

Multibellows family (BX/BL)



This family is designed for height differences, slightly curved planes and uneven surfaces. Applications such as bag handling, cardboard, high temperature or if the need is specifically to touch a food item as they are also available in material that complies with the FDA (FDA 21 CFR 177.2600) and meets EU's regulation EU 1935/2004.

Lifting forces

	Lifting force vertical to the surface, lbf, at vacuum level			Lifting force parallel to the surface, lbf, at vacuum level		
	6 -inHg	18 -inHg	27 -inHg	6 -inHg	18 -inHg	27 -inHg
BX10P	0.22	0.52	0.83	—	—	—
BX15P	0.45/0.45*	0.90/1.35*	1.01/1.35*	—	—	—
BX20P	1.01/1.08*	1.57/1.57*	2.14/2.47*	—	—	—
BX25P	1.80/2.02*	2.92/3.15*	4.05/4.05*	1.12/1.57*	2.25/2.47*	2.7/3.37*
BX35P	2.70/3.37*	4.5/5.62*	6.29/6.74*	3.15/4.95*	6.07/6.74*	7.64/8.09*
BX52P	7.19/8.32*	12.6/13.3*	16.9/18.0*	6.29/6.07*	9.89/11.0*	12.1/12.6*
BX75P	13.9/18.0*	24.7/27.0*	31.7/37.3*	8.77/17.5*	18.7/25.6*	26.1/33.7*
BX110P	35.5/40.7*	68.8/95.8*	77.8/95.3*	18.7/35.5*	58/54.9*	58.5/65.9*
BL20-2	0.07/0.72**	0.14/1.39**	—	—	—	—
BL30-2	0.14/1.44**	0.36/3.60**	—	—	—	—
BL40-2	0.25/2.47**	0.49/4.95**	—	—	—	—
BL50-2	0.38/3.82**	0.97/9.67**	—	—	—	—
BL30-3P	2.25	4.95	6.29	2.02	2.25	3.60
BL40-3P	4.50	9.67	12.4	2.92	5.40	8.09
BL50-3P	5.40	13.5	16.9	4.95	11.0	13.5
BL30-4	1.80***	—	—	—	—	—
BL40-4	2.25	3.37	4.95	2.02	3.60	5.85
BL50-4	1.80	5.62	—	—	—	—
BL30-5	1.80	2.02	—	—	—	—
BL40-5	2.92	3.37	—	—	—	—
BL50-5	1.80	5.62	—	—	—	—
B-BL40-2	0.25/2.47**	0.49/4.95**	—	—	—	—
B-BL40-2 FDA, detectable	3.51	7.67	10.2	—	—	—

* PU30°/PU60° / PU60°, ** With reinforcement ring, *** The suction cup is not intended for deeper vacuum levels than 6 -inHg.

General specifications

	Outer diameter, in	Height, in	Min. curve radius, in	Max. vertical movement, in	Volume, in ³
BX10P	0.43	0.65	0.16/0.24*	0.18	0.03
BX15P	0.63	0.73	0.22/0.24*	0.22	0.06
BX20P	0.83	0.60	0.39/0.33*	0.30	0.07
BX25P	1.02	0.75	0.24/0.31*	0.33	0.18
BX35P	1.46	1.06	0.39	0.55	0.61
BX52P	2.09	1.54	1.26	0.75	1.83
BX75P	3.05	2.04	0.91	1.02	4.88
BX110P	4.48	2.91	2.17	1.54	14.04
BL20-2	0.79	0.90	0.16	0.51	0.24
BL30-2	1.18	1.28	0.31	0.79	0.61
BL40-2	1.57	1.67	0.43	1.30	1.65
BL50-2	1.97	2.09	0.51	1.34	3.23
BL30-3P	1.18	1.40	0.24	0.55	0.85
BL40-3P	1.57	1.67	0.51	0.83	1.65
BL50-3P	1.89	2.09	0.63	1.02	3.30
BL30-4	1.20	0.65	0.79	0.75	0.25
BL40-4	1.58	1.57	0.59	0.71	0.92
BL50-4	1.98	2.09	1.18	0.87	2.14
BL30-5	1.20	1.44	0.67	0.43	0.52
BL40-5	1.57	1.57	0.87	0.79	0.85
BL50-5	1.97	2.09	1.18	0.71	1.59
B-BL40-2	1.67	1.50	0.43	1.30	1.65
B-BL40-2 FDA, detectable	1.67	1.50	0.43	0.87	1.77

* PU30°/PU60° / PU60°.

Available materials

	Chloroprene, CR	HNBR	PU30°/PU60°	PU60°	PU30°/PU70°	Silicone, SIL	Silicone FDA EU, SIL FDA	Silicone FDA EU detectable, SIL FDA DET
BX10P			●	●				
BX15P			●	●				
BX20P			●	●				
BX25P			●	●				
BX35P			●	●				
BX52P			●	●				
BX75P			●	●				
BX110P			●	●				
BL20-2	●	●				●	●	
BL30-2	●					●	●	

	Chloroprene, CR	HNBR	PU30°/PU60°	PU60°	PU30°/PU70°	Silicone, SIL	Silicone FDA EU, SIL FDA	Silicone FDA EU detecta- ble, SIL FDA DET
BL40-2	●					●	●	
BL50-2	●					●	●	
BL30-3P					●			
BL40-3P					●			
BL50-3P					●			
BL30-4						●	●	
BL40-4						●	●	
BL50-4						●	●	
BL30-5						●	●	
BL40-5						●	●	
BL50-5						●	●	
B-BL40-2							●	
B-BL40-2 FDA, detectable								●

Material resistance

For more material information go to page 23.

Applications

Table shows typical applications for the suction cup. For more detailed information, please visit piab.com.

	Dry sheet metal	Bag handling	Corrugated / cardboard	FDA EU- standard compliant	FDA EU detectable	Mark Free	Plastic injec- tion molded parts
BX10P	●		●			●	●
BX15P	●		●			●	●
BX20P	●		●			●	●
BX25P	●		●			●	●
BX35P	●		●			●	●
BX52P	●		●			●	●
BX75P	●		●			●	●
BX110P	●		●			●	●
BL20-2		●		●		●	
BL30-2		●		●			
BL40-2		●		●			
BL50-2		●		●			
BL30-3P		●					
BL40-3P		●					
BL50-3P		●					

	Dry sheet metal	Bag handling	Corrugated / cardboard	FDA EU-standard compliant	FDA EU detectable	Mark Free	Plastic injection molded parts
BL30-4		●		●			
BL40-4		●		●			
BL50-4		●		●			
BL30-5		●		●			
BL40-5		●		●			
BL50-5		●		●			
B-BL40-2				●			
B-BL40-2 FDA, detectable					●		

Fittings

For a table of possible fittings to use go to page 80 for technical information on all fittings visit piab.com.

Ordering information

For a complete list of available cups and combinations with further information visit piab.com. On our webpage you will also be able to find dimensional drawings, CAD-drawings and much more. Register to receive full access to all resources available.