



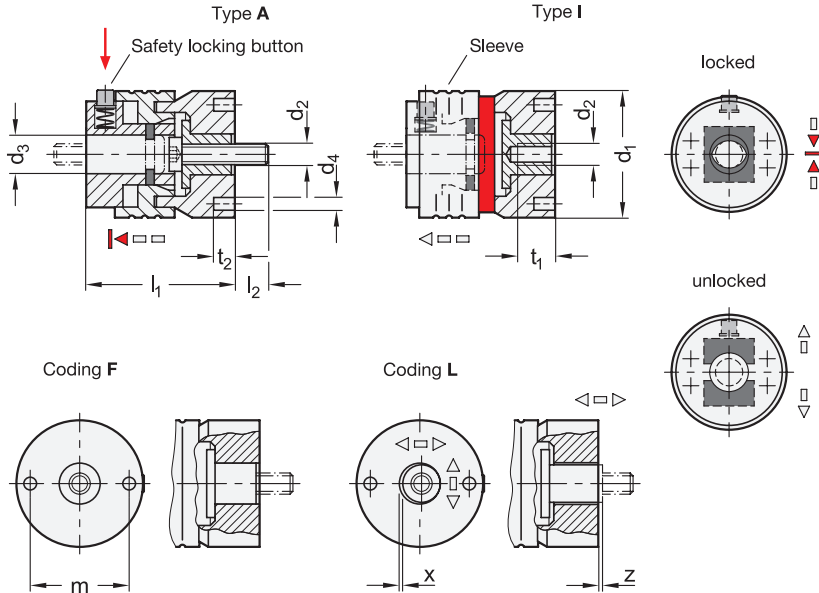
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Highlights

# Quick Release Couplings



Standard Parts. **Ganter.**



- 3 Type**
  - A With threaded stud
  - I With internal thread
- 4 Coding**
  - F Fixed bearing
  - L Floating bearing

Nominal size	d <sub>2</sub>	d <sub>1</sub>	d <sub>3</sub> Bore ±0,03	Studs GN 1050.1 ±0,03	d <sub>4</sub> H7	l <sub>1</sub>	l <sub>2</sub>	m	t <sub>1</sub> Min.	t <sub>2</sub>	x +0,05 Radial offset Coding L	z ±0,1 Axial offset Coding L
2N	M 10	53	18,5	18,25	6	70,1	15	40	18	10	0,75	0,4
2N	M 12	53	18,5	18,25	6	70,1	20	40	18	10	0,75	0,4

**Specification**

- Housing  
Aluminum  
Black anodized **ASS**
- Closure mechanism  
Steel, tempered  
Zinc plated, blue passivated
- Fastening bushing (type I)  
Stainless steel AISI 431  
Tempered
- Mounting screw (type A)  
Socket cap screw DIN 7984  
Property class 8.8
- Other screws  
Steel, zinc plated, blue passivated
- Other parts  
Stainless steel
- Operating temperature -30 °C to 120 °C
- *Stainless Steel Characteristics* → Page 2166
- **RoHS**

**Accessory**

- Studs GN 1050.1 → Page 4
- Flanges GN 1050.2 → Page 5

**On request**

- Other colors (anodized) or plain

**Information**

Quick release couplings GN 1050 position and connect components without tools using studs GN 1050.1 for a tight and repeatable fit. For repeated machine set ups or assemblies that require the inconvenient use of a screwdriver, quick release couplings can be used on fixtures or production lines to efficiently mount guide rails, covers or additional devices.

A safety locking button protects against accidental opening of the coupling. When pressing the button, the sleeve can be moved axially to unlock a stud inserted into the notch on the inside. At the same time, a red ring becomes visible on the outside to indicate the unlocked state.

The couplings do not transmit any torque. If multiple couplings are used on the same unit, coding L can be used to compensate for a radial and axial offset. The bores d<sub>4</sub> can hold cylinder or cam point pins to position the coupling, if needed. For coding L, the pin holes on the application must be proportionally larger to allow for radial adjustments.

Flanges GN 1050.2 are available as an accessory for the assembly of couplings and studs, and provide additional attachment options.

