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**Inspection Document**  
**EN 10204**  
**Prüfbescheinigung**

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Document No.    *Dokument Nr.*

P8\_2.2\_035

Item-Nr.	Product designation	Customer ref. -Nr.	Batch-Nr.	Quantity
<i>Sach-Nr.</i>	<i>Produktbezeichnung</i>	<i>Kunden Ref. Nr.</i>	<i>Charge/Los Nr.</i>	<i>Menge</i>
Code art.	Référence produit	No. ref. de client	Commande No.	Quantité
259953	HAS-R M12x110/88			

Item designation	HAS-R	Rod M12	Nut M12	Washer 13		
Sachbezeichnung	M12x110/88					
Reference composant						

**Inspection values/Prüfergebnisse**

Chemical composition		set value	actual value	set value	actual value	set value	actual value	set value	actual value	set value	actual value
Chem. Zusammensetzung											
<b>C %</b>		0.00-0.07	0.02	0.00-0.08	0.01	0.00-0.08	0.01				
<b>Si %</b>		0.00-1.00	0.35	0.00-1.00	0.52	0.00-1.00	0.41				
<b>Mn %</b>		0.00-2.00	1.80	0.00-2.00	1.42	0.00-2.00	1.43				
<b>P %</b>		0.000-0.045	0.030	0.000-0.050	0.029	0.000-0.050	0.03				
<b>S %</b>		0.000-0.030	0.026	0.000-0.030	0.002	0.000-0.030	0.003				
<b>Cr %</b>		16.50-18.50	16.71	16.00-18.50	17.30	16.00-18.50	17.12				
<b>Mo %</b>		2.00-2.50	2.01	2.00-3.00	2.01	2.00-3.00	2.05				
<b>Ni %</b>		10.00-13.00	10.23	10.00-14.00	10.04	10.00-14.00	10.13				
<b>Cu %</b>											
<b>B %</b>											
<b>Al %</b>											
<b>N %</b>		0.00-0.11	0.08								
<b>Pb %</b>											
<b>Mech. properties</b>											
Mechanische Eigensch. / Mecan. prop.											
<b>N</b>											
<b>V</b>											
<b>Fp</b>				59	59						
<b>HV</b>						140-250	145				
<b>A</b>		min.20	24								
<b>Z</b>											
<b>R<sub>p0.2</sub></b>		min.350	675								
<b>R<sub>m</sub></b>		700-850	800								
<b>Layer thickness/Schichtdicke</b>											
Epaisseur de couche extérieure											
<b>d (Zn)</b>											
N	kN	Tension load / Bruchlast Zug / charge de tension				Z	%	Reduction of area / Einschnürung / contraction			
V	kN	Shear load / Querlast / charge de cisaillement				R <sub>p0.2</sub>	N/mm <sup>2</sup>	Yield strength / Streckgrenze / limite d'elasticite			
F <sub>p</sub>	N	Proof load / Prüfkraft / charge limite				R <sub>m</sub>	N/mm <sup>2</sup>	Ultimate tensile strength / Zugfestigkeit / resistance a la			
HV	-	Vickers hardness / Härte Vickers / durete Vickers				d (Zn)	µm	Mean zinc thickness/ mittlere Schicht-dicke Zn / epaisseur			
A	%	Elongation after fracture / Bruch-dehnung / elongation apres fracture									