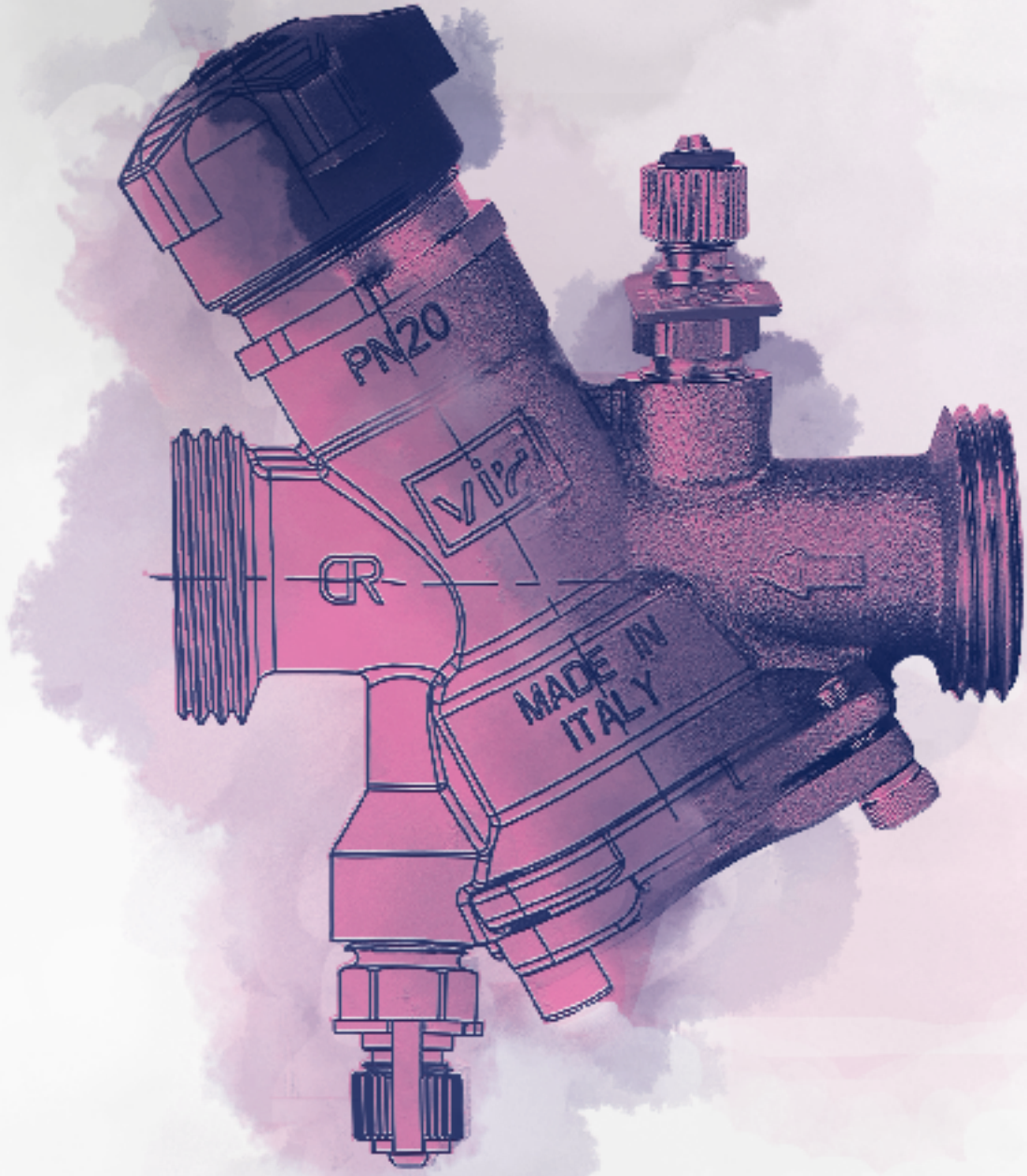




*flowing ideas*

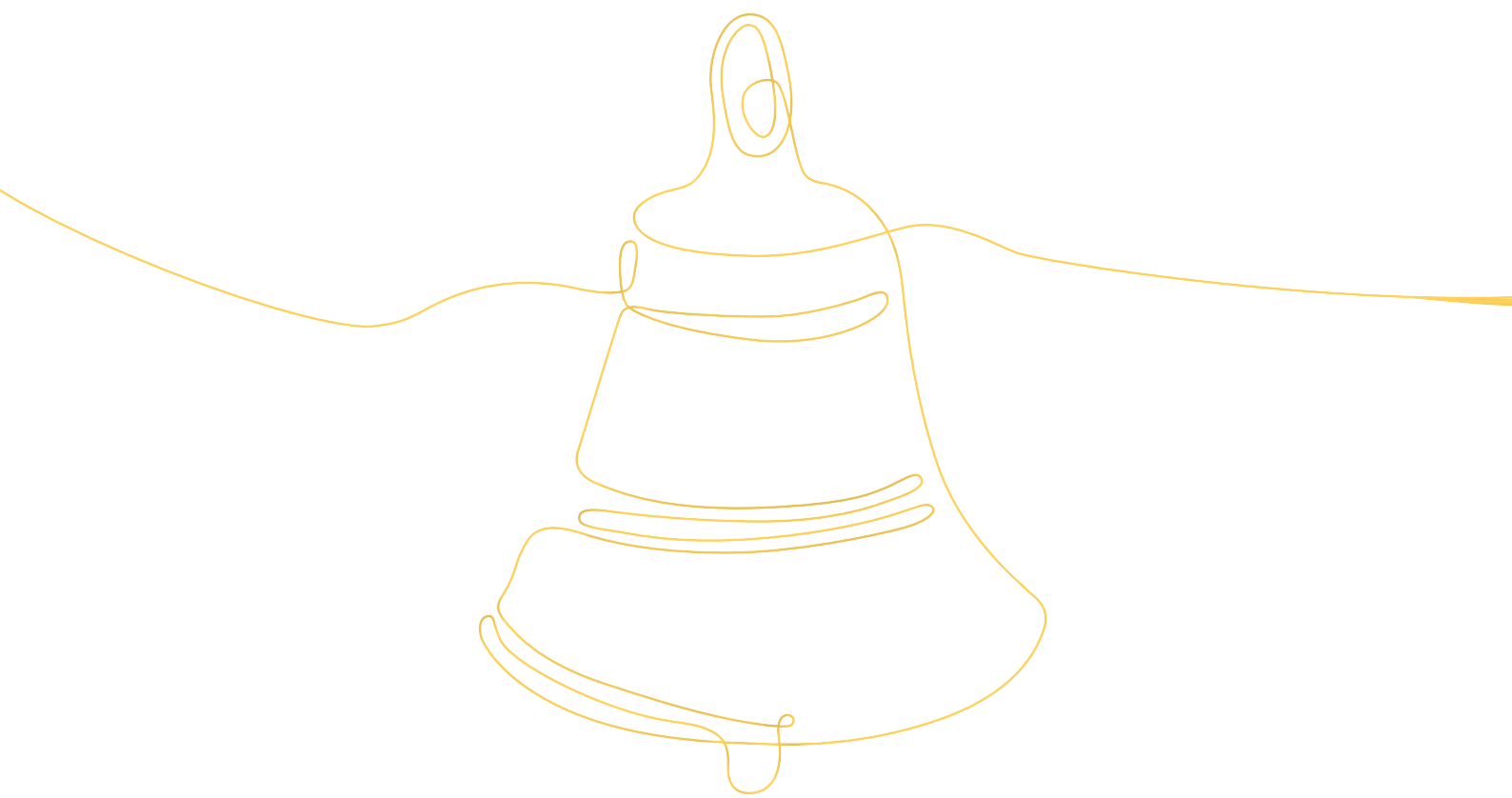


# CATALOGUE 2024



*flowing ideas*

# CATALOGUE 2024

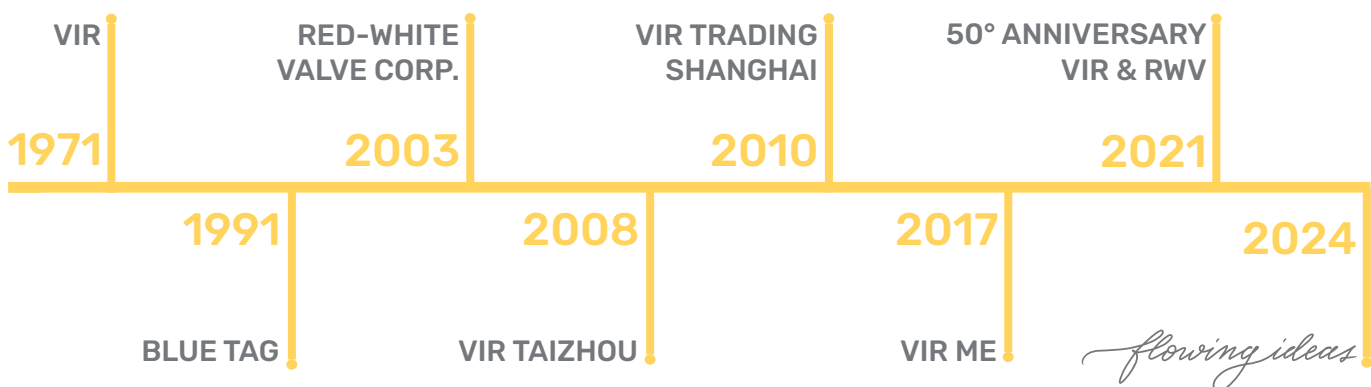


# The force of a group that makes ideas flow

VIR was established in 1971 in Valduggia in the province of Vercelli, in the heart of the Cusio-Valsesia district. VIR – Valvoindustria Ing. Rizzio S.p.A. – has its roots in the local tradition of bronze casting for the artisan production of bells and is perfectly integrated in a territory which is rated today amongst the major Italian valve and tap manufacturing centres.

