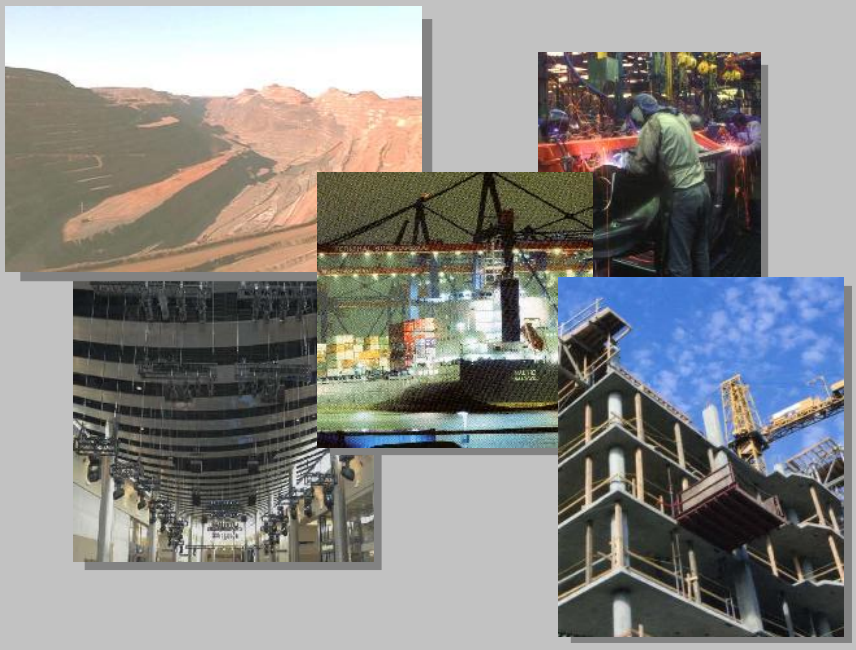
Cables And Equipment

Mining * Construction * Shipping * Manufacturing * Lighting & Entertainment



Power Cables*Festoon Systems*Conductor Systems*Connectors*Cable Reelers
High Voltage Couplers*Spring Reels*Grounding Reels*Fixed Power Cables
Fibre Cables*Data Accessories*Glands*Manufactured Leads*Tools*Slip Rings
Conveyor Monitoring Equipment*Auto Cables*Gaffa Reels*VSD Cables

Conductix wampfler | Aflex Cables | cmi Electrical Products | Noremak Cables And Systems | Xlpe Cables

Noremak Industries

General Product Catalogue 2009-2010

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Section A Flex Power Cables

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Flexible Power Cables

Noremak
Total Cable Solutions

110° C RATED

Single, Double Insulated 110° Deg
Flexible Cable 0.6/1.0Kv
LOW SMOKE HALOGEN FREE

Cable Construction

* Conductors of extra fine wires to international standards to ensure maximum flexibility.
* Insulation allows conductor temperature of 110 degrees C and is extremely flexible
* Special jacket of outstanding toughness and flexibility, resistance to acid, solvents and oil at extreme temperatures
* UV stabilised and flame retardant

HALOGEN FREE

Temperature Range:
*-30 to + 110 degrees C static -20 to +90 degrees C flexible

Rated Voltage:
* 0.6/1Kv Relevant Standards: * VDE 0250, AS 3116, AS 1995, IEC 332-3

Maximum Conductor Temperature:
* 110 Degrees C

Bending Radius Fixed:
* 5 times diameter of the cable

Available Colors:
Orange

Part No	Size mm²	Stranding	Overall Dia mm	Weight Kg/Km	Nominal Current Single phase @ 40 Deg C	Bellmouth Lug * Hole Size	Bootlace Pins Uninsulated Ferrules
777500163OR	16	470/0.20	9.30	202	130	CL16-*BM	PBL16
777500253OR	25	726/0.20	10.80	293	175	CL25-*BM	PBL25
777500353OR	35	1040/0.20	12.10	390	220	CL35-*BM	PBL35
777500503OR	50	1499/0.20	13.70	535	265	CL50-*BM	PBL50
777500703OR	70	2165/0.20	15.50	725	340	CL70-*BM	PBL70
777500953OR	95	2745/0.20	17.90	870	420	CL95-*BM	PBL95
777501203OR	120	1544/0.30	19.80	1205	490	CL120-*BM	PBL120
777051503OR	150	1961/0.30	22.10	1500	570	CL150-*BM	-
777501853OR	185	2331/0.30	24.40	1840	660	CL185-*BM	-
777502403OR	240	3172/0.30	27.10	2350	790	CL240-*BM	-
777503003OR	300	3965/0.30	29.90	2915	910	CL300-*BM	-
777504003OR	400	5246/0.30	33.50	3817	1070	CL400-*BM	-
777505003OR	500	6588/0.30	37.20	4805	1250	-	-

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Noremak
Total Cable Solutions

Flexible Power Cables

90° C RATED

Single, Double Insulated Flexible Cable 0.6/1.0Kv

Cable Construction

* Conductors of extra fine wires to international standards to ensure maximum flexibility.
* Insulation allows conductor temperature of 90 degrees C and is extremely flexible NBR Elastomer
* Special jacket of outstanding toughness and flexibility, resistance to acid, solvents and oil at extreme temperatures [see detailed properties chart of NBR Elastomer]
* UV stabilised and flame retardant.

Temperature Range:
*-30 to + 90 degrees C static -20 to +90 degrees C flexible

Rated Voltage:
* 0.6/1Kv Relevant Standards: * VDE 0250, AS 3116, AS 1995, IEC 332-3

Maximum Conductor Temperature:
* 90 Degrees C

Bending Radius Fixed:
* 5 times diameter of the cable

Available Colors:
***Orange, Black, Red, & Blue ***
Add to Part No When Ordering

Part No	Cross Sectional Area mm Square	Approx No: of Wires Stranding	Max Overall Dia mm	Weight Kg/Km	Nominal Current Single phase @ 40 Deg C	Bellmouth Lug * Hole Size	Bootlace Pins Uninsulated Ferrules
777500061	6	172/0.21	8.50	118	59	CL6-*BM	PBL06
777500101	10	304/0.21	9.50	172	81	CL10-*BM	PBL10
777500161	16	462/0.21	10.80	231	110	CL16-*BM	PBL16
777500251	25	742/0.21	12.50	350	145	CL25-*BM	PBL25
777500351	35	1050/0.21	13.50	451	180	CL35-*BM	PBL35
777500501	50	1482/0.21	15.50	605	220	CL50-*BM	PBL50
777500701	70	2090/0.21	17.50	810	280	CL70-*BM	PBL70
777500951	95	2812/0.21	20.00	1075	350	CL95-*BM	PBL95
777501201	120	1480/0.31	22.00	1332	410	CL120-*BM	PBL120
777051501	150	1887/0.31	24.50	1654	470	CL150-*BM	-
777501851	185	2294/0.31	27.00	2060	550	CL185-*BM	-
777502401	240	3034/0.31	30.00	2576	660	CL240-*BM	-
777503001	300	3811/0.31	34.00	3213	770	CL300-*BM	-
777504001	400	5246/0.31	39.00	4200	900	CL400-*BM	-

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Flexible Power Cables

Noremak
Total Cable Solutions

110^{0}C RATED

Single, Double Insulated Flexible Cable EPR/CPE 1.9/3.3Kv

Cable Construction

* Tinned Stranded Conductors According to VDE 0295 Class 5
* EPR Rubber Insulation Type 3G13
* CPE Rubber Outer Sheath
* UV stablised and flame retardant.
* Resistant to oil and abrasion
* Submersible to 100 Mts

TYPICAL USES:

Power Switchboards, flexible droppers from bus bars, generators, load banks or anywhere SingleDouble insulated flexible cables are recommended

Automotive Battery leads, wiring looms, battery chargers, electric fork lifts.

Welding Leads, Earth & Power.

