DGC/GC SERIES

2-Jaw Precision Parallel Grippers | Features and Benefits | How To Order

Features:

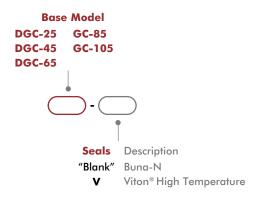
- · Rugged, high precision long stroke gripper
- High impact resistant with double wedge design
- Versatile mounting on top or sides of gripper
- Spring assist option maintains grip in case of air pressure loss
- Two end of stroke inductive sensing positions supported
- DIRECTCONNECT™ mounting (DGC only)
- Shielded design to repel chips and particulates

Applications:

- Machining and harsh environment applications
- High vibration and impact applications
- Pick and Place applications



How To Order



Accessories

| Sensor Accessories | Model Numbers | Part Number | Qty/Unit |
|--|----------------|-------------|----------|
| 4mm NPN Inductive Sensor with Quick Disconnect* | 25, 45 | OISN-014 | 1-2 |
| 4mm PNP Inductive Sensor with Quick Disconnect* | 25, 45 | OISP-014 | 1-2 |
| 8mm NPN Inductive Sensor with Quick Disconnect* | 65, 85 | OISN-011 | 1-2 |
| 8mm PNP Inductive Sensor with Quick Disconnect* | 65, 85 | OISP-011 | 1-2 |
| 12mm NPN Inductive Sensor with Quick Disconnect* | 105 | OISN-017 | 1-2 |
| 12mm PNP Inductive Sensor with Quick Disconnect* | 105 | OISP-017 | 1-2 |
| Quick Disconnect 2 Meter Cable Length* | 24, 45, 65, 85 | CABL-010 | 1-2 |
| Quick Disconnect 5 Meter Cable Length* | 24, 45, 65, 85 | CABL-013 | 1-2 |
| Quick Disconnect 2 Meter Cable Length* | 105 | CABL-014 | 1-2 |
| Quick Disconnect 5 Meter Cable Length* | 105 | CABL-018 | 1-2 |

^{*} Sensor and cable sold separately.



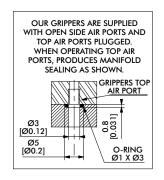
DGC/GC SERIES

2-Jaw Precision Parallel Grippers | Technical Specifications

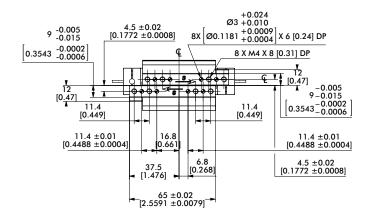
| Specifications | Units | 25 | 45 | 65 | 85 | 105 |
|---|--------------|-----------------------|--------------|--------------|---------------|----------------|
| Total Rated Grip Force F @ 100 psi [7 bar] | N [lb] | 474 [106] | 481 [108] | 796 [179] | 1480 [333] | 2318 [521] |
| Total Stroke | mm [in] | 20 [0.787] | 30 [1.181] | 40 [1.575] | 50 [1.968] | 60 [2.362] |
| Weight | kg [lbs] | 0.35 [0.77] | 0.60 [1.32] | 1.30 [2.87] | 2.20 [4.85] | 4.31 [9.50] |
| Pressure Range | bar [psi] | | 3-7 [45-100] | | | |
| Ingress Protection Class (IP) | | | IP54 | | | |
| Displacement | cm³ [in³] | 16 [0.98] | 29 [1.77] | 62 [3.78] | 136 [8.30] | 261 [15.93] |
| Temperature Range (Buna-N seals) | °C [°F] | -35°~80° [-30°~180°] | | | | |
| Temperature Range (Viton® seals) | °C [°F] | -30°~150° [-20°~300°] | | | | |
| Actuation (open/close) | sec | 0.20 | 0.25 | 0.35 | 0.50 | 0.70 |
| Accuracy | mm [in] | ±0.02 [±0.0009] | | | | |
| Repeatability | mm [in] | ±0.01 [±0.0004] | | | | |
| Valve to Required Actuate Single Acting | | 3-way, 2-position | | | | |
| Valve to Required Actuate Double Acting | | 4-way, 2-position | | | | |

