

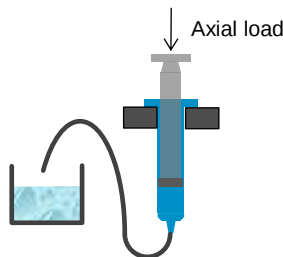
Test Methods for Prefilled syringes - ISO 11040

Finished prefilled syringes are tested according to ISO 11040-8. A detailed description of the tests can be found in ISO 11040-4, ISO 7668-1 and ISO 80369.

ISO 11040-8

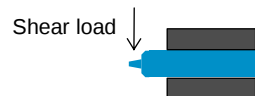
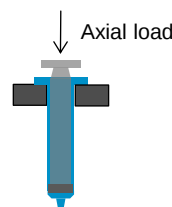
Glide force test

- ☐ 6.2: Break loose and extrusion forces
(see also [ISO 11040-8, Annex E](#))



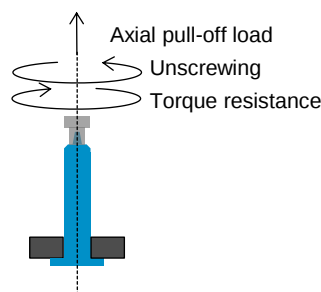
Test methods for syringe barrels

- ☐ 6.3: Burst resistance
(see also [ISO 11040-4, Annex G.2](#))
- ☐ 6.4: Flange break resistance
(see also [ISO 11040-4: C.1](#))
- ☐ 6.4: Luer cone break resistance
(see also [ISO 11040-4: C.2](#))



Closure system forces and torques

- ☐ 6.5: Luer lock adaptor collar pull-off force
(see also [ISO 11040-4, Annex G.3](#))
- ☐ 6.5: Luer lock adaptor collar torque resistance
(see also [ISO 11040-4, Annex G.4](#))
- ☐ 6.5: Luer lock rigid tip cap unscrewing torque
(see also [ISO 11040-4, Annex G.5](#))
- ☐ 6.5: Pull-off force of the tip cap or the needle shield
(see also [ISO 11040-4, Annex G.6](#))



Connectivity with fluid path connectors

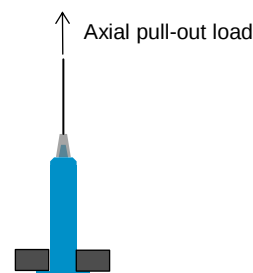
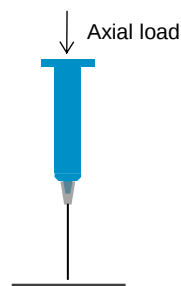
- ☐ 6.6: various, see [ISO 80369](#)

Residual volume

- ☐ 6.7: Residual volume (see [ISO 7886-1](#))

Test methods for needles

- ☐ 6.8: Needle penetration test
(see also [ISO 11040-4, Annex F](#))
- ☐ 6.9: Needle pull-out force
(see also [ISO 11040-4, Annex G.1](#))



Leakage tests

- ☐ 6.11: Liquid leakage beyond plunger
(see [ISO 7886-1](#))