

RHX SERIES

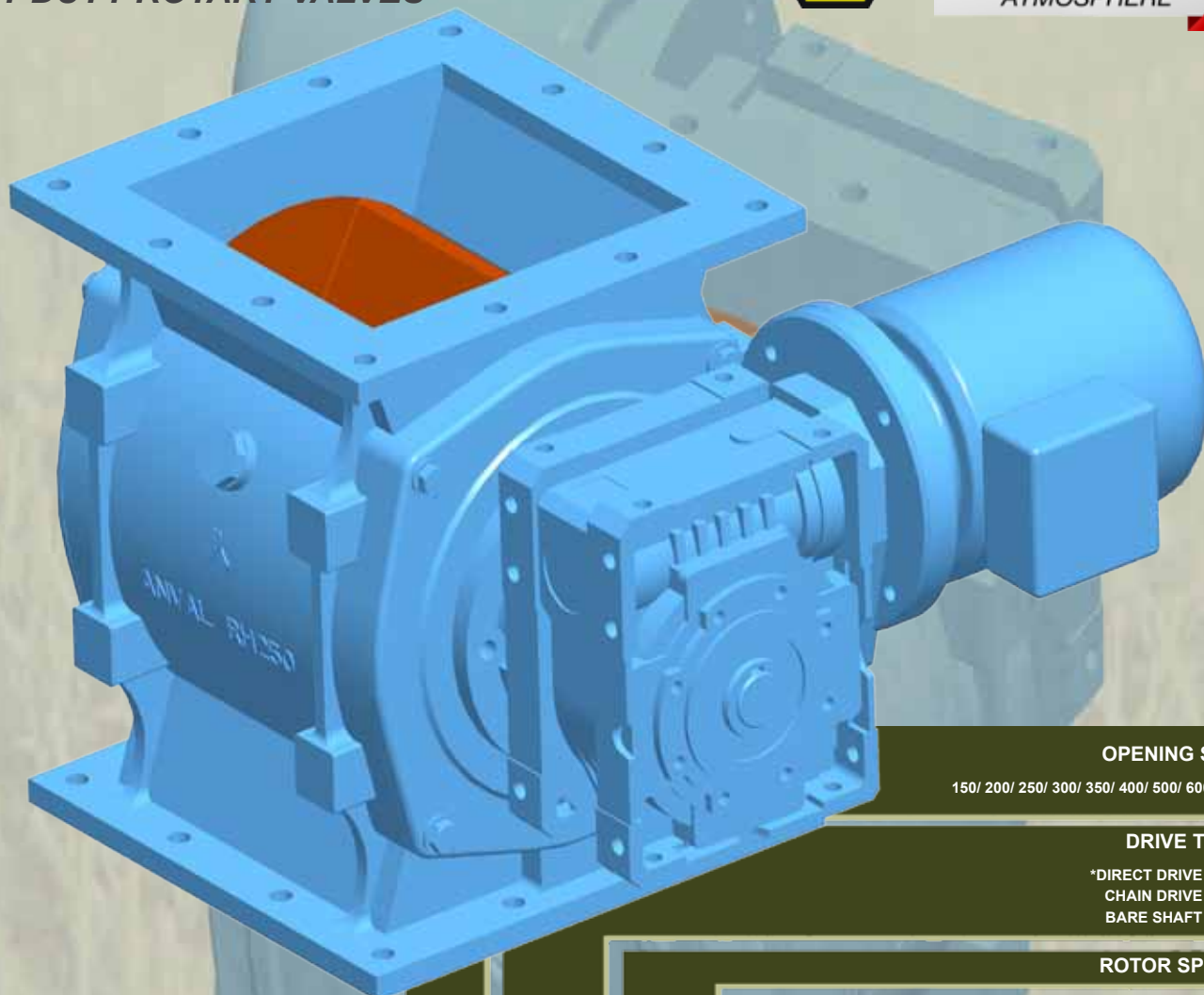
HEAVY DUTY ROTARY VALVES



TOUGH VALVE EXCLUSIVELY

BUILT FOR **EXPLOSIVE**
ATMOSPHERE

ATEX VERSION



OPENING SIZE

150/ 200/ 250/ 300/ 350/ 400/ 500/ 600/ 750

DRIVE TYPE

*DIRECT DRIVE : D
CHAIN DRIVE : C
BARE SHAFT : B

ROTOR SPEED

ROTOR TYPE

(150 to 400) *CLOSED : N
(500 to 750) *CLOSED FABRICATED : M
OPEN FABRICATED : Q
REDUCED POCKET OPEN FABRICATED : R

SEALING

NONE : -
GREASE PURGE : G
GAS PURGE : A

PROXIMITY
SENSOR : P

RHX

300

D

14

M

G

P

BASIC DESIGNATION

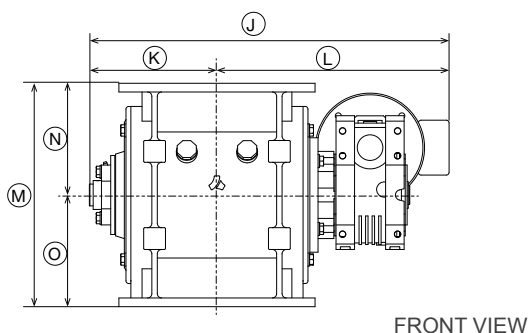
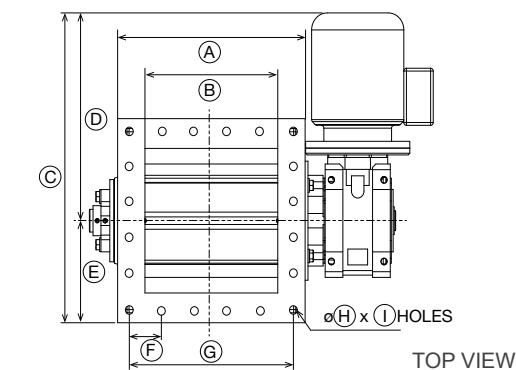
EXTENDED DESIGNATION

*DEFAULT



DIRECT DRIVE (D) > DIMENSIONS

RHX



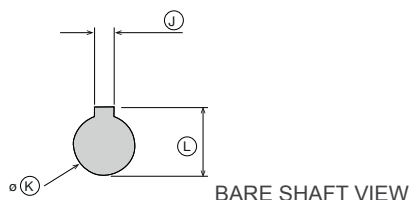
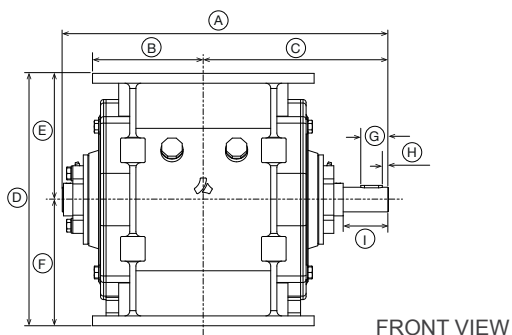
NAME	RHX 150	RHX 200	RHX 250	RHX 300	RHX 350	RHX 400	RHX 500	RHX 600	RHX 750
A	□ 240	□ 300	□ 360	□ 430	□ 480	□ 530	□ 630	□ 760	□ 930
B	□ 150	□ 200	□ 250	□ 300	□ 350	□ 400	□ 500	□ 600	□ 750
C*	440	517	563	598	678	894	1026	1068	1309
D*	320	367	383	383	438	629	711	940	1050
E	120	150	180	215	240	265	315	380	465
F	70	85	105	94	106	94	114	100	108
G	210	255	315	376	424	470	570	700	864
H	12	14	15	15	15	15	15	18	18
I	12	12	12	16	16	20	20	28	32
J*	507	574	660	718	800	932	1089	1182	1376
K	150	190	232	250	290	325	375	457	465
L*	357	384	428	468	510	607	714	725	911
M	240	330	410	470	525	620	760	900	1120
N	120	165	205	235	262.5	310	380	450	560
O	120	165	205	235	262.5	310	380	450	560
Net Weight	50	84	146	183	255	400	650	1058	1750
Gross weight	65	105	165	215	280	440	715	1120	1820

ALL DIMENSIONS IN MM, WEIGHT IN KGS.

