

Technical details

Temperature range	0°C ... +50°C
Medium	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Alternatively the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
Materials	Body: plastic, seals: NBR, pressure connector: brass, zinc plated


Function

Adjustable, digital pressure switch with 2 colour LCD display. The pressure provides a wide range of output options (see table below). The 2m connection cable is included.

Order code

82-DPS-***-***-***	
Series	Connection
	without G-thread
	N NPT-thread
Version / Outputs	Outputs
2 Standard, 2 electrical outputs	NN 2 x switch, NPN
3 Standard, 1 electrical output	PP 2 x switch, PNP
5 Enhanced humidity resistance, 2 electrical outputs	NV 1 x switch, NPN 1 x analog, 1 ... 5 V
Measurement range / Setting range	PV 1 x switch, PNP 1 x analog, 1 ... 5 V
01 -1 ... 1 bar	NA 1 x switch, NPN 1 x analog, 4 ... 20 mA
10 -1 ... 10 bar	PA 1 x switch, PNP 1 x analog, 4 ... 20 mA
20* -1 ... 20 bar	PN** 1 x switch, PNP or NPN

* only 82-DPS-5...

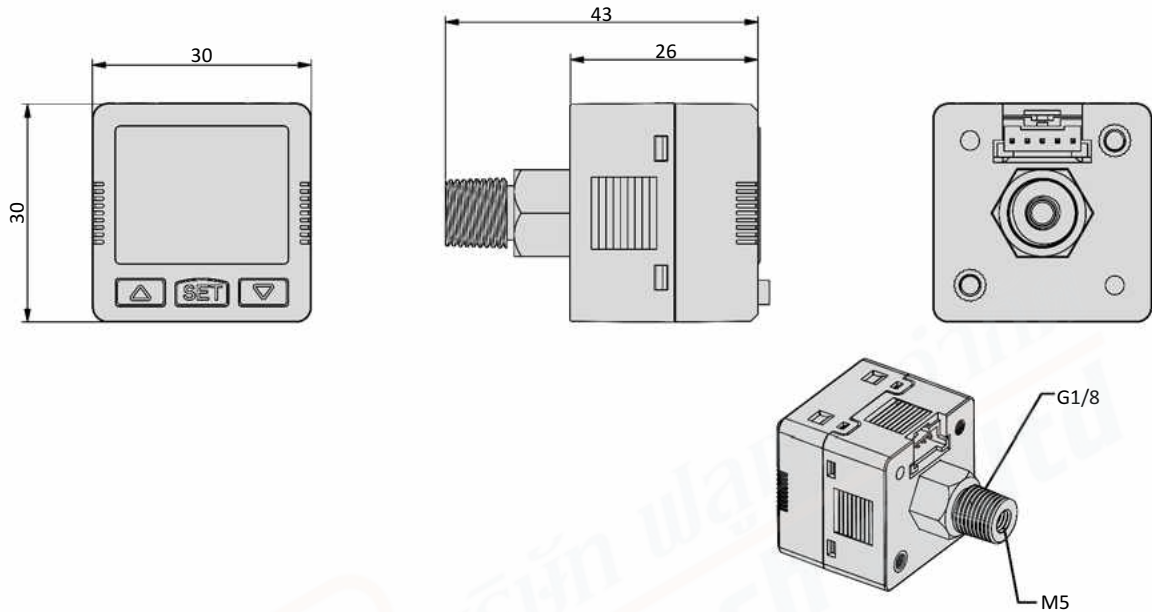
** only 82-DPS-3...

