Table 3. Classes of reaction to fire performance for cables

Class	Test method(s)	Classification criteria	Additional classification
A_{ca}	EN ISO 1716	PCS ≤ 2,0 MJ/kg (1)	
$B1_{ca}$	$FIPEC_{20}$ Scen 2 ([5]) *And* EN 60332-1-2	FS ≤ 1.75 m *and* THR_{1200s} ≤ 10 MJ *and* Peak HRR ≤ 20 kW *and* FIGRA ≤ 120 Ws^{-1} H ≤ 425 mm	Smoke production ([2, 6]) and Flaming droplets/particles ([3]) and Acidity ([4, 8])
$B2_{ca}$	$FIPEC_{20}$ Scen 1 ([5]) *and*	FS ≤ 1.5 m; *and* THR_{1200s} ≤ 15 MJ; *and* Peak HRR ≤ 30 kW; *and* FIGRA ≤ 150 Ws^{-1}	Smoke production ([2, 7]) and Flaming droplets/particles ([3]) and Acidity ([4, 8])
	EN 60332-1-2	H ≤ 425 mm	
C_{ca}	$FIPEC_{20}$ Scen 1 ([5]) *And*	FS ≤ 2.0 m; *and* THR_{1200s} ≤ 30 MJ; *and* Peak HRR ≤ 60 kW; *and* FIGRA ≤ 300 Ws^{-1}	Smoke production ([2, 7]) and Flaming droplets/particles ([3]) and Acidity ([4, 8])
	EN 60332-1-2	H ≤ 425 mm	
D_{ca}	$FIPEC_{20}$ Scen 1 ([5]) *And*	THR_{1200s} ≤ 70 MJ; *and* Peak HRR ≤ 400 kW; *and* FIGRA ≤ 1300 Ws^{-1}	Smoke production ([2, 7]) and Flaming droplets/particles ([3]) and Acidity ([4, 8])
	EN 60332-1-2	H ≤ 425 mm	
E_{ca}	EN 60332-1-2	H ≤ 425 mm	
F_{ca}	No performance determined		

([1]) For the product as a whole, excluding metallic materials, and for any external component (i.e. sheath) of the product.
([2]) **s1** = TSP_{1200} ≤ 50 m^2 *and* Peak SPR ≤ 0.25 m^2/s
s1a = **s1** and transmittance in accordance with EN 61034-2 ≥ 80%
s1b = **s1** and transmittance in accordance with EN 61034-2 ≥ 60% < 80%
s2 = TSP_{1200} ≤ 400 m^2 *and* Peak SPR ≤ 1.5 m^2/s
s3 = not s1 or s2
([3]) For $FIPEC_{20}$ Scenarios 1 and 2: **d0** = No flaming droplets/particles within 1200 s; **d1** = No flaming droplets/ particles persisting longer than 10 s within 1200 s; **d2** = not d0 or d1.
([4]) EN 50267-2-3: **a1** = conductivity < 2.5 µS/mm *and* pH > 4,3; **a2** = conductivity < 10 µS/mm *and* pH > 4.3;
a3 = not a1 or a2. No declaration = No Performance Determined.
([5]) Air flow into chamber shall be set to 8000 ± 800 l/min.
$FIPEC_{20}$ Scenario 1 = prEN 50399-2-1 with mounting and fixing as below
$FIPEC_{20}$ Scenario 2 = prEN 50399-2-2 with mounting and fixing as below
([6]) The smoke class declared for class $B1_{ca}$ cables must originate from the $FIPEC_{20}$ Scen 2 test.
([7]) The smoke class declared for class $B2_{ca}$, C_{ca}, D_{ca} cables must originate from the $FIPEC_{20}$ Scen 1 test.
([8]) Measuring the hazardous properties of gases developed in the event of fire, which compromise the ability of the persons exposed to them to take effective action to accomplish escape, and not describing the toxicity of these gases.