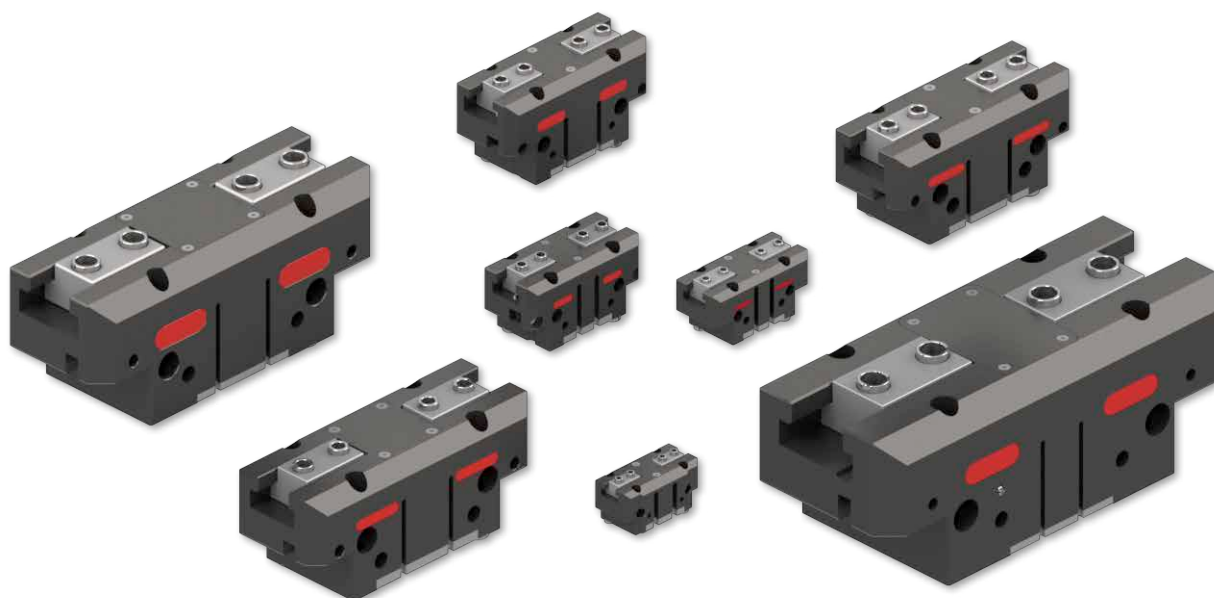


Pinza pneumatica a 2 griffe ad azione parallela autocentrante (serie DH)

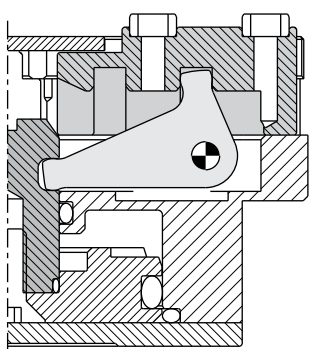
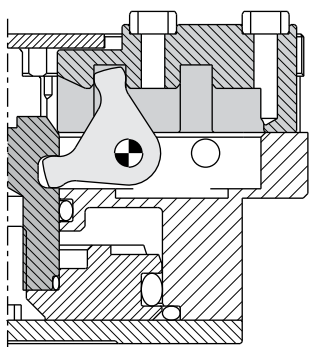
- Azionamento a doppio effetto, con molle opzionali (in chiusura o apertura).
- Corsa lunga o corsa corta (1).
- Possibilità di fissaggio frontale con viti passanti (2).
- Meccanismo di trasmissione ad alta efficienza (1).
- Sensori magnetici o induttivi opzionali (3).
- Disponibili su richiesta con grasso alimentare FDA-H1 e guarnizioni per alte temperature (fino a 100°C.).

2-jaw self-centering pneumatic parallel gripper (series DH)

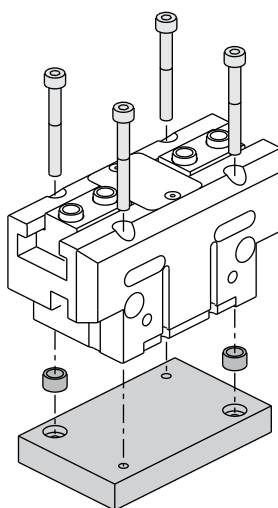
- Double acting with optional springs (normally closed or normally open).
- Long stroke or short stroke (1).
- Possibility of front fastening with through screws (2).
- High efficiency force transmission (1).
- Optional magnetic or inductive sensors (3).
- Available upon request with food grease FDA-H1 and with high temperature (up to 100°C.) seals.



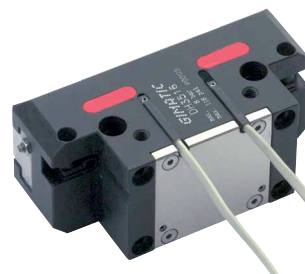
[1]



[2]



[3]



[3]



Molle opzionali

Tutte le pinze DH sono disponibili con o senza molla.

Le versioni a molla possono essere normalmente chiuse (NC) o normalmente aperte (NO).

In entrambi i casi è necessario un corpo addizionale e la pinza è più alta della versione senza molla.

Le molle sono calcolate per una vita superiore ai 10 milioni di cicli e forniscono, in assenza d'aria, una forza di ritenzione pari a circa un terzo della forza normale a 6bar.

Optional springs

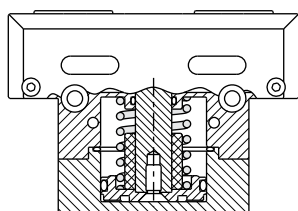
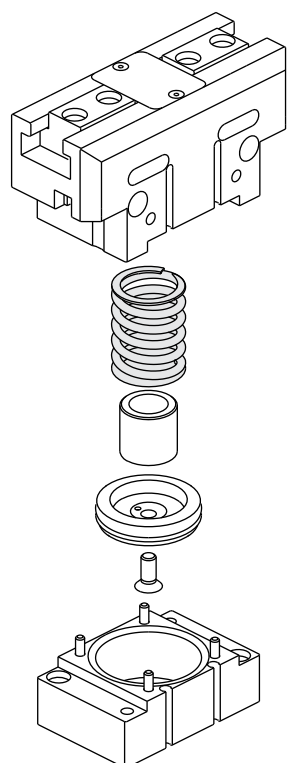
All DH grippers are available with or without spring.

The spring versions can be normally closed (NC) or normally open (NO).

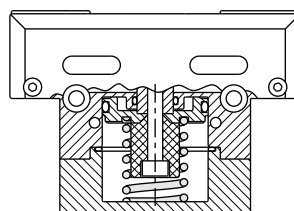
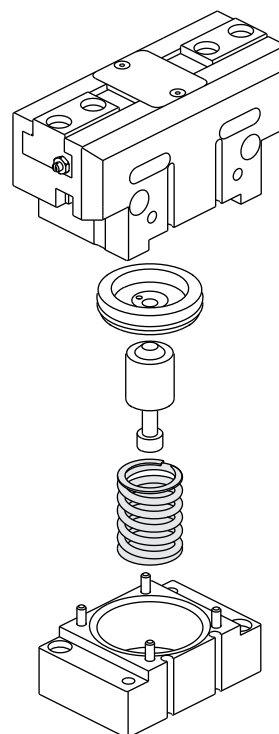
In both cases an additional body is necessary and the gripper is taller than the version without spring.

The springs are designed for a life time higher than 10 million cycles and they provide a retention force, after a pressure black-out, about one third of the output force at 6bar.

DH...-NC

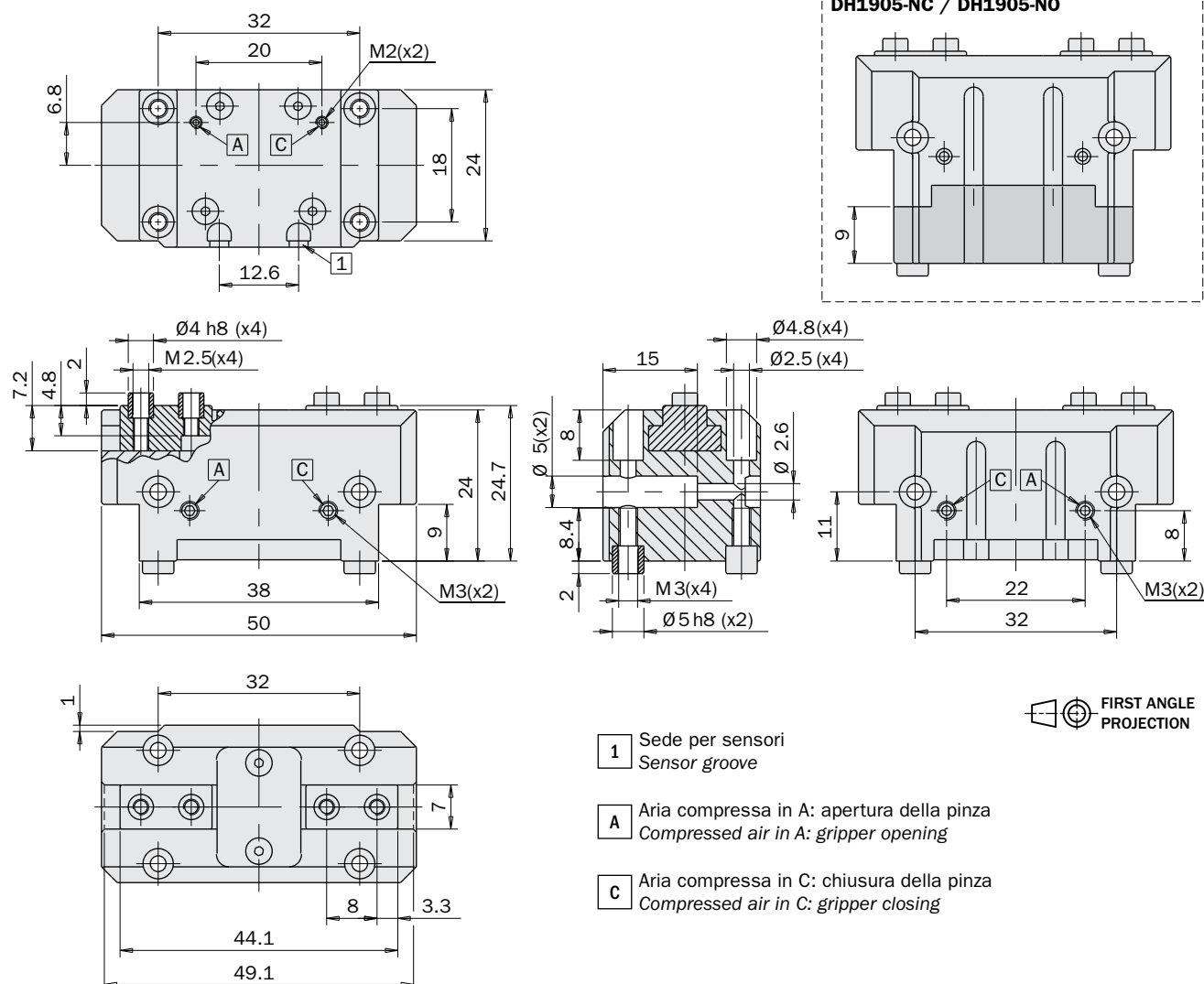


DH...-NO



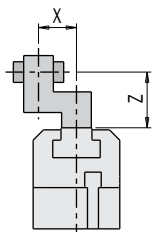
	DH1905	DH1905-NC	DH1905-NO
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air		
Pressione di esercizio Pressure range	2 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar
Temperatura di esercizio Temperature range	5 ÷ 60°C.		
Forza di serraggio per griffa in apertura a 6 bar Opening gripping force at 6 bar each jaw	75N	43 ÷ 49N	101 ÷ 107N
Forza di serraggio totale in apertura a 6 bar Opening total gripping force at 6 bar	150N	86 ÷ 98N	202 ÷ 214N
Forza di serraggio per griffa in chiusura a 6 bar Closing gripping force at 6 bar each jaw	68N	94 ÷ 100N	36 ÷ 42N
Forza di serraggio totale in chiusura a 6 bar Closing total gripping force at 6 bar	136N	188 ÷ 200N	72 ÷ 84N
Corsa totale Total stroke	±0.3mm	5mm	
Frequenza max funzionamento continuativo Maximum working frequency	3Hz		
Consumo d'aria per ciclo Cycle air consumption	2cm³	3cm³	3cm³
Tempo minimo di chiusura / apertura Closing / opening minimum time	0.01s / 0.01s	0.01s / 0.02s	0.02s / 0.01s
Ripetibilità Repetition accuracy	0.02mm		
Peso Weight	87g	100g	98g

Dimensioni (mm) / Dimensions (mm)



Forza di serraggio

I grafici mostrano la forza (F) per griffa espressa dalla pinza in funzione della pressione, del braccio di leva (Z) e del disassamento del punto di presa (X).
Diminuire la pressione se la pinza è impiegata nella zona rossa.



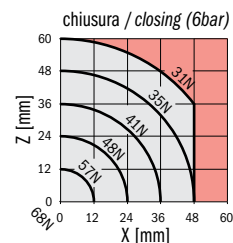
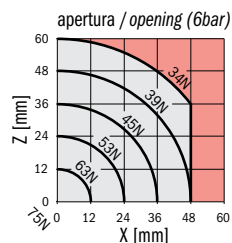
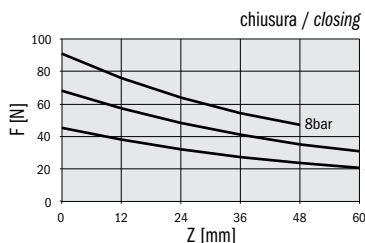
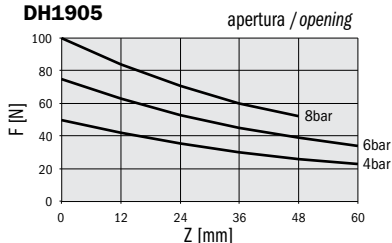
Gripping force

The graphs show the gripping force (F) on each jaw, as a function of the operating pressure, the gripping tool length (Z) and the overhanging (X).
Decrease the air pressure if the gripper is used in red area.

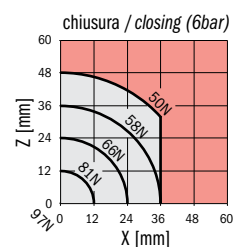
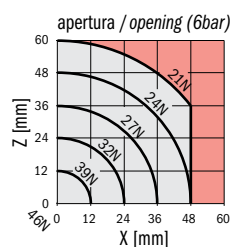
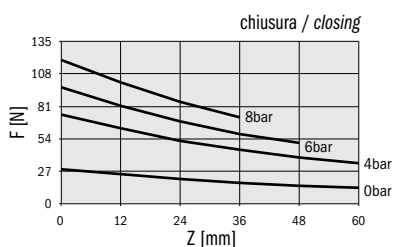
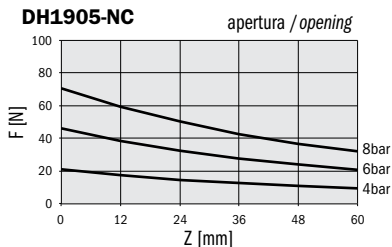
La forza indicata in questi grafici è riferita alla singola griffa.
La forza totale è il doppio.

The force shown in these graphs refers to one jaw.
The total force is double.

