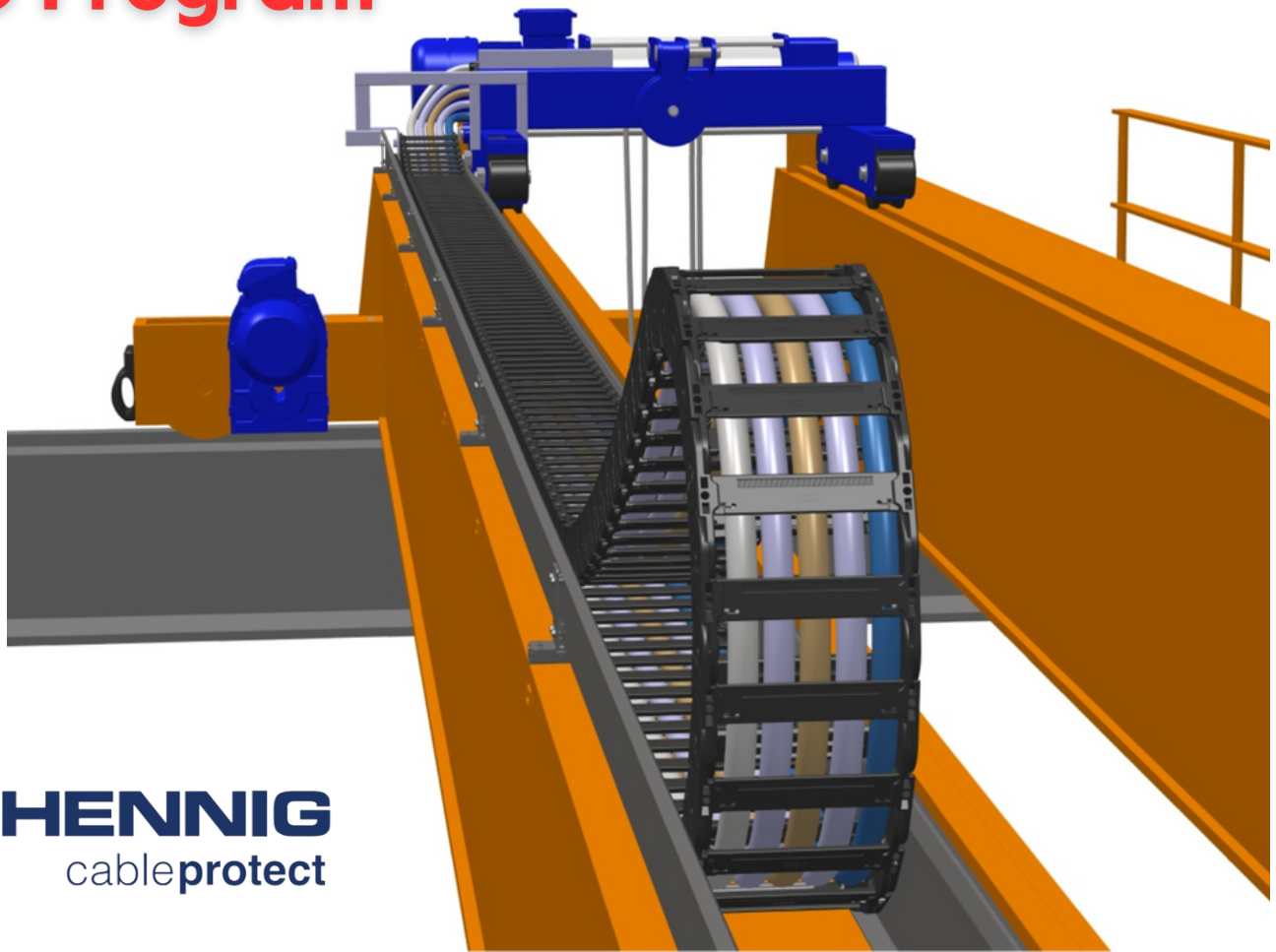


HEAVY DUTY NYLON CABLE CHAIN SYSTEMS

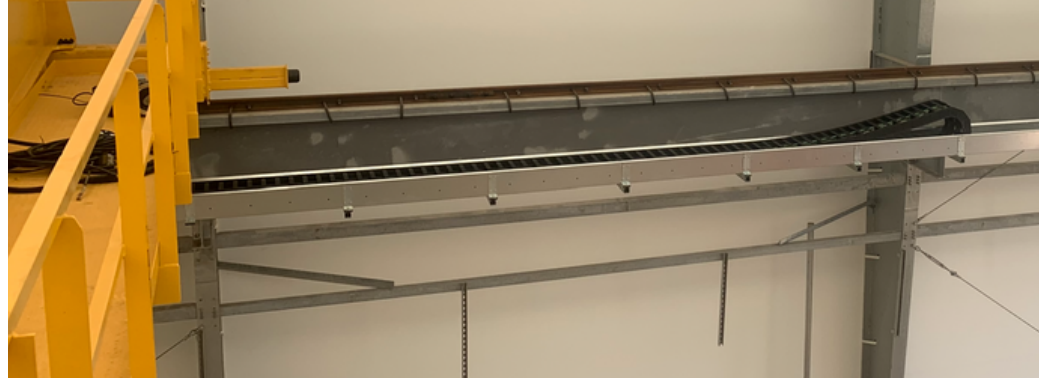
CBU Program



|||| HENNIG
cableprotect

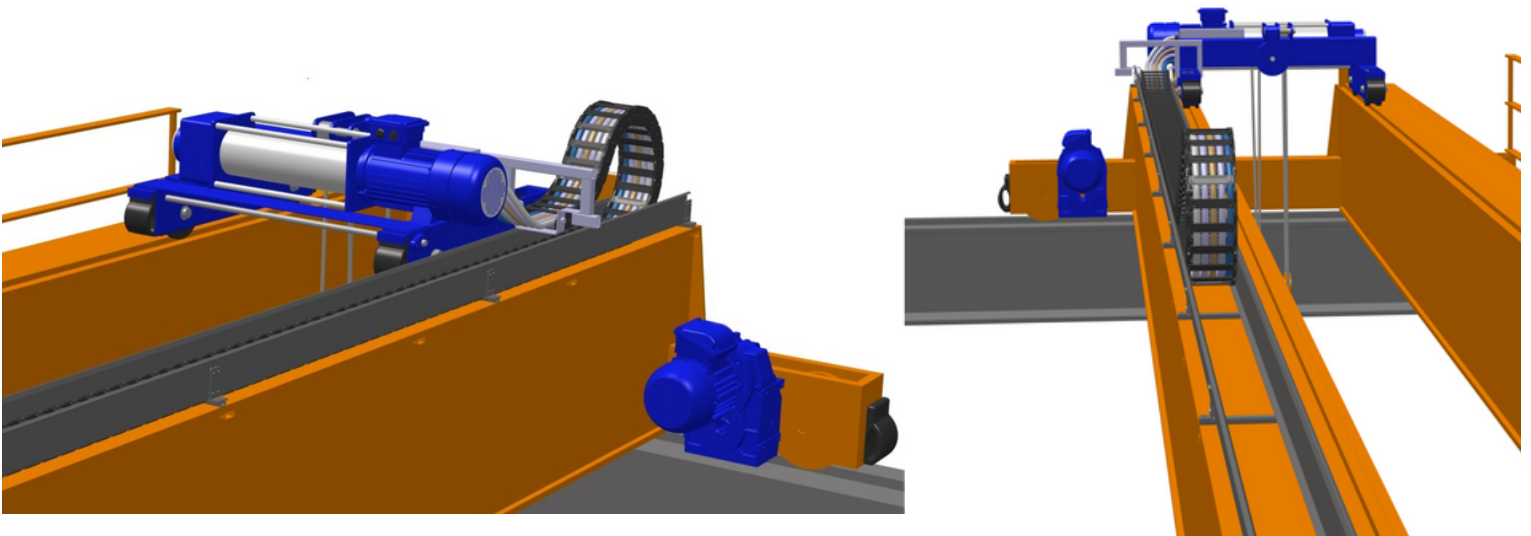
**FOR LARGER CAPACITY BUILT UP TROLLEYS
IN DEMANDING APPLICATIONS**

CBU PROGRAM



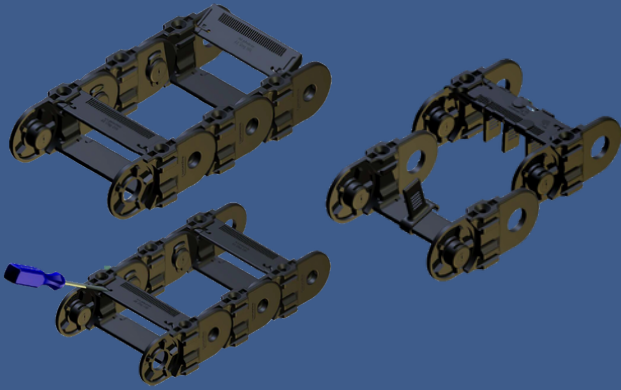
WHILE TYPICALLY USED FOR THE TROLLEY MOTION, CABLE CHAINS CAN BE EMPLOYED FOR THE BRIDGE MOTION WHEN THE CRANE CONTROLS ARE NOT MOUNTED ON THE CRANE.

