

A large industrial valve, likely a gate valve, with a blue upper body and a yellow lower body. The valve is shown in a three-quarter view, highlighting its robust construction and the circular opening with a metal flange. The background is white.

Technical drawing of a butterfly valve, showing front, side, and detail views with dimensions and labels.

Front View Dimensions:

- Overall width: 1650
- Distance between flange faces: 1406
- Flange thickness: 500
- Actuator label: ACTUATOR
- Distance from flange face to actuator center: H2
- Distance from flange face to valve center: H1
- Overall height: H

Side View Dimensions:

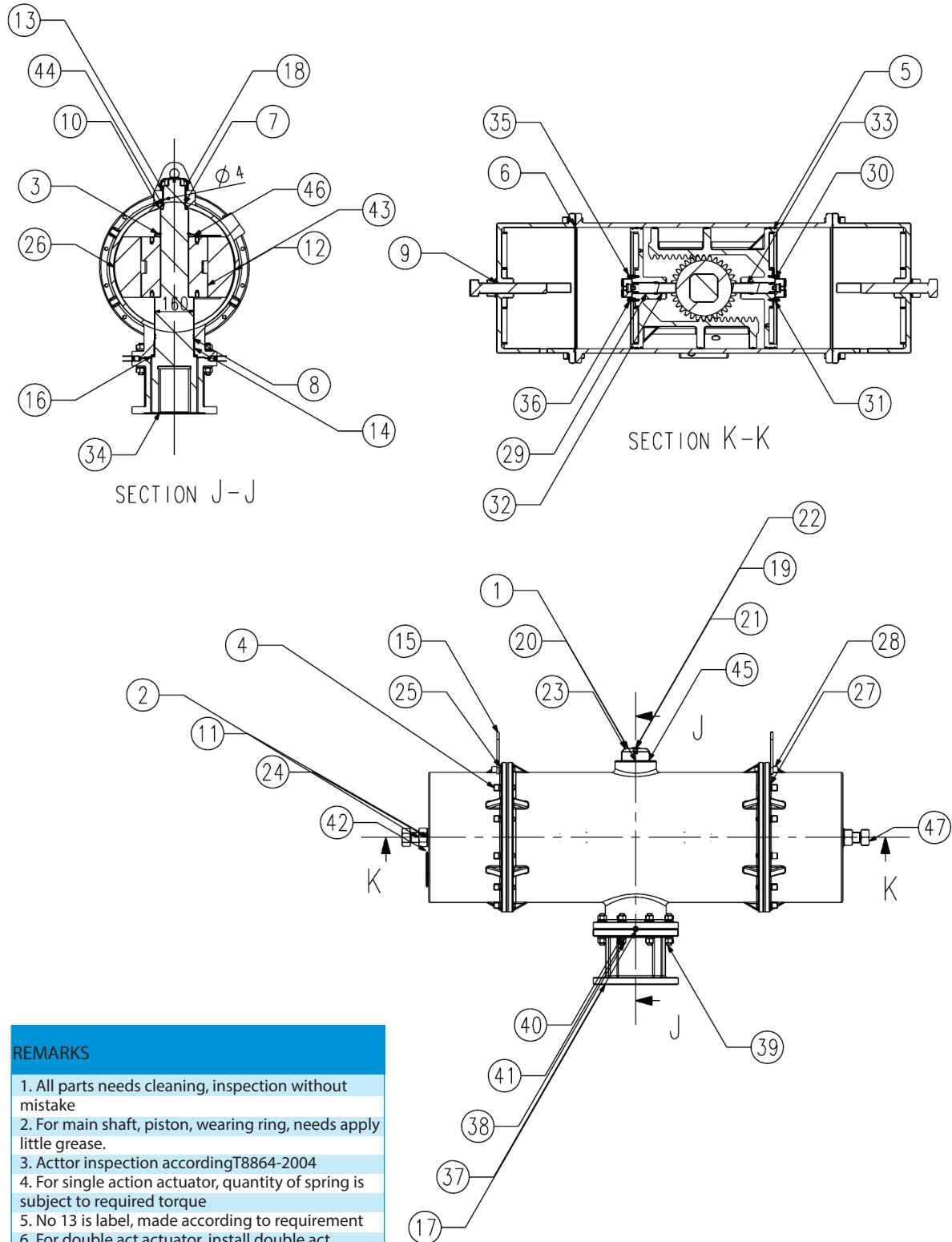
- Flange outer diameter: 2 $\varnothing 40$
- Flange thickness: 307.5
- Distance from flange face to valve center: 432
- Overall height: 1037
- Actuator height: 180

