



GMA7C

P L A S T I C S

	C [Ncm]	s	m [g]
OFA20-35	100	35°	60
OFA20-35S	100	35°	86
OFA30-35	430	35°	220
OFA30-35S	430	35°	272
OFR20-95	70	95°	55
OFR20-95S	70	95°	82
OFR30-95	300	95°	200
OFR30-95S	300	95°	257

OF

Pinze per staffaggio

Grippers for clamping



Pinze pneumatiche mono-dito angolari per staffaggio serie OF

- Due taglie e quattro tipologie disponibili.
- Azionamento a semplice effetto.
- Pistoni magnetici e predisposizione per sensori (solo OF...S)
- Sensori magnetici opzionali.

One finger angular pneumatic gripper for clamping series OF

- Two sizes and four types available.
- Single acting.
- Magnetic pistons for sensor detection (OF...S only).
- Optional magnetic sensors.



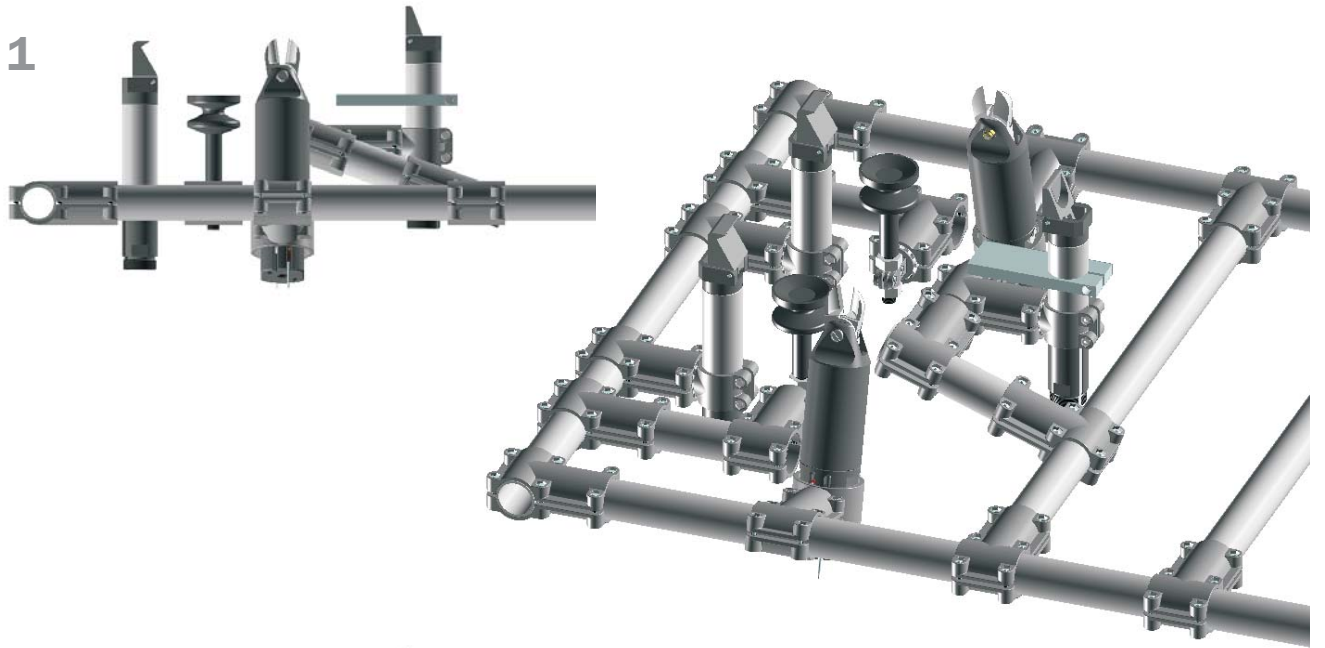
Caratteristiche / Features

	OFA20-35 (*) OFA20-35S	OFA30-35 (*) OFA30-35S	OFR20-95 (*) OFR20-95S	OFR30-95 (*) OFR30-95S
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air			
Pressione di esercizio Pressure range	2.5 ÷ 6 bar			
Temperatura di esercizio Temperature range	5° ÷ 60°C.			
Corsa Stroke	35°	35°	95°	95°
Alesaggio Piston bore	Ø16 mm	Ø25 mm	Ø16 mm	Ø25 mm
Coppia di chiusura a 6 bar Closing torque at 6 bar	100 Ncm	430 Ncm	70 Ncm	300 Ncm
Consumo d'aria per ciclo Cycle air consumption	1.24 cm ³	4.56 cm ³	3.52 cm ³	12.9 cm ³
Peso Weight	60 g (OFA20-35) 86 g (OFA20-35S)	220 g (OFA30-35) 272 g (OFA30-35S)	55 g (OFR20-95) 82 g (OFR20-95S)	200 g (OFR30-95) 257 g (OFR30-95S)

