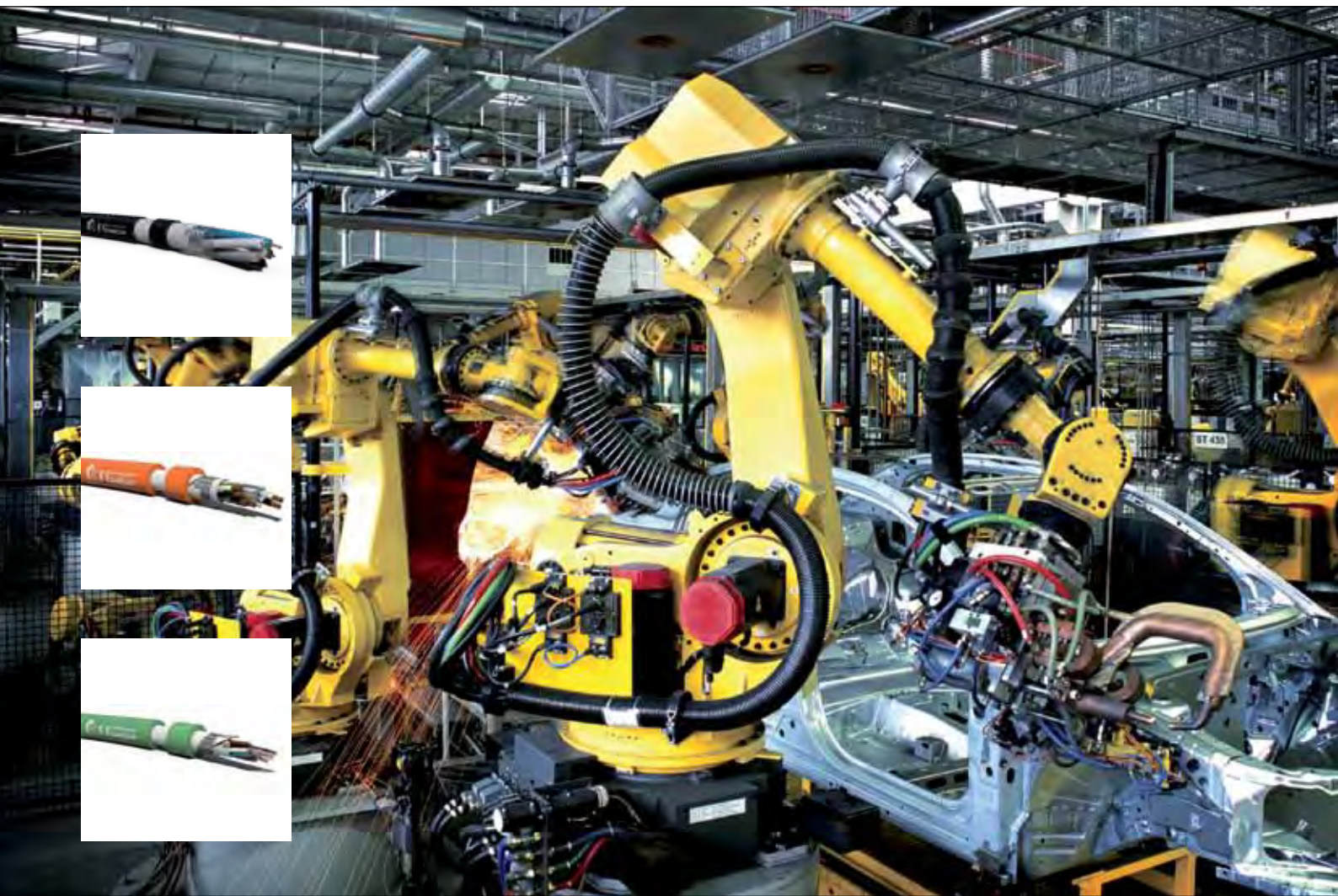


FLAMAR STANDARD CABLES > FOR INDUSTRIAL AUTOMATION



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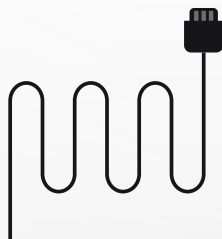
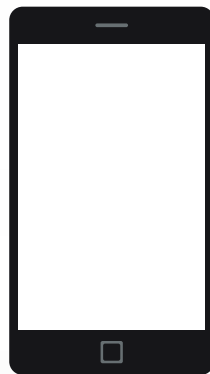


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Certifications / Conformities



Legend



Oil Resistant



Suitable for Drag Chain



Halogen-Free



Flame Resistant

A photograph of a factory floor featuring several yellow robotic arms and complex machinery. The scene is brightly lit, highlighting the metallic surfaces and the intricate structure of the equipment.

OUR PROVEN EXPERIENCE IN CABLE MANUFACTURING ASSURES EXCELLENT PERFORMANCE, QUALITY AND DURABILITY IN THE INDUSTRIAL SECTOR

Flamar was founded in 1975 and over the years has developed a significant know-how in the design and manufacturing of cables for Industrial Automation.

The company is equipped with state-of-the-art extrusion lines and back-torsion cabling machines which are essential to meet top quality expectations of key market players. The internal Reliability & Testing Laboratory performs mechanical, electrical, flame resistance, drag chain tests and validates new cable developments in compliance with many agency approvals.



Industrial Automation cables for machine builder application

Flamar, a Molex company since 2014, proposes a brand-new set of cables designed to cover the broadest range of applications for machine builders and system integrators:

- **Signal & Control**
to connect sensors, actuators, valves, control cabinets and distribution boxes
- **Servo Motor**
for power and encoder/resolver connection
- **Network**
for I/O modules and connection to PLC
- **Hybrid**
composite multicore cables whenever an extremely compact solution is required



Signal & Control

Series	Environment	Installation	Halogen Free	Temperature Rating °C (flexible installation)		Voltage Rating V	Bending Radius (flex. install. at 20°C)
155210	Standard	Flexible	No	+5°C	+80°C	300V	> 15xOD
155211	Standard	Flexible	No	+5°C	+80°C	300V	> 15xOD
155220	Severe	Drag Chain	No	-25°C	+80°C	600V	> 7,5xOD
155221	Severe	Drag Chain	No	-25°C	+80°C	600V	> 7,5xOD
155230	Harsh	Drag Chain	Yes	-40°C	+80°C	1000V	> 7,5xOD
155231	Harsh	Drag Chain	Yes	-40°C	+80°C	1000V	> 7,5xOD
155240	Severe	Drag Chain	No	-40°C	+105°C	300V	> 10xOD
155241	Severe	Drag Chain	No	-40°C	+105°C	300V	> 10xOD

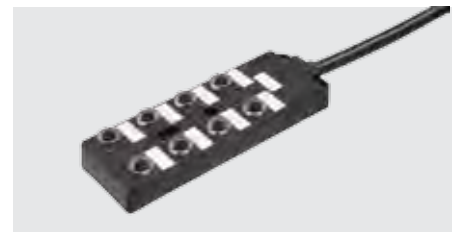
Typical Applications



Sensors



Actuators, valves,
control cabinets



Distribution Boxes

Jacket choice criteria

- PVC: The most cost-effective solution for flexible and static installation.
- WSOR: Weld-Slag and Oil-Resistant Cable, a single-cable solution designed to withstand the severe environments found in automotive and industrial factory floors. ECOLAB compatible (resistant to detergents, disinfectants and wash down water-jet used in Food & Beverage). Suitable for drag chain applications.
- PUR (Polyurethane): Ensures top mechanical performance, withstands harsh environments, abrasion resistant. Suitable for drag chain applications
- TPE: Cables defined according to the US/Canadian market requirements (UL «PLTC»). ECOLAB compatible (resistant to detergents, disinfectants and wash down water-jet used in Food & Beverage). Suitable for drag chain applications.



Flamar Cables for Signal & Control Applications

Jacket Material	Shielded	Approval	Flame Resistance	Oil & Lubricants Resistance	Abrasion Resistance	Page No.
PVC	No	UL AWM 2464 / CSA	Good	Limited	Limited	8
PVC	Yes	UL AWM 2464 / CSA	Good	Limited	Limited	18
WSOR	No	UL AWM 21215 / CSA	Good	Good	Medium	20
WSOR	Yes	UL AWM 21215 / CSA	Good	Good	Medium	30
PUR	No	UL AWM 21223 / CSA	Good	Excellent	Excellent	32
PUR	Yes	UL AWM 21223 / CSA	Good	Excellent	Excellent	42
TPE	No	UL Listed PLTC	Excellent	Good	Medium	44
TPE	Yes	UL Listed PLTC	Excellent	Good	Medium	52

Selecting the right cable for your application is very important to ensure a reliable, problem-free installation. Careful consideration of mechanical abrasion, fluid/chemical exposure, flexibility (C-track, torsion), temperature resistance and flame retardancy requirements is required to select the cable that will provide performance and reliability in service.



Flamar Signal & Control

155210 Sensor Cables, PVC Jacket

Flexible Installation, Unshielded, +5°C/+80°C, 300V

molex

Cables with PVC jacket, suitable for flexible installation in standard environments. Typically used for sensors (position, pressure, temperature, motion...) and optical switches in combination with M8 and M12 connectors.



Specifications

Application: Standard Environment
 Installation: Flexible
 Halogen Free: No
 Temp. rating (flexible installation):
 +5°C/+80°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 > 15xOD
 Insulation material: TPE
 Jacket material: PVC

Shielded: No
 Approval: UL AWM 2464 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Cost-effective solution for less demanding environments (limited exposure to oil and lubricants)

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging Size	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,25	24	3	4,5	Black	S	3x200m	155210-0001	
					M	1x800m	155210-0002	
					L	1x1500m	155210-0003	
				Grey	S	3x200m	155210-0004	
					M	1x800m	155210-0005	
					L	1x1500m	155210-0006	
				Yellow	S	3x200m	155210-0007	
					M	1x800m	155210-0008	
					L	1x1500m	155210-0009	
				Orange	S	3x200m	155210-0010	
					M	1x800m	155210-0011	
					L	1x1500m	155210-0012	
		4	4,8	Black	S	3x200m	155210-0013	
					M	1x800m	155210-0014	
					L	1x1500m	155210-0015	
				Grey	S	3x200m	155210-0016	
					M	1x800m	155210-0017	
					L	1x1500m	155210-0018	
				Yellow	S	3x200m	155210-0019	
					M	1x800m	155210-0020	
					L	1x1500m	155210-0021	
				Orange	S	3x200m	155210-0022	
					M	1x800m	155210-0023	
					L	1x1500m	155210-0024	
5	5,3	Black	S	3x200m	155210-0025			
			M	1x800m	155210-0026			
			L	1x1500m	155210-0027			
		Grey	S	3x200m	155210-0028			
			M	1x800m	155210-0029			
			L	1x1500m	155210-0030			
		Yellow	S	3x200m	155210-0031			
			M	1x800m	155210-0032			
			L	1x1500m	155210-0033			

Flamar Signal & Control

155210 Sensor Cables, PVC Jacket

Flexible Installation, Unshielded, +5°C/+80°C, 300V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging Size	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,25	24	8	6,4	Black	S	3x100m	155210-0034	
					M	1x500m	155210-0035	
					L	1x1000m	155210-0036	
				Grey	S	3x100m	155210-0037	
					M	1x500m	155210-0038	
					L	1x1000m	155210-0039	
		Yellow	S	3x100m	155210-0040			
			M	1x500m	155210-0041			
			L	1x1000m	155210-0042			
		12	6,9	Black	S	3x100m	155210-0043	
					M	1x500m	155210-0044	
					L	1x1000m	155210-0045	
	Grey			S	3x100m	155210-0046		
				M	1x500m	155210-0047		
				L	1x1000m	155210-0048		
	Yellow	S	3x100m	155210-0049				
		M	1x500m	155210-0050				
		L	1x1000m	155210-0051				
0,34	22	3	4,8	Black	S	3x200m	155210-0052	
					M	1x800m	155210-0053	
					L	1x1500m	155210-0054	
				Grey	S	3x200m	155210-0055	
					M	1x800m	155210-0056	
					L	1x1500m	155210-0057	
		Yellow	S	3x200m	155210-0058			
			M	1x800m	155210-0059			
			L	1x1500m	155210-0060			
		Orange	S	3x200m	155210-0061			
			M	1x800m	155210-0062			
			L	1x1500m	155210-0063			
	4	5,1	Black	S	3x200m	155210-0064		
				M	1x800m	155210-0065		
				L	1x1500m	155210-0066		
			Grey	S	3x200m	155210-0067		
				M	1x800m	155210-0068		
				L	1x1500m	155210-0069		
			Yellow	S	3x200m	155210-0070		
				M	1x800m	155210-0071		
				L	1x1500m	155210-0072		
			Orange	S	3x200m	155210-0073		
				M	1x800m	155210-0074		
				L	1x1500m	155210-0075		

Flamar Signal & Control

155210 Sensor Cables, PVC Jacket

Flexible Installation, Unshielded, +5°C/+80°C, 300V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging Size	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,34	22	5	5,5	Black	S	3x200m	155210-0076	
					M	1x800m	155210-0077	
					L	1x1500m	155210-0078	
				Grey	S	3x200m	155210-0079	
					M	1x800m	155210-0080	
					L	1x1500m	155210-0081	
				Yellow	S	3x200m	155210-0082	
					M	1x800m	155210-0083	
					L	1x1500m	155210-0084	
				Orange	S	3x200m	155210-0085	
		M	1x800m		155210-0086			
		L	1x1500m		155210-0087			
		5	5,5	Black	S	3x200m	155210-0088	
					M	1x800m	155210-0089	
					L	1x1500m	155210-0090	
				Grey	S	3x200m	155210-0091	
					M	1x800m	155210-0092	
					L	1x1500m	155210-0093	
				Yellow	S	3x200m	155210-0094	
					M	1x800m	155210-0095	
L	1x1500m				155210-0096			
Orange	S			3x200m	155210-0097			
	M	1x800m	155210-0098					
	L	1x1500m	155210-0099					

Related Products

Field Attachable Connectors



120091 – Brad Nano-Change (M8)
Field Attachable Connectors



120071 – Brad Micro-Change (M12)
Field Attachable Connector



120085 – Brad Ultra-Lock (M12)
Field Attachable Connectors

Overmolded Connectors



120027, 120028, 120086, 120087 –
Brad Nano-Change (M8)
Single-Ended and Double Ended Cordsets



120006 – Brad Micro-Change (M12)
Single-Ended Cordsets

120009 – Brad Micro-Change (M12)
Cordsets with Knurled Hexnuts



120065, 120066 – Brad Micro-Push (M12)
Single-Ended and Double Ended Cordsets

Flamar Signal & Control

155210 Control Cables, PVC Jacket

Flexible Installation, Unshielded, +5°C/+80°C, 300V

molex

Cables with PVC jacket, suitable for flexible installation in standard environments. The right choice for actuators (valves, slides, cylinders...) and control cabinets in combination with DIN, M16, M23 or heavy duty connectors.



Specifications

Application: Standard environment
 Installation: Flexible
 Halogen Free: No
 Temp. rating (flexible installation):
 +5°C/+80°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 > 15xOD
 Insulation material: TPE
 Jacket material: PVC

Shielded: No
 Approval: UL AWM 2464 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Cost-effective solution for less demanding environments (limited exposure to oil and lubricants)

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,5	21	2	5,2	Black	S	3x200m	155210-0100	
					M	1x800m	155210-0101	
					L	1x1500m	155210-0102	
				Grey	S	3x200m	155210-0103	
					M	1x800m	155210-0104	
					L	1x1500m	155210-0105	
		3	5,6	Black	S	3x100m	155210-0106	
					M	1x500m	155210-0107	
					L	1x1000m	155210-0108	
				Grey	S	3x100m	155210-0109	
					M	1x500m	155210-0110	
					L	1x1000m	155210-0111	
		4	5,9	Orange	S	3x100m	155210-0112	
					M	1x500m	155210-0113	
					L	1x1000m	155210-0114	
				Black	S	3x100m	155210-0115	
					M	1x500m	155210-0116	
					L	1x1000m	155210-0117	
		5	6,2	Grey	S	3x100m	155210-0118	
					M	1x500m	155210-0119	
					L	1x1000m	155210-0120	
				Black	S	3x100m	155210-0121	
					M	1x500m	155210-0122	
					L	1x1000m	155210-0123	
12	8,7	Black	S	3x100m	155210-0124			
			M	1x500m	155210-0125			
			L	1x1000m	155210-0126			
		Grey	S	1x200m	155210-0127			
			M	1x500m	155210-0128			
			L	1x1000m	155210-0129			
12	8,7	Grey	S	1x200m	155210-0130			
			M	1x500m	155210-0131			
			L	1x1000m	155210-0132			

Flamar Signal & Control

155210 Control Cables, PVC Jacket

Flexible Installation, Unshielded, +5°C/+80°C, 300V

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Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,75	19	2	6,0	Black	S	3x100m	155210-0133	
					M	1x500m	155210-0134	
					L	1x1000m	155210-0135	
				Grey	S	3x100m	155210-0136	
					M	1x500m	155210-0137	
					L	1x1000m	155210-0138	
		3	6,4	Black	S	3x100m	155210-0139	
					M	1x500m	155210-0140	
					L	1x1000m	155210-0141	
				Grey	S	3x100m	155210-0142	
					M	1x500m	155210-0143	
					L	1x1000m	155210-0144	
		4	7,0	Black	S	3x100m	155210-0145	
					M	1x500m	155210-0146	
					L	1x1000m	155210-0147	
				Grey	S	3x100m	155210-0148	
					M	1x500m	155210-0149	
					L	1x1000m	155210-0150	
		5	7,5	Black	S	3x100m	155210-0151	
					M	1x500m	155210-0152	
					L	1x1000m	155210-0153	
				Grey	S	3x100m	155210-0154	
					M	1x500m	155210-0155	
					L	1x1000m	155210-0156	
1,00	18	2	6,7	Black	S	3x100m	155210-0157	
					M	1x500m	155210-0158	
					L	1x1000m	155210-0159	
				Grey	S	3x100m	155210-0160	
					M	1x500m	155210-0161	
					L	1x1000m	155210-0162	
		3	7,1	Black	S	3x100m	155210-0163	
					M	1x500m	155210-0164	
					L	1x1000m	155210-0165	
				Grey	S	3x100m	155210-0166	
					M	1x500m	155210-0167	
					L	1x1000m	155210-0168	
		4	7,6	Black	S	3x100m	155210-0169	
					M	1x500m	155210-0170	
					L	1x1000m	155210-0171	
				Grey	S	3x100m	155210-0172	
					M	1x500m	155210-0173	
					L	1x1000m	155210-0174	

