Media Compatibility Information

The following is a chart of common media with recommended O-Ring compounds that can be used with the Polyimide and Elastomer diaphragms used in Neo-Dyn® pressure switches except as noted.

NOTE: The information given on this chart is typical performance data for "Kapton" Type H and Type F films; it is not intended to be used as design data. We believe this Information is the best currently available on the subject. It is offered as a possible helpful suggestion in experimentation you may care to undertake along these lines. It is subject to revision as additional knowledge and experience are gained. Neo-Dyn® makes no guarantee of results and assumes no obligation or liability whatsoever in connection with this information.

	O-Ring Compound			
	BUNA-N	EPR	VITON	KALREZ
Acetic Acid		•		
Acetone		•		
Acetylene		•		
Air	•			
Ammonia, Anhydrous		*		
Asphalt			•	
Beer	•			
Benzene			•	
Black Liquor			•	
Boric Acid	•			
Brake Fluid		•		
Brayco 719-R		•		
Brayco 885			•	
Bunker Oil	•			
Butane	•			
Carbon Dioxide	•			
Carbon Monoxide	•			
Cellulube A60, 90, 100, 150, 220, 300 and 500		•		
Chlorine				*
Chlorobenzene			•	
Citric Acid	•			
Coke Oven Gas			•	
Coolanol	•			
Diesel	•			
Di-ester-Lubricant, Mil-L-7808			•	
Dowtherm A and E			•	
Ethanol	•			
Ethylene	•			
Ethylene Glycol	•			
Freon 11, 12, 112 and 114	•			
Freon 21				*
Freon 22		•		
Fyrquel		•		
Fuel Oil	•			
Gasoline	•			
Helium	•			
Houghto – Safe 271, 620, 1010, 1055 and 1120	•			
Houghto – Safe 5040	•			
Hydraulic Oil (Petroleum Base)	•			
Hydrocarbons	•			
Hydrochloric Acid				*
Hydrofluoric Acid				*

*Consult factory for port and diaphragm materials

	O-Ring Compound			
	BUNA-N	EPR	VITON	KALREZ
Hydrogen	•			
Hydrogen Sulphide		•		
Isopropanol		•		
JP-3, 4, 5 and 6	•			
Kerosene	•			
Linseed Oils	•			
Liquid Petroleum Gas	•			
Lubricating Oils (Petroleum Base)	•			
Mercury	*			
Methanol		•		
Methyl Ethyl Ketone (MEK)		•		
Mineral Oils	•			
Naptha			•	
Natural Gas	•			
Nitric Acid			•	
Nitrogen	•			
Oleum Spirits			•	
Oxygen		•		
Ozone		•		
Petroleum Oil, Crude	•			
Phosphoric Acid			•	
Propane	•			
Propanol	•			
Propylene			•	
Pydraul 135, 150, A200, 312, AC, F-9 and 625			•	
Shell Iris 902	•			
Silicone Greases	•			
Silicone Oils	•			
Skydrol 500 and 7000		•		
Soap Solutions	•			
Sodium Hydroxide				*
†Steam, Below 350°F		•		
†Steam, Above 350°F				*
Stoddard Solvent	•			
Sulphuric Acid			•	
Toluene			•	
Transformer Oil	•			
Transmission Fluid Type A	•			
Trisodium Phosphate	•			
Turbine Oil	•			
Turpentine	•			
†Water		•		

†Polyimide diaphragm not suitable for water applications above 140°F

Conversion Tables

Temperature Conversion Table - Formula ˚C=5/9 (˚F-32˚) ˚F=(9/5˚C) +32˚

˚C	˚F	˚C	˚F	˚C	˚F	˚C	˚F	˚C	˚F
0	32.0	20	68.0	40	104.0	60	140.0	80	176.0
1	33.8	21	69.8	41	105.8	61	141.8	81	177.8
2	35.6	22	71.6	42	107.6	62	143.6	82	179.6
3	37.4	23	73.4	43	109.4	63	145.4	83	181.4
4	39.2	24	75.2	44	111.2	64	147.2	84	183.2
5	41.0	25	77.0	45	113.0	65	149.0	85	185.0
6	42.8	26	78.8	46	114.8	66	150.8	86	186.8
7	44.6	27	80.6	47	116.6	67	152.6	87	188.6
8	46.4	28	82.4	48	118.4	68	154.4	88	190.4
9	48.2	29	84.2	49	120.2	69	156.2	89	192.2
10	50.0	30	86.0	50	122.0	70	158.0	90	194.0
11	51.8	31	87.8	51	123.8	71	159.8	91	195.8
12	53.6	32	89.6	52	125.6	72	161.6	92	197.6
13	55.4	33	91.4	53	127.4	73	163.4	93	199.4
14	57.2	34	93.2	54	129.2	74	165.2	94	201.2
15	59.0	35	95.0	55	131.0	75	167.0	95	203.0
16	60.8	36	96.8	56	132.8	76	168.8	96	204.8
17	62.6	37	98.6	57	134.6	77	170.6	97	206.6
18	64.4	38	100.4	58	136.4	78	172.4	98	208.4
19	66.2	39	102.2	59	138.2	79	174.2	99	210.2
								100	212.0

Pressure Conversion Formulas

INTO ‰ MULTIPLY BY TO CONVERT	PSI	"H_2O (15˚C)	mmHg (0˚C)	"Hg (0˚C)	Millibar	Bar	Kg/Cm²	kPa
PSI	•	27.70	51.71	2.036	68.95	0.06895	0.07031	6.895
"H_2O (15˚C)	0.03609	•	1.867	0.07349	2.489	0.002489	0.002538	.249
mmHg (0˚C)	0.01934	0.5357	•	0.03937	1.3333	0.0013333	0.0013596	.113
"Hg (0˚C)	0.4912	13.61	25.40	•	33.86	0.03386	0.03453	3.386
Millibar	0.0145	0.4018	0.750062	0.02953	•	0.001	0.0010197	.09998
Bar	14.50	401.8	750.062	29.53	1000	•	1.0197	99.98
Kg/Cm²	14.22	394.05	735.559	28.96	980.7	0.9807	•	98.05
kPa	.145	4.016	7.519	.2953	10.002	.010	.0102	•

"The use of ITT Industrial Controls pressure, temperature and flow switches must be in accordance with the provisions of the National Electric Code, U.L. and/or other local, military or industry standards that are pertinent to the particular end use. Installation or use not in accordance with these codes and standards could be hazardous to personnel and/or equipment."

⚠CAUTION

Note: It is buyer's responsibility to determine the suitability of the Neo-Dyn® switch for its application. ITT Industrial Controls makes no warranties and assumes no liability as to the suitability or sufficiency for buyer's application of the switch.

Underwriters' Laboratories, Inc. Listing and CSA International Certification Data

The following listings are extracted from official Underwriters' Laboratories, Inc. and CSA International records. Verification of the listings may be obtained from the respective organization by referencing the file number or by requesting a file card from the factory.

Enclosure 3

CSA INTERNATIONAL
Class 3231-02

ITT Industries, Valencia, CA 91355

SWITCHES - Automatic - Pressure Type

Pressure switches, weatherproof enclosure,
Series 115P*C3**X, SPDT and
115P*CC3**X, DPDT
Pressure switches, adjustable, water-tight enclosure (CSA Encl. 4)
Series 100P, 101P, 110P, 130P, 131P, 132P, 160P and 200P.
Series 125P, 225P, 225PP, with suffixes.

File No. 38229

Enclosure 6

UNDERWRITERS' LABORATORIES, INC.
Guide WSQX.E56677 Nov. 27, 2002
Snap Switches for Use in Hazardous Locations.

ITT Industries, Valencia, CA 91355

Class I, Groups A, B, C and D;
Class II, Groups E, F and G.

Cat. Nos. 057-0770, 057-0771, 057-0771 and 057-0773.
The switches are provided with factory seals of conductors entering the switch enclosures.

File No. E56677

Enclosure 6

CSA INTERNATIONAL
Class 6248-01 Feb. 18, 2004

ITT Industries, Valencia, CA 91355

SWITCHES - Snap - For Hazardous Locations.

Class I, Groups A, B, C and D;
Class II, Groups E, F and G.

Snap Switch, Cat. Nos. 057-0770, SPDT, and 057-0771, DPDT, each rated 11 amp, ¼ hp, 125 or 250Vac, 5 amp resistive, 30Vdc max; .5 amp, 125Vdc; leads factory sealed.

Snap Switch, Cat. Nos. 057-0772, SPDT, and 057-0773, DPDT, each rated 1 amp @ 125 Vac and 1 amp resistive, .5 amp inductive @ 28 Vdc max, leads factory sealed.

File No. 34146