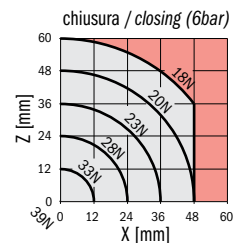
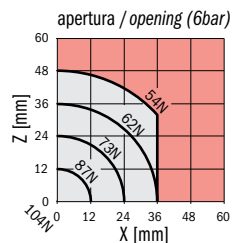
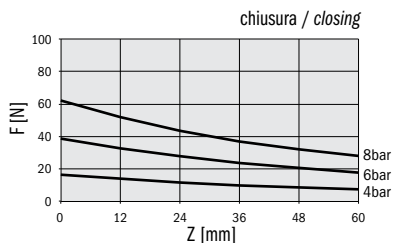
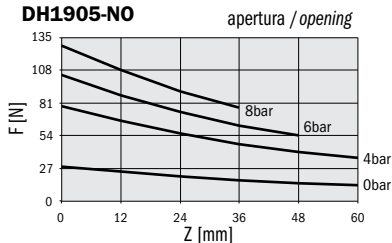
DH1905



DH1905-NC

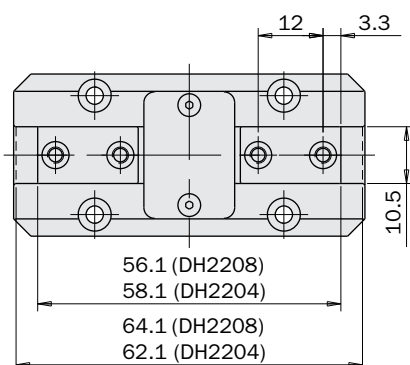
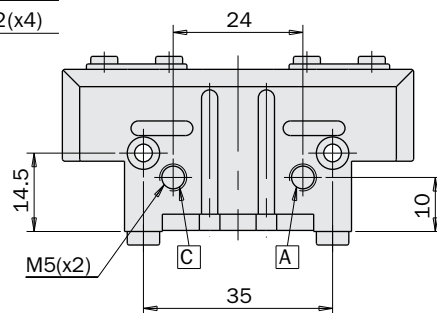
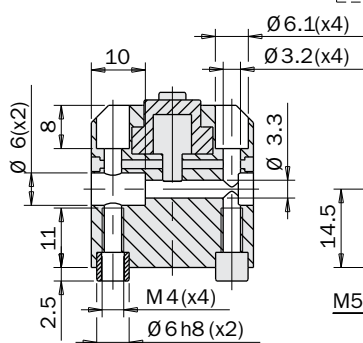
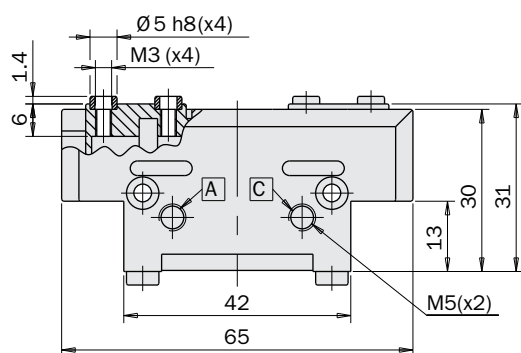
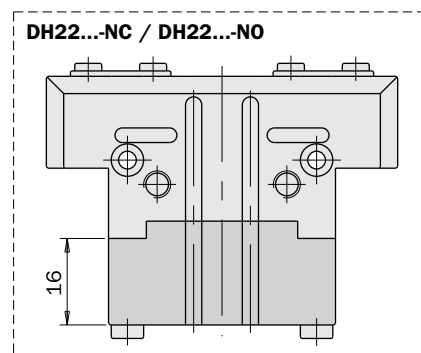
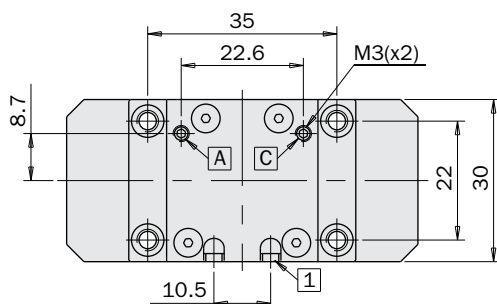


DH1905-NO



	DH2208	DH2208-NC	DH2208-NO	DH2204	DH2204-NC	DH2204-NO
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air					
Pressione di esercizio Pressure range	2 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar	2 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar
Temperatura di esercizio Temperature range	5 ÷ 60°C.					
Forza di serraggio per griffa in apertura a 6 bar Opening gripping force at 6 bar each jaw	100N	58 ÷ 67N	134 ÷ 142N	200N	116 ÷ 133N	267 ÷ 284N
Forza di serraggio totale in apertura a 6 bar Opening total gripping force at 6 bar	200N	116 ÷ 134N	268 ÷ 284N	400N	232 ÷ 266N	534 ÷ 568N
Forza di serraggio per griffa in chiusura a 6 bar Closing gripping force at 6 bar each jaw	90N	123 ÷ 132N	48 ÷ 56N	180N	247 ÷ 264N	96 ÷ 113N
Forza di serraggio totale in chiusura a 6 bar Closing total gripping force at 6 bar	180N	246 ÷ 264N	96 ÷ 112N	360N	494 ÷ 528N	192 ÷ 226N
Corsa totale Total stroke	±0.3mm	8mm		4mm		
Frequenza max funzionamento continuativo Maximum working frequency	3Hz					
Consumo d'aria per ciclo Cycle air consumption	4cm³	7cm³	7cm³	4cm³	7cm³	7cm³
Tempo minimo di chiusura / apertura Closing / opening minimum time	0.02s / 0.02s	0.02s / 0.03s	0.03s / 0.02s	0.02s / 0.02s	0.02s / 0.03s	0.03s / 0.02s
Ripetibilità Repetition accuracy	0.02mm	0.02mm	0.02mm	0.02mm	0.02mm	0.02mm
Peso Weight	148g	188g	184g	150g	190g	186g

Dimensioni (mm) / Dimensions (mm)



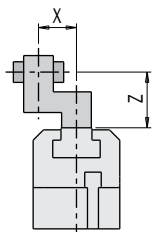
1 Sede per sensori
Sensor groove

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

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

Forza di serraggio

I grafici mostrano la forza (F) per griffa espressa dalla pinza in funzione della pressione, del braccio di leva (Z) e del disassamento del punto di presa (X).
Diminuire la pressione se la pinza è impiegata nella zona rossa.



Gripping force

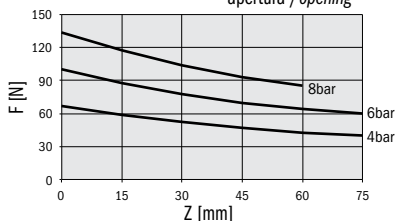
The graphs show the gripping force (F) on each jaw, as a function of the operating pressure, the gripping tool length (Z) and the overhanging (X).
Decrease the air pressure if the gripper is used in red area.

La forza indicata in questi grafici è riferita alla singola griffa.
La forza totale è il doppio.

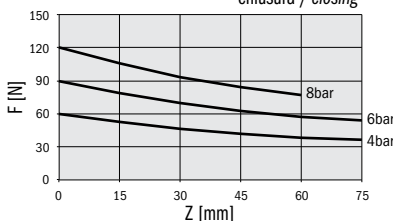
The force shown in these graphs refers to one jaw.
The total force is double.

DH2208

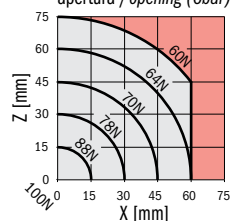
apertura / opening



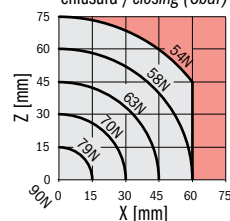
chiusura / closing



apertura / opening (6bar)

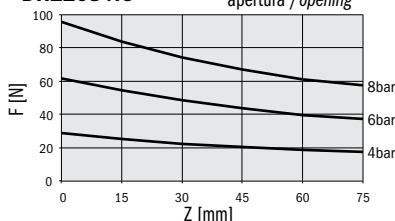


chiusura / closing (6bar)

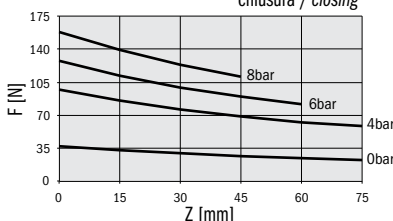


DH2208-NC

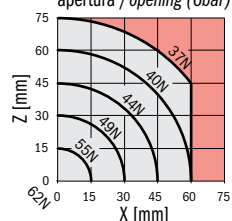
apertura / opening



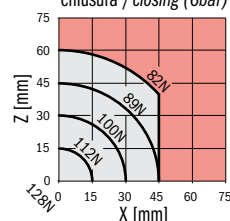
chiusura / closing



apertura / opening (6bar)

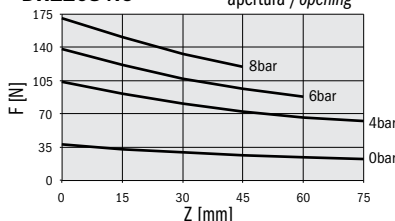


chiusura / closing (6bar)

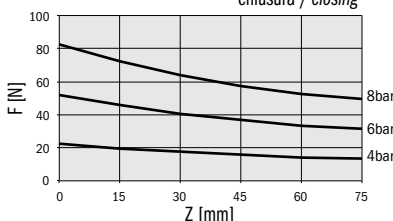


DH2208-NO

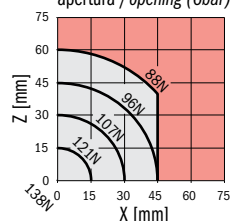
apertura / opening



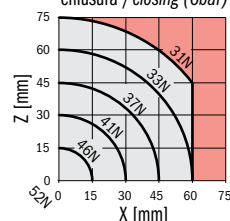
chiusura / closing



apertura / opening (6bar)

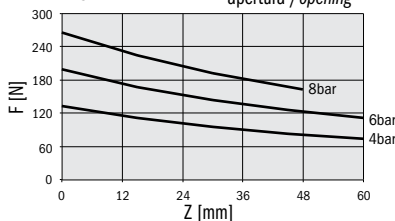


chiusura / closing (6bar)

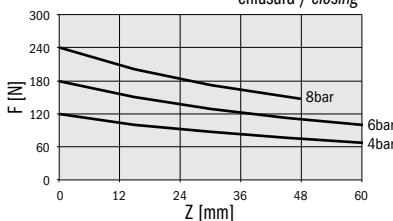


DH2204

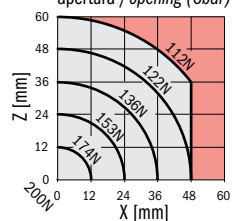
apertura / opening



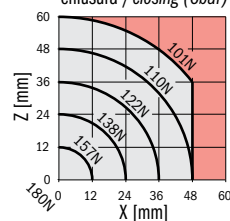
chiusura / closing



apertura / opening (6bar)

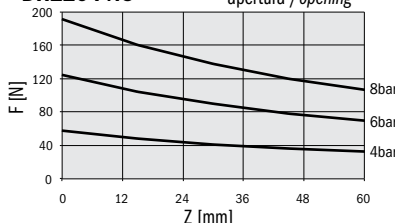


chiusura / closing (6bar)

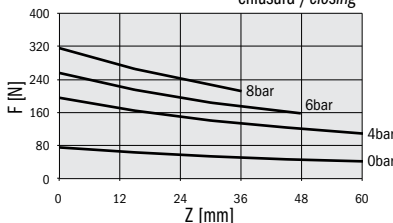


DH2204-NC

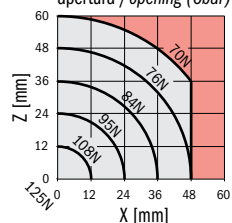
apertura / opening



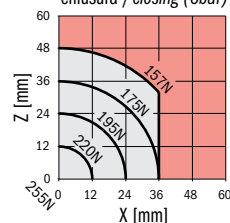
chiusura / closing



apertura / opening (6bar)

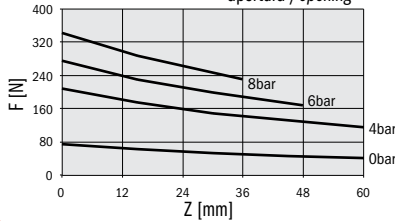


chiusura / closing (6bar)

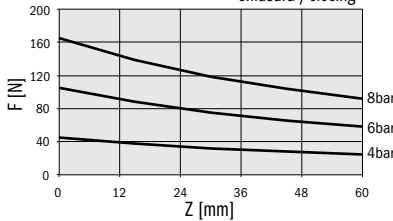


DH2204-NO

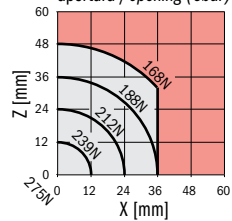
apertura / opening



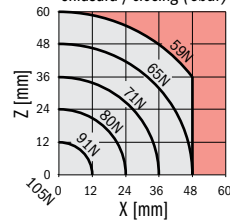
chiusura / closing



apertura / opening (6bar)

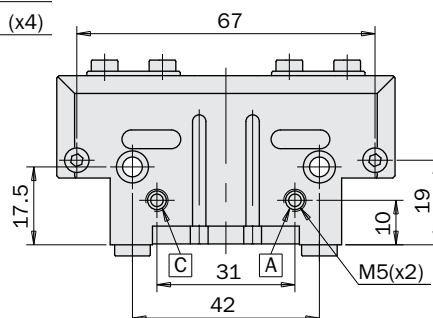
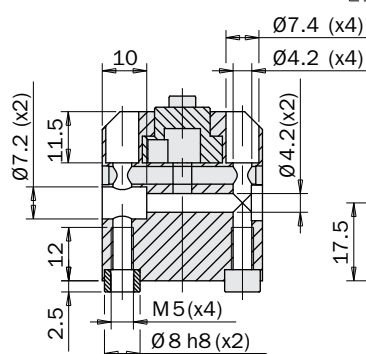
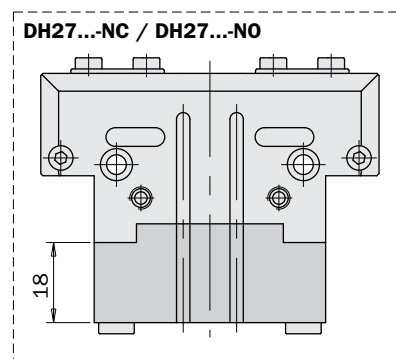
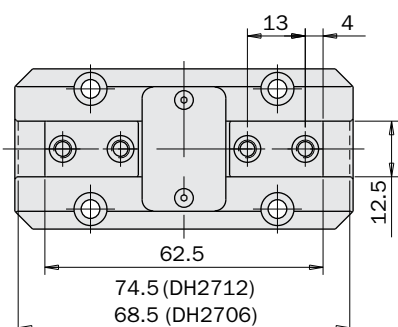
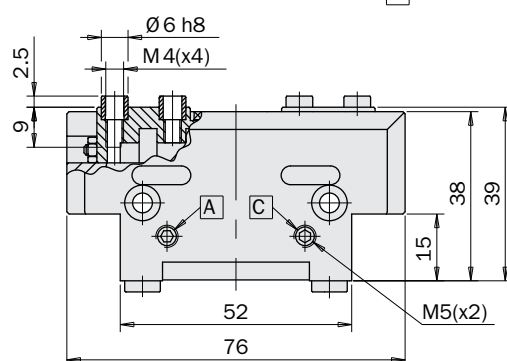
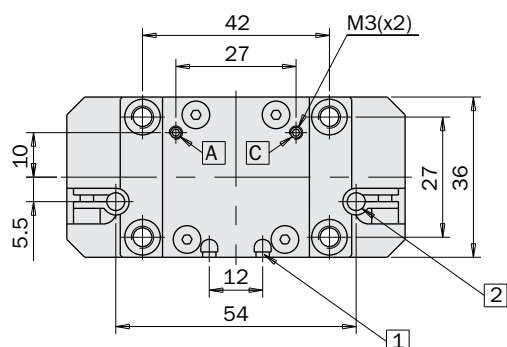


chiusura / closing (6bar)



