

Flat Concave family (FC)



The friction cups in flat concave shape and in the material DURAFLEX® suction cups have been developed to meet the strict demands of the automotive industry and designed for flat and curved surfaces. A typical application is the feeding of sheet metal into a press tool. The FCF-P design is especially suitable for oily surfaces, slightly domed and flat surfaces, e.g., such as those encountered when handling metal sheets in press lines. The suction cups have support cleats that prevent thin objects from being disfigured.

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
FC20P	4.5	12	16	4.5	9	12
FC25P	8	20	27	9	12	18
FC35P	11/11*	36/34*	51/49*	27/27*	51/41*	62/51*
FC50P	28/28**	77/77**	103/104**	49/52**	82/93**	100/111**
FC75P	73/73**	157/168**	215/225**	107/93**	200/225**	230/255**
FC100P	137/152**	284/328**	377/446**	176/112**	318/264**	420/382**
FC150P	274/284**	647/716**	922/932**	343/215**	765/568**	902/863**
FCF25P	—	19/19***	28/29***	—	7/5***	10/7.2***
FCF35P	—	42/34***	58/50***	—	30/26***	42/32***
FCF50P	—	78/72***	106/101***	—	77/52***	105/70***
FCF75P	—	171/163***	236/228***	—	166/104***	211/139***
FCF100P	—	347/236***	490/298***	—	337/139***	484/205***
FCF125P	—	475/405***	650/442***	—	445/194***	602/236***

* PU50°/PU60°, ** PU40°/PU60°, *** Dry metal sheet/Oily metal sheet.

General specifications

	Outer diameter, mm	Height, mm	Min. curve radius, mm	Max. vertical movement, mm	Volume, cm ³
FC20P	21.8	9.4	25	1.9	1
FC25P	28.5	11	45	4	3
FC35P	35	15	32	5.5	5

	Outer diameter, mm	Height, mm	Min. curve radius, mm	Max. vertical movement, mm	Volume, cm ³
FC50P	50	33.5	53	5	10
FC75P	75	24	78	6.5	30
FC100P	100	27	110	10.2	80
FC150P	150	40.5	165	14.2	250
FCF25P	25	28	27	—	5.5
FCF35P	35	29–47.8*	40	2	5
FCF50P	50	31–49.9*	50	3	10
FCF75P	75	31–41*	100	4	30
FCF100P	100	36–45*	150	6	70
FCF125P	126	42–51.2*	150	8	100

* Height range includes fittings.

Available materials

	PU40°	PU50°	PU55°/PU60°	PU60°
FC20P		●		
FC25P		●		
FC35P		●		●
FC50P	●			●
FC75P	●			●
FC100P	●			●
FC150P	●			●
FCF25P			●	
FCF35P			●	
FCF50P			●	
FCF75P			●	
FCF100P			●	
FCF125P			●	

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.

	Oily sheet metal	Dry sheet metal	Mark free
FC20P		●	●
FC25P		●	●
FC35P		●	●
FC50P		●	●
FC75P		●	●
FC100P		●	●

	Oily sheet metal	Dry sheet metal	Mark free
FC150P		●	●
FCF25P	●		
FCF35P	●		
FCF50P	●		
FCF75P	●		
FCF100P	●		
FCF125P	●		

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.

FC20P



Flat, concave suction cup with cleats

- ▶ Suitable for lifting small objects and narrow parts, also slightly domed, flat and oily surfaces, e.g., such as those encountered when handling steel sheets in press processes.
- ▶ Thanks to the high friction of the rubber material, the suction cups can withstand high forces at rapid accelerations in horizontal directions, even on oily surfaces.
- ▶ The suction cups have cleats that prevent thin objects from being disfigured.
- ▶ DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane. The material does not leave any marks on the objects handled.

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 ³	mm	mm	g
4.5	12.0	16.0	4.5	9.0	12.0	1.0	25	1.9	1.3

Material specifications

Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU50	Blue transparent	50	10–50

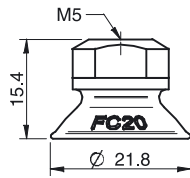
Material resistance

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

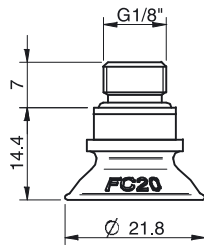
**Please contact Piab.

