

Pinze pneumatiche perpendicolari per staffaggio mono-dito, serie OFX

- Azionamento con pistone pneumatico a semplice effetto.
- Movimento lineare del dito perpendicolare al pistone.
- Dito con foro passante, per alimentare una ventosa.
- Pastiglia rimovibile in gomma (TPU) sul dito, per contatto morbido.

One finger, perpendicular acting, pneumatic grippers for clamping, series OFX

- Actuation by a single acting piston.
- Linear motion of the finger, perpendicular to the piston.
- Through hole in the finger, to provide vacuum to a cup.
- Removable paddle in (TPU) rubber on the finger, for the soft touch.



OFX14-06



OFX20-10



OFX30-15

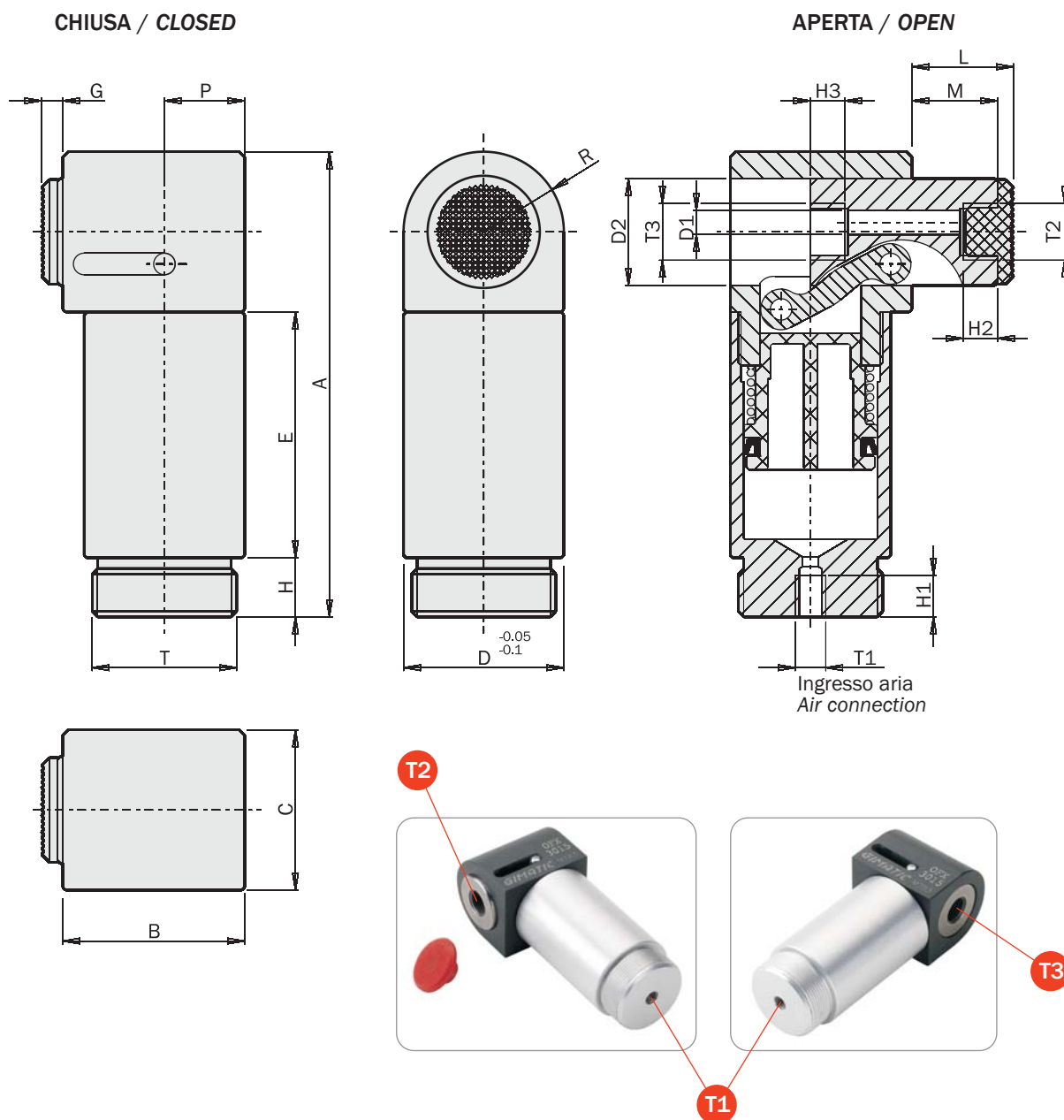


OFX50-20



	OFX14-06	OFX20-10	OFX30-15	OFX50-20
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air			
Pressione di esercizio Pressure range	2 ÷ 8 bar			
Temperatura di esercizio Temperature range	5° ÷ 60°C.			
Forza di serraggio in apertura a 6 bar Opening gripping force at 6 bar	13 ÷ 63 N	20 ÷ 115 N	44 ÷ 230 N	100 ÷ 900 N
