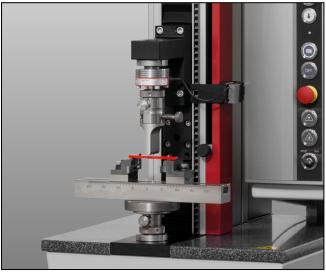


# **Product Information**

3-point flexure test kits



3-point flexure test kits

### Applications

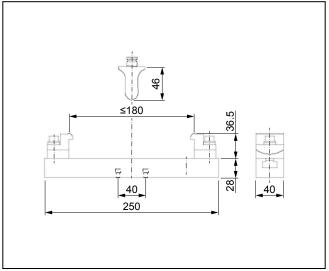
CTA: 175637 47735

The 3-point flexure test kit is mainly used for testing on plastics to ISO 178 / ASTM D790. It can also be used for testing food.

## Equipment

The 3-point flexure test kit for forces up to 20 kN consists of a rigid flexure fin and tiltable supports that can be adjusted depending upon the required support separation.

- The ZwickRoell flexure test kit can be used for tests up to a maximum test load of 20 kN, whereby the maximum deflection is 36 mm.
- The flexure test kit can be used with all ZwickRoell materials testing machines. Automated test sequences and simple adaptions of test requirements (different materials, dimensions, etc.) can be dealt with quickly and comfortably through test software.



3-point flexure test kits, general view

- The freely adjustable support separation of 10 180 mm enables flexure tests on specimen of different lengths, and makes the flexure test kit available for a range of applications.
- The two adjustable supports ensure plane parallel alignment of the specimen with respect to the flexure fin.
- The flexure test kit's simple handling also enables rapid and exact testing even when specimen of different shapes and sizes are to be tested.
- The variably adjustable specimen stop ensures that specimen are always supported centrally on the flexure test kit.
- The flexure test kit is set to standard with the help of the optional distance gage for tests to ISO 178 and ASTM D790.
- Can also be used for testing foodstuffs.



# **Product Information**

3-point flexure test kits

# **Technical data**

Item No.	320490		
Test load F <sub>max</sub> <sup>1)</sup>	20	kN	
Test load F <sub>max</sub> with TK 40 connector <sup>2)</sup>	10	kN	
Flexure table height x length	28 x 250	mm	
Span	10 to 180	mm	
Anvil radius	5 ± 0.2	mm	
Anvil height x width	36.5 x 40	mm	
Die radius	5 ± 0.1	mm	
Die height x width	46 x 40	mm	
Mounting height <sup>3)</sup> Top	46	mm	
Mounting height <sup>3)</sup> Bottom	56.5	mm	
Total weight	1.05	kg	
Upper connection	Adapter 16 <sup>H7</sup>		
Lower connection			
Included in the scope of delivery	1 flexure table, 2 adjustab adjustable centering-stop	1 flexure table, 2 adjustable anvils, 1 rigid die, 1 variably adjustable centering-stop	
Ambient temperature at			
Fmax 10 kN	-70 to +250	С°	
Fmax 20 kN	0 to +30	С°	

1) Fmax when mounted directly via flange or T-slot system

2) Fmax when mounted via TK 40 mm T-slot system connector and with span > 100 mm

<sup>3)</sup> The mounting height at the top is determined by the height of the die, the mounting height at the bottom by the flexure table with anvil, but without guard plate.

#### **Optional accessories**

Description	Item number
Additional anvils For flexure tests on plastics to ISO 178; 2 x anvils, radius 2 mm, width 40 mm, Fmax 20 kN	320904
<ul> <li>Distance gauge to ISO 178 and ASTM D790</li> <li>Distance gauge for setting the anvil span and the centering stops</li> <li>According to ISO 178 for 3-point flexure tests: Span 64 mm with anvil and die radius of 5 mm and anvil width of 40 mm</li> <li>According to ASTM D790 for 3-point flexure tests: Span 51.2 mm with anvil and die radius of 5 mm and anvil width of 40 mm</li> <li>The anvils can be aligned at a precise distance from each other and the support axis, and centered with the die</li> <li>With the distance gauge, the flexure test fixture's centering stops can be comfortably adjusted</li> </ul>	1072697
<ul> <li>and positioned according to the specimen widths of 10 and 12.7 mm</li> <li>Re-alignment of the anvils to the die is possible without removing the centering stops</li> </ul>	