

| Item No. | Nominal size | ℓ <sub>c</sub> | Limit | Type | Dimensions (mm) |    |                |                |                |     |                | Radial | Oil groove | New Model |
|----------|--------------|----------------|-------|------|-----------------|----|----------------|----------------|----------------|-----|----------------|--------|------------|-----------|
|          |              |                |       |      | L               | ℓ  | D <sub>s</sub> | ℓ <sub>n</sub> | D <sub>n</sub> | K   | ℓ <sub>k</sub> |        |            |           |
| 46980    | M3 X 0.5     | B              | 5     | 2    | 46              | 10 | 4              | 18             | 2.3            | 3.2 | 6              | 5      | 5          |           |
| 46981    | M3 X 0.5     | B              | 6     | 2    | 46              | 10 | 4              | 18             | 2.3            | 3.2 | 6              | 5      | 5          |           |
| 46982    | M3 X 0.5     | B              | 7     | 2    | 46              | 10 | 4              | 18             | 2.3            | 3.2 | 6              | 5      | 5          |           |
| 46983    | M3 X 0.5     | P              | 5     | 2    | 46              | 10 | 4              | 18             | 2.3            | 3.2 | 6              | 5      | 5          |           |
| 46984    | M3 X 0.5     | P              | 6     | 2    | 46              | 10 | 4              | 18             | 2.3            | 3.2 | 6              | 5      | 5          |           |
| 46985    | M3 X 0.5     | P              | 7     | 2    | 46              | 10 | 4              | 18             | 2.3            | 3.2 | 6              | 5      | 5          |           |
| 46986    | M3.5 X 0.6   | B              | 5     | 2    | 48              | 10 | 4              | 18             | 2.6            | 3.2 | 6              | 5      | 5          |           |
| 46987    | M3.5 X 0.6   | P              | 5     | 2    | 48              | 10 | 4              | 18             | 2.6            | 3.2 | 6              | 5      | 5          |           |
| 46988    | M4 X 0.7     | B              | 6     | 2    | 52              | 10 | 5              | 20             | 3              | 4   | 7              | 5      | 5          |           |
| 46989    | M4 X 0.7     | B              | 7     | 2    | 52              | 10 | 5              | 20             | 3              | 4   | 7              | 5      | 5          |           |
| 46990    | M4 X 0.7     | B              | 8     | 2    | 52              | 10 | 5              | 20             | 3              | 4   | 7              | 5      | 5          |           |
| 46991    | M4 X 0.7     | P              | 6     | 2    | 52              | 10 | 5              | 20             | 3              | 4   | 7              | 5      | 5          |           |
| 46992    | M4 X 0.7     | P              | 7     | 2    | 52              | 10 | 5              | 20             | 3              | 4   | 7              | 5      | 5          |           |
| 46993    | M4 X 0.7     | P              | 8     | 2    | 52              | 10 | 5              | 20             | 3              | 4   | 7              | 5      | 5          |           |
| 47850    | M5 X 0.8     | 1C             | 6     | 2    | 60              | 10 | 5.5            | 22             | 3.9            | 4.5 | 7              | 5      | 5          | ★         |
| 46994    | M5 X 0.8     | B              | 6     | 2    | 60              | 10 | 5.5            | 22             | 3.9            | 4.5 | 7              | 5      | 5          |           |
| 46995    | M5 X 0.8     | B              | 7     | 2    | 60              | 10 | 5.5            | 22             | 3.9            | 4.5 | 7              | 5      | 5          |           |
| 46996    | M5 X 0.8     | B              | 8     | 2    | 60              | 10 | 5.5            | 22             | 3.9            | 4.5 | 7              | 5      | 5          |           |
| 46997    | M5 X 0.8     | P              | 6     | 2    | 60              | 10 | 5.5            | 22             | 3.9            | 4.5 | 7              | 5      | 5          |           |
| 46998    | M5 X 0.8     | P              | 7     | 2    | 60              | 10 | 5.5            | 22             | 3.9            | 4.5 | 7              | 5      | 5          |           |
| 46999    | M5 X 0.8     | P              | 8     | 2    | 60              | 10 | 5.5            | 22             | 3.9            | 4.5 | 7              | 5      | 5          |           |
| 47853    | M6 X 1       | 1C             | 7     | 2    | 62              | 10 | 6              | 24             | 4.6            | 4.5 | 7              | 5      | 5          | ★         |
| 47000    | M6 X 1       | B              | 7     | 2    | 62              | 10 | 6              | 24             | 4.6            | 4.5 | 7              | 5      | 5          |           |
| 47001    | M6 X 1       | B              | 8     | 2    | 62              | 10 | 6              | 24             | 4.6            | 4.5 | 7              | 5      | 5          |           |
| 47002    | M6 X 1       | B              | 9     | 2    | 62              | 10 | 6              | 24             | 4.6            | 4.5 | 7              | 5      | 5          |           |
| 47003    | M6 X 1       | P              | 7     | 2    | 62              | 10 | 6              | 24             | 4.6            | 4.5 | 7              | 5      | 5          |           |
| 47004    | M6 X 1       | P              | 8     | 2    | 62              | 10 | 6              | 24             | 4.6            | 4.5 | 7              | 5      | 5          |           |
| 47005    | M6 X 1       | P              | 9     | 2    | 62              | 10 | 6              | 24             | 4.6            | 4.5 | 7              | 5      | 5          |           |
| 47006    | M6 X 0.75    | B              | 6     | 2    | 62              | 10 | 6              | 24             | 4.6            | 4.5 | 7              | 5      | 5          |           |
| 47007    | M6 X 0.75    | P              | 6     | 2    | 62              | 10 | 6              | 24             | 4.6            | 4.5 | 7              | 5      | 5          |           |
| 47008    | M7 X 1       | B              | 7     | 3    | 65              | 16 | 6.2            | 26             | 5.6            | 5   | 8              | 6      | 6          |           |
| 47009    | M7 X 1       | P              | 7     | 3    | 65              | 16 | 6.2            | 26             | 5.6            | 5   | 8              | 6      | 6          |           |
| 47010    | M7 X 0.75    | B              | 6     | 3    | 65              | 16 | 6.2            | 26             | 5.6            | 5   | 8              | 6      | 6          |           |
| 47011    | M7 X 0.75    | P              | 6     | 3    | 65              | 16 | 6.2            | 26             | 5.6            | 5   | 8              | 6      | 6          |           |
| 47856    | M8 X 1.25    | 1C             | 7     | 3    | 70              | 18 | 6.2            | 30             | 6              | 5   | 8              | 6      | 6          | ★         |
| 47012    | M8 X 1.25    | B              | 7     | 3    | 70              | 18 | 6.2            | 30             | 6              | 5   | 8              | 6      | 6          |           |
| 47013    | M8 X 1.25    | B              | 8     | 3    | 70              | 18 | 6.2            | 30             | 6              | 5   | 8              | 6      | 6          |           |
| 47014    | M8 X 1.25    | B              | 9     | 3    | 70              | 18 | 6.2            | 30             | 6              | 5   | 8              | 6      | 6          |           |
| 47015    | M8 X 1.25    | P              | 7     | 3    | 70              | 18 | 6.2            | 30             | 6              | 5   | 8              | 6      | 6          |           |
| 47016    | M8 X 1.25    | P              | 8     | 3    | 70              | 18 | 6.2            | 30             | 6              | 5   | 8              | 6      | 6          |           |
| 47017    | M8 X 1.25    | P              | 9     | 3    | 70              | 18 | 6.2            | 30             | 6              | 5   | 8              | 6      | 6          |           |
| 47859    | M8 X 1       | 1C             | 7     | 3    | 70              | 18 | 6.2            | 30             | 6              | 5   | 8              | 6      | 6          | ★         |
| 47018    | M8 X 1       | B              | 7     | 3    | 70              | 18 | 6.2            | 30             | 6              | 5   | 8              | 6      | 6          |           |
| 47019    | M8 X 1       | P              | 7     | 3    | 70              | 18 | 6.2            | 30             | 6              | 5   | 8              | 6      | 6          |           |
| 47860    | M10 X 1.5    | 1C             | 7     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          | ★         |
| 47020    | M10 X 1.5    | B              | 7     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          |           |
| 47021    | M10 X 1.5    | B              | 9     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          |           |
| 47022    | M10 X 1.5    | P              | 7     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          |           |
| 47023    | M10 X 1.5    | P              | 9     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          |           |
| 47863    | M10 X 1.25   | 1C             | 7     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          | ★         |
| 47024    | M10 X 1.25   | B              | 7     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          |           |
