

### Electrical Connection

**BP1:** one cable inlet for PG 13,5 Cable Gland

**BP2:** one cable inlet for 1/2" NPT Cable Gland

**BP5:** one cable inlet for M20 x 1,5 Cable Gland



### Operating Head Type

**H11 - Plain steel plunger**

**H12 - Steel ball plunger**

**H13 - Steel 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

EN 50041

0,5  
14 / 40



EN 50041

0,5  
14 / 40


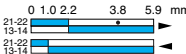

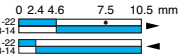

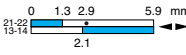
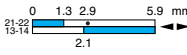
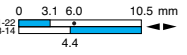

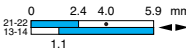
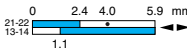
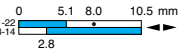

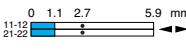
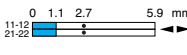
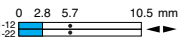





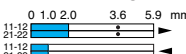
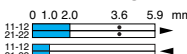
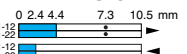

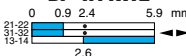
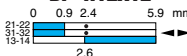
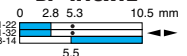
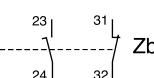
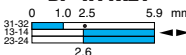
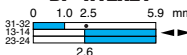
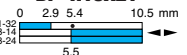
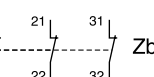
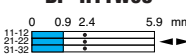
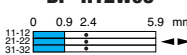
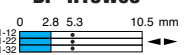
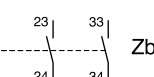


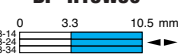


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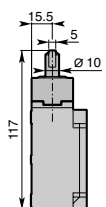
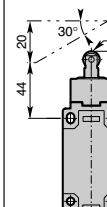
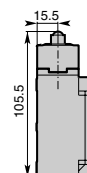
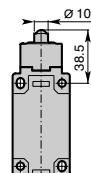
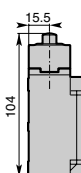
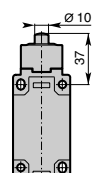
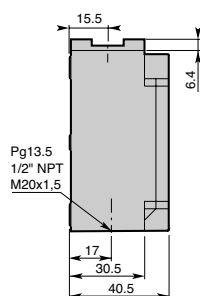
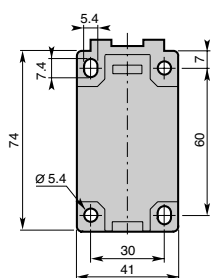
0,5  
14 / 40



### Additional Technical Datas

<b>Z11</b> Snap Action Contacts (1NO + 1NC)		<b>Order Code</b>	<b>BP•H11Z11</b>		<b>BP•H12Z11</b>		<b>BP•H13Z11</b>	
<b>X11</b> Non overlapping Slow Action Contacts (1NO + 1NC)		<b>Order Code</b>	<b>BP•H11X11</b>		<b>BP•H12X11</b>		<b>BP•H13X11</b>	
<b>Y11</b> Overlapping Slow Action Contacts (1NO + 1NC)		<b>Order Code</b>	<b>BP•H11Y11</b>		<b>BP•H12Y11</b>		<b>BP•H13Y11</b>	
<b>W02</b> Slow Action Contacts (2NC)		<b>Order Code</b>	<b>BP•H11W02</b>		<b>BP•H12W02</b>		<b>BP•H13W02</b>	
<b>W20</b> Slow Action Contacts (2NO)		<b>Order Code</b>	<b>BP•H11W20</b>		<b>BP•H12W20</b>		<b>BP•H13W20</b>	
<b>Z02</b> Snap Action Contacts (2NC)		<b>Order Code</b>	<b>BP•H11Z02</b>		<b>BP•H12Z02</b>		<b>BP•H13Z02</b>	
<b>X12</b> Non overlapping Slow Action Contacts (1NO + 2NC)		<b>Order Code</b>	<b>BP•H11X12</b>		<b>BP•H12X12</b>		<b>BP•H13X12</b>	
<b>X21</b> Non overlapping Slow Action Contacts (2NO + 1NC)		<b>Order Code</b>	<b>BP•H11X21</b>		<b>BP•H12X21</b>		<b>BP•H13X21</b>	
<b>W03</b> Simultaneous Slow Action Contacts (3NC)		<b>Order Code</b>	<b>BP•H11W03</b>		<b>BP•H12W03</b>		<b>BP•H13W03</b>	
<b>W30</b> Simultaneous Slow Action Contacts (3NO)		<b>Order Code</b>	<b>BP•H11W30</b>		<b>BP•H12W30</b>		<b>BP•H13W30</b>	
<b>Weight (packing per unit)</b>		<b>[kg]</b>	<b>0,145</b>		<b>0,145</b>		<b>0,150</b>	

