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# Leistungserklärung

Nr.: 4 - 018 - 160107 - 2021/02

DE

# EJOT®

## b) Brandschutz (BWR 2)

Wesentliche Merkmale	Leistungswerte

## c) Hygiene, Gesundheit und Umweltschutz (BWR 3)

Wesentliche Merkmale	Leistungswerte

## d) Schallschutz (BWR 5)

Wesentliche Merkmale	Leistungswerte

## e) Energieeinsparung und Wärmeschutz (BWR 6)

Wesentliche Merkmale	Leistungswerte

## f) Nachhaltige Nutzung der natürlichen Ressourcen (BWR 7)

Wesentliche Merkmale	Leistungswerte

Die Leistung des vorstehenden Produkts entspricht der erklärten Leistung/den erklärten Leistungen. Für die Erstellung der Leistungserklärung im Einklang mit der Verordnung (EU) Nr. 305/2011 ist allein der oben genannte Hersteller verantwortlich.

Unterzeichnet für den Hersteller und im Namen des Herstellers von:

**Dr. Jens Weber**

(Name)

**Bad Laasphe, 27 January 2021**

(Ort und Datum der Ausstellung)



(Unterschrift)



# Declaration of Performance

No **4 - 018 - 160107 - 2021/02**

EN

# EJOT®

## b) Safety in case of fire (BWR 2)

Essential characteristic	Performance

## c) Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance

## d) Protection against noise (BWR 5)

Essential characteristic	Performance

## e) Energy economy and heat retention (BWR 6)

Essential characteristic	Performance

## f) Sustainable use of natural resources (BWR 7)

Essential characteristic	Performance

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

**Dr. Jens Weber**

(Name)

**Bad Laasphe, 27 January 2021**

(Place and date of issue)



(Signature)



# ДЕКЛАРАЦИЯ ЗА ЕКСПЛОАТАЦИОННИ ПОКАЗАТЕЛИ

№ 4 - 018 - 160107 - 2021/02

BG

# EJOT®

## b) Безопасност в случай на пожар (BWR 2)

Основни характеристики	Показатели

## c) Хигиена, здраве и околна среда (BWR 3)

Основни характеристики	Показатели

## d) Защита от шум (BWR 5)

Основни характеристики	Показатели

## e) Икономия на енергия и запазване на топлината (BWR 6)

Основни характеристики	Показатели

## f) Устойчиво използване на природните ресурси (BWR 7)

Основни характеристики	Показатели

Експлоатационните показатели на продукта, посочени по-горе, са в съответствие с декларираните експлоатационни показатели. Настоящата декларация за експлоатационни показатели се издава в съответствие с Регламент (ЕС) № 305/2011, като отговорността за нея се носи изцяло от посочения по-горе производител.

Подписано за и от името на производителя от:

**Dr. Jens Weber**

(Име)

**Bad Laasphe, 27 January 2021**

(Място и Дата)



(Подпис)



# PROHLÁŠENÍ O VLASTNOSTECH

č. 4 - 018 - 160107 - 2021/02

CZ

# EJOT®

## b) Bezpečnost při požáru (BWR 2)

základní charakteristiky	vlastnosti výrobku

## c) Hygiena, zdraví a životní prostředí (BWR 3)

základní charakteristiky	vlastnosti výrobku

## d) Ochrana proti hluku (BWR 5)

základní charakteristiky	vlastnosti výrobku

## e) Úspora energie a zadržování tepla (BWR 6)

základní charakteristiky	vlastnosti výrobku

## f) Udržitelné využívání přírodních zdrojů (BWR 7)

základní charakteristiky	vlastnosti výrobku

Vlastnosti výše uvedeného výrobku jsou ve shodě se souborem deklarovaných vlastností. Toto prohlášení o vlastnostech se v souladu s nařízením (EU) č. 305/2011 vydává na výhradní odpovědnost výrobce uvedeného výše.

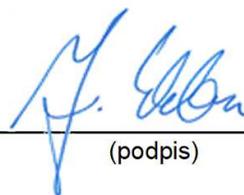
Podepsáno za výrobce a jeho jménem:

**Dr. Jens Weber**

(jméno)

**Bad Laasphe, 27 January 2021**

(místo a datum vydání)



(podpis)



# YDEEVNEDEKLARATION

Nr.: 4 - 018 - 160107 - 2021/02

DK

# EJOT®

## b) Sikkerhed ved brand (BWR 2)

Væsentlige egenskaber	Ydelse

## c) Hygiejne, sundhed og miljø (BWR 3)

Væsentlige egenskaber	Ydelse

## d) Beskyttelse mod støj (BWR 5)

Væsentlige egenskaber	Ydelse

## e) Energibesparelser og varmebinding (BWR 6)

Væsentlige egenskaber	Ydelse

## f) Bæredygtig udnyttelse af naturressourcer (BWR 7)

Væsentlige egenskaber	Ydelse

Ydeevnen for den vare, der er anført ovenfor, er i overensstemmelse med den deklarerede ydeevne. Denne ydeevnedeklaration er udarbejdet i overensstemmelse med forordning (EU) nr. 305/2011 på eneansvar af den fabrikant, der er anført ovenfor.

Underskrevet for fabrikanten og på dennes vegne af:

**Dr. Jens Weber**

(navn)

**Bad Laasphe, 27 January 2021**

(sted og dato for udstedelse)



(underskrift)



# TOIMIVUSDEKLARATSIOON

nr 4 - 018 - 160107 - 2021/02

EE

# EJOT®

## b) Ohutus tulekahju korral (BWR 2)

Põhiomadused	Toimivus

## c) Hügieen, tervis ja keskkond (BWR 3)

Põhiomadused	Toimivus

## d) Kaitse müra eest (BWR 5)

Põhiomadused	Toimivus

## e) Energiasääst ja soojapidavus (BWR 6)

Põhiomadused	Toimivus

## f) Loodusvarade säästev kasutamine (BWR 7)

Põhiomadused	Toimivus

Eespool kirjeldatud toote toimivus vastab deklareeritud toimivusele. Käesolev toimivusdeklaratsioon on välja antud kooskõlas määrusega (EL) nr 305/2011 eespool nimetatud tootja ainuvastutusel.

Tootja poolt ja nimel allkirjastanud:

**Dr. Jens Weber**

(Nimi)

**Bad Laasphe, 27 January 2021**

(Koht ja kuupäev)



(Allkiri)



# DECLARACIÓN DE PRESTACIONES

no 4 - 018 - 160107 - 2021/02

ES

# EJOT®

## b) Seguridad en caso de incendio (BWR 2)

Características esenciales	Prestaciones

## c) Higiene, salud y medio ambiente (BWR 3)

Características esenciales	Prestaciones

## d) Protección contra el ruido (BWR 5)

Características esenciales	Prestaciones

## e) Ahorro de energía y retención del calor (BWR 6)

Características esenciales	Prestaciones

## f) Uso sostenible de los recursos naturales (BWR 7)

Características esenciales	Prestaciones

Las prestaciones del producto identificado anteriormente son conformes con el conjunto de prestaciones declaradas. La presente declaración de prestaciones se emite, de conformidad con el Reglamento (UE) no 305/2011, bajo la sola responsabilidad del fabricante arriba identificado.

Firmado por y en nombre del fabricante por:

**Dr. Jens Weber**

(nombre)

**Bad Laasphe, 27 January 2021**

(lugar y fecha de emisión)



(firma)



# SUORITUSTASOILMOITUS

Nro 4 - 018 - 160107 - 2021/02

FI

# EJOT®

## b) Turvallisuus tulipalon sattuessa (BWR 2)

Perusominaisuudet	Tuotteen suoritustaso

## c) Hygienia, terveys ja ympäristö (BWR 3)

Perusominaisuudet	Tuotteen suoritustaso

## d) Suojaus melua vastaan (BWR 5)

Perusominaisuudet	Tuotteen suoritustaso

## e) Energiansäästö ja lämmöntalteenotto (BWR 6)

Perusominaisuudet	Tuotteen suoritustaso

## f) Luonnonvarojen kestävä käyttö (BWR 7)

Perusominaisuudet	Tuotteen suoritustaso

Edellä yksilöidyn tuotteen suoritustaso on ilmoitettujen suoritustasojen joukon mukainen. Tämä suoritustasoilmoitus on asetuksen (EU) N:o 305/2011 mukaisesti annettu edellä ilmoitetun valmistajan yksinomaisella vastuulla.

