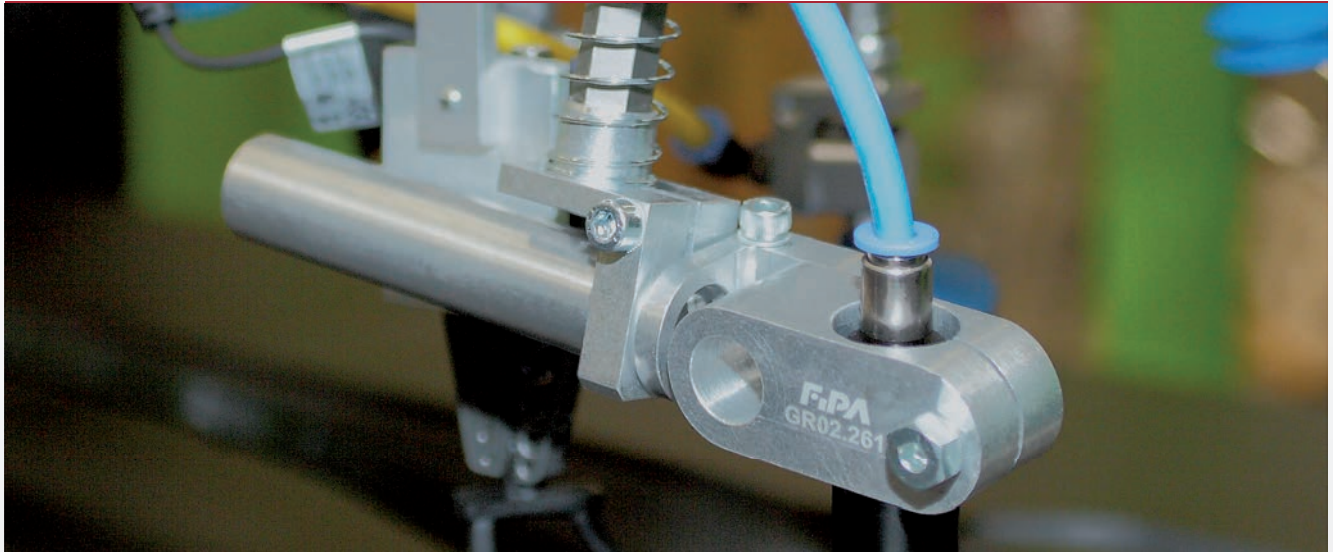




FIPA Gripper arms



Angle arms, elbow or rigid

- > Elements for integration of gripper components
- > Secure clamping even under high load

GR03.160 - GR03.165

- > Spring loaded elbow, rotatable, torsionally rigid
- > Compensates stroke when product is ejected from sprue mold
- > Precise function even with angular loads



GR02.070A - GR02.100

- > Rigid arms

GR02.240 - GR02.262

- > Modular elbow, heavy duty
- > Clamping heads can be exchanged with suction heads of GR03.240–GR03.262

> See page 105



Arms for vacuum cups, elbow or rigid

- > Elements for integration of vacuum cups in gripper systems

GR03.120B - GR03.153B

- > Spring loaded elbow, torsionally rigid
- > Compensates stroke when product is ejected from sprue mold
- > Precise function even with angular loads



GR03.080A - GR03.115

- > Spring-loaded, rigid arms, torsionally rigid

GR03.240 - GR03.262

- > Modular, heavy duty
- > Suction heads can be exchanged with clamping heads of GR02.240 - GR02.262

> See page 112



Angle arms – rigid

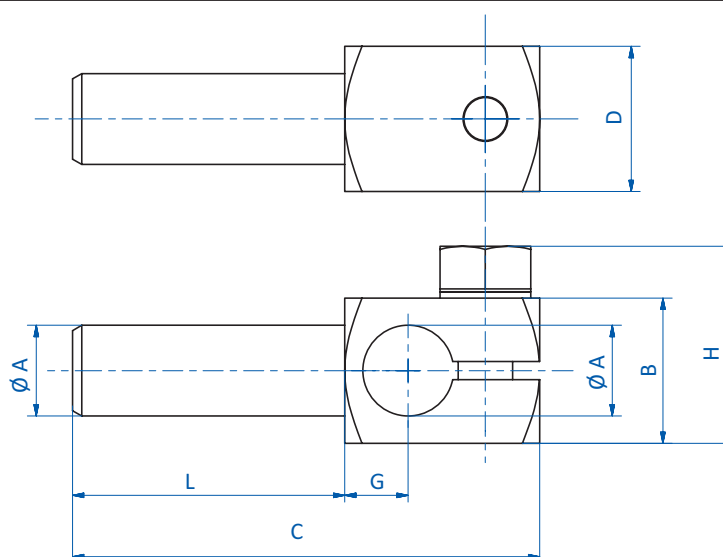


Product notes

> Components for mounting grippers, gripper fingers or gripper arms

Technical data		Dimensions						
Item no.	Weight [g]	Ø A [mm]	B [mm]	C [mm]	D [mm]	G [mm]	H [mm]	L [mm]
GR02.070A	20	10	16	51	16	7	21.7	30
GR02.071A	24	10	16	81	10	7	21.7	60
GR02.072A	28	10	16	111	16	7	21.7	90
GR02.083	36	14	18	70.5	20	9.5	23.7	45
GR02.084	45	14	18	115.5	20	9.5	23.7	90
GR02.085	52	14	18	155.5	20	9.5	23.7	130
GR02.100	61	20	24	84	25	13	29.7	50
GR02.101A	80	20	24	134	25	13	29.7	100
GR02.102A	95	20	24	184	25	13	29.7	150
GR02.104	137	30	36	98	30	21	42.3	50
GR02.105	171	30	36	148	30	21	42.3	100
GR02.106	205	30	36	198	30	21	42.3	150
GR02.107	239	30	36	248	30	21	42.3	200

