

COLLABORATIVE ROBOT GRIPPER

SERIES CSSP

SIZE 40



The Series CSSP pneumatic gripper provides an innovative solution for cobots used in industrial process applications such as machine tool tending, end-of-line packaging, and assembly. Its lightweight and compact design optimises available space and cobot payload, ensuring flexibility, safety, ease of use, and efficiency.

Safety

- Compliant with **ISO TS 15066**.
- Maintains the workpiece even in the event of pressure failure (with spring).

Plug & Play

- Integrated control valves.
- Simple connection with a single pneumatic input and a single electrical power supply.
- Universal mechanical interface compatible with the main cobot makes, including **ABB, UR, and FANUC**
- Intuitive user interface easily integrates with the cobot control system.

Flexibility

- Standard or customised gripper fingers
- The gripper can be powered and controlled directly from the interface on the cobot wrist or through external devices such as the cobot controller, HMI, or PLC.

GENERAL DATA

Type of construction	Self-centering collaborative gripper with T-guide
Operation	Double acting with spring in closing or opening
Size	40 mm
Air connections	M5 (tube Ø6 mm)
Operating temperature	5°C ÷ 50°C
Storage temperature	-10°C ÷ 60°C
Maximum use frequency	3Hz (NC) 1.7Hz (NO)
Repeatability	0.02 mm
Medium	Filtered air in class [7:4:4] according to ISO 8573-1. In case lubricated air is used, we recommend ISOVG32 oil and to never interrupt lubrication.
Protection class	IP40
Compatibility	ROHS and REACH Directives
Certifications	ISO 12100, ISO 10218, ISO TS15066, ISO 4414
Operating pressure	4 ÷ 7 bar
Voltage	24V
Max current	0.25A
Closing force per jaw at 0 mm (6bar)	94N (NC) 62N (NO)
Opening force per jaw at 0 mm (6bar)	76N (NC) 107N (NO)
Stroke per gripper jaw [mm]	6 mm

CODING EXAMPLE

CSSP	-	40	-	NC
CSSP	SERIES			
40	SIZE 40			
NC	OPERATION NC = Double acting with spring in closing NO = Double acting with spring in opening			

COLLABORATIVE ROBOT GRIPPER
SERIES CSSP- DIMENSIONAL CHARACTERISTICS

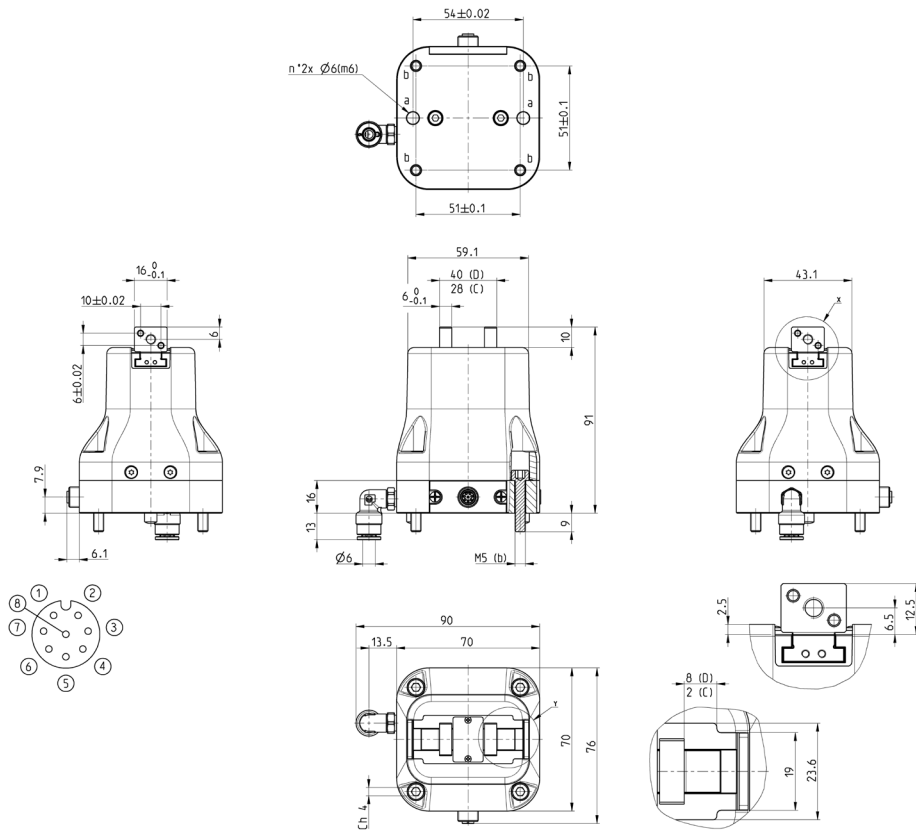
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CSSP gripper, size 40 mm - dimensions

