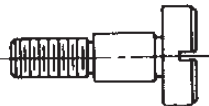
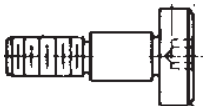
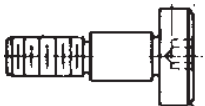
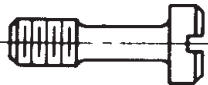




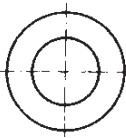


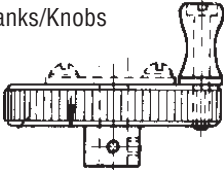

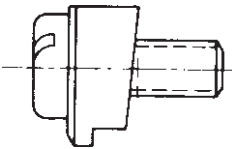
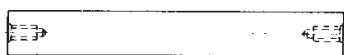
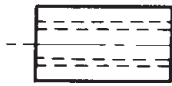
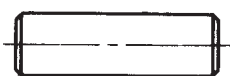

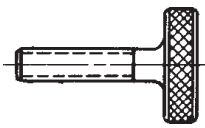
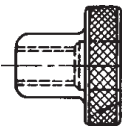
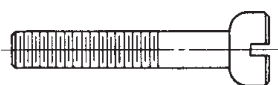

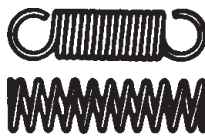
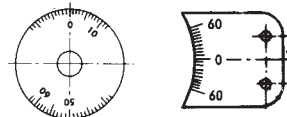


PIC Design offers an extensive line of precision Hardware which contains various items for fastening and/or locating of precision industrial components. The hardware is manufactured from Stainless Steel to the PIC high quality standards, in either inch or metric styles of thread, diameter and length.

The following pages have been included as a technical guide to aid the designer or engineer in selecting the appropriate screw type and size. The drill and tap data in inch for both the UNF and the UNC pieces,

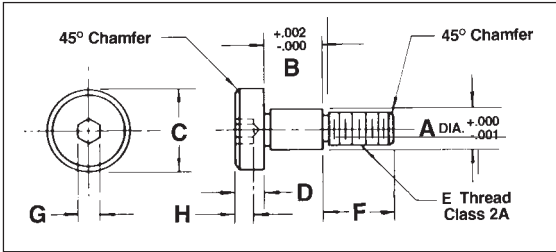
selects the correct drill to be used for the appropriate tap. For the metric ISO thread, the correct drill is recommended for the thread size and pitch.

The screw head detail data for both inch and metric heads enables the designer to select the appropriate type of head required and to allow for the clearance of the heads.

Slotted head shoulder screws. 	Socket head shoulder screws. 	Philips head shoulder screws. 	Captive Screws 
No-Mar set screws 	Silver-Grip set screws 	Cup point set screws 	Brass tip set screws 
Precision washers 	Belleville spring washers 	Curved washers 	Cranks/Knobs 
Retaining rings 	Motor mount cleats 	Spacers 	Standoffs 
Dowel pins 	Woodruff keys 	Knurled thumb screws 	Knurled thumb nuts 
Swivel studs, nuts and washers 	Handles 	Springs 	Dials and verniers 

SOCKET HEAD SHOULDER SCREWS

303 & Hardened 416 Stainless Steel — Inch



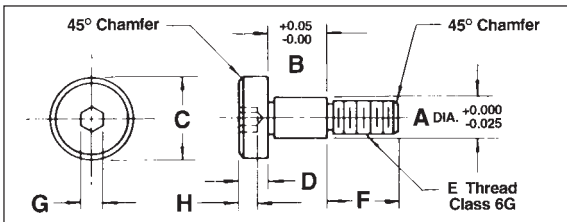
Material: 303 Stainless Steel — 44XX
416 Stainless Steel — 46XX (Hardness 26-32 RC)

A	B	C	D	E	F	G	H (min.)	303 P / N	416 P / N
1/8 .1245	1/8- .1255	1/4	1/8	# 4-40	5/32	5/64	1/16	4410	4610
	3/16- .1880							4411	4611
	1/4- .2505							4412	4612
	5/16- .3130							4413	4613
	3/8- .3755							4414	4614
5/32 .1557	1/8- .1255	9/32	1/8	# 6-32	3/16	3/32	5/64	4461	4661
	3/16- .1880							4462	4662
	1/4- .2505							4463	4663
	5/16- .3130							4464	4664
	3/8- .3755							4465	4665
3/16 .1870	1/8- .1255	5/16	5/32	# 8-32	3/16	3/32	5/64	4415	4615
	3/16- .1880							4416	4616
	1/4- .2505							4417	4617
	5/16- .3130							4418	4618
	3/8- .3755							4419	4619
	1/2- .5005							4420	4620
	5/8- .6255							4421	4621
	3/4- .7505							4422	4622
	1- 1.0005							4423	4623
	1-1/4- 1.2505							4424	4624
	1-1/2- 1.5005							4425	4625

