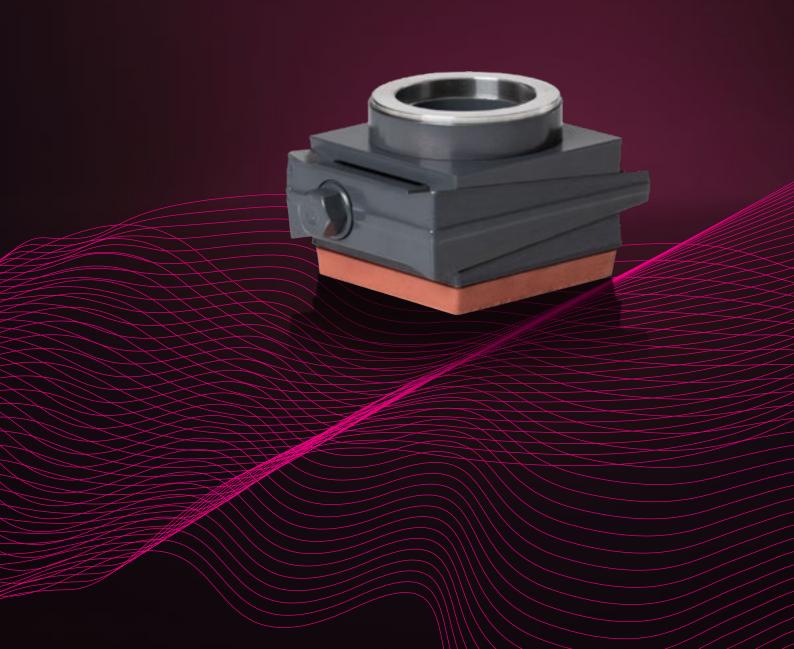
# ISOLOC UMS MACHINE SHOES SL

For the precise and zero-play installation of highly dynamic machines.



### THE COMPANY

Isoloc was founded in 1996 in Stuttgart.

Since 2000 the company has been managed by the Managing Director Mr. Uwe Schuerrle.

Aim of the new company isoloc is the development of innovative and high-quality products "Made in Germany", in the field of installation technology and vibration insulation of machines and plants of all kinds.

This aim we consequently pursue with our team of qualified professionals. Today our company is successfully active in all fields of the industry, whether in Stuttgart, Beijing or São Paulo.

We develop economic and optimal solutions for you.

Thereby, the size of the machine is not important. We store smaller machine tools just as big forging presses, but also machines for forming technology, durables, printing and paper, chemistry, wood processing, food, electrical and construction industry. Even insulations of constructions and buildings, such as the Swiss Embassy in Berlin, heavy machine foundations (sprung foundations) for large machinery and plants are included in our wide array of solutions.

We succeed in optimising your machines with the most modern measuring and analysing technology - with the result of a measurable quality improvement of your products and increased productivity.

At the same time the noise level in the production facility is reduced. Because the health of our staff is important to us.

We are your competent and reliable partner in all questions and challenging issues concerning the vibration technology and optimisation of machines.

Your perfection is our aim!

### ISOLOC UMS MACHINE SHOE STEEL LINE -MADE OF FORGED STEEL AND INCLINED RUNNING SURFACES

The new patented universal precision machine shoes made of forged steel are the consequent development due to steadily increased requirements in the machine-tool manufacturing. Due the patented construction, which differs from all other levelling shoes, even heaviest loads can be levelled very precisely at the same time, at smaller external dimensions. The running surfaces, inclined by 15°, ensure zero play and excellent power transmission to the foundation respectively on our highly absorbing vibration insulation panels due to the double stiffness to comparable elements of cast iron.

### **DESIGNS**

These UMS machine shoes are available in the following designs:

- · Free-standing
- · Screw-on centric
- · Screw-on eccentric
- · Through-bore centric
- · Through-bore eccentric
- · With or without inclination compensation

### YOUR ADVANTAGES

- Due to the faster (not anchored) setup and levelling of your machines you reduce your installation costs by up to 50 %.
- Thanks to the high stiffness of the SL series (c = 1666 kN/mm at a load magnitude of 100 kN), you can even better take advantage of the excellent damping of our vibration insulation panels.

