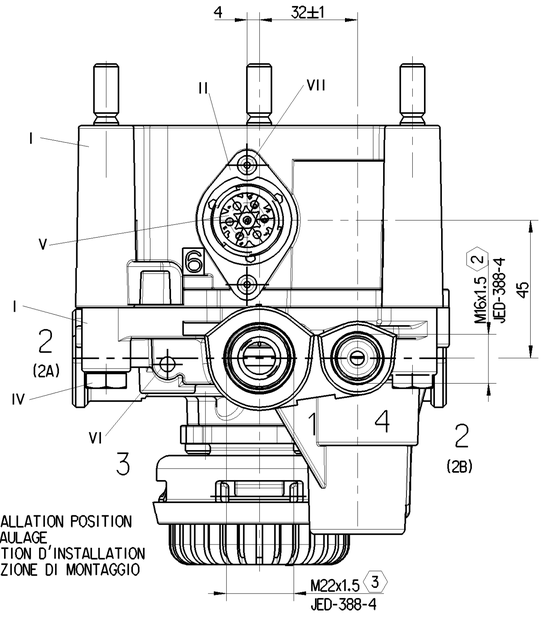
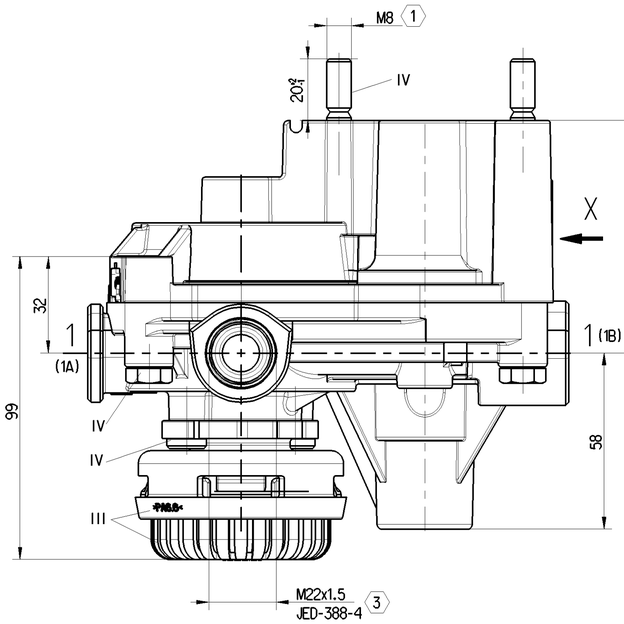
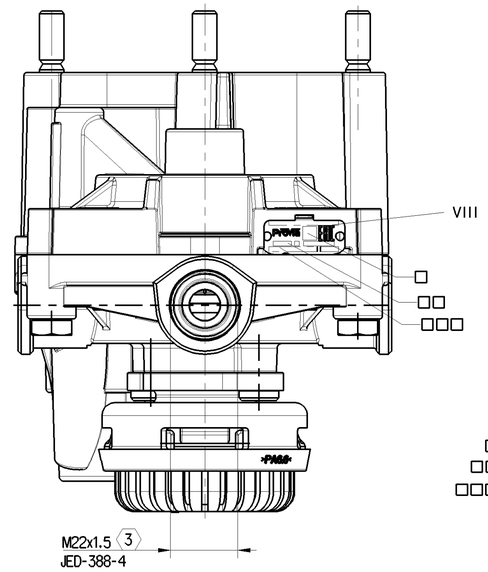
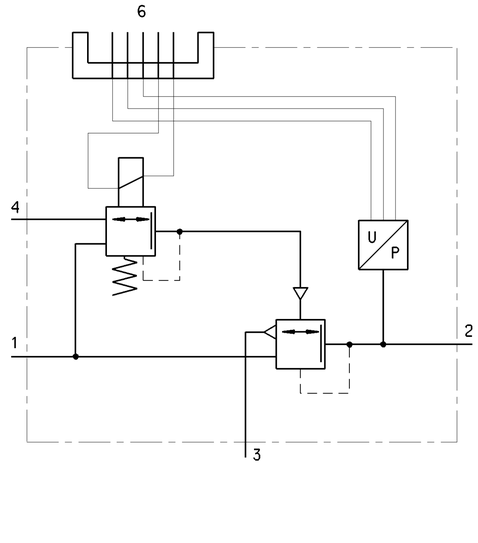
	MATERIAL AND SURFACE PROTECTION MATERIAL UND OBERFLAECHENSCHUTZ MATERIAU ET PROTECTION SUPERFICIELLE MATERIALE E PROTEZIONE SUPERFICIALE	PORT ANSCHLUSS ORIFICE ORIFIZIO	FUNCTION FUNKTION FONCTION FUNZIONE
I	Al JED-029M1 / JED-259-3	6	
II	PA6.6 JED-359-1		PRESSURE SENSOR, DRUCKSENSOR
III	PA6.6 JED-354-1		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-024MO	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

