

Suction pads for packaging

Bellows suction pad SPB1 (1.5 folds)



Bellows suction pads SPB1

Our highlights...

- Flexible, adaptable sealing lip
- Corrugated geometry with a high suction pad stroke
- Suction pad features robust, reinforced main body
- "Interlocking" of sealing-lip and fold due to locking elements
- Maximised effective suction surface
- Made from wear-proof and abrasion-proof material ELASTODUR ED-65
- Optional pre-filter (250 µm filtration grade)
- Modular suction pad structure with connection system Schmalz Connector

Your advantages...

- >Excellent sealing performance when used on cardboard and rigid packaging
- >Height compensation and damping effect
- >High intrinsic stability of the suction pad in dynamic processes
- >Form-locking connection to avoid sliding of the suction pad
- >High suction force with small dimensions
- >Very low wear for a long service life; approx. 3x the service life of NBR
- >Vacuum system protection directly at the suction pad
- >Suction pads can be configured for different applications quickly and easily



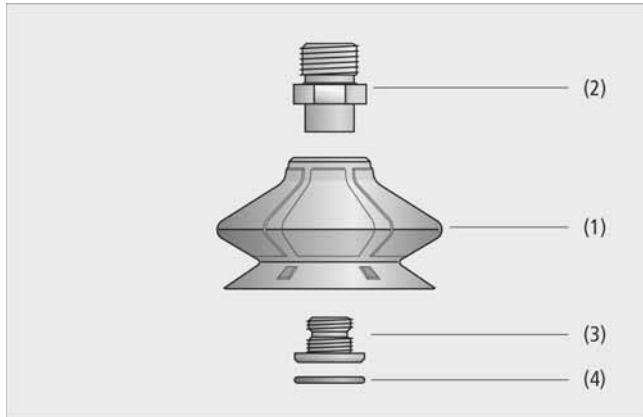
Bellows suction pads SPB1 for handling of cardboard boxes

Applications

- In cardboard box and tray erectors
- Handling cardboard and rigid packaging in top-loading and side-loading machines
- Palletising and depalletising processes
- Heavy-duty applications that require suction pads with excellent sealing and low wear

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System design Bellows suction pads SPB1

Construction

- Round bellows suction pad SPB1 with 1.5 folds and soft, flexible sealing lip
- Suction pad features robust, reinforced main body
- "Interlocking" elements between sealing lip and folds for a form-locking connection when vacuum is applied
- Made from wear-proof material ELASTODUR ED-65 with a long service life
- Clip-in filter screen (4) as pre-filter
- Models with diameter up to 30 mm feature plug-in connection element for quick change of suction pad
- Models with diameter 40 mm or above feature a two-piece connection element for quick change of suction pad (1). Consisting of mounting top part (2) and lower part (3).
- All connection elements with male thread are equipped with integrated sealing



Suitability for branch-specific applications

Order procedure Bellows suction pad SPB1

Step 1: Choose suction pad		Step 2: Choose connection element	Step 3: Choose additional function
Type	Material and shore hardness	Thread	Additional function
SPB1...Bellows suction pad round	Elastodur ED-65	G1/8-F...G1/8 female thread G1/8-M...G1/8 male thread G1/4-F...G1/4 female thread G1/4-M...G1/4 male thread	Filter screen...pre-filter that clips into the suction pad

Step 1: Ordering data Bellows suction pad SPB1

Type	Article No.
SPB1-20 ED-65	10.01.06.02452
SPB1-25 ED-65	10.01.06.02453
SPB1-30 ED-65	10.01.06.02454
SPB1-40 ED-65	10.01.06.02455
SPB1-50 ED-65	10.01.06.02456
SPB1-60 ED-65	10.01.06.02457

Step 2: Ordering data Connection elements Bellows suction pad SPB1

Type	Connection			
	G1/8"-M	G1/8"-F	G1/4"-M	G1/4"-F
SPB1-20 ED-65	10.01.06.02490	10.01.06.02482	-	-
SPB1-25 ED-65	10.01.06.02490	10.01.06.02482	-	-
SPB1-30 ED-65	10.01.06.02490	10.01.06.02482	-	-
SPB1-40 ED-65	-	-	10.01.06.02487	10.01.06.02488
SPB1-50 ED-65	-	-	10.01.06.02487	10.01.06.02488
SPB1-60 ED-65	-	-	10.01.06.02487	10.01.06.02488

