


**Sn = 2 mm**
**W I R E**

- full stainless steel housing 1.4404 (A4)
- designed for the food industry
- protection class IP 69K

**general data**

mounting type	quasi shielded
special type	full metal housing ( <i>DuroProx</i> )
nominal sensing distance Sn	2 mm
hysteresis	2 ... 20 % of Sr

**electrical data**

switching frequency	< 150 Hz
voltage supply range +Vs	10 ... 30 VDC
current consumption max.	20 mA
voltage drop Vd	< 2 VDC
short circuit protection	yes
reverse polarity protection	yes

**mechanical data**

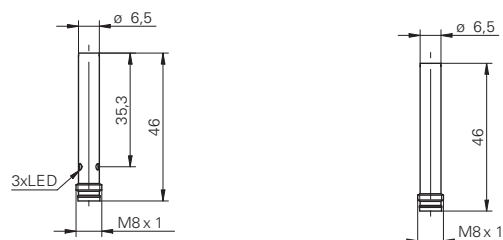
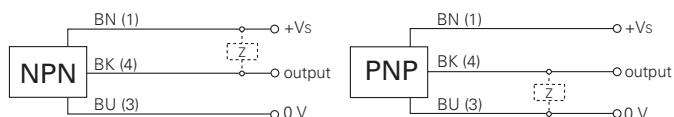
type	cylindrical smooth
material (sensing face)	stainless steel 1.4404 (V4A)
housing material	stainless steel 1.4404 (A4)
pressure static	< 20 bar
dimension	6 mm
housing length	46 mm
connection types	connector M8

**accessories**

connectors	ESW 31S, ESG 32S
------------	------------------

**remarks**

for correct installation refer to chapter 1 "mounting instructions"


**dimension drawings**

**connection diagrams**


order reference	output circuit	operating temperature	protection class	output indicator	output current
IFRD 06N17A1/S35L	NPN make function (NO)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 06N17T1/S35	NPN make function (NO)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA
IFRD 06N37A1/S35L	NPN break function (NC)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 06N37T1/S35	NPN break function (NC)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA
IFRD 06P17A1/S35L	PNP make function (NO)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 06P17T1/S35	PNP make function (NO)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA
IFRD 06P37A1/S35L	PNP break function (NC)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 06P37T1/S35	PNP break function (NC)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA



Sn = 2 mm

- full stainless steel housing 1.4404 (A4)
- designed for the food industry
- protection class IP 69K



**general data**

mounting type	quasi shielded
special type	full metal housing ( <i>DuroProx</i> )
nominal sensing distance Sn	2 mm
hysteresis	2 ... 20 % of Sr

**electrical data**

switching frequency	< 150 Hz
voltage supply range +Vs	10 ... 30 VDC
current consumption max.	20 mA
voltage drop Vd	< 2 VDC
short circuit protection	yes
reverse polarity protection	yes

**mechanical data**

type	cylindrical threaded
material (sensing face)	stainless steel 1.4404 (V4A)
housing material	stainless steel 1.4404 (A4)
pressure static	< 20 bar
dimension	8 mm
housing length	46 mm
connection types	connector M8

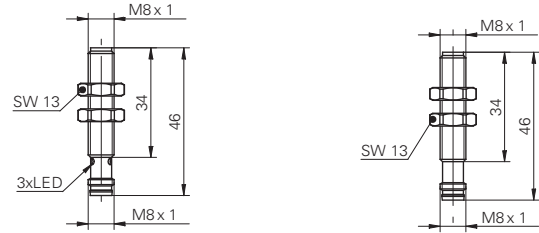
**accessories**

connectors	ESW 31S, ESG 32S
------------	------------------

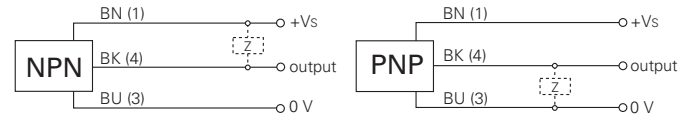
**remarks**

for correct installation refer to chapter 1 "mounting instructions"

**dimension drawings**



**connection diagrams**



order reference	output circuit	operating temperature	protection class	output indicator	output current
IFRD 08N17A1/S35L	NPN make function (NO)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 08N17T1/S35	NPN make function (NO)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA
IFRD 08N37A1/S35L	NPN break function (NC)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 08N37T1/S35	NPN break function (NC)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA
IFRD 08P17A1/S35L	PNP make function (NO)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 08P17T1/S35	PNP make function (NO)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA
IFRD 08P37A1/S35L	PNP break function (NC)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 08P37T1/S35	PNP break function (NC)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA


**Sn = 4 mm**
**W I R E**

- full stainless steel housing 1.4404 (A4)
- designed for the food industry
- protection class IP 69K

