

DPS SERIES BAG GRIPPER

Palletizing Solutions | How to Order



DPS

30

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1

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P

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SS

0

2

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L

0

C1

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A

Payload	Description
15	15 Kg
30	30 Kg
50	50 Kg

Power Source	Description
P	Pneumatic

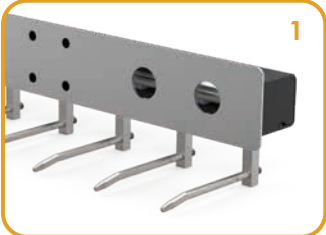
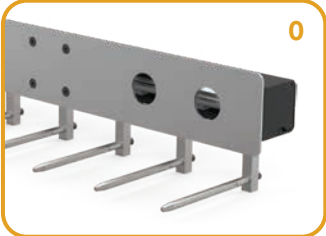
Gripping Type	Description
1	Bag Gripping



Add-Ons	Description
00	None
PS	2X Pneumatic Bag Stabilizer
SS	2X Slip Sheet Pick



Gripper Fingers	Description
0	Straight Tines
1	10° Angled Tines



Tine Length	Description
1	120 mm [4.72 in]
2	160 mm [6.30 in]
3	220 mm [8.66 in]
4	280 mm [11.02 in]



Note: Shown with optional Robot Arm Stand-Off. Sold separately. See page 14.

Pallet Handling

Description
0 None
PP† Pallet Pick
†Consult DESTACO.

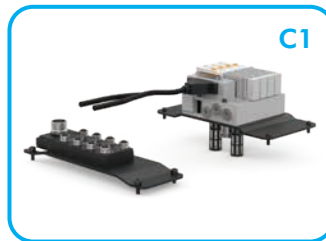
Visual Status Indicator

Description
0 None
L LED Status Light



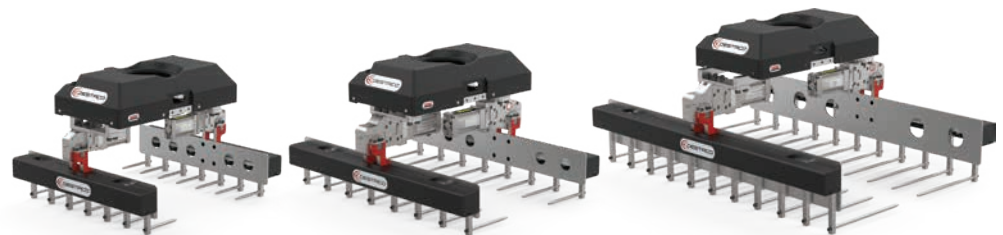
Pneumatic/IO Control

Description
00 None
C1 8-Port I/O Passive/4-Valve Pneumatic Island
C2* 16-Port I/O Active /4-Valve Pneumatic Island
*Required with Add-On Option + Pallet Pick.



Assembled/Kitted

Description
A Assembled (Ready to Install)
K Kitted (Assembly Required)



Specifications	Units	DPS15	DPS30	DPS50
Maximum Payload	kg [lbs]	Up to 15 [33.07]	Up to 30 [66.14]	Up to 50 [110.23]
Weight (Base Unit - No Options)	kg [lbs]	[45.1 to 48.2] 20.44 to 21.85	[58.3 to 61.9] 26.45 to 28.06	[74.6 to 79.5] 33.84 to 36.05
Maximum Bag Size (L x B x H)	mm [in]	[21.6 x 14.96 x 5.90] 550 x 380 x 150	[29.5 x 20.47 x 5.90] 750 x 520 x 150	[39.37 x 24.21 x 7.87] 1000 x 615 x 200
Overall Dimension (L x B x H)	mm [in]	[21.62 x 20.66 x 15.75] 550 x 525 x 400	[29.52 x 25.90x 16.73] 750 x 685 x 425	[39.37 x 30.51 x 18.70] 1000 x 775 x 475
Regulated Operating Pressure	bar [psi]	5 [72] (Recommended)		
Speed (Bags Per Minute)		34		

Environmental	Units	DPS15	DPS30	DPS50
Noise Emmission	dB(A)	< 60 Normal Operation		
Ingress Protection Class (IP)		IP54		
Operating Temperature	°C [°F]	0° to 50° C [32° to 122° F]		

