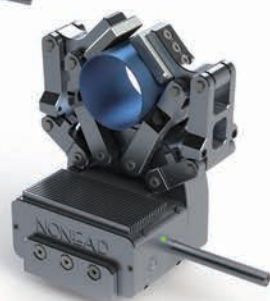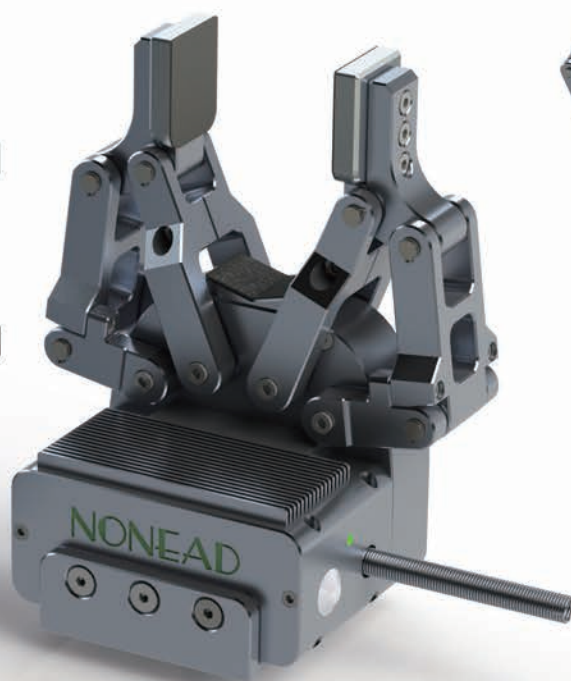# NONEAD

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NONEAD 2-FINGER ROBOT FLEXIBLE GRIPPER - 90 CB4.0

nGripper90_CB4.0 PRODUCT INTRODUCTION

WHAT IS IT?

NONEAD 2-Finger Robot Flexible Gripper - 90 CB4.0

The nGripper90 is a flexible electric gripper specially designed for robots from Universal Robots. It can be used to grip different parts, including parts of different materials and sharps. It could even be something easily breakable like a balloon or an egg. Almost everything which meets the requirements of stroke and load can be held.

The height of nGripper90 is only 145 mm, and the force is adjustable (2N-150N). Its load is 6 KG, and the stroke is 90 mm. The resolution of the force and the position is 1000. Accuracy is ±0.02mm. The built-in security feature ensure the safety of both the operator and the workpiece. When this feature is turned on the gripper can avoid clipping finger or something that is easily breakable during its working. And the gripper can also pick softy things when this feature is turned off. Don't worry about the safety of your operator or workpieces, because the maximum force will be under 68N even the security feature is turned off.

The standard fingers can be used with many different objects. It is also possible to fit custom fingers.

The control is done directly on the Universal Robots user interface.

Features and benefits

The nGripper90 has been designed to fit seamlessly with all UR robots, offering the following:
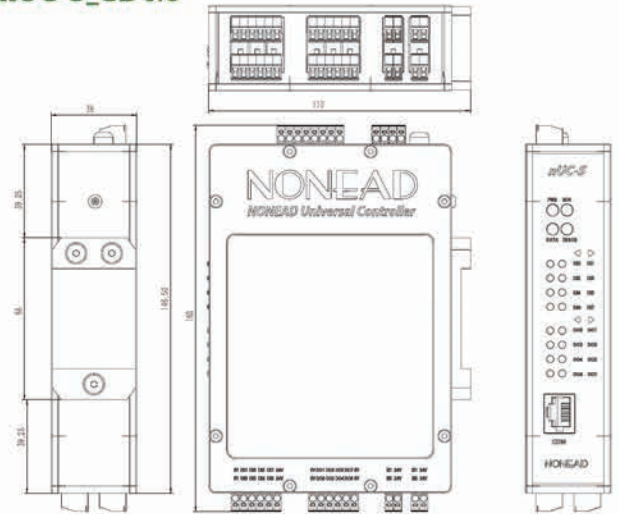
· Plug & Produce
· 90mm stroke
· Mechanical coupling
· TCP/IP connectivity，URCap、Web and software tool management
· You can set open and close parameters and control it with IO
· Multi-function button which can be used to open/close the fixture by click it or activate the freedrive mode of UR robot just by keep pressing it over 2 seconds.
· The standard configuration includes MODBUS-TCP and Ethernet/IP protocols.
· Self-security feature provide the safety of operators
· Take work piece size detection, intelligent choice grab work piece;
· Free IO of the controller can be used as UR's extend IO
· Using nGripper90 is like using UR's own functionality.
· The controller can upgrade the firmware to add new features
· One controller can control two fixtures
· Provide running data for third-part device