Series 82-DPS

Technical data

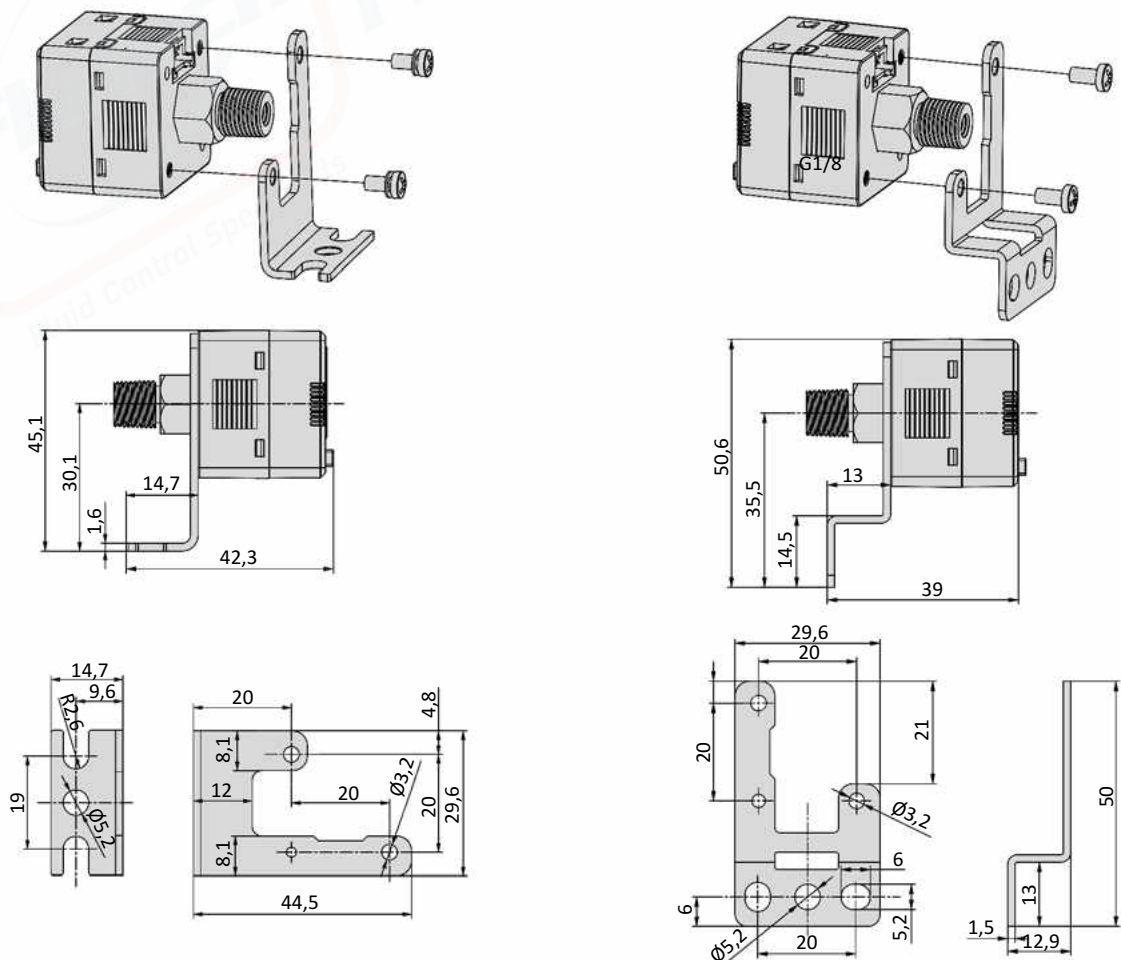
Model-no.: 82-DPS-	2-01-PN	2-10-PN	3-01-xx	3-10-xx	5-01-xx	5-10-xx	5-20-xx
Measurement range (bar)	-1 ... 1	-1 ... 10	-1 ... 1	-1 ... 10	-1 ... 1	-1 ... 10	-1 ... 20
Setting range (bar)	-1 ... 1	-1 ... 10	-1 ... 1	-1 ... 10	-1 ... 1	-1 ... 10	-1 ... 20
Withstand pressure (bar)	5	15	5	15	3	30	30
Output signal (switch)	NN: 2 x NPN, PP: 2 x PNP, Nx: 1 x NPN, Px: 1 x PNP		NPN or PNP		NN: 2 x NPN, PP: 2 x PNP, Nx: 1 x NPN, Px: 1 x PNP		
Switch function	NO or NC (programmable)						
Output modus	hysteresis mode, window comparator mode, output off						
Max. contact voltage	28 V						
Max. load current	80 mA						
Voltage drop	≤ 1 V						
Response time (ms)	adjustable: 2,5, 20, 100, 500, 1000, 2000						
Short-circuit protection	yes						
Output signal (analog)	xV: 1 ... 5 V, load impedance ≥ 1 kΩ xA: 4 ... 20 mA, load impedance ≤ 400 Ω		-		xV: 1 ... 5 V, load impedance ≥ 1 kΩ xA: 4 ... 20 mA, load impedance ≤ 400 Ω		
Display accuracy	± 2% full span (at 25°C)						
Temperature characteristics	± 3% full span (0 ... 50°C)						
Hysteresis	adjustable						
Pressure units	mHg, psi, bar, MPa, kPa						
Display	2-line LCD-display, four digit, 1.line red/green, 2.line orange		single-line LCD-display, four digit, red/green, output status display				
Electrical connection	flat plug, 5-pin				round plug with bayonet coupling, 5-pin		
Nominal voltage	12 ... 24 V DC ± 10%						
Power consumption	max. 40 mA						
Protection	IP 40 according to EN 60529				IP 65 according to EN 60529		
Connection	G(NPT)1/8 male and M5 female				G(NPT)1/4 male and M5 female		
Weight (kg)	0,036				0,052		

