

Highlights

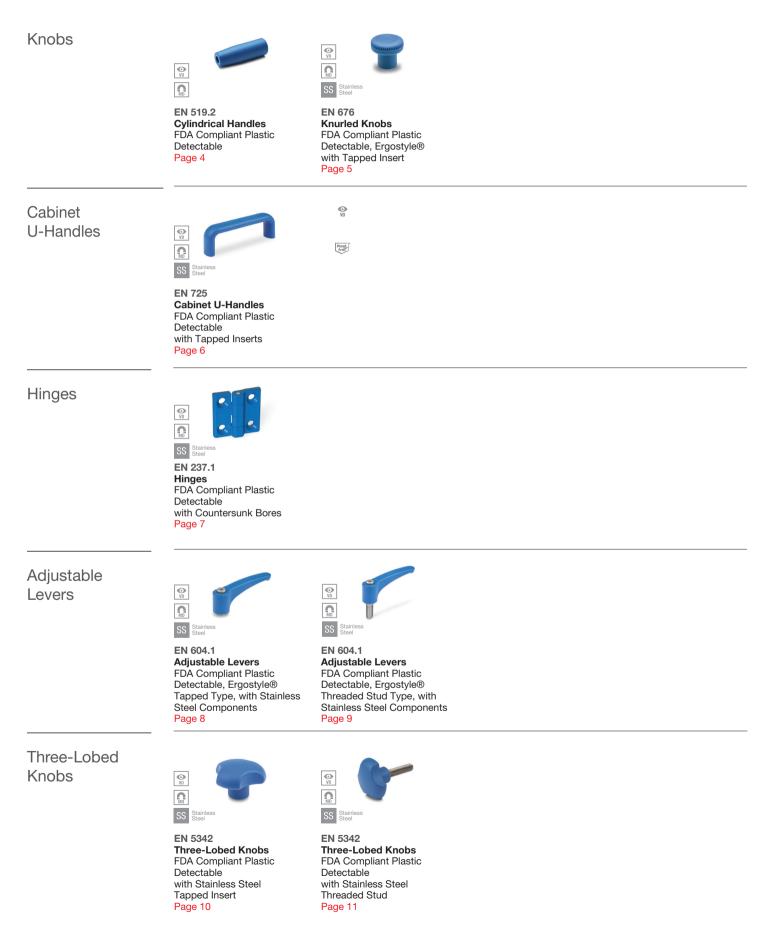
Standard Parts Made of Detectable Plastics





Pictorial Index





Standard Parts made of Detectable Plastics

General Information



Introduction

It is essential in many areas of industrial production to guarantee the purity of raw materials and end products. Expensive recalls, such as for contaminated food, can severely damage a company's reputation and regularly show how important it is to identify foreign bodies as early as possible before they become a problem for production and packaging machines or even a risk to consumers.

Contamination frequently occurs in the form of chips and pieces of plastic or metal from the production equipment itself. In the event of problems, damaged parts or lost fasteners can enter into the production process.

To help prevent such instances, JW Winco offers standard parts with materials that are easy to detect. The two available options are explained below.

Standard parts with visual detectability (VD)

Visually detectable standard parts are made of blue plastic. The blue color makes them especially visible to the human eye and, perhaps more importantly, to optical monitoring systems. Especially in milk, dairy, and meat products, but also in most other areas of food production, blue colors are rarely encountered and therefore stand out well.

Complete standard parts or only pieces of them that mistakenly end up in the food production can then be easily and reliably detected. In addition, contaminants and residues of food on standard parts and operating elements are also easier to identify thanks to the color contrast.

All visually detectable plastic standard parts are made of FDA compliant plastic granulate as per FDA CFR.21 and EU 10/2011 and can therefore be used safely in contact with food and in pharmaceutical production.