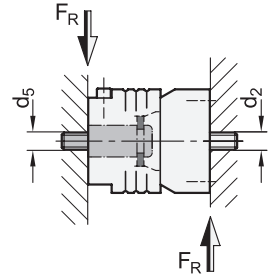
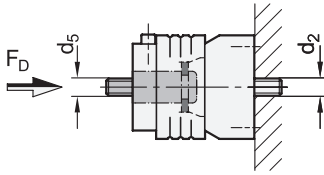
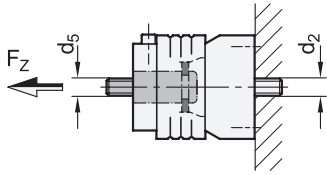
**How to order**

1	Nominal size
2	d <sub>2</sub>
3	Type
4	Coding
5	Finish

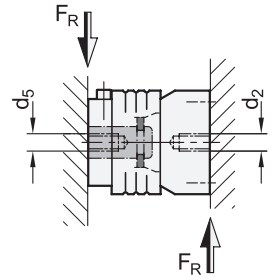
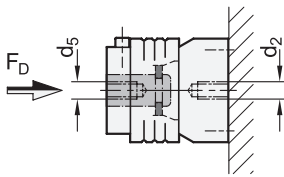
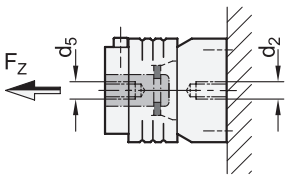
GN 1050-2N-M10- I -L-ASS

### Mounting and load information

GN 1050 (Type A) with GN 1050.1 (Type A)



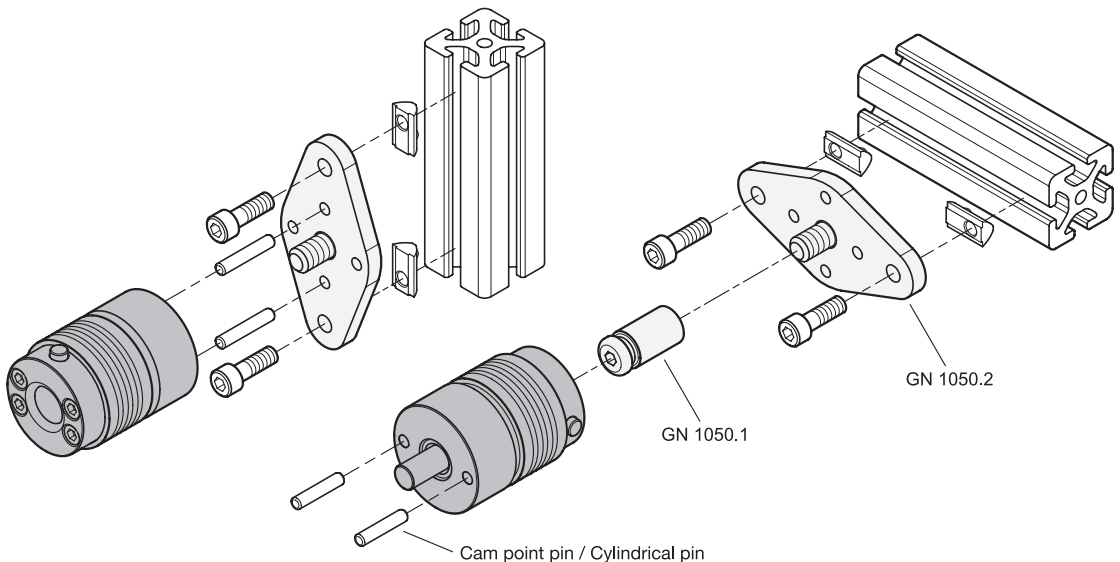
GN 1050 (Type I) with GN 1050.1 (Type I)

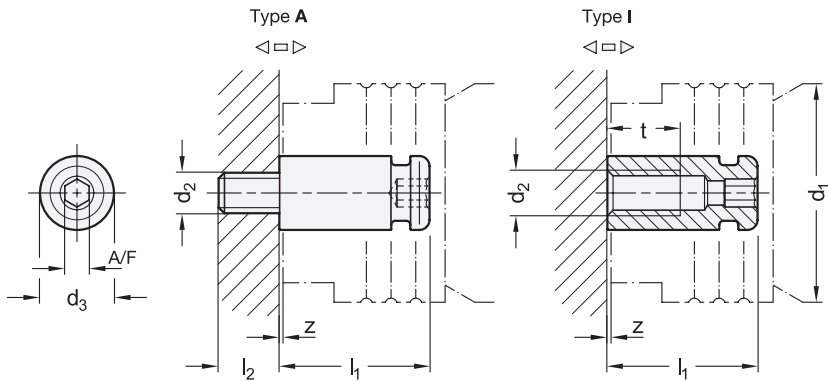


Nominal size	d <sub>2</sub> Mounting thread Quick release couplings	d <sub>5</sub> Mounting thread Studs GN 1050.1	F <sub>Z</sub> Max. tensile load in kN	F <sub>D</sub> Max. compressive load in kN	F <sub>R</sub> Max. shear load in kN
2N	M 10	M 10	25	25	19
2N	M 10	M 12	25	25	19
2N	M 12	M 10	25	25	19
2N	M 12	M 12	35	35	28

**Safety instructions:** The load capacities can only be achieved if the surrounding structure is capable of supporting these loads. Any threaded holes on the application or inserted nuts and screws require at least property class 8. Depending on the application, additional safety factors should be added.