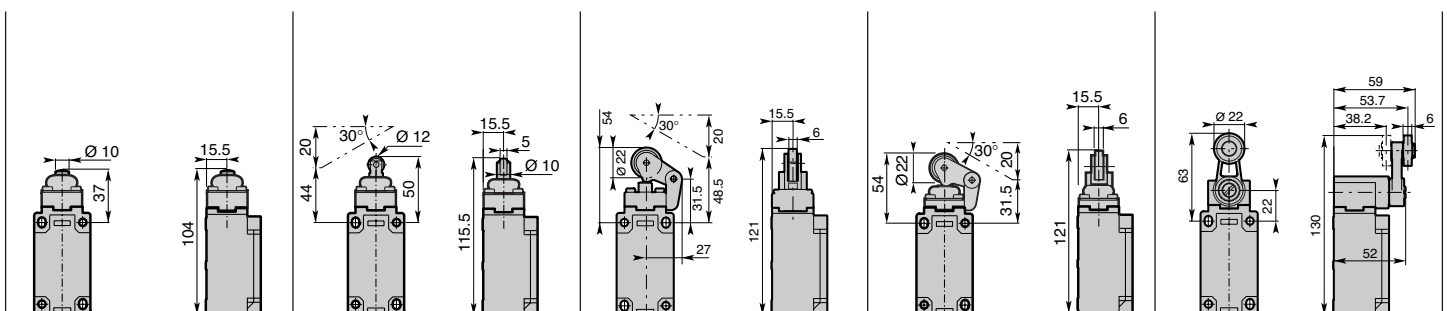
### Dimensions (in mm)





<b>H14 - Plain steel plunger with dust protection cup</b>	<b>H19 - Steel roller plunger with dust protection cup</b>	<b>H3• - One way lever</b>	<b>H3• - One way lever with dust protection cup</b>	<b>H4• - Ø 22 roller lever</b>
		H31: Ø22 nylon roller H32: Ø22 stainless steel roller H33: Ø22 steel ball bearing	H35: Ø22 nylon roller H36: Ø22 stainless steel roller H37: Ø22 steel ball bearing	H41: nylon roller H42: stainless steel roller H43: steel ball bearing
EN 50041	EN 50041			EN 50041
0,5 14 / 40	0,5 14 / 40	1,0 8 / 30	1,0 8 / 30	1,5 0,15 / 0,30

