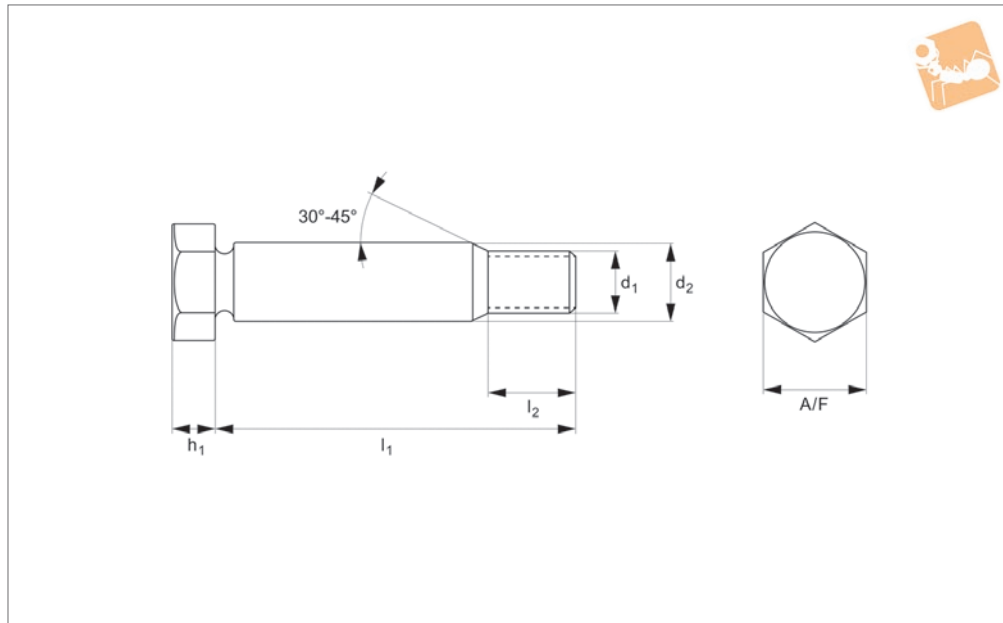




Steel Shoulder Bolts - Hex. Head

short thread, steel 10.9

Shoulder Screws



P0141.SC

SHOULDER SCREWS

Material

Black alloy steel, strength 10,9. Hardness 38 HRC, tensile strength 830 N/mm².

Technical Notes

To DIN 610.

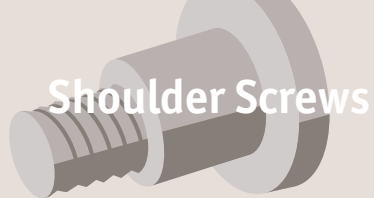
For strength 8.8 see part P0140.SC

Tips

Do not tighten to standard strength class 10,9 torque; as the tightening torque is limited,

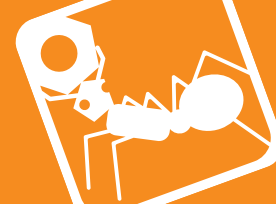
by the presence of the reduced diameter undercut under the head and at the shoulder/thread area.
Drill hole to H7 tolerance.

Order No.	d ₁	d ₂ tol. k6	l ₁	l ₂	h ₁	A/F
P0141.080-025-SC	M 8	9	25	11.5	5.3	13
P0141.080-024-SC	M 8	9	24	11.5	5.3	13
P0141.080-035-SC	M 8	9	35	11.5	5.3	13
P0141.080-038-SC	M 8	9	38	11.5	5.3	13
P0141.080-040-SC	M 8	9	40	11.5	5.3	13
P0141.080-048-SC	M 8	9	48	11.5	5.3	13
P0141.080-060-SC	M 8	9	60	13.5	5.3	13
P0141.080-080-SC	M 8	9	80	13.5	5.3	13
P0141.100-030-SC	M10	11	30	13.5	6.4	17
P0141.100-032-SC	M10	11	32	13.5	6.4	17
P0141.100-035-SC	M10	11	35	13.5	6.4	17
P0141.100-038-SC	M10	11	38	13.5	6.4	17
P0141.100-040-SC	M10	11	40	13.5	6.4	17
P0141.100-042-SC	M10	11	42	13.5	6.4	17
P0141.100-045-SC	M10	11	45	13.5	6.4	17
P0141.100-048-SC	M10	11	48	13.5	6.4	17
P0141.100-050-SC	M10	11	50	13.5	6.4	17
P0141.100-055-SC	M10	11	55	15.5	6.4	17
P0141.100-060-SC	M10	11	60	15.5	6.4	17
P0141.100-065-SC	M10	11	65	15.5	6.4	17
P0141.100-070-SC	M10	11	70	15.5	6.4	17
P0141.100-075-SC	M10	11	75	15.5	6.4	17
P0141.100-080-SC	M10	11	80	15.5	6.4	17
P0141.120-030-SC	M12	13	30	15.5	7.5	19
P0141.120-032-SC	M12	13	32	15.5	7.5	19
P0141.120-035-SC	M12	13	35	15.5	7.5	19
P0141.120-038-SC	M12	13	38	15.5	7.5	19
P0141.120-040-SC	M12	13	40	15.5	7.5	19
P0141.120-045-SC	M12	13	45	15.5	7.5	19
P0141.120-048-SC	M12	13	48	15.5	7.5	19
P0141.120-050-SC	M12	13	50	15.5	7.5	19
P0141.120-055-SC	M12	13	55	17.5	7.5	19