### Application example for profile systems

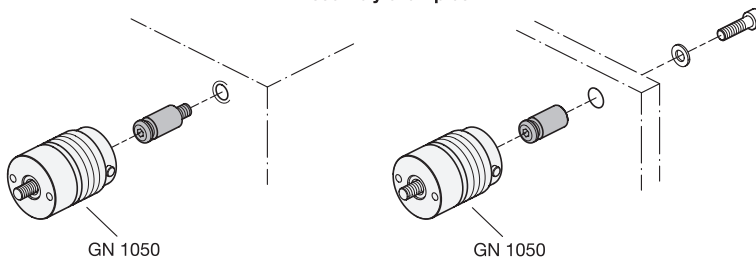




**3 Type**

- A** With threaded stud
- I** With internal thread

**Assembly examples**



<b>1</b> Nominal size Quick release coupling GN 1050	<b>2</b> $d_2$	$d_1$	$d_3 \pm 0,03$	$l_1$	$l_2$	A/F	t Min.	$z \pm 0,01$ Axial offset
2	M 10	53	18,25	37,1	15	6	18	0,4
2	M 12	53	18,25	37,1	18	6	18	0,4

**Specification**

- Steel
- Tempered
- Zinc plated, blue passivated
- RoHS

**ST**

**Information**

Studs GN 1050.1 position and attach components without tools using quick release couplings GN 1050 for a tight and repeatable fit. The dimensions and material properties of the studs have been precisely adapted to the couplings to ensure proper functionality.

The studs can be purchased individually so that multiple studs can be paired with a coupling in alternation, such as to efficiently position fixtures in different locations depending on the workpiece. The studs are fastened with threaded stud or internal thread, depending on the type.

To achieve the indicated load capacities, threaded holes on the application or inserted nuts and screws must meet at least property class 8.

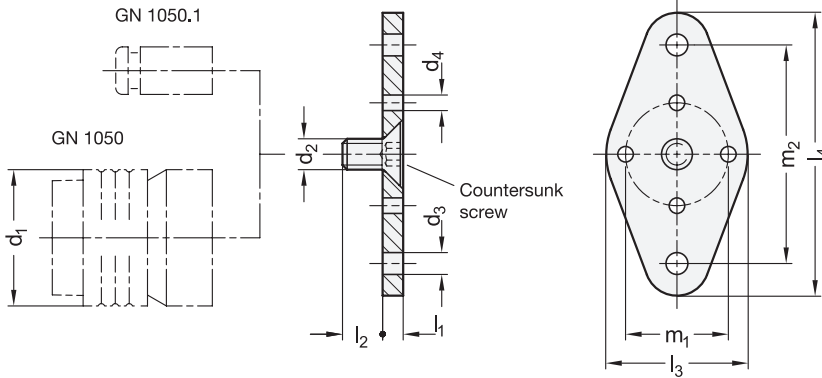
Flanges GN 1050.2 are available as an accessory for mounting the studs and provide additional attachment options.

see also...

- Quick Release Couplings GN 1050 → Page 2

How to order	
<b>1</b>	Nominal size
<b>2</b>	$d_2$
<b>3</b>	Type
<b>4</b>	Material

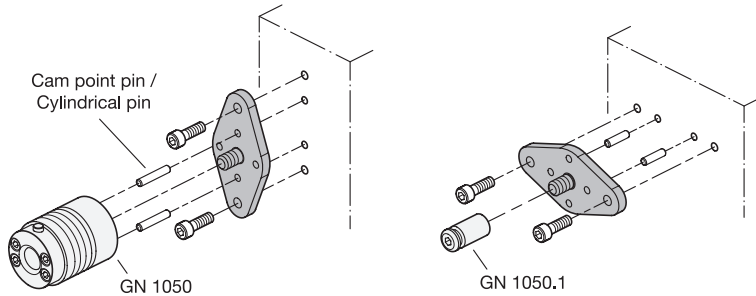
**GN 1050.1-2-M12- I-ST**



**2 Coding**

- F Fixed bearing
- L Floating bearing

**Assembly examples**



Nominal size Quick release coupling GN 1050	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	Coding F	Coding L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	m <sub>1</sub>	m <sub>2</sub>
2	53	M 12	8,5	6,05		8,5	8	12	55	110	40	85

**Specification**

- Steel **ST**
- Zinc plated, blue passivated **ZB**
- Countersunk screw DIN 7991  
Steel, property class 8.8  
Zinc plated, blue passivated
- **RoHS**

**On request**

- Other finishes e.g. powder coated

**Information**

Flanges GN 1050.2 are available as accessories for mounting quick release couplings GN 1050 and studs GN 1050.1 to expand the attachment options of both fastening elements.

