

Multiple-Joint Hinges

Stainless Steel, Concealed, Opening Angle 120°

SPECIFICATION

Types

- Type L: Fixing angle piece left
- Type R: Fixing angle piece right

Hinge

Stainless steel AISI 304 NI
Matte finish, tumbled **MT**

Friction bearing

Bronze
Self lubricated



INFORMATION

Multiple-joint hinges GN 7233 are installed on the inside of flaps, hatches and doors to save space and ensure protection against vandalism. The hinges have a maximum opening angle of 120°, making them perfect for use with medium-thick doors.

Use of this hinge type leaves housing exteriors free of attachments that do not match the design or that should be avoided entirely in the interests of fast and easy cleaning.

Multiple-joint hinges are generally used in pairs, meaning that one L type and one R type are used per opening. For higher loads, e.g. from large flaps or hatches, these can be supplemented with additional hinges of any type.

ACCESSORY

- GN 2372 Plates (with Tapped Holes) (see page 1393)
- GN 2370 Spacer Plates (see page 1392)
- GN 2376 Plates (with Threaded Studs) (see page)

ON REQUEST

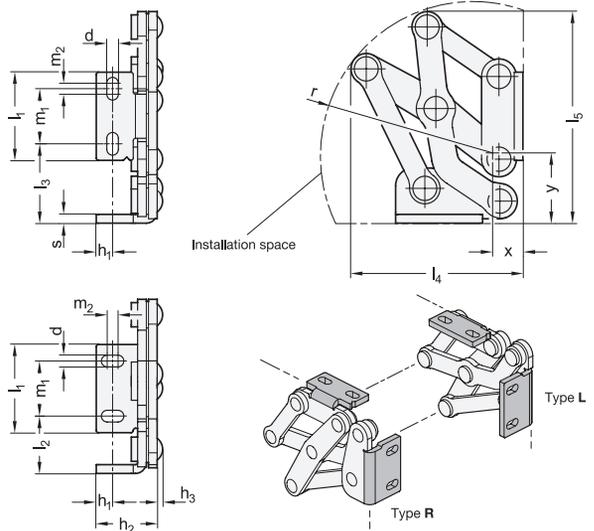
- Other materials
- Other finishes
- Other fixing angle pieces
- Other opening angles
- Other max. wall thicknesses
- Other lifting motion

TECHNICAL INFORMATION

- Overview of Hinge Types (see page 1362)
- Stainless Steel Characteristics (see page A26)

Security Information

The information in the operating instruction must be observed during installation, initial operation, and use. It is enclosed with the product and is provided digitally on the product page at elesa-ganter.com.



GN 7233-L

STAINLESS STEEL

Description	l1	d	h1	h2	h3 ≈	l2	l3	l4	l5	l6	l7	l8	l9	m1	m2	r	s	x	y	⚖
GN 7233-NI-30-L-MT	30	4.3	7.5	25	4	19.5	24.5	62.5	68.5	23	50	21.8	55.3	18	4	57.5	3	9.8	22.3	150
GN 7233-NI-40-L-MT	40	5.3	7.5	28	4	26	36	79	96	33.8	65.9	27.9	77.4	25	5	70	4	23	30.5	267
GN 7233-NI-50-L-MT	50	6.5	10	35	4	35	46	105	135	79.3	82	2.8	113.3	30	6	105	5	20	37	533
GN 7233-NI-60-L-MT	60	8.5	12.5	40	4	40	61	130	169	87.5	107.5	17.4	147.1	36	8	125	5	34	50	700

