

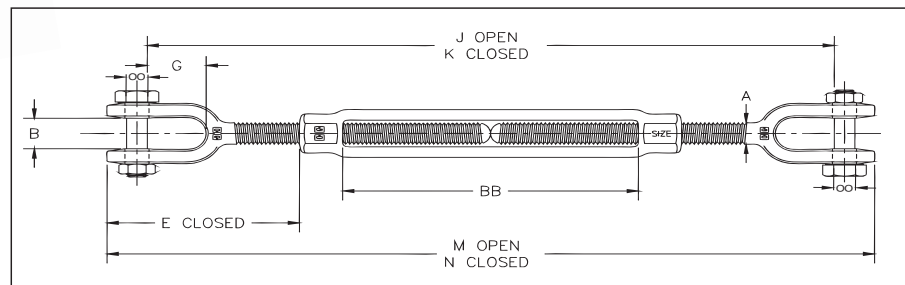
# Jaw & Jaw Turnbuckles



**HG -228**  
Jaw & Jaw

Meets the performance requirements of Federal Specifications FF-791b, Type 1 Form 1 - CLASS 7, and ASTM F-1145, except for those provisions required of the contractor. For additional information, see page 452.

- End fittings are Quenched and Tempered or Normalized, bodies heat treated by normalizing.
- Hot Dip galvanized steel.
- **TURNBUCKLES RECOMMENDED FOR STRAIGHT OR IN-LINE PULL ONLY.**
- Forged jaw ends are fitted with bolts and nuts for 1/4" through 5/8", and pins and cotters on 3/4" through 2-3/4" sizes.
- Modified UNJ thread on end fittings for improved fatigue properties
- Body has UNC threads.
- Lock Nuts available for all sizes (see page 198).
- Comprehensive end fitting data provided on page 196.
- Fatigue Rated.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these turnbuckles meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.



