
















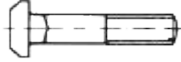
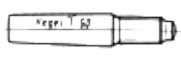
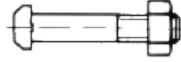


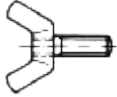
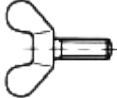
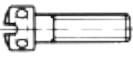

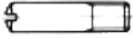



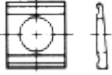
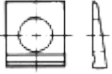
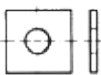










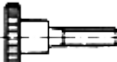






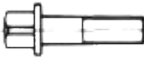
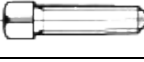



Overview of the transition from standards of the German Institute for Standardization (DIN) to those of the International Organization for Standardization (ISO)

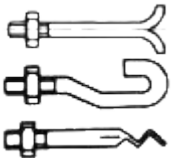



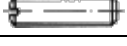


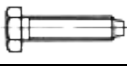


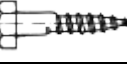


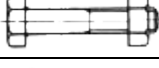

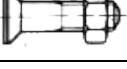

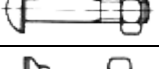
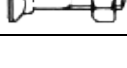
Organized in ascending order by DIN number, the table compares relevant ISO product standards with the key thread and general standards.

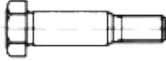
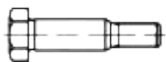
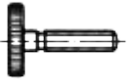
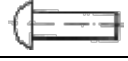
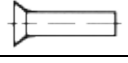

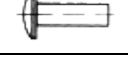
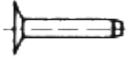




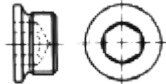


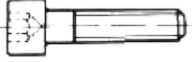



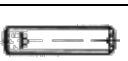
**product standards**




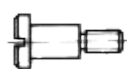





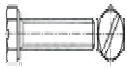
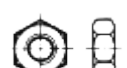
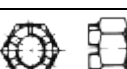
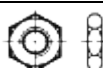
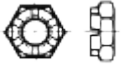


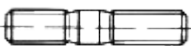

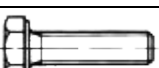
DIN	ISO	Description	Illustration
1	2339	Taper pins	
7	2338	Parallel Pins	
84	1207	Slotted cheese head screws; product grade A	
85	1580	Slotted pan head screws; product group A	
93	-	Tab Washers with Long Tab	
94	1234	Split pins	
95	-	Slotted raised countersunk (oval) head wood screws	
96	-	Slotted round head wood screws	
97	-	Wood screws with countersunk head and slot	
125 - A	7089	Plain washers, normal series product grade A	
125 - B	7090	Plain washers, chamfered, product group A – Form B	
126	7091	Plain washers, normal series, product grade C	
127 - B	-	Single coil spring washers- Form B	
128 - A	-	Spring washers, curved or crinkled - Form A	
137 - A	-	Spring washers, domed - Form A	
137 - B	-	Wave washers - Type B	







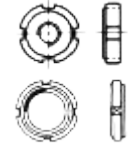

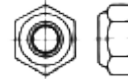
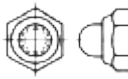





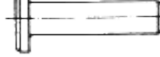


DIN	ISO	Description	Illustration
186	-	T-head bolts with square neck	
188	-	T-head bolts with double nib	
258	8737	Taper pins with thread ends and constant taper lengths	
261	-	T-head bolts	
315	-	Fasteners - Wing nuts - Rounded wings- american	
315	-	Fasteners - Wing nuts - Rounded wings- german	
316	-	Fasteners - Wing screws - Rounded wings - american	
316	-	Fasteners - Wing screws - Rounded wings- german	
404	-	Slotted capstan screws	
417	7435	Slotted set screws with long dog point	
427	2342	Slotted headless screws with shank	
431	-	Pipe nuts with thread - Form B	
432	-	External tap washers	
433	7092	Washers for cheese head screws	
434	-	Square taper washers for U-sections, inclination 8%	
435	-	Square taper washers for I-sections, inclination 14%	
436	-	Square washers, especially for wood constructions	
438	7436	Slotted set screws with cup point	








