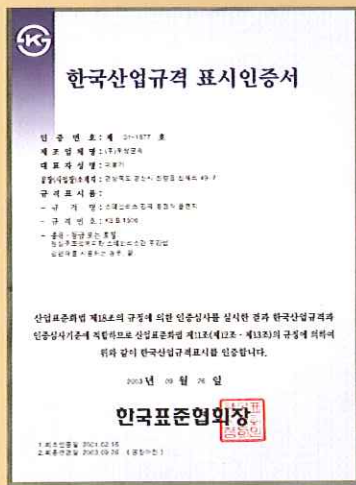


(주)성금순인 항상 고객을 먼저 생각합니다...



# 미래를 향하여 용비하는 기업!

끊임없는 연구, 그리고 최첨단 설비를 이용한 엄격한 품질관리



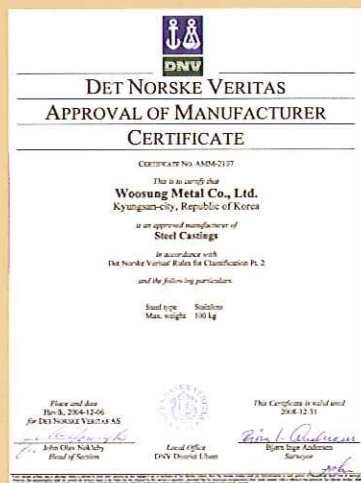
KS표시 인증



품질경영시스템 인증



현대 HQMS 등록



선급 승인 DNV



선급 승인 RINA



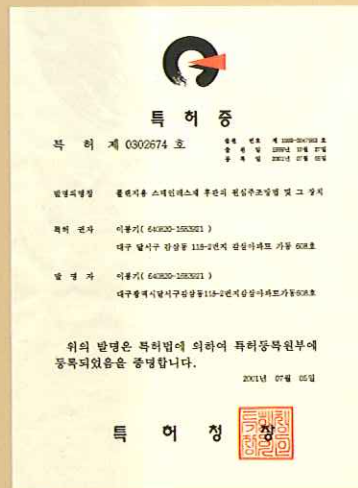
WOO SUNG with more growth aiming  
toward the future always considers the customer in advance.

(주)우성금속은 체계적인 생산공정으로 완벽한 제품만을 생산합니다.  
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관리하여 한치의 오차도 없도록 끊임없이 노력하고 있습니다.

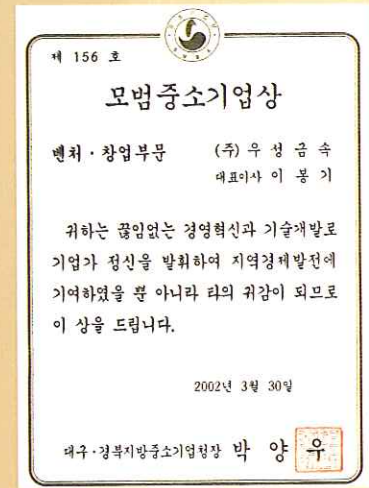
## Continued Research and Strict Quality Control with Updated Equipments



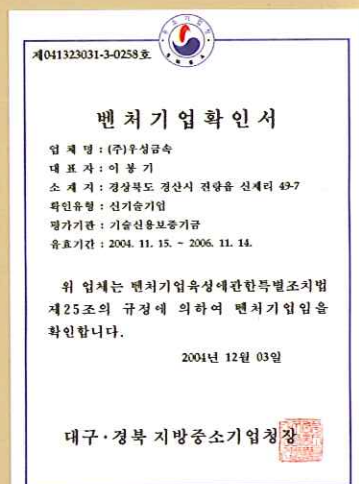
GQ마크 인증



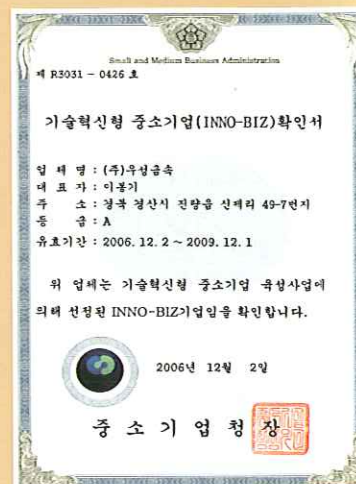
특허(제0302674호)



벤처,창업부문 모범중소기업상



벤처기업 확인



기술혁신형 중소기업확인

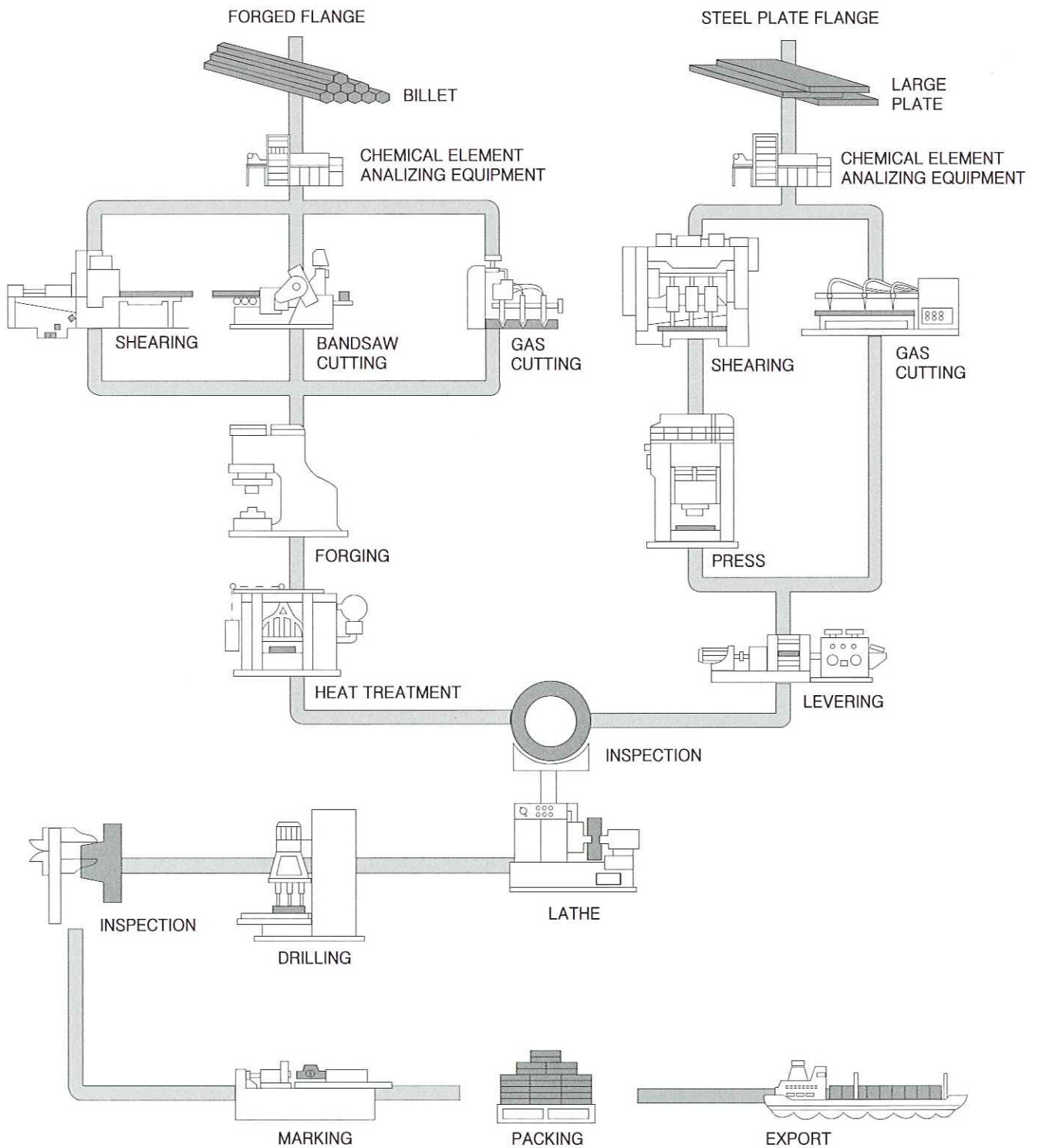
WOO SUNG with a systematic production system has manufactured only the perfect products, In addition, this company is continuously making all its efforts to achieve the error-free production by carefully controlling all processes including research, design, manufacturing and delivery inspection.

## 회사 연혁

- 1999. 07.      우성금속 설립
- 1999. 12.      주식회사 우성금속으로 전환.
- 1999. 12.      원심 주조법에 의한 스테인레스  
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- 2000. 02.      KSB 1506 KS인증 획득.  
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- 2000. 07.      ISO 9002 인증획득.
- 2001. 06.      플랜지용 스테인레스재 후판의  
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- 2001. 07.      KSB 1506 강판제 KS인증 추가획득.  
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- 2002. 03.      중소기업청 선정 모범중소기업 등록.
- 2002. 05.      중소기업청 선정 벤처기업 선정.
- 2002. 07.      중소기업청 선정우수제품 인증(GQ)
- 2003. 04.      사업장 확장, 이전
- 2003. 12.      기술혁신형 중소기업(INNO-BIZ) 확인서
- 2004. 09.      유망중소기업 지정(대구은행)
- 2004. 10.      현대미포조선 HQMS 승인(A등급)
- 2004. 12.      조선선급 승인 DNV(제조 승인, 공장 승인)
- 2006. 09.      조선선급 승인 RINA(제조 승인, 공장 승인)



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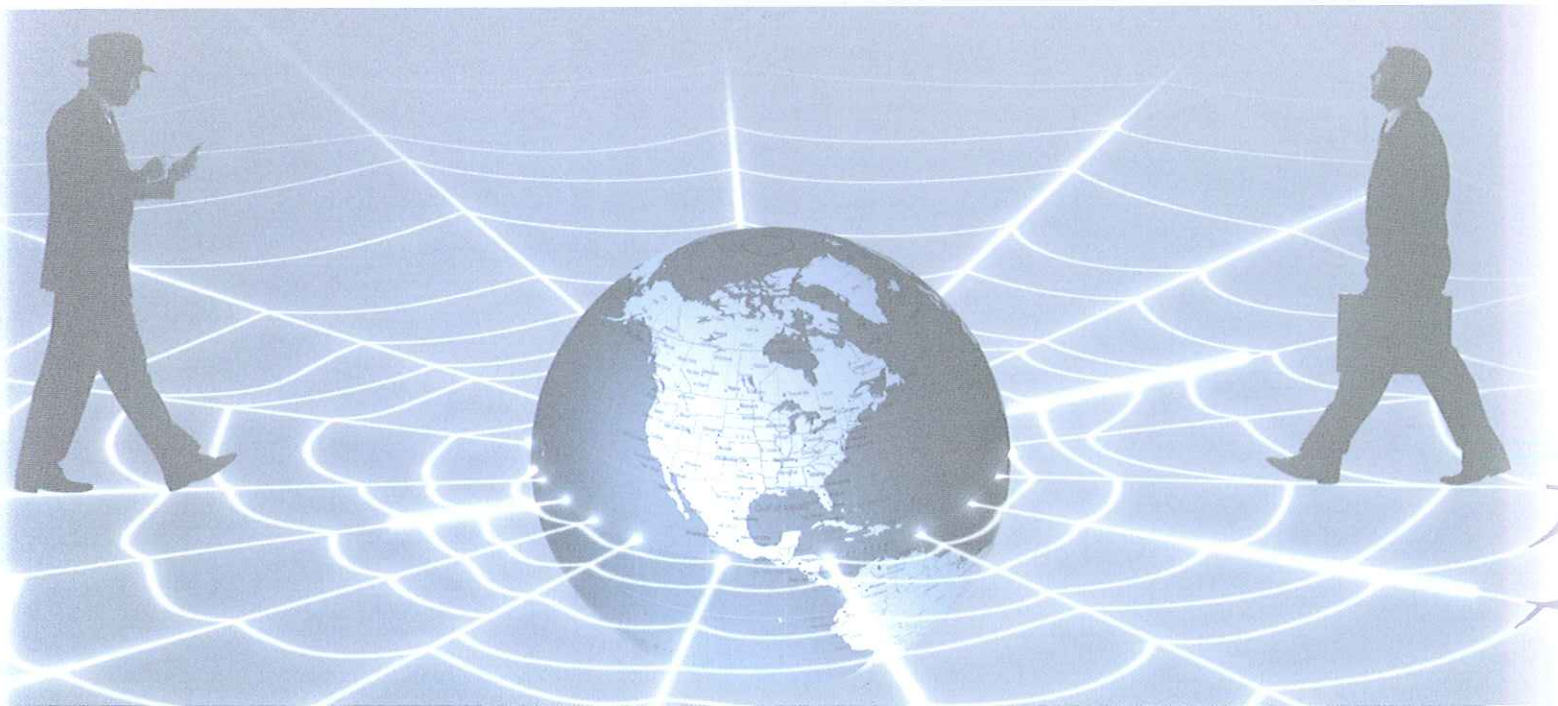
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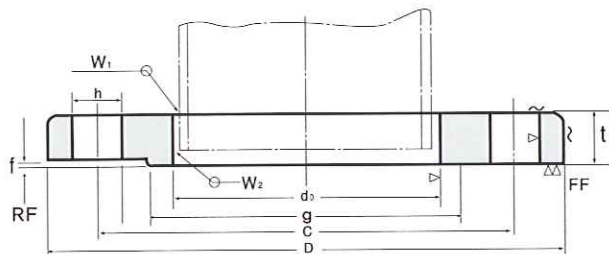
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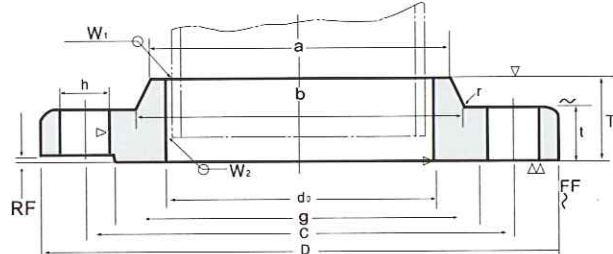
# 5Kg/Cm<sup>2</sup>

**【KS B1506-1998】**
**SLIP-ON WELDING STAINLESS STEEL PIPE FLANGES**

SOP TYPE  
NOMINAL SIZE 10-1000mm



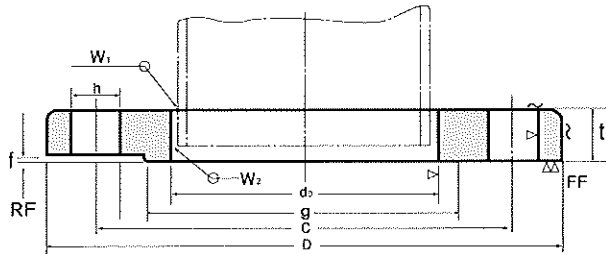
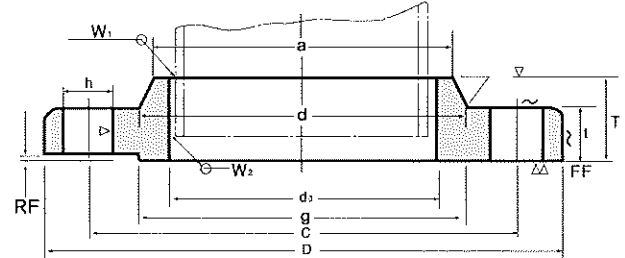
SOH TYPE  
NOMINAL SIZE 450-1000mm