Shoulder Screws

Steel Shoulder Bolts - Hex. Head short thread, steel 10.9



SHOULDER SCREWS

Order No.	d ₁	d ₂ tol. k6	l ₁	l ₂	h ₁	A/F
P0141.120-060-SC	M12	13	60	17.5	7.5	19
P0141.120-065-SC	M12	13	65	17.5	7.5	19
P0141.120-070-SC	M12	13	70	17.5	7.5	19
P0141.120-075-SC	M12	13	75	17.5	7.5	19
P0141.120-090-SC	M12	13	90	17.5	7.5	19
P0141.120-110-SC	M12	13	110	17.5	7.5	19
P0141.140-035-SC	M14	15	35	17.0	8.8	22
P0141.140-040-SC	M14	15	40	17.0	8.8	22
P0141.140-042-SC	M14	15	42	17.0	8.8	22
P0141.140-045-SC	M14	15	45	17.0	8.8	22
P0141.140-050-SC	M14	15	50	17.0	8.8	22
P0141.140-055-SC	M14	15	55	19.0	8.8	22
P0141.140-060-SC	M14	15	60	19.0	8.8	22
P0141.140-080-SC	M14	15	80	19.0	8.8	22
P0141.160-040-SC	M16	17	40	19.0	10	24
P0141.160-042-SC	M16	17	42	19.0	10	24
P0141.160-045-SC	M16	17	45	19.0	10	24
P0141.160-048-SC	M16	17	48	19.0	10	24
P0141.160-050-SC	M16	17	50	19.0	10	24
P0141.160-055-SC	M16	17	55	21.0	10	24
P0141.160-060-SC	M16	17	60	21.0	10	24
P0141.160-065-SC	M16	17	65	21.0	10	24
P0141.160-070-SC	M16	17	70	21.0	10	24
P0141.160-075-SC	M16	17	75	21.0	10	24
P0141.160-080-SC	M16	17	80	21.0	10	24
P0141.160-085-SC	M16	17	85	21.0	10	24
P0141.160-090-SC	M16	17	90	21.0	10	24
P0141.160-100-SC	M16	17	100	21.0	10	24
P0141.160-110-SC	M16	17	110	21.0	10	24
P0141.160-120-SC	M16	17	120	21.0	10	24
P0141.160-150-SC	M16	17	150	21.0	10	24
P0141.200-045-SC	M20	21	45	22.5	12.5	30
P0141.200-050-SC	M20	21	50	22.5	12.5	30
P0141.200-055-SC	M20	21	55	24.5	12.5	30
P0141.200-060-SC	M20	21	60	24.5	12.5	30
P0141.200-065-SC	M20	21	65	24.5	12.5	30
P0141.200-070-SC	M20	21	70	24.5	12.5	30
P0141.200-075-SC	M20	21	75	24.5	12.5	30
P0141.200-080-SC	M20	21	80	24.5	12.5	30
P0141.200-085-SC	M20	21	85	24.5	12.5	30
P0141.200-090-SC	M20	21	90	24.5	12.5	30
P0141.200-100-SC	M20	21	100	24.5	12.5	30
P0141.200-105-SC	M20	21	105	24.5	12.5	30
P0141.200-110-SC	M20	21	110	24.5	12.5	30
P0141.200-120-SC	M20	21	120	24.5	12.5	30
P0141.200-130-SC	M20	21	130	24.5	12.5	30
P0141.200-140-SC	M20	21	140	24.5	12.5	30
P0141.200-150-SC	M20	21	150	24.5	12.5	30
P0141.200-160-SC	M20	21	160	29.5	12.5	30
P0141.240-055-SC	M24	25	55	28.5	15.0	36
P0141.240-060-SC	M24	25	60	28.5	15.0	36
P0141.240-065-SC	M24	25	65	28.5	15.0	36
P0141.240-070-SC	M24	25	70	28.5	15.0	36
P0141.240-075-SC	M24	25	75	28.5	15.0	36
P0141.240-080-SC	M24	25	80	28.5	15.0	36
P0141.240-085-SC	M24	25	85	28.5	15.0	36
P0141.240-090-SC	M24	25	90	28.5	15.0	36
P0141.240-100-SC	M24	25	100	28.5	15.0	36
P0141.240-105-SC	M24	25	105	28.5	15.0	36
P0141.240-110-SC	M24	25	110	28.5	15.0	36
P0141.240-120-SC	M24	25	120	28.5	15.0	36
P0141.240-125-SC	M24	25	125	28.5	15.0	36
P0141.240-130-SC	M24	25	130	28.5	15.0	36
P0141.240-140-SC	M24	25	140	28.5	15.0	36
P0141.240-150-SC	M24	25	150	28.5	15.0	36
P0141.240-160-SC	M24	25	160	33.5	15.0	36
P0141.240-170-SC	M24	25	170	33.5	15.0	36
P0141.240-180-SC	M24	25	180	33.5	15.0	36