DPS15 SERIES BAG GRIPPER

Palletizing Solutions | Dimensions

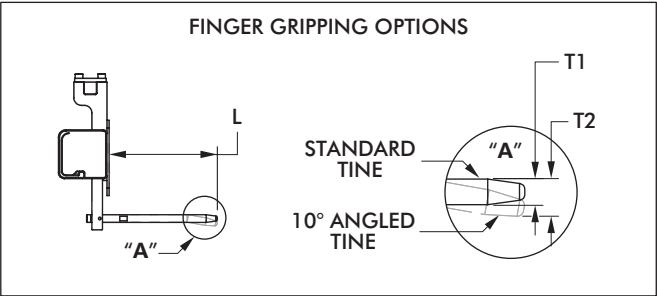
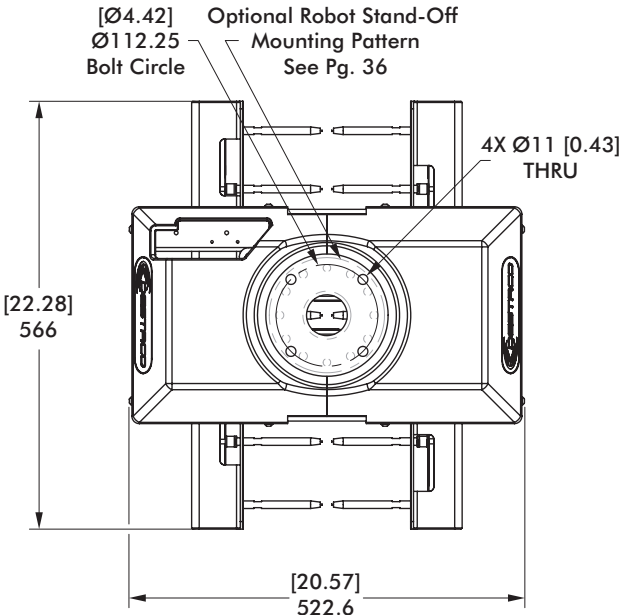
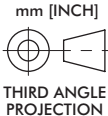


DPS15-1P

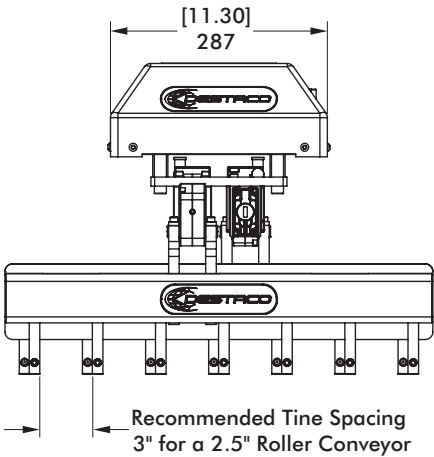
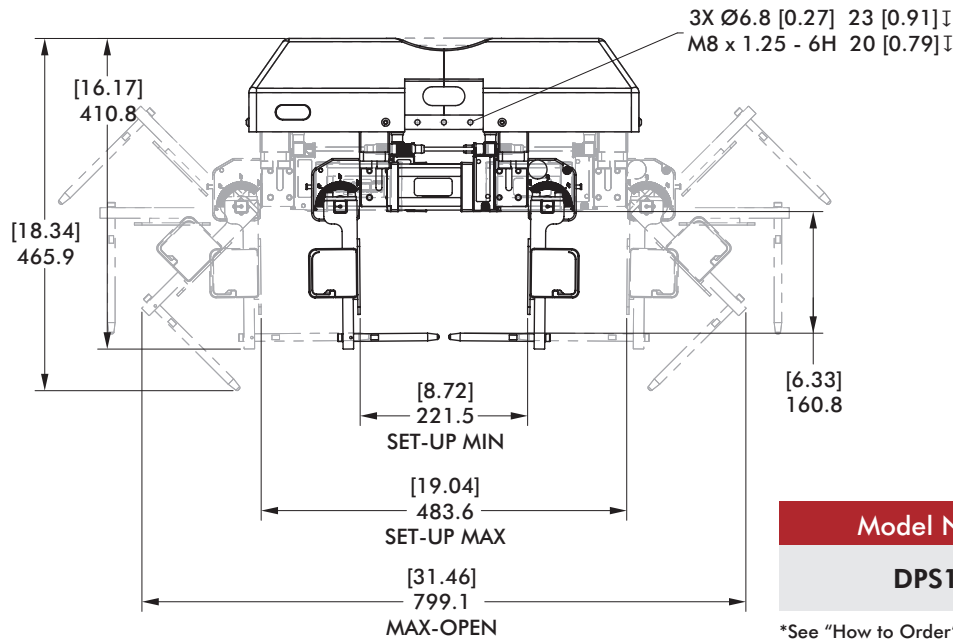
15 Kg Max. Payload



Base configuration shown with optional Robot Arm Stand-Off.