	DH2712	DH2712-NC	DH2712-NO	DH2706	DH2706-NC	DH2706-NO
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air					
Pressione di esercizio Pressure range	2 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar	2 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar
Temperatura di esercizio Temperature range	5 ÷ 60°C.					
Forza di serraggio per griffa in apertura a 6 bar Opening gripping force at 6 bar each jaw	145N	85 ÷ 97N	194 ÷ 206N	290N	170 ÷ 194N	389 ÷ 413N
Forza di serraggio totale in apertura a 6 bar Opening total gripping force at 6 bar	290N	170 ÷ 194N	388 ÷ 412N	580N	340 ÷ 388N	778 ÷ 826N
Forza di serraggio per griffa in chiusura a 6 bar Closing gripping force at 6 bar each jaw	130N	178 ÷ 190N	69 ÷ 81N	260N	356 ÷ 380N	138 ÷ 162N
Forza di serraggio totale in chiusura a 6 bar Closing total gripping force at 6 bar	260N	356 ÷ 380N	138 ÷ 162N	520N	712 ÷ 760N	276 ÷ 324N
Corsa totale Total stroke	±0.3mm	12mm		6mm		
Frequenza max funzionamento continuativo Maximum working frequency	3Hz					
Consumo d'aria per ciclo Cycle air consumption	9cm³	13cm³	13cm³	9cm³	13cm³	13cm³
Tempo minimo di chiusura / apertura Closing / opening minimum time	0.03s / 0.03s	0.03s / 0.04s	0.04s / 0.03s	0.03s / 0.03s	0.03s / 0.04s	0.04s / 0.03s
Ripetibilità Repetition accuracy	0.02mm					
Peso Weight	255g	325g	315g	260g	330g	320g

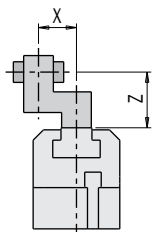
Dimensioni (mm) / Dimensions (mm)



- 1 Sede per sensori
Sensor groove
- 2 Porta sensori induttivi Ø4
Ø4 inductive sensor holder
- A Aria compressa in A: apertura della pinza
Compressed air in A: gripper opening
- C Aria compressa in C: chiusura della pinza
Compressed air in C: gripper closing

Forza di serraggio

I grafici mostrano la forza (F) per griffa espressa dalla pinza in funzione della pressione, del braccio di leva (Z) e del disassamento del punto di presa (X).
Diminuire la pressione se la pinza è impiegata nella zona rossa.



Gripping force

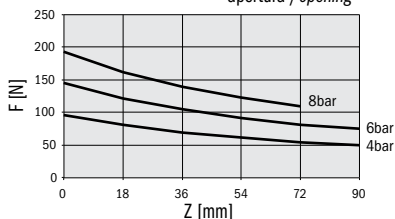
The graphs show the gripping force (F) on each jaw, as a function of the operating pressure, the gripping tool length (Z) and the overhanging (X).
Decrease the air pressure if the gripper is used in red area.

La forza indicata in questi grafici è riferita alla singola griffa.
La forza totale è il doppio.

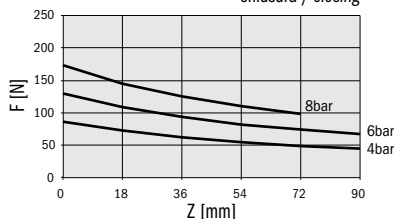
The force shown in these graphs refers to one jaw.
The total force is double.

DH2712

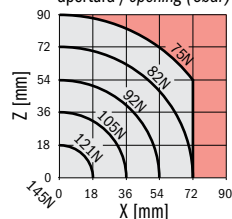
apertura / opening



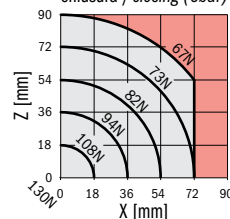
chiusura / closing



apertura / opening (6bar)

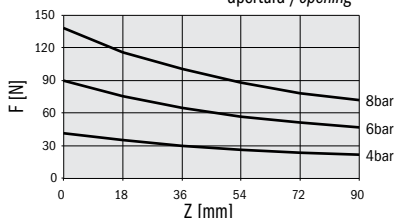


chiusura / closing (6bar)

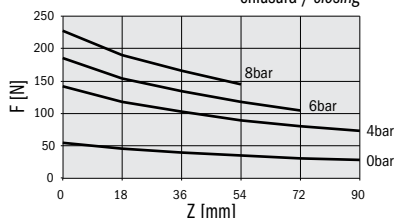


DH2712-NC

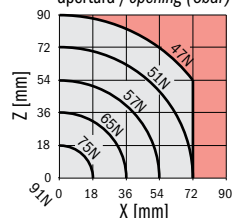
apertura / opening



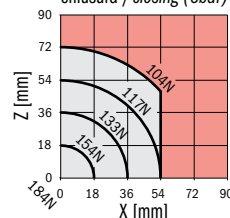
chiusura / closing



apertura / opening (6bar)

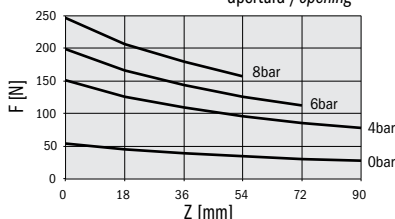


chiusura / closing (6bar)

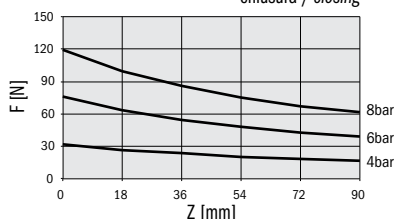


DH2712-NO

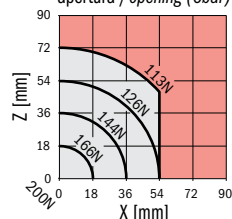
apertura / opening



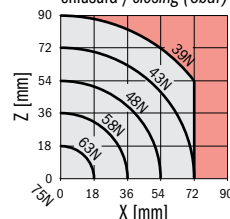
chiusura / closing



apertura / opening (6bar)

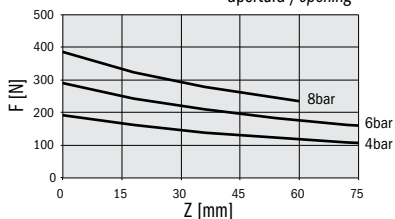


chiusura / closing (6bar)

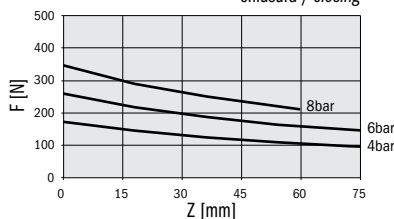


DH2706

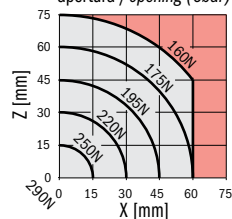
apertura / opening



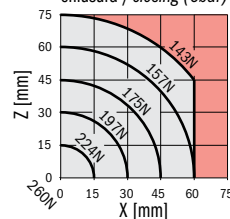
chiusura / closing



apertura / opening (6bar)

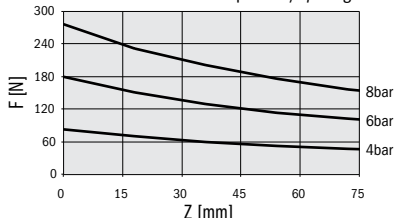


chiusura / closing (6bar)

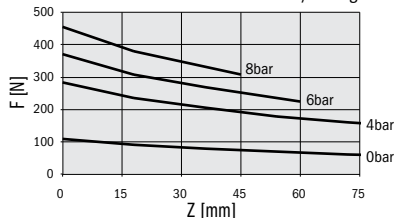


DH2706-NC

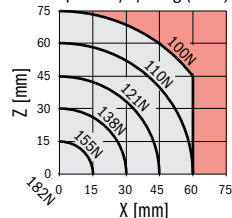
apertura / opening



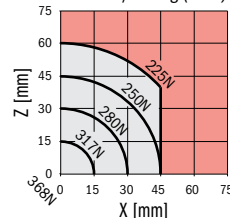
chiusura / closing



apertura / opening (6bar)

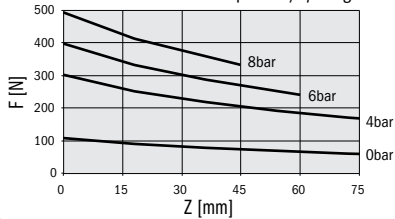


chiusura / closing (6bar)

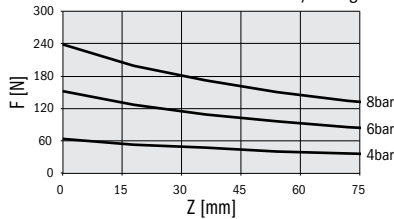


DH2706-NO

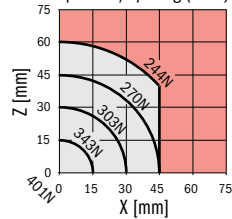
apertura / opening



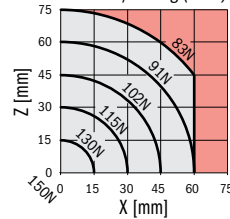
chiusura / closing



apertura / opening (6bar)

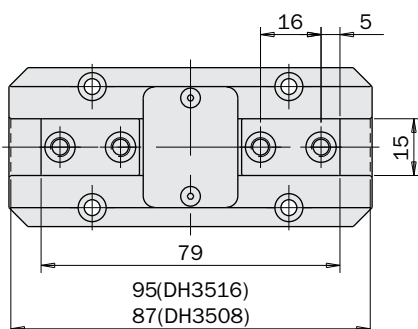
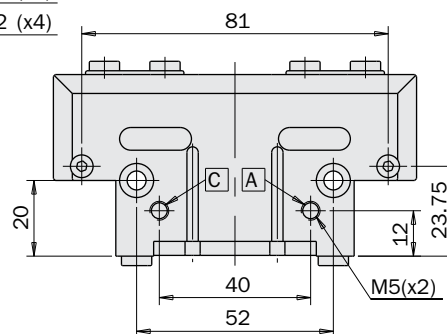
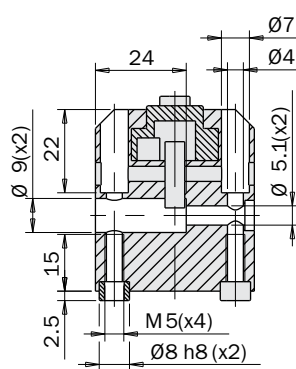
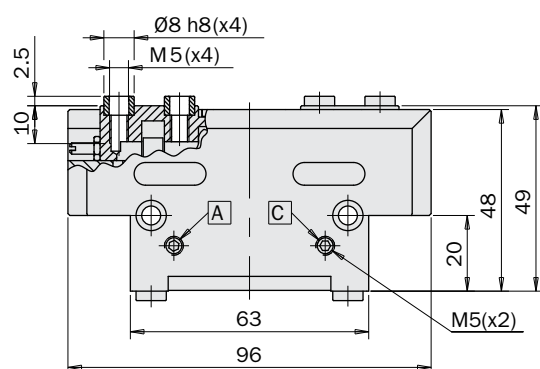
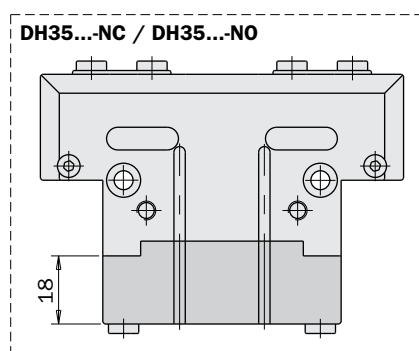
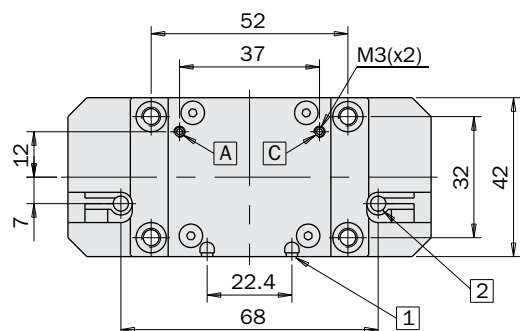


chiusura / closing (6bar)



	DH3516	DH3516-NC	DH3516-NO	DH3508	DH3508-NC	DH3508-NO
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air					
Pressione di esercizio Pressure range	1.5 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar	1.5 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar
Temperatura di esercizio Temperature range	5 ÷ 60°C.					
Forza di serraggio per griffa in apertura a 6 bar Opening gripping force at 6 bar each jaw	250N	140 ÷ 177N	323 ÷ 360N	500N	280 ÷ 353N	647 ÷ 720N
Forza di serraggio totale in apertura a 6 bar Opening total gripping force at 6 bar	500N	280 ÷ 354N	646 ÷ 720N	1000N	560 ÷ 706N	1294 ÷ 1440N
Forza di serraggio per griffa in chiusura a 6 bar Closing gripping force at 6 bar each jaw	220N	298 ÷ 319N	122 ÷ 143N	440N	595 ÷ 639N	244 ÷ 287N
Forza di serraggio totale in chiusura a 6 bar Closing total gripping force at 6 bar	440N	596 ÷ 638N	244 ÷ 286N	880N	1190 ÷ 1278N	488 ÷ 574N
Corsa totale Total stroke	±0.3mm	16mm		8mm		
Frequenza max funzionamento continuativo Maximum working frequency	3Hz					
Consumo d'aria per ciclo Cycle air consumption	18cm³	25cm³	25cm³	18cm³	25cm³	25cm³
Tempo minimo di chiusura / apertura Closing / opening minimum time	0.03s / 0.03s	0.03s / 0.04s	0.04s / 0.03s	0.03s / 0.03s	0.03s / 0.04s	0.04s / 0.03s
Ripetibilità Repetition accuracy	0.02mm					
Peso Weight	460g	550g	540g	470g	560g	550g

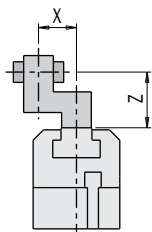
Dimensioni (mm) / Dimensions (mm)



- 1 Sede per sensori
Sensor groove
- 2 Porta sensori induttivi Ø4
Ø4 inductive sensor holder
- A Aria compressa in A: apertura della pinza
Compressed air in A: gripper opening
- C Aria compressa in C: chiusura della pinza
Compressed air in C: gripper closing

Forza di serraggio

I grafici mostrano la forza (F) per griffa espressa dalla pinza in funzione della pressione, del braccio di leva (Z) e del disassamento del punto di presa (X).
Diminuire la pressione se la pinza è impiegata nella zona rossa.



Gripping force

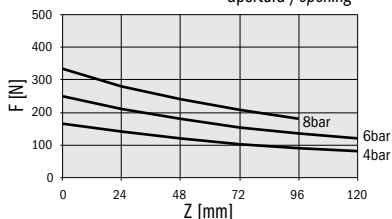
The graphs show the gripping force (F) on each jaw, as a function of the operating pressure, the gripping tool length (Z) and the overhanging (X).
Decrease the air pressure if the gripper is used in red area.

