

RLS080-040

STANDARD OPTICAL FRAME SENSOR

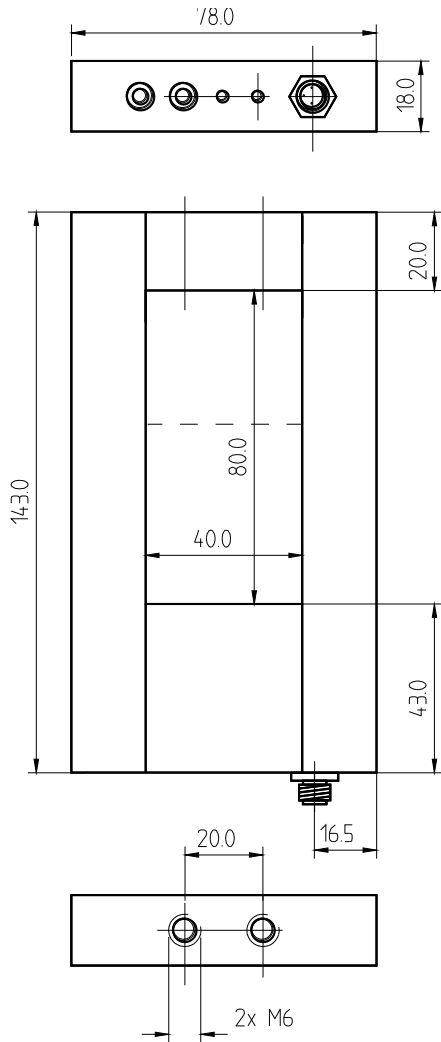
- ➔ dynamic working principle
- ➔ ideal for part ejection control
- ➔ manual adjustment
- ➔ robust design



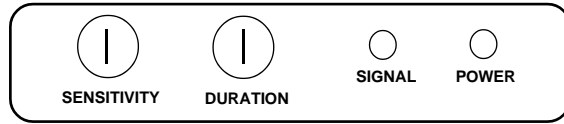
GENERAL TECHNICAL DATA

operating voltage	10...30 VDC, reversed polarity protection
current consumption	65 mA
output	PNP or NPN, 200mA, short-circuit proof
switching function	dark-on, dynamic
light type	Infrared
operating state indicator	LED green
function indicator	LED red
switching delay	440µsec
pulse stretching	7 ms to 300 ms (adjustable)
temperature range	-10°C to +55°C
protection class	IP65
opening	80 mm (active side) x 40 mm
dimensions (w x d x h)	78 mm x 143 mm x 18 mm
housing	aluminium, black anodized
resolution (smallest part)	objects ≥ 2mm
counting frequency	function of pulse stretching (max. 140 parts /s)
plug	M8 locking device, 3 pins, IP65

DIMENSIONS



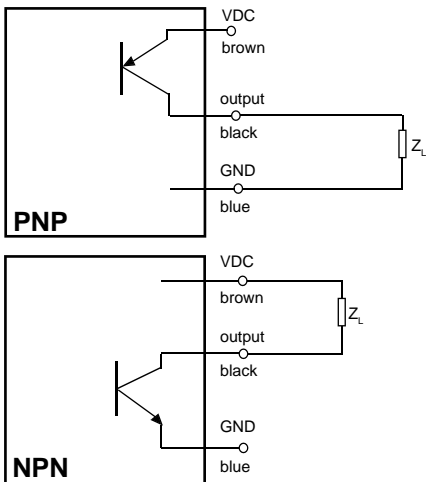
OPERATING CONTROLS



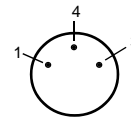
(270° - potentiometers)

- operating state (Power) LED green
- function indicator (Signal) LED red
- resolution (Sensitivity)
- impuls stretching (Duration)

CONNECTION DIAGRAM



SUPPLY AND OUTPUT

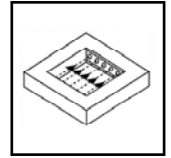


- 1 (brown) VDC
- 4 (black) output
- 3 (blue) GND

(supply cable to be ordered separately)

PART DESIGNATION

RLS080-040-ADP:	non-pulsed	dark-on	PNP-output
RLS080-040-ADN:	non-pulsed	dark-on	NPN-output



