

Single Core, Flexible Conductor, P.V.C Insulated (H05V-K, H07V-K)

Application

- > **H05V-K**
are suitable for internal wiring of device and for protected laying in and on lights
- > **H07V-K**
are suitable for laying in conduits expose and buried in plaster and in closed installation ducts These cables are used for fixed instalation as connecting cable in under-face cable ducts, machines, and in distribution boards where more flexibility is required

Construction

- > **Design:**
60227 IEC 06 (H05V-K) for conductors up to 1mm²
60227 IEC 02 (H07V-K) for conductors above 1mm²
- > **Conductor:**
Fine bare copper conductor (class 5) acc.to IEC 60228 or ISIRI 3084
- > **Insulation:**
PVC compound, type of PVC/C
- > **Core identification:**
as per customer request

Electrical parameters

- > **Rate voltage ($\hat{u}/u$):**
300/500V for conductors up to 1mm²
450/750V conductors up above 1mm²
- > **Test voltage:**
H05V-K: 2KV(AC)
H07V-K: 2.5 KV (AC)
- > **Min.insulation resistance:**
> 0.013M.ohm/KM at 70°C

Thermal parameters

- > **Temperature range:**
-30 to 70°C

Mechanical parameters

- > **Min.bending radius:**
12.5 x cable Φ



Single Core, Flexible Conductor, P.V.C Insulated (H05V-K,H07V-K)



Cable Size mm ²	Insulation thickness mm	Overall diameter mm	Max. Conductor Resistance at 20°C	Appr.weight Kg/Km
0.5	0.6	2.1	39	9
0.75	0.6	2.3	26	12
1	0.6	2.5	19.5	14
1.5	0.7	3	13.3	21
2.5	0.8	3.6	7.98	33
4	0.8	4.2	4.95	50
6	0.8	4.8	3.3	70
10	1	6.1	1.91	116
16	1	7	1.21	162
25	1.2	8.6	0.78	250
35	1.2	9.8	0.554	342
50	1.4	11.6	0.386	489
70	1.6	13.3	0.272	677
95	1.6	15.3	0.206	893
120	1.6	16.9	0.161	1126
150	1.8	18.9	0.129	1407
185	2	20.9	0.106	1712
240	2.2	23.8	0.0801	2257

Single Core, Rigid Conductor, PVC Insulated (H05V-U, H07V-U, H07V-R)

Application

- > These types of cables are used for fixed installations as connecting cable in under-face cable ducts, machines and distribution boards. they can be used in control cabinet structures

Construction

- > **Design:**
60227 IEC 05 (H05V-U), class1 for conductors up to 1mm², 60227 IEC 01(H07V-U), class1 for conductors above 1mm²
60227 IEC 01(H07V-R), class2 for conductors above 1mm²
- > **Conductor:**
copper conductor solid (class 1) acc.to IEC 60228

copper conductor stranded (class2) acc.to IEC 60228

Electrical parameters

- > **Insulation:**
PVC compound, type of PVC/C
- > **Core identification:**
as per customer request
- > **Rate voltage ($\hat{u}/u$):**
300/500V for conductors up to 1mm²
450/750V conductors up above 1mm²
- > **Test voltage:**
H05V-U: 2KV(AC)
H07V-U: 2.5KV(AC)
H07V-R: 2.5KV(AC)
- > **Min.insulation resistance:**
>0.015 M.ohm/km at 70°C

Thermal parameters

- > **Temperature range:**
-30 to 70°C

Mechanical parameters

- > **Min.bending radius:**
15 x cable Φ



Single Core, Rigid Conductor, PVC Insulated (H05V-U,H07V-U,H07V-R)



Cable Size mm ²	Class of conductor	Insulation Thickness mm	Overall Diameter mm	Max.conductor Resistance at 20°C Ω/km	Appr.weight Kg/Km
0.5	1	0.6	2	36	8
0.75	1	0.6	2.2	24.5	11
1	1	0.6	2.3	18.1	14
1.5	1	0.7	2.8	12.1	20
1.5	2	0.7	3	12.1	22
2.5	1	0.8	3.4	7.41	32
2.5	2	0.8	3.6	7.41	34
4	1	0.8	3.9	4.61	46
4	2	0.8	4.2	4.61	50
6	1	0.8	4.4	3.08	66
6	2	0.8	4.8	3.08	71
10	1	1	5.6	1.83	110
10	2	1	6.1	1.83	116
16	2	1	7.1	1.15	174
25	2	1.2	8.8	0.727	273
35	2	1.2	10	0.524	368
50	2	1.4	11.7	0.387	499
70	2	1.4	13.5	0.268	702
95	2	1.6	15.8	0.193	969
120	2	1.6	17.4	0.153	1207
150	2	1.8	19.4	0.124	1486
185	2	2	21.6	0.0991	1862
240	2	2.2	24.7	0.0754	2436
300	2	2.4	27.5	0.0601	3047
400	2	2.6	30.9	0.047	3879

Light Multi Core, PVC Insulated, PVC Sheathed, Flexible Cable (H03VV-F)

Application

- > These types of cables are used as extensions and connecting cables for electrical devices, appliances machinery where plugs must be permanently connected to the corresponding cables
For example: desk lamps, vacuum cleaners, office machines

Construction

- > **Design:**
60227 IEC 52 (H03VV-F) for conductors up to 0.75mm^2
- > **Conductor:**
Fine bare copper conductor (class 5) acc To IEC 60228
- > **Insulation:**
PVC compound, type of PVC/D
- > **Core identification:**
according to IEC 60227-1
- > **Jacket:**
PVC compound, type of PVC/ST5

Electrical parameters

- > **Rate voltage ($\hat{u}/u$):**
300/300V
- > **Test voltage:**
H03VV-F: 2KV (AC)
- > **Min.insulation resistance:**
0.012 M.ohm/km at 70°C

Thermal parameters

- > **Temperatures range:**
 -30 to 70°C

Mechanical parameters

- > **Min.bending radius:**
 $7.5 \times \text{cable } \Phi$



Light Multi Core, PVC Insulated, PVC Sheathed, Flexible Cable (H03VV-F)



