## **DGC/GC SERIES**

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

#### Features:

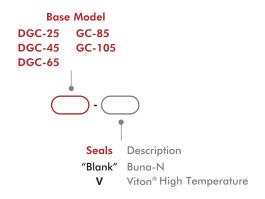
- · Rugged, high precision long stroke gripper
- · High impact resistant with double wedge design
- · Versatile mounting on top or sides of gripper
- Spring assist option maintains grip in case of air pressure loss
- Two end of stroke inductive sensing positions supported
- DIRECTCONNECT™ mounting (DGC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

<sup>\*</sup>Sensor and cable sold separately.

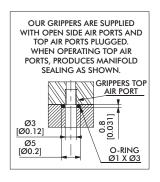


# **DGC/GC SERIES**

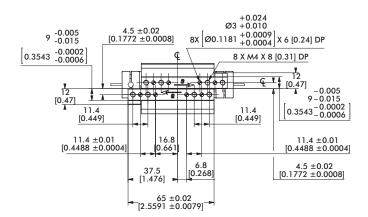
## 2-Jaw Precision Parallel Grippers | Technical Specifications

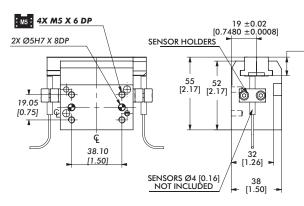
Specifications	Units	25	45	65	85	105
Total Rated Grip Force <b>F</b> @ 100 psi [7 bar]	N [lb]	474 [106]	481 [108]	796 [179]	1480 [333]	2318 [521]
Total Stroke	mm [in]	20 [0.787]	30 [1.181]	40 [1.575]	50 [1.968]	60 [2.362]
Weight	kg [lbs]	0.35 [0.77]	0.60 [1.32]	1.30 [2.87]	2.20 [4.85]	4.31 [9.50]
Pressure 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				

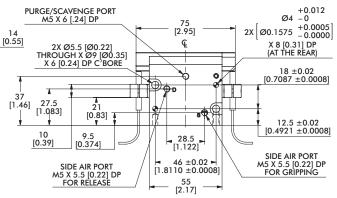










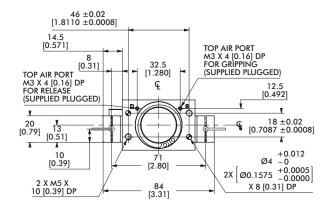


#### NOTE:

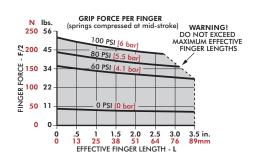
To benefit from safety springs power, on open or on close, gripper must always be operated with "S" for GRIPPING and with "D" for RELEASE.

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

Seal Repair Kits	DGC-25
Buna-N Seal Repair Kit	SLKT-319
Viton® Seal Repair Kit	SLKT-319V



## **Loading Information**

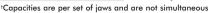






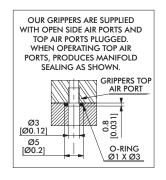


DGC-25	Static	Dynamic
Maximum Tensile T	125 N [28 lbs]	25 N [6 lbs]
Maximum Compressive C	145 N [33 lbs]	29 N [7 lbs]
Maximum Moment M <sub>X</sub>	2 Nm [18 in-lbs]	0.5 Nm [4 in-lbs]
Maximum Moment My	4 Nm [35 in-lbs]	1 Nm [9 in-lbs]
Maximum Moment Mz	6 Nm [53 in-lbs]	1.5 Nm [13 in-lbs]

