

## Micro Series EOAT Kit



### A gripping system for the niche: Micro System for tight spaces and the smallest components

The innovative Micro System for tight spaces and the smallest components from ASS closes the gap: With a clamping diameter of 6 millimeters, the Micro System is significantly smaller and lighter than the previous smallest system with a 10 millimeter clamping diameter. The Micro System is used wherever small injection molding machines or small linear handlings and other micro machines are in use and there is little space in the tool. With the new system, even the smallest components, which were previously case parts, can now be handled easily and cleanly in the tightest of spaces.

The Micro System was awarded the „RHEINLAND GENIAL“ innovation prize.

#### Remarks:

**For use in small injection moulding machines, linear handling machines or other miniature machines where space is limited or only a low handling weight is allowed.**

#### For an example comparison:

- Micro System: 239g, B85xH70xT75 (right side on top image)
- 10mm clamping diameter: 436g, B125xH110xT115 (left side on top image)
- Particularly for setting up a micro gripper the small quick change systems SWM in sizes 0 or 01 and the semi-automatic quick change system SWH 50 are suitable.
- L-profile + GPM => When using a base plate with the L-profile, it is recommended to countersink the screw head in the profile in order to remain the micro components displaceable.



**000**  
Quick Change  
Systems

**050**  
Profiles  
Channel Nuts

**100/115**  
Clamps

**120**  
Profile  
Connectors

**190**  
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**850**  
Pneumatics

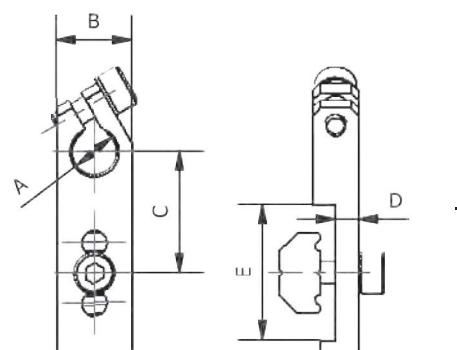
**990**  
Tubular System  
Micro System

**990**  
PA-Forming  
Others

## 990 | Tubular- and Micro-System

## WST L 6 U / Universal Angle Clamp „Micro Series“

MICRO



## Remarks:

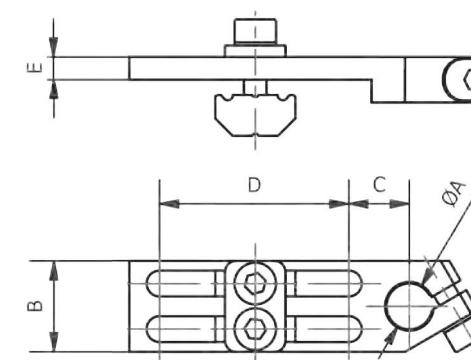
**Application:** has the advantage of many possible applications:  
**can be mounted form fit or adjustable**

- just one tool needed: hexagon socket screw key
- mounted directly on profile
- allows compact gripper design

Part No.	Description	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Material	Weight [g]
1-103-01-00	WST L 6 U	6	10	16	3	18	Aluminium	7

## WSL L 6-25 U / Universal Long Angle Clamp „Micro Series“

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## Remarks:

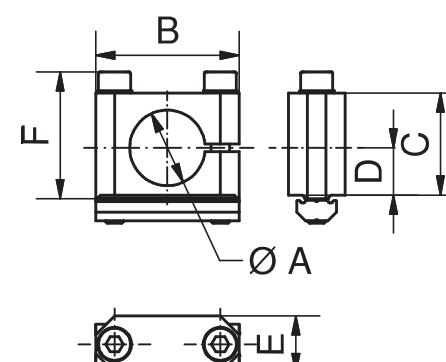
**Application:** universal Long Angle Clamp e.g. for mounting Gripper GRZ or other components with 6mm connection to profiles

- same allen screw size for clamping and channel nuts
- can be mounted directly on profiles
- allows compact gripper design

Part No.	Description	ØA [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Material	Weight [g]
1-105-06-00	WSL L 6-25 U	6	12	8	25	3	Aluminium	11

## KVB L 6 / Cross Connector „Micro Series“

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## Remarks:

**Application:** gripper arms, adapters, etc. with 6mm connection can be clamped at an angle of 90 ° to the profile

- Cross Connector is mounted directly to the profile
- exact positioning through an additional positive connection
- by loosening a screw, various settings can be made without changing the position of the KVB

