

# Motorisation for OPAP PREMIUM PLUS Series B2 93



# Motorisation for OPAP PREMIUM PLUS



All-or-nothing motorisation "OPAP PREMIUM PLUS" flanged butterfly valves, for isolation.

## 1 - General

### 1 - 1. Applications:

- Water transmission, water treatment, dams and hydropower, industrial water.
- Water distribution and irrigation networks (filtered water).
- Fire protection networks.

### 1 - 2. Specifications:

- Range: DN 150 to 1200.
- PFA 10, 16.
- Medium temperature 1°C to 60°C.
- Tightness acc. to DIN 12266-1, leak-rate A (drop-tight).
- Face to face dimensions according to standards NF EN 558-1 series 14 (except DN 1100) and ISO 5752 series 14 (except DN 1100).
- Pipe connection flange drilling according to standards EN 1092-2 and ISO 7005-2: ISO PN10, 16 for DN 80 to 1200.
- Visual position indicator gearbox IP68 as standard.

### 1 - 3. Description:

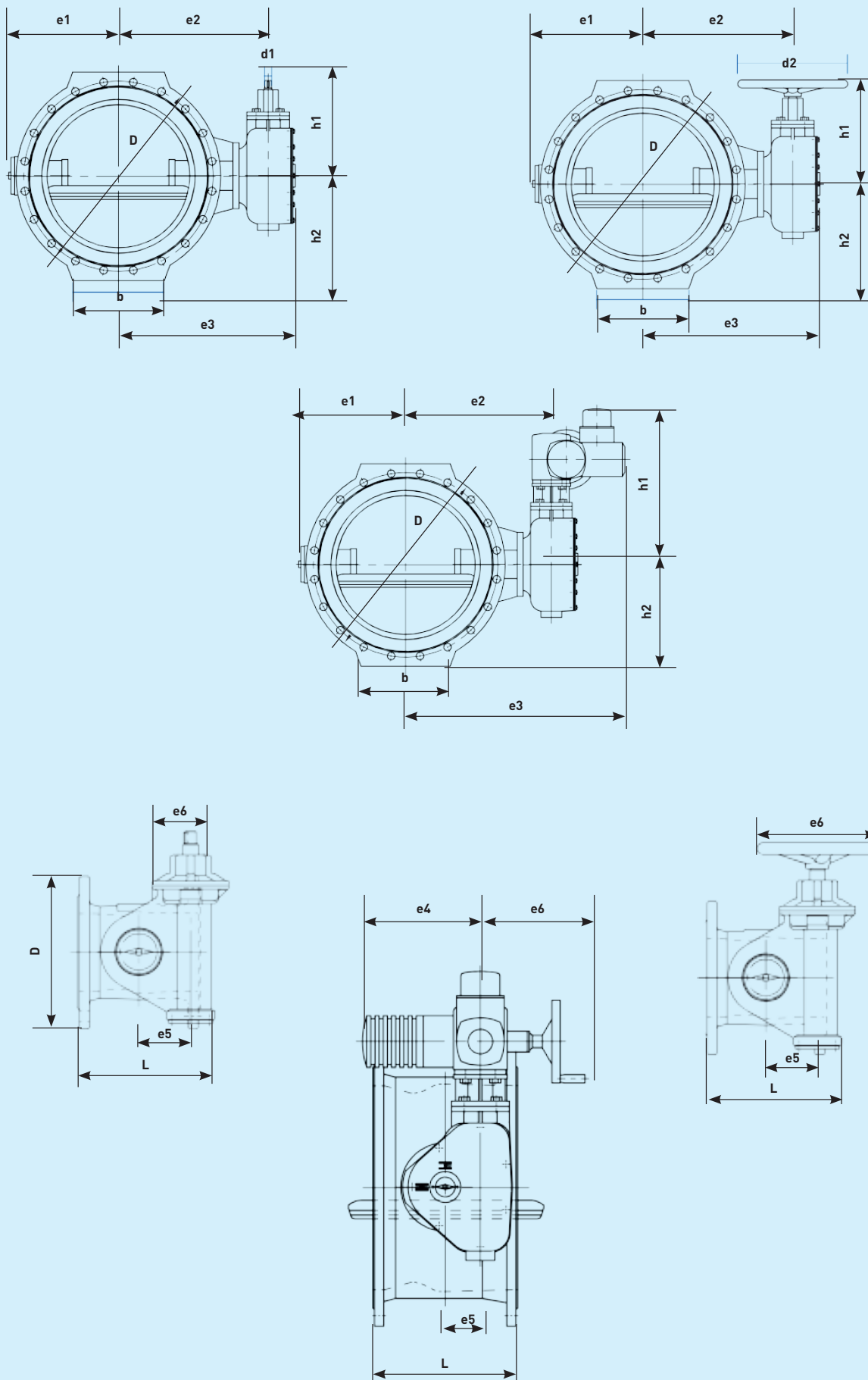
- Fitted to a flanged butterfly valve closing clockwise with ISO 5210 mounting plate.
- Opening/closing function.
- Standard multiturn actuator AUMA® NORM:
  - Power supply 400 V, three-phase, 50 Hz,
  - Speed depends on sizes of valve, also 90 rpm is used,
  - Built-in thermal protection,
  - Heating resistor, self-regulating from 3 to 15 W (60-250 V),
  - IP68 protection according to EN 60529,
  - Torque switch contacts for closing and opening,
  - Limit switch contacts for closing and opening,
  - Short-time duty S2-15 minutes, classes A and B according to EN15714-2,
  - Operating temperature: - 40 °C to +80 °C,
  - KS type coating,
  - Disengageable emergency manual override by handwheel.
- Options:
  - DUO intermediate contacts,
  - Position transmitter RWG (4-20 mA/4 wire),
  - Additional paired limit switch contacts,
  - Double sealed connector,
  - Bloc Aumatic control integrated with local control,
  - Auma Matic,
  - Different voltage (single-phase 230 V 50 Hz),
  - Other voltage, single phase, direct current, speed or options on request
- Tests:
  - Final inspection test acc. to EN 12266 (DIN 3230).

# OPAP PREMIUM PLUS

## Classification of electric actuators AUMA

Nominal diameter DN	Nominal Pressure PN	Shaft diameter (mm)	ISO connection	Type of gearbox	turns / stroke	Type of AUMA actuator	Female connector electric actuator ISO 5210	Output speed electric actuator	Engine motor nominal output power (kW)	Starting electric current (A)	Closing time (s)
150	16	18	F10	SKG 05 10	18	SA 07.2	B1	45	0,1	2,5	24
150	25	28	F10	SKG 05	18	SA 07.2	B1	45	0,1	2,5	24
150	40	28	F10	SKG 05	18	SA 07.2	B1	45	0,1	2,5	24
200	10	28	F10	SKG 05	18	SA 07.2	B1	45	0,1	2,5	24
200	16	28	F10	SKG 05 10	18	SA 07.2	B1	45	0,1	2,5	24
200	25	36	F12	SKG 1 14	25	SA 07.2	B1	45	0,1	2,5	33
200	40	36	F12	SKG 1	25	SA 07.2	B1	45	0,1	2,5	33
250	10	28	F10	SKG 05	18	SA 07.2	B1	45	0,1	2,5	24
250	16	36	F12	SKG 1 14	25	SA 07.2	B1	45	0,1	2,5	33
250	25	48	F14	SKG2 24	29	SA 07.6	B1	45	0,2	4,8	39
250	40	48	F14	SKG2	29	SA 07.6	B1	45	0,2	4,8	39
300	10	36	F12	SKG 1	25	SA 07.2	B1	45	0,1	2,5	33
300	16	36	F12	SKG1	25	SA 07.2	B1	45	0,1	2,5	33
300	25	48	F14	SKG2	29	SA 07.6	B1	45	0,2	4,8	39
300	40	60	F16	SKG4 33	36	SA 07.6	B1	45	0,2	4,8	48
350	10	36	F12	SKG1	25	SA 07.6	B1	45	0,2	4,8	33
350	16	48	F14	SKG2	29	SA 07.6	B1	45	0,2	4,8	39
350	25	60	F16	SKG4	36	SA 07.6	B1	45	0,2	4,8	48
350	40	60	F16	SKG4	36	SA 07.6	B1	45	0,2	4,8	48
400	10	48	F14	SKG2	29	SA 07.6	B1	45	0,2	4,8	39
400	16	48	F14	SKG2	29	SA 07.6	B1	45	0,2	4,8	39
400	25	60	F16	SKG4	36	SA 07.6	B1	45	0,2	4,8	48
400	40	72	F25	SKG8 / IV20 / 4:1	148	SA 07.6	B1	90	0,4	4,8	99
450	10	60	F16	SKG4	36	SA 07.6	B1	45	0,2	4,8	48
450	16	60	F16	SKG4	36	SA 07.6	B1	45	0,2	4,8	48
450	25	72	F25	SKG8 / IV25 / 4:1	148	SA 07.6	B1	90	0,4	4,8	99
450	40	72	F25	SKG8 / IV25 / 4:1	148	SA 07.6	B1	90	0,4	4,8	99
500	10	60	F16	SKG4	36	SA 07.6	B1	45	0,2	4,8	48
500	16	60	F16	SKG4	36	SA 07.6	B1	45	0,2	4,8	48
500	25	72	F25	SKG8 / IV25 / 4:1	148	SA 07.6	B1	90	0,4	4,8	99
500	40	80	F30	SKG16 / IV25 / 4:1	184	SA 07.6	B1	90	0,4	4,8	123
600	10	60	F16	SKG4	36	SA 07.6	B1	45	0,2	4,8	48
600	16	72	F25	SKG8 / IV25 / 4:1	148	SA 07.6	B1	90	0,4	4,8	99
600	25	80	F30	SKG16 / IV25 / 4:1	184	SA 07.6	B1	90	0,4	4,8	123
600	40	98	F30	SKG16 / IV25 / 4:1	184	SA 07.6	B1	90	0,4	4,8	123
700	10	72	F25	SKG8 / IV25 / 4:1	148	SA 07.6	B1	90	0,4	4,8	99
700	16	80	F30	SKG16 / IV25 / 4:1	184	SA 07.6	B1	90	0,4	4,8	123
700	25	98	F30	SKG16 / IV25 / 4:1	184	SA 07.6	B1	90	0,4	4,8	123
700	40	110	F35	SKG32 / IV25 / 4:1	242	SA 07.6	B1	90	0,4	4,8	161
800	10	72	F25	SKG8 / IV25 / 4:1	148	SA 07.6	B1	90	0,4	4,8	99
800	16	98	F30	SKG16 / IV25 / 4:1	184	SA 07.6	B1	90	0,4	4,8	123
800	25	110	F35	SKG32 / IV25 / 4:1	242	SA 07.6	B1	90	0,4	4,8	161
800	40	110	F35	SKG32 / IV25 / 4:1	242	SA 10.2	B1	90	0,7	4,8	161
900	10	80	F30	SKG16 / IV25 / 4:1	184	SA 07.6	B1	90	0,4	4,8	123
900	16	98	F30	SKG16 / IV25 / 4:1	184	SA 07.6	B1	90	0,4	4,8	123
900	25	110	F35	SKG32 / IV25 / 4:1	242	SA 10.2	B1	90	0,7	8,9	161
900	40	150	F40	SKG63 / IV25 / 4:1	266	SA 10.2	B1	90	0,7	8,9	177
1000	10	98	F30	SKG16 / IV25 / 4:1	184	SA 07.6	B1	90	0,4	4,8	123
1000	16	110	F35	SKG32 / IV25 / 4:1	242	SA 07.6	B1	90	0,4	4,8	161
1000	25	135	F40	SKG63 / IV25 / 4:1	266	SA 10.2	B1	90	0,7	8,9	177
1000	40	150	F40	SKG63 / IV25 / 4:1	266	SA 10.2 1)	B1	90	0,7	8,9	177
1100	10	98	F30	SKG16 / IV25 / 4:1	184	SA 07.6	B1	90	0,4	4,8	123
1100	16	110	F35	SKG32 / IV25 / 4:1	242	SA 10.2	B1	90	0,7	4,8	161
1100	25	150	F40	SKG63 / IV25 / 4:1	266	SA 10.2	B1	90	0,7	4,8	177
1100	40		F48	SKG125 / GST16.1 / 5,6:1	428	SA 14.2	B1	90	1,4	17	285
1200	10	98	F30	SKG16 / IV25 / 4:1	184	SA 07.6	B1	90	0,4	4,8	123
1200	16	110	F35	SKG32 / IV25 / 4:1	242	SA 10.2	B1	90	0,7	8,9	161
1200	25	150	F40	SKG63 / IV25 / 4:1	266	SA 10.2 1)	B1	90	0,7	8,9	177
1200	40		F48	SKG125 / GST16.1 / 5,6:1	428	SA 14.2	B1	90	1,4	17	285
1400	10		F35	SKG32 / IV25 / 4:1	242	SA 10.2	B1	90	0,7	8,9	161
1400	16		F40	SKG63 / IV25 / 4:1	266	SA 10.2	B1	90	0,7	8,9	177
1400	25		F48	SKG125 / GST16.1 / 5,6:1	428	SA 14.2	B1	90	1,4	17	285
1400	40		F60	SKG250 / GST25.1 / 8:1	694	SA 14.2	B1	90	1,4	17	463
1600	10	135	F40	SKG63 / IV25 / 4:1	266	SA 10.2	B1	90	0,7	8,9	177
1600	16	150	F40	SKG63 / IV25 / 4:1	266	SA 10.2 1)	B1	90	0,7	8,9	177
1600	25		F48	SKG125 / GST16.1 / 5,6:1	428	SA 14.2	B1	90	1,4	17	285
1600	40		F60	SKG250 / GST25.1 / 8:1	694	SA 14.2	B1	90	1,4	17	463

# OPAP PREMIUM PLUS - Dimensions table all DN PN10 to 40



# OPAP PREMIUM PLUS - Dimensions table all DN PN10 to 40

DN	PN	L	D	h1 RZ	h1 HR	h1 EA	h2	b	e1	e2	e3 RZ	e3 HR	e3 EA	e4	e5 EA	e6 RZ	e6 HR	e6 EA	d1 RZ	d2 HR	G HR	G RZ	G EA	u	Weight kg
80	16	180	200	199	222	438	117	/	100	167	229	267	404	85	180	185	148	334	18	200	22	22	44	18	
100	16	190	220	199	222	438	117	/	110	182	244	282	419	85	180	185	148	334	18	200	26	26	48	18	
125	16	200	250	199	222	438	117	/	125	195	257	295	432	85	180	185	148	334	18	200	30	30	52	18	
150	16	210	240	200	222	452	145	150	146	201	264	301	439	179	85	148	185	334	18	200	36	36	56	39	
150	25	210	250	200	222	452	167	150	160	221	283	321	458	179	85	148	185	334	18	200	44	44	64		
150	40	210	250	200	222	452	167	150	160	221	283	321	453	179	85	148	185	334	18	200	48	48	67		
200	10	230	295	200	222	452	172	180	186	246	309	346	484	179	85	148	185	334	18	200	48	48	67	47	
200	16	230	295	200	222	452	172	180	186	246	309	346	484	179	85	148	185	334	18	200	48	48	67	47	
200	25	230	310	221	244	473	197	180	180	253	316	353	491	159	105	168	205	354	18	200	69	69	85		
200	40	230	320	221	244	473	210	180	188	253	316	353	491	159	105	168	205	354	18	200	82	82	98		
250	10	250	350	200	222	452	202	200	210	271	333	371	508	179	85	148	185	334	18	200	62	62	81	60	
250	16	250	355	221	244	473	202	200	204	278	341	378	516	159	105	168	205	354	18	200	70	70	86	69	
250	25	250	370	293	321	540	234	200	223	312	392	437	550	159	105	185	230	354	22	250	109	109	129		
250	40	250	385	293	321	540	247	210	225	312	392	437	540	159	105	185	230	354	22	250	135	135	155		
300	10	270	400	221	244	473	230	260	229	303	366	403	541	159	105	168	205	354	18	200	89	89	105	87	
300	16	270	410	221	244	473	230	260	229	303	366	403	541	159	105	1678	205	354	18	200	88	88	108	85	
300	25	270	430	293	321	540	254	260	246	335	415	460	572	159	105	185	230	354	22	250	136	136	156		
300	40	270	450	318	348	565	260	300	261	372	453	497	610	139	125	205	250	374	22	250	193	193	213		
350	10	290	460	221	244	473	255	280	253	325	387	425	562	159	105	168	205	354	18	200	103	103	124	101	
350	16	290	470	293	321	540	262	280	272	361	441	486	599	159	105	185	230	354	22	250	134	134	154	131	
350	25	290	490	318	348	565	297	280	286	390	471	515	628	139	125	205	250	374	22	250	198	198	218		
400	10	310	515	293	321	540	285	310	301	390	470	515	628	159	105	185	230	354	22	250	150	150	170	147	
400	16	310	525	293	321	540	292	320	301	390	470	515	628	159	105	185	230	354	22	250	164	164	184	161	
400	25	310	550	318	348	565	327	320	310	411	491	536	648	139	125	205	250	374	22	250	243	243	263		
400	40	310	585	396	428	778	332	350	330	480	582	655	718	40	155	255	330	473	22	350	367	367	386		
450	10	330	565	318	348	565	310	320	335	439	520	564	677	139	125	205	250	374	22	250	196	196	216	192	
450	16	330	585	318	348	565	322	320	335	439	520	564	677	139	125	205	250	374	22	250	215	215	235	211	
500	10	350	620	318	348	565	337	360	360	464	545	589	702	139	125	205	250	374	22	250	219	219	239	215	
500	16	350	650	318	348	565	360	360	360	464	545	589	702	139	125	205	250	374	22	250	267	267	287	262	
500	25	350	660	396	428	778	382	360	370	515	617	690	753	40	155	255	330	473	22	350	403	403	421		
500	40	350	670	419	459	799	380	360	386	583	721	833	831	28	185	329	435	508	30	500	576	576	615		
600	10	390	725	318	348	565	392	400	408	513	593	638	750	139	125	205	250	374	22	250	301	301	321	295	
600	16	390	770	396	428	778	422	440	423	548	650	723	785	40	155	255	330	473	25	350	450	450	469	462	
600	25	390	770	419	459	799	437	440	440	614	752	864	862	28	185	329	435	508	30	500	619	619	658		
600	40	390	795	419	459	799	447	440	477	638	776	888	886	28	185	329	435	508	30	500	809	809	848		
700	10	430	840	396	428	778	450	440	468	593	695	768	831	40	155	255	330	473	25	350	478	478	497	482	
700	16	430	840	419	459	799	457	500	492	653	790	903	900	28	185	329	435	508	30	500	646	646	685	653	
700	25	430	875	419	459	799	482	500	518	680	818	930	928	28	185	329	435	508	30	500	841	841	861		
800	10	470	950	396	428	778	510	520	528	653	755	828	891	40	155	255	330	473	25	350	635	635	653	631	
800	16	470	950	419	459	799	515	580	553	718	856	968	966	28	185	329	435	508	30	500	837	837	876	839	
800	25	470	990	601	637	854	545	560	568	771	933	946	1019	27	240	402	484	563	22	350	1197	1197	1216		
900	10	510	1050	419	459	799	560	580	587	748	885	998	995	28	185	329	435	508	30	500	840	840	879	840	
900	16	510	1050	419	459	799	565	580	631	788	926	1038	1036	28	185	329	435	508	30	500	1044	1044	1083	1041	
900	25	510	1090	601	637	854	595	580	635	820	982	995	1067	27	240	402	484	563	22	350	1509	1509	1532		
1000	10	550	1160	419	459	799	617	600	653	818	956	1068	1066	28	185	329	435	508	30	500	1031	1031	1070	1026	
1000	16	550	1170	601	637	854	630	640	672	855	1017	1030	1103	27	240	402	484	563	22	350	1447	1447	1465	1415	
1000	25	550	1210	666	702	919	662	680	705	937	1147	1147	1184	92	305	515	549	628	22	350	2070	2070	2092		
1100	10	590	1270	419	459	799	672	640	709	869	1007	1119	1117	28	185	329	435	508	30	500	1288	1288	1327	1274	
1200	10	630	1380	419	459	799	730	690	771	934	1071	1184	1181	28	185	329	435	508	30	500	1604	1604	1642	1573	
1200	16	630	1390	601	637	854	745	740	800	990	1152	1165	1238	27	240	402	484	563	22	350	2171	2171	2193	2110	
1200	25	630	1420	666	702	919	767	740	845	1067	1277	1277	1315	92	305	515	549	628	22	350	2844	2844	2867		
1400	10	710	1590	601	637	854	840	720	892	1077	1239	1252	1324	27	240	402	484	563	22	350	2788	2788	2811	2414	
1400	16	710	1590	666	702	919	845	820	929	1144	1354	1354	1392	92	305	515	549	628	22	350	3314	3314	3337	3260	
1600	10	790	1820	666	702	919	960	940	1016	1242	1452	1452	1490	92	305	515	549	628	22	350	3552	3552	3574	3473	
1600	16	790	1820	666	707	919	967	960	1055	1277	1487	1487	1525	92	305	515	549	628	22	350	4513	4513	4535	4442	
1600	25	790	1860	882	917	1138	990	960	1111	1354	1626	1626	1639	312	395	668	945	1019	30	500	5638	5638	5679	5415	

## Dimensions

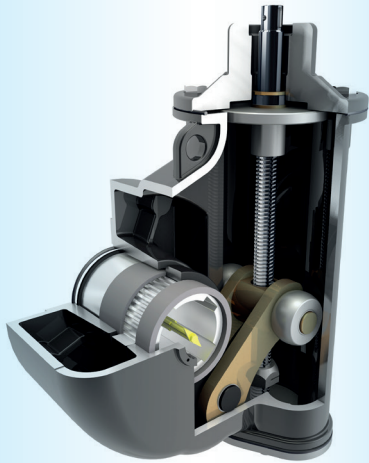
L [mm] Face-to-face  
D [mm] Flange outside

Diameter G [kg] weight  
u Turns handwheel

(Auf/Zu) RZ with round pin  
HR with handwheel  
EA with electric actuator

(Dimension according manufacturer  
of the actuator may change)  
Other variants on request

# OPAP PREMIUM PLUS - Assets



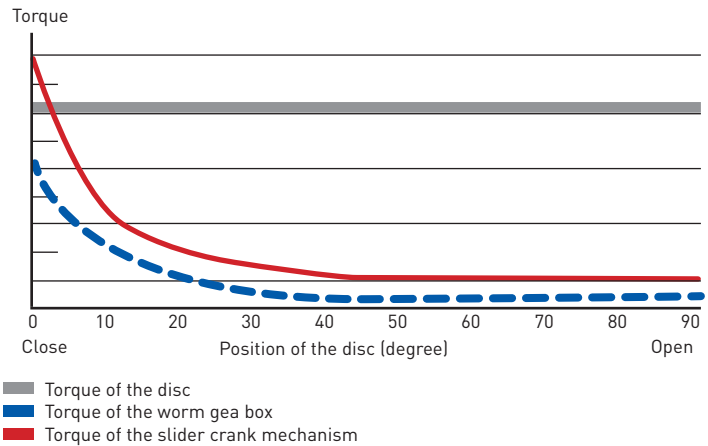
## SKG-gear box:

- Erhard engineered.
- Standardized ISO-connection!
- Adjusted power transmission (toggle lever).

## Slowed closing

- Against pressure surge.

**Torque curve rises near the closing point strong main seal is pressed reliably in the seat.**



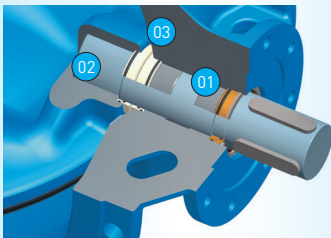
## Hub connection with Polygon advantages:

- Connection play-free.
- Self centering, no imbalance.
- Without additional elements.
- Notch-free cross section.
- Approx. 20 % more power transmission reserve.
- Highest security of the connection.
- Uncritical under dynamic loading.
- Proven for decades.

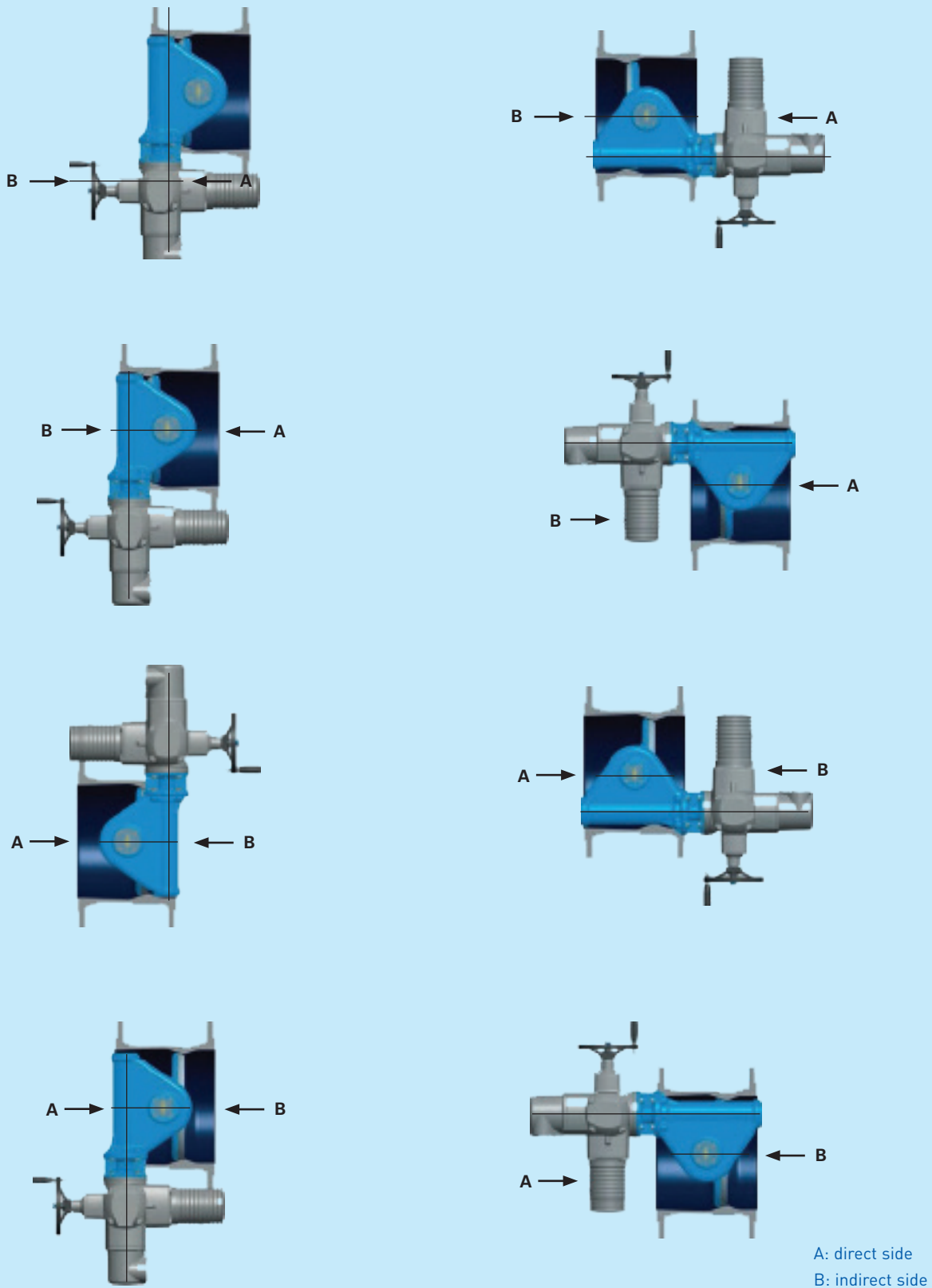


## Seal of the shaft-bearing

- 01 - **P1-bushes according DIN ISO 3547** mounted in the body bearing.
- 02 - **Closed bearing eyes at the disc.**
- Body-and clamp bearing sealed with pressed in cages with O-Rings, seated by coated area.
- 03 - **Optimal corrosion protecting at the bearing.**
- Changeable O-Ring cage, made of Bronze, in the front of the ISO-flange 1.
- Blow out secured shaft drive by circlip [1].
- Safety in disassembly.
- Sealing-concept without "dead spaces"!



# OPAP PREMIUM PLUS - Gearbox and drive with electric actuator



The BAYARD butterfly valves are tight in both directions. At pressure only from one side, then should be the pressure at side A (direct side); preferred pressure direction. BAYARD butterfly valves can be installed in all positions. All figures are also suitable for vertical pipe. By right turning the handwheel closes the valve disc.

# Your choice in waterflow control



TALIS is always the number one choice whenever water transport or management is required. Our company offers the most appropriate solution for water and energy management, and applications serving industrial and municipal customers. With a complete range of more than 20,000 products, we offer comprehensive solutions for the entire water cycle: pumping, distribution, and connections, ... Our experience, innovative technology, global and specific expertise form the basis for developing sustainable solutions for the efficient handling of the vital resource... water.



## **BAYARD**

ZI - 4 avenue Lionel Terray  
CS 70047

69881 Meyzieu cedex France

**TÉL.** + 33 (0)4 37 44 24 24

**FAX** + 33 (0)4 37 44 24 25

**E-MAIL** : bayard@talis-group.com

**SITE** : www.bayard.fr

Specifications and performance may be changed without notice as a result of technical developments. Images and photos given for illustration purposes only.

