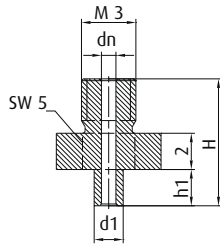
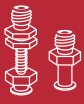
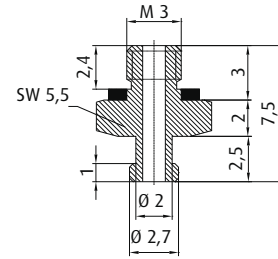


Fittings	446
Joints	481
Spring plungers	484



Technical Data

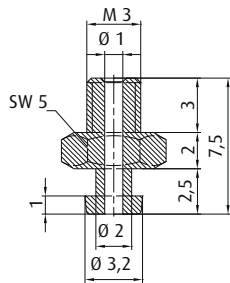
Item no.	Thread G1	H [mm]	h1 [mm]	Ø d1 [mm]	Ø dn [mm]
270.026	M3-male	6	1	1,1	0,6
270.011	M3-male	7	2	1,6	0,8
270.025	M3-male	7,5	2	2	1



NEW

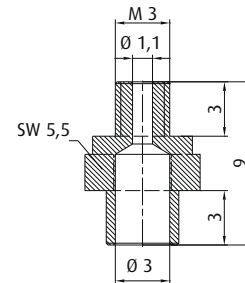
Technical Data

Item no.	Thread G1
270.524	M3-male



Technical Data

Item no.	Thread G1
270.014	M3-male



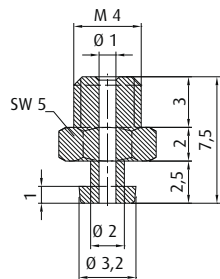
NEW

Technical Data

Item no.	Thread G1
270.427	M3-male

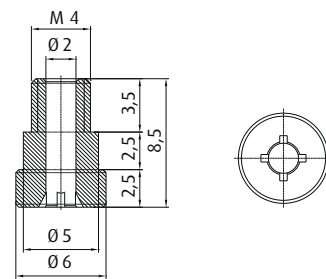
Note

Vacuum cup is plugged into the borehole of the fitting



Technical Data

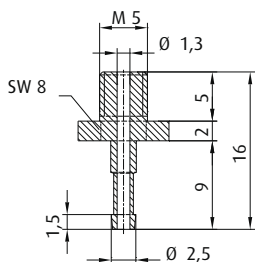
Item no.	Thread G1
270.111	M4-male



NEW

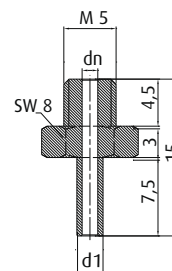
Technical Data

Item no.	Thread G1
270.458	M4-male



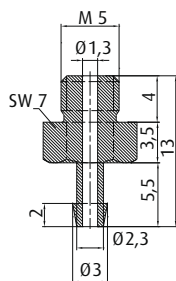
Technical Data

Item no.	Thread G1
270.195	M5-male



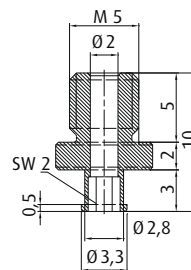
Technical Data

Item no.	Thread G1	Ø d1 [mm]	Ø dn [mm]
270.001	M5-male	2,5	1,5
270.022	M5-male	3,4	2



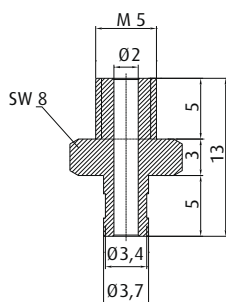
Technical Data

Item no.	Thread G1
270.153	M5-male



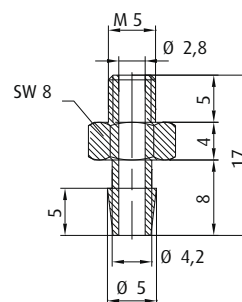
Technical Data

Item no.	Thread G1
270.283	M5-male



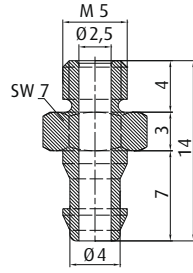
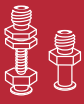
Technical Data

Item no.	Thread G1
270.536	M5-male



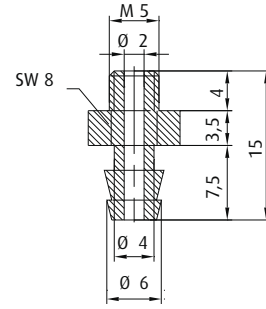
Technical Data

Item no.	Thread G1
270.134	M5-male



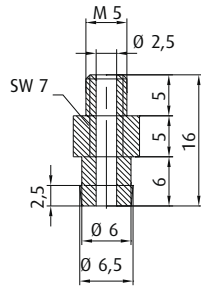
Technical Data

Item no.	Thread G1
270.399	M5-male



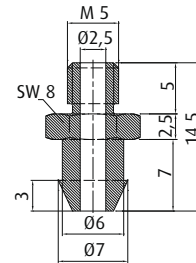
Technical Data

Item no.	Thread G1
270.024	M5-male



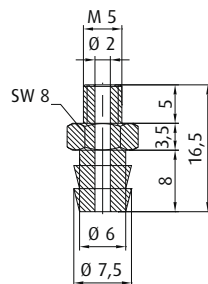
Technical Data

Item no.	Thread G1
270.013	M5-male



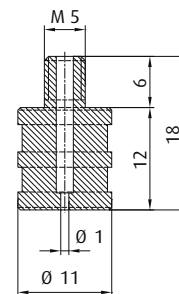
Technical Data

Item no.	Thread G1
270.317	M5-male



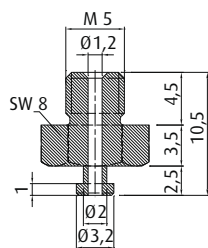
Technical Data

Item no.	Thread G1
270.443	M5-male



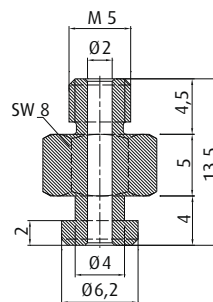
Technical Data

Item no.	Thread G1
270.244	M5-male



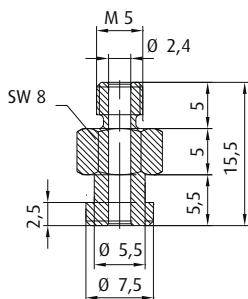
Technical Data

Item no.	Thread G1
270.300	M5-male



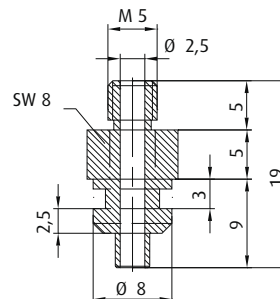
Technical Data

Item no.	Thread G1
270.010	M5-male



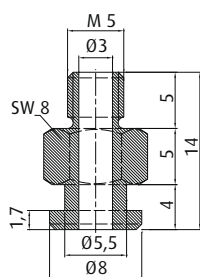
Technical Data

Item no.	Thread G1
270.094	M5-male



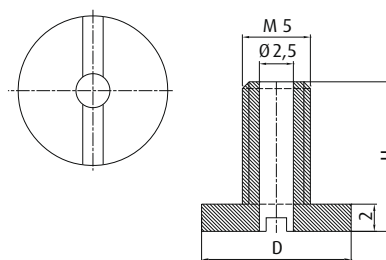
Technical Data

Item no.	Thread G1
270.037	M5-male



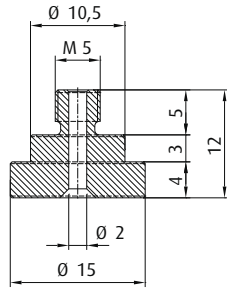
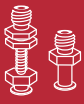
Technical Data

Item no.	Thread G1
270.200	M5-male



Technical Data

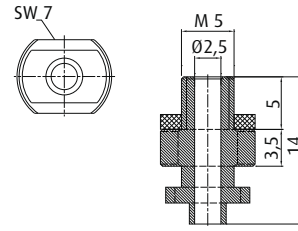
Item no.	Thread G1	H [mm]	Ø D [mm]
270.310	M5-male	9	8
270.311	M5-male	11	11



NEW

Technical Data

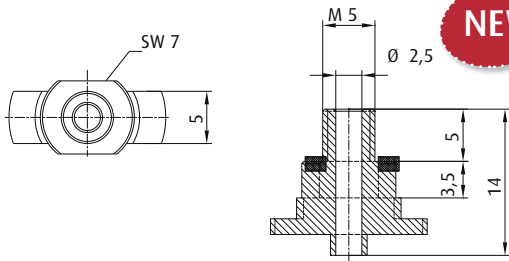
	Thread G1
Item no.	
270.521	M5-male



NEW

Technical Data

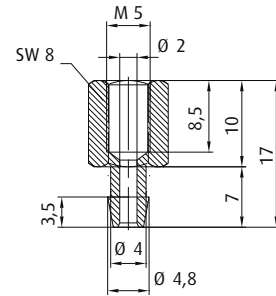
	Thread G1
Item no.	
270.463	M5-male



NEW

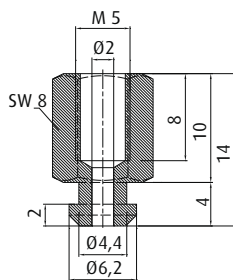
Technical Data

	Thread G1
Item no.	
270.464	M5-male



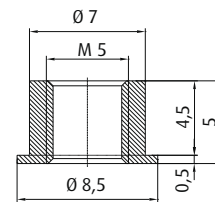
Technical Data

	Thread G1
Item no.	
270.347	M5-female



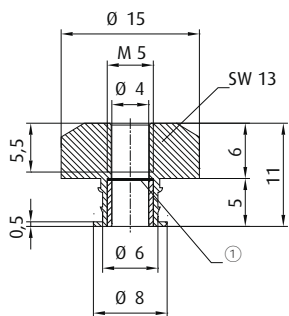
Technical Data

	Thread G1
Item no.	
270.005	M5-female



Technical Data

	Thread G1
Item no.	
270.382	M5-female



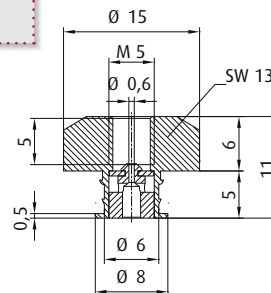
NEW

① = Filter screen

Technical Data

	Thread G1
Item no.	
270.500-5	M5-female

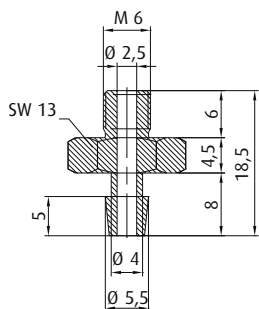
WITH FLOW CONTROL VALVE



NEW

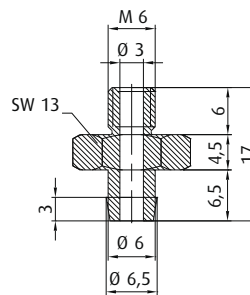
Technical Data

	Thread G1
Item no.	
270.500-DRV	M5-female



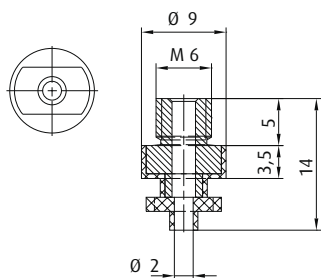
Technical Data

	Thread G1
Item no.	
270.104	M6-male



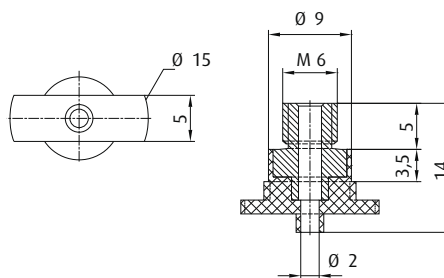
Technical Data

	Thread G1
Item no.	
270.103	M6-male



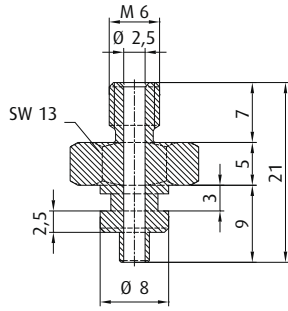
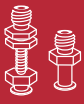
Technical Data

	Thread G1
Item no.	
270.339	M6-male



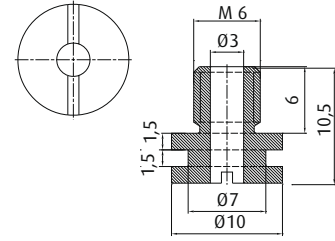
Technical Data

	Thread G1
Item no.	
270.340	M6-male



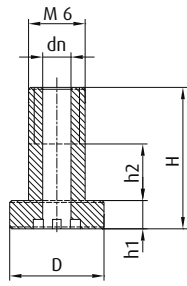
Technical Data

Item no.	Thread G1
270.373	M6-male



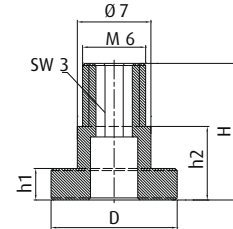
Technical Data

Item no.	Thread G1
270.105	M6-male



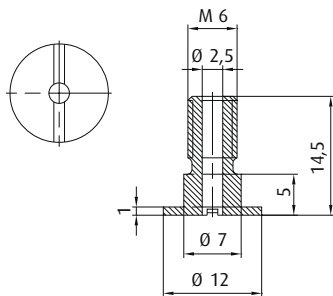
Technical Data

Item no.	Thread G1	H [mm]	h1 [mm]	h2 [mm]	Ø D [mm]	Ø dn [mm]
270.312/19	M6-male	14	2	5	11	3,5
270.457	M6-male	15	3	6	10	3
270.461	M6-male	16,5	2,5	8	10	SW 3



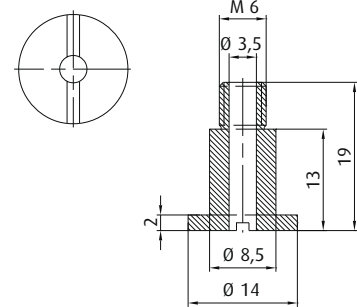
Technical Data

Item no.	Thread G1	H [mm]	h1 [mm]	h2 [mm]	Ø D [mm]
270.459	M6-male	11	2,5	6	10
270.460	M6-male	13	3	7	10



