

pushPIN™ Heat Sink Attachments

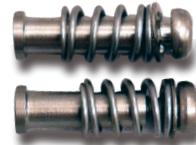
ATTACHMENT OPTIONS FOR ATS PUSHPIN™ HEATSINKS



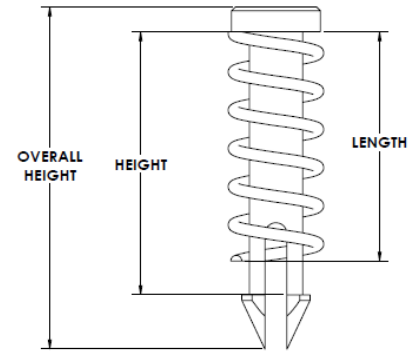
Push Pins



Push Pin Spring Kits



Hardware Kits



Individual Push Pins

| Part # | Description | Dimensions | | | |
|-----------|-----------------------|-------------|---------------------|-------------|----------------------|
| | | HEIGHT (mm) | OVERALL HEIGHT (mm) | WEIGHT (gr) | BOARD HOLE SIZE (mm) |
| ATS-PP-01 | Brass Push Pin, 9 mm | 9.0 | 10.3 | .9 | 3.175 |
| ATS-PP-02 | Brass Push Pin, 10 mm | 10.0 | 11.3 | 0.9 | 3.175 |
| ATS-PP-03 | Brass Push Pin, 11 mm | 11.0 | 12.3 | 1.0 | 3.175 |
| ATS-PP-04 | Brass Push Pin, 12 mm | 12.0 | 13.3 | 1.0 | 3.175 |
| ATS-PP-05 | Brass Push Pin, 13 mm | 13.0 | 14.3 | 1.1 | 3.175 |
| ATS-PP-06 | Brass Push Pin, 14 mm | 14.0 | 15.3 | 1.1 | 3.175 |
| ATS-PP-08 | Brass Push Pin, 18 mm | 18.0 | 19.3 | 1.4 | 3.175 |
| ATS-PP-09 | Brass Push Pin, 20 mm | 20.3 | 21.6 | 1.5 | 3.175 |

Individual Push Pin Spring Kits

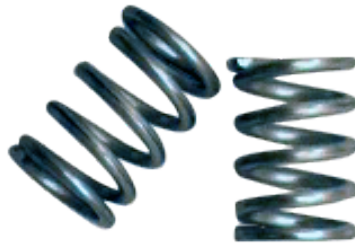
| PART # | DESCRIPTION | LENGTH (mm) | HEIGHT (mm) | OVERALL HEIGHT (mm) | FORCE (lb/mm) | BOARD HOLE SIZE (mm) | QUANTITY PER HEAT SINK | MATERIAL |
|--------------|-------------------------------|-------------|-------------|---------------------|---------------|----------------------|------------------------|----------|
| ATS-HK127-R0 | PLASTIC PIN AND SPRING ASMBLY | 7.3 | 10.3 | 13.3 | .47 | 3.0 | 1 | PLASTIC |
| ATS-HK91-R0 | BRASS PIN AND SPRING ASMBLY | 12.7 | 15.1 | 17.9 | .40 | 3.0 | 1 | BRASS |

Individual Hardware Kits

| PART # | DESCRIPTION | LENGTH (mm) | HEIGHT (mm) | OVERALL HEIGHT (mm) | FORCE (lb/mm) | BOARD HOLE SIZE (mm) | QUANTITY PER HEAT SINK | MATERIAL |
|-------------|----------------------------------|-------------|-------------|---------------------|---------------|----------------------|------------------------|----------|
| ATS-HK76-R0 | PEM, SPRING AND SCREWS, QTY 2/EA | 8.0 | 11.5 | 14.0 | 1.0 | 3.0 | 1 | SS |

