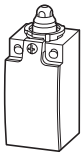


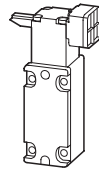


Position switches



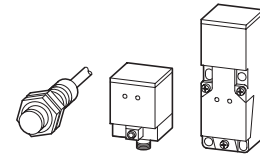
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Safety position switches



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Inductive proximity switches

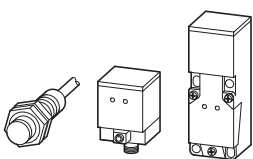


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Position switches, proximity switches, pressure switches



Capacitive proximity switches



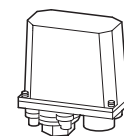
	Page
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Optical proximity switches



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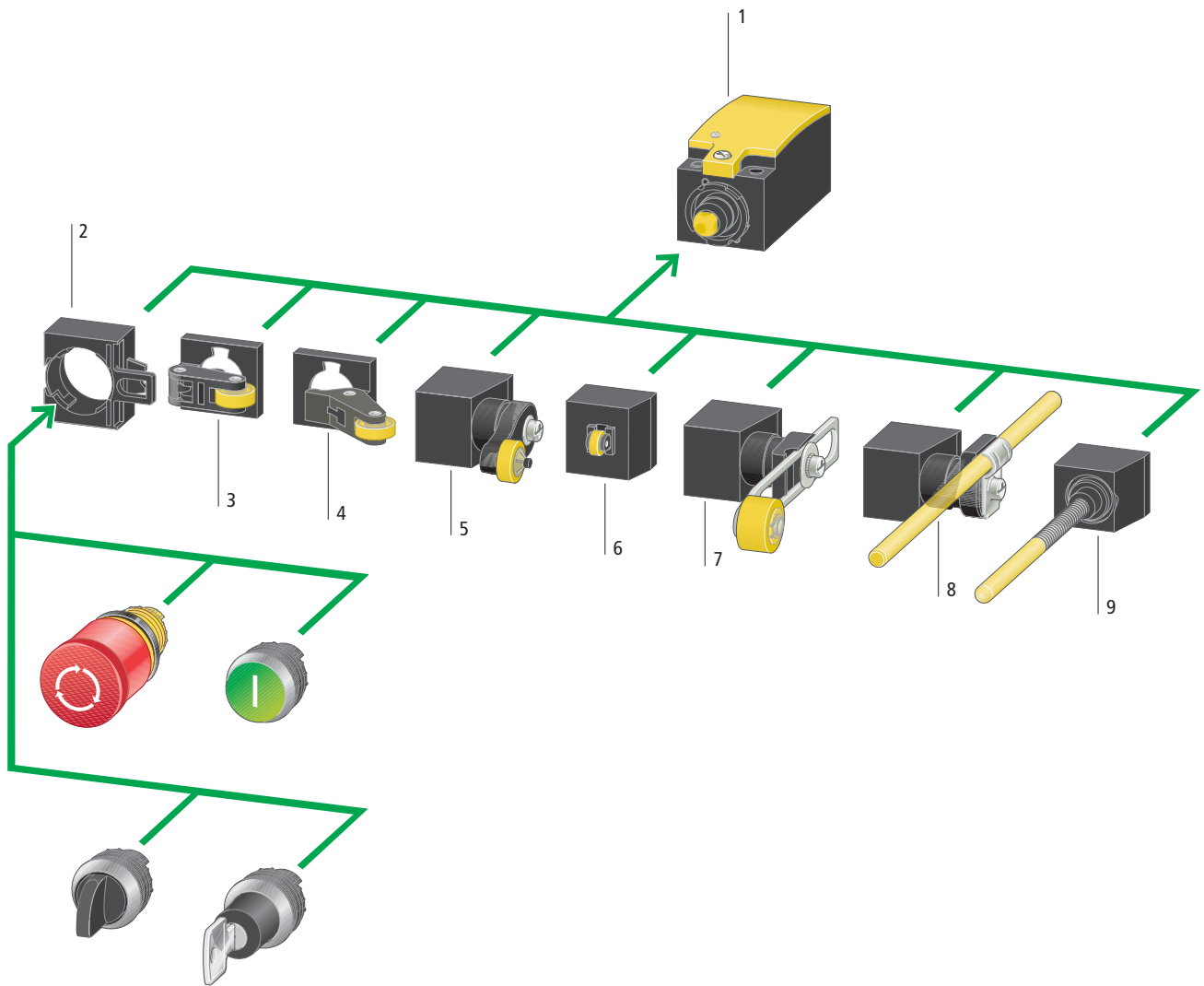
Pressure switches



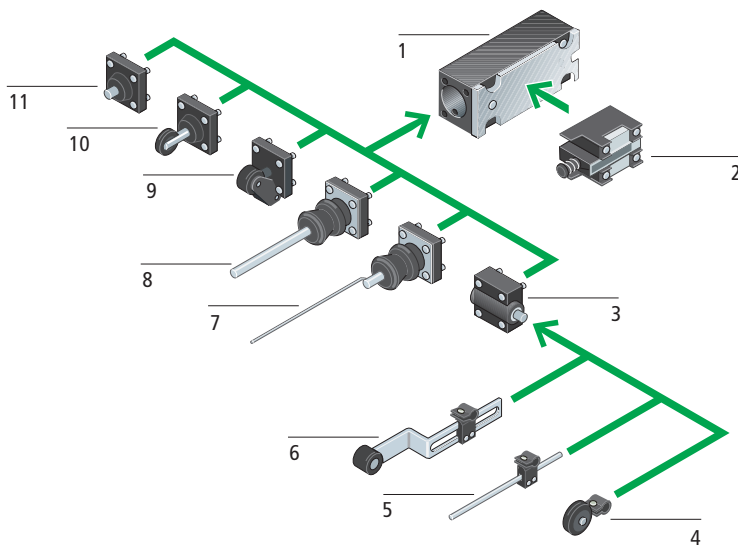
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LS, LSM

