

## **ROLAND ELECTRONIC**

# Overview of spring loaded sensor brackets

for destackers and centering stations, robot-loader, high-speed destackers, inclinated steel stacks

- The best suited mounting solution for each requirement tailored to your individual measuring tasks.
- For best sensor contact, even at inclined or bended sheets.
- For reliable, durable and best measurement results. Together with the leading ROLAND ELECTRONIC measurement technology for Double Sheet Detection, for best protection of your subsequent production stages.
- Durable design and high quality components guarantee a minimum of maintenance and a maximum of reliability.
- Ensured availability of individual parts and maintenance-friendly design guarantees lowest operating costs.

### THE ROLAND PLUS

- ► High range of applications
- ► Minimal wear
  - Low weight







## **OVERVIEW OF SPRING LOADED SENSOR BRACKETS**

Туре	SH42GS	SHS42GS	SHS42GS-85	SH75GS	SHS75GS	SHS42G-FB	SHS42G-FB80	SHX42	SHX42-85	SHX42-DL	
	世	当	計								
Description	Spring loaded sensor bracket	Spring loaded sensor bracket with flat suction cup		Spring loaded sensor bracket	Spring loaded sensor bracket with flat suction cup	Spring loaded with bellow su	sensor bracket loction cup (red)		sensor bracket bber lip	Spring loaded sensor bracket with double-lip	
						SHS42G-FB_SW (black) SHS42G-FB_GE (yellow)	SHS42G-FB80_SW (black) SHS42G-FB80_GE (yellow)		Optimal flexibility		
Suited for	P42GS P42AGS PW42AGS		P75VGS P75GS		P42GS P42AGS PW42AGS						
Sensor mounting	Ø 43 mm	Thread I	M42 x 1.5	Ø 76 mm	Thread M75 x 1.5			Thread M42 x 1.5			
Total height (unloaded)	98 mm sensor excess length	141 mm	141 mm	98 mm sensor excess length	128 mm	128 mm	128 mm	120 mm	141 mm	120 mm	
Spring travel (plus suction cup compression)	approx. 26 mm	approx. 26 mm	approx. 26 mm	approx. 26 mm	approx. 26 mm	approx. 34 mm (plus approx. 20 mm)	approx. 34 mm (plus approx. 17 mm)	approx. 70 mm	approx. 70 mm	approx. 70 mm	
Weight	approx. 0.75 kg	approx. 1.25 kg	approx. 1.2 kg	approx. 0.7 kg	approx. 1.5 kg	approx. 1.2 kg	approx. 0.75 kg	approx. 0.85 kg	approx. 1.1 kg	approx. 0.85 kg	
Pressure force at 1/2 of spring travel	approx. 48 N	approx. 48 N	approx. 48 N	approx. 48 N	approx. 48 N	approx. 60 N	approx. 60 N	approx. 25 N	approx. 25 N	approx. 25 N	
Suction cup diameter (while applying vacuum)	n.a.	115 mm	85 mm	n.a.	155 mm	105 mm	80 mm	115 mm	85 mm	105 mm	
Vacuum feed	n.a.	Hose 8 mm OD	Hose 8 mm OD	n.a.	Hose 10 mm OD	Hose 8 mm OD	Hose 8 mm OD	Hose 8 mm OD	Hose 8 mm OD	Hose 8 mm OD	
Spare parts			Spring Kit 2395117			Bellow suction cup 2395045 (red) Hardness: 45 shore	Bellow suction cup 2395100 (red) Hardness: 45 shore	Strap set SHX42-STRAP-80			
								Sealing ring 2395126			
		Rubber lip 2395110 (black)	Rubber lip 2395168 (black)		Foam rubber ring 2395038	Bellow suction cup 2395046 (black) Hardness: 60 shore	Bellow suction cup 2395217 (black) Hardness: 60 shore	Rubber lip 395110 (black)	Rubber lip 2395168 (black)	Bellow suction cup 2395218 (yellow)	
		Rubber pressure pad 2395109	Rubber pressure pad 2395167		Rubber pressure pad 2995039	Bellow suction cup 2395133 (yellow) Hardness: 55 shore	Bellow suction cup 2395216 (yellow) Hardness: 55 shore	Rubber pressure pad 2395109	Rubber pressure pad 2395167		
Accessories	SHK Bracket clamp for mounting of sensor brackets to destacking tools with crossing over clamp 25 mm.								SHSHX-AZ2-25 Shank / Adapter for 25 mm clamp collar / swivel arm.		
								SHX-AZ2-25 SHX-AZ-BILSING			
								SHX-AZ-BILSING Adapter for Bilsing quick-change coupling.			



## **APPLICATION PROPERTIES OF SENSOR BRACKETS**

### **General information**

The suction delay time is strongly dependent on vaccuum strength, tube resistance, contact angle and contact pressure to the sheet.

Never use the sensor brackets as a lifting device! (Except sheet is smaller than the area of 3 suction cups.)

0.16.15	Vertical	Robot loader		Notes  For narrow sheets and applications where weight is critical	
Suited for	destacker	High-speed destackers	Inclinated sheet stacks		
SH42GS No suction delay time	+		_		
SHS42GS Suction delay time approx. 0.1 s	+	_	O	Strong hold on even sheets due to suction cup	
SHS42GS-85 Suction delay time approx. 0.1 s	+	_	0		
SHS42G-FB Suction delay time approx. 0.5 s	+	+	+	Various rubber hardnesses for different surface requirements	
SHS42G-FB80 Suction delay time approx 0.5 s	+	+	+		
SHX42 Suction delay time approx. 0.1 s	+	+	++	Highest tilt flexibility, highest spring travel,	
SHX42-DL Suction delay time approx. 0.1 s	+	+	++	very lightweight, for high lateral acceleration (up to 2g). Minimal wear,	
SHX42-85 Suction delay time approx. 0.1 s	+	+	++	durable designed, low lifecycle costs	
SH75GS No suction delay time	+		_	Well-suited for big sheet thicknesses.	
SHS75GS Suction delay time approx.0.1 s	+	_	o		

(Legend: "——" = absolutely not suited / "—" = not suited / "o" = applicable / "+" = well suited / "++" = best suited)

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