Unit : mm

| Nominal Bore of Flange | Outside Diam. of Appli- cable Pipe | Inside Diam. of Flange do | Outside Diam. of Flange D | Sectional Dimensions of Flange |    |              |      |          |               |                        | Dia. of Bolt           |                      |              |     | Nominal Bolt Size | Weight(kg) |      |  |
|------------------------|------------------------------------|---------------------------|---------------------------|--------------------------------|----|--------------|------|----------|---------------|------------------------|------------------------|----------------------|--------------|-----|-------------------|------------|------|--|
|                        |                                    |                           |                           | t                              | T  | Diam. of Hub |      | Radius r | Raised Face f | Diam. of Raised Face g | Diam. of Bolt Circle c | Number of Bolt Holes | Hole Diam. h | SOP |                   | BL         | SOH  |  |
|                        |                                    |                           |                           |                                |    | a            | b    |          |               |                        |                        |                      |              |     |                   |            |      |  |
| (10)A                  | 17.3                               | 17.8                      | 75                        | 9                              | —  | —            | —    | —        | 1             | 39                     | 55                     | 4                    | 12           | M10 | 0.27              | 0.3        | —    |  |
| 15A                    | 21.7                               | 22.2                      | 80                        | 9                              | —  | —            | —    | —        | 1             | 44                     | 60                     | 4                    | 12           | M10 | 0.30              | 0.4        | —    |  |
| (20)A                  | 27.2                               | 27.7                      | 85                        | 10                             | —  | —            | —    | —        | 1             | 49                     | 65                     | 4                    | 12           | M10 | 0.37              | 0.5        | —    |  |
| 25A                    | 34.0                               | 34.5                      | 95                        | 10                             | —  | —            | —    | —        | 1             | 59                     | 75                     | 4                    | 12           | M10 | 0.45              | 0.6        | —    |  |
| (32)A                  | 42.7                               | 43.2                      | 115                       | 12                             | —  | —            | —    | —        | 2             | 70                     | 90                     | 4                    | 15           | M12 | 0.78              | 0.9        | —    |  |
| 40A                    | 48.6                               | 49.1                      | 120                       | 12                             | —  | —            | —    | —        | 2             | 75                     | 95                     | 4                    | 15           | M12 | 0.83              | 1.0        | —    |  |
| 50A                    | 60.5                               | 61.1                      | 130                       | 14                             | —  | —            | —    | —        | 2             | 85                     | 105                    | 4                    | 15           | M12 | 1.07              | 1.4        | —    |  |
| 65A                    | 76.3                               | 77.1                      | 155                       | 14                             | —  | —            | —    | —        | 2             | 110                    | 130                    | 4                    | 15           | M12 | 1.49              | 2.0        | —    |  |
| 80A                    | 89.1                               | 90.0                      | 180                       | 14                             | —  | —            | —    | —        | 2             | 121                    | 145                    | 4                    | 19           | M16 | 1.99              | 2.7        | —    |  |
| (90)A                  | 101.6                              | 102.6                     | 190                       | 14                             | —  | —            | —    | —        | 2             | 131                    | 155                    | 4                    | 19           | M16 | 2.09              | 3.0        | —    |  |
| 100A                   | 114.3                              | 115.4                     | 200                       | 16                             | —  | —            | —    | —        | 2             | 141                    | 165                    | 8                    | 19           | M16 | 2.39              | 3.7        | —    |  |
| 125A                   | 139.8                              | 141.2                     | 235                       | 16                             | —  | —            | —    | —        | 2             | 176                    | 200                    | 8                    | 19           | M16 | 3.23              | 5.2        | —    |  |
| 150A                   | 165.2                              | 166.6                     | 265                       | 18                             | —  | —            | —    | —        | 2             | 206                    | 230                    | 8                    | 19           | M16 | 4.41              | 7.5        | —    |  |
| (175)A                 | 190.7                              | 192.1                     | 300                       | 18                             | —  | —            | —    | —        | 2             | 232                    | 260                    | 8                    | 23           | M20 | 5.51              | 9.5        | —    |  |
| 200A                   | 216.3                              | 218.0                     | 320                       | 20                             | —  | —            | —    | —        | 2             | 252                    | 280                    | 8                    | 23           | M20 | 6.33              | 12.2       | —    |  |
| (225)A                 | 241.8                              | 243.7                     | 345                       | 20                             | —  | —            | —    | —        | 2             | 277                    | 305                    | 12                   | 23           | M20 | 6.64              | 14.0       | —    |  |
| 250A                   | 267.4                              | 269.5                     | 385                       | 22                             | —  | —            | —    | —        | 2             | 317                    | 345                    | 12                   | 23           | M20 | 9.45              | 19.3       | —    |  |
| 300A                   | 318.5                              | 321.0                     | 430                       | 22                             | —  | —            | —    | —        | 3             | 360                    | 390                    | 12                   | 23           | M20 | 10.3              | 24.3       | —    |  |
| 350A                   | 355.6                              | 358.1                     | 480                       | 24                             | —  | —            | —    | —        | 3             | 403                    | 435                    | 12                   | 25           | M22 | 14.0              | 33.2       | —    |  |
| 400A                   | 406.4                              | 409.0                     | 540                       | 24                             | —  | —            | —    | —        | 3             | 463                    | 495                    | 16                   | 25           | M22 | 16.9              | 41.9       | —    |  |
| 450A                   | 457.2                              | 460.0                     | 605                       | 24                             | 40 | 495          | 500  | 5        | 3             | 523                    | 555                    | 16                   | 25           | M22 | 21.6              | 53.0       | 24.8 |  |
| 500A                   | 508.0                              | 511.0                     | 655                       | 24                             | 40 | 546          | 552  | 5        | 3             | 573                    | 605                    | 20                   | 25           | M22 | 23.1              | 61.9       | 26.9 |  |
| (550)A                 | 558.8                              | 562.0                     | 720                       | 26                             | 42 | 597          | 603  | 5        | 3             | 630                    | 665                    | 20                   | 27           | M24 | 30.3              | 81.2       | 34.1 |  |
| 600A                   | 609.6                              | 613.0                     | 770                       | 26                             | 44 | 648          | 654  | 5        | 3             | 680                    | 715                    | 20                   | 27           | M24 | 32.7              | 93.2       | 37.5 |  |
| (650)A                 | 660.4                              | 664.0                     | 825                       | 26                             | 48 | 702          | 708  | 5        | 3             | 735                    | 770                    | 24                   | 27           | M24 | 35.9              | 106.9      | 42.8 |  |
| 700A                   | 711.2                              | 715.0                     | 875                       | 26                             | 48 | 751          | 758  | 5        | 3             | 785                    | 820                    | 24                   | 27           | M24 | 38.2              | 120.6      | 45.4 |  |
| (750)A                 | 762.0                              | 766.0                     | 945                       | 28                             | 52 | 802          | 810  | 5        | 3             | 840                    | 880                    | 24                   | 33           | M30 | 48.7              | 150.5      | 57.4 |  |
| 800A                   | 812.8                              | 817.0                     | 995                       | 28                             | 52 | 854          | 862  | 5        | 3             | 890                    | 930                    | 24                   | 33           | M30 | 51.2              | 167.4      | 60.8 |  |
| (850)A                 | 863.6                              | 868.0                     | 1045                      | 28                             | 54 | 904          | 912  | 5        | 3             | 940                    | 980                    | 24                   | 33           | M30 | 54.4              | 185.1      | 63.5 |  |
| 900A                   | 914.4                              | 919.0                     | 1095                      | 30                             | 56 | 956          | 964  | 5        | 3             | 990                    | 1030                   | 24                   | 33           | M30 | 61.1              | 218.1      | 75.3 |  |
| 1000A                  | 1016.0                             | 1021.0                    | 1195                      | 32                             | 60 | 1058         | 1066 | 5        | 3             | 1090                   | 1130                   | 28                   | 33           | M30 | 70.5              | 277.3      | 88.5 |  |
| *(1100)A               | 1117.6                             | 1123.0                    | 1305                      | 32                             | —  | —            | —    | —        | 3             | 1200                   | 1240                   | 28                   | 33           | M30 | 81.7              | 331.9      | —    |  |
| *1200A                 | 1219.2                             | 1225.0                    | 1420                      | 34                             | —  | —            | —    | —        | 3             | 1305                   | 1350                   | 32                   | 33           | M30 | 102.0             | 417.8      | —    |  |
| *1350A                 | 1371.6                             | 1377.0                    | 1575                      | 34                             | —  | —            | —    | —        | 3             | 1460                   | 1505                   | 32                   | 33           | M30 | 115.9             | 515.6      | —    |  |
| *1500A                 | 1524.0                             | 1529.0                    | 1730                      | 36                             | —  | —            | —    | —        | 3             | 1615                   | 1660                   | 36                   | 33           | M30 | 157.4             | 659.2      | —    |  |

1. ( )를 붙인 호칭 지름은 가능한 한 사용하지 않는다.
2. 플랜지의 개스킷 자리는 KS B 1519에 따른다.
3. 볼트 및 너트의 재료와 모양에 대해서는 KS B 1511의 참고2를 참조.
4. 무게 계산은 KS D 3695에 따른다.

**10Kg/Cm<sup>2</sup>****[KS B1506-1998]****SLIP-ON WELDING STAINLESS STEEL PIPE FLANGES****SOP TYPE**  
NOMINAL SIZE 10-800mm**SOH TYPE**  
NOMINAL SIZE 250-1000mm

Unit : mm

| Nominal Bore of Flange | Outside Diam. of Steel Pipe | Inside Diam. of Flange do | Outside Diam. of Flange D | Sectional Dimensions of Flange |    |              |      |          |               |                        | Dia. of Bolt           |                      |              | Nominal Bolt Size | Weight(kg) |       |       |
|------------------------|-----------------------------|---------------------------|---------------------------|--------------------------------|----|--------------|------|----------|---------------|------------------------|------------------------|----------------------|--------------|-------------------|------------|-------|-------|
|                        |                             |                           |                           | t                              | T  | Diam. of Hub |      | Radius r | Raised Face f | Diam. of Raised Face g | Diam. of Bolt Circle c | Number of Bolt Holes | Hole Diam. h |                   | SOP        | BL    | SOH   |
|                        |                             |                           |                           |                                |    | a            | b    |          |               |                        |                        |                      |              |                   |            |       |       |
| 10A                    | 17.3                        | 17.8                      | 90                        | 12                             | —  | —            | —    | —        | 1             | 46                     | 65                     | 4                    | 15           | M12               | 0.52       | 0.54  | —     |
| 15A                    | 21.7                        | 22.2                      | 95                        | 12                             | —  | —            | —    | —        | 1             | 51                     | 70                     | 4                    | 15           | M12               | 0.57       | 0.61  | —     |
| 20A                    | 27.2                        | 27.7                      | 100                       | 14                             | —  | —            | —    | —        | 1             | 56                     | 75                     | 4                    | 15           | M12               | 0.73       | 0.79  | —     |
| 25A                    | 34.0                        | 34.5                      | 125                       | 14                             | —  | —            | —    | —        | 1             | 67                     | 90                     | 4                    | 19           | M16               | 1.13       | 1.24  | —     |
| 32A                    | 42.7                        | 43.2                      | 135                       | 16                             | —  | —            | —    | —        | 2             | 76                     | 100                    | 4                    | 19           | M16               | 1.48       | 1.66  | —     |
| 40A                    | 48.6                        | 49.1                      | 140                       | 16                             | —  | —            | —    | —        | 2             | 81                     | 105                    | 4                    | 19           | M16               | 1.56       | 1.81  | —     |
| 50A                    | 60.5                        | 61.1                      | 155                       | 16                             | —  | —            | —    | —        | 2             | 96                     | 120                    | 4                    | 19           | M16               | 1.88       | 2.23  | —     |
| 65A                    | 76.3                        | 77.1                      | 175                       | 18                             | —  | —            | —    | —        | 2             | 116                    | 140                    | 4                    | 19           | M16               | 2.60       | 3.3   | —     |
| 80A                    | 89.1                        | 90.0                      | 185                       | 18                             | —  | —            | —    | —        | 2             | 126                    | 150                    | 8                    | 19           | M16               | 2.61       | 3.5   | —     |
| (90)A                  | 101.6                       | 102.6                     | 195                       | 18                             | —  | —            | —    | —        | 2             | 136                    | 160                    | 8                    | 19           | M16               | 2.76       | 4.0   | —     |
| 100A                   | 114.3                       | 115.4                     | 210                       | 18                             | —  | —            | —    | —        | 2             | 151                    | 175                    | 8                    | 19           | M16               | 3.14       | 4.6   | —     |
| 125A                   | 139.8                       | 141.2                     | 250                       | 20                             | —  | —            | —    | —        | 2             | 182                    | 210                    | 8                    | 23           | M20               | 4.77       | 7.3   | —     |
| 150A                   | 165.2                       | 166.6                     | 280                       | 22                             | —  | —            | —    | —        | 2             | 212                    | 240                    | 8                    | 23           | M20               | 6.34       | 10.1  | —     |
| (175)A                 | 190.7                       | 192.1                     | 305                       | 22                             | —  | —            | —    | —        | 2             | 237                    | 265                    | 12                   | 23           | M20               | 6.82       | 11.8  | —     |
| 200A                   | 216.3                       | 218.0                     | 330                       | 22                             | —  | —            | —    | —        | 2             | 262                    | 290                    | 12                   | 23           | M20               | 7.53       | 14.0  | —     |
| (225)A                 | 241.8                       | 243.7                     | 350                       | 22                             | —  | —            | —    | —        | 2             | 282                    | 310                    | 12                   | 23           | M20               | 7.74       | 15.8  | —     |
| 250A                   | 267.4                       | 269.5                     | 400                       | 24                             | 36 | 288          | 292  | 6        | 2             | 324                    | 355                    | 12                   | 25           | M22               | 11.8       | 22.7  | 12.7  |
| 300A                   | 318.5                       | 321.0                     | 445                       | 24                             | 38 | 340          | 346  | 6        | 3             | 368                    | 400                    | 16                   | 25           | M22               | 12.7       | 27.8  | 13.8  |
| 350A                   | 355.6                       | 358.1                     | 490                       | 26                             | 42 | 380          | 386  | 6        | 3             | 413                    | 445                    | 16                   | 25           | M22               | 16.4       | 37.1  | 18.2  |
| 400A                   | 406.4                       | 409.0                     | 560                       | 28                             | 44 | 436          | 442  | 6        | 3             | 475                    | 510                    | 16                   | 27           | M24               | 23.0       | 52.5  | 25.2  |
| 450A                   | 457.2                       | 460.0                     | 620                       | 30                             | 48 | 496          | 502  | 6        | 3             | 530                    | 565                    | 20                   | 27           | M24               | 29.5       | 68.8  | 33.0  |
| 500A                   | 508.0                       | 511.0                     | 675                       | 30                             | 48 | 548          | 554  | 6        | 3             | 585                    | 620                    | 20                   | 27           | M24               | 33.5       | 82.1  | 37.6  |
| (550)A                 | 558.8                       | 562.0                     | 745                       | 32                             | 52 | 604          | 610  | 6        | 3             | 640                    | 680                    | 20                   | 33           | M30               | 43.1       | 105.8 | 49.7  |
| 600A                   | 609.6                       | 613.0                     | 795                       | 32                             | 52 | 656          | 662  | 6        | 3             | 690                    | 730                    | 24                   | 33           | M30               | 45.7       | 120.2 | 52.6  |
| (650)A                 | 660.4                       | 664.0                     | 845                       | 34                             | 56 | 706          | 712  | 6        | 3             | 740                    | 780                    | 24                   | 33           | M30               | 52.1       | 145.0 | 60.6  |
| 700A                   | 711.2                       | 715.0                     | 905                       | 34                             | 58 | 762          | 770  | 6        | 3             | 800                    | 840                    | 24                   | 33           | M30               | 59.5       | 167.2 | 70.6  |
| (750)A                 | 762.0                       | 766.0                     | 970                       | 36                             | 62 | 816          | 824  | 6        | 3             | 855                    | 900                    | 24                   | 33           | M30               | 73.2       | 204.2 | 85.8  |
| 800A                   | 812.8                       | 817.0                     | 1020                      | 36                             | 64 | 868          | 876  | 6        | 3             | 905                    | 950                    | 28                   | 33           | M30               | 76.4       | 225.4 | 91.2  |
| (850)A                 | 863.6                       | 868.0                     | 1070                      | 36                             | 66 | 920          | 928  | 6        | 3             | 955                    | 1000                   | 28                   | 33           | M30               | 80.7       | 248.8 | 98.6  |
| 900A                   | 914.4                       | 919.0                     | 1120                      | 38                             | 70 | 971          | 979  | 6        | 3             | 1005                   | 1050                   | 28                   | 33           | M30               | 89.4       | 288.4 | 109.0 |
| 1000A                  | 1016.0                      | 1021.0                    | 1235                      | 40                             | 74 | 1073         | 1081 | 6        | 3             | 1110                   | 1160                   | 28                   | 39           | M36               | 109.2      | 367.7 | 133.0 |
| *(1100)A               | 1117.6                      | 1123.0                    | 1345                      | 42                             | 76 | —            | —    | —        | 3             | 1220                   | 1270                   | 28                   | 39           | M36               | 131.6      | 460.0 | —     |
| *1200A                 | 1219.2                      | 1225.0                    | 1465                      | 44                             | 78 | —            | —    | —        | 3             | 1325                   | 1380                   | 32                   | 39           | M36               | 163.5      | 572.2 | —     |
| *1350A                 | 1371.6                      | 1377.0                    | 1630                      | 48                             | 82 | —            | —    | —        | 3             | 1480                   | 1540                   | 36                   | 45           | M42               | 204.7      | 769.0 | —     |
| *1500A                 | 1524.0                      | 1529.0                    | 1795                      | 50                             | 90 | —            | —    | —        | 3             | 1635                   | 1700                   | 40                   | 45           | M42               | 250.2      | 974.9 | —     |

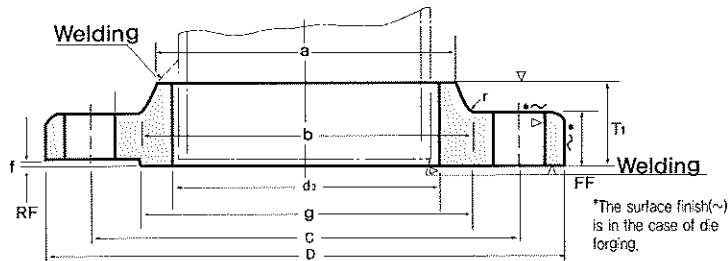
1. ( )를 붙인 호칭 자름은 가능한 한 사용하지 않는다.
2. 플랜지의 개스킷 자리는 KS B 1519에 따른다.
3. 볼트 및 너트의 재료와 모양에 대해서는 KS B 1511의 참고2를 참조.
4. 무게 계산은 KS D 3695에 따른다.

