

Pinza pneumatica per materozze, angolare autocentrante a due griffe serie AA

- A doppio effetto o con molla in apertura (-NO).
- Forza di serraggio molto elevata in rapporto al peso ed alle dimensioni.
- Varie possibilità di fissaggio.
- Sensori magnetici opzionali.
- Grasso alimentare FDA-H1.

2-jaw self-centering angular pneumatic sprue gripper series AA

- Double acting or spring open (-NO).
- Very high gripping force related to the weight and dimensions.
- Different options for fastening.
- Optional magnetic sensors.
- Food grade grease FDA-H1.



AA-22-NO

AA-23-NO

AA-25-NO

AA-26-NO

AA-35-NO

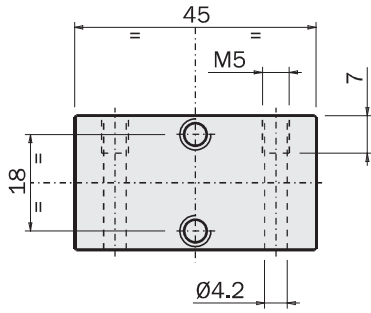
(*)

Il sensore SS3N203-G è incluso
The sensor SS3N203-G is included

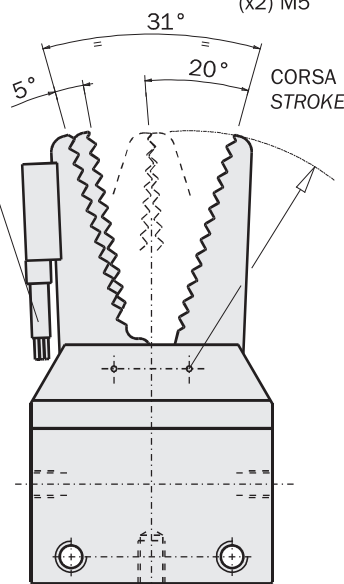
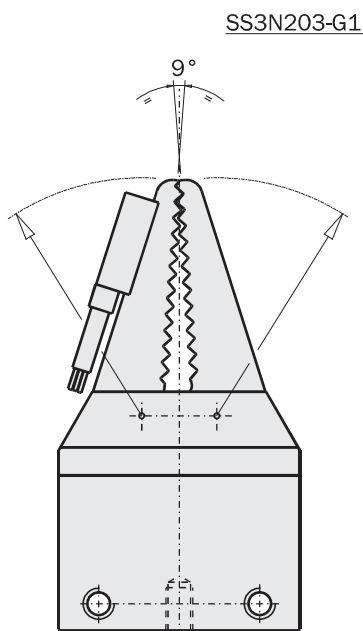
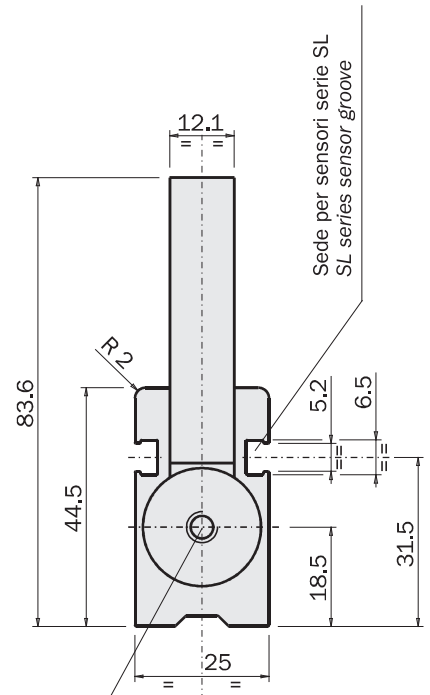
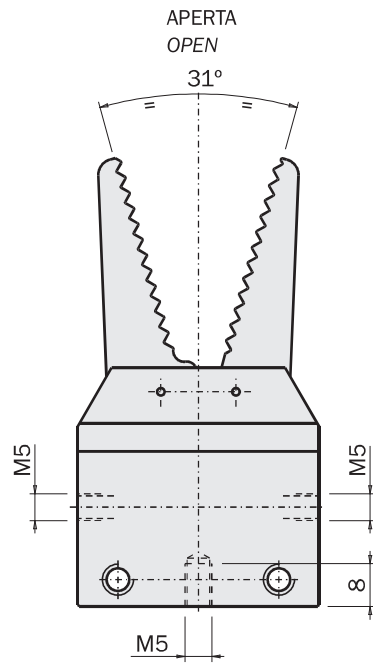
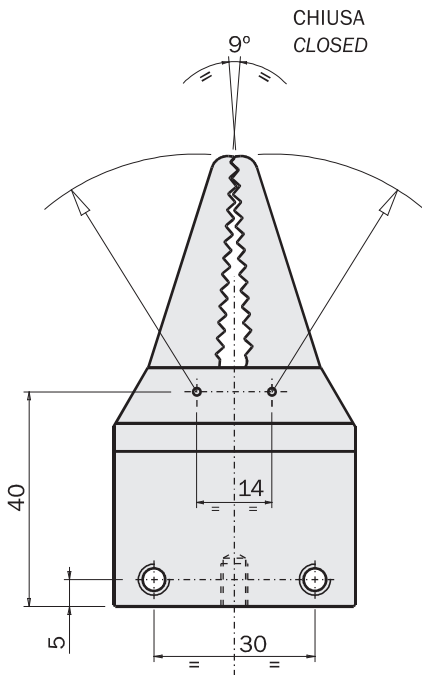
	AA-22	AA-22-NO	AA-23	AA-23-NO AA-25-NO	AA-26	AA-26-NO	AA-35	AA-35-NO
Fluido Medium	Aria compressa a norma ISO 8573-1:2010 [7:4:4] Compressed air in compliance with ISO 8573-1:2010 [7:4:4]							
Pressione di esercizio Pressure range	2.5 ÷ 8 bar							
Temperatura di esercizio Temperature range	5 ÷ 60 °C.							
Corsa Stroke (±1°)	2 x 20°							
Coppia di chiusura per griffa a 6 bar Closing torque at 6 bar each jaw	150 Ncm	125 Ncm	150 Ncm	125 Ncm	150 Ncm	125 Ncm	150 Ncm	125 Ncm
Coppia di chiusura totale a 6 bar Total closing torque at 6 bar	300 Ncm	250 Ncm	300 Ncm	250 Ncm	300 Ncm	250 Ncm	300 Ncm	250 Ncm
Coppia di apertura per griffa a 6 bar Opening torque at 6 bar each jaw	150 Ncm	175 Ncm	150 Ncm	175 Ncm	150 Ncm	175 Ncm	150 Ncm	175 Ncm
Coppia di apertura totale a 6 bar Total opening torque at 6 bar	300 Ncm	350 Ncm	300 Ncm	350 Ncm	300 Ncm	350 Ncm	300 Ncm	350 Ncm
Coppia di apertura per griffa a 0 bar Opening torque at 0 bar each jaw	0 Ncm	25 Ncm	0 Ncm	25 Ncm	0 Ncm	25 Ncm	0 Ncm	25 Ncm
Coppia di apertura totale a 0 bar Total opening torque at 0 bar	0 Ncm	50 Ncm	0 Ncm	50 Ncm	0 Ncm	50 Ncm	0 Ncm	50 Ncm
Frequenza max funzionamento continuativo Maximum working frequency	2 Hz	2 Hz	2 Hz	2 Hz	2 Hz	2 Hz	2 Hz	2 Hz
Consumo d'aria per ciclo Cycle air consumption	5 cm ³	2 cm ³	5 cm ³	2 cm ³	5 cm ³	2 cm ³	5 cm ³	2 cm ³
Tempo di chiusura senza carico Closing time without load	0.02 s	0.02 s	0.02 s	0.02 s	0.02 s	0.02 s	0.02 s	0.02 s
Peso Weight	115 g	115 g	100 g	100 g	120 g	120 g	140 g	140 g

Dimensioni (mm)
Dimensions (mm)

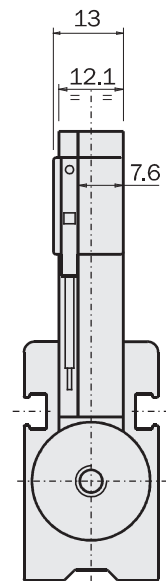
AA-22
AA-22-NO
AA-26
AA-26-NO



AA-22



Ingresso aria
Air connection
(x2) M5

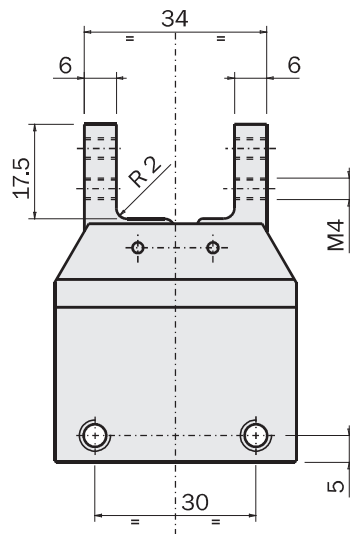
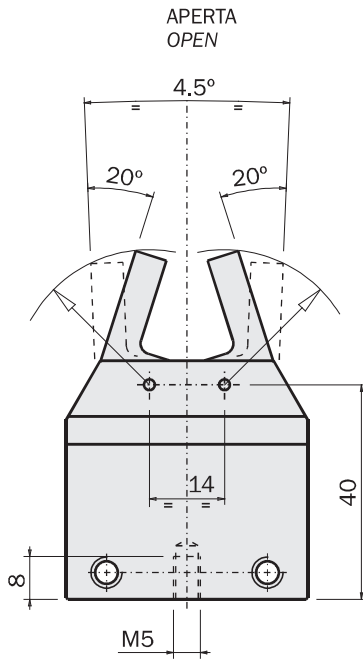
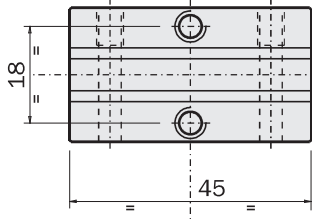


AA-26

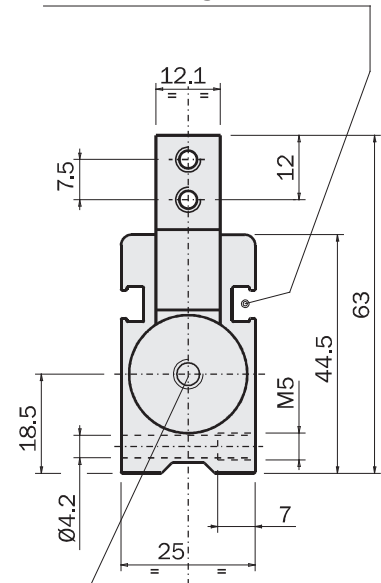


Dimensioni (mm)
Dimensions (mm)

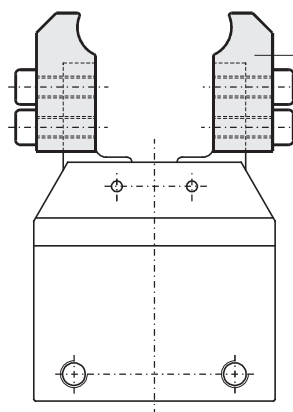
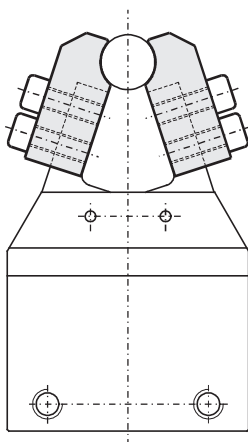
AA-23
AA-23-NO



Sede per sensori serie SL
SL series sensor groove



Ingresso aria
Air connection
(x2) M5



Dito di presa (non fornito)
Gripping tool (not supplied)

FIRST ANGLE
PROJECTION

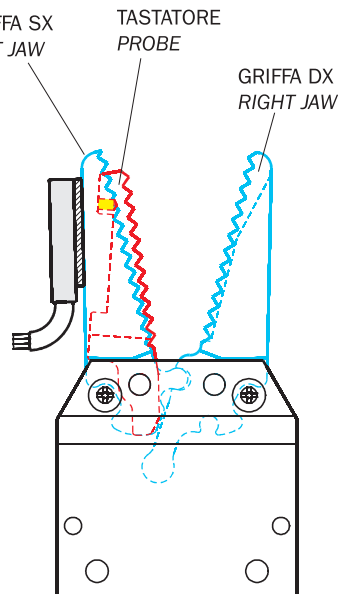
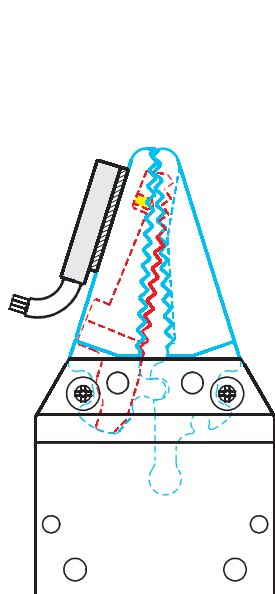
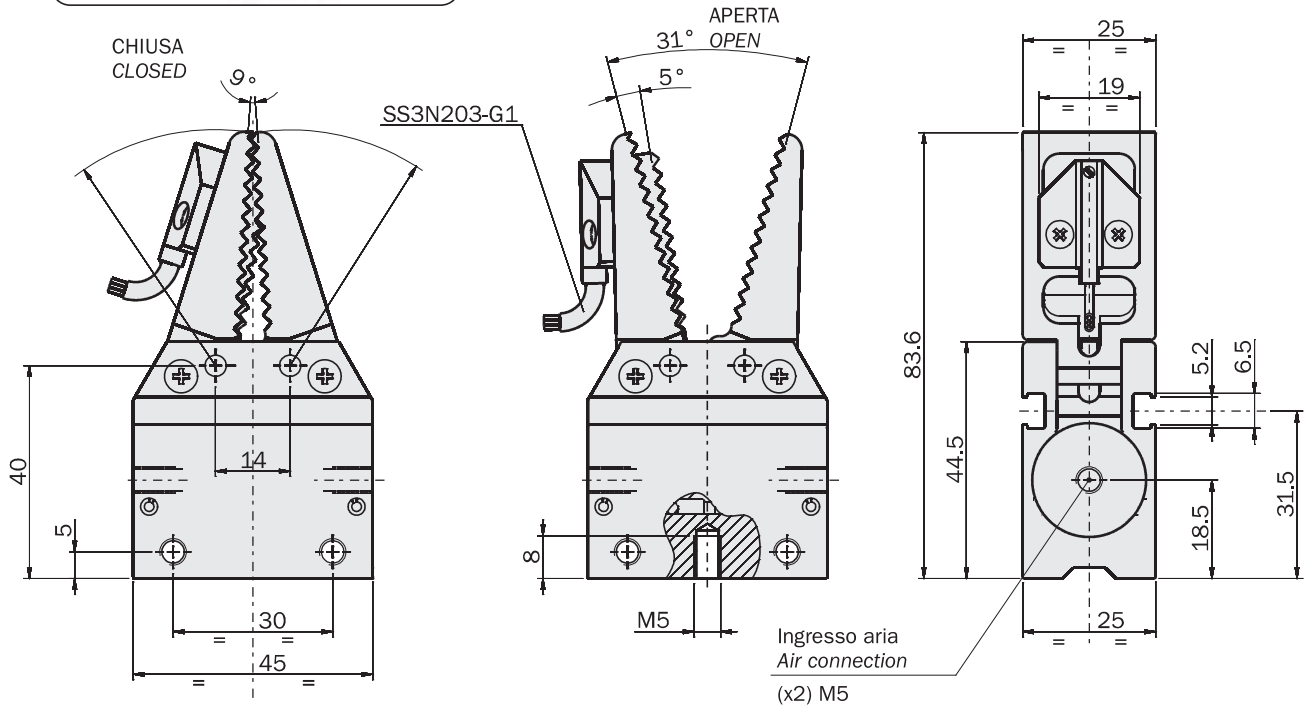
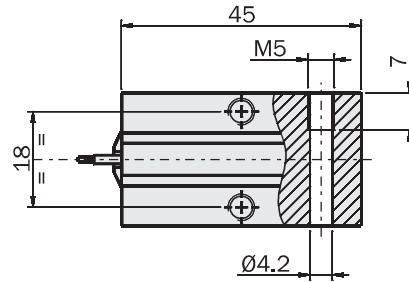
Dimensioni (mm)
Dimensions (mm)

Dita più larghe e scanalate per una presa migliore
Wider, grooved fingers for a better gripping

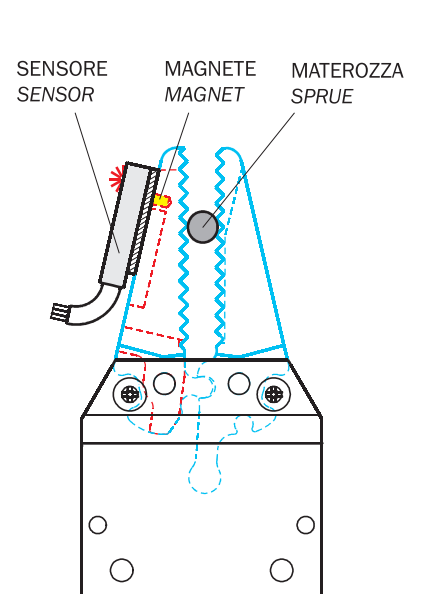
AA-35
AA-35-NO

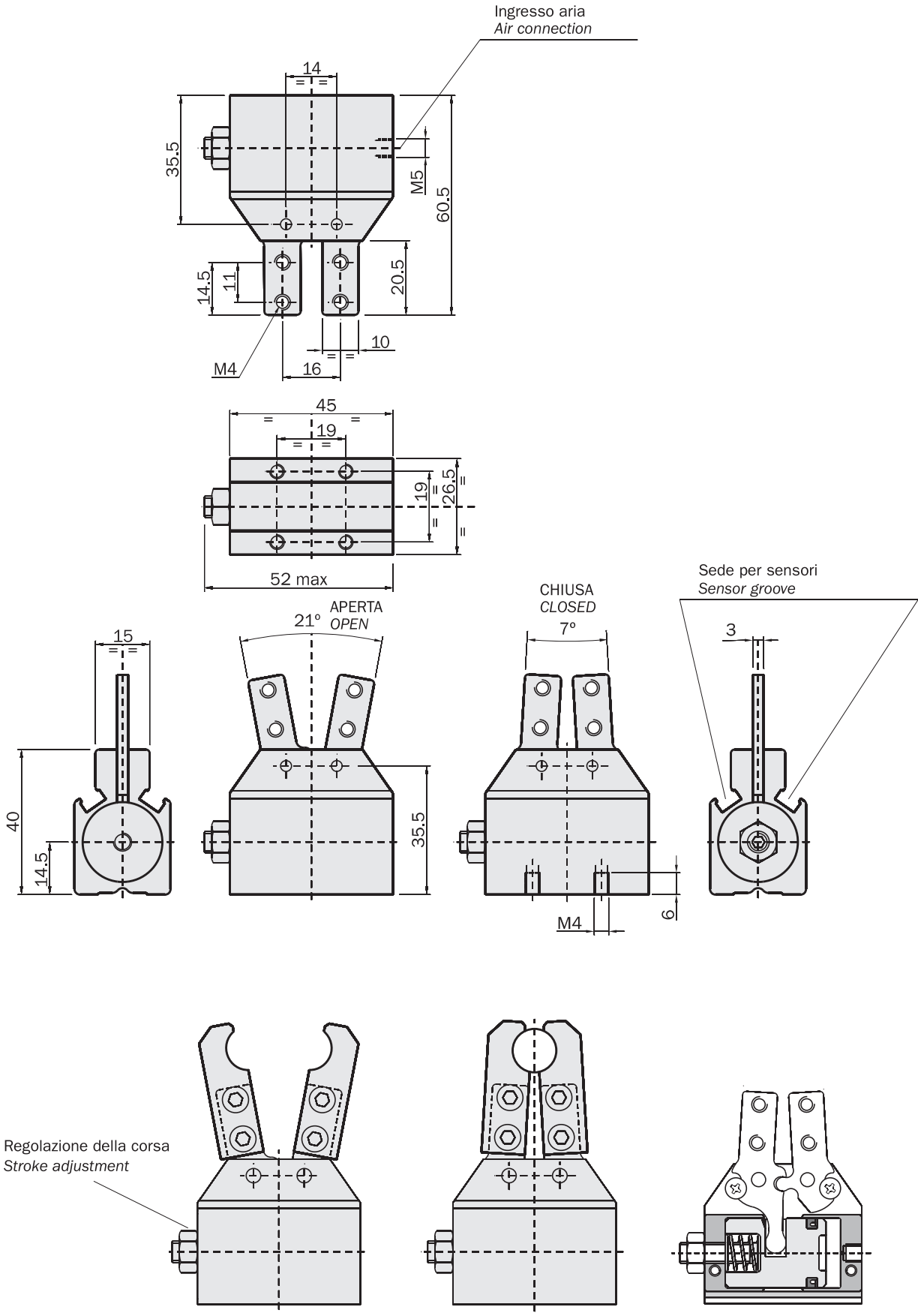


FIRST ANGLE PROJECTION



TASTATORE PROBE





FIRST ANGLE PROJECTION

Unità Rotanti
Rotary Units

Cambia Utensile
Quick Changer

Profili e Staffe
Profiles and Brackets

Pinze
Grippers

Attuatori Lineari
Linear Actuators

Sospensioni
Suspensions

Taglierini
Nippers

Kit-Robot
Robot Kit

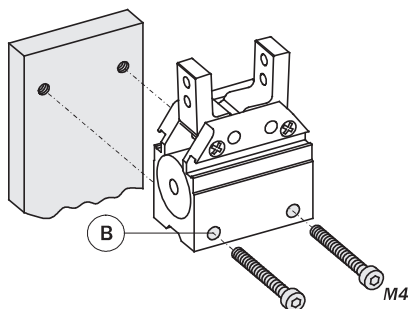
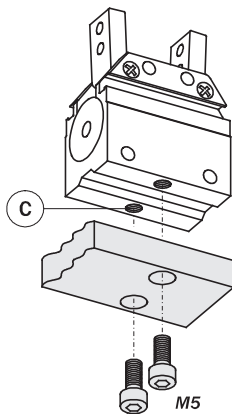
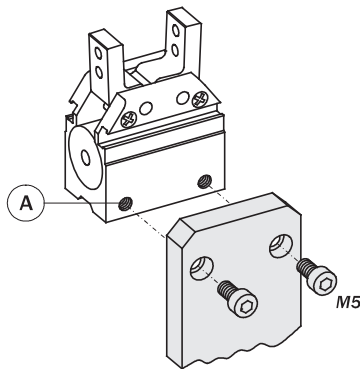
Accessori Opzionali
Options

Sensori
Sensors

Fissaggio della pinza (non AA-25-N0)

Per fissare la pinza lateralmente utilizzare due viti M5 passanti attraverso la piastra e avvitate nel corpo pinza (A).
Il fissaggio laterale può essere anche effettuato mediante due viti M4 passanti attraverso il corpo della pinza (B) e avvitate nei fori filettati della piastra, del dado MFM-058, oppure del dado MFM-070.

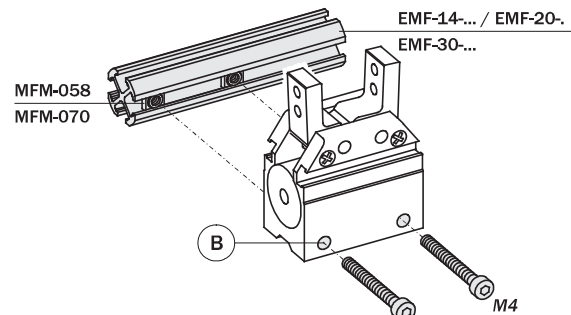
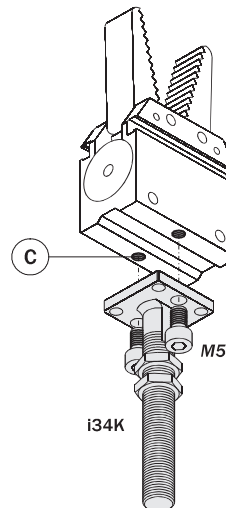
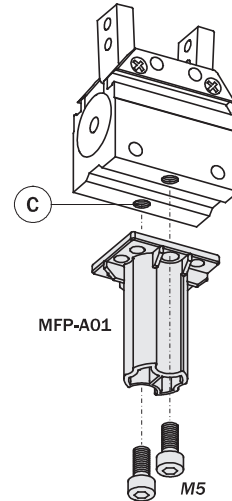
Per fissare la pinza sul fondo usare due viti M5 passanti attraverso la piastra ed avvitate nel corpo pinza (C).
In alternativa sono disponibili le interfacce MFP-A01 e i34K.



Mounting the gripper (Not AA-25-N0)

To mount the gripper sideways, use two M5 screws passing through the plate and screwed into the gripper body (A).
The mounting of the gripper sideways can also be achieved with two M4 screws passing through the gripper body (B) and screwed into the threaded holes of the plate, of nut MFM-058, or of nut MFM-070.

To mount the gripper on its bottom, use two M5 screws passing through the plate and screwed into the gripper body (C).
Alternatively, the interfaces MFP-A01 and i34K are available.



Avvertenze

Evitare il contatto con sostanze corrosive, spruzzi di saldatura, polveri abrasive, che potrebbero danneggiare la funzionalità della pinza.

Per nessun motivo, persone od oggetti estranei devono entrare nel raggio d'azione della pinza.

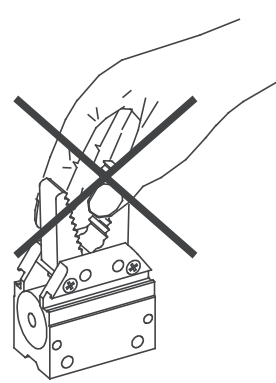
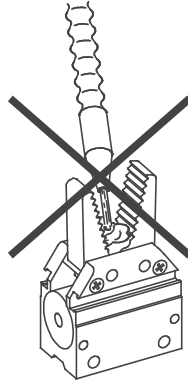
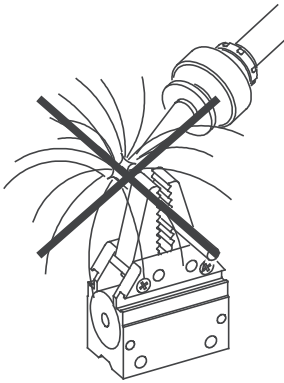
La pinza non deve essere messa in servizio prima che la macchina di cui fa parte sia stata dichiarata conforme alle disposizioni di sicurezza vigenti.

Caution

Avoid the gripper coming into contact with the following media: coolants which cause corrosion, grinding dust or glowing sparks.

Make sure that nobody can place his/her hand between the gripping tools and there are no objects in the path of the gripper.

The gripper must not run before the whole machine, on which it is mounted, complies with the laws or safety norms of your country.

**Connessione pneumatica**

La pinza si alimenta montando raccordi M5.

La pinza è azionata con aria compressa filtrata non necessariamente lubrificata.

La scelta iniziale, lubrificata o non lubrificata, deve essere mantenuta per tutta la vita della pinza.

L'impianto pneumatico deve essere pressurizzato gradualmente, per evitare movimenti incontrollati.

Compressed air feeding

The gripper is fed through M5 fittings.

The gripper is driven by filtered compressed air not necessarily lubricated.

The initial choice on air lubrication (lubricated or not) must be kept for the entire service life of the gripper.

The pneumatic circuit must be pressurised progressively, to avoid uncontrolled movements.



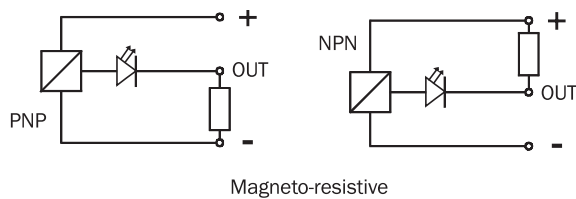
Sensori

Il rilevamento della posizione di lavoro è affidato a uno o più sensori magnetici di prossimità (opzionali), che rilevano la posizione attraverso il magnete sul pistone.

Quindi, per un corretto funzionamento, è da evitare l'impiego in presenza di forti campi magnetici od in prossimità di grosse masse di materiale ferromagnetico.

I sensori utilizzabili sono:

			AA...
SC4N225Y	PNP	Cavo 2.5m 2.5m cable	
SC3N203Y	PNP	Connettore M8 M8 snap plug connector	
SL4N225-G	PNP	Cavo 2.5m 2.5m cable	☑
SL4M225-G	NPN		
SL3N203-G	PNP	Connettore M8 M8 snap plug connector	
SL3M203-G	NPN		
SS4N225-G	PNP	Cavo 2.5m 2.5m cable	☑ (1)
SS4M225-G	NPN		
SS3N203-G	PNP	Connettore M M8 snap plug connector	
SS3M203-G	NPN		



(1)
Utilizzando l'adattatore (SS.004.000) fornito nella confezione K-SENS.

Inoltre i modelli AA-26, AA-26-NO, AA-35 e AA-35-NO sono dotati di serie di un sensore supplementare del tipo SS3N203-G, che si accende solo quando la pinza stringe il carico.



Sensors

The operating position is detected by magnetic proximity sensors (optional) through a magnet placed on the piston.

The use of magnetic proximity sensors is to be avoided in the vicinity of large masses of ferromagnetic material or intense magnetic fields as this may cause detection problems.

The sensors that can be used are:



(1)
By the adapter (SS.004.000) provided with the pack K-SENS.

Moreover, models AA-26, AA-26-NO, AA-35 and AA-35-NO are equipped as standard with an additional sensor, type SS3N203-G, which only switches on when the gripper grips the load.

Circuito pneumatico

Possibili inconvenienti sul circuito di alimentazione dell'aria compressa:

- 1- Oscillazioni di pressione;
- 2- Riempimento pinza vuota all'avvio;
- 3- Velocità di azionamento eccessiva.

Accorgimenti per risolvere i problemi:

- 4- Serbatoio esterno (A);
- 5- Valvola di avviamento progressivo (B);
- 6- Regolatori di flusso (C).

Pneumatic circuit

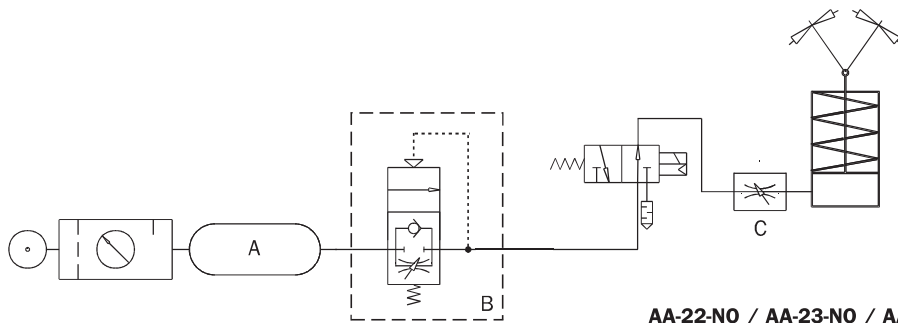
Common issues of a pneumatic system

- 1- Pressure variation;
- 2- Pressurizing with empty cylinders;
- 3- Excessive speed of the jaws.

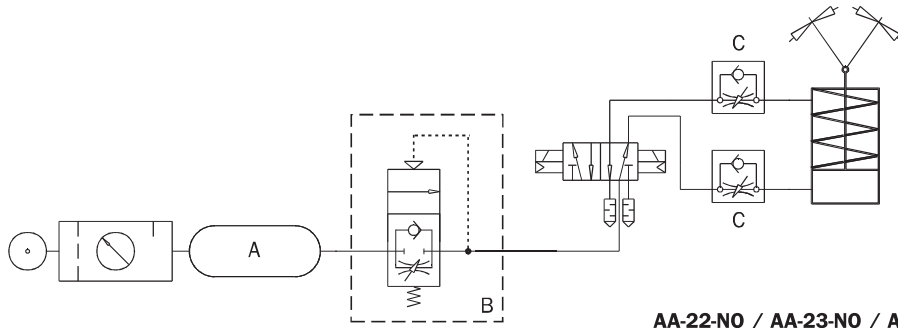
Possible solutions:

- 4- Compressed air storage (A);
- 5- Start-up valve (B);
- 6- Flow controller (C).

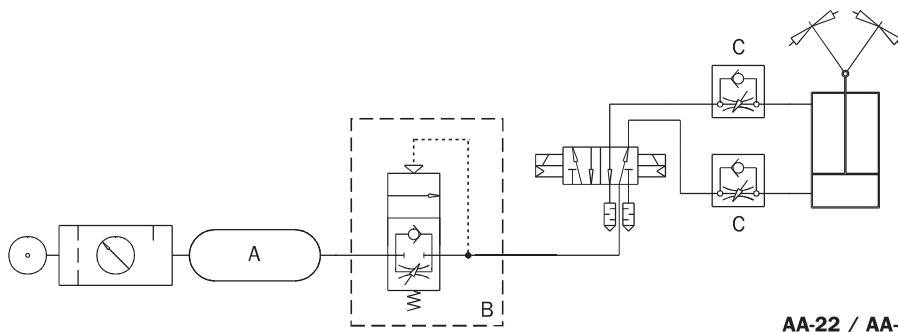
SEMPLICE EFFETTO SINGLE-ACTING



DOPPIO EFFETTO DOUBLE-ACTING



DOPPIO EFFETTO DOUBLE-ACTING



Note
Notes

Lined area for notes with 28 horizontal lines.

Unità Rotanti
Rotary Units

Cambia Utensile
Quick Changer

Profili e Stafie
Profiles and Brackets

**Pinze
Grippers**

Attuatori Lineari
Linear Actuators

Sospensioni
Suspensions

Taglierini
Nippers

Kit-Robot
Robot Kit

Accessori Opzionali
Options

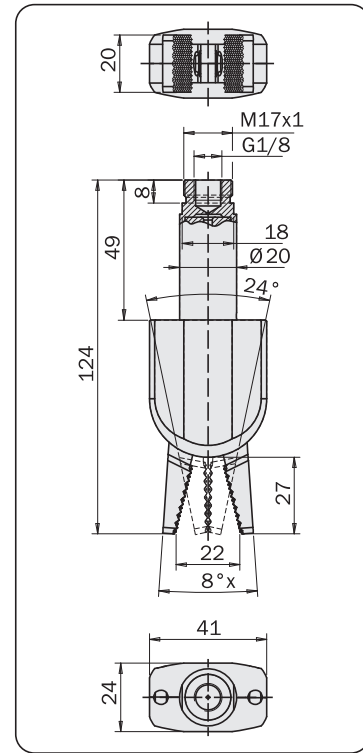
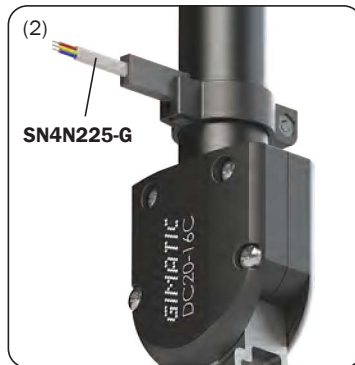
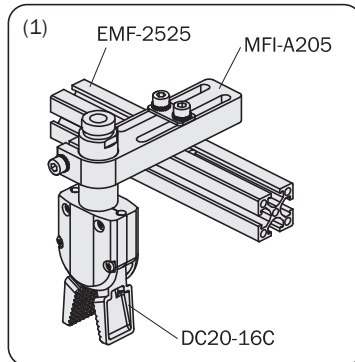
Sensori
Sensors

Pinza pneumatica per materozze, angolare autocentrante a due griffe, serie DC

- Azionamento a semplice effetto con apertura a molla.
- Vari accessori disponibili per il fissaggio (1).
- Griffe in acciaio.
- Corpo composito in plastica, acciaio, alluminio.
- Grasso alimentare FDA-H1.
- Sensori e fascette opzionali (2).

2-jaw self-centering angular pneumatic sprue gripper, series DC

- Single acting with spring opening (1).
- Several mounting accessories.
- Steel jaws.
- Plastic-steel-aluminium composite body.
- FDA-H1 food-grade grease.
- Optional sensors and clamps (2).



	DC20-16C
Fluido <i>Medium</i>	Aria compressa a norma ISO 8573-1:2010 [7:4:4] <i>Compressed air in compliance with ISO 8573-1:2010 [7:4:4]</i>
Pressione di esercizio <i>Pressure range</i>	2 ÷ 8 bar
Temperatura di esercizio <i>Temperature range</i>	5 ÷ 60 °C.
Corsa <i>Stroke</i>	2 x 15°
Coppia di chiusura per griffa a 6 bar <i>Closing torque at 6 bar each jaw</i>	300 Ncm
Coppia di chiusura totale a 6 bar <i>Total closing torque at 6 bar</i>	600 Ncm
Coppia di apertura per griffa a 0 bar <i>Opening torque at 0 bar each jaw</i>	20 Ncm
Coppia di apertura totale a 0 bar <i>Total opening torque at 0 bar</i>	40 Ncm
Frequenza max funzionamento continuativo <i>Maximum working frequency</i>	2 Hz
Consumo d'aria per ciclo <i>Cycle air consumption</i>	3.6 cm ³
Tempo di chiusura <i>Closing time</i>	0.02 s
Peso <i>Weight</i>	148 g

Sensori

La posizione operativa è individuata da un sensore magnetico (opzionale) il quale rileva la posizione della griffa grazie alla presenza di un magnete allocato all'interno del codolo della pinza. Una grande concentrazione di materiale ferromagnetico, oppure intensi campi magnetici, potrebbero essere causa di malfunzionamenti.

Il sensore può essere fissato semplicemente sul codolo della pinza grazie ad una apposita fascetta, come mostrato nella figura sottostante.

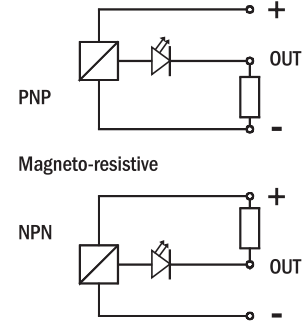


Sensors

The operating position is detected by a magnetic sensor (optional) which detects the position of the jaw thanks to a magnet placed inside the shank of the gripper.

The presence of large masses of ferromagnetic material or intense magnetic fields may cause malfunctions.

The sensor can simply be attached to the shank of the gripper by means of a special clamp, as shown in the figure below.



SN...		
SN4N225-G	PNP	Cavo 2.5m
SN4M225-G	NPN	2.5m cable
SN3N203-G	PNP	Connettore M8
SN3M203-G	NPN	Snap M8 plug connector

Connessione pneumatica

La pinza si alimenta montando un raccordo M5.

La pinza è azionata con aria compressa filtrata non necessariamente lubrificata.

La scelta iniziale, lubrificata o non lubrificata, deve essere mantenuta per tutta la vita della pinza.

L'impianto pneumatico deve essere pressurizzato gradualmente, per evitare movimenti incontrollati.

Nella figura sottostante un esempio delle principali tipologie di raccordi che possono essere montati sulla pinza in oggetto. Consultare il capitolo "raccordi" per ulteriori informazioni.

Compressed air feeding

The gripper is fed through an M5 fitting.

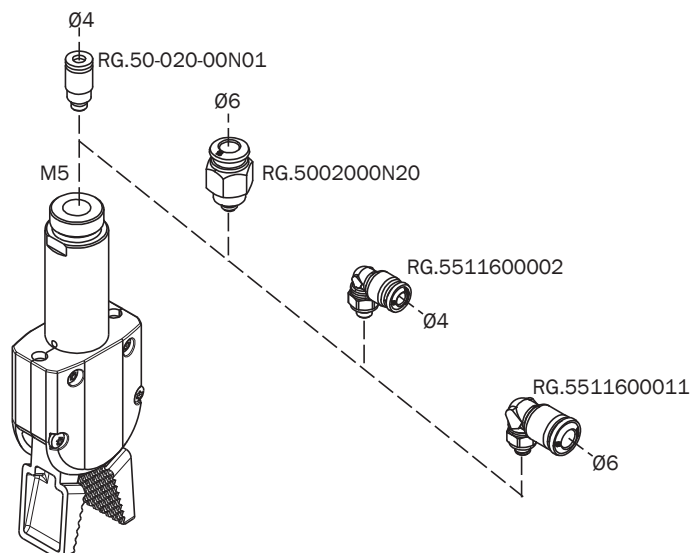
The gripper is driven by filtered compressed air not necessarily lubricated.

The initial choice on air lubrication (lubricated or not) must be kept for the entire service life of the gripper.

The pneumatic circuit must be pressurised progressively, to avoid uncontrolled movements.

The figure below shows the main types of fittings that can be mounted on the gripper in question.

For further information, refer to the "Fittings" section.



Circuito pneumatico

Possibili inconvenienti sul circuito di alimentazione dell'aria compressa:

- 1- Oscillazioni di pressione;
- 2- Riempimento pinza vuota all'avvio;
- 3- Velocità di azionamento eccessiva.

Accorgimenti per risolvere i problemi:

- 1- Serbatoio esterno (A);
- 2- Valvola di avviamento progressivo (B);
- 3- Regolatori di flusso (C).

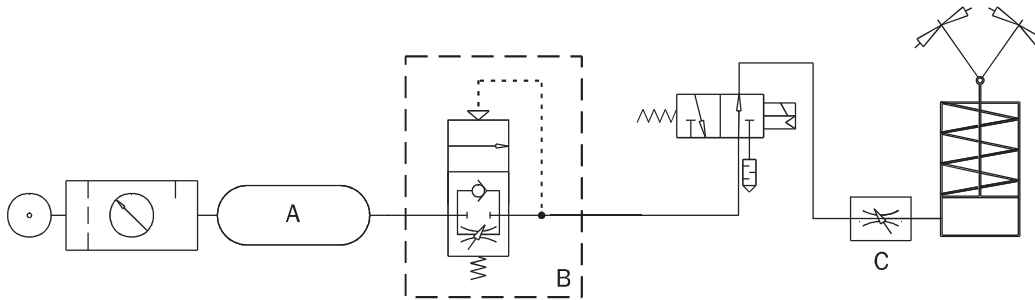
Pneumatic circuit

Possible problems on a compressed air circuit:

- 1- Pressure variation;
- 2- Pressurizing with empty cylinders;
- 3- Excessive speed of the jaws.

Possible solutions:

- 1- Compressed air storage (A);
- 2- Start-up valve (B);
- 3- Flow controller (C).



Avvertenze

Evitare il contatto con sostanze corrosive, spruzzi di saldatura, polveri abrasive, che potrebbero danneggiare la funzionalità della pinza.

Per nessun motivo, persone od oggetti estranei devono entrare nel raggio d'azione della pinza.

La pinza non deve essere messa in servizio prima che la macchina di cui fa parte sia stata dichiarata conforme alle disposizioni di sicurezza vigenti.

Cautions

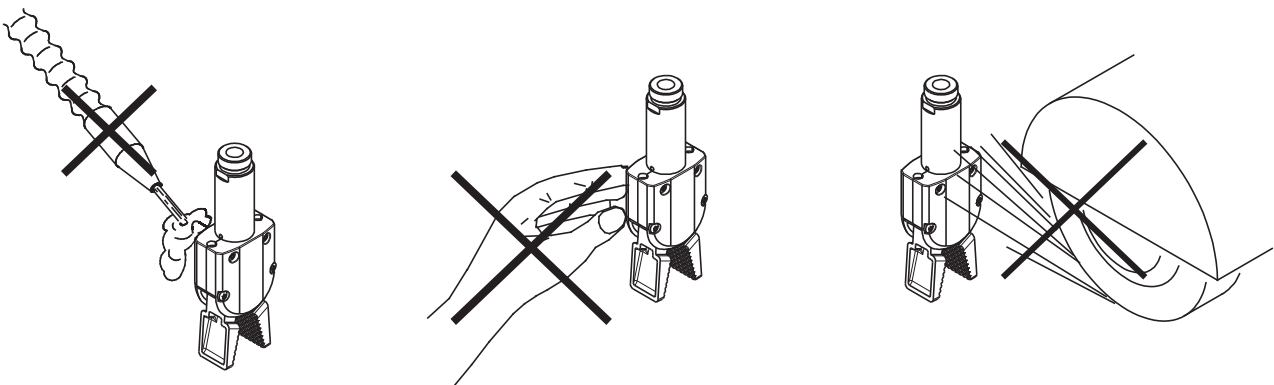
Avoid the gripper coming into contact with the following media: coolants which cause corrosion, grinding dust or glowing sparks. Make sure that nobody can place his/her hand between the gripping tools and there are no objects in the path of the gripper. The gripper must not run before the whole machine, on which it is mounted, complies with the laws or safety norms of your country.

Manutenzione

Esente da manutenzione per 1 milione di cicli.

Maintenance

Maintenance-free for 1 million cycles.

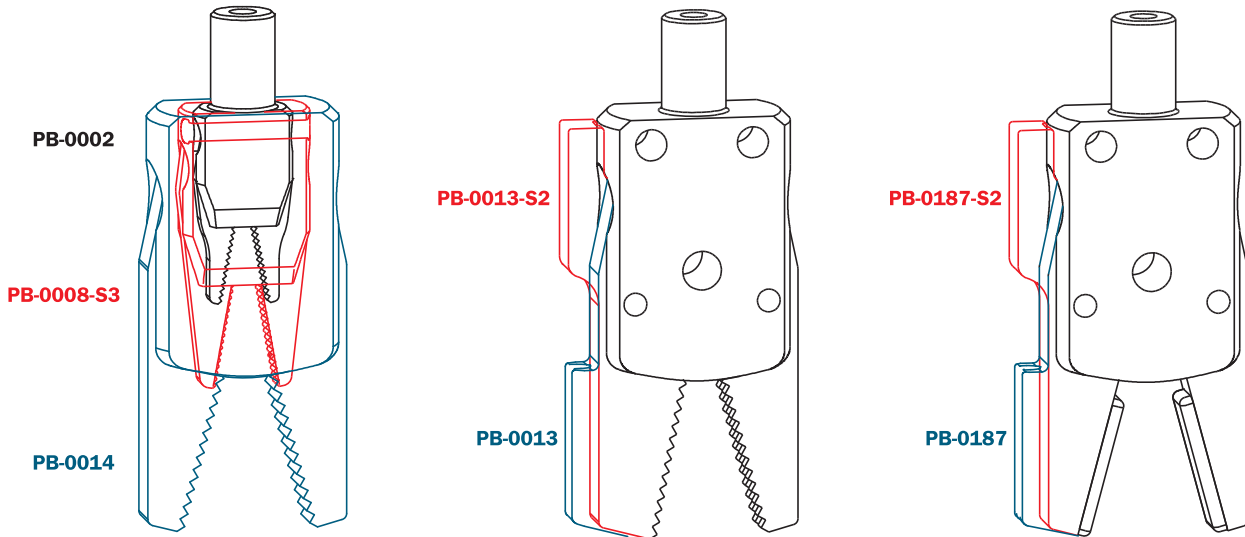


Pinza pneumatica per materozze, angolare non autocentrante a due griffe serie PB

- Grasso alimentare FDA-H1.
- Tre taglie disponibili con alesaggio 6mm, 8mm, 12mm.
- Sensore sulla punta, o sul fondo della griffa.
- Griffi con denti (per presa materozze), o con pastiglie (per contatto morbido).
- Griffi in alluminio o acciaio.

2-jaw non-selfcentering angular pneumatic sprue gripper series PB

- FDA-H1 food-grade grease.
- Three available sizes with piston bore 6mm, 8mm, 12mm.
- Sensor on the tip of the jaw, or on the tail.
- Jaws with teeth (for sprue gripping), or with pads (for soft contact).
- Jaws in aluminium or steel.



	PB-0002	NEW PB-0007-S3	NEW PB-0008-S3	PB-0013	PB-0013-S2	PB-0014	PB-0170	PB-0015	PB-0017	PB-0140	PB-0150	PB-0160	PB-0180-S2	PB-0182	PB-0187	PB-0187-S2
Fluido Medium	Aria compressa a norma ISO 8573-1:2010 [7:4:4] Compressed air in compliance with ISO 8573-1:2010 [7:4:4]															
Pressione di esercizio Pressure range	4 ÷ 8 bar															
Temperatura di esercizio Temperature range	5 ÷ 60 °C.															
Peso Weight	7 g	15 g	15 g	55 g	50 g	50 g	50 g	50 g	45 g	75 g	75 g	60 g	75 g	75 g	58 g	58 g
Corsa Stroke (±2°)	2x10°			2x15°			2x16°			2x15°						
Consumo d'aria per ciclo Cycle air consumption	0.3 cm ³			1.2 cm ³			1.5 cm ³			1.2 cm ³						
Coppia di serraggio per griffa in chiusura a 6 bar Closing gripping torque at 6 bar each jaw	10 Ncm	24 Ncm		80 Ncm			60 Ncm			80 Ncm						
Coppia per griffa in apertura (a 6 bar) Opening gripping torque (at 6 bar) each jaw	1 Ncm	2 Ncm		5 Ncm			5 Ncm (25 Ncm)			5 Ncm						
Frequenza max funzionamento continuativo Maximum working frequency	3 Hz															
Tempo di chiusura senza carico Closing time without load	0.01 s															

Unità Rotanti
Rotary Units

Cambia Utensile
Quick Changer

Profili e Staffe
Profiles and Brackets

Pinze
Grippers

Attuatori Lineari
Linear Actuators

Sospensioni
Suspensions

Taglierini
Nippers

Kit-Robot
Robot Kit

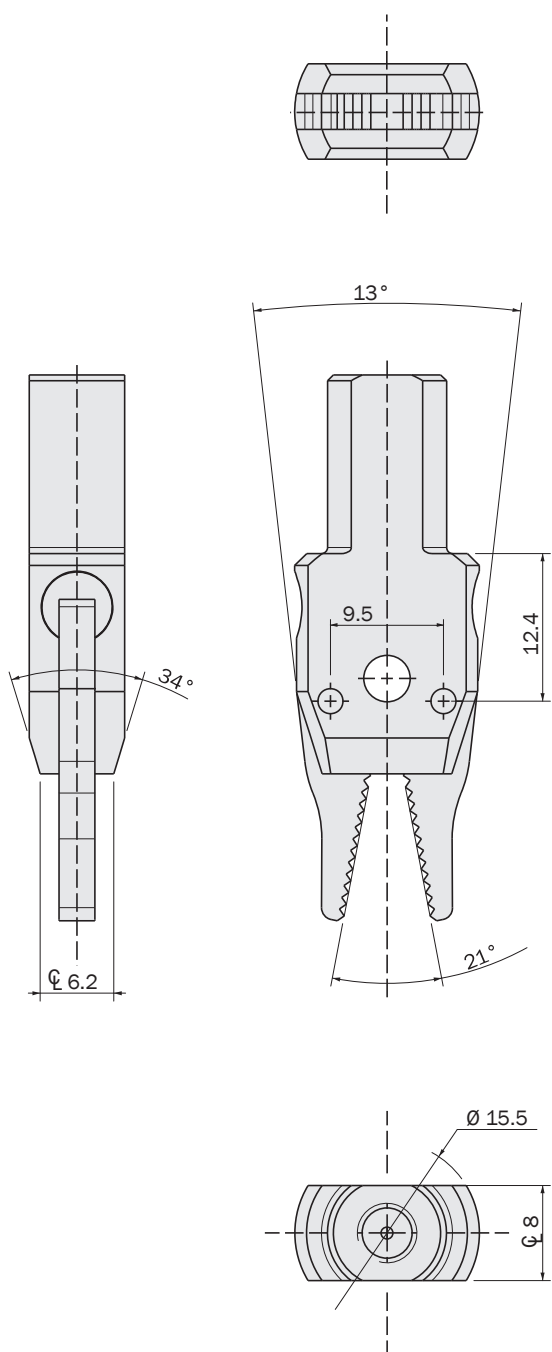
Accessori Opzionali
Options

Sensori
Sensors

PB-0002

- Alesaggio: 6mm.
- 8mm di spessore.
- A semplice effetto con molla in apertura.

