



The damping rods reduce the noise level and dampen vibrations.

General Hints

Please read through these mounting instructions carefully before you assemble the damping rod. Please pay special attention to the safety instructions!

The mounting instructions are part of your product. Please keep them carefully and close to the damping rod.

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Safety and Advice Hints



DANGER!

Danger of injury to persons.



CAUTION!

Damages on the machine possible.



ATTENTION!

Pointing to important items.

General Hints to Danger



DANGER!

With the assembly and maintenance of the damping rods please make sure to protect the complete drive train from being switched on accidentally and make sure that the machine is depressurized. Improper handling of the damping rods may cause serious injuries.

Please make absolutely sure to read through and observe the following safety instructions.

- All operations on the damping rod have to be performed taking into account "safety first".
- Protect the power pack against unintentional engagement, e. g. by providing hints at the place of engagement or removing the fuse for current supply.
- Protect the power pack from tilting by mistake. Please provide for the necessary protection devices and caps.

Proper Use

You may only assemble and maintain the damping rod if you

- carefully read through the mounting instructions and understood them
- had technical training
- are authorized to do so by your company

The damping rod may only be used in accordance with the technical data. Unauthorized modifications on the damping rod design are not admissible. We do not take any warranty for resulting damages. To further develop the product we reserve the right for technical modifications.

The **damping rod** described in here corresponds to the technical status at the time of printing of these mounting instructions.

Please note protection mark ISO 16016.	Drawn: 02.07.13 Pz/Ha	Replaced for: ---
	Verified: 11.07.13 Pz	Replaced by:



Type Assignment

- DSM → for mounting with IEC electric motors type IMB 35
- DSFL → for mounting with KTR foot flange PTFL
- DSFS → for mounting with KTR foot flange PTFS
- DSK → for mounting with KTR-PIK oil cooler
- SDS → special damping rods

