

Hexagon head bolts, stainless steel with seal washer in Hygienic DESIGN

Item description/product images



Description

Product description:

The Hygienic DESIGN fastening system was specially developed for use in food-processing facilities. Special emphasis has been placed on the cleaning-optimized geometry and a surface finish of $Ra \leq 0.8 \mu\text{m}$. Quick and easy product installation due to a pre-mounted sealing washer rounds off the overall package.

Material:

Hex head bolt: stainless steel 1.4404 (AISI 316L equivalent).
Sealing washer: EU10/2011 and FDA constyle thermoplastic (POM).

Version:

Hex head bolt: Polished or unpolished stainless steel.
Sealing washer: RAL5002 - Ultramarine blue (POM).

Note:

The contact face for the sealing ring must ideally be flat and perpendicular to the threaded hole and have a surface finish of $Ra \leq 0.8 \mu\text{m}$.
Sealing ring is unsuitable for acidic cleaning ($\text{pH} < 4$) and oxidizing agents.

Temperature range:

-20 °C to +100 °C (POM).

Benefits:

Pre-installed, exchangeable seal washer.
Foodstuff constyle material.
Cleaning optimized geometry.

On request:

Special versions.

Attention:

The suitability of the Hygienic DESIGN fasteners for the respective application must be checked by the user. Depending on the loads and external influences (temperature, cleaning media, product media), the sealing washer should be inspected regularly and replaced if necessary.

Supplied with:

Hex head bolt incl. seal washer.

Accessory:

Sealing washer K1649.
Stainless steel hex nut with sealing washer K1648.
Sockets with plastic inserts K1361.
Ring/open-end spanner with protective caps K1362.

Threaded version:

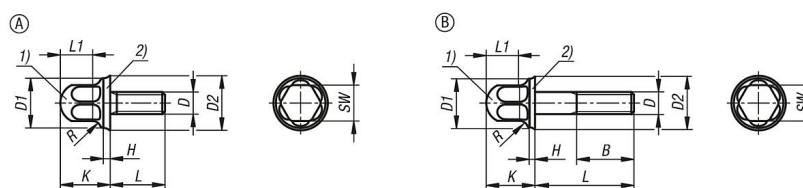
M4 - M16.

Drawing reference:

1) Hex head bolt
2) Sealing washer

Hexagon head bolts, stainless steel with seal washer in Hygienic DESIGN

Drawings



Hexagon head bolts, stainless steel with seal washer in Hygienic DESIGN

Order No.	style	Style definition	Surface finish body	B	D	D1	D2	H	K	L	L1	R	SW
K1647.1104X08	A	without shaft	polished	-	M4	10	11,25	2	11,1	8	5,9	3	7
K1647.1104X10	A	without shaft	polished	-	M4	10	11,25	2	11,1	10	5,9	3	7
K1647.1104X12	A	without shaft	polished	-	M4	10	11,25	2	11,1	12	5,9	3	7
K1647.1104X16	A	without shaft	polished	-	M4	10	11,25	2	11,1	16	5,9	3	7
K1647.1104X20	A	without shaft	polished	-	M4	10	11,25	2	11,1	20	5,9	3	7
K1647.1104X25	B	with shaft	polished	14	M4	10	11,25	2	11,1	25	5,9	3	7
K1647.1104X30	B	with shaft	polished	14	M4	10	11,25	2	11,1	30	5,9	3	7
K1647.1104X35	B	with shaft	polished	14	M4	10	11,25	2	11,1	35	5,9	3	7
K1647.1104X40	B	with shaft	polished	14	M4	10	11,25	2	11,1	40	5,9	3	7
K1647.1105X10	A	without shaft	polished	-	M5	12	13,25	2	13,1	10	7,4	3	8
K1647.1105X12	A	without shaft	polished	-	M5	12	13,25	2	13,1	12	7,4	3	8
K1647.1105X16	A	without shaft	polished	-	M5	12	13,25	2	13,1	16	7,4	3	8
K1647.1105X20	A	without shaft	polished	-	M5	12	13,25	2	13,1	20	7,4	3	8
K1647.1105X25	B	with shaft	polished	16	M5	12	13,25	2	13,1	25	7,4	3	8
K1647.1105X30	B	with shaft	polished	16	M5	12	13,25	2	13,1	30	7,4	3	8
K1647.1105X35	B	with shaft	polished	16	M5	12	13,25	2	13,1	35	7,4	3	8
K1647.1105X40	B	with shaft	polished	16	M5	12	13,25	2	13,1	40	7,4	3	8
K1647.1105X45	B	with shaft	polished	16	M5	12	13,25	2	13,1	45	7,4	3	8
K1647.1105X50	B	with shaft	polished	16	M5	12	13,25	2	13,1	50	7,4	3	8
K1647.1106X12	A	without shaft	polished	-	M6	14	15,74	2,5	15,1	12	9,1	3	10
K1647.1106X16	A	without shaft	polished	-	M6	14	15,74	2,5	15,1	16	9,1	3	10
K1647.1106X20	A	without shaft	polished	-	M6	14	15,74	2,5	15,1	20	9,1	3	10
K1647.1106X25	A	without shaft	polished	-	M6	14	15,74	2,5	15,1	25	9,1	3	10
K1647.1106X30	B	with shaft	polished	18	M6	14	15,74	2,5	15,1	30	9,1	3	10
K1647.1106X35	B	with shaft	polished	18	M6	14	15,74	2,5	15,1	35	9,1	3	10
K1647.1106X40	B	with shaft	polished	18	M6	14	15,74	2,5	15,1	40	9,1	3	10
K1647.1106X45	B	with shaft	polished	18	M6	14	15,74	2,5	15,1	45	9,1	3	10
K1647.1106X50	B	with shaft	polished	18	M6	14	15,74	2,5	15,1	50	9,1	3	10
K1647.1106X60	B	with shaft	polished	18	M6	14	15,74	2,5	15,1	60	9,1	3	10
K1647.1108X16	A	without shaft	polished	-	M8	18	19,74	2,5	18,1	16	11,7	3	13
K1647.1108X20	A	without shaft	polished	-	M8	18	19,74	2,5	18,1	20	11,7	3	13
K1647.1108X25	A	without shaft	polished	-	M8	18	19,74	2,5	18,1	25	11,7	3	13
K1647.1108X30	A	without shaft	polished	-	M8	18	19,74	2,5	18,1	30	11,7	3	13
K1647.1108X35	A	without shaft	polished	-	M8	18	19,74	2,5	18,1	35	11,7	3	13
K1647.1108X40	B	with shaft	polished	22	M8	18	19,74	2,5	18,1	40	11,7	3	13
K1647.1108X45	B	with shaft	polished	22	M8	18	19,74	2,5	18,1	45	11,7	3	13
K1647.1108X50	B	with shaft	polished	22	M8	18	19,74	2,5	18,1	50	11,7	3	13
K1647.1108X60	B	with shaft	polished	22	M8	18	19,74	2,5	18,1	60	11,7	3	13
K1647.1108X70	B	with shaft	polished	22	M8	18	19,74	2,5	18,1	70	11,7	3	13
K1647.1108X80	B	with shaft	polished	22	M8	18	19,74	2,5	18,1	80	11,7	3	13
K1647.1110X20	A	without shaft	polished	-	M10	22	23,74	2,5	22,1	20	15	4	16
K1647.1110X25	A	without shaft	polished	-	M10	22	23,74	2,5	22,1	25	15	4	16
K1647.1110X30	A	without shaft	polished	-	M10	22	23,74	2,5	22,1	30	15	4	16
K1647.1110X35	A	without shaft	polished	-	M10	22	23,74	2,5	22,1	35	15	4	16
K1647.1110X40	A	without shaft	polished	-	M10	22	23,74	2,5	22,1	40	15	4	16
K1647.1110X45	B	with shaft	polished	26	M10	22	23,74	2,5	22,1	45	15	4	16
K1647.1110X50	B	with shaft	polished	26	M10	22	23,74	2,5	22,1	50	15	4	16
K1647.1110X60	B	with shaft	polished	26	M10	22	23,74	2,5	22,1	60	15	4	16
K1647.1110X70	B	with shaft	polished	26	M10	22	23,74	2,5	22,1	70	15	4	16
K1647.1110X80	B	with shaft	polished	26	M10	22	23,74	2,5	22,1	80	15	4	16

