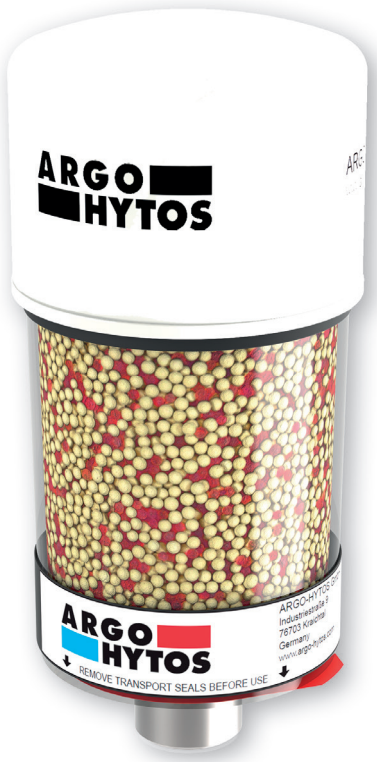
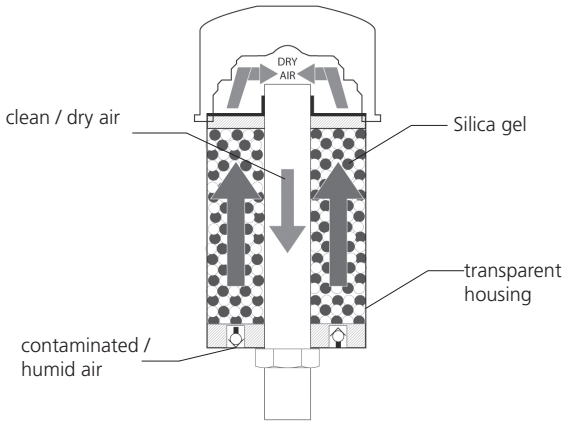
LT.1021-51 · LT.1325-51

Connection up to G1¼ · Nominal flow rate up to 400 l/min / 105.7 gpm



Desiccant breather LT.1021-51



Description

Application

Desiccant breathers are mounted at tanks of hydraulic and lubrication systems in order to prevent humidity from entering the systems during ventilation.

General

Water in hydraulic and lubrication oils may have the following causes:

- Environment humidity
- Spray-water

Already small quantities of free water in oil can lead to acidification. Corrosion of surfaces can be the result. Due to water the oil characteristics change, e.g. decreased load-carrying capacity, reduced temperature resistance. In order to avoid economic damage, the oil must be protected against water.

Special features

Desiccant breathers prevent solid particles as well as humidity, snow, spray- or rainwater from entering. They may even be used in sea atmosphere without any problems. The filter consists of a vessel with silica gel and an integrated ventilating filter.

Performance features

- Water abstraction from the humid air to maintain the lubrication effect and to prevent oxidation
- Color change when the maximum dirt holding capacity of the filter element is reached

Maintenance

With color change of the silica gel from red to orange or with clogged filter element.

Accessories

Additional humidity sensors for monitoring of the pressure fluid are available on request - LubCos humidity sensors dimensions and technical data see data sheet LubCos H_2O and LubCos H_2O+ II.

Operation

The air flows via the in the bottom integrated valves into the desiccant breather, therein the humid air is first dried in Silica gel, then the solid particle contamination is removed by the 3 µm fine ventilating filter.

Characteristics

Nominal flow rate
400 l/min / 105.7 gpm

Connection
Outer thread according to
› ISO 228 or DIN 13.
Sizes see Selection Chart, column 9.

Filter fineness
3 µm
Tested in a single pass test with ISO MTD

Pressure fluid

Mineral oils:	H, HL, HLP, HVLP
Synthetic ester:	HESS
Polyalphaolefin:	HEPR

Other oils on request.

Temperature range
- 40 °C ... + 90 °C / - 40 °F ... + 194 °F

Materials

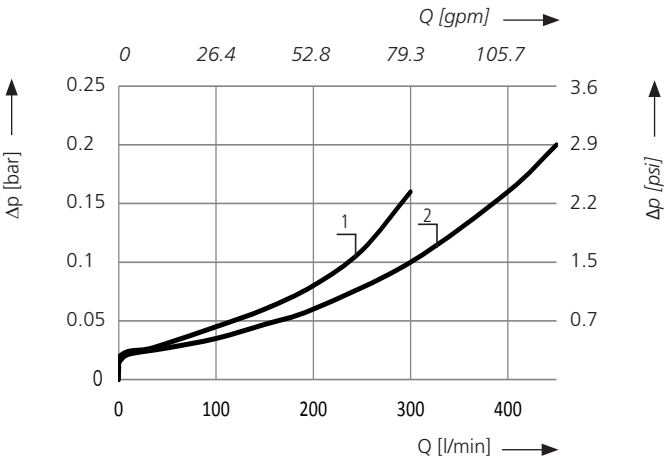
Housing:	Styrene acrylonitrile (SAN)
Tank connection:	Stainless steel
Ventilator housing:	Steel, painted
Drying material:	ZR gel (non-toxic)
Filter material:	Glass fiber

Mounting position
Preferably vertical, on top of the reservoir.

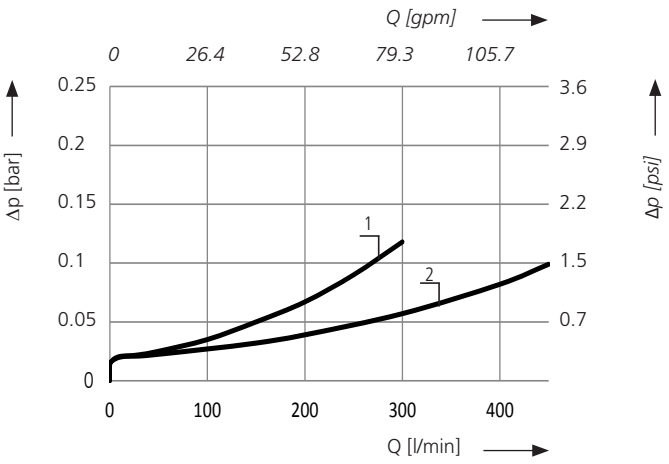
Diagrams

Δp-curves

D1 Pressure drop as a function of the **flow volume AIR IN**



Pressure drop as a function of the **flow volume AIR OUT**



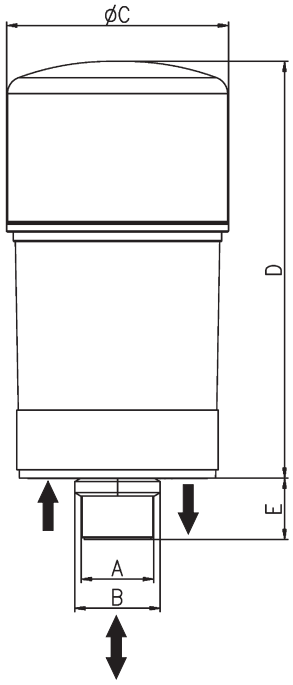
Selection Chart

Part No.	Pressure drop see diagram **D**/curve no.	Nominal flow rate ventilating filter	Filter fineness	Filter surface	Water absorption capacity	Cracking pressure air IN	Cracking pressure air OUT	Connection A	Symbol	Weight	Remarks
		l/min	µm	cm^2	g	bar	bar			kg	
1	2	3	4	5	6	7	8	9	10	11	12
LT.1021-51	**D1**/1	300	3	754	172	0.01	0.01	G¾"	1	1.5	-
LT.1325-51	**D1**/2	400	3	2116	288	0.01	0.01	G1¼"	1	2.7	-

		gpm	µm	$inch^2$	lbs	psi	psi			lbs	
1	2	3	4	5	6	7	8	9	10	11	12
LT.1021-51	**D1**/1	79.3	3	116.9	0.4	0.15	0.15	G¾"	1	3.3	-
LT.1325-51	**D1**/2	105.7	3	328.0	0.6	0.15	0.15	G1¼"	1	6.0	-

Remark: The ventilating filters listed in this chart are standard filters. If modifications are required, we kindly ask for your request.

Dimensions

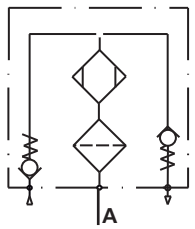


Measurements

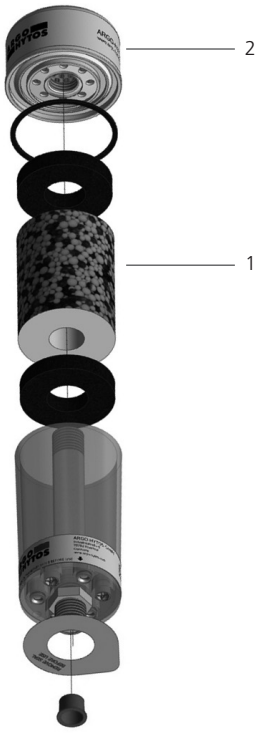
Type	A	B	ØC		D		E	
		mm	mm	inch	mm	inch	mm	inch
LT.1021-51	G¾	AF 32	96	3.78	210	8.27	20	0.79
LT.1325-51	G1¼	AF 50	128	5.04	250	9.84	30	1.18

Symbol

1



Spare Parts



LT.1021-51

Pos.	Designation	Spare Part No.
1	Drying agent	X9.1021-01 (delivered as refill)
2	Ventilating filter	X9.1021-21 incl. seal

LT.1325-51

Pos.	Designation	Spare Part No.
1	Drying agent	X9.1325-01 (delivered as refill)
2	Ventilating filter	X9.1325-21 incl. seal

The functions of the complete filters as well as the outstanding features of the filter elements assured by ARGO-HYTOS can only be guaranteed if original ARGO-HYTOS spare parts are used.

Quality Assurance

Quality management according to DIN EN ISO 9001

To ensure constant quality in production and operation, ARGO-HYTOS filter elements undergo strict controls and tests according to the following ISO standards:

ISO 2941	Verification of collapse / burst pressure rating
ISO 2942	Verification of fabrication integrity (Bubble Point Test)
ISO 2943	Verification of material compatibility with fluids
ISO 3968	Evaluation of pressure drop versus flow characteristics
ISO 16889	Multi-Pass-Test (evaluation of filter fineness and dirt-holding capacity)
ISO 23181	Determination of resistance to flow fatigue using high viscosity fluid

Various quality controls during the production process guarantee the leakfree function and solidity of our filters.