

PN 10 - Art. D140 TIS1

PN 16 - Art. D141 TIS1

PN 25 - Art. D142 TIS1

VALVOLA A FARFALLA BIFLANGIATA DOPPIO ECCENTRICO PN10/16/25

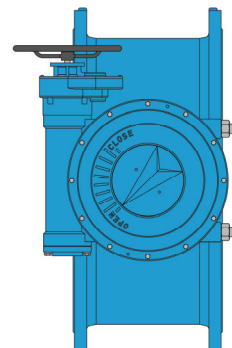
DOUBLE FLANGED, DOUBLE ECCENTRIC, BUTTERFLY VALVE PN10/16/25

APPLICAZIONE:

Stazioni di pompaggio, imp. di trattamento, bacini idrici, impianti di desalinizzazione, applicaz. industriali.

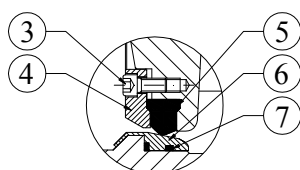
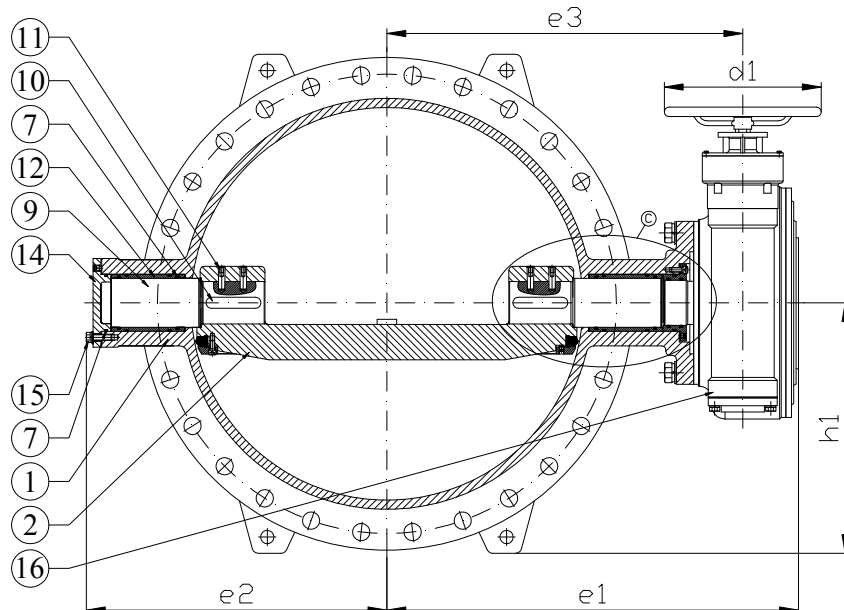
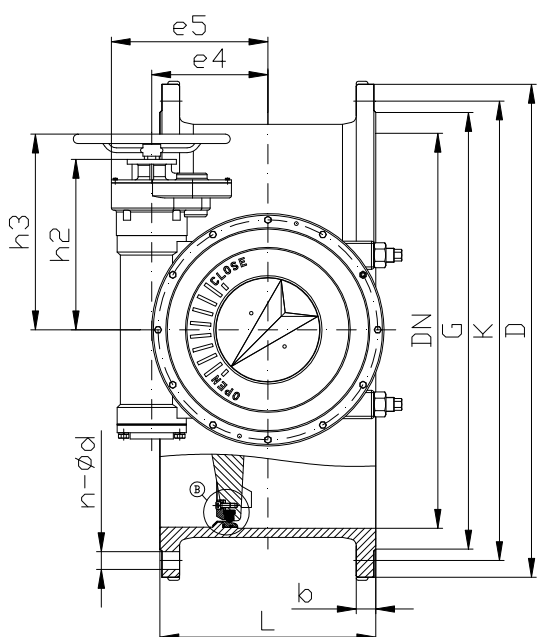
APPLICATION:

Pumping stations, treatment plants, reservoirs, desalination plants, industrial applications.

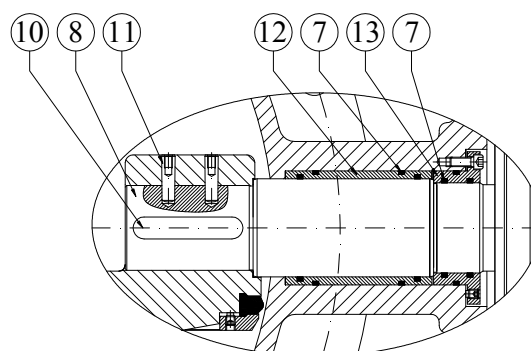


NORMA PROGETTO: EN 593
SCARTAMENTO: EN 558-1 Serie 14
FLANGE: EN 1092-2
COLLAUDI: EN 12266
TEMP. ESERCIZIO: Min -15°C/Max+80°C

