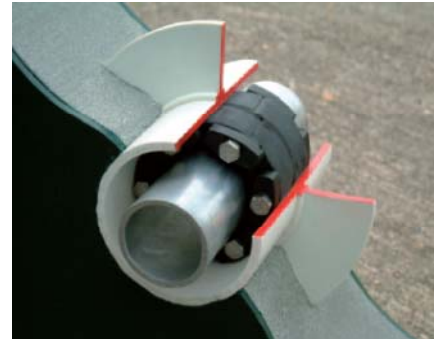


- Retrofit application
- Applicable for various constructions and plants
- Cost-efficient solution
- Short term delivery, standards on stock
- Good differentiation of the various rubber qualities because of different colours
- electrical isolation
- easy stockholding



### DESCRIPTION

Pressio-Elements Modular Wall Penetration Seals are an excellent choice to seal annular spaces securely against water and gas.

Pressio-Elements Modular Seals can be used flexible because of their variable sizes for different combinations of wall sleeves/core holes and media pipes. These seals are basically leakproof against pressing water.

By pressing of the rubber between both plastic pressure plates a gas and water tight closure of the annular space between medium pipe and casing pipe or core boring can be achieved.

Pressio-Elements Modular Seals can be always used for retrofit application.

Pressio-Elements Modular Wall Penetration Seals are not suitable for especially thin walled plastic pipes (e.g. district-heating pipes).

Pressure ratings:

- Elements C-S316-O-OS316: up to 5 bar pressure tight
- Elements B-BS316: up to 5 bar pressure tight

Model 13650 can be used at inlet/outlet of reservoirs, for electric insulation of pipeline, as noise and vibration protection, for marine application.

The system is RADON tight.



C and S136 -EPDM



B and BS316 -SOFT



OC and OS136 - NITRILE



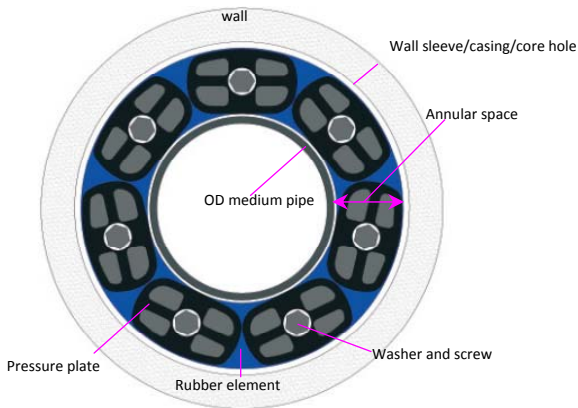
T - SILICONE

### CARATTERISTICHE TECNICHE

TYPE	VERSION	SEALING ELEMENT	PRESSURE PLATES	SCREWS	TEMPERATURE MIN/MAX[°C]
<b>C</b>	Standard	EPDM - black shore 50±5	Polyamide 6-30	Galvanized steel	-40/+80
<b>S316</b>	Stainless steel	EPDM - black shore 50±5	Polyamide 6-30	Stainless steel	-40/+80
<b>BC</b>	Soft	EPDM - blue shore 35±5	Polyamide 6-30	Galvanized steel	-40/+80
<b>BS316</b>	Soft/stainless steel	EPDM -blue shore 35±5	Polyamide 6-30	Stainless steel	-40/+80
<b>OC</b>	Oil and fuel	NBR- green shore ±5 (*)	Polyamide 6-30	Galvanized steel	-40/+70
<b>OS316</b>	Oil and fuel Stainless steel	NBR- green shore ±5 (*)	Polyamide 6-30	Stainless steel	-40/+70
<b>T</b>	High temperatures	SILICONE grey shore 50±5	Galvanized steel	Galvanized steel	-55/+204

(\*) non resiste ai raggi UV

### DIMENSIONING



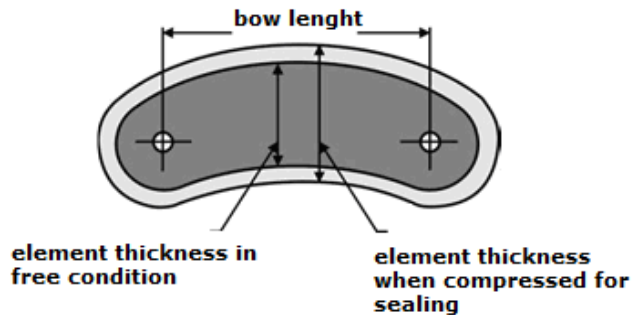
$$\text{Annular space} = \frac{\text{ID casing pipe} - \text{OD media pipe}}{2}$$

Choose pressio element type for annular space from table to calculate the right quantity.

$$\varnothing \text{ ring} = \frac{\text{ID casing pipe} + \text{OD media pipe}}{2}$$

$$\text{Nr. elements} = \frac{\varnothing \text{ ring} \times 3,14}{\text{Bow lenght}}$$

Round the number of elements up or down to the nearest figure.



