	920	928	6	3	955	1000	28	33	M30	80.1	(330)	98.7
900	914.4	919.0	1120	38(50)	70	971	979	6	3	1005	1050	28	33	M30	88.9	(377)	110
1000	1016.0	1021.0	1235	40(56)	74	1073	1081	6	3	1110	1160	28	39	M36	109	(512)	133
1100	1117.6	1122.0	1345	42(62)	95	1175	1185	8	3	1220	1270	28	39	M36	131	(675)	175
1200	1219.2	1224.0	1465	44(66)	101	1278	1290	8	3	1325	1380	32	39	M36	163	(854)	215
1350	1371.6	1376.0	1630	48(74)	110	1432	1450	8	3	1480	1540	36	45	M42	204	(1180)	274
1500	1524.0	1529.0	1795	50(82)	123	1585	1605	8	3	1635	1700	40	45	M42	248	(1590)	340

1. Flanges of parenthesized nominal diameter had letter not be used.
2. In case of nominal diameter 550a~1500A, Blank flange(BL) is conform to parenthesized thickness.

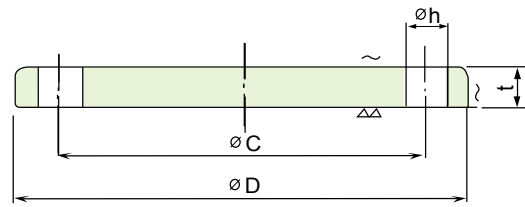
16K (JIS B 2220-2001)

허브 플랜지(HUB FLANGE)
10-600



SOH

블랭크 플랜지(BLANK FLANGE)
10-1600



BL

Unit : mm

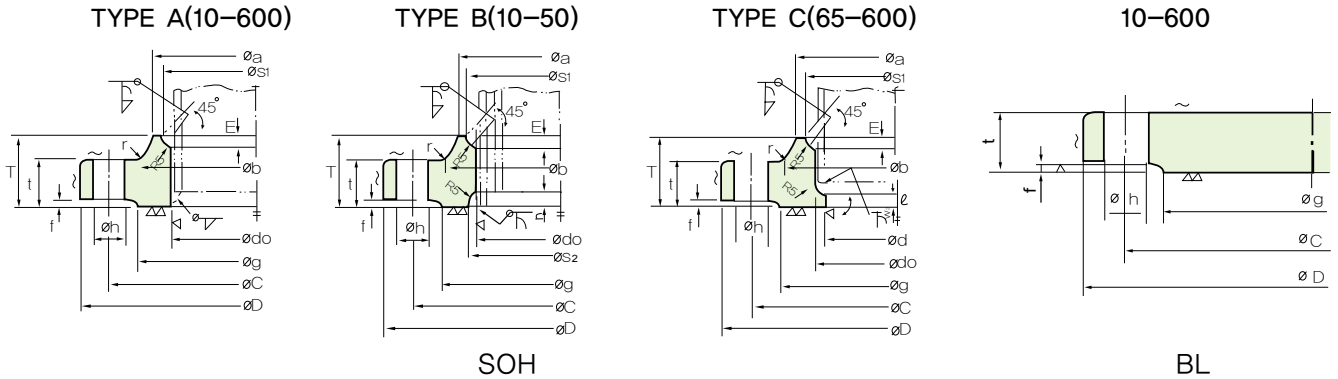
Nominal Dia. of Flange	Outside Dia. of Steel Pipe	Inside Dia. of Flange do	Outside Dia. of Flange d	Sectional Dimensions of Flange							Bolt Hole			Nominal Bolt Size	Approx. Weight (kg)	
				t	T	Dia. of Hub		r	f	g	Bolt Circle dia. C Dia	Number of Bolt Holes	Hole Dia h		BL	SOH
						a	b									
10	17.3	17.8	90	12	16	26	28	4	1	46	65	4	15	M12	0.53	0.52
15	21.7	22.2	95	12	16	30	32	4	1	51	70	4	15	M12	0.60	0.58
20	27.2	27.7	100	14	20	38	42	4	1	56	75	4	15	M12	0.79	0.75
25	34.0	34.5	125	14	20	46	50	4	1	67	90	4	19	M16	1.22	1.16
32	42.7	43.2	135	16	22	56	60	5	2	76	100	4	19	M16	1.66	1.53
40	48.6	49.1	140	16	24	62	66	5	2	81	105	4	19	M16	1.79	1.64
50	60.5	61.1	155	16	24	76	80	5	2	96	120	8	19	M16	2.09	1.83
65	76.3	77.1	175	18	26	94	98	5	2	116	140	8	19	M16	3.08	2.58
80	89.1	90.0	200	20	28	108	112	6	2	132	160	8	23	M20	4.41	3.61
(90)	101.6	102.6	210	20	30	120	124	6	2	145	170	8	23	M20	4.92	3.89
100	114.3	115.4	225	22	34	134	138	6	2	160	185	8	23	M20	6.29	4.87
125	139.8	141.2	270	22	34	164	170	6	2	195	225	8	25	M22	9.21	7.09
150	165.2	166.6	305	24	38	196	202	6	2	230	260	12	25	M22	12.7	9.57
200	216.3	218.0	350	26	40	244	252	6	2	275	305	12	25	M22	18.4	12.0
250	267.4	269.5	430	28	44	304	312	6	2	345	380	12	27	M24	30.4	20.1
300	318.5	321.0	480	30	48	354	364	8	3	395	430	16	27	M24	40.5	24.3
350	355.6	358.1	540	34	52	398	408	8	3	440	480	16	33	M30×3	57.5	34.4
400	406.4	409.0	605	38	60	446	456	10	3	495	540	16	33	M30×3	81.7	47.4
450	457.2	460.0	675	40	64	504	514	10	3	560	605	20	33	M30×3	107	61.8
500	508.0	511.0	730	42	68	558	568	10	3	615	660	20	33	M30×3	132	73.7
(550)	558.8	562.0	795	44	70	612	622	10	3	670	720	20	39	M36×3	163	87.9
600	609.6	613.0	845	46	74	666	676	10	3	720	770	24	39	M36×3	192	98.4
* 650	660.4	664.0	895	48	77	704	726	10	5	770	820	24	39	M36×3	-	-
* 700	711.2	715.0	960	50	80	754	776	10	5	820	875	24	42	M39×3	-	-
* 750	762.0	766.0	1020	52	83	806	832	10	5	880	935	24	42	M39×3	-	-
* 800	812.8	817.0	1085	54	86	865	885	10	5	930	990	24	48	M45×3	-	-
* 850	863.6	868.0	1135	56	89	916	936	10	5	980	1040	24	48	M45×3	-	-
* 900	914.4	919.0	1185	58	93	968	986	10	5	1030	1090	28	48	M45×3	-	-
* 1000	1016.0	1021.0	1320	62	99	1070	1098	12	5	1140	1210	28	56	M52×3	-	-
* 1100	1117.6	1123.0	1420	66	105	1180	1200	12	15	1240	1310	32	56	M52×3	-	-
* 1200	1219.2	1225.0	1530	70	112	1282	1302	12	5	1350	1420	32	56	M52×3	-	-
* 1300	1320.8	1326.0	1645	74	-	-	-	-	5	1450	1530	32	62	M56×3	-	-
* 1350	1371.6	1377.0	1700	76	-	-	-	-	5	1510	1590	32	62	M56×3	-	-
* 1400	1422.4	1428.0	1755	78	-	-	-	-	5	1560	1640	36	62	M56×3	-	-
* 1500	1524.0	1529.0	1865	80	-	-	-	-	5	1670	1750	36	62	M56×3	-	-

1. Flanges of parenthesized nominal diameter had better not be used.
2. Nominal diameter over 600 is manufacturer's standard(*)

20K (JIS B 2220-2001)

허브 플랜지(HUB FLANGE)

블랭크 플랜지(BLANK FLANGE)



Unit : mm

Nominal Dia. of Flange	Outside Dia. of Steel Pipe	Inside Dia. of Flange do	Outside Dia. of Flange D	Sectional Dimensions of Flange								Bolt Hole			Nominal Bolt Size	Reference					Approx. Weight (kg)		
				t	T	Dia. of Hub		r	f	g	d	Bolt Circle Dia. C	Num-ber of Bolt Holes	Hole Dia. h		S ₁	m	S ₂	n	ℓ	SOH (A)	SOH (B.C)	BL
						a	b																
10	17.3	17.8	90	14	20	30	32	4	1	46	12.7	65	4	15	M12	27	4	27	4	-	0.58	0.58	0.59
15	21.7	22.2	95	14	20	34	36	4	1	51	16.1	70	4	15	M12	31	4	31	4	-	0.65	0.64	0.67
20	27.2	27.7	100	16	22	40	42	4	1	56	21.4	75	4	15	M12	37	4	37	4	-	0.81	0.80	0.86
25	34.0	34.5	125	16	24	48	50	4	1	67	27.2	90	4	19	M16	44	4	44	4.5	-	1.27	1.26	1.34
32	42.7	43.2	135	18	26	56	60	5	2	76	35.5	100	4	19	M16	52	4	53	5	-	1.58	1.57	1.73
40	48.6	49.1	140	18	26	62	66	5	2	81	41.2	105	4	19	M16	58	4	59	5.5	-	1.68	1.66	1.87
50	60.5	61.1	155	18	26	76	80	5	2	95	52.7	120	8	19	M16	70	4	72	5.5	-	1.89	1.86	2.20
65	76.3	77.1	175	20	30	100	104	5	2	116	65.9	140	8	19	M16	94	6	-	-	6	2.73	2.81	3.24
80	89.1	90.0	200	22	34	113	117	6	2	132	78.1	160	8	23	M20	107	6	-	-	6	3.85	3.95	4.63
(90)	101.6	102.6	210	24	36	126	130	6	2	145	90.2	170	8	23	M20	120	6	-	-	6	4.47	4.59	5.67
100	114.3	115.4	225	24	36	138	142	6	2	160	102.3	185	8	23	M20	132	6	-	-	6	5.03	5.18	6.61
125	139.8	141.2	270	26	40	166	172	6	2	195	126.6	225	8	25	M22	160	7	-	-	6	7.94	8.15	10.5
150	165.2	166.6	305	28	42	196	202	6	2	230	151.0	260	12	25	M22	186	8	-	-	6	10.4	10.7	14.4
200	216.3	218.0	350	30	46	244	252	6	2	275	199.9	305	12	25	M22	237	9	-	-	6	13.1	13.6	20.8
250	267.4	269.5	430	34	52	304	312	6	2	345	248.8	380	12	27	M24	290	10	-	-	6	23.1	23.8	36.2
300	318.5	321.0	480	36	56	354	364	8	3	395	297.9	430	16	27	M24	345	11	-	-	6	27.2	28.1	47.4
350	355.6	358.1	540	40	62	398	408	8	3	440	333.4	480	16	33	M30×3	384	12	-	-	6	38.4	39.5	66.1
400	406.4	409.0	605	46	70	446	456	10	3	495	381.0	540	16	33	M30×3	437	13	-	-	7	53.9	55.6	97.0
450	457.2	460.0	675	48	78	504	514	10	3	560	431.8	605	20	33	M30×3	490	15	-	-	7	71.0	72.9	126
500	508.0	511.0	730	50	84	558	568	10	3	615	482.6	660	20	33	M30×3	544	16	-	-	7	84.6	86.7	155
(550)	558.8	562.0	795	52	90	612	622	10	3	670	533.4	720	20	39	M36×3	595	16	-	-	7	102	104	190
600	609.6	613.0	845	54(56)	96	666	676	10	3	720	584.2	770	24	39	M36×3			-	-	7	115	117	223(231)
* 650	660.4	664.0	945	60	-	-	-	5	5	790	-	850	24	48	M45×3	646	18	-	-	-	-	-	-
* 700	711.2	715.0	995	64	-	-	-	5	5	840	-	900	24	48	M45×3			-	-	-	-	-	-
* 750	762.0	766.0	1080	68	-	-	-	5	5	900	-	970	24	56	M52×3			-	-	-	-	-	-
* 800	812.8	817.0	1140	72	-	-	-	5	5	960	-	1030	24	56	M52×3			-	-	-	-	-	-
* 850	863.6	868.0	1200	74	-	-	-	5	5	1020	-	1090	24	56	M52×3			-	-	-	-	-	-
* 900	914.4	919.0	1250	76	-	-	-	5	5	1070	-	1140	28	56	M52×3			-	-	-	-	-	-

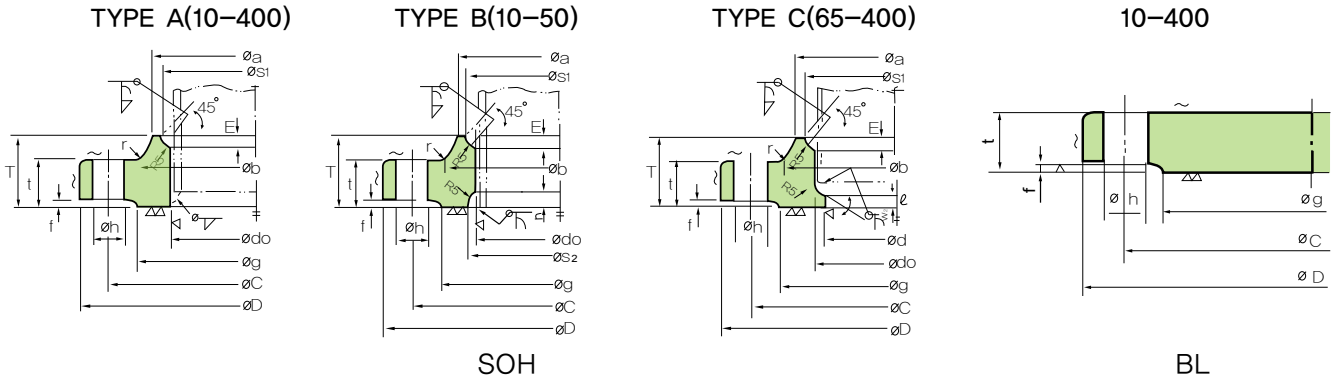
1. Flanges of parenthesized nominal diameter had better not be used.
2. Norminal diameter over 600 is manufacturer's standard(*)
3. In case of nominal diameter 600, Blank flange(BL) is conform to parenthesized thickness.



30K (JIS B 2220-2001)

허브 플랜지(HUB FLANGE)

블랭크 플랜지(BLANK FLANGE)

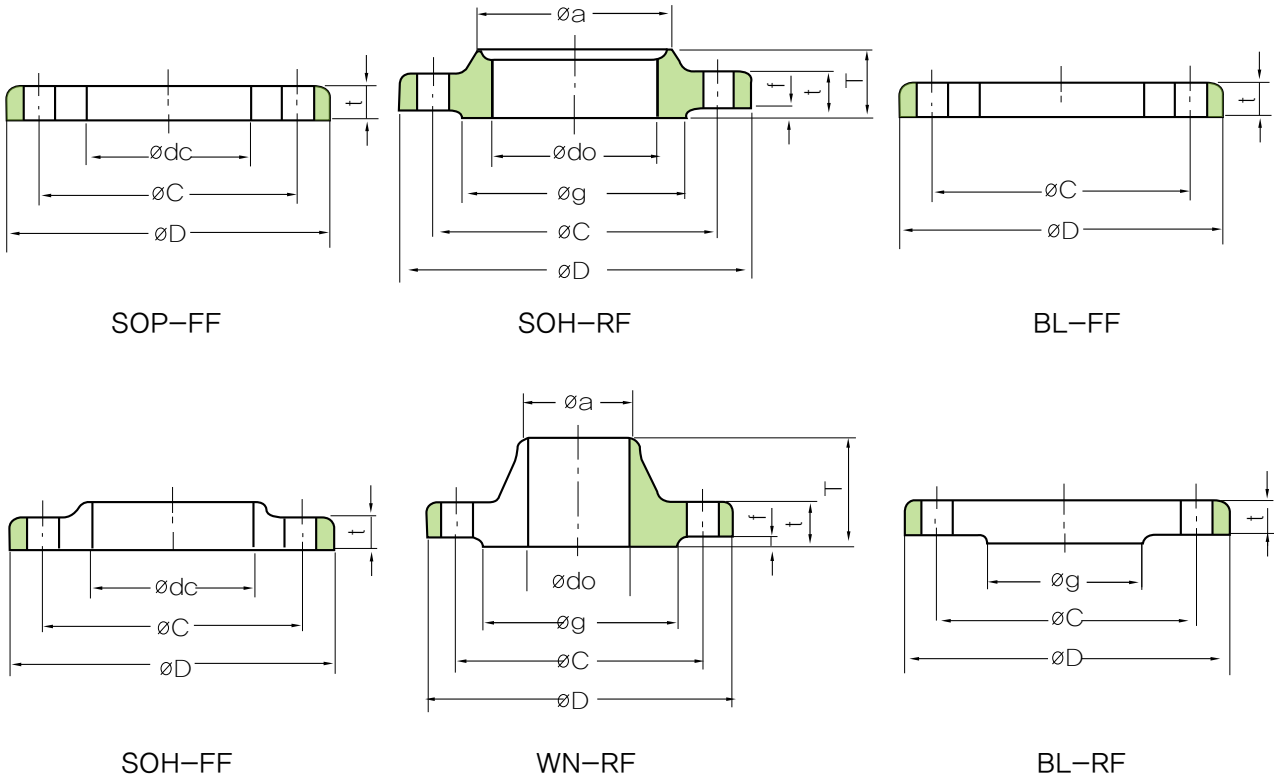


Unit : mm

Nominal Dia. of Flange	Outside Dia. of Steel Pipe	Inside Dia. of Flange do	Outside Dia. of Flange D	Sectional Dimensions of Flange								Bolt Hole			Nominal Bolt Size	Reference					Approx. Weight (kg)		
				t	T	Dia. of Hub		r	f	g	d	Bolt Circle Dia. C	Number of Bolt Holes	Hole Dia. h		S ₁	m	S ₂	n	ℓ	SOH (A)	SOH (B,C)	BL
						a	b																
10	17.3	17.8	110	16	24	30	34	4	1	52	12.7	75	4	19	M16	27	4	27	4	-	1.00	1.00	1.00
15	21.7	22.2	115	18	26	36	40	5	1	55	16.1	80	4	19	M16	31	4	40	4	-	1.24	1.22	1.25
20	27.2	27.7	120	18	28	42	46	5	1	60	21.4	85	4	19	M16	37	5	44	4	-	1.36	1.34	1.38
25	34.0	34.5	130	20	30	50	54	5	1	70	27.2	95	4	19	M16	44	6	52	5	-	1.77	1.75	1.84
32	42.7	43.2	140	22	32	60	64	6	2	80	35.5	105	4	19	M16	52	6	60	5	-	2.17	2.15	2.32
40	48.6	49.1	160	22	34	66	70	6	2	90	41.2	120	4	23	M20	58	6	66	5	-	2.82	2.79	3.00
50	60.5	61.1	165	22	36	82	86	6	2	105	52.7	130	8	19	M16	70	6.5	78	5	-	2.89	2.86	3.14
65	76.3	77.1	200	26	40	102	106	8	2	130	65.9	160	8	23	M20	96	9.5	-	6	4.88	4.96	5.50	
80	89.1	90.0	210	28	44	115	121	8	2	140	78.1	170	8	23	M20	109	9.5	-	6	5.70	5.80	6.63	
(90)	101.6	102.6	230	30	46	128	134	8	2	150	90.2	185	8	25	M22	122	9.5	-	6	7.13	7.25	8.55	
100	114.3	115.4	240	32	48	141	147	8	2	160	102.3	195	8	25	M22	135	9.5	-	6	8.01	8.16	10.0	
125	139.8	141.2	275	36	54	166	172	8	2	195	126.6	230	8	25	M22	160	9.5	-	6	11.6	11.9	15.3	
150	165.2	166.6	325	38	58	196	204	8	2	235	151.0	275	12	27	M24	186	9.5	-	6	17.0	17.3	22.2	
200	216.3	218.0	370	42	64	248	256	8	2	280	199.9	320	12	27	M24	237	9.5	-	6	22.2	22.6	32.6	
250	267.4	269.5	450	48	72	306	314	10	2	345	248.8	390	12	33	M30×3	290	10	-	6	36.8	37.5	55.2	
300	318.5	321.0	515	52	78	360	370	10	3	405	297.9	450	16	33	M30×3	345	12	-	6	49.1	50.0	77.9	
350	355.6	358.1	560	54	84	402	412	12	3	450	333.4	495	16	33	M30×3	383	13	-	6	60.4	61.5	96.9	
400	406.4	409	630	60	92	456	468	15	3	510	381.0	560	16	33	M36×3	435	14	-	7	82.0	83.7	136	

