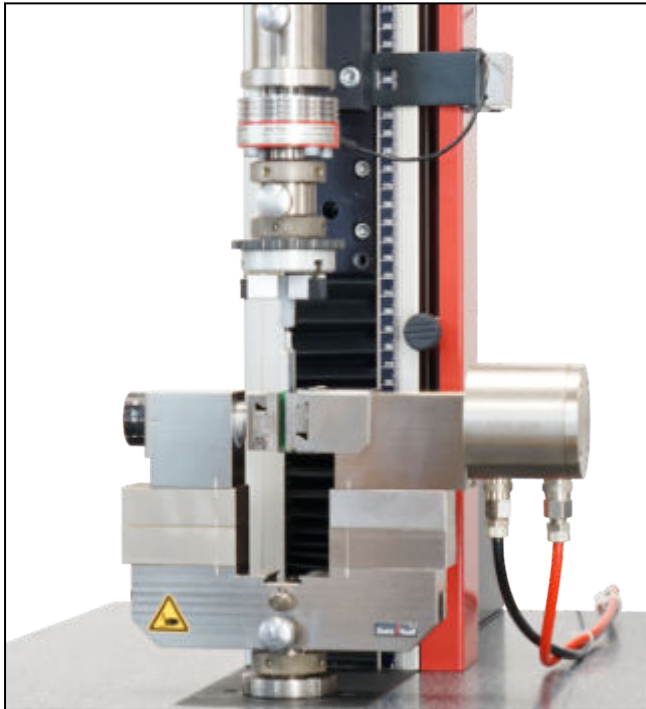


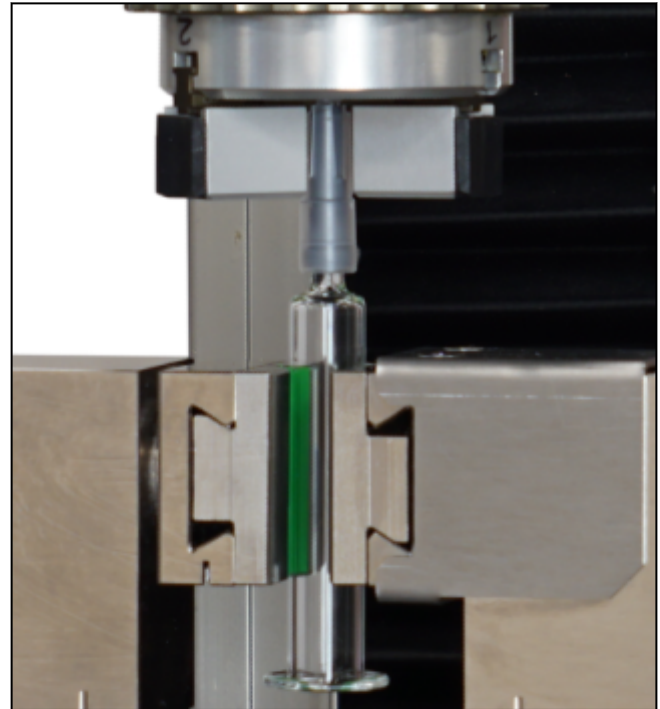
Product Information

ISO 11040-4/-6 Annex G6, Method 1 - Pull-off force of needle shield (tip cap)

CTA: 167334 133008



Test arrangement with pneumatic grips and 3-Jaw chuck



Detail view with gripped needle shield (tip cap)

Applications

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

In Annex G6 of the standard, the pull-off force of the needle shield (tip cap) is measured.

To perform the test, the syringe is gripped with the lower pneumatic grip, F_{max} 500 N.

The needle shield (tip cap) is pulled axially upwards off the syringe with the 3-Jaw chuck. The test speed is between 100 mm/min and 1000 mm/min. The pull-off force and the pull-off distance are measured and recorded.

The expected force range is 15 N.

The test results contain the following information:

- Sampling rate
- Test speed

- Maximum force and force-displacement curve
- Number of syringes
- Deviations

Advantages and features

- Versatile pneumatic grips that can also be used for Annex F, G1, G3, G4 and G5
- Secure gripping of sensitive specimens through adjustable gripping pressure
- high stiffness and precise crosshead guidance with zwickiLine
- 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, tamper-proof documentation of all actions and changes performed in the testXpert III testing software

Product Information

ISO 11040-4/-6 Annex G6, Method 1 - Pull-off force of needle shield (tip cap)

Technical data

Type Item No.	Specimen grip, 3-jaw chuck 1037579	
Test load F_{max}	100	N
Number of jaws	1	Set
Jaws glued with	Rubber	
Base unit		
Diameter	90	mm
Material (chuck)	Cast steel	
Gripping range	Ø 2 to 25	mm
Connection, bolt	Ø 20	mm
Ambient temperature	-40 to +70	°C
Weight, approx.	2	kg
Scope of delivery	1	piece

Pneumatic specimen grips type 8097

Item No.	1106823	
Type	8097	
Operating principle/identification	Opposing jaw with stepped and stepless adjustment	
Test load F_{max}	0.5	kN
Operating pressure	1 ... 10	bar
	The operating pressure depends on the upstream components.	
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
Depth with 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	1	piece(s)

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

Product Information

ISO 11040-4/-6 Annex G6, Method 1 - Pull-off force of needle shield (tip cap)

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

Spacers (1x required)

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

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 or	1108557
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 relief	1112640

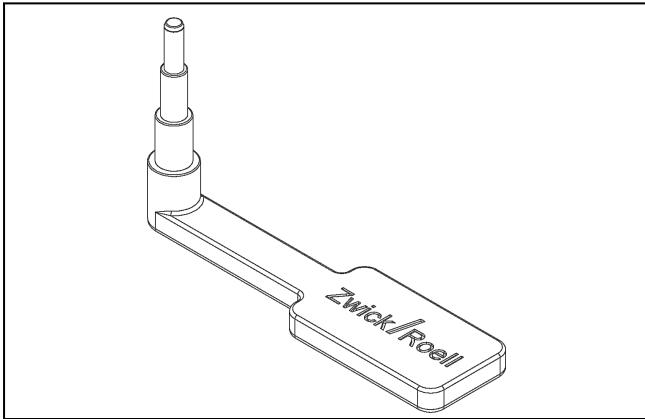
Optional accessories

Description	ArticleNumber
Holder For Inserting Prefilled Syringes into Pneumatic Grips (e.g. ISO 11040 Annexes G1, G3, G6)	1075238
- 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	

Product Information

ISO 11040-4/-6 Annex G6, Method 1 - Pull-off force of needle shield (tip cap)

CTA: 254217



Holder For Inserting Prefilled Syringes