The chains in the CBU Program are assembled from standard components that allow for tailor made solutions for specific applications. While any combination of standard widths and bend radii are available, Hennig stocks particular configurations that can cover most requirements allowing for very competitive lead times.



CBU PROGRAM

PKK SERIES CHAINS

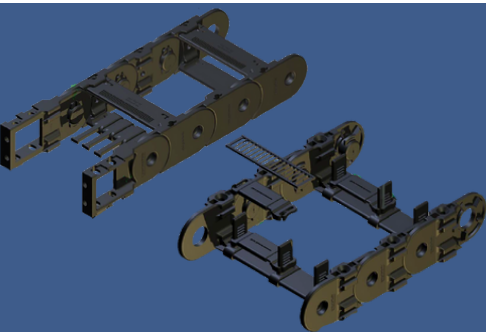
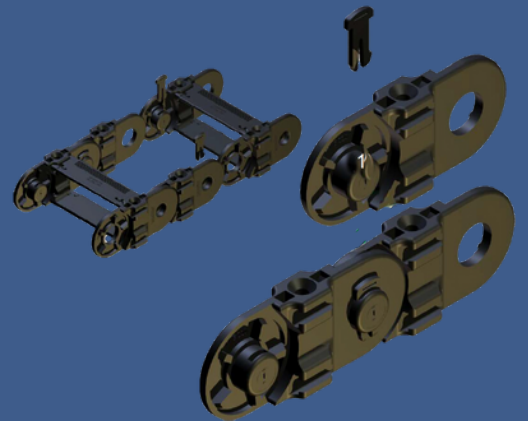


MODULAR DESIGN

Simple assembly/disassembly with a standard screwdriver. Cross bars are removable on both the inner and outer radius making for easy cable access.

POSITIVE LINK TO LINK CONNECTION

High strength, glass filled nylon clips are easily removed for chain length adjustment or link replacement.



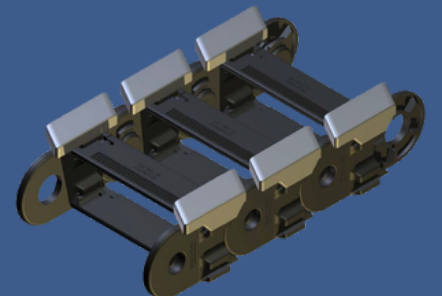
INTEGRAL CABLE STRAIN RELIEF ELEMENTS

Assembled on top and/or bottom crossbars on each end of the chain.

VERTICAL AND HORIZONTAL SEPARATORS

OPTIONAL REPLACEABLE LOW FRICTION SLIDERS

Replaceable wear surface for high speed and high duty cycle applications.

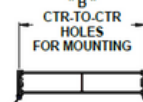
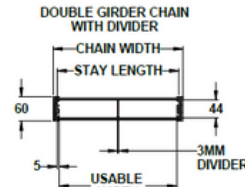
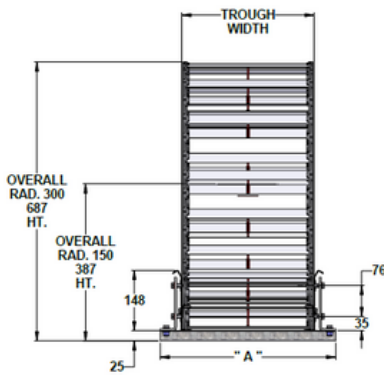


CBU PROGRAM

PKK SERIES CHAINS - STOCK CONFIGURATIONS

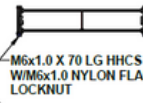
PKK
240
241

STAY LENGTH [MM]	CHAIN WIDTH [MM]	USEABLE WIDTH [MM]	TROUGH WIDTH [MM]	"A" [MM]	"B" [MM]	"C" [MM]
150	170	140	176	283	160	28
200	220	190	226	333	210	53
250	270	240	276	383	260	78
300	320	290	326	433	310	103



