



ÖLFLEX® INSTRUM 160

Overall screened instrumentation cable
CU/PE/OS/PVC



Info

REXOHR 300 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, overall screened, PE insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** PE
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Outer sheath:** PVC, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U_o/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
8 x Outer Diameter

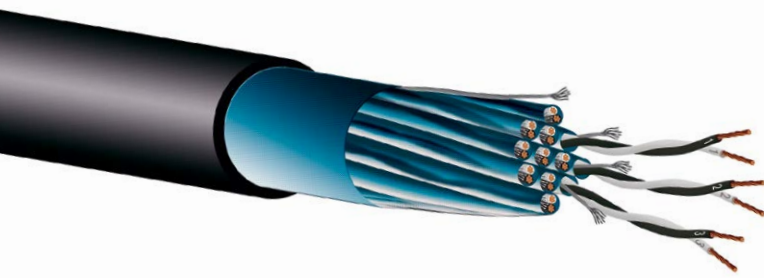
Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 160			
1x2x0,5	5,1	15,1	36
2x2x0,5	7,5	25,4	68
6x2x0,5	10,5	66,7	142
10x2x0,5	13,4	108,0	216
12x2x0,5	13,9	128,7	239
16x2x0,5	15,6	170,0	313
20x2x0,5	17,5	211,3	396
24x2x0,5	19,4	252,6	456
30x2x0,5	20,7	314,6	550
1x3x0,5	5,4	20,2	44
3x3x0,5	9,0	51,2	106
6x3x0,5	11,8	97,7	196
10x3x0,5	15,2	159,7	301
12x3x0,5	15,7	190,6	337
1x2x0,75	5,9	20,2	47
2x2x0,75	8,4	35,7	87
6x2x0,75	12,1	97,5	193
10x2x0,75	15,5	159,4	295
12x2x0,75	16,0	190,3	329
16x2x0,75	18,0	252,2	431
20x2x0,75	20,2	314,0	546
24x2x0,75	22,4	375,9	630
30x2x0,75	23,9	468,7	760
1x3x0,75	6,2	27,9	58
3x3x0,75	10,1	74,3	139
6x3x0,75	13,4	143,9	261
10x3x0,75	17,5	236,7	414
12x3x0,75	18,1	283,1	466

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 160			
1x2x1	6,4	25,6	55
2x2x1	9,4	46,5	109
6x2x1	13,2	130,1	238
10x2x1	17,2	213,6	375
12x2x1	17,8	255,4	419
16x2x1	19,7	338,9	540
20x2x1	22,2	422,5	684
24x2x1	24,8	506,0	804
30x2x1	26,5	631,4	972
1x3x1	6,7	36,1	69
3x3x1	11,0	98,7	170
6x3x1	14,9	192,7	333
10x3x1	19,2	318,0	518
12x3x1	20,1	380,7	595
1x2x1,5	7,2	36,5	71
2x2x1,5	10,8	68,2	145
6x2x1,5	15,5	195,1	336
10x2x1,5	20,2	322,1	529
12x2x1,5	20,9	385,5	594
16x2x1,5	23,4	512,5	782
20x2x1,5	26,3	639,4	989
24x2x1,5	29,4	766,3	1.161
30x2x1,5	31,4	956,7	1.404
1x3x1,5	7,6	52,3	92
3x3x1,5	13,0	147,5	240
6x3x1,5	17,5	290,3	472
10x3x1,5	22,6	480,7	738
12x3x1,5	23,6	575,9	850

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

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AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, other colors



ÖLFLEX® INSTRUM 161

Individual and overall screened instrumentation cable
CU/PE/IS/OS/PVC



Info

REXHOHR 300 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, individual and overall screened, PE insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** PE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Outer sheath:** PVC, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U_o/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 161			
2x2x0,5	8,3	35,7	86
6x2x0,5	11,8	97,7	195
10x2x0,5	15,2	159,7	300
12x2x0,5	15,7	190,6	337
16x2x0,5	17,6	252,6	442
20x2x0,5	19,5	314,6	547
24x2x0,5	21,9	376,6	646
30x2x0,5	23,3	469,5	783
3x3x0,5	9,9	66,7	132
6x3x0,5	13,1	128,7	246
10x3x0,5	16,9	211,3	382
12x3x0,5	17,7	252,6	440
2x2x0,75	9,5	46,0	110
6x2x0,75	13,3	128,5	244
10x2x0,75	17,4	211,0	386
12x2x0,75	18,0	252,3	434
16x2x0,75	20,1	334,8	569
20x2x0,75	22,4	417,3	706
24x2x0,75	25,1	499,8	832
30x2x0,75	26,8	623,6	1.008
3x3x0,75	11,1	89,8	166
6x3x0,75	15,0	174,9	321
10x3x0,75	19,4	288,3	501
12x3x0,75	20,3	345,1	577

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 161			
2x2x1	10,3	56,8	130
6x2x1	14,8	161,0	299
10x2x1	19,0	265,3	462
12x2x1	19,7	317,4	520
16x2x1	22,1	421,6	684
20x2x1	24,8	525,8	864
24x2x1	27,8	630,0	1.017
30x2x1	29,6	786,3	1.233
3x3x1	12,4	114,2	205
6x3x1	16,4	223,7	389
10x3x1	21,5	369,7	619
12x3x1	22,2	442,7	702
2x2x1,5	12,0	78,5	173
6x2x1,5	17,2	226,1	403
10x2x1,5	22,2	373,7	625
12x2x1,5	23,2	447,5	716
16x2x1,5	26,0	595,1	940
20x2x1,5	29,2	742,7	1.186
24x2x1,5	32,7	890,3	1.394
30x2x1,5	34,8	1111,6	1.689
3x3x1,5	14,4	163,0	279
6x3x1,5	19,2	321,3	534
10x3x1,5	25,1	532,4	849
12x3x1,5	26,2	637,9	979

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AVAILABLE ALSO IN: Conductor class 5, timed conductor, other colors



ÖLFLEX® INSTRUM SWA 162

Armoured, Overall screened instrumentation cable
CU/PE/OS/PVC/SWA/PVC



Info

**REXOHRFR 300 V
EN 50288-7**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured, twisted pair or triad signal cable,
overall screened, PE insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** PE
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Inner sheath:** PVC
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** PVC, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage Uo/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
10 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 162			
1x2x0,5	9,8	15,1	179
2x2x0,5	12,3	25,4	267
6x2x0,5	15,3	66,7	405
10x2x0,5	18,5	108,0	552
12x2x0,5	18,9	128,7	585
16x2x0,5	20,8	170,0	706
20x2x0,5	23,5	211,3	954
24x2x0,5	25,5	252,6	1.079
30x2x0,5	26,9	314,6	1.211
1x3x0,5	10,0	20,2	193
3x3x0,5	13,8	51,2	337
6x3x0,5	16,9	97,7	496
10x3x0,5	20,4	159,7	685
12x3x0,5	20,9	190,6	733
1x2x0,75	10,5	20,2	206
2x2x0,75	13,3	35,7	306
6x2x0,75	17,1	97,5	499
10x2x0,75	20,7	159,4	687
12x2x0,75	22,0	190,3	844
16x2x0,75	23,9	252,2	1.002
20x2x0,75	26,4	314,0	1.192
24x2x0,75	28,8	375,9	1.353
30x2x0,75	30,3	468,7	1.528
1x3x0,75	10,8	27,9	224
3x3x0,75	14,9	74,3	394
6x3x0,75	18,4	143,9	597
10x3x0,75	23,5	236,7	972
12x3x0,75	24,3	283,1	1.052

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 162			
1x2x1	11,0	25,6	224
2x2x1	14,2	46,5	349
6x2x1	18,2	130,1	569
10x2x1	23,2	213,6	925
12x2x1	23,8	255,4	985
16x2x1	25,9	338,9	1.174
20x2x1	28,6	422,5	1.403
24x2x1	31,2	506,0	1.599
30x2x1	33,9	631,4	2.012
1x3x1	11,3	36,1	246
3x3x1	15,9	98,7	446
6x3x1	20,0	192,7	701
10x3x1	25,4	318,0	1.137
12x3x1	26,3	380,7	1.239
1x2x1,5	11,8	36,5	258
2x2x1,5	15,6	68,2	415
6x2x1,5	20,7	195,1	727
10x2x1,5	26,4	322,1	1.176
12x2x1,5	27,1	385,5	1.260
16x2x1,5	29,8	512,5	1.535
20x2x1,5	33,7	639,4	2.022
24x2x1,5	36,9	766,3	2.320
30x2x1,5	38,9	956,7	2.634
1x3x1,5	12,5	52,3	294
3x3x1,5	18,0	147,5	566
6x3x1,5	23,5	290,3	1.029
10x3x1,5	29,0	480,7	1.467
12x3x1,5	30,0	575,9	1.608

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AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, Armour SWB, DSTA, other colors



ÖLFLEX® INSTRUM SWA 163

Armoured, Individual and Overall screened instrumentation cable
CU/PE/IS/OS/PVC/SWA/PVC



Info

**REXHOHRFR 300 V
EN 50288-7**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured, twisted pair or triad signal cable,
individual and overall screened, PE insulated and
PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** PE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** PE
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** PVC, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U_o/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
10 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 163			
2x2x0,5	13,1	35,7	302
6x2x0,5	16,9	97,7	495
10x2x0,5	20,4	159,7	684
12x2x0,5	20,9	190,6	732
16x2x0,5	23,5	252,6	1.001
20x2x0,5	25,7	314,6	1.175
24x2x0,5	28,3	376,6	1.354
30x2x0,5	29,8	469,5	1.534
3x3x0,5	14,7	66,7	383
6x3x0,5	18,1	128,7	574
10x3x0,5	22,9	211,3	922
12x3x0,5	23,6	252,6	1.003
2x2x0,75	14,3	46,0	352
6x2x0,75	18,4	128,5	578
10x2x0,75	23,4	211,0	941
12x2x0,75	24,0	252,3	1.005
16x2x0,75	26,3	334,8	1.214
20x2x0,75	28,8	417,3	1.431
24x2x0,75	31,5	499,8	1.635
30x2x0,75	34,1	623,6	2.058
3x3x0,75	16,0	89,8	444
6x3x0,75	20,3	174,9	702
10x3x0,75	25,6	288,3	1.124
12x3x0,75	26,5	345,1	1.225

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 163			
2x2x1	15,1	56,8	389
6x2x1	19,8	161,0	664
10x2x1	25,2	265,3	1.075
12x2x1	25,9	317,4	1.152
16x2x1	28,5	421,6	1.399
20x2x1	31,2	525,8	1.659
24x2x1	35,1	630,0	2.101
30x2x1	37,2	786,3	2.401
3x3x1	17,4	114,2	517
6x3x1	22,4	223,7	917
10x3x1	27,7	369,7	1.303
12x3x1	28,6	442,7	1.421
2x2x1,5	17,0	78,5	478
6x2x1,5	23,2	226,1	953
10x2x1,5	28,6	373,7	1.344
12x2x1,5	29,6	447,5	1.463
16x2x1,5	32,6	595,1	1.785
20x2x1,5	36,8	742,7	2.340
24x2x1,5	40,4	890,3	2.691
30x2x1,5	42,6	1111,6	3.065
3x3x1,5	19,4	163,0	636
6x3x1,5	25,4	321,3	1.152
10x3x1,5	31,5	532,4	1.652
12x3x1,5	32,8	637,9	1.828

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AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, Armour SWB, DSTA, other colors



ÖLFLEX® INSTRUM 164 H

Overall screened instrumentation cable
CU/LSZH/OS/LSZH



Info

RM9XOHM 1 300 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Halogen free
- Low smoke
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, overall screened, LSZH insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** LSZH
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

100 MOhm x km



Conductor stranding:

Class 2 IEC 60228



Nominal Voltage U₀/U:

300/300 V



Test voltage:

C/C 1500 V x 1 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 164 H			
1x2x0,5	5,1	15,1	36
2x2x0,5	7,5	25,4	68
6x2x0,5	10,5	66,7	142
10x2x0,5	13,4	108,0	216
12x2x0,5	13,9	128,7	239
16x2x0,5	15,6	170,0	313
20x2x0,5	17,5	211,3	396
24x2x0,5	19,4	252,6	456
30x2x0,5	20,7	314,6	550
1x3x0,5	5,4	20,2	44
3x3x0,5	9,0	51,2	106
6x3x0,5	11,8	97,7	196
10x3x0,5	15,2	159,7	301
12x3x0,5	15,7	190,6	337
1x2x0,75	5,9	20,2	47
2x2x0,75	8,4	35,7	87
6x2x0,75	12,1	97,5	193
10x2x0,75	15,5	159,4	295
12x2x0,75	16,0	190,3	329
16x2x0,75	18,0	252,2	431
20x2x0,75	20,2	314,0	546
24x2x0,75	22,4	375,9	630
30x2x0,75	23,9	468,7	760
1x3x0,75	6,2	27,9	58
3x3x0,75	10,1	74,3	139
6x3x0,75	13,4	143,9	261
10x3x0,75	17,5	236,7	414
12x3x0,75	18,1	283,1	466

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 164 H			
1x2x1	6,4	25,6	55
2x2x1	9,4	46,5	109
6x2x1	13,2	130,1	238
10x2x1	17,2	213,6	375
12x2x1	17,8	255,4	419
16x2x1	19,7	338,9	540
20x2x1	22,2	422,5	684
24x2x1	24,8	506,0	804
30x2x1	26,5	631,4	972
1x3x1	6,7	36,1	69
3x3x1	11,0	98,7	170
6x3x1	14,9	192,7	333
10x3x1	19,2	318,0	518
12x3x1	20,1	380,7	595
1x2x1,5	7,2	36,5	71
2x2x1,5	10,8	68,2	145
6x2x1,5	15,5	195,1	336
10x2x1,5	20,2	322,1	529
12x2x1,5	20,9	385,5	594
16x2x1,5	23,4	512,5	782
20x2x1,5	26,3	639,4	989
24x2x1,5	29,4	766,3	1.161
30x2x1,5	31,4	956,7	1.404
1x3x1,5	7,6	52,3	92
3x3x1,5	13,0	147,5	240
6x3x1,5	17,5	290,3	472
10x3x1,5	22,6	480,7	738
12x3x1,5	23,6	575,9	850

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

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AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, other colors



ÖLFLEX® INSTRUM 165 H

Individual and overall screened instrumentation cable
CU/LSZH/IS/OS/LSZH



Info

RM9XHOHM 1 300 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Halogen free
- Low smoke
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, individual and overall screened, LSZH insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** LSZH
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

100 MOhm x km



Conductor stranding:

Class 2 IEC 60228



Nominal Voltage U₀/U:

300/300 V



Test voltage:

C/C 1500 V x 1 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 165 H			
2x2x0,5	8,3	35,7	86
6x2x0,5	11,8	97,7	195
10x2x0,5	15,2	159,7	300
12x2x0,5	15,7	190,6	337
16x2x0,5	17,6	252,6	442
20x2x0,5	19,5	314,6	547
24x2x0,5	21,9	376,6	646
30x2x0,5	23,3	469,5	783
3x3x0,5	9,9	66,7	132
6x3x0,5	13,1	128,7	246
10x3x0,5	16,9	211,3	382
12x3x0,5	17,7	252,6	440
2x2x0,75	9,5	46,0	110
6x2x0,75	13,3	128,5	244
10x2x0,75	17,4	211,0	386
12x2x0,75	18,0	252,3	434
16x2x0,75	20,1	334,8	569
20x2x0,75	22,4	417,3	706
24x2x0,75	25,1	499,8	832
30x2x0,75	26,8	623,6	1.008
3x3x0,75	11,1	89,8	166
6x3x0,75	15,0	174,9	321
10x3x0,75	19,4	288,3	501
12x3x0,75	20,3	345,1	577

