



Elad Limited liability company

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Buyer: Bergin South Trading Ltd			Seller: Elad LLC	
Bergin Item		BFS12-2SN	Test Date: Mar 10, 2017	
Specification & Size		2SN 1/2"	Test Standard	EN853
NO.E1	Test Items	Test Standard	Test Result	Item Judgment
1	Material	NBR content should more than 40%, Carbon content should less than 15%	NBR 45% Carbon 10%	Qualified
2	Inside Diameter	Between 12,3 mm ~ 13,5 mm	12,5 mm	Qualified
3	Outside Diameter	Should not exceed 23,0 mm	22,0 mm	Qualified
6	Working Pressure	Max 27,5 MPa	27,5 MPa	Qualified
7	Proof Pressure	Max 55 MPa	55 MPa	Qualified
8	Bursting Pressure	Max 110 MPa	110 MPa	Qualified
9	Bend Rate	Mini 180 mm	180 mm	Qualified
11	Length	Each roll should be in 50 Meters length	50 Meters	Qualified
12	Impulse test	According to EN853, test temperature 100°C. The hose can undertake at least 200000 times impulse and should not leak or crack.	Pass	Qualified
13	Cold Flexibility	According to EN853, testing in -40°C the inner and outer rubber should not crack. Back to the normal temperature then pressure testing, the hose should not leak or crack	Pass	Qualified
14	Vacuum Resistance	According to EN853, testing the hydraulic hose and its hose assemblies, the Max negative pressure should be -0.8 Bar	-1,0 Bar	Qualified
15	Abrasion resistance	For 2SN hydraulic hose, according to EN853, vertical pressure (25±0.5)N, after 2000 times the abrasion should not more than 0.5g	0,2 g	Qualified
17	Adhesion between Components	AS ISO8033 ,the adhesion between components shall be over 2.5KN/M	2.7KN/M	Qualified
18	Oil resistance	According to ISO1817, soak the inner rubber into 100°C oil for 168 hours, it should not shrink or expand more than 25%	20%	Qualified
		According to ISO 1817, soak the outer rubber into 70°C oil for 168 hours, it should not shrink or expand for more than 100%	60%	
19	Water-based fluid resistance	As ISO1817, soak the hose lining and cover into 70°C test liquid for 168 hours made up of 1:2 distilled water and ethanediol, test the lining and cover should no shrinkage and the expand for cover should less than 25% and 100% for lining	Pass	Qualified
20	Water resistance	As ISO1817, soak the hose into 70°C water for 168 hours, test the lining and cover should no shrinkage and the expand for lining should less than 25% and 100% for Cover	Cover 90% Lining 20%	
21	Ozone resistance	According to EN853 first method, enlarge to two times the outer cover should not leak or crack.	Pass	Qualified
22	Concentricity	As EN 24671 , the concentricity of hose for Max variation between ID ~ OD is 0.8 and between ID ~ Reinforce is 0.4	0.8/0.4	Qualified