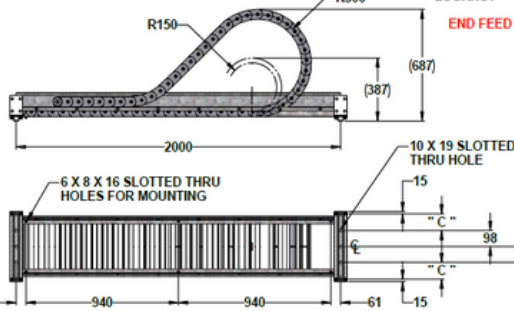
M6x1.0 X 70 LG FLHD SHCS
W/M6x1.0 NYLON FLANGE
LOCKNUT

CENTER FEED FIXED END

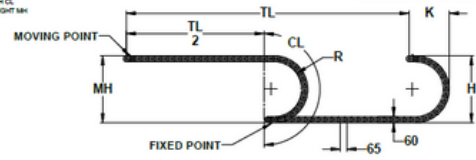


M6x1.0 X 70 LG HHCS
W/M6x1.0 NYLON FLANGE
LOCKNUT

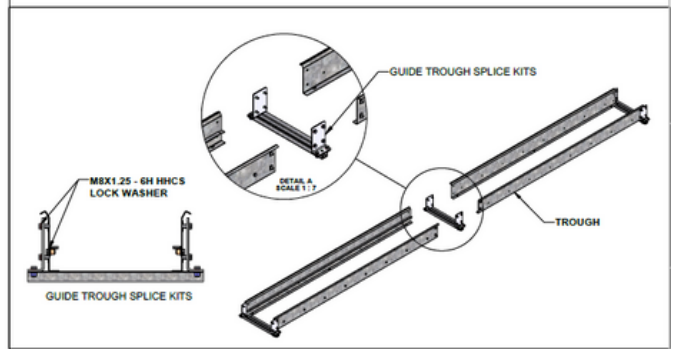
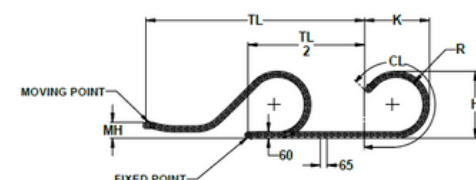
END FEED FIXED END



R	H	K	CL	MH
150	385	244	600	360
300	685	459	1200	660



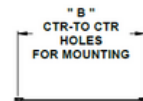
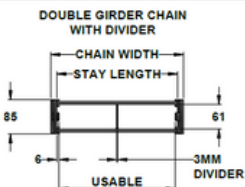
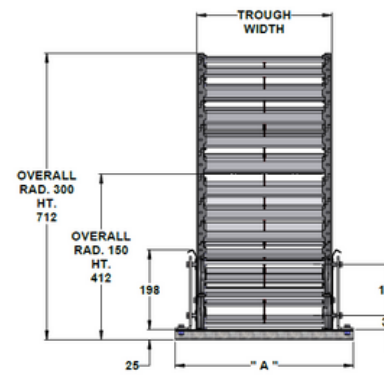
R	H	K	CL	MH
150	385	643	1383	195
300	685	1097	2597	195



ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED	PROCESS	ASSEMBLY	AS LISTED
DESIGNED BY: CC	DATE: 11/20/2022	REVISIONS: 1	1
DRAWN BY: CC	DATE: 11/20/2022	REVISIONS: 1	1
CHECKED BY: CC	DATE: 11/20/2022	REVISIONS: 1	1
APPROVED BY: CC	DATE: 11/20/2022	REVISIONS: 1	1
PROJECT: CP-3000 PKK 240-241	DESCRIPTION: CP-3000 PKK 240-241	SCALE: CP-3000 PKK 240-241	FILE: CP-3000 PKK 240-241
DESIGNER: CARL P. TROTSCH	DATE: 11/20/2022	REVISIONS: 1	1

PKK
340
341

STAY LENGTH [MM]	CHAIN WIDTH [MM]	USEABLE WIDTH [MM]	TROUGH WIDTH [MM]	"A" [MM]	"B" [MM]	"C" [MM]
150	180	138	186	293	165	28
200	230	188	236	343	215	53
250	280	238	286	393	265	78
300	330	288	336	443	315	103