1. Flanges of parenthesized nominal diameter had better not be used.

TOLERANCE FOR PIPE FLANGES (JIS B 2220-2001)



Unit : mm

Flange Section	Flange Type	Mark	Basic Size	Tolerance
Outside Diameter	ALL	D	600 & below	±1.5
			over 600	±3
Inside Diameter	SOP & SOH	do	100 & below	+0.5 0
			over 100 thru 400	+1 0
			over 400 thru 600	+1.5 0
			over 600 thru 800	+2 0
			over 800 thru 1000	+2.5 0
			over 1000	+3 0
	WN	d	100 & below	0 -0.5
			over 100	0 -1
Bolt Circle Diameter	ALL	c	950 & below	±0.8
			over 950	±1.5
Bolt Hole Pitch	ALL	-	-	±0.8
Gasket Seat	RF	g	700 & below	±0.8
			over 700	±1.5

Flange Section	Flange Type	Mark	Basic Size	Tolerance
Thickness	FF	t	20 & below	+1.5 0
			over 20 thru 50	+2 0
			over 50	+3 0
	RF	t-f	20 & below	+1.5 0
			over 20 thru 50	+2 0
			over 50	+3 0
Hub	SOH & WN	a	220 & below	+2 0
			over 220 thru 650	+4 0
			over 650	+8 0
Hub Height	SOH	T	-	±2
	WN	T	-	+2 0
Gasket Seat and Bolt nut Seat Flatness	ALL	-	-	1° & below



JIS MATERIAL SPECIFICATIONS (JIS / KS Standard)

Code	Material Spec		CHEMISTRY								MECHANICAL PROPERTIES					
			C%	Si%	Mn	P	S	Ni	Cr	Mo	Y · S% (N/mm ²)	T · S% (N/mm ²)	EL min%	RED min%	HB	
JIS B 2220 / KSB 1506	JIS G3101 SS400	16mm below	-	-	-	max 0.05	max 0.05	-	-	-	min 245	400-510	17	-	-	
		16mm~40mm	-	-	-	max 0.05	max 0.05	-	-	-	min 235	400-510	21	-	-	
		40mm over	-	-	-	max 0.05	max 0.05	-	-	-	min 215	400-510	23	-	-	
	JIS G3106 SM400A	50mm below	max 0.23	-	min 2.5xc	max 0.035	max 0.035	-	-	-	min 235	400-510	22	-	-	
		50mm over	max 0.25	-	min 2.5xc	max 0.035	max 0.035	-	-	-	min 215	400-510	24	-	-	
	JIS G3106 SM400B	50mm below	max 0.20	max 0.35	0.60 ~1.40	max 0.035	max 0.035	-	-	-	min 235	400-510	22	-	-	
		50mm over	max 0.22	max 0.35	0.60 ~1.40	max 0.035	max 0.035	-	-	-	min 215	400-510	24	-	-	
	JIS G4051 S20C / JIS G4051 S25C	JIS G4051 S20C		0.18 ~0.23	0.15 ~0.35	0.30 ~0.60	max 0.030	max 0.035	-	-	-	min 245	402	28	-	114 ~153
		JIS G4051 S25C		0.22 ~0.28	0.15 ~0.35	0.30 ~0.60	max 0.030	max 0.035	-	-	-	min 265	441	27	-	121 ~183
		JIS G3201 SF440A		max 0.60	0.15 ~0.50	0.30 ~1.20	max 0.03	max 0.035	-	-	-	min 225	440-540	24	45	min 121
JIS G3201 SF490A		max 0.60	0.15 ~0.50	0.30 ~1.20	max 0.03	max 0.035	-	-	-	min 245	490-590	22	40	min 134		
JIS G3202 SFVC 1 / JIS G3202 SFVC 2A	JIS G3202 SFVC 1		max 0.30	max 0.35	0.40 ~1.35	max 0.030	max 0.030	-	-	-	min 205	410-560	21	38	-	
	JIS G3202 SFVC 2A		max 0.35	max 0.35	0.40 ~1.10	max 0.030	max 0.030	-	-	-	min 245	490-640	18	33	-	
	JIS G3203 SFVC F1		max 0.30	max 0.35	0.60 ~0.90	max 0.030	max 0.030	-	-	0.45 ~0.65	min 275	480-660	18	35	-	
	JIS G3203 SFVA F11A		max 0.20	0.50 ~1.0	0.30 ~0.80	max 0.030	max 0.030	-	1.0 ~1.5	0.45 ~0.65	min 275	480-660	18	35	-	
JIS B 2220 / KSB 1506	JISG 4304 SUS 304		max 0.08	max 1.0	max 2.0	max 0.045	max 0.03	8.0 ~10.5	18.0 ~20.0	-	min 205	min 520	40	-	max 187	
	JISG 4304 SUS 316		max 0.08	max 1.0	max 2.0	max 0.045	max 0.03	10.0 ~14.0	16.0 ~18.0	2.0 ~3.0	min 205	min 520	40	-	max 187	
	JISG 4304 SUS 304L		max 0.03	max 1.0	max 2.0	max 0.045	max 0.03	9.0 ~13.0	18.0 ~20.0	-	min 750	min 480	40	-	max 187	
	JISG 4305 SUS 316L		max 0.03	max 1.0	max 2.0	max 0.045	max 0.03	12.0 ~15.0	16.0 ~18.0	2.0 ~3.0	min 175	min 480	40	-	max 187	

JIS B 2220 (2001)

Type of Materials	Rolling Steel		Forging Steel		Material Group Code
	Code	Material Code	Code	Material Code	
Carbon Steel	JIS G 3101	SS400	JIS G 3201	SF390A	001
	JIS G 4051	S20C	JIS G 3202	SFVC1	
	JIS G 4051	S25C	JIS G 3201	SF440A	
			JIS G 3202	SRVC2A	003a
Molybdenum Steel			JIS G 3203	SFVAF1	013a
Crommolybdenum Steel			JIS G 3203	SFVAF11A	015a
Stainless Steel	JIS G 4304	SUS304	JIS G 3214	SUSF304	021a
	JIS G 4305	SUS304			
	JIS G 4304	SUS316	JIS G 3214	SUSF316	022a
	JIS G 4305	SUS316			
	JIS G 4304	SUS304L	JIS G 3214	SUSF304L	023a
	JIS G 4305	SUS304L			
	JIS G 4304	SUS316L	JIS G 3214	SUSF316L	023b
	JIS G 4305	SUS316L			

KSB 1506 (2000)

Nominal Pressure	Type of Flange	Type of Materials	Materials	
			Code	Material
10k 20K 30K	Slip-On Flange Blind Flange W/N Flange	Stainless Steel	KS D 3705	SUS 304 SUS 316 SUS 304L SUS 316L

JIS MATERIAL SPECIFICATIONS (JIS / KS Standard)

Unit : MPa

Nominal Pressure	Material Group Code	Class	Temperature & Maximum Pressure								
			Temperature °C								
			T _L -120	220	300	350	400	425	450	475	490
5K	001 002 003a	I	0.7	0.6	0.5	—	—	—	—	—	—
		II	0.5	0.5	0.5	—	—	—	—	—	—
		III	0.5	—	—	—	—	—	—	—	—
	021a 022a	I	0.7	0.6	0.5	—	—	—	—	—	—
		II	0.5	0.5	0.5	—	—	—	—	—	—
		III	0.5	—	—	—	—	—	—	—	—
	023a 023b	I	0.7	0.6	0.5	—	—	—	—	—	—
		II	0.5	0.5	0.5	—	—	—	—	—	—
		III	0.5	—	—	—	—	—	—	—	—
10k	001 002 003a	I	1.4	1.2	1.0	—	—	—	—	—	—
		II	1.0	1.0	1.0	—	—	—	—	—	—
		III	1.0	—	—	—	—	—	—	—	—
	021a 022a	I	1.4	1.2	1.0	—	—	—	—	—	—
		II	1.0	1.0	0.9	—	—	—	—	—	—
		III	1.0	—	—	—	—	—	—	—	—
	023a 023b	I	1.4	1.2	1.0	—	—	—	—	—	—
		II	1.0	0.9	0.8	—	—	—	—	—	—
		III	1.0	—	—	—	—	—	—	—	—
16k	002 003a	I	2.7	2.5	2.3	2.1	1.8	1.6	—	—	—
		II	1.6	1.6	1.6	—	—	—	—	—	—
		III	1.6	—	—	—	—	—	—	—	—
	021a 022a	I	2.7	2.5	2.3	2.1	1.8	1.6	—	—	—
		II	1.6	1.6	1.6	1.6	1.5	1.5	—	—	—
		III	1.6	—	—	—	—	—	—	—	—
	023a 023b	I	2.7	2.5	2.3	2.1	1.8	1.6	—	—	—
		II	1.6	1.6	1.5	1.4	1.3	1.3	—	—	—
		III	1.6	—	—	—	—	—	—	—	—
20k	002 003a	I	3.4	3.1	2.9	2.6	2.3	2.0	—	—	—
		II	2.0	2.0	2.0	—	—	—	—	—	—
		III	2.0	—	—	—	—	—	—	—	—
	021a 022a	I	3.4	3.1	2.9	2.6	2.3	2.0	—	—	—
		II	2.0	2.0	2.0	2.0	1.9	1.9	—	—	—
		III	2.0	—	—	—	—	—	—	—	—
	023a 023b	I	3.4	3.1	2.9	2.6	2.3	2.0	—	—	—
		II	2.0	2.0	1.9	1.7	1.7	1.7	—	—	—
		III	2.0	—	—	—	—	—	—	—	—
30k	002 003a	I	5.1	4.6	4.3	3.9	3.4	3.0	—	—	—
		II	3.9	3.9	3.9	—	—	—	—	—	—
	013a	I	5.1	4.6	4.3	3.9	3.6	3.6	3.4	3.0	—
		II	3.9	3.9	3.9	3.9	3.7	3.6	3.4	3.0	—
	015a	I	5.1	4.6	4.3	3.9	3.8	3.6	3.4	3.2	3.0
		II	3.9	3.9	3.9	3.9	3.8	3.6	3.4	3.2	2.9
	021a 022a	I	5.1	4.6	4.3	3.9	3.8	3.6	3.4	3.2	3.0
		II	3.9	3.6	3.4	3.0	2.5	2.3	2.3	2.3	2.3
		III	3.9	—	—	—	—	—	—	—	—
023a 023b	I	5.1	4.6	4.3	3.9	3.8	3.6	3.4 ⁽⁷⁾	—	—	
	II	3.5	3.0	2.9	2.6	2.1	2.0	2.0 ⁽⁷⁾	—	—	
	III	3.5	—	—	—	—	—	—	—	—	

Note(7) : application – Material Group 023b

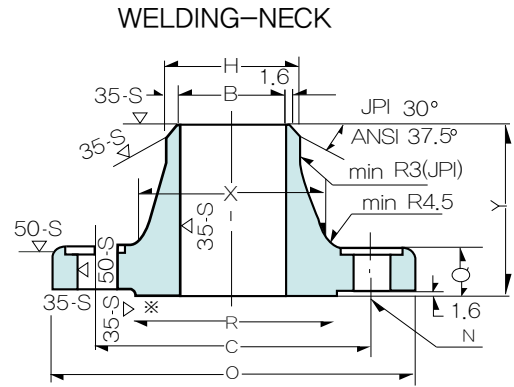
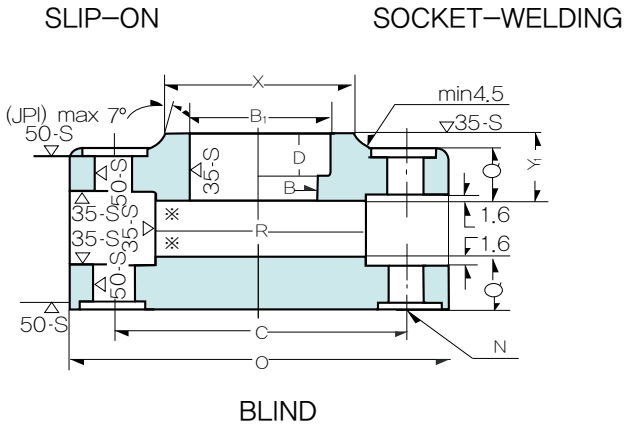


ANSI FLANGES

	<p>▶▶ Welding Neck Flanges</p> <p>The welding neck flange is normally referred to as the "high hup" flange. It is designed to transfer stresses to the pipe, thereby reducing high stress concentrations at the base of the flange. The welding neck flanges is the best designed butt-welded flange of those currently available because of its inherent structural value. It is expensive because of the design.</p> <p>▶▶ 웰딩넥 플랜지</p> <p>웰딩넥 플랜지는 통상적으로 고압(하이하브)플랜지에 속한다. 웰딩넥 플랜지는 파이프에 압력을 전달하도록 설계되었으며 그것으로 플랜지 몸체에 고압력 집중을 감소시킨다. 웰딩넥 플랜지는 맞대기 용접에 적합하게 설계되었으며 타고난 구조강도값으로 인해 널리 사용되고 있다.</p>
	<p>▶▶ Lap joint Flanges</p> <p>The lap joint flanges is practically identical to a slip-on flange except it has a radius at the intersection of the bore and flange face. This radius is necessary to have the flange accommodate a lap joint stub end. Normally, a lap joint flange and a lap joint stub end are mated together in an assembly system.</p> <p>▶▶ 랩조인트 플랜지</p> <p>랩조인트 플랜지는 내경과 플랜지 표면의 접합부에 있는 반경을 제외하고는 슬립온 플랜지와 동일하다. 이 반경은 플랜지와 랩 조인트 이음부를 조절하는데 필요하다. 일반적으로 배관조립 시스템에서는 랩조인트 플랜지와 랩조인트 이음부를 함께 사용한다.</p>
	<p>▶▶ Threaded(Screwed) Flanges</p> <p>The threaded flange is similar to the slip-on flange, but the bore is threaded. Its chief merit is that it can be assembled without welding, explaining its use in low pressure services at ordinary atmospheric temperatures, and in highly explosive areas where welding createa a hazard.</p> <p>▶▶ 스래드(나사) 플랜지</p> <p>스래드(나사) 플랜지는 슬립온 플랜지와 비슷하다. 그러나 내경이 나사로 되어 있다. 스래드 플랜지의 주된 장점은 용접 없이도 조립이 가능하다는 것이다. 스래드 플랜지의 용도는 일반적인 대기온도에서의 저압배관과 용접으로 위험을 일으킬 수 있는 높은 폭발성 지역에 사용된다.</p>
	<p>▶▶ Blind Flanges</p> <p>The blind flanges is a flange without a bore. It is used to close off the ends of a piping system and/or pressure vessel openin. It also permits easy access to the interior of a line or vessel once it has been sealed and must be reopened.</p> <p>▶▶ 브라인드 플랜지</p> <p>브라인드 플랜지는 내경이 없는 플랜지로서 배관 시스템의 끝단부와 압력탱크 개폐부를 차단할때 사용된다. 또한 브라인드 플랜지 배관라인 내부 또는 한번 일봉된 탱크를 재개봉하여야 할 때 용이한 접근이 가능하다.</p>
	<p>▶▶ Slip-on Flanges</p> <p>The Slip-on flanges has a low hub because the pipe slips into the flanges prior to welding. It is welded both inside and out to provide sufficient strength and prevent leakage. Slip-on flanges are all bored slightly larger than the O.D. of the machining pipe They are preferred over welding neck flanges by many users due to their lower initial cost, butfinal installation cust is probably not much less than that of the welding neck flange because of the additional welding involved.</p> <p>▶▶ 슬립온 플랜지</p> <p>슬립온 플랜지는 용접전 플랜지속으로 파이프를 밀어넣기 때문에 로우하브를 가지고 있다. 슬립온 플랜지는 충분한 강도와 누설방지를 제공하기 위해 안쪽과 바깥쪽 양쪽을 용접한다. 슬립온 플랜지 모든 내경은 상대 파이프의 외경보다 근소하게 크다. 슬립온 플랜지는 저렴한 초기 설치 비용으로 인해 웰딩넥 플랜지 보다 선호되고 있다.</p>
	<p>▶▶ Socket Welding Flanges</p> <p>The socket welding flange is similar to a slip-on flange except it has a bore and a counterbore dimension. The counterbore is slightly larger than the O.D. of the matching pipe, allow in the pipe to be inserted into the flange similar to a slip-on flange. The diameter of the smaller bore is the same as the I.D. of the matching pipe. A restriction is built into the bottom of the bore which sets as a shouder for the pipe to rest on. This eliminates any restriction in flow when using a socket welding flange.</p> <p>▶▶ 소켓 웰딩 플랜지</p> <p>소켓 웰딩 플랜지는 내경과 상대편 내경 치수를 제외하고는 슬립온 플랜지와 동일하다. 상대편 내경은 결합 파이프의 외경보다 근소하게 크다. 파이프를 플랜지에 삽이하도록 허용된 것은 슬립온 플랜지와 유사하다. 작은 내경쪽은 상대 파이프의 내경과 동일하다. 이것에 기초하여 파이프를 지지할수 있도록 내경 바닥면에 삽입하여 시공한다. 소켓 웰딩 플랜지를 사용할 경우 흐름상의 어떠한 제한도 제거할 수 있다.</p>

