



New GPL Grippers

Twice the Force – Half the Weight

The New GPL Series of parallel grippers represents a pinnacle in parallel gripper development. This GPL has not changed catalog dimensions but provides higher levels of closing force and lighter weight. This 5th generation ZAYTRAN product uses patented (US4591199) double helix technology. The double helix allows long strokes and high centering precision (± 0.001 inches, ± 0.025 mm). Tough materials and treatments are employed to assure long life in the harshest environments. The slides are heat treated and tempered to assure that they will continue to operate where typical grippers fail.

Borrowing from the MagnumTM Series the GPL employs a purge system that allows a chamber under the slides to be pressurized. This positive pressure ejects foreign materials such as grinding dust and welding slag. To make plumbing easy the grippers have open and close ports at either end as well as on the mounting side.

Sensors are easily added via an accessory kit and are easily positioned via a standard slot. This allows the grippers to be easily set up in complex automation applications. To facilitate the common requirement of Fail Safe operation a Fail Safe accessory is available. This device works the full length of the GPL's stroke and can be mounted to be fail safe in a grip closed or grip open application.



GPL-5

NEW STYLE

Stroke: 0.500 in. (12.7 mm)

Stroke limit options available

Gripping Force Per Jaw (Close) @ 100PSI (6.8bar): 12.0 lbs. (5.44 kgf)

Gripping Force Per Jaw (Open) @ 100PSI (6.8bar): 19.6 lbs. (8.89 kgf)

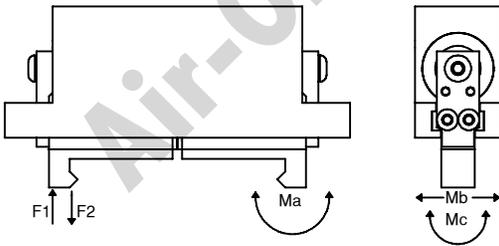
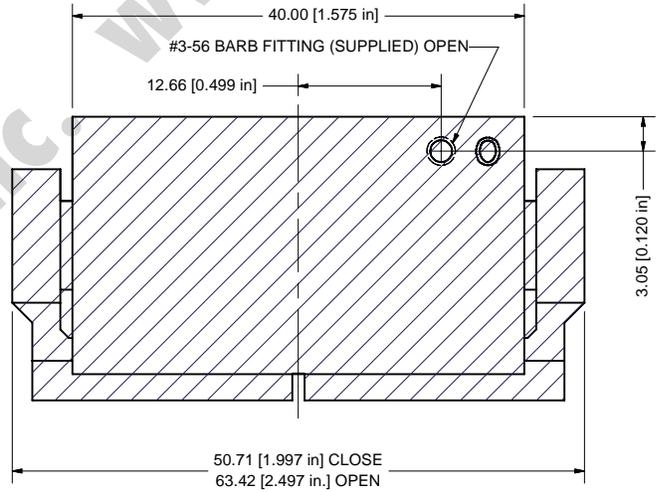
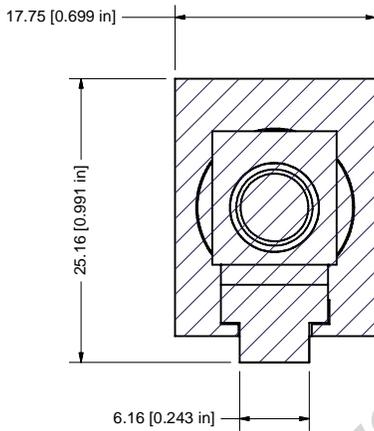
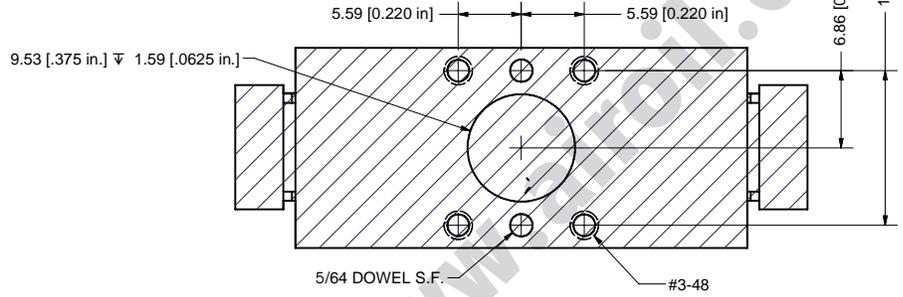
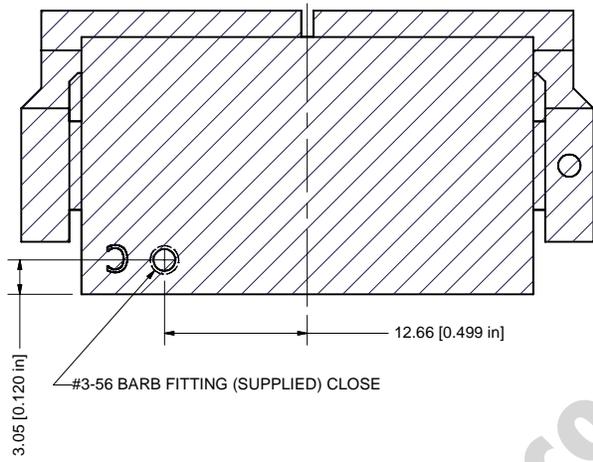
Approximate Weight: 2.01oz. (57 g)

Operating Displacement: 0.1 cu. in. (1.63 cu. cm)

Maximum Operating Pressure: 120 PSI (8.3 bar)

- All mounting holes 1-1/2 diameter minimum thread depth.

- Ports labeled "O" for open, "C" for close.



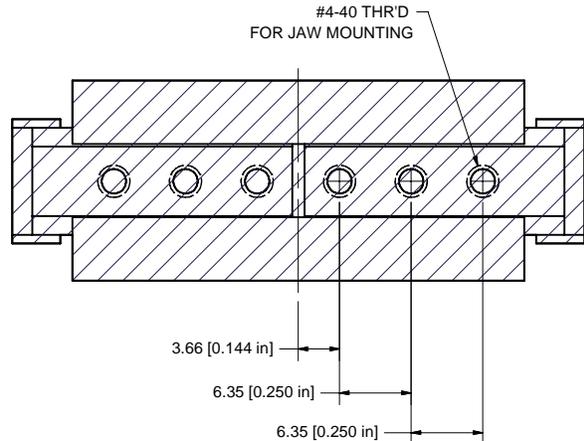
Ma = 32 in*lbs (35 kgf*cm)

Mb = 43 in*lbs (50 kgf*cm)

