

**2 Type**

- Q** With cross hole
- A** With axial bore
- W** With bolt

**4 Coding**

- I** Ball element with internal thread
- S** Ball element with external thread

**5 Identification no.**

- 1** Clamping with adjustable hand lever
- 2** Clamping with grub screw

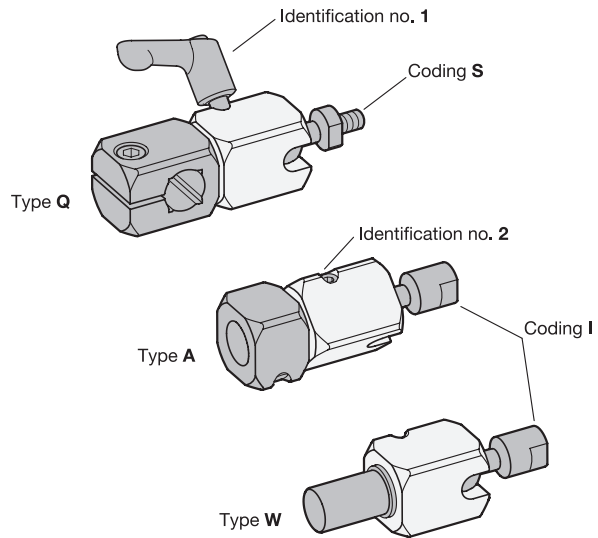
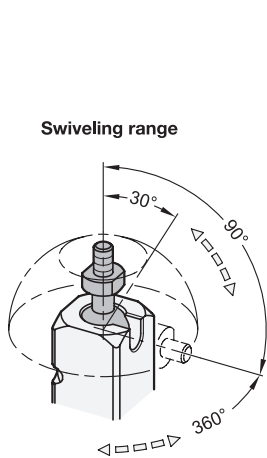
**1 1 3**

d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	d <sub>5</sub>	d <sub>6</sub>	d <sub>7</sub>	k	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	l <sub>7</sub>	l <sub>8</sub>	l <sub>9</sub>
Type A Type Q	Type W															
B 10	10	M 5	11	14	M 5	M 5	20	8	22	37	11,5	53	15,5	42,5	17	27,5
B 12	12	M 5	11	14	M 5	M 5	20	8	22	37	11,5	54	16,5	43,5	19	27,5
B 15	15	M 6	14	18	M 6	M 6	25	10	22	41	14,5	67,6	20	55,1	21	35,1
B 16	16	M 6	14	18	M 6	M 6	25	10	22	41	14,5	67,6	20	55,6	24	35,1
B 20	20	M 8	15	24	M 6	M 6	30	12	30	50	18,6	81	22	67	26	44

d <sub>1</sub>	d <sub>2</sub>	m <sub>1</sub>	m <sub>2</sub>	m <sub>3</sub>	r <sub>1</sub>	r <sub>2</sub>	s	A/F	t <sub>1</sub>	t <sub>2</sub>	Recommended tightening torque of the clamping (identification no.) in Nm ≈	Resulting stop torque on the ball in Nm ≈
Type A Type Q	Type W								min.			
B 10	10	32,7	37,7	22,7	17,3	24,8	8	9	8	10	1,5	4,5
B 12	12	32,7	38,7	22,7	17,3	24,8	10	9	8	12	1,5	4,5
B 15	15	41,8	49,3	29,3	21,5	32,5	12	12	10	15	2,5	6,5
B 16	16	41,8	49,8	29,3	21,5	32,5	-	12	10	16	2,5	6,5
B 20	20	51,3	59,3	36,3	30,8	36,5	16	13	12	16	2,5	10

3.1  
3.2  
3.3  
3.4  
3.5  
3.6  
3.7  
3.8  
3.9





### Specification



- Body, clamping element  
Aluminum
  - Anodized, natural color ● EL
  - Anodized, black ● ES
- Ball element  
Aluminum, plain finish
- Adjustable hand lever (identification no. 1)
  - Zinc die casting  
Powder coated  
Silver RAL 9006, textured finish
  - Threaded insert and retaining screw  
Stainless steel AISI 303
- Grub screw (identification no. 2)  
Stainless steel AISI 304
- Socket cap screw DIN 912 (type Q)  
Stainless steel AISI 304
- Grub screw DIN 913 (type A)  
Stainless steel AISI 304
- *Stainless Steel Characteristics* → Page QVX
- RoHS

### On request

- Ball elements with other thread sizes and inch thread (as for swivel ball joints GN 784)

### Information

Swivel ball joint mounting clamps GN 487 allow precise and stepless adjustment of the ball pivot within the swivel range. This makes it easy to position and adjust components such as scanners, cameras and lighting.

Thanks to the efficient clamping mechanism, even small amounts of tightening torque result in comparatively strong clamping forces on the ball. To readjust the joint, the clamping must be completely released. The hand lever (identification no. 1) can be used to easily operate the clamping mechanism without tools.

For a permanent high stop torque, the contact surfaces of the ball must be kept free of grease. Exceeding the recommended tightening torques increases the stop torque, but may result in increased wear of the clamping mechanism.

see also...

- *Swivel Ball Joints GN 784* → Page QVX
- *Twistable Two-Way Mounting Clamps GN 475* → Page QVX
- *T-Mounting Clamps GN 476* → Page QVX

#### How to order (Type Q / Type A)

1	d <sub>1</sub>
2	Type
3	d <sub>3</sub>
4	Coding
5	Identification no.
6	Finish

1
2
3
4
5
6

**GN 487-B20-Q-M8- I -1-ES**

#### How to order (Type W)

1	d <sub>2</sub>
2	Type
3	d <sub>3</sub>
4	Coding
5	Identification no.
6	Finish

1
2
3
4
5
6

**GN 487-12-W-M5-S-2-EL**