

TBT Plug Diverter Valves

Application

Rota Val TBT Plug Diverter Valves are designed to route most materials, especially where stainless steel contact parts are required, in both lean and dense phase conveying systems. They are also suitable for both diverging and converging applications.

Design

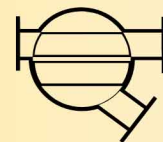
The twin pipe plug combines the benefits of both a constant bore and a low rotational angle, furthermore pressure assisted seals are fitted as standard. NB: Pressure assisted seals require no additional controls.

Construction

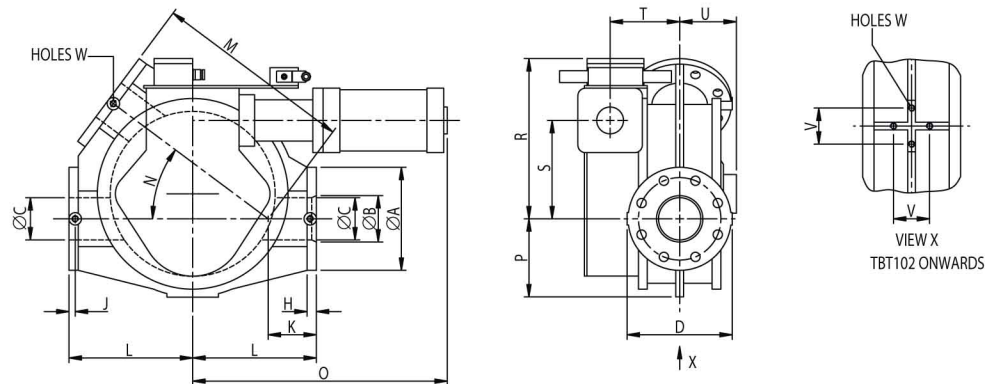
The valve housing and plug are manufactured from cast aluminium with stainless steel 321 liners. This combination offers low valve weight and food quality contact parts.

Standard Specification

The valve is suitable for positive pneumatic conveying systems up to 4 barg (2 barg for valve sizes ≥ 186) and -0.5 barg vacuum systems. The standard construction is suitable for use with product temperatures between -25°C and $+100^{\circ}\text{C}$.



TBT
General duty Plug Diverter valve, suitable for most Pneumatic conveying applications
Standard flange drilling - BS4504 (Din 2501) PN10
'E' holes, 'F' diameter equi-spaced on 'G' PCD off centres.
Other options available



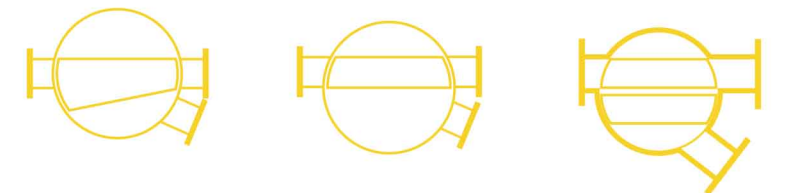
TYPE	ØA	ØB	ØC	D	E	ØF	ØG	H	J	K	L	M	N	O	P	R	S	T	U	V	W	WT kg Approx
TBT55	165	55	55	169	4	18	125	16	12	69	185	301	33.50	435	125	275	145.0	121.0	95	-	M12 X 18	38
TBT71	185	71	70	189	4	18	145	16	12	87	215	343	36.67	449	138	283	152.5	129.0	103	-	M12 X 18	44
TBT84	200	84	82	204	8	18	160	18	12	93	240	387	36.67	494	152	311	191.0	135.0	110	-	M12 X 18	51
TBT102	228	102	100	232	8	18	180	18	20	88	270	452	35.00	494	178	353	200.0	150.0	120	70	M12 X 18	66
TBT108	228	108	100	232	8	18	180	18	20	88	270	452	35.00	494	178	353	200.0	150.0	120	70	M12 X 18	66
TBT127	250	127	125	254	8	18	210	20	20	102	320	538	35.50	610	215	420	294.0	177.0	138	140	M16 X 24	106
TBT134	250	134	125	254	8	18	210	20	20	102	320	538	35.50	610	215	420	294.0	177.0	138	140	M16 X 24	106
TBT152	285	152	150	289	8	22	240	20	20	105	360	615	35.92	610	249	476	306.5	190.0	150	140	M16 X 24	137
TBT161	285	161	150	289	8	22	240	20	20	105	360	615	35.92	610	249	476	306.5	190.0	150	140	M16 X 24	137
TBT186	315	186	183	319	8	22	270	20	20	120	425	730	36.00	750	286	557	419.0	249.0	200	140	M16 X 24	232
TBT212	343	212	210	347	8	22	295	25	20	133	500	867	34.80	770	350	635	435.0	267.5	220	140	M16 X 24	340
TBT265	406	265	260	410	12	22	350	25	20	161	600	1039	35.38	771	400	767	460.0	292.5	244	140	M16 X 24	410