Flamar Signal & Control

155210 Control Cables, PVC Jacket

Flexible Installation, Unshielded, +5°C/+80°C, 300V

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Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
1,0	18	5	8,3	Black	S	1x200m	155210-0175	
					M	1x500m	155210-0176	
					L	1x1000m	155210-0177	
				Grey	S	1x200m	155210-0178	
					M	1x500m	155210-0179	
					L	1x1000m	155210-0180	
		7	9,6	Black	S	1x200m	155210-0181	
					M	1x500m	155210-0182	
					L	1x1000m	155210-0183	
				Grey	S	1x200m	155210-0184	
					M	1x500m	155210-0185	
					L	1x1000m	155210-0186	
		11	11,5	Black	S	1x100m	155210-0187	
					M	1x500m	155210-0188	
					L	1x1000m	155210-0189	
				Grey	S	1x100m	155210-0190	
					M	1x500m	155210-0191	
					L	1x1000m	155210-0192	
		12	11,5	Black	S	1x100m	155210-0193	
					M	1x500m	155210-0194	
					L	1x1000m	155210-0195	
				Grey	S	1x100m	155210-0196	
					M	1x500m	155210-0197	
					L	1x1000m	155210-0198	
17	13,4	Black	S	1x100m	155210-0199			
			M	1x500m	155210-0200			
			L	1x1000m	155210-0201			
		Grey	S	1x100m	155210-0202			
			M	1x500m	155210-0203			
			L	1x1000m	155210-0204			
25	16,0	Black	S	1x100m	155210-0205			
			M	1x250m	155210-0206			
			L	1x500m	155210-0207			
		Grey	S	1x100m	155210-0208			
			M	1x250m	155210-0209			
			L	1x500m	155210-0210			

Flamar Signal & Control

155210 Control Cables, PVC Jacket

Flexible Installation, Unshielded, +5°C/+80°C, 300V

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Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
1,5	16	2	7,1	Black	S	3x100m	155210-0211	
					M	1x500m	155210-0212	
					L	1x1000m	155210-0213	
				Grey	S	3x100m	155210-0214	
					M	1x500m	155210-0215	
					L	1x1000m	155210-0216	
		3	7,3	Black	S	3x100m	155210-0217	
					M	1x500m	155210-0218	
					L	1x1000m	155210-0219	
				Grey	S	3x100m	155210-0220	
					M	1x500m	155210-0221	
					L	1x1000m	155210-0222	
		4	7,9	Black	S	3x100m	155210-0223	
					M	1x500m	155210-0224	
					L	1x1000m	155210-0225	
				Grey	S	3x100m	155210-0226	
					M	1x500m	155210-0227	
					L	1x1000m	155210-0228	
		4	7,9	Black	S	3x100m	155210-0229	
					M	1x500m	155210-0230	
					L	1x1000m	155210-0231	
				Grey	S	3x100m	155210-0232	
					M	1x500m	155210-0233	
					L	1x1000m	155210-0234	
5	8,6	Black	S	1x200m	155210-0235			
			M	1x500m	155210-0236			
			L	1x1000m	155210-0237			
		Grey	S	1x200m	155210-0238			
			M	1x500m	155210-0239			
			L	1x1000m	155210-0240			
7	10,5	Black	S	1x100m	155210-0241			
			M	1x500m	155210-0242			
			L	1x1000m	155210-0243			
		Grey	S	1x100m	155210-0244			
			M	1x500m	155210-0245			
			L	1x1000m	155210-0246			
11	12,7	Black	S	1x100m	155210-0247			
			M	1x500m	155210-0248			
			L	1x1000m	155210-0249			
		Grey	S	1x100m	155210-0250			
			M	1x500m	155210-0251			
			L	1x1000m	155210-0252			
12	12,7	Black	S	1x100m	155210-0253			
			M	1x500m	155210-0254			
			L	1x1000m	155210-0255			
		Grey	S	1x100m	155210-0256			
			M	1x500m	155210-0257			
			L	1x1000m	155210-0258			

Flamar Signal & Control

155210 Control Cables, PVC Jacket

Flexible Installation, Unshielded, +5°C/+80°C, 300V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch							
mm ²	AWG														
1,5	16	17	14,7	Black	S	1x100m	155210-0259								
					M	1x500m	155210-0260								
					L	1x1000m	155210-0261								
				Grey	S	1x100m	155210-0262								
					M	1x500m	155210-0263								
					L	1x1000m	155210-0264								
	25	17,7	25	17,7	Black	S	1x100m	155210-0265							
						M	1x250m	155210-0266							
						L	1x500m	155210-0267							
					Grey	S	1x100m	155210-0268							
						M	1x250m	155210-0269							
						L	1x500m	155210-0270							
2,5	14	2	8,8	Black	S	1x200m	155210-0271								
					M	1x500m	155210-0272								
					L	1x1000m	155210-0273								
				Grey	S	1x200m	155210-0274								
					M	1x500m	155210-0275								
					L	1x1000m	155210-0276								
		3	9,3	3	9,3	Black	S	1x200m	155210-0277						
							M	1x500m	155210-0278						
							L	1x1000m	155210-0279						
						Grey	S	1x200m	155210-0280						
							M	1x500m	155210-0281						
							L	1x1000m	155210-0282						
	4	10,1	4	10,1	Black	S	1x100m	155210-0283							
						M	1x500m	155210-0284							
						L	1x1000m	155210-0285							
						S	1x100m	155210-0286							
					Grey	M	1x500m	155210-0287							
						L	1x1000m	155210-0288							
						5	11,3	5		11,3	Black	S	1x100m	155210-0289	
												M	1x500m	155210-0290	
	L	1x1000m	155210-0291												
	Grey	S	1x100m	155210-0292											
		M	1x500m	155210-0293											
		L	1x1000m	155210-0294											

Flamar Signal & Control

155210 Control Cables, PVC Jacket

Flexible Installation, Unshielded, +5°C/+80°C, 300V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
2,5	14	7	13,3	Black	S	1x100m	155210-0295	
					M	1x500m	155210-0296	
					L	1x1000m	155210-0297	
				Grey	S	1x100m	155210-0298	
					M	1x500m	155210-0299	
					L	1x1000m	155210-0300	
		11	15,7	Black	S	1x100m	155210-0301	
					M	1x250m	155210-0302	
					L	1x500m	155210-0303	
				Grey	S	1x100m	155210-0304	
					M	1x250m	155210-0305	
					L	1x500m	155210-0306	
		12	15,9	Black	S	1x100m	155210-0307	
					M	1x250m	155210-0308	
					L	1x500m	155210-0309	
				Grey	S	1x100m	155210-0310	
					M	1x250m	155210-0311	
					L	1x500m	155210-0312	
		17	18,5	Black	S	1x100m	155210-0313	
					M	1x250m	155210-0314	
L	1x500m				155210-0315			
Grey	S			1x100m	155210-0316			
	M			1x250m	155210-0317			
	L			1x500m	155210-0318			
25	22,3	Black	S	1x350m	155210-0319			
			Grey	S	1x350m		155210-0322	

Related Products

Field Attachable Connectors



121201, 121207 – Brad mPm DIN Valve Connectors, Form A, External Thread

121202, 121208 – Brad mPm DIN Valve Connector, Form B - Industrial, External Thread

121205, 121211 – Brad mPm DIN Valve Connector, Form C - Industrial, External Thread



120071 – Brad Micro-Change (M12) Field Attachable Connectors

Field Attachable Connectors



120085 – Brad Ultra-Lock (M12) Field Attachable Connectors

93601 - GWconnect Heavy Duty Connectors

Overmolded Connectors



120094 – Brad M23 Single-Ended Cordsets

Flamar Signal & Control

155210 Distribution Boxes, PVC Jacket

Flexible Installation, Unshielded, +5°C/+80°C, 300V

molex

Cables with PVC jacket, suitable for flexible installation in standard environments. Select this cable for distribution boxes ("MPIS") and safety barriers in combination with M23 signal connectors.



Specifications

Application: Standard environment
 Installation: Flexible
 Halogen Free: No
 Temp. rating (flexible installation): +5°C/+80°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C): > 15xOD
 Insulation material: TPE
 Jacket material: PVC

Shielded: No
 Approval: UL AWM 2464 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance: Good (VW1/FT1 & IEC60332-1)
 Key factor: Cost-effective solution for less demanding environments (limited exposure to oil and lubricants)

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
3x0,75 + 4x0,34	3x AWG 19 + 4x AWG 22	7 (3+4)	7,8	Black	S	3x100m	155210-9001	
					M	1x500m	155210-9002	
					L	1x1000m	155210-9003	
				Grey	S	3x100m	155210-9004	
					M	1x500m	155210-9005	
					L	1x1000m	155210-9006	
3x0,75 + 6x0,34	3x AWG 19 + 6x AWG 22	9 (3+6)	8,5	Black	S	1x200m	155210-9007	
					M	1x500m	155210-9008	
					L	1x1000m	155210-9009	
				Grey	S	1x200m	155210-9010	
					M	1x500m	155210-9011	
					L	1x1000m	155210-9012	
3x0,75 + 8x0,34	3x AWG 19 + 8x AWG 22	11 (3+8)	8,5	Black	S	1x200m	155210-9013	
					M	1x500m	155210-9014	
					L	1x1000m	155210-9015	
				Grey	S	1x200m	155210-9016	
					M	1x500m	155210-9017	
					L	1x1000m	155210-9018	
3x0,75 + 16x0,34	3x AWG 19 + 16x AWG 22	19 (3+16)	10,2	Black	S	1x100m	155210-9019	
					M	1x500m	155210-9020	
					L	1x1000m	155210-9021	
				Grey	S	1x100m	155210-9022	
					M	1x500m	155210-9023	
					L	1x1000m	155210-9024	

Related Products

Field Attachable Connectors



120230 – Brad M23 Signal Connectors
120233 – Brad M23 Power Connectors

Overmolded Connectors



120094 – Brad M23
 Single-Ended Cordsets

Flamar Signal & Control

155211 Sensor Cables, PVC Jacket

Flexible Installation, Shielded, +5°C/+80°C, 300V

molex

Cables with PVC jacket, suitable for flexible installation in standard environments. Shielded cable for sensors (position, pressure, temperature, motion...) and optical switches in combination with M8 and M12 connectors.



Specifications

Application: Standard environment
 Installation: Flexible
 Halogen Free: No
 Temp. rating (flexible installation):
 +5°C/+80°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 > 15xOD
 Insulation material: TPE
 Jacket material: PVC

Shielded: Yes
 Approval: UL AWM 2464 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Cost-effective solution for less demanding environments (limited exposure to oil and lubricants)

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,34	22	3	5,4	Black	S	3x200m	155211-0001	
					M	1x800m	155211-0002	
					L	1x1500m	155211-0003	
				Grey	S	3x200m	155211-0004	
					M	1x800m	155211-0005	
					L	1x1500m	155211-0006	
				Yellow	S	3x200m	155211-0007	
					M	1x800m	155211-0008	
					L	1x1500m	155211-0009	
				Orange	S	3x200m	155211-0010	
					M	1x800m	155211-0011	
					L	1x1500m	155211-0012	
0,34	22	4	5,7	Black	S	3x100m	155211-0013	
					M	1x500m	155211-0014	
					L	1x1000m	155211-0015	
				Grey	S	3x100m	155211-0016	
					M	1x500m	155211-0017	
					L	1x1000m	155211-0018	
				Yellow	S	3x100m	155211-0019	
					M	1x500m	155211-0020	
					L	1x1000m	155211-0021	
				Orange	S	3x100m	155211-0022	
					M	1x500m	155211-0023	
					L	1x1000m	155211-0024	
0,34	22	5	6,1	Black	S	3x100m	155211-0025	
					M	1x500m	155211-0026	
					L	1x1000m	155211-0027	
				Grey	S	3x100m	155211-0028	
					M	1x500m	155211-0029	
					L	1x1000m	155211-0030	
				Yellow	S	3x100m	155211-0031	
					M	1x500m	155211-0032	
					L	1x1000m	155211-0033	
				Orange	S	3x100m	155211-0034	
					M	1x500m	155211-0035	
					L	1x1000m	155211-0036	

Flamar Signal & Control

155211 Sensor Cables, PVC Jacket

Flexible Installation, Shielded, +5°C/+80°C, 300V




molex






Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,34	22	5	6,1	Black	S	3x100m	155211-0037	
					M	1x500m	155211-0038	
					L	1x1000m	155211-0039	
				Grey	S	3x100m	155211-0040	
					M	1x500m	155211-0041	
					L	1x1000m	155211-0042	
				Yellow	S	3x100m	155211-0043	
					M	1x500m	155211-0044	
					L	1x1000m	155211-0045	
				Orange	S	3x100m	155211-0046	
					M	1x500m	155211-0047	
					L	1x1000m	155211-0048	

Related Products

Field Attachable Connectors

- 
120091 – Brad Nano-Change (M8)
Field Attachable Connectors
- 
120071 – Brad Micro-Change (M12)
Field Attachable Connectors
- 
120085 – Brad Ultra-Lock (M12)
Field Attachable Connectors

Overmolded Connectors

- 
120027, 120028, 120086, 120087 –
Brad Nano-Change (M8)
Single-Ended and Double Ended Cordsets
- 
120006, 120009 – Brad Micro-Change (M12)
Single-Ended and Double Ended Cordsets
- 
120065, 120066 – Brad Micro-Push (M12) Single-Ended and
Double Ended Cordsets

Flamar Signal & Control

155220 Sensor Cables, WSOR Jacket

Drag Chain Installation, Unshielded, -25°C/+80°C, 600V

molex

Cables with Weld-Slag and Oil-Resistant "WSOR" jacket cover the broadest range of industrial applications, allowing the reduction of inventory costs. Suitable for drag chain applications. Typically used for sensors (position, pressure, temperature, motion...) and optical switches in combination with M8 and M12 connectors.



Specifications

Application: Severe environment
 Installation: Drag Chain
 Halogen Free: No
 Temp. rating (flexible installation):
 -25°C/+80°C
 Voltage rating: 600V
 Bending radius (flex. install. at 20°C):
 > 7,5xOD
 Insulation material: TPE
 Jacket material: WSOR
 Shielded: No

Approval: UL AWM 21215 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Weld-Slag and Oil-Resistant. A single cable solution for automotive lines and industrial applications. ECOLAB compatible (for Food & Beverage environments).

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch	
mm ²	AWG								
0,25	24	3	4,5	Black	S	3x200m	155220-0001		
					M	1x800m	155220-0002		
					L	1x1500m	155220-0003		
				Grey	S	3x200m	155220-0004		
					M	1x800m	155220-0005		
					L	1x1500m	155220-0006		
				Yellow	S	3x200m	155220-0007		
					M	1x800m	155220-0008		
					L	1x1500m	155220-0009		
				Orange	S	3x200m	155220-0010		
					M	1x800m	155220-0011		
					L	1x1500m	155220-0012		
		4	4,8	Black	S	3x200m	155220-0013		
					M	1x800m	155220-0014		
					L	1x1500m	155220-0015		
					Grey	S	3x200m		155220-0016
						M	1x800m		155220-0017
						L	1x1500m		155220-0018
				Yellow	S	3x200m	155220-0019		
					M	1x800m	155220-0020		
					L	1x1500m	155220-0021		
				Orange	S	3x200m	155220-0022		
					M	1x800m	155220-0023		
					L	1x1500m	155220-0024		
5	5,3	Black	S	3x200m	155220-0025				
			M	1x800m	155220-0026				
			L	1x1500m	155220-0027				
		Grey	S	3x200m	155220-0028				
			M	1x800m	155220-0029				
			L	1x1500m	155220-0030				
		Yellow	S	3x200m	155220-0031				
			M	1x800m	155220-0032				
			L	1x1500m	155220-0033				

Flamar Signal & Control

155220 Sensor Cables, WSOR Jacket

Drag Chain Installation, Unshielded, -25°C/+80°C, 600V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,25	24	8	6,4	Black	S	3x100m	155220-0034	
					M	1x500m	155220-0035	
					L	1x1000m	155220-0036	
				Grey	S	3x100m	155220-0037	
					M	1x500m	155220-0038	
					L	1x1000m	155220-0039	
				Yellow	S	3x100m	155220-0040	
					M	1x500m	155220-0041	
					L	1x1000m	155220-0042	
		12	6,9	Black	S	3x100m	155220-0043	
					M	1x500m	155220-0044	
					L	1x1000m	155220-0045	
				Grey	S	3x100m	155220-0046	
					M	1x500m	155220-0047	
					L	1x1000m	155220-0048	
				Yellow	S	3x100m	155220-0049	
					M	1x500m	155220-0050	
					L	1x1000m	155220-0051	
0,34	22	3	4,8	Black	S	3x200m	155220-0052	
					M	1x800m	155220-0053	
					L	1x1500m	155220-0054	
				Grey	S	3x200m	155220-0055	
					M	1x800m	155220-0056	
					L	1x1500m	155220-0057	
				Yellow	S	3x200m	155220-0058	
					M	1x800m	155220-0059	
					L	1x1500m	155220-0060	
		Orange	S	3x200m	155220-0061			
			M	1x800m	155220-0062			
			L	1x1500m	155220-0063			
		4	5,1	Black	S	3x200m	155220-0064	
					M	1x800m	155220-0065	
					L	1x1500m	155220-0066	
				Grey	S	3x200m	155220-0067	
					M	1x800m	155220-0068	
					L	1x1500m	155220-0069	
Yellow	S			3x200m	155220-0070			
	M			1x800m	155220-0071			
	L			1x1500m	155220-0072			
Orange	S	3x200m	155220-0073					
	M	1x800m	155220-0074					
	L	1x1500m	155220-0075					

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155220 Sensor Cables, WSOR Jacket

Drag Chain Installation, Unshielded, -25°C/+80°C, 600V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch	
mm ²	AWG								
0,34	22	5	5,5	Black	S	3x200m	155220-0076		
					M	1x800m	155220-0077		
					L	1x1500m	155220-0078		
				Grey	S	3x200m	155220-0079		
					M	1x800m	155220-0080		
					L	1x1500m	155220-0081		
				Yellow	S	3x200m	155220-0082		
					M	1x800m	155220-0083		
					L	1x1500m	155220-0084		
				Orange	S	3x200m	155220-0085		
					M	1x800m	155220-0086		
					L	1x1500m	155220-0087		
				Black	S	3x200m	155220-0088		
					M	1x800m	155220-0089		
					L	1x1500m	155220-0090		
					Grey	S	3x200m		155220-0091
						M	1x800m		155220-0092
						L	1x1500m		155220-0093
					Yellow	S	3x200m		155220-0094
						M	1x800m		155220-0095
						L	1x1500m		155220-0096
				Orange	S	3x200m	155220-0097		
					M	1x800m	155220-0098		
					L	1x1500m	155220-0099		

Related Products

Field Attachable Connectors



120091 – Brad Nano-Change (M8)
Field Attachable Connectors



120071 – Brad Micro-Change (M12)
Field Attachable Connectors



120085 – Brad Ultra-Lock (M12)
Field Attachable Connectors

Overmolded Connectors



120027, 120028, 120086, 120087 –
Brad Nano-Change (M8)
Single-Ended and Double Ended Cordsets



120006 – Brad Micro-Change (M12)
Single-Ended and Double Ended Cordsets

120009 – Brad Micro-Change
M12 Cordsets with Knurled Hexnuts



120065, 120066 – Brad Micro-Push (M12) Single-
Ended and Double Ended Cordsets

Flamar Signal & Control

155220 Control Cables, WSOR Jacket

Drag Chain Installation, Unshielded, -25°C/+80°C, 600V

molex

Cables with Weld-Slag and Oil-Resistant "WSOR" jacket cover the broadest range of industrial applications, allowing the reduction of inventory costs. Suitable for drag chain applications. The right choice for actuators (valves, slides, cylinders...) and control cabinets in combination with DIN, M16, M23 or heavy duty connectors.