Cable Size	Insulation Thickness	Jacket Thickness	Overall dimension	Max. conductor resistance at 20°C	APPr.weight
mm ²	mm	mm	mm	Ω/km	Kg/Km
2*0.5	0.5	0.6	5.4	39	36
2*0.5 flat	0.5	0.6	3.7*5.9	39	26
2*0.75	0.5	0.6	6	26	43
2*0.75 flat	0.5	0.6	5.6	26	32
3*0.5	0.5	0.6	5.8	39	41
3*0.75	0.5	0.6	6.1	26	55
4*0.5	0.5	0.6	6.2	39	56
4*0.75	0.5	0.6	6.5	26	67

Multi Core, PVC Insulated, PVC Sheathed, Flexible Cables (H05VV-F)

Application

- > These types of cables are used in such as extension and connecting cables for electrical devices, appliances and machinery where plugs must be permanently connected to the corresponding cable

Construction

- > **Design:**
60227 IEC 53 (H05VV-F) for conductors up to 2.5mm² BS 6500 for conductors of 4mm²
- > **Conductor:**
copper conductor flexible (class 5) acc.to IEC 60228
- > **Insulation:**
PVC compound, type of PVC/D
- > **Core identification:**
according to IEC 60227-1
- > **Jacket:**
PVC compound, type of PVC/ST5
- > **Jacket color:**
black, white or grey

Electrical parameters

- > **Rate voltage ($\hat{u}/u$):**
300/500V
- > **Test voltage:**
(H05VV-F): 2.5KV(AC)
- > **Min.insulation resistance:**
>0.011 M.ohm/KM at 70°C

Thermal parameters

- > **Temperature range:**
-30 to 70°C

Mechanical parameters

- > **Min.bending radius:**
7.5 x cable Φ



Multi Core, PVC Insulated, PVC Sheathed, Flexible Cables (H05VV-F)



Cable Size mm ²	Insulation Thickness mm	Jacket Thickness mm	Overall dimension mm	Max.conductor Resistance at 20°C Ω/km	APPr.weight Kg/Km
2*0.75	0.6	0.8	6.2	26	55
2*0.75 flat	0.6	0.8	3.9*6.2	26	34
2*1	0.6	0.8	6.6	19.5	64
2*1.5	0.7	0.8	7.6	13.3	88
2*2.5	0.8	1	9.3	7.98	136
2*4	0.8	1.1	10.6	4.95	188
3*0.75	0.6	0.8	6.6	26	66
3*1	0.6	0.8	7	19.5	77
3*1.5	0.7	0.9	8.2	13.3	111
3*2.5	0.8	1.1	10.1	7.98	171
3*4	0.8	1.2	11.5	4.95	238
4*0.75	0.6	0.8	7.2	26	79
4*1	0.6	0.9	7.8	19.5	97
4*1.5	0.7	1.1	9.2	13.3	139
4*2.5	0.8	1.1	11	7.98	208
4*4	0.8	1.2	12.5	4.95	293
5*0.75	0.6	0.9	8	26	97
5*1	0.6	0.9	8.5	19.5	115
5*1.5	0.7	1.1	10.3	13.3	169
5*2.5	0.8	1.2	12.3	7.98	254
5*4	0.8	1.4	14.1	4.95	363

Multi Core, PVC Insulated, PVC Sheathed Cable (NYM)

Application

- > These types of cables suitable for using in, on and under the plaster, in dry, wet, and damp rooms, as well as brickwork or concrete, with the exception of direct laying of shake vibrated or compressed concrete

Construction

- > **Design:**
60227 IEC 10(NYM)
- > **Conductor:**
copper conductor solid (class 1) or stranded (class 2) acc.to IEC 60228
- > **Insulation:**
PVC compound, type of PVC/C
- > **Core identification:**
according to IEC 60227-1
- > **Inner covering:**
PVC compound compatible with insulation & jacket
- > **Jacket:**
PVC compound, type of PVC/ST4
- > **Jacket color:**
black or grey

Electrical parameters

- > **Rate voltage ($\hat{u}/u$):**
300/500V
- > **Test voltage:**
2KV(AC)
- > **Min.insulation resistance:**
>0.011 M.ohm/KM at 70°C

Thermal parameters

- > **Temperature range:**
-30 to 70°C

Mechanical parameters

- > **Min.bending radius:**
6 x cable Φ



Multi Core, PVC Insulated, PVC Sheathed Cable (NYM)



