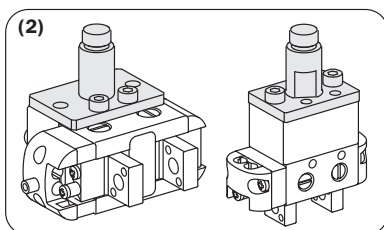
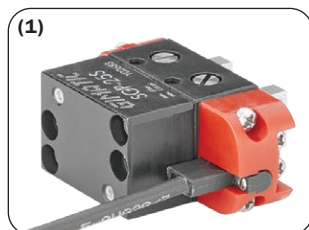


## Pinza pneumatica a 2 griffe ad azione parallela autocentrante (serie SGP-S)

- Azionamento a doppio effetto.
- Meccanismo di regolazione del gioco.
- Prestazioni elevate in dimensioni ridotte.
- Costruzione robusta: grande durata e affidabilità senza manutenzione.
- Diverse possibilità di fissaggio e alimentazione.
- Predisposta per sensore magnetico programmabile PRO-SN ...HS (1).
- Grasso alimentare FDA-H1.
- Vari accessori disponibili per il fissaggio (2).

## 2-jaw parallel self-centering pneumatic gripper (series SGP-S)

- Double acting.
- Backlash adjusting system.
- High performance in small dimensions.
- The rugged construction lends itself to heavy duty applications for a trouble free long life without maintenance.
- Various fastening and air feeding options.
- Ready for PRO-SN ...HS (1) programmable magnetic sensor.
- Food grade grease FDA-H1.
- Several mounting accessories (2).



SGP-16S

SGP-20S

SGP-25S

SGP-32S

SGP-40S

SGP-50S

|                                                                                                         | SGP-16S                                                                                                            | SGP-20S | SGP-25S   | SGP-32S | SGP-40S | SGP-50S |
|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------|-----------|---------|---------|---------|
| Fluido<br><i>Medium</i>                                                                                 | Aria compressa a norma ISO 8573-1:2010 [7:4:4]<br><i>Compressed air in compliance with ISO 8573-1:2010 [7:4:4]</i> |         |           |         |         |         |
| Pressione di esercizio<br><i>Operating pressure range</i>                                               | 2.5 ÷ 8 bar                                                                                                        |         | 2 ÷ 8 bar |         |         |         |
| Temperatura di esercizio<br><i>Operating temperature range</i>                                          | 5° ÷ 60°C.                                                                                                         |         |           |         |         |         |
| Forza di serraggio per griffa in apertura a 6 bar<br><i>Opening gripping force at 6 bar on each jaw</i> | 16 N                                                                                                               | 23 N    | 52 N      | 67 N    | 80 N    | 145 N   |
| Forza di serraggio totale in apertura a 6 bar<br><i>Opening total gripping force at 6 bar</i>           | 32 N                                                                                                               | 46 N    | 104 N     | 134 N   | 160 N   | 290 N   |
| Forza di serraggio per griffa in chiusura a 6 bar<br><i>Closing gripping force at 6 bar on each jaw</i> | 14 N                                                                                                               | 20 N    | 47 N      | 60 N    | 73 N    | 126 N   |
| Forza di serraggio totale in chiusura a 6 bar<br><i>Closing total gripping force at 6 bar</i>           | 28 N                                                                                                               | 40 N    | 94 N      | 120 N   | 146 N   | 252 N   |
| Corsa totale<br><i>Total stroke (±0.3 mm)</i>                                                           | 3 mm                                                                                                               | 4 mm    | 6 mm      | 8 mm    | 12 mm   | 16 mm   |
| Frequenza max funzionamento continuativo<br><i>Maximum working frequency</i>                            | 3 Hz                                                                                                               | 3 Hz    | 3 Hz      | 3 Hz    | 2 Hz    | 2 Hz    |
| Consumo d'aria per ciclo<br><i>Cycle air consumption</i>                                                | 0.2 cm³                                                                                                            | 0.5 cm³ | 1.4 cm³   | 2.4 cm³ | 4.5 cm³ | 10 cm³  |
| Tempo di chiusura senza carico<br><i>Closing time without load</i>                                      | 0.02 s                                                                                                             | 0.02 s  | 0.02 s    | 0.02 s  | 0.05 s  | 0.05 s  |
| Ripetibilità<br><i>Repetition accuracy</i>                                                              | 0.02 mm                                                                                                            | 0.02 mm | 0.02 mm   | 0.02 mm | 0.02 mm | 0.02 mm |
| Peso<br><i>Weight</i>                                                                                   | 19 g                                                                                                               | 33 g    | 43 g      | 86 g    | 170 g   | 250 g   |

## Sensori

Le posizioni di funzionamento possono essere verificate grazie ad un sensore programmabile a 3 uscite (non incluso), che rileva la posizione del magnete nella griffa destra.

