PRODUCTS | YLOCK QUICK RELEASE FLANGES

The YLOCK quick release flanges are fully proven alternative to the conventional flanged connection used throughout in the oil & gas, petrochemical, powerplant, steam power and food processing industries.
Produced in a comprehensive range of sizes and materials, YLOCK quick release flanges are offering versatility, compactness, weight and cost effectiveness in piping system.

The YLOCK quick release flanges comprise:

- A pair of hubs to welding to the pipe, similar to the flange.
- A seal ring, which is a modified cone ring giving excellent leak tightness properties under the most severe conditions.
- A clamp set, which can be rotated around the hubs to suit the most practical positions.

STANDARD:

- ASME B31.1 & ASME B31.3
- European Pressure Equipment Directive (2014/68/EU)
- National Association of Corrosion Engineers (NACE Mr0175)

SIZE:

- One Bolted Clamp: 3/4 - 3 (DN20 - DN80)
- Four Bolted Clamp: $2^{1/2}$ - 4 (DN65 - DN100)

MATERIAL:

- Seal Ring
  - A453 Gr660
  - A182 F316 / 316L
- Hub
  - A182 F304 / 304L
  - A182 F316 / 316L
- Clamp
  - A351 CF3 / CF3M
  - A351 Cf8 / CF8M
  - A182 F304 / 304L
  - A182 F316 / 316L

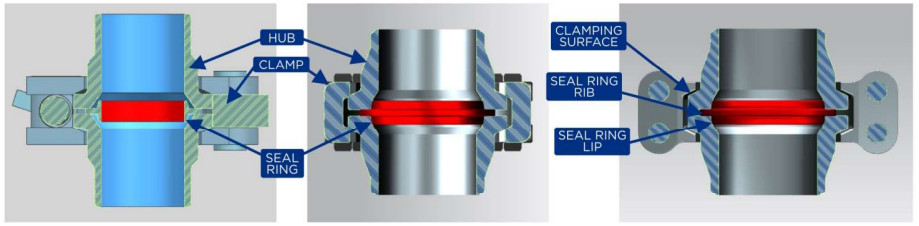
ADVANTAGES

YLOCK quick release flange family is offering many advantages versus conventional flanges:

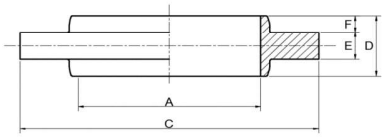
- Quick installation
- Significant torque decrease by 93% single bolted, 75% 4-bolted comparing with conventional flanges
- Mechanical sealing
- High pressure and temperature strength
- Various working conditions
- Low maintenance requirement
- Less accessory requirement
- Lighter design compared with conventional flange connections

How the YLOCK seal: METAL - TO - METAL SEAL:

The seal ring rib is clamped between the hub faces. The seal ring lips engage the inner hub surfaces in an interference fit which deflects the lips to achieve a seal.

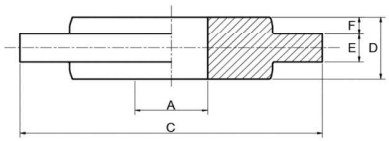


SEAL



CNBO INDEX NO. ASTM - A453 GR660 MSO2 COATED	NOM PIPE SIZE	A	C	D	E	F	WEIGHT (LBS)
B0-X3Q-E0	3/4	0.906	1.375	0.375	0.125	0.125	0.060
B0-X3Q-F0	1	1.125	1.734	0.375	0.125	0.125	0.080
B0-X3Q-G0	1 1/4	1.610	2.625	0.563	0.250	0.156	0.310
B0-X3Q-H0	1 1/2	1.610	2.625	0.563	0.250	0.156	0.310
B0-X3Q-J0	2	2.063	3.250	0.750	0.250	0.250	0.500
B0-X3Q-K0	2 1/2	2.672	4.000	0.750	0.250	0.250	0.700
B0-X3Q-L0	3	3.063	4.250	0.750	0.250	0.250	0.700
B0-X3Q-N0	4	4.063	5.500	1.000	0.250	0.375	1.280
B0-X3Q-P0	5	5.313	6.625	1.000	0.250	0.375	1.650
B0-X3Q-R0	6	6.065	7.875	1.375	0.375	0.500	4.000

