
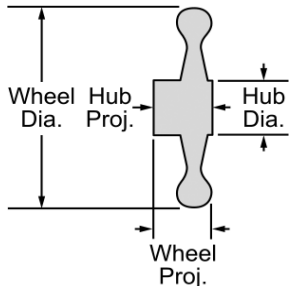

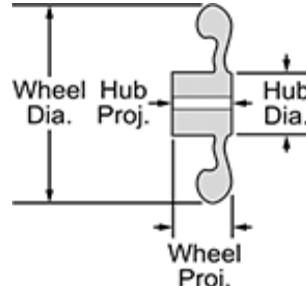

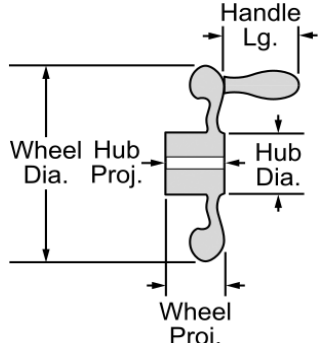

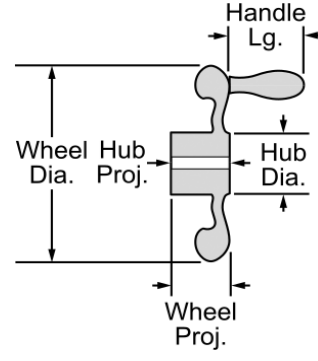






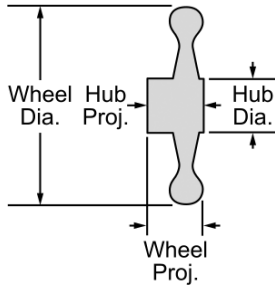
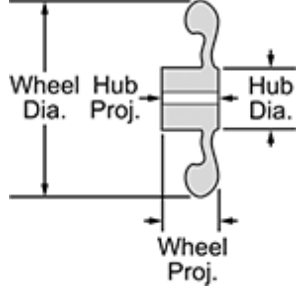
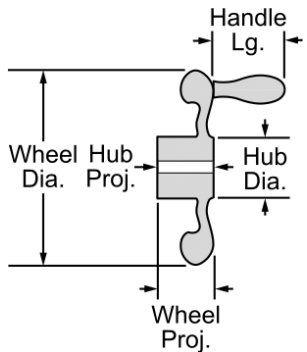
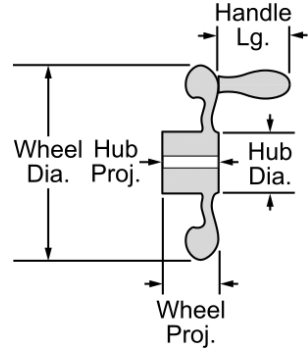



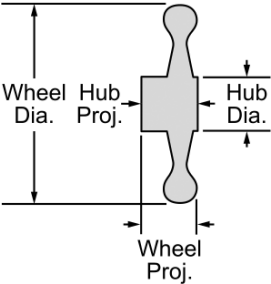

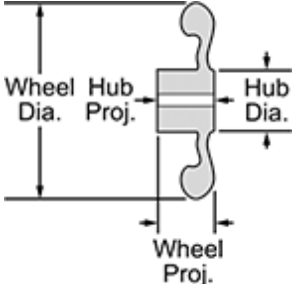

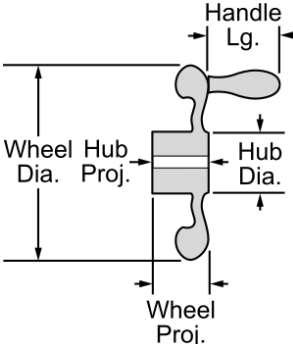

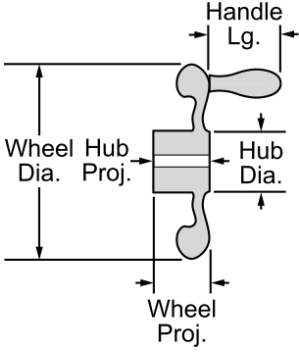
## 2020/21 Catalog



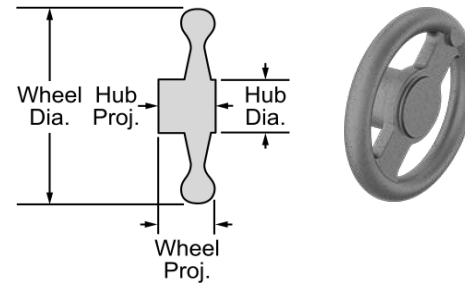
## W Series - Cast Iron Handwheels, Straight

W-4	W-4-MK	W-4-FS-1-MK	W-4-FR-1-MK
 	 	 	 
<b>example:</b> W-4	W-4-MK	W-4-FS-1-MK	W-4-FR-1-MK
<b>W</b> = Straight Wheel	<b>W</b> = Straight Wheel	<b>W</b> = Straight Wheel	<b>W</b> = Straight Wheel
<b>4</b> = Wheel Diameter (4")	<b>4</b> = Wheel Diameter (4")	<b>4</b> = Wheel Diameter (4")	<b>4</b> = Wheel Diameter (4")
	<b>MK</b> = Machined	<b>FS-1</b> = Formed Solid Handle	<b>FR-1</b> = Formed Revolving Handle
		<b>MK</b> = Machined	<b>MK</b> = Machined
W-4	W-4-MK	W-4-FS-1-MK	W-4-FR-1-MK

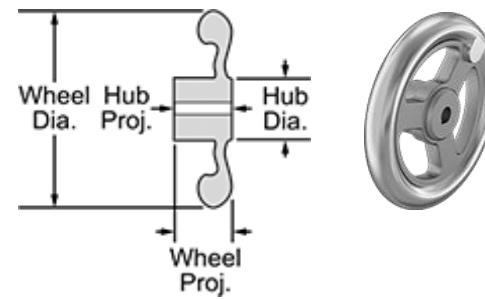
W-5 thru W-10		W-5-Mk thru W-10-MK		W-5-FS-1-MK thru W-10-FS-4-MK		W-5-FR-1-MK thru W-10-FR-4-MK	
							
							
<i>example:</i> <b>W-5</b>		<b>W-5-MK</b>		<b>W-5-FS-1-MK</b>		<b>W-5-FR-1-MK</b>	
<b>W</b> = Straight <b>Wheel</b>		<b>W</b> = Straight <b>Wheel</b>		<b>W</b> = Straight <b>Wheel</b>		<b>W</b> = Straight <b>Wheel</b>	
<b>5</b> = Wheel Diameter (5")		<b>5</b> = Wheel Diameter (5")		<b>5</b> = Wheel Diameter (5")		<b>5</b> = Wheel Diameter (5")	
		<b>MK</b> = Machined		<b>FS-1</b> = Formed Solid Handle		<b>FR-1</b> = Formed Revolving Handle	
				<b>MK</b> = Machined		<b>MK</b> = Machined	
W-5		W-5-MK		W-5-FS-1-MK		W-5-FR-1-MK	
W-6		W-6-MK		W-6-FS-3-MK		W-6-FR-3-MK	
W-8		W-8-MK		W-8-FS-4-MK		W-8-FR-4-MK	
W-10		W-10-MK		W-10-FS-4-MK		W-10-FR-4-MK	

W-12	W-12-MK	W-12-FS-7-MK	W-12-FR-7-MK
 	 	 	 
<i>example</i> <b>W-12</b>	<b>W-12-MK</b>	<b>W-12-FS-7-MK</b>	<b>W-12-FR-7-MK</b>
<b>W</b> = Straight <b>W</b> heel	<b>W</b> = Straight <b>W</b> heel	<b>W</b> = Straight <b>W</b> heel	<b>W</b> = Straight <b>W</b> heel
<b>12</b> = Wheel Diameter ( <b>12"</b> )	<b>12</b> = Wheel Diameter ( <b>12"</b> )	<b>12</b> = Wheel Diameter ( <b>12"</b> )	<b>12</b> = Wheel Diameter ( <b>12"</b> )
	<b>MK</b> = <b>M</b> achined	<b>FS-7</b> = <b>F</b> ormed <b>S</b> olid <b>H</b> andle	<b>FR-7</b> = <b>F</b> ormed <b>R</b> evolving <b>H</b> andle
		<b>MK</b> = <b>M</b> achined	<b>MK</b> = <b>M</b> achined
W-12	W-12-MK	W-12-FS-7-MK	W-12-FR-7-MK

