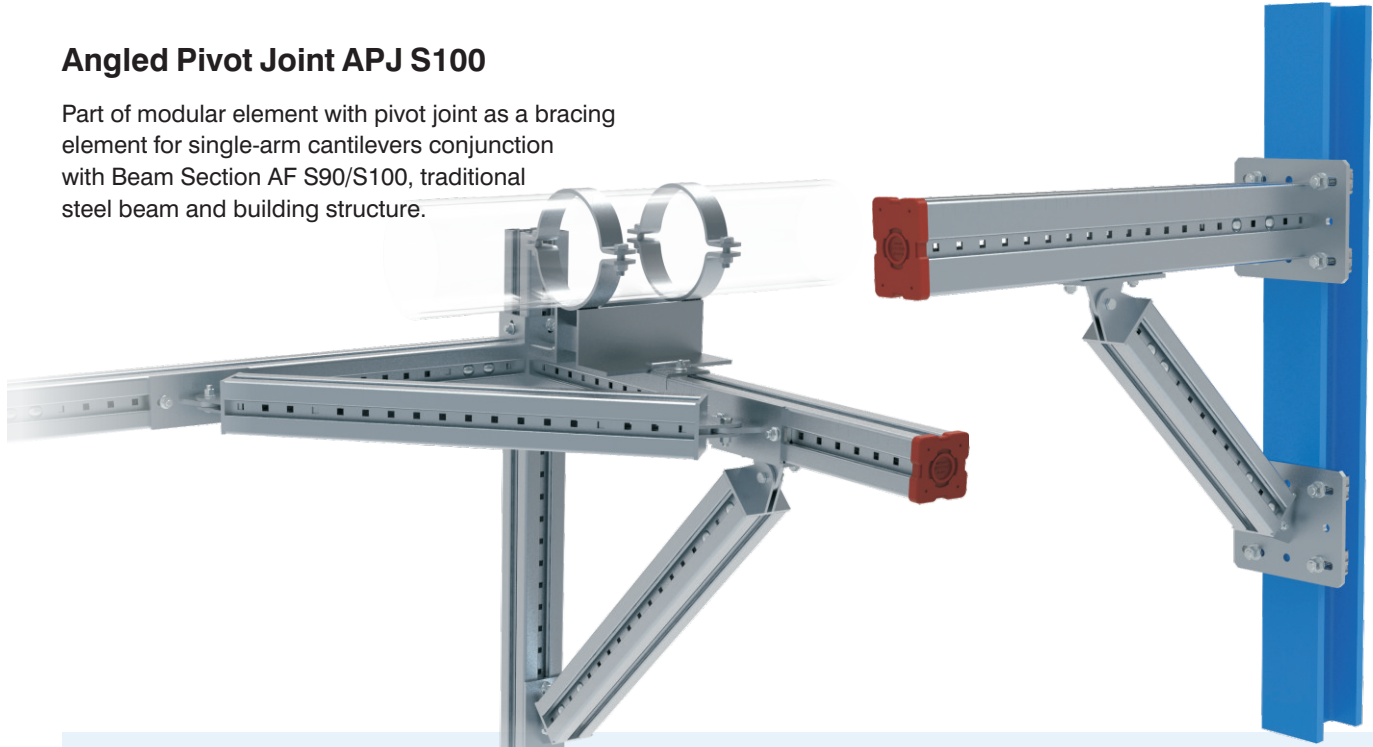


### Angled Pivot Joint APJ S100

Part of modular element with pivot joint as a bracing element for single-arm cantilevers conjunction with Beam Section AF S90/S100, traditional steel beam and building structure.



