

## OCF20x80P, OCF30x90P, OCF40x110P



- ▶ 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  $> 0,1\text{g/m}^2$  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 "OCF" design is suitable for oblong objects with slightly curved or flat surfaces, such as those encountered with body parts in the automotive industry.
- ▶ Fitting option, male G3/8", with a swivel function prior to the locking operation, for easy positioning of the oval cup.
- ▶ 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 force vertical to the surface, N, at vacuum level |            | Friction/Shear forces parallel to the surface, N, at vacuum level |           | Volume<br>cm <sup>3</sup> | Min. curve radius<br>mm | Weight<br>g |
|------------|------------------------|---|------------|---|-----------|---------------------------|-------------------------|-------------|
|            |                        | 60 -kPa   | 90 -kPa    | 60 -kPa   | 90 -kPa   |                           |                         |             |
| OCF20x80P  | Oily steel plate       | 82 (75*)  | 90 (111*)  | 35 (78*)  | 48 (112*) | 15                        | 20                      | 24          |
| OCF30x90P  | Oily steel plate       | 115 (111*)  | 159 (157*) | 51 (107*)   | 74 (160*) | 17                        | 25                      | 24          |
| OCF40x110P | Oily steel plate       | 185 (178*)  | 246 (245*) | 54 (167*)   | 78 (232*) | 34                        | 42                      | 55          |

Values valid for steel sheet with surface finish Ra 1 and 2-3g/m<sup>2</sup> 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                 |

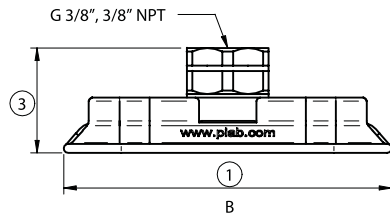
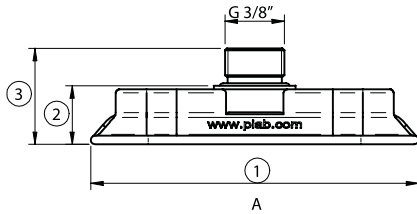
### Material resistance

| 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 OCF20x80P Polyurethane 55/60, G3/8" male       | OCF20x80P.5R.G41M  | 0121847  |
| B | Suction cup OCF20x80P Polyurethane 55/60, 3/8" NPT female  | OCF20x80P.5R.N47W  | 0121859  |
| B | Suction cup OCF20x80P Polyurethane 55/60, G3/8" female     | OCF20x80P.5R.G45W  | 0122455  |
| A | Suction cup OCF30x90P Polyurethane 55/60, G3/8" male       | OCF30x90P.5R.G41M  | 0122456  |
| B | Suction cup OCF30x90P Polyurethane 55/60, 3/8" NPT female  | OCF30x90P.5R.N47W  | 0122459  |
| B | Suction cup OCF30x90P Polyurethane 55/60, G3/8" female     | OCF30x90P.5R.G45W  | 0121786  |
| A | Suction cup OCF40x110P Polyurethane 55/60, G3/8" male      | OCF40x110P.5R.G40M | 0122457  |
| B | Suction cup OCF40x110P Polyurethane 55/60, 3/8" NPT female | OCF40x110P.5R.N48W | 0121865  |
| B | Suction cup OCF40x110P Polyurethane 55/60, G3/8" female    | OCF40x110P.5R.G46W | 0122860  |



|                            | OCF20x80P |         | OCF30x90P |           | OCF40x110P |        |
|----------------------------|-----------|---------|-----------|-----------|------------|--------|
|                            | A         | B       | A         | B         | A          | B      |
| 1                          | 24x84     | 24x84   | 32.5x92.5 | 32.5x92.5 | 43x113     | 43x113 |
| 2                          | 17.0      | 15.5    | 16.5      | 16.5      | 22.5       | 22.5   |
| 3                          | 27.0      | 30.1    | 26.5      | 29.5      | 32.5       | 35.5   |
| Max. vertical movement, mm | 3         | 3       | 4         | 4         | 5          | 5      |
| Max. expanding lip, mm     | 27x86.2   | 27x86.2 | 36x95     | 36x95     | 49x118     | 49x118 |