Specifications

Application: Severe environment
 Installation: Drag Chain
 Halogen Free: No
 Temp. rating (flexible installation):
 -25°C/+80°C
 Voltage rating: 600V
 Bending radius (flex. install. at 20°C):
 > 7,5xOD
 Insulation material: TPE
 Jacket material: WSOR
 Shielded: No

Approval: UL AWM 21215 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Weld-Slag and Oil-Resistant. A single cable solution for automotive lines and industrial applications. ECOLAB compatible (for Food & Beverage environments).

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm²	AWG							
0,5	21	2	5,2	Black	S	3x200m	155220-0100	
					M	1x800m	155220-0101	
					L	1x1500m	155220-0102	
				Grey	S	3x200m	155220-0103	
					M	1x800m	155220-0104	
					L	1x1500m	155220-0105	
		3	5,6	Black	S	3x100m	155220-0106	
					M	1x500m	155220-0107	
					L	1x1000m	155220-0108	
				Grey	S	3x100m	155220-0109	
					M	1x500m	155220-0110	
					L	1x1000m	155220-0111	
				Orange	S	3x100m	155220-0112	
					M	1x500m	155220-0113	
					L	1x1000m	155220-0114	
		4	5,9	Black	S	3x100m	155220-0115	
					M	1x500m	155220-0116	
					L	1x1000m	155220-0117	
				Grey	S	3x100m	155220-0118	
					M	1x500m	155220-0119	
					L	1x1000m	155220-0120	
		5	6,2	Black	S	3x100m	155220-0121	
					M	1x500m	155220-0122	
					L	1x1000m	155220-0123	
Grey	S			3x100m	155220-0124			
	M			1x500m	155220-0125			
	L			1x1000m	155220-0126			
12	8,7	Black	S	1x200m	155220-0127			
			M	1x500m	155220-0128			
			L	1x1000m	155220-0129			
		Grey	S	1x200m	155220-0130			
			M	1x500m	155220-0131			
			L	1x1000m	155220-0132			

Flamar Signal & Control

155220 Control Cables, WSOR Jacket

Drag Chain Installation, Unshielded, -25°C/+80°C, 600V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,75	19	2	6,0	Black	S	3x100m	155220-0133	
					M	1x500m	155220-0134	
					L	1x1000m	155220-0135	
				Grey	S	3x100m	155220-0136	
					M	1x500m	155220-0137	
					L	1x1000m	155220-0138	
		3	6,4	Black	S	3x100m	155220-0139	
					M	1x500m	155220-0140	
					L	1x1000m	155220-0141	
				Grey	S	3x100m	155220-0142	
					M	1x500m	155220-0143	
					L	1x1000m	155220-0144	
		4	7,0	Black	S	3x100m	155220-0145	
					M	1x500m	155220-0146	
					L	1x1000m	155220-0147	
				Grey	S	3x100m	155220-0148	
					M	1x500m	155220-0149	
					L	1x1000m	155220-0150	
		5	7,5	Black	S	3x100m	155220-0151	
					M	1x500m	155220-0152	
L	1x1000m				155220-0153			
Grey	S			3x100m	155220-0154			
	M			1x500m	155220-0155			
	L			1x1000m	155220-0156			
1,00	18	2	6,7	Black	S	3x100m	155220-0157	
					M	1x500m	155220-0158	
					L	1x1000m	155220-0159	
				Grey	S	3x100m	155220-0160	
					M	1x500m	155220-0161	
					L	1x1000m	155220-0162	
		3	7,1	Black	S	3x100m	155220-0163	
					M	1x500m	155220-0164	
					L	1x1000m	155220-0165	
				Grey	S	3x100m	155220-0166	
					M	1x500m	155220-0167	
					L	1x1000m	155220-0168	
		4	7,6	Black	S	3x100m	155220-0169	
					M	1x500m	155220-0170	
					L	1x1000m	155220-0171	
				Grey	S	3x100m	155220-0172	
					M	1x500m	155220-0173	
					L	1x1000m	155220-0174	
		5	8,3	Black	S	1x200m	155220-0175	
					M	1x500m	155220-0176	
					L	1x1000m	155220-0177	
				Grey	S	1x200m	155220-0178	
					M	1x500m	155220-0179	
					L	1x1000m	155220-0180	

Flamar Signal & Control

155220 Control Cables, WSOR Jacket

Drag Chain Installation, Unshielded, -25°C/+80°C, 600V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
1,00	18	7	9,6	Black	S	1x200m	155220-0181	
					M	1x500m	155220-0182	
					L	1x1000m	155220-0183	
				Grey	S	1x200m	155220-0184	
					M	1x500m	155220-0185	
					L	1x1000m	155220-0186	
		11	11,5	Black	S	1x100m	155220-0187	
					M	1x500m	155220-0188	
					L	1x1000m	155220-0189	
				Grey	S	1x100m	155220-0190	
					M	1x500m	155220-0191	
					L	1x1000m	155220-0192	
		12	11,5	Black	S	1x100m	155220-0193	
					M	1x500m	155220-0194	
					L	1x1000m	155220-0195	
				Grey	S	1x100m	155220-0196	
					M	1x500m	155220-0197	
					L	1x1000m	155220-0198	
		17	13,4	Black	S	1x100m	155220-0199	
					M	1x500m	155220-0200	
					L	1x1000m	155220-0201	
				Grey	S	1x100m	155220-0202	
					M	1x500m	155220-0203	
					L	1x1000m	155220-0204	
		25	16,0	Black	S	1x100m	155220-0205	
					M	1x250m	155220-0206	
					L	1x500m	155220-0207	
				Grey	S	1x100m	155220-0208	
M	1x250m				155220-0209			
L	1x500m				155220-0210			
1,5	16	2	7,1	Black	S	3x100m	155220-0211	
					M	1x500m	155220-0212	
					L	1x1000m	155220-0213	
				Grey	S	3x100m	155220-0214	
					M	1x500m	155220-0215	
					L	1x1000m	155220-0216	
		3	7,3	Black	S	3x100m	155220-0217	
					M	1x500m	155220-0218	
					L	1x1000m	155220-0219	
				Grey	S	3x100m	155220-0220	
					M	1x500m	155220-0221	
					L	1x1000m	155220-0222	

Flamar Signal & Control

155220 Control Cables, WSOR Jacket

Drag Chain Installation, Unshielded, -25°C/+80°C, 600V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
1,5	16	4	7,9	Black	S	3x100m	155220-0223	
					M	1x500m	155220-0224	
					L	1x1000m	155220-0225	
				Grey	S	3x100m	155220-0226	
					M	1x500m	155220-0227	
					L	1x1000m	155220-0228	
		4	7,9	Black	S	3x100m	155220-0229	
					M	1x500m	155220-0230	
					L	1x1000m	155220-0231	
				Grey	S	3x100m	155220-0232	
					M	1x500m	155220-0233	
					L	1x1000m	155220-0234	
		5	8,6	Black	S	1x200m	155220-0235	
					M	1x500m	155220-0236	
					L	1x1000m	155220-0237	
				Grey	S	1x200m	155220-0238	
					M	1x500m	155220-0239	
					L	1x1000m	155220-0240	
		7	10,5	Black	S	1x100m	155220-0241	
					M	1x500m	155220-0242	
					L	1x1000m	155220-0243	
				Grey	S	1x100m	155220-0244	
					M	1x500m	155220-0245	
					L	1x1000m	155220-0246	
		11	12,7	Black	S	1x100m	155220-0247	
					M	1x500m	155220-0248	
					L	1x1000m	155220-0249	
				Grey	S	1x100m	155220-0250	
					M	1x500m	155220-0251	
					L	1x1000m	155220-0252	
		12	12,7	Black	S	1x100m	155220-0253	
					M	1x500m	155220-0254	
					L	1x1000m	155220-0255	
				Grey	S	1x100m	155220-0256	
					M	1x500m	155220-0257	
					L	1x1000m	155220-0258	
		17	14,7	Black	S	1x100m	155220-0259	
					M	1x500m	155220-0260	
					L	1x1000m	155220-0261	
				Grey	S	1x100m	155220-0262	
					M	1x500m	155220-0263	
					L	1x1000m	155220-0264	
		25	17,7	Black	S	1x100m	155220-0265	
					M	1x250m	155220-0266	
					L	1x500m	155220-0267	
				Grey	S	1x100m	155220-0268	
					M	1x250m	155220-0269	
					L	1x500m	155220-0270	

Flamar Signal & Control

155220 Control Cables, WSOR Jacket

Drag Chain Installation, Unshielded, -25°C/+80°C, 600V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
2,5	14	2	8,8	Black	S	1x200m	155220-0271	
					M	1x500m	155220-0272	
					L	1x1000m	155220-0273	
				Grey	S	1x200m	155220-0274	
					M	1x500m	155220-0275	
					L	1x1000m	155220-0276	
		3	9,3	Black	S	1x200m	155220-0277	
					M	1x500m	155220-0278	
					L	1x1000m	155220-0279	
				Grey	S	1x200m	155220-0280	
					M	1x500m	155220-0281	
					L	1x1000m	155220-0282	
		4	10,1	Black	S	1x100m	155220-0283	
					M	1x500m	155220-0284	
					L	1x1000m	155220-0285	
				Grey	S	1x100m	155220-0286	
					M	1x500m	155220-0287	
					L	1x1000m	155220-0288	
		5	11,3	Black	S	1x100m	155220-0289	
					M	1x500m	155220-0290	
					L	1x1000m	155220-0291	
				Grey	S	1x100m	155220-0292	
					M	1x500m	155220-0293	
					L	1x1000m	155220-0294	
		7	13,1	Black	S	1x100m	155220-0295	
					M	1x500m	155220-0296	
					L	1x1000m	155220-0297	
				Grey	S	1x100m	155220-0298	
					M	1x500m	155220-0299	
					L	1x1000m	155220-0300	
		11	15,7	Black	S	1x100m	155220-0301	
					M	1x250m	155220-0302	
L	1x500m				155220-0303			
Grey	S			1x100m	155220-0304			
	M			1x250m	155220-0305			
	L			1x500m	155220-0306			
12	15,9	Black	S	1x100m	155220-0307			
			M	1x250m	155220-0308			
			L	1x500m	155220-0309			
		Grey	S	1x100m	155220-0310			
			M	1x250m	155220-0311			
			L	1x500m	155220-0312			

Flamar Signal & Control

155220 Control Cables, WSOR Jacket

Drag Chain Installation, Unshielded, -25°C/+80°C, 600V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
2,5	14	17	18,5	Black	S	1x100m	155220-0313	
					M	1x250m	155220-0314	
					L	1x500m	155220-0315	
				Grey	S	1x100m	155220-0316	
					M	1x250m	155220-0317	
					L	1x500m	155220-0318	
25	22,3	25	22,3	Black	S	1x350m	155220-0319	
				Grey	S	1x350m	155220-0322	

Related Products

Field Attachable Connectors



121201, 121207 – Brad mPm DIN Valve Connectors, Form A, External Thread

121202, 121208 – Brad mPm DIN Valve Connector, Form B - Industrial, External Thread

121205, 121211 – Brad mPm DIN Valve Connector, Form C - Industrial, External Thread



120071 – Brad Micro-Change (M12) Field Attachable Connectors



120085 – Brad Ultra-Lock (M12) Field Attachable Connectors



93601 - GWconnect Heavy Duty Connectors

Overmolded Connectors



120094 – Brad M23 Single-Ended Cordsets

Flamar Signal & Control

155220 Distribution Boxes, WSOR Jacket

Drag Chain Installation, Unshielded, -25°C/+80°C, 600V

molex

Cables with Weld-Slag and Oil-Resistant "WSOR" jacket cover the broadest range of industrial applications, allowing the reduction of inventory costs. Suitable for drag chain applications. Select this cable for distribution boxes ("MPIS") and safety barriers in combination with M23 signal connectors.



Specifications

Application: Severe environment
 Installation: Drag Chain
 Halogen Free: No
 Temp. rating (flexible installation):
 -25°C/+80°C
 Voltage rating: 600V
 Bending radius (flex. install. at 20°C):
 > 10xOD
 Insulation material: TPE
 Jacket material: WSOR
 Shielded: No

Approval: UL AWM 21215 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Weld-Slag and Oil-Resistant. A single cable solution for automotive lines and industrial applications. ECOLAB compatible (for Food & Beverage environments).

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
3x0,75 + 4x0,34	3x AWG19 + 4x AWG22	7 (3+4)	7,8	Black	S	3x100m	155220-9001	
					M	1x500m	155220-9002	
					L	1x1000m	155220-9003	
				Grey	S	3x100m	155220-9004	
					M	1x500m	155220-9005	
					L	1x1000m	155220-9006	
3x0,75 + 6x0,34	3x AWG19 + 6x AWG22	9 (3+6)	8,5	Black	S	1x200m	155220-9007	
					M	1x500m	155220-9008	
					L	1x1000m	155220-9009	
				Grey	S	1x200m	155220-9010	
					M	1x500m	155220-9011	
					L	1x1000m	155220-9012	
3x0,75 + 8x0,34	3x AWG19 + 8x AWG22	11 (3+8)	8,5	Black	S	1x200m	155220-9013	
					M	1x500m	155220-9014	
					L	1x1000m	155220-9015	
				Grey	S	1x200m	155220-9016	
					M	1x500m	155220-9017	
					L	1x1000m	155220-9018	
3x0,75 + 16x0,34	3x AWG19 + 16x AWG22	19 (3+16)	10,2	Black	S	1x100m	155220-9019	
					M	1x500m	155220-9020	
					L	1x1000m	155220-9021	
				Grey	S	1x100m	155220-9022	
					M	1x500m	155220-9023	
					L	1x1000m	155220-9024	

Related Products

Field Attachable Connectors



120230 – Brad M23 Signal Connectors

120233 – Brad M23 Power Connectors

Overmolded Connectors



120094 – Brad M23
Single-Ended Cordsets

Flamar Signal & Control

155221 Sensor Cables, WSOR Jacket

Drag Chain Installation, Shielded, -25°C/+80°C, 600V

molex

Cables with Weld-Slag and Oil-Resistant "WSOR" jacket cover the broadest range of industrial applications, allowing the reduction of inventory costs. Suitable for drag chain applications. Shielded cable for sensors (position, pressure, temperature, motion...) and optical switches in combination with M8 and M12 connectors.



Specifications

Application: Severe environment
 Installation: Drag Chain
 Halogen Free: No
 Temp. rating (flexible installation):
 -25°C/+80°C
 Voltage rating: 600V
 Bending radius (flex. install. at 20°C):
 > 7,5xOD
 Insulation material: TPE
 Jacket material: WSOR
 Shielded: Yes

Approval: UL AWM 21215 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Weld-Slag and Oil-Resistant. A single cable solution for automotive lines and industrial applications. ECOLAB compatible (for Food & Beverage environments).

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch		
mm ²	AWG									
0,34	22	3	5,4	Black	S	3x200m	155221-0001			
					M	1x800m	155221-0002			
					L	1x1500m	155221-0003			
				Grey	S	3x200m	155221-0004			
					M	1x800m	155221-0005			
					L	1x1500m	155221-0006			
				Yellow	S	3x200m	155221-0007			
					M	1x800m	155221-0008			
					L	1x1500m	155221-0009			
				Orange	S	3x200m	155221-0010			
					M	1x800m	155221-0011			
					L	1x1500m	155221-0012			
		4	5,7	4	5,7	Black	S	3x100m	155221-0013	
							M	1x500m	155221-0014	
							L	1x1000m	155221-0015	
						Grey	S	3x100m	155221-0016	
							M	1x500m	155221-0017	
							L	1x1000m	155221-0018	
						Yellow	S	3x100m	155221-0019	
							M	1x500m	155221-0020	
							L	1x1000m	155221-0021	
						Orange	S	3x100m	155221-0022	
							M	1x500m	155221-0023	
							L	1x1000m	155221-0024	
		5	6,1	5	6,1	Black	S	3x100m	155221-0025	
							M	1x500m	155221-0026	
							L	1x1000m	155221-0027	
						Grey	S	3x100m	155221-0028	
							M	1x500m	155221-0029	
							L	1x1000m	155221-0030	
						Yellow	S	3x100m	155221-0031	
							M	1x500m	155221-0032	
							L	1x1000m	155221-0033	
						Orange	S	3x100m	155221-0034	
							M	1x500m	155221-0035	
							L	1x1000m	155221-0036	

Flamar Signal & Control

155221 Sensor Cables, WSOR Jacket

Drag Chain Installation, Shielded, -25°C/+80°C, 600V




molex







Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,34	22	5	6,1	Black	S	3x100m	155221-0037	
					M	1x500m	155221-0038	
					L	1x1000m	155221-0039	
				Grey	S	3x100m	155221-0040	
					M	1x500m	155221-0041	
					L	1x1000m	155221-0042	
				Yellow	S	3x100m	155221-0043	
					M	1x500m	155221-0044	
					L	1x1000m	155221-0045	
				Orange	S	3x100m	155221-0046	
					M	1x500m	155221-0047	
					L	1x1000m	155221-0048	

Related Products

Field Attachable Connectors

- 
120091 – Brad Nano-Change (M8) Field Attachable Connectors
- 
120071 – Brad Micro-Change (M12) Field Attachable Connectors
- 
120085 – Brad Ultra-Lock (M12) Field Attachable Connectors

Overmolded Connectors

- 
120027, 120028, 120086, 120087 – Brad Nano-Change (M8) Single-Ended and Double Ended Cordsets
- 
120006 – Brad Micro-Change (M12) Single-Ended and Double Ended Cordsets
- 
120009 – Brad Micro-Change (M12) Cordsets with Knurled Hexnuts
- 
120065, 120066 – Brad Micro-Push (M12) Single-Ended and Double Ended Cordsets

Flamar Signal & Control

155230 Sensor Cables, PUR Jacket

Drag Chain Installation, Unshielded, -40°C/+80°C, 1000V

molex

Cables with Polyurethane (PUR, TPU) jacket ensure top mechanical performance, withstand harsh environments and resist to abrasion. Suitable for drag chain applications. Typically used for sensors (position, pressure, temperature, motion...) and optical switches in combination with M8 and M12 connectors.



Specifications

Application: Harsh environment
 Installation: Drag Chain
 Halogen Free: Yes
 Temp. rating (flexible installation):
 -40°C/+80°C
 Voltage rating: 1000V
 Bending radius (flex. install. at 20°C):
 > 7,5xOD
 Insulation material: TPE
 Jacket material: PUR

Shielded: No
 Approval: UL AWM 21223 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Excellent resistance to oil and abrasion. Ensures top mechanical performances.