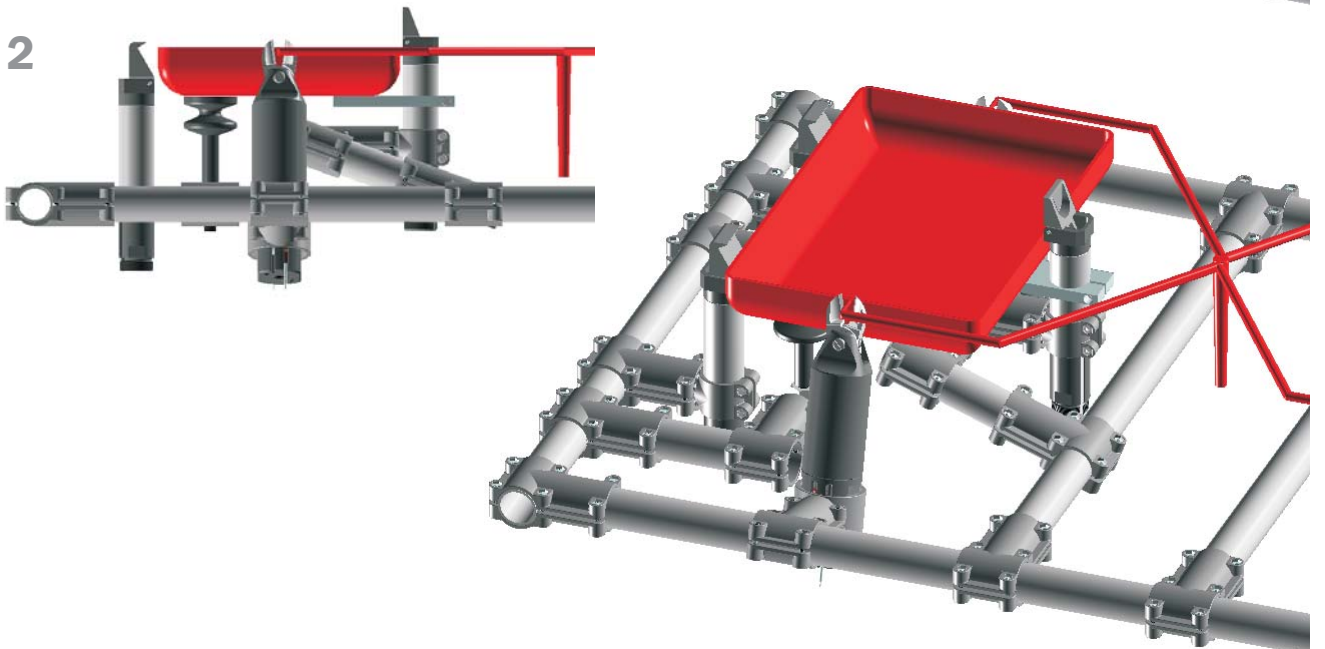
(*) Articoli in preparazione

(*) Under construction

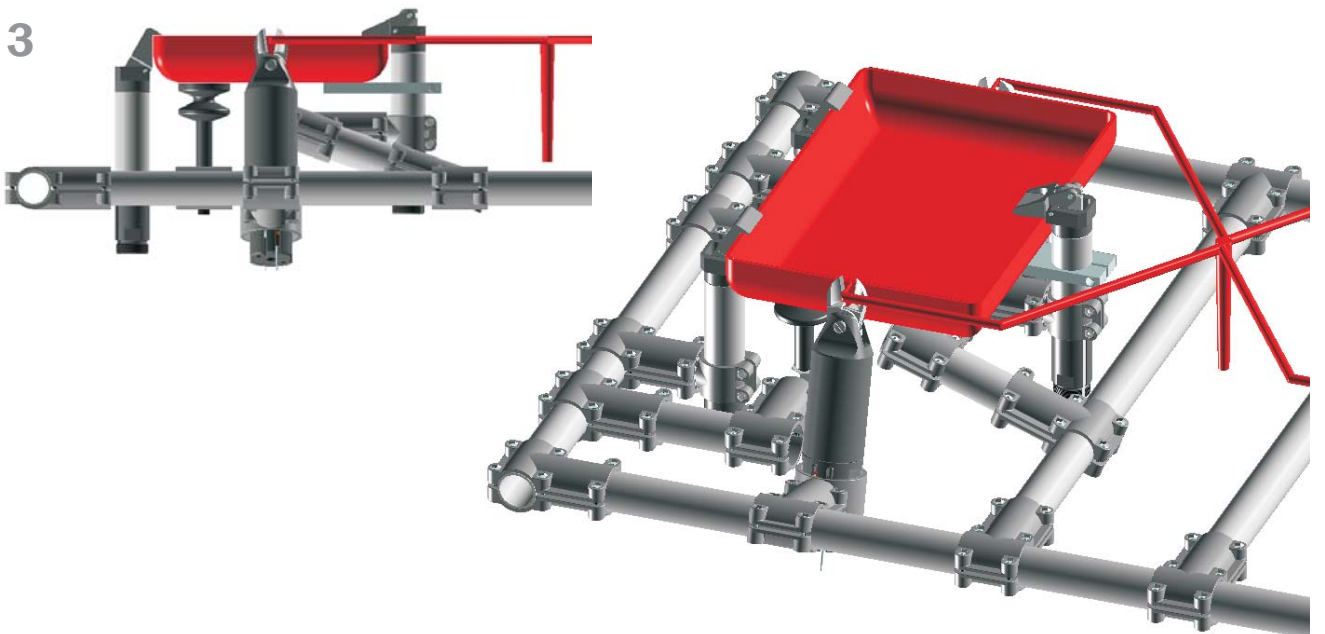
1



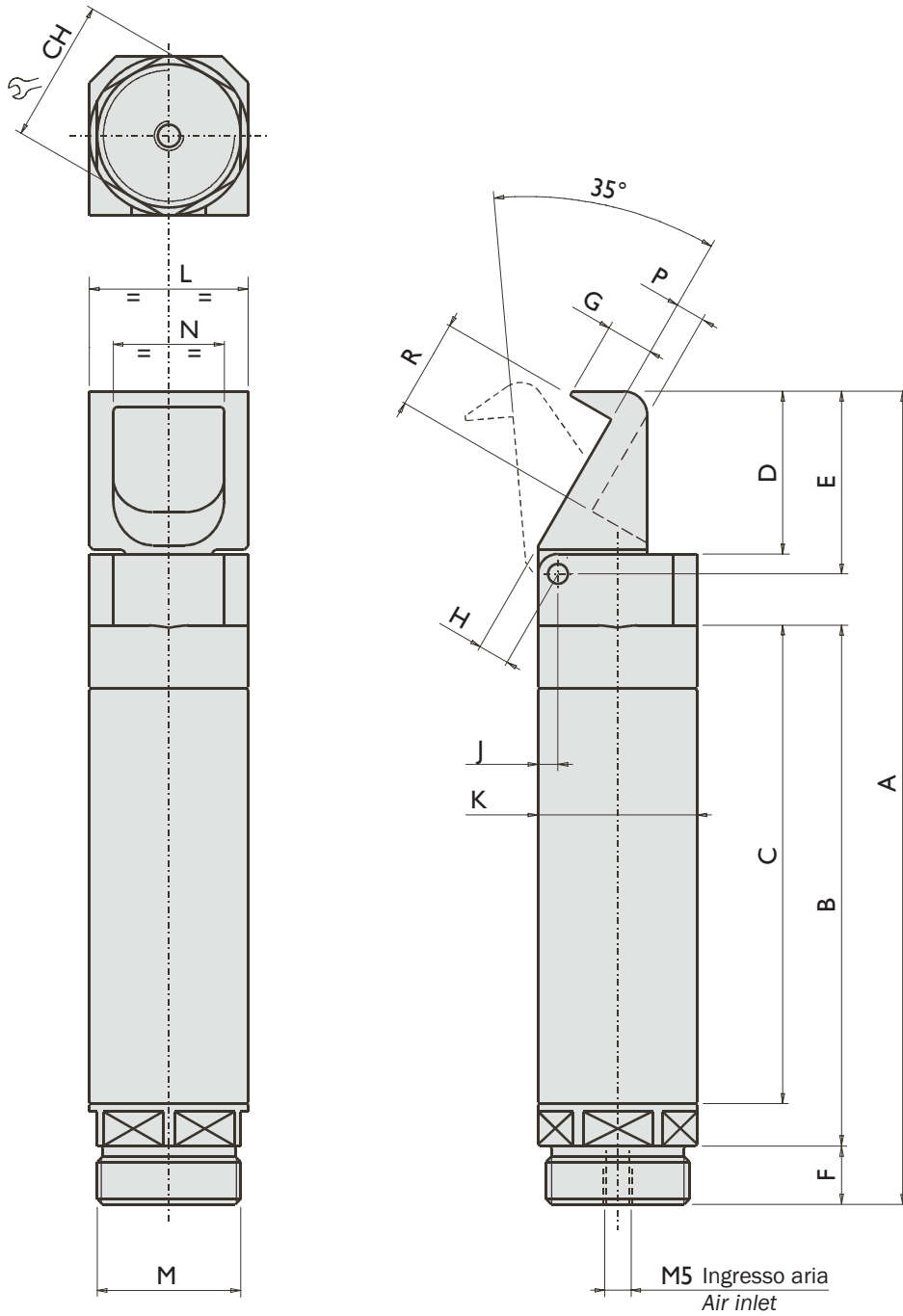
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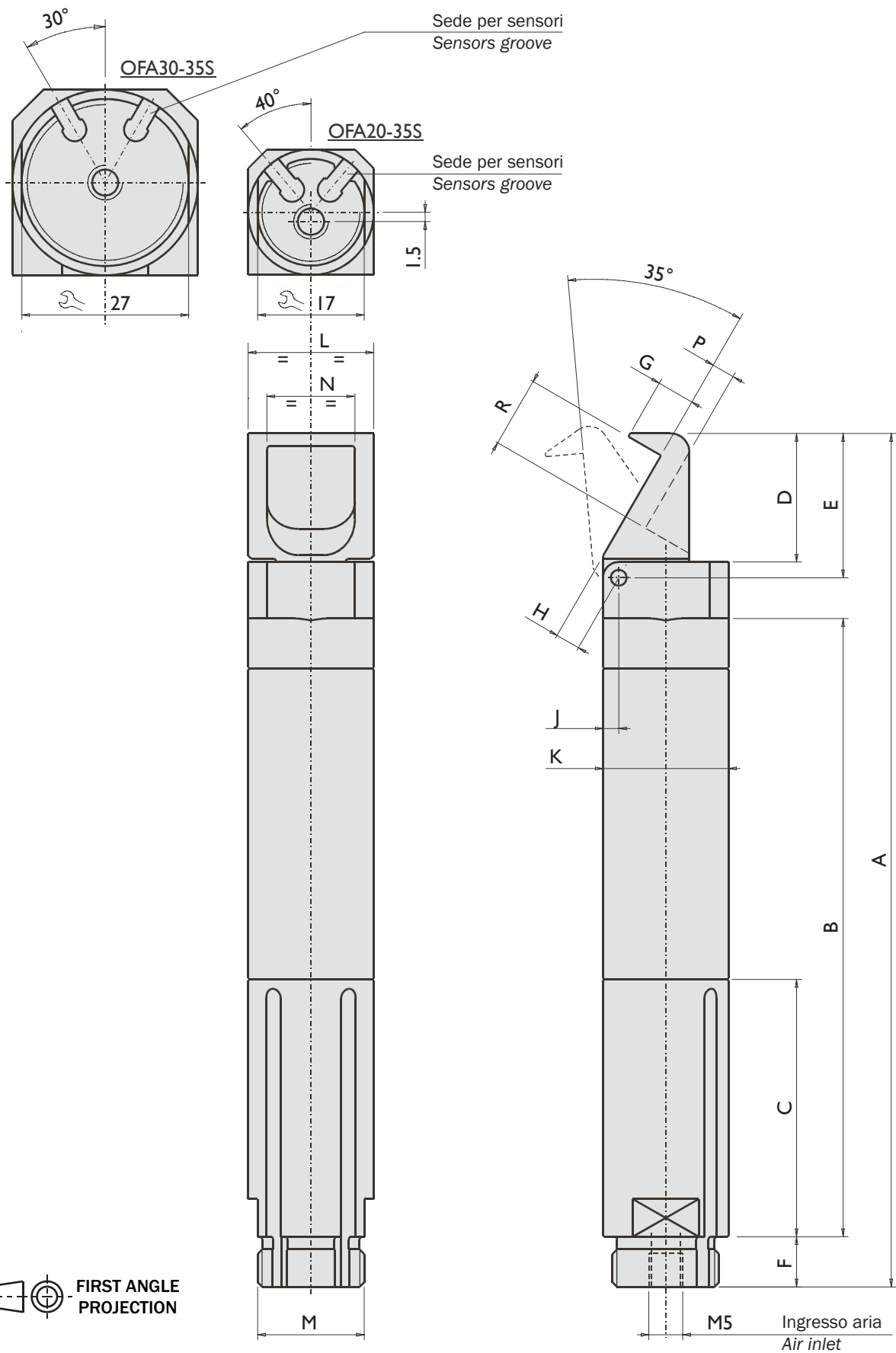
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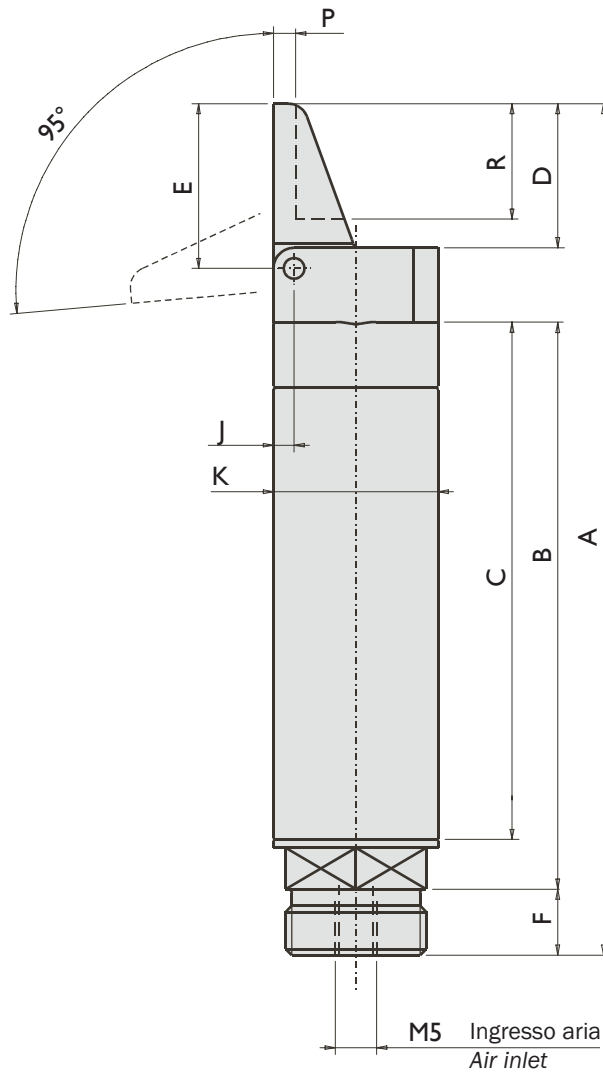
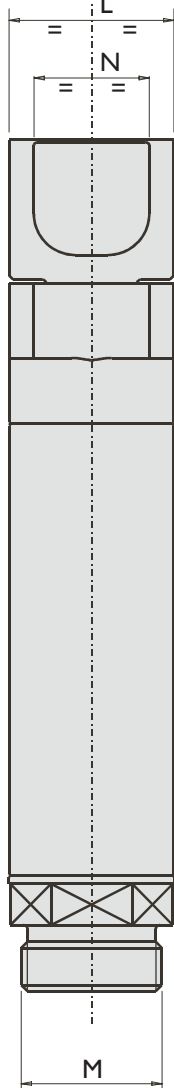
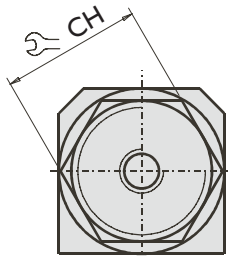
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	CH
OFA20-35	106	68.5	63.5	20.5	23	8	6	3.9	2.5	Ø20	20	M17x1	14	3	11.5	17
OFA30-35	153	100	92	30	34	11	8	6	4	Ø30	30	M27x1	22	5	17	27



