

Parallel Gripper- CP Square Jaw Series

Compact and Powerful

This gripper is designed for use in confined spaces, combining long strokes with a high grip force. Optional safety springs retain the components, should the air supply fail or to increase grip force.

Multipurpose Gripper

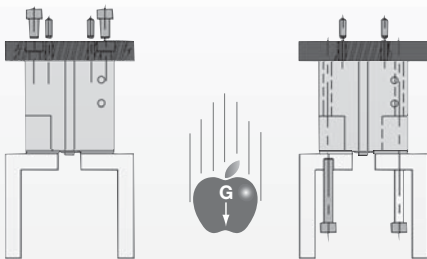
A wide range of options and accessories (extended stroke, safety springs for internal or external gripping, inductive sensors and Viton® seals) allow these grippers to be used in a number of applications.

Harsh Environments

Shielded design repels chips and other particulate from internal drive mechanism depending on the chosen material of the shield.

Mounting Information:

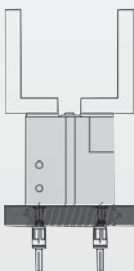
Gripper can be mounted and operated in any orientation



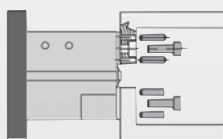
Gripper is located using 2 dowel pins and assembled from the top with 2 screws.

Gripper can also be assembled from the bottom with 2 through body screws.

Gripper is protected from debris when operated upside down.



Gripper can be operated utilizing top manifold air ports.



Fingers are located on jaw with 2 dowel pins and assembled with 1 screw.

Technical Specifications:

Pneumatic Specifications

Pressure Operating Range	3-7 bar
Cylinder Type	Double Acting
Dynamic Seals	Buna-N
Valve Required to Operate:	
Double Acting	4-way, 2-position
Single acting (Option RE or RI)	3-way, 2-position

Air Quality Requirements

Filtration	40 Micron or Better
Lubrication	Not Necessary*

Temperature Operating Range

Buna-N Seals (standard)	-35°~80° C
Viton® Seals (optional)	-30°~150° C

Application Restrictions

Expected Life	3 million cycles
Normal Application	6 million cycles*
w/ Preventative Maintenance	Yes
Field Repairable	Yes
Seal Repair Kits Available	Yes

*Addition of lubrication will greatly increase service life

Product Features

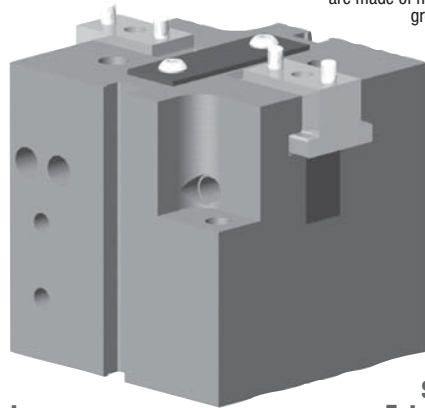
Multiple Air Ports
Side or top air ports
(top ports require O-ring)

Angular Finger Jaws
Option (-Q)

Quality Components
Body made from aluminum alloy with Teflon™ impregnated hardcoat anodize. Other essential parts of the gripper are made of hardened and precision ground steel

Inductive Sensors
Accessory (SD) for control jaw position. Support for two sensors, adjustable screen and spacer.

Viton® Seals
Optional Viton® seals (-V) for high temperatures



Shielded Design
Gripper body is shielded to repel chips and other particulate from internal drive mechanism

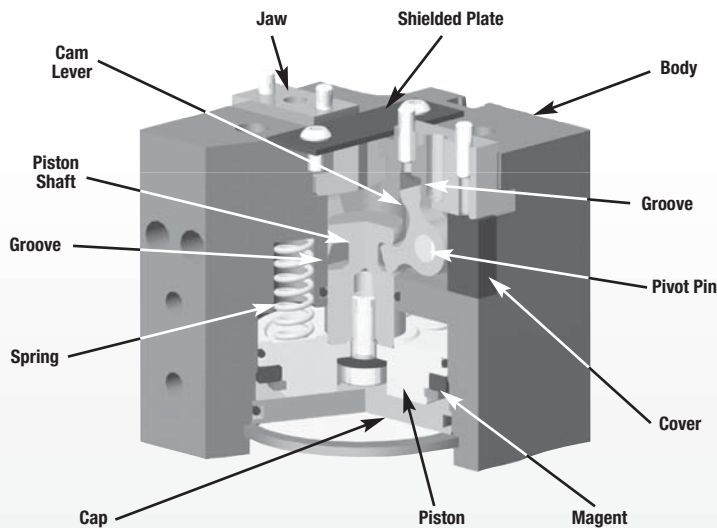
Optional: the front (push) or backward (pulling).

Optional Spring Assist
Optional spring assist retains the component should the air supply fail, to assist the gripper for internal (-RE) or external (-RI) gripping, or in single acting mode

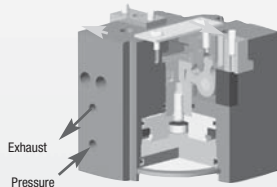
Magnetic Sensing
Gripper is pre-equipped with 2 magnets for sensors, adjustable in grooves (for sensing the position of the jaw).

Standard and Extended Stroke (-C)
Each model of gripper is available in two stroke lengths

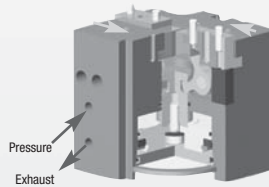
Operating Principle



Open Stroke Position

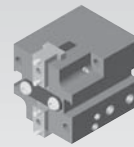


Closed Stroke Position



- A double-acting piston is connected to the piston shaft at its end with a driving groove. The piston is pre-fitted with a ring magnet for sensor detection.
- Levers pivot in the body about an axis of articulation. Their two heads agree precisely on one side in the groove of the small piston, the other in a groove cut in each jaw holder.
- The rotation of the levers converts the vertical movement of the piston in a horizontal motion and synchronized two-bit gates, which are guided in grooves in «T» fitting body.
- This gripper is suitable for internal or external gripping and can be mounted in any orientation
- Optional failsafe spring can be used to maintain gripping force if gripper loses air pressure or as a single acting return gripper.

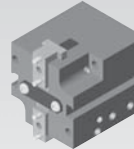
Style: CP Parallel Gripper



Model	CP-1	CP-1-C
Total Stroke:	4 mm	6 mm
Force at 6bar: ¹	88 N	60 N
Force w/o air: ²	15 N	10 N
Weight:	0.09 kg	0.09 kg

See Page **1.58 & 1.59**

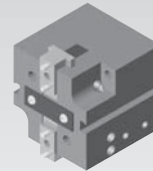
Style: CP Parallel Gripper



Model	CP-2	CP-2-C
Total Stroke:	6 mm	9 mm
Force at 6bar: ¹	238 N	161 N
Force w/o air: ²	43 N	29 N
Weight:	0.21 kg	0.20 kg

See Page **1.60 & 1.61**

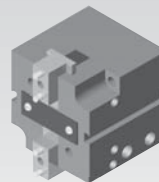
Style: CP Parallel Gripper



Model	CP-3	CP-3-C
Total Stroke:	10 mm	16 mm
Force at 6bar: ¹	677 N	407 N
Force w/o air: ²	161 N	97 N
Weight:	0.45 kg	0.47 kg

See Page **1.62 & 1.63**

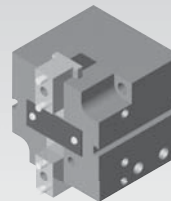
Style: CP Parallel Gripper



Model	CP-4	CP-4-C
Total Stroke:	13 mm	20 mm
Force at 6bar: ¹	1016 N	665 N
Force w/o air: ²	222 N	145 N
Weight:	0.73 kg	0.75 kg

See Page **1.64 & 1.65**

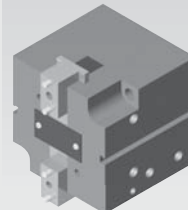
Style: CP Parallel Gripper



Model	CP-5	CP-5-C
Total Stroke:	18 mm	27 mm
Force F _{6-R} : ¹	1591 N	1081 N
Force F _{0-R} : ²	322 N	219 N
Weight:	1.25 kg	1.27 kg

See Page **1.66 & 1.67**

Style: CP Parallel Gripper



Model	CP-6	CP-6-C
Total Stroke:	24 mm	32 mm
Force at 6bar: ¹	2749 N	2092 N
Force w/o air: ²	711 N	541 N
Weight:	2.50 kg	2.56 kg

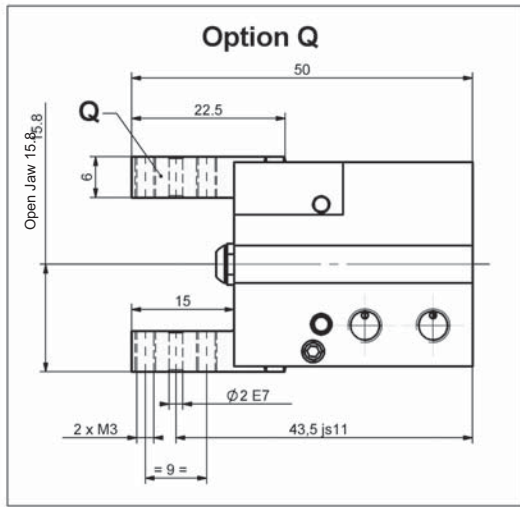
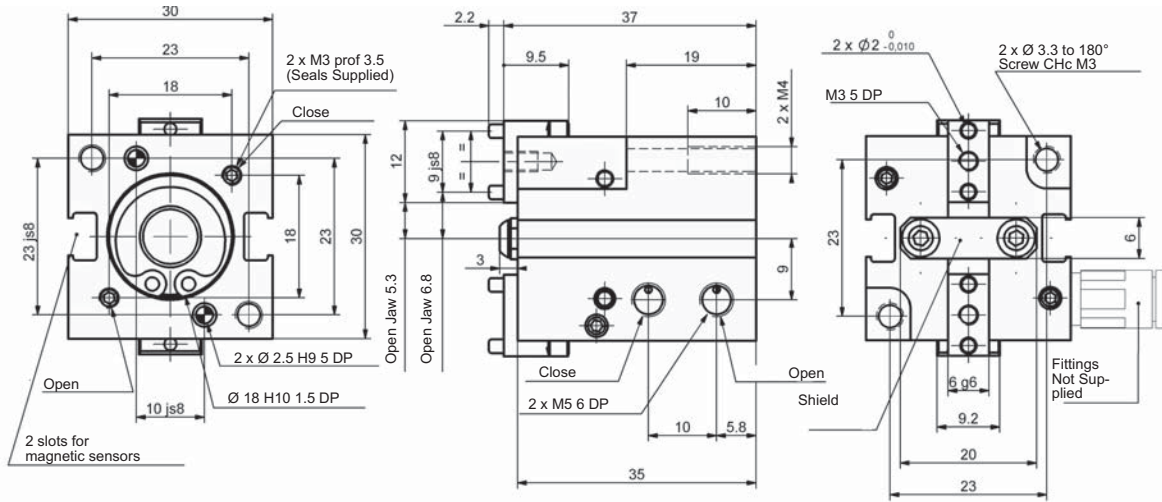
See Page **1.68 & 1.69**

