

Selection Table A1

A1: Power and control cables

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Application Criteria					~					Cab	ле а	na l	_ead	De	sign	ratio	on									
For static and occasional flexing use	ÖLFLEX® CLASSIC 100	ÖLFLEX® CLASSIC 100 Yellow	ÖLFLEX® CLASSIC 100 CY	ÖLFLEX® CLASSIC 100 SY	ÖLFLEX® CLASSIC 100 BK POWER 0,6/1 KV	ÖLFLEX® CLASSIC 110	ÖLFLEX® CLASSIC 110 Cold	ÖLFLEX® CLASSIC 110 Orange	ÖLFLEX® CLASSIC 110 CY	ÖLFLEX® CLASSIC 110 SY	ÖLFLEX® CLASSIC 110 black	ÖLFLEX® CLASSIC 110 CY black	ÖLFLEX® CLASSIC 115 CY	ÖLFLEX® EB	ÖLFLEX® EB CY	ÖLFLEX® 140	ÖLFLEX® 140 CY	ÖLFLEX® 150	ÖLFLEX® 150 CY	ÖLFLEX® 191	ÖLFLEX® 191 CY	ÖLFLEX® CONTROL TM	ÖLFLEX® CONTROL TM CY	ÖLFLEX® Tray II	ÖLFLEX® Tray II CY	ÖLFLEX® SF
Application	, C	.0	.0	.0	.00		.0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.O	.0	.0	.0	.0	.O	.0	
Excepted circuits remain energized acc. IEE 60204-1 § 5.3.5 For intrinsically safe circuits in hazardous locations to/VDE 0165 Hand tools and lamps on worksites Oil resistant to UL + CSA specification Oil resistant to VDE Bio oil resistant Cables resistant to chemicals Cables resistant to ultra-violet light Cold-flexible cables Servomotors/Motive power engineering Standards			•		S	ee E	B-ca			sep	arate	e se	lection	on ta	able	• T1 :	and	• • T2	•	see E	B-c	able	s •	•	•	•
Based on VDE/HAR/DIN	•	•	•	•	•	•		•	•	•	•	•	•	•	•					•	•					•
As per Standard with VDE certification with VDE registration with HAR certification (HAR) with UL certification with CSA certification Temperature range						•	•		•	•						•	•	•	•	•	•	•	•	•	•	
+105 °C																										
+90 °C +80 °C																										
+70 °C			•	•		•			•	•	•	•														_
+60 °C -5 °C				Н								П			П				П	П						
-10 °C																										
-15 °C -25 °C																										
-30 °C]								
-40 °C -50 °C																										
-55 °C																										
Laying Outdoor, only indirectly in the ground (conduit) UV-protected, static Indoor, on surface, in conduit, in ducting, in partition walls, static Outdoor, protected against UV light, static laying Outdoor, unprotected in the open, low flexing Indoor, static & low flexing application	•	•	0	0	•	•	•	•	0	0	•	•	0	•	•	•	•	•	•	•	•	•	•	•	•	0 0 0
Bending radius, low flexing																										
5 x D 10 x D																										•
12.5 x D 15 x D	•	•									•			•	•	•		•		•		•				
20 x D			•	•					•	•		•	•				•		•		•		•			
Nominal voltage 250 V																										
300/300 V																										
300/500 V 600 V acc. to UL/CSA	•		•	•		•	•	•	•	•			•			•	•		•							
450/750 V	•	•	•	•																Ĭ	Ĭ	Ĭ	Ĭ			
600/1000 V Make-up	0		0	0	•						•	•														
Fine-wire VDE class 5, copper stranded conductors Superfine wire VDE class 6, copper stranded conductors Ultra fine wire VDE class 6, copper stranded conductors	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0	0	0	0	•
Polyurethane core insulation Rubber core insulation																										
PVC/special PVC PE/PP core insulation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Halogen free core insulation																										
Number printing Colour code to VDE 0293	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0
ÖLFLEX® colour code	•		•	•																						ĺ
Screening on the forn of copper braiding Common inner sheath under overall protection/braiding			•	•					•	•		•	•		•		•		•		•		•		•	
Steel wire braiding				•						•																
PVC sheath PUR sheath, wear resistant, cutting resistant	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•
Halogen free outer sheath																										
Bio oil resistant outer sheath P4/11 Outer sheath of synthetic rubber																										
Outer sheath of Neoprene® rubber																										
Outer sheath of rubber compound acc. to standard																										

