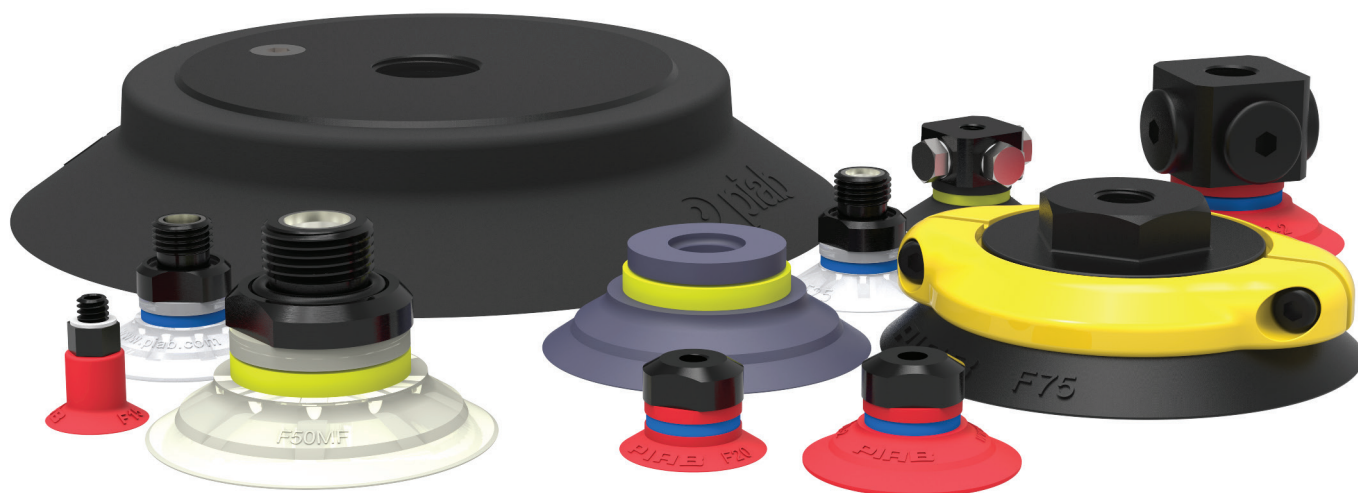


Flat family (F)



There is a variety of cups in this family to suit a number of different flat surfaces, e.g. cardboard, glass and metal sheets. The cleats stop deformation by preventing suction of the object into the cup. The suction cup has good stability and very little movement. Also suitable when the lifting force is parallel to the surface as the cleats increase friction. There is also a variety in materials from mark-free to high temperature applications and FDA compliant material (FDA 21 CFR 177.2600) that meets EU's regulation EU 1935/2004.

LIFTING FORCES

	Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the surface, N, at vacuum level		
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa
F15	3.5	8.5	11	3.5	6.5	7.5
F20	6	14.5	19	5	8	8.5
F25	9	19.5	25	8	9	10
F30-2	12	25	31	11	16	20
F40-2	20	40	50	15	25	30
F50-2	36	74	96	24	40	50
F75	80	200	270	60	110	140
F110	140	420	560	140	250	300
F150	300	850	1100	250	600	800
F26 FDA	11	25	31	9	21	26
F33 FDA	16	38	49	13.5	32.5	41.5

	Lifting force vertical to the surface, N, at vacuum level			Lifting force parallel to the surface, N, at vacuum level		
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa
F75P	70/82*	193/231*	273/330*	44/47*	176/113*	308/169*
F110P	167/191*	432/498*	591/705*	149/297*	441/523*	617/664*
F15MF	4	8	12	4.5	9	14.5
F20MF	3.6	14.5	22	8	14.5	21
F25MF	6.3	24.5	65.5	9	24.5	36.3
F30MF	11	34.5	48	13.6	28	42
F40MF	18	57	83	16	49	57
F50MF	24.5	92	141	31	82	107
XLF150	330/520**	500/770**	780/1130**	281	425	663
XLF200	760/1030**	1130/1510**	1720/2200**	646	961	1462
XLF250	1310/1640**	1950/2460**	2870/3540**	1114	1658	2440
XLF300	2150/2620**	3200/3760**	4630/5450**	1828	2720	3936

* PU30°/PU60° / PU60°, **Inner/Outer lip.