Ordering information

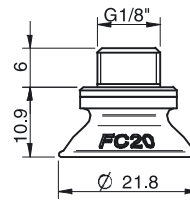
	Complete suction cups	Art. No.
A	Suction cup FC20P Polyurethane 50, M5 female	0106717
B	Suction cup FC20P Polyurethane 50, G1/8" male, with mesh filter	0106722
C	Suction cup FC20P Polyurethane 50, G1/8" male / M5 female, with mesh filter	0106718



A



B



C

	Rubber part	Art. No.
	Suction cup FC20P Polyurethane 50	0106016



	Fittings	Art. No.
	Fitting M5 female	3250003
	Fitting G1/8" male, with mesh filter	3250085
	Fitting G1/8" male/M5 female, with mesh filter	0101152

For further information and dimensioned drawings, see section Suction cups/grippers Fittings.

FC25P



Flat, concave suction cup with cleats

- ▶ Suitable for lifting small objects and narrow parts, also slightly domed, flat and oily surfaces, e.g., such as those encountered when handling steel sheets in press processes.
- ▶ Thanks to the high friction of the rubber material, the suction cups can withstand high forces at rapid accelerations in horizontal directions, even on oily surfaces.
- ▶ The suction cups have cleats that prevent thin objects from being disfigured.
- ▶ DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane. The material does not leave any marks on the objects handled.

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 cm ³	Min. curve radius mm	Max. vertical movement mm	Weight rubber part g
20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa				
8.0	20.0	27	9.0	12.0	18.0	3.0	45	4.0	3

Material specifications

Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU50	Blue transparent	50	10–50

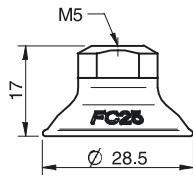
Material resistance

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

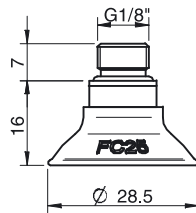
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Ordering information

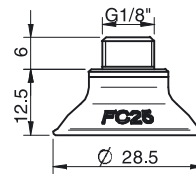
	Complete suction cups	Art. No.
A	Suction cup FC25P Polyurethane 50, M5 female	0106719
B	Suction cup FC25P Polyurethane 50, G1/8" male, with mesh filter	0106721
C	Suction cup FC25P Polyurethane 50, G1/8" male / M5 female, with mesh filter	0106720



A

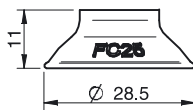


B



C

	Rubber part	Art. No.
	Suction cup FC25P Polyurethane 50	0104803



	Fittings	Art. No.
	Fitting M5 female	3250003
	Fitting G1/8" male, with mesh filter	3250085
	Fitting G1/8" male/M5 female, with mesh filter	0101152

For further information and dimensioned drawings, see section Suction cups/grippers Fittings.

FC35P



Flat, concave suction cup with cleats

- ▶ Suitable for slightly domed and flat and oily surfaces, e.g., such as those encountered when handling steel sheets in press processes.
- ▶ Thanks to the high friction of the rubber material, the suction cups can withstand high forces at rapid accelerations in horizontal directions, even on oily surfaces.
- ▶ The suction cups have cleats that prevent thin objects from being disfigured.
- ▶ DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane. The material does not leave any marks on the objects handled.

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 cm ³	Min. curve radius mm	Max. vertical movement mm	Weight rubber part g
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa				
PU50°	11.0	36	51	27	51	62	5.0	32	5.5	6
PU60°	11.0	34	49	27	41	51	5.0	32	5.5	6

Material specifications

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

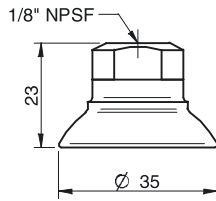
Material resistance

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

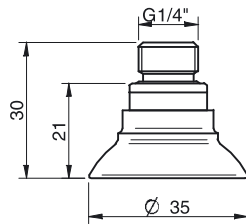
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Ordering information