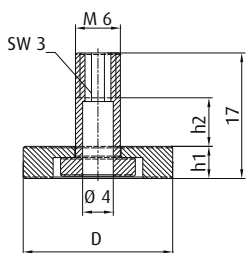
Technical Data

Item no.	Thread G1
270.039	M6-male



Technical Data

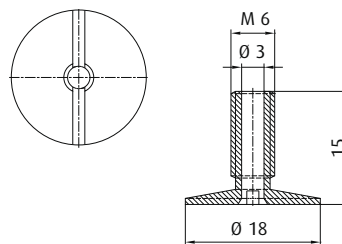
Item no.	Thread G1
270.315	M6-male



NEW

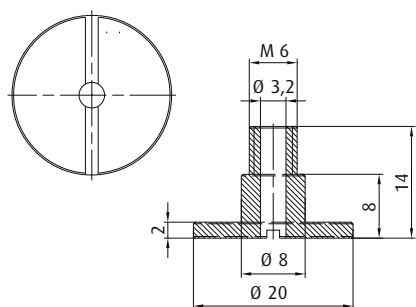
Technical Data

Item no.	Thread G1	h1 [mm]	h2 [mm]	Ø D [mm]
270.498	M6-male	5	6	15
270.499	M6-male	4,5	6,5	20



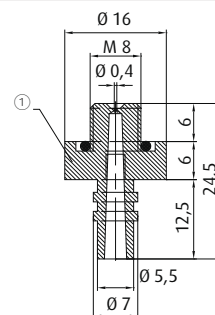
Technical Data

Item no.	Thread G1
270.254	M6-male



Technical Data

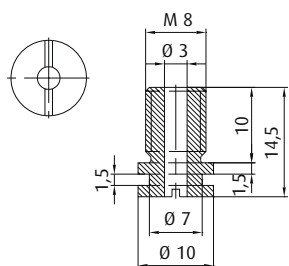
Item no.	Thread G1
270.314	M6-male



① = Material: PA6

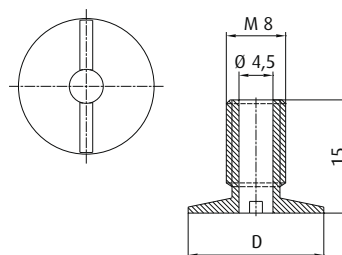
Technical Data

Item no.	Thread G1
270.378	M8-male



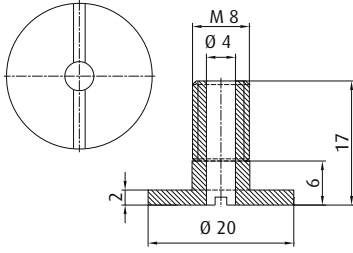
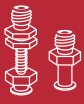
Technical Data

Item no.	Thread G1
270.040	M8-male



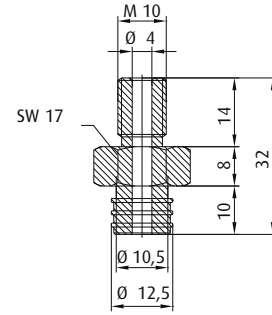
Technical Data

Item no.	Thread G1	Ø D [mm]
270.247	M8-male	12
270.255	M8-male	15
270.256	M8-male	18



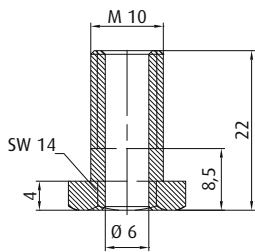
Technical Data

Item no.	Thread G1
270.313	M8-male



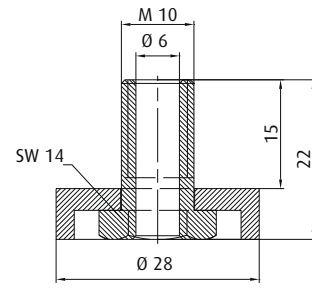
Technical Data

Item no.	Thread G1
270.177	M10-male



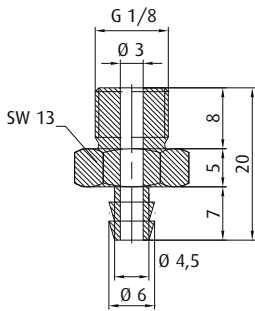
Technical Data

Item no.	Thread G1
270.462	M10-male



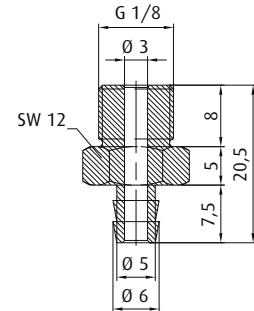
Technical Data

Item no.	Thread G1
270.512	M10-male



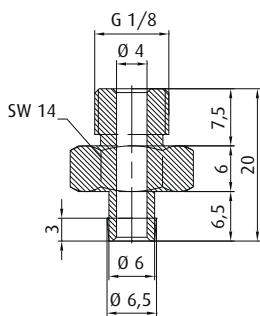
Technical Data

Item no.	Thread G1
270.033	G1/8-male



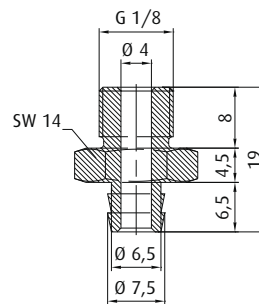
Technical Data

Item no.	Thread G1
270.205	G1/8-male



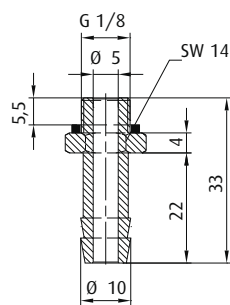
Technical Data

Item no.	Thread G1
270.003	G1/8-male



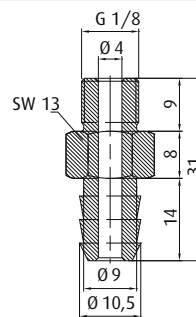
Technical Data

Item no.	Thread G1
270.238	G1/8-male



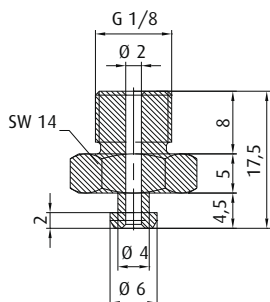
Technical Data

Item no.	Thread G1
270.060	G1/8-male



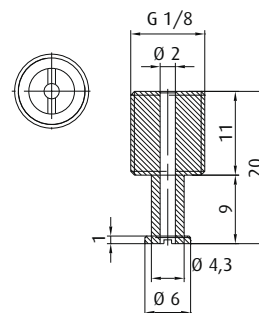
Technical Data

Item no.	Thread G1
270.132	G1/8-male



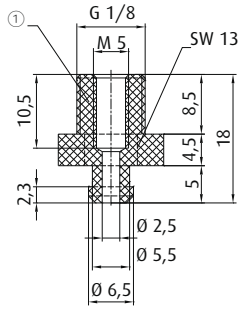
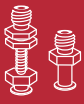
Technical Data

Item no.	Thread G1
270.009	G1/8-male



Technical Data

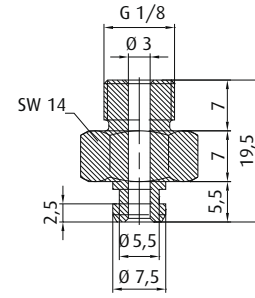
Item no.	Thread G1
270.242	G1/8-male



① = Material: POM

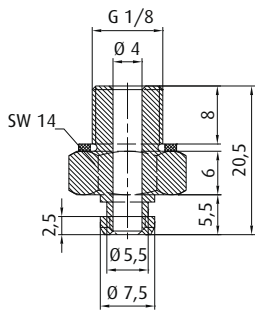
Technical Data

Item no.	Thread G1
270.188	G1/8-male



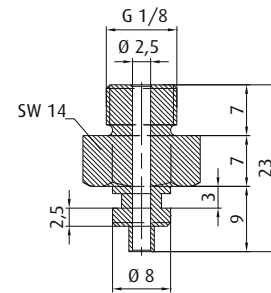
Technical Data

Item no.	Thread G1
270.095	G1/8-male



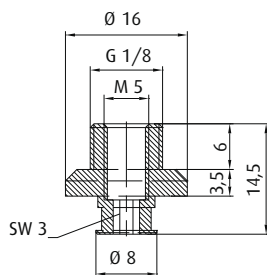
Technical Data

Item no.	Thread G1
270.431	G1/8-male



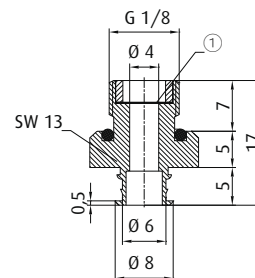
Technical Data

Item no.	Thread G1
270.085	G1/8-male



Technical Data

Item no.	Thread G1
270.250	G1/8-male



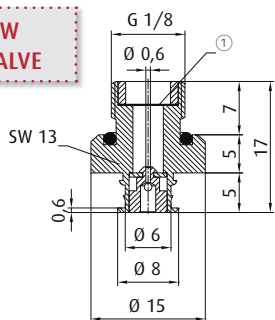
① = Filter screen

Technical Data

Item no.	Thread G1
270.503-5	G1/8-male



WITH FLOW CONTROL VALVE

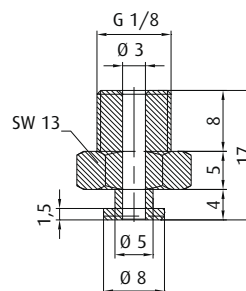


NEW

① = Filter screen

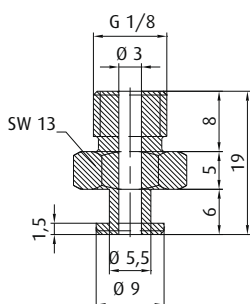
Technical Data

Item no.	Thread G1
270.503-SDRV	G1/8-male



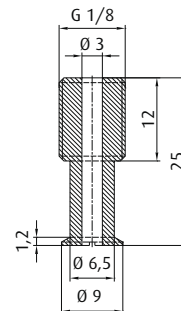
Technical Data

Item no.	Thread G1
270.064	G1/8-male



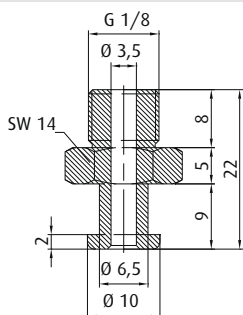
Technical Data

Item no.	Thread G1
270.063	G1/8-male



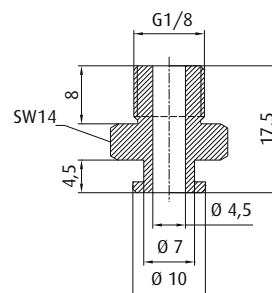
Technical Data

Item no.	Thread G1
270.147	G1/8-male



Technical Data

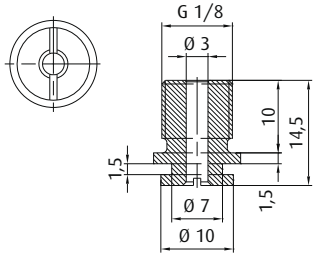
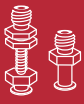
Item no.	Thread G1
270.030	G1/8-male



NEW

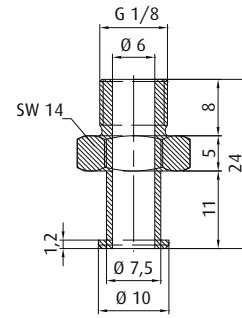
Technical Data

Item no.	Thread G1
270.543	G1/8-male



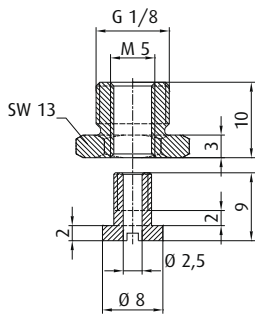
Technical Data

Item no.	Thread G1
270.077	G1/8-male



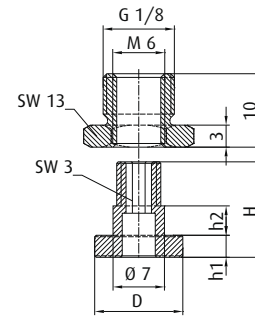
Technical Data

Item no.	Thread G1
270.112	G1/8-male



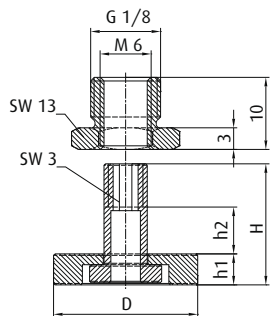
Technical Data

Item no.	Thread G1
270.493	G1/8-male



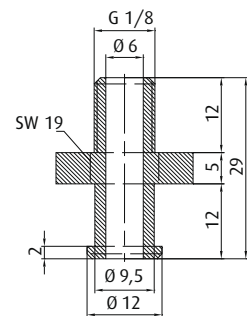
Technical Data

Item no.	Thread G1	H [mm]	h1 [mm]	h2 [mm]	Ø D [mm]
270.480	G1/8-male	11	2,5	3,5	10
270.482	G1/8-male	13	3	4	12



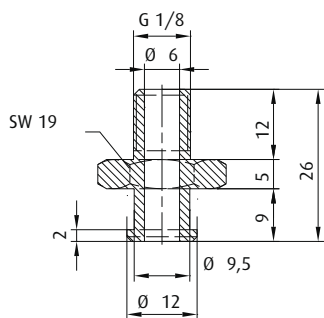
Technical Data

Item no.	Thread G1	H [mm]	h1 [mm]	h2 [mm]	Ø D [mm]
270.486	G1/8-male	17	5	6	15
270.490	G1/8-male	17	4,5	6,5	20



