

**B10**

Rectangular Design B10

- Two- to Six-Finger Hollow Gripper -

Characteristics:

- centric, linear and parallel or swiveling finger movement, can also be combined
- adjustable in finger length, amount and position.
- inside and outside gripper
- lubrication and maintenance free slide bearings
- constant hollow tube (Ø75mm)
- self-locking free
- stepless stroke adjustment with shock absorbing action, or
- object retention at blackout through gas spring
- multiple position monitoring through proximity switch, optional

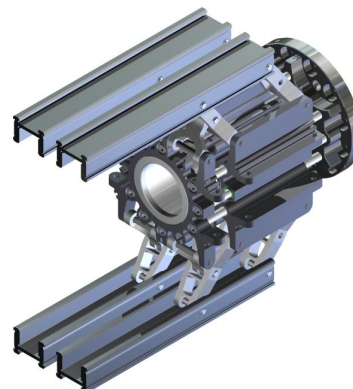


Illustration: type B110-400200-A-PNO-00

Technical Data

Type B10			Finger Length (F)				
			0 mm	50 mm	100 mm	150 mm	200 mm
Finger Movement A (parallel open / parallel close)	Stroke [mm]		103				
	Gripping Width* [mm]		299 to 402 (323 to 426)				
	Gripping Force*** [N]		892 to 8.100				
Finger Movement B** (parallel open / swiveling close)	Stroke [mm]		110	134	158	182	220
	Gripping Width* [mm]		292 to 402 (316 to 426)	268 to 402 (292 to 426)	244 to 402 (268 to 426)	220 to 402 (244 to 426)	182 to 402 (206 to 426)
	Gripping Force*** [N]		855 to 7.120	717 to 4.595	616 to 3.392	541 to 2.689	482 to 2.227
Finger Movement C** (swiveling open / swiveling close)	Stroke [mm]		112	158	204	250	304
	Gripping Width* [mm]		294 to 406 (318 to 430)	273 to 431 (297 to 455)	252 to 456 (276 to 480)	231 to 481 (255 to 505)	203 to 507 (227 to 531)
	Gripping Force*** [N]		846 to 7.178	684 to 2.914	574 to 1.848	494 to 1.354	434 to 1.068
Drive			pneumatic				
Operating Air Pressure / Voltage			2,5 to 6 bar				
Cycle Time (undamped)			1,5 s				
Energy Consumption per Cycle			2,75 liter (to 6 bar)				
Operating Temperature			-30 to +80°C				
Mass	Operating Unit		9 kg				
	per Finger Mechanism		max. 1,25 kg				
Loading Capacity* per Finger with Gripping Mass and Acceleration	Mx _{max.}		31 Nm ⇒ (Fy _{max.} : 155 N at finger length F = 200mm)				
	My _{max.}		61 Nm ⇒ (Fx _{max.} : 305 N at finger length F = 200mm)				
	Mz _{max.}		30,0 Nm				
	Fz _{max.}		3000 N				

* two gripping widths result due to the rectangular design, data referring to fingers' outer edge

** larger strokes through adjustment of gripping width and pivoting angle on request

*** higher gripping force always at finger position "open" (data referring to 6 bar air pressure)

* loading capacity autonomous of gripping force



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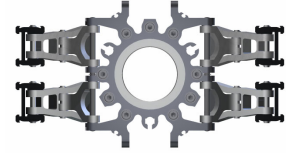
Quantity and Position of Fingers



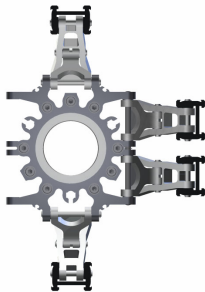
Basic Shape B10



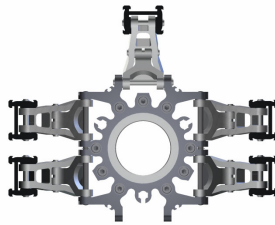
B110-200



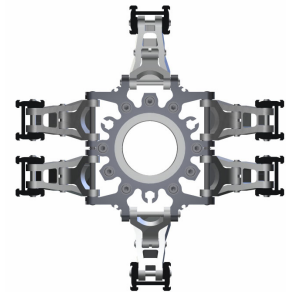
B110-400



B110-410



B110-500

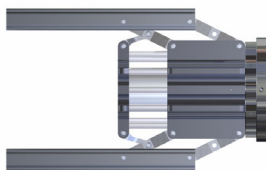
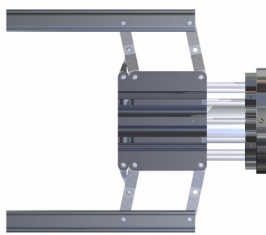


B110-600

Finger Movement

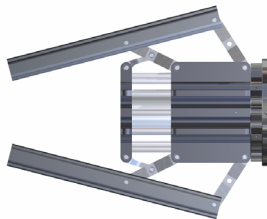
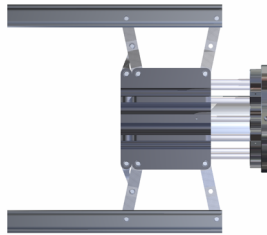
Shape A

(parallel open / parallel close)



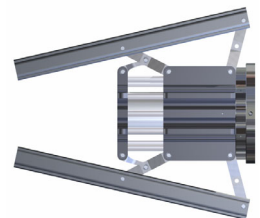
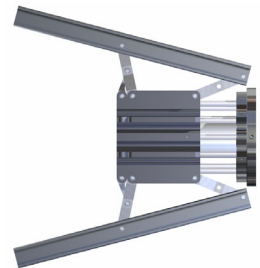
Shape B

(parallel open / swiveling close)



Shape C

(swiveling open / swiveling close)



Special Movement through combining shapes are possible upon request!



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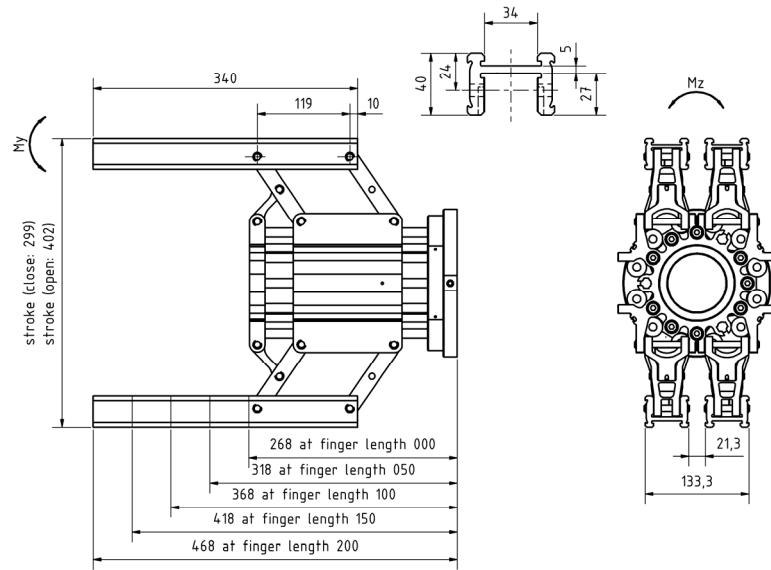
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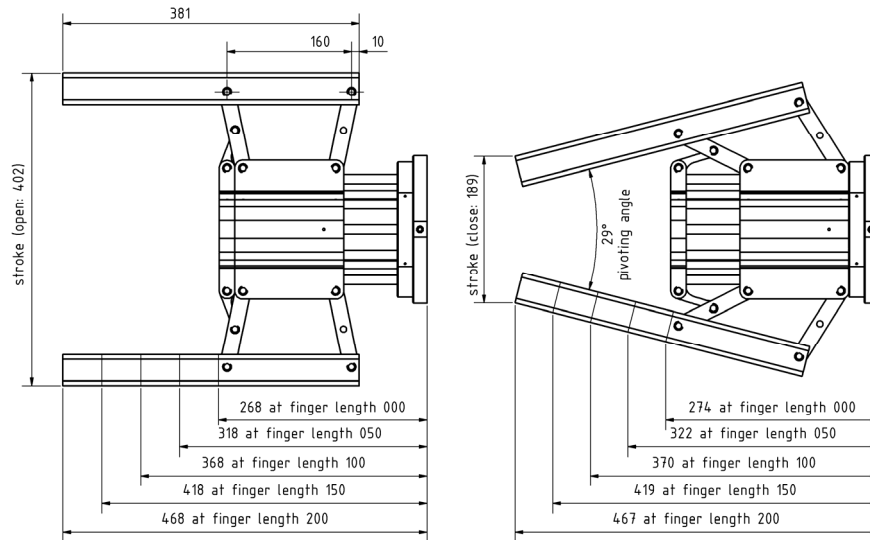


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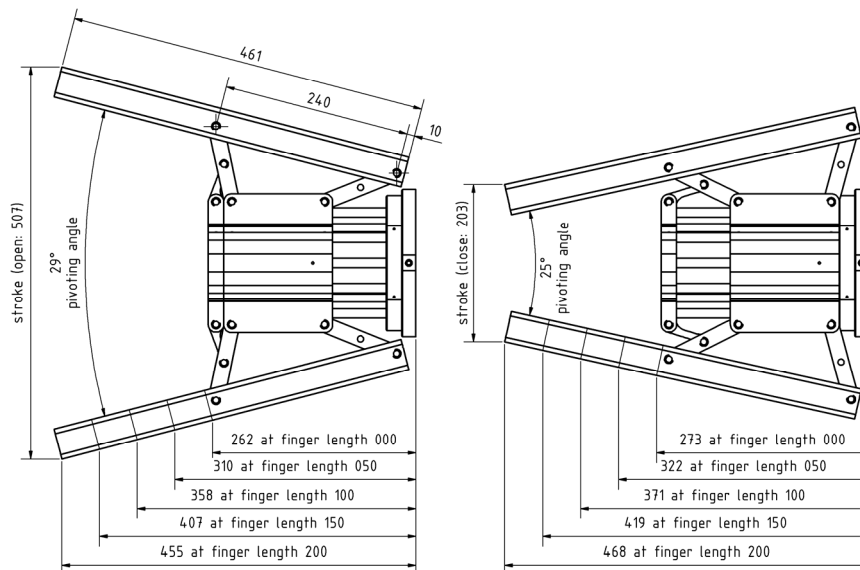
Finger Movement A



Finger Movement B



Finger Movement C



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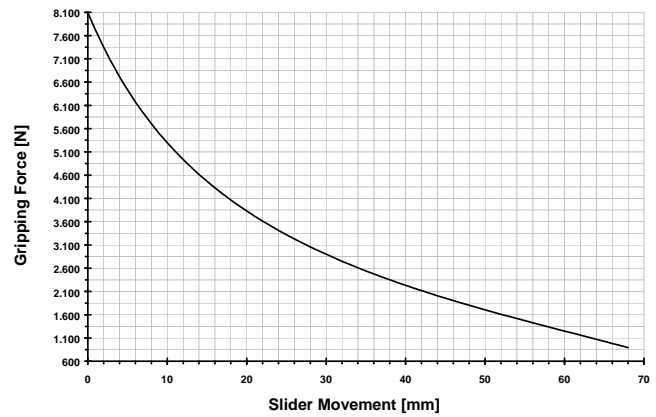
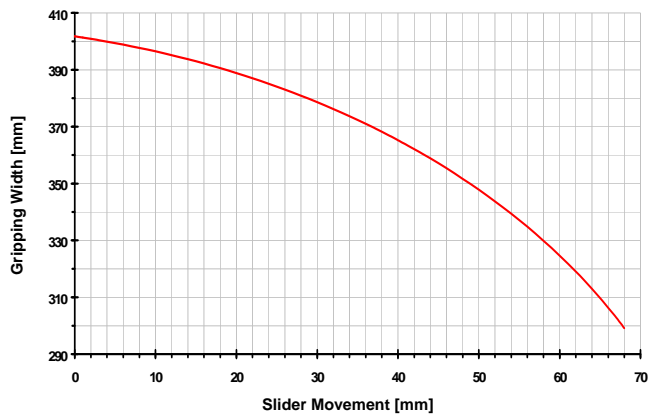
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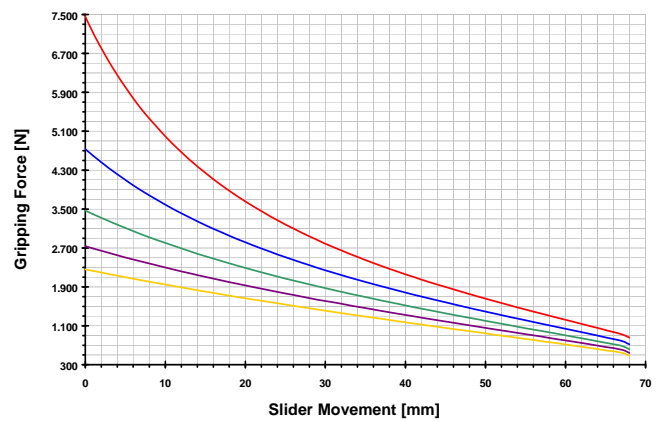
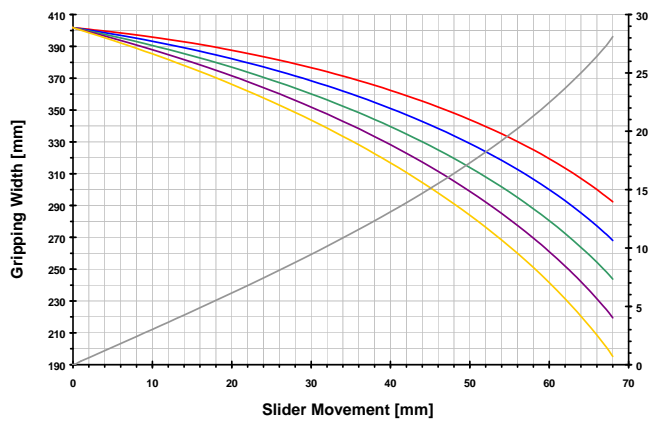
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Force- and Gripping-Width-Diagram

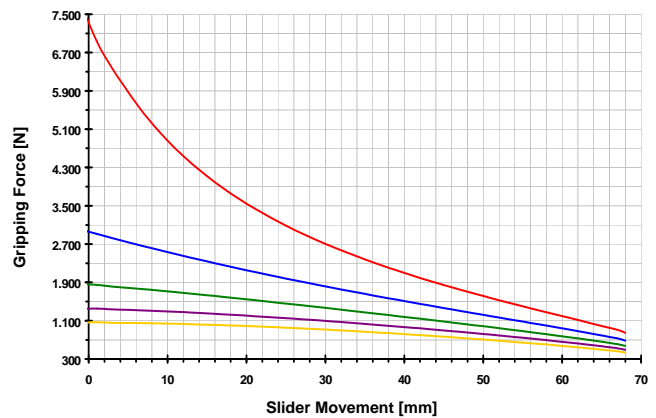
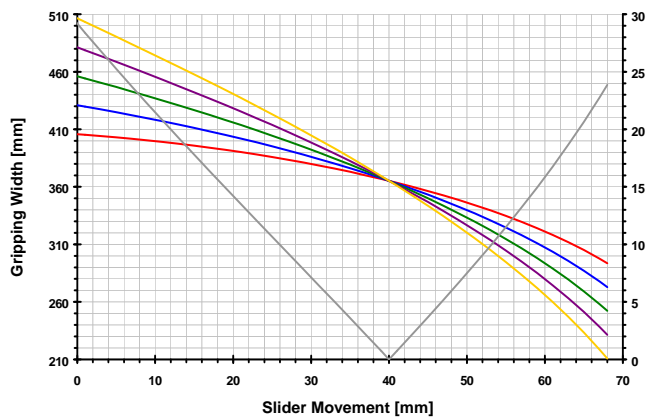
Finger Movement A



Finger Movement B



Finger Movement C



— 0 mm — 50 mm — 100 mm — 150 mm — 200 mm — Pivoting Angle



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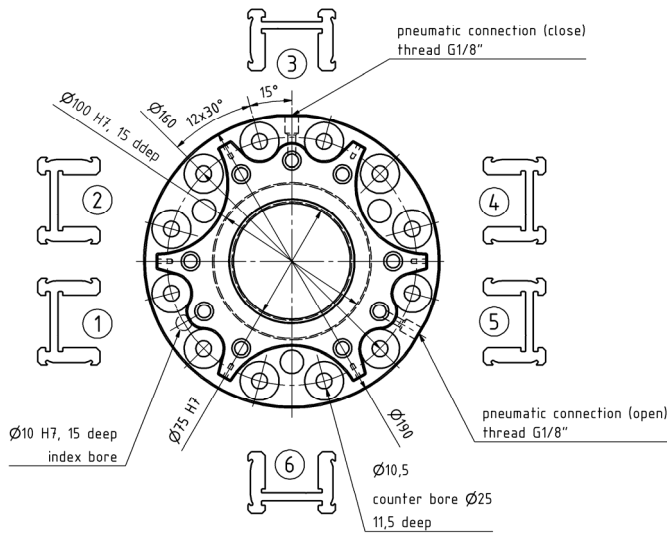
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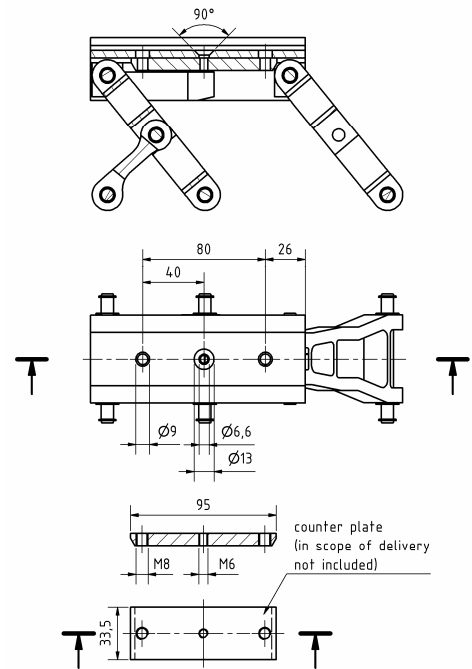
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Finger Position Referring to Grippers Flange



Front View

Standard – Bore - Plan



Order Number Counter Plate:
1007-B110-GP10

Only for Finger Length F = 0mm

Finger Quantity	Position						Ident.
	1	2	3	4	5	6	
2			X			X	200
4	X	X		X	X		400
			X	X	X	X	410
	X	X	X			X	411
5	X	X	X	X	X		500
	X	X		X	X	X	501
6	X	X	X	X	X	X	600

 Standard Style



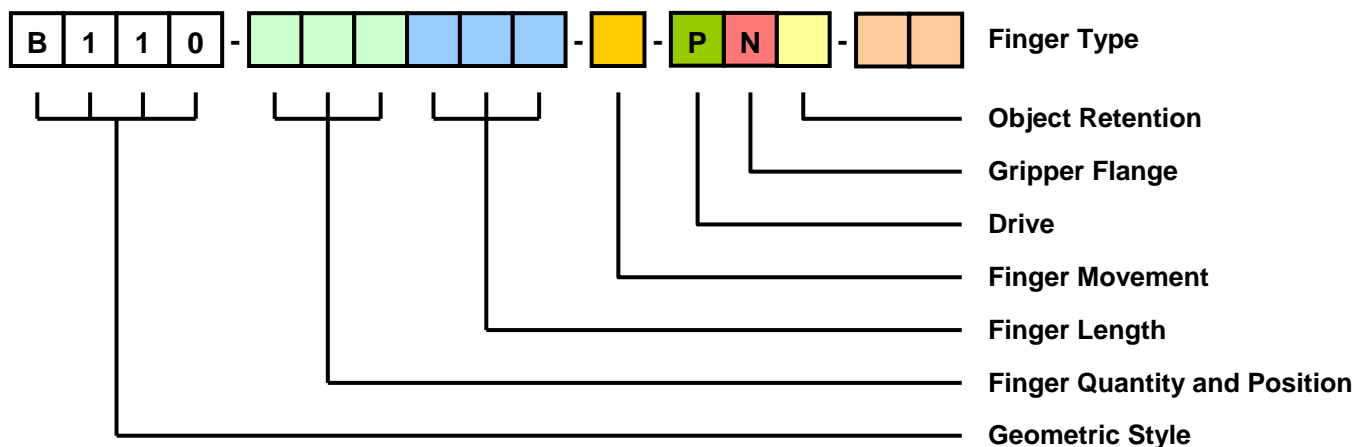
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Order Number



Finger Quantity and Position

View table on previous page!

Finger Length		
	Length (F)	Ident.
Standard	0 mm	000
	50 mm	050
	100 mm	100
	150 mm	150
	200 mm	200
	Special Length	Declaration in mm

Finger Movement	
Style	Ident.
parallel open parallel close	A
parallel open swiveling close	B
swiveling open swiveling close	C
Combination of Finger Movement Styles*	K

Gripper Flange	
Style	Ident.
Normal	N

* on request

Object Retention at Blackout	
Style	Ident.
Without Object Retention	O
Retention "Finger Closing"	Z
Retention "Finger Opening"	A

Drive	
Style	Ident.
pneumatic	P

Finger Type	
Style	Ident.
Without Bore	00
With Bore	01



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