GENERAL SPECIFICATIONS

	Outer diameter, mm	Height, mm	Min. curve radius, mm	Max. vertical movement, mm	Volume, cm ³
F15	15.7	11	13	1	0.37
F20	22	8	18	1.5	1
F25	27	9	22	1.5	1.1
F30-2	32	10.4	25	2	2
F40-2	42	13	52	2.5	4.8
F50-2	53	17.5	55	3	10








	Outer diameter, mm	Height, mm	Min. curve radius, mm	Max. vertical movement, mm	Volume, cm ³
F75	77	13	150	3	20
F110	112	20	250	4	70
F150	152	26.4	500	6	160
F26 FDA	26	23.5	25	1.5	1.6
F33 FDA	33	23.5	35	1.5	2.1
F75P	77	13	150	2	19
F110P	115	20	250	4	60
F15MF	16.5	11	17	1	0.37
F20MF	22	8	18	2	1
F25MF	27	9	23	1.5	1.1
F30MF	32	10	44	1.5	2
F40MF	42	13	60	2	4.8
F50MF	53	17.5	95	2	10
XLF150	153	27	500	8	145
XLF200	204	27	800	8	275
XLF250	250	27	1300	8	435
XLF300	304	27	1900	8	666

AVAILABLE MATERIALS AND INDUSTRIES

An explanation of the industry icons is available on the cover fold out.

Cup	Material								MSF
F15	Chloroprene, CR	●				●		●	●
F15	Silicone, SIL	●	●						
F15	Silicone FDA EU, SIL FDA	●	●						
F20	Chloroprene, CR	●				●		●	●
F20	Silicone, SIL	●	●						
F20	Silicone FDA EU, SIL FDA	●	●						
F25	Chloroprene, CR	●				●		●	●
F25	Silicone, SIL	●	●						
F25	Silicone FDA EU, SIL FDA	●	●						
F30-2	Chloroprene, CR	●				●		●	●
F30-2	Silicone, SIL	●	●						
F30-2	Silicone FDA EU, SIL FDA	●	●						
F40-2	Nitrile-PVC, NPV	●				●		●	●
F40-2	Silicone, SIL	●	●						
F40-2	Silicone FDA EU, SIL FDA	●	●						
F50-2	HNBR	●					●	●	
F50-2	Nitrile-PVC, NPV	●				●		●	●
F50-2	Silicone, SIL	●	●						
F50-2	Silicone FDA EU, SIL FDA	●	●						

Cup	Material								MSF
F75	HNBR	●					●	●	
F75	Nitrile-PVC, NPV	●				●		●	●
F75	Silicone, SIL	●	●						
F75	Silicone FDA EU, SIL FDA	●	●						
F110	HNBR	●					●	●	
F110	Nitrile-PVC, NPV	●				●		●	●
F110	Silicone, SIL	●	●						
F110	Silicone FDA EU, SIL FDA	●	●						
F150	Nitrile-PVC, NPV	●				●		●	●
F150	Silicone, SIL	●	●						
F150	Silicone FDA EU, SIL FDA	●	●						
F26 FDA	Silicone FDA EU, SIL FDA	●	●						
F33 FDA	Silicone FDA EU, SIL FDA	●	●						
F75P	PU30°/PU60°	●		●					
F75P	PU60°	●		●	●	●		●	●
F110P	PU30°/PU60°	●		●					
F110P	PU60°	●		●	●	●		●	●
F15MF	Thermoplastic Polyurethane, TPE-U				●			●	
F20MF	Thermoplastic Polyurethane, TPE-U				●			●	
F25MF	Thermoplastic Polyurethane, TPE-U				●			●	

Cup	Material								MSF
F30MF	Thermoplastic Polyurethane, TPE-U				●			●	
F40MF	Thermoplastic Polyurethane, TPE-U				●			●	
F50MF	Thermoplastic Polyurethane, TPE-U				●			●	
XLF150	Nitrile-PVC, NPV	●				●		●	●
XLF200	Nitrile-PVC, NPV	●				●		●	●
XLF250	Nitrile-PVC, NPV	●				●		●	●
XLF300	Nitrile-PVC, NPV	●				●		●	●

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 opening/ thin paper – slip sheets/ film	FDA EU-standard compliant	Glass handling	High/low temp cup (plastic)	Mark free	Plastic injection molded parts
F15	●		●				
F20	●		●				
F25	●		●				
F30-2	●		●				
F40-2	●		●				
F50-2	●		●	●	●	●	●
F75	●		●	●	●	●	●
F110	●		●	●	●	●	●
F150	●		●				