Position switches, proximity switches, pressure switches



AT4




Moeller HPL0211-2004/2005

LS, LSM		Operating heads Can be rotated by 90°		Operating heads Can be rotated by 90°	
Basic units		Fixing adapter 2		Roller plunger 6	
Basic unit 1		Actuation through front elements RMQ-Titan®		For transverse actuation with low actuating force	
To EN 50047		Roller lever 3		Adjustable roller lever 7	
With screw-on cover		For one-sided operation with higher operating speed		For length adjustment as required	
Contacts: 1M/1B, 2M, 2B		Angled roller lever 4		Actuating rod 8	
Cage-Clamp		For actuation along the unit axis		On conveyor belts for lightweight goods	
As snap-action or standard-action switch		Rotary lever 5		Spring-rod 9	
As electronic snap-action switch, (individually adjustable)		For transverse actuation, for pendulum movements		For flexible actuation from any side	
As 4-20 mA analog signal encoder					
As 0-10 V DC analog signal encoder					
→ page 3/4		→ page 3/12		→ page 3/12	

AT4		Operating heads Can be rotated by 90°		Operating heads Can be rotated by 90°	
Enclosures/switch mechanisms		Rotary drive head 3		Spring-rod head 8	
AT4 enclosure 1		For use in combination with more than 30 roller heads		For flexible actuation from all sides with steel spring-rods	
Narrow enclosure		Actuating roller lever 4		Actuating roller head 9	
To EN 50041		With various lever lengths and roller diameters		For one-sided operation with higher operating speed	
→ page 3/9		Actuating rod 5		Roller plunger head 10	
Switch mechanisms 2		With plastic rod or adjustable aluminium rod		For transverse actuation with low wear	
Snap-action or standard-action switch		Adjustable roller lever 6		Plunger head 11	
Overlapping contact-making method		For length adjustment as required		With steel cap for operation with hot operating elements	
Contacts: 1M/1B		Spring-rod head 7			
→ page 3/9		For flexible actuation from all sides with steel spring-rods		→ page 3/15	
		→ page 3/15			

LS, LSM and AT4 product features

- Modular system
- IP65 and IP66 degree of protection
-  (except LSM)
- Personnel protection
- Positive operation
- ☉ Safety function by positive opening of contacts to IEC/EN 60947-5-1
- Up to safety category 4 to EN 954-1
- Suitable for use with electronic devices to IEC/EN 61131-2
- Devices for world markets

Notes Do not use as a mechanical stop/shipping brace.
Cage-Clamp is a registered trademark of Wago Kontakttechnik/Minden, Germany.



<p>Contacts M = Make B = Break ⊕ = positive opening safety function to IEC/EN 60947-5-1</p> <p>M = Make B = Break</p>	<p>Circuit-symbol</p>	<p>Contact sequence ■ = Contact closed □ = Contact open Zw = Positive opening sequence</p>	<p>Enclosure cover colour</p>	<p>Plastic version Type Article no.</p>	<p>Price See Price List</p>	<p>Std. pack</p>
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Electronically adjustable operating point, IP66

Basic unit
Visible status display, comparable with positive opening function



	1 M	1 B				<p>LSE-11 266121</p>	2 off
	-	2 B				<p>LSE-02 266122</p>	2 off

Analog electronic position switches, IP66

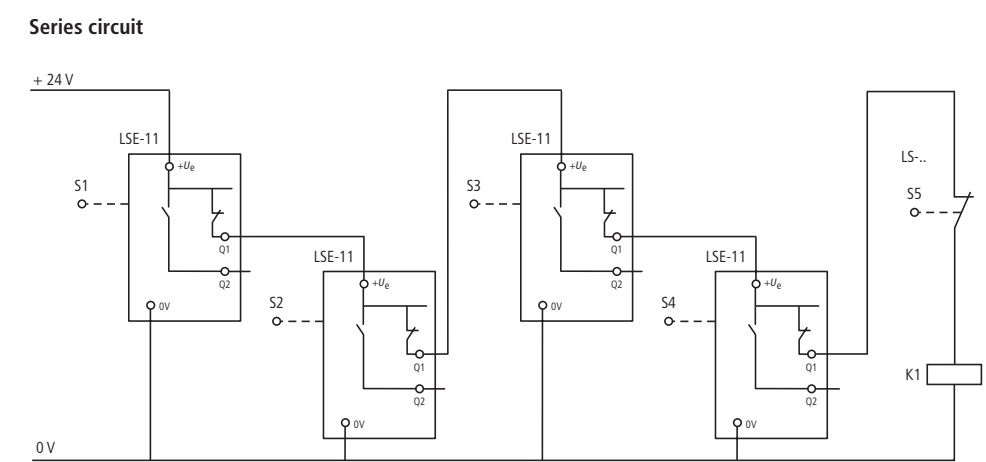
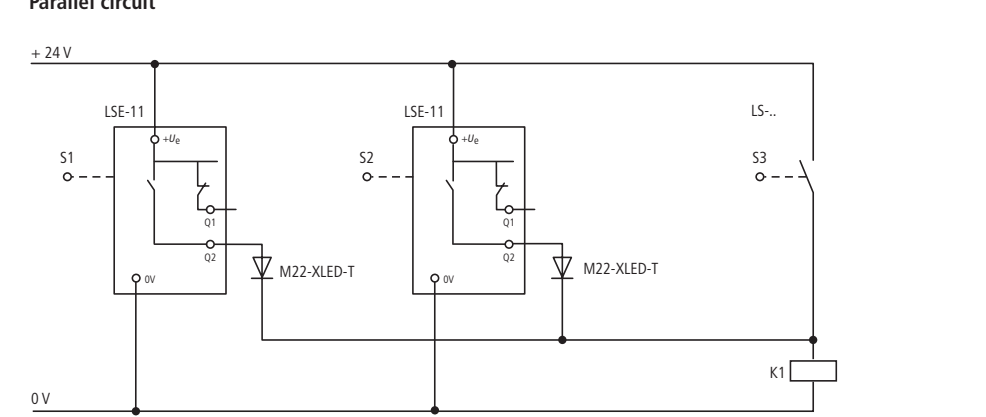
Basic unit
Visual status indication
Q1 = analog output
Q2 = diagnostics output