Hexagon head bolts, stainless steel with seal washer in Hygienic DESIGN

Order No.	style	Style definition	Surface finish body	B	D	D1	D2	H	K	L	L1	R	SW
K1647.1112X25	A	without shaft	polished	-	M12	26	28,25	3	25,1	25	16,1	5	18
K1647.1112X30	A	without shaft	polished	-	M12	26	28,25	3	25,1	30	16,1	5	18
K1647.1112X35	A	without shaft	polished	-	M12	26	28,25	3	25,1	35	16,1	5	18
K1647.1112X40	A	without shaft	polished	-	M12	26	28,25	3	25,1	40	16,1	5	18
K1647.1112X45	A	without shaft	polished	-	M12	26	28,25	3	25,1	45	16,1	5	18
K1647.1112X50	B	with shaft	polished	30	M12	26	28,25	3	25,1	50	16,1	5	18
K1647.1112X60	B	with shaft	polished	30	M12	26	28,25	3	25,1	60	16,1	5	18
K1647.1112X70	B	with shaft	polished	30	M12	26	28,25	3	25,1	70	16,1	5	18
K1647.1112X80	B	with shaft	polished	30	M12	26	28,25	3	25,1	80	16,1	5	18
K1647.1116X30	A	without shaft	polished	-	M16	35	37,25	3	32,1	30	21,8	6	24
K1647.1116X35	A	without shaft	polished	-	M16	35	37,25	3	32,1	35	21,8	6	24
K1647.1116X40	A	without shaft	polished	-	M16	35	37,25	3	32,1	40	21,8	6	24
K1647.1116X45	A	without shaft	polished	-	M16	35	37,25	3	32,1	45	21,8	6	24
K1647.1116X50	A	without shaft	polished	-	M16	35	37,25	3	32,1	50	21,8	6	24
K1647.1116X60	A	without shaft	polished	-	M16	35	37,25	3	32,1	60	21,8	6	24
K1647.1116X70	B	with shaft	polished	38	M16	35	37,25	3	32,1	70	21,8	6	24
K1647.1116X80	B	with shaft	polished	38	M16	35	37,25	3	32,1	80	21,8	6	24
K1647.2104X08	A	without shaft	not polished	-	M4	10	11,25	2	11,1	8	5,9	3	7
K1647.2104X10	A	without shaft	not polished	-	M4	10	11,25	2	11,1	10	5,9	3	7
K1647.2104X12	A	without shaft	not polished	-	M4	10	11,25	2	11,1	12	5,9	3	7
K1647.2104X16	A	without shaft	not polished	-	M4	10	11,25	2	11,1	16	5,9	3	7
K1647.2104X20	A	without shaft	not polished	-	M4	10	11,25	2	11,1	20	5,9	3	7
K1647.2104X25	B	with shaft	not polished	14	M4	10	11,25	2	11,1	25	5,9	3	7
K1647.2104X30	B	with shaft	not polished	14	M4	10	11,25	2	11,1	30	5,9	3	7
K1647.2104X35	B	with shaft	not polished	14	M4	10	11,25	2	11,1	35	5,9	3	7
K1647.2104X40	B	with shaft	not polished	14	M4	10	11,25	2	11,1	40	5,9	3	7
K1647.2105X10	A	without shaft	not polished	-	M5	12	13,25	2	13,1	10	7,4	3	8
K1647.2105X12	A	without shaft	not polished	-	M5	12	13,25	2	13,1	12	7,4	3	8
K1647.2105X16	A	without shaft	not polished	-	M5	12	13,25	2	13,1	16	7,4	3	8
K1647.2105X20	A	without shaft	not polished	-	M5	12	13,25	2	13,1	20	7,4	3	8
K1647.2105X25	B	with shaft	not polished	16	M5	12	13,25	2	13,1	25	7,4	3	8
K1647.2105X30	B	with shaft	not polished	16	M5	12	13,25	2	13,1	30	7,4	3	8
K1647.2105X35	B	with shaft	not polished	16	M5	12	13,25	2	13,1	35	7,4	3	8
K1647.2105X40	B	with shaft	not polished	16	M5	12	13,25	2	13,1	40	7,4	3	8
K1647.2105X45	B	with shaft	not polished	16	M5	12	13,25	2	13,1	45	7,4	3	8
K1647.2105X50	B	with shaft	not polished	16	M5	12	13,25	2	13,1	50	7,4	3	8
K1647.2106X12	A	without shaft	not polished	-	M6	14	15,74	2,5	15,1	12	9,1	3	10
K1647.2106X16	A	without shaft	not polished	-	M6	14	15,74	2,5	15,1	16	9,1	3	10
K1647.2106X20	A	without shaft	not polished	-	M6	14	15,74	2,5	15,1	20	9,1	3	10
K1647.2106X25	A	without shaft	not polished	-	M6	14	15,74	2,5	15,1	25	9,1	3	10
K1647.2106X30	B	with shaft	not polished	18	M6	14	15,74	2,5	15,1	30	9,1	3	10
K1647.2106X35	B	with shaft	not polished	18	M6	14	15,74	2,5	15,1	35	9,1	3	10
K1647.2106X40	B	with shaft	not polished	18	M6	14	15,74	2,5	15,1	40	9,1	3	10
K1647.2106X45	B	with shaft	not polished	18	M6	14	15,74	2,5	15,1	45	9,1	3	10
K1647.2106X50	B	with shaft	not polished	18	M6	14	15,74	2,5	15,1	50	9,1	3	10
K1647.2106X60	B	with shaft	not polished	18	M6	14	15,74	2,5	15,1	60	9,1	3	10
K1647.2108X16	A	without shaft	not polished	-	M8	18	19,74	2,5	18,1	16	11,7	3	13
K1647.2108X20	A	without shaft	not polished	-	M8	18	19,74	2,5	18,1	20	11,7	3	13
K1647.2108X25	A	without shaft	not polished	-	M8	18	19,74	2,5	18,1	25	11,7	3	13
K1647.2108X30	A	without shaft	not polished	-	M8	18	19,74	2,5	18,1	30	11,7	3	13
K1647.2108X35	A	without shaft	not polished	-	M8	18	19,74	2,5	18,1	35	11,7	3	13
K1647.2108X40	B	with shaft	not polished	22	M8	18	19,74	2,5	18,1	40	11,7	3	13
K1647.2108X45	B	with shaft	not polished	22	M8	18	19,74	2,5	18,1	45	11,7	3	13
K1647.2108X50	B	with shaft	not polished	22	M8	18	19,74	2,5	18,1	50	11,7	3	13
K1647.2108X60	B	with shaft	not polished	22	M8	18	19,74	2,5	18,1	60	11,7	3	13
K1647.2108X70	B	with shaft	not polished	22	M8	18	19,74	2,5	18,1	70	11,7	3	13
K1647.2108X80	B	with shaft	not polished	22	M8	18	19,74	2,5	18,1	80	11,7	3	13
K1647.2110X20	A	without shaft	not polished	-	M10	22	23,74	2,5	22,1	20	15	4	16
K1647.2110X25	A	without shaft	not polished	-	M10	22	23,74	2,5	22,1	25	15	4	16
K1647.2110X30	A	without shaft	not polished	-	M10	22	23,74	2,5	22,1	30	15	4	16
K1647.2110X35	A	without shaft	not polished	-	M10	22	23,74	2,5	22,1	35	15	4	16
K1647.2110X40	A	without shaft	not polished	-	M10	22	23,74	2,5	22,1	40	15	4	16
K1647.2110X45	B	with shaft	not polished	26	M10	22	23,74	2,5	22,1	45	15	4	16