<b>BP•H14Z11</b> 0 1.0 2.2 3.8 5.9 mm	<b>BP•H19Z11</b> 0 2.4 4.6 7.5 10.5 mm	<b>BP•H3•Z11</b> 0 3.8 6.8 11.3 17.0 mm	<b>BP•H3•Z11</b> 0 3.8 6.8 11.3 17.0 mm	<b>BP•H4•Z11</b> 0 19° 31° 47° 90°
<b>BP•H14X11</b> 0 1.3 2.9 5.9 mm 2.1	<b>BP•H19X11</b> 0 3.1 6.0 10.5 mm 4.4	<b>BP•H3•X11</b> 0 4.9 9.4 17.0 mm 6.3	<b>BP•H3•X11</b> 0 4.9 9.4 17.0 mm 6.3	<b>BP•H4•X11</b> 0 21° 37° 90° 30°
<b>BP•H14Y11</b> 0 2.4 4.0 5.9 mm 1.1	<b>BP•H19Y11</b> 0 5.1 8.0 10.5 mm 2.8	<b>BP•H3•Y11</b> 0 7.6 12.1 17.0 mm 4.4	<b>BP•H3•Y11</b> 0 7.6 12.1 17.0 mm 4.4	<b>BP•H4•Y11</b> 0 34° 50° 90° 19°
<b>BP•H14W02</b> 0 1.1 2.7 5.9 mm	<b>BP•H19W02</b> 0 2.8 5.7 10.5 mm	<b>BP•H3•W02</b> 0 4.4 8.9 17.0 mm	<b>BP•H3•W02</b> 0 4.4 8.9 17.0 mm	<b>BP•H4•W02</b> 0 19° 35° 90°
<b>BP•H14W20</b> 0 1.0 5.9 mm	<b>BP•H19W20</b> 0 2.6 10.5 mm	<b>BP•H3•W20</b> 0 4.0 17.0 mm	<b>BP•H3•W20</b> 0 4.0 17.0 mm	<b>BP•H4•W20</b> 0 18° 90°
<b>BP•H14Z02</b> 0 1.0 2.0 3.6 5.9 mm	<b>BP•H19Z02</b> 0 2.4 4.4 7.3 10.5 mm	<b>BP•H3•Z02</b> 0 3.8 6.6 11.1 17.0 mm	<b>BP•H3•Z02</b> 0 3.8 6.6 11.1 17.0 mm	<b>BP•H4•Z02</b> 0 19° 30° 46° 90°
<b>BP•H14X12</b> 0 0.9 2.4 5.9 mm 2.6	<b>BP•H19X12</b> 0 2.8 5.3 10.5 mm 5.5	<b>BP•H3•X12</b> 0 3.7 7.5 17.0 mm 7.7	<b>BP•H3•X12</b> 0 3.7 7.5 17.0 mm 7.7	<b>BP•H4•X12</b> 0 16° 33° 90° 35°
<b>BP•H14X21</b> 0 1.0 2.5 5.9 mm 2.6	<b>BP•H19X21</b> 0 2.9 5.4 10.5 mm 5.5	<b>BP•H3•X21</b> 0 4.0 7.6 17.0 mm 7.7	<b>BP•H3•X21</b> 0 4.0 7.6 17.0 mm 7.7	<b>BP•H4•X21</b> 0 17° 34° 90° 35°
<b>BP•H14W03</b> 0 0.9 2.4 5.9 mm	<b>BP•H19W03</b> 0 2.8 5.3 10.5 mm	<b>BP•H3•W03</b> 0 3.7 7.5 17.0 mm	<b>BP•H3•W03</b> 0 3.7 7.5 17.0 mm	<b>BP•H4•W03</b> 0 16° 33° 90°
<b>BP•H14W30</b> 0 1.3 5.9 mm	<b>BP•H19W30</b> 0 3.3 10.5 mm	<b>BP•H3•W30</b> 0 4.8 17.0 mm	<b>BP•H3•W30</b> 0 4.8 17.0 mm	<b>BP•H4•W30</b> 0 21° 90°
<b>0,145</b>	<b>0,150</b>	<b>0,185</b>	<b>0,180</b>	<b>0,200</b>



## Electrical Connection

**BP1:** one cable inlet for PG 13,5 Cable Gland

**BP2:** one cable inlet for 1/2" NPT Cable Gland

**BP5:** one cable inlet for M20 x 1,5 Cable Gland

## Operating Head Type



**H44 - Ø 50 rubber roller lever**



**H5 - Adjustable Ø 22 roller lever**

H51: nylon roller  
H52: stainless steel roller  
H53: steel ball bearing



**H54 - Adjustable Ø 50 rubber roller lever**

Conformity /  $\rightarrow$  (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 / 0,30

