VSNG

Suspensions pour ventouses

- Les suspensions (ou buffer, ou compensateurs de niveau) sont employées pour maintenir en position les ventouses durant l'approche du robot.
- Gimatic propose une gamme spécialement conçue pour les applications plastiques.
- Elles sont généralement montées sur des effecteurs de robot (EOAT) avec les étriers MFI.

Vacuum cup suspensions

- *The suspensions (or buffers, or level compensators) are used to keep the suction cups in position as the robot approaches.*
- *Gimatic offers a range specifically designed for Plastics applications.*
- *They are typically mounted on EOATs (End Of Arm Toolings) with MFI brackets.*

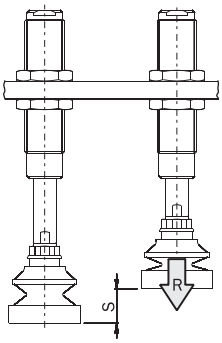
Force de réaction

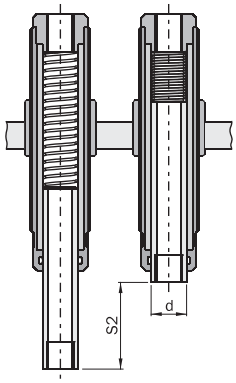
La force de réaction dépend de la compression (S) du ressort interne. Elle dépend aussi du diamètre du piston (d) et de la pression d'utilisation (p) dans le cas des suspensions télescopiques.
Utiliser la formule suivante pour le calcul.

Reaction force

The reaction force depends on the compression (S) of the internal spring. And also on the piston diameter (d) and operation pressure (p), in the case of telescopic suspensions.
Use the following formula for calculation.

$$R = R1 + K \cdot S + d^2 \cdot \frac{\pi}{40} \cdot p$$





R [N]	Force de réaction *Reaction force*
R1 [N]	Force du ressort au début de la course *Spring force at the beginning*
K [N/mm]	Elasticité constante du ressort *Spring rate*
S [mm]	Course effectuée *Compression stroke*
d [mm]	Alésage *Piston bore*
p [bar]	Pression *Pressure*
R2 [N]	Force du ressort à la fin de la course *Spring force at the end-stroke*
S2 [mm]	Course maximum *Maximum stroke*
m [g]	Poids *Weight*


VSL


VSC


VSR


VSRT


VSE


VSET


VVX


VSRTG


VSNG


VSNTG


VSS


VSD


VSNF

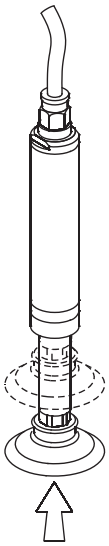

VSNTF


VSRF


VSRTF

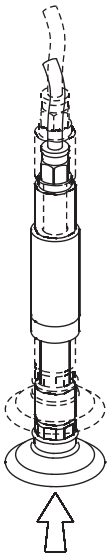
Suspensions télescopiques
Telescopic suspensions

VSC
VSL
VSS



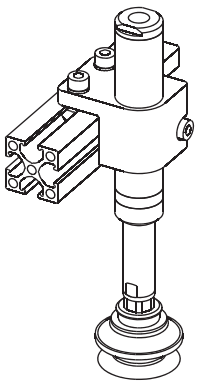
Suspensions à tige traversante
Through rod suspensions

VSR
VSRT
VSN
VSNT
VSE
VSET
VVX
VSRTG
VSNG
VSNTG
VSD



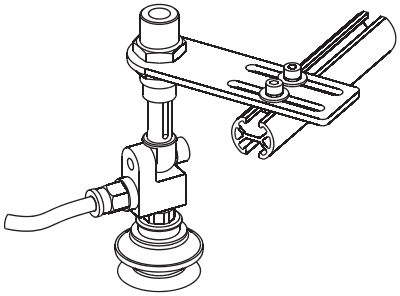
Suspensions avec corps lisse
Suspensions with smooth body

VSL
VSS
VSR
VSN
VSE
VVX
VSNG
VSD
VSNF
VSRF



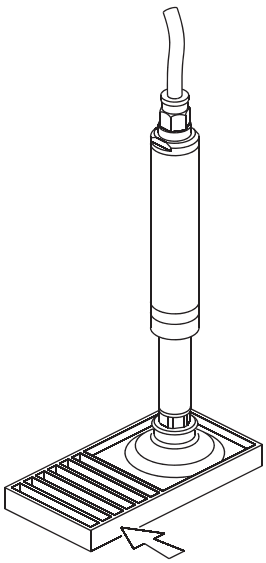
Suspensions avec corps taraudé
Suspensions with threaded body

VSC
VSRT
VSNT
VSET
VSRTG
VSNTG
VSNTF
VSRTF



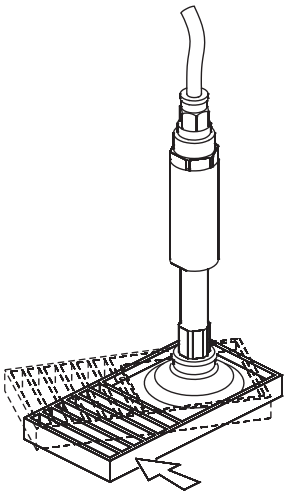
Suspensions anti-rotation
Non-rotative suspensions

