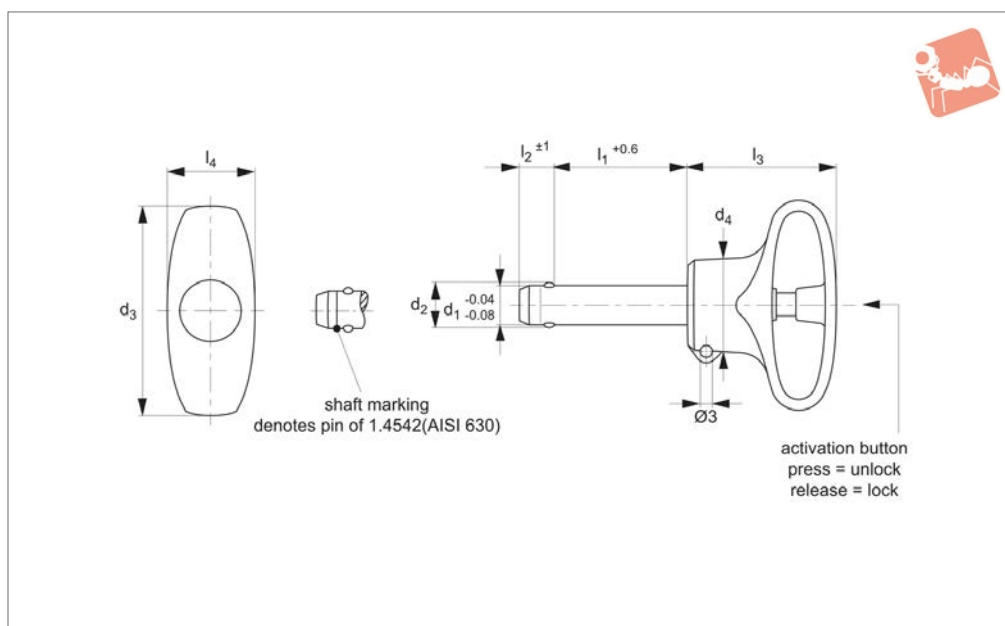


# Ball Lock Pins - Single Acting - Elastic self-locking

## Ball Lock Pins & Quick Release



**33100**

BALL LOCK PINS & QUICK RELEASE PINS

### Material

#### Type One-

Pin: Stainless steel 1.4305 (AISI 303).

#### Type Two-

Pin: Stainless steel 1.4542 (AISI 630), precipitation hardened, blast finish. Offering extreme load capacity. (Marked at end of shaft to denote 1.4542 material).

Handle: plastic (PBT/TPE). Colours avail.; orange/grey

### Technical Notes

Pressing = unlocking.

Releasing = locking.

**Unique design; elastic handle provides integral spring action to reset pin** (hence no internal spring mechanism required).

Tested to over 100,000+ repetitions.

Temperature resistance -30°C to 80°C.

For quick fastening and locking of frequently repeated connections in applica-

tions such as; sports, leisure, medical and general engineering applications.

### Tips

**For easy to install locating bush see part 33248 <X\33248#26>.**

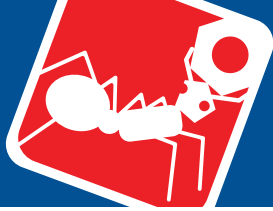
### Important Notes

\*Shearing resistance similar to DIN 50141.

