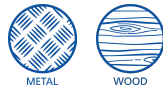


Flat Suction Cups (Round)

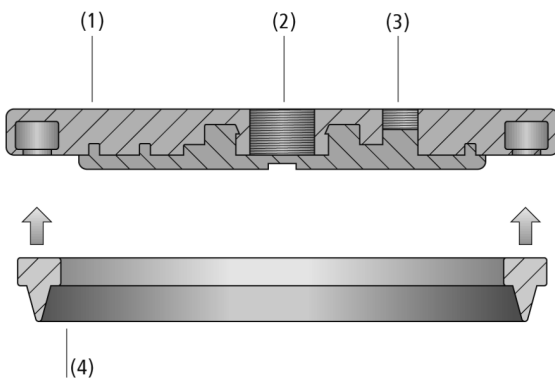


## Suction Plates SPK

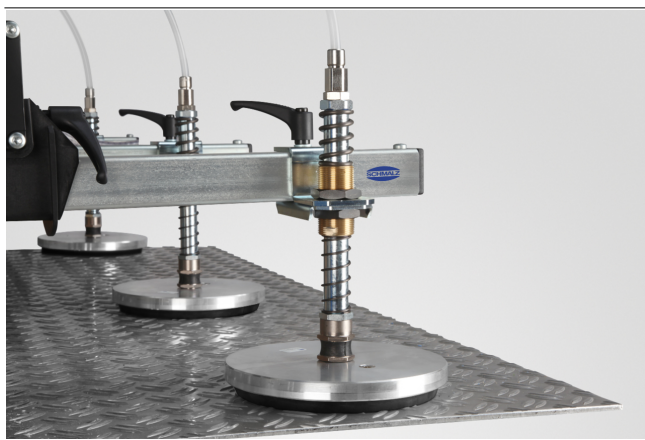
Suction area (Ø) from 55 mm to 250 mm



Suction Plates SPK



System Design Suction Plates SPK



Suction plates SPK being used for handling corrugated sheet metal

### Suitability for Industry Specific Applications

#### Applications

- Round suction plate for handling of objects with very rough or structured surfaces (such as ornamental glass, checker plate, broken natural stone, etc.)
- Deactivation of unused suction cups by touch valves (accessory)

#### Design

- Robust and wear-resistant suction plate SPK, consisting of flexible sealing edge MOS (4) made of EPDM and aluminum supporting plate (1)
- Sealing ring without seams
- Sealing edge is securely clipped into the base plate
- Sealing edge can be replaced separately in case of wear
- Lower side of supporting plate with elastomer insert to prevent damage to workpieces
- Threaded hole for vacuum connection (2) or touch valve (off-centre) (3) sealed with a plug when delivered

#### Product Highlights

- Sealing edge made of very adaptable EPDM adapts optimally to highly structured surfaces
- Sealing edge positively clipped into support plate for quick replacement of the sealing element
- Support surfaces on the bottom prevent permanent deformation of thin-walled workpieces
- Fastest cycle times thanks to low own volume
- Wide range of diameters for a large selection of different workpieces

## Suction Plates SPK

Suction area (Ø) from 55 mm to 250 mm

### Designation Code Suction Plates SPK

<b>SPK</b>	–	<b>110</b>	–	<b>MOS EPDM-15</b>	–	<b>G1/2-IG</b>
1		2		3		4

#### 1 – Abbreviated designation

Code	Version
SPK	Flat

#### 2 – Suction area

Code	Diameter in mm
55...250	ø 55 to 250

#### 3 – Material

Code	Material
MOS EPDM-15	Foam rubber made of ethylene-propylene-caoutchuc

#### 4 – Connection

Code	Connection
G1/4-IG	G1/4-IG (IG = female (F))
G1/2-IG	G1/2-IG

Suction plate SPK (sealing ring + support plate) is delivered assembled. The assembly consists of:

- Sealing ring of type DR-SPK – elastomer part, available in various diameters
- Aluminum support plate, available with various threads

Available spare parts: sealing ring DR-SPK

Available accessories: touch valve

### Ordering Data Suction Plates SPK

Type	Part no.
SPK 55 MOS EPDM-15 G1/4-IG	10.01.01.12060
SPK 80 MOS EPDM-15 G1/4-IG	10.01.01.12061
SPK 110 MOS EPDM-15 G1/2-IG	10.01.01.12062
SPK 160 MOS EPDM-15 G1/2-IG	10.01.01.12063
SPK 200 MOS EPDM-15 G1/2-IG	10.01.01.12064
SPK 250 MOS EPDM-15 G1/2-IG	10.01.01.12065