Dimensions





Gripper arms | Angle arms

Elbow arms – adjustable

Elbow arms – adjustable



Product notes

- > Components for mounting grippers, gripper fingers or gripper arms
- > Angle adjustment +/- 95°

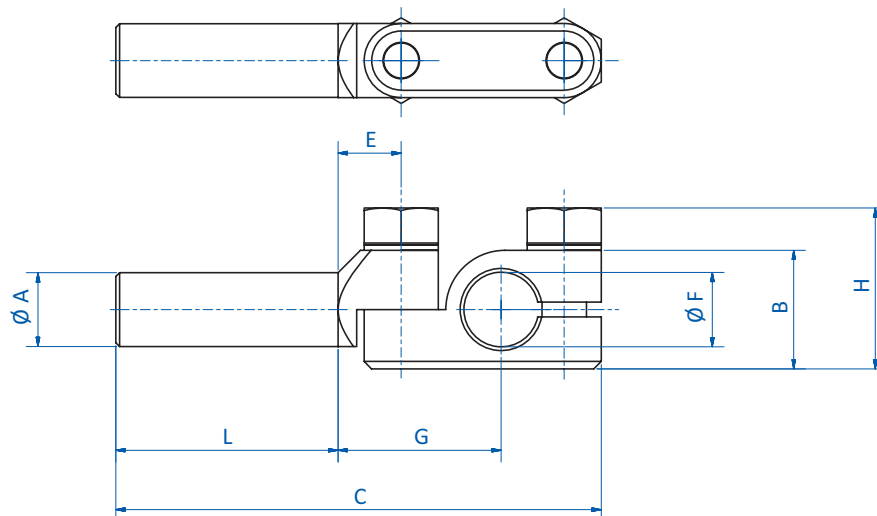
Technical data

Item no.	Weight [g]
GR02.140	36
GR02.141	40
GR02.142	45
GR02.180	42
GR02.181	51
GR02.182	59
GR02.153	60
GR02.154	68
GR02.155	78
GR02.170	87
GR02.171	103
GR02.172	120

Dimensions

$\varnothing A$ [mm]	$\varnothing F$ [mm]	B [mm]	C [mm]	E [mm]	G [mm]	H [mm]	L [mm]
10	10	16	65.5	8.5	22	21.7	30
10	10	16	95.5	8.5	22	21.7	60
10	10	16	125.5	8.5	22	21.7	90
14	10	16	90	10	27	21.7	45
14	10	16	135	10	27	21.7	90
14	10	16	175	10	27	21.7	130
14	14	18	90	10	27	23.7	45
14	14	18	135	10	27	23.7	90
14	14	18	175	10	27	23.7	130
20	20	24	111	17	40	29.7	50
20	20	24	161	17	40	29.7	100
20	20	24	211	17	40	29.7	150

Dimensions





Elbow arms – adjustable, heavy duty



Product notes

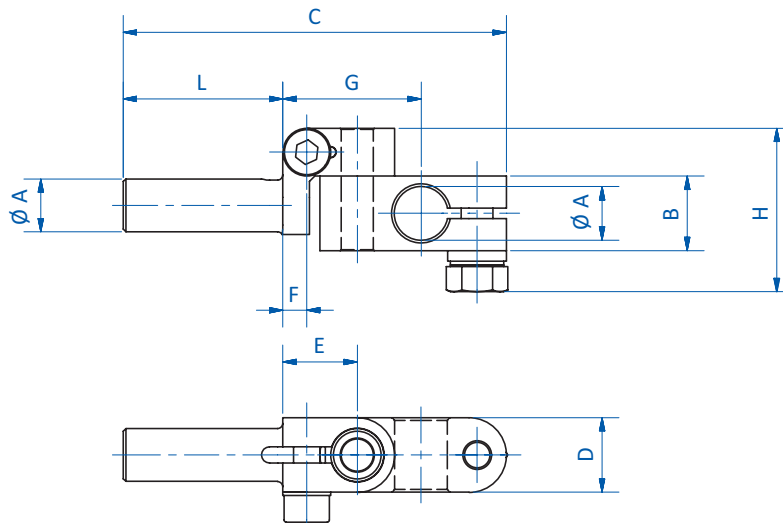
- > Components for mounting grippers, gripper fingers or gripper arms
- > Secure clamping under heavy load
- > Angle adjustment +/- 100°
- > Heads are interchangeable with the heads of suction fingers GR03.240 - GR03.242, GR03.250 - GR03.252 und GR03.260 - GR03.262

