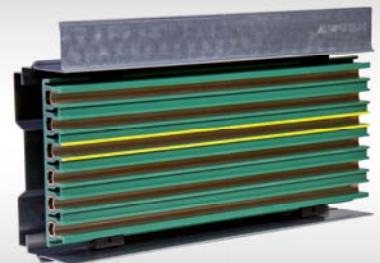
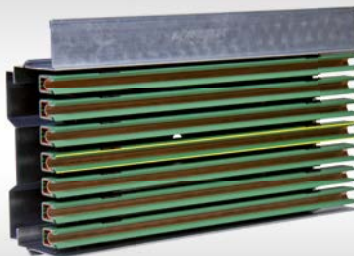




VAHLE

Multi Support Profile VMT

SYSTEMS IN MOTION



Multi Support Profile (VMT)

Content

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The VAHLE solution for automation

The VAHLE Multi-Support-Profile VMT has been specifically designed to meet highly diverse requirements of storage and retrieval installations and transfer cars. For other applications such as crane technology, please ask us.

Advantage: VMT facilitates uncomplicated, fast installation of several VAHLE conductor systems. VAHLE positioning systems may also be included. Another plus is the large support center distance which reduces component cost and facilitates quick installation.

System specifics

- Can be used with several VAHLE conductor systems
- Support center distance of up to 3.5 m (11'-6") possible
- Plug-in and clamping connection technology enables unprecedented fast installation
- Provides mechanical impact protection for conductor system
- Temperature fluctuations will not influence systems rigidity
- Integration of all VAHLE positioning systems

- Attachment hangers for all commonly used rack upright profiles
- 4 to 7 conductors
- 60 to 400 A
- Same profile regardless of conductor system
- Touch proof as per IP 23
- Electrically safe with potential equalization
- Simple and quick exchange of profile sections or subsections

