

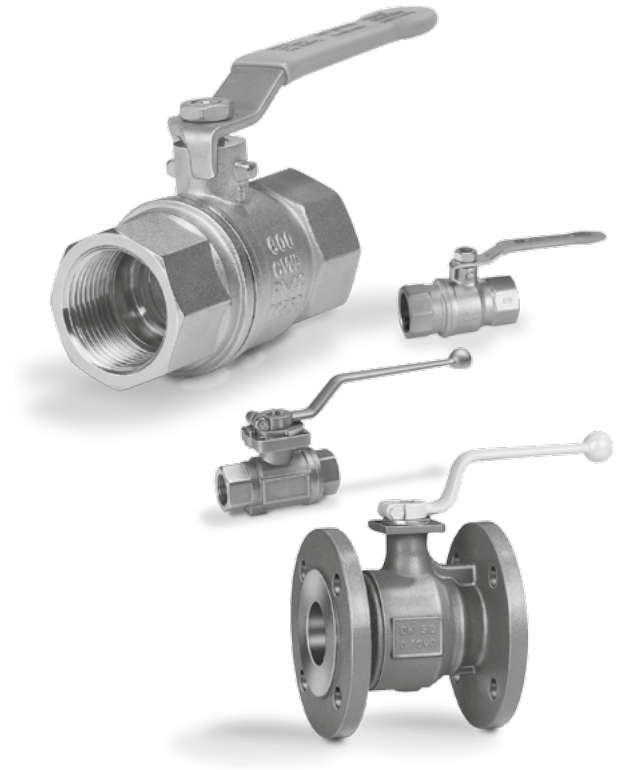
# Honeywell

krom  
schroder

## Manual valves AKT

Technical Information · GB  
1 Edition 06.17

- Any installation position
- Low torque design for ease of action by means of Teflon seals
- AKT..R, AKT..F: EC type-tested and certified



ERC CE

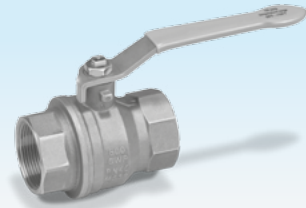
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# Contents

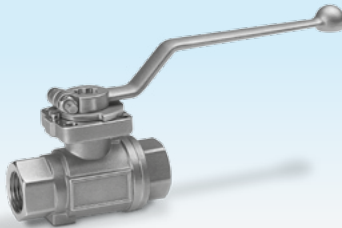
|  |           |
|--|-----------|
| <b>Manual valves AKT</b> .....                 | <b>1</b>  |
| <b>Contents</b> .....                          | <b>2</b>  |
| <b>1 Application</b> .....                     | <b>3</b>  |
| 1.1 Examples of application .....              | 4         |
| <b>2 Certification</b> .....                   | <b>5</b>  |
| 2.1 AKT..R, AKT..F .....                       | 5         |
| <b>3 Selection</b> .....                       | <b>7</b>  |
| 3.1 Type code .....                            | 8         |
| 3.1.1 AKT..R, AKT..F .....                     | 8         |
| 3.1.2 AKT..T .....                             | 8         |
| <b>4 Locking device ASV</b> .....              | <b>9</b>  |
| <b>5 Technical data</b> .....                  | <b>10</b> |
| 5.1 AKT..R, AKT..F .....                       | 10        |
| 5.2 AKT..T .....                               | 10        |
| 5.3 Dimensions .....                           | 12        |
| 5.3.1 AKT 6 – 50R50B .....                     | 12        |
| 5.3.2 AKT 15 – 50R160S, AKT 15 – 50R160M ..... | 13        |
| 5.3.3 AKT 25 – 100F160C .....                  | 14        |
| 5.3.4 AKT 125 – 250/200F160G .....             | 15        |
| 4.1.2 AKT 10 – 50TN88 .....                    | 16        |
| <b>Feedback</b> .....                          | <b>17</b> |
| <b>Contact</b> .....                           | <b>17</b> |