**I sensori consigliati per le pinze SGP-20S/25S/32S/40S/50S sono:**

**The recommended sensors for the grippers SGP-20S/25S/32S/40S/50S are:**

|                 |     |                                         |
|-----------------|-----|-----------------------------------------|
| PRO-SN4N225HS-G | PNP | Cavo 2.5m<br>2.5m cable                 |
| PRO-SN4M225HS-G | NPN |                                         |
| PRO-SN3N215HS-G | PNP | Connettore M8<br>M8 snap plug connector |
| PRO-SN3M215HS-G | NPN |                                         |

**I sensori opzionali per la pinza SGP-16S sono:**

**The recommended sensors for the gripper SGP-16S are:**

|               |     |                                         |
|---------------|-----|-----------------------------------------|
| PRO-SN4N225-G | PNP | Cavo 2.5m<br>2.5m cable                 |
| PRO-SN4M225-G | NPN |                                         |
| PRO-SN3N215-G | PNP | Connettore M8<br>M8 snap plug connector |
| PRO-SN3M215-G | NPN |                                         |

La posizioni rilevate possono essere regolate tramite la procedura di configurazione, in questo modo le 3 uscite digitali possono essere:

Uscita 1 – griffe completamente chiuse [1];

Uscita 2 – griffe in presa dell'oggetto (posizione intermedia) [2];

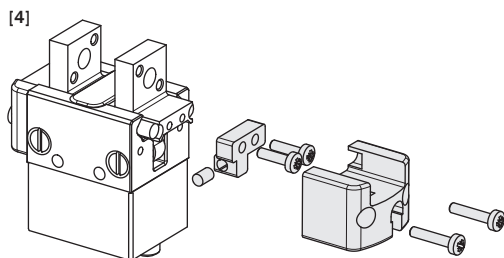
Uscita 3 – griffe completamente aperte [3].

## Upgrade

Le vecchie pinze possono essere aggiornate per utilizzare il nuovo sensore programmabile [4].

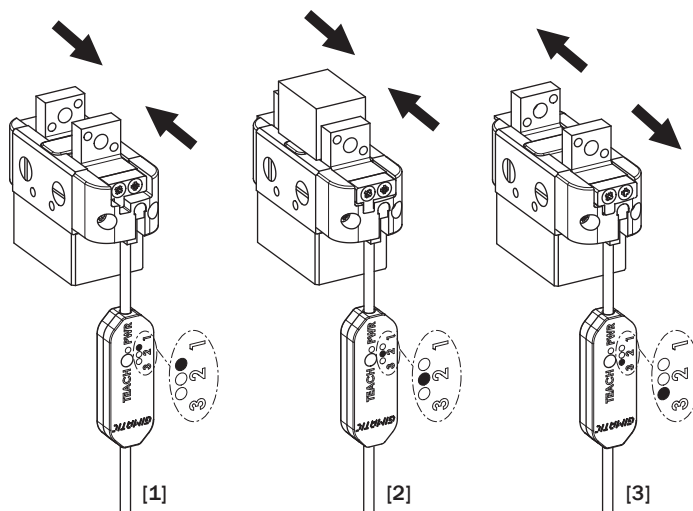
## Downgrade

Le nuove pinze possono essere aggiornate per utilizzare i sensori induttivi [5 e 6].



## Sensors

The operating position can be checked by one 3 - outputs programmable sensor (not included), detecting the position of the magnet on the right jaw.



The detected positions can be adjusted by a teaching procedure, so that 3 digital outputs can be:

Output 1 - totally closed jaws [1];

Output 2 - gripped part (intermediate position) [2];

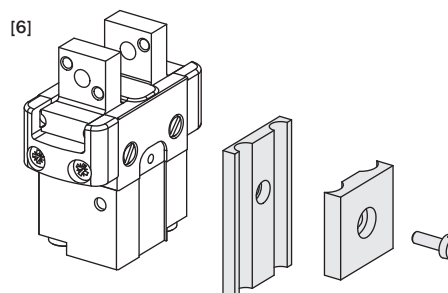
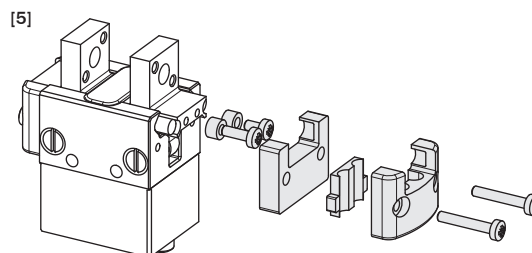
Output 3 - totally open jaws [3].

## Upgrade

Old grippers can be upgraded in order to use the new teachable sensor [4].

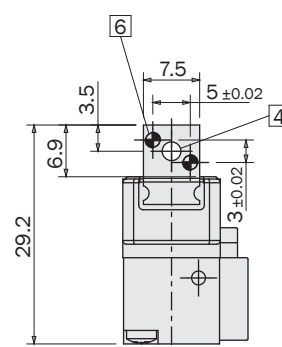
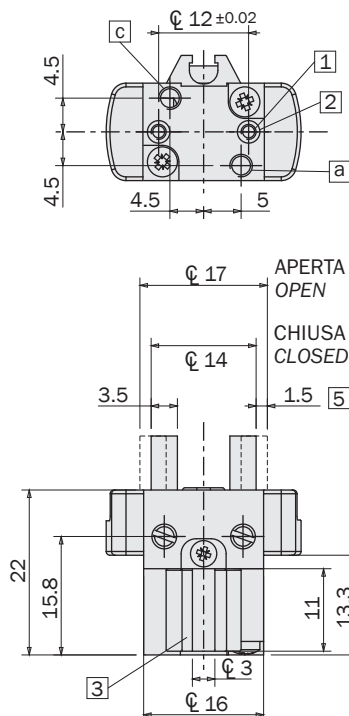
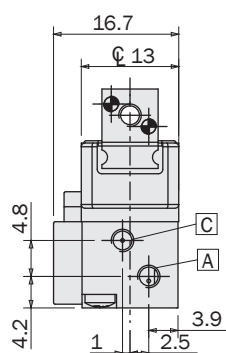
## Downgrade

New grippers can be downgraded in order to use the inductive sensors [5 and 6].

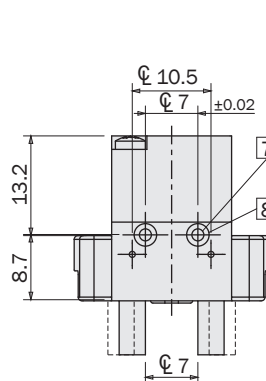
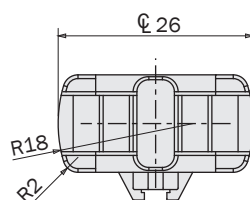
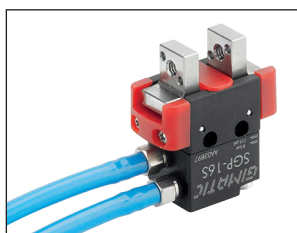


|         | Upgrade [4] | Downgrade [5] | Downgrade [6] |
|---------|-------------|---------------|---------------|
| SGP-16S | -           | -             | SGP-16S-KD    |
| SGP-20S | SGP-20S-KU  | SGP-20S-KD    | -             |
| SGP-25S | SGP-25S-KU  | SGP-25S-KD    | -             |
| SGP-32S | SGP-32S-KU  | SGP-32S-KD    | -             |
| SGP-40S | SGP-40S-KU  | SGP-40S-KD    | -             |
| SGP-50S | -           | SGP-50S-KD    | -             |

**Dimensioni (mm)**  
**Dimensions (mm)**



**RG.R0-1376-AS1**  
 Raccordo M3 diritto  
 Straight M3 fitting



**1** (N°2) M2x2.8mm  
 Foro per fissaggio  
 Hole for fastening

**2** (N°2) Ø3H8x1.2mm  
 Sede per boccole di centraggio  
 Hole for fastening

**3** Supporto per posizionamento sensore magnetico PRO-SN/SS  
 Magnetic sensor slot (PRO-SN/SS)

**4** M3  
 Foro passante per fissaggio  
 Through hole for fastening

**5** Corsa per griffa  
 Stroke each jaw

**6** Ø1.5H8x3.5mm  
 Foro di riferimento  
 Dowel pin hole

**7** (N°2) M2x1.5mm  
 Foro per fissaggio  
 Hole for fastening

**8** (N°2) Ø3H8x1.5mm  
 Foro di riferimento  
 Hole for fastening

**a** M2.5  
 Aria compressa in a: apertura della pinza  
 Compressed air in a: gripper opening

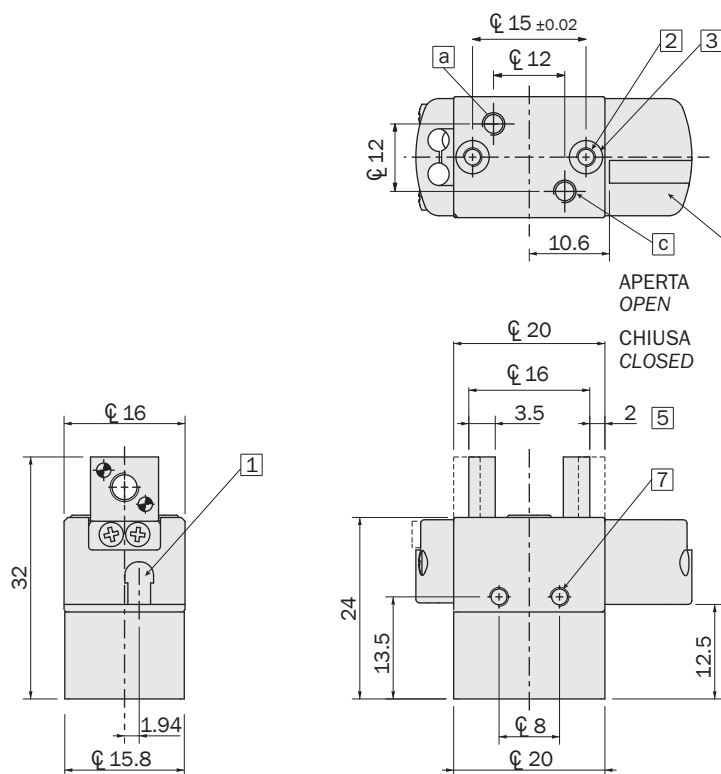
**A** M3  
 Aria compressa in A: apertura della pinza  
 Compressed air in A: gripper opening

**c** M2.5  
 Aria compressa in c: chiusura della pinza  
 Compressed air in c: gripper closing

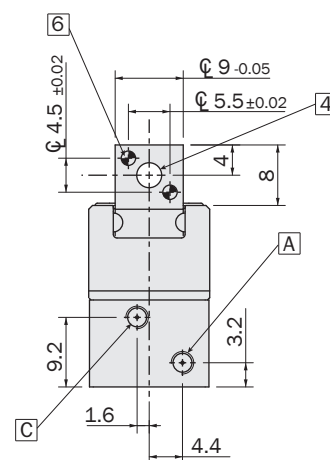
**C** M3  
 Aria compressa in C: chiusura della pinza  
 Compressed air in C: gripper closing

**Dimensioni (mm)**  
**Dimensions (mm)**

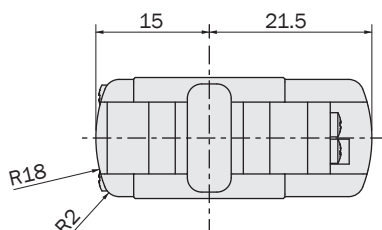
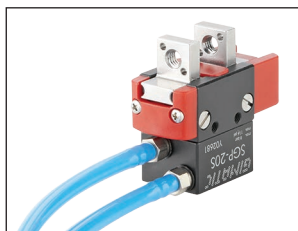
## SGP-20S



- 1 Foro per sensore programmabile PRO-SN ...HS  
Hole for programmable sensor PRO-SN ...HS
- 2 (N°2) M2.5x6mm  
Foro per fissaggio  
Hole for fastening
- 3 (N°2)  $\varnothing 4H8 \times 2mm$   
Sede per boccole di centraggio  
Centering sleeve hole
- 4 M4  
Foro passante per fissaggio  
Through hole for fastening

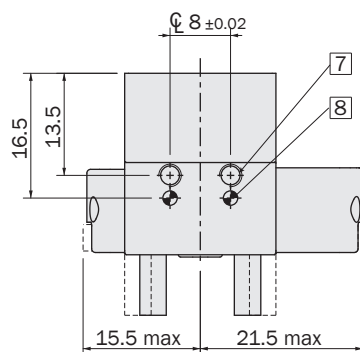
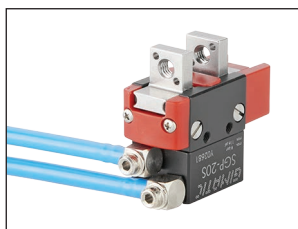


**RG.RO-1376-AS1**  
Raccordo M3 diritto  
Straight M3 fitting



- 5 Corsa per griffa  
Stroke each jaw
- 6  $\varnothing 1.5H8 \times 3.5mm$   
Foro di riferimento  
Dowel pin hole
- 7 (N°2) M2.5x4mm  
Foro per fissaggio  
Hole for fastening
- 8  $\varnothing 1.5H8 \times 3mm$   
Foro di riferimento  
Dowel pin hole

**RG.RO-1376-AS2**  
Raccordo M3 orientabile a "L"  
Adjustable M3 fitting



- a M2.5  
Aria compressa in a: apertura della pinza  
Compressed air in a: gripper opening
- A M3  
Aria compressa in A: apertura della pinza  
Compressed air in A: gripper opening
- c M2.5  
Aria compressa in c: chiusura della pinza  
Compressed air in c: gripper closing
- C M3  
Aria compressa in C: chiusura della pinza  
Compressed air in C: gripper closing



FIRST ANGLE  
PROJECTION

**Dimensioni (mm)**  
**Dimensions (mm)**
**SGP-25S**

Foro per sensore programmabile  
PRO-SN...HS  
Hole for programmable sensor  
PRO-SN...HS