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,25	24	3	4,5	Black	S	3x200m	155230-0001	
					M	1x800m	155230-0002	
					L	1x1500m	155230-0003	
				Grey	S	3x200m	155230-0004	
					M	1x800m	155230-0005	
					L	1x1500m	155230-0006	
		Yellow	S	3x200m	155230-0007			
			M	1x800m	155230-0008			
			L	1x1500m	155230-0009			
			Orange	S	3x200m	155230-0010		
				M	1x800m	155230-0011		
				L	1x1500m	155230-0012		
	4	4,8	Black	S	3x200m	155230-0013		
				M	1x800m	155230-0014		
				L	1x1500m	155230-0015		
			Grey	S	3x200m	155230-0016		
				M	1x800m	155230-0017		
				L	1x1500m	155230-0018		
		Yellow	S	3x200m	155230-0019			
			M	1x800m	155230-0020			
			L	1x1500m	155230-0021			
		Orange	S	3x200m	155230-0022			
			M	1x800m	155230-0023			
			L	1x1500m	155230-0024			
5	5,3		Black	S	3x200m	155230-0025		
				M	1x800m	155230-0026		
				L	1x1500m	155230-0027		
	Grey	S	3x200m	155230-0028				
		M	1x800m	155230-0029				
		L	1x1500m	155230-0030				
Yellow	S	3x200m	155230-0031					
	M	1x800m	155230-0032					
	L	1x1500m	155230-0033					

Flamar Signal & Control

155230 Sensor Cables, PUR Jacket

Drag Chain Installation, Unshielded, -40°C/+80°C, 1000V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,25	24	8	6,4	Black	S	3x100m	155230-0034	
					M	1x500m	155230-0035	
					L	1x1000m	155230-0036	
				Grey	S	3x100m	155230-0037	
					M	1x500m	155230-0038	
					L	1x1000m	155230-0039	
				Yellow	S	3x100m	155230-0040	
					M	1x500m	155230-0041	
					L	1x1000m	155230-0042	
		12	6,9	Black	S	3x100m	155230-0043	
					M	1x500m	155230-0044	
					L	1x1000m	155230-0045	
				Grey	S	3x100m	155230-0046	
					M	1x500m	155230-0047	
					L	1x1000m	155230-0048	
				Yellow	S	3x100m	155230-0049	
					M	1x500m	155230-0050	
					L	1x1000m	155230-0051	
0,34	22	3	4,8	Black	S	3x200m	155230-0052	
					M	1x800m	155230-0053	
					L	1x1500m	155230-0054	
				Grey	S	3x200m	155230-0055	
					M	1x800m	155230-0056	
					L	1x1500m	155230-0057	
				Yellow	S	3x200m	155230-0058	
					M	1x800m	155230-0059	
					L	1x1500m	155230-0060	
		Orange	S	3x200m	155230-0061			
			M	1x800m	155230-0062			
			L	1x1500m	155230-0063			
		4	5,1	Black	S	3x200m	155230-0064	
					M	1x800m	155230-0065	
					L	1x1500m	155230-0066	
				Grey	S	3x200m	155230-0067	
					M	1x800m	155230-0068	
					L	1x1500m	155230-0069	
Yellow	S			3x200m	155230-0070			
	M			1x800m	155230-0071			
	L			1x1500m	155230-0072			
Orange	S	3x200m	155230-0073					
	M	1x800m	155230-0074					
	L	1x1500m	155230-0075					

Flamar Signal & Control

155230 Sensor Cables, PUR Jacket

Drag Chain Installation, Unshielded, -40°C/+80°C, 1000V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch		
mm ²	AWG									
0,34	22	5	5,5	Black	S	3x200m	155230-0076			
					M	1x800m	155230-0077			
					L	1x1500m	155230-0078			
				Grey	S	3x200m	155230-0079			
					M	1x800m	155230-0080			
					L	1x1500m	155230-0081			
				Yellow	S	3x200m	155230-0082			
					M	1x800m	155230-0083			
					L	1x1500m	155230-0084			
				Orange	S	3x200m	155230-0085			
					M	1x800m	155230-0086			
					L	1x1500m	155230-0087			
		5	5,5	5	5,5	Black	S	3x200m	155230-0088	
							M	1x800m	155230-0089	
							L	1x1500m	155230-0090	
						Grey	S	3x200m	155230-0091	
							M	1x800m	155230-0092	
							L	1x1500m	155230-0093	
						Yellow	S	3x200m	155230-0094	
							M	1x800m	155230-0095	
Orange	L	1x1500m	155230-0096							
	S	3x200m	155230-0097							
	M	1x800m	155230-0098							
L	1x1500m	155230-0099								

Related Products

Field Attachable Connectors



120091 – Brad Nano-Change (M8)
Field Attachable Connectors



120071 – Brad Micro-Change (M12)
Field Attachable Connectors



120085 – Brad Ultra-Lock (M12)
Field Attachable Connectors

Overmolded Connectors



120027, 120028, 120086, 120087 –
Brad Nano-Change (M8) Single-Ended and Double
Ended Cordsets



120006 – Brad Micro-Change (M12)
Single-Ended and Double Ended Cordsets

120009 – Brad Micro-Change (M12)
Cordsets with Knurled Hexnuts



120065, 120066 – Brad Micro-Push (M12)
Single-Ended and Double Ended Cordsets

Flamar Signal & Control

155230 Control Cables, PUR Jacket

Drag Chain Installation, Unshielded, -40°C/+80°C, 1000V

molex

Cables with Polyurethane (PUR, TPU) jacket ensure top mechanical performance, withstand harsh environments and resist to abrasion. Suitable for drag chain applications. The right choice for actuators (valves, slides, cylinders...) and control cabinets in combination with DIN, M16, M23 or heavy duty connectors.



Specifications

Application: Harsh environment
 Installation: Drag Chain
 Halogen Free: Yes
 Temp. rating (flexible installation):
 -40°C/+80°C
 Voltage rating: 1000V
 Bending radius (flex. install. at 20°C):
 > 7,5xOD
 Insulation material: TPE
 Jacket material: PUR

Shielded: No
 Approval: UL AWM 21223 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Excellent resistance to oil and abrasion. Ensures top mechanical performances.

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,5	21	2	5,2	Black	S	3x200m	155230-0100	
					M	1x800m	155230-0101	
					L	1x1500m	155230-0102	
				Grey	S	3x200m	155230-0103	
					M	1x800m	155230-0104	
					L	1x1500m	155230-0105	
		3	5,6	Black	S	3x100m	155230-0106	
					M	1x500m	155230-0107	
					L	1x1000m	155230-0108	
				Grey	S	3x100m	155230-0109	
					M	1x500m	155230-0110	
					L	1x1000m	155230-0111	
				Orange	S	3x100m	155230-0112	
					M	1x500m	155230-0113	
					L	1x1000m	155230-0114	
		4	5,9	Black	S	3x100m	155230-0115	
					M	1x500m	155230-0116	
					L	1x1000m	155230-0117	
				Grey	S	3x100m	155230-0118	
					M	1x500m	155230-0119	
					L	1x1000m	155230-0120	
		5	6,2	Black	S	3x100m	155230-0121	
					M	1x500m	155230-0122	
					L	1x1000m	155230-0123	
Grey	S			3x100m	155230-0124			
	M			1x500m	155230-0125			
	L			1x1000m	155230-0126			
12	8,7	Black	S	1x200m	155230-0127			
			M	1x500m	155230-0128			
			L	1x1000m	155230-0129			
		Grey	S	1x200m	155230-0130			
			M	1x500m	155230-0131			
			L	1x1000m	155230-0132			

Flamar Signal & Control

155230 Control Cables, PUR Jacket

Drag Chain Installation, Unshielded, -40°C/+80°C, 1000V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,75	19	2	6,0	Black	S	3x100m	155230-0133	
					M	1x500m	155230-0134	
					L	1x1000m	155230-0135	
				Grey	S	3x100m	155230-0136	
					M	1x500m	155230-0137	
					L	1x1000m	155230-0138	
		3	6,4	Black	S	3x100m	155230-0139	
					M	1x500m	155230-0140	
					L	1x1000m	155230-0141	
				Grey	S	3x100m	155230-0142	
					M	1x500m	155230-0143	
					L	1x1000m	155230-0144	
		4	7,0	Black	S	3x100m	155230-0145	
					M	1x500m	155230-0146	
					L	1x1000m	155230-0147	
				Grey	S	3x100m	155230-0148	
					M	1x500m	155230-0149	
					L	1x1000m	155230-0150	
		5	7,5	Black	S	3x100m	155230-0151	
					M	1x500m	155230-0152	
L	1x1000m				155230-0153			
Grey	S			3x100m	155230-0154			
	M			1x500m	155230-0155			
	L			1x1000m	155230-0156			
1,00	18	2	6,7	Black	S	3x100m	155230-0157	
					M	1x500m	155230-0158	
					L	1x1000m	155230-0159	
				Grey	S	3x100m	155230-0160	
					M	1x500m	155230-0161	
					L	1x1000m	155230-0162	
		3	7,1	Black	S	3x100m	155230-0163	
					M	1x500m	155230-0164	
					L	1x1000m	155230-0165	
				Grey	S	3x100m	155230-0166	
					M	1x500m	155230-0167	
					L	1x1000m	155230-0168	
		4	7,6	Black	S	3x100m	155230-0169	
					M	1x500m	155230-0170	
					L	1x1000m	155230-0171	
				Grey	S	3x100m	155230-0172	
					M	1x500m	155230-0173	
					L	1x1000m	155230-0174	
		5	8,3	Black	S	1x200m	155230-0175	
					M	1x500m	155230-0176	
					L	1x1000m	155230-0177	
				Grey	S	1x200m	155230-0178	
					M	1x500m	155230-0179	
					L	1x1000m	155230-0180	

Flamar Signal & Control

155230 Control Cables, PUR Jacket

Drag Chain Installation, Unshielded, -40°C/+80°C, 1000V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
1,00	18	7	9,6	Black	S	1x200m	155230-0181	
					M	1x500m	155230-0182	
					L	1x1000m	155230-0183	
				Grey	S	1x200m	155230-0184	
					M	1x500m	155230-0185	
					L	1x1000m	155230-0186	
		11	11,5	Black	S	1x100m	155230-0187	
					M	1x500m	155230-0188	
					L	1x1000m	155230-0189	
				Grey	S	1x100m	155230-0190	
					M	1x500m	155230-0191	
					L	1x1000m	155230-0192	
		12	11,5	Black	S	1x100m	155230-0193	
					M	1x500m	155230-0194	
					L	1x1000m	155230-0195	
				Grey	S	1x100m	155230-0196	
					M	1x500m	155230-0197	
					L	1x1000m	155230-0198	
		17	13,4	Black	S	1x100m	155230-0199	
					M	1x500m	155230-0200	
					L	1x1000m	155230-0201	
				Grey	S	1x100m	155230-0202	
					M	1x500m	155230-0203	
					L	1x1000m	155230-0204	
25	16,0	Black	S	1x100m	155230-0205			
			M	1x250m	155230-0206			
			L	1x500m	155230-0207			
		Grey	S	1x100m	155230-0208			
			M	1x250m	155230-0209			
			L	1x500m	155230-0210			

Flamar Signal & Control

155230 Control Cables, PUR Jacket

Drag Chain Installation, Unshielded, -40°C/+80°C, 1000V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
1,5	16	2	7,1	Black	S	3x100m	155230-0211	
					M	1x500m	155230-0212	
					L	1x1000m	155230-0213	
				Grey	S	3x100m	155230-0214	
					M	1x500m	155230-0215	
					L	1x1000m	155230-0216	
		3	7,3	Black	S	3x100m	155230-0217	
					M	1x500m	155230-0218	
					L	1x1000m	155230-0219	
				Grey	S	3x100m	155230-0220	
					M	1x500m	155230-0221	
					L	1x1000m	155230-0222	
		4	7,9	Black	S	3x100m	155230-0223	
					M	1x500m	155230-0224	
					L	1x1000m	155230-0225	
				Grey	S	3x100m	155230-0226	
					M	1x500m	155230-0227	
					L	1x1000m	155230-0228	
		4	7,9	Black	S	3x100m	155230-0229	
					M	1x500m	155230-0230	
					L	1x1000m	155230-0231	
				Grey	S	3x100m	155230-0232	
					M	1x500m	155230-0233	
					L	1x1000m	155230-0234	
		5	8,6	Black	S	1x200m	155230-0235	
					M	1x500m	155230-0236	
					L	1x1000m	155230-0237	
				Grey	S	1x200m	155230-0238	
					M	1x500m	155230-0239	
					L	1x1000m	155230-0240	
		7	10,5	Black	S	1x100m	155230-0241	
					M	1x500m	155230-0242	
					L	1x1000m	155230-0243	
				Grey	S	1x100m	155230-0244	
					M	1x500m	155230-0245	
					L	1x1000m	155230-0246	
		11	12,7	Black	S	1x100m	155230-0247	
					M	1x500m	155230-0248	
					L	1x1000m	155230-0249	
				Grey	S	1x100m	155230-0250	
					M	1x500m	155230-0251	
					L	1x1000m	155230-0252	

Flamar Signal & Control

155230 Control Cables, PUR Jacket

Drag Chain Installation, Unshielded, -40°C/+80°C, 1000V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
1,5	16	12	12,7	Black	S	1x100m	155230-0253	
					M	1x500m	155230-0254	
					L	1x1000m	155230-0255	
				Grey	S	1x100m	155230-0256	
					M	1x500m	155230-0257	
					L	1x1000m	155230-0258	
		17	14,7	Black	S	1x100m	155230-0259	
					M	1x500m	155230-0260	
					L	1x1000m	155230-0261	
				Grey	S	1x100m	155230-0262	
					M	1x500m	155230-0263	
					L	1x1000m	155230-0264	
	25	17,7	Black	S	1x100m	155230-0265		
				M	1x250m	155230-0266		
				L	1x500m	155230-0267		
			Grey	S	1x100m	155230-0268		
				M	1x250m	155230-0269		
				L	1x500m	155230-0270		
2,5	14	2	8,8	Black	S	1x200m	155230-0271	
					M	1x500m	155230-0272	
					L	1x1000m	155230-0273	
				Grey	S	1x200m	155230-0274	
					M	1x500m	155230-0275	
					L	1x1000m	155230-0276	
		3	9,3	Black	S	1x200m	155230-0277	
					M	1x500m	155230-0278	
					L	1x1000m	155230-0279	
				Grey	S	1x200m	155230-0280	
					M	1x500m	155230-0281	
					L	1x1000m	155230-0282	
	4	10,1	Black	S	1x100m	155230-0283		
				M	1x500m	155230-0284		
				L	1x1000m	155230-0285		
			Grey	S	1x100m	155230-0286		
				M	1x500m	155230-0287		
				L	1x1000m	155230-0288		
	5	11,3	Black	S	1x100m	155230-0289		
				M	1x500m	155230-0290		
				L	1x1000m	155230-0291		
			Grey	S	1x100m	155230-0292		
				M	1x500m	155230-0293		
				L	1x1000m	155230-0294		

Flamar Signal & Control

155230 Control Cables, PUR Jacket

Drag Chain Installation, Unshielded, -40°C/+80°C, 1000V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
2,5	14	7	13,3	Black	S	1x100m	155230-0295	
					M	1x500m	155230-0296	
					L	1x1000m	155230-0297	
				Grey	S	1x100m	155230-0298	
					M	1x500m	155230-0299	
					L	1x1000m	155230-0300	
		11	15,7	Black	S	1x100m	155230-0301	
					M	1x250m	155230-0302	
					L	1x500m	155230-0303	
				Grey	S	1x100m	155230-0304	
					M	1x250m	155230-0305	
					L	1x500m	155230-0306	
		12	15,9	Black	S	1x100m	155230-0307	
					M	1x250m	155230-0308	
					L	1x500m	155230-0309	
				Grey	S	1x100m	155230-0310	
					M	1x250m	155230-0311	
					L	1x500m	155230-0312	
		17	18,5	Black	S	1x100m	155230-0313	
					M	1x250m	155230-0314	
L	1x500m				155230-0315			
Grey	S			1x100m	155230-0316			
	M			1x250m	155230-0317			
	L			1x500m	155230-0318			
25	22,3	Black	S	1x350m	155230-0319			
			Grey	S	1x350m		155230-0322	

Related Products

Field Attachable Connectors



121201, 121207 – Brad mPm DIN Valve Connectors, Form A, External Thread

121202, 121208 – Brad mPm DIN Valve Connector, Form B - Industrial, External Thread

121205, 121211 – Brad mPm DIN Valve Connector, Form C - Industrial, External Thread



120071 – Brad Micro-Change (M12) Field Attachable Connectors

Field Attachable Connectors



120085 – Brad Ultra-Lock (M12) Field Attachable Connectors



93601 - GWconnect Heavy Duty Connectors

Overmolded Connectors



120094 – Brad M23 Single-Ended Cordsets

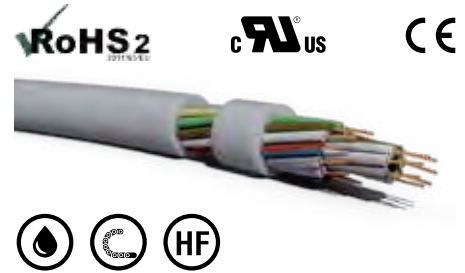
Flamar Signal & Control

155230 Distribution Boxes, PUR Jacket

Drag Chain Installation, Unshielded, -40°C/+80°C, 1000V

molex

Cables with Polyurethane (PUR, TPU) jacket ensure top mechanical performance, withstand harsh environments and resist to abrasion. Suitable for drag chain applications. Select this cable for distribution boxes ("MPIS") and safety barriers in combination with M23 signal connectors.



Specifications

Application: Harsh environment
 Installation: Drag Chain
 Halogen Free: Yes
 Temp. rating (flexible installation):
 -40°C/+80°C
 Voltage rating: 1000V
 Bending radius (flex. install. at 20°C):
 > 10 x OD
 Insulation material: TPE
 Jacket material: PUR

Shielded: No
 Approval: UL AWM 21223 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Excellent resistance to oil and abrasion. Ensures top mechanical performances.