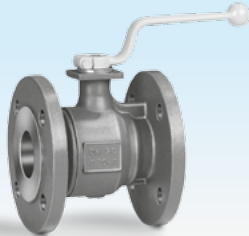
AKT 6 – 50R50B



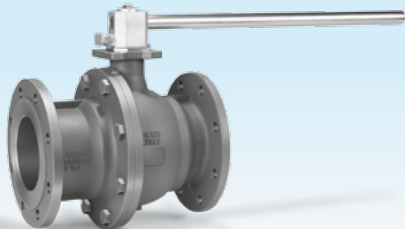
AKT 10 – 50TN88



AKT 15 – 50R160S,  
AKT 15 – 50R160M



AKT 25 – 100F160G



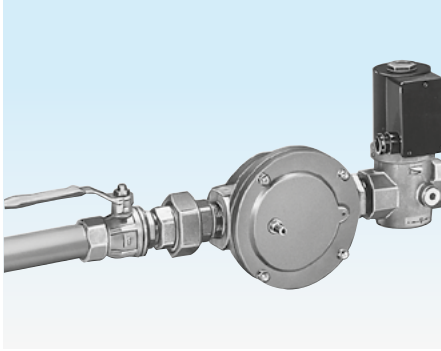
AKT 125 – 250/200F160G1

### 1 Application

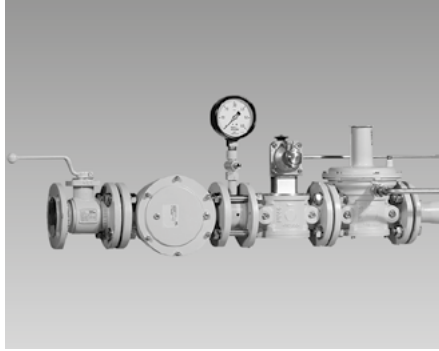
For isolation of light and heavy fuel oil, water and all gases to DVGW Code of Practice G 260/I and air.

AKT..R with internal thread, AKT..F with flange and AKT..T with NPT thread.

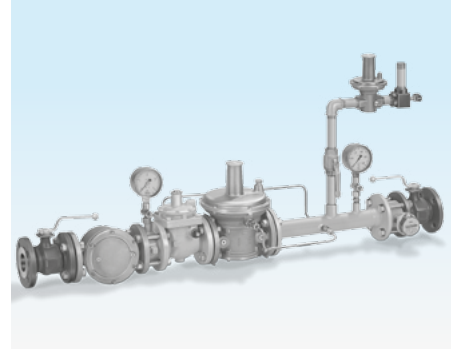
## 1.1 Examples of application



Central flame protection  $\leq$  DN 50



Central flame protection  $\geq$  DN 50



Gas control line  $p_u \leq 4$  bar

## 2 Certification

### 2.1 AKT..R, AKT..F

EU certified pursuant to



Classification of manual valves pursuant to the Pressure Equipment Directive 2014/68/EU:

Pressure accessory.

Fluid group 1.

Diagram 6, Annex II.

All nominal diameters up to **DN 25** are covered by Article 3, Para. 3 under 'sound engineering practice' and are not provided with a CE mark.

Nominal diameters **DN 32 to DN 50** are covered by Category I. Since an approval (type-examination) has been issued pursuant to the Gas Appliances Directive 2009/142/EC, these valves are not covered by the scope of application of the PED in accordance with Article 1, Para. 3.6.

Nominal diameters **DN 65 to DN 250/200** are covered by Category II and are marked with "CE" followed by the reference number of the Notified Body for Production monitoring.

### Approvals for manual valves

| Type                    | In acc. with Gas Appliances Directive | DVGW test mark |
|-------------------------|---------------------------------------|----------------|
| AKT 650R50B             | CE-0085AU0271                         | NG-4312AU0247  |
| AKT 15 - 50R160S        | CE-0085BQ0576                         | DG-4313BQ0568  |
| AKT 15 - 50R160M        | CE-0085BQ0576                         | DG-4313BQ0568  |
| AKT 25 - 100F160G       | CE-0085AT0438                         | NG-4313AT2770  |
| AKT 125 - 250/200F160G1 | CE-0085BN0275                         | NG-4313BN0274  |

### Eurasian Customs Union



The product AKT meets the technical specifications of the Eurasian Customs Union.