**general data**

mounting type	quasi shielded
special type	full metal housing ( <i>DuroProx</i> )
nominal sensing distance Sn	4 mm
hysteresis	2 ... 20 % of Sr

**electrical data**

switching frequency	< 100 Hz
voltage supply range +Vs	10 ... 30 VDC
current consumption max.	14 mA
voltage drop Vd	< 2 VDC
short circuit protection	yes
reverse polarity protection	yes

**mechanical data**

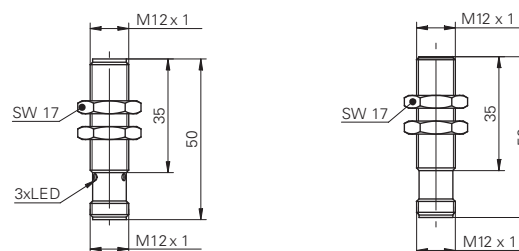
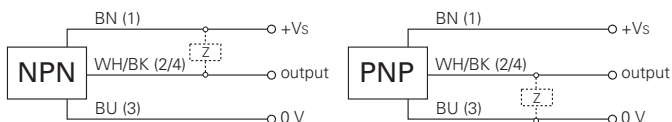
type	cylindrical threaded
material (sensing face)	stainless steel 1.4404 (V4A)
housing material	stainless steel 1.4404 (A4)
pressure static	< 20 bar
dimension	12 mm
housing length	50 mm
connection types	connector M12

**accessories**

connectors	ES 14, ES 18, ESW 33S, ESG 34S
------------	--------------------------------

**remarks**

for correct installation refer to chapter 1 "mounting instructions"


**dimension drawings**

**connection diagrams**


order reference	output circuit	operating temperature	protection class	output indicator	output current
IFRD 12N17A3/S14L	NPN make function (NO)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 12N17T3/S14	NPN make function (NO)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA
IFRD 12N37A3/S14L	NPN break function (NC)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 12N37T3/S14	NPN break function (NC)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA
IFRD 12P17A3/S14L	PNP make function (NO)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 12P17T3/S14	PNP make function (NO)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA
IFRD 12P37A3/S14L	PNP break function (NC)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 12P37T3/S14	PNP break function (NC)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA



Sn = 6 mm

- full stainless steel housing 1.4404 (A4)
- designed for the food industry
- protection class IP 69K



**general data**

mounting type	quasi shielded
special type	full metal housing ( <i>DuroProx</i> )
nominal sensing distance Sn	6 mm
hysteresis	2 ... 20 % of Sr

**electrical data**

switching frequency	< 100 Hz
voltage supply range +Vs	10 ... 30 VDC
current consumption max.	14 mA
voltage drop Vd	< 2 VDC
short circuit protection	yes
reverse polarity protection	yes

**mechanical data**

type	cylindrical threaded
material (sensing face)	stainless steel 1.4404 (V4A)
housing material	stainless steel 1.4404 (A4)
pressure static	< 20 bar
dimension	18 mm
housing length	60 mm
connection types	connector M12

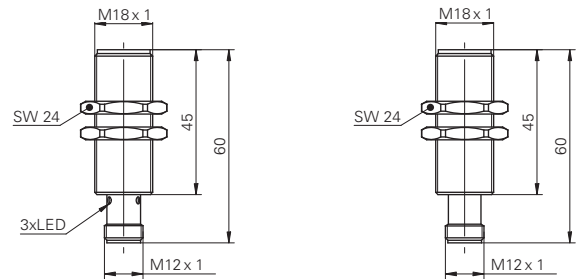
**accessories**

connectors	ES 14, ES 18, ESW 33S, ESG 34S
------------	--------------------------------

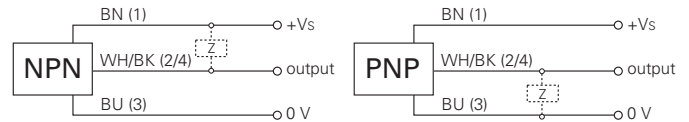
**remarks**

for correct installation refer to chapter 1 "mounting instructions"

**dimension drawings**



**connection diagrams**



order reference	output circuit	operating temperature	protection class	output indicator	output current
IFRD 18N17A3/S14L	NPN make function (NO)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 18N17T3/S14	NPN make function (NO)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA
IFRD 18N37A3/S14L	NPN break function (NC)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 18N37T3/S14	NPN break function (NC)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA
IFRD 18P17A3/S14L	PNP make function (NO)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 18P17T3/S14	PNP make function (NO)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA
IFRD 18P37A3/S14L	PNP break function (NC)	-25 ... +75 °C	IP 68/67 (sensing face/sensor)	3 port LED red	< 200 mA
IFRD 18P37T3/S14	PNP break function (NC)	-25 ... +100 °C	IP 69K (sensing face/sensor)	-	< 100 mA