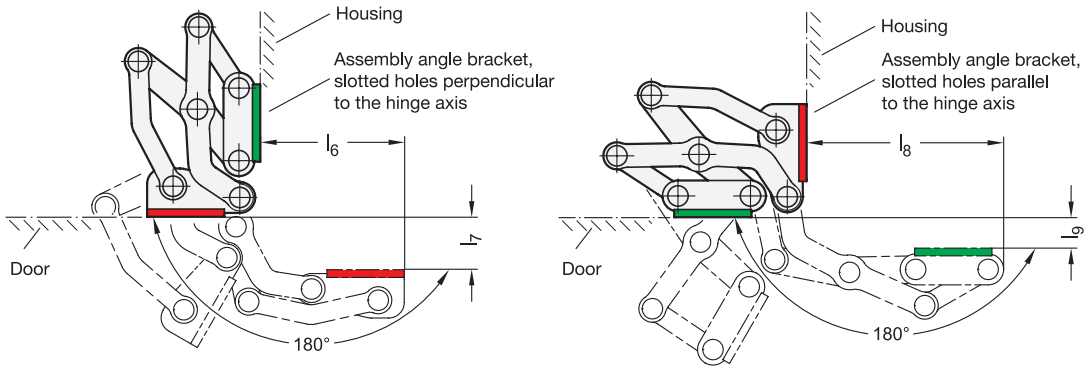
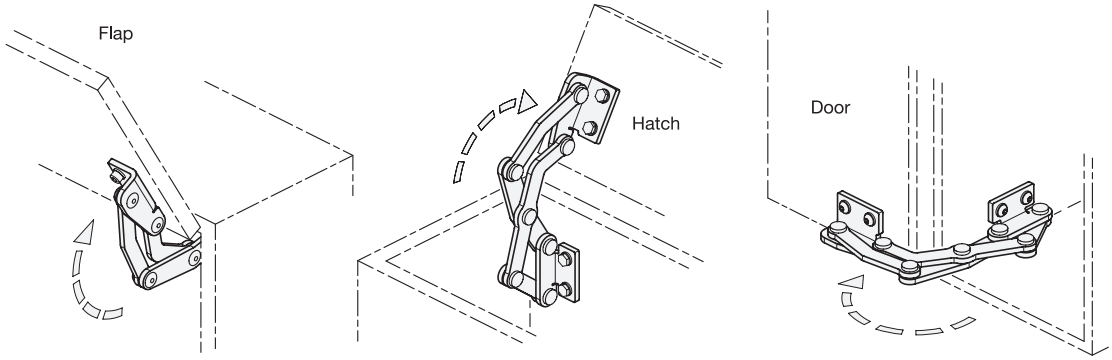
Installation position – pivot characteristics

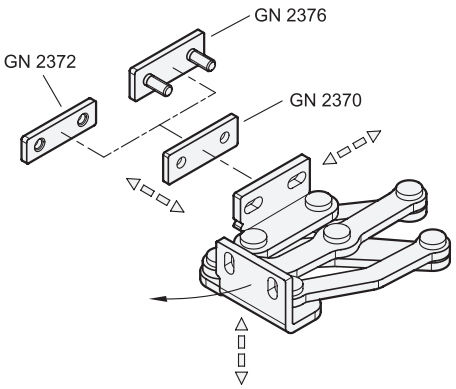
The stainless steel multiple-joint hinges can be installed to the housing with slotted holes on the assembly angle brackets that are either perpendicular or parallel to the hinge axis. This results in the two pivot characteristics depicted.



Application examples



Adjustment and mounting options



The stainless steel multiple-joint hinges can be adjusted in three planes during installation. For example, this allows adjustment for tolerances or establishing of required compressive forces for seals.

Two planes can be adjusted via parallel or perpendicular slotted holes in the assembly angle brackets. In the third plane, position corrections can be made using GN 2370 stainless steel spacer plates.

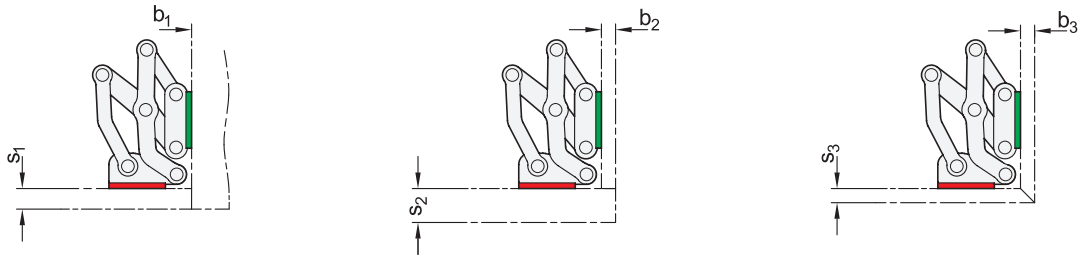
GN 2372 spacer plates with tapped holes as well as GN 2376 mounting plates with threaded studs are also available for mounting the hinges. The latter can be welded on or inserted through the wall from the outside and fastened in place.