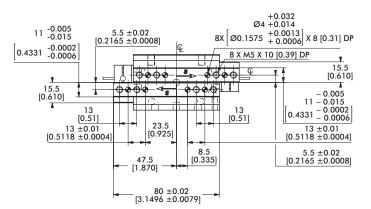


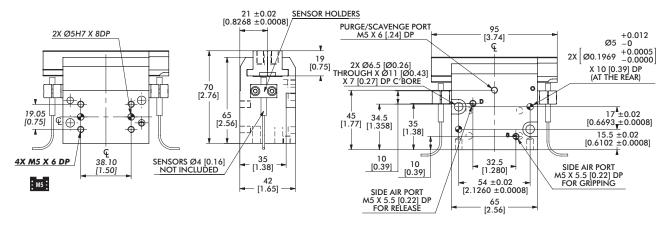










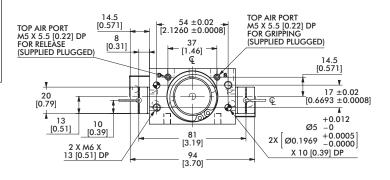


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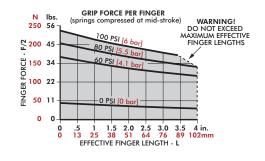
To benefit from safety springs power, on open or on close, gripper must always be operated with "S" for GRIPPING and with "D" for RELEASE.

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

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



#### **Loading Information**







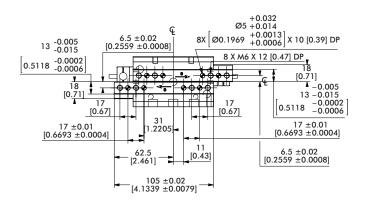


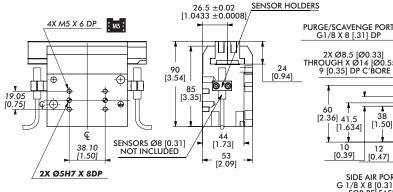
DGC-45	Static	Dynamic
Maximum Tensile T	205 N [46 lbs]	41 N [9 lbs]
Maximum Compressive C	225 N [51 lbs]	45 N [10 lbs]
Maximum Moment M <sub>X</sub>	3 Nm [27 in-lbs]	0.75 Nm [7 in-lbs]
Maximum Moment My	6 Nm [53 in-lbs]	1.5 Nm [13 in-lbs]
Maximum Moment Mz	9 Nm [80 in-lbs]	2.25 Nm [20 in-lbs]
†Capacities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

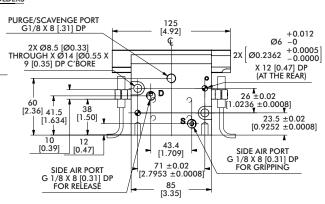








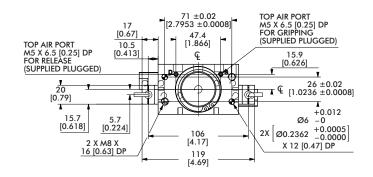




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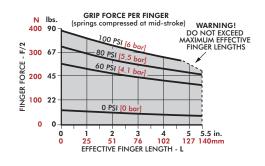
To benefit from safety springs power, on open or on close, gripper must always be operated with "S" for GRIPPING and with "D" for RELEASE.

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



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

## **Loading Information**





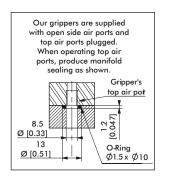




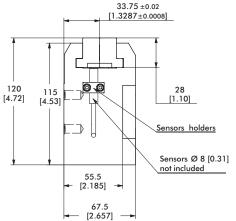
070 11 (1 11 1	
2/0 N [61 lbs]	54 N [12 lbs]
305 N [69 lbs]	61 N [14 lbs]
4 Nm [35 in-lbs]	1 Nm [9 in-lbs]
10 Nm [89 in-lbs]	2.5 Nm [22 in-lbs]
17 Nm [150 in-lbs]	4.25 Nm [38 in-lbs]
	4 Nm [35 in-lbs] 10 Nm [89 in-lbs]