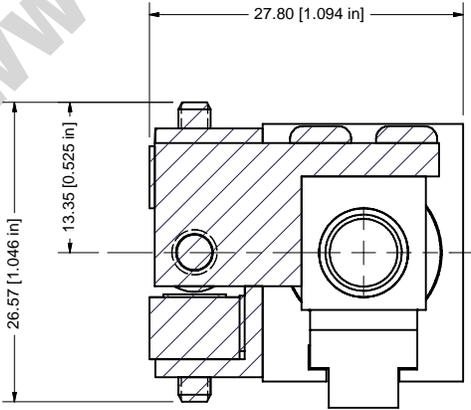
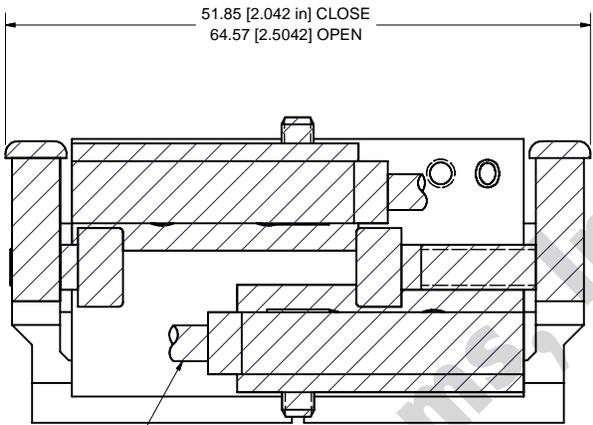
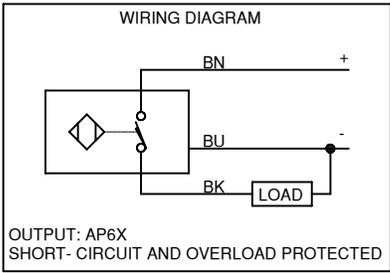
Mc = 54 in*lbs (60 kgf*cm)

F1 = 5 lbs (2.3 kgf)

F2 = 5 lbs (2.3 kgf)



SENSING ACCESSORY KIT GPL-5



CORD 2.0 METER LENGTH TYP.

Air-Oil Systems, Inc. www.airoil.com

GPL-10

NEW STYLE

Stroke: 0.750 in. (19.1 mm)

Stroke limit options available

Gripping Force Per Jaw (Close) @ 100PSI (6.8bar): 26.2 lbs. (11.88 kgf)

Gripping Force Per Jaw (Open) @ 100PSI (6.8bar): 37.2 lbs. (16.87 kgf)

Approximate Weight: 5.7oz. (162 g)

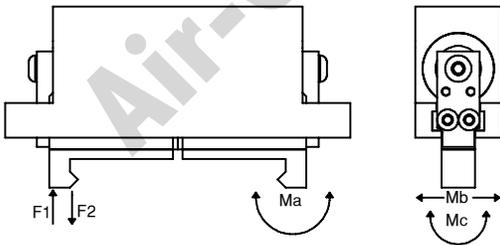
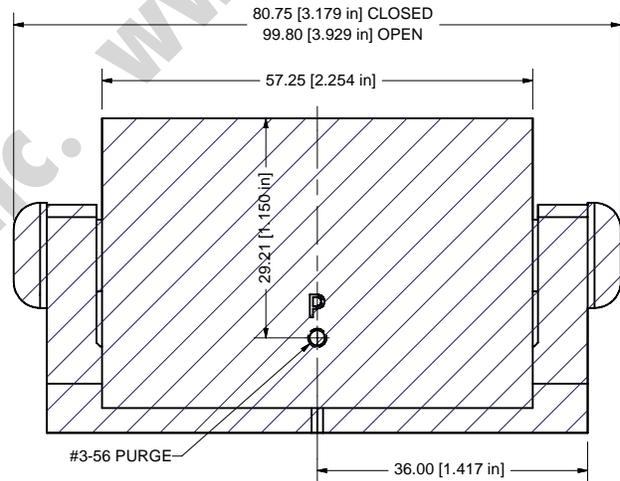
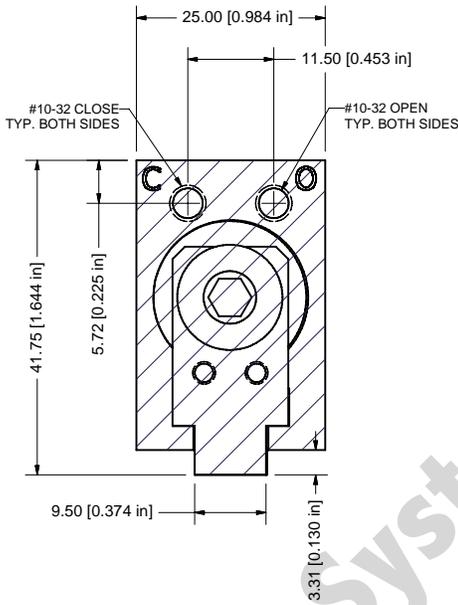
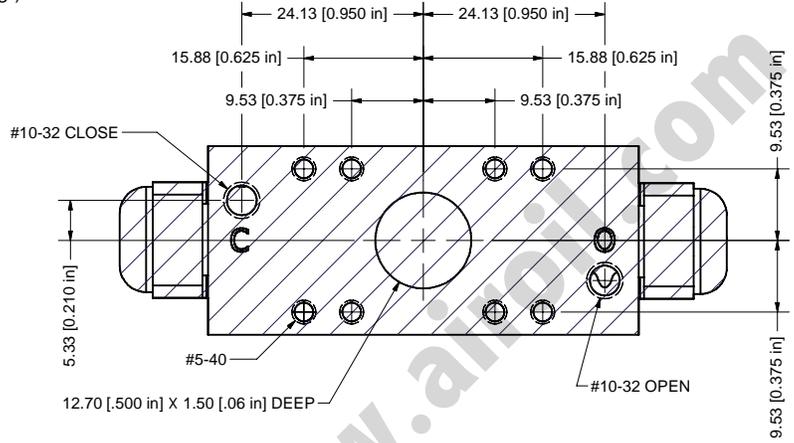
Operating Displacement: .280 cu. in. (4.59 cu. cm)

Maximum Operating Pressure: 120 PSI (8.3 bar)

Recommended purge pressure: 1/2 of operating pressure

- All mounting holes 1-1/2 diameter minimum thread depth.

- Ports labeled "O" for open, "C" for close and "P" for purge.



