Threaded connectors 501

Valves 506

Filter discs 512

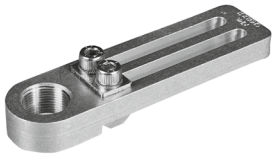
Rings and clamps 513

Notes:

Angle connectors, adjustable – for spring plungers

Integration of vacuum cups into gripper systems via the spring plunger

NEW



Product Description

- Compatible with commercially available spring plungers
- Particularly compatible with FIPA Heavy-Duty spring plungers
- Channel nuts included in the delivery

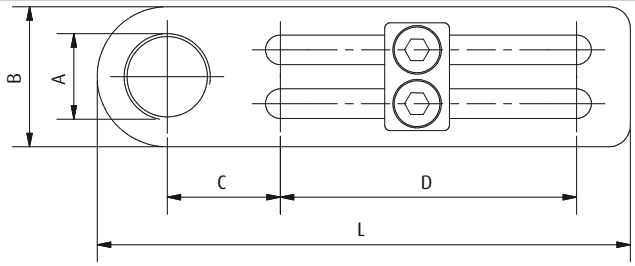
Technical Data

Item no.	Weight [g]
GR02.230	29
GR02.231	55
GR02.232	63

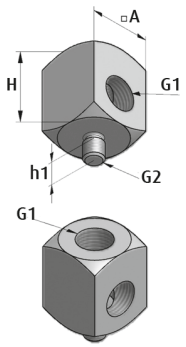
Dimensions

A	B [mm]	C [mm]	D [mm]	L [mm]
G1/8	20	17	45	82
M16x1	26	21	55	99
M20x1,5	28	21	65	110

Dimensions



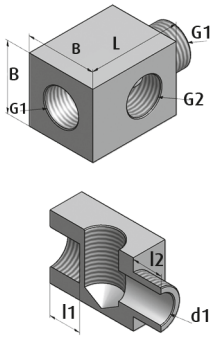
Elbow connection AG, Series SZ-WAA



Dimensions

Item no.	G1 (female)	G2 (male)	H [mm]	h1 [mm]	□A [mm]
GR07.010	G1/8	M5	20	6	16
GR07.011	G1/4	M6	33	10	25
GR07.012	G1/4	M8	33	10	25

Elbow connection IG, Series SZ-WAI

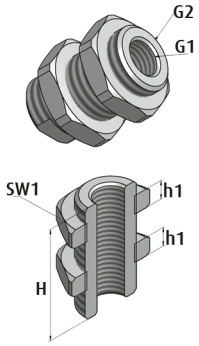


Dimensions

Item no.	G1 (female + male)	G2 (female)	Ø d1 [mm]	L [mm]	B [mm]	l1 [mm]	l2 [mm]
270.395	G1/8	G1/8	6,6	21	16	6	7
270.396	G1/4	G1/8	8	26	18	10	10
270.397	G1/2	G3/8	10	35	24	12	10

Bulkhead connector, Series SZ-SVS

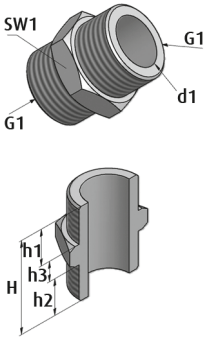
Allows for height adjustment during vacuum cup installation



Dimensions

Item no.	G1 (female)	G2 (male)	H [mm]	h1 [mm]	SW1
270.518	G1/8	M16x1	30	5	22
270.519	G1/4	M20x1.5	30	5	24

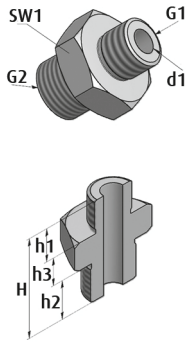
Double nipples, identical thread, Series SZ-GA-MM



Dimensions

Item no.	G1 (male)	H [mm]	h1 [mm]	h2 [mm]	h3 [mm]	Ø d1 [mm]	SW1
270.420	M5	13	5	5	3	2,5	7
270.059	G1/8	18	7	7	4	5	14
270.191	G1/4	21	8	8	5	8	17
270.121	G3/8	23	9	9	5	11	19
270.081	G1/2	26	10	10	6	14	24

