



Shoulder Screws - Cap Head

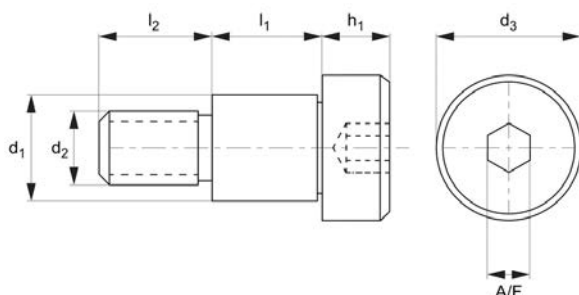
hex drive - 303 stainless

Shoulder Screws



36642.A2

SHOULDER SCREWS



Material

Stainless steel (AISI 303, 1.4305). Tensile strength 550 N/mm². Proof stress min. 190 N/mm², austenitic stainless steel.

Technical Notes

303 series stainless steel provides good resistance to corrosion. It is mildly magnetic.

For torx drive versions please see P0145.
Special lengths and diameters produced to drawings.

Order No.	d ₁ +0 -0.025	l ₁ +0.05 -0.0	d ₂	d ₃	l ₂	h ₁	A/F
36642.W0404-A2	4	4	M 3	6	4	3	2
36642.W0405-A2	4	5	M 3	6	4	3	2
36642.W0406-A2	4	6	M 3	6	4	3	2
36642.W0408-A2	4	8	M 3	6	4	3	2
36642.W0410-A2	4	10	M 3	6	4	3	2
36642.W0504-A2	5	4	M 4	8	5	4	2.5
36642.W0505-A2	5	5	M 4	8	5	4	2.5
36642.W0506-A2	5	6	M 4	8	5	4	2.5
36642.W0508-A2	5	8	M 4	8	5	4	2.5
36642.W0510-A2	5	10	M 4	8	5	4	2.5
36642.W0512-A2	5	12	M 4	8	5	4	2.5
36642.W0514-A2	5	14	M 4	8	5	4	2.5
36642.W0516-A2	5	16	M 4	8	5	4	2.5
36642.W0520-A2	5	20	M 4	8	5	4	2.5
36642.W0525-A2	5	25	M 4	8	5	4	2.5
36642.W0530-A2	5	30	M 4	8	5	4	2.5
36642.W0604-A2	6	4	M 5	10	6	5	3
36642.W0605-A2	6	5	M 5	10	6	5	3
36642.W0606-A2	6	6	M 5	10	6	5	3
36642.W0608-A2	6	8	M 5	10	6	5	3
36642.W0610-A2	6	10	M 5	10	6	5	3
36642.W0612-A2	6	12	M 5	10	6	5	3
36642.W0614-A2	6	14	M 5	10	6	5	3
36642.W0616-A2	6	16	M 5	10	6	5	3
36642.W0620-A2	6	20	M 5	10	6	5	3
36642.W0625-A2	6	25	M 5	10	6	5	3
36642.W0630-A2	6	30	M 5	10	6	5	3
36642.W0640-A2	6	40	M 5	10	6	5	3
36642.W0650-A2	6	50	M 5	10	6	5	3
36642.W0660-A2	6	60	M 5	10	6	5	3
36642.W0806-A2	8	6	M 6	12	11	6	4
36642.W0808-A2	8	8	M 6	12	11	6	4
36642.W0810-A2	8	10	M 6	12	11	6	4
36642.W0812-A2	8	12	M 6	12	11	6	4