La forza indicata in questi grafici è riferita alla singola griffa.
La forza totale è il doppio.

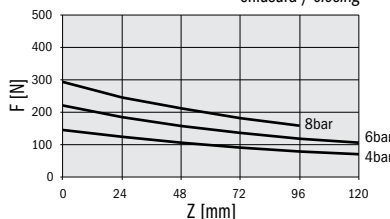
The force shown in these graphs refers to one jaw.
The total force is double.

DH3516

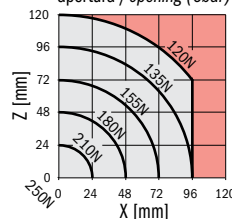
apertura / opening



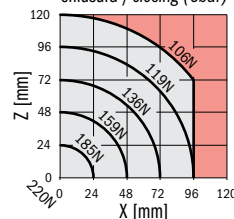
chiusura / closing



apertura / opening (6bar)

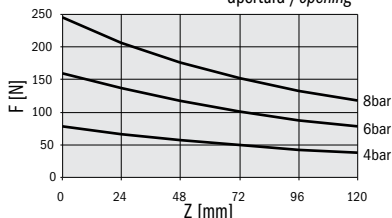


chiusura / closing (6bar)

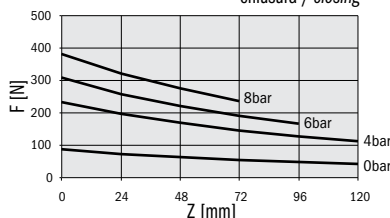


DH3516-NC

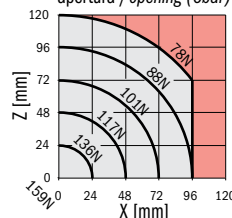
apertura / opening



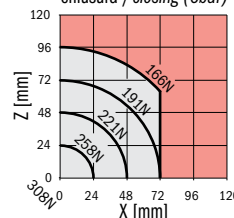
chiusura / closing



apertura / opening (6bar)

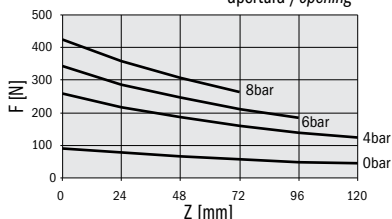


chiusura / closing (6bar)

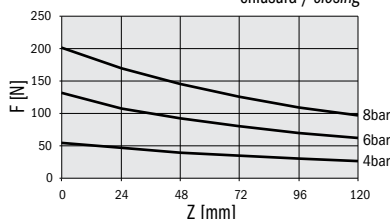


DH3516-NO

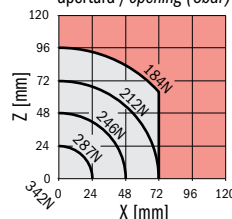
apertura / opening



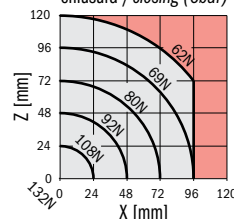
chiusura / closing



apertura / opening (6bar)

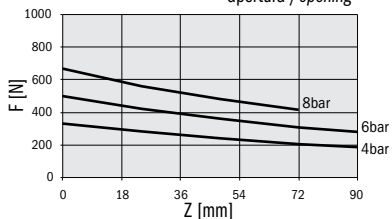


chiusura / closing (6bar)

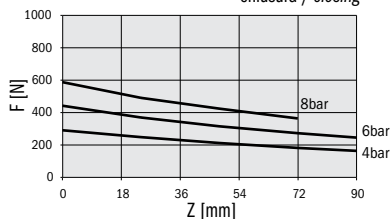


DH3508

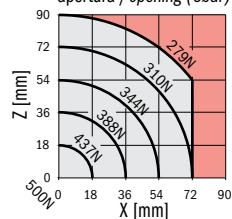
apertura / opening



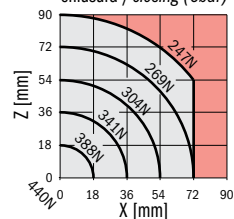
chiusura / closing



apertura / opening (6bar)

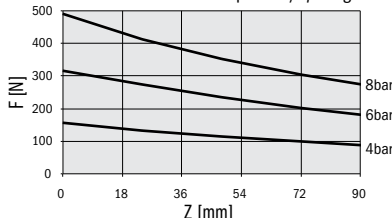


chiusura / closing (6bar)

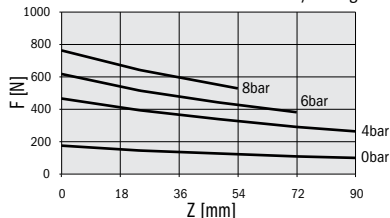


DH3508-NC

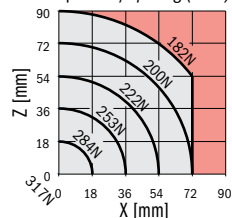
apertura / opening



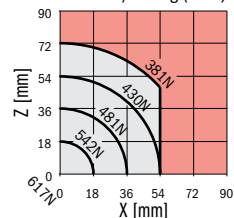
chiusura / closing



apertura / opening (6bar)

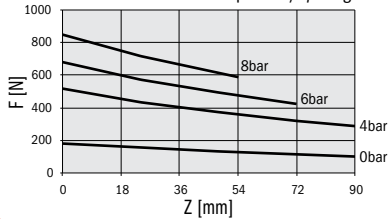


chiusura / closing (6bar)

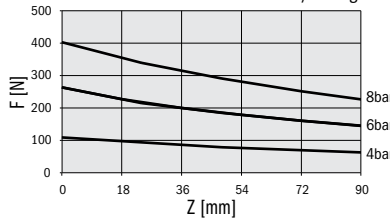


DH3508-NO

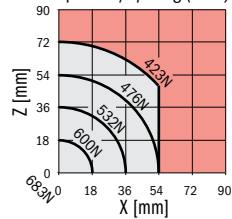
apertura / opening



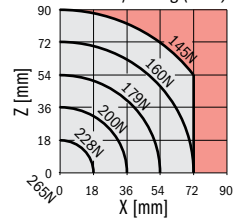
chiusura / closing



apertura / opening (6bar)

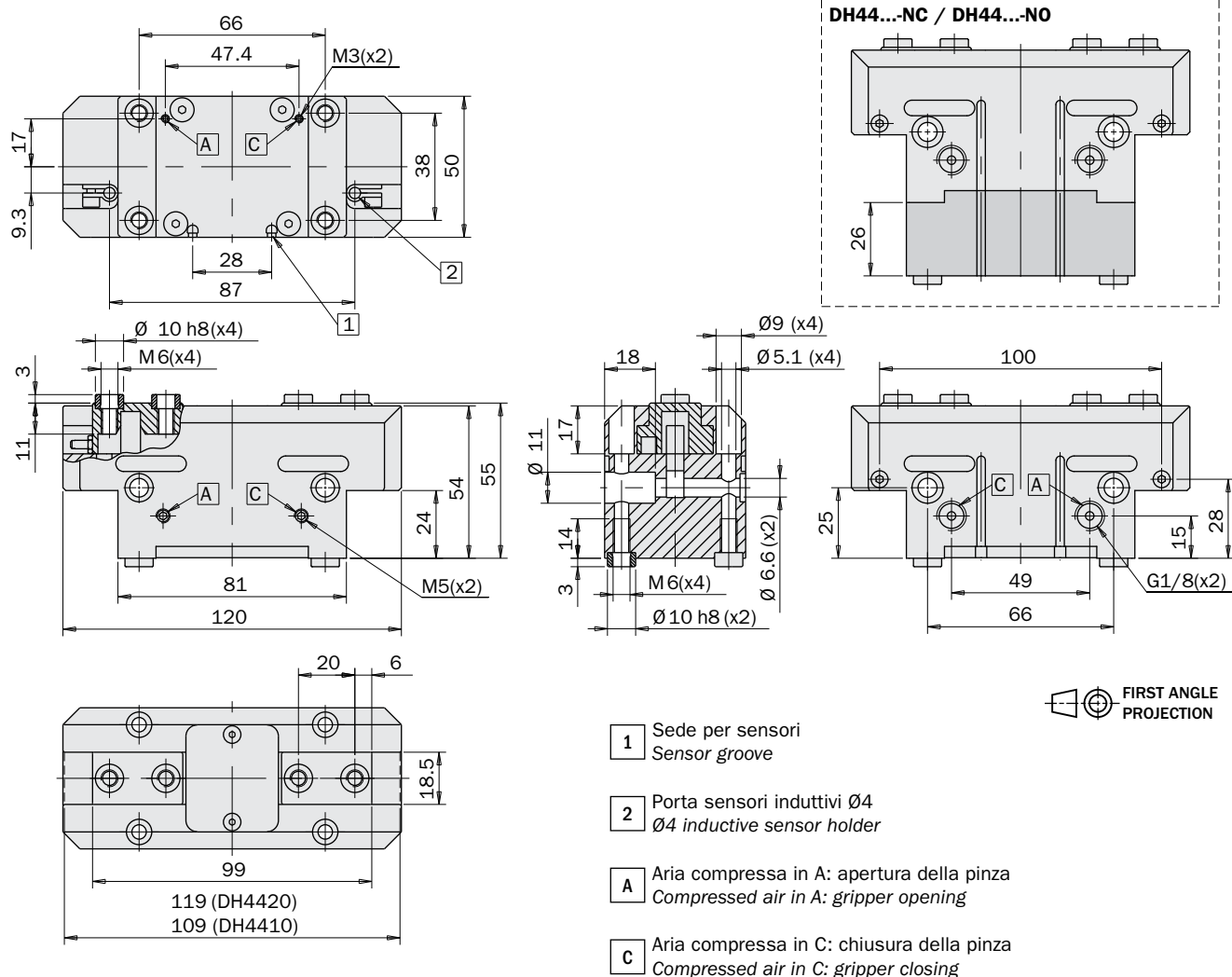


chiusura / closing (6bar)



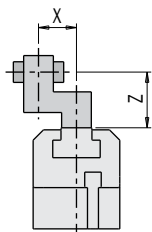
	DH4420	DH4420-NC	DH4420-NO	DH4410	DH4410-NC	DH4410-NO
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air					
Pressione di esercizio Pressure range	1.5 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar	1.5 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar
Temperatura di esercizio Temperature range	5 ÷ 60°C.					
Forza di serraggio per griffa in apertura a 6 bar Opening gripping force at 6 bar each jaw	405N	236 ÷ 298N	513 ÷ 575N	810N	472 ÷ 595N	1027 ÷ 1150N
Forza di serraggio totale in apertura a 6 bar Opening total gripping force at 6 bar	810N	472 ÷ 596N	1026 ÷ 1150N	1620N	944 ÷ 1190N	2054 ÷ 2300N
Forza di serraggio per griffa in chiusura a 6 bar Closing gripping force at 6 bar each jaw	365N	472 ÷ 534N	195 ÷ 257N	730N	945 ÷ 1068N	390 ÷ 513N
Forza di serraggio totale in chiusura a 6 bar Closing total gripping force at 6 bar	730N	944 ÷ 1068N	390 ÷ 514N	1460N	1890 ÷ 2136N	780 ÷ 1026N
Corsa totale Total stroke	±0.3mm	20mm		10mm		
Frequenza max funzionamento continuativo Maximum working frequency	2Hz					
Consumo d'aria per ciclo Cycle air consumption	36cm³	52cm³	52cm³	36cm³	52cm³	52cm³
Tempo minimo di chiusura / apertura Closing / opening minimum time	0.08s / 0.08s	0.06s / 0.13s	0.13s / 0.06s	0.08s / 0.08s	0.06s / 0.13s	0.13s / 0.06s
Ripetibilità Repetition accuracy	0.02mm					
Peso Weight	780g	990g	960g	800g	1010g	980g

Dimensioni (mm) / Dimensions (mm)



Forza di serraggio

I grafici mostrano la forza (F) per griffa espressa dalla pinza in funzione della pressione, del braccio di leva (Z) e del disassamento del punto di presa (X).
Diminuire la pressione se la pinza è impiegata nella zona rossa.



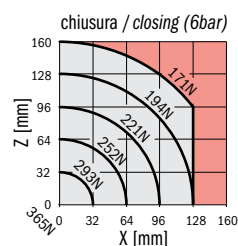
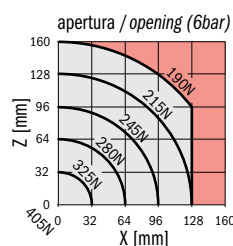
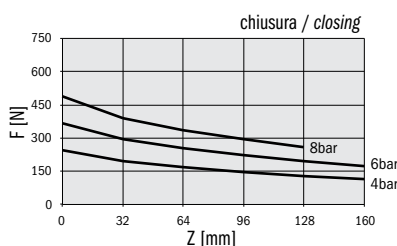
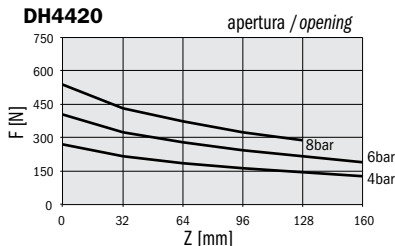
Gripping force

The graphs show the gripping force (F) on each jaw, as a function of the operating pressure, the gripping tool length (Z) and the overhanging (X).
Decrease the air pressure if the gripper is used in red area.

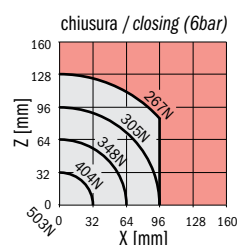
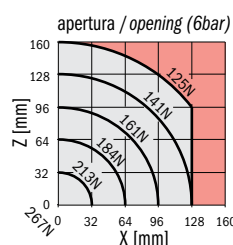
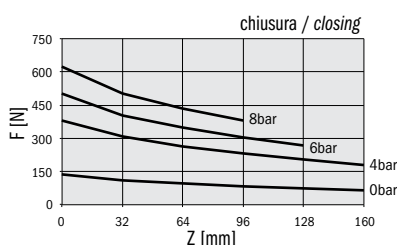
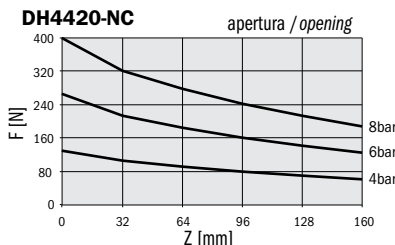
La forza indicata in questi grafici è riferita alla singola griffa.
La forza totale è il doppio.

The force shown in these graphs refers to one jaw.
The total force is double.

