

## ROBINETS 2-PIECES

R2

### 2-PIECE BALL VALVE

DN 15 à 200

DIN PN 16 / PN 40

Passage intégral

Platine ISO

Acier inoxydable et carbone

Version chimie & version sécurité feu

Size 1/2" to 8"

PN 16 / PN 40

Full bore

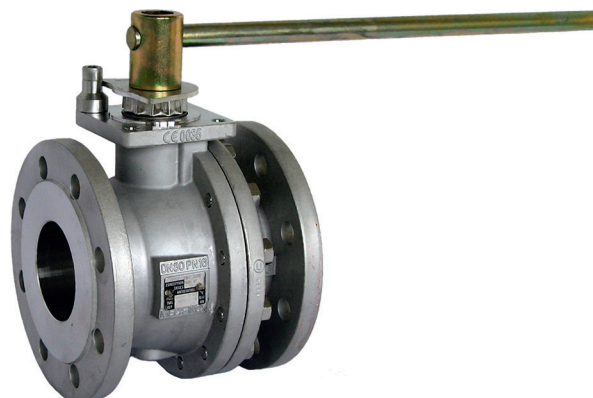
ISO top flange

Stainless steel and carbon steel

Chemical version & Fire safe design



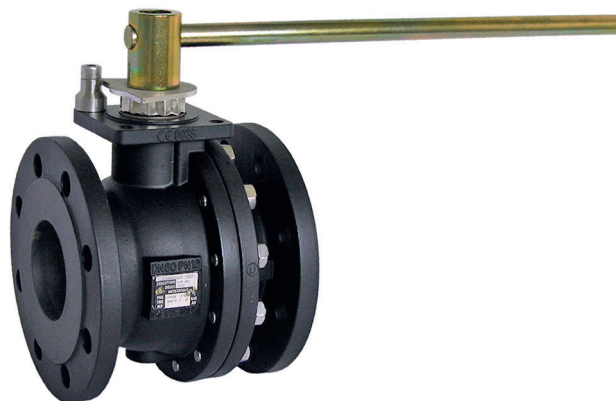
○ Série R2 en acier inoxydable - DN < 65  
Stainless steel R2 series - Size <2"1/2



○ Série R2 en acier inoxydable - DN > 50  
Stainless steel R2 series - Size >2"



○ Série R2 en acier carbone - DN < 65  
Carbon steel R2 series - Size <2"1/2



○ Série R2 en acier carbone - DN > 50  
Carbon steel R2 series - Size >2"

По вопросам продаж и поддержки обращайтесь:

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Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
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Новосибирск (383)227-86-73  
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Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16

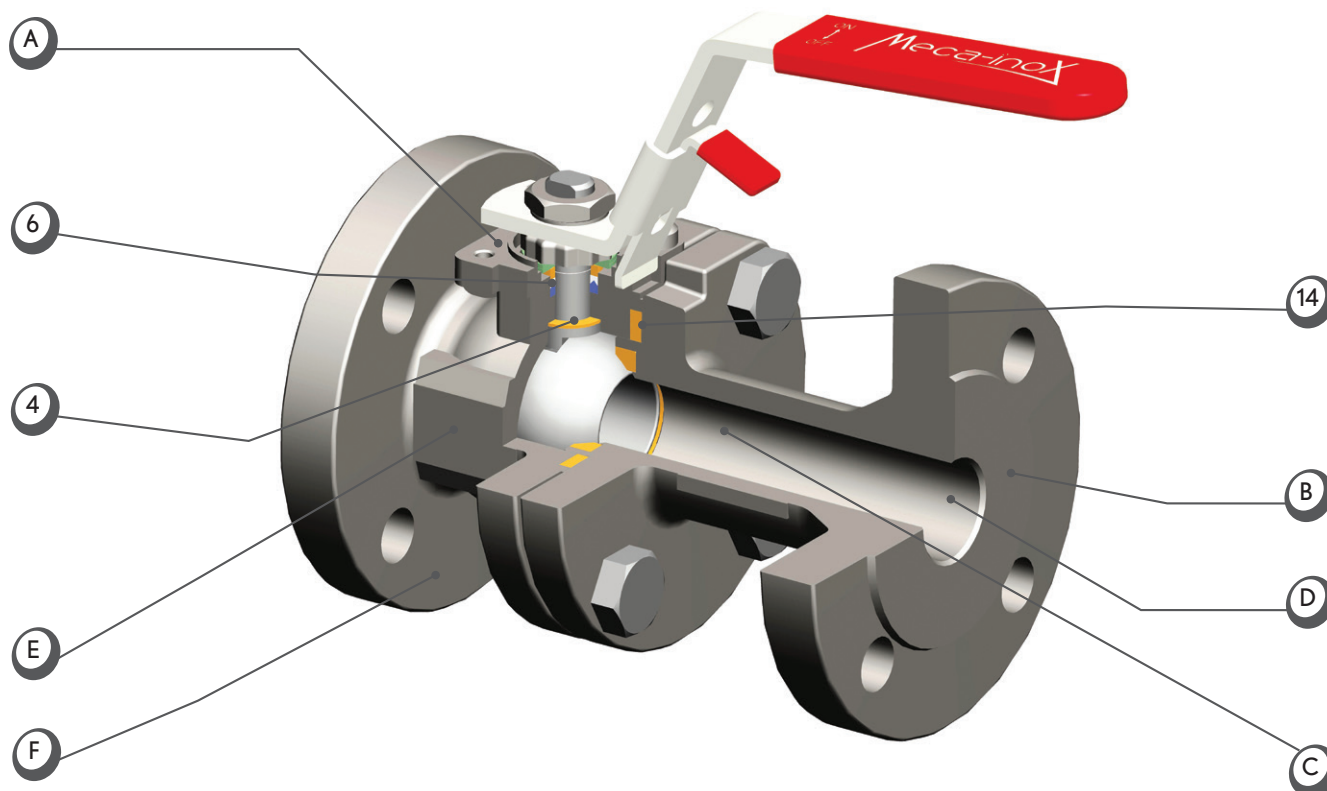
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Симферополь (3652)67-13-56  
Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13

Сургут (3462)77-98-35  
Тверь (4822)63-31-35  
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Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Ярославль (4852)69-52-93

R2

## AVANTAGES 2-PIÈCES

### 2-PIECE BALL VALVE FEATURES



#### A • Platine NF EN ISO 5211

Elle autorise toute motorisation et les encoches permettent le verrouillage du levier en position ouvert ou fermé.

#### B • Faces de brides

Surélevées et usinées.

#### C • Usinage

Afin d'assurer l'absence d'accrochage et la bonne qualité des fonderies, toutes les surfaces internes sont usinées.

#### D • Passage

Passage intégral en standard.

#### E • Marquage selon EN19

Marquage sur le corps, permet d'identifier le PN / DN, nuance matière, fabricant et limite d'utilisation.

#### F • Bride de corps

Une construction homogène qui évite les concentrations de contraintes au niveau du corps car les dimensions des brides de corps sont cohérentes avec les brides PN40 ou PN16 de raccordement sur la tuyauterie.

#### 4 • Rondelle de friction

En PTFE chargé PEEK elle assure une meilleure durée de vie du presse-étoupe.

#### 6 • Presse-étoupe

Boîtier usiné et équipé de garniture de type chevron. Le presse-étoupe est antistatique et agréé TA-Luft. Il existe aussi en version "sécurité feu".

#### 14 • Joint de corps

3 versions disponibles : en **PTFE** "version Chimie" - en **Graphite** "version Sécurité Feu" suivant EN ISO 10497 avec barrière chimique PTFE évitant le contact du graphite avec le fluide - en **Fluorosilicone** pour contraintes thermiques.

#### A • NF EN ISO 5211 top flange

Ensures any motorization and notches allow the handle's locking in opened or closed position.

#### B • Flanges faces

Raised face machined as standard.

#### C • Machining

In order to ensure the absence of trapping medium and the good quality of the foundries, all the inner parts are machined.

#### D • Bore

Full bore as standard.

#### E • Marking according to EN19

Located on the body and on the connector, PN/DN, material tag manufacturer.

#### F • Body flange

A homogeneous construction which avoids stress concentration on the body flange as body flange dimensions are coherently designed with PN40 or PN16 connecting flanges on the pipe.

#### 4 • Stem thrust seal

Made from 20% PEEK filled PTFE, it ensures a better lifespan for the gland-packing.

#### 6 • Gland-packing

Box packing is manufactured and equipped with "V-ring" packing. This design is antistatic and tested according to TA-Luft. "Fire Safe" version is available.

#### 14 • Body seal

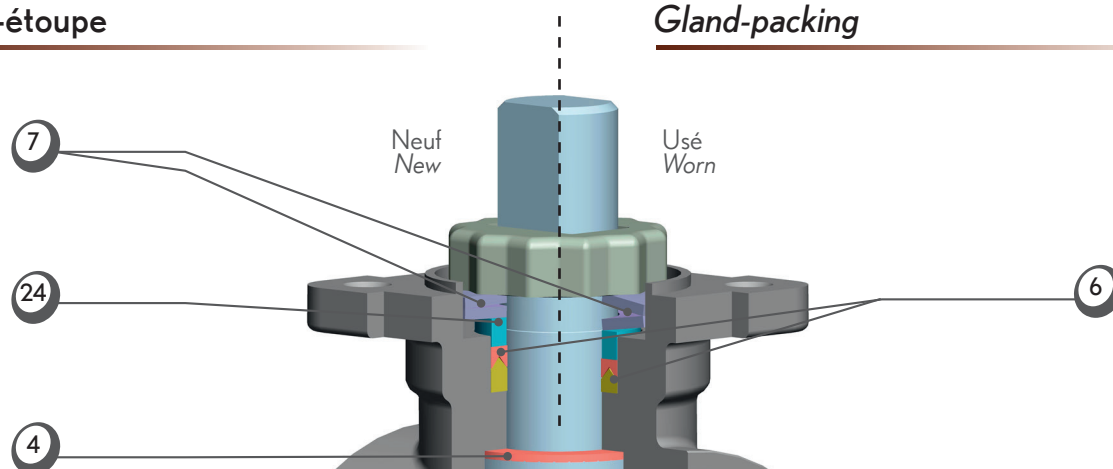
3 versions available: **PTFE** for the "chemistry Version" - **Graphite** for the "fire safety" version according to EN ISO 10497 with PTFE chemical barrier avoiding fluid contact with graphite - **Fluorosilicone** for thermal stress.