Temperature Range:
*-40 to + 110 degrees C static -20 to +90 degrees C flexible

Rated Voltage:
* 1.9/3.3Kv Relevant Standards: * VDE 0250 Part 602, AS 3116, AS3008, AS1125 Maximim

Conductor Temperature:
* 110 Degrees C

Bending Radius:
* 4 times diameter of the cable Static 6 Times Flexing

Available Colours:
* Black

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Part No	Cross Sectional Area mm Square	Approx No: of Wires Max Dia mm	Max Overall Dia mm	Nominal Current Spaced @ 40 Deg C	Weight Kg/km	Bell Mouth Lug Part No * Hole Size	Bootlace Pins Uninsulated Ferrules
777633105	1.5	30/0.25	6.0	31	65		PBL15
777633205	2.5	50/0.25	6.2	43	80	-	PBL025
77763304	4.0	56/0.30	6.7	57	95	-	PBL04
77763306	6.0	84/0.30	7.3	73	120	-	PBL06
77763310	10.0	80/0.40	8.6	99	180	CL6-*BM	PBL10
77763316	16.0	126/0.40	10.1	130	250	CL10-*BM	PBL16
77763325	25.0	196/0.40	12.3	175	350	CL16-*BM	PBL25
77763335	35.0	276/0.40	13.0	220	455	CL25-*BM	PBL35
77763350	50.0	396/0.40	15.0	265	610	CL35-*BM	PBL50
77763370	70.0	540/0.40	16.8	340	805	CL50-*BM	PBL70
77763395	95.0	715/0.40	19.7	420	1055	CL70-*BM	PBL95
777633120	120.0	920/0.40	20.8	490	1350	CL95-*BM	PBL120
777633150	150.0	1138/0.40	23.6	570	1655	CL120-*BM	-
777633185	185.0	1390/0.40	25.7	660	1975	CL150-*BM	-
777633240	240.0	1838/0.40	27.6	790	2550	CL185-*BM	-
777633300	300.0	2275/0.40	31.4	910	3230	CL240-*BM	-
777633400	400.0	3035/0.40	34.4	1070	4222	CL300-*BM	-
777633500	500.0	3795/.040	43.2	1250	5200	CL400BM	-

Noremak
Total Cable Solutions

Flexible Power Cables

Screened EPR/CPE Variable Speed Drive SDI Flexible

Cable Construction

*Flexible tinned annealed copper conductors, insulation EPR type IEP3 equivalent to 3G13 according to DIN VDE 0207 Part 20.

*Tinned Copper Braid screened min 80% plus aluminium / mylar tape. Separator polyester tape. Outer Sheath CPE elastomer

*UV stabilised and flame retardant

Maximum Conductor Temperature

+90C
Short Circuit 250C

Temperature Range

-30C to +90C Flexing
-40C to +90C Fixed

Bending Radius

10 x Cable Dia Fixed
12 x Cable Dia Flexing

Typical Uses

The cable is designed primarily for large Variable Speed Drives and because of the dual screening gives maximum EMV protection

Part No	Cross Sectional Area mm Square	Approx No: of Wires Max Dia mm	Max Overall Dia mm	Nominal Current Spaced @ 40 Deg C	Weight Kg/km	Bell Mouth Lugs * Hole Size	EMC Approved Metal Gland
777801120SC	120	960/0.40	23.0	410	1460	CL120-*BM	MG40EMCL
777801150SC	150	1200/0.40	26.0	470	1774	CL150-*BM	MG40EMCL
777801185SC	185	1470/0.40	28.0	550	2170	CL185-*BM	MG50EMCL
777801240SC	240	1870.0.40	31.5	660	2798	CL240-*BM	MG50EMCL

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Flexible Power Cables

Single Insulated Flexible Earth Cable TPE 0.6/1kV

Cable Construction

* Conductors of extra fine wires to international standards to ensure maximum flexibility.

* Insulation allows conductor temperatures of 90 degree C & is extremely flexible special TPE compound.

* UV stabilised & flame retardant

Temperature Range

Static - 30 to + 90 degree C
Flexible -20 to + 90 degree C

Typical Uses

Power: Switchboards, Flexible droppers from busbars flexible links, transformers, generators, load banks, or anywhere green/yellow flexible earth cables are to be used. Welding earth leads.

Part No	Cross Sectional area mm square	Approx No of Wires Max Dia mm	Nominal overall Dia mm	Weight Kg/Km	Lugs * Hole Size	Bootlace Pins Uninsulated Ferrules
77710006	6	84/0.30	4.8	109	CL6-*BM	PBL06
77710010	10	128/0.30	6.4	155	CL10-*BM	PBL10
77710016	16	196/0.30	7.7	220	CL16-*BM	PBL16
77710025	25	308/0.30	9.5	325	CL25-*BM	PBL25
77710035	35	434/0.30	10.6	430	CL35-*BM	PBL35
77710050	50	608/0.30	12.5	590	CL50-*BM	PBL50
77710070	70	874/0.30	14.8	800	CL70-*BM	PBL70
77710095	95	1178/0.30	17.0	1040	CL95-*BM	PBL95
77710120	120	1480/0.30	18.5	1300	CL120-*BM	PBL120
77710150	150	1887/0.30	21.0	1500	CL150-*BM	-
77710300	300	3811/0.30	29.7	2950	CL300-*BM	-

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Noremak

Single Insulated V90 HT PVC Flexible Cables 0.6-1Kv Rated Tinned Copper Cores

Cable Construction

* Tinned copper conductors

* Insulation V90 HT PVC

* Manufactured in accordance with AS3191 Or AS3178

Max Conductor Temperature

+90° C

Available Colours

Red, Blue, Black, Yellow, White Brown, Violet, Orange Pink, Grey, Green Green/Yellow Other Cables Available On Request

Typical Uses

Internal Wiring of Electronic equipment, Switchboards Control panels

Part No	Cross Sectional area mm square	Nominal overall Dia mm	Approx No of Wires Max Dia mm	Insulation Thickness	Insulated Ring Terminal * Hole Size	Un-Insulated Ring Terminal * Hole Size
4271C16020**	0.50	2.60	16/0.20	0.80	TRRD-*DG	TRU05-*DG
4271C24020**	0.75	2.80	24/0.20	0.80	TRRD-*DG	TRU07-*DG
4271C32020**	1.00	3.00	32/0.20	0.80	TRBU-*DG	TRU10-*DG
4271C30025**	1.50	3.20	30/0.25	0.80	TRBU-*DG	TRU15-*DG
4271C50025**	2.50	3.90	50/0.25	0.90	TRY-*DG	TRU25-*DG
4271C56030**	4.00	5.40	56/0.30	1.00	TRY-*DG	TRU04-*DG
4271C84030**	6.00	5.50	84/0.30	1.00	TRY-*DG	TRU06-*DG

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Noremak Total Cable Solutions

Single Insulated 180° Silicon Flexible Cables

Cable Construction

* Tinned copper conductors, all Class 5 Stranding.

* Silicon Insulation tear and heat resistant Compound

* UV stabilised & Flame Retardant

Maximum Conductor Temperature

+180C
Short Term 220C

Temperature Range

Static - 60 to + 180 degree C
Flexible -40 to + 180 degree C
Short Term 220C

Bending Radius

4 x Cable Dia Fixed

Typical Uses

Electric signs and connections
Motor Appliances
Heavy Industry
Medical Areas
Ship and Railway Building
Foundry Switch Boards

Colours Available

0.75mm² To 1.5mm²: Earth, Black, Brown, Yellow, Grey, Blue, Orange, Red, Violet, White
2.5mm²: Earth, Black, Blue, Red, White
4.0mm² To 25.0mm²: Red, Black

Part No	Cross Sectional area mm square	Nominal overall Dia mm	Weight Kg/Km	Un-Insulated Lugs * Hole Size	Insulated Ring Terminals * Hole Size
777S01075	0.75	2.4	13.3	-	TRRD-*DG
777S01010	1.0	2.5	15.9	CL1.5-*	TRRD-*DG
777S01015	1.5	2.8	21.9	CL1.5-*	TRBU-*DG
777S01025	2.5	3.4	34.7	CL2.5-*	TRBU-*DG
777S01040	4.0	4.2	54.4	CL4.0-*	TRY-*DG
777S01060	6.0	5.2	82.3	CL6.0-*	TRY-*DG
777S01010	10.0	6.4	131.9	CL10-*	-
777S01016	16.0	8.0	209.1	CL16-*	-
777S01250	25.0	10.0	326.7	CL25-*	-

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Noremak
Total Cable Solutions

Noremak

PVC Flexible Multi Core Cables
Ordinary And Heavy Duty
V90-HT

OD Multi Core Flex 250V/440V

Part No	No: of Cores & mm square	Stranding	Nominal overall Dia mm	Insulation Thickness
PVC2C75OD**	2 x 0.75	24/0.20	6.40	0.6
PVC3C75OD**	3 x 0.75	24/0.20	6.80	0.6
PVC4C75OD**	4 x 0.75	24/0.20	7.30	0.6
PVC5C75OD**	5 x 0.75	24/0.20	8.20	0.6
PVC2C01OD**	2 x 1.0	32/0.20	6.70	0.6
PVC3C01OD**	3 x 1.0	32/0.20	7.00	0.6
PVC4C01OD**	4 x 1.0	32/0.20	7.80	0.6
PVC5C01OD**	5 x 1.0	32/0.20	8.60	0.6
PVC2C15OD**	2 x 1.5	30/0.25	7.70	0.7
PVC3C15OD**	3 x 1.5	30/0.25	8.10	0.7
PVC4C15OD**	4 x 1.5	30/0.25	9.10	0.7
PVC5C15OD**	5 x 1.5	30/0.25	10.20	0.7
PVC3C25OD**	3 x 2.5	50/0.25	10.00	0.8
PVC4C25OD**	4 x 2.5	50/0.25	11.00	0.8
PVC5C25OD**	5 x 1.5	50/0.25	12.40	0.8
PVC3C04OD**	3 x 4.0	56/0.30	11.40	0.8
PVC4C04OD**	4 x 4.0	56/0.30	12.50	0.8
PVC5C04OD**	5 x 4.0	56/0.30	13.80	0.8