Dimensions

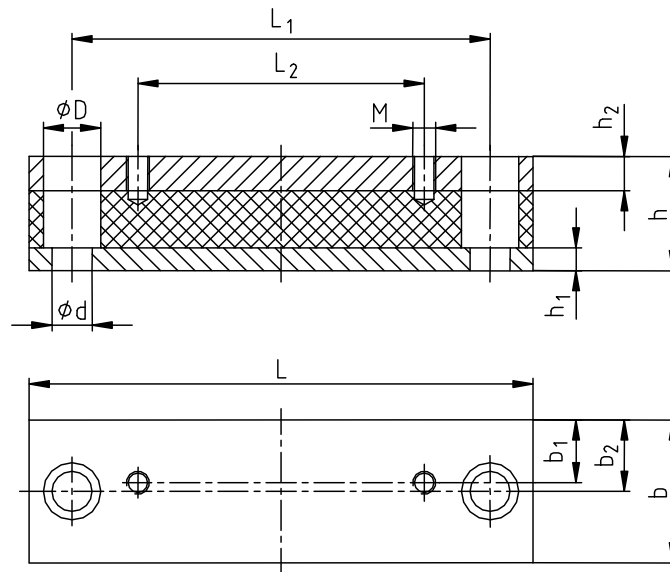


Illustration 1: Dimensions of the damping rods

Table 1: type DSM

Size	For motor size	Dimensions [mm]											
		L	L ₁	L ₂	h	h ₁	h ₂	b	b ₁	b ₂	d	D	M
DSM 71	71	196	156	90	40	8	12	50	21	25	14	20	M6
DSM 80	80	176	146	100	40	8	12	50	22	25	14	20	M8
DSM 90 S	90 S	196	156	100	40	8	12	50	24,5	25	14	20	M8
DSM 90 L	90 L	240	205	125	40	8	12	50	24	25	14	20	M8
DSM 100 L	100 L	240	205	140	40	8	12	50	24	25	14	20	M10
DSM 112 M	112 M	240	205	140	40	8	12	50	20	25	14	20	M10
DSM 132 S	132 S	280	245	140	45	8	12	50	20	25	14	20	M10
DSM 132 M	132 M	280	245	178	45	8	12	50	20	25	14	20	M10
DSM 160 M	160 M	340	300	210	60	15	15	70	28	35	18	26	M12
DSM 160 L	160 L	416	370	254	60	15	15	70	28	35	18	26	M12
DSM 180 M	180 M	416	370	241	60	15	15	70	35	35	18	26	M12
DSM 180 L	180 L	446	400	279	60	15	15	70	35	35	18	26	M12
DSM 200 L	200 L	492	430	305	60	15	15	70	35	35	22	33	M16
DSM 225 S	225 S	492	430	286	60	15	15	70	35	35	22	33	M16
DSM 225 M	225 M	492	445	311	60	15	15	70	35	35	22	33	M16
DSM 250 M	250 M	492	445	349	60	15	15	100	50	50	22	33	M20
DSM 280 S	280 S	614	570	368	60	15	15	100	50	50	22	33	M20
DSM 280 M	280 M	614	570	419	60	15	15	100	50	50	22	33	M20
DSM 315 S	315 S	614	570	406	60	15	15	120	60	60	22	33	M24
DSM 315 M	315 M	614	570	457	60	15	15	120	60	60	22	33	M24
DSM 315 L	315 L	704	660	508	60	15	15	120	60	60	22	33	M24



Dimensions

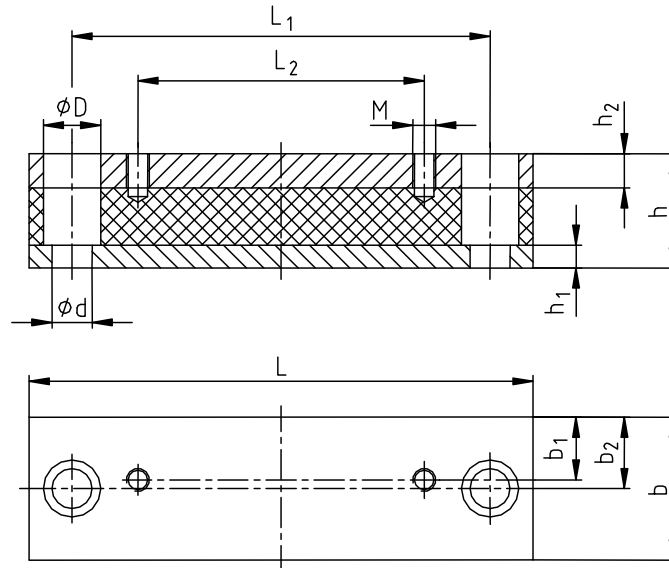


Illustration 1: Dimensions of the damping rods

Table 2: type DSFL

Size	For foot flange	Dimensions [mm]											
		L	L ₁	L ₂	h	h ₁	h ₂	b	b ₁	b ₂	d	D	M
DSFL 160	PTFL 160	176	130	50	40	8	12	50	10	25	14	20	M8
DSFL 200	PTFL 200	176	130	60	40	8	12	50	15	25	14	20	M10
DSFL 250	PTFL 250	230	140	60	40	8	12	50	15	25	14	20	M12
DSFL 300	PTFL 300	270	170	80	40	8	12	50	15	25	14	20	M12
DSFL 350	PTFL 350	305	200	110	60	15	15	70	25	35	18	26	M16

Table 3: type DSFS

Size	For foot flange	Dimensions [mm]											
		L	L ₁	L ₂	h	h ₁	h ₂	b	b ₁	b ₂	d	D	M
DSFS 250	PTFS 250	240	140	185	40	8	12	50	17,5	25	13	20	M12
DSFS 300	PTFS 300	280	180	225	40	8	12	50	17,5	25	13	20	M12
DSFS 350	PTFS 350	325	200	265	60	15	15	70	25	35	17	26	M16
DSFS 400	PTFS 400	350	234	300	60	15	15	70	25	35	17	26	M16
DSFS 450	PTFS 450	385	270	335	60	15	15	70	25	35	17	26	M16
DSFS 550	PTFS 550	490	350	415	60	15	15	100	25	50	18	26	M16
DSFS 660	PTFS 660	635	415	495	60	15	15	100	30	50	22	33	M20

