

M-FLEX CONTROL CABLES

Flexible, workable and environmentally resistant.



A brand of the

Prysmian
Group



Your reliable partner for integrated industrial cable solutions.

Prysmian Group is world leading in the development and production of innovative and robust cable solutions for industry application and a reliable partner for consultants and electrical installers. Industrial environments have unique requirements for cables, therefore our wide range of cable products is based on extensive know-how and experience from numerous industrial environments and processes.

You can count on our expertise and service to meet your requirements. We recommend the type of cable you need for your specific and demanding environment - with or without screen or in a halogen-free version. Our cables meet the highest demands for handling, fire classification and durability.

Draka cable solutions for energy and communications include:

- Medium voltage (MV)
- Low voltage (LV)
- Automation and control systems

You can get customer specific cable guidance from us
[Sales and technical support](#)
[See local contact details on last page](#)

In connection with delivery to projects, you can rely on our logistics and service. We look forward to talking with you about your specific challenges, so you can take full advantage of our cable expertise.



Industrial Automation & Control

Reliable and efficient industrial production with robots, assembly lines and transport systems are highly dependent on automated control systems. The cables must therefore be robust, fire-rated and flexible - so they are easy to install without flaws or electrical noise.

Draka offers a complete portfolio of industrial automation and control cables consisting of:

- Draka M-Flex Control cables
- Draka InstruLine 7000 - Instrumentation cables
- Draka Industrial Ethernet cables
- Draka Bus cables (Profibus, EIB etc.)

For more information about our portfolio visit our website or contact our sales department - see last page for local phone numbers and e-mail address.



M-Flex

A complete cable program for all type of applications

Draka M-Flex control cables offer every solution to the industry, today and in the future. The program is designed to meet both light, normal and heavy industry demands - where the cables are affected by oil, heat, humidity, electromagnetic interference as well as mechanical or chemical stress. The cable structure is designed to deliver an optimal and reliable signal through KEMA quality labeled cable types, that are suitable for demanding environments. In terms of fire safety - all M-Flex cables are self-extinguishing and the SF and ASF types are also flame retardant. The LSHF types offer increased safety in terms of low smoke development and a halogen-free outer jacket.

Draka M-Flex control cables

- Reliable signal
- Operational reliability
- Robust versions
- Self-extinguishing
- Flame-retardant (SF and ASF types)
- Flexible and easy to handle and install
- LSHF type is halogen-free with low smoke emission

Multi-stranded conductor class 5.

- Insulation and sheath material of PVC
- Insulation and sheath material of halogen-free materials



Choose the right cable for your environment with **MECI**

Draka has developed an environmental classification for control cables called industry MECI*, which can support you to choose the right cable type.

MECI is a categorization of the requirements for industrial cables that are heavily dependent on their environment, and hence their use.

The parameters are: MECI

MECHANICAL	ELECTROMAGNETIC	CLIMATE & CHEMICAL	INGRESS
Mechanical resistance	Electromagnetic interference	Climate and chemical resistance	Moisture resistance

CABLE TYPE	M	E	C	I
Standard				
Draka M-Flex YY 300/500V	L	L	L	L
Draka M-Flex YCY 300/500V	N	N	L	L
Draka M-Flex HH 300/500V	L	L	N	L
Draka M-Flex HCH 300/500V	N	N	N	L
Draka M-Flex EX HCH 300/500V	N	N	N	L
Robust				
Draka M-Flex SF mb	N	L	H	L
Draka M-Flex ASF mb	N	N	H	L
Draka M-Flex PUR 300/500 V	H	L	H	H
250V Signalling				
Draka M-Flex YCY 250V	N	N	L	L
Draka M-Flex YCY-P 250V	N	N	L	L
Draka M-Flex Datax HH 250V	L	L	N	L
Draka M-Flex Datax HCH 250V	L	L	N	L
EMC/EMI Screened				
Draka M-Flex YCY-P 300/500V	N	N	L	L
Draka M-Flex HCH EMC 0.6/1kV	N	H	N	L

L	Light industry
N	Normal industry
H	Heavy industry

* The classification is used solely to support your choice. Contact Draka for precise advice.

M-Flex control cables

Standard



Draka M-Flex YY 300/500V
Flexible control cable

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Draka M-Flex YCY 300/500V
Screened and flexible control cable

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Draka M-Flex HH 300/500 V
Halogen-free and flexible control cable

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Draka M-Flex HCH 300/500 V
Halogen-free, screened and flexible control cable

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Draka M-Flex EX HCH 300/500 V
Halogen-free, screened and flexible control cable
with blue outer sheath

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Robust



Draka M-Flex SF
Flexible, oil resistant and flame-retardant control cable

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Draka M-Flex ASF
Screened, flexible, oil resistant and flame-retardant
control cable

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Draka M-Flex PUR 300/500 V
Robust, cold resistant and flexible control cable

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250V Signaling



Draka M-Flex YCY 250V
Screened and flexible control cable for data transmission

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Draka M-Flex YCY-P 250V
Screened and flexible control cable with twisted pairs for data transmission

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Draka M-Flex Datax HH 250V
Halogen-free and flexible control cable

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Draka M-Flex Datax HCH 250V
Halogen-free, screened and flexible control cable

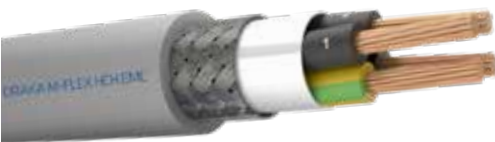
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EMC/EMI screened



Draka M-Flex YCY-P 300/500V
Screened and flexible control cable with twisted pairs

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Draka M-Flex HCH EMC 0.6/1kV
Halogen-free, EMC screened and flexible control cable

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Draka M-Flex YY 300/500V

Flexible control cable

	M	MECHANICAL Light industry
	E	ELECTROMAGNETIC Light industry
	C	CLIMATE & CHEMICAL Light industry
	I	INGRESS Light industry

Application

- Suitable for installation in control equipment, assembly lines, transport facilities, production lines and robots.