RLS080-080

STANDARD OPTICAL FRAME SENSOR

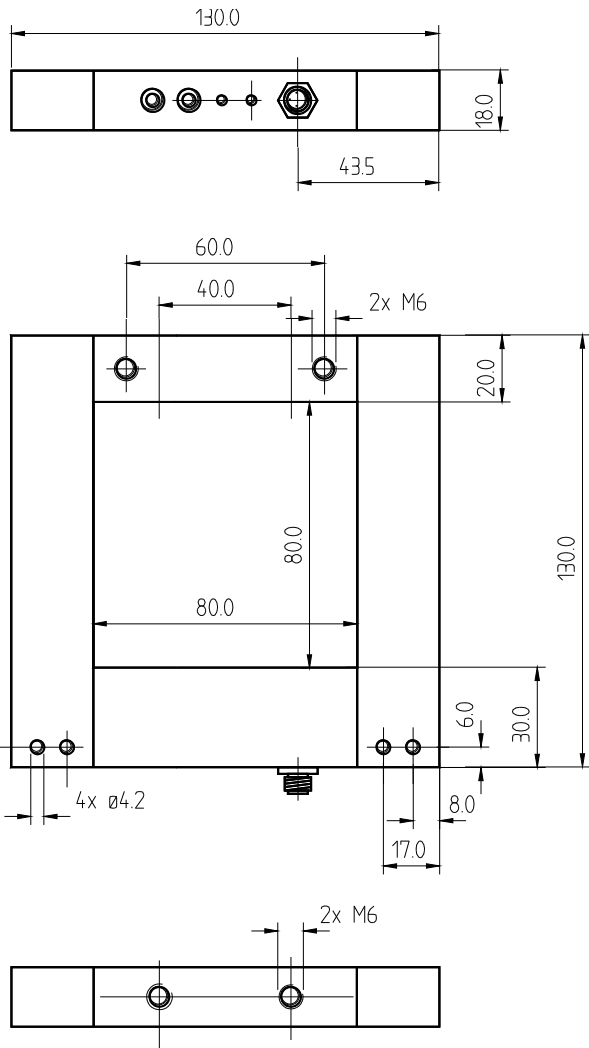
- ➔ dynamic working principle
- ➔ ideal for part ejection control
- ➔ manual adjustment
- ➔ robust design



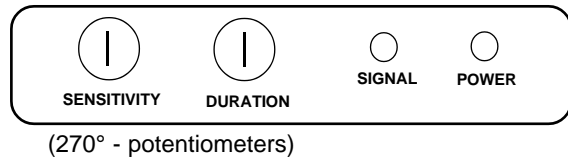
GENERAL TECHNICAL DATA

operating voltage	10...30 VDC, reversed polarity protection
current consumption	100 mA
output	PNP or NPN, 200mA, short-circuit proof
switching function	dark-on, dynamic
light type	Infrared
operating state indicator	LED green
function indicator	LED red
switching delay	440µsec
pulse stretching	7 ms to 300 ms (adjustable)
temperature range	-10°C to +55°C
protection class	IP65
opening	80 mm (active side) x 80 mm
dimensions (w x d x h)	130 mm x 130 mm x 18 mm
housing	aluminium, black anodized
resolution (smallest part)	objects ≥ 2 mm
counting frequency	function of pulse stretching (max. 140 parts /s)
plug	M8 locking device, 3 pins, IP65

DIMENSIONS

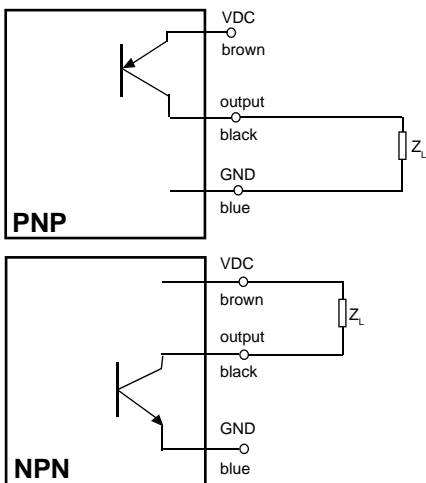


OPERATING CONTROLS

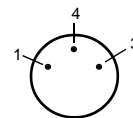


- power supply indicator (Power) LED green
- function indicator (Signal) LED red
- resolution (Sensitivity)
- impuls stretching (Duration)

