

**G238 Family**  
**3 & 4 Point Bend Fixtures**  
 Modular & Configurable

The G238 features a unique modular design enabling it to expand to a variety of test scenarios from a standard 3 point bend test to 4 point tests to flexural tests on ceramics and glass with special articulating anvils - at loads up to 2250 pounds (10 kN). The G238X family performs a variety of bend, flexural and fracture tests to make flexural modulus, flexural strength and flexural yield strength measurements. Interchangeable anvils, rollers and bases ensure you meet your needs today as well as in the future.

Each 3 point setup includes a support span base, two lower anvils which are adjustable to handle specimens of different spans, and a single upper loading anvil. Each 4 point setup includes a span base, an upper mounted base, with both bases including two adjustable anvils.

Both upper and lower fixtures are mounted to a TestResources machine or the users existing test machine, using adapters available from TestResources.

Each anvil diameter may be easily changed to a different length or diameter. The base includes a ruler that simplifies manual centering.

Specimen deflection can be measured through machine head displacement, or directly via an optional deflectometer such as a Model 3540.

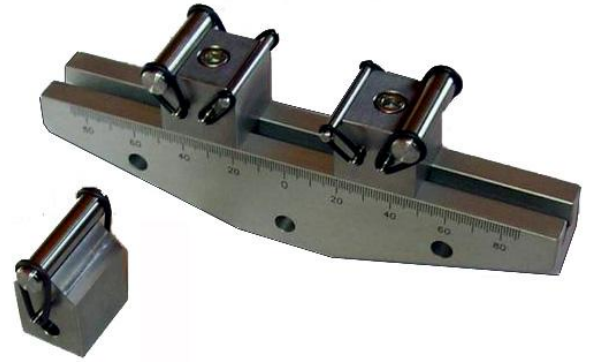


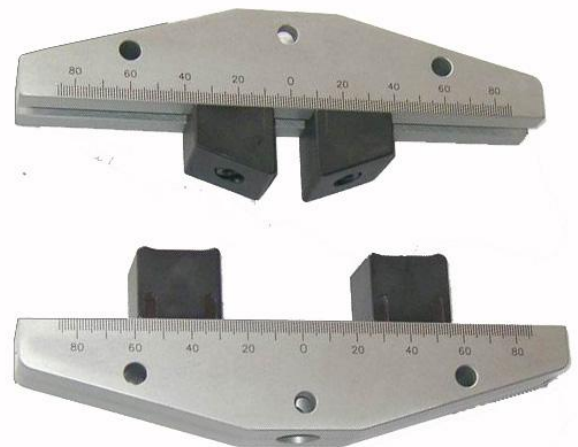
Fig 1 - Model G238X – 3 Point Bend Fixture



Fig 2 – Several base lengths are available.

**Features**

- Applications: Static flexure, bend, and cyclic flexure tests
- Specimen types: Composites, plastics, metal, bone, medical devices, electronics, alloys and other materials
- Modular design enables multiple configurations (two load ratings, several span lengths, many roller diameters and lengths)
- Designed to be further engineered for special requirements
- Three-point bend fixture is standard. We offer an optional conversion kit for four point loading.
- Conforms to ASTM, DIN, ISO and other industry standards.
- Adjustable span distance for a wide range of sample lengths.
- Interchangeable rollers with many diameters and lengths to choose from – also engineered to order.
- Rollers include elastic attachment and are free to rotate.
- Integrated anvil-rollers available for fixed setups.
- Anvils designed to enable short spans with flexibility to handle large rollers.

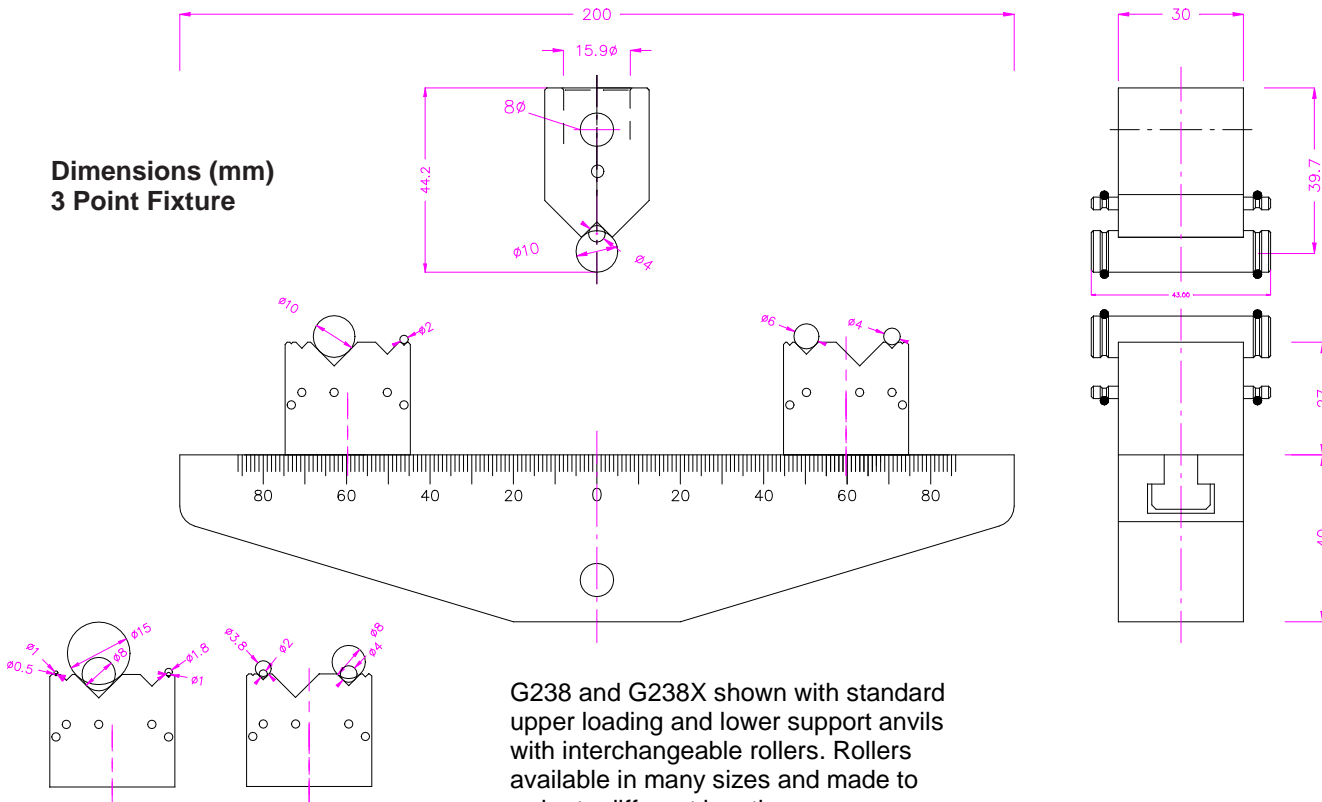


Optional - 4 Point Fixture Expansion Kits Available

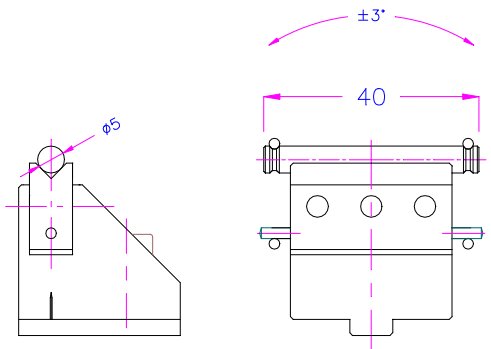
## Specifications - 3 Point Fixture

3 Point Model Number:	G238X	G238XS	G238XS300
Force Capacity	2 kN (550 lb)	10 kN (2250 lb)	10 kN (2250 lb)
Lower Support Span	4 to 150 mm (0.16 to 6")	4 to 150 mm (0.16 to 6")	4 to 250 mm (0.16 to 10")
Length of Base	200 mm (8")	200 mm (8")	300 mm (12")
Interchangeable Rollers (Dia)	1, 2, 3, 4, 5, 6, 8, 10, 12 mm or 0.25", 0.5" Std – non-std lengths & diameters made to order		

Dimensions (mm)  
3 Point Fixture



G238 and G238X shown with standard upper loading and lower support anvils with interchangeable rollers. Rollers available in many sizes and made to order to different lengths.