Valmistajan puolesta allekirjoittanut:

**Dr. Jens Weber**

(nimi)

**Bad Laasphe, 27 January 2021**

(paikka ja päivämäärä)



(allekirjoitus)



# DÉCLARATION DES PERFORMANCES

No 4 - 018 - 160107 - 2021/02

FR

# EJOT®

## b) Sécurité en cas d'incendie (REB 2)

Caractéristiques essentielles	Performances du produit

## c) Hygiène, santé et environnement (REB 3)

Caractéristiques essentielles	Performances du produit

## d) Protection contre le bruit (REB 5)

Caractéristiques essentielles	Performances du produit

## e) Économie d'énergie et rétention de la chaleur (REB 6)

Caractéristiques essentielles	Performances du produit

## f) Utilisation durable des ressources naturelles (REB 7)

Caractéristiques essentielles	Performances du produit

Les performances du produit identifié ci-dessus sont conformes aux performances déclarées. Conformément au règlement (UE) no 305/2011, la présente déclaration des performances est établie sous la seule responsabilité du fabricant mentionné ci-dessus.

Signé pour le fabricant et en son nom par:

**Dr. Jens Weber**

(Nom)

**Bad Laasphe, 27 January 2021**

(Lieu et date)



(Signature)



**ΔΗΛΩΣΗ ΕΠΙΔΟΣΕΩΝ**Αριθ. **4 - 018 - 160107 - 2021/02**

GR

**EJOT®****b) Ασφάλεια σε περίπτωση πυρκαγιάς (BWR 2)**

Ουσιώδη χαρακτηριστικά	Απόδοση

**c) Υγιεινή, υγεία και περιβάλλον (BWR 3)**

Ουσιώδη χαρακτηριστικά	Απόδοση

**d) Προστασία από θόρυβο (BWR 5)**

Ουσιώδη χαρακτηριστικά	Απόδοση

**e) Εξοικονόμηση ενέργειας και συγκράτηση θερμότητας (BWR 6)**

Ουσιώδη χαρακτηριστικά	Απόδοση

**f) Εξοικονόμηση ενέργειας και συγκράτηση θερμότητας (BWR 7)**

Ουσιώδη χαρακτηριστικά	Απόδοση

Η επίδοση του προϊόντος που ταυτοποιείται ανωτέρω είναι σύμφωνη με τη (τις) δηλωθείσα(-ες) επίδοση(-εις). Η δήλωση αυτή των επιδόσεων συντάσσεται, σύμφωνα με τον κανονισμό (ΕΕ) αριθ. 305/2011, με αποκλειστική ευθύνη του κατασκευαστή που ταυτοποιείται ανωτέρω.

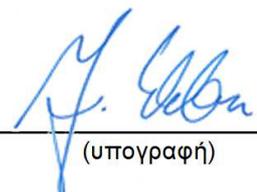
Υπογραφή για λογαριασμό και εξ ονόματος του κατασκευαστή από:

**Dr. Jens Weber**

(όνομα)

**Bad Laasphe, 27 January 2021**

(τόπος και ημερομηνία έκδοσης)

  
(υπογραφή)



# IZJAVA O SVOJSTVIMA

Br. 4 - 018 - 160107 - 2021/02

HR

# EJOT®

## b) Sigurnost u slučaju požara (BWR 2)

Bitne karakteristike	Svojstva

## c) Higijena, zdravlje i okoliš (BWR 3)

Bitne karakteristike	Svojstva

## d) Zaštita od buke (BWR 5)

Bitne karakteristike	Svojstva

## e) Ušteda energije i zadržavanje topline (BWR 6)

Bitne karakteristike	Svojstva

## f) Održivo korištenje prirodnih resursa (BWR 7)

Bitne karakteristike	Svojstva

Prije utvrđeno svojstvo proizvoda u skladu je s objavljenim svojstvima. Ova izjava o svojstvima izdaje se, u skladu s Uredbom (EU) br. 305/2011, pod isključivom odgovornošću prethodno utvrđenog proizvođača.

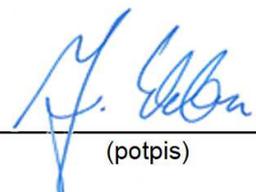
Za proizvođača i u njegovo ime potpisao:

**Dr. Jens Weber**

(ime)

**Bad Laasphe, 27 January 2021**

(Mjesto i datum izdavanja)



(potpis)



# TELJESÍTMÉNYNYILATKOZAT

Száma: 4 - 018 - 160107 - 2021/02

HU

# EJOT®

## b) Biztonság tűz esetén (BWR 2)

Lényeges termékjellemzők	Termék teljesítménye

## c) Higiénia, egészség és környezet (BWR 3)

Lényeges termékjellemzők	Termék teljesítménye

## d) Zaj elleni védelem (BWR 5)

Lényeges termékjellemzők	Termék teljesítménye

## e) Energiatakarékosság és hővisszatartás (BWR 6)

Lényeges termékjellemzők	Termék teljesítménye

## f) A természeti erőforrások fenntartható használata (BWR 7)

Lényeges termékjellemzők	Termék teljesítménye

A fent azonosított termék teljesítménye megfelel a bejelentett teljesítmény(ek)nek. A 305/2011/EU rendeletnek megfelelően e teljesítménynyilatkozat kiadásáért kizárólag a fent meghatározott gyártó a felelős.

A gyártó nevében és részéről aláíró személy:

**Dr. Jens Weber**

(név)

**Bad Laasphe, 27 January 2021**

(hely és kiállítás dátuma)



(aláírás)



# DICHIARAZIONE DI PRESTAZIONE

N. 4 - 018 - 160107 - 2021/02

IT

# EJOT®

## b) Sicurezza in caso di incendio (BWR 2)

Caratteristiche essenziali	Prestazione

## c) Igiene, salute e ambiente (BWR 3)

Caratteristiche essenziali	Prestazione

## d) Protezione contro il rumore (BWR 5)

Caratteristiche essenziali	Prestazione

## e) Economia energetica e ritenzione di calore (BWR 6)

Caratteristiche essenziali	Prestazione

## f) Uso sostenibile delle risorse naturali (BWR 7)

Caratteristiche essenziali	Prestazione

La prestazione del prodotto sopra identificato è conforme all'insieme delle prestazioni dichiarate. La presente dichiarazione di responsabilità viene emessa, in conformità al regolamento (UE) n. 305/2011, sotto la sola responsabilità del fabbricante sopra identificato.

Firmato a nome e per conto del fabbricante da:

**Dr. Jens Weber**

(nome)

**Bad Laasphe, 27 January 2021**

(luogo e data del rilascio)



(firma)



# EKSPLOATACINIŲ SAVYBIŲ DEKLARACIJA

Nr. 4 - 018 - 160107 - 2021/02

LT

# EJOT®

## b) Sauga gaisro atveju (BWR 2)

Esminės charakteristikos	Eksploatacinės savybės

## c) Higiena, sveikata ir aplinka (BWR 3)

Esminės charakteristikos	Eksploatacinės savybės

## d) Apsauga nuo triukšmo (BWR 5)

Esminės charakteristikos	Eksploatacinės savybės

## e) Energijos taupymas ir šilumos išsaugojimas (BWR 6)

Esminės charakteristikos	Eksploatacinės savybės

## f) Tvarus gamtos išteklių naudojimas (BWR 7)

Esminės charakteristikos	Eksploatacinės savybės

Nurodyto produkto eksploatacinės savybės atitinka visas deklaruotas eksploatacines savybes. Ši eksploatacinių savybių deklaracija pateikiama vadovaujantis Reglamentu (ES) Nr. 305/2011, atsakomybė už jos turinį tenka tik joje nurodytam gamintojui.

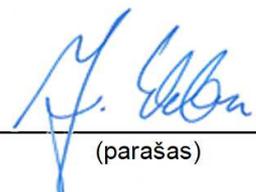
Pasirašyta (gamintojo ir jo vardu):

**Dr. Jens Weber**

(vardas)

**Bad Laasphe, 27 January 2021**

(išdavimo vieta ir data)



(parašas)



# EKSPLUATĀCIJAS ĪPAŠĪBU DEKLARĀCIJA

Nr. 4 - 018 - 160107 - 2021/02

LV

# EJOT®

## b) Drošība ugunsgrēka gadījumā (BWR 2)

Būtiskie raksturlielumi	Ekspluatācijas īpašības

## c) Higiēna, veselība un vide (BWR 3)

Būtiskie raksturlielumi	Ekspluatācijas īpašības

## d) Aizsardzība pret troksni (BWR 5)

Būtiskie raksturlielumi	Ekspluatācijas īpašības

## e) Enerģijas ekonomija un siltuma saglabāšana (BWR 6)

Būtiskie raksturlielumi	Ekspluatācijas īpašības

## f) Dabas resursu ilgtspējīga izmantošana (BWR 7)

Būtiskie raksturlielumi	Ekspluatācijas īpašības

Iepriekš norādītā izstrādājuma ekspluatācijas īpašības atbilst deklarēto ekspluatācijas īpašību kopumam. Šī ekspluatācijas īpašību deklarācija izdota saskaņā ar Regulu (ES) Nr. 305/2011, un par to ir atbildīgs vienīgi iepriekš norādītais ražotājs.

Parakstīts ražotāja vārdā:

**Dr. Jens Weber**

(Vārds)

**Bad Laasphe, 27 January 2021**

(Izsniegšanas vieta un datums)



(Paraksts)



# DIKJARAZZJONI TA' PRESTAZZJONI

Nru. 4 - 018 - 160107 - 2021/02

MT

# EJOT®

## b) Sigurtà fil-każ ta 'nar (BWR 2)

Karatteristiċi essenzjali	Prestazzjoni

## c) Iġjene, saħħa u ambjent (BWR 3)

Karatteristiċi essenzjali	Prestazzjoni

## d) Protezzjoni kontra l-istorbju (BWR 5)

Karatteristiċi essenzjali	Prestazzjoni

## e) Ekonomija tal-enerġija u żamma tas-sħana (BWR 6)

Karatteristiċi essenzjali	Prestazzjoni

## f) Użu sostenibbli tar-riżorsi naturali (BWR 7)

Karatteristiċi essenzjali	Prestazzjoni

Il-prestazzjoni tal-prodott identifikat hawn fuq hija konformi mal-prestazzjonijiet iddikjarati. Din id-dikjarazzjoni ta' prestazzjoni hija maħruġa, skont ir-Regolament (UE) Nru 305/2011, taħt ir-responsabbiltà unika tal-manifattur identifikat hawn fuq.

Iffirmat għal u f'isem il-manifattur minn:

**Dr. Jens Weber**

(isem)

**Bad Laasphe, 27 January 2021**

(post u data tal-ħruġ)



(firma)



# PRESTATIEVERKLARING

Nr. 4 - 018 - 160107 - 2021/02

NL

# EJOT®

## b) Veiligheid in geval van brand (BWR 2)

Essentiële kenmerken	Prestaties

## c) Hygiëne, gezondheid en het milieu (BWR 3)

Essentiële kenmerken	Prestaties

## d) Bescherming tegen lawaai (BWR 5)

Essentiële kenmerken	Prestaties

## e) Energiebesparing en warmtebehoud (BWR 6)

Essentiële kenmerken	Prestaties

## f) Duurzaam gebruik van natuurlijke hulpbronnen (BWR 7)

Essentiële kenmerken	Prestaties

De prestaties van het hierboven omschreven product zijn conform de aangegeven prestaties. Deze prestatieverklaring wordt in overeenstemming met Verordening (EU) nr. 305/2011 onder de exclusieve verantwoordelijkheid van de hierboven vermelde fabrikant verstrekt.

Ondertekend voor en namens de fabrikant door:

**Dr. Jens Weber**

(naam)

**Bad Laasphe, 27 January 2021**

(plaats en datum van afgifte)



(handtekening)



# DEKLARACJA WŁAŚCIWOŚCI UŻYTKOWYCH

Nr 4 - 018 - 160107 - 2021/02

PL

**EJOT**<sup>®</sup>

## b) Bezpieczeństwo pożarowe (BWR 2)

Zasadnicze charakterystyki	Właściwości użytkowe

## c) Higiena, zdrowie i środowisko (BWR 3)

Zasadnicze charakterystyki	Właściwości użytkowe

## d) Ochrona przed hałasem (BWR 5)

Zasadnicze charakterystyki	Właściwości użytkowe

## e) Oszczędność energii i zatrzymywanie ciepła (BWR 6)

Zasadnicze charakterystyki	Właściwości użytkowe

## f) Zrównoważone wykorzystanie zasobów naturalnych (BWR 7)

Zasadnicze charakterystyki	Właściwości użytkowe

Właściwości użytkowe określonego powyżej wyrobu są zgodne z zestawem deklarowanych właściwości użytkowych. Niniejsza deklaracja właściwości użytkowych wydana zostaje zgodnie z Rozporządzeniem (UE) nr 305/2011 na wyłączną odpowiedzialność producenta określonego powyżej.

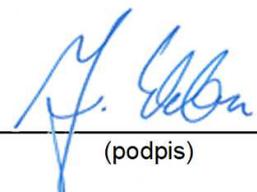
W imieniu producenta podpisał(-a):

**dr Jens Weber**

(nazwisko)

**Bad Laasphe, 27 January 2021**

(miejsce i data wydania)



(podpis)



# DECLARAÇÃO DE DESEMPENHO

N.º 4 - 018 - 160107 - 2021/02

PT

# EJOT®

## b) Segurança em caso de incêndio (BWR 2)

Características essenciais	Desempenho

## c) Higiene, saúde e meio ambiente (BWR 3)

Características essenciais	Desempenho

## d) Protecção contra o ruído (BWR 5)

Características essenciais	Desempenho

## e) Economia de energia e retenção de calor (BWR 6)

Características essenciais	Desempenho

## f) Utilização sustentável dos recursos naturais (BWR 7)

Características essenciais	Desempenho

O desempenho do produto identificado acima está em conformidade com o conjunto de desempenhos declarados. A presente declaração de desempenho é emitida, em conformidade com o Regulamento (UE) n.º 305/2011, sob a exclusiva responsabilidade do fabricante identificado acima.

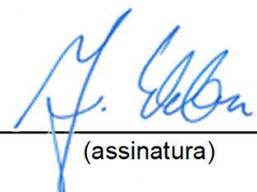
Assinado por e em nome do fabricante por:

**Dr. Jens Weber**

(nome)

**Bad Laasphe, 27 January 2021**

(local e data de emissão)



(assinatura)



# DECLARAȚIA DE PERFORMANȚĂ

Nr, **4 - 018 - 160107 - 2021/02**

RO

# EJOT®

## b) Siguranța în caz de incendiu (BWR 2)

Caracteristici esențiale	Performanța produsului

## c) Igiena, sănătatea și mediul (BWR 3)

Caracteristici esențiale	Performanța produsului

## d) Protecție împotriva zgomotului (BWR 5)

Caracteristici esențiale	Performanța produsului

## e) Economie de energie și păstrarea căldurii (BWR 6)

Caracteristici esențiale	Performanța produsului

## f) Utilizarea durabilă a resurselor naturale (BWR 7)

Caracteristici esențiale	Performanța produsului

Performanța produsului identificat mai sus este în conformitate cu setul de performanțe declarate. Această declarație de performanță este eliberată în conformitate cu Regulamentul (UE) nr. 305/2011, pe răspunderea exclusivă a fabricantului identificat mai sus.

Semnată pentru și în numele fabricantului de către:

**Dr. Jens Weber**

(numele)

**Bad Laasphe, 27 January 2021**

(locul și data emiterii)



(semnătură)



# PRESTANDEDEKLARATION

Nr 4 - 018 - 160107 - 2021/02

SE

**EJOT**<sup>®</sup>

## b) Säkerhet vid brand (BWR 2)

Väsentliga egenskaper	Prestanda

## c) Hygien, hälsa och miljö (BWR 3)

Väsentliga egenskaper	Prestanda

## d) Skydd mot buller (BWR 5)

Väsentliga egenskaper	Prestanda

## e) Energihushållning och värmehållning (BWR 6)

Väsentliga egenskaper	Prestanda

## f) Hållbar användning av naturresurser (BWR 7)

Väsentliga egenskaper	Prestanda

Prestandan för ovanstående produkt överensstämmer med den angivna prestandan. Denna prestandadeklaration har utfärdats i enlighet med förordning (EU) nr 305/2011 på eget ansvar av den tillverkare som anges ovan.

Undertecknad på tillverkarens vägnar av:

**Dr. Jens Weber**

(namn)

**Bad Laasphe, 27 January 2021**

(plats and datum)



(signatur)



# VYHLÁSENIE O PARAMETROCH

č. 4 - 018 - 160107 - 2021/02

SK

# EJOT®

## b) Bezpečnosť v prípade požiaru (BWR 2)

základné charakteristiky	vlastnosti výrobku

## c) Hygiena, zdravie a životné prostredie (BWR 3)

základné charakteristiky	vlastnosti výrobku

## d) Ochrana proti hluku (BWR 5)

základné charakteristiky	vlastnosti výrobku

## e) Úspora energie a zadržiavanie tepla (BWR 6)

základné charakteristiky	vlastnosti výrobku

## f) Udržateľné využívanie prírodných zdrojov (BWR 7)

základné charakteristiky	vlastnosti výrobku

Uvedené parametre výrobku sú v zhode so súborom deklarovaných parametrov. Toto vyhlásenie o parametroch sa v súlade s nariadením (EÚ) č. 305/2011 vydáva na výhradnú zodpovednosť uvedeného výrobcu.

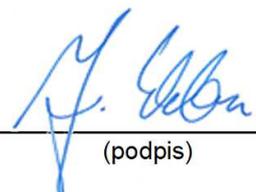
Podpísal(-a) za a v mene výrobcu:

**Dr. Jens Weber**

(meno)

**Bad Laasphe, 27 January 2021**

(miesto a dátum na výstava)



(podpis)



# IZJAVA O LASTNOSTIH

Št. 4 - 018 - 160107 - 2021/02

SLO

**EJOT**<sup>®</sup>

## b) Varnost v primeru požara (BWR 2)

Glavne značilnosti	Zmogljivost proizvoda

## c) Higiena, zdravje in okolje (BWR 3) \ t

Glavne značilnosti	Zmogljivost proizvoda

## d) Zaščita pred hrupom (BWR 5) \ t

Glavne značilnosti	Zmogljivost proizvoda

## e) Varčevanje z energijo in ohranjanje toplote (BWR 6) \ t

Glavne značilnosti	Zmogljivost proizvoda

## f) Trajnostna raba naravnih virov (BWR 7) \ t

Glavne značilnosti	Zmogljivost proizvoda

Lastnosti proizvoda, navedenega zgoraj, so v skladu z navedenimi lastnostmi. Za izdajo te izjave o lastnostih je v skladu z Uredbo (EU) št. 305/2011 odgovoren izključno proizvajalec, naveden zgoraj.

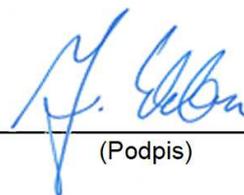
Podpisal za in v imenu proizvajalca:

**Dr. Jens Weber**

(Ime)

**Bad Laasphe, 27 January 2021**

(Kraj in datum izstavitve)



(Podpis)

<b>Table C1: Characteristic values for steel tension resistance and steel shear resistance of threaded rods</b>											
<b>Size</b>			<b>M8</b>	<b>M10</b>	<b>M12</b>	<b>M16</b>	<b>M20</b>	<b>M24</b>	<b>M27</b>	<b>M30</b>	
Cross section area	$A_s$	[mm <sup>2</sup> ]	36,6	58	84,3	157	245	353	459	561	
Characteristic tension resistance, Steel failure <sup>1)</sup>											
Steel, Property class 4.6 and 4.8	$N_{Rk,s}$	[kN]	15 (13)	23 (21)	34	63	98	141	184	224	
Steel, Property class 5.6 and 5.8	$N_{Rk,s}$	[kN]	18 (17)	29 (27)	42	78	122	176	230	280	
Steel, Property class 8.8	$N_{Rk,s}$	[kN]	29 (27)	46 (43)	67	125	196	282	368	449	
Stainless steel A2, A4 and HCR, class 50	$N_{Rk,s}$	[kN]	18	29	42	79	123	177	230	281	
Stainless steel A2, A4 and HCR, class 70	$N_{Rk,s}$	[kN]	26	41	59	110	171	247	- <sup>3)</sup>	- <sup>3)</sup>	
Stainless steel A4 and HCR, class 80	$N_{Rk,s}$	[kN]	29	46	67	126	196	282	- <sup>3)</sup>	- <sup>3)</sup>	
Characteristic tension resistance, Partial factor <sup>2)</sup>											
Steel, Property class 4.6 and 5.6	$\gamma_{Ms,N}$	[-]	2,0								
Steel, Property class 4.8, 5.8 and 8.8	$\gamma_{Ms,N}$	[-]	1,5								
Stainless steel A2, A4 and HCR, class 50	$\gamma_{Ms,N}$	[-]	2,86								
Stainless steel A2, A4 and HCR, class 70	$\gamma_{Ms,N}$	[-]	1,87								
Stainless steel A4 and HCR, class 80	$\gamma_{Ms,N}$	[-]	1,6								
Characteristic shear resistance, Steel failure <sup>1)</sup>											
Without lever arm	Steel, Property class 4.6 and 4.8	$V_{Rk,s}^0$	[kN]	9 (8)	14 (13)	20	38	59	85	110	135
	Steel, Property class 5.6 and 5.8	$V_{Rk,s}^0$	[kN]	11 (10)	17 (16)	25	47	74	106	138	168
	Steel, Property class 8.8	$V_{Rk,s}^0$	[kN]	15 (13)	23 (21)	34	63	98	141	184	224
	Stainless steel A2, A4 and HCR, class 50	$V_{Rk,s}^0$	[kN]	9	15	21	39	61	88	115	140
	Stainless steel A2, A4 and HCR, class 70	$V_{Rk,s}^0$	[kN]	13	20	30	55	86	124	- <sup>3)</sup>	- <sup>3)</sup>
	Stainless steel A4 and HCR, class 80	$V_{Rk,s}^0$	[kN]	15	23	34	63	98	141	- <sup>3)</sup>	- <sup>3)</sup>
With lever arm	Steel, Property class 4.6 and 4.8	$M_{Rk,s}^0$	[Nm]	15 (13)	30 (27)	52	133	260	449	666	900
	Steel, Property class 5.6 and 5.8	$M_{Rk,s}^0$	[Nm]	19 (16)	37 (33)	65	166	324	560	833	1123
	Steel, Property class 8.8	$M_{Rk,s}^0$	[Nm]	30 (26)	60 (53)	105	266	519	896	1333	1797
	Stainless steel A2, A4 and HCR, class 50	$M_{Rk,s}^0$	[Nm]	19	37	66	167	325	561	832	1125
	Stainless steel A2, A4 and HCR, class 70	$M_{Rk,s}^0$	[Nm]	26	52	92	232	454	784	- <sup>3)</sup>	- <sup>3)</sup>
	Stainless steel A4 and HCR, class 80	$M_{Rk,s}^0$	[Nm]	30	59	105	266	519	896	- <sup>3)</sup>	- <sup>3)</sup>
Characteristic shear resistance, Partial factor <sup>2)</sup>											
Steel, Property class 4.6 and 5.6	$\gamma_{Ms,V}$	[-]	1,67								
Steel, Property class 4.8, 5.8 and 8.8	$\gamma_{Ms,V}$	[-]	1,25								
Stainless steel A2, A4 and HCR, class 50	$\gamma_{Ms,V}$	[-]	2,38								
Stainless steel A2, A4 and HCR, class 70	$\gamma_{Ms,V}$	[-]	1,56								
Stainless steel A4 and HCR, class 80	$\gamma_{Ms,V}$	[-]	1,33								
<sup>1)</sup> Values are only valid for the given stress area $A_s$ . Values in brackets are valid for undersized threaded rods with smaller stress area $A_s$ for hot-dip galvanised threaded rods according to EN ISO 10684:2004+AC:2009. <sup>2)</sup> in absence of national regulation <sup>3)</sup> Anchor type not part of the ETA											
<b>EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete</b>									<b>Annex C 1</b>		
<b>Performances</b> Characteristic values for steel tension resistance and steel shear resistance of threaded rods											