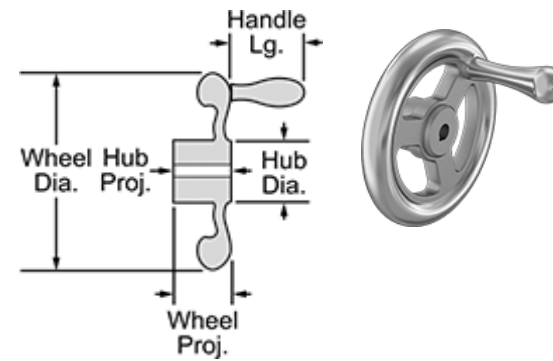
Straight Wheel Blank	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection
W-4	2	4"	1-1/8"	1-1/4"	1-1/8"
W-5	3	5"	1-1/8"	1-1/2"	1-1/8"
W-6	3	6"	1-1/4"	1-5/8"	1-1/4"
W-7	4	7"	2-1/4"	1-3/4"	3/4"
W-8	3	8"	1-1/2"	1-7/8"	1-1/2"
W-10	3	10"	2-1/4"	2-1/4"	2-1/4"
W-12	4	12"	3"	3"	3"
W-14	4	14"	3-7/16"	3-1/8"	3-7/16"
W-16	4	16"	3-3/4"	3-1/8"	3-3/4"



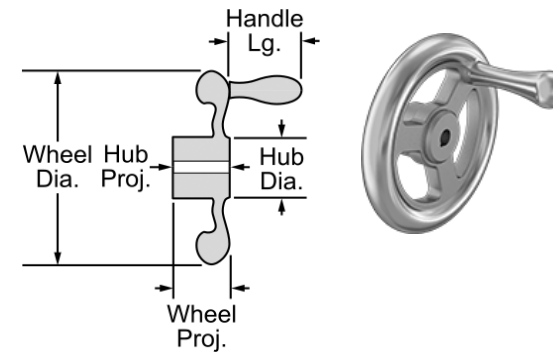
Straight Wheel Machined	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter
W-4-MK	2	4"	1-1/8"	1-1/4"	1-1/8"	1/4"
W-5-MK	3	5"	1-1/8"	1-1/2"	1-1/8"	5/16"
W-6-MK	3	6"	1-1/4"	1-5/8"	1-1/4"	5/16"
W-8-MK	3	8"	1-1/2"	1-7/8"	1-1/2"	3/8"
W-10-MK	3	10"	2-1/4"	2-1/4"	2-1/4"	1/2"
W-12-MK	4	12"	3"	3"	3"	5/8"







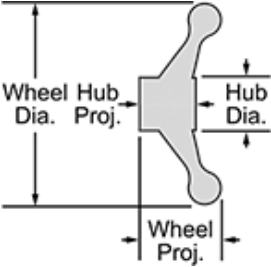
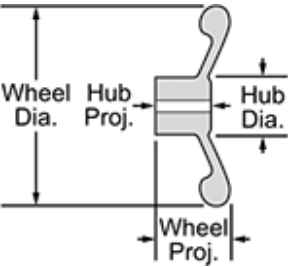
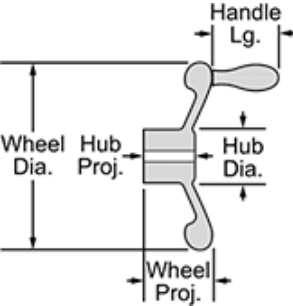
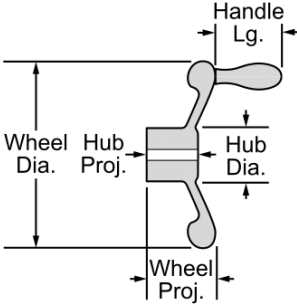
Straight Wheel Solid Handle	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter	Handle Length
W-4-FS-1-MK	2	4"	1-1/8"	1-1/4"	1-1/8"	1/4"	1-13/32"
W-5-FS-1-MK	3	5"	1-1/8"	1-1/2"	1-1/8"	5/16"	1-15/32"
W-6-FS-3-MK	3	6"	1-1/4"	1-5/8"	1-1/4"	5/16"	3-7/32"
W-8-FS-4-MK	3	8"	1-1/2"	1-7/8"	1-1/2"	3/8"	3-5/8"
W-10-FS-4-M	3	10"	2-1/4"	2-1/4"	2-1/4"	1/2"	3-5/8"
W-12-FS-7-M	4	12"	3"	3"	3"	5/8"	4-1/16"




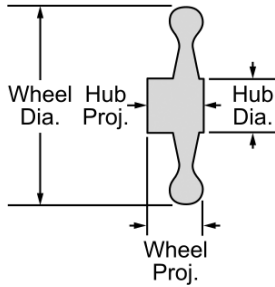

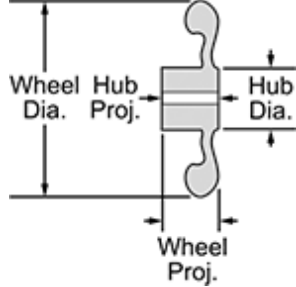

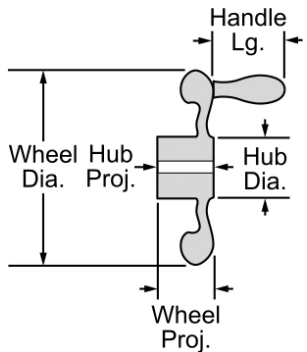

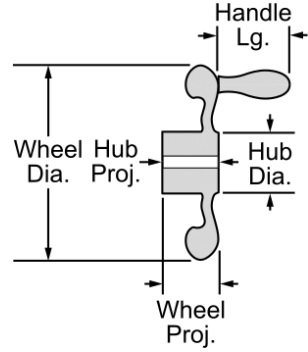
Straight Wheel Revolving Handle	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter	Handle Length
W-4-FR-1-MK	2	4"	1-1/8"	1-1/4"	1-1/8"	1/4"	2-1/16"
W-5-FR-1-MK	3	5"	1-1/8"	1-1/2"	1-1/8"	5/16"	2-1/16"
W-6-FR-3-MK	3	6"	1-1/4"	1-5/8"	1-1/4"	5/16"	3-1/2"
W-8-FR-4-MK	3	8"	1-1/2"	1-7/8"	1-1/2"	3/8"	3-9/32"
W-10-FR-4-M	3	10"	2-1/4"	2-1/4"	2-1/4"	1/2"	3-9/32"
W-12-FR-7-M	4	12"	3"	3"	3"	5/8"	4-3/16"




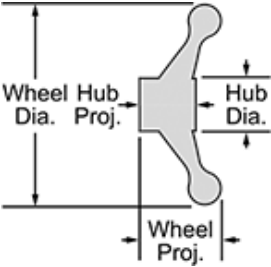

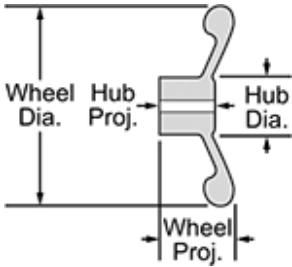

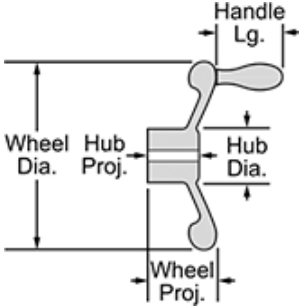

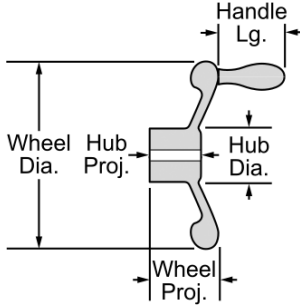
# OW Series - Cast Iron Handwheels, Off-Set

OW-4	OW-4-MK	OW-4-FS-1-MK	OW-4-FR-1-MK
			
			
<i>example</i> OW-4	OW-4-MK	OW-4-FS-1-MK	OW-4-FR-1-MK
OW = Off-Set Wheel	OW = Off-Set Wheel	OW = Off-Set Wheel	OW = Off-Set Wheel
4 = Wheel Diameter (4")	4 = Wheel Diameter (4")	4 = Wheel Diameter (4")	4 = Wheel Diameter (4")
	MK = Machined	FS-1 = Formed Solid Handle	FR-1 = Formed Revolving Handle
		MK = Machined	MK = Machined
OW-4	OW-4-MK	OW-4-FS-1-MK	OW-4-FR-1-MK

