

CABLE SERIES 155240 (Unshielded) – 155241 (Shielded)

Signal & Control - UL Listed - TPE jacket



PLTC or CMG (105°C) or  AWM (105°C/300V)

1. CONSTRUCTION DATA

1.1 CONDUCTOR:

Bare copper strand; according to EN 13602 - ETP1; stranding according to DIN VDE 0295, EN60228 Class 6
Stranded lay compliant with UL 13/UL444/UL758.

1.2 WIRE STRUCTURE:

Nominal Section (mm ²)	AWG	Stranding (nbr of wires x wire diameter in mm)	Diameter of stranded core (mm)	Max Resistance IEC60334 (Ω/km)
0.34	22	42x0.10	0.80	65.3
0.50	21	28x0.15	0.95	42.3
0.75	19	42x0.15	1.20	27.7
1.00	18	52x0.15	1.32	22.4
1.50	16	81x0.15	1.50	14.4
2.50	14	133x0.15	2.10	8.7

1.3 INSULATION:

PVC compound; Max Insulation resistance 30.5 MΩxKm @15.6°C, nominal hardness 48 Shore D

1.4 INSULATION DIAMETER

Section (mm ²)	Nominal Ø (mm)	Nominal thickness (mm)
0.34	1.35	0.27
0.50	1.65	0.35
0.75	2.10	0.45
1.00	2.45	0.55
1.50	2.70	0.60
2.50	3.60	0.75

1.5 ASSEMBLY:

Cores stranded together in one or two layers (depending on the number of cores), where if necessary one or more fillers can be used for a better roundness.

1.6 SHIELD (only for 0.34mm², series 155241):

Braid type, tin copper wire; nominal optical Coverage 80%; tapes are used for protection of shield, PET foil under braid and Nonwovens TNT over braid.

1.7 JACKET:

Thermoplastic compound (TPE), nominal hardness 78 Shore A; Silicone, Pb,Cd,Hg & FCKW free; according to UL758.
For overall diameter, jacket and cores colors refer to Annex #1 & #2

REVISION HISTORY Rev.A 04/11/2015 RELEASED	ECR/ECN INFORMATION:	TITLE: SIGNAL & CONTROL – UL Listed	Page 1 of 9
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2. TECHNICAL DATA

2.1 ELECTRICAL:

Voltage rating	300 Vrms (AWM 2661)
Voltage test on core (thick. <0.4mm)	1500 Vrms x 1 min. (IEC60885-1)
Voltage test on core (thick. ≥0.4mm)	2000 Vrms x 1 min. (IEC60885-1)
Voltage test (core/screen if present)	2000 Vrms x 1min. (IEC60885-1)

2.2 TEMPERATURE:

Temperature range	-40 °C to +105°C according to UL13/UL444
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2.3 CHEMICAL:

Oil resistance	yes, according to UL758/UL2556/UL13
Free of FCKW, Silicone and Pb	yes
Halogen free	no

2.4 PHYSICAL:

Sun resistant	yes, according to UL13 (720h)
Max installation pulling force	50N
Bending radius (Fixed)	>5xOD
Bending radius (Flex)	>10xOD (free motion without periodic recurrence and forced guidance)
Bending radius (C-Track)	>15xOD – 5 Mio cycles @20°C- pending

2.5 FLAME:

UL Vertical Tray flame test	pass
UL FT-4	pass
IEC 60332-3A	pending

3. COMPLIANCE

Accordance to:	2006/95/CE; 2004/108/CE; 2011/65/CE (RoHS) - PLTC (UL13) – CMG (UL444) - Style 2661 (UL758) - CSA I/II - A/B
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4. PRINTING & PACKAGE

Printing text	Ink-jet type;
Package	available in different packaging sizes (refer to Annex #1& #2)