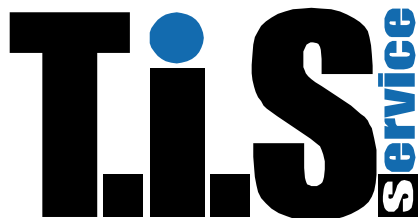
DESIGN STANDARD: EN 593
FACE TO FACE: EN 558-1 Serie 14
FLANGES: EN 1092-2
TESTS: EN 12266
WORKING TEMP.: Min -15°C/Max+80°C



DETAIL B



DETAIL C



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DENOMINAZIONE - PART	MATERIALI - MATERIALS
1 CORPO - BODY	GHISA SFEROIDALE GJS400/7 - DUCTILE IRON GJS400/7
2 DISCO - DISC	GHISA SFEROIDALE GJS400/7 - DUCTILE IRON GJS400/7
3 VITE - SCREW	ACCIAIO INOX A2 - STAINLESS STEEL A2
4 ANELLO PREMI GUARNIZIONE - RETAINING RING	INOX AISI 304
5 ANELLO DI TENUTA SUL DISCO - DISC SEALING RING	EPDM - EPDM
6 ANELLO DI TENUTA SUL CORPO - BODY SEALING RING	ACCIAIO INOX AISI 304 - STAINLESS STEEL AISI 304
7 O-RING - O-RING	EPDM - EPDM
8 ALBERO CONDUTTORE - SHAFT (DRIVEN END)	ACCIAIO INOX AISI 420 - STAINLESS STEEL AISI 420
9 ALBERO GUIDA - SHAFT (FREE END)	ACCIAIO INOX AISI 420 - STAINLESS STEEL AISI 420
10 CHIAVETTA - KEY	ACCIAIO INOX AISI 420 - STAINLESS STEEL AISI 420
11 PERNO - PIN	ACCIAIO INOX AISI 420 - STAINLESS STEEL AISI 420
12 BOCCOLA - SEAL BUSH	BRONZO/ALLUMINO - ALUMINIUM/BRONZE
13 BOCCOLA - SEAL BUSH	BRONZO/ALLUMINO - ALUMINIUM/BRONZE
14 COPERCHIO - COVER	GHISA SFEROIDALE GJS400/15 - DUCTILE IRON GJS400/15
15 BULLONE - BOLT	ACCIAIO INOX A2 - STAINLESS STEEL A2
16 RIDUTTORE - GEAR BOX	GHISA SFEROIDALE GJS400/15 - DUCTILE IRON GJS400/15

RIVESTIMENTO ESTERNO/INTERNO: Polvere epossidica 3M di colore BLU RAL 5015 con spessore min 250µm.

SURFACE PROTECTION: FBE coating process with 3M epoxy resin powder of sky blue color RAL 5015 and minimum thickness of 250µm.

	DN	G	K	D	n-ød	b	L	e1	e2	e3	e4	e5	ød1	h1	h2	h3	W(kg)
P N 1 0	80	132	160	200	8-19	19	180	232	117	183	43	73	180	105	-	155	22
	100	156	180	220	8-19	19	190	258	136	209	43	73	180	115	-	155	31
	150	211	240	285	8-23	19	210	284	169	235	43	73	180	148	-	155	34
	200	266	295	340	8-23	20	230	337	200	278	64	127	250	175	145	200	36
	250	319	350	395	12-23	22	250	367	226	308	64	127	250	203	145	200	54
	300	370	400	445	12-23	24.5	270	418	253	350	94	157	250	228	178	238	70
	350	429	460	505	16-23	24.5	290	453	298	385	94	157	250	258	178	238	105
	400	480	515	565	16-28	24.5	310	546	333	456	132	195	400	288	205	275	136
	450	530	565	615	20-28	25.5	330	571	370	481	132	195	400	313	205	275	190
	500	582	620	670	20-28	26.5	350	605	400	515	185	251	400	340	336	391	223
	600	682	725	780	20-31	30	390	715	457	605	185	251	400	395	336	391	275
	700	794	840	895	24-31	32.5	430	785	538	670	185	251	400	453	336	391	408
	800	901	950	1015	24-34	35	470	871	594	741	233	313	400	513	386	441	570
	900	1001	1050	1115	28-34	37.5	510	936	658	806	233	313	400	563	386	441	795
	1000	1112	1160	1230	28-37	40	550	1059	723	896	296	399	400	620	436	491	1132
	1100	1218	1270	1340	32-37	42.5	590	1120	784	960	296	399	400	675	436	491	1452
	1200	1328	1380	1455	32-41	45	630	1181	845	1018	296	399	400	733	436	491	1810
	1300	1430	1490	1575	32-44	45	670	1295	910	1106	410	538	400	793	547	602	2011
	1400	1530	1590	1675	36-44	46	710	1405	967	1194	410	538	400	843	547	602	3134
	1500	1640	1700	1785	36-44	47.5	750	1451	1040	1240	410	538	400	898	547	602	3750
1600	1750	1820	1915	40-50	49	790	1497	1113	1286	410	538	400	963	547	602	3951	
1800	1950	2020	2115	44-50	52	870	1702	1247	1464	512	727	400	1063	684	739	5691	
2000	2150	2230	2325	48-50	55	950	1920	1380	1660	512	727	400	1168	684	739	7780	

T.I.S.

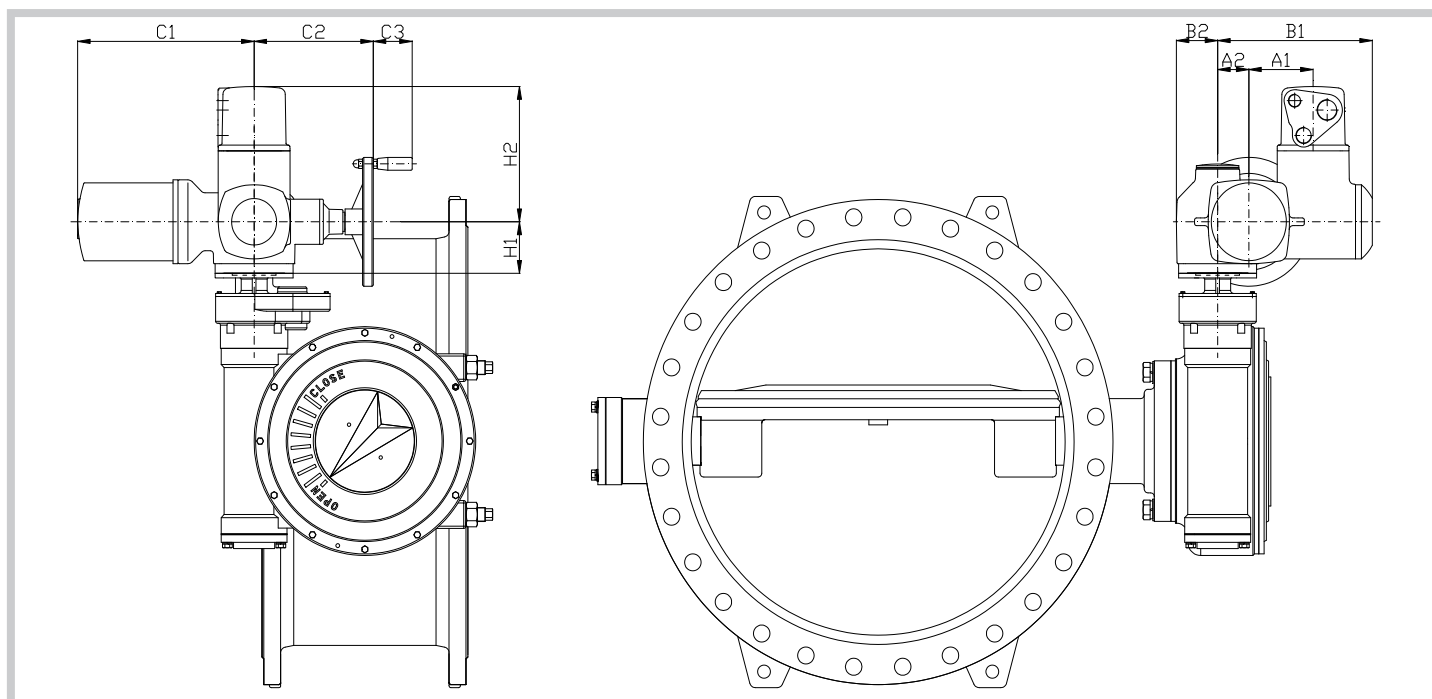
Art. D140 (PN10) E

Art. D141 (PN16) E

Art. D142 (PN25) E

VALVOLA A FARFALLA BIFLANGIATA DOPPIO ECCENTRICO CON ATTUATORE ELETTRICO MULTIGIRO TRIFASE TIPO "SA-NORM" (AUMA)

DOUBLE FLANGED DOUBLE ECCENTRIC BUTTERFLY VALVE WITH THREE-PHASE ELECTRIC MULTI-TURNS ACTUATOR "SA-NORM" TYPE (AUMA)



DN	PN	AUMA actuator
150	10	-
150	16	-
150	25	SA 07.6
200	10	SA 07.6
200	16	SA 07.6
200	25	SA 07.6
250	10	SA 07.6
250	16	SA 07.6
250	25	SA 10.2
300	10	SA 07.6
300	16	SA 10.2
300	25	SA 10.2
350	10	SA 10.2
350	16	SA 10.2
350	25	SA 07.6
400	10	SA 10.2
400	16	SA 10.2
400	25	SA 07.6
450	10	SA 10.2
450	16	SA 07.6
450	25	SA 10.2
500	10	SA 07.6
500	16	SA 07.6
500	25	SA 10.2

DN	PN	AUMA actuator
600	10	SA 07.6
600	16	SA 10.2
600	25	SA 10.2
700	10	SA 10.2
700	16	SA 10.2
700	25	SA 10.2
800	10	SA 10.2
800	16	SA 10.2
800	25	SA 10.2
900	10	SA 10.2
900	16	SA 10.2
900	25	SA 10.2
1000	10	SA 10.2
1000	16	SA 10.2
1000	25	SA 10.2
1100	10	SA 14.2
1100	16	SA 10.2
1200	10	SA 10.2
1200	16	SA 10.2
1200	25	SA 10.2
1400	10	SA 10.2
1400	16	SA 10.2
1600	10	SA 10.2
1600	16	SA 10.2

**CARATTERISTICHE STANDARD****Attuatore Multi giro AUMA Norm, Tipo SA 07.2 -16.2****Versione Base****Modulo di Collegamento:** Secondo EN ISO 5210 o DIN 3210**Alimentazioni trifase disponibili:** 220/50 230/50 240/50 380/50 400/50 415/50 440/60 460/60 480/60 500/50 (Volt/Hz)**Motore:** Asincrono Trifase AUMA, CA TENV, isolamento classe F Tropicalizzato, 3 Termostati di protezione motore.**Tipo di Servizio:** Classe A, servizio ON OFF, definito in accordo alla EN 15714-2:2007.

Servizio Breve S2 - 15 min. secondo IEC/34 VDE0530.

Gruppo di controllo FC/LC: 1 interruttore di fine corsa per ciascuna posizione di estremità raggiunta APERTO/CHIUSO contatti NO&NC.

1 interruttore per raggiunta coppia di taratura in APERTURA/CHIUSURA contatti NO&NC.

Blinker, indicatore di movimento 1 contatto NC.

Resistenza anticondensa nel comparto interruttori.

Schema di Collegamento: TPA 00R1AA-101-000.**Custodia:** IP 68 secondo EN 60529.**Temperatura Ambiente:** -40°C to +80°C.**Protezione anticorrosive:** KS verniciatura a polvere su base poliuretana - categoria classe C4 secondo EN ISO12944-2.**Colore:** Standard grigio-argento AUMA (simile a RAL 7037).**Comando Manuale:** a volantino per le operazioni di emergenza con pulsante di innesto e dispositivo automatico di disinnesco.**Collegamento elettrico:** Morsettiere multi rapida AUMA tipo presa/spina, con morsetti a vite, 3 imbrocchi cavo con filettatura metrica. (1xM20x1,5; 1xM25x1,5; 1xM32x1,5)**Documentazione:** Manuale d'uso e manutenzione, schema di collegamento, disegni dimensionali e di ingombro.**Collaudi:** test e collaudi in fabbrica, secondo standard del produttore. Per ogni attuatore può essere fornito il relativo certificato di collaudo finale.**STANDARD FEATURE****Multi Turn AUMA Norm SA, Type SA 07.2 -16.2****Basic version****Valve attachment:** According to EN ISO 5210 or DIN 3210**Power supply:** 220/50 230/50 240/50 380/50 400/50 415/50 440/60 460/60 480/60 500/50 (Volts/Hz)**Motor:** AUMA 3-ph AC TENV motor, insulation class F, 3 thermo switches,**Type of duty:** Class A, ON OFF duty, designed in accordance with EN 15714-2:2007

Short Time duty S2 - 15 min rated according to IEC/34 VDE0530

Control unit: 1 NO&NC limit switch each for end positions OPEN/CLOSED

1 NO&NC torque switch each for closing and opening direction

Blinker transmitter for running indication

Heater

Terminal plan: TPA 00R1AA-101-000**Enclosure protection:** IP 68 according to EN 60529**Ambient temperature:** -40°C to +80°C**Corrosion protection:** KS powder coated - corrosively category class C4 according to EN ISO12944-2**Colour:** AUMA silver-grey (similar to RAL 7037)**Hand wheel:** Hand wheel for manual operation**Electrical connection:** AUMA plug/socket connector with screw-type connection**Documentation:** One copy, English language, comprises installation and operation instruction, electric wiring diagram, dimensional drawing and storage instruction**Inspections and testing:** at manufacturer premises, a final inspection record is available on request**TIPO DI ATTUATORE-ACTUATOR TYPE**

DIMENSIONI DIMENSIONS	SA 07.2	SA 07.6	SA 10.2	SA 14.2	SA 14.6	SA 16.2
	SAR 07.2	SAR 07.6	SAR 10.2	SAR 14.2	SAR 14.6	SAR 16.2
A1	103	103	103	119	119	124
A2	40	40	50	67	67	80
B1	238	238	248	286	286	303
B2	62	62	65	91	91	117
C1	265	265	283	389	389	430
C2	186	186	191	242	245	271
C3	63	63	63	94	94	94
H1	78	78	80	90	90	110
H2	210	210	210	226	226	230

Multi-turn actuator			Motor									
Type	Output speed [rpm]	Max. torque [Nm]	Motor type	Nominal power ¹⁾ P _N [kW]	Speed [rpm]	Nominal current ²⁾ I _N (A)	Max. current ³⁾ I _{max} [A]	Starting current I _A [A]	cos φ	Overcurr. prot. device setting [A]	AUMA power class for switchgear	
											Contactors	Thyristor
SA 07.2	4	30	VD00063-4-0,02	0.02	1,400	0.4	0.4	1.0	0.40	0.4	A1	B1
	5.6					0.4	0.4	1.0	0.40	0.4	A1	B1
	8		VD00063-4-0,04	0.04	1,400	0.4	0.4	1.0	0.50	0.4	A1	B1
	11					0.4	0.5	1.0	0.50	0.5	A1	B1
	16		VD00063-2-0,06	0.06	2,800	0.6	0.6	1.9	0.42	0.6	A1	B1
	22					0.6	0.7	1.9	0.42	0.7	A1	B1
	32		AD00063-4-0,10	0.10	1,400	1.0	1.0	2.4	0.42	1.0	A1	B1
	45					1.0	1.0	2.4	0.42	1.0	A1	B1
	63		AD00063-2-0,20	0.20	2,800	0.8	1.2	4.4	0.60	1.2	A1	B1
	90					0.8	1.3	4.4	0.60	1.3	A1	B1
125	AD00063-2-0,30	0.30	2,800	0.9	1.6	4.4	0.70	1.6	A1	B1		
180				0.9	1.7	4.4	0.70	1.7	A1	B1		
SA 07.6	4	60	VD00063-4-0,03	0.03	1,400	0.4	0.5	1.0	0.43	0.5	A1	B1
	5.6					0.4	0.5	1.0	0.43	0.5	A1	B1
	8		VD00063-4-0,06	0.06	1,400	0.6	0.7	1.6	0.38	0.7	A1	B1
	11					0.6	0.7	1.6	0.38	0.7	A1	B1
	16		VD00063-2-0,12	0.12	2,800	0.7	0.9	3.0	0.52	0.9	A1	B1
	22					0.7	1.0	3.0	0.52	1.0	A1	B1
	32		AD00063-4-0,20	0.20	1,400	1.6	1.9	4.6	0.42	1.9	A1	B1
	45					1.6	2.0	4.6	0.42	2.0	A1	B1
	63		AD00063-2-0,40	0.40	2,800	1.8	2.3	9.0	0.53	2.3	A1	B1
	90					1.8	2.5	9.0	0.53	2.5	A1	B1
125	AD00063-2-0,50	0.50	2,800	1.9	3.0	9.0	0.62	3.0	A1	B1		
180				1.9	3.2	9.0	0.62	3.2	A1	B1		
SA 10.2	4	120	VD00071-4-0,06	0.06	1,400	0.5	0.6	2.0	0.40	0.6	A1	B1
	5.6					0.5	0.6	2.0	0.40	0.6	A1	B1
	8		VD00071-4-0,12	0.12	1,400	1.0	1.1	3.0	0.40	1.1	A1	B1
	11					1.0	1.2	3.0	0.40	1.2	A1	B1
	16		VD00071-2-0,25	0.25	2,800	1.3	1.5	4.5	0.52	1.5	A1	B1
	22					1.3	1.8	4.5	0.52	1.8	A1	B1
	32		AD00071-4-0,40	0.40	1,400	2.5	2.6	8.5	0.42	2.6	A1	B1
	45					2.5	3.0	8.5	0.42	3.0	A1	B1
	63		AD00071-2-0,70	0.70	2,800	3.0	4.0	16	0.54	4.0	A1	B1
	90					3.0	4.5	16	0.54	4.5	A1	B1
125	AD00071-2-1,00	1.00	2,800	3.5	5.4	16	0.64	5.4	A1	B1		
180				3.5	6.0	16	0.64	6.0	A1	B1		
SA 14.2	4	250	VD00090-4-0,12	0.12	1,400	0.5	0.8	2.8	0.60	0.8	A1	B1
	5.6					0.5	1.0	2.8	0.60	1.0	A1	B1
	8		VD00090-4-0,25	0.25	1,400	1.0	1.6	5.2	0.60	1.6	A1	B1
	11					1.0	1.7	5.2	0.60	1.7	A1	B1
	16		VD00090-2-0,45	0.45	2,800	1.5	3.0	9.0	0.64	3.0	A1	B1
	22					1.5	3.5	9.0	0.64	3.5	A1	B1
	32		AD00090-4-0,75	0.75	1,400	2.6	4.3	16	0.62	4.3	A1	B1
	45					2.6	5.0	16	0.62	5.0	A1	B1
	63		AD00090-2-1,40	1.40	2,800	4.7	7.6	38	0.60	7.6	A2	B2
	90					4.7	9.0	38	0.60	9.0	A2	B2
125	AD00090-2-1,80	1.80	2,800	5.3	12	38	0.65	11	A2	B2		
180				5.3	12	38	0.65	11	A2	B2		
SA 14.6	4	500	VD00090-4-0,20	0.20	1,400	0.9	1.5	5.2	0.54	1.5	A1	B1
	5.6					0.9	1.7	5.2	0.54	1.7	A1	B1
	8		VD00090-4-0,40	0.40	1,400	1.8	3.0	9.3	0.56	3.0	A1	B1
	11					1.8	3.5	9.3	0.56	3.5	A1	B1
	16		VD00090-2-0,80	0.80	2,800	3.6	5.0	18	0.51	5.0	A1	B1
	22					3.6	5.5	18	0.51	5.5	A1	B1
	32		AD00090-4-1,60	1.60	1,400	5.3	7.5	38	0.57	7.5	A2	B2
	45					5.3	9.0	38	0.57	9.0	A2	B2
	63		AD00090-2-3,00	3.00	2,800	9.0	14	68	0.60	14	A2	B3
	90					9.0	16	68	0.60	16	A2	B3
125	AD00090-2-3,30	3.30	2,800	9.5	21	68	0.65	21	A2	B3		
180				9.5	22	68	0.65	22	A2	B3		
SA 16.2	4	1,000	VD00112-4-0,40	0.40	1,400	1.4	2.7	10	0.65	2.7	A1	B1
	5.6					1.4	2.9	10	0.65	2.9	A1	B1
	8		VD00112-4-0,80	0.80	1,400	3.0	5.2	22	0.57	5.2	A1	B2
	11					3.0	5.5	22	0.57	5.5	A1	B2
	16		VD00112-2-1,50	1.50	2,800	5.6	9.0	40	0.60	9.0	A2	B2
	22					5.6	11	40	0.60	11	A2	B2
	32		AD00112-4-3,00	3.00	1,400	8.5	15	60	0.71	15	A2	B3
	45					8.5	17	60	0.71	17	A2	B3
	63		AD00112-2-5,00	5.00	2,800	12	25	114	0.80	25	A2	–
	90					12	30	114	0.80	25	A2	–
125	AD00112-2-6,00	6.00	2,800	14	35	114	0.83	25	A2	–		
180				14	45	114	0.83	25	A2	–		

1) – 3) Refer to Notes on Electrical data SA .2/SAR .2 multi-turn actuators with 3-phase AC motors

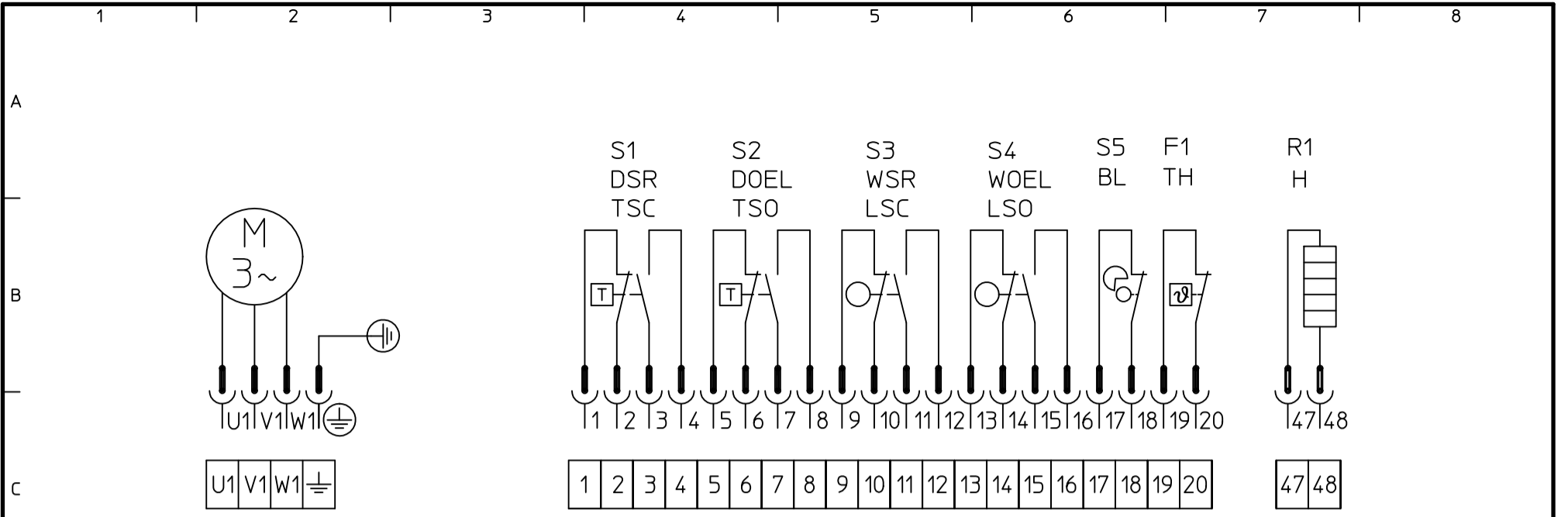
We reserve the right to alter data according to improvements made. Previous documents become invalid with the issue of this document.

Electrical data multi-turn actuators for open-close duty with 3-phase AC motors

Short-time duty S2 - 15 min, 400 V/50 Hz

Installation and sizing																																												
Motor data	Motor data is approximate. Due to usual manufacturing tolerances, there may be deviations from the values given.																																											
Motor protection	<p>To protect against overheating, thermostats or PTC thermistors are embedded in the motor windings.</p> <p>Actuators without integral actuator controls (AUMA NORM): Thermostats or PTC thermistors have to be considered within the external controls (refer to terminal plan). Note: Failure to connect thermostats or PTC thermistors shall void the warranty for the motor.</p> <p>Rating of the thermostats</p> <table border="1"> <thead> <tr> <th colspan="2">AC current</th> <th colspan="2">DC current</th> </tr> </thead> <tbody> <tr> <td colspan="2">250 V, 50 – 60 Hz</td> <td>60 V</td> <td>1.0 A</td> </tr> <tr> <td>cos φ = 1</td> <td>2.5 A</td> <td>42 V</td> <td>1.2 A</td> </tr> <tr> <td>cos φ = 0.6</td> <td>1.6 A</td> <td>24 V</td> <td>1.5 A</td> </tr> </tbody> </table> <p>Actuators with AM or AC integral actuator controls: Thermal motor protection is already integrated.</p>	AC current		DC current		250 V, 50 – 60 Hz		60 V	1.0 A	cos φ = 1	2.5 A	42 V	1.2 A	cos φ = 0.6	1.6 A	24 V	1.5 A																											
AC current		DC current																																										
250 V, 50 – 60 Hz		60 V	1.0 A																																									
cos φ = 1	2.5 A	42 V	1.2 A																																									
cos φ = 0.6	1.6 A	24 V	1.5 A																																									
Mains voltage, mains frequency	<p>Permissible variation of mains voltage: ±10 %</p> <p>Permissible variation of mains frequency: ±5 %</p>																																											
Switchgear sizing	<p>For motor operation, reversing contactors (mechanically, electrically and electronically locked) or thyristors (electronically locked) can be used.</p> <p>Actuators without integral actuator controls (AUMA NORM): Switchgear are supplied by the customer. We recommend specification of switchgear suitable for their rated operating power/motor power in compliance with the assigned AUMA power class. Switchgear assignment to AUMA power classes:</p> <table border="1"> <thead> <tr> <th rowspan="2">AUMA power class</th> <th rowspan="2">Reversing contactor Rated operating power acc. to EN 60947-4-1 Utilization category AC-3</th> <th colspan="2">Reversing contactor Motor power according to UL/CSA at</th> </tr> <tr> <th>480 V AC</th> <th>600 V AC</th> </tr> </thead> <tbody> <tr> <td></td> <td>400 V AC</td> <td></td> <td></td> </tr> <tr> <td>A1</td> <td>4.0 kW</td> <td>5.0 hp</td> <td>5.0 hp</td> </tr> <tr> <td>A2</td> <td>7.5 kW</td> <td>10 hp</td> <td>10 hp</td> </tr> <tr> <td>A3</td> <td>15 kW</td> <td>20 hp</td> <td>25 hp</td> </tr> <tr> <td>A4</td> <td>30 kW</td> <td>60 hp</td> <td>60 hp</td> </tr> <tr> <td>A5</td> <td>55 kW</td> <td>75 hp</td> <td>100 hp</td> </tr> <tr> <td>A6</td> <td>75 kW</td> <td>100 hp</td> <td>125 hp</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th rowspan="2">AUMA power class</th> <th rowspan="2">Thyristor Rated operating current acc. to EN 60947-4-2 Utilization category AC-53a</th> </tr> <tr> <th>400 V AC</th> </tr> </thead> <tbody> <tr> <td>B1</td> <td>6 A</td> </tr> <tr> <td>B2</td> <td>8.5 A</td> </tr> <tr> <td>B3</td> <td>16 A</td> </tr> </tbody> </table> <p>Actuators with AM or AC integral actuator controls: Required switchgear in power classes A1 – A3 or B1 – B3 are already integrated in AM or AC actuator controls. For switchgear of power classes A4 – A6, a control box is additionally required. For actuators with AM integral actuator controls and installed switchgear in AUMA power class A3, an optional thermal overcurrent protection device cannot be directly integrated within the AM. A control box is additionally required. However, AC actuator controls can be used instead of AM actuator controls. When opting for AC actuator controls, the additional control box can be omitted.</p>	AUMA power class	Reversing contactor Rated operating power acc. to EN 60947-4-1 Utilization category AC-3	Reversing contactor Motor power according to UL/CSA at		480 V AC	600 V AC		400 V AC			A1	4.0 kW	5.0 hp	5.0 hp	A2	7.5 kW	10 hp	10 hp	A3	15 kW	20 hp	25 hp	A4	30 kW	60 hp	60 hp	A5	55 kW	75 hp	100 hp	A6	75 kW	100 hp	125 hp	AUMA power class	Thyristor Rated operating current acc. to EN 60947-4-2 Utilization category AC-53a	400 V AC	B1	6 A	B2	8.5 A	B3	16 A
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Notes on Electrical data SA .2/SAR .2 multi-turn actuators with 3-phase AC motors																																												
1) Nominal power P_N	<p>Mechanical power output at motor shaft at run torque of multi-turn actuator (corresponds to approx. 35 % of maximum torque).</p> <p>The consumed electrical power can be calculated using the following formula: $P = U \times I \times \cos \varphi \times \sqrt{3}$</p>																																											
2) Nominal current I_N	Current at run torque at approx. 35 % of maximum torque																																											
3) Max. current I_{max}	Current at maximum torque																																											

Für diese Zeichnung gelten die Bestimmungen über den Schutz für Urheberrecht.



ZU wegabhängig abschalten
CLOSED stop by limit switch

AUF wegabhängig abschalten
OPEN stop by limit switch

ZU drehmomentabhängig abschalten
CLOSED stop by torque switch (torque seating)

AUF wegabhängig abschalten
OPEN stop by limit switch

Schalterabwicklung / Switch development			
Schalter/ Switch	Kontakt/ Contact	0% ZU CLOSE	100% AUF OPEN
S1 DSR/TSC	Öffner / NC Schließer / NO	—	—
S2 DOEL/TSO	Öffner / NC Schließer / NO	—	—
S3 WSR/LSC	Öffner / NC Schließer / NO	—	—
S4 WOEL/LSO	Öffner / NC Schließer / NO	—	—

Schalterabwicklung / Switch development			
Schalter/ Switch	Kontakt/ Contact	0% ZU CLOSE	100% AUF OPEN
S1 DSR/TSC	Öffner / NC Schließer / NO	—	—
S2 DOEL/TSO	Öffner / NC Schließer / NO	—	—
S3 WSR/LSC	Öffner / NC Schließer / NO	—	—
S4 WOEL/LSO	Öffner / NC Schließer / NO	—	—

— = Kontakt geschlossen / Contact closed
- - = Kontakt offen / Contact open

- S1 DSR/TSC Drehmomentschalter, Schließen, Rechtslauf / Torque switch, closing, clockwise rotation
- S2 DOEL/TSO Drehmomentschalter, Öffnen, Linkslauf / Torque switch, opening, counter-clockwise rotation
- S3 WSR/LSC Wegschalter, Schließen, Rechtslauf / Limit switch, closing, clockwise rotation
- S4 WOEL/LSO Wegschalter, Öffnen, Linkslauf / Limit switch, opening, counter-clockwise rotation
- S5 BL Blinkgeber / Blinker transmitter
- F1 TH Thermoschalter / Thermostwitches
- R1 H Heizung / Heater

Anschlußplan zeigt den Stellantrieb in Zwischenstellung, Schalter sind nicht betätigt.
Terminal plan shows the actuator in intermediate position, switches are not actuated.

Bei Ex-Antrieben werden an Stelle der Stecker Schraubklemmen/Käfigzugfederklemmen verwendet !
For explosion-proof actuators terminals/cage clamps are used instead of plug/socket connector !

				Datum	2013-07-17	auma [®] AUMA Riester GmbH & Co. KG		TPA00R1AA-101-000		
				Bearb.	Montaire					
01	799/09	2009-12-08	Mey	Gepr.	Montaire			Legende	Auftragsnummer	Bestellnummer
Zust.	Änderung	Datum	Name	Norm	Montaire					Projekt