



ÖLFLEX® INSTRUM F90 378 H

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



Info

RTE4XOHM 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, 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, Arctic version with operation between -60°C and +70°C



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 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 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, Arctic version with operation between -60°C and +70°C



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

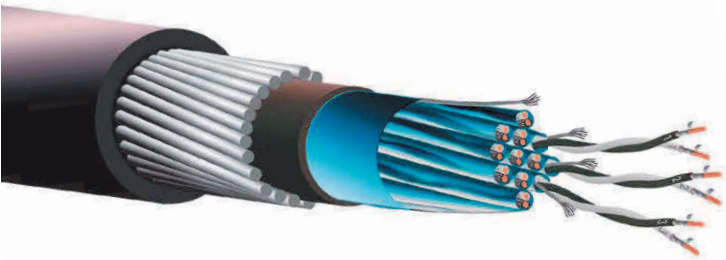
- Core identification code:**
Pairs are black & white with printed numbers
Triads are black, white, red with printed numbers
- Insulation resistance:**
5000 MOhm x km
- Conductor stranding:**
Class 2 IEC 60228
- Nominal Voltage U₀/U:**
300/300 V
- Test voltage:**
C/C 1500 V x 1 minute
- Temperature range:**
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 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

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, Arctic version with operation between -60°C and +70°C



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

RTE4XHOHM 1FM 1 300 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, Arctic version with operation between -60°C and +70°C