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Rev.A 04/11/2015 RELEASED

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Page

2 of 9

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1552400001 PS P1E A

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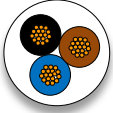
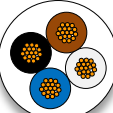
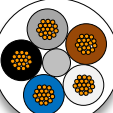
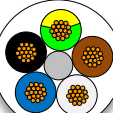
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A. Defendi

Approved by:

C. Lerose

ANNEX 1 (Unshielded)

mm ²	AWG	Number of conductors	Outer Diameter (mm)	Jacket color	Packaging size	Packaging composition	Standard order number	Sketch*
0,34	22	3	5,1	Black	S	3x200m	1552400001	 Brown-Blue-Black
				Black	M	1x800m	1552400002	
				Black	L	1x1500m	1552400003	
				Grey	S	3x200m	1552400004	
				Grey	M	1x800m	1552400005	
				Grey	L	1x1500m	1552400006	
				Yellow	S	3x200m	1552400007	
				Yellow	M	1x800m	1552400008	
				Yellow	L	1x1500m	1552400009	
				Orange	S	3x200m	1552400010	
				Orange	M	1x800m	1552400011	
				Orange	L	1x1500m	1552400012	
		4	5,4	Black	S	3x200m	1552400013	 Brown-White-Blue-Black
				Black	M	1x800m	1552400014	
				Black	L	1x1500m	1552400015	
				Grey	S	3x200m	1552400016	
				Grey	M	1x800m	1552400017	
				Grey	L	1x1500m	1552400018	
				Yellow	S	3x200m	1552400019	
				Yellow	M	1x800m	1552400020	
				Yellow	L	1x1500m	1552400021	
				Orange	S	3x200m	1552400022	
				Orange	M	1x800m	1552400023	
				Orange	L	1x1500m	1552400024	
		5	5,8	Black	S	3x100m	1552400025	 Brown-White-Blue-Black-Grey
				Black	M	1x500m	1552400026	
				Black	L	1x1000m	1552400027	
				Grey	S	3x100m	1552400028	
				Grey	M	1x500m	1552400029	
				Grey	L	1x1000m	1552400030	
				Yellow	S	3x100m	1552400031	
				Yellow	M	1x500m	1552400032	
				Yellow	L	1x1000m	1552400033	
				Orange	S	3x100m	1552400034	
				Orange	M	1x500m	1552400035	
				Orange	L	1x1000m	1552400036	
				Black	S	3x100m	1552400037	 Brown-White-Blue-Black-Yellow/Green
				Black	M	1x500m	1552400038	
				Black	L	1x1000m	1552400039	
				Grey	S	3x100m	1552400040	
				Grey	M	1x500m	1552400041	
				Grey	L	1x1000m	1552400042	
				Yellow	S	3x100m	1552400043	
				Yellow	M	1x500m	1552400044	
				Yellow	L	1x1000m	1552400045	
				Orange	S	3x100m	1552400046	
				Orange	M	1x500m	1552400047	
				Orange	L	1x1000m	1552400048	

*Colour Sequence

for packaging size L: colors clockwise exit drum (as in sketch)

for packaging size S and M: colors counterclockwise

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SIGNAL & CONTROL – UL Listed

Page

3 of 9

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1552400001 PS P1E A

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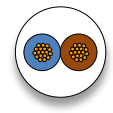
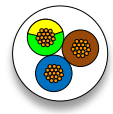
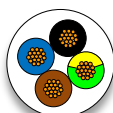
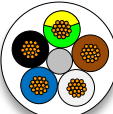
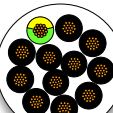
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Checked by:

A. Defendi

Approved by:

