Installation instructions for
AIRDAM - air suspension systems

1. Read the installation instructions thoroughly. If you still have any questions, please get in touch with us -> Tel. +49 (0) 711/69760-0

2. Before starting the installation, please check the following:
   - Is an even surface ensured for each individual air spring?
   - Does the respective machine base cover the air spring completely and in a level manner? If not, an installation plate is required! (see diagrams below)

3. Installation of the air springs below the machine:
   - Lift the machine and subsequently position the air springs (if necessary, incl. installation plate) on the supporting point in an unpressurised state
   - Align air springs -> Consider the accessibility of the valves
   - Slowly lower the machine onto the air springs

4. Attaching the air springs to the machine:
   - Screw the fixing screws "finger-tight" into the threaded hole provided in the centre of each air spring
   - Subsequently, above the machine base, tension the unit using a DIN nut

5. Level the machine upwards solely by means of the air pressure:

   5.1 Compressed air supply via hand pump or electric pump:
   Please remove the end caps from the air springs and, as for a car tyre, introduce the air. It is imperative to monitor the pressure here! Fine adjustment is difficult because some air escapes during removal of the cap. We therefore recommend using a pressure regulating unit with central or peripheral compressed air supply.

   5.2 Compressed air supply using central or peripheral unit:
   After removing the end caps, connect the aligned air springs by means of pneumatic hoses and valve connections to the still unpressurised pressure regulating unit (see pneumatic circuit diagram). Please also check that all pressure regulators of the pressure regulating unit are closed. When all those connections are firmly tightened, apply air pressure to the pressure regulating unit from the central or peripheral compressed air system. Adjust the pressure regulating unit using the respective permitted pressure of the air springs being used. Subsequently, open each individual pressure reducing valve sufficiently far until approx. 3 bar air pressure is reached. Now the precise height adjustment can take place. Here, each connected air spring can be adjusted (individually or in parallel). Overloading of the springs can no

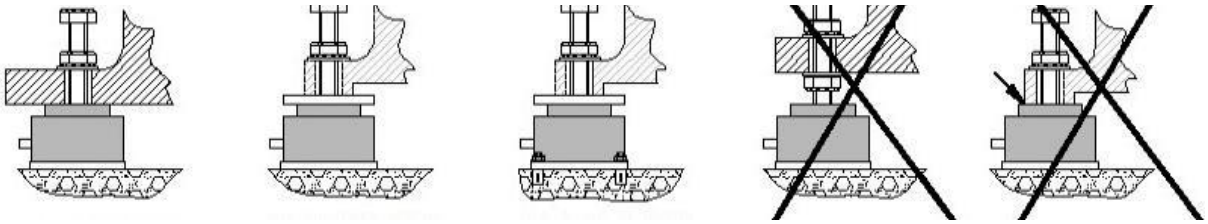
longer occur since the pressure regulating unit was previously set to the maximum pressure.

Once adjustment has taken place, the individual valves stay in position. Should the level deviate as a result of machine operation or, potentially, other influences, this will be automatically re-adjusted by the pressure regulating unit. Before operating the machine, all air connections should be checked again to ensure there are no leaks!

6. Optional floor anchoring:
   Using the 4x attachment drill holes for each air spring, these can be anchored to the hall floor. If no floor anchoring is envisaged, we recommend that you consider using an anti-slip panel (GPL3025) underneath the air spring. This is not provided with the air spring and must be requested from us separately.

Other important information:

-Never supply air to elements in an unloaded state!
-Do not exceed maximum permitted load!
-Comply with maximum permitted operating pressure!
-Observe the maximum permitted installation height Hmax!
-Fully evacuate the air from elements before dismantling and load removal!
-Elements may only be serviced when the machine is not in operation!

