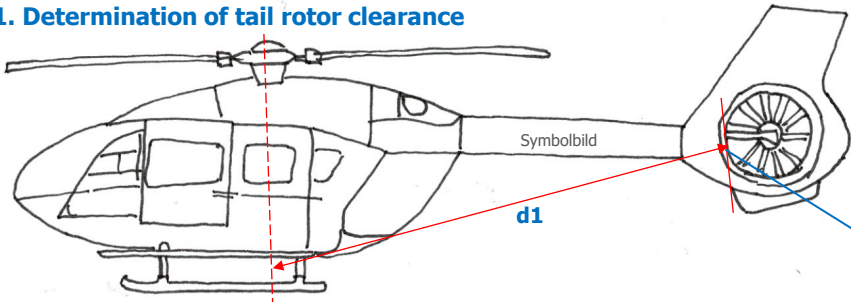


1. Determination of tail rotor clearance



Regardless of whether it is a tail rotor or a fan: this always refers to the forward position of the T/R rotor blade in relation to the primary load hook

H/C	Typ TR	Cargo Hook	Distanz d1	x	Bambi Bucket	Length d2 max.	x
BK117-C2 BK117-C2e	Tail Rotor	Sling ¹⁾	6012 mm		BBX1518, 680 lt	4050 mm	
BK117-C2	Tail Rotor	Beam	6405 mm		BBX1821, 820 lt	4100 mm	
H145 (BK117 D-2/D-3)	Fan	Sling	6490 mm		BBX2024, 910 lt	5390 mm ²⁾	
H145 (BK117 D-2/D-3)	Fan	Beam	6835 mm		BBX2226, 1000 lt	4110 mm	
other:					mm		

1) The "Sling" load hook type swings significantly further back.
2) These types are always too long for direct operation with the VM-DP_16_1.85_H145-M_FFK: BB2024 (6.13 m) and BBX2024 (5.39 m)

Your choice	Goal: d1 > d2	1.85 m			OK	not OK
d1 in mm	Minus d2 mm	Difference 1	VM-DP_H145-M_FFK	Difference 2		

no scale – 2007 - 2025 ©© AirWork & Heliselerei GmbH (A&H)

2. Connector assignment (4-pin variants)

H/C (Socket)	Plug	M/F	Pins (1 – 4 non-functional, 5 – 7 operation BB, 7 + 8 operation Remote)							
H/C socket on cargo hook beam	804-114-01M12-205SA	F	1	2	3	4	5	6	7	8
Feeding		--	--	--	--	--	28V/5A	28V/5A	M	28V/15A
Function		--	--	--	--	--	Current	Neutral	Mass	Current
Plug VM-DP_H145_FFK above	804-001-06M12-205PA	M	1	2	3	4	5	6	7	8
Socket VM-DP_H145_FFK below	select no 4.c. 8.e or 8.g	F					1	2	3	4 (M)
TLME_16_xx above ³⁾	select no. 4.b, 8.d or 8.f	M								
TLME_16_xx below	select no 4.c. 8.e or 8.g	F								
TLME_16_xx above	select no. 4.b, 8.d or 8.f	M								
TLME_16_xx below (VM-GO)	Select 4.d	F								
Electrical wire 4 x AWG14 Up to 30 m lenght of line ⁴⁾	E-LE_AWG14x4 (2 mm ²)	--					white	red	black	yellow or blue
A+B Seilendhülse (VM-GO)	VM-GO_PIN	M					3	4	1	2
A Remote /Swivel above	Pins on swivel ⁶⁾	Pin					Pin	Pin	Pin	Pin
or:										--
B Adapter VM-VL_20_E	select no 4.c. 8.e or 8.g ⁷⁾	F					3	4	1	2
B Bambi Bucket above	select no. 4.b, 8.d or 8.f	M					white	green	black	--
Equipment	--	--					Bambi Bucket			Remote

3) According to the SEI manual, the minimum length is 15 m (50 ft). In combination with the damper, the ShortLine can be shortened accordingly.
4) According to the SEI manual, AWG 14 is required for LongLine up to 30 m, and AWG 12 for 30 m and more. In practice, Remote Cargo Hooks also work without problems with AWG 14 and up to 100 m in length. 5) IP67 connector, robust and durable, screw cap. Robust contacts, screwed with soldered end sleeves. 6) Pin assignment only relevant for the swivel with Remote Cargo Hook. There are no pin numbers on the swivel. 7) Adapter pin assignment only relevant for BambiBucket

