



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 Magnum™ 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-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)

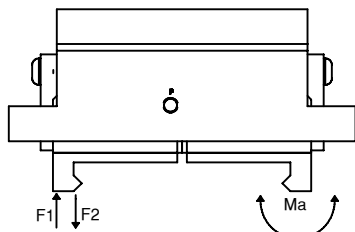
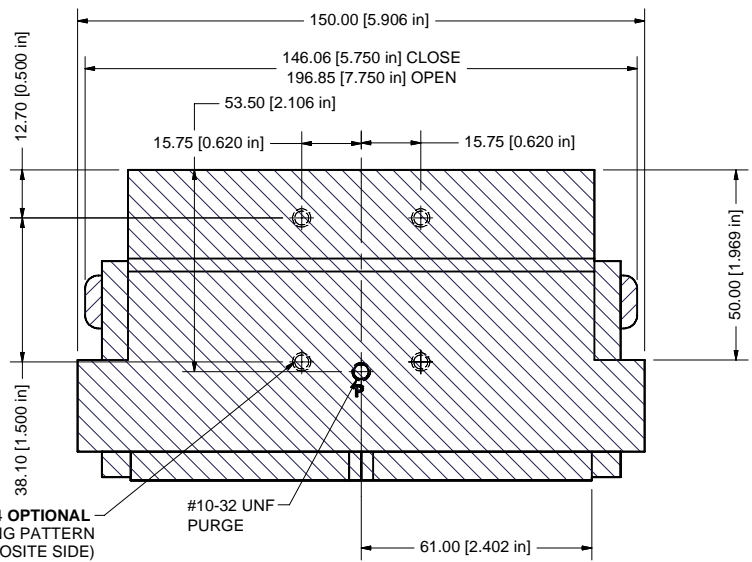
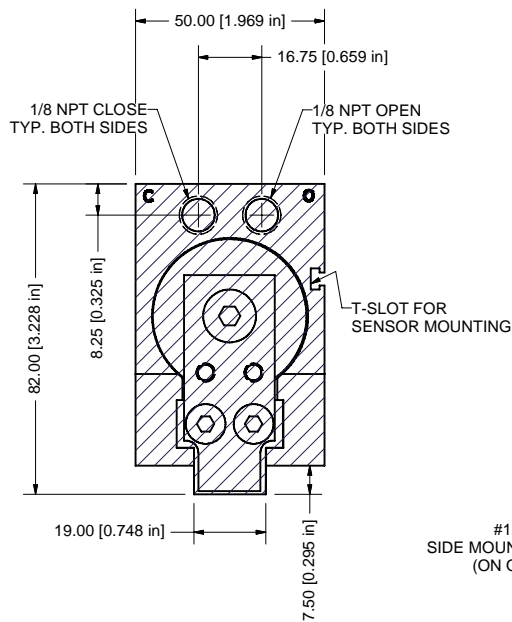
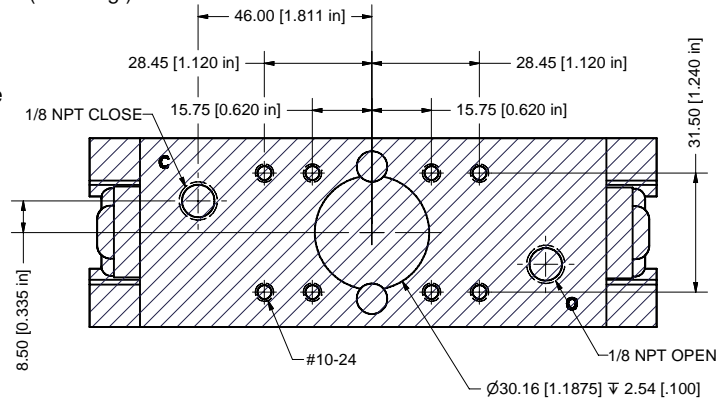
Approximate Weight: 2.8 lbs. (1270 g)

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.