### Ordering Data Spare Parts Suction Plates SPK

Type	Spare Parts	Part no.
SPK 55 MOS EPDM-15 G1/4-IG	Sealing ring for SPK suction plate	DR-SPK 55 MOS EPDM-15 10.01.01.12072
SPK 80 MOS EPDM-15 G1/4-IG	Sealing ring for SPK suction plate	DR-SPK 80 MOS EPDM-15 10.01.01.12073
SPK 110 MOS EPDM-15 G1/2-IG	Sealing ring for SPK suction plate	DR-SPK 110 MOS EPDM-15 10.01.01.12074
SPK 160 MOS EPDM-15 G1/2-IG	Sealing ring for SPK suction plate	DR-SPK 160 MOS EPDM-15 10.01.01.12075
SPK 200 MOS EPDM-15 G1/2-IG	Sealing ring for SPK suction plate	DR-SPK 200 MOS EPDM-15 10.01.01.12076
SPK 250 MOS EPDM-15 G1/2-IG	Sealing ring for SPK suction plate	DR-SPK 250 MOS EPDM-15 10.01.01.12077

### Ordering Data Accessories Suction Plates SPK

Type	Accessories	Part no.
SPK 55 MOS EPDM-15 G1/4-IG	-	-
SPK 80 MOS EPDM-15 G1/4-IG	Touch Valve	TV G1/4-AG 13 10.05.10.00061
SPK 110 MOS EPDM-15 G1/2-IG	Touch Valve	TV G1/4-AG 13 10.05.10.00061
SPK 160 MOS EPDM-15 G1/2-IG	Touch Valve	TV G1/4-AG 13 10.05.10.00061
SPK 200 MOS EPDM-15 G1/2-IG	Touch Valve	TV G1/2-AG 13 10.05.10.00038
SPK 250 MOS EPDM-15 G1/2-IG	Touch Valve	TV G1/2-AG 13 10.05.10.00038

## Suction Plates SPK

Suction area (Ø) from 55 mm to 250 mm

### Technical Data Suction Plates SPK

Type	Suction force (-600 mbar) [N]*	Volume [cm <sup>3</sup> ]	Workpiece radius min. (convex) [mm]	Hose diameter (recom.) d [mm]**
SPK 55 MOS EPDM-15 G1/4-IG	121	12	250	9
SPK 80 MOS EPDM-15 G1/4-IG	256	22	400	9
SPK 110 MOS EPDM-15 G1/2-IG	471	68	500	12
SPK 160 MOS EPDM-15 G1/2-IG	1,060	129	1,000	12
SPK 200 MOS EPDM-15 G1/2-IG	1,700	199	1,600	12
SPK 250 MOS EPDM-15 G1/2-IG	2,714	291	2,600	12

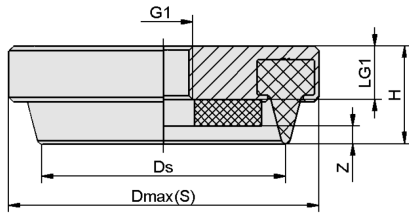
\*The specified suction forces are theoretical values at a vacuum of -0.6 bar and with a smooth, dry workpiece surface - they do not include a safety factor

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

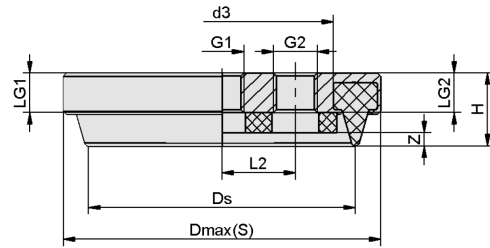
## Suction Plates SPK

Suction area ( $\emptyset$ ) from 55 mm to 250 mm

### Design Data Suction Plates SPK



SPK 55



SPK 80 - 250

## Suction Plates SPK

Suction area ( $\emptyset$ ) from 55 mm to 250 mm

### Design Data Suction Plates SPK

Type*	d3 [mm]	Dmax(S) [mm]**	Ds [mm]	G1	G2***	H [mm]	LG1 [mm]	LG2 [mm]	L2 [mm]	Z (Stroke) [mm]
SPK 55 MOS EPDM-15 G1/4- IG	-	70.0	55	G1/4"-F	-	22.0	11.5	-	-	4
SPK 80 MOS EPDM-15 G1/4- IG	66.8	95.2	80	G1/4"-F	G1/4"-F	22.0	11.5	11.5	22.0	4
SPK 110 MOS EPDM-15 G1/2- IG	96.0	130.0	110	G1/2"-F	G1/4"-F	25.5	14.5	14.5	36.5	6
SPK 160 MOS EPDM-15 G1/2- IG	148.0	179.0	159	G1/2"-F	G1/4"-F	25.5	14.5	14.5	36.5	6
SPK 200 MOS EPDM-15 G1/2- IG	185.0	219.0	199	G1/2"-F	G1/2"-F	25.5	14.5	14.5	76.0	6
SPK 250 MOS EPDM-15 G1/2- IG	235.0	269.0	249	G1/2"-F	G1/2"-F	25.5	14.5	14.5	76.0	6

\*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

\*\*\*A plug is fitted in this connection in the factory