

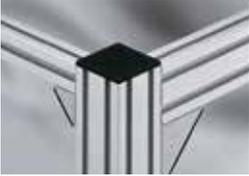
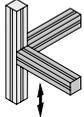
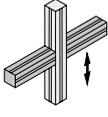
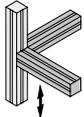
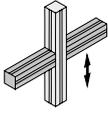
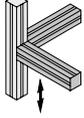
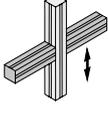
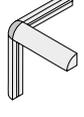
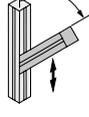
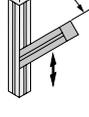
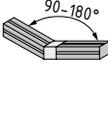
Overview – finding the right fastener fast

Configuration	Application	Product
Right-angled profile connections		
	Extremely rapid and repositionable profile connections with no machining	Automatic-Fastening Sets
	High-strength and repositionable screw connections with minimal assembly requirements	Universal-Fastening Sets
	Cost-effective and fixed connection	Standard-Fastening Sets
	Flexible and rapid construction of frames for panel elements	Central-Fastening Sets
	Rapid profile connection with simple angle adjustment system	Click-Fastening Set 90°
	Right-angled profile connections at any angle of rotation	Direct-Fastening Set 90°
	Extra hold for load-bearing support profiles without additional profile machining	Angle Bracket Zn
	Simple connection of three profiles to form one corner unit	Corner Fastening Sets
Connections at various angles		
	Construction of load-carrying latticework and supporting struts at a 45° angle	Angle Elements
	Construction of fixable tool rails or load-carrying hinges	Hinges, heavy-duty
	Permanent swivel capability and secure connection	Ball-Bearing Hinge
	Easily adjustable fastening for lightweight attachments	Ball joint
	Movable profile connections at any angle	Mitre-Fastening Sets
Cross-profile connections		
	Power-lock connection between profiles that cross	Direct-Fastening Sets
	Rapid fixing of struts at any (variable) position with minimal assembly requirements	Click-Fastening Sets
	Cost-effective angled fixing	Face Fastening Set
	Secure and fixed connection between profiles that cross	Angle Clamp Brackets
	Shelves with high load-carrying capacity and extremely easy-to-use angle adjustment system	Angle Locking Bracket
Butt fasteners for extending lengths		
	High load-carrying capacity with average machining requirements	Universal-Butt-Fastening Sets
	Medium load-carrying capacity with no profile machining	Automatic Butt-Fastening Sets
	Fastening mitre-cut profiles to frames	Mitre-Butt-Fastening Sets
Parallel fasteners for adjoining profiles		
	Gap-free assembly with moderate profile machining	Central-Fastening Sets
	Partition assembly with small gaps and no profile machining	Parallel-Fastening Sets
	Strong, continuous struts for profile constructions with exceptional load-carrying capacity	Connecting Profiles

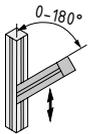
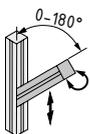
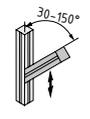
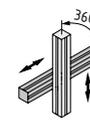
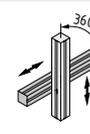
Technical Data – Fastening technology

	Application options	Line	Displacement force	Torsional moment *	Bending moment *	Profile machining	Can be retrofitted to existing constructions
Automatic-Fastening Sets		5 6 8 10 12	++	++	++	No	Yes
Universal-Fastening Sets		5 6 8 10 12	++	++	++	Yes 1 stepped bore each	Yes
Standard-Fastening Sets		5 6 8 10 12	++	+	+	Yes 1 bore 1 threaded bore	No
Central-Fastening Set		8	○	○	○	Yes 2 stepped bores	Yes
Click-Fastening Set 90°		8	○	–	–	1 threaded bore	Yes
Direct-Fastening Set 90°		8	○	○	○	1 threaded bore	No

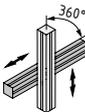
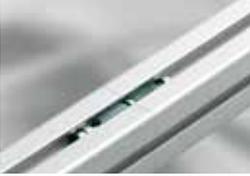
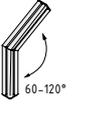
• Fixed ↕ Movable (linear) ↻ Twistable (axial) ▷ Selectable angle ++ Excellent + Good ○ Sometimes recommended – Not recommended
 * Dependent on line and profile design

Application options		Line	Displacement force	Torsional moment *	Bending moment *	Profile machining	Can be retrofitted to existing constructions
Angle Bracket Zn							
	 	5 6 8 12	++	++	++	Profile machining not necessary	Yes
Angle Bracket V Zn							
	 	5 6 8	+	+	+	No	Yes
Angle Bracket Al and St							
	 	8 12	++	++	++	No	Yes
Corner Fastening Sets							
		5 6 8	++	○	○	Yes 3 threaded bores	
Angle Elements							
		6 8	++	+	+	No	Yes
Hinges, heavy-duty							
	 	5 6 8	+	-		No	Yes

• Fixed ↕ Movable (linear) ↻ Twistable (axial) ▷ Selectable angle ++ Excellent + Good ○ Sometimes recommended - Not recommended
 * Dependent on line and profile design

Application options		Line	Displacement force	Torsional moment *	Bending moment *	Profile machining	Can be retrofitted to existing constructions
Ball-Bearing Hinge							
		8	+	○		No	Yes
Ball joints							
		8	+	-	-	No	Yes
Mitre-Fastening Sets							
		6 8	○	-	○	Yes	Yes
Direct-Fastening Set							
		8	-	-	○	No	Yes
Click-Fastening Set							
		8	○	-	○	No	Yes
Angle Hinge Brackets, Angle Clamp Brackets							
		5 6 8	+	+	+	No	Yes

• Fixed ↕ Movable (linear) ↻ Twistable (axial) ▷ Selectable angle ++ Excellent + Good ○ Sometimes recommended - Not recommended
 * Dependent on line and profile design

Application options		 Line	 Displacement force	 Torsional moment *	 Bending moment *	 Profile machining	Can be retrofitted to existing constructions
Angle Locking Bracket 8 80x40							
		8	+	+	+	No	Yes
Automatic Butt-Fastening Sets							
		5 6 8 12	+	+	○	No	Yes
Mitre-Butt-Fastening Sets							
		6 8	○	○	○	Yes	No
Parallel Fastener 8							
		8	○	—	—	No	Yes
Connecting Profiles							
		8	++	++	++	No	Yes
Pin Elements							
		8 10 12	++	++	++	Yes	No Yes No

• Fixed ↕ Movable (linear) ↻ Twistable (axial) ▷ Selectable angle ++ Excellent + Good ○ Sometimes recommended — Not recommended
 * Dependent on line and profile design