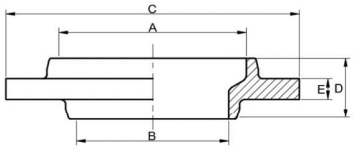
ORIFICE SEAL



CNBO INDEX NO. ASTM - A453 Gr660 MOS2 COATED	NOM PIPE SIZE	A	C	D	E	F	WEIGHT (LBS)
B5-X3Q-H0	1 1/2	0.630	2.625	0.563	0.25	0.156	0.31

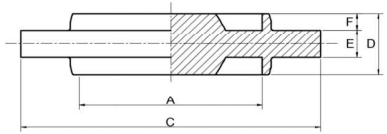
Custom sizes are available upon requirements.

REDUCING SEAL



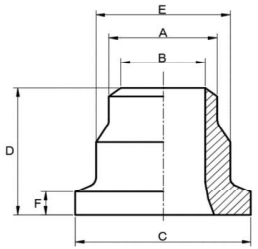
CNBO INDEX NO. ASTM - A453 GR660 MOS2 COATED	NOM PIPE SIZE	A	B	C	D	E	WEIGHT (LBS)
B2-X3Q-FE	1 - 3/4	1.125	0.906	1.734	0.375	0.125	0.08
B2-X3Q-HF	1 1/2 - 1	1.610	1.125	2.625	0.563	0.250	0.31
B2-X3Q-JH	2 - 1 1/2	2.063	1.610	3.250	0.750	0.250	0.50
B2-X3Q-KJ	2 1/2 - 2	2.672	2.063	4.000	0.750	0.250	0.70
B2-X3Q-LK	3 - 2 1/2	3.063	2.672	4.250	0.750	0.250	0.70
B2-X3Q-NL	4 - 3	4.063	3.063	5.500	1.000	0.250	1.28

BLIND SEAL



CNBO INDEX NO. ASTM-A453 GR660 MOS2 COATED	CNBO INDEX NO. AISI 630 GR 17-4PH PTFE BLUE COATED	NOM PIPE SIZE	A	C	D	E	F	WEIGHT (LBS)
B1-X3Q-E0	B1-X4Q-E0	3/4	0.906	1.375	0.375	0.125	0.125	0.12
B1-X3Q-F0	B1-X4Q-F0	1	1.125	1.734	0.375	0.125	0.125	0.18
B1-X3Q-G0	B1-X4Q-G0	1 1/4	1.610	2.625	0.563	0.250	0.156	0.63
B1-X3Q-H0	B1-X4Q-H0	1 1/2	1.610	2.625	0.563	0.250	0.156	0.63
B1-X3Q-J0	B1-X4Q-J0	2	2.063	3.250	0.750	0.250	0.250	1.21
B1-X3Q-K0	B1-X4Q-K0	2 1/2	2.672	4.000	0.750	0.250	0.250	1.89
B1-X3Q-L0	B1-X4Q-L0	3	3.063	4.250	0.750	0.250	0.250	2.27
B1-X3Q-N0	B1-X4Q-N0	4	4.063	5.500	1.000	0.250	0.375	4.96
B1-X3Q-P0	B1-X4Q-P0	5	5.313	6.625	1.000	0.250	0.375	7.94
B1-X3Q-R0	B1-X4Q-R0	6	6.065	7.875	1.375	0.375	0.500	15.26