Table 4: type DSK

Size	For foot flange	Dimensions [mm]											
		L	L ₁	L ₂	h	h ₁	h ₂	b	b ₁	b ₂	d	D	M
DSK 200	PIK 200	240	210	154,5	40	8	12	50	25	25	14	20	M12
DSK 250	PIK 250	270	240	175,5	40	8	12	50	25	25	14	20	M12
DSK 300	PIK 300	280	250	199,5	45	8	12	50	25	25	14	20	M12
DSK 350	PIK 350	325	295	243,5	60	15	15	70	35	35	14	20	M12



ATTENTION!

For special damping rods SDS a special data sheet has to be ordered.

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Load



ATTENTION!

The standard damping rods (DSM, DSFL, DSFS, DSK) are selected in a way that they stand the loads for intended use. Deviations (e. g. settings on the electric motor) have to be arranged with and approved by KTR before assembly).

All damping rods are to be loaded on compression only. Small tension loads which may be produced, for example, by the bending moment with horizontal assembly due to irregular weight distribution are not permissible.



CAUTION!

Shear load is not permissible and absolutely needs to be prevented.

Assembly of Damping Rods DSM with Electric Motor

- The electric motor is fitted with its feet on the damping rods.



ATTENTION!

The motor feet have to be situated completely on the damping rods.

- Select the screw length of electric motor/damping rod as follows:
Screw length = thickness of motor foot + depth of thread of damping rod (dimension h_2)
- Put the screws with the disk through the motor foot and screw them each in the thread of the damping rod. For tightening torques T_A see table 5.

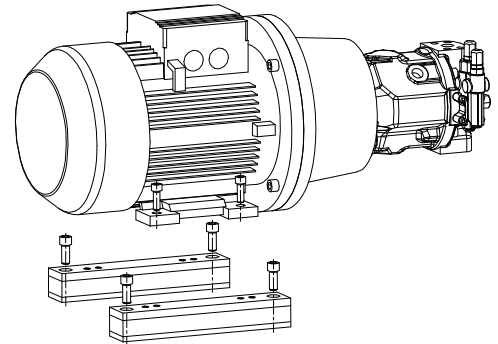


Illustration 2: Assembly of damping rods DSM with electric motor

- Put the hexagon socket head cap screws through the counterbores of the damping rods and screw them each in the thread of the support surface (base plate). The tightening torque T_A depends on the material of the base plate and needs to be identified before assembly!



DANGER!

Please observe that tilting of the drive may cause serious injuries (contusions). Please protect the power pack by corresponding supports.

Table 5: tightening torques – cap screws DIN EN ISO 4762

Cap screws acc. to DIN EN ISO 4762 ¹⁾	M8	M10	M12	M16	M20	M24
Tightening torque ²⁾ T_A [Nm]	25	49	86	210	410	710

1) min. property class 8.8

2) tightening torque of property class 8.8



Assembly of Damping Rods DSFL with Foot Flange PTFL

- The foot flange PTFL is fitted on the damping rods with its feet.



ATTENTION!

The feet have to be situated completely on the damping rods

- Select the screw length of the PTFL damping rod as follows:
Screw length = thickness of foot + depth of thread of damping rod (dimension h_2)
- Put the screws with the disk through the PTFL foot and screw them each in the thread of the damping rod. For tightening torques T_A see table 5.
- Put the hexagon socket head cap screws through the counterbores of the damping rods and screw them each in the thread of the support surface (base plate). The tightening torque T_A depends on the material of the base plate and needs to be identified before assembly!

