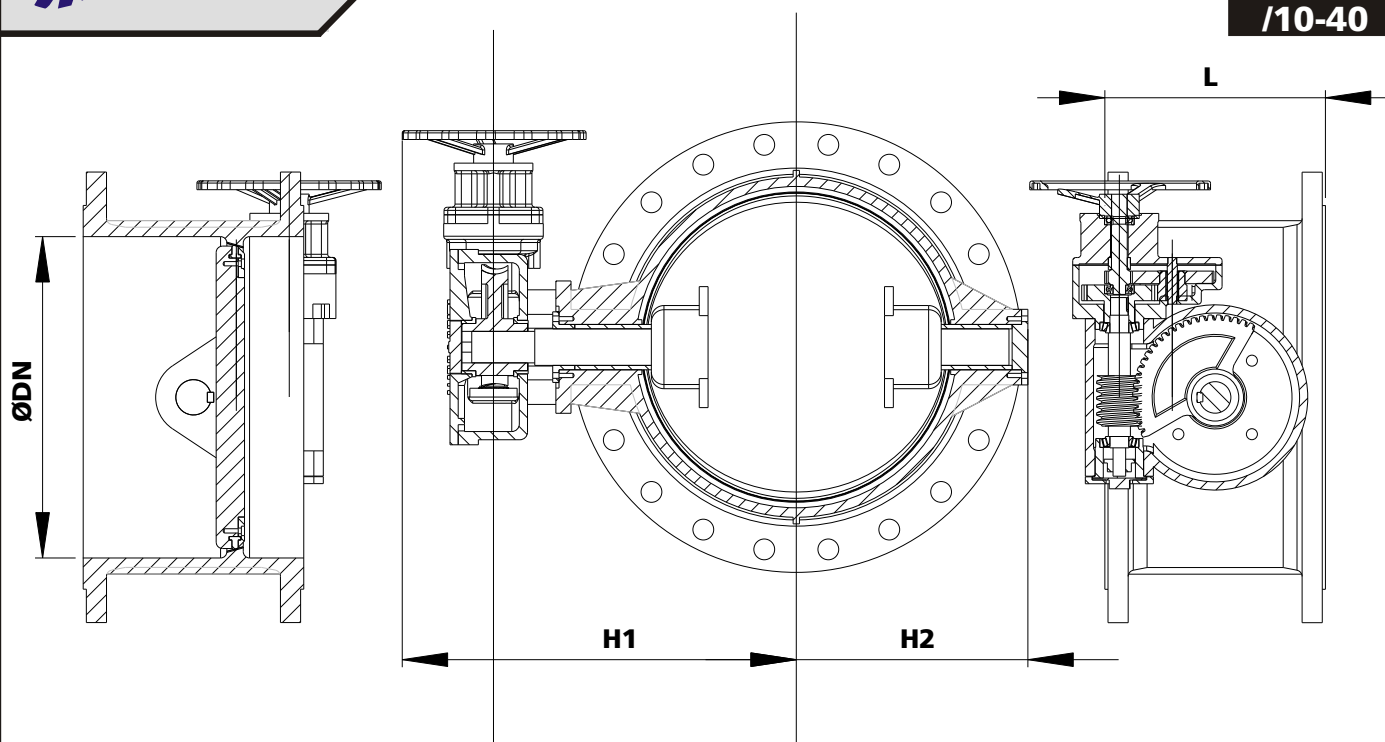