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Step 3: Ordering data accessories Bellows suction pad SPB1

Type	Sieve
SPB1-20 ED-65	10.07.01.00309
SPB1-25 ED-65	10.07.01.00309
SPB1-30 ED-65	10.07.01.00309
SPB1-40 ED-65	10.07.01.00308
SPB1-50 ED-65	10.07.01.00308
SPB1-60 ED-65	10.07.01.00308



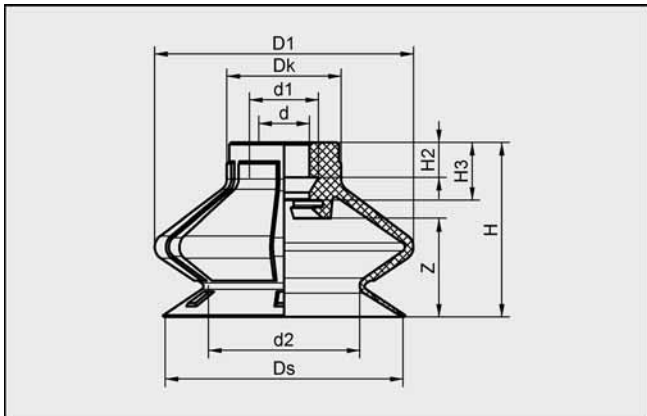
Technical data Bellows suction pad SPB1

Type	Suction force [N]*	Pull-off force [N]	Lateral force [N]	Volume [cm ³]	Min. curve radius [mm] (convex)	Recom. internal hose diameter d [mm]	Type Connection element SC...
SPB1-20 ED-65	9,9	16,2	9,8	2,9	20	4	040
SPB1-25 ED-65	14,9	23,4	13,0	5,1	20	4	040
SPB1-30 ED-65	20,7	30,6	15,5	7,8	35	6	040
SPB1-40 ED-65	35,9	46,8	24,8	18,4	70	6	050
SPB1-50 ED-65	54,7	72,7	31,2	30,3	100	6	050
SPB1-60 ED-65	78,0	100,9	49,4	49,5	200	6	050

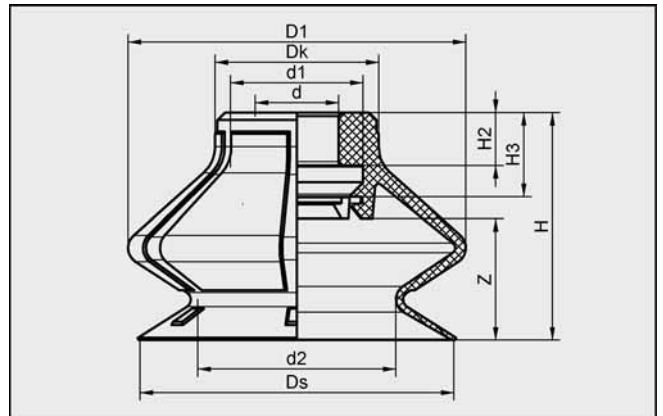
*The specified suction forces are theoretical values at a vacuum of -0.6 bar and with a smooth, dry workpiece surface - they do not include a safety factor



Design data Bellows suction pad SPB1



SPB1-20...30



SPB1-40...60

Type	Dimensions in mm*									
	d	d1	D1	Dk	d2	Ds	H	H2	H3	Z
SPB1-20 ED-65	6,7	9,1	24,0	15,1	13,8	21,4	18	4,6	7,6	8
SPB1-25 ED-65	6,7	9,1	28,4	15,1	16,9	26,4	21	4,6	7,6	11
SPB1-30 ED-65	6,7	9,1	33,6	15,1	20,0	31,4	23	4,6	7,6	13
SPB1-40 ED-65	11,0	17,5	44,6	21,6	26,3	41,4	30	7,0	11,1	16
SPB1-50 ED-65	11,0	17,5	54,6	21,6	32,5	51,4	32	7,0	11,1	18
SPB1-60 ED-65	11,0	17,5	65,1	21,6	38,6	61,4	36	7,0	11,1	22

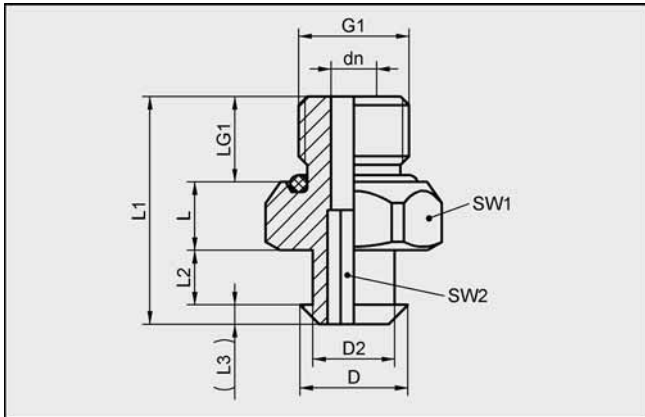
*Acceptable dimensional tolerances for rubber parts concerning to M3 - DIN 7715

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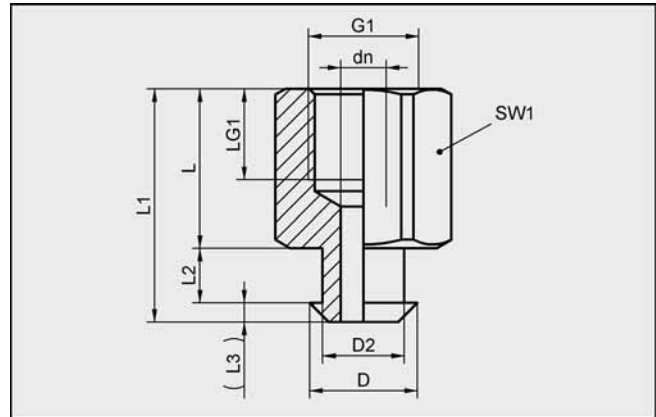
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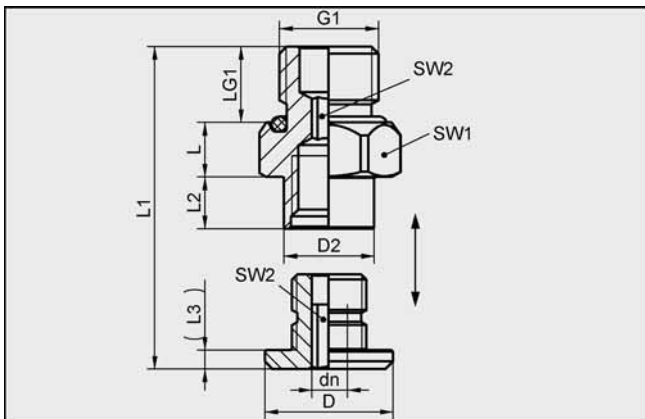
Design data connection elements Bellows suction pad SPB1



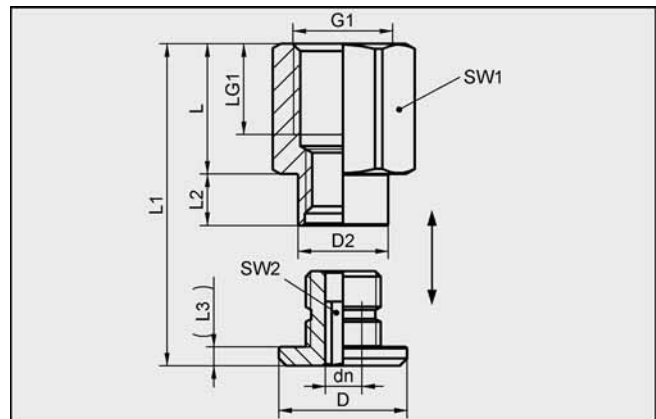
Connection element SC 040 G1/8-M for SPB1-20...30



Connection element SC 040 G1/8-F for SPB1-20...30



Connection element SC 040 G1/4-M for SPB1-40...60



Connection element SC 050 G1/4-F for SPB1-40...60

Type	Dimensions in mm										
	D	D2	dn	G1	L	L1	L2	L3	LG1	SW1	SW2
SC 040 G1/8-AG	10,3	8	4	G1/8"-M	6,0	20,0	4,8	1,7	7,5	14	4
SC 040 G1/8-IG	10,3	8	4	G1/8"-F	14,0	20,5	4,8	1,7	8,0	14	-
SC 050 G1/4-AG	17,0	12	5	G1/4"-M	7,2	26,5	6,8	2,5	10,0	17	5
SC 050 G1/4-IG	17,0	12	5	G1/4"-F	17,2	26,5	6,8	2,5	12,0	17	5