

Inflatable packers GMA



Inflatable reusable packers



Art.nr
From the left: 853-35-50-500
853-40-55-600
853-45-80-600
853-54-100-600
853-60-120-600
853-83-150-600
853-105-200-800
853-150-220-800

Work span (min-max):
35-50mm
40-55mm
45-80mm
54-100mm
60-120mm
83-150mm
105-200mm
150-220mm

Note: Most of the above inflatable reusable packers can be made of aluminum (pipe and sleeves) on request for use in combination with TBM machines and where there is a risk of packers getting stuck. Contact GMA for more information.

Several of the above inflatable reusable packers can also be manufactured on request with 2, or 4-layer, steel cords instead of values specified in the brochure for textile cords, this in order to increase the **Maximum Expansion** pressure in each packer.

Inflatable reusable packers, steel tube + textile cord hose, basic information

Packer Model	Min Ø (mm)	Max working Ø (mm)	Ø center tube (mm)	Connetion top (inside)	Connection bottom (outside)	Ø Connection-nipple inflation	Hose lenght for inflation (mm)	Total lenght packer (mm)	Weight (kg)
853-35-50-500	35	50	10x1	G 1/2"	-	6mm	500	900	1,5
853-40-55-600	40	55	16x2,5	G 1/2"	M16x1,5*	6mm	600	1000	2,1
853-45-80-600	45	80	16x2,5	G 1/2"	M16x1,5*	6mm	600	1000	2,4
853-54-100-600	54	100	20x2,5	G 1/2"	M20x1,5*	6mm	600	1000	3,3
853-60-120-600	60	120	20x2,5	G 1/2"	M20x1,5*	6mm	600	1000	4,1
853-83-150-600	83	150	30x3	G 1"	M30x2*	6mm	600	1030	7,5
853-105-200-800	105	200	30x3	G 1"	-	8mm	800	1130	11,3
853-150-220-800	150	220	40x3	G 1"	-	8mm	800	1225	18,9

* Available with and without thread connection in bottom, standard is without thread.

Inflatable reusable packers, Maximum Expansion pressure relative to Borehole diameters

The table below shows the maximum expansion pressure in Bar (blue numbers) for each packer in relation to the borehole diameters (Max Inflation pressure¹)

In the table, in parentheses (with green numbers), there is also the expansion pressure in Bar that is needed to achieve the specified diameter (Inflation Pressure²)

Packer model	Borehole diameter (mm)																
	40	45	50	55	60	70	80	90	100	110	120	130	150	160	180	200	220
853-35-50-500	90 (2 ³)	75 (3,5 ³)	60 (6,5 ³)														
853-40-55-600		70 (6)	60 (12)	50 (20)													
853-45-80-600			100 (4)	n.a	80 (7)	60 (11)	50 (15)										
853-54-100-600					120 (1)	100 (2,5)	80 (5,5)	60 (7,5)	40 (11)								
853-60-120-600					100 (0,5)	85 (1)	70 (2)	55 (3)	45 (5)	35 (8,5)	30 (17)						
853-83-150-600								70 (0,5)	60 (0,5)	50 (0,5)	40 (0,5)	30 (1)	20 (5)				
853-105-200-800										80 (0,5)	n.a	65 (0,5)	50 (1,5)	n.a	30 (4,5)	20 (12)	
853-150-220-800														60 (0,5)	45 (0,5)	30 (1,5)	15 (5)

Test pressure of hoses according to this table has been performed in steel pipes where pressure has been maintained for 1 hour.

Deviations may occur when used in boreholes, see more information in the respective TDS.

Not¹: Maximum expansion pressure (Max Inflation pressure) must not be exceeded by calculating Total Expansion Pressure (T) in the formula below.

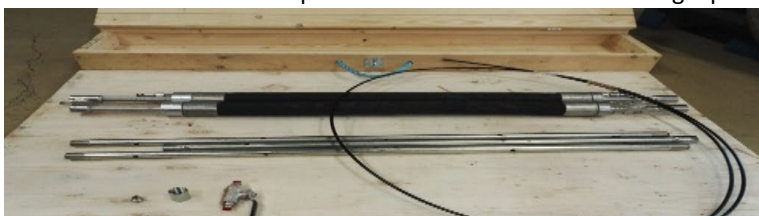
Not²: Expansion pressure (Inflation pressure) is the same as V1 in the formula below.

Calculation Total Expansion pressure: $T = (V1 + V2 + V3) \times 1,3$
 V2: Hydrostatic pressure in boreholes
 V3: Planned injection pressure

Not³: Hose inflated many times = Less expansion pressure needed compared with new hose.

Double packer set (2pcs inflatable reusable packers with injection pipes in between)

Complete set of double packers consists of: Wooden box, 2 inflatable reusable packers, 3 perforated splice tubes, splice sleeve, 3m plastic hose, plug, valves and quick couplings (splice tubes can be combined in lengths of: 1m, 2m and 3m). Packers included in double packer sets can also be used as single packers.



