

FCF35P, FCF50P, FCF75P, FCF100P, FCF125P



- ▶ 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 $> 0,1g/m^2$ 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	50	26	32	5	40	19–42
FCF50P	Oily steel plate	72	101	52	70	10	50	31–67
FCF75P	Oily steel plate	163	228	104	139	30	100	60–78
FCF100P	Oily steel plate	236	298	139	205	70	150	92–113
FCF125P	Oily steel plate	405	442	194	236	100	150	151–170

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

MATERIAL SPECIFICATIONS

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

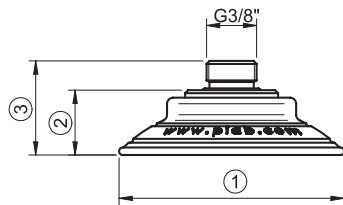
MATERIAL RESISTANCE

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

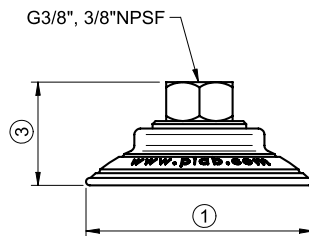
**Please contact Piab.

ORDERING INFORMATION

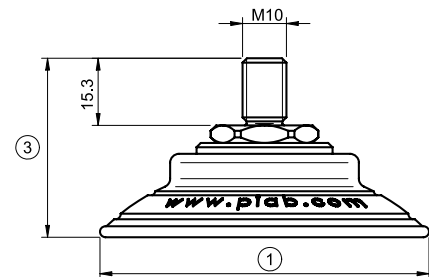
	Complete suction cups	Code	Art. No.
A	Suction cup FCF35P Polyurethane 55/60, G3/8" male, with mesh filter	FCF35P.4R.04UF	0119913
B	Suction cup FCF35P Polyurethane 55/60, G3/8" female	FCF35P.4R.04UA	0118981
B	Suction cup FCF35P Polyurethane 55/60, 3/8" NPT female	FCF35P.4R.04UN	0122282
C	Suction cup FCF35P 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.05UF	0118985
B	Suction cup FCF50P Polyurethane 55/60, G3/8" female	FCF50P.4R.05UA	0118986
B	Suction cup FCF50P Polyurethane 55/60, 3/8" NPT female	FCF50P.4R.05UN	0122283
C	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
B	Suction cup FCF75P Polyurethane 55/60, 3/8" NPT female	FCF75P.5R.N47W	0122284
C	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
B	Suction cup FCF100P Polyurethane 55/60, 3/8" NPT female	FCF100P.5R.N48W	0122285
C	Suction cup FCF100 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
B	Suction cup FCF125P Polyurethane 55/60, 3/8" NPT female	FCF125P.5R.N48W	0122286
C	Suction cup FCF125P Polyurethane 55/60, M10x1.5 male	FCF125P.5R.M10M	0121435



A



B



C

Measures complete suction cups	FCF35P			FCF50P			FCF75P			FCF100P			FCF125P		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
1	35	35	35	50	50	50	75	75	75	100	100	100	126	126	126
2	19	—	—	24	—	—	22	—	—	26	—	—	32	—	—
3	29	29	47.8	34	31	49.9	31	34	40.8	36	39	44.8	42	45	50.8
Max. vertical movement, mm	2	2	2	3	3	3	4	4	4	6	6	6	8	8	8
Max. expanding lip, mm	38	38	38	54	54	54	79	79	79	105	105	105	132	132	132

Suction cups
FCF-P