

**August 28, 2018**

**Issue Number: 961**

**Product Change Notice: Specification Changes to 3M™ Halogen Free Cable, HF659 and HF759 Series**

**To Our 3M Authorized Distributors,**

Following consultation with Underwriters Laboratory (UL), 3M has decided to reclassify the Halogen Free Cables, HF659 and HF759 Series, to better align with UL's Styles and 3M's cable constructions. It is important to note that the product materials and construction are not actually changing. The reclassification of these offerings will, however, have an impact on what is included on our product specifications.

All product shipments from 3M after the issuance of this notice will be in accordance with the new UL classifications for these offerings.

**What is not changing?**

The materials and product construction of the 3M™ Halogen Free Cables, HF659 and HF759 Series are not changing.

**What is being changed?**

The UL classification is changing for the 3M™ Halogen Free Cables, HF659 and HF759 Series. The new UL classification will impact the specifications relating to the UL Style, Temperature Rating and UL Flammability. The changes are noted in the table below:

**List of Specification Changes**

	Old	New
UL Style No.	21683	22170
Temperature Rating	-40°C to +105°C	-40°C to +105°C (EIA364-32G, Method A, Test Condition 2)
		HF759: -10°C to +75°C (UL Temperature Rating)
		HF659: -15°C to +75°C (UL Temperature Rating)
Flammability Rating	UL VW-1 / FT-1	Internal: Horizontal Flame per UL758 External: Cable Flame (Vertical) per UL758

Please see the new specification drawings included in this notice; they can also be found on 3M's website by clicking on the links below.

3M™ Halogen Free Cable HF659 Series Drawing:

TS2335-E.pdf

<https://multimedia.3m.com/mws/media/6679430/3mtm-round-shielded-jacketed-flat-cable-hf659-series-ts2335.pdf>

3M™ Halogen Free Cable HF759 Series Drawing:  
TS2336-E.pdf

<https://multimedia.3m.com/mws/media/667944O/3mtm-round-jacketed-flat-cable-hf759-series-ts2336.pdf>

**What is the difference in testing between a VW-1 rating and Cable Flame rating?**

UL's "Cable Flame" test is essentially a variant of the vertical test category, though the Cable Flame test is not as commonly referenced as the VW-1.

In UL758, Table 3.4 calls out two required flammability tests for this type of cable construction which apply to the HF Cables, HF659 and HF759 Series from 3M. These tests are the Horizontal Flame Test and the Cable Flame Test.

As defined in Section 41 of UL758 with references to Section 1061 of UL1581 are included the specific test requirements. The Cable Flame test is a vertical test similar to VW-1. The flame application pattern and times are the main differences.

- Cable Flame (Vertical) test applies 180 total seconds of flame to the product under evaluation. The flame is applied in increments of 60 seconds, 3 times with 30 seconds between applications.
- The VW-1 (Vertical) test applies a flame for a total 75 seconds to the product under evaluation. The flame is applied in increments of 15 seconds, 5 times with 15 seconds between applications.

**What actions and impact will this change have on purchase orders?**

All purchase orders shipped after the issuance of this notice will be per the noted new drawing specifications.

A list of all active stock numbers for 3M cables HF659 and HF759 Series are noted in the tables below and also in the included spreadsheet.

3M cable HF659 and HF759 Series Active SKUs\_Final.xlsx

## List of All Active 3M™ Halogen Free Cable HF659 Series SKUs

3M Product Number	3M Stock Number	Product Description	14 Digit UPC Number
HF659/09	80001241324	80001241324 HF659/09=09/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948729
HF659/09	80001412248	80001412248 HF659/09=09/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631505
HF659/09SF	80001241332	80001241332 HF659/09SF=09/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948736
HF659/10	80001241340	80001241340 HF659/10=10/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948743
HF659/10	80001412255	80001412255 HF659/10=10/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631512
HF659/10SF	80001241357	80001241357 HF659/10SF=10/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948750
HF659/14	80001241365	80001241365 HF659/14=14/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948767
HF659/14	80001412263	80001412263 HF659/14=14/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631529
HF659/14SF	80001241373	80001241373 HF659/14SF=14/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948774
HF659/15	80001236605	80001236605 HF659/15=15/CAB/GRAY/RC/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111942789
HF659/15	80001412271	80001412271 HF659/15=15/CAB/GRAY/RC/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631536
HF659/15SF	80001241381	80001241381 HF659/15SF=15/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948781
HF659/16	80001241399	80001241399 HF659/16=16/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948798
HF659/16	80001412289	80001412289 HF659/16=16/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631543
HF659/16SF	80001241407	80001241407 HF659/16SF=16/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948804
HF659/20	80001236910	80001236910 HF659/20=20/CAB/GRAY/RC/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111943632
HF659/20	80001412297	80001412297 HF659/20=20/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631550
HF659/20SF	80001241415	80001241415 HF659/20SF=20/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948811
HF659/24	80001241423	80001241423 HF659/24=24/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948828
HF659/24	80001412305	80001412305 HF659/24=24/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631567
HF659/24SF	80001241431	80001241431 HF659/24SF=24/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948835
HF659/25	80001241449	80001241449 HF659/25=25/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948842
HF659/25	80001412313	80001412313 HF659/25=25/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631574
HF659/25SF	80001241456	80001241456 HF659/25SF=25/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948859
HF659/26	80001237835	80001237835 HF659/26=26/CAB/GRAY/RC/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111945544
HF659/26	80001412321	80001412321 HF659/26=26/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631581
HF659/26SF	80001241464	80001241464 HF659/26SF=26/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948866
HF659/30	80001241472	80001241472 HF659/30=30/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948873
HF659/30	80001412339	80001412339 HF659/30=30/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631598
HF659/30SF	80001241480	80001241480 HF659/30SF=30/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948880
HF659/34	80001241498	80001241498 HF659/34=34/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948897
HF659/34	80001412347	80001412347 HF659/34=34/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631604
HF659/34SF	80001241506	80001241506 HF659/34SF=34/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948903
HF659/36	80001241514	80001241514 HF659/36=36/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948910
HF659/36	80001412354	80001412354 HF659/36=36/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631611
HF659/36SF	80001241522	80001241522 HF659/36SF=36/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948927
HF659/37	80001241530	80001241530 HF659/37=37/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948934
HF659/37	80001412362	80001412362 HF659/37=37/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631628
HF659/37SF	80001241548	80001241548 HF659/37SF=37/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948941
HF659/40	80001241555	80001241555 HF659/40=40/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948958
HF659/40	80001412370	80001412370 HF659/40=40/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631635
HF659/40SF	80001241563	80001241563 HF659/40SF=40/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948965
HF659/50	80001241571	80001241571 HF659/50=50/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948972
HF659/50	80001412388	80001412388 HF659/50=50/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631642
HF659/50SF	80001241589	80001241589 HF659/50SF=50/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948989
HF659/60	80001241597	80001241597 HF659/60=60/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111948996
HF659/60	80001412396	80001412396 HF659/60=60/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/295'	00076308631659
HF659/60SF	80001241605	80001241605 HF659/60SF=60/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111949009
HF659/60SO	80001391350	80001391350 HF659/60SO=60/CAB/GRAY/RJFL/SHLD/HF/28AWG/CB/.050/275FT ROLL	00076308096274
HF659/60SOSF	80001391368	80001391368 HF659/60SOSF=60/CAB/GRAY/RJFL/SHLD/HF/28AWG/CB/.050/275FTSF	00076308096281
HF659/64	80001241613	80001241613 HF659/64=64/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111949016
HF659/64SF	80001241621	80001241621 HF659/64SF=64/CAB/GRAY/RJFL/SHLD/HF/28AWG/STR/.050/275FT ROLL	00051111949023

