

### REBOUND

The rebound effect is the ability of the hose to regain its original shape after compression by shoe or roller.

### ROTATION SPEED

The faster the pump rotation, the faster the shoe moves over the hose. And the more friction is produced, increasing hose temperature - one of the primary causes of hose delamination. High rotation speed can also cause buckling when the hose cannot cope adequately with the shoe speed and stretching results.



### UNIFORMITY

A uniform wall thickness makes for uniform occlusion.



1. Outer layer from material with the best mechanical features
2. Nylon cord layers
3. Inner layer from different types of material

### SHIMMING

**Shim right!** Correct shimming practice is essential to optimizing hose life and operational efficiency. The hose must close fully during compression; under-occlusion causes backflow leading to cracks in the hose, but excessive pressure can damage the hose.

Discharge pressure, fluid temperature and pump rotation speed are all key considerations when shimming.



Material	Colour code	Max Temp.	Working pressure	Properties
NR		80°C	16 bar	Outstanding abrasion resistance. Generally resistant to diluted acids and alcohols. Highly resilient with excellent abrasion resistance. This is the most widely-used peristaltic hose. Generally suitable in lightly corrosive chemical applications and with abrasive slurries etc.
NBR		80°C	16 bar	Resistant to oils, alkalis, greases and detergents. The inner layer is from NBR and the outer layer is from NR to afford the optimal mechanical resistance.
NBR Food (black)		80°C	16 bar	For all food products including oils and greases. Complies with food grade standards EC 1935/2004. The inner layer is made of black NBR food grade approved for hygienic applications. The outer layer is made of NR for optimal mechanical resistance.
EPDM		90°C	16 bar	High chemical resistance to concentrated acids, corrosive chemicals, ketones. The inner liner is made of EPDM and the outer is made of NR for optimal mechanical resistance.
Hypalon / CSM		80°C	16 bar	For highly corrosive products and high concentration acids. The inner layer is made from Hypalon/CSM and the outer from NR for optimal mechanical resistance.

For more information about OVATIO hoses and lubricants please contact:  
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All you need to know about peristaltic hoses & lubricants



# ...and all you need to know about OVATIO

The peristaltic hoses and lubricants you use in your processes are as vital as the pumps themselves. Our OVATIO hoses and lubricants are specifically designed and manufactured to optimize the operation of the pumps. Their contribution is vital.

### Optimized to suit your application, optimized for durability

Drawing on more than fifty years of experience of peristaltic hose pump technology and industrial processes, has pushed our OVATIO hoses into the very forefront of hose design and manufacture. And, as you'd expect, they're manufactured to withstand even the very toughest pumping tasks.

OVATIO hose design eliminates the common problems of:

- **Tear and abrasion resistance** (both through their unique mix of polymer/rubber compounds and our vulcanization process)
- **Rebound effect** (through a unique combination of nylon cord reinforcement layers)
- **Inconsistent wall thickness and uneven surfaces** (through very tight manufacturing tolerances)

And out in the real, process world, our **OVATIO hoses have proven their superiority in a wide range of applications and under some extreme operating conditions.**

Industry	Application	Pressure [bar]	Temperature [°C]	Hose material	Continuous or batch duty
pet food	caramel	8	ambient	NBR	batch
food	mustard	10	ambient	NBR	batch
food	potato pulp	11	65	EPDM	batch
food	dough	7	ambient	NBR	batch
food	food additives	3	ambient	NBR	batch
food	animal fat	6	60	NBR Buna	continuous
food	hot carrageenan	12	90	NR	batch
brewery	waste yeast	4	ambient	NBR	batch
cosmetics	cosmetics	3	ambient	EPDM	batch
cellular concrete	concrete production	12	20	NR	continuous
cellular concrete	mortar	12	20 - 50	EPDM	batch
construction	cement and lime slurry	8	ambient	NR	batch
mining	abrasive slurry with varying viscosity and density	9	ambient	NBR	continuous
mining, foundry	magnesium sulfate	8	70	NR	batch
mining, foundry	abrasive sludge	15	65	NR	continuous
ceramic	ceramic paste	6	ambient	NR	continuous
ceramic	mortar	1,4	20	NR	batch
energy	lime slurry	11	ambient	NR	continuous
energy	cooling water with refrigerants	2	ambient	NR	continuous
paper	paper pulp	6	ambient	NR	batch
water / wastewater	waste water	5	20	NR	batch



\*Abrasive liquids with up to 80% solids in suspension