### This means to you:

- A significant improvement of the dynamic properties (= higher kv-factor and jerk) of machine-tools, with less structure-borne sound and noise at the same time.
- The patented construction with the running surfaces inclined by 15° has almost zero play.

### This means to you:

- · High dynamics with no additional relative movements.
- Excellent power transmission to the foundation, also if the installation is not anchored.

We set high standards concerning the reliability and durability of our products. Spare parts and levelling spindles are made of high-resistance steel.

All calculations regarding stiffness are performed via FEM and reviewed and certified by independent testing bodies, such as e.g. KIT in Karlsruhe.

Thereby, it is ensured that calculated values are complied with in practice, too.









### **UMS MACHINE SHOES SL**

# **Equipment & Dimensions**







### UMS8/SL-ASF

Screw-on or free-standing version available. Upon request with base broadening panels BV for special requirements, e.g. in a very high dynamic of a machine or to decrease the surface pressure on the floor. The top side is equipped with a non-skid panel GPL 3025 and the bottom side with a vibration insulation panel.

### UMS8/SL-DSF

Through-bore for floor anchoring of the machine or free-standing use possible. The top side is delivered with a non-skid panel GPL 3025; the bottom side is equipped with a vibration insulation panel.

Screw and RONKAP element can be ordered separately.

### UMS8/SL-KDS

Through-bore machine shoe, which must be inserted with a floor anchoring. It is recommended for a pure compensation of the height of the machine, since it does not provide any vibration insulation. The machine shoe must be anchored or grouted after levelling.

### **EQUIPMENT UMS MACHINE SHOES S**

Artno.	Туре	F max <sup>1</sup>
305S10	UMS8/SL-ASF/10	6 000
305S15	UMS8/SL-ASF/17	24 000
305S20	UMS8/SL-ASF/20	14 500
305S202	UMS8/SL-ASF/20-2	14 500
305S250	UMS8/SL-ASF/25	20 570
305S30	UMS8/SL-ASF/30	60 000
305S35	UMS8/SL-ASF/32	48 400
305S40	UMS8/SL-ASF/40	24 000

Artno.	Туре	F max <sup>1</sup>
305S11	UMS8/SL-DSF/10	6 000
305S16	UMS8/SL-DSF/17	24 000
305S21	UMS8/SL-DSF/20	14 500
305S212	UMS8/SL-DSF/20-2	14 500
305S251	UMS8/SL-DSF/25	20 570
305S31	UMS8/SL-DSF/30	60 000
305S36	UMS8/SL-DSF/32	48 400
305541	UMS8/SL-DSF/40	24 000

Artno.	Туре	F max <sup>1</sup>
305S00	UMS8/SL-KDS	80 000

### Note

Please refer to our website or our general catalogue to select the correct IPL vibration insulation panels for your use. We will also be pleased to give you advice, just give us a call.

 $^{1}F$  max in N F max =  $F_{v_{sp}} + F_{_{G}} + F_{_{dyp}}$  in N  $F_{v_{sp}}$ : Screw preload force in floor anchoring  $F_{_{G}}$ : proportional weight force of the machine  $F_{_{dyn}}$ : proportional dynamic forces

### UMS MACHINE SHOES SL-ASA AND SL-DSA

# **Equipment & Dimensions**







### UMS8/SL-ASA

Screw-on machine shoe with inclination compensation. For a stable positioning in inclined floors or uneven machine footprint. The ball ring enables a stress-free compensation of floor unevenness of up to 3°. The top side will be equipped with vibration insulation panels. The machine shoe must be anchored with the machine after levelling.

### UMS8/SL-DSA

Through-bore machine shoe for floor anchoring of the machine with inclination compensation. For a stable positioning of the machine even on an uneven floor. The machine must be anchored to the floor through the machine foot after levelling. A vibration decoupling of the screw takes place by our insulation discs RONKAP. The bottom side will be equipped with a vibration insulation panel.

### UMS8/SL-KDSA

Through-bore machine shoe, which must be inserted by floor anchoring. It is recommended for a pure height compensation of the machine since it does not provide any vibration insulation. With inclination compensation to compensate floor inclinations or uneven machine feet. The machine shoe must be anchored after levelling.