OPTIONS & ACCESSORIES

See Pages **1.72**

1. Force with spring and air at 6bar
2. Force with spring without air

PARALLEL GRIPPER CP-1 COMPACT GRIPPER SERIES

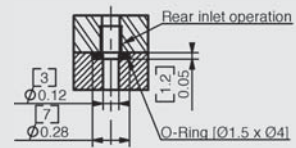


Specifications

Specifications	CP-1
Grip Force (F6+R) ¹ , 6 bars, Springs Mid-Way, L=0	88 N
Grip Force (F0+R) ² , 0 bars, Springs Mid-Way, L=0	15 N
Total Stroke	4 mm
Weight	0.09 kg
Pressure Range	2-10 bar
Pressure Range with Springs	2.5-10 bar
Ø Cylinder Bore	16 mm
Displacement	0.7 cm ³
Acuation (open / close)	0.06 s / 0.06 s
Repeatability	± 0.025

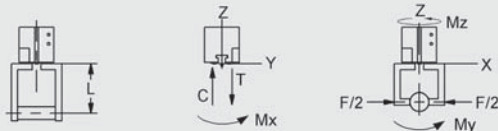
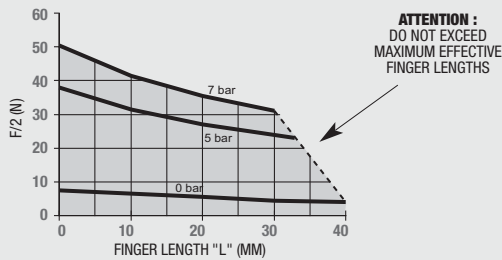
1. Force with spring and air at 6bar
2. Force with spring without air

Grippers are supplied with open side air ports and top manifold air ports plugged. Top manifold sealing dimensions shown.



Loading Information

Sum of forces transmitted by the jaws on the workpiece
(Springs compressed at 50% stroke)



Loading Capacity*	Static	Dynamic
Maximum Tensile T	110 N	10 N
Maximum Compressive C	190 N	10 N
Maximum Moment Mx	1 Nm	0.2 Nm
Maximum Moment My	2 Nm	0.4 Nm
Maximum Moment Mz	2 Nm	0.4 Nm

* The Capacities are per set of jaws and are not simultaneous.

How to Order: (Order Accessories separately from Basic Model)

BASE MODEL

ANGULAR JAW

CP-1 - [] - [] - V

SPRINGS

VITON® SEALS

RE External Gripping

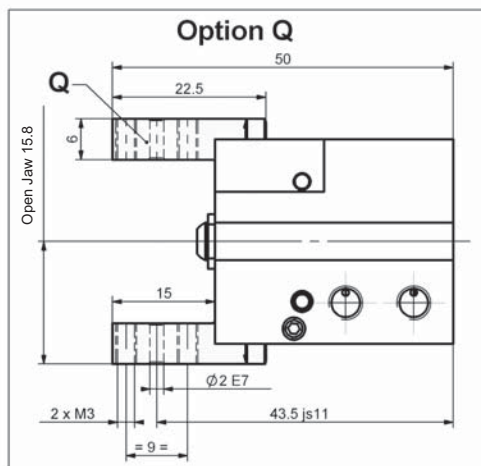
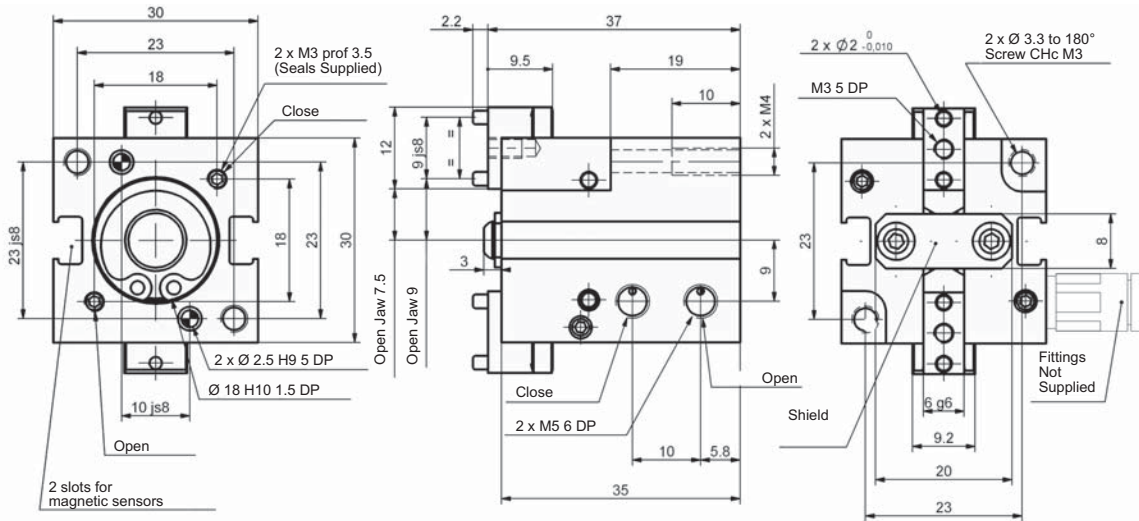
SENSOR ACCESSORIES

	ORDER #	QTY/UNIT
PNP Sensor with 0.3m Output Cable with 90° with M8 connector	D1	1 or 2
PNP Sensor with 0.3m Output Cable with M8 connector	D4	1 or 2
Quick Disconnect 2 Meter Cable Length	CABL-010	1 or 2

PNEUMATIC ACCESSORIES

Standard Seal Repair Kit	SCP1	1
Viton® Seal Repair Kit	SCP1V	1
Repair Kit (screws, springs, standard seals)	KSCP1	1
Repair Kit (screws, springs, seals Viton)	KSCP1V	1

Accessories: see page 1.72

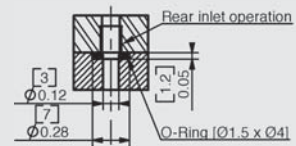


Specifications

	CP-1-C
Grip Force (F6+R) ¹ , 6 bars, Springs Mid-Way, L=0	60 N
Grip Force (F0+R) ² , 0 bars, Springs Mid-Way, L=0	10 N
Total Stroke	6 mm
Weight	0.09 kg
Pressure Range	2-10 bar
Pressure Range with Springs	2.5-10 bar
Ø Cylinder Bore	16 mm
Displacement	0.7 cm ³
Acuation (open / close)	0.06 s / 0.06 s
Repeatability	± 0.025

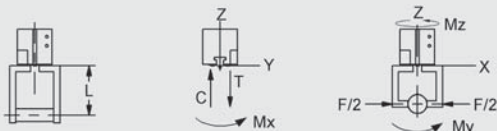
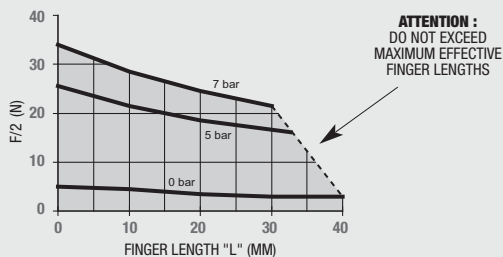
1. Force with spring and air at 6bar
2. Force with spring without air

Grippers are supplied with open side air ports and top manifold air ports plugged. Top manifold sealing dimensions shown.



Loading Information

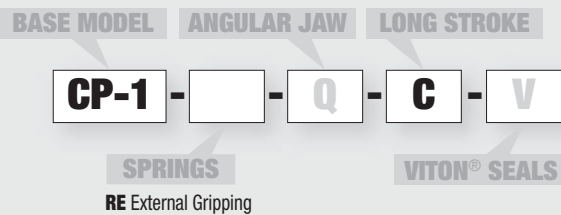
Sum of forces transmitted by the jaws on the workpiece
(Springs compressed at 50% stroke)



Loading Capacity*	Static	Dynamic
Maximum Tensile T	110 N	8 N
Maximum Compressive C	190 N	8 N
Maximum Moment Mx	1 Nm	0.2 Nm
Maximum Moment My	2 Nm	0.3 Nm
Maximum Moment Mz	2 Nm	0.3 Nm

* The Capacities are per set of jaws and are not simultaneous.

How to Order: (Order Accessories separately from Basic Model)



SENSOR ACCESSORIES

	ORDER #	QTY/UNIT
PNP Sensor with 0.3m Output Cable with 90° with M8 connector	D1	1 or 2
PNP Sensor with 0.3m Output Cable with M8 connector	D4	1 or 2
Quick Disconnect 2 Meter Cable Length	CABL-010	1 or 2

PNEUMATIC ACCESSORIES

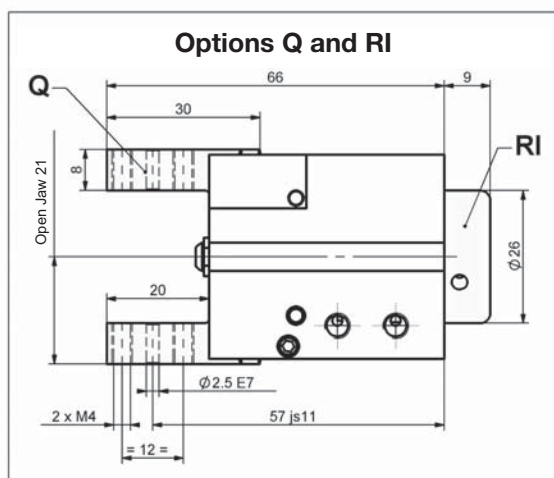
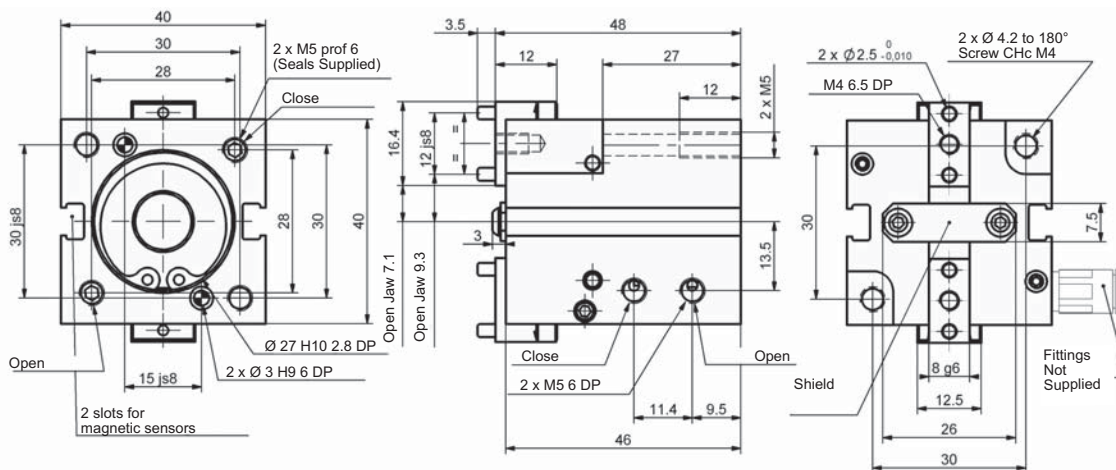
	ORDER #	QTY/UNIT
Standard Seal Repair Kit	SCP1	1
Viton® Seal Repair Kit	SCP1V	1
Repair Kit (screws, springs, standard seals)	KSCP1	1
Repair Kit (screws, springs, seals Viton)	KSCP1V	1

Accessories: see page 1.72

PARALLEL GRIPPER CP-2 COMPACT GRIPPER SERIES

CP SERIES

1.62

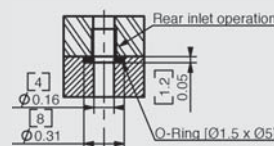


Specifications

	CP-2
Grip Force (F _{G+R}) ¹ , 6 bars, Springs Mid-Way, L=0	238 N
Grip Force (F _{0+R}) ² , 0 bars, Springs Mid-Way, L=0	43 N
Total Stroke	6 mm
Weight	0.21 kg
Pressure Range	2-10 bar
Pressure Range with Springs	2.5-10 bar
Ø Cylinder Bore	25 mm
Displacement	2.7 cm ³
Acuation (open / close)	0.06 s / 0.06 s
Repeatability	± 0.025

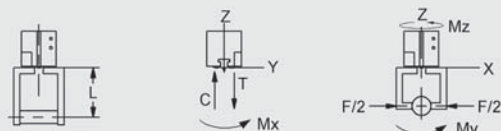
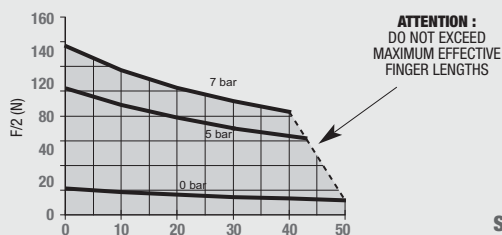
1. Force with spring and air at 6bar
2. Force with spring without air

Grippers are supplied with open side air ports and top manifold air ports plugged. Top manifold sealing dimensions shown.



Loading Information

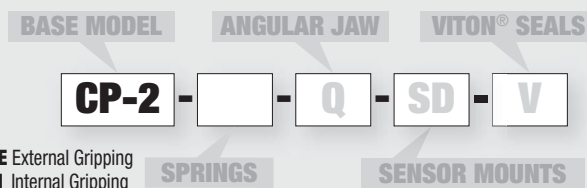
Sum of forces transmitted by the jaws on the workpiece
(Springs compressed at 50% stroke)



Loading Capacity*	Static	Dynamic
Maximum Tensile T	110 N	10 N
Maximum Compressive C	190 N	10 N
Maximum Moment M_x	1 Nm	0.2 Nm
Maximum Moment M_y	2 Nm	0.4 Nm
Maximum Moment M_z	2 Nm	0.4 Nm

* The Capacities are per set of jaws and are not simultaneous.

How to Order: (Order Accessories separately from Basic Model)



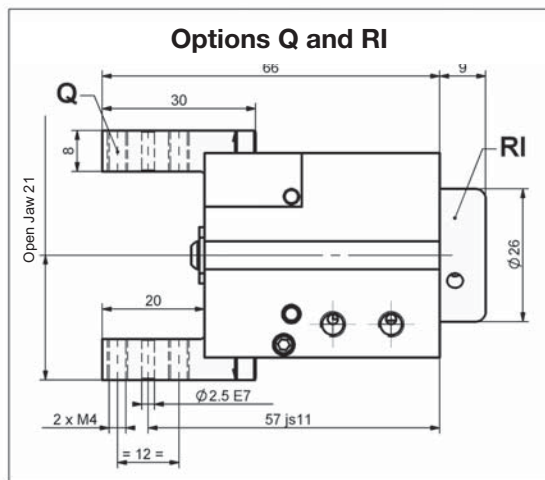
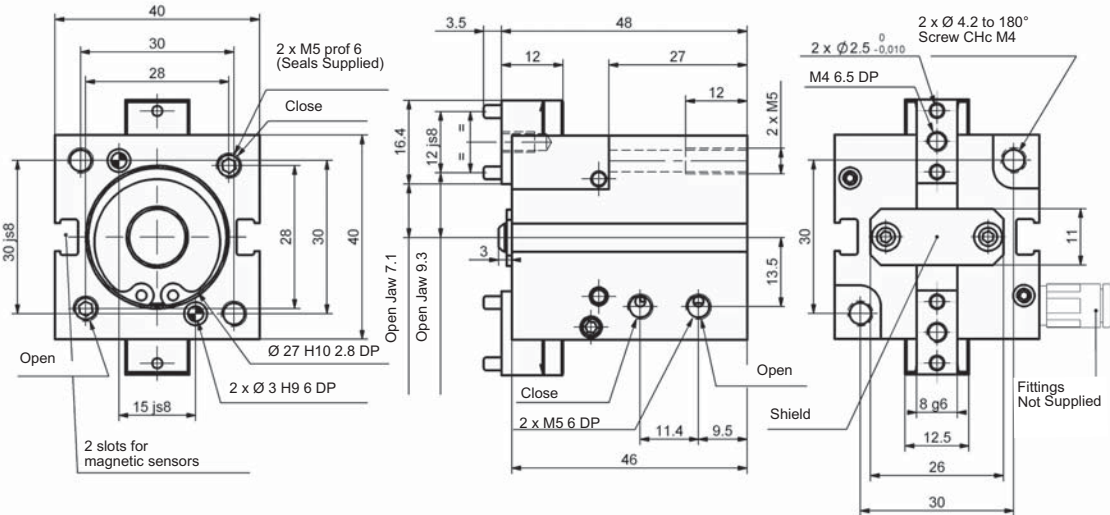
SENSOR ACCESSORIES

	ORDER #	QTY/UNIT
PNP Sensor with 0.3m Output Cable with 90° with M8 connector	D1	1 or 2
NPN Sensor with 0.3m Output Cable with 90° with M8 connector	D10	1 or 2
PNP Sensor with 0.3m Output Cable with M8 connector	D4	1 or 2
NPN Sensor with 0.3m Output Cable with M8 connector	D7	1 or 2
Inductive Sensor Mounting Kit for (mounts 2 sensors) (SD)	SDCP2	1
Inductive PNP Sensor with M8 Connector	OISP-011-C	1 or 2
Inductive NPN Sensor with M8 Connector	OINP-011-C	1 or 2
Quick Disconnect 2 Meter Cable Length	CABL-010	1 or 2

PNEUMATIC ACCESSORIES

Standard Seal Repair Kit	SCP2	1
Viton® Seal Repair Kit	SCP2V	1
Repair Kit (screws, springs, standard seals)	KSCP2	1
Repair Kit (screws, springs, seals Viton)	KSCP2V	1

Accessories: see page 1.72

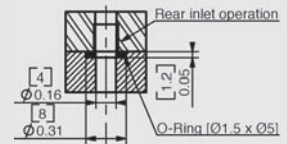


Specifications

	CP-2-C
Grip Force (F6+R) ¹ , 6 bars, Springs Mid-Way, L=0	161 N
Grip Force (F0+R) ² , 0 bars, Springs Mid-Way, L=0	29 N
Total Stroke	9 mm
Weight	0.20 kg
Pressure Range	2-10 bar
Pressure Range with Springs	2.5-10 bar
\varnothing Cylinder Bore	25 mm
Displacement	2.7 cm ³
Acuation (open / close)	0.06 s / 0.06 s
Repeatability	± 0.025

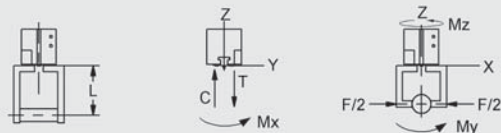
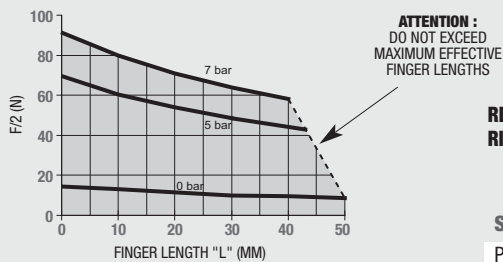
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2. Force with spring without air

Grippers are supplied with open side air ports and top manifold air ports plugged. Top manifold sealing dimensions shown.



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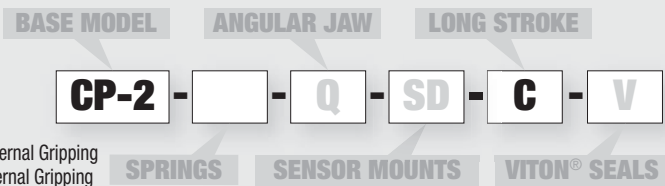
Sum of forces transmitted by the jaws on the workpiece
(Springs compressed at 50% stroke)



Loading Capacity*	Static	Dynamic
Maximum Tensile T	260 N	22 N
Maximum Compressive C	375 N	22 N
Maximum Moment Mx	4 Nm	0.7 Nm
Maximum Moment My	8 Nm	1.2 Nm
Maximum Moment Mz	8 Nm	1.2 Nm

* The Capacities are per set of jaws and are not simultaneous.

How to Order: (Order Accessories separately from Basic Model)



RE External Gripping
RI Internal Gripping

SENSOR ACCESSORIES

	ORDER #	QTY/UNIT
PNP Sensor with 0.3m Output Cable with 90° with M8 connector	D1	1 or 2
NPN Sensor with 0.3m Output Cable with 90° with M8 connector	D10	1 or 2
PNP Sensor with 0.3m Output Cable with M8 connector	D4	1 or 2
NPN Sensor with 0.3m Output Cable with M8 connector	D7	1 or 2
Inductive Sensor Mounting Kit for (mounts 2 sensors) (SD)	SDCP2	1
Inductive PNP Sensor with M8 Connector	OISP-011-C	1 or 2
Inductive NPN Sensor with M8 Connector	OINP-011-C	1 or 2
Quick Disconnect 2 Meter Cable Length	CABL-010	1 or 2

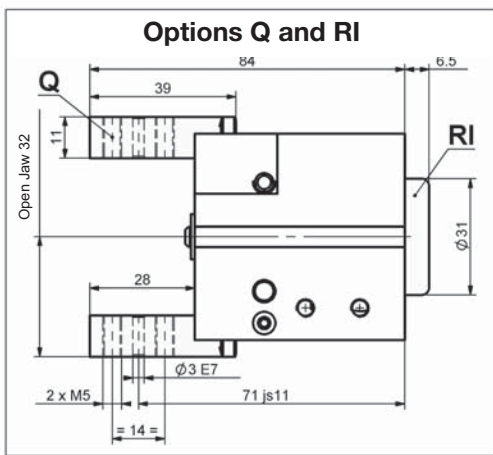
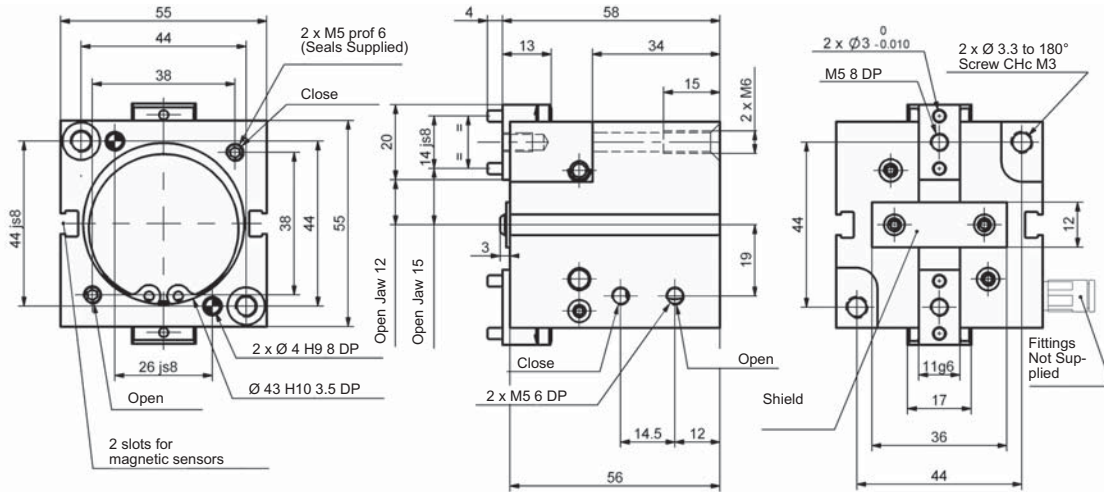
PNEUMATIC ACCESSORIES

Standard Seal Repair Kit	SCP2	1
Viton® Seal Repair Kit	SCP2V	1
Repair Kit (screws, springs, standard seals)	KSCP2	1
Repair Kit (screws, springs, seals Viton)	KSCP2V	1

Accessories: see page 1.72

PARALLEL GRIPPER CP-3 COMPACT GRIPPER SERIES

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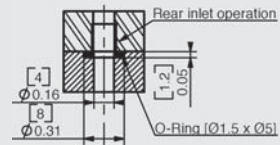


Specifications

	CP-3
Grip Force (F _{G+R}) ¹ , 6 bars, Springs Mid-Way, L=0	677 N
Grip Force (F _{0+R}) ² , 0 bars, Springs Mid-Way, L=0	161 N
Total Stroke	10 mm
Weight	0.45 kg
Pressure Range	2-10 bar
Pressure Range with Springs	3-10 bar
Ø Cylinder Bore	40 mm
Displacement	11.7 cm ³
Acuation (open / close)	0.07 s / 0.07 s
Repeatability	± 0.025

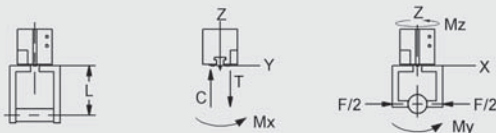
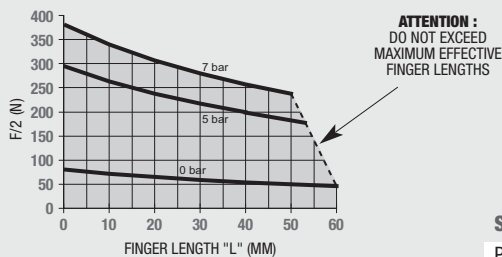
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2. Force with spring without air

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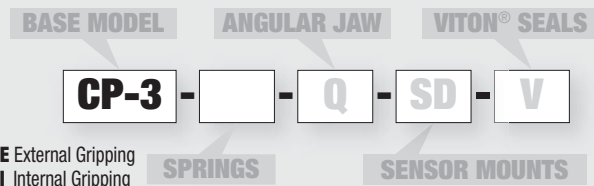
Sum of forces transmitted by the jaws on the workpiece
(Springs compressed at 50% stroke)



Loading Capacity*	Static	Dynamic
Maximum Tensile T	520 N	72 N
Maximum Compressive C	690 N	72 N
Maximum Moment M_x	11 Nm	3.5 Nm
Maximum Moment M_y	18 Nm	6 Nm
Maximum Moment M_z	17 Nm	6 Nm

* The Capacities are per set of jaws and are not simultaneous.

How to Order: (Order Accessories separately from Basic Model)



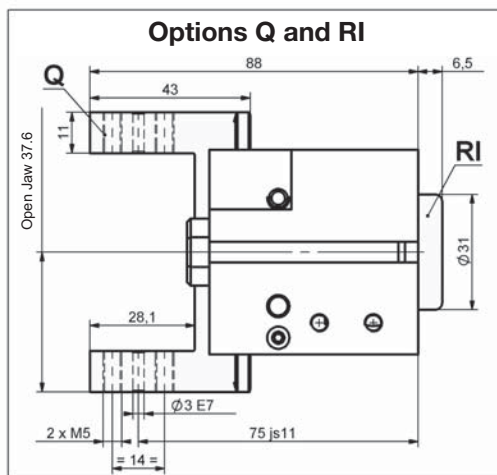
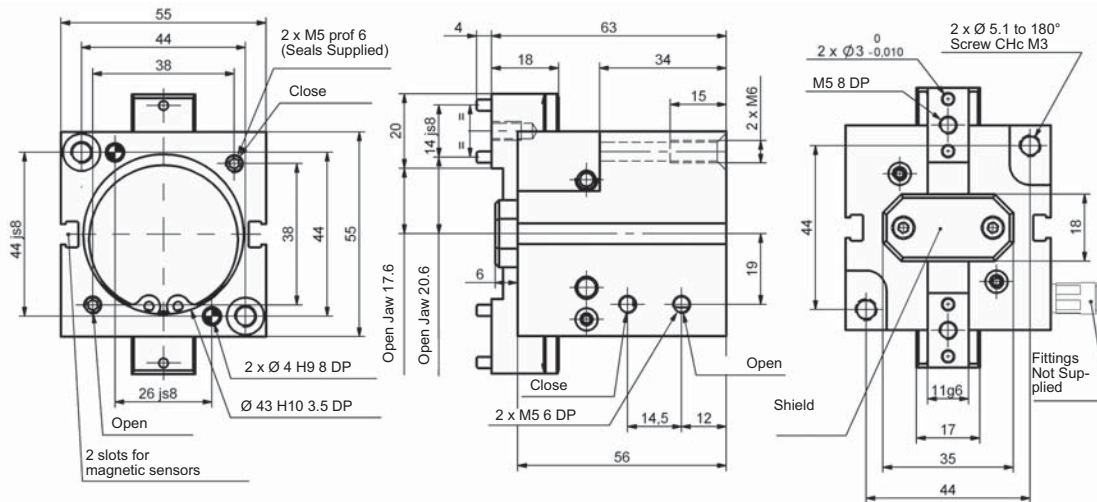
SENSOR ACCESSORIES

	ORDER #	QTY/UNIT
PNP Sensor with 0.3m Output Cable with 90° with M8 connector	D1	1 or 2
NPN Sensor with 0.3m Output Cable with 90° with M8 connector	D10	1 or 2
PNP Sensor with 0.3m Output Cable with M8 connector	D4	1 or 2
NPN Sensor with 0.3m Output Cable with M8 connector	D7	1 or 2
Inductive Sensor Mounting Kit for (mounts 2 sensors) (SD)	SDCP3	1
Inductive PNP Sensor with M8 Connector	OISP-011-C	1 or 2
Inductive NPN Sensor with M8 Connector	OINP-011-C	1 or 2
Quick Disconnect 2 Meter Cable Length	CABL-010	1 or 2

PNEUMATIC ACCESSORIES

Standard Seal Repair Kit	SCP3	1
Viton® Seal Repair Kit	SCP3V	1
Repair Kit (screws, springs, standard seals)	KSCP3	1
Repair Kit (screws, springs, seals Viton)	KSCP3V	1

Accessories: see page 1.72

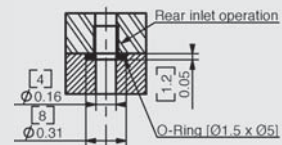


Specifications

	CP-3-C
Grip Force (F _{G+R}) ¹ , 6 bars, Springs Mid-Way, L=0	407 N
Grip Force (F _{0+R}) ² , 0 bars, Springs Mid-Way, L=0	97 N
Total Stroke	16 mm
Weight	0.47 kg
Pressure Range	2-10 bar
Pressure Range with Springs	3-10 bar
Ø Cylinder Bore	40 mm
Displacement	11.7 cm ³
Acuation (open / close)	0.07 s / 0.07 s
Repeatability	± 0.025

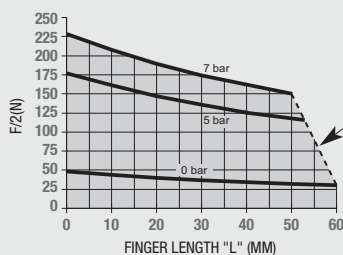
1. Force with spring and air at 6bar
2. Force with spring without air

Grippers are supplied with open side air ports and top manifold air ports plugged. Top manifold sealing dimensions shown.

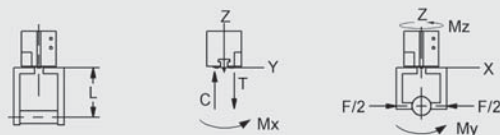


Loading Information

Sum of forces transmitted by the jaws on the workpiece
(Springs compressed at 50% stroke)



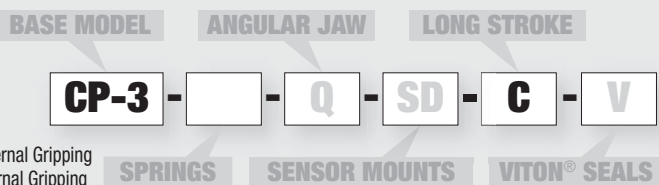
ATTENTION :
DO NOT EXCEED
MAXIMUM EFFECTIVE
FINGER LENGTHS



Loading Capacity*	Static	Dynamic
Maximum Tensile T	500 N	55 N
Maximum Compressive C	675 N	55 N
Maximum Moment M_x	9 Nm	2.5 Nm
Maximum Moment M_y	16 Nm	4 Nm
Maximum Moment M_z	17 Nm	4 Nm

* The Capacities are per set of jaws and are not simultaneous.

How to Order: (Order Accessories separately from Basic Model)



RE External Gripping
RI Internal Gripping

SENSOR ACCESSORIES

	ORDER #	QTY/UNIT
PNP Sensor with 0.3m Output Cable with 90° with M8 connector	D1	1 or 2
NPN Sensor with 0.3m Output Cable with 90° with M8 connector	D10	1 or 2
PNP Sensor with 0.3m Output Cable with M8 connector	D4	1 or 2
NPN Sensor with 0.3m Output Cable with M8 connector	D7	1 or 2
Inductive Sensor Mounting Kit for (mounts 2 sensors) (SD)	SDCP3	1
Inductive PNP Sensor with M8 Connector	OISP-011-C	1 or 2
Inductive NPN Sensor with M8 Connector	OINP-011-C	1 or 2
Quick Disconnect 2 Meter Cable Length	CABL-010	1 or 2

PNEUMATIC ACCESSORIES

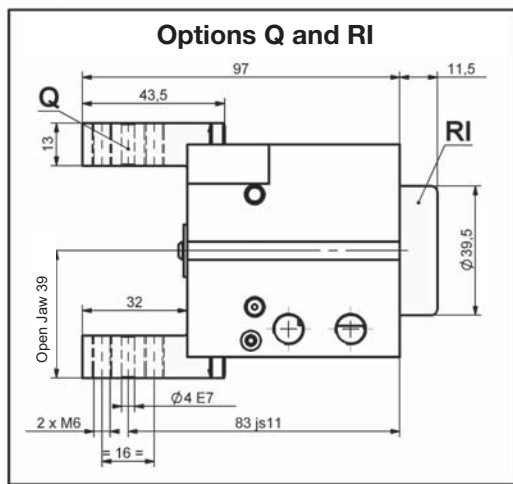
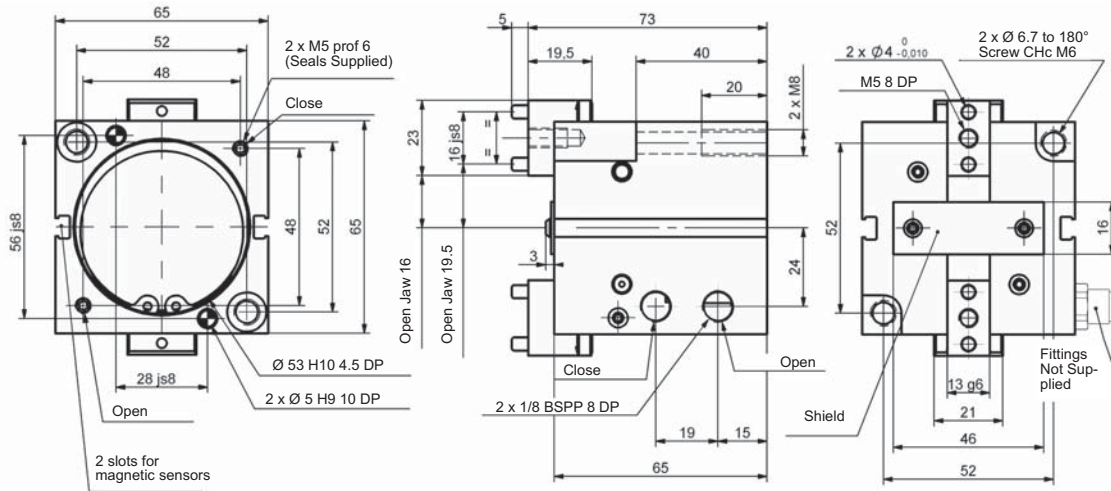
Standard Seal Repair Kit	SCP3	1
Viton® Seal Repair Kit	SCP3V	1
Repair Kit (screws, springs, standard seals)	KSCP3	1
Repair Kit (screws, springs, seals Viton)	KSCP3V	1

Accessories: see page 1.72

PARALLEL GRIPPER CP-4 COMPACT GRIPPER SERIES

CP SERIES

1.66

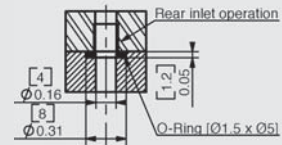


Specifications

	CP-4
Grip Force (F _{6+R}) ¹ , 6 bars, Springs Mid-Way, L=0	1016 N
Grip Force (F _{0+R}) ² , 0 bars, Springs Mid-Way, L=0	222 N
Total Stroke	13 mm
Weight	0.73 kg
Pressure Range	2-10 bar
Pressure Range with Springs	3-10 bar
Ø Cylinder Bore	50 mm
Displacement	24.2 cm ³
Acuation (open / close)	0.07 s / 0.07 s
Repeatability	± 0.025

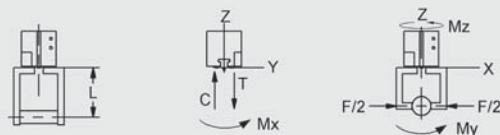
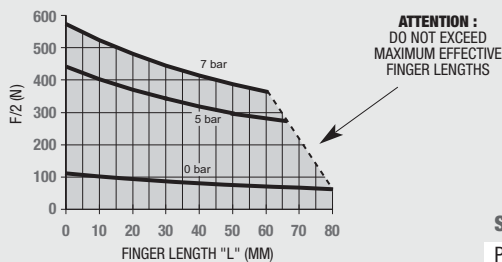
1. Force with spring and air at 6bar
2. Force with spring without air

Grippers are supplied with open side air ports and top manifold air ports plugged. Top manifold sealing dimensions shown.



Loading Information

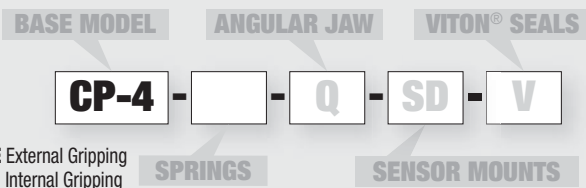
Sum of forces transmitted by the jaws on the workpiece
(Springs compressed at 50% stroke)



Loading Capacity*	Static		Dynamic	
	Static	Dynamic	Static	Dynamic
Maximum Tensile T	740 N	109 N		
Maximum Compressive C	830 N	109 N		
Maximum Moment M_x	23 Nm	6.5 Nm		
Maximum Moment M_y	35 Nm	10 Nm		
Maximum Moment M_z	25 Nm	8 Nm		

* The Capacities are per set of jaws and are not simultaneous.

How to Order: (Order Accessories separately from Basic Model)



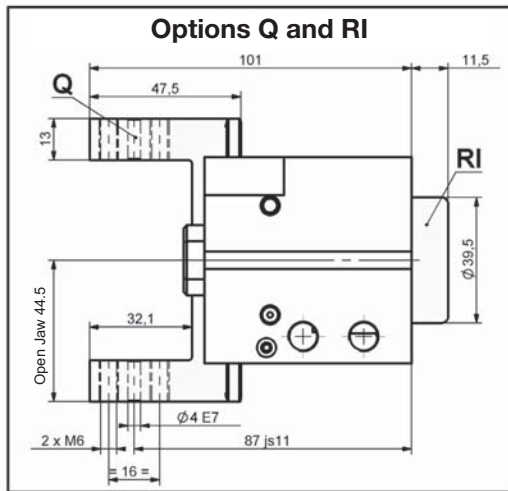
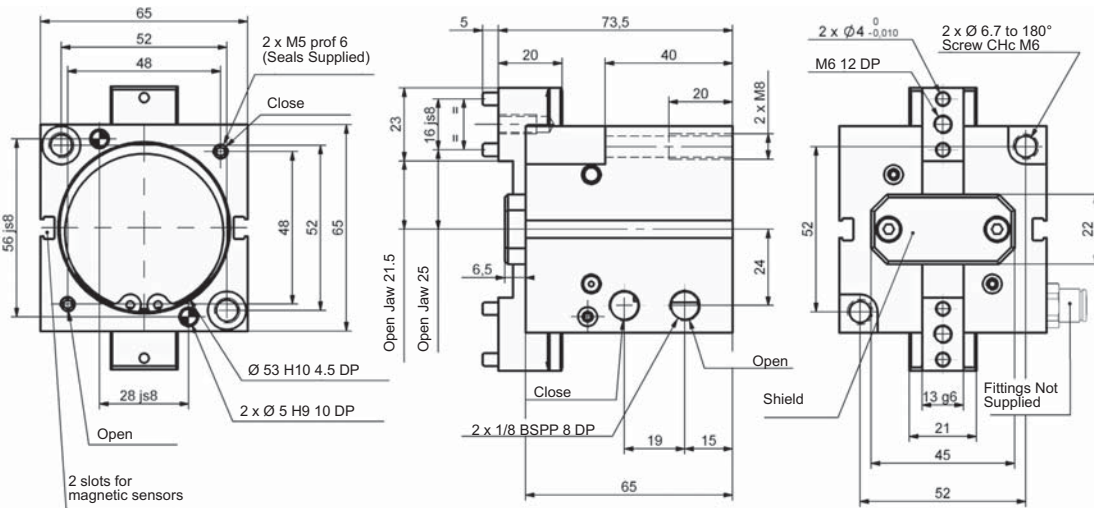
SENSOR ACCESSORIES

	ORDER #	QTY/UNIT
PNP Sensor with 0.3m Output Cable with 90° with M8 connector	D1	1 or 2
NPN Sensor with 0.3m Output Cable with 90° with M8 connector	D10	1 or 2
PNP Sensor with 0.3m Output Cable with M8 connector	D4	1 or 2
NPN Sensor with 0.3m Output Cable with M8 connector	D7	1 or 2
Inductive Sensor Mounting Kit for (mounts 2 sensors) (SD)	SDCP4	1
Inductive PNP Sensor with M8 Connector	OISP-011-C	1 or 2
Inductive NPN Sensor with M8 Connector	OINP-011-C	1 or 2
Quick Disconnect 2 Meter Cable Length	CABL-010	1 or 2

PNEUMATIC ACCESSORIES

Standard Seal Repair Kit	SCP4	1
Viton® Seal Repair Kit	SCP4V	1
Repair Kit (screws, springs, standard seals)	KSCP4	1
Repair Kit (screws, springs, seals Viton)	KSCP4V	1

Accessories: see page 1.72

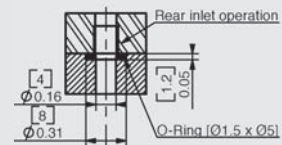


Specifications

	CP-4-C
Grip Force (F _{G+R}) ¹ , 6 bars, Springs Mid-Way, L=0	665 N
Grip Force (F _{0+R}) ² , 0 bars, Springs Mid-Way, L=0	145 N
Total Stroke	20 mm
Weight	0.75 kg
Pressure Range	2-10 bar
Pressure Range with Springs	3-10 bar
Ø Cylinder Bore	50 mm
Displacement	24.2 cm ³
Acuation (open / close)	0.07 s / 0.07 s
Repeatability	± 0.025

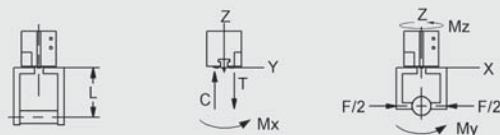
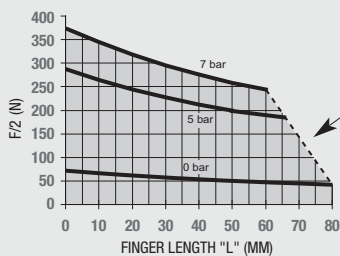
1. Force with spring and air at 6bar
2. Force with spring without air

Grippers are supplied with open side air ports and top manifold air ports plugged. Top manifold sealing dimensions shown.



Loading Information

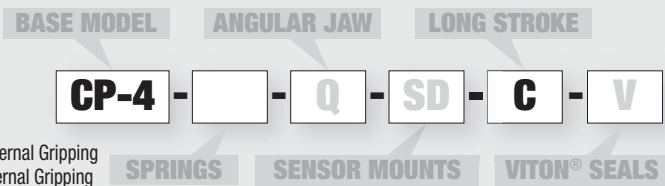
Sum of forces transmitted by the jaws on the workpiece
(Springs compressed at 50% stroke)



Loading Capacity*	Static	Dynamic
Maximum Tensile T	710 N	89 N
Maximum Compressive C	800 N	89 N
Maximum Moment M_x	18 Nm	4.7 Nm
Maximum Moment M_y	30 Nm	7.6 Nm
Maximum Moment M_z	25 Nm	7.6 Nm

* The Capacities are per set of jaws and are not simultaneous.

How to Order: (Order Accessories separately from Basic Model)



RE External Gripping
RI Internal Gripping

SENSOR ACCESSORIES

	ORDER #	QTY/UNIT
PNP Sensor with 0.3m Output Cable with 90° with M8 connector	D1	1 or 2
NPN Sensor with 0.3m Output Cable with 90° with M8 connector	D10	1 or 2
PNP Sensor with 0.3m Output Cable with M8 connector	D4	1 or 2
NPN Sensor with 0.3m Output Cable with M8 connector	D7	1 or 2
Inductive Sensor Mounting Kit for (mounts 2 sensors) (SD)	SDCP4	1
Inductive PNP Sensor with M8 Connector	OISP-011-C	1 or 2
Inductive NPN Sensor with M8 Connector	OINP-011-C	1 or 2
Quick Disconnect 2 Meter Cable Length	CABL-010	1 or 2

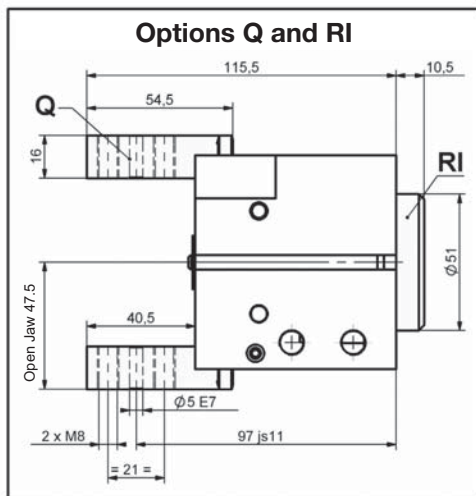
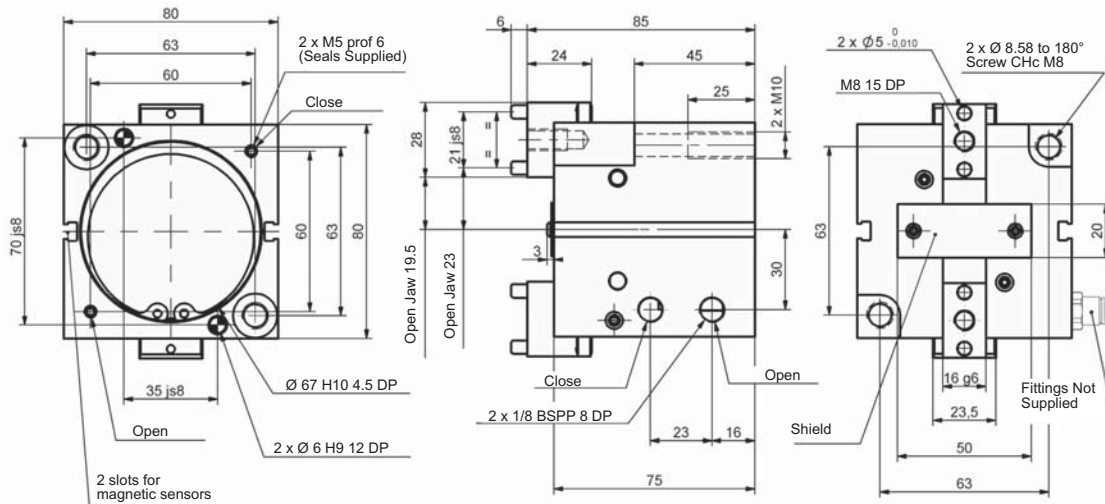
PNEUMATIC ACCESSORIES

Standard Seal Repair Kit	SCP4	1
Viton® Seal Repair Kit	SCP4V	1
Repair Kit (screws, springs, standard seals)	KSCP4	1
Repair Kit (screws, springs, seals Viton)	KSCP4V	1

Accessories: see page 1.72

PARALLEL GRIPPER CP-5 COMPACT GRIPPER SERIES

1.68

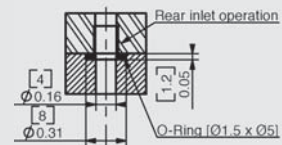


Specifications

	CP-5
Grip Force (F _{G+R}) ¹ , 6 bars, Springs Mid-Way, L=0	1591 N
Grip Force (F _{0+R}) ² , 0 bars, Springs Mid-Way, L=0	322 N
Total Stroke	18 mm
Weight	1.25 kg
Pressure Range	2-10 bar
Pressure Range with Springs	3-10 bar
Ø Cylinder Bore	63 mm
Displacement	53.5 cm ³
Acuation (open / close)	0.09 s / 0.09 s
Repeatability	± 0.025

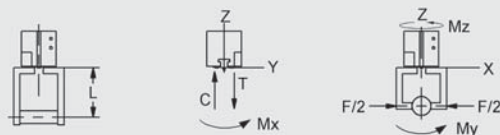
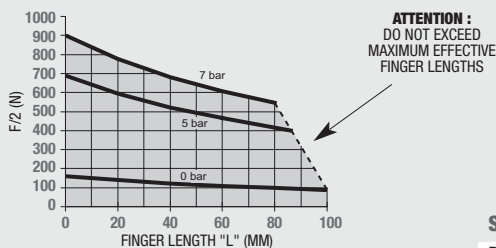
1. Force with spring and air at 6bar
2. Force with spring without air

Grippers are supplied with open side air ports and top manifold air ports plugged. Top manifold sealing dimensions shown.



Loading Information

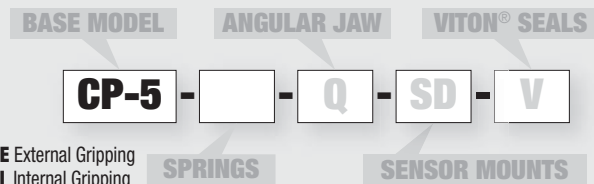
Sum of forces transmitted by the jaws on the workpiece
(Springs compressed at 50% stroke)



Loading Capacity*	Static	Dynamic
Maximum Tensile T	830 N	169 N
Maximum Compressive C	940 N	169 N
Maximum Moment M_x	27 Nm	9 Nm
Maximum Moment M_y	44 Nm	14 Nm
Maximum Moment M_z	30 Nm	10 Nm

* The Capacities are per set of jaws and are not simultaneous.

How to Order: (Order Accessories separately from Basic Model)



RE External Gripping
RI Internal Gripping

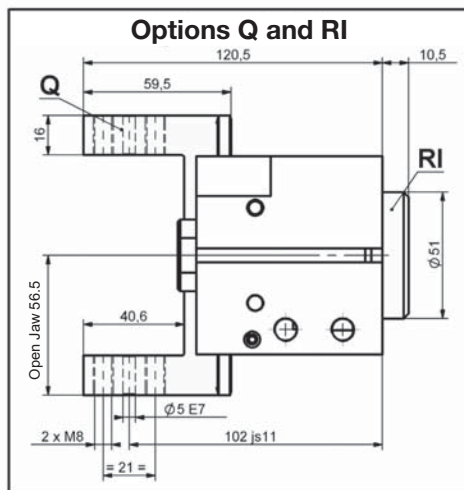
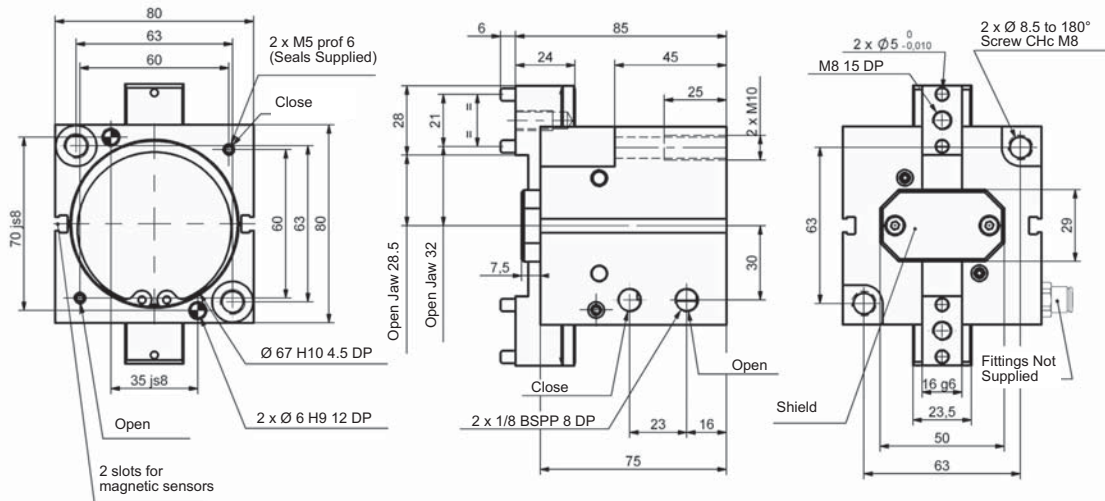
SENSOR ACCESSORIES