CONNECTION-DIAGRAM



SUPPLY AND OUTPUT

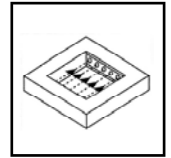


- 1 (brown) VDC
- 4 (black) output
- 3 (blue) GND

(supply cable to be ordered separately)

PART DESIGNATION

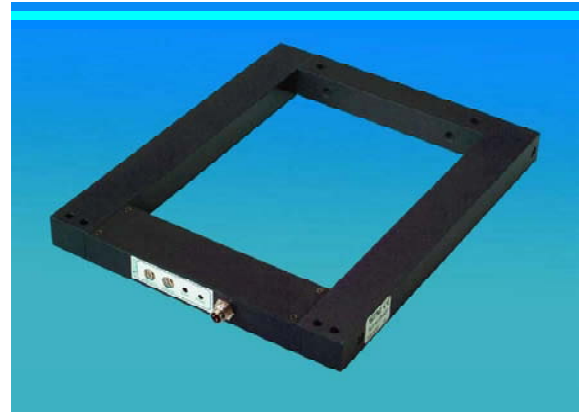
RLS080-080-ADP:	non-pulsed	dark-on	PNP-output
RLS080-080-ADN:	non-pulsed	dark-on	NPN-output



RLS160-120

STANDARD OPTICAL FRAME SENSOR

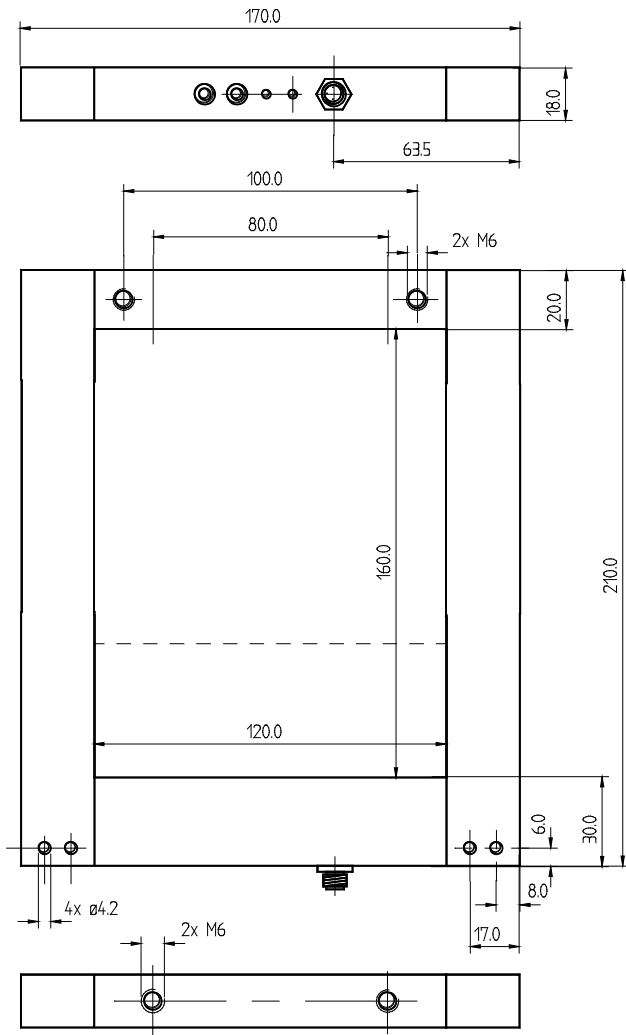
- dynamic working principle
- ideal for part ejection control
- manual adjustment
- robust design



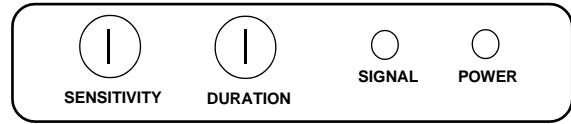
GENERAL TECHNICAL DATA

operating voltage	10...30 VDC, reversed polarity protection
current consumption	135 mA
output	PNP or NPN, 200mA, short-circuit proof
switching function	dark-on, dynamic
light type	Infrared
operating state indicator	LED green
function indicator	LED red
switching delay	440µsec
pulse stretching	7 ms to 300 ms (adjustable)
temperature range	-10°C to +55°C
protection class	IP65
opening	160 mm (active side) x 120 mm
dimensions (w x d x h)	170 mm x 210 mm x 18 mm
housing	aluminium, black anodized
resolution (smallest part)	objects \geq 4 mm
counting frequency	function of pulse stretching (max. 140 parts /s)
plug	M8 locking device, 3pins, IP65

