

# Suction pads for handling sheet metal

Bell suction pads SAOG (oval)



Sheet-metal suction pads SAOG

## Our highlights...

- Oval, bell-shaped suction pad
- Suction pad made of extremely flexible NBR, material hardness 45 Shore
- Many different connection elements available

## Your advantages...

- >Optimum adaptation to narrow, very curved workpieces
- >Adaptation to workpieces with very small curvature radii
- >Adapters available for mounting the suction pad on all common load cross-beams and feeder systems



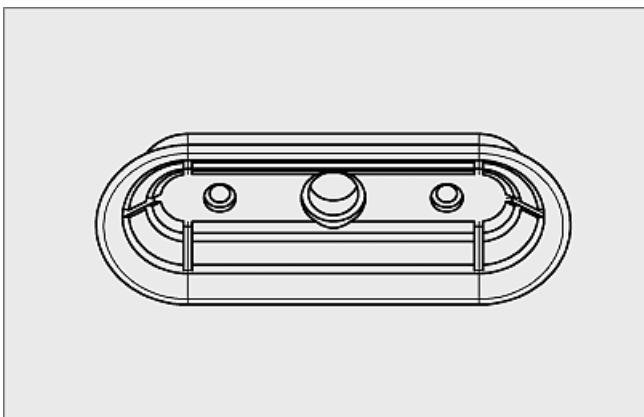
Bell suction pad SAOG for lifting very curved sheet-metal parts

## Applications

- Handling of long, oiled workpieces with extremely small curved radii
- Handling of metal sheets with very dynamic movements (shorter cycle times)
- Inner support permits handling of thin steel sheets and aluminum sheets without deformation
- For use e.g. in feeder systems for press lines in the automobile industry
- Special slot on the bottom prevents the oily metal sheets from slipping, permitting precise positioning in laser-cutting machines and stamping presses

## Construction

- Oval, bell-shaped suction pad with single sealing lip, special groove and inner support
- Suction pads made of NBR material hardness 45 Shore
- Suction pads are delivered assembled



## Suitability for branch-specific applications

Vacuum suction pads  
2

# Suction pads for handling sheet metal



## Bell suction pads SAOG (oval)

Vacuum suction pads  
2

### Designation code Bell suction pads SAOG (oval)

Short designation	Length x width in mm	Material and shore hardness	Connection thread
Example: SAOG	80x30	NBR-45	G1/4-AG
SAOG	60x20 80x30 95x40	NBR-45	G1/4-AG (AG = male) G1/4-IG (IG = female) G3/8-AG G3/8-IG M10-AG M14x1.5-AG RA...rectangular adapter

### Ordering data Bell suction pads SAOG (oval)

Type	Connection						
	G1/4" (male)	G1/4" (female)	G3/8" (male)	G3/8" (female)	M10 (male)	M14x1.5 (male)	Rectangular adapter
SAOG 60x20 NBR-45	10.01.01.11755	10.01.01.11754	10.01.01.11758	10.01.01.11757	10.01.01.11760	10.01.01.11761	10.01.01.11762
SAOG 80x30 NBR-45	10.01.01.11659	10.01.01.11649	10.01.01.11651	10.01.01.11614	10.01.01.11653	10.01.01.11655	10.01.01.11668
SAOG 95x40 NBR-45	10.01.01.11660	10.01.01.11650	10.01.01.11652	10.01.01.11615	10.01.01.11654	10.01.01.11656	10.01.01.11669

### Technical data Bell suction pads SAOG (oval)

Type	Suction force [N]*	Lateral force [N]**	Lateral force oily surface [N]**	Volume [cm³]	Min. curve radius [mm] (convex)	Recom. internal hose diameter d [mm]
SAOG 60x20 NBR-45	56	35	10	4,5	8	4
SAOG 80x30 NBR-45	105	65	45	13,2	20	4
SAOG 95x40 NBR-45	165	97	68	26,9	25	4

\*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

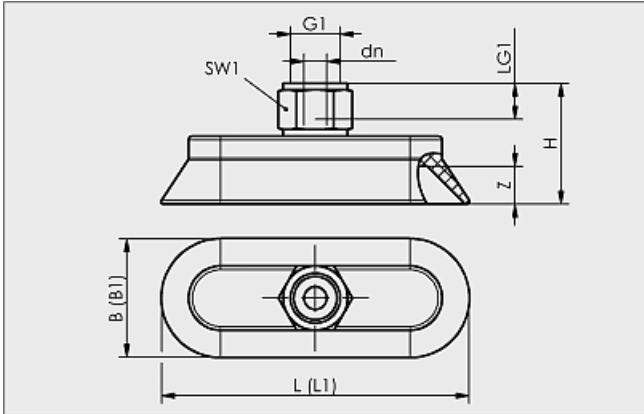
\*\*The specified transverse forces are values measured at a vacuum of -0.6 bar with a dry or oily, smooth, flat workpiece surface. Depending on the workpiece surface and its quality, the actual values may deviate from these values.

# Suction pads for handling sheet metal

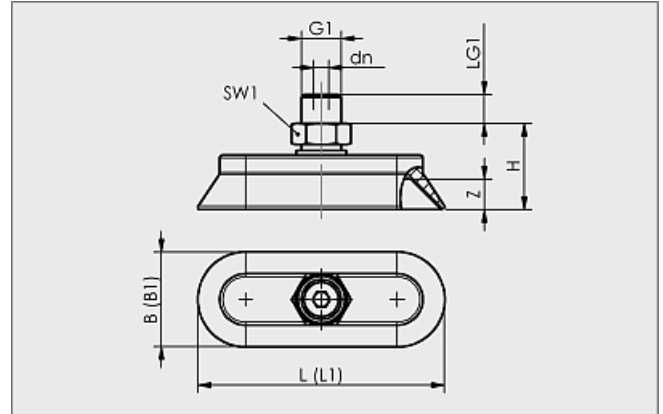


## Bell suction pads SAOG (oval)

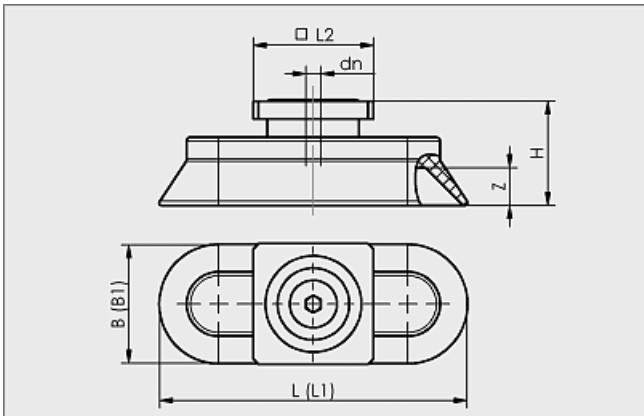
### Design data Bell suction pads SAOG (oval)



SAOG 60x20 to 95x40 IG



SAOG 60x20 to 95x40 AG



SAOG 60x20 to 95x40 RA (rectangular adapter)

# Suction pads for handling sheet metal



## Bell suction pads SAOG (oval)



### Design data Bell suction pads SAOG (oval)

Type	Dimensions in mm*										
	B	B1**	dn	G1	H	L	L1**	L2	LG1	SW1	Z
SAOG 60x20 NBR-45 G1/4-AG	21,5	26	5,0	G1/4"-M	35,0	61,5	66	-	10,5	17	4,5
SAOG 60x20 NBR-45 G1/4-IG	21,5	26	6,0	G1/4"-F	29,0	61,5	66	-	9,5	17	4,5
SAOG 60x20 NBR-45 G3/8-AG	21,5	26	5,0	G3/8"-M	32,0	61,5	66	-	11,0	22	4,5
SAOG 60x20 NBR-45 G3/8-IG	21,5	26	6,0	G3/8"-F	29,5	61,5	66	-	9,5	22	4,5
SAOG 60x20 NBR-45 M10-AG	21,5	26	4,0	M10-M	33,5	61,5	66	-	11,0	16	4,5
SAOG 60x20 NBR-45 M14x1.5-AG	21,5	26	5,0	M14x1.5-M	35,5	61,5	66	-	11,0	22	4,5
SAOG 60x20 NBR-45 RA	21,5	26	4,0	-	24,5	61,5	66	31,8	-	-	4,5
SAOG 80x30 NBR-45 G1/4-AG	31,3	36	5,0	G1/4"-M	27,5	81,3	86	-	10,5	17	5,5
SAOG 80x30 NBR-45 G1/4-IG	31,3	36	6,0	G1/4"-F	32,0	81,3	86	-	9,5	17	5,5
SAOG 80x30 NBR-45 G3/8-AG	31,3	36	5,0	G3/8"-M	24,0	81,3	86	-	11,0	22	5,5
SAOG 80x30 NBR-45 G3/8-IG	31,3	36	6,0	G3/8"-F	32,5	81,3	86	-	8,0	22	5,5
SAOG 80x30 NBR-45 M10-AG	31,3	36	4,0	M10-M	24,5	81,3	86	-	12,0	16	5,5
SAOG 80x30 NBR-45 M14x1.5-AG	31,3	36	5,2	M14x1.5-M	26,5	81,3	86	-	12,0	22	5,5
SAOG 80x30 NBR-45 RA	31,3	36	4,0	-	27,5	81,3	86	31,8	-	-	5,5
SAOG 95x40 NBR-45 G1/4-AG	41,3	46	5,0	G1/4"-M	30,5	96,5	102	-	10,5	17	6,0
SAOG 95x40 NBR-45 G1/4-IG	41,3	46	6,0	G1/4"-F	35,0	96,5	102	-	9,5	17	6,0
SAOG 95x40 NBR-45 G3/8-AG	41,3	46	5,0	G3/8"-M	38,0	96,5	102	-	11,0	22	6,0
SAOG 95x40 NBR-45 G3/8-IG	41,3	46	6,0	G3/8"-F	35,5	96,5	102	-	8,0	22	6,0
SAOG 95x40 NBR-45 M10-AG	41,3	46	4,0	M10-M	27,5	96,5	102	-	12,0	16	6,0
SAOG 95x40 NBR-45 M14x1.5-AG	41,3	46	5,2	M14x1.5-M	29,5	96,5	102	-	12,0	22	6,0
SAOG 95x40 NBR-45 RA	41,3	46	4,0	-	30,5	96,5	102	31,8	-	-	6,0

\*Acceptable dimensional tolerances for rubber parts concerning to M3 - DIN 7715

\*\*L1 and D1 are the external dimensions of the suction pad when it is pressed against the workpiece by the vacuum

Vacuum suction pads  
2