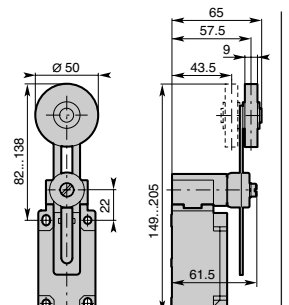
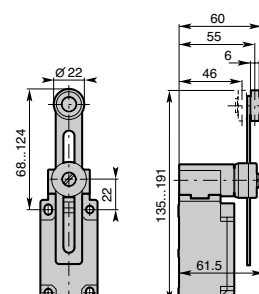
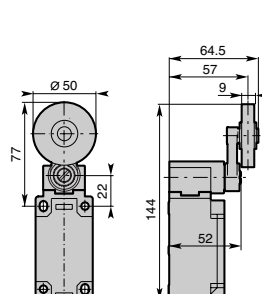
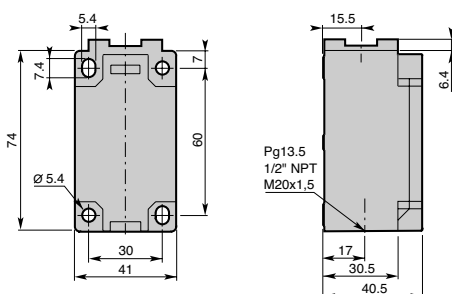
1,5  
0,15 / 0,30

1,5  
0,15 / 0,30

## Additional Technical Datas

<b>Z11</b> Snap Action Contacts (1NO + 1NC)		<b>Order Code</b>	<b>BP•H44Z11</b>		<b>BP•H5•Z11</b>		<b>BP•H54Z11</b>	
<b>X11</b> Non overlapping Slow Action Contacts (1NO + 1NC)		<b>Order Code</b>	<b>BP•H44X11</b>		<b>BP•H5•X11</b>		<b>BP•H54X11</b>	
<b>Y11</b> Overlapping Slow Action Contacts (1NO + 1NC)		<b>Order Code</b>	<b>BP•H44Y11</b>		<b>BP•H5•Y11</b>		<b>BP•H54Y11</b>	
<b>W02</b> Slow Action Contacts (2NC)		<b>Order Code</b>	<b>BP•H44W02</b>		<b>BP•H5•W02</b>		<b>BP•H54W02</b>	
<b>W20</b> Slow Action Contacts (2NO)		<b>Order Code</b>	<b>BP•H44W20</b>		<b>BP•H5•W20</b>		<b>BP•H54W20</b>	
<b>Z02</b> Snap Action Contacts (2NC)		<b>Order Code</b>	<b>BP•H44Z02</b>		<b>BP•H5•Z02</b>		<b>BP•H54Z02</b>	
<b>X12</b> Non overlapping Slow Action Contacts (1NO + 2NC)		<b>Order Code</b>	<b>BP•H44X12</b>		<b>BP•H5•X12</b>		<b>BP•H54X12</b>	
<b>X21</b> Non overlapping Slow Action Contacts (2NO + 1NC)		<b>Order Code</b>	<b>BP•H44X21</b>		<b>BP•H5•X21</b>		<b>BP•H54X21</b>	
<b>W03</b> Simultaneous Slow Action Contacts (3NC)		<b>Order Code</b>	<b>BP•H44W03</b>		<b>BP•H5•W03</b>		<b>BP•H54W03</b>	
<b>W30</b> Simultaneous Slow Action Contacts (3NO)		<b>Order Code</b>	<b>BP•H44W30</b>		<b>BP•H5•W30</b>		<b>BP•H54W30</b>	
<b>Weight (packing per unit)</b>		<b>[kg]</b>	<b>0,205</b>		<b>0,195</b>		<b>0,205</b>	