Order No.	d_1 +0 -0.025	l_1 +0.05 -0.0	d_2	d_3	l_2	h_1	A/F
36642.W0814-A2	8	14	M 6	12	11	6	4
36642.W0816-A2	8	16	M 6	12	11	6	4
36642.W0820-A2	8	20	M 6	12	11	6	4
36642.W0825-A2	8	25	M 6	12	11	6	4
36642.W0830-A2	8	30	M 6	12	11	6	4
36642.W0840-A2	8	40	M 6	12	11	6	4
36642.W0850-A2	8	50	M 6	12	11	6	4
36642.W0860-A2	8	60	M 6	12	11	6	4
36642.W0870-A2	8	70	M 6	12	11	6	4
36642.W0880-A2	8	80	M 6	12	11	6	4
36642.W1010-A2	10	10	M 6	14	11	7	5
36642.W1108-A2	10	8	M 8	14	12	7	5
36642.W1110-A2	10	10	M 8	14	12	7	5
36642.W1112-A2	10	12	M 8	14	12	7	5
36642.W1116-A2	10	16	M 8	14	12	7	5
36642.W1120-A2	10	20	M 8	14	12	7	5
36642.W1125-A2	10	25	M 8	14	12	7	5
36642.W1130-A2	10	30	M 8	14	12	7	5
36642.W1140-A2	10	40	M 8	14	12	7	5
36642.W1150-A2	10	50	M 8	14	12	7	5
36642.W1160-A2	10	60	M 8	14	12	7	5
36642.W1170-A2	10	70	M 8	14	12	7	5
36642.W1180-A2	10	80	M 8	14	12	7	5
36642.W1190-A2	10	90	M 8	14	12	7	5
36642.W1199-A2	10	100	M 8	14	12	7	5
36642.W1212-A2	12	12	M10	20	16	8	6
36642.W1216-A2	12	16	M10	20	16	8	6
36642.W1220-A2	12	20	M10	20	16	8	6
36642.W1225-A2	12	25	M10	20	16	8	6
36642.W1230-A2	12	30	M10	20	16	8	6
36642.W1240-A2	12	40	M10	20	16	8	6
36642.W1250-A2	12	50	M10	20	16	8	6
36642.W1260-A2	12	60	M10	20	16	8	6
36642.W1290-A2	12	90	M10	20	16	8	6
36642.W1625-A2	16	25	M12	24	18	11	8
36642.W1630-A2	16	30	M12	24	18	11	8
36642.W1640-A2	16	40	M12	24	18	11	8
36642.W1650-A2	16	50	M12	24	18	11	8
36642.W1660-A2	16	60	M12	24	18	11	8
36642.W1670-A2	16	70	M12	24	18	11	8
36642.W1699-A2	16	100	M12	24	18	11	8
36642.W2030-A2	20	30	M16	30	22	14	10
36642.W2040-A2	20	40	M16	30	22	14	10
36642.W2050-A2	20	50	M16	30	22	14	10
36642.W2060-A2	20	60	M16	30	22	14	10



Shoulder Screws - Cap Head

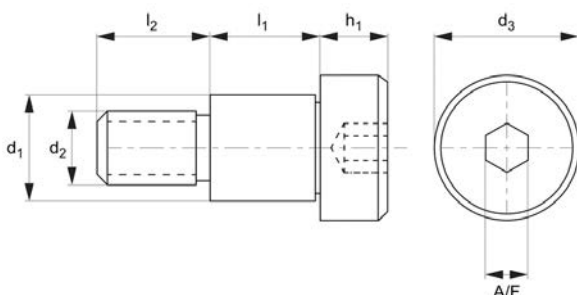
hex drive - 316 stainless

Shoulder Screws



36644.A4

SHOULDER SCREWS



Material

Stainless steel (AISI 316, 1.440).
Tensile strength 480 N/mm².
Proof stress min. 200 N/mm², austenitic stainless steel.

Technical Notes

Highly resistant to corrosion (including

from salt water).

These 316 series stainless steel shoulder bolts are considerably more expensive than our standard 303 grade stainless shoulder bolts (P0130 +).

Shim washers can be used to reduce shoulder length if required. It is non-

magnetic.

Can also be manufactured (for a batch size) in aluminium, monel & titanium.