| 47025    | M10 X 1.25   | B              | 9     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          |           |
| 47026    | M10 X 1.25   | P              | 7     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          |           |
| 47027    | M10 X 1.25   | P              | 9     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          |           |
| 47866    | M10 X 1      | 1C             | 7     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          | ★         |
| 47028    | M10 X 1      | B              | 7     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          |           |
| 47029    | M10 X 1      | B              | 9     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          |           |
| 47030    | M10 X 1      | P              | 7     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          |           |
| 47031    | M10 X 1      | P              | 9     | 3    | 75              | 19 | 7              | 32             | 6.8            | 5.5 | 8              | 8      | 8          |           |
| 47867    | M12 X 1.75   | 1C             | 10    | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          | ★         |
| 47032    | M12 X 1.75   | B              | 8     | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47033    | M12 X 1.75   | B              | 10    | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47034    | M12 X 1.75   | P              | 8     | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47035    | M12 X 1.75   | P              | 10    | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47870    | M12 X 1.5    | 1C             | 10    | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          | ★         |
| 47036    | M12 X 1.5    | B              | 7     | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47037    | M12 X 1.5    | B              | 10    | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47038    | M12 X 1.5    | P              | 7     | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47039    | M12 X 1.5    | P              | 10    | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47873    | M12 X 1.25   | 1C             | 12    | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          | ★         |
| 47040    | M12 X 1.25   | B              | 7     | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47041    | M12 X 1.25   | B              | 12    | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47042    | M12 X 1.25   | P              | 7     | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47043    | M12 X 1.25   | P              | 12    | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47876    | M12 X 1      | 1C             | 9     | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          | ★         |
| 47044    | M12 X 1      | B              | 7     | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47045    | M12 X 1      | B              | 9     | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47046    | M12 X 1      | P              | 7     | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47047    | M12 X 1      | P              | 9     | 3    | 82              | 23 | 8.5            | 38             | 8.3            | 6.5 | 9              | 8      | 8          |           |
| 47048    | M14 X 1.5    | B              | 10    | 3    | 88              | 25 | 10.5           | 42             | 10.3           | 8   | 11             | 8      | 8          |           |
| 47049    | M14 X 1.5    | P              | 10    | 3    | 88              | 25 | 10.5           | 42             | 10.3           | 8   | 11             | 8      | 8          |           |
| 47050    | M16 X 1.5    | B              | 10    | 3    | 95              | 27 | 12.5           | 45             | 12.3           | 10  | 13             | 8      | 8          |           |
| 47051    | M16 X 1.5    | P              | 10    | 3    | 95              | 27 | 12.5           | 45             | 12.3           | 10  | 13             | 8      | 8          |           |
| 47052    | M18 X 1.5    | B              | 11    | 3    | 100             | 29 | 14             | 48             | 13.8           | 11  | 14             | 8      | 8          |           |
| 47053    | M18 X 1.5    | P              | 11    | 3    | 100             | 29 | 14             | 48             | 13.8           | 11  | 14             | 8      | 8          |           |
| 47054    | M20 X 1.5    | B              | 11    | 3    | 105             | 30 | 15             | 50             | 14.8           | 12  | 15             | 8      | 8          |           |
| 47055    | M20 X 1.5    | P              | 11    | 3    | 105             | 30 | 15             | 50             | 14.8           | 12  | 15             | 8      | 8          |           |

・ The recommended tap limit in   corresponds to JIS Class 2 internal thread standard.

・ New model of ★ will be released in the fall of 2020.

### Unified coarse screw threads

(Unit) : mm

| Item No. | Nominal size | $\ell_c$ | Limit | Type | Dimensions (mm) |        |     |          |     |     |          | Radial | Oil groove | New Model |
|----------|--------------|----------|-------|------|-----------------|--------|-----|----------|-----|-----|----------|--------|------------|-----------|
|          |              |          |       |      | L               | $\ell$ | Ds  | $\ell_n$ | Dn  | K   | $\ell_k$ |        |            |           |
| 47056    | No.2 - 56UNC | B        | 4     | 1    | 42              | 9      | 3   | 15       | 2.9 | 2.5 | 5        | 4      | 0          | -         |
| 47057    | No.2 - 56UNC | P        | 4     | 1    | 42              | 9      | 3   | 15       | 2.9 | 2.5 | 5        | 4      | 0          | -         |
| 47058    | No.4 - 40UNC | B        | 4     | 1    | 44              | 10     | 3   | 16       | 2.9 | 2.5 | 5        | 4      | 0          | -         |
| 47059    | No.4 - 40UNC | P        | 4     | 1    | 44              | 10     | 3   | 16       | 2.9 | 2.5 | 5        | 4      | 0          | -         |
| 47060    | No.6 - 32UNC | B        | 5     | 2    | 48              | 10     | 4   | 18       | 2.4 | 3.2 | 6        | 5      | 5          | -         |
| 47061    | No.6 - 32UNC | P        | 5     | 2    | 48              | 10     | 4   | 18       | 2.4 | 3.2 | 6        | 5      | 5          | -         |
| 47062    | No.8 - 32UNC | B        | 6     | 2    | 52              | 10     | 5   | 20       | 3   | 4   | 7        | 5      | 5          | -         |
| 47063    | No.8 - 32UNC | P        | 6     | 2    | 52              | 10     | 5   | 20       | 3   | 4   | 7        | 5      | 5          | -         |
| 47064    | 1/4 - 20UNC  | B        | 6     | 2    | 62              | 10     | 6   | 24       | 4.6 | 4.5 | 7        | 5      | 5          | -         |
| 47065    | 1/4 - 20UNC  | P        | 6     | 2    | 62              | 10     | 6   | 24       | 4.6 | 4.5 | 7        | 5      | 5          | -         |
| 47068    | 5/16 - 18UNC | B        | 7     | 3    | 70              | 18     | 6.1 | 30       | 5.9 | 5   | 8        | 6      | 6          | -         |
| 47069    | 5/16 - 18UNC | P        | 7     | 3    | 70              | 18     | 6.1 | 30       | 5.9 | 5   | 8        | 6      | 6          | -         |
| 47072    | 3/8 - 16UNC  | B        | 7     | 3    | 75              | 21     | 7   | 35       | 6.8 | 5.5 | 8        | 6      | 6          | -         |
| 47073    | 3/8 - 16UNC  | P        | 7     | 3    | 75              | 21     | 7   | 35       | 6.8 | 5.5 | 8        | 6      | 6          | -         |

### Unified fine screw threads

(Unit) : mm

| Item No. | Nominal size | $\ell_c$ | Limit | Type | Dimensions (mm) |        |     |          |     |     |          | Radial | Oil groove | New Model |
|----------|--------------|----------|-------|------|-----------------|--------|-----|----------|-----|-----|----------|--------|------------|-----------|
|          |              |          |       |      | L               | $\ell$ | Ds  | $\ell_n$ | Dn  | K   | $\ell_k$ |        |            |           |
| 47066    | 1/4 - 28UNF  | B        | 6     | 2    | 62              | 10     | 6   | 24       | 4.6 | 4.5 | 7        | 5      | 5          | -         |
| 47067    | 1/4 - 28UNF  | P        | 6     | 2    | 62              | 10     | 6   | 24       | 4.6 | 4.5 | 7        | 5      | 5          | -         |
| 47070    | 5/16 - 24UNF | B        | 7     | 3    | 70              | 18     | 6.1 | 30       | 5.9 | 5   | 8        | 6      | 6          | -         |
| 47071    | 5/16 - 24UNF | P        | 7     | 3    | 70              | 18     | 6.1 | 30       | 5.9 | 5   | 8        | 6      | 6          | -         |
| 47074    | 3/8 - 24UNF  | B        | 7     | 3    | 75              | 21     | 7   | 35       | 6.8 | 5.5 | 8        | 6      | 6          | -         |
| 47075    | 3/8 - 24UNF  | P        | 7     | 3    | 75              | 21     | 7   | 35       | 6.8 | 5.5 | 8        | 6      | 6          | -         |