Hexagon head bolts, stainless steel with seal washer in Hygienic DESIGN

Order No.	style	Style definition	Surface finish body	B	D	D1	D2	H	K	L	L1	R	SW
K1647.2110X50	B	with shaft	not polished	26	M10	22	23,74	2,5	22,1	50	15	4	16
K1647.2110X60	B	with shaft	not polished	26	M10	22	23,74	2,5	22,1	60	15	4	16
K1647.2110X70	B	with shaft	not polished	26	M10	22	23,74	2,5	22,1	70	15	4	16
K1647.2110X80	B	with shaft	not polished	26	M10	22	23,74	2,5	22,1	80	15	4	16
K1647.2112X25	A	without shaft	not polished	-	M12	26	28,25	3	25,1	25	16,1	5	18
K1647.2112X30	A	without shaft	not polished	-	M12	26	28,25	3	25,1	30	16,1	5	18
K1647.2112X35	A	without shaft	not polished	-	M12	26	28,25	3	25,1	35	16,1	5	18
K1647.2112X40	A	without shaft	not polished	-	M12	26	28,25	3	25,1	40	16,1	5	18
K1647.2112X45	A	without shaft	not polished	-	M12	26	28,25	3	25,1	45	16,1	5	18
K1647.2112X50	B	with shaft	not polished	30	M12	26	28,25	3	25,1	50	16,1	5	18
K1647.2112X60	B	with shaft	not polished	30	M12	26	28,25	3	25,1	60	16,1	5	18
K1647.2112X70	B	with shaft	not polished	30	M12	26	28,25	3	25,1	70	16,1	5	18
K1647.2112X80	B	with shaft	not polished	30	M12	26	28,25	3	25,1	80	16,1	5	18
K1647.2116X30	A	without shaft	not polished	-	M16	35	37,25	3	32,1	30	21,8	6	24
K1647.2116X35	A	without shaft	not polished	-	M16	35	37,25	3	32,1	35	21,8	6	24
K1647.2116X40	A	without shaft	not polished	-	M16	35	37,25	3	32,1	40	21,8	6	24
K1647.2116X45	A	without shaft	not polished	-	M16	35	37,25	3	32,1	45	21,8	6	24
K1647.2116X50	A	without shaft	not polished	-	M16	35	37,25	3	32,1	50	21,8	6	24
K1647.2116X60	A	without shaft	not polished	-	M16	35	37,25	3	32,1	60	21,8	6	24
K1647.2116X70	B	with shaft	not polished	38	M16	35	37,25	3	32,1	70	21,8	6	24
K1647.2116X80	B	with shaft	not polished	38	M16	35	37,25	3	32,1	80	21,8	6	24