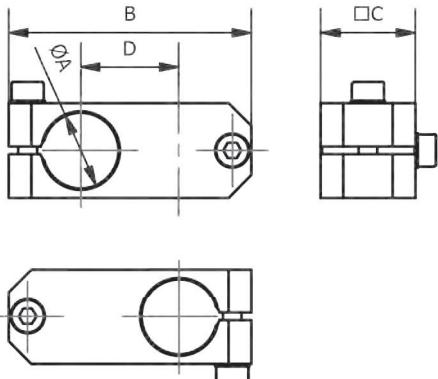
Part No.	Description	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Material	Weight [g]
1-115-01-00	KVB L 6	6	15	9	4,5	8	12,5	Aluminium	11

## KKS 6-6-10 / Cross Connector „Micro Series“

**Remarks:**

**Application:** connects two components with clamping diameter 6mm at a 90° angle

- both clamps can be set independently



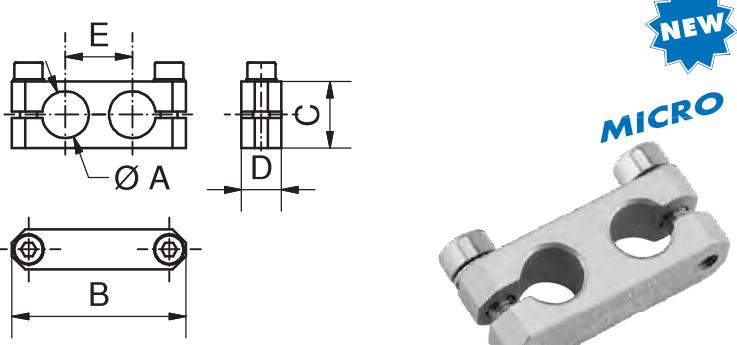
Part No.	Description	$\varnothing A$ [mm]	B [mm]	C [mm]	D [mm]	Material	Weight [g]
1-115-39-00	KKS 6-6-10	6	25	10	10	Aluminium	6

## PKS / Parallel Connector „Micro Series“

**Remarks:**

**Application:** connects two components with clamping diameter 6mm at parallel arrangement

- both clamps can be set independently

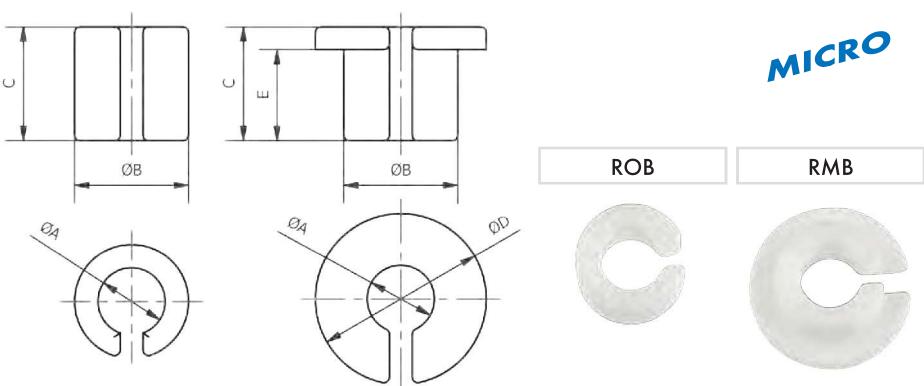


Part No.	Description	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Material	Weight [g]
1-115-59-00	PKS 6-6-10	6	25	10	8	10	Aluminium	5

## RMB-ROB / Reduction with and without collar „Micro Series“

**Remarks:**

**Application:** to connect the Micro Series (6mm clamping diameter) to clamping diameter 10mm



Part No.	Description	$\varnothing A$ [mm]	$\varnothing B$ [mm]	C [mm]	D [mm]	E [mm]	Material	Weight [g]
1-116-00-16	RMB 0610-10	6	10	10	15	8	Polyamide	<1
1-116-00-17	ROB 0610-10	6	10	10	-	-	Polyamide	<1

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## 990 | Tubular- and Micro-System