Technical data

Dimensions

Item no.	Weight [g]	Dimensions								
		∅ A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	L [mm]
GR02.240	29	10	14	72	14	14	4.5	26	30.7	30
GR02.241	32	10	14	102	14	14	4.5	26	30.7	60
GR02.242	35	10	14	132	14	14	4.5	26	30.7	90
GR02.250	50	14	18	97	18	16	4.5	34	32.7	45
GR02.251	58	14	18	142	18	16	4.5	34	32.7	90
GR02.252	66	14	18	182	18	16	4.5	34	32.7	130
GR02.260	89	20	24	116	24	19	4.5	43	38.7	50
GR02.261	104	20	24	166	24	19	4.5	43	38.7	100
GR02.262	119	20	24	216	24	19	4.5	43	38.7	150

Dimensions





Gripper arms | Angle arms

Rotary heads for angle arms $\varnothing 30$ mm – heavy duty

Rotary heads for angle arms $\varnothing 30$ mm – heavy duty



Rotary head GR02.270 with angle arm GR02.104

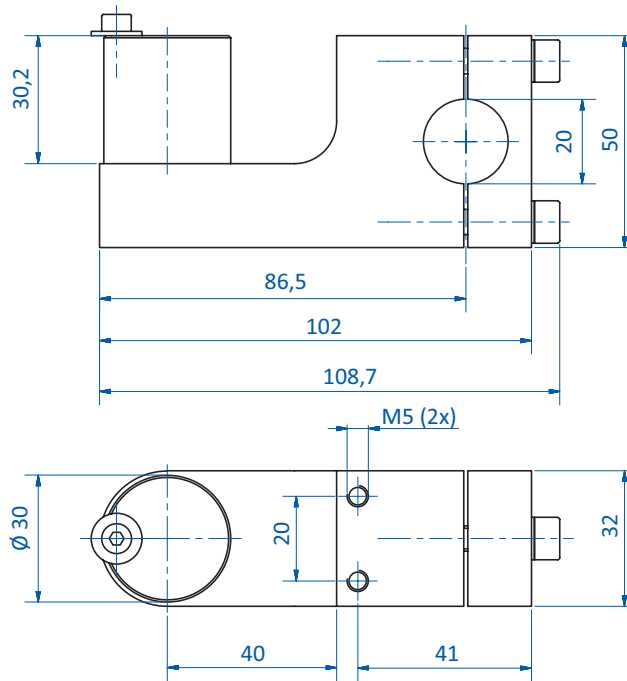
Product notes

- > Rotary heads for angle arms with shaft diameter 30 mm
- > Integration of gripper elements with clamping diameter 20 mm or 30 mm
- > Secure clamping even under heavy load
- > Pivoting range 0° to $\sim 130^\circ$, can be freely adjusted in two directions
- > Please order your combination of gripper arm and rotary head

Technical data

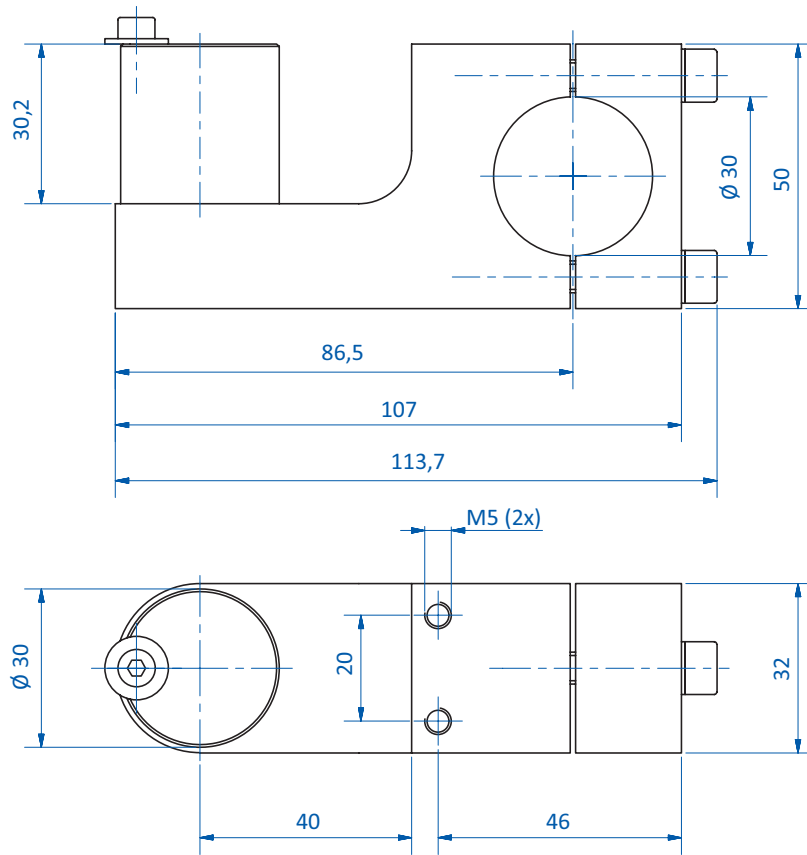
Item no.	Clamping \varnothing [mm]	Weight [g]	Suitable for angle arms
GR02.270	20	332	GR02.104, GR02.105, GR02.106, GR02.107
GR02.273	30	319	GR02.104, GR02.105, GR02.106, GR02.107

Dimensions





Dimensions



GR02.273



Gripper arms | Angle arms

Elbow arms – spring compensated and non-rotating

Elbow arms – spring compensated and non-rotating



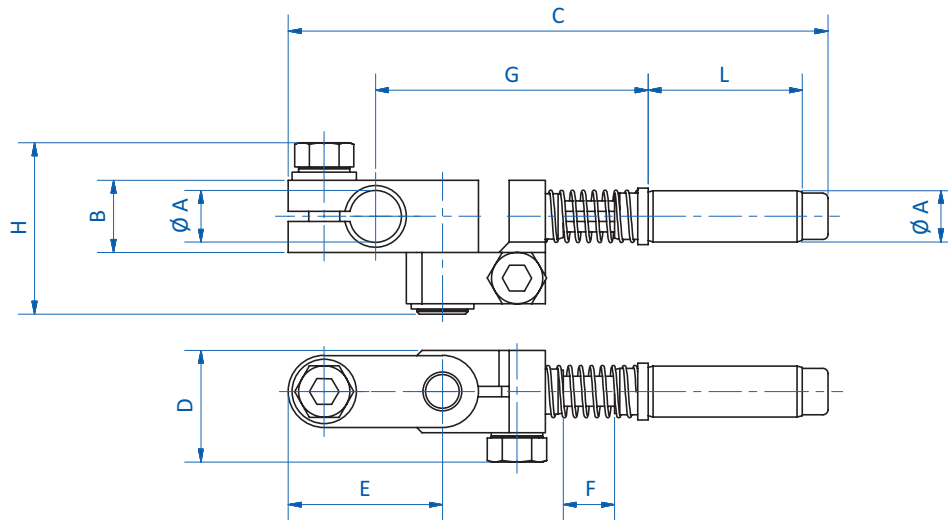
Product notes

- > Components for mounting grippers, gripper fingers or gripper arms
- > Spring compensates for variation in ejection stroke
- > Angle adjustment +/- 130°
- > Smooth motion due to lubrication-free polymer bearing

Technical data

Item no.	Stroke [mm]	Weight [g]
GR03.160	10	60
GR03.161	20	65
GR03.162	15	125
GR03.163	35	134
GR03.164	20	288
GR03.165	40	310

Dimensions

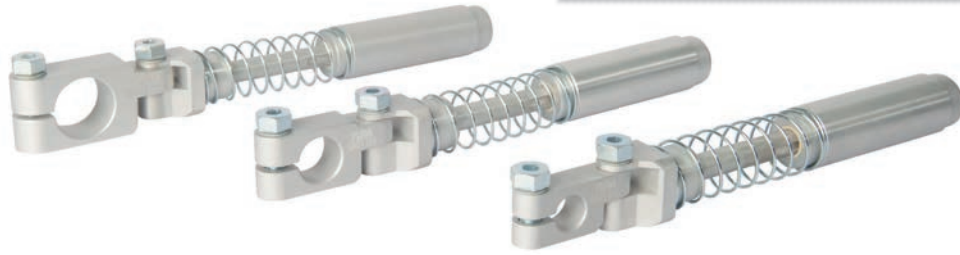


Item no.	Ø A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	L [mm]
GR03.160	10	14	105	21.7	30	10	53	33.3	30
GR03.161	10	14	115	21.7	30	20	63	33.3	30
GR03.162	14	20	133	24.7	37.5	15	69.5	37.7	35
GR03.163	14	20	153	24.7	37.5	35	89.5	37.7	35
GR03.164	20	25	179.5	30.7	52	20	87.5	42.7	55
GR03.165	20	25	199.5	30.7	52	40	107.5	42.7	55



Elbow arms with sliding bush – spring compensated, adjustable and non-rotating

PRECISE FUNCTIONING EVEN UNDER HIGH LOAD



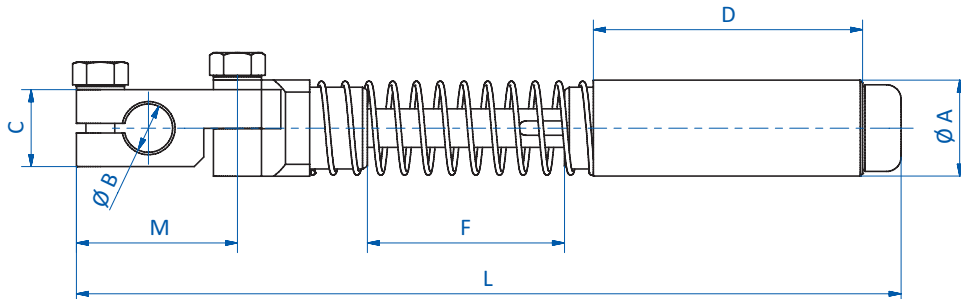
Product notes

- > Elements for connecting grippers
- > Guiding through sliding bushes for high precision by absorbing lateral forces and moments
- > Spring compensates for variation in ejection stroke