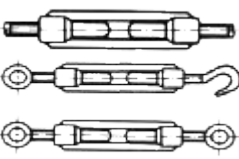


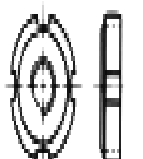


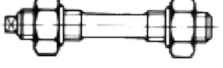




DIN	ISO	Description	Illustration
439	4036	Hexagon thin nuts	
440 - R	7094	Washers with square hole, especially for timber constructions- Form R	
440 - V	7094	Washers with square hole, especially for timber constructions- Form V	
443	-	Sealing push-in caps	
444	-	Fasteners - Eye bolts	
462	-	Machine tools - Internal tab washers for slotted round nuts in conformity with DIN 1804	
463	-	Tab washers with long and short tap at right angles	
464	-	Knurled thumb screws, high type	
465	-	Knurled thumb screws, high type, slotted	
466	-	Knurled nuts - High type	
467	-	Knurled nuts - Low type	
470	-	Sealing washers	
471	-	Retaining rings for shafts, form A	
472	-	Retaining rings for bores, form I	
478	-	Square head bolts with collar	
479	-	Square head bolts with short dog point	
480	-	Square head bolts with collar and short dog point with rounded end	
508	299	T-slot nuts (nuts)	
525	-	Studs for welding	






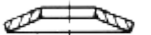

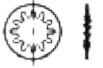











DIN	ISO	Description	Illustration
529	-	Masonry and foundation bolts	
546	-	Slotted round nuts	
547	-	Round nuts with drilled holes in one face	
548	-	Round nuts with set pin holes in side	
551	4766	Slotted set screws with flat point	
553	7434	Slotted grub screws with cone end	
557	-	Fasteners - Square nuts - Product grade C	
561	-	Hexagon head set screws with small hexagon and full dog point	
562	-	Square thin nuts - Product grade B	
564	-	Hexagon head set screws with small hexagon and half dog point and flat cone point	
571	-	Hexagon head wood screws	
580	-	Lifting eye bolts	
582	-	Lifting eye nuts	
601	4016	Hexagon head bolts; metric thread	
603	8677	Cup head square neck bolts	
604	-	Flat countersunk head nib bolts	
605	-	Flat countersunk head square neck bolts with long square	
607	-	Cup head nib bolts	
608	-	Flat countersunk head square neck bolts with short square	

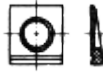
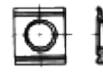
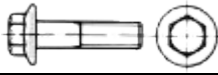

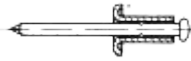
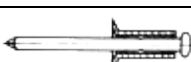
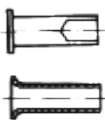

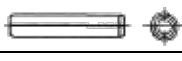


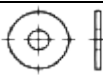
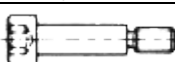
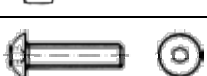
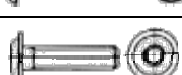
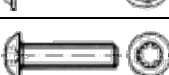
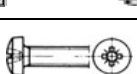
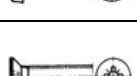

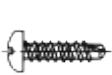
DIN	ISO	Description	Illustration
609	-	Hexagon fits bolts with long thread	
610	-	Hexagon fit bolts with short threaded dog point	
653	-	Knurled thumb screws, low type	
660	1051	Round head rivets	
661	1051	Countersunk head rivets	
662	1051	Mushroom head rivets	
674	1051	Flat round head rivets	
675	1051	Flat countersunk head rivets	
705	-	Adjusting rings	
787	299	Bolts and screws for T-slots	
835	-	Fasteners - Studs - Metal end $\approx 2d$	
906	-	Internal drive pipe plugs - Conical thread	
908	-	Internal drive screw plugs with collar - Cylindrical thread	
910	-	Hexagon head screw plugs with collar - Cylindrical thread	
911	2936	Hexagon socket screw keys (allen keys)	
912	4762	Hexagon socket head cap screws	
913	4026	Hexagon socket set screws with flat point, ISO 4026 modified	
914	4027	Hexagon socket set screws with cone point	
915	4028	Hexagon socket set screws with dog point	
916	4029	Hexagon socket set screws with cup point	


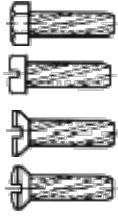
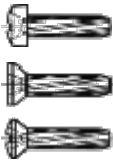

