




A Borehole Packer shown in its inflated state.

	PRODUCT CATEGORY:
	BOREHOLE PACKERS + ACCESSORIES

Borehole Packers

RST Instruments Borehole Packers are pneumatically or hydraulically inflatable packers that incorporate one fixed and one sliding head attached to a center shaft. This sliding head allows the packer gland to retract about the center shaft as it inflates.

The packer heads are constructed of either plated steel or aluminum while the shaft is polished stainless steel or aluminum. The packer gland consists of a rubber membrane reinforced with either polyester fabric or steel. Packers made from steel heads, stainless steel shaft and a steel reinforced gland are suitable for medium pressure applications, while packers made from aluminum heads, aluminum shaft and a polyester reinforced gland are suitable for low pressure applications.

> WHY IT IS IMPORTANT

Single packers in an open borehole or well screen:

Isolates a zone from the packer to the bottom of the well.	Allows samples to be taken and pressure to be monitored in the zone below the packer.
Allows water to be pumped under pressure to below the packer for permeability testing or hydrofracturing.	

Two packers separated by a specified length of perforated spacer pipe:

Can be used to test a zone or formation at a specific depth.	Only the zone between the packers is affected.
Can also be used with a wireline system - water can be pumped down the drill rods for zone testing below the second packer, eliminating the need to pull the rods for each test, therefore minimizing in-hole disturbance and costly re-drilling.	

Multiple packers:

Can be combined for testing and monitoring an unlimited number of zones.	All packers in a multiple set up are identical, maximizing inter-changeability of parts.
Multiple packer setups in several boreholes allow horizontal and vertical extents of groundwater contamination to be investigated.	

> APPLICATIONS

Suitable for:

Monitor well sampling.	Zone testing and monitoring.
Permeability testing.	Hydro-fracturing of formations.
Packer piezometers.	Pressure grouting.
Sealing off artesian flows in open or cased holes.	

> FEATURES

- Can be combined with integral pumps and pressure transducers.
- Packer heads can include sealed pass throughs for instrumentation leads, pump leads, etc.
- Steel reinforced, or fabric reinforced, abrasion resistant glands that are easily replaced in the field.
- Hollow center shaft for placement of sampling and monitoring equipment, or for passing water through the packer during permeability testing or hydrofracturing.
- Suitable for a wide variety of applications in open or cased holes.

> BENEFITS

✓ Increase Safety	✓ High Accuracy
✓ Increase Productivity	✓ Upgradable
✓ High Reliability	✓ Technical Support



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SPECIFICATIONS + ORDERING

MEDIUM PRESSURE PACKER SPECIFICATIONS

Steel reinforced gland, plated steel heads, stainless steel shaft.

MODEL	PART #	DEFLATED DIAMETER		MAX. INFLATED DIAMETER		MAX. UNCONFINED WORKING PRESSURE*		STANDARD GLAND LENGTHS**	CENTRE SHAFT I.D.		SHAFT THREAD SIZE
B	BP0004	3.3 cm	1.30 in.	7.06 cm	2.78 in.	2895 kPa	420 psi	1000 mm (40 in.)	9.1 mm	0.36 in.	1/4 NPT
N	BP0053 BP0054	4.3 cm	1.69 in.	8.25 cm	3.25 in.	2482 kPa	360 psi	635 mm (25 in.) 1000 mm (40 in.)	1.25 cm	0.493 in.	3/8 NPT
H	BP0103 BP0104	5.7 cm	2.25 in.	11.05 cm	4.35 in.	1930 kPa	280 psi	635 mm (25 in.) 1000 mm (40 in.)	2.09 cm	0.824 in.	3/4 NPT
P	BP0153 BP0154	7.2 cm	2.83 in.	14.78 cm	5.82 in.	1172 kPa	170 psi	635 mm (25 in.) 1000 mm (40 in.)	3.51 cm	1.38 in.	1 1/4 NPT
1-85	BP0203 BP0204	8.5 cm	3.35 in.	16.26 cm	6.4 in.	1103 kPa	160 psi	635 mm (25 in.) 1000 mm (40 in.)	4.09 cm	1.61 in.	1 1/2 NPT
P5-9	BP0224	11.9 cm	4.7 in.	25.65 cm	10.1 in.	965 kPa	140 psi	1250 mm (49 in.)	5.26 cm	2.07 in.	2 NPT
P6-10	BP0254	14.3 cm	5.63 in.	28.96 cm	11.4 in.	965 kPa	140 psi	1250 mm (49 in.)	5.26 cm	2.07 in.	2 NPT
P8-12	BP0304	19.4 cm	7.63 in.	35.43 cm	13.95 in.	827 kPa	120 psi	1500 mm (59 in.)	10.2 cm	4.03 in.	4 NPT
P10-16	BP0324	24.8 cm	9.75 in.	41.40 cm	16.3 in.	1034 kPa	150 psi	1778 mm (70 in.)	12.8 cm	5.04 in.	5 NPT
P12-20	BP0354	29.7 cm	11.7 in.	57.91 cm	22.8 in.	965 kPa	140 psi	2000 mm (79 in.)	15.4 cm	6.07 in.	6 NPT