* APPROXIMATE DIMENSION ONLY. VARIES WITH MOTOR SIZE AND GEARBOX VARIATION.

BARE SHAFT (B) > DIMENSIONS

RHX

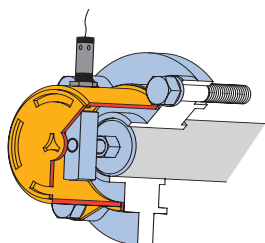


NAME	RHX 150	RHX 200	RHX 250	RHX 300	RHX 350	RHX 400	RHX 500	RHX 600	RHX 750
A	375	437	530	590	630	730	870	1025	1125
B	150	150	180	215	290	265	315	380	465
C	225	260	300	331	350	396	455	505	660
D	240	330	410	470	525	620	760	900	1120
E	120	165	205	235	262.5	310	380	450	560
F	120	165	205	235	262.5	310	380	450	560
G	30	35	45	45	65	50	50	75	50
H	5	5	10	10	5	5	10	10	5
I	60	60	75	75	72	77	51	55	75
J	8	8	12	12	14	14	18	18	20
K	25	30	40	40	45	50	60	60	70
L	28.3	33.3	43.3	43.3	48.3	53.3	63.3	63.3	74.9
Net Weight	35	61	116	161	210	331	513	950	1500
Gross weight	45	81	130	185	228	356	546	995	1560

ALL DIMENSIONS IN MM, WEIGHT IN KGS.

PROXIMITY SENSORS

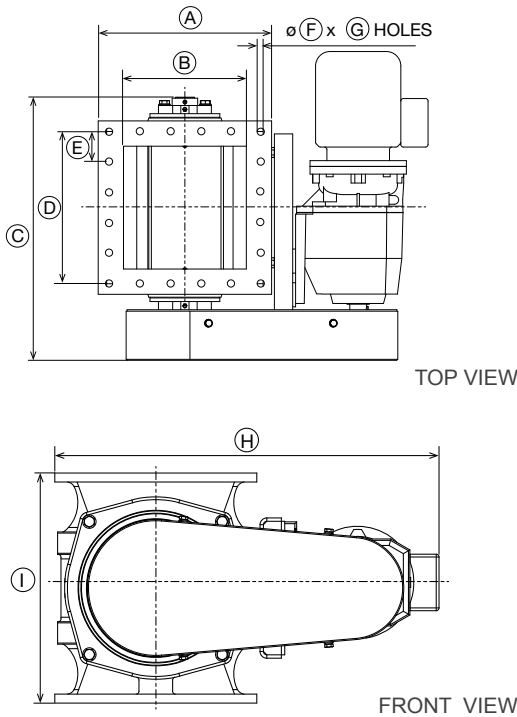
RHX



ATEX approved underspeed sensors can be supplied and fitted to rotary valves. These are mounted on a specifically designed bracket that is bolted onto the bearing.

CHAIN DRIVE (C) > DIMENSIONS

RHX



NAME	RHX 150	RHX 200	RHX 250	RHX 300	RHX 350	RHX 400	RHX 500	RHX 600	RHX 750
A	□ 240	□ 300	□ 360	□ 430	□ 480	□ 530	□ 630	□ 760	□ 930
B	□ 150	□ 200	□ 250	□ 300	□ 350	□ 400	□ 500	□ 600	□ 750
C*	350	452	546	616	650	754	925	1060	1208
D	210	255	315	376	424	470	570	700	864
E	70	85	105	94	106	94	114	100	108
F	12	14	15	15	15	15	15	18	18
G	12	12	12	16	16	20	20	28	32
H*	451	600	685	740	772	905	1010	1140	1452
I	240	330	410	470	525	620	760	900	1120
Net Weight	68	102	164	214	340	400	608	1343	1600
Gross Weight	88	125	186	245	370	432	636	1400	1690

ALL DIMENSIONS IN MM, WEIGHT IN KGS.