Corsa totale Total stroke (±0.2 mm)	6 mm	10 mm	15 mm	20 mm
Frequenza max funzionamento continuativo Maximum working frequency	1 Hz	1 Hz	1 Hz	1 Hz
Consumo d'aria per ciclo Cycle air consumption	0.5 cm³	3.5 cm³	15 cm³	50 cm³
Peso Weight	30 g	65 g	190 g	740 g

Dimensioni (mm) / Dimensions (mm)



FIRST ANGLE
PROJECTION

	OFX14-06	OFX20-10	OFX30-15	OFX50-20
A	52	62.5	87	143
B	23	25	34	60
C	14	20	30	50
D	Ø14	Ø20	Ø30	Ø50
D1	Ø1.5	Ø2.4	Ø4.5	Ø9
D2	Ø10	Ø14	Ø20	Ø35
E	30	34.5	46	68
G	3.5	3.5	4	4
H	8	8	11	25
H1	7	7	7	10
H2	5	5	6	9
H3	5	5	6	9
L	9.5	13.5	19	24
M	7	11	16	21
P	9	10	15	25
R	R7	R10	R15	R25
T	M12x1	M17x1	M27x1	M45x1.5
T1	M5	M5	M5	G1/8"
T2	M5	M5	G1/8"	G1/8"
T3	M5	M5	G1/8"	G1/8"

Fissaggio

Esempio di utilizzo come pinza a 3 griffe.

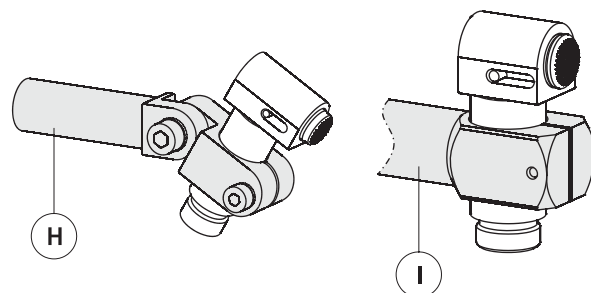
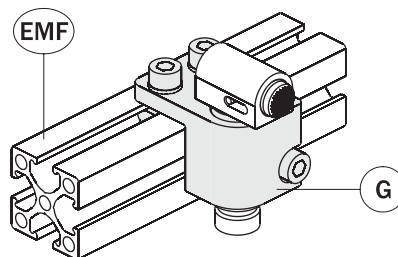
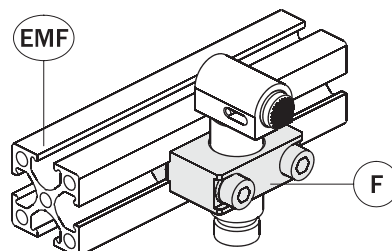
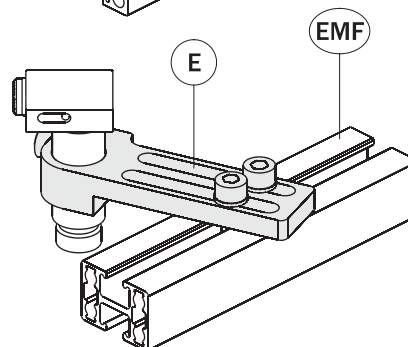
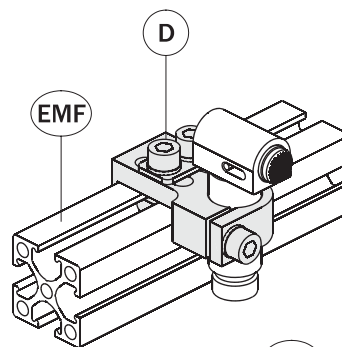
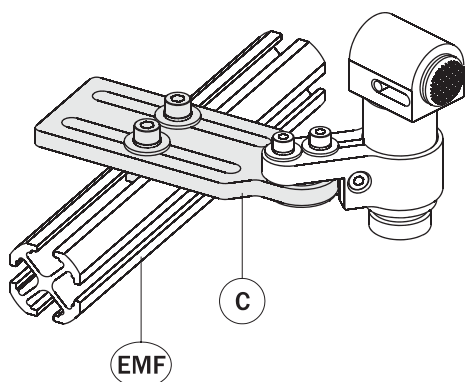
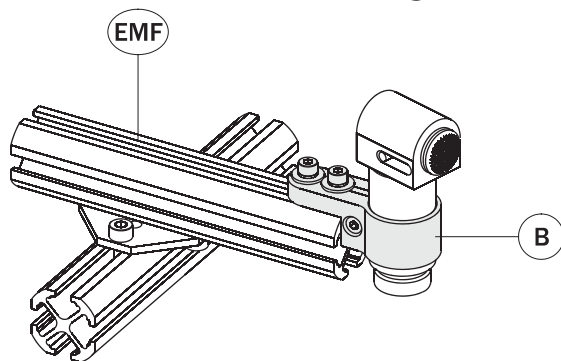
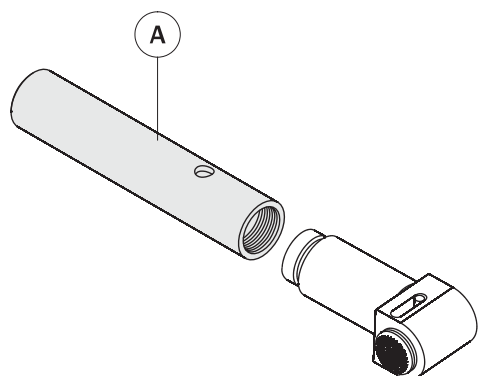
Fastening