# 16Kg/Cm<sup>2</sup>

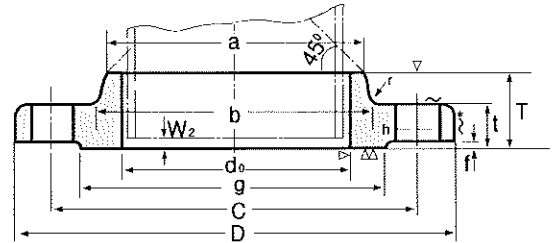
[KS B1506-1998]

SLIP-ON WELDING STAINLESS STEEL PIPE FLANGES

NOMINAL SIZE 10-600mm



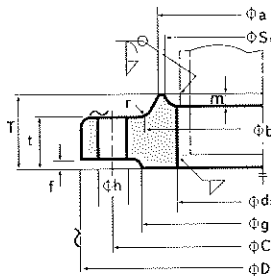
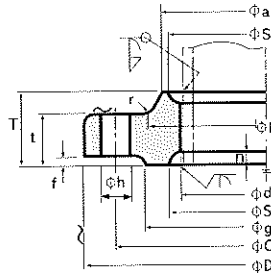
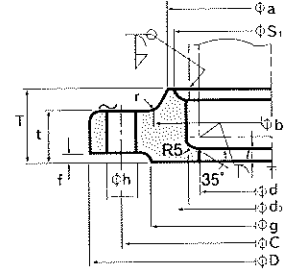
NOMINAL SIZE 650-1200mm



Unit : mm

| Nominal Bore of Flange | Outside Diameter of Steel Pipe | Inside Diameter of Flange do | Sectional Dimensions of Flange |    |     |              |      |          |   |      | Dia. of Bolt           |                      |                 | Nominal Bolt Size | Weight(kg) |        |       |
|------------------------|--------------------------------|------------------------------|--------------------------------|----|-----|--------------|------|----------|---|------|------------------------|----------------------|-----------------|-------------------|------------|--------|-------|
|                        |                                |                              | Outside Diameter of Flange D   | t  | T   | Diam. of Hub |      | Radius r | f | g    | Bolt Circle Diameter c | Number of Bolt Holes | Hole Diameter h |                   | SOP        | BL     | SOH   |
|                        |                                |                              |                                |    |     | a            | b    |          |   |      |                        |                      |                 |                   |            |        |       |
| 10A                    | 17.3                           | 17.8                         | 90                             | 12 | 16  | 26           | 28   | 4        | 1 | 46   | 65                     | 4                    | 15              | M12               | 0.52       | 0.54   | 0.52  |
| 15A                    | 21.7                           | 22.2                         | 95                             | 12 | 16  | 30           | 32   | 4        | 1 | 51   | 70                     | 4                    | 15              | M12               | 0.57       | 0.61   | 0.58  |
| 20A                    | 27.2                           | 27.7                         | 100                            | 14 | 20  | 38           | 42   | 4        | 1 | 56   | 75                     | 4                    | 15              | M12               | 0.73       | 0.79   | 0.75  |
| 25A                    | 34.0                           | 34.5                         | 125                            | 14 | 20  | 46           | 50   | 4        | 1 | 67   | 90                     | 4                    | 19              | M16               | 1.13       | 1.24   | 1.16  |
| 32A                    | 42.7                           | 43.2                         | 135                            | 16 | 22  | 56           | 60   | 5        | 2 | 76   | 100                    | 4                    | 19              | M16               | 1.48       | 1.66   | 1.53  |
| 40A                    | 48.6                           | 49.1                         | 140                            | 16 | 24  | 62           | 66   | 5        | 2 | 81   | 105                    | 4                    | 19              | M16               | 1.56       | 1.81   | 1.64  |
| 50A                    | 60.5                           | 61.1                         | 155                            | 16 | 24  | 76           | 80   | 5        | 2 | 96   | 120                    | 8                    | 19              | M16               | 1.8        | 2.3    | 1.83  |
| 65A                    | 76.3                           | 77.1                         | 175                            | 18 | 26  | 94           | 98   | 5        | 2 | 116  | 140                    | 8                    | 19              | M16               | 2.5        | 3.1    | 2.58  |
| 80A                    | 89.1                           | 90.0                         | 200                            | 20 | 28  | 108          | 112  | 6        | 2 | 132  | 160                    | 8                    | 23              | M20               | 3.5        | 4.5    | 3.66  |
| (90)A                  | 101.6                          | 102.6                        | 210                            | 20 | 30  | 120          | 124  | 6        | 2 | 145  | 170                    | 8                    | 23              | M20               | 3.7        | 5.0    | 3.95  |
| 100A                   | 114.3                          | 115.4                        | 225                            | 22 | 34  | 134          | 138  | 6        | 2 | 160  | 185                    | 8                    | 23              | M20               | 4.5        | 6.3    | 4.94  |
| 125A                   | 139.8                          | 141.2                        | 270                            | 22 | 34  | 164          | 170  | 6        | 2 | 195  | 225                    | 8                    | 25              | M22               | 6.5        | 9.2    | 7.0   |
| 150A                   | 165.2                          | 166.6                        | 305                            | 24 | 38  | 196          | 202  | 6        | 2 | 230  | 260                    | 12                   | 25              | M22               | 8.7        | 12.8   | 9.62  |
| 200A                   | 216.3                          | 218.0                        | 350                            | 26 | 40  | 244          | 252  | 6        | 2 | 275  | 305                    | 12                   | 25              | M22               | 10.9       | 18.6   | 12.1  |
| 250A                   | 267.4                          | 269.5                        | 430                            | 28 | 44  | 304          | 312  | 6        | 2 | 345  | 380                    | 12                   | 27              | M24               | 18.0       | 30.6   | 20.0  |
| 300A                   | 318.5                          | 321.0                        | 480                            | 30 | 48  | 354          | 364  | 8        | 3 | 395  | 430                    | 16                   | 27              | M24               | 21.5       | 40.7   | 24.4  |
| 350A                   | 355.6                          | 358.1                        | 540                            | 34 | 52  | 398          | 408  | 8        | 3 | 440  | 480                    | 16                   | 33              | M30×3             | 30.8       | 57.8   | 35.0  |
| 400A                   | 406.4                          | 409.0                        | 605                            | 38 | 60  | 446          | 456  | 10       | 3 | 495  | 540                    | 16                   | 33              | M30×3             | 42.8       | 82.2   | 46.2  |
| 450A                   | 457.2                          | 460.0                        | 675                            | 40 | 64  | 504          | 514  | 10       | 3 | 560  | 605                    | 20                   | 33              | M30×3             | 55.1       | 107.6  | 61.9  |
| 500A                   | 508.0                          | 511.0                        | 730                            | 42 | 68  | 558          | 568  | 10       | 3 | 615  | 660                    | 20                   | 33              | M30×3             | 65.1       | 133.1  | 73.25 |
| (550)A                 | 558.8                          | 562.0                        | 795                            | 44 | 70  | 612          | 622  | 10       | 3 | 670  | 720                    | 20                   | 39              | M36×3             | 77.9       | 164.1  | 88.1  |
| 600A                   | 609.6                          | 613.0                        | 845                            | 46 | 74  | 666          | 676  | 10       | 3 | 720  | 770                    | 24                   | 39              | M36×3             | 86.0       | 193.2  | 98.8  |
| (650)A                 | 660.4                          | 664                          | 895                            | 48 | 77  | 704          | 726  | 10       | 5 | 770  | 820                    | 24                   | 39              | M36×3             | 96.3       | 227.5  | 101.0 |
| 700A                   | 711.2                          | 715                          | 960                            | 50 | 80  | 754          | 776  | 10       | 5 | 820  | 875                    | 24                   | 42              | M39×3             | 114.1      | 272.6  | 120.0 |
| (750)A                 | 762.0                          | 766                          | 1020                           | 52 | 83  | 806          | 832  | 10       | 5 | 880  | 935                    | 24                   | 42              | M39×3             | 132.7      | 321.9  | 141.0 |
| 800A                   | 812.8                          | 817                          | 1085                           | 54 | 86  | 865          | 885  | 10       | 5 | 930  | 990                    | 24                   | 48              | M45×3             | 152.1      | 375.6  | 161.0 |
| (850)A                 | 863.6                          | 868                          | 1135                           | 56 | 89  | 916          | 936  | 10       | 5 | 980  | 1040                   | 24                   | 48              | M45×3             | 166.5      | 428.1  | 177.0 |
| 900A                   | 914.4                          | 919                          | 1185                           | 58 | 93  | 968          | 986  | 10       | 5 | 1030 | 1090                   | 28                   | 48              | M45×3             | 178.1      | 481.8  | 191.0 |
| 1000A                  | 1016.0                         | 1021                         | 1320                           | 62 | 99  | 1070         | 1098 | 12       | 5 | 1140 | 1210                   | 28                   | 56              | M52×3             | 235.3      | 636.0  | 230.0 |
| 1100A                  | 1117.6                         | 1123                         | 1420                           | 66 | 105 | 1180         | 1200 | 12       | 5 | 1240 | 1310                   | 32                   | 56              | M52×3             | 267.9      | 784.0  | 289.0 |
| 1200A                  | 1219.2                         | 1225                         | 1530                           | 70 | 112 | 1282         | 1302 | 12       | 5 | 1350 | 1420                   | 32                   | 56              | M52×3             | 321.1      | 972.4  | 348.0 |
| 1300A                  | 1320.8                         | 1326                         | 1645                           | 74 | —   | —            | —    | —        | 5 | 1450 | 1530                   | 32                   | 62              |                   | 378.6      | 1185.2 | —     |
| 1350A                  | 1371.6                         | 1377                         | 1700                           | 76 | —   | —            | —    | —        | 5 | 1510 | 1590                   | 32                   | 62              |                   | 410.0      | 1303.8 | —     |
| 1400A                  | 1422.4                         | 1428                         | 1755                           | 78 | —   | —            | —    | —        | 5 | 1560 | 1640                   | 36                   | 62              |                   | 436.0      | 1422.5 | —     |
| 1500A                  | 1524.0                         | 1529                         | 1865                           | 80 | —   | —            | —    | —        | 5 | 1670 | 1750                   | 36                   | 62              |                   | 496.4      | 1656.6 | —     |

- ( )를 붙인 호칭 지름은 가능한 한 사용하지 않는다.
- 플랜지의 개스킷 자리는 KS B 1519에 따른다.
- 볼트 및 너트의 재료와 모양에 대해서는 KS B 1511의 참고2를 참조.
- 무게 계산은 KS D 3695에 따른다.

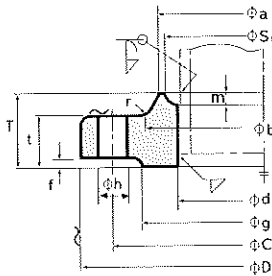
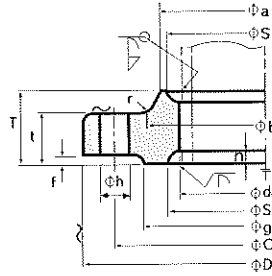
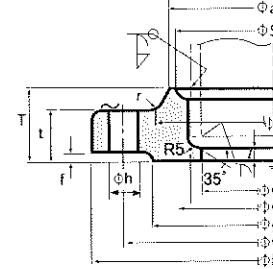
**20Kg/Cm<sup>2</sup>****[KS B1506-1998]****SLIP-ON WELDING STAINLESS STEEL PIPE FLANGES****A-TYPE**  
NOMINAL SIZE 10-600mm**B-TYPE**  
NOMINAL SIZE 10-50mm**C-TYPE**  
NOMINAL SIZE 65-600mm

\*The surface finish(~~) is in the case of die forging.

Unit : mm

| Nominal Diameter of Flange | Outside Diameter of Steel Pipe | Inside Diameter of Flange do | Outside Diameter of Flange D | Sectional Dimensions of Flange |    |              |     |          |   |      |       |                        | Dia. of Bolt         |                 |                   |     | Reference |    |     |   |       | Weight(kg) |       |  |
|----------------------------|--------------------------------|------------------------------|------------------------------|--------------------------------|----|--------------|-----|----------|---|------|-------|------------------------|----------------------|-----------------|-------------------|-----|-----------|----|-----|---|-------|------------|-------|--|
|                            |                                |                              |                              | t                              | T  | Diam. of Hub |     | Radius r | f | g    | d     | Bolt Circle Diameter c | Number of Bolt Holes | Hole Diameter h | Nominal Bolt Size | S1  | m         | S2 | n   | l | SOP   | BL         | SOH   |  |
|                            |                                |                              |                              |                                |    | a            | b   |          |   |      |       |                        |                      |                 |                   |     |           |    |     |   |       |            |       |  |
| 10A                        | 17.3                           | 17.8                         | 90                           | 14                             | 20 | 30           | 32  | 4        | 1 | 46   | -     | 65                     | 4                    | 15              | M12               | 27  | 4         | 27 | 4   | - | 0.6   | 0.6        | 0.59  |  |
| 15A                        | 21.7                           | 22.2                         | 95                           | 14                             | 20 | 34           | 36  | 4        | 1 | 51   | -     | 70                     | 4                    | 15              | M12               | 31  | 4         | 31 | 4   | - | 0.7   | 0.7        | 0.65  |  |
| 20A                        | 27.2                           | 27.7                         | 100                          | 16                             | 22 | 40           | 42  | 4        | 1 | 56   | -     | 75                     | 4                    | 15              | M12               | 37  | 4         | 37 | 4   | - | 0.8   | 0.9        | 0.81  |  |
| 25A                        | 34.0                           | 34.5                         | 125                          | 16                             | 24 | 48           | 50  | 4        | 1 | 67   | -     | 90                     | 4                    | 19              | M16               | 44  | 4         | 44 | 4.5 | - | 1.3   | 1.5        | 1.29  |  |
| 32A                        | 42.7                           | 43.2                         | 135                          | 18                             | 26 | 56           | 60  | 5        | 2 | 76   | -     | 100                    | 4                    | 19              | M16               | 52  | 4         | 53 | 5   | - | 1.6   | 1.8        | 1.60  |  |
| 40A                        | 48.6                           | 49.1                         | 140                          | 18                             | 26 | 62           | 66  | 5        | 2 | 81   | -     | 105                    | 4                    | 19              | M16               | 58  | 4         | 59 | 5.5 | - | 1.7   | 2.0        | 1.69  |  |
| 50A                        | 60.5                           | 61.1                         | 155                          | 18                             | 26 | 76           | 80  | 5        | 2 | 96   | -     | 120                    | 8                    | 19              | M16               | 70  | 4         | 72 | 5.5 | - | 1.9   | 2.4        | 1.89  |  |
| 65A                        | 76.3                           | 77.1                         | 175                          | 20                             | 30 | 100          | 104 | 5        | 2 | 116  | 65.9  | 140                    | 8                    | 19              | M16               | 94  | 6         | 85 | 6   | 6 | 2.6   | 3.4        | 2.60  |  |
| 80A                        | 89.1                           | 90.0                         | 200                          | 22                             | 34 | 113          | 117 | 6        | 2 | 132  | 78.1  | 160                    | 8                    | 23              | M20               | 107 | 6         | -  | -   | 6 | 3.8   | 4.9        | 3.93  |  |
| (90)A                      | 101.6                          | 102.6                        | 210                          | 24                             | 36 | 126          | 130 | 6        | 2 | 145  | 90.2  | 170                    | 8                    | 23              | M20               | 120 | 6         | -  | -   | 6 | 4.4   | 6.0        | 4.56  |  |
| 100A                       | 114.3                          | 115.4                        | 225                          | 24                             | 36 | 138          | 142 | 6        | 2 | 160  | 102.3 | 185                    | 8                    | 23              | M20               | 132 | 6         | -  | -   | 6 | 4.9   | 6.9        | 5.13  |  |
| 125A                       | 139.8                          | 141.2                        | 270                          | 26                             | 40 | 166          | 172 | 6        | 2 | 195  | 126.6 | 225                    | 8                    | 25              | M22               | 160 | 7         | -  | -   | 6 | 7.8   | 11.0       | 8.30  |  |
| 150A                       | 165.2                          | 166.6                        | 305                          | 28                             | 42 | 196          | 202 | 6        | 2 | 230  | 151.0 | 260                    | 12                   | 25              | M22               | 186 | 8         | -  | -   | 6 | 10.1  | 14.9       | 10.6  |  |
| 200A                       | 216.3                          | 218.0                        | 350                          | 30                             | 46 | 244          | 252 | 6        | 2 | 275  | 199.9 | 305                    | 12                   | 25              | M22               | 237 | 9         | -  | -   | 6 | 12.6  | 21.4       | 13.3  |  |
| 250A                       | 267.4                          | 269.5                        | 430                          | 34                             | 52 | 304          | 312 | 6        | 2 | 345  | 248.8 | 380                    | 12                   | 27              | M24               | 290 | 10        | -  | -   | 6 | 21.9  | 37.2       | 23.4  |  |
| 300A                       | 318.5                          | 321.0                        | 480                          | 36                             | 56 | 354          | 364 | 8        | 3 | 395  | 297.9 | 430                    | 16                   | 27              | M24               | 345 | 11        | -  | -   | 6 | 25.8  | 48.8       | 27.7  |  |
| 350A                       | 355.6                          | 358.1                        | 540                          | 40                             | 62 | 398          | 408 | 8        | 3 | 440  | 333.4 | 480                    | 16                   | 33              | M30×3             | 384 | 12        | -  | -   | 6 | 36.2  | 68.0       | 39.2  |  |
| 400A                       | 406.4                          | 409.0                        | 605                          | 46                             | 70 | 446          | 456 | 10       | 3 | 495  | 381.0 | 540                    | 16                   | 33              | M30×3             | 437 | 13        | -  | -   | 7 | 51.7  | 99.4       | 54.2  |  |
| 450A                       | 457.2                          | 460.0                        | 675                          | 48                             | 78 | 504          | 514 | 10       | 3 | 560  | 431.8 | 605                    | 20                   | 33              | M30×3             | 490 | 15        | -  | -   | 7 | 66.1  | 129.1      | 71.7  |  |
| 500A                       | 508.0                          | 511.0                        | 730                          | 50                             | 84 | 558          | 568 | 10       | 3 | 615  | 482.6 | 660                    | 20                   | 33              | M30×3             | 544 | 16        | -  | -   | 7 | 77.4  | 158.4      | 86.2  |  |
| (550)A                     | 558.8                          | 562.0                        | 795                          | 52                             | 90 | 612          | 622 | 10       | 3 | 670  | 533.4 | 720                    | 20                   | 39              | M36×3             | 595 | 16        | -  | -   | 7 | 92.2  | 194.0      | 105.0 |  |
| 600A                       | 609.6                          | 613.0                        | 845                          | 54                             | 96 | 666          | 676 | 10       | 3 | 720  | 584.2 | 770                    | 24                   | 39              | M36×3             | 646 | 18        | -  | -   | 7 | 101.1 | 226.9      | 119.0 |  |
| (650)A                     | 660.4                          | 664.0                        | 945                          | 60                             | -  | -            | -   | -        | 5 | 790  | -     | 850                    | 24                   | 48              | M45×3             | -   | -         | -  | -   | - | 147.6 | 311.6      | -     |  |
| 700A                       | 711.2                          | 715.0                        | 995                          | 64                             | -  | -            | -   | -        | 5 | 840  | -     | -                      | -                    | -               | -                 | -   | -         | -  | -   | - | 168.0 | 370.9      | -     |  |
| (750)A                     | 762.0                          | 766.0                        | 1080                         | 68                             | -  | -            | -   | -        | 5 | 900  | -     | 970                    | 24                   | 56              | M52×3             | -   | -         | -  | -   | - | 212.7 | 460.1      | -     |  |
| 800A                       | 812.8                          | 817.0                        | 1140                         | 72                             | -  | -            | -   | -        | 5 | 960  | -     | 1030                   | 24                   | 56              | M52×3             | -   | -         | -  | -   | - | 248.5 | 546.5      | -     |  |
| (850)A                     | 863.6                          | 868.0                        | 1200                         | 74                             | -  | -            | -   | -        | 5 | 1020 | -     | 1090                   | 24                   | 56              | M52×3             | -   | -         | -  | -   | - | 280.5 | 626.2      | -     |  |
| 900A                       | 914.4                          | 919.0                        | 1250                         | 76                             | -  | -            | -   | -        | 5 | 1070 | -     | 1140                   | 28                   | 56              | M52×3             | -   | -         | -  | -   | - | 296.9 | 694.9      | -     |  |