Distribution Boxes

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
3x0,75 + 4x0,34	3x AWG19 + 4x AWG22	7 (3+4)	7,8	Black	S	3x100m	155230-9001	
					M	1x500m	155230-9002	
					L	1x1000m	155230-9003	
				Grey	S	3x100m	155230-9004	
					M	1x500m	155230-9005	
					L	1x1000m	155230-9006	
3x0,75 + 6x0,34	3x AWG19 + 6x AWG22	9 (3+6)	8,5	Black	S	1x200m	155230-9007	
					M	1x500m	155230-9008	
					L	1x1000m	155230-9009	
				Grey	S	1x200m	155230-9010	
					M	1x500m	155230-9011	
					L	1x1000m	155230-9012	
3x0,75 + 8x0,34	3x AWG19 + 8x AWG22	11 (3+8)	8,5	Black	S	1x200m	155230-9013	
					M	1x500m	155230-9014	
					L	1x1000m	155230-9015	
				Grey	S	1x200m	155230-9016	
					M	1x500m	155230-9017	
					L	1x1000m	155230-9018	
3x0,75 + 16x0,34	3x AWG19 + 16x AWG22	19 (3+16)	10,2	Black	S	1x100m	155230-9019	
					M	1x500m	155230-9020	
					L	1x1000m	155230-9021	
				Grey	S	1x100m	155230-9022	
					M	1x500m	155230-9023	
					L	1x1000m	155230-9024	

Related Products

Field Attachable Connectors



120230 – Brad M23 Signal Connectors

120233 – Brad M23 Power Connectors

Overmolded Connectors



120094 – Brad M23
Single-Ended Cordsets

Flamar Signal & Control

155231 Sensor Cables, PUR Jacket

Drag Chain Installation, Shielded, -40°C/+80°C, 1000V

molex

Cables with Polyurethane (PUR, TPU) jacket ensure top mechanical performance, withstand harsh environments and resist to abrasion. Suitable for drag chain applications. Shielded cable for sensors (position, pressure, temperature, motion...) and optical switches in combination with M8 and M12 connectors.



Specifications

Application: Harsh environment
 Installation: Drag Chain
 Halogen Free: Yes
 Temp. rating (flexible installation):
 -40°C/+80°C
 Voltage rating: 1000V
 Bending radius (flex. install. at 20°C):
 > 7,5xOD
 Insulation material: TPE
 Jacket material: PUR

Shielded: Yes
 Approval: UL AWM 21223 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Excellent resistance to oil and abrasion. Ensures top mechanical performances.

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,34	22	3	5,4	Black	S	3x200m	155231-0001	
					M	1x800m	155231-0002	
					L	1x1500m	155231-0003	
				Grey	S	3x200m	155231-0004	
					M	1x800m	155231-0005	
					L	1x1500m	155231-0006	
		Yellow	S	3x200m	155231-0007			
			M	1x800m	155231-0008			
			L	1x1500m	155231-0009			
			Orange	S	3x200m	155231-0010		
				M	1x800m	155231-0011		
				L	1x1500m	155231-0012		
	4	5,7		Black	S	3x100m	155231-0013	
					M	1x500m	155231-0014	
					L	1x1000m	155231-0015	
				Grey	S	3x100m	155231-0016	
					M	1x500m	155231-0017	
					L	1x1000m	155231-0018	
		Yellow	S	3x100m	155231-0019			
			M	1x500m	155231-0020			
			L	1x1000m	155231-0021			
			Orange	S	3x100m	155231-0022		
				M	1x500m	155231-0023		
				L	1x1000m	155231-0024		
5	6,1		Black	S	3x100m	155231-0025		
				M	1x500m	155231-0026		
				L	1x1000m	155231-0027		
			Grey	S	3x100m	155231-0028		
				M	1x500m	155231-0029		
				L	1x1000m	155231-0030		
	Yellow	S	3x100m	155231-0031				
		M	1x500m	155231-0032				
		L	1x1000m	155231-0033				
		Orange	S	3x100m	155231-0034			
			M	1x500m	155231-0035			
			L	1x1000m	155231-0036			

Flamar Signal & Control

155231 Sensor Cables, PUR Jacket







Drag Chain Installation, Shielded, -40°C/+80°C, 1000V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,34	22	5	6,1	Black	S	3x100m	155231-0037	
					M	1x500m	155231-0038	
					L	1x1000m	155231-0039	
				Grey	S	3x100m	155231-0040	
					M	1x500m	155231-0041	
					L	1x1000m	155231-0042	
				Yellow	S	3x100m	155231-0043	
					M	1x500m	155231-0044	
					L	1x1000m	155231-0045	
				Orange	S	3x100m	155231-0046	
					M	1x500m	155231-0047	
					L	1x1000m	155231-0048	

Related Products

<p>Field Attachable Connectors</p> <p> 120091 – Brad Nano-Change (M8) Field Attachable Connectors</p> <p> 120071 – Brad Micro-Change (M12) Field Attachable Connectors</p> <p> 120085 – Brad Ultra-Lock (M12) Field Attachable Connectors</p>	<p>Overmolded Connectors</p> <p> 120027, 120028, 120086, 120087 – Brad Nano-Change (M8) Single-Ended and Double Ended Cordsets</p> <p> 120006 – Brad Micro-Change (M12) Single-Ended and Double Ended Cordsets</p> <p>120009 – Brad Micro-Change (M12) Cordsets with Knurled Hexnuts</p> <p> 120065, 120066 – Brad Micro-Push (M12) Single-Ended and Double Ended Cordsets</p>
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Flamar Signal & Control

155240 Sensor Cables, TPE Jacket

Drag Chain Installation, Unshielded, -40°C/+105°C, 300V

molex

UL Listed cables with TPE (Thermoplastic Elastomer) jacket, defined according to the US/Canadian market requirements. Excellent flame resistance. Suitable for drag chain applications. Typically used for sensors (position, pressure, temperature, motion...) and optical switches in combination with M8 and M12 connectors.



Specifications

Application: Severe environment
 Installation: Drag Chain
 Halogen Free: No
 Temp. rating (flexible installation):
 -40°C/+105°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 > 10xOD
 Insulation material: PVC
 Jacket material: TPE
 Shielded: No

Approval: UL Listed PLTC
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Excellent (FT4 & VW1/FT1 &
 IEC60332-3A)
 Key factor:
 Designed in accordance with North
 American market requirements.
 Good resistance to oil. ECOLAB compatible
 (for Food & Beverage environments).

Cross section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,34	22	3	5,1	Black	S	3x200m	155240-0001	
					M	1x800m	155240-0002	
					L	1x1500m	155240-0003	
				Grey	S	3x200m	155240-0004	
					M	1x800m	155240-0005	
					L	1x1500m	155240-0006	
				Yellow	S	3x200m	155240-0007	
					M	1x800m	155240-0008	
					L	1x1500m	155240-0009	
				Orange	S	3x200m	155240-0010	
					M	1x800m	155240-0011	
					L	1x1500m	155240-0012	
		4	5,4	Black	S	3x200m	155240-0013	
					M	1x800m	155240-0014	
					L	1x1500m	155240-0015	
				Grey	S	3x200m	155240-0016	
					M	1x800m	155240-0017	
					L	1x1500m	155240-0018	
				Yellow	S	3x200m	155240-0019	
					M	1x800m	155240-0020	
					L	1x1500m	155240-0021	
				Orange	S	3x200m	155240-0022	
					M	1x800m	155240-0023	
					L	1x1500m	155240-0024	

Flamar Signal & Control

155240 Sensor Cables, TPE Jacket

Drag Chain Installation, Unshielded, -40°C/+105°C, 300V




molex






Cross section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,34	22	5	5,8	Black	S	3x100m	155240-0025	
					M	1x500m	155240-0026	
					L	1x1000m	155240-0027	
				Grey	S	3x100m	155240-0028	
					M	1x500m	155240-0029	
					L	1x1000m	155240-0030	
				Yellow	S	3x100m	155240-0031	
					M	1x500m	155240-0032	
					L	1x1000m	155240-0033	
		Orange	S	3x100m	155240-0034			
			M	1x500m	155240-0035			
			L	1x1000m	155240-0036			
		5	5,8	Black	S	3x100m	155240-0037	
					M	1x500m	155240-0038	
					L	1x1000m	155240-0039	
				Grey	S	3x100m	155240-0040	
					M	1x500m	155240-0041	
					L	1x1000m	155240-0042	
Yellow	S			3x100m	155240-0043			
	M			1x500m	155240-0044			
	L			1x1000m	155240-0045			
Orange	S	3x100m	155240-0046					
	M	1x500m	155240-0047					
	L	1x1000m	155240-0048					

Related Products

Field Attachable Connectors

-  **120091** – Brad Nano-Change (M8) Field Attachable Connectors
-  **120071** – Brad Micro-Change (M12) Field Attachable Connectors
-  **120085** – Brad Ultra-Lock (M12) Field Attachable Connectors

Overmolded Connectors

-  **120027, 120028, 120086, 120087** – Brad Nano-Change (M8) Single-Ended and Double Ended Cordsets
-  **120006** – Brad Micro-Change (M12) Single-Ended and Double Ended Cordsets
- 120009** – Brad Micro-Change M12 Cordsets with Knurled Hexnuts
-  **120065, 120066** – Brad Micro-Push (M12) Single-Ended and Double Ended Cordsets

Flamar Signal & Control

155240 Control Cables, TPE Jacket

Drag Chain Installation, Unshielded, -40°C/+105°C, 300V

molex

UL Listed cables with TPE (Thermoplastic Elastomer) jacket, defined according to the US/Canadian market requirements. Excellent flame resistance. Suitable for drag chain applications. The right choice for actuators (valves, slides, cylinders...) and control cabinets in combination with DIN, M16, M23 or heavy duty connectors.



Specifications

Application: Severe environment
 Installation: Drag Chain
 Halogen Free: No
 Temp. rating (flexible installation):
 -40°C/+105°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 > 10xOD
 Insulation material: PVC
 Jacket material: TPE
 Shielded: No

Approval: UL Listed PLTC
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Excellent (FT4 & VW1/FT1 &
 IEC60332-3A)
 Key factor:
 Designed in accordance with North
 American market requirements.
 Good resistance to oil. ECOLAB compatible
 (for Food & Beverage environments).

Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,5	21	2	5,6	Black	S	3x100m	155240-0049	
					M	1x500m	155240-0050	
					L	1x1000m	155240-0051	
				Grey	S	3x100m	155240-0052	
					M	1x500m	155240-0053	
					L	1x1000m	155240-0054	
		3	6,0	Black	S	3x100m	155240-0055	
					M	1x500m	155240-0056	
					L	1x1000m	155240-0057	
				Grey	S	3x100m	155240-0058	
					M	1x500m	155240-0059	
					L	1x1000m	155240-0060	
				Orange	S	3x100m	155240-0061	
					M	1x500m	155240-0062	
					L	1x1000m	155240-0063	
		4	6,4	Black	S	3x100m	155240-0064	
					M	1x500m	155240-0065	
					L	1x1000m	155240-0066	
				Grey	S	3x100m	155240-0067	
					M	1x500m	155240-0068	
					L	1x1000m	155240-0069	
		5	6,9	Black	S	3x100m	155240-0070	
					M	1x500m	155240-0071	
					L	1x1000m	155240-0072	
Grey	S			3x100m	155240-0073			
	M			1x500m	155240-0074			
	L			1x1000m	155240-0075			
12	9,0	Black	S	1x200m	155240-0076			
			M	1x500m	155240-0077			
			L	1x1000m	155240-0078			
		Grey	S	1x200m	155240-0079			
			M	1x500m	155240-0080			
			L	1x1000m	155240-0081			

Flamar Signal & Control

155240 Control Cables, TPE Jacket

Drag Chain Installation, Unshielded, -40°C/+105°C, 300V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,75	19	2	6,5	Black	S	3x100m	155240-0082	
					M	1x500m	155240-0083	
					L	1x1000m	155240-0084	
				Grey	S	3x100m	155240-0085	
					M	1x500m	155240-0086	
					L	1x1000m	155240-0087	
		3	7,0	Black	S	3x100m	155240-0088	
					M	1x500m	155240-0089	
					L	1x1000m	155240-0090	
				Grey	S	3x100m	155240-0091	
					M	1x500m	155240-0092	
					L	1x1000m	155240-0093	
	4	7,7	Black	S	3x100m	155240-0094		
				M	1x500m	155240-0095		
				L	1x1000m	155240-0096		
			Grey	S	3x100m	155240-0097		
				M	1x500m	155240-0098		
				L	1x1000m	155240-0099		
	5	8,3	Black	S	1x200m	155240-0100		
				M	1x500m	155240-0101		
				L	1x1000m	155240-0102		
			Grey	S	1x200m	155240-0103		
				M	1x500m	155240-0104		
				L	1x1000m	155240-0105		
1,00	18	2	7,5	Black	S	3x100m	155240-0106	
					M	1x500m	155240-0107	
					L	1x1000m	155240-0108	
				Grey	S	3x100m	155240-0109	
					M	1x500m	155240-0110	
					L	1x1000m	155240-0111	
		3	7,9	Black	S	3x100m	155240-0112	
					M	1x500m	155240-0113	
					L	1x1000m	155240-0114	
				Grey	S	3x100m	155240-0115	
					M	1x500m	155240-0116	
					L	1x1000m	155240-0117	
	4	8,6	Black	S	1x200m	155240-0118		
				M	1x500m	155240-0119		
				L	1x1000m	155240-0120		
			Grey	S	1x200m	155240-0121		
				M	1x500m	155240-0122		
				L	1x1000m	155240-0123		
	5	9,3	Black	S	1x200m	155240-0124		
				M	1x500m	155240-0125		
				L	1x1000m	155240-0126		
			Grey	S	1x200m	155240-0127		
				M	1x500m	155240-0128		
				L	1x1000m	155240-0129		

Flamar Signal & Control

155240 Control Cables, TPE Jacket

Drag Chain Installation, Unshielded, -40°C/+105°C, 300V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
1,0	18	7	11,0	Black	S	1x100m	155240-0130	
					M	1x500m	155240-0131	
					L	1x1000m	155240-0132	
				Grey	S	1x100m	155240-0133	
					M	1x500m	155240-0134	
					L	1x1000m	155240-0135	
		11	13,0	Black	S	1x100m	155240-0136	
					M	1x500m	155240-0137	
					L	1x1000m	155240-0138	
				Grey	S	1x100m	155240-0139	
					M	1x500m	155240-0140	
					L	1x1000m	155240-0141	
		12	13,0	Black	S	1x100m	155240-0142	
					M	1x500m	155240-0143	
					L	1x1000m	155240-0144	
				Grey	S	1x100m	155240-0145	
					M	1x500m	155240-0146	
					L	1x1000m	155240-0147	
		17	15,0	Black	S	1x100m	155240-0148	
					M	1x250m	155240-0149	
L	1x500m				155240-0150			
Grey	S			1x100m	155240-0151			
	M			1x250m	155240-0152			
	L			1x500m	155240-0153			
25	18,0	Black	S	1x100m	155240-0154			
			M	1x250m	155240-0155			
			L	1x500m	155240-0156			
		Grey	S	1x100m	155240-0157			
			M	1x250m	155240-0158			
			L	1x500m	155240-0159			

Flamar Signal & Control

155240 Control Cables, TPE Jacket

Drag Chain Installation, Unshielded, -40°C/+105°C, 300V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
1,5	16	2	8,0	Black	S	1x200m	155240-0160	
					M	1x500m	155240-0161	
					L	1x1000m	155240-0162	
				Grey	S	1x200m	155240-0163	
					M	1x500m	155240-0164	
					L	1x1000m	155240-0165	
		3	8,5	Black	S	1x200m	155240-0166	
					M	1x500m	155240-0167	
					L	1x1000m	155240-0168	
				Grey	S	1x200m	155240-0169	
					M	1x500m	155240-0170	
					L	1x1000m	155240-0171	
		4	9,3	Black	S	1x200m	155240-0172	
					M	1x500m	155240-0173	
					L	1x1000m	155240-0174	
				Grey	S	1x200m	155240-0175	
					M	1x500m	155240-0176	
					L	1x1000m	155240-0177	
		4	9,3	Black	S	1x200m	155240-0178	
					M	1x500m	155240-0179	
					L	1x1000m	155240-0180	
				Grey	S	1x200m	155240-0181	
					M	1x500m	155240-0182	
					L	1x1000m	155240-0183	
5	10,0	Black	S	1x100m	155240-0184			
			M	1x500m	155240-0185			
			L	1x1000m	155240-0186			
		Grey	S	1x100m	155240-0187			
			M	1x500m	155240-0188			
			L	1x1000m	155240-0189			
7	11,8	Black	S	1x100m	155240-0190			
			M	1x500m	155240-0191			
			L	1x1000m	155240-0192			
		Grey	S	1x100m	155240-0193			
			M	1x500m	155240-0194			
			L	1x1000m	155240-0195			

Flamar Signal & Control

155240 Control Cables, TPE Jacket

Drag Chain Installation, Unshielded, -40°C/+105°C, 300V

molex



Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
1,5	16	11	14,2	Black	S	1x100m	155240-0196	
					M	1x500m	155240-0197	
					L	1x1000m	155240-0198	
				Grey	S	1x100m	155240-0199	
					M	1x500m	155240-0200	
					L	1x1000m	155240-0201	
		12	14,2	Black	S	1x100m	155240-0202	
					M	1x500m	155240-0203	
					L	1x1000m	155240-0204	
				Grey	S	1x100m	155240-0205	
					M	1x500m	155240-0206	
					L	1x1000m	155240-0207	
		17	16,6	Black	S	1x100m	155240-0208	
					M	1x250m	155240-0209	
					L	1x500m	155240-0210	
				Grey	S	1x100m	155240-0211	
					M	1x250m	155240-0212	
					L	1x500m	155240-0213	
25	20,0	Black	S	1x350m	155240-0214			
		Grey	S	1x350m	155240-0217			
2,5	14	2	9,8	Black	S	1x200m	155240-0220	
					M	1x500m	155240-0221	
					L	1x1000m	155240-0222	
				Grey	S	1x200m	155240-0223	
					M	1x500m	155240-0224	
					L	1x1000m	155240-0225	
		3	10,5	Black	S	1x100m	155240-0226	
					M	1x500m	155240-0227	
					L	1x1000m	155240-0228	
				Grey	S	1x100m	155240-0229	
					M	1x500m	155240-0230	
					L	1x1000m	155240-0231	
		4	11,6	Black	S	1x100m	155240-0232	
					M	1x500m	155240-0233	
					L	1x1000m	155240-0234	
				Grey	S	1x100m	155240-0235	
					M	1x500m	155240-0236	
					L	1x1000m	155240-0237	
		5	12,6	Black	S	1x100m	155240-0238	
					M	1x500m	155240-0239	
					L	1x1000m	155240-0240	
				Grey	S	1x100m	155240-0241	
					M	1x500m	155240-0242	
					L	1x1000m	155240-0243	

Flamar Signal & Control

155240 Control Cables, TPE Jacket

Drag Chain Installation, Unshielded, -40°C/+105°C, 300V


molex




Cross Section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
2,5	14	7	15,2	Black	S	1x100m	155240-0244	
					M	1x250m	155240-0245	
					L	1x500m	155240-0246	
				Grey	S	1x100m	155240-0247	
					M	1x250m	155240-0248	
					L	1x500m	155240-0249	
		11	18,4	Black	S	1x100m	155240-0250	
					M	1x250m	155240-0251	
					L	1x500m	155240-0252	
				Grey	S	1x100m	155240-0253	
					M	1x250m	155240-0254	
					L	1x500m	155240-0255	
		12	18,4	Black	S	1x100m	155240-0256	
					M	1x250m	155240-0257	
					L	1x500m	155240-0258	
				Grey	S	1x100m	155240-0259	
					M	1x250m	155240-0260	
					L	1x500m	155240-0261	
		17	21,4	Black	S	1x350m	155240-0262	
					S	1x350m	155240-0265	
25	25,6	Black	S	1x250m	155240-0268			
			Grey	S	1x250m		155240-0271	

Related Products

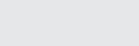
Field Attachable Connectors




121201, 121207 – Brad mPm DIN Valve Connectors, Form A, External Thread



121202, 121208 – Brad mPm DIN Valve Connector, Form B - Industrial, External Thread




121205, 121211 – Brad mPm DIN Valve Connector, Form C - Industrial, External Thread




120071 – Brad Micro-Change (M12) Field Attachable Connectors

Field Attachable Connectors



120085 – Brad Ultra-Lock (M12) Field Attachable Connectors



93601 - GWconnect Heavy Duty Connectors

Overmolded Connectors



120094 – Brad M23 Single-Ended Cordsets

Flamar Signal & Control

155241 Sensor Cables, TPE Jacket

Drag Chain Installation, Shielded, -40°C/+105°C, 300V

molex

UL Listed cables with TPE (Thermoplastic Elastomer) jacket, defined according to the US/Canadian market requirements. Excellent flame resistance. Suitable for drag chain applications. Shielded cable for sensors (position, pressure, temperature, motion...) and optical switches in combination with M8 and M12 connectors.



Specifications

Application: Severe environment
 Installation: Drag Chain
 Halogen Free: No
 Temp. rating (flexible installation):
 -40°C/+105°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 > 10xOD
 Insulation material: PVC
 Jacket material: TPE
 Shielded: Yes

Approval: UL Listed PLTC
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Excellent (FT4 & VW1/FT1 &
 IEC60332-3A)
 Key factor:
 Designed in accordance with North
 American market requirements.
 Good resistance to oil. ECOLAB compatible
 (for Food & Beverage environments).

Cross section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch		
mm ²	AWG									
0,34	22	3	5,7	Black	S	3x100m	155241-0001			
					M	1x500m	155241-0002			
					L	1x1000m	155241-0003			
				Grey	S	3x100m	155241-0004			
					M	1x500m	155241-0005			
					L	1x1000m	155241-0006			
				Yellow	S	3x100m	155241-0007			
					M	1x500m	155241-0008			
					L	1x1000m	155241-0009			
				Orange	S	3x100m	155241-0010			
					M	1x500m	155241-0011			
					L	1x1000m	155241-0012			
		4	6,0	4	6,0	Black	S	3x100m	155241-0013	
							M	1x500m	155241-0014	
							L	1x1000m	155241-0015	
						Grey	S	3x100m	155241-0016	
							M	1x500m	155241-0017	
							L	1x1000m	155241-0018	
						Yellow	S	3x100m	155241-0019	
							M	1x500m	155241-0020	
							L	1x1000m	155241-0021	
						Orange	S	3x100m	155241-0022	
							M	1x500m	155241-0023	
							L	1x1000m	155241-0024	
		5	6,4	5	6,4	Black	S	3x100m	155241-0025	
							M	1x500m	155241-0026	
							L	1x1000m	155241-0027	
						Grey	S	3x100m	155241-0028	
							M	1x500m	155241-0029	
							L	1x1000m	155241-0030	
						Yellow	S	3x100m	155241-0031	
							M	1x500m	155241-0032	
							L	1x1000m	155241-0033	
						Orange	S	3x100m	155241-0034	
							M	1x500m	155241-0035	
							L	1x1000m	155241-0036	

Flamar Signal & Control

155241 Sensor Cables, TPE Jacket







Drag Chain Installation, Shielded, -40°C/+105°C, 300V

molex



Cross section		No. of Circuits	Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
0,34	22	5	6,4	Black	S	3x100m	155241-0037	
					M	1x500m	155241-0038	
					L	1x1000m	155241-0039	
				Grey	S	3x100m	155241-0040	
					M	1x500m	155241-0041	
					L	1x1000m	155241-0042	
				Yellow	S	3x100m	155241-0043	
					M	1x500m	155241-0044	
					L	1x1000m	155241-0045	
				Orange	S	3x100m	155241-0046	
					M	1x500m	155241-0047	
					L	1x1000m	155241-0048	

Related Products

<p>Field Attachable Connectors</p> <p> 120091 – Brad Nano-Change (M8) Field Attachable Connectors</p> <p> 120071 – Brad Micro-Change (M12) Field Attachable Connectors</p> <p> 120085 – Brad Ultra-Lock (M12) Field Attachable Connectors</p>	<p>Overmolded Connectors</p> <p> 120027, 120028, 120086, 120087 – Brad Nano-Change (M8) Single-Ended and Double Ended Cordsets</p> <p> 120006 – Brad Micro-Change (M12) Single-Ended and Double Ended Cordsets</p> <p>120009 – Brad Micro-Change (M12) Cordsets with Knurled Hexnuts</p> <p> 120065, 120066 – Brad Micro-Push (M12) Single-Ended and Double Ended Cordsets</p>
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Servo Motor

Series	Environment	Installation	Halogen Free	Temperature Rating °C (flexible installation)		Voltage Rating V	Bending Radius (flex. install. at 20°C)
155311	Standard	Flexible	No	+5°C	+80°C	1000V power 600V feedback	> 15xOD
155321	Severe	Drag Chain	No	-25°C	+80°C	1000V power 600V feedback	> 10xOD
155331	Harsh	Drag Chain	Yes	-40°C	+80°C	1000V power 600V feedback	> 10xOD

Typical Applications



Motors



Encoder / Resolver

Jacket choice criteria

- PVC: The most cost-effective solution for flexible and static installation.
- WSOR: Weld-Slag and Oil-Resistant Cable, a single-cable solution designed to withstand the severe environments found in automotive and industrial factory floors. ECOLAB compatible (resistant to detergents, disinfectants and wash down water-jet used in Food & Beverage). Suitable for drag chain applications.
- PUR (Polyurethane): Ensures top mechanical performance, withstands harsh environments, abrasion resistant. Suitable for drag chain applications.



Flamar Cables for Servo Motor Applications

Jacket Material	Shielded	Approval	Flame Resistance	Oil & Lubricants Resistance	Abrasion Resistance	Page No.
PVC	Yes	UL AWM 2570 / CSA	Good	Limited	Limited	56
WSOR	Yes	UL AWM 21939 / CSA power UL AWM 21215 / CSA feedback	Good	Good	Medium	58
PUR	Yes	UL AWM 21223 / CSA	Good	Excellent	Excellent	60

Selecting the right cable for your application is very important to ensure a reliable, problem-free installation. Careful consideration of mechanical abrasion, fluid/chemical exposure, flexibility (C-track, torsion), temperature resistance and flame retardancy requirements is required to select the cable that will provide performance and reliability in service.



Flamar Servo Motor

155311 Power Cables, PVC Jacket

Flexible Installation, Shielded, +5°C/+80°C, 1000V

molex

Cables with PVC jacket, suitable for flexible installation in standard environments. For servo motors power supply in combination with M23 power connector. Available with or without shielded pairs, in case brakes or thermal sensors (PTC) might be connected.



Specifications

Application: Standard environment
 Installation: Flexible
 Halogen Free: No
 Temp. rating (flexible installation):
 +5°C/+80°C
 Voltage rating: 1000V
 Bending radius (flex. install. at 20°C):
 > 15xOD
 Insulation material: TPE
 Jacket material: PVC
 Shielded: Yes

Approval: UL AWM 2570 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Cost-effective solution for less
 demanding environments (limited
 exposure to oil and lubricants)

Cross Section		No. of Circuits	Diameter in mm	In accordance with	Packaging	Packaging Composition	Standard Order No	Sketch	
mm ²	AWG								
(4G1,5)	(4G AWG16)	4	9,0	Siemens 6FX5008	S	1x200m	155311-0001		
					M	1x500m	155311-0002		
					L	1x1000m	155311-0003		
(4G2,5)	(4G AWG14)	4	10,6		S	1x100m	155311-0004		
					M	1x500m	155311-0005		
					L	1x1000m	155311-0006		
(4G4,0)	(4G AWG12)	4	12,2		S	1x100m	155311-0007		
					M	1x500m	155311-0008		
					L	1x1000m	155311-0009		
(4G6,0)	(4G AWG10)	4	14,5		S	1x100m	155311-0010		
					M	1x500m	155311-0011		
					L	1x1000m	155311-0012		
(4G1,5 + 2x1,5)	(4G AWG16 + 2xAWG16)	6 (4+2)	11,1	Siemens 6FX5008	S	1x100m	155311-1001		
					M	1x500m	155311-1002		
					L	1x1000m	155311-1003		
					S	1x100m	155311-1004		
(4G2,5 + 2x1,5)	(4G AWG14 + 2xAWG16)	6 (4+2)	12,6		M	1x500m	155311-1005		
					L	1x1000m	155311-1006		
					S	1x100m	155311-1007		
					M	1x500m	155311-1008		
(4G4,0 + 2x1,5)	(4G AWG12 + 2xAWG16)	6 (4+2)	14,0		L	1x1000m	155311-1009		
					S	1x100m	155311-1010		
					M	1x250m	155311-1011		
					L	1x500m	155311-1012		
(4G1,5 + 2x(2x0,75))	(4G AWG16 + 2x(2xAWG19))	8 (4+2+2)	12,1	Bosch Rexroth INDRAMAT INK650	S	1x100m	155311-2001		
					M	1x500m	155311-2002		
					L	1x1000m	155311-2003		
(4G2,5 + 2x(2x1,0))	(4G AWG14 + 2x(2xAWG18))	8 (4+2+2)	14,1		S	1x100m	155311-2004		
					M	1x500m	155311-2005		
					L	1x1000m	155311-2006		
(4G4,0 + 2x(2x1,5))	(4G AWG12 + 2x(2xAWG16))	8 (4+2+2)	15,8		Bosch Rexroth INDRAMAT INK603	S	1x100m		155311-2007
					M	1x250m	155311-2008		
					L	1x500m	155311-2009		
(4G6,0 + 2x(2x1,5))	(4G AWG10 + 2x(2xAWG16))	8 (4+2+2)	17,9	Bosch Rexroth INDRAMAT INK604	S	1x100m	155311-2010		
				M	1x250m	155311-2011			
				L	1x500m	155311-2012			

Flamar Servo Motor

155311 Feedback Cables, PVC Jacket

Flexible Installation, Shielded, +5°C/+80°C, 600V

molex

Cables with PVC jacket, suitable for flexible installation in standard environments. To connect encoders/ resolvers by means of a M23 signal connector.



Specifications


Application: Standard environment
 Installation: Flexible
 Halogen Free: No
 Temp. rating (flexible installation):
 +5°C/+80°C
 Voltage rating: 600V
 Bending radius (flex. install. at 20°C):
 > 15xOD
 Insulation material: TPE
 Jacket material: PVC
 Shielded: Yes

Approval: UL AWM 2570 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Cost-effective solution for less
 demanding environments (limited
 exposure to oil and lubricants)

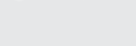
Cross Section		No. of Circuits	Diameter in mm	In accordance with	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
(4x2x0,25 + 2x1,00)C	(4x2xAWG24 + 2xAWG18)C	10 (8+2)	8,8	Bosch Rexroth INDRAMAT INK 0209	S	1x200m	155311-9001	
					M	1x500m	155311-9002	
					L	1x1000m	155311-9003	
(3x(2x0,14)D + 2x(0,50)D)C	(3x(2xAWG26)D + 2x(AWG21)D)C	8 (6+2)	9,0	Heidenhain	S	1x200m	155311-9004	
					M	1x500m	155311-9005	
					L	1x1000m	155311-9006	
(4x2x0,38 + 4x0,50)C	(4x2xAWG22 + 4xAWG21)C	12 (8+4)	9,5	Siemens 6FX5008-1BD21	S	1x200m	155311-9007	
					M	1x500m	155311-9008	
					L	1x1000m	155311-9009	
(3x(2x0,14)D + 2x0,50 + 4x0,14 + 4x0,25)C	(3x(2xAWG26)D + 2xAWG21 + 4xAWG26 + 4xAWG24)C	16 (6+2+4+4)	10,0	Siemens 6FX5008-1BD51	S	1x100m	155311-9010	
					M	1x500m	155311-9011	
					L	1x1000m	155311-9012	

Related Products

Field Attachable Connectors




120230 – Brad M23 Signal Connectors



120233 – Brad M23 Power Connectors


120604 – Brad M40

Overmolded Connectors



120480 – Brad M23 Power Cordsets

120600 – Brad M40



120490 – Brad M23 Signal Overmolded Cordsets

Flamar Servo Motor

155321 Power Cables, WSOR Jacket

Drag Chain Installation, Shielded, -25°C/+80°C, 1000V

molex

Cables with Weld-Slag and Oil-Resistant "WSOR" jacket cover the broadest range of industrial applications, allowing the reduction of inventory costs. Suitable for drag chain applications. For servo motors power supply in combination with M23 power connector. Available with or without shielded pairs, in case brakes or thermal sensors (PTC) might be connected.



Specifications

Application: Severe environment
 Installation: Drag Chain
 Halogen Free: No
 Temp. rating (flexible installation):
 -25°C/+80°C
 Voltage rating: 1000V
 Bending radius (flex. install. at 20°C):
 > 10xOD
 Insulation material: TPE
 Jacket material: WSOR
 Shielded: Yes

Approval: UL AWM 21939 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Weld-Slag and Oil-Resistant. A single cable solution for automotive lines and industrial applications. ECOLAB compatible (for Food & Beverage environments).

Cross Section		No. of Circuits	Diameter in mm	In accordance with	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
(4G1,5)	(4G AWG16)	4	9,0	Siemens 6FX5008	S	1x200m	155321-0001	
					M	1x500m	155321-0002	
					L	1x1000m	155321-0003	
(4G2,5)	(4G AWG14)	4	10,6		S	1x100m	155321-0004	
					M	1x500m	155321-0005	
					L	1x1000m	155321-0006	
(4G4,0)	(4G AWG12)	4	12,2		S	1x100m	155321-0007	
					M	1x500m	155321-0008	
					L	1x1000m	155321-0009	
(4G6,0)	(4G AWG10)	4	14,5		S	1x100m	155321-0010	
					M	1x500m	155321-0011	
					L	1x1000m	155321-0012	
(4G1,5 + 2x1,5)	(4G AWG16 + 2xAWG16)	6 (4+2)	11,1	Siemens 6FX5008	S	1x100m	155321-1001	
					M	1x500m	155321-1002	
					L	1x1000m	155321-1003	
(4G2,5 + 2x1,5)	(4G AWG14 + 2xAWG16)	6 (4+2)	12,6		S	1x100m	155321-1004	
					M	1x500m	155321-1005	
					L	1x1000m	155321-1006	
(4G4 + 2x1,5)	(4G AWG12 + 2xAWG16)	6 (4+2)	14,0		S	1x100m	155321-1007	
					M	1x500m	155321-1008	
					L	1x1000m	155321-1009	
(4G6 + 2x1,5)	(4G AWG10 + 2xAWG16)	6 (4+2)	16,2		S	1x100m	155321-1010	
					M	1x250m	155321-1011	
					L	1x500m	155321-1012	
(4G1,5 + 2x(2x0,75))	(4G AWG16 + 2x(2xAWG19))	8 (4+2+2)	12,1	Bosch Rexroth INDRAMAT INK650	S	1x100m	155321-2001	
					M	1x500m	155321-2002	
					L	1x1000m	155321-2003	
(4G2,5 + 2x(2x1,0))	(4G AWG14 + 2x(2xAWG18))	8 (4+2+2)	14,1		S	1x100m	155321-2004	
					M	1x500m	155321-2005	
					L	1x1000m	155321-2006	
(4G4,0 + 2x(2x1,5))	(4G AWG12 + 2x(2xAWG16))	8 (4+2+2)	15,8		S	1x100m	155321-2007	
					M	1x250m	155321-2008	
					L	1x500m	155321-2009	
(4G6,0 + 2x(2x1,5))	(4G AWG10 + 2x(2xAWG16))	8 (4+2+2)	17,9	S	1x100m	155321-2010		
				M	1x250m	155321-2011		
				L	1x500m	155321-2012		

Flamar Servo Motor

155321 Feedback Cables, WSOR Jacket

Drag Chain Installation, Shielded, -25°C/+80°C, 600V

molex

Cables with Weld-Slag and Oil-Resistant "WSOR" jacket cover the broadest range of industrial applications, allowing the reduction of inventory costs. Suitable for drag chain applications. To connect encoders/ resolvers by means of a M23 signal connector.



ECOLAB

Specifications


Application: Severe environment
 Installation: Drag Chain
 Halogen Free: No
 Temp. rating (flexible installation):
 -25°C/+80°C
 Voltage rating: 600V
 Bending radius (flex. install. at 20°C):
 > 12xOD
 Insulation material: TPE
 Jacket material: WSOR
 Shielded: Yes

Approval: UL AWM 21215 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Weld-Slag and Oil-Resistant. A single cable solution for automotive lines and industrial applications. ECOLAB compatible (for Food & Beverage environments).

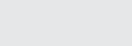
Cross Section		No. of Circuits	Diameter in mm	In accordance with	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
(4x2x0,25 + 2x1,00)C	(4x2xAWG24 + 2xAWG18)C	10 (8+2)	8,8	Bosch Rexroth INDRAMAT INK 0209	S	1x200m	155321-9001	
					M	1x500m	155321-9002	
					L	1x1000m	155321-9003	
(3x(2x0,14)D + 2x(0,50)D)C	(3x(2xAWG26)D + 2x(AWG21)D)C	8 (6+2)	9,0	Heidenhain	S	1x200m	155321-9004	
					M	1x500m	155321-9005	
					L	1x1000m	155321-9006	
(4x2x0,38 + 4x0,50)C	(4x2xAWG22 + 4xAWG21)C	12 (8+4)	9,5	Siemens 6FX5008-1BD21	S	1x200m	155321-9007	
					M	1x500m	155321-9008	
					L	1x1000m	155321-9009	
(3x(2x0,14)D + 2x0,50 + 4x0,14 + 4x0,25)C	(3x(2xAWG26)D + 2xAWG21 + 4xAWG26 + 4xAWG24)C	16 (6+2+4+4)	10,0	Siemens 6FX5008-1BD51	S	1x100m	155321-9010	
					M	1x500m	155321-9011	
					L	1x1000m	155321-9012	

Related Products

Field Attachable Connectors




120230 – Brad M23 Signal Connectors



120233 – Brad M23 Power Connectors


120604 – Brad M40

Overmolded Connectors



120480 – Brad M23 Power Cordsets

120600 – Brad M40



120490 – Brad M23 Signal Overmolded Cordsets

Flamar Servo Motor

155331 Power Cables, PUR Jacket

Drag Chain Installation, Shielded, -40°C/+80°C, 1000V

molex

Cables with Polyurethane (PUR, TPU) jacket ensure top mechanical performance, withstand harsh environments and resist to abrasion. Suitable for drag chain applications. For servo motors power supply in combination with M23 power connector. Available with or without shielded pairs, in case brakes or thermal sensors (PTC) might be connected.



Specifications

Application: Harsh environment
 Installation: Drag Chain
 Halogen Free: Yes
 Temp. rating (flexible installation):
 -40°C/+80°C
 Voltage rating: 1000V
 Bending radius (flex. install. at 20°C):
 > 10xOD
 Insulation material: TPE
 Jacket material: PUR
 Shielded: Yes

Approval: UL AWM 21223 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Excellent resistance to oil and abrasion. Ensures top mechanical performances.

Cross Section		No. of Circuits	Diameter in mm	In accordance with	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
(4G1,5)	(4G AWG16)	4	9,0	Siemens 6FX8008 Plus	S	1x200m	155331-0001	
					M	1x500m	155331-0002	
					L	1x1000m	155331-0003	
(4G2,5)	(4G AWG14)	4	10,6		S	1x100m	155331-0004	
					M	1x500m	155331-0005	
					L	1x1000m	155331-0006	
(4G4,0)	(4G AWG12)	4	12,2		S	1x100m	155331-0007	
					M	1x500m	155331-0008	
					L	1x1000m	155331-0009	
(4G6,0)	(4G AWG10)	4	14,5		S	1x100m	155331-0010	
					M	1x500m	155331-0011	
					L	1x1000m	155331-0012	
4G1,5 + (2x1,5)	(4G AWG16 + (2xAWG16))	6 (4+2)	11,1	Siemens 6FX8008 Plus	S	1x100m	155331-1001	
					M	1x500m	155331-1002	
					L	1x1000m	155331-1003	
(4G2,5 + (2x1,5))	(4G AWG14 + (2xAWG16))	6 (4+2)	12,6		S	1x100m	155331-1004	
					M	1x500m	155331-1005	
					L	1x1000m	155331-1006	
(4G4,0 + (2x1,5))	(4G AWG12 + (2xAWG16))	6 (4+2)	14,0		S	1x100m	155331-1007	
					M	1x500m	155331-1008	
					L	1x1000m	155331-1009	
(4G6,0 + (2x1,5))	(4G AWG10 + (2xAWG16))	6 (4+2)	16,2		S	1x100m	155331-1010	
					M	1x250m	155331-1011	
					L	1x500m	155331-1012	
(4G1,5 + 2x(2x0,75))	(4G AWG16 + 2x(2xAWG19))	8 (4+2+2)	12,1	Bosch Rexroth INDRAMAT INK650	S	1x100m	155331-2001	
					M	1x500m	155331-2002	
					L	1x1000m	155331-2003	
(4G2,5 + 2x(2x1,0))	(4G AWG14 + 2x(2xAWG18))	8 (4+2+2)	14,1	Bosch Rexroth INDRAMAT INK602	S	1x100m	155331-2004	
					M	1x500m	155331-2005	
					L	1x1000m	155331-2006	
(4G4 + 2x(2x1,5))	(4G AWG12 + 2x(2xAWG16))	8 (4+2+2)	15,8	Bosch Rexroth INDRAMAT INK603	S	1x100m	155331-2007	
					M	1x250m	155331-2008	
					L	1x500m	155331-2009	
(4G6 + 2x(2x1,5))	(4G AWG10 + 2x(2xAWG16))	8 (4+2+2)	17,9	Bosch Rexroth INDRAMAT INK604	S	1x100m	155331-2010	
					M	1x250m	155331-2011	
					L	1x500m	155331-2012	

Flamar Servo Motor

155331 Feedback Cables, PUR Jacket

Drag Chain Installation, Shielded, -40°C/+80°C, 600V

molex

Cables with Polyurethane (PUR, TPU) jacket ensure top mechanical performance, withstand harsh environments and resist to abrasion. Suitable for drag chain applications. To connect encoders/ resolvers by means of a M23 signal connector.



Specifications


Application: Harsh environment
 Installation: Drag Chain
 Halogen Free: Yes
 Temp. rating (flexible installation):
 -40°C/+80°C
 Voltage rating: 600V
 Bending radius (flex. install. at 20°C):
 > 12xOD
 Insulation material: TPE
 Jacket material: PUR
 Shielded: Yes

Approval: UL AWM 21223 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Excellent resistance to oil and abrasion. Ensures top mechanical performances.

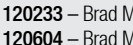
Cross Section		No. of Circuits	Diameter in mm	In accordance with	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG							
(4x2x0,25 + 2x1,00)C	(4x2xAWG24 + 2xAWG18)C	10 (8+2)	8,80	Bosch Rexroth INDRAMAT INK 0209	S	1x200m	155331-9001	
					M	1x500m	155331-9002	
					L	1x1000m	155331-9003	
(3x(2x0,14)D + 2x0,50)C	(3x(2xAWG26)D + 2x(AWG21)D)C	8 (6+2)	9,00	Heidenhain	S	1x200m	155331-9004	
					M	1x500m	155331-9005	
					L	1x1000m	155331-9006	
(4x2x0,38 + 4x0,50)C	(4x2xAWG22 + 4xAWG21)C	12 (8+4)	9,5	Siemens 6FX8008-1BD21	S	1x200m	155331-9007	
					M	1x500m	155331-9008	
					L	1x1000m	155331-9009	
(3x(2x0,14)D + 2x0,50 + 4x0,14 + 4x0,25)C	(3x(2xAWG26)D + 2xAWG21 + 4xAWG26 + 4xAWG24)C	16 (6+2+4+4)	10,0	Siemens 6FX8008-1BD51	S	1x100m	155331-9010	
					M	1x500m	155331-9011	
					L	1x1000m	155331-9012	

Related Products

Field Attachable Connectors




120230 – Brad M23 Signal Connectors



120233 – Brad M23 Power Connectors


120604 – Brad M40

Overmolded Connectors



120480 – Brad M23 Power Cordsets

120600 – Brad M40



120490 – Brad M23 Signal Overmolded Cordsets



Network

Series	Environment	Installation	Halogen Free	Temperature Rating °C (flexible installation)		Voltage Rating V	Bending Radius (flex. install. at 20°C)
155411	Standard	Flexible	No	+5°C	+60°C (CC-Link) +60°C (PROFIBUS) +70°C (PROFINET) +60°C (EtherNet/IP)	300V	>15xOD
155421	Severe	Drag Chain	No	-10°C	+60°C (CC-Link) +60°C (PROFIBUS) +70°C (PROFINET) +60°C (EtherNet/IP)	600V	> 15xOD
155431	Harsh	Drag Chain	Yes	-20°C	+60°C (CC-Link) +60°C (PROFIBUS) +70°C (PROFINET) +60°C (EtherNet/IP)	300V	> 15xOD

Typical Applications



I/O Modules



Connections to PLC

Jacket choice criteria

- PVC: The most cost-effective solution for flexible and static installation.
- WSOR: Weld-Slag and Oil-Resistant Cable, a single-cable solution designed to withstand the severe environments found in automotive and industrial factory floors. ECOLAB compatible (resistant to detergents, disinfectants and wash down water-jet used in Food & Beverage). Suitable for drag chain applications.
- PUR (Polyurethane): Ensures top mechanical performance, withstands harsh environments, abrasion resistant. Suitable for drag chain applications

Flamar Cables for Network Applications



Jacket Material	Shielded	Approval	Flame Resistance	Oil & Lubricants Resistance	Abrasion Resistance	Page No.
PVC	Yes	UL AWM 2464 / CSA	Good	Limited	Limited	64
WSOR	Yes	UL AWM 21215 / CSA	Good	Good	Medium	68
PUR	Yes	UL AWM 20233 / CSA	Good	Excellent	Excellent	72

Selecting the right cable for your application is very important to ensure a reliable, problem-free installation. Careful consideration of mechanical abrasion, fluid/chemical exposure, flexibility (C-track, torsion), temperature resistance and flame retardancy requirements is required to select the cable that will provide performance and reliability in service.

CC-Link

PROFI[®]
BUS

PROFI[®]
NET

EtherNet/IP[™]



Flamar Network Cables

155411 CC-Link, PVC Jacket

Flexible Installation, Shielded, +5°C/+60°C

molex

Cables with PVC jacket, suitable for flexible installation in standard environments. To connect field based devices (sensors, actuators, I/O modules, PLC) in combination with M12 and RJ45 connectors.



Specifications

Application: Standard environment
 Installation: Flexible
 Halogen Free: No
 Temp. rating (flexible installation):
 +5°C / +60°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 >15xOD
 Insulation material: Foam PE
 Jacket material: PVC

Shielded: Yes
 Approval: UL AWM 2464 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Cost-effective solution for less
 demanding environments (limited
 exposure to oil and lubricants)

Network Cables - CC-Link

Cross Section		Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG						
3x0,5	3xAWG20	7,7	Red	S	3x100m	155411-2001	
				M	1x500m	155411-2002	
				L	1x1000m	155411-2003	

Flamar Network Cables

155411 PROFIBUS, PVC Jacket

Flexible Installation, Shielded, +5°C/+60°C

molex

Cables with PVC jacket, suitable for flexible installation in standard environments. To connect field based devices (sensors, actuators, I/O modules, PLC) in combination with M12 and RJ45 connectors.



Specifications

Application: Standard environment
 Installation: Flexible
 Halogen Free: No
 Temp. rating (flexible installation):
 +5°C / +60°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 >15xOD
 Insulation material: Foam PE
 Jacket material: PVC

Shielded: Yes
 Approval: UL AWM 2464 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Cost-effective solution for less
 demanding environments (limited
 exposure to oil and lubricants)

Network Cables - PROFIBUS "DP"

Cross Section		Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG						
2x0,34	2xAWG22	8,2	Violet	S	1x200m	155411-1004	
				M	1x500m	155411-1005	
				L	1x1000m	155411-1006	

Flamar Network Cables

155411 Profinet, PVC Jacket

Flexible Installation, Shielded, +5°C/+70°C

molex

Cables with PVC jacket, suitable for flexible installation in standard environments. To connect field based devices (sensors, actuators, I/O modules, PLC) in combination with M12 and RJ45 connectors.



Specifications

Application: Standard environment
 Installation: Flexible
 Halogen Free: No
 Temp. rating (flexible installation):
 +5°C / +70°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 >15xOD
 Insulation material: PE
 Jacket material: PVC

Shielded: Yes
 Approval: UL AWM 2464 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Cost-effective solution for less
 demanding environments (limited
 exposure to oil and lubricants)

Network Cables - PROFINET TYPE "C"

Cross Section		Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG						
2x2x0,34	2x2xAWG22	6,8	Green	S	3x100m	155411-5001	
				M	1x500m	155411-5002	
				L	1x1000m	155411-5003	

Flamar Network Cables

155411 Ethernet, PVC Jacket

Flexible Installation, Shielded, +5°C/+60°C

molex

Cables with PVC jacket, suitable for flexible installation in standard environments. To connect field based devices (sensors, actuators, I/O modules, PLC) in combination with M12 and RJ45 connectors.



EtherNet/IP

Specifications

Application: Standard environment
 Installation: Flexible
 Halogen Free: No
 Temp. rating (flexible installation):
 +5°C / +60°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 >15xOD
 Insulation material: PE
 Jacket material: PVC

Shielded: Yes
 Approval: UL AWM 2464 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Cost-effective solution for less demanding environments (limited exposure to oil and lubricants)

Network Cables - Ethernet Cat.5e

Cross Section		Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG						
2x2x0,14	2x2xAWG26	6,5	Teal	S	3x100m	155411-6001	
				M	1x500m	155411-6002	
				L	1x1000m	155411-6003	
4x2x0,14	4x2xAWG26	7,2		S	3x100m	155411-6004	
				M	1x500m	155411-6005	
				L	1x1000m	155411-6006	
2x2x0,25	2x2xAWG24	7,0		S	3x100m	155411-6007	
				M	1x500m	155411-6008	
				L	1x1000m	155411-6009	
4x2x0,25	4x2xAWG24	7,8	S	3x100m	155411-6010		
			M	1x500m	155411-6011		
			L	1x1000m	155411-6012		

Flamar Network Cables

155421 CC-Link, WSOR Jacket

Drag Chain Installation, Shielded, -10°C/+60°C

molex

Cables with Weld-Slag and Oil-Resistant "WSOR" jacket cover the broadest range of industrial applications, allowing the reduction of inventory costs. Suitable for drag chain applications. To connect field based devices (sensors, actuators, I/O modules, PLC) in combination with M12 and RJ45 connectors.



Specifications

Application: Severe environment
 Installation: Drag Chain
 Halogen Free: No
 Temp. rating (flexible installation):
 -10°C / +60°C
 Voltage rating: 600V
 Bending radius (flex. install. at 20°C):
 > 15xOD
 Insulation material: Foam PE
 Jacket material: WSOR
 Shielded: Yes

Approval: UL AWM 21215 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Weld-Slag and Oil-Resistant. A single cable solution for automotive lines and industrial applications. ECOLAB compatible (for Food & Beverage environments).

Network Cables - CC-Link

Cross Section		Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG						
3x0,5	3xAWG20	7,7	Red	S	3x100m	155421-2001	
				M	1x500m	155421-2002	
				L	1x1000m	155421-2003	

Flamar Network Cables

155421 PROFIBUS, WSOR Jacket

Drag Chain Installation, Shielded, -10°C/+60°C

molex

Cables with Weld-Slag and Oil-Resistant "WSOR" jacket cover the broadest range of industrial applications, allowing the reduction of inventory costs. Suitable for drag chain applications. To connect field based devices (sensors, actuators, I/O modules, PLC) in combination with M12 and RJ45 connectors.



Specifications

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 Halogen Free: No
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 -10°C / +60°C
 Voltage rating: 600V
 Bending radius (flex. install. at 20°C):
 >15xOD
 Insulation material: Foam PE
 Jacket material: WSOR
 Shielded: Yes

Approval: UL AWM 21215 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Weld-Slag and Oil-Resistant. A single cable solution for automotive lines and industrial applications. ECOLAB compatible (for Food & Beverage environments).

Network Cables - PROFIBUS "DP"

Cross Section		Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG						
2x0,34	2xAWG22	8,2	Violet	S	1x200m	155421-1004	
				M	1x500m	155421-1005	
				L	1x1000m	155421-1006	

Flamar Network Cables

155421 Profinet, WSOR Jacket

Drag Chain Installation, Shielded, -10°C/+70°C

molex

Cables with Weld-Slag and Oil-Resistant "WSOR" jacket cover the broadest range of industrial applications, allowing the reduction of inventory costs. Suitable for drag chain applications. To connect field based devices (sensors, actuators, I/O modules, PLC) in combination with M12 and RJ45 connectors.



Specifications

Application: Severe environment
 Installation: Drag Chain
 Halogen Free: No
 Temp. rating (flexible installation):
 -10°C / +70°C
 Voltage rating: 600V
 Bending radius (flex. install. at 20°C):
 > 15xOD
 Insulation material: PE
 Jacket material: WSOR
 Shielded: Yes

Approval: UL AWM 21215 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Weld-Slag and Oil-Resistant. A single cable solution for automotive lines and industrial applications. ECOLAB compatible (for Food & Beverage environments).

Network Cables - PROFINET TYPE "C"

Cross Section		Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG						
2x2x0,34	2x2xAWG22	6,8	Green	S	3x100m	155421-5001	
				M	1x500m	155421-5002	
				L	1x1000m	155421-5003	

Flamar Network Cables

155421 Ethernet, WSOR Jacket

Drag Chain Installation, Shielded, -10°C/+60°C

molex

Cables with Weld-Slag and Oil-Resistant "WSOR" jacket cover the broadest range of industrial applications, allowing the reduction of inventory costs. Suitable for drag chain applications. To connect field based devices (sensors, actuators, I/O modules, PLC) in combination with M12 and RJ45 connectors.



Specifications

Application: Severe environment
 Installation: Drag Chain
 Halogen Free: No
 Temp. rating (flexible installation):
 -10°C / +60°C
 Voltage rating: 600V
 Bending radius (flex. install. at 20°C):
 > 15xOD
 Insulation material: PE
 Jacket material: WSOR
 Shielded: Yes

Approval: UL AWM 21215 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Weld-Slag and Oil-Resistant. A single cable solution for automotive lines and industrial applications. ECOLAB compatible (for Food & Beverage environments).

Network Cables - Ethernet Cat.5e

Cross Section		Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG						
2x2x0,14	2x2xAWG26	6,5	Teal	S	3x100m	155421-6001	
				M	1x500m	155421-6002	
				L	1x1000m	155421-6003	
4x2x0,14	4x2xAWG26	7,2		S	3x100m	155421-6004	
				M	1x500m	155421-6005	
				L	1x1000m	155421-6006	
2x2x0,25	2x2xAWG24	7,0		S	3x100m	155421-6007	
				M	1x500m	155421-6008	
				L	1x1000m	155421-6009	
4x2x0,25	4x2xAWG24	7,8	S	3x100m	155421-6010		
			M	1x500m	155421-6011		
			L	1x1000m	155421-6012		

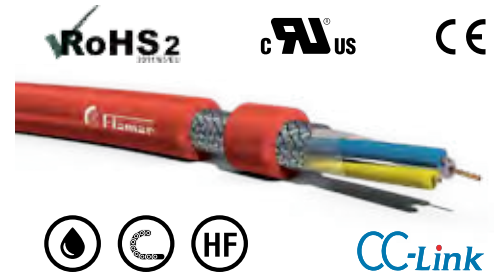
Flamar Network Cables

155431 CC-Link, PUR Jacket

Drag Chain Installation, Shielded, -20°C/+60°C

molex

Cables with Polyurethane (PUR, TPU) jacket ensure top mechanical performance, withstand harsh environments and resist to abrasion. Suitable for drag chain applications. To connect field based devices (sensors, actuators, I/O modules, PLC) in combination with M12 and RJ45 connectors.



Specifications

Application: Harsh environment
 Installation: Drag Chain
 Halogen Free: Yes
 Temp. rating (flexible installation):
 -20°C / +60°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 > 15xOD
 Insulation material: Foam PE
 Jacket material: PUR

Shielded: Yes
 Approval: UL AWM 20233 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Excellent resistance to oil and abrasion. Ensures top mechanical performances.

Network Cables - CC-Link

Cross Section		Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG						
3x0,5	3xAWG20	7,7	Red	S	3x100m	155431-2001	
				M	1x500m	155431-2002	
				L	1x1000m	155431-2003	

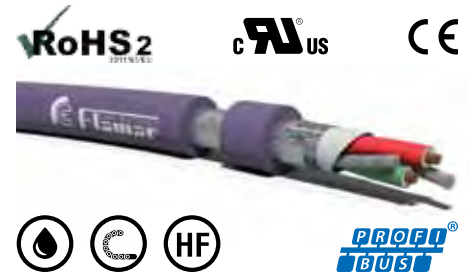
Flamar Network Cables

155431 PROFIBUS, PUR Jacket

Drag Chain Installation, Shielded, -20°C/+60°C

molex

Cables with Polyurethane (PUR, TPU) jacket ensure top mechanical performance, withstand harsh environments and resist to abrasion. Suitable for drag chain applications. To connect field based devices (sensors, actuators, I/O modules, PLC) in combination with M12 and RJ45 connectors.



