



P0144.ZP

Material

Steel, zinc-plated.

Technical notes

To DIN 923.

Order no.	d_1	d_2 h ₉	l_1	d_3	l_2	h	w
P0144.020-002-ZP	M 2	2,8	2	4,5	3,0	1,2	0,5
P0144.020-003-ZP	M 2	2,8	3	4,5	3,0	1,2	0,5
P0144.020-004-ZP	M 2	2,8	4	4,5	3,0	1,2	0,5
P0144.020-005-ZP	M 2	2,8	5	4,5	3,0	1,2	0,5
P0144.020-006-ZP	M 2	2,8	6	4,5	3,0	1,2	0,5
P0144.020-008-ZP	M 2	2,8	8	4,5	3,0	1,2	0,5
P0144.020-012-ZP	M 2	2,8	12	4,5	3,0	1,2	0,5
P0144.025-003-ZP	M2,5	2,8	3	4,5	3,0	1,2	0,5
P0144.025-004-ZP	M2,5	2,8	4	4,5	3,0	1,2	0,5
P0144.025-005-ZP	M2,5	2,8	5	4,5	3,0	1,2	0,5
P0144.025-006-ZP	M2,5	2,8	6	4,5	3,0	1,2	0,5
P0144.025-008-ZP	M2,5	2,8	8	4,5	3,0	1,2	0,5
P0144.030-001-ZP	M 3	4,0	1	7,0	4,5	1,8	0,8
P0144.030-002-ZP	M 3	4,0	2	7,0	4,5	1,8	0,8
P0144.030-003-ZP	M 3	4,0	3	7,0	4,5	1,8	0,8
P0144.030-004-ZP	M 3	4,0	4	7,0	4,5	1,8	0,8
P0144.030-005-ZP	M 3	4,0	5	7,0	4,5	1,8	0,8
P0144.030-006-ZP	M 3	4,0	6	7,0	4,5	1,8	0,8
P0144.030-008-ZP	M 3	4,0	8	7,0	4,5	1,8	0,8
P0144.030-010-ZP	M 3	4,0	10	7,0	4,5	1,8	0,8
P0144.030-012-ZP	M 3	4,0	12	7,0	4,5	1,8	0,8
P0144.030-016-ZP	M 3	4,0	16	7,0	4,5	1,8	0,8
P0144.030-030-ZP	M 3	4,0	30	7,0	4,5	1,8	0,8
P0144.040-002-ZP	M 4	5,5	2	8,5	6,0	2,4	1,0
P0144.040-003-ZP	M 4	5,5	3	8,5	6,0	2,4	1,0
P0144.040-004-ZP	M 4	5,5	4	8,5	6,0	2,4	1,0
P0144.040-005-ZP	M 4	5,5	5	8,5	6,0	2,4	1,0
P0144.040-006-ZP	M 4	5,5	6	8,5	6,0	2,4	1,0
P0144.040-008-ZP	M 4	5,5	8	8,5	6,0	2,4	1,0
P0144.040-010-ZP	M 4	5,5	10	8,5	6,0	2,4	1,0
P0144.040-012-ZP	M 4	5,5	12	8,5	6,0	2,4	1,0
P0144.040-016-ZP	M 4	5,5	16	8,5	6,0	2,4	1,0

Order no.	d ₁	d ₂ h9	l ₁	d ₃	l ₂	h	w
P0144.040-020-ZP	M 4	5,5	20	8,5	6,0	2,4	1,0
P0144.040-030-ZP	M 4	5,5	30	8,5	6,0	2,4	1,0
P0144.050-002-ZP	M 5	7,0	2	11,0	7,0	2,7	1,2
P0144.050-003-ZP	M 5	7,0	3	11,0	7,0	2,7	1,2
P0144.050-004-ZP	M 5	7,0	4	11,0	7,0	2,7	1,2
P0144.050-005-ZP	M 5	7,0	5	11,0	7,0	2,7	1,2
P0144.050-006-ZP	M 5	7,0	6	11,0	7,0	2,7	1,2
P0144.050-008-ZP	M 5	7,0	8	11,0	7,0	2,7	1,2
P0144.050-010-ZP	M 5	7,0	10	11,0	7,0	2,7	1,2
P0144.050-012-ZP	M 5	7,0	12	11,0	7,0	2,7	1,2
P0144.050-016-ZP	M 5	7,0	16	11,0	7,0	2,7	1,2
P0144.050-020-ZP	M 5	7,0	20	11,0	7,0	2,7	1,2
P0144.050-025-ZP	M 5	7,0	25	11,0	7,0	2,7	1,2
P0144.060-002-ZP	M 6	8,0	2	13,0	9,0	3,1	1,6
P0144.060-003-ZP	M 6	8,0	3	13,0	9,0	3,1	1,6
P0144.060-004-ZP	M 6	8,0	4	13,0	9,0	3,1	1,6
P0144.060-005-ZP	M 6	8,0	5	13,0	9,0	3,1	1,6
P0144.060-006-ZP	M 6	8,0	6	13,0	9,0	3,1	1,6
P0144.060-008-ZP	M 6	8,0	8	13,0	9,0	3,1	1,6
P0144.060-010-ZP	M 6	8,0	10	13,0	9,0	3,1	1,6
P0144.060-012-ZP	M 6	8,0	12	13,0	9,0	3,1	1,6
P0144.060-016-ZP	M 6	8,0	16	13,0	9,0	3,1	1,6
P0144.060-020-ZP	M 6	8,0	16	13,0	9,0	3,1	1,6
P0144.060-025-ZP	M 6	8,0	25	13,0	9,0	3,1	1,6
P0144.080-004-ZP	M 8	10,0	4	16,0	11,0	3,8	2,0
P0144.080-005-ZP	M 8	10,0	5	16,0	11,0	3,8	2,0
P0144.080-006-ZP	M 8	10,0	6	16,0	11,0	3,8	2,0
P0144.080-008-ZP	M 8	10,0	8	16,0	11,0	3,8	2,0
P0144.080-010-ZP	M 8	10,0	10	16,0	11,0	3,8	2,0
P0144.080-012-ZP	M 8	10,0	12	16,0	11,0	3,8	2,0
P0144.080-016-ZP	M 8	10,0	16	16,0	11,0	3,8	2,0
P0144.080-020-ZP	M 8	10,0	20	16,0	11,0	3,8	2,0
P0144.080-025-ZP	M 8	10,0	25	16,0	11,0	3,8	2,0
P0144.100-005-ZP	M10	13,0	5	20,0	13,5	4,6	2,5
P0144.100-006-ZP	M10	13,0	6	20,0	13,5	4,6	2,5
P0144.100-008-ZP	M10	13,0	8	20,0	13,5	4,6	2,5
P0144.100-010-ZP	M10	13,0	10	20,0	13,5	4,6	2,5
P0144.100-012-ZP	M10	13,0	12	20,0	13,5	4,6	2,5
P0144.100-016-ZP	M10	13,0	16	20,0	13,5	4,6	2,5
P0144.100-020-ZP	M10	13,0	20	20,0	13,5	4,6	2,5
P0144.100-025-ZP	M10	13,0	25	20,0	13,5	4,6	2,5

