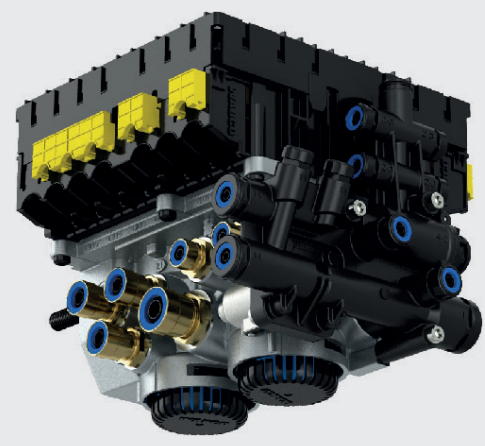


# Trailer EBS E - System Overview

Trailer EBS E Modulator	Product Number	System	Support Mechanical Suspension	Air Suspension Control	Number of GIOs	Pneumatic Extension Module	Quick Connector	Supported Piping	
								Supply	Air Suspension
	480 102 030 0	Standard, 2S / 2M	✗	✗	4	✗	✗	M 22x1.5	M 16x1.5
	480 102 031 0	Standard, 2S / 2M	✗	✗	4	✓ Composite	✓	Ø 16x2	Ø 8x1
	480 102 032 0	Standard, 2S / 2M	✗	✗	4	✗	✓	Ø 15x1.5	M 16x1.5
	480 102 033 0	Standard, 2S / 2M	✗	✗	4	✓ Aluminum	✓	Ø 15x1.5	Ø 8x1
	480 102 034 0	Standard, 2S / 2M	✗	✗	4	✓ Aluminum	✗	M 22x1.5	M 16x1.5
	480 102 035 0	Standard, 2S / 2M	✗	✗	4	✓ Aluminum	✓	Ø 15x1.5	Ø 8x1
	480 102 036 0	Standard, 2S / 2M	✗	✗	4	✓ Composite	✓	Ø 15x1.5	Ø 8x1
	480 102 060 0	Premium, max. 4S / 3M	✓	✓	7	✗	✗	M 22x1.5	M 16x1.5
	480 102 061 0	Premium, max. 4S / 3M	✓	✓	7	✓ Composite	✓	Ø 16x2	Ø 8x1
	480 102 062 0	Premium, max. 4S / 3M	✓	✓	7	✗	✓	Ø 15x1.5	M 16x1.5
	480 102 063 0	Premium, max. 4S / 3M	✓	✓	7	✓ Aluminum	✓	Ø 15x1.5	Ø 8x1
	480 102 064 0	Premium, max. 4S / 3M	✓	✓	7	✓ Aluminum	✗	M 22x1.5	M 16x1.5
	480 102 065 0	Premium, max. 4S / 3M	✓	✓	7	✓ Aluminum	✓	Ø 15x1.5	Ø 8x1
	480 102 066 0	Premium, max. 4S / 3M	✓	✓	7	✓ Composite	✓	Ø 15x1.5	Ø 8x1
	480 102 080 0	Multivoltage, max. 4S / 3M	✓	✓	7	✗	✗	M 22x1.5	M 16x1.5
	480 102 084 0	Multivoltage, max. 4S / 3M	✓	✓	7	✓ Aluminum	✗	M 22x1.5	M 16x1.5

## Standard TEBS E Modulator with Conventional Air Suspension

**Information Sticker ISO 7638**  
813 000 025 3  
**Silver Adhesive Label**  
(Print from Diagnostic Software)  
899 200 922 4

**Supply Coupling Head with Integrated Filter** 1  
952 201 012 0  
952 201 015 0 - With Quick Connector

**Control Coupling Head with Integrated Filter** 2  
952 201 011 0  
952 201 013 0 - With Test Port  
952 201 014 0 - With Quick Connector & Test Port

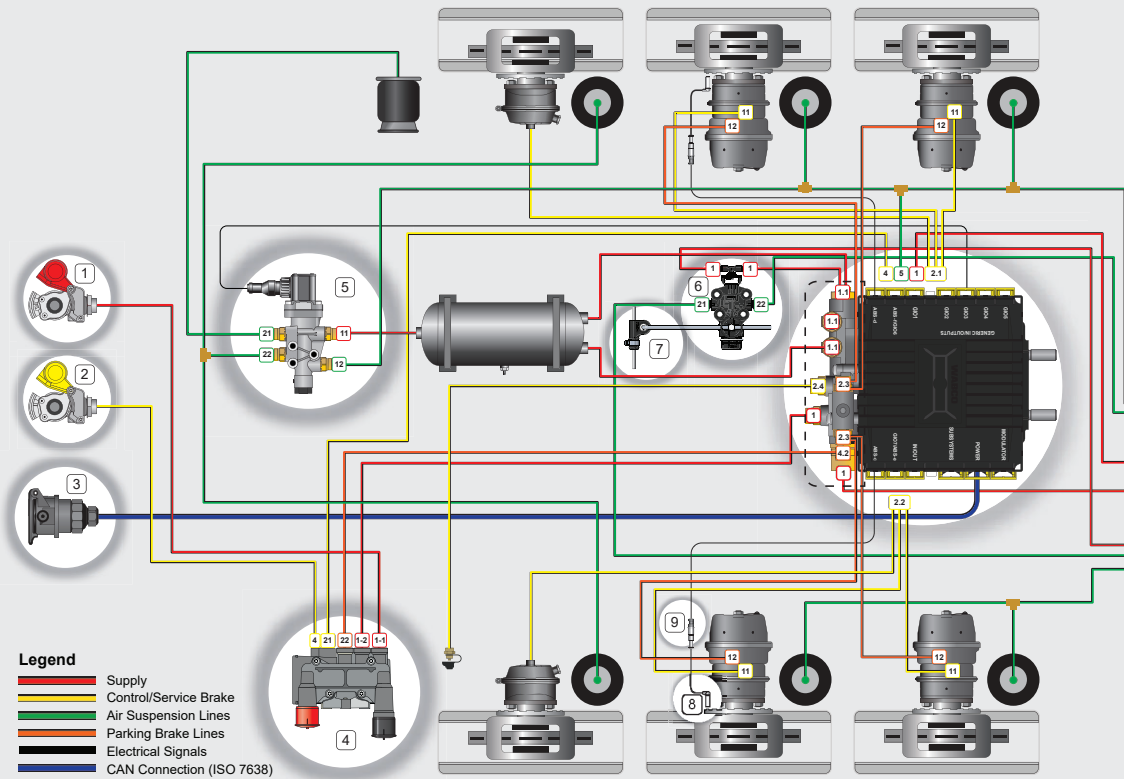
**Power Cable ISO 7638** 3  
449 173 090 0 - 9 m    449 173 140 0 - 14 m  
449 173 100 0 - 10 m    449 173 150 0 - 15 m  
449 173 120 0 - 12 m    449 173 160 0 - 16 m  
449 173 130 0 - 13 m

**Park Release Emergency Valve - PREV** 4  
971 002 900 0 - No Fittings - with Plate  
971 002 902 0  
971 002 910 0 - All Fittings Ø 8x1  
971 002 911 0 - With fittings (3x Ø 8x1 / 2x Ø 10x1)  
971 002 912 0 - All Fittings Ø 8x1 + Plate & Test Port  
971 002 913 0 - With fittings (2x Ø 8x1 / 3x Ø 10x1)

**Operation Plate** - 971 002 103 4

**Lift Axle Control Valve - LACV** 5  
463 084 031 0 - 1-circuit  
463 084 041 0 - 1-circuit with quick connector

**LACV Cable**  
449 443 008 0 - 0.8 m  
449 443 010 0 - 1 m  
449 443 020 0 - 2 m  
449 443 040 0 - 4 m  
449 443 060 0 - 6 m  
449 443 100 0 - 10 m



**Legend**

- Supply
- Control/Service Brake
- Air Suspension Lines
- Parking Brake Lines
- Electrical Signals
- CAN Connection (ISO 7638)

**Rotary Slide Valve** 10  
463 032 020 0 - Dual Circuit  
463 032 023 0 - Single Circuit  
463 032 220 0 - Dual Circuit with Quick Connector  
or  
**Trailer Air Suspension Control - TASC**  
463 090 332 0 - Single Circuit; Ports (1, 21: M 12x1.5; 24: M 16x1.5)  
463 090 315 0 - Dual Circuit; Ports (1, 21, 24: Ø 8x1)  
463 090 313 0 - Dual Circuit; Ports (1, 21: M 12x1.5; 24: M 16x1.5)  
463 090 310 0 - Dual Circuit; Ports (1, 21: Ø 8x1; 24: Ø 12x1.5)

**TASC Cable**  
449 443 008 0 - 0.8 m    449 443 040 0 - 4 m  
449 443 010 0 - 1 m    449 443 060 0 - 6 m  
449 443 020 0 - 2 m    449 443 100 0 - 10 m

**Wheel Speed Sensor** 8  
441 032 808 0 - Type S+ with 0.4 m Cable  
441 032 809 0 - Type S+ with 1 m Cable  
441 032 921 2 - Repair Kit (0.4 m sensor)  
441 032 922 2 - Repair Kit (1 m sensor)  
899 760 510 4 - Sensor Bush

**Cable Extension for Wheel Speed Sensor** 9  
449 723 030 0 - 3 m  
449 723 040 0 - 4 m

**Levelling Valve** 6  
464 006 540 0 - Single Circuit  
464 006 500 0 - Dual Circuit  
464 006 520 0 - Dual Circuit with Height Limitation  
464 006 580 0 - Dual Circuit and Inverted Lever

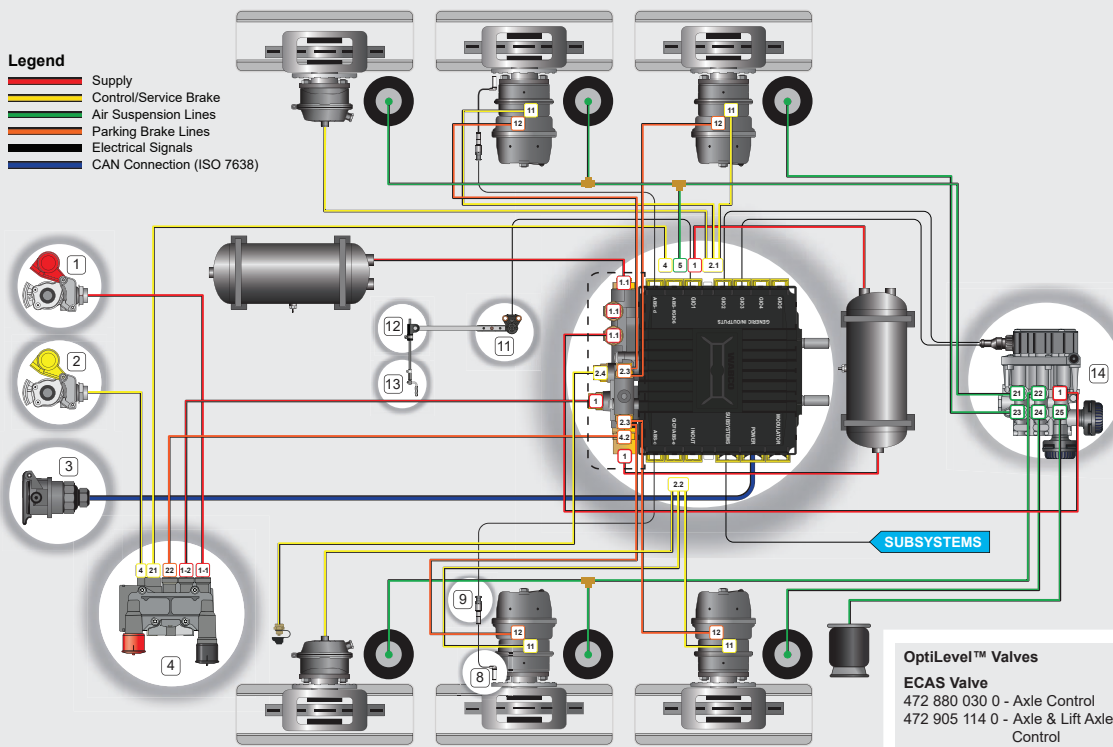
**Lever Linkages - Length 289 mm** 7  
441 050 712 2  
441 906 710 2

**Blind Plugs for PEM and Fittings**  
893 022 001 4 - for Ø 8x1  
893 022 016 4 - for Ø 12x1.5  
893 022 017 4 - for Ø 15x1.5  
893 022 018 4 - for Ø 16x2

## Premium TEBS E Modulator with Electronic Air Suspension OptiLevel™

**Legend**

- Supply
- Control/Service Brake
- Air Suspension Lines
- Parking Brake Lines
- Electrical Signals
- CAN Connection (ISO 7638)



**ECAS / OptiLevel™ Sensor** 11  
441 050 100 0

**OptiLevel™ Sensor Cable**  
449 811 010 0 - 1 m  
449 811 030 0 - 3 m  
449 811 050 0 - 5 m  
449 811 080 0 - 8 m  
449 811 120 0 - 12 m

**Lever** 12  
441 050 718 2

**Linkage** 13  
433 401 003 0

**Lift Axle Control Valve - Impulse Controlled**  
463 084 100 0 - Dual circuit Lift Axle Control

**LACV-IC Cable**  
449 445 010 0 - 1 m  
449 445 030 0 - 3 m  
449 445 050 0 - 5 m  
449 445 060 0 - 6 m

**OptiLevel™ Valves** 14  
**ECAS Valve**  
472 880 030 0 - Axle Control  
472 905 114 0 - Axle & Lift Axle Control  
or  
**eTASC Valve**  
463 090 500 0 - With Quick Connector  
463 090 503 0  
463 090 510 0 - Dead-man Control

**OptiLevel™ Cable**  
449 445 010 0 - 1 m  
449 445 030 0 - 3 m  
449 445 050 0 - 5 m  
449 445 060 0 - 6 m

## SUBSYSTEMS Devices

**SmartBoard**  
446 192 210 0 - Battery Included  
446 192 211 0 - Without Battery

**SmartBoard Cable**  
449 961 040 0 - 4 m  
449 961 060 0 - 6 m  
449 961 120 0 - 12 m

**OptiLink™**  
446 290 700 0

**OptiLink Cable**  
449 963 020 0 - 2 m  
449 963 030 0 - 3 m  
449 963 050 0 - 5 m

**OptiTire™**  
446 220 110 0

**OptiTire Cable**  
449 963 020 0 - 2 m  
449 963 030 0 - 3 m  
449 963 050 0 - 5 m

**ZF Telematics**

1 TX-TRAILERPULSE with Battery  
346 292 000 0

2 TX-TRAILERPULSE  
346 291 000 0

**TX-TRAILERPULSE Cable**  
449 963 020 0 - 2 m  
449 963 050 0 - 5 m

3 TX-TRAILERGUARD  
346 290 000 0

**TX-TRAILERGUARD Cable**  
449 029 050 0 - 5 m

**Control Box**  
446 156 021 0 - Axle Control  
446 156 022 0 - Axle & Lift Axle Control  
446 156 023 0 - Drawbar Axle Control

**Control Box cables**  
449 627 060 0 - 6 m

**Trailer Remote Control**  
446 122 080 0

**Electronic Extension Module**  
446 122 070 0

**TailGUARD™**  
446 122 071 0

## Diagnostics Components

**24 V CAN Diagnosis**

1 Diagnostic Interface 2  
446 301 030 0

2 CAN Diagnostic Cable  
446 300 361 0 - 5 m  
446 300 362 0 - 20 m

3 Diagnostic Cable ISO 7638 CAN 24 V  
446 300 360 0

**5 V CAN Diagnosis**

4 Diagnostic Cable CAN 5 V  
446 300 348 0

5 TEBS E Diagnostic Cable  
449 611 030 0 - 3 m  
449 611 040 0 - 4 m  
449 611 060 0 - 6 m  
449 611 080 0 - 8 m