

PNEUMATIC SHAKE DEVICES

PNEUMATIC KNOCKER

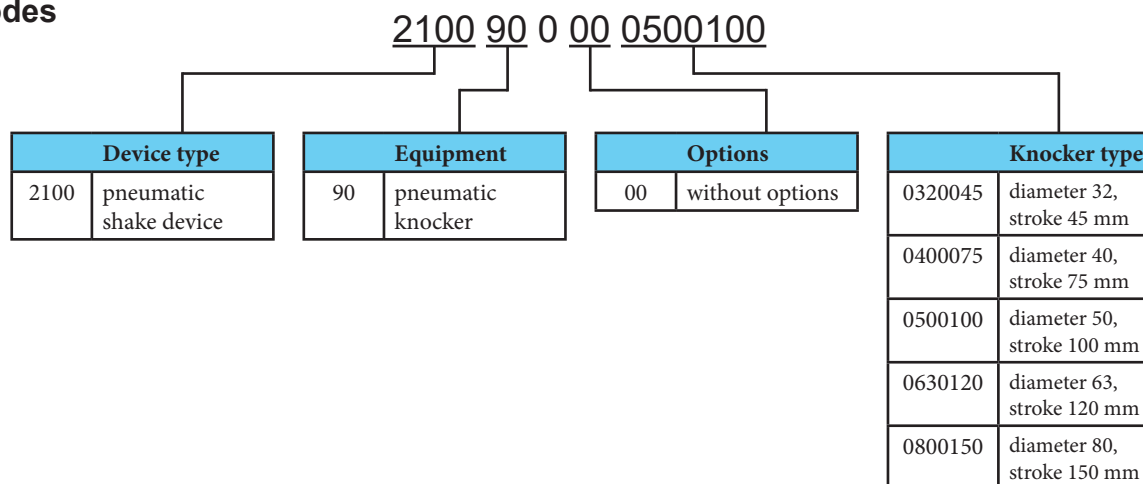


Pneumatic knocker could be used for bulk material release if the bulk material was adhered on walls of tubes or filling hopper. Compared to ball vibrator, knocker can be used for materials which solidify by intensive shedding; in this case individual shakes are well-proven. Knocker should be controlled as well as double acting cylinder. From piston diameter 50 mm incl. knockers are equipped with fully adjustable cushioning at end of return piston movement.

Working pressure	0.6 MPa
Min. pressure	0.2 MPa
Max. pressure	1.0 MPa
Temp. range	-20°C to +80°C
Working medium	modified compressed air

Type	OK32	OK40	OK50	OK63	OK80
Piston diameter [mm]	32	40	50	63	80
Stroke [mm]	45	75	100	120	150
Piston weight [kg]	0.2	0.4	1	2.3	4
Recommended orifice of air supply [mm]	8	8	10	10	10
Recommended flow capacity [NI/min]	900	900	1600	1600	2200
Impulse [Ns]	1.7	3.5	8	15	30
Kinetic energy [Nm]	7	14	32	60	100

Order codes



Installation and operation notes

We recommend to fix fixing screws with Loctite 242E or similar adhesive.

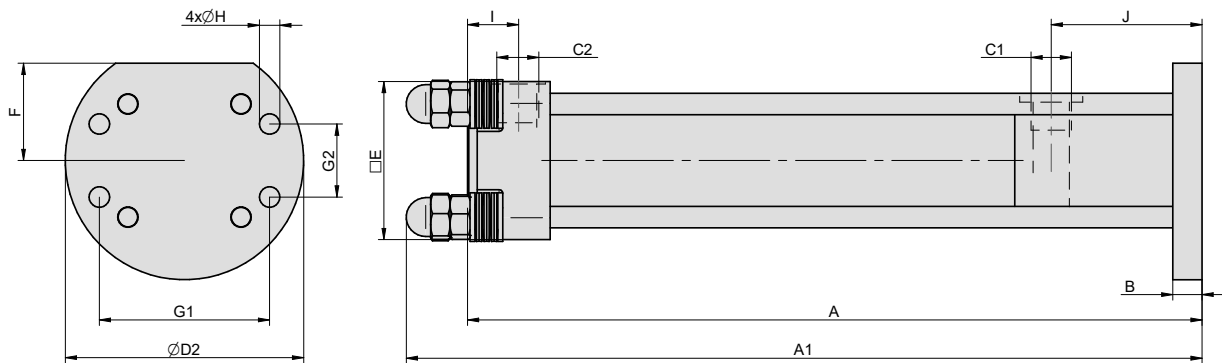
There is necessary to check right tightening of fixing screws regularly to prevent their releasing.

We recommend to use quick exhaust valve on exhaust on impact side not to decrease knocker's effectivity.

Construction / materials

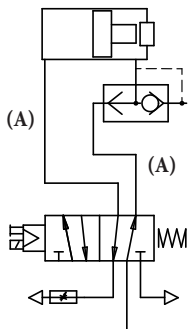
- flange: zinc plated steel
- end cap: aluminium casting
- body: drawn dural tube, anodized
- piston: steel

Dimensions



Ø	A	A1	B	C1	C2	D2	E	F	G1	G2	H	I	J
32	186	-	8	G1/4"	G1/4"	69	48	28	50	18	6.4	26	40
40	228	-	10	G1/4"	G1/4"	72	55	30	55	20	6.4	24	44
50	302	327	12	G3/8"	G3/8"	98	65	40	70	30	8.4	21	62
63	352	377	15	G3/8"	G3/8"	119	75	45	85	40	10.5	20	58
80	388	422	20	G3/8"	G3/8"	138	95	55	100	50	13	20	58

Recommended connection



The 5/2 valve is suitable for knocker control. Valve should be placed as closest to knocker as possible, but we recommend to fix it so that valve will be isolated to shocks from knocker. We recommend to use quick exhaust valve on exhaust (mounted parallel to knocker's axis to prevent from shocks) so as not to decrease impact intensity. It is suitable to use speed control silencer during piston return movement, to get possible to control of return speed of piston into home position to prevent chocks.

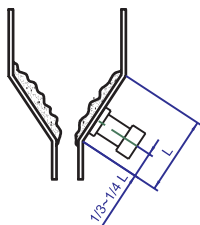


Attention: knocker is designed for make shocks only by movement of piston towards to front cap with flange! Do not allow to make shocks during piston return movement in any case! It may be the cause of permanent damage of end cap of knocker!

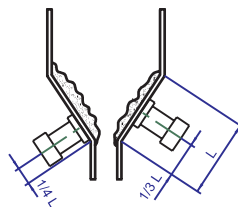
(A) We recommend consulting the choice of length and diameter of the marked parts of the circuit with our technical department.

Mounting examples

Single knocker on filling hopper



Two knockers on filling hopper
(edge distances should be different)



Single knocker on tube