C. Leroese

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0,50	21	2	5,6	Black	S	3x100m	1552400049	 Blue-Brown
				Black	M	1x500m	1552400050	
				Black	L	1x1000m	1552400051	
				Grey	S	3x100m	1552400052	
				Grey	M	1x500m	1552400053	
				Grey	L	1x1000m	1552400054	
		3	6,0	Black	S	3x100m	1552400055	 Brown-Blue-Yellow/Green
				Black	M	1x500m	1552400056	
				Black	L	1x1000m	1552400057	
				Grey	S	3x100m	1552400058	
				Grey	M	1x500m	1552400059	
				Grey	L	1x1000m	1552400060	
				Orange	S	3x100m	1552400061	
				Orange	M	1x500m	1552400062	
				Orange	L	1x1000m	1552400063	
		4	6,4	Black	S	3x100m	1552400064	 Brown-Blue-Black-Yellow/Green
				Black	M	1x500m	1552400065	
				Black	L	1x1000m	1552400066	
				Grey	S	3x100m	1552400067	
				Grey	M	1x500m	1552400068	
				Grey	L	1x1000m	1552400069	
		5	6,9	Black	S	3x100m	1552400070	 Brown-White-Blue-Black-Yellow/Green
				Black	M	1x500m	1552400071	
				Black	L	1x1000m	1552400072	
				Grey	S	3x100m	1552400073	
				Grey	M	1x500m	1552400074	
				Grey	L	1x1000m	1552400075	
		12	9,0	Black	S	1x200m	1552400076	 Black numbered in White + Yellow/Green
				Black	M	1x500m	1552400077	
				Black	L	1x1000m	1552400078	
				Grey	S	1x200m	1552400079	
				Grey	M	1x500m	1552400080	
				Grey	L	1x1000m	1552400081	

*Colour Sequence

for packaging size L: colors clockwise exit drum (as in sketch)

for packaging size S and M; colors counterclockwise

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Page

4 of 9

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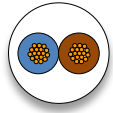
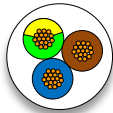
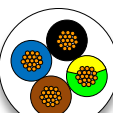
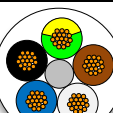
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mm ²	AWG	Number of conductors	Outer Diameter (mm)	Jacket color	Packaging size	Packaging composition	Standard order number	Sketch*
0,75	19	2	6,5	Black	S	3x100m	1552400082	 Blue-Brown
				Black	M	1x500m	1552400083	
				Black	L	1x1000m	1552400084	
				Grey	S	3x100m	1552400085	
				Grey	M	1x500m	1552400086	
				Grey	L	1x1000m	1552400087	
		3	7,0	Black	S	3x100m	1552400088	 Brown-Blue-Yellow/Green
				Black	M	1x500m	1552400089	
				Black	L	1x1000m	1552400090	
				Grey	S	3x100m	1552400091	
				Grey	M	1x500m	1552400092	
				Grey	L	1x1000m	1552400093	
		4	7,7	Black	S	3x100m	1552400094	 Brown-Blue-Black-Yellow/Green
				Black	M	1x500m	1552400095	
				Black	L	1x1000m	1552400096	
				Grey	S	3x100m	1552400097	
				Grey	M	1x500m	1552400098	
				Grey	L	1x1000m	1552400099	
		5	8,3	Black	S	1x200m	1552400100	 Brown-White-Blue-Black-Yellow/Green
				Black	M	1x500m	1552400101	
				Black	L	1x1000m	1552400102	
				Grey	S	1x200m	1552400103	
				Grey	M	1x500m	1552400104	
				Grey	L	1x1000m	1552400105	

*Colour Sequence

for packaging size L: colors clockwise exit drum (as in sketch)