4 – 20 mA			<p>LSE-AI 269461</p>	2 off
0 – 10 V			<p>LSE-AU 274096</p>	2 off

Individual operating point adjustment:



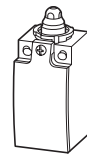

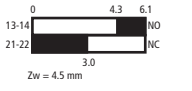

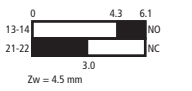

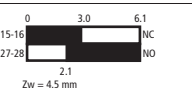

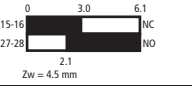

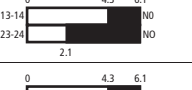

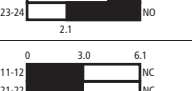

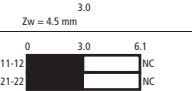





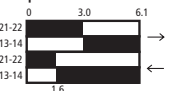
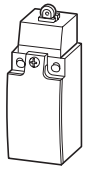

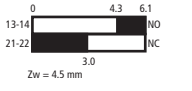

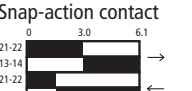
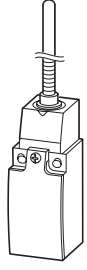

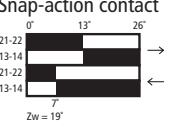
Circuit examples
LSE-11 and LSE-02 can be used in safety-oriented circuits.



S1 is connected to 24 V DC
S2, S3, S4 each switch with a delay of 0.7 s

Position switches, proximity switches, pressure switches

Position switches, proximity switches, pressure switches

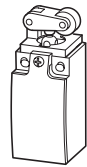

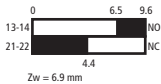

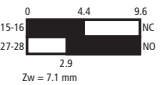



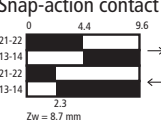
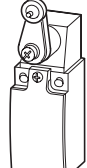

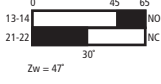

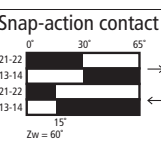
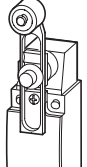

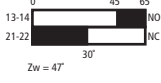

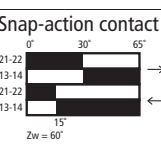
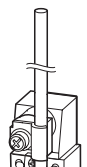

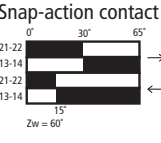
		Contacts	Circuit-symbol	Contact sequence	Enclosure cover colour	Plastic version	Price	Std. pack
		M = Make B = Break ⊕ = positive opening safety function to IEC/EN 60947-5-1		■ = Contact closed □ = Contact open Zw = Positive opening sequence		Type Article no.	See Price List	
		M = Make B = Break						
Rounded plunger, IP66								
Basic unit								
	1 M	1 B ⊕			Yellow	LS-11 266109		10 off
	1 M	1 B ⊕			Black	LS-11-SW 272006		
	1 M	1 B ⊕			Yellow	LS-11D 266114		
	1 M	1 B ⊕			Black	LS-11D-SW 272007		
	2 M	-			Yellow	LS-20 266120		
	2 M	-			Black	LS-20-SW 272008		
	-	2 B ⊕			Yellow	LS-02 266107		
	-	2 B ⊕			Black	LS-02-SW 272009		
	1 M	1 B ⊕			Yellow	LS-11S 266105		
	1 M	1 B ⊕			Black	LS-11S-SW 272020		
Roller plunger, IP66								
	1 M	1 B ⊕			Yellow	LS-11/P 266112		2 off
	1 M	1 B ⊕			Yellow	LS-11S/P 266118		2 off
Spring-rod actuator, IP66								
	1 M	1 B ⊕			Yellow	LS-11S/S 266104		2 off

		Metal version	Price	Std. pack
		Type Article no.	See Price List	
LSM-11 266144		2 off		EN 50047 Form B
				EN 50047 Form B
LSM-11D 266149		2 off		-
				-
LSM-20 266155		2 off		-
				-
LSM-02 266142		2 off		-
				-
LSM-11S 266140		2 off		EN 50047 Form B
				EN 50047 Form B
LSM-11/P 266147		2 off		EN 50047 Form C
LSM-11S/P 266153		2 off		EN 50047 Form C
LSM-11S/S 266139		2 off		Do not use spring-rod actuator as a safety position switch; admissible only with snap-action contact.



Position switches, proximity switches, pressure switches

Position switches, proximity switches, pressure switches

		Contacts	Circuit symbol	Contact sequence	Enclosure cover colour	Plastic version	Price	Std. pack
		M = Make B = Break ⊕ = positive opening safety function to IEC/EN 60947-5-1		■ = Contact closed □ = Contact open Zw = Positive opening sequence		Type Article no.	See Price List	
		M = Make B = Break						
Roller lever, IP66								
	1 M	1 B ⊕		 Zw = 6.9 mm	Yellow	LS-11/L 266110		2 off
	1 M	1 B ⊕		 Zw = 7.1 mm	Yellow	LS-11D/L 266115		
	-	2 B ⊕		 Zw = 6.9 mm	Yellow	LS-02/L 266108		
	1 M	1 B ⊕		Snap-action contact  Zw = 8.7 mm	Yellow	LS-11S/L 266116		
Rotary lever, IP66								
	1 M	1 B ⊕		 Zw = 47°	Yellow	LS-11/RL 266111		2 off
	1 M	1 B ⊕		Snap-action contact  Zw = 60°	Yellow	LS-11S/RL 266117		2 off
Adjustable roller lever, IP66								
	1 M	1 B ⊕		 Zw = 47°	Yellow	LS-11/RLA 266113		2 off
	1 M	1 B ⊕		Snap-action contact  Zw = 60°	Yellow	LS-11S/RLA 266119		2 off
Actuating rod, IP66								
	1 M	1 B ⊕		Snap-action contact  Zw = 60°	Yellow	LS-11S/RR 266106		4 off
Custom complete units								
(*) user-definable customer ID or stock no.; up to 10 characters						LS-COMBINATION-*		1 off
						266168		