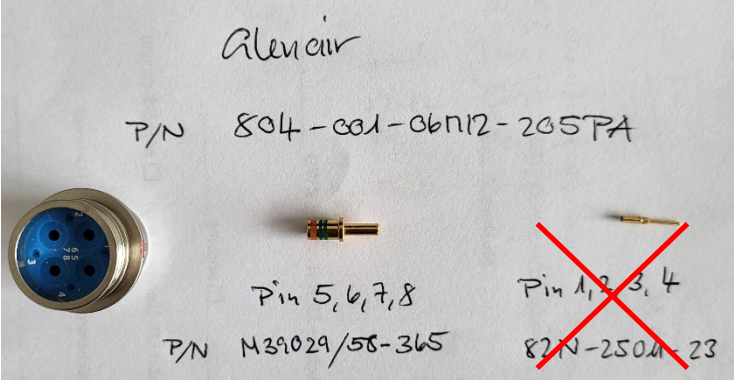
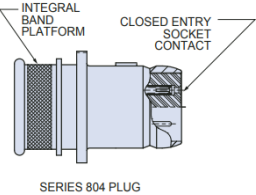
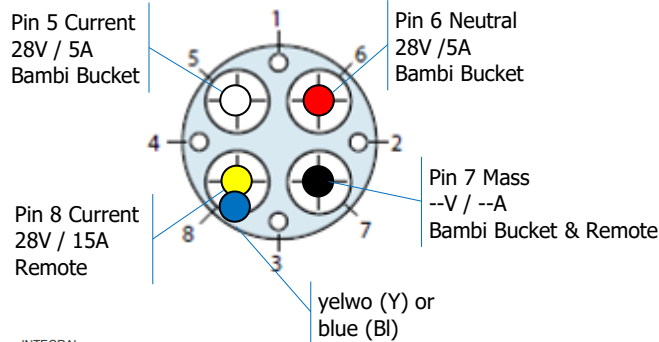
Connector assignment (4-pin variants)

3. Installation on H/C side, according to Airbus Amber

- Suppressor diodes are located directly at the separation point (helicopter socket) for all lines except the GND connection.
- Socket on H/S-frame (socket): EN3645M0CN04BN
 - Plug and cable bundles: EN3645M6CN04AN
 - Breakaway plug on Cargo-hook beam (socket): 804-114-01M12-205SA

4.a E-STE_804-001-06M12-205PA

VM-DP_H145-M_FFK, Masterlink to primary cargo hook Plug above, breakaway, M

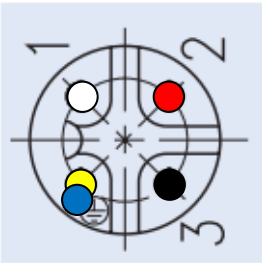


The plugs and their installation are included in the price.

4.b E-STE_M_4_AMP

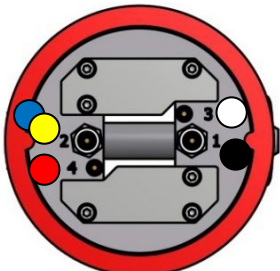
4.c E-STE_F_4_AMP

VM-DP_H145-M_FFK, Masterlink to primary cargo hook Socket below, F as well as on the lines above/below (M/F) on Links (VM-AD), below (F) Holding function through screw cap