Norms

VDE 0812
NEN-EN-IEC 60332-1

Characteristics

- Unscreened cable
- For indoor use
- Self-extinguishing
- Compact design

Construction

Conductor	Copper
Conductor design	Multi-stranded class 5 = flexible
Insulation	PVC
Conductor marking	White numbering > 3 core incl. yellow/green core
Screen	None
Sheath material	PVC
Sheath color	Gray or blue on request

Properties

Halogen free acc. to EN 60754-1 / 2	No.
Fire classification	Self extinguishing acc. to EN 60332-1-2
Smoke density acc. to EN 61034-2	No.
Cold resistant acc. to EN 60811-504 + 505 + 506	No.
Oil resistant acc. to EN 60811-404	No.
Allowed ambient temperature, in motion	-5 / 70 ° C
Allowed ambient temperature, fixed	-5 / 80 ° C
Maximum conductor temperature	80°C

Electrical data

Rated operating voltage U ₀ / U	300/500 V
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Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
126479	2x0,5	4,8	25	26
126494	2x0,75	5,6	30	36
126504	2x1	5,9	30	42
126516	2x1,5	6,6	35	55
131966	2x2,5	7,7	40	80
126480	3G0,5	5,1	30	34
126474	3G0,75	5,9	30	47
126505	3G1	6,3	35	60
126475	3G1,5	7	35	75
131965	3G2,5	8,2	45	110
126481	4G0,5	6	30	47
126495	4G0,75	6,4	35	60
126506	4G1	6,8	35	70
126517	4G1,5	7,7	40	95
131964	4G2,5	9	45	140
126482	5G0,5	6,5	35	60
126496	5G0,75	7	35	75
126507	5G1	7,5	40	90
126518	5G1,5	8,4	45	120
131963	5G2,5	10,3	55	185
126483	6G0,5	7	35	70
126497	6G0,75	7,6	40	90
126508	6G1	8,1	45	105
126519	6G1,5	9,1	50	140
131962	6G2,5	11,2	60	220
126484	7G0,5	7,1	40	75
126498	7G0,75	7,6	40	95
126509	7G1	8,1	45	115
126520	7G1,5	9,2	50	150
131961	7G2,5	11,2	60	235
126485	8G0,5	7,7	40	85
126499	8G0,75	8,3	45	105
126510	8G1	8,8	45	125
126521	8G1,5	10,4	55	180
131950	8G2,5	12,2	75	265
126486	10G0,5	8,8	45	100

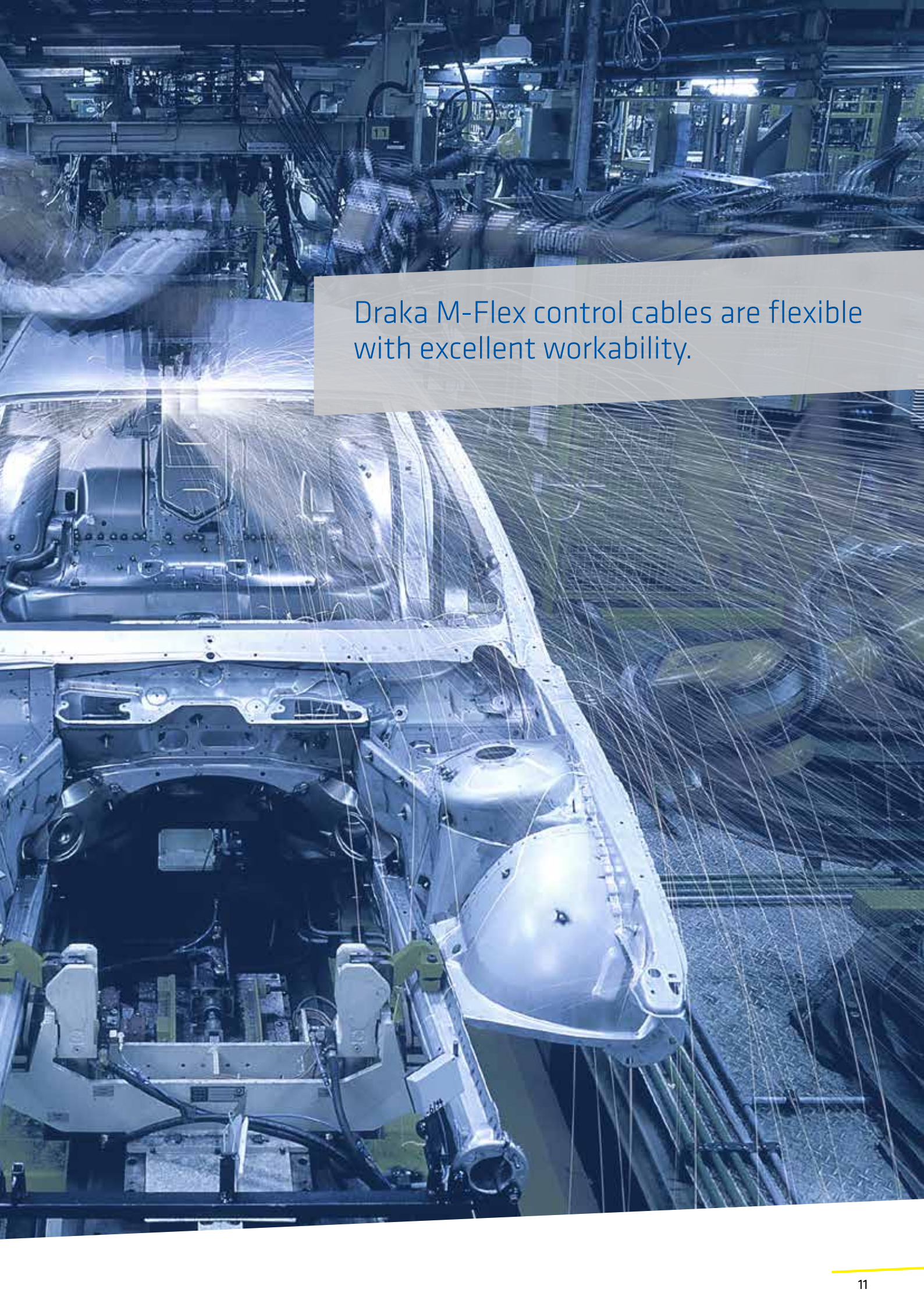
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Draka M-Flex YY 300/500V