Dimensioni (mm)

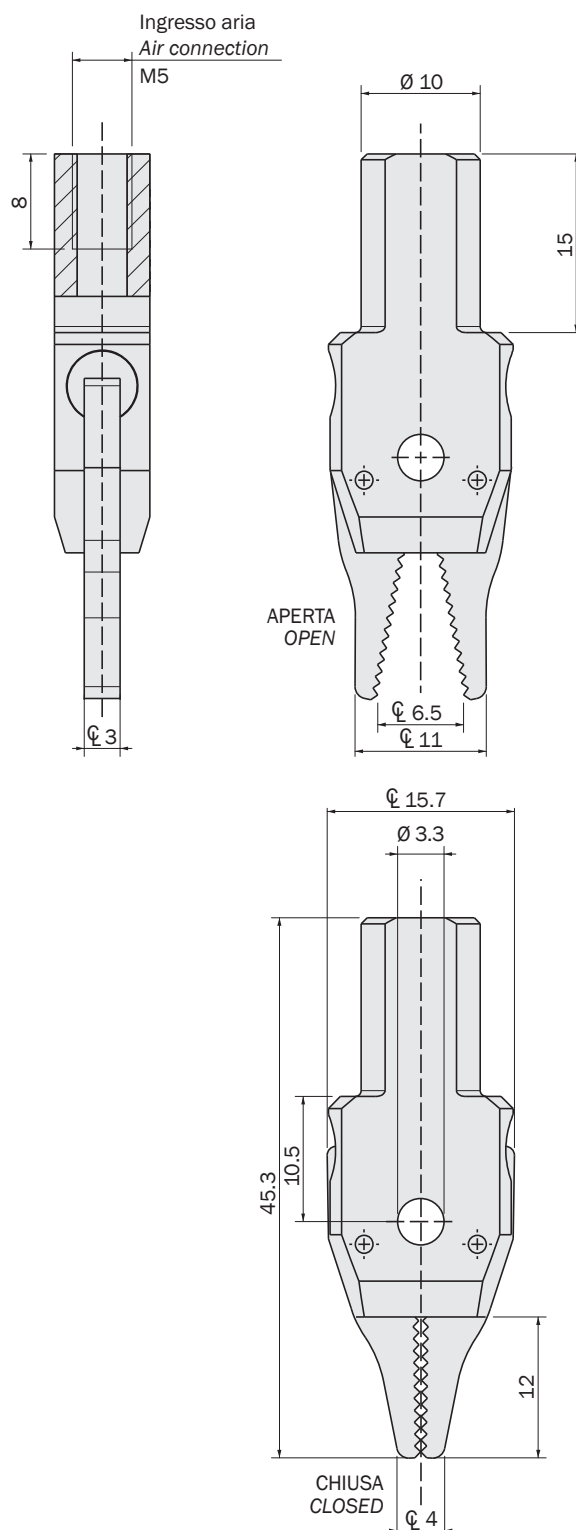


PB-0002

- Piston bore: 6mm.
- 8mm thickness.
- Single-acting with opening spring.

Dimensions (mm)

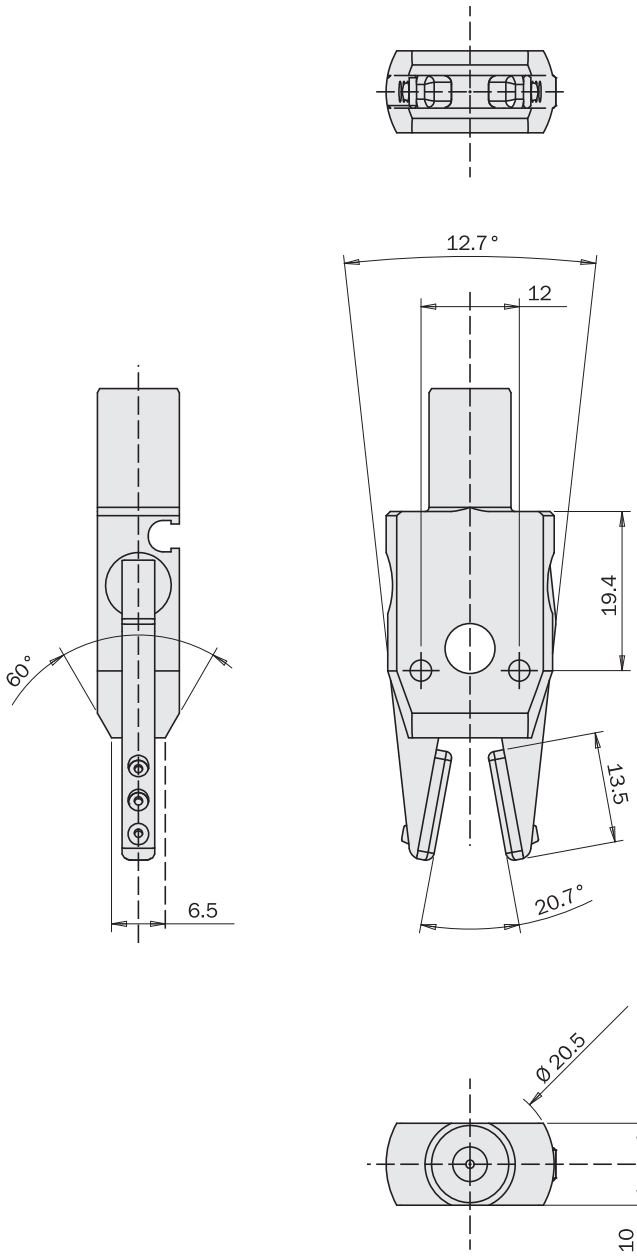
FIRST ANGLE PROJECTION



PB-0007-S3

- Alesaggio: 8mm.
- A semplice effetto con molla in apertura.
- Pastiglia in gomma (HNBR) per contatto morbido.
- Predisposta per sensore magnetico programmabile PRO-SSR.
- Spessore minimo rilevabile: 2mm.

Dimensioni (mm)



PB-0007-S3

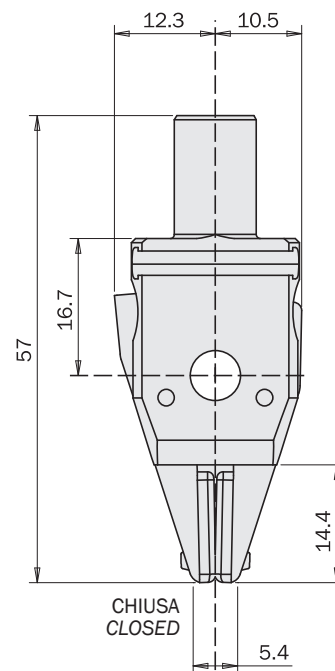
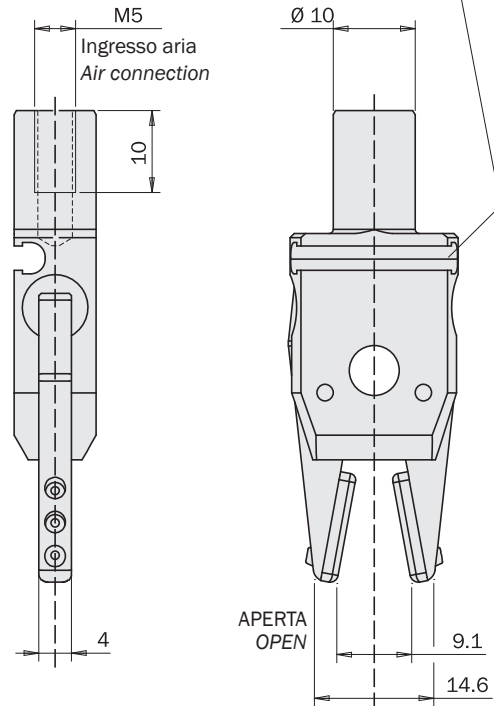
- Piston bore: 8mm.
- Single-acting with opening spring.
- Rubber (HNBR) pads for a soft contact.
- Ready for PRO-SSR programmable magnetic sensor.
- Minimum detectable thickness: 2mm.

Dimensions (mm)



**I sensori opzionali sono:
The optional sensors are:**

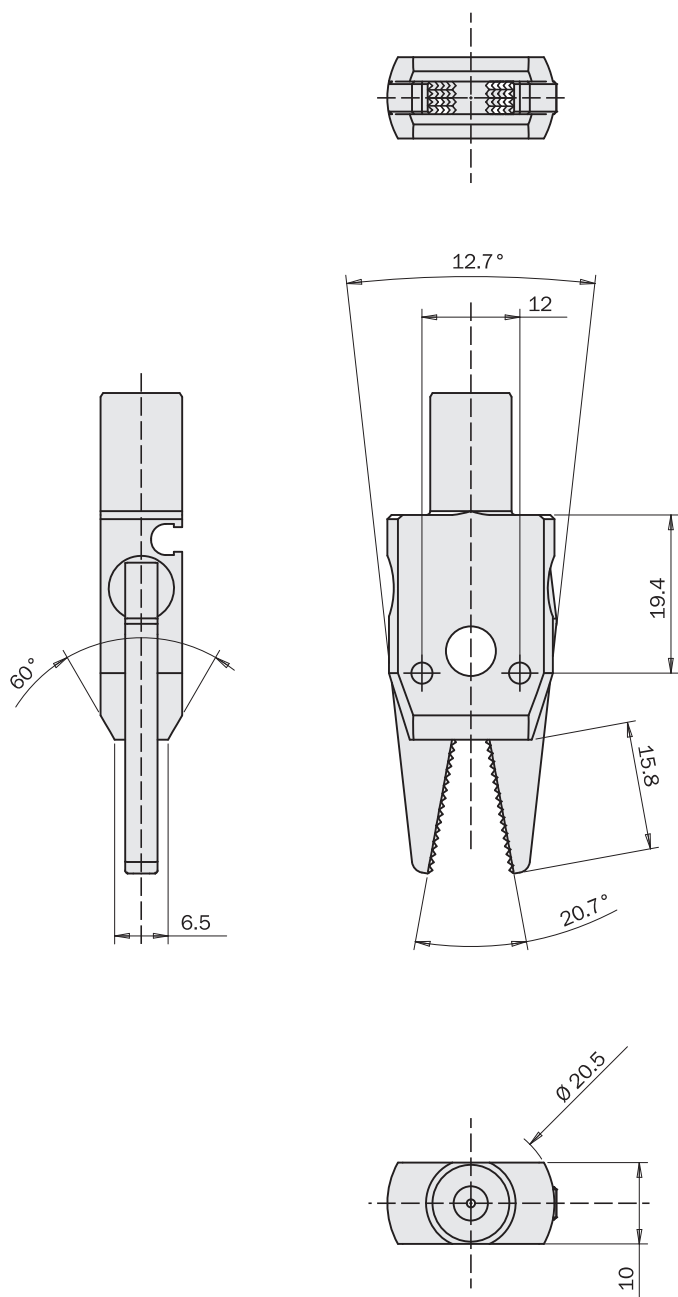
PRO-SSR3M215-G	NPN	Connettore M8
PRO-SSR3N215-G	PNP	M8 snap plug connector
PRO-SSR4M225-G	NPN	Cavo 2.5m
PRO-SSR4N225-G	PNP	2.5m cable



PB-0008-S3

- Alesaggio: 8mm.
- A semplice effetto con molla in apertura.
- Predisposta per sensore magnetico programmabile PRO-SSR.
- Spessore minimo rilevabile: 2mm.

Dimensioni (mm)



PB-0008-S3

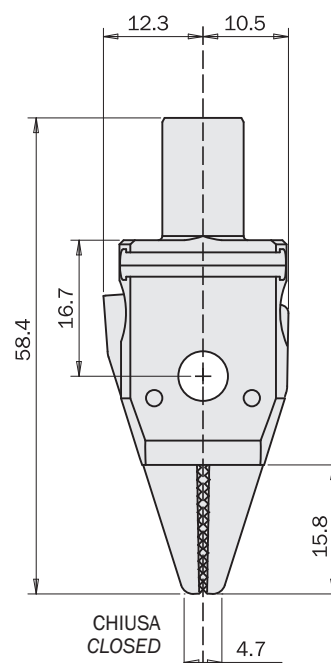
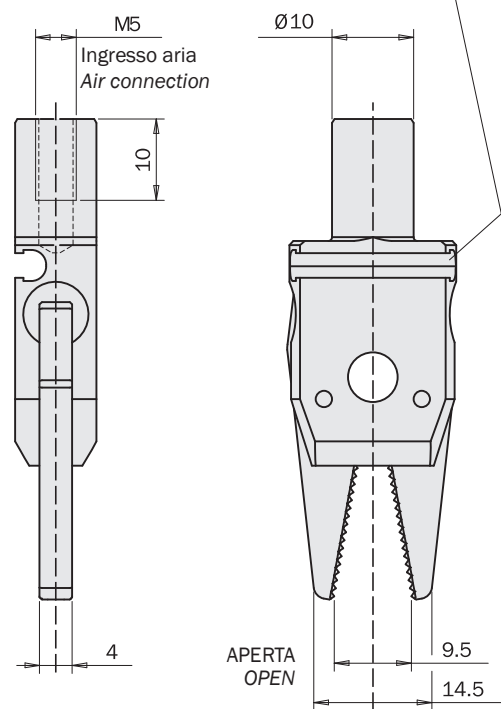
- Piston bore: 8mm.
- Single-acting with opening spring.
- Ready for PRO-SSR programmable magnetic sensor.
- Minimum detectable thickness: 2mm.

Dimensions (mm)



I sensori opzionali sono:
The optional sensors are:

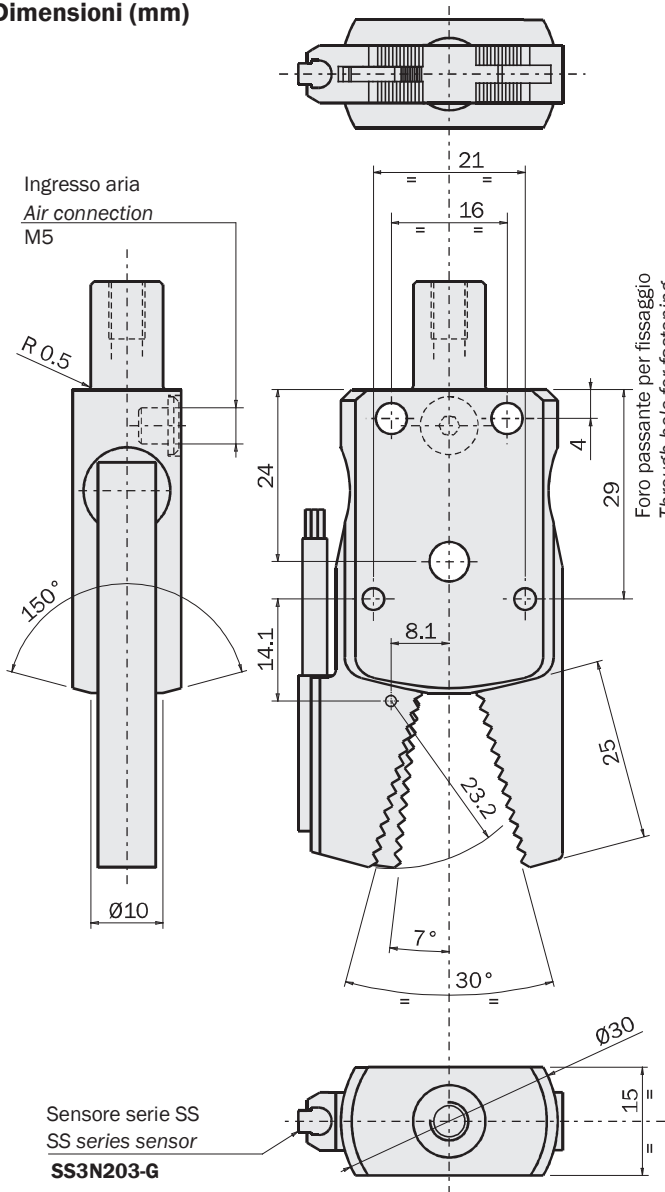
PRO-SSR3M215-G	NPN	Connettore M8 M8 snap plug connector
PRO-SSR3N215-G	PNP	
PRO-SSR4M225-G	NPN	Cavo 2.5m 2.5m cable
PRO-SSR4N225-G	PNP	



PB-0013

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Sensore SS3N203-G incluso e montato sulla punta della griffa.

Dimensioni (mm)

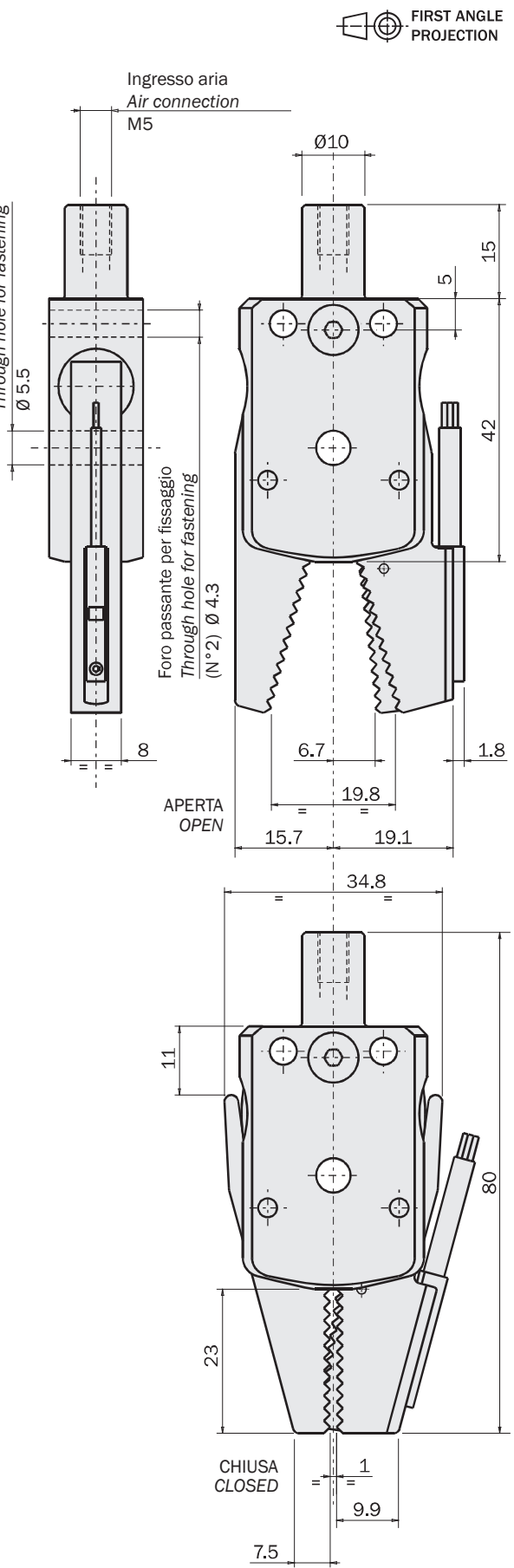


Tastatore in acciaio
Steel probe

PB-0013

- Piston bore: 12mm.
- Single-acting with opening spring.
- Sensor SS3N203-G included and fitted to the tip of the jaw.

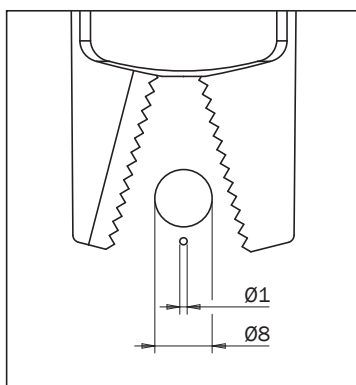
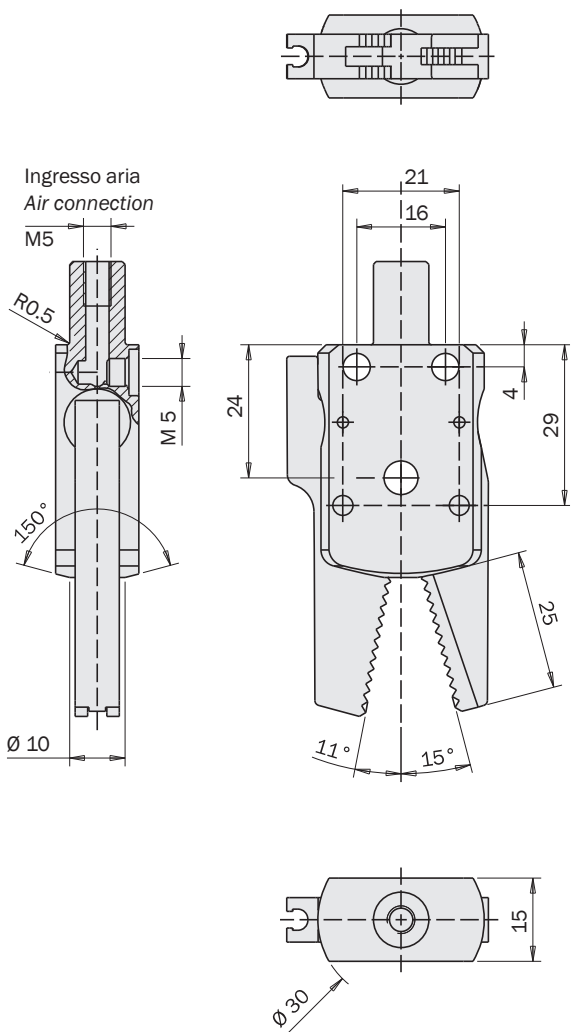
Dimensions (mm)



PB-0013-S2

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Sensore magnetico SSY opzionale con ingombro ridotto nella zona di presa.

Dimensioni (mm)



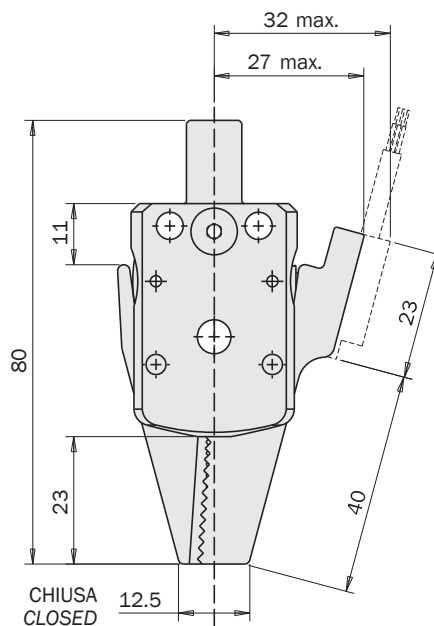
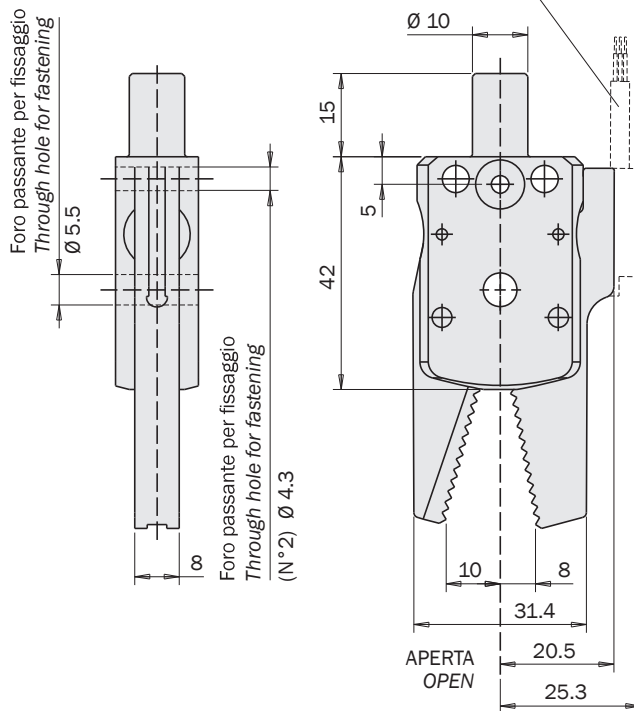
PB-0013-S2

- Piston bore: 12mm.
- Single-acting with opening spring.
- Optional magnetic sensor SSY with reduced encumbrance in the grip area.

Dimensions (mm)



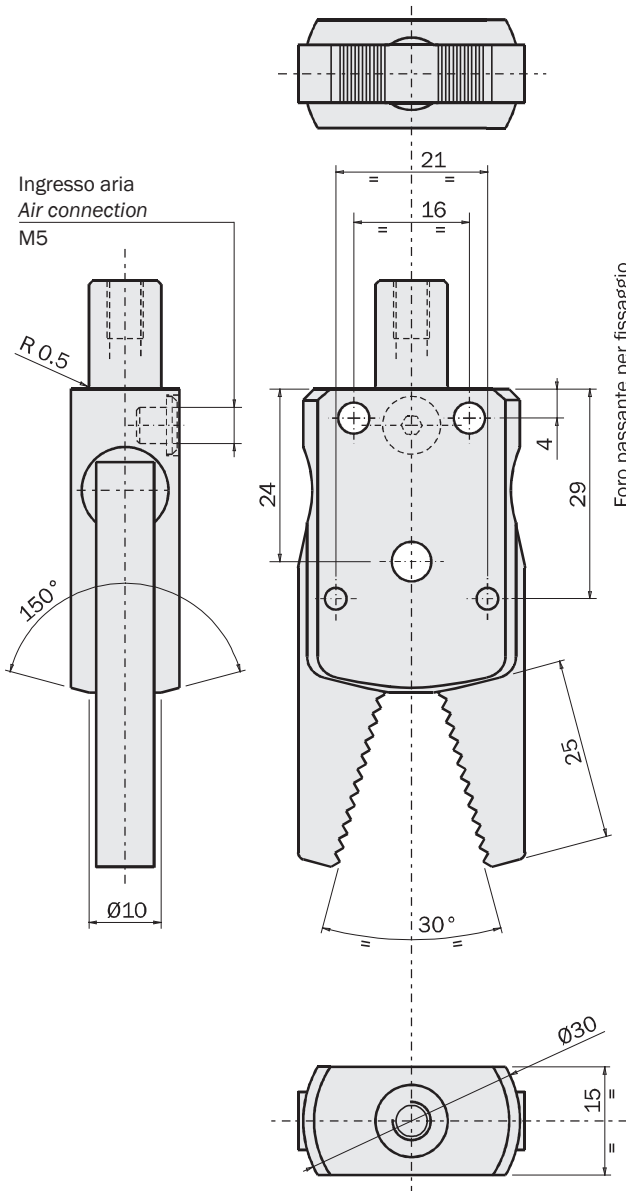
I sensori opzionali sono:		
The optional sensors are:		
SSY4N225-G	PNP	Cavo 2.5m
SSY4M225-G	NPN	2.5m cable
SSY3N203-G	PNP	Connettore M8
SSY3M203-G	NPN	M8 snap plug connector



PB-0014

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.

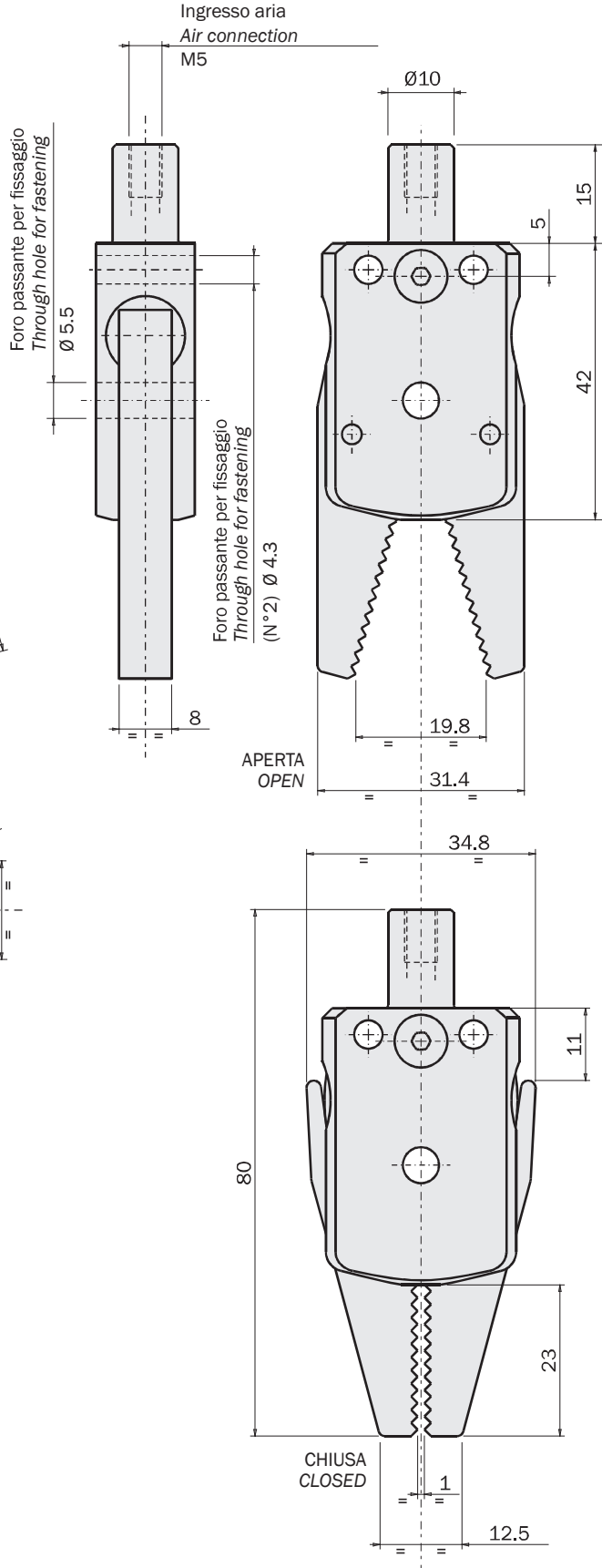
Dimensioni (mm)



PB-0014

- Piston bore: 12mm.
- Single-acting with opening spring.

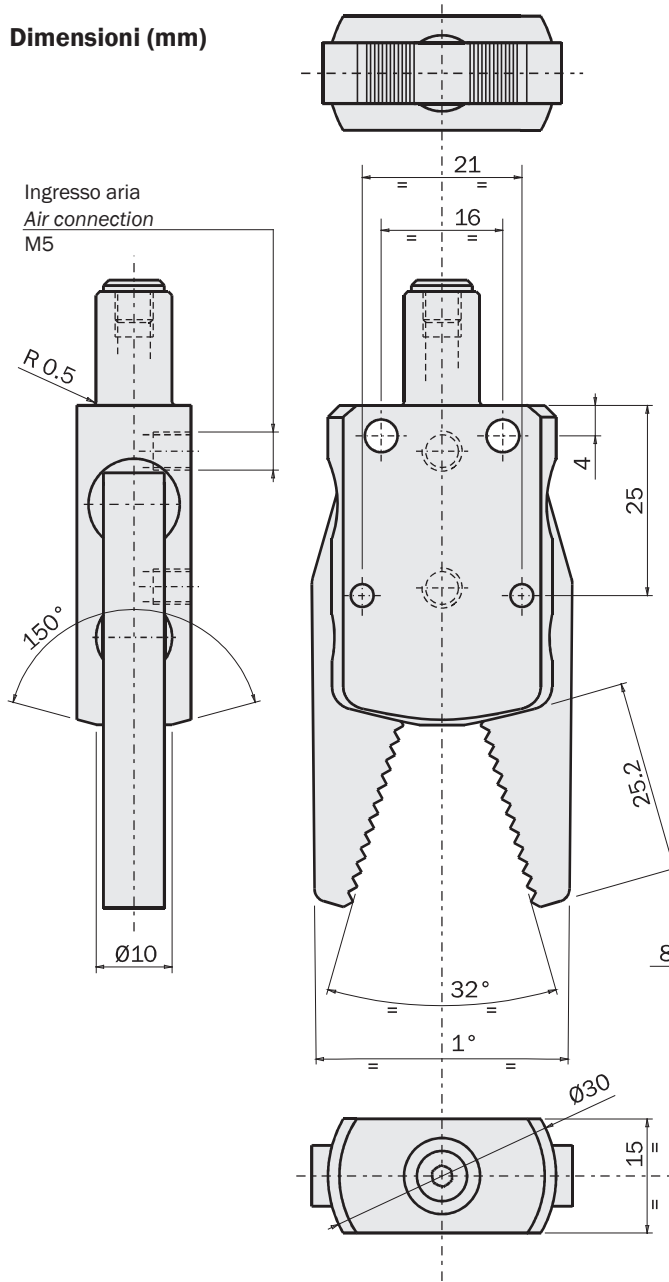
Dimensions (mm)



PB-0015

- Alesaggio: 12mm.
- A doppio effetto con molla in apertura.

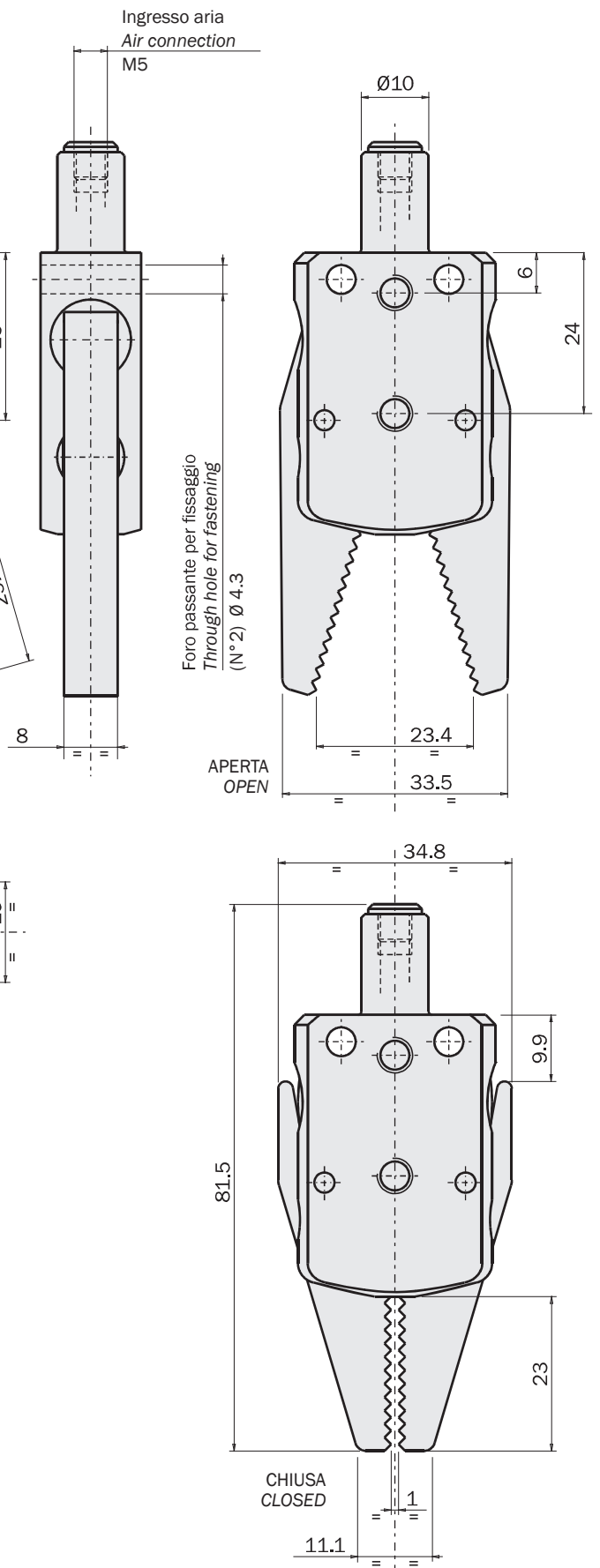
Dimensioni (mm)



PB-0015

- Piston bore: 12mm.
- Double-acting with opening spring.

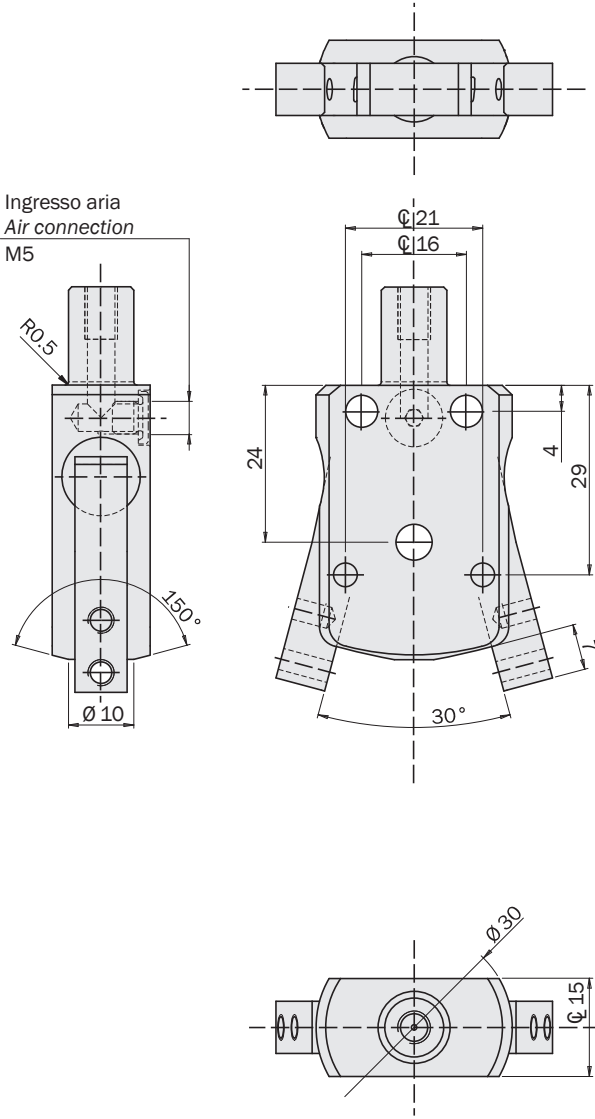
Dimensions (mm)



PB-0017

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Griffi personalizzabili.

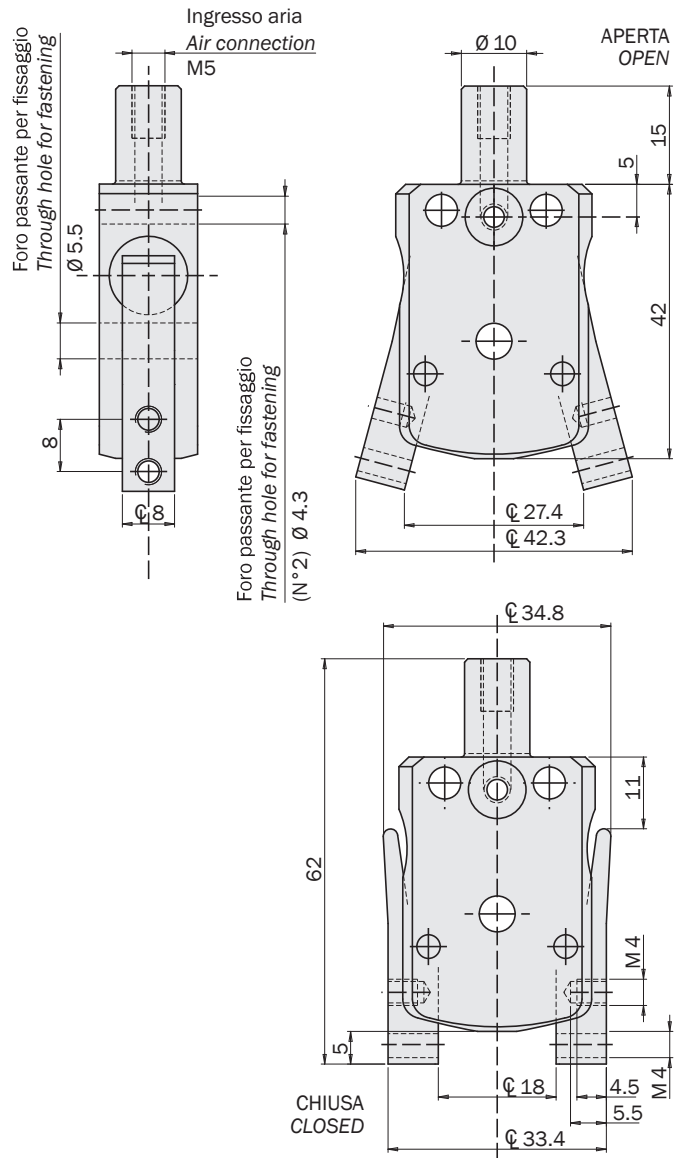
Dimensioni (mm)



PB-0017

- Piston bore: 12mm.
- Single-acting with opening spring.
- Custom jaws.

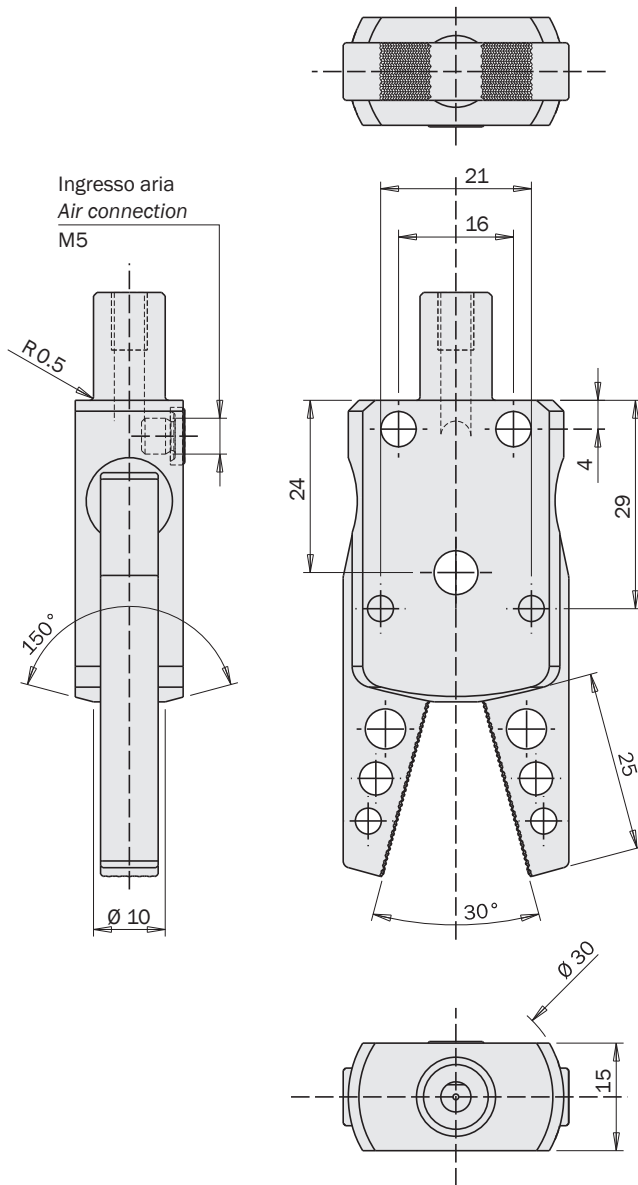
Dimensions (mm)



PB-0140

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Griffe in acciaio.

Dimensioni (mm)



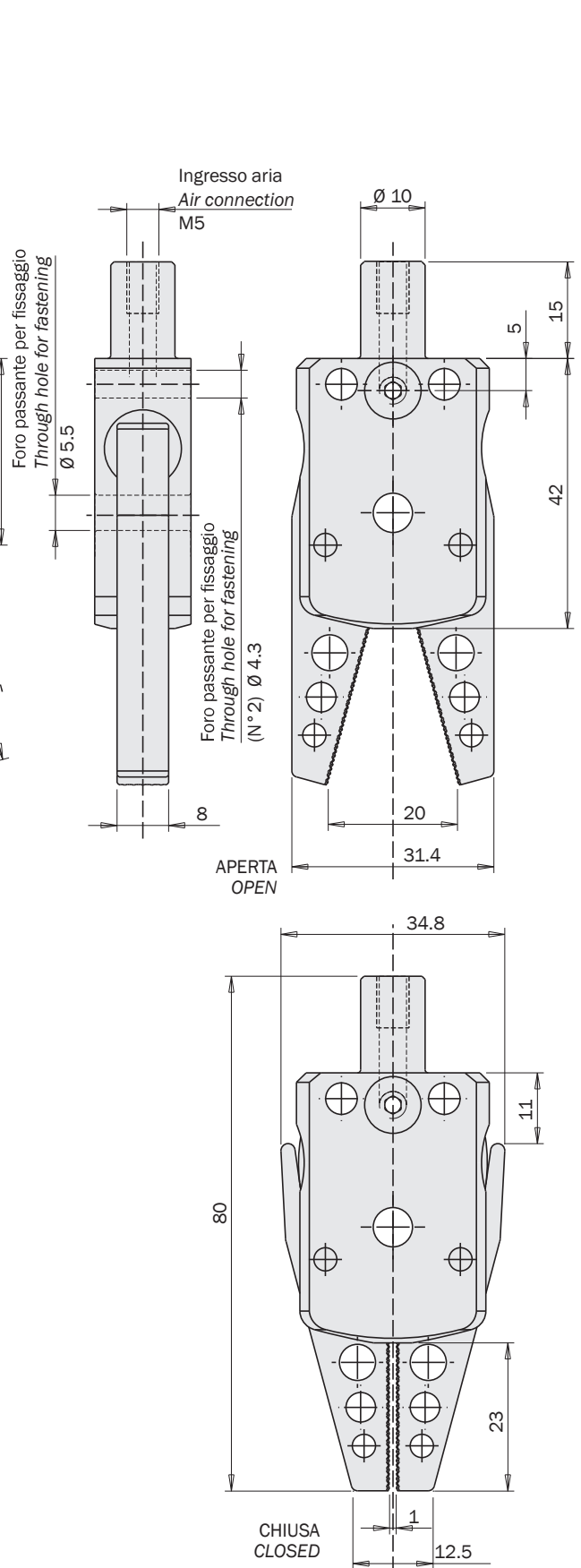
Griffe in acciaio con zigrinatura spinata (90°)
Steel jaws with diamond knurl (90°)



PB-0140

- Piston bore: 12mm.
- Single-acting with opening spring.
- Steel jaws.

Dimensions (mm)



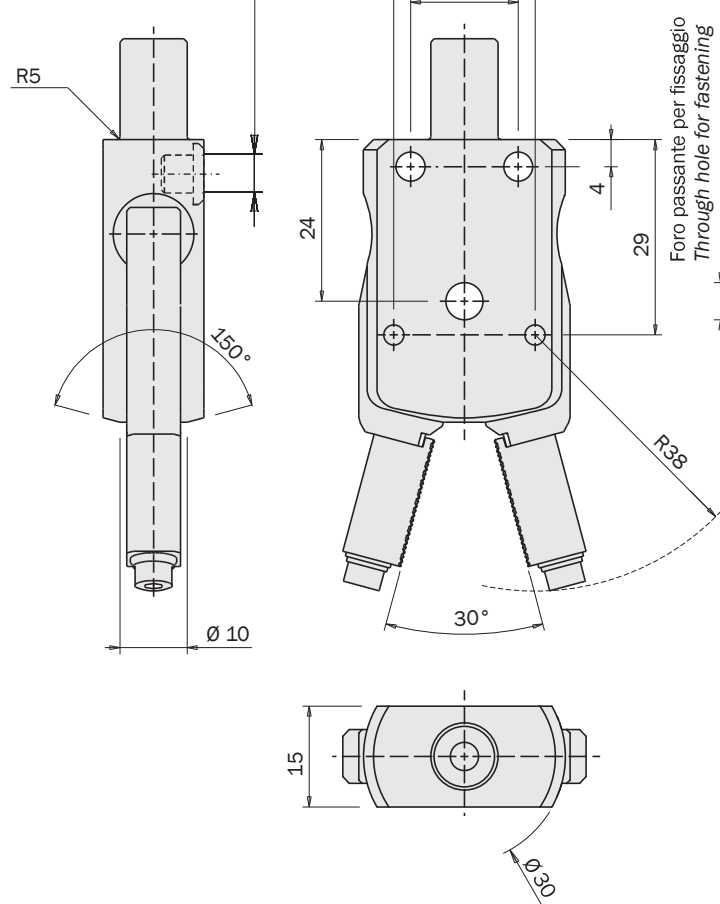
CHIUSA
CLOSED

PB-0150

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Griffe oscillanti per materozze coniche.

Dimensioni (mm)

Ingresso aria
Air connection
M5

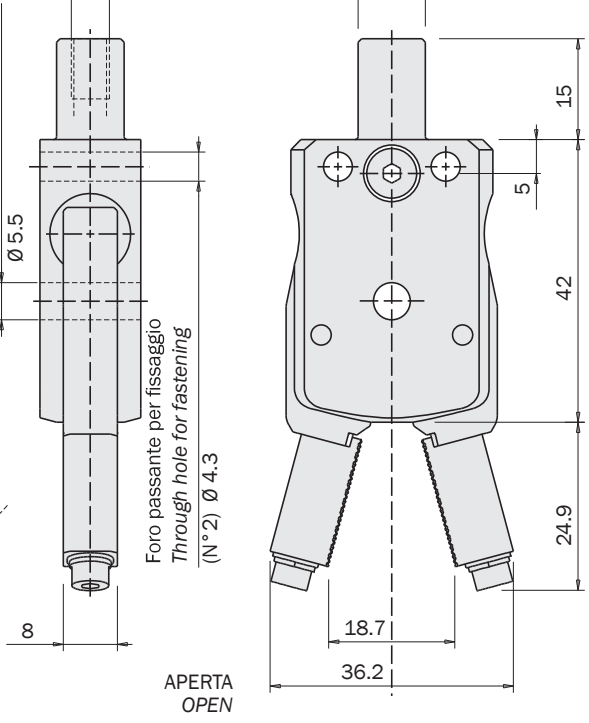


PB-0150

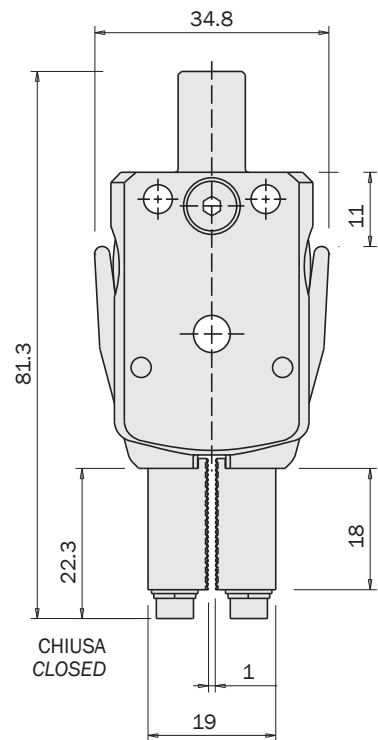
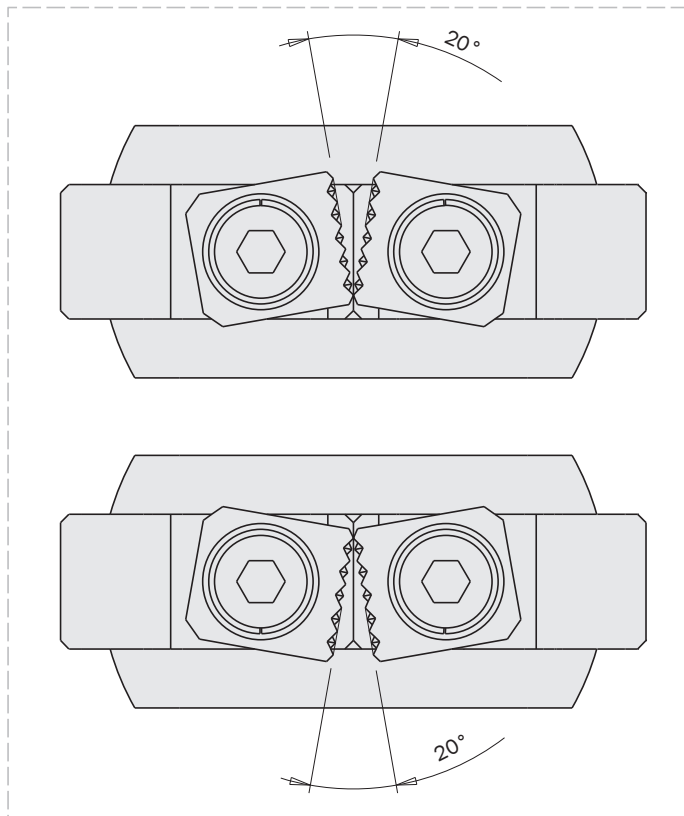
- Piston bore: 12mm.
- Single-acting with opening spring.
- Swiveling jaws for conical sprues.

Dimensions (mm)

Ingresso aria
Air connection
M5



APERTA
OPEN

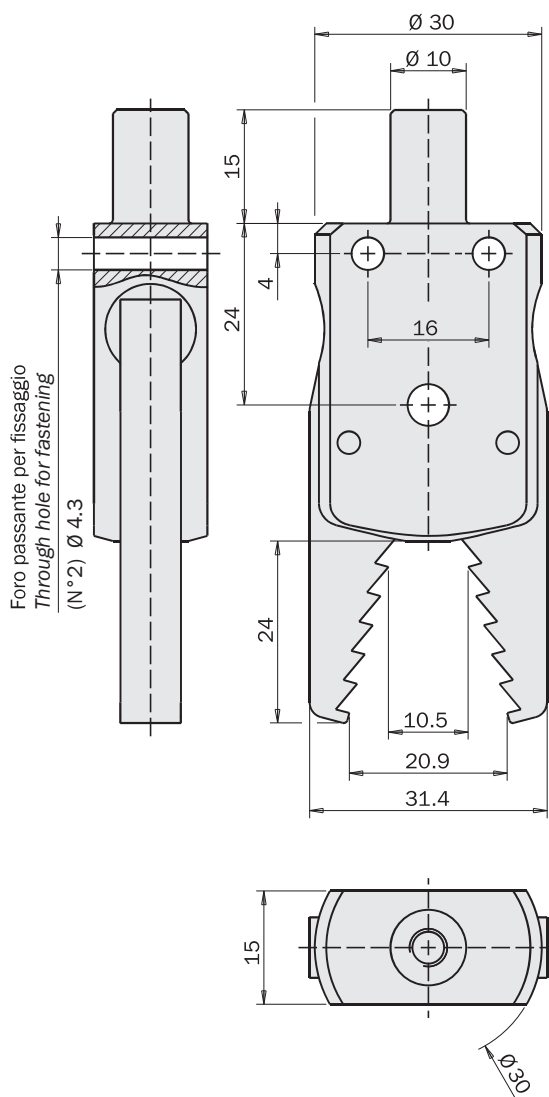


FIRST ANGLE
PROJECTION

PB-0160

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Griffe in acciaio.

Dimensioni (mm)

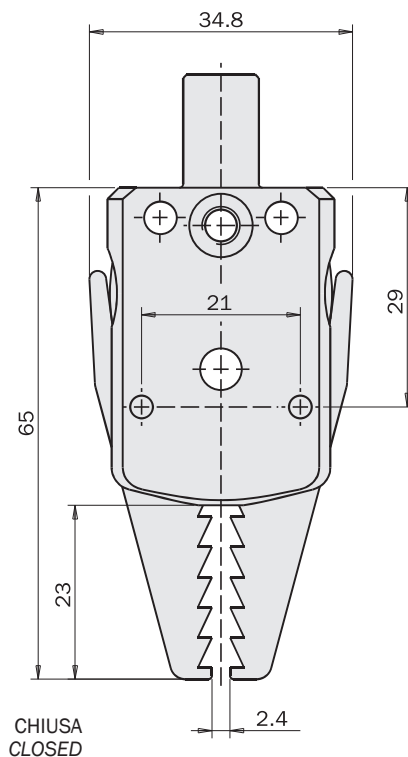
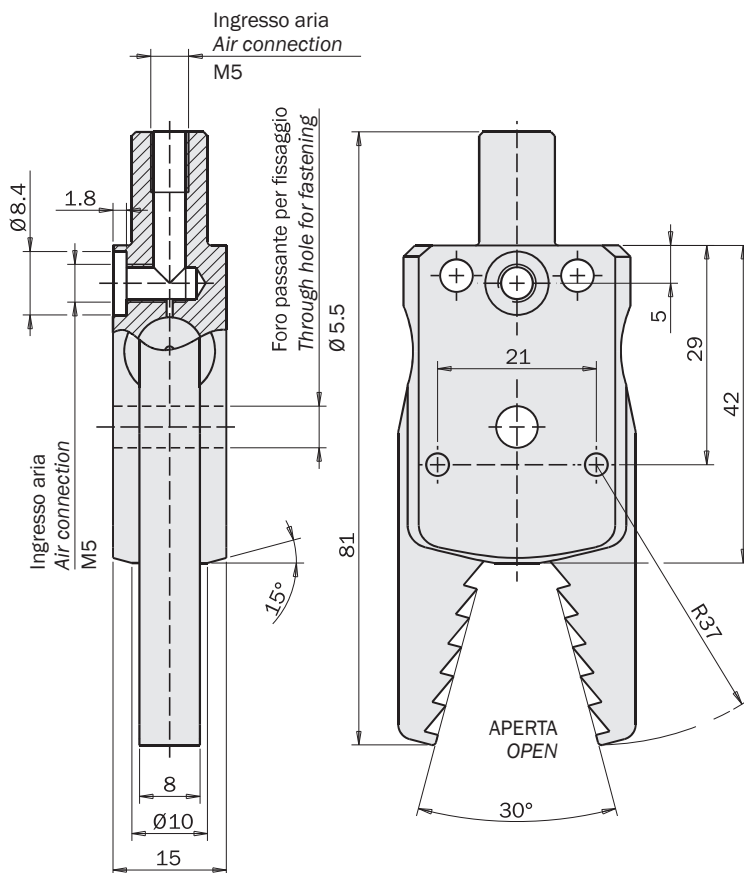


Griffe in acciaio
Steel jaws

PB-0160

- Piston bore: 12mm.
- Single-acting with opening spring.
- Steel jaws.

Dimensions (mm)

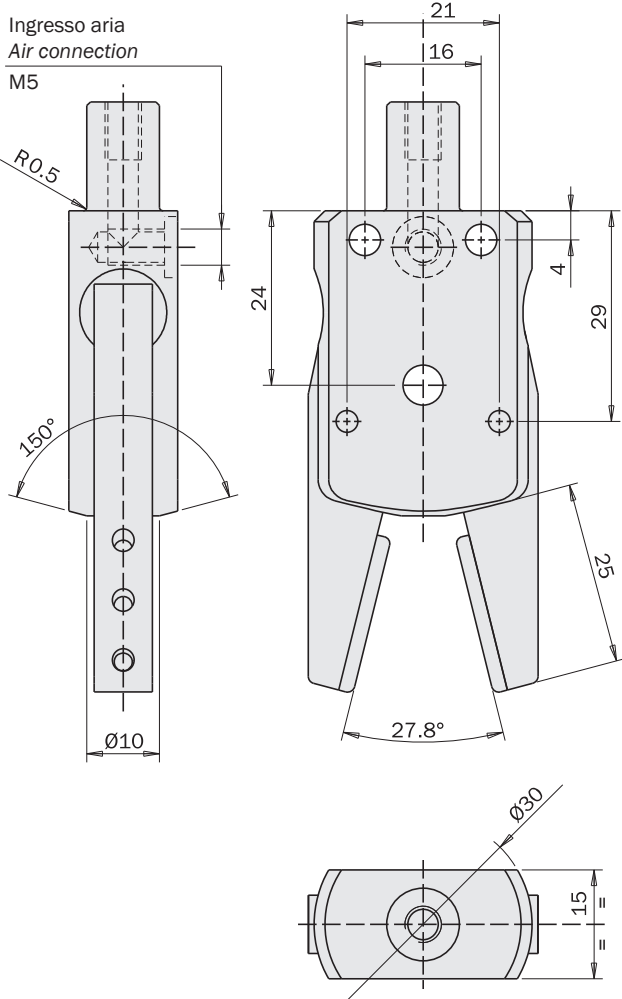


FIRST ANGLE
PROJECTION

PB-0170

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Pastiglia in gomma (HNBR) per contatto morbido.

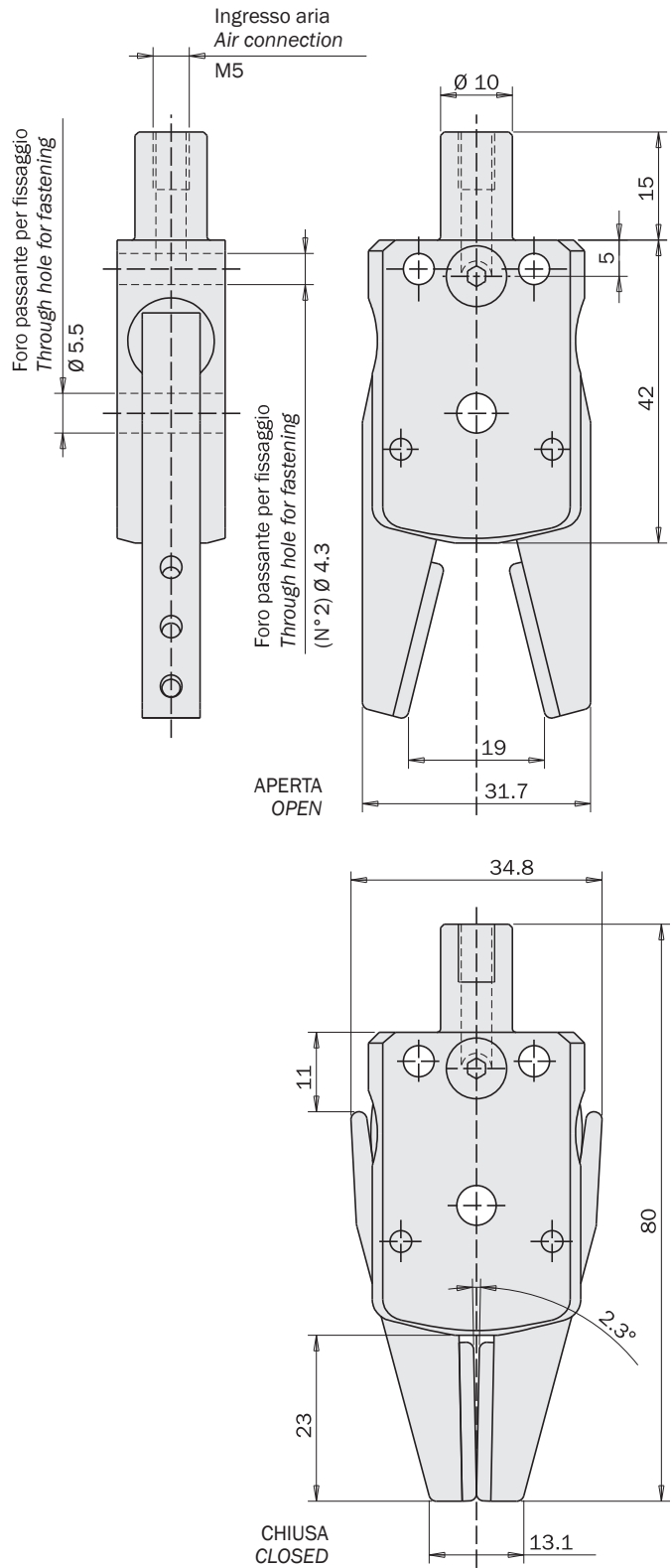
Dimensioni (mm)



PB-0170

- Piston bore: 12mm.
- Single-acting with opening spring.
- Rubber (HNBR) pads for a soft contact.

Dimensioni (mm)

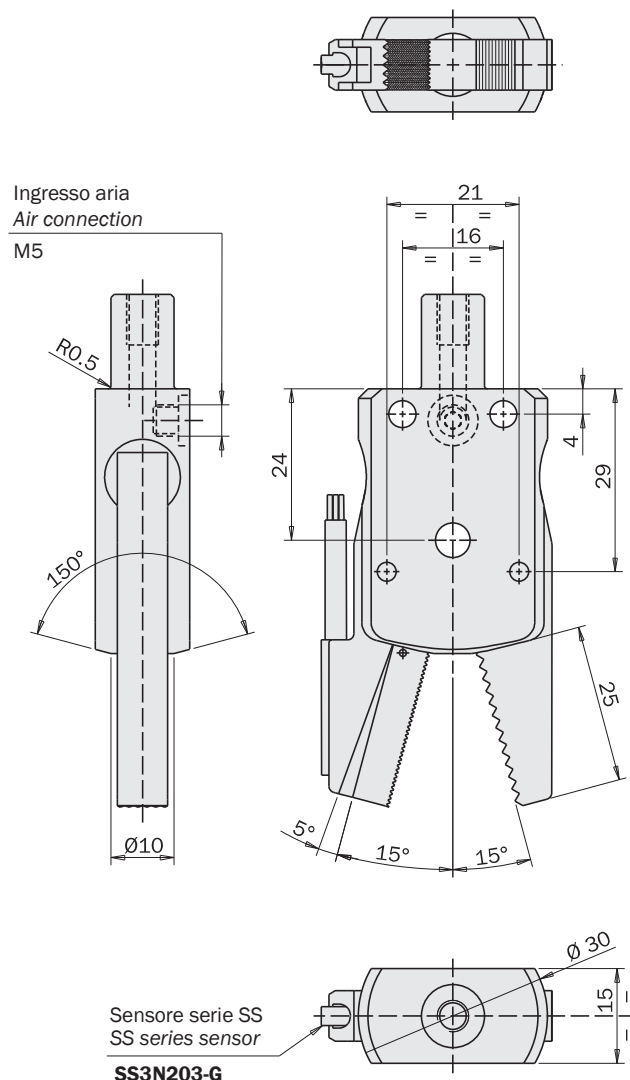


FIRST ANGLE PROJECTION

PB-0180

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Sensore SS3N203-G incluso e montato sulla punta della griffa.
- Tastatore in acciaio.

Dimensioni (mm)

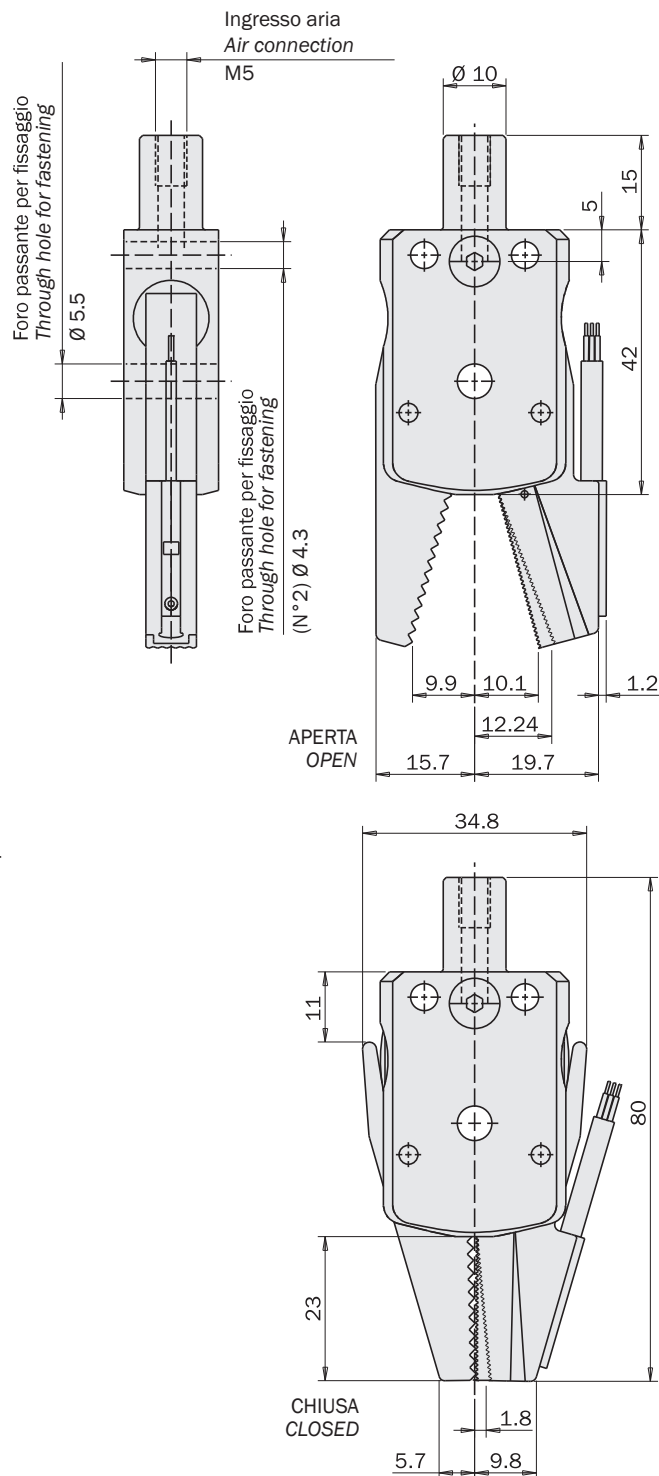


Tastatore in acciaio
Steel probe

PB-0180

- Piston bore: 12mm.
- Single-acting with opening spring.
- Sensor SS3N203-G included and fitted to the tip of the jaw.
- Steel probe.

Dimensions (mm)

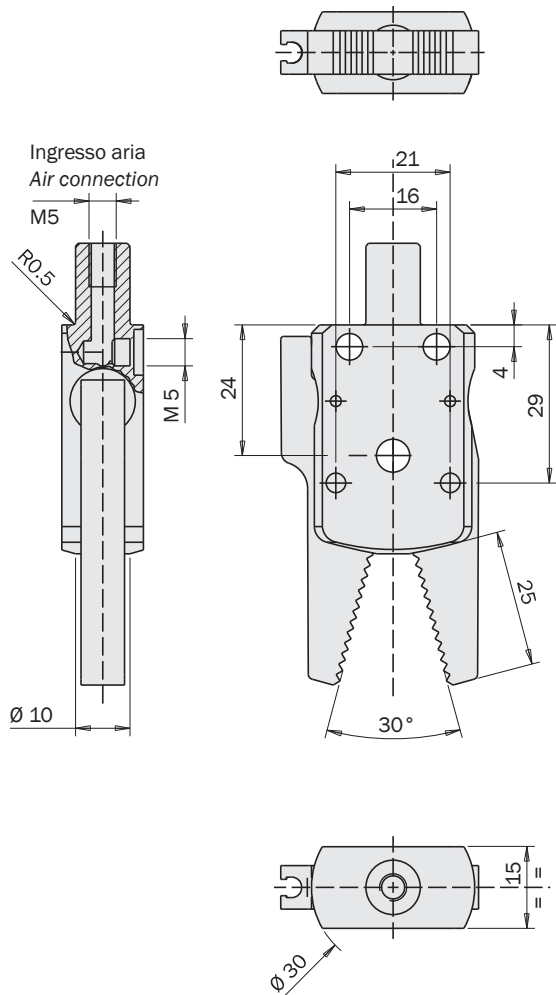


FIRST ANGLE
PROJECTION

PB-0180-S2

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Sensore magnetico SSY opzionale con ingombro ridotto nella zona di presa.

Dimensioni (mm)

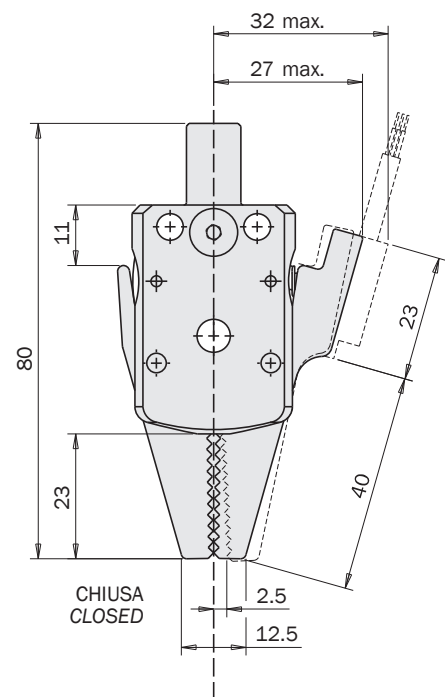
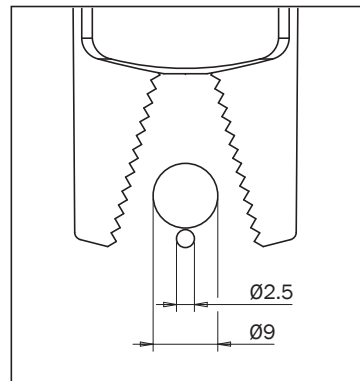
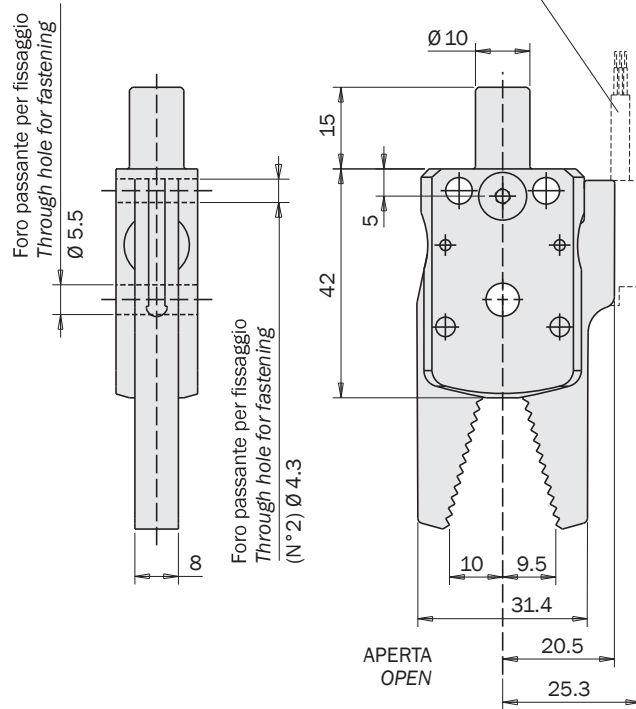


PB-0180-S2

- Piston bore: 12mm.
- Single-acting with opening spring.
- Optional magnetic sensor SSY with reduced encumbrance in the grip area.

Dimensions (mm)

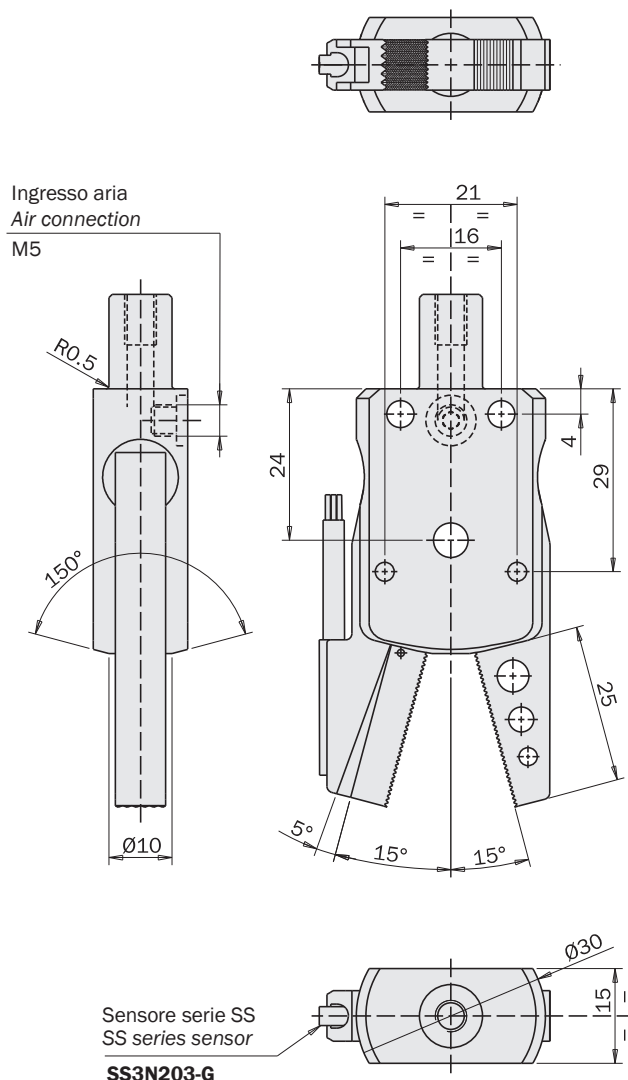
I sensori opzionali sono: The optional sensors are:		
SSY4N225-G	PNP	Cavo 2.5m
SSY4M225-G	NPN	2.5m cable
SSY3N203-G	PNP	Connettore M8
SSY3M203-G	NPN	M8 snap plug connector



PB-0181

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Sensore SS3N203-G incluso e montato sulla punta della griffa.
- Griffa e tastatore in acciaio.

Dimensioni (mm)



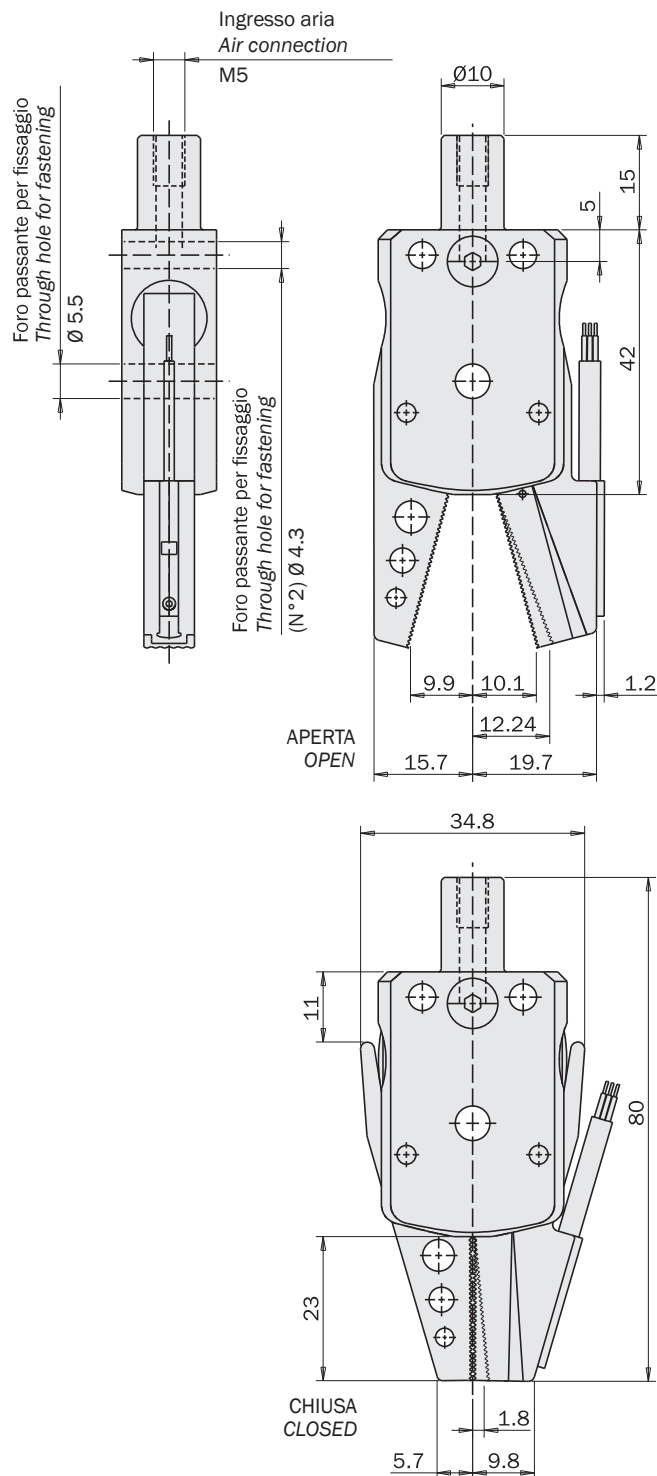
Griffa in acciaio
Steel jaw

Tastatore in acciaio
Steel probe

PB-0181

- Piston bore: 12mm.
- Single-acting with opening spring.
- Sensor SS3N203-G included and fitted to the tip of the jaw.
- Steel jaw and probe.

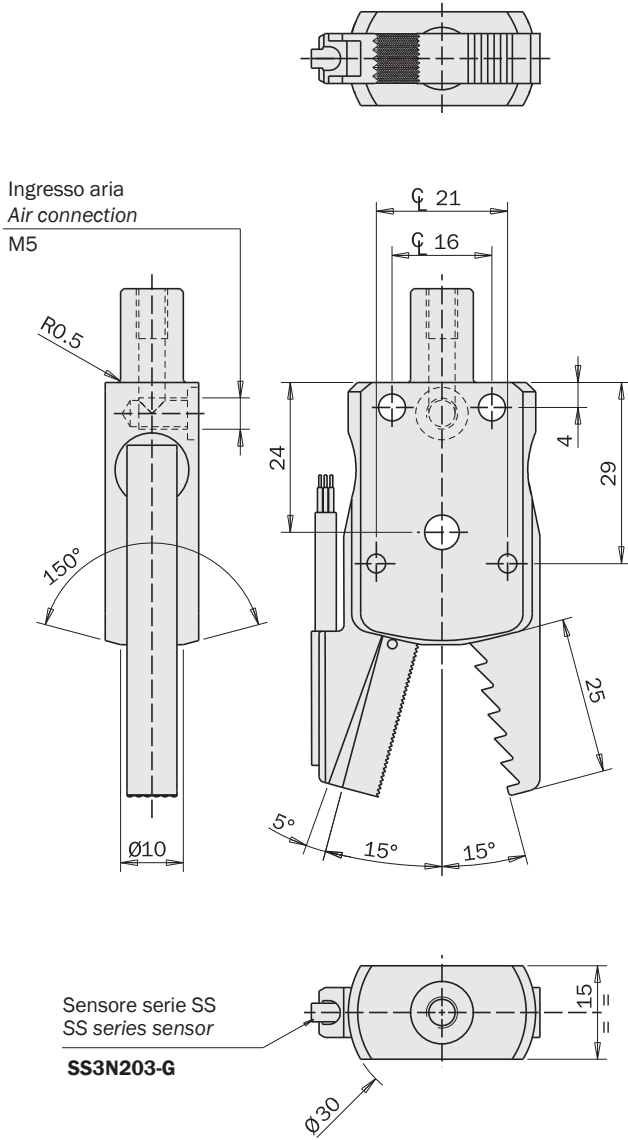
Dimensions (mm)



PB-0182

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Sensore SS3N203-G incluso e montato sulla punta della griffa.
- Griffa e tastatore in acciaio.

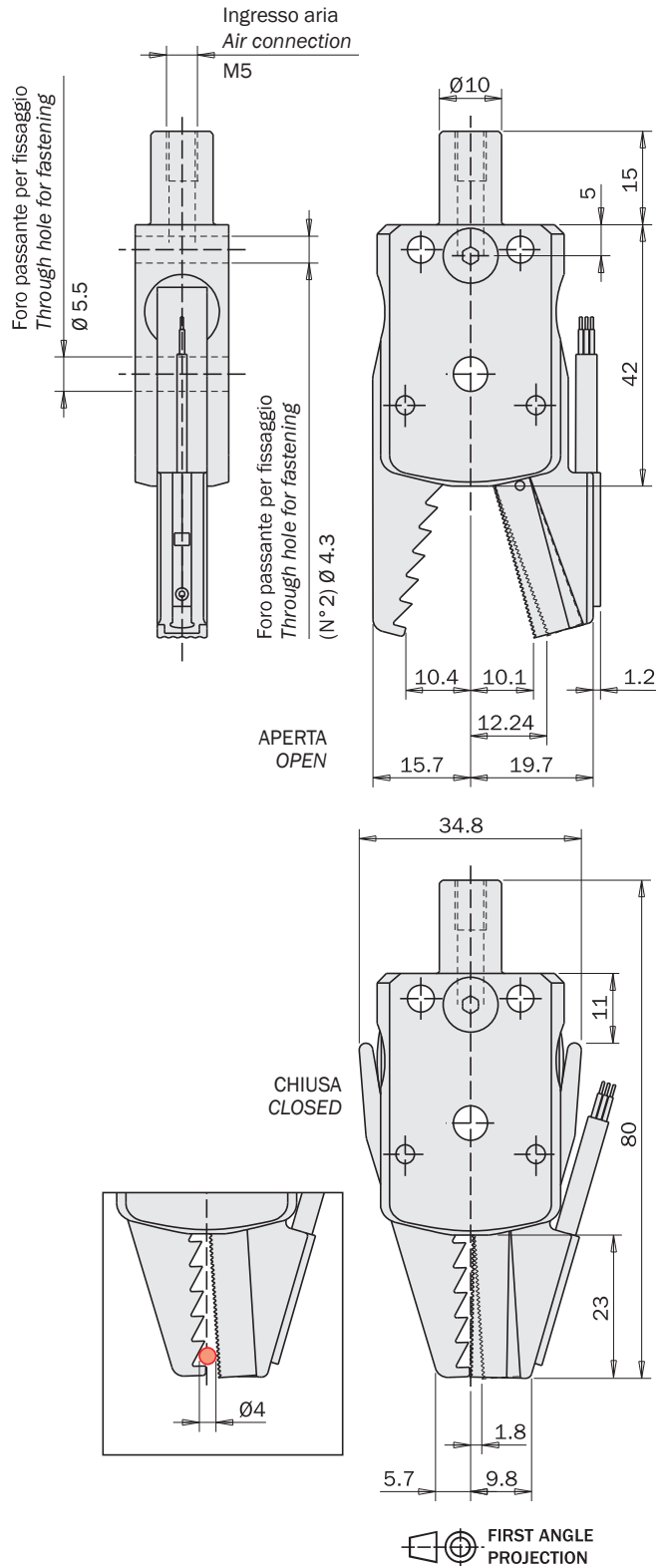
Dimensioni (mm)



PB-0182

- Piston bore: 12mm.
- Single-acting with opening spring.
- Sensor SS3N203-G included and fitted to the tip of the jaw.
- Steel jaw and probe.

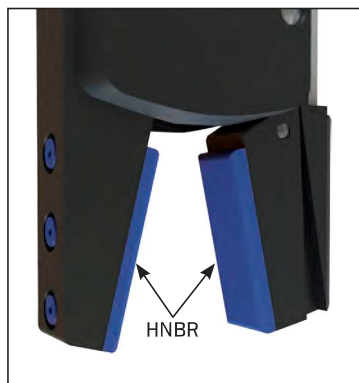
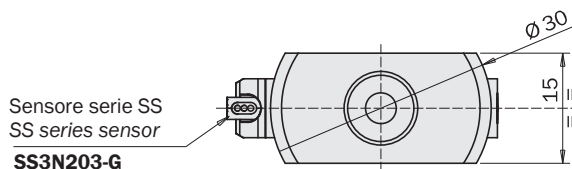
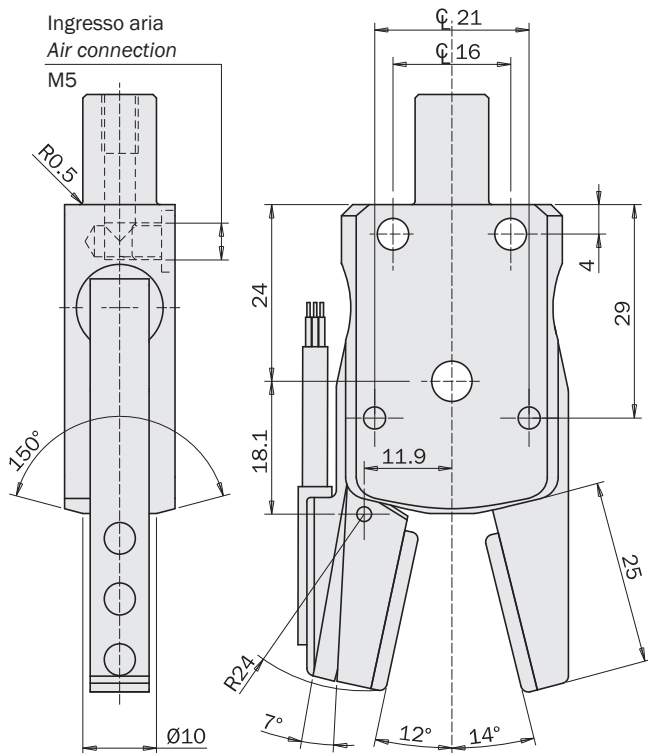
Dimensions (mm)



PB-0187

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Pastiglia in gomma (HNBR) per contatto morbido.
- Sensore SS3N203-G incluso e montato sulla punta della griffa.

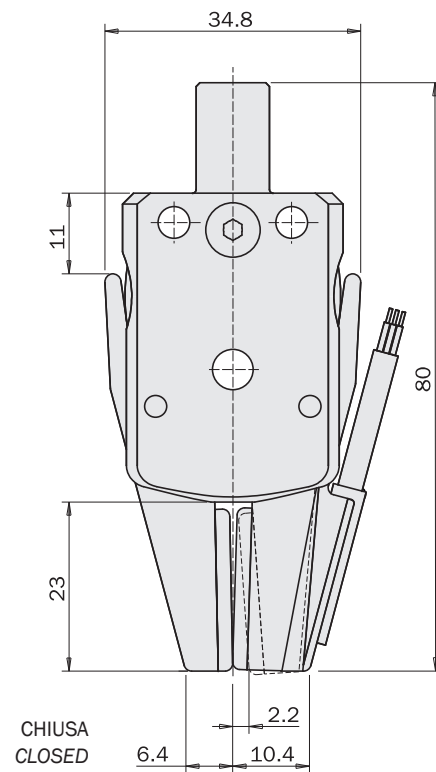
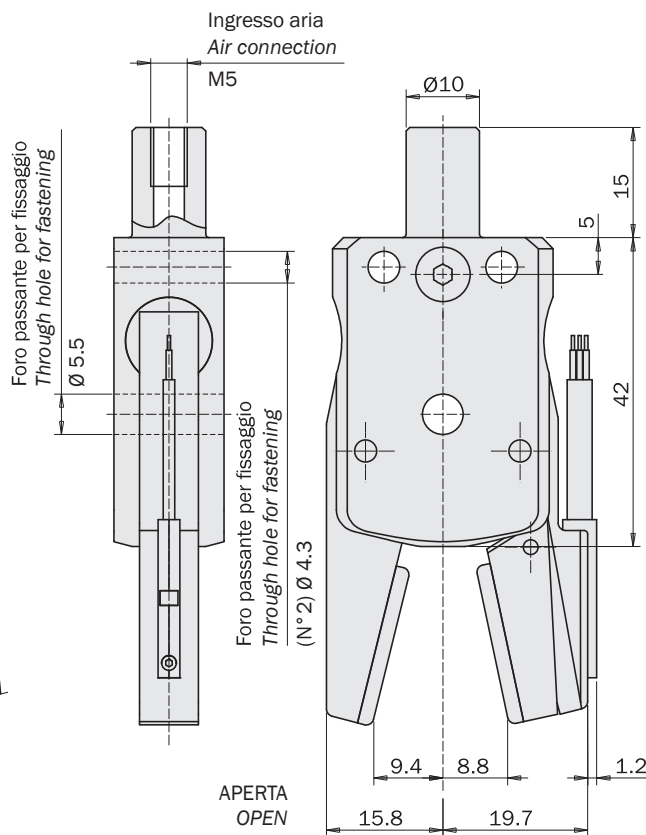
Dimensioni (mm)



PB-0187

- Piston bore: 12mm.
- Single-acting with opening spring.
- Rubber (HNBR) pads for a soft contact.
- Sensor SS3N203-G included and fitted to the tip of the jaw.

Dimensions (mm)

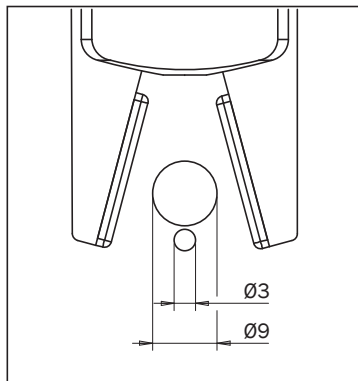
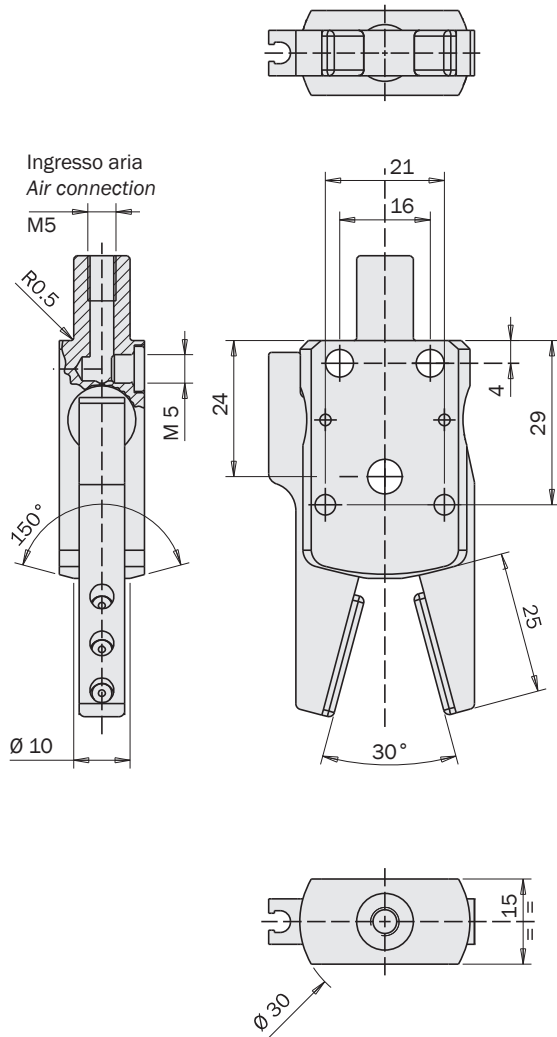


FIRST ANGLE PROJECTION

PB-0187-S2

- Alesaggio: 12mm.
- A semplice effetto con molla in apertura.
- Pastiglia in gomma (HNBR) per contatto morbido.
- Sensore magnetico SSY opzionale con ingombro ridotto nella zona di presa.

Dimensioni (mm)

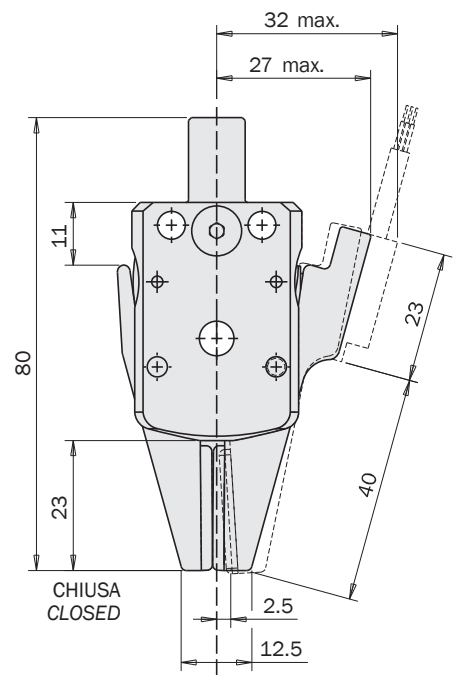
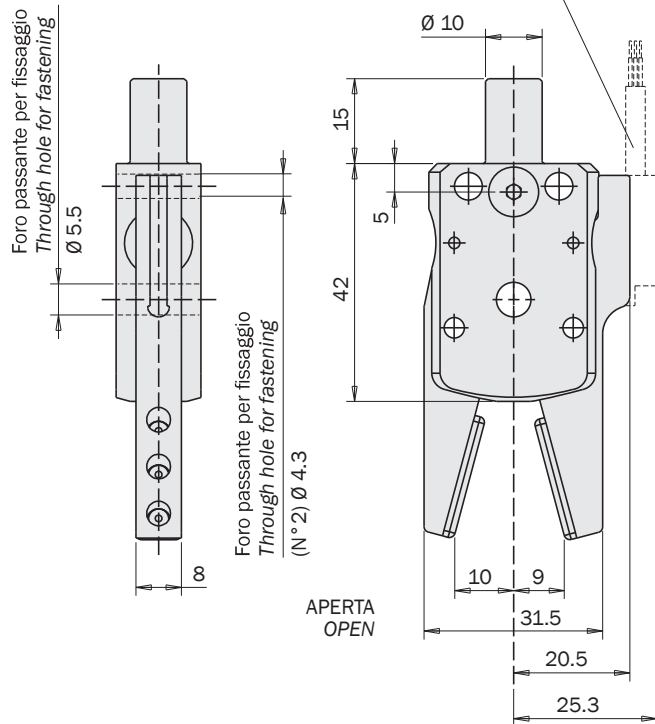


PB-0187-S2

- Piston bore: 12mm.
- Single-acting with opening spring.
- Rubber (HNBR) pads for a soft contact.
- Optional magnetic sensor SSY with reduced encumbrance in the grip area.

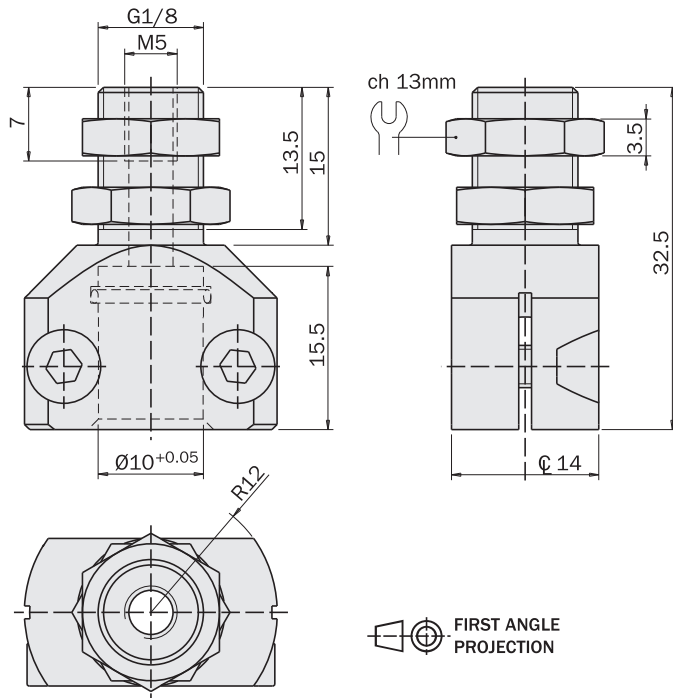
Dimensions (mm)

I sensori opzionali sono: The optional sensors are:		
SSY4N225-G	PNP	Cavo 2.5m 2.5m cable
SSY4M225-G	NPN	
SSY3N203-G	PNP	Connettore M8 M8 snap plug connector
SSY3M203-G	NPN	



Adattatore per pinze PB

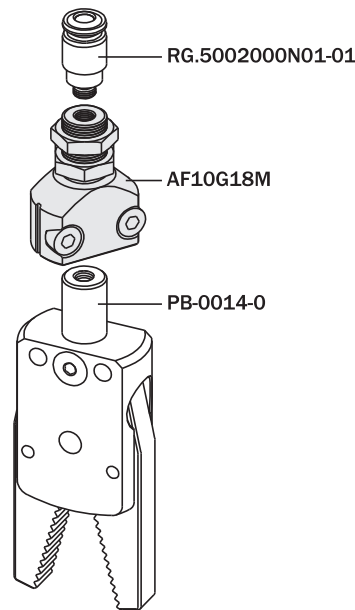
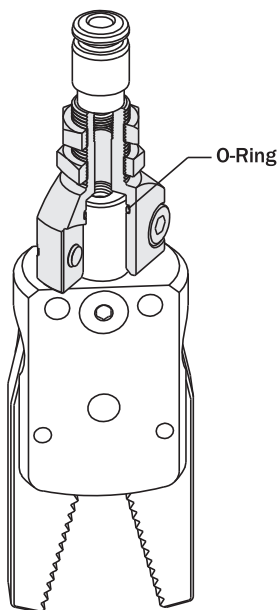
Adapter fitting for PB grippers



	AF10G18M
Peso Weight	18 g



Esempi di utilizzo
Application example



Pinza pneumatica per materozze, angolare non autocentrante a due griffe serie BB

- BB-12-00 a doppio effetto.
- BB-12-NO normale aperta.
- BB-13-NO normale aperta con sensore.
- Corpo e griffe fusi in lega di zinco (zama).
- Profilo sottile.
- Doppia possibilità di fissaggio.
- Grasso alimentare FDA-H1.

2-jaw non-selfcentering angular pneumatic sprue gripper series BB

- BB-12-00 double-acting.
- BB-12-NO normally open.
- BB-13-NO normally open with sensor.
- Housing and jaws die-casted in zinc alloy (zamak).
- Flat profile.
- Two fastening options.
- Food grade grease FDA-H1.



BB-12-00



BB-12-NO



BB-13-NO

SS3N203-G (*)

(*)
Il sensore SS3N203-G è incluso.
The sensor SS3N203-G is included.

	BB-12-00	BB-12-NO	BB-13-NO
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air		
Pressione di esercizio Pressure range	2.5 ÷ 8 bar		
Temperatura di esercizio Temperature range	5 ÷ 60 °C.		
Corsa Stroke	2 x 15°		
Coppia di serraggio per griffa in chiusura a 6 bar Closing gripping torque at 6 bar each jaw	65 Ncm	60 Ncm	60 Ncm
Coppia per griffa in apertura a 6 bar Opening gripping torque at 6 bar each jaw	20 Ncm	-	-
Coppia per griffa in apertura a 0 bar Opening gripping torque at 0 bar each jaw	-	5 Ncm	5 Ncm
Frequenza max funzionamento continuativo Maximum working frequency	3 Hz	3 Hz	3 Hz
Consumo d'aria per ciclo Cycle air consumption	1.5 cm ³	1.1 cm ³	1.1 cm ³
Tempo di chiusura senza carico Closing time without load	0.01 s	0.01 s	0.01 s
Peso Weight	75 g	77 g	90 g

Unità Rotanti
Rotary Units

Cambia Utensile
Quick Changer

Profili e Staffe
Profiles and Brackets

Pinze
Grippers

Attuatori Lineari
Linear Actuators

Sospensioni
Suspensions

Taglierini
Nippers

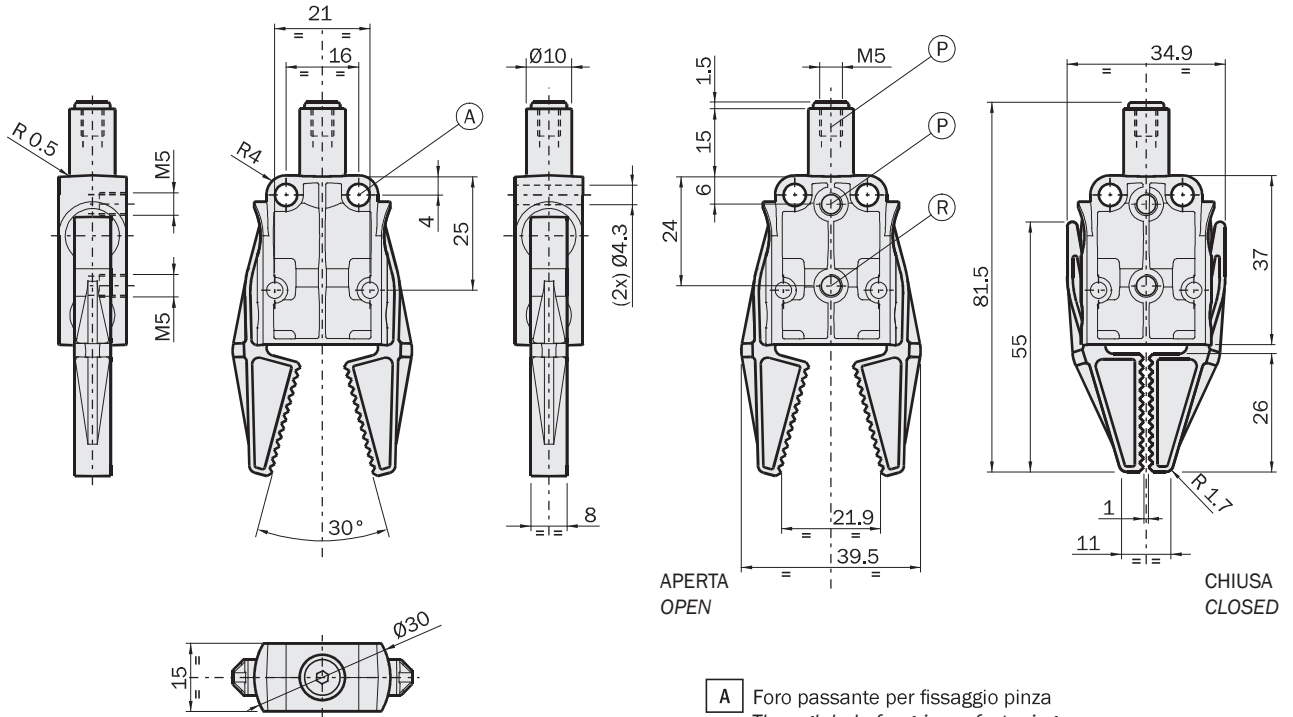
Kit-Robot
Robot Kit

Accessori Opzionali
Options

Sensori
Sensors

Dimensioni (mm)
Dimensions (mm)

BB-12-00
BB-12-NO



- A** Foro passante per fissaggio pinza
Through hole for gripper fastening
- P** Aria compressa in P: chiusura della pinza
Compressed air in P: gripper closing
- R** Aria compressa in R: apertura della pinza
Compressed air in R: gripper opening

FIRST ANGLE PROJECTION

Unità Rotanti
Rotary Units

Cambia Utensile
Quick Changer

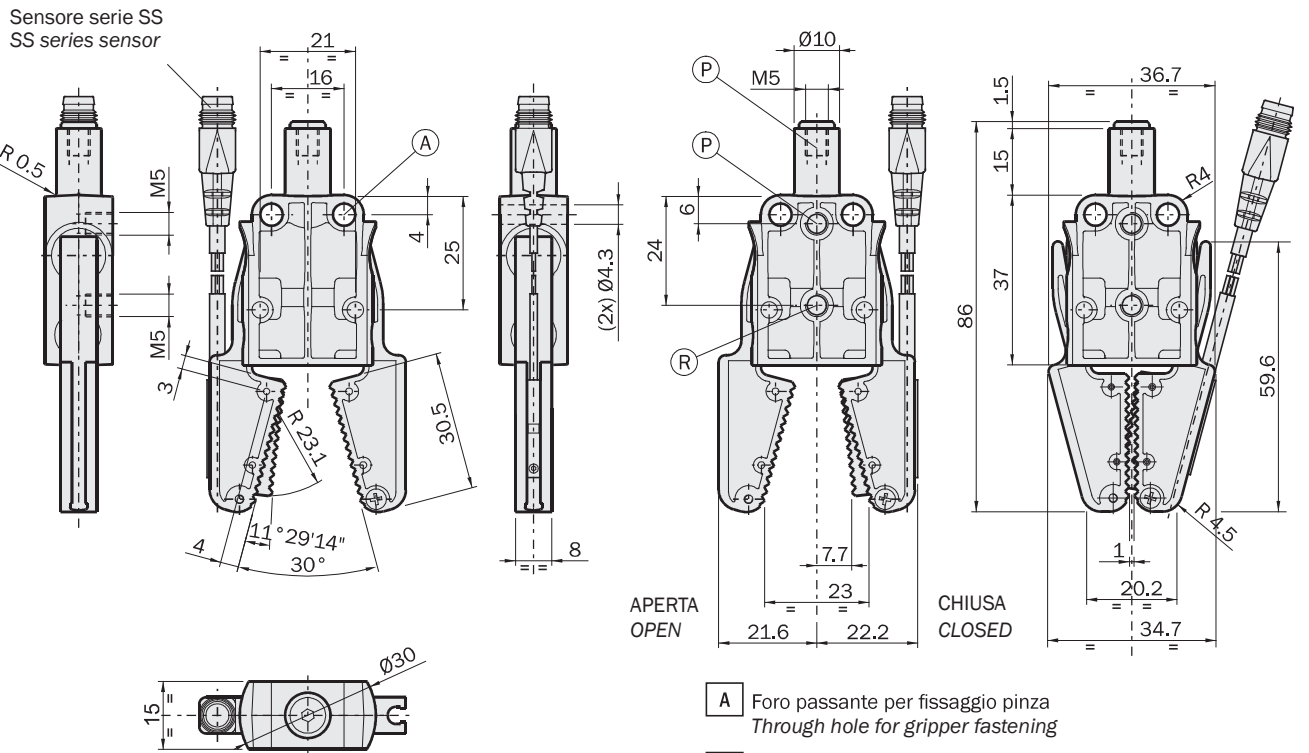
Profili e Staffe
Profiles and Brackets

Pinze
Grippers

Attuatori Lineari
Linear Actuators

Dimensioni (mm)
Dimensions (mm)

BB-13-NO



- A** Foro passante per fissaggio pinza
Through hole for gripper fastening
- P** Aria compressa in P: chiusura della pinza
Compressed air in P: gripper closing
- R** Aria compressa in R: apertura della pinza
Compressed air in R: gripper opening

FIRST ANGLE PROJECTION

Sospensioni
Suspensions

Taglierini
Nippers

Kit-Robot
Robot Kit

Accessori Opzionali
Options

Sensori
Sensors

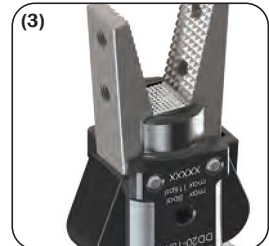
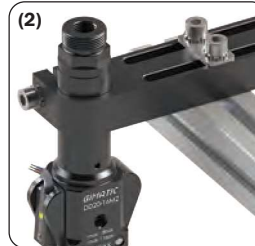
Pinza pneumatica per materozze, angolare autocentrante a due griffe, serie DD

- Nuovo concetto con sensore arretrato e minore ingombro nella zona di presa.
- Sensori magnetici opzionali (1).
- Il sensore è acceso solo quando viene pinzato qualcosa.
- Azionamento a semplice effetto con apertura a molla.
- Elevata forza di serraggio.
- Vari accessori disponibili per il fissaggio (2).
- Griffe in acciaio.
- Grasso alimentare FDA-H1.
- Protezione contro l'ingresso di piccoli corpi estranei (3).
- Fine corsa robusti.

2-jaw self-centering angular pneumatic sprue gripper, series DD

- New concept with retracted sensor and smaller dimensions in the grip area.
- Optional magnetic sensors (1).
- The sensor is ON only when something is gripped.
- Single acting with spring opening.
- Very high closing force.
- Several mounting accessories (2).
- Steel jaws.
- FDA-H1 food-grade grease.
- Protection against the entry of small foreign bodies (3).
- Heavy-duty end-strokes.

SS4N225-G	PNP	Cavo 2.5m
SS4M225-G	NPN	2.5m cable
SS3N203-G	PNP	Connettore M8
SS3M203-G	NPN	



NEW

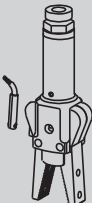
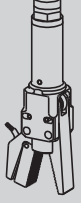
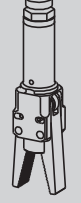
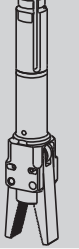
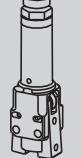
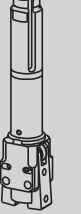
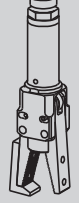
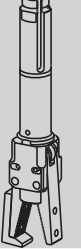
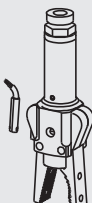
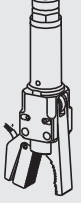
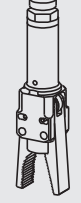
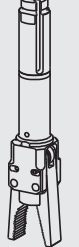

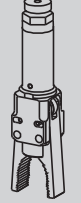
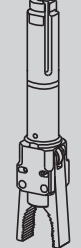

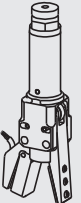
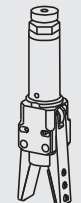
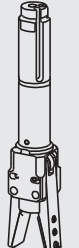
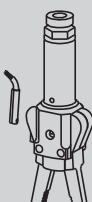
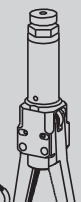
	DD20-16MV	DD20-16LV	DD20-16M2	DD20-16L2	DD20-16E2	DD20-16W2	DD20-16B2
Fluido Medium	Aria compressa a norma ISO 8573-1:2010 [7:4:4] Compressed air in compliance with ISO 8573-1:2010 [7:4:4]						
Pressione di esercizio Pressure range	3.5 ÷ 8 bar						
Temperatura di esercizio Temperature range	5 ÷ 60 °C.						
Corsa Stroke	2 x 15°						
Coppia di chiusura per griffa a 6 bar Closing torque at 6 bar each jaw	300 Ncm						
Coppia di chiusura totale a 6 bar Total closing torque at 6 bar	600 Ncm						
Coppia di apertura per griffa a 0 bar Opening torque at 0 bar each jaw	20 Ncm						
Coppia di apertura totale a 0 bar Total opening torque at 0 bar	40 Ncm						
Frequenza max funzionamento continuativo Maximum working frequency	2 Hz						
Consumo d'aria per ciclo Cycle air consumption	3.6 cm ³						
Tempo di chiusura senza carico Closing time without load	0.03 s						
Peso Weight	147 g	138 g	143 g	132 g	138 g	141 g	140 g

Passare alla nuova versione

Le vecchie pinze DD verranno dismesse, ma quelle nuove sono intercambiabili. Le dimensioni esterne sono le stesse e tutte le opzioni del dito sono ancora disponibili. Con il vecchio schema c'erano versioni con sensore (o sulla punta del dito o sulla coda del corpo) e versioni senza. Con il nuovo schema è possibile utilizzare la stessa pinza con o senza sensore. E il sensore può essere scelto tra le versioni PNP/NPN e cavo/connettore.

Change to the new version

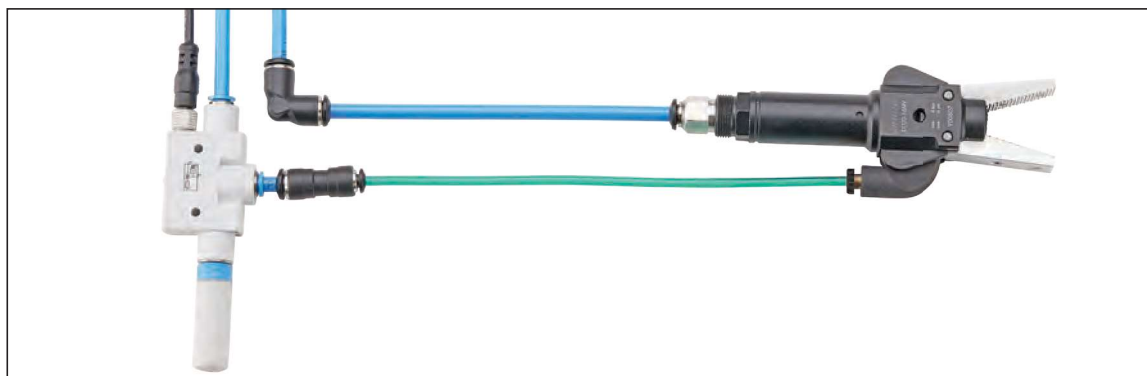
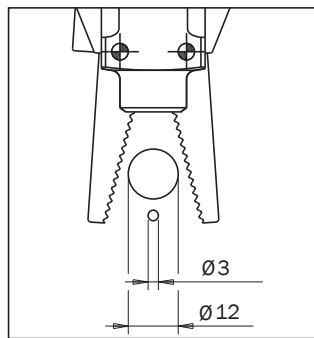
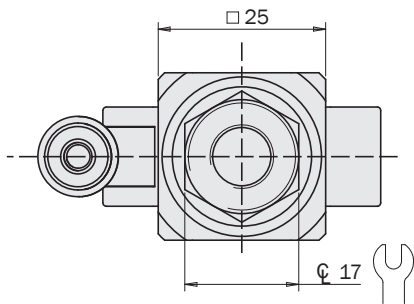
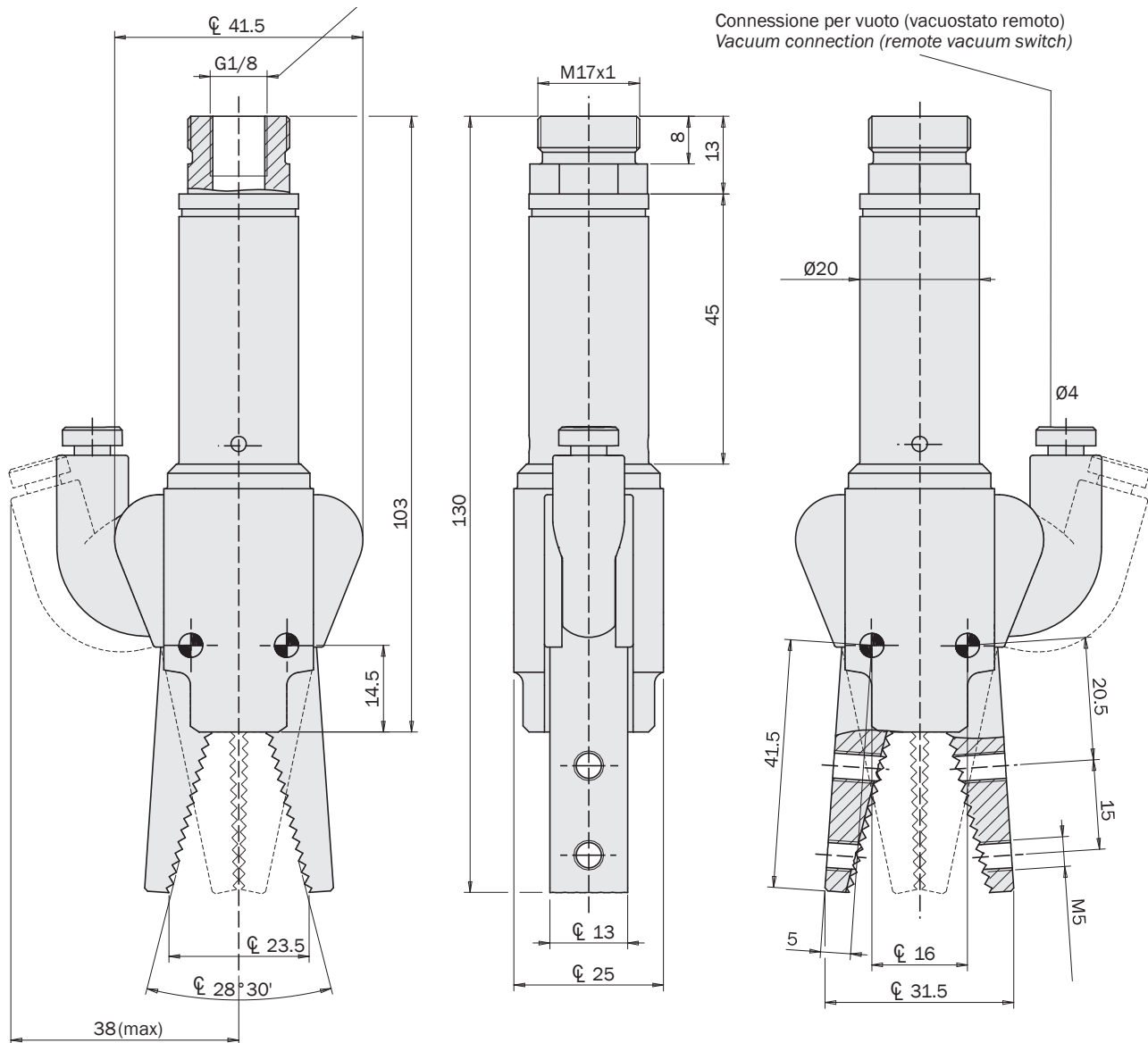
The old DD grippers will be discontinued, however the new ones are compatible. Outer dimensions are the same and all the finger options are still available. The old scheme had versions with sensor (either on the finger tip or on the body tail) and versions without sensor. The new scheme enables to use the same gripper with or without sensor. Moreover, the sensor can be chosen amongst the PNP/NPN and cable/connector versions.

Nuova versione New version	Vecchia versione Old version							
<p>DD20-16M2</p> 	<p>DD20-16M</p> 	<p>DD20-16R</p> 	<p>DD20-16RS</p> 	<p>DD20-16A</p> 	<p>DD20-16AS</p> 	<p>DD20-16T</p> 	<p>DD20-16TS</p> 	
<p>DD20-16W2</p> 	<p>DD20-16W</p> 	<p>DD20-16K</p> 	<p>DD20-16KS</p> 					
<p>DD20-16E2</p> 	<p>DD20-16E</p> 	<p>DD20-16ES</p> 						
<p>DD20-16L2</p> 	<p>DD20-16L</p> 	<p>DD20-16P</p> 	<p>DD20-16PS</p> 					
<p>DD20-16B2</p> 	<p>DD20-16B</p> 							

Dimensioni (mm)
Dimensions (mm)

Connessione per aria compressa (chiusura pinza)
Compressed air connection (gripper closing)

Connessione per vuoto (vacuostato remoto)
Vacuum connection (remote vacuum switch)



Unità Rotanti
Rotary Units

Cambia Utensile
Quick Changer

Profili e Staffe
Profiles and Brackets

Pinze
Grippers

Attuatori Lineari
Linear Actuators

Sospensioni
Suspensions

Taglierini
Nippers

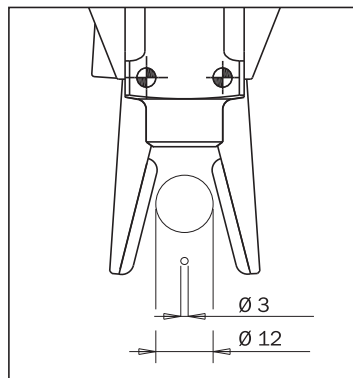
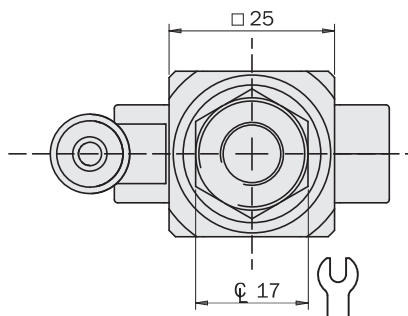
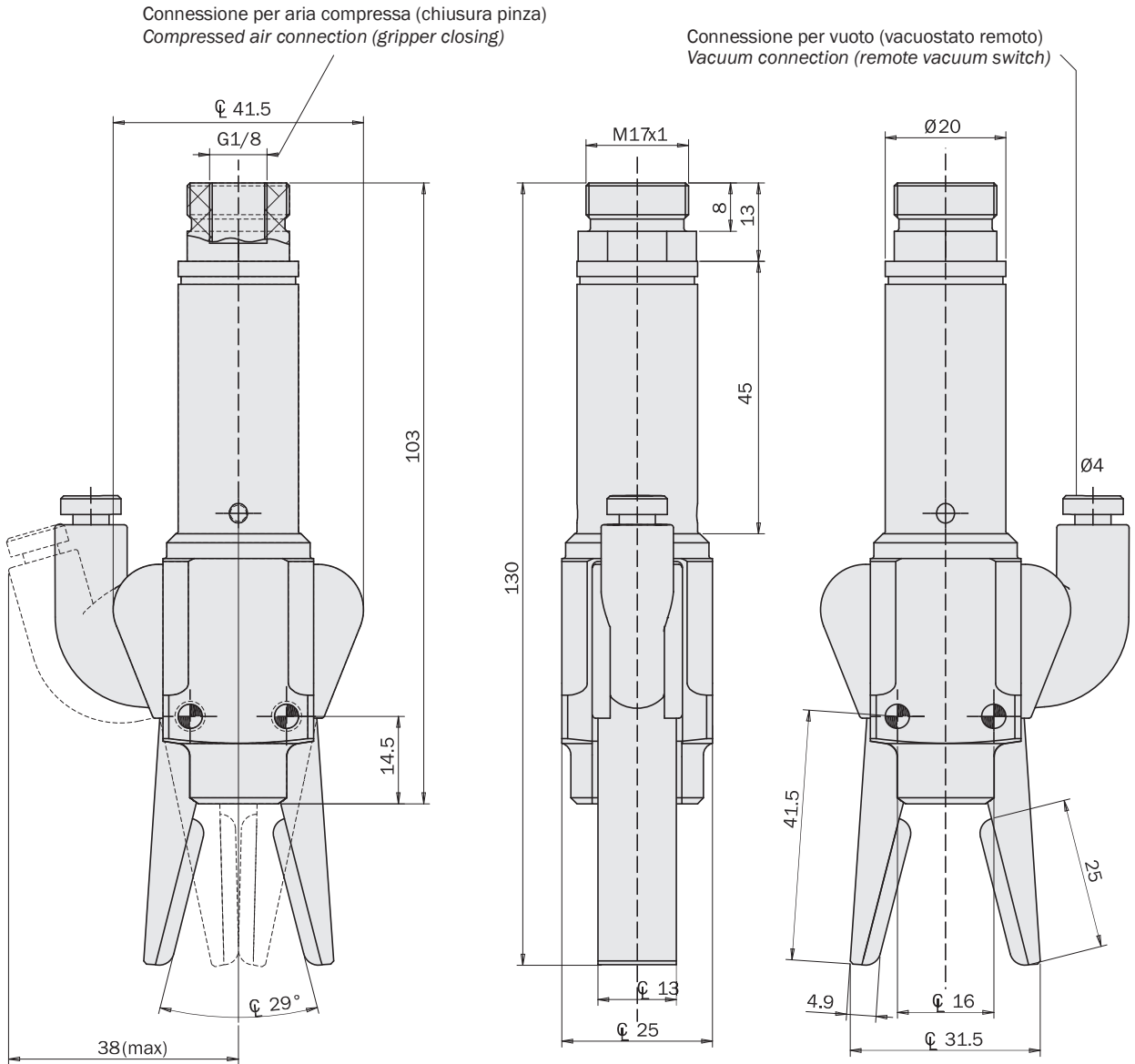
Kit-Robot
Robot Kit

Accessori Opzionali
Options

Sensori
Sensors

Dimensioni (mm)
Dimensions (mm)

DD20-16LV



Dimensioni (mm)
Dimensions (mm)

DD20-16M2

Unità Rotanti
Rotary Units

Cambia Utensile
Quick Changer

Profili e Staffe
Profiles and Brackets

Pinze
Grippers

Attuatori Lineari
Linear Actuators

Sospensioni
Suspensions

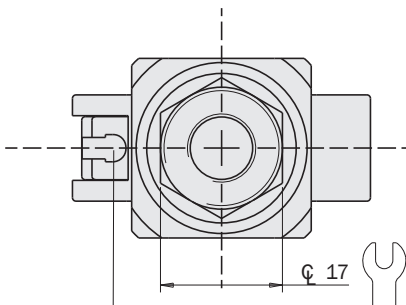
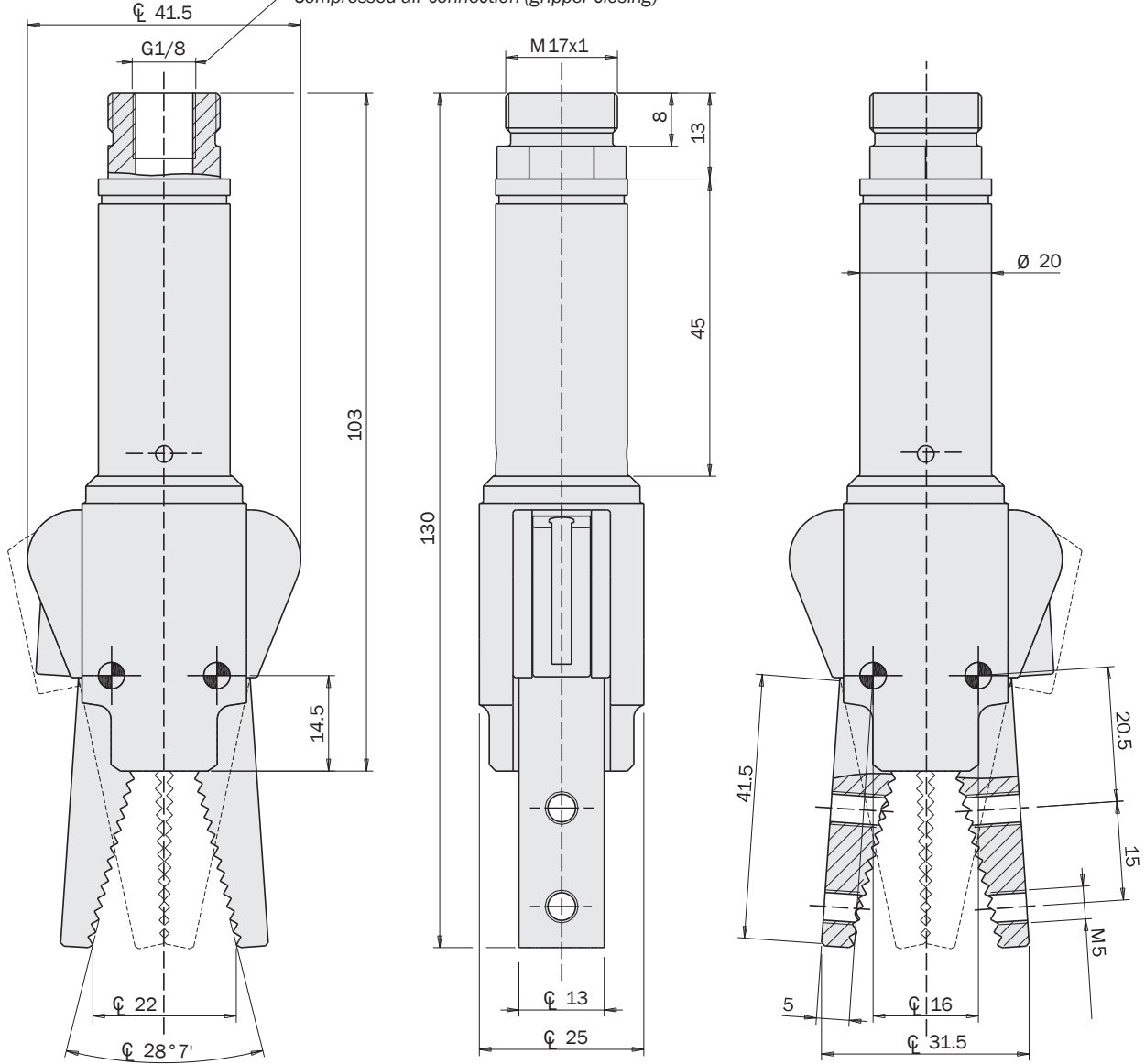
Taglierini
Nippers