VSC
VSL
VSN
VSNT
VSE
VSET
VVX
VSNG
VSNTG
VSD
VSNF
VSNTF



Suspensions rotatives
Rotative suspensions

VSS
VSR
VSRT
VSRTG
VSRF
VSRTF



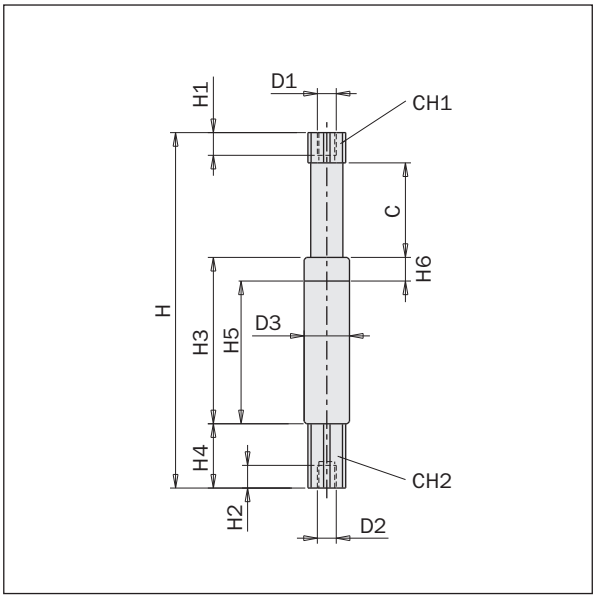
VSNG

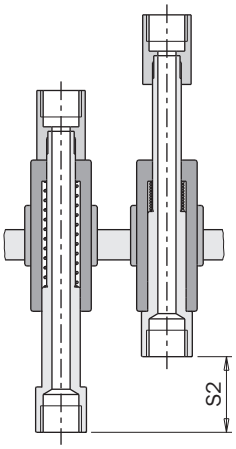
Suspensions anti-rotation avec corps lisse

- Corps et tige en aluminium anodisé.
- Ressort en acier inoxydable.
- Tige anti-rotation avec capacité élevée de charge.
- Pression d'utilisation: -1 ÷ 8 bar.
- Graisse alimentaire FDA-H1.

Smooth-body non-rotative telescopic suspensions

- *Body and rod in anodized aluminum.*
- *Spring in stainless steel.*
- *Non-rotative rod with high load capability.*
- *Pressure range: -1 ÷ 8 bar.*
- *FDA-H1 food-grade grease.*







		NEW VSNG1010	NEW VSNG1025	NEW VSNG1210	NEW VSNG1225	NEW VSNG1420	NEW VSNG1435	NEW VSNG1620	NEW VSNG1635	NEW VSNG2025F18	NEW VSNG2025F14	NEW VSNG2050F18	NEW VSNG2050F14	NEW VSNG2540	NEW VSNG2580
H	[mm]	56	90.5	64.5	98.4	107	142	107	142	126	126	183.5	183.5	173	263
H1	[mm]	5	5	5.5	5.5	7	7	7	7	10	10	10	10	11	11
H2	[mm]	5	5	5.5	5.5	7	7	7	7	10	10	10	10	11	11
H3	[mm]	24.5	44	30	49	52	72	52	72	58	58	90.5	90.5	90	140
H4	[mm]	13.5	13.5	16.7	16.6	22	22	22	22	28	28	28	28	28	28
H5	[mm]	18.3	36.8	22.8	41.8	38.4	58.6	38.6	58.6	44.3	44.3	76.8	76.8	74.3	124.3
H6	[mm]	6.2*	7.2	7.2	7.2	13.6	13.4	13.4	13.4	13.7	13.7	13.7	13.7	15.7*	15.7*
D1		M5	M5	M5	M5	G1/8"	G1/8"	G1/8"	G1/8"	G1/8"	G1/4"	G1/8"	G1/4"	G3/8"	G3/8"
D2		M5	M5	M5	M5	G1/8"	G1/8"	G1/8"	G1/8"	G1/8"	G1/4"	G1/8"	G1/4"	G3/8"	G3/8"
D3	[mm]	Ø10	Ø10	Ø12	Ø12	Ø14	Ø14	Ø16	Ø16	Ø20	Ø20	Ø20	Ø20	Ø25	Ø25
CH1	[mm]	8	8	10	10	12	12	12	12	16	16	16	16	22	22
CH2	[mm]	8	8	10	10	12	12	12	12	16	16	16	16	22	22
C	[mm]	10	25	10	25	20	35	20	35	25	25	50	50	40	80
S2	[mm]	10	25	10	25	20	35	20	35	25	25	50	50	40	80
d	[mm]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
K	[N/mm]	0.213	0.085	0.277	0.108	0.268	0.15	0.252	0.137	0.275	0.258	0.141	0.129	0.230	0.119
R1	[N]	1.49	1.575	1.938	2.112	3.617	4.267	3.650	4.325	4.131	4.388	4.308	4.452	6.082	6.005
R2	[N]	3.619	3.704	4.706	4.820	8.975	9.507	8.685	9.132	11.02	10.84	11.37	10.90	15.26	15.52
m	[g]	7.6 g	12 g	14 g	20 g	30 g	38 g	35.5 g	47 g	67.5 g	64 g	96 g	93 g	148 g	220 g

*Non fixable
**Non-clampable*