ANSI & JPI FLANGES

150Lbs 300Lbs (JP1-7S-15-84 & ANSI B16.5)



Class 150

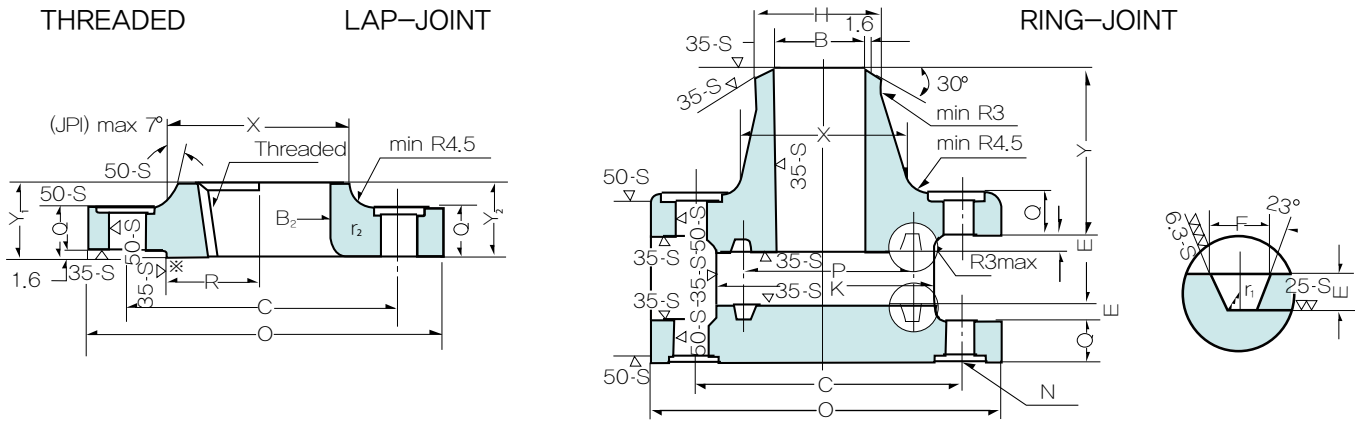
Unit : mm

Normal Pipe Size		Outside Dia. of Flanges	Dia of Bore									Dia. of Hub at Bevel H		Dia. of Hub at Base X	Dia. of Raised Face R	Thick of Flanges Q	Radius of Fillet r2	
A	B	O	Slip-on Socket, B1		Lap-Joint B2		Welding-Neck, Socket B						JPI	ANSI				
			JPI	ANSI	JPI	ANSI	JPI			ANSI								
							SCH40	SCH80	SCH160	SCH40	SCH80	SCH160						
15	1/2	89	22,2	22,2	23,4	23,0	16,1	14,3	12,3	15,8	13,9	11,8	21,7	21,4	30,2	34,9	11,5	3
20	3/4	98	27,7	27,8	28,9	28,2	21,4	19,4	16,2	20,9	18,8	15,5	27,2	26,6	38,1	42,9	13,0	3
25	1	108	34,5	34,5	35,6	34,9	27,2	25,0	21,2	26,6	24,3	20,7	34,0	33,5	49,2	50,8	14,5	3
(32)	(1 1/4)	117	43,2	43,3	44,3	43,7	35,5	32,9	29,9	35,1	32,5	29,5	42,7	42,1	58,7	63,5	16,0	5
40	1 1/2	127	49,1	49,5	50,4	50,0	41,2	38,4	34,4	40,9	38,1	34,0	48,6	48,3	65,1	73,0	17,5	6
50	2	152	61,1	61,9	62,7	62,5	52,7	49,5	43,1	52,5	49,3	42,8	60,5	60,3	77,6	92,1	19,5	8
65	2 1/2	178	77,1	74,6	78,7	75,4	65,9	62,3	57,3	62,7	59,0	54,0	76,3	73,0	90,5	104,8	22,5	8
80	3	191	90,0	90,7	91,6	91,4	78,1	73,9	66,9	77,9	73,7	66,6	89,1	88,9	107,9	127,0	24,0	10
(90)	(3 1/2)	216	102,6	103,4	104,1	104,1	90,2	85,4	76,2	90,1	85,4	-	101,6	101,6	122,2	139,7	24,0	10
100	4	229	115,4	116,1	116,9	116,8	102,3	97,1	87,3	102,3	97,2	87,3	114,3	114,3	134,9	157,2	24,0	11
(125)	(5)	254	141,2	143,7	143,0	144,5	126,6	120,8	108,0	128,2	122,3	109,6	189,8	141,3	163,5	185,7	24,0	11
150	6	279	166,6	170,7	168,4	171,4	151,0	143,2	128,8	154,1	146,3	131,7	165,2	168,3	192,1	215,9	25,5	13
200	8	343	218,0	221,5	219,5	222,2	199,9	190,9	170,3	202,7	193,7	173,1	216,3	219,1	246,1	269,9	29,0	13
250	10	406	269,5	276,2	271,7	277,4	248,8	237,2	210,2	254,5	242,9	215,9	267,4	273,0	304,8	323,8	30,5	13
300	12	483	321,0	327,0	322,8	328,2	297,9	283,7	251,9	303,2	288,9	257,2	318,5	323,8	365,1	381,0	32,0	13
350	14	535	358,1	359,2	-	360,2	333,4	317,6	284,2	333,3	317,5	284,2	355,6	355,6	400,0	412,8	35,0	13
400	16	595	409,0	410,4	-	411,2	381,0	363,6	325,4	381,0	363,5	325,4	406,4	406,4	457,2	469,9	37,0	13
450	18	635	460,0	461,8	-	462,4	428,6	409,6	366,8	428,7	409,5	366,7	457,2	457,2	504,8	533,4	40,0	13
500	20	700	511,0	513,1	-	514,3	477,8	455,6	408,0	477,8	455,6	408,0	508,0	508,0	558,8	584,2	43,0	13
600	24	815	613,0	615,9	-	615,9	574,6	547,8	490,6	574,6	547,7	490,5	609,6	609,6	663,6	692,2	48,0	13

Class 300

Unit : mm

Normal Pipe Size		Outside Dia. of Flanges	Dia of Bore									Dia. of Hub at Bevel H		Dia. of Hub at Base X	Dia. of Raised Face R	Thick of Flanges Q	Radius of Fillet r2	
A	B	O	Slip-on Socket, B1		Lap-Joint B2		Welding-Neck, Socket B						JPI	ANSI				
			JPI	ANSI	JPI	ANSI	JPI			ANSI								
							SCH40	SCH80	SCH160	SCH40	SCH80	SCH160						
15	1/2	95	22,2	22,2	23,4	22,9	16,1	14,3	12,3	15,8	13,9	11,8	21,7	21,4	38,1	34,9	14,5	3
20	3/4	117	27,7	27,8	28,9	28,2	21,4	19,4	16,2	20,9	18,8	15,5	27,2	26,6	47,6	42,9	16,0	3
25	1	124	34,5	34,5	35,6	34,9	27,2	25,0	21,2	26,6	24,3	20,7	34,0	33,5	53,8	50,8	17,5	3
(32)	(1 1/4)	133	43,2	43,3	44,3	43,7	35,5	32,9	29,9	35,1	32,5	29,5	42,7	42,1	63,5	63,5	19,5	5
40	1 1/2	156	49,1	49,6	50,4	50,0	41,2	38,4	34,4	40,9	38,1	34,0	48,6	48,3	69,9	73,0	21,5	6
50	2	165	61,1	61,9	62,7	62,5	52,7	49,5	43,1	52,5	49,3	42,8	60,5	60,3	84,1	92,1	22,5	8
65	2 1/2	191	77,1	74,6	78,7	75,4	65,9	62,3	57,3	62,7	59,0	54,0	76,3	73,0	100,0	104,8	25,5	8
80	3	210	90,0	90,7	91,6	91,4	78,1	73,9	66,9	77,9	73,7	66,6	89,1	88,9	117,5	127,0	29,0	10
(90)	(3 1/2)	229	102,6	103,4	104,1	104,1	90,2	85,4	76,2	90,1	85,4	-	101,6	101,6	133,3	139,7	30,5	10
100	4	254	115,4	116,1	116,9	116,8	102,3	97,1	87,3	102,3	97,2	87,3	114,3	114,3	146,0	157,2	32,0	11
(125)	(5)	279	141,2	143,7	143,0	144,5	126,6	120,8	108,0	128,2	122,3	109,6	139,8	141,3	177,8	185,7	35,0	11
150	6	318	166,6	170,7	168,4	171,4	151,0	143,2	128,8	154,1	146,3	131,7	165,2	168,3	206,4	215,9	37,0	13
200	8	381	218,0	221,5	219,5	222,2	199,9	190,9	170,3	202,7	193,7	173,1	216,3	219,1	260,3	269,9	41,5	13
250	10	445	269,5	276,2	271,7	277,4	248,8	237,2	210,2	254,5	242,9	215,9	267,4	273,0	320,7	323,8	48,0	13
300	12	520	321,0	327,0	322,8	328,2	297,9	283,7	251,9	303,2	288,9	257,2	318,5	323,8	374,6	381,0	51,0	13
350	14	585	358,1	359,2	-	360,2	333,4	317,6	284,2	333,3	317,5	284,2	355,6	355,6	425,5	412,8	54,0	13
400	16	650	409,0	410,4	-	411,2	381,0	363,6	325,4	381,0	363,5	325,4	406,4	406,4	482,6	469,9	57,5	13
450	18	710	460,0	461,8	-	462,4	428,6	409,6	366,8	428,7	409,5	366,7	457,2	457,2	533,4	533,4	60,5	13
500	20	775	511,0	513,1	-	514,3	477,8	455,6	408,0	477,8	455,6	408,0	508,0	508,0	587,4	584,2	63,5	13
600	24	915	613,0	615,9	-	615,9	574,6	547,8	490,6	574,6	547,7	490,5	609,6	609,0	701,7	692,2	70,0	13



Class 150

Unit : mm

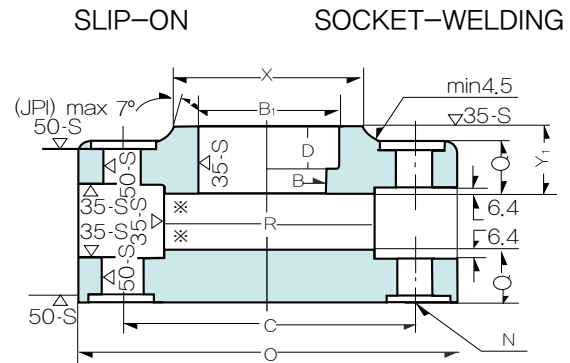
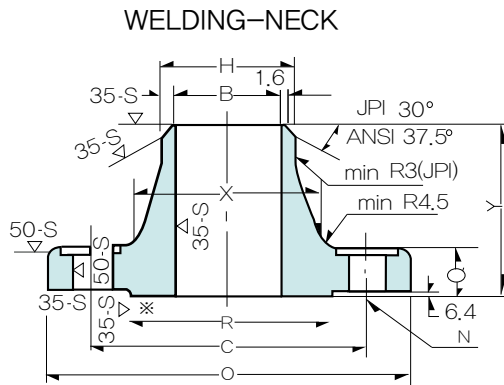
Length Thru Hub			Depth of Socket	Drilling			Dia of Raised Face for Ring Joint	Pitch Dia. or Ring & Groove	Ring No.	RTS Type			Nominal Pipe Size				Nominal Pipe Size	
Slip-on Socket Thread	Lap Joint	Welding Neck		Dia. of Bolt Circle	Number of Bolt	Dia. of Bolt Hole				Depth of Groove	With of Groove	Radius of Groove	W.N	S.O	S.W	B.L	A	B
Y ₁	Y ₂	Y																
16	16	47.6	10	60.3	4	16	—	—	—	—	—	—	0.50	0.41	0.42	0.43	15	1/2
16	16	52.4	11	69.9	4	16	—	—	—	—	—	—	0.75	0.57	0.58	0.62	20	3/4
17	17	55.6	13	79.4	4	16	63.5	47.62	R15	6.35	8.74	0.8	1.02	0.78	0.80	0.87	25	1
21	21	57.1	14	88.9	4	16	73.0	57.15	R17	6.35	8.74	0.8	1.33	1.03	1.06	1.16	(32)	(1 1/4)
22	22	61.9	16	98.4	4	16	82.5	69.07	R19	6.35	8.74	0.8	1.72	1.32	1.35	1.54	40	(1 1/2)
25	25	63.5	17	120.6	4	19	102	82.55	R22	6.35	8.74	0.8	2.59	2.09	2.13	2.46	50	2
29	29	69.8	19	139.7	4	19	121	101.60	R25	6.35	8.74	0.8	4.06	3.25	3.35	3.99	65	2 1/2
30	30	69.8	21	152.4	4	19	133	114.30	R29	6.35	8.74	0.8	4.95	3.91	4.02	4.98	80	3
32	32	71.4	—	177.8	8	19	154	131.78	R33	6.35	8.74	0.8	6.08	4.86	—	6.20	(90)	(3 1/2)
33	33	76.2	—	190.5	8	19	171	149.22	R36	6.35	8.74	0.8	6.91	5.35	—	7.05	100	4
36	36	88.9	—	215.9	8	22	194	171.45	R40	6.35	8.74	0.8	8.75	6.22	—	8.67	(125)	(5)
40	40	88.9	—	241.3	8	22	219	193.68	R43	6.35	8.74	0.8	10.8	7.76	—	11.3	150	6
44	44	101.6	—	298.4	8	22	273	247.65	R48	6.35	8.74	0.8	18.0	12.6	—	19.9	200	8
49	49	101.6	—	361.9	12	25	330	304.80	R52	6.35	8.74	0.8	24.9	17.6	—	29.0	250	10
56	56	114.3	—	431.8	12	25	406	381.00	R56	6.35	8.74	0.8	38.6	27.8	—	43.7	300	12
57	※ 79	127.0	—	476.2	12	29	425	396.88	R59	6.35	8.74	0.8	50.6	35.2	—	58.6	350	14
63	※ 87	127.0	—	539.7	16	29	483	454.02	R64	6.35	8.74	0.8	63.9	45.3	—	76.6	400	16
68	※ 97	139.7	—	577.8	16	32	546	517.52	R68	6.35	8.74	0.8	74.9	49.7	—	94.5	450	18
73	※ 103	144.5	—	635.0	20	32	597	558.80	R72	6.35	8.74	0.8	93.5	63.5	—	123	500	20
83	※ 111	152.4	—	749.3	20	35	711	673.10	R76	6.35	8.74	0.8	133	90.5	—	188	600	24

Class 300

Unit : mm

Length Thru Hub			Depth of Socket	Drilling			Dia of Raised Face for Ring Joint	Pitch Dia. or Ring & Groove	Ring No.	RTS Type			Approx. Weigh(kg)				Nominal Pipe Size	
Slip-on Socket Thread	Lap Joint	Welding Neck		Dia. of Bolt Circle	Number of Bolt	Dia. of Bolt Hole				Depth of Groove	With of Groove	Radius of Groove	W.N	S.O	S.W	B.L	A	B
Y ₁	Y ₂	Y																
22	22	52.4	10	66.7	4	16	51.0	34.14	R11	5.56	7.14	0.8	0.80	0.65	0.67	0.65	15	1/2
25	25	57.1	11	82.5	4	19	63.5	42.88	R13	6.35	8.74	0.8	1.25	1.10	1.12	1.09	20	3/4
27	27	61.9	13	88.9	4	19	70.0	50.80	R16	6.35	8.74	0.8	1.58	1.35	1.39	1.38	25	1
27	27	65.1	14	98.4	4	19	79.5	60.32	R18	6.35	8.74	0.8	2.05	1.69	1.74	1.82	(32)	(1 1/4)
30	30	68.3	16	114.3	4	22	90.5	68.28	R20	6.35	8.74	0.8	2.93	2.54	2.60	2.70	40	(1 1/2)
33	33	69.8	17	127.0	8	19	108	82.55	R23	7.92	11.91	0.8	3.40	2.92	3.02	3.18	50	2
38	38	76.2	19	149.2	8	22	127	101.60	R26	7.92	11.91	0.8	5.10	4.24	4.43	4.86	65	2 1/2
43	43	79.4	21	168.3	8	22	146	123.82	R31	7.92	11.91	0.8	7.01	5.94	6.21	6.90	80	3
44	44	81.0	—	184.1	8	22	159	131.78	R34	7.92	11.91	0.8	8.71	7.90	—	8.79	(90)	(3 1/2)
48	48	85.7	—	200.0	8	22	175	149.22	R37	7.92	11.91	0.8	11.3	9.71	—	11.6	100	4
51	51	98.4	—	234.9	8	22	210	180.98	R41	7.92	11.91	0.8	15.1	12.4	—	15.5	(125)	(5)
52	52	98.4	—	269.9	12	22	241	211.12	R45	7.92	11.91	0.8	19.6	16.2	—	21.2	150	6
62	62	111.1	—	330.2	12	26	302	269.88	R49	7.92	11.91	0.8	30.3	24.8	—	34.5	200	8
67	95	117.5	—	387.3	16	29	356	323.85	R53	7.92	11.91	0.8	44.3	35.9	—	53.9	250	10
73	102	130.2	—	450.8	16	32	413	381.00	R57	7.92	11.91	0.8	64.1	51.5	—	78.9	300	12
76	※ 111	142.9	—	514.3	20	32	457	419.10	R61	7.92	11.91	0.8	88.3	70.1	—	106	350	14
83	※ 121	146.0	—	571.5	20	35	508	469.90	R65	7.92	11.91	0.8	113	90.4	—	139	400	16
89	※ 130	158.7	—	628.6	24	35	575	533.40	R69	7.92	11.91	0.8	138	109	—	175	450	18
95	※ 140	161.9	—	685.8	24	35	635	584.20	R73	9.52	13.49	1.5	169	136	—	222	500	20
106	※ 152	168.3	—	812.8	24	42	749	692.15	R77	11.13	16.66	1.5	248	204	—	340	600	24