| Order No.          | Material         | d <sub>1</sub> | l <sub>1</sub> | d <sub>2</sub> | d <sub>3</sub> | d <sub>4</sub> | l <sub>2</sub> | l <sub>3</sub> | l <sub>4</sub> | Location hole dia.<br>tol. H11 | Shearing resistance, double<br>kN min. | Weight<br>g |
|--------------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------------------|----------------------------------------|-------------|
| <b>33100.W0712</b> | Stainless 1.4305 | 5              | 10             | 5.5            | 36             | 12.7           | 6.0            | 31.0           | 15.9           | 5                              | 14                                     | 9           |
| <b>33100.W0713</b> | Stainless 1.4305 | 5              | 15             | 5.5            | 36             | 12.7           | 6.0            | 31.0           | 15.9           | 5                              | 14                                     | 10          |
| <b>33100.W0714</b> | Stainless 1.4305 | 5              | 20             | 5.5            | 36             | 12.7           | 6.0            | 31.0           | 15.9           | 5                              | 14                                     | 11          |
| <b>33100.W0715</b> | Stainless 1.4305 | 5              | 25             | 5.5            | 36             | 12.7           | 6.0            | 31.0           | 15.9           | 5                              | 14                                     | 11          |
| <b>33100.W0716</b> | Stainless 1.4305 | 5              | 30             | 5.5            | 36             | 12.7           | 6.0            | 31.0           | 15.9           | 5                              | 14                                     | 12          |
| <b>33100.W0722</b> | Stainless 1.4305 | 6              | 10             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 21                                     | 10          |
| <b>33100.W0723</b> | Stainless 1.4305 | 6              | 15             | 7.0            | 35             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 21                                     | 11          |
| <b>33100.W0724</b> | Stainless 1.4305 | 6              | 20             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 21                                     | 12          |
| <b>33100.W0725</b> | Stainless 1.4305 | 6              | 25             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 21                                     | 13          |
| <b>33100.W0726</b> | Stainless 1.4305 | 6              | 30             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 21                                     | 14          |
| <b>33100.W0727</b> | Stainless 1.4305 | 6              | 35             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 21                                     | 15          |
| <b>33100.W0728</b> | Stainless 1.4305 | 6              | 40             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 21                                     | 16          |
| <b>33100.W0729</b> | Stainless 1.4305 | 6              | 45             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 21                                     | 18          |
| <b>33100.W0730</b> | Stainless 1.4305 | 6              | 50             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 21                                     | 18          |
| <b>33100.W0734</b> | Stainless 1.4305 | 8              | 20             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 38                                     | 23          |
| <b>33100.W0735</b> | Stainless 1.4305 | 8              | 25             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 38                                     | 25          |
| <b>33100.W0736</b> | Stainless 1.4305 | 8              | 30             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 38                                     | 26          |
| <b>33100.W0737</b> | Stainless 1.4305 | 8              | 35             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 38                                     | 28          |
| <b>33100.W0738</b> | Stainless 1.4305 | 8              | 40             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 38                                     | 30          |
| <b>33100.W0739</b> | Stainless 1.4305 | 8              | 45             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 38                                     | 32          |
| <b>33100.W0740</b> | Stainless 1.4305 | 8              | 50             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 38                                     | 34          |
| <b>33100.W0744</b> | Stainless 1.4305 | 10             | 20             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 60                                     | 30          |
| <b>33100.W0745</b> | Stainless 1.4305 | 10             | 25             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 60                                     | 32          |
| <b>33100.W0746</b> | Stainless 1.4305 | 10             | 30             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 60                                     | 35          |
| <b>33100.W0747</b> | Stainless 1.4305 | 10             | 35             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 60                                     | 38          |
| <b>33100.W0748</b> | Stainless 1.4305 | 10             | 40             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 60                                     | 41          |



