

Optilene[®]

An extraordinary monofilament suture for Cardiovascular Surgery

Non-absorbable monofilament suture made of polypropylene and polyethylene



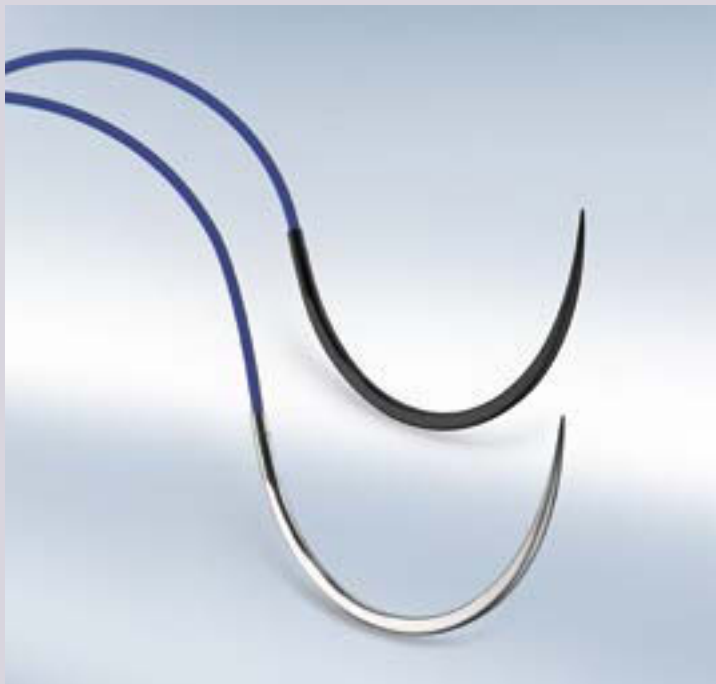
Sutures

Optilene®

An extraordinary monofilament suture for Cardiovascular Surgery



An increasingly aging population combined with more complex and diffuse cardiac diseases result in more challenging cardiac cases in daily practice. For that reason B. Braun is committed to providing you with the **high quality and innovative surgical products** sharing with you the same **Passion for Cardiovascular Surgery**.



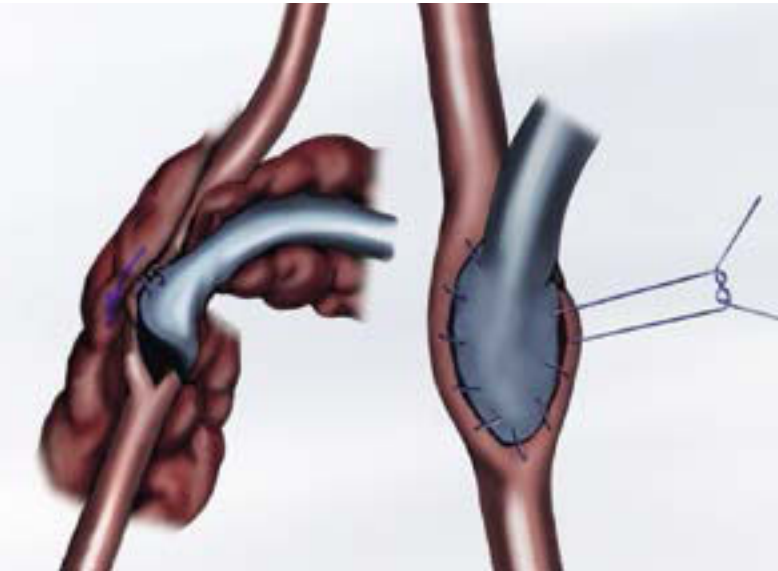
Optilene® is a non-absorbable monofilament suture made of polypropylene and polyethylene which has been specifically designed for Cardiovascular Surgery. The main indications are:

Cardiovascular Surgery

- CABG anastomosis
- Other cardiac and vascular anastomosis
- Valve repair procedures



Precision and ease of use, our top priorities



The additives included in the new formulation as well as our special extrusion process provide Optilene® with **precision and ease of use**.