Steel Shoulder Bolts - Hex. Head

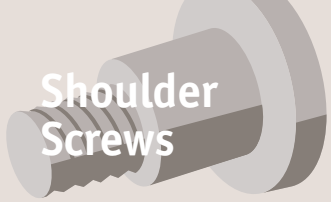
short thread, steel 10.9

Shoulder Screws



Order No.	d ₁	d ₂ tol. k6	l ₁	l ₂	h ₁	A/F
P0141.300-080-SC	M30	32	80	34.0	19.0	46
P0141.300-090-SC	M30	32	90	34.0	19.0	46
P0141.300-100-SC	M30	32	100	34.0	19.0	46
P0141.300-105-SC	M30	32	105	34.0	19.0	46
P0141.300-110-SC	M30	32	110	34.0	19.0	46
P0141.300-120-SC	M30	32	120	34.0	19.0	46
P0141.300-130-SC	M30	32	130	34.0	19.0	46
P0141.300-140-SC	M30	32	140	34.0	19.0	46
P0141.360-120-SC	M36	38	120	40.0	22.0	55
P0141.360-130-SC	M36	38	130	40.0	22.0	55
P0141.360-200-SC	M36	38	200	45.0	22.0	55

SHOULDER SCREWS



SHOULDER SCREWS

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:

303 series – these are our standard grade of stainless (P0130.A2). They are strong and resistant to corrosion but not to very harsh environments such as salt water.

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).

316 series – these shoulder screws (P0130.A4) are very resistant to corrosion but are considerably more expensive than other stainless versions.



Shoulder bolts

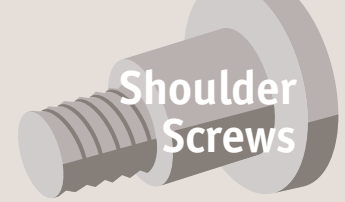
Our range of precision shoulder bolts with hexagonal heads come in both steel (grades 8.8 and 10.9) and stainless steel (303 and 316 stainless). These bolts are manufactured to DIN 609 and DIN 610. We also have shoulder bolts for construction, manufactured to DIN 7968.

	DIN 609 standard length thread	DIN 610 short length thread	DIN 7968 construction
Grade 8.8 steel	P0138.SC	P0140.SC	P0142
Grade 10.9 steel	P0139	P0141	-
303 stainless steel	P0138.A2	P0140.A2	-



Product Overview

Shoulder Screws & Shoulder Bolts



Shoulder
Screws

Shoulder Screw from Automotion Components

SHOULDER SCREWS

Part No.		Material	Head	Corrosion resistance	Strength	Ø/thread	DIN/ISO
P0130		303 stainless steel	Hex socket	✓✓	✓	Min: Ø4/M3 Max: Ø20/M16	-
P0130.A4		316 stainless steel	Hex socket	✓✓✓	✓	Min: Ø4/M3 Max: Ø20/M16	ISO 7379
P0131		416 stainless steel	Hex socket	✓	✓✓	Min: Ø4/M3 Max: Ø12/M10	-
P0132		303 stainless steel	Slotted	✓✓	✓	Min: Ø4/M3 Max: Ø12/M10	-
P0133		416 stainless steel	Slotted	✓	✓✓	Min: Ø4/M3 Max: Ø12/M10	-
P0134		303 stainless steel	Hex socket	✓✓	✓	Min: Ø4/M3 Max: Ø8/M6	-
P0135		303 stainless steel	Hex head	✓✓	✓	Min: Ø4/M3 Max: Ø12/M10	-
P0136		Steel 12,9	Hex socket	✗	✓✓	Min: Ø4/M3 Max: Ø24/M20	ISO 7379
P0137		304 stainless steel	Hex socket	✓✓	✓	Min: Ø6/M5 Max: Ø20/M16	ISO 7379
P0138		Steel 8,8	Hex head (long thread)	✗	✓	Min: Ø9/M8 Max: Ø44/M42	DIN 610
P0139		Steel 10,9	Hex head (long thread)	✗	✓✓	Min: Ø9/M8 Max: Ø38/M36	DIN 610
P0140		Steel 8,8	Hex socket (short thread)	✗	✓✓	Min: Ø9/M8 Max: Ø44/M42	DIN 609
P0141		Steel 10,9	Hex socket (short thread)	✗	✓✓	Min: Ø9/M8 Max: Ø38/M36	DIN 609
P0142		Steel 8,8	Hex head	✗	✓✓	Min: Ø12/M12 Max: Ø27/M27	DIN 7968
P0144		303 stainless steel	Pan head	✓✓	✓✓	Min: Ø4/M3 Max: Ø10/M8	DIN 923