



# AUTOMA

Automatic Valve & Accessories

## CAST IRON BODY WITH DUCTILE IRON NICKEL PLATED DISC WAFER TYPE BUTTERFLY VALVE SERIES ACD (PINLESS TYPE)

*Your Partner In Flow Management*



31011261350312040001

**ACD**

- Body Material : CAST IRON
- Disc Material : DUCTILE IRON  
NICKEL PLATED
- Seat Material : NBR
- Stem Material : SUS 416

**TTS 14**

The new body neck with octagon shape design offers esthetic appearance, strength and compatible flange connection to international standards. Its top flange is designed to ISO5211 for the direct mounting of gear operator or actuators which eliminate the cost of mounting bracket. The one piece design body provides outstanding protection against particle entrapment and bacterial growth. The body is epoxy coated for better resistant against abrasion and corrosion. AUTOMA offers various materials for the valves seat and disc to meet the various requirements of customers. The fine finishing of seat surfaces and the polished edge of disc give good sealing and reduction in operating torque. The upper and lower shafts are well supported and properly sealed to prevent leakage. This pin less design has eliminated the potential of leak through pin hole.



 ISO 9001:2008 CERTIFICATE NO. 0436-2002-AQ-RGC-RVA-Rev.1	 Pressure accessory CERTIFICATE NO. 4588-2014-CE-RGC-ACCREDIA	 CE Notified Body No. 0496 CERTIFICATE NO. 4590-2014-CE-RGC-ACCREDIA	 Det Norske Veritas Rules for Classification of Ships Det Norske Veritas Standards for Certification 2.9 No.5.794,40 CERTIFICATE NO. P-12513	 BM TRADA CERTIFICATION ISO 9001:2008  UKAS MANAGEMENT SYSTEMS 012 <b>Certificate Number : 8711</b>
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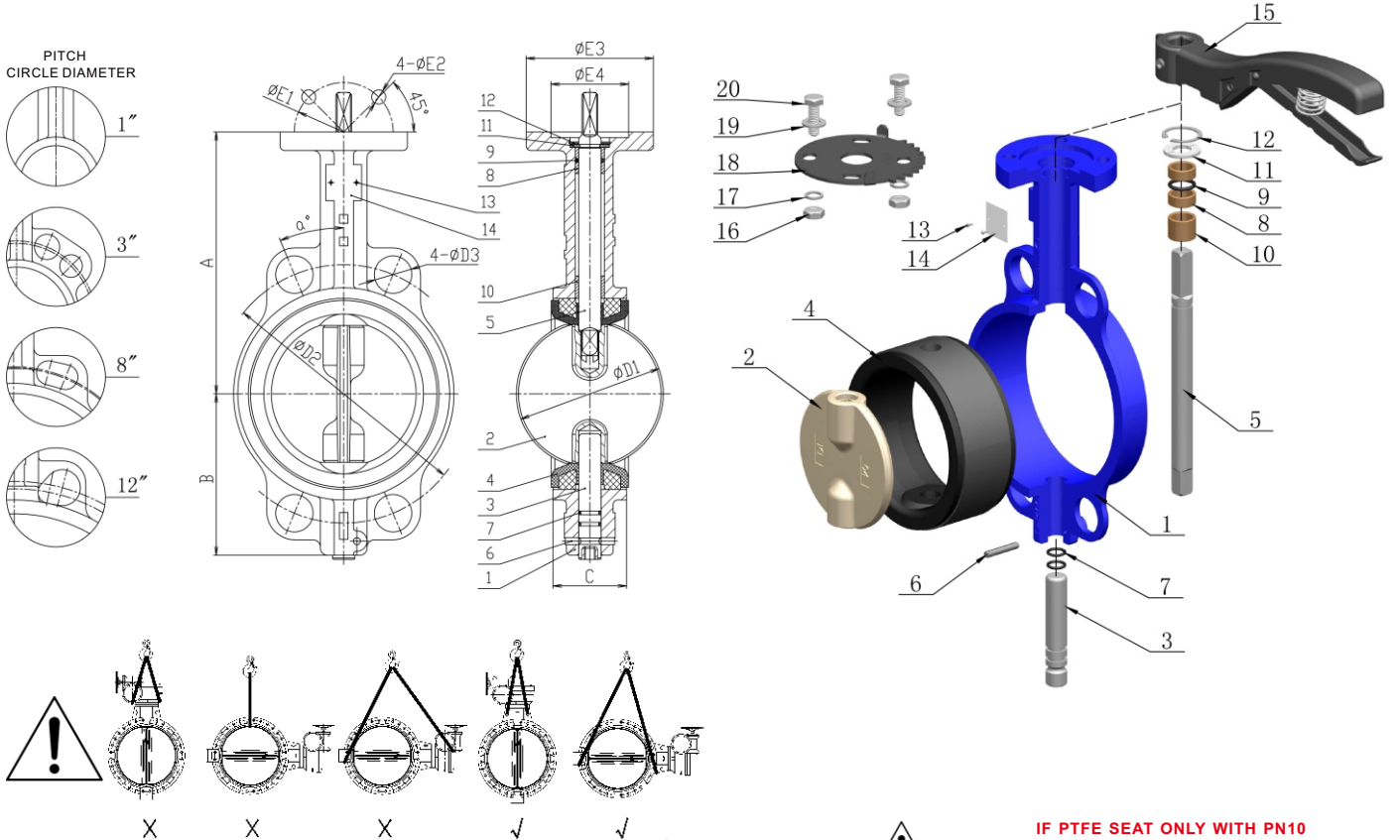
# Dimensions in mm (ACD)