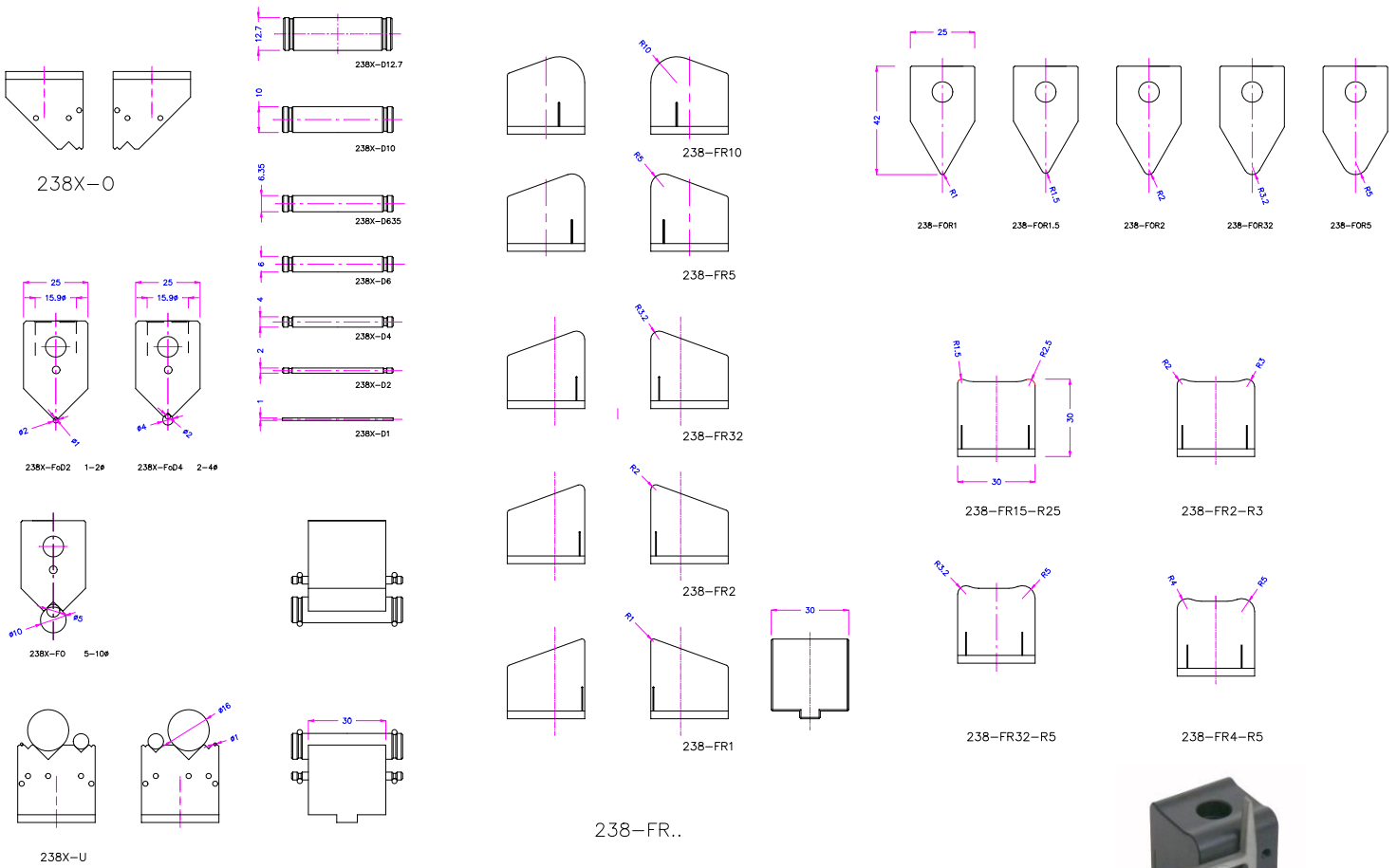


238XW-U

Special Articulating Rollers for testing brittle misaligned materials such as ceramics and glass

