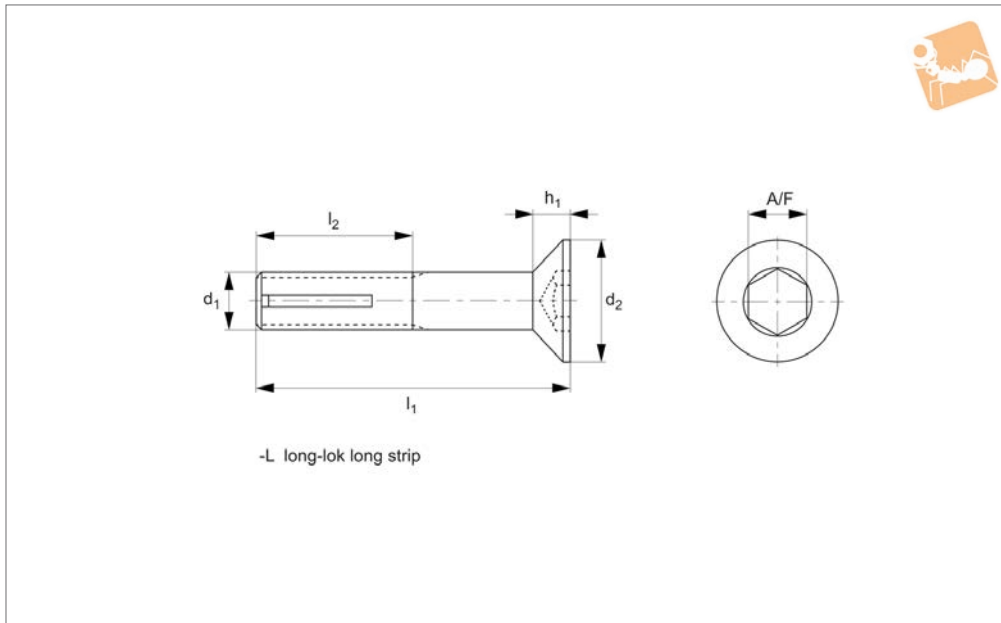




Self-Locking Countersunk Screws

Hex. socket - nylon strip

Self Locking
Screws



P0112

SELF LOCKING SCREWS

Material

Stainless steel A2, with nylon locking patch.
A4 available on request.

Technical Notes

To DIN 7991, ISO 10642, with nylon locking patch. Vibration proof.

Standard green locking patch. Breakaway torque values are complex and can be calculated on request.
Can be manufactured to MIL spec on request (MIL-DTL-18240 and NAS1283).

Tips

Surface finishes such as cadmium plating,

nickel plating, armalloy coating, black oxide coating - all available on request.
Due to the wide range of sizes, material grades and finishes, these parts are manufactured on demand - minimum batch size is 100 pieces.