Cable Size mm ²	Class of conductor	Insulation Thickness mm	Inner covering Thickness mm	Jacket Thickness mm	Overall Diameter mm	Max. conductor Resistance at 20°C Ω/km	APPr.weight Kg/Km
2 core							
2*1.5	1	0.7	0.4	1.2	9.2	12.1	123
2*1.5	2	0.7	0.4	1.2	9.6	12.1	132
2*2.5	1	0.8	0.4	1.2	10.4	7.41	166
2*2.5	2	0.8	0.4	1.2	10.9	7.41	179
2*4	1	0.8	0.4	1.2	11.3	4.61	213
2*4	2	0.8	0.4	1.2	12	4.61	231
2*6	1	0.8	0.4	1.2	12.3	3.08	273
2*6	2	0.8	0.4	1.4	13.1	3.08	295
2*10	1	1	0.6	1.4	15.2	1.83	432
2*10	2	1	0.6	1.4	16.2	1.83	463
2*16	2	1	0.6	1.4	18.6	1.15	651
2*25	2	1.2	0.8	1.4	22	0.727	957
2*35	2	1.2	1	1.6	25.1	0.524	1276
3 core							
3*1.5	1	0.7	0.4	1.2	9.5	12.1	140
3*1.5	2	0.7	0.4	1.2	9.9	12.1	151
3*2.5	1	0.8	0.4	1.2	11	7.41	200
3*2.5	2	0.8	0.4	1.2	11.5	7.41	214
3*4	1	0.8	0.4	1.2	12	4.61	260
3*4	2	0.8	0.4	1.2	12.7	4.61	281
3*6	1	0.8	0.4	1.4	13.5	3.08	352
3*6	2	0.8	0.4	1.4	14.3	3.08	377
3*10	1	1	0.6	1.4	16.4	1.83	548
3*10	2	1	0.6	1.4	17.4	1.83	582
3*16	2	1	0.8	1.4	19.7	1.15	811
3*25	2	1.2	0.8	1.6	24.2	0.727	1252
3*35	2	1.2	1	1.6	26.7	0.524	1614
4 core							
4*1.5	1	0.7	0.4	1.2	10.4	12.1	171
4*1.5	2	0.7	0.4	1.2	10.9	12.1	184
4*2.5	1	0.8	0.4	1.2	11.9	7.41	239
4*2.5	2	0.8	0.4	1.2	12.5	7.41	256
4*4	1	0.8	0.4	1.4	13.5	4.61	330
4*4	2	0.8	0.4	1.4	14.3	4.61	356
4*6	1	0.8	0.6	1.4	14.9	3.08	441
4*6	2	0.8	0.6	1.4	15.9	3.08	470
4*10	1	1	0.6	1.4	17.9	1.83	674
4*10	2	1	0.6	1.4	19	1.83	712
4*16	2	1	0.8	1.4	21.7	1.15	1013
4*25	2	1.2	1	1.6	26.5	0.727	1550
4*35	2	1.2	1	1.6	29.4	0.524	2026
5 core							
5*1.5	1	0.7	0.4	1.2	11.1	12.1	196
5*1.5	2	0.7	0.4	1.2	11.7	12.1	210
5*2.5	1	0.8	0.4	1.2	13	7.41	287
5*2.5	2	0.8	0.4	1.2	13.7	7.41	306
5*4	1	0.8	0.6	1.4	14.7	4.61	393
5*4	2	0.8	0.6	1.4	15.6	4.61	423
5*6	1	0.8	0.6	1.4	16.1	3.08	518
5*6	2	0.8	0.6	1.4	17.1	3.08	552
5*10	1	1	0.6	1.4	19.7	1.83	819
5*10	2	1	0.6	1.4	21	1.83	864
5*16	2	1	0.8	1.6	24.3	1.15	1240
5*25	2	1.2	1	1.6	29.2	0.727	1874
5*35	2	1.2	1.2	1.6	32.5	0.524	2454

Single Core, PVC Insulated, PVC Sheathed, Power Cables (NYY-NAYY)

Application

- > These types of cables suitable for using as power cable in supplying electric energy in static installation, indoors, outdoors, underground, in concrete, cable ducts, in water and open air where mechanical damage are not expected

Construction

- > **Design:**
IEC 60502-1 (NYY) or (NAYY)
- > **Conductor:**
copper conductor solid (class 1) for up to 10 mm² or stranded (class 2) for all sizes and or aluminum, solid or stranded acc.to IEC 60228
- > **Insulation:**
PVC compound type of PVC/A
- > **Core insulation color:**
normally black
- > **Jacket:**
PVC compound type of PVC/ST1
- > **Jacket color:**
black

Electrical parameters

- > **Rate voltage ($\hat{u}/u$):**
600/1000V
- > **Test voltage:**
3.5KV (AC)
- > **Min.insulation resistance:**
>0.037 M.ohm/KM at 70°C

Thermal parameters

- > **Temperatures range:**
-30 to 70°C

Mechanical parameters

- > **Min.bending radius:**
15 x cable Φ



Single Core, PVC Insulated, PVC Sheathed, Power Cables (NYY-NAYY)



NYY

Cable Size mm ²	Class of conductor	Insulation Thickness mm	Jacket Thickness mm	Overall Diameter mm	Max.conductor Resistance at 20°C Ω/km	APPr.weight Kg/Km
1*4	1	1	1.4	7.1	4.61	85
1*6	1	1	1.4	7.6	3.08	108
1*10	1	1	1.4	8.4	1.83	153
1*16	2	1	1.4	9.9	1.15	235
1*25	2	1.2	1.4	11.6	0.727	347
1*35	2	1.2	1.4	12.8	0.524	451
1*50	2	1.4	1.4	14.5	0.387	598
1*70	2	1.4	1.4	16.3	0.268	809
1*95	2	1.6	1.5	18.8	0.193	1115
1*120	2	1.6	1.5	20.4	0.153	1362
1*150	2	1.8	1.6	22.6	0.124	1698
1*185	2	2	1.7	25	0.0991	2117
1*240	2	2.2	1.8	28.3	0.0754	2756
1*300	2	2.4	1.9	31.3	0.0601	3450
1*400	2	2.6	2	34.9	0.047	4387
1*500	2	2.8	2.1	38.6	0.0366	5561

NAYY

Cable Size mm ²	Class of conductor	Insulation Thickness mm	Jacket Thickness mm	Overall Diameter mm	Max.conductor Resistance at 20°C Ω/km	APPr.weight Kg/Km
1*10	1	1	1.4	8.2	3.08	92
1*16	2	1	1.4	9.9	1.91	137
1*25	2	1.2	1.4	11.6	1.2	192
1*35	2	1.2	1.4	12.7	0.868	235
1*50	2	1.4	1.4	14.5	0.641	304
1*70	2	1.4	1.4	16.3	0.443	390
1*95	2	1.6	1.5	18.7	0.32	530
1*120	2	1.6	1.5	20.3	0.253	629
1*150	2	1.8	1.6	22.4	0.206	777
1*185	2	2	1.7	24.9	0.164	970
1*240	2	2.2	1.8	28.1	0.125	1260
1*300	2	2.4	1.9	31.1	0.1	1569
1*400	2	2.6	2	34.7	0.0778	1976
1*500	2	2.8	2.1	38.7	0.0605	2490

Multi Core Power Cable, PVC Sheathed (NYY-O – NYY-J)

Application

- > These type of cables are used for distribution of electrical energy for fixed installation in underground, cable ducts, power stations, indoors, in water and open air where mechanical damage are not expected