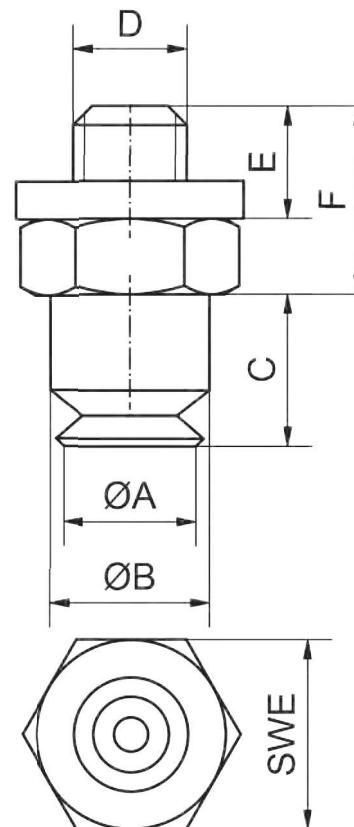
## VS N3 A / VN N3 A / Vacuum Cups Nitril, antistatic „Micro Series“

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VS ... N3 A



VN ... N A



## Remarks:

## Application: antistatic Vacuum Cups for the Micro Series

- to avoid electrical charging and rapid discharge
- Versions with 1, 2 and 3 bellows available
- VS ... N3 A: complete vacuum cup: suction cup with mounted adapters
- VN ... N3 A: suction cup without adapter
- VSA ...: Adapter for suckers
- other matching vacuum cups suitable for the Micro Series can be found in category 220 (VS 2, VN 2, VS 3 and VN 3)

Vacuum Cup VS N3 A, complete  
(suction cup with adapter)Suction Cup VN N3 A  
(suction cup without adapter)Adapter VSA  
for suction cup VN

	Part No.	Description	Part No.	Description	Part No.	Description
1	1-226-12-00	VS 1-2 N3 A	1-226-12-01	VN 1-2 N A	1-290-05-00	VSA 5
2	1-226-14-00	VS 1-3,5 N3 A	1-226-14-01	VN 1-3,5 N A	1-290-05-00	VSA 5
3	1-226-15-00	VS 1-5 N3 A	1-226-15-01	VN 1-5 N A	1-290-04-00	VSA 4
4	1-226-26-00	VS 2-6 N3 A	1-226-26-01	VN 2-6 N A	1-290-04-00	VSA 4
5	1-226-27-00	VS 2-11 N3 A	1-226-27-01	VN 2-11 N A	1-290-16-00	VSA 16
6	1-226-35-00	VS 3-5 N3 A	1-226-35-01	VN 3-5 N A	1-290-17-00	VSA 17
7	1-226-37-00	VS 3-7 N3 A	1-226-37-01	VN 3-7 N A	1-290-16-00	VSA 16
8	1-226-39-00	VS 3-9 N3 A	1-226-39-01	VN 3-9 N A	1-290-16-00	VSA 16

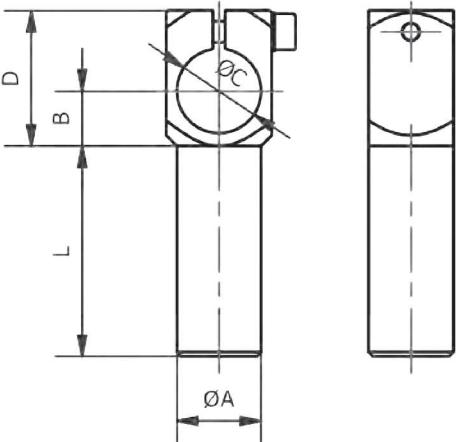
	Material	Working Area [mm]	Operating [cm <sup>2</sup> ]	Holding Force [N]	Push fit	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	SWE [mm]
1	Nitril antistatic	1	0.007	0.05	x	2	4.2	4	M3	3	5	5
2	Nitril antistatic	1	0.007	0.05	x	3.5	4.2	4	M3	3	5	5
3	Nitril antistatic	1.5	0.02	0.1	x	5	7.7	6.5	M3	3	5	5
4	Nitril antistatic	3	0.07	0.4	x	6	7.2	9	M3	3	5	5
5	Nitril antistatic	4.5	0.16	0.9	x	11	10	16	M3	3	5	5
6	Nitril antistatic	2.6	0.05	0.3	x	5	7	14	M3	3	5	5
7	Nitril antistatic	1.8	0.03	0.15	x	7	9	14	M3	3	5	5
8	Nitril antistatic	3.8	0.11	0.7	x	9	9	15	M3	3	5	5

## WKA 6-6 / Angle Arm „Micro Series“

### Remarks:

**Application:** e.g. for easy mounting of components with clamping diameter 6mm

- easy to handle
- secure connection by cylinder screw



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Part No.	Description	A [mm]	B [mm]	C [mm]	D [mm]	L [mm]	Material	Weight [g]
1-320-63-00	WKA 6-6-20	6	4.5	6	12	20	Aluminium	3
1-320-66-00	WKA 6-6-40	6	4.5	6	12	40	Aluminium	4
1-320-69-00	WKA 6-6-60	6	4.5	6	12	60	Aluminium	6