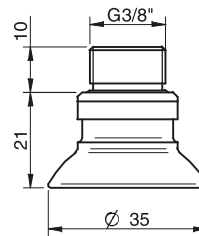
	Complete suction cups	Art. No.
A	Suction cup FC35P Polyurethane 50, 1/8" NPSF female, with mesh filter	0103705
A	Suction cup FC35P Polyurethane 50, 1/8" NPSF female, with dual flow control valve	0103709
B	Suction cup FC35P Polyurethane 50, G1/4" male, with mesh filter	0103711
B	Suction cup FC35P Polyurethane 50, G1/4" male, with mesh filter and dual flow control valve	0103713
C	Suction cup FC35P Polyurethane 50, G3/8" male, with mesh filter	0103719
A	Suction cup FC35P Polyurethane 60, 1/8" NPSF female, with mesh filter	0103706
B	Suction cup FC35P Polyurethane 60, G1/4" male, with mesh filter	0103712
C	Suction cup FC35P Polyurethane 60, G3/8" male, with mesh filter	0103720
C	Suction cup FC35P Polyurethane 60, G3/8" male, with mesh filter and dual flow control valve	0103722
D	Suction cup FC35P Polyurethane 60, 5x1/8" NPSF female	0103728



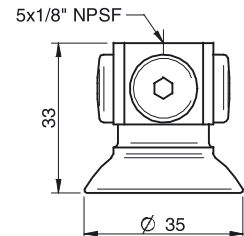
A



B

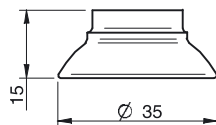


C



D

	Rubber parts	Art. No.
	Suction cup FC35P Polyurethane 50	0103290
	Suction cup FC35P Polyurethane 60	0103291



	Fittings	Art. No.
	Fitting 1/8" NPSF female, 30-40, with mesh filter	0101153
	Fitting 1/8" NPSF female, 30-40, with dual flow control valve	3251006
	Fitting G1/4" male, 30-40, with mesh filter	3250091
	Fitting G1/4" male, 30-40, with mesh filter and dual flow control valve	3251007
	Fitting G3/8" male, 30-40, with mesh filter	3250086
	Fitting G3/8" male, 30-40, with mesh and dual flow control valve	3251009
	Fitting 5x1/8" NPSF female, 30-40	0100261
	Fitting 5x1/8" NPSF female, 30-40, with dual flow control valve	3251011

For further information and dimensioned drawings, see section Suction cups/grippers Fittings..

FC50P



Flat, concave suction cup with cleats

- ▶ Suitable for slightly domed and flat and oily surfaces, e.g., such as those encountered when handling steel sheets in press processes.
- ▶ Thanks to the high friction of the rubber material, the suction cups can withstand high forces at rapid accelerations in horizontal directions, even on oily surfaces.
- ▶ The suction cups have cleats that prevent thin objects from being disfigured.
- ▶ DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane. The material does not leave any marks on the objects handled.

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 cm ³	Min. curve radius mm	Max. vertical movement mm	Weight with fitting g
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa				
PU40°	28	77	103	49	82	100	10	53	5.0	28
PU60°	28	77	104	52	93	111	10	53	5.0	28

Material specifications

Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU40	Red transparent	40	10–50
Polyurethane, PU60	Green transparent	60	10–50

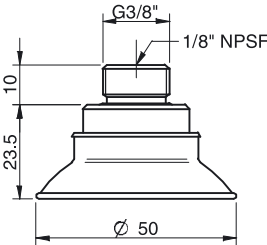
Material resistance

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.
Suction cup FC50P Polyurethane 40, G3/8" male - 1/8" NPSF female	0103289
Suction cup FC50P Polyurethane 60, G3/8" male - 1/8" NPSF female	0103293



FC75P



Flat, concave suction cup with cleats

- ▶ Suitable for slightly domed and flat and oily surfaces, e.g., such as those encountered when handling steel sheets in press processes.
- ▶ Thanks to the high friction of the rubber material, the suction cups can withstand high forces at rapid accelerations in horizontal directions, even on oily surfaces.
- ▶ The suction cups have cleats that prevent thin objects from being disfigured.
- ▶ DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane. The material does not leave any marks on the objects handled.