Construction

- > **Design:**
IEC 60502-1 (NYY-O) (NAYY-O), without protective green/yellow core IEC 60502-1 (NYY-J) (NAYY-J), with protective green/yellow core
- > **Conductor:**
copper conductor solid (class1), stranded (class2) or flexible (class5) and/or Aluminium solid or stranded in power applications acc.to IEC 60228
- > **Insulation:**
PVC compound type of PVC/A
- > **Core identification:**
according to IEC 60227-1
- > **Inner covering:**
PVC compound compatible with insulation and jacket, and for cable sizes more than 35mm² a layer of helical dielectric tape with an overlap
- > **Jacket:**
PVC compound type of PVC/ST1
- > **Jacket color:**
black

Electrical parameters

- > **Rate voltage ($\hat{u}/u$):**
600/1000V
- > **Test voltage:**
3.5KV (AC)
- > **Min.insulation resistance:**
0.037 M.ohm/KM at 70°C

Thermal parameters

- > **Temperatures range:**
-30 to 70°C

Mechanical parameters

- > **Min.bending radius:**
12 x cable Φ



Multi Core Power Cable, PVC Sheathed (NYY-O – NYY-J)



Cable Size mm ²	Class of conductor	Insulation Thickness mm	Inner covering Thickness mm	Jacket Thickness mm	Overall Diameter mm	Max.conductor Resistance at 20°C Ω/km	APPr.weight Kg/Km
2 core							
2*1.5	Re	0.8	1	1.8	11.6	12.1	187
2*1.5	Rm	0.8	1	1.8	12	12.1	199
2*2.5	Re	0.8	1	1.8	12.3	7.41	225
2*2.5	Rm	0.8	1	1.8	12.8	7.41	238
2*4	Re	1	1	1.8	14.1	4.61	304
2*4	Rm	1	1	1.8	14.7	4.61	325
2*6	Re	1	1	1.8	15.1	3.08	370
2*6	Rm	1	1	1.8	15.8	3.08	397
2*10	Re	1	1	1.8	16.7	1.83	497
2*10	Rm	1	1	1.8	17.7	1.83	534
2*16	Rm	1	1	1.8	19.8	1.15	718
2*25	Rm	1.2	1	1.8	23.2	0.727	1039
2*35	Rm	1.2	1	1.8	25.5	0.524	1320
3 core							
3*15	Re	0.8	1	1.8	12	12.1	210
3*1.5	Rm	0.8	1	1.8	12.5	12.1	223
3*2.5	Re	0.8	1	1.8	12.9	7.41	258
3*2.5	Rm	0.8	1	1.8	13.4	7.41	272
3*4	Re	1	1	1.8	14.7	4.61	355
3*4	Rm	1	1	1.8	15.4	4.61	377
3*6	Re	1	1	1.8	15.8	3.08	439
3*6	Rm	1	1	1.8	16.6	3.08	468
3*10	Re	1	1	1.8	17.6	1.83	604
3*10	Rm	1	1	1.8	18.6	1.83	643
3*16	Rm	1	1	1.8	20.9	1.15	881
3*25	Rm	1.2	1	1.8	24.6	0.727	1290
3*35	Rm	1.2	1	1.8	27.1	0.524	1657
3*50	Sm	1.4	0.2	1.8	25	0.387	1832
3*70	Sm	1.4	0.2	2	28.6	0.268	2486
3*95	Sm	1.6	0.2	2.1	32.6	0.193	3322
3*120	Sm	1.6	0.2	2.2	34.8	0.153	4085
3*150	Sm	1.8	0.2	2.3	38.6	0.124	5078
3*185	Sm	2	0.2	2.5	42.2	0.0991	6240
3*240	Sm	2.2	0.2	2.7	47.4	0.0754	8022
3*25/16	Rm	1.2/1	1	1.8	26.8	0.727/1.15	1471
3*35/16	Rm	1.2/1	1	1.8	29.5	0.524/1.15	1838
3*50/25	Sm	1.4/1.2	0.2	1.9	27.6	0.387/0.727	2030
3*70/35	Sm	1.4/1.2	0.2	2	30.6	0.268/0.524	2778
3*95/50	Sm	1.6/1.4	0.2	2.2	35.4	0.193/0.387	3762
3*120/70	Sm	1.6/1.4	0.2	2.3	38.2	0.153/0.268	4773
3*150/70	Sm	1.8/1.4	0.2	2.4	42.2	0.124/0.268	5702
3*185/95	Sm	2/1.6	0.2	2.6	46.6	0.0991/0.193	7191
3*240/120	Sm	2.2/1.6	0.2	2.8	52.6	0.0754/0.153	9363

Single Core, XLPE Insulated, PVC Sheathed, Power Cable (N2XY-NA2XY)

Application

- > These types of cables are used for distribution of electrical energy in fixed installation in underground cable ducts, indoors, in water and open air where mechanical damage are not expected

Construction

- > **Design:**
IEC 60502-1 (N2XY-NA2XY)
- > **Conductor:**
copper conductor solid (class1) for conductors up to 10mm or stranded (class 2) for all sizes and/or aluminum solid or stranded, acc.to IEC 60228

- > **Insulation:**
cross linked polyethylene compound (XLPE)

- > **Core identification:**
as per customer request

- > **Jacket:**
PVC compound type of PVC/ST1

- > **Jacket color:**
black

Electrical parameters

- > **Rate voltage:**
600/1000V

- > **Test voltage:**
3.5 KV(AC)

Thermal parameters

- > **Temperature range:**
-30 to +70°C

Mechanical parameters

- > **Min.bending radius:**
15 x cable Φ



Single Core, XLPE Insulated, PVC Sheathed, Power Cable (N2XY-NA2XY)



