VAHLE

Typical applications for APOS positioning systems with VAHLE conductor lines

Storage technology



VKS 10, contactless



VKS 10, APOS in 10-pole



VKS 10, APOS in 11-pole



Crane technology



Powerail enclosed conductor system KBH



Powerail enclosed conductor system MKL





Electric monorail systems

U 10 unipole insulated powerail



FABA 100 unipole insulated powerail



25159





Kamen/Germany +49(0)2307/704-0 www.vahle.de · info@vahle.de











APOS

Positioning systems for VAHLE conductor lines



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.



- Absolute position determination up to 524 m Reliable position detection even in • Space-saving solutions for integration
 - into the powerail system or for installation in parallel to the runway
 - VKS 10
 - Absolute position immediately available when switching on or after a power failure
- humid or dusty environments
- Trouble-free functionality even in poor lighting conditions
- Retrofittable for U 10, FABA 100 and Travel speed up to 5 m/s • The system enables the combination
 - of horizontally and vertically combined handling equipment

Intelligent positioning solutions with VAHLE and APOS perfectly integrated and retrofittable



VKS 10, contactless







VKS 10, APOS in 10-pole





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.

LB-17 reading head



Contactless scanning for powerail systems VKS 10, KBH and MKL

Code rail



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

Reading head carrier LW



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



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

SB interface module

LKG-17 reading head



Logging of APOS to CANopen, Profibus DP and others

Name	Type/interface	Order no.	U 10	FABA 100	КВН	MKL	VKS 10		
							contact- less	sliding	
								10-pole	11-pole
Sliding reading head LKG-17	LKG 17 - RS 485	2823156							
	LKG 17 - RS 485 steel	2823157	٠	٠				٠	•
	LKG 17 - SSI	2823158							
Contactless reading head LB-17	LB 17 - RS 485	2823159			•	•	•		
	LB 17 - RS 485 steel	2823251							
	LB 17 - SSI	2823252							
	LB 17 - CAN	2823253							
Interface module SB	SB - CAN	2823262	0	0				0	0
	SB - Profibus	2823263	0	0	0	0	0	0	0
	SB - Interbus	2823264	0	0	0	0	0	0	0
Code band 7.5 mm	CB 75	2823254			•	•			
Code band 8 mm	CB 80	2823255	٠	•				•	•
Code band 10 mm, self-adhesive	CB 100	2823256					•		
Fixing profile	FP 75	2823257			•	•			
Sliding rail 8 mm	GS 80 - 3	2823129	•	•				•	•
Support profile	TPA - U 10 - 6	2823258	٠						
	TPA - FABA 100 - 4	2806571		٠					
	TPA - VKS 10/10 - 6	2823259						•	
	TPA - VKS 10/11 - 6	2823265							•
Reading head carrier LW	LWK	2823260			•				
	LWM	2823261				٠			





KBH/MKL



VKS 10, APOS in 11-pole







• = necessary, • = optional