Ordering system for hinges: 6910.01/45-3-80

Hinge series
6910 = standard
6912 = low height
6914 = two lid flanges
6911 = for heavy lids

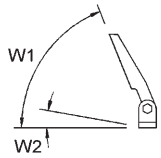
Hinge series – subgroup
(Way of mounting hinge to lid)

Height of turning axis
There are several different heights (dimension H) available for hinges series 6910, 6912 and 6914.
The range covers 30 mm to 113 mm. Additionally we offer spacers to cover heights in between the standard steps .
Please note that series 6911 is only available in heights 45 mm and 66 mm.

Hinge momentum

Series	Momentum	Momentum range
6910/6912, 198 mm centers	1 2 3 5 6	to 10 Nm 10 Nm to 20 Nm 20 Nm to 30 Nm 30 Nm to 50 Nm 50 Nm to 60 Nm
6910/6912, 220 mm centers	7	70 Nm to 100 Nm
6914	8	ca. 40 Nm to 60 Nm
6911	1 2 3	100 Nm to 140 Nm 140 Nm to 200 Nm 200 Nm to 270 Nm
Remark: Spring tolerance according to DIN 2095!		

Aperture angle
Standard aperture angle W1 = 80° (for series 6911 = 85°)
Also available 65, 70, 75, 80, 85 or 90 grade on request
Closing angle W2 = ca. 10°
(10° closing angle only valid for horizontal installation face)



Calculation scheme:
Input data: lid weight incl. handle, safety valve etc.
Dimension turning axis – centre of gravity

1. Lid-acceleration-force

force F	= lid weight x gravitational acceleration
F	= 15 x 9,81 (kg x m/s²)
F	= ca. 150 kg m/s²
F	**= ca. 150 Nm**

2. Centre of gravity L 1 of the lid

centre of gravity L 1	= total length of lid : 2
L 1	= 0,6 m : 2
L 1	= 0,3 m

3. Lever / lever distance

lever L 2	= Projection hinge + centre of gravity L 1
L 2	= 0,05 m + 0,3 m
L 2	= 0,35 m

4. Momentum calculation

momentum M	= force x lever
M	= 150 N x 0,35 m
M	**= ca. 52 Nm**

Repeat calculation for all additional components and add the momentum together

Decision: hinge momentum 6 (50 to 60 Nm) or two separate hinges with momentum 3 (20 to 30 Nm)

Remark: Please note that hinges are tailor made solution and assembled to order the goods are non-returnable.