Continuation

Produkt nr.	Leder tværsnit (n x mm ²)	Nominel ydre diameter (mm)	Minimum bøjeradius (mm)	Vægt ca. (kg pr. km)
126500	10G0,75	10	50	140
126511	10G1	10,6	55	165
126522	10G1,5	12	60	220
131949	10G2,5	14,6	90	340
126487	12G0,5	9,1	50	120
126501	12G0,75	10,3	55	160
126512	12G1	11	55	190
126523	12G1,5	12,4	75	255
131946	12G2,5	15,1	95	400
126503	18G0,75	12	60	240
126514	18G1	12,5	75	290
126525	18G1,5	14,9	90	405
126491	25G0,5	13,1	80	255
126515	25G1	15,3	95	400
126526	25G1,5	17,8	110	550





Cable specifications: For further information contact our sales department.



Draka M-Flex control cables are flexible with excellent workability.

Draka M-Flex YCY 300/500V

Screened and flexible control cable

	M	MECHANICAL Normal industry
	E	ELECTROMAGNETIC Normal industry
	C	CLIMATE & CHEMICAL Light industry
	I	INGRESS Light industry

Application

- Suitable for installation in control equipment, assembly lines, transport facilities, production lines and robots in and environment with risk of electro-magnetic noise.

Norms

VDE 0812
NEN-EN-IEC 60332-1

Characteristics

- Effective screening against electro-magnetic interference or noise (EMI)
- For indoor usage
- Compact design
- Self-extinguishing

Construction

Conductor	Copper
Conductor design	Multi-stranded class 5 = flexible
Insulation	PVC
Conductor marking	White numbering > 3 core incl. yellow/green co
Wrapping	Tape
Screen	Braid of tinned copper wires
Sheath material	PVC
Sheath colour	Grey or blue on request

Properties

Halogen-free acc. to EN 60754-1/2	No
Fire classification	Self-extinguishing acc. to EN 60332-1-2
Smoke density acc. to EN 61034-2	No
Cold resistance acc. to EN 60811-504 +505+506	No
Oil resistance acc. to EN 60811-404	No
Allowed ambient temperature, in motion	-5 / 70°C
Allowed ambient temperature, fixed	-5 / 70°C
Maximum conductor temperature	80°C

Electrical data

Rated operating voltage U ₀ / U	300/500 V
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Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
126625	2x0,5	5,9	30	46
126637	2x0,75	6,3	35	55
126650	2x1	6,6	35	60
126476	2x1,5	7,3	40	75
131960	2x2,5	8,4	45	100
126626	3G0,5	6,2	35	55
126638	3G0,75	6,6	35	65
126651	3G1	7	35	75
126661	3G1,5	7,7	40	95
131959	3G2,5	8,9	45	135
126627	4G0,5	6,7	35	65
126889	4x0,5	6,4	35	60
126639	4G0,75	7,1	40	80
126890	4x0,75	6,9	35	75
126652	4G1	7,5	40	90
126662	4G1,5	8,4	45	115
131958	4G2,5	10,1	55	175
126628	5G0,5	7,2	40	80
126640	5G0,75	7,7	40	95
126653	5G1	8,2	45	110
126663	5G1,5	9,1	50	140
131957	5G2,5	11	55	210
126629	6G0,5	7,7	40	90
126641	6G0,75	8,3	45	110
126654	6G1	8,8	45	130
131925	6G1,5	10,2	55	175
131956	6G2,5	11,9	60	250
126630	7G0,5	7,8	40	95
126642	7G0,75	8,3	45	115
126655	7G1	8,8	45	135
126664	7G1,5	10,3	55	185
131953	7G2,5	11,9	60	270
126631	8G0,5	8,4	45	105
126643	8G0,75	9	45	130
126656	8G1	9,5	50	155
126665	8G1,5	11,1	60	210
131951	8G2,5	12,9	80	300
126632	10G0,5	9,5	50	130
131890	10G0,75	10,7	55	165
126657	10G1	11,3	60	200
126666	10G1,5	12,7	80	255
131948	10G2,5	15,3	95	380
126633	12G0,5	10,2	55	155
126645	12G0,75	11	55	185
126658	12G1	11,7	60	225
126667	12G1,5	13,1	80	290
131947	12G2,5	15,8	95	440
126634	18G0,5	11,6	60	205

Cable specifications: For further information contact our sales department.

Draka M-Flex HH 300/500V

Halogen-free and flexible control cable

	M	MECHANICAL Light industry
	E	ELECTROMAGNETIC Light industry
	C	CLIMATE & CHEMICAL Normal industry
	I	INGRESS Light industry

Application

- Suitable for installation in control equipment, assembly lines, transport facilities, production lines and robots as well as climate and cooling systems.