Available Colours

Black, Red, Orange, White
Grey Blue

Voltage Rating
250/440V

Standards
AS3191

HD Multi Core Flex 0.6/1Kv

Part No	No: of Cores & mm square	Stranding	Nominal overall Dia mm	Insulation Thickness
PVC2C75HD**	2 x 0.75	24/0.20	8.20	1.30
PVC3C75HD**	3 x 0.75	24/0.20	8.80	1.40
PVC4C75HD**	4 x 0.75	24/0.20	9.70	1.50
PVC5C75HD**	5 x 0.75	24/0.20	10.70	1.60
PVC2C01HD**	2 x 1.0	32/0.20	8.50	1.30
PVC3C01HD**	3 x 1.0	32/0.20	9.00	1.40
PVC4C01HD**	4 x 1.0	32/0.20	10.00	1.50
PVC5C01HD**	5 x 1.0	32/0.20	11.00	1.60
PVC3C15HD**	3 x 1.5	30/0.25	10.00	1.60
PVC4C15HD**	4 x 1.5	30/0.25	11.00	1.70
PVC5C15HD**	5 x 1.5	30/0.25	12.20	1.80
PVC3C25HD**	3 x 2.5	50/0.25	12.00	1.80
PVC4C25HD**	4 x 2.5	50/0.25	13.00	1.90
PVC5C25HD**	5 x 1.5	50/0.25	14.40	2.00
PVC3C04HD**	3 x 4.0	56/0.30	13.90	1.90
PVC4C04HD**	4 x 4.0	56/0.30	15.30	2.00
PVC5C04HD**	5 x 4.0	56/0.30	17.00	2.20

Available Colours
**Add To Part No

Black, Red, Orange, White
Grey Blue

Voltage Rating
0.6/1Kv

Standards
AS3191

Flexible Power Cables

Silicon Multi Core Flexible Cables

Low Smoke Halogen Free

Cable Construction

* Tinned copper conductors, all Class 5 stranding.
* Silicon Insulation tear and heat resistant compound
* Low Smoke Halogen Free

Working Temperature

-60° C To +180° C

Rated Voltage

450/750V

Typical Uses

Electric Motor Applications
Power Supplies
Medical Areas
Railway And Shipping

OD Multi Core Flex 250V/440V

Part No	No: of Cores & mm square	Stranding	Nominal overall Dia mm	Cable Weight Kg/Km
777S0375	3 X 0.75	24/0.20	6.80	76.0
777S0475	4 X 0.75	24/0.20	7.80	101.0
777S0201	2 X 1.0	32/0.20	6.60	76.0
777S0301	3 X 1.0	32/0.20	7.40	93.0
777S0401	4 X 1.0	32/0.20	8.10	113.0
777S0501	5 X 1.0	32/0.20	8.80	133.0
777S0315	3 X 1.5	30/0.25	8.00	117.0
777S0415	4 X 1.5	30/0.25	8.80	145.0
777S0515	5 X 1.5	30/0.25	9.60	175.0
777S0715	7 X 1.5	30/0.25	10.40	220.0
777S1215	12 X 1.5	30/0.25	14.60	413.0
777S1915	19 X 1.5	30/0.25	17.00	591.0
777S0325	3 X 2.5	50/0.25	9.70	179.0
777S0425	4 X 2.5	50/0.25	10.60	222.0
777S0525	5 X 2.5	50/0.25	11.60	268.0
777S0404	4 X 4.0	56/0.30	13.20	346.0
777S0406	4 X 6.0	84/0.30	15.60	497.0

Noremak
Total Cable Solutions

Flexible Power Cables

NBR Rubber Elastomer Insulated and Sheathed High Flex Power and Control Cables
Heavy Duty 0.6/1kV
Ordinary Duty 250/440V

Cable Construction
*Conductors: annealed fine wires of plain electrolytic copper stranded for high flexibility.
*Insulation of special flame retardant NBR Elastomer compound formulated for high flexibility & durable operation in extreme temperatures.
*Separator or bedding of extruded or taped NBR material. Silicated powder lubricant between cores & inner sheath to reduce friction.
*NBR Elastomer for outstanding flexibility & durability in most hostile environments.
*UV Stabilised & fire retardant.

Temperature Range
-30 to +90 degree C static
-20 to +90 degree C flexible

Bending Radius
5 times diameter - fixed
6 times diameter - flexible

Rated Voltage
O.D.250/440V **HD** 0.6/1kV

Maximum Conductor Temperature
90 degree C

Relevant Standards
AS3147, AS3191, IEC227, IEC332.1
AS3008.1.1 1998 Table 13 Fixed, Table 15 Flexing

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Applications
In machine tools, construction & engineering equipment, conveyors & other industrial application where outstanding flexibility is required under tough climatic & mechanical conditions. Diesel powered generator sets, load banks, ship to shore cables.

OD Multi Core Flex Orange 250V/440V

Part No	No: of Cores & mm square	Stranding	Nominal overall Dia mm	Weight Kg/Km	Nominal Amps Protected from Sun	Nylon Gland Part No	Metal Gland Part No IP66
77700201OR	2 x 1.0	32/0.21	6.8	70	10	NGM16	MG20-S
77700301OR	3 x 1.0	32/0.21	7.4	80	10	NGM16	MG20-S
77700315OR	3 x 1.5	48/0.21	8.4	105	15	NGM16	MG20-S
77700325OR	3 x 2.5	80/0.21	10.0	160	20	NGM20	MG20-S
77700401OR	4 x 1.0	32/0.21	8.0	100	10	NGM16	MG20-S
77700415OR	4 x 1.5	48/0.21	9.2	130	15	NGM20	MG20-S
77700425OR	4 x 2.5	80/0.21	11.2	200	20	NGM20	MG20
77700525OR	5 x 2.5	80/0.21	12.5	240	20	NGM25	MG20

IP68 Glands Also Available

Flexible Power Cables

Noremak
Total Cable Solutions

NBR Rubber Elastomer Insulated and Sheathed High Flex
Power and Control Cables
Heavy Duty 0.6/1kV
Ordinary Duty 250/440V

Heavy Duty Multi Core Flex 0.6/1kV

Part No	No: of Cores & mm square	Stranding	Nominal Overall Dia mm	Weight Kg/Km	Nominal Amps Protected fromSun	Nylon Gland Part No	Metal Gland Part No IP66
77700301	3 x 1.0	32/0.21	9.8	90	10	NGM20	MG20-S
77700401	4 x 1.0	32/0.21	10.5	100	10	NGM20	MG20-S
77700501	5 x 1.0	32/0.21	11.6	130	10	NGM20	MG20
77700315	3 x 1.5	48/0.21	10.5	140	15	NGM20	MG20-S
77700415	4 x 1.5	48/0.21	11.6	170	15	NGM20	MG20
77700515	5 x 1.5	48/0.21	13.0	210	15	NGM25	MG20
77700715	7 x 1.5	48/0.21	15.0	268	15	NGM32	MG25
77701215	12 x 1.5	48/0.21	16.7	425	15	NGM32	MG25
77700325	3 x 2.5	80/0.21	12.4	194	20	NGM25	MG20-S
77700425	4 x 2.5	80/0.21	14.0	239	20	NGM25	MG25
77700525	5 x 2.5	80/0.81	15.4	289	20	NGM25	MG25
77700725	7 x 2.5	80/0.21	15.8	365	20	NGM25	MG25
77701225	12 x 2.5	80/0.21	19.2	589	20	NGM32	MG25
77701825	18 x 2.5	80/0.21	25.4	785	20	NGM40	MG32
77700204	2 x 4	127/0.21	13.7	275	25	NGM25	MG25
77700304	3 x 4	127/0.21	14.4	319	25	NGM25	MG25
77700404	4 x 4	127/0.21	16.0	394	25	NGM25	MG25
77700504	5 x 4	127/0.21	17.4	482	25	NGM32	MG25
77700704	7 x 4	127/0.21	20.0	600	25	NGM32	MG2
77700306	3 x 6	190/0.21	15.9	406	46	NGM25	MG25
77700406	4 x 6	190/0.21	19.0	505	46	NGM32	MG32
77700506	5 x 6	190/0.21	21.0	619	46	NGM32	MG32
77700310	3 x 10	318/0.21	23.7	803	63	NGM40	MG32
77700410	4 x 10	318/0.21	25.8	975	63	NGM40	MG32
77700510	5 x 10	318/0.21	28.1	1190	63	NGM50	MG40
77700316	3 x 16	504/0.21	26.0	1040	85	NGM40	MG40
77700416	4 x 16	504/0.21	28.6	1285	85	NGM50	MG40
77700516	5 x 16	504/0.21	31.7	1590	85	NGM50	MG40