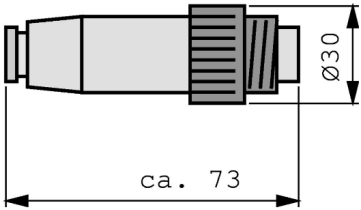


4.d VM-GO_14, 4 Pins

Pin 1 and 2 operation of Remote Pin 1 up to 4 optional for VM-VL with BB



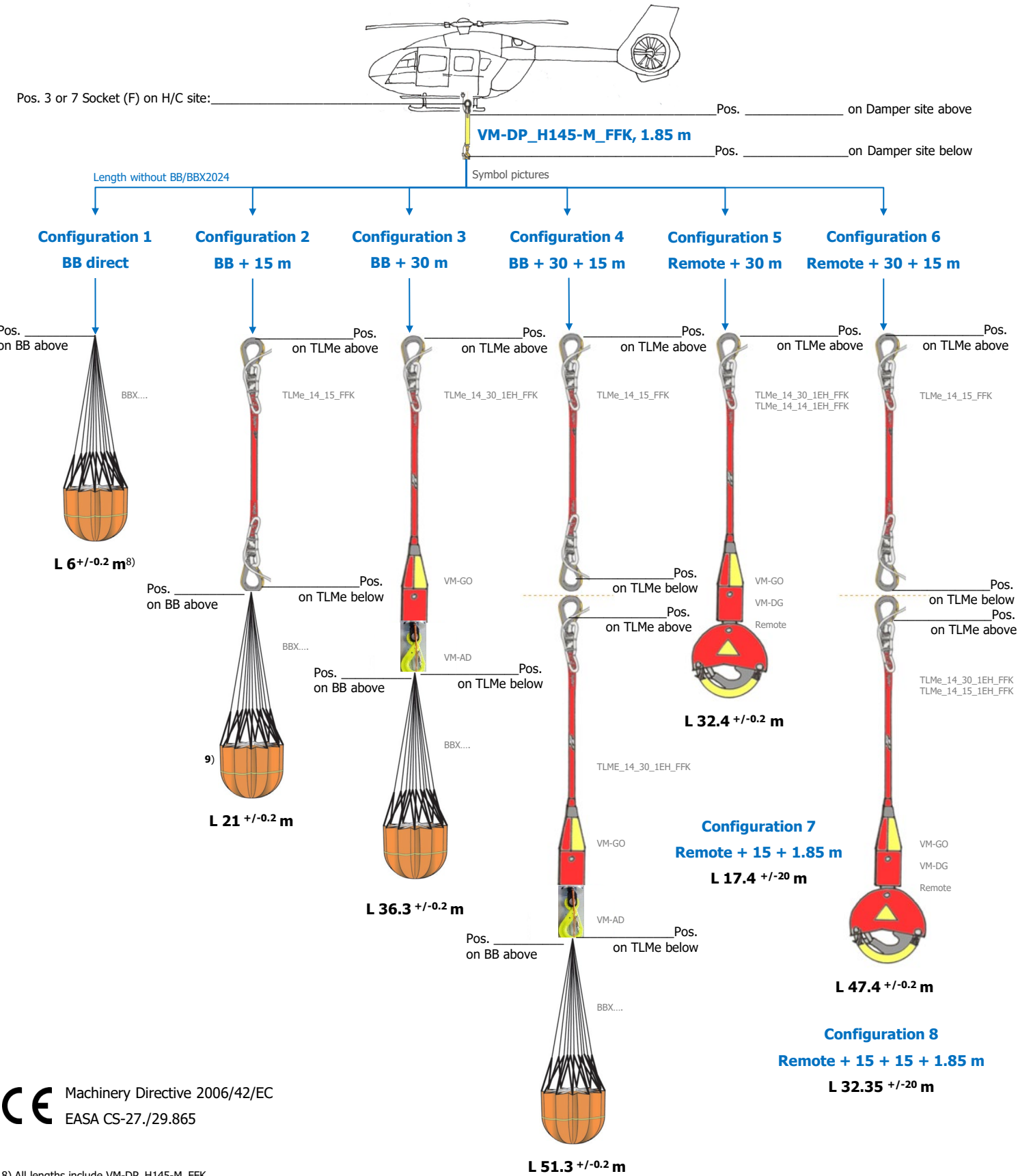
Ansicht von oben



On the BambiBucket/other devices plug E-STE_M_4_AMP

5. Short- und LongLine - Optionen

6 Configurations – 1 Solution



CE Machinery Directive 2006/42/EC
EASA CS-27./29.865

8) All lengths include VM-DP_H145-M_FFK
9) Image source: USD of Agriculture Forestry Service, Helicopter Dip Tank...

The flying lines from A&H Equipment - feel experience and safety.

