

Deep family (D)



This family is designed for curved and irregular surfaces. Can lift even over corners and edges. This product is also available in material that is compliant by FDA (FDA 21 CFR 177.2600) and 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 |
| D15-2 | 2.9 | 7.8 | 11 | — | — | — |
| D20-2 | 5.9 | 15 | 18 | — | — | — |
| D30-2 | 14 | 26 | 31 | — | — | — |
| D50 | 36 | 78 | 98 | — | — | — |

General specifications

| | Outer diameter, mm | Height, mm | Min. curve radius, mm | Max. vertical movement, mm | Volume, cm ³ |
|-------|--------------------|------------|--------------------------|-------------------------------|-------------------------|
| D15-2 | 16 | 16.6 | 6 | 3 | 0.9 |
| D20-2 | 22 | 13.2 | 8 | 4.5 | 2.5 |
| D30-2 | 32 | 19.2 | 13 | 5 | 5 |
| D50 | 53 | 31.5 | 25 | 10 | 15 |

Available materials

| | Chloroprene, CR | Silicone, SIL | Silicone FDA EU, SIL FDA |
|-------|-----------------|---------------|--------------------------|
| D15-2 | ● | ● | ● |
| D20-2 | ● | ● | ● |
| D30-2 | ● | ● | ● |
| D50 | ● | ● | ● |

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 | FDA EU-standard compliant | Plastic injection molded parts |
|-------|-----------------|---------------------------|--------------------------------|
| D15-2 | ● | ● | ● |
| D20-2 | ● | ● | ● |
| D30-2 | ● | ● | ● |
| D50 | ● | ● | ● |

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.