1

(N°2) M3x7mm  
Foro per fissaggio  
Hole for fastening

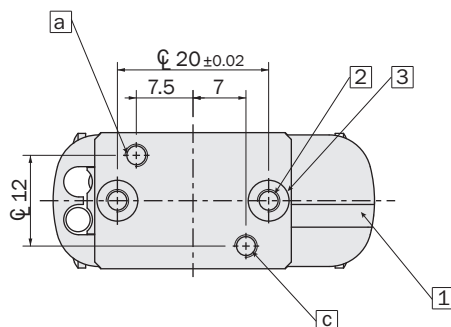
2

(N°2) Ø5H8x2.4mm  
Sede per boccole di centraggio  
Centering sleeve hole

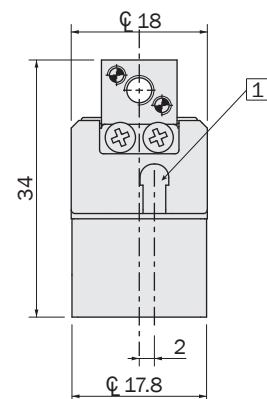
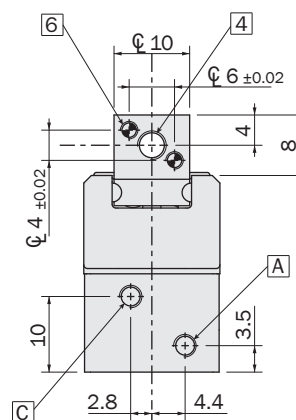
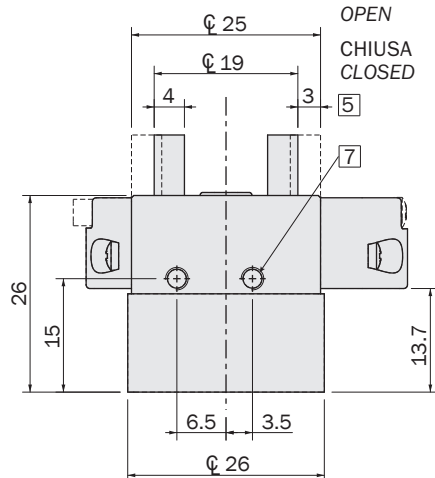
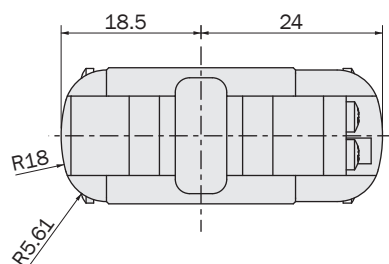
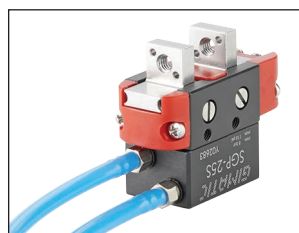
3

M4  
Foro passante per fissaggio  
Through hole for fastening

4



APERTA  
OPEN  
CHIUSA  
CLOSED


**RG.R0-1376-AS1**  
 Raccordo M3 diretto  
 Straight M3 fitting


5 Corsa per griffa  
Stroke each jaw

6 Ø1.5H8x4mm  
Foro di riferimento  
Dowel pin hole

7 (N°2) M3x5mm  
Foro per fissaggio  
Hole for fastening

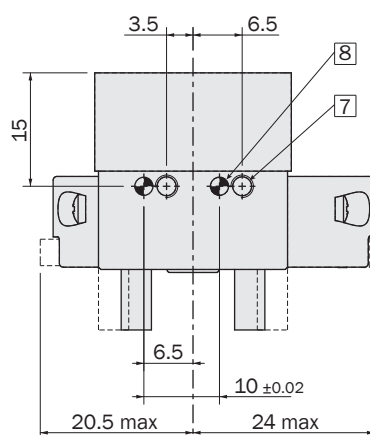
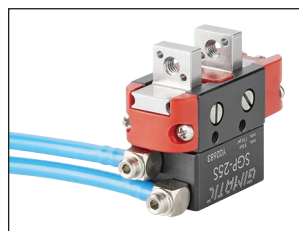
8 Ø2H8x4mm  
Foro di riferimento  
Dowel pin hole

a M3  
Aria compressa in a: apertura della pinza  
Compressed air in a: gripper opening

A M3  
Aria compressa in A: apertura della pinza  
Compressed air in A: gripper opening

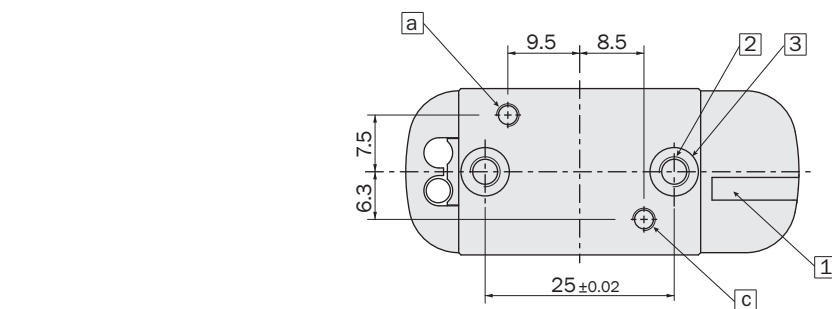
c M3  
Aria compressa in c: chiusura della pinza  
Compressed air in c: gripper closing

C M3  
Aria compressa in C: chiusura della pinza  
Compressed air in C: gripper closing

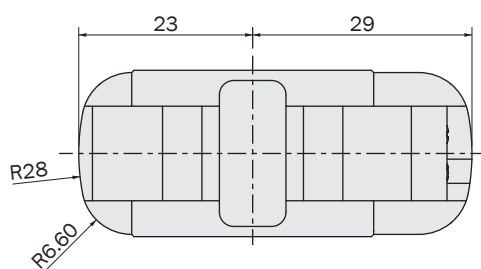
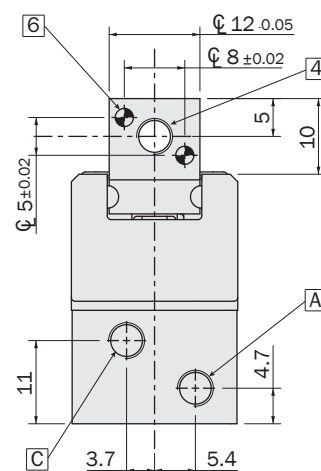
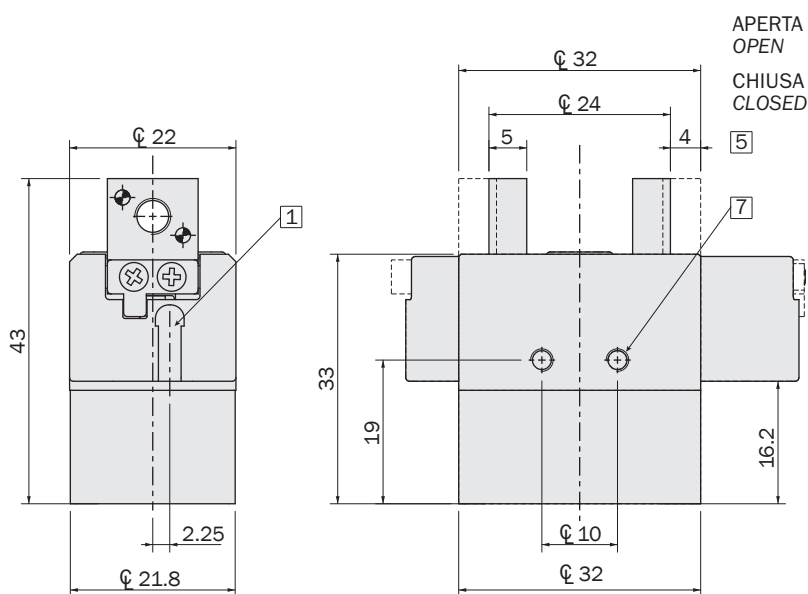
**RG.R0-1376-AS2**  
 Raccordo M3 orientabile a "L"  
 Adjustable M3 fitting


**Dimensioni (mm)**  
**Dimensions (mm)**

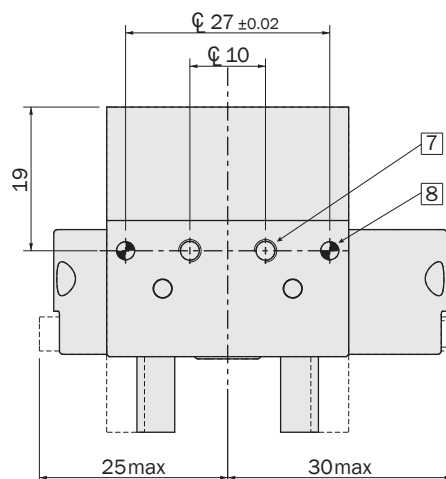
## SGP-32S



- 1 Foro per sensore programmabile  
PRO-SN...HS  
*Hole for programmable sensor  
PRO-SN...HS*
- 2 (N°2) M4x7.5mm  
Foro per fissaggio  
*Hole for fastening*
- 3 (N°2) Ø6H8x2.9mm  
Sede per boccole di centraggio  
*Centering sleeve hole*
- 4 M5  
Foro passante per fissaggio  
*Through hole for fastening*



- 5 Corsa per griffa  
*Stroke each jaw*
- 6 Ø2H8x5mm  
Foro di riferimento  
*Dowel pin hole*
- 7 (N°2) M3x5mm  
Foro per fissaggio  
*Hole for fastening*



- 8 Ø2H8x5mm  
Foro di riferimento  
*Dowel pin hole*
- a M3  
Aria compressa in a: apertura della pinza  
*Compressed air in a: gripper opening*
- A M5  
Aria compressa in A: apertura della pinza  
*Compressed air in A: gripper opening*
- c M3  
Aria compressa in c: chiusura della pinza  
*Compressed air in c: gripper closing*
- C M5  
Aria compressa in C: chiusura della pinza  
*Compressed air in C: gripper closing*



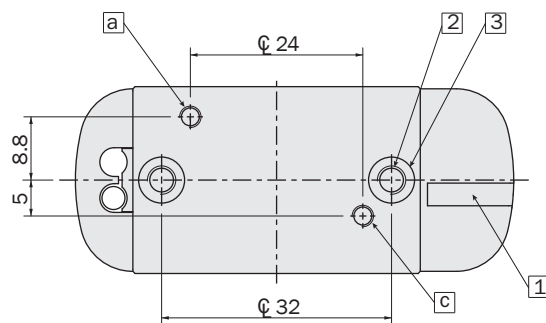
**Dimensioni (mm)**  
**Dimensions (mm)**

Foro per sensore programmabile  
PRO-SN...HS  
Hole for programmable sensor  
PRO-SN...HS

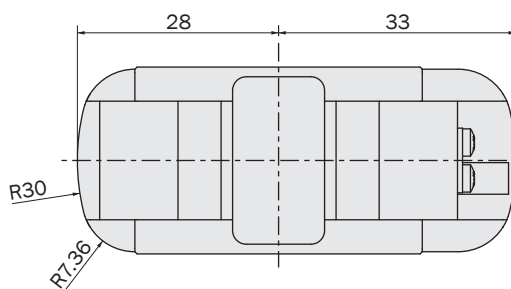
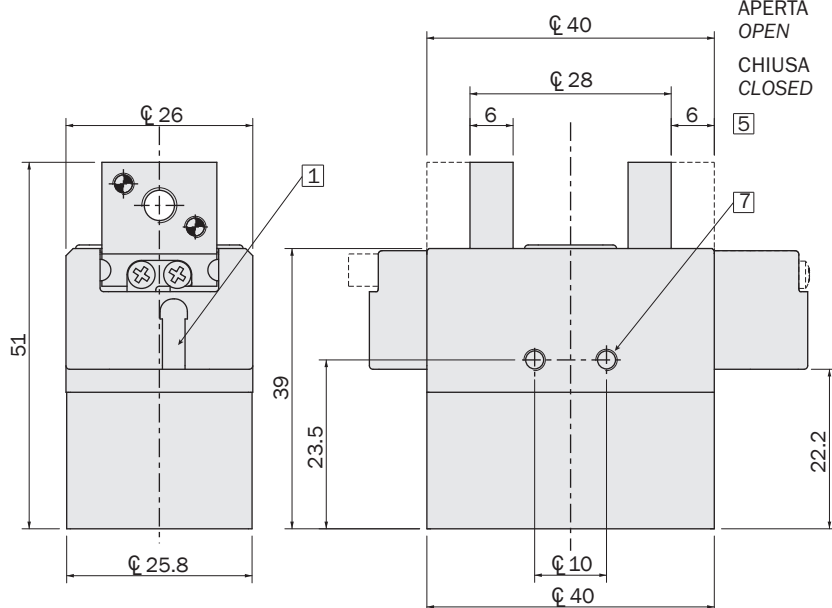
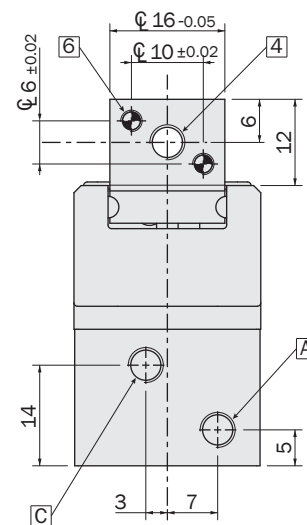
1 (N°2) M4x9.5mm  
Foro per fissaggio  
Hole for fastening

3 (N°2) Ø6H8x2.9mm  
Sede per boccole di centraggio  
Centering sleeve hole

4 M5  
Foro passante per fissaggio  
Through hole for fastening



APERTA  
OPEN  
CHIUSA  
CLOSED



5 Corsa per griffa  
Stroke each jaw

6 Ø2.5H8x6mm  
Foro di riferimento  
Dowel pin hole

7 (N°2) M3x5mm  
Foro per fissaggio  
Hole for fastening

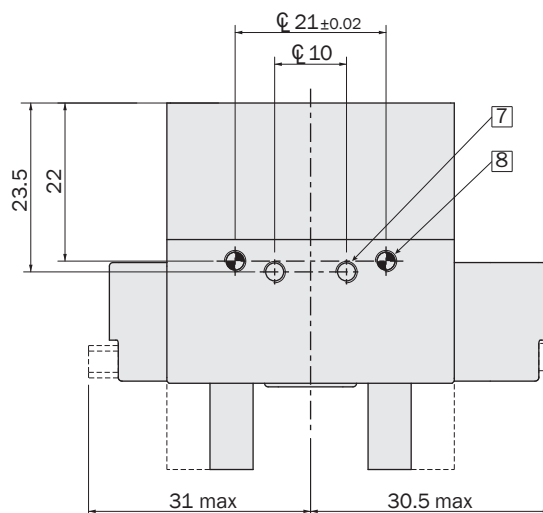
8 Ø2.5H8x6mm  
Foro di riferimento  
Dowel pin hole

a M3  
Aria compressa in a: apertura della pinza  
Compressed air in a: gripper opening

A M5  
Aria compressa in A: apertura della pinza  
Compressed air in A: gripper opening

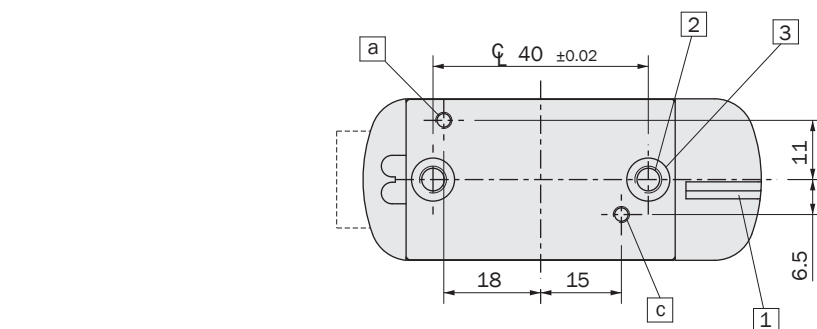
c M3  
Aria compressa in c: chiusura della pinza  
Compressed air in c: gripper closing

C M5  
Aria compressa in C: chiusura della pinza  
Compressed air in C: gripper closing

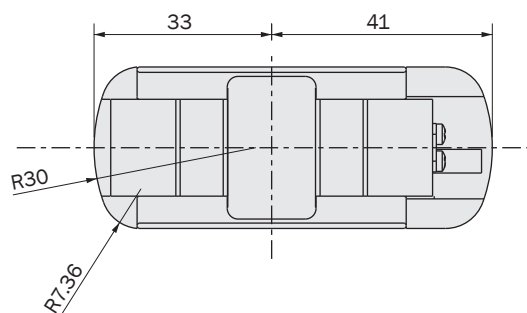
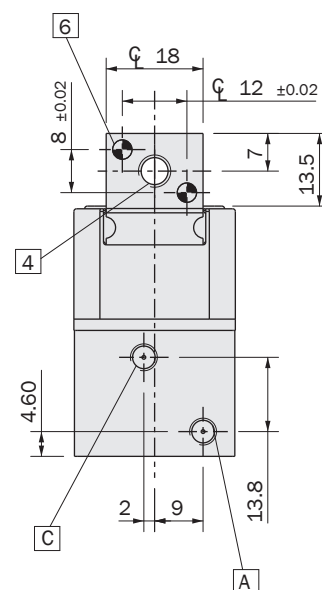
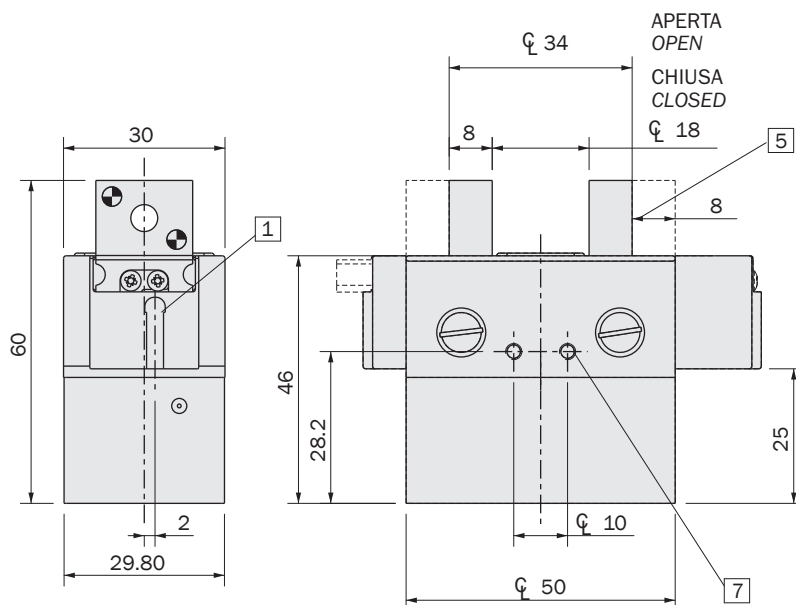


**Dimensioni (mm)**  
**Dimensions (mm)**

## SGP-50S



- 1** Foro per sensore programmabile  
PRO-SN...HS  
*Hole for programmable sensor  
PRO-SN...HS*
- 2** (N°2) M5x5.9mm  
Foro per fissaggio  
*Hole for fastening*
- 3** (N°2) Ø8H8x2.9mm  
Sede per boccole di centraggio  
*Centering sleeve hole*
- 4** M6  
Foro passante per fissaggio  
*Through hole for fastening*



- 5** Corsa per griffa  
*Stroke each jaw*
- 6** Ø3H8x8mm  
Foro di riferimento  
*Dowel pin hole*
- 7** (N°2) M5x5.5mm  
Foro per fissaggio  
*Hole for fastening*
- 8** Ø8H8x2.5mm  
Sede per boccole di centraggio  
*Centering sleeve hole*
- a** M3  
Aria compressa in a: apertura della pinza  
*Compressed air in a: gripper opening*
- A** M5  
Aria compressa in A: apertura della pinza  
*Compressed air in A: gripper opening*
- c** M3  
Aria compressa in c: chiusura della pinza  
*Compressed air in c: gripper closing*
- C** M5  
Aria compressa in C: chiusura della pinza  
*Compressed air in C: gripper closing*