Possible system variants



U15
Catalog 2c



U25
Catalog 2c

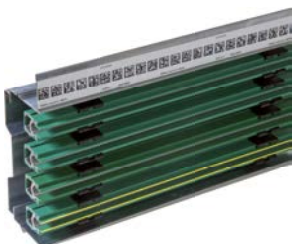


VKS4
Catalog 3b



VKS6
Catalog 3b

Accessory components

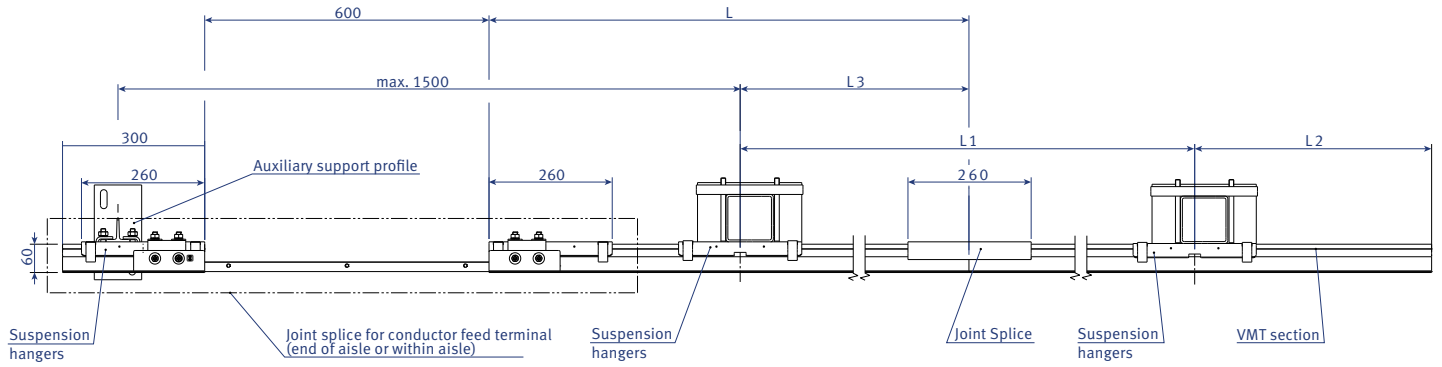


Data matrix tape



Bar code tape

System layout



L = Length of VMT Multi Support Profile
 L1 = Support center distance max 3,5 m

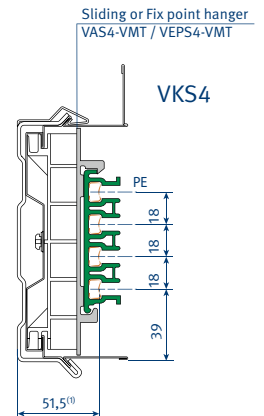
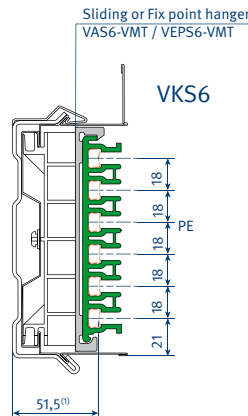
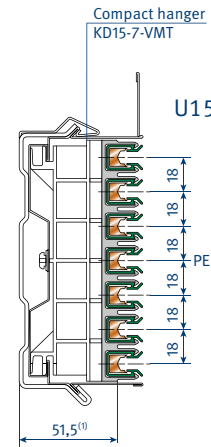
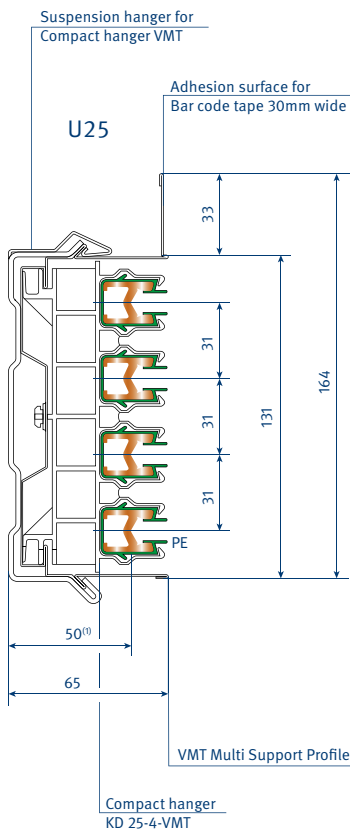
L2 = Overhang max 0,5m
 L3 = Safety dimension for expansion min. 0,35 m

Technical data

VMT Multi Support Profile:galvanized
 Grid dimension compact hanger:100 mm
 VMT Multi Support Profile length: 6000 mm
 Support hanger: universal
 Max. support center distance:
 - lateral arrangement 3,5 m
 - pendant arrangement 3,0 m

System data⁽¹⁾

Number of conductors: 4 to 7
 Max. Betriebsspannung: 690 V
 Current: 60 to 400 A
 Duty cycle: 100 %
 Approvals: UL
 Max. operating speed: 600 m/min
 Temperature range: -30 bis +85° C
 Application area: Indoor systems



(1) Dimension support base to contact surface
 (2) Dependent on installed conductor system



VMT - Multi Support Profile

Type	Description	Weight kg	Order No.
VMT-6000	VAHLE Multi Support Profile, 6 m long	12,336	171 546