Some of the benefits of our new Optilene®:

- Top level consistent tensile strength
- Excellent surface smoothness which leads to precise and controlled knot run down and small tissue drag
- Reengineered elasticity for good touch and controlled suture elongation in microsurgery sizes
- Increased pliability for good handling and knot tightness
- Improved thread visibility thanks to new dyestuff formulation for enhanced visual comfort in operating field
- High thread "pig-tailing" resistance even in case of hard tissues
- Low memory effect thanks to the RacePack® packaging for easy handling

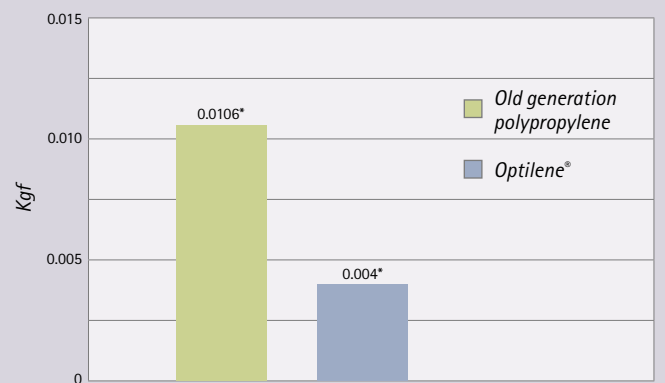


Excellent smoothness



Low memory effect

Roughness



* Average roughness drag force in USP 4/0
Data on file



Optilene®

An extraordinary monofilament suture for Cardiovascular Surgery

CV pass needles offer:

- Excellent penetration pass after pass even in atheromatous tissues
- Hold precision
- Low traumaticity
- Improved needle to thread ratio
- High bending resistance
- Enhanced visibility in the operating field

Our CV Pass needles are made of 300 series stainless steel to provide superior bending resistance and ductility as well as an improved needle penetration thanks to its geometry, surface treatment and silicone coating. We offer them in a wide portfolio for CV surgery.

■ Excellent penetration

■ Taper point

Eases penetration with lowest traumaticity



■ Short cutting point

Improves penetration through calcified tissues with less force



■ Low reflection

- Needles also available as Easyblack needles which reduce reflection by up to 60%* and permit better visibility and less visual fatigue

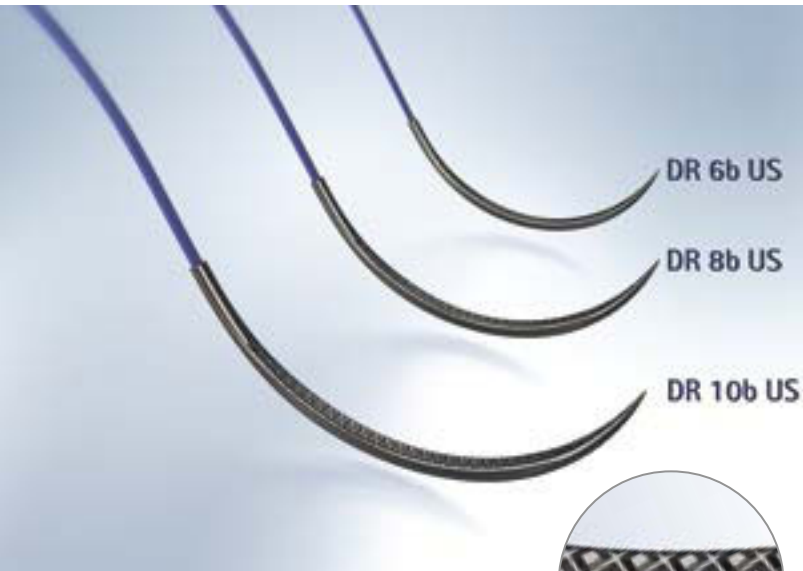


* Data on file



Optilene® Ultraslide®

New CABG Ultraslide® needles with Micro Cavity Technology



Micro Cavity Technology

New patented technology available for CABG surgery.

CABG Ultraslide® needles have been designed for those cardiac surgeons who perform each anastomosis as a masterpiece.