Black Standard Orange Available On Request

IP68 Glands Also Available

Cable Technical Information Page A20, A21 & A22
Gland Options F8, F9 & F10
Voltage Drop Figures Page A22

Noremak
Total Cable Solutions

Flexible Power Cables

Flexible Submersible Harmonised Rubber Sheathed Cables VDE Approved

Cable Construction

*Copper conductors [tinned up to 16 sq mm],acc.to VDE 0295, CLASS 5;
*PETP-tape [only for sections above 16 sq,mm]
*EPR rubber insulation type E14 acc. to HD22;
*Elastomeric outer sheath type EM2 acc to HD222

Operating Temperature

*Minimum permissible ambient temperature - 40 degrees Cel
*Maximum permissible short circuit temperature 250 degrees Cel
*Minimum ambient temperature for optimum fully flexible operations - 25 degrees C

Minimum Bending Radii

The following minimum bending radius should be observed to ensure operating reliability.
* For fixed installation - 4 x cable Diameter
* When freely flexing - 5 x cable Diameter
* For drag chains & reels - 10x cable Diameter

Properties

* Good tensile strength, tearing strength & abrasion resistance
* Good elongation at breaks
* Good dialectical properties * Acid resistant

Properties [cont]

* Oil resistant
* Resistant to environmental factors like oxidation, ozone, sunlight
* Flame retardant
* Very good behavior to variations of outdoor temperature

Voltage Rating

* Rated Voltage UO/U = 0.6/1kv
* Maximum operating voltages in: 3 phase AC Operation UO/U = 0.7/1.15kV
DC operation UO/U=0.9/1.73kV
* The cable is designated 450/750V with E14 insulation compound in accordance with VDE/IEC and meets or exceeds the Australian Standards AS3116 for the voltage rating of 0.6/1kV, R-EP-90

Applications

* For medium level mechanical loads, for use in dry & damp locations, for outdoor use or in locations subject to explosion hazards,
* For industrial & workshop equipment
* For connections of mobile machines & engines on construction sites,
* As fixed installation, for example as installation on plaster in temporary buildings

Colour Code

* 2 conductors : Brown-Blue
* 3 conductors : Brown-Blue-Green/Yellow
* 4 conductors : Grey-Black-Brown-Green/Yellow
* 5 conductors : Grey-Black-Brown-Blue-Green/Yellow

*Submersible to 100 Mtr

HO5RN-F 300/500v

Part No	No Cores & MM Square	Stranding	Nominal Overall Dia mm	Weight Kg/Km	Maximum Amps Protected from Sun	Nylon Gland Part No	Metal Gland IP66	Metal Gland IP68
77711275H05	2 x 0.75	0.21	6.4	78	12	NGM16	MG20-16	MGS16
77711201H05	2 x 1.0	0.21	7.1	94	18	NGM16	MG20-16	MGS16
777113G75H05	3 x 0.75	0.21	7.0	94	12	NGM16	MG20-16	MGS16
777113G1H05	3 x 1.0	0.21	8.5	114	18	NGM16	MG20-S	MGS16
777114G75H05	4 x 0.75	0.21	8.8	90	12	NGM16	MG20-S	MGS16

Quick Reference

Current Capacities Page A21
Gland Options Page F8, F9 And F10

Flexible Power Cables

Noremak
Total Cable Solutions

Flexible Submersible
Harmonised Rubber Sheathed Cables
VDE Approved

HO7RN-F 0.6-1Kv

Part No	No of cores & size mm sq	Max Dia of Strands mm	Overall Dia	Weight Kg/Km	Max allowable current under permanent conditions 40deg Cel Amps	Nylon Gland Part No	Metal Gland IP66	Metal Gland IP68
77711201	2 x 1.0	0.21	9.4	100	18	NGM16	MG20-S	MGS20
77711215	2 x 1.5	0.26	9.4	130	24	NGM16	MG20-S	MGS20
77711225	2 x 2.5	0.26	11.5	190	34	NGM20	MG20	MGS20
77711240	2 x 4.0	0.31	13.0	260	45	NGM25	MG25	MGS25
77711260	2 x 6.0	0.31	14.5	350	57	NGM25	MG25	MGS25
77711210	2 x 10.0	0.41	19.5	620	78	NGM32	MG32	MGS32
77711216	2 x 16.0	0.41	22.0	850	105	NGM32	MG32	MGS40
777113G1	3 x 1.0	0.21	9.10	125	18	NGM20	MG20-S	MGS20
777113G15	3 x 1.5	0.26	10.10	160	24	NGM20	MG20-S	MGS20
777113G25	3 x 2.5	0.26	12.0	230	34	NGM20	MG20	MGS20
777113G4	3 x 4.0	0.31	14.0	320	45	NGM25	MG25	MGS25
777113G6	3 x 6.0	0.31	15.5	425	57	NGM25	MG25	MGS25
777113G10	3 x 10.0	0.41	21.0	765	78	NGM32	MG32	MGS40
777113G16	3 x 16.0	0.41	24.0	1060	105	NGM40	MG32	MGS40
777113G025	3 x 25.0	0.41	29.0	1560	140	NGM50	MG40	MGS50
777114G1	4 x 1.0	0.21	10.0	155	16	NGM20	MG20-S	MGS20
777114G15	4 x 1.5	0.26	11.50	200	20	NGM20	MG20	MGS20
777114G25	4 x 2.5	0.26	13.50	290	28	NGM25	MG25	MGS25
777114G4	4 x 4.0	0.31	15.50	400	38	NGM25	MG25	MGS25
777114G6	4 x 6.0	0.31	17.50	540	48	NGM32	MG25	MGS32
777114G10	4 x 10.0	0.41	23.0	930	66	NGM40	MG32	MGS40
777114G16	4 x 16.0	0.41	26.0	1300	88	NGM40	MG40	MGS40
777114G025	4 x 25.0	0.41	32.0	1950	120	NGM50	MG50-S	MGS50
777114G35	4 x 35.0	0.41	35.0	2330	145	NGM63	MG50-S	MGS63
777114G50	4 x 50.0	0.41	40.0	3200	180	NGM63	MG50	MGS63
777114G70	4 x 70.0	0.51	45.0	4200	230	-	MG63-S	
777114G95	4 x 95.0	0.51	51.0	5490	285	-	MG63	-
77114G120	4 x 120.0	0.51	56.0	7098	330	-	MG63	-
777115g1	5 x 1.0	0.21	11.5	190	16	NGM20	MG20	MGS20
777115G15	5 x 1.5	0.26	12.5	240	20	NGM25	MG20	MGS20
777115G025	5 x 2.5	0.26	15.0	350	28	NGM25	MG25	MGS25
777115G4	5 x 4.0	0.31	17.0	500	38	NGM32	MG25	MGS32
777115G6	5 x 6.0	0.31	19.0	670	48	NGM32	MG25	MGS32
777115G10	5 x 10.0	0.41	25.0	1140	66	NGM40	MG32	MGS40
777115G16	5 x 16.0	0.41	29.0	1610	88	NGM50	MG40	MGS50
777115G25	5 x 25.0	0.41	35.0	2440	120	NGM63	MG50-S	MGS63
777115G35	5 x 35.0	0.41	39.0	2900	145	NGM63	MG50	MGS63
777115G50	5 x 50.0	0.41	45.0	4000	180	-	MG63S	-
777115G70	5 x 70.0	0.51	50.0	5250	230	-	MG63	-
777115G95	5 x 95.0	0.51	56.6	6780	285	-	-	
777117G15	7 x 1.5	0.26	16.0	330	13	NGM25	MG25	MGS32
777117G25	7 x 2.5	0.26	18.50	470	18	NGM32	MG25	MGS32
777117G4	7 x 4.0	0.31	21.50	660	22	NGM32	MG32	MGS40
777117G6	7 x 6.0	0.31	24.80	956	31	NGM40	MG32	MGS40
777117G10	7 x 10	0.41	29.50	1494	41	NGM50	MG40	MGS50
777112G15	12 x 1.5	0.26	19.0	480	13	NGM32	MG32	MGS32
777112G25	12 x 2.5	0.26	22.50	690	18	NGM40	MG32	MGS40
777118G15	18 x 1.5	0.26	22.0	690	13	NGM32	MG32	MGS40
777118G25	18 x 2.5	0.26	26.50	1010	18	NGM40	MG40	MGS40
7771127G15	27 x 1.5	0.26	28.10	1102	13	NGM50	MG40	MGS50
7771127G25	27 x 2.5	0.26	33.50	1521	18	NGM50	MG50-S	MGS50
7771137G15	37 x 1.5	0.26	30.10	1310	13	NGM50	MG40	MGS50

Noremak
Total Cable Solutions

Flexible Power Cables

XLPE/NBR 90C 0.6/1Kv
Screened Flexible
Variable Speed Drive Cable

Cable Construction
* Conductors of extra fine bare annealed copper wires.