### **EQUIPMENT UMS MACHINE SHOES SL**

Artno.	Туре	F max <sup>1</sup>
305S12	UMS8/SL-ASA/10	6 000
305S17	UMS8/SL-ASA/17	24 000
305S22	UMS8/SL-ASA/20	14 500
305S222	UMS8/SL-ASA/20-2	14 500
305S252	UMS8/SL-ASA/25	20 570
305S32	UMS8/SL-ASA/30	60 000
305S37	UMS8/SL-ASA/32	48 400
305S42	UMS8/SL-ASA/40	24 000

Artno.	Туре	F max <sup>1</sup>
305S13	UMS8/SL-DSA/10	6 000
305S18	UMS8/SL-DSA/17	24 000
305S23	UMS8/SL-DSA/20	14 500
305S232	UMS8/SL-DSA/20-2	14 500
305S253	UMS8/SL-DSA/25	20 570
305S33	UMS8/SL-DSA/30	60 000
305S38	UMS8/SL-DSA/32	48 400
305S43	UMS8/SL-DSA/40	24 000

Artno.	Туре	F max <sup>1</sup>
305S03	UMS8/SL-KDSA	80 000

¹F max in N

F max =  $F_{Vsp}$  +  $F_{G}$  +  $F_{dyn}$  in N  $F_{Vsp}$ : Screw preload force in floor anchoring F<sub>G</sub>: proportional weight force of the machine F<sub>dvn</sub>: proportional dynamic forces

### **UMS MACHINE SHOES SLZ**

# **Equipment & Dimensions**







### UMS8/SLZ-ASF

Screw-on or free-standing version available. Upon request with base broadening panels BV for special requirements, e.g. in a very high dynamics of a machine or to decrease the surface pressure on the floor. The top side is equipped with a non-skid panel GPL 3025 and the bottom side with vibration insulation panel.

### UMS8/SLZ-DSF

Centric through-bore for floor anchoring of the machine or free-standing use possible. The top side will be delivered with a non-skid panel GPL 3025; the bottom side will be equipped with a vibration insulation panel.

Screw and RONKAP element can be ordered separately.

### UMS8/SLZ-KDS

Centric through-bore machine shoe, which must be inserted by floor anchoring. It is recommended for a pure compensation of the height of the machine, since it does not provide any vibration insulation. The machine shoe must be anchored after levelling.

### **EQUIPMENT UMS MACHINE SHOES SLZ**

Artno.	Туре	F max <sup>1</sup>
305SZ10	UMS8/SLZ-ASF/10	6 000
305SZ15	UMS8/SLZ-ASF/17	24 000
305SZ20	UMS8/SLZ-ASF/20	14 500
305SZ202	UMS8/SLZ-ASF/20-2	14 500
305SZ250	UMS8/SLZ-ASF/25	20 570
305SZ30	UMS8/SLZ-ASF/30	60 000
305SZ35	UMS8/SLZ-ASF/32	48 400
305SZ40	UMS8/SLZ-ASF/40	24 000

Artno.	Туре	F max <sup>1</sup>
305SZ11	UMS8/SLZ-DSF/10	6 000
305SZ16	UMS8/SLZ-DSF/17	24 000
305SZ21	UMS8/SLZ-DSF/20	14 500
305SZ212	UMS8/SLZ-DSF/20-2	14 500
305SZ251	UMS8/SLZ-DSF/25	20 570
305SZ31	UMS8/SLZ-DSF/30	60 000
305SZ36	UMS8/SLZ-DSF/32	48 400
3055741	UMS8/SL7-DSF/40	24 000

Artno.	Туре	F max <sup>1</sup>
305SZ00	UMS8/SLZ-KDS	80 000

### Note:

Please refer to our website or our general catalogue to select the correct IPL vibration insulation panels for your use. We will also be pleased to give you advice, just give us a call.

 $^{1}F$  max in N F max =  $F_{v_{sp}} + F_{_{G}} + F_{_{dyp}}$  in N  $F_{v_{sp}}$ : Screw preload force in floor anchoring  $F_{_{G}}$ : proportional weight force of the machine  $F_{_{dyn}}$ : proportional dynamic forces

### UMS MACHINE SHOES SLZ-ASA AND SLZ-DSA

# **Equipment & Dimensions**







### UMS8/SLZ-ASA

Screw-on machine shoe with inclination compensation. For a stable positioning in inclined floors or uneven machine footprints. The ball ring enables a stress-free compensation of floor unevenness of up to 3°. The bottom side will be equipped with vibration insulation panels. The machine shoe must be anchored with the machine after levelling.

