

Operating Instruction

IECEx BVS07.0021

DMT 03 ATEX E 049

Articles: V-Ex, V-Ms^{*}-Ex, V-INOX-Ex, RSD-Ms-Ex,
RSD-INOX-Ex

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ENGLISH

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This documentation includes the following documents:

- Current Sales Catalog of HUMMEL AG
- Accident Prevention Regulations and related installation instructions /
Electrotechnical Regulations (responsibility lies with installer)

Manufacturer	HUMMEL AG Lise-Meitner-Straße 2 79211 Denzlingen / Germany
Notified body	DEKRA Testing and Certification GmbH Dinnendahlstraße 9 44809 Bochum / Germany
ID number	0158
IECEX CoC	IECEX BVS07.0021
Type-examination certificate	DMT 03 ATEX E 049
Scope	V-Ex, V-MS-Ex, V-INOX-Ex, RSD-MS-Ex, RSD-INOX-Ex
Reference standards	<ul style="list-style-type: none">• DIN EN IEC 60079-0:2019• DIN EN IEC 60079-7 / A1:2018• DIN EN 60079-31:2014• DIN EN 60529:2014
Temperature range	
Type 1.297.*:	-20 °C – 90 °C (-4 °F – 194 °F)
Types 1.197.*, 1.078.*, 1.192.*, 1.098.*:	-20 °C – 95 °C (-4 °F – 203 °F)
Types 1.198.*, 1.193.*:	-20 °C – 180 °C (-4 °F – 356 °F)
Types 1.199.*, 1.079.*, 1.194.*, 1.099.*:	-60 °C – 180 °C (-76 °F – 356 °F)
Type / degree of protection	IP 68 to 10 bar (with O-ring)

Technical Data

Series	Metric	Connection Thread	PG	Torque [Nm] Dome Nut / Body / Lock Nut
V-Ms-*Ex, V-INOX-Ex, RSD-Ms-Ex, RSD-INOX-Ex	M 12 x 1,5		PG 7	4,5
	M 16 x 1,5		PG 9	6
			PG 11	6,5
	M 20 x 1,5		PG 13,5	8
			PG 16	10
	M 25 x 1,5		PG 21	12
	M 32 x 1,5		PG 29	15
	M 40 x 1,5		PG 36	16
	M 50 x 1,5		PG 42	24
	M 63 x 1,5		PG 38	30
	M 12 x 1,5		PG 7	1,5
	M 16 x 1,5		PG 9	2
V-Ex			PG 11	3
	M 20 x 1,5		PG 13,5	4,5
			PG 16	4,5
	M 25 x 1,5		PG 21	5
	M 32 x 1,5		PG 29	6,5
	M 40 x 1,5		PG 36	10
	M 50 x 1,5		PG 42	15
	M 63 x 1,5		PG 38	22

The tightening torque specified in the table must be applied to the plug / reducer using a torque wrench.

Installation conditions - general

Be sure to check the products for proper working order (integrity) before mounting them. Only qualified personnel (electricians) may carry out installations, using suitable tools. The products must be used as delivered, no modifications permitted. To prevent accidental loosening, use a lock nut or suitable safeguard adhesive. Note that undertightening or overtightening the connecting thread or the cap nut may adversely affect the type of protection, the tightness and/or the strain relief. Joining ("stacking") different reducers (types 1.078*, 1.079*) is not permitted.

Surface roughness: max. Rz 16

Perpendicularity: The connection hole for the cable gland must be perpendicular to the sealing surface of the housing. In addition, the seal of the cable gland must completely cover the sealing surface on the housing.

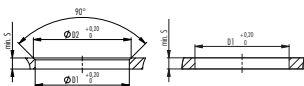
Earthtag: The installation of earthtags is only permitted on the sealing surface between the housing and the plug / reducer. The user has to ensure the tightness with regard to IP and explosion protection.

Housing material: There are no restrictions regarding the housing material.

Sealing method: Sealing at the housing is done by an O-ring.

Installation conditions - through hole

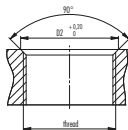
The cable gland must be fixed with a lock nut



Thread	D1	D2	S
M6x1	6	7,3	2,5
M8x1,25	8	9	2,5
M10x1,5	10	10,4	2,5
M12x1,5	12	13	2,5
M16x1,5	16	17	2,5
M20x1,5	20	21	2,5
M25x1,5	25	26	2,5
M32x1,5	32	33	2,5
M40x1,5	40	41	2,5
M50x1,5	50	51	2,5
M63x1,5	63	64	2,5
M75x1,5	75	76	2,5
M80x2	80	81	4
M90x2	90	91	5
M100x2	100	101,3	5
M110x2	110	111	5

Installation conditions - thread

For all thread sizes the thread tolerance is 6g



Thread	D1	D2	S
Pg7	12,7	13,2	2,5
Pg9	15,4	15,9	2,5
Pg11	18,8	19,3	2,5
Pg13,5	20,7	21,2	2,5
Pg16	22,8	23,3	2,5
Pg21	28,6	29,1	3
Pg29	37,4	38,4	3
Pg36	47,5	48,5	3
Pg42	54,5	55,5	3
Pg48	59,8	60,8	3

Thread	D1	D2	S
NPT 3/8"	17,3	18	4
NPT 1/2"	21,1	22	5
NPT 3/4"	26,7	27,5	4
NPT 1"	34,3	35	4
NPT 1 1/4"	41,9	42,5	5
NPT 1 1/2"	48,8	49,5	5
NPT 2"	61,1	62,0	5
NPT 2 1/2"	74,0	76,5	6
NPT 3"	89,8	92,5	6

D1: through hole
D2: countersink




If the plug/reducer is used in a way that deviates from the specified installation conditions, the user must ensure the safety of the system.

Special conditions

None

Marking

The products and /or their smallest packaging units are marked as specified below. Products marked otherwise may **not** be used under this type-examination certificate. Non-compliance shall void the manufacturer's liability.

- Manufacturer's name and address
- DMT 03 ATEX E 049
-  II 2G Ex e IIC Gb (IP 68)
-  II 1D Ex ta IIIC Da
- IECEx BVS07.0021
- Connecting thread size (internal thread only by reducers)
- -mark incl. ID number of notified body
- Temperature range

Safety

The products may only be used within the specified temperature range. The manufacturer shall not be liable for damage caused by use in non-specified fields of application. Only qualified personnel may carry out work in hazardous areas. All relevant regulations must be observed in this case!

Resistance / Endurance

The products consist of:

Body of fitting:	nickel-plated brass, polyamide or stainless steel
O-ring:	NBR, FKM or VMQ

The materials used are suitable for „industrial atmospheres“, meaning that they are resistant or highly resistant to mineral oils within the specified temperature range. For all other applications, consult the manufacturer!

Maintenance

At the specified maintenance intervals it is recommended to check the articles and tighten as necessary.

Prior to use

Before putting the installation into service, check it for compliance with these installation instructions as well as local and international standards (incl. application-specific ones).

Should you have additional questions, please contact the manufacturer. Please note that unauthorized or improper application or non-compliance with these installation instructions shall void the manufacturer's liability.

EU Declaration of Conformity

issued under the sole responsibility of the manufacturer
Complying the EU Directive 2014/34/EU, Attachment X

Types V-Ex, V-MS*-Ex, V-INOX-Ex, RSD-MS-Ex, RSD-INOX-Ex

**Certified in Type
Examination certificates** DMT 03 ATEX E 049

Issued by notified body DEKRA Testing and Certification GmbH
Dinnendahlstraße 9
44809 Bochum / Germany

ID number 0158

Following standards are applied

DIN EN IEC 60079-0 : 2019 Electrical apparatus for potentially explosive atmospheres
— General requirements

DIN EN IEC 60079-7 / A1:2018 Electrical apparatus for potentially explosive atmospheres
— Increased safety „e“

DIN EN 60079-31 : 2014 Electrical apparatus for use in the presence of combustible dust,
Electrical apparatus protected by enclosures — Construction and testing

DIN EN 60529 : 2014 Degrees of protection provided by enclosures (IP-Code)

We declare that the above articles were developed and manufactured in the responsibility of HUMMEL AG.



Michael Nörr
HUMMEL AG / CEO