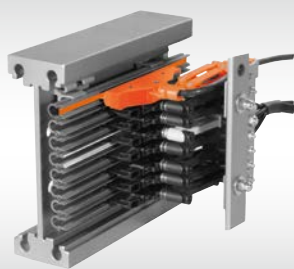




VAHLE

APOS Positioning System

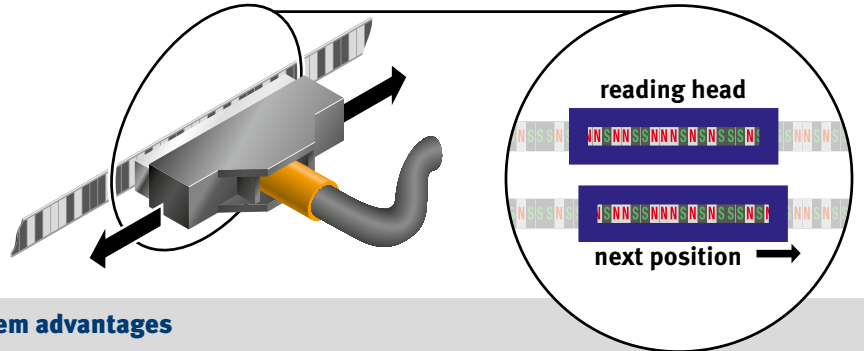
SYSTEMS IN MOTION



APOS positioning systems with VAHLE conductor lines were developed for automated handling systems in material flow technology. The control system can constantly query the absolute position of the mobile consumer.

Operating principle

Vahle-APOS consists of a code strip with a magnetic length coding as a reading head with integrated logic, which transmits the position to the control system via the interface. The intelligent reading head determines the position from the code strip and evaluates it for downstream control systems for processing.



System advantages

- absolute position determination up to 524 m
- Space-saving solutions for integration into the powerail system or for installation in parallel to the runway
- retrofittable for U 10, FABA 100 and VKS 10
- absolute position immediately available when switching on or after a power failure
- travel speed up to 6 m/s
- reliable position detection even in humid or dusty environments
- trouble-free functionality even in poor lighting conditions
- the system enables the combination of horizontally and vertically combined handling equipment
- wear detection (depending on interface)

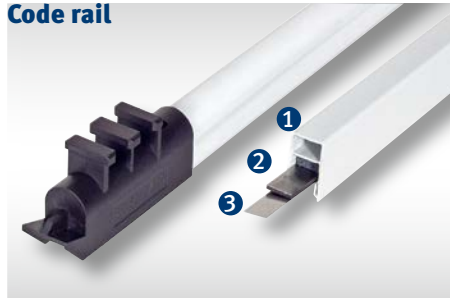
Overview of APOS components

Code strip



The code strip comes factory assembled with a cross-magnetised specified code and is thus given a digital length coding.

Code rail



The code rail consists of the support profile (1), the code strip (2) and the sliding strip (3). The sliding strip serves for the mounting and sliding guidance of the APOS LKG-17 reading head.

LKG-17 reading head



Sliding scanner for powerail systems U 10, VKS 10 and FABA 100.

LB-15 reading head



Contactless scanning for powerail systems KBH and MKL.

Reading head carrier LW



Guide carrier for the mounting of the LB contactless reading head for KBH and MKL conductor line systems.

SU interface module



Logging of APOS to CANopen, Profibus DP and others.

Intelligent positioning solutions with VAHLE and APOS perfectly integrated and retrofittable

U 10



FABA 100



KBH



MKH



VKS 10, APOS in

10-pole



11-pole



Type	Name	Interface	U 10	FABA 100	KBH	MKH	VKS 10		Order-no.
							10-pole	11-pole	

Contactless reading head

LB15-RS485	Standard protection	RS485			●	●			2823159
LB15-SSI Gray	Standard protection	SSI (Gray Code)			●	●			2823252
LB15-SSI binary	Standard protection	SSI (binary code)			●	●			2823557
LB15-RS485 IP54	IP54 protection	RS485			●	●			2823555
LB15-SSI Gray IP54	IP54 protection	SSI (Gray Code)			●	●			2823554

Sliding reading head

LKG17-Steel 2	Short arm	Steel 2		●					2823658
LLG17-Steel 2	Long arm	Steel 2		●					2823659
LKGU17-Steel 2	14 mm phase distance	Steel 2	●						2823627
LKG17-Steel 2	18 mm phase distance	Steel 2	●				●	●	2823666
LKG17-Leutze	Short arm	Leutze		●					2823450
LLG17-Leutze	Long arm	Leutze		●					2823452
LKG17-SSI	Short arm	SSI (Gray Code)		●					2823158
LLG17-SSI	Long arm	SSI (Gray Code)		●					2823212

Accessories

SU - CAN	Interface module		○	○			○	○	2823262
SU - Profibus für LB	Interface module				○	○			2823263
SU - Profibus f. LKG u. LLG	Interface module		○	○			○	○	2518699
SU - Interbus	Interface module		○	○			○	○	2823264
CB 75	Code band 7.5 mm				●	●			2823254
CB 80	Sliding rail 8 mm		●	●			●	●	2823255
FP 20	Fixing profile					●			2823280
FP 25	Fixing profile				●				2823257
GB 80	Sliding rail 8 mm		●	●			●	●	2823446
TPA - U 10 - 6	Support profile		●						2823258
TPA - FABA 100 - 4	Support profile			●					2806571
TPA - VKS 10/10 - 6	Support profile						●		2823259
TPA - VKS 10/11 - 6	Support profile							●	2823265
LWK	Reading head carrier					●			2823445
LWM	Reading head carrier						●		2823261
ZAK	Accessories				●				2823281
ZAM	Accessories					●			2823282

● = necessary, ○ = optional

Scope of delivery and services

Catalog no.

1 Open conductor systems	
Open conductor systems	1a
2 Insulated conductor systems	
U10	2a
FABA 100	2b
U15, U25, U35	2c
U20, U30, U40	2d
3 Compact conductor systems	
VKS 10	3a
VKS - VKL	3b
VMT	3c
4 Enclosed conductor systems	
KBSL - KSL	4a
KBH	4b
MKH	4c
LSV - LSVG	4d
5 Contactless power supply	
Contactless power supply (CPS®)	5a
6 Data transmission	
VAHLE Powercom®	6a
Slotted Microwave Guide (SMG)	6b
7 Positioning systems	
VAHLE APOS®	7a
VAHLE APOS® Optic	7b
8 Festoon systems and cables	
Festoon systems for □-tracks	8a
Festoon systems for flatform cables on I-tracks	8b
Festoon systems for round cables on I-tracks	8c
Festoon systems for ◇-tracks	8d
Cables	8e
9 Reels	
Spring-operated cable reels	9a
Motor-powered cable reels	9b
10 Other	
Battery charging systems	10a
Heavy enclosed conductor systems	10b
Tender	10c
Contact wire	10d
11 Automotive Handling	
Control systems	11a
BOK	11b
Assemblies / Commissioning	
Spare parts / Maintenance service	



DQS certified in accordance with DIN EN ISO 9001:2008
OHSAS 18001 (Reg.No. 003140 QM OH)