All accessory items are designed for use with both assembly angle brackets.

Design variants

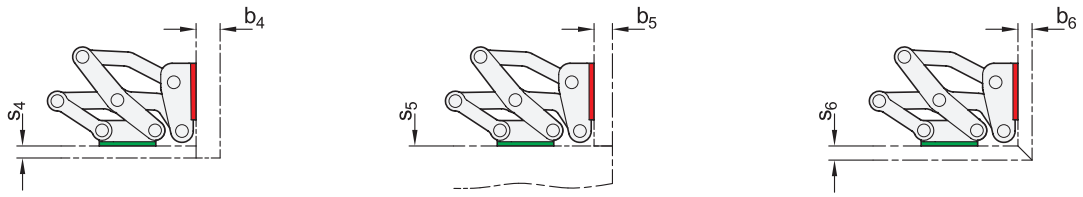
Flaps, hatches and doors can be inset, surface-mounted or mitered. The maximum wall thicknesses and bend sizes for planned sheet metal constructions arise from the respective installation type.

1. Assembly angle brackets mounted to the housing with slotted holes perpendicular to the hinge axis:



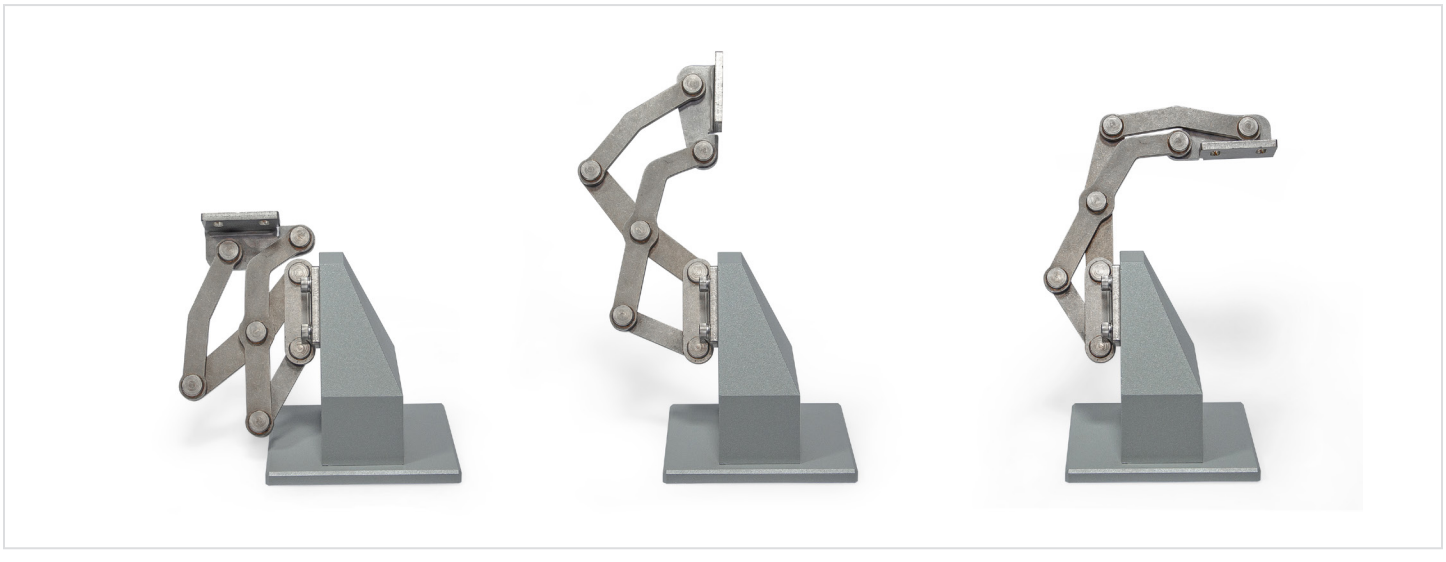
l_1	$s_{1\ max.}$	b_1	$s_{2\ max.}$	$b_{2\ max.}$	$s_{3\ max.}$	$b_{3\ max.}$
40 *1.57*	13 *.51*	1 ... ∞	24 *.94*	10 *.39*	10 *.39*	10 *.39*
50 *1.97*	19 *.75*	1 ... ∞	34 *1.34*	17 *.67*	16 *.63*	16 *.63*
60 *2.36*	25 *.98*	1 ... ∞	44 *1.73*	24 *.94*	21 *.83*	21 *.83*

2. Assembly angle brackets mounted to the housing with slotted holes parallel to the hinge axis:

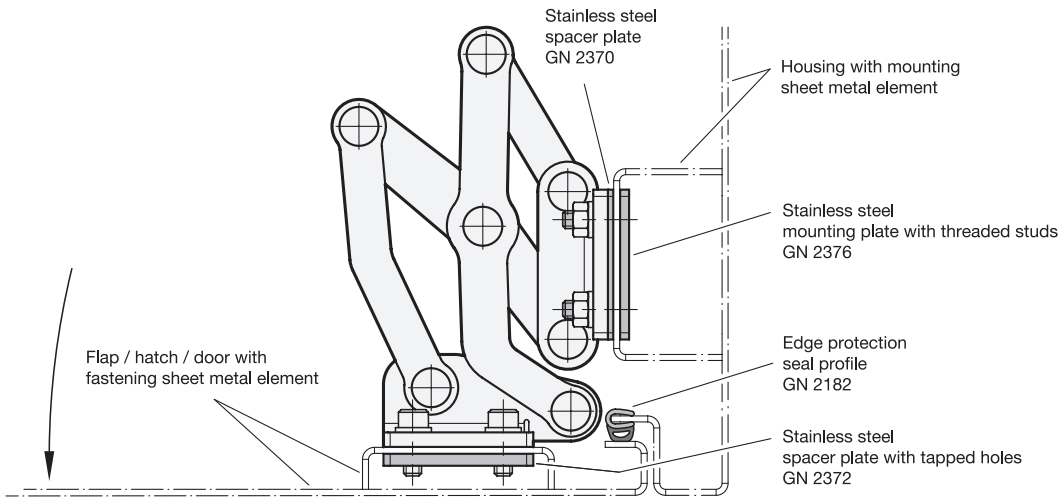


l_1	$s_{4\ max.}$	$b_{4\ max.}$	s_5	$b_{5\ max.}$	$s_{6\ max.}$	$b_{6\ max.}$
40 *1.57*	9 *.35*	27 *1.06*	1 ... ∞	13 *.51*	10 *.39*	10 *.39*
50 *1.97*	17 *.67*	35 *1.38*	1 ... ∞	19 *.75*	16 *.63*	16 *.63*
60 *2.36*	23 *.91*	45 *1.77*	1 ... ∞	25 *.98*	21 *.83*	21 *.83*

The design variants shown represent standard installation conditions. If the installation position of the hinge is changed or one of the two wall thickness dimensions s or b are lower, the maximum achievable dimensions change independently of each other. This makes it possible in some cases to work with larger wall thickness dimensions than those specified with the same hinge size. A simple design check via CAD or a test setup is therefore recommended.

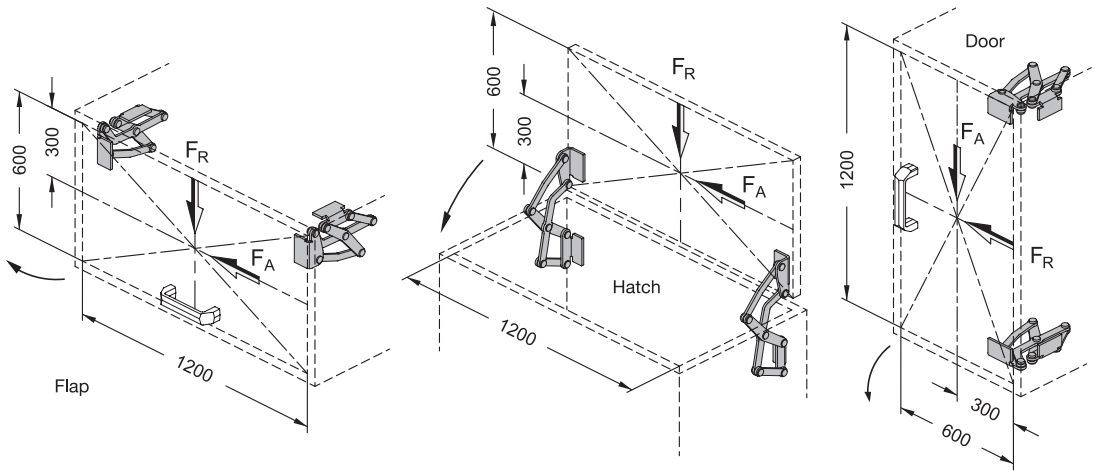


Construction example



Load capacity

The maximum load of the stainless steel multiple-joint hinges specified below applies to the standard use cases and serves for orientation in the case of deviating applications. The resulting forces lead to slight elastic deformation, which can be compensated for by means of the adjustment options, if necessary.



Max. load capacity per hinge pair		
l_1	**F_A (axial)**	**F_R (radial)**
40 *1.57*	175 N *39.34 lbf*	650 N *146.13 lbf*
50 *1.97*	175 N *39.34 lbf*	750 N *168.61 lbf*
60 *2.36*	150 N *33.72 lbf*	550 N *123.65 lbf*