Insulation
XLPE 90 Deg C

Screening
Aluminium/Mylar tape plus tinned copper braid up to 4.0mm, above is tinned copper braid

Sheath
Clear Sheath is TPE 1.5mm to 35.0mm
Back Sheath NBR to 6.0mm and CPE 10.0mm and above

UV Stabilised and Flame Retardant

Rated Voltage
0.6/1Kv

Relevant Standards
AS3147, IEC332-1

Maximum Conductor Temperature
-30 to +90 degree C

Colour
Black / Clear To 35.0mm
Black Only Over 35.0mm

Bending Radius
Fixed >20.0mm 7.5x diam<20.0mm 10x Cable diam
Flexing>20.0mm 15xcable diam <20.0mm x 20 cable diam

AS 3008.1.1 1998 Table 13 Fixed Table 15 Flexing

Part No	Cross Sectional area mm square	Power Cores	Earth Cores	Nominal overall Dia mm	Weight Kg/Km	Amps Spaced	EMC Compliant Metal Gland
77780315SC	1.5	2x1.5	1x1.5	12.5	155	24	MG20EMCL
77780325SC	2.5	2x2.5	1x2.5	13.5	195	34	MG25EMCL
77780415SC	1.5	3x1.5	1x1.5	13.5	195	20	MG25EMCL
77780425SC	2.5	3x2.5	1x2.5	14.5	245	28	MG25EMCL
77780404SC	4.0	3x4.0	1x4.0	16.5	350	38	MG25EMCL
77780406SC	6.0	3x6.0	3x1.5	19.5	445	48	MG32EMCL
77780410SC	10.0	3x10.0	3x1.5	21.5	675	66	MG40EMCL
77780416SC	16.0	3x16.0	3x2.5	23.5	955	88	MG40EMCL
777804025SC	25.0	3x25.0	3x4.0	28.5	1455	120	MG50EMCL
77780435SC	35.0	3x35.0	3x6.0	32.0	2200	145	MG50EMCL
77780450SC	50.0	3x50.0	3x10.0	40.0	3211	180	MG63EMCL
77780470SC	70.0	3x70.0	3x10.0	43.3	3950	230	
77780495SC	95.0	3x95.0	3x16.0	48.7	5126	285	Please Refer to Noremak For More Information On Larger Sizes And Options
777804120SC	120.0	3x120.0	3x16.0	51.3	5925	330	
777804150SC	150.0	3x150.0	3x25.0	58.5	7146	375	
77780525SC	2.5	4x2.5	1x2.5	18.7	533	28	MG32EMCL
77780506SC	6.0	4x6.0	1x6.0	21.0	952	48	MG40EMCL

Please refer to Australian Standards for full conditions and notes which refer to this table

Quick Reference

Current Capacities Page A21
Gland Options Page F9

Flexible Power Cables

Flexible Control PVC/NBR 0.3/0.5kV

Cable Construction

*Conductors annealed fine wires of plain electrolytic copper stranded for high flexibility.

PVC Insulated

Cores: white insulated with sequential black numbers, 1green/yellow

Protective sheath of flame retardant NBR Elastomer for outstanding flexibility & durability in most hostile environments.
UV stabilised & flame retardant

Screening if applicable will be tinned copper braid. 85% minimum coverage. Suitable for protection against EMI Radiation

Temperature Range

Static - 30 to + 80 degree C
Flexing -5 to + 70 degree C

Rated Voltage

300/500 votls

Relevant Standards

VDE 0295 class 5 [conductor] VDE 0812 [cores] IEC 332-1

Maximum Conductor Temperature

90 degree C

Bending Radius For flexing application:

15 times diameter unscreened
20 times diameter screened

Applications

As power control or signal cables on machines, portable tools, conveying equipment & similar industrial applications.

Part No	No of Cores Section mm square	Approx O.D. mm	Approx Weight Kg/Km	Nylon Gland	Metal Gland IP66
77720205	2 x 0.5	4.8	35	NGM12	MG20-16
77720305	3 x 0.5	5.1	42	NGM12	MG20-16
77720405	4 x 0.5	5.7	54	NGM16	MG20-16
77720505	5 x 0.5	6.6	67	NGM16	MG20-16
77720705	7 x 0.5	7.0	84	NGM16	MG20-S
77721205	12 x 0.5	9.4	131	NGM20	MG20-S
77721805	18 x 0.5	11.1	192	NGM20	MG20
77722505	25 x 0.5	12.4	261	NGM25	MG20
77723005	30 x 0.5	13.3	304	NGM25	MG25
77724105	41 x 0.5	16.6	450	NGM25	MG25
77720375	3 x 0.75	6.0	66	NGM16	MG20-16
77720475	4 x 0.75	6.2	88	NGM16	MG20-16
77720575	5 x 0.75	7.1	100	NGM16	MG20-16
77720775	7 x 0.75	7.6	161	NGM16	MG20-16
77721275	12 x 0.75	10.6	247	NGM20	MG20-S
77721875	18 x 0.75	12.2	268	NGM25	MG20
77722575	25 x 0.75	14.3	465	NGM25	MG25
77720301	3 x 1.0	6.0	65	NGM16	MG20-16
77720401	4 x 1.0	6.5	79	NGM16	MG20-16
77720501	5 x 1.0	7.6	105	NGM16	MG20-16
77720701	7 x 1.0	8.0	131	NGM16	MG20-S
77721201	12 x 1.0	11.1	220	NGM20	MG20
77721801	18 x 1.0	13.4	315	NGM25	MG25
77722501	25 x 1.0	15.4	449	NGM25	MG25
77723601	36 x 1.0	18.2	620	NGM32	MG25
77724101	41 x 1.0	18.8	660	NGM32	MG25
77720215	2 x 1.5	8.5	84	NGM16	MG20-S
77720315	3 x 1.5	6.7	117	NGM16	MG20-S
77720415	4 x 1.5	8.3	121	NGM16	MG20-S
77720515	5 x 1.5	9.1	144	NGM20	MG20-S
77720715	7 x 1.5	9.7	237	NGM20	MG20-S
77721215	12 x 1.5	13.4	393	NGM25	MG25
77721815	18 x 1.5	16.2	465	NGM25	MG25
77721915	19 x 1.5	16.5	542	NGM32	MG25
77722515	25 x 1.5	19.5	655	NGM32	MG32
77723015	30 x 1.5	20.5	750	NGM32	MG32
77723715	37 x 1.5	22.0	980	NGM40	MG32
77725015	50 x 1.5	26.0	1224	NGM40	MG40
77720425	4 x 2.5	11.0	192	NGM20	MG20
77720725	7 x 2.5	13.0	310	NGM25	MG25
77721225	12 x 2.5	17.5	524	NGM32	MG25
77721825	18 x 2.5	21.0	784	NGM32	MG32
77722725	27 x 2.5	25.0	900	NGM40	MG40

Quick Reference

Current Capacities Page A20
Multi Core Deratings A21
Gland Options Page F8, F9 And F10

Noremak
Total Cable Solutions

Flexible Power Cables

Flexible Control PVC/PVC 0.3/0.5Kv

Cable Construction

*Conductors annealed fine wires of plain electrolytic copper stranded for high flexibility.

*PVC Insulated

*Cores: Black insulated with sequential white numbers, Plus 1 green/yellow

*Protective sheath of flame retardant PVC for outstanding flexibility & durability in most hostile environments.

*UV stabilised & flame retardant

Temperature Range

*Static - 30 to + 80 degree C
*Flexing -5 to + 70 degree C

Relevant Standards

VDE 0295 class 5 [conductor]
VDE 0812 [cores] IEC 332-1

Maximum Conductor Temperature

90 degree C

Bending Radius For flexing application:

15 times diameter unscreened

Applications

As power control or signal cables on machines, portable tools, conveying equipment & similar industrial applications.