Norms

EN 50525-2-21
NEN-EN-IEC 60332

Characteristics

- Unscreened
- For indoor usage
- Compact design
- Halogen-free with low smoke emission

Construction

Conductor	Copper
Conductor design	Multi-stranded class 5 = flexible
Insulation	Halogen-free, polymer
Conductor marking	White numbering > 3 core incl. yellow/green core
Screen	No
Sheath material	Halogen-free polymer, grey
Sheath colour	Grey or blue on request

Properties

Halogen-free acc. to EN 60754-1/2	Yes
Fire classification	Self-extinguishing acc. to 60332-1-2
Smoke density acc. to EN 61034-2	Yes
Cold resistance acc. to EN 60811-504 +505+506	No
Oil resistance acc. to EN 60811-404	No
Allowed ambient temperature, in motion	-15 / 70°C
Allowed ambient temperature, fixed	-40 / 80°C
Maximum conductor temperature	80°C

Electrical data

Rated operating voltage U ₀ / U	300/500 V
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Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
132149	2x0,75	5,6	28	35
132177	2x1	5,9	30	41
132136	2x1,5	6,6	33	53
132161	2x2,5	7,7	39	75
132150	3G0,75	5,9	30	47
132178	3G1	6,3	32	58
132138	3G1,5	7	35	72
132162	3G2,5	8,2	41	102
132151	4G0,75	6,4	32	58
132179	4G1	6,8	34	68
132139	4G1,5	7,7	39	92
132163	4G2,5	9	45	130
On request	4G4	11	55	205
On request	4G6	12,2	61	280
On request	4G10	15,5	78	470
On request	4G16	18,8	94	715
132152	5G0,75	7	35	73
132180	5G1	7,5	38	87
132140	5G1,5	8,4	42	112
132164	5G2,5	10,5	53	175
132588	6G1	8,1	41	99
132153	7G0,75	7,6	38	92
132181	7G1	8,1	41	112
132142	7G1,5	9,2	46	146
132165	7G2,5	11	55	225
132587	8G0,75	8,3	42	100
132589	10G1	10,6	53	158
132154	12G0,75	10,3	52	155
132182	12G1	11	55	184
132141	12G1,5	12,4	62	247
132166	12G2,5	15,1	76	385
132218	14G1,5	13,1	66	279
132214	18G0,75	12	60	233
On request	18G1	12,5	63	281
132217	18G1,5	14,9	75	393
On request	18G2,5	17,7	89	575
132215	25G0,75	14,8	74	303
132216	25G1,5	18,0	90	496

Cable specifications: For further information contact our sales department.

Draka M-Flex HCH 300/500V

Halogen-free, screened and flexible control cable

	M	MECHANICAL Normal industry
	E	ELECTROMAGNETIC Normal industry
	C	CLIMATE & CHEMICAL Normal industry
	I	INGRESS Light industry

Application

- Suitable for installation in control equipment, assembly lines, transport facilities, production lines and robots as well as climate and cooling systems.

Norms

EN 50525-2-21
NEN-EN-IEC 60332

Characteristics

- Effective screening against electromagnetic interference or noise (EMI)
- For indoor usage
- Compact design
- Halogen-free with low smoke emission

Construction

Conductor	Copper
Conductor design	Multi-stranded class 5 = flexible
Insulation	Halogen-free polymer
Conductor marking	White numbering > 3 core incl. yellow/green core
Screen	Braid of tinned copper wires
Sheath material	Halogen-free polymer
Sheath colour	Grey or blue on request

Properties

Halogen-free acc. to EN 60754-1/2	Yes
Fire classification	Self-extinguishing acc. to EN 60332-1-2
Smoke density acc. to EN 61034-2	Yes
Cold resistance acc. to EN 60811-504 +505+506	No
Oil resistance acc. to EN 60811-404	No
Allowed ambient temperature, in motion	-15 / 70°C
Allowed ambient temperature, fixed	-40 / 80°C
Maximum conductor temperature	80°C

Electrical data

Rated operating voltage U ₀ / U	300/500 V
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Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
132155	2x0,75	6,3	32	53
132184	2x1	6,6	33	58
132143	2x1,5	7,3	37	73
132167	2x2,5	8,4	42	98
132156	3G0,75	6,6	33	63
132188	3G1	7,0	35	73
132144	3G1,5	7,7	39	92
132168	3G2,5	8,9	45	125
132157	4G0,75	7,1	36	78
132413	4G1	7,5	38	87
132145	4G1,5	8,4	42	112
132171	4G2,5	10,1	51	165
On request	4G4	11,7	59	235
On request	4G6	13,0	65	320
On request	4G10	16,2	81	515
On request	4G16	19,5	98	775
132158	5G0,75	7,7	39	92
132189	5G1	8,2	41	107
132146	5G1,5	9,1	46	136
132172	5G2,5	11,0	55	200
132159	7G0,75	8,3	42	112
132190	7G1	8,8	44	131
132147	7G1,5	10,3	52	179
132173	7G2,5	11,9	60	255
132590	8G1	9,5	48	144
132160	12G0,75	11,0	55	179
132021	12G1	11,7	59	218
132148	12G1,5	13,1	66	281
132219	18G0,75	12,7	64	270
132221	18G1,5	15,6	78	435
132220	25G0,75	15,4	77	341

Cable specifications: For further information contact our sales department.

Draka M-Flex EX HCH 300/500V

Halogen-free, screened and flexible control cable
with blue outer sheath

	M	MECHANICAL Normal industry
	E	ELECTROMAGNETIC Normal industry
	C	CLIMATE & CHEMICAL Normal industry
	I	INGRESS Light industry

Application

- Suitable for safe installation in potentially explosive areas where electromagnetic noise must be avoided.