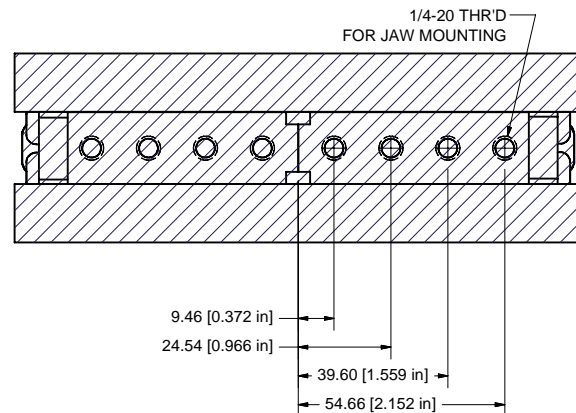
$M_a = 295 \text{ in} \cdot \text{lbs} \text{ (340 kgf} \cdot \text{cm)}$

$M_b = 432 \text{ in} \cdot \text{lbs} \text{ (500 kgf} \cdot \text{cm)}$

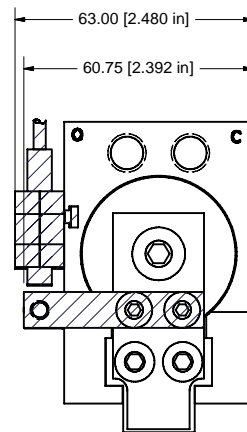
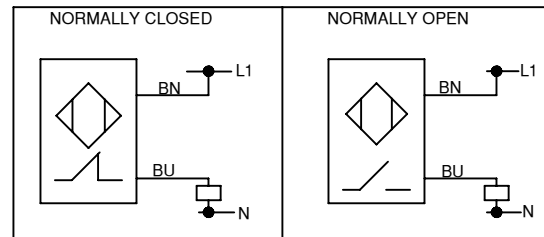
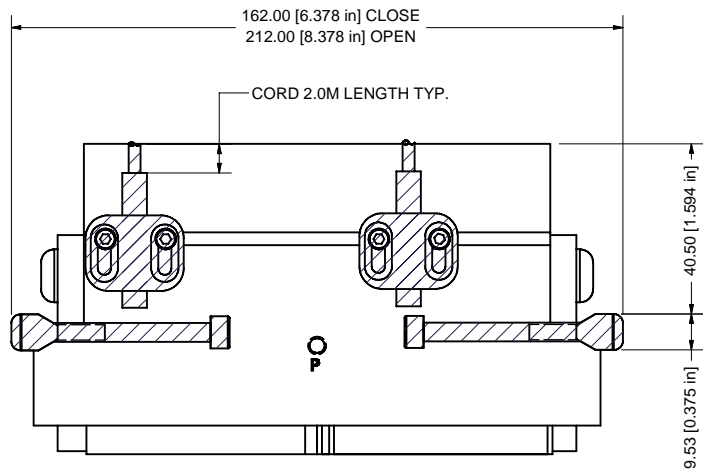
$M_c = 302 \text{ in} \cdot \text{lbs} \text{ (350 kgf} \cdot \text{cm)}$

$F_1 = 62 \text{ lbs} \text{ (28.0 kgf)}$

$F_2 = 42 \text{ lbs} \text{ (19.2 kgf)}$



SENSING ACCESSORY KIT GPL-40



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)

