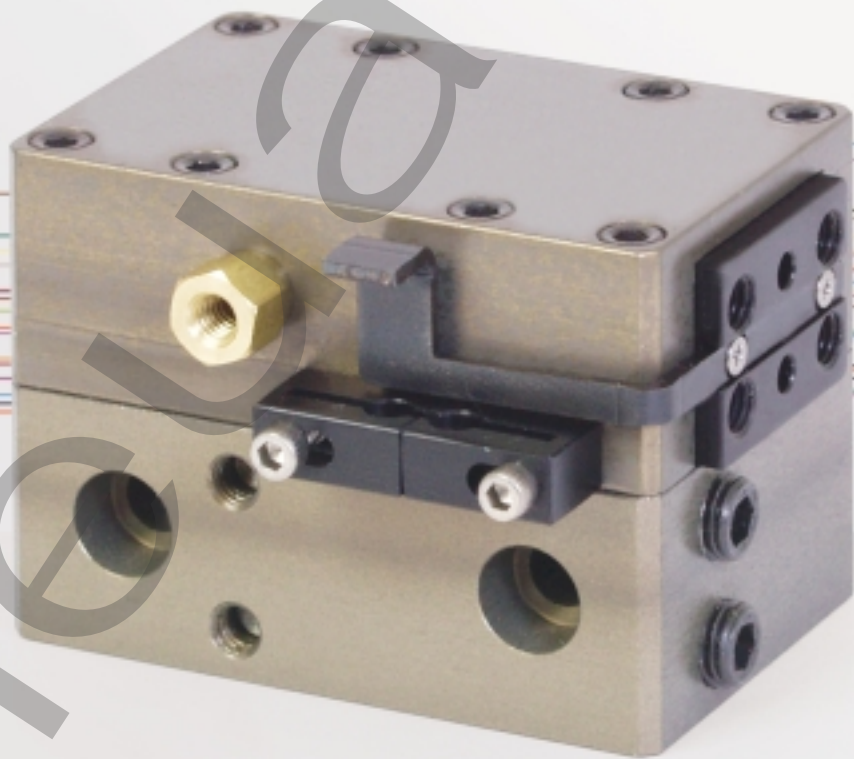


ORDER  
ONLINE



Grippers



***WG Series***

***Double Guided Wedge Grippers***

*We're everywhere you need us to be!*



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Pneumatic



## WG Series Parallel Gripper Double Guided Wedge



### WGS-50 Parallel Gripper Double Guided Wedge

Gripper summary of Operation:

Synchronous motion is achieved with a double acting piston attached via the piston shaft to a double sided wedge. The double sided angles of the wedge convert vertical motion to synchronous horizontal motion of the jaws.

#### A. Body

Hardcoat Anodized Teflon impregnated aluminum inside and out. Ultra high gripping force to weight ratio.

#### B. Jaws

Jaws machined from S7 tool steel to prevent jaw breakage.

#### C. Switches

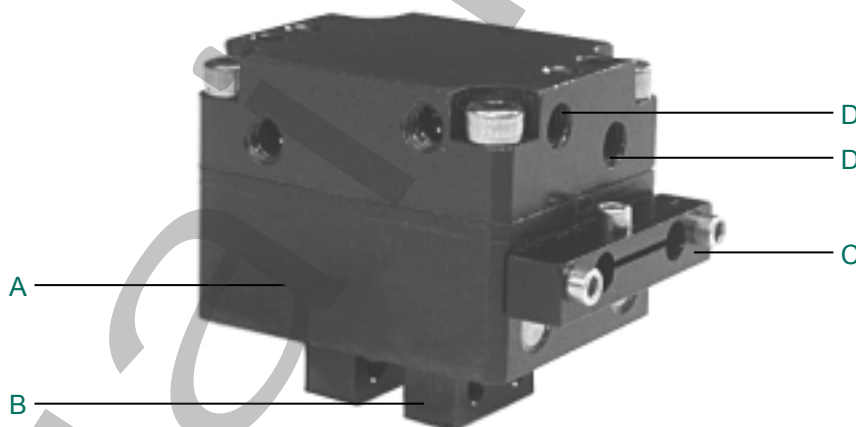
Proximity switches are available to monitor open and closed position of the jaws.

#### D. Side Ports

Additional side mounting holes and side air ports for optional mounting and porting.

#### E. Lubrication

Units are permanently lubricated for non-lube air operation, this allowing for compliance with OSHA regulations.