**Declaration of performance pursuant to annex III of  
Regulation (EU) No. 305/2011**



Elster GmbH  
Strotheweg 1  
49504 Lotte (Büren)  
Germany

2015

DIN EN 331  
Manual valve

**AKT (DN)R50B**

Manual valve for  
gas installations

Fuel gases pursuant to G 260

1st, 2nd and 3rd gas families to EN 437

DIN-DVGW NG-4312AU0247

|                         |                         |
|-------------------------|-------------------------|
| Features:               | DIN EN 331              |
| Pressure class:         | MOP 5 bar               |
| Temperature class:      | -20 °C to +60 °C        |
| Rated flow rate:        | passed                  |
| Dimensional tolerances: | passed                  |
| Tightness test:         | ≤ 20 cm <sup>3</sup> /h |
| Mechanical strength:    | passed                  |
| Operating torque:       | passed                  |
| Strength of stops:      | passed                  |
| Endurance:              | passed                  |

### 3 Selection

AKT..R with internal thread,  $p_u$  max. 5 bar/72 psig

|        | R | 50 | B |
|--------|---|----|---|
| AKT 6  | ● | ●  | ● |
| AKT 10 | ● | ●  | ● |
| AKT 15 | ● | ●  | ● |
| AKT 20 | ● | ●  | ● |
| AKT 25 | ● | ●  | ● |
| AKT 32 | ● | ●  | ● |
| AKT 40 | ● | ●  | ● |
| AKT 50 | ● | ●  | ● |

AKT..R with internal thread,  $p_u$  max. 16 bar/232 psig

|        | R | 160 | S | M |
|--------|---|-----|---|---|
| AKT 15 | ● | ●   | ● | ● |
| AKT 20 | ● | ●   | ● | ● |
| AKT 25 | ● | ●   | ● | ● |
| AKT 32 | ● | ●   | ● | ● |
| AKT 40 | ● | ●   | ● | ● |
| AKT 50 | ● | ●   | ● | ● |

AKT..F with flanged connection,  $p_u$  max. 16 bar/232 psig

|             | F | 160 | G | G1 | K |
|-------------|---|-----|---|----|---|
| AKT 25      | ● | ●   | ● |    | ● |
| AKT 32      | ● | ●   | ● |    |   |
| AKT 40      | ● | ●   | ● |    |   |
| AKT 50      | ● | ●   | ● |    |   |
| AKT 65      | ● | ●   | ● |    |   |
| AKT 80      | ● | ●   | ● |    |   |
| AKT 100     | ● | ●   | ● |    |   |
| AKT 125     | ● | ●   |   | ●  |   |
| AKT 150     | ● | ●   |   | ●  |   |
| AKT 200     | ● | ●   |   | ●  |   |
| AKT 250/200 | ● | ●   |   | ●  |   |

Order example

AKT 100F160G

AKT..T with NPT thread,  $p_u$  max. 8.8 bar/125 psig

|        | T | N | 88 |
|--------|---|---|----|
| AKT 10 | ● | ● | ●  |
| AKT 15 | ● | ● | ●  |
| AKT 20 | ● | ● | ●  |
| AKT 25 | ● | ● | ●  |
| AKT 32 | ● | ● | ●  |
| AKT 40 | ● | ● | ●  |
| AKT 50 | ● | ● | ●  |

### 3.1 Type code

#### 3.1.1 AKT..R, AKT..F

| Code        | Description  |
|-------------|--|
| AKT         | Manual valve   |
| 6 - 250/200 | Nominal size   |
| R<br>F      | Rp internal thread<br>Flange to ISO 7005   |
| 50<br>160   | Max. inlet pressure $p_{U \max}$ .<br>5 bar/72 psig<br>16 bar/232 psig                 |
| B<br>G      | Brass housing<br>Two-part housing, GJS400-18,<br>ball: C45 steel, hard chromium-plated |
| G1          | Two-part housing, GJS400-18,<br>ball: C45 steel, hard chromium-plated                  |
| S           | Steel housing  |
| M           | Stainless steel housing, suitable for biogas   |
| K           | Short length   |

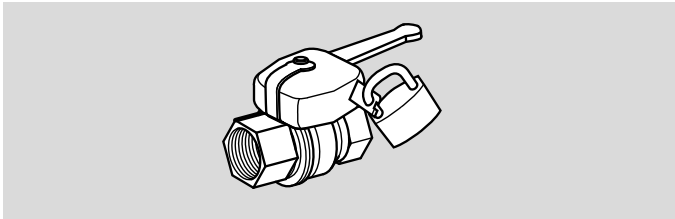
#### 3.1.2 AKT..T

| Code    | Description  |
|---------|--|
| AKT     | Manual valve   |
| 10 - 50 | Nominal size   |
| T       | T-product  |
| N       | NPT thread   |
| 88      | Max. inlet pressure $p_{U \max}$ .<br>8.8 bar/125 psig |



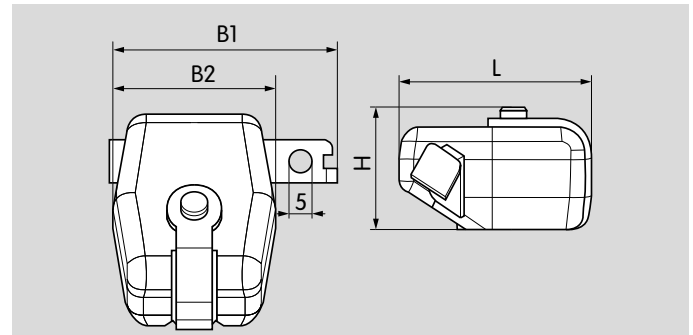
## 4 Locking device ASV

Suitable for manual valve AKT..R50B made of brass.



The locking device ASV can be fitted without the need for tools. For this purpose, no changes are to be made to the manual valve. It can be locked in the open or closed position using a padlock (not included in the delivery).

## Dimensions



|           | DN AKT | B1 | B2 | L  | H  | Order No |
|-----------|--------|----|----|----|----|----------|
| ASV 6/10  | 6/10   | 48 | 34 | 25 | 42 | 03151181 |
| ASV 15/20 | 15/20  | 48 | 35 | 40 | 49 | 03151182 |
| ASV 25/32 | 25/32  | 49 | 40 | 34 | 48 | 03151183 |
| ASV 40/50 | 40/50  | 57 | 49 | 40 | 58 | 03151184 |

## 5 Technical data

### 5.1 AKT..R, AKT..F

#### AKT 6 – 50R50B

DN 6 – 50

In acc. with EN 331

With internal thread to DIN  
EN 10266-1

Housing: Ms 58, nickel-plated

Ball: Ms 58, chromium-plated

Ball seal: PTFE (Teflon)

Stem: brass, nickel-plated

Stem seal: 2 Viton O-rings

#### AKT 15 – 50R160S

DN 15 – 50

In acc. with DIN 331

With internal thread to DIN 2999

Housing: cast steel 1.0619, galva-  
nized

Ball: stainless steel 1.4408

Ball seal: PTFE (Teflon)

Stem: stainless steel 1.4401

Stem seal: PTFE/viton

#### AKT 15 – 50R160M

DN 15 – 50

In acc. with DIN 331

With internal thread to DIN 10226-1

Housing: stainless steel 1.4408

Ball: stainless steel 1.4408

Ball seal: PTFE (Teflon)

Stem: stainless steel 1.4401

Stem seal: PTFE/viton

#### AKT 25 – 100F160C

DN 25 – 100

In acc. with EN 13774

Flanged connection to EN 1092-2;  
PN 16

Housing: GJS 400-18 LT

Ball: S45C, chromium-plated

Ball seal: PTFE (Teflon)

Stem: stainless steel 1.4021

Stem seal: FKM (Viton)

Housing flange seal:  
Perbunan

Up to 4 bar, this series meets the  
requirements for high thermal ca-  
pacity (HTR up to 650°C) as well as  
for internal and external tightness

pursuant to DIN EN 1775:2007, An-  
nex A, Procedure B.

#### AKT 125 – 250/200F160G1

DN 125 – 250 (DN 250 with bore  
reduced to DN 200)

In acc. with EN 13774

Flanged connection to EN 1092-2;  
PN 16

Housing: GJS 400-18 LT

Ball: S45C, chromium-plated

Ball seal: PTFE (Teflon)

Stem: stainless steel

Stem seal: 2 × Viton

Housing flange seal: Perbunan

### 5.2 AKT..T

AKT 10 – 50TN88

DN 10 – 50

Housing: brass

Ball: brass, chromium-plated

Ball seal: PTFE (Teflon)

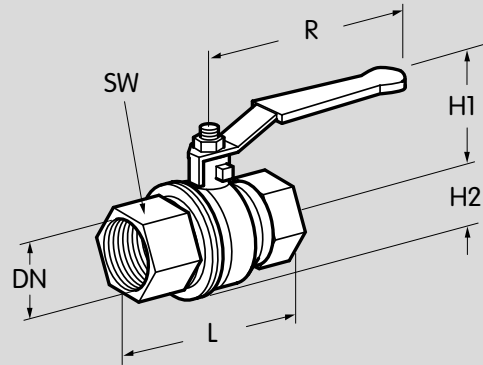
Stem seal: Viton

## Technical data

| Typ  | Medium temperature |           |              |           | Max. inlet pressure $p_u$ |       |             |       |
|--|--------------------|-----------|--------------|-----------|---------------------------|-------|-------------|-------|
|  | Gas                |           | Other media* |           | Gas                       |       | Other media |       |
|  | °C                 | °F        | °C           | °F        | bar                       | psig  | bar         | psig  |
| <b>Manual valve with internal thread connection AKT..R</b> |                    |           |              |           |                           |       |             |       |
| AKT 6 - 50R50B   | -20 - +60          | -4 - +140 | -20 - +180   | -4 - +350 | 5**                       | 72**  | 16**        | 232** |
| AKT 15 - 50R160S   | -20 - +60          | -4 - +140 | -20 - +180   | -4 - +350 | 16**                      | 232** | 16**        | 232** |
| AKT 15 - 50R160M   | -20 - +60          | -4 - +140 | -20 - +180   | -4 - +350 | 16**                      | 232** | 16**        | 232** |
| <b>Manual valve with flanged connection AKT..F</b>         |                    |           |              |           |                           |       |             |       |
| AKT 25 - 100F160G  | -20 - +60          | -4 - +140 | -10 - +140   | -4 - +350 | 16                        | 232   | 16          | 232   |
| AKT 125 - 250/200F160G1                                    | -20 - +60          | -4 - +140 | -20 - +180   | -4 - +350 | 16                        | 232   | 16          | 232   |
| <b>Manual valve with NPT thread connection AKT..T</b>      |                    |           |              |           |                           |       |             |       |
| AKT 10 - 50TN88  | -20 - +60          | -4 - +140 | -20 - +180   | -4 - +350 | 8,8                       | 125   | 8,8         | 125   |

\* Dependent on operating pressure and medium.

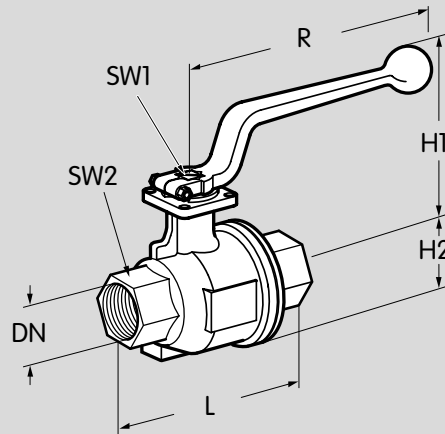
\*\* Some application standards (e.g. EN 746-2) limit the pressure range for threaded joints, depending on the nominal diameter.



## 5.3 Dimensions

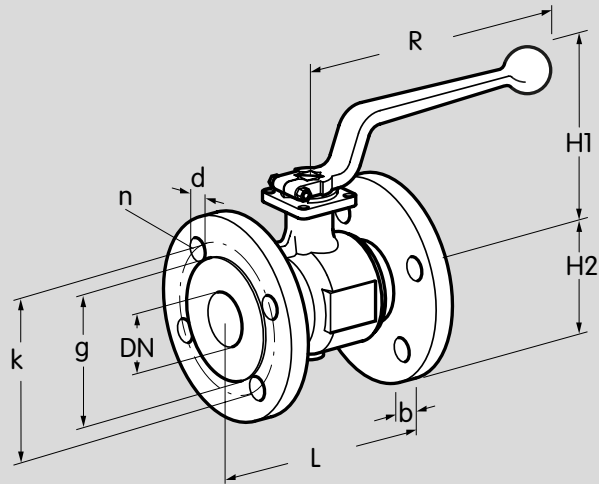
### 5.3.1 AKT 6 – 50R50B

| Type       | DN | Connection | Dimensions |    |    |     |    | Weight<br>kg |
|------------|----|------------|------------|----|----|-----|----|--------------|
|            |    |            | L          | H1 | H2 | R   | SW |              |
| AKT 6R50B  | 6  | Rp 1/4     | 50         | 38 | 13 | 82  | 20 | 0.16         |
| AKT 10R50B | 10 | Rp 3/8     | 60         | 38 | 13 | 82  | 20 | 0.15         |
| AKT 15R50B | 15 | Rp 1/2     | 75         | 43 | 16 | 100 | 25 | 0.25         |
| AKT 20R50B | 20 | Rp 3/4     | 80         | 50 | 19 | 120 | 32 | 0.39         |
| AKT 25R50B | 25 | Rp 1       | 90         | 54 | 25 | 120 | 41 | 0.62         |
| AKT 32R50B | 32 | Rp 1 1/4   | 110        | 73 | 30 | 160 | 50 | 0.98         |
| AKT 40R50B | 40 | Rp 1 1/2   | 120        | 79 | 36 | 160 | 55 | 1.20         |
| AKT 50R50B | 50 | Rp 2       | 140        | 86 | 43 | 160 | 70 | 2.00         |



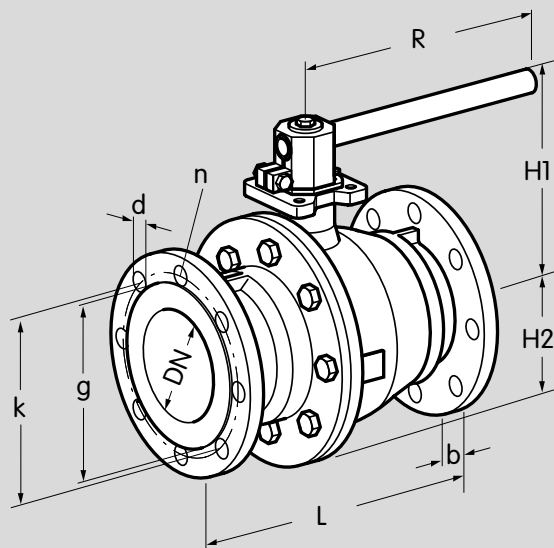
### 5.3.2 AKT 15 – 50R160S, AKT 15 – 50R160M

| Type                     | DN | Connection | Dimensions [mm] |       |    |     |    | SW1 | SW2   | Weight<br>kg |
|--------------------------|----|------------|-----------------|-------|----|-----|----|-----|-------|--------------|
|                          |    |            | L               | H1    | H2 | R   |    |     |       |              |
| AKT 15R160S, AKT 15R160M | 15 | Rp 1/2     | 75              | 69.5  | 18 | 130 | 9  | 27  | 0.50  |              |
| AKT 20R160S, AKT 20R160M | 20 | Rp 3/4     | 80              | 73.0  | 23 | 130 | 9  | 32  | 0.625 |              |
| AKT 25R160S, AKT 25R160M | 25 | Rp 1       | 90              | 102.0 | 28 | 167 | 11 | 41  | 1.18  |              |
| AKT 32R160S, AKT 32R160M | 32 | Rp 1 1/4   | 110             | 108.0 | 34 | 167 | 11 | 50  | 1.68  |              |
| AKT 40R160S, AKT 40R160M | 40 | Rp 1 1/2   | 120             | 124.0 | 40 | 188 | 14 | 55  | 2.355 |              |
| AKT 50R160S, AKT 50R160M | 50 | Rp 2       | 140             | 132.0 | 48 | 188 | 14 | 70  | 3.73  |              |



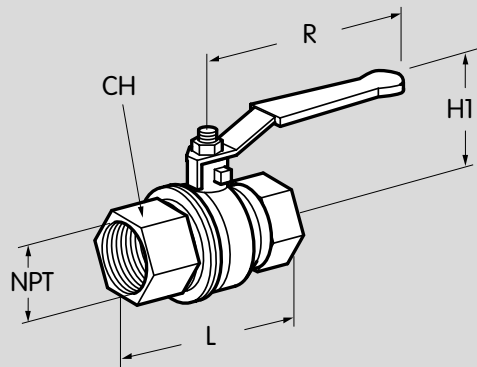
### 5.3.3 AKT 25 – 100F160C

| Type         | DN  | Dimensions |     |     |    |   |    |     |     |     | Weight<br>kg |
|--------------|-----|------------|-----|-----|----|---|----|-----|-----|-----|--------------|
|              |     | L          | k   | g   | b  | n | d  | H1  | H2  | R   |              |
| AKT 25F160GK | 25  | 125        | 85  | 70  | 18 | 4 | 14 | 83  | 58  | 158 | 4.20         |
| AKT 32F160G  | 32  | 130        | 100 | 80  | 18 | 4 | 18 | 102 | 70  | 180 | 5.60         |
| AKT 40F160G  | 40  | 140        | 110 | 89  | 18 | 4 | 18 | 107 | 76  | 180 | 7.50         |
| AKT 50F160G  | 50  | 150        | 125 | 103 | 20 | 4 | 18 | 117 | 83  | 222 | 9.80         |
| AKT 65F160G  | 65  | 170        | 145 | 123 | 20 | 4 | 18 | 137 | 93  | 293 | 14.60        |
| AKT 80F160G  | 80  | 180        | 160 | 140 | 20 | 8 | 18 | 149 | 100 | 293 | 19.80        |
| AKT 100F160G | 100 | 190        | 180 | 158 | 20 | 8 | 18 | 163 | 110 | 293 | 27.20        |



### 5.3.4 AKT 125 – 250/200F160G

| Type              | DN  | Dimensions |     |     |    |    |    |     |     |     | Weight<br>kg |
|-------------------|-----|------------|-----|-----|----|----|----|-----|-----|-----|--------------|
|                   |     | L          | k   | g   | b  | n  | d  | H1  | H2  | R   |              |
| AKT 125F160G1     | 125 | 325        | 210 | 188 | 26 | 8  | 18 | 245 | 138 | 565 | 34.90        |
| AKT 150F160G1     | 150 | 350        | 240 | 212 | 26 | 8  | 22 | 268 | 168 | 565 | 52.00        |
| AKT 200F160G1     | 200 | 400        | 295 | 268 | 30 | 12 | 22 | 316 | 208 | 715 | 89.00        |
| AKT 250/200F160G1 | 250 | 450        | 355 | 320 | 30 | 12 | 26 | 301 | 210 | 715 | 125.00       |



#### 4.1.2 AKT 10 – 50TN88

| Type       | DN | Connection | Dimensions |      |      |      |       |      |      |      | Weight |      |
|------------|----|------------|------------|------|------|------|-------|------|------|------|--------|------|
|            |    |            | L          |      | H1   |      | R     |      | CH   |      | kg     | Lb   |
|            |    |            | mm         | inch | mm   | inch | mm    | inch | mm   | inch |        |      |
| AKT 10TN88 | 10 | 3/8" NPT   | 45,0       | 1,77 | 1,50 | 38,1 | 82,0  | 3,23 | 20,0 | 0,79 | 0,124  | 0,27 |
| AKT 15TN88 | 15 | 1/2" NPT   | 59,0       | 2,32 | 1,69 | 42,9 | 100,0 | 3,94 | 24,9 | 0,98 | 0,224  | 0,49 |
| AKT 20TN88 | 20 | 3/4" NPT   | 64,0       | 2,52 | 1,97 | 50,0 | 119,9 | 4,72 | 31,0 | 1,22 | 0,352  | 0,78 |
| AKT 25TN88 | 25 | 1" NPT     | 81,0       | 3,19 | 2,13 | 54,1 | 119,9 | 4,72 | 39,9 | 1,57 | 0,604  | 1,33 |
| AKT 32TN88 | 32 | 1 1/4" NPT | 93,0       | 3,66 | 2,87 | 72,9 | 158,0 | 6,22 | 49,0 | 1,93 | 0,908  | 2,00 |
| AKT 40TN88 | 40 | 1 1/2" NPT | 102,1      | 4,02 | 3,11 | 79,0 | 158,0 | 6,22 | 54,1 | 2,13 | 1,105  | 2,44 |
| AKT 50TN88 | 50 | 2" NPT     | 120,9      | 4,76 | 3,39 | 86,1 | 158,0 | 6,22 | 68,6 | 2,70 | 1,820  | 4,01 |



## Feedback

Finally, we are offering you the opportunity to assess this “Technical Information (TI)” and to give us your opinion, so that we can improve our documents further and suit them to your needs.

### Clarity

- Found information quickly
- Searched for a long time
- Didn't find information
- What is missing?
- No answer

### Comprehension

- Coherent
- Too complicated
- No answer

### Scope

- Too little
- Sufficient
- Too wide
- No answer



### Use

- To get to know the product
- To choose a product
- Planning
- To look for information

### Navigation

- I can find my way around
- I got “lost”
- No answer

### My scope of functions

- Technical department
- Sales
- No answer

### Remarks

## Contact

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The current addresses of our international agents are available on the Internet:  
[www.kromschroeder.de/Weltweit.20.0.html?&L=1](http://www.kromschroeder.de/Weltweit.20.0.html?&L=1)

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