RF 20/40
Data sheet

Kongskilde Rotary Vales, type RF are suitable for feeding materials either into a pressure or vacuum pneumatic system or as a feed to a subsequent process.

The Rotary Valves are commonly used in system handling granulates, (granules, pellets, flakes, small molded products etc.).

The design of the Rotary Valves ensures minimal air losses when introducing products into a pressurized conveying line.

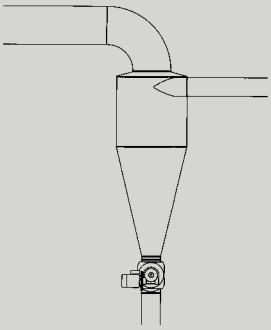
Kongskildes Rotary Vales types RF have a slow rotating rotor which has 6 pockets. Each of the rotor blades are mounted with a wear resistant polyurethane blade, which forms an airtight seal against the precision made valve housing which prevent any material from jamming the rotor.

RF Rotary Valves are suitable for many different applications involving the controlled delivery of material to a pneumatic conveying system or production process. (The models are shown with optional accessories).

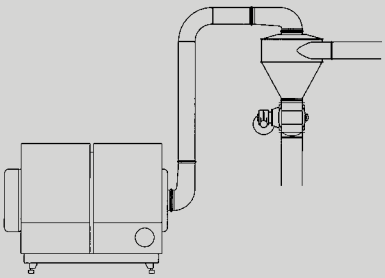
KONGSKILDE
Air solutions / your success

Typical applications:

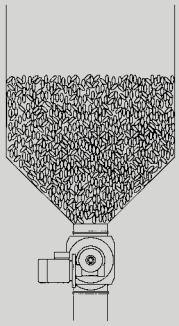
1. Metered feed



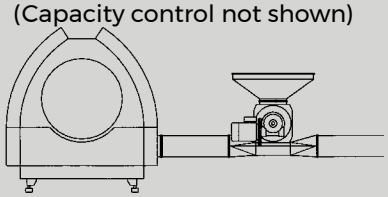
2. Negative pressure, (vacuum), conveying system



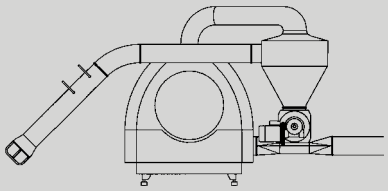
3. Dosing



4. Positive pressure conveying system (Capacity control not shown)



5. Combined negative and positive pressure conveying



Two sizes and three versions

Kongskilde can offer 2 sizes of the RF Rotary Valve. The size of valve needed depends on each individual system requirement.

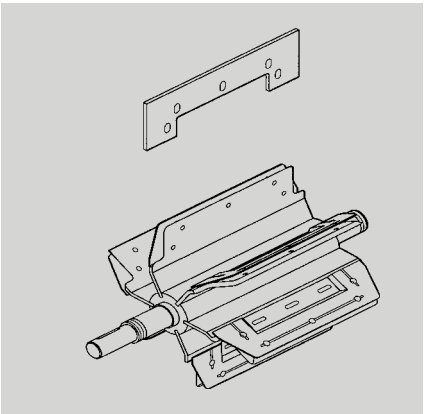
The RF Rotary Valve can be delivered in an “E” version with vertical inlet and outlet which enables the RF Rotary Valve to be mounted under a cyclone, hopper or similar.

A “D” version of the RF Rotary Valve can be delivered with a horizontal blow through bottom that enables the valve to be used directly in combination with a Kongskilde high pressure blower to pneumatically blow the material away from the valve to a designated position.

In applications where the dust contends is high such as in rubber granulate, recycled material and similar Kongskilde can offer a “S” version of the RF Rotary Valves. The “S” version of the rotary valves is equipped with an extra sealing, which protects the mechanical parts against buildup of dust.

RF Rotor

The RF Rotor is designed to handle both pellet and grinded materials from example a grinder or similar. Flexible polyurethane blades are fitted to create the seal on 3 sides of the rotor blades. The design ensures that even thin material such as flakes cannot build up between the housing and the rotor and thereby ensures that that the material will not block the rotor.



Technical data

As standard the RF 20 Rotary Valve is available with any one of five gear motors. The gearing selected should match the application to ensure optimal operation.

For the RF 40 Rotary Valve a selection of 3 different gear motors is available.

