

P U R A S Y S

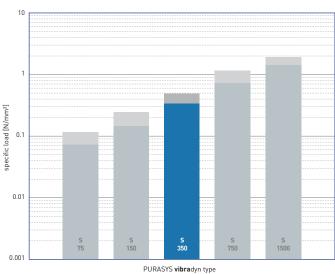
KRAIBURG PuraSys GmbH & Co. KG

Porschestraße 1

49356 Diepholz / GERMANY

www.purasys.com

## PURASYS **vibra**dyn **series** Working range



# Recommendations for elastic bearing:

Static load: up to [N/mm²]

0.350

Dynamic load: up to [N/mm²]

0.500

Load peaks: up to [N/mm²]

4.0

Values depending on form factor and apply to form factor q = 3

Material closed cellular polyether-urethane

Colour blue

**Delivery specifications** 

Thickness: 12.5 mm and 25 mm

Mats: 0.5 m wide, 2.0 m long

Stripes: max. 2.0 m long

Other dimensions on request (also stamping and moulded parts).

Properties	Value	Test method	Comment
Mechanical loss factor [1]	0.03	DIN 53513 <sup>(2)</sup>	guide value
Static E-modulus [1]	2.53 N/mm²	DIN 53513 <sup>(2)</sup>	
Dynamic E-modulus <sup>(1)</sup>	3.25 N/mm²	DIN 53513 <sup>(2)</sup>	
Static shear modulus <sup>(1)</sup>	0,35 N/mm²	DIN 53513 <sup>(2)</sup>	preload 0.35 N/mm²
Dynamic shear modulus [1]	0,52 N/mm²	DIN 53513 <sup>(2)</sup>	preload 0.35 N/mm², 10 Hz
Resistance to strain	0.32 N/mm²		at 10% deformation
Residual compression set	< 5 %	DIN EN ISO 1856	50%, 23°C, 70 h, 30 min after unloading
Tensile strength	> 3.5 N/mm <sup>2</sup>	DIN 53455-6-4	minimum
Elongation at break	> 500 %	DIN 53455-6-4	minimum
Tear resistance	> 2.5 N/mm	DIN ISO 34-1/A	
Rebound elasticity	70 %	DIN EN ISO 8307	± 10%
Specific volume resistance	>10 <sup>11</sup> Ω·cm	DIN IEC 93	dry
Thermal conductivity	0.09 W/[m·K]	DIN 52612-1	
Operating temperature	-30 up to +70 °C		
Temperature peak	+120 °C		
Inflammability	Class E / EN 13501-1	EN ISO 11925-1	normal flammable

 $<sup>^{\</sup>mbox{\scriptsize [1]}}$  measured at maximum limit of static application range

All information and data is based on our current knowledge. The data are subject to typical manufacturing tolerances and are not guaranteed. We reserve the right to amend the data.

 $<sup>^{(2)}</sup>$  test according to DIN 53513



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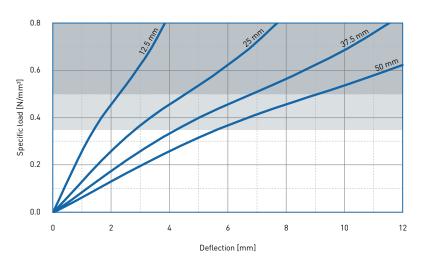
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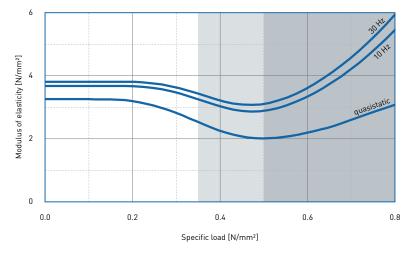
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### Load deflection curve



Recording of the 3rd loading; testing between steel plates at room temperature measured with a deflection rate of 1% of the thickness per second Form factor q = 3

# Modulus of elasticity

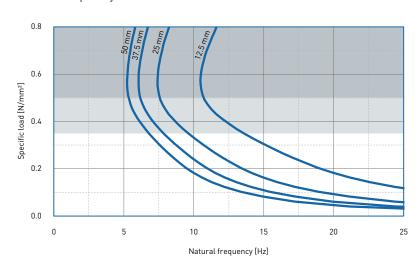


Dynamic test: sinusoidal excitation with an oscillating range of  $\pm$  0.11 mm at 10 Hz and  $\pm$  0.04 mm at 30 Hz

Quasistatic modulus of elasticity: tangent modulus taken from the load deflection

Test according to DIN 53513 Form factor q = 3

## Natural frequency



Natural frequency of a single-degree-of-freedom system consisting of a fixed mass and an elastic bearing consisting of PURASYS **vibra**dyn S 350 on a stiff subgrade.

Form factor q = 3

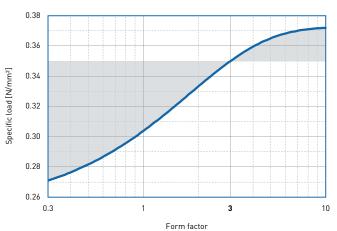


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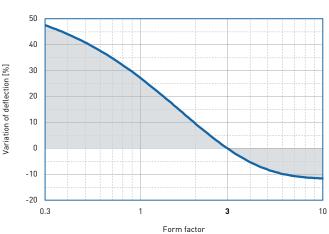
# Correction values varying form factors

specific load  $0.35 \text{ N/mm}^2$ , form factor q = 3

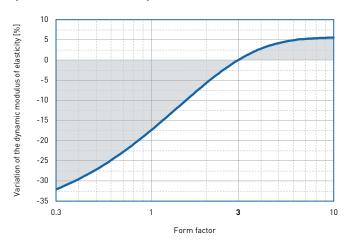
# Static load range



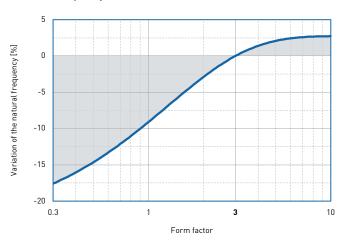
### Deflection



### Dynamic modulus of elasticity at 10 Hz



### Natural frequency



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