

LOAD CORRESPONDING TYPE **F5M36**

MULTI-APERTURE, IRREGULAR ORIFICE

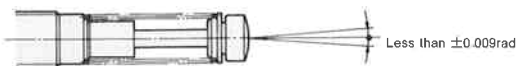


SMALL, LIGHTWEIGHT SHOCK ABSORBER OF SCREW TYPE WITH ADJUSTMENT UNNECESSARY

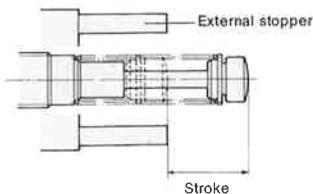
- With the adjustment not needed, impact objects are softly stopped according to the fluctuation of load.
- With the mounting thread provided on the outer surface of body, the handling is easy as if bolt is mounted.
- It is ideal for the shock absorption with air cylinder.
- With the use of urethane cap, the noise in impact can be reduced.
- As the structure is simple and solid, MINI-SOFTER body can be used as stopper.
- In case of similar impact loads, the parallel use of over 2 MINI-SOFTERS is available.

PRECAUTIONS FOR HANDLING

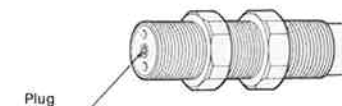
1. In case that MINI-SOFTER is mounted, load shall be applied at the center of piston rod.
In case of the declination, the impact angle shall be set at less than $\pm 0.009\text{rad}$.



2. For MINI-SOFTER, the installation of external stopper is not needed. In case that the external stopper is especially installed, it shall be mounted at the position of MINI-SOFTER stroke end.



3. Do not use at locations where the cutting oil and other liquids are adhered to piston rod.
4. Do not hurt piston rod. It may cause the lowering of durability and the inferiority of return of piston rod.
5. Do not turn the plug.



6. Nut clamp torque is $155\text{N}\cdot\text{m}$.

SPECIFICATIONS

Code	F5M36N050SD-1	F5M36N050SD-3
Max. energy absorption J	392	
Stroke mm	50	
(※1)Max. energy capacity J/min	1170	
Impact speed range m/s	1 and less	3 and less
Max. resisting force value N	20000	
(※2)Rod return force N	30.8~70.3	
(※2)Rod return time s	0.07	
Max. operating cycle cycle/min	60	
Operating temp. range °C	-5~+70 (at non-freezing condition)	
Weight kg	1.18(With 2 hexagonal nuts)(FA attachment:0.399)	

(※1)The max. energy capacity per minute in the table is shown at the ambient temperature of 26.7°C.

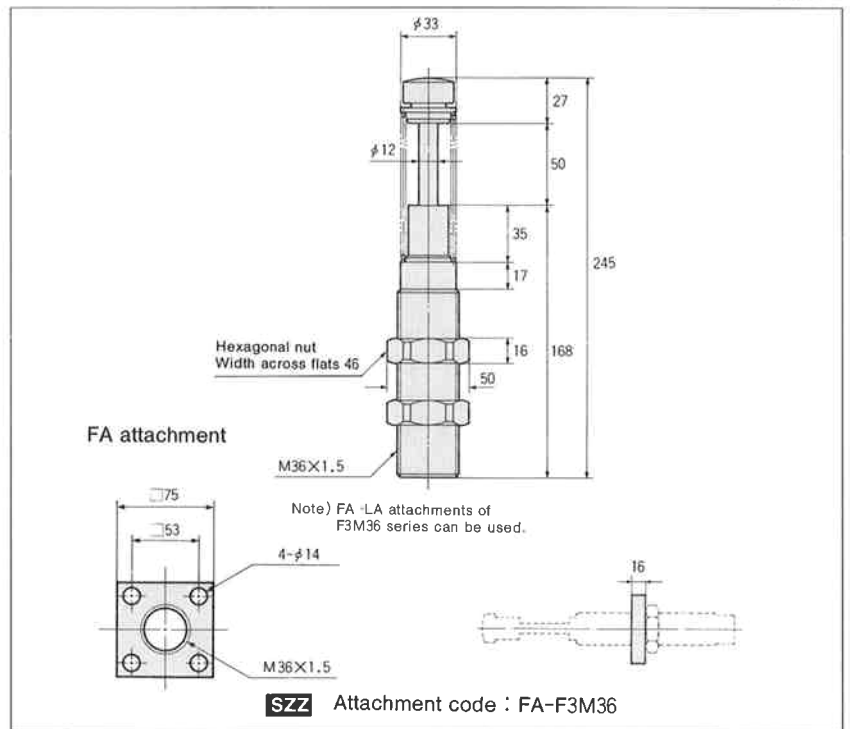
The max. energy capacity per minute at the ambient temperature T(°C) mentioned as E₂(J/min) is calculated according to the following formula:

$$E_2 = \frac{(82.2 - T)}{55.5} \times (\text{Max. energy capacity per min. in table})$$

(※2)It indicates the max. value when stroke 50mm is pushed.

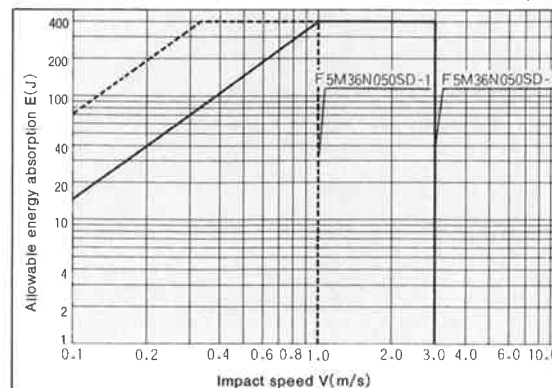
DIMENSIONAL DRAWINGS

Unit : mm



ENERGY ABSORPTION TABLE

10J=1.02kgf·m



WAY OF LOOKING AT TABLE

In case of impact speed V=0.6m/s, the allowable energy absorption E(J) is computed. From the Energy Absorption Table, E coping with V=0.6m/s is E=392J in case of F5M36N050SD-1, E=186J in case of F5M36N050SD-3.