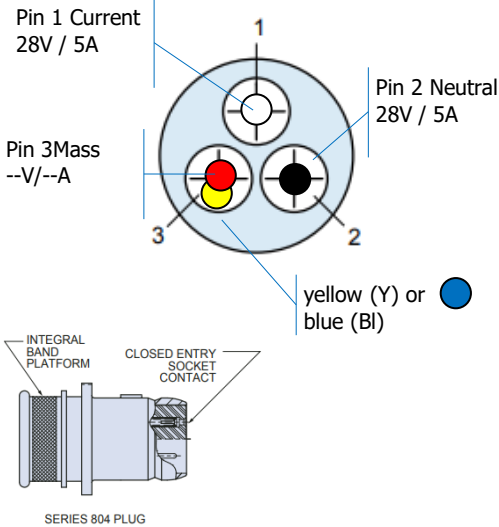
6. Determination of tail rotor clearance see page 1

7. Connector assignment (3-pin variants)

H/C (Socket)	Plug	M/F	PIN 1 - 3			
H/C socket on cargo hook beam	804-114-01M12-3SA	F	1 W	2 BK	3 G	
Other P/N for socket on H/C		F				
Feeding		--	28V/5A	28V/5A	M	
Function		--	Current	Neutral	Mass	
Plug VM-DP_H145_FFK above	E-STE_804-001-06M12-3PA	M	1	2	3	
Socket VM-DP_H145_FFK below	select no. 8.c, 8e or 8.g ¹²⁾	F	1	2	3	4
Electrical wire 4 x AWG14 Up to 30 m lenght of line ¹⁰⁾	E-LE_AWG14x4 (2 mm ²)	--	white	black	red	blue
TLMe_16_xx above ¹¹⁾	select no. 8.b, 8.d or 8.f	M	1	2	3	4
TLMe_16_xx below	select no. 8.c, 8e or 8.g	F	1	2	3	
B Bambi Bucket above	select no. 8.b, 8.d or 8.f	M	1	2	3	
Equipment	--	--	Bambi Bucket			

8.a E-STE_804-001-06M12-3PA ☐

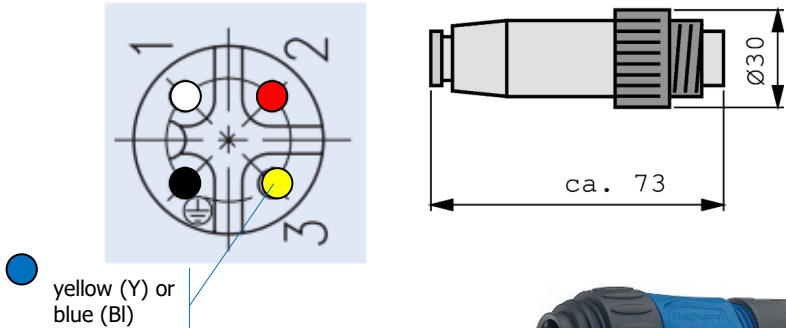
VM-DP_H145-M_FFK, Masterlink to primary cargo hook
Plug above, breakaway, M



8.b E-STE_M_4_AMP ☐

8.c E-STE_F_4_AMP ☐

VM-DP_H145-M_FFK, Masterlink to primary cargo hook
Socket below, F
as well as on th elines above/below (M/F)
on Links (VM-AD), below (F)
Holding function through screw cap



Plug M



Socket F

8.d E-STE_M_3r_SEI ☐

8.e E-STE_F_3r_SEI ☐

TLMe_16_xx_FFK, socket below, F and/or Plug above, M
Socket below, F



Plug M



Socket F

8.f E-STE_M_3e_SEI ☐

8.g E-STE_F_3e_SEI ☐

TLMe_16_xx_FFK, socket below, F and/or Plug above, M
Socket below, F (this plugs for control unit, if available)



Plug M



Socket F

10) According to the SEI manual, AWG 14 is required for LongLine up to 30 m, and AWG 12 for 30 m and more.

In practice, Remote Cargo Hooks also work without problems with AWG 14 and up to 100 m in length.

11) According to the SEI manual, the minimum length is 15 m (50 ft). In combination with the damper, the ShortLine can be shortened accordingly.

12) IP67 connector, robust and durable, screw cap. Robust contacts, screwed with soldered end sleeves.

The plugs and their installation are included in the price.

☐ pages 2 and 3 not relevant

The flying lines from A&H Equipment - feel experience and safety.