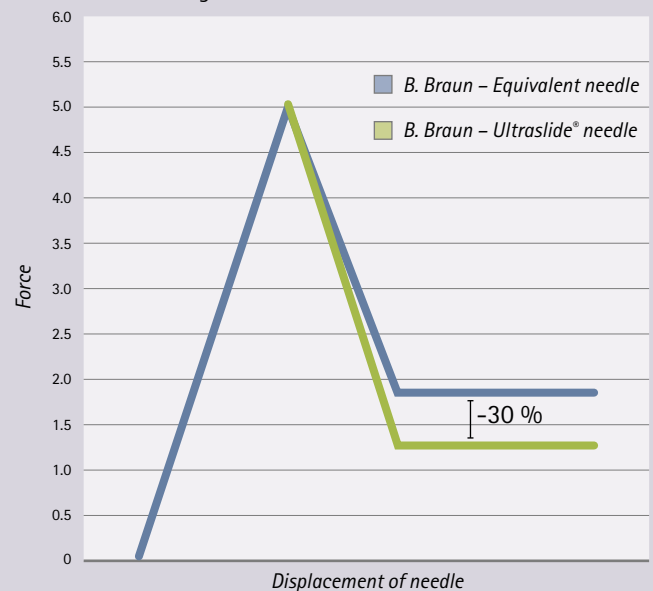
The Ultraslide® needles set new standards for sliding through the tissue, which can lead to lower traumaticity, due to the needle-tissue friction reduction effect of the Micro Cavity Technology. **30 % less force** is required to pass through the tissue with the Ultraslide® needles in comparison to standard needles*.



Low reflection needles

Tracking force needle body comparison

Better sliding – Less force



* Data on file

Low traumaticity

- Finer needle versions, labelled as "f", with up to 43 % less cross section surface for precise needle to thread ratio that leads to lower traumaticity and less bleeding

Reinforced needle zone tapers off gradually

- Reinforced versions, labelled as "s", also available

Semi square body design:

- Improves bending strength resistance
- Enhances stability in the needleholder



Optilene®
























An extraordinary monofilament suture for Cardiovascular Surgery

Product overview

Structure	Monofilament
Colour	Blue
Chemical composition	Polypropylene and polyethylene
Coating	Uncoated
Origin	Synthetic
Sizes	USP 10/0 (0.2 metric) to USP 0 (3.5 metric)
Type of absorption	Non-absorbable
Indication	Cardiovascular, neurosurgical, ophthalmological and micro surgery and general soft tissue approximation
Sterilization	Ethylene oxide
















Needle-thread combination

Needle			Thread		USP metric						
length mm	angle	diameter microns	length cm	colour	10/0 0.2	9/0 0.3	8/0 0.4	7/0 0.5	6/0 0.7	5/0 1	4/0 1.5
3/8 circle round bodied Ultraslide® needle											
	DR 6b 		 140µ	45 Blue							G3096116
				45 60 75 Blue							C3096111 C3096127 C3096152
	2xDR 6b 		 140µ	60 2 x 45 2 x 60 Blue							G3096118 G3096102 G3096105
			 140µ								
	DR 8b 		 175µ	45 Blue							C3096117
				45 60 75 Blue							C3096100 C3096129 C3096143 C3096121 C3096141
	2xDR 8b 		 175µ	60 75 2 x 60 Blue							G3096119 G3096138 G3096106
			 175µ								
	DR 10b 		 200µ	75 Blue							C3096167 C3096169
				60 75 Blue							C3096125 C3096145 C3096123 C3096148
	2xDR 10b 		 200µ	60 2 x 45 2 x 60 2 x 75 Blue							G3096137 G3096101 G3096108 G3096151 G3096104
			 200µ								
1/2 round bodied micro-needle with taper point											
	2xHRm 6 	180°	 200µ	45 Blue							G3090742 G3090743



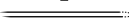
C Box of 36 units	B Box of 24 units	G Box of 12 units	M Box of 6 units
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Optilene®

Needle-thread combination

Needle			Thread		USP metric						
length mm	angle	diameter microns	length cm	colour	10/0 0.2	9/0 0.3	8/0 0.4	7/0 0.5	6/0 0.7	5/0 1	4/0 1.5
3/8 round bodied micro-needle with taper point											
	135°	70µ	10	Blue	G3090781						
	135°	100µ	15	Blue	G3090782						
	135°	100µ	45	Blue		G3090482					
	135°	140µ	15 45	Blue		G3090783 G3090883					
	135°	140µ	45 60	Blue			G3090780 G3090609				
3/8 round bodied micro-needle with short cutting point											
		135°	 200µ	75	Blue				G3090693		
3/8 circle round bodied micro vascular needle with taper point											
			 320µ	60 90	Blue				G3095201 G3095746		
		135°	 320µ	75 90	Blue				G3095133 G3095132		
		135°	 320µ	2 x 60	Blue				G3095269		