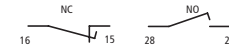
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		Type Article no.	See Price List	
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		LSM-11D/L 266150		-
		LSM-02/L 266143		-
		LSM-11S/L 266151		EN 50047 Form E
		LSM-11/RL 266146		2 off EN 50047 Form A
		LSM-11S/RL 266152		2 off EN 50047 Form A
		LSM-11/RLA 266148		2 off -
		LSM-11S/RLA 266154		2 off -
		LSM-11S/RR 266141		4 off -
				-



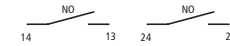
LS-11
LSM-11



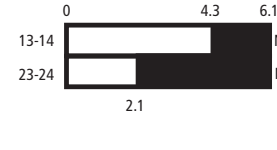
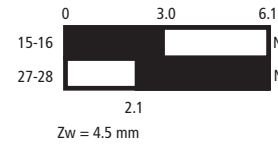
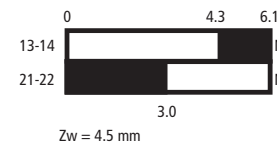
LS-11D
LSM-11D



LS-20
LSM-20



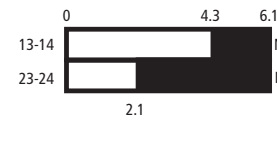
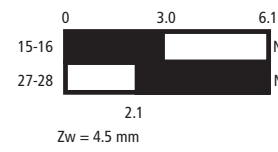
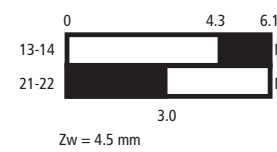
Basic units



Operating heads

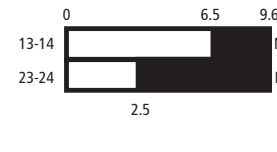
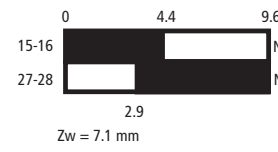
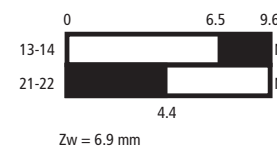
Roller plunger

LS-XP
LSM-XP



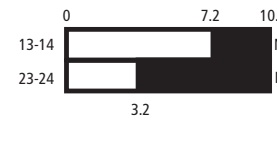
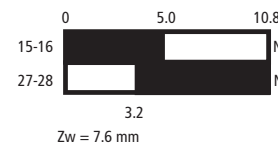
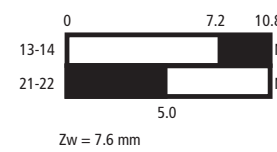
Roller lever

LS-XL
LSM-XL



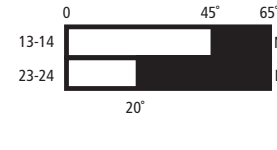
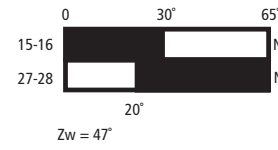
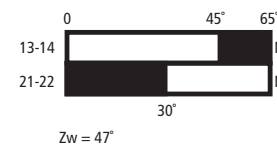
Angled roller lever

LS-XLA
LSM-XLA



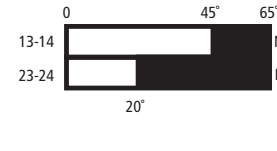
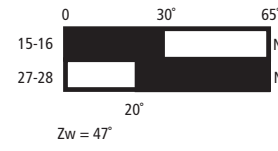
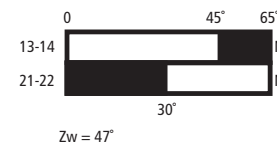
Rotary lever

LS-XRL
LSM-XRL



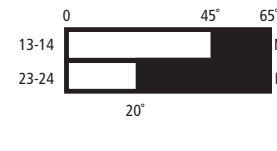
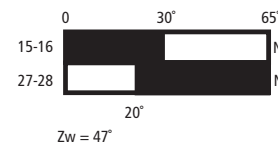
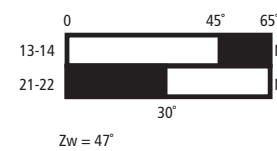
Adjustable roller lever

LS-XRLA
LSM-XRLA
LS-XRLA30
LS-XRLA40
LS-XRLA40R



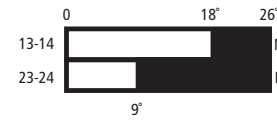
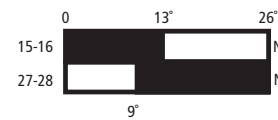
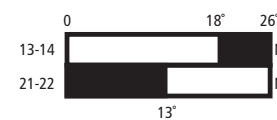
Actuating rod