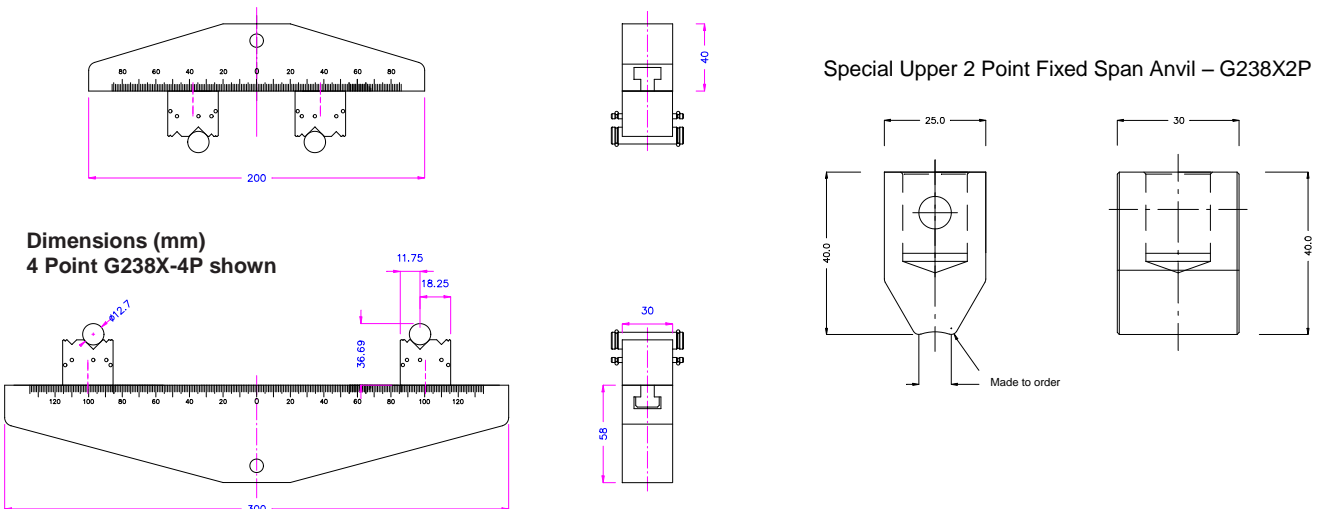


## Anvil & Roller Options

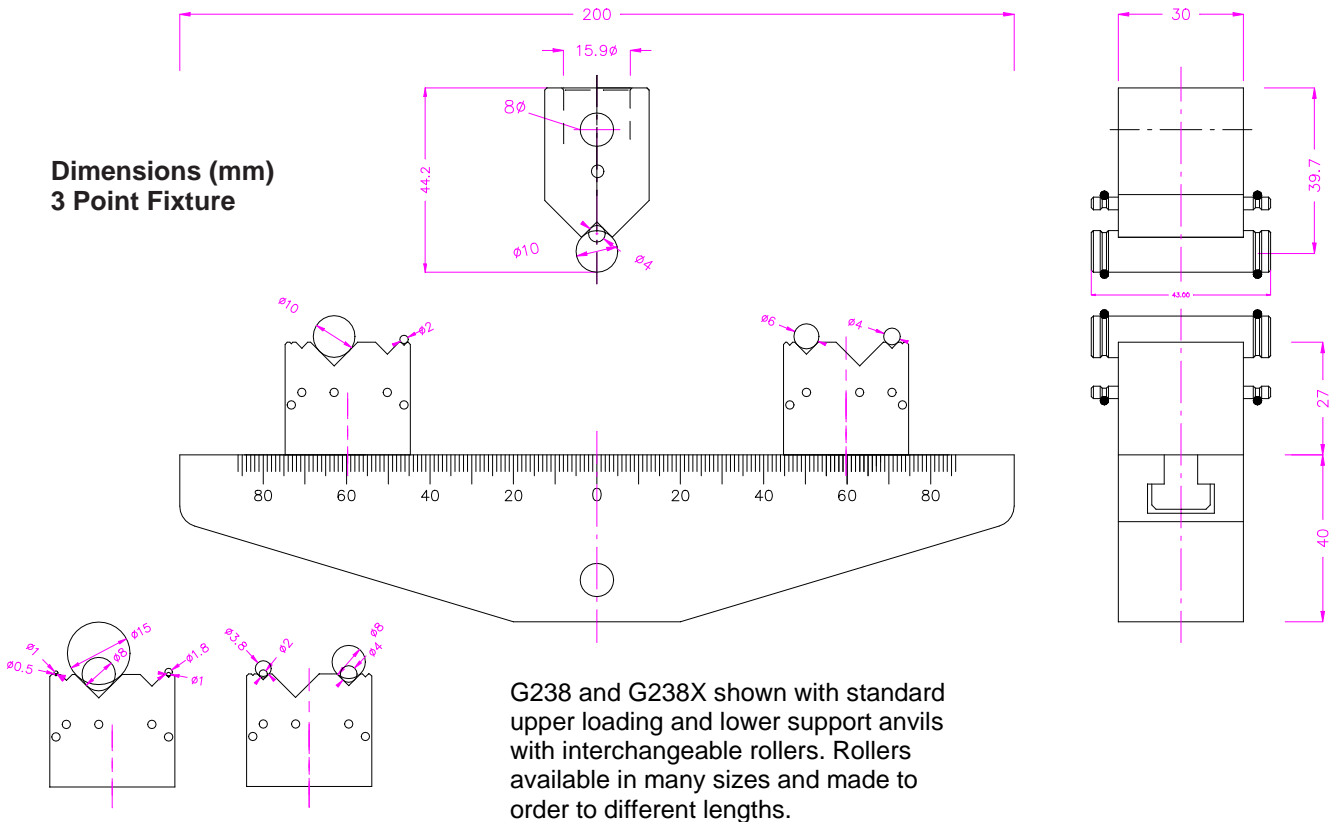


## Optional - 4 Point Kit

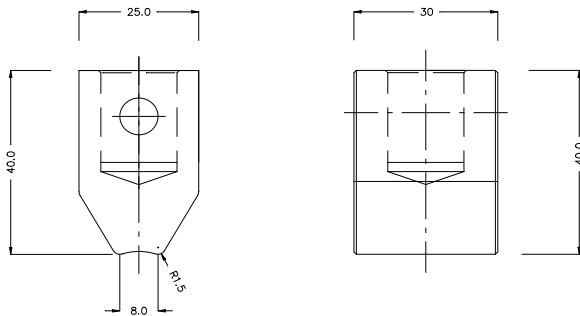
Add On Kit Model Number	G238X4P	G238XS4P	G238XS300-4P
Prerequisite	This kit requires purchase of the three point fixture		
Upper Span Force Capacity	2 kN (550 lb)	10 kN (2250 lb)	10 kN (2250 lb)
Upper Span	4 to 150 mm (0.16 to 6")	4 to 150 mm (0.16 to 6")	4 to 250 mm (0.16 to 10")
Overall Length of Upper Span	200 mm (8")	200 mm (8")	300 mm (12")



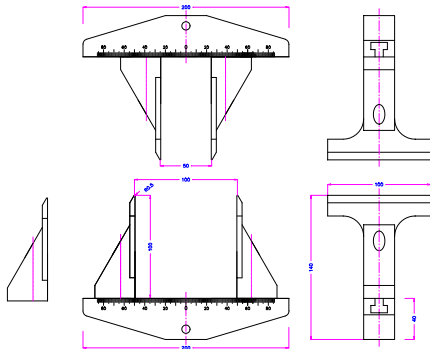
**Dimensions (mm)  
3 Point Fixture**



**Applications – Engineered to Order Examples**



**EXAMPLE 1**  
Upper anvil engineered to 4 point loading (1.5 mm radius line of contact) with small fixed span (8 mm) that is 30 mm wide.



**EXAMPLE 2**  
Wide width and deep anvils

EXAMPLE 3

Unconstrained hardened rollers for testing Glass.

*Shown with adapters for 1 1/4" Pin & cup – contact us for adapters for your test machine*

