

KSA

Accessories for wall penstocks
Accessoires voor wandafsluiters
Accessoires avec Vanne murales
Zubehör für Gewindeschieber



Where water flows, KWT controls
Since 1988



Chapter summary - Hoofdstuksamenvatting ·Résumé du chapitre · Kapitelauszug

EN – KWT has a fast amount of product and accessories to be fitted on. Trough standardisation there is the possibility to cross-use many of our accessories onto different products. That’s why KWT can deliver many solution from stock, it also prevent operators to carry multiple different operating tools to the job site. Whether it is a T-crank or a complete actuator assembly, KWT can deliver.

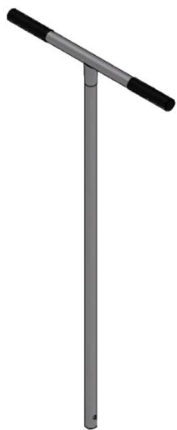
NL - KWT heeft een breed aanbod van producten en accessoires voor de producten. Door standarisatie is het mogelijk om veel van de accessoires onderling uit te wisselen. Hierdoor kunnen we veel oplossingen direct uit voorraad leveren en voorkomt dat de gebruiker met verschillende bedieningsmateriaal naar locatie moet. Of het nu gaat om een T-sleutel of een complete actuator opstelling, KWT kan leveren!

FR - KWT dispose d'une quantité rapide de produits et d'accessoires à monter. Grâce à la standardisation, il est possible d'utiliser plusieurs de nos accessoires sur différents produits. C'est pourquoi KWT peut fournir de nombreuses solutions en stock, cela empêche également les opérateurs de transporter plusieurs outils d'exploitation différents sur le chantier. Qu'il s'agisse d'une manivelle en T ou d'un ensemble complet d'actionneurs, KWT peut vous livrer.

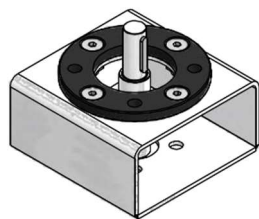
DE - KWT hat eine schnelle Menge an Produkten und Zubehörteilen, die montiert werden müssen. Durch Standardisierung besteht die Möglichkeit, viele unserer Zubehörteile auf verschiedene Produkte zu übertragen. Aus diesem Grund kann KWT viele Lösungen ab Lager liefern und verhindert auch, dass Bediener mehrere verschiedene Bediengeräte zur Baustelle tragen müssen. Ob T-Kurbel oder komplette Aktuatorbaugruppe, KWT kann liefern.

Product range - Leverprogramma - Gamme de produits – Produktauswahl

| Code | EN | NL | FR | DE |
|------|---------------------------------|--------------------------------|-----------------------|-----------------------|
| 814 | Spindle extensions and brackets | Spindelverlengingen en beugels | Rallonges et supports | Spindelverlängerungen |
| 840 | Columns | Kolommen | Colonnes | Säulen |
| 710 | Handoperation tools | Bediensleutels | Opération manuelle | Handbetrieb |
| 2440 | Adapters | Adapters | L' adaptateur | Adapter |
| 730 | Actuators | Aandrijvingen | Opération actionneur | Antrieb |



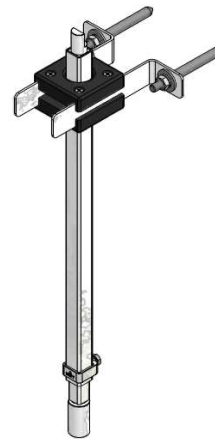
710
page 4



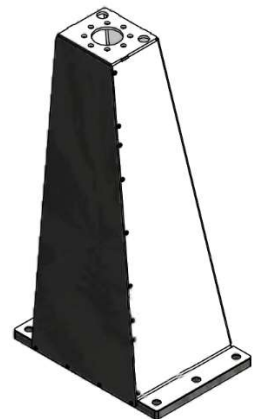
2440
page 4



730
page 5



710
page 6



730
page 7

| | | | KSL 814 | T-Crank | Handwheel ² | Gearbox with handwheel ² | Actuator ² | Spindle- driver ² |
|---|---|---------------------|---|---|--|---|---|---|
|  | Penstock Terminal | |  |  |  |  |  |  |
|  | KHS series | ½ moon | Type A | ✓ | - | - | - | - |
|  | KSA-LD series | ½ moon | Type A | ✓ | ✓ | - | - | - |
|  | KSA-MD-Y series 100- 700 | ½ moon | Type A | ✓ | ✓ | ✓ | ✓ ₁ | ✓ ₁ |
|  | KSA-MD-Y series 800- 1.000 | Ø20-6 | Type A |  | ✓ | ✓ | ✓ ₁ | ✓ ₁ |
|  | KSA-MD-Z series 100- 800 | ½ moon | Type A | ✓ | ✓ | ✓ | ✓ ₁ | ✓ ₁ |
|  | KSA-MD-Z series 900- 1.500 | Ø25-8 | Type B |  | - | ✓ | ✓ ₁ | ✓ ₁ |
|  | KSA-RA series 300-800 | Ø20-6 | Type A |  | ✓ | ✓ | ✓ | ✓ |
|  | KSA-RA series 900-1000 | Ø30-6 | Type B |  | ✓ | ✓ | ✓ | ✓ |
|  | KSA-HD series | Ø Order specific | Type B/C | - | - | ✓ | ✓ | ✓ |

¹ Requires additional bronze (RG7) nublock - Bronzen draadblok benodigd -

Nécessite un bloc de noix supplémentaire en bronze (RG7) - Erfordert zusätzlichen Mutterblock aus Bronze (RG7)

² Solutions require additional adapters, as explained on dedicated pages below – Kijk op de specificatiepagina welke aanvullende producten nodig zijn voor deze toepassing - Les solutions nécessitent des adaptateurs supplémentaires, comme expliqué sur les pages dédiées ci-dessous - Lösungen erfordern zusätzliche Adapter, wie auf den entsprechenden Seiten unten erläutert

Manual operation – Handbedienung - Opération manuelle - Handbetrieb

| | | | $\frac{1}{2} \text{ } \varnothing$ | VK 20x20 | 27/32 |
|--|---------|--------|------------------------------------|---------------|----------------------------|
| | 1.000mm | 500 mm | | | |
| | 1.000mm | 500 mm | 710ZT1000KWT | 710ZT1000VK20 | 710ZT1000CV |
| | 1.500mm | 500 mm | 710ZT1500KWT | - | 710ZT1500CV |
| | 100mm | 300 mm | 710ZS0300KWT | - | 710ZS0300CV |
| | 500mm | 200 mm | 710ZSS0500KWT | - | - |
| | | 368 mm | - | - | 2311.368.LORC ¹ |
| | | 568 mm | - | - | 2311.568.LORC ¹ |

Manual operation – Handbedienung - Opération manuelle - Handbetrieb

| | Penstock Terminal | | | | | |
|--|---------------------------|--------------------|----------------|----------------|-----------------|------------------------------|
| | KSA-MD-Y series 100-700 | $\frac{1}{2}$ moon | - | - | - | |
| | KSA-MD-Y series 800-1.000 | $\varnothing 20-6$ | 2440.D20S.KWT | 2440.R20S.VK20 | 2440.D20SL.2732 | |
| | KSA-MD-Z series 100-800 | $\frac{1}{2}$ moon | - | 750.01KWT.VK20 | 750.01KWT.2732 | 750.01KWT.2732 750.02KWT.R20 |
| | KSA-MD-Z series 900-1.500 | $\varnothing 25-8$ | 2440.R25SB.KWT | 2440.R20S.VK20 | 2440.D25SB.2732 | |
| | KSA-RA series 300-800 | $\varnothing 20-6$ | 2440.D20S.KWT | 2440.R20S.VK20 | 2440.D20SL.2732 | |
| | KSA-RA series 900-1000 | $\varnothing 30-8$ | - | - | 2440.R30S.2732 | |

Actuator operation

Motorbediening
Opération actionneur
Antrieb

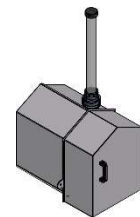
930

KWT supports 4 types of actuators:



| Options | Auma SA series | Rotork IQ series | Spindle drivers | Compact package |
|----------------------------|----------------|------------------|---|------------------------|
| Wired power 24/230/400v | ✓ | ✓ | ✓ | ✓ |
| Solarpower | ✓ | - | - | ✓ |
| Battery pack | - | - | ✓ | - |
| Mounting | F-10 / F-14 | F-10 / F-14 | Special flange | F-10 |
| Intended use | Heavy duty | Heavy duty | Emergency / maintainance | Incemental use |
| Rising stem optional | ✓ | ✓ |  gearbox needed | - |
| Cover | HDPE / Inox | Inox | - | Included / RAL 6009 |

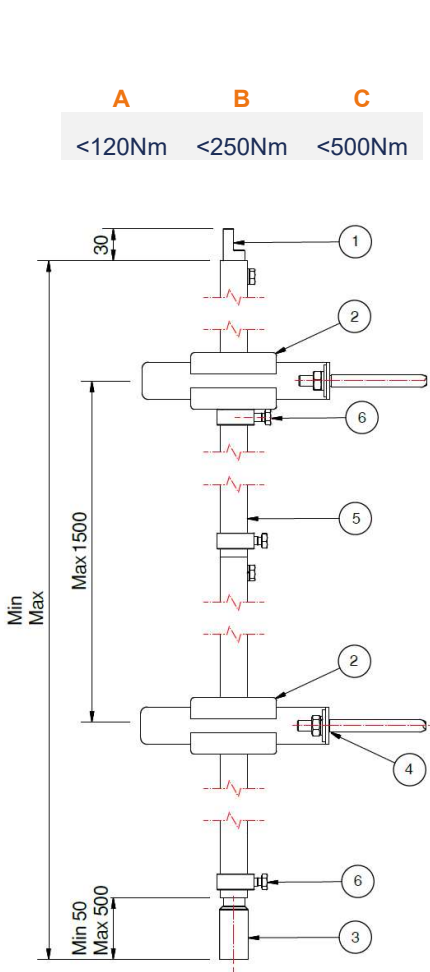
Auma SA protection covers – beschermkappen Auma SA



| Options | PBEKA series | BEKA series | BEKA-RS series |
|----------------------|--------------|--|------------------------|
| Auma SA 07.6 Matic | ✓ | ✓ | ✓ |
| Auma SA 10.2 Matic | - | ✓ | ✓ |
| RAL-color optional | - | ✓ | ✓ |
| Rising stem optional | - | - | ✓ |
| Cover | HDPE (PeHD) | Bottom: HDPE(PeHD) Cover: Stainless Steel / Inox | Stainless Steel / Inox |

Attention; Protection covers block the ventilation of the actuator, this can cause a slight drop of the actuator running time.

Spindle extensions and brackets - Spindelverlengingen en beugels - Rallonges et supports - Spindelverlängerungen und console



| KWT KSL (SET) | Length (mm) | ½ Ø | VK 20x20 | VK 25x25 | 27/32 | Ø20-6 | Ø25-8 | Ø30-8 |
|---------------------|---------------|-----|-------------|-------------|-------|-------|-------|-------|
| T1 | 650 – 1.000 | A | A | A | A/B/C | A/B | B | B/C |
| T2 | 1.000 – 1.500 | A | A | A | A/B/C | A/B | B | B/C |
| T3 | 1.500 – 2.000 | A | A | A | A/B/C | A/B | B | B/C |
| T4 | 2.000 – 2.500 | A | A | A | A/B/C | A/B | B | B/C |
| T5 | 2.500 – 3.000 | A | A | A | A/B/C | A/B | B | B/C |
| T6 | 3.000 – 3.500 | A | A | A | A/B/C | A/B | B | B/C |
| T7 | 3.500 – 4.000 | A | A | A | A/B/C | A/B | B | B/C |
| T8 | 4.000 – 4.500 | A | A | A | A/B/C | A/B | B | B/C |
| T9 | 4.500 – 5.000 | A | A | A | A/B/C | A/B | B | B/C |

| Operation | ½ Ø | VK | 27/32 | Ø | Cardan(7) |
|------------------------|-----|----|-------|---|-----------|
| T-crank | | | | | |
| Actuator | | | | | |
| Handwheel | | | | | |
| Gearbox with handwheel | | | | | |
| Spindledriver | | | | | |



Parts discription

- 1 Operating point
- 2 Wall console
- 3 Penstock connection
- 4 Wall anchor
- 5 Expansion tube
- 6 Locking ring



Onderdelen omschrijving

- 1 Bedienpunt
- 2 Wandconsole
- 3 Afsluiter aansluiting
- 4 Muuranker
- 5 Verlengkoker
- 6 Vergrendelingsring



Descriptif des pièces

- 1 Point de commande
- 2 Support murale
- 3 Connecteur de vanne
- 4 Ancre murale
- 5 Tube d'expansion
- 6 Verrouillage



Teileterminologie

- 1 Anschlußstelle
- 2 Wandkonsole
- 3 Anschluß für schieber
- 4 Wand anker
- 5 Verbindungsrohr
- 6 Sperre



EN - Material

| | |
|------------------|------------------|
| Guidance profile | HDPE |
| Expansion tube | St. steel 316L |
| Fixing kit | Chemical anchors |
| Bolts and nuts | St. steel A4 |



NL - Materiaal

| | |
|-----------------------|------------------|
| Geleidingsprofiel | HDPE |
| Verlengkoker | RVS 316L |
| Bevestigingsmateriaal | Chemische ankers |
| Bouten en moeren | RVS A4 |

Product Features

| | |
|-----------------------------|--------------------|
| Driving mechanism | Non rising spindle |
| Expected life span | 50 Years |
| Intended use | (Sewage) water |
| Strenght calculation method | KWT standard |

Producteigenschaften

| | |
|----------------------|------------------------|
| Aandrijving | Niet stijgende spindel |
| Verwachte levensduur | 50 jaar |
| Beoogd gebruik | (Riool) water |
| Sterktecalculatie | KWT standaard |



FR - Matériaux

| | |
|-----------------------|----------------|
| Glissières | PEHD |
| Tube d'expansion | Inox 316L |
| Matériaux de fixation | Ancre chimique |
| boulons et écrous | Inox A4 |



DE - Material

| | |
|----------------------|-----------------|
| Führungsprofil | HDPE |
| Verbindungsrohr | WSt 1.4404 |
| Befestigungsmaterial | Chemische Anker |
| Schrauben und Nüsse | WSt. V4A |

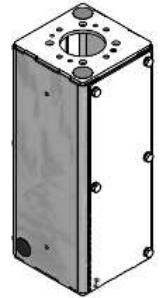
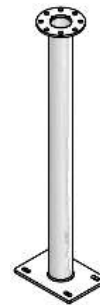
Caractéristiques du produit

| | |
|-------------------------------|---------------------|
| Traction | Tige non-ascendante |
| Durée de vie prévue | 50 ans |
| Utilisation conforme | Eaux (usées) |
| Méthode de calcul de la force | Norme KWT |

Produktmerkmale

| | |
|-----------------------------------|-------------------------|
| Antrieb | nichtstiegender Spindel |
| Erwartete Lebensdauer | 50 Jahre |
| Verwendungszweck | (Ab) wasser |
| Methode zur Festigkeitsberechnung | Standard-KWT |

Columns – Kolommen – Colonnes - Säulen



Operation

| | | | | |
|------------------------|--|---------------|---------------|-------------|
| S-crank | | ✓ | ✓ | ✓ |
| Actuator | | - | ✓ | ✓ |
| Handwheel | | ✓ | ✓ | ✓ |
| Gearbox with handwheel | | - | ✓ | ✓ |
| Spindledriver | | ✓ | ✓ | ✓ |
| Torque | | <40 Nm | <250 Nm | <400 Nm |
| Wallbrackets | | ✓ | ✓ | ✓ |
| Floor mounting | | ✓ | ✓ | ✓ |
| Height (mm) | | 100-1.100 | 900 | Custom |
| Connection | | F-10 | F-10 | F-10 & F-14 |
| Partnr. | | 844Y.F10.BV.A | 844Y900.250NM | Custom |

EN - Material

| | |
|------------------|-----------------------|
| Guidance profile | HDPE |
| Column | St. steel 304L / HDPE |
| Fixing kit | Chemical anchors |
| Bolts and nuts | St. steel A4 |

Product Features

| | |
|-----------------------------|--------------|
| Expected life span | 50 Years |
| Strenght calculation method | KWT standard |

FR - Matériaux

| | |
|-----------------------|------------------|
| Glissières | PEHD |
| Colon | Inox 304L / PHED |
| Matériaux de fixation | Ancre chimique |
| boulons et écrous | Inox A4 |

Caractéristiques du produit

| | |
|-------------------------------|-----------|
| Durée de vie prévue | 50 ans |
| Méthode de calcul de la force | Norme KWT |

NL - Materiaal

| | |
|-----------------------|------------------|
| Geleidingsprofiel | HDPE |
| Kolom | RVS 304L / HDPE |
| Bevestigingsmateriaal | Chemische ankers |
| Bouten en moeren | RVS A4 |

Producteigenschappen

| | |
|----------------------|---------------|
| Verwachte levensduur | 50 jaar |
| Sterktecalculatie | KWT standaard |

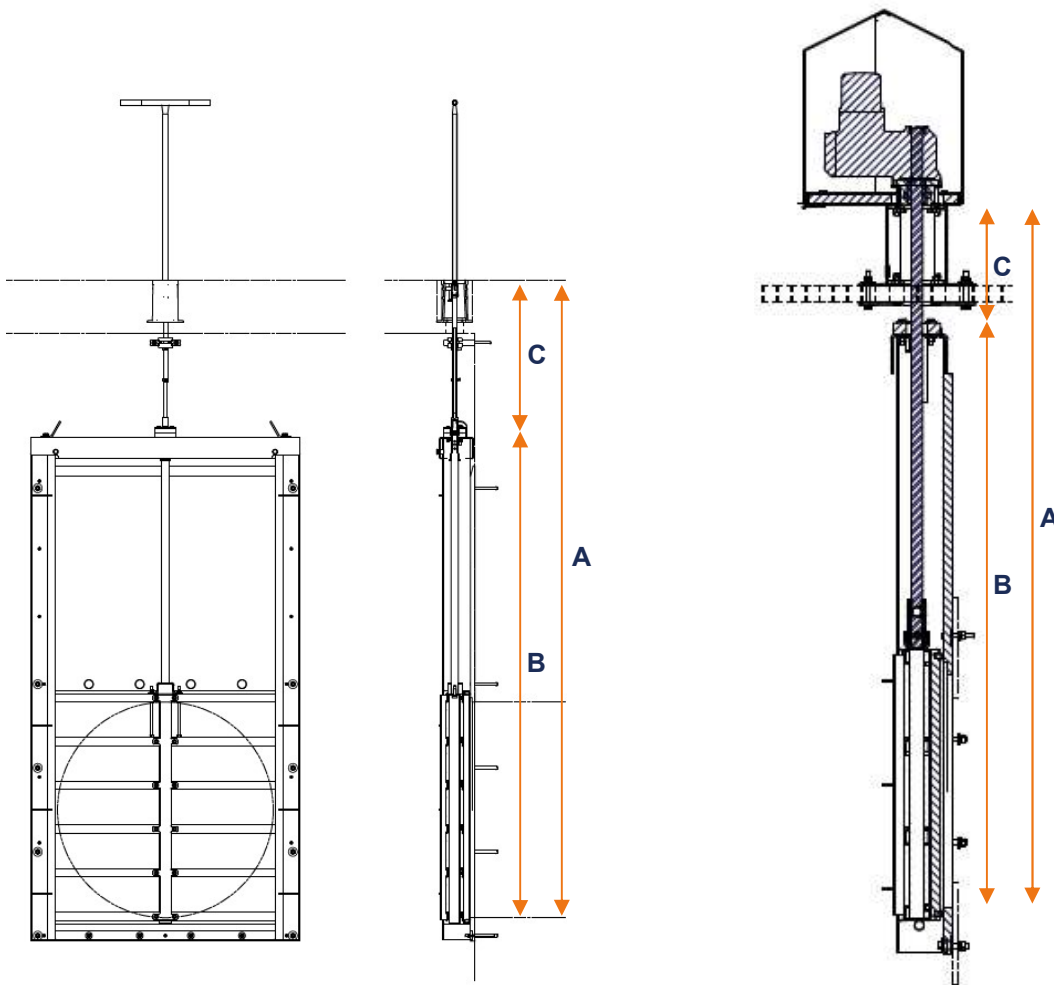
DE - Material

| | |
|----------------------|-------------------|
| Führungsprofil | HDPE |
| Säulen | WSt 1.4306 / HDPE |
| Befestigungsmaterial | Chemische Anker |
| Schrauben und Nüsse | WSt. V4A |

Produktmerkmale

| | |
|-----------------------------------|--------------|
| Erwartete Lebensdauer | 50 Jahre |
| Methode zur Festigkeitsberechnung | Standard-KWT |

How to calculate the length of an spindle extension?



$$C = A - B$$



Parts discription

- A Invert to coping
- B Penstock height
- C Extension length



Onderdelen omschrijving

- A BOB – maaiveld
- B Afsluiter hoogte
- C Hoogte spindelverlenging



Descriptif des pièces

- A Inverser pour faire face
- B Hauteur de la Vanne
- C Rallonges longue



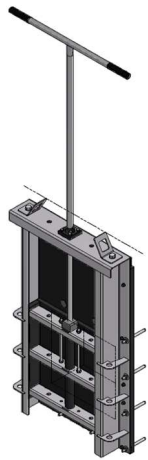
Teileterminologie

- A In Bewältigung umkehren
- B Rohrhöhe
- C Spindelverlängerung

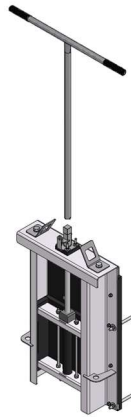
Size B:

| | DN | | | | | | | | | | | | | |
|------------------------|----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| | | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 |
| KHSA series | | 505 | 510 | 530 | 550 | 650 | 750 | 950 | 1150 | - | - | - | - | - |
| KSA-LD series | | 310 | 410 | 460 | 560 | 660 | 760 | 990 | 1190 | - | - | - | - | - |
| KSA-MD-Y series | | 650 | 650 | 650 | 650 | 750 | 880 | 1050 | 1250 | 1451 | 1652 | 1913 | 2113 | 2317 |
| KSA-MD-Z series | | 400 | 430 | 500 | 580 | 680 | 730 | 980 | 1180 | 1380 | 1580 | 1780 | 2070 | 2290 |
| KSA-RA series | | - | - | - | - | - | 907 | 1117 | 1307 | - | 1723 | - | - | 2364 |

Examples – Voorbeelden – Exemples -



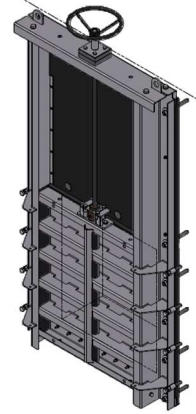
Manual operation
Handbediening
Opération manuelle
Handbetrieb



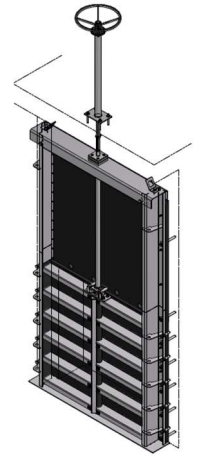
Adapter
Adapter
adaptateur
Adapter



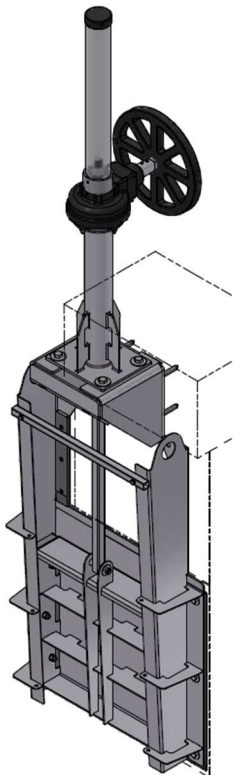
Extention and culvert box
Verlenging en straatpot
Rallonges et ponceau
Spindelverlängerungen
und Straßenkappe



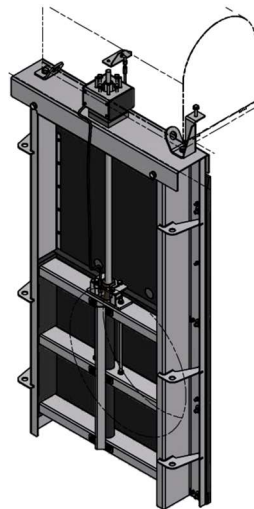
Handwheel
Handwiel
volant
Handrad



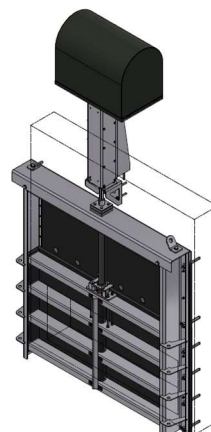
Risen handwheel
Verhoogd handwiel
Volant levé
Angehobenes Handrad



Handwheel with gearbox
Handwiel met tandwielkast
Volant avec réducteur
Handrad mit Getriebe



Actuator operation
Motorbediening
Opération actionneur
Antrieb



Actuator operation
Motorbediening
Opération actionneur
Antrieb



Actuator operation
Motorbediening
Opération actionneur
Antrieb