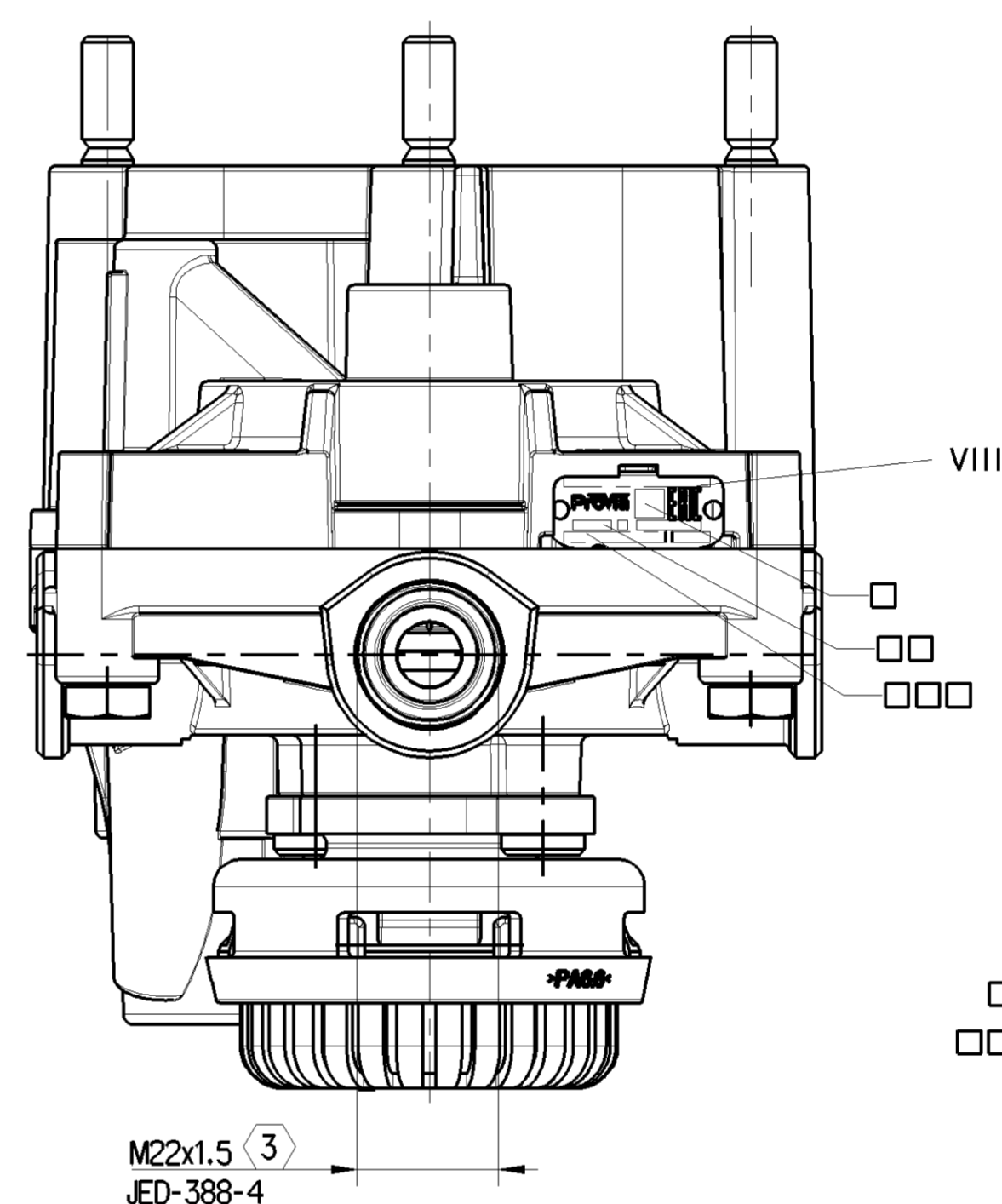
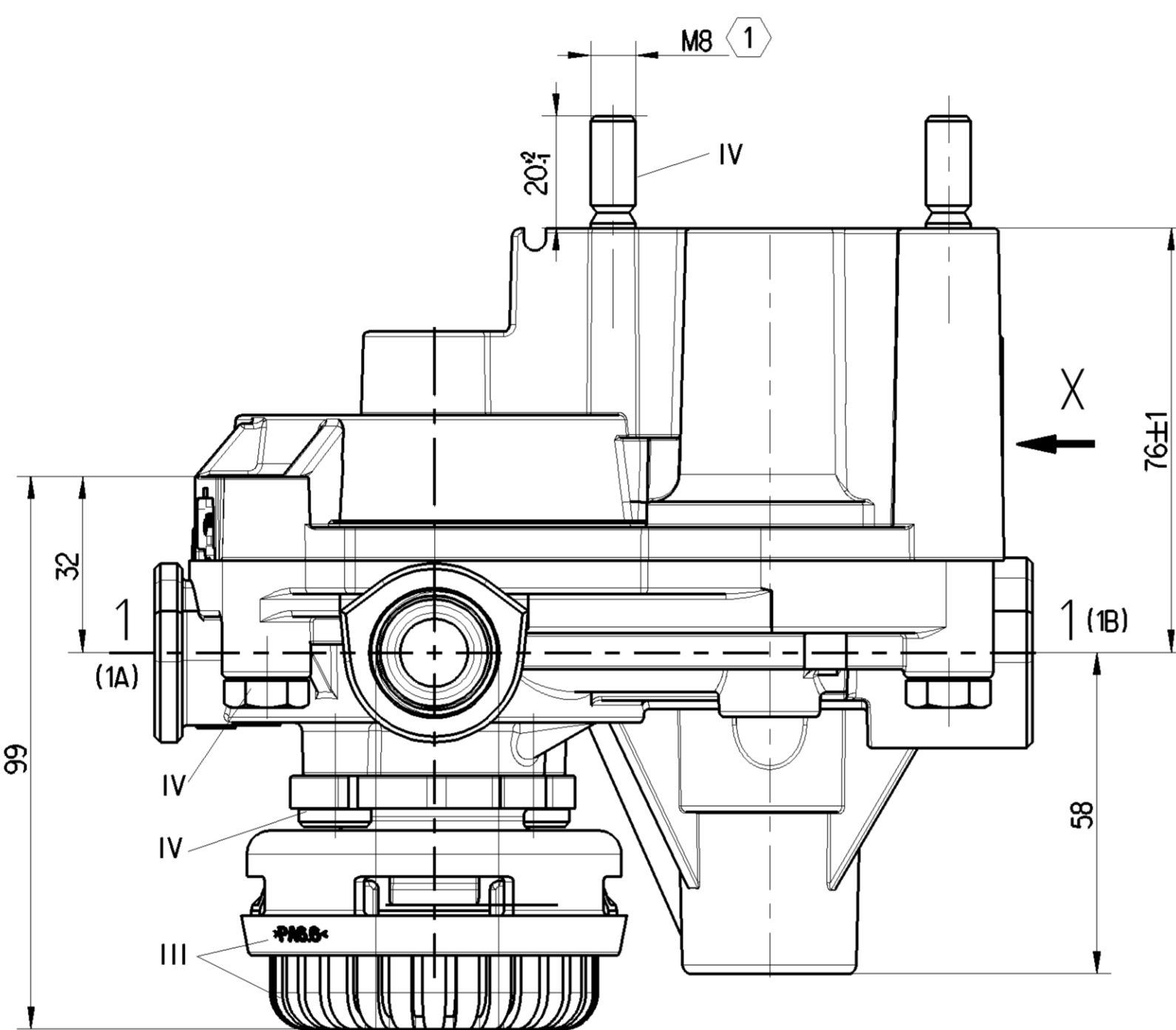