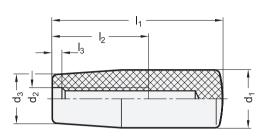
Standard parts with metal detectability (MD)

Metal detectable standard parts are made of dark blue plastics that contain additives such as iron oxide. As a result, they are detected by metal detectors as of a particle volume of 0.125 cm³, meaning that even hidden plastic chips can be detected. The blue color also improves visual detectability. It is always important to calibrate the metal detector since products at risk of contamination and the moisture they contain can influence the detection performance.

Also the metal detectable plastic standard parts are made of FDA compliant plastic granulate as per FDA CFR.21 and EU 10/2011 and can therefore be used safely in contact with food and in pharmaceutical production.









Metric table

Ų	2			Dimensio	ns in: millimeters - inches	
d₁ +0.5	d ₂	d ₃	I ₁	l ₂ min.	I ₃	
26	M 10	21	80	55	7	
1.02		0.83	3.15	2.17	0.28	

Specification

Plastic

- Technopolymer (Polyamide PA)
- Glass fiber reinforced
- Temperature resistant up to 230 °F (110 °C)
- FDA compliant plastic granulate
- Blue, RAL 5005, matte finish
- Visually detectable Plastic
- Technopolymer (Polyamide PA)
- Glass fiber reinforced
- Temperature resistant up to 230 °F (110 °C)
- FDA compliant plastic granulate
- Metal detectable additives
- Blue, RAL 5001, matte finish
- Metal detectable

Plastic Characteristics

- → Standard Parts Handbook page 2135
- RoHS compliant

Information

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VDB

MDB

EN 519.2 cylindrical handles are made of blue plastic granulate that is FDA compliant as per FDA CFR.21 and EU 10/2011 as well as visually detectable or metal detectable.

The blue color is especially easy to see with the human eye and is also easy to detect with optical monitoring systems. This allows monitoring of the production process, such as in food production, so that the process can be interrupted if foreign bodies are detected.

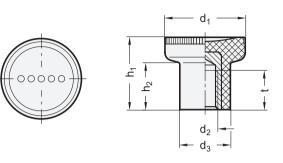
The plastic of version MDB contains metal detectable additives. Metal detectors will be triggered by this material from a particle volume of about 0.007628 in³ (0.125 cm³), meaning that even hidden plastic chips can be detected.

- Cylindrical Handles EN 519.2 (Technopolymer Plastic) → www.jwwinco.com
- Cylindrical Handles EN 519 (Phenolic Plastic) → Standard Parts Handbook page 62
- Softline Cylindrical Handles EN 519.6 → www.jwwinco.com

How to order	1	Handle diameter d ₁
U Q Q	2	Thread d ₂
EN 519.2-26-M10-VDB	3	Material / Finish

FDA Compliant Plastic, Detectable, with Stainless Steel Tapped Insert, Ergostyle®







Metric table

Ų	2			Dimensio	ons in: millimeters - inches
d ₁	d ₂	d ₃	h ₁	h ₂	t min.
21	M 5	12.5	18	10.5	10
<i>0.83</i>		0.49	<i>0.71</i>	<i>0.41</i>	<i>0.39</i>
31	M 8	18.5	27	17	15
<i>1.22</i>		0.73	1.06	<i>0.67</i>	<i>0.59</i>

Specification

Body Plastic

Technopolymer (Polyamide PA)

- Glass fiber reinforced
- Temperature resistant up to 266 °F (130 °C)
- FDA compliant plastic granulate
- Blue, RAL 5005, matte finish
- Visually detectable

Body

- Plastic
- Technopolymer (Polyamide PA)
- Glass fiber reinforced
- Temperature resistant up to 266 $^\circ\text{F}$ (130 $^\circ\text{C})$
- FDA compliant plastic granulate
- Metal detectable additives
- Blue, RAL 5001, matte finish
- Metal detectable

Tapped insert Stainless steel AISI 303

- Plastic Characteristics
- → Standard Parts Handbook page 2135
- Stainless Steel Characteristics
- → Standard Parts Handbook page 2143
- RoHS compliant

Information

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VDB

EN 676 knurled knobs are made of blue plastic granulate that is FDA compliant as per FDA CFR.21 and EU 10/2011 as well as visually detectable or metal detectable.