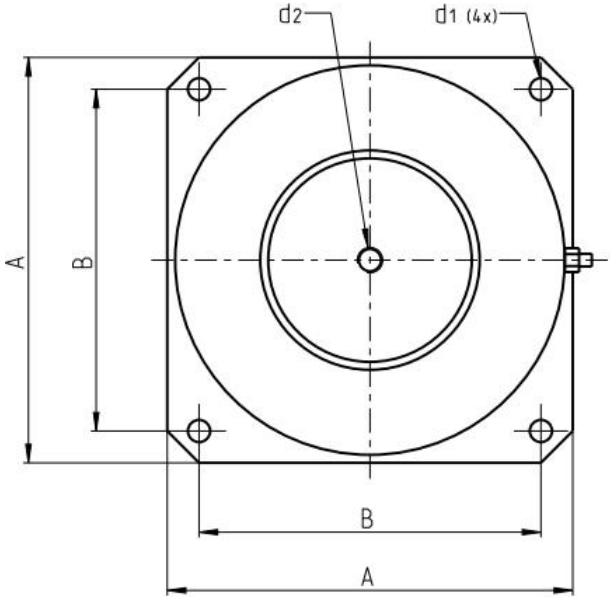


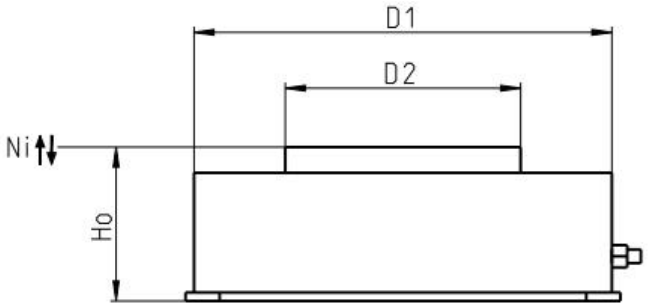
AIRDAM Luftfederelemente ohne integrierter Dämpfung

LFS Typ	Art-Nr.	D1 mm	D2 mm	Ho mm	Ni mm	H_{max} = Ho + Ni mm	H_{min} = Ho - Ni mm	A mm	B mm	d1 mm	Gewindebohrung d2 (mittig) mm	Betriebsdruck (max.) bar	Belastung (max.) N	Maschinen-fußdicke (max.) mm	Gewicht kg
LFS 0.65	90101	73	28	65	±5	70	60	75	60	7	M10	5	650	50	0,30
LFS 1.8	90102	105	52	65	±5	70	60	105	89	7	M12	5	1.800	65	0,50
LFS 2.8	90103	127	60	90	±6	96	84	130	108	7	M12	6	2.800	65	1,00
LFS 6 S	90104	172	96	90	±6	96	84	175	153	7	M12	6	6.000	65	2,20
LFS 13	90105	245	138	90	±6	96	84	255	215	14	M16	6	13.000	75	7,20
LFS 26	90106	338	205	90	±6	96	84	343	305	14	M16	6	26.000	75	15,00
LFS 38	90107	380	255	91	±6	97	85	385	310	20	M24,1,5	6	38.000	75	23,00
LFS 55	90108	468	300	90	±6	96	84	470	406	20	M24	6	55.000	75	29,00
LFS 76	90109	550	360	91	±6	97	85	555	480	20	M24x1,5	6	76.000	75	46,50
LFS 100	90110	610	430	90	±6	96	84	610	508	20	M24	6	100.000	75	52,50