## Dimensions (in mm)





**H61 - Nylon actuator with stainless steel spring**

1,5  
0,15 / -



**H62 - Stainless steel spring actuator**

1,5  
0,15 / -



**H7 - Adjustable rod lever**

H71: stainless steel rod Ø3  
H73: fiberglass rod Ø3  
H75: square steel rod 3x3

1,5  
0,15 / 0,30



**H7 - Adjustable Ø6 rod lever**

H72: nylon rod  
H74: fiberglass rod

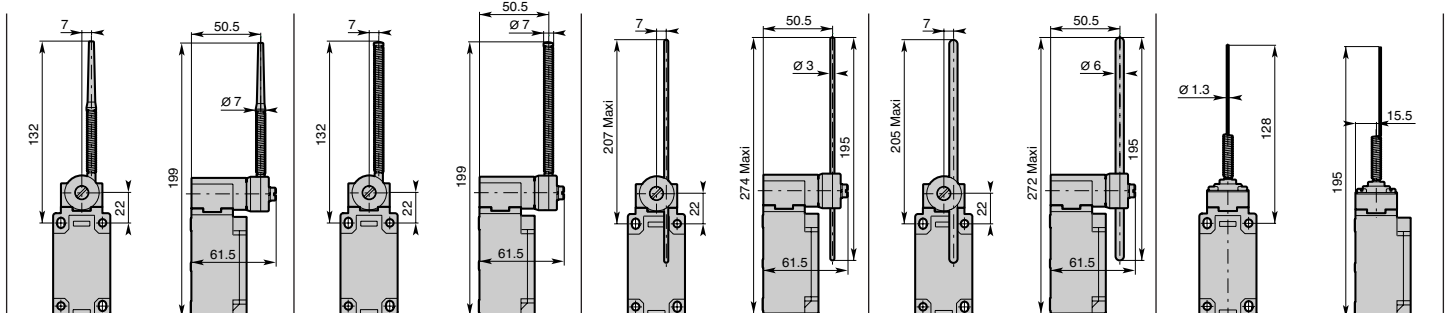
1,5  
0,15 / 0,30



**H91 - Stainless steel spring multidirectional actuator**

1,0  
0,18 / -

 <b>BP•H61Z11</b> 0 19° 31° 90° 21-22 13-14 13-14	 <b>BP•H62Z11</b> 0 19° 31° 90° 21-22 13-14 13-14	 <b>BP•H7•Z11</b> 0 19° 31° 47° 90° 21-22 13-14 13-14	 <b>BP•H7•Z11</b> 0 19° 31° 47° 90° 21-22 13-14 13-14	 <b>BP•H91Z11</b> 0 15° 27° 21-22 13-14 13-14
 <b>BP•H61X11</b> 0 21° 90° 21-22 13-14 30°	 <b>BP•H62X11</b> 0 21° 90° 21-22 13-14 30°	 <b>BP•H7•X11</b> 0 21° 37° 90° 21-22 13-14 30°	 <b>BP•H7•X11</b> 0 21° 37° 90° 21-22 13-14 30°	 <b>BP•H91X11</b> 0 18° 21-22 13-14 25°
 <b>BP•H61Y11</b> 0 34° 90° 21-22 13-14 19°	 <b>BP•H62Y11</b> 0 34° 90° 21-22 13-14 19°	 <b>BP•H7•Y11</b> 0 34° 50° 90° 21-22 13-14 19°	 <b>BP•H7•Y11</b> 0 34° 50° 90° 21-22 13-14 19°	 <b>BP•H91Y11</b> 0 30° 21-22 13-14 17°
 <b>BP•H61W02</b> 0 19° 90° 11-12 21-22	 <b>BP•H62W02</b> 0 19° 90° 11-12 21-22	 <b>BP•H7•W02</b> 0 19° 35° 90° 11-12 21-22	 <b>BP•H7•W02</b> 0 19° 35° 90° 11-12 21-22	 <b>BP•H91W02</b> 0 17° 11-12 21-22
 <b>BP•H61W20</b> 0 18° 90° 13-14 23-24	 <b>BP•H62W20</b> 0 18° 90° 13-14 23-24	 <b>BP•H7•W20</b> 0 18° 90° 13-14 23-24	 <b>BP•H7•W20</b> 0 18° 90° 13-14 23-24	 <b>BP•H91W20</b> 0 16° 13-14 23-24
 <b>BP•H61Z02</b> 0 19° 30° 90° 11-12 21-22 11-12 21-22	 <b>BP•H62Z02</b> 0 19° 30° 90° 11-12 21-22 11-12 21-22	 <b>BP•H7•Z02</b> 0 19° 30° 46° 90° 21-25 11-12 21-22	 <b>BP•H7•Z02</b> 0 19° 30° 46° 90° 21-25 11-12 21-22	 <b>BP•H91Z02</b> 0 15° 26° 11-12 21-22 11-12 21-22
 <b>BP•H61X12</b> 0 16° 90° 21-22 13-14 35°	 <b>BP•H62X12</b> 0 16° 90° 21-22 13-14 35°	 <b>BP•H7•X12</b> 0 16° 33° 90° 21-22 13-14 35°	 <b>BP•H7•X12</b> 0 16° 33° 90° 21-22 13-14 35°	 <b>BP•H91X12</b> 0 15° 21-22 13-14 32°
 <b>BP•H61X21</b> 0 17° 90° 31-32 13-14 23-24 35°	 <b>BP•H62X21</b> 0 17° 90° 31-32 13-14 23-24 35°	 <b>BP•H7•X21</b> 0 17° 34° 90° 31-32 13-14 23-24 35°	 <b>BP•H7•X21</b> 0 17° 34° 90° 31-32 13-14 23-24 35°	 <b>BP•H91X21</b> 0 16° 31-32 13-14 23-24 32°
 <b>BP•H61W03</b> 0 16° 90° 21-22 31-32	 <b>BP•H62W03</b> 0 16° 90° 21-22 31-32	 <b>BP•H7•W03</b> 0 16° 33° 90° 11-12 31-32	 <b>BP•H7•W03</b> 0 16° 33° 90° 11-12 31-32	 <b>BP•H91W03</b> 0 15° 11-12 31-32
 <b>BP•H61W30</b> 0 21° 90° 13-14 23-24	 <b>BP•H62W30</b> 0 21° 90° 13-14 23-24	 <b>BP•H7•W30</b> 0 21° 90° 13-14 23-24	 <b>BP•H7•W30</b> 0 21° 90° 13-14 23-24	 <b>BP•H91W30</b> 0 19° 13-14 23-24
<b>0,190</b>	<b>0,195</b>	<b>0,185</b>	<b>0,185</b>	<b>0,150</b>