Dimensions 82-DPS-2 and 82-DPS-3



82-DPS-2-3-MB-L

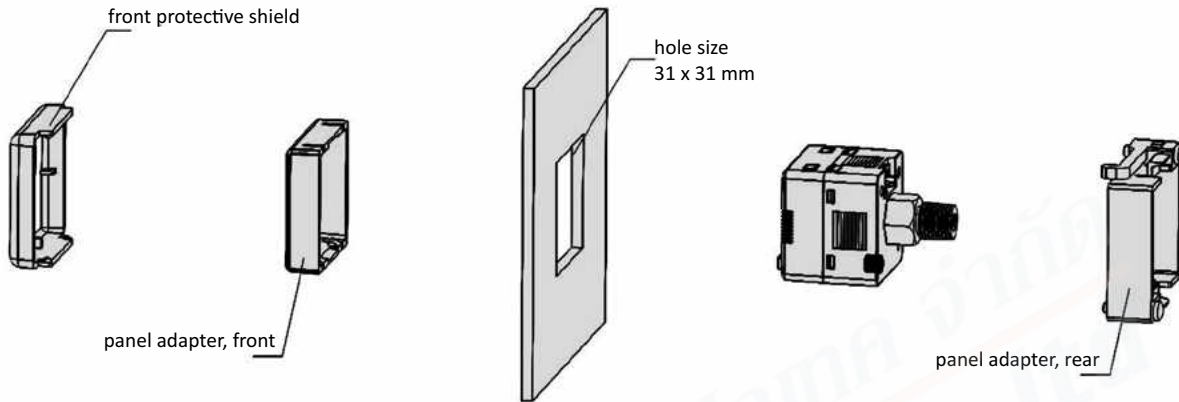
82-DPS-2-3-MB-S



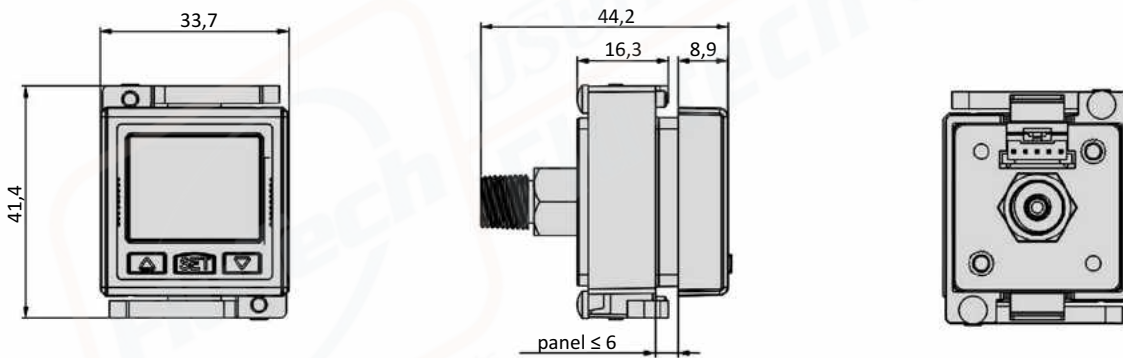
Series 82-DPS

Dimensions

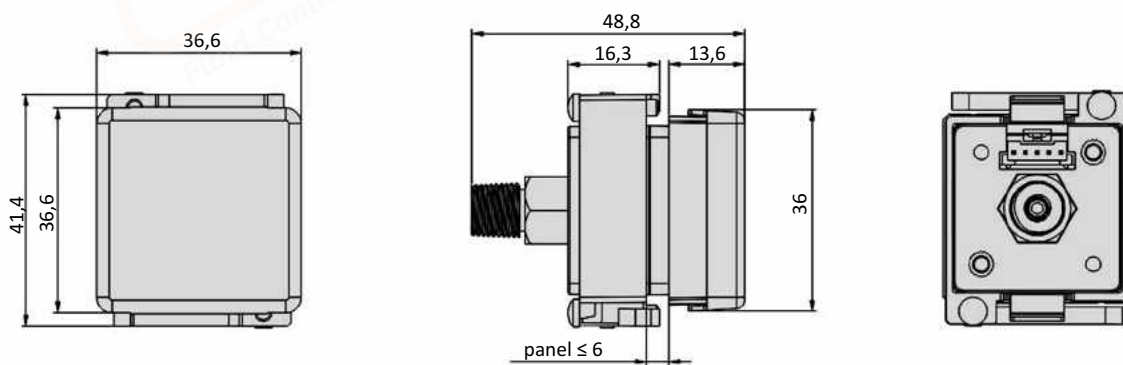
Panel mounting 82-DPS-2 and 82-DPS-3, functional principle