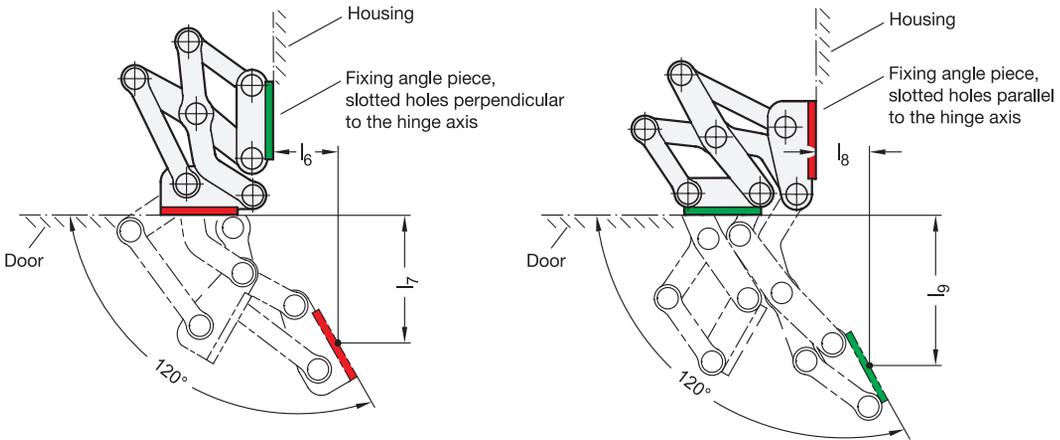
GN 7233-R

STAINLESS STEEL

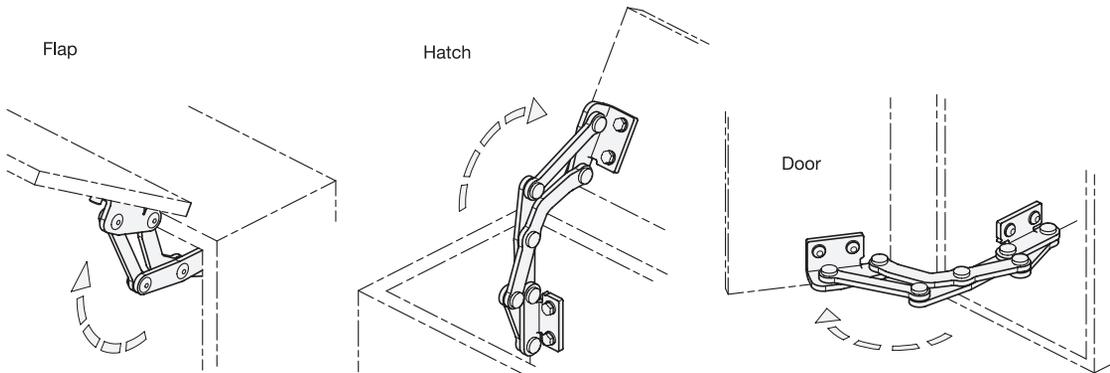
Description	l1	d	h1	h2	h3 ≈	l2	l3	l4	l5	l6	l7	l8	l9	m1	m2	r	s	x	y	⚖
GN 7233-NI-30-R-MT	30	4.3	7.5	25	4	19.5	24.5	62.5	68.5	23	50	21.8	55.3	18	4	57.5	3	9.8	22.3	150
GN 7233-NI-40-R-MT	40	5.3	7.5	28	4	26	36	79	96	33.8	65.9	27.9	77.4	25	5	70	4	23	30.5	267
GN 7233-NI-50-R-MT	50	6.5	10	35	4	35	46	105	135	79.3	82	2.8	113.3	30	6	105	5	20	37	533
GN 7233-NI-60-R-MT	60	8.5	12.5	40	4	40	61	130	169	87.5	107.5	17.4	147.1	36	8	125	5	34	50	700

Installation Position - Pivot Characteristics

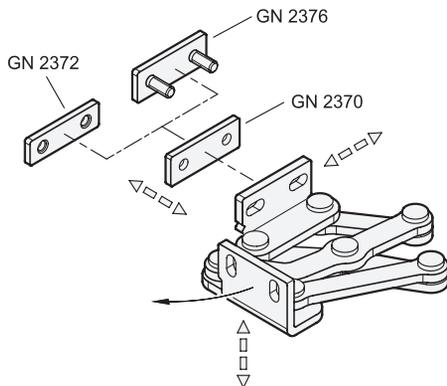
The multiple-joint hinges can be installed on the housing with the slots of the fixing angle piece oriented either perpendicular or parallel to the hinge axis. This results in the two pivot characteristics depicted.



Examples of Use



Adjustment and Fastening Options



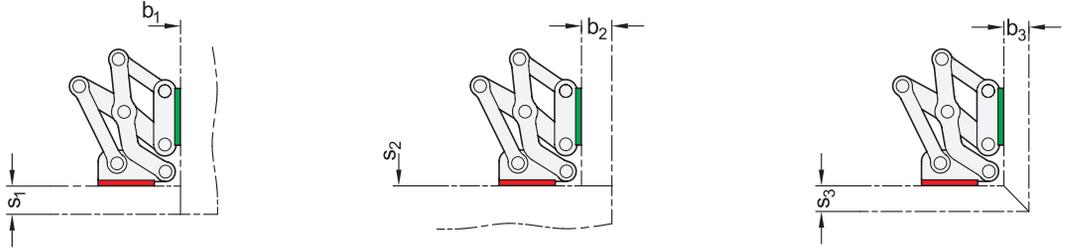
The multiple-joint hinges can be adjusted in three planes during installation. For example, this allows tolerances to be adjusted or the required compressive forces for seals to be established. Two planes can be adjusted via the parallel or perpendicular slots in the fixing angle pieces. In the third plane, position corrections can be made using the spacer plates GN 2370 (see page 1392). Plates with tapped holes GN 2372 (see page 1393) as well as plates with threaded studs GN 2376 (see page) are also available for fastening 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 fixing angle pieces.