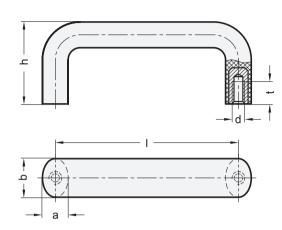
The blue color is especially easy to see with the human eye and is also easy to detect with optical monitoring systems. This allows monitoring of the production process, such as in food production, so that the process can be interrupted if foreign bodies are detected.

The plastic of version MDB contains metal detectable additives. Metal detectors will be triggered by this material from a particle volume of about 0.007628 in³ (0.125 cm³), meaning that even hidden plastic chips can be detected.

- Product Family Ergostyle[®] → Standard Parts Handbook page 18
- Knurled Knobs EN 676 (Plastic) → Standard Parts Handbook page 73
- Push / Pull Knobs GN 676.1 (Steel, Blackened Finish) → page 77
- Push / Pull Knobs GN 676.2 (Steel, Zinc Plated) → www.jwwinco.com
- Push / Pull Knobs GN 676.5 (Stainless Steel) → Standard Parts Handbook page 77
- Mushroom Shaped Knobs GN 76 → Standard Parts Handbook page 70

How to order	1	Knob diameter d ₁
U 2 3	2	Thread d ₂
EN 676-31-M8-MDB	3	Material / Finish







Metric table

Ų	2			Dimensio	ns in: millimeters - inches
Length I	d	а	b	h	t min.
117 ±0.5	M 8	15	25	49	13
4.61 ±0.02		<i>0.59</i>	0.98	<i>1.93</i>	<i>0.51</i>
179 ±1	M 8	16	27	57	13
7.05 ±0.04		<i>0.63</i>	1.06	2.24	<i>0.51</i>

Specification

Body Plastic

Technopolymer (Polyamide PA)

- Glass fiber reinforced
- Temperature resistant up to 266 °F (130 °C)
- FDA compliant plastic granulate
- Blue, RAL 5005, matte finish
- Visually detectable

Body

- Plastic
- Technopolymer (Polyamide PA)
- Glass fiber reinforced
- Temperature resistant up to 266 °F (130 °C)
- FDA compliant plastic granulate
- Metal detectable additives
- Blue, RAL 5001, matte finish
- Metal detectable

Tapped inserts Stainless steel AISI 303

Strength Values

- → Standard Parts Handbook page 2081
- Plastic Characteristics
- → Standard Parts Handbook page 2135
- Stainless Steel Characteristics
 Standard Darts Handback
- → Standard Parts Handbook page 2143
 RoHS compliant

Information

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VDB

MDB

EN 725 cabinet U-handles are made of blue plastic granulate that is FDA compliant as per FDA CFR.21 and EU 10/2011 as well as visually detectable or metal detectable.

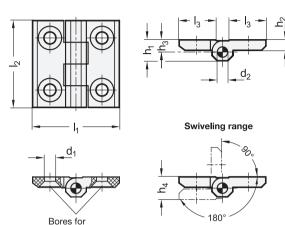
The blue color is especially easy to see with the human eye and is also easy to detect with optical monitoring systems. This allows monitoring of the production process, such as in food production, so that the process can be interrupted if foreign bodies are detected.

The plastic of version MDB contains metal detectable additives. Metal detectors will be triggered by this material from a particle volume of about 0.007628 in³ (0.125 cm³), meaning that even hidden plastic chips can be detected.