## GSE U 6 / Gripper Arm for Suction Cups with air duct „Micro Series“

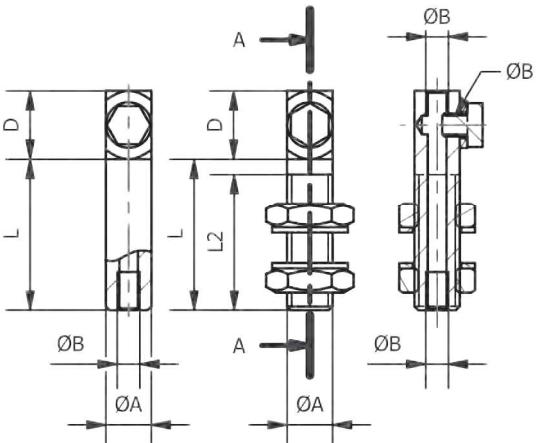
### Remarks:

**Application:** for mounting vacuum cups to the micro FOAT

- vacuum connection sidewise or air duct

### Scope of delivery:

- sealing screw included



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1-311-30-00  
1-311-31-00  
1-311-32-00

1-311-35-00  
1-311-36-00  
1-311-37-00



Artikelnummer	Bezeichnung	ØA [mm]	B [mm]	D [mm]	L [mm]	L2 [mm]	Material	Weight [g]
1-311-30-00	GSE U 6-M3-M3-20	6	M3	9	20	-	Aluminium	3
1-311-31-00	GSE U 6-M3-M3-40	6	M3	9	40	-	Aluminium	4
1-311-32-00	GSE U 6-M3-M3-60	6	M3	9	60	-	Aluminium	6
1-311-35-00	GSE U M6x1-M3-M3-20	M6	M3	9	20	18	Aluminium	5
1-311-36-00	GSE U M6x1-M3-M3-40	M6	M3	9	40	38	Aluminium	6
1-311-37-00	GSE U M6x1-M3-M3-60	M6	M3	9	60	58	Aluminium	7

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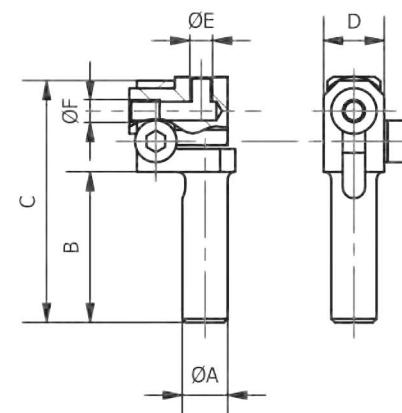
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Others

## 990 | Tubular- and Micro-System

## GGE 6 / Swivel Head Gripper Arm for Vacuum Cups „Micro Series“

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## Remarks:

Application: for mounting  
vacuum cups at an angle

- swivel head can be clamped separately by cylinder screw
- air connection (F) on the side

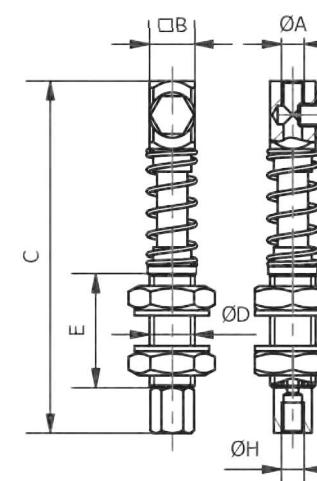
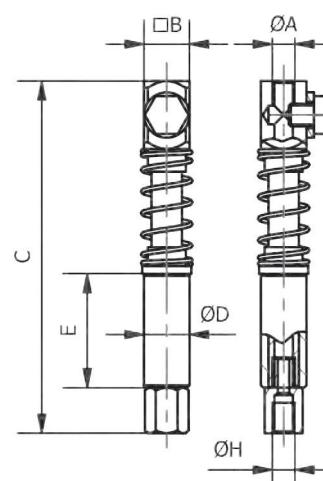
Part No.	Description	ØA [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Material	Weight [g]
1-315-00-00	GGE 6-M3-M3-20	6	20	32	8	M3	M3	Al	4
1-315-01-00	GGE 6-M3-M3-40	6	40	52	8	M3	M3	Al	6
1-315-02-00	GGE 6-M3-M3-60	6	60	72	8	M3	M3	Al	8

