

### Electrical Connection

**BM1:** one cable inlet for PG 13,5 Cable Gland

**BM2:** one cable inlet for 1/2" NPT Cable Gland

**BM5:** one cable inlet for M20 x 1,5 Cable Gland



### Operating Head Type

**E11 - Stainless steel plain plunger**

**E12 - Stainless steel ball plunger**

**E13 - Stainless steel Ø 12 roller plunger**

Conformity /  $\rightarrow$  (N.C. contact with positive opening operation)  
Max actuation speed [m/s]  
Min. force [N] or torque [Nm]: actuation / positive opening operation

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0,5  
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
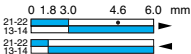

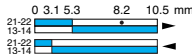

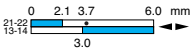
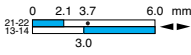
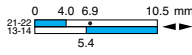

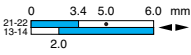
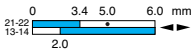
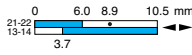


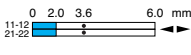


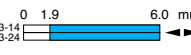
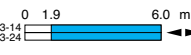


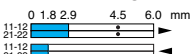

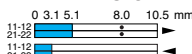

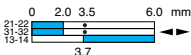
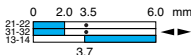
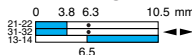

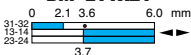
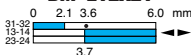
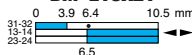

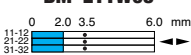
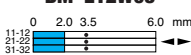
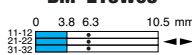

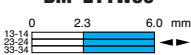
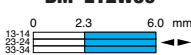
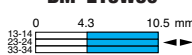


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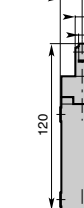
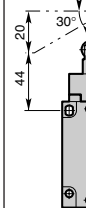
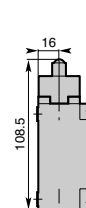
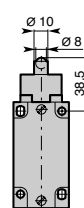
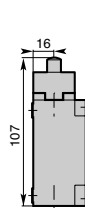
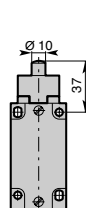
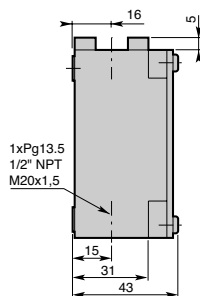
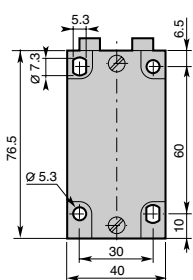
0,5  
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### Additional Technical Datas

			<b>E11 - Stainless steel plain plunger</b>	<b>E12 - Stainless steel ball plunger</b>	<b>E13 - Stainless steel Ø 12 roller plunger</b>
<b>Z11</b> Snap Action Contacts (1NO + 1NC)		<b>Order Code</b> Operation Diagram	<b>BM•E11Z11</b> 	<b>BM•E12Z11</b> 	<b>BM•E13Z11</b> 
<b>X11</b> Non overlapping Slow Action Contacts (1NO + 1NC)		<b>Order Code</b> Operation Diagram	<b>BM•E11X11</b> 	<b>BM•E12X11</b> 	<b>BM•E13X11</b> 
<b>Y11</b> Overlapping Slow Action Contacts (1NO + 1NC)		<b>Order Code</b> Operation Diagram	<b>BM•E11Y11</b> 	<b>BM•E12Y11</b> 	<b>BM•E13Y11</b> 
<b>W02</b> Slow Action Contacts (2NC)		<b>Order Code</b> Operation Diagram	<b>BM•E11W02</b> 	<b>BM•E12W02</b> 	<b>BM•E13W02</b> 
<b>W20</b> Slow Action Contacts (2NO)		<b>Order Code</b> Operation Diagram	<b>BM•E11W20</b> 	<b>BM•E12W20</b> 	<b>BM•E13W20</b> 
<b>Z02</b> Snap Action Contacts (2NC)		<b>Order Code</b> Operation Diagram	<b>BM•E11Z02</b> 	<b>BM•E12Z02</b> 	<b>BM•E13Z02</b> 
<b>X12</b> Non overlapping Slow Action Contacts (1NO + 2NC)		<b>Order Code</b> Operation Diagram	<b>BM•E11X12</b> 	<b>BM•E12X12</b> 	<b>BM•E13X12</b> 
<b>X21</b> Non overlapping Slow Action Contacts (2NO + 1NC)		<b>Order Code</b> Operation Diagram	<b>BM•E11X21</b> 	<b>BM•E12X21</b> 	<b>BM•E13X21</b> 
<b>W03</b> Simultaneous Slow Action Contacts (3NC)		<b>Order Code</b> Operation Diagram	<b>BM•E11W03</b> 	<b>BM•E12W03</b> 	<b>BM•E13W03</b> 
<b>W30</b> Simultaneous Slow Action Contacts (3NO)		<b>Order Code</b> Operation Diagram	<b>BM•E11W30</b> 	<b>BM•E12W30</b> 	<b>BM•E13W30</b> 
<b>Weight (packing per unit)</b>		<b>[kg]</b>	<b>0,240</b>	<b>0,240</b>	<b>0,245</b>