### WGL-50 Long Stroke and WGS-90 Short Stroke Parallel Grippers Double Guided Wedge

Gripper summary of Operation:

Synchronous motion is achieved with a double acting piston attached via the piston shaft to a double sided wedge. The double sided angles of the wedge convert vertical motion to synchronous horizontal motion of the jaws.

#### A. Body

Hardcoat Anodized Teflon impregnated aluminum inside and out. Ultra high gripping force to weight ratio.

#### B. Jaws

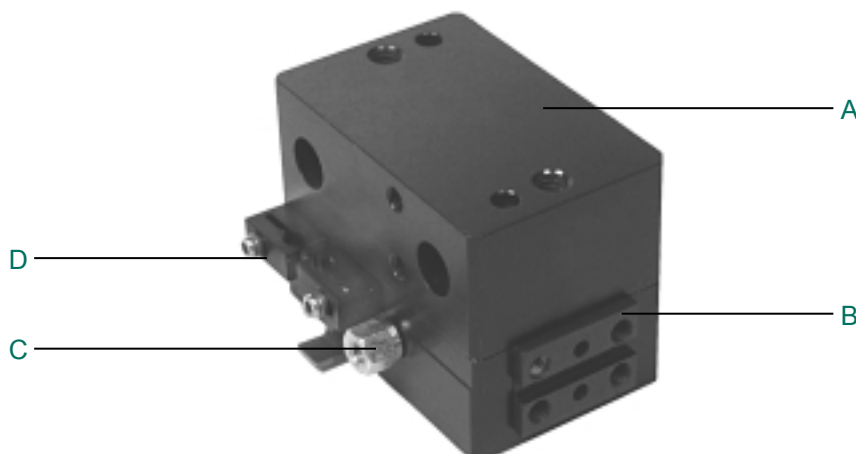
Hardcoat Anodized Teflon impregnated aluminum. Lightweight, Durable, high strength.

#### C. Purge Port

Unit can be slightly pressurized to prevent debris or coolant from entering. A vacuum can be applied to evacuate contaminants from inside the unit in a clean room environment.

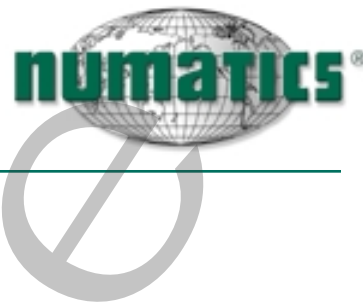
#### D. Switches

Proximity switches are available to monitor open and closed position of the jaws.





WG Series  
Parallel Gripper Double Guided Wedge



How to Order

**WG S 50 1 4 C X**

Gripper Stroke

- S = Short Stroke
- L = Long Stroke

Gripper Series

- 50
- 90

Seal Type

- 1 = Buna-N
- 2 = Viton

Special Options

- X = No Options

Sensing Position

- A = Single Position Open
- B = Single Position Close
- C = Two Position Sensing
- D = No Sensing

Sensing Type

- Standard Cord Set
  - 4 = Prox Switch - PNP (sourcing)
  - 5 = Prox Switch - NPN (sinking)
  - 6 = No Sensing
  - Quick Disconnect Cord Set
  - W = Prox Switch - PNP (sourcing)
  - V = Prox Switch - NPN (sinking)
  - U = Prox Switch - PNP (sourcing) 90 Deg.
  - T = Prox Switch - NPN (sinking) 90 Deg.
- Prox switches are 4mm diameter.  
See Sensor section.

When ordering additional switches:

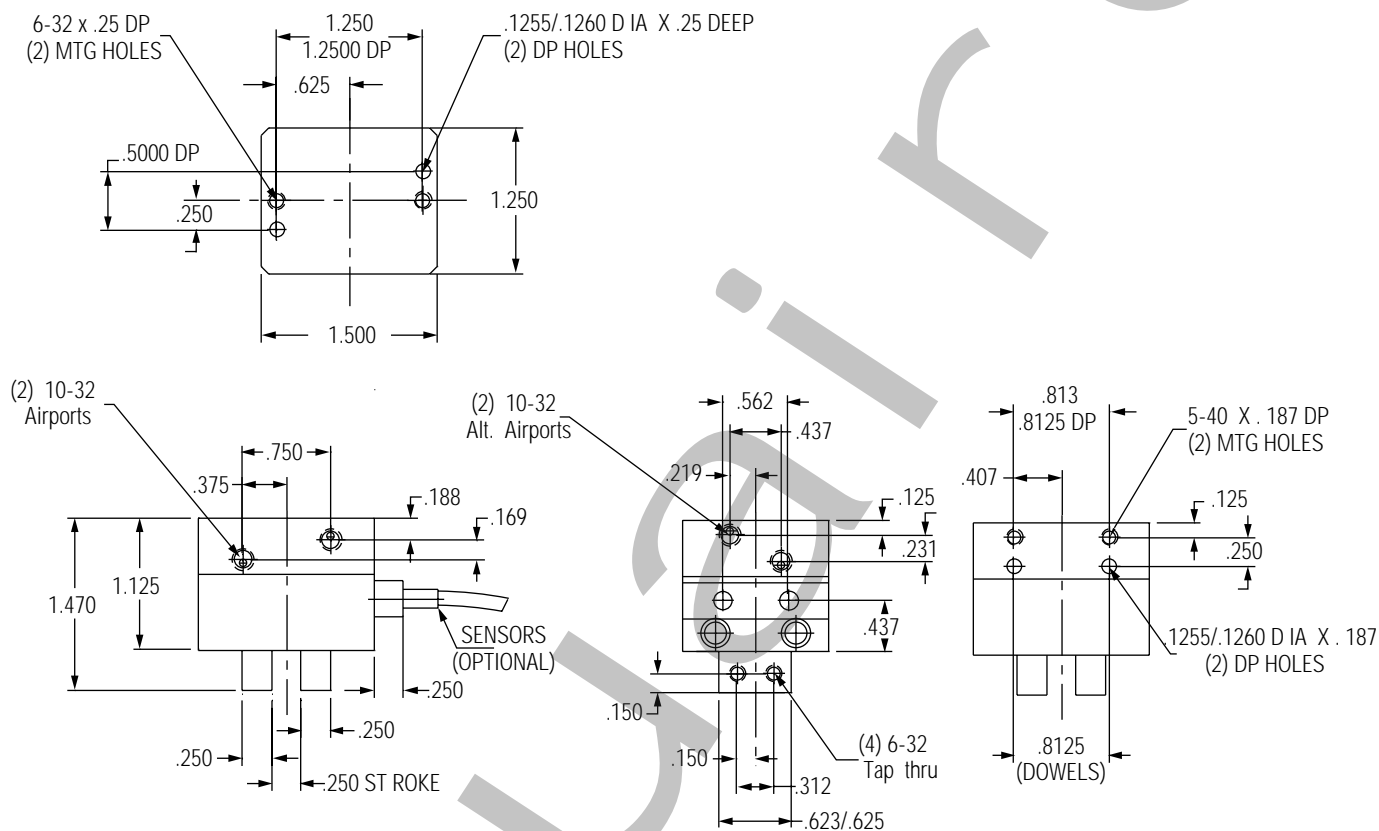
SWITCH DESCRIPTION	STANDARD PART NO.	QUICK DISCONNECT PART NO.
Prox Switch - PNP (Sourcing)	PX04PS	PX04PQ
Prox Switch - NPN (Sinking)	PX04NS	PX04NQ
Quick disconnect cable straight	-	PXCST
Quick disconnect cable 90 deg.	-	PXC90



WG Series  
Parallel Gripper Double Guided Wedge



WGS-50



Gripper Specifications

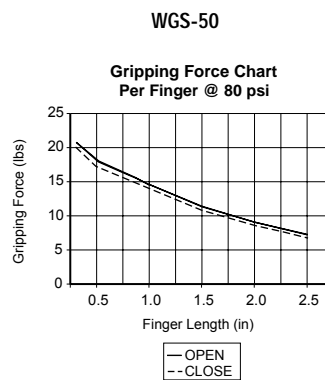
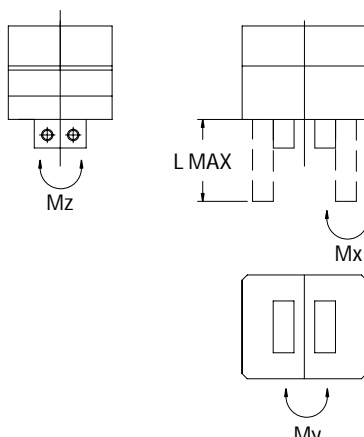
MODEL	FORCE OPEN @100 PSI	FORCE CLOSE @100 PSI	DISPLACEMENT	MAX. PSI	REPEATABILITY	WEIGHT
WGS-50	45 lbs.	40 lbs.	.10 cu. inches	150 PSI	±.002	4 oz.

Recommended Maximum Load Rating

MODEL	Mx	My	Mz
WGS-50	123 in.-lbs.	123 in.-lbs.	123 in.-lbs.

Grip Force vs. Finger Length

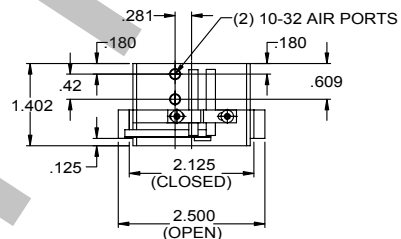
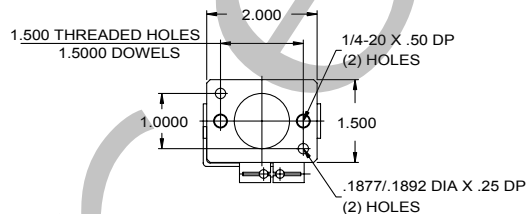
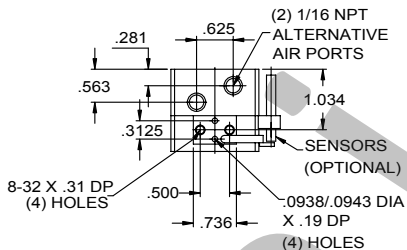
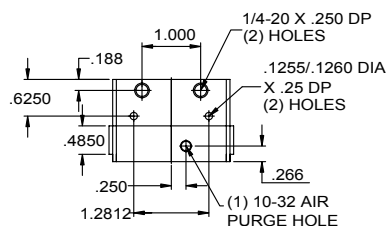
"L" MAX	FORCE CLOSE @ 100 PSI
.05	42 lbs.
1.0	34 lbs.
1.5	30 lbs.
2.0	20 lbs.
2.5	16 lbs.



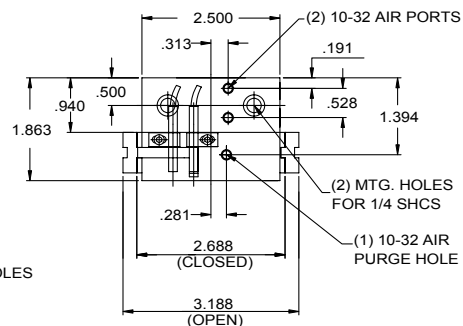
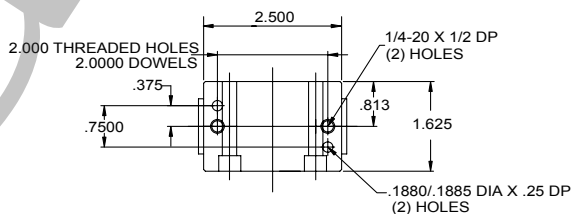
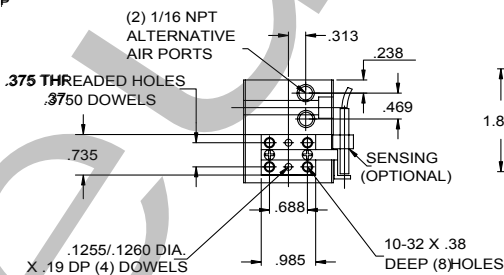
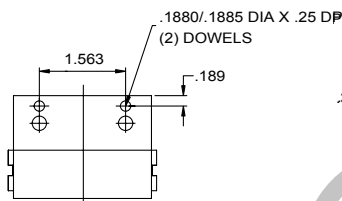


## WG Series Parallel Gripper Double Guided Wedge

### WGL-50

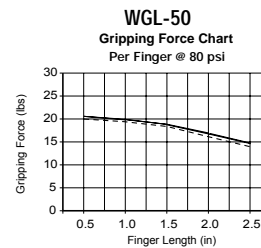


### WGS-90



### Gripper Specifications

MODEL	STROKE	FORCE CLOSE @100 PSI	DISPLACEMENT	MAX. PSI	REPEATABILITY	WEIGHT
WGL-50	.375	40 lbs.	.20 cu. inches	150 PSI	±.002	7 oz.
WGS-90	.500	70 lbs.	.30 cu. inches	150 PSI	±.002	11 oz.



### Recommended Maximum Load Rating

MODEL	Mx	My	Mz	Lmax
WGL-50	70 in.-lbs.	70 in.-lbs.	70 in.-lbs.	2.5 inches
WGS-90	160 in.-lbs.	160 in.-lbs.	160 in.-lbs.	2.5 inches

### Grip Force vs. Finger Length

"L" MAX	WGL-50	WGS-90
0.05	50 lbs.	92.5 lbs.
1.0	47 lbs.	90 lbs.
1.5	42 lbs.	80 lbs.
2.0	40 lbs.	75 lbs.
2.5	35 lbs.	70 lbs.