HUB | 40S

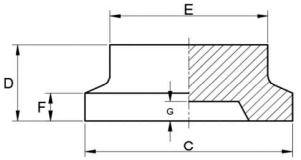


CNBO INDEX NO. ASME SA182 F304/F304L	CNBO INDEX NO. ASME SA182 F316/F316L	NOM PIPE SIZE	PIPE O. D. A.	PIPE I. D. B.	C	D	E	F	WEIGHT (LBS)
A0-U1Q-E0	A0-U2Q-E0	3/4	1.050	0.824	2.000	1.750	1.500	0.313	0.62
A0-U1Q-F0	A0-U2Q-F0	1	1.315	1.049	2.000	1.750	1.500	0.313	0.51
A0-U1Q-G0	A0-U2Q-G0	1 1/4	1.660	1.380	3.125	2.375	2.375	0.437	2.00
A0-U1Q-H0	A0-U2Q-H0	1 1/2	1.900	1.610	3.125	2.375	2.375	0.437	1.68
A0-U1Q-J0	A0-U2Q-J0	2	2.375	2.067	3.625	2.750	2.875	0.437	2.36
A0-U1Q-K0	A0-U2Q-K0	2 1/2	2.875	2.469	5.000	3.250	4.000	0.500	5.86
A0-U1Q-L0	A0-U2Q-L0	3	3.500	3.068	5.000	3.250	4.000	0.500	4.95
A0-U1Q-N0	A0-U2Q-N0	4	4.500	4.026	6.000	3.625	5.000	0.500	6.97
A0-U1Q-P0	A0-U2Q-P0	5	5.563	5.047	7.500	4.375	6.500	0.625	11.00
A0-U1Q-R0	A0-U2Q-R0	6	6.625	6.065	9.250	4.625	7.750	0.750	22.00

HUB | 80S

CNBO INDEX NO. ASME SA182 F304/F304L	CNBO INDEX NO. ASME SA182 F316/F316L	NOM PIPE SIZE	PIPE O. D. A.	PIPE I. D. B.	C	D	E	F	WEIGHT (LBS)
A0-V1Q-E0	A0-V2Q-E0	3/4	1.050	0.742	2.000	1.750	1.500	0.313	0.62
A0-V1Q-F0	A0-V2Q-F0	1	1.315	0.957	2.000	1.750	1.500	0.313	0.51
A0-V1Q-G0	A0-V2Q-G0	1 1/4	1.660	1.278	3.125	2.375	2.375	0.437	2.00
A0-V1Q-H0	A0-V2Q-H0	1 1/2	1.900	1.500	3.125	2.375	2.375	0.437	1.68
A0-V1Q-J0	A0-V2Q-J0	2	2.375	1.939	3.625	2.750	2.875	0.437	2.36
A0-V1Q-K0	A0-V2Q-K0	2 1/2	2.875	2.323	5.000	3.250	4.000	0.500	5.86
A0-V1Q-L0	A0-V2Q-L0	3	3.500	2.900	5.000	3.250	4.000	0.500	4.95
A0-V1Q-N0	A0-V2Q-N0	4	4.500	3.826	6.000	3.625	5.000	0.500	6.97
A0-V1Q-P0	A0-V2Q-P0	5	5.563	4.813	7.500	4.375	6.500	0.625	11.00
A0-V1Q-R0	A0-V2Q-R0	6	6.625	5.761	9.250	4.625	7.750	0.750	22.00

BLIND HUB | 40S

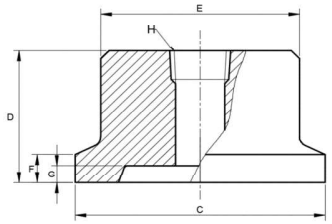


CNBO INDEX NO. ASME SA182 F304/F304L	CNBO INDEX NO. ASME SA182 F316/F316L	NOM PIPE SIZE	C	D	E	F	G	WEIGHT (LBS)
A1-U1Q-E0	A1-U2Q-E0	3/4	2.000	1.750	1.500	0.313	0.563	0.95
A1-U1Q-F0	A1-U2Q-F0	1	2.000	1.750	1.500	0.313	0.563	0.94
A1-U1Q-G0	A1-U2Q-G0	1 1/4	3.125	2.125	2.375	0.437	0.688	2.82
A1-U1Q-H0	A1-U2Q-H0	1 1/2	3.125	2.125	2.375	0.437	0.688	2.82
A1-U1Q-J0	A1-U2Q-J0	2	3.625	2.000	2.875	0.437	0.688	3.63
A1-U1Q-K0	A1-U2Q-K0	2 1/2	5.000	2.500	4.000	0.500	0.688	9.15
A1-U1Q-L0	A1-U2Q-L0	3	5.000	2.500	4.000	0.500	0.938	8.32
A1-U1Q-N0	A1-U2Q-N0	4	6.000	2.125	5.000	0.500	1.000	9.72
A1-U1Q-P0	A1-U2Q-P0	5	7.500	2.875	6.500	0.625	1.000	29.00
A1-U1Q-R0	A1-U2Q-R0	6	9.250	2.875	7.750	0.750	1.000	42.00