**Fatigue Rated**

## HG-228 Jaw & Jaw

| Thread Dia. & Take Up (in) | HG-228 Stock No. | Working Load Limit (lb)* | Weight Each (lb) | Dimensions (in) |      |          |      |        |          |        |          |       |
|----------------------------|------------------|--------------------------|------------------|-----------------|------|----------|------|--------|----------|--------|----------|-------|
|                            |                  |                          |                  | A               | B    | E Closed | G    | J Open | K Closed | M Open | N Closed | BB    |
| † 1/4 x 4                  | 1032493          | 500                      | .37              | .25             | .45  | 1.66     | .64  | 11.19  | 7.19     | 12.18  | 8.18     | 4.07  |
| † 5/16 x 4-1/2             | 1032518          | 800                      | .56              | .31             | .50  | 2.02     | .87  | 13.07  | 8.57     | 14.12  | 9.62     | 4.58  |
| † 3/8 x 6                  | 1032536          | 1200                     | .85              | .38             | .53  | 2.11     | .85  | 16.25  | 10.25    | 17.50  | 11.50    | 6.10  |
| 1/2 x 6                    | 1032554          | 2200                     | 1.82             | .50             | .64  | 3.22     | 1.07 | 18.65  | 12.65    | 20.14  | 14.14    | 6.03  |
| 1/2 x 9                    | 1032572          | 2200                     | 2.29             | .50             | .64  | 3.20     | 1.07 | 24.94  | 15.94    | 26.43  | 17.43    | 9.36  |
| 1/2 x 12                   | 1032590          | 2200                     | 2.71             | .50             | .64  | 3.20     | 1.07 | 30.94  | 18.94    | 32.43  | 20.43    | 12.36 |
| 5/8 x 6                    | 1032616          | 3500                     | 3.21             | .63             | .79  | 3.90     | 1.32 | 19.74  | 13.74    | 21.82  | 15.82    | 6.03  |
| 5/8 x 9                    | 1032634          | 3500                     | 3.95             | .63             | .79  | 3.89     | 1.32 | 26.08  | 17.08    | 28.16  | 19.16    | 9.39  |
| 5/8 x 12                   | 1032652          | 3500                     | 4.58             | .63             | .79  | 3.89     | 1.32 | 32.08  | 20.08    | 34.16  | 22.16    | 12.39 |
| 3/4 x 6                    | 1032670          | 5200                     | 4.80             | .75             | .97  | 4.71     | 1.52 | 21.09  | 15.09    | 23.68  | 17.68    | 6.13  |
| 3/4 x 9                    | 1032698          | 5200                     | 5.85             | .75             | .97  | 4.68     | 1.52 | 27.49  | 18.49    | 30.08  | 21.08    | 9.59  |
| 3/4 x 12                   | 1032714          | 5200                     | 6.72             | .75             | .97  | 4.68     | 1.52 | 33.49  | 21.49    | 36.08  | 24.08    | 12.59 |
| 3/4 x 18                   | 1032732          | 5200                     | 8.45             | .75             | .97  | 4.71     | 1.52 | 45.49  | 27.49    | 48.08  | 30.08    | 18.53 |
| 7/8 x 12                   | 1032750          | 7200                     | 9.37             | .88             | 1.16 | 5.50     | 1.77 | 34.65  | 22.65    | 37.62  | 25.62    | 12.16 |
| 7/8 x 18                   | 1032778          | 7200                     | 11.8             | .88             | 1.16 | 5.50     | 1.77 | 47.12  | 29.12    | 50.09  | 32.09    | 18.63 |
| 1 x 6                      | 1032796          | 10000                    | 10.4             | 1.00            | 1.34 | 6.09     | 2.05 | 23.82  | 17.82    | 27.18  | 21.18    | 6.18  |
| 1 x 12                     | 1032812          | 10000                    | 13.8             | 1.00            | 1.34 | 6.09     | 2.05 | 35.82  | 23.82    | 39.18  | 27.18    | 12.18 |
| 1 x 18                     | 1032830          | 10000                    | 17.1             | 1.00            | 1.34 | 6.09     | 2.05 | 47.82  | 29.82    | 51.18  | 33.18    | 18.18 |
| 1 x 24                     | 1032858          | 10000                    | 21.0             | 1.00            | 1.34 | 6.06     | 2.05 | 60.42  | 36.42    | 63.78  | 39.78    | 24.84 |
| 1-1/4 x 12                 | 1032876          | 15200                    | 21.9             | 1.25            | 1.84 | 8.09     | 2.82 | 39.37  | 27.37    | 43.58  | 31.58    | 12.06 |
| 1-1/4 x 18                 | 1032894          | 15200                    | 25.9             | 1.25            | 1.84 | 8.09     | 2.82 | 51.37  | 33.37    | 55.58  | 37.58    | 18.06 |
| 1-1/4 x 24                 | 1032910          | 15200                    | 29.8             | 1.25            | 1.84 | 8.09     | 2.82 | 63.93  | 39.93    | 68.14  | 44.14    | 24.62 |
| 1-1/2 x 12                 | 1032938          | 21400                    | 32.6             | 1.50            | 2.06 | 8.93     | 2.81 | 40.76  | 28.76    | 45.68  | 33.68    | 12.32 |
| 1-1/2 x 18                 | 1032956          | 21400                    | 38.0             | 1.50            | 2.06 | 8.93     | 2.81 | 52.76  | 34.76    | 57.68  | 39.68    | 18.32 |
| 1-1/2 x 24                 | 1032974          | 21400                    | 43.5             | 1.50            | 2.06 | 8.93     | 2.81 | 65.38  | 41.38    | 70.30  | 46.30    | 24.94 |
| 1-3/4 x 18                 | 1033018          | 28000                    | 53.5             | 1.75            | 2.60 | 9.36     | 3.35 | 53.35  | 35.35    | 59.16  | 41.16    | 18.37 |
| 1-3/4 x 24                 | 1033036          | 28000                    | 61.1             | 1.75            | 2.60 | 9.36     | 3.35 | 65.35  | 41.35    | 71.16  | 47.16    | 24.37 |
| 2 x 24                     | 1033054          | 37000                    | 96.3             | 2.00            | 2.62 | 11.80    | 3.74 | 69.64  | 45.64    | 76.72  | 52.72    | 24.48 |
| 2-1/2 x 24                 | 1033072          | 60000                    | 167              | 2.50            | 3.06 | 13.26    | 4.44 | 72.97  | 48.97    | 82.18  | 58.18    | 24.60 |
| 2-3/4 x 24                 | 1033090          | 75000                    | 199              | 2.75            | 3.69 | 14.92    | 4.19 | 74.75  | 50.75    | 85.50  | 61.50    | 24.65 |

\*Proof Load is 2.5 times the Working Load Limit. Ultimate Load is 5 times the Working Load Limit. † Mechanical Galvanized