ACCESSORIES

SECTION 5

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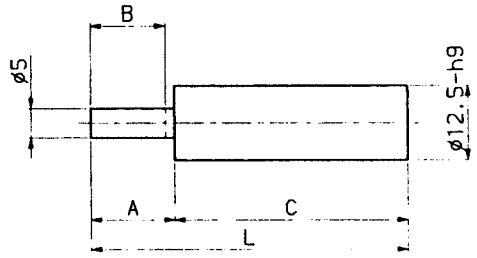
Elastomer cushion KB

KB07/12.5, KB08/12.5, KB14/12.5

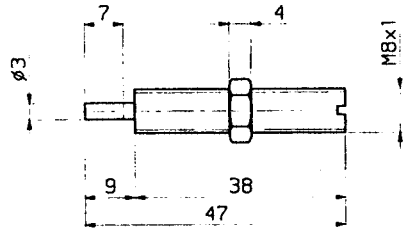
Use with VE Unit 20, 50 80 / HT Slides



Type	A	B	C	L	Force KE Lb. in (Nm)	Weight ounces (g)	Order No.
KB07/12.5	7	6.5	39	46	17.7 (2.0)	0.78 (22)	KB07/12.5
KB08/12.5	7	6.5	34	41	17.7 (2.0)	0.71 (20)	KB08/12.5
KB14/12.5	14	12.5	39	53	39.8 (4.5)	0.82 (23)	KB14/12.5

KB06 M8x1

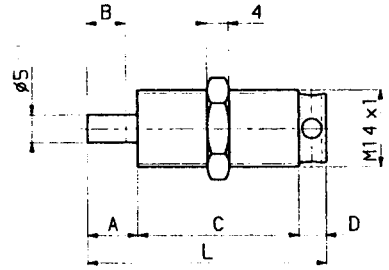
Use with ML 13 Slides



Type	Force KE Lb. in (Nm)	Weight ounces (g)	Order No.
KB06	17.7 (2.0)	0.32 (g)	KB06

KB07M14x1, KB08 M14x1

Use with VE22, 52, 82 / ML 26, 33, 50 / LH slides

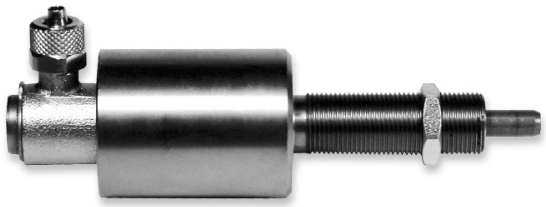


Type	A	B	C	D	L	Force KE Lb. in (Nm)	Weight ounces (g)	Order No.
KB07	9	7	29	5	43	39.8 (4.5)	0.96 (27)	KB07
KB08	14	12.5	43	7	64	39.8 (4.5)	1.42 (40)	KB08

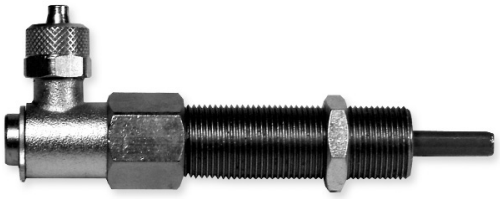
Oil Cushion OB

KOB 50

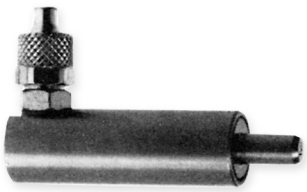
OB 12/20



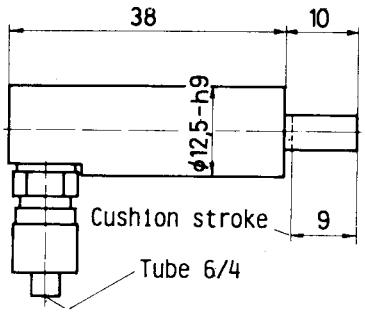
OB 15/10K and OB 15/10L



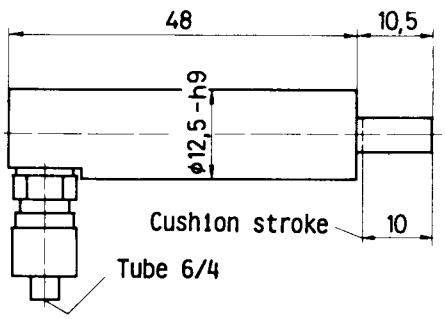
OB 9/10 and OB 10/10



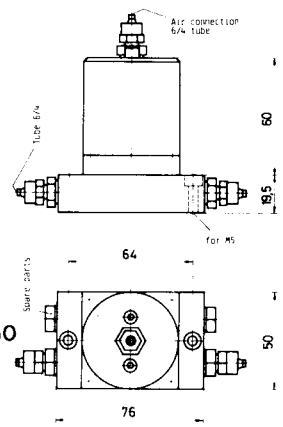
The oil cushions are intended to absorb the kinetic energy of a moving mass and arrest the momentum in a progressive manner. They provide stable motion of slide ways and rotary units by bringing them to a gentle stop without undue wear on the stops. The oil cushion should be adjusted such that it is not used as the final stop, only the stop screws are designed for this purpose.