Technical data

Item no.	Suitable for grippers with clamping \varnothing [mm]	Stroke [mm]	Weight [g]
GR03.202	10	40	104
GR03.203	14	40	111
GR03.204	20	40	122

Dimensions



Item no.	$\varnothing A$ [mm]	$\varnothing B$ [mm]	C [mm]	D [mm]	F [mm]	L [mm]	M [mm]
GR03.202	20	10	16	55.5	40	171.5	33.5
GR03.203	20	14	20	55.5	40	177.5	39.5
GR03.204	20	20	25	55.5	40	185.5	47.5



Gripper arms | Suction fingers

Suction fingers for vacuum cups – rigid

Suction fingers for vacuum cups – rigid



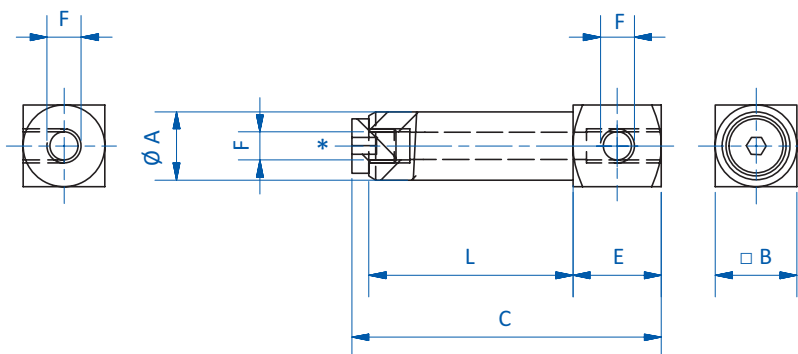
Product notes

- > Components for mounting vacuum cups
- > Two vacuum ports

Technical data

Item no.	Weight [g]	Dimensions							
		$\varnothing A$ [mm]	F	G	H	$\square B$ [mm]	E [mm]	C [mm]	L [mm]
GR03.001A	11	10	M5	--	--	12	13	45.5	30
GR03.002A	16	10	M5	--	--	12	13	75	60
GR03.003A	22	10	M5	--	--	12	13	105	90
GR03.010A	27	14	G1/8	--	--	16	20	67.5	45
GR03.011A	39	14	G1/8	--	--	16	20	112.5	90
GR03.012A	49	14	G1/8	--	--	16	20	152.5	130
GR03.036	64	20	G1/4	G1/8	G1/8	22	23	75.5	50
GR03.037	100	20	G1/4	G1/8	G1/8	22	23	125	100
GR03.038	137	20	G1/4	G1/8	G1/8	22	23	175.5	150
GR03.039	203	30	G1/4	--	G1/4	30	30	230	200