Tine Length	L	T1	T2
1	104 [4.09]	10 [0.39]	13.2 [0.52]
2	144 [5.67]		14.9 [0.59]
3	204 [8.03]		17.6 [0.69]
4	264 [10.39]		



Model Number*	Weight (Base Unit)
DPS15-1P	[45.1 to 48.2] 20.44 to 21.85

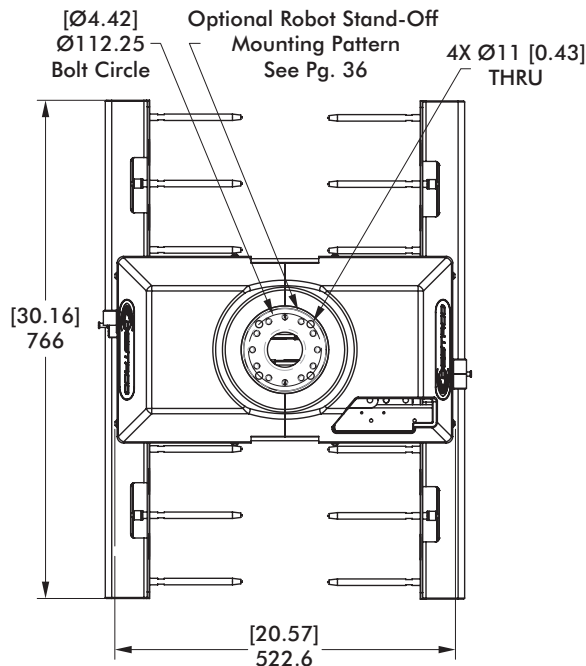
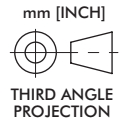
*See "How to Order" pages for complete model numbers.

DPS30-1P

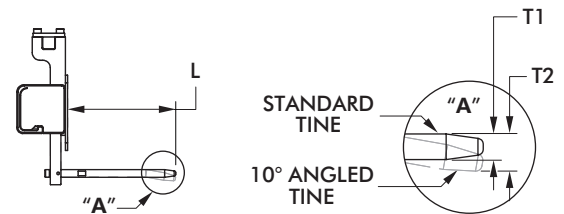
30 Kg Max. Payload



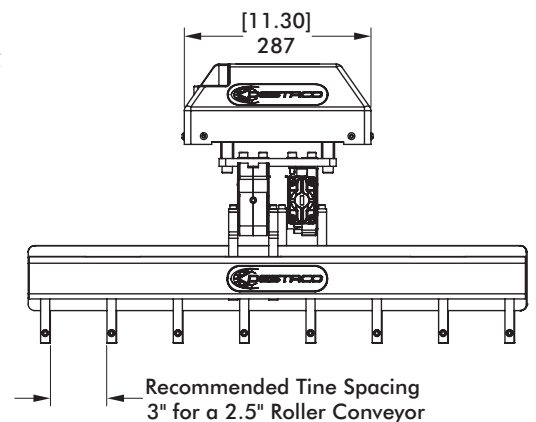
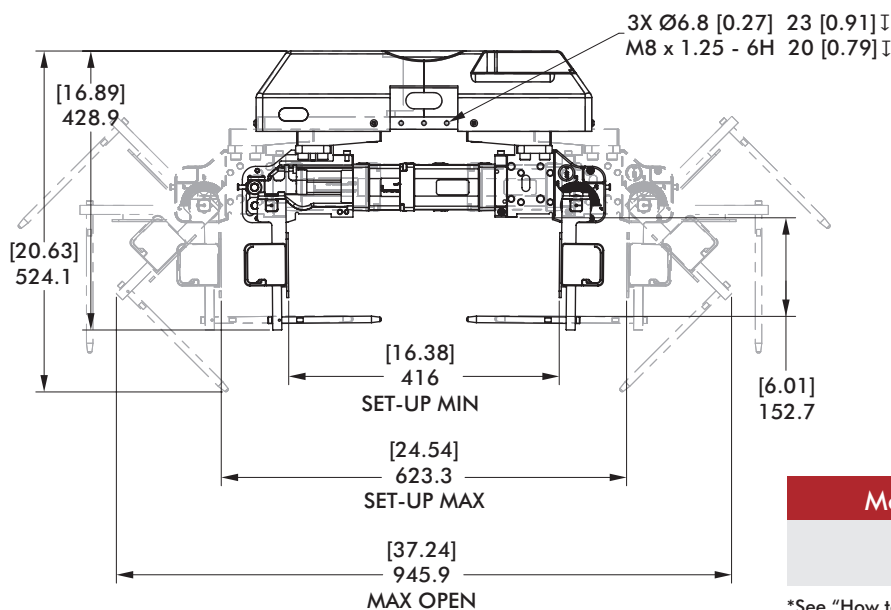
Base configuration shown with optional Robot Arm Stand-Off.



FINGER GRIPPING OPTIONS



Tine Length	L	T1	T2
1	104 [4.09]	10 [0.39]	13.2 [0.52]
2	144 [5.67]		14.9 [0.59]
3	204 [8.03]		17.6 [0.69]
4	264 [10.39]		



Model Number*	Weight (Base Unit)
DPS30-1P	[58.3 to 61.9] 26.45 to 28.06

*See "How to Order" pages for complete model numbers.