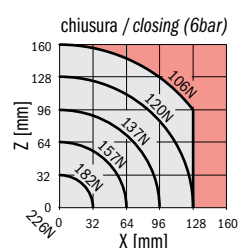
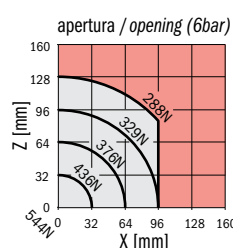
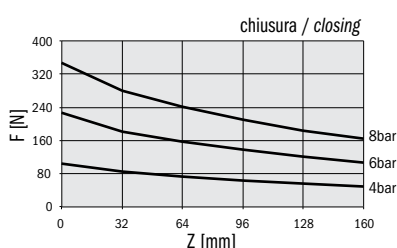
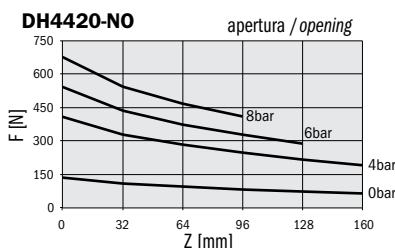
DH4420



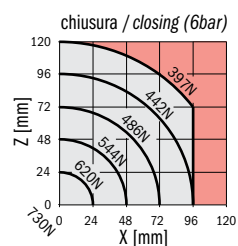
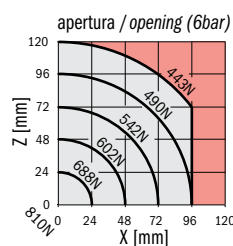
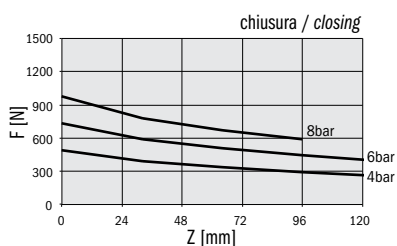
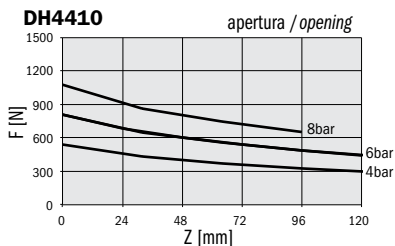
DH4420-NC



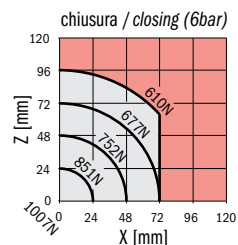
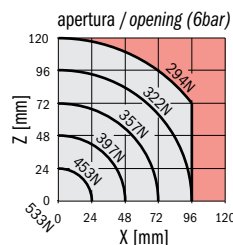
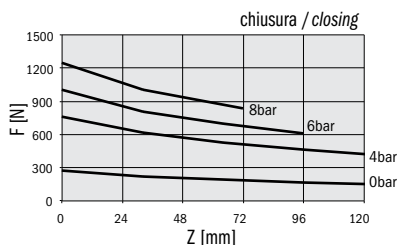
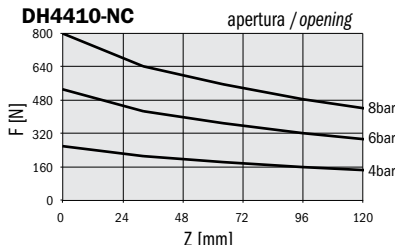
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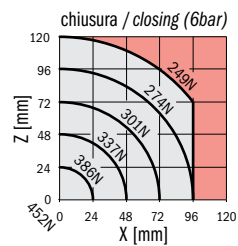
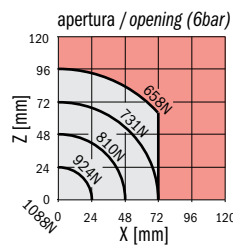
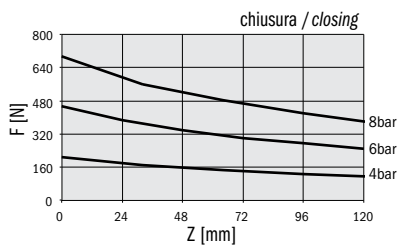
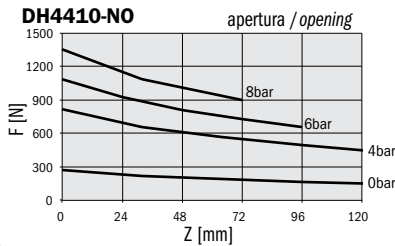
DH4410



DH4410-NC

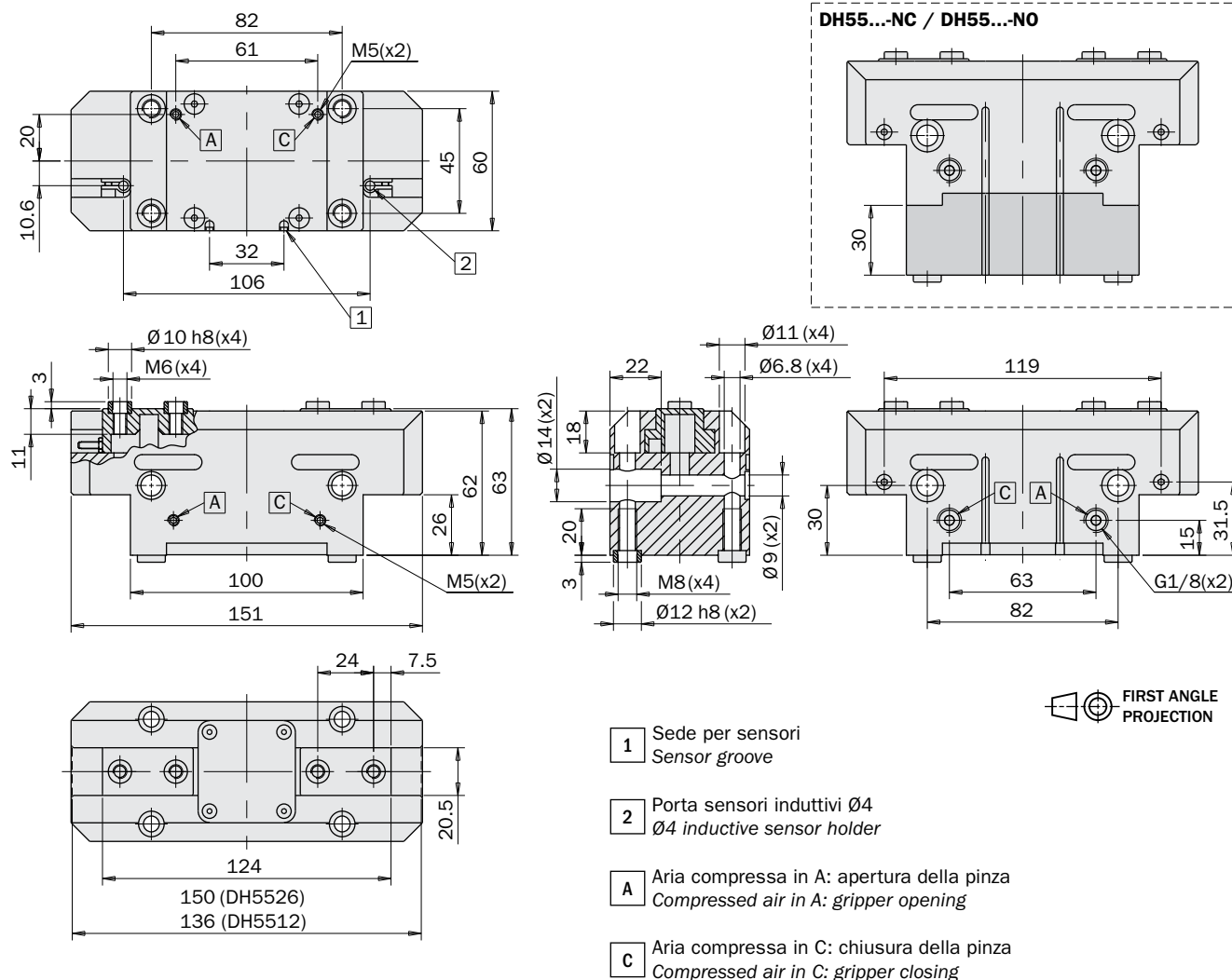


DH4410-NO



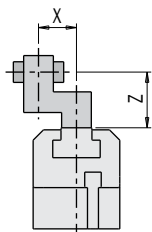
	DH5526	DH5526-NC	DH5526-NO	DH5512	DH5512-NC	DH5512-NO
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air					
Pressione di esercizio Pressure range	1.5 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar	1.5 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar
Temperatura di esercizio Temperature range	5 ÷ 60°C.					
Forza di serraggio per griffa in apertura a 6 bar Opening gripping force at 6 bar each jaw	625N	359 ÷ 443N	807 ÷ 891N	1350N	774 ÷ 957N	1742 ÷ 1924N
Forza di serraggio totale in apertura a 6 bar Opening total gripping force at 6 bar	1250N	718 ÷ 886N	1614 ÷ 1782N	2700N	1548 ÷ 1914N	3484 ÷ 3884N
Forza di serraggio per griffa in chiusura a 6 bar Closing gripping force at 6 bar each jaw	555N	739 ÷ 823N	290 ÷ 375N	1200N	1595 ÷ 1777N	627 ÷ 809N
Forza di serraggio totale in chiusura a 6 bar Closing total gripping force at 6 bar	1110N	1478 ÷ 1646N	580 ÷ 750N	2400N	3190 ÷ 3554N	1254 ÷ 1618N
Corsa totale Total stroke	±0.3mm	26mm		12mm		
Frequenza max funzionamento continuativo Maximum working frequency	2Hz					
Consumo d'aria per ciclo Cycle air consumption	70cm³	97cm³	97cm³	70cm³	97cm³	97cm³
Tempo minimo di chiusura / apertura Closing / opening minimum time	0.11s / 0.11s	0.08s / 0.13s	0.13s / 0.08s	0.08s / 0.08s	0.06s / 0.13s	0.13s / 0.06s
Ripetibilità Repetition accuracy	0.02mm					
Peso Weight	1350g	1750g	1700g	1370g	1770g	1720g

Dimensioni (mm) / Dimensions (mm)



Forza di serraggio

I grafici mostrano la forza (F) per griffa espressa dalla pinza in funzione della pressione, del braccio di leva (Z) e del disassamento del punto di presa (X).
Diminuire la pressione se la pinza è impiegata nella zona rossa.



Gripping force

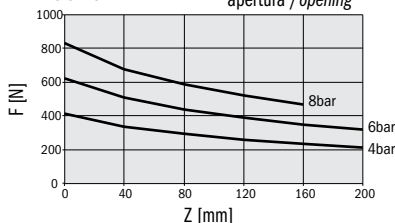
The graphs show the gripping force (F) on each jaw, as a function of the operating pressure, the gripping tool length (Z) and the overhanging (X).
Decrease the air pressure if the gripper is used in red area.

La forza indicata in questi grafici è riferita alla singola griffa.
La forza totale è il doppio.

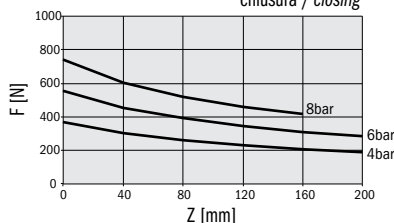
The force shown in these graphs refers to one jaw.
The total force is double.

DH5526

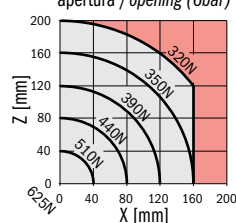
apertura / opening



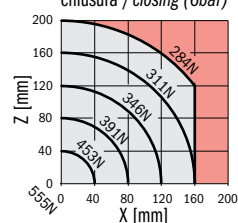
chiusura / closing



apertura / opening (6bar)

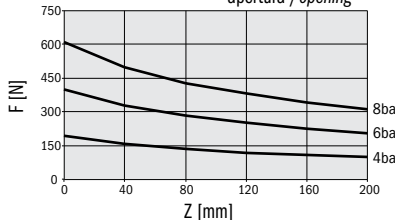


chiusura / closing (6bar)

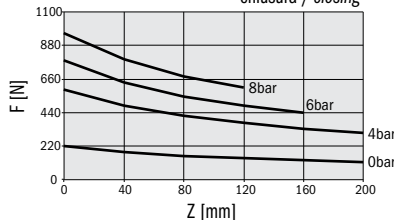


DH5526-NC

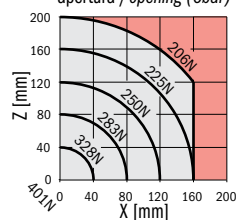
apertura / opening



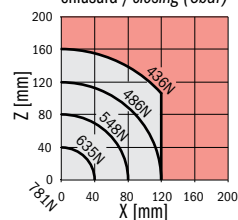
chiusura / closing



apertura / opening (6bar)

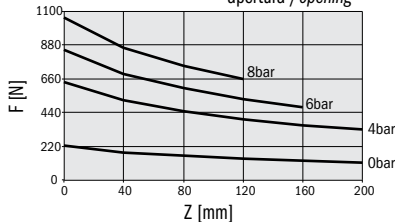


chiusura / closing (6bar)

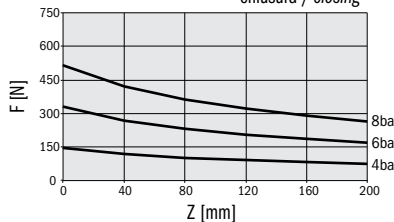


DH5526-NO

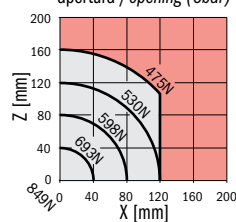
apertura / opening



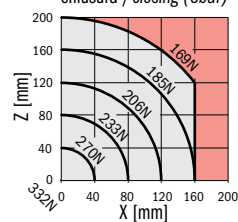
chiusura / closing



apertura / opening (6bar)

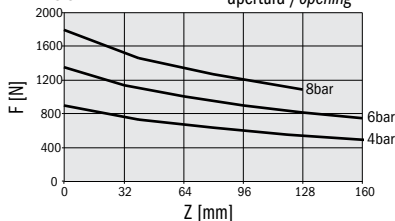


chiusura / closing (6bar)

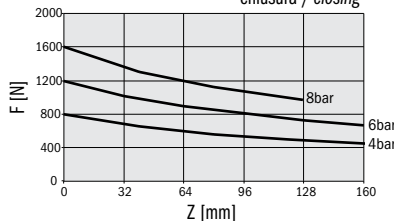


DH5512

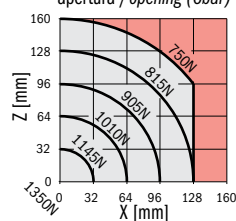
apertura / opening



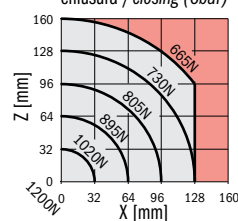
chiusura / closing



apertura / opening (6bar)

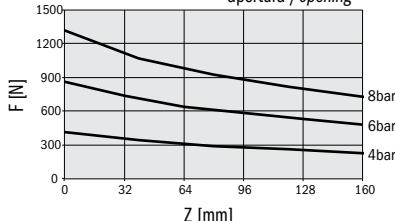


chiusura / closing (6bar)

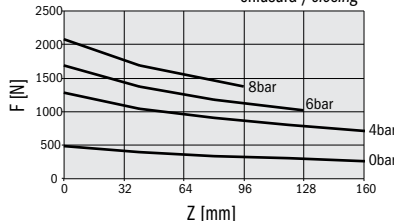


DH5512-NC

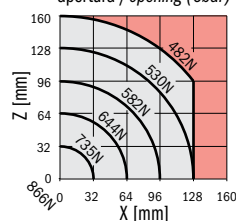
apertura / opening



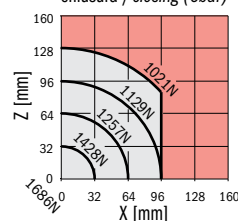
chiusura / closing



apertura / opening (6bar)

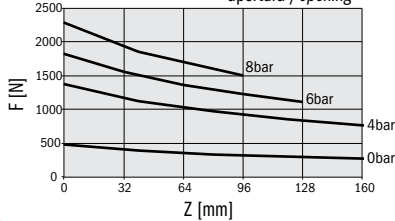


chiusura / closing (6bar)

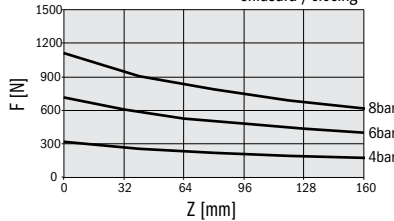


DH5512-NO

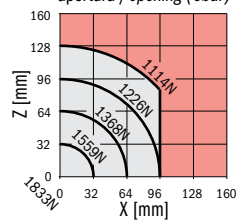
apertura / opening



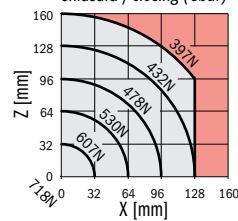
chiusura / closing



apertura / opening (6bar)

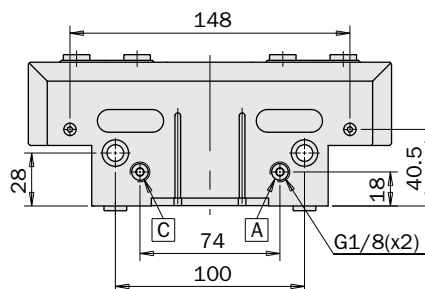
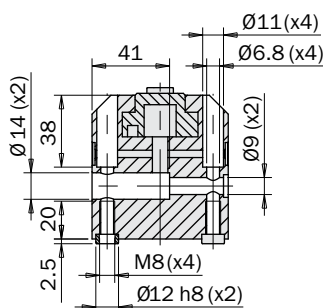
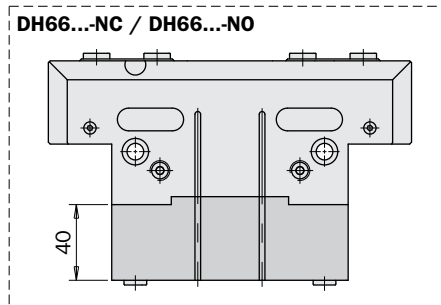
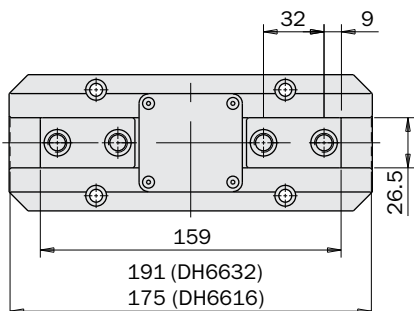
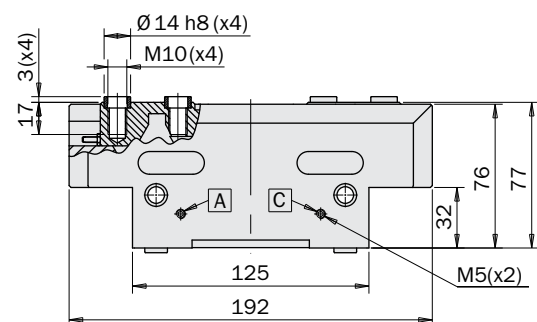
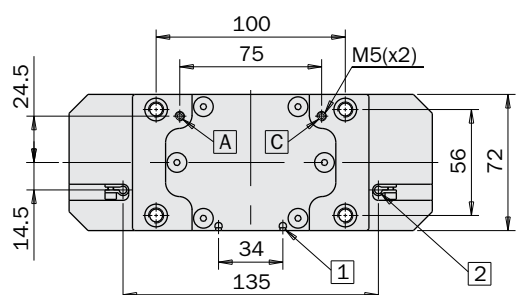


chiusura / closing (6bar)



	DH6632	DH6632-NC	DH6632-NO	DH6616	DH6616-NC	DH6616-NO
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air					
Pressione di esercizio Pressure range	1.5 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar	1.5 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar
Temperatura di esercizio Temperature range	5 ÷ 60°C.					
Forza di serraggio per griffa in apertura a 6 bar Opening gripping force at 6 bar each jaw	920N	559 ÷ 663N	1180 ÷ 1284N	1840N	1119 ÷ 1326N	2361 ÷ 2568N
Forza di serraggio totale in apertura a 6 bar Opening total gripping force at 6 bar	1840N	1118 ÷ 1326N	2360 ÷ 2568N	3680N	2238 ÷ 2652N	4722 ÷ 5136N
Forza di serraggio per griffa in chiusura a 6 bar Closing gripping force at 6 bar each jaw	820N	1078 ÷ 1181N	457 ÷ 560N	1640N	2156 ÷ 2363N	914 ÷ 1121N
Forza di serraggio totale in chiusura a 6 bar Closing total gripping force at 6 bar	1640N	2156 ÷ 2362N	914 ÷ 1120N	3280N	4312 ÷ 4726N	1828 ÷ 2242N
Corsa totale Total stroke	±0.3mm	32mm		16mm		
Frequenza max funzionamento continuativo Maximum working frequency	2Hz					
Consumo d'aria per ciclo Cycle air consumption	127cm³	178cm³	178cm³	127cm³	178cm³	178cm³
Tempo minimo di chiusura / apertura Closing / opening minimum time	0.15s / 0.15s	0.12s / 0.18s	0.18s / 0.12s	0.15s / 0.15s	0.12s / 0.18s	0.18s / 0.12s
Ripetibilità Repetition accuracy	0.02mm					
Peso Weight	2630g	3430g	3300g	2670g	3470g	3340g

Dimensioni (mm) / Dimensions (mm)



1 Sede per sensori
Sensor groove

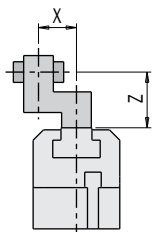
2 Porta sensori induttivi Ø4
Ø4 inductive sensor holder

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

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

Forza di serraggio

I grafici mostrano la forza (F) per griffa espressa dalla pinza in funzione della pressione, del braccio di leva (Z) e del disassamento del punto di presa (X).
Diminuire la pressione se la pinza è impiegata nella zona rossa.

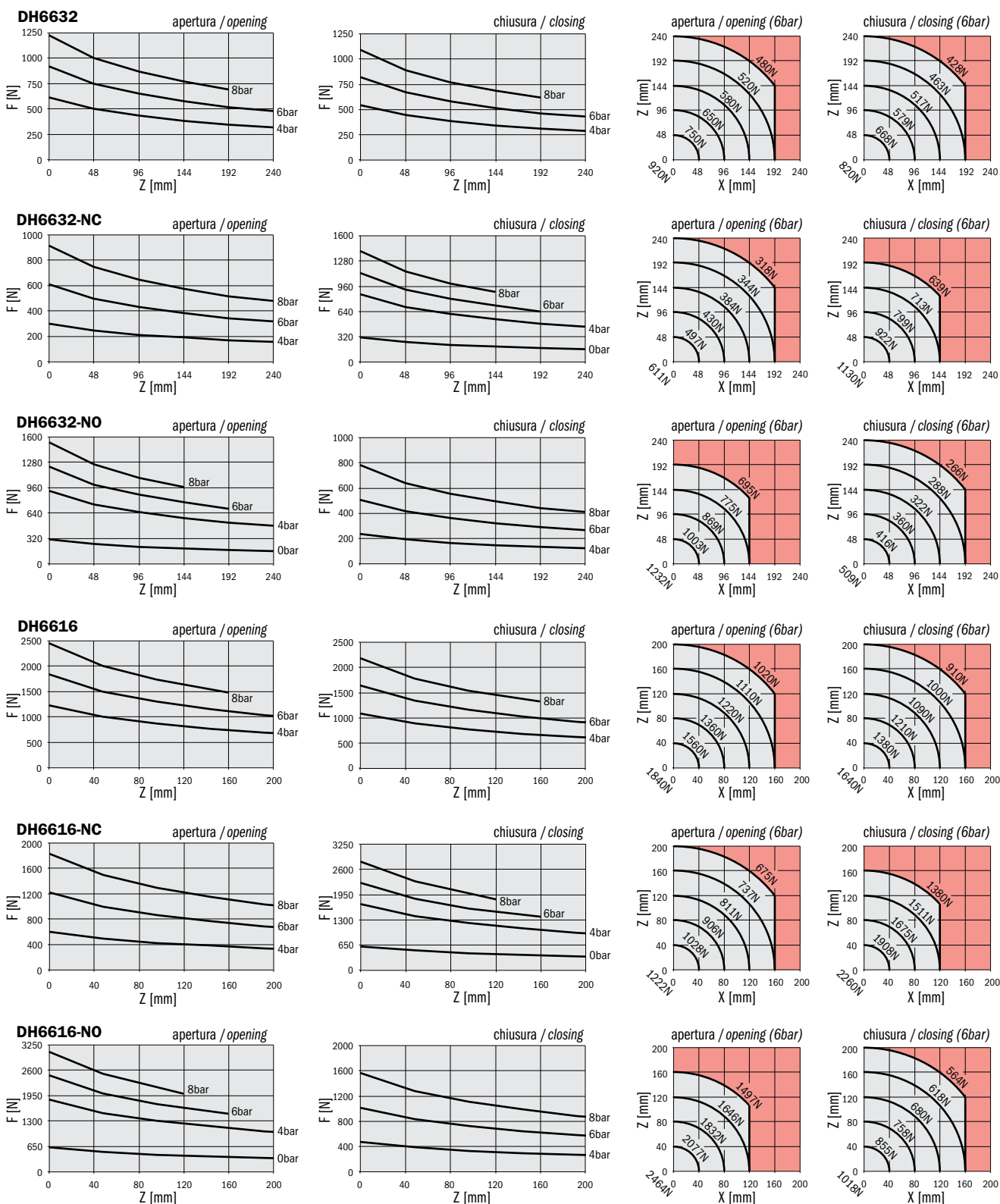


Gripping force

The graphs show the gripping force (F) on each jaw, as a function of the operating pressure, the gripping tool length (Z) and the overhanging (X).
Decrease the air pressure if the gripper is used in red area.

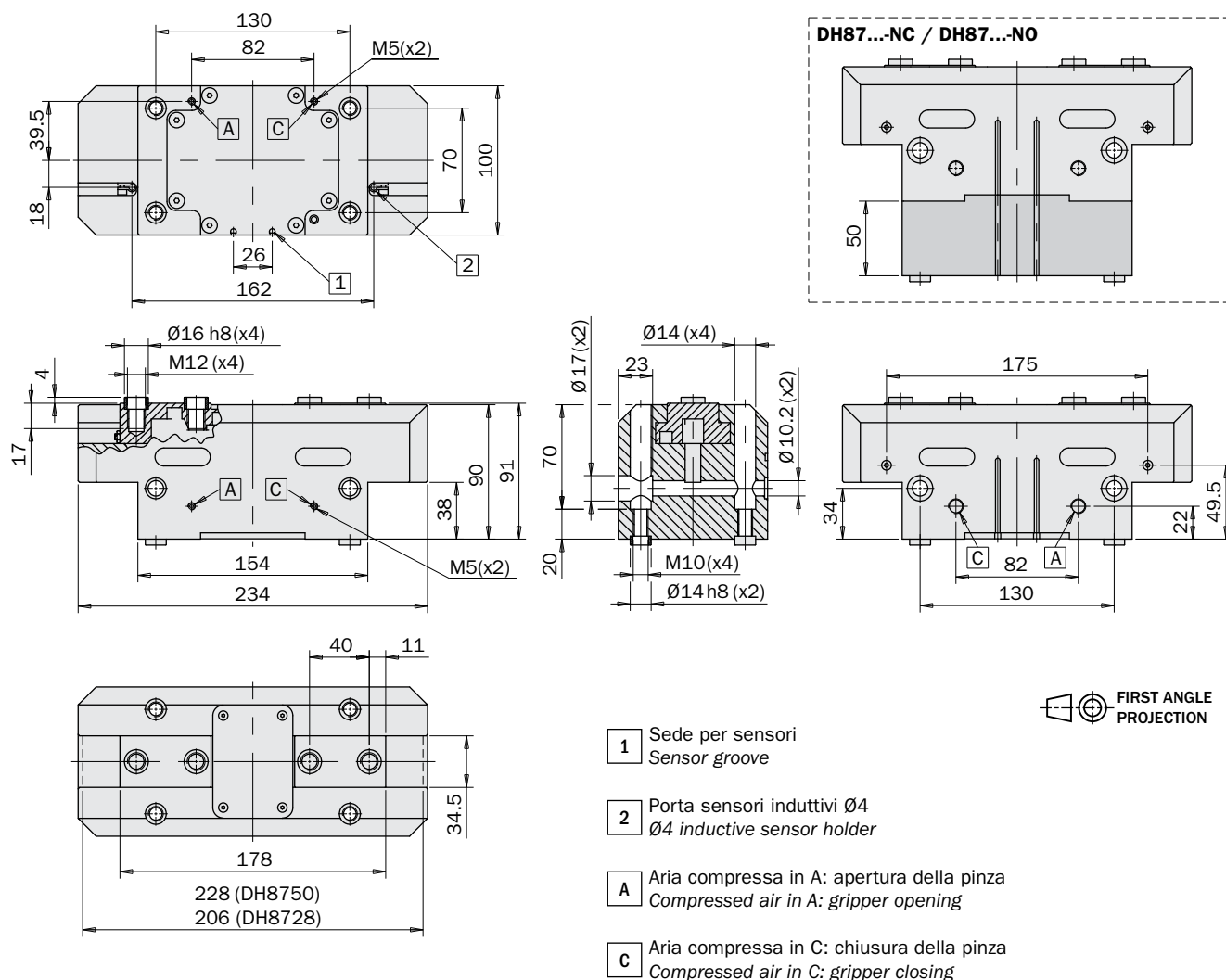
La forza indicata in questi grafici è riferita alla singola griffa.
La forza totale è il doppio.

The force shown in these graphs refers to one jaw.
The total force is double.



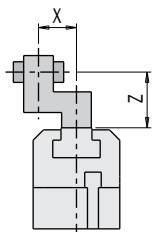
	DH8750	DH8750-NC	DH8750-NO	DH8728	DH8728-NC	DH8728-NO
Fluido Medium	Aria compressa filtrata, lubrificata / non lubrificata Filtered, lubricated / non lubricated compressed air					
Pressione di esercizio Pressure range	1.5 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar	1.5 ÷ 8bar	4 ÷ 8bar	4 ÷ 8bar
Temperatura di esercizio Temperature range	5 ÷ 60°C.					
Forza di serraggio per griffa in apertura a 6 bar Opening gripping force at 6 bar each jaw	1560N	977 ÷ 1129N	1992 ÷ 2144N	2750N	1720 ÷ 1988N	3509 ÷ 3776N
Forza di serraggio totale in apertura a 6 bar Opening total gripping force at 6 bar	3120N	1954 ÷ 2258N	3984 ÷ 4288N	5500N	3440 ÷ 3976N	7018 ÷ 7552N
Forza di serraggio per griffa in chiusura a 6 bar Closing gripping force at 6 bar each jaw	1420N	1853 ÷ 2005N	837 ÷ 989N	2500N	3263 ÷ 3531N	1475 ÷ 1742N
Forza di serraggio totale in chiusura a 6 bar Closing total gripping force at 6 bar	2840N	3706 ÷ 4010N	1674 ÷ 1978N	5000N	6526 ÷ 7026N	2950 ÷ 3484N
Corsa totale Total stroke	±0.3mm	50mm		28mm		
Frequenza max funzionamento continuativo Maximum working frequency	1Hz					
Consumo d'aria per ciclo Cycle air consumption	347cm³	472cm³	472cm³	347cm³	472cm³	472cm³
Tempo minimo di chiusura / apertura Closing / opening minimum time	0.21s / 0.21s	0.19s / 0.31s	0.31s / 0.19s	0.21s / 0.21s	0.19s / 0.31s	0.31s / 0.19s
Ripetibilità Repetition accuracy	0.02mm					
Peso Weight	4990g	6920g	6750g	5050g	6980g	6810g

Dimensioni (mm) / Dimensions (mm)



Forza di serraggio

I grafici mostrano la forza (F) per griffa espressa dalla pinza in funzione della pressione, del braccio di leva (Z) e del disassamento del punto di presa (X).
Diminuire la pressione se la pinza è impiegata nella zona rossa.

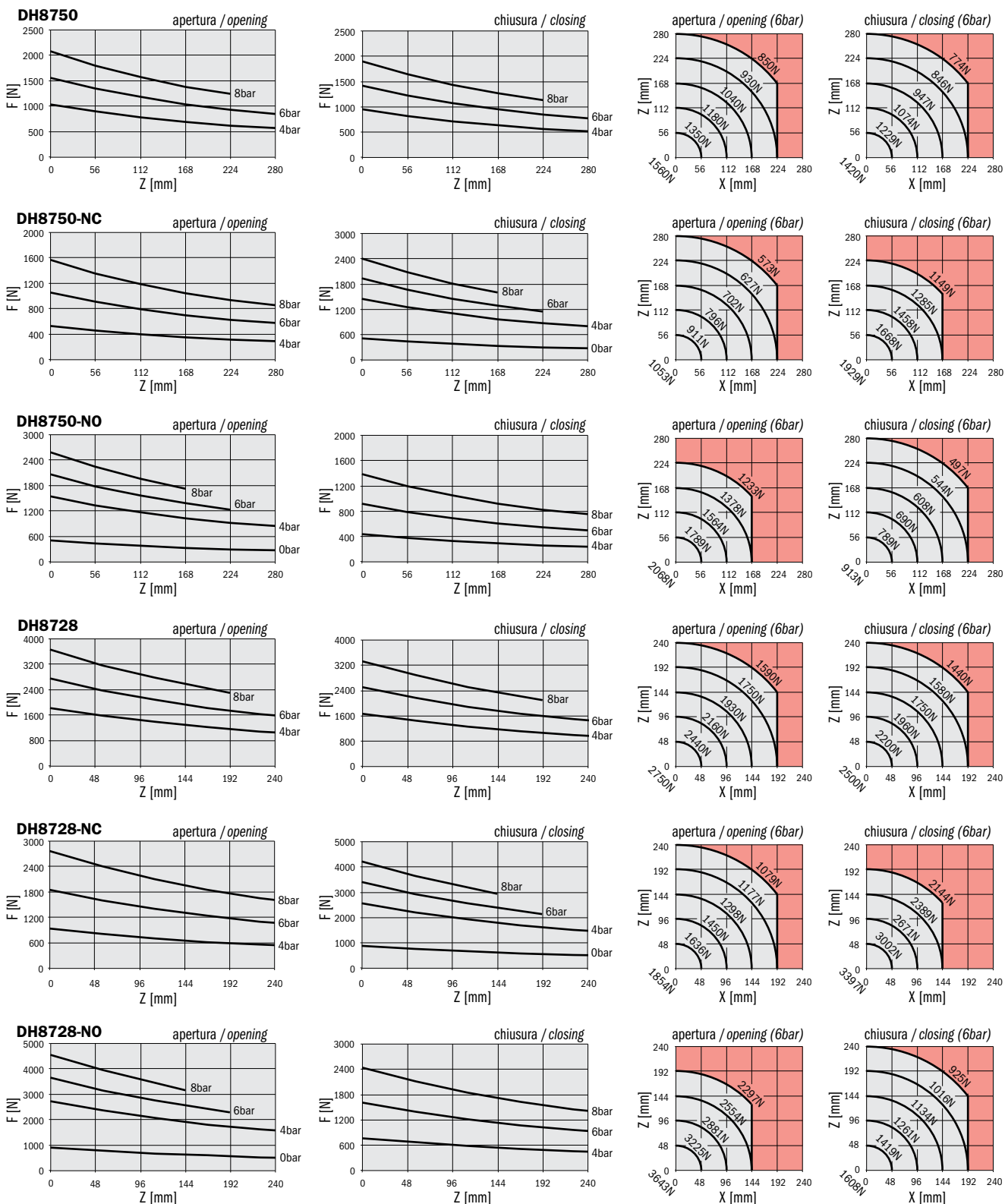


Gripping force

The graphs show the gripping force (F) on each jaw, as a function of the operating pressure, the gripping tool length (Z) and the overhanging (X).
Decrease the air pressure if the gripper is used in red area.

La forza indicata in questi grafici è riferita alla singola griffa.
La forza totale è il doppio.

The force shown in these graphs refers to one jaw.
The total force is double.



Fissaggio della pinza

La pinza può essere montata in posizione fissa oppure su parti in movimento: in questo caso va considerata la forza d'inerzia cui la pinza ed il suo carico sono sottoposti.

- 1) Per fissare la pinza sul fondo, usare quattro viti (SC1) attraverso i fori passanti.
- 2) Il fissaggio sul fondo è possibile anche con quattro viti (SC2) passanti attraverso la piastra di fissaggio ed avvitata nella pinza.
- 3) Per fissare la pinza su un lato, usare due viti (SC3) attraverso i fori passanti dopo aver rimosso i tappi di protezione (T3).

In ogni caso utilizzare per il centraggio le due boccole (BC), fornite nella confezione. Rispettare le dimensioni nella tabella (D8 e H5) per le loro sedi nella piastra di fissaggio.

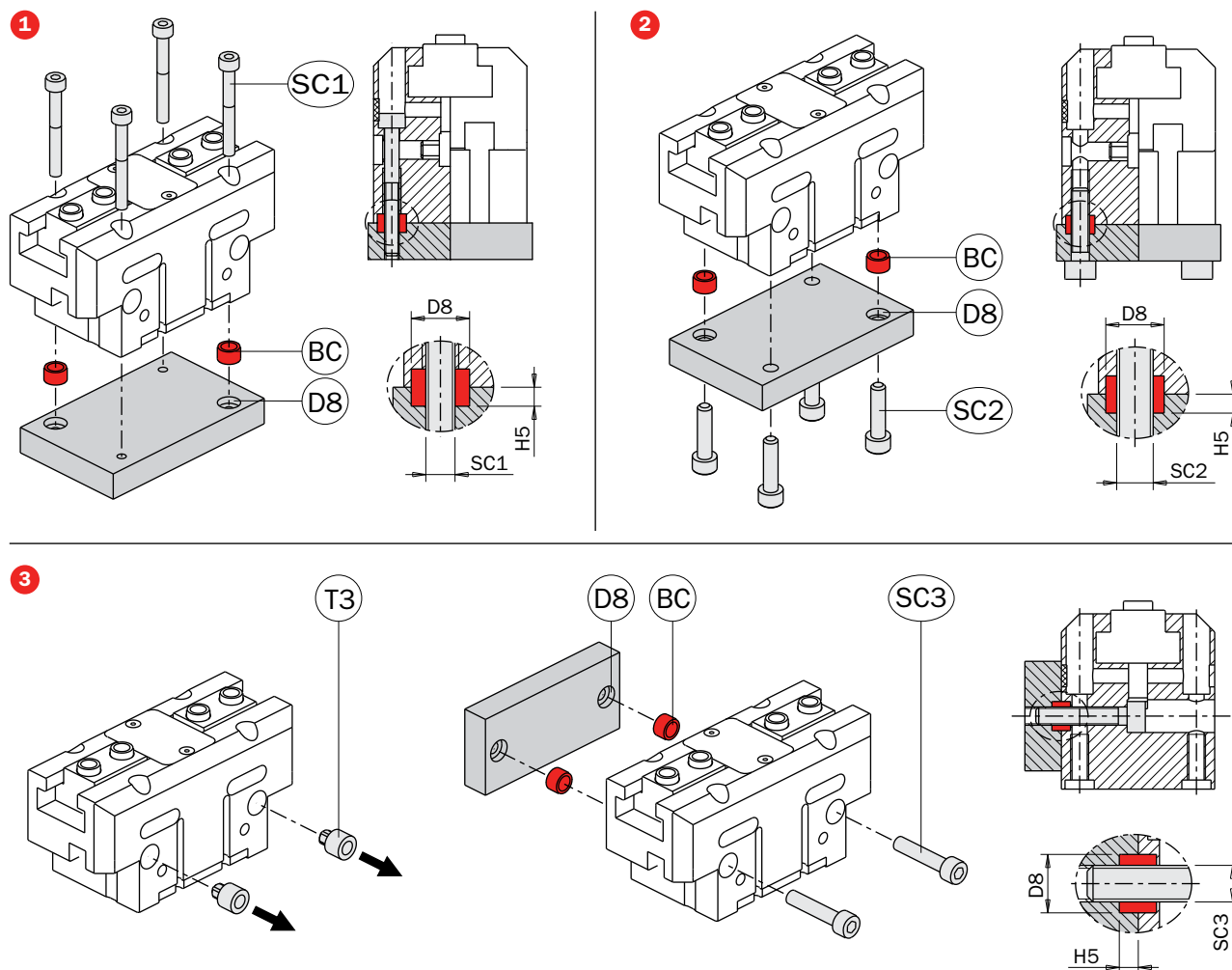
Gripper fastening

The gripper can be fastened to a static or moving part.

When on a moving part, you must pay attention to the inertial force to which the gripper and its load are subjected.

- 1) To fasten gripper to base, use four screws (SC1) in the through holes.
- 2) To fasten gripper to base, you can also use four screws (SC2) through the mounting plate, screwed in the gripper.
- 3) To fasten the gripper side, use two screws (SC3) in the through holes, after removing the protection plugs (T3).

In every case, put the two centering sleeves (BC), which are supplied in the package. Check the dimensions in the table (D8 and H5) for their housings in the mounting plate.



		DH19...	DH22...	DH27...	DH35...	DH44...	DH55...	DH66...	DH87...
D8	H8	Ø5	Ø6	Ø8	Ø8	Ø10	Ø12	Ø12	Ø14
H5	+0.1 +0.2	2	2.5	2.5	2.5	3	3	2.5	4
SC1		M2.5	M3	M4	M4	M5	M6	M6	M8
SC2		M3	M4	M5	M5	M6	M8	M8	M10
SC3		M2.5	M3	M4	M5	M6	M8	M8	M10

Fissaggio delle estremità di presa

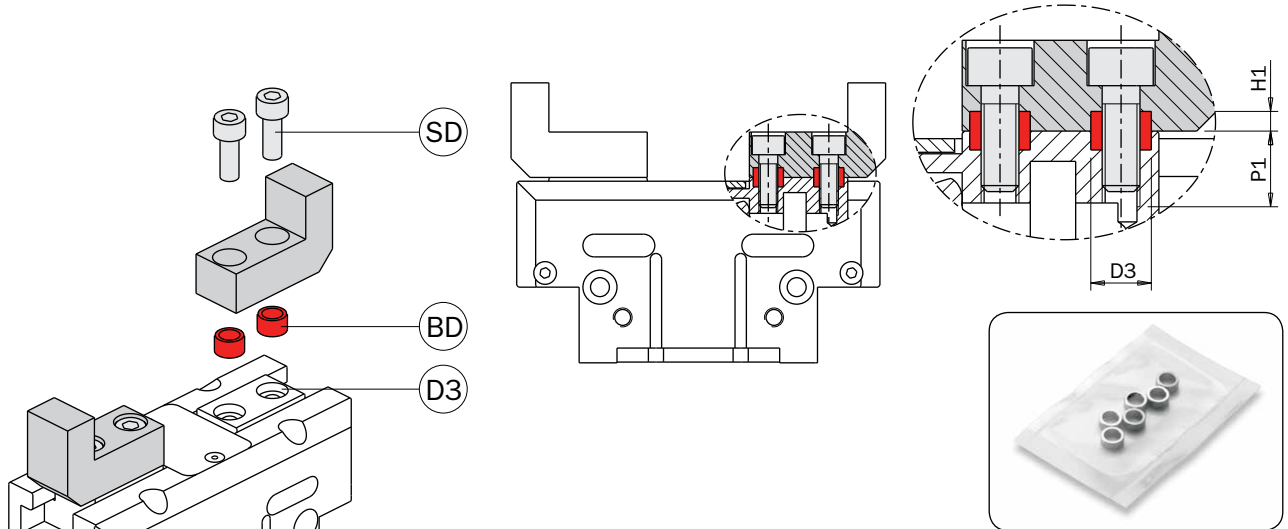
Costruire le dita di presa il più possibile corte e leggere.
Fissarle con due viti (SD) e due boccole di centraggio (BD) nei fori calibrati (D3) delle griffe.

Gripping tool fastening

The gripping tools must be as short and light as possible.
They must be fastened by two screws (SD) and two centering sleeves (BD) in the calibrated holes (D3) of the jaws.

Nella confezione della pinza sono fornite 4 boccole di centraggio (BD) per le dita di presa e 2 boccole (BC) per il corpo.

4 centering rings (BD) for the gripping tools and 2 centering sleeves (BC) for the housing are supplied in the packaging.



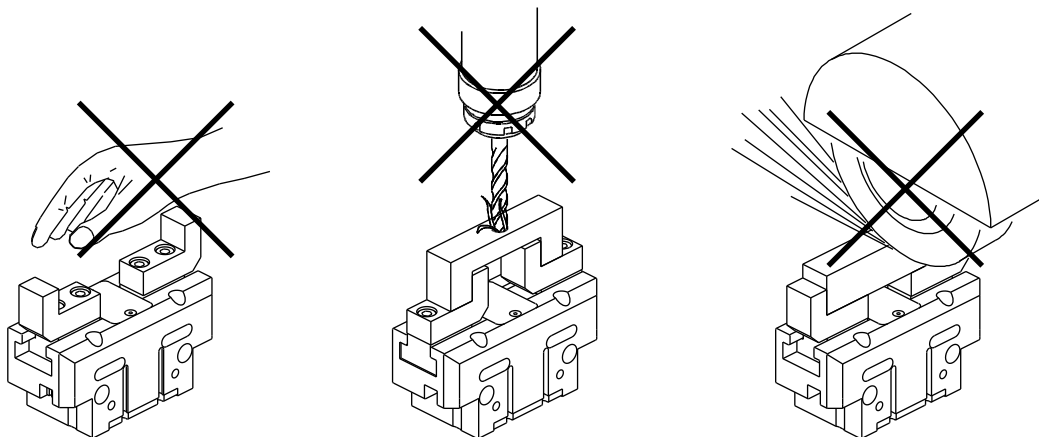
		DH19...	DH22...	DH27...	DH35...	DH44...	DH55...	DH66...	DH87...
D3	H8	Ø4	Ø5	Ø6	Ø8	Ø10	Ø10	Ø14	Ø16
H1	+0.1 +0.2	2	1.4	2.5	2.5	3	3	3	4
P1		5	6	8	9.5	11	11	17	17
SD		M2.5	M3	M4	M5	M6	M6	M10	M12

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.



Carichi di sicurezza

Consultare la tabella per i carichi massimi ammissibili. Forze e coppie eccessive possono danneggiare la pinza e causare difficoltà di funzionamento compromettendo la sicurezza dell'operatore.

F_s , $M_x s$, $M_y s$, $M_z s$, sono i carichi massimi ammissibili in condizioni statiche, cioè con le griffe ferme.

F_d , $M_x d$, $M_y d$, $M_z d$, sono i carichi massimi ammissibili in condizioni dinamiche, cioè con le griffe in movimento.

m , è il massimo peso ammissibile su ogni dito di presa quando la pinza è utilizzata senza regolazione di velocità; per dita più pesanti si deve diminuire la velocità delle griffe agendo sui regolatori di flusso (non forniti).

Safety loads

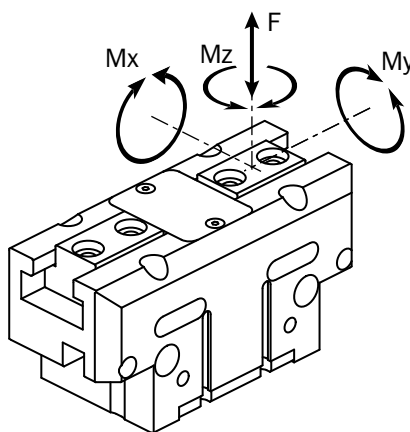
Check the table for maximum permitted loads.

Excessive forces or torques can damage the gripper, cause functioning troubles and endanger the safety of the operator.

F_s , $M_x s$, $M_y s$, $M_z s$, are maximum permitted static loads. Static means with motionless jaws.

F_d , $M_x d$, $M_y d$, $M_z d$, are maximum permitted dynamic loads. Dynamic means with running jaws.

m , is the maximum permitted weight of each gripping tool, when the gripper works without speed adjustment. If the weight is over the permitted value, it is necessary to decrease the speed of the jaw by using flow controllers (not supplied).



	DH1905 DH1905-NC DH1905-NO	DH2208 DH2208-NC DH2208-NO	DH2204 DH2204-NC DH2204-NO	DH2712 DH2712-NC DH2712-NO	DH2706 DH2706-NC DH2706-NO	DH3516 DH3516-NC DH3516-NO	DH3508 DH3508-NC DH3508-NO
F_s	200N	350N	350N	600N	600N	900N	900N
$M_x s$	2.5Nm	5Nm	7.5Nm	8Nm	13Nm	18Nm	30Nm
$M_y s$	2.5Nm	7.5Nm	7.5Nm	13Nm	13Nm	30Nm	30Nm
$M_z s$	2Nm	4Nm	6Nm	6.5Nm	10Nm	15Nm	23Nm
F_d	2N	4N	4N	6N	6N	9N	9N
$M_x d$	0.06Nm	0.12Nm	0.12Nm	0.25Nm	0.25Nm	0.5Nm	0.5Nm
$M_y d$	0.06Nm	0.12Nm	0.12Nm	0.25Nm	0.25Nm	0.5Nm	0.5Nm
$M_z d$	0.06Nm	0.12Nm	0.12Nm	0.25Nm	0.25Nm	0.5Nm	0.5Nm
m	100g	180g	180g	350g	350g	600g	600g

	DH4420 DH4420-NC DH4420-NO	DH4410 DH4410-NC DH4410-NO	DH5526 DH5526-NC DH5526-NO	DH5512 DH5512-NC DH5512-NO	DH6632 DH6632-NC DH6632-NO	DH6616 DH6616-NC DH6616-NO	DH8750 DH8750-NC DH8750-NO	DH8728 DH8728-NC DH8728-NO
F_s	1500N	1500N	2500N	2500N	4000N	4000N	7000N	7000N
$M_x s$	40Nm	60Nm	80Nm	125Nm	145Nm	215Nm	350Nm	400Nm
$M_y s$	60Nm	60Nm	80Nm	80Nm	145Nm	145Nm	200Nm	200Nm
$M_z s$	30Nm	45Nm	65Nm	95Nm	115Nm	165Nm	280Nm	300Nm
F_d	15N	15N	25N	25N	40N	40N	70N	70N
$M_x d$	1Nm	1Nm	2Nm	2Nm	4Nm	4Nm	8Nm	8Nm
$M_y d$	1Nm	1Nm	2Nm	2Nm	4Nm	4Nm	8Nm	8Nm
$M_z d$	1Nm	1Nm	2Nm	2Nm	4Nm	4Nm	8Nm	8Nm
m	1100g	1100g	2100g	2100g	3500g	3500g	6500g	6500g

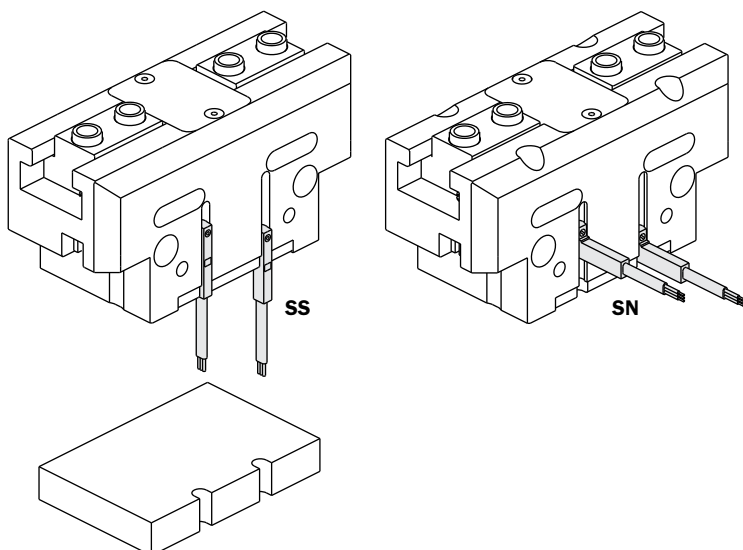
Sensori (opzionali)

Il rilevamento della posizione di lavoro può essere effettuato con sensori magnetici che rilevano il magnete sul pistone, oppure con sensori induttivi (diametro 4mm), che rilevano una parte metallica (M) la cui posizione nella griffa è regolabile.

I sensori magnetici utilizzabili sono i codici Gimatic:

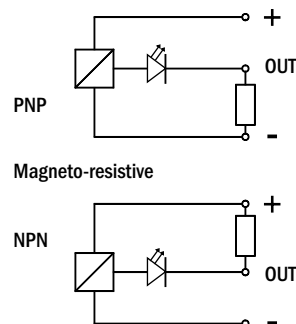
			DH
SN4N225-G	PNP	Cavo 2.5m / 2.5m cable	✓
SN4M225-G	NPN	Cavo 2.5m / 2.5m cable	✓
SN3N203-G	PNP	Connettore M8 / M8 snap plug connector	✓
SN3M203-G	NPN	Connettore M8 / M8 snap plug connector	✓
SS4N225-G	PNP	Cavo 2.5m / 2.5m cable	✓
SS4M225-G	NPN	Cavo 2.5m / 2.5m cable	✓
SS3N203-G	PNP	Connettore M8 / M8 snap plug connector	✓
SS3M203-G	NPN	Connettore M8 / M8 snap plug connector	✓

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

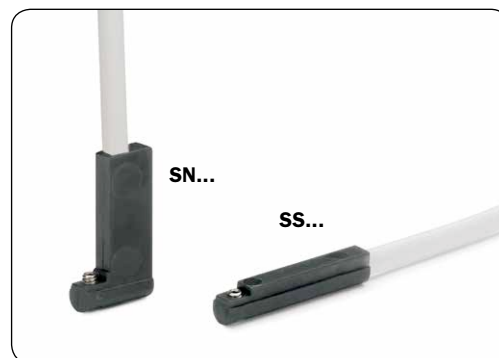
**Sensors (optional)**

The operating position can be checked by magnetic sensors which detect a magnet on the piston, or by inductive sensors (4mm diameter), which detect a metal part (M) in an adjustable position into the jaw.

The magnetic sensors from Gimatic are the codes:

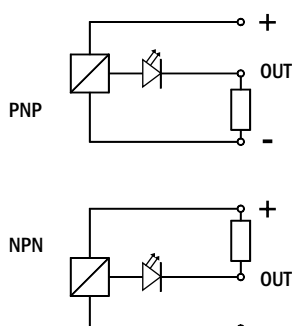


They are all provided with a 3-wire flat cable and a LED.

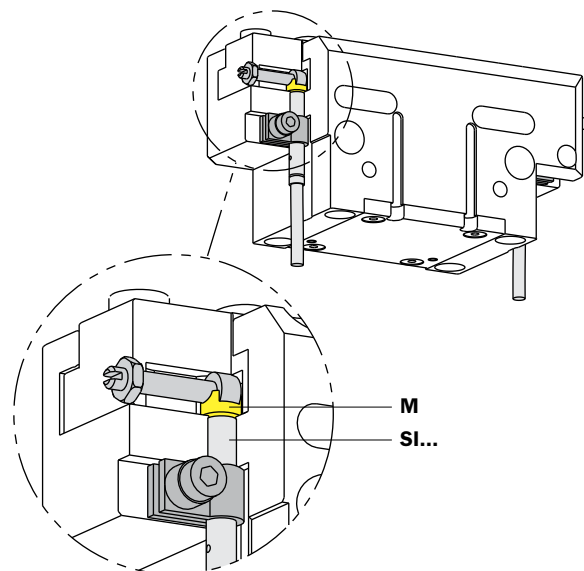


Sensori induttivi regolabili (non per DH19 e DH22):

			DH27 DH35 DH44 DH55 DH66 DH87
SI4M225-G	NPN	Cavo 2.5m / 2.5m cable	✓
SI4N225-G	PNP	Cavo 2.5m / 2.5m cable	✓



Adjustable inductive sensors (not for DH19 and DH22):



Connessione pneumatica

La pinza può essere alimentata con aria compressa dai fori principali sul fianco, montando i raccordi dell'aria ed i relativi tubi (non forniti).

Oppure si può alimentare direttamente dalla piastra di fissaggio rimuovendo i tappi e interponendo degli O-Ring (non forniti).

Questo è possibile, dopo aver tappato i fori principali, sia con la pinza fissata sul fondo, sia con la pinza fissata sul fianco.

Rispettare le dimensioni indicate nella tabella per le sedi degli O-Ring nella piastra di fissaggio.

Aria compressa in A: apertura della pinza.

Aria compressa in C: chiusura della pinza.

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 feeding can be accomplished by the main lateral air ports on the gripper side, after mounting fittings and hoses (not supplied).

Or the compressed air can be supplied directly by the mounting plate, through O-Rings (not supplied), after removing the plugs.

This is possible with the gripper fastened on the bottom, or on one side, after plugging the main air ports.

Check the dimensions in the table for the housings of the O-Rings in the mounting plate.

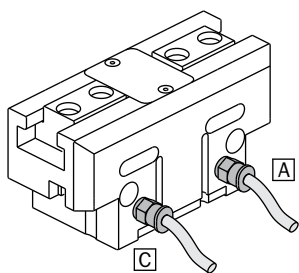
Compressed air in A: gripper opening.

Compressed air in C: gripper closing.

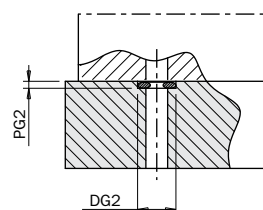
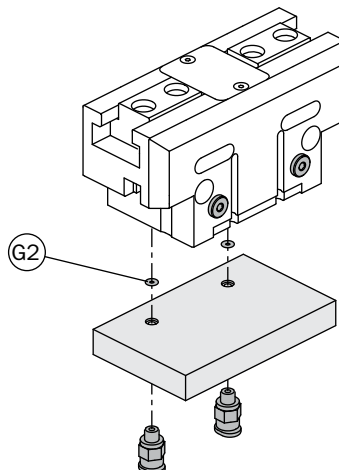
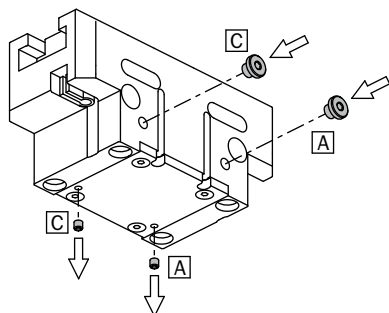
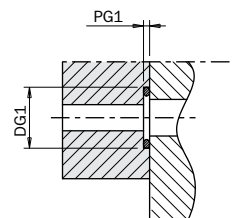
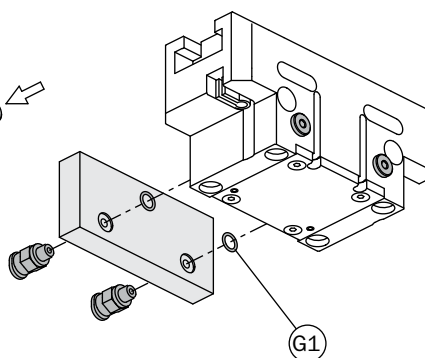
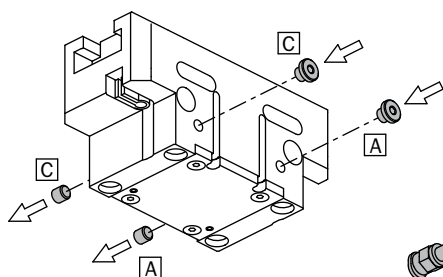
Compressed air must be supplied filtered (5÷40µm), not necessarily lubricated.

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

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



		DH19...	DH22...	DH27...	DH35...	DH44...	DH55...	DH66...	DH87...
G1		O-Ring 1x3 (GUAR-082)		O-Ring 1x5 (GUAR-021)					
DG1	H11	Ø5	Ø7						
PG1	+0.1	0.7							
G2		O-Ring 1x3 (GUAR-082)					O-Ring 1x5 (GUAR-021)		
DG2	H11	Ø5					Ø7		
PG2	+0.1	0.7							



Circuito pneumatico

Possibili inconvenienti sul circuito di alimentazione dell'aria compressa:

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

Accorgimenti per risolvere i problemi:

- 1- Serbatoio esterno (A).
- 2- Valvola di avviamento progressivo (B).
- 3- Valvole di sicurezza (C).
- 4- Regolatori di flusso (D).

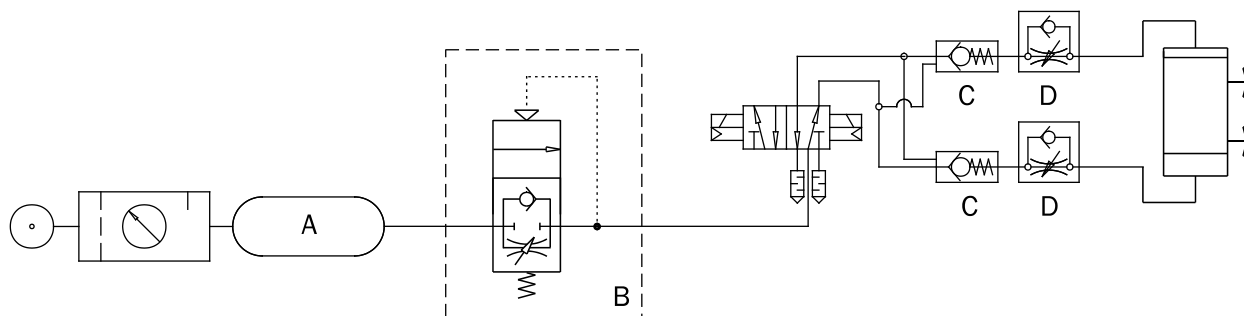
Pneumatic circuit

Possible problems on a compressed air circuit:

- 1- Pressure variation.
- 2- Pressurizing with empty gripper.
- 3- Sudden pressure black-out.
- 4- Excessive speed of the jaws.

Possible solutions:

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



Manutenzione

La pinza va ingrassata ogni 10 milioni di cicli con:

- BERULUB FG-H 2 EP
(Lubrificante NSF H1 Registrazione No. 140486).

La figura sotto mostra il gioco massimo delle griffe.

Maintenance

Grease the gripper after 10 million cycles with:

- BERULUB FG-H 2 EP
(Lubricant NSF H1 Registration No. 140486).

The picture below shows the jaw maximum backlash.