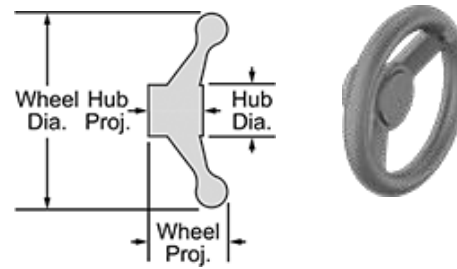


OW-5 thru W-10		OW-5-MK thru OW-10-MK		OW-5-FS-1-MK thru OW-10-FS-4-MK		OW-5-FR-1-MK thru OW-10-FR-4-MK	
 		 		 		 	
<i>example:</i> <b>OW-5</b>		<b>OW-5-MK</b>		<b>OW-5-FS-1-MK</b>		<b>OW-5-FR-1-MK</b>	
<b>OW = Off-Set Wheel</b>		<b>OW = Off-Set Wheel</b>		<b>OW = Off-Set Wheel</b>		<b>OW = Off-Set Wheel</b>	
<b>5 = Wheel Diameter (5")</b>		<b>5 = Wheel Diameter (5")</b>		<b>5 = Wheel Diameter (5")</b>		<b>5 = Wheel Diameter (5")</b>	
		<b>MK = Machined</b>		<b>FS-1 = Formed Solid Handle</b>		<b>FR-1 = Formed Revolving Handle</b>	
				<b>MK = Machined</b>		<b>MK = Machined</b>	
OW-5		OW-5-MK		OW-5-FS-1-MK		OW-5-FR-1-MK	
OW-6		OW-6-MK		OW-6-FS-3-MK		OW-6-FR-3-MK	
OW-8		OW-8-MK		OW-8-FS-4-MK		OW-8-FR-4-MK	
OW-10		OW-10-MK		OW-10-FS-4-MK		OW-10-FR-4-MK	

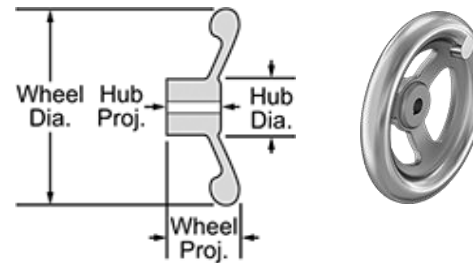


OW-12	OW-12-MK	OW-12-FS-7-MK	OW-12-FR-7-MK
 	 	 	 
<i>example:</i> OW-12	OW-12-MK	OW-12-FS-7-MK	OW-12-FR-7-MK
<b>OW</b> = Off-Set Wheel	<b>OW</b> = Off-Set Wheel	<b>OW</b> = Off-Set Wheel	<b>OW</b> = Off-Set Wheel
<b>12</b> = Wheel Diameter (12")	<b>12</b> = Wheel Diameter (12")	<b>12</b> = Wheel Diameter (12")	<b>12</b> = Wheel Diameter (12")
	<b>MK</b> = Machined	<b>FS-7</b> = Formed Solid Handle	<b>FR-7</b> = Formed Revolving Handle
		<b>MK</b> = Machined	<b>MK</b> = Machined
OW-12	OW-12-MK	OW-12-FS-7-MK	OW-12-FR-7-MK

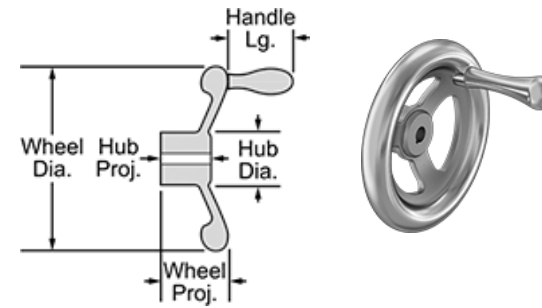
Off-Set Wheel Blank	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection
OW-4	2	4"	1-1/2"	1-1/8"	1"
OW-5	3	5"	1-3/4"	1-1/4"	1-1/4"
OW-6	3	6"	1-7/8"	1-3/8"	1-1/4"
OW-7	4	7"	2-1/4"	1-5/8"	1-1/2"
OW-8	3	8"	2-1/2"	1-3/4"	1-3/4"
OW-9	3	9"	2-3/4"	2"	2"
OW-10	3	10"	3"	2-1/8"	2-1/8"
OW-12	4	12"	3-1/4"	2-1/2"	1-7/8"
OW-15	5	15"	2-1/8"	3-1/16"	1-5/8"
OW-18	5	18"	3-15/16"	3-1/8"	1-9/16"
OW-20	6	20"	3-15/16"	3-1/8"	1-9/16"



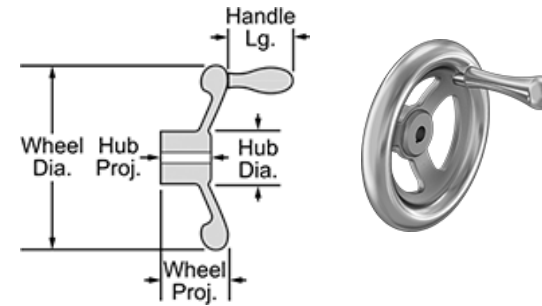
Off-Set Wheel Machined	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter
OW-4-MK	2	4"	1-1/2"	1-1/8"	1"	1/4"
OW-5-MK	3	5"	1-3/4"	1-1/4"	1-1/4"	5/16"
OW-6-MK	3	6"	1-7/8"	1-3/8"	1-1/4"	5/16"
OW-7-MK	3	7"	2-1/4"	1-5/8"	1-1/2"	3/8"
OW-8-MK	3	8"	2-1/2"	1-3/4"	1-3/4"	3/8"
OW-9-MK	3	9"	2-3/4"	2"	2"	1/2"
OW-10-MK	3	10"	3"	2-1/8"	2-1/8"	1/2"
OW-12-MK	4	12"	3-1/4"	2-1/2"	1-7/8"	5/8"



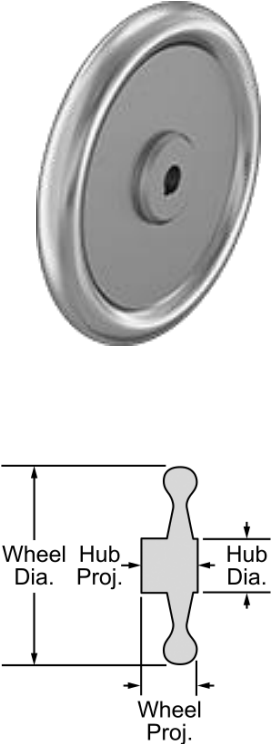
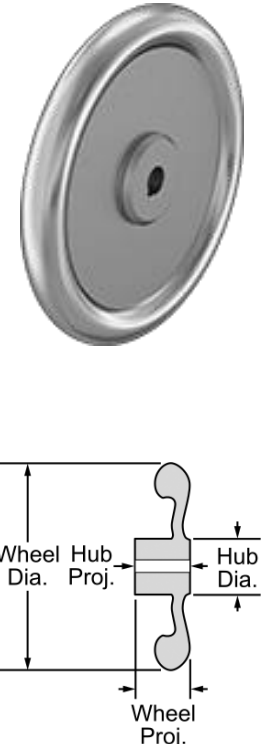
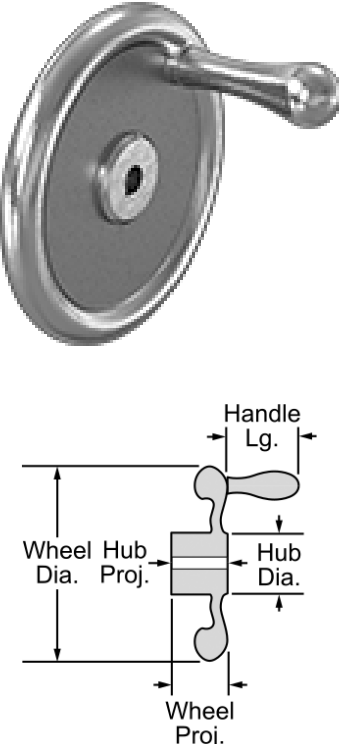
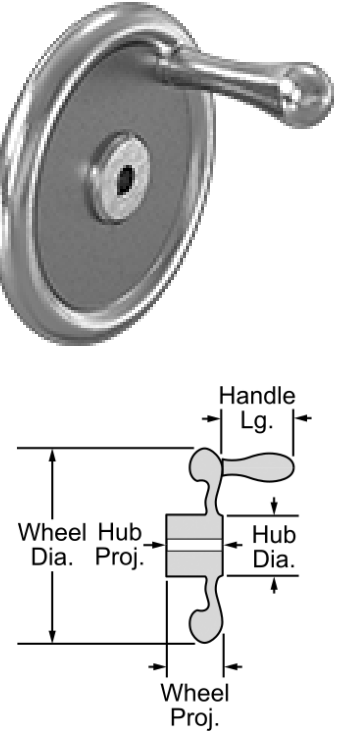
Off-Set Wheel Solid Handle	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter	Handle Length
OW-4-FS-1-M	2	4"	1-1/2"	1-1/8"	1"	1/4"	1-27/32"
OW-5-FS-1-M	3	5"	1-3/4"	1-1/4"	1-1/4"	5/16"	1-27/32"
OW-6-FS-3-M	3	6"	1-7/8"	1-3/8"	1-1/4"	5/16"	3-7/32"
OW-7-FS-3-M	3	7"	2-1/4"	1-5/8"	1-1/2"	3/8"	3-7/32"
OW-8-FS-4-M	3	8"	2-1/2"	1-3/4"	1-3/4"	3/8"	3-5/8"
OW-9-FS-4-M	3	9"	2-3/4"	2"	2"	1/2"	3-5/8"
OW-10-FS-4-M	3	10"	3"	2-1/8"	2-1/8"	1/2"	3-5/8"
OW-12-FS-7-M	4	12"	3-1/4"	2-1/2"	1-7/8"	5/8"	4-1/16"



