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Parameter	Standard Mode	Degraded Mode
Operating Data Clutch		
Supply Voltage (rated)	28 V	
Supply Voltage Range	24 ... 30 V DC	
Rated Current ₁ at rated voltage	1,1 A	
Rated transmittable Torque ₂ at rated voltage (without slippage)	30 Nm	
Operating Temperature	-30 ... +40 °C	
Operating Data Servo <i>(please see datasheet of DA 30-HT-D for more details)</i>		
Supply Voltage (rated)	28 V DC	
Supply Voltage Range	12 ... 32 V DC	
Standby Current ₁ at rated voltage	0,1 A	0,1 A
Rated Current ₁ at rated voltage	4,5 A	2 A
Peak Current ₁ at rated voltage	7,8 A	N.A.
Rated Torque ₁ at rated speed	36,0 Nm	14,0 Nm
Peak Torque ₁ at rated voltage	64,0 Nm	26,0 Nm
No Load Speed ₁ at rated voltage	165 °/s	100 °/s
Rated Speed ₁ at rated torque	115 °/s	75 °/s
Max. Travel Angle ₃	± 160° = 320° total travel	
Backlash (mechanical)	≤ 0,6°	
Position Error under Temperature ₄	≤ ± 1°	
Operating Temperature Range	-30 ... +70 °C	
Storage Temperature Range	-55 ... +85 °C	
Weight ₁	4260 g	

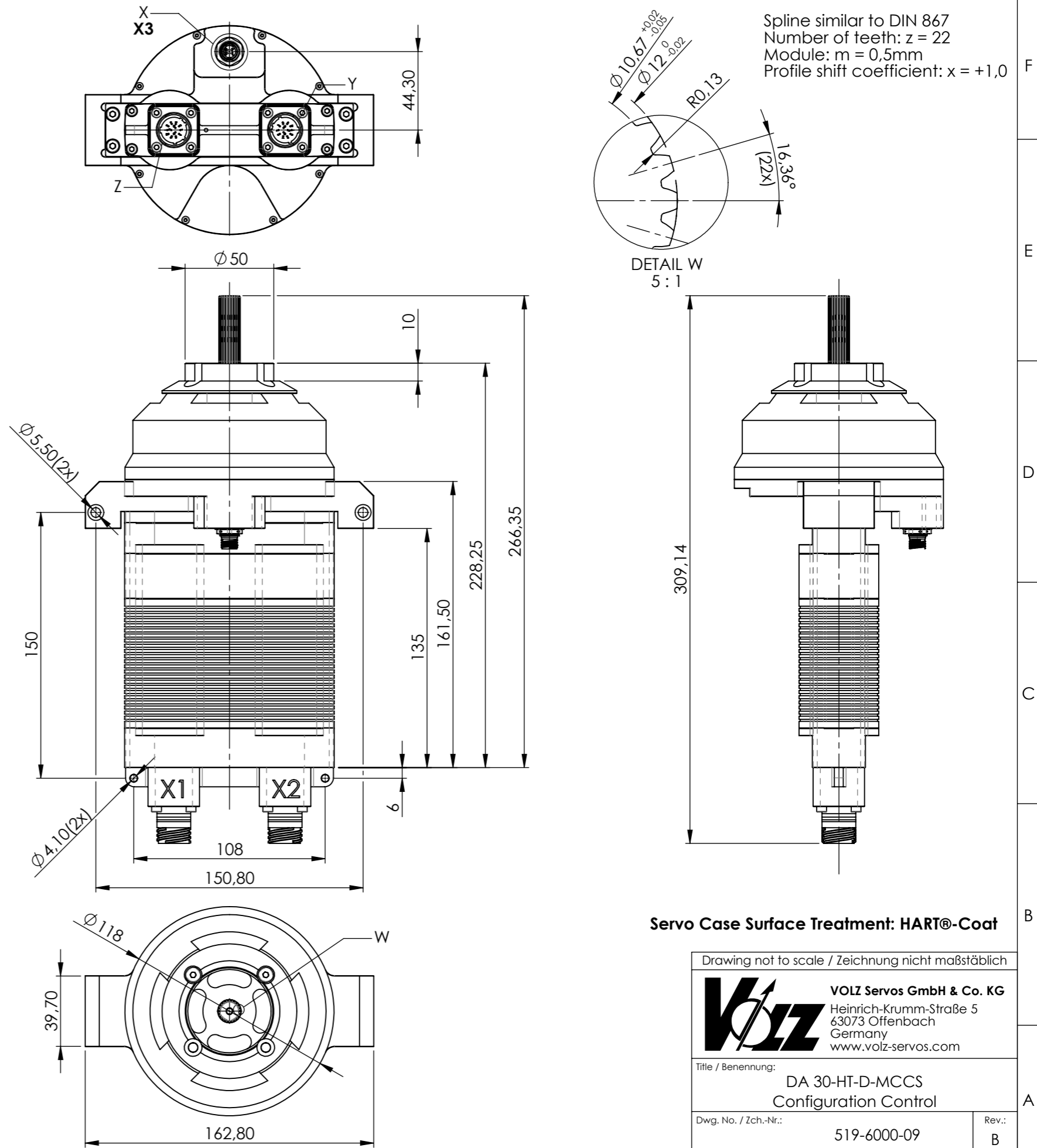
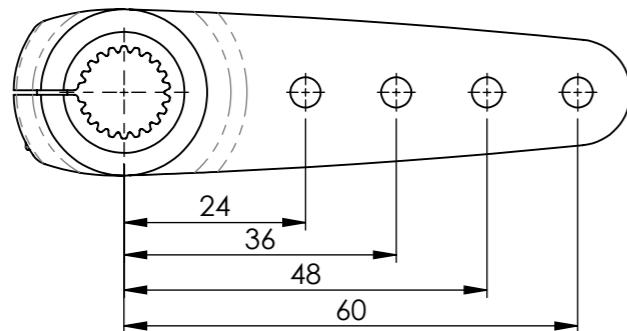
- 1) Tolerance ±10%
- 2) Tolerance ±20%
- 3) without clutch
- 4) -20...+50°C, Δt=70°C

Item No.:

DA 30-HT-D.MCCS.30.5848.3.MIL13

- DA Digital Actuator
- 30 30mm Class
- HT High Torque Version
- D Duplex (redundant) Version
- MCCS Magnetic Clutch, Coaxial Shaft with internal Sensor
- 30 28-32V DC Power Supply
- 5848 Internal Number
- 3 RS 485 Command Interface
- MIL13 38999 13-pin MIL Connector

Standard Servo Arm
1 : 1



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Drawing not to scale / Zeichnung nicht maßstäblich

VOLZ Servos GmbH & Co. KG
Heinrich-Krumm-Straße 5
63073 Offenbach
Germany
www.volz-servos.com

Title / Benennung: DA 30-HT-D-MCCS Configuration Control

Dwg. No. / Zch.-Nr.: 519-6000-09 Rev.: B

Scale / Maßstab: 1:2.5 Sheet / Blatt: 1/2 A3

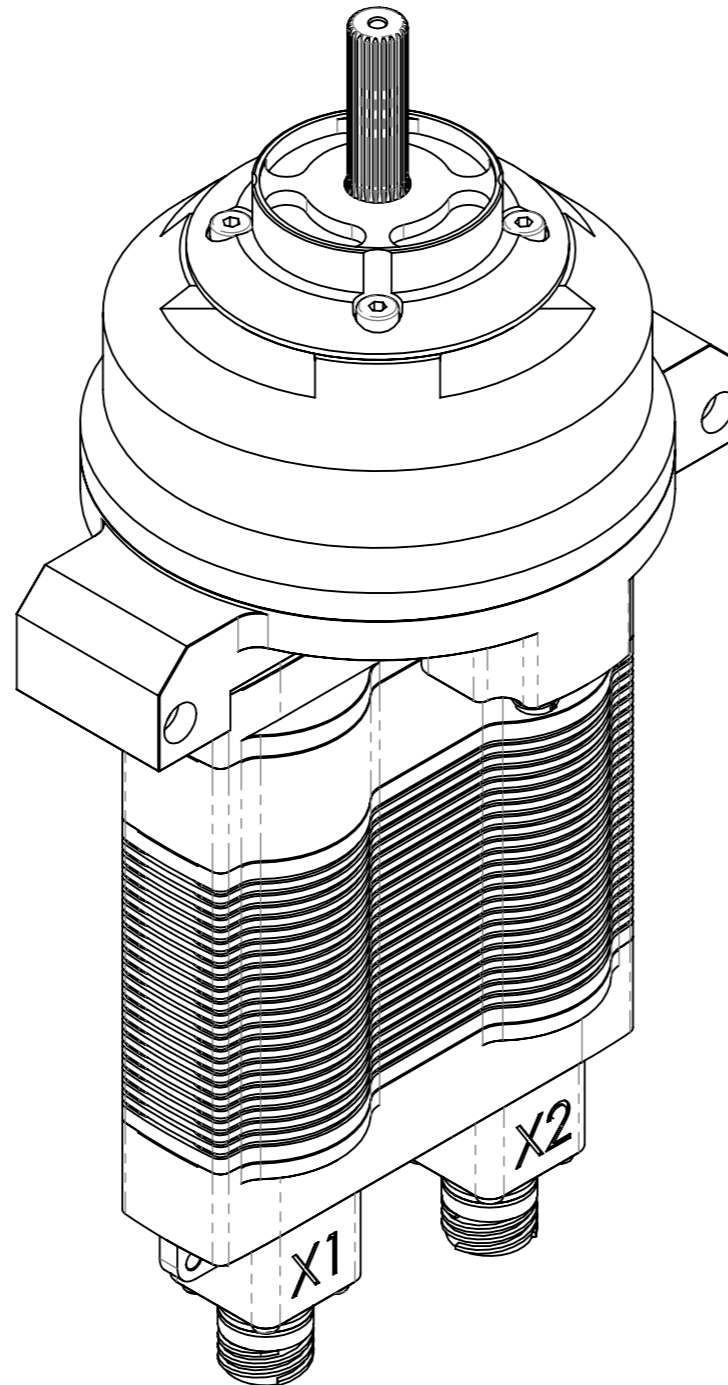
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RS 485 Communication Parameters	
Baudrate 1	115200
No. of Data Bits	8
No. of Stop Bits	2
Parity	None
Data Frame	6 bytes
Max. Frame Rate	100 Frames per second
Signal Polarity	One = High , Zero = Low
Address Range	0x01 ... 0x1E

1) Other baudrate on request

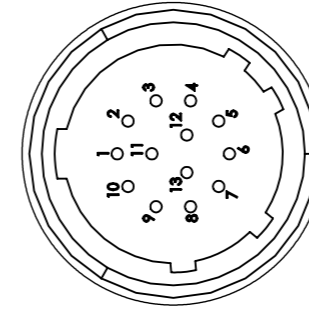
RS 485 Command / Response Frame	
Byte #	Description
1	Command / Response-Code
2	Actuator ID
3	Argument 1
4	Argument 2
5	CRC High Byte
6	CRC Low Byte

Harness Configuration		
connect		to
X3 - Pin 3	→	X1 - Pin 10
X3 - Pin 4	→	X1 - Pin 13



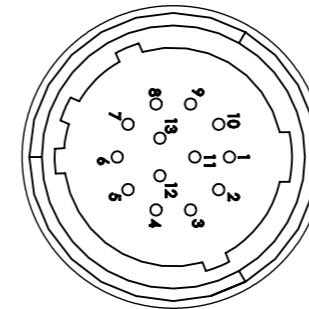
1 : 1.5

Amphenol
38999-20WB35PN
X1



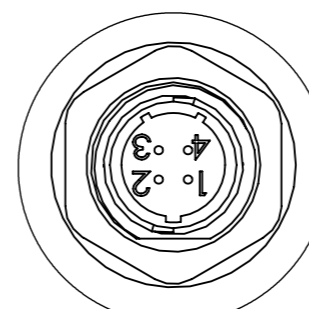
DETAIL Z
2 : 1

Amphenol
38999-20WB35PA
X2



DETAIL Y
2 : 1

Glenair MM
801-009-07M6-4PA
X3




DETAIL X
2 : 1

Pin Assignment		
38999-20WB35PN (Detail Z) - X1		
1	NC	Do not connect
2	PWR_1.1	Power Supply Input 1.1
3	NC	Do not connect
4	COM1_1.1	COM1 A (RS 485)
5	COM1_1.2	COM1 B (RS 485)
6	CASE_GND_1	Case Ground
7	COMi_1.1	COMi A (RS 485) / Do not connect
8	COMi_1.2	COMi B (RS 485) / Do not connect
9	NC	Do not connect
10	PWR_1.2	Power Supply Input 1.2 + Clutch Sense
11	NC	Do not connect
12	GND_1.1	Return, Signal Ground 1.1
13	GND_1.2	Return, Signal Ground 1.2

38999-20WB35PA (Detail Y) - X2		
1	NC	Do not connect
2	PWR_2.1	Power Supply Input 2.1
3	NC	Do not connect
4	COM1_2.1	COM1 A (RS 485)
5	COM1_2.2	COM1 B (RS 485)
6	CASE_GND_2	Case Ground
7	COMi_2.1	COMi A (RS 485) / Do not connect
8	COMi_2.2	COMi B (RS 485) / Do not connect
9	NC	Do not connect
10	PWR_2.2	Power Supply Input 2.2 + Clutch Sense
11	NC	Do not connect
12	GND_2.1	Return, Signal Ground 2.1
13	GND_2.2	Return, Signal Ground 2.2

801-009-07M6-4PA (Detail X) - X3		
1	GND_3	Clutch Engage Return
2	PWR_3	Clutch Engage Power
3	CS	Clutch Sense
4	CS_GND	Clutch Sense Ground

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