Double nipples, reducing, Series SZ-GA-RMM



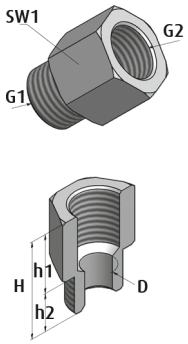
Technical Data

Item no.	Material
270.280	Nickle-plated brass
270.279	Aluminum
270.131	Brass
270.107	Aluminum
270.227	Brass
270.181	Nickle-plated brass
270.320	Aluminum
270.108	Aluminum
270.297	Nickle-plated brass
270.323	Nickle-plated brass

Dimensions

G1 (male)	G2 (male)	H [mm]	h1 [mm]	h2 [mm]	h3 [mm]	Ø d1 [mm]	SW1
G1/8	M5	15,5	4,8	6,5	4,2	2,4	14
G1/8	M6	21	7	9	5	3	14
G1/8	M8	18	6	7	5	4	14
G1/8	M12	21	7,5	8,5	5	5,5	17
G1/4	M5	19	5	9	5	2.5	17
G1/4	G1/8	22	8	9	5	4	17
G1/4	M10x1,25	25	10	10	5	5,5	17
G1/4	M12	21	8	8	5	5,5	17
G1/2	G1/4	25	9	10,5	5,5	8	24
G1/2	G3/8	25,5	9	10,5	6	11	24

Reducing Bushing male/female, Series SZ-GA-MF

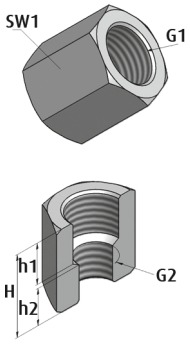


Technical Data

Dimensions

Item no.	Material	G1 (male)	G2 (female)	H [mm]	h1 [mm]	h2 [mm]	Ø D [mm]	SW1
270.423	Nickle-plated brass	M5	M5	11	7	4	2	8
270.302	Nickle-plated brass	G1/8	M5	10	4	6	--	14
270.303	Nickle-plated brass	G1/8	M6	13	5	8	--	13
270.304	Aluminum	G1/4	M6	15	5	10	--	17
270.090	Brass	G1/4	M10x1,25	11,5	5,8	5,7	--	19
270.088	Aluminum	G1/4	M10	28	16	12	4	17
270.079	Brass	M5	G1/8	17	12	5	2,4	14
270.334	Nickle-plated brass	G1/8	G1/4	20	13,6	6,5	5,4	17
270.245	Brass	G1/4	G1/8	13	4,5	8,5	--	17
270.078	Brass	G1/4	G1/4	28	19	9	7,5	17
270.329	Nickle-plated brass	G3/8	G1/4	14	5	9	--	19
270.229	Brass	G1/2	G1/4	18	6	12	--	24
270.230	Brass	G1/2	G3/8	18	6	12	--	24
270.102	Brass	G3/4	G3/8	18	6	12	--	32

Reducing Bushing female/female, Series SZ-GA-RFF

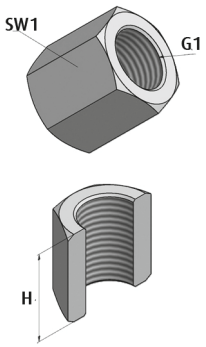


Technical Data

Dimensions

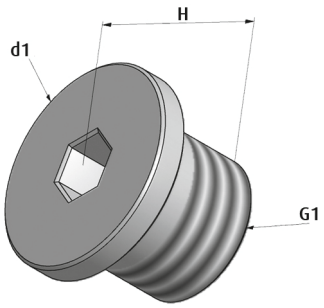
Item no.	Material	G1 (female)	G2 (female)	H [mm]	h1 [mm]	h2 [mm]	SW1
270.306	Aluminum	G1/8	M5	14	9,5	4,5	13
270.307	Aluminum	G1/8	M6	14	9,5	4,5	13
270.308	Aluminum	G1/4	M6	17,5	11	6,5	17
270.309	Aluminum	G1/4	M8	17,5	11	6,5	17
270.089	Aluminum	G1/4	M10	18	9	9	17
270.228	Nickle-plated brass	G3/8	G1/4	21,5	11,5	10	22

