

# RDH SERIES

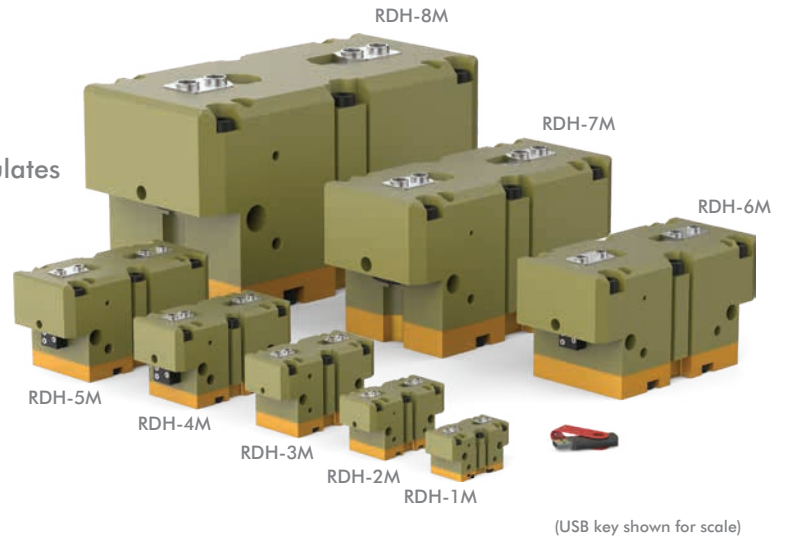
## 2-Jaw General Industrial Grippers | Features and Benefits | How To Order

### Features:

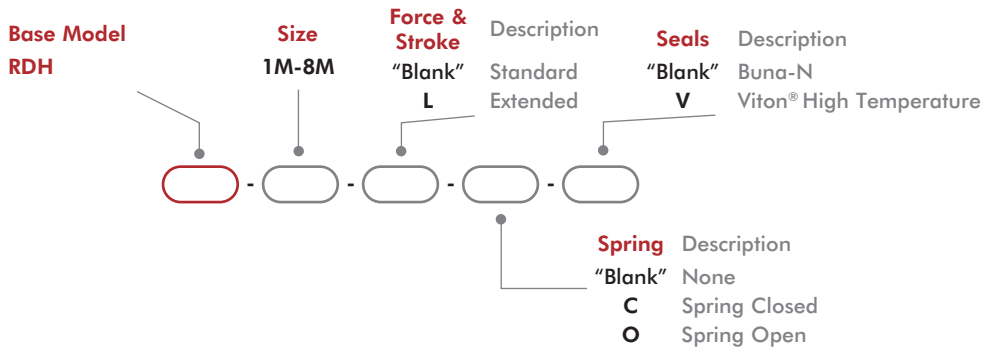
- Rugged multi-purpose powerful gripper
- 8 sizes for small lightweight to very large and heavy part gripping
- High impact resistant with double wedge design
- Shielded gripper to repel metal chips and particulates
- Spring assist option maintains grip in case of air pressure loss
- Purge and scavenge ports for harsh & clean environments
- Multi-position sensing up to 4 locations

### Applications:

- High particulate application environments
- Automotive engine block and gantry systems
- Ideal for very heavy part gripping



### How To Order



### Accessories

| Sensor Accessories  | Model Numbers    | Part Number | Qty/Unit |
|---|------------------|-------------|----------|
| 8mm PNP Magneto Resistive Sensor (90° barrel) w/ M8 Qk. Disc* | All Models       | OHSP-011    | 1-4      |
| 8mm NPN Magneto Resistive Sensor (90° barrel) w/ M8 Qk. Disc* | All Models       | OHSN-011    | 1-4      |
| 8mm PNP Magneto Resistive Sensor Short Barrel w/ M8 Qk Disc*  | All Models       | OHSP-017    | 1-4      |
| 8mm NPN Magneto Resistive Sensor Short Barrel w/ M8 Qk Disc*  | All Models       | OHSN-017    | 1-4      |
| 8mm PNP Inductive Sensor w/ M8 Quick Disconnect*              | RDH-4M, -5M, -6M | OISP-011    | 1-2      |
| 8mm NPN Inductive Sensor w/ M8 Quick Disconnect*              | RDH-4M, -5M, -6M | OISN-011    | 1-2      |
| 12mm PNP Inductive Sensor w/ M12 Quick Disconnect*            | RDH-7M, -8M      | OISP-017    | 1-2      |
| 12mm NPN Inductive Sensor w/ M12 Quick Disconnect*            | RDH-7M, -8M      | OISN-017    | 1-2      |
| M8 Quick Disconnect 2 Meter Cable Length*                     | All Models       | CABL-010    | 1-4      |
| M8 Quick Disconnect 5 Meter Cable Length*                     | All Models       | CABL-013    | 1-4      |
| M12 Quick Disconnect 2 Meter Cable Length*                    | RDH-7M, -8M      | CABL-014    | 1-2      |
| M12 Quick Disconnect 5 Meter Cable Length*                    | RDH-7M, -8M      | CABL-018    | 1-2      |

| Pneumatic Accessories          | Model Numbers         | Part Number | Qty/Unit |
|--------------------------------|-----------------------|-------------|----------|
| M5 Adjustable Flow Control     | RDH-1M, -2M, -3M      | VLVF-008    | 1-2      |
| G 1/4" Adjustable Flow Control | RDH-4M, -5M, -6M, -7M | VLVF-005    | 1-2      |
| G 1/8" Adjustable Flow Control | RDH-8M                | VLVF-010    | 1-2      |

\* Sensor and cable sold separately.

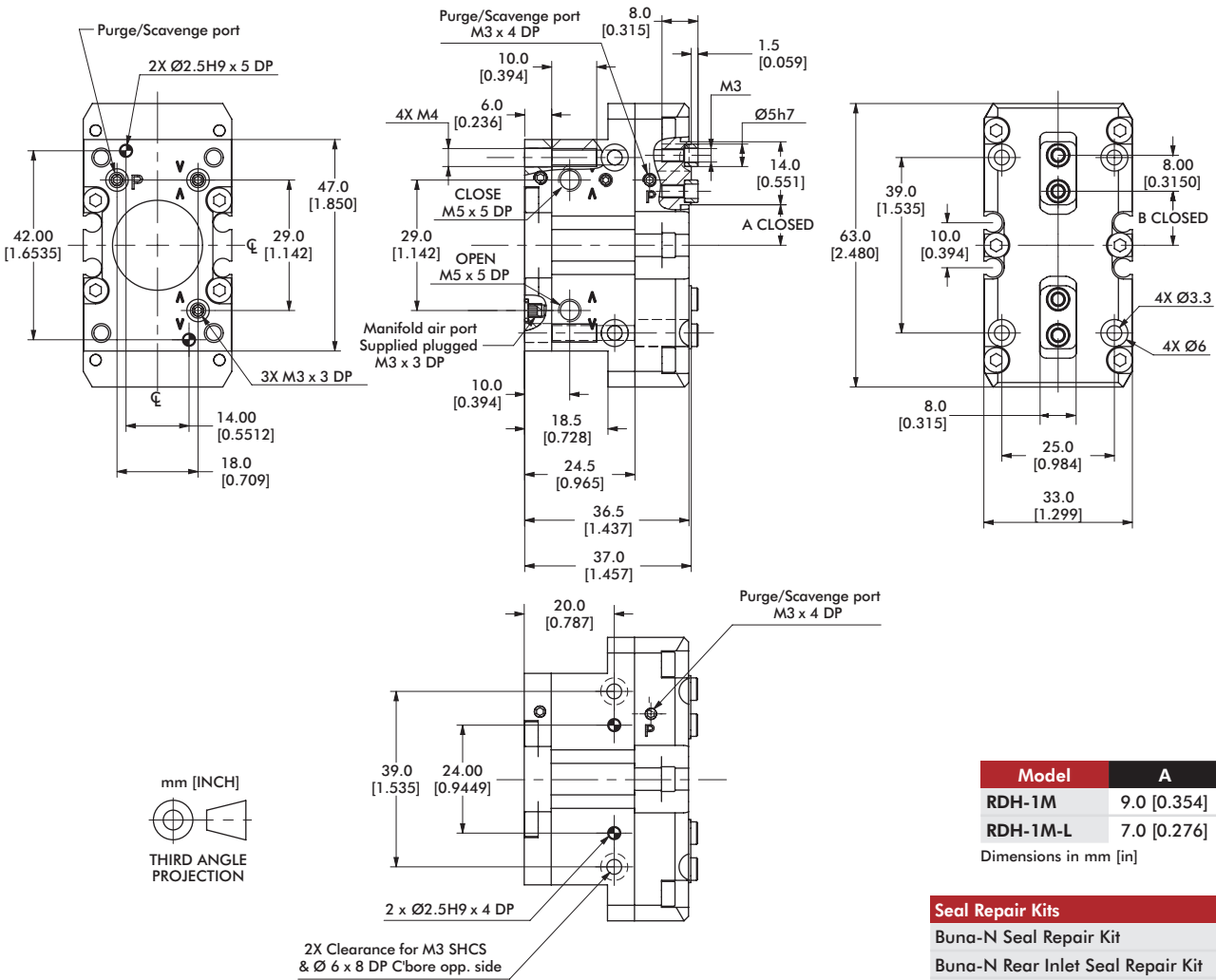
## 2-Jaw General Industrial Grippers | Technical Specifications

| Specifications  | Units                              | 1M                    | 1M-L        | 2M          | 2M-L        | 3M          | 3M-L        | 4M              | 4M-L        |  |
|---|------------------------------------|-----------------------|-------------|-------------|-------------|-------------|-------------|-----------------|-------------|--|
| Total Rated Grip Force F @ 100 psi [7 bar] w/o Spring Assist  | N [lbs]                            | 555 [125]             | 361 [81]    | 754 [170]   | 494 [111]   | 1317 [296]  | 854 [192]   | 2177 [490]      | 1414 [318]  |  |
| Total Rated Grip Force F @ 100 psi [7 bar] with Spring Assist | N [lbs]                            | 693 [156]             | 452 [102]   | 1006 [226]  | 661 [149]   | 1683 [379]  | 1094 [246]  | 2789 [628]      | 1814 [408]  |  |
| Total Stroke  | mm [in]                            | 4 [0.16]              | 8 [0.32]    | 6 [0.24]    | 12 [0.47]   | 8 [0.31]    | 16 [0.63]   | 10 [0.39]       | 20 [0.79]   |  |
| Weight  | kg [lbs]                           | 0.19 [0.4]            | 0.21 [0.5]  | 0.39 [0.86] | 0.42 [0.93] | 0.82 [1.81] | 0.88 [1.94] | 1.43 [3.15]     | 1.51 [3.33] |  |
| Pressure Range w/o Spring                                     | bar [psi]                          | 2-7 [30-100]          |             |             |             |             |             |                 |             |  |
| Pressure Range with Spring                                    | bar [psi]                          | 3.5-7 [50-100]        |             |             |             |             |             |                 |             |  |
| Max. Vacuum for Scavenge Port                                 | mm Hg [in Hg]                      | 200 [8]               |             |             |             |             |             |                 |             |  |
| Max. Pressure for Purge Port                                  | bar [psi]                          | 2.1 [30]              |             |             |             |             |             |                 |             |  |
| Ingress Protection Class (IP)                                 |                                    | IP55                  |             |             |             |             |             |                 |             |  |
| Displacement  | cm <sup>3</sup> [in <sup>3</sup> ] | 5 [0.31]              | 10.3 [0.63] |             | 23.4 [1.43] |             | 47.5 [2.90] |                 |             |  |
| 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.                               | 0.06                  |             | 0.07        |             | 0.08        |             |                 |             |  |
| Accuracy  | mm [in]                            | ±0.04 [±0.002]        |             |             |             |             |             | ±0.06 [±0.0024] |             |  |
| Repeatability   | mm [in]                            | ±0.02 [±0.001]        |             |             |             |             |             | ±0.03 [±0.0012] |             |  |
| Valve to Actuate Single Acting                                |                                    | 3-way, 2-position     |             |             |             |             |             |                 |             |  |
| Valve to Actuate Double Acting                                |                                    | 4-way, 2-position     |             |             |             |             |             |                 |             |  |

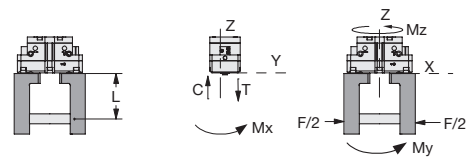
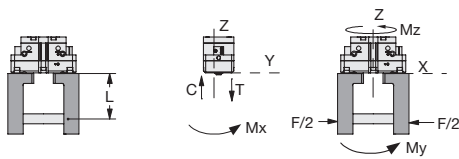
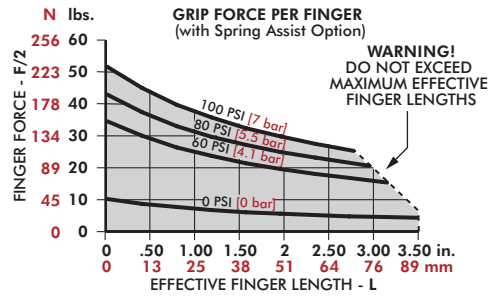
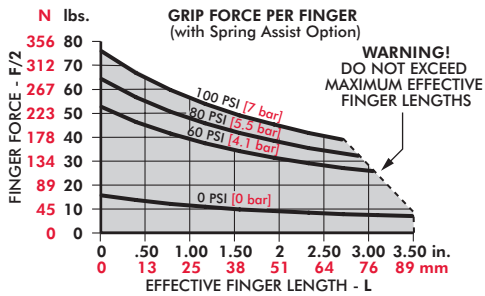
| Specifications (cont.)  | Units                              | 5M                    | 5M-L           | 6M              | 6M-L         | 7M             | 7M-L           | 8M           | 8M-L         |
|---|------------------------------------|-----------------------|----------------|-----------------|--------------|----------------|----------------|--------------|--------------|
| Total Rated Grip Force F @ 100 psi [7 bar] w/o Spring Assist  | N [lbs]                            | 3593 [808]            | 2333 [525]     | 6250 [1406]     | 4062 [914]   | 9901 [2228]    | 6404 [1441]    | 21958 [4941] | 14178 [3190] |
| Total Rated Grip Force F @ 100 psi [7 bar] with Spring Assist | N [lbs]                            | 4609 [1037]           | 2999 [675]     | 8640 [1944]     | 5623 [1265]  | 12542 [2822]   | 8135 [1830]    | 28002 [6300] | 18115 [4076] |
| Total Stroke  | mm [in]                            | 13 [0.51]             | 26 [1.02]      | 16 [0.63]       | 32 [1.26]    | 25 [0.98]      | 50 [1.97]      | 35 [1.38]    | 70 [2.76]    |
| Weight  | kg [lbs]                           | 2.75 [6.06]           | 2.98 [6.57]    | 5.77 [12.72]    |              | 11.25 [24.8]   |                | 32.3 [71.1]  |              |
| Pressure Range w/o Spring                                     | bar [psi]                          | 2-7 [30-100]          |                |                 |              |                |                |              |              |
| Pressure Range with Spring                                    | bar [psi]                          | 4-7 [60-100]          | 4.5-7 [65-100] |                 | 4-7 [60-100] |                | 3.5-7 [50-100] |              |              |
| Max. Vacuum for Scavenge Port                                 | mm Hg [in Hg]                      | 20 [8]                |                |                 |              |                |                |              |              |
| Max. Pressure for Purge Port                                  | bar [psi]                          | 2.1 [30]              |                |                 |              |                |                |              |              |
| Ingress Protection Class (IP)                                 |                                    | IP55                  |                |                 |              |                |                |              |              |
| Displacement  | cm <sup>3</sup> [in <sup>3</sup> ] | 102 [6.22]            | 216 [13.18]    |                 | 540 [32.95]  |                | 1689 [103.1]   |              |              |
| 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.                               | 0.14                  |                | 0.20            |              | 0.55           |                | 1.3          |              |
| Accuracy  | mm [in]                            | ±0.06 [±0.0024]       |                | ±0.08 [±0.0031] |              | ±0.1 [±0.0039] |                |              |              |
| Repeatability   | mm [in]                            | ±0.03 [±0.0012]       |                | ±0.04 [±0.0016] |              | ±0.05 [±0.002] |                |              |              |
| Valve to Actuate Single Acting                                |                                    | 3-way, 2-position     |                |                 |              |                |                |              |              |
| Valve to Actuate Double Acting                                |                                    | 4-way, 2-position     |                |                 |              |                |                |              |              |

# RDH-1M, -1M-L

## 2-Jaw General Industrial Grippers | Dimensions and Technical Specifications



## Loading Information



| RDH-1M                | Static             | Dynamic          |
|-----------------------|--------------------|------------------|
| Maximum Tensile T     | 594 N [134 lbs]    | 74 N [17 lbs]    |
| Maximum Compressive C | 779 N [175 lbs]    | 74 N [17 lbs]    |
| Maximum Moment $M_x$  | 18 Nm [159 in-lbs] | 2 Nm [18 in-lbs] |
| Maximum Moment $M_y$  | 23 Nm [204 in-lbs] | 2 Nm [18 in-lbs] |
| Maximum Moment $M_z$  | 14 Nm [124 in-lbs] | 2 Nm [18 in-lbs] |

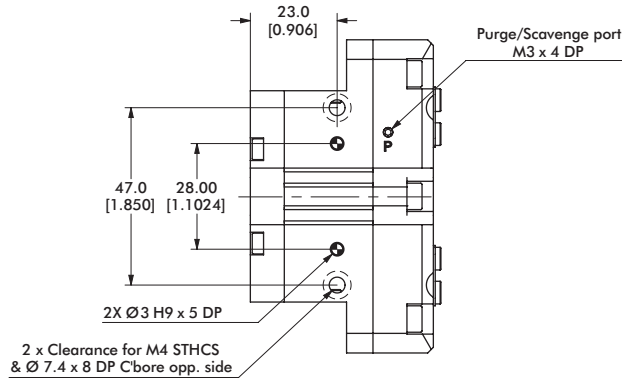
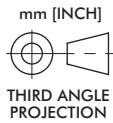
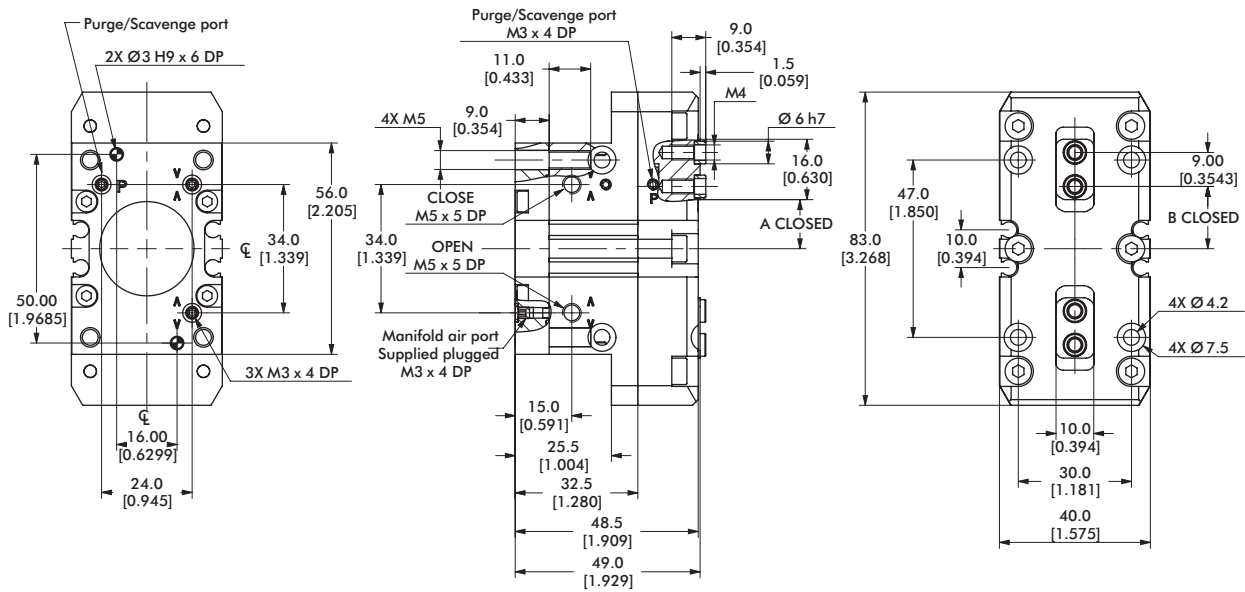
\*Capacities are per set of jaws and are not simultaneous

| RDH-1M-L              | Static             | Dynamic         |
|-----------------------|--------------------|-----------------|
| Maximum Tensile T     | 540 N [121 lbs]    | 48 N [11 lbs]   |
| Maximum Compressive C | 708 N [159 lbs]    | 48 N [11 lbs]   |
| Maximum Moment $M_x$  | 16 Nm [142 in-lbs] | 1 Nm [9 in-lbs] |
| Maximum Moment $M_y$  | 19 Nm [168 in-lbs] | 1 Nm [9 in-lbs] |
| Maximum Moment $M_z$  | 12 Nm [106 in-lbs] | 1 Nm [9 in-lbs] |

\*Capacities are per set of jaws and are not simultaneous

# RDH-2M, -2M-L

## 2-Jaw General Industrial Grippers | Dimensions and Technical Specifications

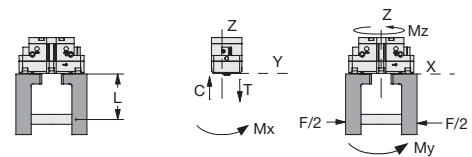
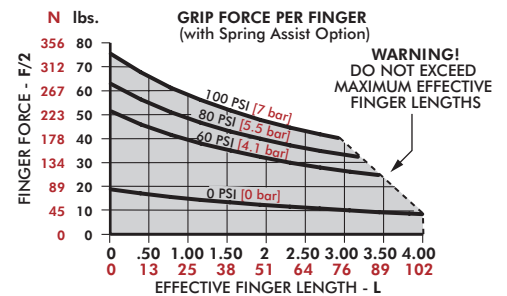
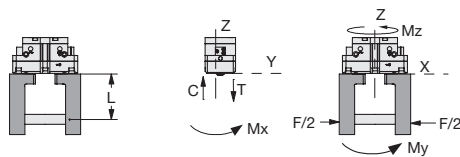
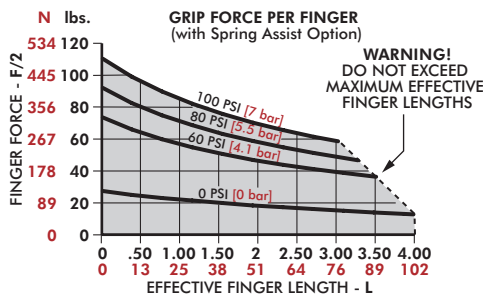


| Model    | A            | B            |
|----------|--------------|--------------|
| RDH-2M   | 13.0 [0.512] | 16.5 [0.650] |
| RDH-2M-L | 10.0 [0.394] | 13.5 [0.531] |

Dimensions in mm [in]

| Seal Repair Kits                  | RDH-2M    |
|-----------------------------------|-----------|
| Buna-N Seal Repair Kit            | SLKT-417  |
| Buna-N Rear Inlet Seal Repair Kit | SLKT-363  |
| Viton® Seal Repair Kit            | SLKT-417V |
| Viton® Rear Inlet Seal Repair Kit | SLKT-363V |

## Loading Information



| RDH-2M                | Static             | Dynamic          |
|-----------------------|--------------------|------------------|
| Maximum Tensile T     | 849 N [191 lbs]    | 81 N [18 lbs]    |
| Maximum Compressive C | 1103 N [248 lbs]   | 81 N [18 lbs]    |
| Maximum Moment $M_x$  | 36 Nm [319 in-lbs] | 3 Nm [27 in-lbs] |
| Maximum Moment $M_y$  | 51 Nm [451 in-lbs] | 4 Nm [35 in-lbs] |
| Maximum Moment $M_z$  | 32 Nm [283 in-lbs] | 4 Nm [35 in-lbs] |

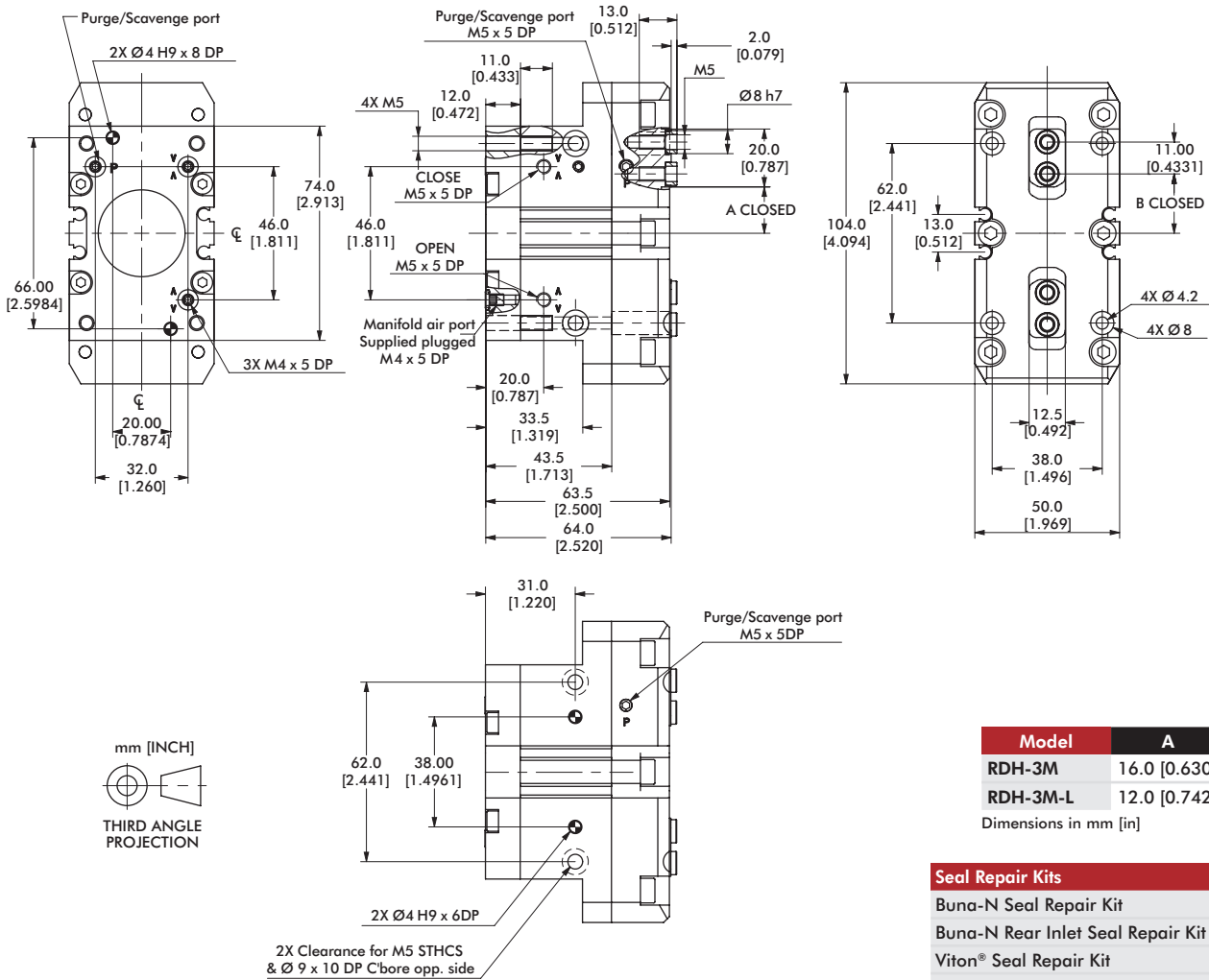
\*Capacities are per set of jaws and are not simultaneous

| RDH-2M-L              | Static             | Dynamic          |
|-----------------------|--------------------|------------------|
| Maximum Tensile T     | 764 N [172 lbs]    | 53 N [12 lbs]    |
| Maximum Compressive C | 993 N [223 lbs]    | 53 N [12 lbs]    |
| Maximum Moment $M_x$  | 32 Nm [283 in-lbs] | 2 Nm [18 in-lbs] |
| Maximum Moment $M_y$  | 41 Nm [363 in-lbs] | 2 Nm [18 in-lbs] |
| Maximum Moment $M_z$  | 26 Nm [230 in-lbs] | 2 Nm [18 in-lbs] |

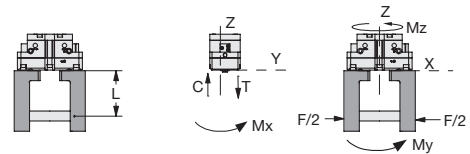
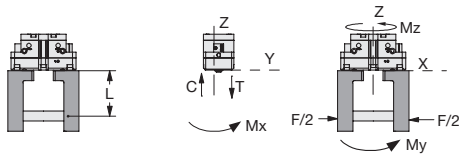
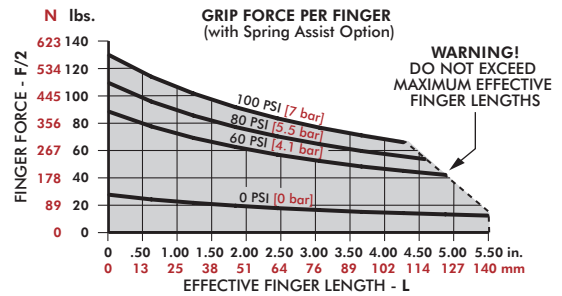
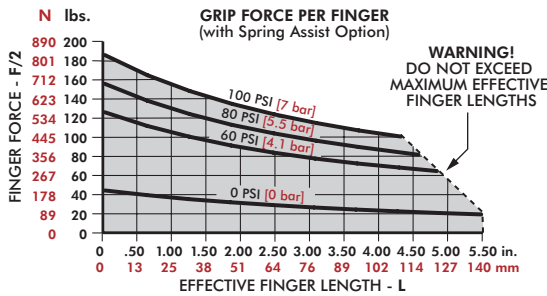
\*Capacities are per set of jaws and are not simultaneous

# RDH-3M, -3M-L

## 2-Jaw General Industrial Grippers | Dimensions and Technical Specifications



## Loading Information



| RDH-3M                | Static             | Dynamic           |
|-----------------------|--------------------|-------------------|
| Maximum Tensile T     | 1284 N [289 lbs]   | 196 N [44 lbs]    |
| Maximum Compressive C | 1665 N [374 lbs]   | 196 N [44 lbs]    |
| Maximum Moment $M_x$  | 58 Nm [513 in-lbs] | 7 Nm [62 in-lbs]  |
| Maximum Moment $M_y$  | 83 Nm [735 in-lbs] | 11 Nm [97 in-lbs] |
| Maximum Moment $M_z$  | 54 Nm [478 in-lbs] | 11 Nm [97 in-lbs] |

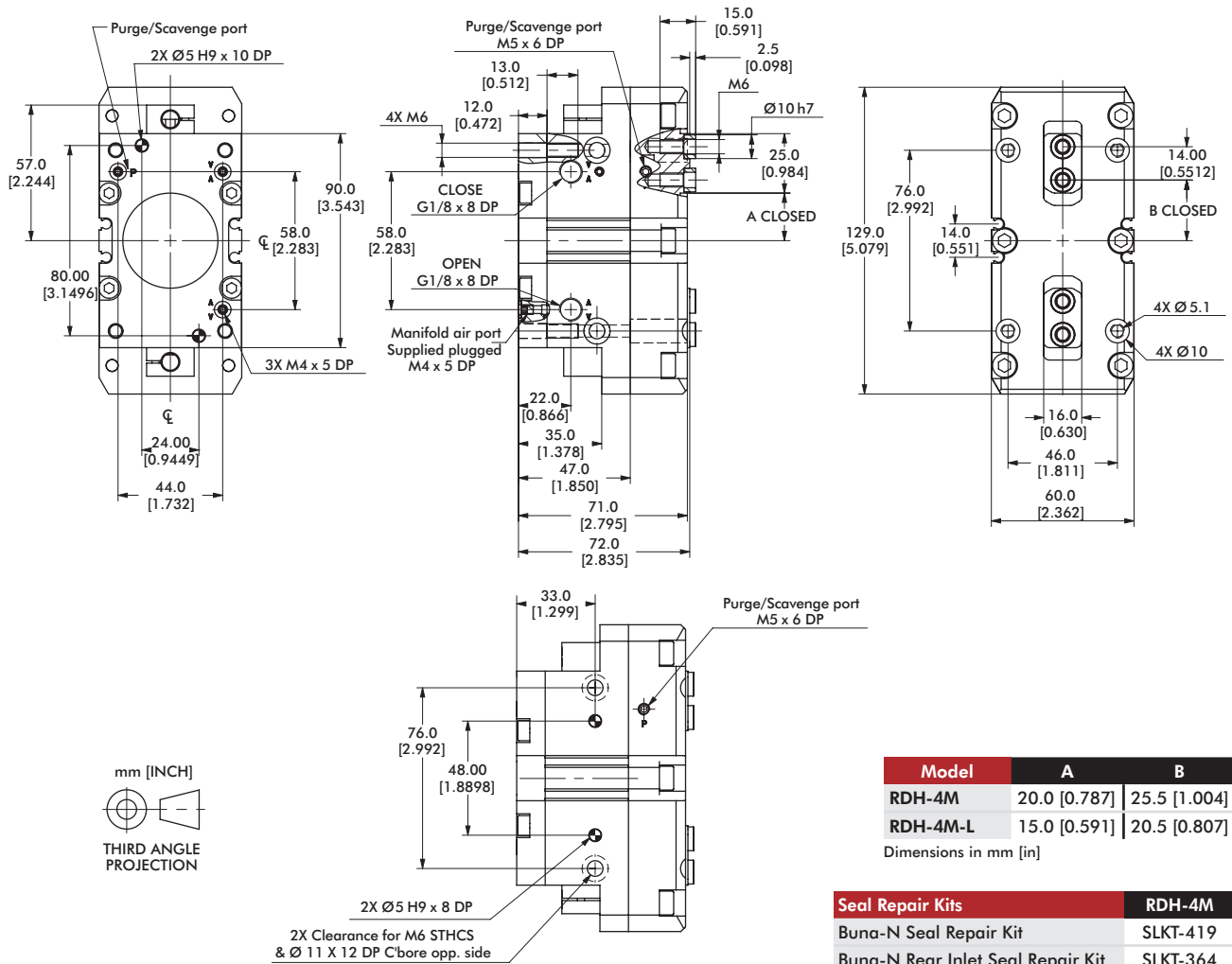
\*Capacities are per set of jaws and are not simultaneous

| RDH-3M-L              | Static             | Dynamic          |
|-----------------------|--------------------|------------------|
| Maximum Tensile T     | 1146 N [258 lbs]   | 127 N [29 lbs]   |
| Maximum Compressive C | 1485 N [334 lbs]   | 127 N [29 lbs]   |
| Maximum Moment $M_x$  | 52 Nm [460 in-lbs] | 5 Nm [44 in-lbs] |
| Maximum Moment $M_y$  | 66 Nm [584 in-lbs] | 6 Nm [53 in-lbs] |
| Maximum Moment $M_z$  | 43 Nm [381 in-lbs] | [53 in-lbs] 6 Nm |

\*Capacities are per set of jaws and are not simultaneous

# RDH-4M, -4M-L

## 2-Jaw General Industrial Grippers | Dimensions and Technical Specifications

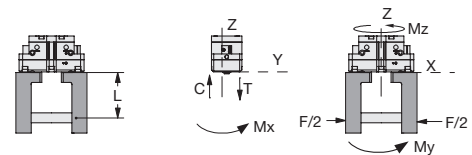
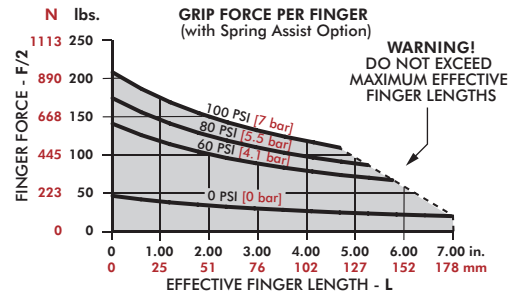
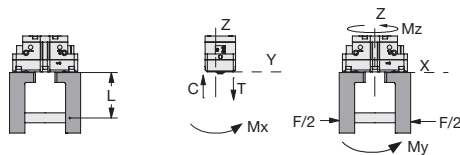
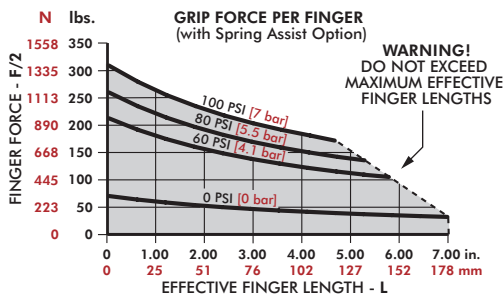


| Model    | A            | B            |
|----------|--------------|--------------|
| RDH-4M   | 20.0 [0.787] | 25.5 [1.004] |
| RDH-4M-L | 15.0 [0.591] | 20.5 [0.807] |

Dimensions in mm [in]

| Seal Repair Kits                  | RDH-4M    |
|-----------------------------------|-----------|
| Buna-N Seal Repair Kit            | SLKT-419  |
| Buna-N Rear Inlet Seal Repair Kit | SLKT-364  |
| Viton® Seal Repair Kit            | SLKT-419V |
| Viton® Rear Inlet Seal Repair Kit | SLKT-364V |

## Loading Information



| RDH-4M                | Static              | Dynamic            |
|-----------------------|---------------------|--------------------|
| Maximum Tensile T     | 1564 N [352 lbs]    | 259 N [58 lbs]     |
| Maximum Compressive C | 2070 N [465 lbs]    | 259 N [58 lbs]     |
| Maximum Moment $M_x$  | 76 Nm [673 in-lbs]  | 10 Nm [89 in-lbs]  |
| Maximum Moment $M_y$  | 106 Nm [938 in-lbs] | 14 Nm [124 in-lbs] |
| Maximum Moment $M_z$  | 70 Nm [620 in-lbs]  | 14 Nm [124 in-lbs] |

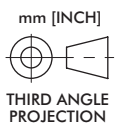
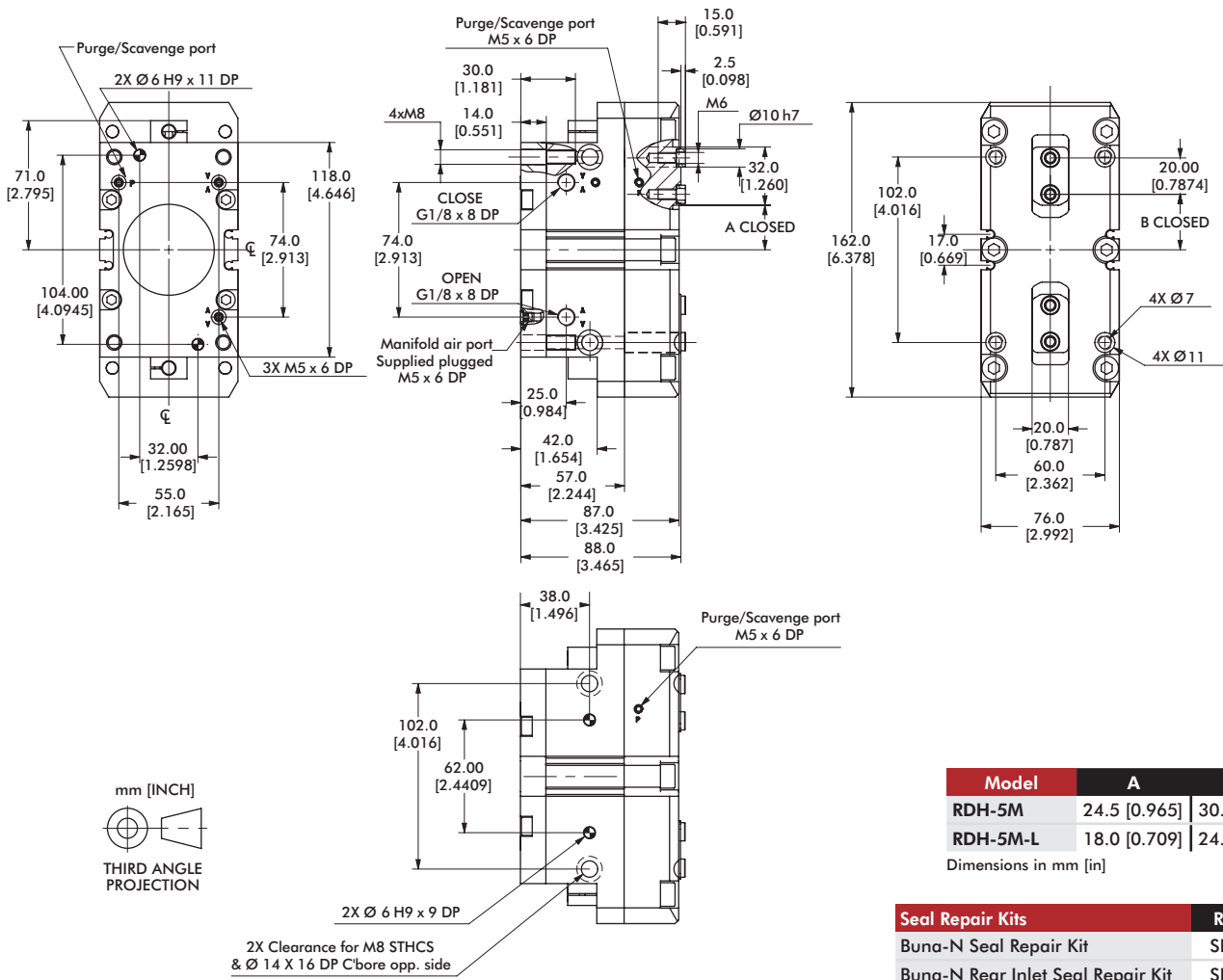
\*Capacities are per set of jaws and are not simultaneous

| RDH-4M-L              | Static             | Dynamic          |
|-----------------------|--------------------|------------------|
| Maximum Tensile T     | 1394 N [313 lbs]   | 168 N [38 lbs]   |
| Maximum Compressive C | 1845 N [415 lbs]   | 168 N [38 lbs]   |
| Maximum Moment $M_x$  | 68 Nm [602 in-lbs] | 6 Nm [53 in-lbs] |
| Maximum Moment $M_y$  | 84 Nm [743 in-lbs] | 8 Nm [71 in-lbs] |
| Maximum Moment $M_z$  | 56 Nm [496 in-lbs] | 8 Nm [71 in-lbs] |

\*Capacities are per set of jaws and are not simultaneous

# RDH-5M, -5M-L

## 2-Jaw General Industrial Grippers | Dimensions and Technical Specifications

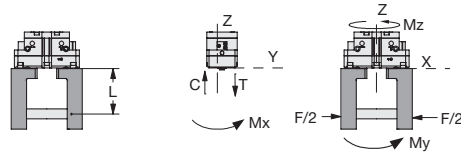
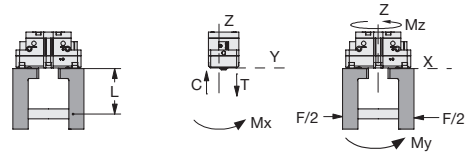
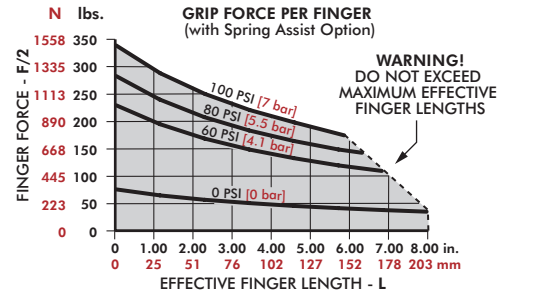
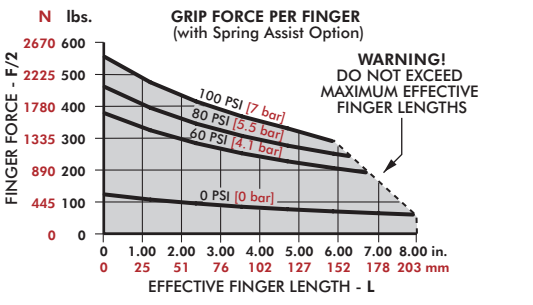


| Model    | A            | B            |
|----------|--------------|--------------|
| RDH-5M   | 24.5 [0.965] | 30.5 [1.201] |
| RDH-5M-L | 18.0 [0.709] | 24.0 [0.945] |

Dimensions in mm [in]

| Seal Repair Kits                  | RDH-5M    |
|-----------------------------------|-----------|
| Buna-N Seal Repair Kit            | SLKT-420  |
| Buna-N Rear Inlet Seal Repair Kit | SLKT-365  |
| Viton® Seal Repair Kit            | SLKT-420V |
| Viton® Rear Inlet Seal Repair Kit | SLKT-365V |

### Loading Information



| RDH-5M                | Static               | Dynamic            |
|-----------------------|----------------------|--------------------|
| Maximum Tensile T     | 2192 N [493 lbs]     | 428 N [96 lbs]     |
| Maximum Compressive C | 2923 N [657 lbs]     | 428 N [96 lbs]     |
| Maximum Moment $M_x$  | 105 Nm [929 in-lbs]  | 16 Nm [142 in-lbs] |
| Maximum Moment $M_y$  | 148 Nm [1310 in-lbs] | 22 Nm [195 in-lbs] |
| Maximum Moment $M_z$  | 97 Nm [859 in-lbs]   | 22 Nm [195 in-lbs] |

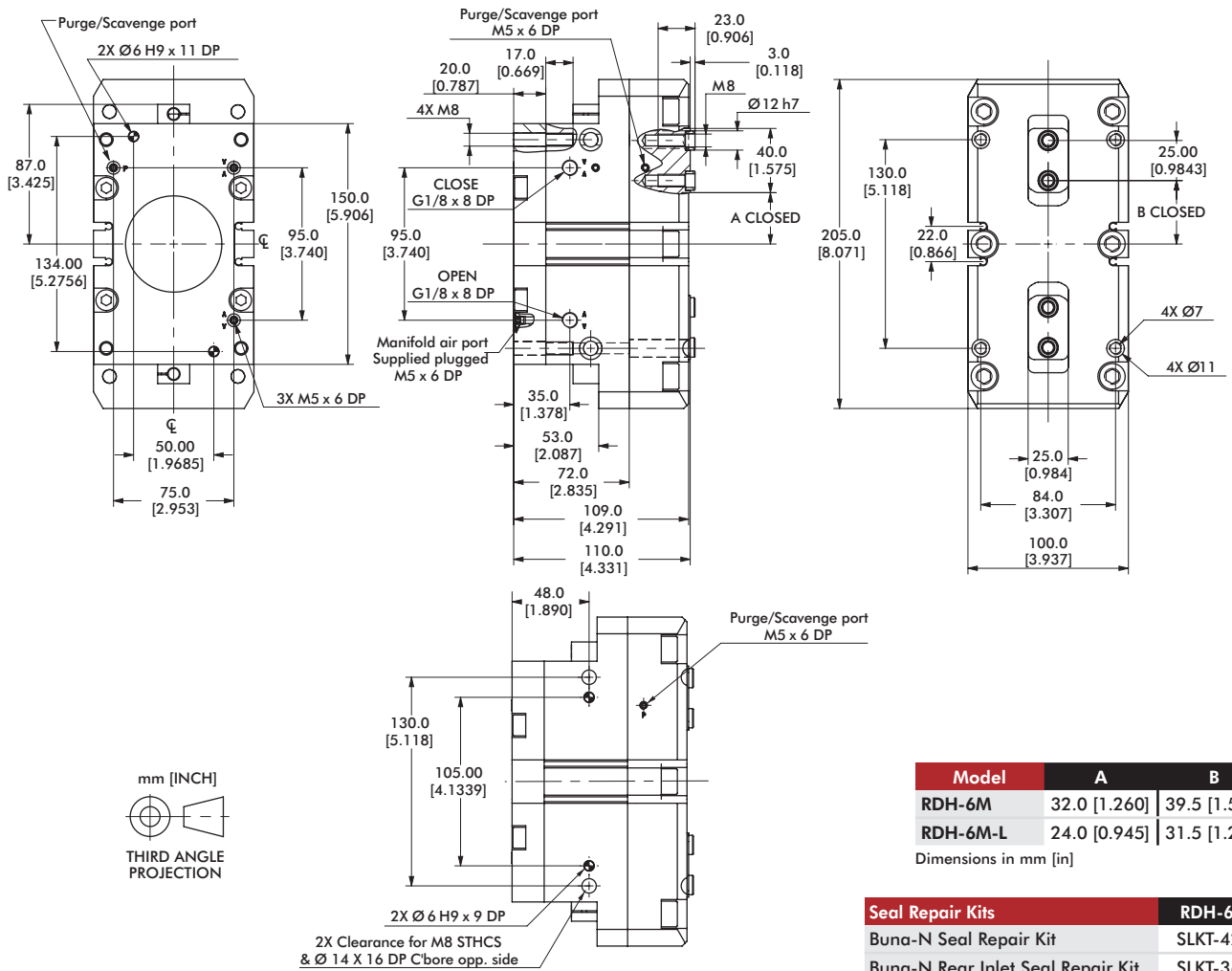
| RDH-5M-L              | Static               | Dynamic            |
|-----------------------|----------------------|--------------------|
| Maximum Tensile T     | 1966 N [442 lbs]     | 278 N [62 lbs]     |
| Maximum Compressive C | 2621 N [589 lbs]     | 278 N [62 lbs]     |
| Maximum Moment $M_x$  | 94 Nm [832 in-lbs]   | 10 Nm [89 in-lbs]  |
| Maximum Moment $M_y$  | 119 Nm [1053 in-lbs] | 13 Nm [115 in-lbs] |
| Maximum Moment $M_z$  | 78 Nm [690 in-lbs]   | 13 Nm [115 in-lbs] |

<sup>1</sup>Capacities are per set of jaws and are not simultaneous

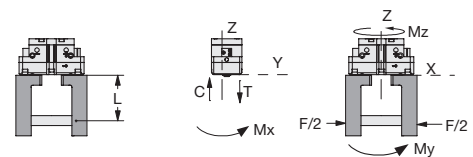
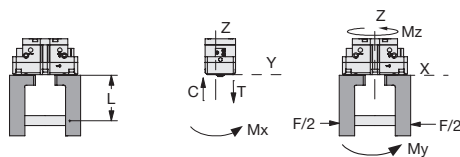
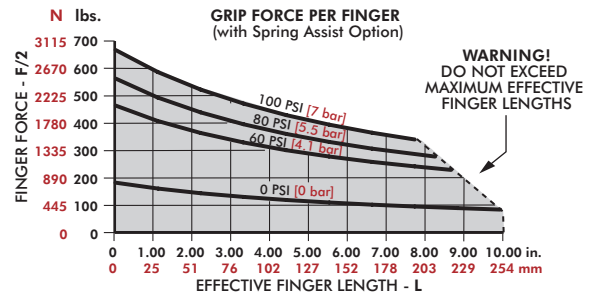
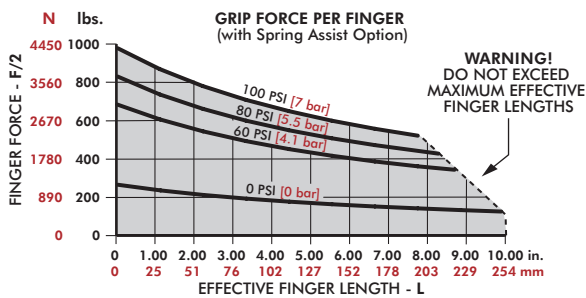
<sup>1</sup>Capacities are per set of jaws and are not simultaneous

# RDH-6M, -6M-L

## 2-Jaw General Industrial Grippers | Dimensions and Technical Specifications



## Loading Information



| RDH-6M                | Static               | Dynamic            |
|-----------------------|----------------------|--------------------|
| Maximum Tensile T     | 3463 N [779 lbs]     | 827 N [186 lbs]    |
| Maximum Compressive C | 4649 N [1045 lbs]    | 827 N [186 lbs]    |
| Maximum Moment $M_x$  | 136 Nm [1204 in-lbs] | 28 Nm [248 in-lbs] |
| Maximum Moment $M_y$  | 197 Nm [1744 in-lbs] | 41 Nm [363 in-lbs] |
| Maximum Moment $M_z$  | 130 Nm [1151 in-lbs] | 41 Nm [363 in-lbs] |

| RDH-6M-L              | Static               | Dynamic            |
|-----------------------|----------------------|--------------------|
| Maximum Tensile T     | 3089 N [694 lbs]     | 537 N [121 lbs]    |
| Maximum Compressive C | 4146 N [932 lbs]     | 537 N [121 lbs]    |
| Maximum Moment $M_x$  | 121 Nm [1071 in-lbs] | 18 Nm [159 in-lbs] |
| Maximum Moment $M_y$  | 157 Nm [1390 in-lbs] | 24 Nm [212 in-lbs] |
| Maximum Moment $M_z$  | 103 Nm [912 in-lbs]  | 24 Nm [212 in-lbs] |

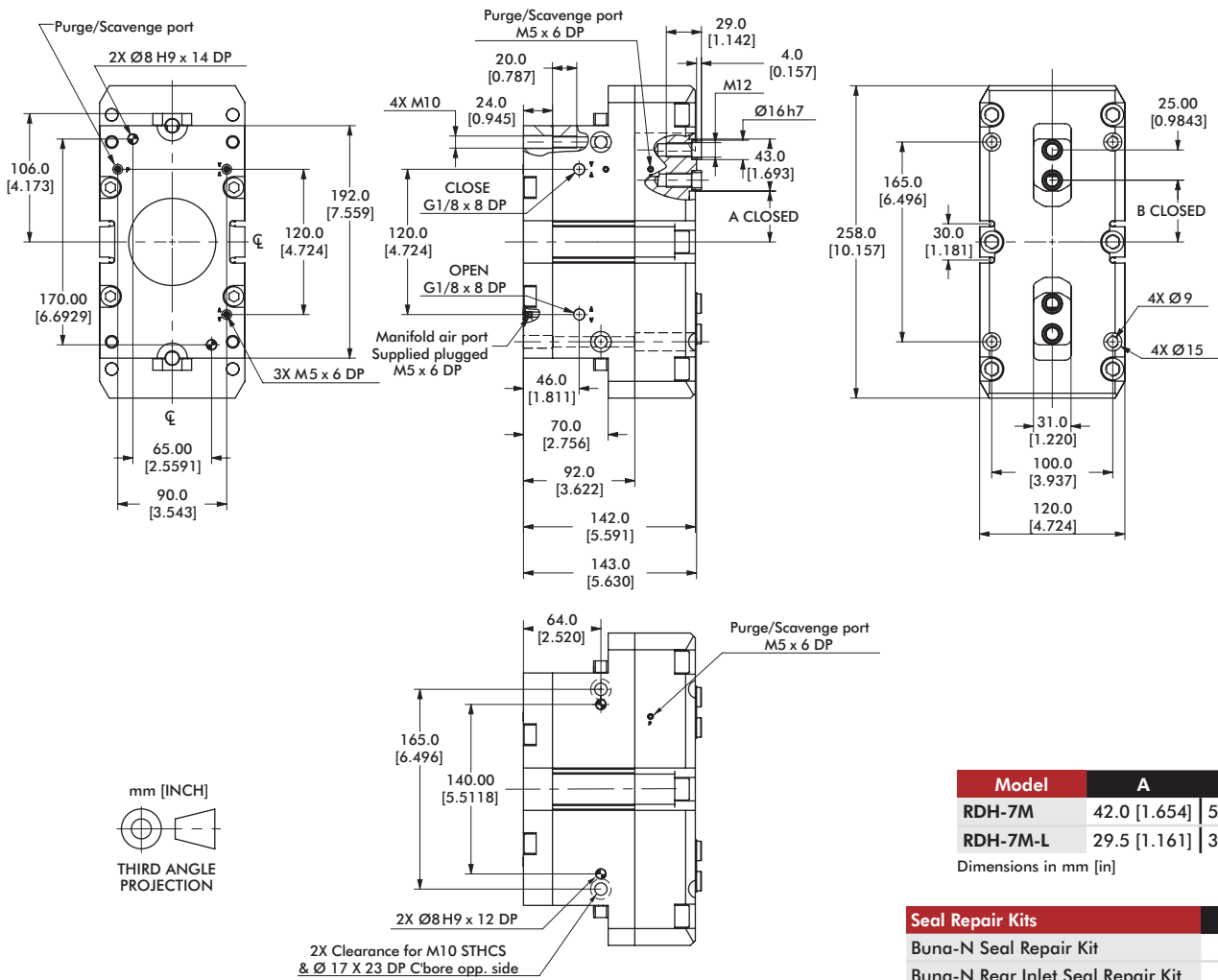
\*Capacities are per set of jaws and are not simultaneous

\*Capacities are per set of jaws and are not simultaneous



# RDH-7M, -7M-L

## 2-Jaw General Industrial Grippers | Dimensions and Technical Specifications

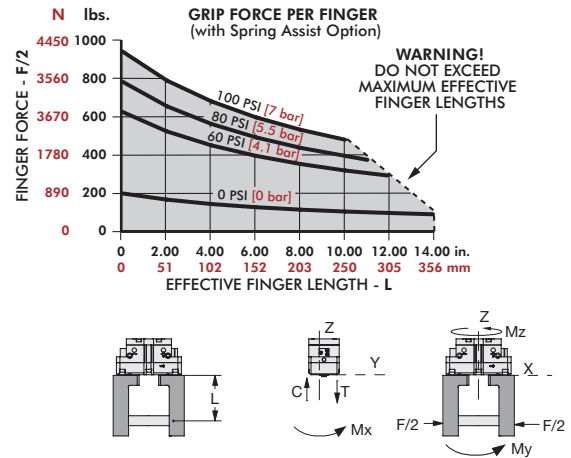
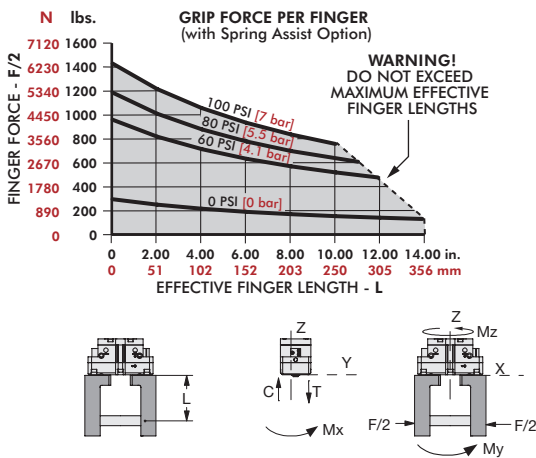


| Model    | A            | B            |
|----------|--------------|--------------|
| RDH-7M   | 42.0 [1.654] | 51.0 [2.008] |
| RDH-7M-L | 29.5 [1.161] | 38.5 [1.516] |

Dimensions in mm [in]

| Seal Repair Kits                  | RDH-7M    |
|-----------------------------------|-----------|
| Buna-N Seal Repair Kit            | SLKT-422  |
| Buna-N Rear Inlet Seal Repair Kit | SLKT-365  |
| Viton® Seal Repair Kit            | SLKT-422V |
| Viton® Rear Inlet Seal Repair Kit | SLKT-365V |

## Loading Information



| RDH-7M                | Static               | Dynamic            |
|-----------------------|----------------------|--------------------|
| Maximum Tensile T     | 4505 N [1013 lbs]    | 1048 N [236 lbs]   |
| Maximum Compressive C | 5938 N [1335 lbs]    | 1048 N [236 lbs]   |
| Maximum Moment $M_x$  | 167 Nm [1478 in-lbs] | 36 Nm [319 in-lbs] |
| Maximum Moment $M_y$  | 238 Nm [2106 in-lbs] | 51 Nm [451 in-lbs] |
| Maximum Moment $M_z$  | 161 Nm [1425 in-lbs] | 51 Nm [451 in-lbs] |

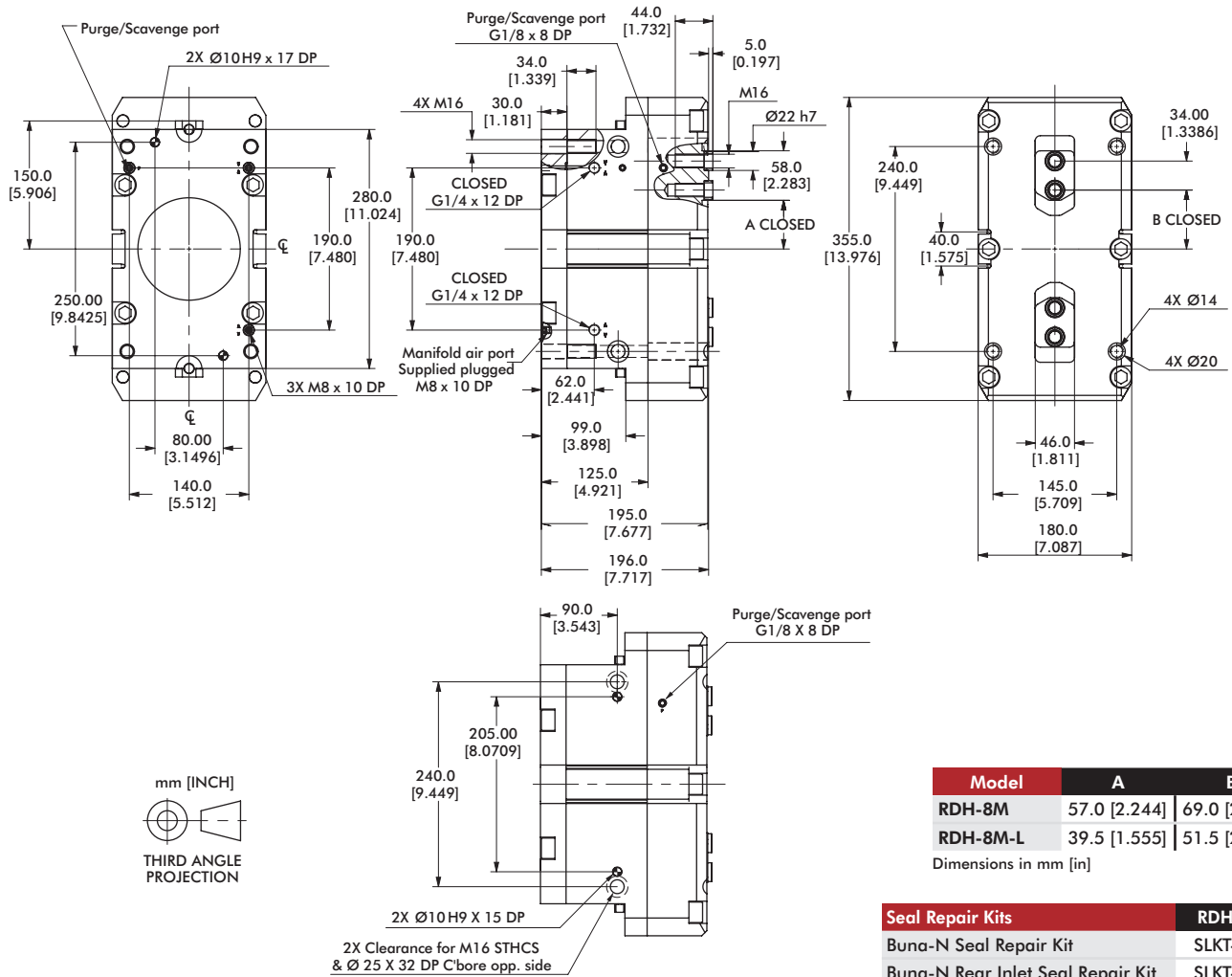
| RDH-7M-L              | Static               | Dynamic            |
|-----------------------|----------------------|--------------------|
| Maximum Tensile T     | 3911 N [879 lbs]     | 678 N [152 lbs]    |
| Maximum Compressive C | 5155 N [1159 lbs]    | 678 N [152 lbs]    |
| Maximum Moment $M_x$  | 145 Nm [1283 in-lbs] | 23 Nm [204 in-lbs] |
| Maximum Moment $M_y$  | 179 Nm [1584 in-lbs] | 29 Nm [257 in-lbs] |
| Maximum Moment $M_z$  | 122 Nm [1080 in-lbs] | 29 Nm [257 in-lbs] |

\*Capacities are per set of jaws and are not simultaneous

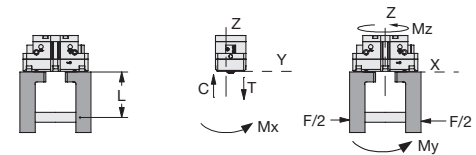
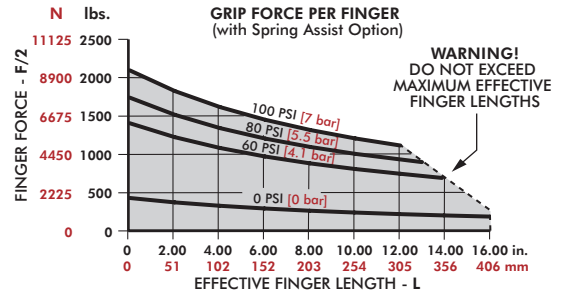
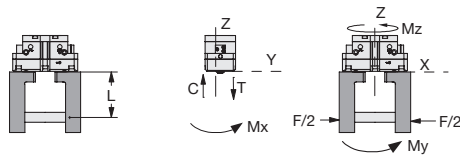
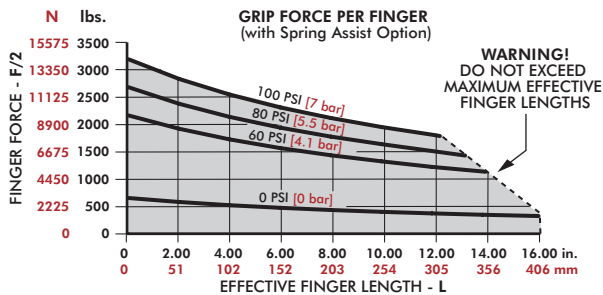
\*Capacities are per set of jaws and are not simultaneous

# RDH-8M, -8M-L

## 2-Jaw General Industrial Grippers | Dimensions and Technical Specifications



## Loading Information



| RDH-8M                | Static               | Dynamic             |
|-----------------------|----------------------|---------------------|
| Maximum Tensile T     | 6863 N [1543 lbs]    | 1743 N [392 lbs]    |
| Maximum Compressive C | 8921 N [2006 lbs]    | 1743 N [392 lbs]    |
| Maximum Moment $M_x$  | 379 Nm [3354 in-lbs] | 84 Nm [743 in-lbs]  |
| Maximum Moment $M_y$  | 481 Nm [4257 in-lbs] | 107 Nm [947 in-lbs] |
| Maximum Moment $M_z$  | 301 Nm [2664 in-lbs] | 107 Nm [947 in-lbs] |

\*Capacities are per set of jaws and are not simultaneous

| RDH-8M-L              | Static               | Dynamic            |
|-----------------------|----------------------|--------------------|
| Maximum Tensile T     | 5906 N [1328 lbs]    | 1125 N [253 lbs]   |
| Maximum Compressive C | 7678 N [1726 lbs]    | 1125 N [253 lbs]   |
| Maximum Moment $M_x$  | 326 Nm [2885 in-lbs] | 54 Nm [478 in-lbs] |
| Maximum Moment $M_y$  | 357 Nm [3160 in-lbs] | 59 Nm [522 in-lbs] |
| Maximum Moment $M_z$  | 223 Nm [1974 in-lbs] | 59 Nm [522 in-lbs] |

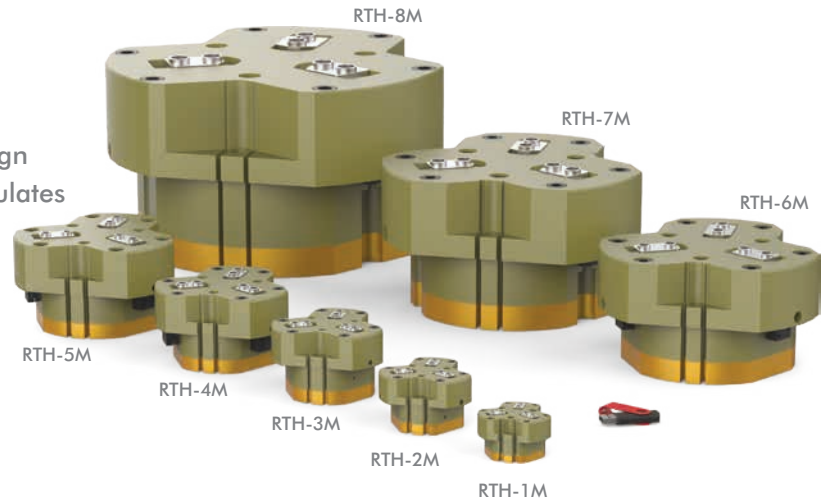
\*Capacities are per set of jaws and are not simultaneous

# RTH SERIES

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

### Features:

- Rugged multi-purpose powerful gripper
- 8 sizes for small lightweight to very large and heavy part gripping
- High impact resistant with triple wedge design
- Shielded gripper to repel metal chips/particulates
- Spring assist option maintains grip in case of air pressure loss
- Purge and scavenge ports for harsh & clean environments
- Multi-position sensing up to 3 locations

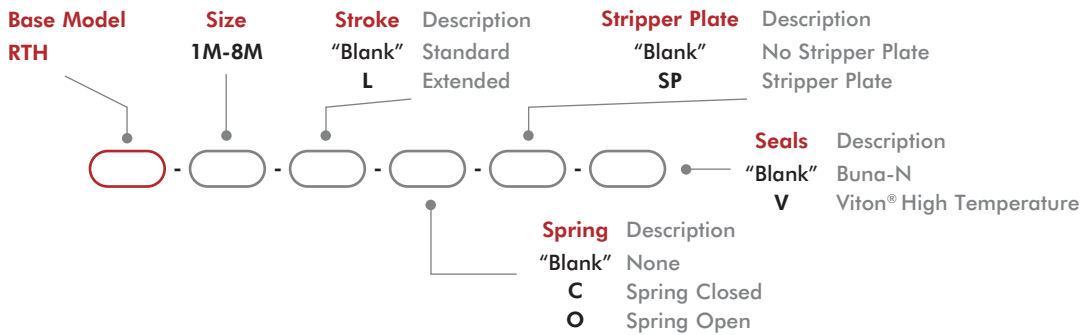


(USB key shown for scale)

### Applications:

- Large round shaped parts
- Automotive engine block and gantry systems
- Ideal for very heavy part gripping

## How To Order



## Accessories

| Sensor Accessories  | Model Numbers    | Part Number | Qty/Unit         |
|---|------------------|-------------|------------------|
| 8mm PNP Magneto Resistive Sensor (90° barrel) w/ M8 Qk. Disc* | All Models       | OHSP-011    | 1-3 <sup>†</sup> |
| 8mm NPN Magneto Resistive Sensor (90° barrel) w/ M8 Qk. Disc* | All Models       | OHSN-011    | 1-3 <sup>†</sup> |
| 8mm PNP Magneto Resistive Sensor Short Barrel w/ M8 Qk Disc*  | All Models       | OHSP-017    | 1-3 <sup>†</sup> |
| 8mm NPN Magneto Resistive Sensor Short Barrel w/ M8 Qk Disc*  | All Models       | OHSN-017    | 1-3 <sup>†</sup> |
| 8mm PNP Inductive Sensor w/ M8 Quick Disconnect*              | RTH-4M, -5M, -6M | OISP-011    | 1-3              |
| 8mm NPN Inductive Sensor w/ M8 Quick Disconnect*              | RTH-4M, -5M, -6M | OISN-011    | 1-3              |
| 12mm PNP Inductive Sensor w/ M12 Quick Disconnect*            | RTH-7M, -8M      | OISP-017    | 1-3              |
| 12mm NPN Inductive Sensor w/ M12 Quick Disconnect*            | RTH-7M, -8M      | OISN-017    | 1-3              |
| M8 Quick Disconnect 2 Meter Cable Length*                     | All Models       | CABL-010    | 1-3              |
| M8 Quick Disconnect 5 Meter Cable Length*                     | All Models       | CABL-013    | 1-3              |
| M12 Quick Disconnect 2 Meter Cable Length*                    | RTH-7M, -8M      | CABL-014    | 1-3 <sup>†</sup> |
| M12 Quick Disconnect 5 Meter Cable Length*                    | RTH-7M, -8M      | CABL-018    | 1-3 <sup>†</sup> |

| Pneumatic Accessories              | Model Numbers         | Part Number | Qty/Unit |
|------------------------------------|-----------------------|-------------|----------|
| M5 Adjustable Flow Control         | RTH-1M, -2M, -3M      | VLVF-008    | 1-2      |
| G 1/8" 90° Adjustable Flow Control | RTH-4M, -5M, -6M, -7M | VLVF-005    | 1-2      |
| G 1/4" Adjustable Flow Control     | RDH-8M                | VLVF-010    | 1-2      |

\* Sensor and cable sold separately. <sup>†</sup> Except RTH-1, 1-2 only.

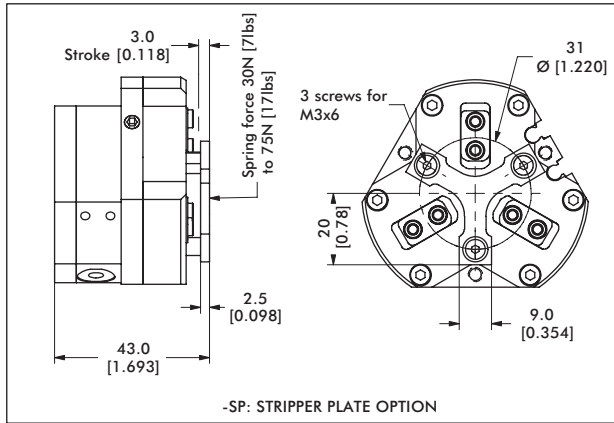
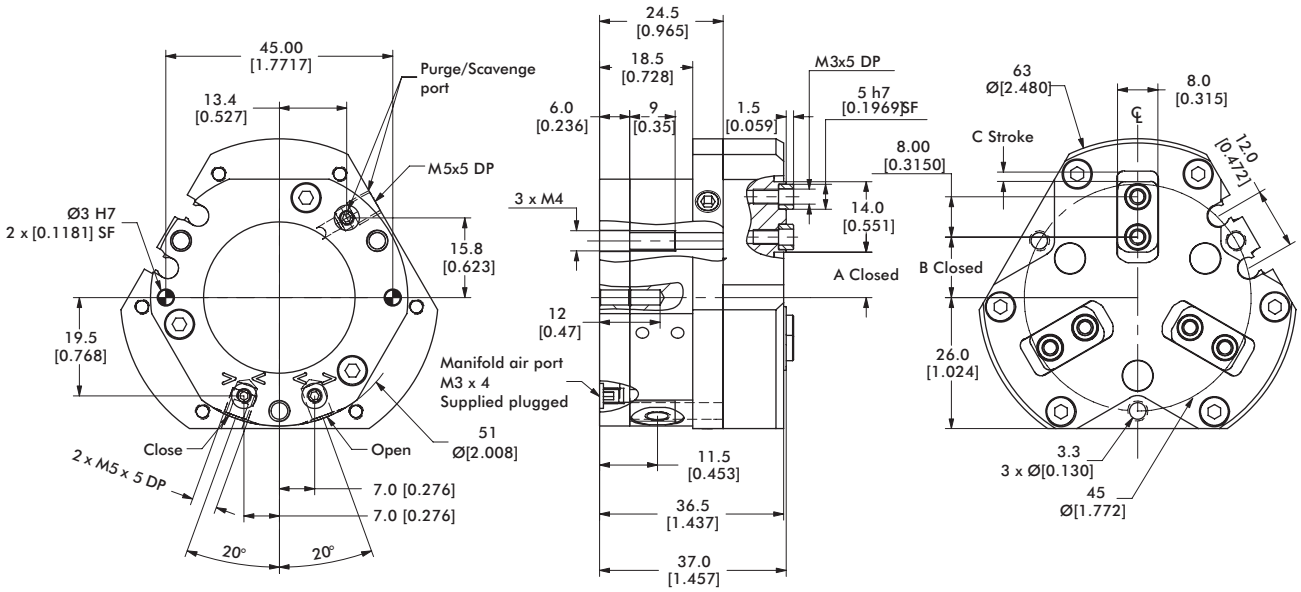
## 3-Jaw Heavy-Duty Parallel Grippers | Technical Specifications

| Specifications  | Units                              | 1M                    | 1M-L      | 2M         | 2M-L      | 3M             | 3M-L       | 4M              | 4M-L       |
|---|------------------------------------|-----------------------|-----------|------------|-----------|----------------|------------|-----------------|------------|
| Total Rated Grip Force F @ 100 psi [7 bar] w/o Spring Assist  | N [lbs]                            | 682 [153]             | 443 [100] | 1238 [278] | 812 [183] | 2078 [467]     | 1349 [303] | 3644 [819]      | 2366 [532] |
| Total Rated Grip Force F @ 100 psi [7 bar] with Spring Assist | N [lbs]                            | 889 [200]             | 579 [130] | 1490 [335] | 979 [220] | 2627 [591]     | 1708 [384] | 4562 [1026]     | 2967 [667] |
| Total Stroke  | mm [in]                            | 4 [0.16]              | 8 [0.32]  | 6 [0.24]   | 12 [0.47] | 8 [0.31]       | 16 [0.63]  | 10 [0.39]       | 20 [0.79]  |
| Weight  | kg [lbs]                           | 0.25 [0.6]            |           | 0.53 [1.2] |           | 1.08 [2.4]     |            | 1.95 [4.3]      |            |
| Pressure Range w/o Spring                                     | bar [psi]                          | 2-7 [30-100]          |           |            |           |                |            |                 |            |
| Pressure Range with Spring                                    | bar [psi]                          | 4-7 [60-100]          |           |            |           | 3.5-7 [50-100] |            | 3-7 [45-100]    |            |
| Max. Vacuum for Scavenge Port                                 | mm Hg [in Hg]                      | 200 [8]               |           |            |           |                |            |                 |            |
| Max. Pressure for Purge Port                                  | bar [psi]                          | 2.1 [30]              |           |            |           |                |            |                 |            |
| Ingress Protection Class (IP)                                 |                                    | IP55                  |           |            |           |                |            |                 |            |
| Displacement  | cm <sup>3</sup> [in <sup>3</sup> ] | 6.5 [0.40]            |           | 17 [1.05]  |           | 37 [2.30]      |            | 80 [4.90]       |            |
| 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.                               | 0.06                  |           | 0.07       |           | 0.08           |            | 0.1             |            |
| Accuracy  | mm [in]                            | ±0.04 [±0.002]        |           |            |           |                |            | ±0.06 [±0.0024] |            |
| Repeatability   | mm [in]                            | ±0.02 [±0.001]        |           |            |           |                |            | ±0.03 [±0.0012] |            |
| Valve to Actuate Single Acting                                |                                    | 3-way, 2-position     |           |            |           |                |            |                 |            |
| Valve to Actuate Double Acting                                |                                    | 4-way, 2-position     |           |            |           |                |            |                 |            |

| Specifications (cont.)  | Units                              | 5M                    | 5M-L        | 6M           | 6M-L            | 7M           | 7M-L         | 8M             | 8M-L         |
|---|------------------------------------|-----------------------|-------------|--------------|-----------------|--------------|--------------|----------------|--------------|
| Total Rated Grip Force F @ 100 psi [7 bar] w/o Spring Assist  | N [lbs]                            | 6353 [1428]           | 4125 [927]  | 10202 [2294] | 6629 [1490]     | 17165 [3859] | 11102 [2496] | 35288 [7933]   | 22784 [5122] |
| Total Rated Grip Force F @ 100 psi [7 bar] with Spring Assist | N [lbs]                            | 7877 [1771]           | 5124 [1152] | 13786 [3099] | 8971 [2017]     | 22093 [4967] | 14322 [3222] | 44354 [9971]   | 28690 [6450] |
| Total Stroke  | mm [in]                            | 13 [0.51]             | 26 [1.02]   | 16 [0.63]    | 32 [1.26]       | 25 [0.98]    | 50 [1.97]    | 35 [1.38]      | 70 [2.76]    |
| Weight  | kg [lbs]                           | 3.9 [8.6]             |             | 7.89 [17.4]  |                 | 15.7 [34.6]  |              | 43.9 [96.8]    |              |
| Pressure Range w/o Spring                                     | bar [psi]                          | 2-7 [30-100]          |             |              |                 |              |              |                |              |
| Pressure Range with Spring                                    | bar [psi]                          | 3-7 [45-100]          |             |              | 4-7 [55-100]    |              |              | 3.5-7 [50-100] |              |
| Max. Vacuum for Scavenge Port                                 | mm Hg [in Hg]                      | 20 [8]                |             |              |                 |              |              |                |              |
| Max. Pressure for Purge Port                                  | bar [psi]                          | 2.1 [30]              |             |              |                 |              |              |                |              |
| Ingress Protection Class (IP)                                 |                                    | IP55                  |             |              |                 |              |              |                |              |
| Displacement  | cm <sup>3</sup> [in <sup>3</sup> ] | 180 [11.0]            |             | 355 [22]     |                 | 940 [57]     |              | 2720 [166]     |              |
| 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.                               | 0.19                  |             | 0.236        |                 | 0.85         |              | 1.7            |              |
| Accuracy  | mm [in]                            | ±0.06 [±0.0024]       |             |              | ±0.08 [±0.0031] |              |              | ±0.1 [±0.0039] |              |
| Repeatability   | mm [in]                            | ±0.03 [±0.0012]       |             |              | ±0.04 [±0.0016] |              |              | ±0.05 [±0.002] |              |
| Valve to Actuate Single Acting                                |                                    | 3-way, 2-position     |             |              |                 |              |              |                |              |
| Valve to Actuate Double Acting                                |                                    | 4-way, 2-position     |             |              |                 |              |              |                |              |

# RTH-1M, -1M-L

## 3-Jaw Parallel Grippers | Dimensions and Technical Specifications



mm [INCH]

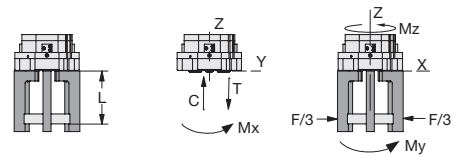
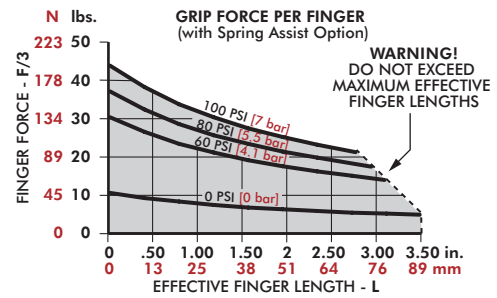
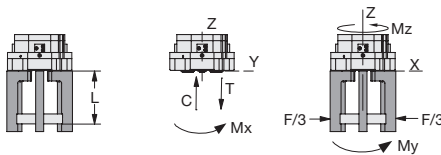
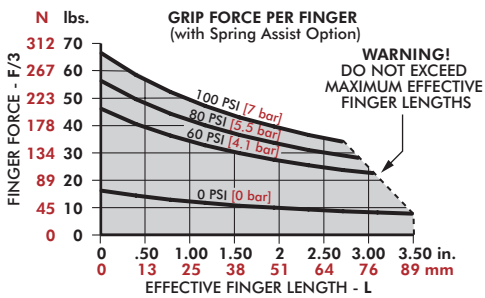


| Model    | A           | B            | C          |
|----------|-------------|--------------|------------|
| RTH-1M   | 9.0 [0.354] | 12.0 [0.472] | 2.0 [0.08] |
| RTH-1M-L | 7.0 [0.276] | 10.0 [0.394] | 4.1 [0.16] |

Dimensions in mm [in]

| Seal Repair Kits                  | RTH-1M    |
|-----------------------------------|-----------|
| Buna-N Seal Repair Kit            | SLKT-347  |
| Buna-N Rear Inlet Seal Repair Kit | SLKT-363  |
| Viton® Seal Repair Kit            | SLKT-347V |
| Viton® Rear Inlet Seal Repair Kit | SLKT-363V |

## Loading Information



| RTH-1M                | Static             | Dynamic          |
|-----------------------|--------------------|------------------|
| Maximum Tensile T     | 810 N [182 lbs]    | 89 N [20 lbs]    |
| Maximum Compressive C | 1060 N [238 lbs]   | 89 N [20 lbs]    |
| Maximum Moment $M_x$  | 22 Nm [195 in-lbs] | 2 Nm [18 in-lbs] |
| Maximum Moment $M_y$  | 28 Nm [248 in-lbs] | 3 Nm [27 in-lbs] |
| Maximum Moment $M_z$  | 18 Nm [159 in-lbs] | 3 Nm [27 in-lbs] |

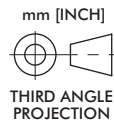
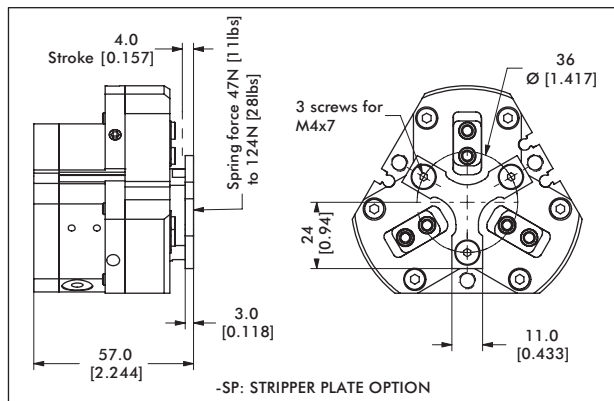
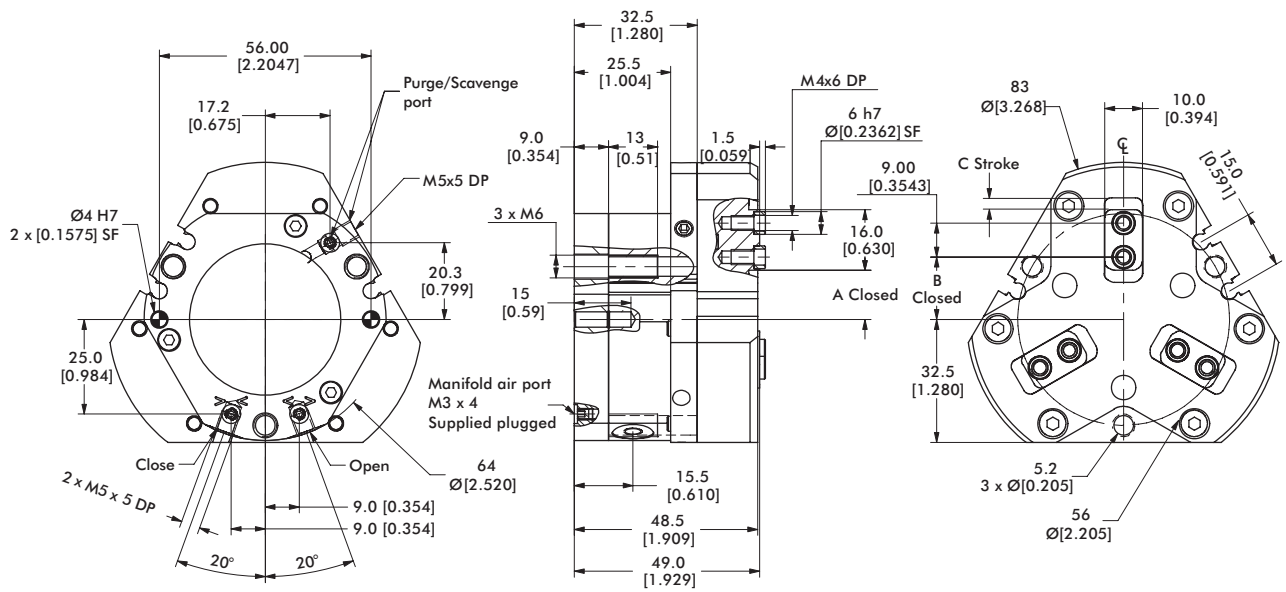
<sup>†</sup>Capacities are per set of jaws and are not simultaneous

| RTH-1M-L              | Static             | Dynamic         |
|-----------------------|--------------------|-----------------|
| Maximum Tensile T     | 730 N [164 lbs]    | 57 N [13 lbs]   |
| Maximum Compressive C | 960 N [216 lbs]    | 57 N [13 lbs]   |
| Maximum Moment $M_x$  | 20 Nm [177 in-lbs] | 1 Nm [9 in-lbs] |
| Maximum Moment $M_y$  | 23 Nm [204 in-lbs] | 1 Nm [9 in-lbs] |
| Maximum Moment $M_z$  | 15 Nm [133 in-lbs] | 1 Nm [9 in-lbs] |

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

# RTH-2M, -2M-L

## 3-Jaw Parallel Grippers | Dimensions and Technical Specifications

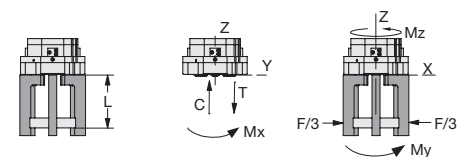
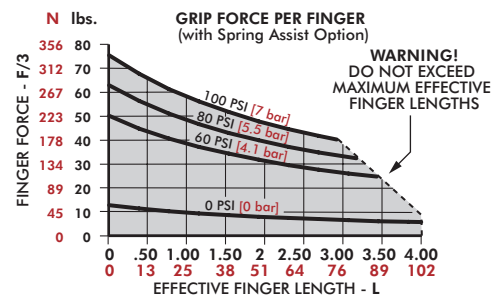
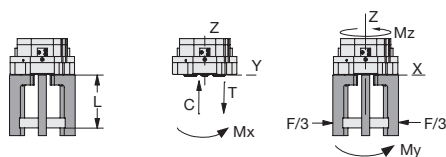
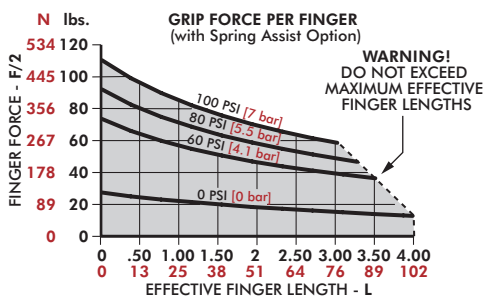


| Model    | A            | B            | C          |
|----------|--------------|--------------|------------|
| RTH-2M   | 13.0 [0.512] | 16.5 [0.650] | 3.0 [0.12] |
| RTH-2M-L | 10.0 [0.394] | 13.5 [0.531] | 6.0 [0.24] |

Dimensions in mm [in]

| Seal Repair Kits                  | RTH-2M     |
|-----------------------------------|------------|
| Buna-N Seal Repair Kit            | SLKT-348   |
| Buna-N Rear Inlet Seal Repair Kit | SLKT-363   |
| Viton® Seal Repair Kit            | SLKT-4348V |
| Viton® Rear Inlet Seal Repair Kit | SLKT-363V  |

## Loading Information



| RTH-2M                | Static             | Dynamic          |
|-----------------------|--------------------|------------------|
| Maximum Tensile T     | 1200 N [270 lbs]   | 129 N [29 lbs]   |
| Maximum Compressive C | 1560 N [351 lbs]   | 129 N [29 lbs]   |
| Maximum Moment $M_x$  | 45 Nm [398 in-lbs] | 4 Nm [35 in-lbs] |
| Maximum Moment $M_y$  | 64 Nm [566 in-lbs] | 6 Nm [53 in-lbs] |
| Maximum Moment $M_z$  | 41 Nm [363 in-lbs] | 6 Nm [53 in-lbs] |

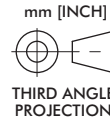
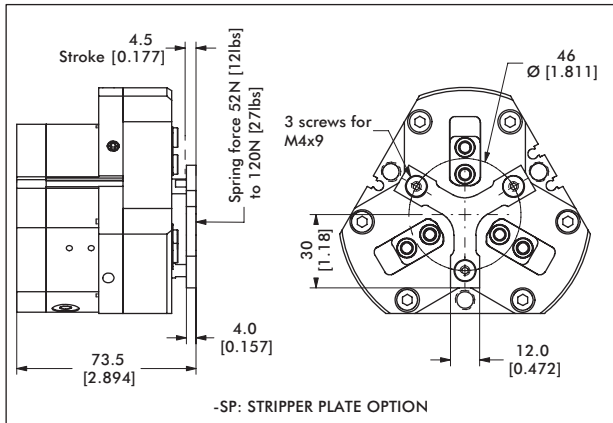
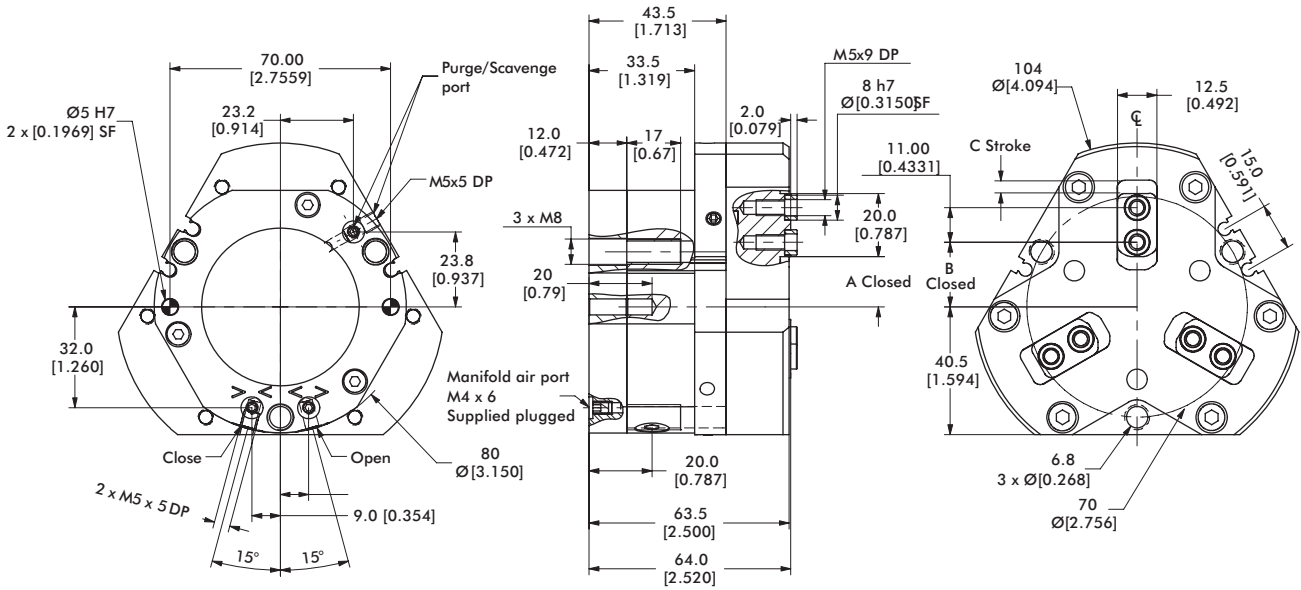
\*Capacities are per set of jaws and are not simultaneous

| RTH-2M-L              | Static             | Dynamic          |
|-----------------------|--------------------|------------------|
| Maximum Tensile T     | 1080 N [243 lbs]   | 84 N [19 lbs]    |
| Maximum Compressive C | 1400 N [315 lbs]   | 84 N [19 lbs]    |
| Maximum Moment $M_x$  | 40 Nm [354 in-lbs] | 3 Nm [27 in-lbs] |
| Maximum Moment $M_y$  | 52 Nm [460 in-lbs] | 4 Nm [35 in-lbs] |
| Maximum Moment $M_z$  | 33 Nm [292 in-lbs] | 4 Nm [35 in-lbs] |

\*Capacities are per set of jaws and are not simultaneous

# RTH-3M, -3M-L

## 3-Jaw Parallel Grippers | Dimensions and Technical Specifications

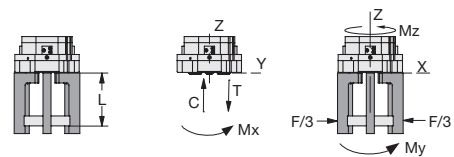
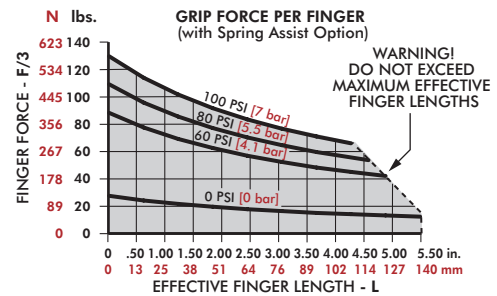
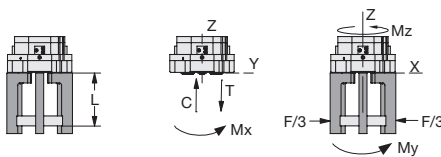
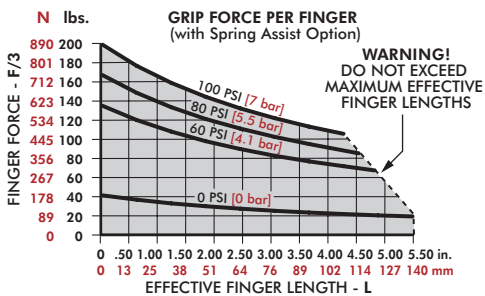


| Model    | A            | B            | C          |
|----------|--------------|--------------|------------|
| RTH-3M   | 16.0 [0.630] | 20.5 [0.807] | 3.9 [0.16] |
| RTH-3M-L | 12.0 [0.742] | 16.5 [0.650] | 8.0 [0.32] |

Dimensions in mm [in]

| Seal Repair Kits                  | RTH-3M    |
|-----------------------------------|-----------|
| Buna-N Seal Repair Kit            | SLKT-349  |
| Buna-N Rear Inlet Seal Repair Kit | SLKT-364  |
| Viton® Seal Repair Kit            | SLKT-349V |
| Viton® Rear Inlet Seal Repair Kit | SLKT-364V |

## Loading Information



| RTH-3M                | Static              | Dynamic            |
|-----------------------|---------------------|--------------------|
| Maximum Tensile T     | 1680 N [378 lbs]    | 302 N [68 lbs]     |
| Maximum Compressive C | 2180 N [490 lbs]    | 302 N [68 lbs]     |
| Maximum Moment $M_x$  | 72 Nm [637 in-lbs]  | 11 Nm [97 in-lbs]  |
| Maximum Moment $M_y$  | 102 Nm [903 in-lbs] | 16 Nm [142 in-lbs] |
| Maximum Moment $M_z$  | 66 Nm [584 in-lbs]  | 16 Nm [142 in-lbs] |

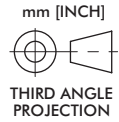
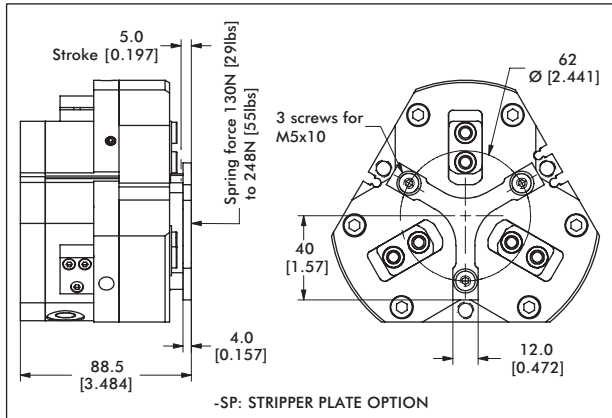
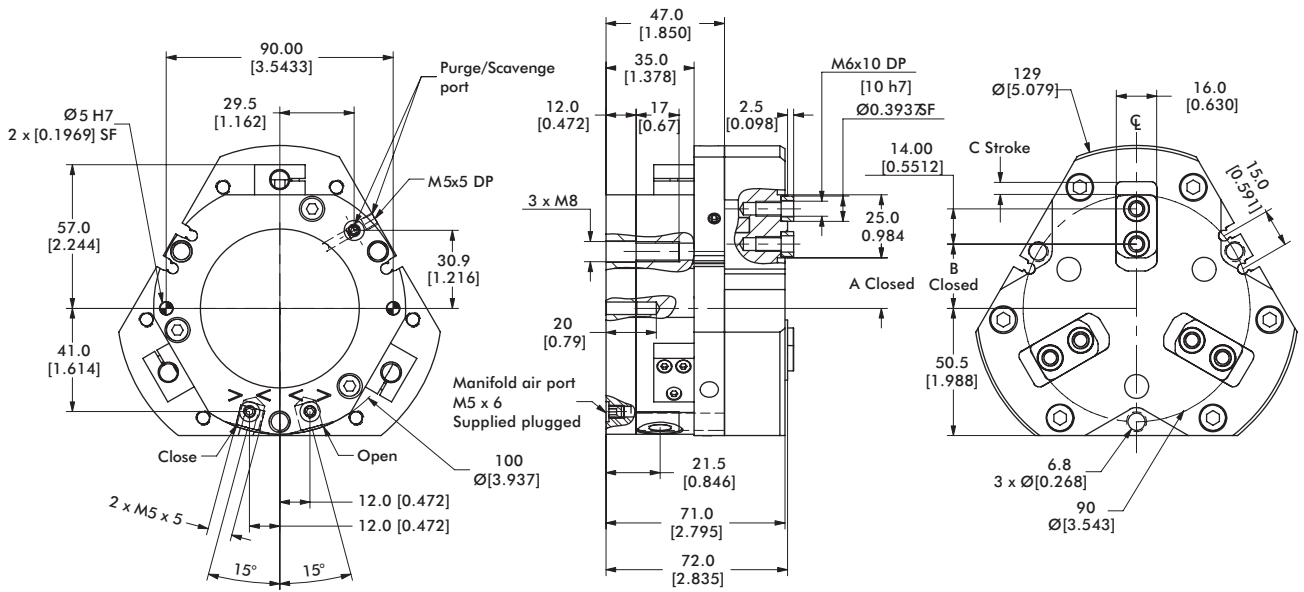
<sup>†</sup>Capacities are per set of jaws and are not simultaneous

| RTH-3M-L              | Static             | Dynamic          |
|-----------------------|--------------------|------------------|
| Maximum Tensile T     | 1500 N [337 lbs]   | 197 N [44 lbs]   |
| Maximum Compressive C | 1940 N [436 lbs]   | 197 N [44 lbs]   |
| Maximum Moment $M_x$  | 64 Nm [566 in-lbs] | 7 Nm [62 in-lbs] |
| Maximum Moment $M_y$  | 81 Nm [717 in-lbs] | 9 Nm [80 in-lbs] |
| Maximum Moment $M_z$  | 53 Nm [469 in-lbs] | 9 Nm [80 in-lbs] |

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

# RTH-4M, -4M-L

## 3-Jaw Parallel Grippers | Dimensions and Technical Specifications

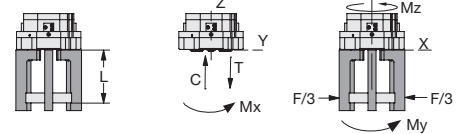
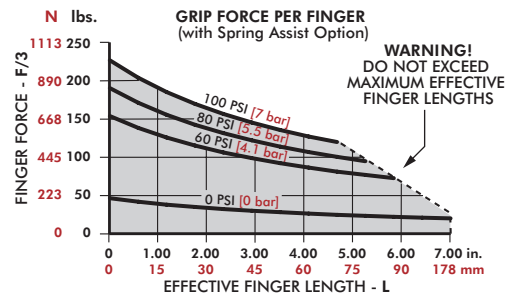
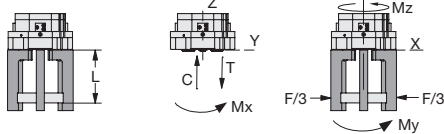
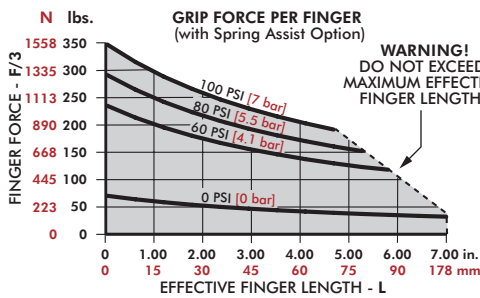


| Model    | A            | B            | C           |
|----------|--------------|--------------|-------------|
| RTH-4M   | 20.0 [0.787] | 25.5 [1.004] | 5.0 [0.20]  |
| RTH-4M-L | 15.0 [0.591] | 20.5 [0.807] | 10.0 [0.40] |

Dimensions in mm [in]

| Seal Repair Kits                  | RTH-4M    |
|-----------------------------------|-----------|
| Buna-N Seal Repair Kit            | SLKT-350  |
| Buna-N Rear Inlet Seal Repair Kit | SLKT-365  |
| Viton® Seal Repair Kit            | SLKT-350V |
| Viton® Rear Inlet Seal Repair Kit | SLKT-365V |

## Loading Information



| RTH-4M                | Static               | Dynamic            |
|-----------------------|----------------------|--------------------|
| Maximum Tensile T     | 2110 N [474 lbs]     | 425 N [96 lbs]     |
| Maximum Compressive C | 2790 N [627 lbs]     | 425 N [96 lbs]     |
| Maximum Moment $M_x$  | 92 Nm [81.4 in-lbs]  | 16 Nm [142 in-lbs] |
| Maximum Moment $M_y$  | 182 Nm [1133 in-lbs] | 22 Nm [195 in-lbs] |
| Maximum Moment $M_z$  | 84 Nm [734 in-lbs]   | 22 Nm [195 in-lbs] |

\*Capacities are per set of jaws and are not simultaneous

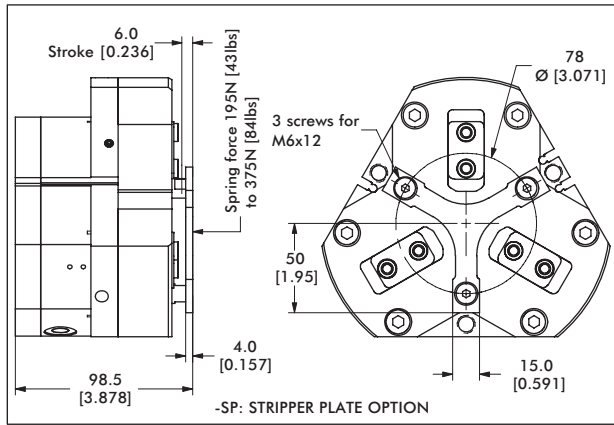
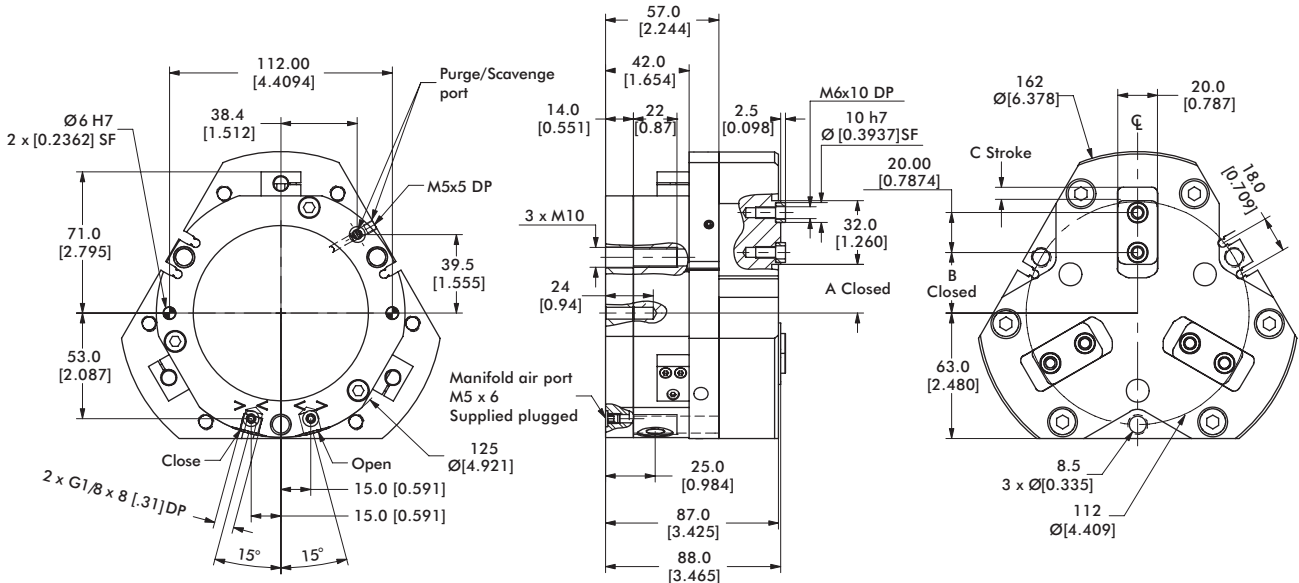
| RTH-4M-L              | Static              | Dynamic            |
|-----------------------|---------------------|--------------------|
| Maximum Tensile T     | 1880 N [423 lbs]    | 275 N [62 lbs]     |
| Maximum Compressive C | 2490 N [560 lbs]    | 275 N [62 lbs]     |
| Maximum Moment $M_x$  | 82 Nm [726 in-lbs]  | 10 Nm [89 in-lbs]  |
| Maximum Moment $M_y$  | 102 Nm [903 in-lbs] | 13 Nm [115 in-lbs] |
| Maximum Moment $M_z$  | 67 Nm [593 in-lbs]  | 13 Nm [115 in-lbs] |

\*Capacities are per set of jaws and are not simultaneous

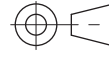


# RTH-5M, -5M-L

## 3-Jaw Parallel Grippers | Dimensions and Technical Specifications



mm [INCH]



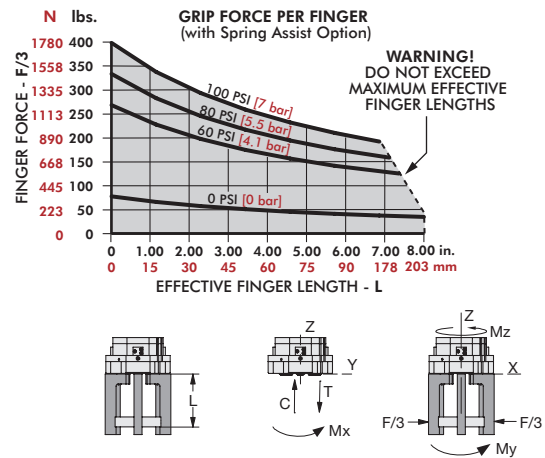
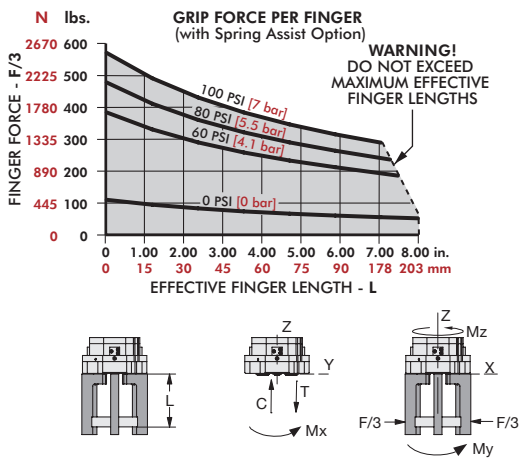
THIRD ANGLE PROJECTION

| Model    | A            | B            | C           |
|----------|--------------|--------------|-------------|
| RTH-5M   | 24.5 [0.965] | 30.5 [1.201] | 6.5 [0.26]  |
| RTH-5M-L | 18.0 [0.709] | 24.0 [0.945] | 13.0 [0.51] |

Dimensions in mm [in]

| Seal Repair Kits                  | RTH-5 M   |
|-----------------------------------|-----------|
| Buna-N Seal Repair Kit            | SLKT-351  |
| Buna-N Rear Inlet Seal Repair Kit | SLKT-365  |
| Viton® Seal Repair Kit            | SLKT-351V |
| Viton® Rear Inlet Seal Repair Kit | SLKT-365V |

## Loading Information



| RTH-5M                | Static               | Dynamic            |
|-----------------------|----------------------|--------------------|
| Maximum Tensile T     | 2990 N [672 lbs]     | 674 N [152 lbs]    |
| Maximum Compressive C | 3980 N [895 lbs]     | 674 N [152 lbs]    |
| Maximum Moment $M_x$  | 127 Nm [1124 in-lbs] | 25 Nm [221 in-lbs] |
| Maximum Moment $M_y$  | 179 Nm [1584 in-lbs] | 35 Nm [310 in-lbs] |
| Maximum Moment $M_z$  | 117 Nm [1036 in-lbs] | 35 Nm [310 in-lbs] |

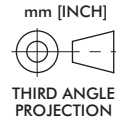
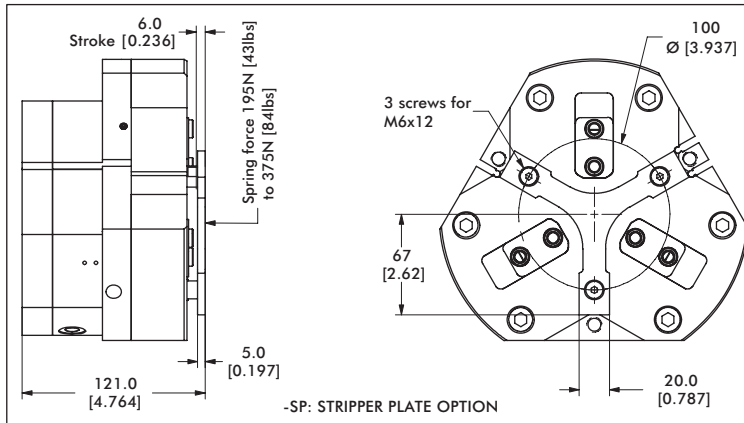
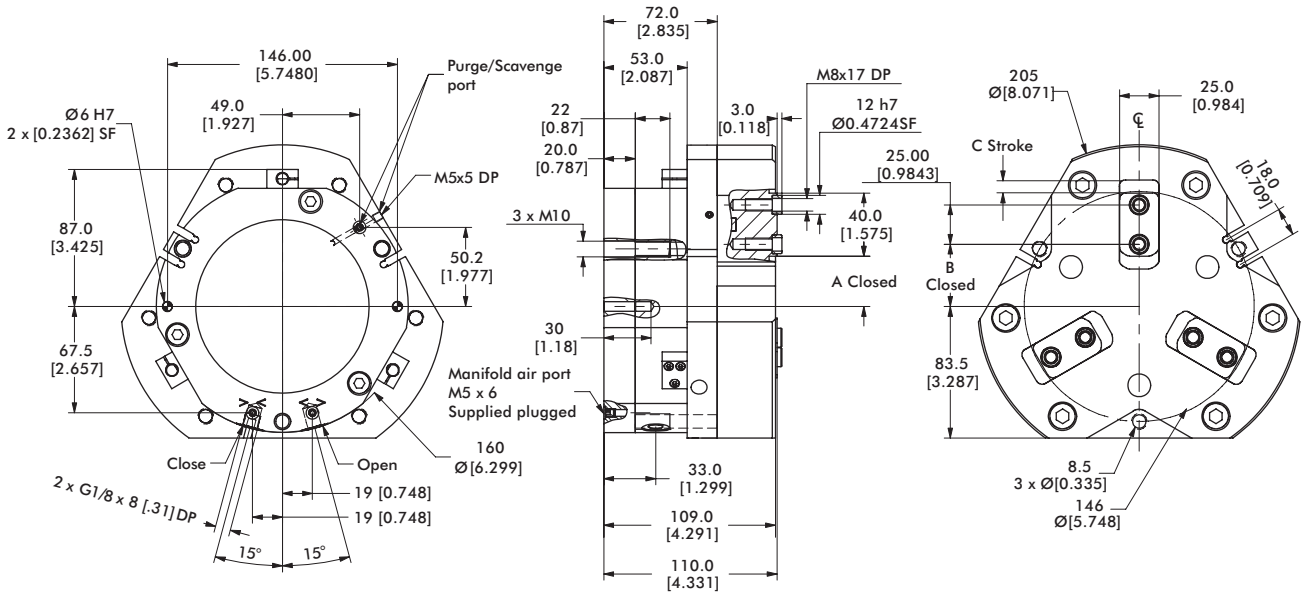
<sup>1</sup>Capacities are per set of jaws and are not simultaneous

| RTH-5M-L              | Static               | Dynamic            |
|-----------------------|----------------------|--------------------|
| Maximum Tensile T     | 2680 N [602 lbs]     | 432 N [97 lbs]     |
| Maximum Compressive C | 3570 N [803 lbs]     | 432 N [97 lbs]     |
| Maximum Moment $M_x$  | 114 Nm [1009 in-lbs] | 16 Nm [142 in-lbs] |
| Maximum Moment $M_y$  | 144 Nm [1275 in-lbs] | 20 Nm [177 in-lbs] |
| Maximum Moment $M_z$  | 94 Nm [832 in-lbs]   | 20 Nm [177 in-lbs] |

<sup>1</sup>Capacities are per set of jaws and are not simultaneous

# RTH-6M, -6M-L

## 3-Jaw Parallel Grippers | Dimensions and Technical Specifications

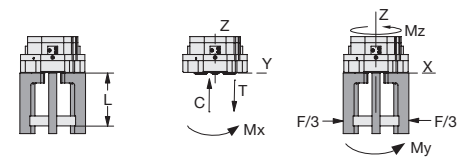
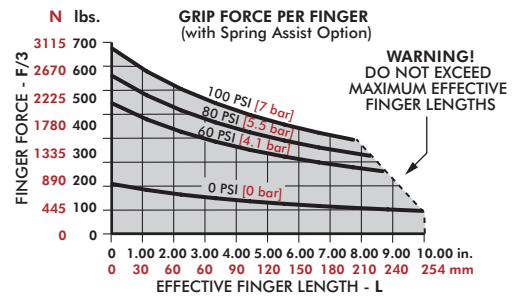
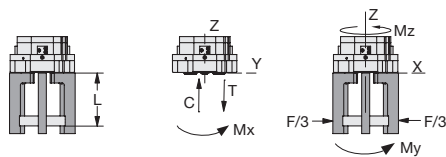
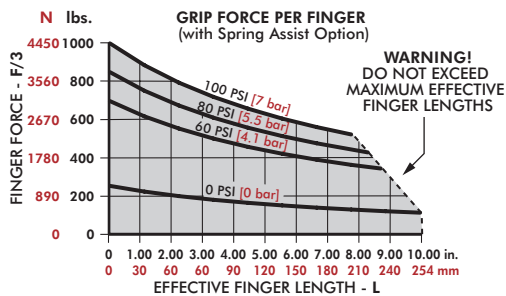


| Model    | A            | B            | C           |
|----------|--------------|--------------|-------------|
| RTH-6M   | 32.0 [1.260] | 39.5 [1.555] | 8.0 [0.32]  |
| RTH-6M-L | 24.0 [0.945] | 31.5 [1.240] | 16.0 [0.63] |