Using an AC Drive in combination with the RF 20 and RF 40, any rotor speed can be obtained.

All RF Rotary Valves are delivered with life time greased bearings.

RF 20

Rotary Valve rpm	Ratio	Motor HP	Motor	Motor rpm	Weight in lbs w/motor
54	1:32	1	D80D	1750	88
43	1:40	1	D80D	1750	88
27	1:65	1	D80D	1750	88
26	1:63	1	D71D	1750	79

RF 40

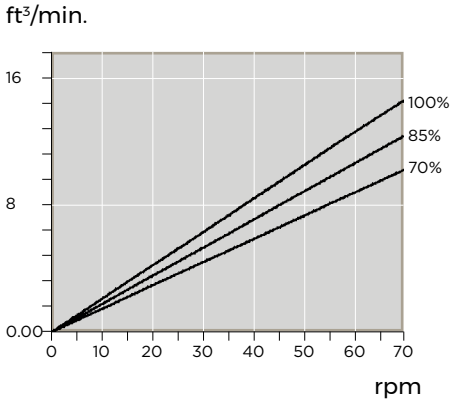
Rotary Valve rpm	Ratio	Motor HP	Motor	Motor rpm	Weight in lbs w/motor
70	1:25	3	D100LD	1750	209
43	1:40	2	D90LD	1750	209

Capacity

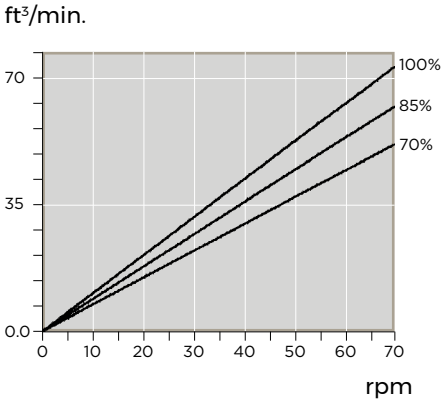
The degree to which each chamber of the rotary valve will be filled will depend upon material density. As a guideline a chamber will be 85% filled if the material is a free-flowing granulate with a bulk density of 37 lbs/ft³. Filling efficiency increases as rpm decrease.

Valve capacity is reduced when handing light, less free-flowing materials. For such applications Kongskilde recommends a maximum rotor speed of 56 rpm.

RF 20



RF 40

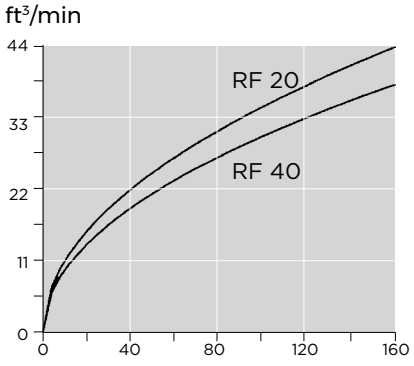


Leakage Curves

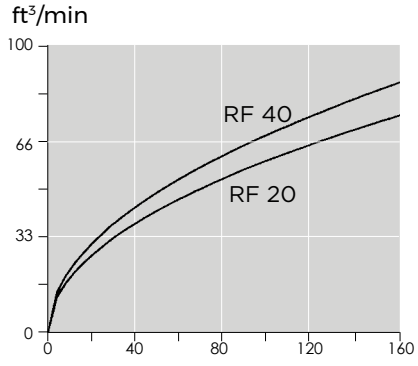
Kongskilde Rotary Valves are carefully designed to minimise air leakage, but this can never be avoided completely, due to the pressure differential across the valve. On the outlet side compressed air will flow into the valve chambers, and escape on the inlet side. This resultant air stream can severely restrict material flow if the valve inlet is sealed to the feed line.

Please ask Kongskilde for further details.

