

Probes for Food Texture Analyzer

## For Compression tests 1


### Simple shaped series

### (Disk, Cylindrical, Conical and Sphere probes)



Elasticity or stiffness can be measured by compressing or breaking with the simple shaped series probes.

Viscosity of semi-solid samples can be measured as well with them.

#### Disk probe (FR-HA series)

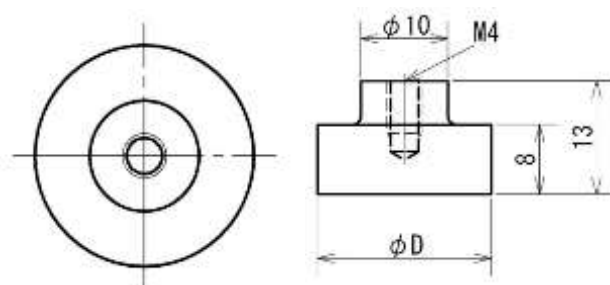
	Feature
	Disk probe can compress wide area of a sample firmly, and measure viscosity of semi-solid sample as well.
	Sample example
	Elasticity of sponge cake, fruits and hamburger steak. Viscosity of cheese, custard cream, and dressing
	Japanese Standard
	Ø20 complies with a part of 「Food for person having difficulty in swallowing」 (only for FR-HA-20J) and 「Universal Design Food」 .

#### [Measurement examples]

Elasticity of sponge cake	Viscosity of soup
	

1. Container holder table  
(FR-BG-60)

#### [Dimensions]




\*unit: mm

\*We will provide made-to-order sizes of all probes and tables if required.

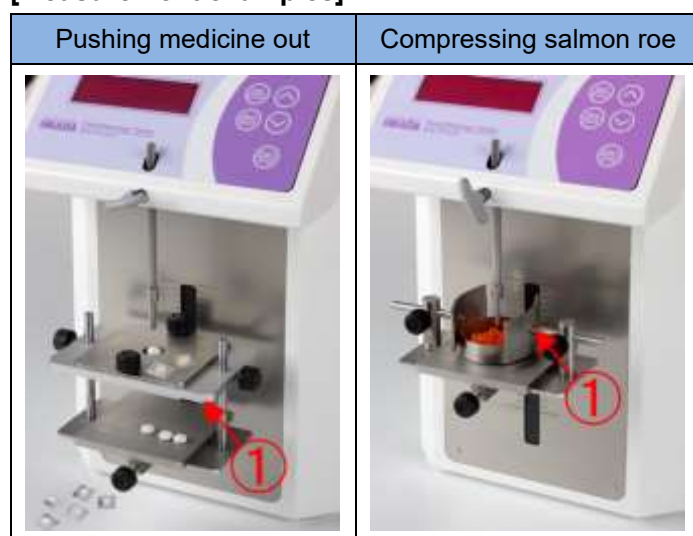
**[Specifications]**

Model	FR-HA-20J	FR-HA-20S	FR-HA-30J	FR-HA-50J
Outside diameter of touch surface Ø D	Ø20		Ø30	Ø50
Material	Polyacetal	Stainless steel	Polyacetal	
Weight	4g	23g	9g	23g
Capacity	50N	100N	50N	

## Cylindrical probe (FR-EC series)

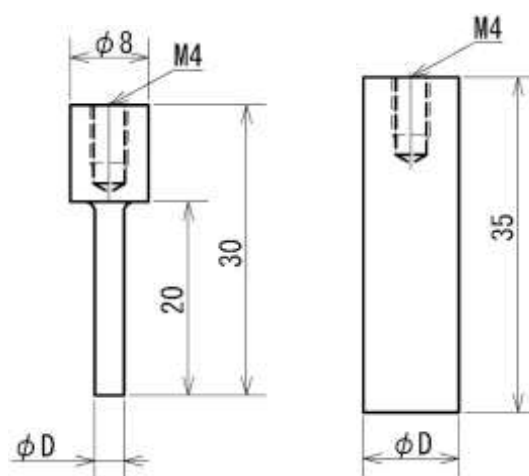
	Feature
	Cylindrical probe can compress a small area of a sample, so it is fit to measure force to push out or crush a sample.
	Sample example
	Stiffness of jelly, tofu, rice and beans
	Japanese Standard
	It meets JIS K6503 [Glue and Gelatin (Ø12.7)]

### [Measurement examples]



1. Container holder table  
(FR-BG-60)

### [Dimensions]



The outside figure A

The outside figure B

\*unit: mm


\*We will provide made-to-order sizes of all probes and tables if required.