Norms

EN 50525-2-21
NEN-EN-IEC 60332-1
NEN-EN-IEC 60079-14

Characteristics

- Effective screening against electromagnetic interference or noise (EMI)
- For indoor usage
- Compact design
- Halogen-free with low smoke emission
- Blue outer sheath

Construction

Conductor	Copper
Conductor design	Multi-stranded class 5 = flexible
Insulation	Halogen-free polymer
Conductor marking	White numbering > 3 core incl. yellow/green core
Screen	Braid of tinned copper wires
Sheath material	Halogen-free polymer
Sheath colour	Blue

Properties

Halogen-free acc. to EN 60754-1/2	Yes
Fire classification	Self-extinguishing acc. to EN 60332-1-2
Smoke density acc. to EN 61034-2	Yes
Cold resistance acc. to EN 60811-504 +505+506	No
Oil resistance acc. to EN 60811-404	No
Allowed ambient temperature, in motion	-15 / 70°C
Allowed ambient temperature, fixed	-40 / 80°C
Maximum conductor temperature	80°C

Electrical data

Rated operating voltage U ₀ / U	300/500 V
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Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
132574	2x0,75	6,3	32	53
On request	2x1,5	7,3	37	73
132575	3G0,75	6,6	33	63
132697	3G1	7,0	35	73
On request	3G1,5	7,7	39	92
132576	4G0,75	7,1	36	78
On request	4G1	7,5	38	87
On request	4G1,5	8,4	42	112
132698	5G0,75	7,7	39	92
On request	5G1	8,2	41	107
On request	5G1,5	9,1	46	136
132577	7G0,75	8,3	42	112
On request	7G1	8,8	44	131
On request	7G1,5	10,3	52	179
132578	12G0,75	11,0	55	179
132699	12G1	11,7	59	218
On request	12G1,5	13,1	66	281
On request	18G0,75	12,7	64	270
On request	18G1,5	15,6	78	435

Cable specifications: For further information contact our sales department.

Draka M-Flex SF

Flexible, oil resistant and fire-retardant control cable

	M	MECHANICAL Normal industry
	E	ELECTROMAGNETIC Light industry
	C	CLIMATE & CHEMICAL Heavy industry
	I	INGRESS Light industry

Application

- Suitable for installation in control equipment, assembly lines, transport facilities, production lines and robots as well as climate and cooling systems.

Characteristics

- Unscreened
- For indoor usage
- Fire-retardant and self-extinguishing
- Grease and oil resistant

Norms

NEN: V-VMvLomb 300/500 V
 CLC: H05VV5-F
 NEN-EN 50525
 NEN-EN-IEC 60332-1-2
 NEN-EN-IEC 60332-3-24

Approval



Construction

Conductor	Copper
Conductor design	Multi-stranded class 5 = flexible
Insulation	PVC
Conductor marking	White numbering > 3 core incl. yellow/green core
Screen	None
Sheath material	PVC
Sheath colour	Grey

Properties

Halogen-free acc. to EN 60754-1/2	No
Fire classification	Self-extinguishing acc. to EN 60332-1-2 Fire-retardant acc. to EN 60332-3-24
Smoke density acc. to EN 61034-2	No
Cold resistance acc. to EN 60811-504 +505+506	No
Oil resistance acc. to EN 60811-404	Yes
Allowed ambient temperature, in motion	-5 / 50°C
Allowed ambient temperature, fixed	-5 / 60°C

Electrical data

Rated operating voltage U ₀ / U	300/500 V
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Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
112364	2x0,75	6,2	35	55
112368	2x1	6,5	35	65
115655	2x1,5	7,4	40	85
112382	2x2,5	9,1	50	130
115652	3G0,75	6,5	35	65
112369	3G1	6,9	35	75
112378	3G1,5	8,1	45	105
115658	3G2,5	9,9	50	160
115653	4G0,75	7,1	40	80
112370	4G1	7,6	40	95
112379	4G1,5	8,8	45	130
112383	4G2,5	10,8	55	195
112365	5G0,75	8,0	40	100
112371	5G1	8,5	45	115
115656	5G1,5	9,9	50	160
112384	5G2,5	12,1	75	245
119028	6G1	9,6	50	150
115654	7G0,75	9,7	50	145
112372	7G1	10,2	55	165
115657	7G1,5	12,1	75	235
112385	7G2,5	14,5	90	350
119029	8G1	11,5	60	210
113377	10G0,75	11,5	60	170
113378	10G2,5	17,7	110	440
115660	12G0,75	11,8	60	190
112373	12G1	12,7	80	230
115662	12G1,5	14,8	90	320
112386	12G2,5	17,9	110	485
115661	18G0,75	14,2	90	290
112374	18G1	15,0	90	355
115663	18G1,5	17,7	110	485
112387	18G2,5	21,9	135	775
113379	24G0,75	16,8	105	410
113380	24G1	17,9	110	485
113381	24G1,5	21,4	130	700
112366	27G0,75	17,5	105	435
112375	27G1	18,7	115	520
112380	27G1,5	21,6	130	705
112367	36G0,75	19,6	120	570
112376	36G1	21,2	130	695
112381	36G1,5	25,0	150	970

Cable specifications: For further information contact our sales department.

Draka M-Flex ASF

Screened, flexible, oil resistant and fire-retardant control cable

	M	MECHANICAL Normal industry
	E	ELECTROMAGNETIC Normal industry
	C	CLIMATE & CHEMICAL Heavy industry
	I	INGRESS Light industry

Application

- Suitable for industrial application in environments with electromagnetic interference or noise (EMI).