- ( )를 붙인 호칭 지름은 가능한 한 사용하지 않는다.
- 플랜지의 개스킷 자리는 KS B 1519에 따른다.
- d치수는 KS D 3562, KS D 3564 KS D 3570의 스케줄 40인 경우를 참고로 해서 표시한 것이다.  
다만, 호칭 지름 450 이상인 것은 관의 안지름 두께를 12.7mm로 했다.
- 볼트 및 너트의 재료와 모양에 대해서는 KS B 1511의 참고2를 참조.
- 무게 계산은 KS D 3695에 따른다.

**30Kg/Cm<sup>2</sup>****【KS B1506-1998】****SLIP-ON WELDING STAINLESS STEEL PIPE FLANGES****A-TYPE**  
NOMINAL SIZE 10-400mm**B-TYPE**  
NOMINAL SIZE 10-50mm**C-TYPE**  
NOMINAL SIZE 65-400mm

\*The surface finish(∼) is in the case of de forging.

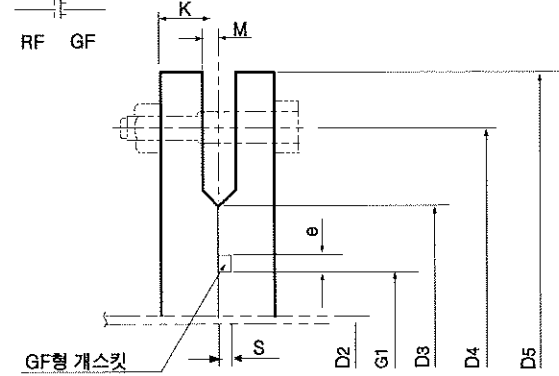
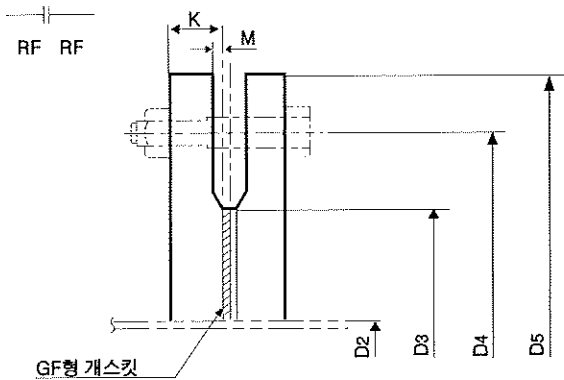
Unit : mm

| Nominal Diameter of Flange | Outside Diameter of steel Pipe | Inside Diameter of Flange d <sub>0</sub> | Outside Diameter of Flange D | Sectional Dimensions of Flange |    |                 |     |           |   |     |       | Dia. of Bolt           |                      |                 |                   | Reference      |     |                |   |   | Approx Weight(kg) |      |
|----------------------------|--------------------------------|------------------------------------------|------------------------------|--------------------------------|----|-----------------|-----|-----------|---|-----|-------|------------------------|----------------------|-----------------|-------------------|----------------|-----|----------------|---|---|-------------------|------|
|                            |                                |                                          |                              | t                              | T  | Diameter of Hub |     | Rad-ius r | f | g   | d     | Bolt Circle Diameter C | Number of Bolt Holes | Hole Diameter h | Nominal Bolt Size | S <sub>1</sub> | m   | S <sub>2</sub> | n | l | SOH               | BL   |
|                            |                                |                                          |                              |                                |    | a               | b   |           |   |     |       |                        |                      |                 |                   |                |     |                |   |   |                   |      |
| 10A                        | 17.3                           | 17.8                                     | 110                          | 16                             | 24 | 30              | 34  | 4         | 1 | 52  | —     | 75                     | 4                    | 19              | M16               | —              | —   | —              | — | — | 0.99              | 1.00 |
| 15A                        | 21.7                           | 22.2                                     | 115                          | 18                             | 26 | 36              | 40  | 5         | 1 | 55  | —     | 80                     | 4                    | 19              | M16               | 31             | 4   | 40             | 5 | — | 1.23              | 1.25 |
| 20A                        | 27.2                           | 27.7                                     | 120                          | 18                             | 28 | 42              | 46  | 5         | 1 | 60  | —     | 85                     | 4                    | 19              | M16               | 37             | 5   | 44             | 5 | — | 1.34              | 1.38 |
| 25A                        | 34.0                           | 34.5                                     | 130                          | 20                             | 30 | 50              | 54  | 5         | 1 | 70  | —     | 95                     | 4                    | 19              | M16               | 44             | 6   | 52             | 5 | — | 1.76              | 1.84 |
| 32A                        | 42.7                           | 43.2                                     | 140                          | 22                             | 32 | 60              | 64  | 6         | 2 | 80  | —     | 105                    | 4                    | 19              | M16               | 52             | 6   | 60             | 5 | — | 2.15              | 2.32 |
| 40A                        | 48.6                           | 49.1                                     | 160                          | 22                             | 34 | 66              | 70  | 6         | 2 | 90  | —     | 120                    | 4                    | 23              | M20               | 58             | 6   | 66             | 5 | — | 2.82              | 3.00 |
| 50A                        | 60.5                           | 61.1                                     | 165                          | 22                             | 36 | 82              | 86  | 6         | 2 | 105 | —     | 130                    | 8                    | 19              | M16               | 70             | 6.5 | 78             | 5 | — | 2.89              | 3.14 |
| 65A                        | 76.3                           | 77.1                                     | 200                          | 26                             | 40 | 102             | 106 | 8         | 2 | 130 | 65.9  | 160                    | 8                    | 23              | M20               | 96             | 9.5 | 94             | 5 | 6 | 4.70              | 5.50 |
| 80A                        | 89.1                           | 90.0                                     | 210                          | 28                             | 44 | 115             | 121 | 8         | 2 | 140 | 78.1  | 170                    | 8                    | 23              | M20               | 109            | 9.5 | —              | — | 6 | 5.36              | 6.63 |
| (90)A                      | 101.6                          | 102.6                                    | 230                          | 30                             | 46 | 128             | 134 | 8         | 2 | 150 | 90.2  | 185                    | 8                    | 25              | M22               | 122            | 9.5 | —              | — | 6 | 6.85              | 8.55 |
| 100A                       | 114.3                          | 115.4                                    | 240                          | 32                             | 48 | 141             | 147 | 8         | 2 | 160 | 102.3 | 195                    | 8                    | 25              | M22               | 135            | 9.5 | —              | — | 6 | 7.89              | 10.0 |
| 125A                       | 139.8                          | 141.2                                    | 275                          | 36                             | 54 | 166             | 172 | 8         | 2 | 195 | 126.6 | 230                    | 8                    | 25              | M22               | 160            | 9.5 | —              | — | 6 | 11.4              | 15.3 |
| 150A                       | 165.2                          | 166.6                                    | 325                          | 38                             | 58 | 196             | 204 | 8         | 2 | 235 | 151.0 | 275                    | 12                   | 27              | M24               | 186            | 9.5 | —              | — | 6 | 16.7              | 22.2 |
| 200A                       | 216.3                          | 218.0                                    | 370                          | 42                             | 64 | 248             | 256 | 8         | 2 | 280 | 199.9 | 320                    | 12                   | 27              | M24               | 237            | 9.5 | —              | — | 6 | 20.6              | 32.6 |
| 250A                       | 267.4                          | 269.5                                    | 450                          | 48                             | 72 | 306             | 314 | 10        | 2 | 345 | 248.8 | 390                    | 12                   | 33              | M30×3             | 290            | 10  | —              | — | 6 | 36.1              | 55.2 |
| 300A                       | 318.5                          | 321.0                                    | 515                          | 52                             | 78 | 360             | 370 | 10        | 3 | 405 | 297.9 | 450                    | 16                   | 33              | M30×3             | 345            | 12  | —              | — | 6 | 49.9              | 77.9 |
| 350A                       | 355.6                          | 358.1                                    | 560                          | 54                             | 84 | 402             | 412 | 12        | 3 | 450 | 333.4 | 495                    | 16                   | 33              | M30×3             | 383            | 13  | —              | — | 6 | 61.2              | 96.9 |
| 400A                       | 406.4                          | 409.0                                    | 630                          | 60                             | 92 | 456             | 468 | 15        | 3 | 510 | 381.0 | 560                    | 16                   | 39              | M36×3             | 435            | 14  | —              | — | 7 | 85.2              | 136  |

- ( )를 붙인 호칭 지름은 가능한 한 사용하지 않는다.
- 플랜지의 개스킷 자리는 KS B 1519에 따른다.
- d치수는 KS D 3562, KS D 3564 KS D 3570의 스케줄 40인 경우를 참고로 해서 표시한 것이다.  
다만, 호칭 지름 450 이상인 것은 관의 안지름 두께를 12.7mm로 했다.
- 볼트 및 너트의 재료와 모양에 대해서는 KS B 1511의 참고2를 참조.
- 무게 계산은 KS D 3695에 따른다.

# KSD 3578

## STANDARD KSD4308 WATER WORKS PIPE FLANGES



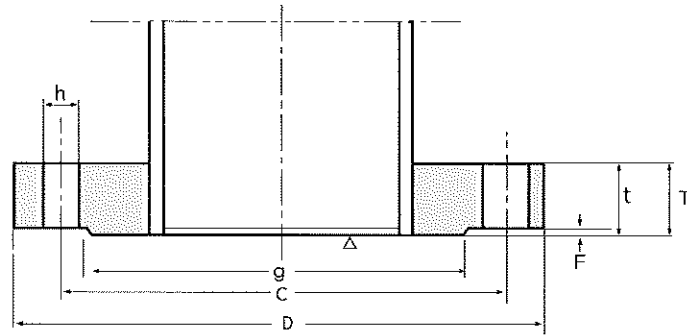
무게 : kg  
Unit : mm

| 호칭지름<br>A | 관몸체    |      | 플렌지치수 |      |      |    |   |    | 보울링 |    | 개스킷홀 |    |   | 무 게  |      |
|-----------|--------|------|-------|------|------|----|---|----|-----|----|------|----|---|------|------|
|           | D2     | t    | D5    | D4   | D3   | K  | M | 수  | 호칭  | 구멍 | G1   | e  | s | RF   | GF   |
| 80A       | 89.1   | 4.5  | 200   | 160  | 135  | 22 | 2 | 8  | M20 | 23 | 90   | 10 | 5 | 3.56 | 3.44 |
| 100A      | 114.3  | 4.9  | 225   | 185  | 160  | 22 | 2 | 8  | M20 | 23 | 115  | 10 | 5 | 4.26 | 4.11 |
| 125A      | 139.8  | 5.1  | 270   | 225  | 195  | 23 | 2 | 8  | M22 | 25 | 145  | 10 | 5 | 6.49 | 6.30 |
| 150A      | 165.2  | 5.5  | 305   | 260  | 230  | 27 | 2 | 12 | M22 | 25 | 170  | 10 | 5 | 9.27 | 9.07 |
| 200A      | 216.3  | 6.4  | 350   | 305  | 275  | 27 | 2 | 12 | M22 | 25 | 220  | 10 | 5 | 10.9 | 10.6 |
| 250A      | 267.4  | 6.4  | 430   | 380  | 345  | 28 | 2 | 12 | M24 | 27 | 275  | 10 | 5 | 17.7 | 17.3 |
| 300A      | 318.5  | 6.4  | 480   | 430  | 395  | 30 | 3 | 16 | M24 | 27 | 325  | 10 | 5 | 20.5 | 20.1 |
| 350A      | 355.6  | 6.0  | 540   | 480  | 440  | 34 | 3 | 16 | M30 | 33 | 375  | 10 | 5 | 29.5 | 29.0 |
| 400A      | 406.4  | 6.0  | 605   | 540  | 495  | 38 | 3 | 16 | M30 | 33 | 425  | 10 | 5 | 41.1 | 40.5 |
| 450A      | 457.2  | 6.0  | 675   | 605  | 560  | 40 | 3 | 20 | M30 | 33 | 475  | 10 | 5 | 53.2 | 52.6 |
| 500A      | 508.0  | 6.0  | 730   | 660  | 615  | 42 | 3 | 20 | M30 | 33 | 530  | 10 | 5 | 63.1 | 62.4 |
| 600A      | 609.6  | 6.0  | 845   | 770  | 720  | 46 | 3 | 24 | M36 | 39 | 630  | 10 | 5 | 83.8 | 83.0 |
| 700A      | 711.2  | 7.0  | 960   | 875  | 820  | 50 | 5 | 24 | M39 | 42 | 730  | 10 | 5 | 109  | 108  |
| 800A      | 812.8  | 8.0  | 1085  | 990  | 930  | 54 | 5 | 24 | M45 | 48 | 832  | 10 | 5 | 146  | 145  |
| 900A      | 914.4  | 8.0  | 1135  | 1090 | 1030 | 58 | 5 | 28 | M45 | 43 | 935  | 10 | 5 | 171  | 170  |
| 1000A     | 1016.0 | 9.0  | 1320  | 1210 | 1140 | 64 | 5 | 28 | M52 | 56 | 1032 | 16 | 8 | 235  | 231  |
| 1100A     | 1117.6 | 10.0 | 1420  | 1310 | 1240 | 67 | 5 | 32 | M52 | 56 | 1134 | 16 | 8 | 264  | 260  |
| 1200A     | 1219.2 | 11.0 | 1530  | 1420 | 1350 | 70 | 5 | 32 | M52 | 56 | 1236 | 16 | 8 | 313  | 309  |
| 1350A     | 1371.6 | 12.0 | 1700  | 1590 | 1510 | 76 | 5 | 32 | M56 | 62 | 1390 | 16 | 8 | 400  | 396  |
| 1500A     | 1524.0 | 14.0 | 1865  | 1750 | 1670 | 80 | 5 | 36 | M56 | 62 | 1544 | 16 | 8 | 485  | 480  |

1. 볼트구멍의 배치는 관의 모든 축선을 수평으로 했을 경우에 그 플렌지면의 수직 중심선에 대하여 나눈다.
2. 주문자의 특별한 지정이 없는한 RF-RF형의 조합으로 한다.
3. RF형(대형면 자리형) 플렌지의 개스킷 접촉면의 깊이 0.03~0.15mm의 톱니모양 홈을 직경 방향 10mm당 10~20개가 되도록 가공한다.