### [Specifications]

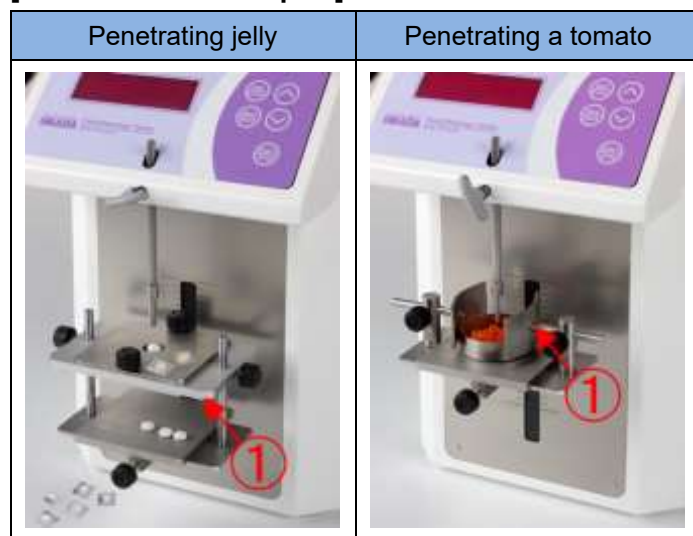
Model	FR-EC-3J	FR-EC-3S	FR-EC-5J	FR-EC-5S
Outside diameters of touch surface	Ø3		Ø5	
Material	Polyacetal	Stainless steel	Polyacetal	Stainless steel
Weight	2g	11g	2g	13g
Capacity	50N	100N	50N	100N
The outside figure	A			

Model	FR-EC-8J	FR-EC-10J	FR-EC-12.7J	FR-EC-15J
Outside diameters of touch surface	Ø8	Ø10	Ø12.7	Ø15
Material	Polyacetal			
Weight	4g		6g	9g
Capacity	50N			
The outside figure	B			

## Conical probe (FR-ES series)

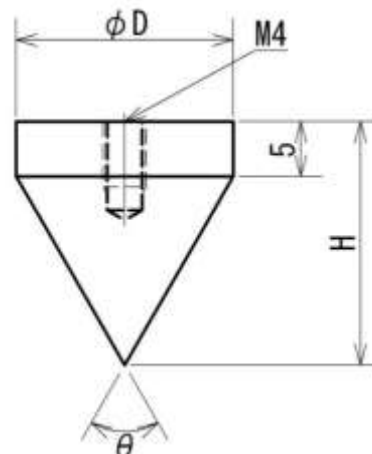
	Feature
	Conical probe is fit to measure how easy to penetrate a sample because of its sharp point.
	Sample example
	Vegetables or fruits skin, butter, yogurt, ice cream, hair conditioner and so on

### [Measurement examples]



1. Anti-scattering sheet  
(FR-DP-80)

### [Dimension]



\*unit: mm


\*We will provide made-to-order sizes of all probes and tables if required.

### [Specifications]



Model	FR-ES45-20J	FR-ES45-30J
The angle of the point $\theta$	45	
Outside diameter $\phi D$	$\phi 20$	$\phi 30$
Height H	(29.1)	(41.2)
Material	Polyacetal	
Weight	4g	13g
Capacity	50N	

Model	FR-ES60-20J		FR-ES60-20S
The angle of the point $\theta$	60		
Outside diameter $\phi D$	$\phi 20$		$\phi 30$
Height H	(22.5)		(31)
Material	Polyacetal	Stainless steel	Polyacetal
Weight	3g	19g	10g
Capacity	50N	100N	50N

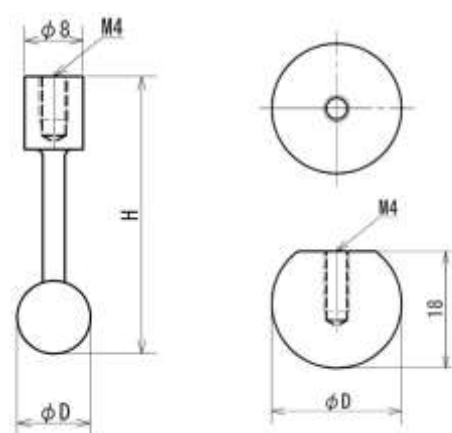
## Sphere probe (FR-SR series)

	Feature
	With Sphere probe, a sample can be compressed and transformed.
	Sample example
	Dough, snack food, fruits, and cheese
	Japanese Standard
	<p>Ø7 is compliant with JAS</p> <p>[Standard of elasticity for special packaging steamed fish paste]</p>

### [Measurement examples]

Stiffness of snack food	Elasticity of bread
	

### [Dimensions]



The outside figure A    The outside figure B

\*unit: mm

\*We will provide made-to-order sizes of all probes and tables if required.

### [Specifications]

Model	FR-SR-5S	FR-SR-7S	FR-SR-10S	FR-SR-20S
The angle of the point ØD	Ø5	Ø7	Ø10	Ø20
Height H	(35)	(35)	(38)	(18)
Material	Stainless steel			
Weight	5g	6g	9g	32g
Capacity	100N			
The outside figures	A			B

\*unit: mm

\*We will provide made-to-order sizes of all probes and tables if required.

### [Cautions]

- Information in this document is subject to change without prior notice.
- This document is product descriptions and handling precautions, and do not guarantee various characteristics or safety.
- This product is designed for force measurement purpose only.
- Do not copy and use this content without authorization.
- Some samples may not be suitable to measure with this product.

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