AIRDAM Luftfederelemente mit integrierter Dämpfung

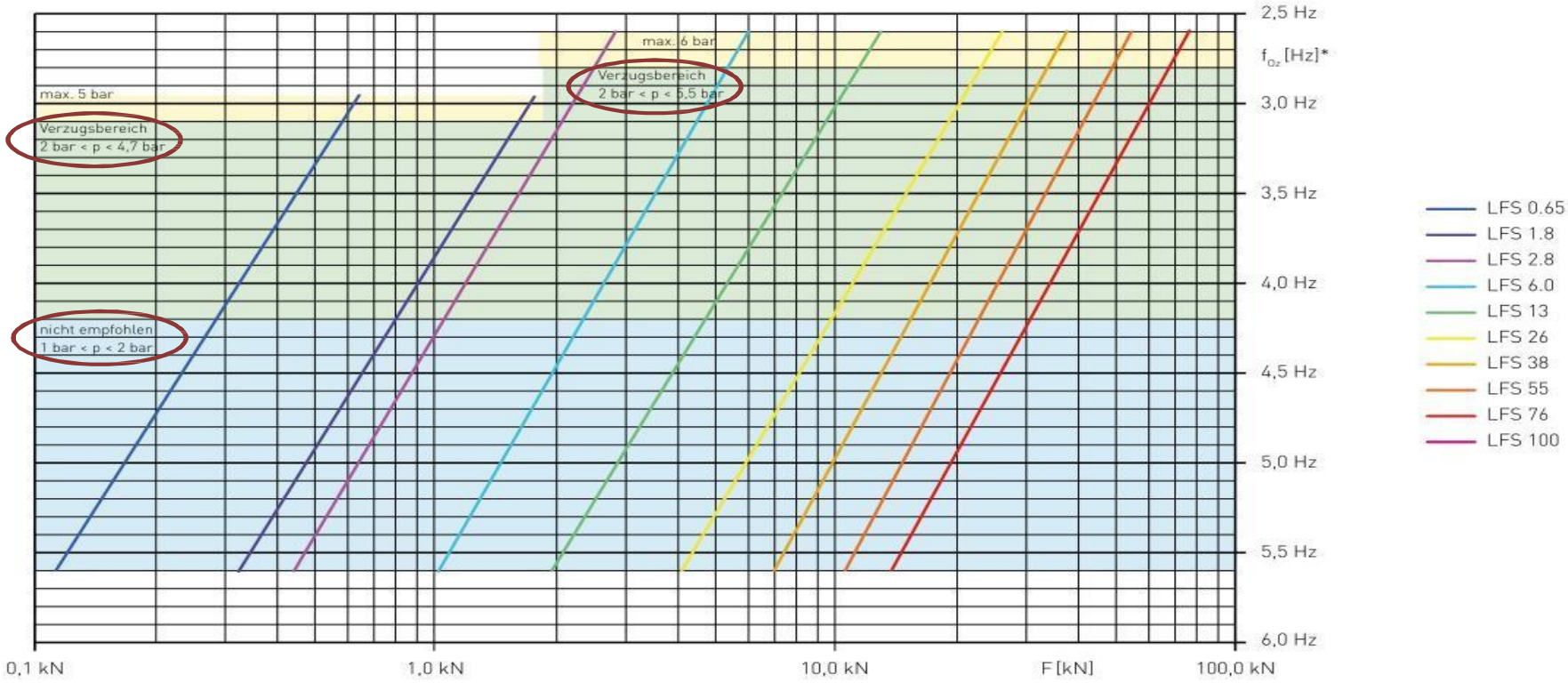
LFS Typ	Art-Nr.	D mm	D2 mm	Ho mm	Ni mm	H_{max} = Ho + Ni mm	H_{min} = Ho mm	A mm	B mm	d1 mm	Gewindebohrung d2 (mittig) mm	Betriebsdruck (max.) bar	Belastung (max.) N	Maschinen-fußdicke (max.) mm	Gewicht kg
LFS-D 13	90205	245	138	90	±6	96	84	255	215	14	M16	6	13.000	75	8,20
LFS-D 26	90206	338	205	90	±6	96	84	343	305	14	M16	6	26.000	75	16,00
LFS-D 38	90207	380	255	91	±6	97	85	385	310	20	M24x1,5	6	38.000	75	24,00
LFS-D 55	90208	468	300	90	±6	96	84	470	406	20	M24	6	55.000	75	32,00
LFS-D 76	90209	550	360	91	±6	97	85	555	480	20	M24x1,5	6	76.000	75	48,00
LFS-D 100	90210	610	430	90	±6	96	84	610	508	20	M24	6	100.000	75	58,00





