

# Configurable Length Screws

## Configurable Length

RoHS 10

| Type                  |              |         |                             |              | Material                        | Surface Treatment                 |
|-----------------------|--------------|---------|-----------------------------|--------------|---------------------------------|-----------------------------------|
| Fully Threaded Screws |              |         | Both Ends Right-Hand Screws |              |                                 |                                   |
| Thread Gauge          | Class 2 Used | Class 3 | Thread Gauge                | Class 2 Used |                                 |                                   |
| Coarse                | Fine         | Coarse  | Coarse                      | Fine         | 1045 Carbon Steel or Equivalent | Black Oxide                       |
| FAB                   | FABP         | FABM    | FWB                         | FWBP         |                                 | 304 Stainless Steel or Equivalent |
| FABN                  | —            | —       | FWBN                        | —            |                                 |                                   |
| FABS                  | FABSP        | FABMS   | FWBS                        | FWBSP        |                                 |                                   |

| M  | Thread Pitch |      |
|----|--------------|------|
|    | Coarse       | Fine |
| 3  | 0.5          | —    |
| 4  | 0.7          | —    |
| 5  | 0.8          | 0.5  |
| 6  | 1            | 0.75 |
| 8  | 1.25         | 1    |
| 10 | 1.5          | 1.25 |
| 12 | 1.75         | 1.25 |
| 16 | 2            | 1.5  |
| 20 | 2.5          | 1.5  |
| 24 | 3            | —    |
| 30 | 3.5          | —    |

**Fully Threaded Screws**

**Both Ends Right-Hand Screws**

## Studs – Fully Threaded

| Part Number     | Type | M      | L<br>1 mm Increment | Available Types |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|-----------------|------|--------|---------------------|-----------------|----------|----------|----------|----------|---------|----------|----------|----------|----------|---------|----------|----------|----------|----------|--|
|                 |      |        |                     | FAB             |          |          | FABN     |          |         | FABS     |          |          |          |         |          |          |          |          |  |
|                 |      |        |                     | L20-100         | L101-200 | L201-400 | L401-600 | L601-800 | L20-100 | L101-200 | L201-400 | L401-600 | L601-800 | L20-100 | L101-200 | L201-400 | L401-600 | L601-800 |  |
| Class 2, Coarse | 3    | 20-150 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 4    | 20-150 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 5    | 20-250 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 6    | 20-250 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 8    | 20-600 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 10   | 20-600 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 12   | 20-800 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 16   | 20-800 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 20   | 20-800 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |

| Part Number     | Type | M      | L<br>1 mm Increment | Available Types |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|-----------------|------|--------|---------------------|-----------------|----------|----------|----------|----------|---------|----------|----------|----------|----------|---------|----------|----------|----------|----------|--|
|                 |      |        |                     | FABM            |          |          | FABMS    |          |         | FABP     |          |          | FABS     |         |          |          |          |          |  |
|                 |      |        |                     | L20-100         | L101-200 | L201-400 | L401-600 | L601-800 | L20-100 | L101-200 | L201-400 | L401-600 | L601-800 | L20-100 | L101-200 | L201-400 | L401-600 | L601-800 |  |
| Class 3, Coarse | 4    | 20-150 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 5    | 20-250 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 6    | 20-250 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 8    | 20-600 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
| Class 2, Fine   | 10   | (400)  |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 12   | 20-800 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 16   | 20-800 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 20   | 20-800 |                     |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |

## Both Ends Right-Hand Screws

| Part Number     | Type | M      | L     | E     | F | Available Types |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|-----------------|------|--------|-------|-------|---|-----------------|----------|----------|----------|----------|---------|----------|----------|----------|----------|---------|----------|----------|----------|----------|--|
|                 |      |        |       |       |   | FWB             |          |          | FWBN     |          |         | FWBS     |          |          |          |         |          |          |          |          |  |
|                 |      |        |       |       |   | L20-100         | L101-200 | L201-400 | L401-600 | L601-800 | L20-100 | L101-200 | L201-400 | L401-600 | L601-800 | L20-100 | L101-200 | L201-400 | L401-600 | L601-800 |  |
| Class 2, Coarse | 3    | 20-100 | 5-15  | 0-15  |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 4    | 20-150 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 5    | 20-250 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 6    | 20-250 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 8    | 20-600 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 10   | 20-600 | 5-100 | 0-100 |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 12   | 20-800 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 16   | 20-800 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 20   | 20-800 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 24   | 20-800 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|                 | 30   | 20-800 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |

Ⓜ E ≤ Mx5 F=0 or M/2 ≤ F ≤ Mx5 When F=0, threads are not machined on the F dimension side.

| Part Number   | Type | M      | L     | E     | F | Available Types |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|---------------|------|--------|-------|-------|---|-----------------|----------|----------|----------|----------|---------|----------|----------|----------|----------|---------|----------|----------|----------|----------|--|
|               |      |        |       |       |   | FWB             |          |          | FWBN     |          |         | FWBS     |          |          |          |         |          |          |          |          |  |
|               |      |        |       |       |   | L20-100         | L101-200 | L201-400 | L401-600 | L601-800 | L20-100 | L101-200 | L201-400 | L401-600 | L601-800 | L20-100 | L101-200 | L201-400 | L401-600 | L601-800 |  |
| Class 2, Fine | 5    | 20-250 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|               | 6    | 20-250 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|               | 8    | 20-600 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|               | 10   | 20-600 | 5-100 | 0-100 |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|               | 12   | 20-800 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|               | 16   | 20-800 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |
|               | 20   | 20-800 |       |       |   |                 |          |          |          |          |         |          |          |          |          |         |          |          |          |          |  |

Ⓜ E ≤ Mx5 F=0 or M/2 ≤ F ≤ Mx5 When F=0, threads are not machined on the F dimension side.

**Part Number Example**

Part Number - L - E - F

FAB6 - 100

FWBS6 - 100 - E10 - F10

| Alterations | Code | Spec.  |   |   |      |   |      |     |    |   |        |     |    |   |
|-------------|------|--|---|---|------|---|------|-----|----|---|--------|-----|----|---|
| Slit        | SWC  | W dimensions are as follows.<br><table border="1" style="font-size: 6px;"> <tr><th>M</th><th>W</th></tr> <tr><td>4, 5</td><td>1</td></tr> <tr><td>6, 8</td><td>1.5</td></tr> <tr><td>10</td><td>2</td></tr> <tr><td>12, 16</td><td>2.5</td></tr> <tr><td>20</td><td>3</td></tr> </table> | M | W | 4, 5 | 1 | 6, 8 | 1.5 | 10 | 2 | 12, 16 | 2.5 | 20 | 3 |
| M           | W    |  |   |   |      |   |      |     |    |   |        |     |    |   |
| 4, 5        | 1    |  |   |   |      |   |      |     |    |   |        |     |    |   |
| 6, 8        | 1.5  |  |   |   |      |   |      |     |    |   |        |     |    |   |
| 10          | 2    |  |   |   |      |   |      |     |    |   |        |     |    |   |
| 12, 16      | 2.5  |  |   |   |      |   |      |     |    |   |        |     |    |   |
| 20          | 3    |  |   |   |      |   |      |     |    |   |        |     |    |   |

**Part Number Alterations**

Part Number - L - E - F - (SWC / SC)

FAB10 - 200 - SWC

| Alterations      | Code | Spec.  |   |   |   |   |   |    |   |     |    |   |   |    |   |     |    |    |   |    |
|------------------|------|--|---|---|---|---|---|----|---|-----|----|---|---|----|---|-----|----|----|---|----|
| 2-Flats Machined | SC   | SC=1 mm Increment<br><table border="1" style="font-size: 6px;"> <tr><th>M</th><th>W</th><th>S</th></tr> <tr><td>4</td><td>3</td><td>12</td></tr> <tr><td>5</td><td>3.5</td><td>16</td></tr> <tr><td>6</td><td>4</td><td>20</td></tr> <tr><td>8</td><td>4.5</td><td>24</td></tr> <tr><td>10</td><td>5</td><td>30</td></tr> </table> | M | W | S | 4 | 3 | 12 | 5 | 3.5 | 16 | 6 | 4 | 20 | 8 | 4.5 | 24 | 10 | 5 | 30 |
| M                | W    | S  |   |   |   |   |   |    |   |     |    |   |   |    |   |     |    |    |   |    |
| 4                | 3    | 12   |   |   |   |   |   |    |   |     |    |   |   |    |   |     |    |    |   |    |
| 5                | 3.5  | 16   |   |   |   |   |   |    |   |     |    |   |   |    |   |     |    |    |   |    |
| 6                | 4    | 20   |   |   |   |   |   |    |   |     |    |   |   |    |   |     |    |    |   |    |
| 8                | 4.5  | 24   |   |   |   |   |   |    |   |     |    |   |   |    |   |     |    |    |   |    |
| 10               | 5    | 30   |   |   |   |   |   |    |   |     |    |   |   |    |   |     |    |    |   |    |

# Fully Threaded Studs with Measurement Markings / Flanged Brackets

## Fully Threaded Studs / Round Flange / Square Flange / Compact Flange

**Fully Threaded Studs with Measurement Markings**

RoHS 10

| Type | Material            | Surface Treatment |
|------|---------------------|-------------------|
| ASSB | 4137 Alloy Steel    | Black Oxide       |
| ASSS | 304 Stainless Steel | —                 |

**Direction of Scale Display Y (Horizontal)**

**Direction of Scale Display T (Vertical)**

\*Use as measuring tool for adjustment of machines and equipment.

| Part Number | Type       | Direction of Scale Display | M (Coarse) | L   | B  | D | t |
|-------------|------------|----------------------------|------------|-----|----|---|---|
|             |            |                            |            |     |    |   |   |
| ASSS        | T Vertical | 10                         | 5          | 8.3 | 6  |   |   |
|             |            | 12                         | 6          | 10  | 8  |   |   |
|             |            | 16                         | 8          | 14  | 10 |   |   |

**Part Number Example**

Part Number - M

Type - Direction of Scale Display

ASSS - T - 8

**Flange Brackets**

Round Flange

BRBR  
MRBR  
SRBR

Square Flange

BRBS  
MRBS  
SRBS

Compact Flange

BRBC  
MRBC  
SRBC

| Type | Material          | Surface Treatment          |
|------|-------------------|----------------------------|
| BRBR | 1018 Carbon Steel | Black Oxide                |
| MRBR |                   | Electroless Nickel Plating |
| SRBR |                   | —                          |

| Part Number    | Type | M   | M x Pitch | L  | D <sub>1</sub> | H  | T | P  | K  | W  | P <sub>1</sub> | F  | d <sub>1</sub> |
|----------------|------|-----|-----------|----|----------------|----|---|----|----|----|----------------|----|----------------|
|                |      |     |           |    |                |    |   |    |    |    |                |    |                |
|                | MRBR | 8   | 8 x 1.25  | 14 | 15             | 32 | 5 | 25 | 25 | 15 | 25             |    |                |
|                | SRBR | 10  | 10 x 1.5  | 18 | 20             | 38 | 5 | 30 | 30 | 20 | 30             |    |                |
| Square Flange  | BRBS | 10A | 10 x 1.25 | 18 | 20             | 38 | 5 | 30 | 30 | 20 | 30             |    | 4.5            |
|                | MRBS | 12  | 12 x 1.75 | 20 | 22             | 40 | 6 | 32 | 32 | 25 | 28             | 16 |                |
|                | SRBS | 14A | 14 x 1.5  | 22 | 26             | 50 | 6 | 40 | 39 | 32 | 33             | 22 | 5.5            |
| Compact Flange | BRBC | 16  | 16 x 2.0  | 26 | 28             | 50 | 8 | 40 | 39 | 32 | 33             | 22 | 5.5            |
|                | MRBC | 18A | 18 x 1.5  | 30 | 32             | 63 | 8 | 50 | 48 | 40 | 42             | 25 | 6.6            |
|                | SRBC | 20  | 20 x 2.5  | 32 | 35             | 63 | 8 | 50 | 48 | 40 | 42             | 25 | 6.6            |

Ⓜ Thread pitches 10A, 14A and 18A are fine.

**Part Number Example**

Part Number

SRBR10

**Application Example**

**Part Number Alterations**

Part Number - (MC)

SRBR16 - MC

**Additional Tapped Holes for Set Screws**

| Code  | M   | MC | I   | M   | MC | I  |
|-------|-----|----|-----|-----|----|----|
| Spec. | 6   | M3 | 9   | 12  | M4 | 14 |
|       | 8   |    | 10  | 14A | M4 | 15 |
|       | 10  |    | 13  | 16  | M4 | 16 |
|       | 10A |    | 18A | M5  | 20 |    |
|       | 20  |    |     |     |    |    |