| Order No.   | Material         | d <sub>1</sub> | l <sub>1</sub> | d <sub>2</sub> | d <sub>3</sub> | d <sub>4</sub> | l <sub>2</sub> | l <sub>3</sub> | l <sub>4</sub> | Location hole dia.<br>tol. H11 | Shearing resistance, double<br>kN<br>min. | Weight<br>g |
|-------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------------------|-------------------------------------------|-------------|
| 33100.W0749 | Stainless 1.4305 | 10             | 45             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 60                                        | 44          |
| 33100.W0750 | Stainless 1.4305 | 10             | 50             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 60                                        | 47          |
| 33100.W0752 | Stainless 1.4305 | 10             | 60             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 60                                        | 53          |
| 33100.W0765 | Stainless 1.4305 | 12             | 25             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 87                                        | 54          |
| 33100.W0766 | Stainless 1.4305 | 12             | 30             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 87                                        | 59          |
| 33100.W0767 | Stainless 1.4305 | 12             | 35             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 87                                        | 63          |
| 33100.W0768 | Stainless 1.4305 | 12             | 40             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 87                                        | 67          |
| 33100.W0769 | Stainless 1.4305 | 12             | 45             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 87                                        | 71          |
| 33100.W0770 | Stainless 1.4305 | 12             | 50             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 87                                        | 75          |
| 33100.W0772 | Stainless 1.4305 | 12             | 60             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 87                                        | 84          |
| 33100.W0774 | Stainless 1.4305 | 12             | 70             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 87                                        | 93          |
| 33100.W0776 | Stainless 1.4305 | 12             | 80             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 87                                        | 101         |
| 33100.W0786 | Stainless 1.4305 | 16             | 30             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 155                                       | 91          |
| 33100.W0787 | Stainless 1.4305 | 16             | 35             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 155                                       | 98          |
| 33100.W0788 | Stainless 1.4305 | 16             | 40             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 155                                       | 106         |
| 33100.W0789 | Stainless 1.4305 | 16             | 45             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 155                                       | 114         |
| 33100.W0790 | Stainless 1.4305 | 16             | 50             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 155                                       | 121         |
| 33100.W0792 | Stainless 1.4305 | 16             | 60             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 155                                       | 137         |
| 33100.W0794 | Stainless 1.4305 | 16             | 70             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 155                                       | 152         |
| 33100.W0796 | Stainless 1.4305 | 16             | 80             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 155                                       | 167         |
| 33100.W0912 | Stainless 1.4542 | 5              | 10             | 5.5            | 36             | 12.7           | 6.0            | 31.0           | 15.9           | 5                              | 24                                        | 9           |
| 33100.W0913 | Stainless 1.4542 | 5              | 15             | 5.5            | 36             | 12.7           | 6.0            | 31.0           | 15.9           | 5                              | 24                                        | 10          |
| 33100.W0914 | Stainless 1.4542 | 5              | 20             | 5.5            | 36             | 12.7           | 6.0            | 31.0           | 15.9           | 5                              | 24                                        | 11          |
| 33100.W0915 | Stainless 1.4542 | 5              | 25             | 5.5            | 36             | 12.7           | 6.0            | 31.0           | 15.9           | 5                              | 24                                        | 11          |
| 33100.W0916 | Stainless 1.4542 | 5              | 30             | 5.5            | 36             | 12.7           | 6.0            | 31.0           | 15.9           | 5                              | 24                                        | 12          |
| 33100.W0922 | Stainless 1.4542 | 6              | 10             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 35                                        | 10          |
| 33100.W0923 | Stainless 1.4542 | 6              | 15             | 7.0            | 35             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 35                                        | 11          |
| 33100.W0924 | Stainless 1.4542 | 6              | 20             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 35                                        | 12          |
| 33100.W0925 | Stainless 1.4542 | 6              | 25             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 35                                        | 13          |
| 33100.W0926 | Stainless 1.4542 | 6              | 30             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 35                                        | 14          |
| 33100.W0927 | Stainless 1.4542 | 6              | 35             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 35                                        | 15          |
| 33100.W0928 | Stainless 1.4542 | 6              | 40             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 35                                        | 16          |
| 33100.W0929 | Stainless 1.4542 | 6              | 45             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 35                                        | 18          |
| 33100.W0930 | Stainless 1.4542 | 6              | 50             | 7.0            | 36             | 12.7           | 7.0            | 31.0           | 15.9           | 6                              | 35                                        | 18          |
| 33100.W0934 | Stainless 1.4542 | 8              | 20             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 63                                        | 23          |
| 33100.W0935 | Stainless 1.4542 | 8              | 25             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 63                                        | 25          |
| 33100.W0936 | Stainless 1.4542 | 8              | 30             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 63                                        | 26          |
| 33100.W0937 | Stainless 1.4542 | 8              | 35             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 63                                        | 28          |
| 33100.W0938 | Stainless 1.4542 | 8              | 40             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 63                                        | 30          |
| 33100.W0939 | Stainless 1.4542 | 8              | 45             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 63                                        | 32          |
| 33100.W0940 | Stainless 1.4542 | 8              | 50             | 9.6            | 41             | 16.4           | 8.2            | 34.8           | 19.2           | 8                              | 63                                        | 34          |
| 33100.W0944 | Stainless 1.4542 | 10             | 20             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 100                                       | 30          |
| 33100.W0945 | Stainless 1.4542 | 10             | 25             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 100                                       | 32          |
| 33100.W0946 | Stainless 1.4542 | 10             | 30             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 100                                       | 35          |
| 33100.W0947 | Stainless 1.4542 | 10             | 35             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 100                                       | 38          |
| 33100.W0948 | Stainless 1.4542 | 10             | 40             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 100                                       | 41          |
| 33100.W0949 | Stainless 1.4542 | 10             | 45             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 100                                       | 44          |
| 33100.W0950 | Stainless 1.4542 | 10             | 50             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 100                                       | 47          |
| 33100.W0952 | Stainless 1.4542 | 10             | 60             | 12.0           | 41             | 16.4           | 9.6            | 34.8           | 19.2           | 10                             | 100                                       | 53          |
| 33100.W0965 | Stainless 1.4542 | 12             | 25             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 144                                       | 54          |
| 33100.W0966 | Stainless 1.4542 | 12             | 30             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 144                                       | 59          |
| 33100.W0967 | Stainless 1.4542 | 12             | 35             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 144                                       | 63          |
| 33100.W0968 | Stainless 1.4542 | 12             | 40             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 144                                       | 67          |
| 33100.W0969 | Stainless 1.4542 | 12             | 45             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 144                                       | 71          |
| 33100.W0970 | Stainless 1.4542 | 12             | 50             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 144                                       | 75          |
| 33100.W0972 | Stainless 1.4542 | 12             | 60             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 144                                       | 84          |
| 33100.W0974 | Stainless 1.4542 | 12             | 70             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 144                                       | 93          |
| 33100.W0976 | Stainless 1.4542 | 12             | 80             | 14.5           | 49             | 21.2           | 10.6           | 40.5           | 24.8           | 12                             | 144                                       | 101         |
| 33100.W0986 | Stainless 1.4542 | 16             | 30             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 257                                       | 91          |
| 33100.W0987 | Stainless 1.4542 | 16             | 35             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 257                                       | 98          |
| 33100.W0988 | Stainless 1.4542 | 16             | 40             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 257                                       | 106         |
| 33100.W0989 | Stainless 1.4542 | 16             | 45             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 257                                       | 114         |
| 33100.W0990 | Stainless 1.4542 | 16             | 50             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 257                                       | 121         |
| 33100.W0992 | Stainless 1.4542 | 16             | 60             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 257                                       | 137         |
| 33100.W0994 | Stainless 1.4542 | 16             | 70             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 257                                       | 152         |