### Dimensions (in mm)



### Electrical Connection

**BM1:** one cable inlet for PG 13,5 Cable Gland

**BM2:** one cable inlet for 1/2" NPT Cable Gland

**BM5:** one cable inlet for M20 x 1,5 Cable Gland




### Operating Head Type

**E21 - Stainless steel lateral plain plunger**

**E22 - Stainless steel lateral plunger with Ø 12 vertical roller**

**E23 - Stainless steel lateral plunger with Ø 12 horizontal roller**

Conformity /  (N.C. contact with positive opening operation)  
Max actuation speed [m/s]  
Min. force [N] or torque [Nm]: actuation / positive opening operation

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0,5  
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
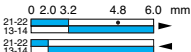
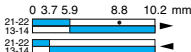
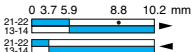

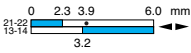
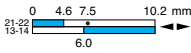
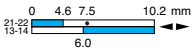

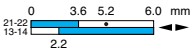
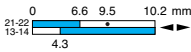
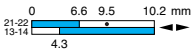

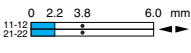
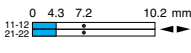
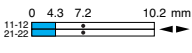

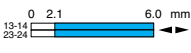
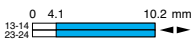
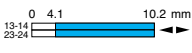

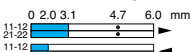
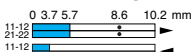
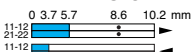

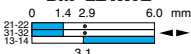
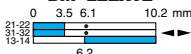
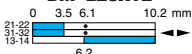

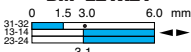
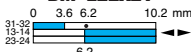
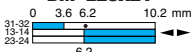

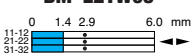
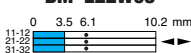
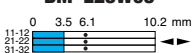

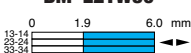
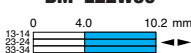
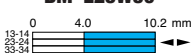


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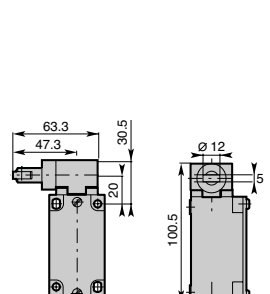
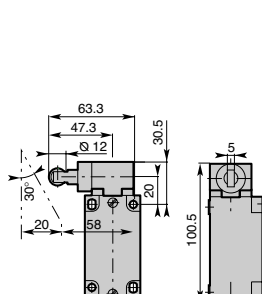
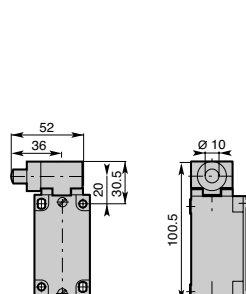
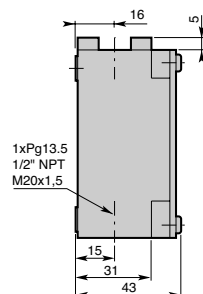
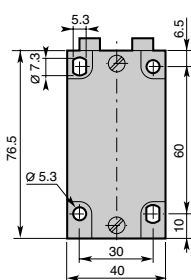
0,5  
30 / 50



### Additional Technical Datas

<b>Z11</b> Snap Action Contacts (1NO + 1NC)		<b>Zb</b>	<b>Order Code</b>	<b>BM-E21Z11</b>	<b>BM-E22Z11</b>	<b>BM-E23Z11</b>			
<b>X11</b> Non overlapping Slow Action Contacts (1NO + 1NC)		<b>Zb</b>	<b>Order Code</b>	<b>BM-E21X11</b>	<b>BM-E22X11</b>	<b>BM-E23X11</b>			
<b>Y11</b> Overlapping Slow Action Contacts (1NO + 1NC)		<b>Zb</b>	<b>Order Code</b>	<b>BM-E21Y11</b>	<b>BM-E22Y11</b>	<b>BM-E23Y11</b>			
<b>W02</b> Slow Action Contacts (2NC)		<b>Zb</b>	<b>Order Code</b>	<b>BM-E21W02</b>	<b>BM-E22W02</b>	<b>BM-E23W02</b>			
<b>W20</b> Slow Action Contacts (2NO)		<b>Zb</b>	<b>Order Code</b>	<b>BM-E21W20</b>	<b>BM-E22W20</b>	<b>BM-E23W20</b>			
<b>Z02</b> Snap Action Contacts (2NC)		<b>Zb</b>	<b>Order Code</b>	<b>BM-E21Z02</b>	<b>BM-E22Z02</b>	<b>BM-E23Z02</b>			
<b>X12</b> Non overlapping Slow Action Contacts (1NO + 2NC)		<b>Zb</b>	<b>Order Code</b>	<b>BM-E21X12</b>	<b>BM-E22X12</b>	<b>BM-E23X12</b>			
<b>X21</b> Non overlapping Slow Action Contacts (2NO + 1NC)		<b>Zb</b>	<b>Order Code</b>	<b>BM-E21X21</b>	<b>BM-E22X21</b>	<b>BM-E23X21</b>			
<b>W03</b> Simultaneous Slow Action Contacts (3NC)		<b>Zb</b>	<b>Order Code</b>	<b>BM-E21W03</b>	<b>BM-E22W03</b>	<b>BM-E23W03</b>			
<b>W30</b> Simultaneous Slow Action Contacts (3NO)		<b>Zb</b>	<b>Order Code</b>	<b>BM-E21W30</b>	<b>BM-E22W30</b>	<b>BM-E23W30</b>			
<b>Weight (packing per unit)</b>			<b>[kg]</b>	<b>0,260</b>	<b>0,265</b>	<b>0,265</b>			

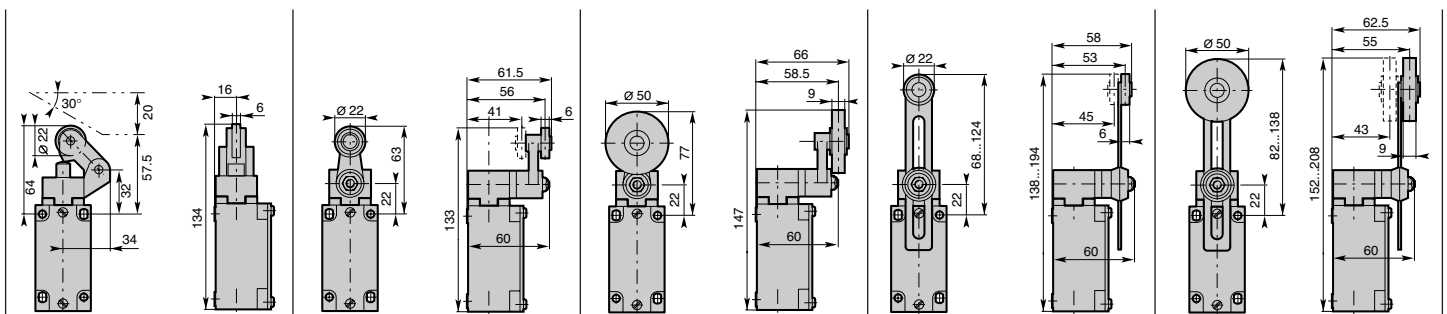
### Dimensions (in mm)





<b>E3• - One way lever</b>	<b>E4• - Ø 22 roller lever</b>	<b>E44 - Ø 50 rubber roller lever</b>	<b>E5• - Adjustable Ø 22 roller lever</b>	<b>E54 - Adjustable Ø 50 rubber roller lever</b>
E31: Ø22 nylon roller E32: Ø22 stainless steel roller E33: Ø22 steel ball bearing	E41: nylon roller E42: stainless steel roller E43: steel ball bearing		E51: nylon roller E52: stainless steel roller E53: steel ball bearing	
1,5 12 / 40	EN 50041 1,5 0,15 / 0,30	1,5 0,15 / 0,30	1,5 0,15 / 0,30	1,5 0,15 / 0,30

<b>BM•E3•Z11</b> 0 3.1 6.3 10.8 15.5 mm 21-22 13-14 13-14	<b>BM•E4•Z11</b> 0 20° 33° 49° 78° 21-22 13-14 13-14	<b>BM•E44Z11</b> 0 20° 33° 49° 78° 21-22 13-14 13-14	<b>BM•E5•Z11</b> 0 20° 33° 49° 78° 21-22 13-14 13-14	<b>BM•E54Z11</b> 0 20° 33° 49° 78° 21-22 13-14 13-14
<b>BM•E3•X11</b> 0 4.5 9.0 15.5 mm 21-22 13-14 6.1	<b>BM•E4•X11</b> 0 22° 38° 78° 21-22 13-14 33°	<b>BM•E44X11</b> 0 22° 38° 78° 21-22 13-14 33°	<b>BM•E5•X11</b> 0 22° 38° 78° 21-22 13-14 33°	<b>BM•E54X11</b> 0 22° 38° 78° 21-22 13-14 33°
<b>BM•E3•Y11</b> 0 7.2 11.7 15.5 mm 21-22 13-14 4.0	<b>BM•E4•Y11</b> 0 37° 53° 78° 21-22 13-14 21°	<b>BM•E44Y11</b> 0 37° 53° 78° 21-22 13-14 21°	<b>BM•E5•Y11</b> 0 37° 53° 78° 21-22 13-14 21°	<b>BM•E54Y11</b> 0 37° 53° 78° 21-22 13-14 21°
<b>BM•E3•W02</b> 0 4.0 9.5 15.5 mm 11-12 21-22	<b>BM•E4•W02</b> 0 21° 37° 78° 11-12 21-22	<b>BM•E44W02</b> 0 21° 37° 78° 11-12 21-22	<b>BM•E5•W02</b> 0 21° 37° 78° 11-12 21-22	<b>BM•E54W02</b> 0 21° 37° 78° 11-12 21-22
<b>BM•E3•W20</b> 0 3.6 15.5 mm 13-14 23-24	<b>BM•E4•W20</b> 0 20° 78° 13-14 23-24	<b>BM•E44W20</b> 0 20° 78° 13-14 23-24	<b>BM•E5•W20</b> 0 20° 78° 13-14 23-24	<b>BM•E54W20</b> 0 20° 78° 13-14 23-24
<b>BM•E3•Z02</b> 0 3.1 6.1 10.6 15.5 mm 11-12 21-22 21-22	<b>BM•E4•Z02</b> 0 20° 32° 48° 78° 11-12 21-22 21-22	<b>BM•E44Z02</b> 0 20° 32° 48° 78° 11-12 21-22 21-22	<b>BM•E5•Z02</b> 0 20° 32° 48° 78° 11-12 21-22 21-22	<b>BM•E54Z02</b> 0 20° 32° 48° 78° 11-12 21-22 21-22
<b>BM•E3•X12</b> 0 4.6 8.4 15.5 mm 21-22 13-14 13-14	<b>BM•E4•X12</b> 0 18° 35° 78° 21-22 13-14 37°	<b>BM•E44X12</b> 0 18° 35° 78° 21-22 13-14 37°	<b>BM•E5•X12</b> 0 18° 35° 78° 21-22 13-14 37°	<b>BM•E54X12</b> 0 18° 35° 78° 21-22 13-14 37°
<b>BM•E3•X21</b> 0 4.7 8.5 15.5 mm 31-32 13-14 23-24 8.6	<b>BM•E4•X21</b> 0 19° 36° 78° 31-32 13-14 23-24 37°	<b>BM•E44X21</b> 0 19° 36° 78° 31-32 13-14 23-24 37°	<b>BM•E5•X21</b> 0 19° 36° 78° 31-32 13-14 23-24 37°	<b>BM•E54X21</b> 0 19° 36° 78° 31-32 13-14 23-24 37°
<b>BM•E3•W03</b> 0 4.6 8.4 15.5 mm 11-12 21-22 31-32 31-32	<b>BM•E4•W03</b> 0 18° 35° 78° 11-12 21-22 31-32 31-32	<b>BM•E44W03</b> 0 18° 35° 78° 11-12 21-22 31-32 31-32	<b>BM•E5•W03</b> 0 18° 35° 78° 11-12 21-22 31-32 31-32	<b>BM•E54W03</b> 0 18° 35° 78° 11-12 21-22 31-32 31-32
<b>BM•E3•W30</b> 0 4.9 15.5 mm 13-14 23-24	<b>BM•E4•W30</b> 0 23° 78° 13-14 23-24	<b>BM•E44W30</b> 0 23° 78° 13-14 23-24	<b>BM•E5•W30</b> 0 23° 78° 13-14 23-24	<b>BM•E54W30</b> 0 23° 78° 13-14 23-24
<b>0,280</b>	<b>0,300</b>	<b>0,315</b>	<b>0,320</b>	<b>0,325</b>



