# **IEC Limit Switches**

## **AAP Series Plastic Housing (Side Rotary Lever Actuator)**

- Small body allows mounting in tight spaces
- Double insulated PBT housing
- 1 N.O. and 1 N.C. contact on all units
- Snap-action (Z11) contacts
- Single conduit opening PG11 with 1/2" NPT adapter or 5-pin M12 quick-disconnect

AAP Series Compact Limit Switches With Plastic Enclosure With Connector Selection Chart							ection Chart
Part Number	Price	Drawing Link	Actuator Type	Max. Actuation Speed (m/s [ft/sec])	Min. Actuation Force (N) or Torque (N•m)	Min. Positive Opening Force (N) or Torque (N•m)	Connection Type
<u>AAP2T41Z11</u>		PDF	Side rotary lever with polyamide roller	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	PG11 threads with a 1/2-inch NPT adapter
<u>AAP7T41Z11</u>		PDF	Side rotary lever with polyamide roller	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	5-pin M12 quick-disconnect (bottom)
AAP2T42Z11		PDF	Side rotary lever with 50mm rubber roller	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	PG11 threads with a 1/2-inch NPT adapter
<u>AAP7T42Z11</u>		PDF	Side rotary lever with 50mm rubber roller	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	5-pin M12 quick-disconnect (bottom)
AAP2T45Z11		PDF	Side rotary lever inward with 18mm nylon roller	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	PG11 threads with a 1/2-inch NPT adapter
<u>AAP7T45Z11</u>		PDF	Side rotary lever inward with 18mm nylon roller	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	5-pin M12 quick-disconnect (bottom)
AAP2T51Z11		PDF	Side rotary adjustable metal lever with polyamide roller	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	PG11 threads with a 1/2-inch NPT adapter
<u>AAP7T51Z11</u>		PDF	Side rotary adjustable metal lever with polyamide roller	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	5-pin M12 quick-disconnect (bottom)
AAP2T5100Z11		PDF	Side rotary 2mm step adjustable lever with 18mm nylon roller	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	PG11 threads with a 1/2-inch NPT adapter
AAP7T5100Z11		PDF	Side rotary 2mm step adjustable lever with 18mm nylon roller	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	5-pin M12 quick-disconnect (bottom)
AAP2T5200Z11		PDF	Side rotary adjustable lever with 50mm rubber roller	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	PG11 threads with a 1/2-inch NPT adapter
AAP7T5200Z11		PDF	Side rotary adjustable lever with 50mm rubber roller	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	5-pin M12 quick-disconnect (bottom)
<u>AAP2T71Z11</u>		PDF	Side rotary adjustable 3mm stainless steel rod	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	PG11 threads with a 1/2-inch NPT adapter
<u>AAP7T71Z11</u>		PDF	Side rotary adjustable 3mm stainless steel rod	1.5 [4.92]	0.10 N•m [0.07 lb•ft]	0.32 N•m [0.24 lb•ft]	5-pin M12 quick-disconnect (bottom)

# **IEC Limit Switches**

## **AAP Series Plastic Housing (Side Rotary Lever Actuator)**









5-pin M12 quick disconnect (bottom)

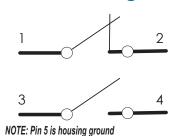
# **IEC Limit Switches**

**AAP Series Plastic Housing (Side Rotary Lever Actuator)** 

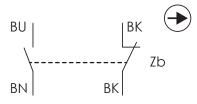
### Connector



## **Contact Configuration**



# Z11 Snap-action contacts 1 N.O. and 1 N.C.



# **IEC General Specifications**

	IEC General Specifications Environmental					
Туре		Plastic		Metal		
Environmental	Environmental Control of the Control					
Degree of Protection		IEC IP65		IEC IP66		
Temperature Range	1	Stocking: -30 to 80°C (-22 to Working: -25 to 70°C (-13 to		Stocking: -30 to 80°C (-22 to 176°F) Working: -10 to 70°C (14 to 158°F);		
Rated Insulation Volt	age		690V (degree o	of pollution 3)		
Mechanical Ratings						
Working Positions <sup>2</sup>		All a	actuators can be rota	ated in 90° increme	nts	
Mechanical Life		Straight line working heads: 30 million operations	Side rotar 25 million o		Multidirectional heads: 10 million operations	
Enclosure Material		Fiberglass-reinforced plastic-V0	class (UL94)		Die-cast aluminum	
Contact Blocks Rating						
Positive Opening <sup>3</sup>			Yes, all r			
Electrical Ratings	AC15	Make: 60A@120VAC; 30A @ 240VAC; 18A @ 400VAC Break:10A @ 24VAC; 6.5 A @130VAC; 3.1 A @ 230VAC; 1.8 A @ 400VAC			400VAC 1.8 A @ 400VAC	
	DC13	2.8A @ 24VDC; 0.5A @ 110VDC				
Maximum Switching	Frequency	C	ontact blocks: all two	o cycles per secon	d	
Repeat Accuracy		0.01 mm	on the operating po	pints at 1 million op	erations	
Short-Circuit Protect	ion	Cari	tridge fuses gl 10A-5	00V 10.3x38 1 100	)KA	
Contact Resistance			0.02			
Recommended Minin	num Operating Speed	With sna With slow-	o-action contacts: 20 action contacts: 500	0.787 in] per mm [19.685 in] per	minute <sup>4</sup> · minute <sup>5</sup>	
Rated Insulation Volt	age		660	V		
Terminals Marking			According to CEN	ELEC EN 50013		
Wiring Connections		2 x 2.5mm <sup>2</sup> (AWG14) to 2 x 0.5mm <sup>2</sup> (AWG18)				
Wiring Terminal Type		Captive screw with self-lifting pressure plate				
Wiring Terminal Markings		According to CENELEC EN50013				
User Protection		Double insulation (plastic models only)				
Contact Blocks Performance						
Operation Frequency	<b>,</b>	3600 ops/h				
Electrical Durability (according to IEC 947-5-1)		Utilization categories AC-15 and DC-13; load factor of 0.5. See table and curves in supplemental section.			d curves in supplemental section.	
Approvals		UL file E191072, CE				
Tools Needed		Phillips screwdriver, #1 #2 / Hex wrench, 10mm				