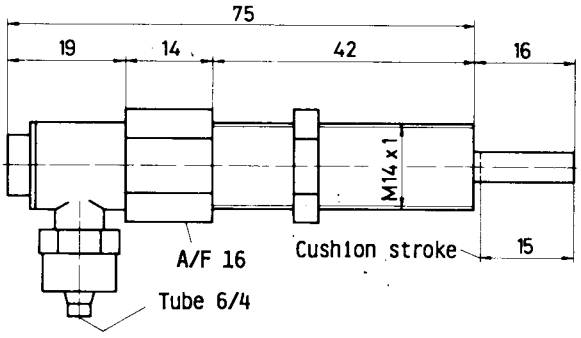
Order No. OB 9/10



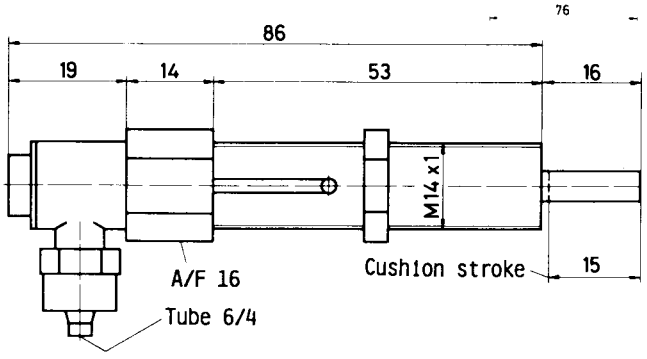
Order No. OB 10/10



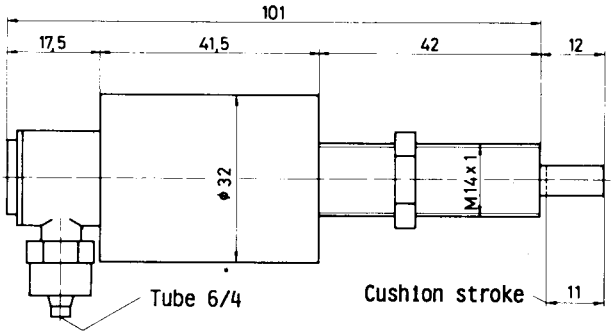
Order No. KOB 50



Order No. OB 15/10 K

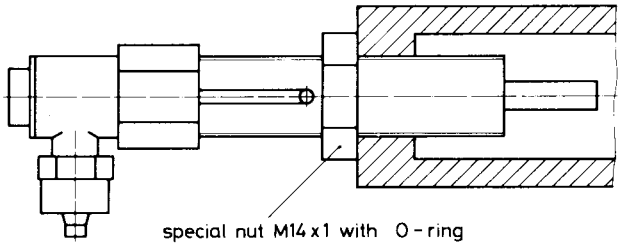


Order No. OB 15/10 L

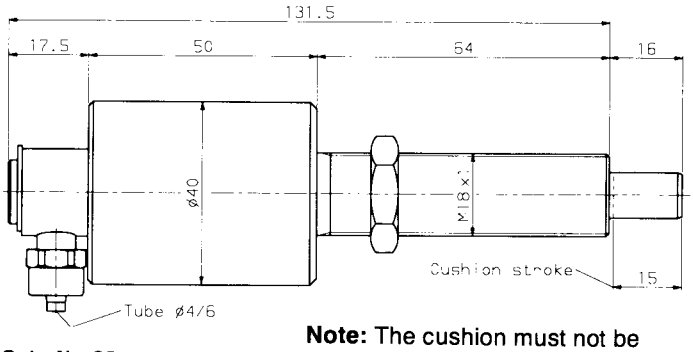


Order No. OB 12/20

Installation of the oil cushion in the cylinder



Order No. MU 01.008



Order No. OB 15/20

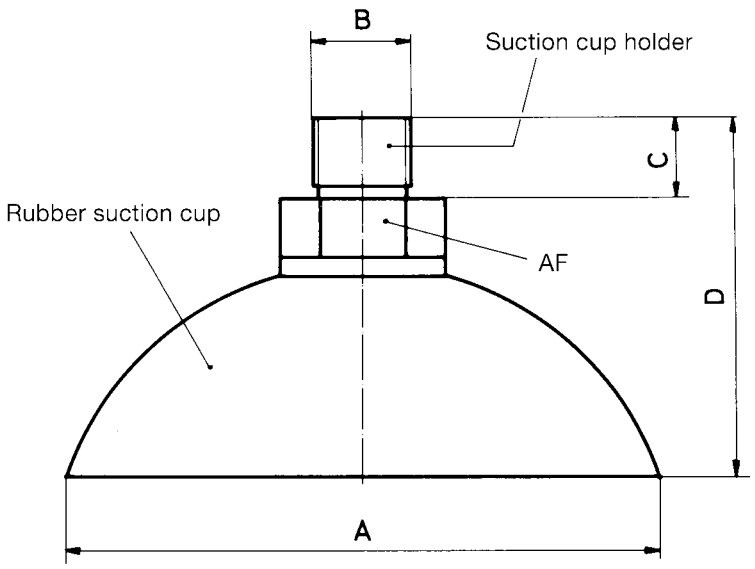
Note: The cushion must not be used as a final stop.

Function of the cushion

The cushion is like a hydraulic cylinder with a built in one way restrictor. It is charged with oil from the compensating reservoir. When a mass approaches and depress's the piston rod the oil is displaced through an orifice plate which reduces progressively with the movement. The displaced oil returns to the reservoir at high speed. The reservoir must not be filled more than half full. Use light hydraulic oil. Ensure all trapped air is expelled from the cushion by cycling. An air supply of 43.5–87.0 psi (3–6 bar) must be connected to the top of the reservoir to keep the cushions charged. Provision is made for up to 4 cushions to be connected, more may connected provided the kinetic energy generated does not cause over heating. The only adjustment is by varying the point of initial contact. The mounting clamp must be robust and able to absorb three times the power of the cushion. (Momentum = Ke / stop distance). Collision speed should be 0,4–3,8 m/s.