LS-XRR
LSM-XRR
LS-XRRM
LSM-XRRM

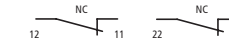


Spring-rod

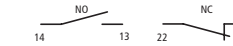
LS-XS
LSM-XS



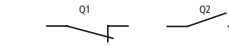
LS-02
LSM-02



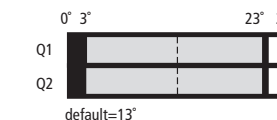
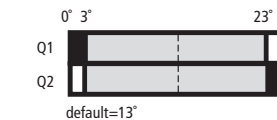
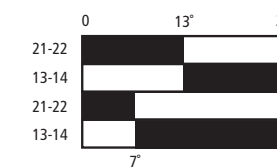
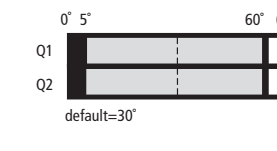
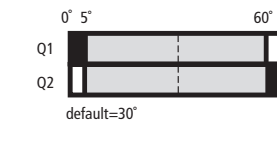
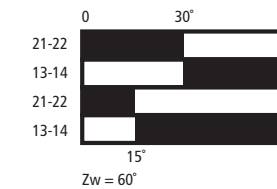
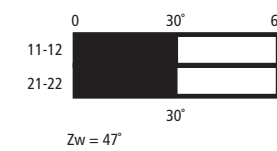
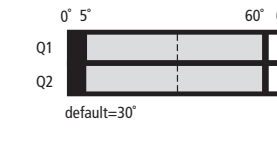
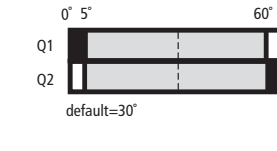
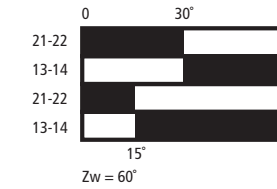
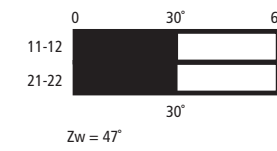
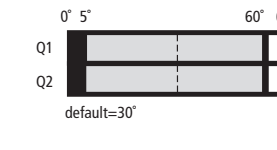
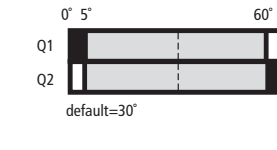
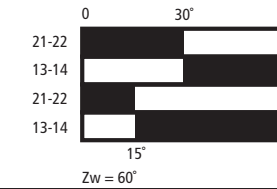
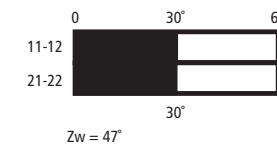
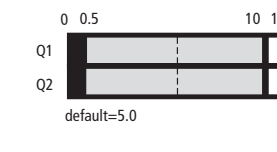
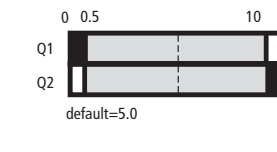
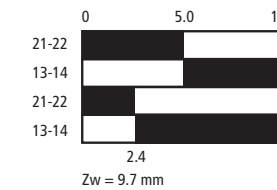
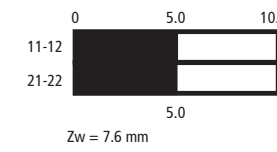
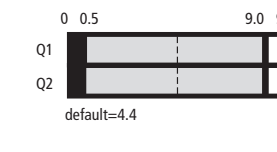
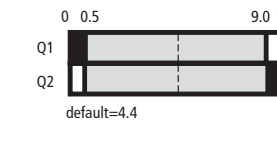
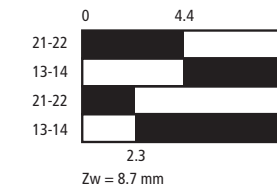
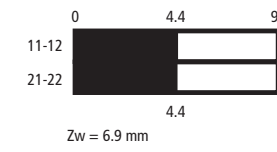
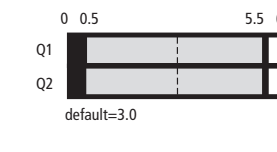
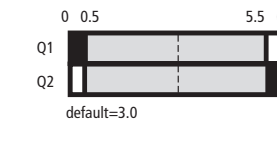
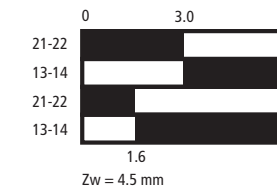
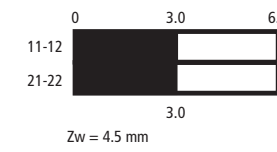
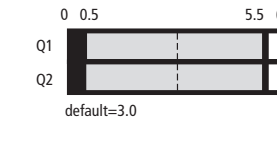
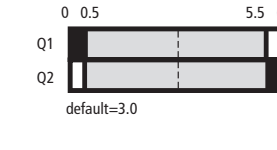
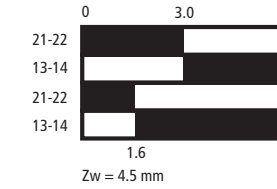
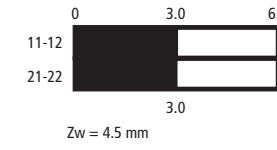
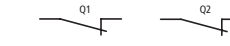
LS-11S
LSM-11S



LSE-11



LSE-02







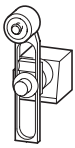
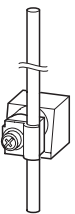
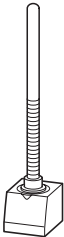

3/12 LS-Titan position switches

Operating heads

Moeller HPL0211-2004/2005

Position switches, proximity switches, pressure switches

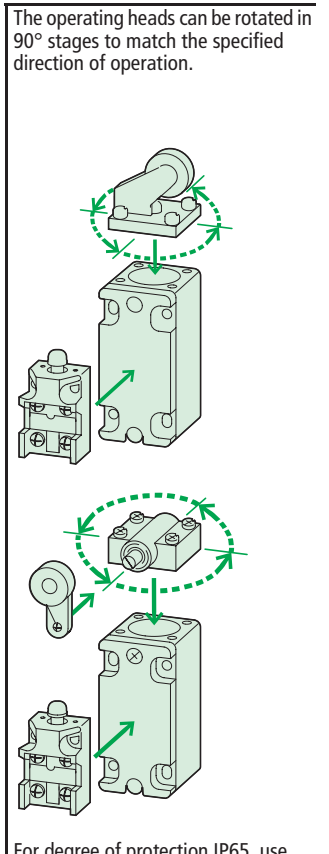


		Plastic version		Metal version		Std. pack	Notes	
		Type Article no.	Price See Price List	Type Article no.	Price See Price List			
Operating heads								
Roller plunger								
	-	LS-XP 266125		LSM-XP 266158		10 off	The operating heads can be rotated in 90 stages to match the specified direction of operation.	
Roller lever								
	-	LS-XL 266123		LSM-XL 266156		10 off		
Angled roller lever								
	-	LS-XLA 266124		LSM-XLA 266157		10 off		
Rotary lever								
	-	LS-XRL 266126		LSM-XRL 266159		10 off		
Adjustable roller lever								
	D = 18 mm	LS-XRLA 266127		LSM-XRLA 266160		5 off		
	D = 30 mm	LS-XRLA30 266128						
	D = 40 mm	LS-XRLA40 266129						
	D = 40 mm (rubber)	LS-XRLA40R 266130						
Actuating rod								
	Plastic rod	LS-XRR 266131		LSM-XRR 266161		5 off		
	Metal rod	LS-XRRM 266132		LSM-XRRM 266162		5 off		
Spring-rod								
Not to be used as a safety position switch Use only in conjunction with snap-action contact.								
	-	LS-XS 266133		LSM-XS 266163		5 off		
Fixing adapter								
Actuation through RMQ-Titan® front elements								
	-	M22-LS 266137				10 off	-	