Diagram

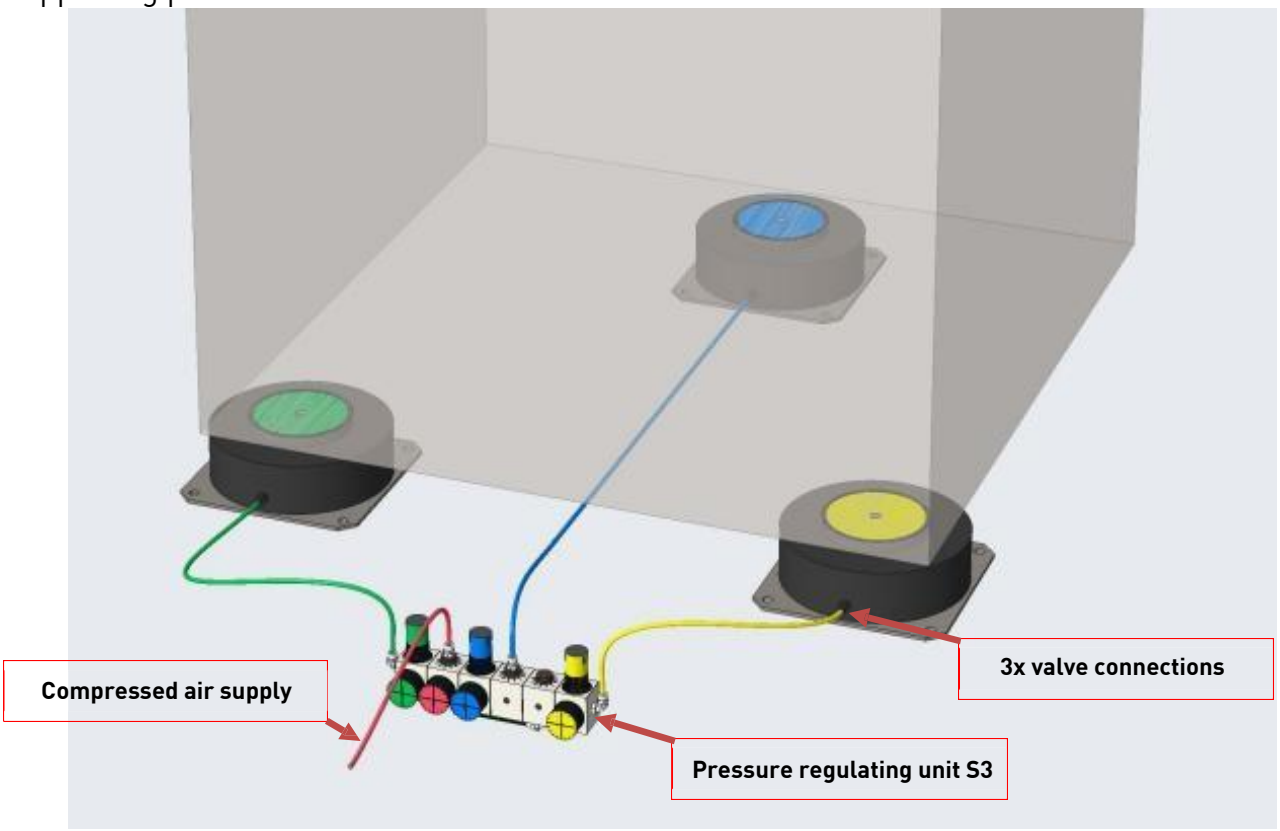
for setting the pressure regulators

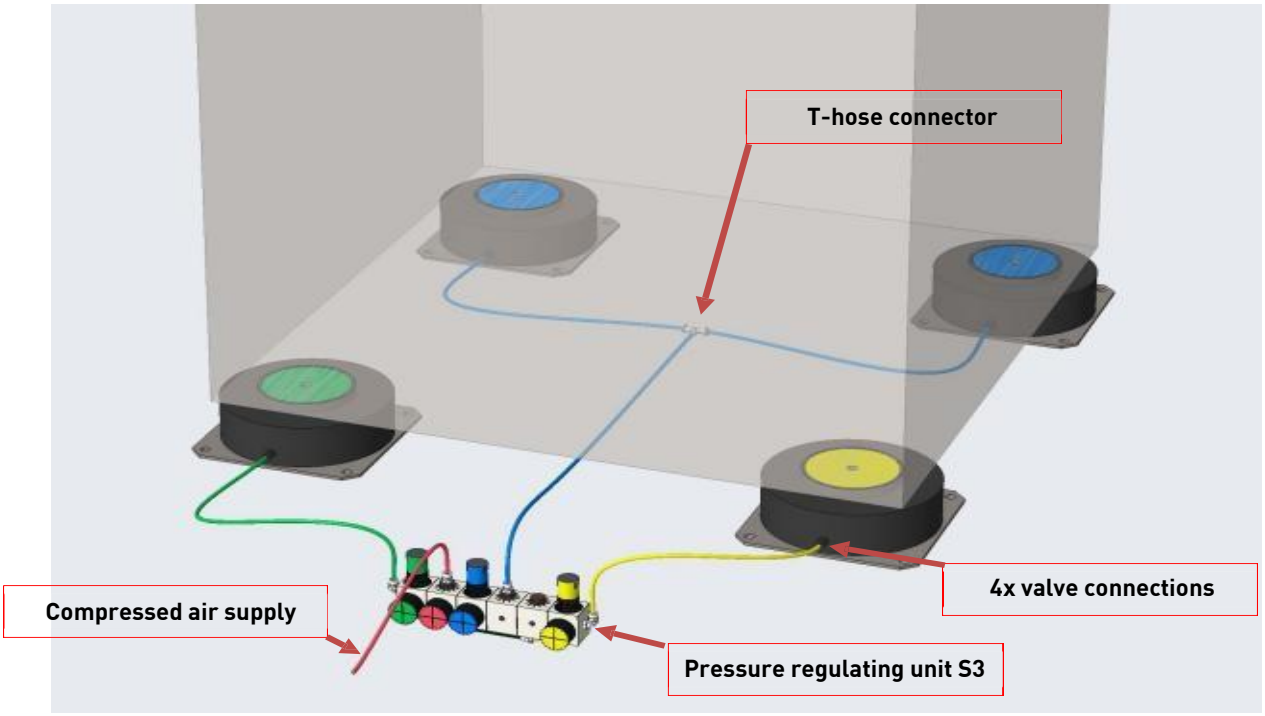


*f_{0z} : vertikale Eigenfrequenz der AIRDAM LFS ohne Dämpfung

Pneumatic circuit diagram

for connecting the pressure regulating unit S3 with three or four supporting points:





Pneumatic circuit diagram

for connecting the pressure regulating unit S4 with four supporting points: