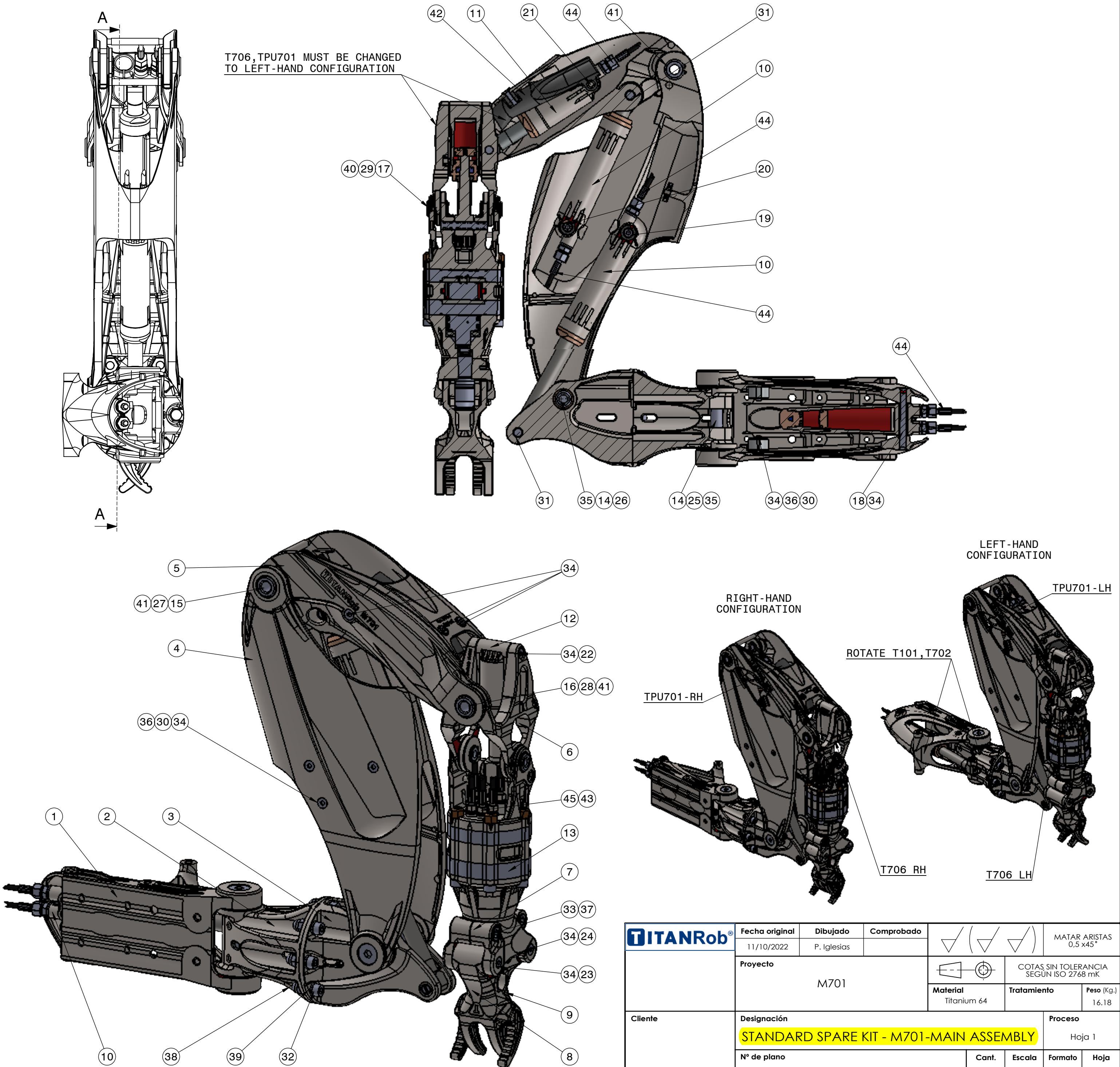


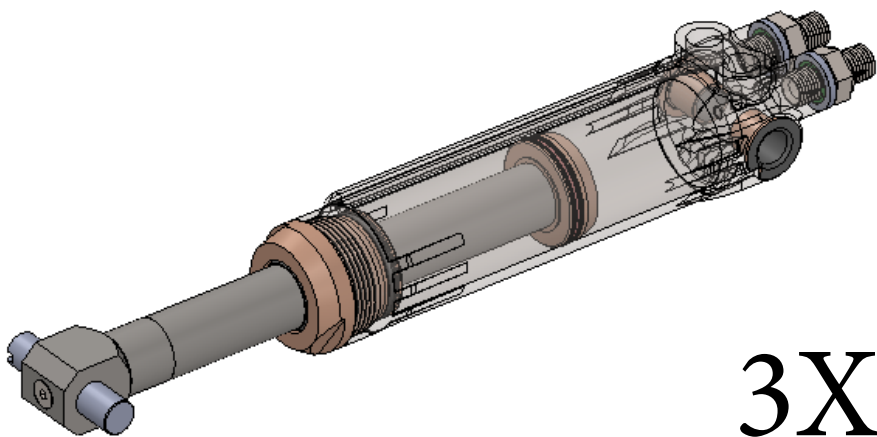
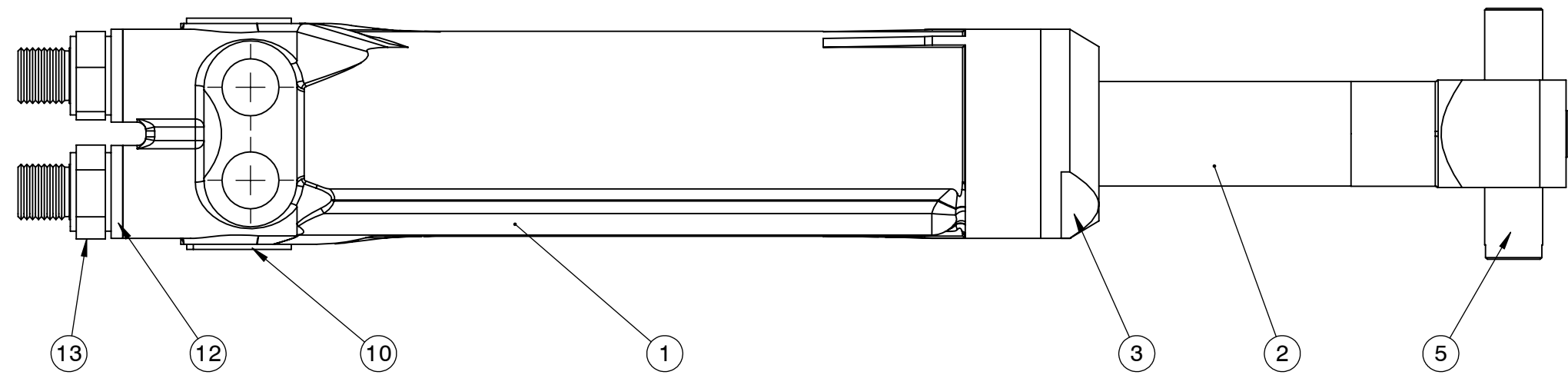
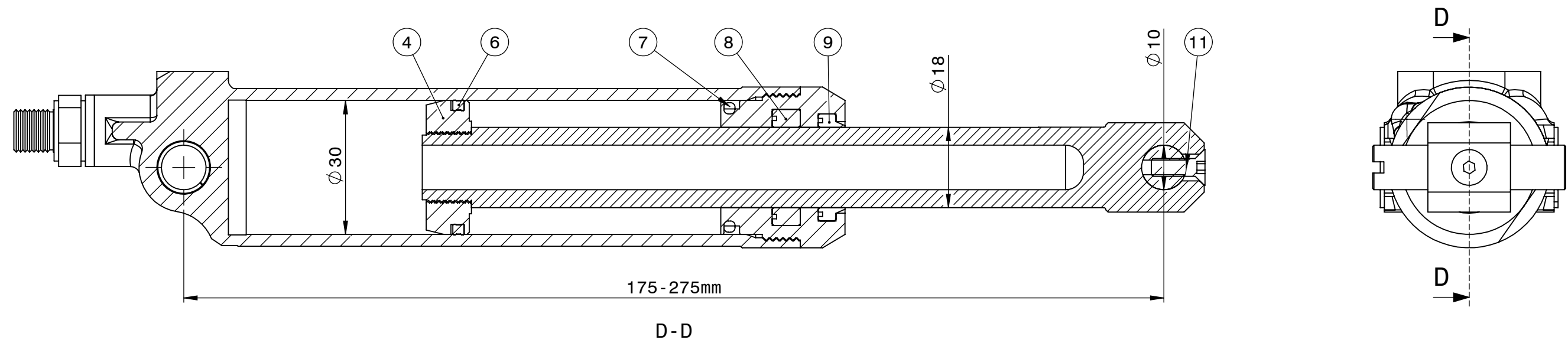
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ITEM	REF.	DESCRIPTION	QTY.
1	T101	SUPPORTING BASE	
2	T702	YAW FLANGE	
3	T703	PITCH FLANGE	
4	T704	UPPER ARM	
5	T705	FOREARM	
6	T706 RH	WRIST PITCH FLANGE - RH	
7	T711	JAW BODY	
8	T712	NARROW JAW	
9	T713	WIDE JAW	
10	3053.14.000-100	CYLINDER MAIN ASSY.	
11	3055.14.000-200	WRIST PITCH CYLINDER	
12	3055.14.000-300	WRIST YAW CYLINDER	
13	3055.14.000-400	JAW ACTUADOR ASSEMBLY	
14	A316-102-D20L105	YAW SHAFT N°1 & N°2	
15	A316-703 D20L29	PITCH SHAFT N°3	
16	A316-704 D20L24	WRIST PITCH SHAFT N°4	
17	A316-705 D16L26	WRIST YAW SHAFT N°5	
18	A316-101-D10L67	SHAFT CYL.N°1	
19	A316-706 D10L90	SHAFT CYL. N° 2	
20	A316-707 D10L67	SAFT CYL. N°3	
21	T717	SHAFT CYL. N°4	
22	A316-708 D10L58	SHAFT CYL. N°5	
23	CU202-D10L58	NARROW JAW SHAFT	
24	CU203-D10L68	WIDE JAW SHAFT	
25	CU701	BRONZE BUSH N°1	
26	CU702	BRONZE BUSH N°2	
27	CU703	BRONZE BUSH N°3	
28	CU704	BRONZE BUSH N°4	
29	CU705	BRONZE BUSH N°5	
30	3053.14.000-304-R01	ANODE Ø24	4
31	673.152	CUSHION DUB 10-12-18-12	6
32	DIN 912 M8x20	ALLEN BOLT M8x20	
33	DIN 912 M10x45	ALLEN BOLT M10x45	
34	DIN 7991 M6x20	COUNTERSUNK BOLT M6x20	4
35	DIN 7991 M12x20	COUNTERSUNK BOLT M12x20	
36	DIN 934 M6	M6 NUT	
37	DIN 934 M10	M10 NUT	
38	DIN 1587 M8	ACORN NUT M8	
39	DIN 127 M8	LOCK WASHER M8	
40	DIN 471 D16	CIRCLIP Ø16	2
41	DIN 471 D20	CIRCLIP Ø20	4
42	TPU701-RH_R01	HOSE GUIDE - RIGHT HAND CONFIG.	
43	C-XAM490006	BONDED WASHER M6 AISI316	
44	HOSE GAS-JIC	DN2 HOSE - 1/8" BSPP FEM. SWIVEL	1
45	HOSE M6-JIC	DN2 HOSE - M6 MALE FITTING	1



ITANRob®	Fecha original	Dibujado	Comprobado	MATAR ARISTAS 0,5 x45°	
	11/10/2022	P. Iglesias			
	Proyecto	M701		COTAS SIN TOLERANCIA SEGUN ISO 2768 mK	
		Material Titanium 64	Tratamiento	Peso (Kg.) 16.18	
Cliente	Designación			Proceso	
	STANDARD SPARE KIT - M701-MAIN ASSEMBLY			Hoja 1	
	Nº de plano		Cant.	Escala	Formato Hoja
3055.14.000-000 SPARES		-	1:5	A2	1 de 1

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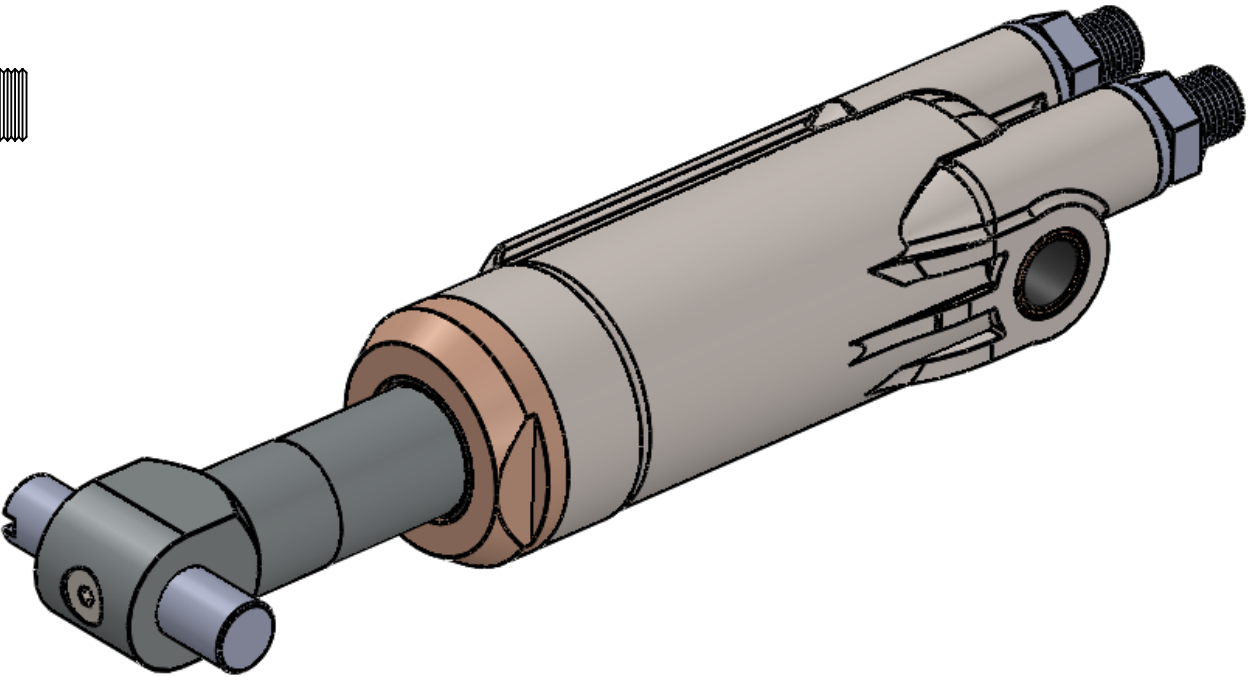
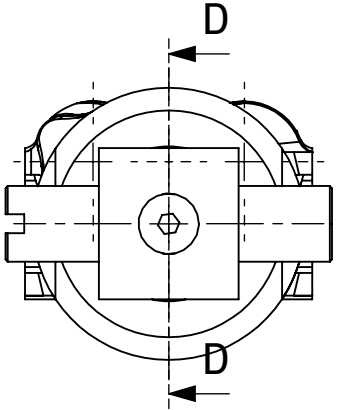
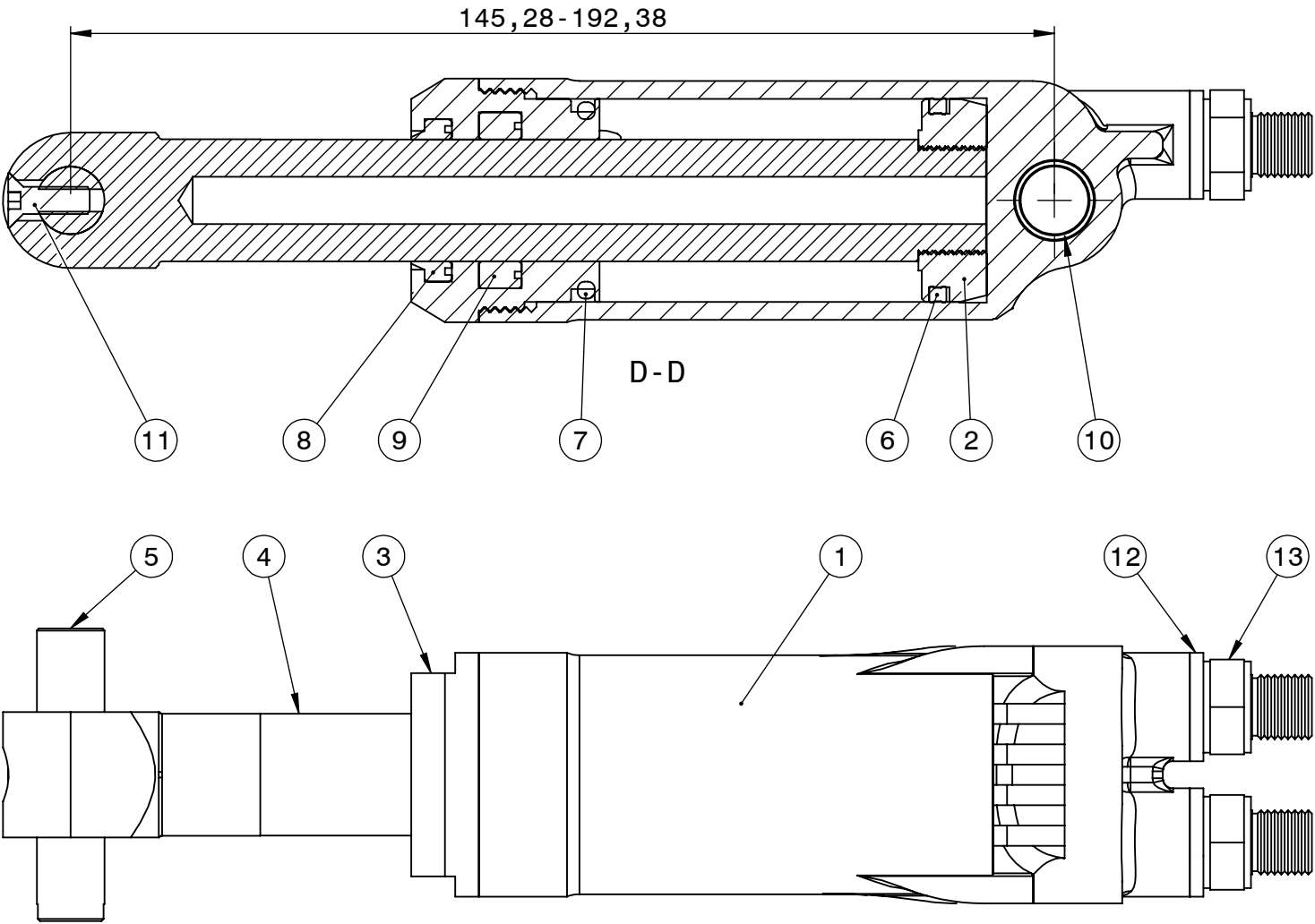


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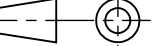
ITEM	REF.	DESCRIPTION	QTY.
1	T110	CYLINDER BODY Ø30X100	
2	T118	PISTON ROD Ø18x100	
3	CU110	CYLINDER HEAD	
4	CU111	PISTON Ø30	
5	A316-110-D10L43	ROD PIN	
6	3053.14.000-310	PISTON SEAL PU88 Ø30	3
7	472.147	O-RING 24 x 2,5	3
8	640.326	ROD SEAL Ø18	3
9	337.847	WIPER SEAL Ø18	3
10	673.152	CUSHION DUB 10-12-18-12	6
11	DIN 7991 M4x12 A4	COUNTERSUNK BOLT M4X12	3
12	C-XAM480002	BONDED WASHER G1/8" AISI316	6
13	C-XRC60180202	FITTING BSPP 1/8" M-M AISI316	6

	Fecha original	Dibujado	Comprobado	☒ (☒ ☒)		MATAR ARISTAS 0,5 x45°	
	21/09/2022	P. Iglesias					
	Proyecto					COTAS SIN TOLERANCIA SEGÚN ISO 2768 mK	
	M701 - G501 - M501			Material	Tratamiento	Peso (Kg.) 0.70	
Cliente	Designación					Proceso	
	STANDARD SPARE KIT - CYLINDER MAIN ASSY.					Hoja 1	
Nº de plano				Cant.	Escala	Formato	Hoja
3053.14.000-100 SPARES				-	1:1	A3	1 de 1

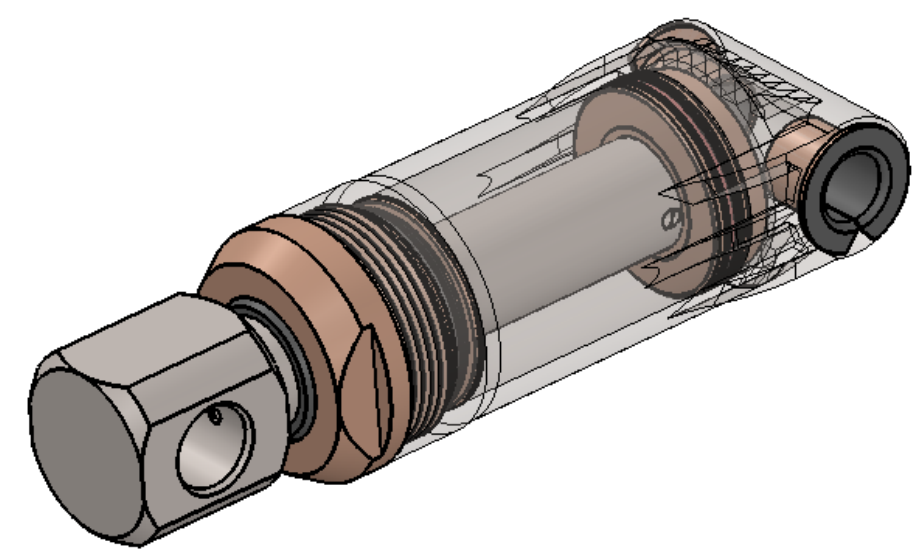
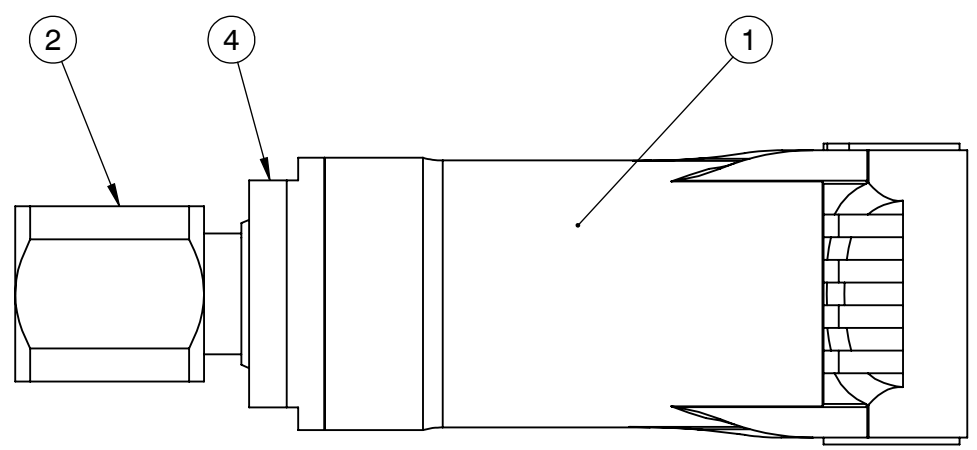
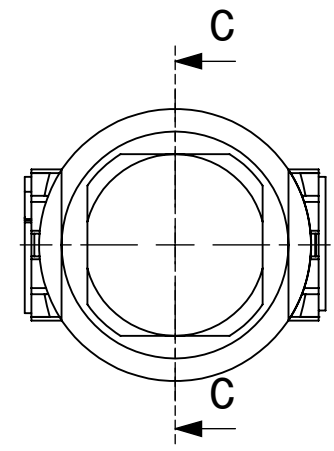
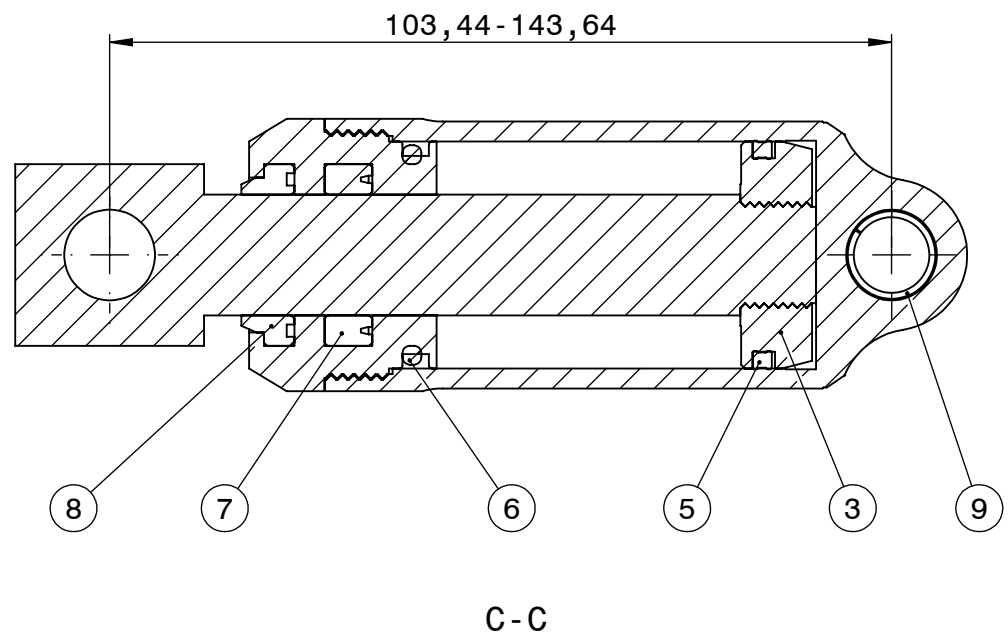
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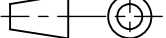
ITEM	REF.	DESCRIPTION	QTY.
1	T714	CYLINDER BODY Ø30X100	
2	CU111	PISTON Ø30	
3	CU110	CYLINDER HEAD	
4	A316-712	PISTON ROD	
5	A316-110-D10L43	ROD PIN	
6	3053.14.000-310	PISTON SEAL PU88 Ø30	1
7	472.147	O-RING 24 x 2,5	1
8	337.847	WIPER SEAL Ø18	1
9	640.326	ROD SEAL Ø18	1
10	594.341	CUSHION DUB 10-12-10	2
11	DIN 7991 M4x12 A4	COUNTERSUNK BOLT M4X12	1
12	C-XAM480002	BONDED WASHER G1/8"	2
13	C-XRC60180202	AISI316 FITTING BSPP 1/8" M-M	2

	Fecha original	Dibujado	Comprobado				MATAR ARISTAS 0,5 x45°	
	04/10/2022	P. Iglesias						
	Proyecto M701					COTAS SIN TOLERANCIA SEGÚN ISO 2768 mK		
				Material		Tratamiento		Peso (Kg.) 0.61
Cliente	Designación STANDARD SPARE KIT-WRIST PITCH CYLINDER						Proceso Hoja 1	
	Nº de plano 3055.14.000-200 SPARES			Cant. -	Escala 1:1	Formato A3	Hoja 1 de 1	

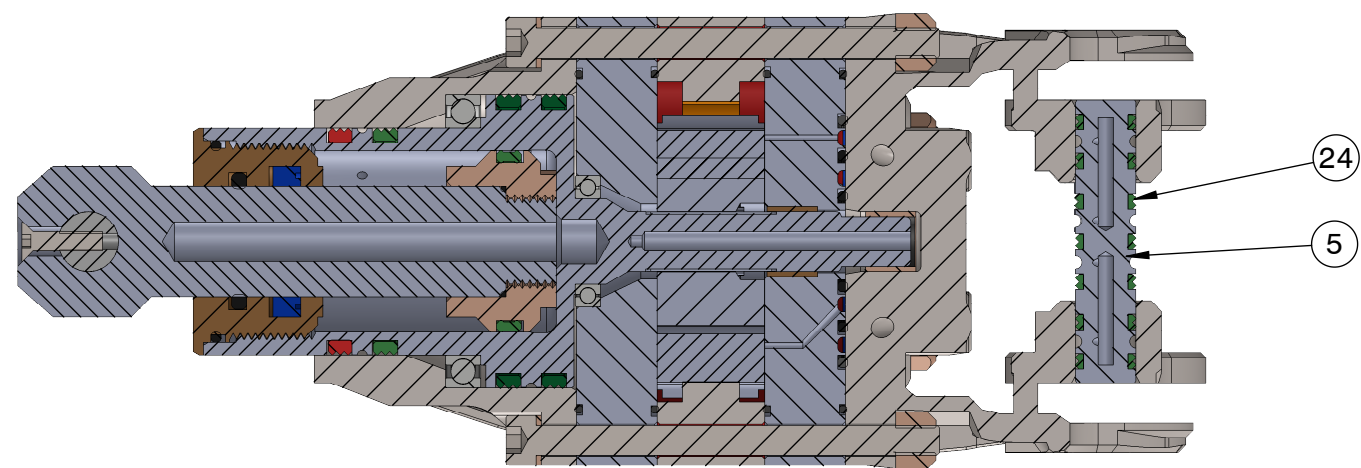
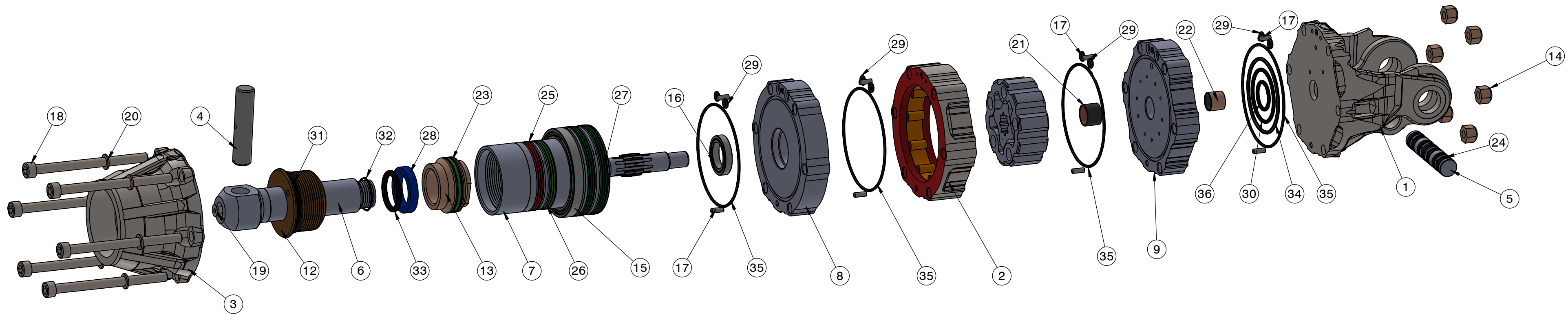
