SUCTION CUPS F



F110



FLAT SUCTION CUP WITH CLEATS

- Suitable for flat objects.
- ▶ Good stability and little inherent movement.
- Recommended when the lifting force is parallel to the surface of the object.
- Cleats prevent thin, sensitive objects from being deformed and gives extra friction when the lifting force is parallel.

LIFTING FORCES & TECHNICAL DATA

| | force vertical e, N, at vacuu | | 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 |
| 140 | 420 | 560 | 140 | 250 | 300 | 70 | 250 | 4.0 | 66 |

MATERIAL SPECIFICATIONS

| Material | Colour | Hardness °Shore A | Temperature range °C |
|------------------|-----------|----------------------|-------------------------|
| Nitrile-PVC, NPV | Black | 50 | 0–90 |
| Silicone, SIL | Red | 50 | -40–200 |
| HNBR | Grey-blue | 75 | -30–140* |

* For a shorter period of time up to +160 $^{\rm C}$

MATERIAL RESISTANCE

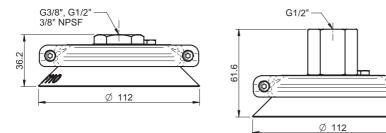
| Material | Wear resistance | Oil | Weather & ozone | Hydrolysis | Petrol | Concentrated acids | Alcohol | Oxidation |
|------------------|--------------------|-----------|--------------------|------------|-----------|-----------------------|---------|-----------|
| Nitrile-PVC, NPV | Excellent | Excellent | Good | Good | Excellent | Fair | Good | Good |
| Silicone, SIL | Good | Poor | Excellent | Fair | Poor | Poor | Good | Excellent |
| HNBR | Excellent | Excellent | Excellent | Good | Excellent | Fair | Good | Excellent |

SUCTION CUPS F



ORDERING INFORMATION

| | Complete suction cups | Art. No. |
|---|--|----------|
| А | Suction cup F110 Nitrile-PVC, G3/8" female, with mesh filter | 0101915 |
| А | Suction cup F110 Nitrile-PVC, 3/8" NPSF female, with mesh filter | 0101916 |
| А | Suction cup F110 Nitrile-PVC, G1/2" female, with mesh filter | 0101917 |
| В | Suction cup F110 Nitrile-PVC, G1/2" female, with cone valve | 0101921 |
| А | Suction cup F110 Silicone, G3/8" female, with mesh filter | 0101908 |
| A | Suction cup F110 Silicone, 3/8" NPSF female, with mesh filter | 0101909 |
| А | Suction cup F110 Silicone, G1/2" female, with mesh filter | 0101910 |
| В | Suction cup F110 Silicone, G1/2" female, with cone valve | 0101914 |
| А | Suction cup F110 HNBR, G3/8" female, with mesh filter | 0108188 |
| A | Suction cup F110 HNBR, 3/8" NPSF female, with mesh filter | 0108189 |
| А | Suction cup F110 HNBR, G1/2" female, with mesh filter | 0108190 |



| Rubber part | Art. No. |
|------------------------------|----------|
| Suction cup F110 Nitrile-PVC | 3150132P |
| Suction cup F110 Silicone | 3150132S |
| Suction cup F110 HNBR | 3150132T |

В

0

A

| Fittings | Art. No. |
|---|----------|
| Fitting 110 G3/8" female, with mesh filter | 0100557 |
| Fitting 110, G1/2" female, with mesh filter | 0100561 |
| Fitting 110, 3/8" NPSF female, with mesh filter | 0100559 |
| Fitting 110, G1/2" female, with cone valve | 0100563 |

For further information and dimensioned drawings, see SUCTION CUPS FITTINGS chapter.

| Spare part | Material | Temperature range °C | Art. No. |
|----------------------------------|-----------|-------------------------|----------|
| Cone valve for Fitting 110 & 150 | AI/SS/NBR | -40–110 | 3350034 |