BLIND HUB | 80S

CNBO INDEX NO. ASME SA182 F304/F304L	CNBO INDEX NO. ASME SA182 F316/F316L	NOM PIPE SIZE	C	D	E	F	G	WEIGHT (LBS)
A1-V1Q-E0	A1-V2Q-E0	3/4	2.000	1.750	1.500	0.313	0.135	0.95
A1-V1Q-F0	A1-V2Q-F0	1	2.000	1.750	1.500	0.313	0.135	0.94
A1-V1Q-G0	A1-V2Q-G0	1 1/4	3.125	2.125	2.375	0.437	0.166	2.82
A1-V1Q-H0	A1-V2Q-H0	1 1/2	3.125	2.125	2.375	0.437	0.166	2.82
A1-V1Q-J0	A1-V2Q-J0	2	3.625	2.000	2.875	0.437	0.260	3.63
A1-V1Q-K0	A1-V2Q-K0	2 1/2	5.000	2.500	4.000	0.500	0.260	9.15
A1-V1Q-L0	A1-V2Q-L0	3	5.000	2.500	4.000	0.500	0.260	8.32
A1-V1Q-N0	A1-V2Q-N0	4	6.000	2.125	5.000	0.500	0.385	9.72
A1-V1Q-P0	A1-V2Q-P0	5	7.500	2.875	6.500	0.625	0.385	29.00
A1-V1Q-R0	A1-V2Q-R0	6	9.250	2.875	7.750	0.750	0.385	42.00

REDUCING HUB | F304 / F304L

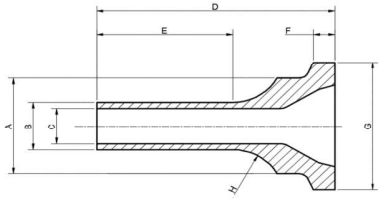


HUB SIZE	THREAD SIZE H (FNPT) / WEIGHT (LBS) / CNBO INDEX NO. ASME SA182 F304/F304L								C	D	E	F	G
	1/2	3/4	1	1¼	1½	2	2½	3					
3/4	0.88 A3-V1Q-ED	0.78 A3-V1Q-EE	-	-	-	-	-	-	2.000	1.750	1.500	0.313	0.135
1	0.87 A3-V1Q-FD	0.77 A3-V1Q-FE	0.64 A3-V1Q-FF	-	-	-	-	-	2.000	1.750	1.500	0.313	0.135
1¼ / 1½	2.73 A3-V1Q-HD	2.62 A3-V1Q-HE	2.46 A3-V1Q-HF	2.26 A3-V1Q-HG	2.01 A3-V1Q-HH	-	-	-	3.125	2.125	2.375	0.437	0.166
2	3.55 A3-V1Q-JD	3.45 A3-V1Q-JE	3.31 A3-V1Q-JF	3.13 A3-V1Q-JG	2.91 A3-V1Q-JH	2.35 A3-V1Q-JJ	-	-	3.625	2.000	2.875	0.437	0.260
2½	9.05 A3-V1Q-KD	8.92 A3-V1Q-KE	8.74 A3-V1Q-KF	8.51 A3-V1Q-KG	8.22 A3-V1Q-KH	7.51 A3-V1Q-KJ	6.58 A3-V1Q-KK	-	5.000	2.500	4.000	0.500	0.260
3	8.22 A3-V1Q-LD	8.09 A3-V1Q-LE	7.91 A3-V1Q-LF	7.68 A3-V1Q-LG	7.39 A3-V1Q-LH	6.68 A3-V1Q-LJ	5.75 A3-V1Q-LK	4.62 A3-V1Q-LL	5.000	2.500	4.000	0.500	0.260
4	9.64 A3-V1Q-ND	9.54 A3-V1Q-NE	9.40 A3-V1Q-NF	9.22 A3-V1Q-NG	9.00 A3-V1Q-NH	8.44 A3-V1Q-NJ	7.72 A3-V1Q-NK	6.85 A3-V1Q-NL	6.000	2.125	5.000	0.500	0.385
5	28.89 A3-V1Q-PD	28.74 A3-V1Q-PE	28.54 A3-V1Q-PF	28.29 A3-V1Q-PG	27.97 A3-V1Q-PH	27.17 A3-V1Q-PJ	26.14 A3-V1Q-PK	24.89 A3-V1Q-PL	7.500	2.875	6.500	0.625	0.385
6	41.89 A3-V1Q-RD	41.74 A3-V1Q-RE	41.54 A3-V1Q-RF	41.29 A3-V1Q-RG	40.97 A3-V1Q-RH	40.17 A3-V1Q-RJ	39.14 A3-V1Q-RK	37.89 A3-V1Q-RL	9.250	2.875	7.750	0.750	0.385