<sup>1.</sup> Minimum temperatures assume that the atmosphere is free of moisture, which could cause moving parts to freeze up.

<sup>2.</sup> Some types of actuators, such as a long, heavy spring with the adjustable actuator fully extended, may not work properly if installed in a horizontal position.

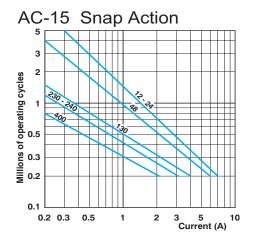
<sup>3.</sup> Positive opening in a snap-action contact block is performed by a rigid mechanism that forces the N.C. contact to open in case the snap action mechanism fails. This would provide protection if, for example, the contacts became "welded" together by excessive current rush. Generally, positive opening is not considered to work properly on switches with actuators that are not a solid design (such as a spring or rubber roller), despite the fact that the contact block itself has positive opening. In order to be considered as having positive opening, a switch must not have flexible components between actuator actioning points and the electrical contact.

<sup>4.</sup> This is the speed at which snap-action contact blocks are tested. There is no minimum operating speed for snap-action contacts because the speed has no influence on the switch action. When using spring actuators, the changeover time may vary from 1ms to 3ms from maximum to minimum operating speed.

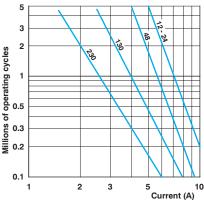
<sup>5.</sup> Slow-action contacts must not be operated at very low speeds because of the tendency to maintain the arc if contacts are not rapidly separated.

# **Limit Switches Supplemental**

### **Electrical Durability (according to IEC 947-5-1)**



### AC-15 Slow Action



# DC-13 Snap Action Slow Action Power breaking for a durability of 5 million cycles 24V 9.5 W 12W 48V 6.8 W 9W 110V 3.6 W 6W

#### Limit switch types

Snap-action contact: A contact element in which the contact motion is independent of the speed of the actuator. This feature ensures reliable electrical performance even in applications involving very slow moving actuators.

Slow-make/slow-break contacts: A contact element in which the contact motion is dependent on the actuator speed.

Terminal	identification	(IFC)

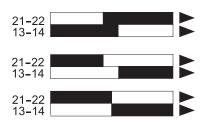
Each terminal is marked with two digits. The first digit indicates the pole (circuit). The second digit indicates the type of contact.

\_1-\_2 is N.C., \_3-\_4 is N.O. so 11-12, 21-22 are N.C., while 13-14, 23-24 are N.O.

Terminal Markings					
European					
Terminal No.	Туре				
11-12	N.C. contact of pole no. 1 <sup>1</sup>				
13-14	N.O. contact of pole no. 2 <sup>1</sup>				
21-22	N.C. contact of pole no. 2 <sup>2</sup>				
23-24	N.O. contact of pole no. 1 <sup>2</sup>				
4					

1 With non-isolated contacts 2 With isolated contacts

Note: Green/yellow wire is physical earth ground.



Make-before-break (overlapping) SPDT: the N.O. contact closes before the N.C. contact opens. (See ex: Y11)

Break-before-make (offset) SPDT: the N.C. contact opens before the N.O. contact closes. (See ex: X11)

Simultaneous make and break SPDT: the N.C. contact opens at the same time as the N.O. contact closes. (See ex: Z11)

= Contact open
= Contact closed

## Bar Chart Examples (cam angle is 30 degrees)



Diagram in millimeters/cam travel

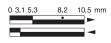




Diagram in degrees/lever rotation

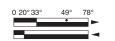




Diagram in millimeters/plunger trave



### Changeable working heads (E42, E52, E71)

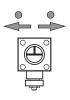
View of cam insert when looking at bottom of head once removed from switch body.

To change position, push in and twist until it locks into place

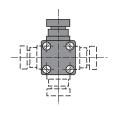




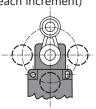




Positioning - 90° each way



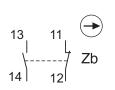
Adjustable lever from 0-360° (6° each increment)

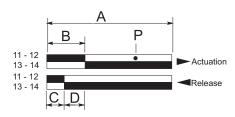


## **Contact Displacement Values**

### **Z11 Snap Action Contacts**

1 N.O. and 1 N.C.





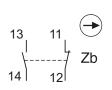
- A = Max. travel of the operator in mm or degrees
- B = Tripping travel of both contacts on actuation
- C = Tripping travel of both contacts on release
- D = Differential travel (between actuation and release)
- P = Point from which positive opening is assured during actuation

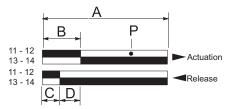
Part Series		Conta	ct Displacement	Values	
A B C P  AEM/2012211-HF1 8.7 [0.343] 3.8 [0.150] 2.4 [0.095] 7.5 [0.295]  AEM/2012211-HF1 5 [0.197] 2.2 [0.867] 1.4 [0.055] 4.3 [0.169]  AEM/2042211-HF1 74° 32° 21° 65°  AEM/2071211-HF1 — 10° 20° —  AEP/Series  AEP/S012211x 8.7 [0.343] 3.8 [0.150] 2.4 [0.095] 7.5 [0.295]  AEP/C012211x 8.7 [0.343] 3.8 [0.150] 2.4 [0.095] 7.5 [0.295]  AEP/C012211x 74° 32° 21° 65°  AAM/S012211x — 10° 20° —  AAM/S0	5 . 6 .		Displacement Values	— mm [in] or degrees	
AEM2G12211-HF1         8.7 [0.343]         3.8 [0.150]         2.4 [0.095]         7.5 [0.295]           AEM2G16211-HF1         5 [0.197]         2.2 [0.867]         1.4 [0.055]         4.3 [0.169]           AEM2G42211-HF1         74°         32°         21°         65°           AEM2G51211-HF1         74°         32°         21°         65°           AEM2G93211-HF1         74°         32°         21°         65°           AEM2G93211-HF1         —         10°         20°         —           AEPS Series         AEPS Series         AEPS Series         AEPS Series           AEPS G12211x         5 [0.197]         2.2 [0.867]         1.4 [0.055]         4.3 [0.169]           AEPS G1211x         5 [0.197]         2.2 [0.867]         1.4 [0.055]         4.3 [0.169]           AEPS G1211x         74°         32°         21°         65°           AEPS G21211x         74°         32°         21°         65°           AEPS G21211x         74°         32°         21°         65°           AEPS G2121x         74°         32°         21°         65°           AEPS G2121x         74°         32°         21°         65°           AEP G2121x         74° </th <th>Part Series</th> <th>A</th> <th>В</th> <th>С</th> <th>Р</th>	Part Series	A	В	С	Р
AEM2G16Z11-HF-1 5 [0.197] 2.2 [0.867] 1.4 [0.055] 4.3 [0.169] AEM2G4Z2T1-HF-1 74° 32° 21° 65° AEM2G51Z11-HF-1 74° 32° 21° 65° AEM2G93Z11-HF-1 74° 32° 21° 65° AEM2G93Z11-HF-1 — 10° 20° — AEPSeries  AEPXG1Z11X 5 [0.197] 2.2 [0.867] 1.4 [0.055] 4.3 [0.169] AEPXG1Z11X 5 [0.197] 2.2 [0.867] 1.4 [0.055] 4.3 [0.169] AEPXG1Z11X 5 [0.197] 2.2 [0.867] 1.4 [0.055] 4.3 [0.169] AEPXG1Z11X 74° 32° 21° 65° AEPXG1Z11X 74° 32° 21° 65° AEPXG1Z11X 74° 32° 21° 65° AEPXG4Z211X 74° 32° 21° 65° AEPXG4Z211X 74° 32° 21° 65° AEPXG51Z11X 74° 32° 21° 65° AEPXG51Z11X 74° 32° 21° 65° AEPXG9Z11X — 10° 20° — AMM Series  AAMXF1Z11X 5.6 [0.20] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161] AAMXT1Z11X 74° 31° 17° 47° AAMXF3Z11X 74° 31° 17° 47° AAPXT3Z11X 74° 31° 17° 47°	AEM Halogen				
AEM2G42211-HF1 74" 32" 211" 65" AEM2G51211-HF1 74" 32" 211" 65" AEM2G93211-HF1 74" 32" 211" 65" AEPXG91Z11X 5 [0.197] 2.2 [0.867] 1.4 [0.055] 4.3 [0.169] AEPXG11Z11X 5 [0.197] 2.2 [0.867] 1.4 [0.055] 4.3 [0.169] AEPXG12Z11X 5 [0.197] 2.2 [0.867] 1.4 [0.055] 4.3 [0.169] AEPXG41Z11X 74" 32" 211" 65" AEPXG42Z11X 74" 32" 211" 65" AEPXG43Z11X 74" 32" 211" 65" AEPXG43Z11X 74" 32" 211" 65" AEPXG93Z11X 74" 31" 11" 41 [0.161] AAMXF1Z211X 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161] AAMXF13Z11X 74" 31" 17" 47" AAMXF43Z11X 74" 31" 17" 47" AAMXF73Z11X 74" 31" 17" 47" AAMXF93Z11X 74" 31" 17" 47" AAPXT1Z11X 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161] AAMXF3Z11X 74" 31" 17" 47" AAMXF93Z11X 74" 31" 17" 47" AAPXT3Z11X 74" 31" 17" 47" AAPXT3Z21X 7	AEM2G12Z11-HF1	8.7 [0.343]	3.8 [0.150]	2.4 [0.095]	7.5 [0.295]
AEM2G51211-HF1 74° 32° 21° 66° AEM2G93211-HF1 74° 32° 21° 66° AEM2G93211-HF1 74° 32° 21° 66° AEM2G93211-HF1 74° 32° 21° 66° AEM2F Series  AEPSeries  AEPX611Z11X 5[0.197] 22[0.867] 1.4[0.055] 4.3[0.169] AEPXG12Z11X 6.7[0.343] 3.8[0.150] 2.4[0.095] 7.5[0.295] AEPXG12Z11X 74° 32° 21° 66° AEPXG43Z11X 74° 32° 21° 66° AEPXG51Z11X 74° 32° 21° 66° AEPXG93Z11X 74° 32° 21° 65° AEPXG93Z11X 74° 31° 13[0.051] 4.1[0.161] AAMXF1Z2T1X 5.6[0.220] 2.5[0.098] 1.3[0.051] 4.1[0.161] AAMXF1Z2T1X 74° 31° 17° 47° AAMXF43Z11X 74° 31° 17° 47° AAMXF73Z11X 74° 31° 17° 47° AAMXF73Z11X 74° 31° 17° 47° AAPXT1Z11X 74° 31° 17° 47° AAPXT1Z11X 74° 31° 17° 47° AAPXT1Z2T1X 74° 31° 17° 47° AAPXT1Z2T1X 74° 31° 17° 47° AAPXT3Z11X 74° AAPXT3Z11X 74° AAPXT3Z11X 74° AAPXT3Z1Z1X 74° AAPXT3Z1Z1X 74° AAPXT3Z1Z1X 74° AAPXT3	AEM2G16Z11-HF1	5 [0.197]	2.2 [0.867]	1.4 [0.055]	4.3 [0.169]
AEM2G71Z11-HF1 74° 32° 20°	AEM2G42Z11-HF1	74°	32°	21°	65°
AEP Series  AEP Se	AEM2G51Z11-HF1	74°	32°	21°	65°
### AEP Series  ### AEP SERIES	AEM2G71Z11-HF1	74°	32°	21°	65°
AEPXG11Z11x         5 [0.197]         2.2 [0.867]         1.4 [0.055]         4.3 [0.169]           AEPXG12Z11x         8.7 [0.343]         3.8 [0.150]         2.4 [0.095]         7.5 [0.295]           AEPXG16Z11x         5 [0.197]         2.2 [0.867]         1.4 [0.055]         4.3 [0.169]           AEPXG4Z211x         74°         32°         21°         65°           AEPXG4Z211x         74°         32°         21°         65°           AEPXG4Z11x         74°         32°         21°         65°           AEPXG93Z11x         74°         32°         21°         65°           AEPXG93Z11x         —         10°         20°         —           AEPXG93Z11x         —         10°         20°         —      <	AEM2G93Z11-HF1	_	10°	20°	_
AEPxG12Z11x       8.7 [0.343]       3.8 [0.150]       2.4 [0.095]       7.5 [0.295]         AEPxG16Z11x       5 [0.197]       2.2 [0.867]       1.4 [0.055]       4.3 [0.169]         AEPxG43Z11x       74°       32°       21°       65°         AEPxG93Z11x       74°       32°       21°       65°         AEPxG93Z11x       -       10°       20°       -         AAMXF1Z11x       56 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAMXF1Z211x       56 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAMXF43Z11x       74°       31°       17°       47	AEP Series				