<sup>†</sup>Capacities are per set of jaws and are not simultaneous







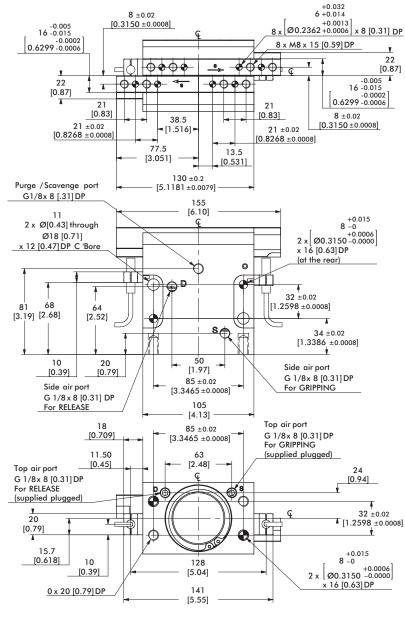


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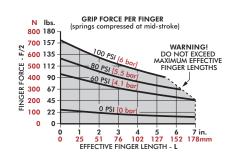
To benefit from safety springs power, on open or on close, gripper must always be operated with "S" for GRIPPING and with "D" for RELEASE.

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

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



#### **Loading Information**









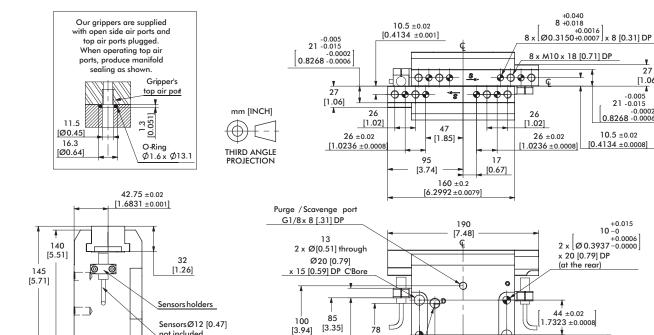
GC-85	Static	Dynamic
Maximum Tensile T	370 N [83 lbs]	74 N [17 lbs]
Maximum Compressive C	405 N [91 lbs]	81 N [18 lbs]
Maximum Moment M <sub>X</sub>	6 Nm [53 in-lbs]	1.5 Nm [13 in-lbs]
Maximum Moment My	15 Nm [133 in-lbs]	3.75 Nm [33 in-lbs]
Maximum Moment Mz	27 Nm [239 in-lbs]	6.75 Nm [60 in-lbs]

†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, grippe operated with "\$" for GR "D" for RELEASE.

70.5

[2.776] 85.5

[3.366]

not included

Drawing hereafter show at the end of stroke (inle

ver must always be GRIPPING and with ws gripper gripping let through "S")	23 [0.906] Top air port [4.3307 ±0.0008] Top air port [0.512] Sp [0.75] [0.75] G 1/4x 12 [0.47] DP For RELEASE (supplied plugged) [0.75] [0.75
DGC-105	[0.87] 16 +0.015 [0.63]
SLKT-27	+0.0006 2 x [80.3937 - 0.000]
SLKT-327V	× M12 x 20 [0.79] DP

[3.07]

25.5 [1.004]

[0.47]

Side air port

G 1/4x 12 [0.47] DP For RELEASE

1

<del>\*</del>◆

[2.80]

110 ±0.02

4.3307 ±0.0008

130

[5.12]

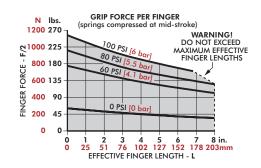
Side air port

For GRIPPING

G 1/4x 12 [0.47] DP

#### Seal Repair Kits Buna-N Seal Repair Kit Viton® Seal Repair Kit

## **Loading Information**









[1.06]

-0.005 21 -0.015

-0.0002 0.8268 -0.0006

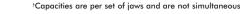
 $10.5 \pm 0.02$ 

+0.015

38 ±0.02

1.4961 ±0.0008

Static	Dynamic
415 N [93 lbs]	83 N [19 lbs]
455 N [102 lbs]	91 N [20 lbs]
8 Nm [71 in-lbs]	2 Nm [18 in-lbs]
19 Nm [168 in-lbs]	4.75 Nm [42 in-lbs]
40 Nm [354 in-lbs]	10 Nm [89 in-lbs]
	415 N [93 lbs] 455 N [102 lbs] 8 Nm [71 in-lbs] 19 Nm [168 in-lbs]





# PRECISION PARALLEL GRIPPERS

Notes