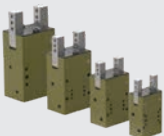


ANGULAR GRIPPERS

Angular Grippers | Product Overview

Model		Stroke Range	Grip Force Range	Operating Environment	Special Features	Page GR-ANG-#
CT		90° per Jaw	272-651 [61-146]	IP43	180 degree Wide Jaw Opening Angle.	3
DCT		90° per Jaw	32-157 [7.2-35]	IP43	180 degree Wide Jaw Opening, spring assist. DIRECTCONNECT	3
RA (CAM) RA (TOGGLE)		15° per Jaw	71-801 [16-180]	IP43	Low Cost, small compact Gripper. Rugged Applications.	13
RUA		31.8° - 38.2° Total	384-7911 [86-1778]	IP54 Using Purge Port	High Force Gripping for Harsh & Rugged Applications. Spring Assist.	27

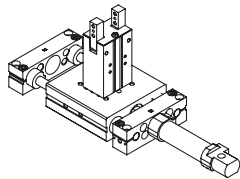
ANGULAR GRIPPERS

Angular Grippers | DIRECTCONNECT™ Mounting Compatibility Chart

DIRECTCONNECT Modular Direct Mounting System without Adapter Plates

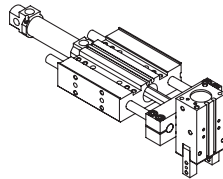
Products can be mounted in multiple positions. Refer to datasheet for complete info.

Slide to Gripper



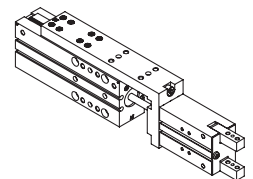
DLB Base Slide to
DCT Angular Gripper

Slide to Gripper



DLT Thruster Slide to
DCT Angular Gripper

Slide to Gripper



DLM Thruster Slide to
DCT Angular Gripper

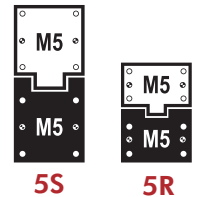
DIRECTCONNECT™

Mounting Compatibility Chart

DESTACO's DIRECTCONNECT™ technology, allows all components of the system—grippers, rotaries and slides—to be mounted together directly. Look for matching icons on product datasheets for mounting compatibility.

Note: The numbers in the cell represent the metric screw size and basic mounting pattern.

S=Square, R=Rectangle. ie; 5S = M5 Screw with square mounting pattern.



Catalog Models		Grippers	
		DCT-12, 16, 20	DCT-25
Base Slides	DLB-06,08	3R	
	DLB-10,12,16		5R
	DLB-20,25		
Thruster Slides	DLT-06,08	3R	
	DLT-10,12,16	3R	5R
	DLT-20,25		5R
	DLM-07	3R	
	DLM-9,12	3R	5R

CT/DCT & CT-RE/DCT-RE SERIES

Angular Grippers | Features and Benefits | How To Order

Features:

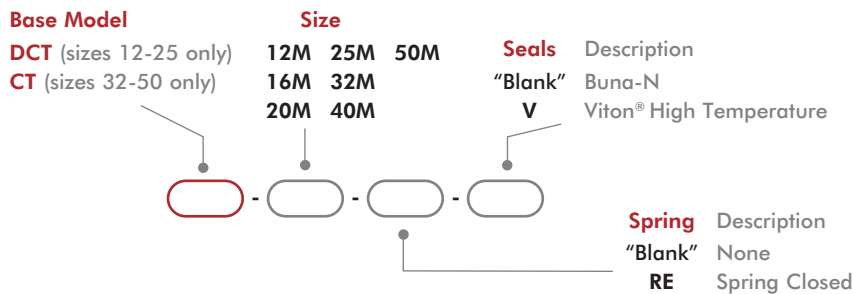
- 180° angular gripper jaw opening for direct feed systems
- Shielded design for working in dirty environments
- Spring assist option maintains grip in case of air pressure loss
- Adjustable 0 to 180° opening angle option.
- Side and bottom gripper mounting
- Multiple air ports, side and top air ports for easy installation

Applications:

- In-line conveying applications
- OEM pick and place machines
- End-of-arm tooling



How To Order



Accessories

Sensor Accessories	Model Numbers	Part Number	Qty/Unit
NPN Magneto Resistive Sensor with M8 Quick Disconnect	All Models	OHSN-017	1-2
PNP Magneto Resistive Sensor with M8 Quick Disconnect	All Models	OHSP-017	1-2
Inductive Sensor Mounting Kit (mounts 2 sensors)	See Datasheet		1
4mm NPN Inductive Sensor with M8 Quick Disconnect*	16M, 20M	OISN-014	1-2
4mm PNP Inductive Sensor M8 with Quick Disconnect*	16M, 20M	OISP-014	1-2
M8 NPN Inductive Sensor with M8 Quick Disconnect*	25M, 32M	OISN-011	1-2
M8 PNP Inductive Sensor with M8 Quick Disconnect*	25M, 32M	OISP-011	1-2
M12 NPN Inductive Sensor with M12 Quick Disconnect*	40M, 50M	OISN-017	1-2
M12 PNP Inductive Sensor with M12 Quick Disconnect*	40M, 50M	OISP-017	1-2
M8 Quick Disconnect 2 Meter Cable Length*	All Models	CABL-010	1-2
M8 Quick Disconnect 5 Meter Cable Length*	All Models	CABL-013	1-2
M12 Quick Disconnect 2 Meter Cable Length*	All Models	CABL-014	1-2
M12 Quick Disconnect 5 Meter Cable Length*	All Models	CABL-018	1-2

Pneumatic Accessories	Model Numbers	Part Number	Qty/Unit
Adjustable Flow Control-M5 Elbow-6mm OD Push-in	12M, 16M, 20M, 25M, 32M	VLVF-008	1-2
Adjustable Flow Control-G1/8 Elbow-6mm OD Push-in	40M, 50M	VLVF-005	1-2

* Sensor and cable sold separately.

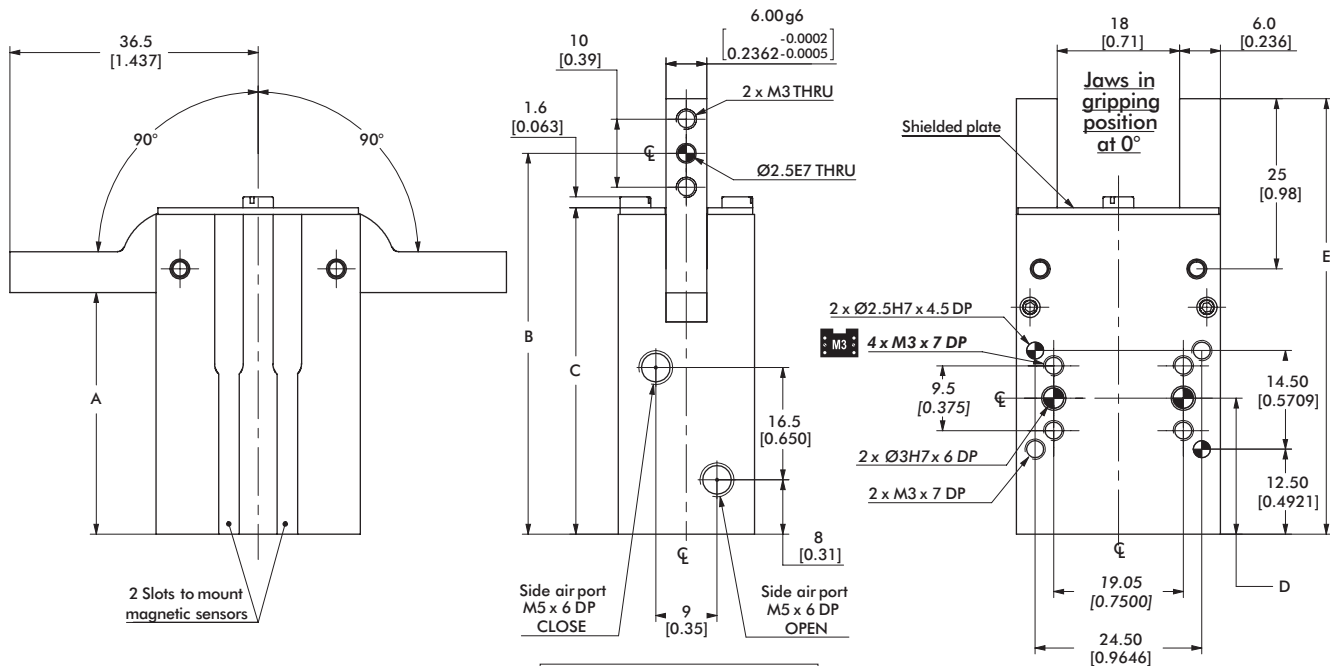
CT/DCT & CT-RE/DCT-RE SERIES

Angular Grippers | Technical Specifications

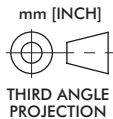
Specifications	Units	12M	12M-RE	16M	16M-RE	20M	20M-RE	25M	25M-RE
Total Rated Grip Force F @ 100 psi [7 bar]	N [lb]	32 [7.2]	40 [9]	70 [16]	87 [19]	112 [25]	141 [32]	157 [35]	199 [45]
Stroke (degrees per finger)		90° per finger (180° total)							
Weight	kg [lbs]	0.09 [0.20]	0.12 [0.26]	0.16 [0.35]	0.20 [0.44]	0.28 [0.62]	0.33 [0.73]	0.49 [1.08]	0.57 [1.26]
Pressure Range w/o Spring	bar [psia]	3-7 [40-100] CT/DCT							
Pressure Range w/ Spring	bar [psi]	4-7 [60-100] CT-RE/DCT-RE							
Ingress Protection Class (IP)		IP43							
Displacement	cm ³ [in ³]	1.92 [0.117]		4.12 [0.251]		7.92 [0.483]		14.9 [0.909]	
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]							
Temperature Range (Viton® seals)	°C [°F]	-30°~150° [-20°~300°]							
Actuation (open)	sec	0.06	0.08	0.13	0.15	0.16	0.20	0.21	0.25
Actuation (close)	sec	0.06	0.05	0.13	0.12	0.16	0.14	0.21	0.19
Accuracy	mm [in]	±0.07 [±0.0028]				±0.08 [±0.003]			
Repeatability	mm [in]	±0.05 [±0.002]							
Valve to Actuate Double Acting		4-way, 2-position CT/DCT							
Valve to Actuate Double Acting Spring Assist		4-way, 2-position CT-RE/DCT-RE							
Valve to Actuate Single Acting		3-way, 2-position CT-RE/DCT-RE							

Specifications	Units	32M	32M-RE	40M	40M-RE	50M	50M-RE
Total Rated Grip Force	N	272	353	446	592	651	893
F @ 100 psi [7 bar]	[lb]	[61]	[79]	[100]	[133]	[146]	[201]
Stroke (degrees per finger)		90° per finger (180° total)					
Weight	kg [lbs]	0.72 [1.59]	0.83 [1.83]	1.18 [2.60]	1.39 [3.06]	1.82 [4.01]	2.21 [4.87]
Pressure Range w/o Spring	bar [psi]	3-7 [40-100] CT/DCT					
Pressure Range w/ Spring	bar [psi]	4-7 [60-100] CT-RE/DCT-RE					
Ingress Protection Class (IP)		IP43					
Displacement	cm³ [in³]	28.6 [1.745]		52 [3.173]		92 [5.614]	
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]					
Temperature Range (Viton® seals)	°C [°F]	-30°~150° [-20°~300°]					
Actuation (open)	sec	0.29	0.35	0.41	0.47	0.46	0.54
Actuation (close)	sec	0.29	0.26	0.41	0.38	0.46	0.42
Accuracy	mm [in]	±0.08 [±0.003]		±0.09 [±0.0036]			
Repeatability	mm [in]	±0.05 [±0.002]					
Valve to Actuate Double Acting		4-way, 2-position CT/DCT					
Valve to Actuate Double Acting Spring Assist		4-way, 2-position CT-RE/DCT-RE					
Valve to Actuate Single Acting		3-way, 2-position CT-RE/DCT-RE					

Angular Grippers | Dimensions and Technical Specifications

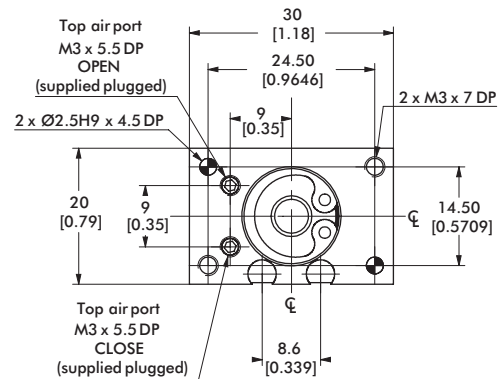
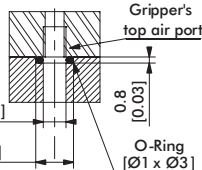


NOTE: Jaws have to be designed for a 0° gripping position (parallel jaws). Jaws will close 1.5° past parallel. To limit shocks at the end of an opening or closing stroke, it is highly recommended to design jaws with minimal inertia (as light and short as possible). Flow Controls make it possible to reduce the rotation speed and are highly recommended.



THIRD ANGLE PROJECTION

Our grippers are supplied with open side air ports and top air ports plugged. When operating top air ports, produce manifold sealing as shown.