AEPxG16Z11x         5 [0.197]         2.2 [0.867]         1.4 [0.055]         4.3 [0.169]           AEPxG4Z2T1x         74°         32°         21°         65°           AEPxG4Z2T1x         74°         32°         21°         65°           AEPxG4Z2T1x         74°         32°         21°         65°           AEPxG5IZ11x         74°         32°         21°         65°           AEPxG9Z2T1x         74°         32°         21°         65°           AEPxG93Z11x         —         10°         20°         —           AAMXF12Z11x         5.6 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]           AAMXF12Z11x </th <td>AEPxG11Z11x</td> <td>5 [0.197]</td> <td>2.2 [0.867]</td> <td>1.4 [0.055]</td> <td>4.3 [0.169]</td>	AEPxG11Z11x	5 [0.197]	2.2 [0.867]	1.4 [0.055]	4.3 [0.169]
AEPxG16Z11x         5 [0.197]         2.2 [0.867]         1.4 [0.055]         4.3 [0.169]           AEPxG4Z2T1x         74°         32°         21°         65°           AEPxG4Z2T1x         74°         32°         21°         65°           AEPxG4Z2T1x         74°         32°         21°         65°           AEPxG5IZ11x         74°         32°         21°         65°           AEPxG9Z2T1x         74°         32°         21°         65°           AEPxG93Z11x         —         10°         20°         —           AAMXF12Z11x         5.6 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]           AAMXF12Z11x </th <td>AEPxG12Z11x</td> <td>8.7 [0.343]</td> <td></td> <td>2.4 [0.095]</td> <td></td>	AEPxG12Z11x	8.7 [0.343]		2.4 [0.095]	
AEPxG41Z11x         74°         32°         21°         65°           AEPxG42Z11x         74°         32°         21°         65°           AEPxG43Z11x         74°         32°         21°         65°           AEPxG51Z11x         74°         32°         21°         65°           AEPxG9Z211x         74°         32°         21°         65°           AEPxG9Z211x         —         10°         20°         —           AEPxG9Z211x         —         10°         20°         —           AEPxG9Z211x         —         10°         20°         —           AAMXF9Z11x         —         10°         20°         —           AAMXF9Z11x         —         10°         20°         —           AAMXF1Z11x         5.6 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]           AAMXF1Z11x         5.6 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]           AAMXF32Z11x         74°         31°         17°         47°           AAMXF32Z11x         74°         31°         17°         47°           AAMXF3Z11x         74°         31°         17°         47°           AAMX	AEPxG16Z11x	5 [0.197]	2.2 [0.867]	1.4 [0.055]	4.3 [0.169]
AEPxG43Z11x         74°         32°         21°         65°           AEPxG51Z11x         74°         32°         21°         65°           AEPxG71Z11x         74°         32°         21°         65°           AEPxG92Z11x         —         10°         20°         —           AEPxG93Z11x         —         10°         20°         —           AAM Series         —         AAM Series         —           AAMXF1Z11x         56 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]           AAMXF1Z11x         56 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]           AAMXF1Z11x         56 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]           AAMXF3Z11x         56 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]           AAMXF3Z11x         74°         31°         17°         47°           AAMXF43Z11x         74°         31°         17°         47°           AAMXF3Z11x         74°         31°         17°         47°           AAMXF73Z11x         74°         31°         17°         47°           AAPXT3Z11x         74°         31°         17°	AEPxG41Z11x	74°	32°	21°	
AEPXG51Z11X         74°         32°         21°         65°           AEPXG71Z11X         74°         32°         21°         65°           AEPXG92Z11X         —         10°         20°         —           AEPXG93Z11X         —         10°         20°         —           AAMXF12Z1X         —         10°         20°         —           AAMXF11Z11X         —         10°         20°         —           AAMXF12Z11X         —         10°         20°         —           AAMXF3Z11X         —         10°         20°         —           AAMXF3Z11X         —         10°         20°         —           AAMXF3Z11X         —         31°         17°         47°           AAMXF3Z11X         —         31°         17°         47°           AAMXF3Z11X         —         12°         23°         —	AEPxG42Z11x	74°	32°	21°	65°
AEPXG71Z11x       74°       32°       21°       65°         AEPXG92Z11x       —       10°       20°       —         AAM Series       —       10°       20°       —         AAMXF11Z11x       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAMXF12Z11x       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAMXT35Z11x       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAMXT35Z11x       74°       31°       17°       47°         AAMXF43Z11x       74°       31°       17°       47°         AAMXF53Z11x       74°       31°       17°       47°         AAMXF53Z11x       74°       31°       17°       47°         AAMXF73Z11x       74°       31°       17°       47°         AAMXF73Z11x       74°       31°       17°       47°         AAMXF33Z11x       74°       31°       17°       47°         AAMXF33Z11x       74°       31°       17°       47°         AAMXF33Z11x       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT13Z11x       9.6 [0.378]<	AEPxG43Z11x	74°	32°	21°	65°
