

# Clamping Screws

-Ball / Angle-

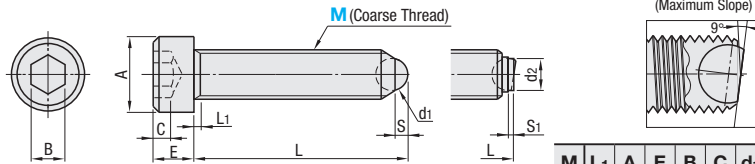
RoHS 10



| Type      |            | Main Body  |                     | Ball       |            |
|-----------|------------|------------|---------------------|------------|------------|
| Ball Type | Angle Type | M Material | S Surface Treatment | M Material | H Hardness |
| HRSM      | HFSM       | SCM435     | Blackening          | SUJ2       | 55~60HRC   |
| HRSU      | HFSU       | SUSXM7     | -                   | SUS440C    | 55~60HRC   |
| HRSUC     | -          |            |                     | Alumina    | 1100HV     |

Ball Type

Angle Type



| M  | L1  | A   | E  | B  | C   | d1  | d2   | S   | S1  | Withstand Load (kgf) |
|----|-----|-----|----|----|-----|-----|------|-----|-----|----------------------|
| 4  | 2.1 | 7   | 4  | 3  | 2   | 2.5 | 2    | 0.8 | 0.3 | 1.3                  |
| 5  | 2.4 | 8.5 | 5  | 4  | 2.5 | 3   | 2.5  | 1   | 0.4 | 1.4                  |
| 6  | 3   | 10  | 6  | 5  | 3   | 4   | 3.2  | 1.3 | 0.6 | 3.3                  |
| 8  | 3.5 | 13  | 8  | 6  | 4   | 5.5 | 4.5  | 1.8 | 0.8 | 3.9                  |
| 10 | 4.5 | 16  | 10 | 8  | 5   | 7   | 6    | 2.3 | 0.8 | 3.4                  |
| 12 | 5   | 18  | 12 | 10 | 6   | 8.5 | 7.2  | 2.8 | 1   | 4.8                  |
| 16 | 6   | 24  | 16 | 14 | 8   | 12  | 10.7 | 4.3 | 1.3 | 9.6                  |

\* Screws grade is judged whether or not it can be used with commercially available nut which is JIS6g Equivalent.

kgf=Nx0.101972

## Ball Type / Angle Type (Steel Ball / Stainless Ball)

| Part Number             | L    |    |         |              |
|-------------------------|------|----|---------|--------------|
|                         | Type | M  | Nominal | HRSM<br>HRSU |
| (Ball)<br>HRSM<br>HRSU  | 4    | 10 | 10.5    | 10           |
|                         |      | 12 | 12.5    | 12           |
|                         |      | 16 | 16.5    | 16           |
|                         |      | 20 | 20.5    | 20           |
|                         |      | 25 | 25.5    | 25           |
| 5                       | 5    | 12 | 12.6    | 12           |
|                         |      | 16 | 16.6    | 16           |
|                         |      | 20 | 20.6    | 20           |
|                         |      | 25 | 25.6    | 25           |
| 6                       | 6    | 30 | 30.6    | 30           |
|                         |      | 16 | 16.8    | 16           |
|                         |      | 20 | 20.8    | 20           |
| 8                       | 8    | 25 | 25.8    | 25           |
|                         |      | 30 | 30.8    | 30           |
|                         |      | 40 | 40.8    | 40           |
|                         |      | 20 | 21.2    | 20           |
| (Angle)<br>HFSM<br>HFSU | 8    | 30 | 31.2    | 30           |
|                         |      | 35 | 36.2    | 35           |
|                         |      | 40 | 41.2    | 40           |
|                         |      | 50 | 51.2    | 50           |
|                         |      | 25 | 26.7    | 25           |
| 10                      | 10   | 30 | 31.7    | 30           |
|                         |      | 40 | 41.7    | 40           |
|                         |      | 50 | 51.7    | 50           |
|                         |      | 60 | 61.7    | 60           |
| 12                      | 12   | 30 | 32      | 30           |
|                         |      | 50 | 52      | 50           |
|                         |      | 80 | 82      | 80           |
| 16                      | 16   | 40 | 43.3    | 40           |
|                         |      | 60 | 63.3    | 60           |
|                         |      | 80 | 83.3    | 80           |

## Ball Type (Alumina Ball)

| Part Number | L    |      |
|-------------|------|------|
|             | Type | M    |
| 4           | 10   | 10.5 |
|             | 16   | 16.5 |
|             | 25   | 25.5 |
| 5           | 20   | 20.6 |
|             | 30   | 30.6 |
| 6           | 16   | 16.8 |
|             | 25   | 25.8 |
|             | 40   | 40.8 |
| 8           | 20   | 21.2 |
|             | 35   | 36.2 |
| 10          | 50   | 51.2 |
|             | 40   | 41.7 |

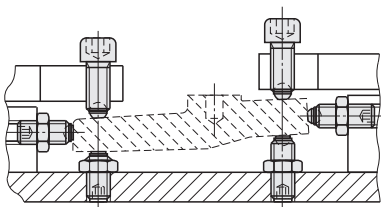


Order Example

Part Number  
HRSM6-16



Example



## Notes on Clamping Screws

This product is used not to rotate face balls but to clamp works. (The face balls do not necessarily rotate depending on each caulking conditions of face balls.)

For Angle Type, a sphere of its hemisphere appears on the face, instead of a flat plane by its rotation. In such a case, return its position using adhesive tape and magnet. Otherwise use Non-reverse Type to avoid rotations.