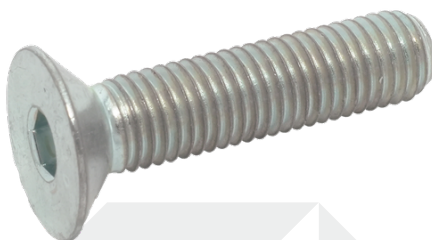


Hexagon socket countersunk head screw

One family data sheet with separate DIN and ISO dimensional executions, materials and finishes.

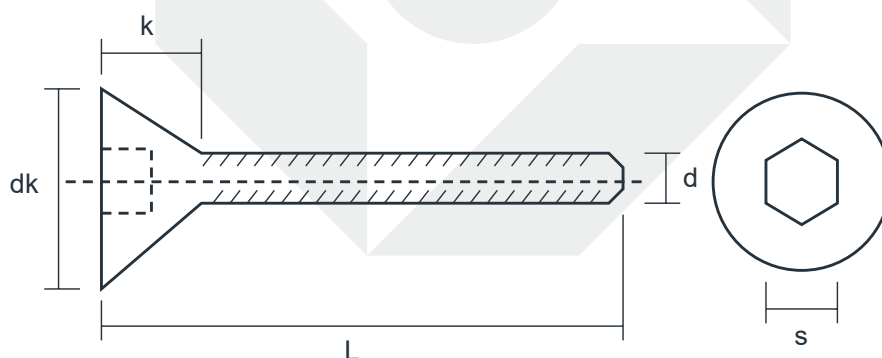
ISO 10642 / DIN 7991

Type: Countersunk head · Drive: Hexagon socket · Thread: Metric, coarse pitch in the tables · Length L: Overall, including head



Representative geometry photograph. Material and finish are specified separately.

Technical drawing



Not to scale. d: thread; L: overall length; dk: head diameter; k: head height; s: hexagon socket; t: minimum socket depth. The table identifies the DIN or ISO execution.

Reference geometry

Dimensions in mm. Supply lengths are not listed: specify the required length in your enquiry.

DIN 7991 and ISO 10642 have different head dimensions. A dash indicates a dimension not given in the source table; verify it on the drawing.

Execution	d	dk	k	s	t min.
DIN 7991	M3	6	1.7	2	0.95
DIN 7991	M4	8	2.3	2.5	1.55
DIN 7991	M5	10	2.8	3	2.05
DIN 7991	M6	12	3.3	4	2.25
DIN 7991	M8	16	4.4	5	3.2
DIN 7991	M10	20	5.5	6	4.1
DIN 7991	M12	24	6.5	8	4.3
DIN 7991	M14	27	7	10	4.5
DIN 7991	M16	30	7.5	10	5
DIN 7991	M18	33	8	12	5.2
DIN 7991	M20	36	8.5	12	5.6
ISO 10642	M6	13.44	3.72	4	-
ISO 10642	M8	17.92	4.96	5	-
ISO 10642	M10	22.4	6.2	6	-
ISO 10642	M12	26.88	7.44	8	-

Materials, grades, finishes and treatments

Material	Grade	Finish	Execution
Steel	8.8	Uncoated; zinc plated; zinc flake; hot-dip galvanized	Specify standard and execution
Steel	10.9 / 010.9	Uncoated; clear, black or yellow zinc plated; zinc flake; hot-dip galvanized	Verify reduced loadability and marking
Stainless steel A2	To specify	To specify	DIN 7991 / ISO 10642
Stainless steel A4	To specify	To specify; black oxide in documented executions	DIN 7991 / ISO 10642
A5 / 1.4571	To specify	To specify	ISO 10642
D6 / 1.4462 Duplex	To specify	To specify	ISO 10642
A8 / 1.4529 HCR	To specify	To specify	ISO 10642
Nylon	Not applicable	Natural	Catalogue geometry referring to DIN 7991

Finishes are documented for individual catalogue executions; they do not form a matrix of automatically available combinations. Dueemme confirms material, standard, class and coating in the quotation.

Documentation

Document	Status
Declaration of conformity	Subject to order agreement
Material certificate	Subject to order agreement
EN 10204 2.2 test report	Subject to order agreement
EN 10204 3.1 inspection certificate	Subject to order agreement
Dimensional inspection report	Subject to order agreement
Coating report	Subject to order agreement
Other documentation	Subject to order agreement

Batch documents are not automatically included: specify your requirements in the RFQ.

Standards, types and application

The countersunk head requires a compatible seat. For the same thread, an ISO head may be wider or higher than the corresponding DIN head: check dk, k, socket depth and component countersink.

Reduced-loadability heads require the applicable marking and standard criteria. Material property class alone does not establish the breaking load of a full-loadability screw. Nylon has polymer-specific properties and limits.

Hexalobular TX versions are distinct drive geometries and must not be ordered as hexagon-socket screws.

Technical references

Berardi - DIN 7991

VIPA - ISO 10642 / DIN 7991

TOBSTEEL - ISO 10642 A5, Duplex, HCR

Berardi - Nylon / DIN 7991

