







DOC NUMBER:

569-DB7B-MEC-731-002

CLIENT NUMBER:

PRD-MEC-DSH-022

CLIENT: **TAKEDA**

PROJECT:

BURITI EPCVM PROJECT

DATA SHEET **EXPANSION TANK** TK-7B-1

0	30/JUL/2021	ISSUED FOR CONSTRUCTION	ASO	LFF	RSP
В	28/JUN/2021	90% DD ISSUE	ASO	LFF	RSP
Α	12/FEB/2021	30% DD ISSUE	ASO	LFF	MAJ
REV	DATE	DESCRIPTION	EXEC	CHECK	APPROV









NUMBER: **569-DB7B-MEC-731-002**TITLE

CLIENT NR

PRD-MEC-DSH-022

SHEET: 2/4

EXPANSION TANK - TK-7B-1

REV.:

1. REVISION HISTORY

Rev	Reason For Change	
Α	ORIGINAL ISSUE	
В	General review: Changed equipment type from atmospheric to pressurized	
0	ISSUED FOR CONSTRUCTION	









DS (Takeda) | | Hemobrás PRD-MEC-DSH-022 NUMBER: 569-DB7B-MEC-731-002 CLIENT NR TITLE SHEET 3/4 **EXPANSION TANK - TK-7B-1** REV.: 0 1 **GENERAL** CHILLED WATER - PROCESS (LOOP 2) TK-7B-1 1.1 SERVICE: ITEM No: 1.2 LOCAL: DRUG SUBSTANCE BUILDING (7B) **QUANTITY:** 1.3 MANUFACTURER: (Note 1) MANUFACTURING STANDARD: 1.4 APPLICABLE: **PROPOSAL OPERATION CONDITIONS** (Note 2) 2 2.1 SYSTEM VOLUME (m3): 5.8 RETURN TEMPERATURE (°C): 10.7 2.2 INSTALLED POWER (TON): 258.6 **MINIMUM TEMPERATURE (°C)** 4.0 2.3 STATIC HEIGHT (m): 1.9 MAXIMUM TEMPERATURE (°C): 25.0 2.4 SUPPLY TEMPERATURE (°C): 6.0 SAFETY VALVE RESPONDE PRESSURE (barg): 3.0 CONSTRUCTION 3 3.1 TYPE OF TANK: **PRESSURIZED** 3.2 SYSTEM TOTAL EXPANSION VOLUME (m3): 0.055 3.3 VESSEL NET VOLUME (m3): note 1 3.4 VESSEL NOMINAL VOLUME (m3): 0.14 3.5 VESSEL DESIGN PRESSURE (barg): 3.0 3.6 **VESSEL DESIGN TEMPERATURE (°C):** 0.0 min / 40.0 max. **VESSEL CONNECTIONS (DN / CLASS):** 3.7 note 1 / 150# ASME/AISI B16.5 SUPPORT: **LEGS** 3.8 MATERIAL 4 4.1 BODY: CARBON STEEL 4.2 BAG / MEMBRANE: AIRPROOF BUTYL (note 3) SAFETY VALVE: 4.3 **BRASS MATERIALS INSPECTION** 5 5.1 IN THE EQUIPMENT MANUFACTURER: NO IN THE CLIENT'S SITE: 5.2 VISUAL 6 **TANK FEATURES** 6.1 EMPTY (kg): note 1 FULL OF WATER (kg): note 1 6.2 DIAMETER (m): note 1 HEIGHT(kg): note 1 7 **ACCESSORIES** ✓ SAFETY VALVE 7.1 ✓ MANUAL VALVES 7.2 ✓ WATER MAKE-UP DEVICE 7.3 Notes: 1) To be confirmed by supplier. 2) The manufacturer will be responsible for the tank sizing. 3) The Tank shall be able of working with a chilled water supply temperature of 4°C and return of 8.7°C









569-DB7B-MEC-731-002 CLIENT NR PRD-MEC-DSH-022

SHEET 4/4

REV.: 0

EXPANSION TANK - TK-7B-1

TITLE

BATTERY LIMITS