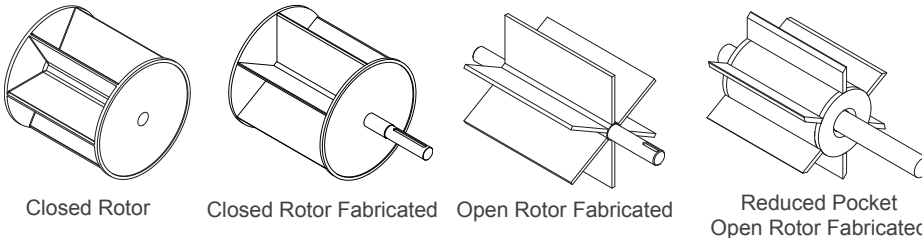
* APPROXIMATE DIMENSION ONLY. VARIES WITH MOTOR SIZE AND GEARBOX VARIATION.

ROTOR

RHX

The standard RHX Series rotor is closed, which has the least amount of potential wear. Open fabricated rotors are provided where required.

Also available in Reduced pocket open rotor fabricated type.

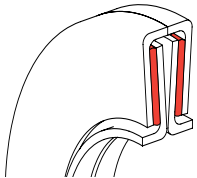


II 1/2 D c T 125 °C	
II	Equipment Group
1/2	Zone 20 (Internal) Zone 21 (External)
D	Dust Atmospheres
c	Protection by Construction Safety
T	Surface Temperature Class

ATEX MARKING TABLE

SHAFT SEALING

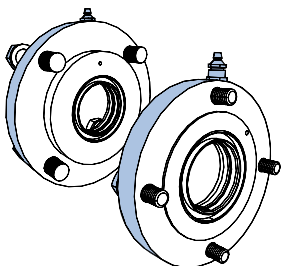
RHX



We are using labyrinth seal, which is a mechanical seal that fits around the axle or shaft to prevent the leakage of any particles. Generally, Labyrinth seal is composed of many threads or grooves that are tightly fit inside the casing, thus making difficult for the dust to pass through a long and difficult path.

Labyrinth seals on rotating shafts provide non contact sealing action by controlling the passage of particles through a variety of chambers by centrifugal motion, as well as by the formation of controlled material vortices.

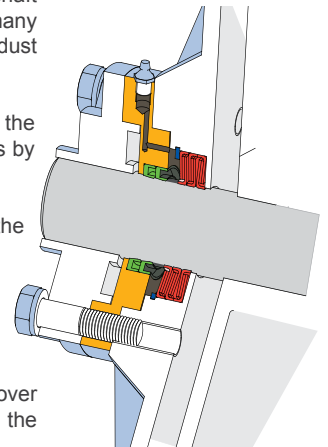
'Double labyrinth Seals' are filled with flock pads, and greased on each side of the valve. These are standard with all RHX Series valves.



PURGE SEALING

Grease Purge - For extreme duty, valves can be fitted with a grease purge unit over the labyrinth seal. By creating a grease filled cavity between the seals, it prevents the escape of any dust particles or gases.

Gas Purge - When grease cannot be used, inert gases can be used to purge the seal so all dust particles or product gases are flushed back into the product stream.