Type	Momentum KE/s in lb (N)	Force KE in lb. in (Nm)	Max. No. double strokes per min	Max. output in Watt
OB 9/10	31 – 540 (140–2400)	13.28–194.70 (1,5–22)	240	90
OB 10/10	31 – 540 (140–2400)	13.28–194.70 (1,5–22)	240	90
OB 15/10 K	31 – 618 (140–2750)	13.28–265.50 (1,5–30)	240	120
OB 15/10 L	31 – 618 (140–2750)	13.28–265.50 (1,5–30)	240	120
OB 12/20	90–1349 (400–6000)	39.83–619.50 (4,5–70)	180	210
OB 15/20	90—2023 (400—9000)	39.83—929.25(4,5—105)	90	315

Suction cups



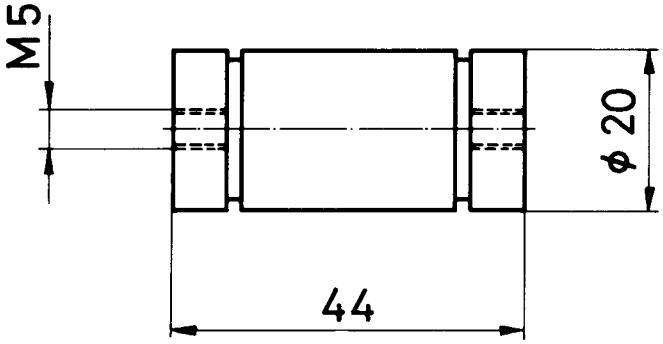
Type	A (mm)	B (mm)	C (mm)	D (mm)	AF (mm)	Suction force	Cup only **Order No.**	Suction cup holder **Order No.**	Complete **Order No.**
VA 10.06	6	M5	6	18	8	.2 lb (0,7 N)	VA–SN–06	VA 03.001	VA–SK–06
VA 10.08	8	M5	6	19	8	.3 lb (1,2 N)	VA–SN–08	VA 03.002	VA–SK–08
VA 10.12	12	M5	6	23	10	.6 lb (2,8 N)	VA–SN–12	VA 03.003	VA–SK–12
VA 10.15	15	M5	6	24	10	1.0 lb (4,4 N)	VA–SN–15	VA 03.003	VA–SK–15
VA 10.18	18	M5	6	24	10	1.4 lb (6,3 N)	VA–SN–18	VA 03.003	VA–SK–18
VA 10.22	22	M5	6	25	10	2.1 lb (9,5 N)	VA–SN–22	VA 03.003	VA–SK–22
VA 10.25	25	M5	6	28	10	2.8 lb (12,3 N)	VA–SN–25	VA 03.004	VA–SK–25
VA 10.30	30	M5	6	28	10	4.0 lb (17,6 N)	VA–SN–30	VA 03.004	VA–SK–30
VA 10.45	45	R⅛"	8	34	15	8.9 lb (39,8 N)	VA–SN–45	VA 03.007	VA–SK–45
VA 10.60	60	R⅛"	8	36	15	15.9 lb (70,6 N)	VA–SN–60	VA 03.007	VA–SK–60
VA 10.85	85	R⅛"	8	58	22	31.9 lb (141,8 N)	VA–SN–85	VA 03.010	VA–SK–85