Parallel Bushing female/female, Series SZ-GA-FF



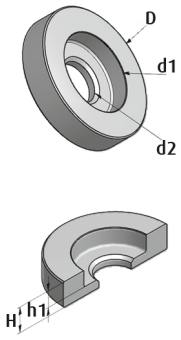
Technical Data		Dimensions		
Item no.	Material	G1 (female)	H [mm]	SW1
270.343	Nickle-plated brass	G1/8	17	14
270.182.0	Aluminum	G1/4	20	19
270.130.0	Aluminum	G1/2	32	30

Threaded plug with O-ring seal, Series SZ-SCV



Technical Data		Dimensions		
Item no.	Material	G1 (male)	H [mm]	Ø d1 [mm]
77.000	Nickle-plated brass	M5	6	8
77.009	Nickle-plated brass	G1/8	10	14
77.008	Nickle-plated brass	G1/4	11	17
77.007	Nickle-plated brass	G1/2	14,5	26
77.010	Nickle-plated brass	G3/8	12,5	20

Adapter plate, series SZ-ASC



Technical Data		Dimensions				
Item no.	Material	H [mm]	h1 [mm]	Ø D [mm]	Ø d1 [mm]	Ø d2 [mm]
78.080	Aluminum	5	2,8	15	11	6,2
78.081	Aluminum	4,3	2,8	20	12	6,2
78.082	Aluminum	7	4	28	23	10,2

Flow control valves with flow pin

Product Description

> Seals unused suction openings to maintain the system vacuum
> Suitable for very fast cycle times
> Wear- and noise-free
> Very short design
> Extremely low leakage
> Optimal installation position is vertical

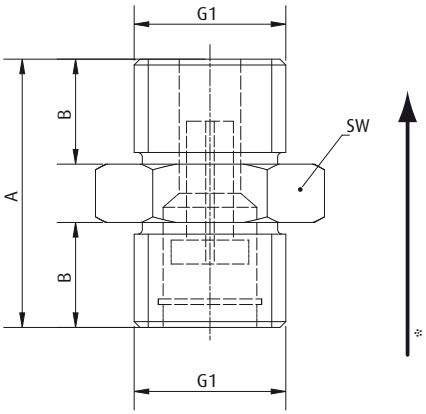
Technical Data

Item no.	Suction power required to achieve 30% vacuum in the system [Nl/min]	Suction power required to achieve 60% vacuum in the system [Nl/min]	Max. flow rate with blow-off at 5 bar [Nl/min]	Flow pin bore hole diameter [mm]	Leakage loss [m³/h]
63.036	5	5	370	0,8	0,46
63.037	11	11	620	1,2	1,04
63.038	17	18	480	1,5	1,62
63.055	3	3	320	0,6	0,21

Dimensions

A [mm]	B [mm]	G1	SW [mm]
23	9	G1/4	17
23	9	G1/4	17
23	9	G1/4	17
16	5	G1/8	12

Dimensions



* = Flow direction

Flow control valves with flow pin and filter, low leakage loss

Inch thread

Product Description

> Seals unused suction openings to maintain the system vacuum
> Ball seat valve with filter (not suitable for high levels of dust or dirt)
> Suitable for fast cycle times
> Low leakage, wear and noise-free
> Preset at the factory. 63.003 can be adjusted if necessary
> Vertical mounting, exception of 63001-63003: Any mounting position

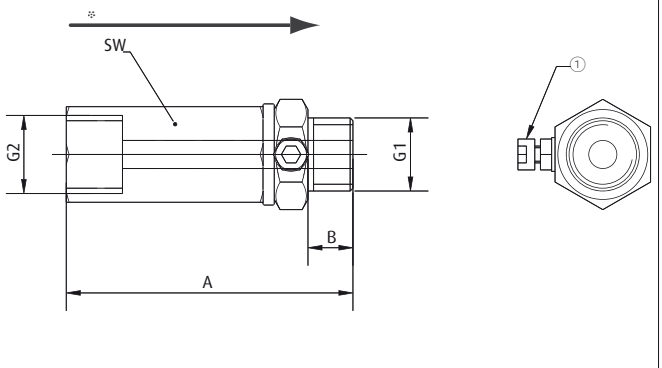
Technical Data

Item no.	Suction power required to achieve 30% vacuum in the system [Nl/min]	Suction power required to achieve 60% vacuum in the system [Nl/min]	Max. flow rate with blow-off at 5 bar [Nl/min]	Weight [g]
63.001	4	7	260	15
63.002	4	8	360	24
63.003	0 - 22,6	0 - 28,6	550	25
63.008	3	3	340	17
63.011	7	8	590	31
63.012	8	9	790	49
63.060	7	8	590	10