REDUCING HUB | F316 / F316L

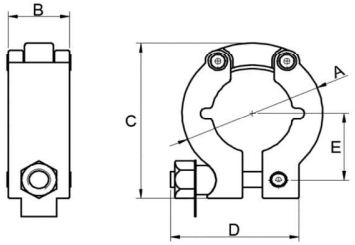
HUB SIZE	THREAD SIZE H (FNPT) / WEIGHT (LBS) / CNBO INDEX NO. ASME SA182 F316/F316L								C	D	E	F	G
	1/2	3/4	1	1¼	1½	2	2½	3					
3/4	0.88 A3-V2Q-ED	0.78 A3-V2Q-EE	-	-	-	-	-	-	2.000	1.750	1.500	0.313	0.135
1	0.87 A3-V2Q-FD	0.77 A3-V2Q-FE	0.64 A3-V2Q-FF	-	-	-	-	-	2.000	1.750	1.500	0.313	0.135
1¼ / 1½	2.73 A3-V2Q-HD	2.62 A3-V2Q-HE	2.46 A3-V2Q-HF	2.26 A3-V2Q-HG	2.01 A3-V2Q-HH	-	-	-	3.125	2.125	2.375	0.437	0.166
2	3.55 A3-V2Q-JD	3.45 A3-V2Q-JE	3.31 A3-V2Q-JF	3.13 A3-V2Q-JG	2.91 A3-V2Q-JH	2.35 A3-V2Q-JJ	-	-	3.625	2.000	2.875	0.437	0.260
2½	9.05 A3-V2Q-KD	8.92 A3-V2Q-KE	8.74 A3-V2Q-KF	8.51 A3-V2Q-KG	8.22 A3-V2Q-KH	7.51 A3-V2Q-KJ	6.58 A3-V2Q-KK	-	5.000	2.500	4.000	0.500	0.260
3	8.22 A3-V2Q-LD	8.09 A3-V2Q-LE	7.91 A3-V2Q-LF	7.68 A3-V2Q-LG	7.39 A3-V2Q-LH	6.68 A3-V2Q-LJ	5.75 A3-V2Q-LK	4.62 A3-V2Q-LL	5.000	2.500	4.000	0.500	0.260
4	9.64 A3-V2Q-ND	9.54 A3-V2Q-NE	9.40 A3-V2Q-NF	9.22 A3-V2Q-NG	9.00 A3-V2Q-NH	8.44 A3-V2Q-NJ	7.72 A3-V2Q-NK	6.85 A3-V2Q-NL	6.000	2.125	5.000	0.500	0.385
5	28.89 A3-V2Q-PD	28.74 A3-V2Q-PE	28.54 A3-V2Q-PF	28.29 A3-V2Q-PG	27.97 A3-V2Q-PH	27.17 A3-V2Q-PJ	26.14 A3-V2Q-PK	24.89 A3-V2Q-PL	7.500	2.875	6.500	0.625	0.385
6	41.89 A3-V2Q-RD	41.74 A3-V2Q-RE	41.54 A3-V2Q-RF	41.29 A3-V2Q-RG	40.97 A3-V2Q-RH	40.17 A3-V2Q-RJ	39.14 A3-V2Q-RK	37.89 A3-V2Q-RL	9.250	2.875	7.750	0.750	0.385

TUBE HUB



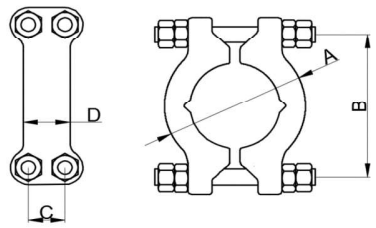
CNBO INDEX NO. ASME SA182 F304/304L	CNBO INDEX NO. ASME SA182 F316/F316L	SIZE 1 (PIPE)	SIZE 2 (TUBE)	TUBE THICK-NESS	A	B	C	D	E	F	G	H	WEIGHT (LBS)
A2-X1Q-F1	A2-X2Q-F1	1	1/2	0.065	1.500	0.500	0.370	3.500	2.000	0.313	2.000	0.500	0.750
A2-X1Q-F2	A2-X2Q-F2	1	3/4	0.095	1.500	0.750	0.560	3.500	2.000	0.313	2.000	0.750	0.750
A2-X1Q-F3	A2-X2Q-F3	1	3/4	0.109	1.500	0.750	0.532	3.500	2.000	0.313	2.000	0.750	0.750
A2-X1Q-F4	A2-X2Q-F4	1	1	0.095	1.500	1.000	0.810	3.500	2.000	0.313	2.000	1.000	0.750
A2-X1Q-F5	A2-X2Q-F5	1	1¼	0.095	1.500	1.250	1.060	3.250	2.000	0.313	2.000	1.250	0.750
A2-X1Q-H6	A2-X2Q-H6	1½	1½	0.095	2.375	1.500	1.310	4.250	2.000	0.437	3.125	1.500	2.500
A2-X1Q-H7	A2-X2Q-H7	1½	1½	0.120	2.375	1.500	1.260	4.250	2.000	0.437	3.125	1.500	2.500
A2-X1Q-H8	A2-X2Q-H8	1½	1½	0.134	2.375	1.500	1.232	4.250	2.000	0.437	3.125	1.500	2.500

ONE BOLTED CLAMP | CIMTAS Ningbo patented product: No. ZL201720352146.1



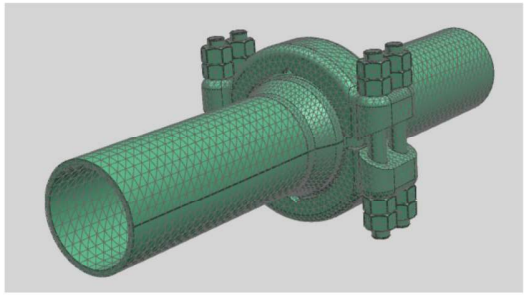
CNBO INDEX NO. ASME SA182 F304/F304L	CNBO INDEX NO. ASTM SA351-CF8M	NOM PIPE SIZE	A	B	C	D	E
C0-X1Q-E0	C0-X5Q-E0	3/4	3.000	1.000	3.500	1.500	1.50
C0-X1Q-F0	C0-X5Q-F0	1	3.000	1.380	3.500	3.000	1.50
C0-X1Q-H0	C0-X5Q-H0	1¼ / 1½	5.750	2.000	5.590	4.000	2.30
C0-X1Q-J0	C0-X5Q-J0	2	5.120	2.060	5.980	3.880	2.50
C0-X1Q-L0	C0-X5Q-L0	2½ / 3	7.750	2.380	7.530	6.130	3.13

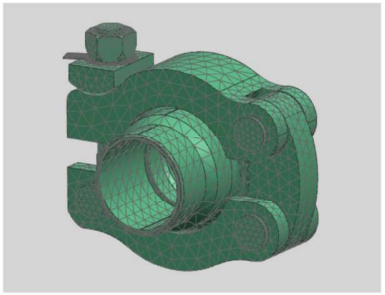
FOUR BOLTED CLAMP



CNBO INDEX NO. ASME SA182 F304/F304L	CNBO INDEX NO. ASTM SA351-CF8M	NOM PIPE SIZE	A	B	C	D
D0-X1Q-L0	D0-X5Q-L0	2½ / 3	6.972	7.480	1.811	2.36
D0-X1Q-N0	D0-X5Q-N0	4	8.150	8.496	2.063	2.39
D0-X1Q-P0	D0-X5Q-P0	5	4.898	10.266	2.317	3.06
D0-X1Q-R0	D0-X5Q-R0	6	6.018	12.632	2.437	3.52

ENGINEERING | ONE AND FOUR BOLTED QRF





STRESS ANALYSIS:

- High durability
- Long life - cycle
- Zero - maintenance