AEPXG92Z11x         —         10°         20°         —           AEPXG93Z11x         —         10°         20°         —           AAM Series         AAMXF1Z11x         5.6 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]           AAMXF1ZZ11x         5.6 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]           AAMXT14Z11x         5.6 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]           AAMXT35Z11x         74°         31°         17°         47°           AAMXF43Z11x         74°         31°         17°         47°           AAMXF53Z11x         74°         31°         17°         47°           AAMXF53Z11x         74°         31°         17°         47°           AAMXF73Z11x         74°         31°         17°         47°           AAMXF73Z11x         74°         31°         17°         47°           AAPXT93Z11x         74°         31°         17°         47°           AAPXT13Z11x         5.6 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]           AAPXT13Z11x         5.6 [0.220]         2.5 [0.098]         1.3 [0.051]         4.1 [0.161]      <	AEPxG51Z11x	74°	32°	21°	65°
AEPXG93Z11X — 10° 20° —  AAM Series  AAMXF11Z11X 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161]  AAMXF12Z11X 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161]  AAMXT14Z11X 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161]  AAMXT35Z11X 21 [0.827] 9 [0.354] 4.5 [0.177] 14.5 [0.571]  AAMXF43Z11X 74° 31° 17° 47°  AAMXF53Z11X 74° 31° 17° 47°  AAMXF53Z11X 74° 31° 17° 47°  AAMXF71Z11X 74° 31° 17° 47°  AAMXT93Z11X — 12° 23° —  AAPX Series  AAPXT10Z11X 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161]  AAPXT13Z11X 9.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161]  AAPXT13Z11X 9.6 [0.378] 4.7 [0.185] 2.5 [0.098] 7.6 [0.299]  AAPXT14Z11X 74° 31° 17° 47°  AAPXT4Z11X 74° 31° 17° 47°  AAPXT4Z11X 74° 31° 17° 47°  AAPXT4Z211X 74° 31° 17° 47°  AAPXT5200Z11X 74° 31° 17° 47°	AEPxG71Z11x	74°	32°	21°	65°
AAM Series  AAMXF11Z11X 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161]  AAMXF12Z11X 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161]  AAMXT14Z11X 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161]  AAMXT135Z11X 21 [0.827] 9 [0.354] 4.5 [0.177] 14.5 [0.571]  AAMXF43Z11X 74° 31° 17° 47°  AAMXF43Z11X 74° 31° 17° 47°  AAMXF53Z11X 74° 31° 17° 47°  AAMXF53Z11X 74° 31° 17° 47°  AAMXF71Z11X 74° 31° 17° 47°  AAMXT93Z11X — 12° 23° — AAP Series  AAPXT10Z11X 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161]  AAPXT13Z11X 9.6 [0.378] 4.7 [0.185] 2.5 [0.098] 7.6 [0.299]  AAPXT14Z11X 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161]  AAPXT13Z11X 74° 31° 17° 47°  AAPXT4Z11X 74° 31° 17° 47°  AAPXT5Z01X 74° 31° 17° 47°  AAPXT5Z11X 74° 31° 17° 47°  AAPXT5Z00Z1X 74° 31° 17° 47°	AEPxG92Z11x	_	10°	20°	_
AAMXF11211X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAMXF12211X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAMXT14211X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAMXT35211X       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAMXF43211X       74°       31°       17°       47°         AAMXF53211X       74°       31°       17°       47°         AAMXF53211X       74°       31°       17°       47°         AAMXF71211X       74°       31°       17°       47°         AAMXF73211X       74°       31°       17°       47°         AAMXF73211X       74°       31°       17°       47°         AAPXF10211X       74°       31°       1.3 [0.051]       4.1 [0.161]         AAPXT13211X       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       7.6 [0.299]         AAPXT13211X       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       7.6 [0.299]         AAPXT14211X       74°       31°       17°       47°         AAPXT42211X       74°       31°       17°       47° <td>AEPxG93Z11x</td> <td>_</td> <td>10°</td> <td>20°</td> <td>_</td>	AEPxG93Z11x	_	10°	20°	_
AAMXF12Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAMXT14Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAMXT35Z11X       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAMXF43Z11X       74°       31°       17°       47°         AAMXF53Z11X       74°       31°       17°       47°         AAMXF53Z11X       74°       31°       17°       47°         AAMXF71Z11X       74°       31°       17°       47°         AAMXF3Z11X       —       12°       23°       —         AAPXF10Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT13Z11X       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       7.6 [0.299]         AAPXT13Z11X       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       7.6 [0.299]         AAPXT14Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT35Z11X       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAPXT42Z11X       74°       31°       17°       47°         AAPXT51Z11X       74°       31°	AAM Series				