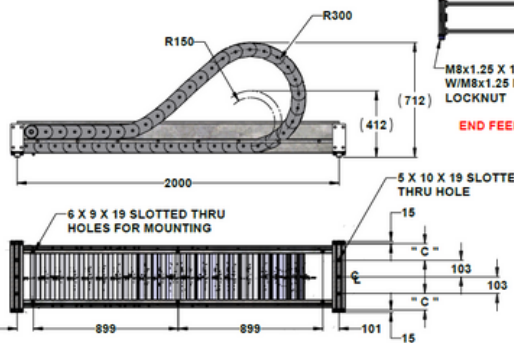
M8x1.25 X 100 LG FLHD SHCS
W/M8x1.25 NYLON FLANGE
LOCKNUT

CENTER FEED FIXED END

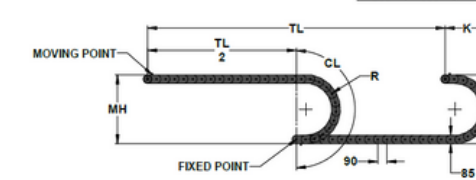


M8x1.25 X 100 LG HHCS
W/M8x1.25 NYLON FLANGE
LOCKNUT

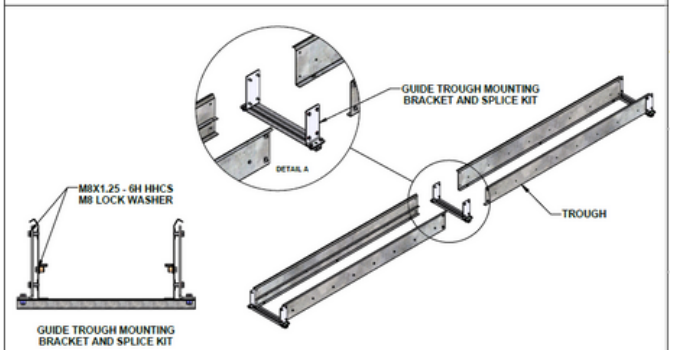
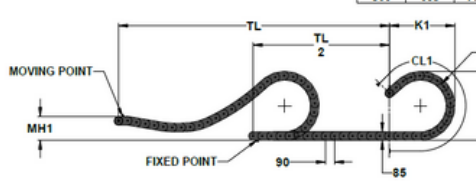
END FEED FIXED END



R	H	K	CL	MH
150	385	257	600	385
300	685	471	1200	685



R	H	K1	CL1	MH1
150	385	661	1368	270
300	685	1142	2611	270



ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED	PROCESS	ASSEMBLY	AS LISTED
DESIGNED BY: CC	DATE: 11/20/2022	REVISIONS: 1	1
DRAWN BY: CC	DATE: 11/20/2022	REVISIONS: 1	1
CHECKED BY: CC	DATE: 11/20/2022	REVISIONS: 1	1
APPROVED BY: CC	DATE: 11/20/2022	REVISIONS: 1	1
PROJECT: CP-3000 PKK 340-341	DESCRIPTION: CP-3000 PKK 340-341	SCALE: CP-3000 PKK 340-341	FILE: CP-3000 PKK 340-341
DESIGNER: CARL P. TROTSCH	DATE: 11/20/2022	REVISIONS: 1	1

***FOR OTHER STANDARD WIDTHS AND BEND RADII, PLEASE CONTACT US**

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CBU PROGRAM

HIGH FLEX PUR CABLES

FLEXIDRUM™ T 210

High speed continuously flexible PUR halogen-free control cable, DIN VDE 0,6/1 kV UL/CSA 600/1000 V



Construction:

Conductor: flexible red copper conductor Cl. 6, acc. to IEC 60228, DIN VDE 0208, special TPE compound

Insulation: special TPE compound

Colour cores: black cores with consecutive numbers acc. to EN 50334, grey/white from 3 cores

Stranding: in layers

Wrapping: non-woven tape over each layer

Outer sheath: grey (RAL 7003), PUR compound acc. to UL 1581

Resistance:

Self-extinguishing and flame retardant acc. to: DIN VDE 0482 part 200-5, EN 50265-2-1, IEC 60332-1-2, UL, VW-1, CSA FT1, FT2

Oil resistance: very good TMRU acc. to DIN VDE 0282 part 10, DIN VDE 0473 part 811-2-1, IEC EN 60811-2-1

Halogen free acc. to: DIN VDE 0482 part 267, EN 50265-2-1, IEC 60754-1

Technical data:

Nominal voltage: DIN VDE 0100 0,6/1 kV, UL/CSA: 600/1000 V

Test voltage: 3 kV acc. to DIN VDE 0281 part 2 + HD 21.2

Temperature range: DIN VDE: -50°C up to +90°C, UL/CSA: -40°C up to +90°C

Fixed laying: -40°C up to +90°C

Flexible installation: -40°C up to +90°C

Radiation resistance: 5 x 10⁶ cGy

Min. bending radius: 5 x d

Continuously flexible: 5 x d

Max speed (main application): 250 m/min

Features:

flexible at low temperatures

high abrasion resistance

mat surface outer sheath

good against acids, alkalines, solvents, hydraulic liquids etc.

UL AWM Style 21223 80°C 600/1000 V, CSA AWM 101 A91 80°C 600V FT1 FT2 CE

for SPEEDS and MINIMUM BENDING RADIUS see pages from 2 to 8 of catalogue

RHNS and CE approval


RoHS CE

Part no.	No. of cores x cross section x mm ²	Outer Ø diam. ± 0,15	Copper weight g/km	Cable weight approx. g/km	AWG (no. 7)
0411034001A20	3 G 0,5	5,4	14,4	38	20
0411034004A20	4 G 0,5	5,7	19,2	46	20
0411034005A20	5 G 0,5	6,3	24	55	20
0411034007A20	7 G 0,5	7,2	33,6	79	20
0411034012A20	12 G 0,5	8,5	57,6	119	20
0411034018A20	18 G 0,5	10,2	86,4	195	20
0411034025A20	25 G 0,5	12,3	120	270	20
0411034034A20	34 G 0,5	13,7	163,2	390	20
0411034052A20	50 G 0,5	16,3	240	540	20
0411034061A20	61 G 0,5	16,7	292,8	600	20
0411034100A19	2x 0,75	5,5	14,6	41	19
0411034020A19	4 G 0,75	6	21,6	56	19
0411034045A19	4 G 0,75	6,4	28,8	60	19
0411034005A19	5 G 0,75	7	36	75	19
0411034011A19	7 G 0,75	8	50,4	110	19
0411034012A19	10 G 0,75	10	86,4	195	19
0411034018A19	18 G 0,75	11,5	151,8	320	19
0411034025A19	25 G 0,75	14,2	180	390	19
0411034034A19	34 G 0,75	15,4	244,8	500	19
0411034050A19	50 G 0,75	18,7	360	540	19
0411034061A19	61 G 0,75	20,8	439,2	600	19

MULTICONDUCTOR POWER AND CONTROL CABLES

FLEXIDRUM™ T 100 UL

Continuously flexible single conductor, 0,6/1 kV, UL/CSA 1000 V



Construction:

Conductor: FLEXIBLE RED COPPER CONDUCTOR Cl. 6, ACC. TO IEC 60228 UL 758

Insulation: SPECIAL TPE COMPOUND

COLOUR CORES: BLACK

WRAPPING: NON-WOVEN TAPE

OUTER SHEATH: BLACK (RAL 9005), SPECIAL PUR COMPOUND

Resistance:

SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO: DIN VDE 0482 PART 200-5-1, EN 50265-2-1, IEC 60332-1-2, UL 181 VW-1/CSA FT1

OIL RESISTANCE ACC. TO: TMRU ACC. TO DIN VDE 0282 PART 10, EN 50265-2-1, IEC 60811-2-1

HALOGEN FREE ACC. TO: DIN VDE 0482 PART 267, EN 50265-2-1, IEC 60754-1

Technical data:

NOMINAL VOLTAGE: 0,6/1 0,6/1 kV, UL/CSA: 1000 V

TEST VOLTAGE: 4 kV EN 50269-1-3

TEMPERATURE RANGE: DIN VDE: -50°C UP TO +90°C, UL/CSA: -40°C UP TO +90°C

FIXED LAYING: -50°C UP TO +90°C

FLEXIBLE INSTALLATION: -40°C UP TO +90°C

RADIATION RESISTANCE: 5 x 10⁶ cGy

MIN. BENDING RADIUS: CONTINUOUSLY FLEXIBLE: 7,5 x d

MAX. PULLING FORCE: STATIC: 50 N/mm, DYNAMIC: 20 N/mm

MAX. SPEED (MAIN APPLICATION): 250 m/min

Features:

HIGHLY FLEXIBLE SINGLE CONDUCTOR FOR USE IN CABLE TRAYS

GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC.

HIGH ABRASION RESISTANCE

UV RESISTANT

AWM STYLE 1003 AWM 101 A91 80°C 1000V FT1 OR AWM STYLE 1004 AWM 101 A91 80°C 1000V FT1

CONDUCTOR RESISTANCE AT 20°C ACC. TO EN 50269-1-2

FOR SPEEDS AND MINIMUM BENDING RADIUS SEE PAGES FROM 2 TO 4 OF CATALOGUE

RHNS AND CE APPROVAL

RoHS CE

Part no.	No. of cores x cross section x mm ²	Outer Ø diam. ± 0,15	Copper weight g/km	Cable weight approx. g/km	AWG (no. 7)
04020FLD01A6	1x 1,5	5,5	34,8	42	16
04020FLD02A4	1x 2,5	6,5	57,6	68	14
04020FLD03A2	1x 4	7,3	115,2	85	12
04020FLD04A0	1x 6	8	172,8	104	10
04020FLD05A0	1x 10	9,8	288	179	8
04020FLD06A0	1x 16	10,8	453,6	245	6
04020FLD04A4	1x 2,5	12,7	240	351	4
04020FLD04A2	1x 35	60	336	459	2
04020FLD04A0	1x 50	63	480	540	1
04020FLD04A2	1x 70	73	672	854	20
04020FLD04A2	1x 95	78	912	1040	20
04020FLD04A4	1x 100	78	1008	1130	20
04020FLD04A2	1x 150	85	1440	1570	20 MCM
04020FLD04A2	1x 180	92	1728	1900	20 MCM
04020FLD04A2	1x 240	95	2304	2520	40 MCM
04020FLD04A2	1x 300	94,3	2880	3180	50 MCM

SINGLE CONDUCTOR POWER CABLES

FLEXIDRUM™ TD 200 C TP

Continuously flexible paired TPE/PUR data cable with colored cores and overall copper screen, max. 350 V



Construction:

Conductor: flexible red copper conductor Cl. 6, acc. to IEC 60228, DIN VDE 0208

Insulation: special TPE compound

Colour cores: acc. to DIN 47100

Stranding: cores twisted in pairs, pairs twisted in layers

Wrapping: non-woven tape over each layer

Screen: twisted copper braid

Wrapping: non-woven tape

Outer sheath: grey (RAL 7003), PUR compound, acc. to UL 1581

Resistance:

Oil resistance: very good TMRU acc. to DIN VDE 0282 part 10 + HD 22 10, DIN VDE 0473 part 811-2-1, IEC EN 60811-2-1

Halogen free acc. to: DIN VDE 0482 part 267, EN 50265-2-1, IEC 60754-1

Technical data:

Nominal voltage: DIN VDE: max. 300 V

Test voltage: 1,5 kV acc. to DIN VDE 0472 part 309, convolution: 1,2 kV

Temperature range: -50°C up to +90°C

Fixed laying: -40°C up to +90°C

Flexible installation: 5 x 10⁶ cGy

Min. bending radius: 7,5 x d

Max speed (main application): 250 m/min

Features:

late uncritical (subsequent moistening interfering substances)

good EMC characteristics

flexible at low temperatures

continuously flexible

high abrasion resistance

weather resistance

small outer diameter

mat surface outer sheath

travel > 10 m is possible

good against acids, alkalines, solvents, hydraulic liquids etc.

for SPEEDS and MINIMUM BENDING RADIUS see pages from 2 to 8 of catalogue

RHNS and CE approval

RoHS CE

Part no.	No. of cores x cross section x mm ²	Outer Ø diam. ± 0,15	Copper weight g/km	Cable weight approx. g/km	AWG (no. 7)
3030C0042M1	4x0,14	7,2	35,5	58	26
3030C0042A26	4x0,14	7,3	35,5	60	26

ENCODER CABLES

SPECIAL PROFINET 681

continuously flexible, type C

SPECIAL PROFINET 682

continuously flexible, type C, UL approval



Construction:

Conductor: flexible twisted copper conductors with fine wires

Insulation: halogen free compound

Colour cores: white/blue, white/yellow, white/green, white/brown

Stranding: cores twisted in pairs

Wrapping: non-woven tape

Screen: aluminum tape and twisted copper braid

Wrapping: non-woven tape

Outer sheath: green (similar RAL 6018) PUR compound

Resistance:

Halogen free acc. to: DIN VDE 0472 part 815 + IEC 60754-1

Oil resistance acc. to: DIN VDE 0282 part 10 + HD 22 10

Technical data:

Peak operating voltage: max. 300 V

Test voltage: convolution: 1,5 kV, convolution: 1,2 kV

Temperature range: -40 up to +90°C

Fixed laying: -40 up to +90°C

Flexible application: -30 up to +90°C

Min. bending radius: Fixed laying: 5 x d, Flexible installation: 10 x d

Continuously flexible: 10 x d

Max speed (main application): 250 m/min

Characteristic impedance: 100 ± 50, acc. to EN 50269-3-2 (CAT 5 acc. to EN 50173-1)

Features:

UL AWM 10403-2023 300V/90°C CE (SPECIAL PROFINET 682 UL continuously flexible) for SPEEDS see pages from 2 to 4 of catalogue

RHNS and CE approval

RoHS CE

Part no.	No. of cores x cross section x mm ²	Outer Ø diam. ± 0,15	Copper weight g/km	Cable weight approx. g/km	AWG (no. 7)
3030C0042M1	4x0,14	7,2	35,5	58	26
3030C0042A26	4x0,14	7,3	35,5	60	26

CAT5E & CAT6A CABLES

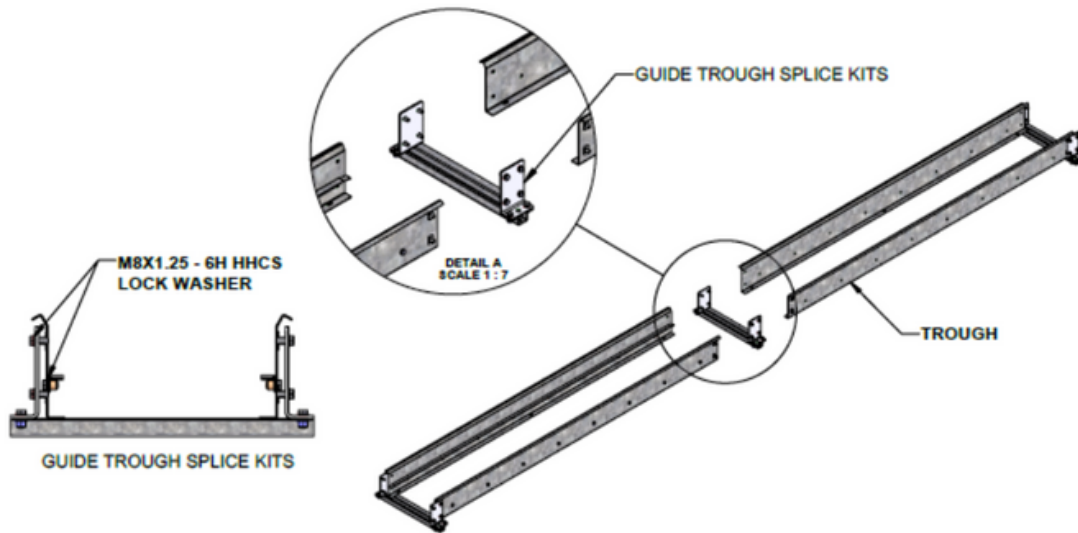
*FOR OTHER CABLE TYPES, PLEASE CONTACT US

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SALES@ENGINEERED-COMPONENTS.COM

CBU PROGRAM

GUIDE TROUGH SYSTEM



GALVANIZED OR GALVANNEAL STEEL MATERIAL STANDARD (STAINLESS STEEL ON REQUEST)

2 METER LONG SECTIONS STANDARD WITH 2 METER SUPPORT CENTERS

STEEL SLIDE PLATE FOR CENTER FED SYSTEMS

ONE SIZE FASTENER USED FOR ENTIRE SYSTEM (M8X1.25)

LASER MARKED PART NUMBERS ON ALL COMPONENTS

CBU PROGRAM

COMPLETE SYSTEMS



CHAINS COMPLETELY ASSEMBLED WITH ALL NECESSARY ACCESSORIES

CABLES INSTALLED IN THE CHAIN

CHAIN SYSTEM CRATED OR SPOOLED

GUIDE TROUGH KITTED AND CRATED

MORE SOLUTIONS



ENGINEERED COMPONENTS GROUP

SG30 Pre-Engineered Cable Chain Systems

HENNIG cableprotect

FOR SINGLE GIRDER CRANES WITH PACKAGED HOISTS



ENGINEERED COMPONENTS GROUP

DG50 & DG228 Pre-Engineered Cable Chain Systems

HENNIG cableprotect

FOR HOIST TROLLEYS ON DOUBLE GIRDER CRANES WITH BRIDGE MOUNTED CONTROLS

STEEL SYSTEMS

MARATHON