Individual Springs

| Part # | Description | OD (mm) | WD (mm) | ID (mm) | FL (mm) | SL (mm) | Force (lb/mm) | Material | Finish |
|-------------------|------------------------------------|---------|---------|---------|---------|---------|---------------|-------------|-------------------------|
| ATS-PPS-01 | MUSIC WIRE COIL SPRING, QTY 1 | 4.6 | 0.5 | 3.7 | 11.2 | 3.1 | 0.3 | Music Wire | Zinc Plate |
| ATS-PPS-02 | STAINLESS STEEL COIL SPRING, QTY 1 | 4.6 | 0.5 | 3.7 | 11.2 | 3.1 | 0.3 | SS Type 302 | Passivate per ASTM A967 |
| ATS-PPS-03 | MUSIC WIRE COIL SPRING, QTY 1 | 4.6 | 0.6 | 3.5 | 9.5 | 3.7 | 0.8 | Music Wire | Zinc Plate |
| ATS-PPS-04 | MUSIC WIRE COIL SPRING, QTY 1 | 4.8 | 0.5 | 3.7 | 11.1 | 3.5 | 0.4 | Music Wire | Zinc Plate |
| ATS-PPS-05 | STAINLESS STEEL COIL SPRING, QTY 1 | 4.75 | 0.5 | 3.7 | 14.3 | 4.3 | 0.3 | SS Type 302 | Passivate per ASTM A967 |
| ATS-PPS-06 | MUSIC WIRE COIL SPRING, QTY 1 | 4.6 | 0.6 | 3.5 | 6.4 | 2.8 | 1.2 | Music Wire | Zinc Plate |
| ATS-PPS-07 | MUSIC WIRE COIL SPRING, QTY 1 | 4.6 | 0.6 | 3.4 | 12.7 | 5.6 | 0.8 | Music Wire | Zinc Plate |
| ATS-PPS-08 | STAINLESS STEEL COIL SPRING, QTY 1 | 5.5 | 0.7 | 4.1 | 8.0 | 3.8 | 1.4 | SS Type 302 | Passivate per ASTM A967 |
| ATS-PPS-09 | MUSIC WIRE COIL SPRING, QTY 1 | 5.3 | 0.6 | 4.4 | 11.1 | 2.7 | 0.2 | Music Wire | Zinc Plate |
| ATS-PPS-10 | MUSIC WIRE COIL SPRING, QTY 1 | 5.3 | 0.6 | 4.2 | 19.1 | 6.3 | 0.2 | Music Wire | Zinc Plate |
| ATS-PPS-11 | MUSIC WIRE COIL SPRING, QTY 1 | 5.3 | 0.7 | 4.2 | 17.5 | 5.8 | 0.3 | Music Wire | Zinc Plate |
| ATS-PPS-12 | MUSIC WIRE COIL SPRING, QTY 1 | 5.3 | 0.6 | 4.0 | 15.9 | 6.9 | 0.5 | Music Wire | Zinc Plate |
| ATS-PPS-13 | MUSIC WIRE COIL SPRING, QTY 1 | 5.5 | 0.7 | 4.1 | 14.3 | 6.2 | 0.8 | Music Wire | Zinc Plate |
| ATS-PPS-14 | STAINLESS STEEL COIL SPRING, QTY 1 | 6.1 | 0.8 | 4.5 | 8.0 | 4.1 | 2.0 | SS Type 302 | Passivate per ASTM A967 |
| ATS-PPS-15 | STAINLESS STEEL COIL SPRING, QTY 1 | 6.4 | 0.5 | 5.3 | 11.1 | 2.6 | 0.2 | SS Type 302 | Passivate per ASTM A967 |
| ATS-PPS-16 | MUSIC WIRE COIL SPRING, QTY 1 | 6.1 | 0.8 | 4.5 | 9.7 | 4.3 | 2.0 | Music Wire | Zinc Plate |
| ATS-PPS-17 | MUSIC WIRE COIL SPRING, QTY 1 | 6.1 | 1.0 | 4.1 | 12.7 | 8.0 | 3.3 | Music Wire | Zinc Plate |
| ATS-PPS-18 | MUSIC WIRE COIL SPRING, QTY 1 | 6.1 | 0.7 | 4.6 | 12.7 | 5.3 | 0.9 | Music Wire | Zinc Plate |
| ATS-PPS-19 | MUSIC WIRE COIL SPRING, QTY 1 | 6.1 | 0.8 | 4.5 | 11.1 | 5.1 | 1.7 | Music Wire | Zinc Plate |
| ATS-PPS-20 | MUSIC WIRE COIL SPRING, QTY 1 | 6.1 | 0.9 | 4.3 | 8.0 | 4.9 | 3.5 | Music Wire | Zinc Plate |
| ATS-PPS-21 | MUSIC WIRE COIL SPRING, QTY 1 | 6.4 | 0.7 | 4.8 | 11.2 | 3.6 | 0.8 | Music Wire | Zinc Plate |



NOTES:

OD = Outside Diameter
 WD = Wire Diameter
 ID = Inside Diameter
 FL = Free Length
 SL = Solid Length