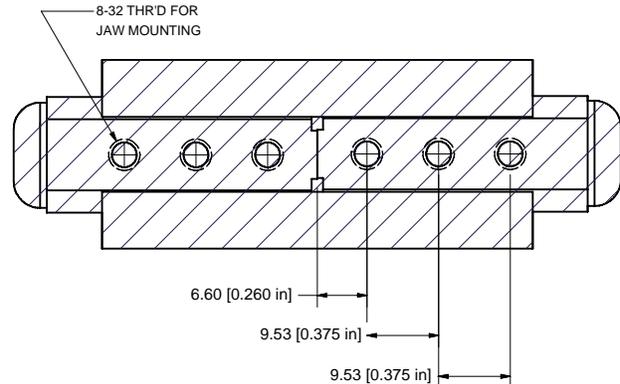
$$Ma = 97 \text{ in} \cdot \text{lbs} \text{ (100 kgf} \cdot \text{cm)}$$

$$Mb = 162 \text{ in} \cdot \text{lbs} \text{ (190 kgf} \cdot \text{cm)}$$

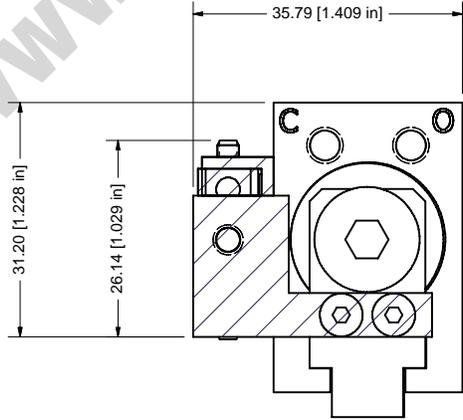
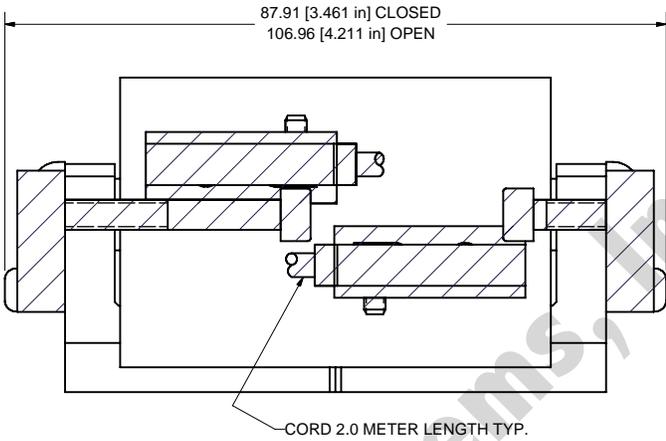
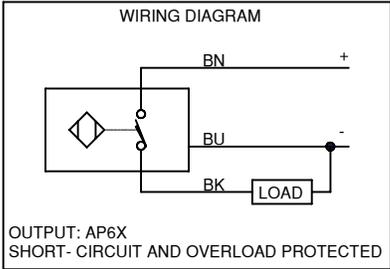
$$Mc = 86 \text{ in} \cdot \text{lbs} \text{ (100 kgf} \cdot \text{cm)}$$

$$F1 = 12 \text{ lbs} \text{ (5.5 kgf)}$$

$$F2 = 14 \text{ lbs} \text{ (6.4 kgf)}$$



SENSING ACCESSORY KIT GPL-10



GPL-40

NEW VERSION

Stroke: 2.00 in. (50.8 mm)

Stroke limit options available

Gripping Force Per Jaw (Close) @ 100PSI (6.8bar): 132 lbs. (59.83 kgf)

Gripping Force Per Jaw (Open) @ 100PSI (6.8bar): 176 lbs. (79.83 kgf)

Approximate Weight: 2.8 lbs. (1270 g)

Operating Displacement: 3.534 cu. in. (57.91 cu. cm)

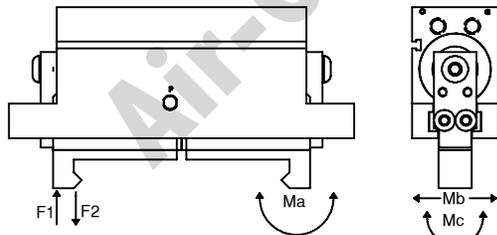
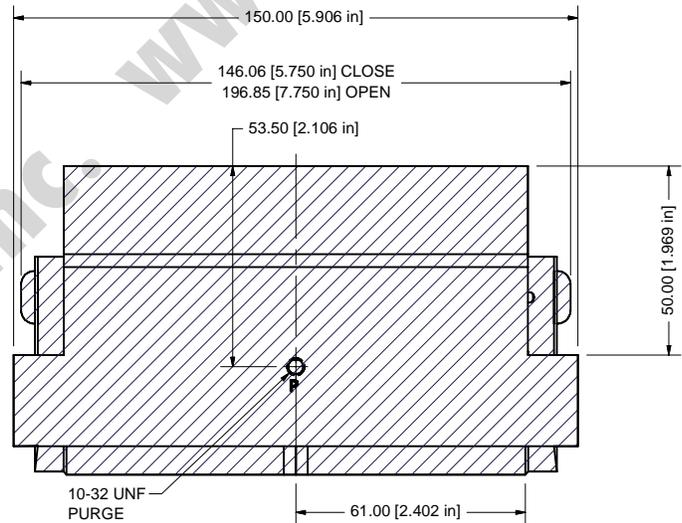
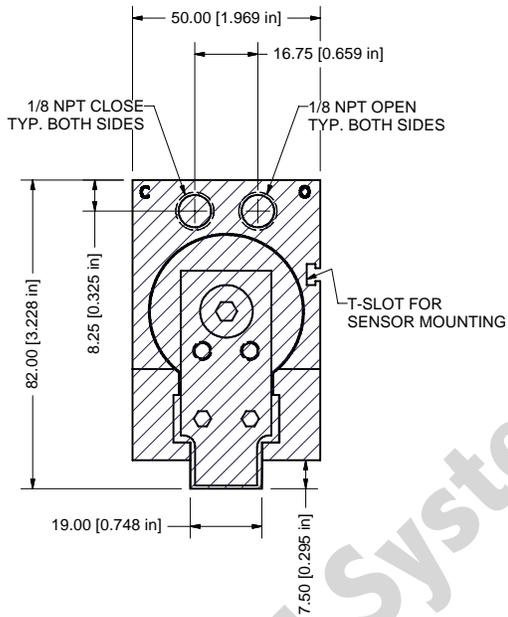
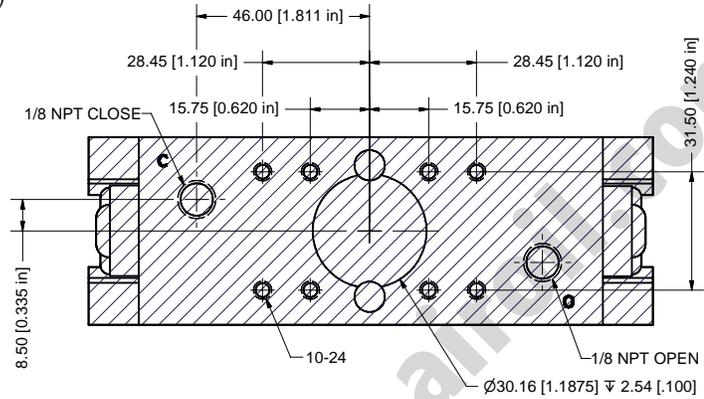
Maximum Operating Pressure: 120 PSI (8.3 bar)

Recommended Purge Pressure: 1/2 of operating pressure

- All mounting holes 1-1/2 diameter minimum thread depth.