This information is for guidance only – **USE ONLY CERTIFIED DRAWINGS FOR PLANNING-IN.**
These valves must not be considered as load bearing without prior consultation.



Plug Diverter Valves

Sizes 50mm–300mm



Rota Val Ltd., Bumpers Way, Bumpers Farm Industrial Estate

Chippenham, Wiltshire, England SN14 6LH

Tel: +44 (0) 1249 651138 Fax: +44 (0) 1249 462054

Email: sales@rotaval.co.uk Web site: www.rotaval.co.uk

CP Plug Diverter Valves

Application

Rota Val CP Plug Diverter Valves are designed to route powders and granular materials within lean phase conveying systems only, they are particularly suited to vacuum conveying systems handling abrasive products.

CP Plug diverter valves are not suitable for the following applications:

- Where mechanical degradation of the product may cause concern
- For some foodstuffs that may be degradable or contaminable
- For fine powders at higher conveying pressures
- In the converging mode

Design

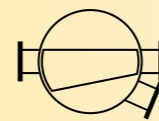
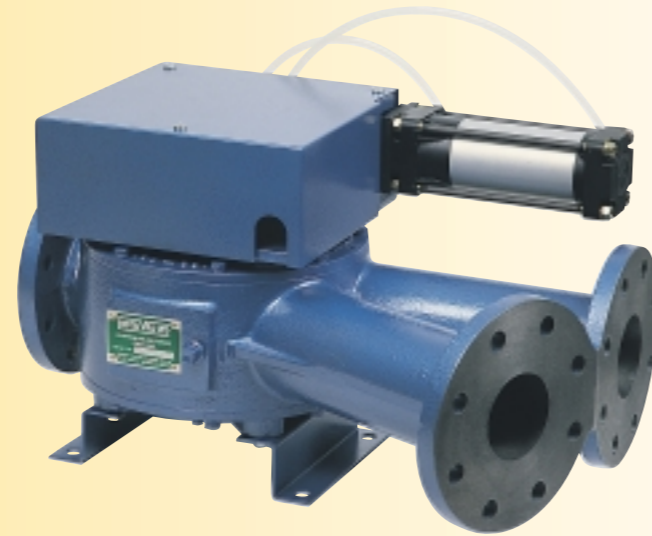
The design of the valve is such that the converging plug rotates through 45° to effect a change of direction. This enables a relatively inexpensive pneumatic cylinder to be used, thus contributing towards a low cost and low maintenance valve.

Construction

The valve housing is a rigid cast design in either aluminium, iron or stainless steel. The plug is available cast in S.G. Iron, stainless steel or Ni-hard, the latter is suited to abrasive products.

Standard Specification

The valve may be used in positive conveying systems at pressures up to 1 barg and in any vacuum system. The standard construction is suitable for use with product temperatures between -10°C and +80°C although this is dependent on ambient conditions surrounding the valve. Wider temperature ranges can be achieved e.g. special modifications to allow for product temperatures up to 500°C.



CP

Low cost general duty Plug Diverter valve, suitable for most Pneumatic conveying applications

Standard flange drilling - BS4504 (Din 2501) PN10
'D' holes, 'E' diameter equi-spaced on 'F' PCD off centres.
Other options available

TB Plug Diverter Valves

Application

Rota Val TB Plug Diverter Valves are designed to route virtually any material, including those with a tendency to plug, within a pneumatic conveying system. The TB Plug Diverter can be used in both the diverging and converging modes.

Design

The design of the plug is such that the bore through the valve is constant; therefore conveying losses are reduced to a minimum.

Construction

The valve housing is a rigid cast design in either aluminium, iron or stainless steel. The plug is available cast in S.G. Iron, stainless steel or Ni-hard, the latter is suited to abrasive products.

Standard Specification

The valve may be used in positive conveying systems up to 1 barg and also vacuum conveying systems. The standard construction is suitable for use with product temperatures between -10°C and +80°C although this is dependent on ambient conditions surrounding the valve. Wider temperature ranges can be achieved e.g. special modifications to allow for product temperatures up to 500°C.

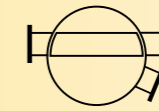
Dense Phase Conveying

The TB type Plug Diverter Valves are suitable for use within dense phase conveying systems when fitted with seals between the plug and valve housing. Two versions are available:

(TBN) Nylatron spring loaded seals, suitable for conveying systems up to 2 barg, no additional controls are required.

(TBS) with Inflatable seals, suitable for conveying systems up to 5 barg, control is by the client's PLC or Rota Val control box.

Both types are ideally suitable for fine powders. The TBS is ideal for inert gas conveying systems.



TB

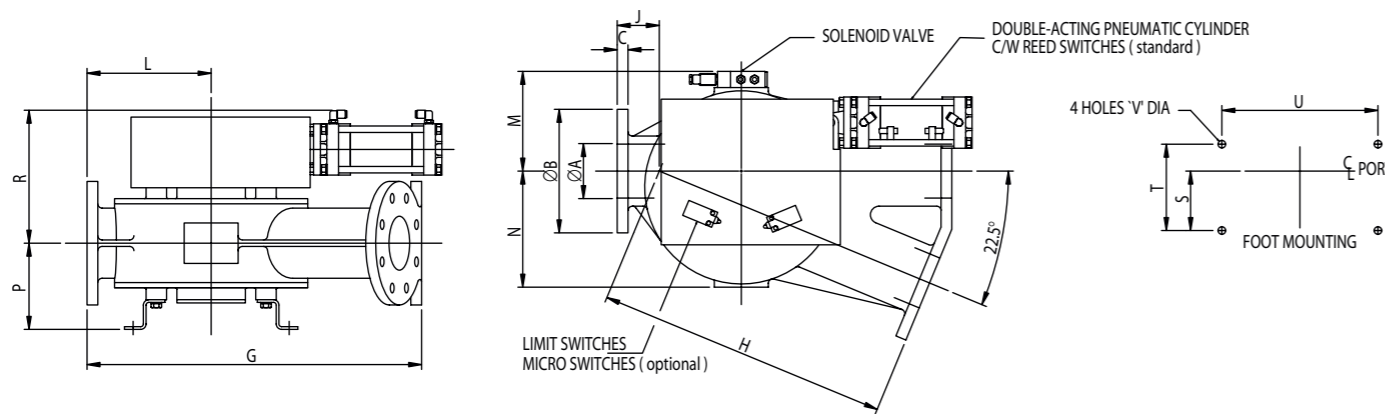
Heavy duty Plug Diverter Valve
For all types of pneumatic conveying

Notes

TB50 -TB150 Angle of Diversion is 22.5°
TB200 - TB300 Angle of diversion is 30°

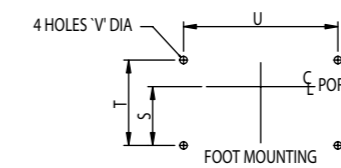
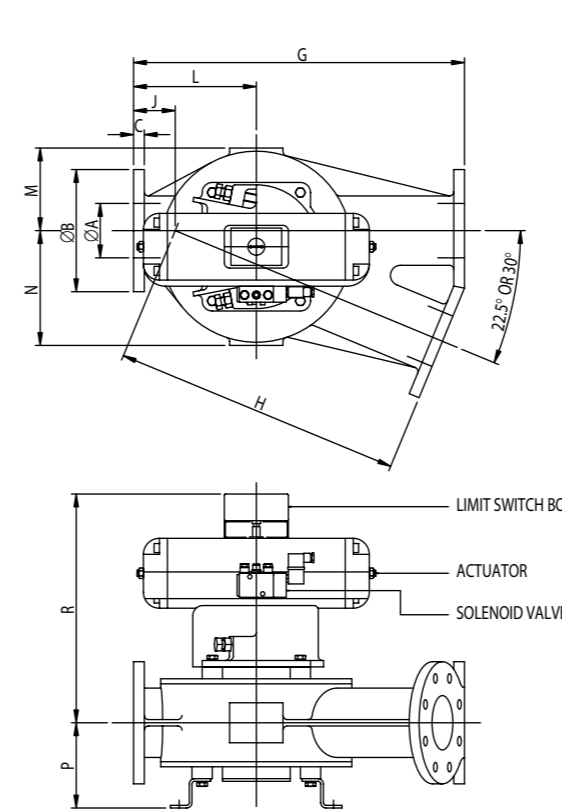


Standard flange drilling - BS4504 (Din 2501) PN10
'D' holes, 'E' diameter equi-spaced on 'F' PCD off centres.
Other options available



Type	ØA	ØB	C	D	ØE	ØF	G	H	J	L	M	N	P	R	S	T	U	Wt kg Approx
CP50	51	165	16	4	18	125	510	416	94	170	127	117	127	173	95	160	195	60
CP65	63	185	16	4	18	145	570	502	68	180	158	162	147	193	102	160	233	67
CP80	76	200	20	8	18	160	570	502	68	180	158	162	147	193	102	160	233	72
CP100	100	229	20	8	18	180	620	542	78	230	195	215	160	230	110	160	289	105
CP125	127	254	22	8	18	210	725	639	86	262	220	250	173	242	115	160	289	135
CP150	152	285	22	8	22	240	811	717	94	318	260	310	185	255	125	160	289	190

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TYPE	ØA	ØB	C	D	ØE	ØF	CI			AL			SS			CI			AL			SS		
							G	G	G	H	H	H	J	J	J	L	L	L	L	L	L			
TB50	51	165	16	4	18	125	510	510	510	416	416	416	94	94	94	170	170	170	170	170	170	170	170	
TB65	63	185	16	4	18	145	570	570	566	502	502	499	68	68	67	180	180	179	180	180	179	180	179	
TB80	76	200	20	8	18	160	570	570	566	502	502	499	68	68	67	180	180	179	180	180	179	180	179	
TB100	100	229	20	8	18	180	620	686	616	542	578	540	78	108	76	230	260	229	230	260	229	230	229	
TB125	127	254	22	8	18	210	725	768	720	639	642	636	86	127	84	262	345	260	262	345	260	262	345	
TB150	152	285	25	8	22	240	811	835	803	717	710	712	94	125	91	318	339	315	318	339	315	318	339	
TB200	200	343	25	8	22	295	780	780	772	640	640	636	140	140	136	339	339	336	339	339	336	339	336	
TB250	250	406	25	12	22	350	945	945	945	758	758	758	187	187	187	430	430	430	430	430	430	430	430	
TB300	305	482	25	12	22	400	-	1100	-	-	900	-	-	200	-	-	484	-	-	-	-	-	-	

TYPE	M	N	P (Max)	R (Max)	CI			AL			SS			CI			AL			SS			Wt kg Approx
					S	S	S	T	T	T	U	U	U	V	V	V	V	V					
TB50	87	117	127	411	95	95	95	160	160	160	195	195	195	14	14	14	14	14	14	14	14	63	
TB65	118	162	147	419	102	102	102	160	160	160	233	233	233	14	14	14	14	14	14	14	14	70	
TB80	118	162	147	436	102	102	102	160	160	160	233	233	233	14	14	14	14	14	14	14	14	75	
TB100	188	249	194	496	110	110	110	160	160	160	289	345	289	14	19	14	14	14	14	14	14	116	
TB125	260	346	237	542	115	303	115	160	520	160	289	520	289	14	24	14	14	14	14	14	14	150	
TB150	260	346	247	610	125	303	125	160	520	160	289	520	289	14	24	14	14	14	14	14	14	204	
TB200	250	356	267	627	133	313	133	160	520	160	289	520	289	14	24	14	14	14	14	14	14	260	
TB250	286	415	292	652	325	325	325	520	520	520	520	520	20	24	24	24	24	24	24	24	24	350	
TB300	327	479	317	717	-	184	-	-	520	-	-	520	-	-	24	-	-	-	-	-	-	640	

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