# KSD 4308

## STANDARD KSD4308 WATER WORKS PIPE FLANGES

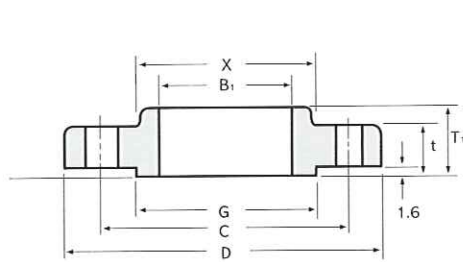


무게 : kg  
Unit : mm

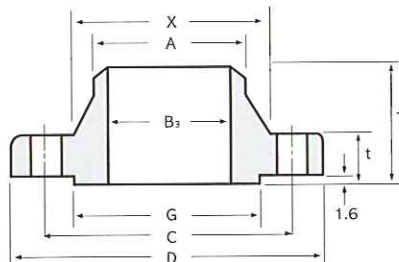
| Nominal Bore of Flange | D    | g    | T    | t    | F | C    | N  | h  | Bolt Size | Weight (kg) |
|------------------------|------|------|------|------|---|------|----|----|-----------|-------------|
| 80A                    | 200  | 133  | 19.0 | 16.0 | 3 | 160  | 4  | 19 | M16       | 3.0         |
| 100A                   | 220  | 153  | 19.0 | 16.0 | 3 | 180  | 8  | 19 | M16       | 3.3         |
| 125A                   | 250  | 183  | 19.0 | 16.0 | 3 | 210  | 8  | 19 | M16       | 4.0         |
| 150A                   | 285  | 209  | 19.0 | 16.0 | 3 | 240  | 8  | 23 | M20       | 4.9         |
| 200A                   | 340  | 264  | 20.0 | 17.0 | 3 | 295  | 8  | 23 | M20       | 6.8         |
| 250A                   | 400  | 319  | 22.0 | 19.0 | 3 | 350  | 12 | 23 | M20       | 9.6         |
| 300A                   | 455  | 367  | 24.5 | 20.5 | 4 | 400  | 12 | 23 | M20       | 12.8        |
| 350A                   | 505  | 427  | 24.5 | 20.5 | 4 | 460  | 16 | 23 | M20       | 14.1        |
| 400A                   | 565  | 477  | 24.5 | 20.5 | 4 | 515  | 16 | 28 | M24       | 16.3        |
| 450A                   | 615  | 527  | 25.5 | 21.5 | 4 | 565  | 20 | 28 | M24       | 18.1        |
| 500A                   | 670  | 582  | 26.5 | 22.5 | 4 | 620  | 20 | 28 | M24       | 21.8        |
| 600A                   | 780  | 682  | 30.0 | 25.0 | 5 | 725  | 20 | 31 | M27       | 30.8        |
| 700A                   | 895  | 797  | 32.5 | 27.5 | 5 | 840  | 24 | 31 | M27       | 40.5        |
| 800A                   | 1015 | 904  | 35.0 | 30.0 | 5 | 950  | 24 | 34 | M30       | 54.8        |
| 900A                   | 1115 | 1004 | 37.5 | 32.5 | 5 | 1050 | 28 | 34 | M30       | 64.3        |
| 1000A                  | 1230 | 1111 | 40.0 | 35.0 | 5 | 1160 | 28 | 37 | M33       | 81.4        |
| 1100A                  | 1340 | 1218 | 42.5 | 37.5 | 5 | 1270 | 32 | 37 | M33       | 105.0       |
| 1200A                  | 1455 | 1328 | 45.0 | 40.0 | 5 | 1380 | 32 | 40 | M36       | 120.9       |

# CLASS 150-300 FLANGES

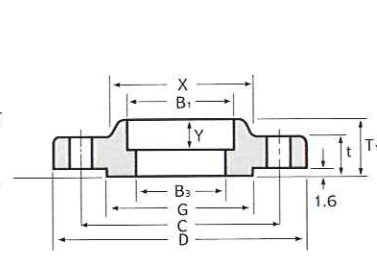
JPI 7S-15-84 &amp; ANSI B 16.5



SLIP-ON



WELDING NECK



SOCKET WELDING

## Class 150

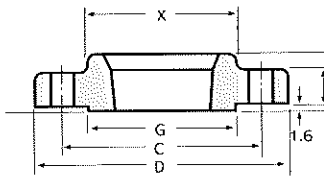
Unit : mm

| Nominal<br>Pipe<br>Size |         | Outside<br>Dia. of<br>Flanges | Dia of Bore                       |       |                             |       |                        |       |        |       |       |        | Dia.of Hub<br>at Bevel<br>A |       | Dia.of<br>Hub at<br>Base | Dia. of<br>Hub at<br>Face | Thick<br>of<br>Flanges | Radius<br>of<br>Fillet |
|-------------------------|---------|-------------------------------|-----------------------------------|-------|-----------------------------|-------|------------------------|-------|--------|-------|-------|--------|-----------------------------|-------|--------------------------|---------------------------|------------------------|------------------------|
|                         |         |                               | Slip-on<br>Socket, B <sub>1</sub> |       | Lap-Joint<br>B <sub>2</sub> |       | Welding-Neck, Socket B |       |        |       |       |        |                             |       |                          |                           |                        |                        |
|                         |         |                               |                                   |       |                             |       | JPI                    |       |        | ANSI  |       |        |                             |       |                          |                           |                        |                        |
| A                       | B       | D                             | JPI                               | ANSI  | JPI                         | ANSI  | SCH40                  | SCH80 | SCH160 | SCH40 | SCH80 | SCH160 | JPI                         | ANSI  | X                        | G                         | t                      | R                      |
| 15                      | 1/2     | 89                            | 22.2                              | 22.4  | 23.4                        | 22.9  | 16.1                   | 14.3  | 12.3   | 15.8  | 13.9  | 11.8   | 21.7                        | 21.3  | 30.2                     | 35.1                      | 11.2                   | 3                      |
| 20                      | 3/4     | 98                            | 27.7                              | 27.7  | 28.9                        | 28.2  | 21.4                   | 19.4  | 16.2   | 20.9  | 18.8  | 15.6   | 27.2                        | 26.7  | 38.1                     | 42.9                      | 12.7                   | 3                      |
| 25                      | 1       | 108                           | 34.5                              | 34.6  | 35.6                        | 35.1  | 27.2                   | 25.0  | 21.2   | 26.6  | 24.3  | 20.7   | 34.0                        | 33.5  | 49.3                     | 50.8                      | 14.3                   | 3                      |
| (32)                    | (11/4)  | 117                           | 43.2                              | 43.2  | 44.3                        | 43.7  | 35.5                   | 32.9  | 29.9   | 35.1  | 32.5  | 29.5   | 42.7                        | 42.2  | 58.7                     | 63.5                      | 15.9                   | 5                      |
| 40                      | 1 1/2   | 127                           | 49.1                              | 49.6  | 50.4                        | 50.0  | 41.2                   | 38.4  | 34.4   | 40.9  | 38.1  | 34.0   | 48.6                        | 48.3  | 65.0                     | 73.2                      | 17.5                   | 6                      |
| 50                      | 2       | 152                           | 61.1                              | 62.0  | 62.7                        | 62.5  | 52.7                   | 49.5  | 43.1   | 52.5  | 49.3  | 42.9   | 60.5                        | 60.5  | 77.8                     | 91.9                      | 19.1                   | 8                      |
| 65                      | 2 1/2   | 178                           | 77.1                              | 74.7  | 78.7                        | 75.5  | 65.9                   | 62.3  | 57.3   | 62.7  | 59.0  | 54.0   | 76.3                        | 73.2  | 90.4                     | 104.6                     | 22.3                   | 8                      |
| 80                      | 3       | 191                           | 90.0                              | 90.7  | 91.6                        | 91.4  | 78.1                   | 73.9  | 66.9   | 77.9  | 73.7  | 66.7   | 89.1                        | 88.9  | 108.0                    | 127.0                     | 23.9                   | 10                     |
| (90)                    | (3 1/2) | 216                           | 102.6                             | 103.4 | 104.1                       | 104.2 | 90.2                   | 85.4  | 76.2   | 90.1  | 85.5  | —      | 101.6                       | 101.6 | 122.2                    | 139.7                     | 23.9                   | 10                     |
| 100                     | 4       | 229                           | 115.4                             | 116.1 | 116.9                       | 116.9 | 102.3                  | 97.1  | 87.3   | 102.3 | 97.2  | 87.3   | 114.3                       | 114.3 | 134.9                    | 157.2                     | 23.9                   | 11                     |
| (125)                   | (5)     | 254                           | 141.2                             | 143.8 | 143.0                       | 144.6 | 126.6                  | 120.8 | 108.0  | 128.2 | 122.3 | 109.6  | 139.8                       | 141.2 | 163.6                    | 185.7                     | 23.9                   | 11                     |
| 150                     | 6       | 279                           | 166.6                             | 170.7 | 168.4                       | 171.5 | 151.0                  | 143.2 | 128.8  | 154.1 | 146.3 | 131.8  | 165.2                       | 168.4 | 192.1                    | 215.9                     | 25.4                   | 13                     |
| 200                     | 8       | 343                           | 218.0                             | 221.5 | 219.5                       | 222.3 | 199.9                  | 190.9 | 170.3  | 202.7 | 193.7 | 173.1  | 216.3                       | 219.2 | 246.1                    | 269.7                     | 28.6                   | 13                     |
| 250                     | 10      | 406                           | 269.5                             | 276.4 | 271.7                       | 277.4 | 248.8                  | 237.2 | 210.2  | 254.4 | 242.9 | 215.9  | 267.4                       | 273.1 | 304.8                    | 323.9                     | 30.2                   | 13                     |
| 300                     | 12      | 483                           | 321.0                             | 327.2 | 322.8                       | 328.2 | 297.9                  | 283.7 | 251.9  | 303.2 | 288.9 | 257.2  | 318.5                       | 323.9 | 365.1                    | 381.0                     | 31.8                   | 13                     |
| 350                     | 14      | 533                           | 358.1                             | 359.2 | —                           | 360.2 | 333.4                  | 317.6 | 284.2  | 333.3 | 317.5 | 284.2  | 355.6                       | 355.6 | 400.1                    | 412.8                     | 35.0                   | 13                     |
| 400                     | 16      | 597                           | 409.0                             | 410.5 | —                           | 411.3 | 381.0                  | 363.6 | 325.4  | 381.0 | 363.6 | 325.5  | 406.4                       | 406.4 | 457.2                    | 469.9                     | 36.6                   | 13                     |
| 450                     | 18      | 635                           | 460.0                             | 461.8 | —                           | 462.4 | 428.6                  | 409.6 | 366.8  | 428.7 | 409.6 | 366.7  | 457.2                       | 457.2 | 504.8                    | 533.4                     | 39.7                   | 13                     |
| 500                     | 20      | 699                           | 511.0                             | 513.1 | —                           | 514.4 | 477.8                  | 455.6 | 408.0  | 477.8 | 455.6 | 408.0  | 508.0                       | 508.0 | 558.8                    | 584.2                     | 42.9                   | 13                     |
| 600                     | 24      | 815                           | 613.0                             | 616.0 | —                           | 616.0 | 574.6                  | 547.8 | 490.6  | 574.7 | 547.7 | 490.6  | 609.6                       | 609.6 | 663.6                    | 692.2                     | 47.7                   | 13                     |

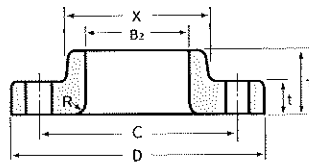
## Class 300

Unit : mm

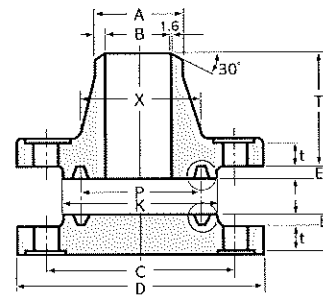
| Nominal<br>Pipe<br>Size |         | Outside<br>Dia. of<br>Flanges | Dia of Bore                       |       |                             |       |                        |       |        |       |       |        | Dia.of Hub<br>at Bevel<br>A |       | Dia.of<br>Hub at<br>Base | Dia. of<br>Hub at<br>Face | Thick<br>of<br>Flanges | Radius<br>of<br>Fillet |
|-------------------------|---------|-------------------------------|-----------------------------------|-------|-----------------------------|-------|------------------------|-------|--------|-------|-------|--------|-----------------------------|-------|--------------------------|---------------------------|------------------------|------------------------|
|                         |         |                               | Slip-on<br>Socket, B <sub>1</sub> |       | Lap-Joint<br>B <sub>2</sub> |       | Welding-Neck, Socket B |       |        |       |       |        |                             |       |                          |                           |                        |                        |
|                         |         |                               |                                   |       |                             |       | JPI                    |       |        | ANSI  |       |        |                             |       |                          |                           |                        |                        |
| A                       | B       | D                             | JPI                               | ANSI  | JPI                         | ANSI  | SCH40                  | SCH80 | SCH160 | SCH40 | SCH80 | SCH160 | JPI                         | ANSI  | X                        | G                         | t                      | R                      |
| 15                      | 1/2     | 95                            | 22.2                              | 22.4  | 23.4                        | 22.9  | 16.1                   | 14.3  | 12.3   | 15.8  | 13.9  | 11.8   | 21.7                        | 21.3  | 38.1                     | 35.1                      | 14.3                   | 3                      |
| 20                      | 3/4     | 117                           | 27.7                              | 27.7  | 28.9                        | 28.2  | 21.4                   | 19.4  | 16.2   | 20.9  | 18.8  | 15.6   | 27.2                        | 26.7  | 47.6                     | 42.9                      | 15.9                   | 3                      |
| 25                      | 1       | 124                           | 34.5                              | 34.6  | 35.6                        | 35.1  | 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                              | 43.2  | 44.3                        | 43.7  | 35.5                   | 32.9  | 29.9   | 35.1  | 32.5  | 29.5   | 42.7                        | 42.2  | 63.5                     | 63.5                      | 19.1                   | 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                     | 73.2                      | 20.6                   | 6                      |
| 50                      | 2       | 165                           | 61.1                              | 62.0  | 62.7                        | 62.5  | 52.7                   | 49.5  | 43.1   | 52.5  | 49.3  | 42.9   | 60.5                        | 60.5  | 84.1                     | 91.9                      | 22.4                   | 8                      |
| 65                      | 2 1/2   | 191                           | 77.1                              | 74.7  | 78.7                        | 75.5  | 65.9                   | 62.3  | 57.3   | 62.7  | 59.0  | 54.0   | 76.3                        | 73.2  | 100.0                    | 104.6                     | 25.4                   | 8                      |
| 80                      | 3       | 210                           | 90.0                              | 90.7  | 91.6                        | 91.4  | 78.1                   | 73.9  | 66.9   | 77.9  | 73.7  | 66.7   | 89.1                        | 88.9  | 117.5                    | 127.0                     | 28.6                   | 10                     |
| (90)                    | (3 1/2) | 229                           | 102.6                             | 103.4 | 104.1                       | 104.2 | 90.2                   | 85.4  | 76.2   | 90.1  | 85.5  | —      | 101.6                       | 101.6 | 133.4                    | 139.7                     | 30.2                   | 10                     |
| 100                     | 4       | 254                           | 115.4                             | 116.1 | 116.9                       | 116.9 | 102.3                  | 97.1  | 87.3   | 102.3 | 97.2  | 87.3   | 114.3                       | 114.2 | 146.1                    | 157.2                     | 31.8                   | 11                     |
| (125)                   | (5)     | 279                           | 141.2                             | 143.8 | 143.0                       | 144.6 | 126.6                  | 120.8 | 108.0  | 128.2 | 122.3 | 109.6  | 139.8                       | 141.2 | 177.8                    | 185.7                     | 35.1                   | 11                     |
| 150                     | 6       | 318                           | 166.6                             | 170.7 | 168.4                       | 171.5 | 151.0                  | 143.2 | 128.8  | 154.1 | 146.3 | 131.8  | 165.2                       | 168.4 | 206.4                    | 215.9                     | 36.6                   | 13                     |
| 200                     | 8       | 381                           | 218.0                             | 221.5 | 219.5                       | 222.3 | 199.9                  | 190.9 | 170.3  | 202.7 | 193.7 | 173.1  | 216.3                       | 219.2 | 260.4                    | 269.7                     | 41.3                   | 13                     |
| 250                     | 10      | 445                           | 269.5                             | 276.4 | 271.7                       | 277.4 | 248.8                  | 237.2 | 210.2  | 254.4 | 242.9 | 215.9  | 267.4                       | 273.1 | 320.7                    | 323.9                     | 47.8                   | 13                     |
| 300                     | 12      | 521                           | 321.0                             | 327.2 | 322.8                       | 328.2 | 297.9                  | 283.7 | 251.9  | 303.2 | 288.9 | 257.2  | 318.5                       | 323.9 | 374.7                    | 381.0                     | 50.8                   | 13                     |
| 350                     | 14      | 584                           | 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                             | 410.5 | —                           | 411.3 | 381.0                  | 363.6 | 325.4  | 381.0 | 363.6 | 325.5  | 406.4                       | 406.4 | 482.6                    | 469.9                     | 57.2                   | 13                     |
| 450                     | 18      | 710                           | 460.0                             | 461.8 | —                           | 462.4 | 428.6                  | 409.6 | 366.8  | 428.7 | 409.6 | 366.7  | 457.2                       | 457.2 | 533.4                    | 533.4                     | 60.4                   | 13                     |
| 500                     | 20      | 775                           | 511.0                             | 513.1 | —                           | 514.4 | 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      | 914                           | 613.0                             | 616.9 | —                           | 616.0 | 574.6                  | 547.8 | 490.6  | 574.7 | 547.7 | 490.6  | 609.6                       | 609.6 | 701.7                    | 692.2                     | 69.9                   | 13                     |