# Ball Lock Pins - Single Acting - Elastic self-locking

## Ball Lock Pins & Quick Release

| Order No.   | Material         | d <sub>1</sub> | l <sub>1</sub> | d <sub>2</sub> | d <sub>3</sub> | d <sub>4</sub> | l <sub>2</sub> | l <sub>3</sub> | l <sub>4</sub> | Location hole dia.<br>tol. H11 | Shearing resistance, double<br>kN<br>min. | Weight<br>g |
|-------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------------------|-------------------------------------------|-------------|
| 33100.W0996 | Stainless 1.4542 | 16             | 80             | 19.0           | 49             | 21.2           | 14.0           | 40.5           | 24.8           | 16                             | 257                                       | 167         |



BALL LOCK PINS & QUICK RELEASE PINS



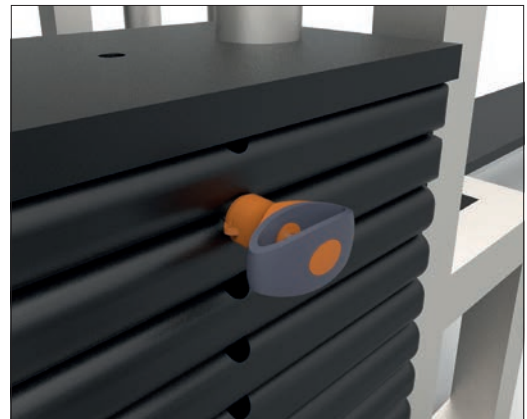
### Sound Rigging Systems

Ball lock pins on a sound rigging system. Offering secure fixing with high shear forces and easy fitting for operators at heights.

In addition full black powder coating of grip and actuation button eliminates glare from other stage lighting.



### Gym Equipment



### Scientific and Medical