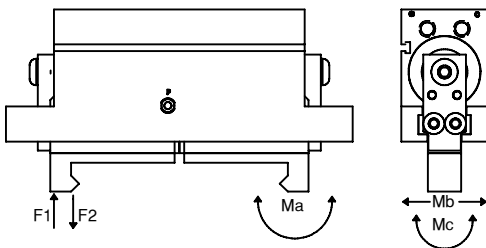
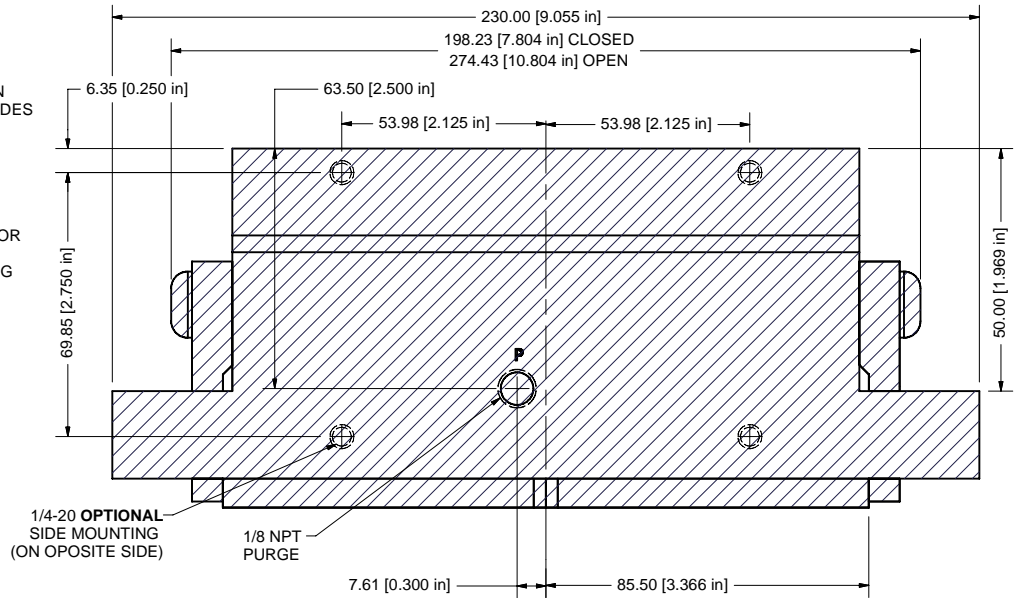
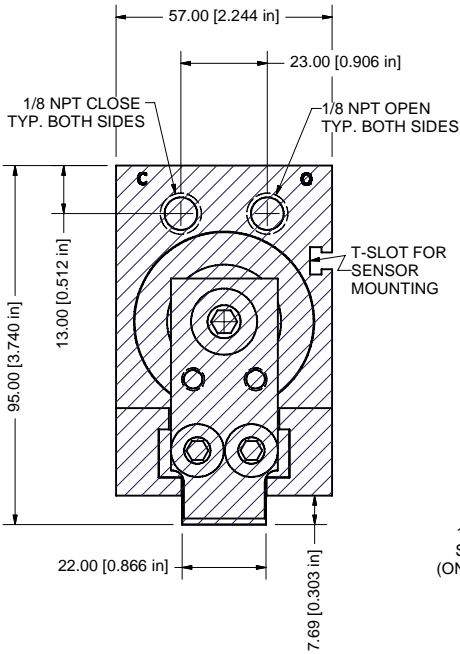
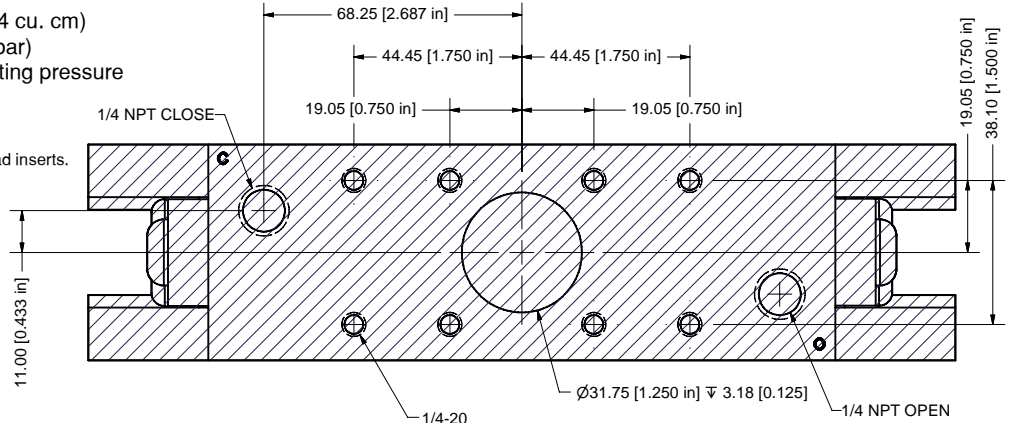
Maximum Operating Pressure: 120 PSI (8.3 bar)

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.



