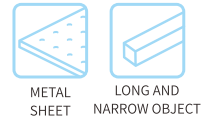


# SOF Series

Oval Bellows Suction Cup Special for Sheet Metal



- SB
- SBA
- SBB
- SBF
- SBOF
- SFT
- STP
- SBL
- SBLP
- SF
- SU
- SUF
- SFG
- STC
- SFF
- SFM
- SDM
- SOB
- SOF**
- SOG
- SFP
- SBP
- SXP
- SGP
- SDL
- SH
- SHB
- SZ
- SAN
- SAO
- SPA
- SPC
- SPF
- SPJ
- SPU
- SNP
- SOP

## Features

- ◇ Large inner support structure protects the sheet metal from deformation and damage during the handling process.
- ◇ Slot structure efficiently improves the friction force between suction cup and workpiece in order to prevent the oily sheet metal from slipping during the handling process.
- ◇ Oval suction cup is suitable for long and narrow workpieces.
- ◇ 2 types hardness of material for option(45 & 60), suitable for metal sheet with different thickness and shapes.

## Applications

- ◇ Car stamped steel plate, oily steel plate
- ◇ Long and thin workpiece

## How to order

### SOF 16×50 N - G2F

- ①
- ②
- ③
- ④

① Series	② Diemision	③ Material & Hardness	④ Connection thread
<b>SOF</b>	16×50 40×110	<b>N</b> - NBR <span style="background-color: #ff9800; color: white; padding: 2px;">60</span>	<b>G2F</b> - G1/4 Female thread
	20×80 50×100	<b>NG</b> - NBR <span style="background-color: #8bc34a; color: white; padding: 2px;">45</span>	<b>G2M</b> - G1/4 Male thread
	23×60 60×120		<b>G3F</b> - G3/8 Female thread
	30×90 70×140		<b>M10M</b> - M10 Male thread
	40×80		<b>M14M</b> - M14×1.5 Male thread
			<b>RA</b> - Rectangular adapter

# SOF Series

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## Selection

Model/ Connection thread	G2F	G2M	G3F	M10M	M14M	RA
SOF16×50	●	○	○	○	○	○
SOF23×60	●	○	○	○	○	○
SOF20×80	●	○	○	○	○	○
SOF30×90	●	○	○	○	○	○
SOF40×80	●	○	○	○	○	○
SOF40×110	○	○	●	○	○	○
SOF50×100	○	○	●	○	○	○
SOF60×120	○	○	●	○	○	○
SOF70×140	○	○	●	○	○	○

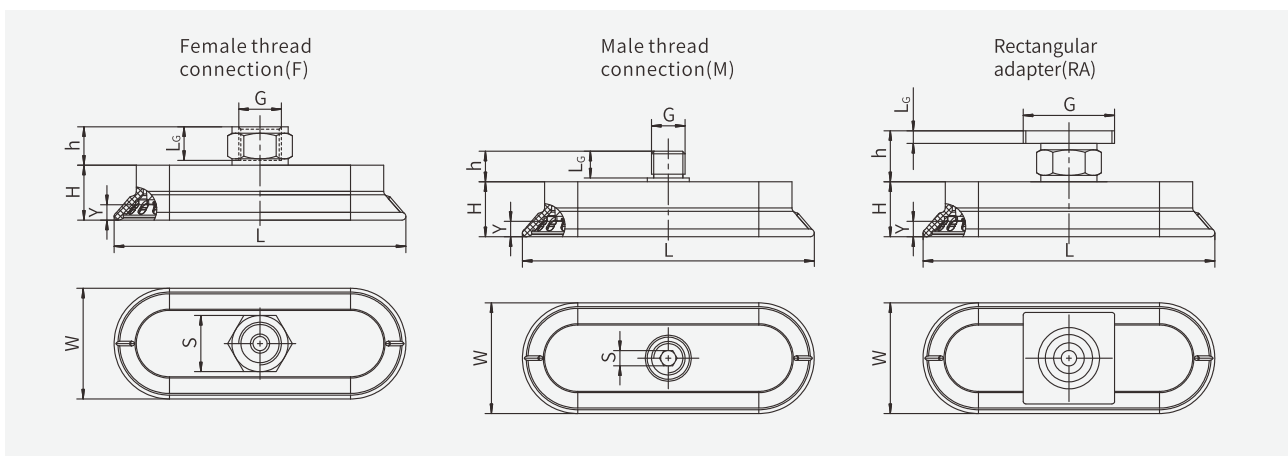
◇ Note: "●"-standard, in stock. "○"-selective, can be achieved in other ways (eg, adapter).

## Technical parameters

Model	Vertical pull-out force (N)	Lateral pull-out force (N)	Lateral pull-out force N(oily surface)	Inner volume (cm <sup>3</sup> )	Min. curve radius of workpiece (mm)	Recommended hose dia. (mm)	Weight (g)
SOF16×50	33	24	12	2	8	4	17
SOF20×80	78	38	35	5	25	4	23
SOF23×60	57	37	33	3	20	4	29
SOF30×90	125	77	60	10	30	4	24
SOF40×80	141	110	100	11	50	6	43
SOF40×110	200	188	118	25	35	6	47
SOF50×100	217	181	121	20	75	6	56
SOF60×120	312	254	170	35	75	6	70
SOF70×140	445	344	230	52	90	8	77

◇ Note: Testing vacuum level -60kPa. Workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.

## Dimensions (mm)



# SOF Series

Oval Bellows Suction Cup Special for Sheet Metal

## Dimensions (mm)

Model/ Size	L	W	H	G	L <sub>c</sub>	h	S	Y	
<b>SOF16×50-G2F</b>	50	16	19.5	G1/4	11	14	17	3	
				G2M	G1/4	12	13.5		5
				G3F	G3/8	11	14		22
				M10M	M10	12	13.5		5
				M14M	M14×1.5	12	13.5		5
				RA	□32	4.7	18.7		—
<b>SOF20×80-G2F</b>	84	24	15.5	G1/4	11	14	17	5	
				G2M	G1/4	12	13.5		5
				G3F	G3/8	11	14		22
				M10M	M10	12	13.5		5
				M14M	M14×1.5	12	13.5		5
				RA	□32	4.7	18.7		—
<b>SOF23×60-G2F</b>	62	25	12	G1/4	11	14	17	3	
				G2M	G1/4	12	13.5		5
				G3F	G3/8	11	14		22
				M10M	M10	12	13.5		5
				M14M	M14×1.5	12	13.5		5
				RA	□32	4.7	18.7		—
<b>SOF30×90-G2F</b>	93	33	16	G1/4	11	14	17	5	
				G2M	G1/4	12	13.5		5
				G3F	G3/8	11	14		22
				M10M	M10	12	13.5		5
				M14M	M14×1.5	12	13.5		5
				RA	□32	4.7	18.7		—
<b>SOF40×80-G2F</b>	82	43	14	G1/4	11	14	17	4	
				G2M	G1/4	12	13.5		5
				G3F	G3/8	11	14		22
				M10M	M10	12	13.5		5
				M14M	M14×1.5	12	13.5		5
				RA	□32	4.7	18.7		—
<b>SOF40×110-G2F</b>	113	43	21.5	G1/4	11	14	17	6	
				G2M	G1/4	12	13.5		5
				G3F	G3/8	11	14		22
				M10M	M10	12	13.5		5
				M14M	M14×1.5	12	13.5		5
				RA	□32	4.7	18.7		—
<b>SOF50×100-G2F</b>	103	54	16	G1/4	11	14	17	5	
				G2M	G1/4	12	13.5		5
				G3F	G3/8	11	14		22
				M10M	M10	12	13.5		5
				M14M	M14×1.5	12	13.5		5
				RA	□32	4.7	18.7		—
<b>SOF60×120-G2F</b>	123	65	18	G1/4	11	14	17	6	
				G2M	G1/4	12	13.5		5
				G3F	G3/8	11	14		22
				M10M	M10	12	13.5		5
				M14M	M14×1.5	12	13.5		5
				RA	□32	4.7	18.7		—
<b>SOF70×140-G2F</b>	143	76	19	G1/4	11	14	17	7	
				G2M	G1/4	12	13.5		5
				G3F	G3/8	11	14		22
				M10M	M10	12	13.5		5
				M14M	M14×1.5	12	13.5		5
				RA	□32	4.7	18.7		—

◇Note: Please refer to suction cup with locking fitting and level compensator on page 24.

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