Moeller HPL0211-2004/2005

Position switches, proximity switches, pressure switches

Contacts M = Make B = Break ⊕ = positive opening safety function to IEC/EN 60947-5-1		Circuit-symbol	Contact sequence ■ = Contact closed □ = Contact open Zw = positive opening sequence	Type Article no. Price See Price List	Std. pack	Notes
Complete unit IP65						
totally insulated						
Plunger						
1 M	1 B ⊕		 13-14 21-22 0 2,9 3,8 6 mm Zw = 4,1 mm		AT4/11-1/I/S 005244	1 off EN 50041 Form B
1 M	1 B ⊕		 13-14 21-22 0 1,8 3,2 6 mm Zw = 4,7 mm Snap-action contact		AT4/11-S/I/S 090673	1 off EN 50041 Form B
Roller plunger						
1 M	1 B ⊕		 13-14 21-22 0 2,4 3,3 5,7 mm Zw = 3,6 mm		AT4/11-1/I/RS 000498	1 off EN 50041 Form C
1 M	1 B ⊕		 13-14 21-22 0 1,3 2,7 5,7 mm Zw = 4,3 mm Snap-action contact		AT4/11-S/I/RS 085927	1 off EN 50041 Form C
Roller head						
1 M	1 B ⊕		 13-14 21-22 0 3,0 4,0 6,9 mm Zw = 4,4 mm		AT4/11-1/I/AR 085925	1 off -
1 M	1 B ⊕		 13-14 21-22 0 1,9 3,4 6,9 mm Zw = 5,1 mm Snap-action contact		AT4/11-S/I/AR 062197	1 off -
Rotary lever						
1 M	1 B ⊕		 13-14 21-22 0° 34° 44° 72° Zw = 50°		AT4/11-1/I/R316 095417	1 off EN 50041 Form A
1 M	1 B ⊕		 13-14 21-22 0° 22° 38° 72° Zw = 58° Snap-action contact		AT4/11-S/I/R316 081181	1 off EN 50041 Form A



For degree of protection IP65, use V-M20 cable glands with connecting thread of up to 9 mm length

Accessories	Page
V-M20 cable gland	→ 2/8



Contacts
 M = Make
 B = Break
 ⊕ = positive opening safety function to IEC/EN 60947-5-1

Contact sequence

Contact sequence
 ■ = Contact closed
 □ = Contact open
 Zw = Positive opening sequence

Type Article no.

Price See Price List

Std. pack

Notes

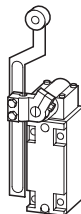
Complete unit IP65

totally insulated

Adjustable roller lever

1 M

1 B ⊕



AT4/11-1/I/V
009990

1 off

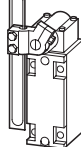
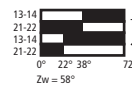
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1 M

1 B ⊕



Snap-action contact



AT4/11-S/I/V
095419

1 off

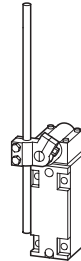
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Actuating rod

Not to be used as a safety position switch

1 M

1 B ⊕



AT4/11-1/I/H
090671

1 off

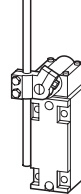
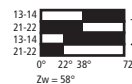
EN 50041
Form D

1 M

1 B ⊕



Snap-action contact



AT4/11-S/I/H
076435

1 off

EN 50041
Form D

Spring-rod

Not to be used as a safety position switch

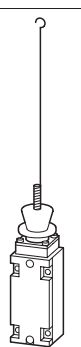
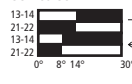
Spring-rod actuator rod length 160 mm

1 M

1 B ⊕



Snap-action contact



AT4/11-S/I/F
066943

1 off

–

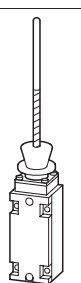
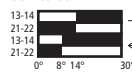
Spring-rod actuator rod length 130 mm

1 M

1 B ⊕



Snap-action contact

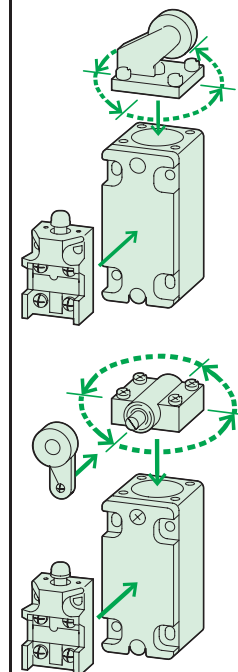


AT4/11-S/I/F2
071689

1 off

–

The operating heads can be rotated in 90° stages to match the specified direction of operation.



For degree of protection IP65, use V-M20 cable glands with connecting thread of up to 9 mm length

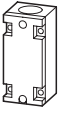




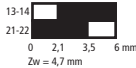

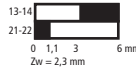

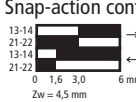





Accessories

Page

V-M20 cable gland

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
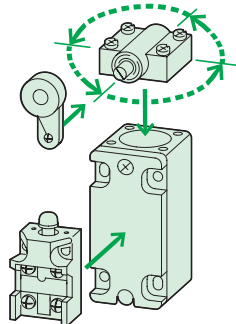
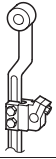


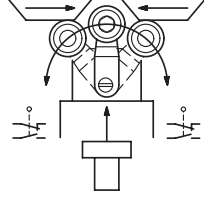

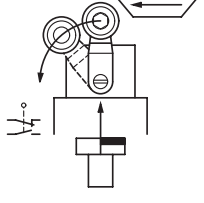
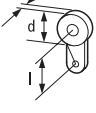
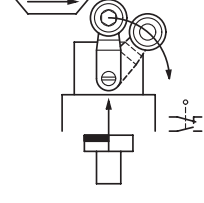
Moeller HPL0211-2004/2005

Contacts		Contact sequence	Contact sequence	Type Article no.	Price See Price List	Std. pack
M = Make	B = Break		■ = Contact closed □ = Contact open Zw = Positive opening sequence			
⊕ = positive opening safety function to IEC/EN 60947-5-1						
Insulated enclosures, IP65						
Narrow enclosure to EN 50041 For housing of switch mechanisms ATB11-...						
	-	-	-	I-AT4 055226		1 off
Switch mechanisms						
For fitting in I-AT4 insulated housings						
	1 M	1 B ⊕		 13-14 21-22 0 2,6 3,6 6 mm Zw = 3,9 mm	ATB11-1 069314	10 off
	1 M	1 B ⊕		 13-14 21-22 0 2,1 3,5 6 mm Zw = 4,7 mm	ATB11-2 071687	
	1 M	1 B ⊕		 13-14 21-22 0 1,1 3 6 mm Zw = 2,3 mm	ATB11-3 077210	
	1 M	1 B ⊕		Snap-action contact  13-14 21-22 13-14 21-22 0 1,6 3,0 6 mm Zw = 4,5 mm	ATB11-S 074060	
Operating heads						
For combination with I-AT4 insulated housings						
Plunger head According to EN 50041, Form B						
	-	-	-	S-AT4 095692		2 off
Roller plunger head To EN 50041, Form C						
	-	-	-	RS-AT4 024502		2 off
Actuating roller head For combination with I-AT4 insulated housings						
	-	-	-	AR-AT4 088344		2 off
Spring-rod actuator head, rod length 160 mm Use only with snap-action contact						
	-	-	-	F-AT4 090792		2 off
Spring-rod actuator head, rod length 130 mm Use only with snap-action contact						
	-	-	-	F2-AT4 036214		2 off

Position switches, proximity switches, pressure switches

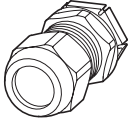





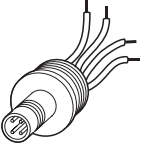


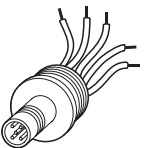




	Maximum transverse operating speed m/s	Angle of actuation Degrees	Lever length mm	Diameter d mm	Type Article no.	Price See Price List	Std. pack	Notes
Operating heads								
For combination with I-AT4 insulated housings								
Rotary drive head								
For H... fixing sundries, directional contacting								
	3 1.5	15 50	–	–	R-AT4 095687		2 off	<p>The operating heads can be rotated in 90° stages to match the specified direction of operation.</p> 
Actuators								
For adding R-AT4 rotary drive								
Adjustable roller lever								
	2.3 1.1	15 50	150	–	HV 019631		5 off	
Actuating rod								
With adjustable aluminium rod Not to be used as a safety position switch								
	1.4	–	190	–	HH-A 063268		10 off	<p>With the rotary drive, the method of establishing contact can be selected to suit the direction of operation simply by turning the plunger components.</p>
With plastic rod Not to be used as a safety position switch, admissible only as a snap-action contact								
	1.4	–	190	–	HH-K 063267		10 off	<p>Contacts made in both directions</p> 
Actuating roller lever								
With plastic roller								
	–	–	30	18	HR311 059970		1 off	<p>Only when actuated from the right</p> 
	–	–	30	40	HR317 071835			
	–	–	37.5	30	HR416 097938			
	–	–	50	50	HR518 048106			
<p>Only when actuated from the left</p> 								
<p>For degree of protection IP65, use V-M20 cable glands with connecting thread of up to 9 mm length.</p>								
Accessories								Page
V-M20 cable gland								→ 2/8

LS, LSM and AT position switches

Moeller HPL0211-2004/2005

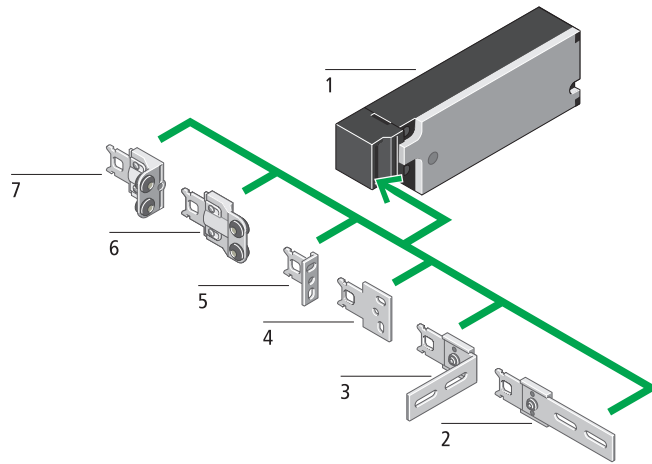
For use with	Type Article no.	Price See Price List	Std. pack	
M20 metric cable glands according to EN 50262				
<ul style="list-style-type: none"> • With lock nut and built-in strain relief • IP68 up to 5 bar, halogen free • External cable diameter 6 – 13 mm 	H05VV-F 4 x 2.5/3 x 4 mm ² NYM 5 x 1.5/5 x 2.5 mm ² Cables with external diameter 6 – 13 mm	V-M20 206910	20 off	Metric to EN 50262
Screw connection to fit M20 into 1/2"				
	For American pipe thread, metal	V1/2"/M20-NA 225269	10 off	The screw connection must be earthed; no total insulation
	For American pipe thread, moulded	V1/2"/M20 225270	10 off	–
M20 diaphragm bolt, IP65				
With integral push-through diaphragm External diameter of cable up to 13 mm IP65 with cable inserted				
	–	EMS20 225271	25 off	–
M20 screw closure				
(Self-sealing grommet) For tightening/loosening by using a standard wrench for sealing grommet plugs				
	–	LS-X20 266134	25 off	–

For use with	Type Article no.	Price See Price List	Std. pack	Description
Plug connector M12×1, IP66				
Moulded $I_{th} = 4 \text{ A}$ Fuse: 6 A gG/gL 4-pole $U_e = 250 \text{ V}$				
	LS	M12A 266135	10 off	"A" coded  Standard in IEC/EN 60947-5-2
	LS	M12B 266136	10 off	"B" coded 
5-pole $U_e = 125 \text{ V}$				
	LSM	M12A5 272202	1 off	"A" coded  Standard in IEC/EN 60947-5-2
	LSM	M12B5 272203	1 off	"B" coded 

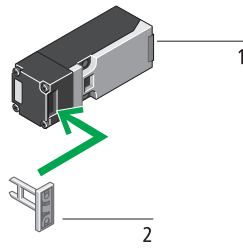
Position switches, proximity switches, pressure switches



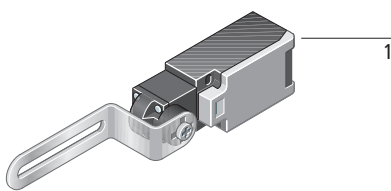
AT0...-ZBZ



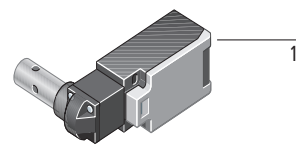
AT0...-ZB



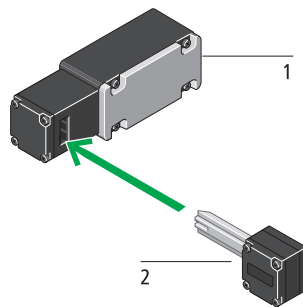
ATR.../TKG



ATR.../TS



AT4.../ZB



Moeller HPL0211-2004/2005

ATO...-ZBZ

Basic unit	1
Spring or magnet-powered interlock	
For increased personnel and process protection	
Tamper-proof	
Triple-coded actuators	
Contacts: 1 M/1 B or 2 B	
→ page 3/18	

Flat flexible actuator	2
For doors that do not close precisely	
→ page 3/19	

Angled flexible actuator	3
For doors that do not close precisely	
→ page 3/19	

Flat actuator	4
For sliding doors	
→ page 3/19	

Angled actuator	5
For swing doors	
→ page 3/19	

Flat compensating actuator	6
For enhanced tolerance compensation in the direction of door closure	
→ page 3/19	

Angled compensating actuator	7
For enhanced tolerance compensation in the direction of door closure	
→ page 3/19	

ATO...-ZB

Complete unit	1
For personnel protection	
Contacts: 1 B, 1 M/1 B or 2 B	
5 directions of operation possible	
→ page 3/20	

Actuator	2
Multiple coding protection against tampering	

ATR.../TKG

Complete unit	1
For personnel protection	
Contacts: 1 M/1 B or 2 B	
For swing doors with permanent connection to the door	
→ page 3/20	

ATR.../TS

Complete unit	1
For personnel protection	
Contacts: 1 M/1 B or 2 B	
For swing doors with permanent connection to the hinge pin	
→ page 3/20	

AT4.../ZB

Complete unit	1
Narrow version	
For personnel protection	
Contacts: 1B, 1M/1B	
→ page 3/20	

Actuator	2
Multiple coding	
For horizontal or vertical operation	

Product features

- Interlocking device to EN 1088
- For use in safety circuits
- ☉ Safety function by positive opening of contacts to IEC/EN 60947-5-1

- Degree of protection IP65
- Operating head can be rotated by $4 \times 90^\circ$
- With M20 \times 1.5 connection thread

totally insulated



Notes

Do not use as a mechanical stop/shipping brace.



Note!

Any change to an original Moeller safety position switch is not permitted and automatically leads to the loss of all approvals



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Safety components for mobile protective mechanisms



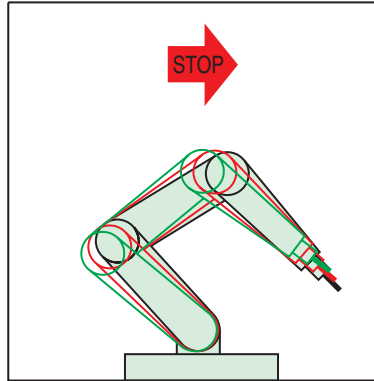
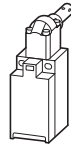
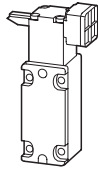
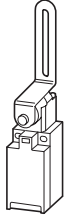
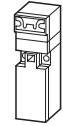
AT0-ZB

ATR/TKG

AT4/ZB

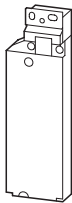
ATR/TS

"Personnel protection" by monitoring of the protective safety device

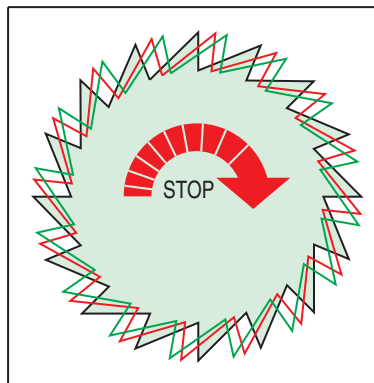


- Door open
- AT...ZB disconnects power
- No danger

AT 0-ZBZ

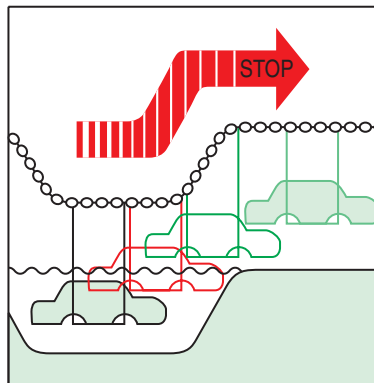


"Increased personnel protection" by monitoring and interlocking the protective mechanism



- Stop command
- Waiting time
- Machine stops
- Protective mechanism open
- No danger

"Process protection"



- Stop command
- Waiting time
- Process sequence halted
- Protective mechanism open
- Product OK

Position switches, proximity switches, pressure switches