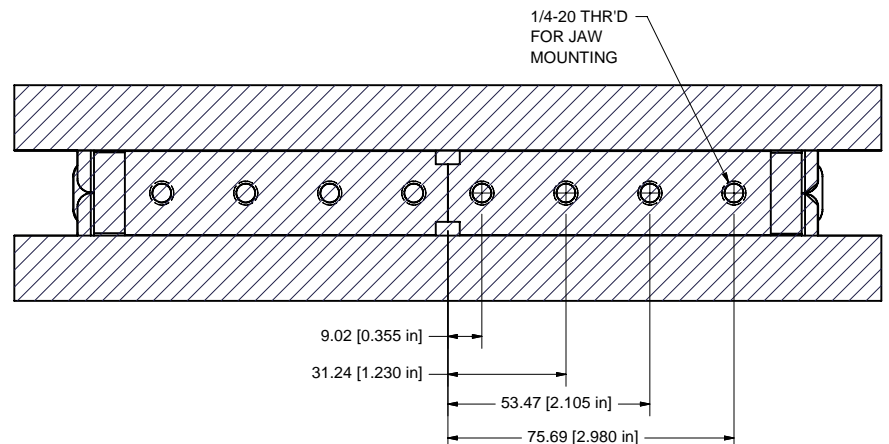
$M_a = 658 \text{ in}^*\text{lbs (750 kgf}^*\text{cm)}$

$M_b = 1080 \text{ in}^*\text{lbs (1250 kgf}^*\text{cm)}$

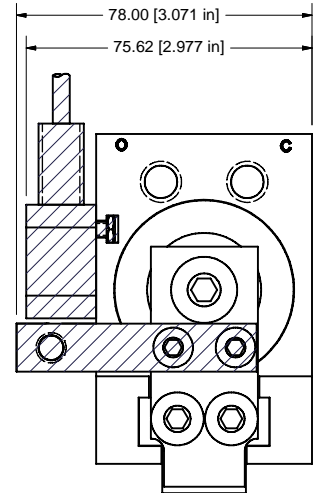
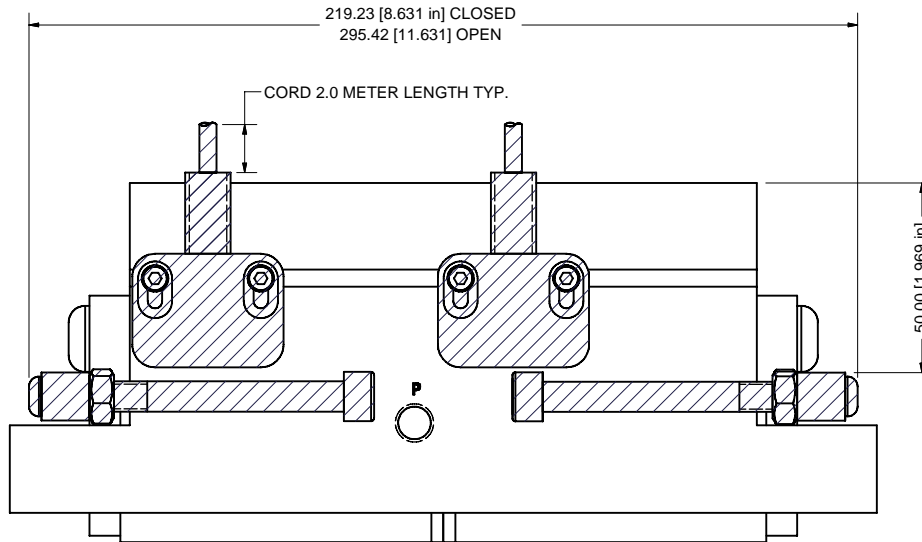
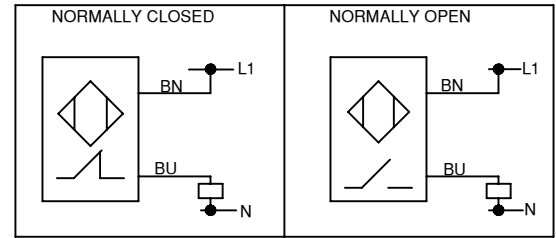
$M_c = 1231 \text{ in}^*\text{lbs (1400 kgf}^*\text{cm)}$