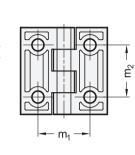
- Cabinet U-Handles EN 725 (Technopolymer Plastic) → Standard Parts Handbook page 104
- Cabinet U-Handles GN 565 (Aluminum) → Standard Parts Handbook page 98
- Cabinet U-Handles EN 625 (Technopolymer Plastic) → Standard Parts Handbook page 109
- Cabinet U-Handles EN 525 (Phenolic Plastic) → Standard Parts Handbook page 110

How to order	1	Length I
U Q Q	2	Thread d
EN 725-179-M8-MDB	3	Material / Finish





countersunk screw DIN 7991





A 2x2 bores for countersunk screws

1		2
•		- V

	•									
l ₁	I ₂	d ₁	d ₂	h ₁	h ₂	h ₃	h₄ ≈	I ₃	m₁ ±0.2	m₂ ±0.2
40	40	5.5	4	9	5	5.5	11	14	25	25
1.57	1.57	0.22	0.16	0.35	0.20	0.22	<i>0.43</i>	<i>0.55</i>	0.98	0.98
50	50	6.5	6	11.5	6	6.5	13	18	30	30
1.97	1.97	<i>0.26</i>	0.24	<i>0.45</i>	0.24	<i>0.26</i>	<i>0.51</i>	<i>0.71</i>	1.18	1.18

Specification

• Body

- Plastic
- Technopolymer (Polyamide PA)
- Glass fiber reinforced
- Temperature resistant up to 176 °F (80 °C)
- FDA compliant plastic granulate
- Blue, RAL 5005, matte finish
- Visually detectable
- Body
- Plastic Technopolymer (Polyamide PA)
- Glass fiber reinforced
- Temperature resistant up to 176 $^\circ\text{F}$ (80 $^\circ\text{C})$
- FDA compliant plastic granulate
- Metal detectable additives
- Blue, RAL 5001, matte finish
- Metal detectable
- Pin
- Stainless steel AISI 303
- · Load Rating Information
- → Standard Parts Handbook page 2095
- Plastic Characteristics
- → Standard Parts Handbook page 2135
- Stainless Steel Characteristics
- → Standard Parts Handbook page 2143
- RoHS compliant

Information

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VDB

MDB

EN 237.1 hinges are made of blue plastic granulate that is FDA compliant as per FDA CFR.21 and EU 10/2011 as well as visually detectable or metal detectable.

The blue color is especially easy to see with the human eye and is also easy to detect with optical monitoring systems. This allows monitoring of the production process, such as in food production, so that the process can be interrupted if foreign bodies are detected.

The plastic of version MDB contains metal detectable additives. Metal detectors will be triggered by this material from a particle volume of about 0.007628 in³ (0.125 cm³), meaning that even hidden plastic chips can be detected.

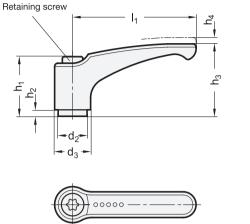
see also ...

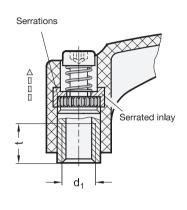
- List of Hinge Types → Standard Parts Handbook page 1324
- Hinges EN 237.1 (Plastic) → Standard Parts Handbook page 1334
- Hinges GN 237 (Zinc Die-Cast / Aluminum / Stainless Steel) -> Standard Parts Handbook page 1330

How to order	1	Width I1
	2	Length I ₂
	3	Туре
EN 237.1-50-50-A-VDB	4	Material / Finish

Dimensions in: millimeters - inches









Dimensions in: inches - millimeters

Inch table

1 2 d₁ \mathbf{I}_1 d₂ d₃ h₁ h_2 h_3 **h**₄ Stroke t min. 2.48 1/4 x 20 5/16 x 18 0.53 0.75 1.22 0.14 1.52 0.16 0.39 13.5 19 31 3.5 38.5 10 63 4 3.07 5/16 x 18 3/8 x 16 0.63 0.91 1.42 0.14 1.83 0.16 0.55 78 23 36 46.5 16 3.5 14

Metric table

Ų	2							Dimens	sions in: millim	eters - <i>inches</i>
I ₁	d ₁			d ₂	d ₃	h ₁	h ₂	h ₃	h ₄ Stroke	t min.
63 <i>2.48</i>	M 6	M 8	-	13.5 <i>0.53</i>	19 <i>0.75</i>	31 <i>1.22</i>	3.5 <i>0.14</i>	38.5 1.52	4 0.16	10 <i>0.39</i>
78 <i>3.07</i>	M 8	M 10	M 12	16 <i>0.63</i>	23 0.91	36 <i>1.42</i>	3.5 <i>0.14</i>	46.5 1.83	4 0.16	14 <i>0.55</i>

Specification

Lever body Plastic

- Technopolymer (Polyamide PA)
- Glass fiber reinforced
- Temperature resistant up to 266 °F (130 °C)
- FDA compliant plastic granulate
- Blue, RAL 5005, matte finish
- Visually detectable
- Lever body

Plastic

Technopolymer (Polyamide PA)

- Glass fiber reinforced
- Temperature resistant up to 266 °F (130 °C)
- FDA compliant plastic granulate
- Metal detectable additives
- Blue, RAL 5001, matte finish
- Metal detectable
- · Serrated inlay Zinc die-cast
- Tapped insert / retaining screw Stainless steel AISI 303
- Plastic Characteristics
- → Standard Parts Handbook page 2135
- Stainless Steel Characteristics → Standard Parts Handbook page 2143
- RoHS compliant

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Information

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VDB

MDB

EN 604.1 adjustable levers are made of blue plastic granulate that is FDA compliant as per FDA CFR.21 and EU 10/2011 as well as visually detectable or metal detectable.

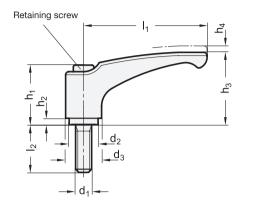
The blue color is especially easy to see with the human eye and is also easy to detect with optical monitoring systems. This allows monitoring of the production process, such as in food production, so that the process can be interrupted if foreign bodies are detected.

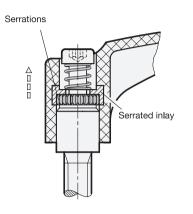
The plastic of version MDB contains metal detectable additives. Metal detectors will be triggered by this material from a particle volume of about 0.007628 in³ (0.125 cm³), meaning that even hidden plastic chips can be detected.

- Product Family Ergostyle® → Standard Parts Handbook page 18
- Adjustable Levers EN 604.1 (Plastic, with Stainless Steel Insert) → Standard Parts Handbook page 493
- Adjustable Levers EN 604 (Plastic, with Steel Insert) → Standard Parts Handbook page 492
- Adjustable Levers EN 602.1 (Zinc Die-Cast, with Stainless Steel Insert) → Standard Parts Handbook page 487

How to order (Inch)	1 Lever length I ₁	
t 2 3	2 Thread d ₁	
EN604.1-63-1/4X20-VDB	3 Material / Finish	
How to order (Metric)	1 Lever length I ₁	
How to order (Metric) 1 2 3 EN 604.1-78-M10-MDB	1Lever length I12Thread d1	









Inch table

U	2	3								Dimensior	ns in: inches	- millimete
l ₁	d ₁	l ₂					d ₂	d ₃	h ₁	h ₂	h ₃	h ₄ Stroke
2.48 63	5/16 x 18	0.79 <i>20</i>	1.26 32	1.57 40	2.48 63	-	0.53 13.5	0.75 19	1.22 <i>31</i>	0.14 3.5	1.52 38.5	0.16 <i>4</i>
3.07 78	3/8 x 16	0.98 25	1.26 32	1.57 40	1.97 50	2.48 63	0.63 16	0.91 23	1.42 36	0.14 3.5	1.83 46.5	0.16 4