Page 4

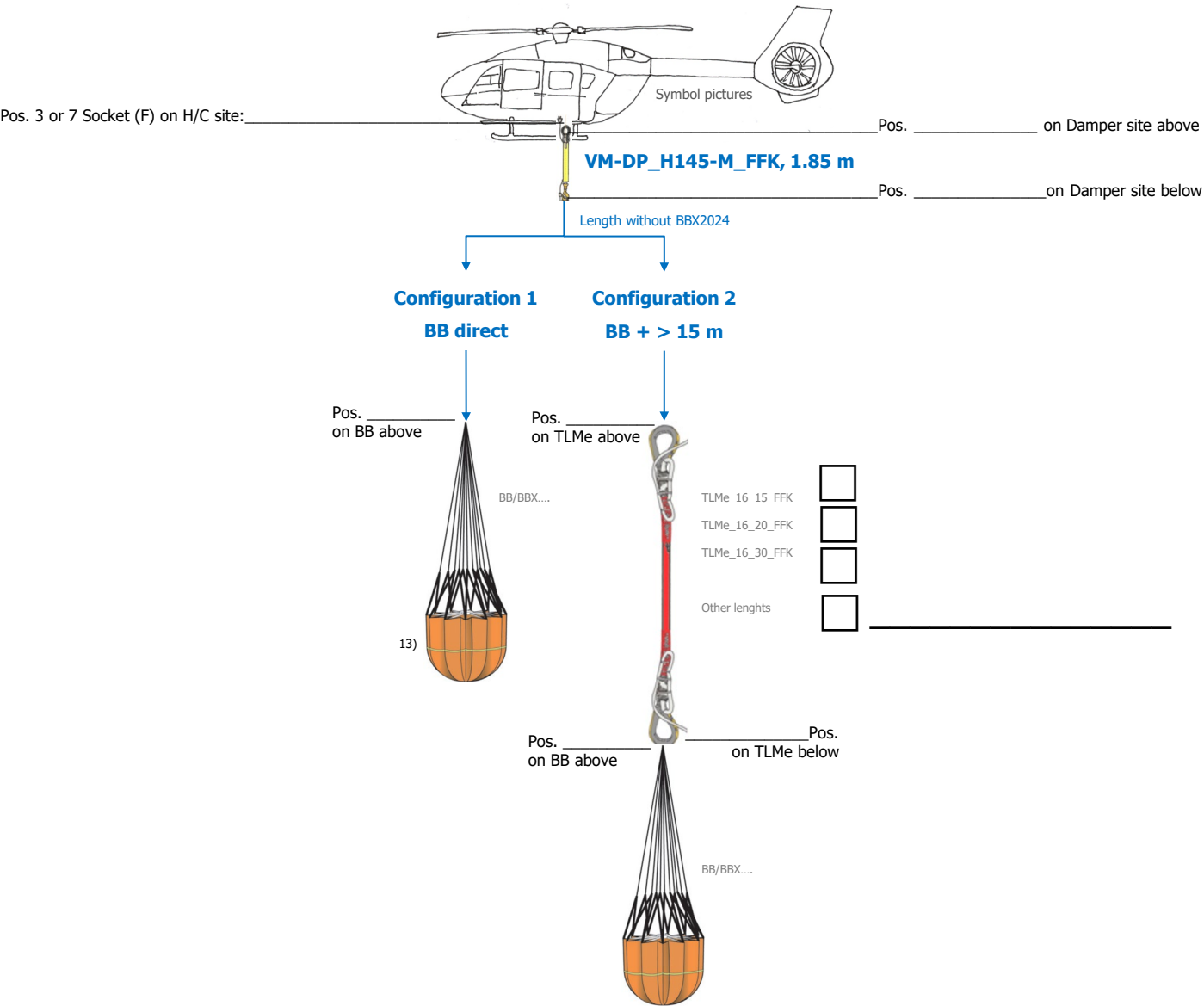
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Short- und LongLine - Optionen

2 Configurations – 1 Solution



The ShortLine must be equal to or longer than 15 m (50 ft).
AWG14 electrical wire is permitted up to 30 m LongLine.

URGENT

Operation of the BB or BBX2024 is possible with a Shortline 15 m or longer (up to 20 m = LongLine).
Operation of the BB/BBX2024 with only the VM-DP_H145_FFK is not permitted.
An adapter cable is supplied for operation of the BB/BBX2024 directly on the primary cargo hook.

13) Image source: USD of Agriculture Forestry Service, Helicopter Dip Tank...

CE Machinery Directive 2006/42/EC
EASA CS-27./29.865

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