**Table C2: Characteristic values for Concrete cone failure and Splitting with all kind of action**

Anchor size			All Anchor types and sizes	
<b>Concrete cone failure</b>				
Non-cracked concrete	$k_{ucr,N}$	[-]	11,0	
Cracked concrete	$k_{cr,N}$	[-]	7,7	
Edge distance	$c_{cr,N}$	[mm]	$1,5 h_{ef}$	
Axial distance	$s_{cr,N}$	[mm]	$2 c_{cr,N}$	
<b>Splitting</b>				
Edge distance	$h/h_{ef} \geq 2,0$	$c_{cr,sp}$	[mm]	$1,0 h_{ef}$
	$2,0 > h/h_{ef} > 1,3$			$2 \cdot h_{ef} \left( 2,5 - \frac{h}{h_{ef}} \right)$
	$h/h_{ef} \leq 1,3$			$2,4 h_{ef}$
Axial distance	$s_{cr,sp}$	[mm]	$2 c_{cr,sp}$	

EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete

**Performances**  
Characteristic values for Concrete cone failure and Splitting with all kind of action

**Annex C 2**

<b>Table C3: Characteristic values of tension loads under static and quasi-static action</b>													
<b>Anchor size threaded rod</b>				<b>M8</b>	<b>M10</b>	<b>M12</b>	<b>M16</b>	<b>M20</b>	<b>M24</b>	<b>M27</b>	<b>M30</b>		
Steel failure													
Characteristic tension resistance		$N_{Rk,s}$	[kN]	$A_s \cdot f_{uk}$ (or see Table C1)									
Partial factor		$\gamma_{Ms,N}$	[-]	see Table C1									
<b>Combined pull-out and concrete failure</b>													
Characteristic bond resistance in non-cracked concrete C20/25													
Temperature range	I: 40°C/24°C	Dry, wet concrete	$\tau_{Rk,ucr}$	[N/mm <sup>2</sup> ]	10	12	12	12	12	11	10	9	
	II: 80°C/50°C				7,5	9	9	9	9	8,5	7,5	6,5	
	III: 120°C/72°C				5,5	6,5	6,5	6,5	6,5	6,5	5,5	5,0	
	I: 40°C/24°C	flooded bore hole			7,5	8,5	8,5	8,5	No Performance Assessed				
	II: 80°C/50°C				5,5	6,5	6,5	6,5					
	III: 120°C/72°C				4,0	5,0	5,0	5,0					
Characteristic bond resistance in cracked concrete C20/25													
Temperature range	I: 40°C/24°C	Dry, wet concrete	$\tau_{Rk,cr}$	[N/mm <sup>2</sup> ]	4,0	5,0	5,5	5,5	5,5	5,5	6,5	6,5	
	II: 80°C/50°C				2,5	3,5	4,0	4,0	4,0	4,0	4,5	4,5	
	III: 120°C/72°C				2,0	2,5	3,0	3,0	3,0	3,0	3,5	3,5	
	I: 40°C/24°C	flooded bore hole			4,0	4,0	5,5	5,5	No Performance Assessed				
	II: 80°C/50°C				2,5	3,0	4,0	4,0					
	III: 120°C/72°C				2,0	2,5	3,0	3,0					
Reduktion factor $\psi_{sus}^0$ in cracked and non-cracked concrete C20/25													
Temperature range	I: 40°C/24°C	Dry, wet concrete and flooded bore hole	$\psi_{sus}^0$	[-]	0,73								
	II: 80°C/50°C				0,65								
	III: 120°C/72°C				0,57								
Increasing factors for concrete $\psi_c$		C25/30	1,02										
		C30/37	1,04										
		C35/45	1,07										
		C40/50	1,08										
		C45/55	1,09										
		C50/60	1,10										
<b>Concrete cone failure</b>													
Relevant parameter				see Table C2									
<b>Splitting</b>													
Relevant parameter				see Table C2									
<b>Installation factor</b>													
for dry and wet concrete		$\gamma_{inst}$	[-]	1,0	1,2								
for flooded bore hole				1,4	No Performance Assessed								
<b>EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete</b>										<b>Annex C 3</b>			
<b>Performances</b> Characteristic values of tension loads under static and quasi-static action													

<b>Table C4: Characteristic values of shear loads under static and quasi-static action</b>											
<b>Anchor size threaded rod</b>			<b>M8</b>	<b>M10</b>	<b>M12</b>	<b>M16</b>	<b>M20</b>	<b>M24</b>	<b>M27</b>	<b>M30</b>	
<b>Steel failure without lever arm</b>											
Characteristic shear resistance Steel, strength class 4.6, 4.8, 5.6 and 5.8	$V_{RK,s}^0$	[kN]	$0,6 \cdot A_s \cdot f_{uk}$ (or see Table C1)								
Characteristic shear resistance Steel, strength class 8.8 Stainless Steel A2, A4 and HCR, all classes	$V_{RK,s}^0$	[kN]	$0,5 \cdot A_s \cdot f_{uk}$ (or see Table C1)								
Partial factor	$\gamma_{Ms,V}$	[-]	see Table C1								
Ductility factor	$k_7$	[-]	1,0								
<b>Steel failure with lever arm</b>											
Characteristic bending moment	$M_{RK,s}^0$	[Nm]	$1,2 \cdot W_{el} \cdot f_{uk}$ (or see Table C1)								
Elastic section modulus	$W_{el}$	[mm <sup>3</sup> ]	31	62	109	277	541	935	1387	1874	
Partial factor	$\gamma_{Ms,V}$	[-]	see Table C1								
<b>Concrete pry-out failure</b>											
Factor	$k_8$	[-]	2,0								
Installation factor	$\gamma_{inst}$	[-]	1,0								
<b>Concrete edge failure</b>											
Effective length of fastener	$l_f$	[mm]	$\min(h_{ef}; 12 \cdot d_{nom})$						$\min(h_{ef}; 300\text{mm})$		
Outside diameter of fastener	$d_{nom}$	[mm]	8	10	12	16	20	24	27	30	
Installation factor	$\gamma_{inst}$	[-]	1,0								
<b>EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete</b>								<b>Annex C 4</b>			
<b>Performances</b> Characteristic values of shear loads under static and quasi-static action											

Table C5: Characteristic values of tension loads under static and quasi-static action											
Anchor size internal threaded anchor rods				IG-M6	IG-M8	IG-M10	IG-M12	IG-M16	IG-M20		
<b>Steel failure<sup>1)</sup></b>											
Characteristic tension resistance,	5.8	$N_{Rk,s}$	[kN]	10	17	29	42	76	123		
Steel, strength class	8.8	$N_{Rk,s}$	[kN]	16	27	46	67	121	196		
Partial factor, strength class 5.8 and 8.8	$\gamma_{Ms,N}$		[-]	1,5							
Characteristic tension resistance, Stainless Steel A4 and HCR, Strength class 70 <sup>2)</sup>		$N_{Rk,s}$	[kN]	14	26	41	59	110	124		
Partial factor	$\gamma_{Ms,N}$		[-]	1,87				2,86			
<b>Combined pull-out and concrete cone failure</b>											
Characteristic bond resistance in non-cracked concrete C20/25											
Temperature range	I: 40°C/24°C	Dry, wet concrete	$\tau_{Rk,ucr}$	[N/mm <sup>2</sup> ]	12	12	12	12	11	9	
	II: 80°C/50°C				9	9	9	9	8,5	6,5	
	III: 120°C/72°C				6,5	6,5	6,5	6,5	6,5	5,0	
	I: 40°C/24°C	flooded bore hole			8,5	8,5	8,5	No Performance Assessed			
	II: 80°C/50°C				6,5	6,5	6,5				
	III: 120°C/72°C				5,0	5,0	5,0				
Characteristic bond resistance in cracked concrete C20/25											
Temperature range	I: 40°C/24°C	Dry, wet concrete	$\tau_{Rk,cr}$	[N/mm <sup>2</sup> ]	5,0	5,5	5,5	5,5	5,5	6,5	
	II: 80°C/50°C				3,5	4,0	4,0	4,0	4,0	4,5	
	III: 120°C/72°C				2,5	3,0	3,0	3,0	3,0	3,5	
	I: 40°C/24°C	flooded bore hole			4,0	5,5	5,5	No Performance Assessed			
	II: 80°C/50°C				3,0	4,0	4,0				
	III: 120°C/72°C				2,5	3,0	3,0				
Reduktion factor $\psi_{sus}^0$ in cracked and non-cracked concrete C20/25											
Temperature range	I: 40°C/24°C	Dry, wet concrete and flooded bore hole	$\psi_{sus}^0$	[-]	0,73						
	II: 80°C/50°C				0,65						
	III: 120°C/72°C				0,57						
Increasing factors for concrete $\psi_c$				C25/30	1,02						
				C30/37	1,04						
				C35/45	1,07						
				C40/50	1,08						
				C45/55	1,09						
				C50/60	1,10						
<b>Concrete cone failure</b>											
Relevant parameter				see Table C2							
<b>Splitting failure</b>											
Relevant parameter				see Table C2							
<b>Installation factor</b>											
for dry and wet concrete				$\gamma_{inst}$	[-]	1,2					
for flooded bore hole						1,4	No Performance Assessed				
<sup>1)</sup> Fastenings (incl. nut and washer) must comply with the appropriate material and property class of the internal threaded rod. The characteristic tension resistance for steel failure is valid for the internal threaded rod and the fastening element. <sup>2)</sup> For IG-M20 strength class 50 is valid											
EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete								Annex C 5			
<b>Performances</b> Characteristic values of tension loads under static and quasi-static action											

Table C6: Characteristic values of shear loads under static and quasi-static action										
Anchor size for internal threaded anchor rods				IG-M6	IG-M8	IG-M10	IG-M12	IG-M16	IG-M20	
<b>Steel failure without lever arm<sup>1)</sup></b>										
Characteristic shear resistance, Steel, strength class	5.8	$V_{Rk,s}^0$	[kN]	5	9	15	21	38	61	
	8.8	$V_{Rk,s}^0$	[kN]	8	14	23	34	60	98	
Partial factor, strength class 5.8 and 8.8	$\gamma_{Ms,V}$		[-]	1,25						
Characteristic shear resistance, Stainless Steel A4 and HCR, Strength class 70 <sup>2)</sup>		$V_{Rk,s}^0$	[kN]	7	13	20	30	55	40	
Partial factor	$\gamma_{Ms,V}$		[-]	1,56					2,38	
Ductility factor	$k_7$		[-]	1,0						
<b>Steel failure with lever arm<sup>1)</sup></b>										
Characteristic bending moment, Steel, strength class	5.8	$M_{Rk,s}^0$	[Nm]	8	19	37	66	167	325	
	8.8	$M_{Rk,s}^0$	[Nm]	12	30	60	105	267	519	
Partial factor, strength class 5.8 and 8.8	$\gamma_{Ms,V}$		[-]	1,25						
Characteristic bending moment, Stainless Steel A4 and HCR, Strength class 70 <sup>2)</sup>		$M_{Rk,s}^0$	[Nm]	11	26	52	92	233	456	
Partial factor	$\gamma_{Ms,V}$		[-]	1,56					2,38	
<b>Concrete pry-out failure</b>										
Factor	$k_B$		[-]	2,0						
Installation factor	$\gamma_{inst}$		[-]	1,0						
<b>Concrete edge failure</b>										
Effective length of fastener	$l_f$	[mm]	$\min(h_{ef}; 12 \cdot d_{nom})$					$\min(h_{ef}; 300\text{mm})$		
Outside diameter of fastener	$d_{nom}$	[mm]	10	12	16	20	24	30		
Installation factor	$\gamma_{inst}$		[-]	1,0						
<sup>1)</sup> Fastenings (incl. nut and washer) must comply with the appropriate material and property class of the internal threaded rod. The characteristic tension resistance for steel failure is valid for the internal threaded rod and the fastening element. <sup>2)</sup> For IG-M20 strength class 50 is valid										
EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete								Annex C 6		
<b>Performances</b> Characteristic values of shear loads under static and quasi-static action										

<b>Table C7: Characteristic values of tension loads under static and quasi-static action</b>														
<b>Anchor size reinforcing bar</b>				Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 20	Ø 25	Ø 28	Ø 32		
<b>Steel failure</b>														
Characteristic tension resistance		$N_{Rk,s}$	[kN]	$A_s \cdot f_{uk}^{1)}$										
Cross section area		$A_s$	[mm <sup>2</sup> ]	50	79	113	154	201	314	491	616	804		
Partial factor		$\gamma_{Ms,N}$	[-]	1,4 <sup>2)</sup>										
<b>Combined pull-out and concrete failure</b>														
Characteristic bond resistance in non-cracked concrete C20/25														
Temperature range	I: 40°C/24°C	Dry, wet concrete	$\tau_{Rk,ucr}$	[N/mm <sup>2</sup> ]	10	12	12	12	12	12	11	10	8,5	
	II: 80°C/50°C				7,5	9	9	9	9	9	8,0	7,0	6,0	
	III: 120°C/72°C				5,5	6,5	6,5	6,5	6,5	6,5	6,0	5,0	4,5	
	I: 40°C/24°C	flooded bore hole			7,5	8,5	8,5	8,5	8,5	No Performance Assessed				
	II: 80°C/50°C				5,5	6,5	6,5	6,5	6,5					
	III: 120°C/72°C				4,0	5,0	5,0	5,0	5,0					
Characteristic bond resistance in cracked concrete C20/25														
Temperature range	I: 40°C/24°C	Dry, wet concrete	$\tau_{Rk,cr}$	[N/mm <sup>2</sup> ]	4,0	5,0	5,5	5,5	5,5	5,5	5,5	6,5	6,5	
	II: 80°C/50°C				2,5	3,5	4,0	4,0	4,0	4,0	4,0	4,5	4,5	
	III: 120°C/72°C				2,0	2,5	3,0	3,0	3,0	3,0	3,0	3,0	3,5	3,5
	I: 40°C/24°C	flooded bore hole			4,0	4,0	5,5	5,5	5,5	No Performance Assessed				
	II: 80°C/50°C				2,5	3,0	4,0	4,0	4,0					
	III: 120°C/72°C				2,0	2,5	3,0	3,0	3,0					
Reduktion factor $\psi_{sus}^0$ in cracked and non-cracked concrete C20/25														
Temperature range	I: 40°C/24°C	Dry, wet concrete and flooded bore hole	$\psi_{sus}^0$	[-]	0,73									
	II: 80°C/50°C				0,65									
	III: 120°C/72°C				0,57									
Increasing factors for concrete $\psi_c$			C25/30		1,02									
			C30/37		1,04									
			C35/45		1,07									
			C40/50		1,08									
			C45/55		1,09									
C50/60		1,10												
<b>Concrete cone failure</b>														
Relevant parameter				see Table C2										
<b>Splitting</b>														
Relevant parameter				see Table C2										
<b>Installation factor</b>														
for dry and wet concrete		$\gamma_{inst}$	[-]	1,2	1,2									
for flooded bore hole				1,4	No Performance Assessed									
<sup>1)</sup> $f_{uk}$ shall be taken from the specifications of reinforcing bars <sup>2)</sup> in absence of national regulation														
EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete										Annex C 7				
<b>Performances</b> Characteristic values of tension loads under static and quasi-static action														

<b>Table C8: Characteristic values of shear loads under static and quasi-static action</b>											
<b>Anchor size reinforcing bar</b>			<b>Ø 8</b>	<b>Ø 10</b>	<b>Ø 12</b>	<b>Ø 14</b>	<b>Ø 16</b>	<b>Ø 20</b>	<b>Ø 25</b>	<b>Ø 28</b>	<b>Ø 32</b>
<b>Steel failure without lever arm</b>											
Characteristic shear resistance	$V_{Rk,s}^0$	[kN]	$0,50 \cdot A_s \cdot f_{uk}^{1)}$								
Cross section area	$A_s$	[mm <sup>2</sup> ]	50	79	113	154	201	314	491	616	804
Partial factor	$\gamma_{Ms,V}$	[-]	1,5 <sup>2)</sup>								
Ductility factor	$k_7$	[-]	1,0								
<b>Steel failure with lever arm</b>											
Characteristic bending moment	$M_{Rk,s}^0$	[Nm]	$1,2 \cdot W_{el} \cdot f_{uk}^{1)}$								
Elastic section modulus	$W_{el}$	[mm <sup>3</sup> ]	50	98	170	269	402	785	1534	2155	3217
Partial factor	$\gamma_{Ms,V}$	[-]	1,5 <sup>2)</sup>								
<b>Concrete pry-out failure</b>											
Factor	$k_8$	[-]	2,0								
Installation factor	$\gamma_{inst}$	[-]	1,0								
<b>Concrete edge failure</b>											
Effective length of fastener	$l_f$	[mm]	$\min(h_{ef}; 12 \cdot d_{nom})$						$\min(h_{ef}; 300\text{mm})$		
Outside diameter of fastener	$d_{nom}$	[mm]	8	10	12	14	16	20	25	28	32
Installation factor	$\gamma_{inst}$	[-]	1,0								
<sup>1)</sup> $f_{uk}$ shall be taken from the specifications of reinforcing bars <sup>2)</sup> in absence of national regulation											
<b>EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete</b>									<b>Annex C 8</b>		
<b>Performances</b> Characteristic values of shear loads under static and quasi-static action											

<b>Table C9: Displacements under tension load<sup>1)</sup> (threaded rod)</b>										
<b>Anchor size threaded rod</b>			<b>M8</b>	<b>M10</b>	<b>M12</b>	<b>M16</b>	<b>M20</b>	<b>M24</b>	<b>M27</b>	<b>M30</b>
<b>Non-cracked concrete C20/25 under static and quasi-static action</b>										
Temperature range I: 40°C/24°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,021	0,023	0,026	0,031	0,036	0,041	0,045	0,049
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,030	0,033	0,037	0,045	0,052	0,060	0,065	0,071
Temperature range II: 80°C/50°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,050	0,056	0,063	0,075	0,088	0,100	0,110	0,119
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,072	0,081	0,090	0,108	0,127	0,145	0,159	0,172
Temperature range III: 120°C/72°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,050	0,056	0,063	0,075	0,088	0,100	0,110	0,119
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,072	0,081	0,090	0,108	0,127	0,145	0,159	0,172
<b>Cracked concrete C20/25 under static and quasi-static action</b>										
Temperature range I: 40°C/24°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,090		0,070					
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,105		0,105					
Temperature range II: 80°C/50°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,219		0,170					
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,255		0,245					
Temperature range III: 120°C/72°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,219		0,170					
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,255		0,245					
<sup>1)</sup> Calculation of the displacement $\delta_{ND} = \delta_{ND}$ -factor $\cdot \tau$ ; $\tau$ : action bond stress for tension $\delta_{Ncr} = \delta_{Ncr}$ -factor $\cdot \tau$ ;										
<b>Table C10: Displacements under shear load<sup>1)</sup> (threaded rod)</b>										
<b>Anchor size threaded rod</b>			<b>M8</b>	<b>M10</b>	<b>M12</b>	<b>M16</b>	<b>M20</b>	<b>M24</b>	<b>M27</b>	<b>M30</b>
<b>Non-cracked concrete C20/25 under static and quasi-static action</b>										
All temperature ranges	$\delta_{V0}$ -factor	[mm/kN]	0,06	0,06	0,05	0,04	0,04	0,03	0,03	0,03
	$\delta_{Vcr}$ -factor	[mm/kN]	0,09	0,08	0,08	0,06	0,06	0,05	0,05	0,05
<b>Cracked concrete C20/25 under static and quasi-static action</b>										
All temperature ranges	$\delta_{V0}$ -factor	[mm/kN]	0,12	0,12	0,11	0,10	0,09	0,08	0,08	0,07
	$\delta_{Vcr}$ -factor	[mm/kN]	0,18	0,18	0,17	0,15	0,14	0,13	0,12	0,10
<sup>1)</sup> Calculation of the displacement $\delta_{V0} = \delta_{V0}$ -factor $\cdot V$ ;                      V: action shear load $\delta_{Vcr} = \delta_{Vcr}$ -factor $\cdot V$ ;										
<b>EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete</b>								<b>Annex C 9</b>		
<b>Performances</b> Displacements (threaded rods)										

<b>Table C11: Displacements under tension load<sup>1)</sup> (Internal threaded anchor rod)</b>								
<b>Anchor size Internal threaded anchor rod</b>			<b>IG-M6</b>	<b>IG-M8</b>	<b>IG-M10</b>	<b>IG-M12</b>	<b>IG-M16</b>	<b>IG-M20</b>
<b>Non-cracked concrete C20/25 under static and quasi-static action</b>								
Temperature range I: 40°C/24°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,023	0,026	0,031	0,036	0,041	0,049
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,033	0,037	0,045	0,052	0,060	0,071
Temperature range II: 80°C/50°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,056	0,063	0,075	0,088	0,100	0,119
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,081	0,090	0,108	0,127	0,145	0,172
Temperature range III: 120°C/72°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,056	0,063	0,075	0,088	0,100	0,119
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,081	0,090	0,108	0,127	0,145	0,172
<b>Cracked concrete C20/25 under static and quasi-static action</b>								
Temperature range I: 40°C/24°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,090			0,070		
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,105			0,105		
Temperature range II: 80°C/50°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,219			0,170		
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,255			0,245		
Temperature range III: 120°C/72°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,219			0,170		
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,255			0,245		
<sup>1)</sup> Calculation of the displacement $\delta_{ND} = \delta_{ND}\text{-factor} \cdot \tau$ ; $\tau$ : action bond stress for tension $\delta_{Ncr} = \delta_{Ncr}\text{-factor} \cdot \tau$ ;								
<b>Table C12: Displacements under shear load<sup>1)</sup> (Internal threaded anchor rod)</b>								
<b>Anchor size Internal threaded anchor rod</b>			<b>IG-M6</b>	<b>IG-M8</b>	<b>IG-M10</b>	<b>IG-M12</b>	<b>IG-M16</b>	<b>IG-M20</b>
<b>Non-cracked and cracked concrete C20/25 under static and quasi-static action</b>								
All temperature ranges	$\delta_{VD}$ -factor	[mm/kN]	0,07	0,06	0,06	0,05	0,04	0,04
	$\delta_{Vcr}$ -factor	[mm/kN]	0,10	0,09	0,08	0,08	0,06	0,06
<sup>1)</sup> Calculation of the displacement $\delta_{VD} = \delta_{VD}\text{-factor} \cdot V$ ;                      V: action shear load $\delta_{Vcr} = \delta_{Vcr}\text{-factor} \cdot V$ ;								
<b>EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete</b>							<b>Annex C 10</b>	
<b>Performances</b> Displacements (Internal threaded anchor rod)								

<b>Table C13: Displacements under tension load<sup>1)</sup> (rebar)</b>											
<b>Anchor size reinforcing bar</b>			<b>Ø 8</b>	<b>Ø 10</b>	<b>Ø 12</b>	<b>Ø 14</b>	<b>Ø 16</b>	<b>Ø 20</b>	<b>Ø 25</b>	<b>Ø 28</b>	<b>Ø 32</b>
<b>Non-cracked concrete C20/25 under static and quasi-static action</b>											
Temperature range I: 40°C/24°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,021	0,023	0,026	0,028	0,031	0,036	0,043	0,047	0,052
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,030	0,033	0,037	0,041	0,045	0,052	0,061	0,071	0,075
Temperature range II: 80°C/50°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,050	0,056	0,063	0,069	0,075	0,088	0,104	0,113	0,126
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,072	0,081	0,090	0,099	0,108	0,127	0,149	0,163	0,181
Temperature range III: 120°C/72°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,050	0,056	0,063	0,069	0,075	0,088	0,104	0,113	0,126
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,072	0,081	0,090	0,099	0,108	0,127	0,149	0,163	0,181
<b>Cracked concrete C20/25 under static and quasi-static action</b>											
Temperature range I: 40°C/24°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,090				0,070				
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,105				0,105				
Temperature range II: 80°C/50°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,219				0,170				
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,255				0,245				
Temperature range III: 120°C/72°C	$\delta_{ND}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,219				0,170				
	$\delta_{Ncr}$ -factor	[mm/(N/mm <sup>2</sup> )]	0,255				0,245				
<sup>1)</sup> Calculation of the displacement $\delta_{ND} = \delta_{ND}$ -factor $\cdot \tau$ ; $\tau$ : action bond stress for tension $\delta_{Ncr} = \delta_{Ncr}$ -factor $\cdot \tau$ ;											
<b>Table C14: Displacement under shear load<sup>1)</sup> (rebar)</b>											
<b>Anchor size reinforcing bar</b>			<b>Ø 8</b>	<b>Ø 10</b>	<b>Ø 12</b>	<b>Ø 14</b>	<b>Ø 16</b>	<b>Ø 20</b>	<b>Ø 25</b>	<b>Ø 28</b>	<b>Ø 32</b>
<b>Non-cracked concrete C20/25 under static and quasi-static action</b>											
All temperature ranges	$\delta_{VD}$ -factor	[mm/kN]	0,06	0,05	0,05	0,04	0,04	0,04	0,03	0,03	0,03
	$\delta_{Vcr}$ -factor	[mm/kN]	0,09	0,08	0,08	0,06	0,06	0,05	0,05	0,04	0,04
<b>Cracked concrete C20/25 under static and quasi-static action</b>											
All temperature ranges	$\delta_{VD}$ -factor	[mm/kN]	0,12	0,12	0,11	0,11	0,10	0,09	0,08	0,07	0,06
	$\delta_{Vcr}$ -factor	[mm/kN]	0,18	0,18	0,17	0,16	0,15	0,14	0,12	0,11	0,10
<sup>1)</sup> Calculation of the displacement $\delta_{VD} = \delta_{VD}$ -factor $\cdot V$ ; $V$ : action shear load $\delta_{Vcr} = \delta_{Vcr}$ -factor $\cdot V$ ;											
<b>EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete</b>										<b>Annex C 11</b>	
<b>Performances</b> Displacements (rebar)											

<b>Table C15: Characteristic values of tension loads under seismic action (performance category C1)</b>													
<b>Anchor size threaded rod</b>				<b>M8</b>	<b>M10</b>	<b>M12</b>	<b>M16</b>	<b>M20</b>	<b>M24</b>	<b>M27</b>	<b>M30</b>		
<b>Steel failure</b>													
Characteristic tension resistance		$N_{Rk,s,eq,C1}$	[kN]	$1,0 \cdot N_{Rk,s}$									
Partial factor		$\gamma_{Ms,N}$	[-]	see Table C1									
<b>Combined pull-out and concrete failure</b>													
Characteristic bond resistance in non-cracked and cracked concrete C20/25													
Temperature range	I: 40°C/24°C	Dry, wet concrete	$\tau_{Rk,eq,C1}$	[N/mm <sup>2</sup> ]	2,5	3,1	3,7	3,7	3,7	3,8	4,5	4,5	
	II: 80°C/50°C				1,6	2,2	2,7	2,7	2,7	2,8	3,1	3,1	
	III: 120°C/72°C				1,3	1,6	2,0	2,0	2,0	2,1	2,4	2,4	
	I: 40°C/24°C	flooded bore hole			2,5	2,5	3,7	3,7	No Performance Assessed				
	II: 80°C/50°C				1,6	1,9	2,7	2,7					
	III: 120°C/72°C				1,3	1,6	2,0	2,0					
Increasing factors for concrete $\psi_C$		C25/30 to C50/60		1,0									
<b>Installation factor</b>													
for dry and wet concrete		$\gamma_{inst}$	[-]	1,0	1,2								
for flooded bore hole				1,4				No Performance Assessed					
<p><b>Table C16: Characteristic values of shear loads under seismic action (performance category C1)</b></p>													
<b>Anchor size threaded rod</b>				<b>M8</b>	<b>M10</b>	<b>M12</b>	<b>M16</b>	<b>M20</b>	<b>M24</b>	<b>M27</b>	<b>M30</b>		
<b>Steel failure without lever arm</b>													
Characteristic shear resistance (Seismic C1)		$V_{Rk,s,eq,C1}$	[kN]	$0,70 \cdot V_{Rk,s}^0$									
Partial factor		$\gamma_{Ms,V}$	[-]	see Table C1									
<b>Factor for annular gap</b>		$\alpha_{gap}$	[-]	0,5 (1,0) <sup>1)</sup>									
<p><sup>1)</sup> Value in brackets valid for filled annular gap between anchor and clearance hole in the fixture. Use of special filling washer Annex A 3 is required</p>													
<b>EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete</b>										<b>Annex C 12</b>			
<b>Performances</b> Characteristic values of tension loads and shear loads under seismic action (performance category C1)													

<b>Table C17: Characteristic values of tension loads under seismic action (performance category C1)</b>														
<b>Anchor size reinforcing bar</b>				Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 20	Ø 25	Ø 28	Ø 32		
<b>Steel failure</b>														
Characteristic tension resistance	$N_{Rk,s,eq,C1}$	[kN]	$1,0 \cdot A_s \cdot f_{uk}^{1)}$											
Cross section area	$A_s$	[mm <sup>2</sup> ]	50	79	113	154	201	314	491	616	804			
Partial factor	$\gamma_{Ms,N}$	[-]	1,4 <sup>2)</sup>											
<b>Combined pull-out and concrete failure</b>														
Characteristic bond resistance in non-cracked and cracked concrete C20/25														
Temperature range	I: 40°C/24°C	Dry, wet concrete	$\tau_{Rk, eq,C1}$	[N/m <sup>2</sup> ]	2,5	3,1	3,7	3,7	3,7	3,7	3,8	4,5	4,5	
	II: 80°C/50°C				1,6	2,2	2,7	2,7	2,7	2,7	2,8	3,1	3,1	
	III: 120°C/72°C				1,3	1,6	2,0	2,0	2,0	2,0	2,1	2,4	2,4	
	I: 40°C/24°C	flooded bore hole			2,5	2,5	3,7	3,7	3,7	No Performance Assessed				
	II: 80°C/50°C				1,6	1,9	2,7	2,7	2,7					
	III: 120°C/72°C				1,3	1,6	2,0	2,0	2,0					
Increasing factors for concrete $\psi_c$		C25/30 to C50/60	1,0											
<b>Installation factor</b>														
for dry and wet concrete		$\gamma_{inst}$	[-]	1,2	1,2									
for flooded bore hole				1,4	No Performance Assessed									
<sup>1)</sup> $f_{uk}$ shall be taken from the specifications of reinforcing bars <sup>2)</sup> in absence of national regulation														
<b>Table C18: Characteristic values of shear loads under seismic action (performance category C1)</b>														
<b>Anchor size reinforcing bar</b>				Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 20	Ø 25	Ø 28	Ø 32		
<b>Steel failure without lever arm</b>														
Characteristic shear resistance	$V_{Rk,s,eq,C1}$	[kN]	$0,35 \cdot A_s \cdot f_{uk}^{2)}$											
Cross section area	$A_s$	[mm <sup>2</sup> ]	50	79	113	154	201	314	491	616	804			
Partial factor	$\gamma_{Ms,V}$	[-]	1,5 <sup>2)</sup>											
<b>Factor for annular gap</b>	$\alpha_{gap}$	[-]	0,5 (1,0) <sup>3)</sup>											
<sup>1)</sup> $f_{uk}$ shall be taken from the specifications of reinforcing bars <sup>2)</sup> in absence of national regulation <sup>3)</sup> Value in brackets valid for filled annular gap between anchor and clearance hole in the fixture. Use of special filling washer Annex A.3 is required														
<b>EJOT Chemical Anchor MULTIFIX USF, MULTIFIX USF winter for concrete</b>										<b>Annex C 13</b>				
<b>Performances</b> Characteristic values of tension loads and shear loads under seismic action (performance category C1)														