Kit-Robot
Robot Kit

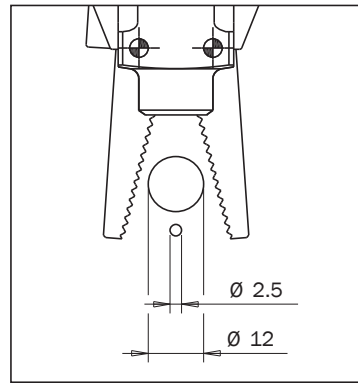
Accessori Opzionali
Options

Sensori
Sensors

Connessione per aria compressa (chiusura pinza)
Compressed air connection (gripper closing)

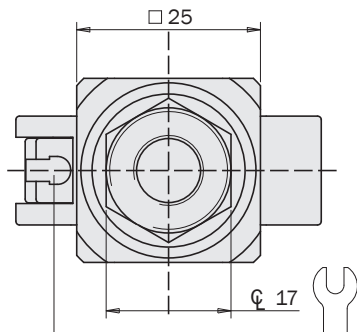
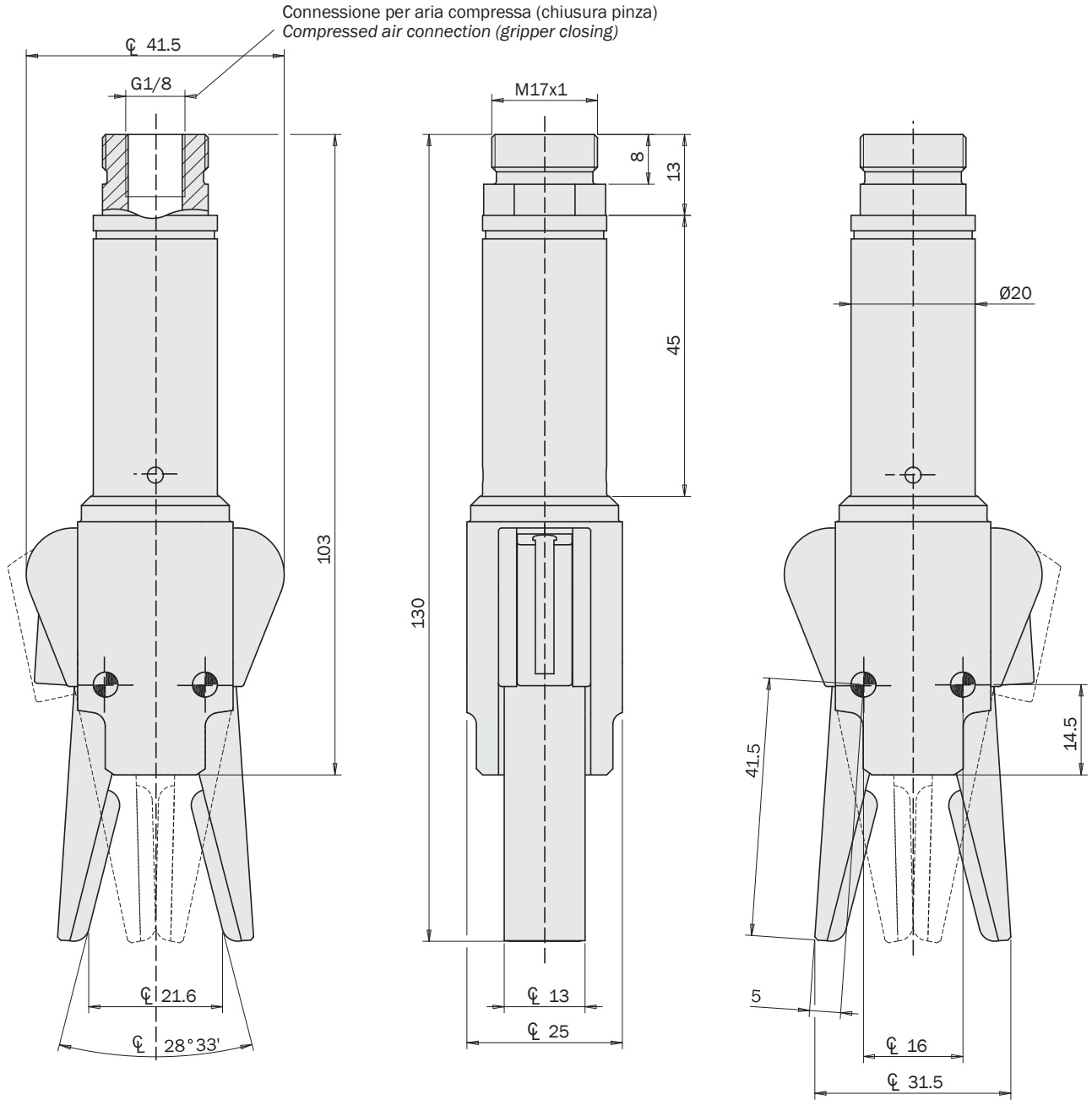


Cava del sensore serie SS
Sensor slot SS series

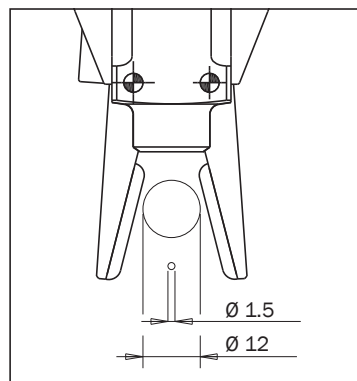


Dimensioni (mm)
Dimensions (mm)

DD20-16L2



Cava del sensore serie SS
Sensor slot SS series



Dimensioni (mm)
Dimensions (mm)

DD20-16E2

Unità Rotanti
Rotary Units

Cambia Utensile
Quick Changer

Profili e Staffe
Profiles and Brackets

Pinze
Grippers

Attuatori Lineari
Linear Actuators

Sospensioni
Suspensions

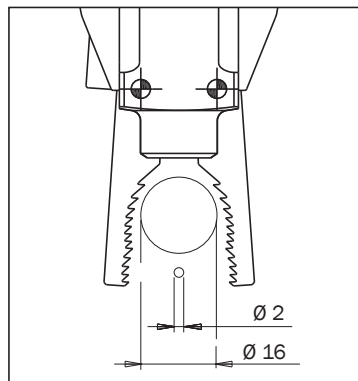
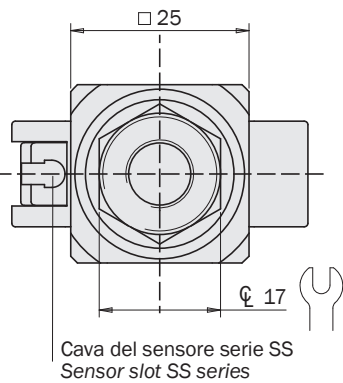
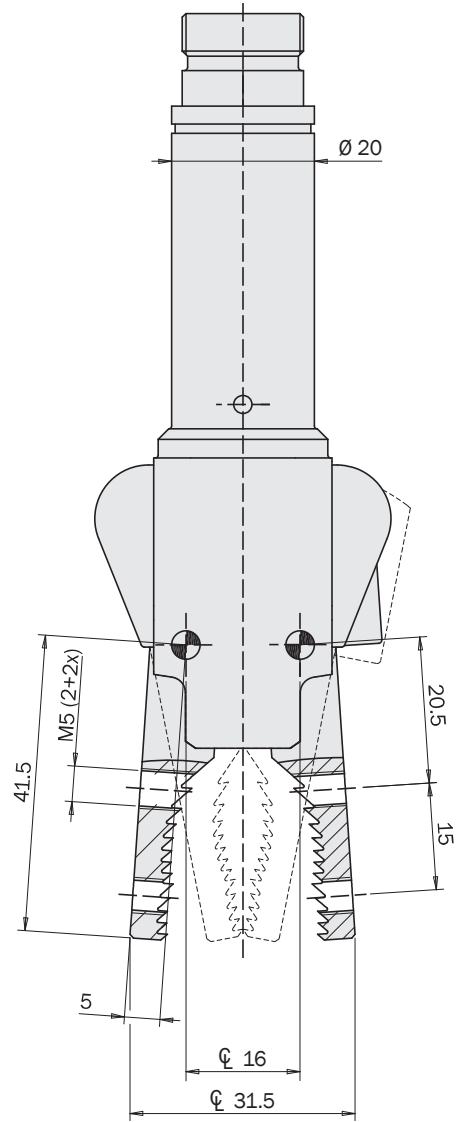
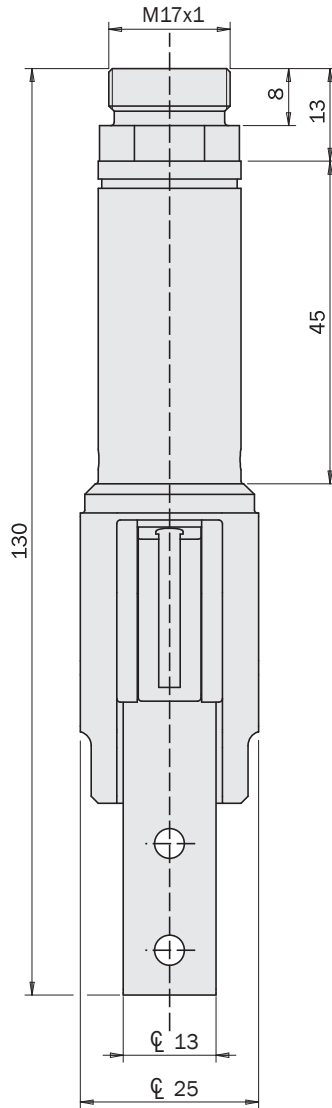
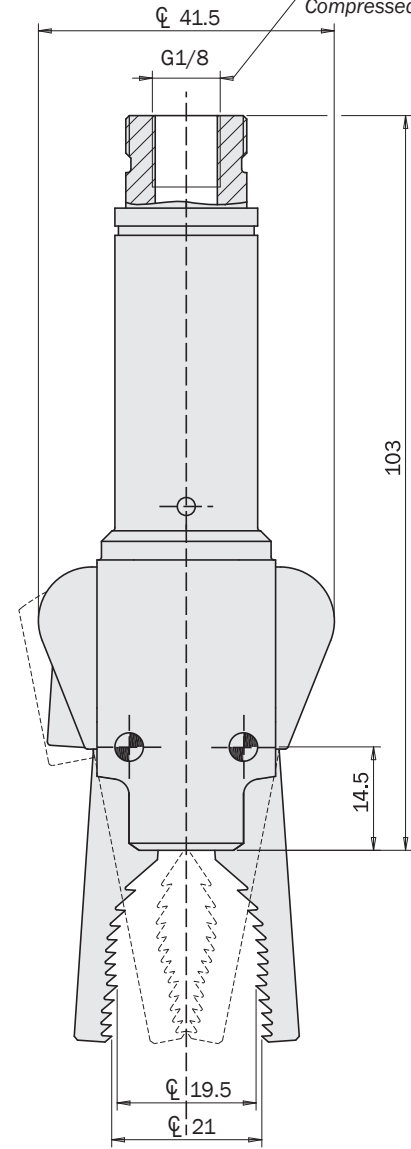
Taglierini
Nippers

Kit-Robot
Robot Kit

Accessori Opzionali
Options

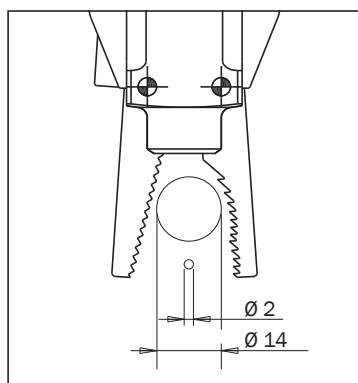
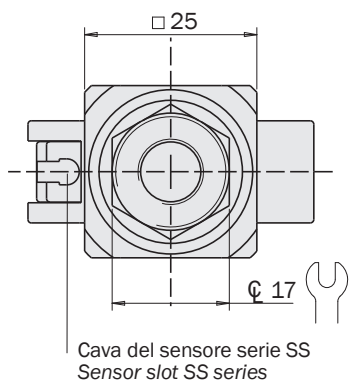
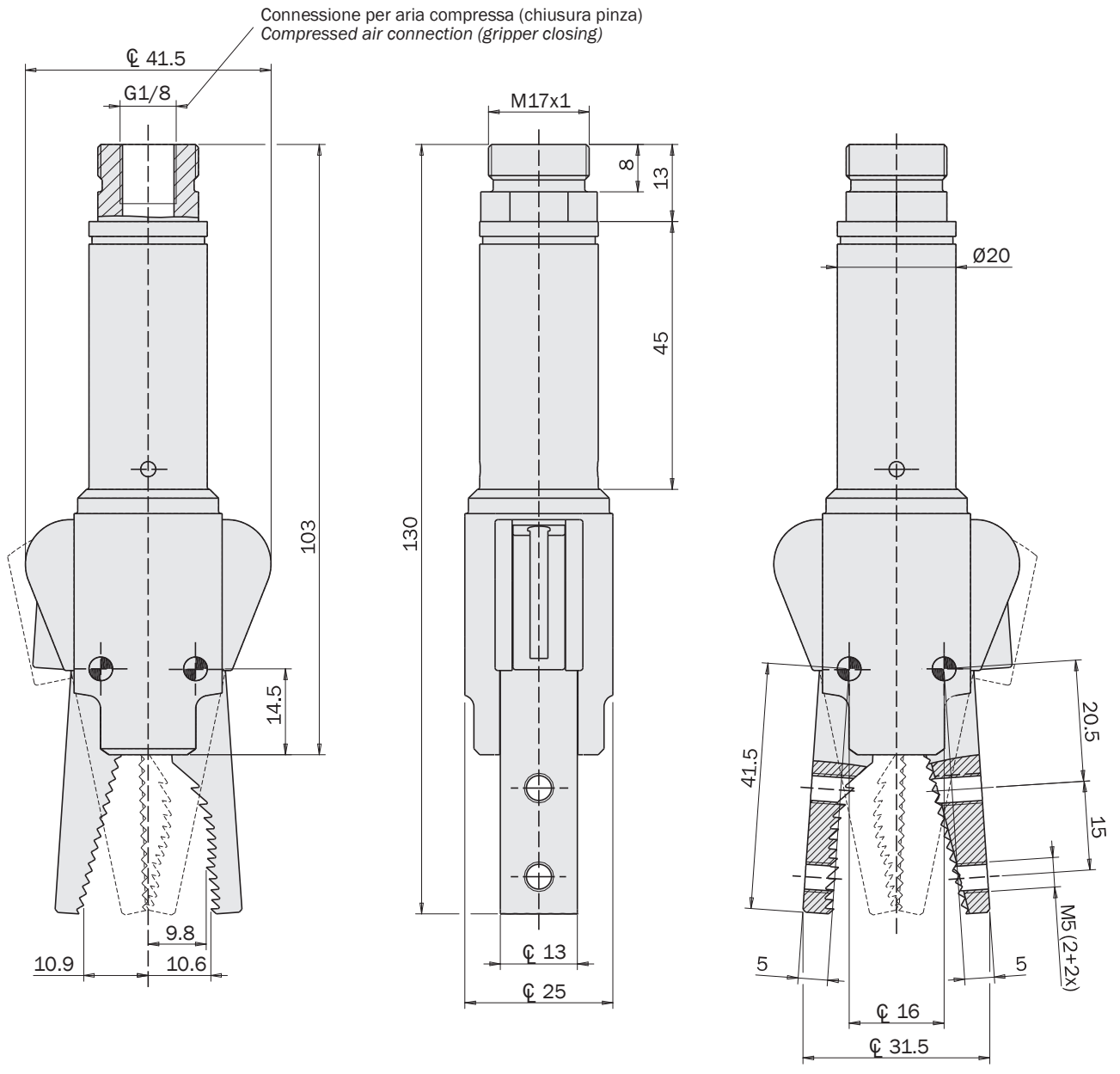
Sensori
Sensors

Connessione per aria compressa (chiusura pinza)
Compressed air connection (gripper closing)



Dimensioni (mm)
Dimensions (mm)

DD20-16W2

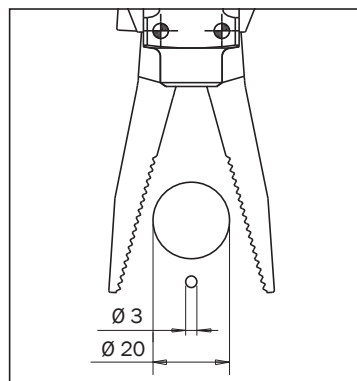
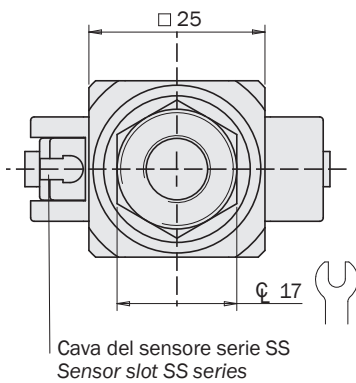
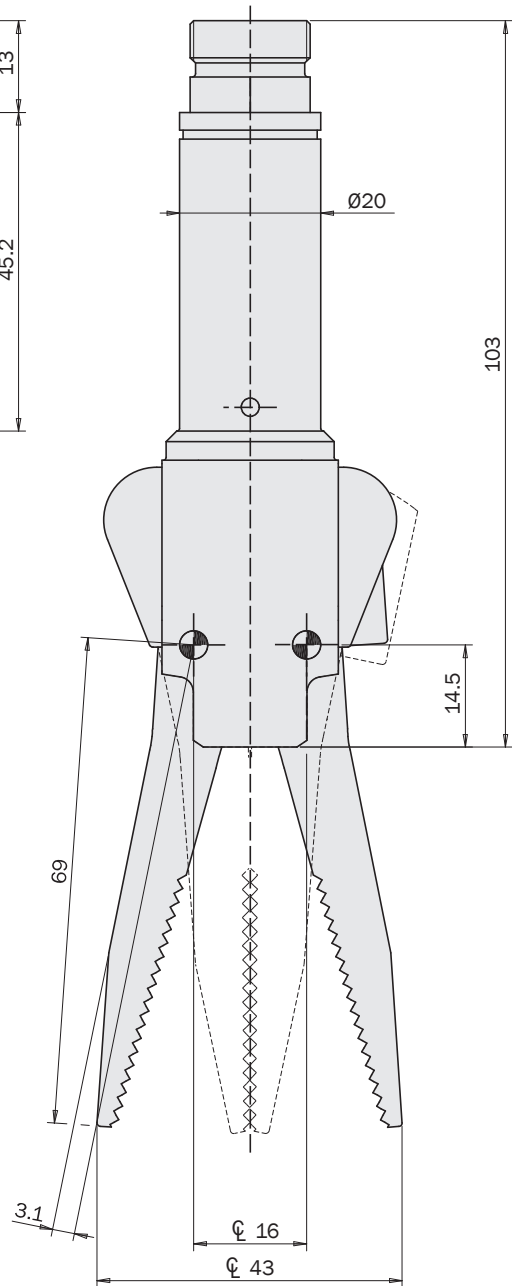
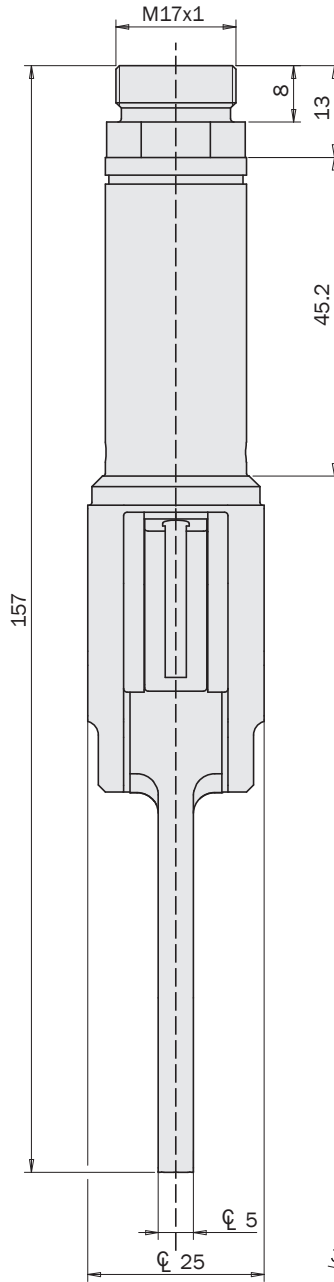
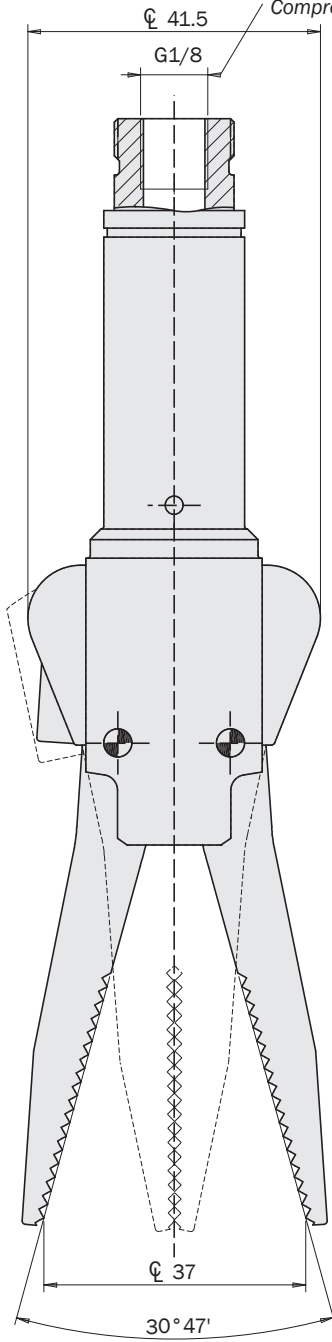


Dimensioni (mm)
Dimensions (mm)

DD20-16B2

FIRST ANGLE
PROJECTION

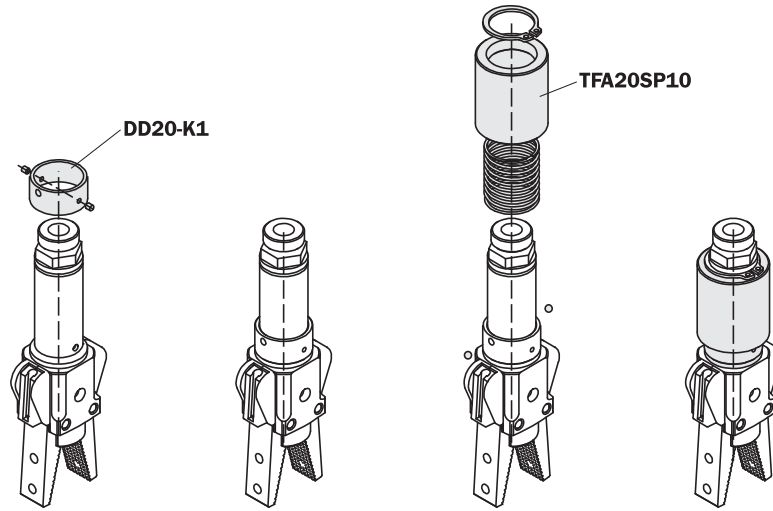
Connessione per aria compressa (chiusura pinza)
Compressed air connection (gripper closing)



Accessori
Accessories

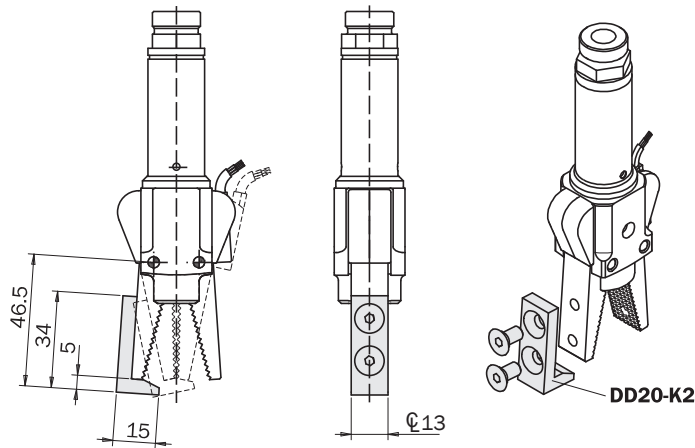
DD20-K1 + TFA20SP10

Sospensione
Suspension



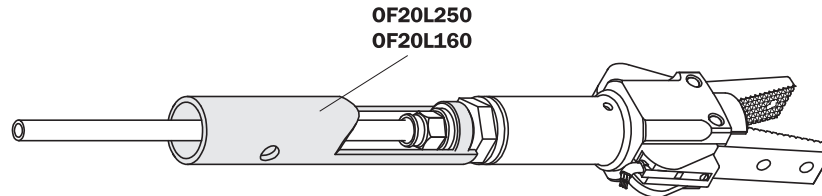
DD20-K2

Dente per griffa
Tooth for jaw



OF20L...

Tubo di prolunga
Extension tube



DD20-16...

Pastiglia di ricambio per DD20-16L2
Spare pad for DD20-16L2



DD20-16P-13
HNBR 60Sh.A

DD20-16P-13F
HNBR 60Sh.A
Floccato
HNBR 60Sh.A
Flocked

DD20-16P-10
TPU 70Sh.A

DD20-16P-17
PU 70Sh.A

DD20-K3
PTFE + PA12

3D...
Personalizzate con Servizio Stampa
3D (PA12)

Customised with the new 3D printing
service (PA12)