-Jaw mounting holes are equipped with stainless steel thread inserts.

- Ports labeled "O" for open, "C" for close and "P" for purge.



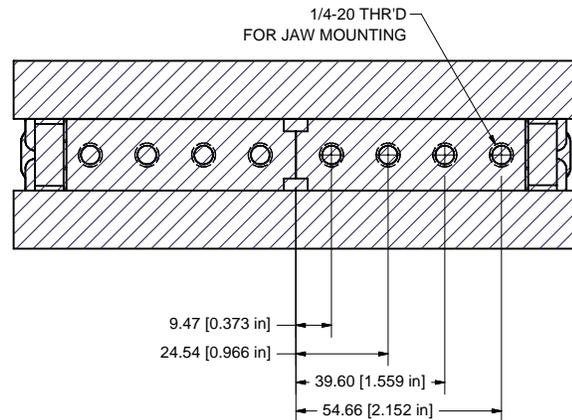
Ma = 295 in*lbs (340 kgf*cm)

Mb = 432 in*lbs (500 kgf*cm)

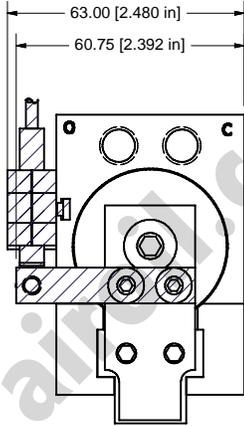
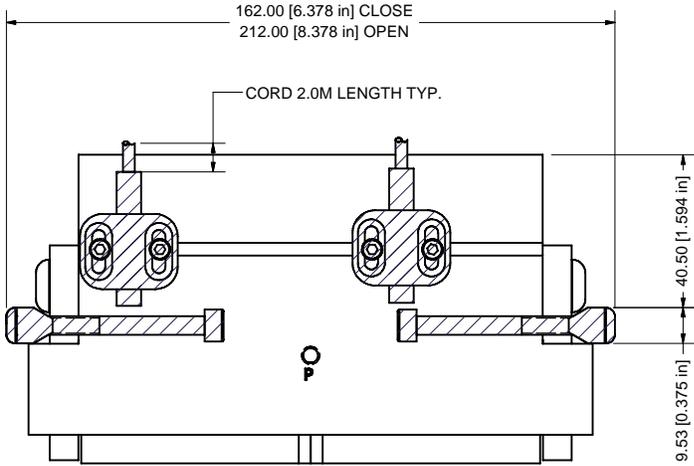
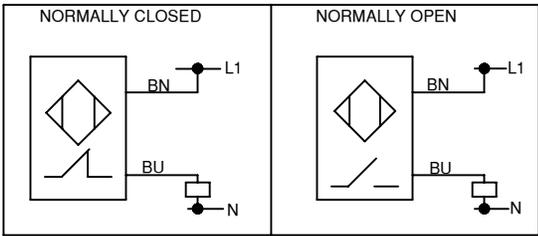
Mc = 302 in*lbs (350 kgf*cm)

F1 = 62 lbs (28.0 kgf)

F2 = 42 lbs (19.2 kgf)

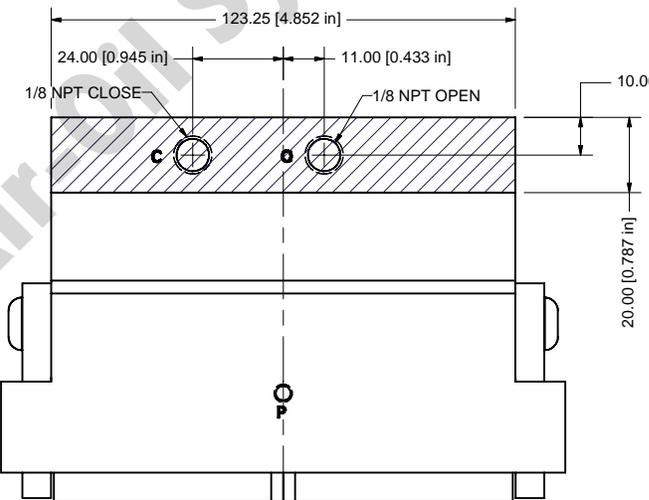
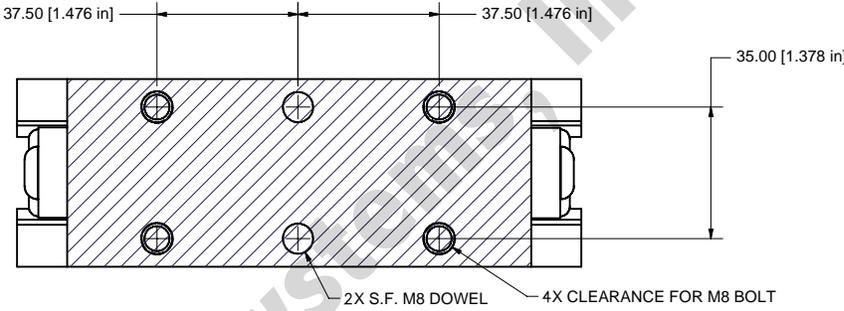


SENSING ACCESSORY KIT GPL-40

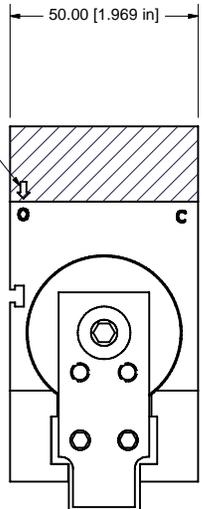


FAILSAFE ACCESSORY KIT

- FAILSAFE IS SHOWN HOLDING IN THE OPEN DIRECTION, HOWEVER THE FAILSAFE CAN BE ROTATED 180° TO HOLD IN THE CLOSE DIRECTION



FAILSAFE DIRECTION INDICATOR
SHOWN HOLDING IN THE OPEN POSITION
FAILSAFE CAN BE ROTATED 180°
TO HOLD IN THE CLOSE POSITION



GPL-100

NEW VERSION

Stroke: 3.00 in. (76.2mm)

Stroke limit options available

Gripping Force Per Jaw (Close) @ 100PSI (6.8bar): 196 lbs. (89 kgf)

Gripping Force Per Jaw (Open) @ 100PSI (6.8bar): 230 lbs. (104 kgf)

Approximate Weight: 5.3 lbs. (2404 g)

Operating Displacement: 7.216 cu. in. (118.24 cu. cm)