Joint splice

Type	Description	Weight kg	Order No.
KV-VMT	Clamping joint splice	0,845	171 536

Suspension hangers with auxiliary support



AH-VMT-HS

Clamping suspension hangers



AH-VMT-SPW



AH-VMT 100-125⁽¹⁾

Bolted suspension hangers



AH-VMT-BS

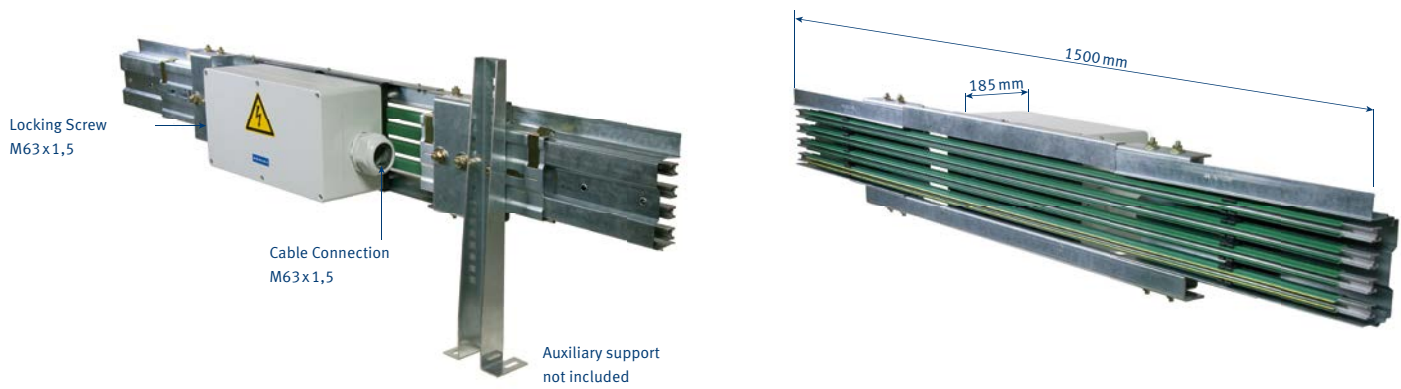


AH-VMT-S

Suspension hangers

Type	Weight kg	Clamping range mm	Order No.
AH-VMT-HS-500	2,783	-	171 583
AH-VMT -SPW	0,985	max. 6 mm	171 539
AH-VMT 100-115	1,603	100-115 ¹	171 537
AH-VMT 110-125	1,615	110-125 ¹	171 538
AH-VMT-BS	0,850	-	171 540
AH-VMT-S	0,909	-	171 547

(1) Additional clamping dimensions available per request



Feeding Module MEU25-VMT

The power feed of the module MEU25, developed for the conductor system U25 in Vahle Multi Support Profile, is an ex works completely pre-assembled unit incl. a pre-fitted terminal box with a cable gland M63 x 1.5 for 4 - pole connecting cables with a max. cable diameter of 45 mm (also both sided connection possible). Two versions allow the connecting of conductor systems made of copper or aluminum steel. The mounting of the power feed can be carried out in the aisle or at the end of the aisle. The power feed module also serves as a fixed point of the bus bars.

Type	Description	Weight kg	Order No.
MEU25/125AE-VMT	Feeding Module U25 AE 320 Ampere	20,205	171 585
MEU25/125C-VMT	Feeding Module U25 C 450 Ampere	25,000	171 584

(1) Additional clamping dimensions available per request

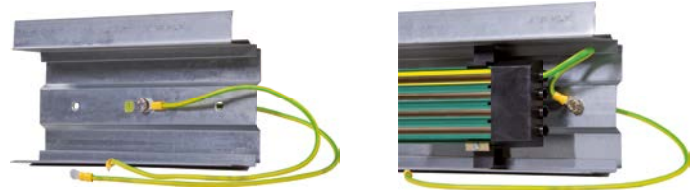
Joint splice BCB

to accommodate conductor feed terminals



Type	Description	Weight kg	Order No.
VMTB900-ESST	Connection within aisle	10,500	171 548
VMTB900-ESAE	Connection at end of aisle	11,100	171 549

Potential equalization



Type	Description	Weight kg	Order No.
VSPA-VMT-600	Connection set U15 U25	0,300	171 563
VSPA-VMT-200-VKS4-R	Connection set VKS4 (r.h. side)	0,443	171 564
VSPA-VMT-200-VKS4-L	Connection set VKS4 (l.h. side)	0,443	171566
VSPA-VMT-200-VKS5+6-R	Connection set VKS5 VKS6 (r.h. side)	0,457	171 565
VSPA-VMT-200-VKS5+6-L	Connection set VKS5 VKS6 (l.h. side)	0,457	171 567



Cutting guide



Installation pliers

Installation tools

Type	Description	Weight kg	Order No.
SVU-VMT	Cutting guide for sub-sections	2,570	171 561
MZ-VMT	Installation pliers for Joint splices	0,700	171 533