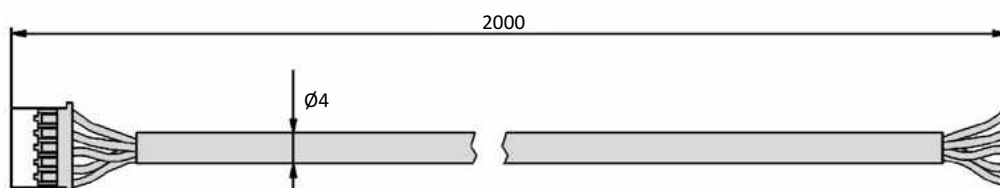
82-DPS-2-3-PM



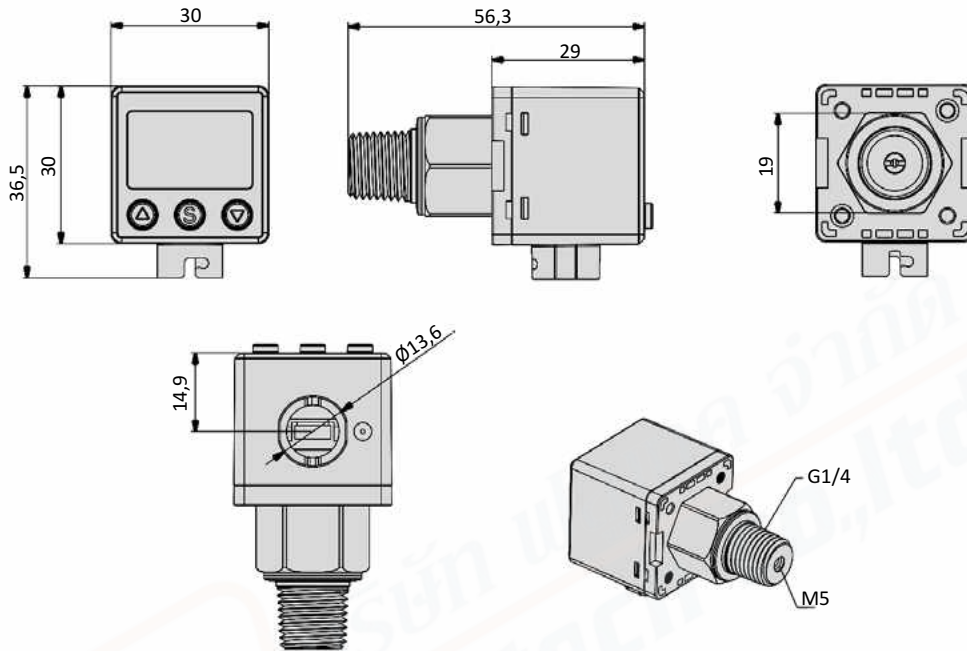
82-DPS-2-3-PMS



86-ST-DPS-2-3-2

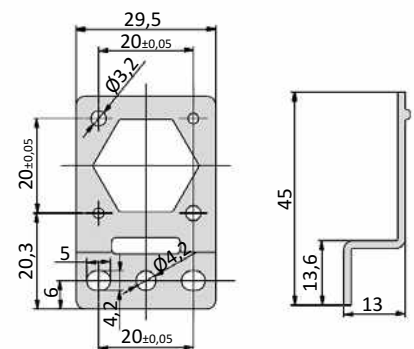
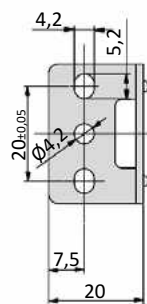
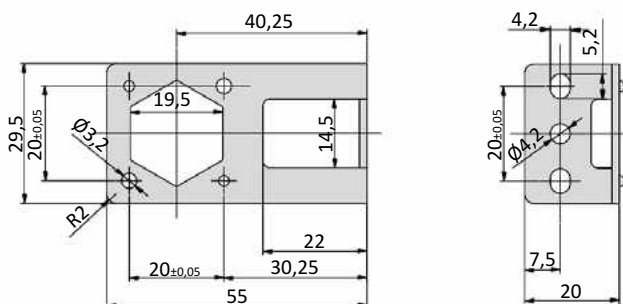
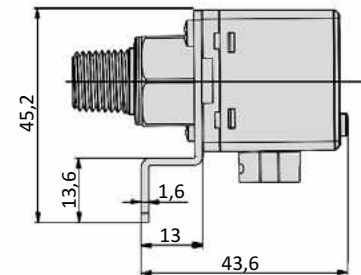
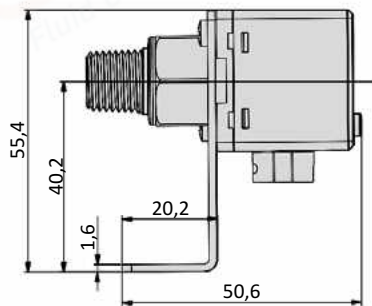
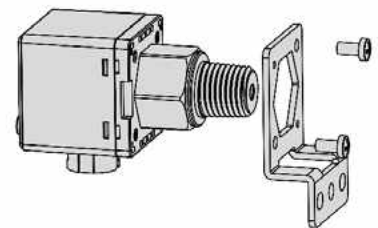
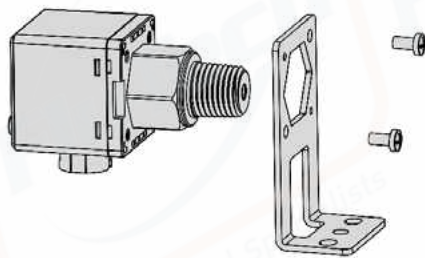