They are used wherever the standard fastening method of the couplings or studs using the central internal thread or threaded stud is not possible or suboptimal due to the surrounding structure. This can happen with aluminum profile systems or thin-walled parts that have insufficient strength to bear a point load.

Both the flange and the coupling can be positioned by inserting cam point pins or cylinder pins into the bores d<sub>4</sub> to prevent unintended twisting. For coding L (floating bearing), the pin holes are designed to avoid restricting the radial offset of the coupling.

see also...

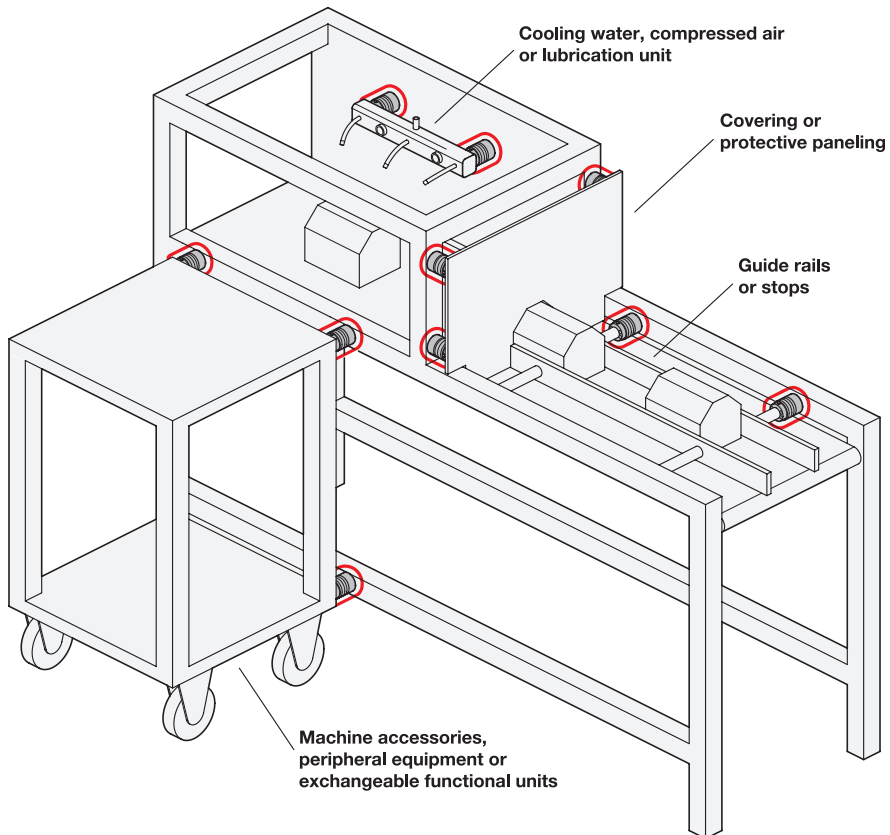
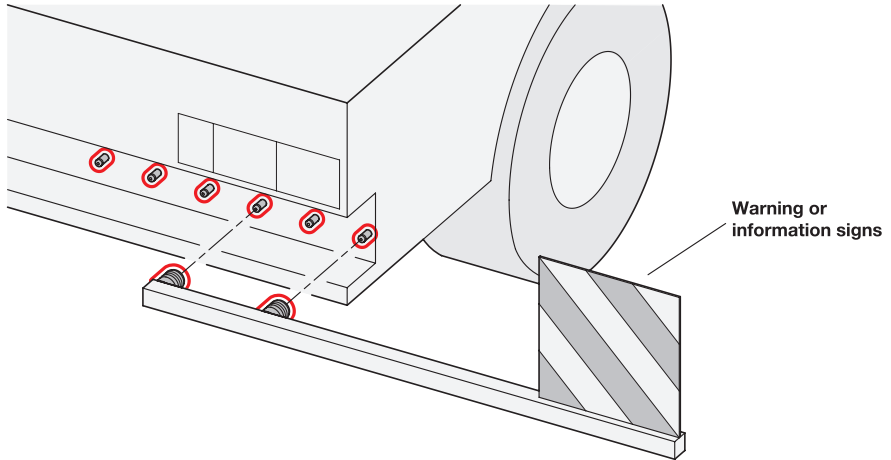
- [Quick Release Couplings GN 1050](#) → Page 2