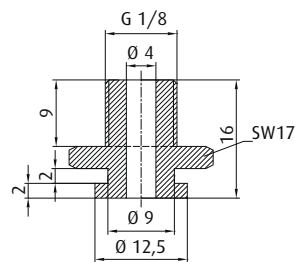
Technical Data

Item no.	Thread G1
270.352	G1/8-male



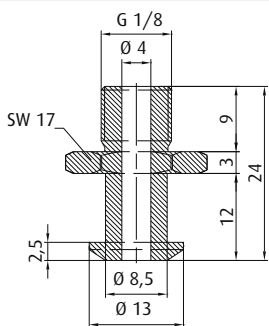
Technical Data

Item no.	Thread G1
270.354	G1/8-male



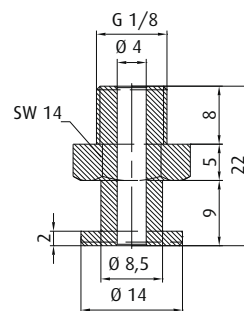
Technical Data

Item no.	Thread G1
270.541	G1/8-male



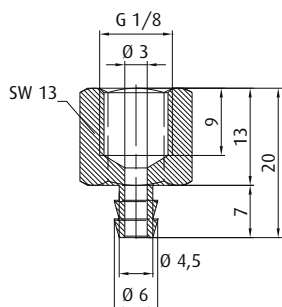
Technical Data

Item no.	Thread G1
270.093	G1/8-male



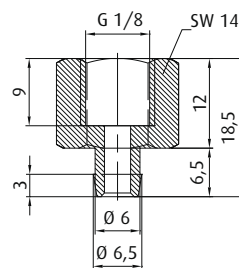
Technical Data

Item no.	Thread G1
270.012	G1/8-male



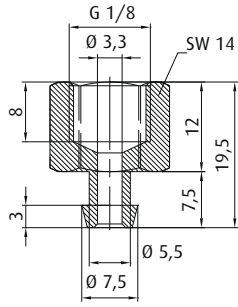
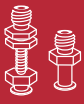
Technical Data

Item no.	Thread G1
270.478	G1/8-female



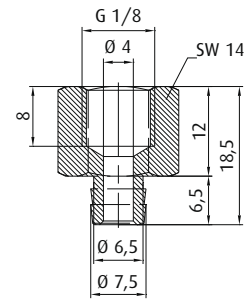
Technical Data

Item no.	Thread G1
270.015	G1/8-female



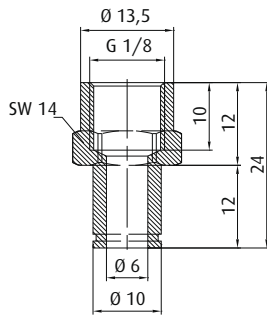
Technical Data

Item no.	Thread G1
270.109	G1/8-female



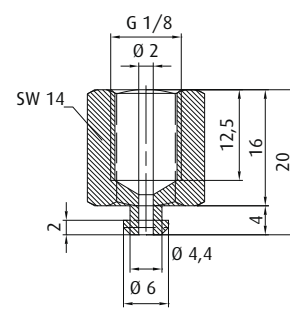
Technical Data

Item no.	Thread G1
270.110	G1/8-female



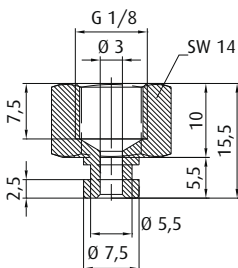
Technical Data

Item no.	Thread G1
270.114	G1/8-female



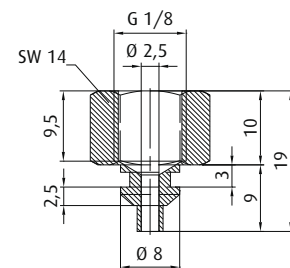
Technical Data

Item no.	Thread G1
270.007	G1/8-female



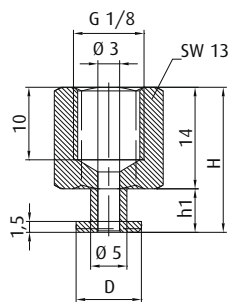
Technical Data

Item no.	Thread G1
270.096	G1/8-female



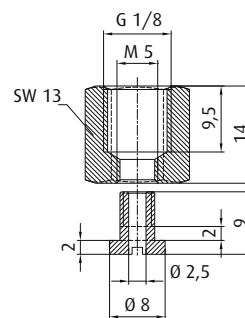
Technical Data

Item no.	Thread G1
270.086	G1/8-female



Technical Data

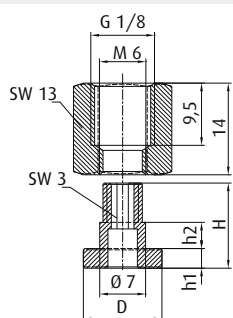
Item no.	Thread G1	H [mm]	h1 [mm]	Ø D [mm]
270.065	G1/8-female	18	4	8,5
270.061	G1/8-female	20	6	9



NEW

Technical Data

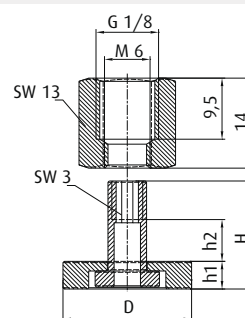
Item no.	Thread G1
270.494	G1/8-female



NEW

Technical Data

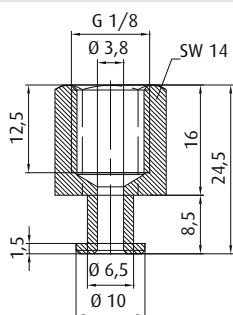
Item no.	Thread G1	H [mm]	h1 [mm]	h2 [mm]	Ø D [mm]
270.479	G1/8-female	11	2,5	3,5	10
270.481	G1/8-female	13	3	4	12



NEW

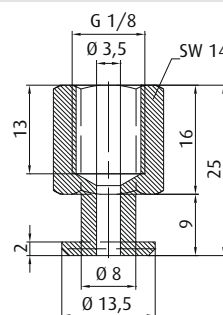
Technical Data

Item no.	Thread G1	H [mm]	h1 [mm]	h2 [mm]	Ø D [mm]
270.485	G1/8-female	17	5	6	15
270.489	G1/8-female	17	4,5	6,5	20



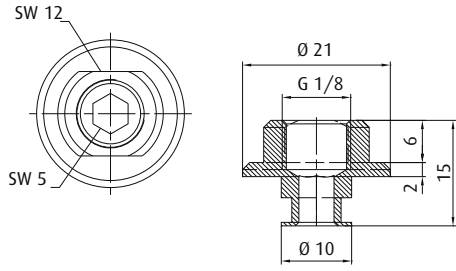
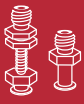
Technical Data

Item no.	Thread G1
270.019	G1/8-female



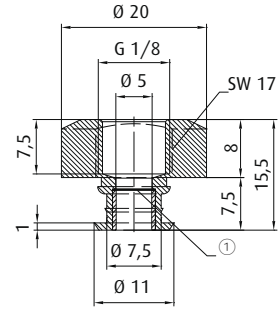
Technical Data

Item no.	Thread G1
270.020	G1/8-female



Technical Data

Item no.	Thread G1
270.251	G1/8-female



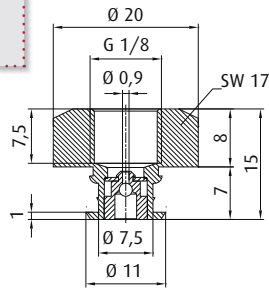
NEW

① = Filter screen

Technical Data

Item no.	Thread G1
270.501-5	NPSF1/8-female

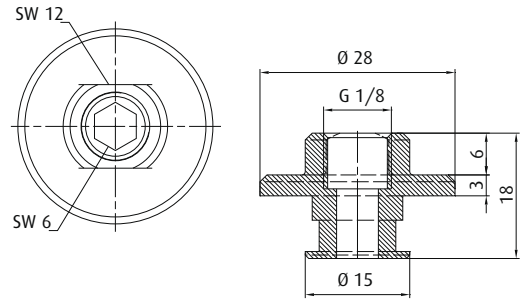
WITH FLOW CONTROL VALVE



NEW

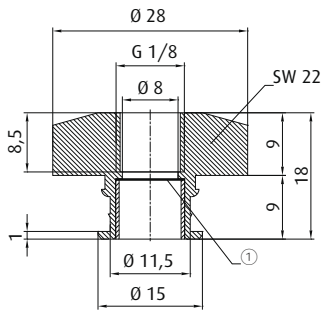
Technical Data

Item no.	Thread G1
270.501-DRV	NPSF1/8-female



Technical Data

Item no.	Thread G1
270.252	G1/8-female



NEW

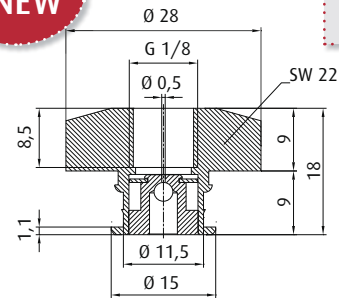
① = Filter screen

Technical Data

Item no.	Thread G1
270.502-S	NPSF1/8-female

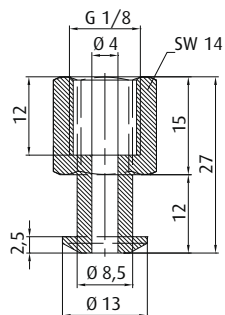
NEW

WITH FLOW CONTROL VALVE



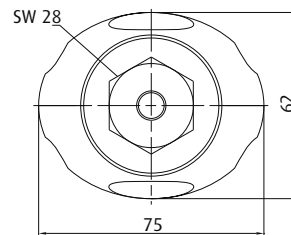
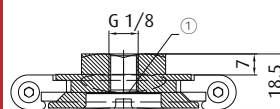
Technical Data

Item no.	Thread G1
270.502-DRV	NPSF1/8-female



Technical Data

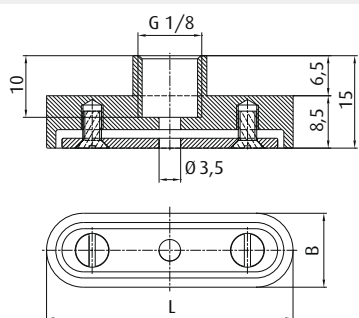
Item no.	Thread G1
270.092	G1/8-female



① = Filter screen

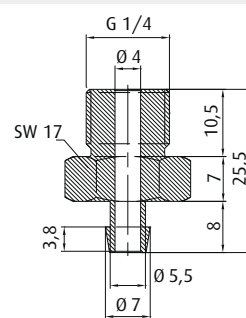
Technical Data

Item no.	Thread G1
270.527-S	G1/8-female



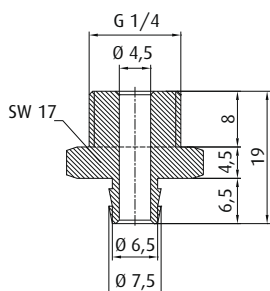
Technical Data

Item no.	Thread G1	Ø L [mm]	Ø B [mm]
270.439	G1/8-female	30	12
270.440	G1/8-female	40	12
270.441	G1/8-female	55	12



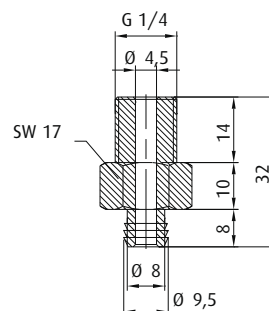
Technical Data

Item no.	Thread G1
270.194	G1/4-male



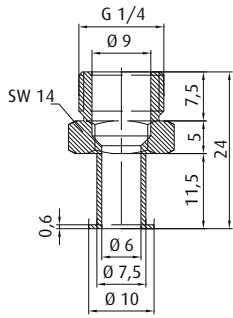
Technical Data

Item no.	Thread G1
270.534	G1/4-male



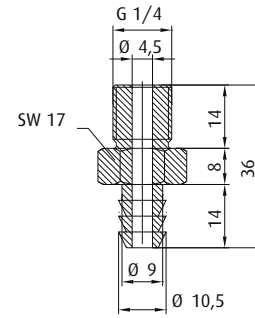
Technical Data

Item no.	Thread G1
270.043	G1/4-male



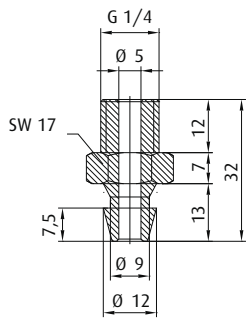
Technical Data

Item no.	Thread G1
270.113	G1/4-male



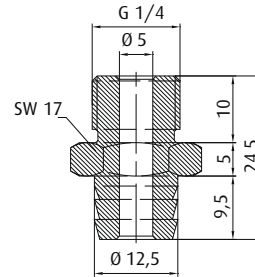
Technical Data

Item no.	Thread G1
270.208	G1/4-male



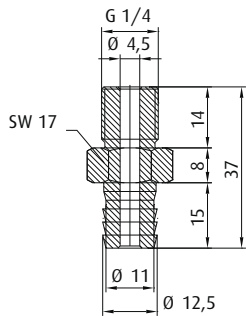
Technical Data

Item no.	Thread G1
270.515	G1/4-male



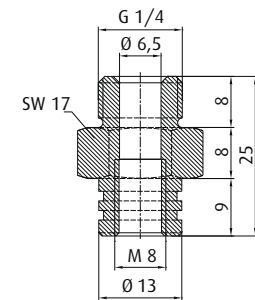
Technical Data

Item no.	Thread G1
270.451	G1/4-male



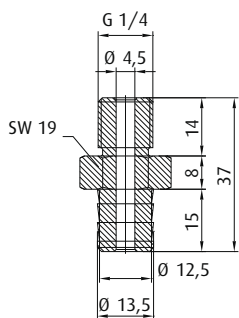
Technical Data

Item no.	Thread G1
270.044	G1/4-male



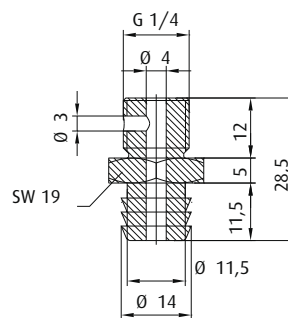
Technical Data

Item no.	Thread G1
270.097	G1/4-male



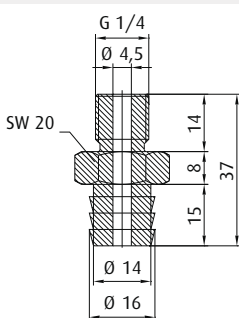
Technical Data

Item no.	Thread G1
270.049-1	G1/4-male



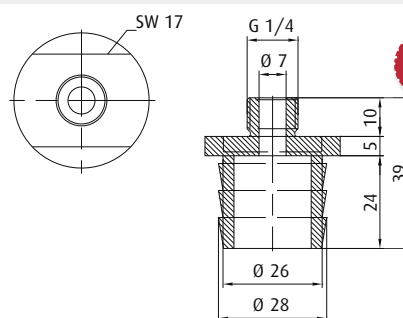
Technical Data

Item no.	Thread G1
270.101	G1/4-male



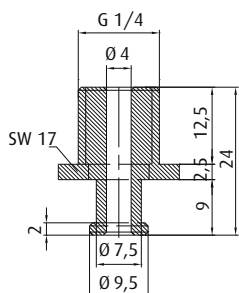
Technical Data

Item no.	Thread G1
270.207	G1/4-male



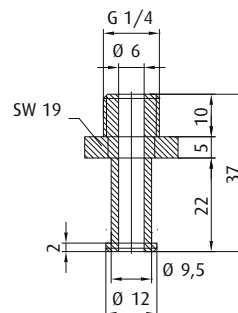
Technical Data

Item no.	Thread G1
270.438	G1/4-male



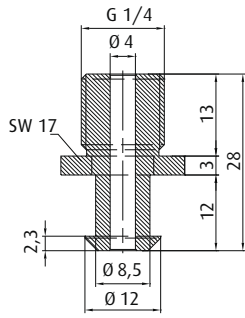
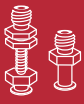
Technical Data

