

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| General Specifications: WED-354-1, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 83 |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

Tout le contenu de ce document, la reproduction ou l'exploitation ou communication de son contenu sont interdites, sauf autorisation expresse. Tout manquement à cette règle constitue un abus évident et expose son auteur au versement de dommages et intérêts. Tous droits de propriété industrielle réservés, notamment en matière de brevets et de modèles.

WABCO sowie Vertriebspartner dieser Untereinheiten, Vertriebspartner und Mitbetroffene, welche nicht ausdrücklich zugelassen sind, sind ausdrücklich untersagt, die Weiterverbreitung dieser Untereinheiten, Vertriebspartner und Mitbetroffenen, stellen einen offensichtlichen Missbrauch dar und verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patentverletzung oder Gebrauchsmuster-Eintragung vorbehalten.

Non è permesso cedere, o terzi o riprodurre questo documento, né utilizzare il contenuto o renderlo comunque noto a terzi senza autorizzazione esplicita. Ogni infrazione costituisce un evidente abuso e comporta il risarcimento dei danni subiti. E' fatta riserva di tutti i diritti derivanti da brevetti o modelli.

Copying of this document and giving it to others and the use or communication of the contents thereof, are forbidden without express authority. Contravention of this restriction will constitute an evident abuse and result in a liability to the payment of damages. All rights are reserved in the event of the grant of patent or registration of a utility model or design. This document is the subject of copyright.

|                                                                                                                                       |  |                                                                                         |                            |                                                         |                                                               |  |
|---------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------|----------------------------|---------------------------------------------------------|---------------------------------------------------------------|--|
| HANDLING, STORAGE, PACKAGING, PRESERVATION AND DELIVERY<br>HANDHABUNG, LAGERUNG, VERPACKUNG, KONSERVIERUNG UND VERSAND                |  |                                                                                         |                            |                                                         | 480 020 000 0<br>(DOC 035)                                    |  |
| FOR FURTHER TECHNICAL DATA SEE PRODUCT SPECIFICATION DOCUMENT N°<br>WEITERE TECHNISCHE DATEN SIEHE PRODUKTSPEZIFIKATION-DOKUMENTEN NR |  |                                                                                         |                            |                                                         | 480 003 078 0<br>(CODE 035)                                   |  |
| THE DEVICE IS SUITED FOR INSTALLATION ON THE DRIVER'S CAB ONLY<br>GERAET IST NUR FUER FAHRERHAUSANBAU GEEIGNET                        |  |                                                                                         |                            |                                                         |                                                               |  |
| PERMISSIBLE LEAKAGE<br>ZULAESSIGE LECKAGE                                                                                             |  |                                                                                         |                            | SEE PRODUCT SPECIFICATION<br>SIEHE PRODUKTSPEZIFIKATION |                                                               |  |
| THERMAL RANGE OF APPLICATION<br>THERMISCHER ANWENDUNGSBEREICH                                                                         |  | -40 °C....+80 °C                                                                        |                            |                                                         |                                                               |  |
| SHORT TERM RESISTANCE TO HEAT<br>KURZZEITIGE WAERMEBESTAENDIGKEIT                                                                     |  | MAX. 110 °C<br>AT 1h                                                                    |                            | WITHOUT FUNCTION<br>OHNE FUNKTION                       |                                                               |  |
| NOMINAL DIAMETER<br>NENNWEITE                                                                                                         |  | 12<br>11<br>22<br>21                                                                    | =><br>=><br>=><br>=>       | 22<br>21<br>3<br>3                                      | Ø6 mm<br>Ø5 mm<br>Ø5.4 mm<br>Ø5 mm                            |  |
| WORKING MEDIUM<br>ARBEITSMEDIUM                                                                                                       |  | AIR (WATER-,OIL-AND ALCOHOL CONTAINING)<br>LUFT (WASSER-,OEL-UND ALKOHOLHALTIG)         |                            |                                                         |                                                               |  |
| AMBIENT ENVIRONMENT<br>UMGEBUNGSMEDIUM                                                                                                |  | AIR (WATER-,SALT-; DUST-AND OIL CONTAINING)<br>LUFT (WASSER-,SALZ-;STAUB-UND OELHALTIG) |                            |                                                         |                                                               |  |
| PERMISSIBLE PRESSURE<br>ZULAESSIGER DRUCK                                                                                             |  |                                                                                         |                            |                                                         | pe = MAX.15 bar                                               |  |
| WORKING PRESSURE<br>BETRIEBSDRUCK                                                                                                     |  |                                                                                         |                            |                                                         | pe = 12.5 bar                                                 |  |
| IN A DISTANCE OF<br>IM ABSTAND VON                                                                                                    |  | 7m                                                                                      | SOUND LEVEL<br>SCHALLPEGEL |                                                         | < 69 dbA<br>(ISO 3744)                                        |  |
| OPERATING VOLTAGE<br>BETRIEBSSPANNUNG                                                                                                 |  |                                                                                         |                            |                                                         | 24 <sup>+8</sup> <sub>-12</sub> V DC                          |  |
| LOAD-CARRYING CAPACITY<br>BELASTBARKEIT                                                                                               |  |                                                                                         | 6.4 / 6.6                  |                                                         | ≤10mA<br>OHMSCHE LAST                                         |  |
| OUTLET<br>AUSGANG                                                                                                                     |  |                                                                                         | 6.5 / 6.7                  |                                                         | PWM-SIGNAL<br>I <sub>max</sub> .20mA<br>R <sub>i</sub> =100KΩ |  |
| CURRENT CONSUMPTION<br>STROMAUFNAHME                                                                                                  |  |                                                                                         | 6.2                        |                                                         | MAX.200mA                                                     |  |

|                                                                                                                                           |                                                                                                 |                                     |                                                           |          |
|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------|----------|
| PROTECTION CLASS ACC. TO<br>SCHUTZKLASSE NACH                                                                                             |                                                                                                 | VDE 0580                            |                                                           |          |
| TYPE OF PROTECTION<br>SCHUTZART                                                                                                           | COMPLETE DEVICE WITH MOUNTED COUPLING<br>KOMPLETTES GERAET MIT MONTIERTER KUPPLUNG              | IP 6K6K<br>IP 6K9K                  |                                                           |          |
|                                                                                                                                           | ELECTRIC TERMINALS WITHOUT MOUNTED COUPLING<br>ELEKTRISCHE ANSCHLUESSE OHNE MONTIERTER KUPPLUNG | IP 6K7                              |                                                           |          |
| MAX. LEAKAGE, DURING PRESSURE MAINTENANCE<br>OR WHILE NOT OPERATED, NEW DEVICE<br>MAX. LECKAGE , DRUCKHALTEND ODER UNBETAETIGT, NEUGERAET |                                                                                                 | ≥-20°...+80 °C<br><br>-40°...-20 °C | 10 cm <sup>3</sup> /min.<br><br>1500 cm <sup>3</sup> /min | DIN 1343 |

|                                                      |  |      |               |                |       |                |    |      |             |                  |            |                    |               |                                                                         |  |                                 |          |       |          |      |              |               |                 |
|------------------------------------------------------|--|------|---------------|----------------|-------|----------------|----|------|-------------|------------------|------------|--------------------|---------------|-------------------------------------------------------------------------|--|---------------------------------|----------|-------|----------|------|--------------|---------------|-----------------|
| General Specification: JED-334-1 , Size ISO 14405 LP |  |      |               |                |       |                |    |      |             | Copyright WABCO® |            |                    |               | <div>WABCO</div> <div>BRAKE SIGNAL TRANSMITTER<br/>BREMSWERTGEBER</div> |  |                                 |          |       |          |      |              |               |                 |
| Further Technical Data:                              |  |      |               |                |       |                |    |      |             | Date             |            | Signature          |               |                                                                         |  |                                 |          |       |          |      |              |               |                 |
| Doc. Code:                                           |  |      |               | Sheet:         |       |                | To |      |             | Drawn            |            | Mksa               |               |                                                                         |  |                                 |          |       |          |      |              |               |                 |
| General Tolerances JED-261                           |  |      |               |                |       |                |    |      |             | Checked          |            | 2019-10-18 Adamski |               |                                                                         |  |                                 |          |       |          |      |              |               |                 |
| Range of Nominal Dimensions ( ± mm)                  |  |      |               |                |       |                |    |      |             | Expert           |            | Keska              |               |                                                                         |  |                                 |          |       |          |      |              |               |                 |
|                                                      |  |      |               |                |       |                |    |      |             |                  |            |                    |               |                                                                         |  |                                 |          |       |          |      |              |               |                 |
| Class 1)                                             |  | ≤ 50 | > 50<br>≤ 180 | > 180<br>≤ 400 | > 400 | <div>±3°</div> |    | Mass |             | Scale            |            | Material No.       |               |                                                                         |  | Date of first issue: 2018-10-03 |          |       |          |      |              |               |                 |
| Fine                                                 |  |      | 0.5           | 1.0            | 1.5   |                |    | 2.0  | 1.350<br>KG |                  | NTS        |                    | 480 003 078 0 |                                                                         |  |                                 | Doc.Code |       | Language |      | Sheet        |               |                 |
| Medium                                               |  | X    | 1.0           | 2.0            | 3.0   |                |    | 4.0  | Size        |                  | CAD System |                    |               |                                                                         |  |                                 | ECN-No.  |       | Revision |      | Techn. Resp. |               | Replacement for |
| Coarse                                               |  |      | 2.0           | 3.5            | 5.0   |                |    | 6.5  |             |                  |            |                    |               |                                                                         |  |                                 |          |       |          |      |              |               |                 |
| Tapped Holes acc. -                                  |  |      |               |                |       |                |    |      |             | A 2              |            | CREO               |               | <div><div></div><div></div></div>                                       |  | 175367                          |          | 1/3 A |          | 6860 |              | 480 003 058 0 |                 |
| 1) Tolerance Class Applied Crossmarked               |  |      |               |                |       |                |    |      |             |                  |            |                    |               |                                                                         |  |                                 |          |       |          |      |              |               |                 |