#### The Key Advantages

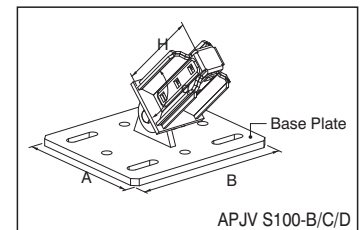
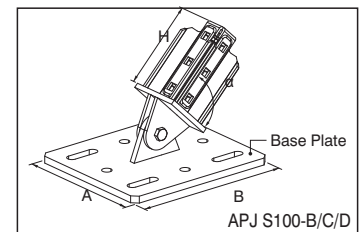
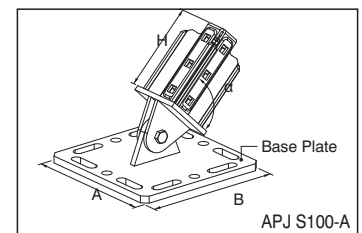
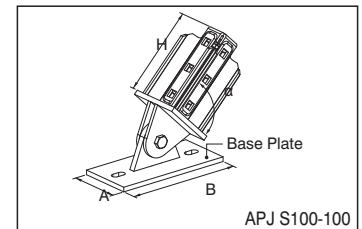
- Angled Pivot Joint APJ S50 for bracing of heavy constructions and to limit deflections.
- For the knee-brace reinforcing of all frame constructions.
- The pivot can be installed with angles from 25° to 155°.

#### Technical Data

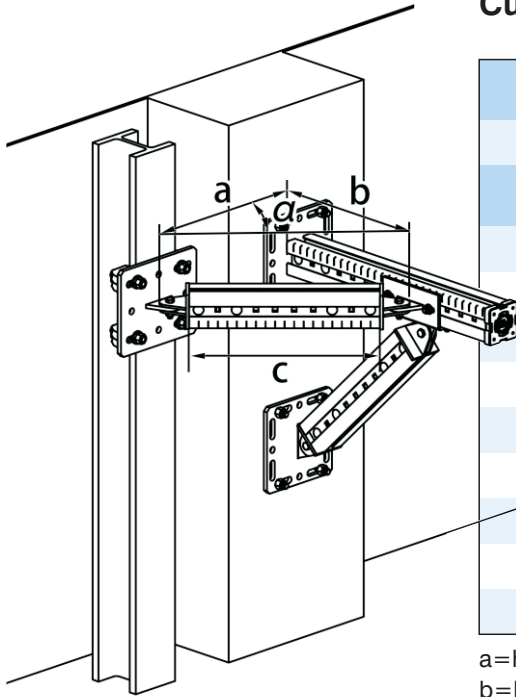
- **Material Composition:**  
Steel S275JR - EN 10025
- **Surface Finish:**  
Hot-dipped galv. 55µm  
DIN EN ISO 1461

Type	Part-No.	Beam Section	Weight [kg/pc]	Pack Size [pcs]
APJ S100-100	11310010	AF S100	5.7	1
APJ S100-A	11510001	AF S100	8.6	1
APJ S100-B	11510002	AF S100	9.5	1
APJ S100-C	11510003	AF S100	10.5	1
APJ S100-D	11510004	AF S100	12.7	1
APJV S100-B	11610002	AF S100	9.5	1
APJV S100-C	11610003	AF S100	10.5	1
APJV S100-D	11610004	AF S100	12.7	1

Type	Plate AxBxs [mm]	Type of Base Plate	Conjunction With		H [mm]	Angle α
			Beam Section	Flange of steel beam		
APJ S100-100	104×210×12	-	AF S100	-	150	25°~155°
APJ S100-A	240×240×12	A	-	75~120	150	25°~155°
APJ S100-B	280×240×12	B	-	121~160	150	25°~155°
APJ S100-C	320×240×12	C	-	161~235	150	25°~155°
APJ S100-D	420×240×12	D	-	235~300	150	25°~155°
APJV S100-B	280×240×12	B	-	121~160	150	25°~155°
APJV S100-C	320×240×12	C	-	161~235	150	25°~155°
APJV S100-D	420×240×12	D	-	235~300	150	25°~155°