Characteristics

- Effective screening against electromagnetic noise EMI.
- For indoor usage
- Fire-retardant and self-extinguishing
- Grease and oil resistant

Norms

NEN: V-VMvLoafmb 300/500
CLC: H05VVC4V5-K
NEN-EN 50525
NEN-EN-IEC 60332-1-2
NEN-EN-IEC 60332-3-24

Approval



Construction

Conductor
Conductor design
Insulation
Conductor marking

Filler
Screen
Sheath material
Sheath colour

Copper
Multi-stranded class 5 = flexible
PVC
White numbering
> 3 core incl. yellow/green core
PVC
Braid of tinned copper wires
PVC
Grey

Properties

Halogen-free acc. to EN 60754-1/2
Fire classification

Smoke density acc. to EN 61034-2
Cold resistance acc. to EN 60811-504
+505+506

Oil resistance acc. to EN 60811-404

Allowed ambient temperature,
in motion

Allowed ambient temperature,
fixed

No
Self-extinguishing acc. to EN 60332-1-2
Fire-retardant acc. to EN 60332-3-24

No

No

Yes

-5 / 50°C

-5 / 60°C

Electrical data

Rated operating voltage U₀ / U

300/500 V







Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
112346	2x0,75	8,4	45	110
113539	2x1	8,7	45	120
112357	2x1,5	9,8	50	150
112655	2x2,5	11,3	60	200
112316	3G0,75	8,7	45	120
112351	3G1	9,3	50	135
112317	3G1,5	10,3	55	170
112318	3G2,5	11,9	60	230
112319	4G0,75	9,5	50	140
112352	4G1	10,0	50	160
112320	4G1,5	11,2	60	205
112362	4G2,5	13,2	80	285
112347	5G0,75	10,2	55	165
112353	5G1	10,9	55	190
112358	5G1,5	12,5	75	250
119036	5G2,5	15,2	95	385
112321	7G0,75	12,1	75	225
112354	7G1	12,8	80	255
112322	7G1,5	14,7	90	355
112363	7G2,5	17,9	110	535
114052	8G1,5	16,4	100	430
121866	10G0,75	14,5	90	310
113374	10G1	15,1	95	325
113375	10G1,5	17,1	105	415
112348	12G0,75	14,6	90	315
112355	12G1	16,1	100	385
112359	12G1,5	17,6	110	470
112349	18G0,75	17,4	105	455
112356	18G1	18,4	115	525
112360	18G1,5	20,5	125	650
122623	24G1	20,9	130	660

Cable specifications: For further information contact our sales department.

Draka M-Flex PUR 300/500V

Robust, flexible and cold resistant control cable

	M	MECHANICAL Heavy industry
	E	ELECTROMAGNETIC Light industry
	C	CLIMATE & CHEMICAL Heavy industry
	I	INGRESS Heavy industry

Application

- Suitable for control equipment, assembly lines, transport systems, production lines and robots.

- High resistance against oil, grease and acid
- Weather and UV resistant
- Self-extinguishing

Characteristics

- Unscreened cable
- For indoor and outdoor usage
- Tolerates high mechanical stress
- Flexible
- Suitable for very low temperatures

Norms

EN 50525-2-21
NEN-EN-IEC 60332-1

Construction

Conductor	Copper
Conductor design	Multi-stranded class 5 = flexible
Insulation	Halogen-free polymer
Conductor marking	White numbering
	> 3 core incl. yellow/green core
Screen	None
Sheath material	PUR
Sheath colour	Black

Properties

Halogen-free acc. to EN 60754-1/2	Yes
Fire classification	Self-extinguishing acc. to EN 60332-1-2
Smoke density acc. to EN 61034-2	No
Cold resistance acc. to EN 60811-504 +505+506	Yes
Oil resistance acc. to EN 60811-2-1	Yes
Oil resistance acc. to EN 60811-404	Yes
Allowed ambient temperature, in motion	-40/ 80°C
Allowed ambient temperature, fixed	-50 / 90°C
Minimum installation temperature	-40°C

Electrical data

Rated operating voltage U ₀ /U	300/500 V
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Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
132256	2x0,75	5,6	28	41
On request	2x1,5	6,6	33	55
132692	3G0,75	5,9	30	47
On request	3G1	6,3	32	60
132261	3G1,5	7	35	75
On request	3G2,5	8,2	41	105
132257	4G0,75	6,4	32	60
On request	4G1	6,8	34	70
132022	4G1,5	7,7	39	95
On request	4G2,5	9	45	135
132693	4G4	11	55	210
On request	4G6	12,2	61	290
On request	4G10	15,5	78	485
On request	4G16	18,8	94	735
132694	5G0,75	7	35	75
On request	5G1	7,5	38	90
132262	5G1,5	8,4	42	115
On request	5G2,5	10,5	53	180
132258	7G0,75	7,6	38	95
On request	7G1	8,1	41	115
132695	7G1,5	9,2	46	150
On request	7G2,5	11	55	230
132259	12G0,75	10,3	52	160
132696	12G1,5	12,4	62	255
132260	18G0,75	12	60	240
On request	18G1,5	14,9	75	405

Cable specifications: For further information contact our sales department.

Draka M-Flex YCY 250V

Screened and flexible control cable for data transmission

	M	MECHANICAL Normal industry
	E	ELECTROMAGNETIC Normal industry
	C	KLIMA & KEMISK Light industry
	I	INGRESS Light industry

Application

- Suitable for control equipment, production lines and robots in an environment with electromagnetic noise EMI.
- Data cable for data rates of up to 100 Kbps such as modems, PLC, POS and security systems as well as for connecting printers and plotters to computer.