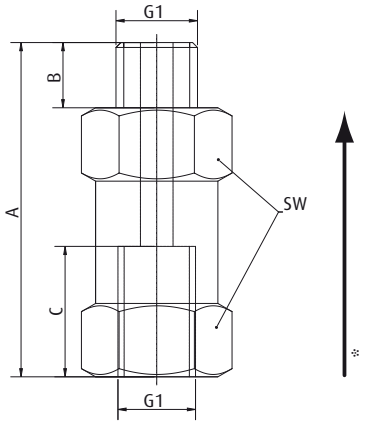
Dimensions

A [mm]	B [mm]	G1	G2	SW [mm]	C [mm]
48,5	6	G1/8	G1/8	14	--
50	10	G1/4	G1/4	17	--
50	8	G1/4	G1/4	17	--
36	10	G1/4	--	17	11
39	10	G3/8	--	22	12
41	12	G1/2	--	27	14
39	10	G1/8	--	22	12

Dimensions



63.003 | 63.002 | 63.001



63.060 | 63.012 | 63.011 | 63.008

① = Adjusting screw

* = Flow direction

Flow control valves with flow pin and filter, low leakage loss

Metric thread

Product Description

> Seals unused suction openings to maintain the system vacuum
> Ball seat valve with filter (not suitable for high levels of dust or dirt)
> Low leakage loss

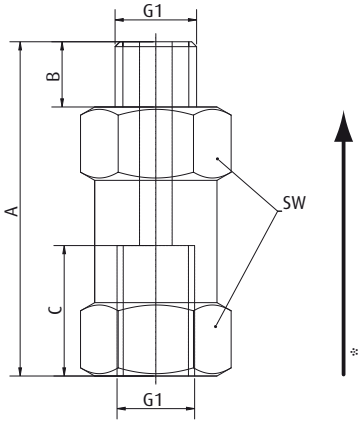
Technical Data

Item no.	Suction power required to achieve 30% vacuum in the system [Nl/min]	Suction power required to achieve 60% vacuum in the system [Nl/min]	Max. flow rate with blow-off at 5 bar [Nl/min]	Weight [g]	Leakage loss [m³/h]
63.056	0,8	0,8	60	5	0,105
63.057	0,9	0,9	70	8	0,105
63.058	1	1	80	6	0,105
63.059	1,5	1,5	100	12	0,105

Dimensions

A [mm]	B [mm]	C [mm]	G1	SW [mm]
18,4	2,5	4,5	M3	8
19,9	3	4,5	M4	10
19,9	3	4,5	M5	10
28,1	4	4,9	M6	12

Dimensions



* = Flow direction

Material in Motion
Phone +49 (0)89 / 96 24 89 – 0

Flow control valves with flow pin, self-cleaning

For harsh environmental conditions

Product Description

- Seals unused suction openings to maintain the system vacuum
- Self-cleaning by blow-off
- 63 015 can be plugged directly into a vacuum cup to conserve space
- Suitable for harsh environmental conditions (Heavy-duty)
- Optimal installation position is vertical

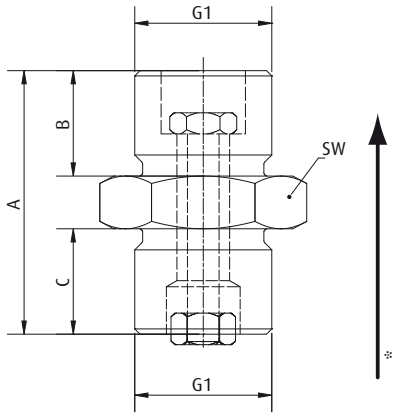
Technical Data

Item no.	Suction power required to achieve 30% vacuum in the system [Nl/min]	Suction power required to achieve 60% vacuum in the system [Nl/min]	Max. flow rate with blow-off at 5 bar [Nl/min]	Weight [g]
63.013	38	55	450	10
63.015	38	55	450	8