Application example like a 3-jaw gripper.



Fissaggio
Fastening

	EMF	OFX14-06	OFX20-10	OFX30-15	OFX50-20
A	-	OF14-L80	OF20-L100	OF30-L120	-
B	EMF-20	MFM-A58	MFM-A90	MFM-A101	-
	EMF-30	MFM-A70	MFM-A91	MFM-A102	-
	EMF-50	-	-	-	MFM-A59
C	EMF-30	MFM-A97			
	EMF-50	MFM-A98			
D	EMF-2525 EMF-4040	MFI-A02	MFI-A03	-	-
E	EMF-2518 EMF-2525	MFI-A05 MFI-A06	MFI-A07	MFI-A08	-
F	EMF-2525 EMF-4040	MFI-A37	MFI-A38	MFI-A39	-
G	EMF-2525 EMF-4040	MFI-A09	MFI-A10 MFI-A36	MFI-A34 MFI-A35	-
H	-	MFI-A60 MFI-A61 MFI-A62	MFI-A63 MFI-A64 MFI-A65	-	-
I	-	-	MFI-A77 MFI-A78 MFI-A79	-	-



Forza di serraggio

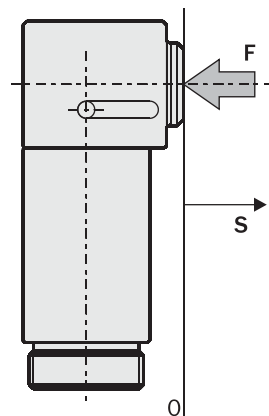
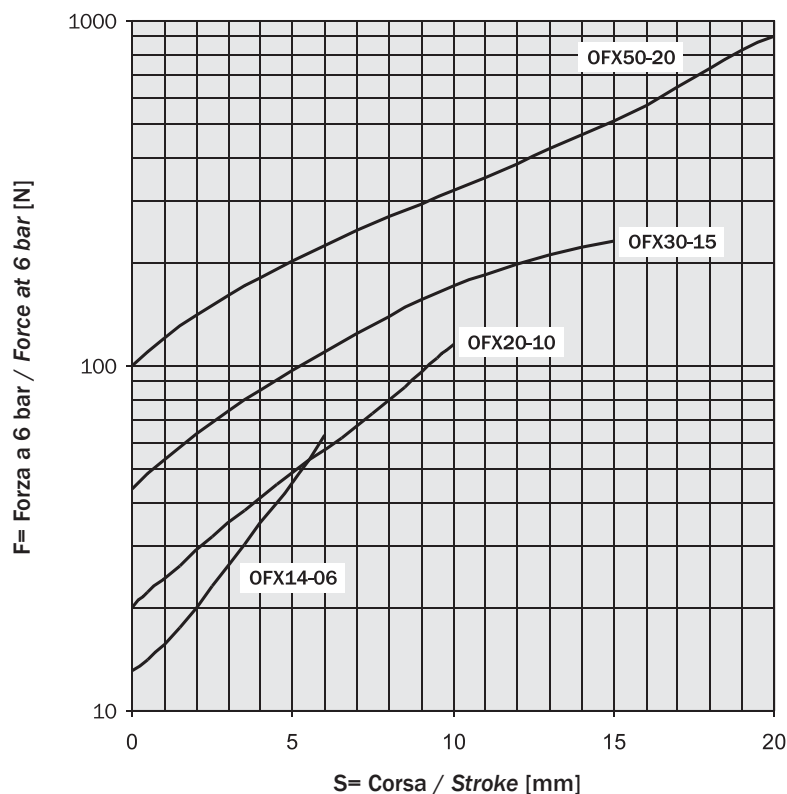
La forza di spinta (F) esercitata dal dito della pinza dipende dalla corsa (s).