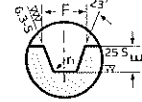
THREADED



LAP JOINT



RING JOINT



## Class 150

Unit : mm

| Length thru Hub       |                            |                         | Depth of Socket      | Drilling                |                |                   | Dia. of Raised Face for Ring Joint | Pitch Dia. of Ring & Groove | Ring No.          | RTJ Type             |                      |                   | Approx. Weight(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      | Width of Groove      | Radius of Groove  | W.N                  | S.O                  | S.W                     | B.L                  | A                   | B                     |
| T <sub>1</sub>        | T <sub>2</sub>             | T                       | Y                    | C                       | N              | h                 | K(min)                             | P                           |                   | E                    | F                    | r <sub>1</sub>    |                      |                      |                         |                      |                     |                       |
| 15.9<br>15.9<br>17.5  | 15.9<br>15.9<br>17.5       | 47.6<br>52.4<br>55.6    | 9.5<br>11.1<br>12.7  | 60.5<br>70.0<br>79.5    | 4<br>4<br>4    | 16<br>16<br>16    | —<br>—<br>63.5                     | —<br>—<br>47.62             | —<br>—<br>R15     | —<br>—<br>6.35       | —<br>—<br>8.74       | —<br>—<br>0.8     | 0.50<br>0.75<br>1.02 | 0.41<br>0.57<br>0.78 | 0.42<br>0.58<br>0.80    | 0.43<br>0.62<br>0.87 | 15<br>20<br>25      | 1/2<br>3/4<br>1       |
| 20.6<br>22.2<br>25.4  | 20.6<br>22.2<br>25.4       | 57.1<br>61.9<br>63.5    | 14.3<br>15.9<br>17.5 | 89.0<br>98.5<br>120.5   | 4<br>4<br>4    | 16<br>16<br>19    | 73.0<br>82.5<br>102                | 57.15<br>69.07<br>82.55     | R17<br>R19<br>R22 | 6.35<br>6.35<br>6.35 | 8.74<br>8.74<br>8.74 | 0.8<br>0.8<br>0.8 | 1.33<br>1.72<br>2.59 | 1.03<br>1.32<br>2.09 | 1.06<br>1.35<br>2.13    | 1.16<br>1.54<br>2.46 | (32)<br>40<br>50    | (1 1/4)<br>1 1/2<br>2 |
| 28.6<br>30.2<br>31.8  | 28.6<br>30.2<br>31.8       | 69.8<br>69.8<br>71.4    | 19.0<br>20.6<br>22.2 | 139.5<br>152.5<br>178.0 | 4<br>4<br>8    | 19<br>19<br>19    | 121<br>133<br>154                  | 101.60<br>114.30<br>131.78  | R25<br>R29<br>R33 | 6.35<br>6.35<br>6.35 | 8.74<br>8.74<br>8.74 | 0.8<br>0.8<br>0.8 | 4.06<br>4.95<br>6.08 | 3.25<br>3.91<br>4.86 | 3.35<br>4.02<br>4.99    | 3.99<br>4.98<br>6.20 | 65<br>80<br>(90)    | 2 1/2<br>3<br>(3 1/2) |
| 33.3<br>36.5<br>39.7  | 33.3<br>36.5<br>39.7       | 76.2<br>88.9<br>88.9    | 23.8<br>23.8<br>27.0 | 190.5<br>216.0<br>241.5 | 8<br>8<br>8    | 19<br>22<br>22    | 171<br>194<br>219                  | 149.22<br>171.45<br>193.68  | R36<br>R40<br>R43 | 6.35<br>6.35<br>6.35 | 8.74<br>8.74<br>8.74 | 0.8<br>0.8<br>0.8 | 6.91<br>8.75<br>10.8 | 5.35<br>6.22<br>7.76 | 5.99<br>6.68<br>7.99    | 7.05<br>8.67<br>11.3 | 100<br>(125)<br>150 | 4<br>(5)<br>6         |
| 44.5<br>49.2<br>55.6  | 44.5<br>49.2<br>55.6       | 101.6<br>101.6<br>114.3 | 31.8<br>33.3<br>39.7 | 298.5<br>362.0<br>432.0 | 8<br>12<br>12  | 22<br>25<br>25    | 273<br>330<br>406                  | 247.65<br>304.80<br>381.00  | R48<br>R52<br>R56 | 6.35<br>6.35<br>6.35 | 8.74<br>8.74<br>8.74 | 0.8<br>0.8<br>0.8 | 18.0<br>24.9<br>38.6 | 12.6<br>17.6<br>27.8 | 13.29<br>19.50<br>29.03 | 19.9<br>29.0<br>43.7 | 200<br>250<br>300   | 8<br>10<br>12         |
| 57.2<br>63.5<br>68.3  | * 79.3<br>* 87.4<br>* 96.8 | 127.0<br>127.0<br>139.7 | 41.3<br>44.5<br>49.2 | 476.0<br>539.5<br>578.0 | 12<br>16<br>16 | 29<br>29<br>32    | 425<br>483<br>546                  | 396.88<br>454.02<br>517.52  | R59<br>R64<br>R68 | 6.35<br>6.35<br>6.35 | 8.74<br>8.74<br>8.74 | 0.8<br>0.8<br>0.8 | 50.6<br>63.9<br>74.9 | 35.2<br>45.3<br>49.7 | 38.56<br>44.49<br>54.43 | 58.6<br>76.6<br>94.5 | 350<br>400<br>450   | 14<br>16<br>18        |
| 73.0<br>82.6          | * 103.1<br>* 111.3         | 144.5<br>152.4          | 54.0<br>63.5         | 635.0<br>749.5          | 20<br>20       | 32<br>35          | 597<br>711                         | 558.80<br>673.10            | R72<br>R76        | 6.35<br>6.35         | 8.74<br>8.74         | 0.8<br>0.8        | 93.5<br>133          | 63.5<br>90.5         | 70.31<br>95.25          | 123<br>188           | 500<br>600          | 20<br>24              |

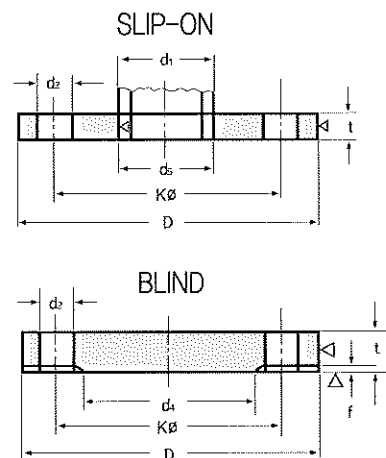
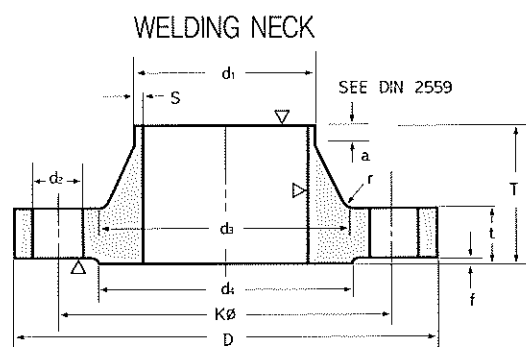
## Class 300

Unit : mm

| Length thru Hub       |                               |                         | Depth of Socket      | Drilling                |                |                   | Dia. of Raised Face for Ring Joint | Pitch Dia. of Ring & Groove | Ring No.          | RTJ Type             |                         |                   | Approx. Weight(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      | Width of Groove         | Radius of Groove  | W.N                  | S.O                  | S.W                  | B.L                  | A                   | B                     |
| T <sub>1</sub>        | T <sub>2</sub>                | T                       | Y                    | C                       | N              | h                 | K(min)                             | P                           |                   | E                    | F                       | r <sub>1</sub>    |                      |                      |                      |                      |                     |                       |
| 22.2<br>25.4<br>27.0  | 22.2<br>25.4<br>27.0          | 52.4<br>57.2<br>61.9    | 9.7<br>11.2<br>12.7  | 66.5<br>82.6<br>88.9    | 4<br>4<br>4    | 16<br>19<br>19    | 51.0<br>63.5<br>70.0               | 34.14<br>42.88<br>50.80     | R11<br>R13<br>R16 | 5.56<br>6.35<br>6.35 | 7.14<br>8.74<br>8.74    | 0.8<br>0.8<br>0.8 | 0.80<br>1.25<br>1.58 | 0.65<br>1.10<br>1.35 | 0.67<br>1.12<br>1.39 | 0.65<br>1.09<br>1.38 | 15<br>20<br>25      | 1/2<br>3/4<br>1       |
| 27.0<br>30.2<br>33.3  | 27.0<br>30.2<br>33.3          | 65.1<br>68.3<br>69.8    | 14.2<br>15.8<br>17.5 | 98.6<br>114.3<br>127.0  | 4<br>4<br>8    | 19<br>22<br>19    | 79.5<br>90.5<br>108                | 60.32<br>68.28<br>82.55     | R18<br>R20<br>R23 | 6.35<br>6.35<br>7.92 | 8.74<br>8.74<br>11.91   | 0.8<br>0.8<br>0.8 | 2.05<br>2.93<br>3.40 | 1.69<br>2.54<br>2.92 | 1.74<br>2.60<br>3.02 | 1.82<br>2.70<br>3.18 | (32)<br>40<br>50    | (1 1/4)<br>1 1/2<br>2 |
| 38.1<br>42.9<br>44.5  | 38.1<br>43.9<br>44.5          | 76.2<br>79.4<br>81.0    | 19.1<br>20.6<br>22.4 | 149.4<br>168.1<br>184.2 | 8<br>8<br>8    | 22<br>22<br>22    | 127<br>146<br>159                  | 101.60<br>123.82<br>131.78  | R26<br>R31<br>R34 | 7.92<br>7.92<br>7.92 | 11.91<br>11.91<br>11.91 | 0.8<br>0.8<br>0.8 | 5.10<br>7.01<br>8.71 | 4.24<br>5.94<br>7.90 | 4.43<br>6.21<br>—    | 4.86<br>6.90<br>8.79 | 65<br>80<br>(90)    | 2 1/2<br>3<br>(3 1/2) |
| 47.6<br>50.8<br>52.4  | 47.6<br>50.8<br>52.4          | 85.7<br>98.4<br>98.4    | 23.9<br>23.9<br>26.9 | 200.2<br>235.0<br>269.7 | 8<br>8<br>12   | 22<br>22<br>22    | 175<br>210<br>241                  | 149.22<br>180.98<br>211.12  | R37<br>R41<br>R45 | 7.92<br>7.92<br>7.92 | 11.91<br>11.91<br>11.91 | 0.8<br>0.8<br>0.8 | 11.3<br>15.1<br>19.6 | 9.71<br>12.4<br>16.2 | —<br>—<br>—          | 11.6<br>15.5<br>21.2 | 100<br>(125)<br>150 | 4<br>(5)<br>6         |
| 61.9<br>66.7<br>73.0  | 61.9<br>95.3<br>101.6         | 111.1<br>117.5<br>130.2 | 31.8<br>33.3<br>39.6 | 330.2<br>387.3<br>450.9 | 12<br>16<br>16 | 26<br>29<br>32    | 302<br>356<br>413                  | 269.88<br>323.85<br>381.004 | R49<br>R53<br>R57 | 7.92<br>7.92<br>7.92 | 11.91<br>11.91<br>11.91 | 0.8<br>0.8<br>0.8 | 30.3<br>44.3<br>64.1 | 24.8<br>35.9<br>51   | —<br>—<br>—          | 34.5<br>53.9<br>78.9 | 200<br>250<br>300   | 8<br>10<br>12         |
| 76.2<br>82.6<br>89.9  | * 111.3<br>* 120.7<br>* 130.0 | 142.9<br>146.0<br>158.8 | 41.4<br>44.5<br>49.3 | 514.4<br>571.5<br>628.7 | 20<br>20<br>24 | 32<br>35<br>35    | 457<br>508<br>575                  | 419.10<br>469.90<br>533.40  | R61<br>R65<br>R69 | 7.92<br>7.92<br>7.92 | 11.91<br>11.91<br>11.91 | 0.8<br>0.8<br>0.8 | 88.3<br>113<br>138   | 70.1<br>90.4<br>109  | —<br>—<br>—          | 106<br>139<br>175    | 350<br>400<br>450   | 14<br>16<br>18        |
| 95.2<br>106.4         | * 139.7<br>* 152.4            | 161.9<br>168.3          | 54.1<br>63.5         | 635.8<br>812.8          | 24<br>24       | 35<br>42          | 635<br>749                         | 584.20<br>692.15            | R73<br>R77        | 9.52<br>11.13        | 13.49<br>16.66          | 1.5<br>1.5        | 169<br>248           | 136<br>204           | —<br>—               | 222<br>340           | 500<br>600          | 20<br>24              |