*The working pressures are specified in free air. **Non standard lengths are available for specialized applications.

LOW PRESSURE PACKER SPECIFICATIONS

Polyester reinforced gland, aluminum heads, aluminum shaft. *Differential pressure ratings are guidelines only. Actual field results may vary.

PART #	DEFLATED DIAMETER		SUITABLE HOLE OR PIPE SIZE		CENTRAL SHAFT I.D.		STANDARD GLAND LENGTH		STANDARD DIFFERENTIAL PRESSURE RATING	
BP1000	4.75 cm	1.87 in.	5.1 cm	2.0 in.	1.25 cm	0.49 in.	1 m	40 in.	690 kPa	100 psi
BP1002	5.72 cm	2.25 in.	7.6 cm	3.0 in.	2.09 cm	0.82 in.	1 m	40 in.	690 kPa	100 psi
BP1004	6.99 cm	2.75 in.	9.5 cm	3.75 in.	2.67 cm	1.05 in.	1 m	40 in.	690 kPa	100 psi
BP1006	8.89 cm	3.50 in.	10.2 cm	4.0 in.	3.51 cm	1.38 in.	1 m	40 in.	690 kPa	100 psi
BP1008	12.7 cm	5.00 in.	15.2 cm	6.0 in.	5.26 cm	2.07 in.	1 m	40 in.	690 kPa	100 psi

BOREHOLE PACKER ACCESSORIES

PART #	DESCRIPTION	PART #	DESCRIPTION
BP0001	B Spare Gland, 635 mm (25 in.)	BP0558	1/4" dia. Nylon Inflation Tubing (3200 psi burst)
BP0002	B Spare Gland, 1 m (40 in.)	BP0550	BQ Seating Cone
BP0051	N Spare Gland, 635 mm (25 in.)	BP0501	NQ Seating Cone
BP0052	N Spare Gland, 1 m (40 in.)	BP0502	HQ Seating Cone
BP0101	H Spare Gland, 635 mm (25 in.)	BP0503	PQ Seating Cone
BP0102	H Spare Gland, 1 m (40 in.)	BP0510	BQ Pin Sub
BP0151	P Spare Gland, 635 mm (25 in.)	BP0511	NQ Stuffing Box
BP0152	P Spare Gland, 1 m (40 in.)	BP0512	HQ Pin Sub
BP0201	1-85 Spare Gland, 635 mm (25 in.)	BP0513	PQ Pin Sub
BP0202	1-85 Spare Gland, 1 m (40 in.)	BP0520	BQ Lifting Bail
BP0226	P5-9 Spare Gland, 1250 mm (49 in.)	BP0521	NQ Lifting Bail
BP0253	P6-10 Spare Gland, 1250 mm (49 in.)	BP0522	HQ Lifting Bail
BP0303	P8-12 Spare Gland, 1500 mm (59 in.)	BP0560	Inflation Regulator 0-359 psi
BP0557	3/16" dia. Nylon Inflation Tubing (3200 psi burst)	BP0560HP	Inflation Regulator 0-1500 psi

For additional accessories, please see the brochure "Packer Accessories".

OPTIONAL EQUIPMENT

Sampling pumps
Pressure transducers
Data loggers
Air driven water inflation pumps
Flow meters
Inflation regulators
Perforated spacer pipe

ORDERING INFO

Hole diameter
Accessories needed
Differential pressure
Model no. / Part no.
Gland length (if other than standard required)

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