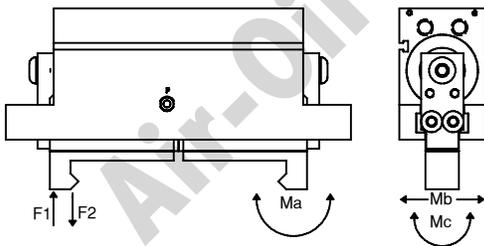
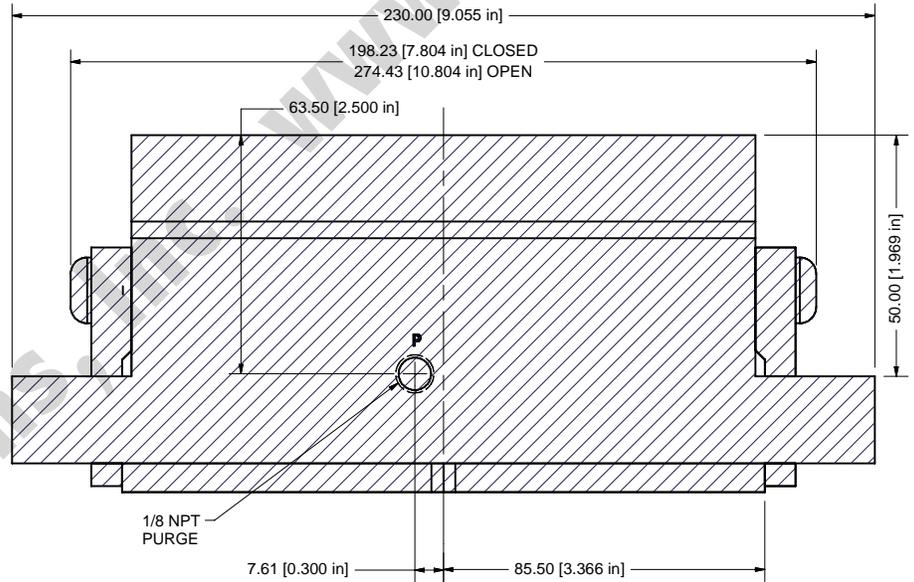
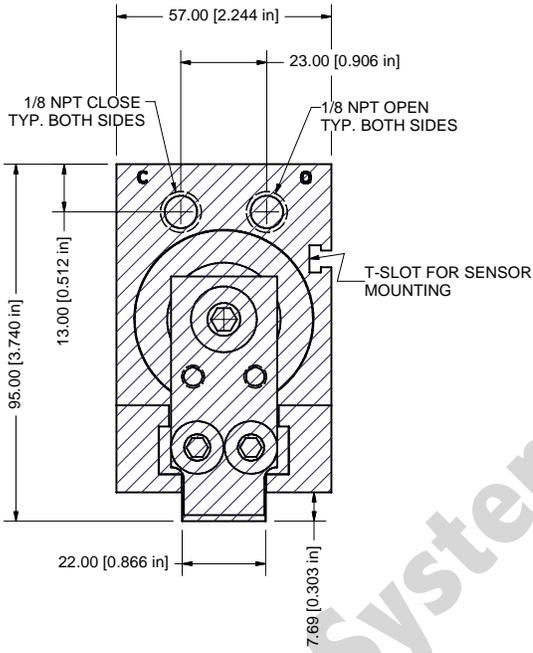
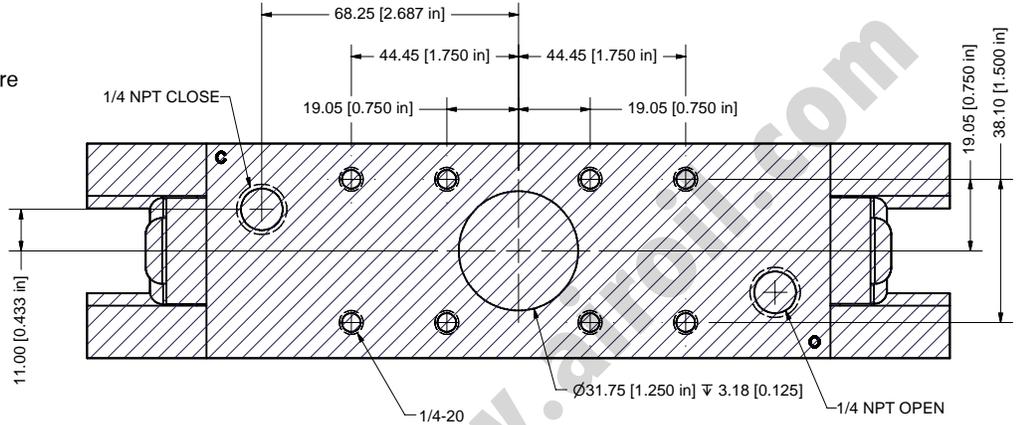
Maximum Operating Pressure: 120 PSI (8.3 bar)

Recommended Purge Pressure: 1/2 of operating pressure

- All mounting holes 1-1/2 diameter minimum thread depth.

- Jaw mounting holes are equipped with stainless steel thread inserts.

- Ports labeled "O" for open, "C" for close and "P" for purge.



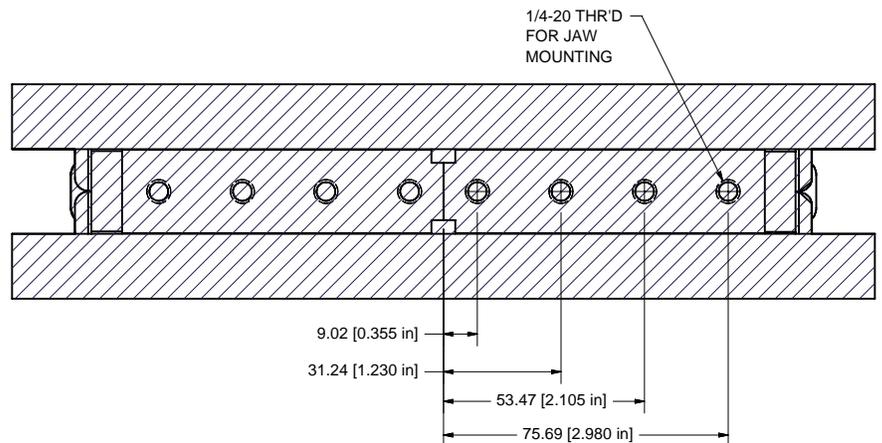
Ma = 658 in*lbs (750 kgf*cm)

Mb = 1080 in*lbs (1250 kgf*cm)

Mc = 1231 in*lbs (1400 kgf*cm)

