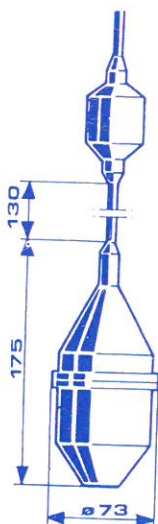


## FLOAT SWITCH Type NP 632 M

- Resistant to most chemicals
- For use in ambient temperature up to 85°C
- Works in liquid density down to 0,9
- All connections vulcanised
- International certification
- Manufacture and quality control in accordance with ISO 9001
- Standard lengths: 5, 10, 20 m.

### Accessories:

- Hanging clip, AKL 801



## DESCRIPTION

### NP 632 M

The unit consists of a float body and a cable to which a weight has been fixed. A shockproof double throw microswitch is mounted in the float body. The float body, cable and weight have a vulcanised cover of Hypalon, a durable synthetic rubber material that is resistant to most chemicals as well as to high temperatures (up to 85°C).

The walls of the float body have their mechanical stiffness increased by a plastic reinforcement giving strength against pressure when submerged at great depths. Maximum permissible working pressure is 20 m.w.g. (0,2 MPa).

The weight is fixed and vulcanised to the cable at a set distance from the float body, which ensures the float body is submerged when the liquid level rises. The weight acts as a sinker, around which the float body can move freely and effectively prevents the cable from being sharply flexed.

## FUNCTION

A three-pole microswitch is affected by a ball, moving depending on the position of the float body.

When the float body is suspended freely in the air above the liquid level, the microswitch makes between the blue conductor and the brown conductor. As the liquid level rises, the float body will be horizontal and then, when the liquid level is sufficiently high, it will assume a reversed vertical position. In this position the microswitch makes between the black conductor and the brown conductor.

For governing pumps it should be noticed that min. contact difference is 130 mm and then only one float switch is needed. With bigger contact difference two float switches are needed, one for on and one for off. If several pumps are used a common float switch can be mounted for cut out.

## MOUNTING

The float switch should be mounted such that it is suspended on its cable. The cable length should then be adjusted to ensure that the weight fitted to the cable will be at the desired height. If a minor adjustment becomes necessary later, the cable length may be altered.

Turning the float body around its longitudinal axis does not affect the contact function as the microswitch has been made axially symmetrical.

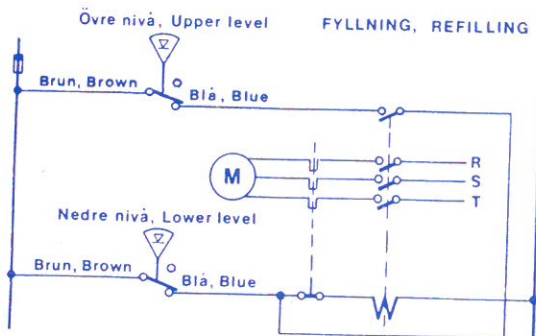
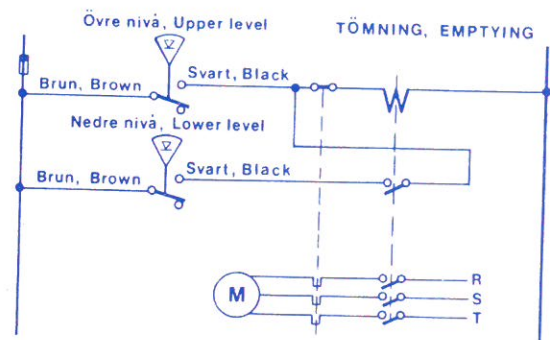
The distance between each individual float switch should be at least 200 mm. for calm liquid levels. For surging levels the distance should be increased to 400 mm. In case of heavy surging effects, the float should be sited within a stilling chamber or tube of suitable dimensions.

The float switch may be connected to closed circuit current as well as to open circuit working systems.

## TECHNICAL DATA

FLOAT SWITCH Type NP 632

Floatcover	Hypalon
Cable	Hypalon
Colour	Black
Conductors	Hypalon 3 x 0,75 mm <sup>2</sup>
Contact action	Microswitch 1-pole double throw 6 A, 220v
Contact rating	cos = 1
Min. liquid density	0,9
Contact operation:	
Float body in air	Brown - Blue
Float body in liquid	Brown - Black
Contact diff. min	130 mm
Max. working depth, liquid density = 1	20 m.
Max. working temperature	85°C
Standard lengths	5, 10, 20 m.



# FLUID RESISTANCE OF HYPALON AND NITRIL

FLUID	TEST TEMPERATURE		FLUID	TEST TEMPERATURE	
<b>HYPALON</b>			<b>HYPALON</b>		
Acetic Acid, Glacial	RT** 158°F.	B C	Lacquer	RT	C
Acetic Anhydride	RT	A	Lactic Acid	RT	A
Acetone	RT	B	Linseed Oil	RT	A
Aluminum Sulfate (300 hours)	230-250°F.	A	Lubricating Oils	158°F.	B
Ammonia, Anhydrous	RT	B	Magnesium Chloride (30 days)	220°F.	A
Ammonium Hydroxide	200°F.	A	Magnesium Hydroxide	200°F.	A
Ammonium Sulfate	200°F.	A	Mercury	RT	A
Amyl Acetate	RT	C	Methyl Alcohol	200°F.	A
Asphalt	RT	C	Methylene Chloride	RT	C
			Mineral Oil	RT	A
Barium Hydroxide	200°F.	A	Naphtha	RT	B-C
Borax	200°F.	A	Naphthalene	RT	C
Boric Acid	200°F.	A	Nitric Acid, 20% (14 days)	72°F.	A
Butane	RT	A	Nitric Acid, 20% (14 days)	122°F.	B
Butyl Acetate	RT	C	Nitric Acid, Concentrated (7 days)	72°F.	B-C
Butyraldehyde	RT	B-C	Nitrobenzene (1 day)	RT	C
			Oleic Acid	RT	B
Calcium Bisulfite	200°F.	A	Oleum	RT	C
Calcium Hydroxide	200°F.	A			
Calcium Hypochlorite, 20%	200°F.	A	Palmitic Acid	RT	B
Carbolic Acid (Phenol)	RT 158°F.	B-C C	Phosphoric Acid, 20%	200°F.	A
Carbon Dioxide	200°F.	A	Phosphoric Acid, 70%	200°F.	A
Carbon Monoxide	200°F.	A	Phosphoric Acid, 85%	200°F.	A
Carbon Tetrachloride	RT	C	Pickling Solution, 20% HNO <sub>3</sub> 4% HF	RT	A
Castor Oil	158°F.	A	Picric Acid	RT	A
Chlorine Gas, Wet (14 days)	RT	B	Potassium Dichromate	200°F.	A
Chloroform	RT	C	Potassium Hydroxide	200°F.	A
Chromic Acid, 20% (14 days)	72°F. 158°F.	A A	Ref. Fuel B (70 hours)	77°F.	B
Chromic Acid, 50% (14 days)	72°F. 158°F.	A A			
Citric Acid	RT	A	Soap Solutions	200°F.	A
Cottonseed Oil (7 days)	72°F.	A	Sodium Hydroxide, 20%	200°F.	A
Creosote Oil	RT	B-C	Sodium Hydroxide, 50%	285°F.	A
Cyclohexane	RT	C	Sodium Hydroxide, 73%	280°F.	A
			Sodium Hypochlorite, 22% (14 days)	72°F.	A
Diacetone Alcohol (4 days)	RT	A	Sodium Hypochlorite, 22% (14 days)	158°F.	A
Diethyl Sebacate	RT	B	Sodium Peroxide	200°F.	A
Diocetyl Phthalate	RT	B	Sodium Salts	200°F.	A
			Soybean Oil	RT	A
Ethyl Acetate	RT	C	Stannous Chloride	200°F.	A
Ethyl Alcohol	200°F.	A	Stearic Acid	158°F.	B
Ethyl Chloride	RT	B-C	Sulfur Dioxide, Liquid (7 days)	RT	A
Ethylene Dichloride	RT	C	Sulfuric Acid, 50% (14 days)	158°F.	A
Ethylene Glycol (14 days)	158°F.	A	Sulfuric Acid, 66° Bé (14 days)	72°F.	A
			Sulfuric Acid, 66° Bé (14 days)	122°F.	B
Ferric Chloride, 15% (243 days)	RT	A	Sulfur Trioxide	RT	B
Ferric Chloride, 60% (1 year)	RT	A			
Fluoboric Acid	RT	A	Tannic Acid, 10%	RT	A
Fluosilicic Acid	250°F.	A	Tartaric Acid	200°F.	A
Formic Acid	RT	A	Toluene	RT	C
FREON-12 <sup>®</sup> (8 days)	RT	A	Tributyl Phosphate	RT	C
Fuel Oil	158°F.	B	Trichloroethylene	RT	C
Furfural	RT	B	Triethanolamin	158°F.	A
			Tung Oil	RT	A
Gasoline	RT	B	Turpentine	RT	C
Glucose	200°F.	A			
Glue	200°F.	A	Water (7 days)	158°F.	A
Glycerine	200°F.	A	Water (28 days)	212°F.	A
Hexane	RT	A			
Hydraulic Oils	200°F.	A			
Hydrochloric Acid, 20% (14 days)	72°F.	A			
Hydrochloric Acid, 20% (14 days)	158°F.	A			
Hydrochloric Acid, 38% (14 days)	72°F.	A			
Hydrochloric Acid, 38% (14 days)	158°F.	A-B			
Hydrocyanic Acid	RT	A			
Hydrofluoric Acid, Vapors (4 months)	250-300 F.	A			
Hydrofluoric Acid, 48% (77 days)	158°F.	A			
Hydrogen	RT	A			
Hydrogen Sulfide	RT	A			
Isooctane	RT	A			
Isopropyl Ether	RT	B			
Kerosene	RT	B			

A - Little or no effect B - Minor to moderate effect C - Severe effect \*\*RT - Room Temperature