Detail View Dimensions:

- Valve diameter: DN
- Actuator diameter: A
- Actuator length: L
- Actuator mounting distance: 2.5(A)

Labels and Callouts:

- 1: Actuator mounting flange
- 2: Flange outer diameter
- 3: Flange thickness
- 4: Valve center
- 5: Valve seat
- 6: Valve disc
- 7: Valve stem
- 8: Valve stem seal
- 9: Valve stem nut
- 10: Valve stem washer
- 11: Valve stem seal
- 12: Valve stem nut
- 13: Valve stem washer
- 14: Valve stem seal
- 15: Valve stem nut
- 16: Valve stem washer
- 17: Valve stem seal
- 18: Valve stem nut
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- 20: Valve stem seal
- 21: Valve stem nut
- 22: Valve stem washer
- 23: Valve stem seal
- 24: Valve stem nut
- 25: Valve stem washer
- 26: Valve stem seal
- 27: Valve stem nut
- 28: Valve stem washer
- 29: Valve stem seal
- 30: Valve stem nut
- 31: Valve stem washer
- 32: Valve stem seal
- 33: Valve stem nut
- 34: Valve stem washer
- 35: Valve stem seal
- 36: Valve stem nut
- 37: Valve stem washer
- 38: Valve stem seal
- 39: Valve stem nut
- 40: Valve stem washer
- 41: Valve stem seal
- 42: Valve stem nut
- 43: Valve stem washer
- 44: Valve stem seal
- 45: Valve stem nut
- 46: Valve stem washer
- 47: Valve stem seal
- 48: Valve stem nut
- 49: Valve stem washer
- 50: Valve stem seal
- 51: Valve stem nut
- 52: Valve stem washer
- 53: Valve stem seal
- 54: Valve stem nut
- 55: Valve stem washer
- 56: Valve stem seal
- 57: Valve stem nut
- 58: Valve stem washer
- 59: Valve stem seal
- 60: Valve stem nut
- 61: Valve stem washer
- 62: Valve stem seal
- 63: Valve stem nut
- 64: Valve stem washer
- 65: Valve stem seal
- 66: Valve stem nut
- 67: Valve stem washer
- 68: Valve stem seal
- 69: Valve stem nut
- 70: Valve stem washer
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- 73: Valve stem washer
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- 81: Valve stem nut
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- 84: Valve stem nut
- 85: Valve stem washer
- 86: Valve stem seal
- 87: Valve stem nut
- 88: Valve stem washer
- 89: Valve stem seal
- 90: Valve stem nut
- 91: Valve stem washer
- 92: Valve stem seal
- 93: Valve stem nut
- 94: Valve stem washer
- 95: Valve stem seal
- 96: Valve stem nut
- 97: Valve stem washer
- 98: Valve stem seal
- 99: Valve stem nut
- 100: Valve stem washer



PART	P/N	DESCRIPTION	MATERIAL	REMARKS
1	RA-PAR0500 - 1.1	1 Cylinder body	A3	GB70.1-2000 M42X4.5/8
2	RA-PAR0500 - 1.10	2 Side cover adjust screw hexagon screw	A2 -70	GB894.1-1986 115
3	RA-PAR0500 - 1.11	1 Gear circlip	65Mn	M16X65/8.8
4	RA-PAR0500 - 1.12	20 side cover inner hexagon screw	A2 - 700	A-467/481. 46 X 6.99
5	RA-PAR0500 - 1.14	4 Piston O - ring	NBR	A389/506.86X5.34
6	RA-PAR0500 - 1.15	2 Side cover o ring	NBR	EKM 80 X 4
7	RA-PAR0500 - 1.16	2 O - ring on shaft	NBR	EKM 150 X 4
8	RA-PAR0500 - 1.17	2 O- ring under shaft	NBR	C92 41. 2X5.3
9	RA-PAR0500 - 1.18	2 Cylinder cover adjust screw o ring	NBR	Width 15 thick 4.4 wear strip
10	RA-PAR0500-1.19	2 Piston wear ring	PTFE	-
11	RA-PAR0500 - 1.2	2 Cylinder cover	A3	265
12	RA-PAR0500 - 1.20	4 Piston wear plate	PA6	CSB - 11 - 9030
13	RA-PAR0500 - 1.21	1 Oil free bearing on shaft	Carbon based + PTFE	CSB - 11 - 16060
14	RA-PAR0500 - 1.22	1 Oil free bearing under shaft	carbon based + PTFE	-
15	RA-PAR0500 - 1.23	2 Lug	A3	-
16	RA-PAR0500 - 1.24	1 Washer under shaft	PA6	For unit, welding is considerable
17	RA-PAR0500 - 1.26	1 Bracket	ZG230-450	GB894.1 - 1986 - 90
18	RA-PAR0500 - 1.27	1 Elastic circlip on shaft	SS304	240
19	RA-PAR0500 - 1.27.00	1 Indication cover kit		-
20	RA-PAR0500 - 1.27.1	1 Indication cover kit1	PA6	-
21	RA-PAR0500 - 1.27.2	2 Indication cover kit2	PA6	-
22	RA-PAR0500 - 1.27.3	1 Indication cover kit3	PA6	-
23	RA-PAR0500 - 1.27.4	2 Indication cover kit4	PA6	-
24	RA-PAR0500 - 1.28	2 Adjust screw washer	SS304	GB93 - 1987 16
25	RA-PAR0500 - 1.29	24 Side cover elastic washer	65Mn	-
26	RA-PAR0500 - 1.3	2 Piston	45#	GB97.1 - 2002 16
27	RA-PAR0500 - 1.30	24 Side flat pad	A200	GB70.1 - 2000 M16 X 75 / 8.8
28	RA-PAR0500 - 1.31	4 Side cover long inner hexagon screw	A2-70	-
29	RA-PAR0500 - 1.32	2 Inner adjust screw	45#	-
30	RA-PAR0500 - 1.33	2 Inner adjust screw fix sleeve	45#	-
31	RA-PAR0500 - 1.34	2 Fix ring	45#	6 X 2.5
32	RA-PAR0500 - 1.35	2 Adjust screw wear ring	PTFE	C92 37.5 X 3.55
33	RA-PAR0500 - 1.36	4 Inner adjust screw o ring	NBR	-
34	RA-PAR0500 - 1.4	1 Main shaft	45#	GB70.1 - 2000 M6 X 30 /8.8
35	RA-PAR0500 - 1.40	8 Fix ring hexagon screw	Steel	GB93 - 1987 6
36	RA-PAR0500 - 1.41	8 Fix ring elastic washer	65Mn	GB77 - 2000 M20 X 30/8.8
37	RA-PAR0500 - 1.42	2 Location bolt	Steel	GB6170-2000 M20/8
38	RA-PAR0500 - 1.43	16 Bracket hexagon nut	A2 - 70	GB901 - 1988 M20X120/8.8
39	RA-PAR0500 - 1.44	8 Bracket stud	A2 - 70	GB97.1 - 2002 20
40	RA-PAR0500 - 1.45	16 Bracket flat pad	A200	GB93 - 1987 20
41	RA-PAR0500 - 1.46	16 Bracket elastic washer	65Mn	Spring/ bolt /nut procured /
42	RA-PAR0500 - 1.47	8 Spring kit	As per components draw	spring seat
43	RA-PAR0500 - 1.5	1 Gear	45#	-
44	RA-PAR0500 - 1.6	1 Gasket in the shaft	PA6	-
45	RA-PAR0500 - 1.7	1 Gasket on the shaft	Pa6	-
46	RA-PAR0500 - 1.8	1 Gear gasket	45#	-
47	RA-PAR0500 - 1.9	2 Side cover adjust screw	Steel	-

RECOMMENDED SPARE PARTS				
ITEM	PART NUMBER	PARTS	MATERIALS	QTY
3		SPRL Wound Gasket	RPTFE	1
8		Seat	RPTFE	1
15		V - Packing	RPTFE	1
17		O - Ring	FPM	1
FOR THE ACTUATOR				
33	RA-PAR0500-2090-1.36	BOTTOM BEARING	PTFE	1
9	RA-PAR0500-2090-1.18	O-Ring (Pinion Bottom)	NBR	1
7	RA-PAR0500-2090-1.16	O-Ring (Pinion Top)	NBR	1
8	RA-PAR0500-2090-1.17	Bearing, back piston	PTFE	2
6	RA-PAR0500-2090-1.15	Bearing,	PTFE	2
5	RA-PAR0500-2090-1.14	O-Ring (Piston)	NBR	2
32	RA-PAR0500-2090-1.35	O-Ring(End cap)	NBR	2
10	RA-PAR0500-2090-1.19	O-Ring(Side Cap)	NBR	2

Pneumatic actuator test report

RP/JL-4. 4-08a

NO. :2014020

Production Type No.	13101103	Model No.	500SR
Angle Rotation	90° ± 3°	Quantity	6
Working Pressure	4 bar	Air Supply Max	8 bar
Testing basis	JB/T8864-2004		
Calibration records			
Test items	Technical Requirements	Inspection results	Single judge
Sealing test	P: 1.1PN=0.6 Mpa	0.66 Mpa	Qualified
	ts ≥3Min	4 Min	
	Back pressure side: leakage≤33 cm ³ /min	20 cm3/min	
	Cover of the output shaft: disclosure≤12 cm3/min	8 cm3/min	
Load test	Actions will be flexible, permanent deformation and other various parts are not allowed	Meet the requirements	Qualified
Surface quality and appearance	Cylinder end caps, end flange on the box may not have scratches, cut marks , holes, burrs, etc. . Pneumatics painted outer surface layer or chemical treatment layer should be flat, smooth , uniform color, no oil, dents and other mechanical damage.	Meet the requirements	Qualified
Conclusions of the examination	This product has been tested and proved to be qualified for delivery in conformity with standard		

Inspector: 李胜利 2014-1-20

Auditor: 

Test Stamp:



MORRIS VALVES
BEYOND THE WORLD, ONE PRODUCT AT A TIME

FACTORY TEST

It. No.	01 & 02	PO 13-714	ON-OFF shutoff Butterfly Valves	S/N: D131101201 - 06					
FINAL INSPECTION									
Test Item	Inspection & test Plan		Reference Document	Acceptance Criteria	Verifying Document	Responsible		Conclusion	
						Manufacture	Customer	Satisfied	Unsatisfied
1	Pre-inspection meeting		FAT Plan						
2	Checking for Order Specifications.		EN593,EN1092, ISO5752	EN593,EN1092, ISO5752	P. Order	Satisfied ✓			
3	Check of Dimensions.		EN593,EN1092, ISO5752	EN593,EN1092, ISO5752	DRAWING	Satisfied ✓			
4	Checking of Surface/Cleanliness		Construction Code	Construction Code	Report & P. Order	Satisfied ✓			
5	Check of Marks		P. Order	P. Order	P. Order	Satisfied ✓			
6	Visual inspection to: Stem. Disc Seat Positioning bushing Stem Bolts Nuts Gaskets Gland Other Fastening Components		EN593 & Constructions Code.	EN593& Constructions Code.	DWG	Satisfied ✓			
						Satisfied ✓			
						Satisfied ✓			
						Satisfied ✓			
						Satisfied ✓			
						Satisfied ✓			
						Satisfied ✓			
						Satisfied ✓			
						Satisfied ✓			
7	Valve Functional Test	Direct Action	Procedure of valve pressure test	Procedure of valve pressure test	P. Order	Satisfied ✓			
8	Consistency of the MTR's		EN12266, EN10204-3.1	EN12266, EN10204-3.1	Report	Satisfied ✓			
9	Instructions for the packing 1. To clean the body valves, so they are "grease free" 2. Wrap the body valves, to avoid contamination with plastic wrapping. 3. To packing in plywood cases and dispatch in Container		Packing Procedure	Packing Procedure	P. Order	Satisfied ✓			



In accordance with

EN 10204 3.1

[illegible]

We hereby certify that the materials herein described are fully in accordance with your purchase order requirements and afore mentioned standards.

Tiangong Valve Group Co.,Ltd



Stamp

Signature: