

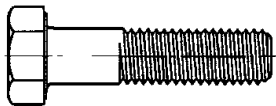
Hexagon Head Bolts - Metric Coarse Thread Class 8.8 ZND - Preferred

REFERENCE DOCUMENTS

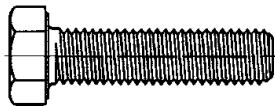
- CNH STPA020 Fastener Finishes and Material Specifications
- ISO 4014 Hexagon head bolts – Product grades A and B
- ISO 4017 Hexagon head bolts – Product grades A and B Full Thread
- ISO 888 Bolts screws and studs – Nominal lengths and thread lengths for general purpose bolts
- ISO 898-1 Mechanical properties of fasteners made of carbon steel and alloy steel
- ISO 6157-3 Fasteners - Surface Discontinuities

When a standard is referenced in a drawing or specification, it is understood that the reference is to the latest revision of the standard, unless stated otherwise.

For cross-reference listing of company part numbers, go to [CNH Catalogue](#).



ISO 4014 Bolt with shank



ISO 4017 Bolt fully threaded

- Thread Length: ISO 888
- Material: Class 8.8 ISO 898-1
- Finish: Zinc Dichromate Yellow (ZND) per STPA020 and MAT0310
- Head dimensions: ISO 4014, ISO 4017

Typical part description for BOM's and CAD drawings

BOLT, M12X30 FULL 8.8 ZND

Bolts and screws shall be free from burrs, seams, laps, loose scale, irregular surfaces and any defects affecting their serviceability (ISO 6157-3).

ISSUED BY DPS 10FEB12	ECN NO. 35137785	NAME CLASS 8.8 ZND METRIC BOLT - PREFERRED		
APPROVED BY SWH 10FEB12	REV. K	PAGE 1 OF 3	CNH NUMBERS 87025256	STPB510

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Head Size Issues.

At the time of the merger, Case was already using ISO standards as a basis for standard hardware parts, while New Holland was generally using DIN standards. CNH standard parts will be specified to ISO standards whenever available.

When we began to combine Case and New Holland standard parts there were systems issues preventing the use of the former Case alpha-numeric part numbers in the New Holland systems. To resolve this problem, it was determined to use the New Holland number as the surviving number whenever one was available. If an all numeric format number was not available, one was created.

Cross references, were based on overall dimensions and performance characteristics. In the case of hex head screws, bolts and nuts, some dimensional mismatches resulted; namely head dimensions as follows:

Bolt size	Across flats dimension	
	Old DIN	CNH, ISO
M10	17	16
M12	19	18
M14	22	21
M22	32	34

Bolts in this standard, which may have formerly been supplied to these old across flats dimensions must now be delivered with the current ISO dimensions, unless explicit engineering deviation to use bolts to the old dimensions has been granted.

It is important that all bolts of a given diameter on a product be to the same head size. Therefore, bolts to the old and current standard should not be mixed.

NAME	REV.	PAGE	CNH NUMBERS
CLASS 8.8 ZND METRIC BOLT - PREFERRED	K	2 OF 3	87025256 STPB510

Table 1. Preferred Metric Hexagon Head Bolts

	Length	Bolt Nominal Diameter						
		6	8	10	12	16	20	
Bolt	12	86977726						
Fully Threaded	16	86508568	120103			Non preferred sizes See STPB670		
ISO 4017	20	120100	120104	43138				
	25	86977786	43127	43139	300388			
	30	43117	43128	43140	9706687			
Bolt	35	86977789	412479	9706704	300389	86508583		
With Shank	40	43118	43129	120112	86629541	43168	86624002	
ISO 4014	45	86977790	386045	325829	9628065	385922	86508588	
	50	120056	43130	120069	9706702	120090	9847023	
	60	338413	120061	120070	9706693	323866	374890	
	70		120062	43144	9706717	120092	440588	
	80		43133	120073	43158	120093	382101	
	90			120074	86508581	350616	412346	
	100			120075	374887	374889	395528	
	110				86562594	43874	9780073	
	120				309308	321246	43188	
	130	Non preferred sizes See STPB520					354360	412427
	140					334967	384656	
	150					362573	384197	
	160					371221	87790434	
	180						412290	
	200						16440421	
Bolt Nominal Diameter		6	8	10	12	16	20	
Coarse Thread Pitch		1	1.25	1.5	1.75	2	2.5	
Length of thread for								
Bolt length to 125		18	22	26	30	38	46	
Bolt length 126 to 200		24	28	32	36	44	52	
Bolt length: >200		37	41	45	49	57	65	
Width across flats nom./max.		10	13	16	18	24	30	
Width across corners min.		11.05	14.38	17.77	20.03	26.75	33.53	
Head height max.		4.15	5.45	6.58	7.68	10.18	12.72	