Part No	No of Cores Section mm square	Approx O.D. mm	Approx Weight Kg/Km	Nylon Gland	Metal Gland IP66
77720305P	3 x 0.50	5.1	42	NGM12	MG20-16
77720405P	4 x 0.50	5.7	54	NGM16	MG20-16
77720505P	5 x 0.50	6.2	63	NGM16	MG20-16
77720705P	7 x 0.50	6.7	81	NGM16	MG20-16
77721205P	12 x 0.50	8.9	131	NGM16	MG20-S
77721805P	18 x 0.50	10.5	188	NGM20	MG20-S
77722505P	25 x 0.50	12.5	261	NGM20	MG20
77720375P	3 x 0.75	5.7	55	NGM12	MG20-16
77720475P	4 x 0.75	6.2	66	NGM16	MG20-16
77720575P	5 x 0.75	6.7	79	NGM16	MG20-16
77720775P	7 x 0.75	7.3	101	NGM16	MG20-16
77721275P	12 x 0.75	10	171	NGM20	MG20-S
77721875P	18 x 0.75	11.8	244	NGM20	MG20
77722575P	25 x 0.75	13.8	337	NGM25	MG25
77720301P	3 x 1.0	6.0	65	NGM16	MG20-16
77720401P	4 x 1.0	6.5	79	NGM16	MG20-16
77720501P	5 x 1.0	7.1	94	NGM16	MG20-16
77720701P	7 x 1.0	8.0	126	NGM16	MG20-S
77721201P	12 x 1.0	10.5	205	NGM20	MG20-S
77721801P	18 x 1.0	12.7	300	NGM25	MG20
77722501P	25 x 1.0	14.7	408	NGM25	MG25
77720315P	3 x 1.5	6.7	84	NGM16	MG20-16
77720415P	4 x 1.5	7.2	104	NGM16	MG20-16
77720515P	5 x 1.5	8.1	128	NGM16	MG20-S
77720715P	7 x 1.5	9.0	166	NGM16	MG20-S
77721215P	12 x 1.5	12	279	NGM20	MG20
77721815P	18 x 1.5	14.4	407	NGM25	MG25
77722515P	25 x 1.5	17.0	560	NGM32	MG25
77721225P	12 x 2.5	17.5	445	NGM32	MG25
77721825P	18 x 2.5	21.0	648	NGM32	MG32

Quick Reference

Current Capacities Page A20
Multi Core Deratings A21
Gland Options Page F8, F9 And F10

Flexible Power Cables

Noremak
Total Cable Solutions

Flexible Control PVC Screened 0.3/0.5Kv

Cable Construction

*Fine wires Strands of bare copper wire, PVC core insulation, cores twisted in layers, black with consecutive numbering in white. One green yellow earth core. Outer sheath of PVC Compound

Temperature Range

Static - 30 to + 70 degree C
Flexing -5 to + 70 degree C

Rated Voltage

300/500 votls
test voltage 2000 V

Conductor Stranding

Fine Wire to VDE0295 and IEC 60228

Quick Reference

Current Capacities Page A20
Multi Core De-ratings A21
Gland Options Page F9

Part No	No of Cores Section mm Square	Approx O.D. mm	EMC Compliant Gland
77720205SC	2 x0.5	7.0	MG16EMCL
77720305SC	3 x 0.5	7.3	MG16EMCL
77720405SC	4 x 0.5	7.9	MG16EMCL
77720505SC	5 x 0.5	8.4	MG16EMCL
77720705SC	7 x 0.5	8.9	MG16EMCL
77721205SC	12 x 0.5	11.3	MG20EMCL
77721805SC	18 x 0.5	13.3	MG25EMCL
77722505SC	25 x 0.5	15.2	MG25EMCL
77723005SC	30 x 0.5	16.1	MG25EMCL
77720475SC	4 x 0.75	8.4	MG16EMCL
77720575SC	5 x 0.75	8.9	MG16EMCL
77720775SC	7 x 0.75	9.7	MG20EMCL
77721275SC	12 x 0.75	12.3	MG20EMCL
77721875SC	18 x 0.75	14.5	MG25EMCL
77722575SC	25 x 0.75	16.6	MG25EMCL
77720301SC	3 x 1.0	8.2	MG16EMCL
77720401SC	4 x 1.0	8.7	MG16EMCL
77720501SC	5 x 1.0	9.5	MG20EMCL
77720701SC	7 x 1.0	10.2	MG20EMCL
77721201SC	12 x 1.0	13.3	MG25EMCL
77721801SC	18 x 1.0	15.5	MG25EMCL
77722501SC	25 x 1.0	17.5	MG32EMCL
77723401SC	34 x 1.0	20.3	MG32EMCL
77724101SC	41 x 1.0	22.0	MG40EMCL
77720215SC	2 x 1.5	8.5	MG16EMCL
77720315SC	3 x 1.5	8.9	MG20EMCL
77720415SC	4 x 1.5	9.6	MG20EMCL
77720515SC	5 x 1.5	10.3	MG20EMCL
77720715SC	7 x 1.5	11.3	MG20EMCL
77721215SC	12 x 1.5	14.8	MG25EMCL
77721815SC	18 x 1.5	17.2	MG32EMCL
77722515SC	25 x 1.5	20.1	MG32EMCL
77723415SC	34 x 1.5	22.8	MG40EMCL
77725015SC	50 x 1.5	27.1	MG40EMCL
77720425SC	4 x 2.5	11.3	MG20EMCL
77720725SC	7 x 2.5	13.9	MG25EMCL
77721225SC	12 x 2.5	17.6	MG32EMCL

Noremak
Total Cable Solutions

Flexible Steel Braided Flexible Cable 0.6/1kV

CABLE CONSTRUCTION

*Conductor fine wire strands of plain electrolytic copper wire for improved flexibility.

*Insulation made of NBR elastomer compound specially designed for resistance to migration & cold flexibility.

*Inner sheath of specially formulated PVC, resistant to migration & highly flexibile in sub-zero temperatures.

*Silicate powder lubricant between cores & inner sheath to reduce friction

Quick Reference

Current Capacities Page A21
Gland Options Page F9-F10

TEMPERATURE RANGE:

* - 30 TO + 90 Degree C static

* - 18 TO + 90 Degree C flexible

RATED VOLTAGE

*0.6/1Kv

RELEVANT STANDARDS

AS3147,IEC92-3,IEC92-353,IEC92-350,
IEC332-3

BENDING RADIUS

15 X DIAMETER

APPLICATIONS

As power, control or signal cable on inland waterway & sea-going vessels. On conveyors, machine tools, cranes, earth moving equipment & other industrial applications where extra mechanical protection is required. Also suitable for wiring in hazardous locations [i.e chemical plants]

Part No	No of Cores x Section mm square	Stranding	Approx Outer Dia mm	Approx Weight Kg/Km	Metal Gland SWA Type
77770315	3x1.5	48/0.21	12.8	220	MGSWA20-16
77770415	4x1.5	48/0.21	13.6	261	MGSWA20-S
77770515	5x1.5	48/0.21	14.5	271	MGSWA20-S
77770715	7x1.5	48/0.21	15.7	330	MGSWA20
77771215	12x1.5	48/0.21	18.0	504	MGSWA20
77770325	3x2.5	80/0.21	14.2	260	MGSWA20-S
77770425	4x2.5	80/0.21	15.2	295	MGSWA20-S
77770725	7x2.5	80/0.21	17.5	448	MGSWA20

Flexible Power Cables

Parallel Twin Flexible Cable 0.6/1kV

Cable Construction

*Conductors of fine strands of electrolytic copper wire for extra flexibility.

*Insulation of cores in red/black or Red/ Blue Aflex NBR elastomer

*Compound specially formulated for improved cold resistance.

*Sheathing of transparent PVC compound resistant to cold, abrasion, industrial oil and chemicals

*UV stabilised and flame retardant

Temperature Range:
*-30 to + 75 degrees C static
-20 to +75 degrees C flexible

Rated Voltage:
* 0.6/1Kv fixed wiring
450/750v for flexing

Relevant Standards:
* VDE 0250, VDE472, AS3147, IEC 332-1

Application:
* Battery cable for use indoors and outdoors, in dry as well as wet locations on motorised vehicles, or battery powered equipment such as fork lifts, field conveyors etc. Also in high quality booster cables.