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 cm ³	Min. curve radius mm	Max. vertical movement mm	Weight with fitting g
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa				
PU40°	73	157	215	107	200	230	30	78	6.5	45
PU60°	73	168	225	93	225	255	30	78	6.5	45

Material specifications

Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU40	Red transparent	40	10–50
Polyurethane, PU60	Green transparent	60	10–50

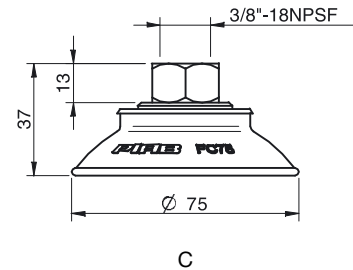
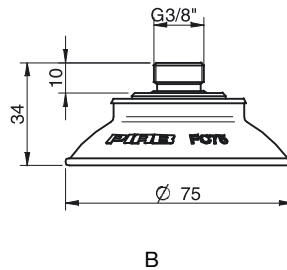
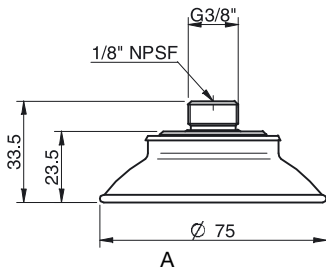
Material resistance

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

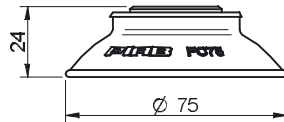
**Please contact Piab.

Ordering information

	Complete suction cups	Art. No.
A	Suction cup FC75P Polyurethane 40, G3/8" male - 1/8" NPSF female	0103294
A	Suction cup FC75P Polyurethane 60, G3/8" male - 1/8" NPSF female	0103296
B	Suction cup FC75P Polyurethane 40, thread insert G3/8" with mesh filter	0106959
B	Suction cup FC75P Polyurethane 60, thread insert G3/8" with mesh filter	0107303
C	Suction cup FC75P Polyurethane 40, 3/8" NPSF female	0108796
C	Suction cup FC75P Polyurethane 60, 3/8" NPSF female	0108797



	Rubber parts	Art. No.
	Suction cup FC75P Polyurethane 40, for tread insert	0106948
	Suction cup FC75P Polyurethane 60, for tread insert	0107302



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

For further information and dimensioned drawings, see section Suction cups/grippers Fittings.

FC100P



Flat, concave suction cup with cleats

- ▶ Suitable for slightly domed and flat and oily surfaces, e.g., such as those encountered when handling steel sheets in press processes.
- ▶ Thanks to the high friction of the rubber material, the suction cups can withstand high forces at rapid accelerations in horizontal directions, even on oily surfaces.
- ▶ The suction cups have cleats that prevent thin objects from being disfigured.
- ▶ DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane. The material does not leave any marks on the objects handled.

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 cm ³	Min. curve radius mm	Max. vertical movement mm	Weight rubber part g
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa				
PU40°	137	284	377	176	318	420	80	110	10.2	64
PU60°	152	328	446	112	264	382	80	110	10.2	64

Material specifications

Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU40	Red transparent	40	10–50
Polyurethane, PU60	Green transparent	60	10–50

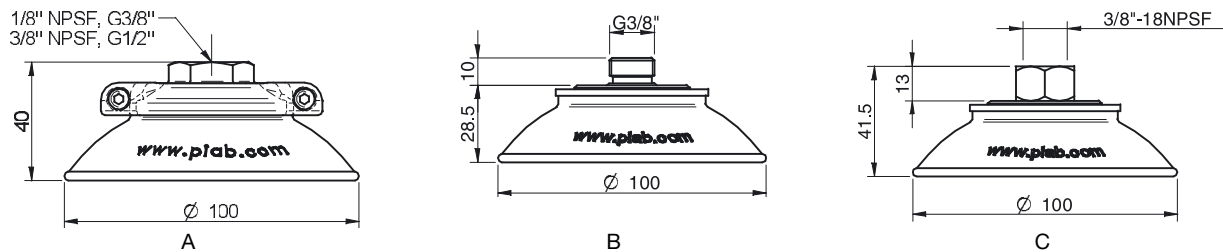
Material resistance

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

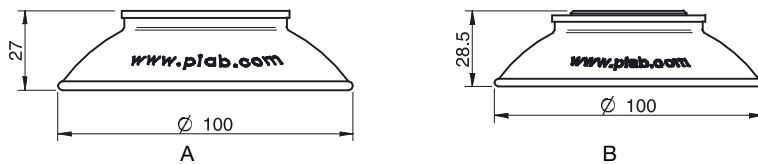
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Ordering information