for packaging size S and M; colors counterclockwise

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Page

5 of 9

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mm ²	AWG	Number of conductors	Outer Diameter (mm)	Jacket color	Packaging size	Packaging composition	Standard order number	Sketch*
1,0	18	2	7,5	Black	S	3x100m	1552400106	 Blue-Brown
				Black	M	1x500m	1552400107	
				Black	L	1x1000m	1552400108	
				Grey	S	3x100m	1552400109	
				Grey	M	1x500m	1552400110	
				Grey	L	1x1000m	1552400111	
		3	7,9	Black	S	3x100m	1552400112	 Brown-Blue-Yellow/Green
				Black	M	1x500m	1552400113	
				Black	L	1x1000m	1552400114	
				Grey	S	3x100m	1552400115	
				Grey	M	1x500m	1552400116	
				Grey	L	1x1000m	1552400117	
		4	8,6	Black	S	1x200m	1552400118	 Brown-Blue-Black-Yellow/Green
				Black	M	1x500m	1552400119	
				Black	L	1x1000m	1552400120	
				Grey	S	1x200m	1552400121	
				Grey	M	1x500m	1552400122	
				Grey	L	1x1000m	1552400123	
		5	9,3	Black	S	1x200m	1552400124	 Brown-White-Blue-Black-Yellow/Green
				Black	M	1x500m	1552400125	
				Black	L	1x1000m	1552400126	
				Grey	S	1x200m	1552400127	
				Grey	M	1x500m	1552400128	
				Grey	L	1x1000m	1552400129	
		7	11,0	Black	S	1x100m	1552400130	 Black numbered in White + Yellow/Green
				Black	M	1x500m	1552400131	
				Black	L	1x1000m	1552400132	
				Grey	S	1x100m	1552400133	
				Grey	M	1x500m	1552400134	
				Grey	L	1x1000m	1552400135	
		11	13,0	Black	S	1x100m	1552400136	 Black numbered in White + Yellow/Green
				Black	M	1x500m	1552400137	
				Black	L	1x1000m	1552400138	
				Grey	S	1x100m	1552400139	
				Grey	M	1x500m	1552400140	
				Grey	L	1x1000m	1552400141	
		12	13,0	Black	S	1x100m	1552400142	 Black numbered in White + Yellow/Green
				Black	M	1x500m	1552400143	
				Black	L	1x1000m	1552400144	
				Grey	S	1x100m	1552400145	
				Grey	M	1x500m	1552400146	
				Grey	L	1x1000m	1552400147	
		17	15,0	Black	S	1x100m	1552400148	 Black numbered in White + Yellow/Green
				Black	M	1x250m	1552400149	
				Black	L	1x500m	1552400150	
				Grey	S	1x100m	1552400151	
				Grey	M	1x250m	1552400152	
				Grey	L	1x500m	1552400153	
		25	18,0	Black	S	1x100m	1552400154	 Black numbered in White + Yellow/Green
				Black	M	1x250m	1552400155	
				Black	L	1x500m	1552400156	
				Grey	S	1x100m	1552400157	
				Grey	M	1x250m	1552400158	
				Grey	L	1x500m	1552400159	

*Colour Sequence

for packaging size L: colors clockwise exit drum (as in sketch)

for packaging size S and M; colors counterclockwise

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Page

6 of 9

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mm ²	AWG	Number of conductors	Outer Diameter (mm)	Jacket color	Packaging size	Packaging composition	Standard order number	Sketch*
1,5	16	2	8	Black	S	1x200m	1552400160	 Blue-Brown
				Black	M	1x500m	1552400161	
				Black	L	1x1000m	1552400162	
				Grey	S	1x200m	1552400163	
				Grey	M	1x500m	1552400164	
				Grey	L	1x1000m	1552400165	
		3	8,5	Black	S	1x200m	1552400166	 Brown-Blue-Yellow/Green
				Black	M	1x500m	1552400167	
				Black	L	1x1000m	1552400168	
				Grey	S	1x200m	1552400169	
				Grey	M	1x500m	1552400170	
				Grey	L	1x1000m	1552400171	
		4	9,3	Black	S	1x200m	1552400172	 Brown-White-Blue-Black
				Black	M	1x500m	1552400173	
				Black	L	1x1000m	1552400174	
				Grey	S	1x200m	1552400175	
				Grey	M	1x500m	1552400176	 Brown-Blue-Black-Yellow/Green
				Grey	L	1x1000m	1552400177	
				Black	S	1x200m	1552400178	
				Black	M	1x500m	1552400179	
				Black	L	1x1000m	1552400180	
				Grey	S	1x200m	1552400181	
				Grey	M	1x500m	1552400182	
				Grey	L	1x1000m	1552400183	
		5	10,0	Black	S	1x100m	1552400184	 Brown-White-Blue-Black-Yellow/Green
				Black	M	1x500m	1552400185	
				Black	L	1x1000m	1552400186	
				Grey	S	1x100m	1552400187	
				Grey	M	1x500m	1552400188	
				Grey	L	1x1000m	1552400189	
		7	11,8	Black	S	1x100m	1552400190	 Black numbered in White + Yellow/Green
				Black	M	1x500m	1552400191	
				Black	L	1x1000m	1552400192	
				Grey	S	1x100m	1552400193	
				Grey	M	1x500m	1552400194	
				Grey	L	1x1000m	1552400195	
		11	14,2	Black	S	1x100m	1552400196	 Black numbered in White + Yellow/Green
				Black	M	1x500m	1552400197	
				Black	L	1x1000m	1552400198	
				Grey	S	1x100m	1552400199	
				Grey	M	1x500m	1552400200	
				Grey	L	1x1000m	1552400201	
		12	14,2	Black	S	1x100m	1552400202	 Black numbered in White + Yellow/Green
				Black	M	1x500m	1552400203	
				Black	L	1x1000m	1552400204	
				Grey	S	1x100m	1552400205	
				Grey	M	1x500m	1552400206	
				Grey	L	1x1000m	1552400207	
		17	16,6	Black	S	1x100m	1552400208	 Black numbered in White + Yellow/Green
				Black	M	1x250m	1552400209	
				Black	L	1x500m	1552400210	
				Grey	S	1x100m	1552400211	
				Grey	M	1x250m	1552400212	
				Grey	L	1x500m	1552400213	
		25	20,0	Black	S	1x350m	1552400214	 Black numbered in White + Yellow/Green
				Grey	S	1x350m	1552400217	

*Colour Sequence: for packaging size L: colors clockwise exit drum (as in sketch); for packaging size S and M; colors counterclockwise

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7 of 9

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2,5	14	2	9,8	Black	S	1x200m	1552400220	 Blue-Brown
				Black	M	1x500m	1552400221	
				Black	L	1x1000m	1552400222	
				Grey	S	1x200m	1552400223	
				Grey	M	1x500m	1552400224	
				Grey	L	1x1000m	1552400225	
		3	10,5	Black	S	1x100m	1552400226	 Brown-Blue-Yellow/Green
				Black	M	1x500m	1552400227	
				Black	L	1x1000m	1552400228	
				Grey	S	1x100m	1552400229	
				Grey	M	1x500m	1552400230	
				Grey	L	1x1000m	1552400231	
		4	11,6	Black	S	1x100m	1552400232	 Brown-Blue-Black-Yellow/Green
				Black	M	1x500m	1552400233	
				Black	L	1x1000m	1552400234	
				Grey	S	1x100m	1552400235	
				Grey	M	1x500m	1552400236	
				Grey	L	1x1000m	1552400237	
		5	12,6	Black	S	1x100m	1552400238	 Brown-White-Blue-Black-Yellow/Green
				Black	M	1x500m	1552400239	
				Black	L	1x1000m	1552400240	
				Grey	S	1x100m	1552400241	
				Grey	M	1x500m	1552400242	
				Grey	L	1x1000m	1552400243	
		7	15,2	Black	S	1x100m	1552400244	 Black numbered in White + Yellow/Green
				Black	M	1x250m	1552400245	
				Black	L	1x500m	1552400246	
				Grey	S	1x100m	1552400247	
				Grey	M	1x250m	1552400248	
				Grey	L	1x500m	1552400249	
		11	18,4	Black	S	1x100m	1552400250	 Black numbered in White + Yellow/Green
				Black	M	1x250m	1552400251	
				Black	L	1x500m	1552400252	
				Grey	S	1x100m	1552400253	
				Grey	M	1x250m	1552400254	
				Grey	L	1x500m	1552400255	
		12	18,4	Black	S	1x100m	1552400256	 Black numbered in White + Yellow/Green
				Black	M	1x250m	1552400257	
				Black	L	1x500m	1552400258	
				Grey	S	1x100m	1552400259	
				Grey	M	1x250m	1552400260	
				Grey	L	1x500m	1552400261	
		17	21,4	Black	S	1x350m	1552400262	 Black numbered in White + Yellow/Green
				Grey	S	1x350m	1552400265	
		25	25,6	Black				 Black numbered in White + Yellow/Green
				Black	S	1x250m	1552400268	
				Black				
				Grey	S	1x250m	1552400271	

*Colour Sequence
for packaging size L: colors clockwise exit drum (as in sketch)
for packaging size S and M; colors counterclockwise

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M. Arrigoni

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SIGNAL & CONTROL – UL Listed

Page

8 of 9

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1552400001 PS P1E A

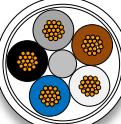
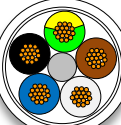
Checked by:

A. Defendi

Approved by:

C. Leroese

ANNEX 2 (SHIELDED)

mm ²	AWG	Number of conductors	Outer Diameter (mm)	Jacket color	Packaging size	Packaging composition	Standard order number	Sketch*
0,34	22	3	5,7	Black	S	3x100m	1552410001	 Brown-Blue-Black
				Black	M	1x500m	1552410002	
				Black	L	1x1000m	1552410003	
				Grey	S	3x100m	1552410004	
				Grey	M	1x500m	1552410005	
				Grey	L	1x1000m	1552410006	
				Yellow	S	3x100m	1552410007	
				Yellow	M	1x500m	1552410008	
				Yellow	L	1x1000m	1552410009	
				Orange	S	3x100m	1552410010	
				Orange	M	1x500m	1552410011	
				Orange	L	1x1000m	1552410012	
		4	6,0	Black	S	3x100m	1552410013	 Brown-White-Blue-Black
				Black	M	1x500m	1552410014	
				Black	L	1x1000m	1552410015	
				Grey	S	3x100m	1552410016	
				Grey	M	1x500m	1552410017	
				Grey	L	1x1000m	1552410018	
				Yellow	S	3x100m	1552410019	
				Yellow	M	1x500m	1552410020	
				Yellow	L	1x1000m	1552410021	
				Orange	S	3x100m	1552410022	
				Orange	M	1x500m	1552410023	
				Orange	L	1x1000m	1552410024	
		5	6,4	Black	S	3x100m	1552410025	 Brown-White-Blue-Black-Grey
				Black	M	1x500m	1552410026	
				Black	L	1x1000m	1552410027	
				Grey	S	3x100m	1552410028	
				Grey	M	1x500m	1552410029	
				Grey	L	1x1000m	1552410030	
				Yellow	S	3x100m	1552410031	
				Yellow	M	1x500m	1552410032	
				Yellow	L	1x1000m	1552410033	
				Orange	S	3x100m	1552410034	 Brown-White-Blue-Black-Yellow/Green
				Orange	M	1x500m	1552410035	
				Orange	L	1x1000m	1552410036	
				Black	S	3x100m	1552410037	
				Black	M	1x500m	1552410038	
				Black	L	1x1000m	1552410039	
				Grey	S	3x100m	1552410040	
				Grey	M	1x500m	1552410041	
				Grey	L	1x1000m	1552410042	
				Yellow	S	3x100m	1552410043	
				Yellow	M	1x500m	1552410044	
				Yellow	L	1x1000m	1552410045	
				Orange	S	3x100m	1552410046	
				Orange	M	1x500m	1552410047	
				Orange	L	1x1000m	1552410048	

*Colour Sequence

for packaging size L: colors clockwise exit drum (as in sketch)

for packaging size S and M; colors counterclockwise

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