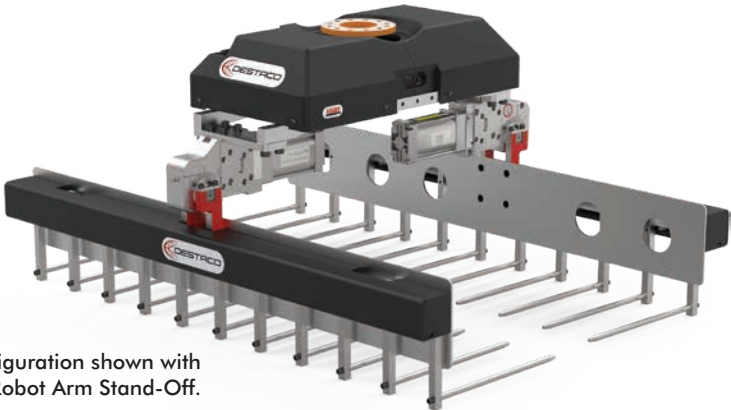
DPS50 SERIES BAG GRIPPER

Palletizing Solutions | Dimensions

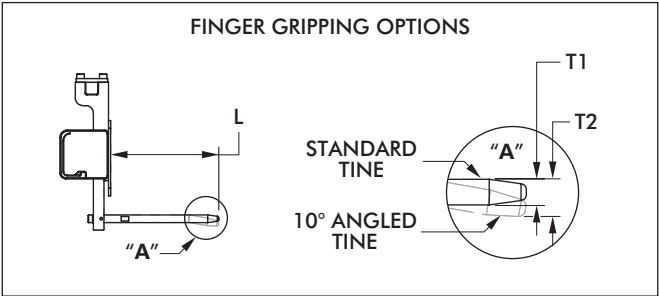
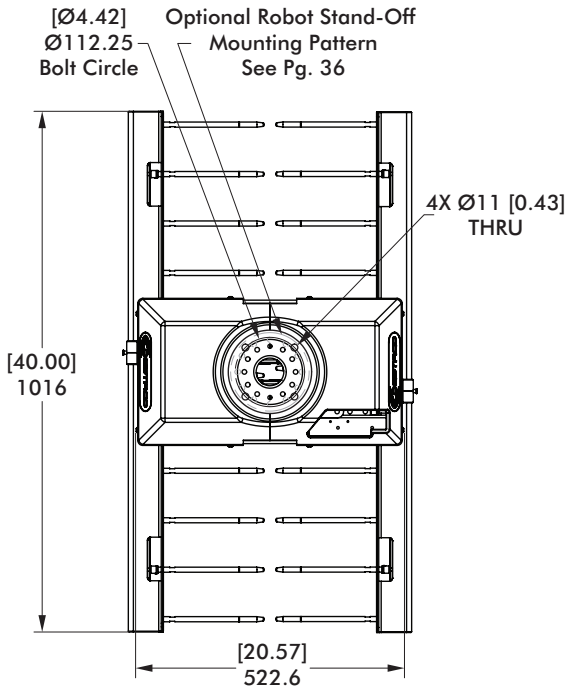
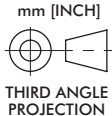


DPS50-1P

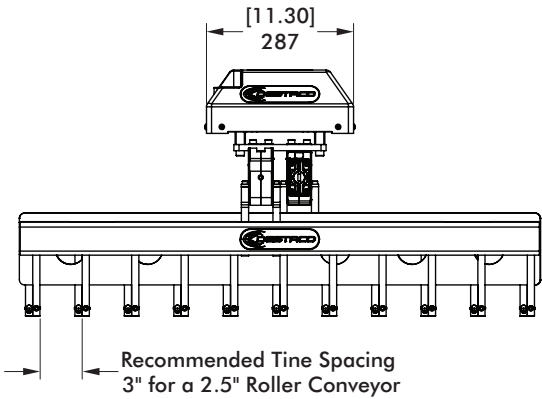
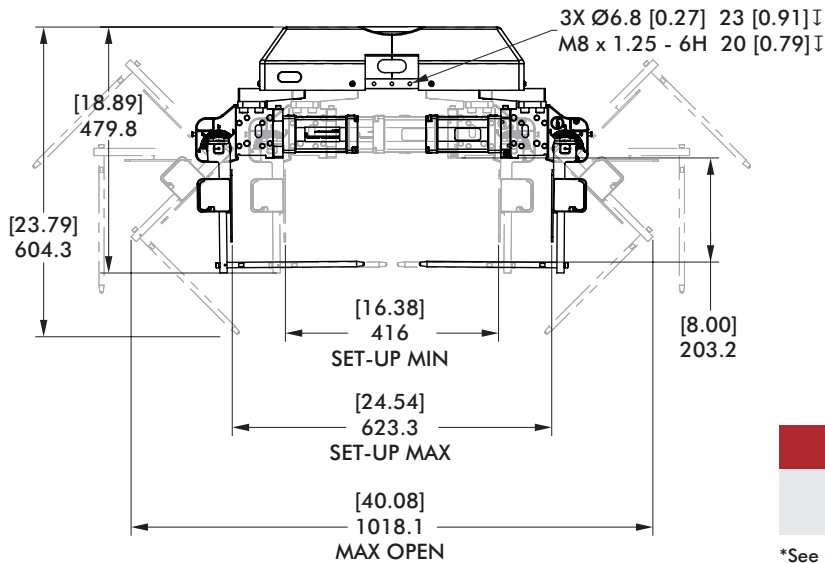
50 Kg Max. Payload



Base configuration shown with optional Robot Arm Stand-Off.