Steel shoulder screws

These are our least expensive option. They are produced to ISO 7379 standards. Thread sizes from Ø4 M3 to Ø24 M20. We manufacture special shoulder screws to customer drawings with a minimum batch size.



Stainless steel shoulder screws

We have three different grades of stainless steel shoulder screws:

A2 series – these are our standard grade of stainless. They are strong and resistant to corrosion but not to very harsh environments such as salt water.

For standard sizes Ø6 M5 up to Ø16 M12, see our part no P0137. For miniature sizes down to Ø4 M3 see parts numbers P0130 and P0132.

416 series – these are made from harder stainless steel with improved shear strengths but the parts are more prone to corrosion (see part no. P0131 and P0133).

A4 series – these shoulder screws (P0143) are very resistant to corrosion but are considerably more expensive than other stainless versions.



A2 Stainless



416 Stainless



A4 Stainless

Shoulder bolts

Our range of precision shoulder bolts with hexagonal heads come in both steel and stainless steel.

Steel – our standard part number P0138 is produced to DIN 609. We also have the same part with slightly longer thread size (P0140) – which is to DIN 610 standards.

Stainless – our standard part number P0139 is produced to DIN 609. We also have the same part with slightly longer thread size (P0141) – which is to DIN 610 standards.

Two different versions. Our most popular version is to DIN 609.



Steel



A2 Stainless



Steel



P0138 + P0139
DIN 609 (long thread)



P0140 + P0141
DIN 610 (short thread)



P0142
DIN 7968 (short thread)

Part No.		Material	Head	Corrosion resistance	Strength	Ø/thread	DIN/ISO
P0130		Stainless A2	Hex socket	3 3	3	Min: Ø4/M3 Max: Ø12/M10	-
P0131		Stainless 416	Hex socket	3	3 3	Min: Ø4/M3 Max: Ø12/M10	-
P0132		Stainless A2	Slotted	3 3	3	Min: Ø4/M3 Max: Ø12/M10	-
P0133		Stainless 416	Slotted	3	3 3	Min: Ø4/M3 Max: Ø12/M10	-
P0134		Stainless A2	Hex socket	3 3	3	Min: Ø4/M3 Max: Ø8/M6	-
P0135		Stainless A2	Hex head	3 3	3	Min: Ø4/M3 Max: Ø12/M10	-
P0136		Steel 12,9	Hex socket	7	3 3	Min: Ø4/M3 Max: Ø24/M20	ISO 7379
P0137		Stainless A2	Hex socket	3 3	3	Min: Ø6/M5 Max: Ø20/M16	ISO 7379
P0138		Steel 8,8	Hex head	7	3	Min: Ø9/M8 Max: Ø44/M42	DIN 610
P0139		Steel 10,9	Hex head (long thread)	7	3 3	Min: Ø9/M8 Max: Ø38/M36	DIN 610
P0140		Steel 8,8	Hex socket (short thread)	7	3 3	Min: Ø9/M8 Max: Ø44/M42	DIN 609
P0141		Steel 10,9	Hex socket (short thread)	7	3 3	Min: Ø9/M8 Max: Ø38/M36	DIN 609
P0142		Steel 8,8	Hex head	7	3 3	Min: Ø12/M12 Max: Ø27/M27	DIN 7968
P0143		Stainless A4	Hex socket	3 3 3	3	Min: Ø4/M3 Max: Ø12/M10	ISO 7379
P0144		Stainless A2	Pan head	3 3	3 3	Min: Ø4/M3 Max: Ø10/M8	DIN 923