

VREMAC CYLINDERS BV PISTON ACCUMULATOR

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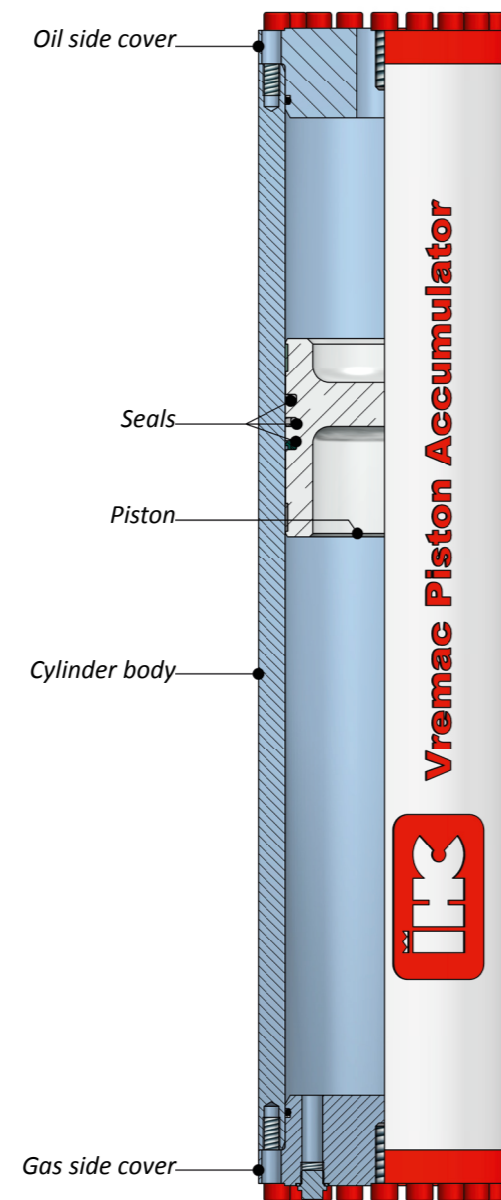
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PRINCIPAL CHARACTERISTICS

MAWP (Maximum Allowable Working Pressure)	350 bar
Test pressure	485 bar
Piston speed	up to 3m/s (standard)
Medium	Mineral oil/nitrogen
Preservation	1 layer of primer
Drawings	eg DWG, STP
Certification	eg PED, LR, DNV-GL

OPTIONS

- The use of air instead of nitrogen can be useful in a number of different applications. If required, the tube must be plated against corrosion, and therefore this is one of the standard options.
- Special seal arrangements, for example low temperature, alternative fluids, are also available for certain applications.
- With an in-house design and production discipline, IHC Vremac Cylinders can develop custom-built piston accumulators that meet internationally accepted standards. It is able to help its customers with a wide range of solutions for specific applications.



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STANDARD SIZES

180-560mm bore
10-1,300 litres

STANDARD RANGE OF HIGH-QUALITY PISTON ACCUMULATORS

From its well-equipped production facilities Vremac Cylinders produces a standard range of piston accumulators to the highest technical standards.

This leaflet provides a general overview, highlighting the standard sizes available, and can be used for conceptual design purposes, and to fit in the piston accumulator in your construction.

ABOUT VREMAC CYLINDERS

Vremac Cylinders designs and manufactures modern, high-quality hydraulic cylinders, swivels and piston accumulators. It has extensive experience in producing equipment that is required to operate in harsh conditions in the dredging, off shore, civil (bridges and lock gates) and heavy machinery markets.

In addition to supplying innovative new products, Vremac Cylinders is able to extend the lifespan of its customers' equipment, through its service and repair department, either in-house or on-site. Furthermore, using its MaXine range of passive heave compensators, Vremac Cylinders can help to increase the workable weather window when performing hoisting operations at sea.



