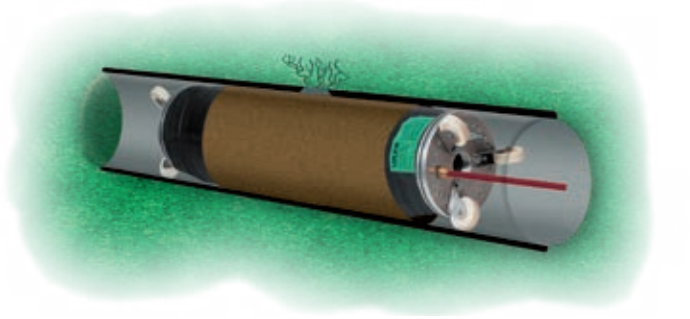
REHABILITATION PACKERS

Rehabilitation packers **P, FP, DP**, **HP** and **HPP** are used for repairing locally-damaged sewerages or other pipelines or for their successive maintenance. The packers can be applied to fissures, leaky joints, misalignments, root downgrowth and corroded sections. Sewerages made of all kinds of materials in the diameter ranging from 50 mm to 1200 mm can be maintained or repaired in this way.

These packers can be divided into several groups: short packers, flexible packers, lateral packers and long packers. They are made of a special rubber guaranteeing the necessary flexibility, strength and resistance. All their metal parts are made of corrosion-resistant materials.

The maintenance work consist of placing the packer and its insertion piece (a fabric of glass fibres impregnated with a special artificial resin) into the piping on the damaged point. This procedure can be monitored by using a closed-loop television while the packer is not under pressure. Then the packer is inflated to the working pressure and the glass-fibre-fabric insertion piece is pressed against the wall of the pipe. As the overflowing resin penetrates the fissures and cavities, the damaged spot and the glass-fibre-fabric insertion piece become firmly connected. After the resin gets hardened, its static load capacity is supported with a short tube with gradual reductions. Then the packer is deflated and pulled out of the piping.



POWER–PACKERS

Advantages:

- They are made from thick-wall material and two cord layers resulting in high safety.
- Unique dissemble.
- Easy manipulation also in pipe elbows due to short cone rubber ends.
- They have stable shape but are still highly flexible.
- They are suitable also for big steps between pipe diameters.
- They are equiped with safety quick-coupling and manipulation eye.

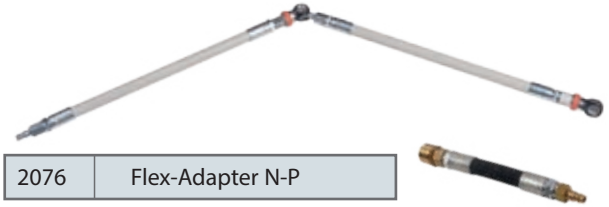
Power–Packer HPP

Type	Part - No	Pipe diameter	Rubber body diameter	Rubber body length	Total length	Application length in max. diameter	Weight	Operating pressure
		mm	mm	mm	mm	mm	kg	bar
HPP 5/12,5-0,6	7366	50–125	40	600	680	380	0,95	2,5
HPP 5/12,5-1	7367	50–125	40	1000	1080	780	1,30	2,5
HPP 5/12,5-1,5	7368	50–125	40	1500	1580	1280	1,80	2,5
HPP 5/12,5-2	7369	50–125	40	2000	2080	1780	2,25	2,5
HPP 5/12,5-2,5	7370	50–125	40	2500	2580	2280	2,70	2,5
HPP 5/12,5-3	7371	50–125	40	3000	3080	2780	3,15	2,5
HPP 5/12,5-3,5	7372	50–125	40	3500	3580	3280	3,65	2,5
HPP 5/12,5-4	7373	50–125	40	4000	4080	3780	4,10	2,5
HPP 7/15-0,6	7374	70–150	54	600	680	340	1,50	2,5
HPP 7/15-1	7375	70–150	54	1000	1080	740	2,20	2,5
HPP 7/15-1,5	7376	70–150	54	1500	1580	1240	3,15	2,5
HPP 7/15-2	7377	70–150	54	2000	2080	1740	4,05	2,5
HPP 7/15-2,5	7378	70–150	54	2500	2580	2240	4,95	2,5
HPP 7/15-3	7379	70–150	54	3000	3080	2740	5,85	2,5
HPP 7/15-3,5	7380	70–150	54	3500	3580	3240	6,80	2,5
HPP 7/15-4	7381	70–150	54	4000	4080	3740	7,70	2,5
HPP 10/20-0,6	7382	100–200	68	600	680	320	1,90	2,5
HPP 10/20-1	7383	100–200	68	1000	1080	720	2,90	2,5
HPP 10/20-1,5	7384	100–200	68	1500	1580	1220	4,10	2,5
HPP 10/20-2	7385	100–200	68	2000	2080	1720	5,30	2,5
HPP 10/20-2,5	7386	100–200	68	2500	2580	2220	6,55	2,5
HPP 10/20-3	7387	100–200	68	3000	3080	2720	7,80	2,5
HPP 10/20-3,5	7388	100–200	68	3500	3580	3220	9,00	2,5
HPP 10/20-4	7389	100–200	68	4000	4080	3720	10,20	2,5

Sliding and filling rods for rehabilitation packers

Part–No.	Description	
2129	Sliding and filling rod	0,5 m – 20 G
2130	Sliding and filling rod	1 m – 20 G
2127	Sliding and filling rod	1,5 m – 20 G
2120	Sliding and filling rod	2 m – 20 G
2131	Sliding and filling rod	2,5 m – 20 G
2132	Sliding and filling rod	3 m – 20 G

Part–No.	Description	
2037	Sliding and filling rod	0,5 m – 20 KR
2040	Sliding and filling rod	1 m – 20 KR
2041	Sliding and filling rod	1,5 m – 20 KR
2038	Sliding and filling rod	2 m – 20 KR



2076	Flex-Adapter N-P

TABLE OF RESISTANCE FOR PIPE STOPPERS AND REHABILITATION PACKERS

A – Pipe stoppers and Rehabilitation packers
B – Pipe stoppers resistant to oil
C – Cone pipe stoppers ULK and PULK

Chemicals	Concentration %	A	B	C
Acetone		+/–	––	++
Acetylene – Alcohol		++	++	++
Aniline		+/–	––	––
Petrol		––	++	++
Benzene		––	––	––
Boric Acid	10	++	++	++
Brake Fluid		++	––	++
Butanol		++	++	++
Butyric Acid		––	+/–	––
Calcium Hydroxide		++	+/–	++
Calcium Hypochlorite	15	++	––	++
Diesel Oil		––	++	++
Ethanol		++	++	++
Formaldehyde	40	++	++	++
Glycerine		++	++	++
Kerosene		––	++	+/–
Methanol	50	++	++	++
Mineral Oil		––	++	++
Methyl Chloride		––	––	––
Natural Gas		––	++	++
Nitric Acid Diluted	50	+/–	+/–	––
Ozone		––	––	++
Phenol		––	––	––
Phosphoric Acid	60	+/–	––	++
Propanol		++	+/–	++
Sodium Hydroxide	20	++	++	++
Sodium Hypochlorite	10	+/–	––	++
Sulphuric Acid	20	++	++	++
Sulphuric Acid	50	++	+/–	++
Sulphuric Acid	60	––	––	+/–
Toluene		––	––	––
Ammonium Hypochlorite		+/–	––	++
Vinegar Acid		++	+/–	+/–
Ferrous Hypochlorite		++	++	++
Sea Water		++	++	++

++ resistant
+/– partially resistant
–– non-resistant