Elastomer hollow bar

Load dampers

METRIC

RoHS

MATERIAL

Polyurethane.

STANDARD EXECUTIONS

Pass-through hole.

- **PEB-80**: hardness 80 Shore A, blue colour.
- **PEB-90**: hardness 90 Shore A, orange colour.
- **PEB-92**: hardness 92 Shore A, red colour.

WORKING TEMPERATURE

- Maximum continuous working temperature: 60°C.
- Minimum continuous operating temperature: PEB-80 and PEB-90: -20°C, PEB-92: +15°C.

Use at temperatures between 60 and 100°C is tolerated but involves a significant reduction in the technical features.
Prolonged exposure to the maximum operating temperature may also lead to a significant deterioration in the mechanical characteristics compared to the nominal values indicated in the technical data.

FEATURES AND APPLICATIONS

The hollow bars guarantee high resistance to axial loads, avoiding sudden breakages in the event of overload.
They are also resistant to chemical agents such as acids, greases, and oils (for details on chemical compatibility please refer to the table Resistance to chemical agents).
They can be used as rollers on conveyor belts, tubes, or by cutting or turning the polyurethane bars it is possible to create springs for moulds, bushings, and shock absorbers.



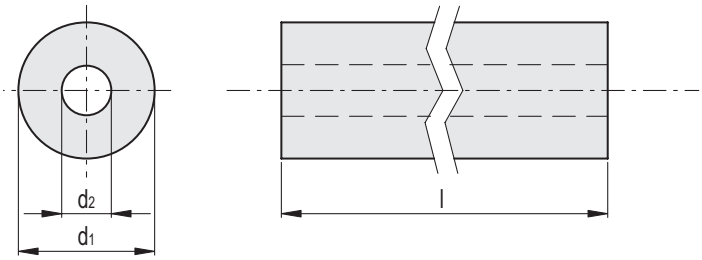
Mechanical characteristics			
Hardness (according to ASTM2240)	Shore A80	Shore A90	Shore A92
Colour	blue	orange	red
Tensile strenght at breakage (according to DIN 53504)	25 MPa	30 MPa	50MPa
Elongation at break (according to DIN 53504)	750%	360%	475%
Elongation at break Modulus 300% (according to DIN 53504)	5.5 MPa	17 Mpa	17.6 MPa
Tear resistance (according to DIN 53515)	14 kN/m	54 kN/m	89 kN/m
Compression set (according to DIN 53517)	25%	23%	18%
Abrasion (according to DIN 53516)	50 mm^3	56 mm^3	82 mm^3
Max. deflection	35%	30%	30%
Rebound	55%	52%	39%
Density	1.16 mg/m^3	1.17 mg/m^3	1.22 mg/m^3

Compression set: measures the deformation percentage after the material has been subjected to a compressive load.
Rebound (or elastic recovery): ability of an elastomer to return to its original shape after being deformed.

elesa 9/2025

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.

Conversion Table *1 mm = 0.039 inch*	
D	
mm	inch
16	**0.62**
20	**0.78**
25	**0.98**
32	**1.25**
40	**1.56**
50	**1.95**
63	**2.46**



METRIC

PEB-80

Code	Description	d1	d2	l	⚖
490001	PEB-16x250-6.5-80	16	6.5	250	48
490006	PEB-20x250-8.5-80	20	8.5	250	75
490011	PEB-25x250-10.5-80	25	10.5	250	114
490016	PEB-32x500-13.5-80	32	13.5	500	364
490021	PEB-40x500-13.5-80	40	13.5	500	617
490026	PEB-50x500-17-80	50	17	500	966
490031	PEB-63x500-17-80	63	17	500	1611

PEB-90

Code	Description	d1	d2	l	⚖
490002	PEB-16x250-6.5-90	16	6.5	250	48
490007	PEB-20x250-8.5-90	20	8.5	250	75
490012	PEB-25x250-10.5-90	25	10.5	250	114
490017	PEB-32x500-13.5-90	32	13.5	500	364
490022	PEB-40x500-13.5-90	40	13.5	500	617
490027	PEB-50x500-17-90	50	17	500	966
490032	PEB-63x500-17-90	63	17	500	1611

PEB-92

Code	Description	d1	d2	l	⚖
490003	PEB-16x250-6.5-92	16	6.5	250	55
490008	PEB-20x250-8.5-92	20	8.5	250	78
490013	PEB-25x250-10.5-92	25	10.5	250	132
490018	PEB-32x500-13.5-92	32	13.5	500	393
490023	PEB-40x500-13.5-92	40	13.5	500	667
490028	PEB-50x500-17-92	50	17	500	1038
490033	PEB-63x500-17-92	63	17	500	1746

Models all rights reserved in accordance with the law. Always mention the source when reproducing our drawings and photos.