### Electrical Connection

**BM1:** one cable inlet for PG 13,5 Cable Gland

**BM2:** one cable inlet for 1/2" NPT Cable Gland

**BM5:** one cable inlet for M20 x 1,5 Cable Gland



### Operating Head Type

**E61 - Nylon actuator with stainless steel spring**

**E62 - Stainless steel spring actuator**

**E7 - Adjustable rod lever**  
E71: stainless steel rod Ø3  
E73: fiberglass rod Ø3  
E75: square steel rod 3x3

Conformity /  $\ominus$  (N.C. contact with positive opening operation)

Max actuation speed [m/s]

Min. force [N] or torque [Nm]: actuation / positive opening operation

1,5  
0,15 / -

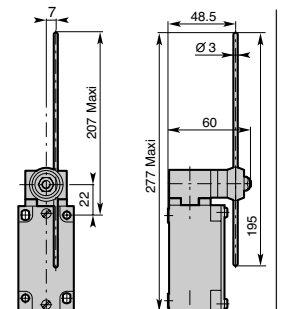
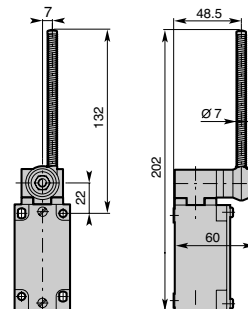
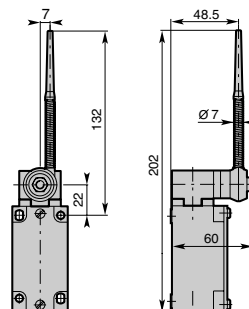
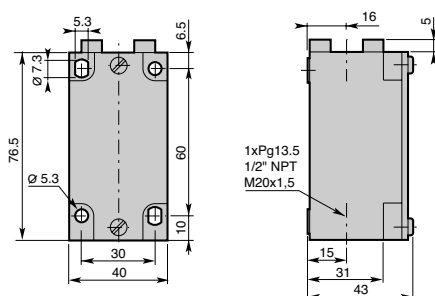
1,5  
0,15 / -