A	B	C	D	E	F	G	H (min.)	303 P / N	416 P / N
1/4 .2495	1/8- .1255	3/8	3/16	# 10-32	1/4	1/8	3/32	4426	4626
	3/16- .1880							4427	4627
	1/4- .2505							4428	4628
	5/16- .3130							4429	4629
	3/8- .3755							4430	4630
	1/2- .5005							4431	4631
	5/8- .6255							4432	4632
	3/4- .7505							4433	4633
	1- 1.0005							4434	4634
	1-1/4- 1.2505							4435	4635
	1-1/2- 1.5005							4436	4636
5/16 .3120	1/4- .2505	1/2	7/32	1/4-20	7/16	5/32	1/8	4437	4637
	5/16- .3130							4438	4638
	3/8- .3755							4439	4639
	1/2- .5005							4440	4640
	5/8- .6255							4441	4641
3/8 .3745	3/4- .7505	1/2	7/32	1/4-20	7/16	5/32	1/8	4442	4642
	5/16- .3130							4443	4643
	3/8- .3755							4444	4644
	1/2- .5005							4445	4645
3/8 .3745	5/8- .6255	9/16	1/4	5/16-18	1/2	3/16	5/32	4446	4646
	5/16- .3130							4447	4647
	3/8- .3755							4448	4648
	1/2- .5005							4449	4649
1/2 .4995	5/8- .6255	3/4	5/16	3/8-16	5/8	1/4	3/16	4450	4650
	3/4- .7505							4451	4651
	1- 1.0005							4452	4652
	1-1/4- 1.2505							4453	4653
	1-1/2- 1.5005							4454	4654

Shoulder Screw Kits	Qty.	303 P / N	416 P / N
Shoulder Screws — Stainless Steel — Slotted and Socket Head. Assorted Lengths for shoulder dia. of 1/8" and thread of # 4-40.	50	Y34K	Y37K
Shoulder Screws — Stainless Steel — Slotted and Socket Head. Assorted Lengths for shoulder dia. of 3/16" and thread of # 8-32.	50	Y35K	Y38K
Shoulder Screws — Stainless Steel — Slotted and Socket Head. Assorted Lengths for shoulder dia. of 1/4" and thread of # 10-32.	50	Y36K	Y39K

303 & Hardened 416 Stainless Steel — Metric



Material: 303 Stainless Steel — MSB2-XX
416 Stainless Steel — MSB4-XX (Hardness 26-32 RC)

A	B	C	D	E	F	G	H (min.)	303 P / N	416 P / N
3.987 (4)	4.013 (4)	6	3	M3 x 0.5	4	2	1.6	MSB2-1	MSB4-1
	5.013 (5)							MSB2-2	MSB4-2
	6.013 (6)							MSB2-3	MSB4-3
	8.013 (8)							MSB2-4	MSB4-4
	10.013 (10)							MSB2-5	MSB4-5
4.987 (5)	4.013 (4)	8	4	M4 x 0.7	5	2.5	2	MSB2-6	MSB4-6
	5.013 (5)							MSB2-7	MSB4-7
	6.013 (6)							MSB2-8	MSB4-8
	8.013 (8)							MSB2-9	MSB4-9
	10.013 (10)							MSB2-10	MSB4-10
	12.013 (12)							MSB2-11	MSB4-11
	14.013 (14)							MSB2-12	MSB4-12
	16.013 (16)							MSB2-13	MSB4-13
	20.013 (20)							MSB2-14	MSB4-14
	25.013 (25)							MSB2-15	MSB4-15
	30.013 (30)							MSB2-16	MSB4-16
5.987 (6)	4.013 (4)	10	5	M5 x 0.8	6	3	2.4	MSB2-17	MSB4-17
	5.013 (5)							MSB2-18	MSB4-18
	6.013 (6)							MSB2-19	MSB4-19
	8.013 (8)							MSB2-20	MSB4-20

A	B	C	D	E	F	G	H (min.)	303 P / N	416 P / N
5.987 (6)	10.013 (10)	10	5	M5 x 0.8	6	3	2.4	MSB2-21	MSB4-21
	12.013 (12)							MSB2-22	MSB4-22
	14.013 (14)							MSB2-23	MSB4-23
	16.013 (16)							MSB2-24	MSB4-24
	20.013 (20)							MSB2-25	MSB4-25
	25.013 (25)							MSB2-26	MSB4-26
	30.013 (30)							MSB2-27	MSB4-27
7.987 (8)	6.013 (6)	12	6	M6 x 1	11	4	3.2	MSB2-28	MSB4-28
	8.013 (8)							MSB2-29	MSB4-29
	10.013 (10)							MSB2-30	MSB4-30
	12.013 (12)							MSB2-31	MSB4-31
	16.013 (16)							MSB2-32	MSB4-32
	20.013 (20)							MSB2-33	MSB4-33
9.987 (10)	8.013 (8)	12	6	M6 x 1	11	4	3.2	MSB2-34	MSB4-34
	10.013 (10)							MSB2-35	MSB4-35
	12.013 (12)							MSB2-36	MSB4-36
	16.013 (16)							MSB2-37	MSB4-37
9.987 (10)	8.013 (8)	14	7	M8 x 1.25	12	5	4	MSB2-38	MSB4-38
	10.013 (10)							MSB2-39	MSB4-39
	12.013 (12)							MSB2-40	MSB4-40
	16.013 (16)							MSB2-41	MSB4-41
11.987 (12)	12.013 (12)	20	8	M10 x 1.5	16	6	4.8	MSB2-42	MSB4-42
	16.013 (16)							MSB2-43	MSB4-43
	20.013 (20)							MSB2-44	MSB4-44
	25.013 (25)							MSB2-45	MSB4-45

Shoulder Screw Kits	Qty.	303 P / N	416 P / N
Shoulder Screws — Stainless Steel — Slotted and Socket Head. Assorted Lengths for shoulder dia. of 4mm and thread of M3 x 0.5.	50	MAK19	MAK22
Shoulder Screws — Stainless Steel — Slotted and Socket Head. Assorted Lengths for shoulder dia. of 5mm and thread of M4 x 0.7.	50	MAK20	MAK23
Shoulder Screws — Stainless Steel — Slotted and Socket Head. Assorted Lengths for shoulder dia. of 6mm and thread of M5 x 0.8.	50	MAK21	MAK24