

Rotary Valves

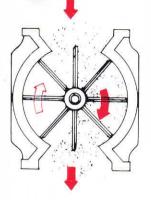
& Airlocks

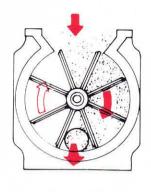
SANITARY
De-mountable
Rotary Valves





Rotary Valves & Airlocks





(Drop Through)

CV Model (Blow Through)

Nu-Con rotary valves and airlocks are designed to meet the requirements of all types of pneumatic handling. Rigid quality control and machining to tolerances to suit specific products assures highest efficiency and years of trouble free operation.

The features listed ensure that the right valve can be selected with correct features for every application and each application is considered individually to assure the optimum configuration is supplied.

Nu-Con's expertise ranges from the very abrasive heavy duty applications to the sanitary 3A approved quick demountable models and the same attention to detail and workmanship is evident throughout the range.

Nu-Con's staff have the knowledge to solve your conveying or material handling problems. Unlike most engineering companies which manufacture rotary valves, Nu-Con manufacture them for their own system and contract work as well as component supply so we fully understand the performance requirements.

PRINCIPLE OF OPERATION

A rotary valve or air lock is used to feed solids between areas of differing pressure while still maintaining the pressure differential.

Nu-Con valves as standard, have eight bladed cylindrical rotors and accurately gauged clearances are maintained between the rotor tips and ends within the valve bore. These clearances are vital to the performance of the valve.

VALVE CONFIGURATION

Nu-Con rotary valves are available in two basic configurations:

- (a) Blow through (CV) with product entering at the top and discharging horizontally at 90° to inlet via a pneumatic conveying line, either vacuum or pressure.
- (b) Drop through (DT) with product entering at the top and discharging vertically from the bottom

Both CV and DT are available in quick demountable sanitary design (USDA approved).

MATERIALS, FEATURES AND DESIGNS:

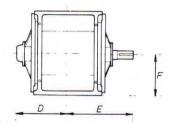
Nu-Con rotary valves are available in a wide range of material and finishes with a variety of special options:

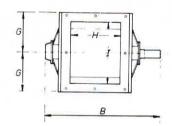
Housing and End Plates:

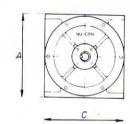
- Stainless steel 304 or 316.

- Cast iron, hard chrome lining. Nickel chrome moly and other alloys.
- Aluminium.

- Available in mild steel, mild steel teflon coated, stainless steel 304 or 316.
- Demountable rotor available without disturbing seals or bearings. Adjustable rotor tips.
- Specially hardened and profiled tips.
- Special scalloped rotor with disc ends for high fat or sticky materials.







Model		Swept Vol.	Rotor Dia.	Drive		Shaft Dia.			Dimens	ions - Mill	imetres					
		m³	x Length	KW HP		mm.	A	В	C	D	E	F	G	H	1	
375	DT	.006	203 x 190	.37	.5	24	266	355	236	150	205	133	118	146	197	
500	DT	0.13	255 x 304	.37	.5	30	321	470	305	205	265	161	152.5	229	152	
750	DT	.022	279 x 444	.75	1	35	330	645	324	285	360	165	162	330	203	
1250	DT	0.36	340 x 460	.75	1	42	410	675	455	295	380	205	227.5	350	305	
2000	DT	0.54	410 x 440	1.5	2	48	480	680	490	295	385	240	245	350	350	
3000	DT	.088	445 x 650	2.25	3	60	600	1010	580	445	565	300	290	650	470	
6000	DT	.167	650 x 580	2.25	3	70	830	995	790	421	574	415	395	584	650	



De-mountable Rotary Valve

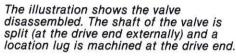
DEMOUNTABLE ROTARY VALVE

It has become necessary in recent times to develop a rotary valve which can be dismantled in a very short time to facilitate cleaning and inspection when required. It has also been an important factor that this whole operation should be done by hand using no tools.

Following a great deal of research and development, Nu-Con can now offer a rotary valve design incorporating a number of new features.

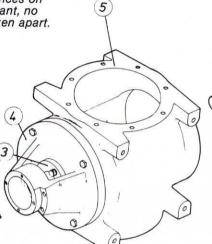
The demountable rotary valve can be made in any of the already available materials in a dropthrough or convey-through configuration.

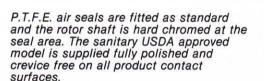
Nu-Con's design enables one end plate to be removed using hand wheels which secure the plate to the valve body, and an additional hand wheel which can be screwed by hand (against the rotorshaft) to push off the entire end plate. This method of removal eliminates the need to disturb both bearings and seals.



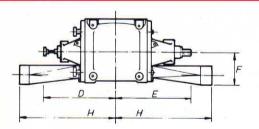
This method ensures that clearances on both tips and ends remain constant, no matter how often the valve is taken apart.

Nο	DESCRIPTION
1	BEARING RETAINER PLATE
2	BEARINGS
3	VARISEAL RETAINER PLATE
4	DRIVE END PLATE
5	BODY
6	SHAFT & ROTOR
7	NON-DRIVE END PLATE
8	END CAP WITH HANDWHEEL
9	BEARING
10	VARISEAL
11	QUICK RELEASE HANDWHEELS (4 OFF)
12	DRIVE SLEEVE
13	BEARING SPACERS (INNER & OUTER RACES)

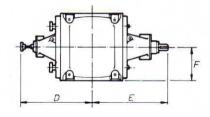


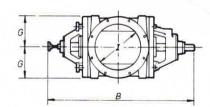


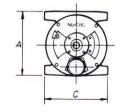
Any of Nu-Con's standard range of rotary valves are available with the option of being demountable and a choice between round and rectangular entry is available.



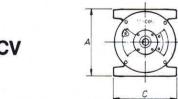
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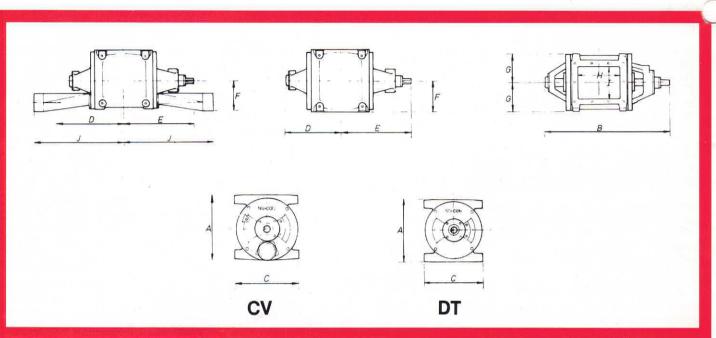


DT

MILCON DOTARY VALVES _	- DEMOUNTABLE SERIES - ROUND ENTRY
ido-com motum surare -	Printed Wher Stuirs - Median Figure

Model		Swept Vol.	Rotor Dia. x Length		ive HP	Shaft Dia. x Key.	A	В	C	Dimens D	ions – Mil E	limetres F	G	Ĥ	1	Mounting J Detail
375	DT	.006	203 x 190	0.37	0.5	30 x 8	290	605	236	280	325	145	119	_	165	8 holes M10 235 PCD
500	CV	0.13	255 x 304	0.37	0.5	30 x 8	305 321	715 715	315 315	350 350	340 365	146 161	157.5 157.5	475	230 230	8 holes M10 286 PCD
750	CV	.022	300 x 380	0.75	1	35 x 9.5	350 350	791 791	370 370	378 378	413 413	175 175	185 185	518	254 254	8 holes M10 336 PCD
1250	CV	.036	343 x 462	0.75	1	35 x 9.5	410 410	885 885	415 415	428 428	487 487	205 205	207.5 207.5	560	328 328	8 holes M10 375 PCD





Model		Swept Vol.	Rotor Dia.	Drive		Shaft Dia.		Dimensions Millimetres								
		m³	x Length	KW HP		mm.	A	В	C	D	E	F	G	H	İ	J
375	CV	.006	203 x 190	.37	.5	24	254 266	470 470	236 236	205 205	265 265	121 133	118 118	146 146	197 197	343
500	CV DT	.013	255 x 304	.37	.5	30	305 321	617 617	305 305	275 275	342 342	146 161	152.5 152.5	229 229	152 152	425
750	CV DT	.022	219 x 444	.75	1	35	317 330	742 742	324 324	330 330	412 412	152 165	162 162	330 330	203 203	508
1250	CV DT	.036	340 x 460	.75	1	42	410 410	855 855	455 455	385 385	470 470	205 205	227.5 227.5	350 350	305 305	580
2000	CV	.054	410 x 440	1.5	2	48	480 480	910 910	490 490	403 403	507 507	240 240	245 245	350 350	350 350	620
3000	CV DT	.088	445 x 650	2.25	3	60	600 600	1247 1247	580 580	572 572	675 675	300 300	290 290	650 650	470 470	650 -
6000	CV	.167	650 x 580	2.25	3	70	830 830	1390 1390	790 790	620 620	770 770	415 415	395 395	584 584	650 650	700

Special Nu-Con Features:

- USDA 3A full specification fully ground and polished internal and external model available in demountable configuration.
- Specially hardened externally adjusted and removed knife blades available on drop through model.
- Standard design air vents available for fitting to housing of all valves in range.
- Rotary valves available with imperial or metric threads.

NU-CON LIMITED

20 Fairfax Avenue, Penrose, Auckland, New Zealand. P.O. Box 12-264, Penrose.

Ph: 64-9-579 2044 Fax: 64-9-579 1121

SERVICE

Nu-Con Systems operates its own wholly owned foundry and Machine Shop and are able to offer a comprehensive fast reconditioning service for the complete range of valves available.

Full spares inventories are kept.

Illustrations and descriptions are not binding. Due to continuing development, the manufacturer reserves the right to alter designs and specifications without prior notice.

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