

Flexible Ducting - Technical specification

General: All seams and other joining works are fully welded (vulcanised) 40 mm wide. No sewing. Suspension hooks are welded to the fabric at a distance of c/c 0,75 m. On duct diameters >Ø1800 mm, two parallel lines of suspension hooks are mounted, standard radial distance between the two lines 1,20 m.

Coupling A1 - ZIP-joints and A-2 VELCRO: Both duct ends made with a split zipper (plastic zipper) of heavy duty PVC-type or VELCRO.

Protection-sleeve which on the outside hides the zipper/VELCRO and on the inside seals the joint according to the principle "the higher pressure the tighter joint". With ZIP/VELCRO-joints, the ducting is delivered on standard pallets regardless diameter.

Coupling B - Steel clamps: One end of each duct length is fitted with a steel ring, vulcanised to the fabric.

One steel clamp made of galvanized 1,5 mm steel with locking device (threaded crank) closes the joint.

Every duct length is marked with information regarding quality, length, diameter, max allowed working pressure and manufacturing date.

* "RS" stands for Rip-Stop. The base fabric is made with an enhanced yarn which dramatically increases the tear strength. This feature eliminates the ducting to further-tear longitudinally under normal	Titan FR-RSX* (yellow)	Airolite FR-RSX* (yellow)	Ultralite FR (yellow)	Titan FRA-RSX* (black)	Airolite FRA-RSX* (black)	
Base fabric	Polyester					
Yarn thickness weft/warp (dtx)	2200/1430	3300/1100	1100/940	2200/1430	3300/1100	
Coating	Flame retardant plasticized PVC					
Tensile strength (N/100 mm)						
DIN EN ISO 1421:1998 (x)	warp	3200	2500	1900	3200	2500
	weft	4800	2800	2100	4800	2800
Tear strength (N/100 - crack 20 mm)						
TTT867007:1987 (xx)	warp	1400	1100	900	1400	1100
	weft	1650	1250	950	1650	1250
Total weight (gram/m2) (DIN 53352)	600	500	350	600	500	
Flame resistance (DIN4102-B1 + MSHA + EN 13501-1)	Meet all three. EN13501-1 as B-s1,d0 (s1=low smoke, d0=no flaming droplets)					
Cold crack (DIN 53361)	-30°C					
Environmental resistance	Resistant against rotting, humus acid, diesel- and nitrous gases, UV-light					
Conductivity (ISO 284)	-----	-----	-----	1x10 ⁶ Ω	1x10 ⁶ Ω	
<p>(x) = Tensile speed 2mm/minute = creep test = very low speed compared to conventional tensile tests. Length of loaded sample 600mm and width of sample 100mm. Standard Tensile Test: speed 100mm/minute, length of loaded sample 200mm and width of sample 50mm. (xx) = Tensile speed 2mm/minute = creep test = very low speed compared to conventional tear tests. Length of loaded sample 600mm. Width of sample 100mm and width of crack 20mm.</p>						

Diameter (mm)						
400	Max allowed working pressures (kPa) valid for new ducting. Safety factor 2.5.	98,0	64,4	48,3	98,0	64,4
500		78,4	51,5	38,6	78,4	51,5
600		65,3	42,9	32,2	65,3	42,9
700		56,0	36,8	27,6	56,0	36,8
800		49,0	32,2	24,2	49,0	32,2
900		43,6	28,6	21,5	43,6	28,6
1000		39,2	25,8	19,4	39,2	25,8
1100		35,6	23,5	17,6	35,6	23,5
1200		32,7	21,5	16,1	32,7	21,5
1300		30,2	19,8	14,9	30,2	19,8
1400		28,0	18,4	13,8	28,0	18,4
1500		26,1	17,1	12,8	26,1	17,1
1600		24,5	16,1	12,1	24,5	16,1
1700		23,1	15,2	11,4	23,1	15,2
1800		21,8	14,3	10,7	21,8	14,3
2000		19,6	12,9	9,7	19,6	12,9
2200		17,8	11,7	8,8	17,8	11,7
2400		16,3	10,7	8,0	16,3	10,7
2500		15,7	10,4	7,8	15,7	10,4
2600		15,1	9,9	7,4	15,1	9,9
2800	14,0	9,2	6,9	14,0	9,2	
3000	13,1	8,6	6,5	13,1	8,6	

Note: All specifications are subject to changes without notification.