HD03PA

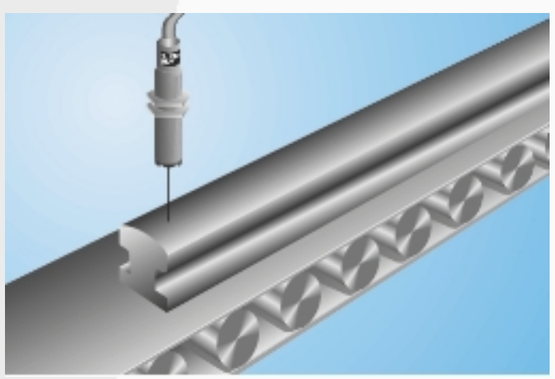
Part Number

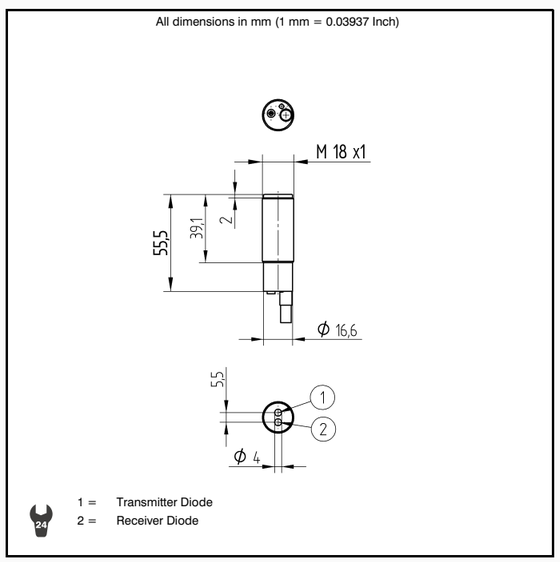
- **Fine Focused Optics**
- **Low-Cost**
- **Quasi-Background-Suppression**

Technical Data

Optical Data	
Range	30 mm
Switching Hysteresis	< 15 %
Light Source	Infrared Light
Service Life (T = +25°C)	100000 h
max. Ambient Light	10000 Lux
Opening Angle	12 °
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (Ub = 24V)	< 40 mA
Switching Frequency	1500 Hz
Response Time	330 µs
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2.5 V
PNP Switching Output/Switching Current	200 mA
Residual Current Switching Output	< 50 µA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Mechanical Data	
Housing	BrasNicPlated
Full Encapsulation	yes
Protection Mode	IP 67
Connection	Prewired
Cabel Length	2 m

Thanks to fine focusing optics the background is suppressed beyond 50 mm.



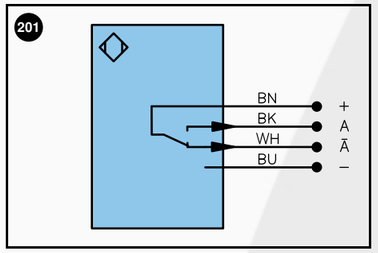


Specifications are subject to change without notice

17/03

Prewired Version

Part Number	HD03PA
PNP NO/NC antivalent	●
Connection Diagram No.	201
Control Panel No.	D 3



Legend

+	Power supply "+"	U	Test input
–	Power supply "0V"	W	Trigger input
~	Power supply (AC Voltage)	O	Analog output (1,2,3,...)
A	Switching output (1,2,3...) / NO	O–	Ground for the analog output
Ā	Switching output (1,2,3...) / NC	BZ	Block discharge
V	Contamination / Error output (NO)	AW	Valve output
V̄	Contamination / Error output (NC)	a	Valve control output "+"
E	Input (analog or digital)	b	Valve control output "0V"
T	Teach input	SY	Synchronization
Z	Time delay (activation)	E+	Receiver-Line
S	Shielding	S+	Emitter-Line
RxD	RS-232 receive path	⏚	Grounding
TxD	RS-232 send path		

Wire colors according to DIN IEC 757

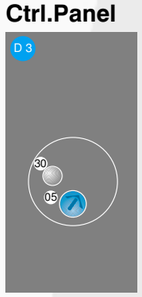
BK	black
BN	brown
RD	red
OG	orange
YE	yellow
GN	green
BU	blue
VT	violet
GY	grey
WH	white
PK	pink
GNYE	green yellow

Accessories

Mounting Clamp BSM18B

Mounting Bracket W18

Ctrl.Panel

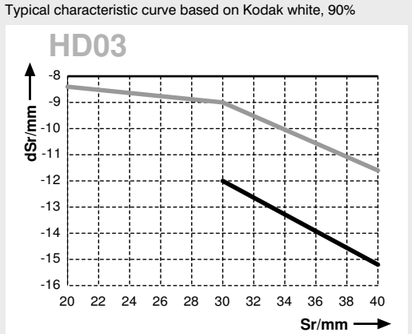


05 = Switching Distance Adjuster

30 = Switching Status/Contamination Warning

Switching Distance Deviation

Typical characteristic curve based on Kodak white, 90%



dSr = Switching Distance Change

Sr = Switching Distance

black 6%

grey 18%