

Flow	ID (mm)	Fisher & Paykel				Hudson				RAM			
		Pressure (cm H <sub>2</sub> O)		Imposed Work of breathing (mJ/breath)		Pressure (cm H <sub>2</sub> O)		Imposed Work of breathing (mJ/breath)		Pressure (cm H <sub>2</sub> O)		Imposed Work of breathing (mJ/breath)	
		Mean	CI (95%)	Mean	CI (95%)	Mean	CI (95%)	Mean	CI (95%)	Mean	CI (95%)	Mean	CI (95%)
6 L/min	3	28.1 (28,06-28,12)		74.8 (74,66-74,89)		27.7 (27,66-27,71)		74.2 (74,09-74,23)		26.7 (26,70-26,77)		78.3 (78,19-78,40)	
	4	12.1 (12,10-12,14)		38.0 (37,90-38,09)		12.3 (12,33-12,35)		39.6 (39,49-39,61)		11.4 (11,43-11,45)		56.2 (56,09-56,26)	
	6	8.0 (8,00-8,03)		15.8 (15,63-15,87)		8.6 (8,62-8,65)		20.1 (19,94-20,18)		7.8 (7,76-7,79)		39.5 (39,38-39,52)	
	8	6.0 (5,99-6,03)		6.3 (6,17-6,49)		6.6 (6,55-6,60)		10.8 (10,69-10,91)		5.7 (5,65-5,67)		30.3 (30,23-30,41)	
	10	5.6 (5,59-5,62)		5.0 (4,85-5,12)		6.3 (6,30-6,34)		9.5 (9,32-9,76)		5.3 (5,24-5,27)		29.1 (28,93-29,22)	
	12	5.8 (5,76-5,80)		4.6 (4,37-4,77)		6.3 (6,28-6,32)		9.1 (8,91-9,21)		5.3 (5,32-5,36)		28.7 (28,57-28,80)	
	FP	5.8 (5,80-5,85)		5.7 (5,35-5,99)		6.4 (6,37-6,43)		10.1 (9,84-10,35)		5.5 (5,48-5,51)		29.4 (29,29-29,58)	
8 L/min	3	39.7 (39,61-39,72)		82.2 (82,04-82,27)		36.7 (36,66-36,74)		81.4 (81,33-81,49)		35.0 (34,98-35,08)		83.1 (83,02-83,22)	
	4	15.2 (15,14-15,18)		44.4 (44,28-44,52)		15.2 (15,19-15,21)		46.1 (46,06-46,20)		13.9 (13,85-13,89)		60.3 (60,22-60,42)	
	6	9.1 (9,10-9,14)		18.1 (18,01-18,25)		10.0 (10,01-10,03)		23.6 (23,50-23,68)		8.7 (8,69-8,71)		41.0 (40,85-41,07)	
	8	6.4 (6,42-6,45)		6.8 (6,70-6,96)		7.2 (7,23-7,26)		12.5 (12,39-12,61)		6.0 (5,94-5,97)		30.8 (30,67-30,92)	
	10	5.9 (5,85-5,89)		5.2 (4,93-5,45)		6.9 (6,88-6,93)		11.2 (10,97-11,32)		5.4 (5,35-5,38)		29.2 (29,08-29,36)	
	12	6.0 (5,96-5,99)		4.9 (4,73-5,11)		6.8 (6,77-6,82)		10.6 (10,49-10,74)		5.4 (5,41-5,44)		29.0 (28,87-29,10)	
	FP	6.2 (6,17-6,22)		6.1 (5,84-6,37)		7.0 (7,02-7,06)		12.0 (11,67-12,29)		5.6 (5,61-5,65)		30.0 (29,76-30,15)	

**Supplementary Table 2:** Effect of different interfaces.

Means and confidence intervals are given for both mean pressure (white background) and imposed work of breathing (gray background). Multiple comparisons of means were made for 19 consecutive breaths for different interfaces with a Games-Howell correction and  $p < 0.05$  was considered significant. All comparisons were significant. The original Fisher & Paykel tubing (FP) was included for reference.