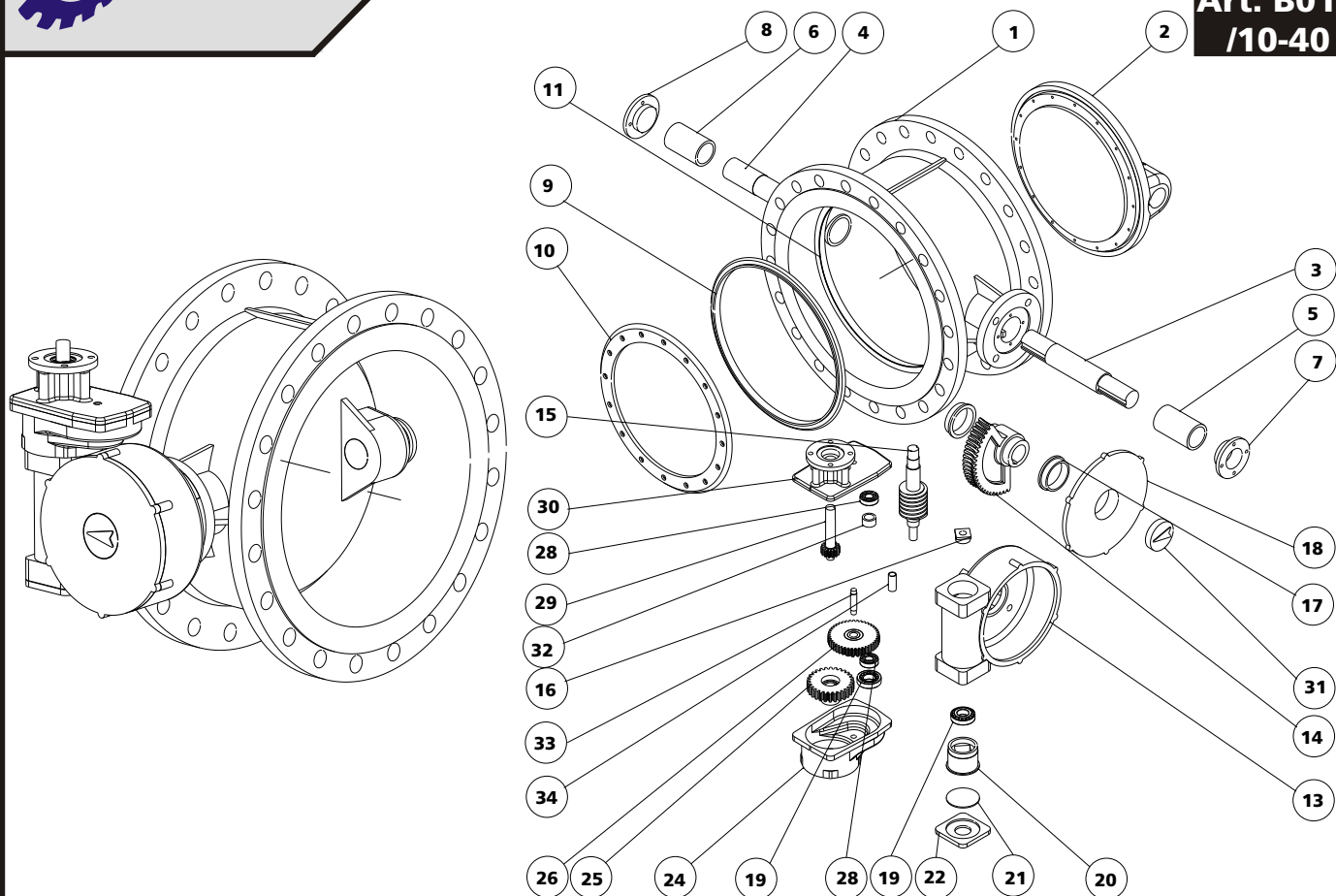