## SYSTÈME D'ÉTANCHÉITE 2-PIÈCES

R2

### 2-PIECE SEALING DESIGN

#### Presse-étoupe



R2 DN 15 à 50

R2 Size 1/2" to 2"

Conception suivant NF EN 12516-1, DIN 3841, ANSI B16.34

Antistatique suivant ISO 7121, NF EN 1983

Garniture (6) chargée PTFE+carbone+graphite

Ensemble bille / ressort (B) entre tige & corps et tige & boisseau (DN > 50)

Rondelle de friction (4) en PTFE renforcé PEEK

Étanchéité par garniture de type "chevron" (6) permettant de maintenir l'étanchéité lorsque la pression vient du corps du robinet

Fouloir inox (24)

Rattrapage du jeu de la garniture par rondelles ressort (7)

Design according NF EN 12516-1, DIN 3841, ANSI B16.34

Antistatic gland packing according to ISO 7121, NF EN 1983

Gland packing (6) in PTFE+carbon+graphite

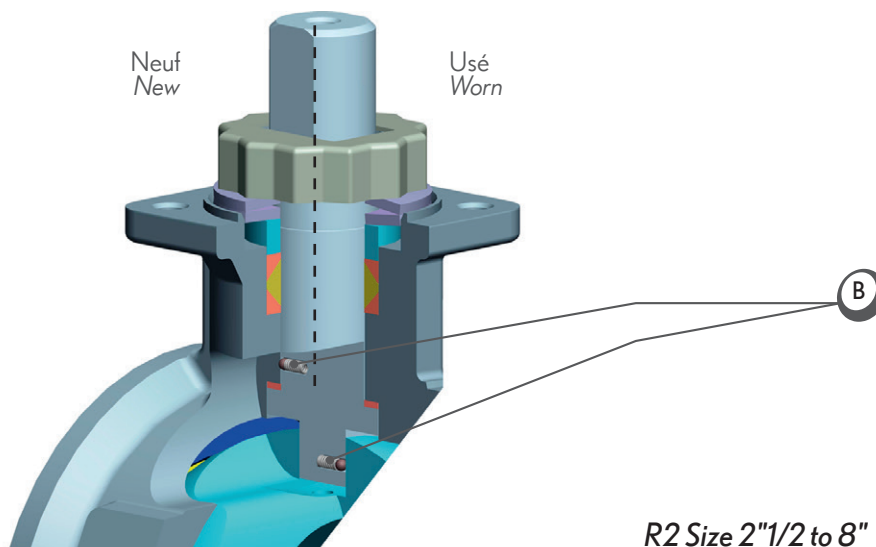
Ball / spring system (B) between stem & body and stem & ball (DN > 50)

Thrust seal (4) in PEEK reinforced PTFE

Sealing with a "V-ring" packing (6) to allow sealing under pressure coming from the valve body

Gland in stainless steel (24)

Wear compensation thanks to the pair of spring washers (7)



R2 DN 65 à 200

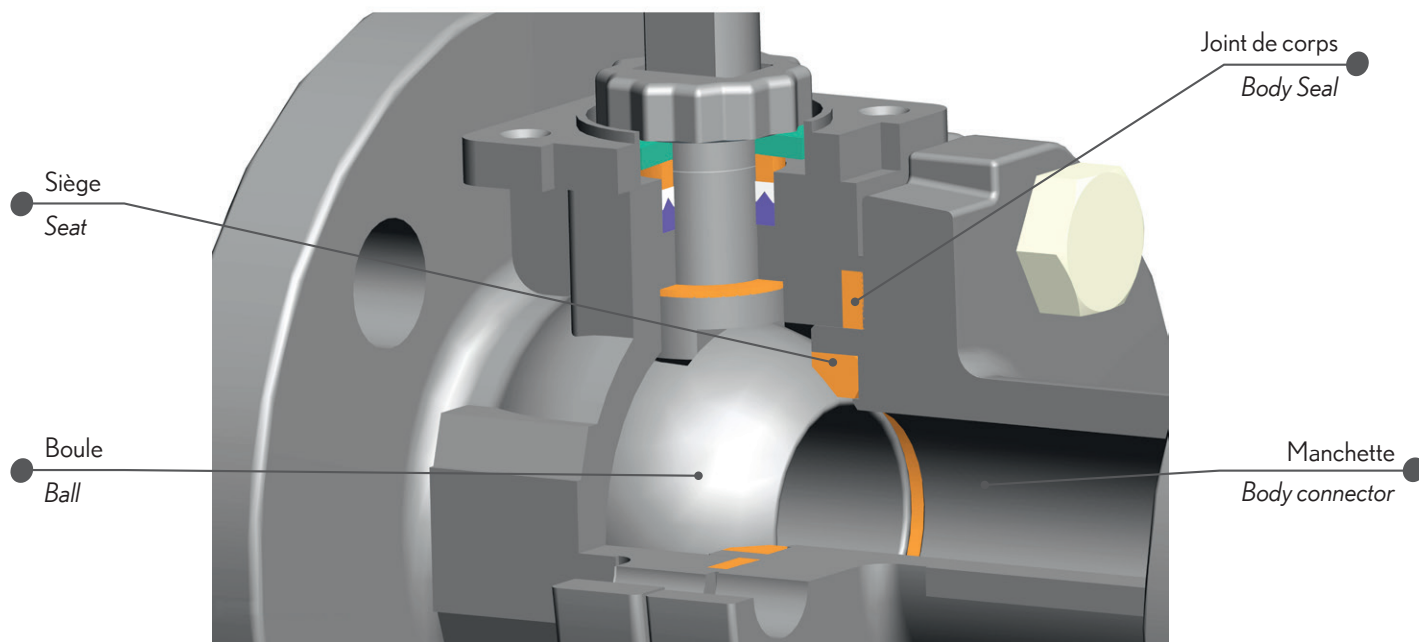
R2 Size 2 1/2" to 8"

R2

## SYSTÈME D'ÉTANCHÉITE 2-PIÈCES 2-PIECE SEALING DESIGN

Sièges et joint de corps

*Seats and body seal*



Joint de corps encastré garantissant l'étanchéité intérieur / extérieur.

Profils de sièges conçus pour une étanchéité amont / aval optimale.

Élasticité des sièges absorbant les contraintes de pression.

Portée progressive qui optimise les couples de manœuvre.

*Encapsulated body seals to guarantee internal/external tightness.*

*Seats profiles designed for upstream/downstream sealing.*

*Seats elasticity to absorb pressure stress*

*Progressive bearing to optimize operating torques.*

## CODIFICATION 2-PIÈCES

R2

### 2-PIECE CODIFICATION

Exemple

Exemple

| R2                                                      | S                                      |                                | 4                                    |                                  | L                                           |                                     | 1                                                          |                                                                       | N               |                       | 025<br>(DN/Size)        |                                  |
|---------------------------------------------------------|----------------------------------------|--------------------------------|--------------------------------------|----------------------------------|---------------------------------------------|-------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------|-----------------|-----------------------|-------------------------|----------------------------------|
| Produit<br>Body                                         | Matériaux des sièges<br>Seats material |                                | Pression nominale<br>Pressure rating |                                  | Encombrement<br>face à face<br>Face to Face |                                     | Matériaux de<br>presse-étoupe<br>Gland packing<br>material |                                                                       | Passage<br>Port |                       | Nuance<br>Body material |                                  |
| R2<br>Fonderie de<br>précision<br>Investment<br>casting | S                                      | TFM1600                        | 4                                    | PN40 - DN 15 à 100<br>1/2" to 4" | L                                           | DIN 3202 - Série 1<br>Long pattern  | 1                                                          | PTFE antistatique<br>DN 15 à 50<br>Antistatic PTFE<br>1/2" to 2"      | N               | Intégral<br>Full bore | I                       | Inox<br>Stainless steel          |
|                                                         | Z                                      | PTFE 20% PEEK<br>20% PEEK PTFE | 1                                    | PN16 - DN 100 à 200<br>4" to 8"  | C                                           | DIN 3202 - Série 4<br>Short pattern | 0                                                          | PTFE - DN 65 à 100<br>PTFE - 2" 1/2 to 4"                             |                 |                       | A                       | Acier au carbone<br>Carbon steel |
|                                                         | H                                      | Securite feu (SF)<br>Fire safe |                                      |                                  |                                             |                                     | 9                                                          | Graphite (sécurité feu)<br>Graphit (Fire Safe)                        |                 |                       |                         |                                  |
|                                                         | J                                      | TFM 1600                       |                                      |                                  |                                             |                                     | 6                                                          | Fluorosilicone<br>Special thermal fluids<br>DN 15 - 50 / 1/2" - 2"    |                 |                       |                         |                                  |
|                                                         | P                                      | PEEK                           |                                      |                                  |                                             |                                     | 7                                                          | Fluorosilicone<br>Special thermal fluids<br>DN 65 - 100 / 2" 1/2 - 4" |                 |                       |                         |                                  |