	Complete suction cups	Art. No.
A	Suction cup FC100P Polyurethane 40, 1/8" NPSF female, with mesh filter	0103731
A	Suction cup FC100P Polyurethane 40, G3/8" female, with mesh filter	0103734
A	Suction cup FC100P Polyurethane 40, 3/8" NPSF female, with mesh filter	0103737
A	Suction cup FC100P Polyurethane 40, G1/2" female, with mesh filter	0103740
A	Suction cup FC100P Polyurethane 60, 1/8" NPSF female, with mesh filter	0103733
A	Suction cup FC100P Polyurethane 60, G3/8" female, with mesh filter	0103736
A	Suction cup FC100P Polyurethane 60, G1/2" female, with mesh filter	0103742
A	Suction cup FC100P Polyurethane 60, 3/8" NPSF female, with mesh filter	0103739
B	Suction cup FC100P Polyurethane 40, thread insert G3/8" male, with mesh filter	0106836
B	Suction cup FC100P Polyurethane 60, thread insert G3/8" male, with mesh filter	0107305
C	Suction cup FC100P Polyurethane 40, 3/8" NPSF female	0108798
C	Suction cup FC100P Polyurethane 60, 3/8" NPSF female	0108799



	Rubber parts	Art. No.
A	Suction cup FC100P Polyurethane 40	0103297
A	Suction cup FC100P Polyurethane 60	0103299
B	Suction cup FC100P Polyurethane 40, for tread insert	0106835
B	Suction cup FC100P Polyurethane 60, for tread insert	0107304



	Fittings	Art. No.
	Fitting 75, 1/8" NPSF female, with mesh filter	0100548
	Fitting 75, G3/8" female, with mesh filter	0100551
	Fitting 75, 3/8" NPSF female, with mesh filter	0100553
	Fitting 75, G1/2" female, with mesh filter	0100555
	Thread insert G3/8" male, with O-ring and mesh filter	0107148

For further information and dimensioned drawings, see section Suction cups/grippers Fittings.

FC150P



Flat, concave suction cup with cleats

- ▶ Suitable for slightly domed and flat and oily surfaces, e.g., such as those encountered when handling steel sheets in press processes.
- ▶ Thanks to the high friction of the rubber material, the suction cups can withstand high forces at rapid accelerations in horizontal directions, even on oily surfaces.
- ▶ The suction cups have cleats that prevent thin objects from being disfigured.
- ▶ DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane. The material does not leave any marks on the objects handled.

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 cm ³	Min. curve radius mm	Max. vertical movement mm	Weight rubber part g
	20 -kPa	60 -kPa	90 -kPa	20 -kPa	60 -kPa	90 -kPa				
PU40°	274	716	932	343	765	902	250	165	14.2	213
PU60°	284	647	922	215	568	863	250	165	14.2	213

Material specifications

Material	Colour	Hardness °Shore A	Temperature range °C
Polyurethane, PU40	Red transparent	40	10–50
Polyurethane, PU60	Green transparent	60	10–50

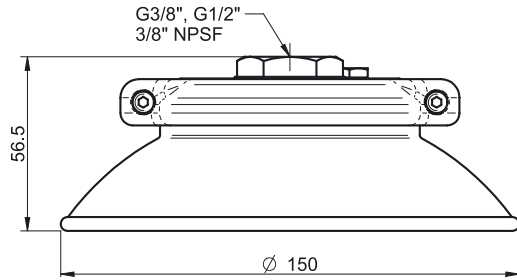
Material resistance

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

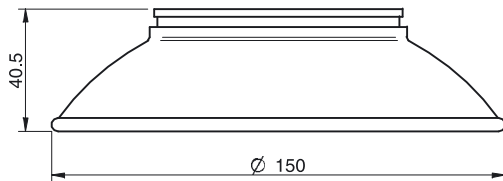
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Ordering information

Complete suction cups	Art. No.
Suction cup FC150P Polyurethane 40, G3/8" female, with mesh filter	0103743
Suction cup FC150P Polyurethane 40, 3/8" NPSF female, with mesh filter	0103749
Suction cup FC150P Polyurethane 40, G1/2" female, with mesh filter	0103755
Suction cup FC150P Polyurethane 60, G3/8" female, with mesh filter	0103745
Suction cup FC150P Polyurethane 60, 3/8" NPSF female, with mesh filter	0103751
Suction cup FC150P Polyurethane 60, G1/2" female, with mesh filter	0103757



Rubber parts	Art. No.
Suction cup FC150P Polyurethane 40	0101946
Suction cup FC150P Polyurethane 60	0103301



Fittings	Art. No.
Fitting 110 G3/8" female, with mesh filter	0100557
Fitting 110, 3/8" NPSF female, with mesh filter	0100559
Fitting 110, G1/2" female, with mesh filter	0100561

For further information and dimensioned drawings, see section Suction cups/grippers Fittings.