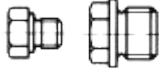


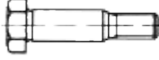
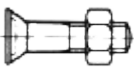
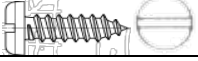




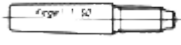
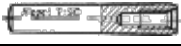

DIN	ISO	Description	Illustration
917	-	Hexagon cap nuts, low type	
920	-	Slotted pan head screws with small head	
921	-	Slotted pan head screws with large head	
923	-	Slotted pan head screws with shoulder	
927	-	Slotted shoulder screws	
928	-	Square weld nuts	
929	-	Hexagon weld nuts	
931	4014	Hexagon head bolts - Part 2: Metric thread M 68 to M 160 x 6 - Product grade B	
933	4017	Fasteners - Hexagon head screws - Product grades A and B	
933-SZ	-	Hexagon head screws; metric thread M 1,6 to M 52 product, product grades A and B, ISO 4017 modified	
934	4032	Hexagon nuts; metric threads; product grades A and B	
935	7035	Hexagon slotted nuts - Part 3: Metric coarse pitch thread, product grade C	
936	4035	Thin hexagon nuts	
937	7038	Hexagon thin slotted and castle nuts	
938	-	Fasteners - Studs - Metal end $\approx 1d$	
939	-	Fasteners - Studs - Metal end $\approx 1,25d$	
940	-	Fasteners - Studs - Metal end $\approx 2,5d$	
960	8765	Hexagon head bolts; metric fine thread M 8x1 to M 100x4	
961	8676	Hexagon head screws; metric fine thread M 8x1 to M 52x3	




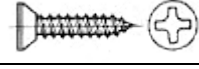
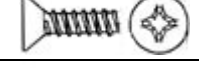




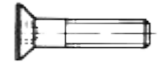

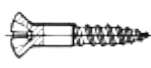

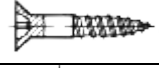



DIN	ISO	Description	Illustration
963	2009	Slotted countersunk (flat) head screws, metric thread	
964	2010	Slotted raised countersunk (oval) head screws	
965	7046	Cross recessed countersunk (flat) head screws	
966	7047	Cross recessed raised countersunk head screws	
975	-	Threaded rods	
976-2	-	Fasteners - Stud bolts	
979	7038	Hexagon thin slotted and castle nuts	
980	7042	Prevailing Torque-type Locknuts; Gripping	
981	-	Rolling bearings - Locknuts	
982	7040	Prevailing torque type hexagon nuts with nonmetallic insert	
985	10511	Prevailing torque type hexagon nuts, with non-metallic insert, low type	
986	-	Prevailing torque type hexagon domed cap nuts with nonmetallic insert	
988	-	Shim rings and supporting rings	
1052	-	Washers for wood joints	
1151	-	Round plain head nails	
1440	8738	Washers; Type Medium for Bolts	
1441	-		
1444	2341	Clevis pins with head	
1471	8744	Full-length taper grooved pins	
1472	8745	Grooved Pins, Half Length Taper-grooved	

DIN	ISO	Description	Illustration
1473	8740	Grooved Pins, Full Length Parallel-grooved with Chamfer	
1474	8741	Grooved Pins, Half Length Reverse-grooved	
1475	8742	Grooved Pins, Third Length Centre-grooved	
1476	8746	Round Head Grooved Pins	
1477	8747	Countersunk Head Grooved Pins	
1478	-	Turnbuckles made from steel tubes or round steel bars	
1479	-	Hexagon turnbuckles	
1480	-	Forged turnbuckles Form AE = with 2 welded ends Form HÖ = with ring eyelet and hook Form ÖÖ = with 2 ring eyes	
1481	8752	Spring-type straight pins, heavy type	
1587	-	Hexagon cap nuts, high type	
1804	-	Slotted Round Nut for Hook Spanner	
1816	-	Round Nut with Set Pin Holes Inside	
2093	-	Disc springs - Quality specifications - Dimensions	
2510	-	Bolted Connections with Reduced Shank - Extension Sleeves	
3017	-	Hose clamps with worm gear drive	
3570	-	Steel Strap for Tubes of NW 20 to 500	
6319	-	Spherical Washers; Conical Seats	
6325	8734	Parallel pins, hardened (fit m 6)	










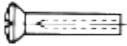

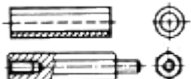


DIN	ISO	Description	Illustration
6330	-	Hexagon nuts with a height of 1,5 d	
6331	-	Hexagon collar nuts with a height of 1,5 d	
6332	-	Grub screws with thrust point	
6334	-	Hex nuts 3x M - diameter long/high	
6340	-	Washers for clamping devices	
6796	10670	Conical spring washers for bolted connections	
6797-A	-	Toothed washers, external teeth Form A	
6797-I	-	Toothed discs, internally toothed Form I	
6797-V	-	Toothed discs, external teeth Form V	
6798-A	-	Fan discs, external teeth Form A	
6798-I	-	Fan washers, internal teeth Form I	
6798-V	-	Fan washers, external teeth Form V	
6799	-	Retaining washers for shafts	
6885	773	Rectangular or square parallel keys and their corresponding keyways	
6911	-	Hexagon socket screw keys with pilot	
6912	-	Hexagon socket head cap screws with reduced loadability - Low head, with centre	
6914	7411	Hexagon bolts with large widths across flats for steel structures (joints with high-tensile, prestressed bolts)	
6915	7413	Hexagon nuts with large widths across flats for steel structures (joints with high-tensile, prestressed bolts)	
6916	7415	Washers for steel structures (joints with high-tensile, prestressed bolts)	


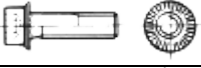
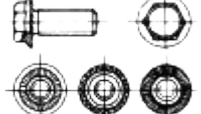
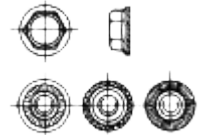

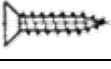






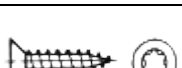
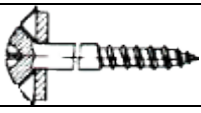
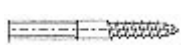

DIN	ISO	Description	Illustration
6917	-	Square taper washers for high-strength structural bolting of steel I sections	
6918	-	Square taper washers for high-strength structural bolting of steel channel sections	
6921	8100	Hexagon flange bolts, product grade A	
6923	4161	Hexagon nuts with flange	
7337	-	Open end blind rivets with break pull mandrel	
7337	-	Open end blind rivets with break pull mandrel- Form B	
7338	-	Rivets for brake and clutch linings Form B = with drilled shaft Form C = tubular rivets	
7340	-	Tubular rivets cut from the tube	
7343	8750	Spiral Pins; Normal Type	
7344	8748	Spiral Pins; Heavy Duty Type	
7346	13337	Spring type straight pins, slotted, slight type	
7349	-	Plain washers for bolts with heavy clamping sleeves	
-	7379	Hexagon socket head shoulder screws	
-	7380	Pan head screws with hexagon socket - ULS	
-	7380	Lens flange screws with hexagon socket - ULF	
-	7380	Lens screws with internal multi-tooth - ULS	
7500-C	-	Thread rolling screws for ISO metric thread similar to DIN 7985 - Form C	
7500-M	-	Thread rolling screws for ISO metric thread/ head similar to DIN 965 - Form M	
7504-K	15480	Self-drilling screws with external hexagon for soft metals (e.g., aluminum) - Form K	
7504-M	15481	Self-drilling screws with pan head and cross recess for soft metals (e.g. aluminum) - Form M	


DIN	ISO	Description	Illustration
7504-O	15482	Countersunk head cross-recess self-tapping screws for soft metals (e.g. aluminum) - Form O	
7513	-	Thread-cutting screws Form A = with hexagonal head Form B = with cylinder head and slot Form F = with countersunk head and slotted Form G = with countersunk head and slot	
7516	-	Thread-cutting screws with cross recess (Phillips H & Pozidriv - cross recess) Form A = with countersunk cylinder head Form D = with countersunk head Form E = with countersunk head	
7603	-	Sealing rings for screw plugs - copper	
7604	-	Hexagon head screw plugs	
7965	-	Screwed inserts (Screw plugs)	
7967	-	Self Locking Counter Nuts	
7968	-	Hexagon fit bolts with hexagon nut for steel structures	
7969	-	Slotted countersunk head bolts with hexagon nut for steel structures	
7971	1481	Slotted pan head tapping screws	
7972	1482	Slotted countersunk head tapping screw	
7973	1483	Slotted raised countersunk head tapping screws	
7976	1479	Hexagon head tapping screws	
7976	Similar to 1479	Hexagon head tapping screws	
7977	8737	Taper Pins with Thread Ends and Constant Point Lengths	
7978	8736	Taper pins with internal thread	
7979	8733	Parallel Pins with Internal Thread	