VAHLE Conductor systems for VMT

Insulated conductors U15C

Type	Description	Weight kg	Order No.
U15/25C-6000PH-BA	6m Section, phase	1,800	162 136
U15/25C-6000PE-AA	6m Section, PE	1,800	162 196
VM-UV15-K4	Joint splice	0,040	160 102
ES-UE15-K4	Feed terminal	0,040	160 107
ES-UEG15-K4	Feed terminal	0,060	160 216
KD15-7-VMT	Compact hanger	0,048	171 524
FP-USK15-K4	Locating clamp	0,030	160 106
EK-UK15-L	End cap	0,010	160 109

Insulated conductors U25C

Type	Description	Weight kg	Order No.
U25/100C-6000PH-BA	6m Section, phase	6,110	171 046
U25/100C-6000PE-AA	6m Section, PE	6,110	171 146
VM-UV25	Joint splice	0,190	170 595
KD25-4-VMT	Compact hanger	0,044	171 523
FP-USK25-K4	Locating clamp	0,026	170 010
ES-UE25-L-B	Feed terminal	0,190	170 599
ES-UEG25-L-B	Feed terminal	0,560	170 597
EK-UK25-L	End cap	0,005	170 013

Insulated conductors U25AE

Type	Description	Weight kg	Order No.
U25/90AE-6000PH-BA	6m Section, phase 90 mm ² cross section	2,630	171 246
U25/90AE-6000PE-AA	6m Section, PE 90 mm ² cross section	2,630	171 256
U25/125AE-6000PH-BA	6m Section, phase 125 mm ² cross section	3,290	171 286
U25/125AE-6000PE-AA	6m Section, PE 125 mm ² cross section	3,290	171 296
VM-UV25AE-B	Joint splice	0,150	170 960
KD25-4-VMT	Compact hanger	0,044	171 523
FP-USK25-K4	Locating clamp	0,026	170 010
ES-UE25AE-L-B	Feed terminal	0,150	171 158
ES-UEG25AE-L-B	Feed terminal	0,460	170 962
EK-UK25-L	End cap	0,005	170 013

VAHLE Conductor systems for VMT

Enclosed compact conductors VKS4

Type	Description	Weight kg	Order No.
VKS4/60-6000HSA	6m Section HS 60 A	8,880	153 996
VKS4/100-6000HSA	6m Section HS 100 A	10,248	154 006
VKS4/120-6000HSA	6m Section HS 120 A	11,094	154 016
VKS4/140-6000HSA	6m Section HS 140 A	11,904	154 316
VM-SVN4/10-100	Joint splice material up to 100 A	0,142	156 535
VM-SVN4/120-140	Joint splice material from 120 A	0,136	156 536
ES-VNS4/60-140	Line feed with terminal box	1,984	157 146
ES-VLS4/60	Line feed with single cables 10 - 60 A	0,061	156 947
ES-VLS4/100-120	Line feed with single cables 100 - 120 A	0,179	156 943
ES-VLS4/140	Line feed with single cables 140 A	0,239	156 957
VAS4-VMT	Sliding hangers	0,036	171 526
VEPS4-VMT	Fix point hangers	0,042	171 527
EK-VES4-L	End cap, lose	0,040	150 140

