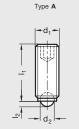
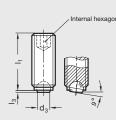
# Inch and Metric Size • With Full, Flat and Serrated Ball Point Ends



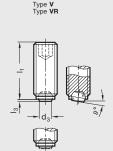


STOCK





Туре В



ISO 9001 Supplier

RoHS Compliant

### **Body**

Alloy steel, black oxide finish European standard 10.9 grade (American standard A490)

### Ball

Steel, hardened

#### GN 605.6

includes steel hex nut and flat washer DIN125A

Socket set screws with full ball point are used in applications where a ball point contact is required.

The flat faced moveable ball allows the clamping or supporting of non-parallel surfaces. Indentation on the workpiece is eliminated and the workpiece does not alter its position during clamping.

Socket set screws with safety twist ball is designed so the flat faced ball cannot twist more than a maximum of 9 degrees. This allows full clamping of the flat faced ball at all times. Socket head cap screws with ball point, see GN 606, page 630.

GN 605.6: Accessory for pneumatic clamps MN 110, page 883, MN 120, page 883, and MN 130, page 884.

### Inch Table - Full and Flat Ball without Safety Feature

Dimensions in: inches (millimeters)

Part Number		d <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	l <sub>2</sub> ≈	A/F
Full Ball	Flat Ball	Thread	Thread Length	u <sub>2</sub>	u <sub>3</sub>	12≈	A/F
25T25000P05/A	-	6-32	.250	.078 (1.98)	.061 (1.56)	.024 (.61)	.063 (1.59)
15T37P05/A	15T37P05/B	8-32	.375	.094 (2.38)	.075 (1.91)	.030 (.76)	.078 (1.98)
2T5000P05/A	2T5000P05/B	10-24	.500	.125	.103	.039	.094
2T580P05/A	2T580P05/B	10-24	.625	(3.18)	(2.61)	(.99)	(2.38)
1T5000P05/A	1T5000P05/B	10-32	.500	.125	.103	.039	.094
1T580P05/A	1T580P05/B		.625	(3.18)	(2.61)	(.99)	(2.38)
3T5000P05/A	3T5000P05/B	1/4-20	.500	.156	.124	.049	.125
3T580P05/A	3T580P05/B	1/4-20	.625	(3.97)	(3.14)	(1.24)	(3.18)
5T5000P05/A	5T5000P05/B	5/16-18	.500	.219 (5.56)	.172 (4.37)	.067 (1.70)	.156 <i>(</i> 3.97)
5T75P05/A	5T75P05/B		.750				
5T87P05/A	5T87P05/B		.875				(5.37)
6T580P05/A	6T580P05/B	3/8-16	.625	.266	.210	.079	.187
6T75P05/A	6T75P05/B		.750	(6.75)	(5.32)	(2.01)	(4.76)
8T75P05/A	8T75P05/B	1/2-13	.750	.344	.266	.102	.250
8T1500P05/A	8T1500P05/B	1/2-13	1.50	(8.73)	(6.76)	(2.59)	(6.35)

### Metric Table - Full and Flat Ball without Safety Feature

Dimensions in: millimeters (inches)

Part N	umber	d <sub>1</sub>	I <sub>1</sub>	d		1	A /E
Full Ball	Flat Ball	Thread	Thread Length	d <sub>2</sub>	d <sub>3</sub>	l <sub>2</sub> ≈	A/F
4N6P05/A	-		6	0.5		4	0
4N10P05/A	-	M4 x .7	10	2.5 (.10)	-	.4 (.02)	(.08)
4N16P05/A	-		16				
5N8P05/A	-	M5 x .8	8	3 (.12)	-	.6 (.02)	2.5 (.10)
5N12P05/A	-		12				
5N20P05/A	-		20				

Table continued...