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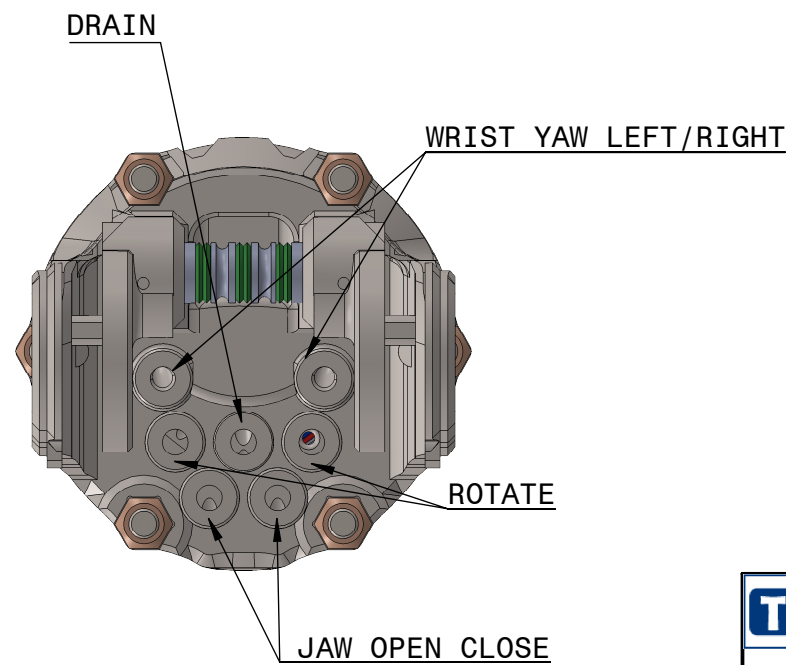
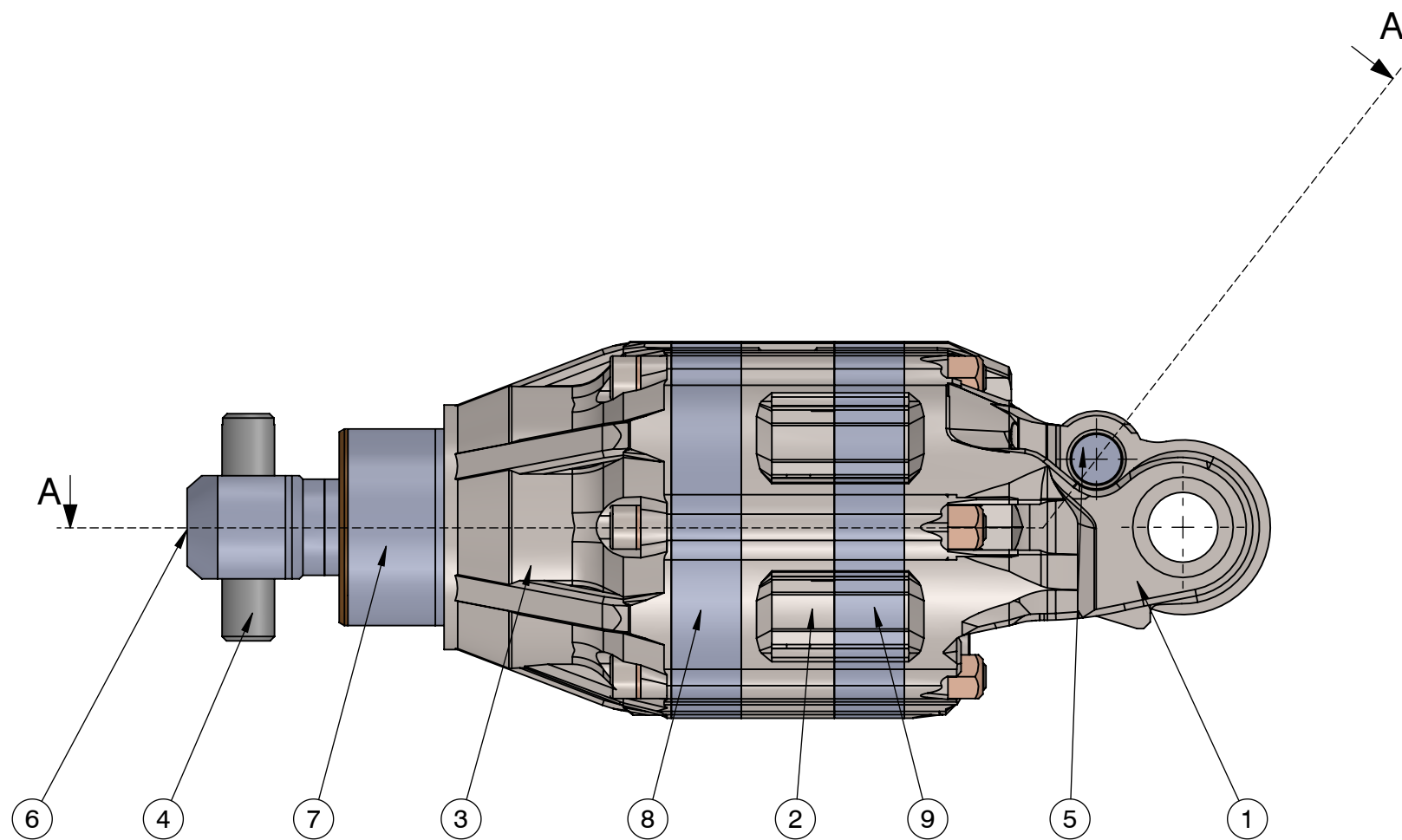
ITEM	REF.	DESCRIPTION	QTY.
1	T715	CYLINDER BODY Ø30X40	
2	T716	PISTON ROD Ø16X40	
3	CU707	PISTON Ø30 M14	
4	CU706	CYLINDER HEAD	
5	3053.14.000-310	PISTON SEAL PU88 Ø30	1
6	472.147	O-RING 24 x 2,5	1
7	504.050	ROD SEAL Ø16	1
8	647.935	WIPER SEAL Ø16	1
9	673.152	CUSHION DUB 10-12-18-12	2