Part No	No Of Cores x mm Sq	Stranding	Approx Overall Dia. mm	Bootlace Pins Uninsulated Ferrules	Bellmouth Lug * Hole Size
77760225	2x 2.5mm	80/0.21	5.5x12	PBL025	CL025-*
77760204	2 x 4.0mm	127/0.21	6.0x13	PBL04	CL6-*
77760206	2 x 6.0mm	190/0.21	6.5x14	PBL06	CL6-*BM
77760210	2 x 10.0mm	318/0.21	8.0x17	PBL10	CL10-*BM
77760216	2 x 16.0mm	504/0.21	9.0x19	PBL16	CL16-*BM
77760225	2 x 25.0mm	770/0.21	11.0x23	PBL25	CL25-*BM
77760235	2 x 35.0mm	1083/0.21	12.5x26	PBL35	CL35-*BM
77760250	2 x 50.0mm	1558/0.21	14.5x30	PBL50	CL50-*BM
77760270	2 x70.0mm	2204/0.21	16.0x33	PBL70	CL70-*BM

Quick Reference

Current Capacities Page A21
Gland Options Page F8, F9, F10

Noremak
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Flexible Power Cables

HO5 BQ-F 300/500V
According to CENELEC HD 22.10 S1

07 BQ-F AS3116 0.6/1Kv
Adapted to CENELEC HD
22.10 S1

Submersible EPR/PUR Flexible Cables

Construction
* Copper Conductor:
  Flexible, tinned up to 16mmsq
  Flexible, bare from 25mmsq upwards
  [acc. to IEC 228 Class 5 resp. Class 6 for single -core cables]

Insulation:
EPDM, compound type Ei6 ass. to HD 22.1 S2
* Filling sheath:
  Halogen-free filling compound
  [except single-core cables]

Outer Sheath;
Halogen free polyurethane, compound type TMPU acc. to HD 22.10 S1
* Screening if applicable will be tinned copper braid. Pilot cores will be 1.5 mmsq Sheath colour * Orange [similar to RAL 2003]

Core Colour
*2 core : brown, blue
*3 Core : brown, blue green/yellow
*4 Core : black, blue, brown, green/yellow
*5 Core : black,blue brown,blackgreen/yellow
From 7Core-: black with numbers,green-yellow

Test voltage
* 300/500V : 2000 V,50 Hz, 5'
* 0.6/1Kv : 2500 V,50 Hz, 5'

Temperature range
* -40 up to +90 degree Cel

Special characteristics
* Extreme mechanical resistance [Abrasion-,tearing,-notch-,pressure & wear resistant]
* Good reversed bending strength [min. 30000 reversed bendings under current acc. to VDE 0472, Part 603, Test H]
* Good chemical resistance [against fuels, oils, grease, chemicals & sewage]
* Resistant against enviromental factors[as ozone, UV, humidity, water]
* Resistant against important temperature fluctuations
* Flame retardant, halogen-free
* Submersible down to 500m
* Microbe & hydrolysis resistant

Quick Reference

Current Capacities Page A21
Gland Options Page F8, F9, F10

H05 BQ-F 300/500 V R-EP-90 Relvent Standard AS3191

Part No	No of Cores x-section mm sq	Max Dia Wires mm	Approx Overall Dia mm	Approx Weight Kg/Km	Maximum Amps Protected from Sun	Nylon Gland Part No	Metal Gland IP66	Metal Gland IP68
77730275	2 x 0.75	0.21	7.0	65	12	NGM16	MG20-16	MGS16
77730210	2 x 1.0	0.21	7.5	78	18	NGM16	MG20-16	MGS16
77733g75	3 x 0.75	0.21	7.5	78	12	NGM16	MG20-16	MGS16
77733g10	3 x 1.0	0.21	8.0	91	18	NGM16	MG20-S	MGS16
77734g75	4 x 0.75	0.21	8.0	91	12	NGM16	MG20-S	MGS16
77734g10	4 x 1.0	0.21	8.5	108	18	NGM16	MG20-S	MGS16
77735g75	5 x 0.75	0.21	9.0	113	12	NGM20	MG20-S	MGS20
77735g10	5 x 1.0	0.21	9.5	137	18	NGM20	MG20-S	MGS20

Flexible Power Cables

Submersible EPR/PUR Flexible Cables

HO5 BQ-F 300/500V
According to CENELEC HD 22.10 S1

07 BQ-F AS3116 0.6/1Kv
Adapted to CENELEC HD
22.10 S1

H07 BQ-F R-EP-90 Relevent Standard AS3191, AS3116 0.6/1Kv

Part No	No of Cores x-section mm sq	Max Dia Strands mm	Approx Overall Dia mm	Approx Weight Kg/Km	Maximum Amps Protected from Sun	Nylon Gland Part No	Metal Gland IP66	Metal Gland IP68
77730215	2 x 1.5	0.26	9.0	111	24	NGM16	MG20-S	MGS20
77733G15	3 x 1.5	0.26	9.5	130	24	NGM20	MG20-S	MGS20
77733G25	3 x 2.5	0.26	11.0	191	34	NGM20	MG20	MGS20
77733G4	3 x 4	0.31	13.0	266	45	NGM25	MG20	MGS25
77734G15	4 x 1.5	0.26	10.5	162	20	NGM20	MG20	MGS20
77734G25	4 x 2.5	0.26	12.5	238	28	NGM25	MG20	MGS20
77734G4	4 x 4	0.31	14.0	331	38	NGM25	MG25	MGS25
77734G6	4 x 6	0.31	14.0	453	48	NGM25	MG25	MGS25
77735G15	5 x 1.5	0.26	11.5	195	20	NGM20	MG20	MGS20
77735G25	5 x 2.5	0.26	13.5	291	28	NGM25	MG25	MGS25
77735G4	5 x 4	0.31	16.0	411	38	NGM25	MG25	MGS32
77735G6	5 x 6	0.31	18.0	559	48	NGM32	MG25	MGS32
77735G10	5 x 10	0.41	23.1	951	66	NGM40	MG32	MGS40
77735G16	5 x 16	0.41	26.5	1351	88	NGM40	MG40	MGS40
77735G025	5 x 25	0.41	33.5	2169	120	NGM50	MG50-S	MGS50
77735G35	5 x 35	0.41	38.0	2923	145	NGM63	MG50	MGS63
77735G50	5 x 50	0.41	43.5	3945	180	-	MG50	-
77737G15	7 x 1.5	0.26	14.0	291	13	NGM25	MG25	MGS25
77737G25	7 x 2.5	0.26	16.5	431	18	NGM32	MG25	MGS32

Guide Only Refer to Australian Standards 3008.1.1 for complete listings and variations

Technical Information

For Flexible Cables

Ratings and Capacities are based on Flexible Cables used In Flexing Applications and NOT Flexible Cables used for Fixed wiring applications. Refer to Australian Standards for these ratings AS 3008.1.1

Limiting Temperatures For Insulated Cables

AS3008.1.1 1998 Table1

Insulation Types	Insulation Types	Operating Temperatures Of Conductors °C	
		Normal Use	Max Permissible
Thermoplastic	V-75 and HFI-75-TP	75	75
	V-90 and HFI-90-TP (AS 3008.1.1 For Conditions)	75	90
	V90 HT (AS 3008.1.1 For Conditions)	75	105
Elastomer	R-EP-90, R-CPE-90, R-HF-90 and R-CSP-90	90	90
	R-HF-110 and R-E-110	110	110
Cross Linked Polyethylene (XLPE)	X-90 and X-HF-90	90	90
	X-HF-110	110	110

Current Carrying Capacities Of Flexible Cords

AS3008.1.1 1998 Table16

Conductor Size mm^2	Current Carrying Capacity Amps
0.50	3.0 (Conditions Apply)
0.75	7.5
1.00	10.0
1.50	15.0
2.50	20.0
4.00	25.0

Based On Ambient Air Temperature of 25°C

Derating For Cords Wound On a Drum 0.5-4.0mm^2

Number Of Layers	Derating Factor
1	0.76
2	0.58
3	0.47
4	0.40

Current Carrying Capacities of 0.6/1 kV Flexible Cables

AS3008.1.1 1998 Table15

Conductor Size mm^2	Protected From Sun		Exposed To Sun	
	Single And 2 Core V75, V90	Single And 2 Core R-EP-90 R-CSP-90	Single And 2 Core V75, V90	Single And 2 Core R-EP-90 R-CSP-90
6.0	44	54	34	43
10.0	60	74	46	58
16.0	81	99	60	77
25.0	110	135	80	105
35.0	135	165	95	125
50.0	160	195	110	145
70.0	205	250	140	185
95.0	240	290	160	210
120.0	280	340	185	245
150.0	320	390	215	280
185.0	360	440	240	315
240.0*	425	510	275	365

Guide Only Refer to Australian Standards 3008.1.1 for complete listings and variations

Noremak Total Cable Solutions

Guide Only Refer to Australian Standards 3008.1.1 for complete listings and variations

Technical Information

For Flexible Cables

Current Carrying Capacities of 0.6/1 kV Flexible Cables

AS3008.1.1 1998 Table15

Conductor Size mm²	Protected From Sun		Exposed To Sun	
	3 And 4 Core  V75, V90	3 And 4 Core  R-EP-90 R-CSP-90	3 And 4 Core  V75, V90	3 And 4 Core  R-EP-90 R-CSP-90
6.0	38	46	29	37
10.0	52	63	39	50
16.0	70	85	51	66
25.0	95	115	68	88
35.0	115	140	81	105
50.0	140	165	96	125
70.0	175	215	120	155
95.0	205	250	140	180
120.0	240	290	160	210
150.0	280	335	185	240
185.0	315	380	205	270
240.0*	370	445	235	310