Model	A	B	C	D	E
DCT-12	35.5 [1.398]	56.00 [2.2047]	48 [1.89]	20.00 [0.7874]	64 [2.52]
DCT-12-RE	51.5 [2.028]	72.00 [2.8346]	64 [2.52]	35.00 [1.3780]	80 [3.15]

Dimensions in mm [in]

Mounting Accessories

Adjustment Stop Kit (1 shielded plate, 1 stop)

Order

KP-DCT12-BR

Seal Repair Kits

Buna-N Seal Repair Kit

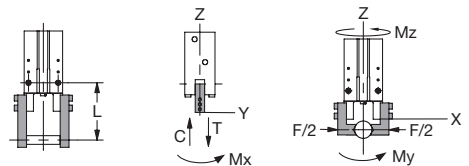
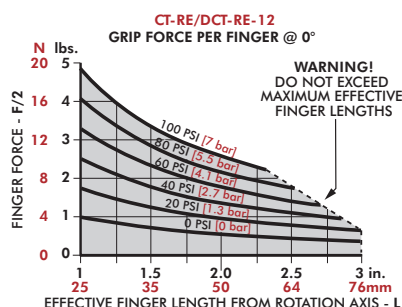
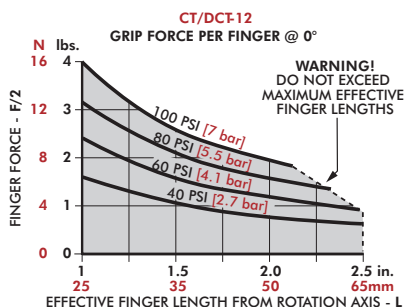
Viton® Seal Repair Kit

Order

SLKT-159

SLKT-159V

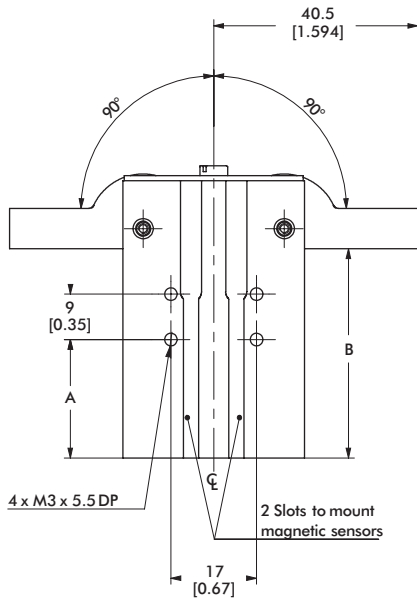
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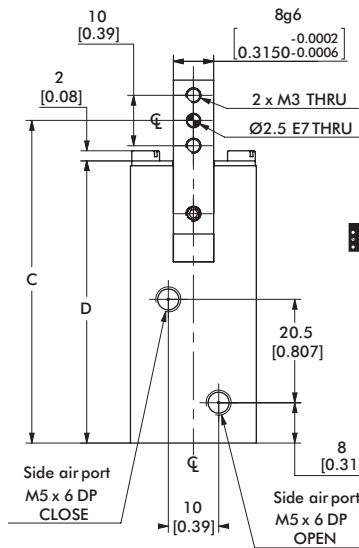
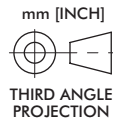
	Static
Maximum Tensile T	47 N [11 lbs]
Maximum Compressive C	47 N [11 lbs]
Maximum Moment M_x	1.1 Nm [10 in-lbs]
Maximum Moment M_y	1.1 Nm [10 in-lbs]
Maximum Moment M_z	1.1 Nm [10 in-lbs]

*Capacities are per set of jaws and are not simultaneous

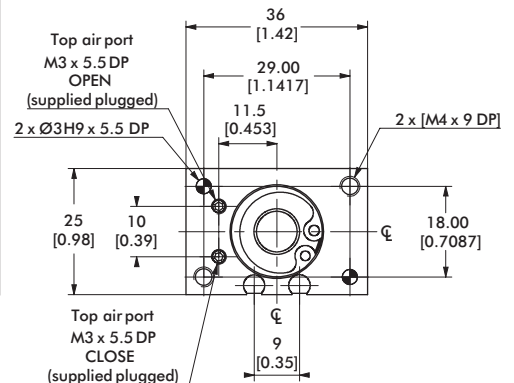
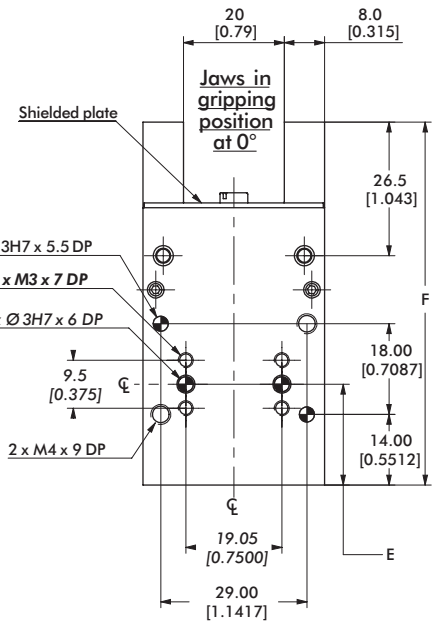
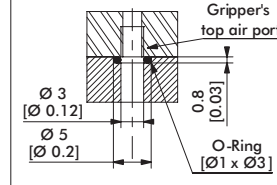
Angular Grippers | Dimensions and Technical Specifications



NOTE: Jaws have to be designed for a 0° gripping position (parallel jaws). Jaws will close 1.5° past parallel. To limit shocks at the end of an opening or closing stroke, it is highly recommended to design jaws with minimal inertia (as light and short as possible). Flow Controls make it possible to reduce the rotation speed and are highly recommended.



Our grippers are supplied with open side air ports and top air ports plugged. When operating top air ports, produce manifold sealing as shown.



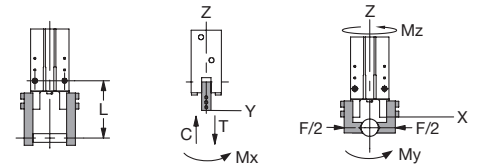
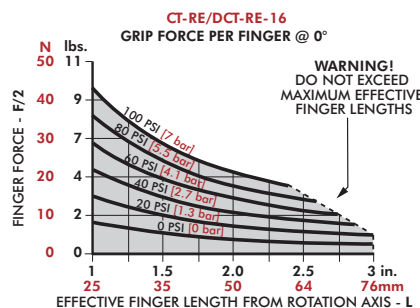
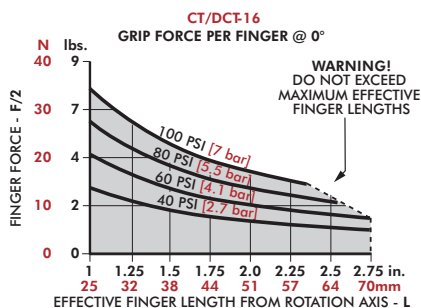
Model	A	B	C	D	E	F
DCT-16	23.5 [0.925]	41.5 [1.634]	64.00 [2.5197]	56 [2.20]	20.00 [0.7874]	72 [2.83]
DCT-16-RE	38.5 [1.516]	56.5 [2.224]	79.00 [3.1102]	71 [2.80]	35.00 [1.3780]	87 [3.43]

Dimensions in mm [in]

Mounting Accessories	Order #
Inductive Sensor Mounting Kit (mounts 2 sensors)	SDCT-16-20
Adjustment Stop Kit (1 shielded plate, 1 stop)	KP-DCT16-BR

Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-160
Viton® Seal Repair Kit	SLKT-160V

Loading Information



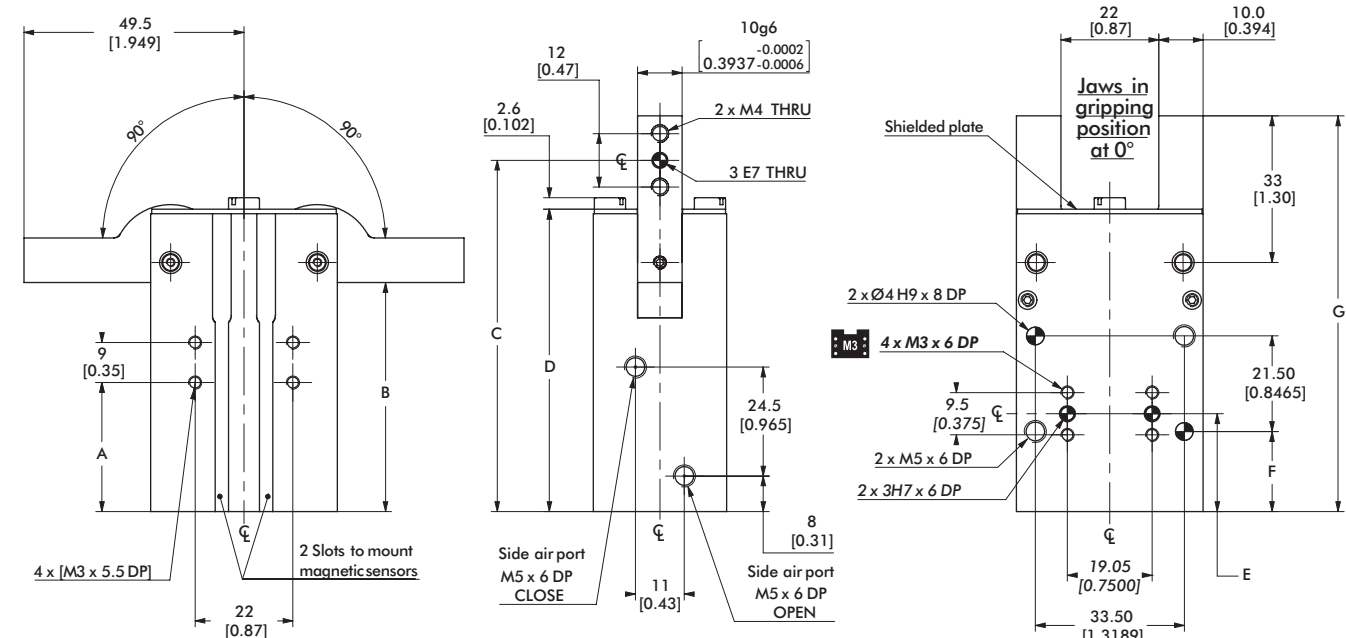
Static	
Maximum Tensile T	90 N [20 lbs]
Maximum Compressive C	90 N [20 lbs]
Maximum Moment M_x	2.9 Nm [26 in-lbs]
Maximum Moment M_y	2.9 Nm [26 in-lbs]
Maximum Moment M_z	2.9 Nm [26 in-lbs]

*Capacities are per set of jaws and are not simultaneous



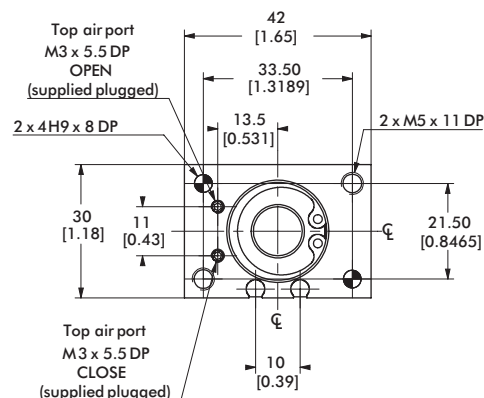
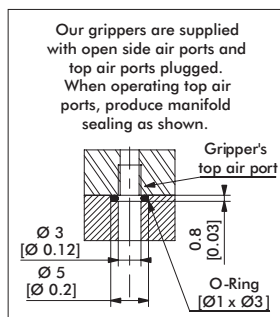
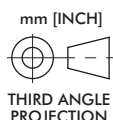
DIRECT⁺CONNECTTM

Angular Grippers | Dimensions and Technical Specifications



NOTE: Jaws have to be designed for a 0° gripping position (parallel jaws). Jaws will close 1.5° past parallel. To limit shocks at the end of an opening or closing stroke, it is highly recommended to design jaws with minimal inertia (as light and short as possible). Flow Controls make it possible to reduce the rotation speed and are highly recommended.

Our grippers are supplied with open side air ports and top air ports plugged. When operating top air ports, produce manifold sealing as shown.

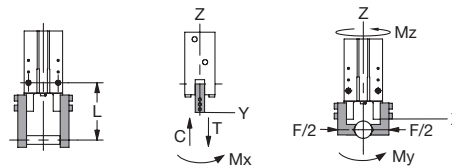
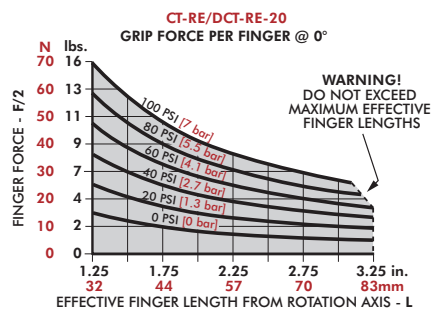
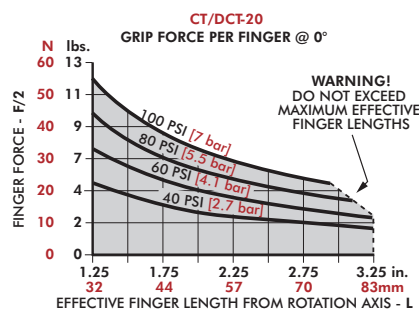


Model	A	B	C	D	E	F	G
DCT-20	29 [1.14]	51.5 [2.028]	79.00 [3.1102]	68 [2.68]	22.00 [0.8661]	18.00 [0.7087]	89 [3.50]
DCG/CT-20-RE	47 [1.85]	66.5 [2.618]	94.00 [3.7008]	83 [3.27]	39.00 [1.5354]	20.00 [0.7874]	104 [4.09]

Dimensions in mm [in]

Mounting Accessories	Order #
Inductive Sensor Mounting Kit (mounts 2 sensors)	SDCT-16-20
Adjustment Stop Kit (1 shielded plate, 1 stop)	KP-DCT20-BR
Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-161
Viton® Seal Repair Kit	SLKT-161V

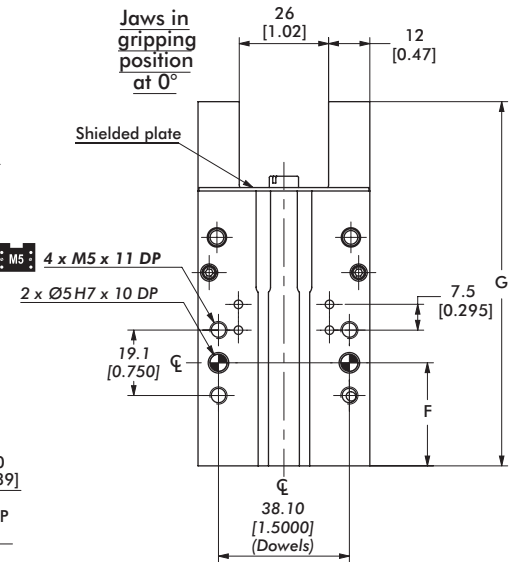
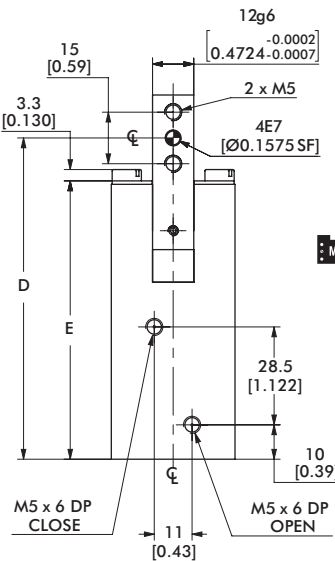
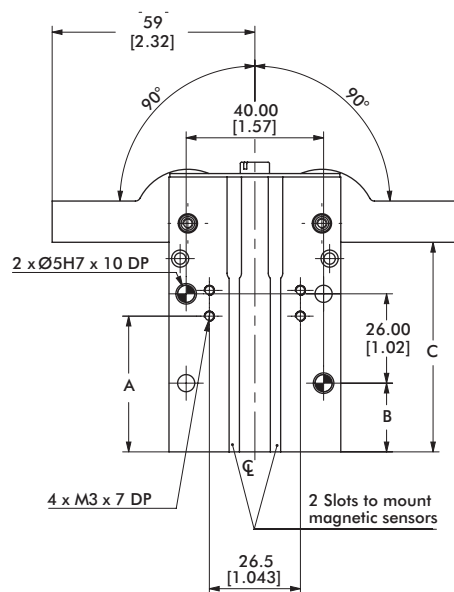
Loading Information



	Static
Maximum Tensile T	150 N [34 lbs]
Maximum Compressive C	150 N [34 lbs]
Maximum Moment M_x	6 Nm [53 in-lbs]
Maximum Moment M_y	6 Nm [53 in-lbs]
Maximum Moment M_z	6 Nm [53 in-lbs]

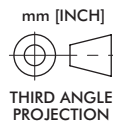
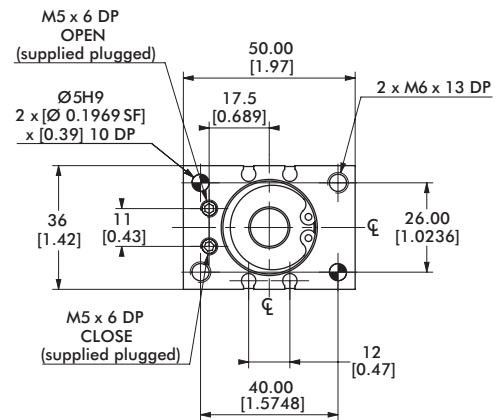
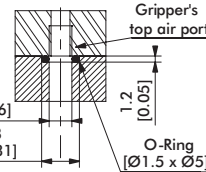
[†]Capacities are per set of jaws and are not simultaneous

Angular Grippers | Dimensions and Technical Specifications



NOTE: Jaws have to be designed for a 0° gripping position (parallel jaws). Jaws will close 1.5° past parallel. To limit shocks at the end of an opening or closing stroke, it is highly recommended to design jaws with minimal inertia (as light and short as possible). Flow Controls make it possible to reduce the rotation speed and are highly recommended.

Our grippers are supplied with open side air ports and top air ports plugged. When operating top air ports, produce manifold sealing as shown.



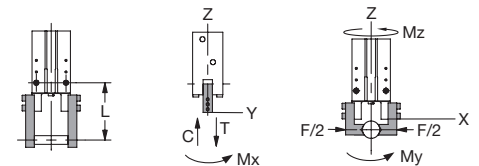
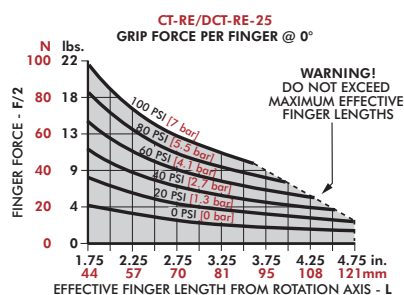
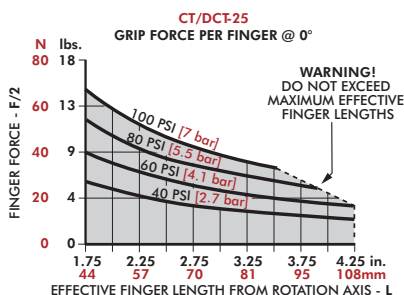
Model	A	B	C	D	E	F	G
DCT-25	39.5 [1.555]	20.00 [0.79]	61 [2.40]	93.50 [3.6811]	81 [3.19]	30.00 [1.1811]	106 [4.17]
DCT-25-RE	60.5 [2.382]	25.00 [0.98]	82 [3.23]	114.50 [4.5079]	102 [4.02]	51.00 [2.0079]	127 [5.00]

Dimensions in mm [in]

Mounting Accessories	Order #
Inductive Sensor Mounting Kit (mounts 2 sensors)	SDCT-25-32
Adjustment Stop Kit (1 shielded plate, 1 stop)	KP-DCT25-BR

Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-162
Viton® Seal Repair Kit	SLKT-162V

Loading Information

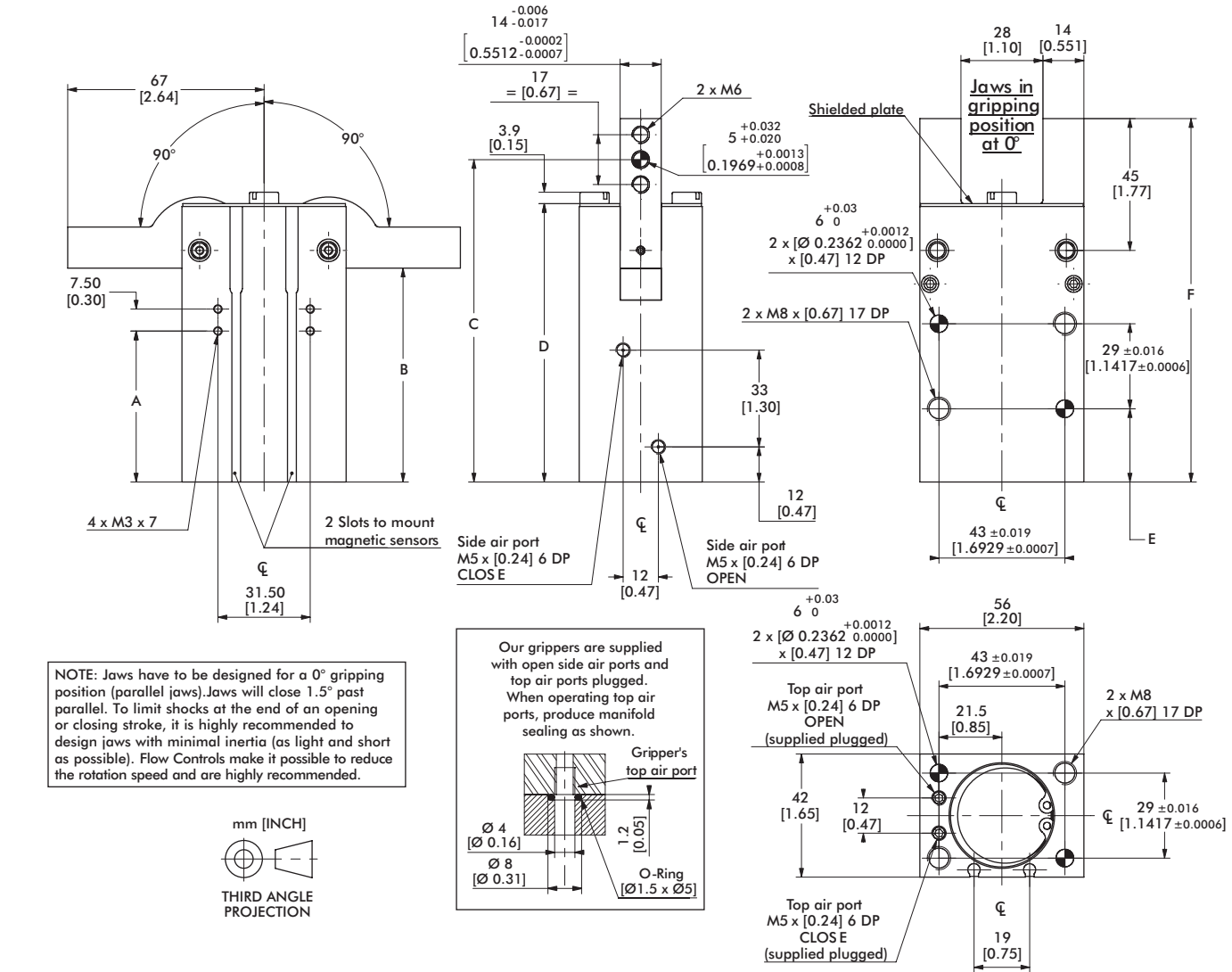


Static	
Maximum Tensile T	205 N [46 lbs]
Maximum Compressive C	205 N [46 lbs]
Maximum Moment M _x	10 Nm [89 in-lbs]
Maximum Moment M _y	10 Nm [89 in-lbs]
Maximum Moment M _z	10 Nm [89 in-lbs]

*Capacities are per set of jaws and are not simultaneous

CT-32/ -32-RE

Angular Grippers | Dimensions and Technical Specifications

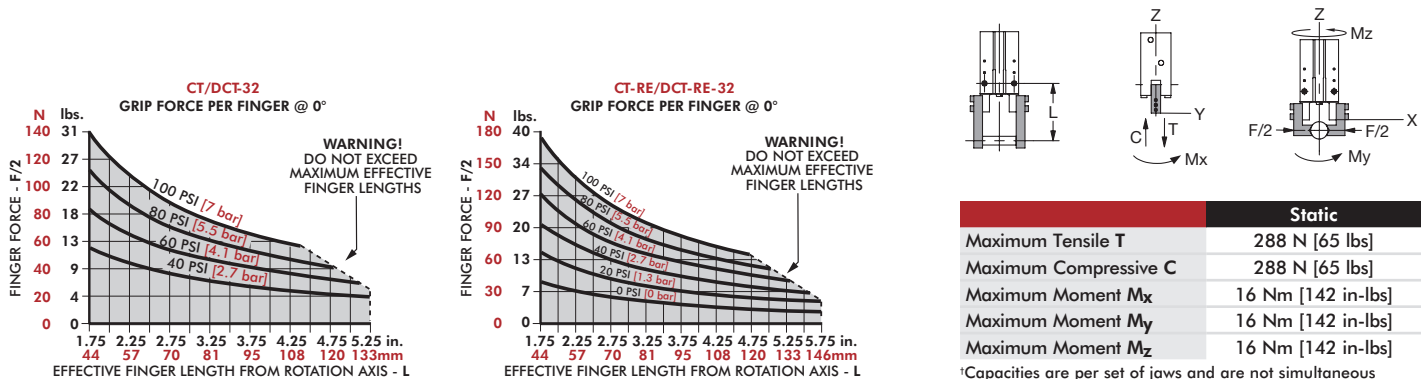


Model	A	B	C	D	E	F
CT-32	51.50 [2.03]	73 [2.87]	110 [4.3307]	95 [3.74]	25 [0.9843]	124 [4.88]
CT-32-RE	72.50 [2.85]	94 [3.70]	131 [5.1575]	116 [4.57]	30 [1.811]	145 [5.71]

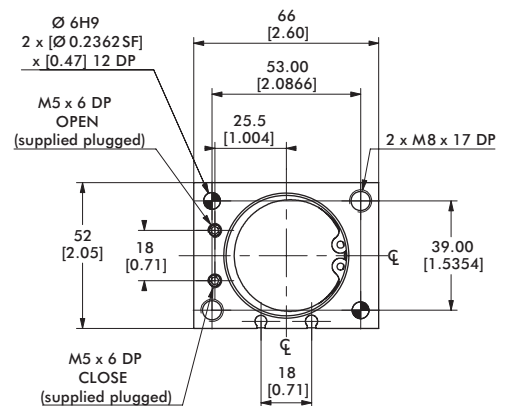
Dimensions in mm [in]

Mounting Accessories	Order #
Inductive Sensor Mounting Kit (mounts 2 sensors)	SDCT-25-32
Adjustment Stop Kit (1 shielded plate, 1 stop)	KP-CT32-BR
Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-163
Viton® Seal Repair Kit	SLKT-163V

Loading Information



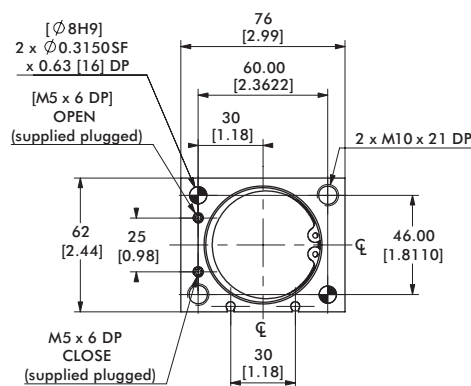
Angular Grippers | Dimensions and Technical Specifications



Mounting Accessories	Order #
Inductive Sensor Mounting Kit (mounts 2 sensors)	SDCT-40-63
Adjustment Stop Kit (1 shielded plate, 1 stop)	KP-CT40-BR
Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-164
Viton® Seal Repair Kit	SLKT-164V

†Capacities are per set of jaws and are not simultaneous

Angular Grippers | Dimensions and Technical Specifications



ANGULAR GRIPPERS

Notes

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RA (CAM DRIVEN) SERIES

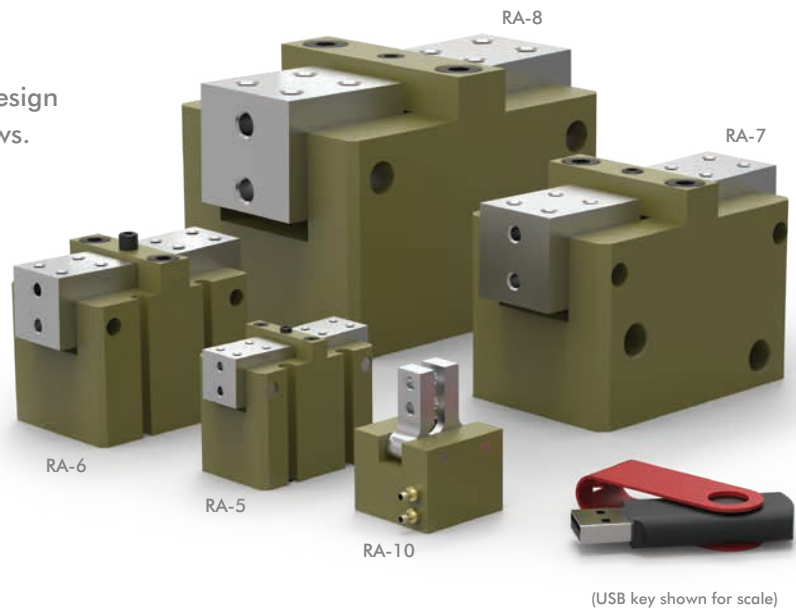
Angular Grippers | Features and Benefits | How To Order

Features:

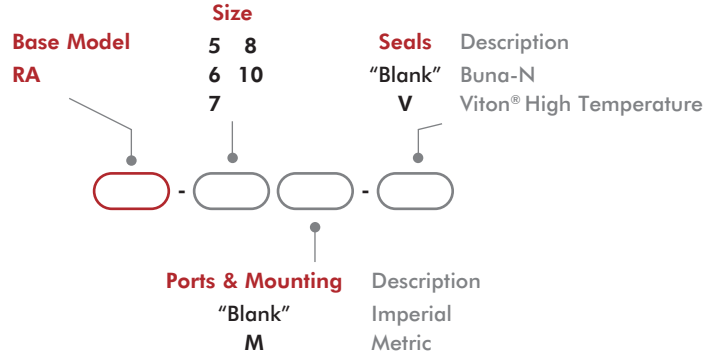
- Highly reliable rugged general purpose gripper
- High grip force to size ratio due to cam driven design
- Fingers can be mounted on the side or top of jaws.
- Optional Viton® seals for high temperatures
-30°C to +150°C [-20°F to +300°F]
- Use up to 2 magneto resistive sensors

Applications:

- Industrial assembly machines
- OEM pick and place machines
- General purpose gripping



How To Order



Accessories

Sensor Accessories	Model Numbers	Part Number	Qty/Unit
NPN Magneto Resistive Sensor with Quick Disconnect*	5, 6, 7, 8	OHSN-017	1-2
PNP Magneto Resistive Sensor with Quick Disconnect*	5, 6, 7, 8	OHSP-017	1-2
NPN Magneto Resistive Sensor 90° with Quick Disconnect*	5, 6, 7, 8	OHSN-011	1-2
PNP Magneto Resistive Sensor 90° with Quick Disconnect*	5, 6, 7, 8	OHSP-011	1-2
Quick Disconnect 2 Meter Cable Length*	5, 6, 7, 8	CABL-010	1-2
Quick Disconnect 5 Meter Cable Length*	5, 6, 7, 8	CABL-013	1-2

Pneumatic Accessories	Model Numbers	Part Number	Qty/Unit
Fail Safe Valve (Imperial)	5, 6	OFSV-001	1
Fail Safe Valve (Metric)	5, 6	OFSV-004	1
Fail Safe Valve (Imperial)	7, 8	OFSV-002	1
Fail Safe Valve (Metric)	7, 8	OFSV-005	1

* Sensor and cable sold separately.

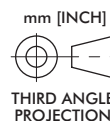
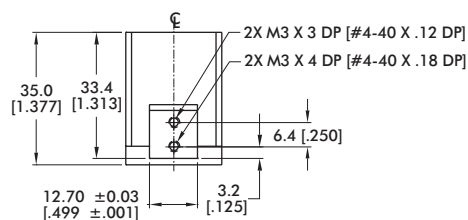
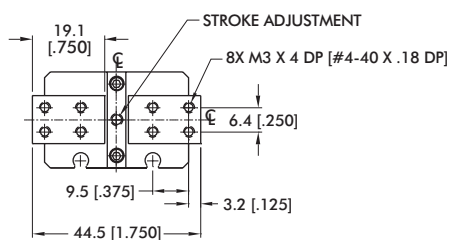
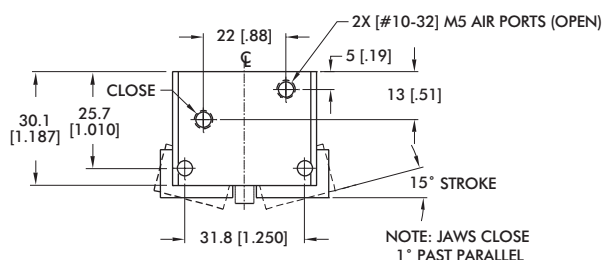
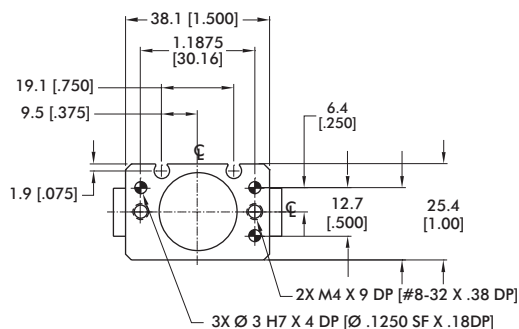
RA (CAM DRIVEN) SERIES

Angular Grippers | Technical Specifications

Specifications	Units	5	6	7
Total Rated Grip Force F @ 7 bar [100 psi]	N [lbs]	89 [20]	196 [44]	534 [120]
Total Stroke		15° per finger (30° total)		
Open Stroke Adjustment		15° per finger (30° total)		10° per finger (20° total)
Weight	kg [lbs]	0.11 [0.25]	0.31 [0.69]	0.8 [1.8]
Pressure Range	bar [psi]	3-7 [40-100]		
Ingress Protection Class (IP)		IP43		
Displacement	cm ³ [in ³]	2.1 [0.13]	4.9 [0.300]	9.8 [0.601]
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]		
Temperature Range (Viton® seals)	°C [°F]	-30°~150° [-20°~300°]		
Actuation	sec	0.10	0.11	0.15
Accuracy	mm [in]	±0.13 [±0.005]		
Repeatability	mm [in]	±0.08 [±0.003]		
Valve to Actuate		4-way, 2-position		

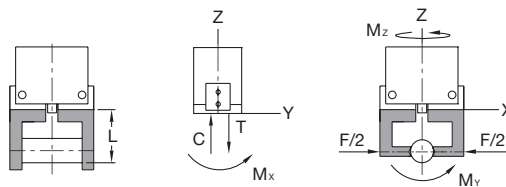
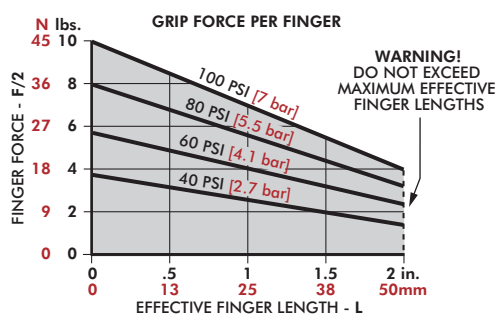
Specifications	Units	8	10
Total Rated Grip Force F @ 7 bar [100 psi]	N [lbs]	801 [180]	71 [16]
Total Stroke		15° per finger (30° total)	
Open Stroke Adjustment		10° per finger (20° total)	--
Weight	kg [lbs]	2.1 [4.6]	0.03 [0.063]
Pressure Range	bar [psi]	3-7 [40-100]	
Ingress Protection Class (IP)		IP43	
Displacement	cm ³ [in ³]	21.6 [1.320]	0.4 [0.026]
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° C [-30°~180° F]	
Temperature Range (Viton® seals)	°C [°F]	-30°~150° C [-20°~300° F]	
Actuation	sec	0.23	0.08
Accuracy	mm [in]	±0.13 [±0.005]	±0.08 [±0.003]
Repeatability	mm [in]	±0.08 [±0.003]	±0.03 [±0.001]
Valve to Actuate		4-way, 2-position	

Angular Grippers | Dimensions and Technical Specifications



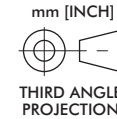
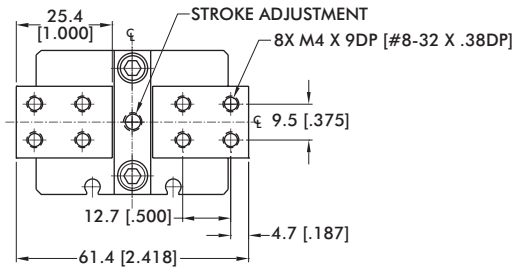
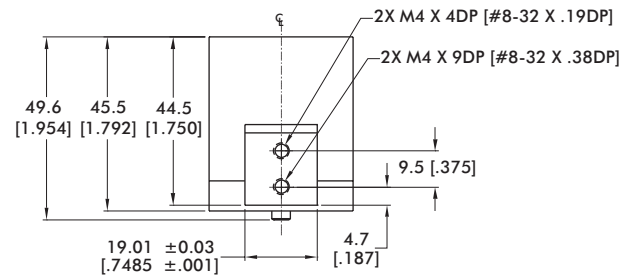
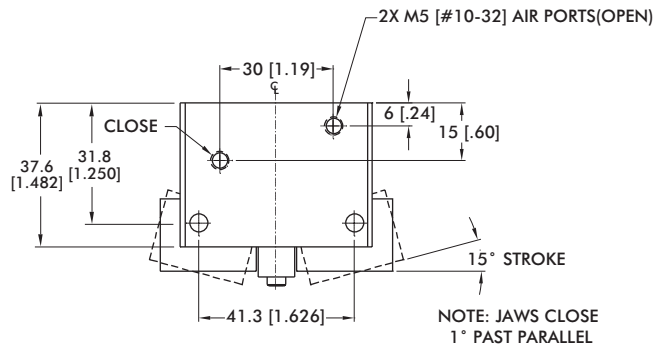
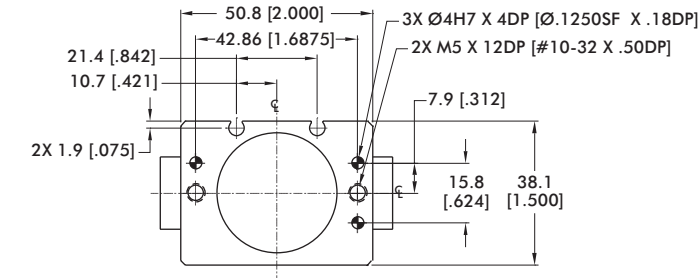
Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-022
Viton® Seal Repair Kit	SLKT-022V

Loading Information



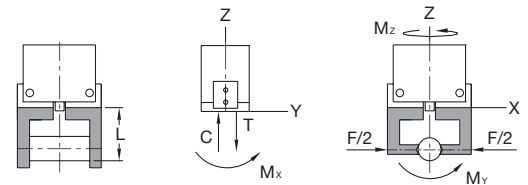
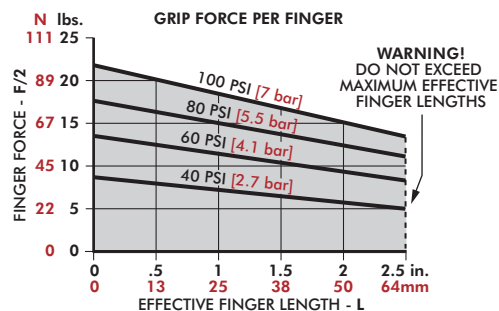
RA-5	Static
Maximum Tensile T	44 N [10 lbs]
Maximum Compressive C	44 N [10 lbs]
Maximum Moment M_x	1.1 Nm [10 in-lbs]
Maximum Moment M_y	1.1 Nm [10 in-lbs]
Maximum Moment M_z	1.1 Nm [10 in-lbs]

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



Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-023
Viton® Seal Repair Kit	SLKT-023V

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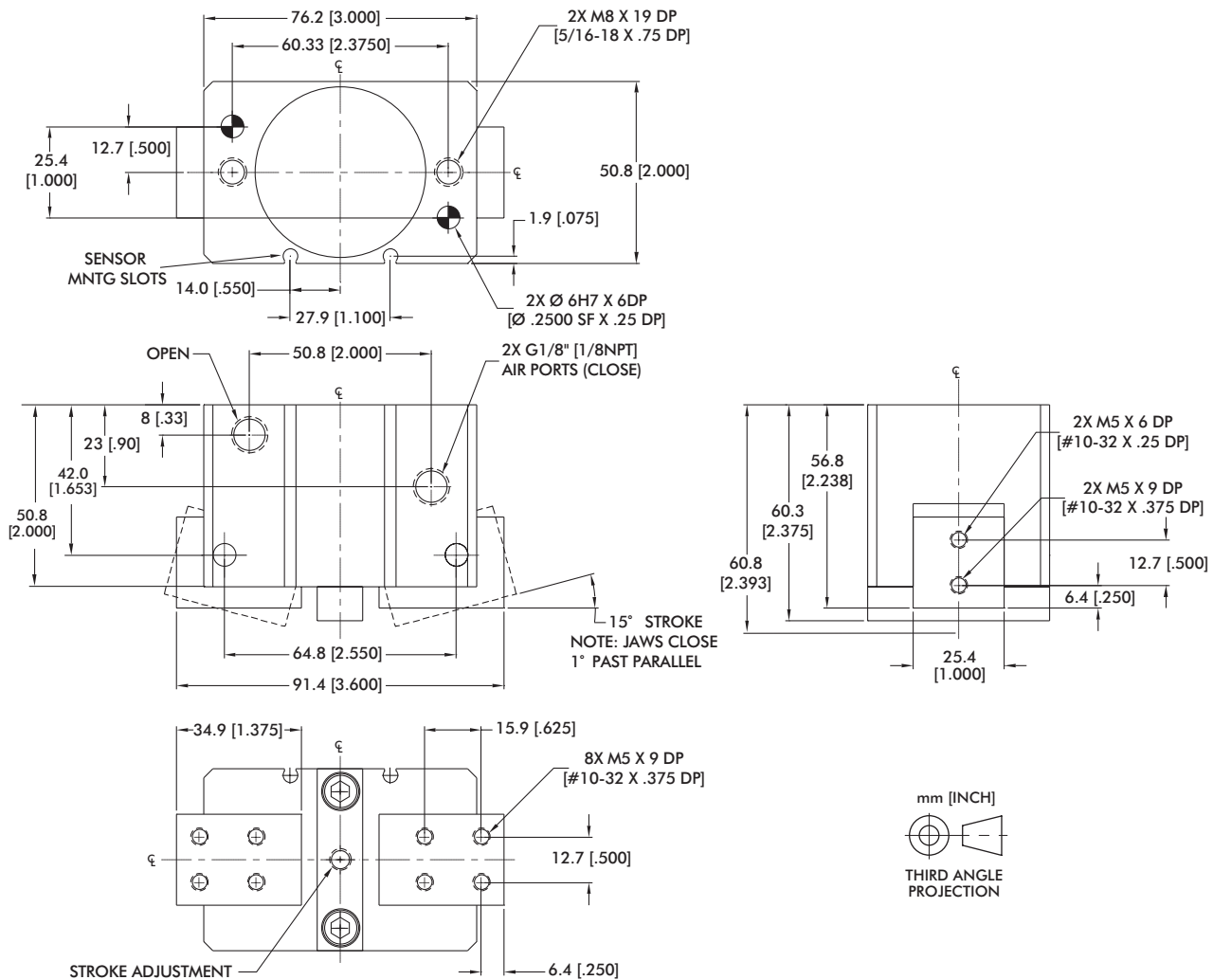


RA-6	Static
Maximum Tensile T	89 N [20 lbs]
Maximum Compressive C	89 N [20 lbs]
Maximum Moment M_x	2.3 Nm [20 in-lbs]
Maximum Moment M_y	2.3 Nm [20 in-lbs]
Maximum Moment M_z	2.3 Nm [20 in-lbs]

*Capacities are per set of jaws and are not simultaneous

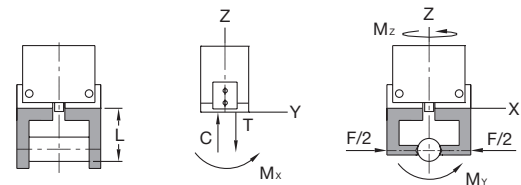
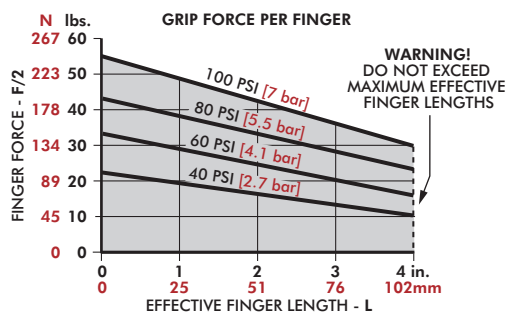
RA-7

Angular Grippers | Dimensions and Technical Specifications



Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-118
Viton® Seal Repair Kit	SLKT-118V

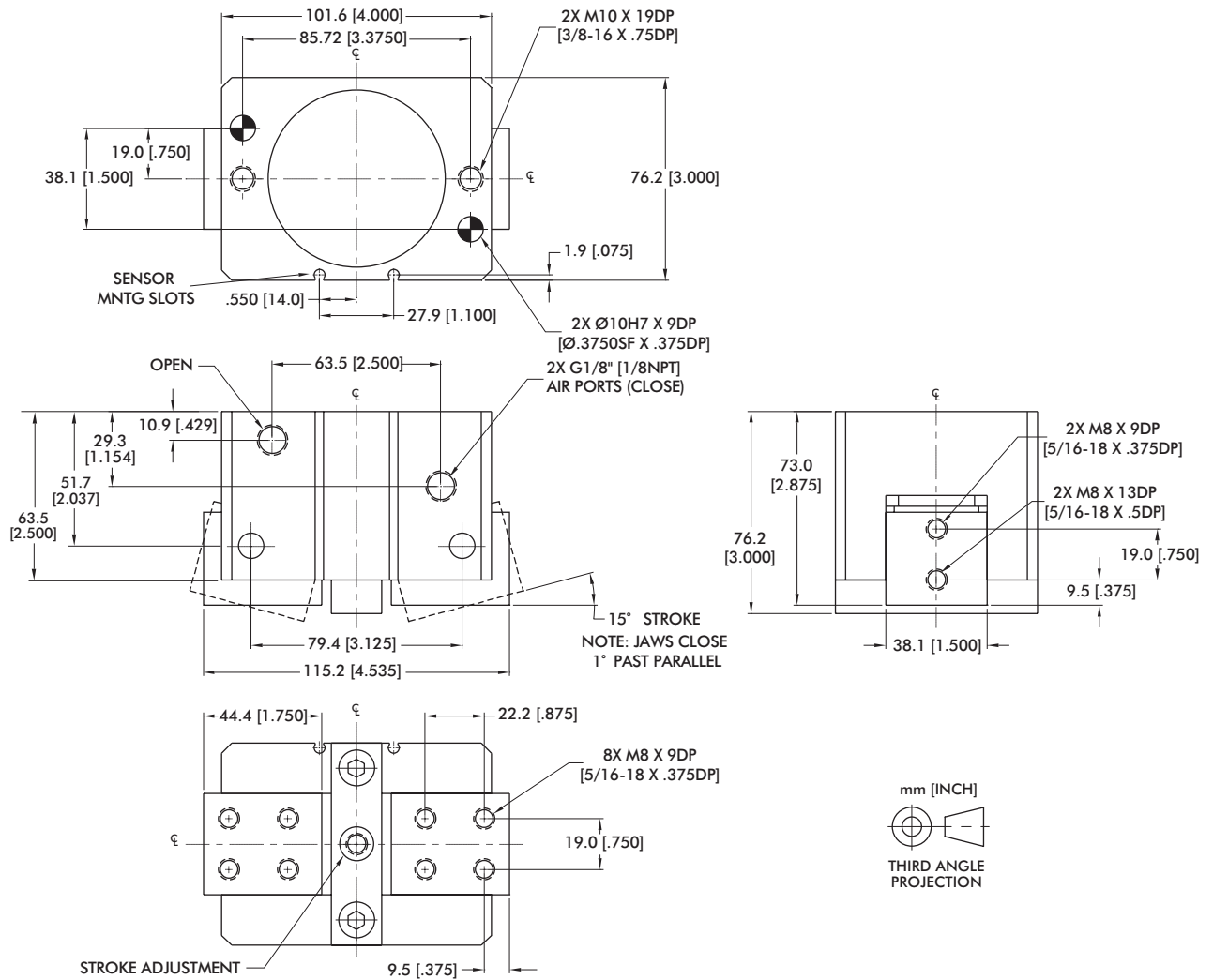
Loading Information



RA-7	Static
Maximum Tensile T	267 N [60 lbs]
Maximum Compressive C	267 N [60 lbs]
Maximum Moment M_x	6.8 Nm [60 in-lbs]
Maximum Moment M_y	6.8 Nm [60 in-lbs]
Maximum Moment M_z	6.8 Nm [60 in-lbs]

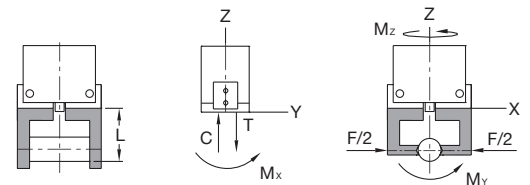
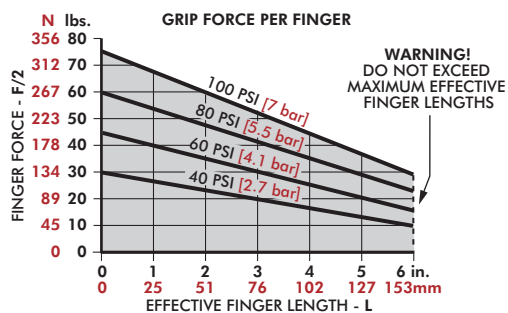
*Capacities are per set of jaws and are not simultaneous

Angular Grippers | Dimensions and Technical Specifications



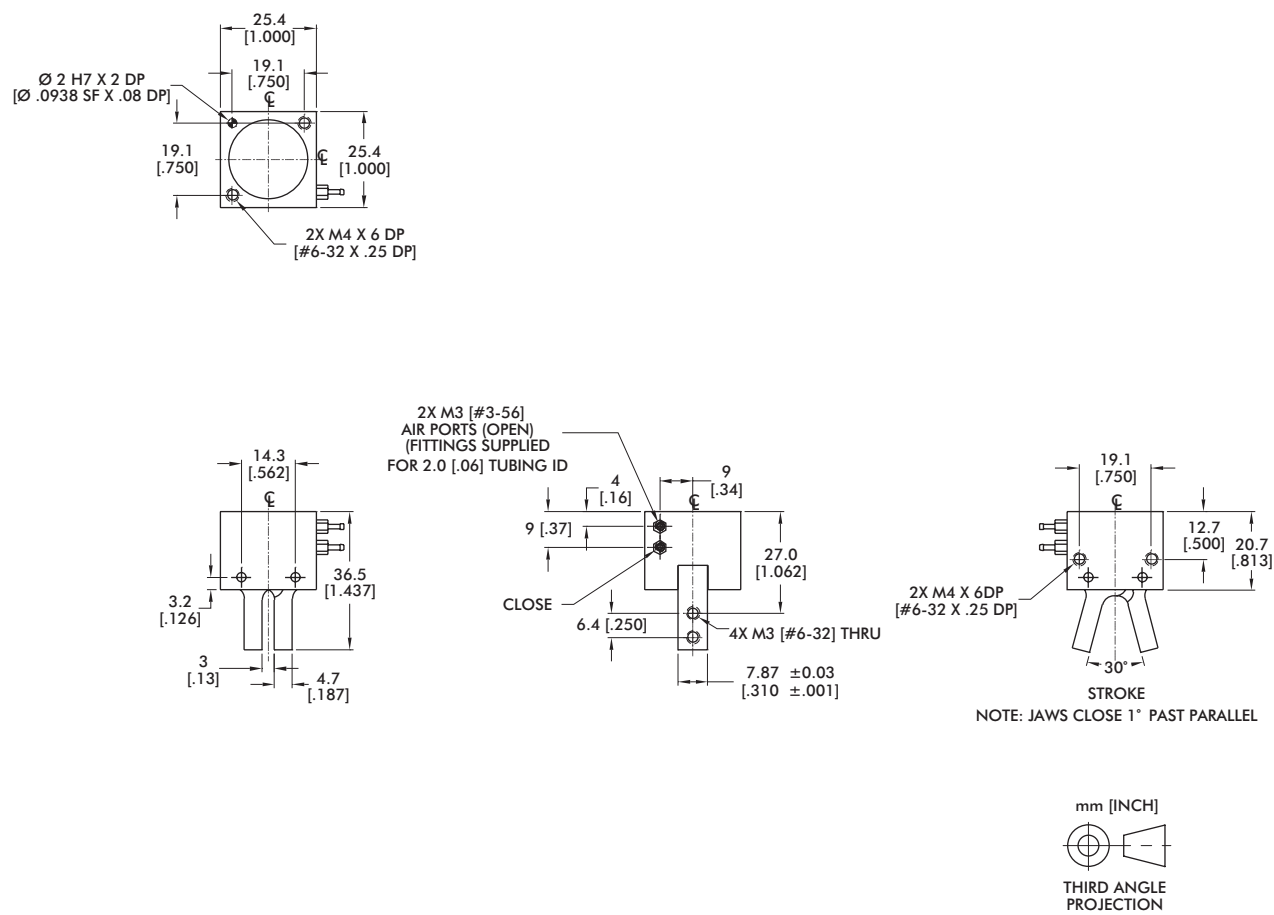
Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-119
Viton® Seal Repair Kit	SLKT-119V

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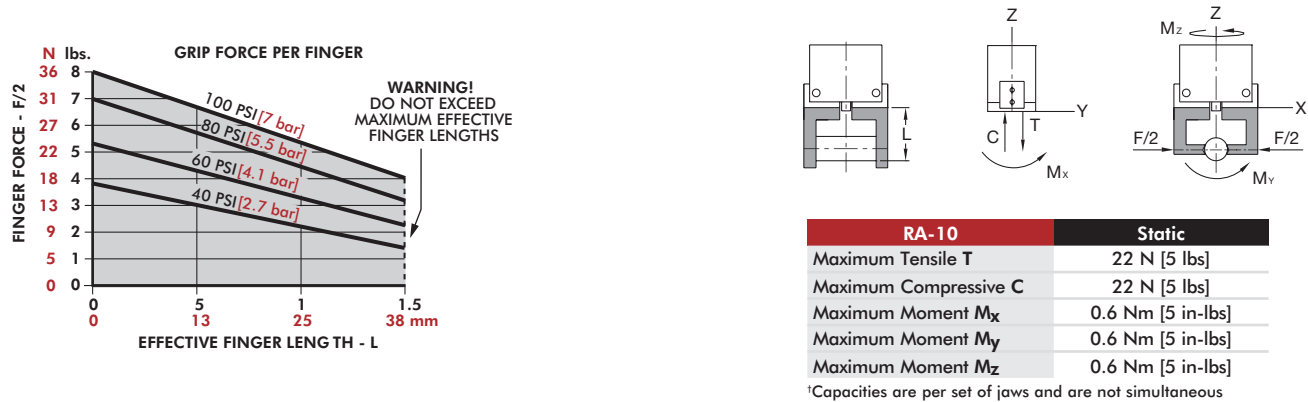
RA-8	Static
Maximum Tensile T	400 N [90 lbs]
Maximum Compressive C	400 N [90 lbs]
Maximum Moment M_x	10.2 Nm [90 in-lbs]
Maximum Moment M_y	10.2 Nm [90 in-lbs]
Maximum Moment M_z	10.2 Nm [90 in-lbs]

*Capacities are per set of jaws and are not simultaneous



Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-018
Viton® Seal Repair Kit	SLKT-018V

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ANGULAR GRIPPERS

Notes

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RA (TOGGLE LOCK) SERIES

Angular Grippers | Features and Benefits | How To Order

Features:

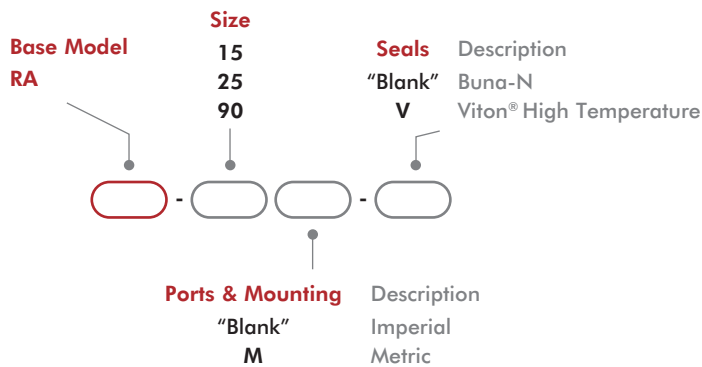
- Highly reliable rugged general purpose gripper
- Very high grip force to size ratio due to toggle mechanism
- True Failsafe with toggle locking jaws—gripper cannot release part without air
- Optional Viton® seals for high temperatures -30°C to +150°C [-20°F to +300°F]
- Optional inductive sensors and flow controls

Applications:

- Applications requiring internal/external gripping with toggle locking
- Internal gripping Applications without locking
- Industrial assembly machines
- OEM pick and place machines



How To Order



Accessories

Sensor Accessories	Model Numbers	Part Number	Qty/Unit
Sensor Mounting Kit, Mounts 2 Inductive Sensors (Imperial/Metric)	See Datasheet		1
NPN Inductive Sensor with Quick Disconnect*	15, 90	OISN-019	1-2
PNP Inductive Sensor with Quick Disconnect*	15, 90	OISP-019	1-2
NPN Inductive Sensor with Quick Disconnect*	25	OISN-014	1-2
PNP Inductive Sensor with Quick Disconnect*	25	OISP-014	1-2
NPN Magneto Resistive Sensor with Quick Disconnect*	90	OHSN-017	1-2
PNP Magneto Resistive Sensor with Quick Disconnect*	90	OHSP-017	1-2
NPN Magneto Resistive Sensor 90° with Quick Disconnect*	90	OHSN-011	1-2
PNP Magneto Resistive Sensor 90° with Quick Disconnect*	90	OHSP-011	1-2
Quick Disconnect 2 Meter Cable Length*	All Models	CABL-010	1-2
Quick Disconnect 5 Meter Cable Length*	All Models	CABL-013	1-2

Pneumatic Accessories	Model Numbers	Part Number	Qty/Unit
#10-32 to 1/4" OD Tube Flow Controls	90	VLVF-007	2
M5 to 6mm OD Tube Flow Controls	90	VLVF-008	2

* Sensor and cable sold separately.

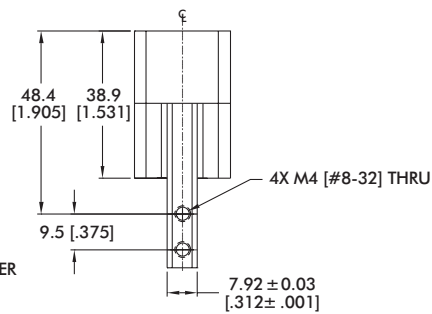
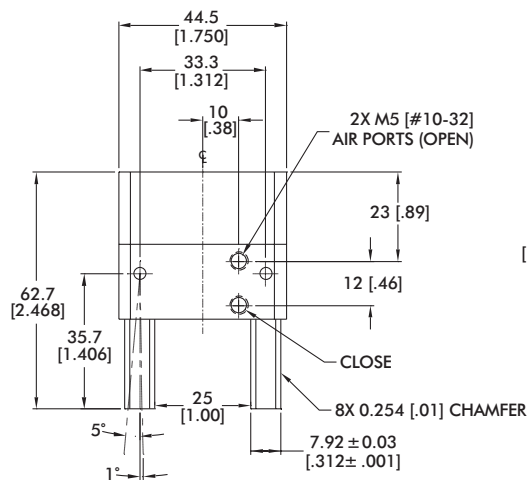
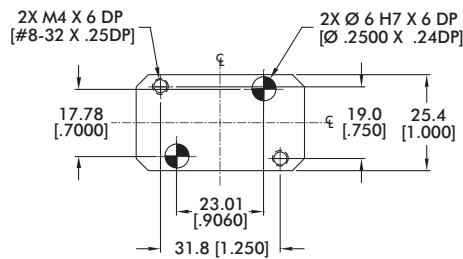
RA (TOGGLE LOCK) SERIES

Angular Grippers | Technical Specifications

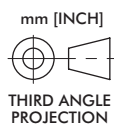
Specifications	Units	15	25	90
Total Rated Grip Force F @ 100 psi [7 bar]	N [lbs]	311 [70]	1112 [250]	356 [80]
Total Stroke		6° per finger (12° total)		90° per finger (180° total)
Stroke Adjustment		--		45° per finger (90° total)
Weight	kg [lbs]	0.14 [0.31]	0.48 [1.06]	0.20 [0.438]
Pressure Range	bar [psi]	3-7 [40-100]		
Ingress Protection Class (IP)		IP43		
Displacement	cm ³ [in ³]	1.8 [0.110]	0.8 [0.046]	7.5 [0.460]
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]		
Temperature Range (Viton® seals)	°C [°F]	-30°~150° [-20°~300°]		
Actuation	sec	0.10	0.12	0.16
Accuracy	mm [in]	±0.08 [±0.003]		
Repeatability	mm [in]	±0.03 [±0.0001]		
Valve to Required Actuate Double Acting		4-way, 2-position		

RA-15

Angular Grippers | Dimensions and Technical Specifications

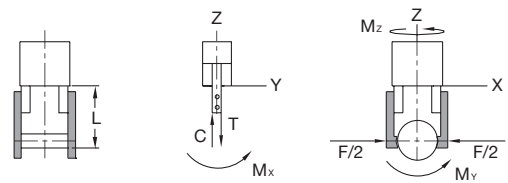
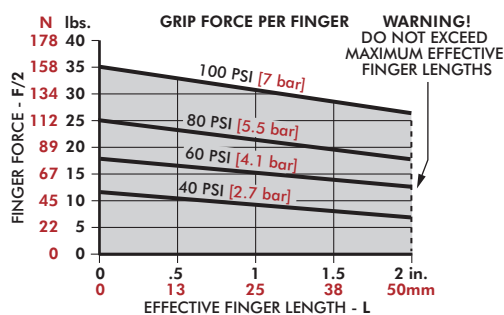


JAW SHOWN PARALLEL
JAW WILL CLOSE 1° PAST PARALLEL



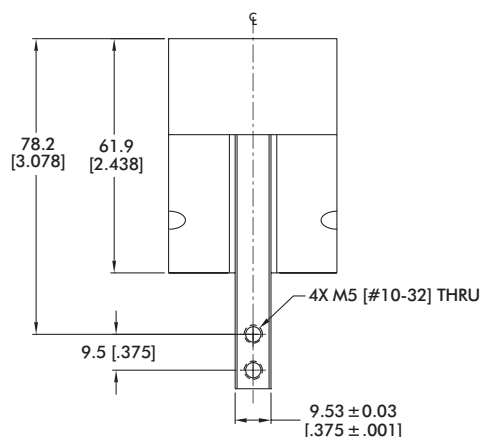
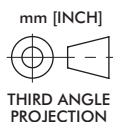
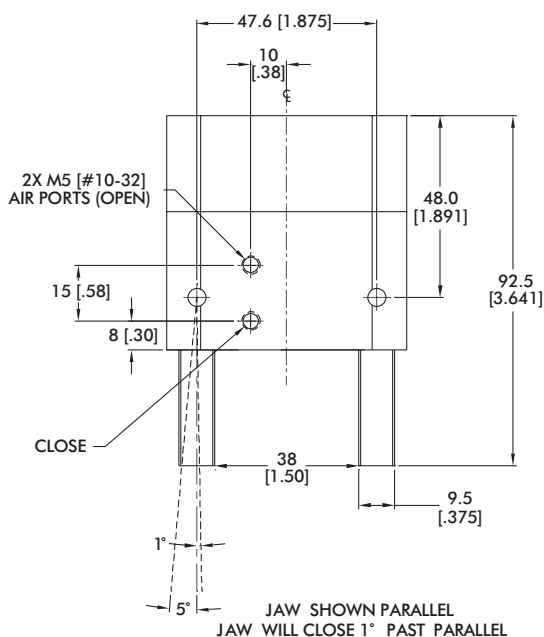
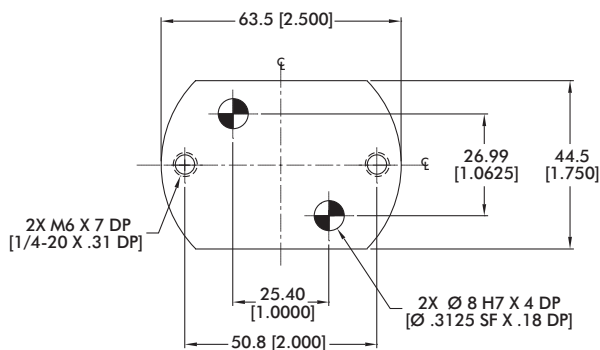
Sensor Accessories	Order #
Inductive Sensor Mounting Kit (mounts 2 sensors)	OSMK-018
Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-019
Viton® Seal Repair Kit	SLKT-019V

Loading Information



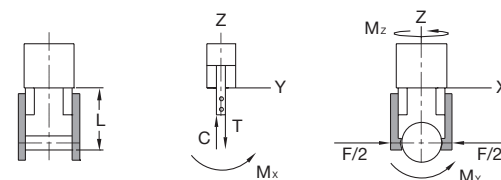
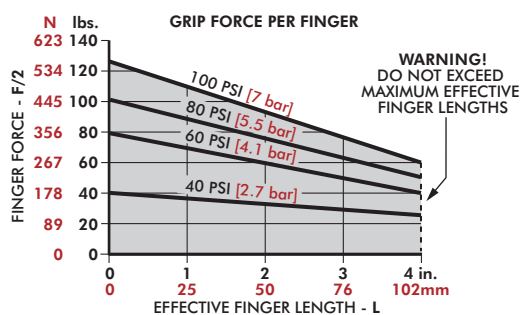
RA-15	Static
Maximum Tensile T	222 N [50 lbs]
Maximum Compressive C	222 N [50 lbs]
Maximum Moment M _x	6.8 Nm [60 in-lbs]
Maximum Moment M _y	13.6 Nm [120 in-lbs]
Maximum Moment M _z	6.8 Nm [60 in-lbs]

¹Capacities are per set of jaws and are not simultaneous



Sensor Accessories	Order #
Inductive Sensor Mounting Kit (mounts 2 sensors)	OSMK-019
Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-020
Viton® Seal Repair Kit	SLKT-020V

Loading Information



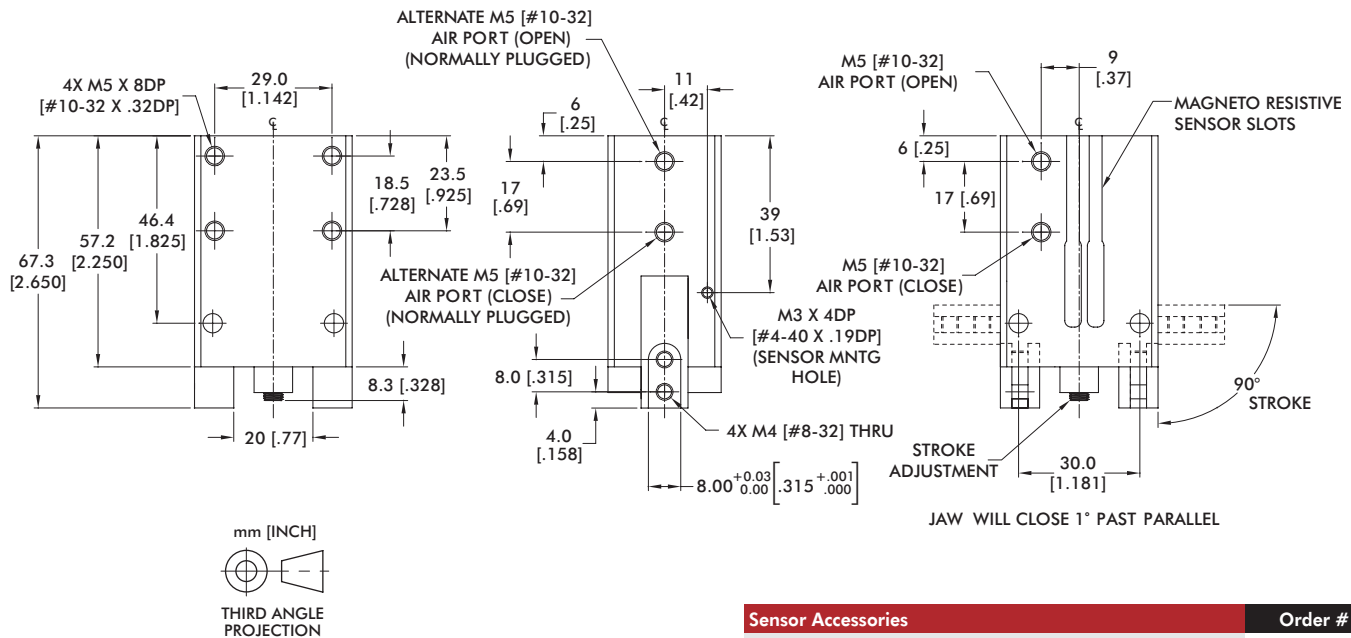
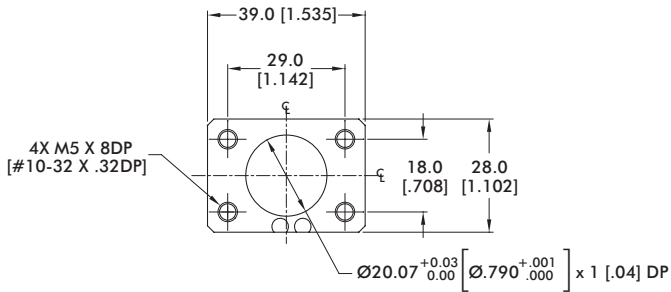
RA-25	Static
Maximum Tensile T	667 N [150 lbs]
Maximum Compressive C	667 N [150 lbs]
Maximum Moment M_x	22.6 Nm [200 in-lbs]
Maximum Moment M_y	33.9 Nm [300 in-lbs]
Maximum Moment M_z	22.6 Nm [200 in-lbs]

*Capacities are per set of jaws and are not simultaneous

RA-90

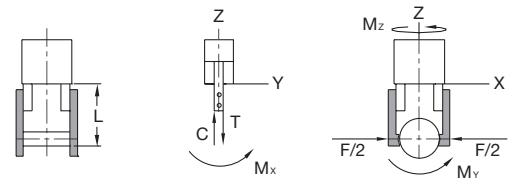
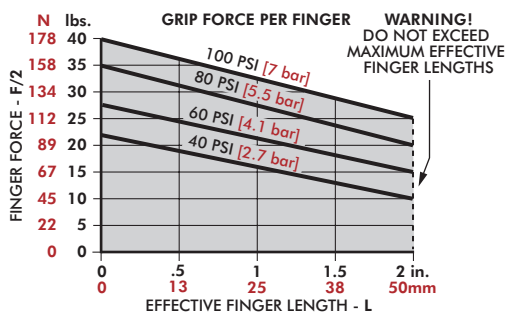
Angular Grippers | Dimensions and Technical Specifications

DO NOT OPERATE WITHOUT FLOW CONTROLS



Sensor Accessories	Order #
Inductive Sensor Mounting Kit (mounts 2 sensors)	OSMK-003
Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-024
Viton® Seal Repair Kit	SLKT-024V

Loading Information



RA-90	Static
Maximum Tensile T	222 N [50 lbs]
Maximum Compressive C	222 N [50 lbs]
Maximum Moment M_x	6.8 Nm [60 in-lbs]
Maximum Moment M_y	13.6 Nm [120 in-lbs]
Maximum Moment M_z	6.8 Nm [60 in-lbs]

¹Capacities are per set of jaws and are not simultaneous

ANGULAR GRIPPERS

Notes

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RUA SERIES

Angular Grippers | Features and Benefits | How To Order

Features:

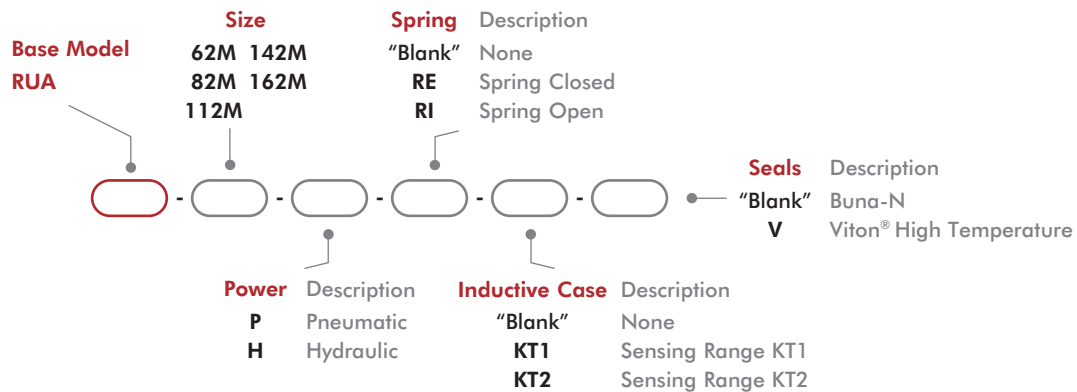
- Robust, shielded, high force gripper
- Optional springs for part retention in case of air loss or increased grip-force
- Side or top manifold air ports
- Optional Viton® seals for high temperatures -30°C to +150°C [-20°F to +300°F]
- Boot options available for weld splatter applications

Applications:

- Welding and sandblasting applications
- Paintbooth applications
- Heavy part gripping solutions



How To Order



Accessories

Sensor Accessories	Model Numbers	Part Number	Qty/Unit
NPN Magneto Resistive Sensor with Quick Disconnect* **	62M, 82M, 112M	OHSN-017	1-2
PNP Magneto Resistive Sensor with Quick Disconnect* **	62M, 82M, 112M	OHSP-017	1-2
NPN Magneto Resistive Sensor 90° with Quick Disconnect* **	62M, 82M, 112M	OHSN-011	1-2
PNP Magneto Resistive Sensor 90° with Quick Disconnect* **	62M, 82M, 112M	OHSP-011	1-2
Replacement PNP Double Inductive Sensor* †	All Models	KT15	1
Quick Disconnect 2 Meter Cable Length*	62M, 82M, 112M	CABL-010	1-2
Quick Disconnect 5 Meter Cable Length*	62M, 82M, 112M	CABL-013	1-2
Quick Disconnect 2 Meter Cable Length (for KT Inductive Sensor)*	All Models	CABL-014	1-2

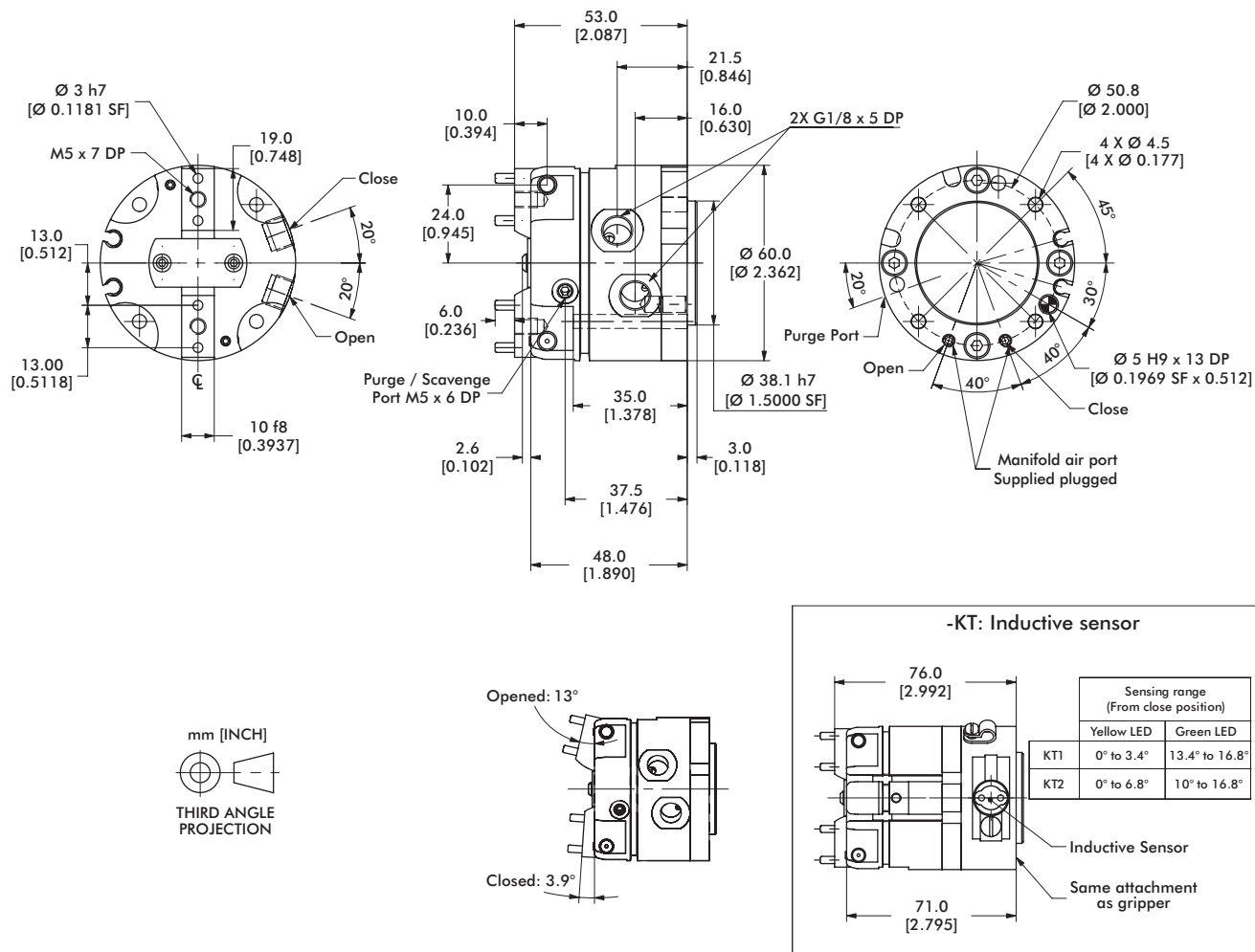
*Sensor and cable sold separately. **Piston magnet standard. †Requires KT1 or KT2 sensor option.

Specifications	Units	62M	82M	112M
Total Rated Grip Force L=25mm [1 in.] @ 0°				
@ 7 bar [100 psi], w/spring	N [lbs]	384 [86]	1228 [276]	2150 [483]
@ 7 bar [100 psi], w/o spring	N [lbs]	313 [70]	922 [207]	1600 [360]
Total Stroke		16.8° per finger (33.6° total)	15.9° per finger (31.8° total)	19.1° per finger (38.2° total)
Weight	kg [lbs]	0.39 [0.86]	0.70 [1.55]	1.70 [3.75]
Pressure Range without springs	bar [psi]	2-7 [30-100]		
Pressure Range with springs -RE, -RI	bar [psi]	3-7 [45-100]		
Ingress Protection Class (IP)		IP54		
Displacement	cm³ [in³]	12 [0.73]	35 [2.14]	85 [5.19]
Temperature Range (Buna-N seals)	°C [°F]	-35°~80° [-30°~180°]		
Temperature Range (Viton® seals)	°C [°F]	-30°~150° [-20°~300°]		
Actuation	sec	0.18	0.10	0.35
Accuracy	mm [in]	±0.05 [±0.002]		±0.08 [±0.003]
Repeatability	mm [in]	±0.02 [±0.0008]		±0.03 [±0.0008]
Valve to Required Actuate Single Acting		3-way, 2-position		
Valve to Required Actuate Double Acting		4-way, 2-position		

Specifications	Units	142M	162M
Total Rated Grip Force L=25mm [1 in.] @ 0°			
@ 7 bar [100 psi], w/spring	N [lbs]	5775 [1298]	5490 [1234]
@ 7 bar [100 psi], w/o spring	N [lbs]	3941 [886]	3790 [853]
Total Stroke		17.6° per finger (35.2° total)	17.2° per finger (34.4° total)
Weight	kg [lbs]	4.1 [9.05]	6.7 [14.8]
Pressure Range without springs	bar [psi]	2-7 [30-100]	
Pressure Range with springs -RE, -RI	bar [psi]	4-7 [60-100]	
Ingress Protection Class (IP)		IP54	
Displacement	cm³ [in³]	215 [13.2]	322 [19.7]
Temperature Range (Buna-N seals)		-35°~80° [-30°~180°]	
Temperature Range (Viton® seals standard)	°C [°F]	-30°~150° [-20°~300°]	
Actuation	sec	0.60	0.80
Accuracy	mm [in]	±0.8 [±0.003]	
Repeatability	mm [in]	±0.03 [±0.0008]	
Valve to Required Actuate Single Acting		3-way, 2-position	
Valve to Required Actuate Double Acting		4-way, 2-position	

RUA-62M

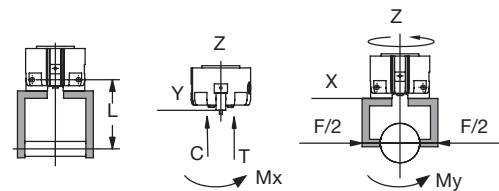
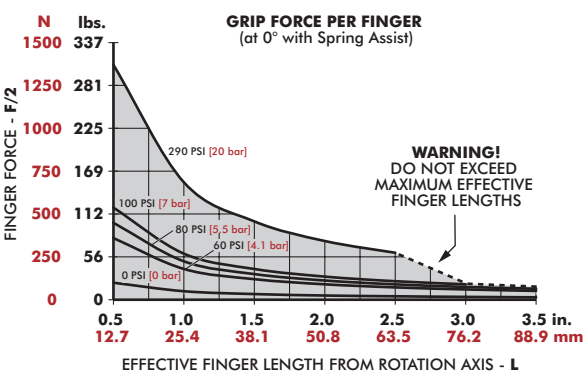
Angular Grippers | Dimensions and Technical Specifications



Protective Boots	Order #
PVC Sealed Boot Kit (2 interfaces, 1 collar, 1 boot)	SLKT-367
Kevlar Sealed Boot Kit (2 interfaces, 1 collar, 1 boot)	SLKT-368

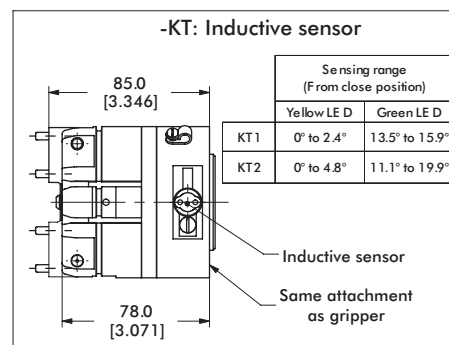
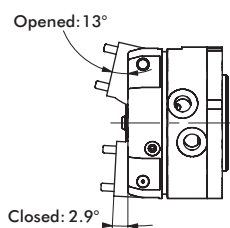
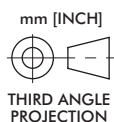
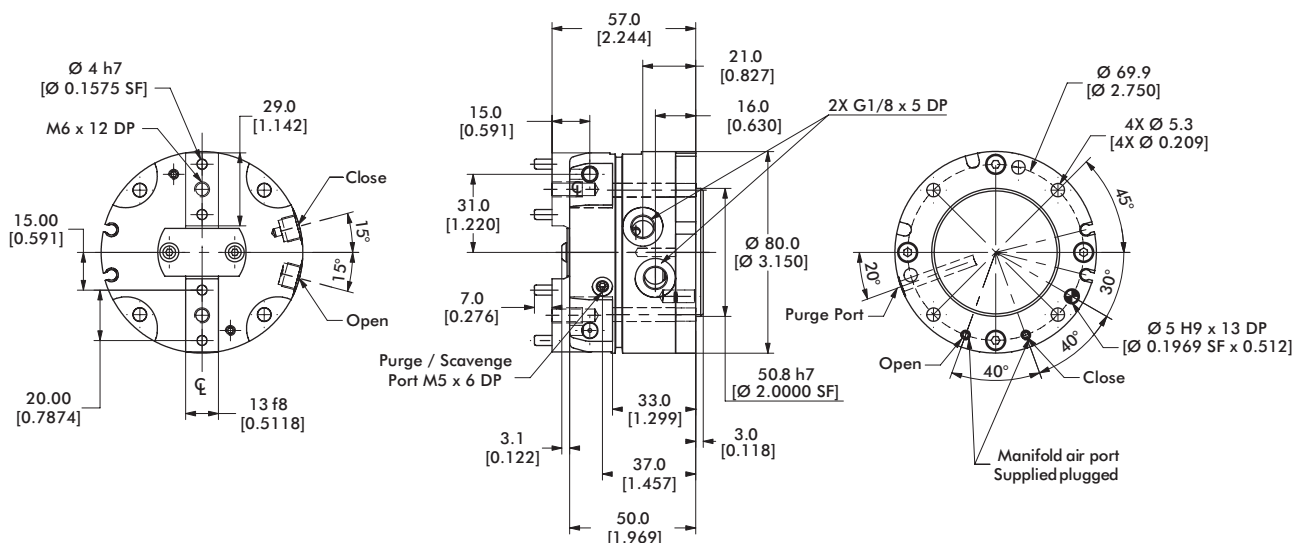
Seal Repair Kits	Order #
Seal Repair Kit Standard (Buna-N)	SLKT-156
Seal Repair Kit (Viton®)	SLKT-156V
Seal Repair Kit (Hydraulic)	SLKT-330

Loading Information



RUA-62M	Static
Maximum Tensile T	236 N [53 lbs]
Maximum Compressive C	236 N [53 lbs]
Maximum Moment M _x	12.5 Nm [111 in-lbs]
Maximum Moment M _y	34.5 Nm [305 in-lbs]
Maximum Moment M _z	12.5 Nm [111 in-lbs]

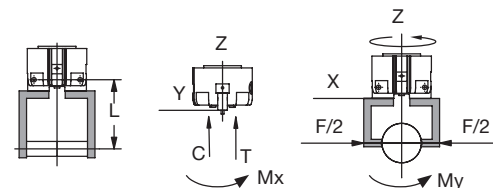
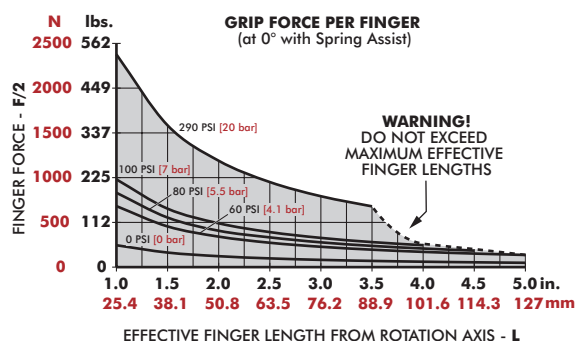
*Capacities are per set of jaws and are not simultaneous



Protective Boots	Order #
PVC Sealed Boot Kit (2 interfaces, 1 collar, 1 boot)	SLKT-370
Kevlar Sealed Boot Kit (2 interfaces, 1 collar, 1 boot)	SLKT-371

Seal Repair Kits	Order #
Seal Repair Kit Standard (Buna-N)	SLKT-157
Seal Repair Kit (Viton®)	SLKT-157V
Seal Repair Kit (Hydraulic)	SLKT-331