Item no.	Thread G1
270.274	G1/4-male



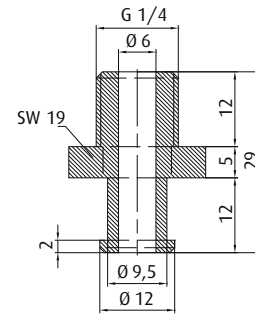
Technical Data

Item no.	Thread G1
270.359	G1/4-male



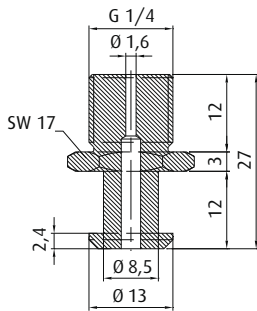
Technical Data

Thread G1	
Item no.	
270.249	G1/4-male



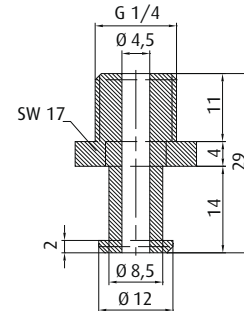
Technical Data

Thread G1	
Item no.	
270.204	G1/4-male



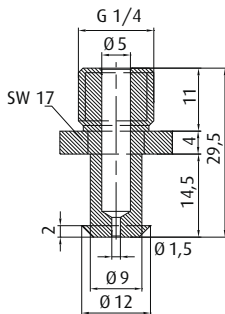
Technical Data

Thread G1	
Item no.	
270.099	G1/4-male



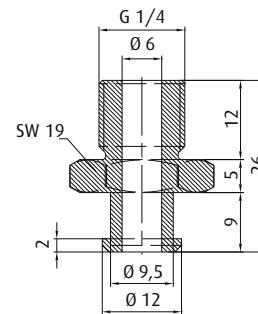
Technical Data

Thread G1	
Item no.	
270.190	G1/4-male



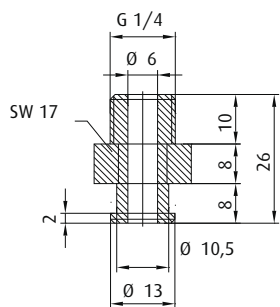
Technical Data

Thread G1	
Item no.	
270.002	G1/4-male



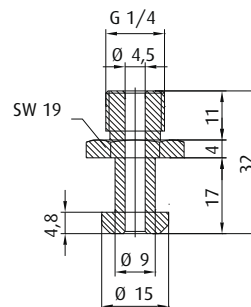
Technical Data

Thread G1	
Item no.	
270.034	G1/4-male



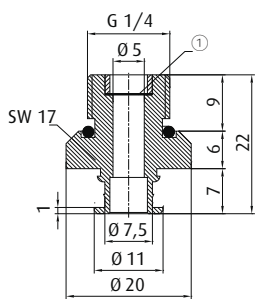
Technical Data

Item no.	Thread G1
270.213	G1/4-male



Technical Data

Item no.	Thread G1
270.281	G1/4-male

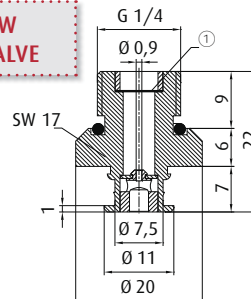


NEW

① = Filter screen

Technical Data

Item no.	Thread G1
270.506-S	G1/4-male



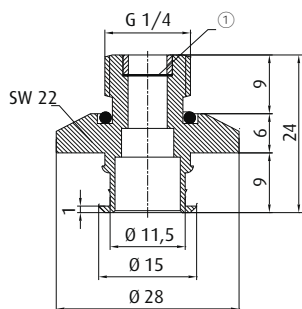
WITH FLOW CONTROL VALVE

NEW

① = Filter screen

Technical Data

Item no.	Thread G1
270.506-SDRV	G1/4-male

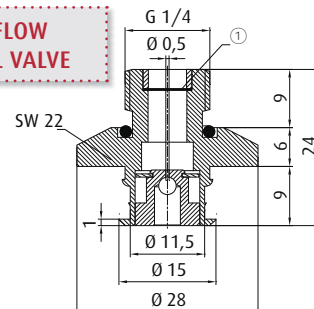


NEW

① = Filter screen

Technical Data

Item no.	Thread G1
270.504-S	G1/4-male



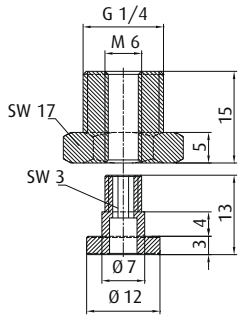
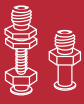
WITH FLOW CONTROL VALVE

NEW

① = Filter screen

Technical Data

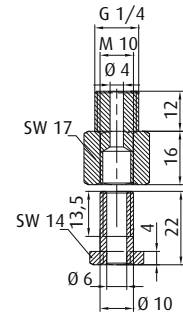
Item no.	Thread G1
270.504-SDRV	G1/4-male



NEW

Technical Data

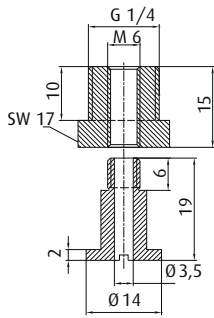
Item no.	Thread G1
270.483	G1/4-male



NEW

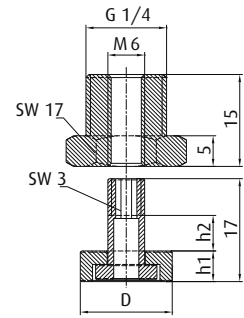
Technical Data

Item no.	Thread G1
270.514	G1/4-male



Technical Data

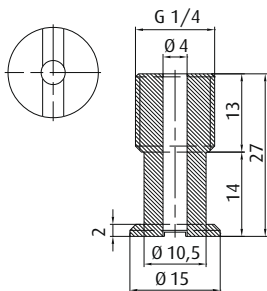
Item no.	Thread G1
270.540	G1/4-male



NEW

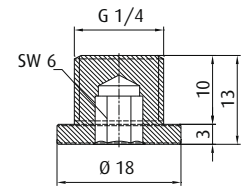
Technical Data

Item no.	Thread G1	h1 [mm]	h2 [mm]	Ø D [mm]
270.487	G1/4-male	5	6	15
270.491	G1/4-male	4,5	6,5	20



Technical Data

Item no.	Thread G1
270.175	G1/4-male

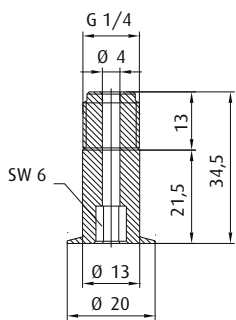


Technical Data

Item no.	Thread G1
270.364	G1/4-male

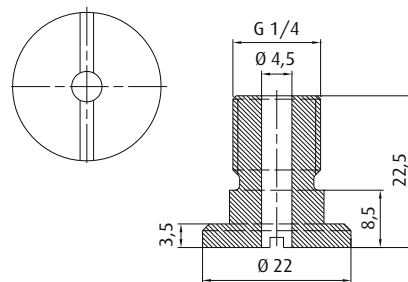
Ordering notes

Without drilling



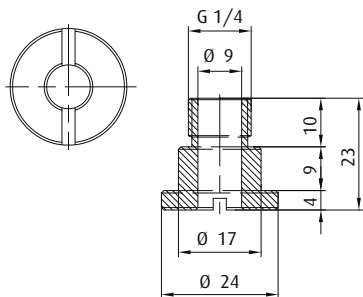
Technical Data

	Thread G1
Item no.	
270.141	G1/4-male



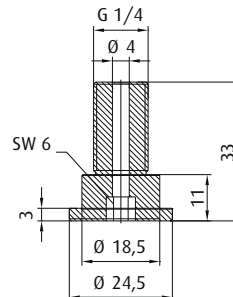
Technical Data

	Thread G1
Item no.	
270.210	G1/4-male



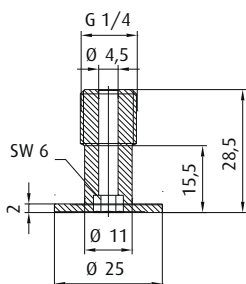
Technical Data

	Thread G1
Item no.	
270.237	G1/4-male



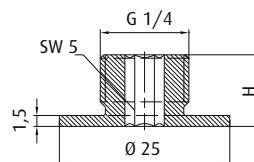
Technical Data

	Thread G1
Item no.	
270.145	G1/4-male



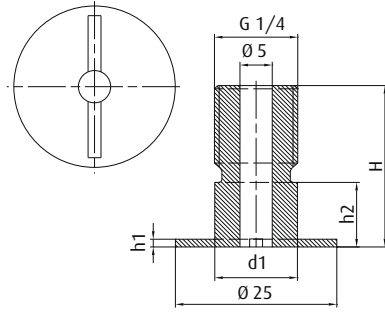
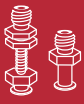
Technical Data

	Thread G1
Item no.	
270.176	G1/4-male



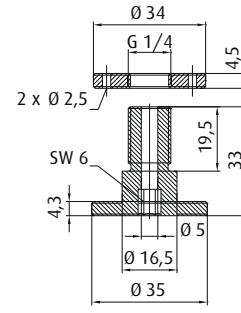
Technical Data

	Thread G1	H [mm]
Item no.		
270.182.U	G1/4-male	10,5
270.183	G1/4-male	15



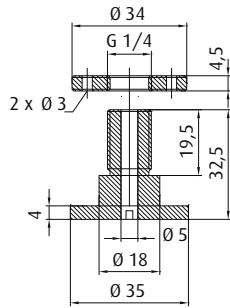
Technical Data

Item no.	Thread G1	H [mm]	h1 [mm]	h2 [mm]	Ø d1 [mm]
270.042	G1/4-male	25	1,2	10	13
270.184	G1/4-male	30	0,8	11	13
270.216	G1/4-male	37,5	1,3	23,5	15,5



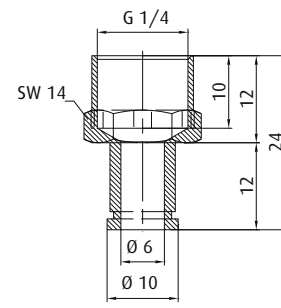
Technical Data

Item no.	Thread G1
270.053	G1/4-male



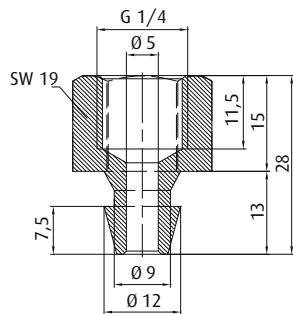
Technical Data

Item no.	Thread G1
270.100	G1/4-male



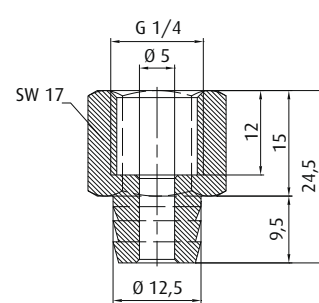
Technical Data

Item no.	Thread G1
270.178	G1/4-female



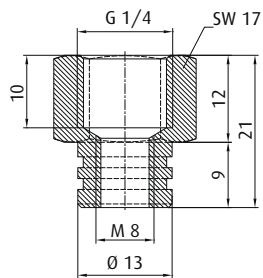
Technical Data

Item no.	Thread G1
270.434	G1/4-female



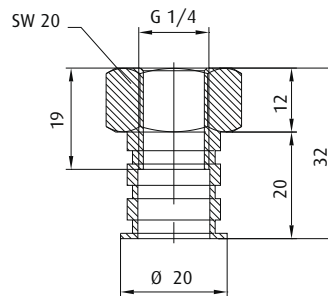
Technical Data

Item no.	Thread G1
270.452	G1/4-female



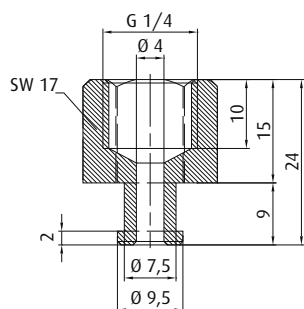
Technical Data

	Thread G1
Item no.	
270.098	G1/4-female



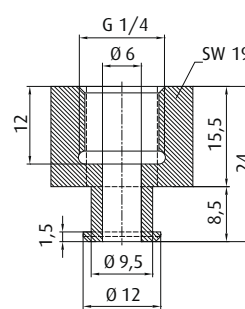
Technical Data

	Thread G1
Item no.	
270.116	G1/4-female



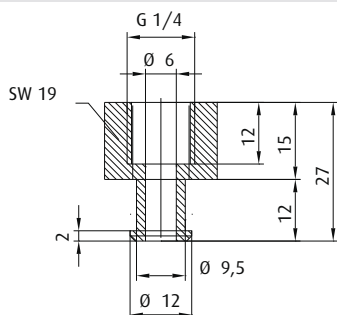
Technical Data

	Thread G1
Item no.	
270.275	G1/4-female



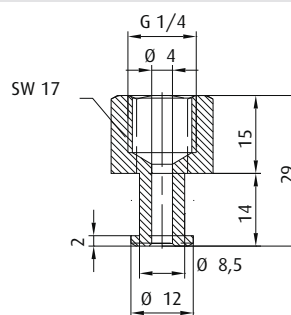
Technical Data

	Thread G1
Item no.	
270.038	G1/4-female



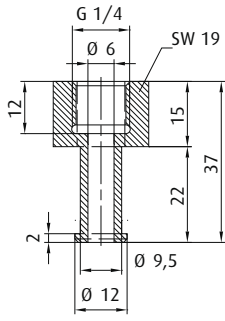
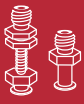
Technical Data