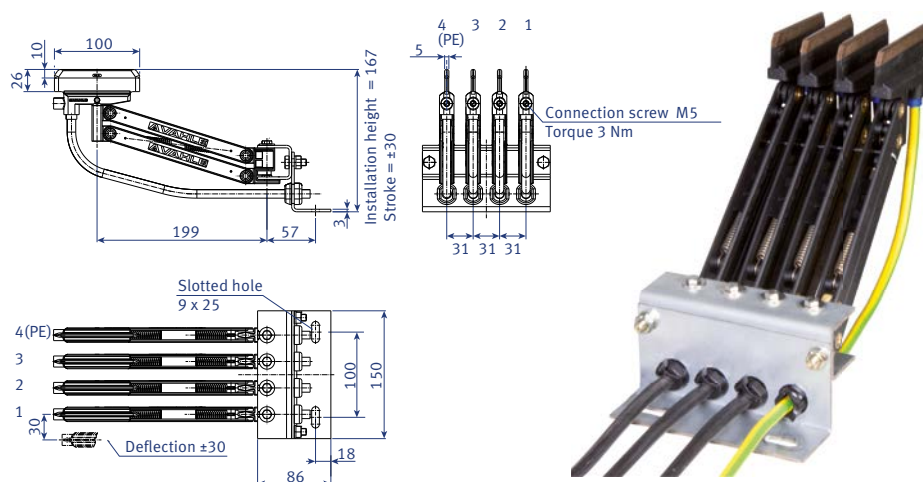
Enclosed compact conductors VKS5

Type	Description	Weight kg	Order No.
VKS5/60-6000HSA	6m Section HS 60 A	12,348	154 096
VKS5/100-6000HSA	6m Section HS 100 A	13,752	154 106
VKS5/120-6000HSA	6m Section HS 120 A	14,628	154 116
VKS5/140-6000HSA	6m Section HS 140 A	15,438	154 876
VM-SVN5/10-100	Joint splice material up to 100 A	0,180	156 537
VM-SVN5/120-140	Joint splice material from 120 A	0,188	156 538
ES-VNS5/60-140	Line feed with terminal box	2,133	157 145
ES-VLS5/60	Line feed with single cables 10 - 60 A	0,145	156 946
ES-VLS5/100-120	Line feed with single cables 100 - 120 A	0,119	156 942
ES-VLS5/140	Line feed with single cables 140 A	0,129	156 956
VAS6-VMT	Sliding hangers	0,036	171 525
VEPS6-VMT	Fix point hangers	0,042	171 528
EK-VES6-L	End cap, lose	0,050	152 140

VAHLE Conductor systems for VMT

Enclosed compact conductors VKS5

Type	Description	Weight kg	Order No.
VKS6/60-6000HSA	6m Section HS 60 A	13,278	154 196
VKS6/100-6000HSA	6m Section HS 100 A	14,616	154 206
VKS6/120-6000HSA	6m Section HS 120 A	15,460	154 216
VKS6/140-6000HSA	6m Section HS 140 A	16,158	152 606
VM-SVN6/10-100	Joint splice material up to 100 A	0,194	156 539
VM-SVN6/120-140	Joint splice material from 120 A	0,194	156 540
ES-VNS6/60-140	Line feed with terminal box	2,266	157 144
ES-VLS6/60	Line feed with single cables 10 - 60 A	0,123	156 945
ES-VLS6/100-120	Line feed with single cables 100 - 120 A	0,255	156 941
ES-VLS6/140	Line feed with single cables 140 A	0,359	156 955
VAS6-VMT	Sliding hangers	0,036	171 525
VEPS6-VMT	Fix point hangers	0,042	171 528
EK-VES6-L	End cap, lose	0,050	152 140



SA-KEH 100 for U 25 conductors

Contact pressure approx. 12 N per collector brush

Number of poles: 4

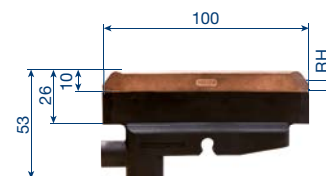
Connection cable 16 mm², 2 m lang

Max. current: 100 A

Deflection ± 30 mm

Type	Weight kg	Number of poles	Base plate	Order-No.
SA-KEH100-4-31HSAD-2,0-04-04	3,100	4	PE at No. 4	171 529/00-D2
SA-KEH100-4-31HSAD-2,0-01-04	3,100	4	PE at No. 1	171 530/00-A2

Collector brushes



Type	Weight kg	Thickness of brush mm	Replacement brush height mm	für collector	Order-No.
SK-KMK100/KEH-04	0,077	4	1,50	KEH 100	1000 0053

Compact current collector sets SA-KESR for U15 and VKS

Contact pressure approx. 3.5 N per brush
Number of poles: 4-7
Connection cable : 2,5 to 10 mm²
Max. current: 32 to 63 A
Deflection: ± 15 mm



Standard

Compact current collector sets SA-KESL for U15 and VKS

Contact pressure approx. 7 N per brush
Number of poles: 4-7
Connection cable : 2,5 to 10 mm²
Max. current: 32 to 63 A
Deflection: ± 30 mm



with adapter



with adapter and
cable terminals



For additional information see catalogs VKS (3b) and U15 (2c)

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)

 **VAHLE**
ELECTRIFICATION SYSTEMS