1,5  
0,15 / 0,30  $\ominus$

### Additional Technical Datas

			<b>E61 - Nylon actuator with stainless steel spring</b>	<b>E62 - Stainless steel spring actuator</b>	<b>E7 - Adjustable rod lever</b>
<b>Z11</b> Snap Action Contacts (1NO + 1NC)		<b>Order Code</b>	<b>BM•E61Z11</b> 	<b>BM•E62Z11</b> 	<b>BM•E7•Z11</b> 
<b>X11</b> Non overlapping Slow Action Contacts (1NO + 1NC)		<b>Order Code</b>	<b>BM•E61X11</b> 	<b>BM•E62X11</b> 	<b>BM•E7•X11</b> 
<b>Y11</b> Overlapping Slow Action Contacts (1NO + 1NC)		<b>Order Code</b>	<b>BM•E61Y11</b> 	<b>BM•E62Y11</b> 	<b>BM•E7•Y11</b> 
<b>W02</b> Slow Action Contacts (2NC)		<b>Order Code</b>	<b>BM•E61W02</b> 	<b>BM•E62W02</b> 	<b>BM•E7•W02</b> 
<b>W20</b> Slow Action Contacts (2NO)		<b>Order Code</b>	<b>BM•E61W20</b> 	<b>BM•E62W20</b> 	<b>BM•E7•W20</b> 
<b>Z02</b> Snap Action Contacts (2NC)		<b>Order Code</b>	<b>BM•E61Z02</b> 	<b>BM•E62Z02</b> 	<b>BM•E7•Z02</b> 
<b>X12</b> Non overlapping Slow Action Contacts (1NO + 2NC)		<b>Order Code</b>	<b>BM•E61X12</b> 	<b>BM•E62X12</b> 	<b>BM•E7•X12</b> 
<b>X21</b> Non overlapping Slow Action Contacts (2NO + 1NC)		<b>Order Code</b>	<b>BM•E61X21</b> 	<b>BM•E62X21</b> 	<b>BM•E7•X21</b> 
<b>W03</b> Simultaneous Slow Action Contacts (3NC)		<b>Order Code</b>	<b>BM•E61W03</b> 	<b>BM•E62W03</b> 	<b>BM•E7•W03</b> 
<b>W30</b> Simultaneous Slow Action Contacts (3NO)		<b>Order Code</b>	<b>BM•E61W30</b> 	<b>BM•E62W30</b> 	<b>BM•E7•W30</b> 
<b>Weight (packing per unit)</b>	<b>[kg]</b>		<b>0,305</b>	<b>0,310</b>	<b>0,305</b>

### Dimensions (in mm)





<p><b>E7 - Adjustable rod lever</b> E72: nylon rod E74: fiberglass rod</p>	<p><b>E91 - Stainless steel spring multidirectional actuator</b></p>	<p><b>E92 - Multidirectional nylon actuator with stainless steel spring</b></p>	<p><b>E93 - Stainless steel spring multidirectional actuator</b></p>	<p><b>E99 - Pull action with ring</b></p>
EN 50041				
1,5 0,15 / 0,30	1,0 0,18 / -	1,0 0,18 / -	1,0 0,18 / -	0,5 25 / -