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 165 H			
2x2x1	10,3	56,8	130
6x2x1	14,8	161,0	299
10x2x1	19,0	265,3	462
12x2x1	19,7	317,4	520
16x2x1	22,1	421,6	684
20x2x1	24,8	525,8	864
24x2x1	27,8	630,0	1.017
30x2x1	29,6	786,3	1.233
3x3x1	12,4	114,2	205
6x3x1	16,4	223,7	389
10x3x1	21,5	369,7	619
12x3x1	22,2	442,7	702
2x2x1,5	12,0	78,5	173
6x2x1,5	17,2	226,1	403
10x2x1,5	22,2	373,7	625
12x2x1,5	23,2	447,5	716
16x2x1,5	26,0	595,1	940
20x2x1,5	29,2	742,7	1.186
24x2x1,5	32,7	890,3	1.394
30x2x1,5	34,8	1.111,6	1.689
3x3x1,5	14,4	163,0	279
6x3x1,5	19,2	321,3	534
10x3x1,5	25,1	532,4	849
12x3x1,5	26,2	637,9	979

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor class 5, tinned conductor, other colors



ÖLFLEX® INSTRUM 166 H

Overall screened instrumentation cable
CU/LSZH/OS/LSZH



Info

RM9XOHM 1 300 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Halogen free
- Low smoke
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, overall screened, LSZH insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** LSZH
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

100 MOhm x km



Conductor stranding:

Class 2 IEC 60228



Nominal Voltage U₀/U:

300/300 V



Test voltage:

C/C 1500 V x 1 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 166 H			
1x2x0,5	5,1	15,1	36
2x2x0,5	7,5	25,4	68
6x2x0,5	10,5	66,7	142
10x2x0,5	13,4	108,0	216
12x2x0,5	13,9	128,7	239
16x2x0,5	15,6	170,0	313
20x2x0,5	17,5	211,3	396
24x2x0,5	19,4	252,6	456
30x2x0,5	20,7	314,6	550
1x3x0,5	5,4	20,2	44
3x3x0,5	9,0	51,2	106
6x3x0,5	11,8	97,7	196
10x3x0,5	15,2	159,7	301
12x3x0,5	15,7	190,6	337
1x2x0,75	5,9	20,2	47
2x2x0,75	8,4	35,7	87
6x2x0,75	12,1	97,5	193
10x2x0,75	15,5	159,4	295
12x2x0,75	16,0	190,3	329
16x2x0,75	18,0	252,2	431
20x2x0,75	20,2	314,0	546
24x2x0,75	22,4	375,9	630
30x2x0,75	23,9	468,7	760
1x3x0,75	6,2	27,9	58
3x3x0,75	10,1	74,3	139
6x3x0,75	13,4	143,9	261
10x3x0,75	17,5	236,7	414
12x3x0,75	18,1	283,1	466

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 166 H			
1x2x1	6,4	25,6	55
2x2x1	9,4	46,5	109
6x2x1	13,2	130,1	238
10x2x1	17,2	213,6	375
12x2x1	17,8	255,4	419
16x2x1	19,7	338,9	540
20x2x1	22,2	422,5	684
24x2x1	24,8	506,0	804
30x2x1	26,5	631,4	972
1x3x1	6,7	36,1	69
3x3x1	11,0	98,7	170
6x3x1	14,9	192,7	333
10x3x1	19,2	318,0	518
12x3x1	20,1	380,7	595
1x2x1,5	7,2	36,5	71
2x2x1,5	10,8	68,2	145
6x2x1,5	15,5	195,1	336
10x2x1,5	20,2	322,1	529
12x2x1,5	20,9	385,5	594
16x2x1,5	23,4	512,5	782
20x2x1,5	26,3	639,4	989
24x2x1,5	29,4	766,3	1.161
30x2x1,5	31,4	956,7	1.404
1x3x1,5	7,6	52,3	92
3x3x1,5	13,0	147,5	240
6x3x1,5	17,5	290,3	472
10x3x1,5	22,6	480,7	738
12x3x1,5	23,6	575,9	850

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, Armour SWB, DSTA, other colors



ÖLFLEX® INSTRUM SWA 167 H

Armoured, Individual and Overall screened instrumentation cable
CU/LSZH/IS/OS/LSZH/SWA/LSZH



Info

**RM9XHOHM1FM1 300 V
EN 50288-7**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Halogen free
- Low smoke
- Fire behaviour
- Oil resistant

Product features

Armoured, twisted pair or triad signal cable,
individual and overall screened, LSZH insulated
and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** LSZH
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

100 MOhm x km



Conductor stranding:

Class 2 IEC 60228



Nominal Voltage U₀/U:

300/300 V



Test voltage:

C/C 1500 V x 1 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

10 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 167 H			
2x2x0,5	13,1	35,7	302
6x2x0,5	16,9	97,7	495
10x2x0,5	20,4	159,7	684
12x2x0,5	20,9	190,6	732
16x2x0,5	23,5	252,6	1.001
20x2x0,5	25,7	314,6	1.175
24x2x0,5	28,3	376,6	1.354
30x2x0,5	29,8	469,5	1.534
3x3x0,5	14,7	66,7	383
6x3x0,5	18,1	128,7	574
10x3x0,5	22,9	211,3	922
12x3x0,5	23,6	252,6	1.003
2x2x0,75	14,3	46,0	352
6x2x0,75	18,4	128,5	578
10x2x0,75	23,4	211,0	941
12x2x0,75	24,0	252,3	1.005
16x2x0,75	26,3	334,8	1.214
20x2x0,75	28,8	417,3	1.431
24x2x0,75	31,5	499,8	1.635
30x2x0,75	34,1	623,6	2.058
3x3x0,75	16,0	89,8	444
6x3x0,75	20,3	174,9	702
10x3x0,75	25,6	288,3	1.124
12x3x0,75	26,5	345,1	1.225

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 167 H			
2x2x1	15,1	56,8	389
6x2x1	19,8	161,0	664
10x2x1	25,2	265,3	1.075
12x2x1	25,9	317,4	1.152
16x2x1	28,5	421,6	1.399
20x2x1	31,2	525,8	1.659
24x2x1	35,1	630,0	2.101
30x2x1	37,2	786,3	2.401
3x3x1	17,4	114,2	517
6x3x1	22,4	223,7	917
10x3x1	27,7	369,7	1.303
12x3x1	28,6	442,7	1.421
2x2x1,5	17,0	78,5	478
6x2x1,5	23,2	226,1	953
10x2x1,5	28,6	373,7	1.344
12x2x1,5	29,6	447,5	1.463
16x2x1,5	32,6	595,1	1.785
20x2x1,5	36,8	742,7	2.340
24x2x1,5	40,4	890,3	2.691
30x2x1,5	42,6	1111,6	3.065
3x3x1,5	19,4	163,0	636
6x3x1,5	25,4	321,3	1.152
10x3x1,5	31,5	532,4	1.652
12x3x1,5	32,8	637,9	1.828

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, Armour SWB, DSTA, other colors



ÖLFLEX® INSTRUM 170

Overall screened instrumentation cable
CU/PVC/OS/PVC



Info

RRXOHR 300 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, overall screened, PVC insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** PVC
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Outer sheath:** PVC, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
100 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage Uo/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 170			
1x2x0,5	5,1	15,1	36
2x2x0,5	7,5	25,4	68
6x2x0,5	10,5	66,7	142
10x2x0,5	13,4	108,0	216
12x2x0,5	13,9	128,7	239
16x2x0,5	15,6	170,0	313
20x2x0,5	17,5	211,3	396
24x2x0,5	19,4	252,6	456
30x2x0,5	20,7	314,6	550
1x3x0,5	5,4	20,2	44
3x3x0,5	9,0	51,2	106
6x3x0,5	11,8	97,7	196
10x3x0,5	15,2	159,7	301
12x3x0,5	15,7	190,6	337
1x2x0,75	5,9	20,2	47
2x2x0,75	8,4	35,7	87
6x2x0,75	12,1	97,5	193
10x2x0,75	15,5	159,4	295
12x2x0,75	16,0	190,3	329
16x2x0,75	18,0	252,2	431
20x2x0,75	20,2	314,0	546
24x2x0,75	22,4	375,9	630
30x2x0,75	23,9	468,7	760
1x3x0,75	6,2	27,9	58
3x3x0,75	10,1	74,3	139
6x3x0,75	13,4	143,9	261
10x3x0,75	17,5	236,7	414
12x3x0,75	18,1	283,1	466

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 170			
1x2x1	6,4	25,6	55
2x2x1	9,4	46,5	109
6x2x1	13,2	130,1	238
10x2x1	17,2	213,6	375
12x2x1	17,8	255,4	419
16x2x1	19,7	338,9	540
20x2x1	22,2	422,5	684
24x2x1	24,8	506,0	804
30x2x1	26,5	631,4	972
1x3x1	6,7	36,1	69
3x3x1	11,0	98,7	170
6x3x1	14,9	192,7	333
10x3x1	19,2	318,0	518
12x3x1	20,1	380,7	595
1x2x1,5	7,2	36,5	71
2x2x1,5	10,8	68,2	145
6x2x1,5	15,5	195,1	336
10x2x1,5	20,2	322,1	529
12x2x1,5	20,9	385,5	594
16x2x1,5	23,4	512,5	782
20x2x1,5	26,3	639,4	989
24x2x1,5	29,4	766,3	1.161
30x2x1,5	31,4	956,7	1.404
1x3x1,5	7,6	52,3	92
3x3x1,5	13,0	147,5	240
6x3x1,5	17,5	290,3	472
10x3x1,5	22,6	480,7	738
12x3x1,5	23,6	575,9	850

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, other colors



ÖLFLEX® INSTRUM 171

Individual and overall screened instrumentation cable
CU/PVC/IS/OS/PVC



Info

RRXHOHR 300 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, individual and overall screened, PVC insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** PVC
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Outer sheath:** PVC, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
100 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U_o/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 171			
2x2x0,5	8,3	35,7	86
6x2x0,5	11,8	97,7	195
10x2x0,5	15,2	159,7	300
12x2x0,5	15,7	190,6	337
16x2x0,5	17,6	252,6	442
20x2x0,5	19,5	314,6	547
24x2x0,5	21,9	376,6	646
30x2x0,5	23,3	469,5	783
3x3x0,5	9,9	66,7	132
6x3x0,5	13,1	128,7	246
10x3x0,5	16,9	211,3	382
12x3x0,5	17,7	252,6	440
2x2x0,75	9,5	46,0	110
6x2x0,75	13,3	128,5	244
10x2x0,75	17,4	211,0	386
12x2x0,75	18,0	252,3	434
16x2x0,75	20,1	334,8	569
20x2x0,75	22,4	417,3	706
24x2x0,75	25,1	499,8	832
30x2x0,75	26,8	623,6	1.008
3x3x0,75	11,1	89,8	166
6x3x0,75	15,0	174,9	321
10x3x0,75	19,4	288,3	501
12x3x0,75	20,3	345,1	577

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 171			
2x2x1	10,3	56,8	130
6x2x1	14,8	161,0	299
10x2x1	19,0	265,3	462
12x2x1	19,7	317,4	520
16x2x1	22,1	421,6	684
20x2x1	24,8	525,8	864
24x2x1	27,8	630,0	1.017
30x2x1	29,6	786,3	1.233
3x3x1	12,4	114,2	205
6x3x1	16,4	223,7	389
10x3x1	21,5	369,7	619
12x3x1	22,2	442,7	702
2x2x1,5	12,0	78,5	173
6x2x1,5	17,2	226,1	403
10x2x1,5	22,2	373,7	625
12x2x1,5	23,2	447,5	716
16x2x1,5	26,0	595,1	940
20x2x1,5	29,2	742,7	1.186
24x2x1,5	32,7	890,3	1.394
30x2x1,5	34,8	1111,6	1.689
3x3x1,5	14,4	163,0	279
6x3x1,5	19,2	321,3	534
10x3x1,5	25,1	532,4	849
12x3x1,5	26,2	637,9	979

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor class 5, timed conductor, other colors



ÖLFLEX® INSTRUM SWA 172

Armoured, Overall screened instrumentation cable
CU/PVC/OS/PVC/SWA/PVC



Info

**RRXOHRFR 300 V
EN 50288-7**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured, twisted pair or triad signal cable,
overall screened, PVC insulated and PVC
jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** PVC
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Inner sheath:** PVC
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** PVC, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
100 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage Uo/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
10 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 172			
1x2x0,5	9,8	15,1	179
2x2x0,5	12,3	25,4	267
6x2x0,5	15,3	66,7	405
10x2x0,5	18,5	108,0	552
12x2x0,5	18,9	128,7	585
16x2x0,5	20,8	170,0	706
20x2x0,5	23,5	211,3	954
24x2x0,5	25,5	252,6	1.079
30x2x0,5	26,9	314,6	1.211
1x3x0,5	10,0	20,2	193
3x3x0,5	13,8	51,2	337
6x3x0,5	16,9	97,7	496
10x3x0,5	20,4	159,7	685
12x3x0,5	20,9	190,6	733
1x2x0,75	10,5	20,2	206
2x2x0,75	13,3	35,7	306
6x2x0,75	17,1	97,5	499
10x2x0,75	20,7	159,4	687
12x2x0,75	22,0	190,3	844
16x2x0,75	23,9	252,2	1.002
20x2x0,75	26,4	314,0	1.192
24x2x0,75	28,8	375,9	1.353
30x2x0,75	30,3	468,7	1.528
1x3x0,75	10,8	27,9	224
3x3x0,75	14,9	74,3	394
6x3x0,75	18,4	143,9	597
10x3x0,75	23,5	236,7	972
12x3x0,75	24,3	283,1	1.052

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 172			
1x2x1	11,0	25,6	224
2x2x1	14,2	46,5	349
6x2x1	18,2	130,1	569
10x2x1	23,2	213,6	925
12x2x1	23,8	255,4	985
16x2x1	25,9	338,9	1.174
20x2x1	28,6	422,5	1.403
24x2x1	31,2	506,0	1.599
30x2x1	33,9	631,4	2.012
1x3x1	11,3	36,1	246
3x3x1	15,9	98,7	446
6x3x1	20,0	192,7	701
10x3x1	25,4	318,0	1.137
12x3x1	26,3	380,7	1.239
1x2x1,5	11,8	36,5	258
2x2x1,5	15,6	68,2	415
6x2x1,5	20,7	195,1	727
10x2x1,5	26,4	322,1	1.176
12x2x1,5	27,1	385,5	1.260
16x2x1,5	29,8	512,5	1.535
20x2x1,5	33,7	639,4	2.022
24x2x1,5	36,9	766,3	2.320
30x2x1,5	38,9	956,7	2.634
1x3x1,5	12,5	52,3	294
3x3x1,5	18,0	147,5	566
6x3x1,5	23,5	290,3	1.029
10x3x1,5	29,0	480,7	1.467
12x3x1,5	30,0	575,9	1.608

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, Armour SWB, DSTA, other colors



ÖLFLEX® INSTRUM SWA 173

Armoured, Individual and Overall screened instrumentation cable
CU/PVC/IS/OS/PVC/SWA/PVC



Info

**RRXHOHRFR 300 V
EN 50288-7**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured, twisted pair or triad signal cable,
individual and overall screened, PVC insulated
and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** PVC
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** PVC
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** PVC, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

100 MOhm x km



Conductor stranding:

Class 2 IEC 60228



Nominal Voltage U₀/U:

300/300 V



Test voltage:

C/C 1500 V x 1 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

10 x Outer Diameter

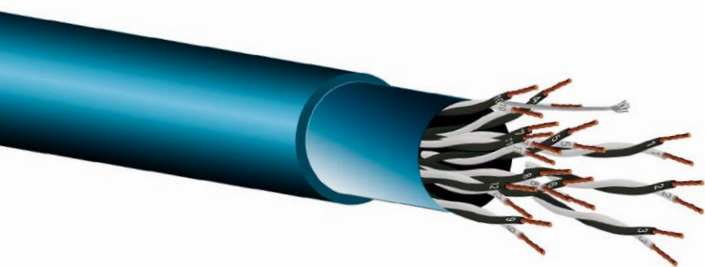
Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 173			
2x2x0,5	13,1	35,7	302
6x2x0,5	16,9	97,7	495
10x2x0,5	20,4	159,7	684
12x2x0,5	20,9	190,6	732
16x2x0,5	23,5	252,6	1.001
20x2x0,5	25,7	314,6	1.175
24x2x0,5	28,3	376,6	1.354
30x2x0,5	29,8	469,5	1.534
3x3x0,5	14,7	66,7	383
6x3x0,5	18,1	128,7	574
10x3x0,5	22,9	211,3	922
12x3x0,5	23,6	252,6	1.003
2x2x0,75	14,3	46,0	352
6x2x0,75	18,4	128,5	578
10x2x0,75	23,4	211,0	941
12x2x0,75	24,0	252,3	1.005
16x2x0,75	26,3	334,8	1.214
20x2x0,75	28,8	417,3	1.431
24x2x0,75	31,5	499,8	1.635
30x2x0,75	34,1	623,6	2.058
3x3x0,75	16,0	89,8	444
6x3x0,75	20,3	174,9	702
10x3x0,75	25,6	288,3	1.124
12x3x0,75	26,5	345,1	1.225

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 173			
2x2x1	15,1	56,8	389
6x2x1	19,8	161,0	664
10x2x1	25,2	265,3	1.075
12x2x1	25,9	317,4	1.152
16x2x1	28,5	421,6	1.399
20x2x1	31,2	525,8	1.659
24x2x1	35,1	630,0	2.101
30x2x1	37,2	786,3	2.401
3x3x1	17,4	114,2	517
6x3x1	22,4	223,7	917
10x3x1	27,7	369,7	1.303
12x3x1	28,6	442,7	1.421
2x2x1,5	17,0	78,5	478
6x2x1,5	23,2	226,1	953
10x2x1,5	28,6	373,7	1.344
12x2x1,5	29,6	447,5	1.463
16x2x1,5	32,6	595,1	1.785
20x2x1,5	36,8	742,7	2.340
24x2x1,5	40,4	890,3	2.691
30x2x1,5	42,6	1111,6	3.065
3x3x1,5	19,4	163,0	636
6x3x1,5	25,4	321,3	1.152
10x3x1,5	31,5	532,4	1.652
12x3x1,5	32,8	637,9	1.828

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, Armour SWB, DSTA, other colors



ÖLFLEX® INSTRUM 174 IS

Overall screened instrumentation cable
for intrinsically safe circuits
CU/XLPE/OS/PVC



Info

RE4XOHR 300 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, overall screened, XLPE insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Outer sheath:** PVC, blue RAL 5015

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage Uo/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
8 x Outer Diameter

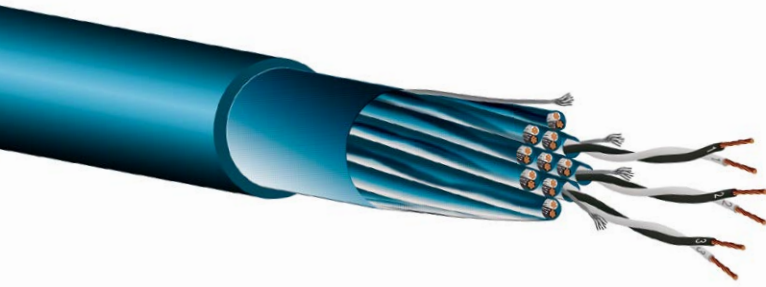
Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 174 IS			
1x2x0,5	5,1	15,1	34
2x2x0,5	7,5	25,4	65
6x2x0,5	10,5	66,7	132
10x2x0,5	13,4	108,0	199
12x2x0,5	13,9	128,7	219
16x2x0,5	15,6	170,0	286
20x2x0,5	17,5	211,3	363
24x2x0,5	19,4	252,6	416
30x2x0,5	20,7	314,6	500
1x3x0,5	5,4	20,2	41
3x3x0,5	9,0	51,2	99
6x3x0,5	11,8	97,7	181
10x3x0,5	15,2	159,7	276
12x3x0,5	15,7	190,6	307
1x2x0,75	5,9	20,2	45
2x2x0,75	8,4	35,7	83
6x2x0,75	12,1	97,5	180
10x2x0,75	15,5	159,4	274
12x2x0,75	16,0	190,3	303
16x2x0,75	18,0	252,2	396
20x2x0,75	20,2	314,0	502
24x2x0,75	22,4	375,9	578
30x2x0,75	23,9	468,7	695
1x3x0,75	6,2	27,9	55
3x3x0,75	10,1	74,3	129
6x3x0,75	13,4	143,9	242
10x3x0,75	17,5	236,7	381
12x3x0,75	18,1	283,1	427

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 174 IS			
1x2x1	6,4	25,6	52
2x2x1	9,4	46,5	104
6x2x1	13,2	130,1	223
10x2x1	17,2	213,6	349
12x2x1	17,8	255,4	388
16x2x1	19,7	338,9	499
20x2x1	22,2	422,5	633
24x2x1	24,8	506,0	742
30x2x1	26,5	631,4	894
1x3x1	6,7	36,1	65
3x3x1	11,0	98,7	159
6x3x1	14,9	192,7	309
10x3x1	19,2	318,0	479
12x3x1	20,1	380,7	549
1x2x1,5	7,2	36,5	67
2x2x1,5	10,8	68,2	138
6x2x1,5	15,5	195,1	315
10x2x1,5	20,2	322,1	494
12x2x1,5	20,9	385,5	552
16x2x1,5	23,4	512,5	725
20x2x1,5	26,3	639,4	919
24x2x1,5	29,4	766,3	1.076
30x2x1,5	31,4	956,7	1.299
1x3x1,5	7,6	52,3	87
3x3x1,5	13,0	147,5	224
6x3x1,5	17,5	290,3	440
10x3x1,5	22,6	480,7	685
12x3x1,5	23,6	575,9	786

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, other colors



ÖLFLEX® INSTRUM 175 IS

Individual and overall screened instrumentation cable
for intrinsically safe circuits
CU/XLPE/IS/OS/PVC



Info

RE4XHOHR 300 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, individual and overall screened, XLPE insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Outer sheath:** PVC, blue RAL 5015

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

5000 MOhm x km



Conductor stranding:

Class 2 IEC 60228



Nominal Voltage U_o/U:

300/300 V



Test voltage:

C/C 1500 V x 1 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

8 x Outer Diameter

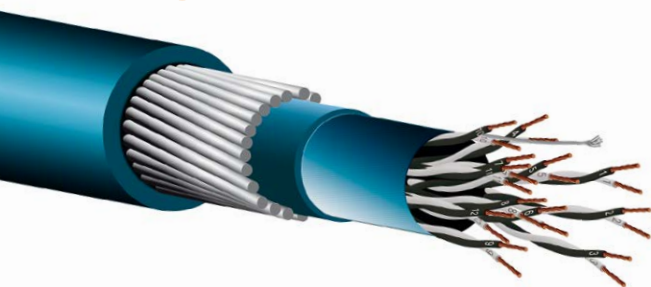
Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 175 IS			
2x2x0,5	8,3	35,7	83
6x2x0,5	11,8	97,7	185
10x2x0,5	15,2	159,7	284
12x2x0,5	15,7	190,6	317
16x2x0,5	17,6	252,6	415
20x2x0,5	19,5	314,6	514
24x2x0,5	21,9	376,6	606
30x2x0,5	23,3	469,5	732
3x3x0,5	9,9	66,7	124
6x3x0,5	13,1	128,7	230
10x3x0,5	16,9	211,3	357
12x3x0,5	17,7	252,6	410
2x2x0,75	9,5	46,0	106
6x2x0,75	13,3	128,5	231
10x2x0,75	17,4	211,0	365
12x2x0,75	18,0	252,3	408
16x2x0,75	20,1	334,8	534
20x2x0,75	22,4	417,3	663
24x2x0,75	25,1	499,8	780
30x2x0,75	26,8	623,6	943
3x3x0,75	11,1	89,8	156
6x3x0,75	15,0	174,9	302
10x3x0,75	19,4	288,3	468
12x3x0,75	20,3	345,1	538

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 175 IS			
2x2x1	10,3	56,8	124
6x2x1	14,8	161,0	283
10x2x1	19,0	265,3	436
12x2x1	19,7	317,4	489
16x2x1	22,1	421,6	643
20x2x1	24,8	525,8	812
24x2x1	27,8	630,0	955
30x2x1	29,6	786,3	1.155
3x3x1	12,4	114,2	193
6x3x1	16,4	223,7	366
10x3x1	21,5	369,7	580
12x3x1	22,2	442,7	656
2x2x1,5	12,0	78,5	166
6x2x1,5	17,2	226,1	382
10x2x1,5	22,2	373,7	589
12x2x1,5	23,2	447,5	673
16x2x1,5	26,0	595,1	884
20x2x1,5	29,2	742,7	1.116
24x2x1,5	32,7	890,3	1.310
30x2x1,5	34,8	1111,6	1.583
3x3x1,5	14,4	163,0	263
6x3x1,5	19,2	321,3	502
10x3x1,5	25,1	532,4	797
12x3x1,5	26,2	637,9	915

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, other colors



ÖLFLEX® INSTRUM SWA 176 IS

Armoured overall screened instrumentation cable
for intrinsically safe circuits
CU/XLPE/OS/PVC/SWA/PVC



Info

**RE4XOHRFR 300 V
EN 50288-7**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured twisted pair or triad signal cable,
overall screened, XLPE insulated and PVC
jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Inner sheath:** PVC, blue RAL 5015
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** PVC, blue RAL 5015

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage Uo/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



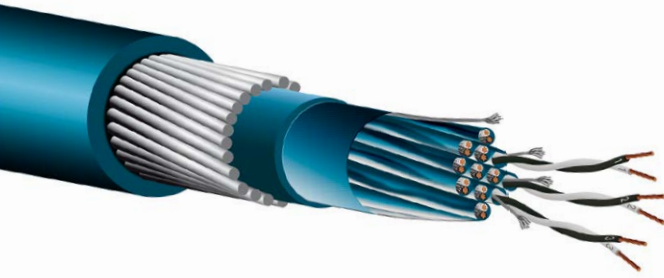
Minimum Bending Radius:
10 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 176 IS			
1x2x0,5	9,8	15,1	177
2x2x0,5	12,3	25,4	264
6x2x0,5	15,3	66,7	395
10x2x0,5	18,5	108,0	535
12x2x0,5	18,9	128,7	565
16x2x0,5	20,8	170,0	679
20x2x0,5	23,5	211,3	921
24x2x0,5	25,5	252,6	1.039
30x2x0,5	26,9	314,6	1.161
1x3x0,5	10,0	20,2	190
3x3x0,5	13,8	51,2	330
6x3x0,5	16,9	97,7	481
10x3x0,5	20,4	159,7	660
12x3x0,5	20,9	190,6	703
1x2x0,75	10,5	20,2	204
2x2x0,75	13,3	35,7	302
6x2x0,75	17,1	97,5	486
10x2x0,75	20,7	159,4	665
12x2x0,75	22,0	190,3	818
16x2x0,75	23,9	252,2	967
20x2x0,75	26,4	314,0	1.149
24x2x0,75	28,8	375,9	1.300
30x2x0,75	30,3	468,7	1.463
1x3x0,75	10,8	27,9	221
3x3x0,75	14,9	74,3	385
6x3x0,75	18,4	143,9	577
10x3x0,75	23,5	236,7	939
12x3x0,75	24,3	283,1	1.013

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 176 IS			
1x2x1	11,0	25,6	222
2x2x1	14,2	46,5	344
6x2x1	18,2	130,1	554
10x2x1	23,2	213,6	899
12x2x1	23,8	255,4	954
16x2x1	25,9	338,9	1.132
20x2x1	28,6	422,5	1.351
24x2x1	31,2	506,0	1.537
30x2x1	33,9	631,4	1.934
1x3x1	11,3	36,1	242
3x3x1	15,9	98,7	435
6x3x1	20,0	192,7	678
10x3x1	25,4	318,0	1.098
12x3x1	26,3	380,7	1.193
1x2x1,5	11,8	36,5	255
2x2x1,5	15,6	68,2	408
6x2x1,5	20,7	195,1	706
10x2x1,5	26,4	322,1	1.141
12x2x1,5	27,1	385,5	1.218
16x2x1,5	29,8	512,5	1.478
20x2x1,5	33,7	639,4	1.951
24x2x1,5	36,9	766,3	2.236
30x2x1,5	38,9	956,7	2.529
1x3x1,5	12,5	52,3	289
3x3x1,5	18,0	147,5	550
6x3x1,5	23,5	290,3	998
10x3x1,5	29,0	480,7	1.414
12x3x1,5	30,0	575,9	1.544

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, Armour SWB, DSTA, other colors



ÖLFLEX® INSTRUM SWA 177 IS

Armoured individual and overall screened instrumentation cable for intrinsically safe circuits
CU/XLPE/IS/OS/PVC/SWA/PVC



Info

**RE4XHOHRFR 300 V
EN 50288-7**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured twisted pair or triad signal cable,
individual and overall screened, XLPE insulated
and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** PVC, blue RAL 5015
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** PVC, blue RAL 5015

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U_o/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
10 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 177 IS			
2x2x0,5	13,1	35,7	298
6x2x0,5	16,9	97,7	485
10x2x0,5	20,4	159,7	667
12x2x0,5	20,9	190,6	712
16x2x0,5	23,5	252,6	975
20x2x0,5	25,7	314,6	1.142
24x2x0,5	28,3	376,6	1.314
30x2x0,5	29,8	469,5	1.484
3x3x0,5	14,7	66,7	375
6x3x0,5	18,1	128,7	559
10x3x0,5	22,9	211,3	897
12x3x0,5	23,6	252,6	972
2x2x0,75	14,3	46,0	348
6x2x0,75	18,4	128,5	565
10x2x0,75	23,4	211,0	919
12x2x0,75	24,0	252,3	979
16x2x0,75	26,3	334,8	1.179
20x2x0,75	28,8	417,3	1.388
24x2x0,75	31,5	499,8	1.583
30x2x0,75	34,1	623,6	1.993
3x3x0,75	16,0	89,8	434
6x3x0,75	20,3	174,9	683
10x3x0,75	25,6	288,3	1.092
12x3x0,75	26,5	345,1	1.186

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 177 IS			
2x2x1	15,1	56,8	384
6x2x1	19,8	161,0	648
10x2x1	25,2	265,3	1.050
12x2x1	25,9	317,4	1.121
16x2x1	28,5	421,6	1.357
20x2x1	31,2	525,8	1.607
24x2x1	35,1	630,0	2.039
30x2x1	37,2	786,3	2.323
3x3x1	17,4	114,2	506
6x3x1	22,4	223,7	894
10x3x1	27,7	369,7	1.264
12x3x1	28,6	442,7	1.374
2x2x1,5	17,0	78,5	471
6x2x1,5	23,2	226,1	931
10x2x1,5	28,6	373,7	1.308
12x2x1,5	29,6	447,5	1.421
16x2x1,5	32,6	595,1	1.729
20x2x1,5	36,8	742,7	2.270
24x2x1,5	40,4	890,3	2.607
30x2x1,5	42,6	1111,6	2.959
3x3x1,5	19,4	163,0	620
6x3x1,5	25,4	321,3	1.121
10x3x1,5	31,5	532,4	1.599
12x3x1,5	32,8	637,9	1.765

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, Armour SWB, DSTA, other colors



ÖLFLEX® INSTRUM SWA LEAD 180

Armoured, Lead jacketed, Overall screened instrumentation cable
CU/XLPE/OS/PVC/LC/PVC/SWA/PVC



Info

RE4XOHRLRFR 300 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured, lead jacketed, twisted pair or triad signal cable, overall screened, XLPE insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Inner sheath:** PVC, black
- **Chemical Barrier:** Lead sheath
- **Inner sheath:** PVC, black
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** PVC, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U₀/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +90°C
during installation: -5° to +50°C



Minimum Bending Radius:
15 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA LEAD 180			
1x2x0,5	13,7	15,1	468
2x2x0,5	16,5	25,4	673
6x2x0,5	19,7	66,7	962
10x2x0,5	23,1	108,0	1.283
12x2x0,5	23,5	128,7	1.332
16x2x0,5	25,4	170,0	1.523
20x2x0,5	28,5	211,3	1.966
24x2x0,5	30,6	252,6	2.244
30x2x0,5	32,1	314,6	2.449
1x3x0,5	14,2	20,2	520
3x3x0,5	18,2	51,2	837
6x3x0,5	21,3	97,7	1.104
10x3x0,5	25,0	159,7	1.486
12x3x0,5	25,5	190,6	1.551
1x2x0,75	14,7	20,2	553
2x2x0,75	17,5	35,7	745
6x2x0,75	21,5	97,5	1.119
10x2x0,75	25,4	159,4	1.506
12x2x0,75	26,8	190,3	1.779
16x2x0,75	29,0	252,2	2.034
20x2x0,75	31,4	314,0	2.397
24x2x0,75	33,8	375,9	2.660
30x2x0,75	36,2	468,7	3.057
1x3x0,75	15,0	27,9	581
3x3x0,75	19,4	74,3	938
6x3x0,75	23,1	143,9	1.325
10x3x0,75	28,5	236,7	1.984
12x3x0,75	29,1	283,1	2.074

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA LEAD 180			
1x2x1	15,2	25,6	588
2x2x1	18,6	46,5	868
6x2x1	22,9	130,1	1.292
10x2x1	28,2	213,6	1.930
12x2x1	28,8	255,4	2.013
16x2x1	31,0	338,9	2.357
20x2x1	33,7	422,5	2.704
24x2x1	37,1	506,0	3.184
30x2x1	39,8	631,4	3.804
1x3x1	15,5	36,1	621
3x3x1	20,5	98,7	1.035
6x3x1	24,8	192,7	1.503
10x3x1	30,2	318,0	2.213
12x3x1	31,3	380,7	2.435
1x2x1,5	16,0	36,5	651
2x2x1,5	20,0	68,2	987
6x2x1,5	25,3	195,1	1.546
10x2x1,5	31,4	322,1	2.388
12x2x1,5	32,3	385,5	2.515
16x2x1,5	35,5	512,5	3.029
20x2x1,5	39,5	639,4	3.809
24x2x1,5	42,8	766,3	4.276
30x2x1,5	45,2	956,7	4.836
1x3x1,5	16,7	52,3	702
3x3x1,5	22,6	147,5	1.278
6x3x1,5	28,5	290,3	2.041
10x3x1,5	34,0	480,7	2.785
12x3x1,5	35,6	575,9	3.104

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned copper conductor, other colors, Armour DSTA



ÖLFLEX® INSTRUM SWA LEAD 181

Armoured, Lead jacketed,
Individual and Overall screened instrumentation cable
CU/XLPE/IS/OS/PVC/LC/PVC/SWA/PVC



Info

**RE4XHOHRLRFR 300 V
EN 50288-7**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured, lead jacketed, twisted pair or triad
signal cable, individual and overall screened,
XLPE insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** PVC, black
- **Chemical Barrier:** Lead sheath
- **Inner sheath:** PVC, black
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** PVC, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U_o/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +90°C
during installation: -5° to +50°C



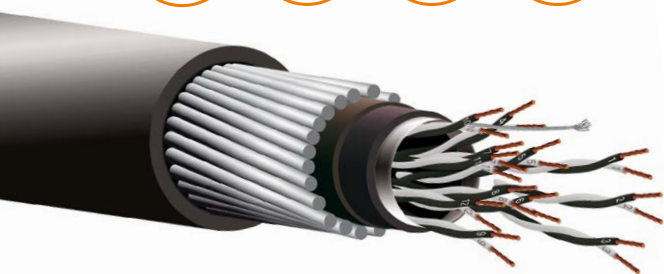
Minimum Bending Radius:
15 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA LEAD 181			
2x2x0,5	17,3	35,7	735
6x2x0,5	21,3	97,7	1.108
10x2x0,5	25,0	159,7	1.494
12x2x0,5	25,5	190,6	1.560
16x2x0,5	28,6	252,6	2.022
20x2x0,5	30,8	314,6	2.356
24x2x0,5	33,3	376,6	2.648
30x2x0,5	35,4	469,5	3.032
3x3x0,5	19,1	66,7	919
6x3x0,5	22,8	128,7	1.293
10x3x0,5	27,7	211,3	1.899
12x3x0,5	28,7	252,6	2.025
2x2x0,75	18,7	46,0	875
6x2x0,75	23,0	128,5	1.309
10x2x0,75	28,4	211,0	1.958
12x2x0,75	29,0	252,3	2.046
16x2x0,75	31,4	334,8	2.424
20x2x0,75	33,9	417,3	2.752
24x2x0,75	37,4	499,8	3.244
30x2x0,75	40,2	623,6	3.898
3x3x0,75	20,6	89,8	1.038
6x3x0,75	24,9	174,9	1.504
10x3x0,75	30,6	288,3	2.298
12x3x0,75	31,5	345,1	2.437

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA LEAD 181			
2x2x1	19,5	56,8	944
6x2x1	24,6	161,0	1.467
10x2x1	30,1	265,3	2.155
12x2x1	30,9	317,4	2.343
16x2x1	33,5	421,6	2.702
20x2x1	37,1	525,8	3.255
24x2x1	41,2	630,0	4.001
30x2x1	43,1	786,3	4.378
3x3x1	22,0	114,2	1.207
6x3x1	27,3	223,7	1.875
10x3x1	32,9	369,7	2.591
12x3x1	33,6	442,7	2.726
2x2x1,5	21,4	78,5	1.101
6x2x1,5	28,2	226,1	1.963
10x2x1,5	33,7	373,7	2.661
12x2x1,5	34,9	447,5	2.922
16x2x1,5	38,3	595,1	3.425
20x2x1,5	42,7	742,7	4.302
24x2x1,5	46,5	890,3	4.976
30x2x1,5	49,5	1111,6	5.685
3x3x1,5	24,3	163,0	1.423
6x3x1,5	30,2	321,3	2.235
10x3x1,5	37,4	532,4	3.260
12x3x1,5	38,5	637,9	3.471

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned copper conductor, other colors, Armour DSTA



ÖLFLEX® INSTRUM SWA AL/HDPE/PA 182

Armoured, AL/HDPE/PA jacketed,
Overall screened instrumentation cable
CU/XLPE/AL/HDPE/PA/SWA/PVC



Info

**RE4XOH5ER4FR 300 V
EN 50288-7**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured, AL/HDPE/PA jacketed, twisted pair
or triad signal cable, overall screened, XLPE
insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** OS Aluminum longitudinal tape (AL) +
TC Drain wire
- **Chemical Barrier:** AL/HDPE/PA
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** PVC, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

5000 MOhm x km



Conductor stranding:

Class 2 IEC 60228



Nominal Voltage U₀/U:

300/300 V



Test voltage:

C/C 1500 V x 1 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

10 x Outer Diameter

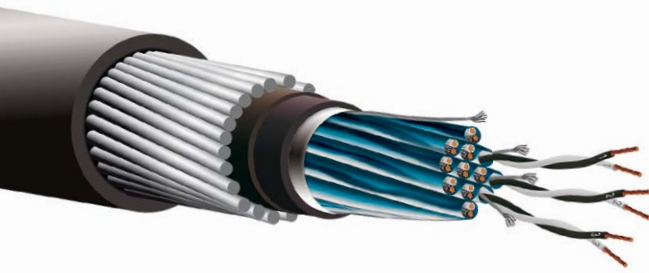
Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA AL/HDPE/PA 182			
1x2x0,5	11,6	15,1	229
2x2x0,5	13,9	25,4	313
6x2x0,5	16,9	66,7	447
10x2x0,5	19,8	108,0	581
12x2x0,5	20,5	128,7	621
16x2x0,5	22,9	170,0	844
20x2x0,5	25,1	211,3	986
24x2x0,5	26,9	252,6	1.094
30x2x0,5	28,5	314,6	1.227
1x3x0,5	11,8	20,2	242
3x3x0,5	15,2	51,2	372
6x3x0,5	18,2	97,7	526
10x3x0,5	21,8	159,7	706
12x3x0,5	23,0	190,6	868
1x2x0,75	12,3	20,2	256
2x2x0,75	14,8	35,7	352
6x2x0,75	18,5	97,5	531
10x2x0,75	22,9	159,4	829
12x2x0,75	23,4	190,3	873
16x2x0,75	25,5	252,2	1.033
20x2x0,75	27,8	314,0	1.202
24x2x0,75	30,1	375,9	1.355
30x2x0,75	31,7	468,7	1.514
1x3x0,75	12,6	27,9	273
3x3x0,75	16,5	74,3	436
6x3x0,75	19,8	143,9	623
10x3x0,75	25,1	236,7	1.005
12x3x0,75	25,7	283,1	1.068

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA AL/HDPE/PA 182			
1x2x1	12,8	25,6	274
2x2x1	15,6	46,5	387
6x2x1	19,6	130,1	600
10x2x1	24,8	213,6	964
12x2x1	25,4	255,4	1.020
16x2x1	27,3	338,9	1.188
20x2x1	30,0	422,5	1.406
24x2x1	32,8	506,0	1.604
30x2x1	35,3	631,4	1.990
1x3x1	13,1	36,1	296
3x3x1	17,5	98,7	488
6x3x1	21,5	192,7	734
10x3x1	26,8	318,0	1.153
12x3x1	27,7	380,7	1.245
1x2x1,5	13,6	36,5	309
2x2x1,5	17,2	68,2	461
6x2x1,5	22,8	195,1	870
10x2x1,5	27,8	322,1	1.193
12x2x1,5	28,7	385,5	1.285
16x2x1,5	31,2	512,5	1.529
20x2x1,5	35,0	639,4	2.008
24x2x1,5	38,3	766,3	2.288
30x2x1,5	40,3	956,7	2.578
1x3x1,5	14,1	52,3	338
3x3x1,5	19,4	147,5	596
6x3x1,5	25,1	290,3	1.063
10x3x1,5	30,4	480,7	1.469
12x3x1,5	31,4	575,9	1.595

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned copper conductor, other colors



ÖLFLEX® INSTRUM SWA AL/HDPE/PA 183

Armoured, AL/HDPE/PA jacketed,
Individual and Overall screened instrumentation cable
CU/XLPE/IS/AL/HDPE/PA/SWA/PVC



Info

**RE4XHOH5ER4FR 300 V
EN 50288-7**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured, AL/HDPE/PA jacketed, twisted
pair or triad signal cable, individual and overall
screened, XLPE insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS Aluminum/PET + TC Drain wire, OS Aluminum longitudinal tape (AL) + TC Drain wire
- **Chemical Barrier:** AL/HDPE/PA
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** PVC, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U_o/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
10 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA AL/HDPE/PA 183			
2x2x0,5	14,7	35,7	349
6x2x0,5	18,2	97,7	530
10x2x0,5	21,8	159,7	714
12x2x0,5	23,0	190,6	878
16x2x0,5	25,1	252,6	1.040
20x2x0,5	27,1	314,6	1.197
24x2x0,5	29,6	376,6	1.368
30x2x0,5	31,1	469,5	1.535
3x3x0,5	16,3	66,7	426
6x3x0,5	19,5	128,7	605
10x3x0,5	24,5	211,3	964
12x3x0,5	25,2	252,6	1.038
2x2x0,75	15,7	46,0	391
6x2x0,75	19,7	128,5	611
10x2x0,75	25,0	211,0	984
12x2x0,75	25,5	252,3	1.045
16x2x0,75	27,7	334,8	1.232
20x2x0,75	30,2	417,3	1.442
24x2x0,75	33,1	499,8	1.650
30x2x0,75	35,5	623,6	2.049
3x3x0,75	17,6	89,8	487
6x3x0,75	21,7	174,9	729
10x3x0,75	27,0	288,3	1.147
12x3x0,75	27,8	345,1	1.239

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA AL/HDPE/PA 183			
2x2x1	16,7	56,8	436
6x2x1	21,4	161,0	704
10x2x1	26,6	265,3	1.105
12x2x1	27,3	317,4	1.177
16x2x1	29,9	421,6	1.411
20x2x1	32,8	525,8	1.674
24x2x1	36,7	630,0	2.113
30x2x1	38,6	786,3	2.376
3x3x1	18,8	114,2	551
6x3x1	23,8	223,7	949
10x3x1	29,3	369,7	1.331
12x3x1	30,0	442,7	1.428
2x2x1,5	18,4	78,5	515
6x2x1,5	24,8	226,1	996
10x2x1,5	30,0	373,7	1.363
12x2x1,5	31,0	447,5	1.472
16x2x1,5	34,7	595,1	1.962
20x2x1,5	38,2	742,7	2.323
24x2x1,5	41,8	890,3	2.654
30x2x1,5	44,2	1111,6	3.022
3x3x1,5	21,0	163,0	675
6x3x1,5	26,8	321,3	1.176
10x3x1,5	33,1	532,4	1.666
12x3x1,5	34,9	637,9	1.999

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned copper conductor, other colors



ÖLFLEX® INSTRUM 278 H

Overall screened instrumentation cable LSZH
CU/XLPE/OS/LSZH



Info

RE4XOHM1 300 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, overall screened, XLPE insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage Uo/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
8 x Outer Diameter

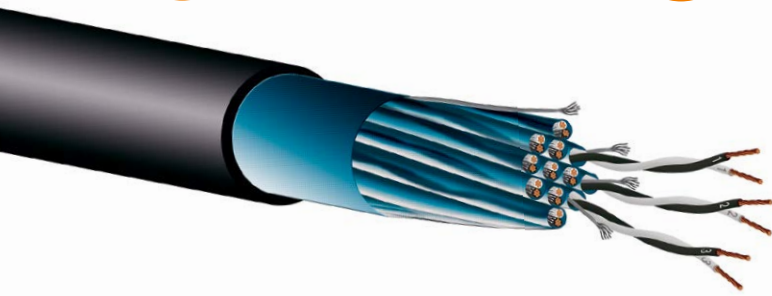
Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 278 H			
1x2x0,5	5,1	15,1	35
2x2x0,5	7,5	25,4	66
6x2x0,5	10,5	66,7	134
10x2x0,5	13,4	108,0	202
12x2x0,5	13,9	128,7	222
16x2x0,5	15,6	170,0	290
20x2x0,5	17,5	211,3	367
24x2x0,5	19,4	252,6	421
30x2x0,5	20,7	314,6	505
1x3x0,5	5,4	20,2	42
3x3x0,5	9,0	51,2	100
6x3x0,5	11,8	97,7	183
10x3x0,5	15,2	159,7	279
12x3x0,5	15,7	190,6	311
1x2x0,75	5,9	20,2	45
2x2x0,75	8,4	35,7	84
6x2x0,75	12,1	97,5	183
10x2x0,75	15,5	159,4	277
12x2x0,75	16,0	190,3	306
16x2x0,75	18,0	252,2	401
20x2x0,75	20,2	314,0	507
24x2x0,75	22,4	375,9	583
30x2x0,75	23,9	468,7	702
1x3x0,75	6,2	27,9	56
3x3x0,75	10,1	74,3	131
6x3x0,75	13,4	143,9	244
10x3x0,75	17,5	236,7	386
12x3x0,75	18,1	283,1	431

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 278 H			
1x2x1	6,4	25,6	53
2x2x1	9,4	46,5	106
6x2x1	13,2	130,1	225
10x2x1	17,2	213,6	353
12x2x1	17,8	255,4	392
16x2x1	19,7	338,9	503
20x2x1	22,2	422,5	638
24x2x1	24,8	506,0	749
30x2x1	26,5	631,4	902
1x3x1	6,7	36,1	66
3x3x1	11,0	98,7	161
6x3x1	14,9	192,7	313
10x3x1	19,2	318,0	484
12x3x1	20,1	380,7	554
1x2x1,5	7,2	36,5	69
2x2x1,5	10,8	68,2	140
6x2x1,5	15,5	195,1	318
10x2x1,5	20,2	322,1	499
12x2x1,5	20,9	385,5	557
16x2x1,5	23,4	512,5	732
20x2x1,5	26,3	639,4	927
24x2x1,5	29,4	766,3	1.086
30x2x1,5	31,4	956,7	1.309
1x3x1,5	7,6	52,3	88
3x3x1,5	13,0	147,5	227
6x3x1,5	17,5	290,3	444
10x3x1,5	22,6	480,7	691
12x3x1,5	23,6	575,9	793

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned copper conductor, other colors



ÖLFLEX® INSTRUM 279 H

Individual and overall screened instrumentation cable LSZH
CU/XLPE/IS/OS/LSZH



Info

RE4XHOHM1 300 V
EN 50288-7

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, individual and overall screened, XLPE insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U₀/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 279 H			
2x2x0,5	8,3	35,7	84
6x2x0,5	11,8	97,7	187
10x2x0,5	15,2	159,7	287
12x2x0,5	15,7	190,6	321
16x2x0,5	17,6	252,6	419
20x2x0,5	19,5	314,6	518
24x2x0,5	21,9	376,6	611
30x2x0,5	23,3	469,5	739
3x3x0,5	9,9	66,7	126
6x3x0,5	13,1	128,7	233
10x3x0,5	16,9	211,3	361
12x3x0,5	17,7	252,6	414
2x2x0,75	9,5	46,0	108
6x2x0,75	13,3	128,5	234
10x2x0,75	17,4	211,0	369
12x2x0,75	18,0	252,3	412
16x2x0,75	20,1	334,8	539
20x2x0,75	22,4	417,3	669
24x2x0,75	25,1	499,8	787
30x2x0,75	26,8	623,6	951
3x3x0,75	11,1	89,8	158
6x3x0,75	15,0	174,9	305
10x3x0,75	19,4	288,3	473
12x3x0,75	20,3	345,1	543

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM 279 H			
2x2x1	10,3	56,8	126
6x2x1	14,8	161,0	286
10x2x1	19,0	265,3	441
12x2x1	19,7	317,4	494
16x2x1	22,1	421,6	648
20x2x1	24,8	525,8	819
24x2x1	27,8	630,0	963
30x2x1	29,6	786,3	1.164
3x3x1	12,4	114,2	196
6x3x1	16,4	223,7	369
10x3x1	21,5	369,7	586
12x3x1	22,2	442,7	661
2x2x1,5	12,0	78,5	168
6x2x1,5	17,2	226,1	386
10x2x1,5	22,2	373,7	595
12x2x1,5	23,2	447,5	680
16x2x1,5	26,0	595,1	891
20x2x1,5	29,2	742,7	1.125
24x2x1,5	32,7	890,3	1.321
30x2x1,5	34,8	1111,6	1.596
3x3x1,5	14,4	163,0	266
6x3x1,5	19,2	321,3	507
10x3x1,5	25,1	532,4	804
12x3x1,5	26,2	637,9	923

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned copper conductor, other colors



ÖLFLEX® INSTRUM SWA 280 H

Armoured overall screened instrumentation cable LSZH
CU/XLPE/OS/LSZH/SWA/LSZH



Info

**RE4XOHM1FM1 300 V
EN 50288-7**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured twisted pair or triad signal cable,
overall screened, XLPE insulated and LSZH
jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage Uo/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
10 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 280 H			
1x2x0,5	9,8	15,1	179
2x2x0,5	12,3	25,4	266
6x2x0,5	15,3	66,7	398
10x2x0,5	18,5	108,0	538
12x2x0,5	18,9	128,7	568
16x2x0,5	20,8	170,0	683
20x2x0,5	23,5	211,3	925
24x2x0,5	25,5	252,6	1.044
30x2x0,5	26,9	314,6	1.166
1x3x0,5	10,0	20,2	192
3x3x0,5	13,8	51,2	332
6x3x0,5	16,9	97,7	484
10x3x0,5	20,4	159,7	664
12x3x0,5	20,9	190,6	707
1x2x0,75	10,5	20,2	206
2x2x0,75	13,3	35,7	304
6x2x0,75	17,1	97,5	489
10x2x0,75	20,7	159,4	669
12x2x0,75	22,0	190,3	823
16x2x0,75	23,9	252,2	972
20x2x0,75	26,4	314,0	1.154
24x2x0,75	28,8	375,9	1.307
30x2x0,75	30,3	468,7	1.469
1x3x0,75	10,8	27,9	223
3x3x0,75	14,9	74,3	387
6x3x0,75	18,4	143,9	581
10x3x0,75	23,5	236,7	944
12x3x0,75	24,3	283,1	1.018

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 280 H			
1x2x1	11,0	25,6	224
2x2x1	14,2	46,5	346
6x2x1	18,2	130,1	557
10x2x1	23,2	213,6	903
12x2x1	23,8	255,4	958
16x2x1	25,9	338,9	1.138
20x2x1	28,6	422,5	1.357
24x2x1	31,2	506,0	1.543
30x2x1	33,9	631,4	1.941
1x3x1	11,3	36,1	244
3x3x1	15,9	98,7	437
6x3x1	20,0	192,7	682
10x3x1	25,4	318,0	1.103
12x3x1	26,3	380,7	1.198
1x2x1,5	11,8	36,5	257
2x2x1,5	15,6	68,2	411
6x2x1,5	20,7	195,1	710
10x2x1,5	26,4	322,1	1.146
12x2x1,5	27,1	385,5	1.223
16x2x1,5	29,8	512,5	1.484
20x2x1,5	33,7	639,4	1.959
24x2x1,5	36,9	766,3	2.244
30x2x1,5	38,9	956,7	2.537
1x3x1,5	12,5	52,3	291
3x3x1,5	18,0	147,5	553
6x3x1,5	23,5	290,3	1.002
10x3x1,5	29,0	480,7	1.420
12x3x1,5	30,0	575,9	1.550

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, Armour SWB, other colors



ÖLFLEX® INSTRUM SWA 281 H

Armoured individual and overall screened instrumentation cable LSZH CU/XLPE/IS/OS/LSZH/SWA/LSZH



Info

**RE4XHOHM1FM1 300 V
EN 50288-7**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured twisted pair or triad signal cable, individual and overall screened, XLPE insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

5000 MOhm x km



Conductor stranding:

Class 2 IEC 60228



Nominal Voltage U₀/U:

300/300 V



Test voltage:

C/C 1500 V x 1 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

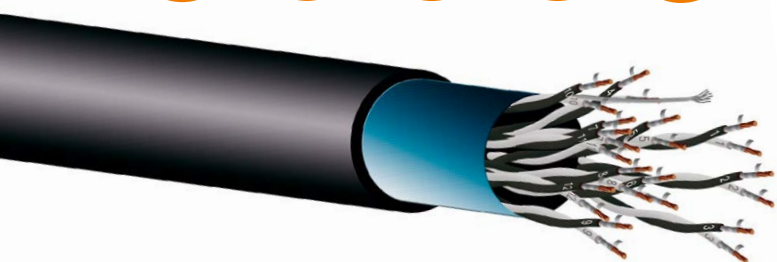
10 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 281 H			
2x2x0,5	13,1	35,7	301
6x2x0,5	16,9	97,7	488
10x2x0,5	20,4	159,7	671
12x2x0,5	20,9	190,6	716
16x2x0,5	23,5	252,6	979
20x2x0,5	25,7	314,6	1.147
24x2x0,5	28,3	376,6	1.320
30x2x0,5	29,8	469,5	1.490
3x3x0,5	14,7	66,7	378
6x3x0,5	18,1	128,7	562
10x3x0,5	22,9	211,3	902
12x3x0,5	23,6	252,6	977
2x2x0,75	14,3	46,0	350
6x2x0,75	18,4	128,5	568
10x2x0,75	23,4	211,0	923
12x2x0,75	24,0	252,3	983
16x2x0,75	26,3	334,8	1.184
20x2x0,75	28,8	417,3	1.394
24x2x0,75	31,5	499,8	1.589
30x2x0,75	34,1	623,6	2.000
3x3x0,75	16,0	89,8	437
6x3x0,75	20,3	174,9	687
10x3x0,75	25,6	288,3	1.097
12x3x0,75	26,5	345,1	1.191

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA 281 H			
2x2x1	15,1	56,8	387
6x2x1	19,8	161,0	652
10x2x1	25,2	265,3	1.055
12x2x1	25,9	317,4	1.127
16x2x1	28,5	421,6	1.363
20x2x1	31,2	525,8	1.614
24x2x1	35,1	630,0	2.047
30x2x1	37,2	786,3	2.331
3x3x1	17,4	114,2	509
6x3x1	22,4	223,7	898
10x3x1	27,7	369,7	1.269
12x3x1	28,6	442,7	1.380
2x2x1,5	17,0	78,5	474
6x2x1,5	23,2	226,1	936
10x2x1,5	28,6	373,7	1.314
12x2x1,5	29,6	447,5	1.427
16x2x1,5	32,6	595,1	1.735
20x2x1,5	36,8	742,7	2.278
24x2x1,5	40,4	890,3	2.616
30x2x1,5	42,6	1111,6	2.969
3x3x1,5	19,4	163,0	624
6x3x1,5	25,4	321,3	1.126
10x3x1,5	31,5	532,4	1.606
12x3x1,5	32,8	637,9	1.772

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned copper conductor, Armour SWB, other colors



ÖLFLEX® INSTRUM F90 378 H

Fire resistant, overall
screened instrumentation cable LSZH
CU/MT/XLPE/OS/LSZH



Info

RTE4XOHM1 300 V
EN 50288-7
IEC 60331-23

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, overall
screened, XLPE over MICA-tape insulated and
LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)
IEC 60331-23 (90 min./750°C)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE, over MICA-tape wrapped conductor
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage Uo/U:
300/300 V



Test voltage:
C/C 1500 V x 1 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM F90 378 H			
1x2x0,5	6,6	15,1	47
2x2x0,5	9,7	25,4	93
6x2x0,5	13,7	66,7	185
10x2x0,5	17,8	108,0	285
12x2x0,5	18,4	128,7	308
16x2x0,5	20,7	170,0	401
20x2x0,5	23,3	211,3	511
24x2x0,5	26,0	252,6	593
30x2x0,5	27,5	314,6	690
1x3x0,5	6,9	20,2	56
3x3x0,5	11,6	51,2	135
6x3x0,5	15,4	97,7	251
10x3x0,5	20,1	159,7	389
12x3x0,5	20,8	190,6	427
1x2x0,75	7,0	20,2	54
2x2x0,75	10,4	35,7	111
6x2x0,75	15,0	97,5	235
10x2x0,75	19,3	159,4	352
12x2x0,75	20,2	190,3	395
16x2x0,75	22,4	252,2	504
20x2x0,75	25,2	314,0	642
24x2x0,75	28,1	375,9	747
30x2x0,75	30,0	468,7	890
1x3x0,75	7,4	27,9	67
3x3x0,75	12,5	74,3	166
6x3x0,75	16,7	143,9	312
10x3x0,75	21,8	236,7	487
12x3x0,75	22,5	283,1	539

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM F90 378 H			
1x2x1	7,4	25,6	62
2x2x1	11,0	46,5	128
6x2x1	15,9	130,1	278
10x2x1	20,7	213,6	430
12x2x1	21,4	255,4	472
16x2x1	24,0	338,9	619
20x2x1	27,0	422,5	786
24x2x1	30,2	506,0	915
30x2x1	32,2	631,4	1.094
1x3x1	7,8	36,1	77
3x3x1	13,3	98,7	196
6x3x1	17,9	192,7	382
10x3x1	23,4	318,0	597
12x3x1	24,2	380,7	664
1x2x1,5	8,2	36,5	78
2x2x1,5	12,6	68,2	171
6x2x1,5	18,2	195,1	378
10x2x1,5	23,7	322,1	587
12x2x1,5	24,5	385,5	649
16x2x1,5	27,5	512,5	852
20x2x1,5	30,9	639,4	1.083
24x2x1,5	34,8	766,3	1.279
30x2x1,5	37,1	956,7	1.532
1x3x1,5	8,9	52,3	104
3x3x1,5	15,2	147,5	267
6x3x1,5	20,5	290,3	524
10x3x1,5	26,8	480,7	821
12x3x1,5	27,7	575,9	919

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned copper conductor, other colors



ÖLFLEX® INSTRUM F90 379 H

Fire resistant, individual and overall screened instrumentation cable LSZH
CU/MT/XLPE/IS/OS/LSZH



Info

RTE4XHOHM 1 300 V
EN 50288-7
IEC 60331-23

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, individual and overall screened, XLPE over MICA-tape insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)
IEC 60331-23 (90 min./750°C)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE, over MICA-tape wrapped conductor
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

5000 MOhm x km



Conductor stranding:

Class 2 IEC 60228



Nominal Voltage U₀/U:

300/300 V



Test voltage:

C/C 1500 V x 1 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM F90 379 H			
2x2x0,5	10,6	35,7	114
6x2x0,5	15,3	97,7	247
10x2x0,5	19,7	159,7	374
12x2x0,5	20,6	190,6	422
16x2x0,5	23,1	252,6	550
20x2x0,5	25,9	314,6	696
24x2x0,5	29,0	376,6	813
30x2x0,5	30,7	469,5	957
3x3x0,5	12,8	66,7	165
6x3x0,5	17,2	128,7	318
10x3x0,5	22,2	211,3	483
12x3x0,5	23,2	252,6	548
2x2x0,75	11,6	46,0	139
6x2x0,75	16,4	128,5	293
10x2x0,75	21,5	211,0	456
12x2x0,75	22,2	252,3	504
16x2x0,75	24,9	334,8	659
20x2x0,75	28,0	417,3	835
24x2x0,75	31,5	499,8	991
30x2x0,75	33,4	623,6	1.170
3x3x0,75	13,7	89,8	197
6x3x0,75	18,6	174,9	382
10x3x0,75	24,2	288,3	597
12x3x0,75	25,1	345,1	666

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM F90 379 H			
2x2x1	12,3	56,8	157
6x2x1	17,7	161,0	346
10x2x1	23,0	265,3	539
12x2x1	23,8	317,4	597
16x2x1	26,7	421,6	781
20x2x1	30,0	525,8	988
24x2x1	33,6	630,0	1.154
30x2x1	35,8	786,3	1.386
3x3x1	14,8	114,2	235
6x3x1	19,7	223,7	446
10x3x1	26,0	369,7	713
12x3x1	26,9	442,7	797
2x2x1,5	13,8	78,5	196
6x2x1,5	20,1	226,1	453
10x2x1,5	26,2	373,7	706
12x2x1,5	27,1	447,5	784
16x2x1,5	30,4	595,1	1.028
20x2x1,5	34,4	742,7	1.319
24x2x1,5	38,5	890,3	1.539
30x2x1,5	41,0	1111,6	1.849
3x3x1,5	16,6	163,0	302
6x3x1,5	22,5	321,3	594
10x3x1,5	29,6	532,4	947
12x3x1,5	30,6	637,9	1.063

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Conductor Class 5, Tinned COPPER conductor, other colors



ÖLFLEX® INSTRUM SWA F90 380 H

Fire resistant, armoured overall screened instrumentation cable LSZH CU/MT/XLPE/OS/LSZH/SWA/LSZH



Info

RTE4XOHM1FM1 300 V
EN 50288-7
IEC 60331-23

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured twisted pair or triad signal cable, overall screened, XLPE over MICA-tape insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2, IEC 60332-3-22 (Cat. A)
IEC 60331-23 (90 min./750°C)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE, over MICA-tape wrapped conductor
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

5000 MOhm x km



Conductor stranding:

Class 2 IEC 60228



Nominal Voltage U_o/U:

300/300 V



Test voltage:

C/C 1500 V x 1 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

10 x Outer Diameter

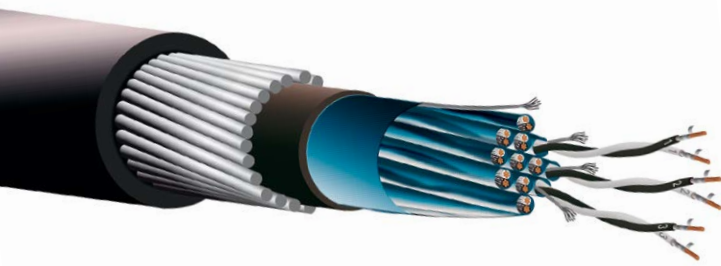
Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA F90 380 H			
1x2x0,5	11,2	15,1	221
2x2x0,5	14,5	25,4	341
6x2x0,5	18,7	66,7	527
10x2x0,5	23,8	108,0	852
12x2x0,5	24,6	128,7	905
16x2x0,5	26,9	170,0	1.062
20x2x0,5	29,7	211,3	1.259
24x2x0,5	32,6	252,6	1.436
30x2x0,5	34,9	314,6	1.764
1x3x0,5	11,5	20,2	238
3x3x0,5	16,7	51,2	433
6x3x0,5	20,7	97,7	642
10x3x0,5	26,3	159,7	1.034
12x3x0,5	27,0	190,6	1.092
1x2x0,75	11,6	20,2	238
2x2x0,75	15,3	35,7	374
6x2x0,75	20,0	97,5	605
10x2x0,75	25,5	159,4	974
12x2x0,75	26,3	190,3	1.040
16x2x0,75	28,8	252,2	1.228
20x2x0,75	31,6	314,0	1.446
24x2x0,75	35,5	375,9	1.844
30x2x0,75	37,6	468,7	2.072
1x3x0,75	12,0	27,9	259
3x3x0,75	17,6	74,3	482
6x3x0,75	22,7	143,9	848
10x3x0,75	28,2	236,7	1.194
12x3x0,75	28,9	283,1	1.268

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA F90 380 H			
1x2x1	12,0	25,6	254
2x2x1	15,9	46,5	404
6x2x1	21,9	130,1	791
10x2x1	26,9	213,6	1.092
12x2x1	27,6	255,4	1.155
16x2x1	30,4	338,9	1.390
20x2x1	34,4	422,5	1.844
24x2x1	37,8	506,0	2.104
30x2x1	39,8	631,4	2.354
1x3x1	12,6	36,1	285
3x3x1	18,3	98,7	529
6x3x1	23,9	192,7	953
10x3x1	29,8	318,0	1.350
12x3x1	30,6	380,7	1.441
1x2x1,5	13,0	36,5	294
2x2x1,5	17,7	68,2	490
6x2x1,5	24,4	195,1	967
10x2x1,5	30,1	322,1	1.349
12x2x1,5	30,9	385,5	1.434
16x2x1,5	34,8	512,5	1.926
20x2x1,5	38,5	639,4	2.297
24x2x1,5	42,5	766,3	2.650
30x2x1,5	45,9	956,7	3.291
1x3x1,5	13,8	52,3	335
3x3x1,5	20,4	147,5	652
6x3x1,5	26,7	290,3	1.180
10x3x1,5	34,1	480,7	1.869
12x3x1,5	35,0	575,9	2.000

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AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, Armour SWB, other colors



ÖLFLEX® INSTRUM SWA F90 381 H

Fire resistant, armoured individual and overall screened instrumentation cable LSZH CU/MT/XLPE/IS/OS/LSZH/SWA/LSZH



Info

RTE4XHOHM1FM1 300 V
EN 50288-7
IEC 60331-23

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured twisted pair or triad signal cable, individual and overall screened, XLPE over MICA-tape insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)
IEC 60331-23 (90 min./750°C)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE, over MICA-tape wrapped conductor
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized Steel Wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

5000 MOhm x km



Conductor stranding:

Class 2 IEC 60228



Nominal Voltage U₀/U:

300/300 V



Test voltage:

C/C 1500 V x 1 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

10 x Outer Diameter

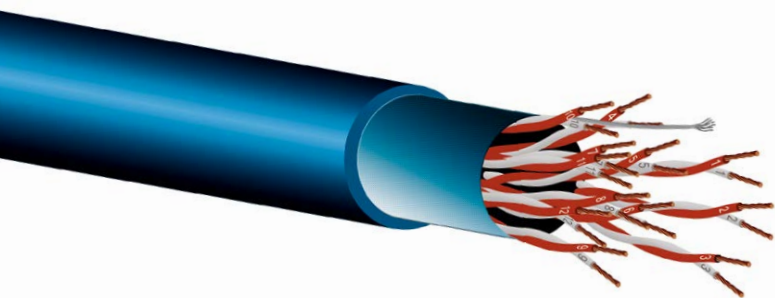
Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA F90 381 H			
2x2x0,5	15,5	35,7	382
6x2x0,5	20,5	97,7	634
10x2x0,5	25,9	159,7	1.007
12x2x0,5	26,8	190,6	1.080
16x2x0,5	29,5	252,6	1.294
20x2x0,5	32,6	314,6	1.538
24x2x0,5	36,5	376,6	1.957
30x2x0,5	38,3	469,5	2.163
3x3x0,5	17,8	66,7	488
6x3x0,5	23,2	128,7	868
10x3x0,5	28,6	211,3	1.203
12x3x0,5	29,6	252,6	1.295
2x2x0,75	16,7	46,0	435
6x2x0,75	22,4	128,5	822
10x2x0,75	27,7	211,0	1.140
12x2x0,75	28,6	252,3	1.223
16x2x0,75	31,3	334,8	1.456
20x2x0,75	35,4	417,3	1.928
24x2x0,75	39,1	499,8	2.226
30x2x0,75	41,2	623,6	2.493
3x3x0,75	18,8	89,8	540
6x3x0,75	24,8	174,9	982
10x3x0,75	30,6	288,3	1.375
12x3x0,75	31,5	345,1	1.467

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SWA F90 381 H			
2x2x1	17,3	56,8	468
6x2x1	23,6	161,0	909
10x2x1	29,4	265,3	1.281
12x2x1	30,2	317,4	1.362
16x2x1	34,1	421,6	1.827
20x2x1	37,6	525,8	2.170
24x2x1	41,3	630,0	2.482
30x2x1	43,6	786,3	2.793
3x3x1	19,8	114,2	601
6x3x1	25,9	223,7	1.079
10x3x1	32,6	369,7	1.556
12x3x1	34,2	442,7	1.849
2x2x1,5	18,8	78,5	541
6x2x1,5	26,3	226,1	1.098
10x2x1,5	32,8	373,7	1.556
12x2x1,5	34,5	447,5	1.846
16x2x1,5	38,0	595,1	2.224
20x2x1,5	42,2	742,7	2.677
24x2x1,5	47,3	890,3	3.358
30x2x1,5	50,0	1111,6	3.801
3x3x1,5	22,6	163,0	836
6x3x1,5	28,9	321,3	1.320
10x3x1,5	37,2	532,4	2.113
12x3x1,5	38,2	637,9	2.267

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AVAILABLE ALSO IN: Conductor Class 5, Tinned conductor, Armour SWB, other colors



ÖLFLEX® INSTRUM NF 670

Overall screened instrumentation cable
CU/PVC/OS/PVC



Info

U/RRXOHR 300/500 V
NF M 87-202

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair, triad or quad signal cable, overall screened, PVC insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
NF M 87-202
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

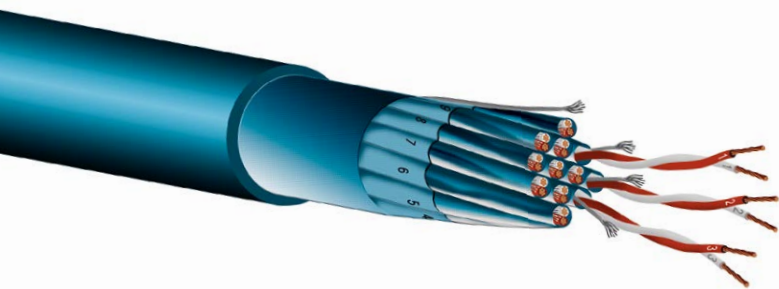
- **Conductor:** Stranded or solid Annealed Copper
- **Core insulation:** PVC
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Inner sheath:** PVC, blue
- **Armour:** Double Steel tape
- **Outer sheath:** PVC, blue (RAL 5015)

Technical data

-  **Core identification code:**
according to NF M 87-202
-  **Insulation resistance:**
500 MOhm x km
-  **Conductor stranding:**
according to NF M 87-202
-  **Nominal Voltage U_o/U:**
300/500 V
-  **Test voltage:**
C/C 1500 V x 1 minute
-  **Temperature range:**
during operation: -30° to +70°C
during installation: -5° to +50°C
-  **Minimum Bending Radius:**
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM NF 670			
3x2x0,5	8,2	31,7	79
7x2x0,5	10,5	70,8	146
12x2x0,5	13,9	119,8	237
19x2x0,5	16,5	188,3	353
27x2x0,5	19,7	266,6	482
7x3x0,5	11,7	105,1	200
12x3x0,5	15,5	178,5	328
2x0,9	6,8	20,4	56
3x0,9	7,2	29,4	70
4x0,9	7,8	38,5	86
3x2x0,9	10,4	56,5	124
7x2x0,9	13,8	128,8	246
12x2x0,9	18,4	219,2	403
19x2x0,9	21,8	345,7	606
27x2x0,9	26,5	490,3	857
7x3x0,9	15,4	192,1	341
12x3x0,9	20,8	327,7	575

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Photographs are not to scale and do not represent detailed images of the respective products



ÖLFLEX® INSTRUM NF 671

Individual and Overall screened instrumentation cable
CU/PVC/IS/PVC/OS/PVC



Info

U/RXHROHR 300/500 V
NF M 87-202

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Twisted pair or triad signal cable, individual and overall screened, PVC insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
NF M 87-202
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

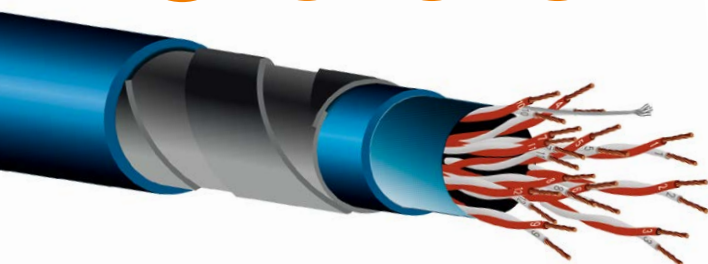
- **Conductor:** Stranded or solid Annealed Copper
- **Core insulation:** PVC
- **Screen:** PVC pair jacket over IS Aluminum/PET + TC Drain wire. OS Aluminum/PET + TC Drain wire
- **Outer sheath:** PVC, blue (RAL 5015)

Technical data

-  **Core identification code:**
according to NF M 87-202
-  **Insulation resistance:**
500 MOhm x km
-  **Conductor stranding:**
according to NF M 87-202
-  **Nominal Voltage U₀/U:**
300/500 V
-  **Test voltage:**
C/C 1500 V x 1 minute
-  **Temperature range:**
during operation: -30° to +70°C
during installation: -5° to +50°C
-  **Minimum Bending Radius:**
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM NF 671			
3x2x0,5	12,9	38,6	152
7x2x0,5	17,5	87,0	310
12x2x0,5	23,4	147,5	506
19x2x0,5	28,0	232,2	769
27x2x0,5	33,7	329,0	1.051
7x3x0,5	18,3	121,3	369
12x3x0,5	24,5	206,3	606
3x2x0,9	15,8	63,5	220
7x2x0,9	21,4	145,0	450
12x2x0,9	29,0	246,9	751
19x2x0,9	34,2	389,6	1.107
27x2x0,9	41,7	552,7	1.563
7x3x0,9	22,5	208,3	553
12x3x0,9	30,5	355,4	927

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Photographs are not to scale and do not represent detailed images of the respective products



ÖLFLEX® INSTRUM NF 672

Armoured and Overall screened instrumentation cable
CU/PVC/OS/PVC/STA/PVC



Info

**U/RXOHRNR 300/500 V
NF M 87-202**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured twisted pair, triad or quad signal
cable overall screened, PVC insulated and PVC
jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
NF M 87-202
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded or solid Annealed Copper
- **Core insulation:** PVC
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Inner sheath:** PVC, blue
- **Armour:** Double Steel tape
- **Outer sheath:** PVC, blue (RAL 5015)

Technical data

-  **Core identification code:**
according to NF M 87-202
-  **Insulation resistance:**
500 MOhm x km
-  **Conductor stranding:**
according to NF M 87-202
-  **Nominal Voltage U₀/U:**
300/500 V
-  **Test voltage:**
C/C 1500 V x 1 minute
-  **Temperature range:**
during operation: -30° to +70°C
during installation: -5° to +50°C
-  **Minimum Bending Radius:**
10 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM NF 672			
3x2x0,5	11,1	31,7	192
7x2x0,5	13,5	70,8	286
12x2x0,5	17,3	119,8	435
19x2x0,5	19,8	188,3	584
27x2x0,5	23,2	266,6	765
7x3x0,5	14,8	105,1	361
12x3x0,5	18,9	178,5	547
2x0,9	9,8	20,4	152
3x0,9	10,1	29,4	171
4x0,9	10,7	38,5	193
3x2x0,9	13,3	56,5	263
7x2x0,9	17,1	128,8	442
12x2x0,9	21,9	219,2	669
19x2x0,9	25,3	345,7	916
27x2x0,9	30,5	490,3	1.259
7x3x0,9	18,7	192,1	558
12x3x0,9	24,4	327,7	872

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products



ÖLFLEX® INSTRUM STA NF 673

Armoured, Individual and Overall screened instrumentation cable
CU/PVC/IS/PVC/OS/PVC/STA/PVC



Info

**U/RXHROHRNR 300/500 V
NF M 87-202**

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Oil resistant

Product features

Armoured twisted pair or triad signal cable, individual and overall screened, PVC insulated and PVC jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0, NF M 87-202
- **Halogen acid gas**
IEC 60754-1 (max 20%)
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

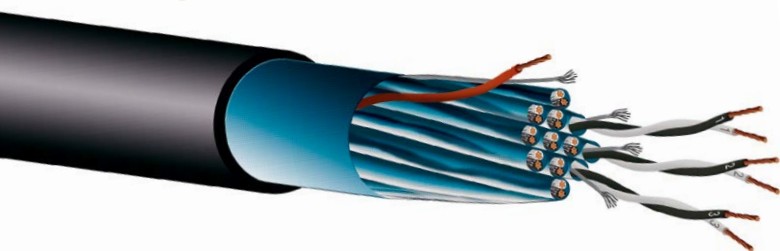
- **Conductor:** Stranded or solid Annealed Copper
- **Core insulation:** PVC
- **Screen:** PVC pair jacket over IS Aluminum/
PET + TC Drain wire.
OS Aluminum/PET + TC Drain wire
- **Inner sheath:** PVC, blue
- **Armour:** Double Steel tape
- **Outer sheath:** PVC, blue (RAL 5015)

Technical data

- **Core identification code:**
according to NF M 87-202
- **Insulation resistance:**
500 MOhm x km
- **Conductor stranding:**
according to NF M 87-202
- **Nominal Voltage U₀/U:**
300/500 V
- **Test voltage:**
C/C 1500 V x 1 minute
- **Temperature range:**
during operation: -30° to +70°C
during installation: -5° to +50°C
- **Minimum Bending Radius:**
10 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM STA NF 673			
3x2x0,5	16,2	38,6	337
7x2x0,5	21,0	87,0	563
12x2x0,5	27,4	147,5	864
19x2x0,5	32,0	232,2	1.191
27x2x0,5	37,9	329,0	1.572
7x3x0,5	21,8	121,3	633
12x3x0,5	28,5	206,3	981
3x2x0,9	19,1	63,5	442
7x2x0,9	25,0	145,0	756
12x2x0,9	33,0	246,9	1.188
19x2x0,9	38,4	389,6	1.636
27x2x0,9	46,1	552,7	2.222
7x3x0,9	26,5	208,3	898
12x3x0,9	34,5	355,4	1.385

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

**I 304**

UL/CSA 300 V PLTC ITC
Instrumentation Cable with Individually
Shielded Pairs/Triads and an Overall Shield (ISOS)
CU/PVC/IS/OS/PVC

**Info**

RRXHOHR 300 V
PLTC per UL 13, ITC per UL 2250,
CMG per UL 444, AWM 2464
CMG FT4, AWM I/II A/B FT4, CSA
C22.2 No. 214, CSA C22.2 No. 210

Benefits

- Sunlight resistant
- Fire behaviour
- Oil resistant

Product features

Stranded bare copper conductors; PVC insulation (cabled pairs or triads); individually foil-shielded pairs or triads with a tinned copper drain wire; orange PVC communication wire; overall foil shield with a tinned copper drain wire (100% coverage); specially blended black PVC jacket

Norm references / Approvals

- **Oil resistance**
OR-01
- **Fire behaviour**
FR-03
- **Motion Type**
FL-01
- **Mechanical Properties**
MP-02

Technical data

Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Conductor stranding:
Class B



Nominal Voltage U₀/U:
300 V



Temperature range:
during operation: -30° to +105°C



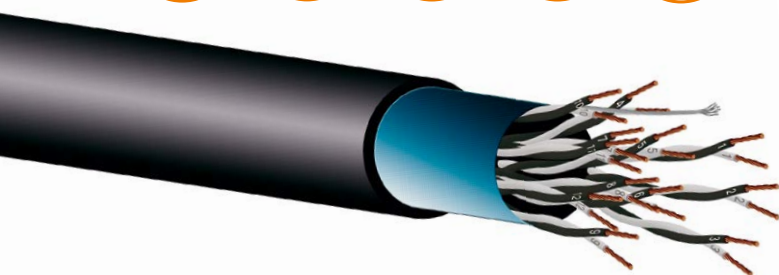
Minimum Bending Radius:
8 x Outer Diameter

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** PVC
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Outer sheath:** PVC, black

Number cores and AWG per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
I 304			
1x2x20 AWG	5,0	13,4	37
2x2x20 AWG	8,1	35,7	81
8x2x20 AWG	13,0	117,6	210
12x2x20 AWG	16,0	171,1	308
1x2x18 AWG	5,1	20,8	53
2x2x18 AWG	10,0	53,6	121
4x2x18 AWG	11,1	98,2	186
6x2x18 AWG	13,1	141,4	242
8x2x18 AWG	15,0	184,5	293
12x2x18 AWG	18,1	272,3	421
16x2x18 AWG	21,0	358,6	522
1x2x16 AWG	6,1	31,3	69
2x2x16 AWG	11,0	77,4	169
3x2x16 AWG	11,1	116,1	206
4x2x16 AWG	13,0	141,4	245
6x2x16 AWG	15,0	205,4	325
8x2x16 AWG	16,1	269,4	419
12x2x16 AWG	20,1	395,9	575
16x2x16 AWG	23,1	523,8	756
24x2x16 AWG	28,5	778,3	1.064
1x3x18 AWG	6,0	29,8	67
2x3x18 AWG	11,0	71,4	173
4x3x18 AWG	13,1	131,0	249
6x3x18 AWG	15,0	190,5	330
8x3x18 AWG	16,1	251,5	423
1x3x16 AWG	6,1	43,2	89
2x3x16 AWG	12,1	98,2	224
4x3x16 AWG	14,1	189,0	334
6x3x16 AWG	17,1	276,8	471
8x3x16 AWG	19,0	363,1	579
12x3x16 AWG	25,4	537,2	839

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ÖLFLEX® INSTRUM SC 701 H

Overall screened ship board
instrumentation cable LSZH
CU/XLPE/OS/LSZH



Info

RE4XOHM1 150/250 V
IEC 60092-376

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Halogen free
- Low smoke
- Oil resistant
- DNV, RINA, BV, LR Type Approval

Product features

Twisted pair or triad signal cable, overall
screened, XLPE insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:
Pairs are black & white with printed
numbers
Triads are black, white, red with
printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage Uo/U:
150/250 V



Test voltage:
C/C 1500 V x 5 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



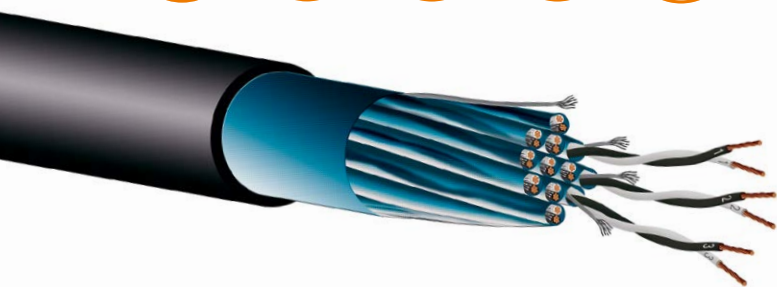
Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC 701 H			
2 x 0,5	5,8	13,9	40
3 x 2 x 0,5	8,5	34,5	80
7 x 2 x 0,5	11,2	75,8	149
12 x 2 x 0,5	15,0	127,5	245
19 x 2 x 0,5	17,7	199,8	358
3 x 0,5	6,0	19,0	48
3 x 3 x 0,5	9,6	50,0	108
7 x 3 x 0,5	12,7	112,0	206
12 x 3 x 0,5	16,8	189,4	332
2 x 0,75	6,6	20,6	53
3 x 2 x 0,75	10,3	51,6	114
7 x 2 x 0,75	13,5	113,4	214
12 x 2 x 0,75	18,1	190,7	352
19 x 2 x 0,75	21,4	299,0	517
3 x 0,75	7,0	28,4	64
3 x 3 x 0,75	11,4	74,8	149
7 x 3 x 0,75	15,3	167,5	297
12 x 3 x 0,75	20,6	283,5	491

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC 701 H			
2 x 1	7,0	28,6	63
3 x 2 x 1	10,9	70,4	136
7 x 2 x 1	14,7	153,9	267
12 x 2 x 1	19,4	258,4	430
19 x 2 x 1	23,2	404,6	647
3 x 1	7,4	39,1	77
3 x 3 x 1	12,4	101,7	186
7 x 3 x 1	16,4	227,1	364
12 x 3 x 1	22,0	383,7	604
2 x 1,5	8,1	39,5	81
3 x 2 x 1,5	13,0	102,9	191
7 x 2 x 1,5	17,4	229,9	380
12 x 2 x 1,5	23,4	388,5	627
19 x 2 x 1,5	27,7	610,7	930
3 x 1,5	8,5	55,3	101
3 x 3 x 1,5	14,7	150,5	263
7 x 3 x 1,5	19,5	340,9	523
12 x 3 x 1,5	26,6	578,9	884

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AVAILABLE ALSO IN: Tinned copper conductors (but without BV Type Approval)



ÖLFLEX® INSTRUM SC 702 H

Individual and overall screened ship board instrumentation cable LSZH CU/XLPE/IS/OS/LSZH



Info

RE4XHOHM1 150/250 V
IEC 60092-376

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Halogen free
- Low smoke
- Oil resistant
- DNV Type Approval

Product features

Twisted pair or triad signal cable, Individual and overall screened, XLPE insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U₀/U:
150/250 V



Test voltage:
C/C 1500 V x 5 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC 702 H			
3 x 2 x 0,5	9,6	45,1	106
7 x 2 x 0,5	12,6	100,5	200
12 x 2 x 0,5	16,7	169,8	322
19 x 2 x 0,5	19,7	266,8	477
3 x 3 x 0,5	10,6	60,6	131
7 x 3 x 0,5	14,0	136,7	254
12 x 3 x 0,5	18,8	231,8	421
3 x 2 x 0,75	11,2	67,1	142
7 x 2 x 0,75	15,1	149,6	282
12 x 2 x 0,75	20,3	252,7	466
19 x 2 x 0,75	23,9	397,1	689
3 x 3 x 0,75	12,7	90,2	184
7 x 3 x 0,75	16,8	203,7	361
12 x 3 x 0,75	22,6	345,5	600

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC 702 H			
3 x 2 x 1	12,2	93,6	179
7 x 2 x 1	16,1	208,1	348
12 x 2 x 1	21,7	351,2	576
19 x 2 x 1	25,6	551,5	858
3 x 3 x 1	13,5	124,9	224
7 x 3 x 1	18,2	281,2	456
12 x 3 x 1	24,4	476,5	756
3 x 2 x 1,5	14,2	126,1	230
7 x 2 x 1,5	19,1	284,0	467
12 x 2 x 1,5	26,0	481,3	787
19 x 2 x 1,5	30,7	757,6	1.173
3 x 3 x 1,5	16,0	173,7	304
7 x 3 x 1,5	21,6	395,1	624
12 x 3 x 1,5	29,3	671,7	1.052

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AVAILABLE ALSO IN: Tinned copper conductors



ÖLFLEX® INSTRUM SC SWB 703 H

Armoured overall screened ship board
instrumentation cable LSZH
CU/XLPE/OS/LSZH/SWB/LSZH



Info

RE4XOHAM 1 150/250 V
IEC 60092-376

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Halogen free
- Low smoke
- Oil resistant
- DNV Type Approval

Product features

Armoured twisted pair or triad signal cable,
overall screened, XLPE insulated and LSZH
jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized steel wire braid
- **Outer sheath:** LSZH, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U_o/U:
150/250 V



Test voltage:
C/C 1500 V x 5 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC SWB 703 H			
2 x 0,5	8,9	13,9	109
3 x 2 x 0,5	11,9	34,5	181
7 x 2 x 0,5	15,0	75,8	306
12 x 2 x 0,5	18,6	127,5	440
19 x 2 x 0,5	21,2	199,8	584
3 x 0,5	9,2	19,0	119
3 x 3 x 0,5	12,8	50,0	214
7 x 3 x 0,5	16,2	112,0	373
12 x 3 x 0,5	20,6	189,4	558
2 x 0,75	9,8	20,6	130
3 x 2 x 0,75	13,4	51,6	225
7 x 2 x 0,75	17,1	113,4	391
12 x 2 x 0,75	21,7	190,7	584
19 x 2 x 0,75	25,0	299,0	787
3 x 0,75	10,1	28,4	144
3 x 3 x 0,75	15,2	74,8	309
7 x 3 x 0,75	18,9	167,5	495
12 x 3 x 0,75	24,1	283,5	751

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC SWB 703 H			
2 x 1	10,2	28,6	143
3 x 2 x 1	14,7	70,4	290
7 x 2 x 1	18,2	153,9	457
12 x 2 x 1	23,2	258,4	688
19 x 2 x 1	26,7	404,6	937
3 x 1	10,5	39,1	161
3 x 3 x 1	15,9	101,7	350
7 x 3 x 1	19,9	227,1	575
12 x 3 x 1	25,6	383,7	881
2 x 1,5	11,2	39,5	171
3 x 2 x 1,5	16,6	102,9	362
7 x 2 x 1,5	21,0	229,9	603
12 x 2 x 1,5	27,0	388,5	921
19 x 2 x 1,5	31,3	610,7	1.275
3 x 1,5	11,9	55,3	202
3 x 3 x 1,5	18,3	150,5	453
7 x 3 x 1,5	23,3	340,9	783
12 x 3 x 1,5	30,1	578,9	1.215

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Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Tinned copper conductors, tinned copper wire braid armour



ÖLFLEX® INSTRUM SC SWB 704 H

Armoured individual and overall screened ship board instrumentation cable LSZH CU/XLPE/IS/OS/LSZH/SWB/LSZH



Info

RE4XHOHAM 1 150/250 V
IEC 60092-376

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Halogen free
- Low smoke
- Oil resistant
- DNV Type Approval

Product features

Armoured twisted pair or triad signal cable,
Individual and overall screened, XLPE insulated
and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized steel wire braid
- **Outer sheath:** LSZH, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U₀/U:
150/250 V



Test voltage:
C/C 1500 V x 5 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



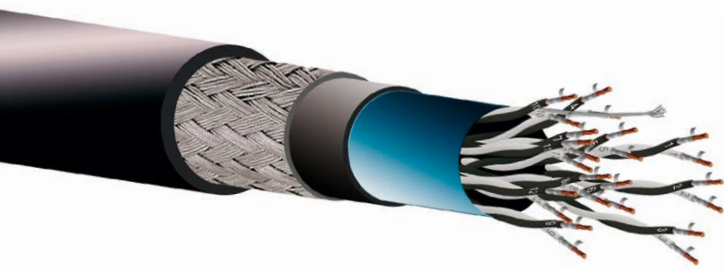
Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC SWB 704 H			
3 x 2 x 0,5	12,7	45,1	211
7 x 2 x 0,5	16,2	100,5	366
12 x 2 x 0,5	20,4	169,8	547
19 x 2 x 0,5	23,4	266,8	738
3 x 3 x 0,5	13,7	60,6	245
7 x 3 x 0,5	17,7	136,7	445
12 x 3 x 0,5	22,3	231,8	660
3 x 2 x 0,75	15,0	67,1	300
7 x 2 x 0,75	18,7	149,6	478
12 x 2 x 0,75	23,8	252,7	722
19 x 2 x 0,75	27,5	397,1	988
3 x 3 x 0,75	16,2	90,2	351
7 x 3 x 0,75	20,6	203,7	587
12 x 3 x 0,75	26,4	345,5	897

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC SWB 704 H			
3 x 2 x 1	15,8	93,6	340
7 x 2 x 1	19,7	208,1	555
12 x 2 x 1	25,2	351,2	849
19 x 2 x 1	29,4	551,5	1.192
3 x 3 x 1	17,1	124,9	401
7 x 3 x 1	21,7	281,2	687
12 x 3 x 1	28,0	476,5	1.061
3 x 2 x 1,5	18,0	126,1	425
7 x 2 x 1,5	22,7	284,0	710
12 x 2 x 1,5	29,5	481,3	1.111
19 x 2 x 1,5	34,9	757,6	1.603
3 x 3 x 1,5	19,6	173,7	511
7 x 3 x 1,5	25,1	395,1	896
12 x 3 x 1,5	32,8	671,7	1.415

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Tinned copper conductors, tinned copper wire braid armour



ÖLFLEX® INSTRUM SC SWB F90 705 H

Fire resistant, armoured overall
screened ship board instrumentation cable LSZH
CU/MT/XLPE/OS/LSZH/SWB/LSZH



Info

RTE4XOHAM 1 150/250 V
IEC 60092-376
IEC 60331-21

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Halogen free
- Low smoke
- Oil resistant
- DNV Type Approval

Product features

Twisted pair or triad signal cable, overall
screened, XLPE insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)
IEC 60331-21 (90 min./750 °C)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE, over MICA-tape wrapped conductor
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized steel wire braid
- **Outer sheath:** LSZH, black

Technical data

- **Core identification code:**
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers
- **Insulation resistance:**
5000 MOhm x km
- **Conductor stranding:**
Class 2 IEC 60228
- **Nominal Voltage U₀/U:**
150/250 V
- **Test voltage:**
C/C 1500 V x 5 minute
- **Temperature range:**
during operation: -30° to +70°C
during installation: -5° to +50°C
- **Minimum Bending Radius:**
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC SWB F90 705 H			
2 x 0,5	9,9	13,9	127
3 x 2 x 0,5	13,7	34,5	218
7 x 2 x 0,5	17,7	75,8	382
12 x 2 x 0,5	22,2	127,5	554
19 x 2 x 0,5	25,6	199,8	737
3 x 0,5	10,3	19,0	140
3 x 3 x 0,5	15,5	50,0	298
7 x 3 x 0,5	19,3	112,0	468
12 x 3 x 0,5	24,7	189,4	704
2 x 0,75	10,8	20,6	149
3 x 2 x 0,75	15,8	51,6	304
7 x 2 x 0,75	19,8	113,4	473
12 x 2 x 0,75	25,4	190,7	709
19 x 2 x 0,75	29,5	299,0	971
3 x 0,75	11,2	28,4	166
3 x 3 x 0,75	17,4	74,8	372
7 x 3 x 0,75	21,9	167,5	600
12 x 3 x 0,75	28,3	283,5	912

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC SWB F90 705 H			
2 x 1	11,2	28,6	162
3 x 2 x 1	16,5	70,4	336
7 x 2 x 1	20,9	153,9	544
12 x 2 x 1	26,9	258,4	819
19 x 2 x 1	31,1	404,6	1.115
3 x 1	11,8	39,1	189
3 x 3 x 1	18,2	101,7	415
7 x 3 x 1	23,2	227,1	695
12 x 3 x 1	30,0	383,7	1.064
2 x 1,5	12,4	39,5	197
3 x 2 x 1,5	18,6	102,9	418
7 x 2 x 1,5	23,7	229,9	697
12 x 2 x 1,5	30,7	388,5	1.065
19 x 2 x 1,5	36,2	610,7	1.525
3 x 1,5	13,0	55,3	227
3 x 3 x 1,5	20,5	150,5	524
7 x 3 x 1,5	26,4	340,9	905
12 x 3 x 1,5	34,9	578,9	1.454

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Tinned copper conductors, tinned copper wire braid armour



ÖLFLEX® INSTRUM SC SWB F90 706 H

Fire resistant, armoured individual and overall screened ship board instrumentation cable LSZH CU/MT/XLPE/IS/OS/LSZH/SWB/LSZH



Info

RTE4XHOHAM1 150/250 V
IEC 60092-376
IEC 60331-21

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Halogen free
- Low smoke
- Oil resistant
- DNV Type Approval

Product features

Armoured twisted pair or triad signal cable,
Individual and overall screened, XLPE over
MICA-tape insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)
IEC 60331-21 (90 min./750 °C)

Design

- **Conductor:** Stranded Annealed Copper
- **Core insulation:** XLPE, over MICA-tape wrapped conductor
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized steel wire braid
- **Outer sheath:** LSZH, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 2 IEC 60228



Nominal Voltage U₀/U:
150/250 V



Test voltage:
C/C 1500 V x 5 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC SWB F90 706 H			
3 x 2 x 0,5	15,3	45,1	290
7 x 2 x 0,5	19,1	100,5	451
12 x 2 x 0,5	24,4	169,8	676
19 x 2 x 0,5	28,1	266,8	913
3 x 3 x 0,5	16,6	60,6	337
7 x 3 x 0,5	21,0	136,7	551
12 x 3 x 0,5	27,0	231,8	834
3 x 2 x 0,75	17,0	67,1	349
7 x 2 x 0,75	21,6	149,6	570
12 x 2 x 0,75	27,8	252,7	863
19 x 2 x 0,75	32,4	397,1	1.196
3 x 3 x 0,75	18,7	90,2	420
7 x 3 x 0,75	23,9	203,7	703
12 x 3 x 0,75	30,9	345,5	1.076

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC SWB F90 706 H			
3 x 2 x 1	17,9	93,6	399
7 x 2 x 1	22,6	208,1	650
12 x 2 x 1	29,4	351,2	1.009
19 x 2 x 1	34,7	551,5	1.443
3 x 3 x 1	19,5	124,9	472
7 x 3 x 1	25,0	281,2	807
12 x 3 x 1	32,7	476,5	1.263
3 x 2 x 1,5	19,9	126,1	478
7 x 2 x 1,5	25,6	284,0	814
12 x 2 x 1,5	33,5	481,3	1.272
19 x 2 x 1,5	40,2	757,6	1.937
3 x 3 x 1,5	22,0	173,7	588
7 x 3 x 1,5	28,4	395,1	1.028
12 x 3 x 1,5	38,4	671,7	1.758

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Tinned copper conductors, tinned copper wire braid armour



ÖLFLEX® INSTRUM SC 707 H

Overall screened ship board instrumentation cable LSZH
CU/XLPE/OS/LSZH



Info

FE4XOHM 1 150/250 V
IEC 60092-376

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Halogen free
- Low smoke
- Oil resistant
- DNV, RINA, BV, LR Type Approval

Product features

Twisted pair or triad signal cable, overall screened, XLPE insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Flexible Annealed Copper
- **Core insulation:** XLPE
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 5 IEC 60228



Nominal Voltage U₀/U:
150/250 V



Test voltage:
C/C 1500 V x 5 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



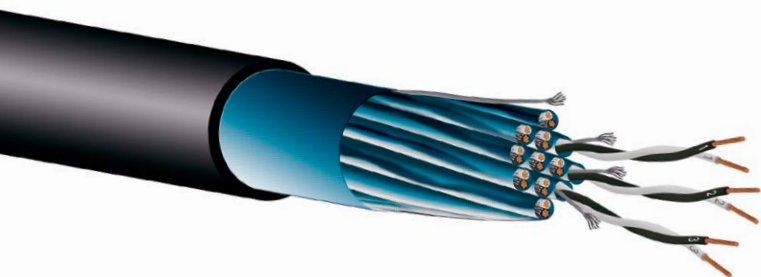
Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC 707 H			
3 x 3 x 0,75	11,4	74,9	148
7 x 3 x 0,75	15,3	167,8	297
12 x 3 x 0,75	20,5	284,0	491
2 x 1	7,1	28,4	63
3 x 2 x 1	11,1	69,7	137
7 x 2 x 1	14,9	152,3	269
12 x 2 x 1	19,8	255,6	431
19 x 2 x 1	23,6	400,2	649
3 x 1	7,5	38,7	77
3 x 3 x 1	12,6	100,7	187
7 x 3 x 1	16,7	224,6	365
12 x 3 x 1	22,4	379,6	606
2 x 1,5	8,1	36,0	78
3 x 2 x 1,5	13,0	92,5	182
7 x 2 x 1,5	17,5	205,4	358
12 x 2 x 1,5	23,5	346,6	590
19 x 2 x 1,5	27,8	544,3	872
3 x 1,5	8,5	50,1	97
3 x 3 x 1,5	14,8	134,8	249
7 x 3 x 1,5	19,6	304,3	491
12 x 3 x 1,5	26,7	516,1	829

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

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AVAILABLE ALSO IN: Tinned copper conductors (but without BV Type Approval)



ÖLFLEX® INSTRUM SC 708 H

Individual and overall screened ship board instrumentation cable LSZH CU/XLPE/IS/OS/LSZH



Info

FE4XHOHM1 150/250 V
IEC 60092-376

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Halogen free
- Low smoke
- Oil resistant
- DNV Type Approval

Product features

Twisted pair or triad signal cable, Individual and overall screened, XLPE insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Flexible Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Outer sheath:** LSZH, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

5000 MOhm x km



Conductor stranding:

Class 5 IEC 60228



Nominal Voltage U_o/U:

150/250 V



Test voltage:

C/C 1500 V x 5 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC 708 H			
3 x 2 x 0,75	11,2	67,1	142
7 x 2 x 0,75	15,0	149,8	282
12 x 2 x 0,75	20,0	253,1	455
19 x 2 x 0,75	23,8	397,7	688
3 x 3 x 0,75	12,6	90,4	184
7 x 3 x 0,75	16,7	204,0	360
12 x 3 x 0,75	22,5	346,0	599
3 x 2 x 1	12,4	92,9	180
7 x 2 x 1	16,4	206,5	349
12 x 2 x 1	22,1	348,4	579
19 x 2 x 1	26,3	547,1	875
3 x 3 x 1	13,7	123,9	226
7 x 3 x 1	18,5	278,8	458
12 x 3 x 1	24,9	472,4	759
3 x 2 x 1,5	14,2	115,7	221
7 x 2 x 1,5	19,2	259,5	446
12 x 2 x 1,5	26,1	439,4	751
19 x 2 x 1,5	30,8	691,2	1.115
3 x 3 x 1,5	16,1	158,0	291
7 x 3 x 1,5	21,6	358,4	592
12 x 3 x 1,5	29,4	608,9	997

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AVAILABLE ALSO IN: Tinned copper conductors



ÖLFLEX® INSTRUM SC SWB 709 H

Armoured overall screened ship board
instrumentation cable LSZH
CU/XLPE/OS/LSZH/SWB/LSZH



Info

FE4XOHAM1 150/250 V
IEC 60092-376

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Halogen free
- Low smoke
- Oil resistant
- DNV Type Approval

Product features

Armoured twisted pair or triad signal cable, overall screened, XLPE insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Flexible Annealed Copper
- **Core insulation:** XLPE
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized steel wire braid
- **Outer sheath:** LSZH, black

Technical data



Core identification code:
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:
5000 MOhm x km



Conductor stranding:
Class 5 IEC 60228



Nominal Voltage U_o/U:
150/250 V



Test voltage:
C/C 1500 V x 5 minute



Temperature range:
during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:
8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC SWB 709 H			
3 x 3 x 0,75	15,1	74,9	308
7 x 3 x 0,75	18,8	167,8	494
12 x 3 x 0,75	24,0	284,0	749
2 x 1	10,3	28,4	145
3 x 2 x 1	14,9	69,7	294
7 x 2 x 1	18,5	152,3	462
12 x 2 x 1	23,6	255,6	694
19 x 2 x 1	27,2	400,2	945
3 x 1	10,6	38,7	163
3 x 3 x 1	16,2	100,7	353
7 x 3 x 1	20,5	224,6	590
12 x 3 x 1	26,2	379,6	901
2 x 1,5	11,2	36,0	168
3 x 2 x 1,5	16,6	92,5	353
7 x 2 x 1,5	21,1	205,4	582
12 x 2 x 1,5	27,1	346,6	885
19 x 2 x 1,5	31,6	544,3	1.233
3 x 1,5	11,9	50,1	198
3 x 3 x 1,5	18,3	134,8	440
7 x 3 x 1,5	23,4	304,3	752
12 x 3 x 1,5	30,2	516,1	1.160

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AVAILABLE ALSO IN: Tinned copper conductors, tinned copper wire braid armour



ÖLFLEX® INSTRUM SC SWB 710 H

Armoured individual and overall screened ship board instrumentation cable LSZH CU/XLPE/IS/OS/LSZH/SWB/LSZH



Info

FE4XHOHAM 1 150/250 V
IEC 60092-376

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Halogen free
- Low smoke
- Oil resistant
- DNV Type Approval

Product features

Armoured twisted pair or triad signal cable,
Individual and overall screened, XLPE insulated
and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)

Design

- **Conductor:** Flexible Annealed Copper
- **Core insulation:** XLPE
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized steel wire braid
- **Outer sheath:** LSZH, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

5000 MOhm x km



Conductor stranding:

Class 5 IEC 60228



Nominal Voltage U_o/U:

150/250 V



Test voltage:

C/C 1500 V x 5 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC SWB 710 H			
3 x 2 x 0,75	15,0	67,1	299
7 x 2 x 0,75	18,6	149,8	476
12 x 2 x 0,75	23,8	253,1	720
19 x 2 x 0,75	27,4	397,7	986
3 x 3 x 0,75	16,2	90,4	350
7 x 3 x 0,75	20,5	204,0	586
12 x 3 x 0,75	26,3	346,0	895
3 x 2 x 1	16,0	92,9	344
7 x 2 x 1	20,0	206,5	560
12 x 2 x 1	25,6	348,4	856
19 x 2 x 1	29,8	547,1	1.202
3 x 3 x 1	17,5	123,9	414
7 x 3 x 1	22,0	278,8	693
12 x 3 x 1	28,4	472,4	1.070
3 x 2 x 1,5	18,0	115,7	416
7 x 2 x 1,5	22,8	259,5	690
12 x 2 x 1,5	29,6	439,4	1.075
19 x 2 x 1,5	35,0	691,2	1.547
3 x 3 x 1,5	19,6	158,0	498
7 x 3 x 1,5	25,2	358,4	865
12 x 3 x 1,5	32,9	608,9	1.361

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Tinned copper conductors, tinned copper wire braid armour



ÖLFLEX® INSTRUM SC SWB F90 711 H

Fire resistant, armoured overall
screened ship board instrumentation cable LSZH
CU/MT/XLPE/OS/LSZH/SWB/LSZH



Info

FTE4XOHAM 1 150/250 V
IEC 60092-376
IEC 60331-21

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Halogen free
- Low smoke
- Oil resistant
- DNV Type Approval

Product features

Armoured twisted pair or triad signal cable,
overall screened, XLPE over MICA-tape insulated
and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)
IEC 60331-21 (90 min./750 °C)

Design

- **Conductor:** Flexible Annealed Copper
- **Core insulation:** XLPE, over MICA-tape wrapped conductor
- **Screen:** OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized steel wire braid
- **Outer sheath:** LSZH, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers



Insulation resistance:

5000 MOhm x km



Conductor stranding:

Class 5 IEC 60228



Nominal Voltage U₀/U:

150/250 V



Test voltage:

C/C 1500 V x 5 minute



Temperature range:

during operation: -30° to +70°C
during installation: -5° to +50°C



Minimum Bending Radius:

8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC SWB F90 711 H			
3 x 3 x 0,75	17,4	74,9	371
7 x 3 x 0,75	21,9	167,8	598
12 x 3 x 0,75	28,2	284,0	910
2 x 1	11,3	28,4	164
3 x 2 x 1	16,7	69,7	339
7 x 2 x 1	21,2	152,3	549
12 x 2 x 1	27,2	255,6	827
19 x 2 x 1	31,7	400,2	1.140
3 x 1	11,9	38,7	191
3 x 3 x 1	18,4	100,7	419
7 x 3 x 1	23,5	224,6	701
12 x 3 x 1	30,4	379,6	1.073
2 x 1,5	12,4	36,0	195
3 x 2 x 1,5	18,6	92,5	410
7 x 2 x 1,5	23,8	205,4	677
12 x 2 x 1,5	30,7	346,6	1.030
19 x 2 x 1,5	36,3	544,3	1.468
3 x 1,5	13,0	50,1	222
3 x 3 x 1,5	20,6	134,8	511
7 x 3 x 1,5	26,5	304,3	874
12 x 3 x 1,5	35,0	516,1	1.400

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Tinned copper conductors, tinned copper wire braid armour



ÖLFLEX® INSTRUM SC SWB F90 712 H

Fire resistant, armoured individual and overall screened ship board instrumentation cable LSZH

CU/MT/XLPE/IS/LSZH/SWB/LSZH



Info

FTE4XHOHAM1 150/250 V
IEC 60092-376
IEC 60331-21

Benefits

- Sunlight resistant
- Hydrocarbon and Chemical resistant
- Fire behaviour
- Halogen free
- Low smoke
- Oil resistant
- DNV Type Approval

Product features

Armoured twisted pair or triad signal cable,
 Individual and overall screened, XLPE over
 MICA-tape insulated and LSZH jacketed

Norm references / Approvals

- **Hydrocarbon & Oil resistance**
CEI 20-34/0
- **Smoke**
IEC 61034-1 and 2
- **Halogen acid gas**
IEC 60754-1 and 2
- **Fire behaviour**
IEC 60332-1-2
IEC 60332-3-22 (Cat. A)
IEC 60331-21 (90 min./750 °C)

Design

- **Conductor:** Flexible Annealed Copper
- **Core insulation:** XLPE, over MICA-tape wrapped conductor
- **Screen:** IS/OS Aluminum/PET + TC Drain wire
- **Inner sheath:** LSZH, black
- **Armour:** Galvanized steel wire braid
- **Outer sheath:** LSZH, black

Technical data



Core identification code:

Pairs are black & white with printed numbers
 Triads are black, white, red with printed numbers



Insulation resistance:

5000 MOhm x km



Conductor stranding:

Class 5 IEC 60228



Nominal Voltage U₀/U:

150/250 V



Test voltage:

C/C 1500 V x 5 minute



Temperature range:

during operation: -30° to +70°C
 during installation: -5° to +50°C



Minimum Bending Radius:

8 x Outer Diameter

Number cores and mm ² per conductor	Approx. Outer Diameter (mm)	Copper index (kg/km)	Approx. Weight (kg/km)
ÖLFLEX® INSTRUM SC SWB F90 712 H			
12 x 2 x 0,75	27,7	253,1	861
19 x 2 x 0,75	32,3	397,7	1.193
3 x 3 x 0,75	18,6	90,4	419
7 x 3 x 0,75	23,8	204,0	702
12 x 3 x 0,75	30,8	346,0	1.074
3 x 2 x 1	18,1	92,9	403
7 x 2 x 1	23,1	206,5	668
12 x 2 x 1	29,8	348,4	1.018
19 x 2 x 1	35,2	547,1	1.455
3 x 3 x 1	19,7	123,9	477
7 x 3 x 1	25,3	278,8	814
12 x 3 x 1	33,1	472,4	1.274
3 x 2 x 1,5	20,0	115,7	470
7 x 2 x 1,5	25,7	259,5	794
12 x 2 x 1,5	33,6	439,4	1.237
19 x 2 x 1,5	40,3	691,2	1.881
3 x 3 x 1,5	22,1	158,0	575
7 x 3 x 1,5	28,5	358,4	997
12 x 3 x 1,5	38,5	608,9	1.705

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
 Photographs are not to scale and do not represent detailed images of the respective products

AVAILABLE ALSO IN: Tinned copper conductors, tinned copper wire braid armour