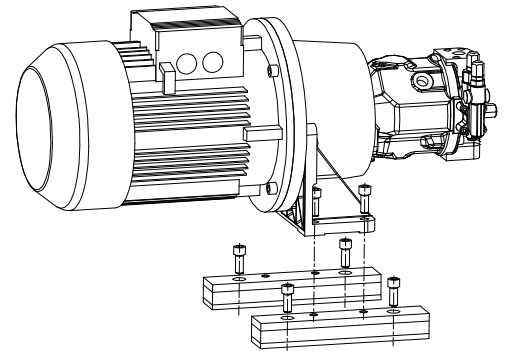


Illustration 3: Assembly of damping rods DSFL with foot flange PTFL



DANGER!

Please observe that tilting of the drive may cause serious injuries (contusions). Please protect the power pack by corresponding supports.

Assembly of Damping Rods DSFS with Foot Flange PTFS

- The PTFS is fitted on the damping rods with its feet.



ATTENTION!

The feet have to be situated completely on the damping rods.

- Select the screw length of the PTFS damping rod as follows:
Screw length = thickness of foot + depth of thread of damping rod (dimension h_2)
- Put the screws with the disk through the PTFS foot and screw them each in the thread of the damping rod. For tightening torques T_A see table 5.
- Put the hexagon socket head cap screws through the counterbores of the damping rods and screw them each in the thread of the support surface (base plate). The tightening torque T_A depends on the material of the base plate and needs to be identified before assembly!

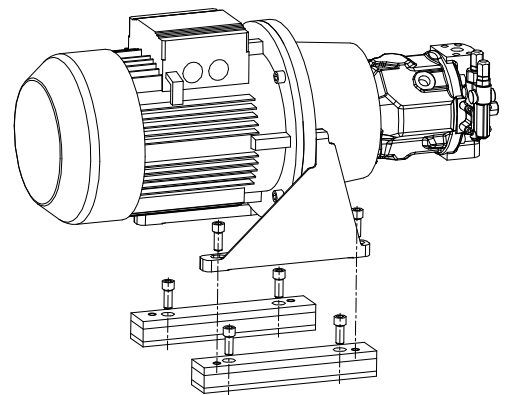


Illustration 4: Assembly of damping rods DSFS with foot flange PTFS



DANGER!

Please observe that tilting of the drive may cause serious injuries (contusions). Please protect the power pack by corresponding supports.

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Assembly of Damping Rods DSK with PIK Oil Coolers

- The PIK is fitted on the damping rods with its feet.



ATTENTION!
The PIK feet have to be situated completely on the damping rods.

- Select the screw length of the PIK damping rod as follows:
Screw length = thickness of PIK foot + depth of thread of damping rod (dimension h_2)
- Put the screws through the PIK foot and screw them each in the thread of the damping rod. For tightening torques T_A see table 5.
- Put the hexagon socket head cap screws through the counterbores of the damping rods and screw them in the thread of the support surface (base plate). The tightening torque T_A depends on the material of the base plate and needs to be identified before assembly!

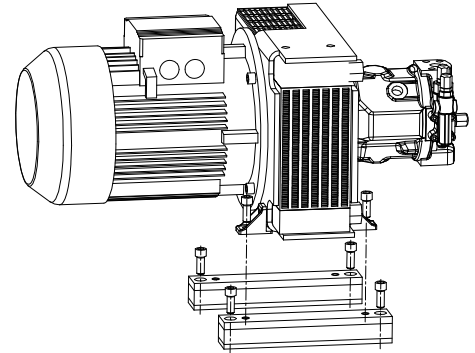


Illustration 5: Assembly of damping rods DSK with PIK oil cooler



DANGER!
Please observe that tilting of the drive may cause serious injuries (contusions). Please protect the power pack by corresponding supports.

Hints



ATTENTION!
The screws basically have to be used with Loctite, Omnifit 230M or similar adhesives for protection.

Additional Information

Please observe the following KTR mounting instructions:

- Mounting instructions of foot flange → KTR-N 41011
- Mounting instructions of PIK oil coolers → KTR-N 41028