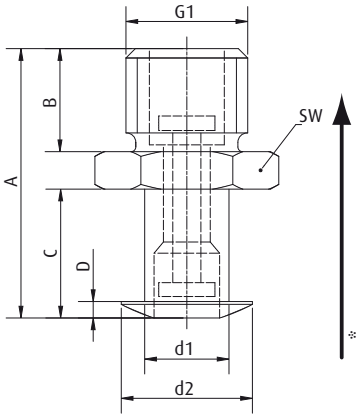
Dimensions

A [mm]	B [mm]	C [mm]	D [mm]	d1 [mm]	d2 [mm]	G1	SW [mm]
25	10	10	--	--	--	G1/4	17
29	11	14	2	9	14	G1/4	17

Dimensions



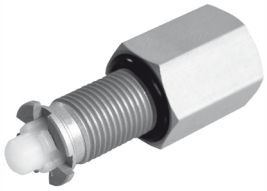
63.013



63.015

* = Flow direction

Touch valves



Product Description

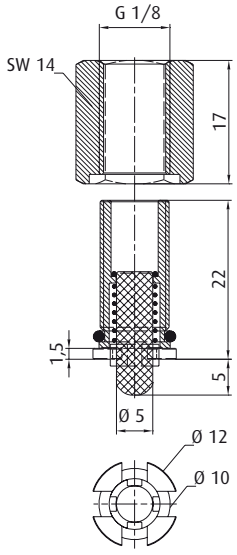
> Maintains the vacuum level in vacuum systems
> Mechanical scanning leaves unused suction openings closed
> Spring-loaded spring plunger allows for any mounting position
> Low susceptibility to dirt and very safe operation

Technical Data

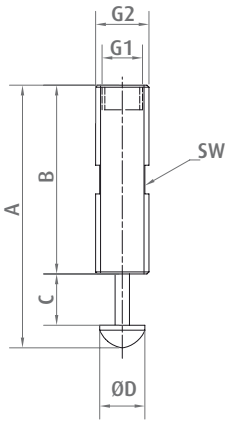
Dimensions

Item no.	Weight [g]	A [mm]	ØB [mm]	C [mm]	D [mm]	ØE [mm]	F [mm]	G1	SW [mm]	ØC [mm]	ØD [mm]	E [mm]	H [mm]	G2	B [mm]
270.129	7	27	12	1,5	22	5	17	G1/8	14	--	--	--	--	--	--
270.130	62	43	25	1,5	35	8	32	G1/2	30	--	--	--	--	--	--
63.026	29	65	--	13	--	--	--	G1/8	11	--	11	--	--	G1/4	45
63.027	21	56	--	5	--	--	--	G1/8	11	--	11	--	--	G1/4	46
63.028	4	27,5	10	6	--	--	13	G1/8	14	6,5	2	7	8	--	--
63.029	5	28,5	14	6,5	--	--	13	G1/8	14	8	2	7	8	--	--
63.032	8	45	7,2	10	6,5	--	--	G1/4	17	--	--	10	--	G1/4	--