DIN	ISO	Description	Illustration
7980	-	Single coil spring square washers for screws with cylindrical heads	
7981	7049	Cross recessed pan head tapping screws	
7981	Similar to 7049	Cross recessed pan head tapping screws and tang	
7982	7050	Countersunk head sheet metal screws with cross recess	
7982	Similar to 7050	Countersunk head sheet metal screws with cross recess and pin	
7983	7051	Cross recessed raised countersunk head tapping screws	
7984	-	Hexagon socket head cap screws with low head with reduced loadability	
7985	7045	Cross recessed raised cheese head screws	
7989	-	Washers for steel structures	
7990	-	Hexagon head bolts with hexagon nut for steel structures	
7991	10642	Hexagon socket countersunk head screws	
7993	-	Round Wire Snap Rings and Snap Ring Grooves for Shafts and Bores	
7995	-	Cross recessed raised countersunk head wood screws	
7996	-	Cross recessed round head wood screws	
7997	-	Cross recessed countersunk head wood screws	
9021	7093	Washers with outside diameter $\approx 3 \times$ bolt diameter	
11024	-	Spring Cotter	
70852	-	Groove nuts	

**without standard**

DIN	ISO	Description	Illustration
-	-	Similar to DIN 912 Hexagon socket head cap screws with flat head and sheet metal screw thread	
-	-	Similar to DIN 965 Countersunk head screws with internal multi-tooth	
-	-	Similar to DIN 7985 Pan head screws with internal multi-tooth	
-	-	Eye bolts, item 48 with metric thread	
-	-	Eye bolts Art. 11 with wood thread	
-	-	"L" weld-on nuts, type A	
-	-	Sealing washers with vulcanized neoprene seal (EPDM)	
-	-	Drive-in nuts	
-	-	Facade construction screws - Form A with captive neoprene washers with tip	
-	-	Facade construction screws - Form BZ with captive neoprene washers with pins	
-	-	Cup screws (side wall screws)	
-	-	Sleeve nuts with pan head and slot	
-	-	Carbon discs - Washers with extra-large outer diameter	
-	-	Reducers with internal + external threads	
-	-	Spacer bolts with internal and external threads	
-	-	Spacer bolts with internal thread	

DIN	ISO	Description	Illustration
-	-	Rosettes turned from solid material or pressed from sheet metal	
-	-	Hexagon - Set nuts	
-	-	INBUS-RIPP® -Screws with hexagon socket	
-	-	VERBUS-RIPP® -screws	
-	-	VERBUS-RIPP® -Nuts	
-	-	Schnorr® -washers	
-	-	ABC-Spax® -Countersunk screws Type "S" with serrated thread	
-	-	ABC-Spax® -Countersunk head screws Type "S" with serrated thread	
-	-	ABC-Spax® -Pan <sup>head</sup> screws Type "S" with serrated thread	
-	-	ABC-Spax® -Tx countersunk head screws Type "S" with serrated thread	
-	-	Chipboard screws with countersunk head and cross-recess	
-	-	Chipboard screws with pan head and cross recess	
-	-	Chipboard screws with raised countersunk head and cross recess	
-	-	Chipboard screws with countersunk head and internal multi-tooth	
-	-	Plumber's screws with neoprene - sealing washers and cross-recess	
-	-	Hanger bolts with single-sided wood screw thread and metric thread on one side	
-	-	Connecting sleeves - ROUND	

DIN	ISO	Description	Illustration
-	-	Connecting sleeves - HEXAGONAL	
-	-	Threaded inserts (Ensat <sup>®</sup> WN 302), self-tapping	