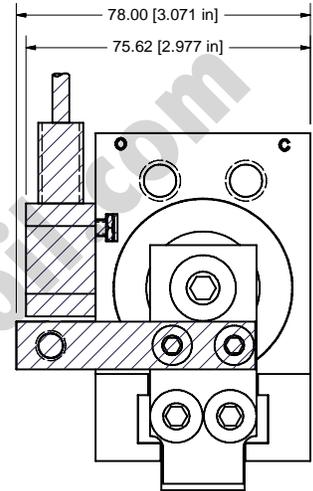
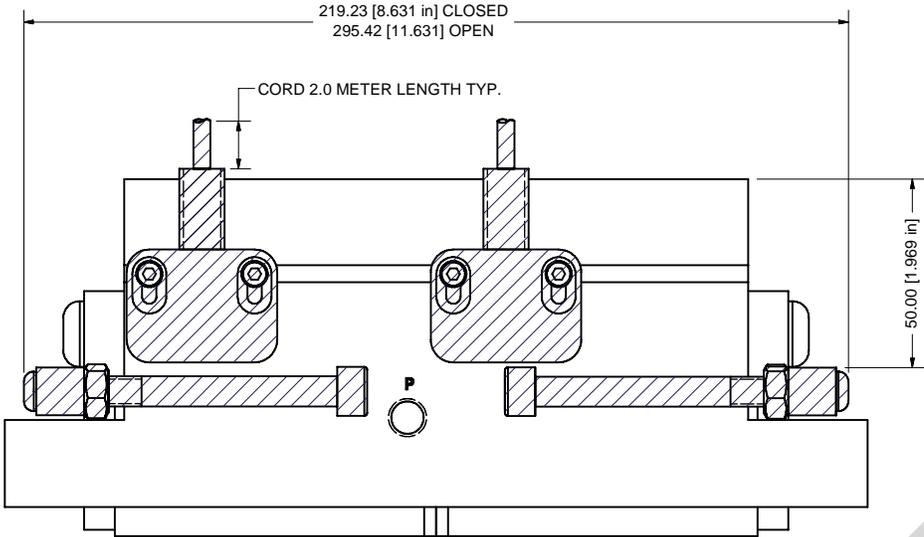
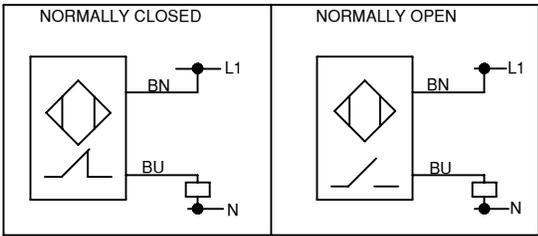
F1 = 246 lbs (111.8 kgf)

F2 = 169 lbs (77.0 kgf)



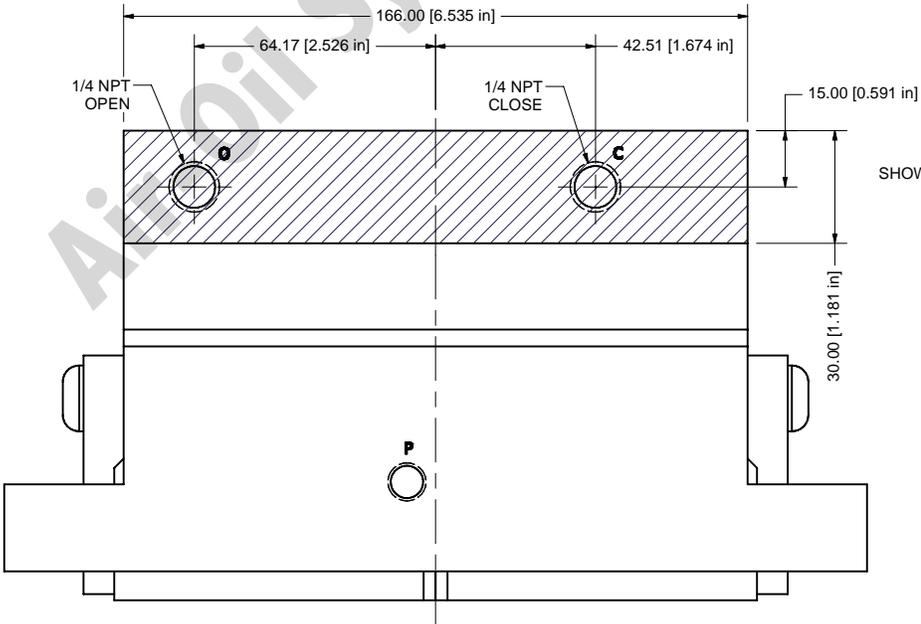
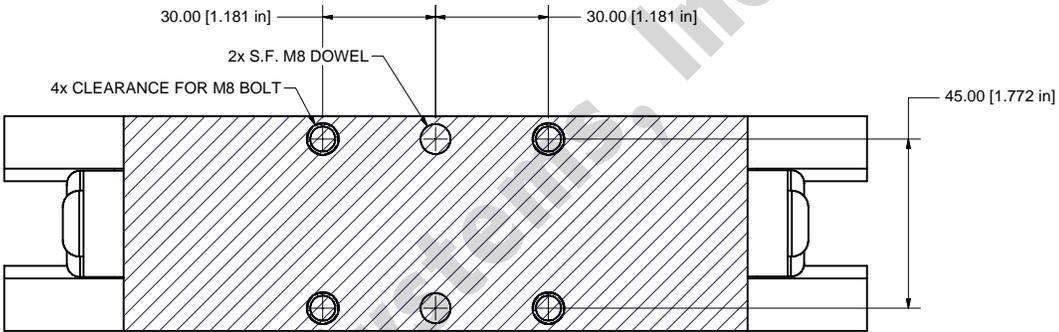
SENSING ACCESSORY KIT

GPL-100

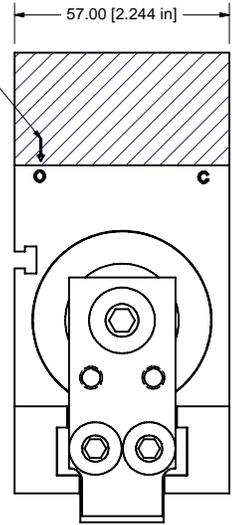


FAILSAFE ACCESSORY KIT

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FAILSAFE DIRECTION INDICATOR SHOWN HOLDING IN THE OPEN POSITION.
FAILSAFE CAN BE ROTATED 180° TO HOLD IN THE CLOSE POSITION



GPL-200

NEW VERSION

Stroke: 4.00 in. (101.6 mm)

Stroke limit options available

Gripping Force Per Jaw (Close) @ 100PSI (6.8bar): 364.0 lbs. (165.1 kgf)

Gripping Force Per Jaw (Open) @ 100PSI (6.8bar): 443.0 lbs. (200.9 kgf)

Approximate Weight: 9.8 lbs. (4445 g)

Operating Displacement: 17.7 cu. in. (290.1 cu. cm)