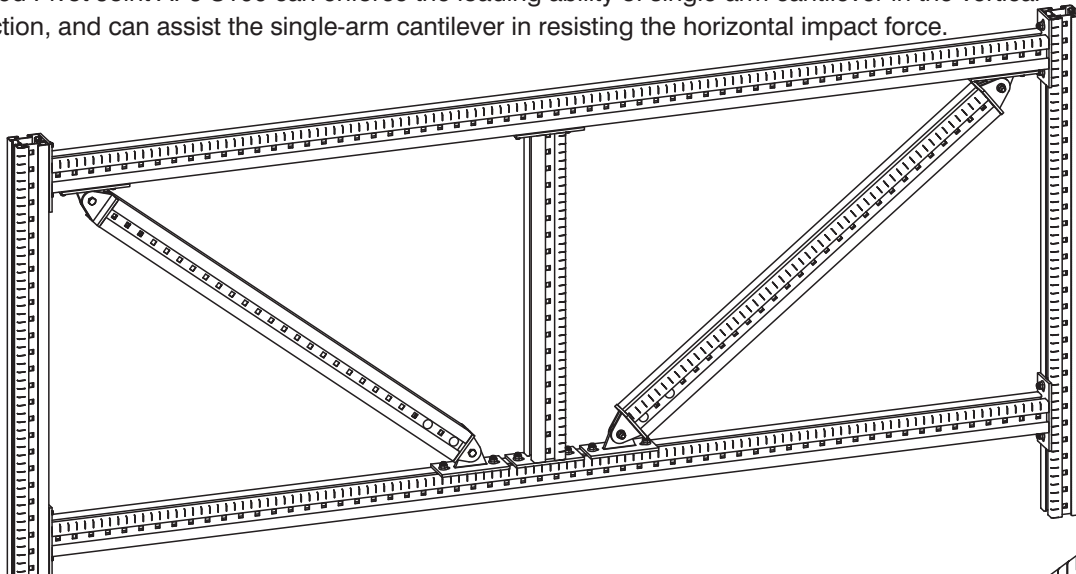
**Cutting length of support beam section between two joints**



	b [mm]	b [mm]	b [mm]	b [mm]	b [mm]	b [mm]	b [mm]
	500	750	1000	1500	2000	2500	3000
$\alpha$	c [mm]	c [mm]	c [mm]	c [mm]	c [mm]	c [mm]	c [mm]
25°	1116.7	1708.2	2299.8	3482.9	4666.0	5849.1	7032.2
30°	931.7	1431.7	1931.7	2931.7	3931.7	4931.7	5931.7
35°	802.1	1237.9	1673.8	2545.5	3417.3	4289.0	5160.7
40°	707.4	1096.4	1485.3	2263.1	3041.0	3818.9	4596.7
45°	636.4	989.9	1343.5	2050.6	2757.7	3464.8	4171.9
50°	582.3	908.6	1235.0	1887.7	2540.4	3193.1	3845.8
55°	540.8	845.9	1151.1	1761.5	2371.9	2982.3	3592.7
60°	509.0	797.7	1086.4	1663.7	2241.1	2818.5	3395.8
65°	485.2	761.1	1036.9	1588.6	2140.3	2692.0	3243.7

a=horizontal length from centerline of joint to bottom of profile at connection  
 b=horizontal length of cantilever from connection to centerline of joint  
 c=cutting length of support profile between two joints  
 $\alpha$ =angle at the opposite of the vertical bracing

- Connection with Beam Section: With on-demand Plate, 2 × T-head Bolt ThB M12.
- Angled Pivot Joint APJ S100 can enforce the loading ability of single-arm cantilever in the vertical direction, and can assist the single-arm cantilever in resisting the horizontal impact force.



- Connection with building structure: With on-demand BP, 4xsuitable wall anchors and 4xsuitable hexagon nut.
- Connection with traditional steel beam: With on-demand BP, 4xGirder Clamps Type AAF M16, 4xM16 DTI Washers (ASEM B 18.2.6)and 4xHardened steel washers(ASTM F436).
- Angled Pivot Joint APJ S100 can enforce the loading ability of single-arm cantilever in the vertical direction, and can assist the single-arm cantilever in resisting the horizontal impact force.
- Additionally all size of Base Plate can be used to connect with building structure.