E' massima nella posizione completamente estesa.

Gripping force

The force (F) at the gripper finger tip is a factor of the stroke (s).

In the fully extended position, the pushing force is maximum.



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).

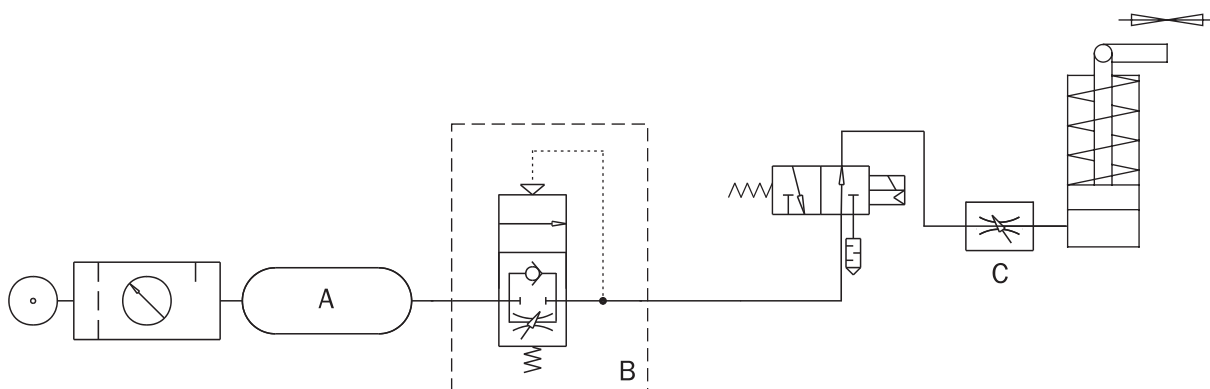
Pneumatic circuit

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).



Connessione pneumatica

La pinza si alimenta montando un raccordo (R1).
L'aria compressa fa estendere il dito; tola l'aria una molla lo richiama.

Dopo aver rimosso la pastiglia si può montare una ventosa sul foro filettato anteriore (R2) ed alimentarla dal foro filettato posteriore (R3).

La pinza è azionata con aria compressa filtrata (5÷40 µm) 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