Tine Length	L	T1	T2
1	104 [4.09]	10 [0.39]	13.2 [0.52]
2	144 [5.67]		14.9 [0.59]
3	204 [8.03]		17.6 [0.69]
4	264 [10.39]		



Model Number*	Weight (Base Unit)
DPS50-1P	[74.6 to 79.5] 33.84 to 36.05

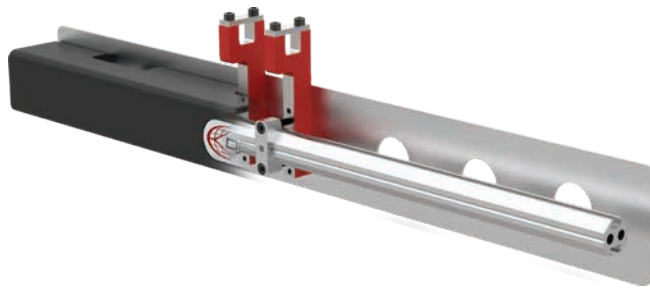
*See "How to Order" pages for complete model numbers.

Upper Assembly Kit



Kit Number	Description
DPS15-1P-01-KIT	For DPS-15 Units
DPS30-1P-01-KIT	For DPS-30 and DPS-50 Units

Lower Assembly Kit



Kit Number	Description
DPS15-1P-02-KIT	For DPS-15 Units
DPS30-1P-02-KIT	For DPS-30 Units
DPS50-1P-02-KIT	For DPS-50 Units

Can be mounted on left or right side of unit

Straight and 10° Angled Tine Assembly Kits



Straight Tine Assembly Kits

Kit Order Number		Length (L)
for DPS15, DPS30	for DPS50	
DPS-T-01-KIT	DPS-T-01-KIT-E	120mm
DPS-T-02-KIT	DPS-T-02-KIT-E	160mm
DPS-T-03-KIT	DPS-T-03-KIT-E	220mm
DPS-T-04-KIT	DPS-T-04-KIT-E	280mm

Kits include (1) Straight Tine Assembly



10° Angled Tine Assembly Kits

Kit Order Number		Length (L)
for DPS15, DPS30	for DPS50	
DPS-T-11-KIT	DPS-T-11-KIT-E	120mm
DPS-T-12-KIT	DPS-T-12-KIT-E	160mm
DPS-T-13-KIT	DPS-T-13-KIT-E	220mm
DPS-T-14-KIT	DPS-T-14-KIT-E	280mm

Kits include (1) 10° Angled Tine Assembly

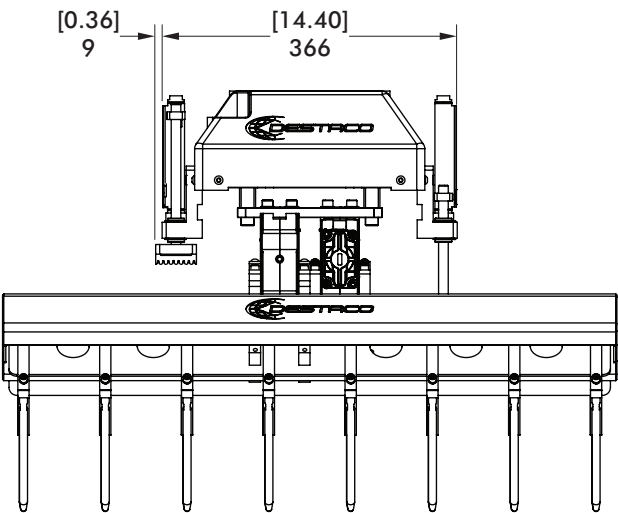
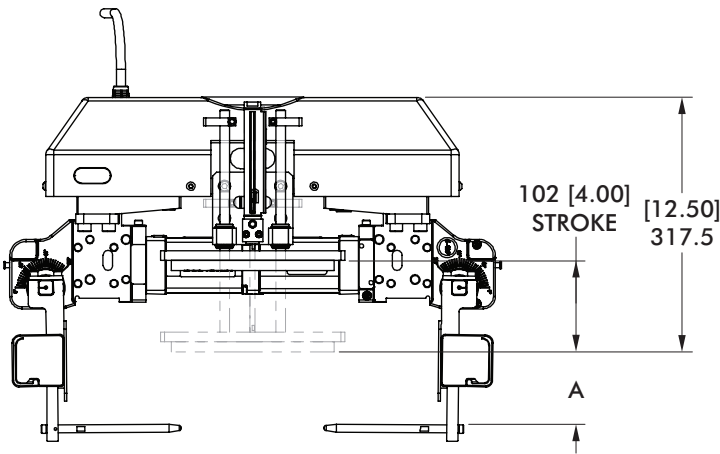
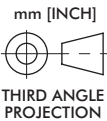
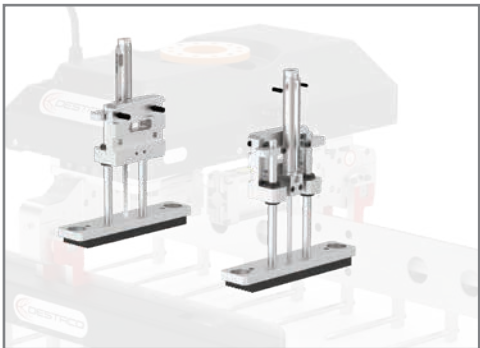
DPS SERIES BAG GRIPPER

Palletizing Solutions | Add-On Options | Dimensions



PS Pneumatic Bag Stabilizer

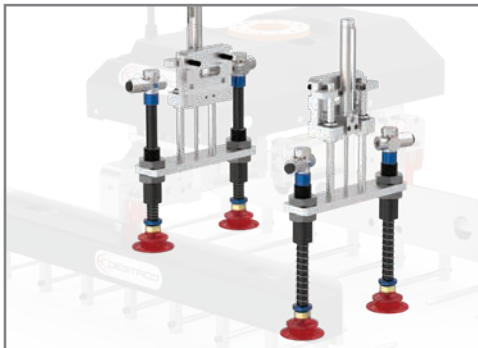
- The pneumatic stabilizer is an add-on accessory that can be installed in the field at any time or included in the part number configuration. The stabilizer applies pressure to the filled bag to help secure it in place and keep from moving during transfer
- Two units required per bag gripper assembly
- Extends 100mm down towards bag from retract position
- Adjust extension length via field adjustable stops
- Attaches to pneumatic valve via included air lines and sensor cables when controls kit is purchased



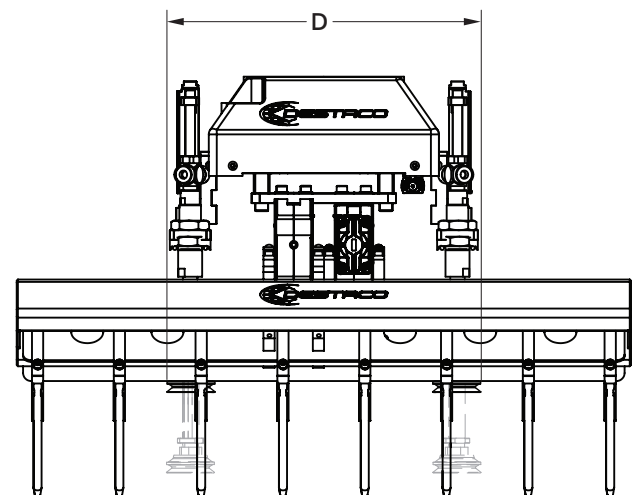
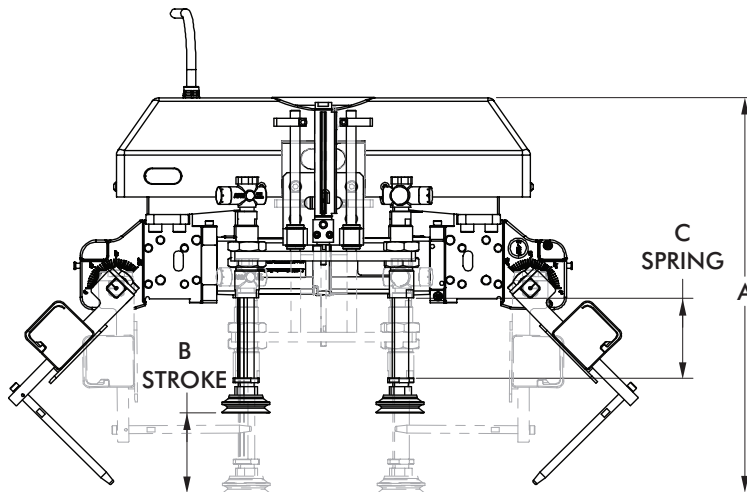
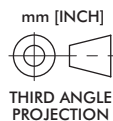
Kit Order Number	Base Model	A mm [in]	Weight* kg [lbs]
DPS-1P-PS-00-KIT	DPS-15	72.4 [2.85]	1.46 [3.2] (per side)
	DPS-30	91.4 [3.60]	
	DPS-50	142.2 [5.60]	

*Individual unit weight only. 2 units per assembly. Add to base model weight. Hardware is included.

SS Pneumatic Slip Sheet Pick and Place



- Vacuum cup design to pick up thin sheets of laminated paperboard or plastic slip sheets that are used to separate layers of bags on a pallet
- Two units required per bag gripper assembly
- The slip sheet with its vacuum cups and compression springs offer a cost effective solution to pick and place slip sheets between bag layers without changing robotic tooling
- Extends 100mm down towards bag from retract position (tines may need to be adjusted or omitted per application needs)
- Adjust extension length via field adjustable stops
- Attaches to pneumatic valve via included air lines and sensor cables when controls kit is purchased



Kit Order Number	A Max. mm [in]	B Stroke mm [in]	C Spring mm [in]	D mm [in]	Weight* kg [lbs]
DPS-1P-SS-00-KIT	530 [20.87]	102 [4]	100 [3.94]	391 [15.41] 366 [14.40]	2.33 [5.14] (per side)

*Individual unit weight only. 2 units per assembly. Add to base model weight. Hardware is included.

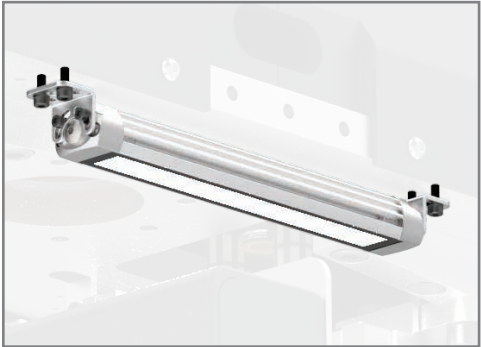
DPS SERIES BAG GRIPPER

Palletizing Solutions | Add-On Options | Dimensions



L Operational Status LED Light Option

- PLC-controlled RGB-W status light provides a clear visual indication of the gripper or automation line status
- Programmable red, yellow, and green color states help operators quickly identify running, warning, or fault conditions
- Can be used to provide additional lighting to assist vision systems for quality control systems.



Kit Order Number	Weight kg [lbs]
DPS-1P-00-L-00-KIT	0.4 [0.88]

Note: Cables included with purchase of light kit.
M8 B-Code to M12 A-Code connectors. P/N# DPS-1P-00-L-00-003

C1, C2 I/O Controls and Pneumatic Valve Options

- Control packages are selected based on the required I/O capacity and the PLC and network architecture. Both packages include a four-valve pneumatic island with single-solenoid, spring-return valves and the required gripper-side I/O cabling.

(C1) Includes an eight-port passive I/O junction block, four-valve spring-return pneumatic island, and gripper-side I/O cabling.

Note: Customer supplies the 19-pin M23 homerun cable.
Recommended homerun cable: Turck CKM 19-19-*

(C2) Networked Ethernet I/O Control. Includes two multiprotocol Ethernet I/O modules, providing a combined 16 PNP inputs and 16 PNP outputs, a four-valve spring-return pneumatic island, and gripper-side I/O cabling. Supports EtherNet/IP, PROFINET, Modbus TCP, and CC-Link IE Field Basic.

Note: Customer supplies PLC/network Ethernet cable, the inter-module Ethernet jumper.
Recommended inter-module jumper: Turck RSSD RSSD 441-0.5M



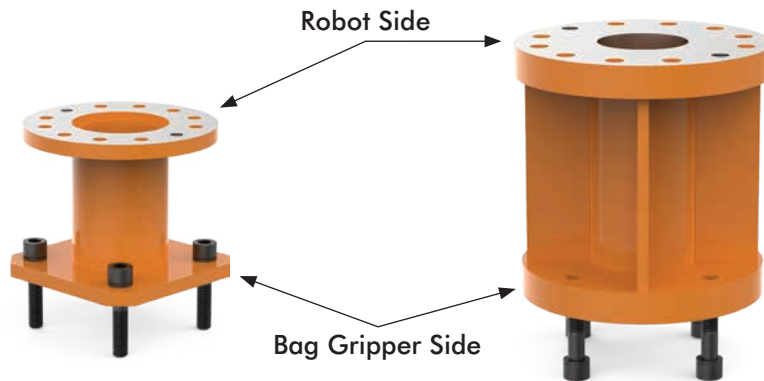
Standard 8-Port Passive (C1)



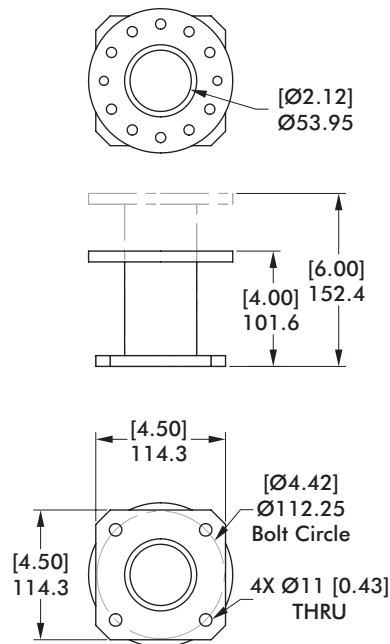
Expanded 16-Port Active (C2)

Kit Order Number	Description	Weight kg [lbs]
DPS-1P-00-C1-KIT	4 directional solenoid valves, 8-port passive discrete I/O block	0.3 [0.66]
DPS-1P-00-C2-KIT	4 directional solenoid valves, 16-port active discrete I/O block	0.62 [1.40]

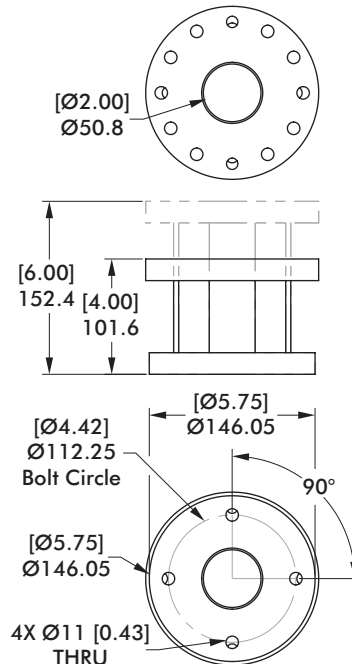
- Steel welded construction
- Painted safety orange
- Bolts for mounting to bag gripper are included



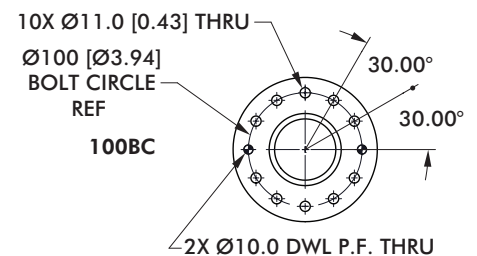
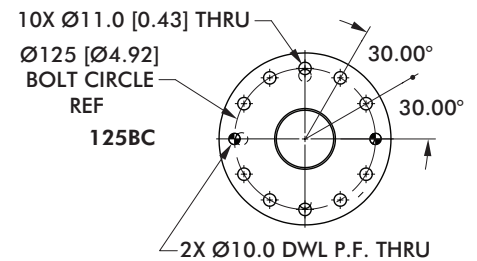
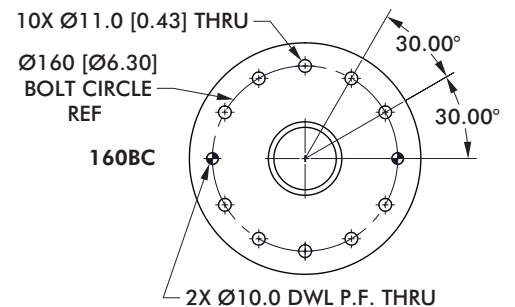
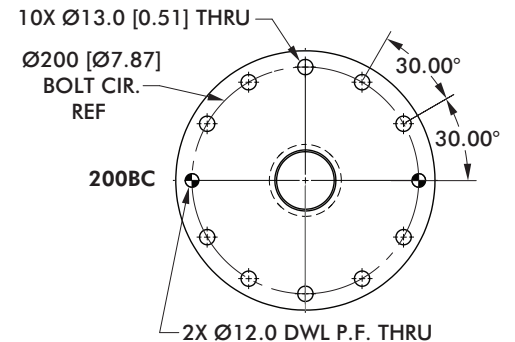
Light-Duty (LD)



Heavy-Duty (HD)



Robot Side Bolt Circle Dimensions



Light-Duty*

Kit Order Number	Bolt Circle mm [in]	Riser Height mm [in]	Weight kg [lbs]
DPS-RS-LD-01-KIT	$\text{Ø}3.94$	101.6 [4.00]	2.13 [4.7]
DPS-RS-LD-02-KIT	$\text{Ø}100$	152.4 [6.00]	2.48 [5.5]
DPS-RS-LD-03-KIT	$\text{Ø}4.92$	101.6 [4.00]	2.52 [5.5]
DPS-RS-LD-04-KIT	$\text{Ø}125$	152.4 [6.00]	2.88 [6.3]
DPS-RS-LD-05-KIT	$\text{Ø}6.30$	101.6 [4.00]	3.51 [7.7]
DPS-RS-LD-06-KIT	$\text{Ø}160$	152.4 [6.00]	3.87 [8.5]

Heavy-Duty

Kit Order Number	Bolt Circle mm [in]	Riser Height mm [in]	Weight kg [lbs]
DPS-RS-HD-01-KIT	$\text{Ø}4.92$	101.6 [4.00]	5.58 [12.3]
DPS-RS-HD-02-KIT	$\text{Ø}125$	152.4 [6.00]	6.42 [14.2]
DPS-RS-HD-03-KIT	$\text{Ø}6.30$	101.6 [4.00]	7.71 [17.0]
DPS-RS-HD-04-KIT	$\text{Ø}160$	152.4 [6.00]	8.56 [18.9]
DPS-RS-HD-05-KIT	$\text{Ø}7.87$	152.4 [6.00]	9.78 [21.6]

*Excludes DPS-50.