Metric table

IJ	2			3	5								Dimens	ions in: m	illimeters	s - inche
l ₁	d ₁			I ₂	2						d ₂	d ₃	h ₁	h ₂	h ₃	h 4 Stroke
63 2.48	M 6	M 8	-	16 <i>0.63</i>	20 0.79	25 0.98	32 1.26	40 1.57	50 1.97	63 2.48	13.5 <i>0.53</i>	19 <i>0.75</i>	31 <i>1.22</i>	3.5 <i>0.14</i>	38.5 1.52	4 0.16
78 3.07	M 8	M 10	M 12	20 0.79	25 0.98	32 1.26	40 1.57	50 1.97	63 2.48	80 <i>3.15</i>	16 <i>0.63</i>	23 0.91	36 1.42	3.5 <i>0.14</i>	46.5 1.83	4 0.16

Specification

Lever body

- Plastic
- Technopolymer (Polyamide PA)
- Glass fiber reinforced
- Temperature resistant up to 266 $^\circ\text{F}$ (130 $^\circ\text{C})$
- FDA compliant plastic granulate
- Blue, RAL 5005, matte finish
- Visually detectable
- Lever body Plastic
- Technopolymer (Polyamide PA)
- Glass fiber reinforced
- Temperature resistant up to 266 °F (130 °C)
- FDA compliant plastic granulate
- Metal detectable additives
- Blue, RAL 5001, matte finish
- Metal detectable
- Serrated inlay
- Zinc die-cast
- Threaded stud / retaining screw Stainless steel AISI 303
- Plastic Characteristics
- → Standard Parts Handbook page 2135
 Stainless Steel Characteristics
- → Standard Parts Handbook page 2143
- RoHS compliant

Information

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VDB

MDB

EN 604.1 adjustable levers are made of blue plastic granulate that is FDA compliant as per FDA CFR.21 and EU 10/2011 as well as visually detectable or metal detectable.

The blue color is especially easy to see with the human eye and is also easy to detect with optical monitoring systems. This allows monitoring of the production process, such as in food production, so that the process can be interrupted if foreign bodies are detected.

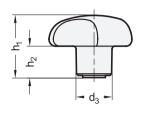
The plastic of version MDB contains metal detectable additives. Metal detectors will be triggered by this material from a particle volume of about 0.007628 in³ (0.125 cm³), meaning that even hidden plastic chips can be detected.

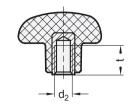
- Product Family Ergostyle[®] → Standard Parts Handbook page 18
- Adjustable Levers EN 604.1 (Plastic, with Stainless Steel Threaded Stud)
 → Standard Parts Handbook page 498
- Adjustable Levers EN 604 (Plastic, with Steel Threaded Stud)
 → Standard Parts Handbook page 496

How to order (Inch)	1 Lever length I ₁	1
	2 Thread d ₁	
	3 Thread length I ₂	1 l ₂
EN 604.1-78-3/8X16-50-MDB	4 Material / Finish	sh
How to order (Metric)	1 Lever length I ₁	1
	1 Lever length I1 2 Thread d1	1
How to order (Metric)		

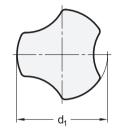
EN 5342 Three-Lobed Knobs FDA Compliant Plastic, Detectable, with Stainless Steel Tapped Insert











Metric table

V	2			Dimensio	ons in: millimeters - inches
d ₁	d ₂	d ₃	h ₁	h ₂	t min.
40	M 8	16	27	13.5	13
<i>1.57</i>		<i>0.63</i>	1.06	<i>0.53</i>	<i>0.51</i>
50	M 10	19	30	15	17
<i>1.97</i>		<i>0.75</i>	<i>1.18</i>	<i>0.59</i>	<i>0.67</i>

