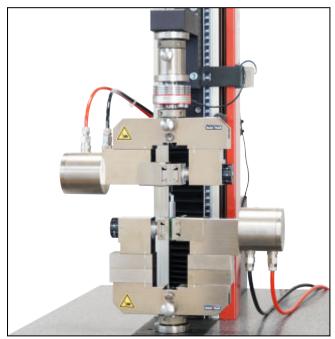


Product Information

ISO 11040-4/-6 Annex G1 - Strength of needle bonding



Test arrangement with pneumatic grips and special jaws



CTA: 167329 132989

Testing is performed on glass or plastic syringe barrels for injectables and sterilized subassembled syringes ready for filling.

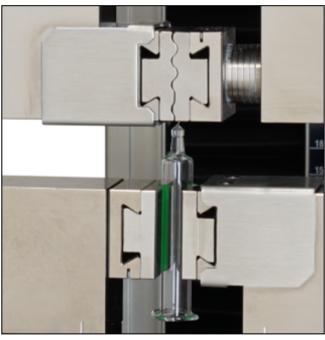
In Annex G1 of the standard the strength of the needle bonding (needle pull-out force) is tested.

To perform the test, the syringe is gripped with the lower pneumatic grip. The aligned syringe needle is gripped with the special jaws of the upper pneumatic grip and pulled off upwards at a defined speed.

The expected force range is 100 N.

The test results contain the following information:

- Sampling rate
- Test speed
- Maximum force
- Force-displacement curve
- Number of syringes
- Deviations



Detail view with gripped syringe needle

Advantages and features

- Versatile pneumatic grips that can also be used for Annex F, G3 and G6
- Special corrugated jaws with plane surfaces for optimum load application
- Secure gripping of sensitive specimens through adjustable gripping pressure
- high stiffness and precise crosshead guidance with zwickil ine
- maximum safety for user, test results, specimen material and testing system.
- online correction of machine compliance guarantees very high travel-measurement and positioning accuracy
- traceable, reliable test results in accordance with FDA 21 CFR Part 11, guaranteeing complete, tamperproof documentation of all actions and changes performed in the testXpert Illtesting software



Product Information

ISO 11040-4/-6 Annex G1 - Strength of needle bonding

Technical data

Pneumatic specimen grips type 8097

Item No.	1106782	
Туре	8097	
Operating principle/identification	Opposing jaw with stepped and stepless adjust- ment	
Test load F _{max}	0.5	kN
Operating pressure The operating pressure depends on the upstream components.	0.5 10	bar
Gripping force at 6 bar	0.75	kN
Gripping force at 10 bar	1.3	kN
Opening width with jaws, 5 mm thickness ¹⁾	20	mm
Gripping travel of pneumatically operated side	10.5	mm
Gripping of the specimen	The specimen must be gripped with at least 2/3 of the jaw height.	
Dimensions		
Height	95	mm
Installation height	110	mm
Width	242	mm
Depth	60	mm
Depthwith connection unit	86	mm
Connection, hole	Ø 20	mm
Weight per specimen grip, approx.	1.5	kg
Ambient temperature	+10 +35	°C
Scope of delivery	2	piece(s)
Scope of delivery	2	piece(s)

¹⁾ The opening width is the result of using jaws with 5 mm jaw thickness.

Accessories required

Jaws (1 x required)

Item No.	Specimen thickness [mm]	Ambient temperature [°C]	Scope of delivery [pieces]
3003408	Ø 12 to 35	-15 to +40	1 pair = 2
3003407	Ø 5 to 12	-15 to +40	1 pair = 2

Туре	Jaw, undulated	
Item No.	3003406	
Test load F _{max}	1	kN
Ambient temperature	-70 to +250	°C
Scope of delivery	1 pair = 2	pieces



Product Information

ISO 11040-4/-6 Annex G1 - Strength of needle bonding

Spacers (1x required)

Description	ArticleNumber
Spacers, height 20 mm, for increasing the free space between jaw and grip body. Scope of	316559
delivery 2 pieces. 2 pieces required per grip. 1)	

¹⁾ For convenient operation

Pneumatic control unit (1x required)

The pneumatic control units can be used with testXpert III V1.7 (from 14.12.2022) and testControl II V8.62.

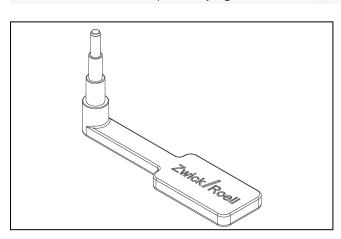
Description	ArticleNumber
Pneumatic control unit	1108557
or	
Pneumatic control unit with clamping pressure preselection via testXpert III testing software	1108559

Pneumatic hoses (1x required)

Description	ArticleNumber
Set of pneumatic hoses for connecting a pair of pneumatic grips; including hose guiding for strain	1112640
relief	

Optional accessories

Description	ArticleNumber
Holder For Inserting Prefilled Syringes into Pneumatic Grips (e.g. ISO 11040	1075238
Annexes G1, G3, G6)	
- The insertion aid enables easy insertion of the syringes into the specimen grip, without risk of	
pinching or injury.	
- The holder is suitable for prefilled syringes in sizes 0.5 ml, 1.0 ml, 1.5 ml and 5 ml	



Holder For Inserting Prefilled Syringes