

Suction Plates for High-Temperature SPL-HT

Suction area (Ø) from 35 mm to 140 mm



Suitability for industry specific applications

Application

- Round suction plate for handling of workpieces with smooth surfaces
- Usage in manufacturing of float glass or in tempering processes in the glass industry
- Hot forming in the metal industry



Suction Plates for High-Temperature SPL-HT

Design

- Robust stainless-steel main body
- Seal clamped into the main body and quickly replaceable
- Seal made of special textile material for handling hot workpieces

Product highlights

- Permanent temperature resistance due to stainless steel main body with seal made of special mesh
- Temperature resistant up to 600 °C for safe and gentle gripping of hot workpieces
- Seal can be quickly and easily replaced separately in case of wear or damage

Designation code Suction Plates for High-Temperature SPL-HT

SPL-HT	–	90	–	ST	–	G1/4-IG
1		2		3		4

1 – Abbreviated designation

Code	Version
SPL-HT	Flat

2 – Suction area

Code	Diameter in mm
35...140	ø 35 to 140

3 – Material

Code	Material
ST	Woven silicate material

4 – Connection

Code	Connection
G1/8-IG	G1/8-IG (IG = female (F))
G1/4-IG	G1/4-IG
G3/8-IG	G3/8-IG

Suction plate SPL-HT (sealing ring + mounting) is delivered assembled. The assembly consists of:

- Sealing ring of type DR-SPL-HT – available in various diameters
- Stainless-steel mounting – available with various threads

Available spare parts: sealing ring DR-SPL-HT

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Ordering data Suction Plates for High-Temperature SPL-HT

Type	Part no.
SPL-HT 35 ST G1/8-IG	10.01.23.00023
SPL-HT 60 ST G1/4-IG	10.01.23.00006
SPL-HT 90 ST G1/4-IG	10.01.23.00007
SPL-HT 140 ST G3/8-IG	10.01.23.00008

Ordering data Spare parts Suction Plates for High-Temperature SPL-HT

Type	Spare parts	Part no.
SPL-HT 35 ST G1/8-IG	Sealing ring for SPL suction plate	DR-SPL-HT 35 ST 10.01.23.00022
SPL-HT 60 ST G1/4-IG	Sealing ring for SPL suction plate	DR-SPL-HT 60 ST 10.01.23.00001
SPL-HT 90 ST G1/4-IG	Sealing ring for SPL suction plate	DR-SPL-HT 90 ST 10.01.23.00016
SPL-HT 140 ST G3/8-IG	Sealing ring for SPL suction plate	DR-SPL-HT 140 ST 10.01.23.00018

Technical data Suction Plates for High-Temperature SPL-HT

Type*	Suction force (-600 mbar) [N]**	Volume [cm ³]	Workpiece radius min. (convex) [mm]	Required suction capacity for $p_u = -0.6$ bar [l/min]	Weight [g]	Hose inner diameter (recom.) d [mm]***
SPL-HT 35 ST G1/8-IG	47	4	90	22	225	4
SPL-HT 60 ST G1/4-IG	130	12	440	32	375	6
SPL-HT 90 ST G1/4-IG	320	25	1,060	32	675	6
SPL-HT 140 ST G3/8-IG	740	50	1,700	47	1,390	9

*The recommended suction capacity is based on an average workpiece temperature of about 300 °C. We recommend testing with original workpieces.

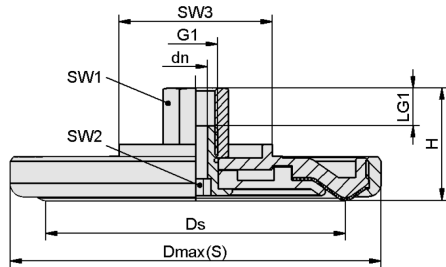
**The suction force figures are theoretical values at a vacuum of -0.6 bar and with a smooth, flat workpiece surface. They are specified without any safety factor. For the system design the safety factors should be increased at least by the factor 3.

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

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Design data Suction Plates for High-Temperature SPL-HT



SPL-HT ST

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Design data Suction Plates for High-Temperature SPL-HT

Type*	dn [mm]	Dmax(S) [mm]**	Ds [mm]	G1	H [mm]	LG1 [mm]	SW1 [mm]	SW2 [mm]	SW3 [mm]
SPL-HT 35 ST G1/8-IG	5	53.0	35	G1/8"-F	29	12	14	5	27
SPL-HT 60 ST G1/4-IG	7	79.5	58	G1/4"-F	39	12	17	8	27
SPL-HT 90 ST G1/4-IG	7	111.5	90	G1/4"-F	39	12	17	8	46
SPL-HT 140 ST G3/8-IG	8	159.5	138	G3/8"-F	39	12	22	8	95

*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