400Lbs 600Lbs (JP1-7S-15-84 & ANSI B16.5)



BLIND

Class 400

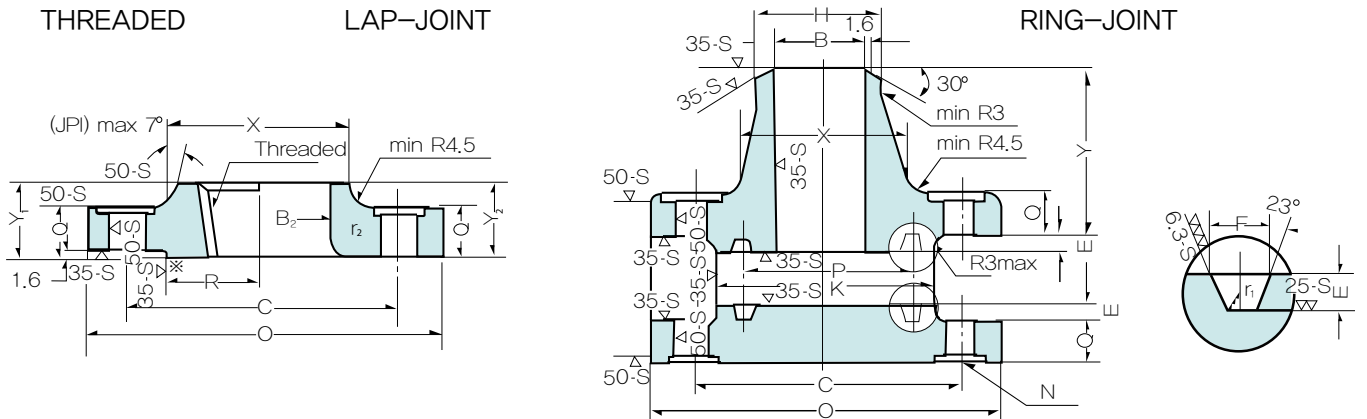
Unit : mm

Normal Pipe Size		Outside Dia. of Flanges O	Dia of Bore										Dia. of Hub at Bevel H		Dia. of Hub at Base X	Dia. of Raised Face R	Thick of Flanges Q	Radius of Fillet r2
A	B		Slip-on Socket, B1		Lap-Joint B2		Welding-Neck, Socket B						JPI	ANSI				
			JPI	ANSI	JPI	ANSI	JPI			ANSI								
			JPI	ANSI	JPI	ANSI	SCH40	SCH80	SCH160	SCH40	SCH80	SCH160	JPI	ANSI				
15	1/2	95	22,2	22,2	-	22,9	16,1	14,3	12,3	15,8	13,9	11,8	21,7	21,4	38,1	34,9	14,5	3
20	3/4	117	27,8	27,8	-	28,2	21,4	19,4	16,2	20,9	18,8	15,5	27,2	26,6	47,6	42,9	16,0	3
25	1	124	34,5	34,5	-	34,9	27,2	25,0	21,2	26,6	24,3	20,7	34,0	33,5	54,0	50,8	17,5	3
(32)	(1 1/4)	133	43,2	43,3	-	43,7	35,5	32,9	29,9	35,1	32,5	29,5	42,7	42,1	63,5	63,5	21,0	5
40	1 1/2	156	49,1	49,5	-	50,0	41,2	38,4	34,4	40,9	38,1	34,0	48,6	48,3	69,8	73,0	22,5	6
50	2	165	61,1	61,9	-	62,5	52,7	49,5	43,1	52,5	49,3	42,8	60,5	60,3	84,1	92,1	25,5	8
65	2 1/2	191	77,1	74,6	-	75,4	65,9	62,3	57,3	62,7	59,0	54,0	76,3	73,0	100,0	104,8	29,0	8
80	3	210	90,0	90,7	-	91,4	78,1	73,9	66,9	77,9	73,7	66,6	89,1	88,9	117,5	127,0	32,0	10
(90)	(3 1/2)	229	102,6	103,4	-	104,1	90,2	85,4	76,2	90,1	85,4	-	101,6	101,6	133,3	139,7	35,0	10
100	4	254	115,4	116,1	-	116,8	102,3	97,1	87,3	102,3	97,2	87,3	114,3	114,3	146,0	157,2	35,0	11
(125)	(5)	279	141,2	143,7	-	144,5	126,6	120,8	108,0	128,2	122,3	109,6	139,8	141,3	177,8	185,7	38,5	11
150	6	318	166,6	170,7	-	171,4	151,0	143,2	128,8	154,1	146,3	131,7	165,2	168,3	206,4	215,9	41,5	13
200	8	381	218,0	221,5	-	222,2	199,9	190,9	170,3	202,7	193,7	173,1	216,3	219,1	260,3	269,9	48,0	13
250	10	445	269,5	276,2	-	277,4	248,8	237,2	210,2	254,5	242,9	215,9	267,4	273,0	320,7	323,8	54,0	13
300	12	520	321,0	327,0	-	328,2	297,9	283,7	251,9	303,2	288,9	257,2	318,5	323,8	374,7	381,0	57,5	13
350	14	585	358,1	359,2	-	360,2	333,4	317,6	284,2	333,3	317,5	284,2	355,6	355,6	425,5	412,8	60,5	13
400	16	650	409,0	410,4	-	411,2	381,0	363,3	325,4	381,0	363,5	325,4	406,4	406,4	482,6	469,9	63,5	13
450	18	710	460,0	461,8	-	462,4	428,6	409,6	366,8	428,7	409,5	366,7	457,2	457,2	533,4	533,4	67,0	13
500	20	775	511,0	513,1	-	514,3	477,8	455,6	408,0	477,8	455,6	408,0	508,0	508,0	587,4	584,2	70,0	13
600	24	915	613,0	615,9	-	615,9	574,6	547,8	490,6	574,6	547,7	490,5	609,6	609,6	701,7	692,2	76,5	13

Class 600

Unit : mm

Normal Pipe Size		Outside Dia. of Flanges O	Dia of Bore										Dia. of Hub at Bevel H		Dia. of Hub at Base X	Dia. of Raised Face R	Thick of Flanges Q	Radius of Fillet r2
A	B		Slip-on Socket, B1		Lap-Joint B2		Welding-Neck, Socket B						JPI	ANSI				
			JPI	ANSI	JPI	ANSI	JPI			ANSI								
			JPI	ANSI	JPI	ANSI	SCH40	SCH80	SCH160	SCH40	SCH80	SCH160	JPI	ANSI				
15	1/2	95	22,2	22,2	-	22,9	16,1	14,3	12,3	15,8	13,9	11,8	21,7	21,4	38,1	34,9	14,5	3
20	3/4	117	27,7	27,8	-	28,2	21,4	19,4	16,2	20,9	18,8	15,5	27,2	26,6	47,6	42,9	16,0	3
25	1	124	34,5	34,5	-	34,9	27,2	25,0	21,2	26,6	24,3	20,7	34,0	33,5	54,0	50,8	17,5	3
(32)	(1 1/4)	133	43,2	43,3	-	43,7	35,5	32,9	29,9	35,1	32,5	29,5	42,7	42,1	63,5	63,5	21,0	5
40	1 1/2	156	49,1	49,5	-	50,0	41,2	38,4	34,4	40,9	38,1	34,0	48,6	48,3	69,8	73,0	22,5	6
50	2	165	61,1	61,9	-	62,5	52,7	49,5	43,1	52,5	49,3	42,8	60,5	60,3	84,1	92,1	25,5	8
65	2 1/4	191	77,1	74,6	-	75,4	65,9	62,3	57,3	62,7	59,0	54,0	76,3	73,0	100,0	104,8	29,0	8
80	3	210	90,0	90,7	-	91,4	78,1	73,9	66,9	77,9	73,7	66,6	89,1	88,9	117,5	127,0	32,0	10
(90)	(3 1/2)	229	102,6	103,4	-	104,1	90,2	85,4	76,2	90,1	85,4	-	101,6	101,6	133,3	139,7	35,0	10
100	4	273	115,4	116,1	-	116,8	102,3	97,1	87,3	102,3	97,2	87,3	114,3	114,3	152,4	157,2	38,5	11
(125)	(5)	330	141,2	143,7	-	144,5	126,6	120,8	108,0	128,2	122,3	109,6	139,8	141,3	188,9	185,7	44,5	11
150	6	356	166,6	170,7	-	171,4	151,0	143,2	128,8	154,1	146,3	131,7	165,2	168,3	222,2	215,9	48,0	13
200	8	419	218,0	221,5	-	222,2	199,9	190,9	170,3	202,7	193,7	173,1	216,3	219,1	273,0	269,9	55,5	13
250	10	510	269,5	276,2	-	277,4	248,8	237,2	210,2	254,5	242,9	215,9	267,4	273,0	342,9	323,8	63,5	13
300	12	560	321,0	327,0	-	328,2	297,9	283,7	251,9	303,2	288,9	257,2	318,5	323,8	400,0	381,0	67,0	13
350	14	605	358,1	359,2	-	360,2	333,4	317,6	284,2	333,3	317,5	284,2	355,6	355,6	431,8	412,8	70,0	13
400	16	685	409,0	410,4	-	411,2	381,0	363,6	325,4	381,0	363,5	325,4	406,4	406,4	495,2	469,9	76,5	13
450	18	745	460,0	461,8	-	462,4	428,6	409,6	366,8	428,7	409,5	366,7	457,2	457,2	546,1	533,4	83,0	13
500	20	815	511,0	513,1	-	514,3	477,8	455,6	408,0	477,8	455,6	408,0	508,0	508,0	609,6	584,2	89,0	13
600	24	940	613,0	615,9	-	615,9	574,6	547,8	490,6	574,6	547,7	490,5	609,6	609,6	717,5	692,2	102,0	13



Class 400

Unit : mm

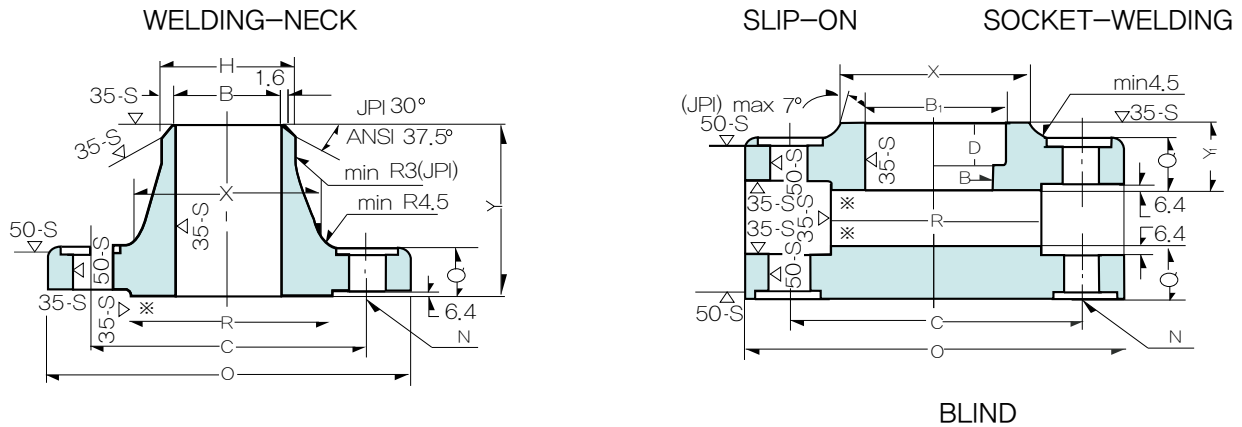
Length Thru Hub			Depth of Socket	Drilling			Dia of Raised Face for Ring Joint	Pitch Dia. or Ring & Groove	Ring No.	RTS Type			Approx. Weigh(kg)				Nominal Pipe Size	
Slip-on Socket Thread	Lap Joint	Welding Neck		Dia. of Bolt Circle	Number of Bolt	Dia. of Bolt Hole				Depth of Groove	With of Groove	Radius of Groove	W.N	S.O	S.W	B.L	A	B
Y ₁	※ Y ₂	Y	D	C	N		K(min)	P		E	F	r ₁						
22	22	52.4	10	66.7	4	16	51.0	34.11	R11	5.56	7.14	0.8	0.86	0.74	0.77	0.76	15	1/2
25	25	57.1	11	82.5	4	19	63.5	42.88	R13	6.35	8.74	0.8	1.40	1.24	1.28	1.27	20	3/4
27	27	61.9	13	88.9	4	19	70.0	50.80	R16	6.35	8.74	0.8	1.76	1.51	1.57	1.59	25	1
29	29	66.7	14	98.4	4	19	79.5	60.32	R18	6.35	8.74	0.8	2.41	2.03	2.11	2.24	(32)	(1 1/4)
32	32	69.8	16	114.3	4	22	90.5	68.28	R20	6.35	8.74	0.8	3.44	3.01	3.11	3.30	40	(1 1/2)
37	37	73.0	17	127.0	8	19	108	82.55	R23	7.92	11.91	0.8	4.18	3.62	3.77	4.11	50	2
41	41	79.4	19	149.2	8	22	127	101.60	R26	7.92	11.91	0.8	6.11	5.20	5.48	6.20	65	2 1/2
46	46	82.5	21	168.3	8	22	146	123.82	R31	7.92	11.91	0.8	8.27	7.08	7.47	8.51	80	3
49	49	85.7	—	184.1	8	25	159	131.78	R34	7.92	11.91	0.8	10.3	8.86	—	10.9	(90)	(3 1/2)
51	51	88.9	—	200.0	8	25	175	149.22	R37	7.92	11.91	0.8	12.9	11.1	—	13.7	100	4
54	54	101.6	—	234.9	8	25	210	180.98	R41	7.92	11.91	0.8	17.1	14.2	—	18.6	(125)	(5)
57	57	103.2	—	269.9	12	25	241	211.12	R45	7.92	11.91	0.8	22.6	18.9	—	25.7	150	6
68	68	117.5	—	330.2	12	29	302	269.88	R49	7.92	11.91	0.8	35.5	29.4	—	42.9	200	8
73	102	123.8	—	387.3	16	32	356	323.85	R53	7.92	11.91	0.8	50.4	41.1	—	64.6	250	10
79	108	136.5	—	450.8	16	35	413	381.00	R57	7.92	11.91	0.8	73.8	59.2	—	95.7	300	12
84	117	149.2	—	514.3	20	35	457	419.10	R61	7.92	11.91	0.8	99.0	80.0	—	125	350	14
94	127	152.4	—	571.5	20	39	508	469.90	R65	7.92	11.91	0.8	125	103	—	162	400	16
98	137	165.1	—	628.6	24	39	575	533.40	R69	7.92	11.91	0.8	153	123	—	205	450	18
102	146	168.3	—	685.8	24	42	635	584.20	R73	9.52	13.49	1.5	184	148	—	255	500	20
114	159	174.6	—	812.8	24	48	749	692.15	R77	11.13	16.66	1.5	270	223	—	388	600	24

Class 600

Unit : mm

Length Thru Hub			Depth of Socket	Drilling			Dia of Raised Face for Ring Joint	Pitch Dia. or Ring & Groove	Ring No.	RTS Type			Approx. Weigh(kg)				Nominal Pipe Size	
Slip-on Socket Thread	Lap Joint	Welding Neck		Dia. of Bolt Circle	Number of Bolt	Dia. of Bolt Hole				Depth of Groove	With of Groove	Radius of Groove	W.N	S.O	S.W	B.L	A	B
Y ₁	※ Y ₂	Y	D	C	N		K(min)	P		E	F	r ₁						
22	22	52.4	10	66.7	4	16	51.0	34.14	R11	5.56	7.14	0.8	0.88	0.74	0.78	0.76	15	1/2
25	25	57.1	11	82.5	4	19	63.5	42.88	R13	6.35	8.74	0.8	1.44	1.24	1.29	1.27	20	3/4
27	27	61.9	13	88.9	4	19	70.0	50.80	R16	6.35	8.74	0.8	1.81	1.51	1.58	1.59	25	1
29	29	66.7	14	98.4	4	19	79.5	60.32	R18	6.35	8.74	0.8	2.49	2.03	2.14	2.24	(32)	(1 1/4)
32	32	69.8	16	114.3	4	22	90.5	68.28	R20	6.35	8.74	0.8	3.55	3.01	3.14	3.30	40	(1 1/2)
37	37	73.0	17	127.0	8	19	108	82.55	R23	7.92	11.91	0.8	4.34	3.62	3.82	4.11	50	2
41	41	79.4	19	149.2	8	22	127	101.60	R26	7.92	11.91	0.8	6.41	5.20	5.57	6.20	65	2 1/2
46	46	82.5	21	168.3	8	22	146	123.82	R31	7.92	11.91	0.8	8.62	7.08	7.59	8.51	80	3
49	49	85.7	—	184.1	8	26	159	131.78	R34	7.92	11.91	0.8	10.8	8.86	—	10.9	(90)	(3 1/2)
54	54	101.6	—	215.9	8	26	175	149.22	R37	7.92	11.91	0.8	17.6	14.6	—	17.4	100	4
60	60	114.3	—	266.7	8	29	210	180.98	R41	7.92	11.91	0.8	29.4	24.6	—	29.4	(125)	(5)
67	67	117.3	—	292.1	12	29	241	211.12	R45	7.92	11.91	0.8	35.7	29.6	—	36.4	150	6
76	76	133.3	—	349.2	12	32	302	269.88	R49	7.92	11.91	0.8	54.6	44.0	—	58.8	200	8
86	111	152.4	—	431.8	16	35	356	323.85	R53	7.92	11.91	0.8	90.7	73.3	—	98.4	250	10
92	117	155.6	—	488.9	20	35	413	381.00	R57	7.92	11.91	0.8	110	87.0	—	124	300	12
94	127	165.1	—	527.0	20	39	457	419.10	R61	7.92	11.91	0.8	130	99.8	—	152	350	14
106	140	177.5	—	603.2	20	42	508	469.90	R65	7.92	11.91	0.8	183	142	—	214	400	16
117	152	184.1	—	654.0	20	45	575	533.40	R69	7.92	11.91	0.8	226	176	—	275	450	18
127	165	190.5	—	723.9	24	45	635	584.20	R73	9.52	13.49	1.5	284	224	—	352	500	20
140	184	203.2	—	838.2	24	51	749	692.15	R77	11.13	16.66	1.5	408	317	—	536	600	24

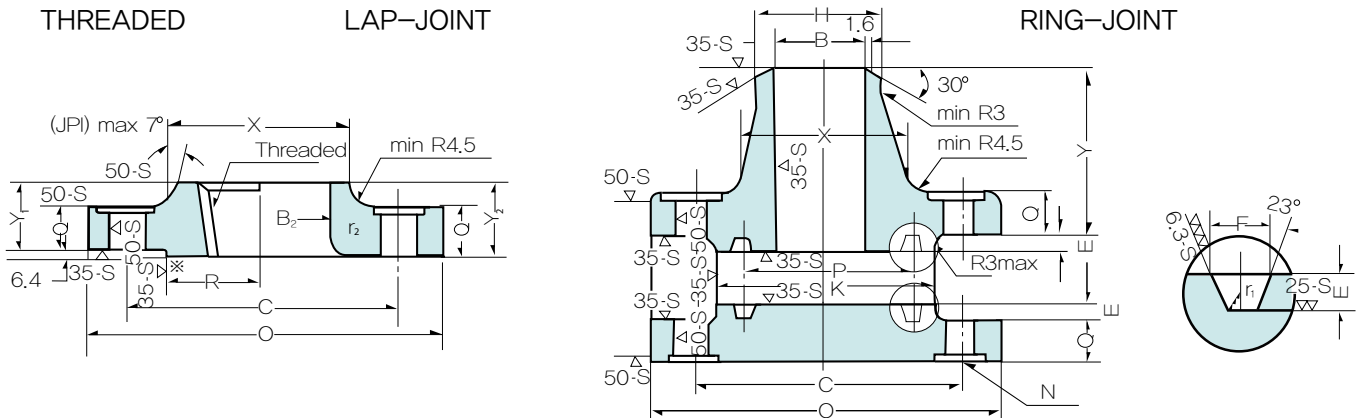
900Lbs, (JP1-7S-15-84 & ANSI B16.5)



Class 900

Unit : mm

Normal Pipe Size		Outside Dia. of Flanges	Dia of Bore										Dia. of Hub at Bevel H	Dia. of Hub at Base X	Dia. of Raised Face R	Thick of Flanges Q	Radius of Fillet r ₂	
			Slip-on Socket B ₁		Lap-Joint B ₂		Welding-Neck, Socket B											
							JPI			ANSI								
A	B	O	JPI	ANSI	JPI	ANSI	SCH40	SCH80	SCH160	SCH40	SCH80	SCH160	JPI	ANSI	X	R	Q	r ₂
15	1/2	121	22,2	22,2	-	22,9	16,1	14,3	12,3	15,8	13,9	11,8	21,7	21,4	38,1	34,9	22,5	3
20	3/4	130	27,7	27,8	-	28,2	21,4	19,4	16,2	20,9	18,8	15,5	27,2	26,6	44,4	42,9	25,5	3
25	1	149	34,5	34,5	-	34,9	27,2	25,0	21,2	26,6	24,3	20,7	34,0	33,5	52,4	50,8	29,0	3
(32)	(1 1/4)	159	43,2	43,3	-	43,7	35,5	32,9	29,9	35,1	32,5	29,5	42,7	42,1	63,5	63,5	29,0	5
40	1 1/2	178	49,1	49,6	-	50,0	41,2	38,4	34,4	40,9	38,1	34,0	48,6	48,3	69,8	73,0	32,0	6
50	2	216	61,1	61,9	-	62,5	52,7	49,5	43,1	52,5	49,3	42,8	60,5	60,3	104,8	92,1	38,5	8
65	2 1/2	244	77,1	74,6	-	75,4	65,9	62,3	57,3	62,7	59,0	54,0	76,3	73,0	123,8	104,8	41,5	8
80	3	241	90,0	90,7	-	91,4	78,1	73,9	66,9	77,9	73,7	66,6	89,1	88,9	127,0	127,0	38,5	10
(90)	(3 1/2)	-	-	-	-	-	90,2	85,4	76,2	90,1	85,4	-	-	-	-	-	-	-
100	4	292	115,4	116,1	-	116,8	102,3	97,1	87,3	102,3	97,2	87,3	114,3	114,3	158,7	157,2	44,5	11
(125)	(5)	349	141,2	143,7	-	144,5	126,6	120,8	108,0	128,2	122,3	109,6	139,8	141,3	190,5	185,7	51,0	11
150	6	381	166,6	170,7	-	171,4	151,0	143,2	128,8	154,1	146,3	131,7	165,2	168,3	234,9	215,9	56,0	13
200	8	470	218,0	221,5	-	222,2	199,9	190,9	170,3	202,7	193,7	173,1	216,3	219,1	298,4	269,9	63,5	13
250	10	545	269,5	276,2	-	277,4	248,8	237,2	210,2	254,5	242,9	215,9	267,4	273,0	368,3	323,8	70,0	13
300	12	610	321,0	327,0	-	328,2	297,9	283,7	251,9	303,2	288,9	257,2	318,5	323,8	419,1	381,0	79,5	13
350	14	640	358,1	359,2	-	360,2	333,4	317,6	284,2	333,3	317,5	284,2	355,6	355,6	450,8	412,8	86,0	13
400	16	705	409,0	410,4	-	411,2	381,0	363,6	325,4	381,0	363,5	325,4	406,4	406,4	508,0	469,9	89,0	13
450	18	785	460,0	461,8	-	462,4	428,6	409,6	366,8	428,7	409,5	366,7	457,2	457,2	565,1	533,4	102,0	13
500	20	855	511,0	513,1	-	514,3	477,8	455,6	408,0	477,8	455,6	408,0	508,0	508,0	622,3	584,2	108,0	13
600	24	1040	613,0	615,9	-	615,9	574,8	547,8	490,6	574,6	547,7	490,5	609,6	609,6	749,3	692,2	410,0	13

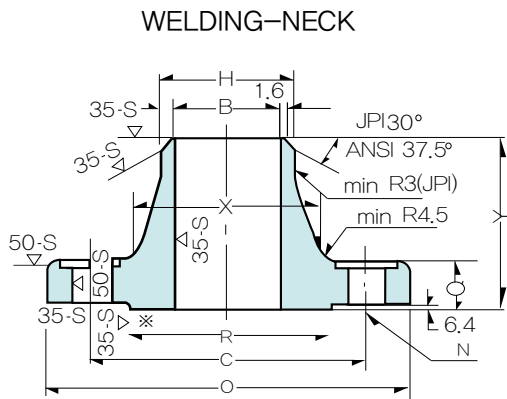


Class 900

Unit : mm

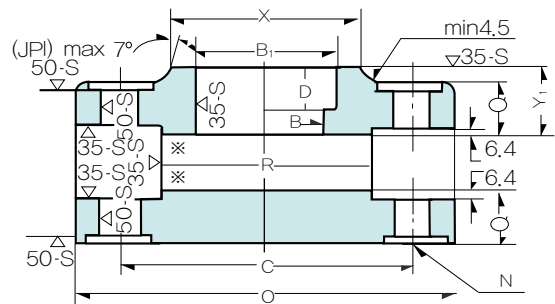
Length Thru Hub			Depth of Socket	Drilling			Dia of Raised Face for Ring Joint	Pitch Dia. or Ring & Groove	Ring No.	RTS Type			Approx. Weigh(kg)				Nominal Pipe Size	
Slip-on Socket Thread	Lap Joint	Welding Neck		Dia. of Bolt Circle	Number of Bolt	Dia. of Bolt Hole				Depth of Groove	With of Groove	Radius of Groove	WtN	StO	StW	BtL	A	B
Y ₁	* Y ₂	Y	D	C	N		K(min)	P		E	F	r ₁						
32	32	60.3	10	82.5	4	23	60.5	39.67	R12	6.35	8.74	0.8	1.98	1.76	1.81	1.88	15	1/2
35	35	69.8	11	88.9	4	23	66.5	44.45	R14	6.35	8.74	0.8	2.64	2.32	2.39	2.50	20	3/4
41	41	73.0	13	101.6	4	26	71.5	50.80	R16	6.35	8.74	0.8	3.84	3.44	3.56	3.68	25	1
41	41	73.0	14	111.1	4	26	81.0	60.32	R18	6.35	8.74	0.8	4.47	3.95	4.11	4.29	(32)	(1 1/4)
44	44	82.5	16	123.8	4	29	92.0	68.28	R20	6.35	8.74	0.8	6.13	5.41	5.61	5.92	40	(1 1/2)
57	57	101.6	17	165.1	8	26	124	95.25	R24	7.92	11.91	0.8	11.3	9.92	10.3	10.5	50	2
64	64	104.8	19	190.5	8	29	137	107.95	R27	7.92	11.91	0.8	15.3	13.5	14.2	14.4	65	2 1/2
54	54	101.6	-	190.5	8	26	156	123.82	R31	7.92	11.91	0.8	14.2	11.6	-	13.7	80	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(90)	(3 1/2)
70	70	114.3	-	234.9	8	32	181	149.22	R37	7.92	11.91	0.8	23.1	19.8	-	22.7	100	4
79	79	127.0	-	279.4	8	35	216	180.98	R41	7.92	11.91	0.8	37.4	32.4	-	37.5	(125)	(5)
86	86	139.7	-	317.5	12	32	241	211.12	R45	7.92	11.91	0.8	49.3	42.1	-	48.7	150	6
102	112	161.9	-	393.7	12	39	308	269.88	R49	7.92	11.91	0.8	83.7	71.6	-	84.0	200	8
108	127	184.1	-	469.9	16	39	362	323.85	R53	7.92	11.91	0.8	124	102	-	124	250	10
117	143	200.0	-	533.4	20	39	419	381.00	R57	7.92	11.91	0.8	168	136	-	176	300	12
130	156	212.7	-	558.8	20	42	467	419.10	R62	11.13	16.66	1.5	194	153	-	213	350	14
133	165	215.9	-	615.9	20	45	524	469.90	R66	11.13	16.66	1.5	239	186	-	269	400	16
152	191	228.8	-	685.8	20	51	594	533.40	R70	12.70	19.84	1.5	326	258	-	382	450	18
159	210	247.6	-	749.3	20	54	648	584.20	R74	12.70	19.84	1.5	410	317	-	481	500	20
203	287	292.1	-	901.7	20	67	772	692.15	R78	15.88	26.97	2.4	758	608	-	914	600	24

1500Lbs, 2500Lbs (JP1-7S-15-84 & ANSI B16.5)



SLIP-ON

SOCKET-WELDING



BLIND

Class 1500

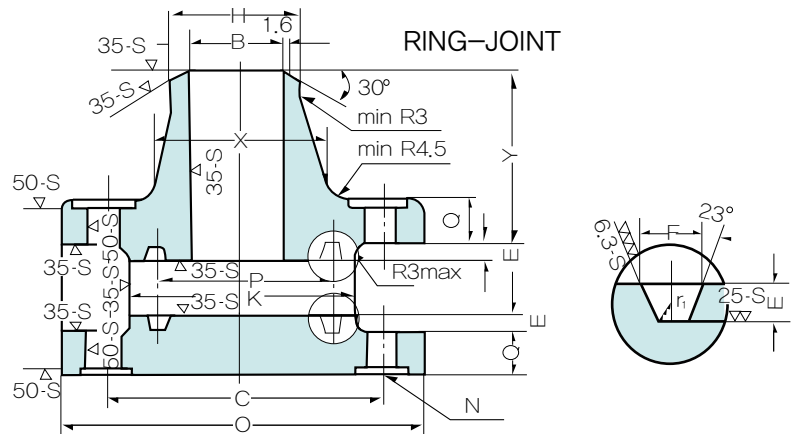
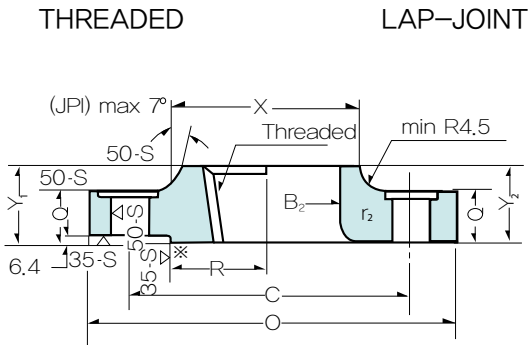
Unit : mm

Normal Pipe Size		Outside Dia. of Flanges	Dia of Bore										Dia. of Hub at Bevel H		Dia. of Hub at Base	Dia. of Raised Face	Thick of Flanges	Radius of Fillet
			Slip-on Socket B1		Lap-Joint B2		Welding-Neck, Socket B											
							JPI			ANSI								
A	B	O	JPI	ANSI	JPI	ANSI	SCH40	SCH80	SCH160	SCH40	SCH80	SCH160	JPI	ANSI	X	R	Q	r ₂
15	1/2	121	22.2	22.2	-	22.9	16.1	14.3	12.3	15.8	13.9	11.8	21.7	21.4	38.1	34.9	22.5	3
20	3/4	130	27.7	27.8	-	28.2	21.4	19.4	16.2	20.9	18.8	15.5	27.2	26.6	44.4	42.9	25.5	3
25	1	149	34.5	34.5	-	34.9	27.2	25.0	21.2	26.6	24.3	20.7	34.0	33.5	52.4	50.8	29.0	3
(32)	(1 1/4)	159	43.2	43.3	-	43.7	35.5	32.9	29.9	35.1	32.5	29.5	42.7	42.1	63.5	63.5	29.0	5
40	1 1/2	178	49.1	49.6	-	50.0	41.2	38.4	34.4	40.9	38.1	34.0	48.6	48.3	69.8	73.0	32.0	6
50	2	216	61.1	61.9	-	62.5	52.7	49.5	43.1	52.5	49.3	42.8	60.5	60.3	104.8	92.1	38.5	8
65	2 1/2	244	77.1	74.6	-	75.4	65.9	62.3	57.3	62.7	59.0	54.0	76.3	73.0	123.8	104.8	41.5	8
80	3	267	90.0	90.7	-	91.4	78.1	73.9	66.9	77.9	73.7	66.6	89.1	88.9	133.3	127.0	48.0	10
(90)	(3 1/2)	-	102.6	103.4	-	-	90.2	85.4	76.2	90.1	85.4	-	-	-	-	-	-	-
100	4	311	115.4	116.1	-	116.8	102.3	97.1	87.3	102.3	97.2	87.3	114.3	114.3	161.9	157.2	54.0	11
(125)	(5)	375	141.2	143.7	-	144.5	126.6	120.8	108.0	128.2	122.3	109.6	139.8	141.3	196.8	185.7	73.5	11
150	6	394	166.6	170.7	-	171.4	151.0	143.2	128.8	154.1	146.3	131.7	165.2	168.3	228.6	215.9	83.0	13
200	8	483	218.0	221.5	-	222.2	199.9	190.9	170.3	202.7	193.7	173.1	216.3	219.1	292.1	269.9	92.0	13
250	10	585	269.5	276.2	-	277.4	248.8	237.2	210.2	254.5	242.9	215.9	267.4	273.0	368.3	323.8	108.0	13
300	12	675	321.0	327.0	-	328.2	297.9	283.7	251.9	303.2	288.9	257.2	318.5	323.8	450.8	381.0	124.0	13
350	14	750	358.1	359.2	-	360.2	333.4	317.6	284.2	333.3	317.5	284.2	355.6	355.6	495.3	412.8	133.5	13
400	16	825	409.0	410.4	-	411.2	381.0	363.6	325.4	381.0	363.5	325.4	406.4	406.4	552.4	469.9	146.5	13
450	18	915	460.0	461.8	-	462.4	428.6	409.6	366.8	428.7	409.5	366.7	457.2	457.2	596.9	533.4	162.0	13
500	20	985	511.0	513.1	-	514.3	477.8	455.6	408.0	477.8	455.6	408.0	508.0	508.0	641.3	584.2	178.0	13
600	24	1170	613.0	615.9	-	615.9	574.6	547.8	490.6	574.6	547.7	490.5	609.6	609.6	762.0	692.2	203.5	13

Class 2500

Unit : mm

Normal Pipe Size		Outside Dia. of Flanges	Dia of Bore										Dia. of Hub at Bevel H		Dia. of Hub at Base	Dia. of Raised Face	Thick of Flanges	Radius of Fillet
			Slip-on Socket B1		Lap-Joint		Welding-Neck, Socket B											
							JPI			ANSI								
A	B	O	JPI	ANSI	JPI	ANSI	SCH40	SCH80	SCH160	SCH40	SCH80	SCH160	JPI	ANSI	X	R	Q	r ₂
15	1/2	133	22.2	22.2	-	-	16.1	14.3	12.3	15.8	13.9	11.8	21.7	21.4	42.9	34.9	30.5	-
20	3/4	140	27.7	27.8	-	-	21.4	19.4	16.2	20.9	18.8	15.5	27.2	26.6	50.8	42.9	32.0	-
25	1	159	34.5	34.5	-	-	27.2	25.0	21.2	26.6	24.3	20.7	34.0	33.5	57.1	50.8	35.0	-
(32)	(1 1/4)	184	43.2	43.3	-	-	35.5	32.9	29.9	35.1	32.5	29.5	42.7	42.1	73.0	63.5	38.5	-
40	1 1/2	203	49.1	49.6	-	-	41.2	38.4	34.4	40.9	38.1	34.0	48.6	48.3	79.4	73.0	44.5	-
50	2	235	61.1	61.9	-	-	52.7	49.5	43.1	52.5	49.3	42.8	60.5	60.3	95.2	92.1	51.0	-
65	2 1/2	267	77.1	74.6	-	-	65.9	62.3	57.3	62.7	59.0	54.0	76.3	73.0	114.3	104.8	57.5	-
80	3	305	90.0	90.7	-	-	78.1	73.9	66.9	77.9	73.7	66.6	89.1	88.9	133.3	127.0	67.0	-
(90)	(3 1/2)	-	-	-	-	-	90.2	85.4	76.2	90.1	85.4	-	-	-	-	-	-	-
100	4	356	115.4	116.1	-	-	102.3	97.1	87.3	102.3	97.2	87.3	114.3	114.3	165.1	157.2	76.5	-
(125)	(5)	419	141.2	143.7	-	-	126.6	120.8	108.0	128.2	122.3	109.6	139.8	141.3	203.2	185.7	92.5	-
150	6	483	166.6	170.7	-	-	151.0	143.2	128.8	154.1	146.3	131.7	165.2	168.3	234.9	215.9	108.0	-
200	8	550	218.0	221.5	-	-	199.9	190.9	170.3	202.7	193.7	173.1	216.3	219.1	304.8	269.9	127.0	-
250	10	675	269.5	276.2	-	-	248.8	237.2	210.2	254.5	242.9	215.9	267.4	273.0	374.8	323.8	165.5	-
300	12	760	321.0	327.0	-	-	297.9	283.7	251.9	303.2	288.9	257.2	318.5	323.8	441.3	381.0	184.5	-