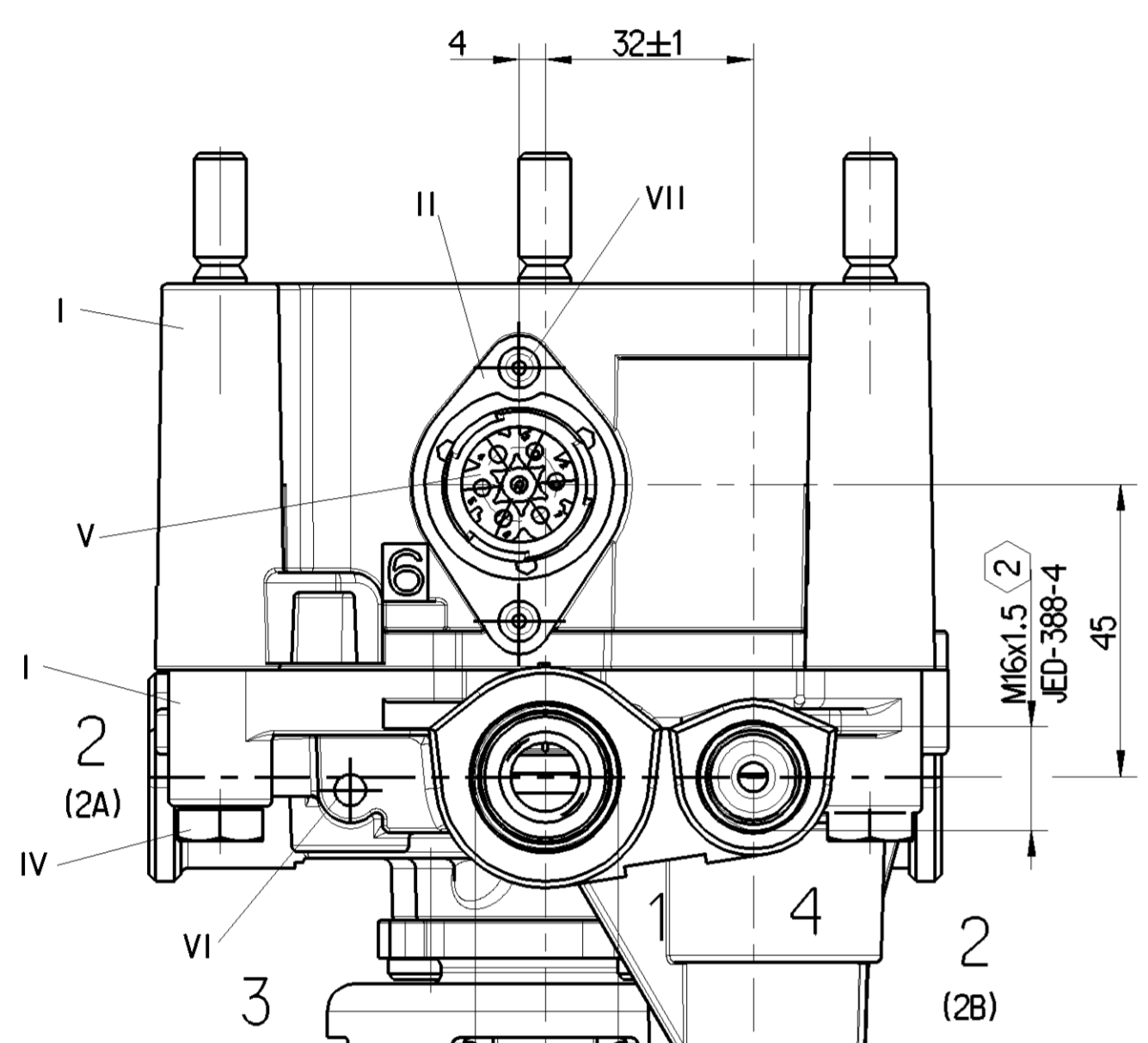
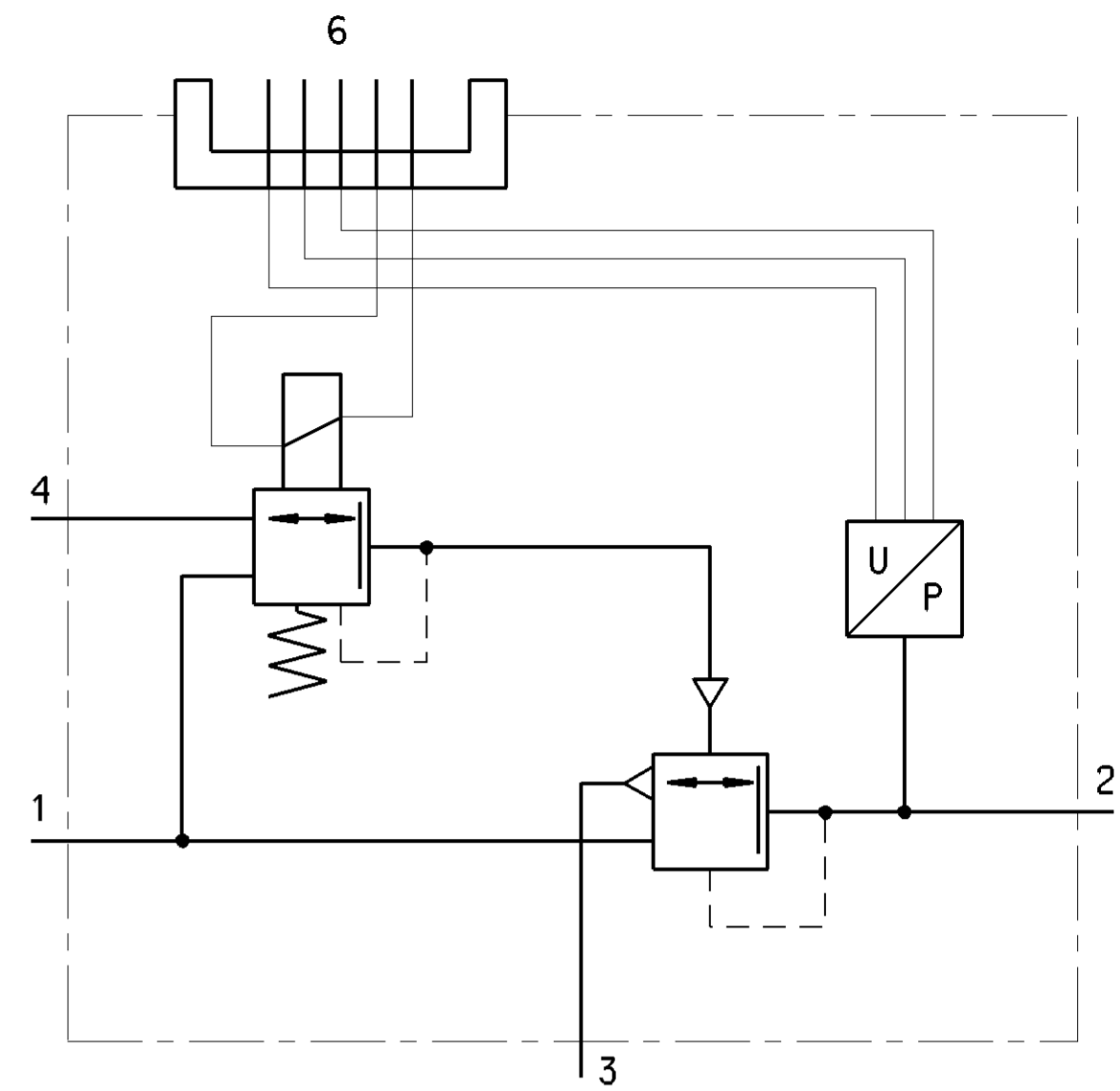
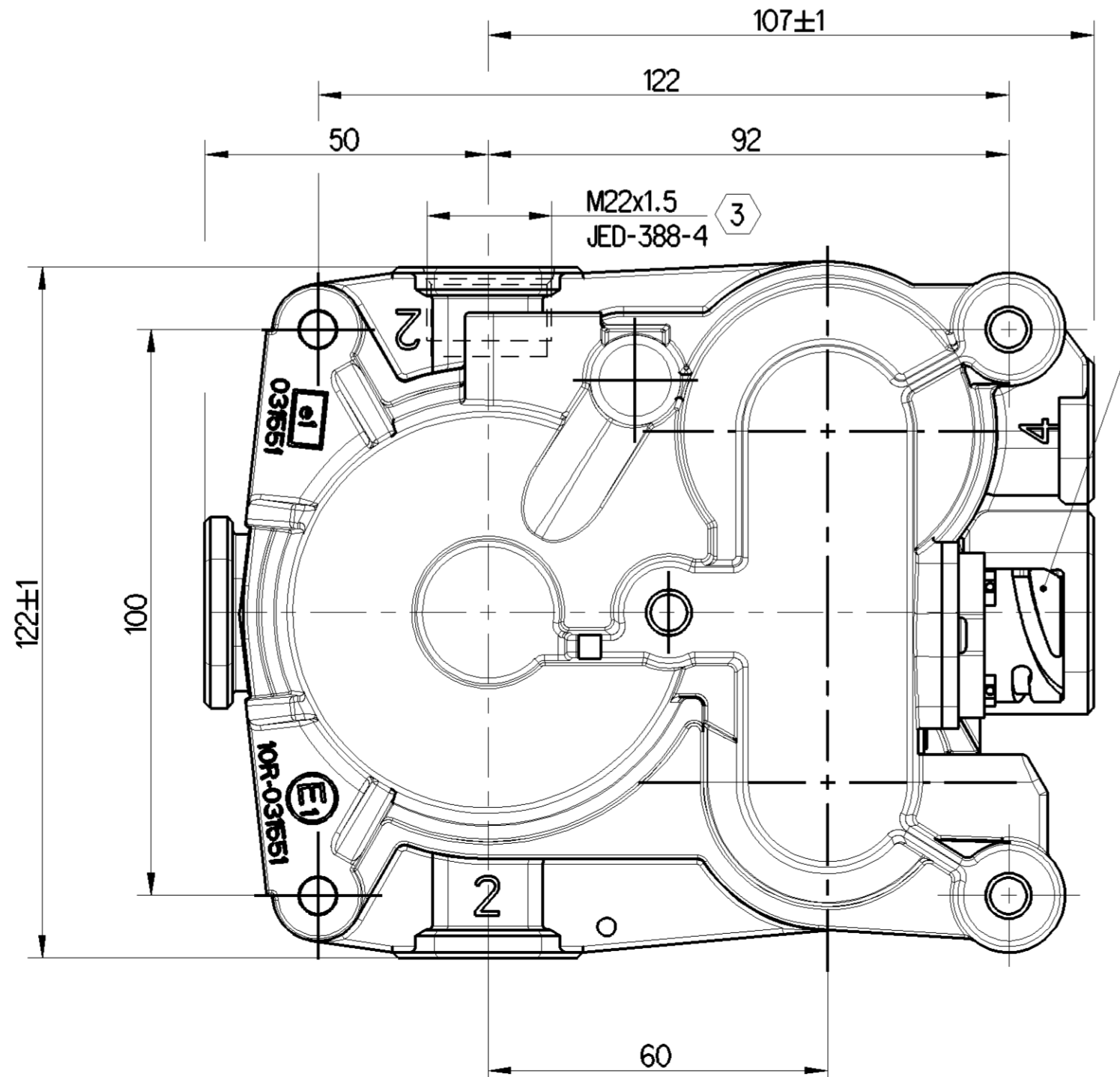
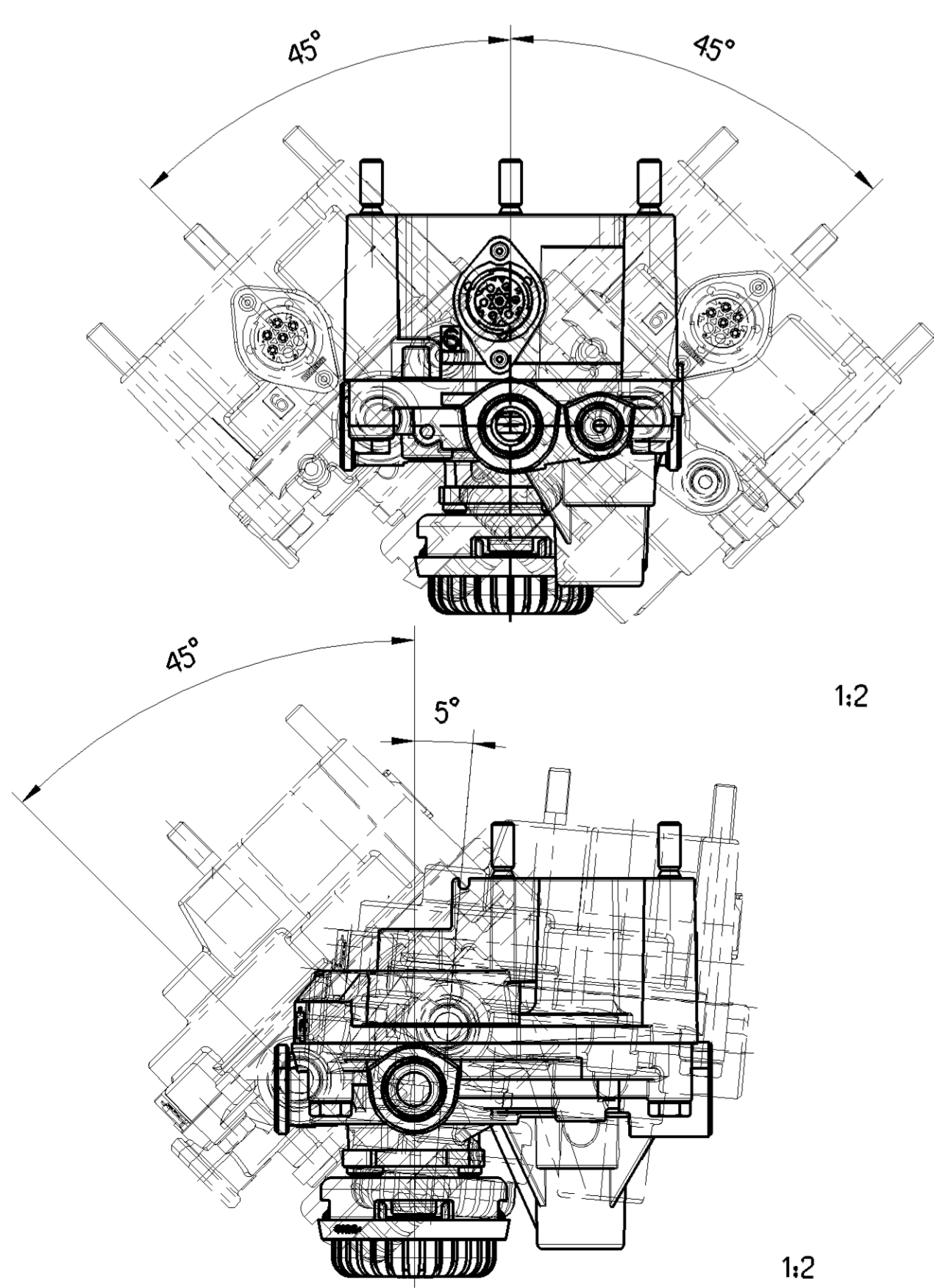


	MATERIAL AND SURFACE PROTECTION MATERIAL UND OBERFLAECHENSCHUTZ MATERIAU ET PROTECTION SUPERFICIELLE MATERIALE E PROTEZIONE SUPERFICIALE	PORT ANSCHLUSS ORIFICE ORIFIZIO	FUNCTION FUNKTION FONCTION FUNZIONE
I	Al JED-029M1 / JED-259-3	6	
II	PA6.6 JED-359-1		PRESSURE SENSOR, DRUCKSENSOR
III	PA6.6 JED-354-1		CAPTEUR DE PRESSION, SENSORE DI PRESSIONE
IV	Fe JED-051M4 / JED-256-1	6.1	Ue +
V	Cu Ni Si / Gal Sn1 JED-570-516	6.2	GROUND, MASSE, MASSE, MASSA
VI	Fe JED-024M0	6.3	SIGNAL, SIGNAL, SIGNAL, SEGNALE
VII	Al Mg2 Mn0.3		
VIII	Al JED-077-1 / JED-007-1		SOLENOID, MAGNET, AIMANT, SOLENOIDE
IX		6.4	HIGH, HIGH, HIGH, ALTO
X		6.5	LOW, LOW, LOW, BASSO

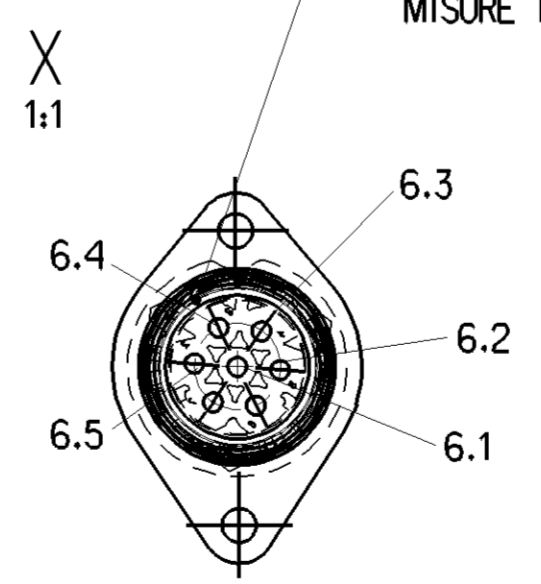


4 INSTALLATION POSITION  
EINBAULAGE  
POSITION D'INSTALLATION  
POSIZIONE DI MONTAGGIO



OVERALL DIMENSIONS  
AUSSENABMESSUNGEN DIN 72585  
DIMENSIONS HORS TOUT  
MISURE ESTERNE

INSIDE DIMENSIONS  
INNENABMESSUNGEN NACH  
DIMENSIONS INTERIEUR  
MISURE INTERNO



- DATA MATRIX CODING
- DATE OF MANUFACTURE (WW/YY)
- PROVIA IDENTIFICATION NUMBER

- 1 SUPPLY  
ENERGIEZUFLOSS VOM VORRAT  
ALIMENTATION  
ALIMENTAZIONE
  - 2 DELIVERY  
ENERGIEABFLUSS IN DIE ARBEITSLEITUNG  
UTILISATION  
MANDATA
  - 3 EXHAUST  
ANSCHLUSS ATMOSPHAERE  
ECHAPPEMENT  
SCARICO
  - 4 BACK UP PORT  
REDUNZANSCHLUSS  
ORIFICE DE REDONDANCE  
ATTACCO DI RIDONDANZA
  - 6 ELECTRICAL CONTROL  
ELEKTRISCHER STEUERANSCHLUSS  
COMMANDE ELECTRIQUE  
COMANDO ELETTRICO
- PRESSURE SENSOR PORT  
DRUCKSENSOR ANSCHLUSS  
PORT DE CAPTEUR DE PRESSION  
ATTACCO DI SENSORE DI PRESSIONE
- INSPECTION MARK  
PRUEFZEICHEN : (E) 10 R - 031551  
MARQUE DE CONTRÔLE  
STAMPA DI COLLAUDO

DEVICE IS DESIGNED FOR USE IN ZF SYSTEMS AND OTHER DEDICATED RELEASED APPLICATIONS.  
POWER SUPPLY AND CONTROL ARE ALWAYS PROVIDED BY ZF CENTRAL MODULE.  
STANDALONE USAGE NOT ALLOWED.

	2	3
FOR THREAD PERMISSIBLE FUER GEWINDE ZULAESSIG POUR FILETAGE ADMISE PER FILETTATURA AMMESSA	M16	M22
TORQUE ACCORDING TO JED-366 ANZUGSMOMENT ENTSPRECHEND JED-366 COUPLE DE SERRAGE SUIVANT JED-366 COPPIA DI SERRAGGIO SECONDO JED-366	MAX. 34 Nm	MAX. 53 Nm

	1
MAX. TORQUE MAX. ANZUGSMOMENT COUPLE MAXI DE SERRAGE COPPIA MASSIMA DI SERRAGGIO	26 Nm

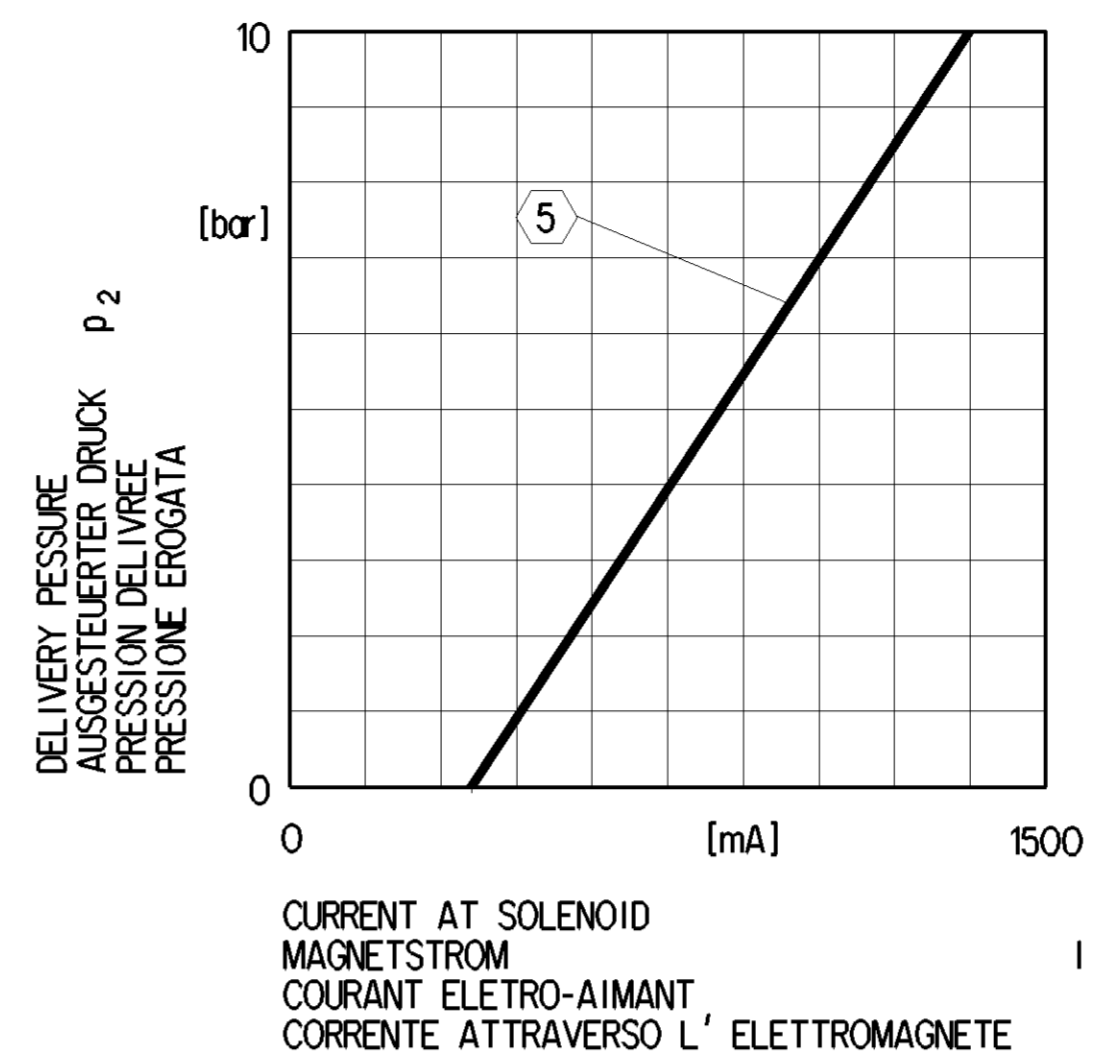
General Specification: ISO 8015, JED-334-1, Size ISO 14405 LP	Copyright ZF*
Further Technical Data: Product Specification	Date: _____
Doc. Code: 035	Sheet: 1 To 25
General Tolerances JED-261	Brand: _____
Range of Nominal Dimensions (± mm)	2023-02-09
Class 1) ± 0.5	2023-02-13
Class 2) ± 0.5	_____
Class 3) ± 0.5	_____
Class 4) ± 0.5	_____
Class 5) ± 0.5	_____
Class 6) ± 0.5	_____
Class 7) ± 0.5	_____
Class 8) ± 0.5	_____
Class 9) ± 0.5	_____
Class 10) ± 0.5	_____
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Class 96) ± 0.5	_____
Class 97) ± 0.5	_____
Class 98) ± 0.5	_____
Class 99) ± 0.5	_____
Class 100) ± 0.5	_____

PROVIA		PROPORTIONAL RELAY VALVE	
Material No.	Date of first issue	Doc. Code	Language
PRO 643 102 0	2022-02-02	005	ML
Mass	Scale	Revision	Techn. Resp.
2.2 kg	1:1	2x	A
Size	CAD System	Rev. No.	Rev. Date
A 1	CREO	513339	2x
Tapped Holes acc. JED-388-4		Replacement for	
1) Tolerance Class Applied Crossmarked			

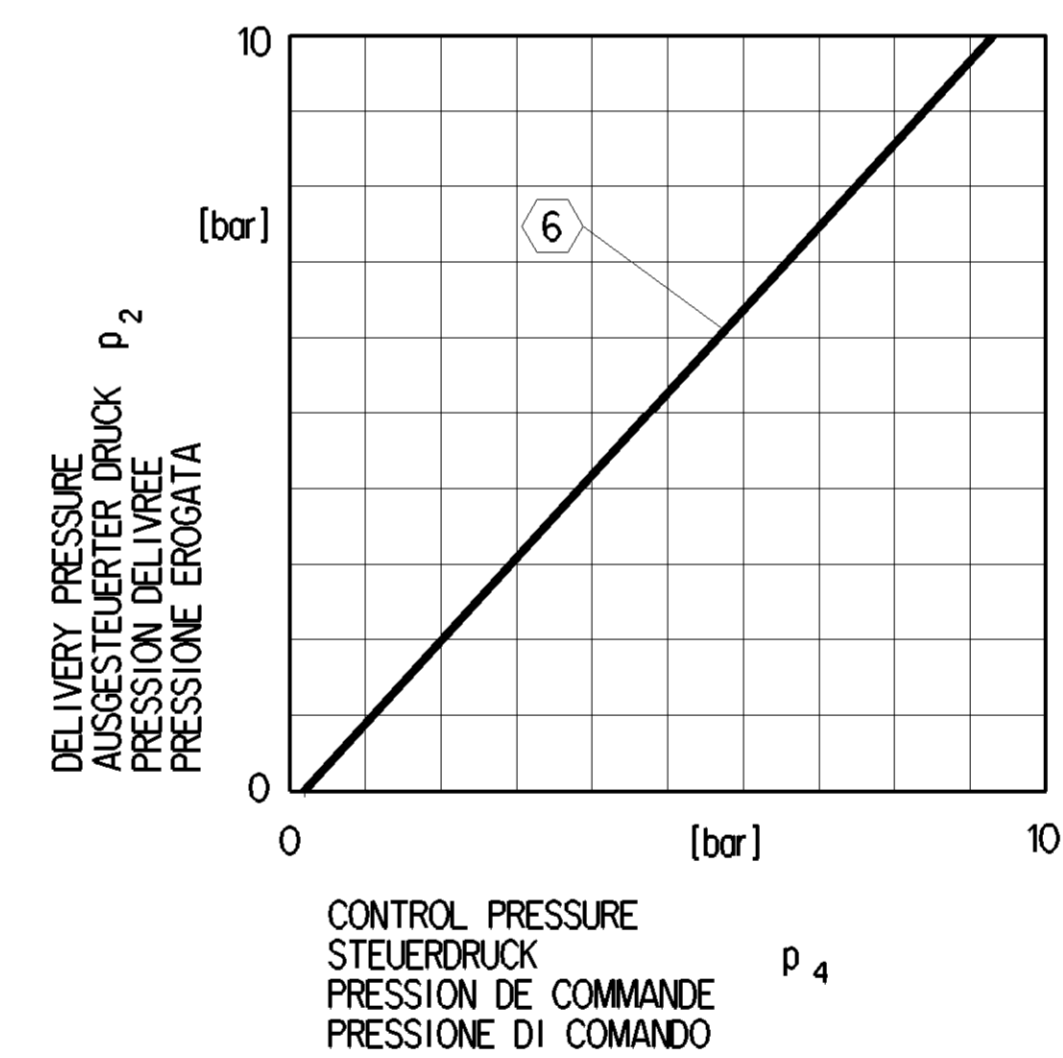
THE VALVE CORRESPONDS TO THE REGULATIONS FOR ELECTROMAGNETIC DEVICES ACCORDING TO VDE 0580  
 GERAET ENTSPRICHT DEN BESTIMMUNGEN FUER ELEKTROMAGNETISCHE GERAETE NACH VDE 0580  
 LA VALVE CORRESPOND AUX CONDITIONS POUR DES APPAREILS ELECTROMAGNETIQUES SUIVANT VDE 0580  
 LA VALVOLA CORRISPONDE ALLE CONDIZIONI PER APPARECCHI ELETTROMAGNETICI SECONDO VDE 0580

- 1.1 WORKING MEDIUM : AIR (CONTAINING WATER, OIL AND ALCOHOL)  
 ARBEITSMEDIUM : LUFT (WASSER-, OEL- UND ALKOHOLHALTIG)  
 FLUIDE D'UTILISATION: AIR (CHARGE D'EAU, D'HUILE ET D'ALCOOL)  
 FLUIDO DI ESERCIZIO : ARIA (CONTENENTE ACQUA, OLIO ED ALCOOL)
- 1.2 AMBIENT ENVIRONMENT: AIR (CONTAINING WATER, SALT, DUST AND OIL)  
 UMGEBUNGSMEDIUM : LUFT (WASSER-, SALZ-, STAUB- UND OELHALTIG)  
 FLUIDE AMBIENT : AIR (CHARGE D'EAU, DE SEL, DE POUSSIERE ET D'HUILE)  
 FLUIDO AMBIENTE : ARIA (CONTENENTE ACQUA, SALE, POLVERO ED OLIO)
- 2.1 THERMAL RANGE OF APPLICATION UNDER NORMAL AMBIANT CONDITIONS :  
 THERMISCHER ANWENDUNGSBEREICH UNTER NORMALEN UMGEBUNGSBEDINGUNGEN: -40°...+80°C  
 PLAGE DE TEMPERATURE EN UTILISATION CONTINUE DE  
 CAMPO D'APPLICAZIONE TERMICA NELLE NORMALI CONDIZIONE AMBIENTALI :
- 2.2 SHORT TERM RESISTANCE TO HEAT : WITHOUT FUNCTION  
 KURZZEITIGE WAERMEBESTAENDIGKEIT : +110°C OHNE FUNKTION  
 RESISTANCE THERMIQUE TEMPORAIRE : (p<sub>1</sub> = 0 bar, max. 1h) SANS FONCTION  
 RESISTANZA TERMICA PER BREVE PERIODO: SENZA FUNZIONE
- 3.1 WORKING PRESSURE (SUPPLY) :  
 BETRIEBSDRUCK (VORRAT) : p<sub>1</sub> = 5...10 bar  
 PRESSION D'UTILISATION (ALIMENTATION) :  
 PRESSIONE DI ESERCIZIO (ALIMENTAZIONE) :
- 3.2 MAX. PERMISSIBLE WORKING PRESSURE (WITHOUT FUNCTION) (SUPPLY) :  
 MAX. ZULAESSIGER BETRIEBSDRUCK (OHNE FUNKTION) (VORRAT) : p<sub>1</sub> = 13 bar  
 PRESSION D'UTILISATION MAXI ADMISSIBLE (SANS FONCTION) (ALIMENTATION) :  
 PRESSIONE DI ESERCIZIO MAX. AMMISSIBILE (SENZA FUNZIONE) (ALIMENTAZIONE) :
- 3.3 OUTPUT PRESSURE :  
 AUSGANGSDRUCK : p<sub>2</sub> = 10 bar / ED = 100%  
 PRESSION DE SORTIE :  
 PRESSIONE D'USCITA :
- 4 MIN. FLOW PASSAGE / NOMINAL DIAMETER : PORT 1 - 2 :  
 MIN. DURCHFLOSSEFFNUNG / NENNWEITE : ANSCHLUSS 1 - 2 : 78.5 mm<sup>2</sup> /NW 10  
 MIN. ORIFICE CALIBRE / DIAMETRE NOMINAL : ORIFICE 1 - 2 :  
 MIN. PASSAGIO LIBERO / DIAMETRO NOMINALE: ORIFIZIO 1 - 2 :  
 PORT 2 - 3 :  
 ANSCHLUSS 2 - 3 : 78.5 mm<sup>2</sup> / NW 10  
 ORIFICE 2 - 3 :  
 ORIFIZIO 2 - 3 :
- 5 VOLTAGE :  
 SPANNUNG : 24 +8/-6.5 V  
 TENSION :  
 TENSIONE :
- 5.1 MAX. CONTINUOUS VOLTAGE BETWEEN PORTS 6.4 AND 6.5 : 8 V  
 MAX. DAUERSPANNUNG ZWISCHEN ANSCHLUSS 6.4 UND 6.5 : 8 V  
 TENSION PERMANENTE MAX. ENTRE ORIFICE 6.4 ET 6.5 : 8 V  
 TENSIONE PERMANENTE MAX. FRA ORIFICIO 6.4 E 6.5 : 8 V
- 6 MAX. CURRENT (SOLENOID) : DIRECT CURRENT  
 MAX. STROM (MAGNET) : I<sub>max</sub> = 1.4 A GLEICHSTROM  
 COURANT MAX. (AIMANT) : COURANT CONTINU  
 CORRENTE MAX. (SOLENOIDE) : CORRENTE CONTINUA
- 7 DEGREE OF PROTECTION : COMPLETE DEVICE WITH MOUNTED COUPLING : IP 6K 6K, IP 6K 9K  
 SCHUTZART : KOMPLETTES GERAET MIT MONTIERTER KUPPLUNG :  
 DEGRE DE PROTECTION : APPAREIL COMPLET AVEC L' ACCOUPLEMENT MONTE :  
 GRADO DI PROTEZIONE : APPARECCHIO COMPLETO CON ACCOPIAMENTO MONTATO :  
 ELECTRICTERMINALS WITH MOUNTED COUPLING : IP 6K 7  
 ELEKTRISCHE ANSCHLUESSE MIT MONTIERTER KUPPLUNG :  
 BORNES ELECTRIQUES AVEC L' ACCOUPLEMENT MONTE :  
 TERMINALI ELETTRICI CON ACCOPIAMENTO MONTATO :
- 8 PROTECTION CLASS :  
 SCHUTZKLASSE : III  
 CLASSE DE PROTECTION:  
 CLASSE DI PROTEZIONE:

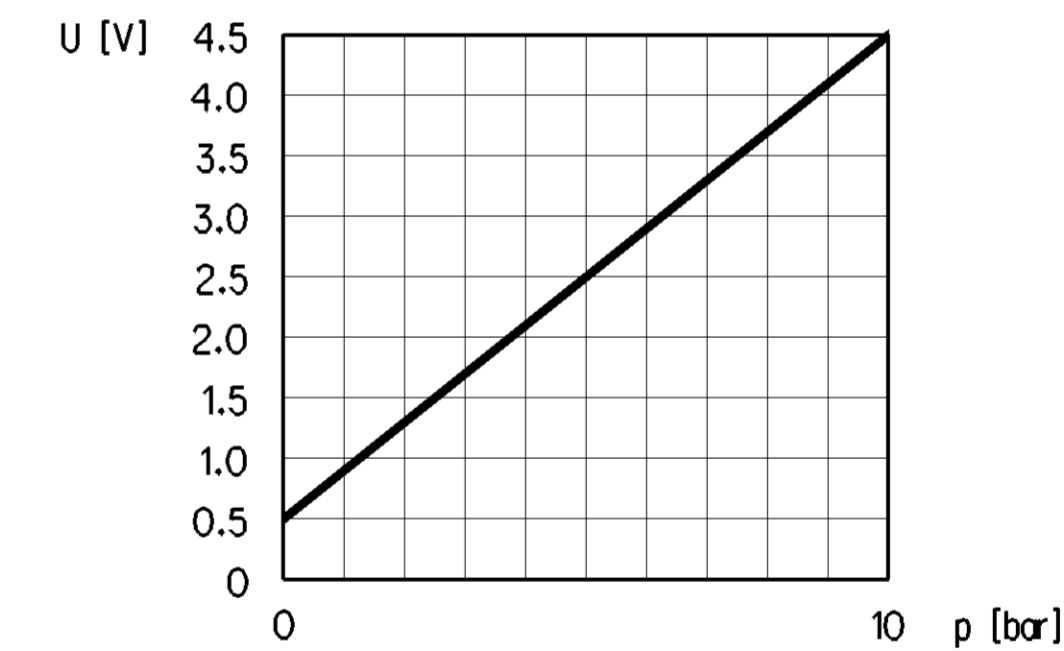
FURTHER TECHNICAL DATA SEE PRODUCT SPECIFICATION.  
 WEITERE TECHNISCHE DATEN SIEHE PRODUKT SPEZIFIKATION.  
 POUR INFORMATION COMPLEMENTAIRES VOIR LES SPECIFICATIONS DU PRODUIT.  
 PER INFORMAZIONI ULTERIORI VEDI LA SPEZIFIZIAZIONE DEL PRODOTTO.



- 5 CHARACTERISTIC CURVE : FAILURE OF BACK UP PORT 4  
 KENNLINIE : AUSFALL DES REDUNDANZANSCHLUSSES 4  
 COURBE CARACTERISTIQUE : DEFAILLANCE DU ORIFICE DE REDONDANCE 4  
 CURVA CARATTERISTICA : DIFETTO DELL' ATTACCO DI RIDONDANZA 4
- 6 CHARACTERISTIC CURVE : FAILURE OF ELECTRICAL CONTROL 6  
 KENNLINIE : AUSFALL DES STEUERANSCHLUSSES 6  
 COURBE CARACTERISTIQUE : DEFAILLANCE DU COMMANDE ELECTRIQUE 6  
 CURVA CARATTERISTICA : DIFETTO DEL COMANDO ELETTRICO 6



CHARACTERISTIC CURVE PRESSURE SENSOR  
 KENNLINIE DRUCKSENSOR  
 COURBE CARACTERISTIQUE CAPTEUR DE PRESSION  
 CURVA CARATTERISTICA SENSORE DI PRESSIONE



General Specifications: ISO 9015, JED-334-1, Size ISO 14405 LP		Copyright ZF*	
Further Technical Data: Product Specification		Date	Signature
Doc. Code: O35	Sheet: 1 To 25	2023-02-09	Blozajk
General Tolerances JED-261		2023-02-13	
Range of Nominal Dimensions ( ± mm)		Pawłowski	
Class	1) ≤ 50 > 50 > 180 > 400	Dimensions in mm	
Fine	±0.5 ±1 ±1.5 ±2	Mass	Scale
Medium	±1 ±2 ±3 ±4 ±3°	2.2	kg
Coarse	±2 ±3.5 ±5 ±6.5	Size	CAD System
Tapped Holes acc. JED-388-4		Material No.	
1) Tolerance Class Applied Crossmarked		PRO 643 102 0	
		Doc. Code	Language
		005	ML
		Revision	Techn. Resp.
		513339	tx A 5220_AM
		Date of first issue: 2022-02-02	
		Sheet	
		2/2	

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