## Double TAFLET, Long Shank

LT-W-TF

### Metric

(Unit) : mm

| Item No. | Nominal size | $\ell_c$ | Limit | Type | Dimensions (mm) |        |     |          |     |     |          | Radial | Oil groove | New Model |
|----------|--------------|----------|-------|------|-----------------|--------|-----|----------|-----|-----|----------|--------|------------|-----------|
|          |              |          |       |      | L               | $\ell$ | Ds  | $\ell_n$ | Dn  | K   | $\ell_k$ |        |            |           |
| 47846    | M3 × 0.5     | B        | 5     | 2    | 80              | 10     | 4   | 18       | 2.3 | 3.2 | 6        | 5      | 5          | ★         |
| 47849    | M4 × 0.7     | B        | 6     | 2    | 80              | 10     | 5   | 20       | 3   | 4   | 7        | 5      | 5          | ★         |
| 47851    | M5 × 0.8     | 1C       | 6     | 2    | 100             | 10     | 5.5 | 25       | 3.9 | 4.5 | 7        | 5      | 5          | ★         |
| 47852    | M5 × 0.8     | B        | 6     | 2    | 100             | 10     | 5.5 | 25       | 3.9 | 4.5 | 7        | 5      | 5          | ★         |
| 47854    | M6 × 1       | 1C       | 7     | 2    | 100             | 10     | 6   | 30       | 4.6 | 4.5 | 7        | 5      | 5          | ★         |
| 47855    | M6 × 1       | B        | 7     | 2    | 100             | 10     | 6   | 30       | 4.6 | 4.5 | 7        | 5      | 5          | ★         |
| 47857    | M8 × 1.25    | 1C       | 7     | 2    | 100             | 18     | 6.2 | 30       | 6   | 5   | 8        | 6      | 6          | ★         |
| 47858    | M8 × 1.25    | B        | 7     | 2    | 100             | 18     | 6.2 | 30       | 6   | 5   | 8        | 6      | 6          | ★         |
| 47861    | M10 × 1.5    | 1C       | 7     | 2    | 100             | 19     | 7   | 32       | 6.8 | 5.5 | 8        | 8      | 8          | ★         |
| 47862    | M10 × 1.5    | B        | 7     | 2    | 100             | 19     | 7   | 32       | 6.8 | 5.5 | 8        | 8      | 8          | ★         |
| 47864    | M10 × 1.25   | 1C       | 7     | 2    | 100             | 19     | 7   | 32       | 6.8 | 5.5 | 8        | 8      | 8          | ★         |
| 47865    | M10 × 1.25   | B        | 7     | 2    | 100             | 19     | 7   | 32       | 6.8 | 5.5 | 8        | 8      | 8          | ★         |
| 47868    | M12 × 1.75   | 1C       | 10    | 2    | 120             | 23     | 8.5 | 38       | 8.3 | 6.5 | 9        | 8      | 8          | ★         |
| 47869    | M12 × 1.75   | B        | 10    | 2    | 120             | 23     | 8.5 | 38       | 8.3 | 6.5 | 9        | 8      | 8          | ★         |
| 47871    | M12 × 1.5    | 1C       | 10    | 2    | 120             | 23     | 8.5 | 38       | 8.3 | 6.5 | 9        | 8      | 8          | ★         |
| 47872    | M12 × 1.5    | B        | 10    | 2    | 120             | 23     | 8.5 | 38       | 8.3 | 6.5 | 9        | 8      | 8          | ★         |
| 47874    | M12 × 1.25   | 1C       | 12    | 2    | 120             | 23     | 8.5 | 38       | 8.3 | 6.5 | 9        | 8      | 8          | ★         |
| 47875    | M12 × 1.25   | B        | 12    | 2    | 120             | 23     | 8.5 | 38       | 8.3 | 6.5 | 9        | 8      | 8          | ★         |

- The recommended tap limit in    corresponds to JIS Class 2 internal thread standard.
- New model of ★ will be released in the fall of 2020.

| Low Carbon Steels | Medium Carbon Steels | High Carbon Steels | Cold Rolled Sheet Steels | Structural Alloy Steels | Stainless Steels | Aluminum | Aluminum Diecasting | Zinc Diecasting | Copper | Brass | Brass Casting |
|-------------------|----------------------|--------------------|--------------------------|-------------------------|------------------|----------|---------------------|-----------------|--------|-------|---------------|
| S10C<br>S20C      | S22C<br>S40C         | S45C               | SPC<br>SPH               | SCM<br>SNCN             | SUS              | AL       | AC<br>ADC           | ZDC             | CU     | BS    | BSC           |
| ◎                 | ◎                    | ◎                  | ◎                        | ◎                       | ◎                | ◎        | ◎                   | ◎               | ○      | ○     | ○             |