How to order	1 Nominal size
	2 Coding
	3 Material
	4 Finish

**GN 1050.2-2-L-ST-ZB**

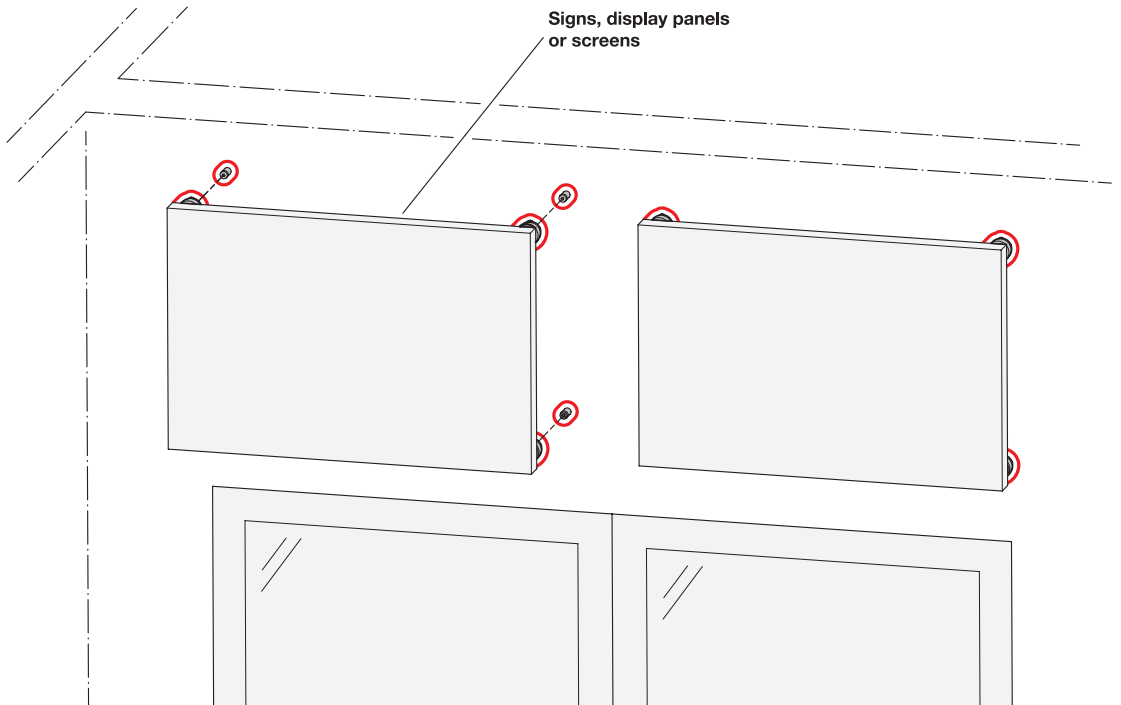
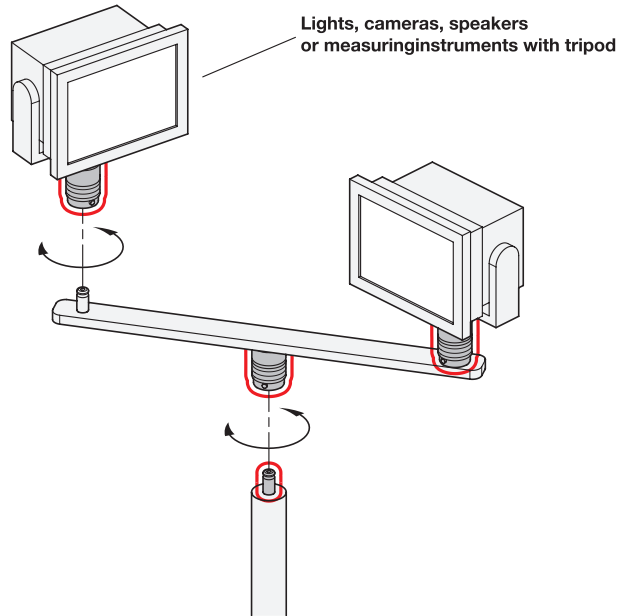
# Quick Release Couplings

Application Examples



# Quick Release Couplings

Application Examples



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