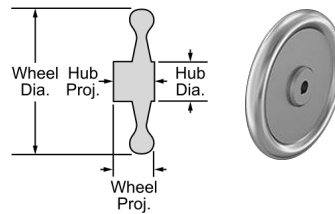
Off-Set Wheel Rev. Handle	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter	Handle Length
OW-4-FR-1-M	2	4"	1-1/2"	1-1/8"	1"	1/4"	2-1/16"
OW-5-FR-1-M	3	5"	1-3/4"	1-1/4"	1-1/4"	5/16"	2-1/16"
OW-6-FR-3-M	3	6"	1-7/8"	1-3/8"	1-1/4"	5/16"	3-1/2"
OW-7-FR-3-M	3	7"	2-1/4"	1-5/8"	1-1/2"	3/8"	3-1/2"
OW-8-FR-4-M	3	8"	2-1/2"	1-3/4"	1-3/4"	3/8"	3-9/32"
OW-9-FR-4-M	3	9"	2-3/4"	2"	2"	1/2"	3-9/32"
OW-10-FR-4-M	3	10"	3"	2-1/8"	2-1/8"	1/2"	3-9/32"
OW-12-FR-7-M	4	12"	3-1/4"	2-1/2"	1-7/8"	5/8"	4-3/16"



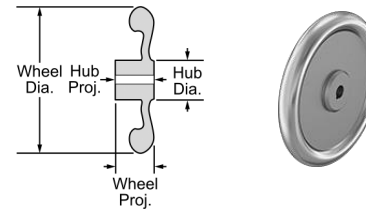
## SW Series - Cast Iron Handwheels, Straight, Solid (Safety)

			
<i>example:</i> <b>SW-4</b>	<b>SW-4-MK</b>	<b>SW-4-FS-1-MK</b>	<b>SW-4-FR-1-MK</b>
<b>SW</b> = Solid Wheel	<b>SW</b> = Solid Wheel	<b>SW</b> = Solid Wheel	<b>SW</b> = Solid Wheel
<b>4</b> = Wheel Diameter ( <b>4"</b> )	<b>4</b> = Wheel Diameter ( <b>4"</b> )	<b>4</b> = Wheel Diameter ( <b>4"</b> )	<b>4</b> = Wheel Diameter ( <b>4"</b> )
	<b>MK</b> = Machined	<b>FS-1</b> = Formed Solid Handle	<b>FR-1</b> = Formed Revolving Handle
		<b>MK</b> = Machined	<b>MK</b> = Machined

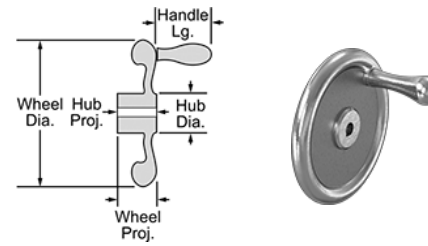
Solid Wheel Blank	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection
SW-4	Solid Straight	4"	1-1/8"	1-1/4"	1-1/8"
SW-5	Solid Straight	5"	1-3/8"	1-5/8"	1-3/8"
SW-6	Solid Straight	6"	1-1/4"	1-5/8"	1-1/4"
SW-10	Solid Straight	10"	2-1/4"	2-1/4"	2-1/4"



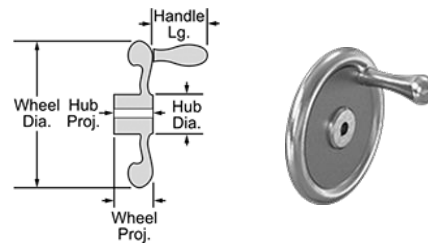
Solid Wheel Machined	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter
SW-4-MK	Solid Straight	4"	1-1/8"	1-1/4"	1-1/8"	1/4"
SW-5-MK	Solid Straight	5"	1-3/8"	1-5/8"	1-3/8"	5/16"
SW-6-MK	Solid Straight	6"	1-1/4"	1-5/8"	2-1/4"	5/16"
SW-10-MK	Solid Straight	10"	2-1/4"	2-1/4"	2-1/4"	1/2"




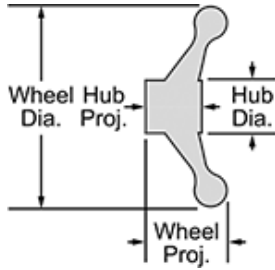

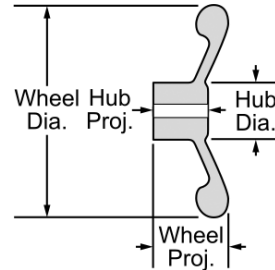

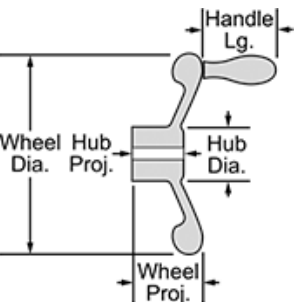

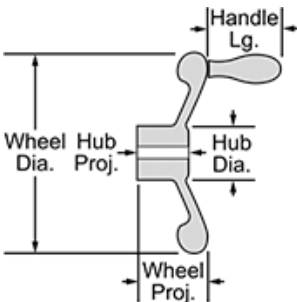
Solid Wheel Machined Solid Handle	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter	Handle Length
SW-4-FS-1-M	Solid Straight	4"	1-1/8"	1-1/4"	1-1/8"	1/4"	1-27/32"
SW-5-FS-1-M	Solid Straight	5"	1-3/8"	1-5/8"	1-3/8"	5/16"	1-27/32"
SW-6-FS-3-M	Solid Straight	6"	1-1/4"	1-5/8"	2-1/4"	5/16"	3-7/32"
SW-10-FS-4-N	Solid Straight	10"	2-1/4"	2-1/4"	2-1/4"	1/2"	3-5/8"



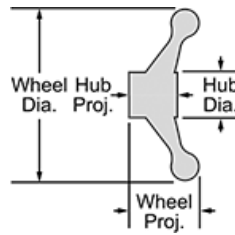
Solid Wheel Machined Rev. Handle	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter	Handle Length
SW-4-FR-1-M	Solid Straight	4"	1-1/8"	1-1/4"	1-1/8"	1/4"	2-1/16"
SW-5-FR-1-M	Solid Straight	5"	1-3/8"	1-5/8"	1-3/8"	5/16"	2-1/16"
SW-6-FR-3-M	Solid Straight	6"	1-1/4"	1-5/8"	2-1/4"	5/16"	3-1/2"
SW-10-FR-4-N	Solid Straight	10"	2-1/4"	2-1/4"	2-1/4"	1/2"	3-9/32"



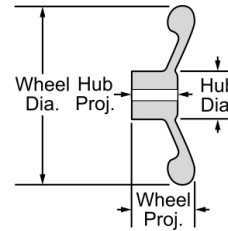
## SOW Series - Cast Iron Handwheels, Off-Set, Solid (Safety)