Design Variants

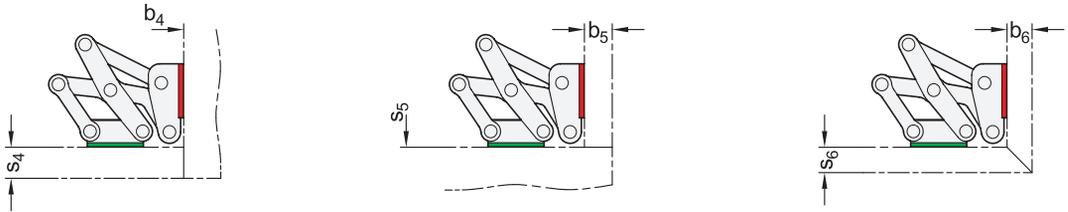
Flaps, hatches and doors can be inset, flush or mitered. The maximum wall thicknesses and bend sizes for sheet metal constructions given below arise from the respective installation type.

1. Fixing angle pieces mounted to the housing with slots perpendicular to the hinge axis:



l1	s1 max.	b1	s2 max.	b2 max.	s3 max.	b3 max.
30	15	1 ... ∞	1 ... ∞	10	10	10
40	20	1 ... ∞	1 ... ∞	22	18	18
50	25	1 ... ∞	1 ... ∞	38	30	30
60	32	1 ... ∞	1 ... ∞	50	40	40

2. Fixing angle pieces mounted to the housing with slots parallel to the hinge axis:

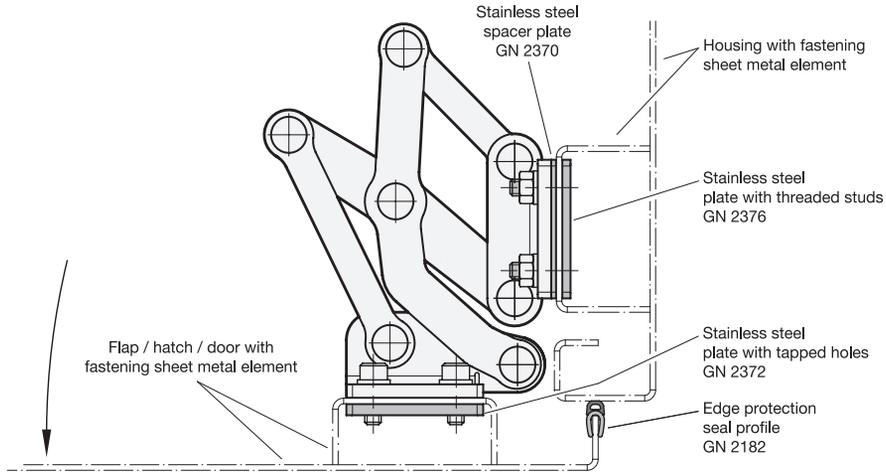


l1	s4 max.	b4 max.	s5	b5 max.	s6 max.	b6 max.
30	10	1 ... ∞	1 ... ∞	15	10	10
40	22	1 ... ∞	1 ... ∞	20	18	18
50	38	1 ... ∞	1 ... ∞	25	30	30
60	50	1 ... ∞	1 ... ∞	32	40	40

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 is lower than s or b, 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.

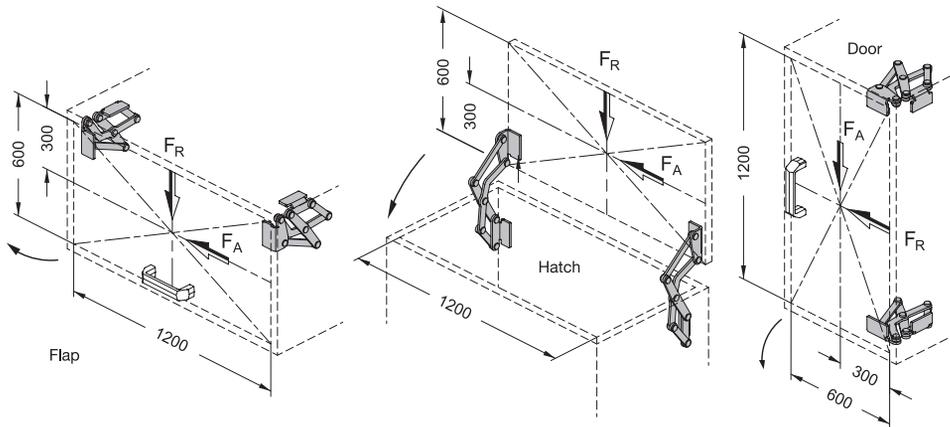


Example of an Assembly



Load Capacity

The maximum load of the multiple-joint hinge 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 in N		
l1	FA axial	FR radial
30	100	300
40	175	650
50	175	750
60	150	550

