AIR PRESSURE UNIT DA 400

For applications where the Linear Encoders are used in harsh environments (e.g. oil and coolants), RSF offers a method of extra protection beyond the enclosed unit's standard set of sealing lips.

An air inlet can be provided for filtered air to be input into the scale spar. A limiting flow restrictor helps set the optimum overpressure airflow inside the scale spar to further prevent oil and coolants from entering the seal. To ensure fail-safe operation of the Linear Encoder, only "clean" and pretreated air should be put into the scale housing.

The scale cavity should have a flow rate of about 7 to 10 l/min (per Linear Encoder). The setted overpressure (adjustable from 0.5 to 3×10^5 Pa) depends on the number of the connected Linear Encoders (max. 10 Linear Encoders) and the design of the compressed-air supply. DA 400 consists of three filter stages (prefilter, fine filter and activated carbon filter) and a pressure regulator with pressure gauge.

To reach the promised accuracy of the measuring system, the air temperature has to be +20 $^{\circ}$ C.

