anyfeed™ SXM100

Universal, programmable parts supply systems

> Innovative, highly flexible feeder technology for all robots

> Maximum availability thanks to automatic error correction

> Minimal changeover times when changing products

> Automatic parts emptying at the touch of a button

> Minimal footprint– anyfeed replaces several conventional feeders

> Exeptionally gentle parts handling

> Standardized communication with all models

> Simple serving thanks to the use of identical servo-electric dirves in all models

Application area

Assembly, Inspection technology, Packing/Counting, Maschine loading

System requirements: In addition to the selected anyfeed model, the following components are required for a flexible feeding solution: robot with grippers, vision system, a vision unit: feedWare CX / Cognex In-Sight from flexfactory, lighting, lens mate for the singulation of all components, robot application for the movement sequence and the data exchange, lenses, vision feeder.

Ideal for parts:

↗	⇆	⬛	°C	💧
≤ 30 mm	≤ 0.15 mm	≤ 15 g	5-45 °C	Dry

anyfeed™ feeder systems for robots

anyfeed flexible bulk parts feeders singulate and deliver bulk parts into the pick up zone of an industrial robot. Part flow and reorientation of parts in the feeder is controlled by feed Ware CX – a Cognex In-Sight based vision solution specifically developed and optimized by flexfactory for flexible part feeding applications. The universal bulk parts feeding solution is in operation with over 18 commercially available robot brands.
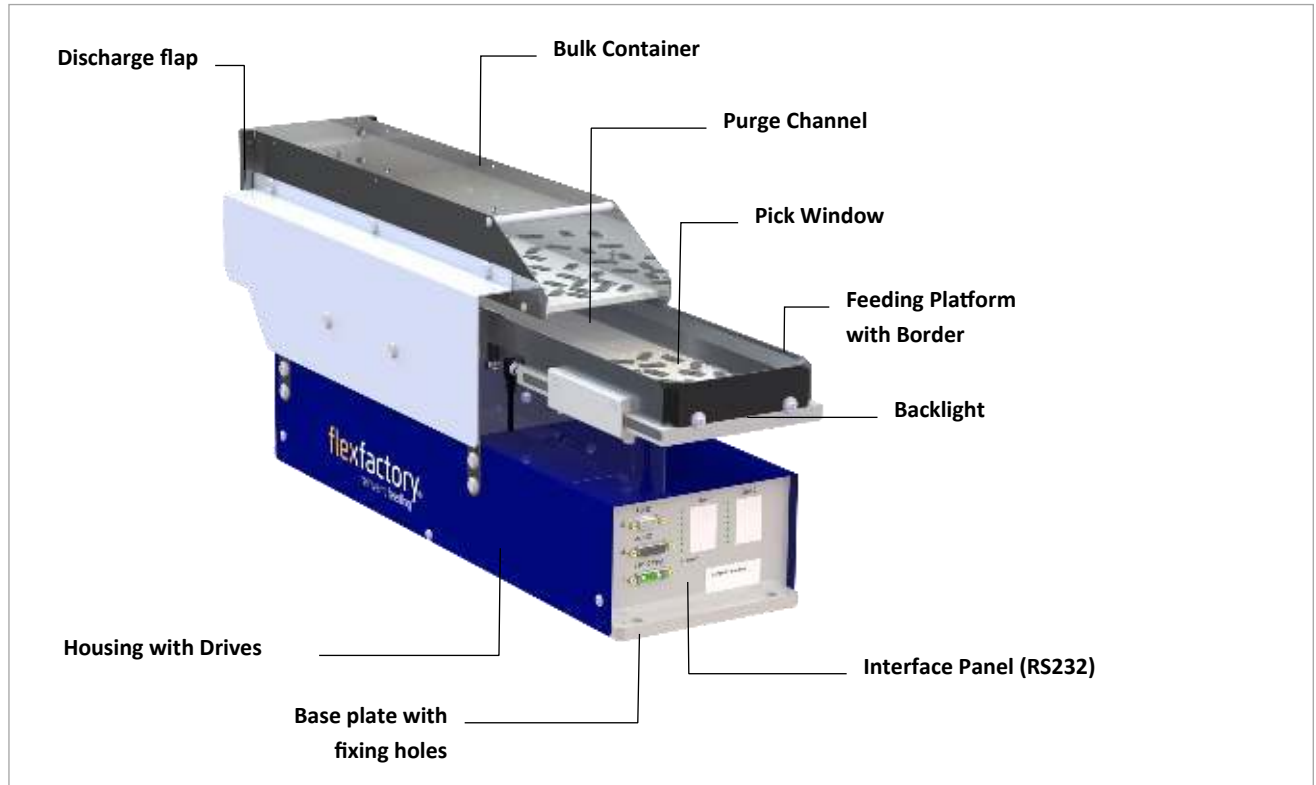
feedware™ CX-Software solution

It is the ideal and proven solution for turning any anyfeed model and any robot into a complete parts supply system – in next to no time and with the greatest of ease. The Cognex In-Sight camera installed above the window identifies correctly oriented parts and transfers the picking coordinates to the robot's control system.

feedware CX continuously monitors the parts in the pick window and sends action commands to the anyfeed telling it to make more parts available for the robot. feedware CX is also responsible for teaching the system to handle new parts, parameterizing feed characteristics, calibrating robot to vision coordinates, and defining pick points and clear grip zones.

flexfactory supplies the full package, including a Cognex In-Sight camera with feedware CX preloaded. The company also provides the appropriate lighting and optics and helps customers get the entire solution up and running.

Part description

- Discharge flap
- Bulk Container
- Purge Channel
- Pick Window
- Feeding Platform with Border
- Backlight
- Housing with Drives
- Interface Panel (RS232)
- Base plate with fixing holes

Electrical Connections - anyfeed SXM100 (IF2011)

Label	Function	Connec-tingtyp	Pin	Allocation	Cabel
J1	Motor Power	D-Sub-M 2+5, Male	A1	24VDC in	Nr.1 (red)
			A2	GND	Nr.2 (blue) Shield
J2	RS232	D-Sub 9, Female	2	Tx	D-Sub 9, Male - Female
			3	Rx	
			5	GND	
J4	Aux I/O	D-Sub 15, Female	1	Trigger out	Connection Cable is not included In the scope of supply
			4	GND	
			5	GND	
			6	24VDC out	
			7	24VDC out	
			8	Pick in	
			14	Error Drive 1	
			15	Error Drive 2	

RS232 — J2
Aux I/O — J4
24VDC Input — J1

Technical Specifications

Capacity Bulk Container	3 dm³
Field of Vision (FOV)	100x134 mm
Pick-Up Area	134 cm² (10x13.4cm)
Unevenness Pick-Up Area	0.3 mm
Repeat-precision Feederplatform in z	± 0.05 mm
Max. weight on surface (FOV)	500 g
Plate level (parts)	1/1 mm
Border height	28 mm
Light height of Purge Channel	34 mm
Power Requirements	24 V/10 A
Typical consumption	100 W (depeding on operating mode)
Compressed Air	-
Eccentricity Feed Surface	± 2 mm (Maximum stop from initial position)
Eccentricity Bulk Container	± 2 mm
Interface	RS232 (DSU39 Female)
Drive	2 brushless servo dirves
Temperature	5-45 °C
Humidity	95 % non-condensing
Weight	18kg

Standard Materials

Housing with Drives	WN 1.4301
Feeder Platform	WN 1.4301
Border Feeder Platform	WN 1.4301
Bulk Container	WN 1.4301
Feed Surface	POM-C Natur

All dimensions in mm

120

10

530

4x M5 mounting screws

199

28

171

21

500

675

Minimal mounting length 550

0.5

Safety shield

Clear height
purge channel

35.2

171

100

133.3

Pick window

3l/3kg bulk

Electrical connections
LED status indicator

180

272

flexfactory
reinvent feeding

Item Nr.

§

Description

900-000-070

anyfeed™SXM100