# **DGC/GC SERIES**

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

#### Features:

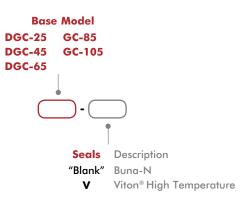
- Rugged, high precision long stroke gripper
- High impact resistant with double wedge design
- Versatile mounting on top or sides of gripper
- Spring assist option maintains grip in case of air pressure loss
- Two end of stroke inductive sensing positions supported
- DIRECTCONNECT<sup>™</sup> mounting (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	OHSN-014	1-2
4mm PNP Inductive Sensor with Quick Disconnect*	25, 45	OHSP-014	1-2
8mm NPN Inductive Sensor with Quick Disconnect*	65, 85	OHSN-011	1-2
8mm PNP Inductive Sensor with Quick Disconnect*	65, 85	OHSP-011	1-2
12mm NPN Inductive Sensor with Quick Disconnect*	105	OHSN-017	1-2
12mm PNP Inductive Sensor with Quick Disconnect*	105	OHSP-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

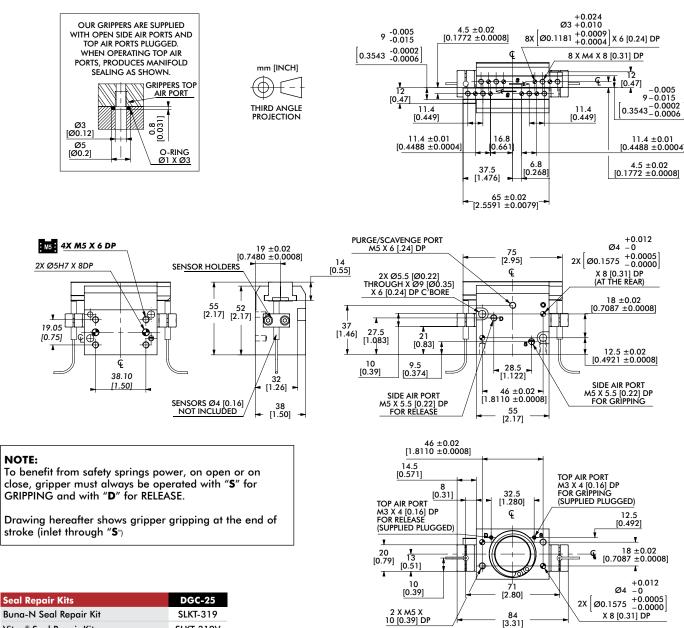
Specifications	Units	25	45	65	85	105
Total Rated Grip Force <b>F</b> @ 100 psi [7 bar]	N [lb]	474 [106]	481 [108]	796 [179]	1480 [333]	2318 [521]
Total Stroke	mm [in]	20 [0.787]	30 [1.181]	40 [1.575]	50 [1.968]	60 [2.362]
Weight	kg [lbs]	0.35 [0.77]	0.60 [1.32]	1.30 [2.87]	2.20 [4.85]	4.31 [9.50]
Pressure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





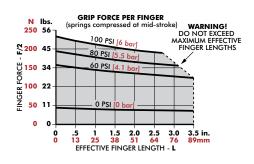


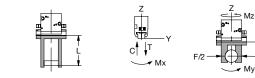
### 2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



Buna-N Seal Repair Kit SLKT-319 Viton<sup>®</sup> Seal Repair Kit SLKT-319V

### Loading Information





DGC-25	Static	Dynamic	
Maximum Tensile <b>T</b>	125 N [28 lbs]	25 N [6 lbs]	
Maximum Compressive C	145 N [33 lbs]	29 N [7 lbs]	
Maximum Moment <b>M</b> <sub>X</sub>	2 Nm [18 in-lbs]	0.5 Nm [4 in-lbs]	
Maximum Moment <b>My</b>	4 Nm [35 in-lbs]	1 Nm [9 in-lbs]	
Maximum Moment <b>M</b> <sub>X</sub>	6 Nm [53 in-lbs]	1.5 Nm [13 in-lbs]	
*Capacities are per set of jaws and are not simultaneous			