AAMXT14Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAMXT35Z11X       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAMXF43Z11X       74°       31°       17°       47°         AAMXF53Z11X       74°       31°       17°       47°         AAMXF53Z11X       74°       31°       17°       47°         AAMXF71Z11X       74°       31°       17°       47°         AAMXF3Z11X       -       12°       23°       -         AAPXF10Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT13Z11X       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       7.6 [0.299]         AAPXT14Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT35Z11X       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAPXT41Z11X       74°       31°       17°       47°         AAPXT45Z11X       74°       31°       17°       47°         AAPXT51Z11X       74°       31°       17°       47°         AAPXT51Z01X       74°       31°       17°       47°         AA	AAMxF11Z11x	5.6 [0.220]	2.5 [0.098]	1.3 [0.051]	4.1 [0.161]
AAMXT35Z11X       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAMXF43Z11X       74°       31°       17°       47°         AAMXF53Z11X       74°       31°       17°       47°         AAMXF53Z11X       74°       31°       17°       47°         AAMXF71Z11X       74°       31°       17°       47°         AAMXT93Z11X       —       12°       23°       —         AAPXT92Z11X       —       12°       23°       —         AAPXT10Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT13Z11X       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       7.6 [0.299]         AAPXT14Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT35Z11X       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAPXT41Z11X       74°       31°       17°       47°         AAPXT45Z11X       74°       31°       17°       47°         AAPXT51Z11X       74°       31°       17°       47°         AAPXT5200Z11X       74°       31°       17°       47°         AAPXT5200Z11X       74° <td>AAMxF12Z11x</td> <td>5.6 [0.220]</td> <td>2.5 [0.098]</td> <td>1.3 [0.051]</td> <td>4.1 [0.161]</td>	AAMxF12Z11x	5.6 [0.220]	2.5 [0.098]	1.3 [0.051]	4.1 [0.161]
AAMXF43Z11X       74°       31°       17°       47°         AAMXF46Z11X       74°       31°       17°       47°         AAMXF53Z11X       74°       31°       17°       47°         AAMXF71Z11X       74°       31°       17°       47°         AAMXT93Z11X       —       12°       23°       —         AAP Series       AAP Series         AAPXT10Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT13Z11X       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       7.6 [0.299]         AAPXT14Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT35Z11X       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAPXT41Z11X       74°       31°       17°       47°         AAPXT42Z11X       74°       31°       17°       47°         AAPXT5200Z11X       74°       31°       17°       47°         AAPXT5200Z11X       74°       31°       17°       47°         AAPXT71Z11X       74°       31°       17°       47°	AAMxT14Z11x	5.6 [0.220]	2.5 [0.098]	1.3 [0.051]	4.1 [0.161]
AAMXF46Z11X       74°       31°       17°       47°         AAMXF53Z11X       74°       31°       17°       47°         AAMXF71Z11X       74°       31°       17°       47°         AAMXT93Z11X       —       12°       23°       —         AAP Series       AAP Series         AAPXT10Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT13Z11X       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       7.6 [0.299]         AAPXT14Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT35Z11X       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAPXT41Z11X       74°       31°       17°       47°         AAPXT45Z11X       74°       31°       17°       47°         AAPXT51Z11X       74°       31°       17°       47°         AAPXT5200Z11X       74°       31°       17°       47°         AAPXT72Z11X       74°       31°       17°       47°	AAMxT35Z11x	21 [0.827]	9 [0.354]	4.5 [0.177]	14.5 [0.571]
AAMXF53Z11X       74°       31°       17°       47°         AAMXF71Z11X       74°       31°       17°       47°         AAMXT93Z11X       —       12°       23°       —         AAP Series         AAPXT10Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT13Z11X       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       7.6 [0.299]         AAPXT14Z11X       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPXT35Z11X       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAPXT41Z11X       74°       31°       17°       47°         AAPXT45Z11X       74°       31°       17°       47°         AAPXT51Z11X       74°       31°       17°       47°         AAPXT5100Z11X       74°       31°       17°       47°         AAPXT5200Z11X       74°       31°       17°       47°         AAPXT71Z11X       74°       31°       17°       47°	AAMxF43Z11x	74°	31°	17°	47°
AAMxF71Z11x       74°       31°       17°       47°         AAMxT93Z11x       —       12°       23°       —         AAP Series       AAP XT10Z11x       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPxT13Z11x       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       7.6 [0.299]         AAPxT14Z11x       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPxT35Z11x       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAPxT41Z11x       74°       31°       17°       47°         AAPxT42Z11x       74°       31°       17°       47°         AAPxT51Z11x       74°       31°       17°       47°         AAPxT5100Z11x       74°       31°       17°       47°         AAPxT5200Z11x       74°       31°       17°       47°         AAPxT71Z11x       74°       31°       17°       47°	AAMxF46Z11x	74°	31°	17°	47°