 	 	 	 
<b>example: SOW-3</b>	<b>SOW-3-MK</b>	<b>SOW-3-FS-1-MK</b>	<b>SOW-3-FR-1-MK</b>
<b>SOW = Solid Off-Set Wheel</b>	<b>SOW = Solid Off-Set Wheel</b>	<b>SOW = Solid Off-Set Wheel</b>	<b>SOW = Solid Off-Set Wheel</b>
<b>3 = Wheel Diameter (3")</b>	<b>3 = Wheel Diameter (3")</b>	<b>3 = Wheel Diameter (3")</b>	<b>3 = Wheel Diameter (3")</b>
	<b>MK = Machined</b>	<b>FS-1 = Formed Solid Handle</b>	<b>FR-1 = Formed Revolving Handle</b>
		<b>MK = Machined</b>	<b>MK = Machined</b>

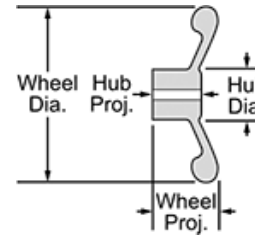
Solid Off-Set Wheel <b>Blank</b>	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection
SOW-3	Solid Off-Set H	3"	1"	3/4"	5/8"
SOW-4	Solid Off-Set H	4"	1-1/2"	1"	3/4"
SOW-6	Solid Off-Set H	6"	1-7/8"	1-1/4"	1"
SOW-8	Solid Off-Set H	8"	2-1/8"	1-5/8"	1-1/8"
SOW-9	Solid Off-Set H	9"	2-7/8"	2"	2-1/8"



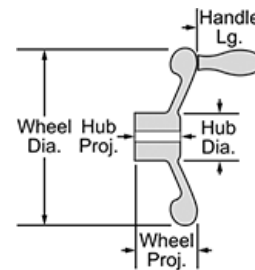
Solid Off-Set Wheel <b>Machined</b>	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter
SOW-3-MK	Solid Off-Set H	3"	1"	3/4"	5/8"	1/4"
SOW-4-MK	Solid Off-Set H	4"	1-1/2"	1"	3/4"	1/4"
SOW-6-MK	Solid Off-Set H	6"	1-7/8"	1-1/4"	1"	5/16"
SOW-8-MK	Solid Off-Set H	8"	2-1/8"	1-5/8"	1-1/8"	3/8"
SOW-9-MK	Solid Off-Set H	9"	2-7/8"	2"	2-1/8"	1/2"



Solid Off-Set Wheel <b>Solid Handle</b>	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter	Handle Length
SOW-3-FS-0-N	Solid Off-Set H	4"	1"	3/4"	5/8"	1/4"	1-27/32"
SOW-4-FS-1-N	Solid Off-Set H	5"	1-1/2"	1"	3/4"	1/4"	1-27/32"
SOW-6-FS-3-N	Solid Off-Set H	6"	1-7/8"	1-1/4"	1"	5/16"	3-7/32"
SOW-8-FS-4-N	Solid Off-Set H	8"	2-1/8"	1-5/8"	1-1/8"	3/8"	3-5/8"
SOW-9-FS-4-N	Solid Off-Set H	9"	2-7/8"	2"	2-1/8"	1/2"	3-5/8"

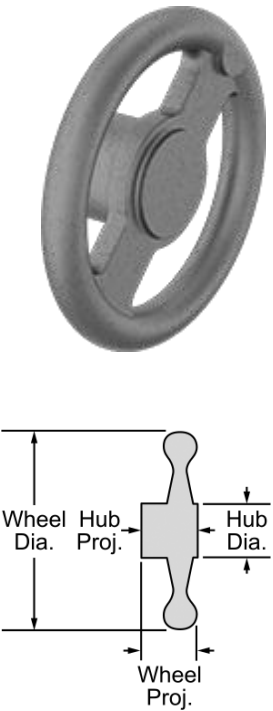
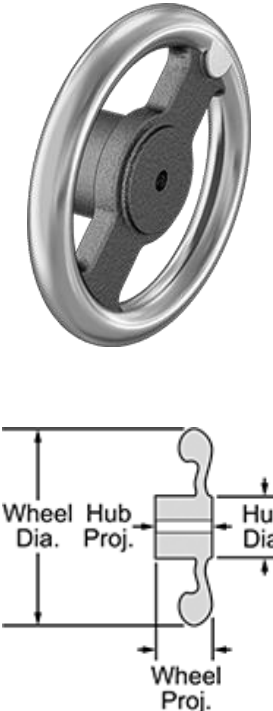
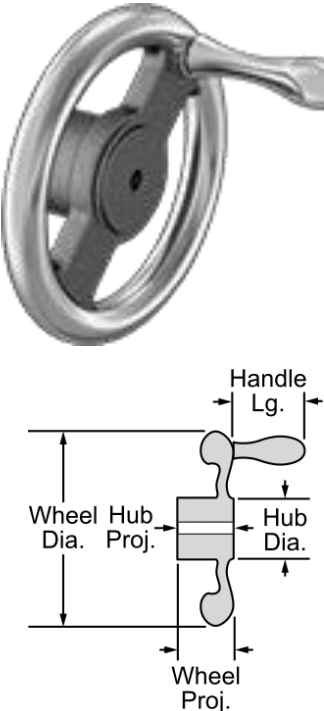
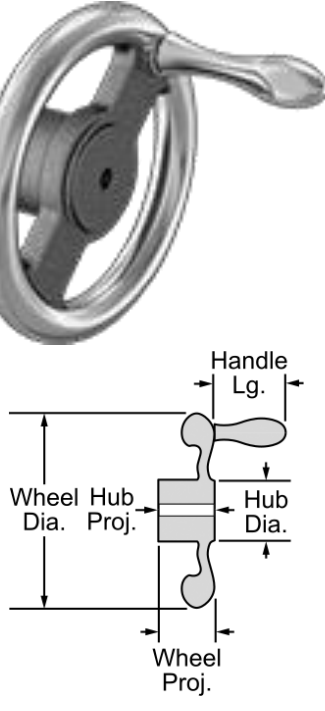


Solid Off-Set Wheel <b>Rev. Handle</b>	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter	Handle Length
SOW-3-FR-0-N	Solid Off-Set H	4"	1"	3/4"	5/8"	1/4"	2-1/16"
SOW-4-FR-1-N	Solid Off-Set H	5"	1-1/2"	1"	3/4"	1/4"	2-1/16"
SOW-6-FR-3-N	Solid Off-Set H	6"	1-7/8"	1-1/4"	1"	5/16"	3-1/2"
SOW-8-FR-4-N	Solid Off-Set H	8"	2-1/8"	1-5/8"	1-1/8"	3/8"	3-9/32"
SOW-9-FR-4-N	Solid Off-Set H	9"	2-7/8"	2"	2-1/8"	1/2"	3-9/32"

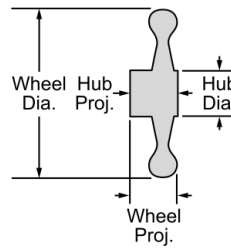




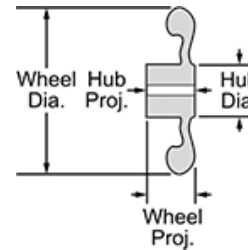
## AW Series - Cast Aluminum Handwheels, Straight

			
<i>example:</i> <b>AW-4</b>	<b>AW-4-MK</b>	<b>AW-4-FS-1-MK</b>	<b>AW-4-FR-1-MK</b>
<b>AW</b> = Aluminum Straight Wheel	<b>AW</b> = Aluminum Straight Wheel	<b>AW</b> = Aluminum Straight Wheel	<b>AW</b> = Aluminum Straight Wheel
<b>4</b> = Wheel Diameter (4")	<b>4</b> = Wheel Diameter (4")	<b>4</b> = Wheel Diameter (4")	<b>4</b> = Wheel Diameter (4")
	<b>MK</b> = Machined	<b>FS-1</b> = Formed Solid Handle	<b>FR-1</b> = Formed Revolving Handle
		<b>MK</b> = Machined	<b>MK</b> = Machined

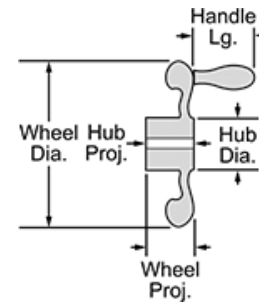
Straight Wheel Blank	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection
AW-4	2	4"	1-1/8"	1-1/4"	1-1/8"
AW-6	3	6"	1-1/4"	1-5/8"	1-1/4"
AW-8	3	8"	1-1/2"	1-7/8"	1-1/2"
AW-10	3	10"	2-1/4"	2-1/4"	2-1/4"
AW-12	4	12"	3"	3"	3"