	Dry sheet metal	Bag opening/ thin paper – slip sheets/ film	FDA EU-standard compliant	Glass handling	High/low temp cup (plastic)	Mark free	Plastic injection molded parts
F26 FDA		●	●				
F33 FDA		●	●				
F75P	●					●	
F110P	●					●	
F15MF						●	
F20MF						●	
F25MF						●	
F30MF						●	
F40MF						●	
F50MF						●	
XLF150	●			●		●	
XLF200	●			●		●	
XLF250	●			●		●	
XLF300	●			●		●	

FITTINGS

For a table of possible fittings to use go to pages 198–200, for technical information on all fittings visit piab.com.

ORDERING INFORMATION

Description	Item no.
Suction cup F15 Chloroprene	3150125
Suction cup F15 Chloroprene, M5 male	3150014
Suction cup F15 Silicone	3150125S
Suction cup F15 Silicone FCM	0200263
Suction cup F15 Silicone FCM, M5 male	9909623
Suction cup F15 Silicone, M5 male	3150014S
Suction cup F20 Chloroprene	0101129
Suction cup F20 Chloroprene, G1/8" male/M5 female, PA	0110950
Suction cup F20 Chloroprene, M5 female	0101259
Suction cup F20 Chloroprene, G1/8" male, with mesh filter	0101260
Suction cup F20 Chloroprene, 1/8" NPT male, with mesh filter	0101261
Suction cup F20 Chloroprene, G1/8" male/M5 female	0101262
Suction cup F20 Chloroprene, 5xM5 female	0101263
Suction cup F20 Chloroprene, G1/8" male/M5 female, with mesh filter	0101264
Suction cup F20 Chloroprene, M5 female, with dual flow control valve	0101265
Suction cup F20 Chloroprene, G1/8" male, with mesh filter and dual flow control valve	0101266
Suction cup F20 Chloroprene, G1/8" male/M5 female, with dual flow control valve	0101268
Suction cup F20 Silicone	0101130
Suction cup F20 Silicone, 1/8" NPT male, with dual flow control valve	0101278
Suction cup F20 Silicone, M5 female	0101270
Suction cup F20 Silicone, G1/8" male, with mesh filter	0101271

Description	Item no.
Suction cup F20 Silicone, 1/8" NPT male, with mesh filter	0101272
Suction cup F20 Silicone, G1/8" male/M5 female	0101273
Suction cup F20 Silicone, 5xM5 female	0101274
Suction cup F20 Silicone, G1/8" male/M5 female, with mesh filter	0101275
Suction cup F20 Silicone, G1/8" male, with mesh filter and dual flow control valve	0101277
Suction cup F20 Silicone, G1/8" male/M5 female, PA	0110334
Suction cup F20MF Thermoelastic polyurethane	0101139
Suction cup F20MF Thermoelastic polyurethane, M5 female	0101281
Suction cup F20MF Thermoelastic polyurethane, G1/8" male, with mesh filter	0101282
Suction cup F20MF Thermoelastic polyurethane, 1/8" NPT male with mesh filter	0101283
Suction cup F20MF Thermoelastic polyurethane, G1/8" male / M5 female	0101284
Suction cup F20MF Thermoelastic polyurethane, 5xM5 female	0101285
Suction cup F20MF Thermoelastic polyurethane, G1/8" male / M5 female, with mesh filter	0101286
Suction cup F20MF Thermoelastic polyurethane, G1/8" male, with mesh filter and dual flow control valve	0101288
Suction cup F20MF Thermoelastic polyurethane, G1/8" male / M5 fem., with dual flow control valve	0101290
Suction cup F20MF Thermoelastic polyurethane, 5xM5 female, with dual flow control valve	0101291
Suction cup F25 Chloroprene, G1/8" male/M5 female, PA	0109842
Suction cup F25 Silicone FCM	0200439
Suction cup F25 Silicone, M5 female	0101303
Suction cup F25 Silicone, G1/8" male, with mesh filter	0101304
Suction cup F25 Silicone, 1/8" NPT male, with mesh filter	0101305