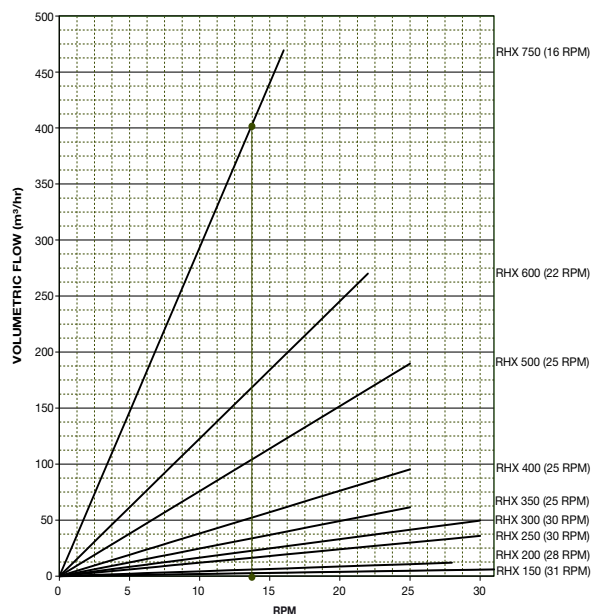


TYPICAL PURGE SEALING ARRANGEMENT

MODEL SELECTION CHART

RHX

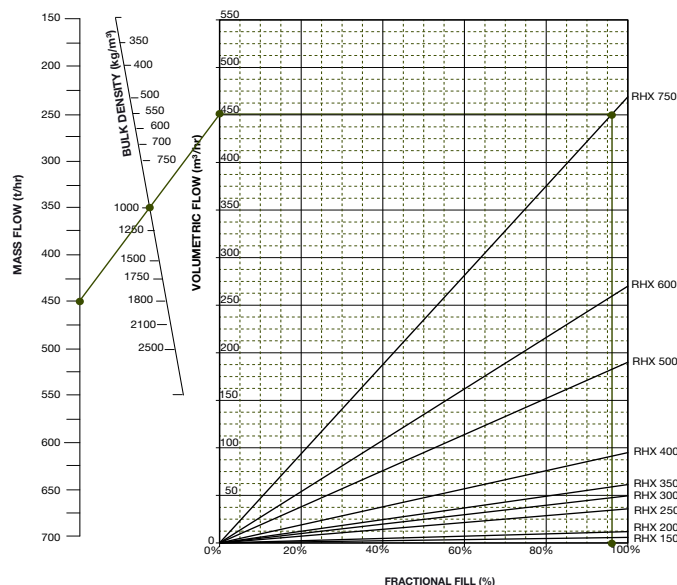
Speed Vs Throughput



- 14 RPM DEFAULT FOR DIRECT (D) AND CHAIN (C) DRIVE
- RPM NOT REQUIRED FOR BARE SHAFT

NOTE: THIS CHART IS PREPARED FOR THE GUIDANCE PURPOSE ONLY, CONSIDERING 100% FILLING CAPACITY.

Capacity Chart



EXAMPLE: A MATERIAL WITH A BULK DENSITY OF 1000(Kg/m³) AND REQUIRED CAPACITY OF 450(t/hr) CAN BE ACHIEVED BY RHX 750 AT 96% FILLING CAPACITY AT 16 RPM.

NOTE: THIS CHART IS PREPARED FOR THE GUIDANCE PURPOSE ONLY.

CONSTRUCTION / TECHNICAL SPECIFICATIONS

RHX

BODY	: Cast Iron	BEARINGS	: Cartridge Type
ROTOR	: Cast Iron / MS	BEARINGS MAKE	: NTN
SIDE PLATES	: Cast Iron	SHAFT	: CS1030
GEARBOX	: Heliworm or Helibevel Gears (D) / Helical Gears (C)	OPENING SIZES	: 150 to 750 mm
SEALS	: Labyrinth Seals (sealing washer)	TEMPERATURE	: Build to eminent temperature
DRIVE TYPE	: Direct / Chain / Bare shaft	DIFFERENTIAL PRESSURE	: Can handle higher pressure
DRIVE	: Nord Standard (ATEX certified)	CAPACITY RANGE	: Upto 469 m³/hr Max.
ROTOR TYPE	: Closed rotor (N) / Closed rotor fabricated (M) / Open rotor fabricated (Q) / Reduced pocket open rotor fabricated (R)	PAINTING STANDARD	: Dark Grey Blue
SENSOR	: Proximity Sensor (P)	SURFACE TREATMENT (ANVAL STANDARD)	: 50µm Grey Primer 50µm Paracryl IFC (B53 Dk. Grey Blue / Y14 Golden Yellow for guards)
SPECIAL SEALS	: Grease Purge (G) / Gas Purge (A)		