FCF35P, FCF50P, FCF75P, FCF100P, FCF125P



Features

- ▶ Special designed friction cups for oily surfaces, such as sheets in metal forming processes.
- ▶ Normal wear on friction cup will not affect the long term shear force performance.
- ▶ Best choice if $> 0,1\text{g}/\text{m}^2$ press oil is used on the sheet.
- ▶ Thanks to the strong grip on oily surfaces, the suction cups can withstand high shear forces, typically 2–4 times more than corresponding conventional suction cups.
- ▶ The "FCF" design is suitable for slightly domed and flat surfaces, e.g., such as those encountered when handling metal sheets in press lines.
- ▶ The suction cups have support cleats that prevent thin objects from being disfigured.
- ▶ DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane. The material does not leave any marks on the objects handled.

Lifting forces & Technical data

Model	Material to be handled	Lifting forces vertical to the surface, N, at vacuum level		Friction/shear forces parallel to the surface, N, at vacuum level		Volume cm ³	Min. curve radius mm	Weight g
		60 -kPa	90 -kPa	60 -kPa	90 -kPa			
FCF35P	Oily steel plate	34 (42*)	50 (58*)	26 (30*)	32 (42*)	5	40	19–42
FCF50P	Oily steel plate	72 (78*)	101 (106*)	52 (77*)	70 (105*)	10	50	31–67
FCF75P	Oily steel plate	163 (171*)	228 (236*)	104 (166*)	139 (211*)	30	100	60–91
FCF100P	Oily steel plate	236 (347*)	298 (490*)	139 (337*)	205 (484*)	70	150	92–171
FCF125P	Oily steel plate	405 (475*)	442 (650*)	194 (445*)	236 (602*)	100	150	151–280

Values valid for steel sheet with surface finish Ra 1 and 2-3g/m² of press oil. *) Dry metal sheet

Material specifications

Material	Colour	Hardness, °Shore A	Temperature range, °C
Polyurethane, PU55	Orange	55	10–50
Polyurethane, PU60	Green transparent	60	10–50

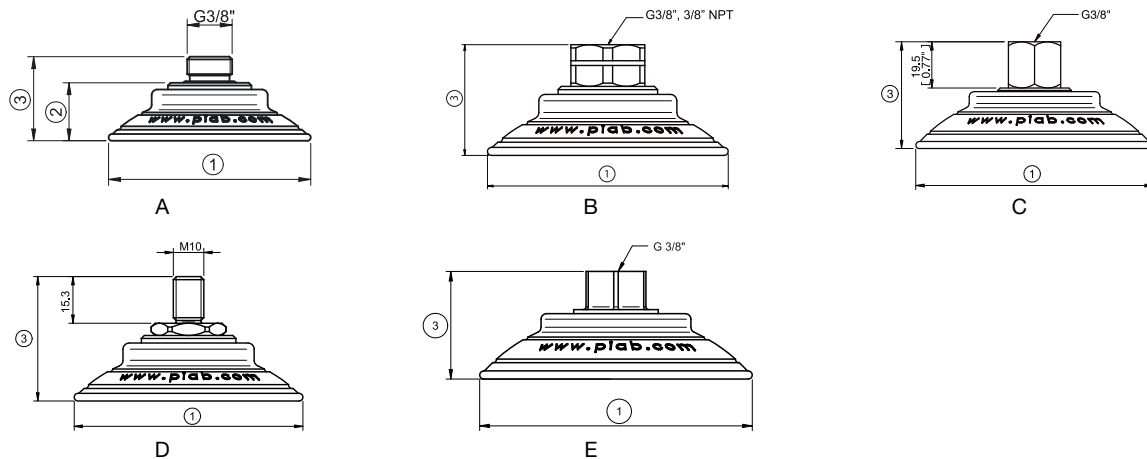
Material resistance

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	Code	Art. No.
A	Suction cup FCF35P Polyurethane 55/60, G3/8" male, with mesh filter	FCF35P.4R.O4UF	0119913
B	Suction cup FCF35P Polyurethane 55/60, G3/8" female	FCF35P.4R.O4UA	0118981
C	Suction cup FCF35P Polyurethane 55/60, G3/8" female, 17 mm thread	FCF35P.4R.G67W	0200652
B	Suction cup FCF35P Polyurethane 55/60, 3/8" NPT female	FCF35P.4R.O4UN	0122282
D	Suction cup FCF35P Polyurethane 55/60, M10x1.5 male	FCF35P.4R.M10M	0121431
A	Suction cup FCF50P Polyurethane 55/60, G3/8" male, with mesh filter	FCF50P.4R.O5UF	0118985
B	Suction cup FCF50P Polyurethane 55/60, G3/8" female	FCF50P.4R.O5UA	0118986
C	Suction cup FCF50P Polyurethane 55/60, G3/8" female, 17 mm thread	FCF50P.4R.G66W	0200685
B	Suction cup FCF50P Polyurethane 55/60, 3/8" NPT female	FCF50P.4R.O5UN	0122283
D	Suction cup FCF50P Polyurethane 55/60, M10x1.5 male	FCF50P.4R.M10M	0121432
A	Suction cup FCF75P Polyurethane 55/60, G3/8" male, with mesh filter	FCF75P.5R.G45M	0118423
B	Suction cup FCF75P Polyurethane 55/60, G3/8" female	FCF75P.5R.G45W	0118429
C	Suction cup FCF75P Polyurethane 55/60, G3/8" female, 17 mm thread	FCF75P.5R.G65W	0200687
E	Suction cup FCF75P Polyurethane 55/60, G3/8" female, plastic thread	FCF75P.5RC.G56WC	0124718
B	Suction cup FCF75P Polyurethane 55/60, 3/8" NPT female	FCF75P.5R.N47W	0122284
D	Suction cup FCF75P Polyurethane 55/60, M10x1.5 male	FCF75P.5R.M10M	0121433
A	Suction cup FCF100P Polyurethane 55/60 G3/8" male, with mesh filter	FCF100P.5R.G40M	0118430
B	Suction cup FCF100P Polyurethane 55/60, G3/8" female	FCF100P.5R.G46W	0118432
C	Suction cup FCF100P Polyurethane 55/60, G3/8" female, 17 mm thread	FCF100P.5R.G62W	0200690
E	Suction cup FCF100P Polyurethane 55/60, G3/8" female, plastic thread	FCF100P.5RC.G56WC	0124669
B	Suction cup FCF100P Polyurethane 55/60, 3/8" NPT female	FCF100P.5R.N48W	0122285
C	Suction cup FCF100P Polyurethane 55/60, M10x1.5 male	FCF100P.5R.M10M	0121385
A	Suction cup FCF125P Polyurethane 55/60, G3/8" male, with mesh filter	FCF125P.5R.G40M	0118435
B	Suction cup FCF125P Polyurethane 55/60, G3/8" female	FCF125P.5R.G46W	0118437
C	Suction cup FCF125P Polyurethane 55/60, G3/8" female, 17 mm thread	FCF125P.5R.G62W	0200693
E	Suction cup FCF125P Polyurethane 55/60, G3/8" female, plastic thread	FCF125P.5RC.G56WC	0124787
B	Suction cup FCF125P Polyurethane 55/60, 3/8" NPT female	FCF125P.5R.N48W	0122286
D	Suction cup FCF125P Polyurethane 55/60, M10x1.5 male	FCF125P.5R.M10M	0121435



	FCF35P				FCF50P				FCF75P				
	A	B	C	D	A	B	C	D	A	B	C	D	E
1	35	35	35	35	50	50	50	50	75	75	75	75	75
2	19	—	—	—	24	—	—	—	22	—	—	—	—
3	29	29	35	47.8	34	31	36.6	49.9	31	34	41	40.8	34
Max. vertical movement, mm	2	2	2	2	3	3	3	3	4	4	4	4	4
Max. expanding lip, mm	38	38	38	38	54	54	54	54	79	79	79	79	79

	FCF100P					FCF125P				
	A	B	C	D	E	A	B	C	D	E
1	100	100	100	100	100	126	126	126	126	126
2	26	—	—	—	—	32	—	—	—	—
3	36	39	45	44.8	41	42	45	51.2	50.8	44
Max. vertical movement, mm	6	6	6	6	6	8	8	8	8	8
Max. expanding lip, mm	105	105	105	105	105	132	132	132	132	132