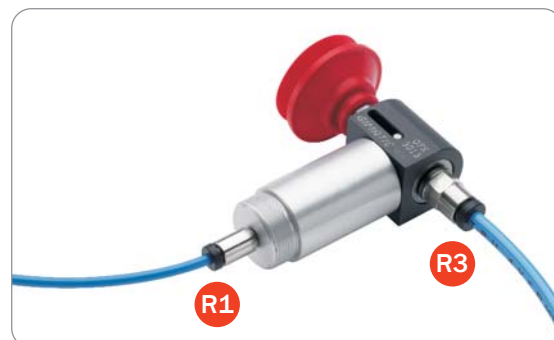
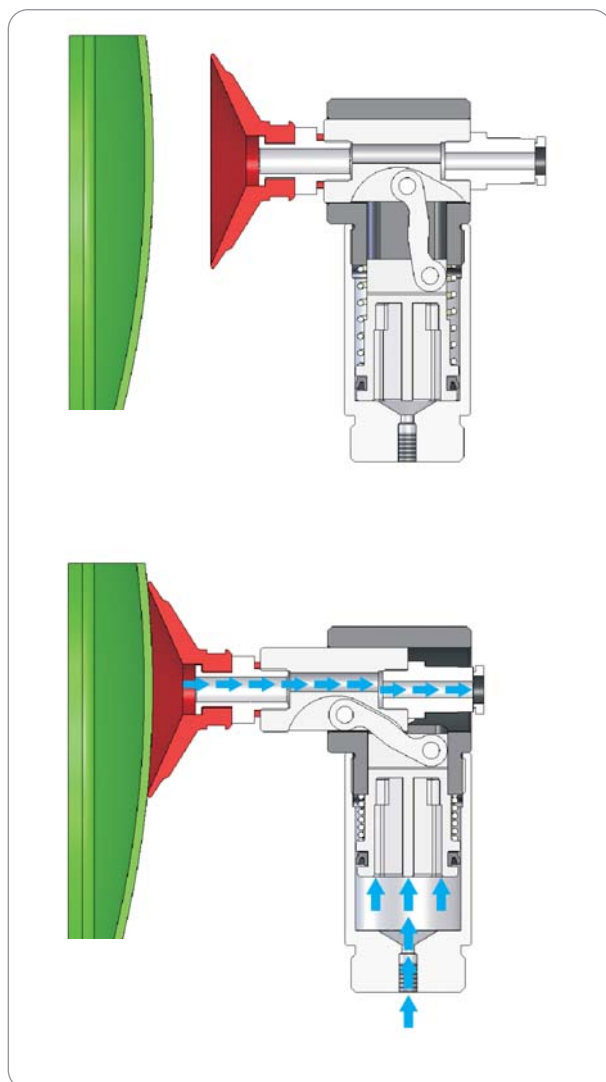
The compressed air extends the finger; without pressure the finger is spring retracted (R1).

After removing the paddle, it is possible to mount a vacuum cup on the front threaded hole (R2) and to provide vacuum from the rear threaded hole (R3).

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 gripper.

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

	OFX14-06	OFX20-10	OFX30-15	OFX50-20
R1	M5	M5	M5	G1/8"
R2	M5	M5	G1/8"	G1/8"
R3	M5	M5	G1/8"	G1/8"



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.

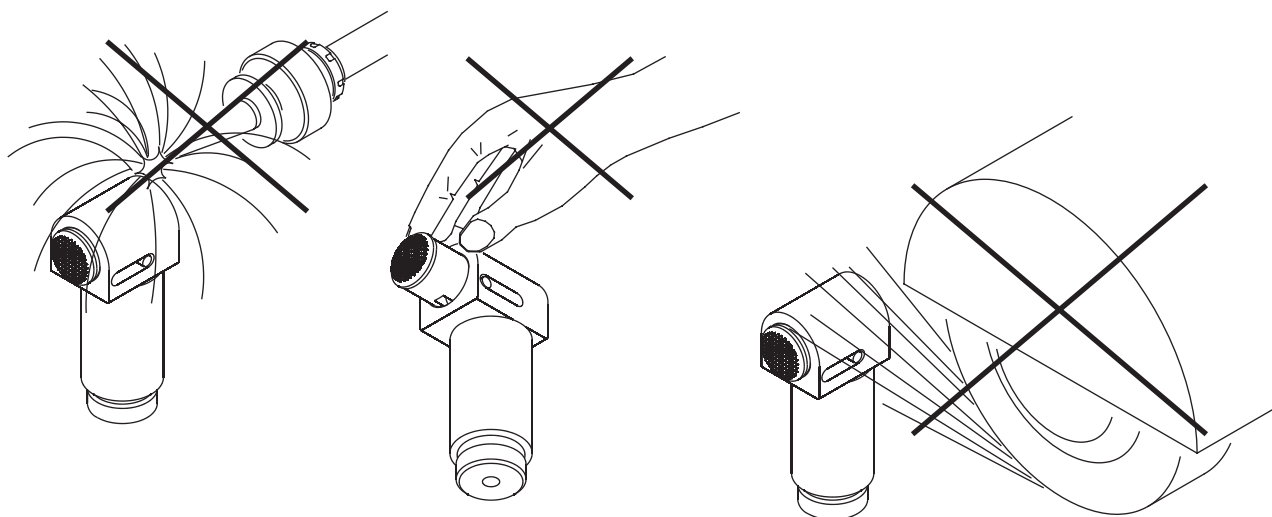
La pinza non deve essere messa in servizio prima che la macchina di cui fa parte sia stata dichiarata conforme alle disposizioni di sicurezza vigenti.