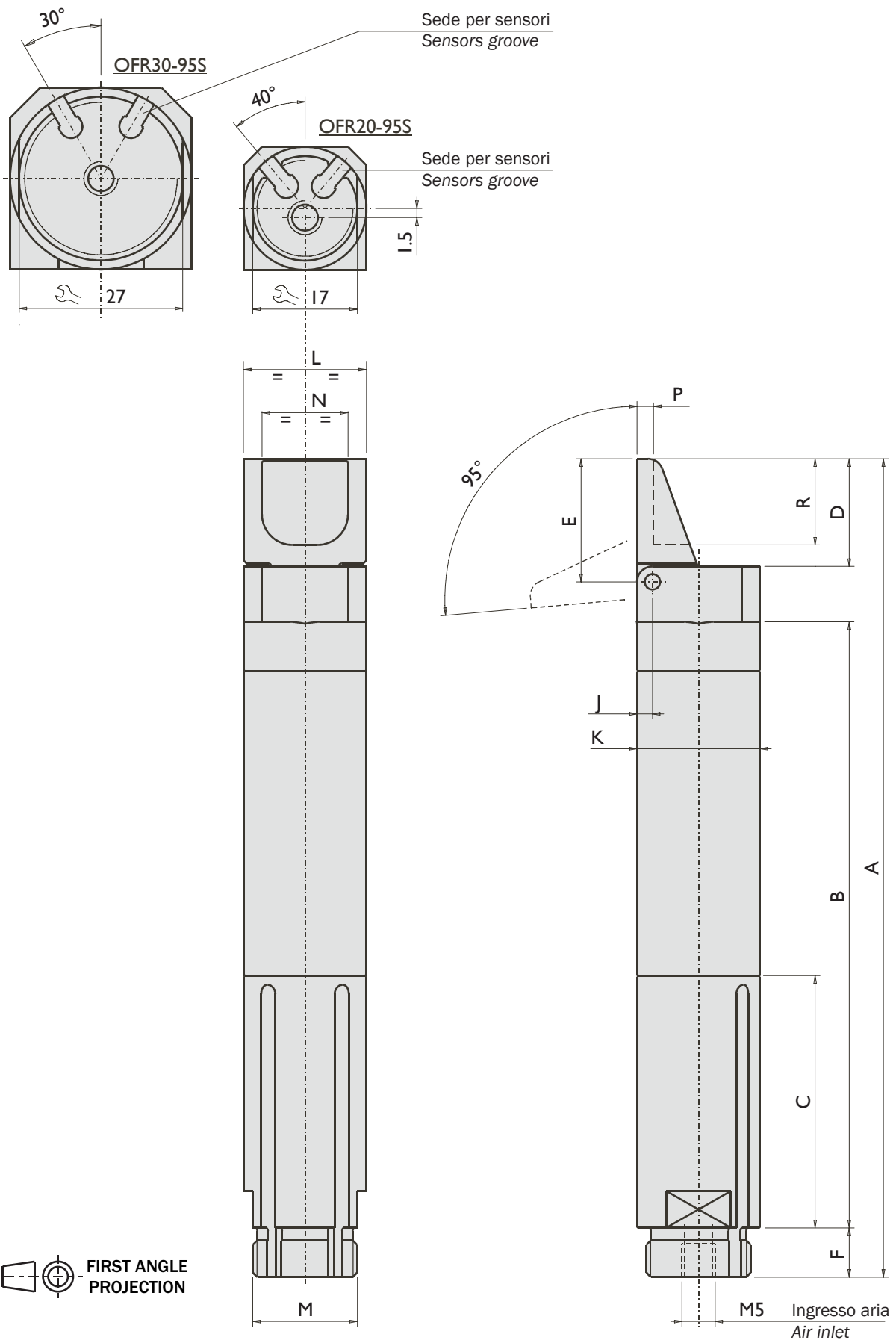
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R
OFA20-35S	136	98.5	41	20.5	23	8	6	3.9	2.5	∅20	20	M17x1	14	3	11.5
OFA30-35S	189	136	53	30	34	11	8	6	4	∅30	30	M27x1	22	5	17



	A	B	C	D	E	F	J	K	L	M	N	P	R	CH
OFR20-95	103	77.5	41	57.5	9	8	2.5	Ø20	20	M17x1	14	3	14	17
OFR30-95	184	148	53	83	12	11	4	Ø30	30	M27x1	22	5	21	27



	A	B	C	D	E	F	J	K	L	M	N	P	R
OFR20-95S	133	107.5	41	57.5	9	8	2.5	Ø20	20	M17x1	14	3	14
OFR30-95S	184	148	53	83	12	11	4	Ø30	30	M27x1	22	5	21



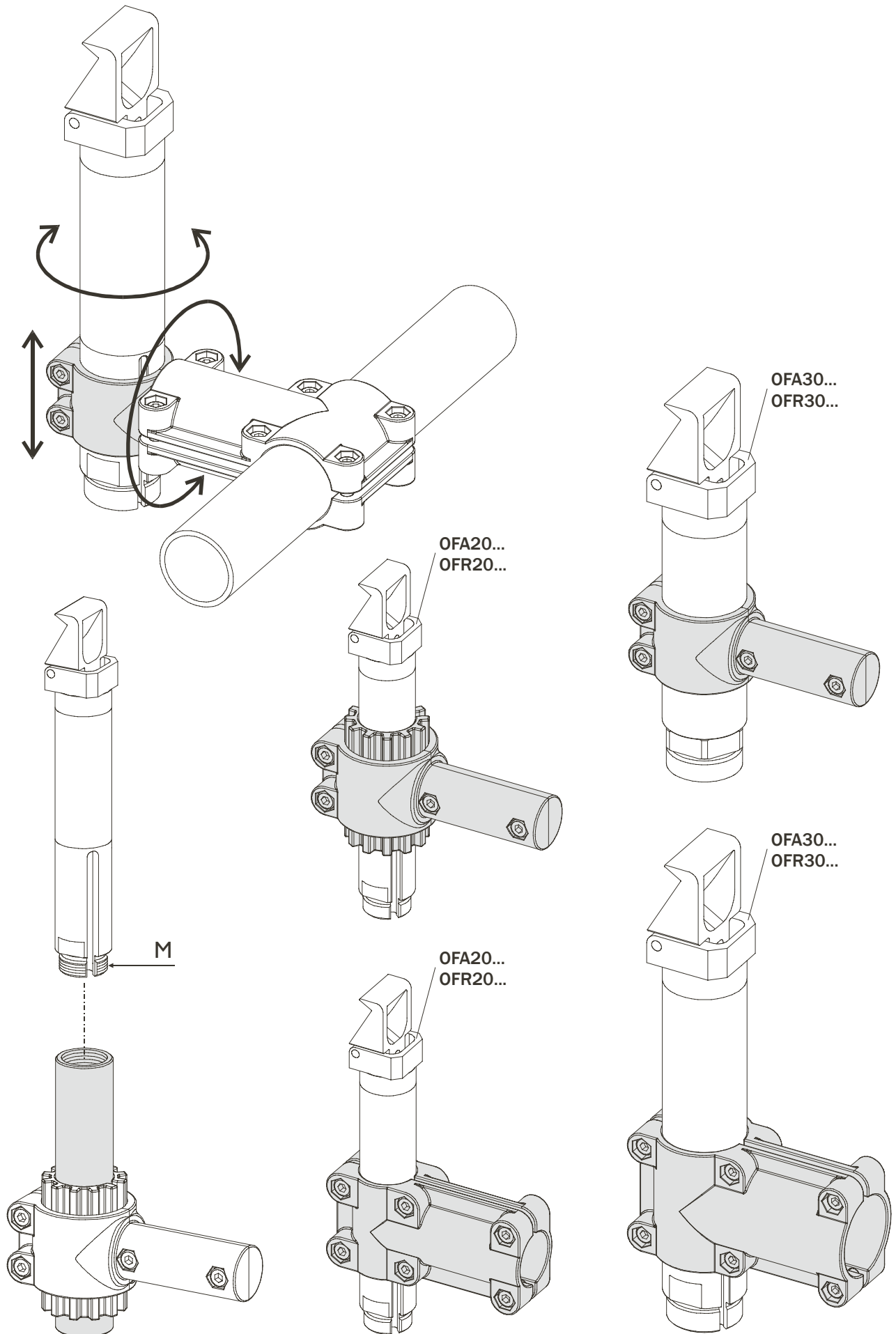
FIRST ANGLE PROJECTION

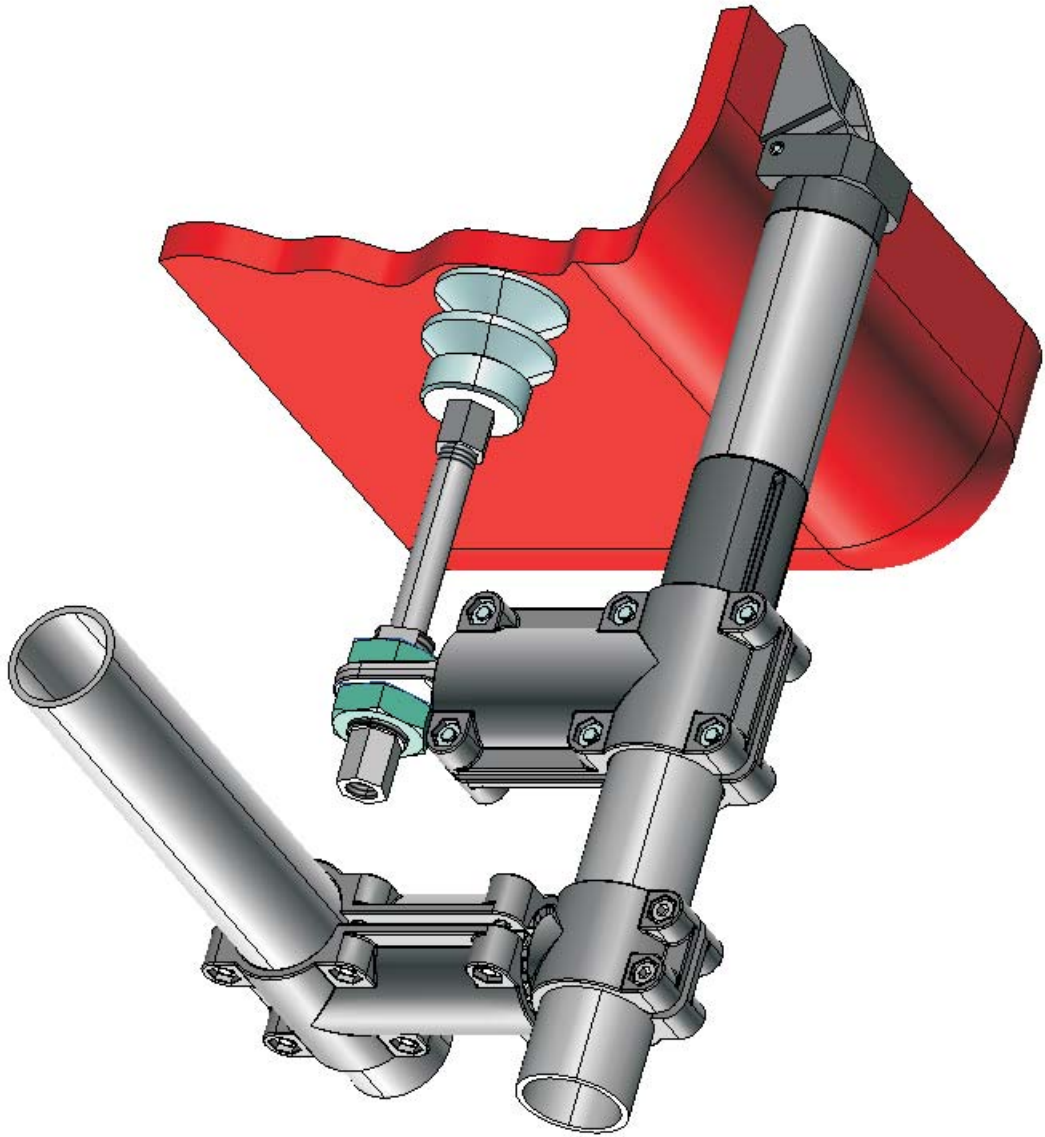
Fissaggio

Utilizzare i moduli di fissaggio MFP / MFM come negli esempi oppure un tubo prolunga.

Fastening

xxxxxxx





Sensori

Sui modelli OF...S 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:

Sensors

On the models OF...S the operating position can be checked by magnetic sensors (optional), that detect the magnet on the piston inside.

Therefore a near big mass of ferromagnetic material or intense magnetic fields may cause sensing troubles.

Use sensors:

PNP

NPN

		OFA20-35S	OFA30-35S	OFR20-95S	OFR30-95S
SN4N225Y	PNP 2.5 m cable	☑	☑	☑	☑
SN4M225Y	NPN 2.5 m cable	☑	☑	☑	☑
SN3N203Y	PNP M8 connector	☑	☑	☑	☑
SN3M203Y	NPN M8 connector	☑	☑	☑	☑
SS4N225Y	PNP 2.5 m cable	☑	☑	☑	☑
SS4M225Y	NPN 2.5 m cable	☑	☑	☑	☑
SS3N203Y	PNP M8 connector	☑	☑	☑	☑
SS3M203Y	NPN M8 connector	☑	☑	☑	☑

Sono tutti dotati di un cavo piatto a tre fili e di un led.

They are all provided with a flat three wires cable and lamp.



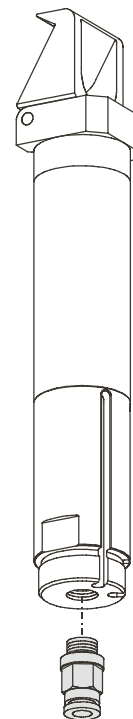
Connessione pneumatica

La pinza si alimenta montando un raccordo M5.



Compressed air feeding

The compressed air feeding can be accomplished with one fitting M5.



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- Regolatore di flusso (C).

L'attuatore è azionato con aria compressa filtrata (5-40 μm) non necessariamente lubrificata.

La scelta iniziale, lubrificata o non lubrificata, deve essere mantenuta per tutta la vita dell'attuatore.

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

Pneumatic circuit

Possible problems on a compressed air circuit:

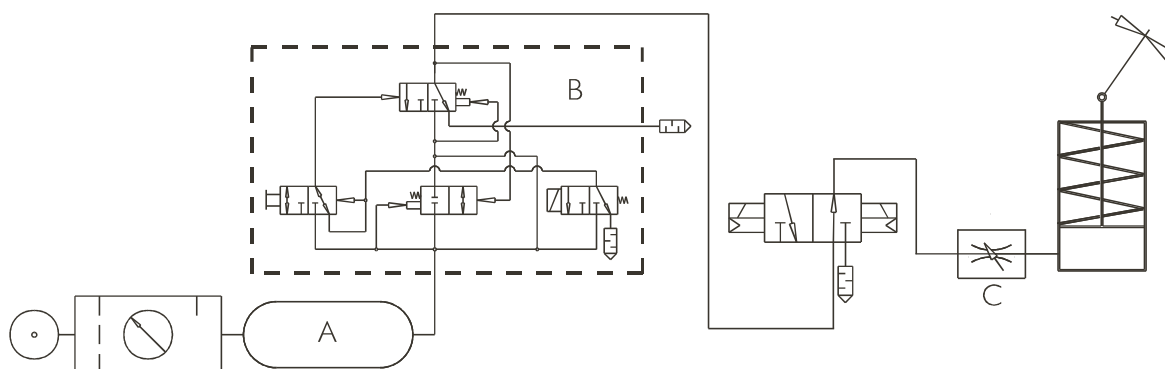
- 1- Pressure variation;
- 2- Pressurizing whit empty cylinders;
- 3- Excessive speed of the jaws.