Specifications

Application: Harsh environment
 Installation: Drag Chain
 Halogen Free: Yes
 Temp. rating (flexible installation):
 -20°C / +60°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 >15xOD
 Insulation material: Foam PE
 Jacket material: PUR

Shielded: Yes
 Approval: UL AWM 20233 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Excellent resistance to oil and abrasion. Ensures top mechanical performances.

Network Cables - PROFIBUS "DP"

Cross Section		Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG						
2x0,34	2xAWG22	8,2	Violet	S	1x200m	155431-1004	
				M	1x500m	155431-1005	
				L	1x1000m	155431-1006	

Flamar Network Cables

155431 Profinet, PUR Jacket

Drag Chain Installation, Shielded, -20°C/+70°C

molex

Cables with Polyurethane (PUR, TPU) jacket ensure top mechanical performance, withstand harsh environments and resist to abrasion. Suitable for drag chain applications. To connect field based devices (sensors, actuators, I/O modules, PLC) in combination with M12 and RJ45 connectors.



Specifications

Application: Harsh environment
 Installation: Drag Chain
 Halogen Free: Yes
 Temp. rating (flexible installation):
 -20°C / +70°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 > 15xOD
 Insulation material: PE
 Jacket material: PUR

Shielded: Yes
 Approval: UL AWM 20233 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Excellent resistance to oil and abrasion. Ensures top mechanical performances.

Network Cables - PROFINET TYPE "C"

Cross Section		Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG						
2x2x0,34	2x2xAWG22	6,8	Green	S	3x100m	155431-5001	
				M	1x500m	155431-5002	
				L	1x1000m	155431-5003	

Related Products

Field Attachable Connectors



130047 – Brad Micro-Change (M12) Ethernet Field Attachable Connectors

120100 – Brad Micro-Change (M12) Field Attachable Connectors, PROFIBUS Shielded

120071 – Brad Micro-Change (M12) Field Attachable Connectors



130034 – Brad Mini-Change Field Attachable Connectors

Overmolded Connectors



130050 - Brad RJ-Lnxx RJ-45 Connectors



130048 – Brad Micro-Change (M12 D-coded) Double-Ended Cordsets

120108 – Brad Micro-Change (M12 D-coded) Double-Ended Cordsets



120341 – Brad Micro-Change (M12 X-coded) Cat6_A



120098 – Brad Micro-Change (M12 B-coded)

Flamar Network Cables

155431 Ethernet, PUR Jacket

Drag Chain Installation, Shielded, -20°C/+60°C

molex

Cables with Polyurethane (PUR, TPU) jacket ensure top mechanical performance, withstand harsh environments and resist to abrasion. Suitable for drag chain applications. To connect field based devices (sensors, actuators, I/O modules, PLC) in combination with M12 and RJ45 connectors.



Specifications

Application: Harsh environment
 Installation: Drag Chain
 Halogen Free: Yes
 Temp. rating (flexible installation):
 -20°C / +60°C
 Voltage rating: 300V
 Bending radius (flex. install. at 20°C):
 > 15xOD
 Insulation material: PE
 Jacket material: PUR

Shielded: Yes
 Approval: UL AWM 20233 / CSA
 Marking: acc. to UL/CSA
 Silicone, Pb,Cd,Hg & FCKW free: Yes
 Flame resistance:
 Good (VW1/FT1 & IEC60332-1)
 Key factor:
 Excellent resistance to oil and abrasion. Ensures top mechanical performances.

Network Cables - Ethernet Cat.5e

Cross Section		Diameter in mm	Jacket Color	Packaging	Packaging Composition	Standard Order No	Sketch
mm ²	AWG						
2x2x0,14	2x2xAWG26	6,5	Teal	S	3x100m	155431-6001	
				M	1x500m	155431-6002	
				L	1x1000m	155431-6003	
4x2x0,14	4x2xAWG26	7,2		S	3x100m	155431-6004	
				M	1x500m	155431-6005	
				L	1x1000m	155431-6006	
2x2x0,25	2x2xAWG24	7,0		S	3x100m	155431-6007	
				M	1x500m	155431-6008	
				L	1x1000m	155431-6009	
4x2x0,25	4x2xAWG24	7,8		S	3x100m	155431-6010	
				M	1x500m	155431-6011	
				L	1x1000m	155431-6012	

A photograph of an industrial environment, likely a factory or laboratory. In the foreground, there are several bundles of hybrid cables, some blue and some yellow, connected to machinery. The background shows industrial equipment, including a large metal cabinet with a yellow 'CAUTION' warning sign. The lighting is bright, and the overall scene is clean and professional.

HYBRID CABLES > FOR CUSTOM SOLUTIONS

Flamar designs and manufactures custom made Hybrid Cables according to customer requirements for a broad range of applications.



Flamar Hybrid Cables



Flamar Hybrid Cables

155500

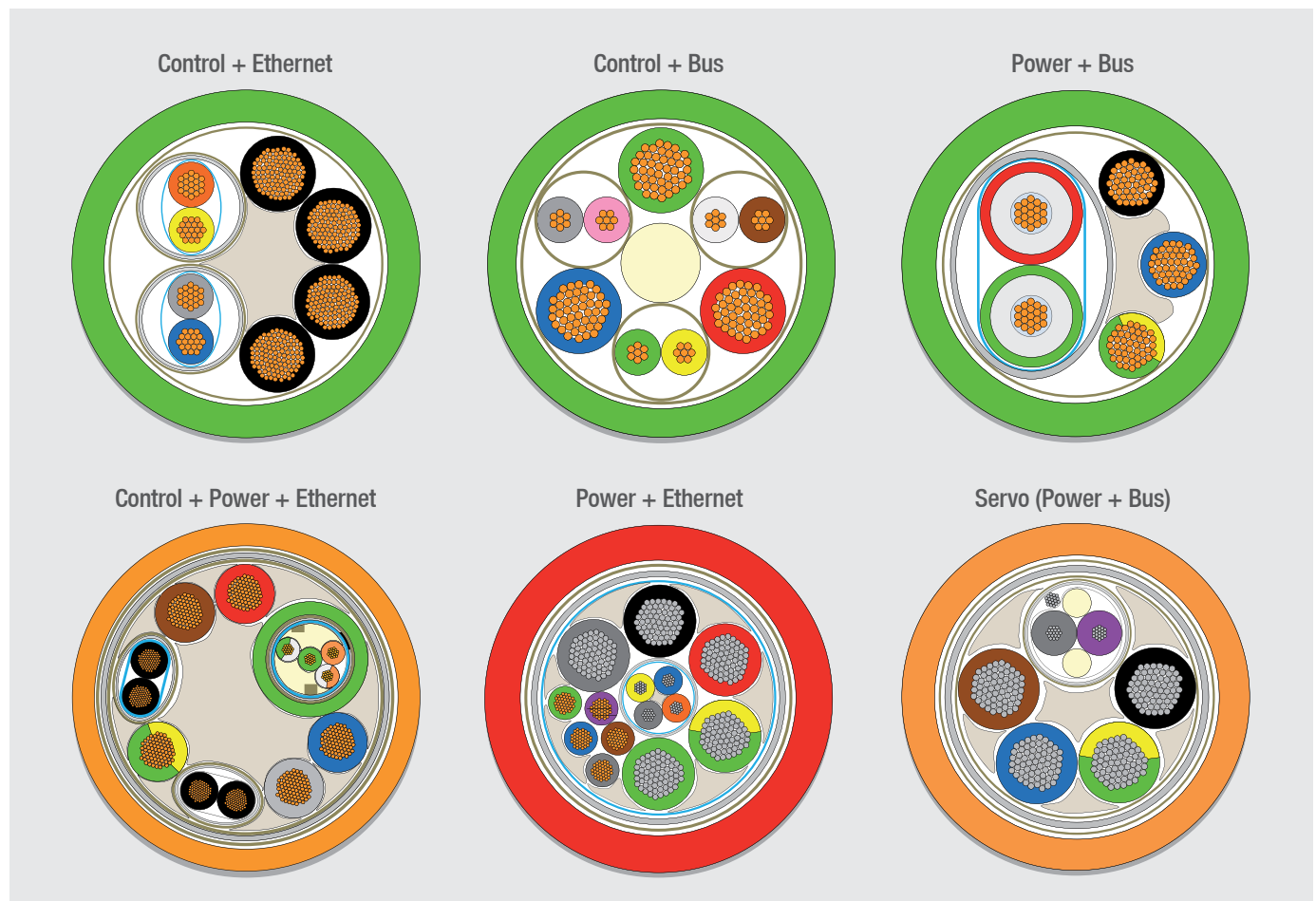
molex

Ideal solutions in applications with signal and power conductors together with coax and transmission elements to reduce installation space.



Specifications

Cross section: 12-26AWG
Insulating Material: PE – PP – PEE
Pair Tape: 9/12 – 40/36
Pair shielding: Braid
Covering Material: TPV – TPO
Tape: 9/12 – 40/36
Shield: Braid
Jacketing Material: PVC – PUR – PE



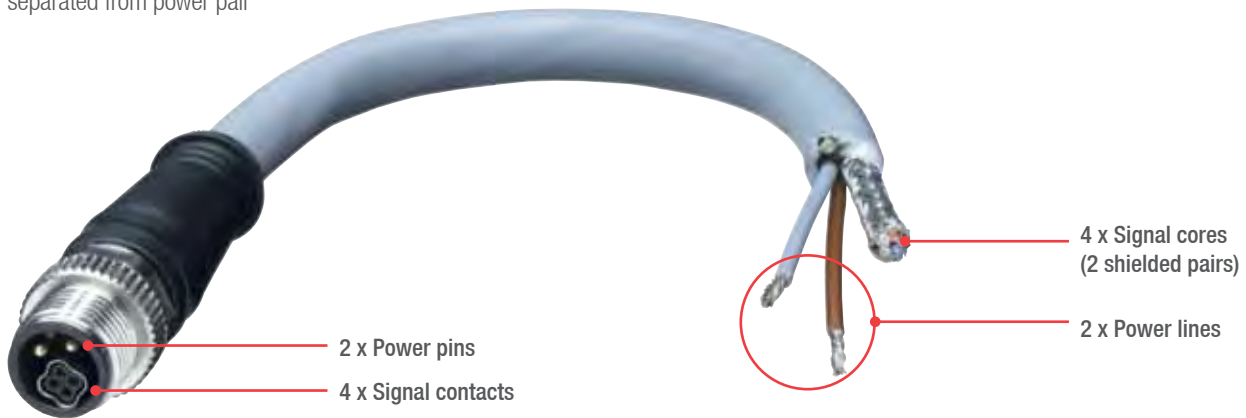
Flamar Hybrid Cables 155500

molex

120355 M12 CHT, 6-Pole,
4+2 and 4+4

Cable construction:

Shielded, 2 twisted data pair
separated from power pair



M12 CHT 4+2 Male-to-Male

Molded Cable Assembly:

Shielded, 2 twisted-pair data cable for best Cat5e speed
Ethernet performance



M12 CHT 4+4 Male-to-Male

Molded Cable Assembly:

Shielded, 4 data lines for best Cat5e speed
Ethernet performance

Flamar Hybrid Cables 155500

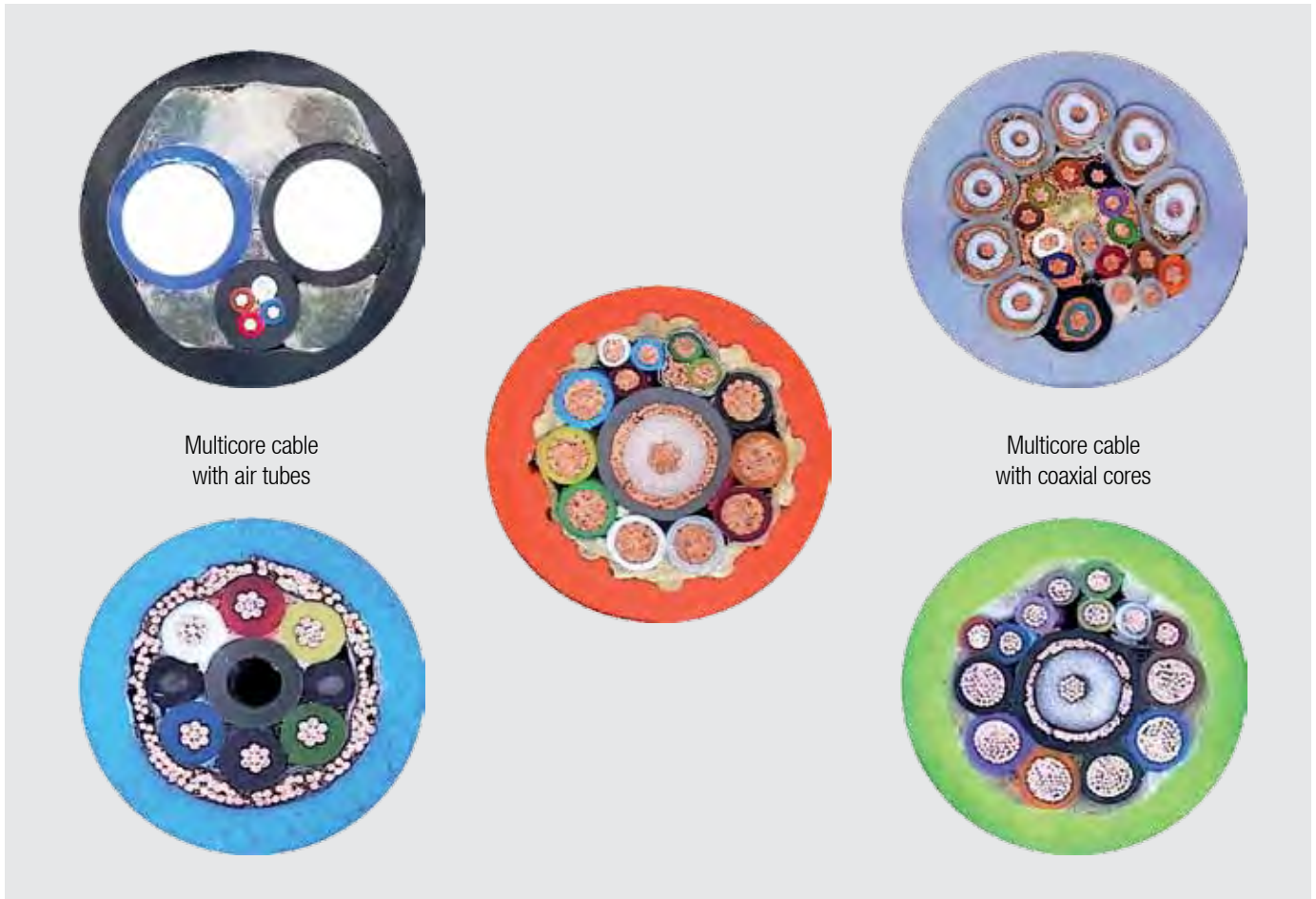
molex

Flamar can design and manufacture custom solutions in order to accommodate in a unique cable coaxial elements, air tubes, multi-cores assemblies.

This allows significant space saving and reduces the number of connections needed.



Few examples of Hybrid cables:



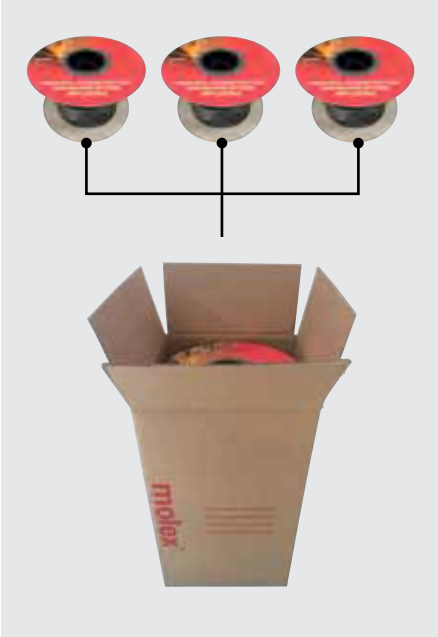


Multicore cable
with air tubes

Multicore cable
with coaxial cores

Contact us at:
flamar.cables@molex.com

For our Industrial Automation standard cables we offer three different packaging types.

3 Packaging sizes

Small	Medium	Large
<p>3x100m ÷ 3x200m*</p> <p>3 cardboard reels inside one box</p>	<p>250m ÷ 800m*</p> <p>1 plywood reel</p>	<p>500m ÷ 1500m*</p> <p>1 wooden drum</p>
		

* Depending on cable diameter

Useful documentation and resources available

Molex Heavy Duty Connectors & Flamar Standard Cables For Industrial Automation

Size	Poles	Hoods & Inserts					Cable	Cable p/n per packaging size and jacket (1,5mm ² - 16AWG)
		Straight	90°	Male Insert	Female Insert	Cable Gland		
3A "21x21"	4 + ground	*7803.6228.0 †93601-0682	*7803.6220.0 †93601-0668	*7204.6102.0 †93601-0133	*7204.6002.0 †93601-0129	*7000.6831.0 †93600-0024 metal		5 cores † 155220-0235 /6/7 WSOR † 155230-0235 /6/7 PUR
		*7803.6232.0 †93601-0692				*7000.7823.0 †93600-0349 plastic		
6B "44x27"	6 + ground	*7806.6553.0 †93601-0917	*7806.6551.0 †93601-0911	*7306.5961.0 †93601-0206	*7306.5861.0 †93601-0204	*7000.6831.0 †93600-0024 metal		7 cores † 155220-0241 /2/3 WSOR † 155230-0241 /2/3 PUR
						*7000.7823.0 †93600-0349 plastic		
10B "57x27"	10 + ground	*7810.6570.0 †93601-1746	*7810.6569.0 †93601-1741	*7310.5962.0 †93601-0230	*7310.5862.0 †93601-0228	*7000.6831.0 †93600-0024 metal		12 cores † 155220-0253 /4/5 WSOR † 155230-0253 /4/5 PUR
						*7000.7823.0 †93600-0349 plastic		
16B "77x27"	16 + ground	*7816.6572.0 †93601-2824	*7816.6571.0 †93601-2819	*7316.5963.0 †93601-0261	*7316.5863.0 †93601-0257	*7000.6832.0 †93600-0026 metal		17 cores † 155220-0259 /60/61 WSOR † 155230-0259 /60/61 PUR
						*7000.7824.0 †93600-0355 plastic		
24B "104x27"	24 + ground	*7824.6926.0 †93601-3857	*7824.6927.0 †93601-3862	*7324.5965.0 †93601-0295	*7324.5865.0 †93601-0291	*7000.6833.0 †93600-0028 metal		25 cores † 155220-0265 /6/7 WSOR † 155230-0265 /6/7 PUR
						*7000.7825.0 †93600-0361 plastic		

Legend:

WSOR: Weld-Slag and Oil-Resistant. PUR: Polyurethane (TPU).
In **bold**: typical configuration. PVC (series 155210) and TPE (series 155240) jacket available as well.

Ordering No. Legend:

*7000.6833.0: Engineering No.
†93600-0028: Standard Ordering No.



Flamar Cables Flyer
987651-4581




Flamar Samples Card



Molex Heavy Duty Connectors Fast Check Fold Out
987651-1521

Molex Heavy Duty Connectors Full Catalog
987651-1522




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