Class 1500

Unit : mm

Length Thru Hub			Depth of Socket	Drilling			Dia of Raised Face for Ring Joint	Pitch Dia. or Ring & Groove	Ring No.	RTS Type			Approx. Weigh(kg)				Nominal Pipe Size	
Slip-on Socket Thread	Lap Joint	Welding Neck		Dia. of Bolt Circle	Number of Bolt	Dia. of Bolt Hole				Depth of Groove	With of Groove	Radius of Groove	W1N	S1O	S1W	B1L	A	B
Y1	※ Y2	Y		C	N	K(min)				E	F	r1						
32	32	60.3	10	82.5	4	23	60.5	39.67	R12	6.35	8.74	0.8	1.98	1.76	1.81	1.88	15	1/2
35	35	69.8	11	88.9	4	23	66.5	44.45	R14	6.35	8.74	0.8	2.64	2.32	2.39	2.50	20	3/4
41	41	73.0	13	101.6	4	26	71.5	50.80	R16	6.35	8.74	0.8	3.84	3.44	3.56	3.68	25	1
41	41	73.0	14	111.1	4	26	81.0	60.32	R18	6.35	8.74	0.8	4.47	3.95	4.11	4.29	(32)	(1 1/4)
44	44	82.5	16	123.8	4	29	92.0	68.28	R20	6.35	8.74	0.8	6.13	5.41	5.61	5.92	40	1 1/2
57	57	101.6	17	165.1	8	26	124	95.25	R24	7.92	11.91	0.8	11.3	9.92	10.3	10.5	50	2
64	64	104.8	19	190.5	8	29	137	107.95	R27	7.92	11.91	0.8	15.3	13.5	14.2	14.4	62	2 1/2
73	73	117.5	—	203.2	8	32	168	136.52	R35	7.92	11.91	0.8	20.7	18.1	—	20.2	80	3
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(90)	(3 1/2)
90	90	123.8	—	241.3	8	35	194	161.92	R39	7.92	11.91	0.8	30.8	27.8	—	30.8	100	4
105	105	155.6	—	292.1	8	42	229	193.68	R44	7.92	11.91	0.8	58.6	52.6	—	60.0	(125)	(5)
119	119	171.4	—	317.5	12	39	248	211.12	R46	9.52	13.49	1.5	70.7	62.1	—	73.7	150	6
143	143	212.7	—	393.7	12	45	318	269.88	R50	11.13	16.66	1.5	121	105	—	125	200	8
159	178	254.0	—	482.6	12	51	371	323.85	R54	11.13	16.66	1.5	211	180	—	216	250	10
181	219	282.6	—	571.5	16	54	438	381.00	R58	14.27	23.01	1.5	318	271	—	330	300	12
—	241	298.4	—	635.0	16	61	489	419.10	R63	15.88	26.97	2.4	415	—	—	437	350	14
—	260	311.1	—	704.8	16	67	546	469.90	R67	17.48	30.18	2.4	535	—	—	582	400	16
—	276	327.0	—	774.7	16	74	613	533.40	R71	17.48	30.18	2.4	702	—	—	769	450	18
—	292	355.6	—	831.8	16	80	673	584.20	R75	17.48	33.32	2.4	871	—	—	100.1	500	20
—	330	406.4	—	990.6	16	93	794	692.15	R79	20.62	36.53	2.4	1405	—	—	1628	600	24

Class 2500

Unit : mm

Length Thru Hub			Depth of Socket	Drilling			Dia of Raised Face for Ring Joint	Pitch Dia. or Ring & Groove	Ring No.	RTS Type			Approx. Weigh(kg)				Nominal Pipe Size	
Slip-on Socket Thread	Lap Joint	Welding Neck		Dia. of Bolt Circle	Number of Bolt	Dia. of Bolt Hole				Depth of Groove	With of Groove	Radius of Groove	W1N	S1O	S1W	B1L	A	B
Y1	※ Y2	Y		C	N	K(min)				E	F	r1						
40	40	73.0	—	88.9	4	23	65.0	42.88	R13	6.35	8.74	0.8	3.23	3.2	—	3.09	15	1/2
43	43	79.4	—	95.2	4	23	73.0	50.80	R16	6.35	8.74	0.8	3.86	3.6	—	3.66	20	3/4
48	48	88.9	—	107.9	4	26	82.5	60.32	R18	6.35	8.74	0.8	5.40	5.0	—	5.14	25	1
52	52	95.2	—	130.2	4	29	102	72.24	R21	7.92	11.91	0.8	8.13	7.3	—	7.74	(32)	(1 3/4)
60	60	111.4	—	146.0	4	32	114	82.55	R23	7.92	11.91	0.8	11.3	10.0	—	10.8	40	1 1/2
70	70	127.0	—	171.4	8	29	133	101.60	R26	7.92	11.91	0.8	16.7	17.2	—	16.1	50	2
79	79	142.9	—	196.8	8	32	149	111.12	R28	9.52	13.49	1.5	24.5	24.9	—	23.7	65	2 1/2
92	92	168.2	—	228.6	8	35	168	127.00	R32	9.52	13.49	1.5	37.4	37.6	—	36.0	85	3
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(90)	(3 1/2)
108	—	190.5	—	273.0	8	42	203	157.18	R38	11.13	16.66	1.5	57.3	56.7	—	55.9	100	4
130	130	228.6	—	323.8	8	48	241	190.50	R42	12.70	19.84	1.5	96.1	95.3	—	94.1	(125)	(5)
152	152	273.0	—	368.3	8	54	279	228.60	R47	12.70	19.84	1.5	149	147.4	—	146	150	6
178	178	317.5	—	438.1	12	54	340	279.40	R51	14.27	23.01	1.5	222	220.0	—	220	200	8
229	229	419.4	—	539.7	12	67	425	342.90	R55	17.48	30.18	2.4	434	421.8	—	429	250	10
254	254	463.6	—	619.1	12	74	495	406.40	R60	17.48	33.32	2.4	610	499.0	—	609	300	12

MATERIAL SPECIFICATIONS (JIS / KS Standard)

ASTM	Grade	Classification	CHEMISTRY								MECHANICAL PROPERTIES					
			C %	Mn %	P Max. %	S Max. %	Si %	Ni %	Cr %	Mo %	T.S Min. psi (kg/mm ²)	Y.S Min. psi (kg/mm ²)	EL Min. %	Red. Min. %	HB	
A-105		Carbon Steel	MAX 0,35	0,60~1,05	0,040	0,050	MAX 0,35					70,000 (49,2)	36,000 (25,3)	22	30	MAX 187
A-181	60	Carbon Steel	MAX 0,35	MAX 0,90	0,050	0,050	MAX 0,35					60,000 (42,2)	30,000 (21,1)	22	35	
A-181	70	Carbon Steel	MAX 0,35	MAX 0,90	0,050	0,050	MAX 0,35					70,000 (49,2)	36,000 (25,3)	18	24	
A-182	F1	1/2 MO	MAX 0,28	0,6~0,90	0,045	0,045	0,15~0,35				0,44~0,65	70,000 (49,2)	40,000 (28,1)	25	35	143~192
A-182	F5	5Cr-1/2Mo	MAX 0,15	0,30~0,60	0,030	0,030	MAX 0,50	MAX 0,50	4,0~6,0	0,44~0,65	70,000 (49,2)	40,000 (28,1)	20	35	143~217	
A-182	F5a	5Cr-1/2Mo	MAX 0,25	MAX 0,6	0,040	0,030	MAX 0,50	MAX 0,50	4,0~6,0	0,44~0,65	90,000 (63,3)	65,000 (45,7)	22	50	187~248	
A-182	F6	13-cr	MAX 0,12	MAX 1,00	0,040	0,030	MAX 1,00	MAX 0,50	11,5~13,5		85,000 (59,8)	55,000 (38,7)	25	50	167~229	
A-182	F6	7cr-1/2Mo	MAX 0,15	0,30~0,60	0,030	0,030	0,50~1,00		6,0~8,0	0,44~0,65	70,000 (49,2)	40,000 (28,1)	20	35	197~217	
A-182	F9	9cr-1Mo	MAX 0,15	0,30~0,60	0,030	0,030	0,5~1,00		8,0~10,0	0,90~1,10	85,000 (59,8)	55,000 (38,7)	20	40	179~217	
A-182	F11	11/4cr-1/2Mo	0,10~0,20	0,30~0,60	0,040	0,040	0,5~1,00		1,00~1,50	0,44~0,65	70,000 (49,2)	40,000 (28,1)	20	30	143~207	
A-182	F12	1cr-1/2Mo	0,10~0,20	0,30~0,80	0,040	0,040	0,1~0,6		0,8~1,25	0,44~0,65	70,000 (49,2)	40,000 (28,1)	20	30	143~207	
A-182	F22	21/4-1Mo	MAX 0,15	0,30~0,60	0,040	0,040	MAX 0,50		2,00~2,50	0,87~1,13	75,000 (52,7)	45,000 (31,6)	20	30	156~207	
A-182	F304	18cr-8Ni	MAX 0,08	MAX 2,00	0,040	0,030	MAX 1,00	8,00~11,00	18,00~20,00		75,000 (52,7)	30,000 (21,1)	45	50		
A-182	F304L	18cr-8Ni LOW	MAX 0,035	MAX 2,00	0,040	0,030	MAX 1,00	8,00~13,00	18,00~20,00		70,000 (49,2)	25,000 (17,6)	30	50		
A-182	F316	18cr-8Ni Mo	MAX 0,08	MAX 2,00	0,040	0,030	MAX 1,00	10,00~14,00	16,00~18,00	2,00~3,00	75,000 (52,7)	30,000 (21,7)	45	50		
A-182	F316L	18cr-8Ni Mo-Low	MAX 0,035	MAX 2,00	0,040	0,030	MAX 1,00	10,00~15,00	16,00~18,00	2,00~3,00	65,000 (45,7)	25,000 (17,6)	30	50		
A-182	F321	18cr-8Ni Ti	MAX 0,08	MAX 2,00	0,030	0,030	MAX 1,00	9,00~12,00	17,00~17,00	Min	75,000 (52,7)	30,000 (21,1)	45	50		
A-182	F347	18cr-8Ni Cb	MAX 0,08	MAX 2,00	0,030	0,030	MAX 1,00	9,00~13,00	17,00~20,00		75,000 (52,7)	30,000 (21,1)	45	50		
A-350	LF1	Carbon Steel	MAX 0,30	0,75~1,05	0,035	0,040	0,15~0,30					60,000~85,000 (42,2)	30,000 (21,1)	25	38	
A-350	LF2	Carbon Steel	MAX 0,30	MAX 1,35	0,035	0,040	0,15~0,30					70,000~95,000 (49,2)	36,000 (25,3)	30	30	
A-350	LF3	31/2Ni	MAX 0,20	MAX 0,90	0,035	0,040	0,20~0,35	3,25 3,75				70000~95000 (49,2)	37,500 (26,4)	22	35	
※5 MSS SP-44 F42		max 0,35	※5 C.E(MSS SP-44, F42, F52, F60, F65, F70) $C.E = C + \frac{Mn}{6} + \frac{Cr+Mo+v}{5} + \frac{Ni+Cu}{15} \leq 0,05\%$													
※5 MSS SP-44 F52		max 0,35														
※5 MSS SP-44 F60		max 0,35														
※5 MSS SP-44 F65		max 0,35														
※5 MSS SP-44 F70		max 0,35	-	-	-	-	-	-	-	-	C,E max 50	min 70 ksi	min 80 ksi	18	-	-



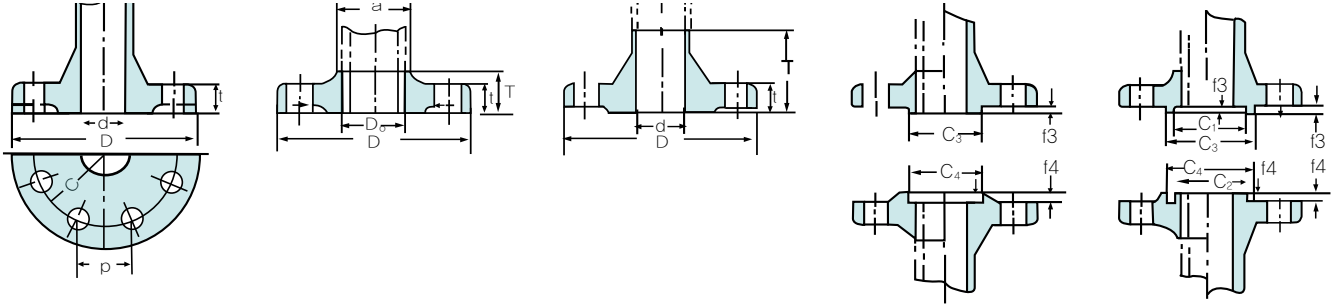
COMPARISON FLANGE BORES OF WELDINGNECK FLANGE FOR ANSI WITH JIS

Unit : mm

NOMINAL PIPE SIZE	O.D		SCH10		SCH20		SCH30		STD		SCH40		SCH60		XH		SCH80		SCH100		SCH120		SCH140		SCH160		XXH			
	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI	JIS	ANSI
1/2"	21.7	21.34	-	-	-	-	-	-	15.798	15.79	16.1	15.79	15.3	-	13.87	14.3	13.87	-	-	-	-	-	-	-	-	12.3	11.84	6.4	-	-
3/4"	27.2	26.67	-	-	-	-	-	-	20.929	21.4	20.92	20.4	-	-	18.85	19.4	18.85	-	-	-	-	-	-	-	-	16.2	15.60	11.02	-	-
1"	34.0	33.40	-	-	-	-	-	-	28.65	27.2	26.65	26.2	-	-	24.31	25.0	24.31	-	-	-	-	-	-	-	-	21.2	20.70	15.22	-	-
1 1/4"	42.7	42.16	-	-	-	-	-	-	35.05	35.5	35.05	33.7	-	-	32.46	32.9	32.46	-	-	-	-	-	-	-	-	29.9	29.47	22.76	-	-
1 1/2"	48.6	48.26	-	-	-	-	-	-	40.89	41.2	40.89	39.6	-	-	38.10	38.4	38.1	-	-	-	-	-	-	-	-	34.4	33.99	27.34	-	-
2"	60.5	60.33	-	-	-	-	-	-	52.5	52.7	52.50	50.7	-	-	49.25	49.5	49.25	-	-	-	-	-	-	-	-	43.1	42.90	38.18	-	-
2 1/2"	76.3	73.03	-	-	-	-	-	-	62.71	69.5	62.71	64.3	-	-	59.00	62.3	59.00	-	-	-	-	-	-	-	-	57.3	53.98	44.98	-	-
3"	89.1	88.90	-	-	-	-	-	-	77.93	78.1	77.93	75.9	-	-	73.66	73.9	73.66	-	-	-	-	-	-	-	-	66.9	66.55	58.42	-	-
3 1/2"	101.6	101.60	-	-	-	-	-	-	70.12	90.2	90.12	87.6	-	-	85.45	85.4	85.45	-	-	-	-	-	-	-	-	76.2	-	-	-	-
4"	114.3	114.30	-	-	-	-	-	-	102.26	102.3	102.26	100.1	-	-	97.18	97.1	97.18	-	-	-	-	-	-	-	-	92.1	92.05	80.06	-	-
5"	139.8	141.30	-	-	-	-	-	-	128.19	126.6	128.19	123.6	-	-	122.25	120.8	122.25	-	-	-	-	-	-	-	-	114.4	115.90	103.20	-	-
6"	165.2	168.28	-	-	-	-	-	-	154	151	154.0	146.6	-	-	146.33	143.2	146.33	-	-	-	-	-	-	-	-	136.6	139.73	124.38	-	-
8"	216.3	219.08	-	-	-	-	-	-	202.72	199.9	202.72	195.7	-	-	193.68	190.9	193.68	-	-	-	-	-	-	-	-	179.9	182.60	174.63	-	-
10"	267.4	273.05	-	-	-	-	-	-	254.51	248.7	254.51	242.0	-	-	242.93	237.2	242.93	-	-	-	-	-	-	-	-	224.5	230.23	215.90	-	-
12"	318.5	323.85	-	-	-	-	-	-	304.8	297.9	303.23	289.9	-	-	288.95	283.7	288.95	-	-	-	-	-	-	-	-	267.7	273.05	257.20	-	-
14"	355.6	365.60	-	-	-	-	-	-	336.55	333	333.35	325.4	-	-	317.50	317.6	317.50	-	-	-	-	-	-	-	-	300.0	300.08	284.18	-	-
16"	406.4	406.40	-	-	-	-	-	-	397.35	381.0	381.0	373.4	-	-	363.58	363.6	363.58	-	-	-	-	-	-	-	-	344.6	344.53	325.48	-	-
18"	457.2	457.20	-	-	-	-	-	-	438.15	428.6	428.65	419.2	-	-	409.6	409.6	409.6	-	-	-	-	-	-	-	-	387.4	387.35	366.73	-	-
20"	508.0	508.0	-	-	-	-	-	-	482.95	477.8	477.88	468.8	-	-	455.63	455.6	455.63	-	-	-	-	-	-	-	-	431.8	431.80	408.03	-	-
24"	-	609.6	-	-	-	-	-	-	590.55	-	574.8	-	-	560.43	584.2	-	547.73	-	-	-	-	-	-	-	-	517.55	-	490.58	-	-
30"	-	762.0	-	-	-	-	-	-	730.25	-	-	-	-	736.6	742.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TOLERANCES (ANSI B1 6.5 FORGED FLANGES)

SOLID FLANGE SLIP-ON-FLANGE WELDING NECK FLANGE TYPE OF GASKET SURFACE
 MALE & FEMALE TYPE TONGUE & GROOVET TYPE



THREAD, SOCKET-WELDING, SLIP-ON, LAP JOINT AND BLIND

Outside Diameter	When O.D. is 24" or less	$\pm 1/16"$ (1,6mm)*
	When O.D. is Over 24"	$\pm 1/8"$ (3,2mm)*
Inside Diameter	Threaded	Within limits on boring gauge
	Socket-Welding Slp-on and Lap joint	10" & Smaller $+ 1/32"$ (0,8mm), -0 12" & Larger $+ 1/16"$ (1,6mm), -0
Outside Diameter of Hub	5" and Smaller	$+ 3/32"$ (2,4mm)* $- 1/32"$ (0,8mm)
	6" and Larger	$+ 5/32"$ (4,0mm) $- 1/32"$ (0,8mm)
Diameter of Contact Face	1/16" Raised Face	$\pm 1/32"$ (0,8mm)
	1/4" Raised Face Tongue & Groove Male Female	$\pm 1/64"$ (0,4mm)
Diameter of Counterbore	Same as for Inside Diameter	
Drilling	Bolt Circle	$\pm 1/16"$ (1,6mm)
	Bolt Hole Spacing	$\pm 1/32"$ (0,8mm)
	Eccentricity of Bolt Circle with Respect to Facing	2 1/2" Smaller $1/32"$ (0,8mm) Max. 3" & Larger $1/16"$ (1,6mm) Max
	Eccentricity of Bolt Circle with Respect to Bore	$1/32"$ (0,8mm) Max.
	Eccentricity of Facing with Respect to Bore	$1/32"$ (0,8mm) Max.
Thickness	18" and Smaller	$+ 1/8"$ (3,2mm), -0
	20" and Larger	$+ 3/16"$ (4,8mm), -0
Length Thru Hub	10" and Smaller	$\pm 1/16"$ (1,6mm)
	12" and Larger	$\pm 1/8"$ (3,2mm)