	ORDER #	QTY/UNIT
PNP Sensor with 0.3m Output Cable with 90° with M8 connector	D1	1 or 2
NPN Sensor with 0.3m Output Cable with 90° with M8 connector	D10	1 or 2
PNP Sensor with 0.3m Output Cable with M8 connector	D4	1 or 2
NPN Sensor with 0.3m Output Cable with M8 connector	D7	1 or 2
Inductive Sensor Mounting Kit for (mounts 2 sensors) (SD)	SDCP5	1
Inductive PNP Sensor with M12 Connector	OISP-017-C	1 or 2
Inductive NPN Sensor with M12 Connector	OINP-017-C	1 or 2
Quick Disconnect 2 Meter M12 Cable Length	CABL-014	1 or 2

PNEUMATIC ACCESSORIES

Standard Seal Repair Kit	SCP5	1
Viton® Seal Repair Kit	SCP5V	1
Repair Kit (screws, springs, standard seals)	KSCP5	1
Repair Kit (screws, springs, seals Viton)	KSCP5V	1

Accessories: see page 1.72

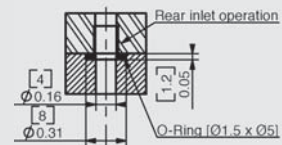


Specifications

	CP-5-C
Grip Force (F _{G+R}) ¹ , 6 bars, Springs Mid-Way, L=0	1081 N
Grip Force (F _{0+R}) ² , 0 bars, Springs Mid-Way, L=0	219 N
Total Stroke	27 mm
Weight	1.27 kg
Pressure Range	2-10 bar
Pressure Range with Springs	3-10 bar
Ø Cylinder Bore	63 mm
Displacement	53.5 cm ³
Acuation (open / close)	0.09 s / 0.09 s
Repeatability	± 0.025

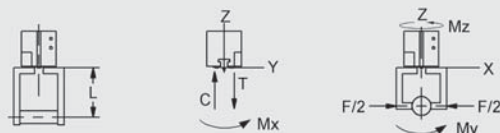
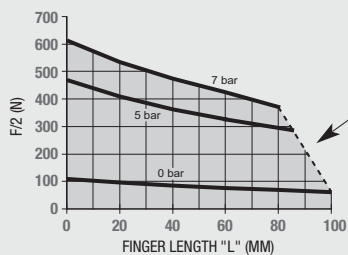
1. Force with spring and air at 6bar
2. Force with spring without air

Grippers are supplied with open side air ports and top manifold air ports plugged. Top manifold sealing dimensions shown.



Loading Information

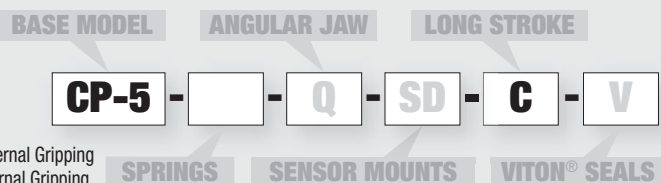
Sum of forces transmitted by the jaws on the workpiece
(Springs compressed at 50% stroke)



Loading Capacity*	Static	Dynamic
Maximum Tensile T	820 N	144 N
Maximum Compressive C	930 N	144 N
Maximum Moment M_x	22 Nm	7 Nm
Maximum Moment M_y	40 Nm	13 Nm
Maximum Moment M_z	30 Nm	10 Nm

* The Capacities are per set of jaws and are not simultaneous.

How to Order: (Order Accessories separately from Basic Model)



RE External Gripping
RI Internal Gripping

SENSOR ACCESSORIES

	ORDER #	QTY/UNIT
PNP Sensor with 0.3m Output Cable with 90° with M8 connector	D1	1 or 2
NPN Sensor with 0.3m Output Cable with 90° with M8 connector	D10	1 or 2
PNP Sensor with 0.3m Output Cable with M8 connector	D4	1 or 2
NPN Sensor with 0.3m Output Cable with M8 connector	D7	1 or 2
Inductive Sensor Mounting Kit for (mounts 2 sensors) (SD)	SDCP5	1
Inductive PNP Sensor with M8 Connector	OISP-017-C	1 or 2
Inductive NPN Sensor with M8 Connector	OINP-017-C	1 or 2
Quick Disconnect 2 Meter Cable Length	CABL-014	1 or 2

PNEUMATIC ACCESSORIES

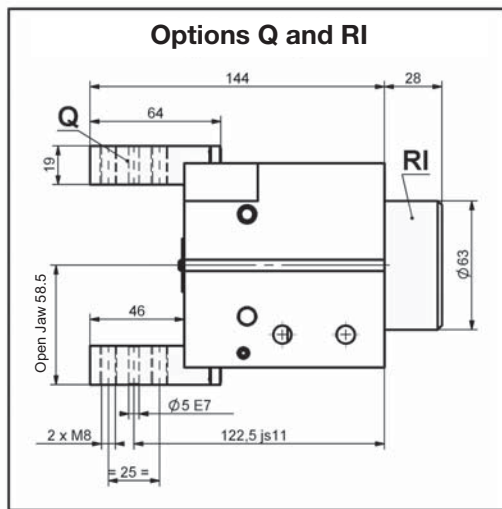
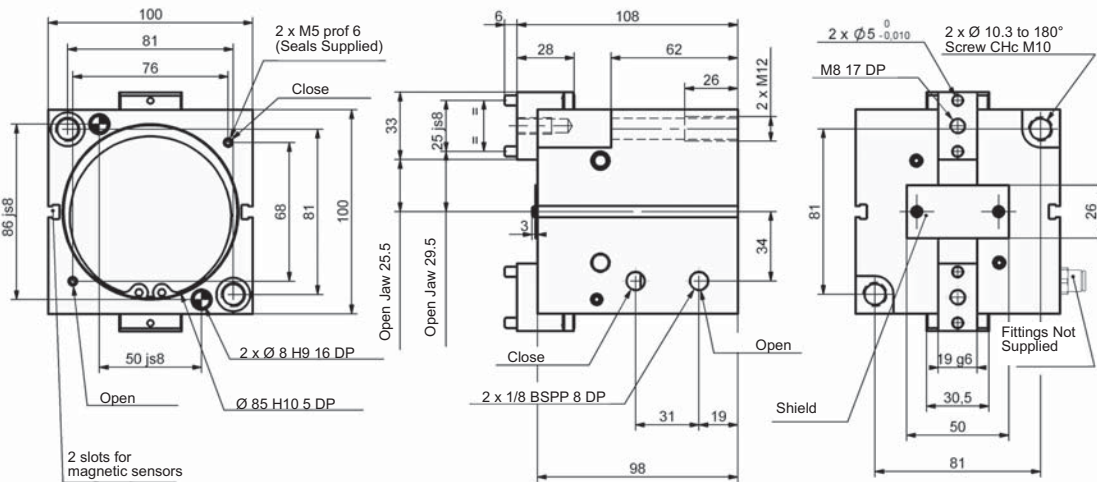
Standard Seal Repair Kit	SCP5	1
Viton® Seal Repair Kit	SCP5V	1
Repair Kit (screws, springs, standard seals)	KSCP5	1
Repair Kit (screws, springs, seals Viton)	KSCP5V	1

Accessories: see page 1.72

PARALLEL GRIPPER CP-6 COMPACT GRIPPER SERIES

CP SERIES

1.70

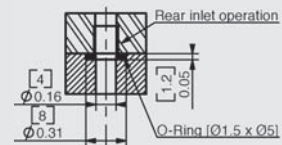


Specifications

	CP-6
Grip Force (F _{6+R}) ¹ , 6 bars, Springs Mid-Way, L=0	2749 N
Grip Force (F _{0+R}) ² , 0 bars, Springs Mid-Way, L=0	711 N
Total Stroke	24 mm
Weight	2.50 kg
Pressure Range	2-10 bar
Pressure Range with Springs	3.5-10 bar
Ø Cylinder Bore	80 mm
Displacement	114.8 cm ³
Acuation (open / close)	0.12 s / 0.12 s
Repeatability	± 0.025

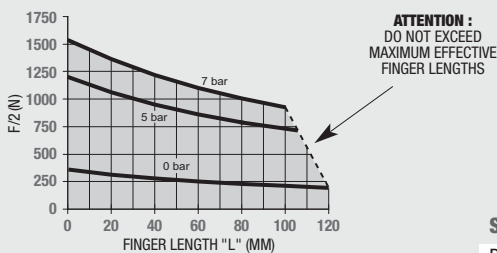
1. Force with spring and air at 6bar
2. Force with spring without air

Grippers are supplied with open side air ports and top manifold air ports plugged. Top manifold sealing dimensions shown.

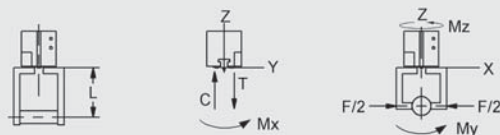


Loading Information

Sum of forces transmitted by the jaws on the workpiece
(Springs compressed at 50% stroke)



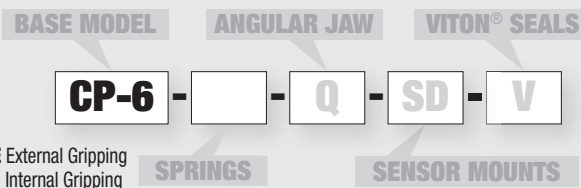
ATTENTION :
DO NOT EXCEED
MAXIMUM EFFECTIVE
FINGER LENGTHS



Loading Capacity*	Static	Dynamic
Maximum Tensile T	1375 N	209 N
Maximum Compressive C	1500 N	209 N
Maximum Moment M_x	48 Nm	16 Nm
Maximum Moment M_y	72 Nm	24 Nm
Maximum Moment M_z	68 Nm	22 Nm

* The Capacities are per set of jaws and are not simultaneous.