	Thread G1
Item no.	
270.324	G1/4-female



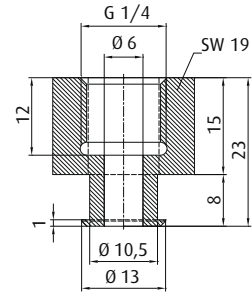
Technical Data

	Thread G1
Item no.	
270.192	G1/4-female



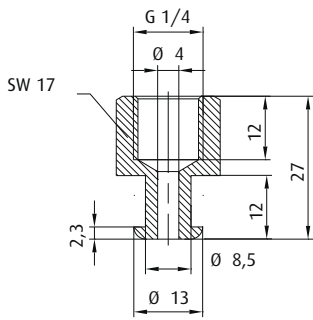
Technical Data

Item no.	Thread G1
270.361	G1/4-female



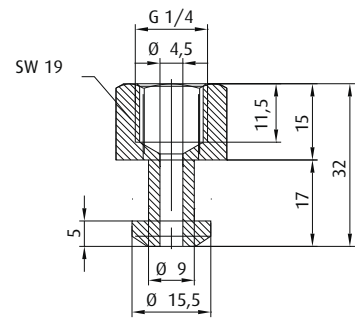
Technical Data

Item no.	Thread G1
270.356	G1/4-female



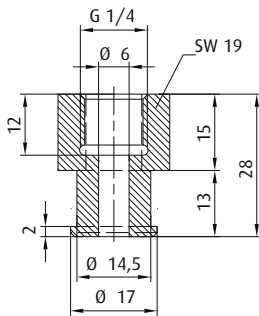
Technical Data

Item no.	Thread G1
270.248	G1/4-female



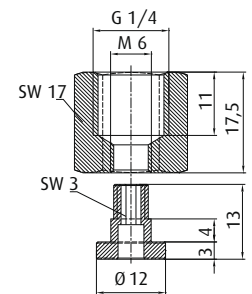
Technical Data

Item no.	Thread G1
270.282	G1/4-female



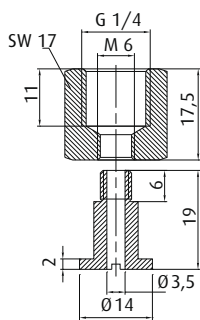
Technical Data

Item no.	Thread G1
270.358	G1/4-female



Technical Data

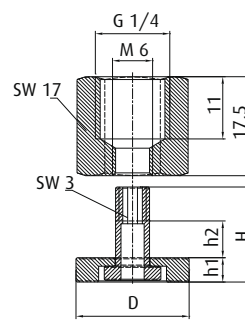
Item no.	Thread G1
270.484	G1/4-female



NEW

Technical Data

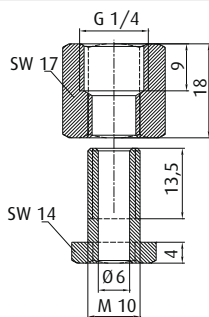
Item no.	Thread G1
270.539	G1/4-female



NEW

Technical Data

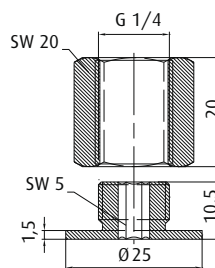
Item no.	Thread G1	H [mm]	h1 [mm]	h2 [mm]	Ø D [mm]
270.488	G1/4-female	17	5	6	15
270.492	G1/4-female	17	4,5	6,5	20



NEW

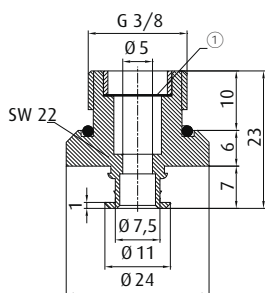
Technical Data

Item no.	Thread G1
270.513	G1/4-female



Technical Data

Item no.	Thread G1
270.182	G1/4-female



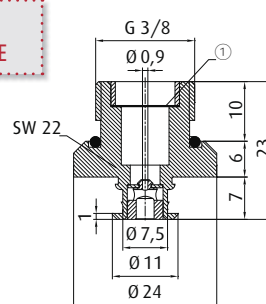
NEW

① = Filter screen

Technical Data

Item no.	Thread G1
270.505-S	G3/8-male

WITH FLOW CONTROL VALVE

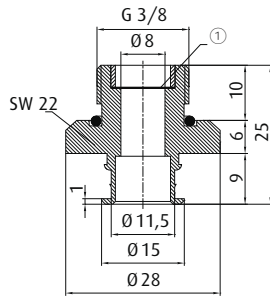
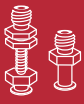