Description	Item no.
Suction cup F25 Silicone, G1/8" male/M5 female	0101306
Suction cup F25 Silicone, 5xM5 female	0101307
Suction cup F25 Silicone, G1/8" male/M5 female, with mesh filter	0101308
Suction cup F25 Silicone, 1/8" NPT male, with dual flow control valve	0101311
Suction cup F25 Silicone, G1/8" male/M5 female, with dual flow control valve	0101312
Suction cup F25 Silicone, G1/8" male/M5 female, PA	0110335
Suction cup F25 Silicone FCM, G1/8" male, with mesh filter	9909625
Suction cup F25 Silicone FCM, 1/8" NPT male, with mesh filter	9909667
Suction cup F25 Silicone FCM, G1/8" male/M5 female, with mesh filter	9909711
Suction cup F25MF Thermoelastic polyurethane	0101140
Suction cup F25MF Thermoelastic polyurethane, M5 female	0101314
Suction cup F25MF Thermoelastic polyurethane, M5 female, with dual flow control valve	0101320
Suction cup F25MF Thermoelastic polyurethane, G1/8" male, with mesh filter	0101315
Suction cup F25MF Thermoelastic polyurethane, G1/8" male, with mesh filter and dual flow control valve	0101321
Suction cup F25MF Thermoelastic polyurethane, G1/8" male/M5 female, with mesh filter	0101319
Suction cup F25MF Thermoelastic polyurethane, 5xM5 female	0101318
Suction cup F75 HNBR, 1/8" NPSF female, with mesh filter	0108184
Suction cup F75 HNBR, 3/8" NPSF female, with mesh filter	0108186
Suction cup F75 HNBR, G1/2" female, with mesh filter	0108187
Suction cup F75 HNBR, G3/8" female, with mesh filter	0108185
Suction cup F75 Nitrile-PVC	3150131P

Description	Item no.
Suction cup F75 Nitrile-PVC, 3/8" NPSF female, with mesh filter	0101875
Suction cup F75 Nitrile-PVC, G1/2" female, with cone valve	0101879
Suction cup F75 Nitrile-PVC, G1/2" female, with mesh filter	0101876
Suction cup F75 Nitrile-PVC, G3/8" female, with cone valve	0101877
Suction cup F75 Nitrile-PVC, G3/8" female, with mesh filter	0101874
Suction cup F75 Nitrile-PVC, 1/8" NPSF female, with mesh filter	0101873
Suction cup F75 Silicone	3150131S
Suction cup F75 Silicone FCM	0200264
Suction cup F75 Silicone FCM, G3/8" female, with mesh filter	0200497
Suction cup F75 Silicone, 1/8" NPSF female, with mesh filter	0101866
Suction cup F75 Silicone, 3/8" NPSF female, with mesh filter	0101868
Suction cup F75 Silicone, G1/2" female, with cone valve	0101872
Suction cup F75 Silicone, G1/2" female, with mesh filter	0101869
Suction cup F75 Silicone, G3/8" female, with cone valve	0101870
Suction cup F75 Silicone, G3/8" female, with mesh filter	0101867
Suction cup F75P Polyurethane 30/60	0104724
Suction cup F75P Polyurethane 30/60, 1/8" NPSF female, with mesh filter	0106349
Suction cup F75P Polyurethane 30/60, 3/8" NPSF female	0108800
Suction cup F75P Polyurethane 30/60, 3/8" NPSF female, with mesh filter	0106351
Suction cup F75P Polyurethane 30/60, for tread insert	0106829
Suction cup F75P Polyurethane 30/60, G1/2" female, with mesh filter	0106352

Description	Item no.
Suction cup F75P Polyurethane 30/60, G3/8" female, with cone valve	0129928
Suction cup F75P Polyurethane 30/60, G3/8" female, with mesh filter	0106350
Suction cup F75P Polyurethane 30/60, thread insert G3/8" male, with mesh filter	0106830
Suction cup F75P Polyurethane 60	0111584
Suction cup F75P Polyurethane 60, 1/8" NPSF female, with mesh filter	0111585
Suction cup F75P Polyurethane 60, 3/8" NPSF female	0108801
Suction cup F75P Polyurethane 60, 3/8" NPSF female, with mesh filter	0111587
Suction cup F75P Polyurethane 60, for tread insert	0107320
Suction cup F75P Polyurethane 60, G1/2" female, with mesh filter	0111588
Suction cup F75P Polyurethane 60, G3/8" female, with cone valve	0129929
Suction cup F75P Polyurethane 60, G3/8" female, with mesh filter	0111586
Suction cup F75P Polyurethane 60, thread insert G3/8" male, with mesh filter	0107321
Suction cup F110 HNBR	3150132T
Suction cup F110 HNBR, 3/8" NPSF female, with mesh filter	0108189
Suction cup F110 HNBR, G1/2" female, with mesh filter	0108190
Suction cup F110 HNBR, G3/8" female, with mesh filter	0108188
Suction cup F110 Nitrile-PVC	3150132P
Suction cup F110 Nitrile-PVC, 3/8" NPSF female, with mesh filter	0101916
Suction cup F110 Nitrile-PVC, G1/2" female, with cone valve	0101921
Suction cup F110 Nitrile-PVC, G1/2" female, with mesh filter	0101917
Suction cup F110 Nitrile-PVC, G3/8" female, with mesh filter	0101915