AAMxT93Z11x — 12° 23° —  AAP Series  AAPxT10Z11x 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161]  AAPxT13Z11x 9.6 [0.378] 4.7 [0.185] 2.5 [0.098] 7.6 [0.299]  AAPxT14Z11x 5.6 [0.220] 2.5 [0.098] 1.3 [0.051] 4.1 [0.161]  AAPxT35Z11x 21 [0.827] 9 [0.354] 4.5 [0.177] 14.5 [0.571]  AAPxT41Z11x 74° 31° 17° 47°  AAPxT42Z11x 74° 31° 17° 47°  AAPxT45Z11x 74° 31° 17° 47°  AAPxT51Z11x 74° 31° 17° 47°  AAPxT51Z11x 74° 31° 17° 47°  AAPxT51Z11x 74° 31° 17° 47°  AAPxT5100Z11x 74° 31° 17° 47°  AAPxT5200Z11x 74° 31° 17° 47°  AAPxT5200Z11x 74° 31° 17° 47°  AAPxT5200Z11x 74° 31° 17° 47°	AAMxF53Z11x	74°	31°	17°	47°
### AAP Series  ### AAP Series	AAMxF71Z11x	74°	31°	17°	47°
AAPxT10Z11x       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPxT13Z11x       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       7.6 [0.299]         AAPxT14Z11x       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPxT35Z11x       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAPxT41Z11x       74°       31°       17°       47°         AAPxT42Z11x       74°       31°       17°       47°         AAPxT45Z11x       74°       31°       17°       47°         AAPxT51Z11x       74°       31°       17°       47°         AAPxT5100Z11x       74°       31°       17°       47°         AAPxT5200Z11x       74°       31°       17°       47°         AAPxT71Z11x       74°       31°       17°       47°	AAMxT93Z11x	_	12°	23°	_
AAPxT13Z11x       9.6 [0.378]       4.7 [0.185]       2.5 [0.098]       7.6 [0.299]         AAPxT14Z11x       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPxT35Z11x       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAPxT41Z11x       74°       31°       17°       47°         AAPxT42Z11x       74°       31°       17°       47°         AAPxT45Z11x       74°       31°       17°       47°         AAPxT51Z11x       74°       31°       17°       47°         AAPxT5100Z11x       74°       31°       17°       47°         AAPxT5200Z11x       74°       31°       17°       47°         AAPxT71Z11x       74°       31°       17°       47°	AAP Series				
AAPxT14Z11x       5.6 [0.220]       2.5 [0.098]       1.3 [0.051]       4.1 [0.161]         AAPxT35Z11x       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAPxT41Z11x       74°       31°       17°       47°         AAPxT42Z11x       74°       31°       17°       47°         AAPxT45Z11x       74°       31°       17°       47°         AAPxT51Z11x       74°       31°       17°       47°         AAPxT5100Z11x       74°       31°       17°       47°         AAPxT5200Z11x       74°       31°       17°       47°         AAPxT71Z11x       74°       31°       17°       47°	AAPxT10Z11x	5.6 [0.220]	2.5 [0.098]	1.3 [0.051]	4.1 [0.161]
AAPxT35Z11x       21 [0.827]       9 [0.354]       4.5 [0.177]       14.5 [0.571]         AAPxT41Z11x       74°       31°       17°       47°         AAPxT42Z11x       74°       31°       17°       47°         AAPxT45Z11x       74°       31°       17°       47°         AAPxT51Z11x       74°       31°       17°       47°         AAPxT5100Z11x       74°       31°       17°       47°         AAPxT5200Z11x       74°       31°       17°       47°         AAPxT71Z11x       74°       31°       17°       47°	AAPxT13Z11x	9.6 [0.378]	4.7 [0.185]	2.5 [0.098]	7.6 [0.299]
AAPxT41Z11x       74°       31°       17°       47°         AAPxT42Z11x       74°       31°       17°       47°         AAPxT45Z11x       74°       31°       17°       47°         AAPxT51Z11x       74°       31°       17°       47°         AAPxT5100Z11x       74°       31°       17°       47°         AAPxT5200Z11x       74°       31°       17°       47°         AAPxT71Z11x       74°       31°       17°       47°	AAPxT14Z11x	5.6 [0.220]	2.5 [0.098]	1.3 [0.051]	4.1 [0.161]
AAPxT42Z11x       74°       31°       17°       47°         AAPxT45Z11x       74°       31°       17°       47°         AAPxT51Z11x       74°       31°       17°       47°         AAPxT5100Z11x       74°       31°       17°       47°         AAPxT5200Z11x       74°       31°       17°       47°         AAPxT71Z11x       74°       31°       17°       47°	AAPxT35Z11x	21 [0.827]	9 [0.354]	4.5 [0.177]	14.5 [0.571]
AAPxT45Z11x       74°       31°       17°       47°         AAPxT51Z11x       74°       31°       17°       47°         AAPxT5100Z11x       74°       31°       17°       47°         AAPxT5200Z11x       74°       31°       17°       47°         AAPxT71Z11x       74°       31°       17°       47°	AAPxT41Z11x	74°	31°	17°	47°
AAPxT51Z11x       74°       31°       17°       47°         AAPxT5100Z11x       74°       31°       17°       47°         AAPxT5200Z11x       74°       31°       17°       47°         AAPxT71Z11x       74°       31°       17°       47°	AAPxT42Z11x	74°	31°	17°	47°
AAPxT5100Z11x       74°       31°       17°       47°         AAPxT5200Z11x       74°       31°       17°       47°         AAPxT71Z11x       74°       31°       17°       47°	AAPxT45Z11x	74°	31°	17°	47°
AAPxT5200Z11x       74°       31°       17°       47°         AAPxT71Z11x       74°       31°       17°       47°	AAPxT51Z11x	74°	31°	17°	47°
AAPxT71Z11x 74° 31° 17° 47°	AAPxT5100Z11x	74°	31°	17°	47°
	AAPxT5200Z11x	74°	31°	17°	47°
AAPxT93711x _ 12° 23° _	AAPxT71Z11x	74°	31°	17°	47°
- IL LV	AAPxT93Z11x	_	12°	23°	_