Suction refers to components with a flat ground surface at max. vacuum of −10.2 psi (−0,7 bar).

Technical data:

– Temperature range	−4° to 158° F (−20° to 70°C)
– Oil-resistant	yes
– Acid-resistant	no
– Hardness	60 Shore
– Good mechanical properties	

Air filter (vacuum)

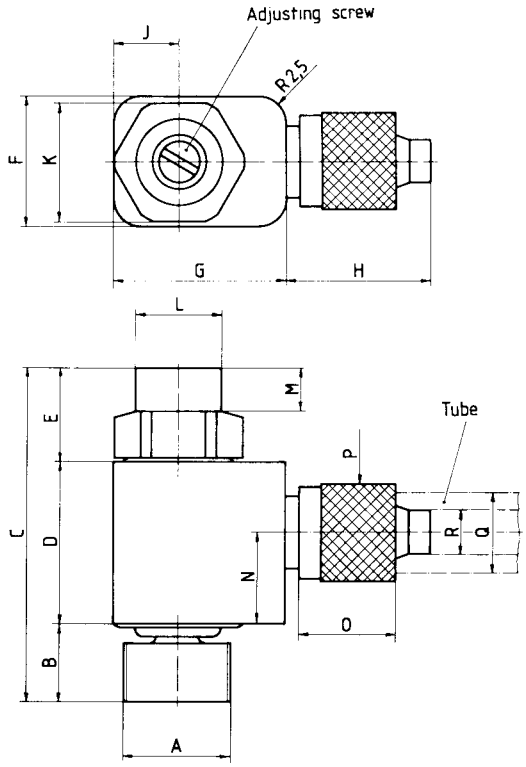


In locations where dirt particles can be picked up by vacuum generators it is recommended that a filter is used.

Replacement filter **Order No.** VA 06 E

Flow control valve DV

Adjustable, with swivel connector



These valves are used to regulate exhaust airflow.
For example: to control the piston on double-acting cylinders.

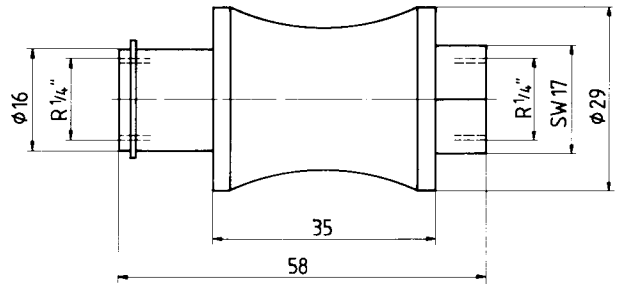
An adjustment screw allows variable flow in one direction (arrow) and permits air to flow freely in the opposite direction.

These space saving valves mount directly into the cylinder port.

The body can be rotated 360° for optimum alignment.

Type	Orifice	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	Weight	**Order No.**
DV-M5	2.5	M5	5.5	29.5	15	9	14	17	13.5	7	11	8	4	8.5	9	9	6	4	.45 ounces (13 g)	DV-M5
DV-R⅛"	2.5	R⅛"	7	31	15	9	14	17	13.5	7	11	8	4	8.5	9	9	6	4	.55 ounces (15.5 g)	DV-R⅛"
DV-R¼"	4	R¼"	9	44.5	20	15.5	18	18	16	9	15	11	8.5	12.5	10	14	8	6	1.45 ounces (41 g)	DV-R¼"

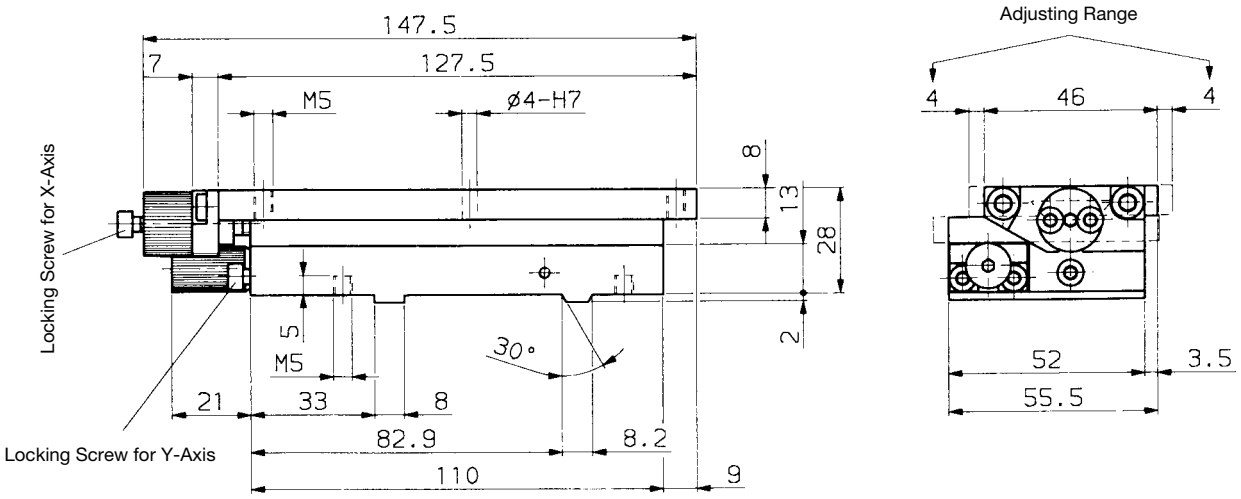
Hand slide valve HV

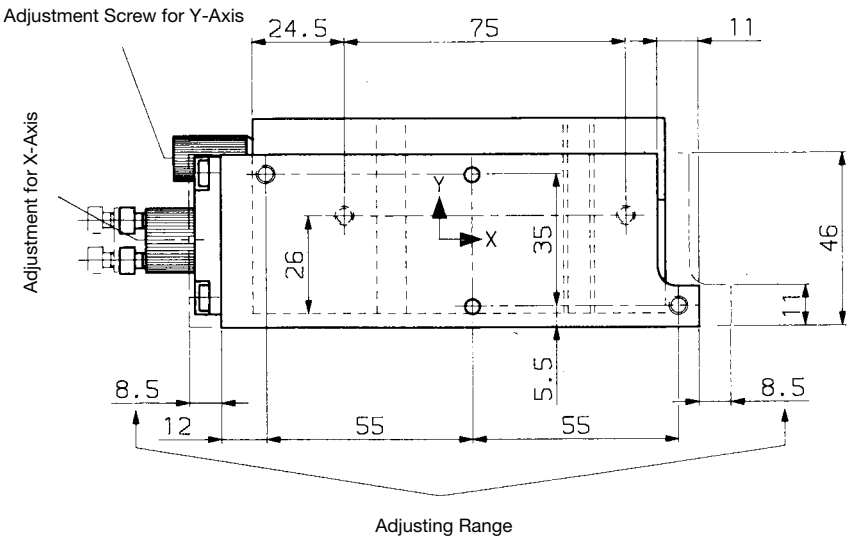


Order No. HV-R1/4"

X-Y Axis Alignment Slides (X-Y stage)

The X-Y Axis Alignment Slide has the advantage of one side operation for both axes. This is especially beneficial for use in small spaces. These X-Y slides are being used extensively in inkjet printers and other standard printer applications.Very fine adjustments are possible from one side by means of an adjusting screw, allowing adjustment in both directions as well as locking of the spindle.

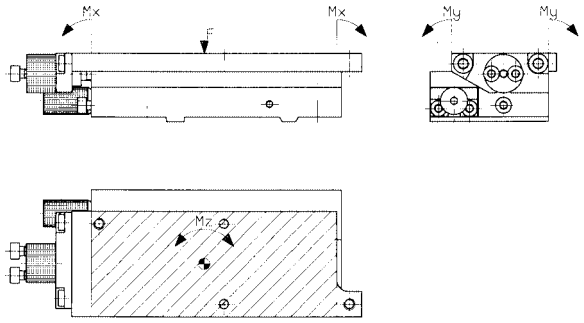




Order No: KK-8.5-4.0

Adjusting Range:
X-Axis ±8.5mm 1mm per one revolution
Y-Axis ±4.0mm 1mm per one revolution

Max Load:
F=200N
Mx=1.5Nm
My-0.5Nm
Mz=1.0Nm



Angularity: Z-Axis ±3°