Overall dimensions										
MOD.	Sealing range		Bow lenght	Medium pipe		Width rubber part	Total width	Elemnts / ring	Screws	Type
	min	max		Ømin	Ømax					
IL100	9,0	12,5	31,0	26,9	219,0	45	60	4	M4x60	(1)
IL200	12,5	15,7	30,0	21,3	323,9	45	63	4	M5x70	(1)
IL265	16,0	20,0	41,0	50,0	406,4	45	63	5	M5x70	(1)
IL275	16,0	20,0	25,6	0,0	90,0	45	63	4	M5x70	(1)
IL300	18,0	22,5	41,0	44,5	273,0	65	90	5	M6x90	(1)
IL310	18,0	22,5	57,0	60,3	406,4	65	90	5	M6x90	(1)
IL315	21,1	26,0	38,4	37,0	323,9	65	90	5	M6x90	(1)
IL325	23,2	30,0	79,0	133,0	711,0	65	100	6	M6x100	(2)
IL340	25,5	34,0	41,4	30,0	323,9	65	100	4	M6x100	(2)
IL360	32,0	42,0	55,1	40,0	406,4	65	100	5	M6x100	(2)
IL400	36,0	46,0	93,1	139,7	1220,0	85	125	6	M8x130	(2)
IL410	37,0	48,5	67,6	60,3	323,9	85	125	5	M8x130	(2)
IL425	28,0	37,0	93,1	144,0	1220,0	85	125	6	M8x130	(2)
IL440	44,0	55,0	99,0	139,7	1220,0	85	125	6	M8x130	(2)
IL475	41,0	48,5	68,6	60,3	1220,0	85	125	5	M8x130	(2)
IL500	60,0	71,5	99,8	100,0	1220,0	90	140	5	M10x150	(2)
IL525	55,0	63,5	99,8	133,0	1220,0	90	140	6	M10x150	(2)
IL575	48,0	58,0	79,3	88,9	1220,0	90	140	5	M10x150	(2)
IL615	81,0	98,0	155,5	219,0	3000,0	100	165	6	M12x180	(2)
IL625	81,0	98,0	106,7	88,9	2000,0	100	165	5	M12x180	(2)
IL650	69,0	84,0	106,7	88,9	2000,0	100	165	5	M12x180	(2)
IL700	95,0	110,0	155,5	219,0	3000,0	100	165	6	M12x180	(2)

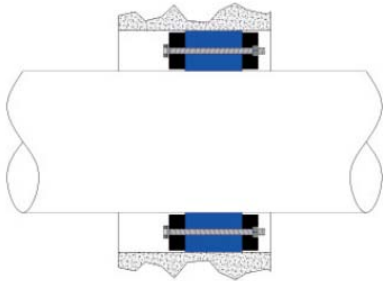
Dimensions in mm

Screw type: (1) inside hexhead

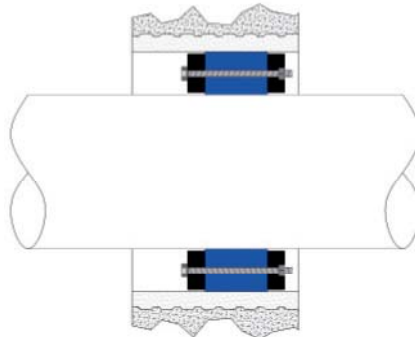
(2) outer hexhead

Examples of applications:

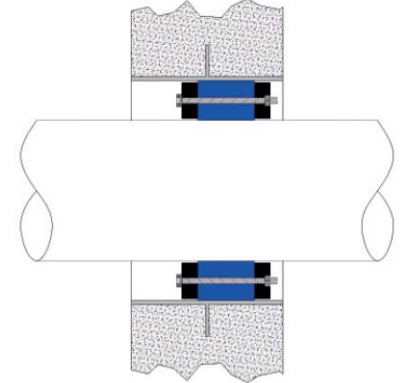
**In core drilled hole**



**In fibre-cement wallsleeve**



**In steel wallsleeve with puddle flange**



### MOUNTING INSTRUCTIONS

Please consider following steps when mounting Pressure-elements Modular Mechanical Seals:

- Remove dirt and impurities from media pipe and corebore / wall sleeve
- Media pipe must be centered
- Pressure plates must be adjusted when mounting
- Amount of elements have to be mounted as defined
- Make sure that pipe is supported before back filling
- Pressio-Element Modular Seals are no fixed point
- On spiral-waved pipes a seal cannot be reached
- Tighten screws always with a torque wrench, **never with power tools**

### TORQUE TABLE

DIMENSIONS	TYPE 13650/C TYPE 13650/S316 TYPE 13650/OC TYPE 13650/OS316 TYPE 13650/T	TYPE 13650/BC TYPE 13650/BS 316	Screws
IL 100	1 Nm	1 Nm	M4
IL200 and IL275	1.5 Nm	1 Nm	M5
from IL300 to IL360	5 Nm	4 Nm	M6
from IL400 to IL475	15 Nm	12 Nm	M8
from IL500 to IL575	30 Nm	22 Nm	M10
from IL615 to IL700	60 Nm	48 Nm	M12



1. Center pipe resp. cable in the wall sleeve/core bore. Media pipe resp. cable must be supported. A carrying function cannot be taken over by Pressio Elements seals.

Advice: core bores can be coated with epoxy resin to protect the cement and eventual armoring steel. This coating could smoothen eventual cavities and grooves.



2. Connect ends of the Pressio Elements. All heads of screws must point into the direction of the installer.



3. It is possible that a chain could slightly sag. No elements shall be taken out of the chain. It can be necessary to stretch the chain at smaller pipe diameters.



4. Push Pressio Elements into the annular space. Begin to push in the seal first at 6 o'clock position, then right and left up to 12 o'clock position. Heads of screws shall be accessible well after the placing in the wall.



5. Tighten the screws with a torque wrench beginning at 12 o'clock. No tightening with an impact wrench!



6. Tighten every screw with about 4 to 5 turns. Repeat in clockwise direction as long as the noted torque (see table) is reached and the rubber snoozes out between pressure plates evenly.



7. Tighten the screws again after about 2 hours according to mentioned torque. Repeat this procedure several times depending on outer circumstances (e.g. temperatures < 10°C, larger annular space etc.). To be considered especially at IL 500 and larger.