 Supplied with:
 4x screws M5x25

GRIPPERS

3

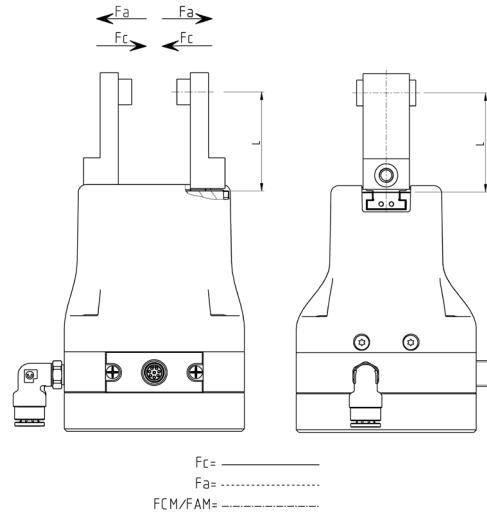


Mod.	Total closing gripping force at 6 bar (N)	Closing gripping force each jaw at 6 bar (N)	Total opening gripping force at 6 bar (N)	Opening gripping force each jaw at 6 bar (N)	Stroke per jaw (mm)	Working pressure (bar)	Working temperature (°C)	Opening time (ms)	Closing time (ms)	Weight [g]
CSSP-40-NC	188	94	152	76	6	4 ÷ 7	5 ÷ 50	115	105	460
CSSP-40-NO	124	62	214	107	6	4 ÷ 7	5 ÷ 50	90	165	440

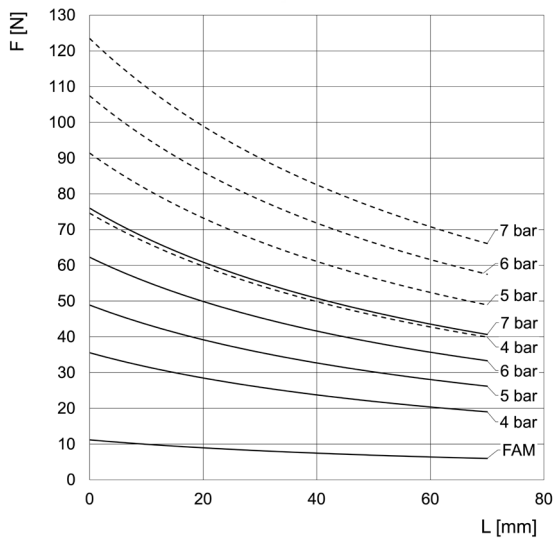
GRIPPING FORCE (F) PER SINGLE JAW

L = distance from gripping point
 FA = opening force
 FC = closing force
 FAM = opening gripping force
 FCM = closing gripping force

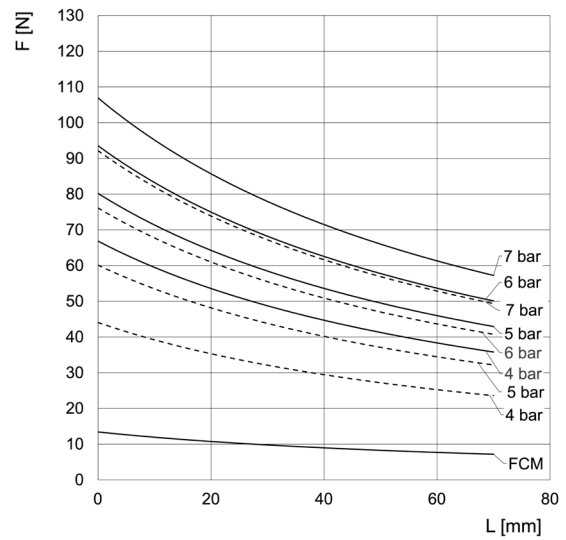
The total gripping force has to be calculated as follows:
Total F = F x 2



CSSP-40-NO



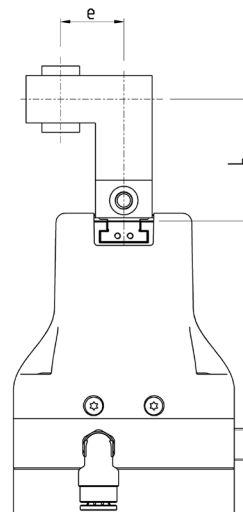
CSSP-40-NC



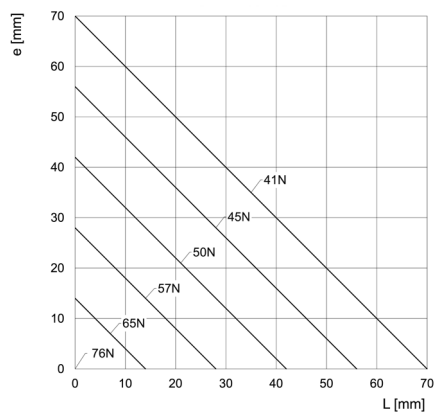
Length vs eccentricity CSSP-40

The total gripping force has to be calculated as follows:
Total F = F x 2

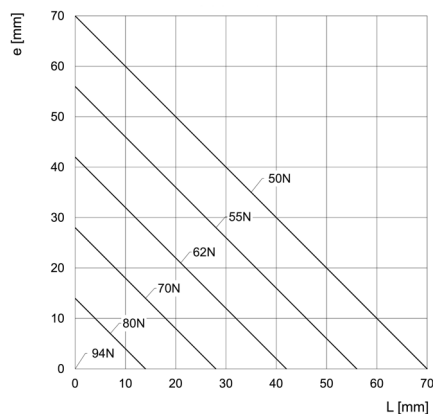
Range of use of the gripper according to gripping point (L) and the arm (e).