Needle-thread combination

Needle			Thread	USP metric						
length mm	angle	diameter microns	length cm colour	10/0 0.2	9/0 0.3	8/0 0.4	7/0 0.5	6/0 0.7	5/0 1	4/0 1.5
3/8 progressive curved round bodied micro vascular needle with taper point										
	2xPRmV 10b 		 75 Blue					G3090670		
	95°/90°	200μ								
3/8 round bodied micro vascular needle with short cutting point										
	2xDRCmV 10b 		 75 Blue				G3095685	G3095672		
	135°	200μ								
Progressive curved round bodied micro vascular needle with short cutting point										
	2xPRCmV 10b 		 75 Blue					G3090668		
	135°	200μ								
3/8 circle micro-lancet needle										
	2xDLm 6 		30 Blue	G3090591						
	140°	150μ								
Lancet needle straight										
	2xGLm 16 		23 Blue	G3095480						
		150μ								

C Box of 36 units




























B Box of 24 units

G Box of 12 units


























M Box of 6 units

Optilene®

Needle-thread combination

Needle		Thread	USP metric							
			8/0 0.4	7/0 0.5	6/0 0.7	5/0 1	4/0 1.5	3/0 2	2/0 3	
length mm	length cm colour									
1/2 circle round bodied needle										
 CV Pass	2xHR 8 	 Long pack	2 x 60 Blue				G3095865			
 CV Pass	2xHR 10f 	 Long pack	2 x 75 Blue				G3095858			
 CV Pass	HR 10 	 RP	75 Blue				C3090402			
 CV Pass	2xHR 10 	 RP	75 Blue		C3090867	C3090868	C3090869			
 CV Pass	2xHR 13ff 	 RP	75 Blue				C3095341	G3095346		
 CV Pass	2xHR 13f 	 RP	45 75 Blue				C3095120 C3095123	C3095124		
 CV Pass	HR 13 	 RP	75 Blue					C3090500		
 CV Pass	2xHR 13 	 RP	60 75 90 Blue				C3090953	C3090954	C3090933	C3090750
 CV Pass	2xHR 13b 	 RP	75 Blue					C3095449		

Needle-thread combination

Needle length mm	Thread length cm colour	USP metric						
		8/0 0.4	7/0 0.5	6/0 0.7	5/0 1	4/0 1.5	3/0 2	2/0 3
1/2 circle round bodied needle								
 2xHR 17f 	 75 Blue				C3095501			
 HR 17 	 75 Blue				C3090012	C3090013	C3090014	
 2xHR 17 	 75 Blue			C3090898	C3090501 C3090901	C3090503 C3090902	C3090502 C3090903	
	 2 x 75 2 x 90 Blue				G3090642	G3090194	G3095183 G3090644	
 2xHR 17b 	 75 Blue				C3095492	C3095461 C3095493	C3095494	
	 90 Blue					C3090338		
 2xHR 20 	 90 Blue							
 HR 22 	 75 Blue					C3090029	C3090030	
	 75 Blue				C3090975	C3090863 C3090976	C3090860 C3090977	C3090086 C3090978
 2xHR 22 	 90 Blue							
	 2 x 75 2 x 90 Blue					G3095620	G3095616	

C Box of 36 units





B Box of 24 units

G Box of 12 units




























M Box of 6 units

Optilene®

Needle-thread combination

Needle		Thread length cm colour	USP metric						
length mm	7/0 0.5		6/0 0.7	5/0 1	4/0 1.5	3/0 2	2/0 3	0 3.5	
1/2 circle round bodied needle									
CV Pass	HR 26	75				C3090040	C3090041	C3090042	C3090043
		90				C3090140			
		120						C3090444	
		Blue							
		 Pledgets 3x3 mm Firm						C3090495	
		20							
		Blue							
CV Pass	2xHR 26	75			C3090906	C3090707	C3090708	C3090087	
		90			C3090905	C3090907	C3090908	C3090909	
		120				C3095709	C3090709	C3095710	
		Blue							
		 Pledgets 6x3 mm Firm						C3090910	
		90							
		Blue							
		 2 x 90				G3090633	G3090631		
		Blue							
CV Pass	2xHR 26b	75				C3095557			
		90						C3095558	
		Blue							
3/8 circle round bodied needle									
CV Pass	2xDR 6	45	C3090880						
		60	C3090712						
		75	C3090980	C3095286	C3095110				
		Blue							
		 2 x 45	G3095841						
		Blue							
CV Pass	2xDR 6b	45	C3095857						
		60	C3095838						
		75	C3095834						
		Blue							