| Order No. | d ₁ | l ₁ | d ₂ | l ₂ | h ₁ | A/F |
|----------------|----------------|----------------|----------------|----------------|----------------|-----|
| P0112.030-006L | M 3 | 6 | 6 | - | 1.7 | 2 |
| P0112.030-008L | M 3 | 8 | 6 | - | 1.7 | 2 |
| P0112.030-010L | M 3 | 10 | 6 | - | 1.7 | 2 |
| P0112.030-012L | M 3 | 12 | 6 | - | 1.7 | 2 |
| P0112.030-014L | M 3 | 14 | 6 | - | 1.7 | 2 |
| P0112.030-016L | M 3 | 16 | 6 | - | 1.7 | 2 |
| P0112.030-018L | M 3 | 18 | 6 | - | 1.7 | 2 |
| P0112.030-020L | M 3 | 20 | 6 | - | 1.7 | 2 |
| P0112.040-006L | M 4 | 6 | 8 | - | 2.3 | 2.5 |
| P0112.040-008L | M 4 | 8 | 8 | - | 2.3 | 2.5 |
| P0112.040-010L | M 4 | 10 | 8 | - | 2.3 | 2.5 |
| P0112.040-012L | M 4 | 12 | 8 | - | 2.3 | 2.5 |
| P0112.040-014L | M 4 | 14 | 8 | - | 2.3 | 2.5 |
| P0112.040-016L | M 4 | 16 | 8 | - | 2.3 | 2.5 |
| P0112.040-018L | M 4 | 18 | 8 | - | 2.3 | 2.5 |
| P0112.040-020L | M 4 | 20 | 8 | - | 2.3 | 2.5 |
| P0112.040-025L | M 4 | 25 | 8 | - | 2.3 | 2.5 |
| P0112.040-030L | M 4 | 30 | 8 | 20 | 2.3 | 2.5 |
| P0112.040-035L | M 4 | 35 | 8 | 20 | 2.3 | 2.5 |
| P0112.040-040L | M 4 | 40 | 8 | 20 | 2.3 | 2.5 |
| P0112.040-045L | M 4 | 45 | 8 | 20 | 2.3 | 2.5 |
| P0112.040-050L | M 4 | 50 | 8 | 20 | 2.3 | 2.5 |
| P0112.040-060L | M 4 | 60 | 8 | 20 | 2.3 | 2.5 |
| P0112.050-006L | M 5 | 6 | 10 | - | 2.8 | 3 |
| P0112.050-008L | M 5 | 8 | 10 | - | 2.8 | 3 |
| P0112.050-010L | M 5 | 10 | 10 | - | 2.8 | 3 |
| P0112.050-012L | M 5 | 12 | 10 | - | 2.8 | 3 |
| P0112.050-014L | M 5 | 14 | 10 | - | 2.8 | 3 |
| P0112.050-016L | M 5 | 16 | 10 | - | 2.8 | 3 |
| P0112.050-018L | M 5 | 18 | 10 | - | 2.8 | 3 |
| P0112.050-020L | M 5 | 20 | 10 | - | 2.8 | 3 |



| Order No. | d ₁ | l ₁ | d ₂ | l ₂ | h ₁ | A/F |
|----------------|----------------|----------------|----------------|----------------|----------------|-----|
| P0112.050-022L | M 5 | 22 | 10 | - | 2.8 | 3 |
| P0112.050-025L | M 5 | 25 | 10 | - | 2.8 | 3 |
| P0112.050-030L | M 5 | 30 | 10 | - | 2.8 | 3 |
| P0112.050-035L | M 5 | 35 | 10 | 22 | 2.8 | 3 |
| P0112.050-040L | M 5 | 40 | 10 | 22 | 2.8 | 3 |
| P0112.050-045L | M 5 | 45 | 10 | 22 | 2.8 | 3 |
| P0112.050-050L | M 5 | 50 | 10 | 22 | 2.8 | 3 |
| P0112.050-060L | M 5 | 60 | 10 | 22 | 2.8 | 3 |
| P0112.050-070L | M 5 | 70 | 10 | 22 | 2.8 | 3 |
| P0112.050-080L | M 5 | 80 | 10 | 22 | 2.8 | 3 |
| P0112.050-090L | M 5 | 90 | 10 | 22 | 2.8 | 3 |
| P0112.050-100L | M 5 | 60 | 10 | 22 | 2.8 | 3 |
| P0112.060-008L | M 6 | 8 | 12 | - | 3.3 | 4 |
| P0112.060-010L | M 6 | 10 | 12 | - | 3.3 | 4 |
| P0112.060-012L | M 6 | 12 | 12 | - | 3.3 | 4 |
| P0112.060-014L | M 6 | 14 | 12 | - | 3.3 | 4 |
| P0112.060-016L | M 6 | 16 | 12 | - | 3.3 | 4 |
| P0112.060-018L | M 6 | 18 | 12 | - | 3.3 | 4 |
| P0112.060-020L | M 6 | 20 | 12 | - | 3.3 | 4 |
| P0112.060-022L | M 6 | 22 | 12 | - | 3.3 | 4 |
| P0112.060-025L | M 6 | 25 | 12 | - | 3.3 | 4 |
| P0112.060-030L | M 6 | 30 | 12 | - | 3.3 | 4 |
| P0112.060-035L | M 6 | 35 | 12 | - | 3.3 | 4 |
| P0112.060-040L | M 6 | 40 | 12 | 24 | 3.3 | 4 |
| P0112.060-045L | M 6 | 45 | 12 | 24 | 3.3 | 4 |
| P0112.060-050L | M 6 | 50 | 12 | 24 | 3.3 | 4 |
| P0112.060-055L | M 6 | 55 | 12 | 24 | 3.3 | 4 |
| P0112.060-060L | M 6 | 60 | 12 | 24 | 3.3 | 4 |
| P0112.060-070L | M 6 | 70 | 12 | 24 | 3.3 | 4 |
| P0112.060-080L | M 6 | 80 | 12 | 24 | 3.3 | 4 |
| P0112.060-090L | M 6 | 90 | 12 | 24 | 3.3 | 4 |
| P0112.060-100L | M 6 | 100 | 12 | 24 | 3.3 | 4 |
| P0112.080-010L | M 8 | 10 | 16 | - | 4.4 | 5 |
| P0112.080-012L | M 8 | 12 | 16 | - | 4.4 | 5 |
| P0112.080-014L | M 8 | 14 | 16 | - | 4.4 | 5 |
| P0112.080-016L | M 8 | 16 | 16 | - | 4.4 | 5 |
| P0112.080-018L | M 8 | 18 | 16 | - | 4.4 | 5 |
| P0112.080-020L | M 8 | 20 | 16 | - | 4.4 | 5 |
| P0112.080-022L | M 8 | 22 | 16 | - | 4.4 | 5 |
| P0112.080-025L | M 8 | 25 | 16 | - | 4.4 | 5 |
| P0112.080-030L | M 8 | 30 | 16 | - | 4.4 | 5 |
| P0112.080-035L | M 8 | 35 | 16 | - | 4.4 | 5 |
| P0112.080-040L | M 8 | 40 | 16 | - | 4.4 | 5 |
| P0112.080-045L | M 8 | 45 | 16 | - | 4.4 | 5 |
| P0112.080-050L | M 8 | 50 | 16 | 28 | 4.4 | 5 |
| P0112.080-055L | M 8 | 55 | 16 | 28 | 4.4 | 5 |
| P0112.080-060L | M 8 | 60 | 16 | 28 | 4.4 | 5 |
| P0112.080-065L | M 8 | 65 | 16 | 28 | 4.4 | 5 |
| P0112.080-070L | M 8 | 70 | 16 | 28 | 4.4 | 5 |
| P0112.080-075L | M 8 | 75 | 16 | 28 | 4.4 | 5 |
| P0112.080-080L | M 8 | 80 | 16 | 28 | 4.4 | 5 |
| P0112.080-090L | M 8 | 90 | 16 | 28 | 4.4 | 5 |
| P0112.080-100L | M 8 | 100 | 16 | 28 | 4.4 | 5 |
| P0112.100-016L | M10 | 16 | 20 | - | 5.5 | 6 |
| P0112.100-020L | M10 | 20 | 20 | - | 5.5 | 6 |
| P0112.100-025L | M10 | 25 | 20 | - | 5.5 | 6 |
| P0112.100-030L | M10 | 30 | 20 | - | 5.5 | 6 |
| P0112.100-035L | M10 | 35 | 20 | - | 5.5 | 6 |
| P0112.100-040L | M10 | 40 | 20 | - | 5.5 | 6 |
| P0112.100-045L | M10 | 45 | 20 | - | 5.5 | 6 |
| P0112.100-050L | M10 | 50 | 20 | - | 5.5 | 6 |
| P0112.100-055L | M10 | 55 | 20 | 32 | 5.5 | 6 |
| P0112.100-060L | M10 | 60 | 20 | 32 | 5.5 | 6 |
| P0112.100-065L | M10 | 65 | 20 | 32 | 5.5 | 6 |
| P0112.100-070L | M10 | 70 | 20 | 32 | 5.5 | 6 |
| P0112.100-075L | M10 | 75 | 20 | 32 | 5.5 | 6 |
| P0112.100-080L | M10 | 80 | 20 | 32 | 5.5 | 6 |
| P0112.100-090L | M10 | 90 | 20 | 32 | 5.5 | 6 |
| P0112.100-100L | M10 | 100 | 20 | 32 | 5.5 | 6 |



Self-Locking Countersunk Screws

Hex. socket - nylon strip

Self Locking
Screws

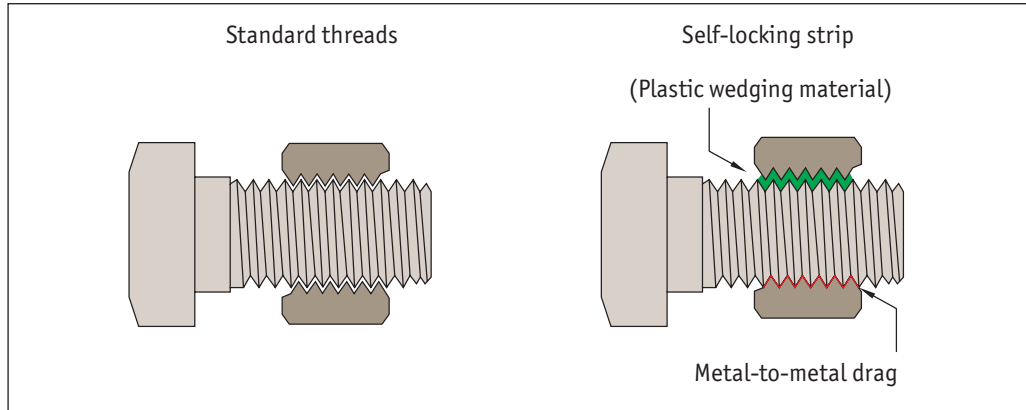
| Order No. | d ₁ | l ₁ | d ₂ | l ₂ | h ₁ | A/F |
|----------------|----------------|----------------|----------------|----------------|----------------|-----|
| P0112.120-020L | M12 | 20 | 24 | - | 6.5 | 8 |
| P0112.120-025L | M12 | 25 | 24 | - | 6.5 | 8 |
| P0112.120-030L | M12 | 30 | 24 | - | 6.5 | 8 |
| P0112.120-035L | M12 | 35 | 24 | - | 6.5 | 8 |
| P0112.120-040L | M12 | 40 | 24 | - | 6.5 | 8 |
| P0112.120-045L | M12 | 45 | 24 | - | 6.5 | 8 |
| P0112.120-050L | M12 | 50 | 24 | - | 6.5 | 8 |
| P0112.120-055L | M12 | 55 | 24 | - | 6.5 | 8 |
| P0112.120-060L | M12 | 60 | 24 | - | 6.5 | 8 |
| P0112.120-065L | M12 | 65 | 24 | 36 | 6.5 | 8 |
| P0112.120-070L | M12 | 70 | 24 | 36 | 6.5 | 8 |
| P0112.120-075L | M12 | 75 | 24 | 36 | 6.5 | 8 |
| P0112.120-080L | M12 | 80 | 24 | 36 | 6.5 | 8 |
| P0112.120-090L | M12 | 90 | 24 | 36 | 6.5 | 8 |
| P0112.120-100L | M12 | 100 | 24 | 36 | 6.5 | 8 |
| P0112.160-025L | M16 | 25 | 30 | - | 7.5 | 10 |
| P0112.160-030L | M16 | 30 | 30 | - | 7.5 | 10 |
| P0112.160-035L | M16 | 35 | 30 | - | 7.5 | 10 |
| P0112.160-040L | M16 | 40 | 30 | - | 7.5 | 10 |
| P0112.160-045L | M16 | 45 | 30 | - | 7.5 | 10 |
| P0112.160-050L | M16 | 50 | 30 | - | 7.5 | 10 |
| P0112.160-055L | M16 | 55 | 30 | - | 7.5 | 10 |
| P0112.160-060L | M16 | 60 | 30 | - | 7.5 | 10 |
| P0112.160-065L | M16 | 65 | 30 | - | 7.5 | 10 |
| P0112.160-070L | M16 | 70 | 30 | - | 7.5 | 10 |
| P0112.160-080L | M16 | 80 | 30 | 44 | 7.5 | 10 |
| P0112.160-090L | M16 | 90 | 30 | 44 | 7.5 | 10 |
| P0112.160-100L | M16 | 100 | 30 | 44 | 7.5 | 10 |
| P0112.200-040L | M20 | 40 | 36 | - | 8.5 | 12 |
| P0112.200-045L | M20 | 45 | 36 | - | 8.5 | 12 |
| P0112.200-050L | M20 | 50 | 36 | - | 8.5 | 12 |
| P0112.200-060L | M20 | 60 | 36 | - | 8.5 | 12 |
| P0112.200-070L | M20 | 70 | 36 | - | 8.5 | 12 |
| P0112.200-080L | M20 | 80 | 36 | - | 8.5 | 12 |
| P0112.200-090L | M20 | 90 | 36 | - | 8.5 | 12 |
| P0112.200-100L | M20 | 100 | 36 | 52 | 8.5 | 12 |