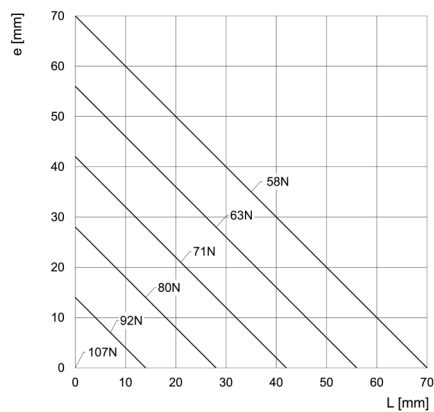
CSSP-40-NC opening



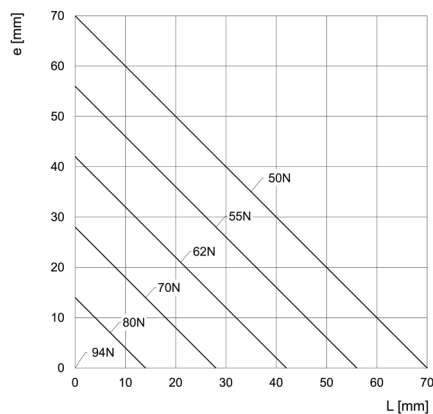
CSSP-40-NC closing



CSSP-40-NO opening



CSSP-40-NO closing



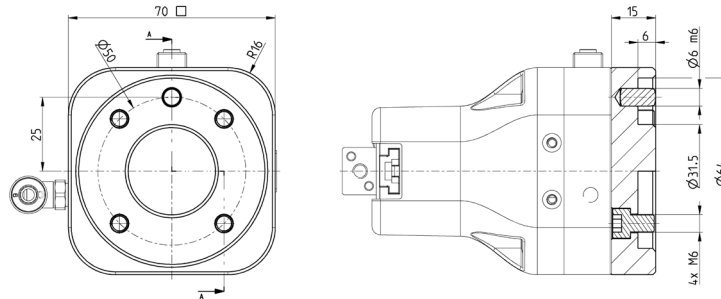
Mechanical robot-gripper interface Series P-CSSP

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In accordance with ISO 9409-1-50-4-M6.



Supplied with:
 1x flange
 4x screws
 2x pin



Mod.	Robot Manufacturer	Robot	Weight (g)
P-CSSP	UNIVERSAL ROBOT	UR3e UR5e UR10e UR16e	140
	ABB	GoFa	140
	FANUC	CRX 5ia CRX 10ia CRX 10ia/L CRX 20ia/L CRX 25ia	140
	Doosan	M0609 M0617 M1013 M1509 H2017 H2515	140
	OMRON	TM5 TM5S TM7S TM12 TM12S TM14 TM14S TM16 TM20	140

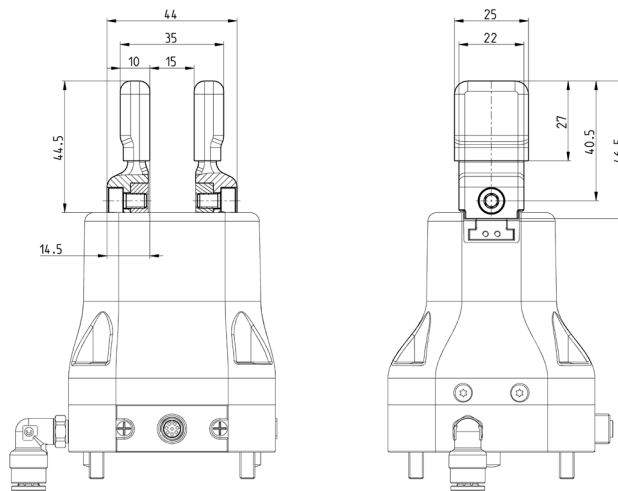
In the table you will find some compatible robots.
 * Refers to the weight of the accessory with screws.

Gripper finger

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Supplied with:
 2x screws
 2x fingers

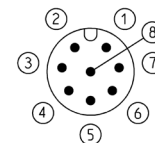
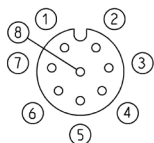
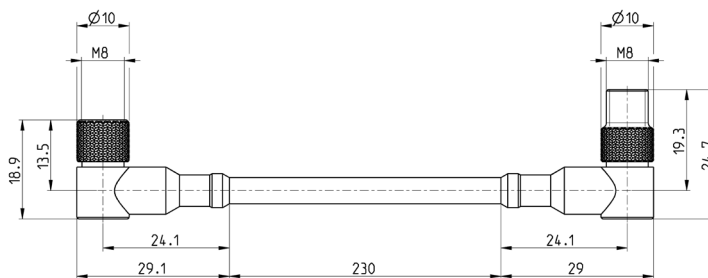


Mod.	Weight (g)
F-CSSP-40	25

* Refers to the weight of a single finger with relative fixing screw.