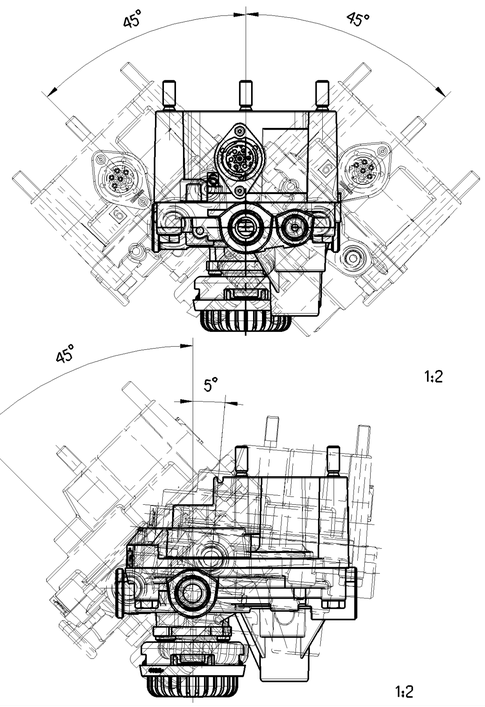


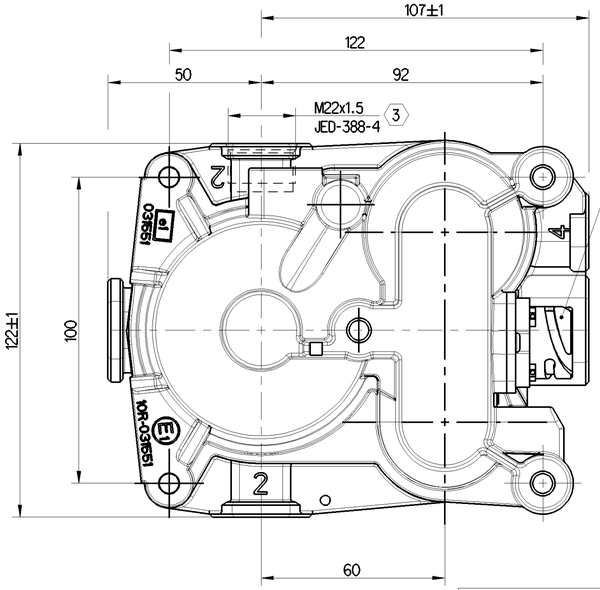
4 INSTALLATION POSITION
EINBAULAGE
POSITION D'INSTALLATION
POSIZIONE DI MONTAGGIO





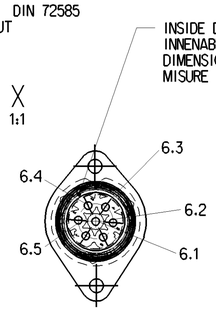






OVERALL DIMENSIONS
AUSSENABMESSUNGEN DIN 72585
DIMENSIONS HORS TOUT
MISURE ESTERNE

INSIDE DIMENSIONS
INNENABMESSUNGEN NACH 375 110 132 4.
DIMENSIONS INTERIEUR INDEX -
MISURE INTERNO



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

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

1 SUPPLY
ENERGIEZUFLUSS VOM VORRAT
ALIMENTATION
ALIMENTAZIONE

2 DELIVERY
ENERGIEABFLUSS IN DIE ARBEITSLEITUNG
UTILISATION
MANDATA

3 EXHAUST
ANSCHLUSS ATMOSPHAERE
ECHAPPEMENT
SCARICO

4 BACK UP PORT
REDUNDANZANSCHLUSS
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 : E1 10 R - 031551
MARQUE DE CONTRUCLE :
STAMPA DI COLLAUDO :

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

A 6 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.

General Specification: ISO 8015, JED-334-1, Size ISO 14405 LP			
Further Technical Data: Product Specification			
Doc. Code: 035		Sheet: 1 To 25	
General Tolerances JED-261			
Range of Nominal Dimensions (± mm)			
Class 1)	≤ 50	> 50 ≤ 180	> 180 ≤ 400	> 400
Fine	±0.5	±1	±1.5	±2
Medium	X ±1	±2	±3	±4
Coarse	±2	±3.5	±5	±6.5
Tapped Holes acc. JED-388-4				
1) Tolerance Class Applied Crossmarked				

±3°

Copyright ZF®

Date	Signature
Drawn: 2023-02-09	Blozejak
Checked: 2023-02-13	Powlowski

Dimensions in mm

ProVia

A

PROPORTIONAL RELAY VALVE

Mass	Scale	Material No.	Date of first issue: 2022-02-02	
2.2 kg	1:1	PRO 643 102 0	Doc.Code: 005	Language: ML / Sheet: 1/2
Size: A 1	CAD System: CREO	ECN-No.: 513339	Revision: 2x A	Techn. Resp.: 5220_AM

Replacement for: -

100mm

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_1 = 0 bar, max. 1h) SANS FONCTION
RESISTANZA TERMICA PER BREVE PERIODO: SENZA FUNZIONE

3.1 WORKING PRESSURE (SUPPLY) :
BETRIEBSDRUCK (VORRAT) : p_1 = 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_1 = 13 bar
PRESSION D'UTILISATION MAXI ADMISSIBLE (SANS FONCTION) (ALIMENTATION) :
PRESSIONE DI ESERCIZIO MAX. AMMISSIBILE (SENZA FUNZIONE) (ALIMENTAZIONE) :

3.3 OUTPUT PRESSURE :
AUSGANGSDRUCK : p_2 = 10 bar / ED = 100%
PRESSION DE SORTIE :
PRESSIONE D'USCITA :

4 MIN. FLOW PASSAGE / NOMINAL DIAMETER : PORT 1 - 2 :
MIN. DURCHFLUSSOEFFNUNG / NENNWEITE : ANSCHLUSS 1 - 2 : 78.5 mm² /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 mm² / 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

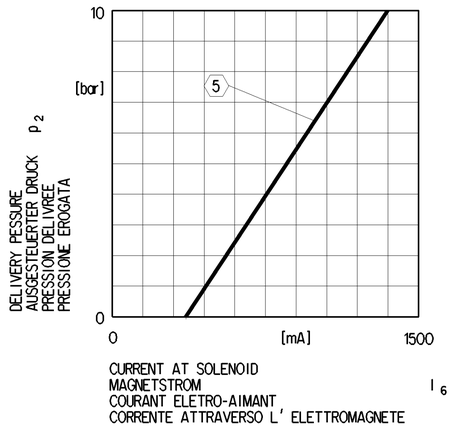
6 MAX. CURRENT (SOLENOID) : DIRECT CURRENT
MAX. STROM (MAGNET) : I_{max} = 1.4 A GLEICHSTROM
COURANT MAX. (AIMANT) : COURANT CONTINU
CORRENTE MAX. (SOLENOIDE) : CORRENTE CONTINUA

7 DEGREE OF PROTECTION : COMPLETE DEVICE WITH MOUNTED COUPLING :
SCHUTZART : KOMPLETTES GERAET MIT MONTIERTER KUPPLUNG : IP 6K 6K, IP 6K 9K
DEGRE DE PROTECTION : APPAREIL COMPLET AVEC L' ACCOUPLEMENT MONTE :
GRADO DI PROTEZIONE : APPARECCHIO COMPLETO CON ACCOPPIAMENTO MONTATO :

ELECTRICTERMINALS WITH MOUNTED COUPLING :
ELEKTRISCHE ANSCHLUESSE MIT MONTIERTER KUPPLUNG : IP 6K 7
BORNES ELECTRIQUES AVEC L' ACCOUPLEMENT MONTE :
TERMINALI ELETTRICI CON ACCOPPIAMENTO MONTATO :

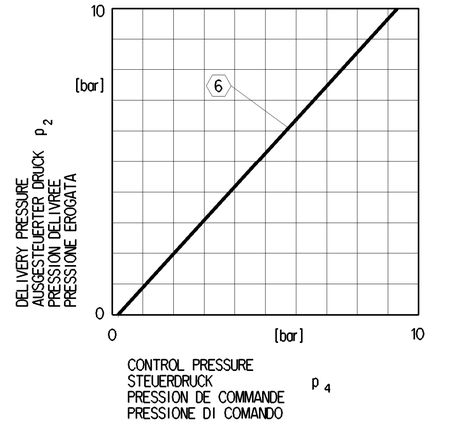
8 PROTECTION CLASS :
SCHUTZKLASSE : III
CLASSE DE PROTECTION:
CLASSE DI PROTEZIONE:

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 SPEZIFICAZIONE DEL PRODOTTO.

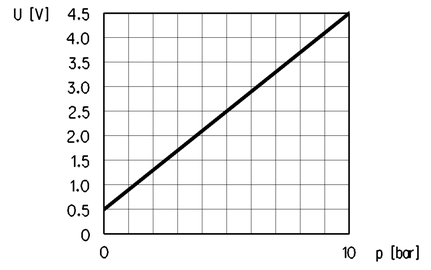


5 CHARACTERISTIC CURVE : FAILURE OF BACK UP PORT 4
KENNLINIE : AUSFALL DES REDUNDANZANSCHLUSSES 4
COURBE CARACTERISTIQUE : DEFAILLANCE DU ORIFICE DE REDONDANCE 4
CURVA CARATTERISTICA : DIFETTO DELL' ATTACCO DI RIDONDANZA 4

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



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1) Tolerance Class Applied Crossmarked						

Date	Signature
Drawn	
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Checked	
2023-02-13	Powlowski

Dimensions in mm

ProVia

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Size	CAD System				
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100mm