

# BF80P



# **SUCTION CUP WITH SHORT BELLOWS**

- Suitable for uneven surfaces.
- ▶ In the two-coloured suction cup the bellows and the sealing lip are of different hardnesses, which makes the suction cup strong and stable and, at the same time, soft and flexible.
- ▶ DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane.
- ▶ The material of the DURAFLEX® is mark free.

#### **LIFTING FORCES & TECHNICAL DATA**

Material	Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the surface, N, at vacuum level		Volume	Min. curve radius	Max. vertical movement	Weight rubber part	
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
PU30°/50°	73	157	196	54	88	117	40	132	15	53
PU60°	98	225	294	68	127	166	40	132	15	53

#### **MATERIAL SPECIFICATIONS**

Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU30	Yellow	30	10–50
Polyurethane, PU50	Blue transparent	50	10–50
Polyurethane, PU60	Green transparent	60	10–50

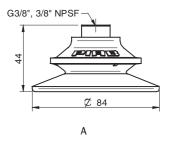
# **MATERIAL RESISTANCE**

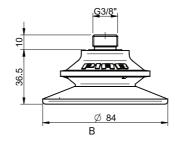
r	Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Ethanol	Methanol	Oxidation
	Excellent	Excellent	Excellent	Fair**	Fair	Fair**	Fair	Poor	Poor

<sup>\*\*</sup>Please contact PIAB.

# **ORDERING INFORMATION**

	Complete suction cups	Art. No.
Α	Suction cup BF80P Polyurethane 30/50, G3/8" female	0102370
Α	Suction cup BF80P Polyurethane 30/50, 3/8"NPSF female	0102371
Α	Suction cup BF80P Polyurethane 60, G3/8" female	0103307
Α	Suction cup BF80P Polyurethane 60, 3/8"NPSF female	0103309
В	Suction cup BF80P Polyurethane 30/50, G3/8" male with mesh filter	0107326
В	Suction cup BF80P Polyurethane 60, G3/8" male with mesh filter	0107327
В	Suction cup BF80P Polyurethane 30/50, G3/8" male	0106985
В	Suction cup BF80P Polyurethane 60, G3/8" male	0107476







# **BF110P**



# **SUCTION CUP WITH SHORT BELLOWS**

- ▶ Suitable for uneven surfaces.
- ▶ In the two-coloured suction cup the bellows and the sealing lip are of different hardnesses, which makes the suction cup strong and stable and, at the same time, soft and flexible.
- ► DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane.
- ► The material of the DURAFLEX® is mark free.

#### **LIFTING FORCES & TECHNICAL DATA**

Material		force vertica , N, at vacui	acuum level surface, N, at vacuum level				Volume	Min. curve radius	Max. vertical movement	Weight rubber part
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
PU30°/60°	128	229	225	106	210	246	110	55	24	110
PU60°	161	334	293	123	231	305	110	70	24	110

# **MATERIAL SPECIFICATIONS**

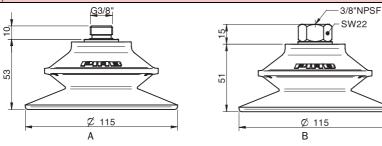
Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU30	Yellow transparent	30	10–50
Polyurethane, PU60	Green transparent	60	10–50

# **MATERIAL RESISTANCE**

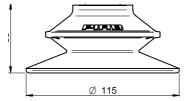
Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Ethanol	Methanol	Oxidation
Excellent	Excellent	Excellent	Fair**	Fair	Fair**	Fair	Poor	Poor
**Please contact	PIAB.							

# **ORDERING INFORMATION**

	Complete suction cups	Art. No.
Α	Suction cup BF110P Polyurethane 30/60, thread insert G3/8" male with mesh filter	0110290
В	Suction cup BF110P Polyurethane 30/60, 3/8"NPSF female	0110291
Α	Suction cup BF110P Polyurethane 60, thread insert G3/8" male with mesh filter	0110287
В	Suction cup BF110P Polyurethane 60, 3/8"NPSF female	0110288



Rubber parts	Art. No.
Suction cup BF110P Polyurethane 30/60 with 0-ring	0110289
Suction cup BF110P Polyurethane 60, with O-ring	0110286



Fittings	Art. No.
Thread insert G3/8" male, with 0-ring and mesh filter	0107148



# **B75P**



# **SUCTION CUP WITH SHORT BELLOWS**

- ➤ Suitable for level adjustment and for uneven and porous surfaces such as cardboard, etc.
- ▶ In the two-coloured suction cup the bellows and the sealing lip are of different hardnesses, which makes the suction cup strong and stable and, at the same time, soft and flexible.
- ► DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane.
- ► The material of the DURAFLEX® is mark free.

# **LIFTING FORCES & TECHNICAL DATA**

Model		orce vertica , N, at vacu			force paralle , N, at vacui		Volume	Min. curve radius	Max. vertical movement	Weight rubber part
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm <sup>3</sup>	mm	mm	g
PU30°/60°	61	149	202	44	96	114	110	90	20	48

# **MATERIAL SPECIFICATIONS**

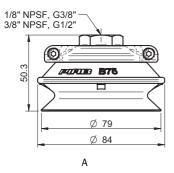
Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU30	Yellow transparent	30	10–50
Polyurethane, PU60	Green transparent	60	10–50

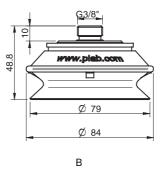
Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Ethanol	Methanol	Oxidation
Excellent	Excellent	Excellent	Fair**	Fair	Fair**	Fair	Poor	Poor

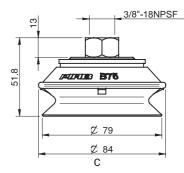
<sup>\*\*</sup>Please contact PIAB.



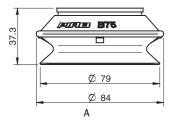
	Complete suction cups	Art. No
Α	Suction cup B75P Polyurethane 30/60, 1/8"NPSF female, with mesh filter	0106345
Α	Suction cup B75P Polyurethane 30/60, G3/8" female, with mesh filter	0106346
Α	Suction cup B75P Polyurethane 30/60, 3/8"NPSF female, with mesh filter	0106347
Α	Suction cup B75P Polyurethane 30/60, G1/2" female, with mesh filter	0106348
Α	Suction cup B75P Polyurethane 60, 1/8"NPSF female, with mesh filter	0111600
Α	Suction cup B75P Polyurethane 60, G3/8" female, with mesh filter	0111601
Α	Suction cup B75P Polyurethane 60, 3/8"NPSF female, with mesh filter	0111602
Α	Suction cup B75P Polyurethane 60, G1/2" female, with mesh filter	0111603
В	Suction cup B75P Polyurethane 30/60, thread insert G3/8" male, with mesh filter	0106833
В	Suction cup B75P Polyurethane 60, thread insert G3/8" male with mesh filter	0107319
С	Suction cup B75P Polyurethane 30/60, 3/8"NPSF female	0108790
С	Suction cup B75P Polyurethane 60, 3/8"NPSF female	0108791

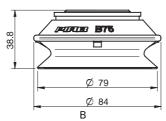






	Rubber parts	Art. No
Α	Suction cup B75P Polyurethane 30/60	0104723
Α	Suction cup B75P Polyurethane 60	0111594
В	Suction cup B75P Polyurethane 30/60, for thread insert	0106832
В	Suction cup B75P Polyurethane 60, for thread insert	0107318





Fittings	Art. No.
Fitting 1/8"NPSF female, with mesh filter	0100548
Fitting G3/8" female, with mesh filter	0100551
Fitting 3/8"NPSF female, with mesh filter	0100553
Fitting G1/2" female, with mesh filter	0100555
Thread insert G3/8" male, with 0-ring and mesh filter	0107148



# **BX25P**



#### **SUCTION CUP WITH 21/2 BELLOWS**

- ➤ Suitable for level adjustment and for uneven and porous surfaces such as cardboard, etc.
- ▶ In the two-coloured suction cup the bellows and the sealing lip are of different hardnesses, which makes the suction cup strong and stable and, at the same time, soft and flexible.
- ► DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane.
- ▶ The material DURAFLEX® is mark free.

#### **LIFTING FORCES & TECHNICAL DATA**

Material	Lifting force vertical to the surface, N, at vacuum level		Lifting force parallel to the surface, N, at vacuum level			Volume	Min. curve radius	Max. vertical movement	Weight rubber part	
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
PU30°/60°	8.0	13.0	18.0	5.0*	10.0*	12.0*	3.0	6.0	8.5	3
PU60°	9.0	14.0	18.0	7.0*	11.0*	15.0*	3.0	8.0	8.5	3

<sup>\*</sup>The suction cup is not intended for handling shear lifts. The values are given as a dimensioning guide to be used when, e.g., the acceleration/retardation causes shear forces.

#### **MATERIAL SPECIFICATIONS**

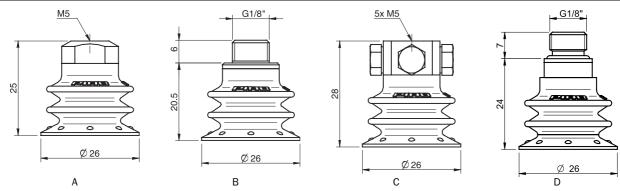
Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU30	Yellow transparent	30	10–50
Polyurethane, PU60	Green transparent	60	10–50

Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Petrol Concentrated acids		Methanol	Oxidation
Excellent	Excellent	Excellent	Fair**	Fair	Fair**	Fair	Poor	Poor

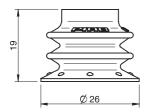
<sup>\*\*</sup>Please contact PIAB.



	Complete suction cups	Art. No.
Α	Suction cup BX25P Polyurethane 30/60 with filter, M5 female	0109404
Α	Suction cup BX25P Polyurethane 30/60 with filter, M5 female, with dual flow control valve	0110326
В	Suction cup BX25P Polyurethane 30/60 with filter, G1/8" male / M5 female	0109402
В	Suction cup BX25P Polyurethane 30/60 with filter, G1/8" male / M5 female, with dual flow control valve	0109403
С	Suction cup BX25P Polyurethane 30/60 with filter, 5xM5 female	0109405
С	Suction cup BX25P Polyurethane 30/60 with filter, 5xM5 female, with dual flow control valve	0110327
D	Suction cup BX25P Polyurethane 30/60 with filter, G1/8" male	0114131
Α	Suction cup BX25P Polyurethane 60 with filter, M5 female	0109400
Α	Suction cup BX25P Polyurethane 60 with filter, M5 female, with dual flow control valve	0110324
В	Suction cup BX25P Polyurethane 60 with filter, G1/8" male / M5 female	0109398
В	Suction cup BX25P Polyurethane 60 with filter, G1/8" male / M5 female, with dual flow control valve	0109399
С	Suction cup BX25P Polyurethane 60 with filter, 5xM5 female	0109401
С	Suction cup BX25P Polyurethane 60 with filter, 5xM5 female, with dual flow control valve	0110325
D	Suction cup BX25P Polyurethane 60 with filter, G1/8" male	0114149



Rubber parts	Art. No.
Suction cup BX25P Polyurethane 30/60	0109006
Suction cup BX25P Polyurethane 30/60, with filter	0109312
Suction cup BX25P Polyurethane 60	0108240
Suction cup BX25P Polyurethane 60, with filter	0109397



Fittings	Art. No.
Fitting M5 female	3250003
Fitting M5 female, with dual flow control valve	3251001
Fitting G1/8" male, with mesh filter	3250085
Fitting G1/8" male/M5 female	3250004
Fitting G1/8" male/M5 female, with dual flow control valve	3251004
Fitting 5xM5 female	0100260
Fitting 5xM5 female, with dual flow control valve	3251005

Spare Part	Material	Temperature range °C	Art. No.
Filter for BX25P	Polyester/TPE	-40–90	0109311



# **BX35P**



#### **SUCTION CUP WITH 21/2 BELLOWS**

- ➤ Suitable for level adjustment and for uneven and porous surfaces such as cardboard, etc.
- ▶ In the two-coloured suction cup the bellows and the sealing lip are of different hardnesses, which makes the suction cup strong and stable and, at the same time, soft and flexible.
- ► DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane.
- ▶ The material DURAFLEX® is mark free.

#### **LIFTING FORCES & TECHNICAL DATA**

Material	Lifting force vertical to the surface, N, at vacuum level		Lifting force parallel to the surface, N, at vacuum level			Volume	Min. curve radius	Max. vertical movement	Weight rubber part	
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
PU30°/60°	12.0	20.0	28	14.0*	27*	34*	10.0	10.0	14.0	8.0
PU60°	15.0	25	30	22.0*	30*	36*	10.0	10.0	14.0	8.0

<sup>\*</sup>The suction cup is not intended for handling shear lifts. The values are given as a dimensioning guide to be used when, e.g., the acceleration/retardation causes shear forces.

#### **MATERIAL SPECIFICATIONS**

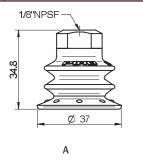
Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU30	Yellow transparent	30	10–50
Polyurethane, PU60	Green transparent	60	10–50

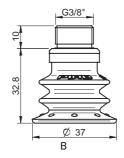
Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Ethanol	Methanol	Oxidation
Excellent	Excellent	Excellent	Fair**	Fair	Fair**	Fair	Poor	Poor

<sup>\*\*</sup>Please contact PIAB.

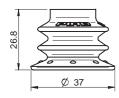


	Complete suction cups	Art. No.
Α	Suction cup BX35P Polyurethane 30/60 with filter, 1/8"NPSF female	0106604
Α	Suction cup BX35P Polyurethane 30/60 with filter, 1/8"NPSF female, with dual flow control valve	0106605
В	Suction cup BX35P Polyurethane 30/60 with filter, G3/8" male, with mesh filter	0107377
В	Suction cup BX35P Polyurethane 30/60 with filter, G3/8" male, with mesh filter and dual flow control valve	0107378
Α	Suction cup BX35P Polyurethane 60 with filter, 1/8"NPSF female	0107561
Α	Suction cup BX35P Polyurethane 60 with filter, 1/8"NPSF female, with dual flow control valve	0107562
В	Suction cup BX35P Polyurethane 60 with filter, G3/8" male, with mesh filter	0107379
В	Suction cup BX35P Polyurethane 60 with filter, G3/8" male, with mesh filter and dual flow control valve	0107380





Rubber parts	Art. No.
Suction cup BX35P Polyurethane 30/60, with filter	0106619
Suction cup BX35P Polyurethane 60, with filter	0107376
Suction cup BX35P Polyurethane 30/60	0106292
Suction cup BX35P Polyurethane 60	0107477



Fittings	Art. No.
Fitting 1/8"NPSF female	3250005
Fitting 1/8"NPSF female, with dual flow control valve	3251006
Fitting G3/8" male, with mesh filter	3250086
Fitting G3/8" male, with mesh and dual flow control valve	3251009

Spare Part	Material	Temperature range °C	Art. No.
Filter for BX35P	Polyester/TPE	-40–90	0106373



# **BX52P**



#### **SUCTION CUP WITH 21/2 BELLOWS**

- ➤ Suitable for level adjustment and for uneven and porous surfaces such as cardboard, etc.
- ▶ In the two-coloured suction cup the bellows and the sealing lip are of different hardnesses, which makes the suction cup strong and stable and, at the same time, soft and flexible.
- ► DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane.
- ▶ The material DURAFLEX® is mark free.

#### **LIFTING FORCES & TECHNICAL DATA**

Material		orce vertica N, at vacu			orce paralle N, at vacu		Volume	Min. curve radius	ve vertical rubber	
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
PU30°/60°	32	56	75	28*	44*	54*	30	32	19.0	24
PU60°	37	59	80	27*	49*	56*	30	32	19.0	24

<sup>\*</sup>The suction cup is not intended for handling shear lifts. The values are given as a dimensioning guide to be used when, e.g., the acceleration/retardation causes shear forces.

# **MATERIAL SPECIFICATIONS**

Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU30	Yellow transparent	30	10–50
Polyurethane, PU60	Green transparent	60	10–50

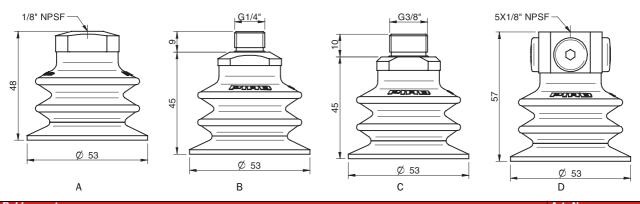
# **MATERIAL RESISTANCE**

ı	Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Ethanol	Methanol	Oxidation
ſ	Excellent	Excellent	Excellent	Fair**	Fair	Fair**	Fair	Poor	Poor

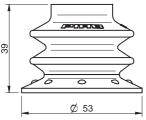
<sup>\*\*</sup>Please contact PIAB.

#### **ORDERING INFORMATION**

	Complete suction cups	Art. No.
Α	Suction cup BX52P Polyurethane 30/60 with filter, 1/8"NPSF female	0104727
Α	Suction cup BX52P Polyurethane 30/60 with filter, 1/8"NPSF female, with mesh filter	0106044
Α	Suction cup BX52P Polyurethane 30/60 with filter, 1/8"NPSF female, with dual flow control valve	0106019
В	Suction cup BX52P Polyurethane 30/60 with filter, G1/4" male, with mesh filter	0106045
В	Suction cup BX52P Polyurethane 30/60 with filter, G1/4" male, with dual flow control valve	0106739
С	Suction cup BX52P Polyurethane 30/60 with filter, G3/8" male, with mesh filter	0106740
С	Suction cup BX52P Polyurethane 30/60 with filter, G3/8" male, with dual flow control valve	0106741
D	Suction cup BX52P Polyurethane 30/60 with filter, 5x1/8"NPSF female	0106046
D	Suction cup BX52P Polyurethane 30/60 with filter, 5x1/8"NPSF female, with dual flow control valve	0106742
Α	Suction cup BX52P Polyurethane 60 with filter, 1/8"NPSF female	0107383
Α	Suction cup BX52P Polyurethane 60 with filter, 1/8"NPSF female, with mesh filter	0107382
Α	Suction cup BX52P Polyurethane 60 with filter, 1/8"NPSF female, with dual flow control valve	0107384
В	Suction cup BX52P Polyurethane 60 with filter, G1/4" male, with mesh filter	0107385
В	Suction cup BX52P Polyurethane 60 with filter, G1/4" male, with dual flow control valve	0107386
С	Suction cup BX52P Polyurethane 60 with filter, G3/8" male, with mesh filter	0107387
С	Suction cup BX52P Polyurethane 60 with filter, G3/8" male, with dual flow control valve	0107388
D	Suction cup BX52P Polyurethane 60 with filter, 5x1/8"NPSF female	0107389
D	Suction cup BX52P Polyurethane 60 with filter, 5x1/8"NPSF female, with dual flow control valve	0107390



Rubber parts	Art. No.
Suction cup BX52P Polyurethane 30/60, with filter	0104729
Suction cup BX52P Polyurethane 60, with filter	0108039
Suction cup BX52P Polyurethane 30/60	0104529
Suction cup BX52P Polyurethane 60	0107381



Fittings	Art. No
Fitting 1/8"NPSF female	3250017
Fitting 1/8"NPSF female, with mesh filter	0101154
Fitting 1/8"NPSF female, with dual flow control valve	3251012
Fitting G1/4" male, with mesh filter	3250092
Fitting G1/4" male, with mesh filter and dual flow control valve	3251013
Fitting G3/8" male, with mesh filter	3250087
Fitting G3/8" male, with mesh filter and dual flow control valve	3251015
Fitting 5x1/8"NPSF female	0100262
Fitting 5x1/8"NPSF female, with dual flow control valve	3251017

Spare Part	Material	Temperature range °C	Art. No.
Filter for BX52P	Polyester/TPE	-40–90	0104726



# **BX75P**



#### **SUCTION CUP WITH 21/2 BELLOWS**

- ➤ Suitable for level adjustment and for uneven and porous surfaces such as cardboard, etc.
- ▶ In the two-coloured suction cup the bellows and the sealing lip are of different hardnesses, which makes the suction cup strong and stable and, at the same time, soft and flexible.
- ► DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane.
- ► The material DURAFLEX® is mark free.

#### **LIFTING FORCES & TECHNICAL DATA**

Material	Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the surface, N, at vacuum level		Volume	Min. curve radius	Max. vertical movement	Weight rubber part	
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
PU30°/60°	62	110	141	39*	83*	116*	80	23.0	26	71
PU60°	80	120	166	78*	114*	150*	80	23.0	26	71

<sup>\*</sup>The suction cup is not intended for handling shear lifts. The values are given as a dimensioning guide to be used when, e.g., the acceleration/retardation causes shear forces.

#### **MATERIAL SPECIFICATIONS**

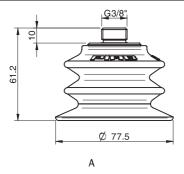
Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU30	Yellow transparent	30	10–50
Polyurethane, PU60	Green transparent	60	10–50

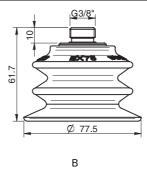
Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Ethanol	Methanol	Oxidation
Excellent	Excellent	Excellent	Fair**	Fair	Fair**	Fair	Poor	Poor

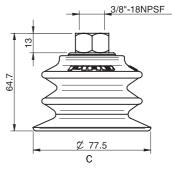
<sup>\*\*</sup>Please contact PIAB.



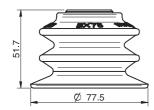
	Complete suction cups	Art. No.
Α	Suction cup BX75P Polyurethane 30/60, G3/8" male / 1/8"NPSF female	0106293
Α	Suction cup BX75P Polyurethane 30/60 with filter, G3/8" male / 1/8"NPSF female	0106606
В	Suction cup BX75P Polyurethane 30/60 with filter, thread insert G3/8" male	0107151
В	Suction cup BX75P Polyurethane 60 with filter, thread insert G3/8" male	0107149
С	Suction cup BX75P Polyurethane 30/60 med filter, 3/8"NPSF female	0108794
С	Suction cup BX75P Polyurethane 60 with filter, 3/8"NPSF female	0108795







Rubber parts	Art. No.
Suction cup BX75P Polyurethane 30/60 with filter, for thread insert	0107145
Suction cup BX75P Polyurethane 60 with filter, for thread insert	0107150



Fittings	Art. No.
Thread insert G3/8" male, with 0-ring	0106797

Spare Part	Material	Temperature range °C	Art. No.
Filter for BX75P	Polyester/TPE	-40–90	0106374



# **BX110P**



#### **SUCTION CUP WITH 21/2 BELLOWS**

- ➤ Suitable for level adjustment and for uneven and porous surfaces such as cardboard, etc.
- ▶ In the two-coloured suction cup the bellows and the sealing lip are of different hardnesses, which makes the suction cup strong and stable and, at the same time, soft and flexible.
- ► DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane.
- ▶ The material DURAFLEX® is mark free.

#### **LIFTING FORCES & TECHNICAL DATA**

Material	Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the surface, N, at vacuum level		Volume	Min. curve radius	Max. vertical movement	Weight rubber part	
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
PU30°/60°	158	306	346	83*	258*	260*	230	55	39	237
PU60°	181	426	424	158*	244*	293*	230	55	39	237

<sup>\*</sup>The suction cup is not intended for handling shear lifts. The values are given as a dimensioning guide to be used when, e.g., the acceleration/retardation causes shear forces.

# **MATERIAL SPECIFICATIONS**

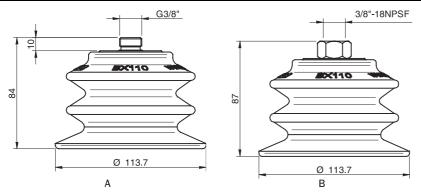
Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU30	Yellow transparent	30	10–50
Polyurethane, PU60	Green transparent	60	10–50

Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Ethanol	Methanol	Oxidation
Excellent	Excellent	Excellent	Fair**	Fair	Fair**	Fair	Poor	Poor

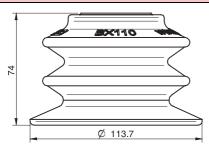
<sup>\*\*</sup>Please contact PIAB.



	Complete suction cups	Art. No.
Α	Suction cup BX110P Polyurethane 30/60 with filter, thread insert G3/8" male	0108273
В	Suction cup BX110P Polyurethane 30/60 with filter, 3/8"NPSF female	0108403
Α	Suction cup BX110P Polyurethane 60 with filter, thread insert G3/8" male	0108341
В	Suction cup BX110P Polyurethane 60 with filter, 3/8"NPSF female	0108404



Rubber parts	Art. No.
Suction cup BX110P Polyurethane 30/60	0107093
Suction cup BX110P Polyurethane 30/60, with filter	0108164
Suction cup BX110P Polyurethane 60	0108339
Suction cup BX110P Polyurethane 60, with filter	0108340



Fittings	Art. No.
Thread insert G3/8" male, with 0-ring	0106797

Spare Part	Material	Temperature range °C	Art. No.
Filter for BX110P	Polyester/TPE	-40–90	0108163



# **B15MF**



# SUCTION CUP WITH SHORT BELLOWS, MARK FREE

- ➤ Suction cup of TPU, a mark free material that leaves no trace on the object being handled.
- ▶ Suitable for level adjustment.
- ► Lifting movement to separate small and thin objects.
- ▶ Only lightweight objects should be handled when the lifting force is parallel to the surface.

# **LIFTING FORCES & TECHNICAL DATA**

Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the surface, N, at vacuum level			Volume	Min. curve radius	Max. vertical movement	Weight rubber part
20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
4.0	8.0	12.0	4.5	7.0	10.0	1.1	11	2.0	1.3

#### **MATERIAL SPECIFICATIONS**

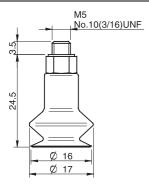
Material	Colour	Hardness °Shore A	Temperature range °C
Thermoelastic polyurethane, TPU	Transparent white	81	-20–80

#### **MATERIAL RESISTANCE**

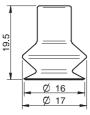
Wear resistance	Oil	Weather & Ozone	Hydrolysis	Petrol	Concentrated acids	Alcohol	Oxidation
Excellent	Excellent	Excellent	Poor	Poor	Poor	Good	Good

# **ORDERING INFORMATION**

Complete suction cups	Art. No.
Suction cup B15MF Thermoelastic polyurethane, M5 male	3250069



Rubber parts	Art. No.
Suction cup B15MF Thermoelastic polyurethane	3150264



Fittings	Art. No.
Fitting M5 male	3107030



# **B20MF**



# SUCTION CUP WITH SHORT BELLOWS, MARK FREE

- ➤ TPU: a mark free material that leaves no trace on the object being handled.
- ► Suitable for level adjustment.
- ▶ Lifting movement to separate small and thin objects.
- ▶ Only lightweight objects should be handled when the lifting force is parallel to the surface.

# **LIFTING FORCES & TECHNICAL DATA**

Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the su N, at vacuum level			radius		Max. vertical movement	Weight rubber part	
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
	4.5	15.5	21.0	6.3	11.0	19.0	2.7	11	8.0	2.0

#### **MATERIAL SPECIFICATIONS**

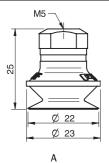
Material	Colour	Hardness °Shore A	Temperature range °C
Thermoelastic polyurethane, TPU	Transparent white	81	-20–80

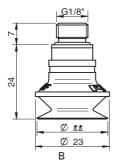
#### **MATERIAL RESISTANCE**

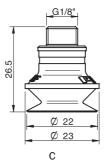
Wear resistance	Oil	Weather & Ozone	Hydrolysis	Petrol	Concentrated acids	Alcohol	Oxidation
Excellent	Excellent	Excellent	Poor	Poor	Poor	Good	Good

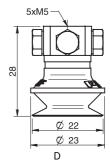
#### **ORDERING INFORMATION**

	Complete suction cups	Art. No.
Α	Suction cup B20MF Thermoelastic polyurethane, M5 female	0101182
Α	Suction cup B20MF Thermoelastic polyurethane, M5 female, with dual flow control valve	0101188
В	Suction cup B20MF Thermoelastic polyurethane, G1/8" male, with mesh filter	0101183
В	Suction cup B20MF Thermoelastic polyurethane, G1/8" male, with dual flow control valve and mesh filter	0101189
С	Suction cup B20MF Thermoelastic polyurethane, G1/8" male/M5 female, with mesh filter	0101187
С	Suction cup B20MF Thermoelastic polyurethane, G1/8" male/M5 fem., with dual flow control valve	0101191
D	Suction cup B20MF Thermoelastic polyurethane, 5xM5 female	0101186
D	Suction cup B20MF Thermoelastic polyurethane, 5xM5 female, with dual flow control valve	0101192

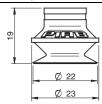








Rubber parts	Art. No.
Suction cup B20MF Thermoelastic polyurethane	0101111



Fittings	Art. No.
Fitting M5 female	3250003
Fitting M5 female, with dual flow control valve	3251001
Fitting G1/8" male, with mesh filter	3250085
Fitting G1/8" male, with mesh filter and dual flow control valve	3251002
Fitting G1/8" male/M5 female, with mesh filter	0101152
Fitting G1/8" male/M5 female, with dual flow control valve	3251004
Fitting 5xM5 female	0100260
Fitting 5xM5 female, with dual flow control valve	3251005
Fitting G1/8" male/M5 female, PA	3150196



# **B30MF**



# SUCTION CUP WITH SHORT BELLOWS, MARK FREE

- ▶ Suction cup of TPU, a mark free material that leaves no trace on the object being handled.
- ▶ Suitable for level adjustment.
- ► Lifting movement to separate small and thin objects.
- ▶ Only lightweight objects should be handled when the lifting force is parallel to the surface.

#### **LIFTING FORCES & TECHNICAL DATA**

	force vertica , N, at vacuu			force parallel , N, at vacuu		Volume	Min. curve radius	Max. vertical movement	Weight rubber part
20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
12.0	40.0	54.5	14.5	32.0	41.0	10.0	16.5	12.0	7

# **MATERIAL SPECIFICATIONS**

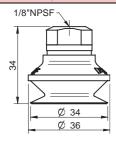
Material	Colour	Hardness °Shore A	Temperature range °C
Thermoelastic polyurethane, TPU	Transparent white	81	-20–80

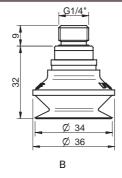
# **MATERIAL RESISTANCE**

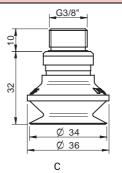
Wear resistance	Oil	Weather & Ozone	Hydrolysis	Petrol	Concentrated acids	Alcohol	Oxidation
Excellent	Excellent	Excellent	Poor	Poor	Poor	Good	Good

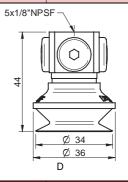
# **ORDERING INFORMATION**

	Complete suction cups	Art. No.						
Α	Suction cup B30MF Thermoelastic polyurethane, 1/8"NPSF female, with mesh filter	0101449						
Α	Suction cup B30MF Thermoelastic polyurethane, 1/8"NPSF female, with dual flow control valve	0101450						
В	Suction cup B30MF Thermoelastic polyurethane, G1/4" male, with mesh filter	0101444						
В	Suction cup B30MF Thermoelastic polyurethane, G1/4" male, with dual flow control valve and mesh filter	0101451						
С	Suction cup B30MF Thermoelastic polyurethane, G3/8" male, with mesh filter	0101446						
С	Suction cup B30MF Thermoelastic polyurethane, G3/8" male, with dual flow control valve and mesh filter	0101453						
D	Suction cup B30MF Thermoelastic polyurethane, 5x1/8"NPSF female	0101448						
D	Suction cup B30MF Thermoelastic polyurethane, 5x1/8"NPSF female, with dual flow control valve	0101455						



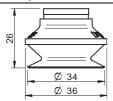






Rubber parts
Suction cup B30MF Thermoelastic polyurethane

0101112	Art. No.
	0101112



Α

Fittings	Art. No
Fitting 1/8"NPSF female, with mesh filter	0101153
Fitting 1/8"NPSF female, with dual flow control valve	3251006
Fitting G1/4" male, with mesh filter	3250091
Fitting G1/4" male, with mesh filter and dual flow control valve	3251007
Fitting G3/8" male, with mesh filter	3250086
Fitting G3/8" male, with mesh and dual flow control valve	3251009
Fitting 5x1/8"NPSF female	0100261
Fitting 5x1/8"NPSF female, with dual flow control valve	3251011
Fitting 1/8"NPSF female, PA	3150197



# **B40MF**



# SUCTION CUP WITH SHORT BELLOWS, MARK FREE

- ▶ Suction cup of TPU, a mark free material that leaves no trace on the object being handled.
- ▶ Suitable for level adjustment.
- ► Lifting movement to separate small and thin objects.
- ▶ Only lightweight objects should be handled when the lifting force is parallel to the surface.

#### **LIFTING FORCES & TECHNICAL DATA**

	force vertica , Ν, at vacuι			force paralle , N, at vacuเ		Volume	Min. curve radius	Max. vertical movement	Weight rubber part
20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm <sup>3</sup>	mm	mm	g
18	57	72	13.6	40	47	15	22	11	10

#### **MATERIAL SPECIFICATIONS**

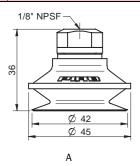
Material	Colour	Hardness, °Shore A	Temperature range, °C
Thermoelastic polyurethane, TPU	Transparent white	81	-20–80

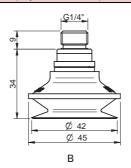
# **MATERIAL RESISTANCE**

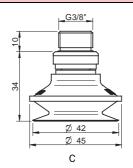
	Wear resistance	stance Oil Weather & Ozo		eather & Ozone Hydrolysis Petrol (			Alcohol	Oxidation
Г	Excellent	Excellent	Excellent	Poor	Poor	Poor	Good	Good

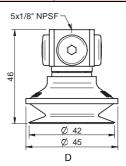
#### **ORDERING INFORMATION**

	Complete suction cups	Art. No.
Α	Suction cup B40MF Thermoelastic polyurethane, 1/8"NPSF female, with mesh filter	0101488
Α	Suction cup B40MF Thermoelastic polyurethane, 1/8"NPSF female, with dual flow control valve	0101489
В	Suction cup B40MF Thermoelastic polyurethane, G1/4" male, with mesh filter	0101483
В	Suction cup B40MF Thermoelastic polyurethane, G1/4" male, with mesh filter and dual flow control valve	0101490
С	Suction cup B40MF Thermoelastic polyurethane, G3/8" male, with mesh filter	0101485
С	Suction cup B40MF Thermoelastic polyurethane, G3/8" male, with mesh filter and dual flow control valve	0101492
D	Suction cup B40MF Thermoelastic polyurethane, 5x1/8"NPSF female	0101487
D	Suction cup B40MF Thermoelastic polyurethane, 5x1/8"NPSF female, with dual flow control valve	0101494

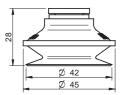








Rubber parts	Art. No.
Suction cup B40MF Thermoelastic polyurethane	0101113



Fittings	Art. No
Fitting 1/8"NPSF female, with mesh filter	0101153
Fitting 1/8"NPSF female, with dual flow control valve	3251006
Fitting G1/4" male, with mesh filter	3250091
Fitting G1/4" male, with mesh filter and dual flow control valve	3251007
Fitting G3/8" male, with mesh filter	3250086
Fitting G3/8" male, with mesh and dual flow control valve	3251009
Fitting 5x1/8"NPSF female	0100261
Fitting 5x1/8"NPSF female, with dual flow control valve	3251011
Fitting 1/8"NPSF female, PA	3150197



# **B50MF**



# SUCTION CUP WITH SHORT BELLOWS, MARK FREE

- ➤ Suction cup of TPU, a mark free material that leaves no trace on the object being handled.
- ► Suitable for level adjustment.
- ► Lifting movement to separate small and thin objects.
- ▶ Only lightweight objects should be handled when the lifting force is parallel to the surface.

# **LIFTING FORCES & TECHNICAL DATA**

Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the surface, N, at vacuum level			Volume	Min. curve radius	Max. vertical movement	Weight rubber part
20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
30	93	136	23	63	97	32	26	13	19

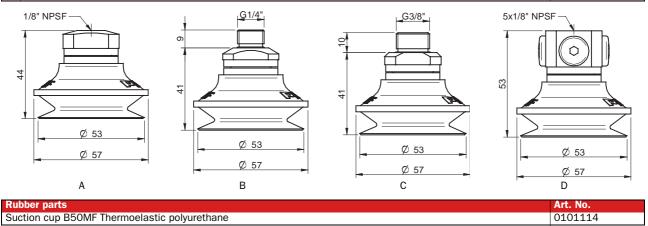
#### **MATERIAL SPECIFICATIONS**

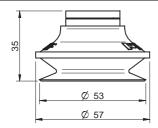
Material	Colour	Hardness °Shore A	Temperature range °C
Thermoelastic polyurethane, TPU	Transparent white	81	-20–80

Wear resistance	Oil	Weather & Ozone	Hydrolysis	Petrol	Concentrated acids	Alcohol	Oxidation
Excellent	Excellent	Excellent	Poor	Poor	Poor	Good	Good



	Complete suction cups	Art. No.
Α	Suction cup B50MF Thermoelastic polyurethane, 1/8"NPSF female, with mesh filter	0101688
Α	Suction cup B50MF Thermoelastic polyurethane, 1/8"NPSF female, with dual flow control valve	0101689
В	Suction cup B50MF Thermoelastic polyurethane, G1/4" male, with mesh filter	0101683
В	Suction cup B50MF Thermoelastic polyurethane, G1/4" male, with dual flow control valve and mesh filter	0101690
С	Suction cup B50MF Thermoelastic polyurethane, G3/8" male, with mesh filter	0101685
С	Suction cup B50MF Thermoelastic polyurethane, G3/8" male, with dual flow control valve and mesh filter	0101692
D	Suction cup B50MF Thermoelastic polyurethane, 5x1/8"NPSF female	0101687
D	Suction cup B50MF Thermoelastic polyurethane, 5x1/8"NPSF female, with dual flow control valve	0101694





Fittings	Art. No
Fitting 1/8"NPSF female, with mesh filter	0101154
Fitting 1/8"NPSF female, with dual flow control valve	3251012
Fitting G1/4" male, with mesh filter	3250092
Fitting G1/4" male, with mesh filter and dual flow control valve	3251013
Fitting G3/8" male, with mesh filter	3250087
Fitting G3/8" male, with mesh filter and dual flow control valve	3251015
Fitting 5x1/8"NPSF female	0100262
Fitting 5x1/8"NPSF female, with dual flow control valve	3251017
Fitting 1/8"NPSF female, PA	3150198



# **BL20-2**



# **SUCTION CUP WITH LONG BELLOWS**

- ▶ Suitable for level adjustment.
- ► Lifting movement to separate small and thin objects.
- ► Less suitable when the lifting force is parallel to the surface of the object.

# **LIFTING FORCES & TECHNICAL DATA**

Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the surface, N, at vacuum level			Volume	Min. curve radius	Max. vertical movement	Weight rubber part
20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
0.32/3.2*	0.62/6.2*	_	_	_	_	4.0	4.0	13	3

<sup>\*</sup>Lifting force with reinforcement rings.

# **MATERIAL SPECIFICATIONS**

Material	Colour	Hardness °Shore A	Temperature range °C
Chloroprene, CR	Black	60	-40–110
Silicone, SIL	Red	50	-40–200

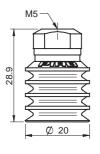
# **MATERIAL RESISTANCE**

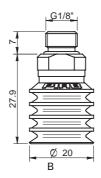
Material	Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Alcohol	Oxidation
Chloroprene, CR	Excellent	Fair	Good	Good	Fair	Poor	Good	Good
Silicone, SIL	Good	Poor	Excellent	Fair	Poor	Poor	Good	Excellent

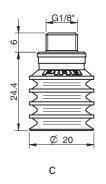
# **ORDERING INFORMATION**

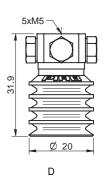
	Complete suction cups	Art. No.
Α	Suction cup BL20-2 Chloroprene, M5 female	0101193
Α	Suction cup BL20-2 Chloroprene, M5 female, with dual flow control valve	0101199
В	Suction cup BL20-2 Chloroprene, G1/8" male, with mesh filter	0101194
В	Suction cup BL20-2 Chloroprene, G1/8" male, with mesh filter and dual flow control valve	0101200
С	Suction cup BL20-2 Chloroprene, G1/8" male/M5 female, with mesh filter	0101198
С	Suction cup BL20-2 Chloroprene, G1/8" male/M5 female, with dual flow control valve	0101202
D	Suction cup BL20-2 Chloroprene, 5xM5 female	0101197
D	Suction cup BL20-2 Chloroprene, 5xM5 female, with dual flow control valve	0101203
Α	Suction cup BL20-2 Silicone, M5 female	0101204
Α	Suction cup BL20-2 Silicone, M5 female, with dual flow control valve	0101210
В	Suction cup BL20-2 Silicone, G1/8" male, with mesh filter	0101205
В	Suction cup BL20-2 Silicone, G1/8" male, with mesh filter and dual flow control valve	0101211
С	Suction cup BL20-2 Silicone, G1/8" male/M5 female, with mesh filter	0101209
С	Suction cup BL20-2 Silicone, G1/8" male/M5 female, with dual flow control valve	0101213
D	Suction cup BL20-2 Silicone, 5xM5 female	0101208
D	Suction cup BL20-2 Silicone, 5xM5 female, with dual flow control valve	0101214
Ε	Suction cup BL20-2 Chloroprene, G1/8" male/M5 female, PA	0109844
Ε	Suction cup BL20-2 Silicone, G1/8" male/M5 female, PA	0110339

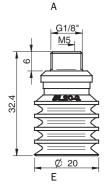




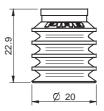








Rubber parts	Art. No.
Suction cup BL20-2 Chloroprene	0101115
Suction cup BL20-2 Silicone	0101116



Fittings	Art. No.
Fitting M5 female	3250003
Fitting M5 female, with dual flow control valve	3251001
Fitting G1/8" male, with mesh filter	3250085
Fitting G1/8" male, with mesh filter and dual flow control valve	3251002
Fitting G1/8" male/M5 female, with mesh filter	0101152
Fitting G1/8" male/M5 female, with dual flow control valve	3251004
Fitting 5xM5 female	0100260
Fitting 5xM5 female, with dual flow control valve	3251005
Fitting G1/8" male/M5 female, PA	3150196

Spare Part	Material	Temperature range °C	Art. No.
Reinforcement ring for BL30-2, 4x	Polyamide, PA	-40–110	3150072



# **BL30-2**



# **SUCTION CUP WITH LONG BELLOWS**

- ▶ Suitable for level adjustment.
- ► Lifting movement to separate small and thin objects.
- ► Less suitable when the lifting force is parallel to the surface of the object.

# **LIFTING FORCES & TECHNICAL DATA**

	Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the surface, N, at vacuum level		Volume	Min. curve radius	Max. vertical movement	Weight rubber part
20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm <sup>3</sup>	mm	mm	g
0.64/6.4*	1.6/16.0*	_		_	_	10	8	20	7

<sup>\*</sup>Lifting force with reinforcement rings.

# **MATERIAL SPECIFICATIONS**

Material	Colour	Hardness °Shore A	Temperature range °C
Chloroprene, CR	Black	60	-40–110
Silicone, SIL	Red	50	-40–200

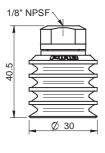
# **MATERIAL RESISTANCE**

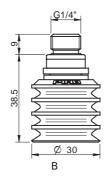
Material	Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Alcohol	Oxidation
Chloroprene, CR	Excellent	Fair	Good	Good	Fair	Poor	Good	Good
Silicone, SIL	Good	Poor	Excellent	Fair	Poor	Poor	Good	Excellent

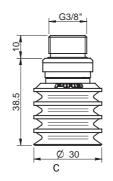
# **ORDERING INFORMATION**

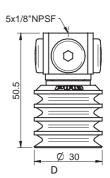
	Complete suction cups	Art. No.
Α	Suction cup BL30-2 Chloroprene, 1/8"NPSF female, with mesh filter	0101501
Α	Suction cup BL30-2 Chloroprene, 1/8"NPSF female, with dual flow control valve	0101502
В	Suction cup BL30-2 Chloroprene, G1/4" male, with mesh filter	0101496
В	Suction cup BL30-2 Chloroprene, G1/4" male, with mesh filter and dual flow control valve	0101503
С	Suction cup BL30-2 Chloroprene, G3/8" male, with mesh filter	0101498
С	Suction cup BL30-2 Chloroprene, G3/8" male, with mesh filter and dual flow control valve	0101505
D	Suction cup BL30-2 Chloroprene, 5x1/8"NPSF female	0101500
D	Suction cup BL30-2 Chloroprene, 5x1/8"NPSF female, with dual flow control valve	0101507
Α	Suction cup BL30-2 Silicone, 1/8"NPSF female, with mesh filter	0101514
Α	Suction cup BL30-2 Silicone, 1/8"NPSF female, with dual flow control valve	0101515
В	Suction cup BL30-2 Silicone, G1/4" male, with mesh filter	0101509
В	Suction cup BL30-2 Silicone, G1/4" male, with mesh filter and dual flow control valve	0101516
С	Suction cup BL30-2 Silicone, G3/8" male, with mesh filter	0101511
С	Suction cup BL30-2 Silicone, G3/8" male, with mesh filter and dual flow control valve	0101518
D	Suction cup BL30-2 Silicone, 5x1/8"NPSF female	0101513
D	Suction cup BL30-2 Silicone, 5x1/8"NPSF female, with dual flow control valve	0101520
Ε	Suction cup BL30-2 Chloroprene, 1/8"NPSF female, PA	0110951
Ε	Suction cup BL30-2 Silicone, 1/8"NPSF female, PA	0110340

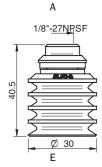




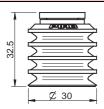








Rubber parts	Art. No.
Suction cup BL30-2 Chloroprene	0101117
Suction cup BL30-2 Silicone	0101118



Fittings	Art. No
Fitting 1/8"NPSF female, with mesh filter	0101153
Fitting 1/8"NPSF female, with dual flow control valve	3251006
Fitting G1/4" male, with mesh filter	3250091
Fitting G1/4" male, with mesh filter and dual flow control valve	3251007
Fitting G3/8" male, with mesh filter	3250086
Fitting G3/8" male, with mesh and dual flow control valve	3251009
Fitting 5x1/8"NPSF female	0100261
Fitting 5x1/8"NPSF female, with dual flow control valve	3251011
Fitting 1/8"NPSF female, PA	3150197

Spare Part	Material	Temperature range °C	Art. No.
Reinforcement ring for BL30-2, 4x	Polyamide, PA	-40–110	3150072



# BL40-2 & B-BL40-2



# **SUCTION CUP WITH LONG BELLOWS**

- ► Suitable for level adjustment.
- ► Lifting movement to separate small and thin objects.
- ► Less suitable when the lifting force is parallel to the surface of the object.
- ▶ B-BL40-2: Suction cup without fitting, specially designed for the food industry (bakery).

# **LIFTING FORCES & TECHNICAL DATA**

Lifting force vertical to the surface, N, at vacuum level surface, N, at vacuum level							Min. curve radius	Max. vertical movement	Weight rubber part
20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
1.1/11.0*	2.2/22.0*		_	_	_	27	11	33	10

<sup>\*</sup>Lifting force with reinforcement rings.

# **MATERIAL SPECIFICATIONS**

Model	Material	Colour	Hardness °Shore A	Temperature range °C
BL40-2	Chloroprene, CR	Black	60	-40–110
BL40-2	Silicone, SIL	Red	50	-40–200
B-BL40-2	Silicone, SIL	White	30	-40–200

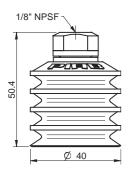
#### **MATERIAL RESISTANCE**

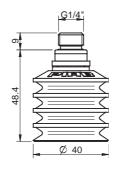
Material	Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Alcohol	Oxidation
Chloroprene, CR	Excellent	Fair	Good	Good	Fair	Poor	Good	Good
Silicone, SIL	Good	Poor	Excellent	Fair	Poor	Poor	Good	Excellent

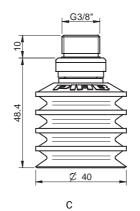
# **ORDERING INFORMATION**

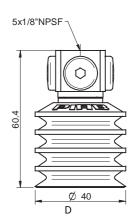
	Complete suction cups	Art. No.
Α	Suction cup BL40-2 Chloroprene, 1/8"NPSF female, with mesh filter	0101527
Α	Suction cup BL40-2 Chloroprene, 1/8"NPSF female, with dual flow control valve	0101528
В	Suction cup BL40-2 Chloroprene, G1/4" male, with mesh filter	0101522
В	Suction cup BL40-2 Chloroprene, G1/4" male, with mesh filter and dual flow control valve	0101529
С	Suction cup BL40-2 Chloroprene, G3/8" male, with mesh filter	0101524
С	Suction cup BL40-2 Chloroprene, G3/8" male, with mesh filter and dual flow control valve	0101531
D	Suction cup BL40-2 Chloroprene, 5x1/8"NPSF female	0101526
D	Suction cup BL40-2 Chloroprene, 5x1/8"NPSF female, with dual flow control valve	0101533
Α	Suction cup BL40-2 Silicone, 1/8"NPSF female, with mesh filter	0101540
Α	Suction cup BL40-2 Silicone, 1/8"NPSF female, with dual flow control valve	0101541
В	Suction cup BL40-2 Silicone, G1/4" male, with mesh filter	0101535
В	Suction cup BL40-2 Silicone, G1/4" male, with mesh filter and dual flow control valve	0101542
С	Suction cup BL40-2 Silicone, G3/8" male, with mesh filter	0101537
С	Suction cup BL40-2 Silicone, G3/8" male, with mesh filter and dual flow control valve	0101544
D	Suction cup BL40-2 Silicone, 5x1/8"NPSF female	0101539
D	Suction cup BL40-2 Silicone, 5x1/8"NPSF female, with dual flow control valve	0101546
Ε	Suction cup BL40-2 Chloroprene, 1/8"NPSF female, PA	0110946
Ε	Suction cup BL40-2 Silicone, 1/8"NPSF female, PA	0110341
F	Suction cup B-BL40-2 Silicone	3150227

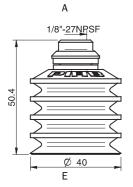


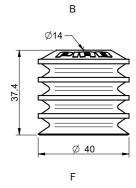




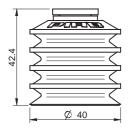








Rubber parts	Art. No.
Suction cup BL40-2 Chloroprene	0101119
Suction cup BL40-2 Silicone	0101120



Fittings	Art. No
Fitting 1/8"NPSF female, with mesh filter	0101153
Fitting 1/8"NPSF female, with dual flow control valve	3251006
Fitting G1/4" male, with mesh filter	3250091
Fitting G1/4" male, with mesh filter and dual flow control valve	3251007
Fitting G3/8" male, with mesh filter	3250086
Fitting G3/8" male, with mesh and dual flow control valve	3251009
Fitting 5x1/8"NPSF female	0100261
Fitting 5x1/8"NPSF female, with dual flow control valve	3251011
Fitting 1/8"NPSF female, PA	3150197

Spare Part	Material	Temperature range °C	Art. No.
Reinforcement ring for BL40-2 & B-BL40-2, 4x	Polyamide, PA	-40–110	3150073



# **BL50-2**



# **SUCTION CUP WITH LONG BELLOWS**

- ► Suitable for level adjustment.
- ► Lifting movement to separate small and thin objects.
- ► Less suitable when the lifting force is parallel to the surface of the object.

#### **LIFTING FORCES & TECHNICAL DATA**

	orce vertical N, at vacuu		Lifting force parallel to the surface, N, at vacuum level			Volume	Min. curve radius	Max. vertical movement	Weight rubber part
20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm <sup>3</sup>	mm	mm	g
1.7/17.0*	4.3/43*	1	_	_		53	13	34	20.0

<sup>\*</sup>Lifting force with reinforcement rings.

# **MATERIAL SPECIFICATIONS**

Material	Colour	Hardness °Shore A	Temperature range °C
Chloroprene, CR	Black	60	-40–110
Silicone, SIL	Red	50	-40–200

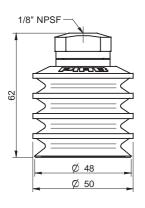
# **MATERIAL RESISTANCE**

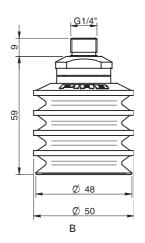
Material	Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Alcohol	Oxidation
Chloroprene, CR	Excellent	Fair	Good	Good	Fair	Poor	Good	Good
Silicone, SIL	Good	Poor	Excellent	Fair	Poor	Poor	Good	Excellent

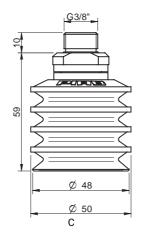
# **ORDERING INFORMATION**

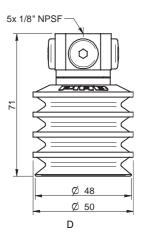
	Complete suction cups	Art. No.
Α	Suction cup BL50-2 Chloroprene, 1/8"NPSF female, with mesh filter	0101701
Α	Suction cup BL50-2 Chloroprene, 1/8"NPSF female, with dual flow control valve	0101702
В	Suction cup BL50-2 Chloroprene, G1/4" male, with mesh filter	0101696
В	Suction cup BL50-2 Chloroprene, G1/4" male, with mesh filter and dual flow control valve	0101703
С	Suction cup BL50-2 Chloroprene, G3/8" male, with mesh filter	0101698
С	Suction cup BL50-2 Chloroprene, G3/8" male, with mesh filter and dual flow control valve	0101705
D	Suction cup BL50-2 Chloroprene, 5x1/8"NPSF female	0101700
D	Suction cup BL50-2 Chloroprene, 5x1/8"NPSF female, with dual flow control valve	0101707
Α	Suction cup BL50-2 Silicone, 1/8"NPSF female, with mesh filter	0101714
Α	Suction cup BL50-2 Silicone, 1/8"NPSF female, with dual flow control valve	0101715
В	Suction cup BL50-2 Silicone, G1/4" male, with mesh filter	0101709
В	Suction cup BL50-2 Silicone, G1/4" male, with mesh filter and dual flow control valve	0101716
С	Suction cup BL50-2 Silicone, G3/8" male, with mesh filter	0101711
С	Suction cup BL50-2 Silicone, G3/8" male, with mesh filter and dual flow control valve	0101718
D	Suction cup BL50-2 Silicone, 5x1/8"NPSF female	0101713
D	Suction cup BL50-2 Silicone, 5x1/8"NPSF female, with dual flow control valve	0101720
Ε	Suction cup BL50-2 Chloroprene, 1/8"NPSF female, PA	0110958
Е	Suction cup BL50-2 Silicone, 1/8"NPSF female, PA	0110342

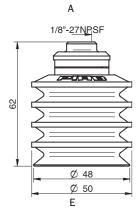




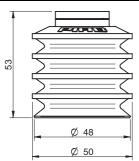








Rubber parts	Art. No.
Suction cup BL50-2 Chloroprene	0101121
Suction cup BL50-2 Silicone	0101122



Fittings	Art. No
Fitting 1/8"NPSF female, with mesh filter	0101154
Fitting 1/8"NPSF female, with dual flow control valve	3251012
Fitting G1/4" male, with mesh filter	3250092
Fitting G1/4" male, with mesh filter and dual flow control valve	3251013
Fitting G3/8" male, with mesh filter	3250087
Fitting G3/8" male, with mesh filter and dual flow control valve	3251015
Fitting 5x1/8"NPSF female	0100262
Fitting 5x1/8"NPSF female, with dual flow control valve	3251017
Fitting 1/8"NPSF female, PA	3150198

Spare Part	Material	Temperature range °C	Art. No.
Reinforcement ring for BL50-2, 4x	Polyamide, PA	-40–110	3150074



# **BL30-3P**



# SUCTION CUP SPECIALLY DESIGNED FOR PLASTIC BAG HANDLING

- High-flow fitting allowing high initial vacuum flow needed for plastic bag handling.
- ► Suitable for level adjustment and uneven surfaces.
- ▶ Dual hardness allowing strength and stability in conjunction with softness and flexibility.
- ► DURAFLEX® material features the elasticity of rubber in combination with the wear resistance of polyurethane.
- ► The DURAFLEX® material is mark-free.

#### **LIFTING FORCES & TECHNICAL DATA**

	Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the surface, N, at vacuum level			Min. curve radius	Max. vertical movement	Weight rubber part
20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
10	22	28	9*	10*	16*	14	6	14	6

<sup>\*</sup>The suction cup is not intended for handling shear lifts. The values are given as a dimensioning guide to be used when, e.g., the acceleration/retardation causes shear forces.

# **MATERIAL SPECIFICATIONS**

Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU30	Yellow	30	10–50
Polyurethane, PU70	Black	70	10–50

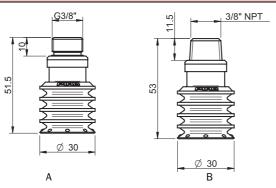
#### **MATERIAL RESISTANCE**

	Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Ethanol	Methanol	Oxidation
ı	Excellent	Excellent	Excellent	Fair**	Fair	Fair**	Fair	Poor	Poor

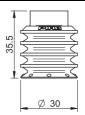
<sup>\*\*</sup>Please contact PIAB.

#### **ORDERING INFORMATION**

Complete suction cup	Art. No.
A Suction cup BL30-3P Polyurethane 30/70, G3/8" male	0113743
B   Suction cup BL30-3P Polyurethane 30/70, 3/8" NPT male	0113744



Rubber part	Art. No.
Suction cup BL30-3P Polyurethane 30/70	0110545



Fitting	Art. No.
Fitting G3/8" male	0112662
Fitting 3/8" NPT male	0112692

 $For \ further \ information \ and \ dimensioned \ drawings, \ see \ SUCTION \ CUPS \ FITTINGS \ chapter.$ 



# **BL40-3P**



# SUCTION CUP SPECIALLY DESIGNED FOR PLASTIC BAG HANDLING

- ► High-flow fitting allowing high initial vacuum flow needed for plastic bag handling.
- ► Suitable for level adjustment and uneven surfaces.
- ▶ Dual hardness allowing strength and stability in conjunction with softness and flexibility.
- ► DURAFLEX® material features the elasticity of rubber in combination with the wear resistance of polyurethane.
- ► The DURAFLEX® material is mark-free.

# **LIFTING FORCES & TECHNICAL DATA**

	Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the surface, N, at vacuum level			Min. curve radius	Max. vertical movement	Weight rubber part
20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
20	43	55	13*	24*	36*	27	13	21	12

<sup>\*</sup>The suction cup is not intended for handling shear lifts. The values are given as a dimensioning guide to be used when, e.g., the acceleration/retardation causes shear forces.

#### **MATERIAL SPECIFICATIONS**

Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU30	Yellow	30	10–50
Polyurethane, PU70	Black	70	10–50

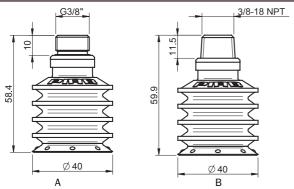
#### **MATERIAL RESISTANCE**

Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Ethanol	Methanol	Oxidation
Excellent	Excellent	Excellent	Fair**	Fair	Fair**	Fair	Poor	Poor

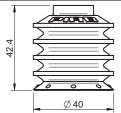
<sup>\*\*</sup>Please contact PIAB.

#### **ORDERING INFORMATION**

ı		Complete suction cup	Art. No.
Ī	Α	Suction cup BL40-3P Polyurethane 30/70, G3/8" male	0111791
	В	Suction cup BL40-3P Polyurethane 30/70, 3/8" NPT male	0112693



Rubber part	Art. No.
Suction cup BL40-3P Polyurethane 30/70	0112667



Fittings	Art. No.
Fitting G3/8" male	0112662
Fitting 3/8" NPT male	0112692



# **BL50-3P**



# SUCTION CUP SPECIALLY DESIGNED FOR PLASTIC BAG HANDLING

- ▶ High-flow fitting allowing high initial vacuum flow needed for plastic bag handling.
- ► Suitable for level adjustment and uneven surfaces.
- ▶ Dual hardness allowing strength and stability in conjunction with softness and flexibility.
- ▶ DURAFLEX® material features the elasticity of rubber in combination with the wear resistance of polyurethane.
- ► The DURAFLEX® material is mark-free.

# **LIFTING FORCES & TECHNICAL DATA**

	force vertical , N, at vacuu			force paralle , N, at vacuu		Volume	Min. curve radius	Max. vertical movement	Weight rubber part
20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa	cm³	mm	mm	g
24	60	75	22*	49*	60*	54	16	26	24

<sup>\*</sup>The suction cup is not intended for handling shear lifts. The values are given as a dimensioning guide to be used when, e.g., the acceleration/retardation causes shear forces.

# **MATERIAL SPECIFICATIONS**

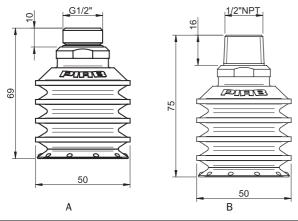
Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU30	Yellow	30	10–50
Polyurethane, PU70	Black	70	10–50

Wear resistance	Oil	Weather & ozone	Hydrolysis	Petrol	Concentrated acids	Ethanol	Methanol	Oxidation
Excellent	Excellent	Excellent	Fair**	Fair	Fair**	Fair	Poor	Poor

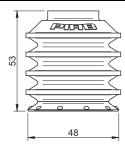
<sup>\*\*</sup>Please contact PIAB.



	Complete suction cup	Art. No.
Α	Suction cup BL50-3P Polyurethane 30/70, G1/2" male	0113745
В	Suction cup BL50-3P Polyurethane 30/70, 1/2" NPT male	0113746



Rubber part	Art. No.
Suction cup BL50-3P Polyurethane 30/70	0112641



Fitting	Art. No.
Fitting G1/2" male	0113117
Fitting 1/2" NPT male	0113140