NEW

① = Filter screen

Technical Data

Item no.	Thread G1
270.505-SDRV	G3/8-male



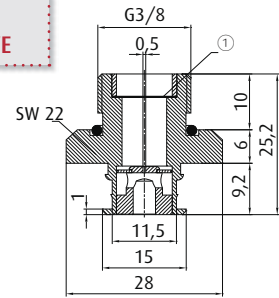
NEW

① = Filter screen

Technical Data

Item no.	Thread G1
270.507-S	G3/8-male

WITH FLOW CONTROL VALVE

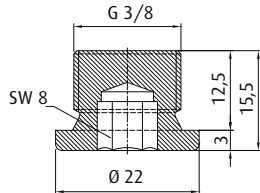


NEW

① = Filter screen

Technical Data

Item no.	Thread G1
270.507-SDRV	G3/8-male

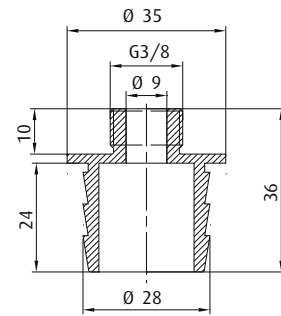


Technical Data

Item no.	Thread G1
270.326	G3/8-male

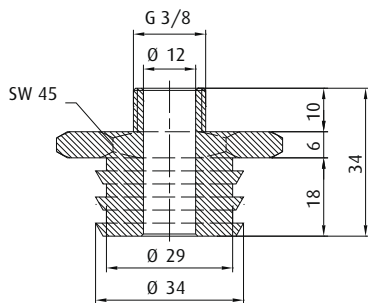
Ordering notes

Without drilling



Technical Data

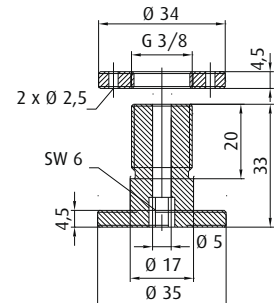
Item no.	Thread G1
270.442	G3/8-male



NEW

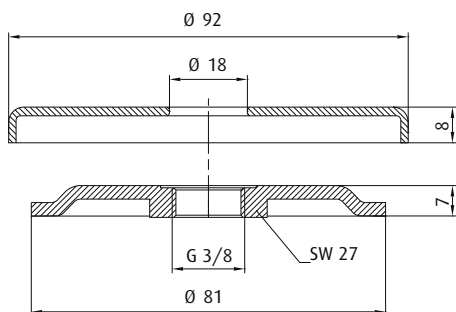
Technical Data

Item no.	Thread G1
270.526	G3/8-male



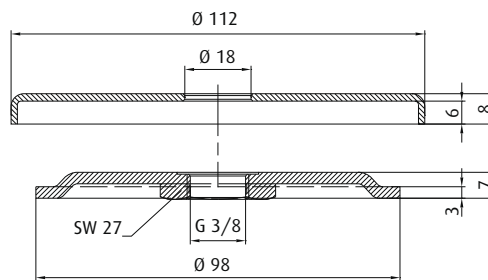
Technical Data

Item no.	Thread G1
270.054	G3/8-male



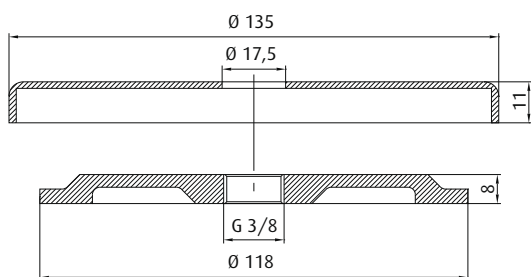
Technical Data

Item no.	Thread G1
270.400	G3/8-female



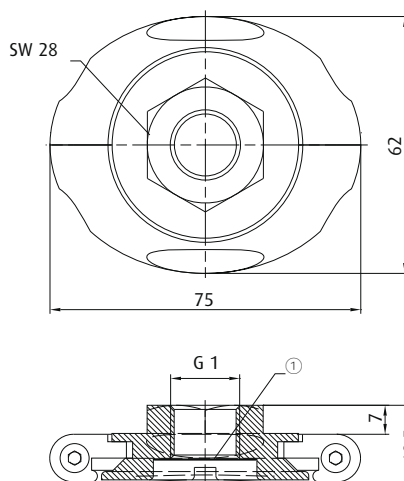
Technical Data

Item no.	Thread G1
270.402	G3/8-female



Technical Data

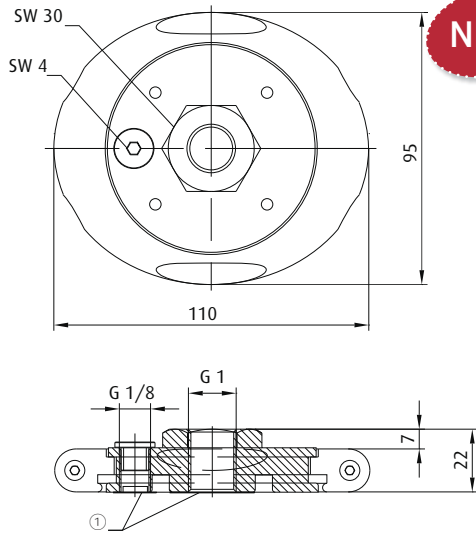
Item no.	Thread G1
270.404	G3/8-female



① = Filter screen

Technical Data

Item no.	Thread G1
270.528-S	G3/8-female
270.529-S	G1/2-female

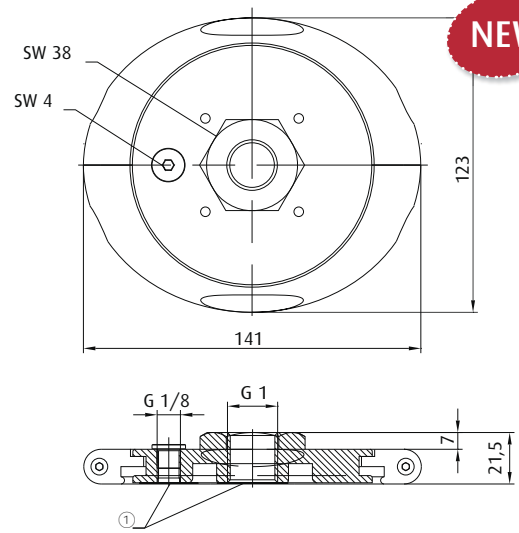


NEW

① = Filter screen

Technical Data

Item no.	Thread G1
270.530-S	G3/8-female
270.531-S	G1/2-female

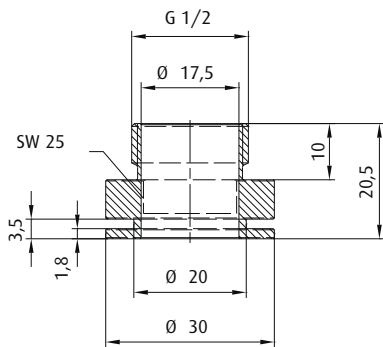


NEW

① = Filter screen

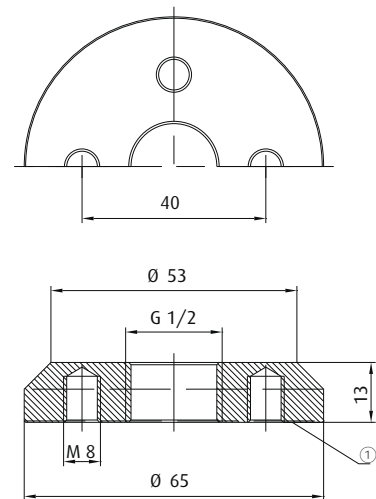
Technical Data

Item no.	Thread G1
270.532-S	G1/2-female
270.533-S	G3/4-female



Technical Data

Item no.	Thread G1
270.372	G1/2-male



① = Aluminum

Technical Data

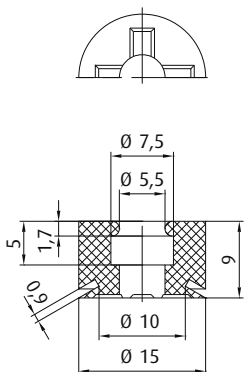
Item no.	Thread G1
270.056	G1/2-female

Ordering notes

4 x M8x16 screws included



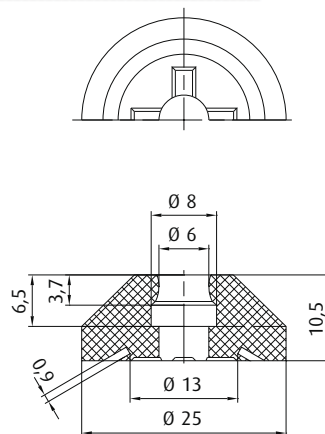
FITTING FOR SUCTION DISCS



Technical Data

Item no.	Thread G1	Material / color
270.067	Without	NBR (sw) 80° Shore

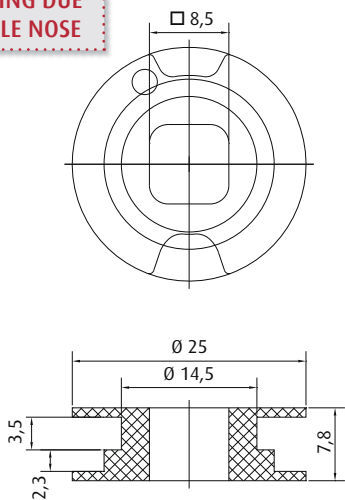
FITTING FOR SUCTION DISCS



Technical Data

Item no.	Thread G1	Material / color
270.068	Without	NBR (sw) 80° Shore

EASY MOUNTING DUE TO ABRADABLE NOSE



Technical Data

Item no.	Thread G1
270.419	Without

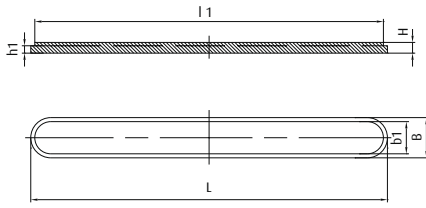
Ordering notes

Suitable mounting means: Item No. 90.007



Carrier plates SZ-NIP-T

NEW



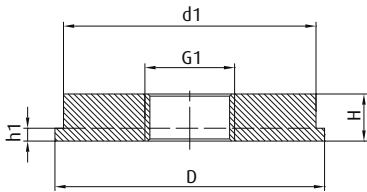
Technical Data

Item no.	Thread G1
270.332	Without

Dimensions

L [mm]	l1 [mm]	B [mm]	b1 [mm]	H [mm]	h1 [mm]
266	260	30	24	8	5,5

Carrier plates SZ-NIP-T



Technical Data

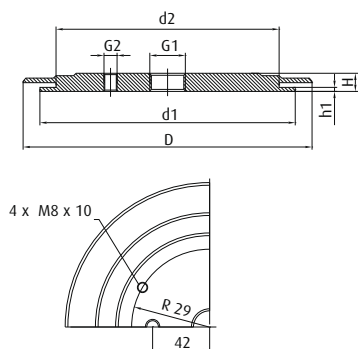
Item no.	Thread G1
270.233	G1/8-female
270.234	G1/8-female
270.235	G1/8-female
270.289	G1/8-female
270.179	G1/4-female
270.262	G1/8-female
270.284	G1/4-female
270.338	M12x1,75-female
270.180	G1/4-female
270.158	G1/8-female
270.264	G1/4-female
270.161	G3/8-female
270.286	G1/2-female
270.224	G1/4-female
270.167	G3/8-female
270.266	G1/2-female
270.164	G1/8-female
270.171	G1/4-female
270.173	G3/8-female
270.268	G1/2-female
270.335	G1/2-female

Dimensions

G1	H [mm]	h1 [mm]	Ø D [mm]	Ø d1 [mm]
G1/8	6	3,1	17,5	14,9
G1/8	6	3	21	17,5
G1/8	5,5	2,1	28,5	25
G1/8	10	3	29	20
G1/4	20	14,5	43	32
G1/8	10	3	44	40
G1/4	10	3	44	40
M12x1,75	10	3	55	45
G1/4	20	14	60	50
G1/8	11	3	63	59
G1/4	11	3	63	59
G3/8	11	3	63	59
G1/2	11	3	63	59
G1/4	11	3	92	88
G3/8	11	3	92	88
G1/2	11	3	92	88
G1/8	11	3	95	88
G1/4	15	4	127	120
G3/8	15	4	127	120
G1/2	15	4	127	120
G1/2	20	14	160	150



Carrier plates SZ-NIP-T



Technical Data

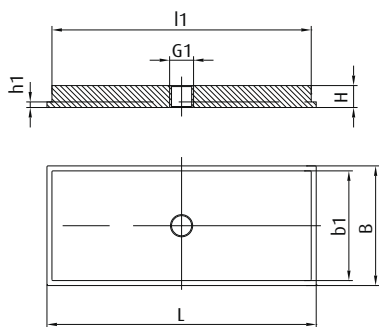
Item no.	Thread G1
270.070	G3/4-female
270.076	G3/4-female

Dimensions

G1	G2	H [mm]	h1 [mm]	Ø D [mm]	Ø d1 [mm]	Ø d2 [mm]
G3/4	G1/8	13,5	3	215	190	166
G3/4	G1/8	13,5	3	315	309	285

Carrier plates SZ-NIP-T

NEW



Technical Data

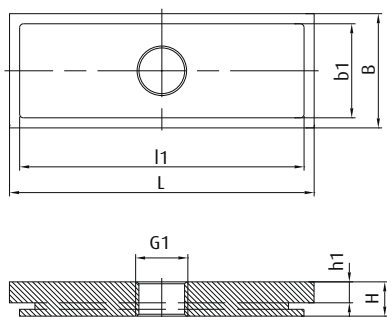
Item no.	Thread G1
270.465	M12-female

Dimensions

L [mm]	l1 [mm]	B [mm]	b1 [mm]	H [mm]	h1 [mm]
135	130	60	55	11	2,8

Carrier plates SZ-NIP-T

NEW



Technical Data

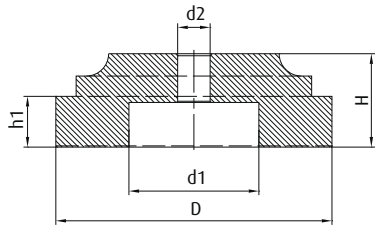
Item no.	Thread G1
270.508	G1/8-female
270.509	G1/4-female
270.392	G1/4-female
270.510	G1/4-female
270.511	G1/4-female

Dimensions

G1	L [mm]	l1 [mm]	B [mm]	b1 [mm]	H [mm]	h1 [mm]
G1/8	52	48	25	22	9	5,5
G1/4	60	56	29	25	9	5,5
G1/4	80	75	30	25	9	5,5
G1/4	80	75	40	35	9	5,5
G1/4	80	75	50	44	9	5,5



Carrier plates SZ-NIP-T



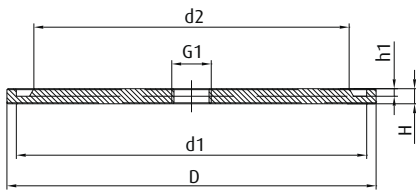
Technical Data

Item no.	Thread G1
270.270	Without
270.269	Without

Dimensions

H [mm]	h1 [mm]	Ø D [mm]	Ø d1 [mm]	Ø d2 [mm]
23	12,5	68	32	8
23	12	130	50	8

Carrier plates SZ-NIP-T



Technical Data

Item no.	Thread G1
270.415	Without
270.155	Without
270.236	G1/2-female
270.535	Without

Dimensions

H [mm]	h1 [mm]	Ø D [mm]	Ø d1 [mm]	Ø d2 [mm]	G1
8	4,8	95	86	62	--
8	4	158	148	123	--
8	4	196	186	167	G1/2
10	5	237	227	198	--



G threaded ball joints, Series SZ-GKG



Product Description

- > Universal articulating mount for vacuum cups
- > Version: Ball and socket with O-ring seal

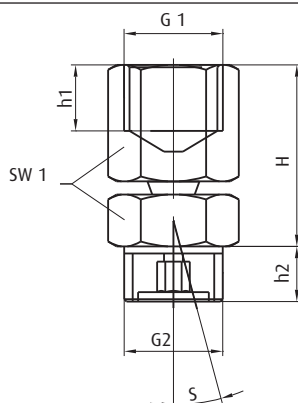
Advantage

- > Compensation for sloping surfaces of the product
- > Angle compensation for sagging products such as sheet goods

Technical Data

Item no.	Thread suction side G2	Thread at the machine G1	Pivoting range S [°]	Lifting force [N]	Weight [g]
270.072	G1/8-male	G1/8-female	2x15	300	26
270.073/1	G1/4-male	G1/4-female	2x15	1500	49
270.075	G1/2-male	G1/2-female	2x15	2500	116

Dimensions



Item no.	Ø dn [mm]	G1	G2	H [mm]	h1 [mm]	h2 [mm]	SW1	S [°]
270.072	2	G1/8	G1/8	25	8,5	7	14	2x15
270.073/1	3,5	G1/4	G1/4	37	11	10	19	2x15
270.075	4	G1/2	G1/2	38,5	14	11,5	24	2x15



Metric threaded ball joints, Series SZ-GKG



Product Description

- > Universal articulating mount for vacuum cups
- > Version: Ball and socket with O-ring seal

Advantage

- > Compensation for sloping surfaces of the product
- > Angle compensation for sagging products such as sheet goods

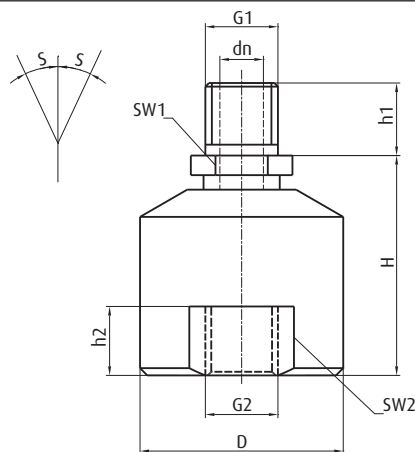
Ordering notes

Using a vacuum filter (e.g. 71.023-71.025) prevents disruptions due to contamination

Technical Data

Item no.	Thread suction side G2	Thread at the machine G1	Pivoting range S [°]	Weight [g]
270.185	M4-female	M4-male	2x15	9
270.186	M6-female	M6-male	2x15	20
270.187	M10-female	M10-male	2x15	58

Dimensions



Item no.	Ø D [mm]	Ø dn [mm]	G1	G2	H [mm]	h1 [mm]	h2 [mm]	SW1	SW2	S [°]
270.185	15	2	M4	M4	19	4	7	4	--	2x15
270.186	20	3	M6	M6	23	6	6,5	7	--	2x15
270.187	28	6	M10	M10	30	10	9,5	12	24	2x15



Rubber joints, Series SZ-GG



Product Description

- > Universal articulating mount for vacuum cups
- > Version: Rubber-metal connection with vacuum channel

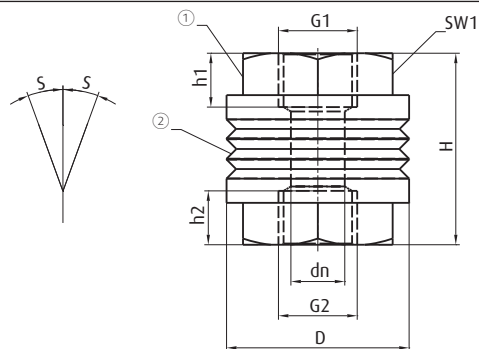
Advantage

- > Compensation for sloping surfaces of the product
- > Angle compensation for sagging products such as sheet goods
- > Automatic reset of the vacuum cup to normal position

Technical Data

Item no.	Thread suction side G2	Thread at the machine G1	Pivoting range S [°]	Lifting force [N]	Weight [g]
270.199	G1/4-female	G1/4-female	2x25	450	49
270.201	G1/4-female	G1/4-female	2x10	850	75
270.202	G3/8-female	G3/8-female	2x10	850	63
270.203	G1/2-male	G1/2-female	2x12	3000	100

Dimensions



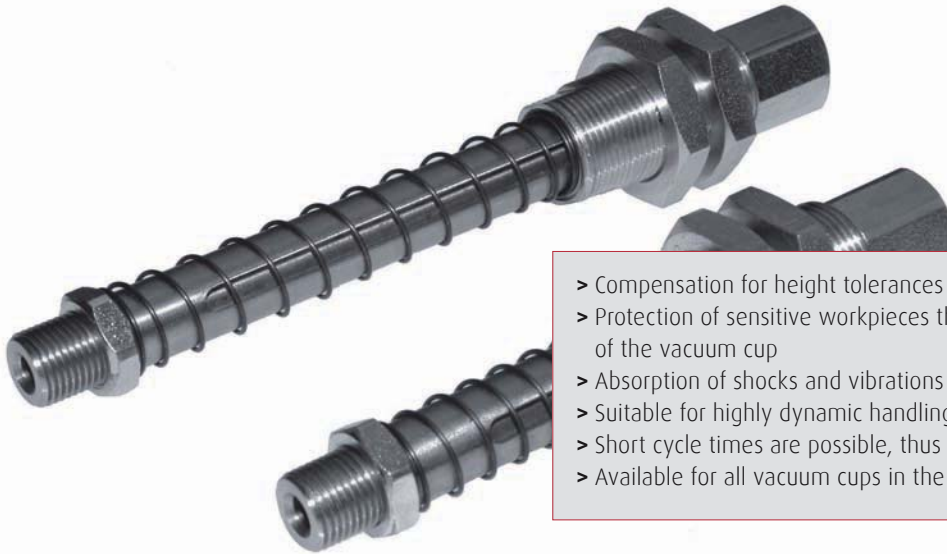
① = Brass/steel

② = Rubber

Item no.	Ø D [mm]	Ø dn [mm]	G1	G2	H [mm]	h1 [mm]	h2 [mm]	SW1	S [°]
270.199	30	5	G1/4	G1/4	46	8	8	17	2x25
270.201	30,5	9	G1/4	G1/4	32	9	9	25	2x10
270.202	30,5	11	G3/8	G3/8	32	9	9	25	2x10
270.203	--	6	G1/2	G1/2	33,5	14	14	27	2x12



FIPA spring plungers



- > Compensation for height tolerances of workpieces
- > Protection of sensitive workpieces thanks to cushioned contact of the vacuum cup
- > Absorption of shocks and vibrations
- > Suitable for highly dynamic handling applications
- > Short cycle times are possible, thus very high efficiency
- > Available for all vacuum cups in the standard range



Spring plungers with internal spring and threaded connection, Series SZ-NIV-I

- > Spring is protected from contamination and damage
- > Spring deflection limiter for longer service life

> For more information, see page 485



Standard spring plungers with threaded connection, Series SZ-NIV-S

- > Universally applicable
- > Also optionally available non-rotating

> For more information, see page 486



Heavy-duty spring plungers with threaded connection, Series SZ-NIV-HD

- > Suitable for harsh operating conditions
- > Leveling with stainless steel shaft and high-quality bearings
- > Also optionally available non-rotating

> For more information, see page 488



Spring plungers with threaded connection

- > Universally applicable
- > Large selection of connection threads available

> More information from page 490



Spring plungers for direct mounting of vacuum cups – Series SZ-NIV-DI and -DA

- > Mounting directly on the vacuum cup without additional fitting
- > Variants with internal or open spring available
- > Rotation-protected models available
- > Models available with spring deflection limit

> More information from page 494



Spring plungers with internal spring and threaded connection Series SZ-NIV-I

BESTSELLER



Product Description

Leveling with internal spring protected from dirt and with spring deflection limiter. Vacuum connection on top. Vacuum channel via plunger rod.