# 6BAR

DIN 2573 SLIP-ON FLANGES    DIN 2527 BLIND FLANGES  
DIN 2631 WELDING NECK FLANGES



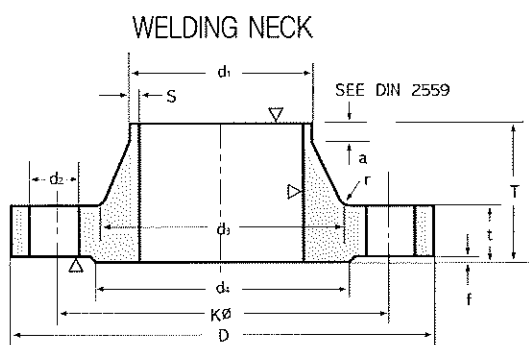
Unit : mm

| Bore         |                | Common Dimention |              |         |       |      |    | Welding Neck   |     |    |    | Raised Face    |   | Drilling       |              |                | Approx. Weight(kg) |          |
|--------------|----------------|------------------|--------------|---------|-------|------|----|----------------|-----|----|----|----------------|---|----------------|--------------|----------------|--------------------|----------|
| Nominal Bore | d <sub>1</sub> | D                | Welding Neck | Slip-on | Blind | k    | T  | d <sub>3</sub> | s   | r  | a  | d <sub>4</sub> | f | Number of Bolt | Dia. of Bolt | d <sub>2</sub> | DIN 2573           | DIN 2631 |
| 10A          | 14<br>17.2")   | 75               | 12           | 12      | 12    | 50   | 28 | 22<br>26       | 1.8 | 4  | 6  | 35             | 2 | 4              | M10          | —              | 0.360              | 0.335    |
| 15A          | 20<br>21.3")   | 80               | 12           | 12      | 12    | 55   | 30 | 28<br>30       | 2.0 | 4  | 6  | 40             | 2 | 4              | M10          | —              | 0.410              | 0.392    |
| 20A          | 25<br>26.9")   | 90               | 14           | 14      | 14    | 65   | 32 | 35<br>38       | 2.3 | 4  | 6  | 50             | 2 | 4              | M10          | —              | 0.600              | 0.592    |
| 25A          | 30<br>33.7")   | 100              | 14           | 14      | 14    | 75   | 35 | 40<br>42       | 2.6 | 4  | 6  | 60             | 2 | 4              | M10          | —              | 0.740              | 0.747    |
| 32A          | 38<br>42.4")   | 120              | 14           | 16      | 14    | 90   | 35 | 50<br>55       | 2.6 | 6  | 6  | 70             | 2 | 4              | M12 (1/2")   | 14             | 1.19               | 1.05     |
| 40A          | 44.5<br>48.3") | 130              | 14           | 16      | 14    | 100  | 38 | 58<br>62       | 2.6 | 6  | 7  | 80             | 3 | 4              | M12 (1/2")   | 14             | 1.39               | 1.18     |
| 50A          | 57<br>60.3")   | 140              | 14           | 16      | 14    | 110  | 38 | 70<br>74       | 2.9 | 6  | 8  | 90             | 3 | 4              | M12 (1/2")   | 14             | 1.35               | 1.34     |
| 65A          | 76.1")         | 160              | 14           | 16      | 14    | 130  | 38 | 88             | 2.9 | 6  | 9  | 110            | 3 | 4              | M12 (1/2")   | 14             | 1.89               | 1.67     |
| 80A          | 88.9")         | 190              | 16           | 18      | 16    | 150  | 42 | 102            | 3.2 | 8  | 10 | 128            | 3 | 4              | M16 (5/8")   | 18             | 2.98               | 2.71     |
| 100A         | 108<br>114.3") | 210              | 16           | 18      | 16    | 170  | 45 | 122<br>130     | 3.6 | 8  | 10 | 148            | 3 | 4              | M16 (5/8")   | 18             | 3.46               | 3.24     |
| 125A         | 133<br>139.7") | 240              | 18           | 20      | 18    | 200  | 48 | 148<br>155     | 4.0 | 8  | 10 | 178            | 3 | 8              | M16 (5/8")   | 18             | 4.60               | 4.49     |
| 150A         | 159<br>168.3") | 265              | 18           | 20      | 18    | 225  | 48 | 172<br>184     | 4.5 | 10 | 12 | 202            | 3 | 8              | M16 (5/8")   | 18             | 5.22               | 5.15     |
| 200A         | 216<br>219.1") | 320              | 20           | 22      | 20    | 280  | 55 | 230<br>236     | 5.9 | 10 | 15 | 258            | 3 | 8              | M16 (5/8")   | 18             | 7.15               | 7.78     |
| 250A         | 267<br>273")   | 375              | 22           | 24      | 22    | 335  | 60 | 282<br>290     | 6.2 | 12 | 15 | 312            | 3 | 12             | M16 (5/8")   | 18             | 9.61               | 10.8     |
| 300A         | 318<br>323.9") | 440              | 22           | 24      | 22    | 395  | 62 | 335<br>342     | 7.1 | 12 | 15 | 365            | 4 | 12             | M20 (3/4")   | 23             | 12.6               | 14.0     |
| 350A         | 355.6*<br>368) | 490              | 22           | 26      | 22    | 445  | 62 | 385            | 7.1 | 12 | 15 | 415            | 4 | 12             | M20 (3/4")   | 23             | 15.6               | 16.1     |
| 400A         | 406.4*<br>419) | 540              | 22           | 28      | 22    | 495  | 65 | 438            | 7.1 | 12 | 15 | 455            | 4 | 16             | M20 (3/4")   | 23             | 18.4               | 18.3     |
| 500A         | 508*<br>521)   | 645              | 24           | 30      | 24    | 600  | 68 | 538            | 7.1 | 12 | 15 | 570            | 4 | 20             | M20 (3/4")   | 23             | 24.5               | 24.6     |
| 600A         | 609.6*<br>622) | 755              | 24           |         |       | 705  | 70 | 640            | 7.1 | 12 | 16 | 670            | 5 | 20             | M24 (7/8")   | 27             |                    |          |
| 700A         | 711.2*<br>720) | 860              | 24           |         |       | 810  | 70 | 740            | 7.1 | 12 | 16 | 775            | 5 | 24             | M24 (7/8")   | 27             |                    |          |
| 800A         | 812.8*<br>820) | 975              | 24           |         |       | 920  | 70 | 842            | 7.1 | 12 | 16 | 880            | 5 | 24             | M27 (1")     | 30             |                    |          |
| 900A         | 914.4*<br>920) | 1075             | 26           |         |       | 1020 | 70 | 942            | 7.1 | 12 | 16 | 980            | 5 | 24             | M27 (1")     | 30             |                    |          |
| 1000A        | 1016*<br>1020) | 1175             | 26           |         |       | 1120 | 70 | 1045           | 7.1 | 16 | 16 | 1080           | 5 | 28             | M27 (1")     | 30             |                    |          |

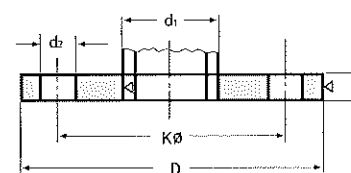
Note : \*Out side diameter of pipe complied with ISO recommendation R64

# 10BAR

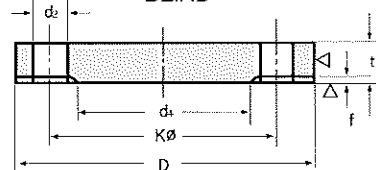
DIN 2576 SLIP-ON FLANGES DIN 2527 BLIND FLANGES  
DIN 2632 WELDING NECK FLANGES



SLIP-ON



BLIND



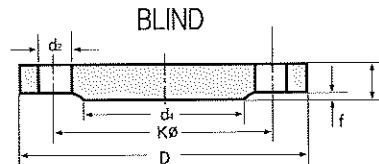
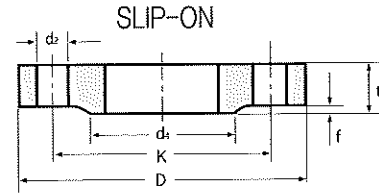
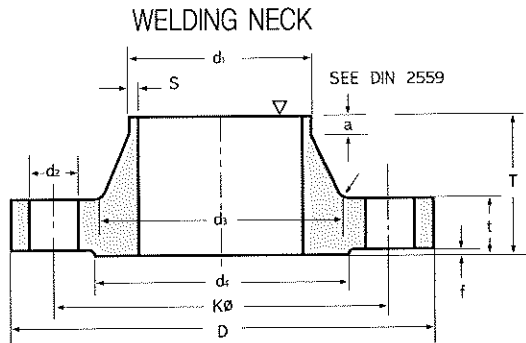
Unit : mm

| Bore         |                 | Common Dimension |    |    |    |      |    | Welding Neck   |      |    |    | Raised Face    |   | Drilling       |              |          |                | Approx. Weight(kg) |          |
|--------------|-----------------|------------------|----|----|----|------|----|----------------|------|----|----|----------------|---|----------------|--------------|----------|----------------|--------------------|----------|
| Nominal Bore | d <sub>1</sub>  | D                | t  |    |    | K    | T  | d <sub>3</sub> | s    | r  | a  | d <sub>4</sub> | f | Number of Bolt | Dia. of Bolt |          | d <sub>2</sub> | DIN 2576           | DIN 2632 |
| 10A          | 14<br>(17.2")   | 90               | 14 | 14 | 14 | 60   | 35 | 25<br>28       | 1.8  | 4  | 6  | 40             | 2 | 4              | M12          | (1/2")   | 14             | 0.163              | 0.580    |
| 15A          | 20<br>(21.3")   | 95               | 14 | 14 | 14 | 65   | 35 | 30<br>32       | 2.0  | 4  | 6  | 45             | 2 | 4              | M12          | (1/2")   | 14             | 0.675              | 0.648    |
| 20A          | 25<br>(26.9")   | 105              | 16 | 16 | 16 | 75   | 38 | 38<br>40       | 2.3  | 4  | 6  | 58             | 2 | 4              | M12          | (1/2")   | 14             | 0.947              | 0.952    |
| 25A          | 30<br>(33.7")   | 115              | 16 | 16 | 16 | 85   | 38 | 42<br>45       | 2.6  | 4  | 6  | 68             | 2 | 4              | M12          | (1/2")   | 14             | 1.14               | 1.14     |
| 32A          | 38<br>(42.4")   | 140              | 16 | 16 | 16 | 100  | 40 | 52<br>56       | 2.6  | 6  | 6  | 78             | 2 | 4              | M16          | (5/8")   | 18             | 1.66               | 1.69     |
| 40A          | 44.5<br>(48.3") | 150              | 16 | 16 | 16 | 110  | 42 | 60<br>64       | 2.6  | 6  | 7  | 88             | 3 | 4              | M16          | (5/8")   | 18             | 1.89               | 1.86     |
| 50A          | 57<br>(6.03")   | 165              | 18 | 18 | 18 | 125  | 45 | 72<br>75       | 2.9  | 6  | 8  | 102            | 3 | 4              | M16          | (5/8")   | 18             | 2.51               | 2.53     |
| 65A          | 76.1")          | 185              | 18 | 18 | 18 | 145  | 45 | 90             | 2.9  | 6  | 10 | 122            | 3 | 4              | M16          | (5/8")   | 18             | 3.00               | 3.06     |
| 80A          | 88.9")          | 200              | 20 | 20 | 20 | 160  | 50 | 105            | 3.2  | 8  | 10 | 138            | 3 | 4              | M16          | (5/8")   | 18             | 3.79               | 3.70     |
| 100A         | 108<br>(114.3") | 220              | 20 | 20 | 20 | 180  | 52 | 125<br>131     | 3.6  | 8  | 12 | 158            | 3 | 8              | M16          | (5/8")   | 18             | 4.20               | 4.62     |
| 125A         | 133<br>(139.7") | 250              | 22 | 22 | 22 | 210  | 55 | 150<br>156     | 4.0  | 8  | 12 | 188            | 3 | 8              | M16          | (5/8")   | 18             | 5.71               | 6.30     |
| 150A         | 159<br>(168.3") | 285              | 22 | 22 | 22 | 240  | 55 | 175<br>184     | 4.5  | 10 | 12 | 212            | 3 | 8              | M20          | (3/4")   | 23             | 6.72               | 7.75     |
| 200A         | 216<br>(219.1") | 340              | 24 | 24 | 24 | 295  | 62 | 232<br>235     | 5.9  | 10 | 16 | 268            | 3 | 8              | M20          | (3/4")   | 23             | 9.50               | 11.3     |
| 250A         | 267<br>(273")   | 395              | 26 | 26 | 26 | 350  | 68 | 285<br>292     | 6.3  | 12 | 16 | 320            | 3 | 12             | M20          | (3/4")   | 23             | 12.5               | 14.7     |
| 300A         | 318<br>(323.9") | 445              | 26 | 26 | 28 | 400  | 68 | 335<br>344     | 7.1  | 12 | 16 | 370            | 4 | 12             | M20          | (3/4")   | 23             | 14.4               | 17.6     |
| 350A         | 355.6"<br>(368) | 505              | 26 | 28 | 30 | 460  | 68 | 385            | 7.1  | 12 | 16 | 430            | 4 | 16             | M20          | (3/4")   | 23             | 20.6               | 21.4     |
| 400A         | 406.4"<br>(419) | 565              | 26 | 32 | 32 | 515  | 72 | 440            | 7.1  | 12 | 16 | 482            | 4 | 16             | M24          | (7/8")   | 27             | 27.9               | 26.1     |
| 500A         | 508"<br>(521)   | 670              | 28 | 38 | 34 | 620  | 75 | 542            | 7.1  | 12 | 16 | 585            | 4 | 20             | M24          | (7/8")   | 27             | 41.1               | 34.7     |
| 600A         | 609.6"<br>(622) | 780              | 28 |    |    | 725  | 80 | 642            | 7.1  | 12 | 18 | 685            | 5 | 20             | M27          | (1")     | 30             |                    |          |
| 700A         | 711.2"<br>(720) | 895              | 30 |    |    | 840  | 80 | 745            | 8.0  | 12 | 18 | 800            | 5 | 24             | M27          | (1")     | 30             |                    |          |
| 800A         | 812.8"<br>(820) | 1015             | 32 |    |    | 950  | 90 | 850            | 8.0  | 12 | 18 | 905            | 5 | 24             | M30          | (1 1/8") | 33             |                    |          |
| 900A         | 914.4"<br>(920) | 1115             | 34 |    |    | 1050 | 95 | 950            | 10.0 | 12 | 20 | 1005           | 5 | 28             | M30          | (1 1/8") | 33             |                    |          |
| 1000A        | 1016"<br>(1020) | 1230             | 34 |    |    | 1160 | 95 | 1052           | 10.0 | 16 | 20 | 1110           | 5 | 28             | M33          | (1 1/4") | 36             |                    |          |

Note : \*Out side diameter of pipe complied with ISO recommendation R64

# 16BAR

DIN 2543 SLIP-ON FLANGES    DIN 2527 BLIND FLANGES  
DIN 2633 WELDING NECK FLANGES



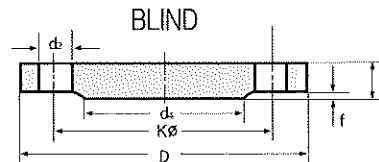
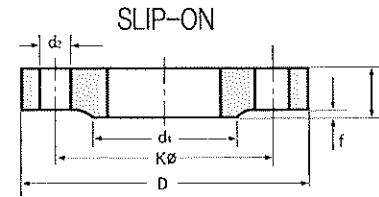
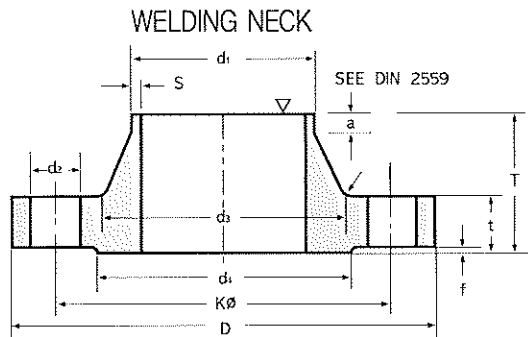
Unit : mm