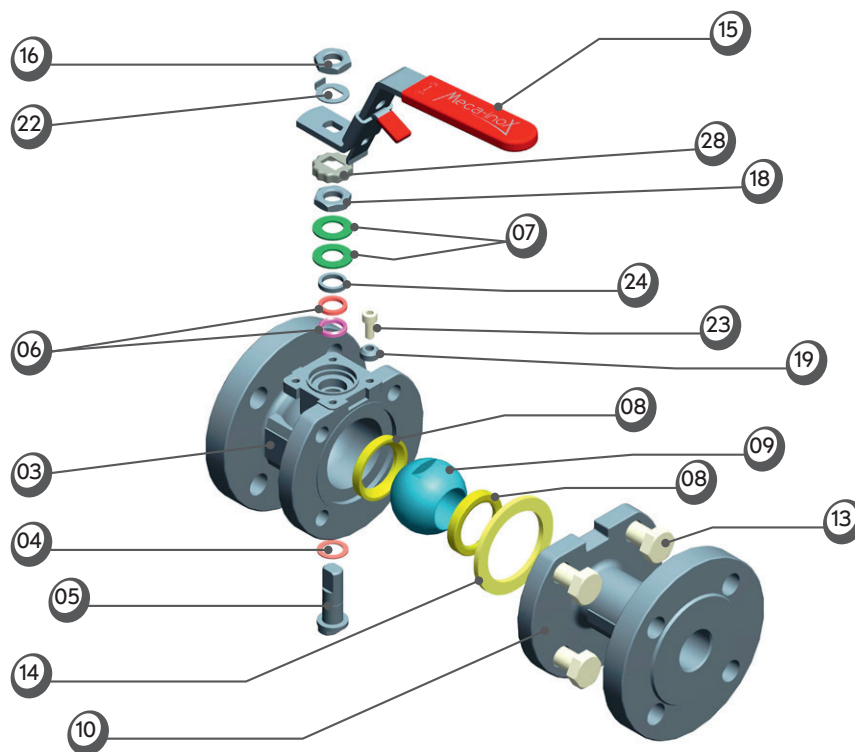
R2

## NOMENCLATURE 2-PIÈCES

## 2-PIECE COMPONENTS

DN 15 à 50

Size 1/2" to 2"



| N°  | Nb | Description                                  | Matière (EN)                        |                      | Item | Qty | Description                          | Material (ASTM)           |                                    |
|-----|----|----------------------------------------------|-------------------------------------|----------------------|------|-----|--------------------------------------|---------------------------|------------------------------------|
|     |    |                                              | Inox                                | Acier                |      |     |                                      | S.steel                   | C.steel                            |
| 03  | 1  | Corps monobloc ISO                           | 1.4408                              | 1.0619 Cataphorèse   | 03   | 1   | Body                                 | A351 CF 8 M               | A216 WCB<br>Cataphoresis treatment |
| 04  | 1  | Rondelle de friction                         | PTFE 20 % PEEK                      | PTFE 20 % PEEK       | 04   | 1   | Stem thrust seal                     | 20%PEEK PTFE              | 20%PEEK PTFE                       |
| 05  | 1  | Tige de manœuvre                             | 1.4404                              | 1.4404               | 05   | 1   | Stem                                 | 316L                      | 316L                               |
| 06  | 1  | Garniture de presse-étoupe<br>Version chimie | PTFE 33 % C + 2 % Gr                | PTFE 33 % C + 2 % Gr | 06   | 1   | Gland packing<br>Chemical version    | 33%C+2%Gr PTFE            | 33%C+2%Gr PTFE                     |
|     |    | Version Sécurité Feu                         | Graphite                            | Graphite             |      |     | Fire-Safe version                    | Graphit                   | Graphit                            |
| 07  | 4  | Rondelles ressort                            | 1.4310                              | 1.4310               | 07   | 4   | Spring washers                       | 301                       | 301                                |
| 08  | 2  | Sièges                                       | PTFE                                | PTFE                 | 08   | 2   | Seats                                | PTFE                      | PTFE                               |
| 09* | 1  | Tournant sphérique                           | 1.4409                              | 1.4409               | 09*  | 1   | Ball                                 | CF3M (316L)               | CF3M (316L)                        |
| 10  | 1  | Manchette de raccordement                    | 1.4408                              | 1.0619 Cataphorèse   | 10   | 1   | Body connector                       | A351 CF 8 M               | A216 WCB<br>Cataphoresis treatment |
| 13  | 4  | Vis TH (DIN F1)<br>DN15 & DN25               | 1.4301                              | Classe 8.8           | 13   | 4   | Screw (DIN F1)<br>Size 1/2" & 1"     | 304                       | Class 8.8                          |
|     | 6  | DN20 + DN32 à DN50                           |                                     |                      |      | 6   | Size 3/4" + 1"1/2 to 2"              |                           |                                    |
| 13b | 4  | Gougeons<br>DN15 & DN25                      | 1.4301                              | 1.4301               | 13b  | 1   | Stud (DIN F4)<br>Size 1/2" & 1"      | 304                       | 304                                |
|     | 6  | DN20 + DN32 à DN50                           | 1.4404 + Graphite                   | 1.4404 + Graphite    |      |     | Size 3/4" + 1"1/2 to 2"              | 316L + Graphit            | 316L + Graphit                     |
| 14  | 1  | Joint de corps<br>Version chimie             | PTFE                                | PTFE                 | 14   | 1   | Body seal<br>Chemical version        | PTFE                      | PTFE                               |
|     |    | Version Sécurité Feu                         | 1.4404 + Graphite                   | 1.4404 + Graphite    |      |     | Fire-Safe version                    | 316L + Graphit            | 316L + Graphit                     |
| 15  | 1  | Levier standard                              | 1.4301                              | 1.4301               | 15   | 1   | Handle standard                      | 304                       | 304                                |
|     |    | Levier option                                | Voir paragraphe OPTIONS DE MANŒUVRE |                      |      |     | Handle option                        | See OPTIONS FOR OPERATION |                                    |
| 17  | 4  | Écrous de serrage (DIN F4)<br>DN15 & DN25    | 1.4301                              | Classe 8.8           | 17   | 4   | Nut screw (DIN F4)<br>Size 1/2" & 1" | 304                       | Class 8.8                          |
|     | 6  | DN20 + DN32 à DN50                           |                                     |                      |      | 6   | Size 3/4" + 1"1/2 to 2"              |                           |                                    |
| 18  | 1  | Écrou de fouloir                             | 1.4404                              | 1.4404               | 18   | 1   | Nut gland                            | 316L                      | 316L                               |
| 19  | 1  | Bague de butée                               | 1.4307                              | 1.4307               | 19   | 1   | Locking plug                         | 304L                      | 304L                               |
| 22  | 1  | Frein d'écrou de levier                      | 1.4307                              | 1.4307               | 22   | 1   | Nut stop                             | 304L                      | 304L                               |
| 23  | 1  | Vis Chc de butée                             | 1.4301                              | 1.4301               | 23   | 1   | Screw stop                           | 304                       | 304                                |
| 24  | 1  | Fouloir                                      | 1.4404                              | 1.4404               | 24   | 1   | Gland                                | 316L                      | 316L                               |
| 28  | 1  | Frein d'écrou de P.E                         | 1.4307                              | 1.4307               | 28   | 1   | Stop nut gland                       | 304L                      | 304L                               |

\* Sphère percée en standard  
\* Drilled ball as standard

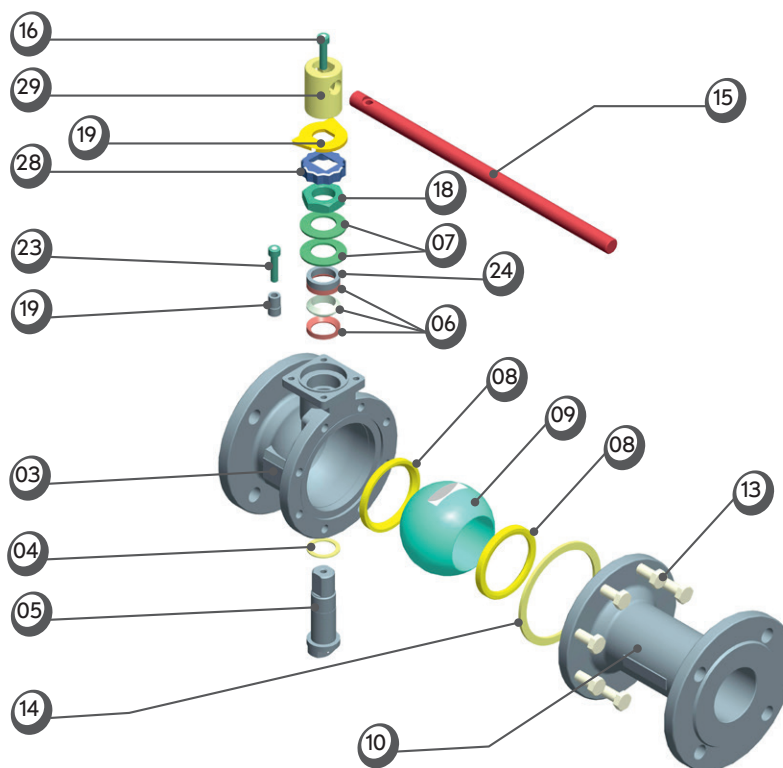
# NOMENCLATURE 2-PIÈCES

R2

## 2-PIECE COMPONENTS

DN 65 à 150

Size 2"1/2 to 6"



| N°  | Nb | Description                                  | Matière (EN)                        |                    |                                                           | Item | Qty | Description                       | Material (ASTM)                  |                                    |
|-----|----|----------------------------------------------|-------------------------------------|--------------------|-----------------------------------------------------------|------|-----|-----------------------------------|----------------------------------|------------------------------------|
|     |    |                                              | Inox                                | Acier              |                                                           |      |     |                                   | S.steel                          | C.steel                            |
| 03  | 1  | Corps monobloc ISO                           | 1.4408                              | 1.0619 Cataphorésé | * Sphère percée en standard<br>* Drilled ball as standard | 03   | 1   | Body                              | A351 CF 8 M                      | A216 WCB<br>Cataphoresis treatment |
| 04  | 1  | Rondelle de friction                         | PTFE 20 % PEEK                      | PTFE 20 % PEEK     |                                                           | 04   | 1   | Stem thrust seal                  | 20%PEEK PTFE                     | 20%PEEK PTFE                       |
| 05  | 1  | Tige de manœuvre                             | 1.4404                              | 1.4404             |                                                           | 05   | 1   | Stem                              | 316L                             | 316L                               |
| 06  | 1  | Garniture de presse-étoupe<br>Version chimie | PTFE                                | PTFE               |                                                           | 06   | 1   | Gland packing<br>Chemical version | PTFE                             | PTFE                               |
|     |    | Version Sécurité Feu                         | Graphite                            | Graphite           |                                                           |      |     | Fire-Safe version                 | Graphit                          | Graphit                            |
| 07  | 2  | Rondelles ressort                            | 1.4310                              | 1.4310             |                                                           | 07   | 2   | Spring washers                    | 301                              | 301                                |
| 08  | 2  | Sièges                                       | PTFE                                | PTFE               |                                                           | 08   | 2   | Seats                             | PTFE                             | PTFE                               |
| 09* | 1  | Tournant sphérique                           | 1.4409                              | 1.4409             |                                                           | 09*  | 1   | Ball                              | CF3M (316L)                      | CF3M (316L)                        |
| 10  | 1  | Manchette de raccordement                    | 1.4408                              | 1.0619 Cataphorésé |                                                           | 10   | 1   | Body connector                    | A351 CF 8 M                      | A216 WCB<br>Cataphoresis treatment |
| 13  | 8  | Vis TH (DIN F1)<br>DN65                      | 1.4301                              | Classe 8.8         |                                                           | 13   | 8   | Screw (DIN F1)<br>Size 2"1/2      | 304                              | Class 8.8                          |
|     | 12 | DN80 à DN150                                 |                                     |                    |                                                           |      | 12  | Size 3" to 6"                     |                                  |                                    |
| 13b | 8  | Goujon (DIN F4)<br>DN65                      | 1.4301                              | 1.4301             |                                                           | 13b  | 8   | Stud (DIN F4)<br>Size 2"1/2       | 304                              | 304                                |
|     | 12 | DN80 à DN150                                 |                                     |                    |                                                           |      | 12  | Size 3" to 6"                     |                                  |                                    |
| 14  | 1  | Joint de corps<br>Version chimie             | PTFE                                | PTFE               |                                                           | 14   | 1   | Body seal<br>Chemical version     | PTFE                             | PTFE                               |
|     |    | Version Sécurité Feu                         | 1.4404 + Graphite                   | 1.4404 + Graphite  |                                                           |      |     | Fire-Safe version                 | 316L + Graphit                   | 316L + Graphit                     |
| 15  | 1  | Levier standard                              | 1.0037 Cataphorésé                  |                    |                                                           | 15   | 1   | Handle standard                   | A283 Gr C Cataphoresis treatment |                                    |
|     |    | Levier option                                | Voir paragraphe OPTIONS DE MANŒUVRE |                    |                                                           |      |     | Handle option                     | See OPTIONS FOR OPERATION        |                                    |
| 16  | 1  | Vis de levier                                | 1.4301                              | 1.4301             |                                                           | 16   | 1   | Handle screw                      | 304                              | 304                                |
| 17  |    | Écrous de serrage (DIN F4)                   | 1.4301                              | Classe 8.8         |                                                           | 17   |     | Nut screw (DIN F4)                | 304                              | Class 8.8                          |
| 18  | 1  | Écrou de fouloir                             | 1.4404                              | 1.4404             |                                                           | 18   | 1   | Nut gland                         | 316L                             | 316L                               |
| 19  | 1  | Plaque d'arrêt                               | 1.4307                              | 1.4307             |                                                           | 19   | 1   | Stop plate                        | 304L                             | 304L                               |
| 19b | 1  | Bague de butée                               | 1.4307                              | 1.4307             |                                                           | 19b  | 1   | Locking plug                      | 304L                             | 304L                               |
| 23  | 1  | Vis Chc de butée                             | 1.4301                              | 1.4301             |                                                           | 23   | 1   | Screw stop                        | 304                              | 304                                |
| 24  | 1  | Fouloir                                      | 1.4404                              | 1.4404             |                                                           | 24   | 1   | Gland                             | 316L                             | 316L                               |
| 28  | 1  | Frein d'écrou de P.E                         | 1.4307                              | 1.4307             |                                                           | 28   | 1   | Stop nut gland                    | 304L                             | 304L                               |
| 29  | 1  | Noix de manœuvre standard                    | 1.0037 Cataphorésé                  |                    |                                                           | 29   | 1   | Handle adaptor standard           | A283 Gr C Cataphoresis treatment |                                    |
|     |    | Noix de manœuvre option                      | 1.4305                              | 1.4305             |                                                           |      |     | Handle adaptor option             | 303                              | 303                                |

\* Sphère percée en standard  
\* Drilled ball as standard

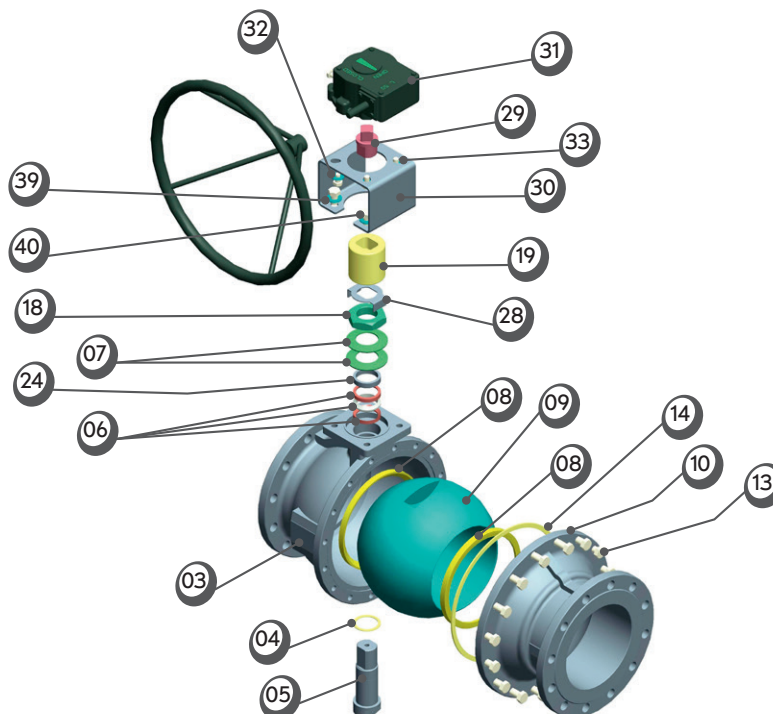
R2

## NOMENCLATURE 2-PIÈCES

## 2-PIECE COMPONENTS

DN 150 à 200

Size 6" to 8"



| N°  | Nb       | Description                                  | Matière (EN)         |                      | Item | Qty      | Description                          | Material (ASTM) |                                    |
|-----|----------|----------------------------------------------|----------------------|----------------------|------|----------|--------------------------------------|-----------------|------------------------------------|
|     |          |                                              | Inox                 | Acier                |      |          |                                      | S.steel         | C.steel                            |
| 03  | 1        | Corps monobloc ISO                           | 1.4408               | 1.0619 Cataphorésé   | 03   | 1        | Body                                 | A351 CF 8 M     | A216 WCB<br>Cataphoresis treatment |
| 04  | 1        | Rondelle de friction                         | PTFE 20% PEEK        | PTFE 20% PEEK        | 04   | 1        | Stem thrust seal                     | 20%PEEK PTFE    | 20%PEEK PTFE                       |
| 05  | 1        | Tige de manœuvre                             | 1.4404               | 1.4404               | 05   | 1        | Stem                                 | 316L            | 316L                               |
| 06  | 1        | Garniture de presse-étoupe<br>Version chimie | PTFE 33 % C + 2 % Gr | PTFE 33 % C + 2 % Gr | 06   | 1        | Gland packing<br>Chemical version    | 33%C+2%Gr PTFE  | 33%C+2%Gr PTFE                     |
|     |          | Version Sécurité Feu                         | Graphite             | Graphite             |      |          | Fire-Safe version                    | Graphit         | Graphit                            |
| 07  | 2        | Rondelles ressort                            | 1.4310               | 1.4310               | 07   | 2        | Spring washers                       | 301             | 301                                |
| 08  | 2        | Sièges                                       | PTFE                 | PTFE                 | 08   | 2        | Seats                                | PTFE            | PTFE                               |
| 09* | 1        | Tournant sphérique<br>DN150 à DN200          | 1.4409               | 1.4409               | 09*  | 1        | Ball<br>Size 6" to 8"                | CF3M (316L)     | CF3M (316L)                        |
| 10  | 1        | Manchette de raccordement                    | 1.4408               | 1.0619 Cataphorésé   | 10   | 1        | Body connector                       | A351 CF 8 M     | A216 WCB<br>Cataphoresis treatment |
| 13  | 12<br>16 | Vis TH (DIN F1)<br>DN150<br>DN200            | 1.4301               | Classe 8.8           | 13   | 12<br>16 | Screw (DIN F1)<br>Size 6"<br>Size 8" | 304             | Class 8.8                          |
|     |          |                                              |                      |                      |      |          |                                      |                 |                                    |
|     |          |                                              |                      |                      |      |          |                                      |                 |                                    |
| 14  | 1        | Joint de corps<br>Version chimie             | PTFE                 | PTFE                 | 14   | 1        | Body seal<br>Chemical version        | PTFE            | PTFE                               |
|     |          | Version Sécurité Feu                         | 1.4404 + Graphite    | 1.4404 + Graphite    |      |          | Fire-Safe version                    | 316L + Graphit  | 316L + Graphit                     |
| 18  | 1        | Écrou de fouloir                             | 1.4404               | 1.4404               | 18   | 1        | Nut gland                            | 316L            | 316L                               |
| 19  | 1        | Noix de manœuvre                             | 1.4305               | 1.4305               | 19   | 1        | Coupling adaptor                     | 303             | 303                                |
| 24  | 1        | Fouloir                                      | 1.4404               | 1.4404               | 24   | 1        | Gland                                | 316L            | 316L                               |
| 28  | 1        | Frein d'écrou de P.E                         | 1.4307               | 1.4307               | 28   | 1        | Stop nut gland                       | 304L            | 304L                               |
| 29  | 1        | Entraîneur                                   | 1.4307               | 1.4307               | 29   | 1        | Coupling                             | 304L            | 304L                               |
| 30  | 1        | Arcade                                       | 1.4307               | 1.4307               | 30   | 1        | Bracket                              | 304L            | 304L                               |
| 31  | 1        | Réducteur manuel                             | Gg25                 | Gg25                 | 31   | 1        | Gear box                             | Gg25            | Gg25                               |
| 32  | 4        | Rondelle plate (coté réducteur)              | 1.4301               | 1.4301               | 32   | 4        | Ring (gear box side)                 | 304             | 304                                |
| 33  | 4        | vis TH (coté réducteur)                      | 1.4301               | 1.4301               | 33   | 4        | Screw (gear box side)                | 304             | 304                                |
| 39  | 4        | Rondelle plate (coté robinet)                | 1.4301               | 1.4301               | 39   | 4        | Ring (valve side)                    | 304             | 304                                |
| 40  | 4        | vis TH (coté robinet)                        | 1.4301               | 1.4301               | 40   | 4        | Screw (valve side)                   | 304             | 304                                |

\* Sphère percée en standard  
\* Drilled ball as standard

## TYPES DE JOINTS

### SEATS & SEALS MATERIAL

**R2S - R2H  
R2Z / R2P**

#### Caractéristiques

Versions "Chimie" :

**R2S** : Sièges TFM1600

Plage de température -50 °C / + 210 °C

**R2Z** : Sièges PTFE +20 % PEEK

Plage de température 0 °C / + 280 °C

**R2P** : Sièges PEEK

Plage de température 0 °C / + 280 °C

Version "Sécurité feu" :

**R2H** : Sièges TFM1600 (PTFE 2<sup>nd</sup> génération)

Plage de température -50 °C / + 210 °C.

Joint de corps spiralé inox + graphite

Versions acier au carbone et inox CF8M

**Version standard :**

Perçage boule dans la rainure pour décompression du corps.  
ATEX 94/9/CE

**Option :**

Perçage boule coté amont.

**Agréments :**

PED 97/23/CE

TA-Luft (conformité aux émanations fugitives)

AD Merkblatt 2000

Matériau des sièges agréé FDA

**Options :**

Marquage  $\pi$  suivant la directive 2010/35/UE TPED :  
certification ADR §1.8.7.6

#### Technical data

"Chemical" versions:

**R2S**: TFM1600 seats

Temperature range: -50°C / +210°C

**R2Z**: 20% PEEK filled PTFE seats

Temperature range: 0°C / +280°C

**R2P**: PEEK seats

Temperature range: 0°C / +280°C

"Fire Safe" version:

**R2H**: TFM1600 seats (2<sup>nd</sup> generation PTFE)

Temperature range: -50°C / +210°C

Seal body spiral stainless steel + graphit

Carbon steel and stainless steel CF8M

**Standard version:**

Ball drilling in the stem mark for cavity relief.  
ATEX 94/9/CE.

**Option:**

Upstream vent hole for cavity relief.

**Approvals:**

PED 97/23/CE

TA-Luft (fugitive emissions)

AD Merkblatt 2000

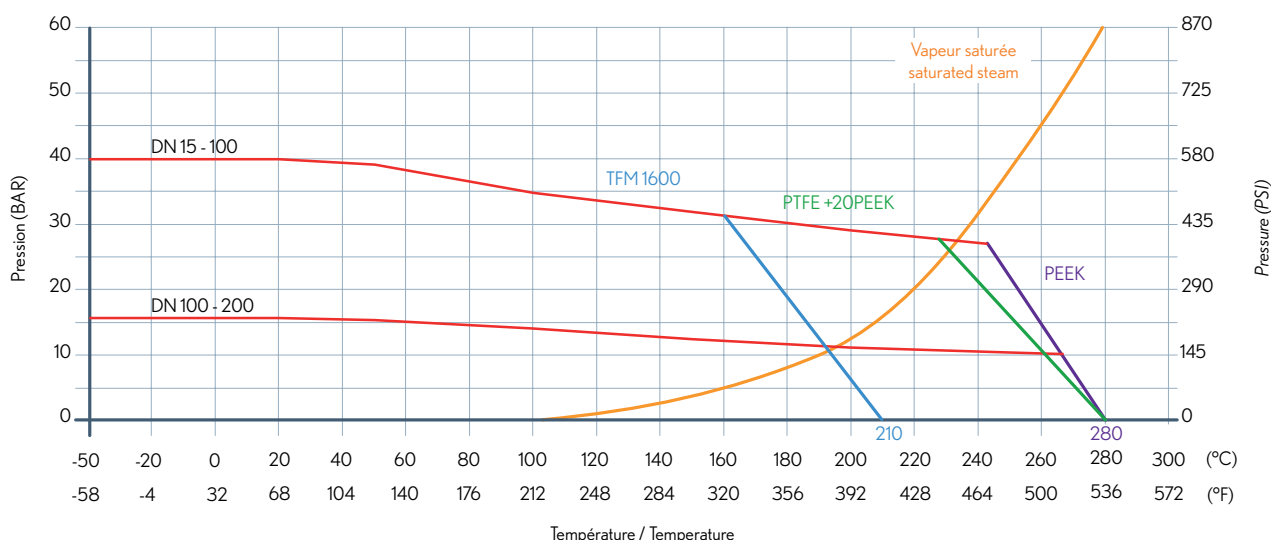
Seat material FDA approved

**Options:**

$\pi$  marking according to 2010/35/UE TPED:  
certification ADR §1.8.7.6

#### Courbes Pression/Température

#### Pressure/Temperature diagrams



Température mini pour robinet en acier au carbone :  
-10 °C / 14 °F.

Des solutions spécifiques sont disponibles pour les applications aux températures inférieures, veuillez nous consulter.

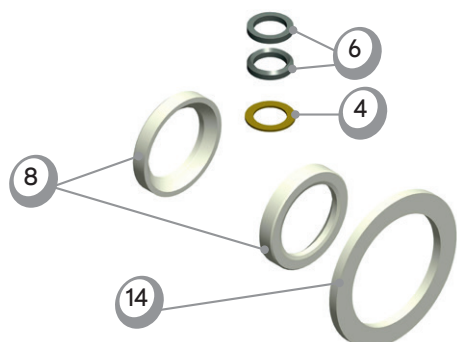
Minimum temperature for carbon steel ball valves:  
-10°C / 14°F

For lower temperature, customer-specific solutions are available on request. Please contact us for more information.

## R2

# TYPES DE JOINTS SEATS & SEALS MATERIAL

DN 15 à 200



Version chimie

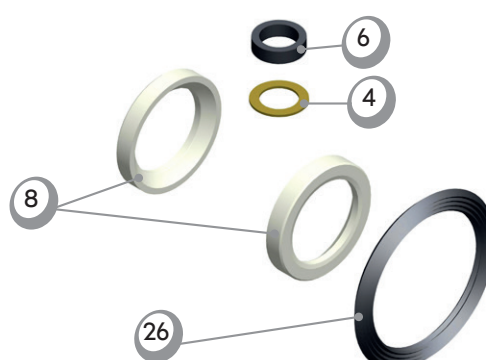
Chemical version

2 sièges 8  
1 joint de corps 14 ou 26  
1 rondelle de friction 4  
1 garniture de presse-étoupe 6

**Version chimie :**  
garniture de presse-étoupe  
en 2 parties = DN 15 à 50 ou  
3 parties = DN 65 à 200

**Version sécurité feu :**  
garniture de presse-étoupe en 1 partie

Size 1/2" to 8"



Version sécurité feu

Fire safe version

2 seats 8  
1 body seat 14 or 26  
1 stem thrust seat 4  
1 gland-packing 6

**Chemical version:**  
gland-packing in  
2 parts = size 1/2" to 2" or  
3 parts = Size 2 1/2 to 6"

**Fire safe version:**  
gland-packing in 1 part

DN 15 à DN 50

DN 1/2" to DN 2"

| Rep<br>Item<br>Robinet<br>Valve type | 04                             | 06                                     | 08                             | 14             | 26                                  |
|--------------------------------------|--------------------------------|----------------------------------------|--------------------------------|----------------|-------------------------------------|
| R2H                                  | PTFE 20 % PEEK<br>20%PEEK PTFE | Graphite<br>Graphit                    | TFM 1600                       | -              | 1.4404 + Graphite<br>316L + Graphit |
| R2J                                  | PTFE 20 % PEEK<br>20%PEEK PTFE | Fluorosilicone                         | TFM 1600                       | Fluorosilicone | -                                   |
| R2P                                  | PEEK                           | PTFE 33 % C + 2 % Gr<br>33%C+2%Gr PTFE | PEEK                           | PTFE           | -                                   |
| R2S                                  | PTFE 20 % PEEK<br>20%PEEK PTFE | PTFE 33 % C + 2 % Gr<br>33%C+2%Gr PTFE | TFM 1600                       | PTFE           | -                                   |
| R2Z                                  | PTFE 20 % PEEK<br>20%PEEK PTFE | PTFE 33 % C + 2 % Gr<br>33%C+2%Gr PTFE | PTFE 20 % PEEK<br>20%PEEK PTFE | PTFE           | -                                   |

DN 65 à DN 200

DN 2 1/2" to DN 8"

| Rep<br>Item<br>Robinet<br>Valve type | 04                             | 06                  | 08                             | 14             | 26                                  |
|--------------------------------------|--------------------------------|---------------------|--------------------------------|----------------|-------------------------------------|
| R2H                                  | PTFE 20 % PEEK<br>20%PEEK PTFE | Graphite<br>Graphit | TFM 1600                       | -              | 1.4404 + Graphite<br>316L + Graphit |
| R2J                                  | PTFE 20 % PEEK<br>20%PEEK PTFE | Fluorosilicone      | TFM 1600                       | Fluorosilicone | -                                   |
| R2S                                  | PTFE 20 % PEEK<br>20%PEEK PTFE | PTFE                | TFM 1600                       | PTFE           | -                                   |
| R2P                                  | PEEK                           | PTFE                | PEEK                           | PTFE           | -                                   |
| R2Z                                  | PTFE 20 % PEEK<br>20%PEEK PTFE | PTFE                | PTFE 20 % PEEK<br>20%PEEK PTFE | PTFE           | -                                   |

# RACCORDEMENT

R2

## TYPE OF CONNECTION

R2 DIN court

R2 DIN short pattern

DN 15 à 50 : PN 40

Passage intégral

Size 1/2" to 2" : PN 40

Full Bore

R2 DIN court

R2 DIN short pattern

DN 65 à 100 : PN 40

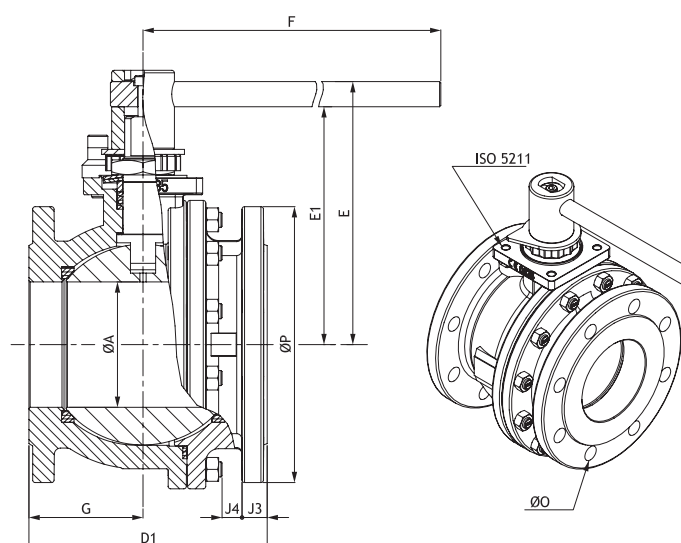
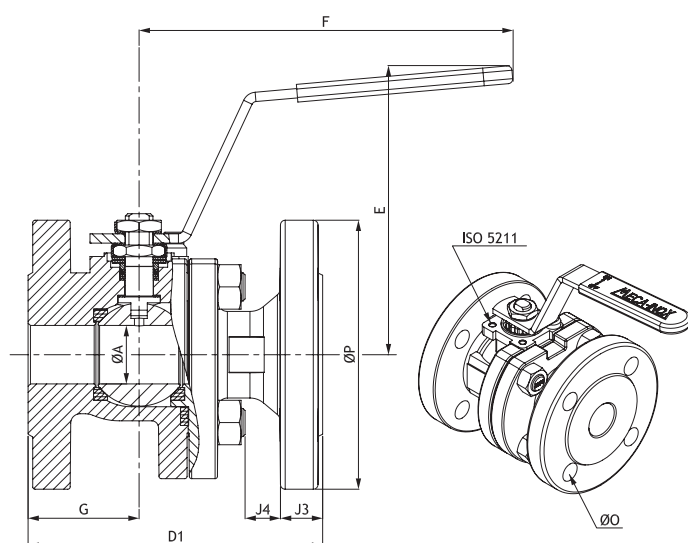
DN 100 à 150 : PN 16

Passage intégral

Size 2 1/2" to 4" : PN 40

Size 4" to 6" : PN 16

Full bore



### Version Court PN 40

### Short pattern PN 40

| DN<br>Size |       | PN | ØA | D1  | E   | F   | G    | J3 | J4   | Ø0           | ØP  | ISO<br>5211 | Poids (Kg)<br>Weight (Kg) |
|------------|-------|----|----|-----|-----|-----|------|----|------|--------------|-----|-------------|---------------------------|
| 15         | 1/2"  | 40 | 14 | 115 | 109 | 118 | 46   | 16 | 15.7 | 4xØ14 / Ø65  | 95  | F03         | 2.710                     |
| 20         | 3/4"  | 40 | 19 | 120 | 118 | 158 | 49.5 | 18 | 14   | 4xØ14 / Ø75  | 105 | F04         | 3.880                     |
| 25         | 1"    | 40 | 25 | 125 | 122 | 158 | 47.5 | 18 | 13.5 | 4xØ14 / Ø85  | 115 | F04         | 5.190                     |
| 32         | 1"1/4 | 40 | 32 | 130 | 136 | 188 | 47   | 18 | 15.1 | 4xØ18 / Ø100 | 140 | F05         | 7.200                     |
| 40         | 1"1/2 | 40 | 38 | 140 | 141 | 188 | 56   | 18 | 15.1 | 4xØ18 / Ø110 | 150 | F05         | 8.400                     |
| 50         | 2"    | 40 | 50 | 150 | 146 | 225 | 56.5 | 20 | 17.1 | 4xØ18 / Ø125 | 165 | F07         | 12.455                    |

| DN Size |       | PN | ØA  | D1  | E   | E1  | F   | G  | J3 | J4 | Ø0           | ØP  | ISO 5211 | Poids (Kg)<br>Weight (Kg) |
|---------|-------|----|-----|-----|-----|-----|-----|----|----|----|--------------|-----|----------|---------------------------|
| 65      | 2"1/2 | 40 | 64  | 170 | 173 | 155 | 370 | 67 | 24 | 21 | 8xØ18 / Ø145 | 185 | F07      | 18.366                    |
| 80      | 3"    | 40 | 76  | 180 | 183 | 165 | 370 | 76 | 24 | 21 | 8xØ18 / Ø160 | 200 | F10      | 25.796                    |
| 100     | 4"    | 40 | 100 | 190 | 210 | 190 | 505 | 81 | 24 | 19 | 8xØ22 / Ø190 | 235 | F10      | 34.923                    |

### Version Court PN 16

### Short pattern PN 16

| DN Size |    | PN | ØA  | D1  | E   | E1  | F   | G   | J3 | J4 | Ø0           | ØP  | ISO 5211 | Poids (Kg)<br>Weight (Kg) |
|---------|----|----|-----|-----|-----|-----|-----|-----|----|----|--------------|-----|----------|---------------------------|
| 100     | 4" | 16 | 100 | 190 | 210 | 190 | 505 | 91  | 20 | 18 | 8xØ18 / Ø180 | 220 | F10      | 31.450                    |
| 150     | 6" | 16 | 150 | 350 | 270 | 242 | 700 | 129 | 22 | -  | 8xØ22 / Ø240 | 285 | F12      | 75.000                    |

R2

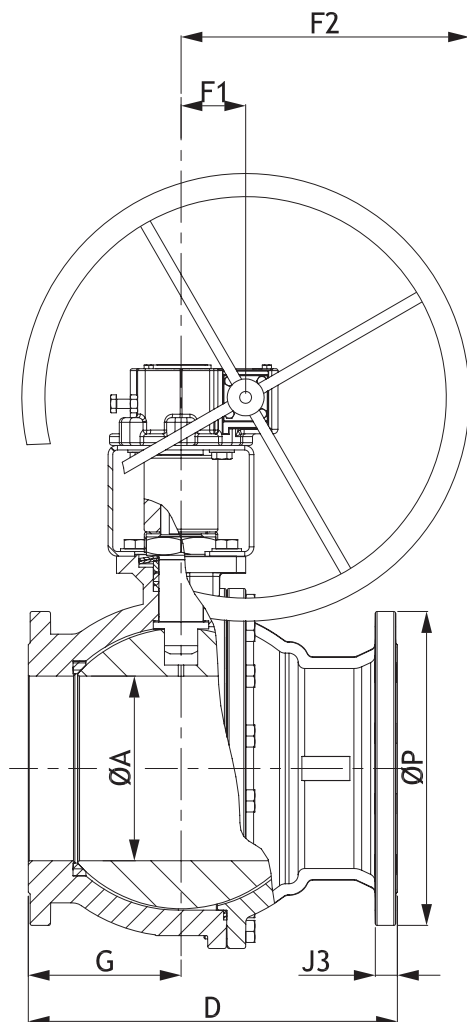
RACCORDEMENT

TYPE OF CONNECTION

R2 DIN court

DN 150 à 200 : PN 16

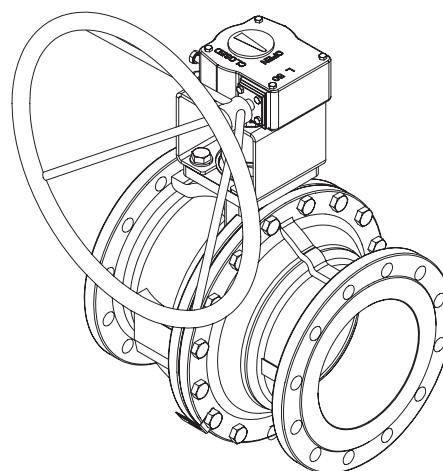
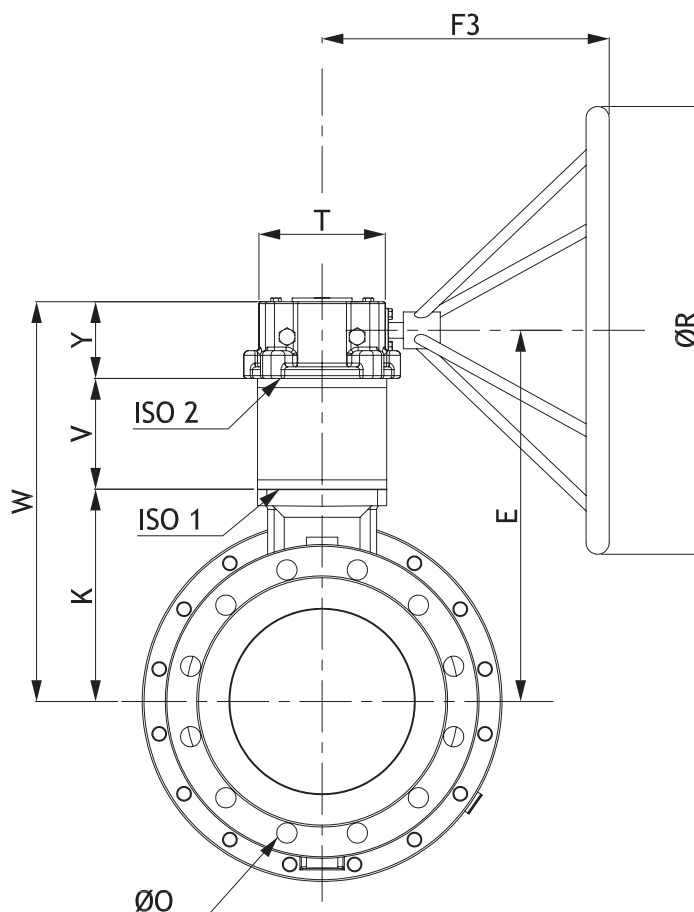
Passage intégral



R2 DIN short pattern

Size 6" to 8" : PN 16

Full Bore



| DN<br>Size |    | PN | ØA  | D   | K   | E   | F1 | F2    | F3  | G     | J3 | ØO              | ØP  | T   | ISO 1<br>5211 | ISO 2<br>5211 | V    | ØR  | W   | Y  | Poids (Kg)<br>Weight (Kg) |
|------------|----|----|-----|-----|-----|-----|----|-------|-----|-------|----|-----------------|-----|-----|---------------|---------------|------|-----|-----|----|---------------------------|
| 150        | 6" | 16 | 150 | 350 | 180 | 330 | 70 | 312.5 | 310 | 129   | 22 | 8 x Ø22 / Ø240  | 285 | 140 | F12           | F12           | 99.5 | 485 | 363 | 83 | 86.000                    |
| 200        | 8" | 16 | 200 | 400 | 230 | 400 | 70 | 312.5 | 310 | 165.5 | 24 | 12 x Ø22 / Ø295 | 340 | 140 | F14           | F12           | 120  | 485 | 433 | 83 | 135.000                   |

## RACCORDEMENT

**R2**

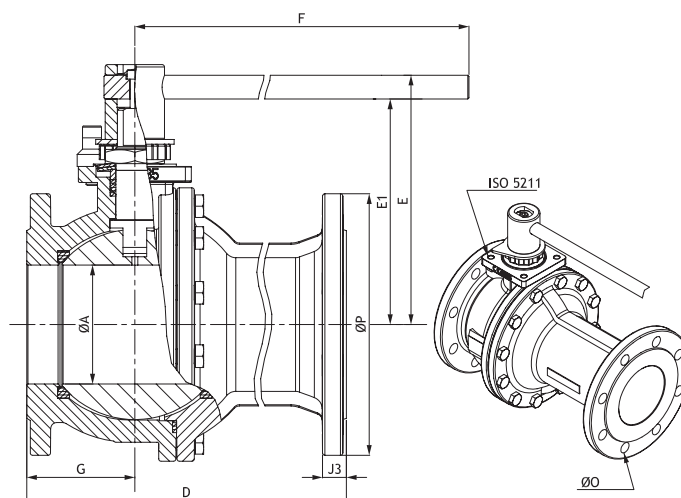
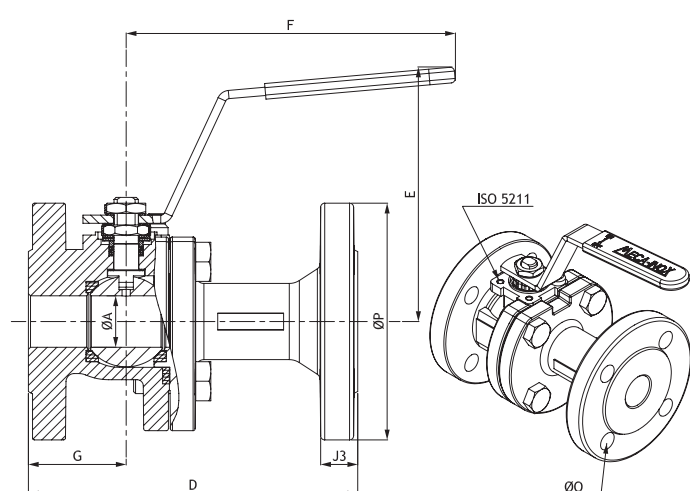
### TYPE OF CONNECTION

**R2 DIN long**  
**R2 DIN long pattern**

DN 15 à 50 : PN 40  
Passage intégral  
Size 1/2" to 2" : PN 40  
Full bore

**R2 DIN long**  
**R2 DIN long pattern**

DN 65 à 100 : PN 40  
DN 100 : PN 16  
Passage intégral  
Size 2 1/2" to 4" : PN 40  
Size 4" : PN 16  
Full bore



### Version Long PN 40

### Long pattern PN 40

| DN Size | PN | ØA | D   | E   | F   | G    | J3 | Ø0           | ØP  | ISO 5211 | Poids (Kg) Weight (Kg) |
|---------|----|----|-----|-----|-----|------|----|--------------|-----|----------|------------------------|
| 15      | 40 | 14 | 130 | 109 | 118 | 46   | 16 | 4xØ14 / Ø65  | 95  | F03      | 2.770                  |
| 20      | 40 | 19 | 150 | 118 | 158 | 49.5 | 18 | 4xØ14 / Ø75  | 105 | F04      | 4.200                  |
| 25      | 40 | 25 | 160 | 122 | 158 | 47.5 | 18 | 4xØ14 / Ø85  | 115 | F04      | 5.230                  |
| 32      | 40 | 32 | 180 | 136 | 188 | 47   | 18 | 4xØ18 / Ø100 | 140 | F05      | 7.650                  |
| 40      | 40 | 38 | 200 | 141 | 188 | 56   | 18 | 4xØ18 / Ø110 | 150 | F05      | 8.935                  |
| 50      | 40 | 50 | 230 | 146 | 225 | 56.5 | 20 | 4xØ18 / Ø125 | 165 | F07      | 13.355                 |

| DN Size | PN | ØA  | D   | E   | E1  | F   | G  | J3 | Ø0           | ØP  | ISO 5211 | Poids (Kg) Weight (Kg) |
|---------|----|-----|-----|-----|-----|-----|----|----|--------------|-----|----------|------------------------|
| 65      | 40 | 64  | 290 | 173 | 155 | 370 | 67 | 24 | 8xØ18 / Ø145 | 185 | F07      | 19.453                 |
| 80      | 40 | 76  | 310 | 183 | 165 | 370 | 76 | 24 | 8xØ18 / Ø160 | 200 | F10      | 27.361                 |
| 100     | 40 | 100 | 350 | 210 | 190 | 505 | 81 | 24 | 8xØ22 / Ø190 | 235 | F10      | 37.360                 |

### Version Long PN 16

### Long pattern PN 16

| DN Size | PN | ØA  | D   | E   | E1  | F   | G  | J3 | Ø0           | ØP  | ISO 5211 | Poids (Kg) Weight (Kg) |
|---------|----|-----|-----|-----|-----|-----|----|----|--------------|-----|----------|------------------------|
| 100     | 16 | 100 | 350 | 210 | 190 | 505 | 81 | 20 | 8xØ18 / Ø180 | 220 | F10      | 35.790                 |

R2

DONNÉES POUR MOTORISATION

DATA FOR ACTUATION

Dimensions sortie d'axe

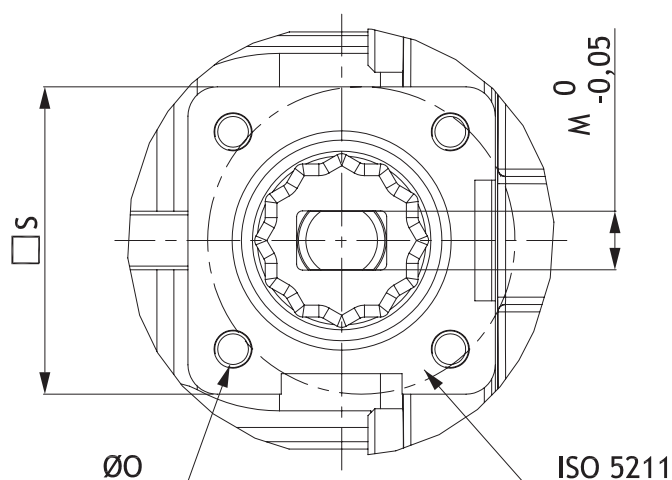
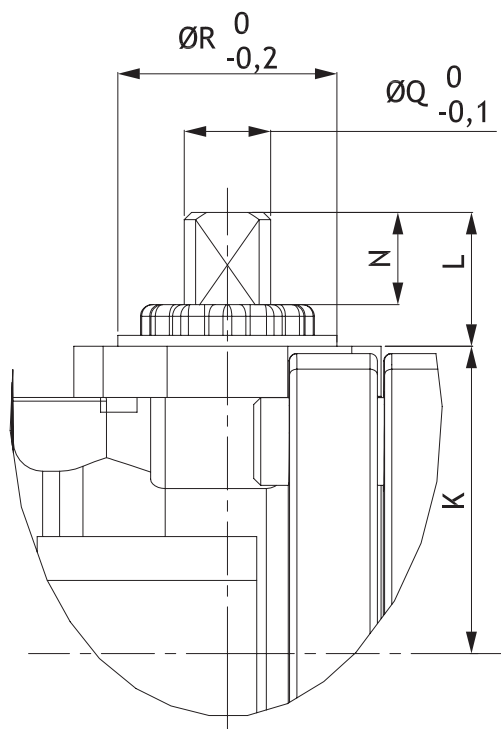
DN 15 à DN 50

Couples de manœuvre

Stem & top flange dimensions

Size 1/2" to 2"

Operating torques



| DN - Nominal<br>Size - Full | ISO<br>5211 | K    | L    | M <sup>0</sup><br>-0.05 | N    | O          | ØQ <sup>0</sup><br>-0.1 | ØR <sup>0</sup><br>-0.2 | S  |
|-----------------------------|-------------|------|------|-------------------------|------|------------|-------------------------|-------------------------|----|
| 15 1/2"                     | F03         | 31   | 13.4 | 6                       | 8.7  | 4xM5 / Ø36 | 9.8                     | 25                      | 36 |
| 20 3/4"                     | F04         | 37.9 | 18.4 | 8                       | 12.6 | 4xM5 / Ø42 | 11.8                    | 29.95                   | 42 |
| 25 1"                       | F04         | 42   | 18.4 | 8                       | 12.6 | 4xM5 / Ø42 | 11.8                    | 29.95                   | 42 |
| 32 1 1/4"                   | F05         | 54   | 24.2 | 11                      | 16.2 | 4xM6 / Ø50 | 15.8                    | 34.95                   | 50 |
| 40 1 1/2"                   | F05         | 59   | 24.2 | 11                      | 16.2 | 4xM6 / Ø60 | 15.8                    | 34.95                   | 50 |
| 50 2"                       | F07         | 83   | 29.6 | 12                      | 19   | 4xM8 / Ø70 | 17.8                    | 54.95                   | 69 |

| DN | R2S/R2H: TFM 1600<br>COUPLE / TORQUE N.m |               |               |           | R2Z: PTFE + 20% PEEK<br>COUPLE / TORQUE N.m |               |               |           | R2P: PEEK<br>COUPLE / TORQUE N.m |               |               |           |
|----|------------------------------------------|---------------|---------------|-----------|---------------------------------------------|---------------|---------------|-----------|----------------------------------|---------------|---------------|-----------|
|    | ΔP<br>7 bars                             | ΔP<br>16 bars | ΔP<br>25 bars | ΔP<br>Max | ΔP<br>7 bars                                | ΔP<br>16 bars | ΔP<br>25 bars | ΔP<br>Max | ΔP<br>7 bars                     | ΔP<br>16 bars | ΔP<br>25 bars | ΔP<br>Max |
| 15 | 7.2                                      | 7.2           | 7.2           | 7.2       | 14.3                                        | 14.3          | 15.7          | 15.7      | 15.7                             | 15.7          | 17.2          | 17.2      |
| 20 | 14.3                                     | 14.3          | 15.7          | 15.7      | 22.9                                        | 22.9          | 25.7          | 25.7      | 24.3                             | 25.7          | 28.6          | 28.6      |
| 25 | 20                                       | 20            | 22.9          | 22.9      | 28.6                                        | 34.3          | 37.2          | 37.2      | 28.6                             | 37.2          | 40            | 50.1      |
| 32 | 28.6                                     | 28.6          | 34.3          | 34.3      | 34.3                                        | 37.2          | 37.2          | 38.6      | 37.2                             | 40            | 42.9          | 64.4      |
| 40 | 35.8                                     | 37.2          | 41.5          | 47.2      | 42.9                                        | 42.9          | 48.6          | 54.3      | 42.9                             | 45.8          | 51.5          | 71.5      |
| 50 | 42.9                                     | 50.1          | 51.5          | 77.2      | 50.1                                        | 65.8          | 93            | 111.5     | 51.5                             | 67.2          | 103           | 157.3     |

Coefficient de sécurité : 1.43 inclus

Sans trace de silicone, ni graisse

Dans les conditions ambiantes de nos ateliers

1.43 safety margin included

Without addition of silicone nor grease

Workshop ambient condition

# DONNÉES POUR MOTORISATION

R2

## DATA FOR ACTUATION

### Dimensions sortie d'axe

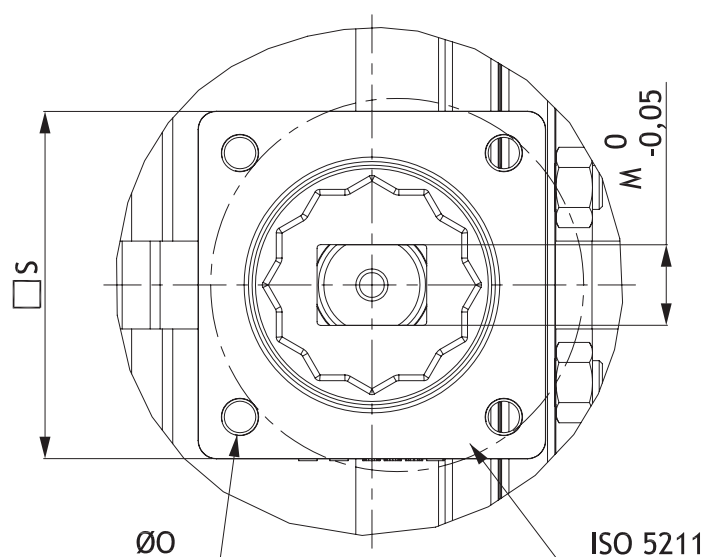
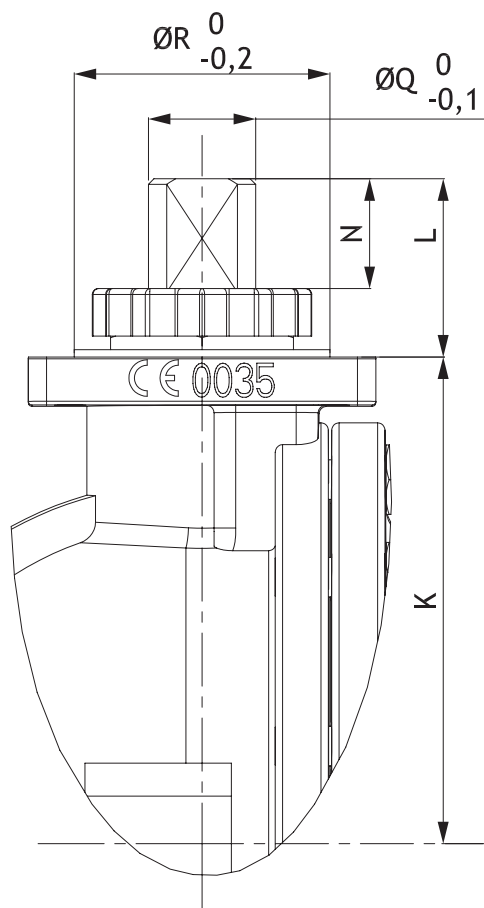
DN 65 à DN 200

Couples de manœuvre

### Stem & top flange dimensions

Size 2"1/2 to 8"

Operating torques



| DN - Nominal<br>Size - Full |        | ISO<br>5211 | K   | L    | M <sup>0</sup><br>-0.05 | N    | O            | ØQ <sup>0</sup><br>-0.1 | ØR <sup>0</sup><br>-0.2 | S   |
|-----------------------------|--------|-------------|-----|------|-------------------------|------|--------------|-------------------------|-------------------------|-----|
| 65                          | 2 1/2" | F07         | 104 | 43.2 | 20                      | 25   | 4xM8 / Ø70   | 24.5                    | 54.9                    | 69  |
| 80                          | 3"     | F10         | 114 | 43.2 | 20                      | 25   | 4xM10 / Ø102 | 24.5                    | 69.9                    | 96  |
| 100                         | 4"     | F10         | 133 | 48.7 | 22                      | 30   | 4xM10 / Ø102 | 29.3                    | 69.9                    | 96  |
| 125                         | 5"     | F12         | 161 | 58.2 | 24                      | 32.5 | 4xM12 / Ø125 | 36.8                    | 84.9                    | 119 |
| 150                         | 6"     | F12         | 180 | 58.2 | 24                      | 32.5 | 4xM12 / Ø125 | 36.8                    | 84.9                    | 119 |
| 200                         | 8"     | F14         | 230 | 74.2 | 36                      | 48   | 4xM14 / Ø140 | 43.8                    | 99.9                    | 140 |

| DN  | R2S/R2H: TFM 1600<br>COUPLE / TORQUE N.m |               |               |           | R2Z: PTFE + 20% PEEK<br>COUPLE / TORQUE N.m |               |               |           | R2P: PEEK<br>COUPLE / TORQUE N.m |               |               |           |
|-----|------------------------------------------|---------------|---------------|-----------|---------------------------------------------|---------------|---------------|-----------|----------------------------------|---------------|---------------|-----------|
|     | ΔP<br>7 bars                             | ΔP<br>16 bars | ΔP<br>25 bars | ΔP<br>Max | ΔP<br>7 bars                                | ΔP<br>16 bars | ΔP<br>25 bars | ΔP<br>Max | ΔP<br>7 bars                     | ΔP<br>16 bars | ΔP<br>25 bars | ΔP<br>Max |
| 65  | 78.7                                     | 107.3         | 114.4         | 128.7     | 85.8                                        | 123           | 157.3         | 236       | 85.8                             | 143           | 200.2         | 286       |
| 80  | 85.8                                     | 114.4         | 143           | 171.6     | 105.8                                       | 143           | 243.1         | 286       | 107.3                            | 214.5         | 328.9         | 500.5     |
| 100 | 100.1                                    | 121.6         | 171.6         | 207.4     | 121.6                                       | 257.4         | 328.9         | 400.4     | 128.7                            | 486.2         | 643.5         | 715       |
| 150 | 400.4                                    | -             | -             | -         | 514.8                                       | -             | -             | -         | -                                | -             | -             | -         |
| 200 | 572                                      | -             | -             | -         | -                                           | -             | -             | -         | -                                | -             | -             | -         |

Coefficient de sécurité : 1.43 inclus  
Sans trace de silicone, ni graisse  
Dans les conditions ambiantes de nos ateliers

1.43 safety margin included  
Without addition of silicone nor grease  
Workshop ambient condition



По вопросам продаж и поддержки обращайтесь:

|                             |                            |                                 |                                |                          |
|-----------------------------|----------------------------|---------------------------------|--------------------------------|--------------------------|
| Архангельск (8182)63-90-72  | Иваново (4932)77-34-06     | Магнитогорск (3519)55-03-13     | Пермь (342)205-81-47           | Сургут (3462)77-98-35    |
| Астана +7(7172)727-132      | Ижевск (3412)26-03-58      | Москва (495)268-04-70           | Ростов-на-Дону (863)308-18-15  | Тверь (4822)63-31-35     |
| Астрахань (8512)99-46-04    | Казань (843)206-01-48      | Мурманск (8152)59-64-93         | Рязань (4912)46-61-64          | Томск (3822)98-41-53     |
| Барнаул (3852)73-04-60      | Калининград (4012)72-03-81 | Набережные Челны (8552)20-53-41 | Самара (846)206-03-16          | Тула (4872)74-02-29      |
| Белгород (4722)40-23-64     | Калуга (4842)92-23-67      | Нижний Новгород (831)429-08-12  | Санкт-Петербург (812)309-46-40 | Тюмень (3452)66-21-18    |
| Брянск (4832)59-03-52       | Кемерово (3842)65-04-62    | Новокузнецк (3843)20-46-81      | Саратов (845)249-38-78         | Ульяновск (8422)24-23-59 |
| Владивосток (423)249-28-31  | Киров (8332)68-02-04       | Новосибирск (383)227-86-73      | Севастополь (8692)22-31-93     | Уфа (347)229-48-12       |
| Волгоград (844)278-03-48    | Краснодар (861)203-40-90   | Омск (3812)21-46-40             | Симферополь (3652)67-13-56     | Хабаровск (4212)92-98-04 |
| Вологда (8172)26-41-59      | Красноярск (391)204-63-61  | Орел (4862)44-53-42             | Смоленск (4812)29-41-54        | Челябинск (351)202-03-61 |
| Воронеж (473)204-51-73      | Курск (4712)77-13-04       | Оренбург (3532)37-68-04         | Сочи (862)225-72-31            | Череповец (8202)49-02-64 |
| Екатеринбург (343)384-55-89 | Липецк (4742)52-20-81      | Пенза (8412)22-31-16            | Ставрополь (8652)20-65-13      | Ярославль (4852)69-52-93 |