<p><b>BM-E7-Z11</b> 0 20° 33° 49° 78° 21-22 13-14 13-14</p>	<p><b>BM-E91Z11</b> 0 9° 21° 21-22 13-14 13-14</p>	<p><b>BM-E92Z11</b> 0 9° 21° 21-22 13-14 13-14</p>	<p><b>BM-E93Z11</b> 0 9° 21° 21-22 13-14 13-14</p>	<p><b>BM-E99Z11A</b> 0 3.2 4.4 5.0 mm 21-22 13-14 13-14</p>
<p><b>BM-E7-X11</b> 0 22° 38° 78° 21-22 13-14 33°</p>	<p><b>BM-E91X11</b> 0 12° 21-22 13-14 19°</p>	<p><b>BM-E92X11</b> 0 12° 21-22 13-14 19°</p>	<p><b>BM-E93X11</b> 0 12° 21-22 13-14 19°</p>	<p><b>BM-E99X11A</b> 0 2.5 5.0 mm 21-22 13-14 3.2</p>
<p><b>BM-E7-Y11</b> 0 37° 53° 78° 21-22 13-14 21°</p>	<p><b>BM-E91Y11</b> 0 23° 21-22 13-14 11°</p>	<p><b>BM-E92Y11</b> 0 23° 21-22 13-14 11°</p>	<p><b>BM-E93Y11</b> 0 23° 21-22 13-14 11°</p>	<p><b>BM-E99Y11A</b> 0 3.4 5.0 mm 21-22 13-14 2.1</p>
<p><b>BM-E7-W02</b> 0 21° 37° 78° 11-12 21-22</p>	<p><b>BM-E91W02</b> 0 11° 11-12 21-22</p>	<p><b>BM-E92W02</b> 0 11° 11-12 21-22</p>	<p><b>BM-E93W02</b> 0 11° 11-12 21-22</p>	<p><b>BM-E99W02A</b> 0 3.4 5.0 mm 11-12 21-22</p>
<p><b>BM-E7-W20</b> 0 20° 78° 13-14 23-24</p>	<p><b>BM-E91W20</b> 0 10° 13-14 23-24</p>	<p><b>BM-E92W20</b> 0 10° 13-14 23-24</p>	<p><b>BM-E93W20</b> 0 10° 13-14 23-24</p>	<p><b>BM-E99W20A</b> 0 3.6 5.0 mm 13-14 23-24</p>
<p><b>BM-E7-Z02</b> 0 20° 32° 48° 78° 11-12 21-22 11-12 21-22</p>	<p><b>BM-E91Z02</b> 0 9° 20° 21-25 13-14 21-22</p>	<p><b>BM-E92Z02</b> 0 9° 20° 21-25 13-14 21-22</p>	<p><b>BM-E93Z02</b> 0 9° 20° 21-25 13-14 21-22</p>	
<p><b>BM-E7-X12</b> 0 18° 35° 78° 21-22 13-14 37°</p>	<p><b>BM-E91X12</b> 0 12° 21-25 13-14 27°</p>	<p><b>BM-E92X12</b> 0 12° 21-25 13-14 27°</p>	<p><b>BM-E93X12</b> 0 12° 21-25 13-14 27°</p>	<p><b>BM-E99X12A</b> 0 1.6 5.0 mm 21-22 31-32 13-14 2.9</p>
<p><b>BM-E7-X21</b> 0 19° 36° 78° 31-32 13-14 23-24 37°</p>	<p><b>BM-E91X21</b> 0 13° 31-32 13-14 23-24 27°</p>	<p><b>BM-E92X21</b> 0 13° 31-32 13-14 23-24 27°</p>	<p><b>BM-E93X21</b> 0 13° 31-32 13-14 23-24 27°</p>	<p><b>BM-E99X21A</b> 0 1.5 5.0 mm 31-32 13-14 23-24 3.0</p>
<p><b>BM-E7-W03</b> 0 18° 35° 78° 11-12 21-22 31-32</p>	<p><b>BM-E91W03</b> 0 12° 21-25 31-32</p>	<p><b>BM-E92W03</b> 0 12° 21-25 31-32</p>	<p><b>BM-E93W03</b> 0 12° 21-25 31-32</p>	<p><b>BM-E99W03A</b> 0 3.3 5.0 mm 11-12 31-32</p>
<p><b>BM-E7-W30</b> 0 23° 78° 13-14 23-24</p>	<p><b>BM-E91W30</b> 0 16° 13-14 23-24</p>	<p><b>BM-E92W30</b> 0 16° 13-14 23-24</p>	<p><b>BM-E93W30</b> 0 16° 13-14 23-24</p>	<p><b>BM-E99W30A</b> 0 2.7 5.0 mm 13-14 23-24</p>
<b>0,300</b>	<b>0,230</b>	<b>0,230</b>	<b>0,235</b>	<b>0,245</b>