| Bore         |                | Common Dimention |              |         |       |      |     | Welding Neck   |      |    |    | Raised Face    |   | Drilling       |              |          | Approx. Weight(kg) |          |          |
|--------------|----------------|------------------|--------------|---------|-------|------|-----|----------------|------|----|----|----------------|---|----------------|--------------|----------|--------------------|----------|----------|
| Nominal Bore | d <sub>1</sub> | D                | t            |         |       | K    | T   | d <sub>3</sub> | s    | r  | a  | d <sub>4</sub> | f | Number of Bolt | Dia. of Bolt |          | d <sub>2</sub>     | DIN 2543 | DIN 2633 |
|              |                |                  | Welding Neck | Slip-on | Blind |      |     |                |      |    |    |                |   |                |              |          |                    |          |          |
| 10A          | 14<br>17.2")   | 90               | 14           |         | 14    | 60   | 35  | 25<br>28       | 1.8  | 4  | 6  | 40             | 2 | 4              | M12          | (1/2")   | 14                 | 0.63     | 0.580    |
| 15A          | 20<br>21.3")   | 95               | 14           | 14      | 14    | 65   | 35  | 30<br>32       | 2.0  | 4  | 6  | 45             | 2 | 4              | M12          | (1/2")   | 14                 | 0.72     | 0.648    |
| 20A          | 25<br>26.9")   | 105              | 16           | 16      | 16    | 75   | 38  | 38<br>40       | 2.3  | 4  | 6  | 58             | 2 | 4              | M12          | (1/2")   | 14                 | 1.01     | 0.952    |
| 25A          | 30<br>33.7")   | 115              | 16           | 16      | 16    | 85   | 38  | 42<br>45       | 2.6  | 4  | 6  | 68             | 2 | 4              | M12          | (1/2")   | 14                 | 1.23     | 1.14     |
| 32A          | 38<br>42.4")   | 140              | 16           | 16      | 16    | 100  | 40  | 52<br>56       | 2.6  | 6  | 6  | 78             | 2 | 4              | M16          | (5/8")   | 18                 | 1.80     | 1.69     |
| 40A          | 44.5<br>48.3") | 150              | 16           | 16      | 16    | 110  | 42  | 60<br>64       | 2.6  | 6  | 7  | 88             | 3 | 4              | M16          | (5/8")   | 18                 | 2.09     | 1.86     |
| 50A          | 57<br>60.3")   | 165              | 18           | 18      | 18    | 125  | 45  | 72<br>75       | 2.9  | 6  | 8  | 102            | 3 | 4              | M16          | (5/8")   | 18                 | 2.88     | 2.53     |
| 65A          | 76.1")         | 185              | 18           | 18      | 18    | 145  | 45  | 90             | 2.9  | 6  | 10 | 122            | 3 | 4              | M16          | (5/8")   | 18                 | 3.66     | 3.06     |
| 80A          | 88.9")         | 200              | 20           | 20      | 20    | 160  | 50  | 105            | 3.2  | 8  | 10 | 138            | 3 | 8              | M16          | (5/8")   | 18                 | 4.77     | 3.70     |
| 100A         | 108<br>114.3") | 220              | 20           | 20      | 20    | 180  | 52  | 125<br>131     | 3.6  | 8  | 12 | 158            | 3 | 8              | M16          | (5/8")   | 18                 | 5.65     | 4.62     |
| 125A         | 133<br>139.7") | 250              | 22           | 22      | 22    | 210  | 55  | 150<br>156     | 4.0  | 8  | 12 | 188            | 3 | 8              | M16          | (5/8")   | 18                 | 8.42     | 6.30     |
| 150A         | 159<br>168.3") | 285              | 22           | 22      | 22    | 240  | 55  | 175<br>184     | 4.5  | 10 | 12 | 212            | 3 | 8              | M20          | (3/4")   | 23                 | 10.4     | 7.75     |
| 200A         | 216<br>219.1") | 340              | 24           | 24      | 24    | 295  | 62  | 232<br>235     | 5.9  | 10 | 16 | 268            | 3 | 12             | M20          | (3/4")   | 23                 | 16.1     | 11.0     |
| 250A         | 267<br>273")   | 405              | 26           | 26      | 26    | 355  | 70  | 285<br>292     | 6.3  | 12 | 16 | 320            | 3 | 12             | M24          | (7/8")   | 27                 | 24.9     | 15.6     |
| 300A         | 318<br>323.9") | 460              | 28           | 28      | 28    | 410  | 78  | 338<br>344     | 7.1  | 12 | 16 | 378            | 4 | 12             | M24          | (7/8")   | 27                 | 35.1     | 22.0     |
| 350A         | 355.6"<br>368) | 520              | 30           | 30      | 30    | 470  | 82  | 390            | 8.0  | 12 | 16 | 438            | 4 | 16             | M24          | (7/8")   | 27                 | 47.8     | 28.7     |
| 400A         | 406.4"<br>419) | 580              | 32           | 32      | 32    | 525  | 85  | 445            | 8.0  | 12 | 16 | 490            | 4 | 16             | M27          | (1")     | 30                 | 63.5     | 36.3     |
| 500A         | 508"<br>521)   | 715              | 34           | 36      | 34    | 650  | 90  | 548            | 8.0  | 12 | 16 | 610            | 4 | 20             | M30          | (1 1/8") | 33                 | 102.0    | 59.3     |
| 600A         | 609.6"<br>622) | 840              | 36           | 40      |       | 770  | 95  | 652            | 8.8  | 12 | 18 | 725            | 5 | 20             | M33          | (1 1/4") | 36                 |          |          |
| 700A         | 711.2"<br>720) | 910              | 36           |         |       | 840  | 100 | 755            | 8.8  | 12 | 18 | 795            | 5 | 24             | M33          | (1 1/4") | 36                 |          |          |
| 800A         | 812.8"<br>820) | 1025             | 38           |         |       | 950  | 105 | 855            | 10.0 | 12 | 20 | 900            | 5 | 24             | M36          | (1 3/8") | 39                 |          |          |
| 900A         | 914.4"<br>920) | 1125             | 40           |         |       | 1050 | 110 | 955            | 10.0 | 12 | 20 | 1000           | 5 | 28             | M36          | (1 3/8") | 39                 |          |          |
| 1000A        | 1016"<br>1020) | 1255             | 42           |         |       | 1170 | 120 | 1058           | 10.0 | 16 | 20 | 1115           | 5 | 28             | M39          | (1 1/2") | 42                 |          |          |

Note : \*Out side diameter of pipe complied with ISO recommendation R64

# 25BAR

DIN 2544 SLIP-ON FLANGES DIN 2527 BLIND FLANGES  
DIN 2634 WELDING NECK FLANGES



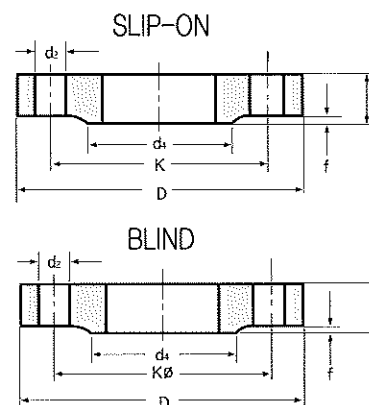
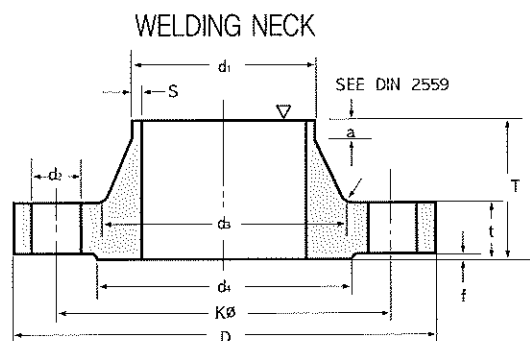
Unit : mm

| Bore         |                | Common Dimension |    |    |    |      |     | Welding Neck   |      |    |    | Raised Face    |   | Drilling       |              |                | Approx. Weight(kg) |          |
|--------------|----------------|------------------|----|----|----|------|-----|----------------|------|----|----|----------------|---|----------------|--------------|----------------|--------------------|----------|
| Nominal Bore | d <sub>1</sub> | D                | t  |    |    | K    | T   | d <sub>3</sub> | s    | r  | a  | d <sub>4</sub> | f | Number of Bolt | Dia. of Bolt | d <sub>2</sub> | DIN 2544           | DIN 2634 |
| 10A          | 14<br>17.2")   | 90               | 16 |    | 16 | 60   | 35  | 25<br>28       | 1.8  | 4  | 6  | 40             | 2 | 4              | M12 (1/2")   | 14             | 0.72               | 0.661    |
| 15A          | 20<br>21.3")   | 95               | 16 | 16 | 16 | 65   | 38  | 30<br>32       | 2.0  | 4  | 6  | 45             | 2 | 4              | M12 (1/2")   | 14             | 0.81               | 0.746    |
| 20A          | 25<br>26.9")   | 105              | 18 | 18 | 18 | 75   | 40  | 38<br>40       | 2.3  | 4  | 6  | 58             | 2 | 4              | M12 (1/2")   | 14             | 1.24               | 1.06     |
| 25A          | 30<br>33.7")   | 115              | 18 | 18 | 18 | 85   | 40  | 42<br>46       | 2.6  | 4  | 6  | 68             | 2 | 4              | M12 (1/2")   | 14             | 1.38               | 1.29     |
| 32A          | 38<br>42.4")   | 140              | 18 | 18 | 18 | 100  | 45  | 52<br>56       | 2.6  | 6  | 6  | 78             | 2 | 4              | M16 (5/8")   | 18             | 2.03               | 1.88     |
| 40A          | 44.5<br>48.3") | 150              | 18 | 18 | 18 | 110  | 45  | 60<br>64       | 2.6  | 6  | 7  | 88             | 3 | 4              | M16 (5/8")   | 18             | 2.35               | 2.34     |
| 50A          | 57<br>60.3")   | 165              | 20 | 20 | 20 | 125  | 48  | 72<br>75       | 2.9  | 6  | 8  | 102            | 3 | 4              | M16 (5/8")   | 18             | 3.20               | 2.82     |
| 65A          | 76.1")         | 185              | 22 | 22 | 22 | 145  | 52  | 90             | 2.9  | 6  | 10 | 122            | 3 | 8              | M16 (5/8")   | 18             | 4.29               | 3.74     |
| 80A          | 88.9")         | 200              | 24 | 24 | 24 | 160  | 58  | 105            | 3.2  | 8  | 12 | 138            | 3 | 8              | M16 (5/8")   | 18             | 5.88               | 4.75     |
| 100A         | 108<br>114.3") | 235              | 24 | 24 | 24 | 190  | 65  | 128<br>134     | 3.6  | 8  | 12 | 162            | 3 | 8              | M20 (3/4")   | 23             | 7.54               | 6.52     |
| 125A         | 133<br>139.7") | 270              | 26 | 26 | 26 | 220  | 68  | 155<br>162     | 4.0  | 8  | 12 | 188            | 3 | 8              | M24 (7/8")   | 27             | 10.8               | 9.07     |
| 150A         | 159<br>168.3") | 300              | 28 | 28 | 28 | 250  | 75  | 182<br>192     | 4.5  | 10 | 12 | 218            | 3 | 8              | M24 (7/8")   | 27             | 14.5               | 11.8     |
| 200A         | 216<br>219.1") | 360              | 30 | 30 | 30 | 310  | 80  | 240<br>244     | 6.3  | 10 | 16 | 278            | 3 | 12             | M24 (7/8")   | 27             | 22.3               | 17.0     |
| 250A         | 267<br>273")   | 425              | 32 | 32 | 32 | 370  | 88  | 292<br>298     | 7.1  | 12 | 18 | 335            | 3 | 12             | M27 (1")     | 30             | 33.5               | 24.4     |
| 300A         | 318<br>323.9") | 485              | 34 | 34 | 34 | 430  | 92  | 345<br>352     | 8.0  | 12 | 18 | 395            | 4 | 16             | M27 (1")     | 30             | 46.3               | 31.2     |
| 350A         | 355.6"<br>368) | 555              | 38 | 38 | 38 | 490  | 100 | 398            | 8.0  | 12 | 20 | 450            | 4 | 16             | M30 (1 1/8") | 33             | 68.0               | 45.0     |
| 400A         | 406.4"<br>419) | 620              | 40 | 40 | 40 | 550  | 110 | 452            | 8.8  | 12 | 20 | 505            | 4 | 16             | M33 (1 1/4") | 36             | 89.7               | 58.7     |
| 500A         | 508"<br>521)   | 730              | 44 | 44 | 44 | 660  | 125 | 558            | 10.0 | 12 | 20 | 615            | 4 | 20             | M33 (1 1/4") | 36             | 138.0              | 86.1     |
| 600A         | 609.6"<br>622) | 845              | 46 |    |    | 770  | 125 | 660            | 11.0 | 12 | 20 | 720            | 5 | 20             | M36 (1 3/8") | 39             |                    | 101.0    |
| 700A         | 721.2"<br>720) | 960              | 46 |    |    | 875  | 125 | 760            | 12.5 | 12 | 20 | 820            | 5 | 24             | M39 (1 1/2") | 42             |                    | 134.0    |
| 800A         | 812.8"<br>820) | 1085             | 50 |    |    | 990  | 135 | 865            | 14.2 | 12 | 22 | 930            | 5 | 24             | M45 (1 3/4") | 48             |                    | 183.0    |
| 900A         | 914.4"<br>930) | 1185             | 54 |    |    | 1090 | 145 | 968            | 16.0 | 12 | 24 | 1030           | 5 | 28             | M45 (1 3/4") | 48             |                    | 232.0    |
| 1000A        | 1016"<br>1020) | 1320             | 58 |    |    | 1210 | 155 | 1070           | 17.5 | 16 | 24 | 1140           | 5 | 28             | M52 (2")     | 56             |                    | 302.0    |

Note : \*Out side diameter of pipe complied with ISO recommendation R64

# 40BAR

DIN 2545 SLIP-ON FLANGES    DIN 2527 BLIND FLANGES  
DIN 2635 WELDING NECK FLANGES



Unit : mm

| Bore         |                 | Common Dimension |    |    |    |     |     | Welding Neck   |      |    |    | Raised Face    |   | Drilling       |              |                | Approx. Weight(kg) |          |
|--------------|-----------------|------------------|----|----|----|-----|-----|----------------|------|----|----|----------------|---|----------------|--------------|----------------|--------------------|----------|
| Nominal Bore | d <sub>1</sub>  | D                | t  |    |    | K   | T   | d <sub>3</sub> | s    | r  | a  | d <sub>4</sub> | f | Number of Bolt | Dia. of Bolt | d <sub>2</sub> | DIN 2545           | DIN 2635 |
| 10A          | 14<br>(17.2")   | 90               | 16 |    | 16 | 60  | 35  | 25<br>28       | 1.8  | 4  | 6  | 40             | 2 | 4              | M12 (1/2")   | 14             | 0.72               | 0.661    |
| 15A          | 20<br>(21.3")   | 95               | 16 | 16 | 16 | 65  | 38  | 30<br>32       | 2.0  | 4  | 6  | 45             | 2 | 4              | M12 (1/2")   | 14             | 0.81               | 0.746    |
| 20A          | 25<br>(26.9")   | 105              | 18 | 18 | 18 | 75  | 40  | 38<br>40       | 2.3  | 4  | 6  | 58             | 2 | 4              | M12 (1/2")   | 14             | 1.24               | 1.06     |
| 25A          | 30<br>(33.7")   | 115              | 18 | 18 | 18 | 85  | 40  | 42<br>46       | 2.6  | 4  | 6  | 68             | 2 | 4              | M12 (1/2")   | 14             | 1.38               | 1.29     |
| 32A          | 38<br>(42.4")   | 140              | 18 | 18 | 18 | 100 | 42  | 52<br>56       | 2.6  | 6  | 6  | 78             | 2 | 4              | M16 (5/8")   | 18             | 2.03               | 1.88     |
| 40A          | 44.5<br>(48.3") | 150              | 18 | 18 | 18 | 110 | 45  | 60<br>64       | 2.6  | 6  | 7  | 88             | 3 | 4              | M16 (5/8")   | 18             | 2.35               | 2.33     |
| 50A          | 57<br>(60.3")   | 165              | 20 | 20 | 20 | 125 | 48  | 72<br>75       | 2.9  | 6  | 8  | 102            | 3 | 4              | M16 (5/8")   | 18             | 3.20               | 2.82     |
| 65A          | 76.1")          | 185              | 22 | 22 | 22 | 145 | 52  | 90             | 2.9  | 6  | 10 | 122            | 3 | 8              | M16 (5/8")   | 18             | 4.29               | 3.74     |
| 80A          | 88.9")          | 200              | 24 | 24 | 24 | 160 | 58  | 105            | 3.2  | 8  | 12 | 138            | 3 | 8              | M16 (5/8")   | 18             | 5.88               | 4.75     |
| 100A         | 108<br>(114.3") | 235              | 24 | 24 | 24 | 190 | 65  | 128<br>134     | 3.6  | 8  | 12 | 162            | 3 | 8              | M20 (3/4")   | 23             | 7.54               | 6.52     |
| 125A         | 133<br>(139.7") | 270              | 26 | 26 | 26 | 220 | 68  | 155<br>162     | 4.0  | 8  | 12 | 188            | 3 | 8              | M24 (7/8")   | 27             | 10.8               | 9.07     |
| 150A         | 159<br>(168.3") | 300              | 28 | 28 | 28 | 250 | 75  | 182<br>192     | 4.5  | 10 | 12 | 218            | 3 | 8              | M24 (7/8")   | 27             | 14.5               | 11.80    |
| (175)A       | 191<br>(193.7") | 350              | 32 | 32 | 32 | 295 | 82  | 215<br>218     | 5.6  | 10 | 15 | 260            | 3 | 12             | M27 (1")     | 30             | 22.1               | 18.2     |
| 200A         | 216<br>(219.1") | 375              | 34 | 34 | 34 | 320 | 88  | 240<br>244     | 6.3  | 10 | 16 | 285            | 3 | 12             | M27 (1")     | 30             | 27.2               | 21.5     |
| 250A         | 267<br>(273")   | 450              | 38 | 38 | 38 | 385 | 105 | 298<br>306     | 7.1  | 12 | 18 | 345            | 3 | 12             | M30 (1 1/8") | 33             | 43.8               | 34.9     |
| 300A         | 318<br>(323.9") | 515              | 42 | 42 | 42 | 450 | 115 | 352<br>362     | 8.0  | 12 | 18 | 410            | 4 | 16             | M30 (1 1/8") | 33             | 63.3               | 49.7     |
| 350A         | 355.6"<br>(368) | 580              | 46 | 46 | 46 | 510 | 125 | 408            | 8.8  | 12 | 20 | 465            | 4 | 16             | M33 (1 1/4") | 36             | 89.5               | 68.1     |
| 400A         | 406.4"<br>(419) | 660              | 50 | 50 | 50 | 585 | 135 | 462            | 11.0 | 12 | 20 | 535            | 4 | 16             | M36 (1 3/8") | 39             | 127.0              | 96.5     |
| 500A         | 508"<br>(521)   | 755              | 52 | 52 | 52 | 670 | 140 | 562            | 14.2 | 12 | 20 | 615            | 4 | 20             | M39 (1 1/2") | 42             | 172.0              | 117.0    |

Note : \*Out side diameter of pipe complied with ISO recommendation R64