Art.nr	Work span (min-max):
853-40-55-600-D	40-55mm
853-45-80-600-D	45-80mm
853-54-100-600-D	54-100mm
853-60-120-600-D	60-120mm
853-83-150-600-D	83-150mm

Inflatable single use (disposable) packers

855-40-80-300 Inflatable single use packer, steel



855-40-80-300-Alu: Inflatable single use packer, Alu



855-55-90-270 Inflatable single use packer, steel



855-55-90-300-Alu: Inflatable single use packer, Alu



Note; More variants of disposable packers with steel pipe and hose with steel cord, respectively aluminum pipe and hose with textile cord, can be manufactured on request. Shown here are standard assortments that are in stock.

Single use inflatable packers, steel tube + steel cord in rubber hose

Model	Min \varnothing (mm)	Max working \varnothing (mm)	\varnothing center tube (mm)	Connection top (outside)	Connection bottom (outside)	Hose length inflated (mm)	Total length packer (mm)	Pop-Off valve (material / Bar)	Weight (kg)
855-40-80-300	40	80	20x4	M20x1,5	M20x1,5	300	550	Alu / Ca 45-50 Bar	1,6
855-55-90-270	55	90	33,7x5	G 1"	G 1"	270	550	Alu / Ca 35-40 Bar	3,5

Packers are delivered with C-check valve as standard.

Accessories:

- * GX-check valve
- * Connectionadapter M20x1,5 - 1/2"-rör, Right (RH) or lefthand (LH) thread
- * Connection adapter 1" - 1/2"-rör, Right (RH) or lefthand (LH) thread

Single use inflatable packers, alu.tube + textile cord in rubber hose

Model	Min \varnothing (mm)	Max working \varnothing (mm)	\varnothing center tube (mm)	Connection top (outside)	Connection bottom (outside)	Hose length inflated (mm)	Total length packer (mm)	Pop-Off valve (material / Bar)
855-40-80-300-Alu	40	80	20x5	M20x1,5	M20x1,5	300	550	Alu / Ca 45-50 Bar
855-55-90-300-Alu	55	90	20x3	M20x1,5	M20x1,5	270	500	Alu / Ca 55-60 Bar

Packers are delivered with C-check valve as standard.

Accessories:

- * GX-check valve
- * Connectionadapter M20x1,5 - 1/2"-rör, Right (RH) or lefthand (LH) thread

Maximum Expansion pressure relative to Borehole diameter Single use packers

Explanations and footnotes table, see; Reusable packers with textile cords.

Blue numbers = Max Inflation pressure, Green numbers (in parentheses) = Inflation Pressure

Packer model	Borehole diameter (mm)				
	45	60	70	80	90
855-40-80-300	120 (<2)	60 (15)	40 (30)		
855-55-90-270		90 (2)	n.a	80 (12)	70 (40)
855-40-80-300-Alu	80 (5)	50 (10)	30 (15)		
855-55-90-300-Alu		80 (10)	70 (12)	60 (15)	50 (30)

The stated values for the Alu models are **guide values**, more tests are performed.

Accessories inflatable packers

- Injections pipe /Extension pipe / Splice pipes

- 1st pipe incl valve and choice of coupling, several dim (3/8", 1/2, 1")*
- 2nd pipe -3rd pipe and so on, splice sleeve / screwing, several dim (3/8", 1/2", 1")* *

Note* Can be delivered with safety hook on request
 Note** Can be delivered with left hand thread on request

3/8" splice tube, internal thread



1/2" splice tube, external thread



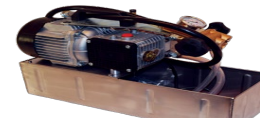
- Hose for inflating packers

- Part nr: 853-Slang 6 (6x1,5mm plastic hose)
- Part nr: 853-Slang 8 (8x1mm plastic hose)
- Part nr: 853-Slang 10 (10mm plastic hose)



- Pumps

- Part nr: 81501, Hand pump (light weight), 50 Bar
- Part nr: 81501-1, Hand pump std, 60 Bar
- Part nr: 81502, Electric pump 40 Bar
- Part nr: 81502-60, Electric pump 60 Bar



- Injection hose, couplings, valves, etc

- Part nr: HYE-8, Injection hose 1/2"
- Part nr: HYE-12, Injection hose 3/4"
- Part nr: HYE-16, Injection hose 1"



Note: More hoses, couplings, valves etc are to be found in our main brochure

OT=Outside Thread
 IT= Inside Thread

- Part nr: 8000032, Quick coupl. Male 1/2" OT
- Part nr: 8000032-1, Quick coupl. Male 1/2" IT
- Part nr: 8000043, Quick coupl. Male 1" IT
- Part nr: 8000044, Quick coupl. Male 1" OT
- Part nr: 8000043, Quick coupl. Female 1" IT
- Part nr: 8000031, Quick coupl. Female PN50
- Part nr: 8000031-G, Quick coupl. Female PN300



- Part nr: 8000036, Claw coupl. 1/2" UG
- Part nr: 8000036-1, Claw coupl. 1" UG



- Part nr: HYJGE-12-08ED, JIC Coupl. 1 1/16"-UG1/2"
- Part nr: HY139-08-08, NPT 1/2"-G1/2"



- Part nr: 8000033, Ball valve 1/2" PN65
- Part nr: 8000033-1, Ball valve 1" PN65
- Part nr: 8000035, Ball valve 1/2" PN500
- Part nr: 8000035-1, Ball valve 1" PN350