RF 20

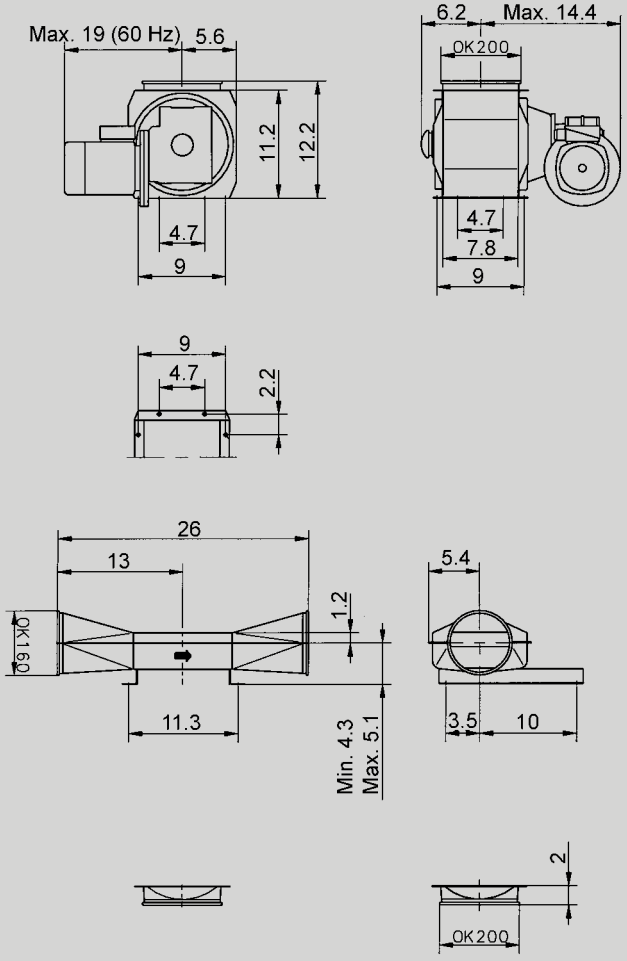


RF 40



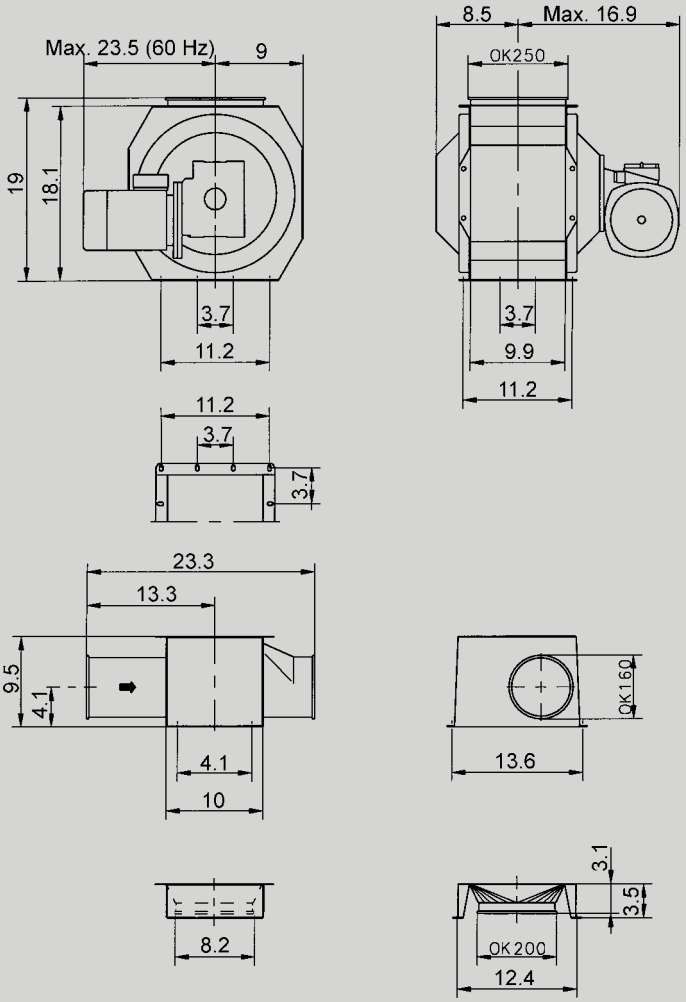
Dimensions (inches)

RV/RF 20



1. RF 20
2. Outlet, horizontal connection
3. Outlet, vertical connection

RV/RF 40



1. RF 40
2. Outlet, horizontal connection
3. Outlet, vertical connection

RF 20/40 accessories include an inlet hopper with shutter. Please do not hesitate to contact Kongskilde for further information.

Subject to modification. 123001724 KNA/GB/RF 20-40/0618

Kongskilde Industries USA Inc.
1802 Industrial Park Drive, Unit A
Normal, IL 61761
Tel.: (309) 452-3300
kna@kongskilde-industries.com
www.kongskilde-industries.com

KONGSKILDE
Air solutions / your success