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(1) EU-Type Examination Certificate

(2) Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres

Directive 2014/34/EU

- (3) EU Type Examination Certificate Number: IEP 19 ATEX 0693X
- (4) Product: M-REB XMXM and M-REB XNXN Series Reducers, M-REXMXM and M-REXNXN Series Adapters
- (5) Firm Name: MSM Mühendislik Elektromekanik San. Tic. Ltd. Sti.
- (6) Firm Address: BarbarosMah. Evren Cad. No: 38 Ataşehir / İSTANBUL
- (7) This product any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) The IEP Uluslararasi Enerji Petrol Gözetim, Sertifikasyon veTeknik Hizmetler Organizasyonu Tic. Ltd. Sti., notified body number 2284 in accordance with Article 17 of the Directive 2014/34/EU of European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in confidential Report Nr: IEP.Rp.Ex.10-1469 date 30.04.2019.
- (9) Compliance with Essential Health and safety requirements has been assured by compliance with;

EN 60079-0:2013, EN 60079-1:2014, EN 60079-7:2015, EN 60079-31:2014

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the directive 2014/34/EU. Further requirements of the directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- (12) The marking of the equipment or protective system shall include the following:

I M2 Ex db I Mb / I M2 Ex eb I Mb / II 1D Ex ta IIIC Da II 2G Ex db IIC Gb / II 2G Ex eb II Gb

Responsible Person:

NurettinTerzioglu Head of Certification Body Date of Issue: 03.05.2019





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(13) Certificate Nr:IEP19 ATEX 0693X

(14) Technical Details: M-REB Series Reducers

			M-R	EB Series	Reducers				
Product Code	Male Size M	Female Size M	Thread Length (mm)	Thread Length (mm)	Height (mm)	Spanner Width (mm)	Outer Min.(mm)	Thread Pieces	Thread Pieces
M-REB1M2M	M12x1,5	M16x1,5	15	15	34	22	24.0	8	8
M-REB2M3M	M16x1,5	M20x1,5	15	15	34	25	27.5	8	8
M-REB3M4M	M20x1,5	M25x1,5	15	15	34	30	33.0	8	8
M-REB4M5M	M25x1,5	M32x1,5	15	15	34	36	40.0	8	8
M-REB5M6M	M32x1,5	M40x1,5	15	18	37	45	50.0	8	10
M-REB6M7M	M40x1,5	M50x1,5	15	18	41	55	61.0	10	10
M-REB7M8M	M50x1,5	M63x1,5	18	18	41	65	77.0	10	10

			M-R	EB Series	Reducers				
Product Code	Male Size M	Female Size M	Thread Length (mm)	Thread Length (mm)	Height (mm)	Spanner Width (mm)	Outer Min. (mm)	Thread Pieces	Thread Pieces
M-REB1N2N	1/4" NPT	3/8" NPT	15	15	34	20	22.0	8/18	8/18
M-REB2N3N	3/8" NPT	1/2" NPT	15	15	34	25	27.5	8/18	8/18
M-REB3N4N	1/2" NPT	3/4" NPT	15	15	34	30	33.0	7/14	7/14
M-REB4N5N	3/4" NPT	1" NPT	15	15	34	36	40.0	6/14	6/14
M-REB5N6N	1" NPT	11/4" NPT	15	18	37	45	50.0	7/11.5	7/11.5
M-REB6N7N	11/4" NPT	11/2" NPT	18	18	41	55	61.0	7/11.5	7/11.5
M-REB7N8N	11/2" NPT	2" NPT	18	18	41	65	72.0	7/11.5	7/11.5

Responsible Person:

Nurettin Terzioglu

Head of Certification Body







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(15) Certificate Nr:IEP19 ATEX 0693X

(16) Technical Details: M-RE Series Adapters

9		N	M-RE Ser	ies Adapte	ers			
Product Code	Male Size M	Female Size M	Thread Length (mm)	Thread Length (mm)	Height (mm)	Spanner Width (mm)	Outer Min. (mm)	Thread Pieces
M-RE2M1M	M16x1,5	M12x1,5	15	18	20	22	24	8
M-RE3M2M	M20x1,5	M16x1,5	15	18	20	25	27.5	8
M-RE4M3M	M25x1,5	M20x1,5	15	18	20	30	33	8
M-RE5M4M	M32x1,5	M25x1,5	15	18	20	36	40	8
M-RE6M5M	M40x1,5	M32x1,5	15	22	24	45	50	8
M-RE7M6M	M50x1,5	M40x1,5	15	22	24	55	61	9
M-RE8M7M	M63x1,5	M50x1,5	15	22	24	70	77	9

			M-RE	Series Ad	apters			
Product Code	Male Size M	Female Size M	Thread Length (mm)	Thread Length (mm)	Heigh t (mm)	Spanner Width (mm)	Outer Min. (mm)	Thread Pieces
M-RE2N1N	3/8"	1/4"	15	18	20	22	24	9/8
M-RE3N2N	1/2"	3/8"	15	18	20	25	27.5	7/14
M-RE4N3N	3/4"	1/2"	15	18	20	30	33	7/14
M-RE5N4N	1"	3/4"	15	18	20	36	40	6/11.5
M-RE6N5N	11/4"	1"	18	22	24	45	50	7/11.5
M-RE7N6N	11/2"	11/4"	18	22	24	55	61	7/11.5
M-RE8N7N	2"	11/2"	18	22	24	65	72	7/11.5

(17) Description of Equipment: M-RE Series adapters are used to pass one of the parts with different diameters to the other. The range of M-REB Series reducers and M-RE Series adapters are manufactured from metallic material and are used to convert an existing cable entry aperture to another thread form and/or size in an enclosure. Each comprises a hollow body with an external male thread and an internal female thread. The body may optionally be fitted with an 'O' ring seal. Gear systems are indicated in the table. Thread combinations are such that minimum wall thickness should be maintained. The range of reducers and adapters has been evaluating in the contents of IP 66/68 according to the EN 60529 standard. Materials of Manufacture: EN12164, Grade (CW614N)

Responsible Person: Nurettin Terzioglu

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- (18) Certificate Nr:IEP19 ATEX 0693X
- (19) Special Conditions for Safe Use(denoted by X after the certificate number)
- 19.1 Only one reducer is to be used with any single cable entry on the associated equipment.
- 19.2 The interfaces between these devices and the associated enclosure cannot be defined; therefore, it is the user's responsibility to ensure that the appropriate ingress protection level is maintained at these interfaces.
- 19.3 The entry thread should be suitably sealed in order to maintain the IP rating.
- 19.4 When used for Increased Safety (Ex e) applications, a suitable method of sealing to the associated enclosure shall be fitted.
- 19.5 At their point of mounting, these devices are suitable for use at -60°C to 180°C at their point of mounting (Note: this is reduced when the stopping plugs are fitted with 'O' rings, see below).

Temperature of Isolation: Chloroprene rubber : $(-40 \sim +180)$ °C

(20) Essential Health and Safety Requirements Of Annex II: This certificate is in the contents of standards that mentioned in item (9) It has been accepted that adapters and reducers are manufactured according to the producer instructions and the standards mentioned above.

(21) Drawings:

Drawing Nr	Drawing Name	Date
M-RE 1	M-RE Adapter	02.01.2019
M-REB 1	M-REB Reducer	02.01.2019
M-REB 2	M-REB Reducer Mounting	13.02.2019
M-RE 2	M-REB Reducer Label	12.02.2019
M-REB 3	M-REB Reducer Mounting	13.02.2019
M-RE 3	M-REB Reducer Label	13.02.2019

(22) Installation manual 10 pages, dated 13.02.2019. If the chemical property of the material changes, the certificate becomes invalid. The clamping forces must comply with the standard and installation instructions.

Responsible Person:

Nurettin Terzioglu

Head of Certification Body

Date of Issue : 03.05.2019