SELF LOCKING SCREWS



This type of fastener is the only fastener that retains its locking torque independent of an axial load. When pre-load is lost, the prevailing torque fastener can prevent the loosening of an assembly subjected to continued shock or vibration.

The nylon strip wedges the fastener against the opposite of the locking device, causing metal-to-metal drag.



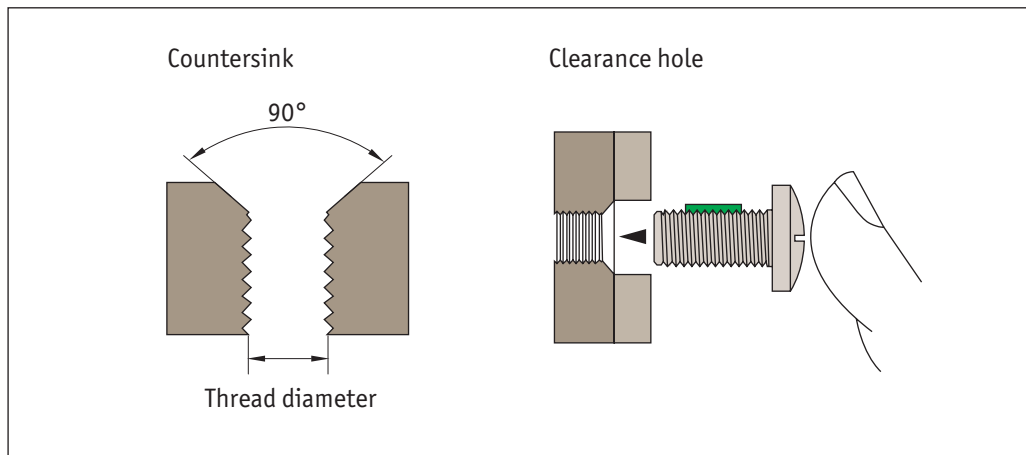
A resilient polymer (generally nylon) strip is inserted into a precisely machined slot that is milled into the thread. The strips are typically positioned one to three threads back from the end of the fastener to assure ease of starting.

When assembled with a mating part the strip is compressed and this provides a locking action in the thread. The locking strip is held in place on the thread without the use of adhesives or thread distortion. This results in a reusable fastener that is both locking and repeatedly adjustable.

These self-locking fasteners are produced to IFI 524 standard (requiring a re-usability of up to 15 on/off cycles). The strips will not dry, shrink or lose resiliency when exposed to commercial solvents, alcohol, oil etc.

Standard nylon temperature range (-50°C to +120°C). Other materials available which can offer -250°C to +300°C (with lower reusability cycles).

We recommend a countersunk or counter-bored clearance hole to aid installation.



Plating

Locking inserts can be damaged by some plating processes or surface treatments so should never be attempted after user installation.

Please advise Automation components of any plating requirements when ordering so that the appropriate process can be applied.

Locking insert patches should never be removed by the end user. Removal and replacement will destroy the effectiveness of the insert.