## GAF U 6 / GAF U 6 M / Spring Comp. Grip. Arm f. Vac.Cups, air duct „Micro“

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1-355-01-00

1-355-02-00



## Remarks:

Application: for mounting va-  
cuum cups in the robot hand

- for rotationally symmetrical vacuum cups
- vacuum cup can rotate relative to the clamping piece
- for best positioning of vacuum cups to the part to be removed
- spring travel to compensate for the ejector stroke
- gripper arm is guided with rotation enabled
- high quality stainless steel spring

Part No.	Description	ØA [mm]	B [mm]	C [mm]	D [mm]	E [mm]	H [mm]	Spring travel [mm]	Material	Weight [g]
1-355-01-00	GAF U 6-M3-M3-10	M3	6	46.5	6	15	M3	10	Al/CuZn	6
1-355-02-00	GAF U M6-M3-M3-10	M3	6	46.5	M6	15	M3	10	Al/CuZn	9

## GRZ 06-06 / Gripper Size 06-06 „Micro Series“

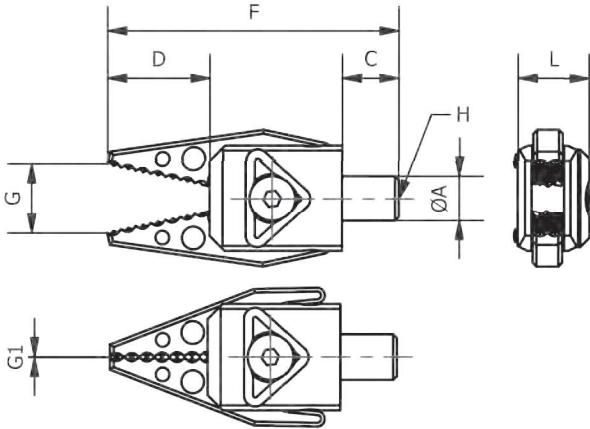
### Remarks:

#### Application: micro sized gripper GRZ

- very lightweight
- very small and compact design
- single-acting gripper
- gripper jaws chequered
- » closing force measured at point of jaws at 6 bar
- » maximum air pressure is 6 bar, use dry and filtered air only



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Part No.	Description	ØA [mm]	C [mm]	D [mm]	F [mm]	G [mm]	G1 [mm]	H	L [mm]	Closing force max. [N]	Weight [g]
1-406-00-00	GRZ 06-06	6	7.5	13.5	39	10	0	M3	10	6	6.5

## GRZ 06-06 / Gripper Size 06-06 with EP Coating „Micro Series“

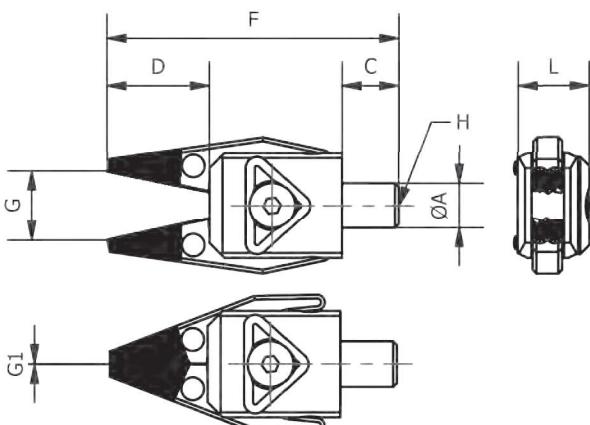
### Remarks:

#### Application: micro sized gripper GRZ with soft EP Coating, Shore 60

- very smooth gripping with more friction
- very lightweight
- very small and compact design
- single-acting gripper
- gripper jaws with EP coating Shore 60, colour black
- » closing force measured at point of jaws at 6 bar
- » maximum air pressure is 6 bar, use dry and filtered air only