## Electrical Connection

**BP1:** one cable inlet for PG 13,5 Cable Gland

**BP2:** one cable inlet for 1/2" NPT Cable Gland

**BP5:** one cable inlet for M20 x 1,5 Cable Gland

## Operating Head Type



**H92 - Multidirectional nylon actuator with stainless steel spring**

**H93 - Stainless steel spring multidirectional actuator**

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

1,0  
0,18 / -

1,0  
0,18 / -

## Additional Technical Datas

<b>Z11</b> Snap Action Contacts (1NO + 1NC)		<b>Order Code</b> Operation Diagram	<b>BP•H92Z11</b> 	<b>BP•H93Z11</b> 
<b>X11</b> Non overlapping Slow Action Contacts (1NO + 1NC)		<b>Order Code</b> Operation Diagram	<b>BP•H92X11</b> 	<b>BP•H93X11</b> 
<b>Y11</b> Overlapping Slow Action Contacts (1NO + 1NC)		<b>Order Code</b> Operation Diagram	<b>BP•H92Y11</b> 	<b>BP•H93Y11</b> 
<b>W02</b> Slow Action Contacts (2NC)		<b>Order Code</b> Operation Diagram	<b>BP•H92W02</b> 	<b>BP•H93W02</b> 
<b>W20</b> Slow Action Contacts (2NO)		<b>Order Code</b> Operation Diagram	<b>BP•H92W20</b> 	<b>BP•H93W20</b> 
<b>Z02</b> Snap Action Contacts (2NC)		<b>Order Code</b> Operation Diagram	<b>BP•H92Z02</b> 	<b>BP•H93Z02</b> 
<b>X12</b> Non overlapping Slow Action Contacts (1NO + 2NC)		<b>Order Code</b> Operation Diagram	<b>BP•H92X12</b> 	<b>BP•H93X12</b> 
<b>X21</b> Non overlapping Slow Action Contacts (2NO + 1NC)		<b>Order Code</b> Operation Diagram	<b>P•H92X21</b> 	<b>BP•H93X21</b> 
<b>W03</b> Simultaneous Slow Action Contacts (3NC)		<b>Order Code</b> Operation Diagram	<b>BP•H92W03</b> 	<b>BP•H93W03</b> 
<b>W30</b> Simultaneous Slow Action Contacts (3NO)		<b>Order Code</b> Operation Diagram	<b>BP•H92W30</b> 	<b>BP•H93W30</b> 
<b>Weight (packing per unit)</b>		<b>[kg]</b>	<b>0,155</b>	<b>0,160</b>

## Dimensions (in mm)

