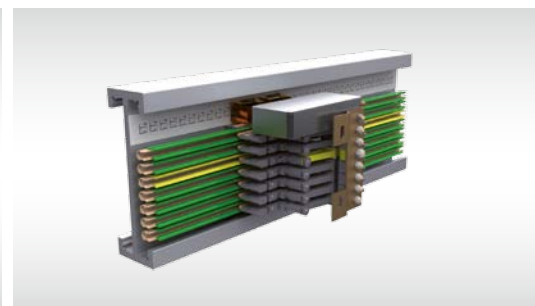


**VAHLE**

## APOS Optic Positioning System

powered by  **DETO**

# SYSTEMS IN MOTION



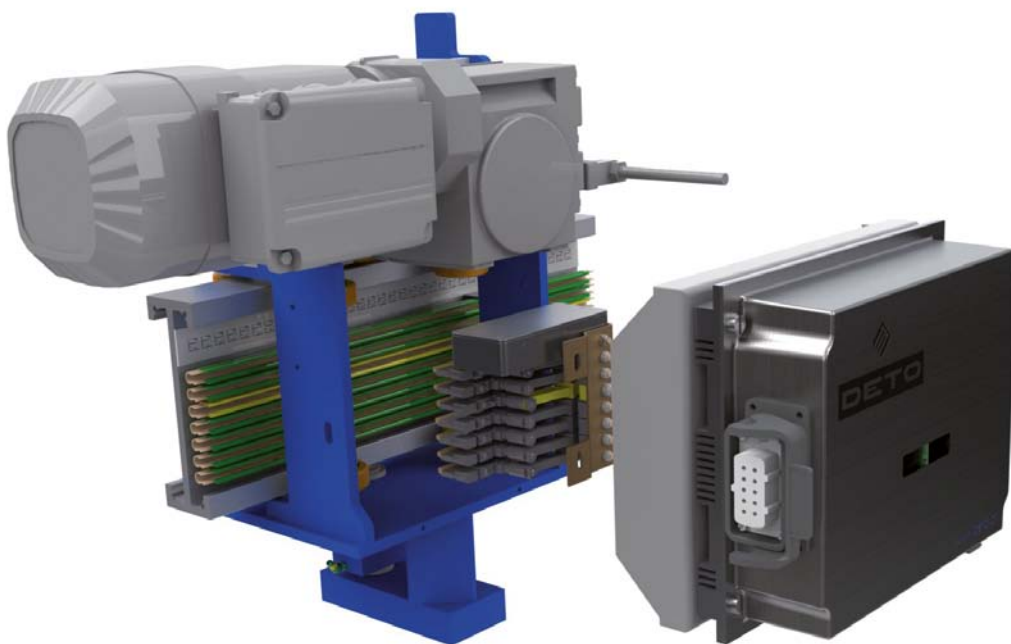
# APOS Optic was developed for automated handling systems. This positioning system is especially designed for special requirements of the EMS-technology.

## Characteristics

- absolute position determination up to 10,000 m system length
- contactless system
- compact design and safe transmission by DataMatrix-code
- travel speed up to 180 m/min.
- resolution: +/- 1 mm
- operating temperature: 0 – 60° C
- minimum bending radii
  - horizontal = 750 mm
  - vertical = 2300 mm
- reading head with one or two cameras

## Why APOS Optic?

- no additional support for the reading head required
  - simple assembly as the head can be easily plugged on a bolt
  - integration into the collector package
- more space available on the vehicle
- extremely insensitive against external light
- conductors and positioning system only from one supplier
- one reading head equipped with two cameras guarantees a higher process reliability



## Code strip

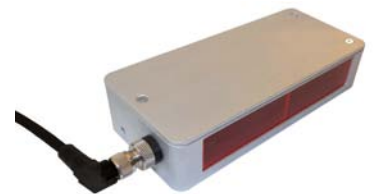
- DataMatrix-Code insensitive against interferences
- Code size 10 x 10 mm
- Height of code strip: 25 mm
- Max. coil length: 500m
- In case of damage fast and easy to exchange



Type	Description	Order-no.
CB25-10X10	Codestrip CB25, 25mm high, 10x10 mm code size	10004169

## Reading head

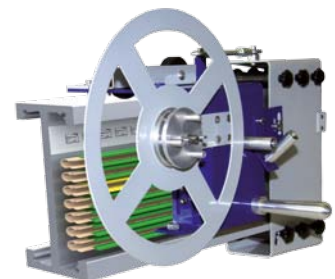
- Optical scanning of the position with one, optional two integrated cameras
- Standard reading distance: 85 mm (other distances on request)
- Sharpness: +/- 14 mm
- With integrated lighting



Type	No. of cameras	Description	Interface	Baud rate	Order-no.
LK-01-RS485-D-576-D1-54	1	APOS optic reading head RS485-interface Deto-protocol	RS485-interface Deto-protocol	57600 Bit/s	10004138
LK-01-RS485-D-625-D1-54	1	APOS optic reading head RS485-interface Deto-protocol	RS485-interface Deto-protocol	62500 Bit/s	10004139
LK-02-RS485-D-576-D1-54	2	APOS optic reading head RS485-interface Deto-protocol	RS485-interface Deto-protocol	57600 Bit/s	10004140
LK-02-RS485-D-625-D1-54	2	APOS optic reading head RS485-interface Deto-protocol	RS485-interface Deto-protocol	62500 Bit/s	10004141

## Spooling device for code strip

The spooling device serves as mounting tool to glue the code strip on the web of an EMS-profile.



Type	Description	Order-no.
ABV-CB-EHB180	Spooling device EHB 180	10004238
ABV-CB-EHB240	Spooling device EHB 240	10004239

# Products and Service

Catalog No.

<b>1 Open conductor systems</b>	
Open conductor systems	1a
<b>2 Insulated conductor systems</b>	
U10	2a
FABA 100	2b
U15, U25, U35	2c
U20, U30, U40	2d
<b>3 Compact conductor systems</b>	
VKS 10	3a
VKS - VKL	3b
<b>4 Enclosed conductor systems</b>	
KBSL - KSL	4a
KBH	4b
MKH	4c
LSV - LSVG	4d
<b>5 Contactless power supply</b>	
Contactless power supply (CPS®)	5a
<b>6 Data transmission</b>	
VAHLE Powercom®	6a
Slotted Microwave Guide (SMG)	6b
<b>7 Positioning systems</b>	
VAHLE APOS®	7a
VAHLE APOS Optic	7b
<b>8 Festoon systems and cables</b>	
Festoon systems for □ -tracks	8a
Festoon systems for flat cables on I-track	8b
Festoon systems for round cables on I-track	8c
Festoon systems for ◇ -track	8d
Cables	8e
<b>9 Reels</b>	
Spring operated cable reels	9a
Motor powered cable reels	9b
<b>10 Other</b>	
Battery charging systems	10a
Heavy enclosed conductor systems	10b
Tender	10c
Contact wire	10d
<b>Assemblies / Commissioning</b>	
<b>Spare parts / Maintenance service</b>	



certified by DQS according to Din EN  
ISO 9001:2008 OHSAS 18001:2007  
(Reg. Nr. 003140 QM 08/BSOH)