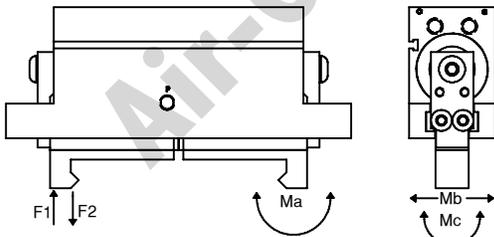
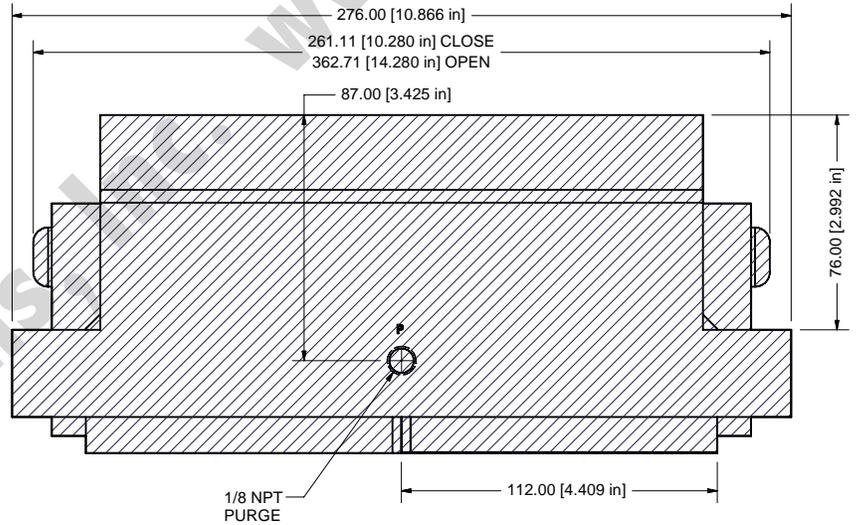
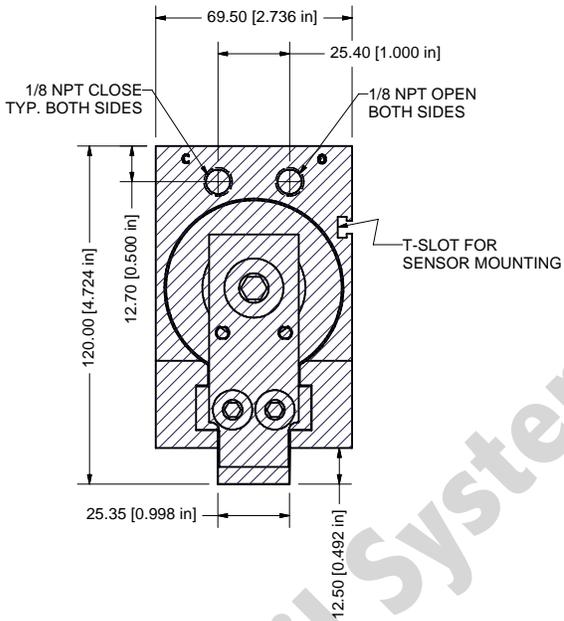
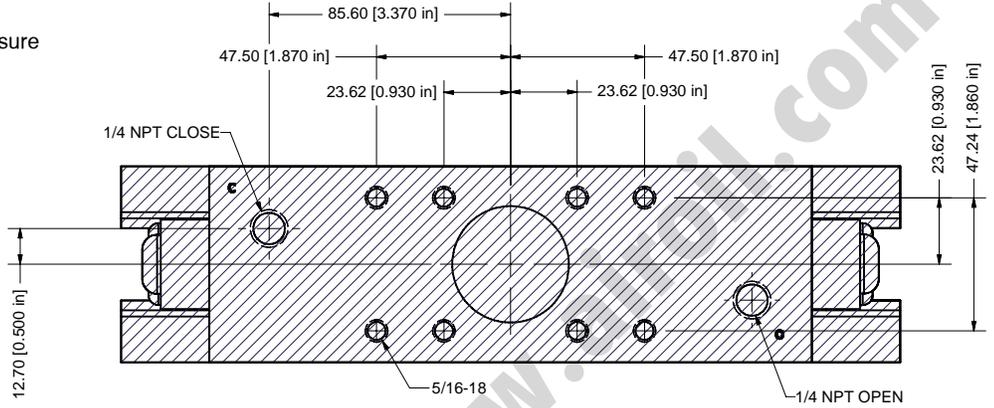
Maximum Operating Pressure: 120 PSI (8.3 bar)

Recommended Purge Pressure: 1/2 of operating pressure

- All mounting holes 1-1/2 diameter minimum thread depth.

-Jaw mounting holes are equipped with stainless steel thread inserts.

- Ports labeled "O" for open, "C" for close and "P" for purge.



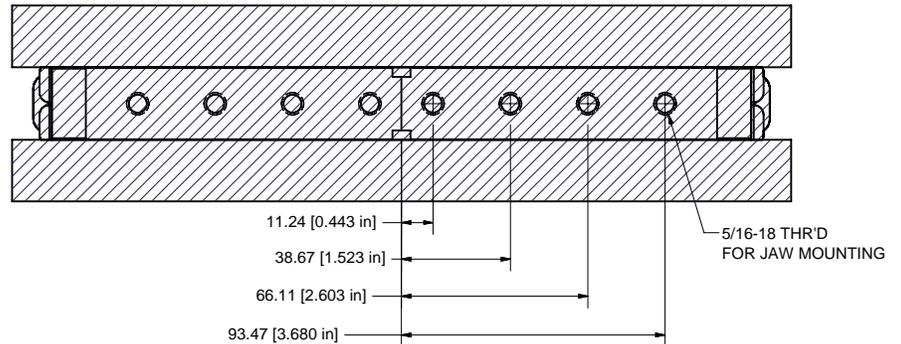
$M_a = 1095 \text{ in} \cdot \text{lbs} (1250 \text{ kgf} \cdot \text{cm})$

$M_b = 1825 \text{ in} \cdot \text{lbs} (2100 \text{ kgf} \cdot \text{cm})$

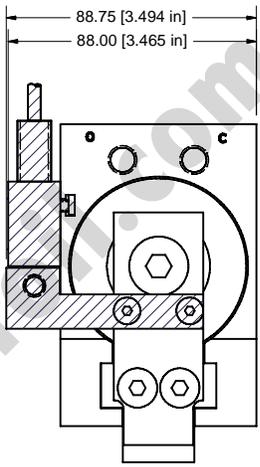
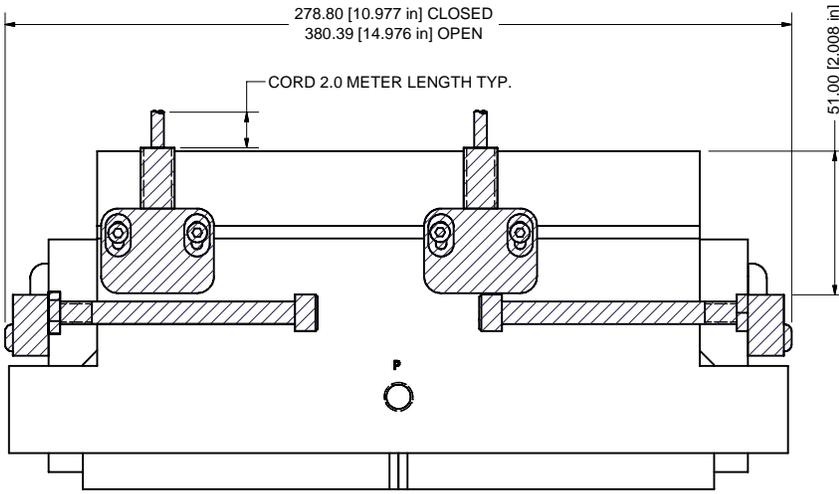
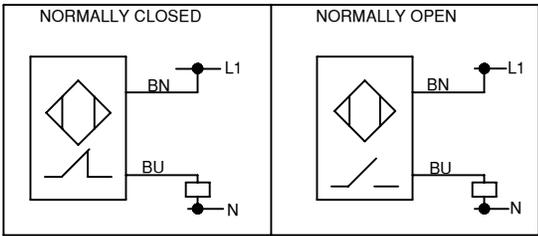
$M_c = 2020 \text{ in} \cdot \text{lbs} (2300 \text{ kgf} \cdot \text{cm})$

