

## CERTIFICADO DE CALIBRACIÓN / CALIBRATION CERTIFICATE

INNOVATECIS CIA LTDA

Certificado No. (Certificate #): 59348

General José María Guerrero N69-170 y Alfonso del Hierro

Fecha de Recepción (Reception Date): 2025-07-24

Quito, Ecuador

Fecha de Calibración (Calibration Date): 2025-07-31

(+593) 02 6040 607

Próxima Fecha de Calibración (Calibration Due): 2026-07

innovatec@innovatec.com.ec

Fecha de Emisión (Emission Date): 2025-07-31

**Cliente (Client):** QUALIPHARM LABORATORIO FARMACEUTICO S.A.  
 AV. MANUEL CORDOVA GALARZA PB Y ESPERANZA (Oe4-175), QUITO, PICHINCHA (SEDE PRINCIPAL)

## Información del Instrumento (Instrument Information)

|                                         |                                                                                       |                                                        |
|-----------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------|
| <b>Equipo (Instrument):</b> Torquimetro | <b>Int. de Medición:</b> (-25 a 25) in.lb<br>(Measurement Range)                      | <b>Tipo de lectura</b> Analógica<br>(Type of reading): |
| <b>Marca (Brand):</b> UCP               |                                                                                       |                                                        |
| <b>Modelo (Model):</b> AO 1189          | <b>División de escala:</b> 1 in.lb<br>(Resolution)                                    | <b>Clase (Class):</b> -%                               |
| <b>Serie (Serial #):</b> 113783         |                                                                                       | <b>Ubicación (Location):</b> L1(L6)-L3(L7)             |
| <b>Código (Code):</b> AFMAYEQ00083      | <b>Lugar de Calibración (Place of Calibration):</b> Lab. INNOVATEC / INNOVATEC's Lab. |                                                        |

**Datos de Calibración (Calibration Info)** **Condiciones Ambientales (Environmental Conditions)**  
**Procedimiento (Procedure):** INN-PC-07 **Temperatura (Temp):** (20 °C ± 21.2 °C) **Humedad (Humidity):** (45 %HR ± 45.1 %HR)

## Trazabilidad (Traceability Info)

| Patrón (Standard) | Marca (Brand) | Cert. # | Última Calibración (Last Cal.) | Período (Period) |
|-------------------|---------------|---------|--------------------------------|------------------|
| Pesas Patrón      | -             | 55798   | 2025-04-05                     | 1 año            |
| Barra de Torque   | INNOVATEC     | 56428   | 2025-04-09                     | 1 año            |

## Calibración Horario (Clockwise Calibration)

| Valor Nominal | Resultados Calibración |        | Desviación de Indicación |        |       | Incertidumbre Expandida Relativa U (k=2) |
|---------------|------------------------|--------|--------------------------|--------|-------|------------------------------------------|
|               | N.m                    | in.lb  | N.m                      | in.lb  | %     | ± %                                      |
| 0 / 0         | 0.000                  | 0.000  | 0.000                    | 0.000  | 0.0%  | 0.28%                                    |
| 0.6 / 5       | 0.564                  | 4.995  | -0.001                   | -0.005 | -0.1% | 0.28%                                    |
| 1.1 / 10      | 1.125                  | 9.953  | -0.005                   | -0.047 | -0.5% | 0.28%                                    |
| 2.3 / 20      | 2.259                  | 19.995 | -0.001                   | -0.005 | 0.0%  | 0.28%                                    |
| 3.4 / 30      | 3.390                  | 29.997 | 0.000                    | -0.003 | 0.0%  | 0.28%                                    |
| 4.5 / 40      | 4.518                  | 39.984 | -0.002                   | -0.016 | 0.0%  | 0.28%                                    |
| 5.7 / 50      | 5.649                  | 49.987 | -0.001                   | -0.013 | 0.0%  | 0.28%                                    |

## Calibración Anti-Horario (Counter Clockwise Calibration)

| Valor Nominal | Resultados Calibración |        | Desviación de Indicación |       |       | Incertidumbre Expandida Relativa U (k=2) |
|---------------|------------------------|--------|--------------------------|-------|-------|------------------------------------------|
|               | N.m                    | in.lb  | N.m                      | in.lb | %     | ± %                                      |
| 0 / 0         | 0.000                  | 0.000  | 0.000                    | 0.00  | 0.0%  | 0.28%                                    |
| 0.6 / 5       | 0.564                  | 4.995  | -0.001                   | 0.00  | -0.1% | 0.28%                                    |
| 1.1 / 10      | 1.129                  | 9.992  | -0.001                   | -0.01 | -0.1% | 0.28%                                    |
| 2.3 / 20      | 2.255                  | 19.954 | -0.005                   | -0.05 | -0.2% | 0.28%                                    |
| 3.4 / 30      | 3.388                  | 29.978 | -0.002                   | -0.02 | -0.1% | 0.28%                                    |
| 4.5 / 40      | 4.515                  | 39.958 | -0.005                   | -0.04 | -0.1% | 0.28%                                    |
| 5.7 / 50      | 5.648                  | 49.985 | -0.002                   | -0.02 | 0.0%  | 0.28%                                    |

**Comentarios:** Ninguno.  
 Comments

**Calibrado por:**  
 Calibrated by: Ing. Isaac Calle

**Aprobado:**  
 Approved by: 

Fin de Certificado (End of Certificate)