### **UMS8/SLZ-DSA**

Centric through-bore machine shoe for floor anchoring of the machine with inclination compensation. For a stable positioning of the machine even on an uneven floor. The machine must be anchored with the floor through the machine foot after levelling. A vibration decoupling of the screw takes place by our insulation discs RONKAP. The bottom side will be equipped with a vibration insulation panel.

### UMS8/SLZ-KDSA

Centric through-bore machine shoe, which must be inserted by floor anchoring. It is recommended for a pure height compensation of the machine since it does not provide any vibration insulation. With inclination compensation to compensate floor inclinations or uneven machine bases. The machine shoe must be anchored after levelling.

### **EQUIPMENT UMS MACHINE SHOES SLZ**

Artno.	Туре	F max <sup>1</sup>
305SZ12	UMS8/SLZ-ASA/10	6 000
305SZ17	UMS8/SLZ-ASA/17	24 000
305SZ22	UMS8/SLZ-ASA/20	14 500
305SZ222	UMS8/SLZ-ASA/20-2	14 500
305SZ252	UMS8/SLZ-ASA/25	20 570
305SZ32	UMS8/SLZ-ASA/30	60 000
305SZ37	UMS8/SLZ-ASA/32	48 400
305SZ42	UMS8/SLZ-ASA/40	24 000

Artno.	Туре	F max <sup>1</sup>
305SZ13	UMS8/SLZ-DSA/10	6 000
305SZ18	UMS8/SLZ-DSA/17	24 000
305SZ23	UMS8/SLZ-DSA/20	14 500
305SZ232	UMS8/SLZ-DSA/20-2	14 500
305SZ253	UMS8/SLZ-DSA/25	20 570
305SZ33	UMS8/SLZ-DSA/30	60 000
305SZ38	UMS8/SLZ-DSA/32	48 400
305SZ43	UMS8/SLZ-DSA/40	24 000

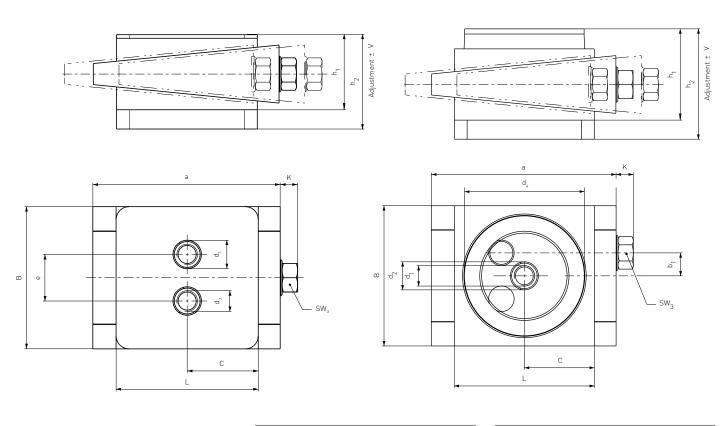
Artno.	Туре	F max <sup>1</sup>
305SZ03	UMS8/SLZ-KDSA	80 000

<sup>&</sup>lt;sup>1</sup>F max in N

F max =  $F_{Vsp}$  +  $F_{G}$  +  $F_{dyn}$  in N  $F_{Vsp}$ : Screw preload force in floor anchoring F<sub>g</sub>: proportional weight force of the machine F<sub>dva</sub>: proportional dynamic forces

### DIMENSIONS UMS8/SL, UMS8/SLZ WITH IPL

	Туре	L x W**	Height in h <sub>1</sub> *	IPL equipment height h <sub>2</sub> *	Adjustment range V*	a*	K**	b <sub>1</sub> **	e*	c*	d <sub>1</sub> *	d <sub>2</sub> *	d <sub>4</sub> * S	SW <sub>3</sub> *
ASF	UMS8/SL	110 x 110	56	(IPL10-30) 74/(IPL25) 84/(IPL40) 67	+7 / -3	145	13.5	-	36	55	M16	22	-	22
ASF-Z	UMS8/SLZ	110 x 110	56	(IPL10-30) 74/(IPL25) 84/(IPL40) 67	+7 / -3	145	13.5	18	-	55	M16	22	-	22
DSF	UMS8/SL	110 x 110	56	(IPL10-30) 74/(IPL25) 84/(IPL40) 67	+7 / -3	145	13.5	-	36	55	22	22	-	22
DSF-Z	UMS8/SLZ	110 x 110	56	(IPL10-30) 74/(IPL25) 84/(IPL40) 67	+7 / -3	145	13.5	18	-	55	22	22	-	22
ASA	UMS8/SL	110 x 110	72	(IPL10-30) 87/(IPL25) 97/(IPL40) 80	+7 / -3	145	13.5	-	36	55	M16	22	94	22
ASA-Z	UMS8/SLZ	110 x 110	72	(IPL10-30) 87/(IPL25) 97/(IPL40) 80	+7 / -3	145	13.5	18	-	55	M16	22	94	22
DSA	UMS8/SL	110 x 110	72	(IPL10-30) 87/(IPL25) 97/(IPL40) 80	+7 / -3	145	13.5	-	36	55	22	22	94	22
DSA-Z	UMS8/SLZ	110 x 110	72	(IPL10-30) 87/(IPL25) 97/(IPL40) 80	+7 / -3	145	13.5	18	-	55	22	22	94	22

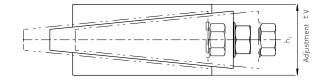


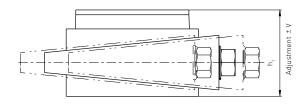
$$<sup>\</sup>label{eq:problem} \begin{split} ^{1}F & \max \text{in N} \\ F & \max = F_{_{V_{Sp}}} + F_{_{G}} + F_{_{dyn}} \text{in N} \\ F_{_{V_{Sp}}} & \text{Screw preload force in floor anchoring} \\ F_{_{G}} & \text{proportional weight force of the machine} \\ F_{_{dyn}} & \text{proportional dynamic forces} \end{split}$$

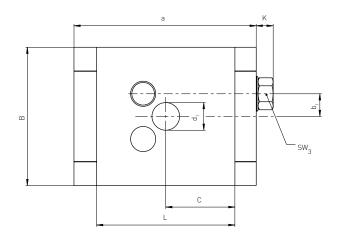
<sup>\*</sup> All measurements in mm
\*\*Length and width in mm

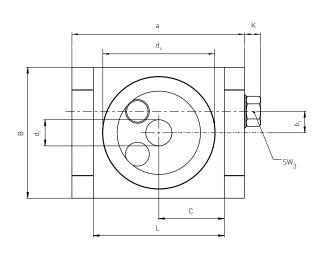
### DIMENSIONS UMS8/SL, UMS8/SLZ WITHOUT IPL

	Туре	L x w**	Height in h <sub>1</sub> *	F max <sup>1</sup>	Adjustment range V*	a*	K**	b <sub>1</sub> **	e*	c*	$d_1^*$	$d_4^*$	SW <sub>3</sub> *
KDSA	UMS8/SL	110 x 110	72	80 000	+7 / -3	145	13.5	-	36	55	22	94	22
KDSA	UMS8/SLZ	110 x 110	72	80 000	+7 / -3	145	13.5	18	-	55	22	94	22
KDS	UMS8/SL	110 x 110	56	80 000	+7 / -3	145	13.5	-	36	55	22	-	22
KDS	UMS8/SLZ	110 x 110	56	80 000	+7 / -3	145	13.5	18	-	55	22	-	22









F max in N F max =  $F_{V_{Np}}$  +  $F_{G}$  +  $F_{dyn}$  in N  $F_{V_{Np}}$ : Screw preload force in floor anchoring  $F_{G}$ : proportional weight force of the machine  $F_{dyn}$ : proportional dynamic forces

<sup>\*</sup> All measurements in mm
\*\*Length and width in mm

### isoloc Product Catalogue 7

Product photography: 75a, Büro für Gestaltung, Stuttgart

All other illustrations: isoloc Schwingungstechnik GmbH

### Design:

75a, Büro für Gestaltung, Stuttgart www.75a.de © 2018 isoloc Schwingungstechnik GmbH

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isoloc Schwingungstechnik GmbH Motorstraße 64, D-70499 Stuttgart

(Industrial Area Weilimdorf)

For further information please refer to: www.isoloc.de