Loading Information

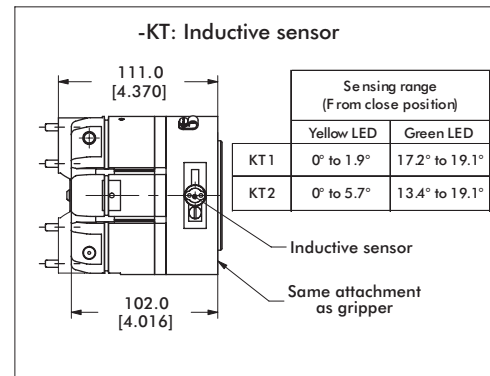
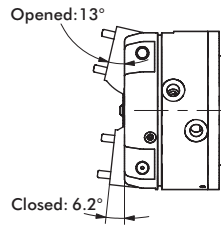
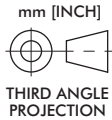
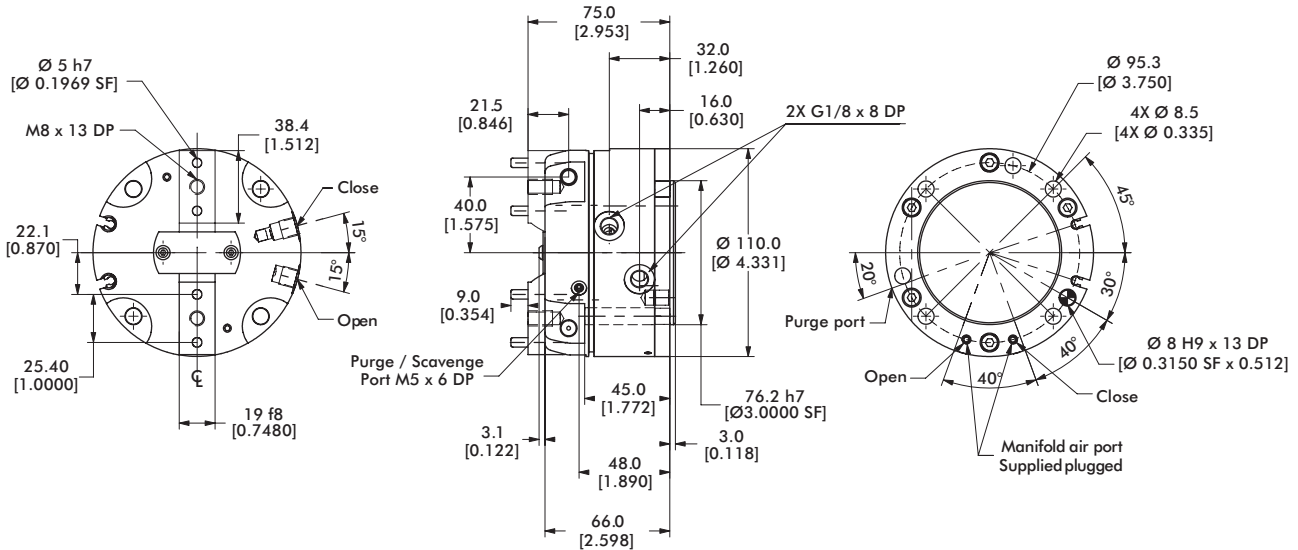


RUA-82M	Static
Maximum Tensile T	290 N [65 lbs]
Maximum Compressive C	290 N [65 lbs]
Maximum Moment M_x	19 Nm [168 in-lbs]
Maximum Moment M_y	121 Nm [1071 in-lbs]
Maximum Moment M_z	19 Nm [168 in-lbs]

*Capacities are per set of jaws and are not simultaneous

RUA-112M

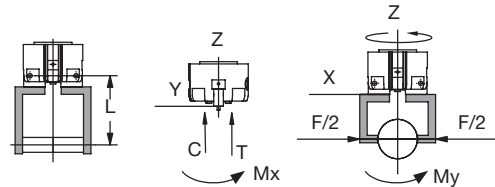
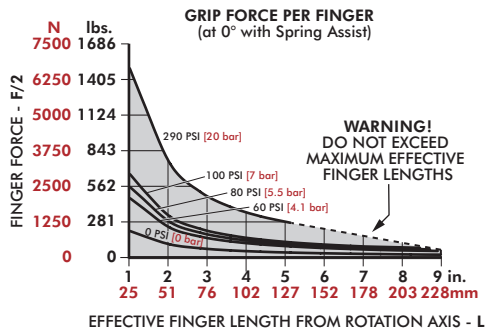
Angular Grippers | Dimensions and Technical Specifications



Protective Boots		Order #
PVC Sealed Boot Kit (2 interfaces, 1 collar, 1 boot)		SLKT-373

Seal Repair Kits		Order #
Seal Repair Kit Standard (Buna-N)		SLKT-158
Seal Repair Kit (Viton®)		SLKT-158V
Seal Repair Kit (Hydraulic)		SLKT-332

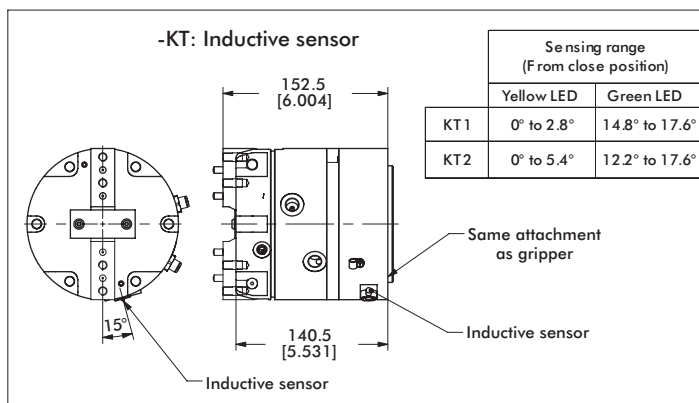
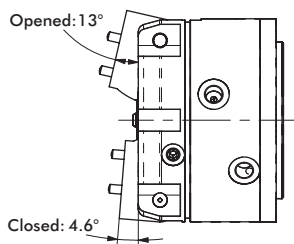
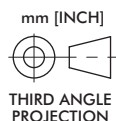
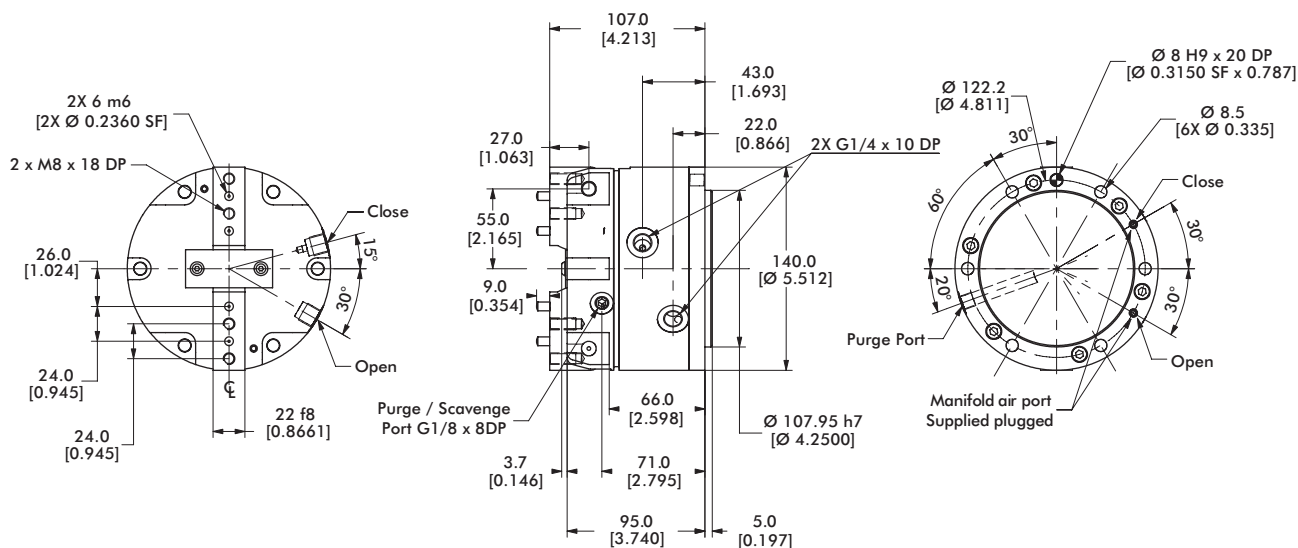
Loading Information



RUA-112M	Static
Maximum Tensile T	290 N [65 lbs]
Maximum Compressive C	290 N [65 lbs]
Maximum Moment M_x	19 Nm [168 in-lbs]
Maximum Moment M_y	121 Nm [1071 in-lbs]
Maximum Moment M_z	19 Nm [168 in-lbs]

*Capacities are per set of jaws and are not simultaneous

Angular Grippers | Dimensions and Technical Specifications



Protective Boots

PVC Sealed Boot Kit (2 interfaces, 1 collar, 1 boot)

Order

SLKT-376

Seal Repair Kits

Seal Repair Kit Standard (Buna-N)

Seal Repair Kit (Viton®)

Seal Repair Kit (Hydraulic)

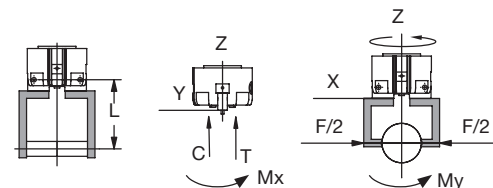
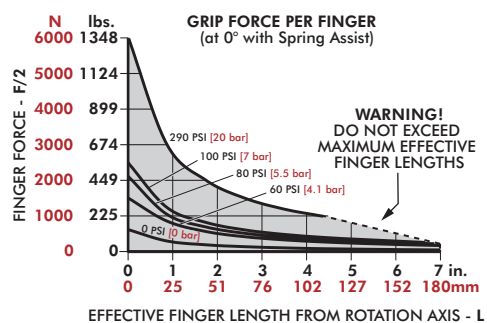
Order

SLKT-333

SLKT-333V

SLKT-334

Loading Information

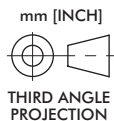
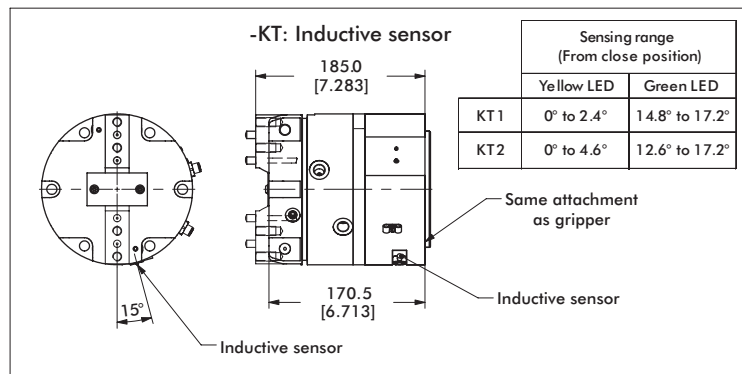
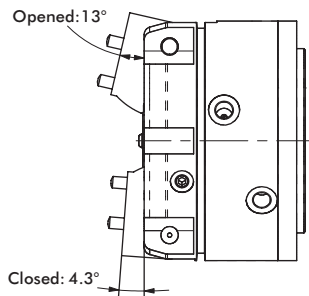
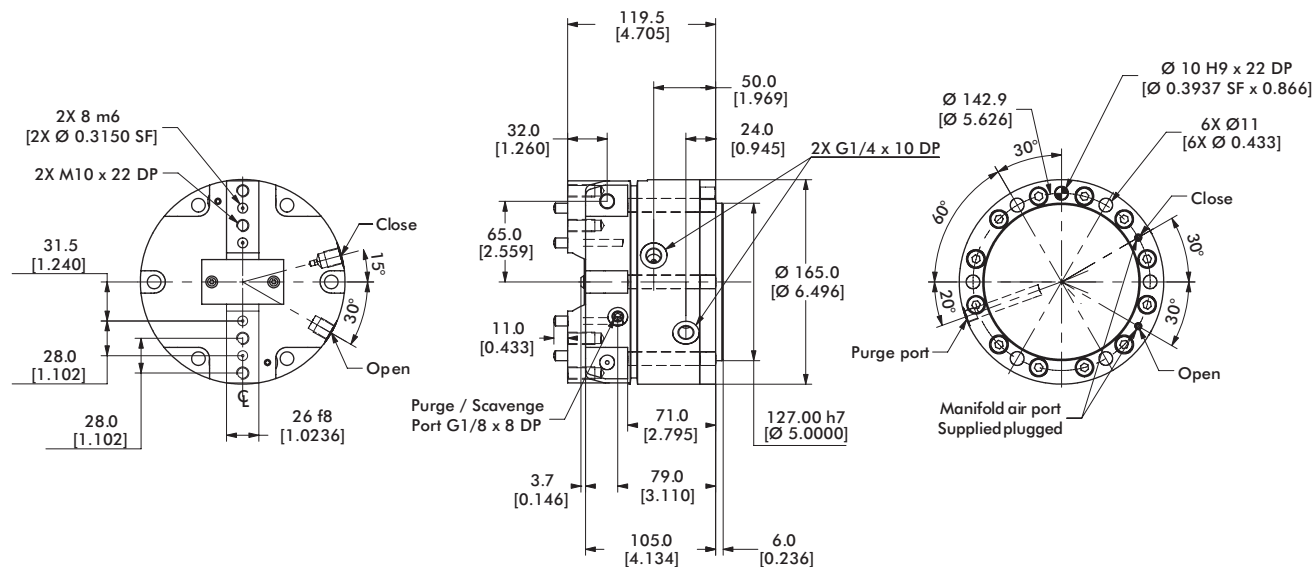


RUA-142M	Static
Maximum Tensile T	630 N [142 lbs]
Maximum Compressive C	630 N [142 lbs]
Maximum Moment M_x	52 Nm [460 in-lbs]
Maximum Moment M_y	696 Nm [6160 in-lbs]
Maximum Moment M_z	52 Nm [460 in-lbs]

*Capacities are per set of jaws and are not simultaneous

RUA-162M

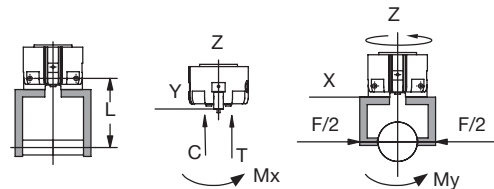
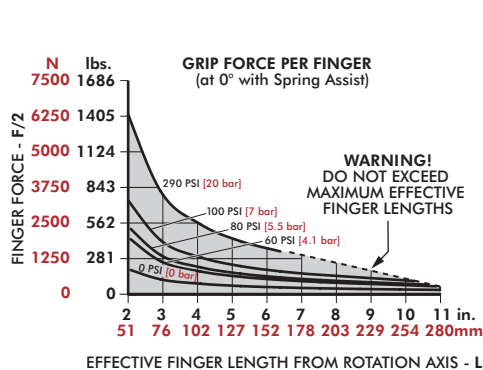
Angular Grippers | Dimensions and Technical Specifications



Protective Boots	Order #
PVC Sealed Boot Kit (2 interfaces, 1 collar, 1 boot)	SLKT-379

Seal Repair Kits	Order #
Seal Repair Kit Standard (Buna-N)	SLKT-335
Seal Repair Kit (Viton®)	SLKT-335V
Seal Repair Kit (Hydraulic)	SLKT-336

Loading Information



RUA-162M	Static
Maximum Tensile T	840 N [189 lbs]
Maximum Compressive C	840 N [189 lbs]
Maximum Moment M _x	75 Nm [664 in-lbs]
Maximum Moment M _y	1050 Nm [9293 in-lbs]
Maximum Moment M _z	75 Nm [664 in-lbs]

*Capacities are per set of jaws and are not simultaneous

ANGULAR GRIPPERS

Notes

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