# FOCUS ON QUALITY YOUR LIFT EXPERT



## LIFT BUFFERS

Lift Buffers	
DIN EN 81-1/-2 compliant	105
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## **LIFT BUFFERS DIN EN 81-1/-2 COMPLIANT**

**MATERIAL PROPERTIES:** • Polycell® elastic cellular polyurethane elastomer • Density:  $500 \pm 20 \, \text{kg/m}^3$  • Solid material • High dynamic load bearing capacity • Deformability up to 90% compared to the original buffer height • Resistance against oil, grease, petrol and ozone • Temperature range between  $-40\,^{\circ}\text{C} - +80\,^{\circ}\text{C}$  [ $-40\,^{\circ}\text{F} - +176\,^{\circ}\text{F}$ ] • Avoid permanent contact with water • All buffers contain a 2mm thick, foamed-in steel plate • The contact surface should be even and approx. 15% larger and 1,5xD smaller than the diameter of the buffer, respectively

**BUFFER MAINTENANCE:** The buffers are generally maintenance free. During maintenance or inspection of safety relevant parts, the buffers should be checked visually, too. The buffers should be replaced if a visible deformation occurs due to a car drop over limit or at the end of the recommended period of use. Discoloration from white to brown has no influence on the technical characteristics of the buffer.

**BUFFER SELECTION:** The specification of the required buffer size goes by the energy absorption capacity depending on the dynamic load. Basis of calculation listed below:

#### **IMPORTANT NOTE (NO CE-MARKING)!**

E- and T-series elevator buffers are certified according to EN81-1 /-2. Buffers of the old series cannot be supplied with a CE-mark, as the buffers are not certified according to the current state of technology (EN81-20 /-50). Since in Europe (EEC) safety components must have a CE-marking, we explicitly state that the buffers (without a CE-marking) cannot be used in a certified elevator system in Europe (EEC). Before purchasing the buffers, we ask you to check the exact situation and suitability for use, as the buffers supplied cannot be returned.

LIFT BUFF	ERS EN 81-1/-2	COMPLIAN	ІТ (NOMI	NAL VEL	OCITY V	=0,70 M/S)
Item No.	Description	Diagonal	Height	Load ra	nge	90% Compression
		D [mm]	H [mm]	m min.	m max	
				[kg]	[kg]	[mm]
0991001600	Lift buffer E1	100	160	235	1,030	144
0991251600	Lift buffer E3	125	160	260	1,505	144
0991401000	Lift buffer E5	140	100	373	1,815	90
0990800800	Lift buffer T1	80	80			72
0991000800	Lift buffer T2	100	80	235	1,140	72
0991250800	Lift buffer T3	125	80	235	1,505	72
0991650800	Lift buffer T4	165	80	235	1,140	72
0992200800	Lift buffer T5	220	80	235	1,505	72

LIFT BUFFERS EN 81-1/-2 COMPLIANT (NOMINAL VELOCITY V=1,0 M/S)										
Item No.	Description	Diagonal	Height	Load ra	nge	90% Compression				
		D [mm]	H [mm]	m min.	m max					
				[kg]	[kg]	[mm]				
0991001600	Lift buffer E1	100	160	235	1,030	144				
0991251600	Lift buffer E3	125	160	435	1,505	144				
0991401000	Lift buffer E5	140	100	542	1,580	90				
0990800800	Lift buffer T1	80	80			72				
0991000800	Lift buffer T2	100	80	235	800	72				
0991250800	Lift buffer T3	125	80	235	1,026	72				
0991650800	Lift buffer T4	165	80	235	800	72				
0992200800	Lift buffer T5	220	80	235	1,026	72				



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## **LIFT BUFFERS DIN EN 81-20/-50 COMPLIANT**

Our new generation of maintenance-free safety buffers made of Diepocell BM® has been optimally adjusted accordding to the new EU standard EN 81-20/-50. The strong damping, as well as high working recordings with large load ranges will win you over. Due to their minimal rebound, the certification standard DIN EN 81-20/-50 could already be carried out in July 2015. In addition to the new standard, the buffers are also certified according to the old standard EN 81-1/2. The P+S buffer elements have always been preferred in elevator and crane construction. The new D-series fits seamlessly into our reliable product range of buffer elements. Usage in areas with high humidity and tropical areas is no problem for the buffers of our D-series. Even under extreme conditions, damping-optimized P+S bumpers from iepocell BM® impress with their extraordinary material properties.

**PRODUCT PROPERTIES:** • exceptional damping properties • maximum deformability with low transverse strain • coverage of wide load ranges • good resistance to mineral oils and greases • good resistance to ozone, UV and high-energy radiation • temperature range from -30  $^{\circ}$  C to +80  $^{\circ}$  C • climate control tested • all standard versions available

LIFT BUFFERS EN 81-20/50 COMPLIANT (NOMINAL VELOCITY V=0,63 M/S)									
Item No.	Description	Diagonal	Height	Load ran	ge	Residual height	Transverse strain		
	DIN EN 81/20+	D	Н	m min.	m max	m min [mm]	Ø		
	DIN EN 81/50 💙	[mm]	[mm]	[kg]	[kg]	m max[mm]	[mm]		
0990800802	Lift buffer D0	80	80	150		56.5	90		
					1,200	16.2	114		
0991000802	Lift buffer D1	100	80	200		59.7	110		
					1,500	20.6	132		
0991000803	Lift buffer D2	100	80	250		65.5	110		
					3,200	19.3	139		
0991250802	Lift buffer D3	125	80	500		65.5	136		
					5,200	19.3	169		
0991400802	Lift buffer D4	140	80	320		65.7	149		
					4,000	19.4	179		
0991650802	Lift buffer D5	165	80	600		66.5	178		
					7,500	19.8	214		
0992200802	Lift buffer D6	220	80	950		68.4	233		
					9,400	26.5	266		

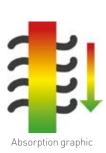
LIFT BUFF	FERS EN 81-20/50 COMP	LIANT (NOI	MINAL VE	LOCITY	/=1,0 M/S)		
Item No.	Description	Diagonal	Height	Load ran	ge	Residual height	Transverse strain
	DIN EN 81/20,	D	Н	m min.	m max	m min [mm]	Ø
	DIN EN 81/50 💙	[mm]	[mm]	[kg]	[kg]	m max[mm]	[mm]
0990800802	Lift buffer D0	80	80	180		42.9	19.3
					600	91	104
0991000802	Lift buffer D1	100	80	220		39.2	115
					700	22.2	135
0991000803	Lift buffer D2	100	80	330		43.7	115
					1,250	23.3	143
0991250802	Lift buffer D3	125	80	600		49.4	143
					1,850	27.8	163
0991400802	Lift buffer D4	140	80	450		45	161
					1,500	26.1	192
0991650802	Lift buffer D5	165	80	650		49.7	183
					2,700	27.2	205
0992200802	Lift buffer D6	220	80	1,500		46.3	244
					5,500	26	275

## **LIFT BUFFERS DIN EN 81-20/-50 COMPLIANT**

The lift buffers "Henning Performance" are energy-absorbing hydraulic buffers according to EN-81-20: 2014, EN-81-50: 2014 5.5 and universally applicable for all applications in elevator construction. The prototype testing allows the use in passenger and goods lifts both below the car and below the counterweight.

**PRODUCT PROPERTIES:** Certified acc. to EN81-20/50 • Made in Germany • Meets all the requirements of the modern elevator industry • Robust, durable and lightweight design • Wide range of impact masses and nominal speeds • Easy installation •Initial filling with oil • Mechanical piston return with spring • Mechanical safety switch triggered by shift ruler • All documents / certificates are available at www.henning-gmbh.de





ERS DIN EN 81-20/-50 COMPLIANT					
Description	HUB	Nominal speed	Max. impact-	Impact mass	Weight
DIN EN 81/20,			speed		incl. oil
DIN EN 81/50 <sup>T</sup>	[mm]	[m/s]	[m/s]	m max. [kg]	[kg]
Lift buffer Performance Hub 80, EN 81-20	80	1.0	1.15	450-3,200	12
Lift buffer Performance Hub 120. EN 81-20	120	1.3	1.495	450-3,500	13
Lift buffer Performance Hub 175. EN 81-20	175	1.6	1.84	450-3,500	14
Lift buffer Performance Hub 275. EN 81-20	275	2.0	2.3	450-3,500	17
Lift buffer Performance Hub 430. EN 81-20	430	2.5	2.875	450-3,500	22
Lift buffer Performance Hub 425. EN 81-20	425	2.5	2.875	500-4,500	47
Lift buffer Performance Hub 695. EN 81-20	695	3.2	3.68	500-4,500	68
Lift buffer Performance Hub 950. EN 81-20	950	3.7	4.255	500-4,500	86
	Description  DIN EN 81/20  Lift buffer Performance Hub 80, EN 81-20  Lift buffer Performance Hub 120. EN 81-20  Lift buffer Performance Hub 175. EN 81-20  Lift buffer Performance Hub 275. EN 81-20  Lift buffer Performance Hub 430. EN 81-20  Lift buffer Performance Hub 425. EN 81-20  Lift buffer Performance Hub 695. EN 81-20	Description HUB    DIN EN 81/20	Description HUB Nominal speed    DIN EN 81/20	Description         HUB         Nominal speed         Max. impact-speed [m/s]           Lift buffer Performance Hub 80, EN 81-20         80         1.0         1.15           Lift buffer Performance Hub 120. EN 81-20         120         1.3         1.495           Lift buffer Performance Hub 175. EN 81-20         175         1.6         1.84           Lift buffer Performance Hub 275. EN 81-20         275         2.0         2.3           Lift buffer Performance Hub 430. EN 81-20         430         2.5         2.875           Lift buffer Performance Hub 425. EN 81-20         425         2.5         2.875           Lift buffer Performance Hub 695. EN 81-20         695         3.2         3.68	Description         HUB         Nominal speed         Max. impact-speed         Impact mass speed           • DIN EN 81/20 • • • • • • • • • • • • • • • • • • •



DIMENSIONING OVERVIEW												
Item No.	Description	S	L	Ν	А	В	С	D	Е	F	G	Р
0990400800	Lift buffer Performance Hub 80, EN 81-20 HPL	80	305		160	120	20	18		100	130	80
0990401200	Lift buffer Performance Hub 120, EN 81-20 HPL	120	385		160	120	20	18		100	130	80
0990401750	Lift buffer Performance Hub 175, EN 81-20 HPL	175	495		160	120	20	18		100	130	80
0990402750	Lift buffer Performance Hub 275, EN 81-20 HPL	275	715		160	120	20	18		100	130	80
0990404300	Lift buffer Performance Hub 430, EN 81-20 HPL	430	1,065		160	120	20	18		100	130	80
0990504250	Lift buffer Performance Hub 425, EN 81-20 LP	425	1,065	640	200	160	20	18	135	155	150	100
0990506950	Lift buffer Performance Hub 695, EN 81-20 LP	695	1,665	970	200	160	20	18	135	155	150	100
0990509500	Lift buffer Performance Hub 950, EN 81-20 LP	950	2,235	1,285	200	160	20	18	135	155	150	100

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