Dimensions 82-DPS-5



82-DPS-5-MB-L

82-DPS-5-MB-S

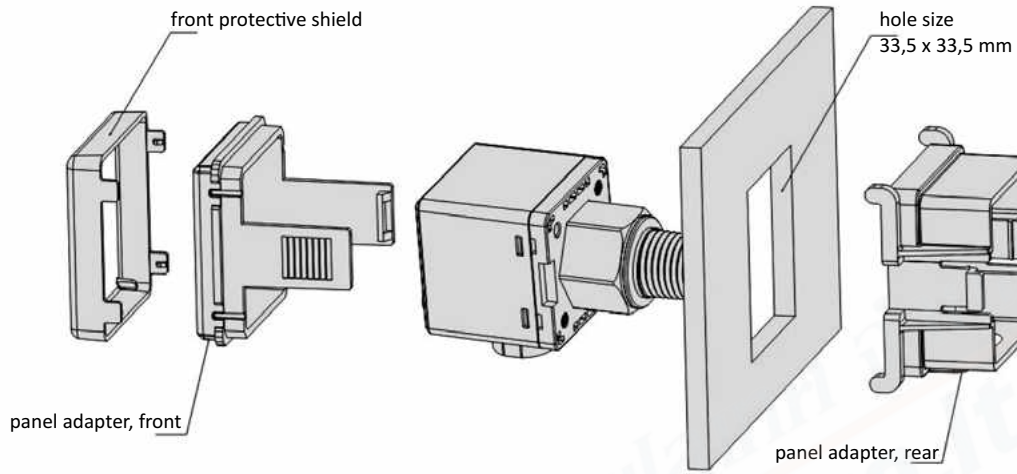


Series 82-DPS

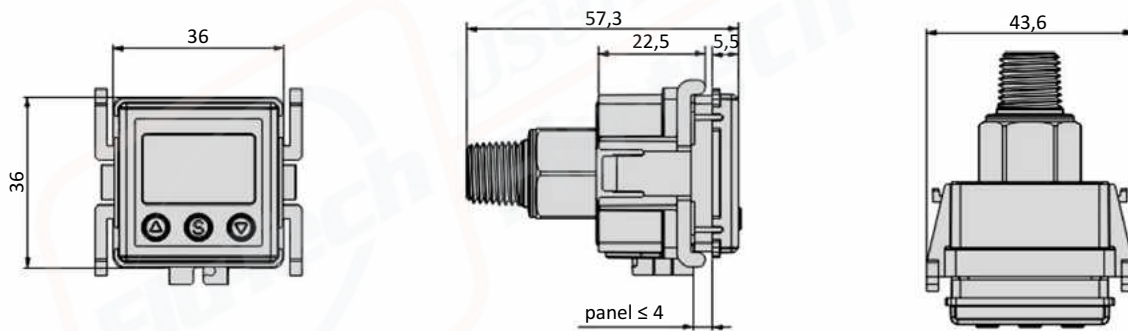


Dimensions

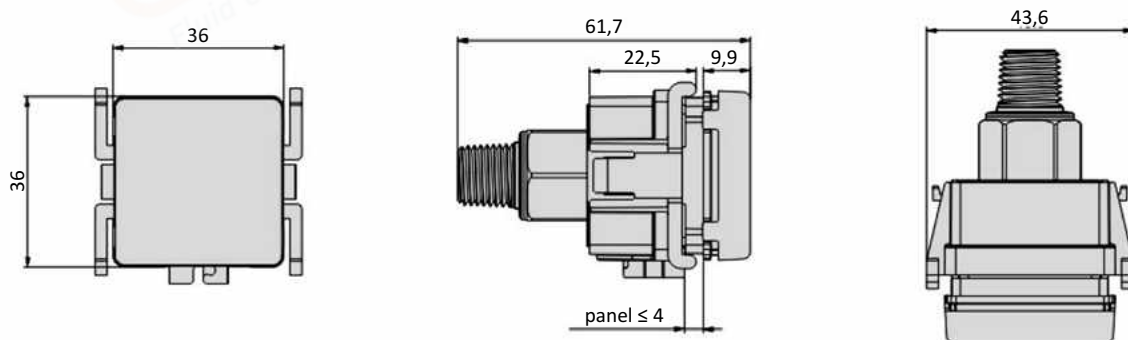
Panel mounting 82-DPS-5, functional principle



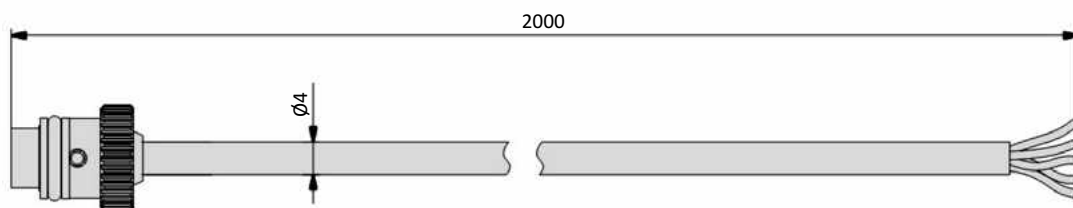
82-DPS-5-PM



82-DPS-5-PMS



86-ST-DPS-5-2



Accessories
Model-no.: 82-DPS-2-3-MB-L

L-type bracket


Model-no.: 82-DPS-5-MB-L

L-type bracket

Model-no.: 82-DPS-2-3-MB-S

S-type bracket

Model-no.: 82-DPS-5-MB-S

S-type bracket

Model-no.: 82-DPS-2-3-PM

panel mount adapter


Model-no.: 82-DPS-5-PM

panel mount adapter

Model-no.: 82-DPS-2-3-PMS

panel mount adapter with front protective shield


Model-no.: 82-DPS-5-PMS

panel mount adapter with front protective shield

Model-no.: 86-ST-DPS-2-3-2

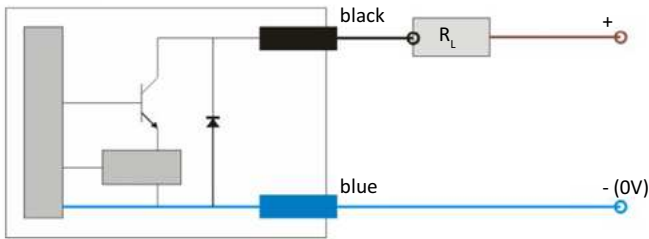
 Cable connector, 2m
(part of delivery)

Model-no.: 86-ST-DPS-5-2

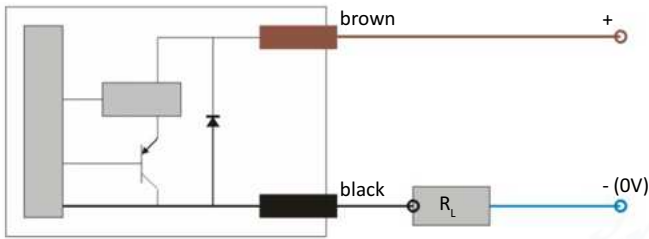
 Cable connector, 2m
(part of delivery)

Elektrical connection

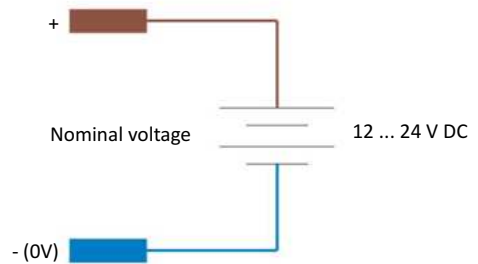
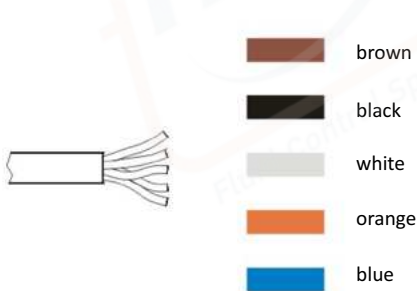
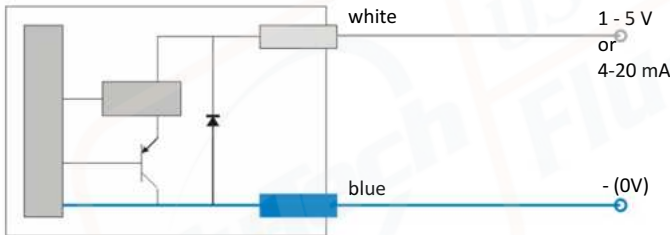
NPN output



PNP output

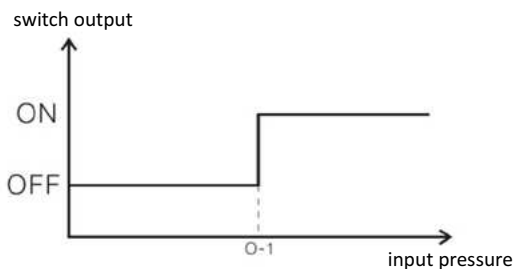


Analog output



Output function

Hysteresis mode



Window comparator mode