DIMENSIONS



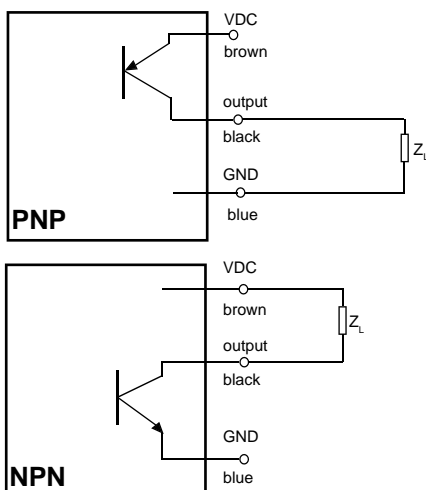
OPERATING CONTROLS



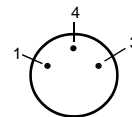
(270° - potentiometers)

- power supply indicator (Power) LED green
- function indicator (Signal) LED red
- resolution (Sensitivity)
- impuls stretching (Duration)

CONNECTION DIAGRAM



SUPPLY AND OUTPUT



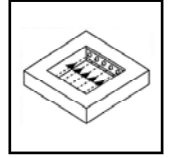
- 1 (brown) VDC
- 4 (black) output
- 3 (blue) GND

(supply cable to be ordered separately)

PART DESIGNATION

RLS160-120-ADP: non-pulsed dark-on PNP-output

RLS160-120-ADN: non-pulsed dark-on NPN-output



RLS160-080
STANDARD OPTICAL FRAME SENSOR

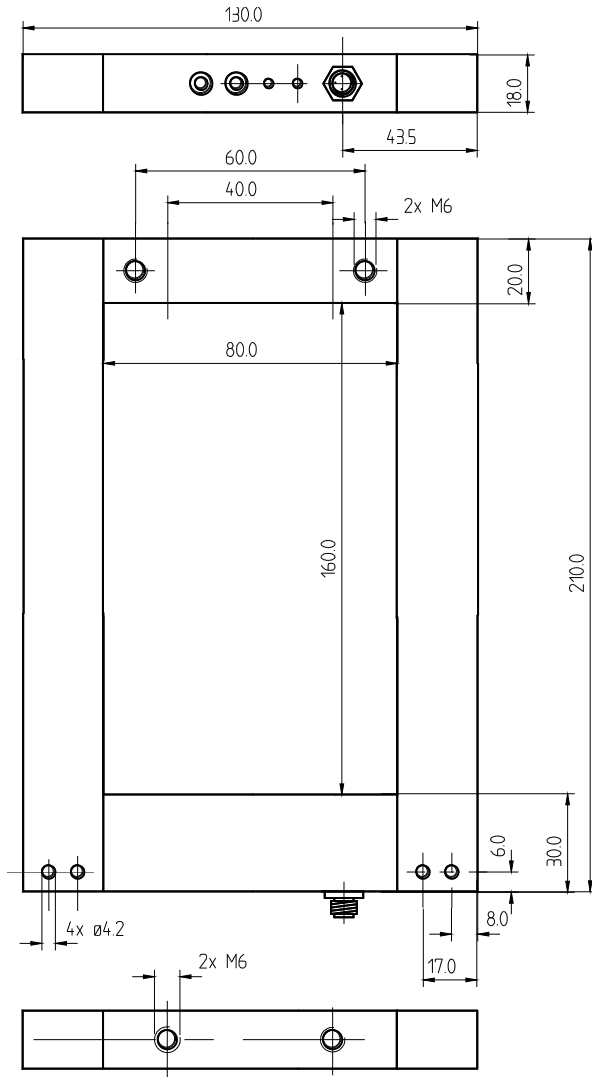
- ➔ dynamic working principle
- ➔ ideal for part ejection control
- ➔ manual adjustment
- ➔ robust design