Current Carrying Capacities of R-S-150 Flexible Cords

AS3008.1.1 1998 Table17

Conductor Size mm²	Two Single Core Or One 2 Core 		Three or Four Single Core or 3 or 4 core 	
0.50	19	15	15	13
0.75	24	20	20	16
1.00	28	23	24	19
1.50	37	28	31	24
2.50	50	38	43	32
4.00	67	50	58	42
6.00	87	67	74	55
10.00	120	90	105	76
16.00	165	119	140	99
25.00	215	160	185	135
35.00	265	194	230	163

AC Derating Factors For Multi Core Cables Greater Than 5 Core 1.5 To 10.0 mm²

Number Of Cores	Laying In air	Laying In Ground
5	0.75	0.70
7	0.65	0.60
10	0.55	0.50
14	0.50	0.45
19	0.45	0.40
24	0.40	0.35
40	0.35	0.30
61	0.30	0.25

Guide Only Refer to Australian Standards 3008.1.1 for complete listings and variations

Technical Information

For Flexible Cables

Three-Phase Voltage Drop At 50 Hz Of Multicore Flexible Cables And Cords With Copper Conductors

Conductor Size mm^2	Three Phase Voltage Drop At 50 Hz, mV/A.m							
	Conductor Temperature °C				Conductor Temperature °C			
	45		60		75		90	
	Max	0.8 p.f	Max	0.8 p.f	Max	0.8 p.f	Max	0.8 p.f
0.5	74.2	-	78.2	-	82.2	-	86.1	-
0.75	49.5	-	52.1	-	54.8	-	57.4	-
1.0	37.1	-	39.1	-	41.1	-	43.1	-
1.5	25.3	-	26.7	-	28.0	-	29.4	-
2.5	15.2	-	16.0	-	16.8	-	17.6	-
4.0	9.42	-	9.92	-	10.4	-	10.9	-
6.0	6.28	-	6.62	-	6.95	-	7.29	-
10.0	3.77	-	3.97	-	4.17	-	4.38	-
16.0	2.31	-	2.43	-	2.55	-	2.68	-
25.0	1.40	-	1.47	-	1.55	-	1.62	-
35.0	1.03	-	1.09	-	1.14	-	1.19	-
50.0	0.781	–	0.822	-	0.862	-	0.902	-
70.0	0.529	-	0.555	-	0.581	-	0.608	-
95.0	0.425	-	0.445	-	0.465	-	0.485	-
120.0	0.342	-	0.357	-	0.371	-	0.387	-
150.0	0.283	-	0.294	-	0.305	-	0.317	-
185.0	0.249	0.249	0.258	0.258	0.266	0.266	0.275	0.274
240.0	0.214	0.214	0.220	0.220	0.226	0.226	0.233	0.233
300.0	0.192	0.188	0.196	0.193	0.200	0.198	0.205	0.203
400.0	0.173	0.164	0.175	0.168	0.178	0.171	0.180	0.174
600.0	0.165	0.153	0.166	0.156	0.168	0.158	0.170	0.161

AC Resistance At 50 Hz Of Flexible Cables And Cords With Copper Conductors

Conductor Size mm^2	Single Core Cables				Multi Core Cables			
	Conductor Temperature °C				Conductor Temperature °C			
	45	60	75	90	45	60	75	90
0.5	42.8	45.1	47.4	49.7	42.8	45.1	47.4	49.7
0.75	28.6	30.1	31.6	33.2	28.6	30.1	31.6	33.2
1.0	21.4	22.6	23.7	24.9	21.4	22.6	23.7	24.9
1.5	14.6	15.4	16.2	17.0	14.6	15.4	16.2	17.0
2.5	8.76	9.23	9.70	10.2	8.76	9.23	9.70	10.2
4.0	5.44	5.73	6.02	6.31	5.44	5.73	6.02	6.31
6.0	3.62	3.82	4.01	4.21	3.62	3.82	4.01	4.21
10.0	2.17	2.29	2.41	2.52	2.17	2.29	2.41	2.52
16.0	1.33	1.40	1.47	1.54	1.33	1.40	1.47	1.54
25.0	0.803	0.846	0.889	0.932	0.803	0.846	0.889	0.932
35.0	0.589	0.621	0.652	0.684	0.589	0.621	0.652	0.684
50.0	0.442	0.466	0.489	0.513	0.442	0.466	0.490	0.513
70.0	0.293	0.309	0.324	0.340	0.293	0.309	0.325	0.340
95.0	0.229	0.242	0.254	0.266	0.230	0.242	0.254	0.266
120.0	0.178	0.188	0.197	0.206	0.179	0.188	0.198	0.207
150.0	0.140	0.147	0.155	0.162	0.141	0.148	0.155	0.163
185.0	0.116	0.122	0.128	0.134	0.117	0.123	0.129	0.135
240.0	0.0909	0.0955	0.100	0.105	0.0919	0.0965	0.101	0.106
300.0	0.0729	0.0764	0.0800	0.0836	0.0741	0.0776	0.0811	0.0847
400.0	0.0558	0.0583	0.0609	0.0634	0.0573	0.0598	0.0623	0.0648

For AC Resistance Of Tinned Copper Conductors Multiply Copper Value By 1.01

Guide Only Refer to Australian Standards 3008.1.1 for complete listings and variations

Technical Information

For Flexible Cables

Current Carrying Capacities of 3 Single Core 0.6/1 kV Flexible Cables R-EP-90 Insulation

As Per AS/NZS 3008.1.1:1998 Table 7

Single Double Insulated Cables In Fixed Application

Conductor Size mm	 Spaced	 Spaced from Surface	 Touching	 Non-metallic wiring enclosure in air
1	19	16	16	14
1.5	25	21	20	18
2.5	35	30	28	25
4	46	40	37	33
6	59	50	47	42
10	81	69	65	58
16	110	92	86	78
25	145	125	115	110
35	180	155	145	125
50	220	190	175	155
70	280	240	225	190
95	350	300	280	230
120	410	350	325	270
150	470	405	375	310
185	550	470	435	355
240	660	560	520	420
300	770	650	600	485
400	900	760	700	560

Please refer to Australian Standards for full conditions and notes which refer to this table

Guide Only Refer to Australian Standards 3008.1.1 for complete listings and variations

Technical Information

For Flexible Cables

Current Carrying Capacities of 3 Single Core 0.6/1 kV Flexible Cables R-E-110 Insulation

As Per AS/NZS 3008.1.1:1998 Table 8

Single Double Insulated Cables In Fixed Application

Conductor Size mm	Spaced	Spaced from Surface	Touching	Non-metallic wiring enclosure in air
1	24	21	20	17
1.5	31	27	25	22
2.5	43	38	36	32
4	57	50	47	41
6	73	63	59	51
10	99	86	81	71
16	130	115	105	93
25	175	155	145	125
35	220	190	175	150
50	265	230	215	180
70	340	290	270	235
95	420	365	340	285
120	490	420	395	335
150	570	485	455	380
185	660	560	530	450
240	790	670	630	550
300	910	780	730	630
400	1070	910	850	720

Please refer to Australian Standards for full conditions and notes which refer to this table

Guide Only Refer to Australian Standards 3008.1.1 for complete listings and variations

Technical Information

For Flexible Cables

Comparison of Current Ratings for Sheath Types As Per Australian Standards

Application: Touching Mounted to Tray etc

Conductor Size mm	(1) V75, V90	(2) R-EP-90	(3) R-E-110
1	13	16	20
1.5	16	20	25
2.5	23	28	36
4	31	37	47
6	40	47	59
10	54	65	81
16	72	86	105
25	97	115	145
35	120	145	175
50	145	175	215
70	185	225	270
95	230	280	340
120	265	325	395
150	310	375	455
185	355	435	530
240	425	520	630
300	490	600	730
400	570	700	850

Please refer to Australian Standards for full conditions and information for the above ratings

Noremak
Total Cable Solutions

Flexible Power Cables

This catalogue only covers the standard range of cables supplied by Noremak Industries. Noremak can have cables manufactured custom cables for the Australian electronics industry with many of these products being used locally and exported on a world wide

Noremak is capable of having products and cables manufactured to AS9002 and to Australian Standards including Austel, and can provide cables to UL approval for those cables involved in export manufacturing.

Noremak Industries has a close relationship with many cable manufactures in Australia and overseas and is able to have special purpose cables manufactured to requirements and specialises in small run quantities.

These cables can be composed of any mixtures of conductors, pairs, coaxial cables and a variety of strength members and other elements depending on application

A few of examples which can be supplied

UNDER WATER VIDEO CAMERA CABLES

SEWER INSPECTION CABLES

MOBILE PHONE SYSTEM CABLES

DENTAL CABLES

METAL DETECTOR CABLES

Please contact Noremak Industries for your cable requirements for Power and Data applications. Noremak can have cables produced to your requirements in surprisingly short runs and in surprisingly quick turn around times. We can also have leads and special application plugs manufacturing capabilities.

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