



Compact models DC-PNP | Screw-in mounting

DC 24 V

PNP output

G1/2 thread



Design	G1/2 • L= 31 mm		G1/2 • L= 48 mm	
Dimensions				
Detection range [cm/s]	water 1...150 / oil 3...300			
Output				
Sensor length L [mm]	31	31	48	48
Thread	G1/2	G1/2	G1/2	G1/2
ID-No.	P11241*	P11161*	P11228*	P11162*
Type	SN 450-A4-GSP	SN 450-A4-GSP-S	SN 450/1-A4-GSP	SN 450/1-A4-GSP-S
Supply voltage [V]	24 DC ±20%			
Current consumption [mA]	< 60			
Switching current [mA]	< 400 (20 °C)			
Ambient temperature [°C]	-20...+70			
Medium temperature [°C]	-20...+80			
Temperature gradient [K/min]	250(> 60 cm/s)			
Start-up time typ. [s]	8 (2...15)			
Reaction time typ. [s]	2 (1...13)			
Compressive strength [bar]	100			
Sensor material	AISI 316 Ti • different materials on request			
Housing material	PBT			
Display flow	LED-array			
Protection [EN 60529]	IP 67			
Connection	2 m PVC-cable 3x0.5 mm ²	M12 connector	2 m PVC-cable 3x0.5 mm ²	M12 connector
* US LISTED E304328				
Accessories	connecting cable type SLG 3-2, SLG 3-5, SLW 3-2, SLW 3-5, see page 1.114			



Compact models DC-Relay | Screw-in mounting

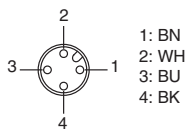
DC 24 V

Relay output

G1/2 thread



Design	G1/2 • L= 31 mm/48 mm		G1/2 • L= 31 mm/48 mm	
Dimensions				
Detection range [cm/s]	water 1...150 / oil 3...300			
Output	Relay		Relay	
Sensor length L [mm]	31	48	31	48
Thread	G1/2	G1/2	G1/2	G1/2
ID-No.	P11115	P11078	P11116	P11086
Type	SN 450-A4-GR	SN 450/1-A4-GR	SN 450-A4-GRS	SN 450/1-A4-GRS
Supply voltage [V]	24 DC ±20%			
Current consumption [mA]	< 80			
switching voltage max. [V]	250 AC / 60 DC		30 AC / 36 DC	
Switching current max. [mA]	4 A AC / 4 A DC		1 A AC / 1 A DC	
Switching power max.	1000 VA / 60 W		-	
Ambient temperature [°C]	-20...+70			
Medium temperature [°C]	-20...+80			
Temperature gradient [K/min]	250 (> 60 cm/s)			
Start-up typ. [s]	8 (2...15)			
Reaction time typ. [s]	2 (1...13)			
Compressive strength [bar]	100			
Sensor material	AISI 316 Ti • different materials on request			
Housing material	PBT			
Display flow	LED-array			
Protection [EN 60529]	IP 67			
Connection	2 m PVC-cable 5x0.5 mm ²		M12 connector	
Accessories	connecting cable type SLG 4-2, SLG 4-5, SLW 4-2, SLW 4-5, see page 1.114			





Compact models AC-Relay | Screw-in mounting

AC 230 V • AC 115 V

Relay output

G1/2 thread



Design	G1/2 • L= 31 mm		G1/2 • L= 48 mm	
Dimensions				
Detection range [cm/s]	water 1...150 / oil 3...300			
Output	 Relay			
Sensor length L [mm]	31	31	48	48
Thread	G1/2	G1/2	G1/2	G1/2
ID-No.	P11113	P11114	P11074	P11076
Type	SN 450-A4-WR1	SN 450-A4-WR2	SN 450/1-A4-WR1	SN 450/1-A4-WR2
Supply voltage [V]	115 AC ±15%	230 AC ±15%	115 AC ±15%	230 AC ±15%
Current consumption [mA]	< 60	< 30	< 60	< 30
Switching voltage max. [V]	250 AC / 60 DC			
Switching current max. [mA]	4 A AC / 4 A DC			
Switching power max.	1000 VA / 60 W			
Ambient temperature [°C]	-20...+70			
Medium temperature [°C]	-20...+80			
Temperature gradient [K/min]	250 (> 60 cm/s)			
Start-up time typ. [s]	8 (2...15)			
Reaction time typ. [s]	2 (1...13)			
Compressive strength [bar]	100			
Sensor material	AISI 316 Ti • different materials on request			
Housing material	PBT			
Display flow	LED-array			
Protection [EN 60529]	IP 67			
Connection	2 m PVC-cable 5x0.5 mm ²			