Dimensions

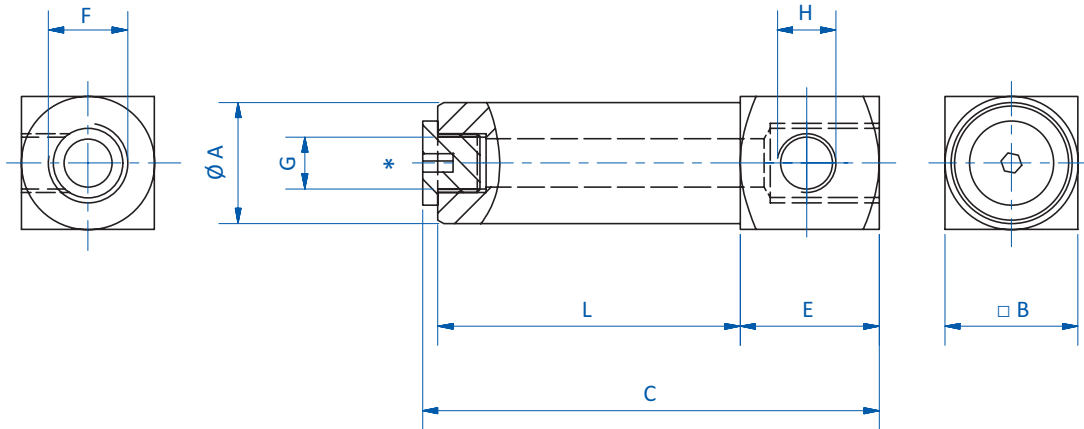


GR03.001A | GR03.002A | GR03.003A | GR03.010A | GR03.011A | GR03.012A

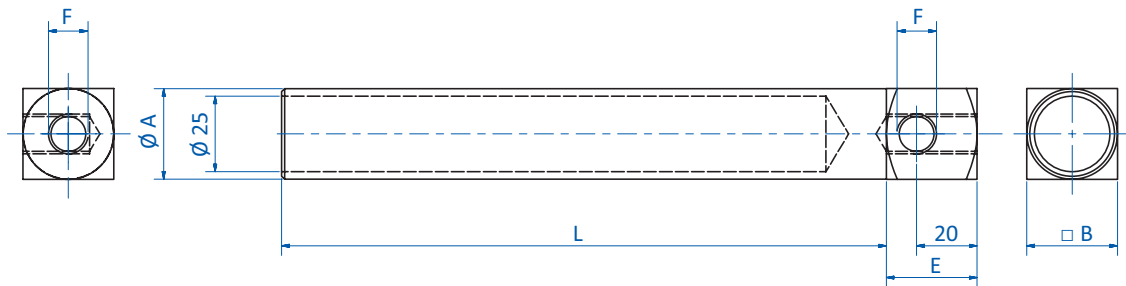
* = Alternative vacuum connection



Dimensions



GR03.036 | GR03.037 | GR03.038



GR03.039

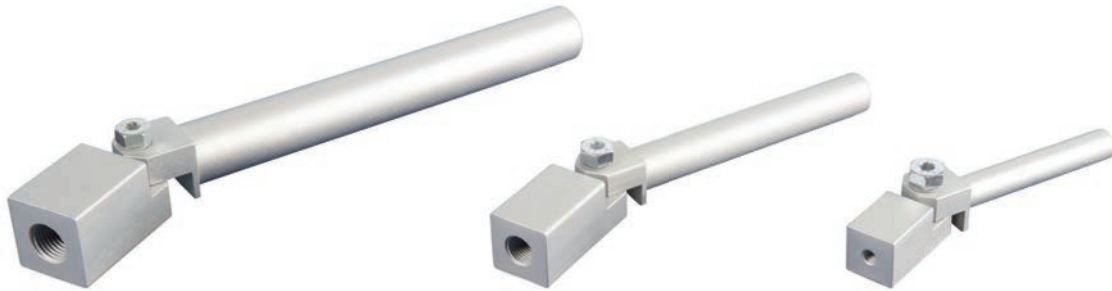
* = Alternative vacuum connection



Gripper arms | Suction fingers

Suction fingers for vacuum cups – adjustable

Suction fingers for vacuum cups – adjustable



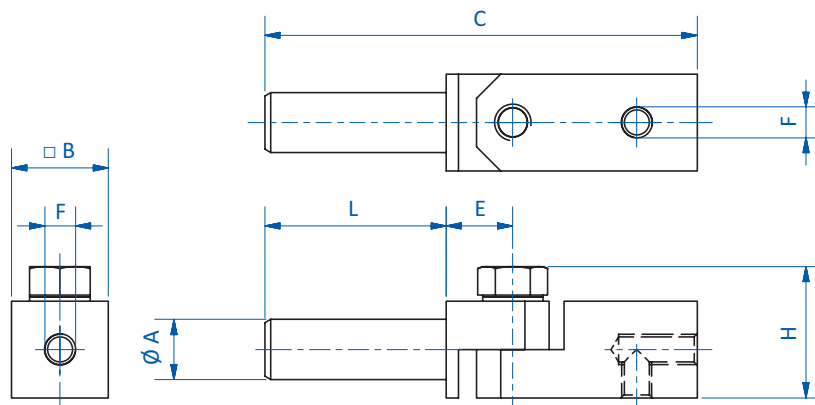
Product notes

- > Components for mounting vacuum cups
- > Angle adjustment +/- 90°

Technical data

Item no.	Weight [g]	Dimensions							
		∅ A [mm]	F	B [mm]	C [mm]	E [mm]	H [mm]	L [mm]	
GR03.040A	35	10	M5	16	66.5	11	21.7	30	
GR03.041A	38	10	M5	16	101.5	11	21.7	60	
GR03.042A	43	10	M5	16	131.5	11	21.7	90	
GR03.050A	58	14	G1/8	20	99	13	23.7	45	
GR03.051A	69	14	G1/8	20	144	13	23.7	90	
GR03.052A	78	14	G1/8	20	184	13	23.7	130	
GR03.070A	72	20	G1/8	20	106	15	25.7	50	
GR03.071A	87	20	G1/8	20	156	15	25.7	100	
GR03.072A	103	20	G1/8	20	206	15	25.7	150	
GR03.073A	93	20	G1/4	25	108	15	28.2	50	
GR03.074A	106	20	G1/4	25	158	15	28.2	100	
GR03.075A	123	20	G1/4	25	208	15	28.2	150	

Dimensions





Suction fingers – adjustable



Product notes

- > Adjustable head for mounting and aligning vacuum cups with part contours
- > Angle adjustment +/- 100°
- > Up to 50 % less weight compared to standard version
- > Heads are interchangeable with the heads of elbow arms GR02.240 - GR02.242, GR02.250 - GR02.252, GR02.260 - GR02.262

Technical data

Item no.	Weight [g]
GR03.240	15
GR03.241	18
GR03.242	21
GR03.250	29
GR03.251	37
GR03.252	46
GR03.260	57
GR03.261	71
GR03.262	86