N2XY

Cable Size mm ²	Class of conductor	Insulation Thickness mm	Jacket Thickness mm	Overall Diameter mm	Max.conductor Resistance at 20°C Ω/km	APPr.weight Kg/Km
1*4	1	1	1.4	7.1	4.61	85
1*6	1	1	1.4	7.6	3.08	108
1*10	1	1	1.4	8.4	1.83	153
1*16	2	1	1.4	9.9	1.15	235
1*25	2	1.2	1.4	11.6	0.727	347
1*35	2	1.2	1.4	12.8	0.524	451
1*50	2	1.4	1.4	14.5	0.387	598
1*70	2	1.4	1.4	16.3	0.268	809
1*95	2	1.6	1.5	18.8	0.193	1115
1*120	2	1.6	1.5	20.4	0.153	1362
1*150	2	1.8	1.6	22.6	0.124	1698
1*185	2	2	1.7	25	0.0991	2117
1*240	2	2.2	1.8	28.3	0.0754	2756
1*300	2	2.4	1.9	31.3	0.0601	3450
1*400	2	2.6	2	34.9	0.047	4387
1*500	2	2.8	2.1	38.6	0.0366	5561

NA2XY

Cable Size mm ²	Class of conductor	Insulation Thickness mm	Jacket Thickness mm	Overall Diameter mm	Max.conductor Resistance at 20°C Ω/km	APPr.weight Kg/Km
1*10	1	1	1.4	8.2	3.08	92
1*16	2	1	1.4	9.9	1.91	137
1*25	2	1.2	1.4	11.6	1.2	192
1*35	2	1.2	1.4	12.7	0.868	235
1*50	2	1.4	1.4	14.5	0.641	304
1*70	2	1.4	1.4	16.3	0.443	390
1*95	2	1.6	1.5	18.7	0.32	530
1*120	2	1.6	1.5	20.3	0.253	629
1*150	2	1.8	1.6	22.4	0.206	777
1*185	2	2	1.7	24.9	0.164	970
1*240	2	2.2	1.8	28.1	0.125	1260
1*300	2	2.4	1.9	31.1	0.1	1569
1*400	2	2.6	2	34.7	0.0778	1976
1*500	2	2.8	2.1	38.7	0.0605	2490

Multi Core, XLPE Insulated, PVC Sheathed, Power Cables (N2XY-O, NA2XY-O)



Application

- > These types of cables are suitable for distribution of electrical energy for fixed installation in underground, cable ducts, power stations, indoors, in water and open air where mechanical damage are not expected. XLPE insulation material has better mechanical, electrical, chemical and durability characteristics than PVC.

Construction

- > **Design:**
IEC60502-1(N2XY-O)(NA2XY-O)
- > **Conductor:**
copper conductor solid(class 1), stranded(class 2) or flexible(class 5) and/or aluminum solid or stranded in power cable applications acc.to IEC 60228
- > **Insulation:**
cross linked polyethylene compound (XLPE)
- > **core identification:**
as per customer request
- > **Inner covering:**
PVC compound compatible with insulation and jacket, for cable sizes more than 35 mm a layer helical dielectric tape with an over lap
- > **Jacket:**
PVC compound type of PVC/ST1
- > **Jacket color:**
black

Electrical parameters

- > **Rate voltage:**
600/1000V
- > **Test voltage:**
3.5 KV/AC
- > **Min.insulation resistance:**
0.037 m.ohm/km at 70°C

Thermal parameters

- > **Temperature range:**
-30 to +70°C

Mechanical parameters

- > **Min.bending radius:**
12 x cable Φ



Multi Core, XLPE Insulated, PVC Sheathed, Power Cables (N2XY-O,NA2XY-O)



Cable Size mm ²	Class of conductor	Insulation Thickness mm	Inner covering Thickness mm	Jacket Thickness mm	Overall Diameter mm	Max.conductor Resistance at 20°C Ω/km	APPr.weight Kg/Km
2 core							
2*1.5	Re	0.8	1	1.8	11.6	12.1	187
2*1.5	Rm	0.8	1	1.8	12	12.1	199
2*2.5	Re	0.8	1	1.8	12.3	7.41	225
2*2.5	Rm	0.8	1	1.8	12.8	7.41	238
2*4	Re	1	1	1.8	14.1	4.61	304
2*4	Rm	1	1	1.8	14.7	4.61	325
2*6	Re	1	1	1.8	15.1	3.08	370
2*6	Rm	1	1	1.8	15.8	3.08	397
2*10	Re	1	1	1.8	16.7	1.83	497
2*10	Rm	1	1	1.8	17.7	1.83	534
2*16	Rm	1	1	1.8	19.8	1.15	718
2*25	Rm	1.2	1	1.8	23.2	0.727	1039
2*35	Rm	1.2	1	1.8	25.5	0.524	1320
3 core							
3*15	Re	0.8	1	1.8	12	12.1	210
3*1.5	Rm	0.8	1	1.8	12.5	12.1	223
3*2.5	Re	0.8	1	1.8	12.9	7.41	258
3*2.5	Rm	0.8	1	1.8	13.4	7.41	272
3*4	Re	1	1	1.8	14.7	4.61	355
3*4	Rm	1	1	1.8	15.4	4.61	377
3*6	Re	1	1	1.8	15.8	3.08	439
3*6	Rm	1	1	1.8	16.6	3.08	468
3*10	Re	1	1	1.8	17.6	1.83	604
3*10	Rm	1	1	1.8	18.6	1.83	643
3*16	Rm	1	1	1.8	20.9	1.15	881
3*25	Rm	1.2	1	1.8	24.6	0.727	1290
3*35	Rm	1.2	1	1.8	27.1	0.524	1657
3*50	Sm	1.4	0.2	1.8	25	0.387	1832
3*70	Sm	1.4	0.2	2	28.6	0.268	2486
3*95	Sm	1.6	0.2	2.1	32.6	0.193	3322
3*120	Sm	1.6	0.2	2.2	34.8	0.153	4085
3*150	Sm	1.8	0.2	2.3	38.6	0.124	5078
3*185	Sm	2	0.2	2.5	42.2	0.0991	6240
3*240	Sm	2.2	0.2	2.7	47.4	0.0754	8022
3*25/16	Rm	1.2/1	1	1.8	26.8	0.727/1.15	1471
3*35/16	Rm	1.2/1	1	1.8	29.5	0.524/1.15	1838
3*50/25	Sm	1.4/1.2	0.2	1.9	27.6	0.387/0.727	2030
3*70/35	Sm	1.4/1.2	0.2	2	30.6	0.268/0.524	2778
3*95/50	Sm	1.6/1.4	0.2	2.2	35.4	0.193/0.387	3762
3*120/70	Sm	1.6/1.4	0.2	2.3	38.2	0.153/0.268	4773
3*150/70	Sm	1.8/1.4	0.2	2.4	42.2	0.124/0.268	5702
3*185/95	Sm	2/1.6	0.2	2.6	46.6	0.0991/0.193	7191
3*240/120	Sm	2.2/1.6	0.2	2.8	52.6	0.0754/0.153	9363

Multi Core, PVC Insulated, Steel Wire Armored, PVC Sheathed Cable (NYRY-NYBY)



Application

- > These types of cables are suitable for use as power and control cable in static installation, in underground, outdoors, in water, indoors and in cable ducts if greater mechanical protection required

Construction

- > **Design:**
IEC 60502-1 (NYRY,NAYRY)
- > **Conductor:**
copper conductor solid (class 1), stranded(class 2) or flexible(class5) and/or aluminum solid or stranded in power cable applications acc.to IEC 60228
- > **Insulation:**
PVC compound type of PVC/A
- > **Core identification:**
up to 5cores color coding and 6cores and more black with number imprints
- > **Inner covering:**
PVC compound compatible with insulation
- > **Armour:**
single galvanized steel wires, or two layer of galvanized steel tape
Note: for single core cables armour material is non magnetic
- > **Jacket:**
PVC compound type PVC/ST1
- > **Jacket color:**
black

Electrical parameters

- > **Rate voltage ($\hat{u}/u$):**
600/1000V
- > **Test voltage:**
3.5KV(AC)
- > **Min.insulation resistance:**
0.037 M.ohm/KM at 70°C

Thermal parameters

- > **Temperatures range:**
-30 to 70°C

Mechanical parameters

- > **Min.bending radius:**
15 x cable Φ



Multi Core, PVC Insulated, Steel Wire Armored, PVC Sheathed Cable (NYRY-NYBY)



Cable size mm ²	Insulation thickness mm	Inner covering thickness mm	Armour Size mm		Jacket thickness mm	Overall diameter mm		APPr.weight Kg/km	
			Wires diameter	Tapes thickness		Wires armour	Tapes armour	Wires armour	Tapes armour
2*1.5	0.8	1	0.9	0.2	1.8	13.7	13.1	369	250
2*2.5	0.8	1	0.9	0.2	1.8	14.6	14	426	290
2*4	1	1	0.9	0.2	1.8	16.4	15.8	542	367
2*6	1	1	1.25	0.2	1.8	18.3	17	729	434
2*10	1	1	1.25	0.2	1.8	20.1	18.8	913	554
2*16	1	1	1.25	0.2	1.8	22.2	20.9	1136	716
2*25	1.2	1	1.6	0.2	1.8	26.3	24.3	1682	983
2*35	1.2	1	1.6	0.2	1.8	28.6	26.6	2042	1221
3*1.5	0.8	1	0.9	0.2	1.8	14.2	13.6	398	283
3*2.5	0.8	1	0.9	0.2	1.8	15.1	14.5	464	333
3*4	1	1	1.25	0.2	1.8	17.8	16.5	697	434
3*6	1	1	1.25	0.2	1.8	19.1	17.8	818	523
3*10	1	1	1.25	0.2	1.8	21.1	19.8	1041	689
3*16	1	1	1.25	0.2	1.8	23.3	22	1326	911
3*35	1.2	1	1.6	0.2	1.8	27.7	25.7	1979	1282
3*10	1.2	1	1.6	0.2	1.8	30.1	28.1	2407	1617
4*1.5	0.8	1	0.9	0.2	1.8	15	14.4	447	322
4*2.5	0.8	1	0.9	0.2	1.8	16.1	15.5	526	387
4*4	1	1	1.25	0.2	1.8	19	17.7	795	512
4*6	1	1	1.25	0.2	1.8	20.4	19.1	938	624
4*10	1	1	1.25	0.2	1.8	22.6	21.3	1204	835
4*16	1	1	1.6	0.2	1.8	25.8	23.8	1722	1121
3*25/16	1.2/1	1	1.6	0.2	1.8	29.9	27.9	2243	1501
3*35/16	1.2/1	1	1.6	0.2	1.8	32.9	30.9	2708	1858
3*50/25	1.4/1.2	1	2	0.2	2	32.6	29.8	3262	2351
3*70/35	1.4/1.2	1.2	2	0.5	2.1	36	34	4184	3469
3*95/50	1.6/1.4	1.2	2	0.5	2.3	40.8	38.8	5433	4591
3*120/70	1.6/1.4	1.4	2.5	0.5	2.4	45	41.8	6882	5629
3*150/70	1.8/1.4	1.4	2.5	0.5	2.6	49.2	46.2	8123	8284
3*185/95	2/1.6	1.4	2.5	0.5	2.7	53.4	50.6	9854	10558
3*240/120	2.2/1.6	1.6	2.5	0.5	2.9	59.8	56.8	12372	364
5*1.5	0.8	1	0.9	0.2	1.8	15.9	15.3	499	441
5*2.5	0.8	1	0.9	0.2	1.8	17.1	16.5	593	592
5*4	1	1	1.25	0.2	1.8	20.3	19	896	726
5*6	1	1	1.25	0.2	1.8	21.8	20.5	1027	984
5*10	1	1	1.6	0.2	1.8	25	23	1531	1335
5*16	1	1	1.6	0.2	1.8	27.8	25.8	1974	1935
5*25	1.2	1	1.6	0.2	1.9	32.6	30.6	2747	2491
5*35	1.2	1	2	0.2	2	36.7	33.9	3670	430
7*1.5	0.8	1	0.9	0.2	1.8	16.9	16.3	550	564
10*1.5	0.8	1	1.25	0.2	1.8	20.7	19.4	850	683
14*1.5	0.8	1	1.25	0.2	1.8	22.1	20.8	971	878
20*1.5	0.8	1	1.6	0.2	1.8	25.6	23.6	1391	1014