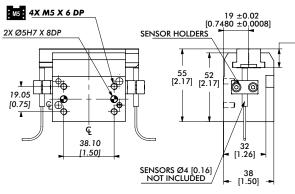


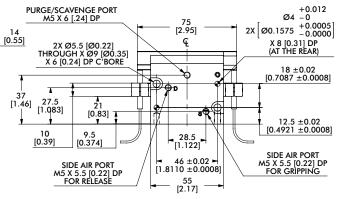










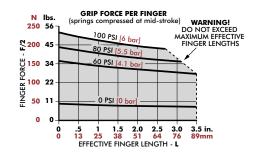


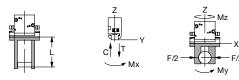
46 ±0.02 [1.8110 ±0.0008]

NOTE:

| NOTE: To benefit from safety spring close, gripper must always be GRIPPING and with "D" for R Drawing hereafter shows grip stroke (inlet through "S") | e operated with " \$ " for ELEASE. | 14.5 [0.571] 8 [0.31] TOP AIR PORT M3 X 4 [0.16] DP FOR RELEASE (SUPPLIED PLUGGED) 7 20 [0.79] [0.51] 1 10 [0.39] | 32.5 [1.280] | TOP AIR PORT M3 X 4 [0.16] DP FOR GRIPPING (SUPPLIED PLUGGED) 12.5 [0.492] 18 ±0.02 [0.7087 ±0.0008] 10 ±0.012 Ø4 -0 2X [Ø0.1575 ±0.0005] |
|---|--|--|-----------------|--|
| Seal Repair Kits | DGC-25 | 2 X M5 X 10 [0.39] DP | 84 | X 8 [0.31] DP |
| Buna-N Seal Repair Kit | SLKT-319 | | [0.01] | |
| Viton® Seal Repair Kit | SLKT-319V | | | |

Loading Information





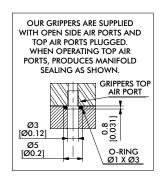
| DGC-25 | Static | Dynamic |
|-------------------------------|------------------|--------------------|
| Maximum Tensile T | 125 N [28 lbs] | 25 N [6 lbs] |
| Maximum Compressive C | 145 N [33 lbs] | 29 N [7 lbs] |
| Maximum Moment M _X | 2 Nm [18 in-lbs] | 0.5 Nm [4 in-lbs] |
| Maximum Moment My | 4 Nm [35 in-lbs] | 1 Nm [9 in-lbs] |
| Maximum Moment Mz | 6 Nm [53 in-lbs] | 1.5 Nm [13 in-lbs] |
| | | |

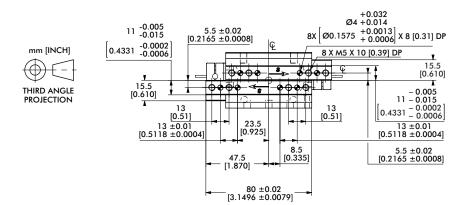
[†]Capacities are per set of jaws and are not simultaneous

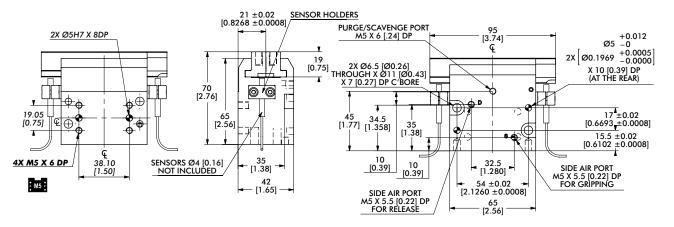








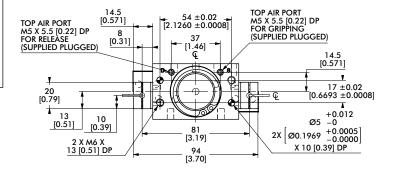




NOTE:

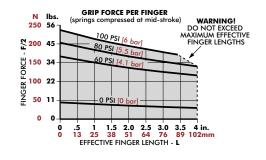
To benefit from safety springs power, on open or on close, gripper must always be operated with "**S**" for GRIPPING and with "**D**" for RELEASE.