Needle-thread combination

Needle length mm		Thread length cm colour	USP metric						
			8/0 0.4	7/0 0.5	6/0 0.7	5/0 1	4/0 1.5	3/0 2	2/0 3
3/8 circle round bodied needle									
CV Pass 	2xDR 8f 		45	C3090107	C3090079				
			60	C3090105	C3090088				
			2 x 60		G3090127				
CV Pass 	2xDR 8fb 		45	C3095824	C3095826				
			60	C3095829	C3095832				
CV Pass 	2xDR 8 		12	C3095870					
			45		C3090685	C3090686	C3090684		
			60	C3090887	C3090888	C3090889			
			75	C3090004	C3090885	C3090886			
			Blue						
			2 x 45		G3090599				
			2 x 60		G3090364				
CV Pass 	2xDR 8b 		45	C3095805					
			60	C3095817	C3095819	C3095821			
			75	C3095822	C3095823	C3090599			
			Blue						
CV Pass 	DR 10f 		75		C3095084				
CV Pass 	2xDR 10f 		45		C3090134	C3095565			
			60		C3090135	C3095477			
			75		C3090136	C3095430			
			Blue						
			2 x 75		G3095429				
CV Pass 	2xDR 10fb 		75		C3095838				
CV Pass 	DR 10 		75		C3090541	C3090542			
			Blue						

C Box of 36 units


















B Box of 24 units

G Box of 12 units


































M Box of 6 units

Optilene®

Needle-thread combination

Needle length mm		Thread length cm colour	USP metric						
			8/0 0.4	7/0 0.5	6/0 0.7	5/0 1	4/0 1.5	3/0 2	2/0 3
3/8 circle round bodied needle									
CV Pass 	2xDR 10 	 Blue	45		C3090614	C3090615			
			60		C3090714	C3090715	C3090522		
			75		C3090914	C3090915	C3090913		
			90		C3090799	C3090815			
		 Blue	2 x 60		G3090611				
CV Pass 	2xDR 10b 	 Blue	45		C3090164				
			60		C3090062	C3095816			
			75		C3095812	C3095843			
CV Pass 	DR 13 	 Blue	75			C3095930	C3095931	C3095932	
CV Pass 	2xDR 13 	 Blue	45		C3095885	C3095886			
			60		C3095894	C3095895			
			75		C3095905	C3095906	C3095907	C3095908	
			90			C3095938	C3095939		
		 Blue	2 x 75			G3095979	G3095980		
CV Pass 	2xDR 13b 	 Blue	60			C3095926			
			75			C3090191	C3090547		
			90			C3095839	C3095840		
			120					C3095997	

Needle-thread combination

Needle length mm	Needle length cm colour	Thread length cm colour	USP metric						
			8/0 0.4	7/0 0.5	6/0 0.7	5/0 1	4/0 1.5	3/0 2	2/0 3
3/8 circle round bodied needle									
 Pass	2xDR 13s 	 75 90 Blue			C3095026		C3095021		
 Pass	2xDR 15 	 90 Blue					C3090716		
 Pass	DR 18 	 75 Blue					C3090119	C3090120	C3095057
 Pass	2xDR 18 	 75 90 Blue					C3090719 C3090919	C3090720 C3090920	C3095921
 Pass	2xDR 18b 	 120 Blue						C3095656	
 Pass	DR 22 	  Pledgets 3x3 mm Firm	20 Blue						C3090492
 Pass	DR 22 	  Pledgets 3x3 mm Firm Knot	20 Blue					C3090991	
 Pass	2xDR 22 	 75 90 Blue					C3090722 C3090822	C3090723	
 Pass	DR 26 	  Pledgets 3x3 mm Firm Knot	20 Blue						C3090993
 Pass	2xDR 26 	 75 Blue							C3090724 C3090725

C Box of 36 units



















B Box of 24 units

G Box of 12 units


























M Box of 6 units

Optilene®

Needle-thread combination

Needle length mm		Thread length cm colour	USP metric					
			8/0 0.4	7/0 0.5	6/0 0.7	5/0 1	4/0 1.5	3/0 2
1/2 round bodied needle with short cutting point								
CV Pass	2xHRC 10 	 75 Blue				C3095205		
		 2 x 75 Blue			G3095313			
CV Pass	2xHRC 13 	 75 Blue			C3095039	C3090303		
		 2 x 60 Blue			G3090195			
CV Pass	HRC 17 	 75 Blue				C3090561	C3090579	
CV Pass	2xHRC 17 	 90 Blue				C3090570	C3090571	C3090800 C3095052
		 Pledgets 6x3 mm Firm  90 Blue						C3095368
CV Pass	2xHRC 17b 	 90 Blue				C3095580	C3095581	
CV Pass	HRC 22 	 75 Blue					C3090566	
CV Pass	2xHRC 22 	 90 Blue					C3090580	C3090581























Needle-thread combination

Needle length mm	Thread length cm colour	USP metric						
		6/0 0.7	5/0 1	4/0 1.5	3/0 2	2/0 3	0 3.5	1 4
1/2 round bodied needle with short cutting point								
 HRC 26 	 75 Blue							C3090474
 2xHRC 26 	 90 120 Blue			C3090811	C3090812 C3090820	C3095825 C3095140		
	 2 x 90 Blue							G3095761
 2xHRC 26b 	 90 Blue			C3095607	C3095608			
 2xHRC 27b 	 90 Blue							C3095670
Needle length mm	Thread length cm colour	8/0 0.4	7/0 0.5	6/0 0.7	5/0 1	4/0 1.5	3/0 2	2/0 3
3/8 round bodied needle with short cutting point								
 2xDRC 6 	 45 60 75 Blue	C3095209 C3095246 C3095272	C3095219					
 2xDRC 8 	 45 60 75 Blue	C3095211 C3090169	C3095046 C3090176	C3090172				
 2xDRC 8b 	 75 Blue		C3095813					
 DRC 10 	 75 Blue		C3090538					







C Box of 36 units	B Box of 24 units	G Box of 12 units	M Box of 6 units
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Optilene®

Needle-thread combination

Needle length mm		Thread length cm colour	USP metric						
			8/0 0.4	7/0 0.5	6/0 0.7	5/0 1	4/0 1.5	3/0 2	2/0 3
3/8 round bodied needle with short cutting point									
CV Pass	2xDRC 10 	 45 60 75 Blue	C3090116	C3090548	C3090543 C3090545				
		 2 x 75 Blue		G3095560	G3095561				
CV Pass	2xDRC 10b 	 60 75 Blue	C3095462	C3090577 C3090516	C3090578				
CV Pass	DRC 13 	 75 Blue			C3095144				
CV Pass	2xDRC 13 	 60 75 90 Blue		C3095268	C3095271	C3095896			
				C3095301 C3095303	C3095175 C3095305	C3095171			
		 2 x 75 Blue			G3095176				
CV Pass	2xDRC 13b 	 75 90 Blue			C3095836	C3095315 C3095311			
CV Pass	2xDRC 13s 	 75 Blue				C3095334			
CV Pass	2xDRC 15 	 75 Blue				C3095756			
CV Pass	2xDRC 18 	 75 90 Blue				C3095194	C3095195		
						C3090525	C3090526		
CV Pass	2xDRC 22 	 90 Blue				C3090535	C3090536		
CV Pass	2xDRC 26 	 90 120 Blue						C3095632	C3095636 C3095612

Needle-thread combination

Needle length mm	Thread length cm colour	USP metric						
		8/0 0.4	7/0 0.5	6/0 0.7	5/0 1	4/0 1.5	3/0 2	2/0 3
Progressive curved round bodied needle with short cutting point								
 2xPRC 10 	 2 x 75 Blue		G3095053					
 2xPRC 13 	 2 x 75 Blue			C3095097				

C Box of 36 units

B Box of 24 units

G Box of 12 units

M Box of 6 units



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