VSNTG

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.*

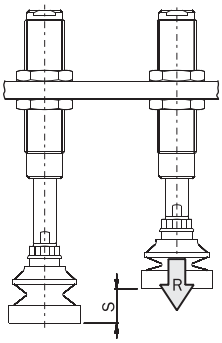
Force de réaction

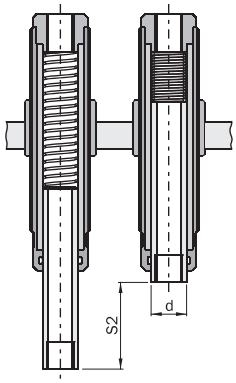
La force de réaction dépend de la compression (S) du ressort interne. Elle dépend aussi du diamètre du piston (d) et de la pression d'utilisation (p) dans le cas des suspensions télescopiques.
Utiliser la formule suivante pour le calcul.

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*



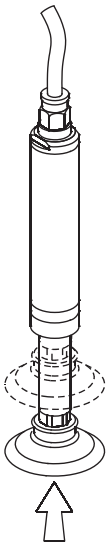
VSL **VSC** **VSR** **VSRT** **VSE** **VSET** **VVX** **VSRTG**



VSNG **VSNTG** **VSS** **VSD** **VSNF** **VSNTF** **VSRF** **VSRTF**

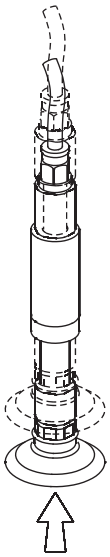
Suspensions télescopiques
Telescopic suspensions

VSC
VSL
VSS



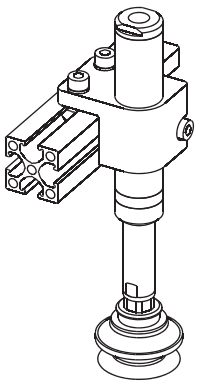
Suspensions à tige traversante
Through rod suspensions

VSR
VSRT
VSN
VSNT
VSE
VSET
VVX
VSRTG
VSNG
VSNTG
VSD



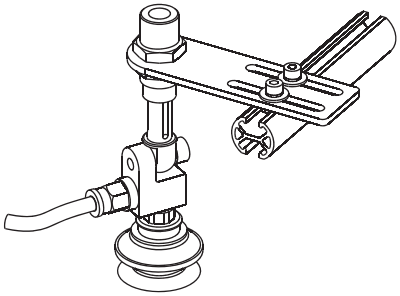
Suspensions avec corps lisse
Suspensions with smooth body

VSL
VSS
VSR
VSN
VSE
VVX
VSNG
VSD
VSNF
VSRF



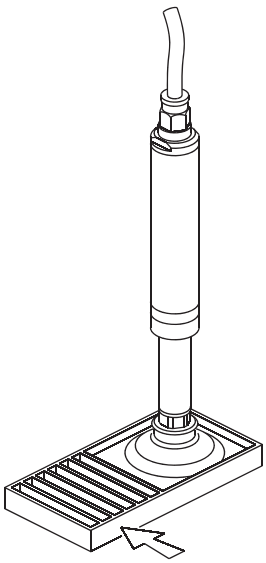
Suspensions avec corps taraudé
Suspensions with threaded body

VSC
VSRT
VSNT
VSET
VSRTG
VSNTG
VSNTF
VSRTF



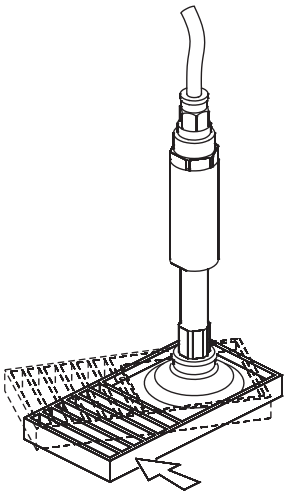
Suspensions anti-rotation
Non-rotative suspensions

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



Suspensions rotatives
Rotative suspensions

VSS
VSR
VSRT
VSRTG
VSRF
VSRTF



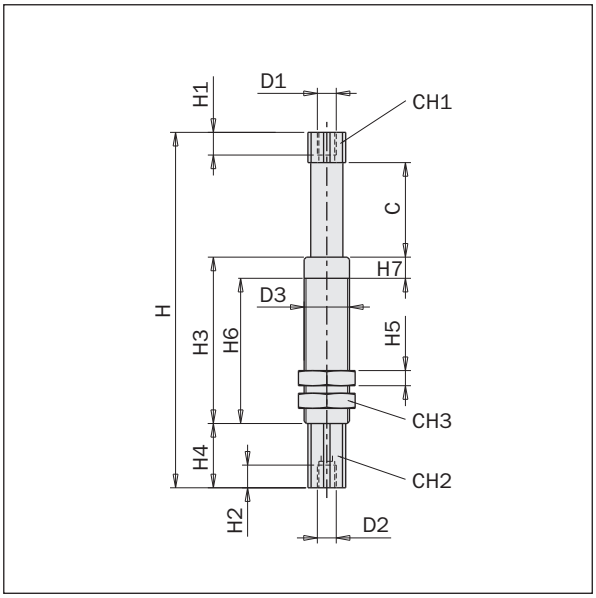
VSNTG

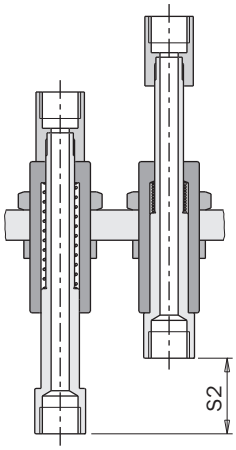
Suspensions anti-rotation avec corps fileté

- 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.

Threaded-body non-rotative 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 VSNTG1010 9900019	NEW VSNTG1025 9900020	NEW VSNTG1210 9900024	NEW VSNTG1225 9900025	NEW VSNTG1420 9900026	NEW VSNTG1435 9900021	NEW VSNTG1620 9900027	NEW VSNTG1635 9900028	NEW VSNTG2025F18 9900022	NEW VSNTG2025F14 9900018	NEW VSNTG2050F18 9900017	NEW VSNTG2050F14 9900023	NEW VSNTG2540 9900029	NEW VSNTG2580 9900030
H	[mm]	56	90.5	64.5	98.5	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	16.7	22	22	22	22	28	28	28	28	28	28
H5	[mm]	3.5	3.5	4	4	4	4	5	5	6	6	6	6	8	8
H6	[mm]	17.5	37	30	49	39	59	52	72	58	58	90.5	90.5	90	140
H7	[mm]	*7	*7	/	/	*13	*13	/	/	/	/	/	/	/	/
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		M10x1		M12x1		M14x1.5		M16x1		M20x1.5				M25x1.5	
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
CH3	[mm]	13	13	15	15	17	17	19	19	24	24	24	24	32	32
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]	12 g	16.5 g	20 g	26.5 g	37 g	47 g	46.5 g	58 g	90 g	86 g	118 g	115 g	205 g	275 g

*Non fileté

**Not threaded*