Oval Flat family (OF)



Oval suction cups are specially suitable for long and narrow objects. This program of oval suction cups has characteristics that are specially suited for handling of metal-sheet material.

Lifting forces

| | Lifting force vertical to the surface, lbf, at vacuum level | | Lifting force parallell to the surface, lbf, at vacuum level | | | |
|-------------------|---|----------|--|---------|----------|----------|
| | 6 -inHg | 18 -inHg | 27 -inHg | 6 -inHg | 18 -inHg | 27 -inHg |
| OF10x30P | 0.90 | 2.47 | 3.82 | 1.35 | 2.70 | 3.82 |
| OF15x45P | 2.02 | 6.07 | 9.22 | 1.35 | 4.50 | 7.64 |
| OF25x70P (PU40°) | 5.40 | 14.8 | 24.1 | 10.3 | 20.2 | 23.6 |
| OF25x70P (PU60°) | 5.40 | 17.3 | 26.5 | 9.44 | 28.6 | 36.2 |
| OF40x110P (PU40°) | 15.5 | 45.6 | 65.9 | 27.0 | 51.7 | 66.5 |
| OF40x110P (PU60°) | 16.6 | 45.0 | 68.1 | 22.0 | 51.3 | 92.2 |
| OF55x150P (PU40°) | 29.4 | 82.3 | 118.5 | 34.8 | 78.7 | 102.3 |
| OF55x150P (PU60°) | 30.1 | 84.5 | 125.4 | 28.8 | 76.0 | 107.2 |
| OF70x175P (PU40°) | 42.7 | 119.1 | 176.5 | 38.2 | 98.9 | 141.6 |
| OF70x175P (PU60°) | 40.5 | 128.1 | 193.3 | 45.0 | 124.8 | 168.6 |

General specifications

| | Outer diameter, in | Height, in | Min. curve radius, in | Max. vertical movement, in | Volume, in ³ |
|-----------|--------------------|------------|-----------------------|----------------------------|-------------------------|
| OF10x30P | 1.21x0.43 | 0.57 | 0.59 | 0.04 | 0.03 |
| OF15x45P | 1.77x0.59 | 0.68 | 1.18 | 0.04 | 0.06 |
| OF25x70P | 2.85x1.07 | 0.91 | 1.97 | 0.07 | 0.37 |
| OF40x110P | 4.45x1.69 | 0.69 | 3.03 | 0.12 | 1.28 |
| OF55x150P | 6.06x2.32 | 0.83 | 5.91 | 0.12 | 2.26 |
| OF70x175P | 7.09x2.95 | 0.98 | 5.12 | 0.22 | 4.88 |



Available materials

| | PU40° | PU50° | PU60° |
|-----------|-------|-------|-------|
| OF10x30P | | • | |
| OF15x45P | | • | |
| OF25x70P | • | | • |
| OF40x110P | • | | • |
| OF55x150P | • | | • |
| OF70x175P | • | | • |

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 | Corrugated / cardboard | Mark Free | Plastic injection molded parts |
|-----------|-----------------|------------------------|-----------|-----------------------------------|
| OF10x30P | | | • | |
| OF15x45P | | | • | |
| OF25x70P | • | • | • | • |
| OF40x110P | • | • | • | • |
| OF55x150P | • | • | • | • |
| OF70x175P | • | • | • | • |

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.