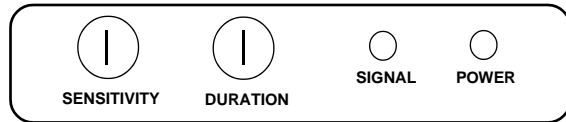
GENERAL TECHNICAL DATA

operating voltage	10...30 VDC, reversed polarity protection
current consumption	120 mA
output	PNP or NPN, 200 mA, short-circuit proof
switching function	dark-on, dynamic
light type	Infrared
operating state indicator	LED green
function indicator	LED red
switching delay	440µsec
pulse stretching	7 ms to 300 ms (adjustable)
temperature range	-10°C to +55°C
protection class	IP65
opening	160 mm (active side) x 80 mm
dimensions (w x d x h)	130 mm x 210 mm x 18 mm
housing	aluminium, black anodized
resolution (smallest part)	objects ≥ 4mm
counting frequency	function of pulse stretching (max. 140 parts /s)
plug	M8 locking device, 3pins, IP65

DIMENSIONS



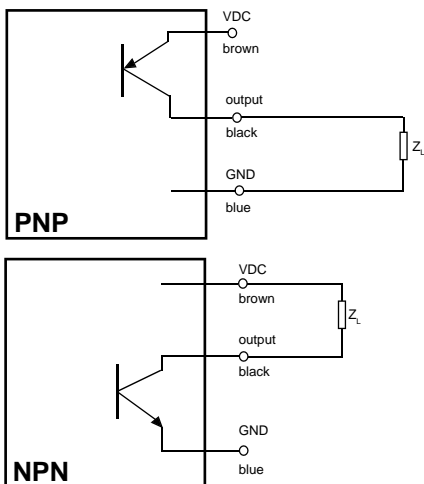
OPERATING CONTROLS



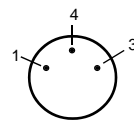
(270° - potentiometers)

- operating state (Power) LED green
- function indicator (Signal) LED red
- resolution (Sensitivity)
- impuls stretching (Duration)

CONNECTION DIAGRAM



SUPPLY AND OUTPUT

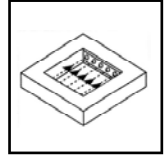


- 1 (brown) VDC
- 4 (black) output
- 3 (blue) GND

(supply cable to be ordered separately)

PART DESIGNATION

RLS160-080-ADP:	non-pulsed	dark-on	PNP-output
RLS160-080-ADN:	non-pulsed	dark-on	NPN-output



RLS080-120

STANDARD OPTICAL FRAME SENSOR

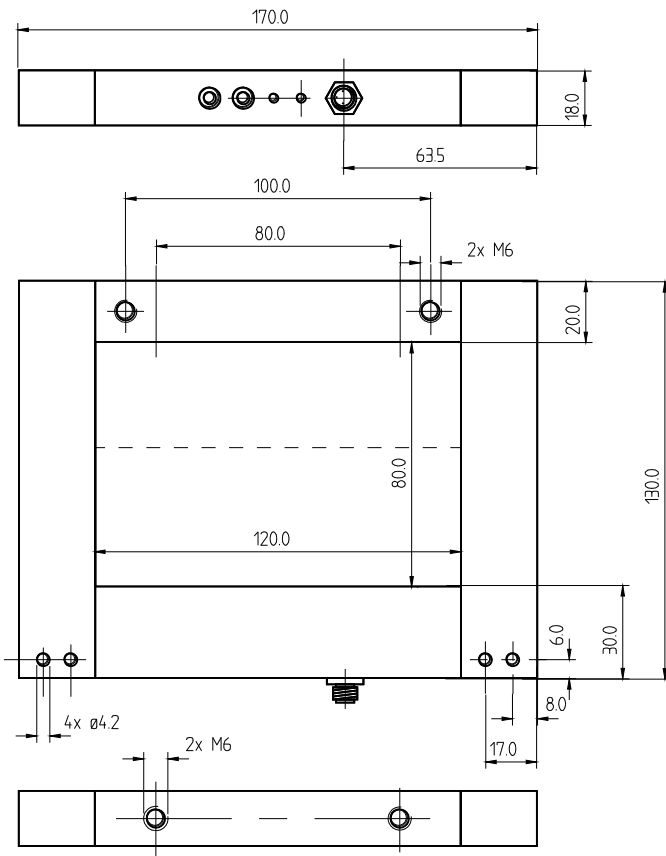
- ➔ dynamic working principle
- ➔ ideal for part ejection control
- ➔ manual adjustment
- ➔ robust design