J. W. Winco, Inc. Engineering Manual

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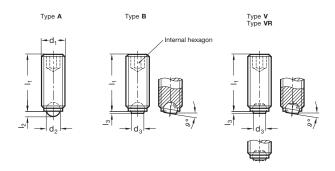
Part Number		$d_1$	I <sub>1</sub>	l <sub>1</sub>		1	A/F
Full Ball	Flat Ball	Thread	Thread Length	$d_2$	d <sub>3</sub>	l <sub>2</sub> ≈	A/F
6N10P05/A	6N10P05/B	M6 x 1.0	10	4	3.2 (.13)	.8 (.03)	3
6N16P05/A	6N16P05/B		16				
6N20P05/A	6N20P05/B		20	(.16)			(.12)
6N25P05/A	6N25P05/B		25				
8N10P05/A	8N10P05/B	M8 x 1.25	10	5.5 (.22)	4.5 (.18)	1.2 (.05)	4 (.16)
8N12P05/A	8N12P05/B		12				
8N20P05/A	8N20P05/B		20				
8N25P05/A	8N25P05/B		25				
8N30P05/A	8N30P05/B		30				
10N12P05/A	10N12P05/B	M10 x 1.5	12	7 (.28)	6 (.24)	1.7	5 (.20)
10N16P05/A	10N16P05/B		16				
10N20P05/A	10N20P05/B		20			(.07)	
10N25P05/A	10N25P05/B		25			(.07)	
10N35P05/A	10N35P05/B		35				
12N16P05/A	12N16P05/B		16	8.5 (.33)	7.2 (.28)	2 (.08)	6 (.24)
12N20P05/A	12N20P05/B	M12 x 1.75	20				
12N30P05/A	12N30P05/B		30				
12N40P05/A	12N40P05/B		40				
16N20P05A	16N20P05B		20	12	10.7 (.42)	3.3 (.13)	8
16N25P05/A	16N25P05/B	M16 x 2.0	25				
16N35P05/A	16N35P05/B	IVI 10 X 2.0	35	(.47)			(.31)
16N50P05/A	16N50P05/B		50				

# Metric Table - Flat Ball with Safety Twist Feature

Dimensions in: millimeters (inches	Dimension	s in:	millimeters	(inches
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Part N	lumber		I <sub>1</sub>		
Plain	Serrated	d₁ Thread	Thread	$d_3$	A/F
Flat Ball	Flat Ball		Length		
6N10P05/V	6N10P05/VR		10		
6N16P05/V	6N16P05/VR	M6 x 1.0	16	3.2	3
6N20P05/V	6N20P05/VR	IVIO X 1.0	20	(.13)	(.12)
6N25P05/V	6N25P05/VR		25		
8N10P05/V	8N10P05/VR		10	4.5 (.18)	
8N12P05/V	8N12P05/VR	M8 x 1.25	12		
8N20P05/V	8N20P05/VR		20		4 (.16)
8N25P05/V	8N25P05/VR		25		(. 10)
8N30P05/V	8N30P05/VR		30		
10N12P05/V	10N12P05/VR		12	6 (.24)	-
10N16P05/V	10N16P05/VR		16		
10N20P05/V	10N20P05/VR	M10 x 1.5	20		5
10N25P05/V	10N25P05/VR		25		(.20)
10N35P05/V	10N35P05/VR		35		
12N16P05/V	12N16P05/VR		16	7.2 (.28)	
12N20P05/V	12N20P05/VR	M40 4 75	20		6
12N30P05/V	12N30P05/VR	M12 x 1.75	30		(.24)
12N40P05/V	12N40P05/VR		40		
16N20P05/V	16N20P05/VR		20	10.7	
16N25P05/V	16N25P05/VR	M40 0.0	25		8
16N35P05/V	16N35P05/VR	M16 x 2.0	35	(.42)	(.31)
16N50P05/V	16N50P05/VR		50		





# Metric Table - Serrated Flat Ball with Nut and Washer

Dimensions in: millimeters (inches)

GN 605.6 Part Number	d₁ Thread	l₁ Thread Length	d <sub>2</sub>	d <sub>3</sub>	I <sub>2</sub> ≈	A/F
8N40PAG	M8 x 1.25	40	5.5 (.22)	4.5 (.18)	1.2 (.05)	4 (.16)
10N50PAG	M10 x 1.5	50	7 (.28)	6 (.24)	1.7 (.07)	5 (.20)
12N50PAG	M12 x 1.75	50	8.5 (.33)	7.2 (.28)	2 (.08)	6 (.24)