

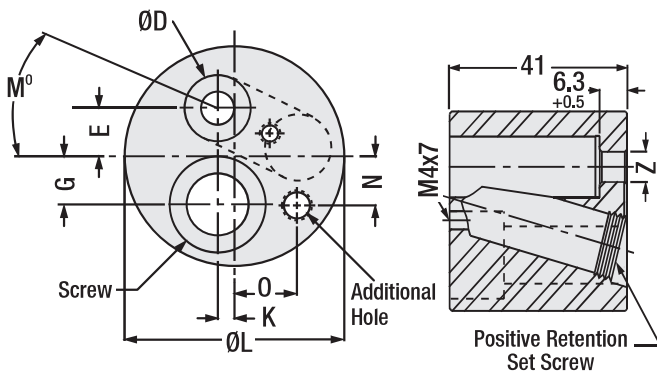


HEAVY DUTY

Ball Lock Punch Retainer - Round

Code: **MRR**

- Centre of pin holes are reference points for punch hole position.
- Shim and backing plate should be supplied separately.
- Economical: This type retainers are more economical than other ball lock retainers.



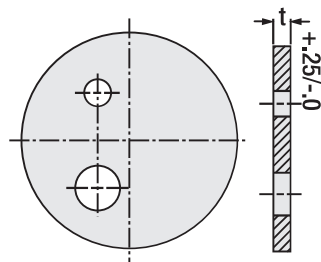
Round Type

Code: **MRR**

| Order | MRR 10 | MRR 13 | MRR 16 | MRR 20 | MRR 25 | MRR 32 | MRR 40 |
|-----------|-------------------|-----------------|-------------------|-----------------|-----------------|-----------------|-----------------|
| D Punch | 10 | 13 | 16 | 20 | 25 | 32 | 40 |
| Ø L | 38.1 | 41.3 | 44.5 | 57.2 | 63.5 | 76.2 | 82.6 |
| E | 9.86 | 9.25 | 9.10 | 12.20 | 12.51 | 15.67 | 15.39 |
| G | 7.10 | 9.17 | 11.07 | 14.30 | 17.50 | 20.83 | 23.55 |
| K | 2.65 | 3.18 | 1.93 | - | - | - | - |
| M | 20.5 ⁰ | 26 ⁰ | 33.5 ⁰ | 30 ⁰ | 30 ⁰ | 30 ⁰ | 30 ⁰ |
| N | 4.47 | 9.35 | 10.21 | 9.35 | 14.27 | 15.46 | 15.46 |
| O | 12.72 | 11.88 | 13.16 | 19.40 | 20.17 | 26.12 | 26.12 |
| Z | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Add. Hole | M6 x 1.0 | M6 x 1.0 | M6 x 1.0 | M8 x 1.25 | M8 x 1.25 | M8 x 1.25 | M8 x 1.25 |
| Screw | M12 | M12 | M12 | M16 | M16 | M20 | M20 |

Shim Plate for Round Retainers (MRR)

Code: **MAY**



| Order | "MAY" Code | t |
|-----------------|------------|------|
| | 018 | 1.80 |
| | 030 | 3.00 |
| | 031 | 3.18 |
| Order Example: | 047 | 4.75 |
| MRR.. / MAY.018 | 060 | 6.00 |
| | 063 | 6.35 |
| | 100 | 10 |
| | 130 | 13 |

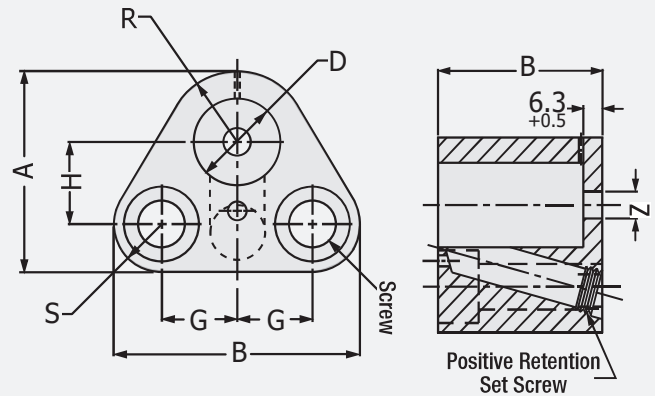


HEAVY DUTY

Ball Lock Punch Retainer - Mini

Code: **MRM**

- Centre of pin holes are reference points for punch hole position.
- Shim and backing plate should be supplied separately.
- Mini sized: This type of retainers are smaller than other retainers.



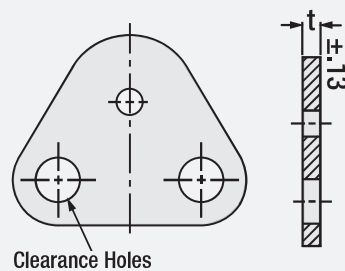
Mini Type

Code: **MRM**

| Order | MRM 10 | MRM 13 | MRM 16 | MRM 20 | MRM 25 | MRM 32 | MRM 40 |
|---------|--------|--------|--------|--------|--------|--------|--------|
| D Punch | 10 | 13 | 16 | 20 | 25 | 32 | 40 |
| A | 37.8 | 40.3 | 42.1 | 46.5 | 56.5 | 58.2 | 67.3 |
| B | 40.6 | 47.6 | 50.8 | 57.1 | 65.1 | 64.0 | 76.2 |
| G | 11.1 | 14.3 | 15.9 | 17.5 | 19.8 | 19.8 | 24.0 |
| H | 19.0 | 19.0 | 19.0 | 19.0 | 23.8 | 23.8 | 27.0 |
| R | 9.5 | 11.7 | 13.5 | 16.4 | 20.0 | 22.2 | 26.0 |
| S | 9.2 | 9.5 | 9.5 | 11.1 | 12.7 | 12.2 | 14.3 |
| Z | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Screw | M8 | M8 | M8 | M10 | M12 | M12 | M12 |

Shim Plate for Mini Retainers (MRM)

Code: **MAM**



| Order | "MAM" Code | t |
|-----------------|------------|------|
| | 030 | 3.00 |
| Order Example: | 060 | 6.00 |
| MRM.. / MAM.030 | 100 | 10 |
| | 130 | 13 |