WELDING NECK

Outside Diameter	When O.D. is 24" or less	$\pm 1/16"$ (1,6mm)*
	When O.D. is Over 24"	$\pm 1/8"$ (3,2mm)
Inside Diameter	10" and Smaller	$\pm 1/32"$ (0,8mm)
	12" thru 18"	$\pm 1/16"$ (1,6mm)
	20" and Larger	$+ 1/8"$ (3,2mm) $- 1/16"$ (1,6mm)
Diameter of Contact Face	1/16" Raised Face	$\pm 1/32"$ (0,8mm)
	1/4" Raised Face Tongue & Groove Male, Female	$\pm 1/64"$ (0,4mm)
Diameter of Hub at Base	When Hub Base is 24" or Smaller	$\pm 1/16"$ (1,6mm)*
	When Hub Base is Over 24"	$\pm 1/8"$ (3,2mm)*
Diameter of Hub at Point of Welding	5" and Smaller	$+ 3/32"$ (2,4mm) $- 1/32"$ (0,8mm)
	6" and Larger	$+ 5/32"$ (4,0mm) $- 1/32"$ (0,8mm)
Drilling	Bolt Circle	$\pm 1/16"$ (1,6mm)
	Bolt Hole Spacing	$\pm 1/32"$ (0,8mm)
	Eccentricity of Bolt Circle with Respect to Facing	2 1/2" & Smaller $1/32"$ (0,8mm)Max. 3" & Larger $1/16"$ (1,6mm)Max
	Eccentricity of Bolt Circle with Respect to Bore	$1/32"$ (0,8mm)Max*
	Eccentricity of Facing with Respect to Bore	$1/32"$ (0,8mm)Max*
Thickness	18" and Smaller	$+ 1/8"$ (3,2mm), -0
	20" and Larger	$+ 3/16"$ (4,8mm), -0
Length Thru Hub	10" and Smaller	$\pm 1/16"$ (1,6mm)
	12" and Larger	$\pm 1/8"$ (3,2mm)

Notes : * This tolerance is not covered in ANSI B 16.5. but maker's option



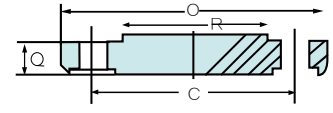
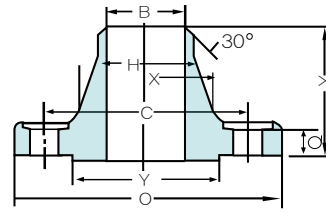
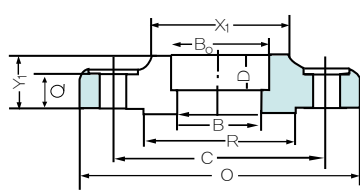
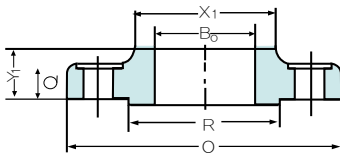
TOLERANCES (JIS -7S-15-84 FORGED FLANGES)

SLIP-ON

SOCKET-WELDING

WELDING-NECK

BLIND

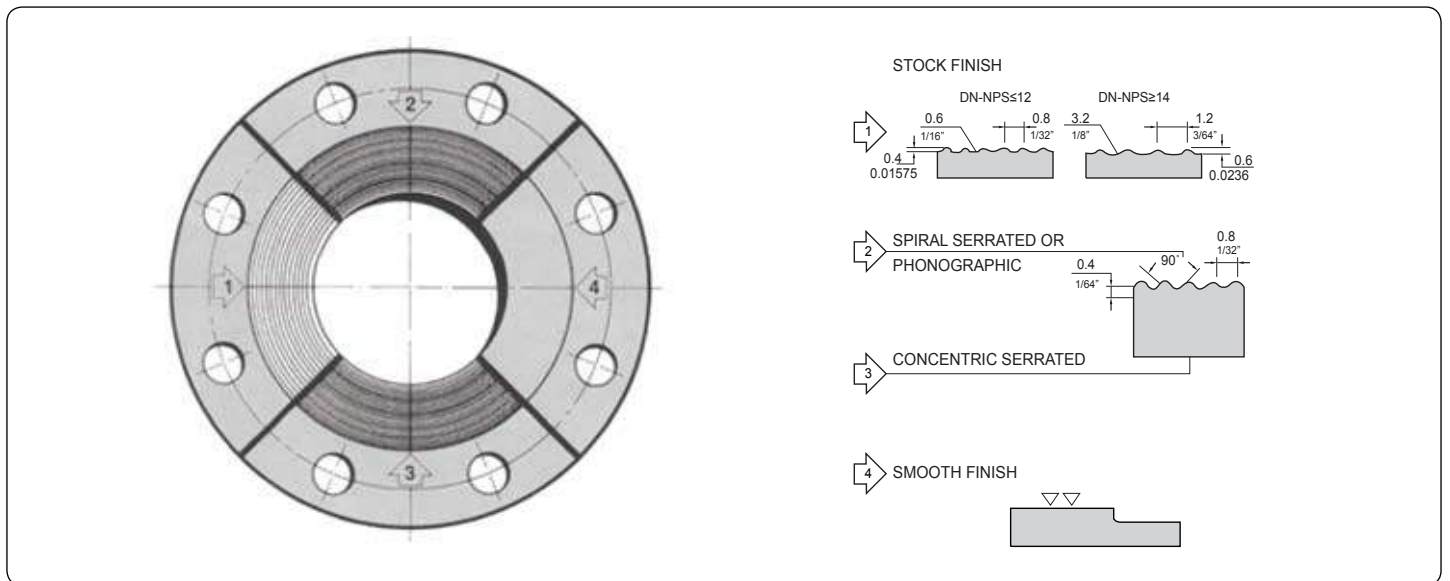


Flange Section		Basic Size	Dimensional Tolerance
Outside Diameter O		610mm & below over 610mm	$\pm 1,6$ $\pm 3,2$
Inside Diameter	Slip-on & Lap Joint B ₀	10B & below	+0,8 -0
		12B & over	+1,6 -0
	Socket-Welding B ₀ , B	1/2B~2B	+0,3 -0
		2 1/2B~3B	+0,4 -0
	Welding-Neck B	1/2B~2B	$\pm 0,4$
		2 1/2B~3B	$\pm 0,8$
Thickness Q	10B & below	18B & below	+3,2 -0
		20B & over	+4,8 -0
	Bolt Circle Diameter C Bolt Hole Diameter		12B & below 14B & over

Flange Section		Basic Size	Dimensional Tolerance
Bolt Hole Pitch		24B & below	$\pm 0,5$
Hub Diameter	Slip-on & Socket X ₁	12B & below	$\pm 1,6$ -0,8
		14B & over	+3,2 -1,6
	Welding-Neck X	610B & below	$\pm 1,6$
		610 & over	$\pm 3,2$
Hub Height Y	Welding-Neck H	5B & below	+2,4 -0,8
		6B & over	+4,0 -0,8
	Slip-on & socket Y ₁	18B & below	+3,2, -0,8
20B & over		+4,8, -1,6	
Welding Neck Y	10B & below	$\pm 1,6$	
	12B & over	$\pm 3,2$	
Gasket Seat R		RFThickness1,6mm RFThickness6,4mm } R	$\pm 0,8$ $\pm 0,5$

STANDARD FINISH

STANDARD FINISHES for Face of Flange(ANSI B16.5)



STOCK FINISH : The most widely used of any gasket finish, because, practically is suitable for all ordinary service conditions. This is a continuous spiral groove, Flanges sizes 12" (304,8mm) and smaller, are produced with a 1/16" round-nosed tool at a feed of 1/32" per revolution. For sizes 14" (355,6mm) and larger, the finish is made with 1/8" round-nosed tool at a feed of 3/64" per revolution.

SPIRAL SERRATED OR PHONOGRAPHIC : The finish is produced by using a 90° round-nosed tool.

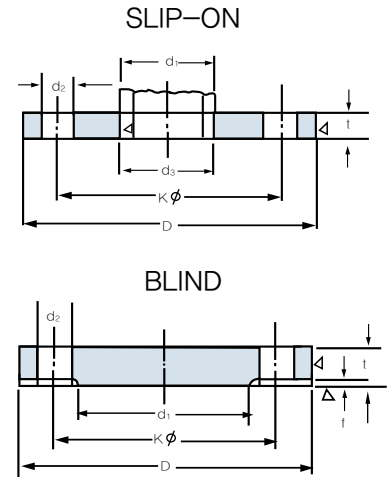
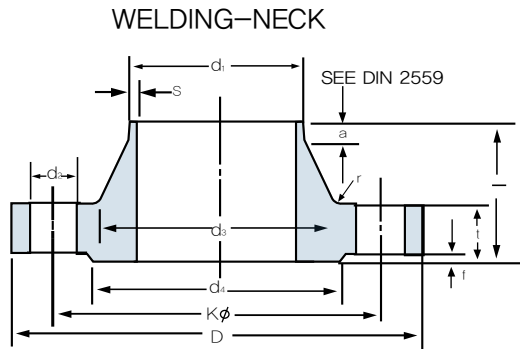
CONCENTRIC SERRATED : This finish is produced by using a 90° round-nosed tool.

SMOOTH FINISH : The cutting tool employed shall have an approximate 0,06" radius.

The resultant surface finish shall have a 125μ inch(ANSI B16,5 para 6,4;4,1)

DIN FLANGES

6-Bar DIN 2573 SLIP – ON FLANGES DIN 2527 BLIND FLANGES DIN 2631 WELDING NECK FLANGES

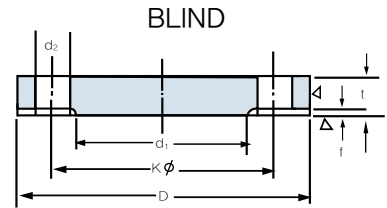
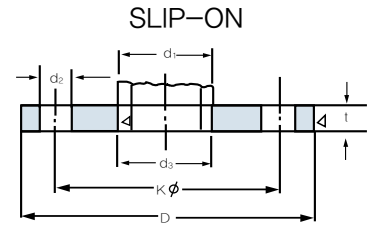
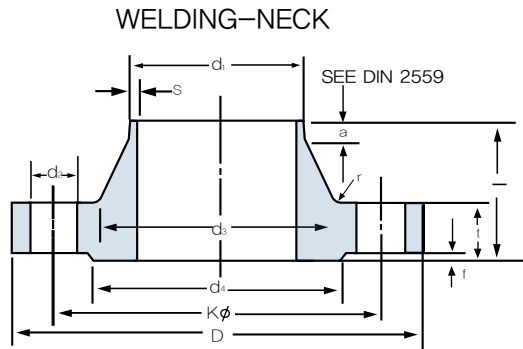


Bore		Common Dimension				Hub				Raised Face		Drilling			Approx Weight(kg)				
Nominal Bore	d ₁	D	t			k	T	d ₃	s	r	a	d ₄	f	Number of Bolt	Dia. of Bolt	d ₂	DIN 2576	DIN 2632	
			Welding Neck	Slip-on	Blind														
10	14 17,2*)	75	12	12	12	50	28	22	1,8	4	6	35	2	4	M10	–	11,5	0,036	0,325
15	20 21,3*)	80	12	12	12	55	30	26 28 30	2,0	4	6	40	2	4	M10	–	11,5	0,410	0,392
20	25 26,9*)	90	14	14	14	65	32	35 38	2,3	4	6	50	2	4	M10	–	11,5	0,600	0,592
25	30 33,7*)	100	14	14	14	75	35	40 42	2,6	4	6	60	2	4	M10	–	11,5	0,740	0,747
32	38 42,4*)	120	14	16	14	90	35	50 55 58	2,6	6	6	70	2	4	M12	(1/2")	14	1,19	1,05
40	44,5 48,3*)	130	14	16	14	100	38	62	2,6	6	7	80	3	4	M12	(1/2")	14	1,39	1,18
50	57 60,3*)	140	14	16	14	110	38	70 74	2,9	6	8	90	3	4	M12	(1/2")	14	1,53	1,34
65	76,1*)	160	14	16	14	130	38	88	2,9	6	9	110	3	4	M12	(1/2")	14	1,89	1,67
80	88,9*)	190	16	18	16	150	42	102	3,2	8	10	128	3	4	M16	(5/8")	18	2,98	2,71
100	108 114,3*)	210	16	18	16	170	45	122 130	3,6	8	10	148	3	4	M16	(5/8")	18	3,46	3,24
125	133 139,7*)	240	18	20	18	200	48	148 155	4,0	8	10	178	3	8	M16	(5/8")	18	4,60	4,49
150	159 168,3*)	265	18	20	18	225	48	172 184	4,5	10	12	202	3	8	M16	(5/8")	18	5,22	5,15
200	216 219,1*)	320	20	22	20	280	55	230 236	5,9	10	15	258	3	8	M16	(5/8")	18	7,15	7,78
250	267 273*)	375	22	24	22	335	60	282 290	6,2	12	15	312	3	12	M16	(5/8")	18	9,61	10,8
300	318 323,9*)	440	22	24	22	395	2	335 342	7,1	12	15	365	4	12	M20	3/4"	23	12,6	14,0
350	355,6*)	490	22	26	22	445	62	385	7,1	12	15	415	4	12	M20	(3/4")	23	15,6	16,1
400	368 406,4*)	540	22	28	22	495	65	438	7,1	12	15	455	4	16	M20	(3/4")	23	18,4	18,3
500	419 508*) 521	645	24	30	24	600	68	538	7,1	12	15	570	4	20	M20	(3/4")	23	24,5	24,6
600	609,6*)	755	24			705	70	640	7,1	12	16	670	5	20	M24	(7/8")	27		
700	622 711,2*)	860	24			810	70	740	7,1	12	16	775	5	24	M24	(7/8")	27		
800	720 812,8*) 820	975	24			920	70	842	7,1	12	16	880	5	24	M27	(1")	30		
900	914,4*)	1075	26			1020	70	942	7,1	12	16	980	5	24	M27	(1")	30		
1000	920 1016*) 1020	1175	26			1120	70	1045	7,1	16	16	1080	5	28	M27	(1")	30		

Notes : * Out side diameter of pipe complies with ISO recommendation R64



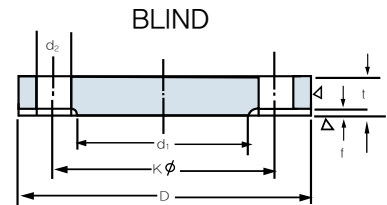
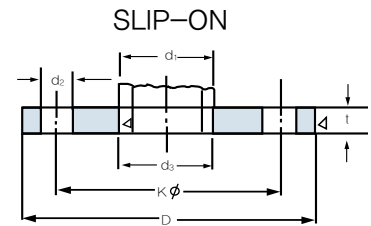
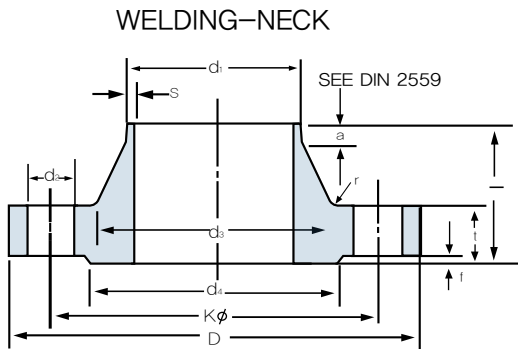
10-Bar DIN 2576 SLIP – ON FLANGES DIN 2527 BLIND FLANGES DIN 2632 WELDING NECK FLANGES



Bore		Common Dimension						Hub				Raised Face		Drilling			Approx Weight(kg)		
Nominal Bore	d ₁	D	t			k	T	d ₃	s	r	a	d ₄	f	Number of Bolt	Dia of Bolt	d ₂	DIN 2576	DIN 2632	
			Welding Neck	Slip-on	Blind														
10	14 17.2*)	90	14	14	14	60	35	25 28	1.8	4	6	40	2	4	M12	(1/2")	14	0.163	0.580
15	20 21.3*)	95	14	14	14	65	35	30 32	2.0	4	6	45	2	4	M12	(1/2")	14	0.675	0.648
20	25 26.9*)	105	16	16	16	75	38	38 40	2.3	4	6	58	2	4	M12	(1/2")	14	0.947	0.952
25	30 33.7*)	115	16	16	16	85	38	42 45	2.6	4	6	68	2	4	M12	(1/2")	14	1.14	1.14
32	38 42.4*)	140	16	16	16	100	40	52 56	2.6	6	6	78	2	4	M16	(5/8")	18	1.66	1.69
40	44.5 48.3*)	150	16	16	16	110	42	60 64	2.6	6	7	88	3	4	M16	(5/8")	18	1.89	1.86
50	57 60.3*)	165	18	18	18	125	45	72 75	2.9	6	8	102	3	4	M16	(5/8")	18	2.51	2.53
65	76.1*)	185	18	18	18	145	45	90	2.9	6	10	122	3	4	M16	(5/8")	18	3.00	3.06
80	88.9*)	200	20	20	20	160	50	105	3.2	8	10	138	3	4	M16	(5/8")	18	3.79	3.70
100	108 114.3*)	220	20	20	20	180	52	125 131	3.6	8	12	158	3	8	M16	(5/8")	18	4.20	4.62
125	133 139.7*)	250	22	22	22	210	55	150 156	4.0	8	12	188	3	8	M16	(5/8")	18	5.71	6.30
150	159 168.3*)	285	22	22	22	240	55	175 184	4.5	10	12	212	3	8	M20	(3/4")	23	6.72	7.75
200	216 219.1*)	340	24	24	24	295	62	232 235	5.9	10	16	268	3	8	M20	(3/4")	23	9.50	11.3
250	267 273*)	395	26	26	26	350	68	285 292	6.3	12	16	320	3	12	M20	(3/4")	23	12.5	14.7
300	318 323.9*)	445	26	26	28	400	68	335 344	7.1	12	16	370	4	12	M20	(3/4")	23	14.4	17.6
350	355.6*)	505	26	28	30	460	68	385	7.1	12	16	430	4	16	M20	(3/4")	23	20.6	21.4
400	406.4*)	565	26	32	32	515	72	440	7.1	12	16	482	4	16	M24	(7/8")	27	27.9	26.1
500	419 508*)	670	28	38	34	620	75	542	7.1	12	16	585	4	20	M24	(7/8")	27	41.1	34.7
600	609.6*)	780	28			725	80	642	7.1	12	18	685	5	20	M27	(1")	30		
700	622 711.2*)	895	30			840	80	745	8.0	12	18	800	5	24	M27	(1")	30		
800	720 812.8*)	1015	32			950	90	850	8.0	12	18	905	5	24	M30	(1 1/8")	33		
900	820 914.4*)	1115	34			1050	95	950	10.0	12	20	1005	5	28	M30	(1 1/8")	33		
1000	920 1016*)	1230	34			1160	95	1052	10.0	16	20	1110	5	28	M33	(1 1/4")	36		