$F_1 = 750 \text{ lbs} (340.9 \text{ kgf})$

$F_2 = 556 \text{ lbs} (252.5 \text{ kgf})$

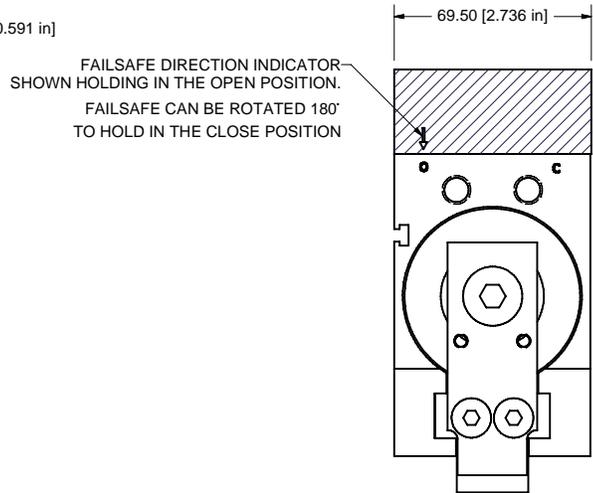
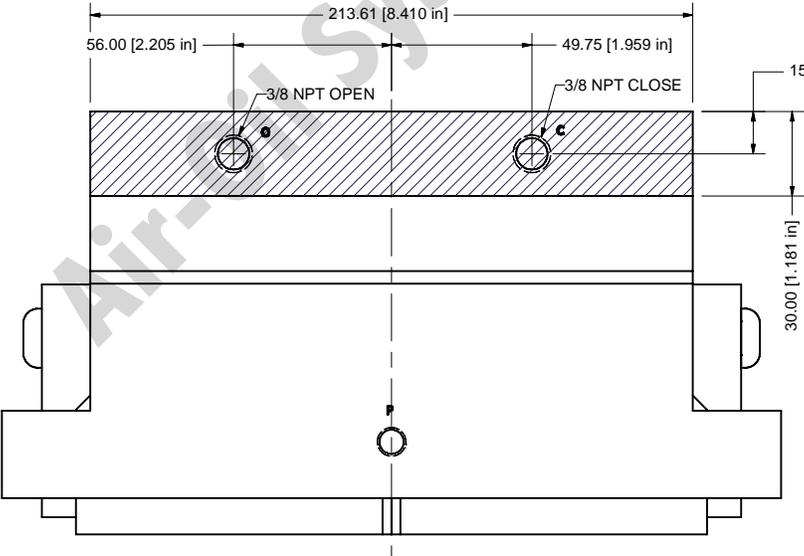
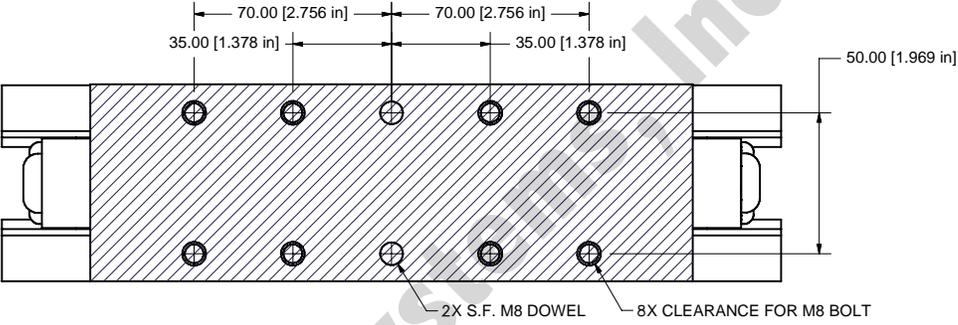


SENSING ACCESSORY KIT GPL-200

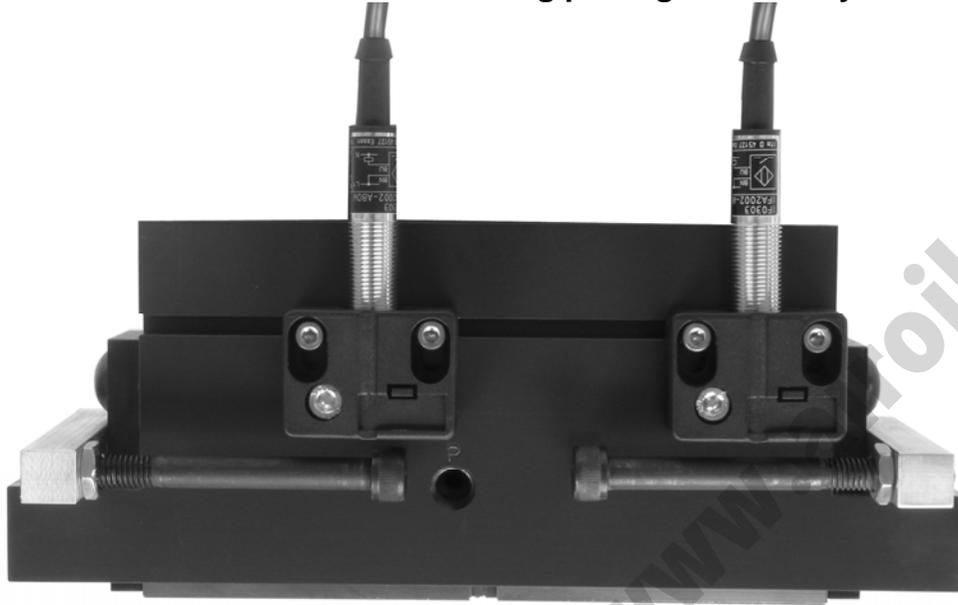


FAILSAFE ACCESSORY KIT

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GPL-100 shown with sensing package accessory



GPL-100 shown with Fail Safe Accessory