Power Cables With Concentric Conductors (NYCY)

Application

- > These types of cables are suitable for energy supply in subscribed networks ,power station as well as control cable for transmission of control Impulses and test data, house connection boxes and street lighting these cables can be installed in open air, underground, in water, indoors and in cable ducts

Construction

- > **Design:**
IEC60502-1(NYCY)
- > **Conductor:**
copper conductor solid (class1) or stranded (class2) acc.to IEC 60228
- > **Insulation:**
PVC compound type of PVC/A
- > **Core identification:**
single core black and multi core up to 5 cores color coding or number imprints and for more than 5 cores number imprint. for 3 or more cores the last core is green/yellow as protective conductors
- > **Inner covering:**
PVC compound compatible with insulation for multi core cables
- > **Concentric conductor:**
plain copper wires twisted with or without counter coil of copper tape, for single core cable directly on insulation and for multi core cables over extruded inner covering
- > **Jacket:**
PVC compound type PVC/ST1
- > **Jacket color:**
black



Electrical parameters

- > **Rate voltage ($\hat{u}/u$):**
600/1000V
- > **Test voltage:**
3.5KV(AC)
- > **Min.insulation resistance:**
>0.037M.ohm/KM at 70°C

Thermal parameters

- > **Temperatures range:**
-40 to 70°C

Mechanical parameters

- > **Min.bending radius:**
12 x cable Φ



Power Cables With Concentric Conductors (NYCY)



Cable Size mm ²	Insulation Thickness mm	Inner covering Thickness mm	No. and size of concentric conductor	Jacket Thickness mm	Overall Diameter mm	Max. conductor Resistance at 20°C Ω/km	APPr. weight Kg/Km
1*1.5/1.5	1.5	-	18*0.5	1.8	9	12.1	108
1*1.5/2.5	1.5	-	13*0.5	1.8	9.5	7.41	132
1*4/4	1.5	-	14*0.6	1.8	10.1	4.61	167
1*6/6	1.5	-	21*0.6	1.8	10.6	3.08	211
1*10/10	1.5	-	26*0.7	1.8	11.6	1.83	297
1*16/16	1.5	-	25*0.9	1.8	13.5	1.15	433
1*25/16	1.5	-	25*0.9	1.8	14.8	0.727	532
1*35/16	1.5	-	25*0.9	1.8	15.9	0.524	637
1*50/16	1.5	-	25*0.9	1.8	17.3	0.387	770
1*70/16	1.5	-	25*0.9	1.8	19	0.268	981
1*95/16	1.6	-	25*0.9	1.8	21.1	0.193	1256
1*120/16	1.6	-	25*0.9	1.8	22.7	0.153	1511
1*150/25	1.8	-	39*0.9	1.8	24.5	0.124	1846
1*185/25	2	-	39*0.9	1.8	26.9	0.0991	2262
1*240/25	2.2	-	39*0.9	1.8	29.7	0.0754	2805
1*300/25	2.4	-	39*0.9	1.9	32.7	0.0601	3442
1*400/35	2.6	-	55*0.9	2	36.2	0.047	4360
1*500/35	2.8	-	55*0.9	2.1	40.1	0.0366	5447
2*1.5/1.5	0.8	1	8*0.5	1.8	12.5	12.1	208
2*2.5/2.5	0.8	1	13*0.5	1.8	13.3	7.41	253
2*4/4	1	1	21*0.5	1.8	15	4.61	345
2*6/6	1	1	21*0.6	1.8	16.2	3.08	428
2*10/10	1	1	26*0.7	1.8	18	1.83	588
2*16/16	1	1	25*0.9	1.8	21.5	1.15	869
3*1.5/1.5	0.8	1	8*0.5	1.8	13	12.1	231
3*2.5/2.5	0.8	1	13*0.5	1.8	13.8	7.41	285
3*4/4	1	1	21*0.5	1.8	15.7	4.61	394
3*6/6	1	1	21*0.6	1.8	16.9	3.08	495
3*10/10	1	1	26*0.7	1.8	18.9	1.83	691
3*16/16	1	1	25*0.9	1.8	22.6	1.15	1028
3*25/16	1.2	1	25*0.9	1.8	26.3	0.727	1430
3*35/16	1.2	1	25*0.9	1.8	28.7	0.524	1792
3*50/16	1.4	1	25*0.9	1.8	27.8	0.387	2277
3*70/16	1.4	1.2	25*0.9	2	30.4	0.268	2648
3*95/16	1.6	1.2	25*0.9	2.1	35.6	0.193	3985
3*120/16	1.6	1.2	25*0.9	2.3	37.8	0.153	4770
3*150/25	1.8	1.4	39*0.9	2.4	42.2	0.124	6008
3*185/25	2	1.4	39*0.9	2.5	45.6	0.0991	7222
3*240/25	2.2	1.6	39*0.9	2.7	51.2	0.0754	9216
7*1.5/2.5	0.8	1	13*0.5	1.8	15.5	12.1	335
10*1.5/2.5	0.8	1	13*0.5	1.8	18.4	12.1	455

Rigid Control Cable (NYY-J)

Application

- > These types of cables are suitable for fixed installation in underground ,indoors ,outdoors in concrete and in water where mechanical damage are not expected

Construction

- > **Design:**
IEC 60502-1 (NYY-J)
- > **conductor:**
copper conductor solid (class 1) or stranded (class2) acc.to IEC 60228
- > **Insulation:**
PVC compound type of PVC/A
- > **core identification:**
up to 5 cores, color or number coding and for more than 5 cores number coded imprint .for 3 more cores the green/yellow earth core is the last core in the outer layer
- > **Inner covering:**
PVC compound compatible with insulation and jacket or a layer of helical dielectric tape with an over lap
- > **Jacket:**
PVC compound type of PVC/ST1
- > **Jacket color:**
black

Electrical parameters

- > **Rate voltage:**
600/1000V
- > **Test voltage:**
3.5 KV/AC
- > **Min.insulation resistance:**
> 0.037m.Ohm/km at 70°C

Thermal parameters

- > **Temperature range:**
-40 to +70°C

Mechanical parameters

- > **Min.bending radius:**
12 x cable Φ



Rigid Control Cable (NYY-J)



Cable size	Insulation thickness	Inner covering thickness	Jacket thickness	Overall diameter	Max. conductor Resistance at 20°C	APPr.weight
mm ²	mm	mm	mm	mm	Ω/km	Kg/Km
5*1.5	0.8	1	1.8	13.6	12.1	272
7*1.5	0.8	1	1.8	14.5	12.1	308
10*1.5	0.8	1	1.8	17.5	12.1	430
12*1.5	0.8	1	1.8	17.9	12.1	467
14*1.5	0.8	1	1.8	18.7	12.1	517
20*1.5	0.8	1	1.8	21.4	12.1	712
24*1.5	0.8	1	1.8	23.4	12.1	843
30*1.5	0.8	1	1.8	24.7	12.1	987
40*1.5	0.8	1	1.8	27.4	12.1	1250
60*1.5	0.8	1.2	2	33.1	12.1	1818
5*2.5	0.8	1	1.8	14.7	7.41	342
7*2.5	0.8	1	1.8	15.7	7.41	393
10*2.5	0.8	1	1.8	19	7.41	556
12*2.5	0.8	1	1.8	19.5	7.41	611
14*2.5	0.8	1	1.8	20.4	7.41	681
20*2.5	0.8	1	1.8	23.5	7.41	984
24*2.5	0.8	1	1.8	25.7	7.41	1127
30*2.5	0.8	1	1.8	27.1	7.41	1333
40*2.5	0.8	1	1.9	30.4	7.41	1717
60*2.5	0.8	1.2	2.1	36.8	7.41	2506
5*4	1	1	1.8	17	4.61	483
7*4	1	1	1.8	18.3	4.61	560
10*4	1	1	1.8	22.5	4.61	804
12*4	1	1	1.8	23.1	4.61	890
14*4	1	1	1.8	25.4	4.61	1095
20*4	1	1	1.8	28.1	4.61	1410
24*4	1	1.2	1.9	31.5	4.61	1734
30*4	1	1.2	2	33.5	4.61	2074
40*4	1	1.2	2.1	37.5	4.61	2676
60*4	1	1.4	2.4	45.6	4.61	3919

Unscreened, Flexible, Control Cable (NYSLY)

Application

- > These types of cables are suitable for internal/external wiring of electrical equipment at medium mechanical stress, in dry damp interiors as well as in industrial environments. these cables can be used in machine tool manufacturing, machines, devices, office machines, data processing

Construction

- > **Design:**
60227 IEC75 (NYSLY)
- > **conductor:**
copper conductor flexible (class 5) acc.to IEC 60228
- > **Insulation:**
PVC compound type of PVC/D
- > **Core identification:**
up to 5 cores color coding or number imprints and for more than 5 cores number imprints. for 3 or more cores the last core is green/ yellow as protective conductor
- > **Jacket:**
PVC compound type of PVC/ST5 (this type of PVC compound is not oil resistance)
- > **Jacket color:**
Normally grey



Electrical parameters

- > **Rate voltage:**
300/500V
- > **Test voltage:**
2KV/ AC
- > **Min.insulation resistance:**
0.013 m.ohm/km at 70°C

Thermal parameters

- > **Temperature range:**
-5 to +40°C

Mechanical parameters

- > **Min.bending radius:**
7.5 x cable Φ



Unscreened, Flexible, Control Cable (NYSLY)



Cable Size	Insulation thickness	Jacket Thickness	Overall Diameter	Max.Conductor Resistance at 20°C	APPr.weight
mm ²	mm	mm	mm	Ω/km	Kg/Km
2*0.5	0.6	0.7	5.7	39	44
3*0.5	0.6	0.7	6	39	53
4*0.5	0.6	0.8	6.7	39	66
5*0.5	0.6	0.8	7.4	39	78
6*0.5	0.6	0.9	8.2	39	93
7*0.5	0.6	0.9	8.9	39	108
12*0.5	0.6	1.1	11.1	39	161
14*0.5	0.6	1.1	11.6	39	180
18*0.5	0.6	1.2	13.1	39	233
24*0.5	0.6	1.4	15.6	39	329
30*0.5	0.6	1.4	16.5	39	388
40*0.5	0.6	1.6	18.8	39	513
50*0.5	0.6	1.7	20.8	39	629
60*0.5	0.6	1.8	22.8	26	743
2*0.75	0.6	0.8	6.3	26	57
3*0.75	0.6	0.8	6.6	26	67
4*0.75	0.6	0.8	7.3	26	82
5*0.75	0.6	0.9	8.1	26	100
6*0.75	0.6	0.9	8.8	26	116
7*0.75	0.6	1	9.8	26	138
12*0.75	0.6	1.1	11.9	26	201
14*0.75	0.6	1.2	12.7	26	232
18*0.75	0.6	1.3	14.3	26	299
24*0.75	0.6	1.5	17	26	419
30*0.75	0.6	1.5	18	26	497
40*0.75	0.6	1.7	20.1	26	656
50*0.75	0.6	1.8	22.7	26	805
60*0.75	0.6	2	25.1	26	963
2*1	0.6	0.8	6.5	19.5	63
3*1	0.6	0.8	6.9	19.5	76
4*1	0.6	0.8	7.6	19.5	92
5*1	0.6	0.9	8.5	19.5	113
6*1	0.6	1	9.4	19.5	135
7*1	0.6	1	10.3	19.5	156
12*1	0.6	1.2	12.7	19.5	235
14*1	0.6	1.2	13.3	19.5	265
18*1	0.6	1.3	15	19.5	342
24*1	0.6	1.5	17.8	19.5	478
30*1	0.6	1.6	19	19.5	578
40*1	0.6	1.7	21.5	19.5	751
50*1	0.6	1.9	23.9	19.5	934
60*1	0.6	2.1	26.4	19.5	1116