

ISO 18250-3 Reference Connectors for Enteral Reservoir Testing



Industrial specification sheet for ISO 18250-3 Figure C.2, C.3, C.4, C.5 and C.6 stainless steel reference connectors used in enteral reservoir connector test configurations.

Applicable Standard: ISO 18250-3

Material: Stainless steel

Selection Basis: Figure number, sample connector structure, mating direction and test item

Supply Scope: Single figure, selected figures or project-based connector configuration

Product Lineup Overview



Figure C.2

Cross Port Reservoir Reference Connector



Figure C.3

Reference Connector



Figure C.4

Cross Reference Connector



Figure C.5

Male Reference Connector



Figure C.6

Female Reference Connector

Start Here: Select by Customer Test Logic

1. Figure Number Specified

Review the corresponding C.2, C.3, C.4, C.5 or C.6 connector directly.

2. Sample Type Known

Female sample: C.5. Male sample: C.6. Cross-port structure: C.2, C.3 or C.4.

3. Test Item Known

Leakage / unscrewing: C.3. Axial load or overriding: C.2 or C.4.

Figure Selection Matrix

Figure	Reference Connector Role	Main Test Configuration
C.2	Cross port reservoir reference connector	E1R-related axial load separation and overriding resistance setups
C.3	Reference connector for cross-port reservoir connector testing	Leakage, stress cracking, resistance to separation from unscrewing and disconnection-by-unscrewing setups
C.4	Cross reference connector	Cross connector axial load separation and overriding resistance configurations
C.5	Male reference connector	Testing female enteral reservoir connectors requiring a defined male reference connector
C.6	Female reference connector	Testing matching male enteral reservoir connectors requiring a defined female reference connector

Selection by Known Test Requirement

Known Test Requirement	Reference Connector / Equipment to Review
Positive pressure liquid leakage	Figure C.3 and matching leakage setup
Subatmospheric pressure air leakage	Figure C.3 and ISO 18250-1 air leakage tester
Stress cracking related evaluation	Figure C.3 and sample preparation setup
Resistance to separation from unscrewing	Figure C.3 and suitable unscrewing fixture
Disconnection by unscrewing	Figure C.3 and controlled holding / rotation method
Separation from axial load / overriding	Figure C.2 or Figure C.4, depending on sample configuration
Female connector sample testing	Figure C.5
Male connector sample testing	Figure C.6

Testing Principle and Setup Boundary

1. Connect

Assemble sample connector with the required reference connector.

2. Stabilize

Confirm mating condition, holding method and alignment.

3. Apply Test

Apply leakage, unscrewing, axial load or overriding condition.

4. Evaluate

Observe performance under the specified setup.

Key engineering point: the reference connector is only one part of the test configuration. Test results may be affected by mating condition, sample holding, fixture alignment, pressure or vacuum condition, force direction and rotation method.

Test Equipment and Fixture Boundary

Test Area	Boundary / Additional Requirement
Leakage-related tests	May require positive pressure liquid leakage setup, subatmospheric pressure air leakage tester, sealing accessories and connection tubing.
Axial load separation	Requires controlled force application, sample holding and alignment of the sample and reference connector.
Unscrewing / disconnection tests	Require suitable holding, rotation or torque-related fixtures according to the selected test method.
Overriding resistance	Depends on connector engagement, loading direction and fixture condition.

Typical Laboratory Test Scenes



Laboratory-style scenes showing air leakage equipment, reference connector components and fixture setup for connector verification projects.

Typical Applications

- Enteral reservoir connector design verification
- Cross-port reservoir connector test setup preparation
- Leakage and sealing performance evaluation
- Stress cracking related connector validation

- Unscrewing and disconnection behavior verification
- Axial load separation and overriding resistance test configuration
- Laboratory quality control and pre-compliance checking
- Medical device connector development and validation projects

Manufacturing, Inspection and Documentation

KINGPO supplies precision-machined stainless steel reference connectors. Dimensional inspection records, material information or other supporting documents can be discussed according to the agreed supply scope. Documentation requirements should be confirmed before production or shipment, especially for validation, laboratory quality control or pre-compliance testing projects.

What to Confirm Before Quotation

Required figure number	Figure C.2, C.3, C.4, C.5 or C.6
Sample connector structure	Cross-port, male, female or other related structure
Mating direction	Whether the setup requires a male or female reference connector
Intended test item	Leakage, stress cracking, unscrewing, axial load separation or overriding
Required equipment	Leakage tester, force fixture, holding fixture or unscrewing fixture



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