$F_1 = 246 \text{ lbs (111.8 kgf)}$

$F_2 = 169 \text{ lbs (77.0 kgf)}$



SENSING ACCESSORY KIT GPL-100



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)

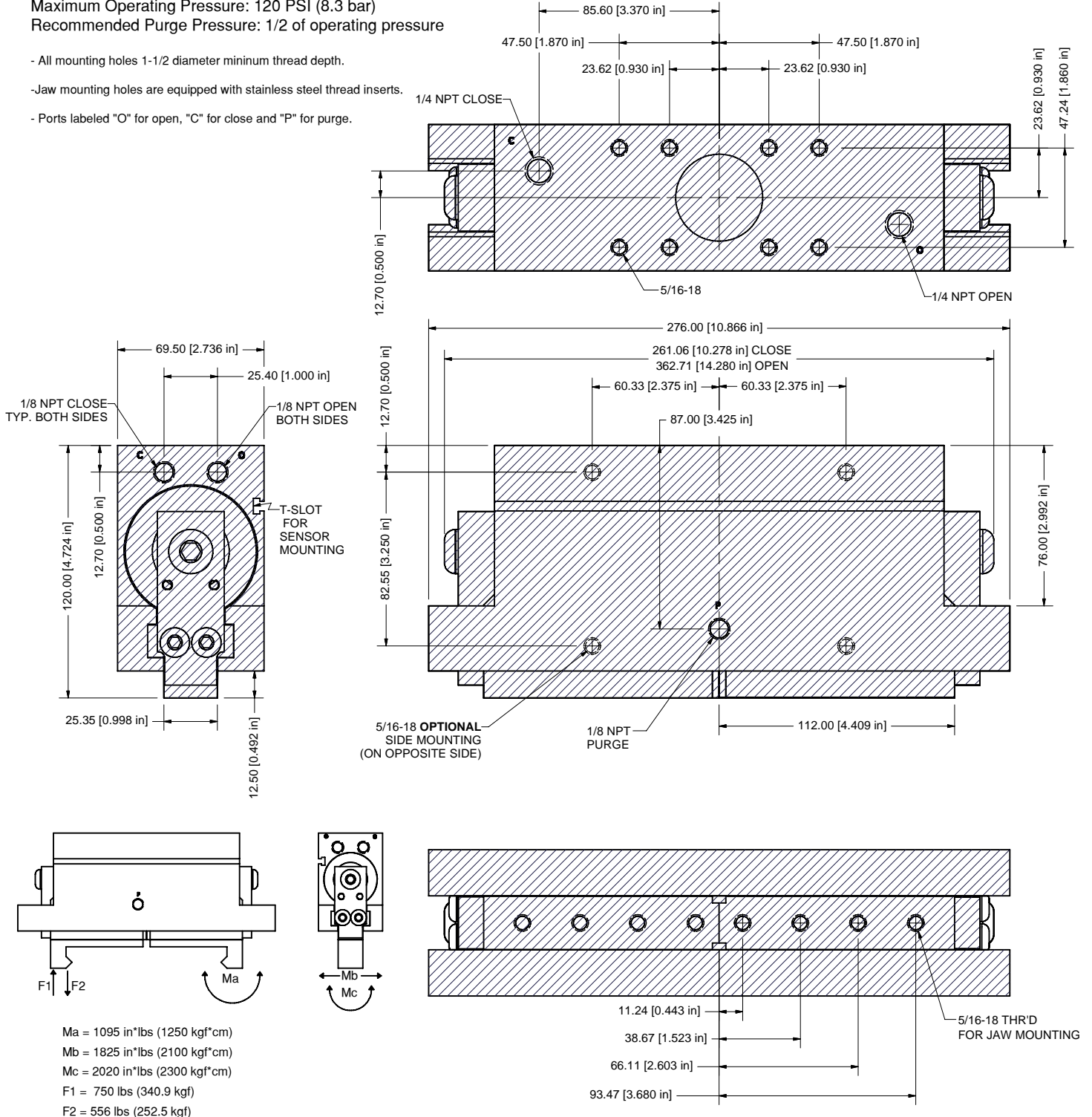
Maximum Operating Pressure: 120 PSI (8.3 bar)

Recommended Purge Pressure: 1/2 of operating pressure

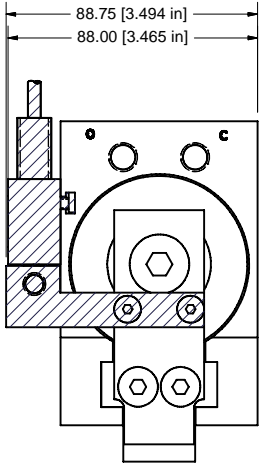
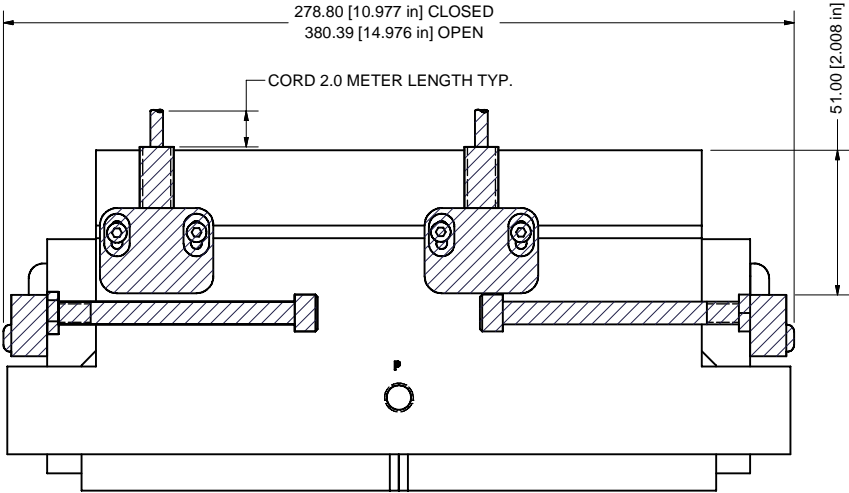
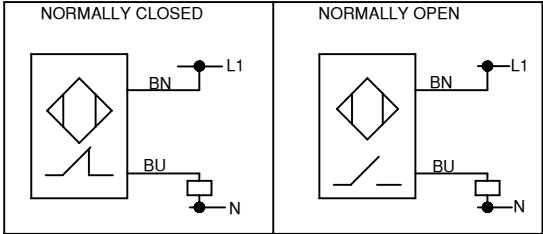
- All mounting holes 1-1/2 diameter minimum thread depth.

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

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



SENSING ACCESSORY KIT GPL-200



GPL Ordering Information



Grippers

Size:
(40, 100, or 200)

Seals:

Blank = Buna-N

V = Viton (High Temp.)

Side Mounting:

Blank = Standard Mounting

SM = Side Mounting Pattern



Example: GPL-40-V

GPL Type Gripper, 40 Size, Viton Seals, No Side Mounting Pattern



Sensing Kits

Size:

(40, 100 or 200)



Sensor Type:

12mm HWO = Hardware Only for 12mm barrel prox. sensor

6.5mm HWO = Hardware Only for 6.5mm barrel prox. sensor

DC SINK = DC Sinking Sensor

DC SOUR = DC Sourcing Sensor

AC NO = AC Normally Open Sensor

AC NC = AC Normally Closed Sensor

Example: G-KIT-200-DC SOUR

Sensor Kit for a GPL-200, with a DC Sourcing Sensor