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);
- Molykote PG75 (guarnizioni).

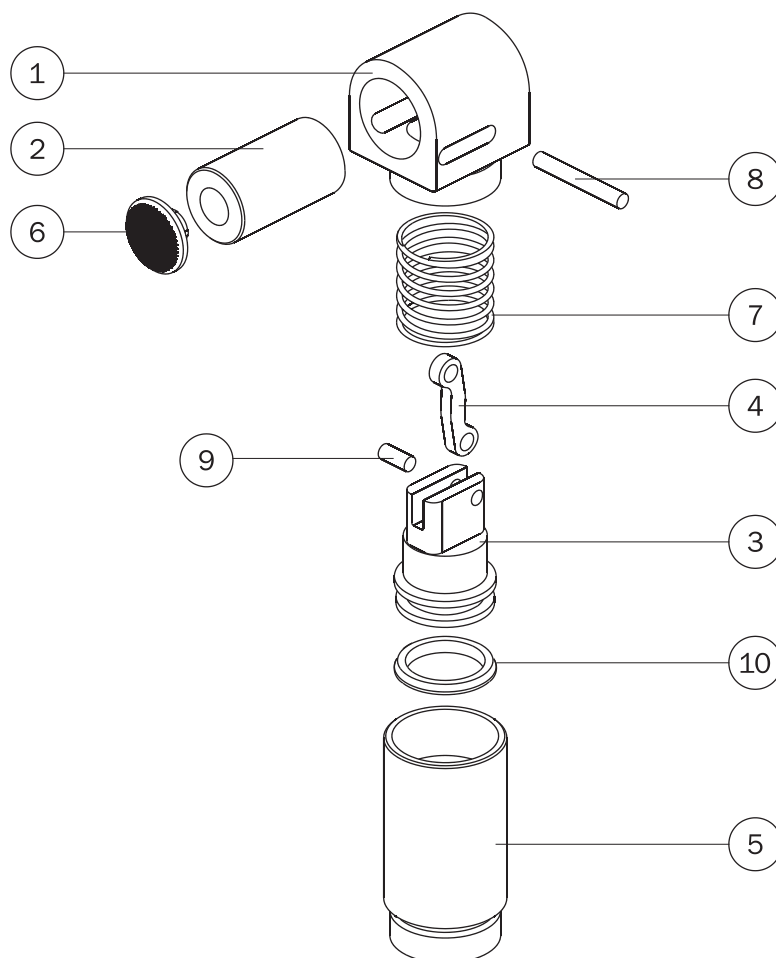
Maintenance

Grease the gripper after 1 million cycles with:

- Molykote DX (metal on metal);
- Molykote PG75 (gaskets).



Elenco delle parti



	OFX14-06	OFX20-10	OFX30-15	OFX50-20	
1- Portagriffa	OFX14-06-01	OFX20-10-01	OFX30-15-01	OFX50-20-01	Jaw holder -1
2- Griffa	OFX14-06-02	OFX21-10-02	OFX30-15-02	OFX50-20-02	Jaw -2
3- Pistone	OFX14-06-03	OFX20-10-03	OFX30-15-03	OFX50-20-03	Piston -3
4- Leva	OFX14-06-04	OFX20-10-04	OFX30-15-04	OFX50-20-04	Lever -4
5- Corpo	OFX14-06-05	OFX20-10-05	OFX30-15-05	OFX50-20-05	Housing -5
6- Pastiglia in Elastomero	OFX14-06-06	OFX20-10-08	OFX30-15-06	OFX50-20-06	Elastomer pad -6
7- Molla	VSR1420-04	OFR20-95-07	OFX30-15-07	OFR50-95-07	Spring -7
8- Spina di riferimento	Ø2x14 mm DIN 6325	Ø3x19.8 mm DIN 5402	Ø4x30 mm DIN 6325	Ø5x50 mm DIN 6325	Dowel pin -8
9- Spina di riferimento	Ø2x5.8 mm DIN 5402	Ø3x8 mm DIN 6325	Ø4x10 mm DIN 6325	Ø5x16 mm DIN 6325	Dowel pin -9
10- Guarnizione dinamica	10x6x3 (GUAR-001)	16x10x3 (GUAR-051)	25x19x3.5 (GUAR-064)	40x32x3.5 (GUAR-092)	Dynamic gasket -10