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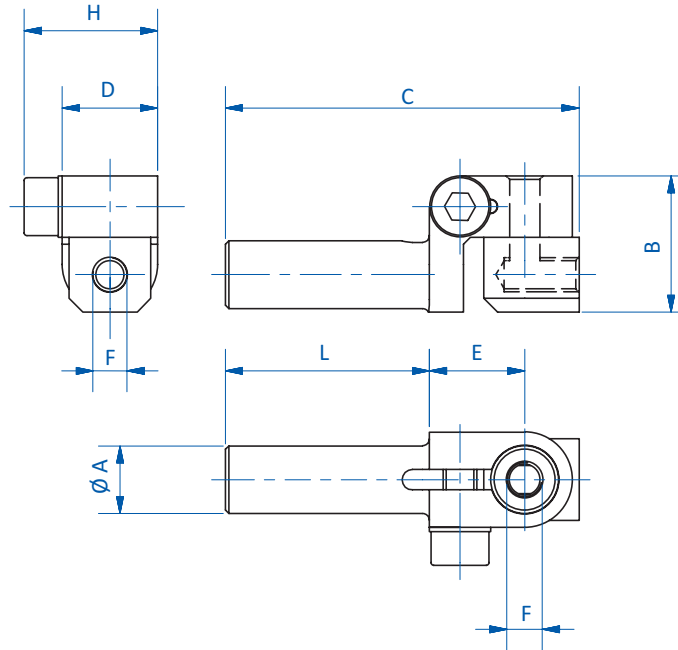




Gripper arms | Suction fingers

Suction fingers – adjustable

Dimensions



Item no.	Ø A [mm]	F	B [mm]	C [mm]	D [mm]	E [mm]	H [mm]	L [mm]
GR03.240	10	M5	20	52	14	14	19.6	30
GR03.241	10	M5	20	82	14	14	19.6	60
GR03.242	10	M5	20	112	14	14	19.6	90
GR03.250	14	G1/8	28	71	18	16	23.6	45
GR03.251	14	G1/8	28	116	18	16	23.6	90
GR03.252	14	G1/8	28	156	18	16	23.6	130
GR03.260	20	G1/4	33	82	24	19	29.6	50
GR03.261	20	G1/4	33	132	24	19	29.6	100
GR03.262	20	G1/4	33	182	24	19	29.6	150



Spring compensated gripper arm for vacuum cups



Product notes

- > Spring compensates for variation in ejection stroke
- > Smooth motion due to lubrication-free polymer bearing
- > Only for round vacuum cups

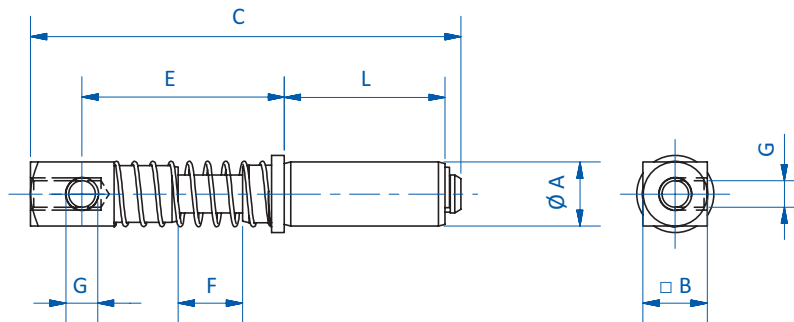
Technical data

Item no.	Stroke [mm]	Weight [g]
GR03.080A	10	18
GR03.081A	20	18
GR03.090A	15	45
GR03.091A	35	48
GR03.114	20	127
GR03.115	40	136

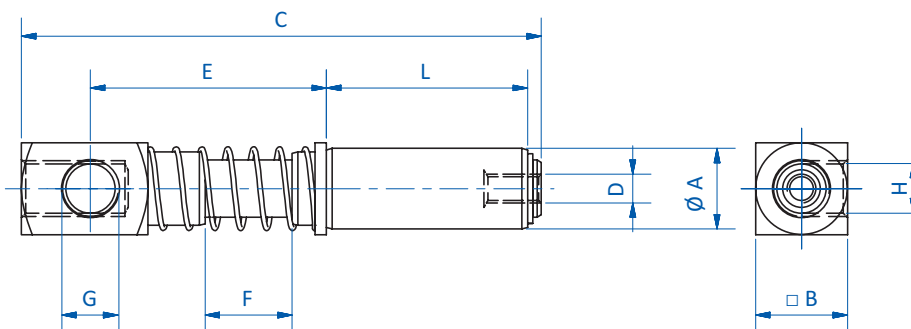
Dimensions

$\varnothing A$ [mm]	G	H	D	$\square B$ [mm]	C [mm]	E [mm]	F [mm]	L [mm]
10	M5	M5	--	10	67	31.5	10	25
10	M5	M5	--	10	77	41.5	20	25
14	G1/8	G1/8	M5	16	92.5	41.1	15.1	35
14	G1/8	G1/8	M5	16	112.5	61.1	35.1	35
20	G1/8	G1/4	G1/8	20	127.5	50	20	55
20	G1/8	G1/4	G1/8	20	147.5	70	40	55

Dimensions



GR03.080A | GR03.081A



GR03.090A | GR03.091A | GR03.114 | GR03.115



Gripper arms | Suction fingers

Spring compensated gripper arm for vacuum cups – non-rotating

Spring compensated gripper arm for vacuum cups – non-rotating



Product notes

- > Spring compensates for variation in ejection stroke
- > Smooth motion due to lubrication-free polymer bearing
- > Suitable for round, oval and rectangular vacuum cups
- > Lateral vacuum port or at the end