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ppendix	EXAMPLE SERVICE LAPP GROUP
election Table	

Application Criteria										C	Cabl	e an	d Le	ad	Desi	igna	tior	1									
For static and occasional flexing use	ÖLFLEX® CLASSIC 100 H	ÖLFLEX® CLASSIC 110 H	ÖLFLEX® CLASSIC 110 CH	ÖLFLEX® 120 H	ÖLFLEX® 120 CH	ÖLFLEX® CLASSIC 130 H	ÖLFLEX® CLASSIC 135 CH	ÖLFLEX® CLASSIC 130 H BK 0,6/1 KV	ÖLFLEX® CLASSIC 135 CHBK 0,6/1 KV	ÖLFLEX® PETRO C HFFR	ÖLFLEX® ROBUST 200	ÖLFLEX® ROBUST 210	ÖLFLEX® ROBUST 215C	ÖLFLEX® CLASSIC 400 P	ÖLFLEX® CLASSIC 400 CP/415 CP	ÖLFLEX® 440 P/CP	ÖLFLEX® 491 P	ÖLFLEX® CONTROL M	ÖLFLEX® FORTIS	ÖLFLEX® 450 P	ÖLFLEX® 500 P	ÖLFLEX® 540 P	ÖLFLEX® 540 CP	ÖLFLEX® 550 P	H05RR-F	H05RN-F	HOZRNF
Application Excepted circuits remain energized acc. IEE 60204-1 § 5.3.5 For intrinsically safe circuits in hazardous locations to/VDE 0165 Hand tools and lamps on worksites Oil resistant to UL + CSA specification Oil resistant to VDE Bio oil resistant Cables resistant to chemicals Cables resistant to ultra-violet light Cold-flexible cables Servomotors/Motive power engineering	**		•	•	0		•	•		•	e epai	S	ee E	B-c	ables	S	•	•	•	•	•	•	•	•	•	•	•
Standards Based on VDE/HAR/DIN As per Standard with VDE certification with VDE registration with HAR certification (HAR) with UL certification with USA certification	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Temperature range +105 °C +90 °C +80 °C +70 °C +60 °C -5 °C -10 °C -15 °C -25 °C -30 °C																					•		-	-	-	-	•
-40 °C -50 °C -55 °C Laying Outdoor, only indirectly in the ground (conduit) UV-protected, static laying Indoor, on surface, in conduit, in ducting, in partition walls, static laying Outdoor, protected against UV light, static laying Outdoor, unprotected in the open, low flexing Indoor low flexing applications	•	•	•	•	•	•	•	•••	0000	•	• • • • • • • • • • • • • • • • • • • •	•	•	•	•	•	•	•	•	•	•	• • • •	• • • • • •	• • • • • •	•	0	• • •
Bending radius, low flexing 5 x D 10 x D 12.5 x D 15 x D 20 x D Nominal voltage	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
250 V 300/300 V 300/500 V 600 V acc. to UL/CSA 450/750 V 600/1000 V	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Make-up Fine-wire VDE class 5, copper stranded conductors Superfine wire VDE class 6, copper stranded conductors Ultra fine wire VDE class 6, copper stranded conductors Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation Rubber core insulation PVC/special PVC PE/PP core insulation Halogen free core insulation Number printing Colour code to VDE 0293 ÖLFLEX® colour code Screening on the forn of copper braiding Common inner sheath under overall protection/braiding	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Steel wire braiding PVC sheath PUR sheath, wear resistant, cutting resistant Halogen free outer sheath Bio oil resistant outer sheath P4/11 Outer sheath of synthetic rubber Outer sheath of Neoprene® rubber Outer sheath of rubber compound acc. to standard	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0	•	•	•	•	•	•	•	•	

^{**} Oil resistance according to SEV TB20B/3C.

Neoprene® is a registered trademark of DuPont de Nemour

 ⁼ Principal application
 = Application not customary, but possible, or alternative design available in the range

 ^{■ =} Temperature range for flexible laying
 ☑ = Temperature range for static and flexible laying
 □ = Temperature range for static laying



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Application Criteria										Cal	ole a	1	Lea	d De		nati	on						
For static and occasional flexing use				988								SERVO-cable acc. to SIEMENS Fx5			SERVO-cable acc. to SEW-Standard								
				H07BN4-F Wind Class5 & Class6								IENS			-Star			Ş					
				8 28		Ç	Ç	_	Ç	ΓC	Ç	SIEN	la	C	SEW		RNC	FR					
10 STORY				Clas	700	700	720	730	730	2YS	709	5	Sigr	9YS	다 :	Z	N	O N C					
				Vind	RVO	RVO	RVO	RVO	RVO	RVO	RVO	acc	Ö. ×	RVO	acc	RSIC	RSIC	RSIC	ANE				
	,	_	3-F	4-F	® SE	® SE	® SE	® SE	® SE	® SE	® SE	cable	® VF	® SE	cable	9 10	® T0	® T0	® CR				
	H07ZZ-F	NSSHÖU	H07RN8-F	'BN4	ÖLFLEX® SERVO 700	ÖLFLEX® SERVO 700 CY	ÖLFLEX® SERVO 720 CY	ÖLFLEX® SERVO 730	ÖLFLEX® SERVO 730 CY	ÖLFLEX® SERVO 2YSLCY	ÖLFLEX® SERVO 709 CY	VO-	ÖLFLEX® VFD w. Signal	ÖLFLEX® SERVO 9YSLCY	0	ÖLFLEX® TORSION	ÖLFLEX® TORSION FRNC	ÖLFLEX® TORSION D FRNC	ÖLFLEX® CRANE				
And the second	H07	NSS	H07	H0/1	ÖLF	ÖLF	ÖLF	ÖLF	ÖLF	ÖĽF	ÖLF	SER	ÖLF	ÖLF	SER	ÖLF	ÖLF	ÖLF	ÖĽF				
Application Excepted circuits remain energized acc. IEE 60204-1 § 5.3.5																						1 1	
For intrinsically safe circuits in hazardous locations to/VDE 0165																							
Hand tools and lamps on worksites Oil resistant to UL + CSA specification	•	•	•									•	•					•					
Oil resistant to VDE	•	•	•	•							•	•	•		•				•				
Bio oil resistant																							
Cables resistant to chemicals Cables resistant to ultra-violet light										0				0		•	•	•	•				
Cold-flexible cables	0	•	•	•						•				0		•	•	•	•				
Servomotors/Motive power engineering Standards					•	•	•	•	•	•		•	•	•	•	0	0	0					
Based on VDE/HAR/DIN					•	•	•	•	•	•	•	•		•		•	•	•	•				
As per Standard with VDE certification with VDE registration		•																					
with HAR certification (HAR)	•		•	•	•																		
with UL certification											•		•	•	•		•	•					
with CSA certification Temperature range																							
+105 °C +90 °C																							
+90 °C +80 °C					П	П																	
+70 °C																							
+60 °C -5 °C	H				Н	П	Н	Н			П	H											
-3 °C							ī																
-15 °C																							
-25 °C -30 °C		Н	۲											71									
-40 °C																							
-50 °C -55 °C																							
Laying										_				_									
Outdoor, only indirectly in the ground (conduit) UV-protected, static laying Indoor, on surface, in conduit, in ducting, in partition walls, static laying	•	0		•		•	•	•	•	0	0			0				•	•				
Outdoor, protected against UV light, static laying	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•				
Outdoor, unprotected in the open, low flexing Indoor low flexing applications	•	•	•	•						0				0		0	•	•	•				
Bending radius, low flexing									Ť										Ť				
5 x D	•	•	•	•						•				•		•		•					
10 x D 12.5 x D												•							•				
15 x D							•		•		•				•								
20 x D Nominal voltage						•	•	•						•									
250 V						•	•																
300/300 V 300/500 V																			•				
600 V acc. to UL/CSA											•	•	•		•								
450/750 V 600/1000 V	•	•	•												•	•	•	•					
Make-up																							
Fine-wire VDE class 5, copper stranded conductors	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•				•				
Superfine wire VDE along (1			•												•		•	•				
Superfine wire VDE class 6, copper stranded conductors Ultra fine wire VDE class 6, copper stranded conductors																							
Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation																							
Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation Rubber core insulation	•	•	•	•		•	•	•	•		•	•	•										
Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation Rubber core insulation PVC/special PVC PE/PP core insulation		•	•	•	•	•	•	•	•	•	•	•	•	•		•							
Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation Rubber core insulation PVC/special PVC PE/PP core insulation Halogen free core insulation	•		•	•			•			•	•			•	•	•	•	•					
Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation Rubber core insulation PVC/special PVC PE/PP core insulation Halogen free core insulation Number printing Colour code to VDE 0293		•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•				
Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation Rubber core insulation PVC/special PVC PE/PP core insulation Halogen free core insulation Number printing Colour code to VDE 0293 ÖLFLEX® colour code	•	•	•	•		•			•	•	•	•	•	•	•	•	•	•	•				
Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation Rubber core insulation PVC/special PVC PE/PP core insulation Halogen free core insulation Number printing Colour code to VDE 0293 ÖLFLEX® colour code Screening on the forn of copper braiding	•	•	•	•			•				•				•	•	•	•	•				
Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation Rubber core insulation PVC/special PVC PE/PP core insulation Halogen free core insulation Number printing Colour code to VDE 0293 ÖLFLEX® colour code Screening on the forn of copper braiding Common inner sheath under overall protection/braiding Steel wire braiding	•	•	•	•		•			•	•	•	•	•	•	•	•	•	•	•				
Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation Rubber core insulation PVC/special PVC PE/PP core insulation Halogen free core insulation Number printing Colour code to VDE 0293 ÖLFLEX* colour code Screening on the forn of copper braiding Common inner sheath under overall protection/braiding Steel wire braiding PVC sheath	•	•	•	•		•			•	•	•	•	•	•	•	•	•	•	•				
Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation Rubber core insulation PVC/special PVC PE/PP core insulation Halogen free core insulation Number printing Colour code to VDE 0293 ÖLFLEX® colour code Screening on the forn of copper braiding Common inner sheath under overall protection/braiding Steel wire braiding	•	•	•	•		•			•	•	•	•	•	•	•	•	•	•	•				
Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation Rubber core insulation PVC/special PVC PE/PP core insulation Halogen free core insulation Number printing Colour code to VDE 0293 ÖLFLEX® colour code Screening on the forn of copper braiding Common inner sheath under overall protection/braiding Steel wire braiding PVC sheath PUR sheath, wear resistant, cutting resistant Halogen free outer sheath Bio oil resistant outer sheath P4/11	•	•	•	•		•			•	•	•	•	•	•	•	•	•	•	•				
Ultra fine wire VDE class 6, copper stranded conductors Polyurethane core insulation Rubber core insulation PVC/special PVC PE/PP core insulation Halogen free core insulation Number printing Colour code to VDE 0293 ÖLFLEX® colour code Screening on the forn of copper braiding Common inner sheath under overall protection/braiding Steel wire braiding PVC sheath PUR sheath, wear resistant, cutting resistant Halogen free outer sheath	•	•	•	•		•			•	•	•	•	•	•	•	•	•	•	•				

Principal application
 Application not customary, but possible, or alternative design available in the range

■ = Temperature range for flexible laying
■ = Temperature range for static and flexible laying
□ = Temperature range for static laying