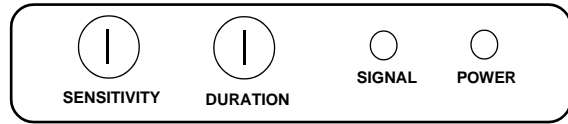
GENERAL TECHNICAL DATA

operating voltage	10...30 VDC, reversed polarity protection
current consumption	120 mA
output	PNP or NPN, 200mA, short-circuit proof
switching function	dark-on, dynamic
light type	Infrared
operating state indicator	LED green
function indicator	LED red
switching delay	440µsec
pulse stretching	7 ms to 300 ms (adjustable)
temperature range	-10°C to +55°C
protection class	IP65
opening	80 mm (active side) x 120 mm
dimensions (w x d x h)	170 mm x 130 mm x 18 mm
housing	aluminium, black anodized
resolution (smallest part)	objects \geq 2 mm
counting frequency	function of pulse stretching (max. 140 parts /s)
plug	M8 locking device, 3 pins, IP65

DIMENSIONS



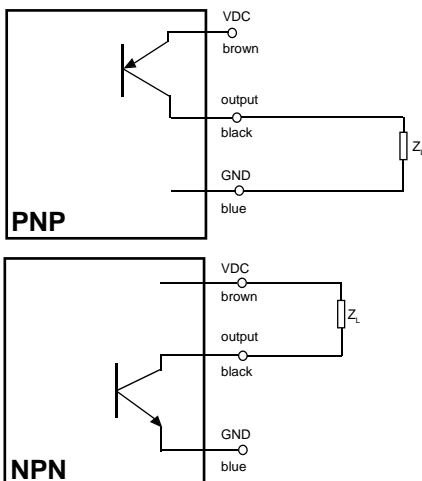
OPERATING CONTROLS



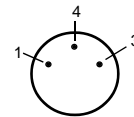
(270° - potentiometers)

- operating state (Power) LED green
- function indicator (Signal) LED red
- resolution (Sensitivity)
- impuls stretching (Duration)

CONNECTION DIAGRAM



SUPPLY AND OUTPUT



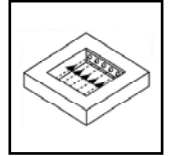
- 1 (brown) VDC
- 4 (black) output
- 3 (blue) GND

(supply cable to be ordered separately)

PART DESIGNATION

RLS080-120-ADP: non-pulsed dark-on PNP-output

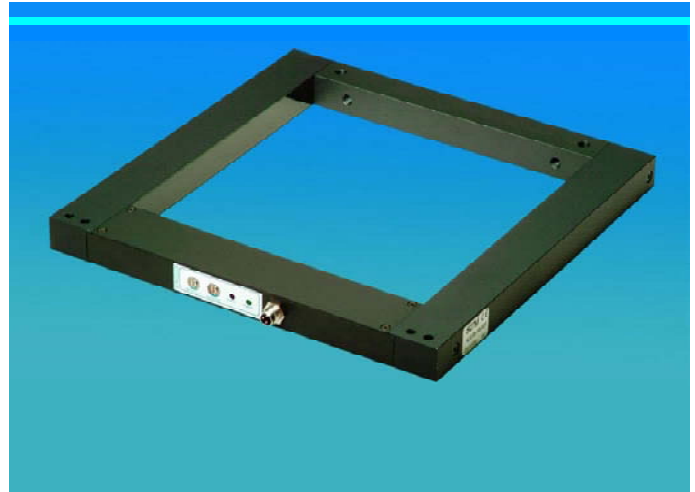
RLS080-120-ADN: non-pulsed dark-on NPN-output



RLS160-160

STANDARD OPTICAL FRAME SENSOR

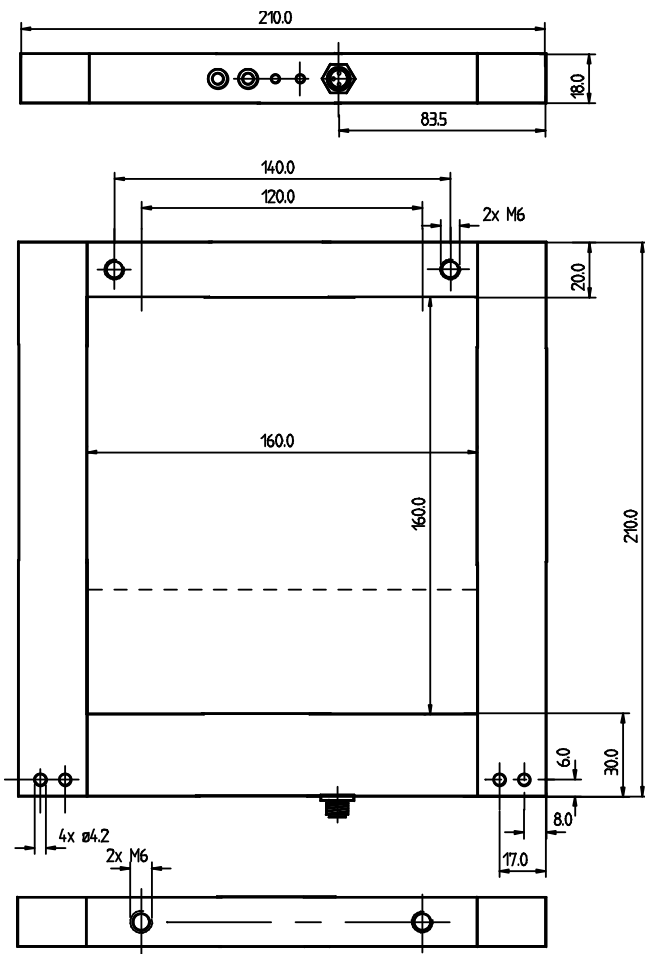
- ➔ dynamic working principle
- ➔ ideal for part ejection control
- ➔ manual adjustment
- ➔ robust design



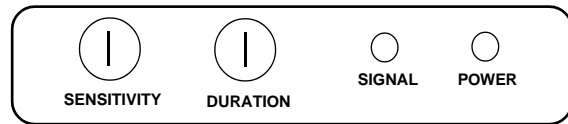
GENERAL TECHNICAL DATA

operating voltage	10...30 VDC, reversed polarity protection
current consumption	155 mA
output	PNP or NPN, 200mA, short-circuit proof
switching function	dark-on, dynamic
light type	Infrared
operating state indicator	LED green
function indicator	LED red
switching delay	440µsec
pulse stretching	7 ms to 300 ms (adjustable)
temperature range	-10°C to +55°C
protection class	IP65
opening	160 mm (active side) x 160 mm
dimensions (w x d x h)	210 mm x 210 mm x 18 mm
housing	aluminium, black anodized
resolution (smallest part)	objects \geq 4mm
counting frequency	function of pulse stretching (max. 140 parts /s)
plug	M8 locking device, 3-pins, IP65

DIMENSIONS



OPERATING CONTROLS

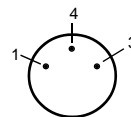
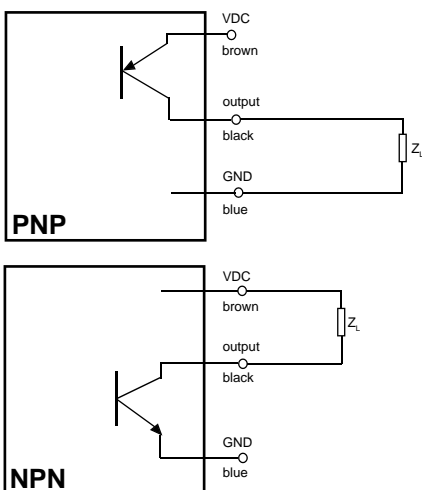


(270° - potentiometers)

- operating state (Power) LED green
- function indicator (Signal) LED red
- resolution (Sensitivity)
- impuls stretching (Duration)

CONNECTION DIAGRAM

SUPPLY AND OUTPUT



- 1 (brown) VDC
- 4 (black) output
- 3 (blue) GND

(supply cable to be ordered separately)

PART DESIGNATION

RLS160-160-ADP:	non-pulsed	dark-on	PNP-output
RLS160-160-ADN:	non-pulsed	dark-on	NPN-output