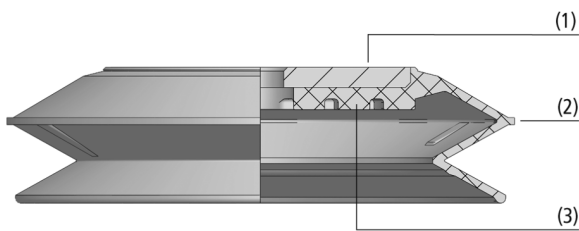


## Bellows Suction Cups FSGPL (1.5 Folds)

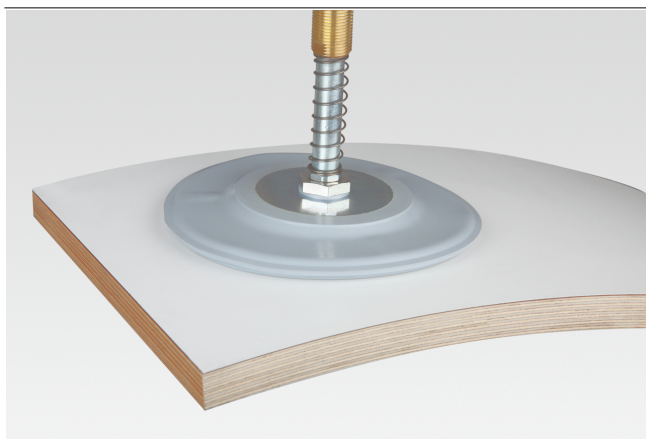
Suction area (Ø) from 100 mm to 250 mm



Bellows Suction Cups FSGPL (1.5 Folds)



System design Bellows Suction Cups FSGPL (1.5 Folds)



Bellows suction cups FSGPL being used for handling coated wood

### Suitability for industry specific applications

#### Application

- Round bellows suction cup with 1.5 folds for handling of cardboard, sheet metal, wood and ceramics
- Handling of workpieces with uneven surfaces (optimal adaptation due to smooth sealing lip)

#### Design

- Suction cup FSGPL with 1.5 folds (2) and vulcanized mounting plate (1)
- Steel supporting plate with female thread
- Lower side of supporting plate covered with an elastomer coating (3)

#### Product highlights

- Large diameters for large, heavy, but also sensitive workpieces
- Soft, tapered sealing lip adapts optimally to curved surfaces
- 1.5 folds ensure high suction force and effective damping during placement on workpiece
- Elastomer support on the bottom prevents permanent deformation of sensitive workpieces

## Bellows Suction Cups FSGPL (1.5 Folds)

Suction area (Ø) from 100 mm to 250 mm

### Designation code Bellows Suction Cups FSGPL (1.5 Folds)

<b>FSGPL</b>	–	<b>200</b>	–	<b>NBR-55</b>	–	<b>G1/2-IG</b>
<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>

#### 1 – Abbreviated designation

Code	Version
FSGPL	1.5 folds

#### 2 – Suction area

Code	Diameter in mm
100...250	ø 100 to 250

#### 3 – Material

Code	Material
HT1-60	High temperature material
NBR-55	Nitrile caoutchuc

#### 4 – Connection

Code	Connection
G1/2-IG	G1/2-IG (IG = female (F))

Suction cup FSGPL, available in various diameters, is delivered with support plate vulcanized to elastomer part.

### Ordering data Bellows Suction Cups FSGPL (1.5 Folds)

Type			Suction cup material with ShA: *	
			HT1-60	NBR-55
FSGPL	100	G1/2-IG	10.01.06.03150	10.01.06.02932
FSGPL	120	G1/2-IG	10.01.06.03151	10.01.06.02933
FSGPL	150	G1/2-IG	10.01.06.03145	10.01.06.00101
FSGPL	200	G1/2-IG	10.01.06.03146	10.01.06.00102
FSGPL	250	G1/2-IG	10.01.06.03421	10.01.06.00103

\*Additional material specifications at beginning of the section "Vacuum Suction Cups"

### Technical data Bellows Suction Cups FSGPL (1.5 Folds)

Type		Suction force (-600 mbar) [N]*	Pull-off force [N]	Volume [cm <sup>3</sup> ]	Workpiece radius min. (convex) [mm]	Hose inner diameter (recom.) d [mm]**
FSGPL	100	150	250	150	100	12
FSGPL	120	280	400	296	150	12
FSGPL	150	370	500	450	250	12
FSGPL	200	850	950	877	350	12
FSGPL	250	1,610	2,000	1,678	500	12

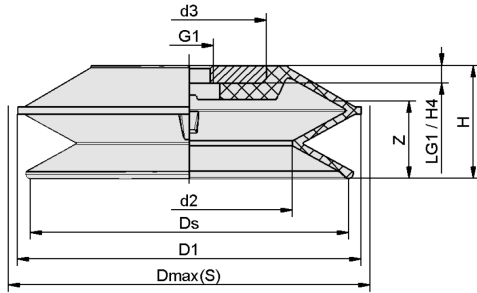
\*The specified suction forces are theoretical values at a vacuum of -0.6 bar and with a smooth, dry workpiece surface - they do not include a safety factor

\*\*The recommended hose diameter is based on a hose length of approx. 2 m

## Bellows Suction Cups FSGPL (1.5 Folds)

Suction area ( $\emptyset$ ) from 100 mm to 250 mm

### Design data Bellows Suction Cups FSGPL (1.5 Folds)



FSGPL

## Bellows Suction Cups FSGPL (1.5 Folds)

Suction area (Ø) from 100 mm to 250 mm

### Design data Bellows Suction Cups FSGPL (1.5 Folds)

Type*		d2 [mm]	d3 [mm]	D1 [mm]	Dmax(S) [mm]**	Ds [mm]	G1***	H [mm]	H4 [mm]	LG1 [mm]	Z (Stroke) [mm]
FSGPL	100	57.2	44	101	106.5	96.1	G1/2"-F	43.3	8	8	29.1
FSGPL	120	79.3	70	128	135.0	118.2	G1/2"-F	51.0	8	8	35.7
FSGPL	150	93.0	70	155	160.0	143.5	G1/2"-F	51.0	8	8	35.7
FSGPL	200	137.0	120	202	208.0	191.0	G1/2"-F	54.0	8	8	37.2
FSGPL	250	186.0	167	250	256.0	239.3	G1/2"-F	60.0	8	8	43.0

\*Acceptable dimensional tolerances for rubber parts concerning to DIN ISO 3302-1 E3

\*\*External dimension of the suction cup when it is pressed against the workpiece by the vacuum

\*\*\*Mounting plate optionally available without drilled holes