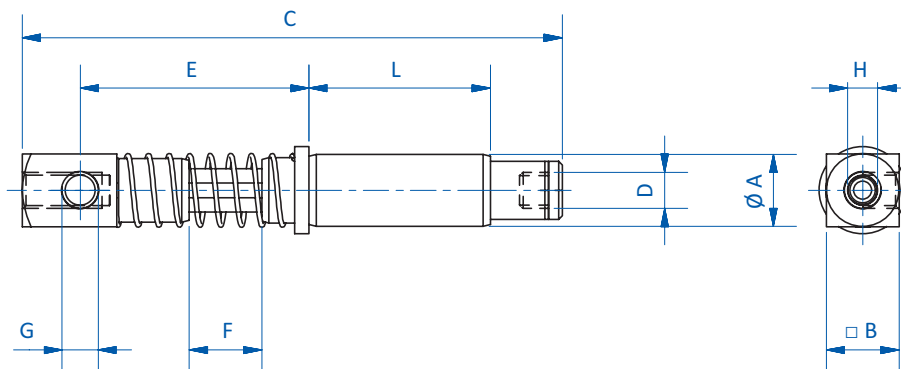
Technical data

Item no.	Stroke [mm]	Weight [g]
GR03.080T	10	17
GR03.081T	20	18
GR03.090T	15	44
GR03.091T	35	48
GR03.114T	20	129
GR03.115T	40	137

Dimensions

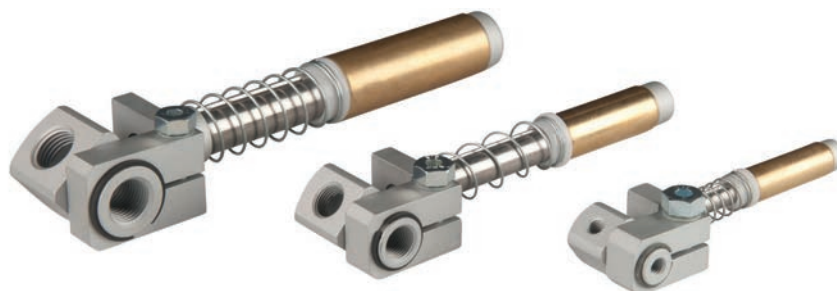
$\varnothing A$ [mm]	G	H	D	$\square B$ [mm]	C [mm]	E [mm]	F [mm]	L [mm]
10	M5	M5	M5	10	75	31.5	10	25
10	M5	M5	M5	10	85	41.5	20	25
14	G1/8	G1/8	M5	16	98.5	41.1	15	35
14	G1/8	G1/8	M5	16	118.5	61	35	35
20	G1/8	G1/4	G1/8	20	137.5	50	20	55
20	G1/8	G1/4	G1/8	20	157	70	40	55

Dimensions





Spring compensated suction fingers for vacuum cups – non-rotating



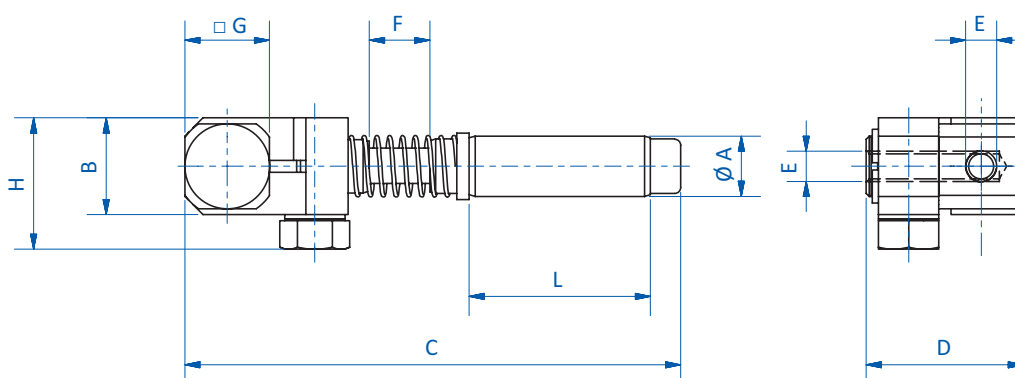
Product notes

- > Adjustable head for mounting and aligning vacuum cups with part contours
- > Spring compensates for variation in ejection stroke
- > Smooth motion due to lubrication-free polymer bearing
- > Angle adjustment +/- 120°

Technical data

Item no.	Stroke [mm]	Weight [g]
GR03.120B	10	35
GR03.121B	20	37
GR03.130B	15	75
GR03.131B	35	84
GR03.152B	20	207
GR03.153B	40	229

Dimensions



Item no.	∅ A [mm]	E	B [mm]	C [mm]	D [mm]	F [mm]	∅ G [mm]	H [mm]	L [mm]
GR03.120B	10	M5	16	82	26	10	14	21.7	30
GR03.121B	10	M5	16	92	26	20	14	21.7	30
GR03.130B	14	G1/8	19	104.5	32.5	15	18	24.7	35
GR03.131B	14	G1/8	19	124.5	32.5	35	18	24.7	35
GR03.152B	20	G1/4	25	139.5	37.5	20	24	30.7	55
GR03.153B	20	G1/4	25	159.5	37.5	40	24	30.7	55