Notes : * Out side diameter of pipe complies with ISO recommendation R64

16-Bar DIN 2543 SLIP – ON FLANGES DIN 2527 BLIND FLANGES DIN 2633 WELDING NECK FLANGES

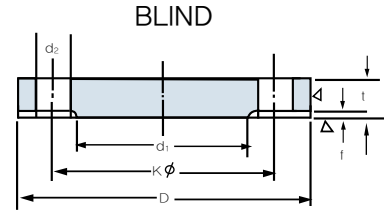
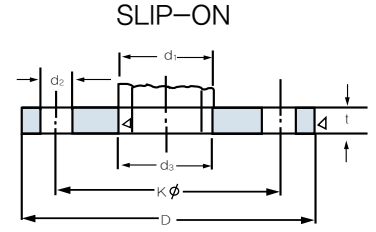
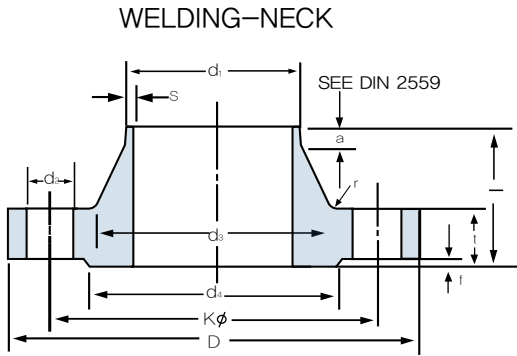


Bore		Common Dimension						Hub				Raised Face		Drilling			Approx Weight(kg)		
Nominal Bore	d ₁	D	t			k	T	d ₃	s	r	a	d ₄	f	Number of Bolt	Dia. of Bolt	d ₂	DIN 2543	DIN 2633	
			Welding Neck	Slip-on	Blind														
10	14 17,2*)	90	14	14	14	60	35	25 28	1,8	4	6	40	2	4	M12	(1/2")	14	0,63	0,580
15	20 21,3*)	95	14	14	14	65	35	30 32 38	2,0	4	6	45	2	4	M12	(1/2")	14	0,72	0,648
20	25 26,9*)	105	16	16	16	75	38	40	2,3	4	6	58	2	4	M12	(1/2")	14	1,01	0,952
25	30 33,7*)	115	16	16	16	85	38	42 45	2,6	4	6	68	2	4	M12	(1/2")	14	1,23	1,14
32	38 42,4*)	140	16	16	16	100	40	52 56 60	2,6	6	6	78	2	4	M16	(5/8")	18	1,80	1,69
40	44,5 48,3*)	150	16	16	16	110	42	64	2,6	6	7	88	3	4	M16	(5/8")	18	2,09	1,86
50	57 60,3*)	165	18	18	18	125	45	72 75	2,9	6	8	102	3	4	M16	(5/8")	18	2,88	2,53
65	76,1*)	185	18	18	18	145	45	90	2,9	6	10	122	3	4	M16	(5/8")	18	3,66	3,06
80	88,9*)	200	20	20	20	160	50	105	2,2	8	10	138	3	8	M16	(5/8")	18	4,77	3,70
100	108 114,3*)	220	20	20	20	180	52	125 131	3,6	8	12	158	3	8	M16	(5/8")	18	5,65	4,62
125	133 139,7*)	250	22	22	22	210	55	150 156	4,0	8	12	188	3	8	M16	(5/8")	18	8,42	6,30
150	159 168,3*)	285	22	22	22	240	55	175 184	4,5	10	12	212	3	8	M20	(3/4")	23	10,4	7,75
200	216 219,1*)	340	24	24	24	295	62	232 235	5,9	10	16	268	3	12	M20	(3/4")	23	16,1	11,0
250	267 273*)	405	26	26	26	355	70	285 292	6,3	12	16	320	3	12	M24	(7/8")	27	24,9	15,6
300	318 323,9*)	460	28	28	28	410	78	338 344	7,1	12	16	378	4	12	M24	(7/8")	27	35,1	22,0
350	355,6*)	520	30	30	30	470	82	390	8,0	12	16	438	4	16	M24	(7/8")	27	47,8	28,7
400	368 406,4*)	580	32	32	32	525	85	445	8,0	12	16	490	4	16	M27	(1")	30	63,5	36,3
500	419 508*)	715	34	36	34	650	90	548	8,0	12	16	610	4	20	M30	(1 1/8")	33	102,0	59,3
600	609,6*)	840	36	40		770	95	652	8,8	12	18	725	5	20	M33	(1 1/4")	36		
700	622 711,2*)	910	36			840	100	755	8,8	12	18	795	5	24	M33	(1 1/4")	36		
800	720 812,8*)	1025	38			950	105	855	10,0	12	20	900	5	24	M36	(1 3/8")	39		
900	820 914,4*)	1125	40			1050	110	955	10,0	12	20	1000	5	28	M36	(1 3/8")	39		
1000	920 1016*)	1255	42			1170	120	1058	10,0	16	20	1115	5	28	M39	(1 1/2")	42		

Notes : * Out side diameter of pipe complies with ISO recommendation R64



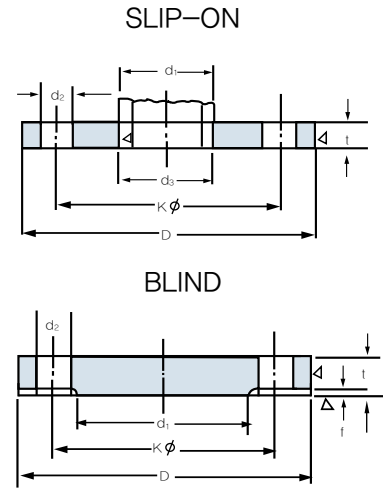
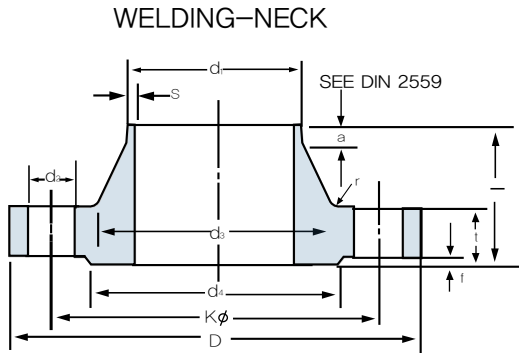
25-Bar DIN 2544 SLIP – ON FLANGES DIN 2527 BLIND FLANGES DIN 2634 WELDING NECK FLANGES



Bore		Common Dimension					Hub				Raised Face		Drilling			Approx Weight(kg)			
Nominal Bore	d ₁	D	t			k	T	d ₃	s	r	a	d ₄	f	Number of Bolt	Dia. of Bolt		d ₂	DIN 2544	DIN 2634
			Welding Neck	Slip-on	Blind														
10	14 17.2*)	90	16	16	16	60	35	25 28	1.8	4	6	40	2	4	M12	(1/2")	14	0.72	0.661
15	20 21.3*)	95	16	16	16	65	38	30 32	2.0	4	6	45	2	4	M12	(1/2")	14	0.81	0.746
20	25 26.9*)	105	18	18	18	75	40	38 40	2.3	4	6	58	2	4	M12	(1/2")	14	1.24	1.06
25	30 33.7*)	115	18	18	18	85	40	42 46	2.6	4	6	68	2	4	M12	(1/2")	14	1.38	1.29
32	38 42.4*)	140	18	18	18	100	42	52 56	2.6	6	6	78	2	4	M16	(5/8")	18	2.03	1.88
40	44.5 48.3*)	150	18	18	18	110	45	60 64	2.6	6	7	88	3	4	M16	(5/8")	18	2.35	2.34
50	57 60.3*)	165	20	20	20	125	48	72 75	2.9	6	8	102	3	4	M16	(5/8")	18	3.20	2.82
65	76.1*)	185	22	22	22	145	52	90	2.9	6	10	122	3	8	M16	(5/8")	18	4.29	3.74
80	88.9*)	200	24	24	24	160	58	105	3.2	8	12	138	3	8	M16	(5/8")	18	5.88	4.75
100	108 114.3*)	235	24	24	24	190	65	128 134	3.6	8	12	162	3	8	M20	(3/4")	23	7.54	6.52
125	133 139.7*)	270	26	26	26	220	68	155 162	4.0	8	12	188	3	8	M24	(7/8")	27	10.8	9.07
150	159 168.3*)	300	28	28	28	250	75	182 192	4.5	10	12	218	3	8	M24	(7/8")	27	14.5	11.8
200	216 219.1*)	360	30	30	30	310	80	240 244	6.3	10	16	278	3	12	M24	(7/8")	27	22.3	17.0
250	267 273*)	425	32	32	32	370	88	292 298	7.1	12	18	335	3	12	M27	(1")	30	33.5	24.4
300	318 323.9*)	485	34	34	34	430	92	345 352	8.0	12	18	395	4	16	M27	(1")	30	46.3	31.2
350	355.6*)	555	38	38	38	490	100	398	8.0	12	20	450	4	16	M30	(11/4")	33	68.0	45.0
400	368 406.4*)	620	40	40	40	550	110	452	8.8	12	20	505	4	16	M33	(11/4")	36	89.7	58.7
500	419 508*)	730	44	44	44	660	125	558	10.0	12	20	615	4	20	M33	(11/4")	36	138.0	86.1
600	609.6*)	845	46			770	125	660	11.0	12	20	720	5	20	M36	(13/8")	39		101.0
700	622 711.2*)	960	46			875	125	760	12.5	12	20	820	5	24	M39	(11/2")	42		134.0
800	720 812.8*)	1085	50			990	135	865	14.2	12	22	930	5	24	M45	(13/4")	48		183.0
900	820 914.4*)	1185	54			1090	145	968	16.0	12	24	1030	5	28	M45	(13/4")	48		232.0
1000	920 1016*)	1320	58			1210	155	1070	17.5	16	24	1140	5	28	M52	(2")	56		302.0

Notes : * Out side diameter of pipe complies with ISO recommendation R64

40-Bar DIN 2545 SLIP – ON FLANGES DIN 2527 BLIND FLANGES DIN 2635 WELDING NECK FLANGES



Bore		Common Dimension				Hub				Raised Face		Drilling			Approx Weight(kg)				
Nominal Bore	d ₁	D	t			k	T	d ₃	s	r	a	d ₄	f	Number of Bolt	Dia. of Bolt	d ₂	DIN 2545	DIN 2635	
			Welding Neck	Slip-on (NO-HUB)	Blind														
10	14 17.2*)	90	16	16	16	60	35	25 28	1.8	4	6	40	2	4	M12	(1/2")	14	0.72	0.661
15	20 21.3*)	95	16	16	16	65	38	30 32	2.0	4	6	45	2	4	M12	(1/2")	14	0.81	0.746
20	25 26.9*)	105	18	18	18	75	40	38 40	2.3	4	6	58	2	4	M12	(1/2")	14	1.24	1.06
25	30 33.7*)	115	18	18	18	85	40	42 46	2.6	4	6	68	2	4	M12	(1/2")	14	1.38	1.29
32	38 42.4*)	140	18	18	18	100	42	52 56	2.6	6	6	78	2	4	M16	(5/8")	18	2.03	1.88
40	44.5 48.3*)	150	18	18	18	110	45	60 64	2.6	6	7	88	3	4	M16	(5/8")	18	2.35	2.33
50	57 60.3*)	165	20	20	20	125	48	72 75	2.9	6	8	102	3	4	M16	(5/8")	18	3.20	2.82
65	76.1*)	185	22	22	22	145	52	90	2.9	6	10	122	3	8	M16	(5/8")	18	4.29	3.74
80	88.9*)	200	24	24	24	160	58	105	3.2	8	12	138	3	8	M16	(5/8")	18	5.88	4.75
100	108 114.3*)	235	24	24	24	190	65	128 134	3.6	8	12	162	3	8	M20	(3/4")	23	7.54	6.52
125	133 139.7*)	270	26	26	26	220	68	155 162	4.0	8	12	188	3	8	M24	(7/8")	27	10.8	9.07
150	159 168.3*)	300	28	28	28	250	75	182 192	4.5	10	12	218	3	8	M24	(7/8")	27	14.5	11.80
(175)	(191) 193.7*)	350	32	32	32	295	82	215 218	5.6	10	15	260	3	12	M27	(1")	30	22.1	18.2
200	216 219.1*)	375	34	34	34	320	88	240 244	6.3	10	16	285	3	12	M27	(1")	30	27.2	21.5
250	267 273*)	450	38	38	38	385	105	298 306	7.1	12	18	345	3	12	M30	(1 1/8")	33	43.8	34.9
300	318 323.9*)	515	42	42	42	450	115	353 362	8.0	12	18	410	4	16	M30	(1 1/8")	33	63.3	49.7
350	355.6*)	580	46	46	46	510	125	408	8.8	12	20	465	4	16	M33	(1 1/4")	36	89.5	68.1
400	368 406.4*)	660	50	50	50	585	135	462	11.0	12	20	535	4	16	M36	(1 3/8")	39	127.0	96.5
500	508*) 521	755	52	52	52	670	140	562	14.2	12	20	615	4	20	M39	(1 1/2")	42	172.0	117.0

Notes : * Out side diameter of pipe complies with ISO recommendation R64



COMPANY LOCATION

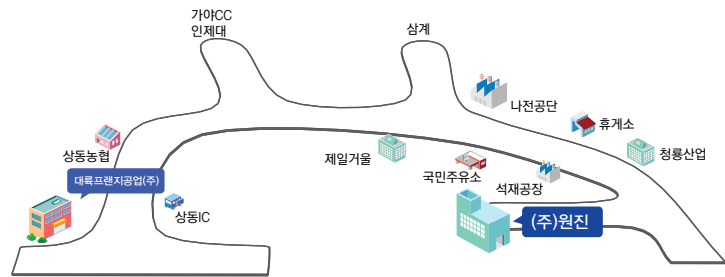
공장약도

FLANGES STEEL & STAINLESS

최고의 품질로 고객과 함께하겠습니다.

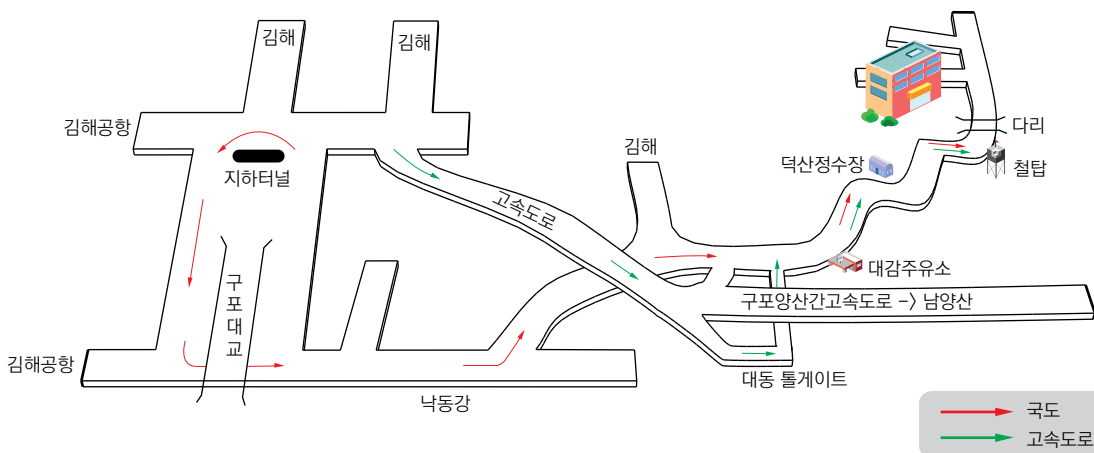


제 2 공장_(주)원진



김해시 생림면 사촌리 산 36번지

제 1 공장_대륙프랜지공업(주)



김해시 상동면 매리 151

FLANGES

STEEL & STAINLESS

풍부한 경험과 축적된 기술을 기초로 하여 조선, 석유화학,
발전설비, 산업설비 및 전문 플랜지 기업



大陸프랜지工業株式會社

DAERYUK FLANGE IND. CO., LTD.

▶▶ **본사 및 공장**

621-810 경남 김해시 상동면 매리 151
TEL : 055.331.9020 FAX : 055.331.9030~1

▶▶ **서울영업소**

153-033 서울시 동대문구 신설동 96-18
TEL : 02.893.4335~6 FAX : 02.893.4337

▶▶ **일본영업소**

SHINTAIRIKUSANGYO CO., LTD.
5-30, Ichioka-Motomachi, 1-Chome, Minato-Ku, Osaka, Japan
TEL : 06.6582.2777 FAX : 06.6583.0190

▶▶ **Head Office & Factory** _ #151 Mae-Ri, Sangdong-Myun,

Kimhae-Si, Kyungsangnam-Do, Korea
TEL : 82.55.331.9020 FAX : 82.55.331.9030~1

▶▶ **Seoul Office**_ #984-49, Sihung Kumchun-Gu, Seoul-Si, Korea

TEL : 82.2.893.4335~6 FAX : 82.2.893.4337

▶▶ **Seoul GangBook Office**_ #96-18, Sinseol-Dong,

Dongdeamun-Gu, Seoul-Si, Korea
TEL : 82.2.2231.4331 FAX : 82.2.2231.4330

▶▶ **Japan Office**_ SHINTAIRIKUSANGYO CO., LTD.

5-30, Ichioka-Motomachi, 1-Chome, Minato-Ku, Osaka, Japan
TEL : 81.06.6582.2777 FAX : 81.06.6583.0190

<http://www.draco.com> E-mail : daeryuk@draco.com