Dimensions in mm [in]

| Seal Repair Kits                  | RTH-6M    |
|-----------------------------------|-----------|
| Buna-N Seal Repair Kit            | SLKT-352  |
| Buna-N Rear Inlet Seal Repair Kit | SLKT-365  |
| Viton® Seal Repair Kit            | SLKT-352V |
| Viton® Rear Inlet Seal Repair Kit | SLKT-365V |

## Loading Information



| RTH-6M                | Static               | Dynamic            |
|-----------------------|----------------------|--------------------|
| Maximum Tensile T     | 4320 N [971 lbs]     | 1315 N [296 lbs]   |
| Maximum Compressive C | 5810 N [1306 lbs]    | 1315 N [296 lbs]   |
| Maximum Moment $M_x$  | 172 Nm [1522 in-lbs] | 45 Nm [398 in-lbs] |
| Maximum Moment $M_y$  | 250 Nm [2213 in-lbs] | 65 Nm [575 in-lbs] |
| Maximum Moment $M_z$  | 164 Nm [1452 in-lbs] | 65 Nm [575 in-lbs] |

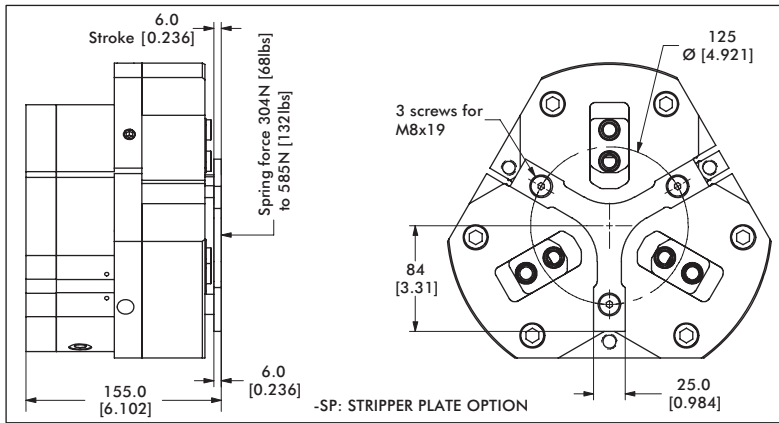
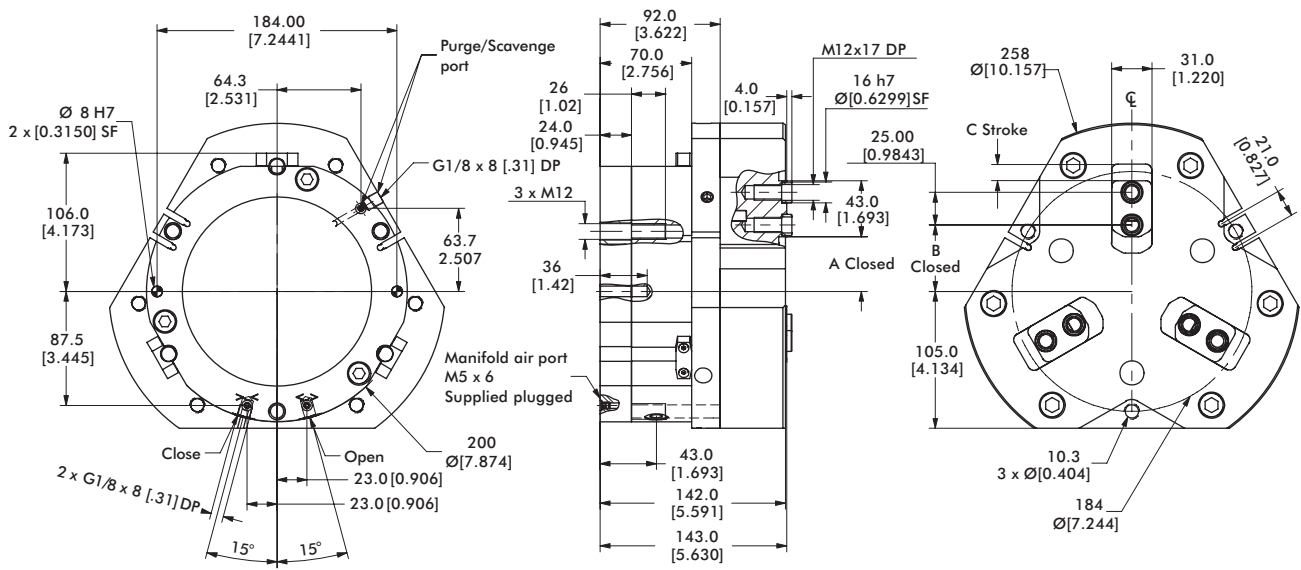
\*Capacities are per set of jaws and are not simultaneous

| RTH-6M-L              | Static               | Dynamic            |
|-----------------------|----------------------|--------------------|
| Maximum Tensile T     | 3860 N [868 lbs]     | 852 N [192 lbs]    |
| Maximum Compressive C | 5180 N [1165 lbs]    | 852 N [192 lbs]    |
| Maximum Moment $M_x$  | 154 Nm [1363 in-lbs] | 29 Nm [257 in-lbs] |
| Maximum Moment $M_y$  | 199 Nm [1761 in-lbs] | 37 Nm [327 in-lbs] |
| Maximum Moment $M_z$  | 131 Nm [1159 in-lbs] | 37 Nm [327 in-lbs] |

\*Capacities are per set of jaws and are not simultaneous

# RTH-7M, -7M-L

## 3-Jaw Parallel Grippers | Dimensions and Technical Specifications



mm [INCH]

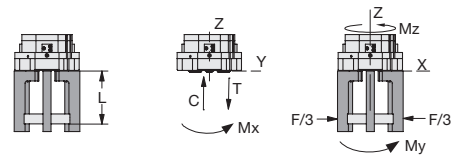
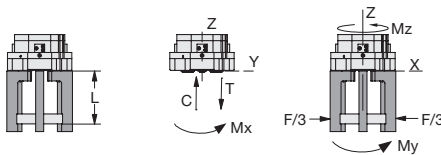
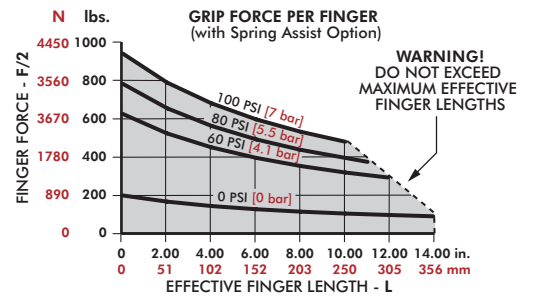
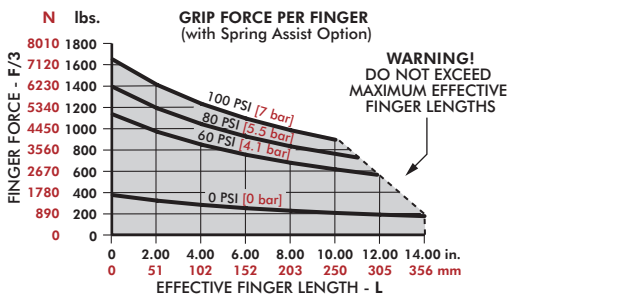


| Model    | A            | B            | C           |
|----------|--------------|--------------|-------------|
| RTH-7M   | 42.0 [1.654] | 51.0 [2.008] | 12.4 [0.49] |
| RTH-7M-L | 29.5 [1.161] | 38.5 [1.516] | 25.0 [0.99] |

Dimensions in mm [in]

| Seal Repair Kits                  | RTH-7M    |
|-----------------------------------|-----------|
| Buna-N Seal Repair Kit            | SLKT-353  |
| Buna-N Rear Inlet Seal Repair Kit | SLKT-365  |
| Viton® Seal Repair Kit            | SLKT-353V |
| Viton® Rear Inlet Seal Repair Kit | SLKT-365V |

## Loading Information



| RTH-7M                        | Static               | Dynamic            |
|-------------------------------|----------------------|--------------------|
| Maximum Tensile T             | 5400 N [1214 lbs]    | 1763 N [396 lbs]   |
| Maximum Compressive C         | 7120 N [1601 lbs]    | 1763 N [396 lbs]   |
| Maximum Moment M <sub>x</sub> | 215 Nm [1903 in-lbs] | 60 Nm [531 in-lbs] |
| Maximum Moment M <sub>y</sub> | 305 Nm [2699 in-lbs] | 86 Nm [761 in-lbs] |
| Maximum Moment M <sub>z</sub> | 208 Nm [1841 in-lbs] | 86 Nm [761 in-lbs] |

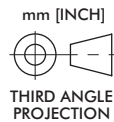
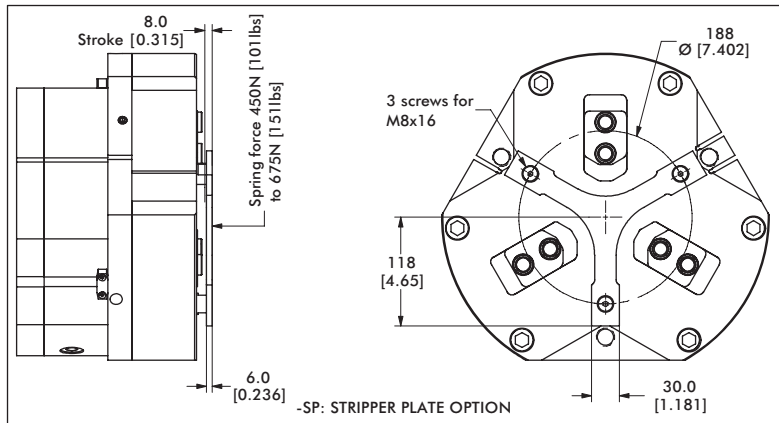
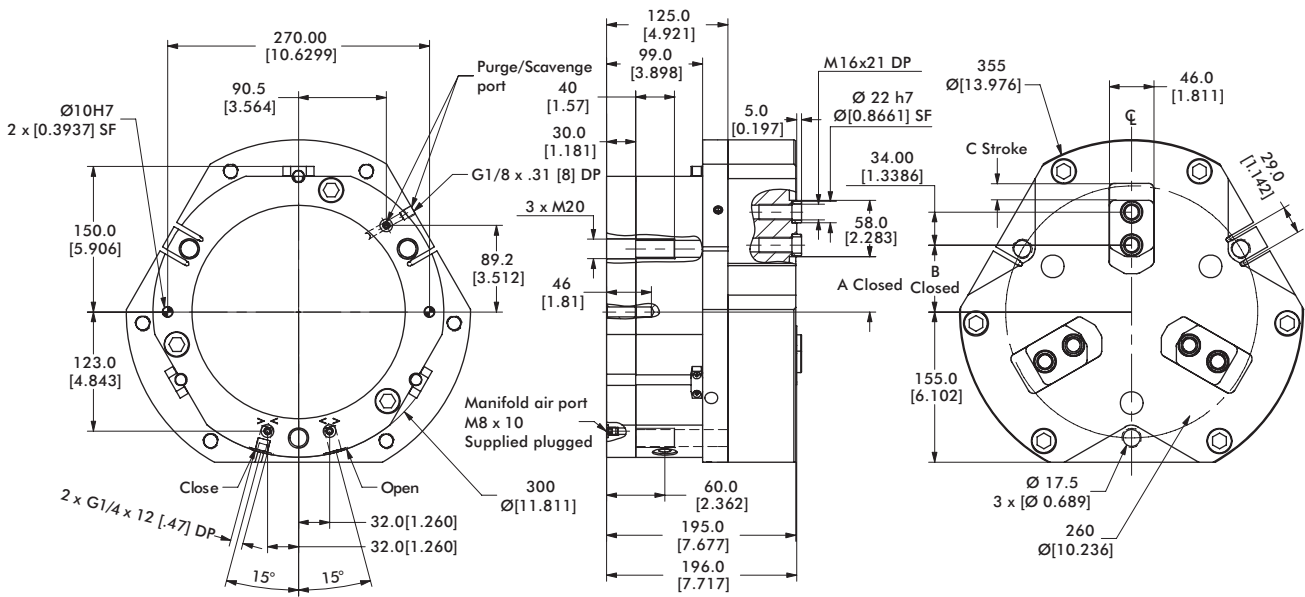
<sup>†</sup>Capacities are per set of jaws and are not simultaneous

| RTH-7M-L                      | Static               | Dynamic            |
|-------------------------------|----------------------|--------------------|
| Maximum Tensile T             | 4690 N [1054 lbs]    | 1141 N [257 lbs]   |
| Maximum Compressive C         | 6180 N [1389 lbs]    | 1141 N [257 lbs]   |
| Maximum Moment M <sub>x</sub> | 186 Nm [1646 in-lbs] | 39 Nm [345 in-lbs] |
| Maximum Moment M <sub>y</sub> | 230 Nm [2036 in-lbs] | 48 Nm [425 in-lbs] |
| Maximum Moment M <sub>z</sub> | 156 Nm [1381 in-lbs] | 48 Nm [425 in-lbs] |

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

# RTH-8M, -8M-L

## 3-Jaw Parallel Grippers | Dimensions and Technical Specifications

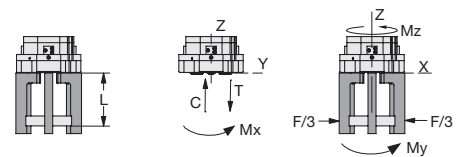
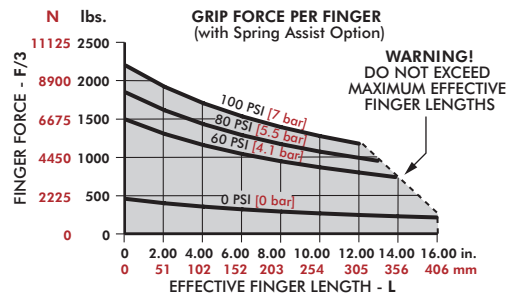
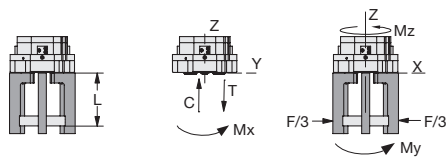
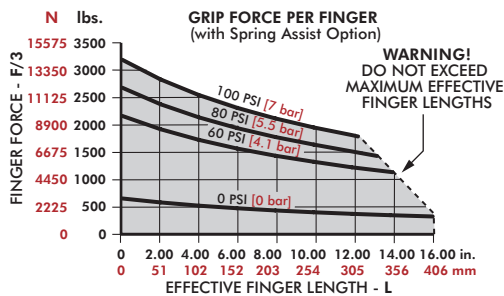


| Model    | A            | B            | C           |
|----------|--------------|--------------|-------------|
| RTH-8M   | 57.0 [2.244] | 69.0 [2.717] | 17.7 [0.70] |
| RTH-8M-L | 39.5 [1.555] | 51.5 [2.028] | 35.1 [1.38] |

Dimensions in mm [in]

| Seal Repair Kits                  | RTH-8M    |
|-----------------------------------|-----------|
| Buna-N Seal Repair Kit            | SLKT-354  |
| Buna-N Rear Inlet Seal Repair Kit | SLKT-366  |
| Viton® Seal Repair Kit            | SLKT-354V |
| Viton® Rear Inlet Seal Repair Kit | SLKT-366V |

## Loading Information



| RTH-8M                        | Static               | Dynamic              |
|-------------------------------|----------------------|----------------------|
| Maximum Tensile T             | 8230 N [1850 lbs]    | 2733 N [614 lbs]     |
| Maximum Compressive C         | 10700 N [2405 lbs]   | 2733 N [614 lbs]     |
| Maximum Moment M <sub>x</sub> | 455 Nm [4027 in-lbs] | 131 Nm [1159 in-lbs] |
| Maximum Moment M <sub>y</sub> | 578 Nm [5116 in-lbs] | 167 Nm [1478 in-lbs] |
| Maximum Moment M <sub>z</sub> | 362 Nm [3204 in-lbs] | 167 Nm [1478 in-lbs] |

\*Capacities are per set of jaws and are not simultaneous

| RTH-8M-L                      | Static               | Dynamic            |
|-------------------------------|----------------------|--------------------|
| Maximum Tensile T             | 7080 N [1592 lbs]    | 1772 N [398 lbs]   |
| Maximum Compressive C         | 9210 N [2070 lbs]    | 1772 N [398 lbs]   |
| Maximum Moment M <sub>x</sub> | 391 Nm [3461 in-lbs] | 85 Nm [752 in-lbs] |
| Maximum Moment M <sub>y</sub> | 428 Nm [3788 in-lbs] | 93 Nm [823 in-lbs] |
| Maximum Moment M <sub>z</sub> | 268 Nm [2372 in-lbs] | 93 Nm [823 in-lbs] |

\*Capacities are per set of jaws and are not simultaneous