Description	Item no.
Suction cup F110 Silicone	3150132S
Suction cup F110 Silicone FCM	0200302
Suction cup F110 Silicone FCM, G1/2" female, with mesh filter	0200504
Suction cup F110 Silicone, 3/8" NPSF female, with mesh filter	0101909
Suction cup F110 Silicone, G1/2" female, with cone valve	0101914
Suction cup F110 Silicone, G1/2" female, with mesh filter	0101910
Suction cup F110 Silicone, G3/8" female, with mesh filter	0101908
Suction cup F110P Polyurethane 30/60	0104725
Suction cup F110P Polyurethane 30/60, 3/8" NPSF female	0108802
Suction cup F110P Polyurethane 30/60, 3/8" NPSF female, with mesh filter	0106354
Suction cup F110P Polyurethane 30/60, for thread insert	0106796
Suction cup F110P Polyurethane 30/60, G1/2" female, with cone valve	0129927
Suction cup F110P Polyurethane 30/60, G1/2" female, with mesh filter	0106355
Suction cup F110P Polyurethane 30/60, G3/8" female, with mesh filter	0106353
Suction cup F110P Polyurethane 30/60, thread insert G3/8" with mesh filter	0106798
Suction cup F110P Polyurethane 60	0111593
Suction cup F110P Polyurethane 60, 3/8" NPSF female	0108803
Suction cup F110P Polyurethane 60, 3/8" NPSF female, with mesh filter	0111596
Suction cup F110P Polyurethane 60, for thread insert	0107322
Suction cup F110P Polyurethane 60, G1/2" female, with cone valve	0129930
Suction cup F110P Polyurethane 60, G1/2" female, with mesh filter	0111597

Description	Item no.
Suction cup F110P Polyurethane 60, G3/8" female, with mesh filter	0111595
Suction cup F110P Polyurethane 60, thread insert G3/8", with mesh filter	0107323
Suction cup F150 Nitrile-PVC	3150133P
Suction cup F150 Nitrile-PVC, G1/2" female, with cone valve	0101941
Suction cup F150 Nitrile-PVC, G1/2" female, with mesh filter	0101938
Suction cup F150 Nitrile-PVC, G3/4" female, with mesh filter	0101939
Suction cup F150 Silicone	3150133S
Suction cup F150 Silicone FCM	0200265
Suction cup F150 Silicone FCM, G1/2" female, with mesh filter	0200507
Suction cup F150 Silicone, G1/2" female, with cone valve	0101937
Suction cup F150 Silicone, G1/2" female, with mesh filter	0101934
Suction cup F150 Silicone, G3/4" female, with mesh filter	0101935
Suction cup F26 Silicone FCM	0201216
Suction cup F26 Silicone FCM, G1/4" male	9914238
Suction cup F26 Silicone FCM, 1/8" NPSF female	9914251
Suction cup F33 Silicone FCM	0200328
Suction cup F33 Silicone FCM, G1/4" male	9914237
Suction cup F33 Silicone FCM, 1/8" NPSF female	9914252
Suction cup F30-2 Chloroprene	0101133
Suction cup F30-2 Chloroprene, 5xM5 female	0101329
Suction cup F30-2 Chloroprene, for fitting with cone valve	3150239

