

NOTES:

1. TORQUE RATINGS, Nm

| PART NUMBER   | SYMMETRIC TORQUE |
|---------------|------------------|
| QM12B-1050-00 | 0.0              |
| QM12B-1050-09 | 0.9              |
| QM12B-1050-18 | 1.8              |
| QM12B-1050-23 | 2.3              |
| QM12B-1050-34 | 3.4              |
| QM12B-1050-39 | 3.9              |

| PART NUMBER   | ASYMMETRIC CW TORQUE | ASYMMETRIC CCW TORQUE |
|---------------|----------------------|-----------------------|
| QM12B-2050-23 | 2.3                  | 1.4                   |
| QM12B-2050-34 | 3.4                  | 2.0                   |
| QM12B-2050-45 | 4.5                  | 2.7                   |
| QM12B-3050-23 | 1.4                  | 2.3                   |
| QM12B-3050-34 | 2.0                  | 3.4                   |
| QM12B-3050-45 | 2.7                  | 4.5                   |

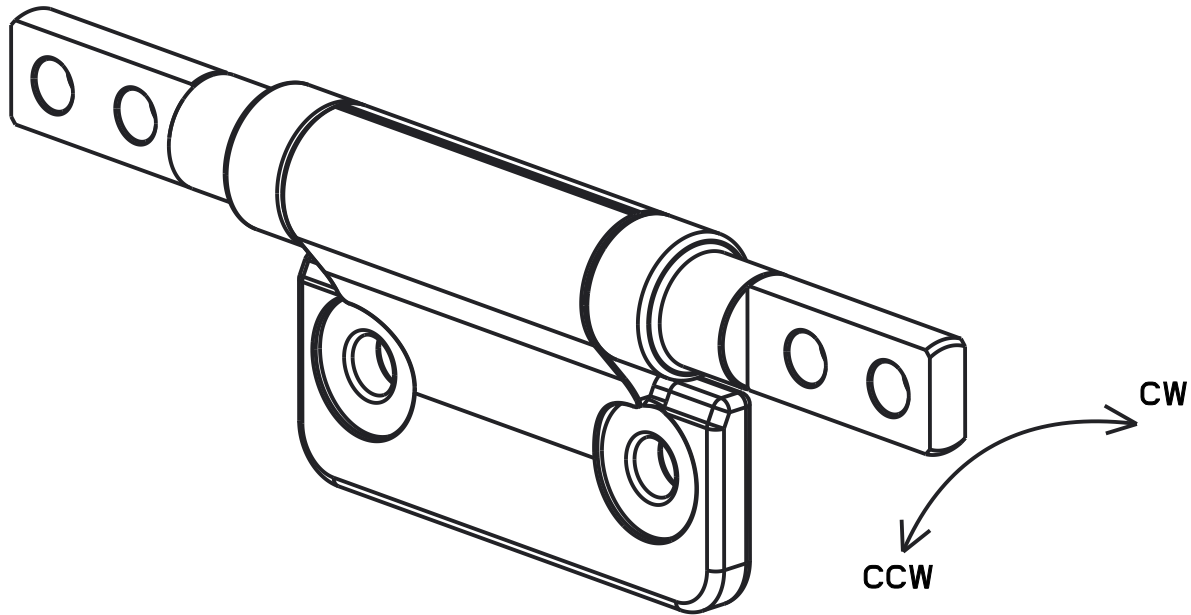