How to Order: (Order Accessories separately from Basic Model)



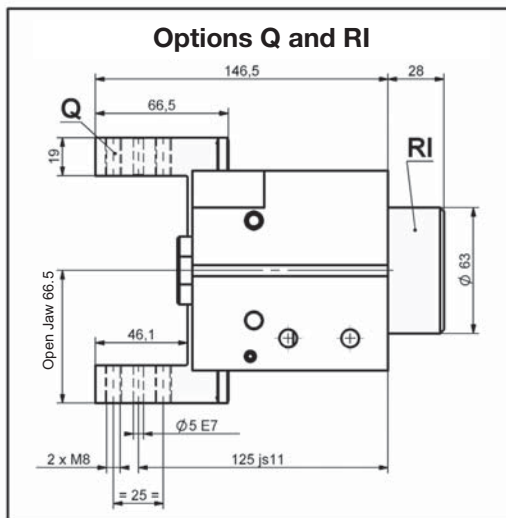
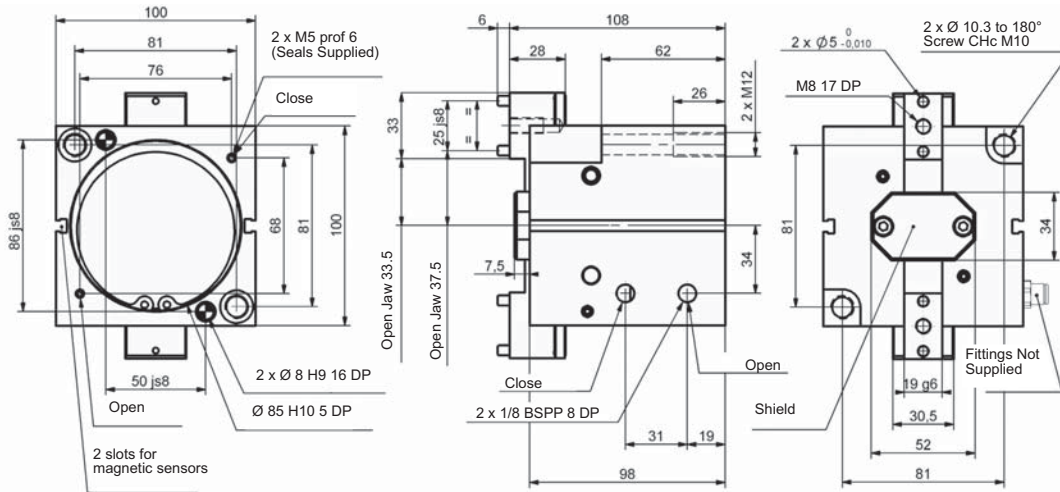
SENSOR ACCESSORIES

	ORDER #	QTY/UNIT
PNP Sensor with 0.3m Output Cable with 90° with M8 connector	D1	1 or 2
NPN Sensor with 0.3m Output Cable with 90° with M8 connector	D10	1 or 2
PNP Sensor with 0.3m Output Cable with M8 connector	D4	1 or 2
NPN Sensor with 0.3m Output Cable with M8 connector	D7	1 or 2
Inductive Sensor Mounting Kit for (mounts 2 sensors) (SD)	SDCP6	1
Inductive PNP Sensor with M12 Connector	OISP-017-C	1 or 2
Inductive NPN Sensor with M12 Connector	OINP-017-C	1 or 2
Quick Disconnect 2 Meter M12 Cable Length	CABL-014	1 or 2

PNEUMATIC ACCESSORIES

Standard Seal Repair Kit	SCP6	1
Viton® Seal Repair Kit	SCP6V	1
Repair Kit (screws, springs, standard seals)	KSCP6	1
Repair Kit (screws, springs, seals Viton)	KSCP6V	1

Accessories: see page 1.72

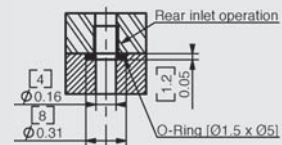


Specifications

	CP-6-C
Grip Force (F _{G+R}) ¹ , 6 bars, Springs Mid-Way, L=0	2092 N
Grip Force (F _{0+R}) ² , 0 bars, Springs Mid-Way, L=0	541 N
Total Stroke	32 mm
Weight	2.56 kg
Pressure Range	2-10 bar
Pressure Range with Springs	3.5-10 bar
Ø Cylinder Bore	80 mm
Displacement	114.8 cm ³
Acuation (open / close)	0.12 s / 0.12 s
Repeatability	± 0.025

1. Force with spring and air at 6bar
2. Force with spring without air

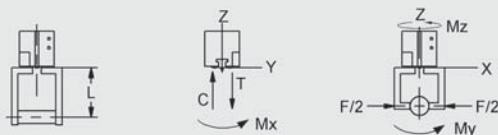
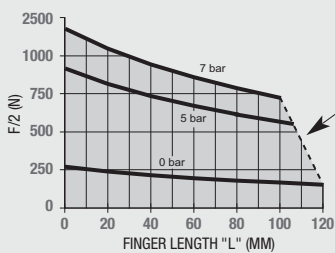
Grippers are supplied with open side air ports and top manifold air ports plugged. Top manifold sealing dimensions shown.



Loading Information

How to Order: (Order Accessories separately from Basic Model)

Sum of forces transmitted by the jaws on the workpiece
(Springs compressed at 50% stroke)



Loading Capacity*	Static		Dynamic	
	T	C	Mx	My
Maximum Tensile T	1340 N	279 N	42 Nm	14 Nm
Maximum Compressive C	1450 N	279 N	70 Nm	23 Nm
Maximum Moment Mx			64 Nm	21 Nm
Maximum Moment My				
Maximum Moment Mz				

* The Capacities are per set of jaws and are not simultaneous.

BASE MODEL ANGULAR JAW LONG STROKE

CP-6 - [] - Q - SD - C - V

RE External Gripping
RI Internal Gripping

SPRINGS SENSOR MOUNTS VITON® SEALS

SENSOR ACCESSORIES

	ORDER #	QTY/UNIT
PNP Sensor with 0.3m Output Cable with 90° with M8 connector	D1	1 or 2
NPN Sensor with 0.3m Output Cable with 90° with M8 connector	D10	1 or 2
PNP Sensor with 0.3m Output Cable with M8 connector	D4	1 or 2
NPN Sensor with 0.3m Output Cable with M8 connector	D7	1 or 2
Inductive Sensor Mounting Kit for (mounts 2 sensors) (SD)	SDCP6	1
Inductive PNP Sensor with M8 Connector	OISP-017-C	1 or 2
Inductive NPN Sensor with M8 Connector	OINP-017-C	1 or 2
Quick Disconnect 2 Meter Cable Length	CABL-014	1 or 2

PNEUMATIC ACCESSORIES

Standard Seal Repair Kit	SCP6	1
Viton® Seal Repair Kit	SCP6V	1
Repair Kit (screws, springs, standard seals)	KSCP6	1
Repair Kit (screws, springs, seals Viton)	KSCP6V	1

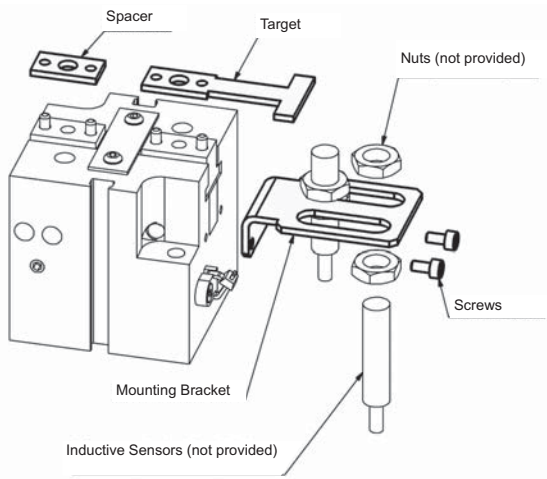
Accessories: see page 1.72

Accessories (SD): Inductive Sensor Mounting Kit

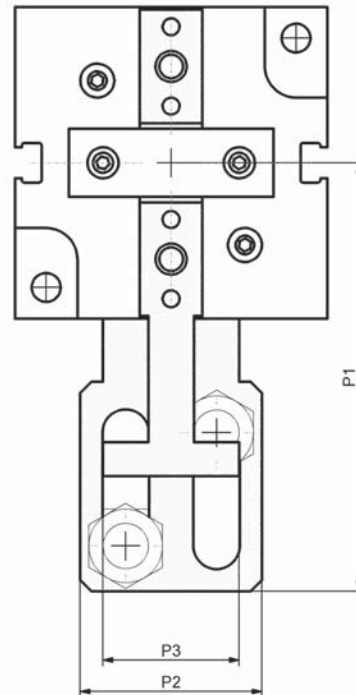
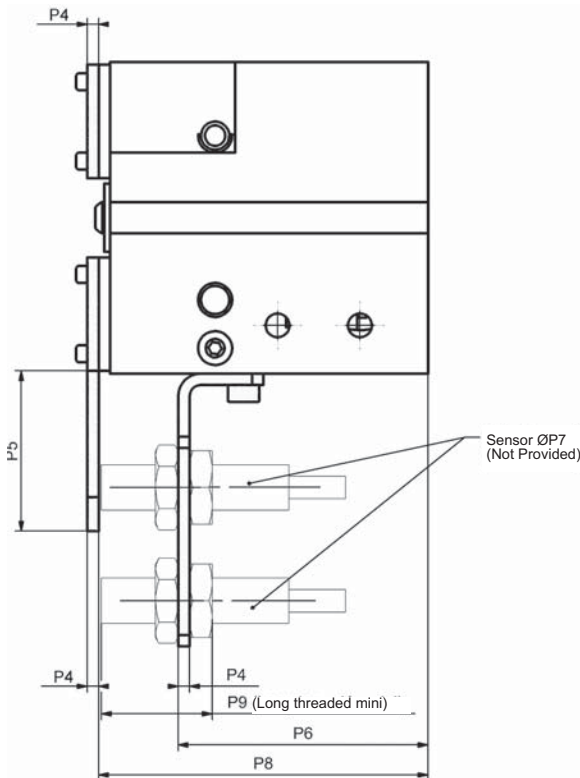
Allows for sensing of two positions: open and closed jaw. The accessory kit (SD) includes: 1 sensor bracket, 1 flag and screws. **Sensors are not provided.**

NOTES:

To be usable, the cylindrical inductive sensors selected by the customer must have tapped their bodies to a minimum depth H (see table below). Depending on their length, the cylindrical inductive sensors can extend below the clamp, requiring provision of suitable housing in the surrounding parts. It is possible to control more than 2 positions using a second attachment (SD).



MODELS	P1	P2	P3	P4	P5	P6	P7	P8	P9	Order #
CP-1	accessory not available									
CP-1-C	accessory not available									
CP-2	58	32	24	2	21.9	35.5	8	48	18	SDCP2
CP-2-C	58	32	24	2	21.9	35.5	8	48	18	SDCP2
CP-3	75.5	32	24	2	28.2	44	8	58	20	SDCP3
CP-3-C	75.5	32	24	2	28.2	44	8	63	24	SDCP3
CP-4	80.5	32	24	2	27	52.5	8	73	26	SDCP4
CP-4-C	80.5	32	24	2	27	52.5	8	73.5	27	SDCP4
CP-5	108	43	28	2.5	38	60	12	85	33	SDCP5
CP-5-C	108	43	28	2.5	38	60	12	85	33	SDCP5
CP-6	118	43	28	2.5	39	76.5	12	108	39	SDCP6
CP-6-C	118	43	28	2.5	39	76.5	12	108	39	SDCP6



Option (V) : Viton® Seals

Gripper with Viton® seals allows for use in high temperature environments [-30 ° C or 150 ° C].



DESIGN NOTES