Compact models AC/DC | Extra long

AC 230 V • AC 115 V • DC 24 V

Relay output

G1/2 thread



Design	G1/2 • L= 80 mm			G1/2 • L= 120 mm		
Dimensions						
Detection range [cm/s]	water 1...150 / oil 3...300					
Output	 Relay					
Sensor length L [mm]	80	80	80	120	120	120
Thread	G1/2	G1/2	G1/2	G1/2	G1/2	G1/2
ID-No.	P11079	P11080	P11081	P11082	P11083	P11084
Type	SN 450/2-A4-WR1	SN 450/2-A4-WR2	SN 450/2-A4-GR	SN 450/3-A4-WR1	SN 450/3-A4-WR2	SN 450/3-A4-GR
Supply voltage [V]	115 AC ±15%	230 AC ±15%	24 DC ±20%	115 AC ±15%	230 AC ±15%	24 DC ±20%
Current consumption [mA]	< 60	< 30	< 80	< 60	< 30	< 80
Switching voltage max. [V]	250 AC / 60 DC					
Switching current max. [mA]	4 A AC / 4 A DC					
Switching power max.	1000 VA / 60 W					
Ambient temperature [°C]	-20...+70					
Medium temperature [°C]	-20...+80					
Temperature gradient [K/min]	250 (> 60 cm/s)					
Start-up time typ. [s]	8 (2...15)					
Reaction time typ. [s]	2 (1...13)					
Compressive strength [bar]	100					
Sensor material	AISI 316 Ti • different materials on request					
Housing material	PBT					
Display flow	LED-array					
Protection [EN 60529]	IP 67					
Connection	2 m PVC-cable 5x0.5 mm ²					



Compact models AC-Relay | Screw-in mounting

AC 230 V • AC 115 V

Relay output

G1/2 thread



Design	G1/2 • L= 31 mm		G1/2 • L= 48 mm		
Dimensions					
Detection range	[cm/s]	water 1...150 / oil 3...300			
Output		 Relay			
Sensor length L	[mm]	31	31	48	48
Thread		G1/2	G1/2	G1/2	G1/2
ID-No.		P11113	P11114	P11074	P11076
Type		SN 450-A4-WR1	SN 450-A4-WR2	SN 450/1-A4-WR1	SN 450/1-A4-WR2
Supply voltage	[V]	115 AC ±15%	230 AC ±15%	115 AC ±15%	230 AC ±15%
Current consumption	[mA]	< 60	< 30	< 60	< 30
Switching voltage max.	[V]	250 AC / 60 DC			
Switching current max.	[mA]	4 A AC / 4 A DC			
Switching power max.		1000 VA / 60 W			
Ambient temperature	[°C]	-20...+70			
Medium temperature	[°C]	-20...+80			
Temperature gradient	[K/min]	250 (> 60 cm/s)			
Start-up time typ.	[s]	8 (2...15)			
Reaction time typ.	[s]	2 (1...13)			
Compressive strength	[bar]	100			
Sensor material		AISI 316 Ti • different materials on request			
Housing material		PBT			
Display flow		LED-array			
Protection	[EN 60529]	IP 67			
Connection		2 m PVC-cable 5x0.5 mm ²			



Compact models AC/DC | Extra long

AC 230 V • AC 115 V • DC 24 V

Relay output

G1/2 thread



Design	G1/2 • L= 80 mm			G1/2 • L= 120 mm		
Dimensions						
Detection range [cm/s]	water 1...150 / oil 3...300					
Output	 Relay					
Sensor length L [mm]	80	80	80	120	120	120
Thread	G1/2	G1/2	G1/2	G1/2	G1/2	G1/2
ID-No.	P11079	P11080	P11081	P11082	P11083	P11084
Type	SN 450/2-A4-WR1	SN 450/2-A4-WR2	SN 450/2-A4-GR	SN 450/3-A4-WR1	SN 450/3-A4-WR2	SN 450/3-A4-GR
Supply voltage [V]	115 AC ±15%	230 AC ±15%	24 DC ±20%	115 AC ±15%	230 AC ±15%	24 DC ±20%
Current consumption [mA]	< 60	< 30	< 80	< 60	< 30	< 80
Switching voltage max. [V]	250 AC / 60 DC					
Switching current max. [mA]	4 A AC / 4 A DC					
Switching power max.	1000 VA / 60 W					
Ambient temperature [°C]	-20...+70					
Medium temperature [°C]	-20...+80					
Temperature gradient [K/min]	250 (> 60 cm/s)					
Start-up time typ. [s]	8 (2...15)					
Reaction time typ. [s]	2 (1...13)					
Compressive strength [bar]	100					
Sensor material	AISI 316 Ti • different materials on request					
Housing material	PBT					
Display flow	LED-array					
Protection [EN 60529]	IP 67					
Connection	2 m PVC-cable 5x0.5 mm ²					



Compact models DC-Analog | Screw-in mounting

DC 24 V

Analog output 4...20 mA

G1/2 thread



Design	G1/2 • L= 31 mm		G1/2 • L= 48 mm			
Dimensions						
Detection range [cm/s]	Water	5...150	5...300	5...150	5...300	5...150
	Oil					3...300
Output	 4...20 mA					
Sensor length L [mm]	31	31	48	48	48	
Thread	G1/2	G1/2	G1/2	G1/2	G1/2	
ID-No.	P11121*	P11118*	P11095*	P11122*	P11239*	
Type	SN 450 GA	SN 450 GA-3M	SN 450/1 GA	SN 450/1 GA-3M	SN 450/1 GAN-S	
Supply voltage [V]	24 DC ±10%					
Current consumption [mA]	<100					
Current output [mA]	4...20, linear			4...20, non linear		
Load R _L [Ω]	200...500					
Ambient temperature [°C]	-20...+70					
Medium temperature [°C]	-20...+80					
Start-up time typ. [s]	8...60					
Reaction time typ. [s]	3					
Compressive strength [bar]	100					
Sensor material	AISI 316 Ti • different materials on request					
Housing material	PBT					
Display flow	LED-array					
Protection [EN 60529]	IP 65					
Connection	M12 connector					
* US LISTED E304328						
Accessories	connecting cable type SLG 3-2 (Z01076), see page 1.114					



Compact models DC-2x PNP | Screw-in mounting

DC 24 V

PNP output

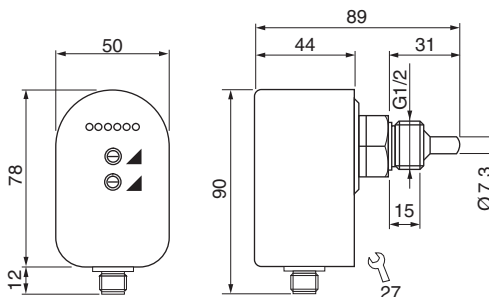
G1/2 thread

Two independent switching points



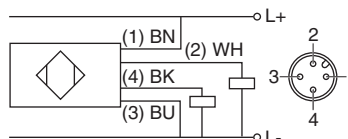
Design **G1/2 • L= 31 mm**

Dimensions



Detection range	[cm/s]	water 1...150 / oil 3...300
Output		2x PNP
Sensor length L	[mm]	31
Thread		G1/2
ID-No.		P11264*
Type		SN 450 GPP
Supply voltage	[V]	24 DC ±20%
Current consumption	[mA]	< 60
Switching current max.	[mA]	200 (20 °C) each output
Ambient temperature	[°C]	-20...+60
Medium temperature	[°C]	-20...+80
Temperature gradient	[K/min]	250 (>60 cm/s)
Start-up time typ.	[s]	8 (2...15)
Reaction time typ.	[s]	2 (1...13)
Compressive strength	[bar]	100
Sensor material		AISI 316 Ti • different materials on request
Housing material		PBT
Display flow		LED-array
Protection	[EN 60529]	IP 67
Connection		M12 connector

* US LISTED
E304328



Accessories connecting cable type SLG 4-2 (Z00445), see page 1.114



Compact models AC/DC | Turn on/off delay

AC 230 V • DC 24 V

Relay output

G1/2 thread



Design	Turn on delay	Turn off delay	
Dimensions			
Detection range [cm/s]	water 1...150 / oil 3...300		
Output	 Relay		
ID-No.	P11234	P11233	P11231
Type	SN 450/1 GR-VE	SN 450/1 GR-VA	SN 450/1 WR2-VA
Turn on delay [s]	0...25	-	-
Turn off delay [s]	-	0...25	0...25
Supply voltage [V]	24 DC ±20%	24 DC ±20%	230 AC ±15%
Current consumption [mA]	< 80	< 80	< 30
Switching voltage max. [V]	250 AC / 60 DC		
Switching current max. [A]	2 AC / 2 DC		
Switching power max.	500 VA / 60 W		
Ambient temperature [°C]	-20...+70		
Medium temperature [°C]	-20...+80		
Temperature gradient [K/min]	250 (> 60 cm/s)		
Start-up time typ. [s]	8 (2...15)		
Reaction time typ. [s]	2 (1...13)		
Compressive strength [bar]	100		
Sensor material	AISI 316 Ti • different materials on request		
Housing material	PBT		
Display flow	LED-array		
Protection [EN 60529]	IP 65		
Connection	2 m PVC-cable, 5x0.5 mm ²		