TITANRob®	Fecha original	Dibujado	Comprobado	N8 / ( ( ())		MATAR ARISTAS 0,5 x45°	
	04/10/2022	P. Iglesias					
	Proyecto					COTAS SIN TOLERANCIA SEGUN ISO 2768 mK	
	M701					Material	Tratamiento
				-			0.38
Cliente	Designación					Proceso	
	STANDARD SPARE KIT - WRIST YAW CYLINDER					Hoja 1	
	Nº de plano			Cant.	Escala	Formato	Hoja
	3055.14.000-300 SPARES			-	1:1	A3	1 de 1

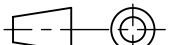
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A-A (1 : 1.5)



ITEM	REF .	DESCRIPTION	QTY .
1	T707 - R06	WRIST FLANGE	
2	T708 - R06	GEROTOR COVER	
3	T710 - R06	WRIST COVER	
4	A316-212	ROD PIN	
5	A316-709 D12L56 R02	WRIST YAW PIN	
6	T719	ROD Ø22	
7	A316-711 - R03	CYLINDER JAW BODY	
8	A316-719 - R02M6	FRONT MOTOR COVER	
9	A316-720 - R01M6	REAR MOTOR COVER	
10	HS703 - R02	GEROTOR BODY	
11	HS704	GEROTOR ROTOR	
12	CU231	CYLINDER HEAD	
13	CU708	PISTON Ø36	
14	CU710 - R01M6	M6 NUT	6
15	61809-45587	BEARING Ø45-Ø58-7	1
16	61803-17265	BEARING Ø17-Ø26-5	1
17	DIN 7 3x8	PIN Ø3X8	8
18	DIN 912 M6x80	ALLEN BOLT M6X80 TI	6
19	DIN 7991 M4x16	COUNTERSUNK BOLT M4x16	1
20	552.521	COPPER WASHER 6-10-1	6
21	672.915	CUSHION DUB 12-14-10	1
22	594.341	CUSHION DUB 10-12-10	1
23	3054.14.000-307	PISTON SEAL PU88 Ø36	1
24	M700C - PU002	CYLINDER PIN ROT SEAL	7
25	PU003	ROT SEAL PU88 Ø45	1
26	3054.14.000-306	ROT SEAL PU88 Ø45	1
27	M700C - PU001	SEAL ROT PU88 Ø58	2
28	640.326	ROD SEAL Ø22	1
29	340.653	O-RING 2,5 x 2	8
30	596.999	O-RING 32 x 2	1
31	342.415	O-RING 34 x 2	1
32	345.023	O-RING 20 x 1	1
33	424.339	O-RING 21 x 3	1
34	308.023	O-RING 46x2	1
35	430.919	O-RING 65x1,5	4
36	463.828	O-RING 16 x 2	1

	Fecha original	Dibujado	Comprobado	  		MATAR ARISTAS 0,5 x45°	
	16/12/2025	P. Iglesias					
	Proyecto M701					COTAS SIN TOLERANCIA SEGÚN ISO 2768 mK	
				Material Titanium 64/ AISI 316/ CuNiAl		Peso (Kg.)	
	Cliente	Designación JAW ACTUATOR ASSEMBLY					Proceso Hoja 1
	Nº de plano 3055.14.000-400			Cant.	Escala	Formato	Hoja
				-	1:2	A2	1 de 1



TITANROB TECHNOLOGIES
STANDARD SPARE KIT-HYDRAULIC HOSE LIST

Equipment	M701 Manipulator	Ref.	3055.14.000
S/N	M701 011	Date	1 NOVEMBER 2025
Assembly	HYDRAULIC HOSES	Revised by	P. IGLESIAS

No.	FUNCTION	Actuator (RIGHT CONFIG)	Valve Pack Port No.	Hose Length (mm)	Manip end Fitting	V Pack end Fitting	Hose Type
1	SHOULDER / ARM Azimuth (Yaw) RIGHT	Retract (RH)	A1	2000	BSPP 1/8" F Swivel	JIC 7/16" F. Swivel	DN2 – TS8552101 00
2	SHOULDER / ARM Azimuth (Yaw) LEFT	Extend (RH)	B1	2000	BSPP 1/8" F Swivel	JIC 7/16" F. Swivel	DN2 – TS8552101 00
3	SHOULDER / ARM Pitch UP	Extend	A2	2840	BSPP 1/8" F Swivel	JIC 7/16" F. Swivel	DN2 – TS8552101 00
4	SHOULDER / ARM Pitch DOWN	Retract	B2	2840	BSPP 1/8" F Swivel	JIC 7/16" F. Swivel	DN2 – TS8552101 00
5	ELBOW / FOREARM Pitch UP	Extend	A3	3040	BSPP 1/8" F Swivel	JIC 7/16" F. Swivel	DN2 – TS8552101 00
6	ELBOW / FOREARM Pitch DOWN	Retract	B3	3040	BSPP 1/8" F Swivel	JIC 7/16" F. Swivel	DN2 – TS8552101 00
7	WRIST / HAND Pitch up	Extend	A4	2990	BSPP 1/8" F Swivel	JIC 7/16" F. Swivel	DN2 – TS8552101 00
8	WRIST / HAND Pitch DOWN	Retract	B4	2990	BSPP 1/8" F Swivel	JIC 7/16" F. Swivel	DN2 – TS8552101 00
9	WRIST / HAND RIGHT	Retract	A5	3360	M6x1 Male	JIC 7/16" F. Swivel	DN2 – TS8552101 00
10	WRIST / HAND LEFT	Extend	B5	3360	M6x1 Male	JIC 7/16" F. Swivel	DN2 – TS8552101 00
11	JAW Rotate CW	Rotate CCW	A6	3360	M6x1 Male	JIC 7/16" F. Swivel	DN2 – TS8552101 00
12	JAW Rotate CWW	Rotate CW	B6	3360	M6x1 Male	JIC 7/16" F. Swivel	DN2 – TS8552101 00
13	DRAIN	N/A	TT	3360	M6x1 Male	JIC 7/16" F. Swivel	DN2 – TS8552101 00
14	JAW CLOSE	Retract	A7	3360	M6x1 Male	JIC 7/16" F. Swivel	DN2 – TS8552101 00
15	JAW OPEN	Extend	B7	3360	M6x1 Male	JIC 7/16" F. Swivel	DN2 – TS8552101 00