MEETING CUSTOMER REQUIREMENTS

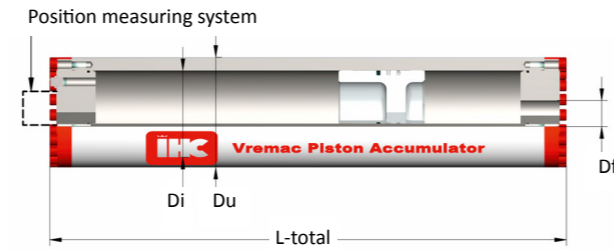
As well as its standard range, Vremac Cylinders supplies custom-made piston accumulators for more demanding applications.

Specialising in the design and manufacture of cylinders, piston accumulators and swivels, Vremac Cylinders can offer a solution to any hydraulic problem. Its solutions are often custom-built to meet individual requirements and are based on standard, proven components.

Vremac Cylinders' job is to optimise its customer's hydraulic systems. For more information, please contact us.

Operating from Apeldoorn, The Netherlands, Vremac Cylinders serves its customers worldwide with first-class products and high-quality services. The company's mission is simple: whatever the customer requires, it will strive to exceed expectations! The key areas of expertise and values that help to achieve this aim are its technological product and manufacturing know-how, dedication and hands-on mentality, motivation and ambition, and above all, a sense of pride in achieving goals.

BOLTED VERSION



SCREWED VERSION



Bore (Di)	Outside tube diameter (Du)	Max. volume (litres)*	Built-in length at minimal volume (L-total min)**	Extra length per 10 litres	Cover construction	Possible oil connection (see table 1.1)
180	244.5	145	768	393	bolted	A & D
200	267	180	828	319	bolted	A, B, D, E
250	323.9	270	1,020	204	bolted	A - G
280	355.6	345	1,110	163	bolted	A - G
310	368	455	1,160	133	screwed	A - H
320	406.4	435	1,268	124	bolted	A - H
355	434	595	1,325	101	screwed	A - I
360	445	560	1,388	98	bolted	A - I
450	559	855	1,746	63	bolted	A - J
490	580	1,130	1,830	53	screwed	A - J
500	622	1,050	1,896	51	bolted	A - J
560	700	1,300	2,142	40	bolted	A - J

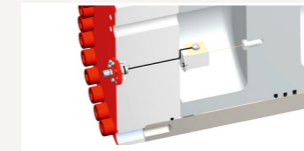
* Others available on request
** Minimal volume = minimal stroke (2xDi)
Gas connection: G3/8" or G1" (special connections are available)

ISO 6162 (SAE)	Max. 6,000 psi	Dfl (mm)	LX (mm)	LY (mm)	Bolts
A	2"	51	44.5	96.8	M20
B	2,5"	64	58.7	123.8	M24
C	3"	76	71.4	152.4	M30

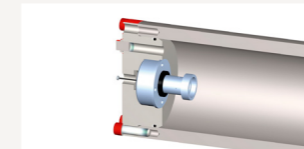
Table 1.1 (oil connection)

ISO 6164 (DIN)	Max. 400 bar	Dfl (mm)	Flange U (mm)	pcd (mm)	Bolts	Number of bolts
D	4"	85	180	175	M30	4
E	5"	120	245	205	M24	8
F	6"	150	300	245	M30	8
G	8"	180	350	290	M30	8
H	10"	223	450	375	M36	12
I	12"	273	490	400	M36	12
J	14"	280	520	440	M36	16

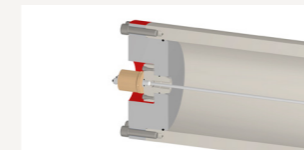
POSSIBLE POSITION MEASURING SYSTEMS



CABLE TENSION MEASURING SYSTEM



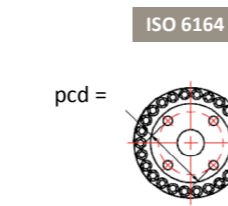
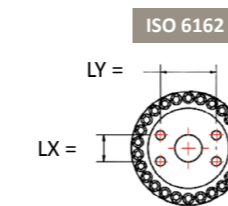
MICROWAVE SYSTEM



MAGNETOSTRICTIVE SYSTEM



LIMIT SWITCH



ORDERING CODE



SERIES

BORE (IN MM)

VOLUME (IN LITRES) $V = (\pi \cdot r^2 \times L \text{stroke}) / 1000$

GAS SIDE CONNECTION

- G 3/8" (DIN ISO 228)
- G 1" (DIN ISO 228)
- special

OIL SIDE CONNECTION

- see table 1.1

POSITION MEASURING SYSTEM*

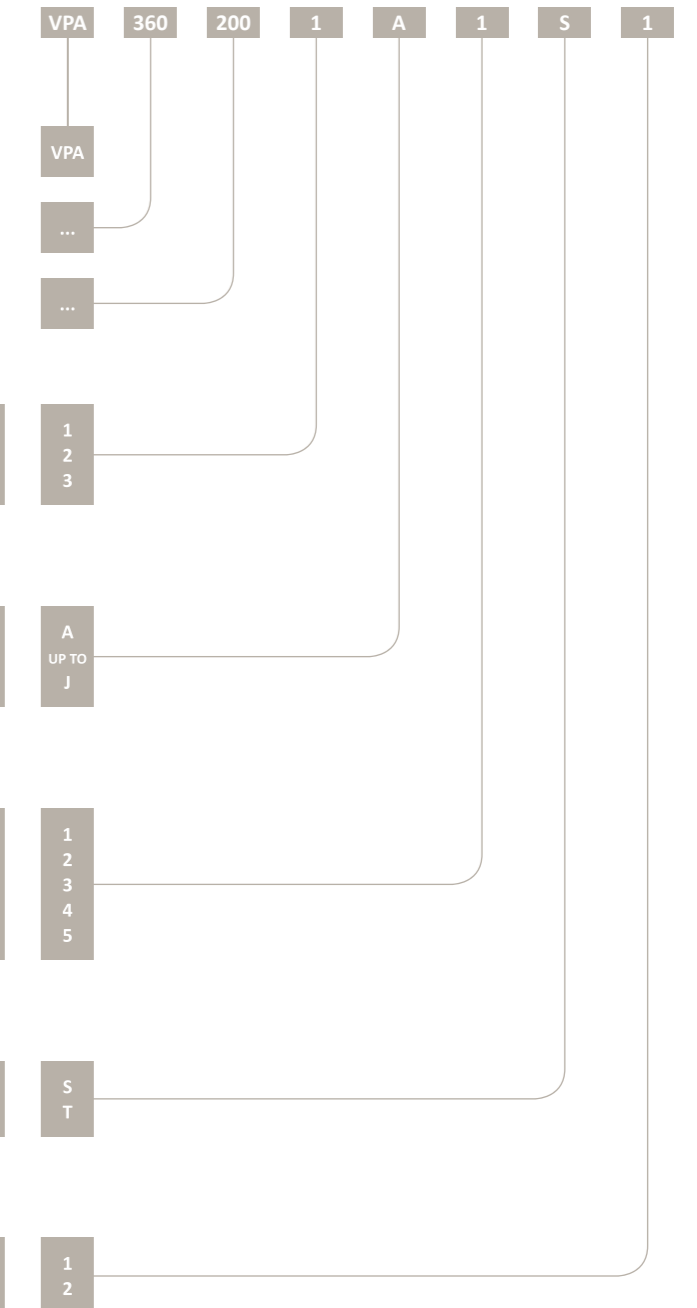
- none
- cable tension measuring system
- microwave system
- magnetostrictive system
- limit switches

SEALS

- standard (mineral oil / nitrogen; up to 3m/s)
- special (e.g. low friction, special medium)

MEDIUM (NON-GAS SIDE)

- standard (mineral oil/nitrogen)
- special (eg biodegradable oil, waterglycol, air)



*Please contact us for the possibilities in case you need the combination of a position measuring system and bigger connections than standard.