## List of All Active 3M™ Halogen Free Cable HF759 Series SKUs

3M Product Number	3M Stock Number	Product Description	14 Digit UPC Number
HF759/09	80001249160	80001249160 HF759/09=09/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111964972
HF759/09	80001412107	80001412107 HF759/09=09/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631369
HF759/09SF	80001249178	80001249178 HF759/09SF=09/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111964989
HF759/10	80001249186	80001249186 HF759/10=10/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111964996
HF759/10	80001412115	80001412115 HF759/10=10/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631376
HF759/10SF	80001249194	80001249194 HF759/10SF=10/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965009
HF759/14	80001249202	80001249202 HF759/14=14/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965016
HF759/14	80001412123	80001412123 HF759/14=14/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631383
HF759/14SF	80001249210	80001249210 HF759/14SF=14/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965023
HF759/15	80001249228	80001249228 HF759/15=15/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965030
HF759/15SF	80001249236	80001249236 HF759/15SF=15/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965047
HF759/16	80001249244	80001249244 HF759/16=16/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965054
HF759/16	80001412131	80001412131 HF759/16=16/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631390
HF759/16SF	80001249251	80001249251 HF759/16SF=16/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965061
HF759/20	80001249269	80001249269 HF759/20=20/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965078
HF759/20	80001412149	80001412149 HF759/20=20/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631406
HF759/20SF	80001249277	80001249277 HF759/20SF=20/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965085
HF759/24	80001249285	80001249285 HF759/24=24/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965092
HF759/24	80001412156	80001412156 HF759/24=24/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631413
HF759/24SF	80001249293	80001249293 HF759/24SF=24/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965108
HF759/25	80001249301	80001249301 HF759/25=25/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965115
HF759/25	80001412164	80001412164 HF759/25=25/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631420
HF759/25SF	80001249319	80001249319 HF759/25SF=25/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965122
HF759/26	80001249327	80001249327 HF759/26=26/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965139
HF759/26	80001412172	80001412172 HF759/26=26/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631437
HF759/26SF	80001249335	80001249335 HF759/26SF=26/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965146
HF759/30	80001249343	80001249343 HF759/30=30/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965153
HF759/30	80001412180	80001412180 HF759/30=30/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631444
HF759/30SF	80001249350	80001249350 HF759/30SF=30/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965160
HF759/34	80001249368	80001249368 HF759/34=34/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965177
HF759/34	80001412198	80001412198 HF759/34=34/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631451
HF759/34SF	80001249376	80001249376 HF759/34SF=34/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965184
HF759/36	80001249384	80001249384 HF759/36=36/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965191
HF759/36	80001412206	80001412206 HF759/36=36/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631468
HF759/36SF	80001249392	80001249392 HF759/36SF=36/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965207
HF759/37	80001249400	80001249400 HF759/37=37/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965214
HF759/37SF	80001249418	80001249418 HF759/37SF=37/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965221
HF759/37SOSF	80001422551	80001422551 HF759/37SOSF=37/NO SPLITS/GRAY/RJFL/HF/28AWG/STR/.050/275FT	00051131121447
HF759/40	80001249426	80001249426 HF759/40=40/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965238
HF759/40	80001412214	80001412214 HF759/40=40/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631475
HF759/40SF	80001249434	80001249434 HF759/40SF=40/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965245
HF759/50	80001249442	80001249442 HF759/50=50/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965252
HF759/50	80001412222	80001412222 HF759/50=50/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631482
HF759/50SF	80001249459	80001249459 HF759/50SF=50/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965269
HF759/60	80001249467	80001249467 HF759/60=60/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965276
HF759/60	80001412230	80001412230 HF759/60=60/CAB/GRAY/RJFL/HF/28AWG/STR/.050/295'	00076308631499
HF759/60SF	80001249475	80001249475 HF759/60SF=60/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965283
HF759/64	80001249483	80001249483 HF759/64=64/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965290
HF759/64SF	80001249491	80001249491 HF759/64SF=64/CAB/GRAY/RJFL/HF/28AWG/STR/.050/275FT ROLL	00051111965306

### What do I need to do?

Please take note of the changes in the specifications that will apply to all 3M cables, HF659 and HF759 Series in future.

Please act now to:

- Advise your sales and technical staff.
- Update your website and systems as appropriate to include the new specification drawings and information.

If you have questions relating to this notice please contact your 3M representative who will be pleased to help you; or visit our website at [3M.com/Interconnect](https://www.3m.com/Interconnect).

Thank you for your understanding and continued partnership with 3M.

Mike Giesler  
Global Business Manager  
3M Electronics Materials Solutions Division