Specification

• Body Plastic

Technopolymer (Polyamide PA)

- Glass fiber reinforced

- Temperature resistant up to 266 °F (130 °C)
- FDA compliant plastic granulate
- Blue, RAL 5005, matte finish
- Visually detectable

• Body

Plastic

- Technopolymer (Polyamide PA)
- Glass fiber reinforced
- Temperature resistant up to 266 °F (130 °C)
- FDA compliant plastic granulate
- Metal detectable additives
- Blue, RAL 5001, matte finish
- Metal detectable Tapped insert
- Stainless steel AISI 303

• Plastic Characteristics

- → Standard Parts Handbook page 2135
- Stainless Steel Characteristics
- → Standard Parts Handbook page 2143
- · RoHS compliant

Information

3

VDB

MDB

EN 5342 three-lobed knobs are made of blue plastic granulate that is FDA compliant as per FDA CFR.21 and EU 10/2011 as well as visually detectable or metal detectable.

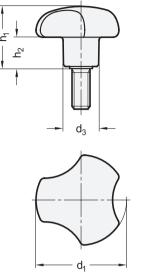
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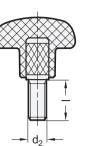
The plastic of version MDB contains metal detectable additives. Metal detectors will be triggered by this material from a particle volume of about 0.007628 in³ (0.125 cm³), meaning that even hidden plastic chips can be detected.

- Three-Lobed Knobs EN 5342 (Plastic, with Stainless Steel Tapped Insert)
- → Standard Parts Handbook page 643

How to order	1	Knob diameter d ₁
00	2	Thread d ₂
EN 5342-40-M8-MDB	3	Material / Finish









Metric table

Q	2	3			Dimensions i	n: millimeters - inches
d ₁	d ₂	Length I		d ₃	h ₁	h ₂
40	M 8	20	30	16	27	13.5
1.57		0.79	1.18	<i>0.63</i>	1.06	<i>0.53</i>
50	M 10	30	40	19	30	15
<i>1.97</i>		1.18	1.57	<i>0.75</i>	1.18	<i>0.59</i>

Specification

Body

- Plastic
- Technopolymer (Polyamide PA)
- Glass fiber reinforced
- Temperature resistant up to 266 °F (130 °C)
- FDA compliant plastic granulate
- Blue, RAL 5005, matte finish
- Visually detectable
- Body
- Plastic
- Technopolymer (Polyamide PA)
- Glass fiber reinforced
- Temperature resistant up to 266 °F (130 °C)
- FDA compliant plastic granulate
- Metal detectable additives
- Blue, RAL 5001, matte finish
- Metal detectable
- Threaded stud
- Stainless steel AISI 303
- Plastic Characteristics
- → Standard Parts Handbook page 2135
- Stainless Steel Characteristics
- → Standard Parts Handbook page 2143
- · RoHS compliant

Information

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VDB

MDB

EN 5342 three-lobed knobs are made of blue plastic granulate that is FDA compliant as per FDA CFR.21 and EU 10/2011 as well as visually detectable or metal detectable.

The blue color is especially easy to see with the human eye and is also easy to detect with optical monitoring systems. This allows monitoring of the production process, such as in food production, so that the process can be interrupted if foreign bodies are detected.

The plastic of version MDB contains metal detectable additives. Metal detectors will be triggered by this material from a particle volume of about 0.007628 in³ (0.125 cm³), meaning that even hidden plastic chips can be detected.

- Three-Lobed Knobs EN 5342 (Plastic, with Stainless Steel Threaded Stud) → Standard Parts Handbook page 646
- Solid Five-Lobed Knobs EN 5337.4 (Plastic, with Stainless Steel Threaded Stud) → Standard Parts Handbook page 608

How to order	1	Knob diameter d ₁
	2	Thread d ₂
	3	Length I
EN 5342-50-M10-30-VDB	4	Material / Finish

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