Connection cable for UR/FANUC

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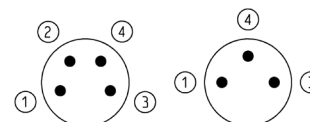
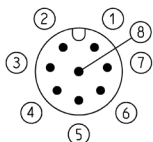
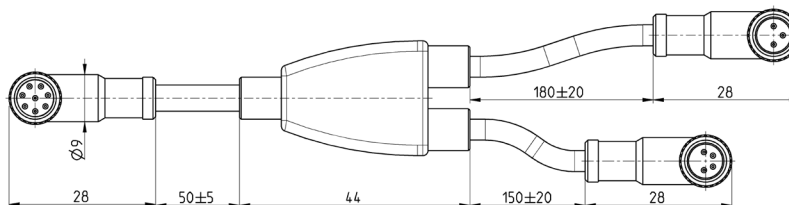
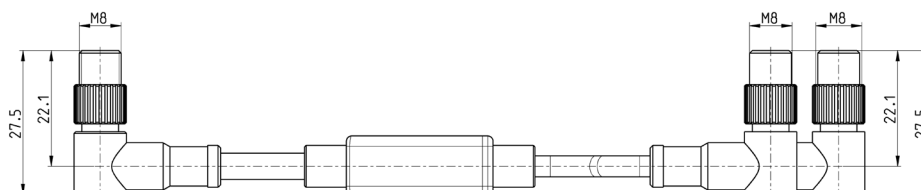
GRIPPERS

3

Mod.	Robot Manufacturer	Robot
CS-DL08MC-E020U	UNIVERSAL ROBOT	UR3e UR5e UR10e UR16e
	FANUC	CRX 5ia CRX 10ia CRX 10ia/L CRX 20ia/L CRX 25ia

Connection cable for ABB

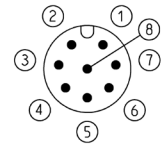
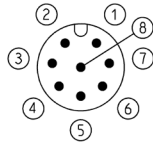
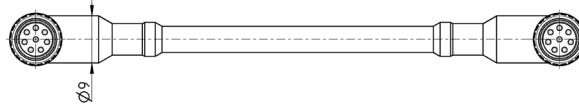
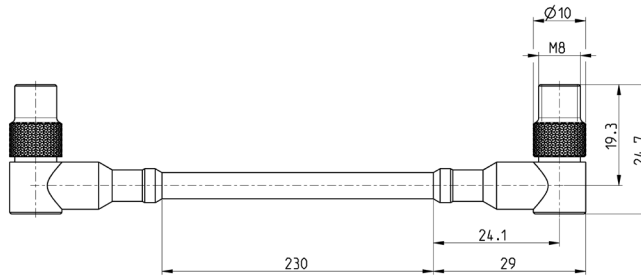
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Mod.	Robot Manufacturer	Robot
CS-DY08MC-E020A	ABB	GoFa

Connection cable for DOOSAN

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* Refer to the **manual** for a correct **TOOL** and **ROBOT** connection.

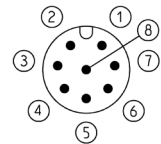
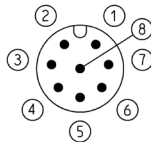
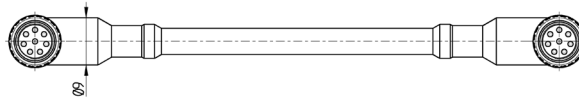
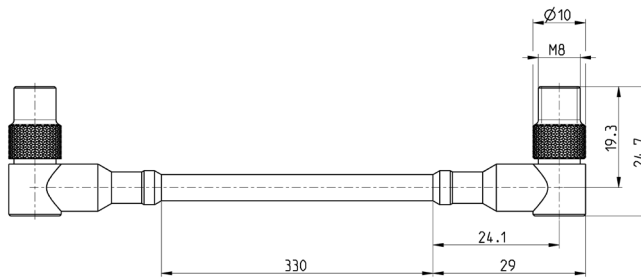
Mod.	Robot Manufacturer	Robot
CS-DN08MC-E020D	DOOSAN	M0609 M0617 M1013 M1509 H2017 H2515

GRIPPERS

3

Connection cable for OMRON

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* Refer to the **manual** for a correct **TOOL** and **ROBOT** connection.

Mod.	Robot Manufacturer	Robot
CS-DN08MC-E0330	OMRON	TM5 TM55 TM75 TM12 TM125 TM14 TM145 TM16 TM20