

7 LABELING INFORMATION (DETAILED INFORMATION IN DOC. 922)

MATERIAL AND SURFACE PROTECTION

I Al JED-029M1 / C JED-259	X CuZn / Ag JED-570-865
II Fe JED-051M4 / Zn/C JED-256-4	XI CuZn / Sn/Pb JED-570-845
III Fe JED-051M4 / Zn/Al JED-378-1	XII Al JED-077-1 / JED-007-1
IV Fe JED-020-1 / Zn/C JED-256-1	XIII JED-050M0
V Al JED-803-2 / C JED-259	XIV Pa 6.6-GF35 JED-359-3
VI Pa 6 JED-426-1	XV
VII Pa 6.6 JED-354-1	XVI Al JED-077-2
VIII Pa 6 JED-557-1	XVII S3755 JED-761.008
IX PBT-GF30 JED-352-9	XVIII S3888 JED-761.008

O-RING-COLOUR : BLACK (63; 65 & 67) ORANGE (62; 64 & 66)

F-F

THREAD PERMISSIBLE	(1) M16	(2) M22
TORQUE ACCORDING TO JED-366	max. 34 Nm	max. 53 Nm

- 4 NECESSARY SOCKET 441 901 316 2
- 5 NECESSARY SOCKET 441 901 314 2
- 6 SEE SHEET : 2/2
- 7 SEE SHEET : 2/2
- 8 SEE SHEET : 2/2

General Specifications: ISO 8015, JED-334-1, Size ISO 14405 LP

Further Technical Data: **480 104 006 R**

Doc. Code: 035 Sheet: 1 To 49

Copyright ZF

Date: 2026-04-28

Signature: Maciejewski

Brand: Maciejewski

Checked: Maciejewski

EBS AXLE MODULATOR

Material No.: 480 104 006 R

Doc. Code: 053 ML 1/2

ECN No.: 522800

Revision: 2 x C

Techn. Resp.: 6840\_RM

Dimensions in mm: 3.0 kg, 1:1

Class 1) < 50 > 50 > 180 > 400

Fine ±0.5 ±1 ±1.5 ±2

Medium ±1 ±2 ±3 ±4 ±3°

Coarse ±2 ±3.5 ±5 ±6.5

Trapped Holes acc. \*\*\*

1) Tolerance Class Applied Crossmarked

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A	DEVICE NUMBER	SOFTWARE STATUS	CONNECTION																APPLICATION	REMARKS
			11	12	4	21	21.2	22	22.2	61	62	63	64	65	66	67	68			
	480 104 001 R	> AMO2R058	X	X	X	X	/	X	/	X	X	X	/	/	/	/	AA 2S 2M	Serial modification		
	480 104 002 R	> AMO2R058	X	X	X	X	X	X	X	X	X	X	/	/	/	/	AA 2S 2M	Serial modification		
	480 104 003 R	> AMO2R058	X	X	/	X	/	X	/	X	X	X	/	/	/	/	AA without Redundancy 2S 2M	Serial modification		
	480 104 005 R	> AMO2R058	X	X	/	X	/	X	/	X	X	X	/	/	X	X	AA without Redundancy 2S 2M 2W	Serial modification		
B	480 104 006 R	> AMO2R058	X	X	X	X	X	X	X	X	X	X	/	/	X	X	AA 2S 2M 2W	Serial modification		
	480 104 007 R (C)	> AMO2R058	X	X	X	X	X	X	X	X	X	X	/	/	X	X	ZA 2S 2M 2W	Serial modification		
	480 104 009 R (C)	> AMO2R058	X	X	X	X	X*	X	X*	X	X	X	/	/	X	X	AA 2S 2M 2W	Serial modification		

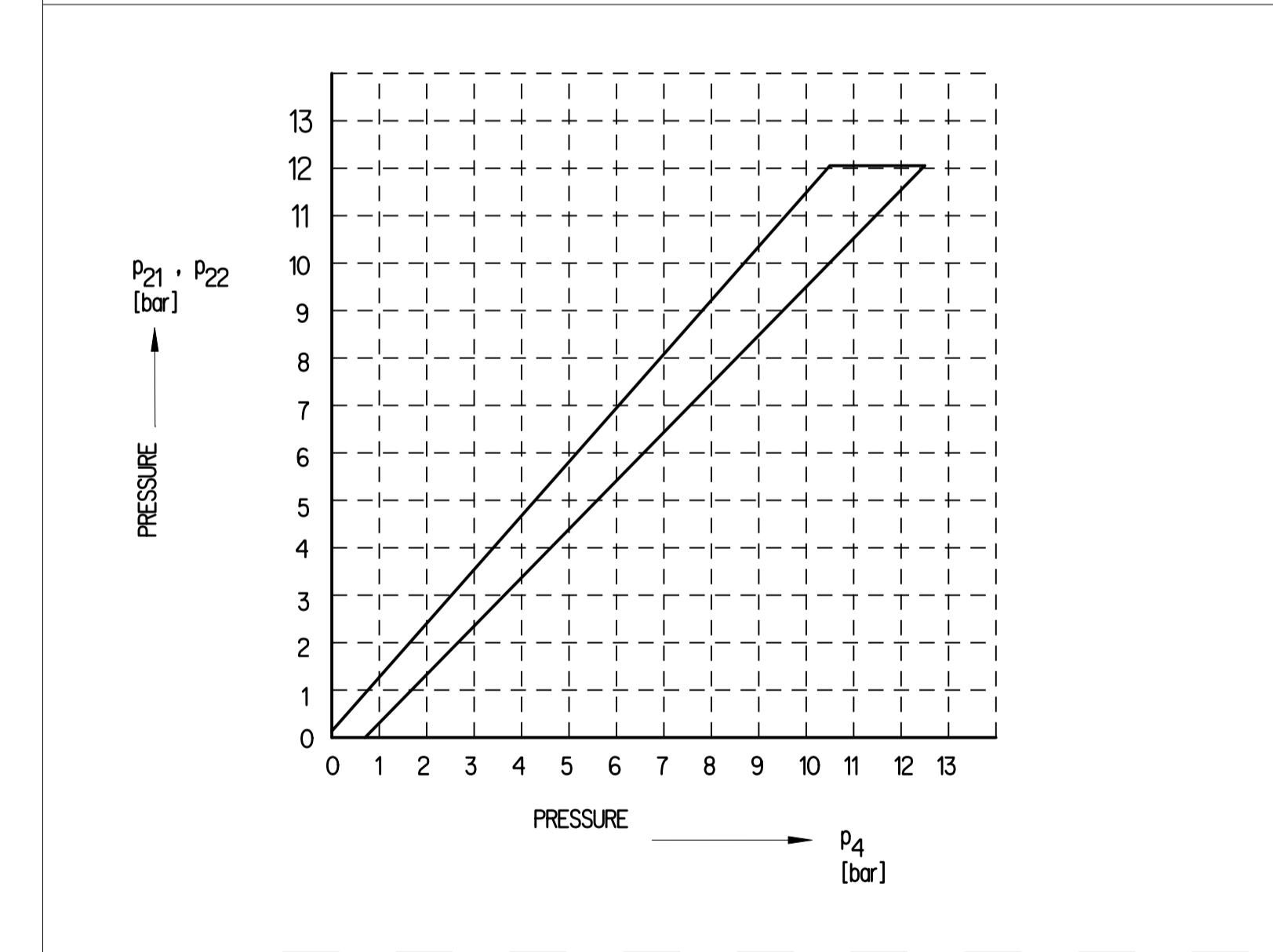
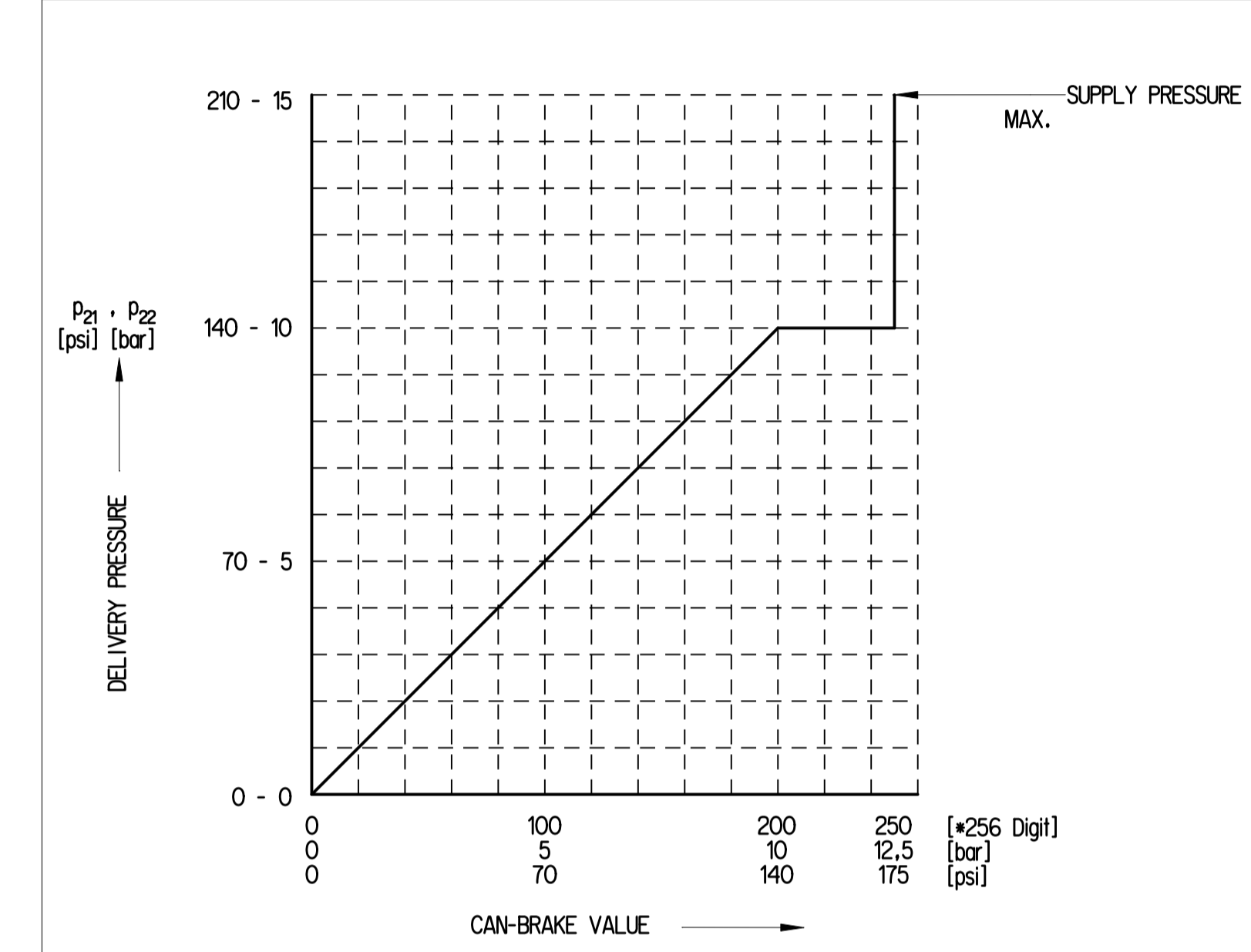
X - USED  
/ - NO USED  
\* - CLOSED

WORKING MEDIUM	AIR (WATER, OIL AND ALCOHOL CONTAINING)
AMBIENT ENVIRONMENT	AIR (CONTAINING WATER, SALT, DUST AND OIL)
THERMAL RANGE OF APPLICATION	-40° ... +80° (SEE PRODUCT SPECIFICATION)
SHORT TERM RESISTANCE TO HEAT (WITHOUT FUNCTION)	MAX. 110°C AT 1h
WORKING PRESSURE (SUPPLY)	$p_e = 12,5 \pm 0,3$ bar
MAX. PERMISSIBLE WORKING PRESSURE (SUPPLY)	$p_e = 15$ bar TEMPORARY WITHOUT FUNCTION
VOLTAGE	24 V $^{+6}_{-9,5}$ TERMINAL 61.1 / 61.2
MAX. CURRENT	10 A / 10 bar ( $p_{21}$ , $p_{22}$ ) DIRECT CURRENT TERMINAL 61.1 / 61.2
DATA TRANSFER (61 / 68)	CAN ACCORDING TO ISO 11898

TYPE OF PROTECTION	
COMPLETE DEVICE WITH MOUNTED COUPLING	IP 6K6K , IP 6K9K
ELECTRIC TERMINALS WITH MOUNTED COUPLING	IP 6K7

DO NOT TOUCH CONNECTOR CONTACTS AND RECEPTACLE CONTACTS	
ALL THE ELECTRIC CONTACTS TO BE PROTECTED BY CAPS / SOCKETS	
TENSION FREE MOUNTING OF THE LINES	
INSPECTION MARK	EMV: e1 031274 (8)
INSTALLATION LIMITATIONS MAX. DEVIATION OF THE DEVICE FROM THE VERTICAL	45° SEE SHEET: 1/2 (7)
SENSITIVE ELECTRONIC DEVICE, TO BE HANDLED WITH THE UTMOST CARE	
ATTENTION: PORT 4 (BACK-UP PORT) SHALL NOT BE CLOSED WITH FILLER PLUG	(6)
HANDLING, STORAGE, PACKAGING, PRESERVATION AND DELIVERY	480 020 000 0 (DOC 035)
FOR FURTHER TECHNICAL DATA SEE PRODUCT SPECIFICATION	480 104 006 R (DOC 035)

PORT		
SIDE A	SIDE B	FUNCTION
11	12	SUPPLY
	4	BACK UP PORT
21 21.2	22 22.2	DELIVERY (DIRECT)
	3	EXHAUST
	61	CAN AND SUPPLY
	61.1 61.2 61.3 61.4	U GROUND CAN HIGH CAN LOW
63	62	WHEEL SPEED SENSOR
63.1 63.2	62.1 62.2	SENSOR HIGH SENSOR LOW
65	64	LINING WEAR SENSOR 2
65.2 65.3 65.1	64.2 64.3 64.1	GROUND SIGNAL SUPPLY
67	66	LINING WEAR SENSOR
67.2 67.3 67.1	66.2 66.3 66.1	GROUND SIGNAL SUPPLY
68		TRAILER CONTROL VALVE
68.1 68.2 68.3		U GROUND SIGNAL
68.4 68.5		SOLENOID HIGH LOW



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Further Technical Data: <b>480 104 006 R</b>		Date	Signature
Doc. Code: <b>035</b>	Sheet: <b>1</b> To <b>49</b>	2026-04-28	Maciejewski
General Tolerances JED-261		Checked	Fizjowski
Range of nominal dimensions in mm			
Class	1)	< 50	> 50 < 180
		> 180 < 400	> 400
Fine		±0,5	±1 ±1,5 ±2 ±3
Medium		±1	±2 ±3 ±4 ±5 ±6
Coarse		±2	±3,5 ±5 ±6,5
Tapped Holes acc. ***			
1) Tolerance Class Applied Crossmarked			
Mass	Scale	Material No.	
3.0	1:1	480 104 006 R	
Size	CAD System	ECN No.	Revision
A1	CREO	522800	2 x C
Date of first issue: <b>2021-10-28</b>		Doc. Code	Language
		053	ML
		2/2	
		EBS AXLE MODULATOR	
		Replacement for	

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