Characteristics

- Effective shield against electromagnetic noise (EMI)
- Good signal frequency up to approx. 100 kHz
- Suitable for indoor use
- Compact design
- Self-extinguishing
- Not approved for power plants

Norms

VDE 0812
NEN-EN-IEC 60332-1
DIN 47100

Construction

Conductor	Copper
Conductor design	Multi-stranded class 5 = flexible
Insulation	PVC
Conductor marking	Colour coded acc. to DIN 47100
Yellow/Green conductor	NO
Wrapping	Tape
Screen	Braid of tinned copper wires
Sheath material	PVC
Sheath colour	Grey

Properties

Halogen-free acc. to EN 60754-1/2	No
Fire classification	Self-extinguishing acc. to EN 60332-1-2
Smoke density acc. to EN 61034-2	No
Cold resistant acc. to EN 60811-504 +505+506	No
Oil resistance acc. to EN 60811-404	No
Allowed ambient temperature, in motion	-5 / 70°C
Allowed ambient temperature, fixed	-5 / 70°C

Electrical data

Rated operating voltage U ₀ / U	250 V
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Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
120556	2x0,14	3,9	20	23
120569	2x0,22	4,1	25	22
120581	2x0,34	4,8	25	33
120582	3x0,34	5	25	34
120558	4x0,14	4,4	25	26
120571	4x0,22	4,6	25	37
120583	4x0,34	6,3	35	60
120560	6x0,14	5	25	33
120573	6x0,22	5,7	30	55
120585	6x0,34	7,3	40	80
120562	8x0,14	5,7	30	44
120575	8x0,22	6,1	35	65
120587	8x0,34	7,9	40	95
120563	10x0,14	6,5	35	55
120576	10x0,22	6,9	35	80
120588	10x0,34	8,4	45	95
120589	12x0,34	8,6	45	110
120568	25x0,14	9	45	110

Cable specifications: For further information contact our sales department.

Draka M-Flex YCY-P 250V

Screened and flexible control cable with twisted pairs for data transmission

	M	MECHANICAL Normal industry
	E	ELECTROMAGNETIC Normal industry
	C	CLIMATE & CHEMICAL Light industry
	I	INGRESS Light industr

Application

- Suitable for control equipment, production lines and robots in an environment with electromagnetic noise EMI.
- Data cable for data rates of up to 100 Kbps such as modems, PLC, POS and security systems as well as for connecting printers and plotters to computer.

Characteristics

- Effective shield against electromagnetic noise (EMI)
- Good signal frequency up to approx. 100 kHz
- Suitable for indoor use
- Compact design
- Self-extinguishing
- Not approved for power plants

Norms

VDE 0812
NEN-EN-IEC 60332-1
DIN 47100

Construction

Conductor	Copper
Nom. conductor cross-section	0,14 mm ²
Conductor design	Multi-stranded class 5. = flexible
Conductor marking	Colour coded acc. to DIN 47100
Yellow/green conductor	No
Insulation	PVC
Composition of conductors	Pair twisted
Wrapping	Tape
Earth wire	Yes
Screening of pairs	None
Screen	Braid of tinned copper wires
Sheath material	PVC
Sheath colour	Grey

Properties

Halogen-free acc. to EN 60754-1/2	No
Fire classification	Self-extinguishing acc. to EN 60332-1-2
Smoke density acc. to EN 61034-2	No
Cold resistance acc. to EN 60811-504 +505+506	No
Oil resistance acc. to EN 60811-404	No
Allowed ambient temperature, in motion	-5 /70 °C
Allowed ambient temperature, fixed	-5 /70 °C



Electrical data





Rated operating voltage U_0 / U	250 V
Conductor resistance	138.8 Ω /km at 20°C
Kapacitance between two adjcent conductors	100 nF
Kapacitance between conductor and screen	170 nF

Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
120634	2x2x0,14	5,6	30	39
120635	3x2x0,14	6,1	35	47
120636	4x2x0,14	6,6	35	55
120637	6x2x0,14	7,7	40	75
120638	8x2x0,14	8,4	45	90
120639	12x2x0,14	10,4	55	130
120640	25x2x0,14	13,4	85	205

Cable specifications: For further information contact our sales department.

Draka M-Flex Datax HH 250V

Halogen-free and flexible control cable

	M	MECHANICAL Light industry
	E	ELECTROMAGNETIC Light industry
	C	CLIMATE & CHEMICAL Normal industry
	I	INGRESS Light industry

Application

- Suitable for control equipment, production lines and robots.

Characteristics

- Unscreened cable
- For indoor usage
- Compact design
- Halogen-free with low smoke emission
- Not approved for power plants

Norms

VDE 0812
NEN-EN-IEC 60332-1
IEC 60228

Construction

Conductor	Copper
Conductor design	Multi-stranded class 5 = flexible
Insulation	Halogen-free polymer
Conductor marking	White numbering > 3 core incl. yellow/green core
Warping	Tape
Screen	None
Sheath material	Halogen-free polymer
Sheath colour	Grey

Properties

Halogen-free acc. to EN 60754-1/2	Yes
Fire classification	Self-extinguishing acc. to EN 60332-1-2
Smoke density acc. to EN 61034-2	Yes
Cold resistance acc. to EN 60811-504 +505+506	No
Oil resistance acc. to EN 60811-404	No
Allowed ambient temperature, in motion	-5 / 70°C
Allowed ambient temperature, fixed	-5 / 70°C

Electrical data

Rated operating voltage U ₀ /U	250 V
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Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
131237	2x1	5,8	29	40
131263	3G1	6,1	31	48
131261	4G1	6,7	34	62
131240	5G1	7,3	37	75
131246	6G1	7,9	40	90
131241	7G1	7,9	40	97
131247	8G1	9,3	47	120
131248	9G1	10,3	52	145
131264	10G1	10,3	52	143
131265	12G1	10,3	52	159
131266	14G1	11,2	56	190
131267	18G1	12,4	62	241
132376	20G1	13,1	80	270

Cable specifications: For further information contact our sales department.



Draka M-Flex Datax HCH 250V

Halogen-free, screened and flexible control cable

	M	MECHANICAL Light industry
	E	ELECTROMAGNETIC Light industry
	C	CLIMATE & CHEMICAL Normal industry
	I	INGRESS Light industry

Application

- Suitable for control equipment, production lines and robots in an environment with electromagnetic interference or noise EMI.
- Compact design
- Halogen-free with low smoke emission
- Not approved for power plants

Characteristics

- Effective screening against electromagnetic noise (EMI)
- For indoor usage

Norms

VDE 0812
NEN-EN-IEC 60332-1

Construction

Conductor	Copper
Conductor design	Multi-stranded class 5 = flexible
Insulation	Halogen-free polymer
Conductor marking	White numbering
Yellow/green conductor	Yes > 3 core
Wrapping	Tape
Earth wire	Yes
Screen	Braid of tinne copper wires
Sheath material	Halogen-free polymer
Sheath colour	Grey

Properties

Halogen-free acc. to EN 60754-1/2	Yes
Fire classification	Self-extinguishing acc. to EN 60332-1-2
Smoke density acc. to EN 61034-2	Yes
Cold resistance acc. to EN 60811-504 +505+506	No
Oil resistance acc. to EN 60811-404	No
Allowed ambient temperature, in motion	-5 / 70°C
Allowed ambient temperature, fixed	-5 / 70°C

Electrical data

Rated operating voltage U ₀ /U	250 V
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Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
131238	2x1	6,4	32	59
131268	3G1	6,7	34	67
131239	4G1	7,3	37	83
131242	5G1	7,9	40	99
131249	6G1	8,5	43	117
131269	7G1	8,5	43	124
131243	7G1,5	10,3	55	175
131262	8G1	10,3	52	158
131244	9G1	10,9	55	180
131245	10G1	10,9	55	179
131270	12G1	11,3	57	202

Cable specifications: For further information contact our sales department.

Draka M-Flex YCY-P 300/500V

Screened and flexible control cable with twisted pairs

	M	MECHANICAL Normal industry
	E	ELECTROMAGNETIC Normal industry
	C	CLIMATE & CHEMICAL Light industry
	I	INGRESS Light industry

Application

- Suitable for control equipment, production lines and robots in an environment with electromagnetic interference or noise EMI.

- Compact design
- Self-extinguishing

Characteristics

- Effective shielding against electromagnetic noise (EMI)
- Pair twisted conductors
- For indoor usage

Norms

VDE 0812
NEN-EN-IEC 60332-1-2
DIN 47100

Construction

Conductor	Copper
Nom. conductor cross-section	0,5 mm ²
Conductor design	Multi-stranded class 5 = flexible
Insulation	PVC
Conductor marking	Colour code acc. to DIN 47100
Composition of pairs	Pair twisted
Yellow/green conductor	No
Wrapping	Tape
Earth wire	Yes
Screen	Braid of tinned copper wires
Sheath material	PVC
Sheath colour	Grey or blue on request

Properties

Halogen-free acc. to EN 60754-1/2	No
Fire classification	Self-extinguishing acc. to EN 60332-1-2
Smoke density acc. to EN 61034-2	No
Cold resistance acc. to EN 60811-504 +505+506	No
Oil resistance acc. to EN 60811-2-1	No
Oil resistance acc. to EN 60811-404	No
Allowed ambient temperature, in motion	-5 / 70°C
Allowed ambient temperature, fixed	-5 / 70°C



Electrical data





Rated operating voltage U ₀ /U	300/500 V
Conductor resistance	39,8 Ω / km at 20°C
Kapacitance between two adjacent conductors	140 nF
Kapacitance between conductor and screen	240 nF

Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
126680	2x2x0,5	8,4	45	80
126477	3x2x0,5	8,9	45	100
126682	4x2x0,5	10,1	55	130
126683	6x2x0,5	11,8	60	165
126684	8x2x0,5	12,7	80	200

Cable specifications: For further information contact our sales department.

Draka M-Flex HCH EMC 0.6/1kV

Halogen-free, EMC screened and flexible control cable

	M	MECHANICAL Normal industry
	E	ELECTROMAGNETIC Heavy industry
	C	CLIMATE & CHEMICAL Normal industry
	I	INGRESS Light industry

Application

- Suitable for control equipment, production lines and robots in an environment with electromagnetic interference or noise EMI.

- Halogen-free with low smoke emission
- Self-extinguishing

Norms

EN 50525-2-21
NEN-EN-IEC 60332-1-2

Characteristics

- High shielding against electromagnetic noise (EMI)
- For indoor usage
- Compact design

Construction

Conductor
Conductor design
Insulation
Conductor marking
Yellow/green conductor
Wrapping
Screen

Copper
Multi-stranded class 5 = flexible
XLPE
White numbering
Yes > 3 core
Tape, white
Metal foil and braid of tinned copper wires
Halogen-free polymer
Grey or blue on request

Sheath material
Sheath colour

Properties

Halogen-free acc. to EN 60754-1/2
Fire classification
Smoke density acc. to EN 61034-2
Cold resistance acc. to EN 60811-504 +505+506
Oil resistance acc. to EN 60811-404
Allowed ambient temperature, in motion
Allowed ambient temperature, fixed

Yes
Self-extinguishing acc. to EN 60332-1-2
Yes
No
No
-15 / 70°C
-40 / 80°C

Electrical data

Rated operating voltage U_0 / U

600/1000 V



Product no.	Conductor cross-section (n x mm ²)	Nominal outer diameter (mm)	Minimum bending radius (mm)	Weight ca. (kg per km)
On request	2x1,5	11,5	58	190
On request	3G1,5	12	60	210
132069	4G1,5	13	65	240
On request	4G2,5	13,5	68	290
On request	4G4	15,5	78	390
On request	4G6	16,5	83	480
On request	4G10	19	95	700
On request	4G16	21,5	108	950
On request	5G1,5	13,5	68	265
On request	7G1,5	14,5	73	320
On request	12G1,5	18	90	465

Cable specifications: For further information contact our sales department.





Draka M-Flex control cables are versatile for use in industry.

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