Contact Displacement Values tables contined on next page

## **Contact Displacement Values (continued)**

# **Z11 Snap Action Contacts** 1 N.O. and 1 N.C.





- A = Max. travel of the operator in mm or degrees
- B = Tripping travel of both contacts on actuation
- C = Tripping travel of both contacts on release
- D = Differential travel (between actuation and release)
- P = Point from which positive opening is assured during actuation

	Contac	ct Displacement	Values			
Dout Course	Displacement Values — mm [in] or degrees					
Part Series	А	В	С	Р		
ABM Series						
ABMxE11Z11	6.0 [0.235]	3.0 [0.118]	1.8 [0.071]	4.6 [0.181]		
ABMxE13Z11	10.5 [0.413]	5.3 [0.209]	3.1 [0.122]	8.2 [0.323]		
ABMxE32Z11	15.5 [0.610]	6.3 [0.248]	3.1 [0.122]	10.8 [0.425]		
ABMxE42Z11	78°	33°	20°	49°		
ABMxE52Z11	78°	33°	20°	49°		
ABMxE71Z11	78°	33°	20°	49°		
ABMxE92Z11 —		21°	9°	_		
ABMxE93Z11	_	21°	21°	_		
ABP Series						
ABPxH14Z11	5.9 [0.232]	2.2 [0.867]	1.0 [0.039]	3.8 [0.150]		
ABPxH19Z11	10.5 [0.413]	4.6 [0.181]	2.4 [0.094]	7.5 [0.295]		
ABPxH35Z11	17 [0.669]	6.8 [0.268]	3.8 [0.150]	11.3 [0.445]		
ABPxH41Z11	90°	31°	19°	47°		
ABPxH51Z11	90°	31°	19°	47°		
ABPxH71Z11	90°	31°	19°	47°		
ABPxH92Z11	_	27°	15°	_		
ABPxH93Z11	_	27°	15°	_		

## **IEC Limit Switches Accessories**

### Replacement contact blocks

Easily-installed replacement contact blocks fit both heavy-duty IEC and double-insulated limit switches, including mini-DIN models.

Note: Limit switches come standard with snap-action contacts (AGZ11-SWITCH.) To replace contact block, remove limit switch cover. Carefully remove old contact block and install replacement. Contact blocks are supplied with an adapter to fit into larger ABM and ABP switches. Remove this adapter when installing contacts in mini-DIN AAP models.



Replacement Contact Blocks						
Part Number	Price	Contact Type	Action			
AGZ11-SWITCH		Snap-action 1 N.C. and N.O.	3ms change-over time			
AGZ02-SWITCH		Snap-action 2 N.C.	3ms change-over time			
AGX11-SWITCH		Slow-action 1 N.C. and 1 N.O.	Break before make			
AGY11-SWITCH		Slow-action overlay 1 N.C. and 1 N.O.	Make before break			
AGW02-SWITCH		Slow-action delay 2 N.C.	Simultaneous			
AGW20-SWITCH		Slow-action overlay 2 N.O.	Simultaneous			

### Additional lever arms, spare parts and accessories for ABM series

Additional Lever Arms/Spare Parts and Accessories					
Part Number	Price	Drawing Link	Actuator Type		
AGE42-LEVER		<u>PDF</u>	Lever with stainless steel roller for E42 models (replacement lever)		
AGE44-LEVER		N/A	Lever with 50mm diameter rubber roller (fits E42 models)		
AGE52-LEVER		PDF	Lever with stainless steel roller for E52 models (replacement lever)		
AGE54-LEVER		<u>PDF</u>	Lever with 50mm diameter rubber roller (fits E52 models)		

Note: See the Bar Charts page of this section for more information.



**Replacement actuator levers for heavy-duty IEC models** Easily-replaceable actuators for E42

and E52 model limit switches.

Note: These models have an E42 or E52 in the part number, for example, ABM1E42Z11.



**AGE52-LEVER** 

(Replacement lever shown installed on ABM5E52Z11 limit switch)



AGE54-LEVER