Possible solutions:

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

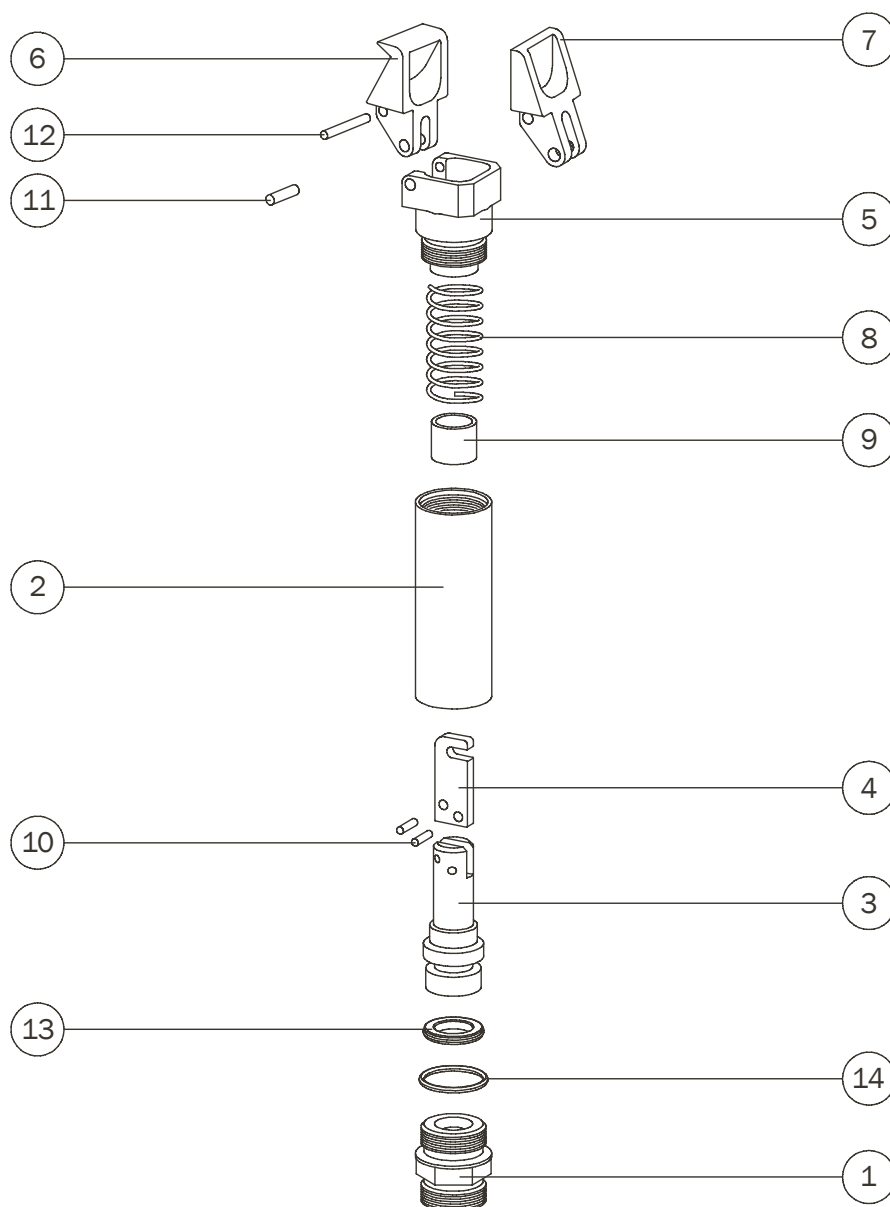
The compressed air, must be filtered from 5 to 40 μm . Maintain the medium selected at the start, lubricated or not, for the complete service life of the nipper.

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



Elenco delle parti

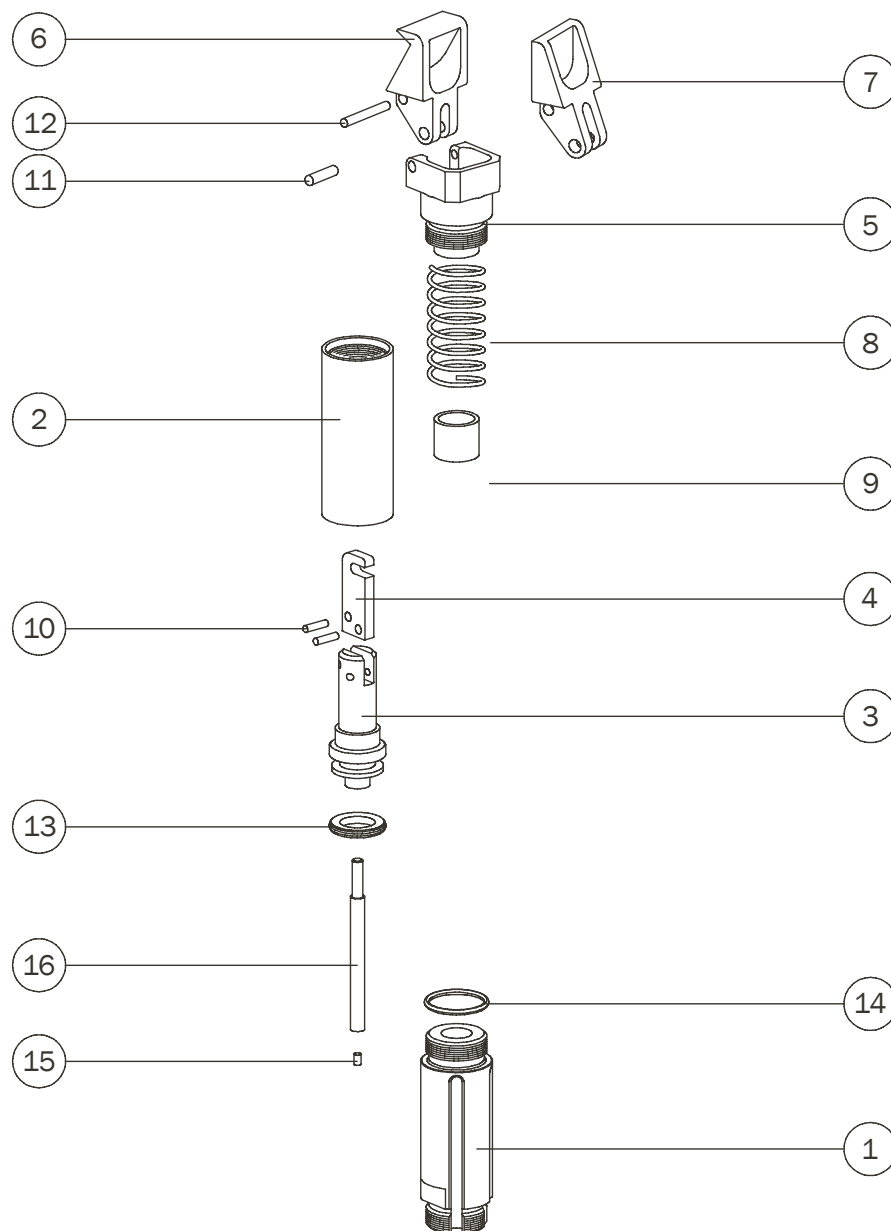
Parts



	OFA20-35	OFR20-95	
1- Fondello	OFR20-95-01	OFR20-95-01	Back end plate -1
2- Cilindro	OFR20-95-02	OFR20-95-02	Cylinder -2
3- Pistone	OFR20-95-03	OFR20-95-03	Piston -3
4- Camma	OFR20-95-04	OFR20-95-04	Cam -4
5- Porta griffa	OFR20-95-05	OFR20-95-05	Jaw holder -5
6- Griffa (OFA...)	OFA20-35-02	/	Jaw (OFA...) -6
7- Griffa (OFR...)	/	OFR20-95-06	Jaw (OFR...) -7
8- Molla di compressione	OFR20-95-07	OFR20-95-07	Spring -8
9- Distanziale	OFA20-35-01	/	Spacer -9
10- Spina	Ø2x8 mm DIN6325	Ø2x8 mm DIN6325	Dowel pin -10
11- Spina	Ø2.5x20 mm DIN6325	Ø2.5x20 mm DIN6325	Dowel pin -11
12- Spina	Ø3x12 mm DIN6325	Ø3x12 mm DIN6325	Dowel pin -12
13- Guarnizione dinamica	PARKER Z8 1610 N3580	PARKER Z8 1610 N3580	Dynamic gasket -13
14- Anello di tenuta O-RING	PARKER cod. 2-015	PARKER cod. 2-015	O-RING gasket -14