Description	Item no.
Suction cup F30-2 Chloroprene, G1/8" male, with mesh filter	0101326
Suction cup F30-2 Chloroprene, G1/8" male, with mesh filter and dual flow control valve	0101332
Suction cup F30-2 Chloroprene, G1/8" male/M5 female PA	0109846
Suction cup F30-2 Chloroprene, G1/8" male/M5 female, with cone valve	3250039
Suction cup F30-2 Chloroprene, G1/8" male/M5 female, with dual flow control valve	0101334
Suction cup F30-2 Chloroprene, G1/8" male/M5 female, with mesh filter	0101330
Suction cup F30-2 Chloroprene, M5 female	0101325
Suction cup F30-2 Chloroprene, M5 female, with dual flow control valve	0101331
Suction cup F30-2 Silicone	0101134
Suction cup F30-2 Silicone FCM	0200418
Suction cup F30-2 Silicone FCM, G1/8" male, with mesh filter	9909626
Suction cup F30-2 Silicone FCM, G1/8" male/M5 female, with mesh filter	9909627
Suction cup F30-2 Silicone, 5xM5 female	0101345
Suction cup F30-2 Silicone, G1/8" male, with mesh filter	0101342
Suction cup F30-2 Silicone, G1/8" male, with mesh filter and dual flow control valve	0101348
Suction cup F30-2 Silicone, G1/8" male/M5 female, with cone valve	3250039S
Suction cup F30-2 Silicone, G1/8" male/M5 female, with dual flow control valve	0101350
Suction cup F30-2 Silicone, G1/8" male/M5 female, with mesh filter	0101346
Suction cup F30-2 Silicone, M5 female	0101341
Suction cup F30-2 Silicone, G1/8" male/M5 female PA	0110344
Suction cup F40-2 Nitrile-PVC	0101135

Description	Item no.
Suction cup F40-2 Nitrile-PVC, 1/8" NPSF female	0101566
Suction cup F40-2 Nitrile-PVC, 1/8" NPSF female PA	0109847
Suction cup F40-2 Nitrile-PVC, 1/8" NPSF female, with cone valve	3150050P
Suction cup F40-2 Nitrile-PVC, 1/8" NPSF female, with dual flow control valve	0101573
Suction cup F40-2 Nitrile-PVC, 1/8" NPSF female, with mesh filter	0101572
Suction cup F40-2 Nitrile-PVC, 5x1/8" NPSF female	0101571
Suction cup F40-2 Nitrile-PVC, G1/4" male, with mesh filter	0101567
Suction cup F40-2 Nitrile-PVC, G1/4" male, with mesh filter and dual flow control valve	0101574
Suction cup F40-2 Nitrile-PVC, G3/8" male, with mesh filter	0101569
Suction cup F40-2 Nitrile-PVC, G3/8" male, with mesh filter and dual flow control valve	0101576
Suction cup F40-2 Silicone	0101136
Suction cup F40-2 Silicone FCM	0200437
Suction cup F40-2 Silicone FCM, 1/4" NPT male, with mesh filter	9909669
Suction cup F40-2 Silicone FCM, 1/8" NPSF female, with mesh filter	9909629
Suction cup F40-2 Silicone FCM, G1/4" male, with mesh filter	9909628
Suction cup F40-2 Silicone, 1/8" NPSF female PA	0110345
Suction cup F40-2 Silicone, 1/8" NPSF female, with cone valve	3150050S
Suction cup F40-2 Silicone, 1/8" NPSF female, with mesh filter...	0101553
Suction cup F40-2 Silicone, 5x1/8" NPSF female	0101552
Suction cup F40-2 Silicone, G1/4" male, with mesh filter	0101548
Suction cup F40-2 Silicone, G3/8" male, with mesh filter	0101550

Description	Item no.
Suction cup F40-2 Silicone, 1/8" NPSF female, with dual flow control valve	0101554
Suction cup F50-2 HNBR	0108166
Suction cup F50-2 HNBR, 1/8" NPSF female	0108181
Suction cup F50-2 HNBR, G1/4" male, with mesh filter	0108182
Suction cup F50-2 HNBR, G3/8" male, with mesh filter	0108183
Suction cup F50-2 Nitrile-PVC	0101137
Suction cup F50-2 Nitrile-PVC, 1/8" NPSF female, PA	0110952
Suction cup F50-2 Nitrile-PVC, 1/8" NPSF female, with cone valve	3150051P
Suction cup F50-2 Nitrile-PVC, 1/8" NPSF female, with dual flow control valve	0101773
Suction cup F50-2 Nitrile-PVC, 1/8" NPSF female, with mesh filter	0101772
Suction cup F50-2 Nitrile-PVC, 5x1/8" NPSF female	0101771
Suction cup F50-2 Nitrile-PVC, 5x1/8" NPSF female, with dual flow control valve	0101778
Suction cup F50-2 Nitrile-PVC, for fitting with cone valve	3150241P
Suction cup F50-2 Nitrile-PVC, G1/4" male, with mesh filter	0101767
Suction cup F50-2 Nitrile-PVC, G1/4" male, with mesh filter and dual flow control valve	9909458
Suction cup F50-2 Nitrile-PVC, G3/8" male, with mesh filter	0101769
Suction cup F50-2 Nitrile-PVC, G3/8" male, with mesh filter and dual flow control valve	0101776
Suction cup F50-2 Silicone	0101138
Suction cup F50-2 Silicone FCM	0200438
Suction cup F50-2 Silicone FCM, 1/8" NPSF female, with mesh filter	9909631
Suction cup F50-2 Silicone FCM, G1/4" male, with mesh filter	9909630

