DIBS DUREL'S INDUSTRIAL BUFFER SERIES - ROBUST & MAINTENANCE-FREE



YOUR ADVANTAGES AT A GLANCE

- High energy absorption despite the low weight
- Lightweight, compact design for small design spaces
- Compatible with commercially available buffers in terms of stroke, energy absorption and end force
- Highly adaptive damping depending on the impulse
- No stick-slip effect means no undesired force peaks
- Operating temperature range –58°F to 194°F (–50°C to +90°C)
- No mechanical spring wear
- Maintenance-free
- No lubrication required no leakage
- No time-consuming disposal of environmentally harmful lubricants
- Custom application design
- Buffers and springs can be arranged in parallel or in series
- Considerable cost-savings potential

The DIBS industrial buffer series by DUREL is maintenance-free, has a compact design and offers a broad application range.

Application-related design is our specialty. DUREL offers a unique range of polymer spring and dampening elements for significantly smaller design spaces. Compared to traditional dampening solutions, they provide an energy capacity that is up to 20% higher when integrated into existing installations.

We would be happy to offer a consultation to help you find the right solution that is tailored to your needs.





YOUR POLYMER SPRING EXPERTS

WWW.DUREL.DE



Product type	Test diagram						Buffer dimensions									Weight	Connection			
	F, [kN]	F_{stat} [kN]	F_{dyn} [kN]	s [mm]	W _{stat} [Joule]	W _{dyn} [Joule]	L [mm]	 [mm]	D [mm]	d [mm]	C [mm]	T [mm]	K [mm]	K ₁ [mm]	a [mm]	[kg]	b [mm]	d ₁ [mm]	D ₁ [mm]	t [mm]
DIBS 6	7	75	93	33	1.350	1.990	197	95	114	105	130	200	28	20	160	12	110	18	117	15
DIBS 7	7	75	93	50	2.025	2.980	274	154	114	105	130	200	28	20	160	15,5	110	18	117	15
DIBS 8	7	75	93	66	2.700	3.400	349	180	114	105	130	200	28	20	160	18	110	18	117	15
DIBS 9	7	75	93	83	3.375	4.970	425	256	114	105	130	200	28	20	160	21	110	18	117	15
DIBS 10	7	75	93	99	4.050	5.960	500	318	114	105	130	200	28	20	160	24	110	18	117	15
DIBS 16	20	180	225	50	3.750	5.520	280	147	165	155	185	250	34	20	215	32	155	23	167	20
DIBS 17	20	180	225	66	5.000	7.500	355	202	165	155	185	250	34	20	215	38	155	23	167	20
DIBS 18	20	180	225	83	6.250	9.190	447	261	165	155	185	250	34	20	215	46	155	23	167	20
DIBS 19	20	180	225	99	7.500	11.030	508	322	165	155	185	250	34	20	215	51	155	23	167	20
DIBS 20	20	180	225	116	8.750	12.870	588	372	165	155	185	250	34	20	215	57	155	23	167	20

- F Pretension force
- $\mathbf{F}_{\mathrm{stat}}$ Static buffer end force
- \mathbb{F}_{dyn} Dynamic buffer end force
- s Stroke, spring travel
- W_{stat} Static spring work (absorbed energy)
- $\mathbf{W}_{\rm dyn}$ Dynamic spring work (absorbed energy)
- . A spring-block design is available for overload protection.
- The springs provide reliable overload absorption, even without the block design. For non-block designs we recommend checking the pretensioning force at regular intervals.
- Pretension: Approximately 5-10 kN by default
- Front flange design. A back flange design is . available as an option.

Total length

L

d

- L Installed length
- D External housing
 - diameter
 - Pin diameter
- Sleeve diameter
- т Buffer head diameter
- Κ Flange thickness
- K, Flange width
- а Flange size
- b
 - Flange drilling d,
 - Installation diameter \mathbf{D}_1 t

Hole dimensions

Supporting wall thickness

• Buffers and springs can be arranged in parallel or in series.

С

- A guiding rod is required for two or more spring elements.
- Spring elements are also available individually.
- Other dimensions or customized solutions on request.

Product specifications valid at the time of printing. The contents of this brochure, technical data and the design drawings are subject to change due to ongoing technical developments. Relevant design drawings apply.