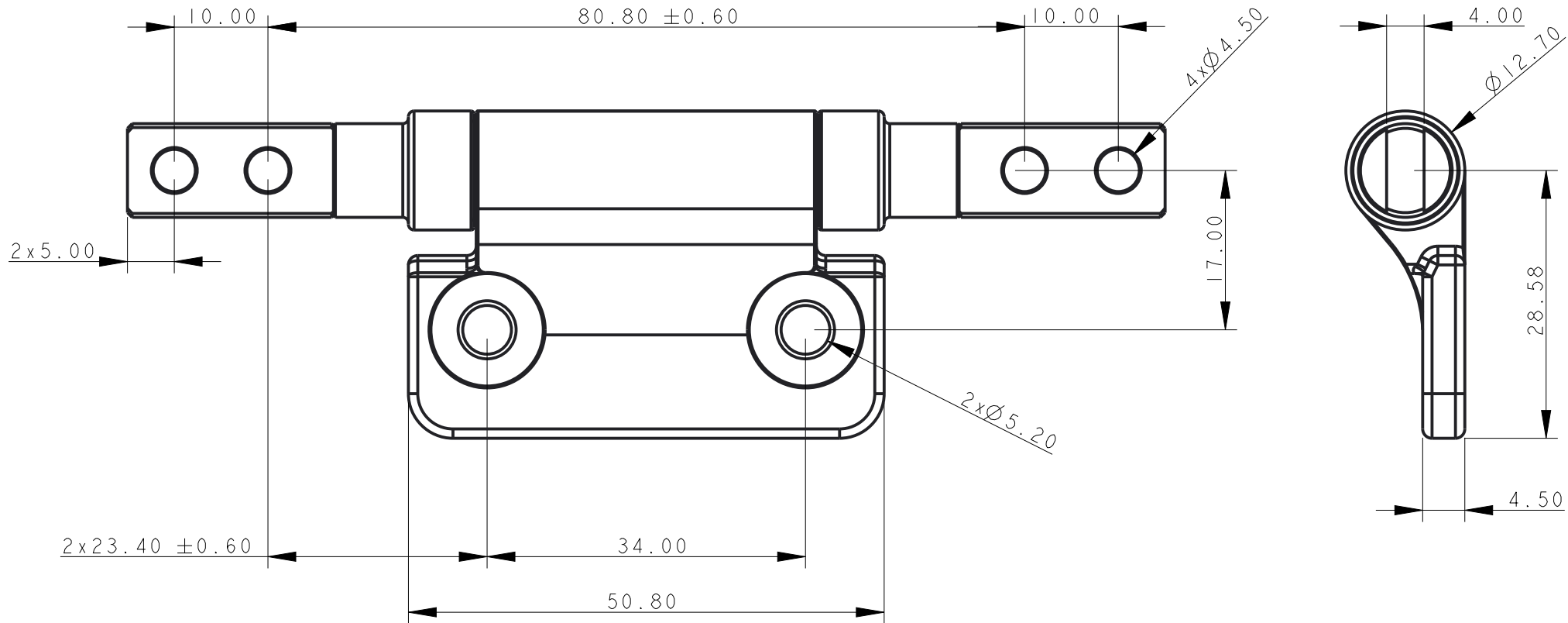
2. CYCLE LIFE:  
WITHIN 25,000 CYCLES STATIC TORQUE STAY WITHIN ±20% OF TORQUE SPECIFICATION.

3. FINISH: NATURE AND PLATING

4. 360 DEGREE SHAFT ROTATION

5. OIL RING SEALS FOR PROTECTION AGAINST ENVIRONMENT CONTAMINATION

6. MATERIAL:  
ZINC ALLOY, STEEL, GREASE AND O-RING



| METRIC(MM)      | [ENGLISH] (IN)       |
|-----------------|----------------------|
| 0-3 < ±0.15     | 0-0.118 < ±0.006     |
| 3-10 < ±0.20    | 0.118-0.394 < ±0.008 |
| 10-30 < ±0.25   | 0.394-1.181 < ±0.010 |
| 30-50 < ±0.30   | 1.181-2.000 < ±0.012 |
| 50-100 < ±0.40  | 2.000-4.000 < ±0.016 |
| 100-200 < ±0.50 | 4.000-8.000 < ±0.020 |

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**LEECO**

APPROVED  
DJU

DRAWN  
JLIU

SHEET 1 OF 1

SCALE: 1.600

DWG NO.  
**QM12B-x003-xx**

TITLE  
**QM12B**

MATERIAL  
**STEEL & ZINC**

REV  
**A3**