Description	Item no.
Suction cup F50-2 Silicone, 1/8" NPSF female, PA	0110346
Suction cup F50-2 Silicone, 1/8" NPSF female, with cone valve	3150051S
Suction cup F50-2 Silicone, 1/8" NPSF female, with dual flow control valve	0101754
Suction cup F50-2 Silicone, 1/8" NPSF female, with mesh filter	0101753
Suction cup F50-2 Silicone, 5x1/8" NPSF female	0101752
Suction cup F50-2 Silicone, for fitting with cone valve	3150241S
Suction cup F50-2 Silicone, G1/4" male, with mesh filter	0101748
Suction cup F50-2 Silicone, G3/8" male, with mesh filter	0101750
Suction cup F75P Polyurethane 30/60	0104724
Suction cup F75P Polyurethane 30/60, 1/8" NPSF female, with mesh filter	0106349
Suction cup F75P Polyurethane 30/60, 3/8" NPSF female	0108800
Suction cup F75P Polyurethane 30/60, 3/8" NPSF female, with mesh filter	0106351
Suction cup F75P Polyurethane 30/60, for tread insert	0106829
Suction cup F75P Polyurethane 30/60, G1/2" female, with mesh filter	0106352
Suction cup F75P Polyurethane 30/60, G3/8" female, with cone valve	0129928
Suction cup F75P Polyurethane 30/60, G3/8" female, with mesh filter	0106350
Suction cup F75P Polyurethane 30/60, thread insert G3/8" male, with mesh filter	0106830
Suction cup F75P Polyurethane 60	0111584
Suction cup F75P Polyurethane 60, 1/8" NPSF female, with mesh filter	0111585
Suction cup F75P Polyurethane 60, 3/8" NPSF female	0108801
Suction cup F75P Polyurethane 60, 3/8" NPSF female, with mesh filter	0111587

Description	Item no.
Suction cup F75P Polyurethane 60, for tread insert	0107320
Suction cup F75P Polyurethane 60, G1/2" female, with mesh filter	0111588
Suction cup F75P Polyurethane 60, G3/8" female, with cone valve	0129929
Suction cup F75P Polyurethane 60, G3/8" female, with mesh filter	0111586
Suction cup F75P Polyurethane 60, thread insert G3/8" male, with mesh filter	0107321
Suction cup F110P Polyurethane 30/60	0104725
Suction cup F110P Polyurethane 30/60, 3/8" NPSF female	0108802
Suction cup F110P Polyurethane 30/60, 3/8" NPSF female, with mesh filter	0106354
Suction cup F110P Polyurethane 30/60, for thread insert	0106796
Suction cup F110P Polyurethane 30/60, G1/2" female, with cone valve	0129927
Suction cup F110P Polyurethane 30/60, G1/2" female, with mesh filter	0106355
Suction cup F110P Polyurethane 30/60, G3/8" female, with mesh filter	0106353
Suction cup F110P Polyurethane 30/60, thread insert G3/8" with mesh filter	0106798
Suction cup F110P Polyurethane 60	0111593
Suction cup F110P Polyurethane 60, 3/8" NPSF female	0108803
Suction cup F110P Polyurethane 60, 3/8" NPSF female, with mesh filter	0111596
Suction cup F110P Polyurethane 60, for thread insert	0107322
Suction cup F110P Polyurethane 60, G1/2" female, with cone valve	0129930
Suction cup F110P Polyurethane 60, G1/2" female, with mesh filter	0111597
Suction cup F110P Polyurethane 60, G3/8" female, with mesh filter	0111595
Suction cup F110P Polyurethane 60, thread insert G3/8", with mesh filter	0107323