Elenco delle parti

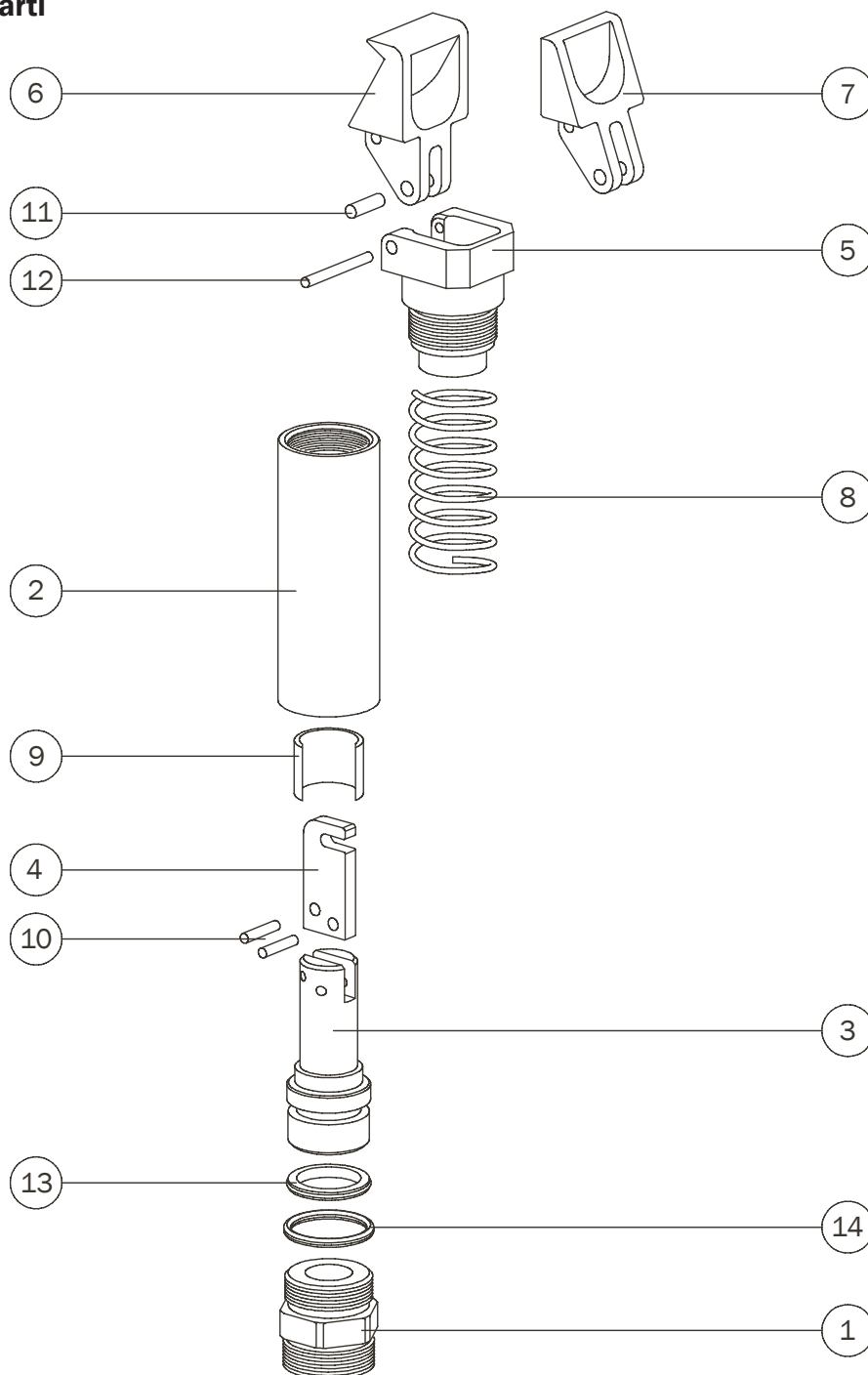
Parts



	OFA20-35S	OFR20-95S	
1- Fondello portasensori	OFR20-95S-01	OFR20-95S-01	Back end plate -1
2- Cilindro	OFR20-95S-02	OFR20-95S-02	Cylinder -2
3- Pistone	OFR20-95S-03	OFR20-95S-03	Piston -3
4- Camma	OFR20-95-04	OFR20-95-04	Cam -4
5- Porta griffa	OFR20-95-05	OFR20-95-05	Jaw holder -5
6- Griffa (OFA...)	OFA20-35-02	/	Jaw (OFA...) -6
7- Griffa (OFR...)	/	OFR20-95-06	Jaw (OFR...) -7
8- Molla di compressione	OFR20-95-07	OFR20-95-07	Spring -8
9- Distanziale	OFA20-35-01	/	Spacer -9
10- Spina	Ø2x8 mm DIN6325	Ø2x8 mm DIN6325	Dowel pin -10
11- Spina	Ø2.5x20 mm DIN6325	Ø2.5x20 mm DIN6325	Dowel pin -11
12- Spina	Ø3x12 mm DIN6325	Ø3x14 mm DIN6325	Dowel pin -12
13- Guarnizione dinamica	PARKER Z8 1610 N3580	PARKER Z8 1610 N3580	Dynamic gasket -13
14- Anello di tenuta O-RING	PARKER cod. 2-015	PARKER cod. 2-015	O-RING gasket -14
15- Magnete	AA-22-6	AA-22-6	Magnet -15
16- Stelo portamagnete	OFR20-95S-04	OFR20-95S-04	Magnet holder -16

Elenco delle parti

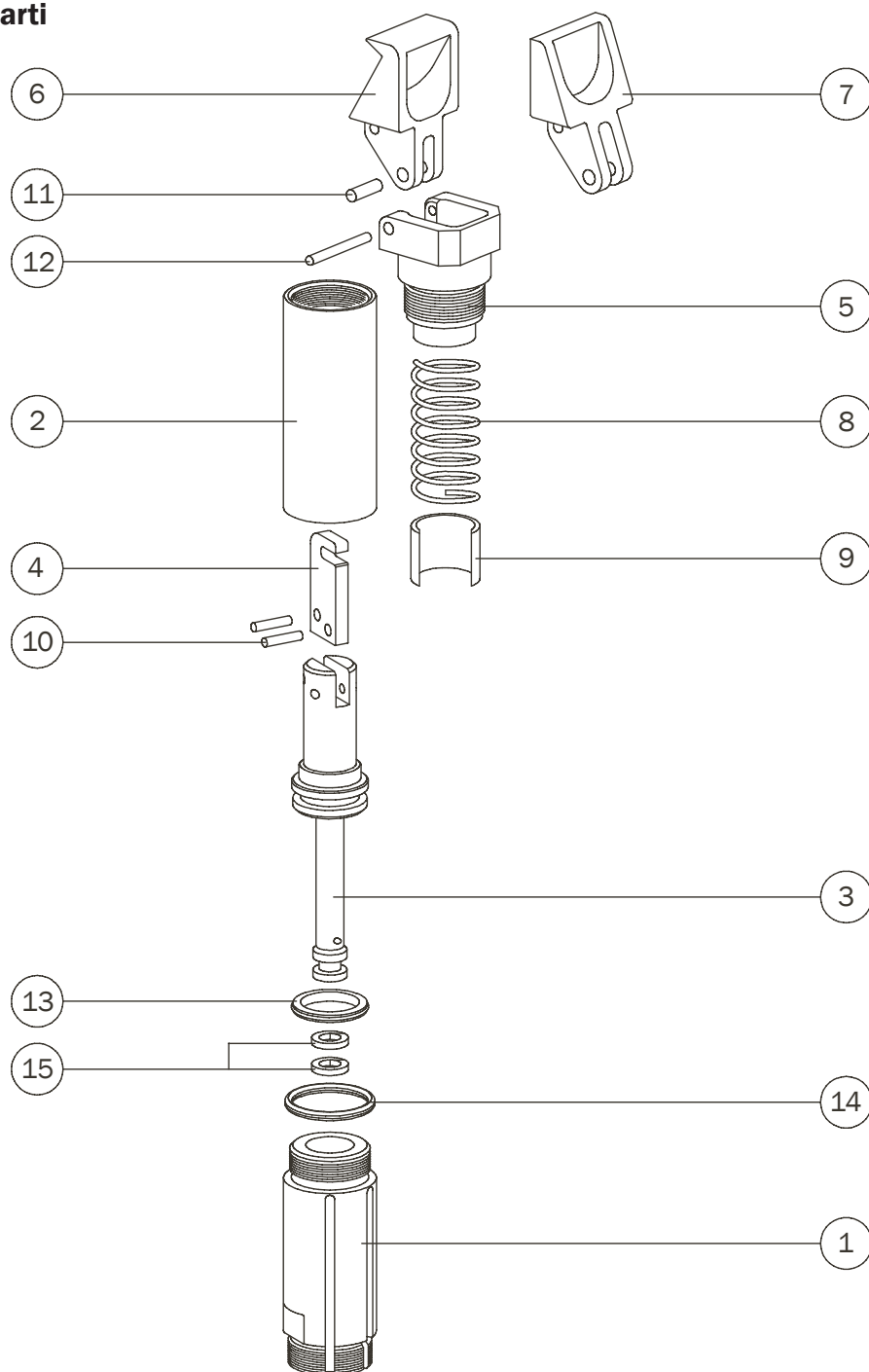
Parts



	OFA30-35	OFR30-95	
1- Fondello	OFR30-95-01	OFR30-95-01	Back end plate -1
2- Cilindro	OFR30-95-02	OFR30-95-02	Cylinder -2
3- Pistone	OFR30-95-03	OFR30-95-03	Piston -3
4- Camma	OFR30-95-04	OFR30-95-04	Cam -4
5- Porta griffa	OFR30-95-05	OFR30-95-05	Jaw holder -5
6- Griffa (OFA...)	OFA30-35-02	/	Jaw (OFA...) -6
7- Griffa (OFR...)	/	OFR30-95-06	Jaw (OFR...) -7
8- Molla di compressione	OFR30-95-07	OFR30-95-07	Spring -8
9- Distanziale	OFA30-35-01	/	Spacer -9
10- Spina	Ø3x14 mm DIN6325	Ø3x14 mm DIN6325	Dowel pin -10
11- Spina	Ø4x14 mm DIN6325	Ø4x14 mm DIN6325	Dowel pin -11
12- Spina	Ø3x30 mm DIN6325	Ø3x30 mm DIN6325	Dowel pin -12
13- Guarnizione dinamica	PARKER Z8 2519 N3580	PARKER Z8 2519 N3580	Dynamic gasket -13
14- Anello di tenuta O-RING	PARKER cod. 2-118	PARKER cod. 2-118	O-RING gasket -14

Elenco delle parti

Parts



	OFA30-35S	OFR30-95S	
1- Fondello portasensori	OFR30-95S-01	OFR30-95S-01	Back end plate -1
2- Cilindro	OFR30-95S-02	OFR30-95S-02	Cylinder -2
3- Pistone	OFR30-95S-03	OFR30-95S-03	Piston -3
4- Camma	OFR30-95-04	OFR30-95-04	Cam -4
5- Porta griffa	OFR30-95-05	OFR30-95-05	Jaw holder -5
6- Griffa (OFA...)	OFA30-35-02	/	Jaw (OFA...) -6
7- Griffa (OFR...)	/	OFR30-95-06	Jaw (OFR...) -7
8- Molla di compressione	OFR30-95-07	OFR30-95-07	Spring -8
9- Distanziale	OFA30-35-01	/	Spacer -9
10- Spina	Ø3x14 mm DIN6325	Ø3x14 mm DIN6325	Dowel pin -10
11- Spina	Ø4x14 mm DIN6325	Ø4x14 mm DIN6325	Dowel pin -11
12- Spina	Ø3x30 mm DIN6325	Ø3x30 mm DIN6325	Dowel pin -12
13- Guarnizione dinamica	PARKER Z8 2519 N3580	PARKER Z8 2519 N3580	Dynamic gasket -13
14- Anello di tenuta O-RING	PARKER cod. 2-118	PARKER cod. 2-118	O-RING gasket -14
15- Magnete	HP-12-7	HP-12-7	Magnet -15

Avvertenze

Evitare il contatto con sostanze corrosive, liquidi o polveri abrasive, che potrebbero danneggiare la funzionalità della pinza.

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

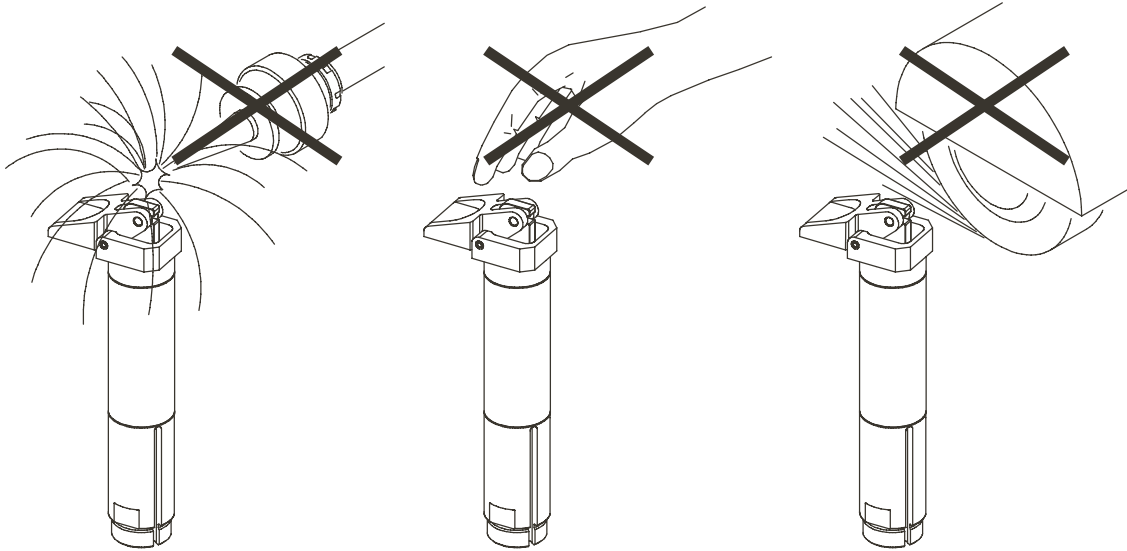
La pinza non deve essere messa in servizio prima che la macchina di cui fa parte sia stata dichiarata conforme alle disposizioni di sicurezza vigenti.

Caution

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

Make sure that nobody can place his/her finger in the jaw area 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

La pinza va ingrassata ogni 1 milione di cicli con:

- Molykote DX (parti metalliche).

Non è necessario smontarla.

Maintenance

Grease the gripper after 1 million cycles with:

- Molykote DX (metal on metal).

Disassembling is not necessary.