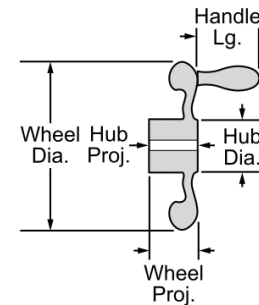
Straight Wheel Machined	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter
AW-4-MK	2	4"	1-1/8"	1-1/4"	1-1/8"	1/4"
AW-6-MK	3	6"	1-1/4"	1-5/8"	1-1/4"	5/16"
AW-8-MK	3	8"	1-1/2"	1-7/8"	1-1/2"	3/8"
AW-10-MK	3	10"	2-1/4"	2-1/4"	2-1/4"	1/2"
AW-12-MK	4	12"	3"	3"	3"	5/8"




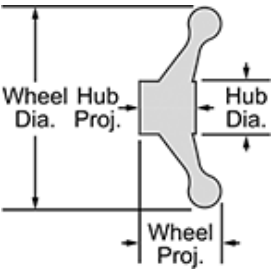

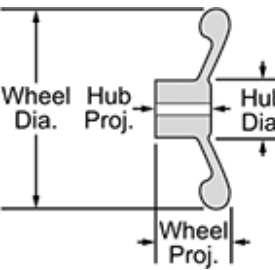

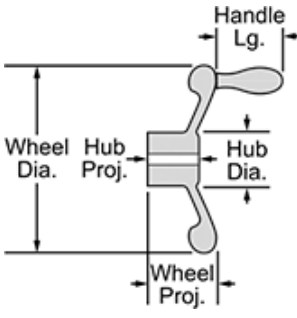

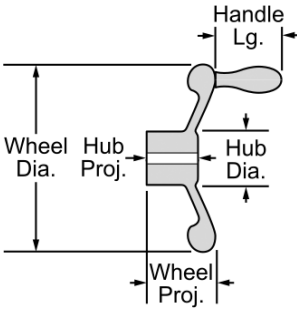
Straight Wheel Solid Handle	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter	Handle Length
AW-4-FS-1-M	2	4"	1-1/8"	1-1/4"	1-1/8"	1/4"	1-27/32"
AW-6-FS-3-M	3	6"	1-1/4"	1-5/8"	1-1/4"	5/16"	3-7/32"
AW-8-FS-4-M	3	8"	1-1/2"	1-7/8"	1-1/2"	3/8"	3-5/8"
AW-10-FS-4-M	3	10"	2-1/4"	2-1/4"	2-1/4"	1/2"	3-5/8"
AW-12-FS-7-M	4	12"	3"	3"	3"	5/8"	4-1/16"



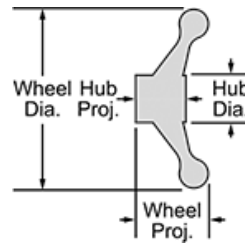
Straight Wheel Rev. Handle	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter	Handle Length
AW-4-FR-1-M	2	4"	1-1/8"	1-1/4"	1-1/8"	1/4"	2-1/16"
AW-6-FR-3-M	3	6"	1-1/4"	1-5/8"	1-1/4"	5/16"	3-1/2"
AW-8-FR-4-M	3	8"	1-1/2"	1-7/8"	1-1/2"	3/8"	3-9/32"
AW-10-FR-4-M	3	10"	2-1/4"	2-1/4"	2-1/4"	1/2"	3-9/32"
AW-12-FR-7-M	4	12"	3"	3"	3"	5/8"	4-3/16"



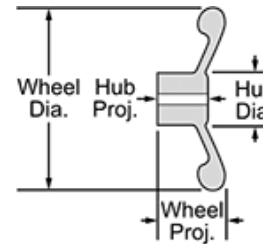
## AOW Series - Cast Aluminum Handwheels, Off-Set

 	 	 	 
<b>example: AOW-4</b>	<b>AOW-4-MK</b>	<b>AOW-4-FS-1-MK</b>	<b>AOW-4-FR-1-MK</b>
<b>AOW = Aluminum Off-Set</b>	<b>AOW = Aluminum Off-Set</b>	<b>AOW = Aluminum Off-Set Wheel</b>	<b>AOW = Aluminum Off-Set Wheel</b>
<b>4 = Wheel Diameter (4")</b>	<b>4 = Wheel Diameter (4")</b>	<b>4 = Wheel Diameter (4")</b>	<b>4 = Wheel Diameter (4")</b>
	<b>MK = Machined</b>	<b>FS-1 = Formed Solid Handle</b>	<b>FR-1 = Formed Revolving Handle</b>
		<b>MK = Machined</b>	<b>MK = Machined</b>

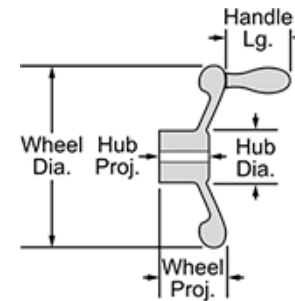
Off-Set Wheel Blank	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection
AOW-4	2	4"	1-1/2"	1-1/8"	1"
AOW-6	3	6"	1-7/8"	1-3/8"	1-1/4"
AOW-8	3	8"	2-1/2"	1-3/4"	1-3/4"
AOW-10	3	10"	3"	2-1/8"	2-1/8"
AOW-12	4	12"	3-1/4"	2-1/2"	1-7/8"



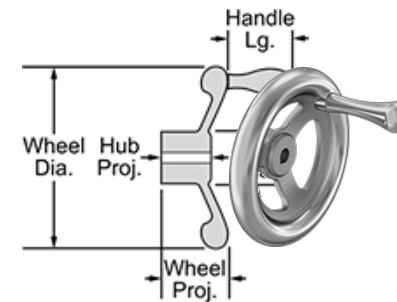
Off-Set Wheel Machined	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter
AOW-4-MK	2	4"	1-1/2"	1-1/8"	1"	1/4"
AOW-6-MK	3	6"	1-7/8"	1-3/8"	1-1/4"	5/16"
AOW-8-MK	3	8"	2-1/2"	1-3/4"	1-3/4"	3/8"
AOW-10-MK	3	10"	3"	2-1/8"	2-1/8"	1/2"
AOW-12-MK	4	12"	3-1/4"	2-1/2"	1-7/8"	5/8"



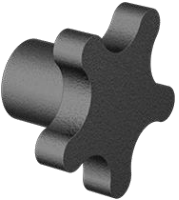



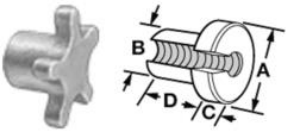
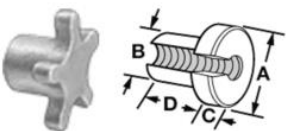
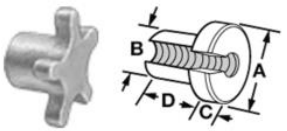
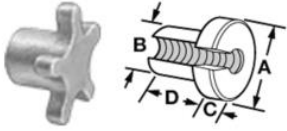
Off-Set Wheel Solid Handle	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter	Handle Length
AOW-4-FS-1-f	2	4"	1-1/2"	1-1/8"	1"	1/4"	1-27/32"
AOW-6-FS-3-f	3	6"	1-7/8"	1-3/8"	1-1/4"	5/16"	3-7/32"
AOW-8-FS-4-f	3	8"	2-1/2"	1-3/4"	1-3/4"	3/8"	3-5/8"
AOW-10-FS-4	3	10"	3"	2-1/8"	2-1/8"	1/2"	3-5/8"
AOW-12-FS-7	4	12"	3-1/4"	2-1/2"	1-7/8"	5/8"	4-1/16"



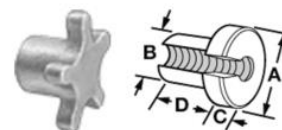
Off-Set Wheel Rev. Handle	Number of spokes	Wheel Diameter	Wheel Projection	Hub Diameter	Hub Projection	Hole Diameter	Handle Length
AOW-4-FR-1-f	2	4"	1-1/2"	1-1/8"	1"	1/4"	2-1/16"
AOW-6-FR-3-f	3	6"	1-7/8"	1-3/8"	1-1/4"	5/16"	3-1/2"
AOW-8-FR-4-f	3	8"	2-1/2"	1-3/4"	1-3/4"	3/8"	3-9/32"
AOW-10-FR-4	3	10"	3"	2-1/8"	2-1/8"	1/2"	3-9/32"
AOW-12-FR-7	4	12"	3-1/4"	2-1/2"	1-7/8"	5/8"	4-3/16"







## 5K Series - Cast Iron Knobs, 5 Prongs (Arms)

			
			
<b>example: 5K-1</b>	<b>5K-1-RM</b>	<b>5K-1-TP</b>	<b>5K-1-TPS</b>
<b>5K = 5 Prong Knob</b>	<b>5K = 5 Prong Knob</b>	<b>5K = 5 Prong Knob</b>	<b>5K = 5 Prong Knob</b>
	<b>RM = Reamed</b>	<b>TP = Tapped Thru Hole</b>	<b>TP = Tapped Thru Hole</b>
			<b>S = Set Screw</b>

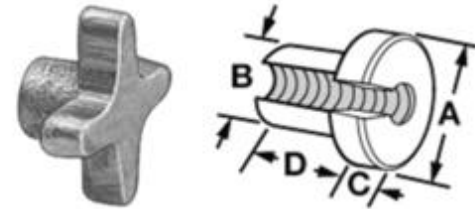
5 Prong Knob	A - Head Diameter	C - Head Height	B - Hub Diameter	D - Hub Height	Reamed Hole Size	Tapped Hole Size	Set Screw
5K-1	3"	1/2"	1-1/4"	1-1/4"	n/a	n/a	n/a
5K-1-RM	3"	1/2"	1-1/4"	1-1/4"	5/8"	n/a	n/a
5K-1-TP	3"	1/2"	1-1/4"	1-1/4"	n/a	5/8"-11	n/a
5K-1-TPS	3"	1/2"	1-1/4"	1-1/4"	n/a	5/8"-11	1/4"-20
5K-2	3 1/4"	1/2"	1-1/8"	1"	n/a	n/a	n/a
5K-2-RM	3 1/4"	1/2"	1-1/8"	1"	3/4"	n/a	n/a
5K-2-TP	3 1/4"	1/2"	1-1/8"	1"	n/a	3/4"-10	n/a
5K-2-TPS	3 1/4"	1/2"	1-1/8"	1"	n/a	3/4"-10	1/4"-20



# 4K Series - Cast Iron Knobs, 4 Prong (Arms)


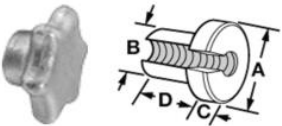
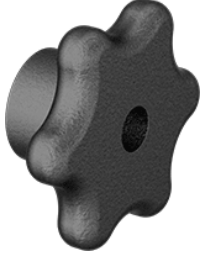
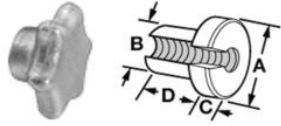

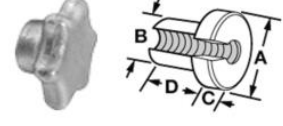

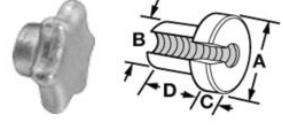
			
<i>example:</i> <b>4K-4</b>	<b>4K-4-RM</b>	<b>4K-4-TP</b>	<b>4K-4-TPS</b>
<b>4K = 4 Prong Knob</b>	<b>4K = 4 Prong Knob</b>	<b>4K = 4 Prong Knob</b>	<b>4K = 4 Prong Knob</b>
	<b>RM = Reamed</b>	<b>TP = Tapped Thru Hole</b>	<b>TP = Tapped Thru Hole</b>
			<b>S = Set Screw</b>

4 Prong Knob	A - Head Diameter	C - Head Height	B - Hub Diameter	D - Hub Height	Reamed Hole Size	Tapped Hole Size	Set Screw
4K-2	1-1/8"	5/16"	9/16"	3/8"	n/a	n/a	n/a
4K-2-RM	1-1/8"	5/16"	9/16"	3/8"	1/4"	n/a	n/a
4K-2-TP	1-1/8"	5/16"	9/16"	3/8"	n/a	1/4"-20	n/a
4K-3	1-1/2"	7/16"	5/8"	9/16"	n/a	n/a	n/a
4K-3-RM	1-1/2"	7/16"	5/8"	9/16"	5/16"	n/a	n/a
4K-3-TP	1-1/2"	7/16"	5/8"	9/16"	n/a	5/16"-18	n/a
4K-4	2"	7/16"	3/4"	9/16"	n/a	n/a	n/a
4K-4-RM	2"	7/16"	3/4"	9/16"	3/8"	n/a	n/a
4K-4-TP	2"	7/16"	3/4"	9/16"	n/a	3/8"-16	n/a
4K-4-TPS	2"	7/16"	3/4"	9/16"	n/a	3/8"-16	1/4"-20
4K-5	2-9/16"	1/2"	1-1/8"	1"	n/a	n/a	n/a
4K-5-RM	2-9/16"	1/2"	1-1/8"	1"	1/2"	n/a	n/a
4K-5-TP	2-9/16"	1/2"	1-1/8"	1"	n/a	1/2"-13	n/a
4K-5-TPS	2-9/16"	1/2"	1-1/8"	1"	n/a	1/2"-13	1/4"-20
4K-6	2-1/2"	1/2"	1"	1-3/4"	n/a	n/a	n/a
4K-6-RM	2-1/2"	1/2"	1"	1-3/4"	5/8"	n/a	n/a
4K-6-TP	2-1/2"	1/2"	1"	1-3/4"	n/a	5/8"-11	n/a
4K-6-TPS	2-1/2"	1/2"	1"	1-3/4"	n/a	5/8"-11	1/4"-20

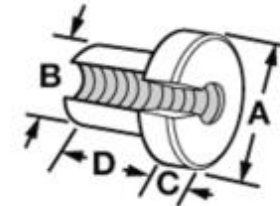



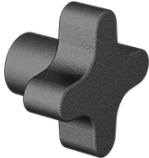


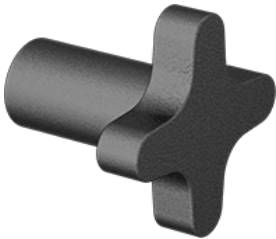


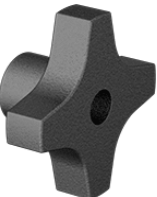












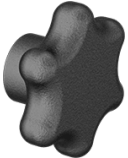
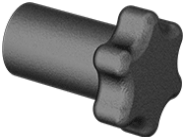
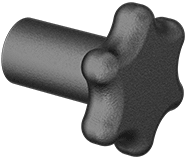

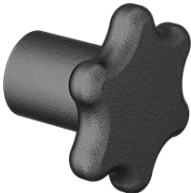


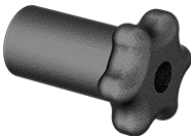
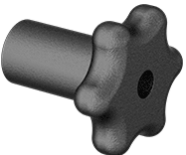
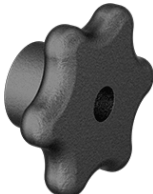













## M Series - Cast Iron Knobs, Scalloped (Lobed, Star)

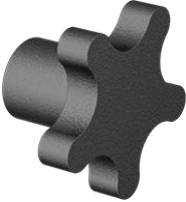
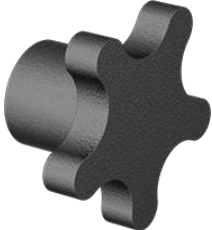






 	 	 	 
<i>example:</i> <b>M-2</b>	<b>M-2-RM</b>	<b>M-2-TP</b>	<b>M-2-TPS</b>
<b>M = Scalloped Knob</b>	<b>M = Scalloped Knob</b>	<b>M = Scalloped Knob</b>	<b>M = Scalloped Knob</b>
	<b>RM = Reamed</b>	<b>TP = Tapped Thru Hole</b>	<b>TP = Tapped Thru Hole</b>
			<b>S = Set Screw</b>

M - Scalloped Knob	A - Head Diameter	C - Head Height	B - Hub Diameter	D - Hub Height	Reamed Hole Size	Tapped Hole Size	Set Screw
M-A	2"	1/2"	7/8"	1/2"	n/a	n/a	n/a
M-A-RM	2"	1/2"	7/8"	1/2"	3/8"	n/a	n/a
M-A-TP	2"	1/2"	7/8"	1/2"	n/a	3/8"-16	n/a
M-0	1-1/2"	1/2"	7/8"	1-1/2"	n/a	n/a	n/a
M-0-RM	1-1/2"	1/2"	7/8"	1-1/2"	3/8"	n/a	n/a
M-0-TP	1-1/2"	1/2"	7/8"	1-1/2"	n/a	3/8"-16	n/a
M-0-TPS	1-1/2"	1/2"	7/8"	1-1/2"	n/a	3/8"-16	n/a
M-1	2"	1/2"	7/8"	1-1/2"	n/a	n/a	n/a
M-1-RM	2"	1/2"	7/8"	1-1/2"	3/8"	n/a	n/a
M-1-TP	2"	1/2"	7/8"	1-1/2"	n/a	3/8"-16	n/a
M-1-TPS	2"	1/2"	7/8"	1-1/2"	n/a	3/8"-16	1/4"-20
M-2	2-3/4"	1/2"	1-1/4"	3/4"	n/a	n/a	n/a
M-2-RM	2-3/4"	1/2"	1 1/4"	3/4"	1/2"	n/a	n/a
M-2-TP	2-3/4"	1/2"	1 1/4"	3/4"	n/a	1/2"-13	n/a
M-2-TPS	2-3/4"	1/2"	1 1/4"	3/4"	n/a	1/2"-13	1/4"-20
M-3	2-3/4"	1/2"	1-1/4"	1-1/2"	n/a	n/a	n/a
M-3-RM	2-3/4"	1/2"	1-1/4"	1-1/2"	1/2"	n/a	n/a
M-3-TP	2-3/4"	1/2"	1-1/4"	1-1/2"	n/a	1/2"-13	n/a
M-3-TPS	2-3/4"	1/2"	1-1/4"	1-1/2"	n/a	1/2"-13	1/4"-20
M-4	3-1/2"	5/8"	1-5/8"	7/8"	n/a	n/a	n/a
M-4-RM	3-1/2"	5/8"	1-5/8"	7/8"	3/4"	n/a	n/a
M-4-TP	3-1/2"	5/8"	1-5/8"	7/8"	n/a	3/4"-10	n/a
M-4-TPS	3-1/2"	5/8"	1-5/8"	7/8"	n/a	3/4"-10	1/4"-20

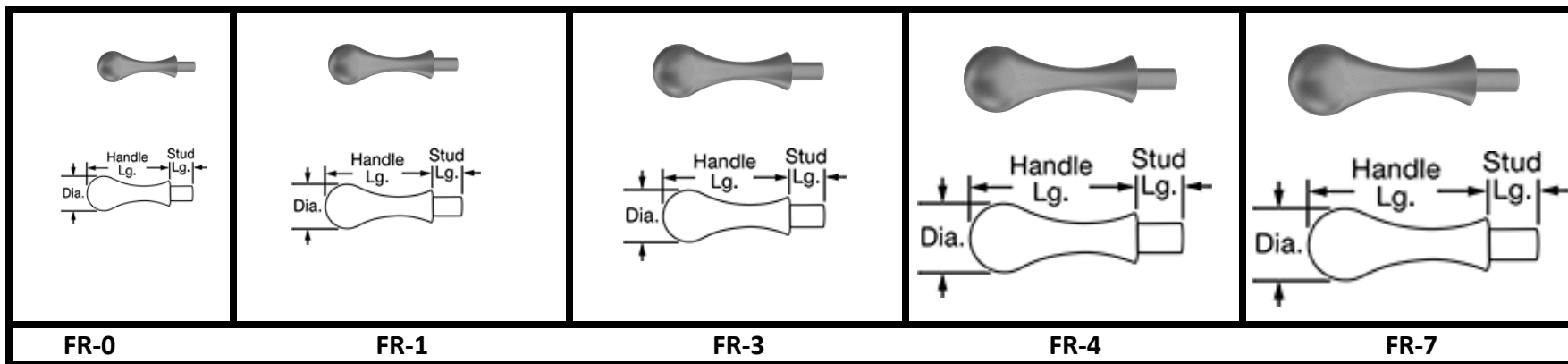


	4K-2	4K-3	4K-4	4K-5	4K-6
Blank					
Reamed					
Tapped					
Tapped W/Set Screw	N/A	N/A			

	M-A	M-0	M-1	M-2	M-3	M-4
Blank						
Reamed						
Tapped						
Tapped W/Set Screw	N/A					

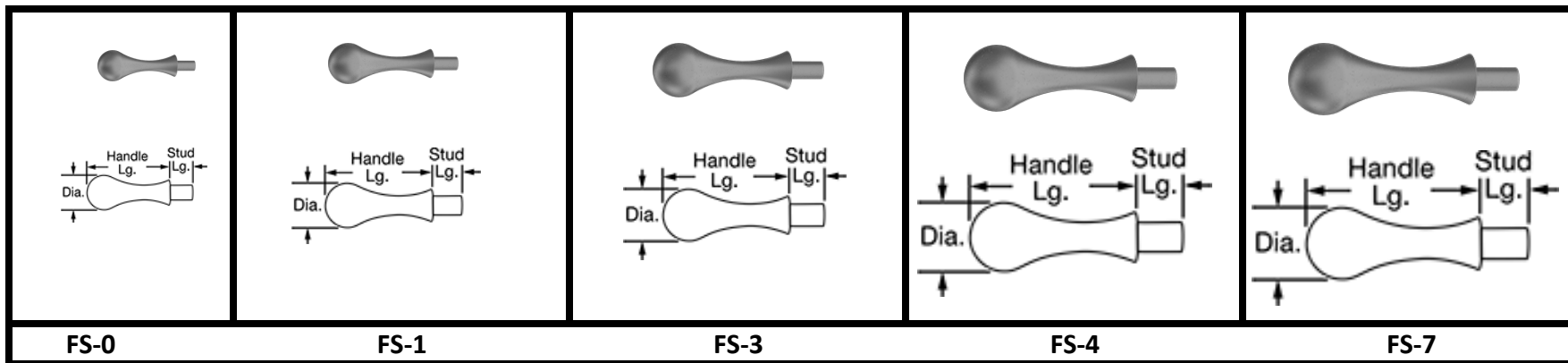
	5K-1	5K-2
Blank		
Reamed		
Tapped		
Tapped W/Set Screw		

## FR Series - Steel Handle (Formed, Revolving)



FR - Handle	Stud Diameter	Stud Length	Handle Length	Handle Diameter
FR-0	1/4"	7/16"	1-15/32"	11/16"
FR-1	5/16"	9/16"	2-1/16"	7/8"
FR-3	3/8"	3/4"	3-1/2"	1-1/8"
FR-4	7/16"	3/4"	3-9/32"	1-1/4"
FR-7	1/2"	15/16"	4-3/16"	1-3/8"

## FS Series - Steel Handle (Formed, Solid)

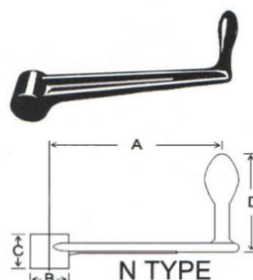


FS - Handle	Stud Diameter	Stud Length	Handle Length	Handle Diameter
FS-0	1/4"	7/16"	1-15/32"	5/8"
FS-1	5/16"	7/16"	1-23/32"	3/4"
FS-3	3/8"	11/16"	3-7/32"	1-3/16"
FS-4	7/16"	15/16"	3-5/8"	1-1/4"
FS-7	1/2"	15/16"	4-1/16"	1-3/8"



## N-Series - Cast Ductile Iron Lever (Crank)

Crank Lever Blank	Pivotal Length "A"	Hub Diameter "B"	Hub Length "C"	Grip Length "D"
N-1	4"	1-1/4"	1-1/4"	3-1/8"
N-2	6"	1-3/8"	1-3/8"	3-1/4"
N-3	8"	1-5/8"	1-1/2"	3-1/4"
N-4	10"	1-7/8"	1-3/4"	3-7/8"
N-5	12"	2"	1-3/4"	3-7/8"
N-6	16"	2-1/2"	2-1/4"	3-7/8"



## H-Series - Cast Ductile Iron Lever (Clamp)

Crank Lever Blank	Pivotal Length "A"	Hub Diameter "B"	Hub Length "C"	Grip Length "D"
H-1	3-7/8"	1-1/8"	13/16"	2-1/4"
H-2	4-1/2"	1-1/8"	1-1/8"	2-5/8"
H-3	5"	1-1/4"	1-1/4"	2-7/8"
H-4	5-3/4"	1-7/16"	1-3/8"	3-7/16"



## T-Series - Cast Ductile Iron handle (Straight, Speed Handle)

Crank Lever Blank	Handle Length "A"	Hub Diameter "B"	Hub Length "C"
TK-5	5"	1-1/8"	2"