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nGripper90_CB4.0 TECHNICAL DATA

nGripper90_CB4.0
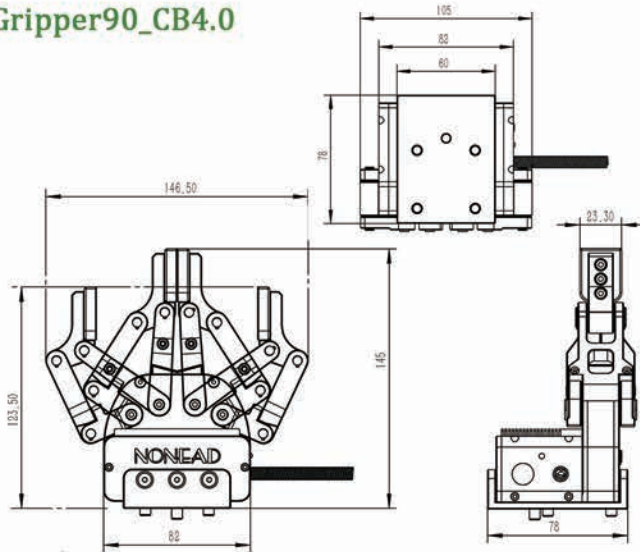
nUC-S_CB4.0

MECHANICAL SPECIFICATIONS

	nGripper90HS_CB4.0	nGripper90HT_CB4.0
ICS CODE	NH0052	NH053
Gripping Force [N] *	2 to 100	2 to 150
Maximum Speed [mm/s]	≤ 90	≤ 55
Workpiece Weight [kg] **	5	6
Finger Stroke [mm]	0 to 90	
Dead-weight [kg]	0.88	
Ambient Temperature [℃]	-10 to +55	
Repeatability [mm] ***	±0.02	
Force Resolution	1000	
Velocity Resolution	1000	
Multi-function Button	Click to close or open the fixture；If press it over 2 seconds, open the controller DO0, and release the controller DO0, the corresponding digital output can be configured	
MCU Type	ST CORTEX-M3	
IP Rating	54	
Communication	RS485	
Power Supply [VDC]	12	
Standby Current [mA]	40	
Maximum Current [A]	1.3	
Maximum Power [W]	20	

* Gripping force is the arithmetic sum of the individual forces acting on the gripper jaws at a distance of P=30 mm.
** Values for friction coefficient μ = 0.1 . The values can be increased in the case of form-fitting.
*** Distribution of the mechanical end positions with 100 successive strokes.

CONTROLLER

	nUC-M_CB4.0	nUC-S_CB4.0	nUC-B_CB4.0
ICS CODE	NH0045	NH0046	NH0047
Digital Input (24VDC Max 500mA PNP)	4	8	24
Digital Output(24VDC Max 500mA NPN)	4	8	24
Analog Input (24VDC Max 500mA PNP)	0	0	2
Analog Output(24VDC Max 500mA NPN)	0	0	2
CAN	0	0	1
USB	0	0	1
Safety Input (24VDC Max 500mA PNP)	2	4	4
Network 10M/100M	1	1	2
COM	1		
TF Card	8G		
Special peripheral interfaces	1 (RS485,FI1/FO1)		
Management Mode	URCap, Web, Configure Software Tools		
Communication Protocol	Modbus-TCP, UR Ethernet/IP, TCP/IP Socket		
Communication Protocol options with controller	Device Net	CANopen, DeviceNet	
MCU Type	ST CORTEX-M7		
IP Rating	30		
Power Supply [VDC]	24 to 48		
Maximum Power [W]	100		
Status LED	Power, Run, Data, Error, Input, Output	Power, Run,Data,Error,Input,Output,nOPLC,Link	
Ambient Temperature [℃]	-10 to +55		
Feedback	Position, Velocity, Force, Trajectory, Temperature, Input Voltage, etc.		

* Standard configuration NH0053 + NH0046 unless the customer specified the product specifically. Different models of the controller, the price is different.

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Specifications subject to change without notice