Dimensions



270.129 | 270.130

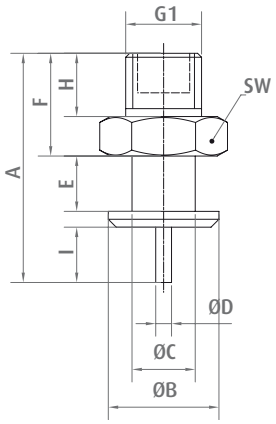


63.026 | 63.027

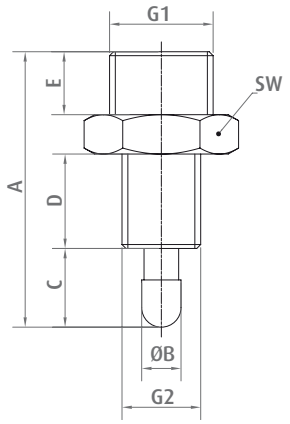
Material in Motion

Phone +49 (0)89 / 96 24 89 – 0

Dimensions



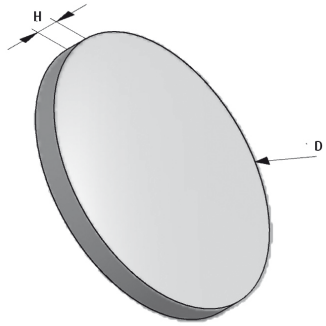
63.028 | 63.029



63.032

Filter discs, Series SZ-FI

For insertion into vacuum cup fold

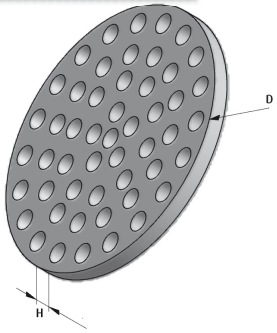


Technical Data			Dimensions	
Item no.	Material	Usage temperature [°C]	H [mm]	Ø D [mm]
78.200	HDPE white	-40 - +80	1,5	17,5
78.201	HDPE white	-40 - +80	1,5	28
78.202	HDPE white	-40 - +80	1,5	38,5
78.203	HDPE white	-40 - +80	1,5	48
78.204	HDPE white	-40 - +80	1,5	70,5
78.205	HDPE white	-40 - +80	1,5	113
78.206	HDPE white	-40 - +80	1,5	147

Filter and supporting grid, Series SZ-FA

Suitable for foodstuff-handling vacuum cups of Series SL-K

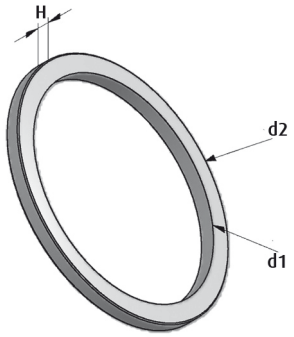
SUITABLE FOR FOODSTUFFS



Technical Data		Dimensions	
Item no.	Material	H [mm]	Ø D [mm]
78.504	Stainless steel	1,5	25,5
78.505	Stainless steel	1,5	38
78.506	Stainless steel	1,5	48
78.503	Stainless steel	1,5	58
78.507	Stainless steel	1,5	73
78.508	Stainless steel	1,5	84

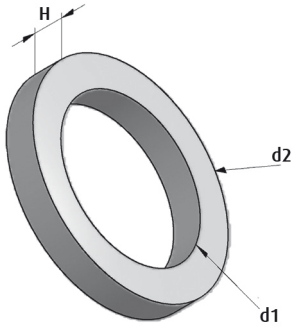
Reinforcement rings SZ-STAB

For stabilising bellows vacuum cups



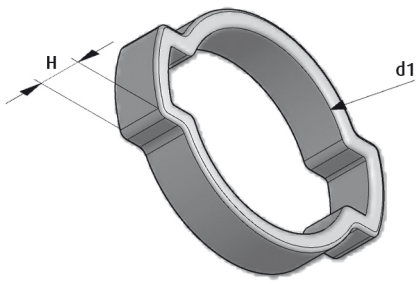
Technical Data		Dimensions		
Item no.	Material	H [mm]	Ø d1 [mm]	Ø d2 [mm]
78.000	PA6	1	13,5	17,5
78.001	PA6	1,1	22	26,5
78.002	PA6	1,2	30	35,5
78.003	PA6	1,5	36	45,5

Retaining rings SZ-HR



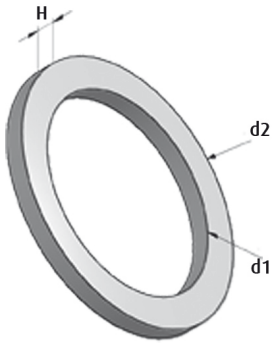
Technical Data		Dimensions		
Item no.	Material	H [mm]	Ø d1 [mm]	Ø d2 [mm]
78.011	TPU	1,9	9,7	14
78.012	TPU	2,5	13	20
78.013	TPU	3,2	19	26

Gripper clamps SZ-KS



Technical Data			Dimensions	
Item no.	Ø Area [mm]	Material	H [mm]	Ø d1 [mm]
78.030	7-9	Steel galvanized	4	9,3
78.031	9-11	Steel galvanized	3	11,3
78.032	11-13	Steel galvanized	4	13,2
78.033	15-18	Steel galvanized	4	18,2
78.034	17-20	Steel galvanized	4	20,2

Sealing rings SZ-DR



Technical Data

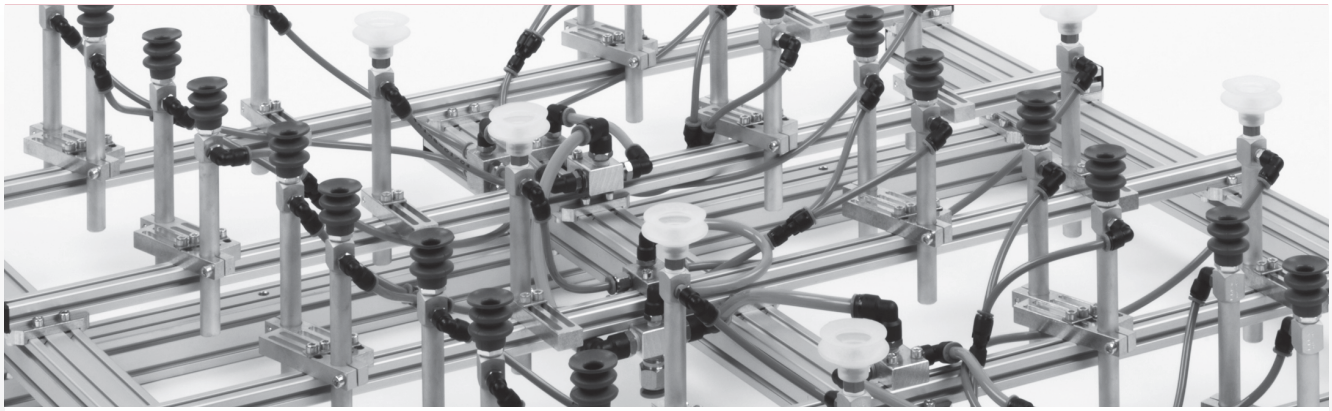
Dimensions

Item no.	For outside thread	Material	H [mm]	Ø d1 [mm]	Ø d2 [mm]
78.052	M5	Rigid PVC white	1	5,4	7,9
78.053	G1/8	Rigid PVC white	2	10,3	13,5
78.054	G1/4	Rigid PVC white	2	13,3	17,9
78.051	G3/8	Rigid PVC white	2	17,2	21,2
78.055	G1/2	Rigid PVC white	2	21,2	27,9
78.056	G3/4	Rigid PVC white	2	26,7	32,5

Ordering notes

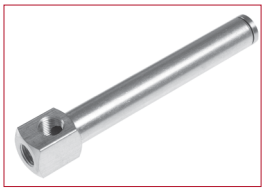
1 packing unit = 100 pieces

Integration of vacuum cups into gripper systems

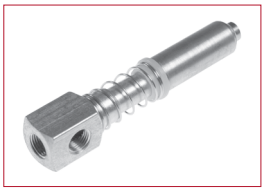


Suction fingers

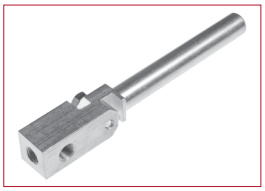
Suction fingers serve for optimal integration of vacuum cups into a gripper system.



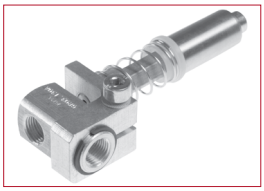
Suction fingers, rigid



Spring-loaded



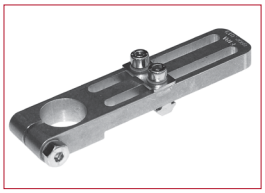
Rotatable



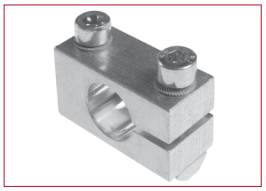
Spring-loaded, rotatable, anti-twist protection

Clamps | Angle connectors

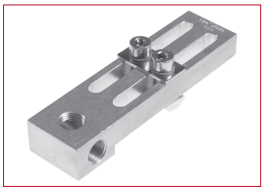
Angle clamps and connectors offer a wide adjustment range for the positioning of the gripper parts.
Cross clamps save space in the assembly of compact gripper systems.

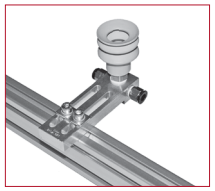


Angle clamp



Cross clamp

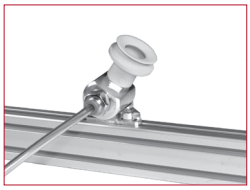




Angle connector, adjustable

Vacuum cup fitting

Adjustable vacuum cup fittings serve for variable integration of vacuum cups into a gripper system.



Vacuum cup fitting, adjustable

More gripper components are available in our End-of-Arm-Tooling catalog.
Request your catalog on page 516.