# Technical Data

SIZES		A	B	C	ØD1	ØD2	ØD3	a°	ØE1	ØE2	ØE3	ØE4	* TORQUE (Nm)			Cv	WT. (KG)
DN	In.												PTFE	PN 10	PN 16		
25	1	88	44	30.0	28.8	—	—	—	50	7	65	35	11	11	11	14	0.8
40	1 1/2	136	69	32.0	42.6	105.60	23.0	45.00	50	7	65	35	17	13	13	19	1.7
50	2	156	80	42.0	52.9	120.00	24.0	45.00	50	7	65	35	18	14	15	31	2.1
65	2 1/2	162	89	44.7	64.5	136.13	28.0	45.00	50	7	65	35	20	15	17	55	2.5
80	3	170	95	45.2	78.8	152.40	24.5	45.00	50	7	65	35	29	22	23	87	2.9
100	4	185	114	52.1	104.3	182.50	27.0	22.50	70	10	90	55	48	37	40	140	4.2
125	5	207	127	54.4	123.3	212.50	26.0	22.50	70	10	90	55	75	58	62	224	5.9
150	6	216	139	55.8	156.0	238.12	26.0	22.50	70	10	90	55	122	94	102	328	7.2
200	8	256	175	60.6	202.5	293.00	26.0	15.00	102	12	125	70	226	174	192	572	12.2
250	10	248	203	65.6	250.8	357.00	30.5	15.00	102	12	125	70	372	286	323	837	18.3
300	12	280	242	76.9	301.6	400.00	25.0	11.25	102	12	125	70	558	429	490	1241	27.8
						416.70	40.5	15.00									

Dimension included ANSI125/150, JIS10K, (EN1092-2, BS4504, DIN2501) PN10/16, AS2129 TABLE E

Note : Cv = US Gallon per minutes



## Material

No.	PART	QTY.	MATERIAL
1	BODY	1	CAST IRON
2	DISC	1	DUCTILE IRON NICKEL PLATED
3	LOWER STEM	1	SUS 416
4	SEAT	1	NBR
5	UPPER STEM	1	SUS 416
6	LOCK PIN	1	SUP 6
7	LOWER 'O' RING	2	NBR
8	BUSHING	2	PTFE
9	'O' RING	1	NBR
10	BUSHING	1	PTFE
11	HALF RING	2	SUS 416
12	RETAINER RING	1	SPRING STEEL
13	RIVET	2	ALUMINIUM
14	NAMEPLATE	1	ALUMINIUM
15	LOCKABLE HANDLE	1	CARBON STEEL STAMPING W/EPOXY COATING
16	HEX NUT	2	SUS 304
17	SPRING WASHER	2	SUS 304
18	INDICATOR	1	CARBON STEEL STAMPING W/EPOXY COATING
19	WASHER	2	SUS 304
20	HEX BOLT	2	SUS 304



IF PTFE SEAT ONLY WITH PN10  
PTFE TEMPERATURE DEPEND ON THE LINED RUBBER  
\* Torque PTFE / Torque PN10&16 for Rubber Seat

### Pressure Test

SIZE	1 1/2" - 20"					
	Working Pressure	1.0 MPa	1.6 MPa	10K	ANSI 125	ANSI 150
Hydrostatic Test	Seal	1.1 MPa	1.76 MPa	1.64 MPa	1.52 MPa	2.2 MPa
	Body	1.5 MPa	2.4 MPa	2.1 MPa	2.1 MPa	3.0 MPa

### Working Temperature

Temperature °C	-10 ~ 80	-15 ~ 140	-20 ~ 150	-20 ~ 180	-50 ~ 200
Seat Material	NBR	EPDM	VITON	PTFE	SILICONE

### Standard:

Design Standard	: BS EN593
Face to Face	: BS EN558-1
Flange Connection	: EN1092-1 PN10/16 JIS B2210 10K : DIN 2501 PN10/16 ANSI B16 125/150 : AS 2129 TABLE E
Top Flange	: ISO 5211
Test Standard	: BS EN12266-1 / API 598



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## TTS Valve Technologies Sdn. Bhd.

(A Member Company of Unimech Group Berhad)

24 Jalan TS 6/9, Taman Industri Subang, 47510 Subang Jaya, Selangor Darul Ehsan, MALAYSIA

Tel : +60356218811

Fax : +60356213278

Email : info@ttsvalve.com Website : www.ttsvalve.com.my

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# Dimensions in mm

# Technical Data

SIZES		A	B	C	ØD1	ØD2	ØD3	a°	ØE1	ØE2	ØE3	ØE4	* TORQUE (Nm)			Cv	WT. (KG)
DN	In.												PTFE	PN 10	PN 16		
350	14	368	267	75	333.5	445.0	25.0	11.25	102	12	125	70	715	550	625	1564	47.4
						470.0	28.0	11.25					715	550	625		
						476.2	32.5	15.00					715	550	625		

Dimension included ANSI125/150, JIS10K, (EN1092-2, BS4504, DIN2501) PN10/16, AS2129 TABLE E

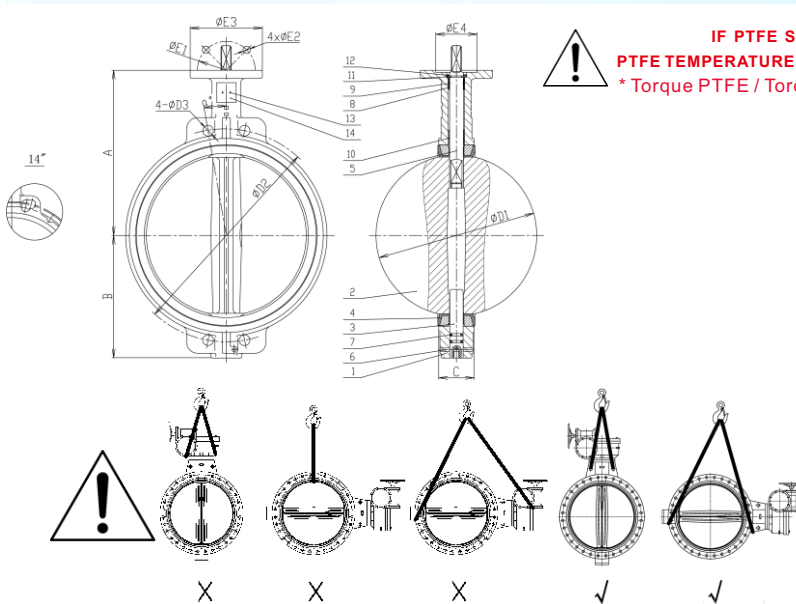
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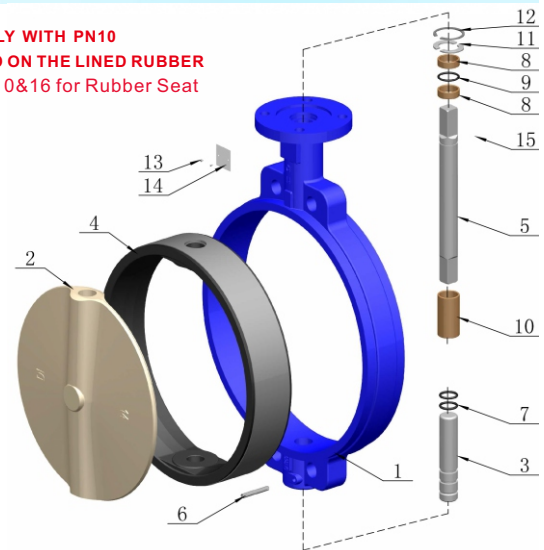
Body Material : CAST IRON  
 Disc Material : DUCTILE IRON  
 NICKEL PLATED  
 Seat Material : NBR  
 Stem Material : SUS 416

**ACD**

**TTS 14**



**IF PTFE SEAT ONLY WITH PN10**  
**PTFE TEMPERATURE DEPEND ON THE LINED RUBBER**  
 \* Torque PTFE / Torque PN10&16 for Rubber Seat



### Pressure Test

Working Pressure	SIZE				
	1.0 MPa	1.6 MPa	10K	ANSI 125	ANSI 150
Hydrostatic Test	Seal	1.1 MPa	1.76 MPa	1.54 MPa	2.2 MPa
	Body	1.5 MPa	2.4 MPa	2.1 MPa	3.0 MPa

### Working Temperature

Temperature °C	-10 ~ 80	-15 ~ 140	-20 ~ 150	-20 ~ 180	-50 ~ 200
Seat Material	NBR	EPDM	VITON	PTFE	SILICONE

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 Top Flange : ISO 5211  
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## Material

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10	BUSHING	1	PTFE
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12	RETAINER RING	1	SPRING STEEL
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DN	In.												PTFE	PN 10	PN 16		
400	16	400	297	85.7	389.6	510.0	27.0	11.25	140	18	175	100	982	755	846	2087	97.6
						515 (525)	28 (31)	11.25									
						539.7	28.4	11.25									
450	18	422	315	104.6	440.5	565.0	27.0	9.00	140	18	175	100	1316	1012	1131	2681	116.3
						577.8	31.8	11.25									
						585.0	31.0	9.00									
						620.0	28.0	9.00									
500	20	480	348	130.3	491.6	635.0	31.8	9.00	140	18	175	100	1755	1350	1431	3350	146.6
						650.0	34.0	9.00									

Dimension included ANSI125/150, JIS10K, (EN1092-2, BS4504, DIN2501) PN10/16, AS2129 TABLE E

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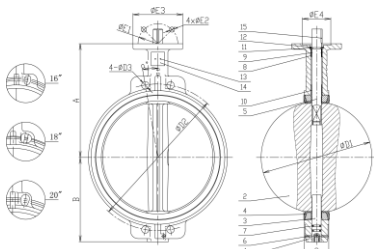


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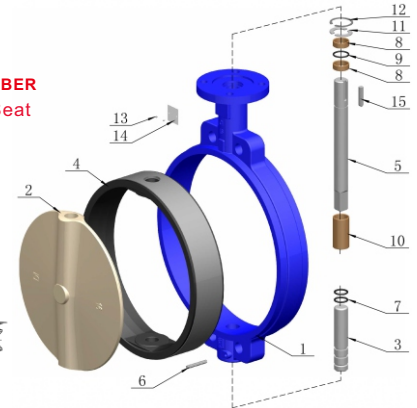
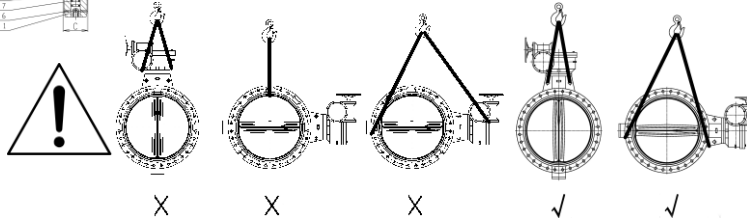


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Hydrostatic Test

Working Pressure	1.0 Mpa
Seal	1.1 MPa
Body	1.5 MPa

Working Temperature

Temperature °C	-10 ~ 80	-15 ~ 140	-20 ~ 150	-20 ~ 180	-50 ~ 200
Seat Material	NBR	EPDM	VITON	PTFE	SILICONE

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