Order No.	d ₁ +0 -0.025	l ₁ +0.05 -0.0	d ₂	d ₃	l ₂	h ₁	A/F
36644.W0404-A4	4	4	M 3	6	4	3.0	2
36644.W0405-A4	4	5	M 3	6	4	3.0	2
36644.W0406-A4	4	6	M 3	6	4	3.0	2
36644.W0408-A4	4	8	M 3	6	4	3.0	2
36644.W0410-A4	4	10	M 3	6	4	3.0	2
36644.W0510-A4	5	10	M 4	8	5	4.0	2.5
36644.W0512-A4	5	12	M 4	8	5	4.0	2.5
36644.W0516-A4	5	16	M 4	8	5	4.0	2.5
36644.W0520-A4	5	20	M 4	8	5	4.0	2.5
36644.W0525-A4	5	25	M 4	8	5	4.0	2.5
36644.W0530-A4	5	30	M 4	8	5	4.0	2.5
36644.W0610-A4	6	10	M 5	10	6	5.0	3
36644.W0612-A4	6	12	M 5	10	6	5.0	3
36644.W0616-A4	6	16	M 5	10	6	5.0	3
36644.W0620-A4	6	20	M 5	10	6	5.0	3
36644.W0625-A4	6	25	M 5	10	6	5.0	3
36644.W0630-A4	6	30	M 5	10	6	5.0	3
36644.W0640-A4	6	40	M 5	10	6	5.0	3
36644.W0650-A4	6	50	M 5	10	6	5.0	3
36644.W0812-A4	8	12	M 6	12	11	6.0	4
36644.W0816-A4	8	16	M 6	12	11	6.0	4
36644.W0820-A4	8	20	M 6	12	11	6.0	4
36644.W0825-A4	8	25	M 6	12	11	6.0	4
36644.W0830-A4	8	30	M 6	12	11	6.0	4
36644.W0840-A4	8	40	M 6	12	11	6.0	4
36644.W0850-A4	8	50	M 6	12	11	6.0	4
36644.W1016-A4	10	16	M 8	14	12	7.0	5
36644.W1020-A4	10	20	M 8	14	12	7.0	5
36644.W1025-A4	10	25	M 8	14	12	7.0	5
36644.W1030-A4	10	30	M 8	14	12	7.0	5



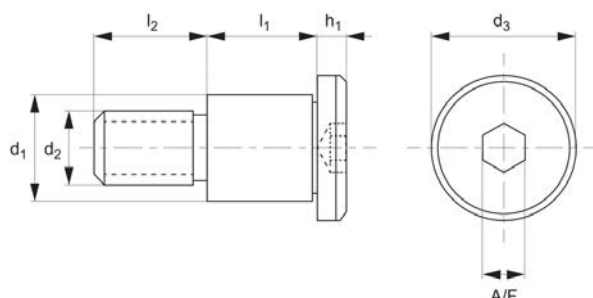
Order No.	d_1 +0 -0.025	l_1 +0.05 -0.0	d_2	d_3	l_2	h_1	A/F
36644.W1040-A4	10	40	M 8	14	12	7.0	5
36644.W1050-A4	10	50	M 8	14	12	7.0	5
36644.W1060-A4	10	60	M 8	14	12	7.0	5
36644.W1070-A4	10	70	M 8	14	12	7.0	5
36644.W1216-A4	12	16	M10	20	16	8.0	6
36644.W1220-A4	12	20	M10	20	16	8.0	6
36644.W1225-A4	12	25	M10	20	16	8.0	6
36644.W1230-A4	12	30	M10	20	16	8.0	6
36644.W1240-A4	12	40	M10	20	16	8.0	6
36644.W1250-A4	12	50	M10	20	16	8.0	6
36644.W1260-A4	12	60	M10	20	16	8.0	6
36644.W1270-A4	12	70	M10	20	16	8.0	6



Ultra Low Head - Shoulder Screw

hex drive - 303 stainless

Shoulder Screws



36650

SHOULDER SCREWS

Material

Stainless steel (AISI 303, 1.4305). Tensile strength 550 N/mm². Proof stress min. 190 N/mm², austenitic stainless steel.

Technical Notes

These very low profile socket shoulder

screws have a head height approximately 1/3 that of normal shoulder screws (P0130).

303 Series stainless is suitable for pharmaceutical and other applications. Stainless steel suitable for marine and other appli-

cations.

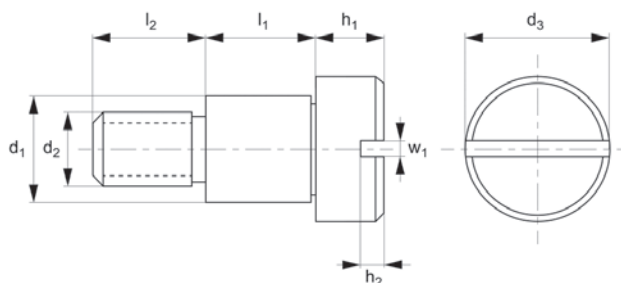
Order No.	d ₁ +0 -0.025	l ₁ +0.05 -0.0	d ₂	d ₃	l ₂	h ₁	A/F
36650.W0401	4	4	M 3	6	4	1.3	2
36650.W0402	4	5	M 3	6	4	1.3	2
36650.W0403	4	6	M 3	6	4	1.3	2
36650.W0404	4	8	M 3	6	4	1.3	2
36650.W0405	4	10	M 3	6	4	1.3	2
36650.W0406	5	4	M 4	9	5	1.3	2.5
36650.W0407	5	5	M 4	9	5	1.3	2.5
36650.W0408	5	6	M 4	9	5	1.3	2.5
36650.W0409	5	8	M 4	9	5	1.3	2.5
36650.W0410	5	10	M 4	9	5	1.3	2.5
36650.W0411	5	12	M 4	9	5	1.3	2.5
36650.W0413	5	16	M 4	9	5	1.3	2.5
36650.W0414	5	20	M 4	9	5	1.3	2.5
36650.W0417	6	4	M 5	10	6	1.7	3
36650.W0418	6	5	M 5	10	6	1.7	3
36650.W0419	6	6	M 5	10	6	1.7	3
36650.W0420	6	8	M 5	10	6	1.7	3
36650.W0421	6	10	M 5	10	6	1.7	3
36650.W0422	6	12	M 5	10	6	1.7	3
36650.W0424	6	16	M 5	10	6	1.7	3
36650.W0425	6	20	M 5	10	6	1.7	3
36650.W0428	8	6	M 6	13	11	2.0	4
36650.W0429	8	8	M 6	13	11	2.0	4
36650.W0430	8	10	M 6	13	11	2.0	4
36650.W0431	8	12	M 6	13	11	2.0	4
36650.W0432	8	16	M 6	13	11	2.0	4
36650.W0433	8	20	M 6	13	11	2.0	4



36660

MADE IN
BRITAIN

SHOULDER SCREWS

**Material**

Stainless steel (AISI 416, 1.4005). Tensile strength 650 N/mm². Proof stress min. 450 N/mm², martensitic stainless steel.

Technical Notes

Stainless steel 416 is a harder, stronger

grade of stainless steel than the 303 stainless alternatives.

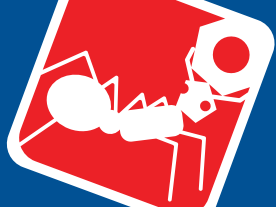
They are magnetic and slightly less resistant to corrosion than the 303 alternative (see P0130 or P0132).

For corrosion resistance it is suited to dry

atmosphere, fresh water and mild alkalis and acids.

Special lengths and diameters produced to drawings.

Order No.	d ₁ +0 -0.025	l ₁ +0.05 -0.0	d ₂	d ₃	l ₂	h ₁	h ₂	w ₁
36660.W0001	4	4	M 3	6	4	3	0.3	0.4
36660.W0002	4	5	M 3	6	4	3	0.3	0.4
36660.W0003	4	6	M 3	6	4	3	0.3	0.4
36660.W0004	4	8	M 3	6	4	3	0.3	0.4
36660.W0005	4	10	M 3	6	4	3	0.3	0.4
36660.W0006	5	4	M 4	8	5	4	0.9	0.8
36660.W0007	5	5	M 4	8	5	4	0.9	0.8
36660.W0008	5	6	M 4	8	5	4	0.9	0.8
36660.W0009	5	8	M 4	8	5	4	0.9	0.8
36660.W0010	5	10	M 4	8	5	4	0.9	0.8
36660.W0011	5	12	M 4	8	5	4	0.9	0.8
36660.W0012	5	14	M 4	8	5	4	0.9	0.8
36660.W0013	5	16	M 4	8	5	4	0.9	0.8
36660.W0014	5	20	M 4	8	5	4	0.9	0.8
36660.W0016	5	30	M 4	8	5	4	0.9	0.8
36660.W0017	6	4	M 5	10	6	5	1.2	1.0
36660.W0018	6	5	M 5	10	6	5	1.2	1.0
36660.W0019	6	6	M 5	10	6	5	1.2	1.0
36660.W0020	6	8	M 5	10	6	5	1.2	1.0
36660.W0021	6	10	M 5	10	6	5	1.2	1.0
36660.W0023	6	14	M 5	10	6	5	1.2	1.0
36660.W0024	6	16	M 5	10	6	5	1.2	1.0
36660.W0025	6	20	M 5	10	6	5	1.2	1.0
36660.W0026	6	25	M 5	10	6	5	1.2	1.0
36660.W0027	6	30	M 5	10	6	5	1.2	1.0
36660.W0028	8	6	M 6	12	11	6	1.3	1.2
36660.W0029	8	8	M 6	12	11	6	1.3	1.2
36660.W0032	8	16	M 6	12	11	6	1.3	1.2
36660.W0034	10	8	M 6	12	11	6	1.5	1.6
36660.W0036	10	12	M 6	12	11	6	1.5	1.6
36660.W0037	10	16	M 6	12	11	6	1.5	1.6



Shoulder Screws - Slot Head

slot drive - 416 stainless

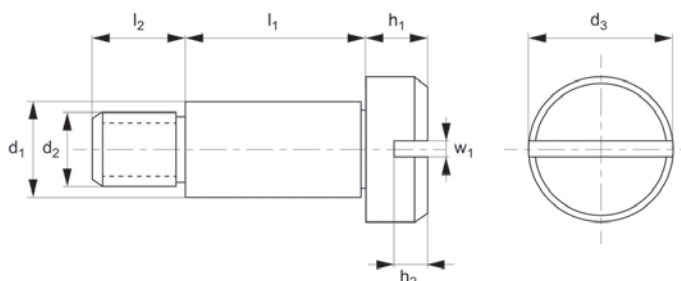
Shoulder Screws



Order No.	d_1 +0 -0.025	l_1 +0.05 -0.0	d_2	d_3	l_2	h_1	h_2	w_1
36660.W0042	12	12	M10	20	16	8	2.4	2.5
36660.W0043	12	16	M10	20	16	8	2.4	2.5
36660.W0045	12	26	M10	20	16	8	2.4	2.5



36662.A2



Material

Stainless steel (AISI 303, 1.4305). Tensile strength 550 N/mm². Proof stress min. 190 N/mm², austenitic stainless steel.

Technical Notes

303 series stainless steel provides good

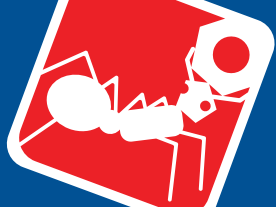
resistance to corrosion. It is mildly magnetic. screws are less expensive than the 416 steel grade (see part no. 36660), which are harder but less resistant to corrosion.

For Ø16 (and above) stainless steel

shoulder screws see part no. .

Special lengths and diameters produced to drawings.

Order No.	d ₁ +0 -0.025	l ₁ +0.05 -0.0	d ₂	d ₃	l ₂	h ₁	h ₂	w ₁
36662.W0404-A2	4	4	M 3	6	4	3	0.9	0.8
36662.W0405-A2	4	5	M 3	6	4	3	0.9	0.8
36662.W0406-A2	4	6	M 3	6	4	3	0.9	0.8
36662.W0408-A2	4	8	M 3	6	4	3	0.9	0.8
36662.W0410-A2	4	10	M 3	6	4	3	0.9	0.8
36662.W0504-A2	5	4	M 4	8	5	4	1.2	1.0
36662.W0505-A2	5	5	M 4	8	5	4	1.2	1.0
36662.W0506-A2	5	6	M 4	8	5	4	1.2	1.0
36662.W0508-A2	5	8	M 4	8	5	4	1.2	1.0
36662.W0510-A2	5	10	M 4	8	5	4	1.2	1.0
36662.W0512-A2	5	12	M 4	8	5	4	1.2	1.0
36662.W0514-A2	5	14	M 4	8	5	4	1.2	1.0
36662.W0516-A2	5	16	M 4	8	5	4	1.2	1.0
36662.W0520-A2	5	20	M 4	8	5	4	1.2	1.0
36662.W0525-A2	5	25	M 4	8	5	4	1.2	1.0
36662.W0530-A2	5	30	M 4	8	5	4	1.2	1.0
36662.W0604-A2	6	4	M 5	10	6	5	1.3	1.2
36662.W0605-A2	6	5	M 5	10	6	5	1.3	1.2
36662.W0606-A2	6	6	M 5	10	6	5	1.3	1.2
36662.W0608-A2	6	8	M 5	10	6	5	1.3	1.2
36662.W0610-A2	6	10	M 5	10	6	5	1.3	1.2
36662.W0612-A2	6	12	M 5	10	6	5	1.3	1.2
36662.W0614-A2	6	14	M 5	10	6	5	1.3	1.2
36662.W0616-A2	6	16	M 5	10	6	5	1.3	1.2
36662.W0620-A2	6	20	M 5	10	6	5	1.3	1.2
36662.W0625-A2	6	25	M 5	10	6	5	1.3	1.2
36662.W0630-A2	6	30	M 5	10	6	5	1.3	1.2
36662.W0806-A2	8	6	M 6	12	11	6	1.5	1.6
36662.W0808-A2	8	8	M 6	12	11	6	1.5	1.6
36662.W0812-A2	8	12	M 6	12	11	6	1.5	1.6
36662.W0816-A2	8	16	M 6	12	11	6	1.5	1.6



Shoulder Screw - Cap Head

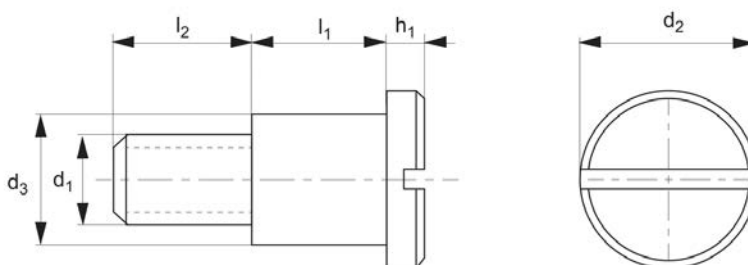
slot drive - 303 stainless

Shoulder Screws



Order No.	d_1 +0 -0.025	l_1 +0.05 -0.0	d_2	d_3	l_2	h_1	h_2	w_1
36662.W1008-A2	10	8	M 6	14	11	6	1.5	1.6
36662.W1012-A2	10	12	M 6	14	11	6	1.5	1.6
36662.W1108-A2	10	8	M 8	14	12	7	1.9	2.0
36662.W1112-A2	10	12	M 8	14	12	7	1.9	2.0
36662.W1116-A2	10	16	M 8	14	12	7	1.9	2.0
36662.W1212-A2	12	12	M10	20	16	8	2.4	2.5
36662.W1225-A2	12	16	M10	20	16	8	2.4	2.5

SHOULDER SCREWS

**36700****Material**

Steel, strength class 5.8, blackened. Case hardened to 0,2 - 0,4mm depth.

36620.

 $l_1 = 16 (+0,20/0,10)$.**Tips**

Dimension tolerances:

$l_1 = 10 (+0,15/+0,07)$,

$l_1 = 12 (+0,20/+0,10)$,

Technical Notes

Suitable for use with captive C washers no.

Order No.	d_1	l_1	d_2	d_3 tol. h9	l_2	h_1	Weight g
36700.W0006	M_6	10	13	8	9.0	3.1	9
36700.W0008	M_8	12	16	10	11.0	3.8	17
36700.W0009	M_8	16	16	10	11.0	3.8	20