Suction Plates SHF

Suction area (Ø) from 125 mm to 210 mm





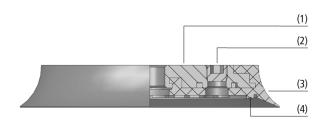
Suitability for industry specific applications

Application

- Round suction plate for handling of sheets, furniture elements, parquet and similar large, flat workpieces
- Handling of wooden parts with rough surfaces



Suction Plates SHF



System design Suction Plates SHF



Suction plates SHF being used for handling pressed wooden boards

Design

- Suction plate SHF consisting of sealing ring (3) and aluminum mounting plate (1)
- Side connection (2) normally sealed with a screw plug (glued into position for extra safety)
- Sealing ring clipped securely onto supporting plate with positive locking (can be changed without tools)
- Double internal sealing edge (4) for better sealing to rough surfaces
- Optional touch valve can be ordered separately (use medium-strength locking compound for installation)
- Filter screen available optionally

Product highlights

- Soft sealing lip adapts optimally to uneven workpieces
- Double internal sealing edge provides optimum sealing on rough and smooth surfaces
- Special structure of the suction cup bottom enables applications with highest dynamics and short cycle times
- Seal can be changed quickly and without tools

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Designation code Suction Plates SHF

SHF	-	210	_	NK-45	_	G1/2-IG
1		2		3		4

1 - Abbreviated designation

Code	Version
SHF	Flat

2 - Suction area

Code	Diameter in mm
125210	ø 125 to 210

3 - Material

Code	Material
NK-45	Natural rubber

4 - Connection

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

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

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

Available spare parts: sealing ring DR-SHF

Available accessories: touch valve, filter screen

Ordering data Suction Plates SHF

Type*	Part no.
SHF 125 NK-45 G1/4-IG	10.01.01.11788
SHF 160 NK-45 G1/2-IG	10.01.01.12025
SHF 210 NK-45 G1/2-IG	10.01.01.11814

^{*}Additional material specifications at beginning of the section "Vacuum Suction Cups"

← Ordering data Spare parts Suction Plates SHF

Туре	Spare parts	Part no.	
SHF 125 NK-45 G1/4-IG	Sealing ring for SHF suction plate	DR-SHF 125 NK-45	10.01.01.11783
SHF 160 NK-45 G1/2-IG	Sealing ring for SHF suction plate	DR-SHF 160 NK-45	10.01.01.12023
SHF 210 NK-45 G1/2-IG	Sealing ring for SHF suction plate	DR-SHF 210 NK-45	10.01.01.11809

• Ordering data Accessories Suction Plates SHF

Туре	Accessories	Part no.	
SHF 125 NK-45 G1/4-IG	Touch Valve	TV G1/4-AG 13	10.05.10.00061
SHF 160 NK-45 G1/2-IG	Touch Valve	TV G1/4-AG 13	10.05.10.00061
SHF 210 NK-45 G1/2-IG	Touch Valve	TV G1/4-AG 13	10.05.10.00061

Туре	Accessories	Accessories			
SHF 125 NK-45 G1/4-IG	Filter screen (outside)	SIEB 19.5x1 MS 100	10.07.01.00215		
SHF 160 NK-45 G1/2-IG	Filter screen (outside)	SIEB 19.5x1 MS 100	10.07.01.00215		
SHF 210 NK-45 G1/2-IG	Filter screen (outside)	SIEB 19.5x1 MS 100	10.07.01.00215		

Туре	Accessories	Part no.	
SHF 125 NK-45 G1/4-IG	Filter screen (center)	SIEB 19.5x1 MS 100	10.07.01.00215
SHF 160 NK-45 G1/2-IG	Filter screen (center)	SIEB 27x1 MS-A2 100 100/65	10.07.01.00110
SHF 210 NK-45 G1/2-IG	Filter screen (center)	SIEB 27x1 MS-A2 100 100/65	10.07.01.00110

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Technical data Suction Plates SHF

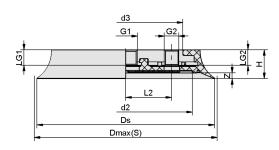
Туре	Suction force (-600 mbar)	Suction force d2 [N]**	Volume [cm³]	Workpiece radius min.	Hose inner diameter
	[N]*			(convex) [mm]	(recom.) d [mm]***
SHF 125 NK-45 G1/4-IG	625	290	70	305	9
SHF 160 NK-45 G1/2-IG	1,025	580	117	500	12
SHF 210 NK-45 G1/2-IG	1,770	1,160	224	885	12

^{***}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 **Suction force referred to the sealing-edge diameter d2
***The recommended hose diameter is based on a hose length of approx. 2 m

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Design data Suction Plates SHF



SHF



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The Second Plates SHF

Type*	d2 [mm]	d3 [mm]	Dmax(S) [mm]**	Ds [mm]	G1	G2***	H [mm]	L2 [mm]	LG1 [mm]	LG2 [mm]	Z (Stroke) [mm]
SHF 125 NK-45 G1/4- IG	85	70	133	125	G1/4"-F	G1/4"-F	26	26.5	14	12.8	6
SHF 160 NK-45 G1/2- IG	120	103	168	160	G1/2"-F	G1/4"-F	26	41.4	14	12.8	6
SHF 210 NK-45 G1/2- IG	170	134	218	210	G1/2"-F	G1/4"-F	26	52.8	14	12.8	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