**MICRO**



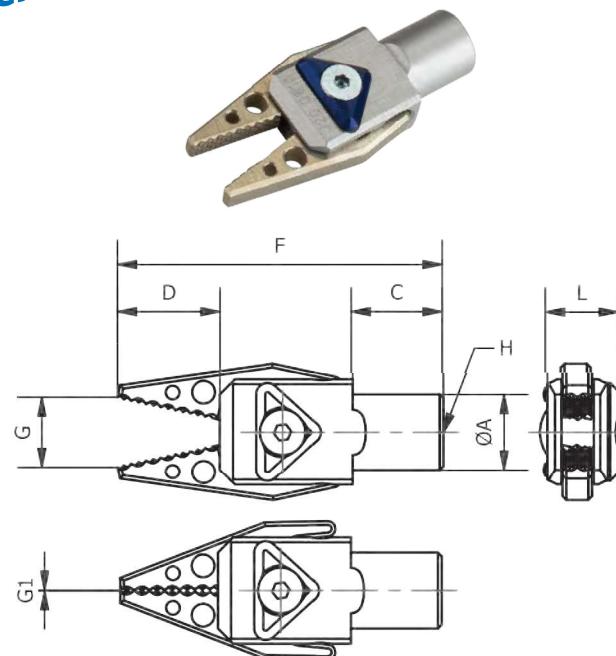
Part No.	Description	ØA [mm]	C [mm]	D [mm]	F [mm]	G [mm]	G1 [mm]	H	L [mm]	Closing force max. [N]	Weight [g]
1-406-02-00	GRZ 06-06 EP	6	7.5	13.5	39	10	0	M3	10	6	6.5

The EP-coating is an elastomer, so all dimensions are nominal.

## 990 | Tubular- and Micro-System

## GRZ 10-06 / Gripper Size 10-06 „Micro Series“

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## Remarks:

**Application:** micro sized gripper GRZ with clamping diameter 10mm

- lightweight
- small and compact design
- single-acting gripper
- gripper jaws chequered
- » closing force measured at point of jaws at 6 bar
- » maximum air pressure is 6 bar, use dry and filtered air only

## Accessories for example:

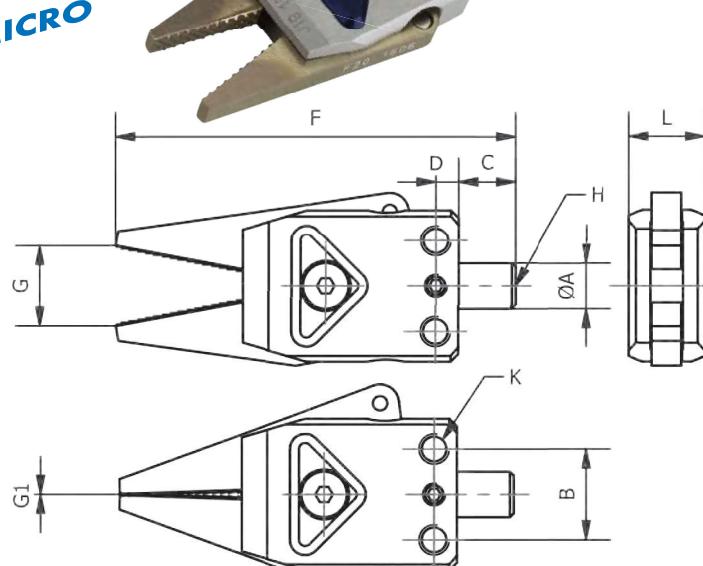
- extension with air duct VL U

Part No.	Description	ØA [mm]	C [mm]	D [mm]	F [mm]	G [mm]	G1 [mm]	H	L [mm]	Closing force max. [N]	Weight [g]
1-406-01-00	GRZ 10-06	10	12	13.5	43	10	0	M5	10	6	8

## GRZ 06-08 / Gripper Size 06-08 „Micro Series“

NEW

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## Remarks:

**Application:** gripper GRZ in miniature design suitable for the Micro System, known from the series GRZ 10-08

- CM: chequered jaws
- BSG: chequered and hardened jaws
- ideal when a higher closing force is required for small robot hands (EOAT)
- lightweight
- small and compact design
- single-acting gripper
- gripper jaws chequered
- two pistons, Ø 8mm
- optionally equipped sensor mounting bracket and initiator
- » closing force measured at point of jaws at 6 bar
- » maximum air pressure is 6 bar, use dry and filtered air only

## Accessories for example:

- Sensor Bracket SH GRZ 10-08
- adapter for board mounting AGP GRZ

Part No.	Description	ØA [mm]	B [mm]	C [mm]	D [mm]	F [mm]	G [mm]	G1 [mm]	H	K	L [mm]	Closing force max. [N]	Weight [g]
1-408-01-00	GRZ 06-08 CM	6	12	7.5	3	52.8	10	0	M3	M4	10	19	15
1-408-05-00	GRZ 06-08 CM BSG	6	12	7.5	3	52.8	10	0	M3	M4	10	19	15

New