Mz

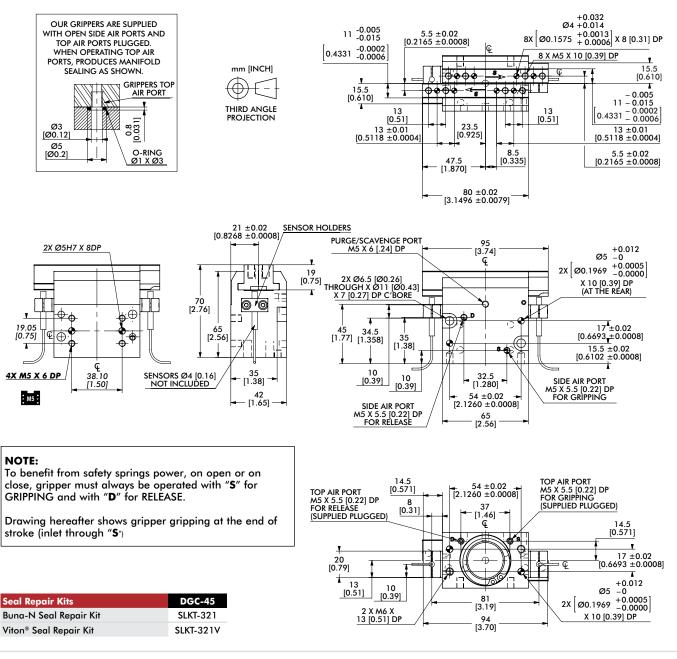
F/2



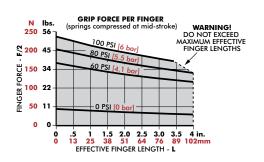


# DGC-45

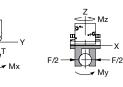
### 2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



#### Loading Information







DGC-45	Static	Dynamic
Maximum Tensile <b>T</b>	205 N [46 lbs]	41 N [9 lbs]
Maximum Compressive C	225 N [51 lbs]	45 N [10 lbs]
Maximum Moment <b>M<sub>X</sub></b>	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 M <sub>X</sub>	9 Nm [80 in-lbs]	2.25 Nm [20 in-lbs]
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<sup>†</sup>Capacities are per set of jaws and are not simultaneous

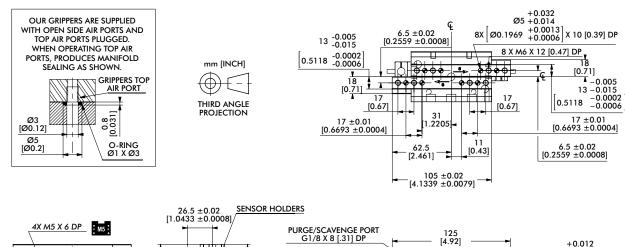


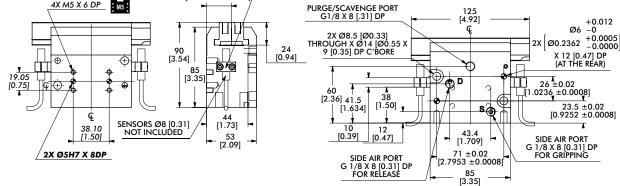






#### 2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications





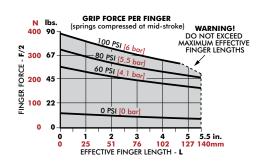
#### NOTE:

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

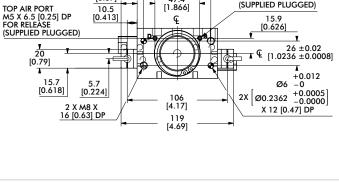
Drawing hereafter shows gripper gripping at the end of stroke (inlet through "S")

Seal Repair Kits	DGC-65
Buna-N Seal Repair Kit	SLKT-323
Viton <sup>®</sup> Seal Repair Kit	SLKT-323V

#### Loading Information







71 ±0.02 753 ±0.0008

47.4 [1.866]

£

[2.7

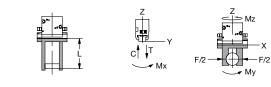
17

[0.67]

10.5 [0.413] TOP AIR PORT M5 X 6.5 [0.25] DP FOR GRIPPING

15.9

(SUPPLIED PLUGGED)

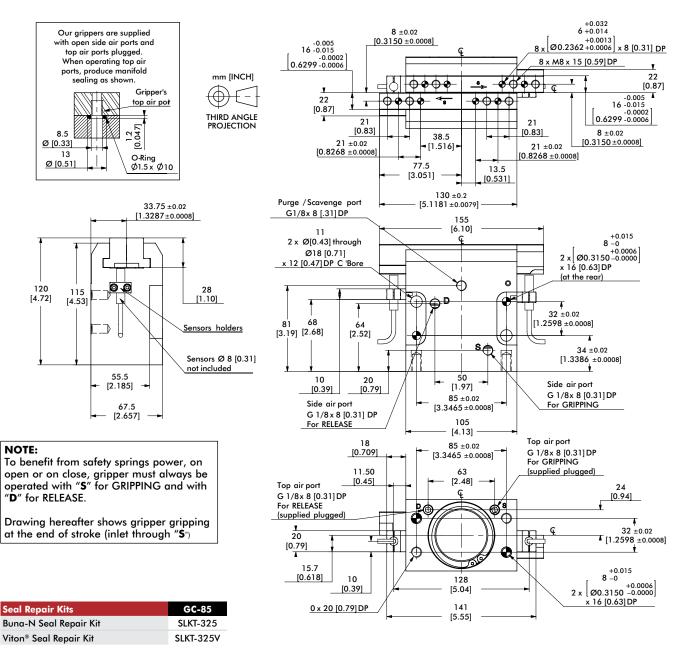


DGC-65	Static	Dynamic	
Maximum Tensile <b>T</b>	270 N [61 lbs]	54 N [12 lbs]	
Maximum Compressive C	305 N [69 lbs]	61 N [14 lbs]	
Maximum Moment <b>M</b> <sub>X</sub>	4 Nm [35 in-lbs]	1 Nm [9 in-lbs]	
Maximum Moment My	10 Nm [89 in-lbs]	2.5 Nm [22 in-lbs]	
Maximum Moment <b>M</b> <sub>X</sub>	17 Nm [150 in-lbs]	4.25 Nm [38 in-lbs]	
*Capacities are per set of jaws and are not simultaneous			

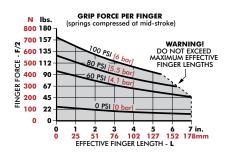
Dimensions and technical information are subject to change without notice

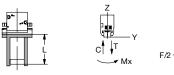
# GC-85

### 2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



#### Loading Information







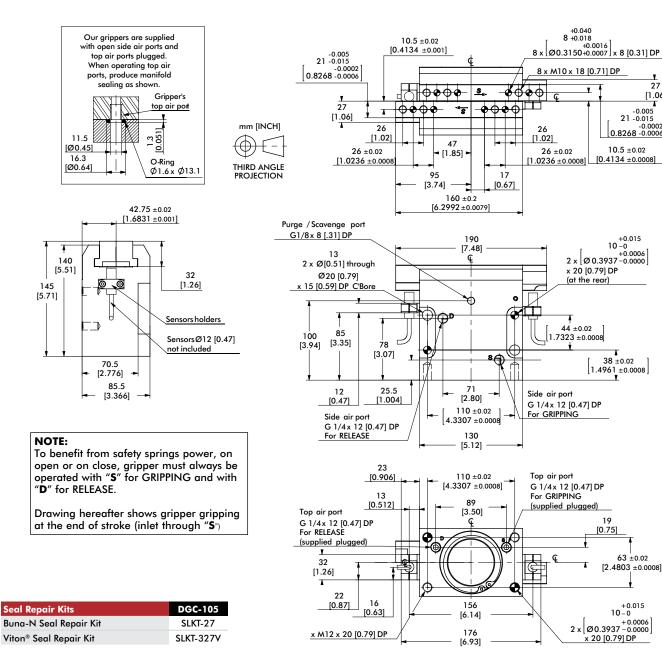
GC-85	Static	Dynamic	
Maximum Tensile <b>T</b>	370 N [83 lbs]	74 N [17 lbs]	
Maximum Compressive C	405 N [91 lbs]	81 N [18 lbs]	
Maximum Moment <b>M</b> <sub>X</sub>	6 Nm [53 in-lbs]	1.5 Nm [13 in-lbs]	
Maximum Moment My	15 Nm [133 in-lbs]	3.75 Nm [33 in-lbs]	
Maximum Moment <b>M</b> <sub>X</sub>	27 Nm [239 in-lbs]	6.75 Nm [60 in-lbs]	
*Capacities are per set of jaws and are not simultaneous			



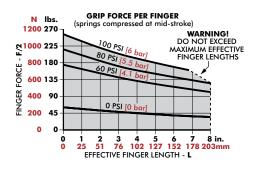


# **GC-105**

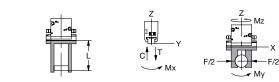
# 2-Jaw Precision Parallel Grippers | Dimensions and Technical Specifications



### Loading Information







GC-105	Static	Dynamic	
Maximum Tensile <b>T</b>	415 N [93 lbs]	83 N [19 lbs]	
Maximum Compressive C	455 N [102 lbs]	91 N [20 lbs]	
Maximum Moment <b>M</b> <sub>X</sub>	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 M <sub>X</sub>	40 Nm [354 in-lbs]	10 Nm [89 in-lbs]	
*Capacities are per set of jaws and are not simultaneous			

27

[1.06]

A

-0.005

-0.0002 0.8268 -0.0006

 $10.5 \pm 0.02$ 

+0.015

38 ±0.02

19

[0.75]

63 ±0.02

[2.4803 ±0.0008]

+0.015 10-0

Dimensions and technical information are subject to change without notice