Description	Item no.
Suction cup F15MF Thermoelastic polyurethane	3150269
Suction cup F15MF Thermoelastic polyurethane, M5 male	3250074
Suction cup F20MF Thermoelastic polyurethane	0101139
Suction cup F20MF Thermoelastic polyurethane, M5 female	0101281
Suction cup F20MF Thermoelastic polyurethane, G1/8" male, with mesh filter	0101282
Suction cup F20MF Thermoelastic polyurethane, 1/8" NPT male with mesh filter	0101283
Suction cup F20MF Thermoelastic polyurethane, G1/8" male / M5 female	0101284
Suction cup F20MF Thermoelastic polyurethane, 5xM5 female	0101285
Suction cup F20MF Thermoelastic polyurethane, G1/8" male / M5 female, with mesh filter	0101286
Suction cup F20MF Thermoelastic polyurethane, G1/8" male, with mesh filter and dual flow control valve	0101288
Suction cup F20MF Thermoelastic polyurethane, G1/8" male / M5 fem., with dual flow control valve	0101290
Suction cup F20MF Thermoelastic polyurethane, 5xM5 female, with dual flow control valve	0101291
Suction cup F25MF Thermoelastic polyurethane	0101140
Suction cup F25MF Thermoelastic polyurethane, M5 female	0101314
Suction cup F25MF Thermoelastic polyurethane, M5 female, with dual flow control valve	0101320
Suction cup F25MF Thermoelastic polyurethane, G1/8" male, with mesh filter	0101315
Suction cup F25MF Thermoelastic polyurethane, G1/8" male, with mesh filter and dual flow control valve	0101321
Suction cup F25MF Thermoelastic polyurethane, G1/8" male/M5 female, with mesh filter	0101319
Suction cup F25MF Thermoelastic polyurethane, 5xM5 female	0101318
Suction cup F30MF Thermoelastic polyurethane	0101141
Suction cup F30MF Thermoelastic polyurethane, 5xM5 female	0101361

Description	Item no.
Suction cup F30MF Thermoelastic polyurethane, 5xM5 female, with dual flow control valve	0101367
Suction cup F30MF Thermoelastic polyurethane, G1/8" male, with mesh filter	0101358
Suction cup F30MF Thermoelastic polyurethane, G1/8" male, with mesh filter and dual flow control valve	0101364
Suction cup F30MF Thermoelastic polyurethane, G1/8" male/M5 female, with mesh filter	0101362
Suction cup F30MF Thermoelastic polyurethane, M5 female	0101357
Suction cup F30MF Thermoelastic polyurethane, M5 female, with dual flow control valve	0101363
Suction cup F40MF Thermoelastic polyurethane	0101142
Suction cup F40MF Thermoelastic polyurethane	0101142
Suction cup F40MF Thermoelastic polyurethane, 1/8" NPSF female, with dual flow control valve	0101592
Suction cup F40MF Thermoelastic polyurethane, 5x1/8" NPSF female	0101590
Suction cup F40MF Thermoelastic polyurethane, G1/4" male, with mesh filter	0101586
Suction cup F40MF Thermoelastic polyurethane, G1/4" male, with mesh filter and dual flow control valve	0101593
Suction cup F40MF Thermoelastic polyurethane, G3/8" male, with mesh filter	0101588
Suction cup F40MF Thermoelastic polyurethane, G3/8" male, with mesh filter and dual flow control valve	0101595
Suction cup F40MF Thermoelastic polyurethane, 1/8" NPSF female	0101591
Suction cup F50MF Thermoelastic polyurethane	0101143
Suction cup F50MF Thermoelastic polyurethane, G1/4" male, with mesh filter	0101786
Suction cup F50MF Thermoelastic polyurethane, G1/4" male, with mesh filter and dual flow control valve	0101793
Suction cup F50MF Thermoelastic polyurethane, G3/8" male, with mesh filter	0101788
Suction cup F50MF Thermoelastic polyurethane, 1/8" NPSF female, with mesh filter	0101791
XLF150 Extra Large Flat cup, G1/2" female	0127131

Description	Item no.
XL200 Extra Large Flat cup, G1/2" female	0127132
XL250 Extra Large Flat cup, G1/2" female	0127133
XL300 Extra Large Flat cup, G1/2" female	0127134