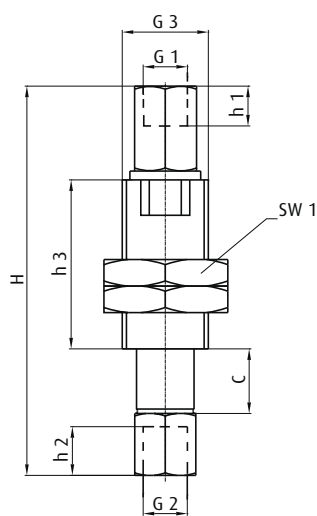
Advantage

- > Compensate for height differences
- > Soft attachment for sensitive products
- > Protected spring

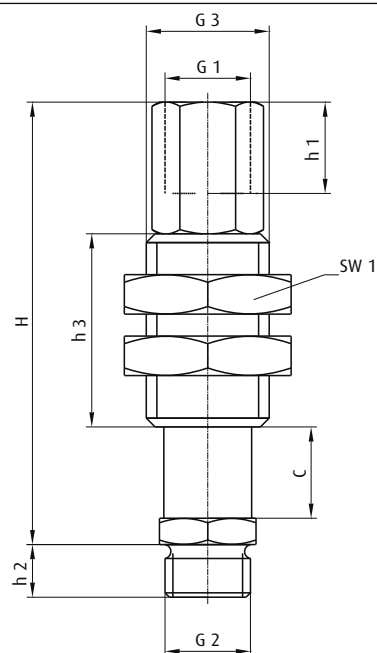
Technical Data

Item no.	Model	Thread suction side G2	Lift C [mm]	Weight [g]
50.120	SZ-NIV-I-M5-IG-7	M5-female	7	17
50.123	SZ-NIV-I-G1/8-AG-8	G1/8-male	8	41
50.124	SZ-NIV-I-G1/8-AG-20	G1/8-male	20	73

Dimensions

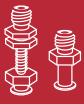


50.120



50.123 | 50.124

Item no.	H [mm]	h1 [mm]	h2 [mm]	h3 [mm]	SW1	G1 (female)	G2 (female)	G2 (male)	G3 (male)	C [mm]
50.120	44	4,3	5	19	14	M5	M5	--	G1/8	7
50.123	50	10	6	22	19	G1/8	--	G1/8	M14x1,5	8
50.124	73	12	5,6	35	21	G1/8	--	G1/8	M16x1	20



Standard spring plungers with threaded connection Series SZ-NIV-S



Product Description

Leveling as standard version.
Optionally also available non-rotating.
Vacuum connection on top. Vacuum channel via spring plungers.

Advantage

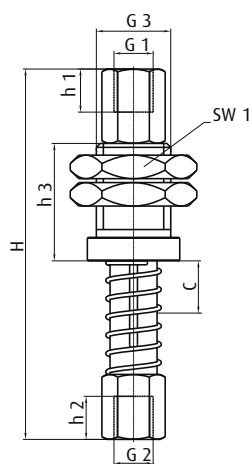
- > Compensate for height differences
- > Soft attachment for sensitive products

Technical Data

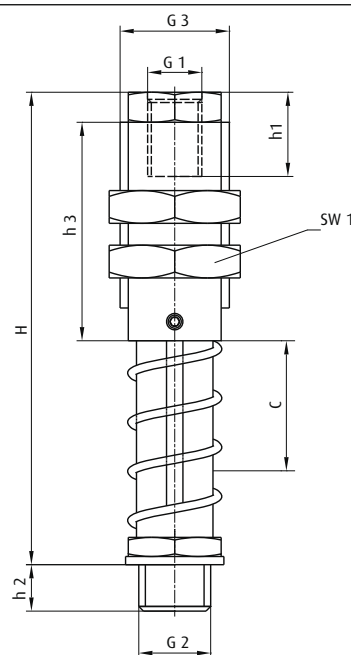
Item no.	Model	Thread suction side G2	Lift C [mm]	Weight [g]	Non-rotating
50.158	SZ-NIV-S-M5-IG-5	M5-female	5	17	--
50.149	SZ-NIV-S-M5-IG-10	M5-female	10	18	--
50.152	SZ-NIV-S-M5-IG-10-VS	M5-female	10	19	Yes
50.150	SZ-NIV-S-M5-IG-20	M5-female	20	20	--
50.153	SZ-NIV-S-M5-IG-20-VS	M5-female	20	21	Yes
50.230	SZ-NIV-S-G1/8-AG-15	G1/8-male	15	94	--
50.161	SZ-NIV-S-G1/8-AG-15-VS	G1/8-male	15	85	Yes
50.160	SZ-NIV-S-G1/8-AG-25	G1/8-male	25	94	--
50.162	SZ-NIV-S-G1/8-AG-50	G1/8-male	50	110	--
50.231	SZ-NIV-S-G1/8-AG-50-VS	G1/8-male	50	110	Yes
50.164	SZ-NIV-S-G1/4-AG-25	G1/4-male	25	136	--
50.232	SZ-NIV-S-G1/4-AG-25-VS	G1/4-male	25	94	Yes
50.166	SZ-NIV-S-G1/4-AG-75	G1/4-male	75	195	--
50.233	SZ-NIV-S-G1/4-AG-75-VS	G1/4-male	75	202	Yes



Dimensions



50.158 | 50.149 | 50.152 | 50.150 | 50.153

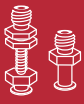


50.230 | 50.161 | 50.160 | 50.162 | 50.231
50.164 | 50.232 | 50.166 | 50.233

Item no.	H [mm]	h1 [mm]	h2 [mm]	h3 [mm]	SW1	G1 (female)	G2 (male)	G2 (female)	G3 (male)	C [mm]
50.158	43	5,5	6,2	15	14	M5	--	M5	G1/8	5
50.149	47	5,5	6,2	15	14	M5	--	M5	G1/8	10
50.152	47	5,5	6,2	15	14	M5	--	M5	G1/8	10
50.150	59	5,5	6,2	15	14	M5	--	M5	G1/8	20
50.153	59	5,5	6,2	15	14	M5	--	M5	G1/8	20
50.230	73,5	8	6,5	30	22	G1/8	G1/8	--	M16x1	15
50.161	73,5	8	6,5	30	22	G1/8	G1/8	--	M16x1	15
50.160	85	8,5	6,5	30	22	G1/8	G1/8	--	M16x1	25
50.162	118	8,5	6,5	30	22	G1/8	G1/8	--	M16x1	50
50.231	118	8,5	6,5	30	22	G1/8	G1/8	--	M16x1	50
50.164	86	13	9	40	24	G1/8	G1/4	--	M20x1,5	25
50.232	86	13	9	40	24	G1/8	G1/4	--	M20x1,5	25
50.166	145	13	9	40	24	G1/8	G1/4	--	M20x1,5	75
50.233	145	13	9	40	24	G1/8	G1/4	--	M20x1,5	75

Note

Recommendation: For the best possible service life do not exceed max. lift indicated.



Heavy-duty spring plungers with threaded fitting Series SZ-NIV-HD

NEW

HEAVY-DUTY DESIGN



Product Description

Leveling with stainless steel shaft and high-quality bearings. Optionally also available non-rotating.
Vacuum connection on top. Vacuum channel via spring plunger.

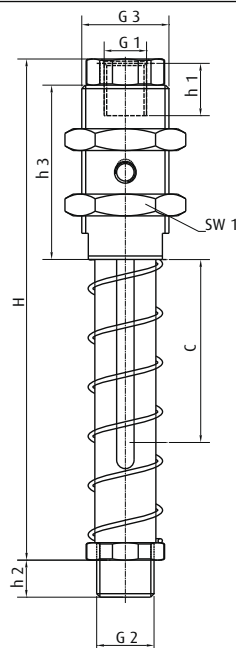
Advantage

- > Long life even under the toughest conditions
- > Compensate for height differences
- > Soft attachment for sensitive products

Technical Data

Item no.	Model	Thread suction side G2	Lift C [mm]	Weight [g / oz]	Non-rotating
50.315	SZ-NIV-HD-G1/8-AG-15	G1/8-male	15	83 / 2,9	--
50.310	SZ-NIV-HD-G1/8-AG-15-VS	G1/8-male	15	83 / 2,9	Yes
50.316	SZ-NIV-HD-G1/8-AG-25	G1/8-male	25	89 / 3,1	--
50.311	SZ-NIV-HD-G1/8-AG-25-VS	G1/8-male	25	89 / 3,1	Yes
50.317	SZ-NIV-HD-G1/8-AG-50	G1/8-male	50	104 / 3,7	--
50.312	SZ-NIV-HD-G1/8-AG-50-VS	G1/8-male	50	104 / 3,7	Yes
50.345	SZ-NIV-HD-G1/4-AG-25	G1/4-male	25	134 / 4,7	--
50.340	SZ-NIV-HD-G1/4-AG-25-VS	G1/4-male	25	134 / 4,7	Yes
50.346	SZ-NIV-HD-G1/4-AG-50	G1/4-male	50	160 / 5,6	--
50.341	SZ-NIV-HD-G1/4-AG-50-VS	G1/4-male	50	160 / 5,6	Yes
50.347	SZ-NIV-HD-G1/4-AG-75	G1/4-male	75	186 / 6,6	--
50.342	SZ-NIV-HD-G1/4-AG-75-VS	G1/4-male	75	186 / 6,6	Yes

Dimensions

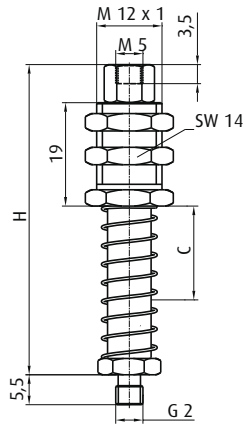
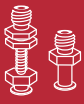




Item no.	C [mm]	H [mm]	h1 [mm]	h2 [mm]	h3 [mm]	SW1	G1 (female)	G2 (male)	G3 (male)
50.315	15	72	8	8	30	22	G1/8	G1/8	M16x1
50.310	15	72	8	8	30	22	G1/8	G1/8	M16x1
50.316	25	85	8	8	30	22	G1/8	G1/8	M16x1
50.311	25	85	8	8	30	22	G1/8	G1/8	M16x1
50.317	50	116	8	8	30	22	G1/8	G1/8	M16x1
50.312	50	116	8	8	30	22	G1/8	G1/8	M16x1
50.345	25	85,5	12	8,5	40	24	G1/8	G1/4	M20x1,5
50.340	25	85,5	12	8,5	40	24	G1/8	G1/4	M20x1,5
50.346	50	115	12	8,5	40	24	G1/8	G1/4	M20x1,5
50.341	50	115	12	8,5	40	24	G1/8	G1/4	M20x1,5
50.347	75	144,5	12	8,5	40	24	G1/8	G1/4	M20x1,5
50.342	75	144,5	12	8,5	40	24	G1/8	G1/4	M20x1,5

Note

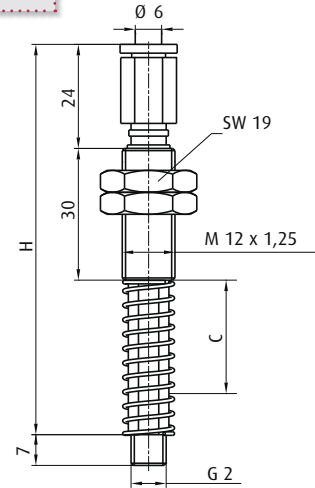
Recommendation: For the best possible service life do not exceed max. lift indicated.



Technical Data

Item no.	Thread suction side G2	Lift C [mm]	Weight [g]	H [mm]
50.121	M5-male	10	28	47
50.122	M5-male	20	31	57

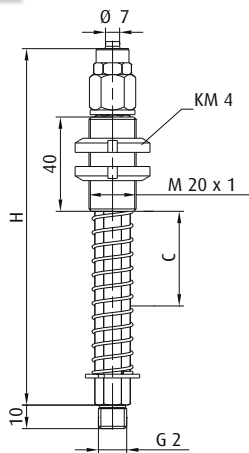
NON-ROTATING



Technical Data

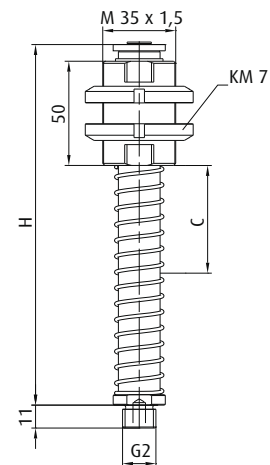
Item no.	Thread suction side G2	Lift C [mm]	Non-rotating	Weight [g]	H [mm]
50.054	M8-male	25	Yes	83	89

NON-ROTATING



Technical Data

Item no.	Thread suction side G2	Lift C [mm]	Non-rotating	Weight [g]	H [mm]
50.051	M12-male	15	Yes	196	115
50.052	M12-male	50	Yes	236	151
50.053	M12-male	73	Yes	268	183



Technical Data

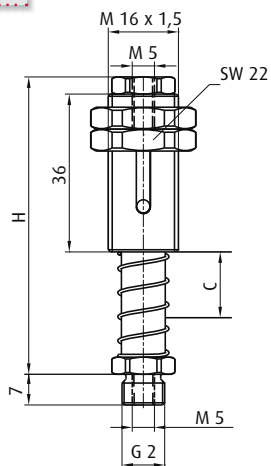
Item no.	Thread suction side G2	Lift C [mm]	Weight [g]	H [mm]
50.101	M16-male	35	685	115
50.102	M16-male	80	798	173

Note

Without vacuum connection



NON-ROTATING



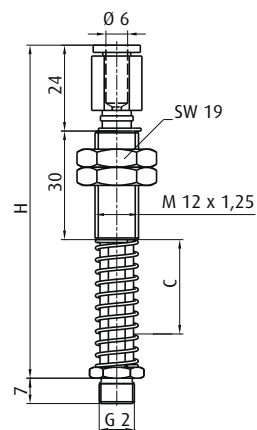
Technical Data

Item no.	Thread suction side G2	Lift C [mm]	Non-rotating	Weight [g]	H [mm]
50.066	G1/8-male	15	Yes	70	68

Note

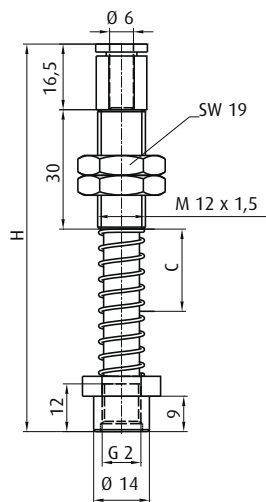
with plastic slide bearings

NON-ROTATING



Technical Data

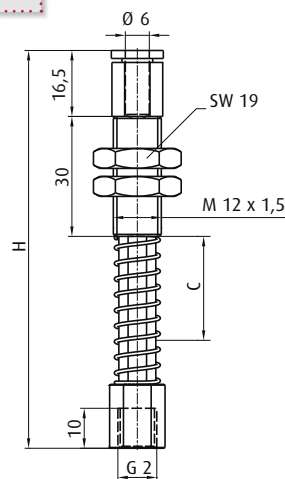
Item no.	Thread suction side G2	Lift C [mm]	Non-rotating	Weight [g]	H [mm]
50.055	G1/8-male	25	Yes	64	92



Technical Data

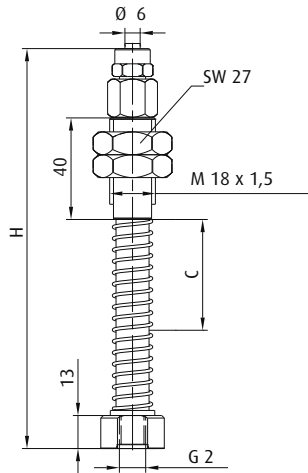
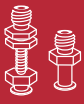
Item no.	Thread suction side G2	Lift C [mm]	Weight [g]	H [mm]
50.021	G1/8-female	25	75	98

NON-ROTATING



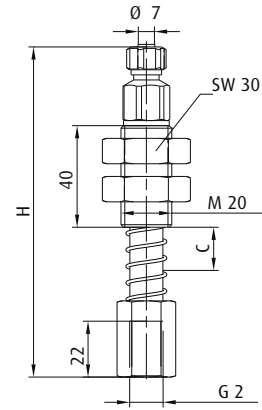
Technical Data

Item no.	Thread suction side G2	Lift C [mm]	Non-rotating	Weight [g]	H [mm]
50.056	G1/8-female	25	Yes	63	100



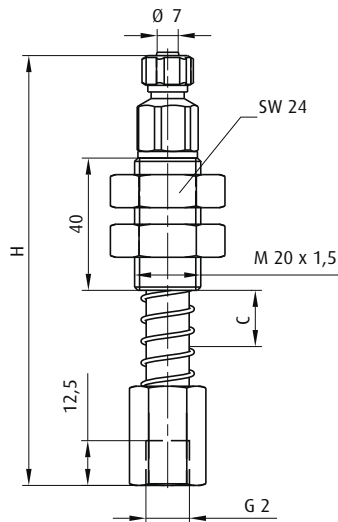
Technical Data

Item no.	Thread suction side G2	Lift C [mm]	Weight [g]	H [mm]
50.028	G1/8-female	25	240	119
50.029	G1/8-female	50	280	157
50.030	G1/8-female	75	310	194



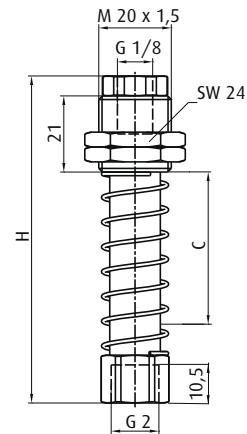
Technical Data

Item no.	Thread suction side G2	Lift C [mm]	Weight [g]	H [mm]
50.105	G1/4-female	15	245	130
50.107	G1/4-female	70	318	195



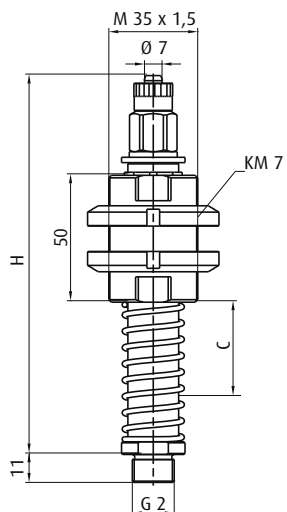
Technical Data

Item no.	Thread suction side G2	Lift C [mm]	Weight [g]	H [mm]
50.106	G1/4-female	45	250	167



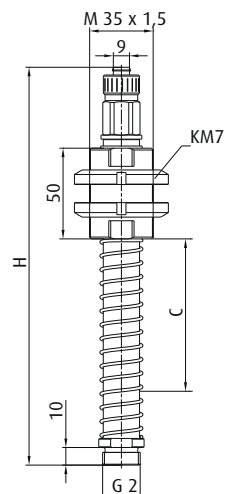
Technical Data

Item no.	Thread suction side G2	Lift C [mm]	Weight [g]	H [mm]
50.050	G1/4-female	42	122	90



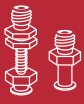
Technical Data

Item no.	Thread suction side G2	Lift C [mm]	Weight [g]	H [mm]
50.092	G3/8-male	35	638	150



Technical Data

Item no.	Thread suction side G2	Lift C [mm]	Weight [g]	H [mm]
50.138	G1/2-male	35	631	150
50.139	G1/2-male	80	750	210



Spring plungers for direct vacuum cup mounting – internal spring, Series SZ-NIV-DI



Product Description

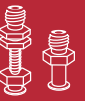
Leveling with internal spring protected from dirt and with spring deflection limiter.
Vacuum cup is plugged directly onto the spring plunger.
Vacuum connection on top. Vacuum channel via spring plunger.

Advantage

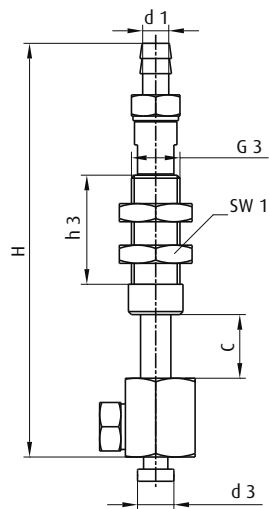
- > Compensate for height differences
- > Soft attachment for sensitive products
- > Direct mounting on the vacuum cup – no additional fitting required
- > Protected spring

Technical Data

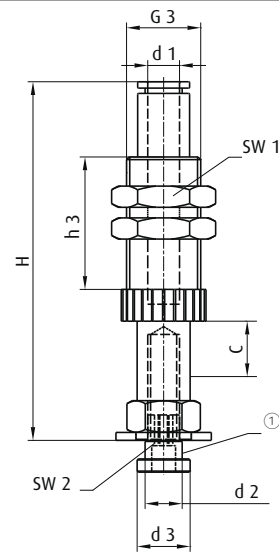
Item no.	Lift C [mm]	Weight [g]	Non-rotating	Hose outside Ø [mm]
Internal spring				
50.330	10	19	--	--
50.103	6	34	Yes	6
50.104	6	33	Yes	4
50.125	10	36	Yes	6
50.126	15	41	Yes	6
50.127	20	48	Yes	6
50.085	6	36	Yes	6
50.086	6	36	Yes	4
50.128	10	36	Yes	6
50.129	15	41	Yes	6
50.130	20	48	Yes	6
With plastic body and internal spring				
50.018	8,5	21	--	4
50.019	8,5	22	--	6
50.020	8,5	23	--	6



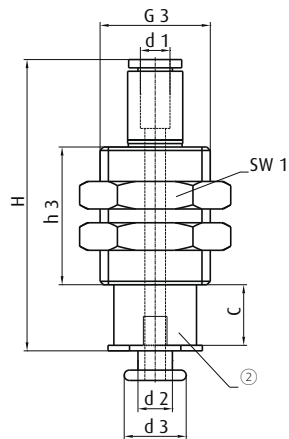
Dimensions



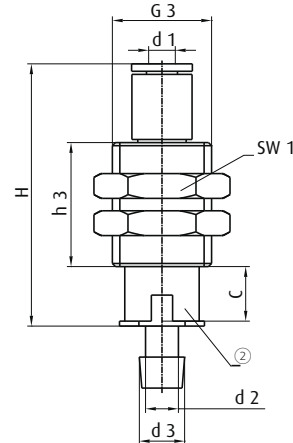
50.330



50.103 | 50.104 | 50.125 | 50.126 | 50.127
50.085 | 50.086 | 50.128 | 50.129 | 50.130



50.018 | 50.019

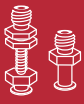


50.020

① = Mounting screw

② = Plastic body

Item no.	Ø d1 [mm]	Ø d2 [mm]	Ø d3 [mm]	G3	H [mm]	h3 [mm]	SW1	SW2	C [mm]
50.330	4,3	--	6	M8x0,75	68	18	12	--	10
50.103	6	M4	6,3	M14x1	52	20	17	+	6
50.104	4	M4	6,3	M14x1	52	20	17	+	6
50.125	6	5	6	M14x1	56	20	17	3	10
50.126	6	5	6	M14x1	67	25	17	3	15
50.127	6	5	6	M14x1	83	34	17	3	20
50.085	6	7	10	M14x1	52	20	17	3	6
50.086	4	7	10	M14x1	52	20	17	3	6
50.128	6	7	10	M14x1	58	20	17	3	10
50.129	6	7	10	M14x1	68	25	17	3	15
50.130	6	7	10	M14x1	83	34	17	3	20
50.018	4	5	9	M16x1	45	20	19	--	8,5
50.019	6	5	9	M16x1	46,5	20	19	--	8,5
50.020	6	5	7,3	M16x1	42,5	20	19	--	8,5



Spring plungers for direct vacuum cup mounting – spring open, Series SZ-NIV-DA



Product Description

Leveling with an open spring. Vacuum cup is plugged directly onto the spring plunger.

Advantage

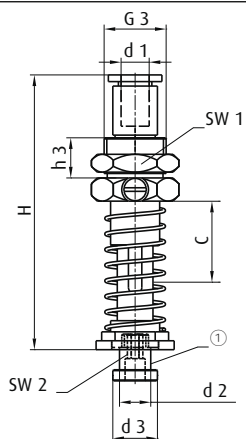
- > Compensate for height differences
- > Soft attachment for sensitive products
- > Direct mounting on the vacuum cup – no additional fitting required

Technical Data

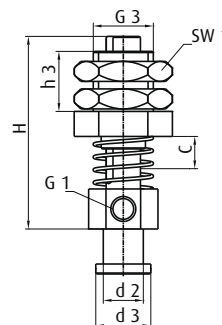
Item no.	Lift C [mm]	Non-rotating	Hose outside Ø [mm]	Weight [g]
Spring open, with deflection limiter and protection against rotation.				
50.095	20	Yes	6	51
50.096	30	Yes	6	57
50.097	40	Yes	6	62
50.098	50	Yes	6	67
50.170	20	Yes	6	51
50.171	30	Yes	6	57
50.172	40	Yes	6	62
50.173	50	Yes	6	67
50.174	20	Yes	6	51
50.175	30	Yes	6	57
50.176	40	Yes	6	62
50.177	50	Yes	6	67
Open spring standard.				
50.141	10	--	--	12
50.005	5	--	--	23
50.148	5	Yes	--	19
50.145	10	--	--	39
50.146	30	--	--	46
50.037	25	--	--	69
50.039	25	--	--	71
50.041	25	--	--	74



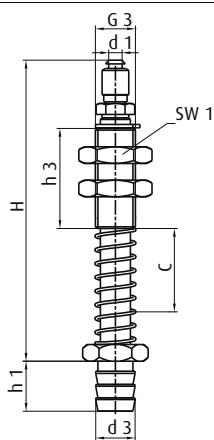
Dimensions



50.095 | 50.096 | 50.097 | 50.098 | 50.170 | 50.171
50.172 | 50.173 | 50.174 | 50.175 | 50.176 | 50.177



50.141 | 50.005 | 50.148 | 50.145 | 50.146



50.037 | 50.039 | 50.041

① = Mounting screw M6

Item no.	Ø d1 [mm]	Ø d2 [mm]	Ø d3 [mm]	G1	G3	H [mm]	h1 [mm]	h3 [mm]	SW1	SW2	C [mm]
50.095	6	7	10	--	M14x1	61	--	9	17	3	20
50.096	6	7	10	--	M14x1	75	--	9	17	3	30
50.097	6	7	10	--	M14x1	87	--	9	17	3	40
50.098	6	7	10	--	M14x1	100	--	9	17	3	50
50.170	6	6	15	--	M14x1	61	--	9	17	3	20
50.171	6	6	15	--	M14x1	75	--	9	17	3	30
50.172	6	6	15	--	M14x1	87	--	9	17	3	40
50.173	6	6	15	--	M14x1	100	--	9	17	3	50
50.174	6	6	20	--	M14x1	61	--	9	17	3	20
50.175	6	6	20	--	M14x1	75	--	9	17	3	30
50.176	6	6	20	--	M14x1	87	--	9	17	3	40
50.177	6	6	20	--	M14x1	100	--	9	17	3	50
50.141	--	5	7	M5	M10x1	40	--	12	14	--	8
50.005	--	8	11	M5	M12	43	--	16	19	--	5
50.148	--	8	11	M5	M12	40	--	12	17	--	5
50.145	--	8	11	M5	M12	44	--	15	17	--	10
50.146	--	8	11	M5	M12	65	--	15	17	--	30
50.037	4	--	5,5	--	M12x1,5	89	7	30	19	--	25
50.039	4	--	7,5	--	M12x1,25	89	10	30	19	--	25
50.041	4	--	12	--	M12x1,25	89	15	30	19	--	25