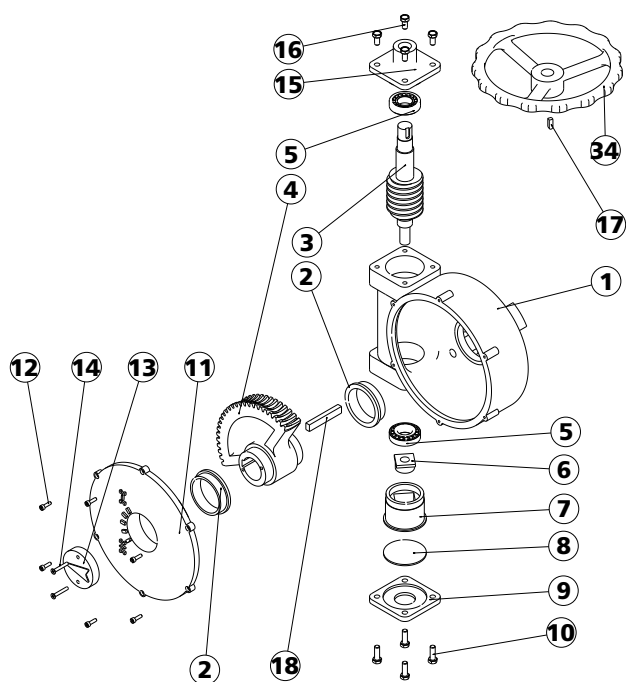


DN	PN 10 - 16		PN 10 - 16		PN 25 - 40			H1	H2
	BS 5155 (short)	Approx. W. (Kg)	DIN 3202 F-4	Approx. W. (Kg)	BS 5155 (long) & DIN 3202 F-4	Approx. W. (Kg)			
	Length mm		Length mm		Length mm	PN 25	PN 40		
80	114	20	180	23	180	30	37	220	105
100	127	22	190	25	190	32	40	231	115
125	140	27	200	30	200	40	48	230	125
150	140	35	210	40	210	52	64	267	148
200	152	52	230	60	230	78	96	297	175
250	165	75	250	85	250	110	136	367	203
300	178	105	270	115	270	150	184	395	228
350	190	125	290	140	290	182	224	438	258
400	216	185	310	200	310	260	320	471	288
450	222	220	330	240	330	312	384	528	313
500	229	295	350	320	350	416	512	560	340
600	267	490	390	520	390	676	832	619	395
700	292	670	430	710	430	923	1136	697	453
800	318	940	470	990	470	1290	1585	763	513
900	330	1140	510	1220	510	1560	1920	833	563
1000	410	1525	550	1600	550	2080	2560	897	620
1100	410	1900	590	2000	590	2600	3200	1000	678
1200	470	2080	630	2200	630	2860	3520	1060	733
1400	530	3000	710	3150	710	4095	5040	1181	843
1500	575	3810	750	4000	750	5200	6400	1350	910
1600	600	4730	790	4950	790	6435	7920	1425	963
1800	670	7200	870	7500	870	9750	12000	1575	1063
2000	760	11160	950	11500	950	14950	18400	1680	1168
2200	-	-	1030	-	1030	-	-	1900	1280
2400	-	-	1110	-	1110	-	-	2000	1385
2600	-	-	1190	-	1190	-	-	2200	1485
2800	-	-	1270	-	1270	-	-	2310	1595
3000	-	-	1350	-	1350	-	-	2530	1708

Double-Eccentric Butterfly Valves With Gearbox - PN 10-40

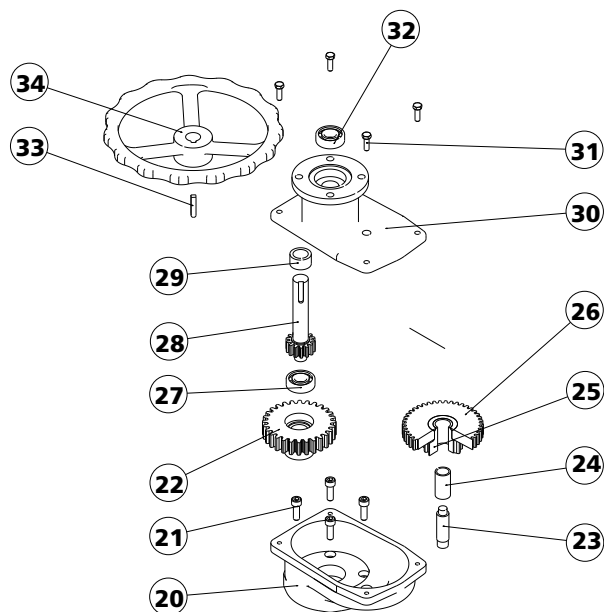
**Art. B01-
/10-40**


No.	Qty.	Description	Material	Standard	BS Standard	DIN Standard
1	1	Body	Ductile Iron (PN 10: Cast Iron)	GGG 50 (PN 10: GG-25)	2789-73 Gr. 500/7 (PN 10: 1452-61 Gr. 17)	1693 GGG-50 (PN 10: 1691 GG-25)
2	1	Disc	Ductile Iron (PN 10: Cast Iron)	GGG 50 (PN 10: GG-25)	2789-73 Gr. 500/7 (PN 10: 1452-61 Gr. 17)	1693 GGG-50 (PN 10: 1691 GG-25)
3	1	Shaft -drive-	Stainless Steel	X20Cr13	970/4-70 420 S37	17440
4	1	Shaft -hinge-	Stainless Steel	X20Cr13	970/4-70 420 S37	17440
5	1	Bearing1	Bronze	Rg5	1400 LG2	1705 G-CuSn5ZnPb
6	1	Bearing2	Bronze	Rg5	1400 LG2	1705 G-CuSn5ZnPb
7	1	Shaft cover	Cast Iron	GG 25	1452-61 Gr. 17	1691 GG-25
8	1	Blind cover	Cast Iron	GG 25	1452-61 Gr. 17	1691 GG-25
9	1	Ring	Rubber	EPDM	-	-
10	1	Retainer	Stainless Steel	AISI 304	970/4-70 304 S15	17440 1.4301
11	1	Body seat	Bronze	Rg5	1400 LG2	1705 G-CuSn5ZnPb
12	1	Key	Stainless Steel	AISI 304	970/4-70 304 S15	17440 1.4301
13	1	Gear box body	Cast Iron	GG 25	1452-61 Gr. 17	1691 GG-25
14	1	Worm gear	Ductile Iron	GGG 50	2789-73 Gr. 500/7	1693 GGG-50
15	1	Helical gear	Steel	C1050	080 M 46	-
16	1	Limiting nut	Ductile Iron	GGG 50	2789-73 Gr. 500/7	1693 GGG-50
17	2	Bearing-gb	Bronze	Rg5	1400 LG2	1705 G-CuSn5ZnPb
18	1	Front cover	Cast Iron	GG 25	1452-61 Gr. 17	1691 GG-25
19	2	Bearing on Helical gear	High strength carbon chromium steel	-	-	-
20	1	Bottom cover	Ductile Iron	GGG 50	2789-73 Gr. 500/7	1693 GGG-50
21	1	Bottom cover cap	Ductile Iron	GGG 50	2789-73 Gr. 500/7	1693 GGG-50
22	1	Bottom cover retainer	Ductile Iron	GGG 50	2789-73 Gr. 500/7	1693 GGG-50
23	1	Key-gb	Steel	-	-	-
24	1	Spur gb body	Cast Iron	GG 25	1452-61 Gr. 17	1691 GG-25
25	1	Spur gear4	Steel	C1050	080 M 46	-
26	1	Spur gear2	Steel	C1050	080 M 46	-
27	1	Spur gear3	Steel	C1050	080 M 46	-
28	2	Bearing on Spur gear 1	High strength carbon chromium steel	-	-	-
29	1	Spur gear1	Steel	C1050	080 M 46	-
30	1	Spur gb cover	Cast Iron	GG 25	1452-61 Gr. 17	1691 GG-25
31	1	Arrow	Cast Iron	GG 25	1452-61 Gr. 17	1691 GG-25
32	1	Distance ring	Bronze	Rg5	1400 LG2	1705 G-CuSn5ZnPb
33	1	Pin	Stainless Steel	X20Cr13	970/4-70 420 S37	17440
34	1	Bearing2-gb	Bronze	Rg5	1400 LG2	1705 G-CuSn5ZnPb



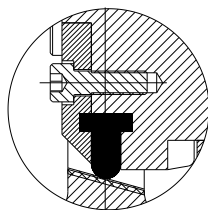
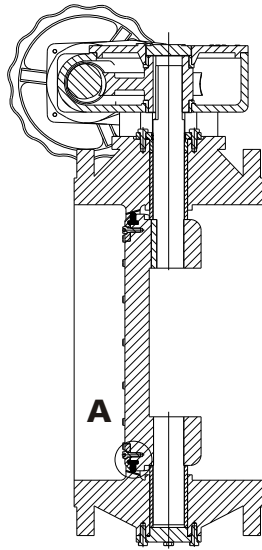
Worm Gearbox - TK

No	Description	Material	Standard
1	Body	Cast Iron	GG 25
2	Bearing	Bronze	Rg 5
3	Helical Gear	Steel	C 1050
4	Worm Gear	Ductile Iron	GGG 50
5	Roller Bearings on Helical Gear	-	-
6	Limiting Nut	Ductile Iron	GGG 50
7	Bottom Cover	Ductile Iron	GGG 50
8	Setting Cap	Ductile Iron	GGG 50
9	Bottom Cover Retainer	Ductile Iron	GGG 50
10	Bolt of Bottom Cover	Steel	8.8 - Galvanised
11	Front Cover	Cast Iron	GG 25
12	Bolt of Front Cover	Steel	8.8 - Galvanised
13	Arrow	Cast Iron	GG 25
14	Bolt of Arrow	Steel	8.8 - Galvanised
15	Top Cover	Cast Iron	GG 25
16	Bolt of Top Cover	Steel	8.8 - Galvanised
17	Key of Helical Gear	Steel	C 1050
18	Key of Worm Gear	Steel	C 1050
19	Connection to Valve	Steel	8.8 - Galvanised
34	Handwheel	Cast Iron	GG 25



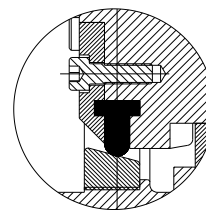
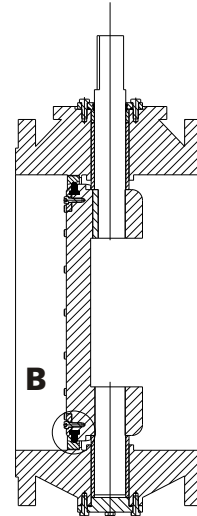
Spur Gearbox - TKS (used for additional gearing)

No	Description	Material	Standard
20	Spur Gear Box Body	Cast Iron	GG 25
21	Bolt for Connection to TK	Steel	8.8 - Galvanised
22	Gear for Transition to TK	Steel	C 1050
23	Pin	Stainless Steel	X20Cr13
24	Bearing	Bronze	Rg 5
25	Ratio Gear (small)	Steel	C 1050
26	Ratio Gear (big)	Steel	C 1050
27	Roller Bearing	-	-
28	Action Gear	Steel	C 1050
29	Distance Ring	Bronze	Rg 5
30	Spur Top Cover	Cast Iron	GG 25
31	Bolt of Spur Top Cover	Steel	8.8 - Galvanised
32	Bearing on Top Cover	-	-
33	Key of Action Gear	Steel	C 1050



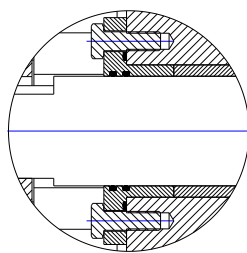
Detail A

**Welded stainless steel seat
and sealing system for disc**



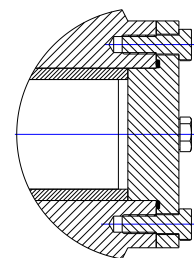
Detail B

**Screwed bronze seat
and sealing system for disc**



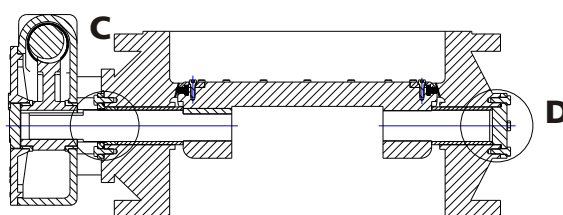
Detail C

Sealing system at open end



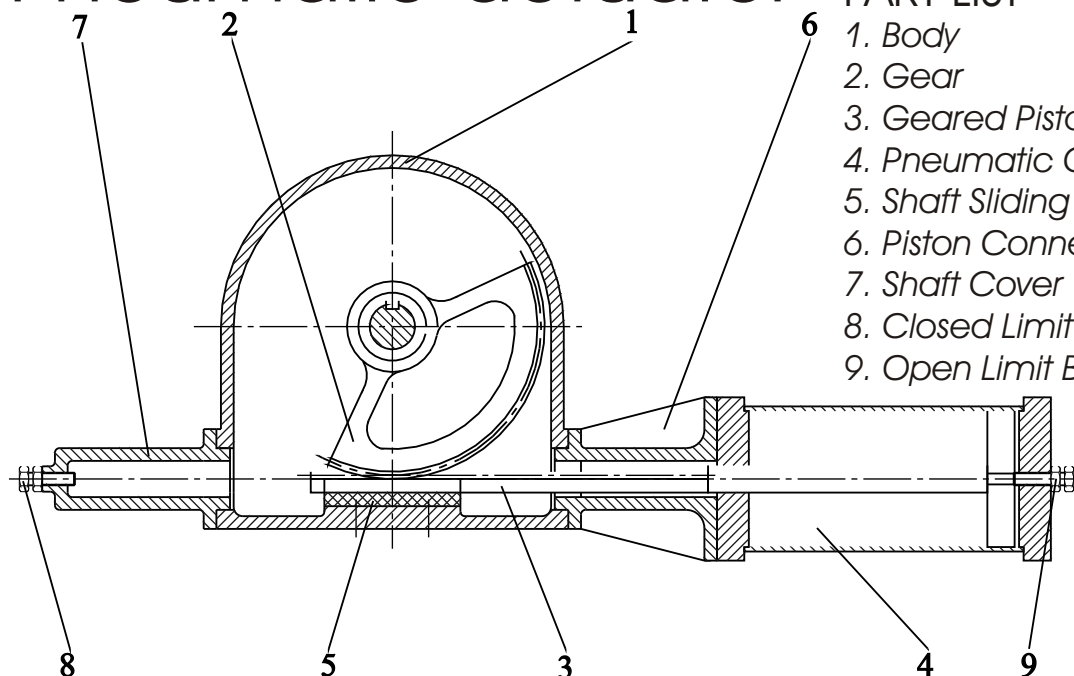
Detail D

Sealing system at blind end



VALVE ACTUATION

Pneumatic actuator



PART LIST

1. Body
2. Gear
3. Geared Piston Shaft
4. Pneumatic Cylinder-Piston Group
5. Shaft Sliding Piece
6. Piston Connection
7. Shaft Cover
8. Closed Limit Bolt
9. Open Limit Bolt

Connection Flange	Piston Dia. (mm)			Torque at 3 bar air pressure (daNm)			Torque at 6 bar air pressure (daNm)		
	PI	P II	P III	PI	P II	P III	PI	P II	P III
10	63	70	90	7,95	9,84	16,23	15,9	19,68	32,46
12	70	90	150	13,86	22,92	63,63	27,72	45,84	127,26
14	90	150	180	27,51	76,35	109,95	55,02	152,7	219,9
16	150	180	200	86,97	125,22	154,59	173,94	250,44	309,18
25	180	200	250	152,7	188,52	294,54	305,4	377,04	589,08
30	200	250		265,8	415,29		531,6	830,58	

- * Our Pneumatic Operated Gear-box is suitable for open-close action of valves under low differential pressure.
- * It is ideal for continuous flow control in Automatic Control Systems.
- * For higher torque requirements, up to 10 bar max. air pressure could be applied.
- * Suitable for applications with or without lubrication by Nitrilic rubber compound sealing.
- * Connection flange according to ISO 5211-F Series (see table).