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REGISTRO ITALIANO NAVALE

PER LA CLASSIFICAZIONE DELLE NAVI MERCANTILI

Sede legale in Roma

STATEMENT N. CEC/126-1/90
(FREE TRANSLATION)

At the request of Messrs DAFRAM S.p.A. of Milano Viale Caldara, 22 - the fire tests in accordance with the BS 6755 : Part.2 : 1987 have been carried out on two samples of ball valves named

"150 TC 9 "

having the following characteristics :
ball valve class rating 150, DN 50 of asymmetric type for bi-directional installation at full bore built by aforesaid firm according to the drawing n. 26/190 dated 19/1/1990 vised by the RINA Head Office on 4/4/1990, having the body in ASTM-A105 steel and the ball in ASTM - A 182 - F 316 stainless steel, of a total mass of 13 Kg and with following marking on the edge of the flange: 150 TC9-2"-A105/F316-150 RF and on the body of the valve by DAFRAM A105 N-DN 50-150 TC.

On the basis of the results of the ascertainments and tests carried out in the presence of a surveyor to this Society at the DAFRAM factory in Petriolo (MC) on 21 and 22 march 1990

IT IS CERTIFIED

that they have satisfied the requirements of the a.s. standard.

The valves to be tested have been choosen at random from stock and duly marked for identification by a RINA Surveyor.

The choosen valves have been subjected to hydrostatic and air tests by the manufacturer.

The tests required by the aforesaid standard have been carried out by water feeding in both directions, one direction for each sample.

The test results have been recorded as per sec. 3 of of the standard ; they are collected in the enclosed summary which forms integral part of the present statement.

The samples of the valves have been disassembled at the end of the test, in order to verify their correspondance to the submitted drawing.

REGISTRO ITALIANO NAVALE

Genova, 27 july 1990.

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SUMMARY OF THE TEST RESULTS CARRIED OUT IN ACCORDANCE WITH THE
BS 6755:Part.2 : 1987.

- 1 - Test with water feeding from the side of principal body of the valve (Part.1 Drw. 26/190) carried out on 22/3/90.

Time of test start i.e. ignition of burners : 17 h 36'

Temperature recorded at start and at 2 min intervals throughout duration of test with individual records for each thermocouple :

t (min)	TF 1 (C°)	TF 2 (C°)	TC 1 (C°)	TC 2 (C°)
2	763	882	280	331
4	830	960	473	527
6	803	905	595	646
8	815	920	663	703
10	833	935	710	739
12	829	871	731	770
14	826	803	756	793
15			760	795
16	825	811	768	802
18	826	770	780	809
20	821	752	783	812
22	845	781	792	821
24	838	733	795	825
26	870	743	802	831
28	876	872	807	835
30	871	828	810	837

TF Temperature of flame environment thermocouples

TC Temperature of calorimeter cubes

Through-seat leakage (high pressure test) during burn periods : 295 ml

External leakage (high pressure test) during burn and cool-down periods : 168 ml

Time required for valve to cool down to 100°C naturally : 37 min

Through-seat leakage (low test pressure) after cool-down : 20 ml

External leakage (low test pressure) after cool-down : 62 ml

Maximum force required for operability : 90 Nm

External leakage in fully open position : 0 ml



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2 - Test with water feeding from the side of lateral body of the valve (Part.2 Drw. 26/190) carried out on 21/3/90.

Time of test start i.e. ignition of burners : 11 h 17'

Temperature recorded at start and at 2 min intervals throughout duration of test with individual records for each thermocouple :

t (min)	TF 1 (C°)	TF 2 (C°)	TC 1 (C°)	TC 2 (C°)
2	779	857	286	206
4	804	892	481	340
6	820	805	605	435
8	812	832	679	502
10	808	862	715	561
12	845	958	732	634
14	851	955	747	683
15			751	703
16	841	932	759	718
18	838	935	766	736
20	813	867	768	748
22	819	803	768	759
24	809	919	767	767
26	815	912	765	773
28	832	920	761	776
30	808	869	755	779

TF Temperature of flame environment thermocouples
TC Temperature of calorimeter cubes

Through-seat leakage (high pressure test) during burn periods : 580 ml

External leakage (high pressure test) during burn and cool-down periods : 321 ml

Time required for valve to cool down to 100°C naturally : 39 min

Through-seat leakage (low test pressure) after cool-down : 25 ml

External leakage (low test pressure) after cool-down : 57 ml

Maximum force required for operability : 132 Nm

External leakage in fully open position : 82 ml