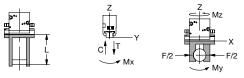
Drawing hereafter shows gripper gripping at the end of stroke (inlet through " \mathbf{S} ")



| Seal Repair Kits | DGC-45 |
|------------------------|-----------|
| Buna-N Seal Repair Kit | SLKT-321 |
| Viton® Seal Repair Kit | SLKT-321V |

Loading Information





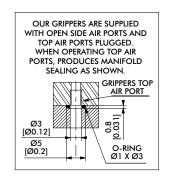
| DGC-45 | Static | Dynamic | |
|---|------------------|---------------------|--|
| Maximum Tensile T | 205 N [46 lbs] | 41 N [9 lbs] | |
| Maximum Compressive C | 225 N [51 lbs] | 45 N [10 lbs] | |
| Maximum Moment M_X | 3 Nm [27 in-lbs] | 0.75 Nm [7 in-lbs] | |
| Maximum Moment My | 6 Nm [53 in-lbs] | 1.5 Nm [13 in-lbs] | |
| Maximum Moment Mz | 9 Nm [80 in-lbs] | 2.25 Nm [20 in-lbs] | |
| Canacities are per set of jaws and are not simultaneous | | | |

†Capacities are per set of jaws and are not simultaneo

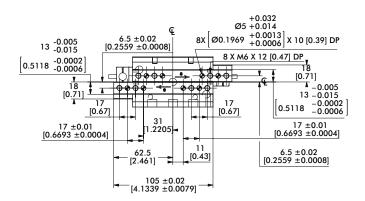


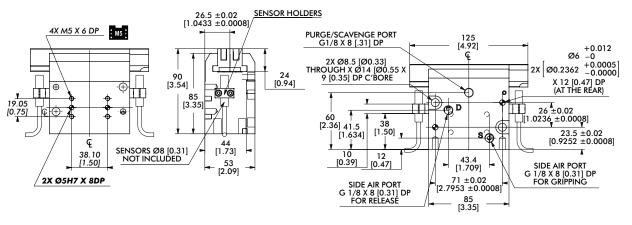








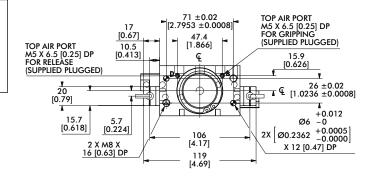




NOTE:

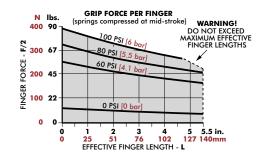
To benefit from safety springs power, on open or on close, gripper must always be operated with "**S**" for GRIPPING and with "**D**" for RELEASE.

Drawing hereafter shows gripper gripping at the end of stroke (inlet through " \mathbf{S} ")



| Seal Repair Kits | DGC-65 |
|------------------------|-----------|
| Buna-N Seal Repair Kit | SLKT-323 |
| Viton® Seal Repair Kit | SLKT-323V |

Loading Information





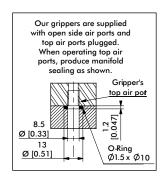




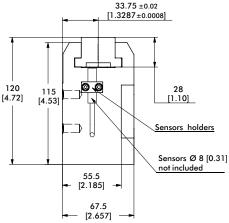
| DGC-65 | Static | Dynamic |
|--------------------------|--------------------|---------------------|
| Maximum Tensile T | 270 N [61 lbs] | 54 N [12 lbs] |
| Maximum Compressive C | 305 N [69 lbs] | 61 N [14 lbs] |
| Maximum Moment M_X | 4 Nm [35 in-lbs] | 1 Nm [9 in-lbs] |
| Maximum Moment My | 10 Nm [89 in-lbs] | 2.5 Nm [22 in-lbs] |
| Maximum Moment Mz | 17 Nm [150 in-lbs] | 4.25 Nm [38 in-lbs] |

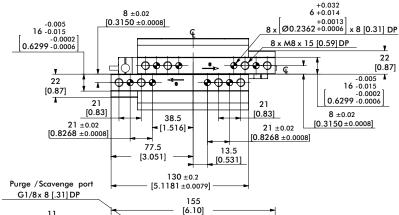
[†]Capacities are per set of jaws and are not simultaneous

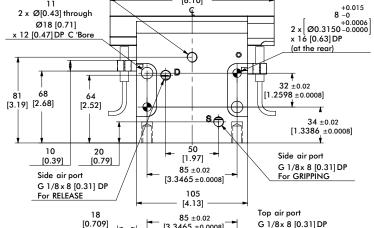












NOTE:

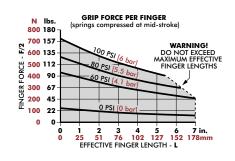
To benefit from safety springs power, on open or on close, gripper must always be operated with "\$" for GRIPPING and with "D" for RELEASE.

Drawing hereafter shows gripper gripping at the end of stroke (inlet through "**S**")

| | 10 | . 85 | ±0.02 | -1 | |
|--------------------|---|---|--------------------|---|---------------------|
| | [0.709] | | ±0.0008] | G 1/8x 8 [0. | 31] DP |
| | | [0.0.00 | _0.0000] | For GRIPPIN | G |
| | 11.50 | | 3 | (supplied plu | gged) |
| To a sala a sal | [0.45] | - [2. | 48] 🔫 📗 | | |
| Top air port — | | 1 'a | . 1 / | | 24 |
| G 1/8x 8 [0.31] DP | | | | | [0.94] |
| For RELEASE | | | ₩ ¶ | | * |
| (supplied plugged) | | | | | |
| <u> </u> | | ¥ /// | | | 32 ±0.02 |
| 20 | , , , , , , , , , , , , , , , , , , , | | — -)) | | [1.2598 ±0.0008] |
| [0.79] | 7 | | | \frac{1}{2} | - [1.2378 ±0.0008] |
| 1 | A | W /// | 10 Q | | *- |
| 15.7 | | | | <u> </u> | |
| [0.618] | ,, / | | | \mathcal{N} | +0.015 8 -0 |
| | 10 | .12 | | | 10,0006 |
| |).39] /- | [5.0 | 04] ——— | \ | 2 x Ø0.3150 -0.0000 |
| | / | _ | | | x 16 [0.63] DP |
| 2 x M10 x 20 [0.] | 79] DP/ | .14 | | | |
| | - | [5.: | 05] | - | |
| | | | | | |
| | | | | | |

| Seal Repair Kits | GC-85 |
|------------------------|-----------|
| Buna-N Seal Repair Kit | SLKT-325 |
| Viton® Seal Repair Kit | SLKT-325V |

Loading Information







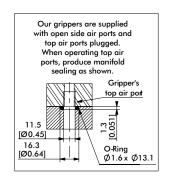


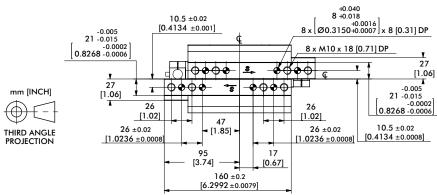
| Static | Dynamic |
|--------------------|--|
| 370 N [83 lbs] | 74 N [17 lbs] |
| 405 N [91 lbs] | 81 N [18 lbs] |
| 6 Nm [53 in-lbs] | 1.5 Nm [13 in-lbs] |
| 15 Nm [133 in-lbs] | 3.75 Nm [33 in-lbs] |
| 27 Nm [239 in-lbs] | 6.75 Nm [60 in-lbs] |
| | 370 N [83 lbs] 405 N [91 lbs] 6 Nm [53 in-lbs] 15 Nm [133 in-lbs] |

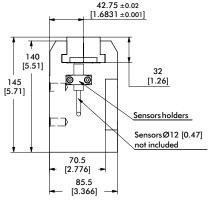
†Capacities are per set of jaws and are not simultaneous

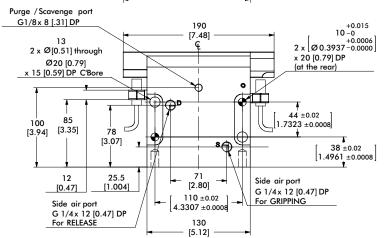
GC-105

2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications









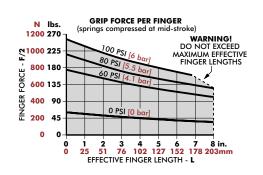
NOTE:

To benefit from safety springs power, on open or on close, gripper must always be operated with "**5**" for GRIPPING and with "**D**" for RELEASE.

Drawing hereafter shows gripper gripping at the end of stroke (inlet through " \mathbf{S} ")

| Seal Repair Kits | DGC-105 |
|------------------------|-----------|
| Buna-N Seal Repair Kit | SLKT-27 |
| Viton® Seal Repair Kit | SLKT-327V |

Loading Information









| GC-105 | Static | Dynamic |
|--------------------------|--------------------|---------------------|
| Maximum Tensile T | 415 N [93 lbs] | 83 N [19 lbs] |
| Maximum Compressive C | 455 N [102 lbs] | 91 N [20 lbs] |
| Maximum Moment M_X | 8 Nm [71 in-lbs] | 2 Nm [18 in-lbs] |
| Maximum Moment My | 19 Nm [168 in-lbs] | 4.75 Nm [42 in-lbs] |
| Maximum Moment Mz | 40 Nm [354 in-lbs] | 10 Nm [89 in-lbs] |

[†]Capacities are per set of jaws and are not simultaneous



PRECISION PARALLEL GRIPPERS

| Notes |
|-------|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |