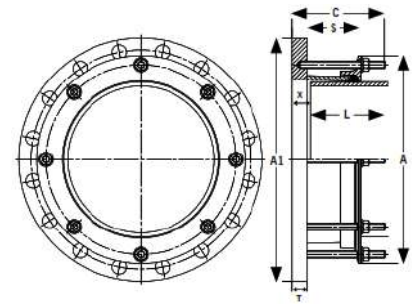


Large Diameter Flange Adaptors OD355 - 813mm to BS EN 1092-1 PN16 Drilling

Specifications

L= Distance back from end of pipe that must be rounded, meet tolerances, and free from any wrapping to ensure correct assembly.

| Flange Adaptor Type | Flange Adaptor Section | Sleeve Length S (mm) | Distance L (mm) | Setting Gap X (mm) | | Bolt Details | | |
|---------------------|------------------------|----------------------|-----------------|--------------------|------|--------------|-------------|-------------|
| | | | | Min. | Max. | Bolt Dia. | Length (mm) | Torque (Nm) |
| Standard Sleeve | L02 | 73 | 150 | 25 | 50 | M12 | 140 | 55 - 65 |
| Long Sleeve | L03 | 123 | 200 | 25 | 100 | M12 | 180 | 55 - 65 |
| Standard Sleeve | YF2 | 87 | 150 | 32 | 76 | M16 | 160 | 95 - 120 |
| Long Sleeve | YF3 | 123 | 200 | 32 | 115 | M16 | 190 | 95 - 120 |
| Standard Sleeve | A2E | 87 | 150 | 32 | 76 | M16 | 160 | 95 - 120 |
| Long Sleeve | A2H | 125 | 200 | 32 | 115 | M16 | 190 | 95 - 120 |
| Standard Sleeve | XSXG | 254 | 200 | 57 | 117 | M16 | 400 | 95 - 120 |



Pressure Working pressure is in accordance with the flange drilling.
Site test pressure is 1.5x working pressure.

End Restraint Dedicated flange adaptors DO NOT resist end load due to the internal pressure - adequate external restraint must be provided by either anchoring the pipework or use of tie rods to restrain the flange adaptor and prevent pipe pull out.

Tie Rods When using tie rods to provide restraint, depending on the pipe OD & flange drilling the flange adaptor end ring may need to be notched to allow the tie rod to pass over. The table below provides details on :-
A) Those products that do not require notching (i.e. there is no interference between the tie rods and end ring) - indicated by "Not Rqd."
B) Those products where there is interference between the tie rod and end ring and do require notching, with the number of notches provided as standard indicated.

Tie Rod Yield Strength The number of notches indicated assumes the use of tie rods with a minimum yield strength of 725 N/mm².

If tie rods with a lower yield strength are used, then depending on the working pressure an increased number than that specified in the table may be required; in this situation please advise Viking Johnson of the number of notches and we will accommodate your requirements.

| Pipe OD (mm) | Pipe Material | Flange Drilling BS EN 1092-1 | | Tolerance on Pipe OD for Distance L | | Gasket Mould No. | No. Notches In End Ring If Required | Flange Adaptor Section Type | | Flange Adaptor Studs No. x Dia | Weight (kg) | | Dimensions | | | | | | Flange Adaptor Studs Length | |
|--------------|---------------|------------------------------|----------|-------------------------------------|--------|------------------|-------------------------------------|-----------------------------|-------------|--------------------------------|-----------------|-------------|-----------------|-------------------|-------------------------|------------------------|--------------------------------|----------------------------|-----------------------------|-------------|
| | | Nominal | Drilling | (mm) + | (mm) - | | | Standard Sleeve | Long Sleeve | | Standard Sleeve | Long Sleeve | Diameter A (mm) | Flange OD A1 (mm) | Flange Thickness T (mm) | Flange Bolts No. x Dia | Overall C Standard Sleeve (mm) | Overall C Long Sleeve (mm) | Standard Sleeve | Long Sleeve |
| 355.6 | Steel & uPVC | 350 | PN16 | 1.6 | 1.6 | J51LS | 4 | L02 | L03 | 8 x M12 | 24.1 | 27.5 | 446 | 520 | 18 | 16 x M24 | 148 | 188 | 140 | 180 |
| 358.6 | Coated Steel | 350 | PN16 | 1.6 | 1.6 | J51LS | 4 | L02 | L03 | 8 x M12 | 23.9 | 27.3 | 450 | 520 | 18 | 16 x M24 | 148 | 188 | 140 | 180 |
| 378 | Ductile Iron | 350 | PN16 | 2.7 | 3.5 | J52LS | 8 | L02 | L03 | 8 x M12 | 22.5 | 26.3 | 469 | 520 | 18 | 16 x M24 | 148 | 188 | 140 | 180 |
| 406.4 | Steel & uPVC | 400 | PN16 | 1.6 | 1.6 | J53LS | 4 | L02 | L03 | 8 x M12 | 27.9 | 31.8 | 497 | 580 | 18 | 16 x M27 | 148 | 188 | 140 | 180 |
| 409.4 | Coated Steel | 400 | PN16 | 1.6 | 1.6 | J53LS | 4 | L02 | L03 | 8 x M12 | 27.7 | 31.6 | 500 | 580 | 18 | 16 x M27 | 148 | 188 | 140 | 180 |
| 429 | Ductile Iron | 400 | PN16 | 2.8 | 4.0 | J54LS | 8 | L02 | L03 | 8 x M12 | 26.2 | 30.2 | 520 | 580 | 18 | 16 x M27 | 148 | 188 | 140 | 180 |
| 451 | PVC & Hep30 | 450 | PN16 | 0.0 | 1.0 | J55LS | Not Rqd. | L02 | L03 | 10 x M12 | 45.2 | 42.4 | 541 | 640 | 25 | 20 x M27 | 155 | 193 | 140 | 180 |
| 457 | Steel & uPVC | 450 | PN16 | 1.6 | 1.6 | J55LS | Not Rqd. | L02 | L03 | 10 x M12 | 37.5 | 41.9 | 548 | 640 | 23 | 20 x M27 | 153 | 193 | 140 | 180 |
| 460 | Coated Steel | 450 | PN16 | 1.6 | 1.6 | J55LS | 5 | L02 | L03 | 10 x M12 | 37.2 | 41.5 | 551 | 640 | 23 | 20 x M27 | 153 | 193 | 140 | 180 |
| 480 | Ductile Iron | 450 | PN16 | 2.9 | 4.0 | J56LS | 10 | L02 | L03 | 10 x M12 | 34.7 | 39.3 | 571 | 640 | 23 | 20 x M27 | 153 | 193 | 140 | 180 |
| 508 | Steel & uPVC | 500 | PN16 | 1.6 | 1.6 | J57LS | Not Rqd. | L02 | L03 | 10 x M12 | 45.5 | 50.3 | 598 | 715 | 23 | 20 x M30 | 153 | 193 | 140 | 180 |
| 511 | Coated Steel | 500 | PN16 | 1.6 | 1.6 | J57LS | Not Rqd. | L02 | L03 | 10 x M12 | 45.1 | 49.9 | 602 | 715 | 23 | 20 x M30 | 153 | 193 | 140 | 180 |
| 532 | Ductile Iron | 500 | PN16 | 3.0 | 4.0 | J58LS | 10 | L02 | L03 | 10 x M12 | 42.2 | 47.2 | 624 | 715 | 23 | 20 x M30 | 153 | 193 | 140 | 180 |
| 610 | Steel & uPVC | 600 | PN16 | 1.6 | 1.6 | J60LS | Not Rqd. | L02 | L03 | 10 x M12 | 58.5 | 64.2 | 700 | 840 | 23 | 20 x M33 | 153 | 193 | 140 | 180 |
| 613 | Coated Steel | 600 | PN16 | 1.6 | 1.6 | J60LS | Not Rqd. | L02 | L03 | 10 x M12 | 58.0 | 63.7 | 703 | 840 | 23 | 20 x M33 | 153 | 193 | 140 | 180 |
| 635 | Ductile Iron | 600 | PN16 | 3.2 | 4.5 | J61LS | Not Rqd. | L02 | L03 | 10 x M12 | 54.5 | 60.4 | 726 | 840 | 23 | 20 x M33 | 153 | 193 | 140 | 180 |
| 711 | Steel | 700 | PN16 | 1.6 | 1.6 | J63LS | 6 | L02 | L03 | 12 x M12 | 58.5 | 65.2 | 802 | 910 | 23 | 24 x M33 | 153 | 193 | 140 | 180 |
| 714 | Coated Steel | 700 | PN16 | 1.6 | 1.6 | J63LS | 6 | L02 | L03 | 12 x M12 | 58.0 | 64.6 | 805 | 910 | 23 | 24 x M33 | 153 | 193 | 140 | 180 |
| 738 | Ductile Iron | 700 | PN16 | 3.4 | 4.5 | J63LS | 12 | L02 | L03 | 12 x M12 | 53.1 | 59.9 | 830 | 910 | 23 | 24 x M33 | 153 | 193 | 140 | 180 |
| 813 | Steel | 800 | PN16 | 1.6 | 1.6 | J65LS | Not Rqd. | L02 | L03 | 12 x M12 | 69.6 | 77.1 | 903 | 1025 | 23 | 24 x M36 | 153 | 193 | 140 | 180 |

Materials & Relevant Standards

Flange/End Ring

Steel to BS EN10025-2: Grade S275JR

Studs/Nuts/Washers

Studs - Steel to BS EN ISO898-1:

Property Class 4.8

Nuts - Steel to BS4190: Grade 4

Washers - Stainless Steel to BS1449:Part 2:

Grade 304S15

Coatings

Body, Flange & End Ring - Rilsan Nylon 11 to WIS 4-52-01 Part 1

Nuts and Studs - Sheraplex coated to WIS 4-52-03

Gaskets: L02/L03/YF2/YF3

Rubber 80 IRHD Moulded Compound to BS

EN681-1: Type WA,WC,WG or BS EN682: Type G (other materials available on request)

Gaskets: A2E/A2H/XSXG

Rubber 70 IRHD Moulded Compound to BS

EN681-1: Type WA, WC, WG or BS EN682: Type G (other materials available on request)