VIR today is an international company with offices in three continents: in Europe, with its historical headquarters in the town of Valduggia (with three separate sites: the production, the warehouse and the foundry together with the plastic division); in North America with Red-White Valve Corp. and its warehouses in Lake Forest (CA), Menlo Park (CA), Arvada (CO), Lakeville (MN), Atlanta (GA), Nashville (TN), Houston (TX); in Asia with its plant in Taizhou and its sales office in Shanghai, and in the Middle East with the Dubai office and warehouse.

Fifty years of presence in the market, together with the creation of a new logistic centre in Valduggia in 2001, have made the VIR group an extremely competitive company, close to its customers' needs.



## About VIR

VIR – Valvoindustria Ing. Rizzio S.p.A. – has its roots in the local tradition of bronze casting for the artisan production of bells and is perfectly integrated in a territory which is rated today amongst the major Italian valve and tap manufacturing centres. Started as a family business and now a successful international group, VIR has shaped its growth on the fundamental principles that have made it a dynamic business aware of the market needs.

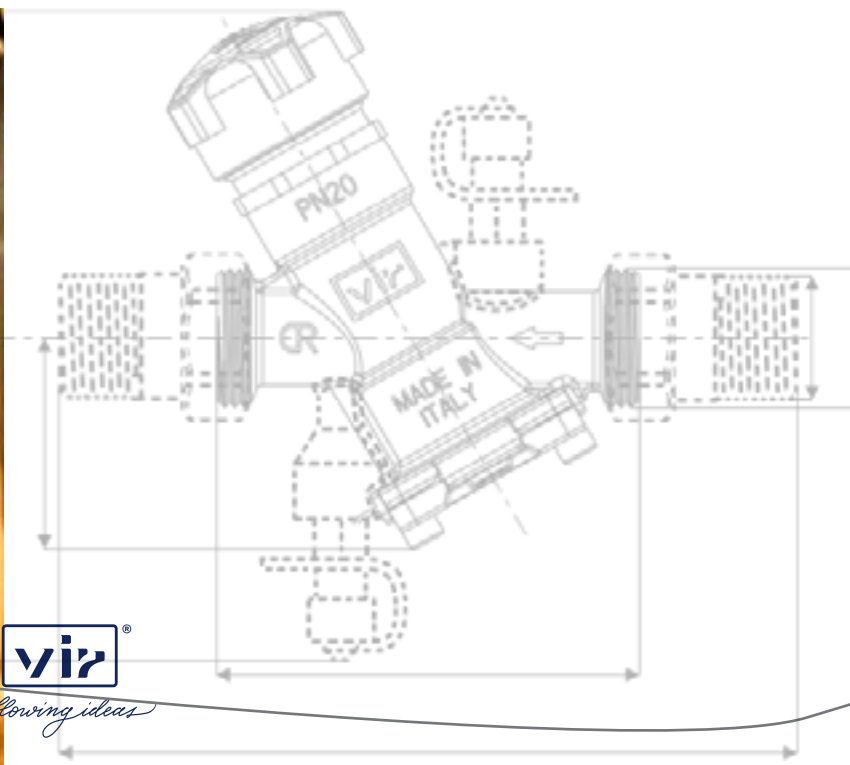
### TYPES OF APPLICATIONS

- HVAC
- OEM
- IRRIGATION
- WATER AND GAS DISTRIBUTION NETWORKS

### TYPES OF MATERIALS

- BRONZE
- BRASS
- DUCTILE AND CAST IRON
- POLYPROPYLENE
- STAINLESS STEEL

VIR today exports to 75 different countries, using its own five commercial business locations and its fifteen warehouses, branching out its trade and reaching all corners of the world.



# VIR's quality is certified



EN331 - Europe



TR CU 010 - Russia, Belarus and Kazakhstan



STF - Finland



ACS - France



IAPMO - USA



VA - Denmark



UL - USA, Canada



FM - USA



CSA - USA, Canada



NSF 61 e 372 - USA, Canada



WRAS - UK



GDV - Denmark



SINTEF - Norway



Water Supplies Department - Hong Kong



TSSA - Canada



CE PED - Europe

VIR is also BIM ready and offers a selection of families representing the most commonly used products in medium and large scale projects, which are increasingly being carried out following the BIM philosophy. These models can be downloaded on our website [www.vironline.com](http://www.vironline.com)



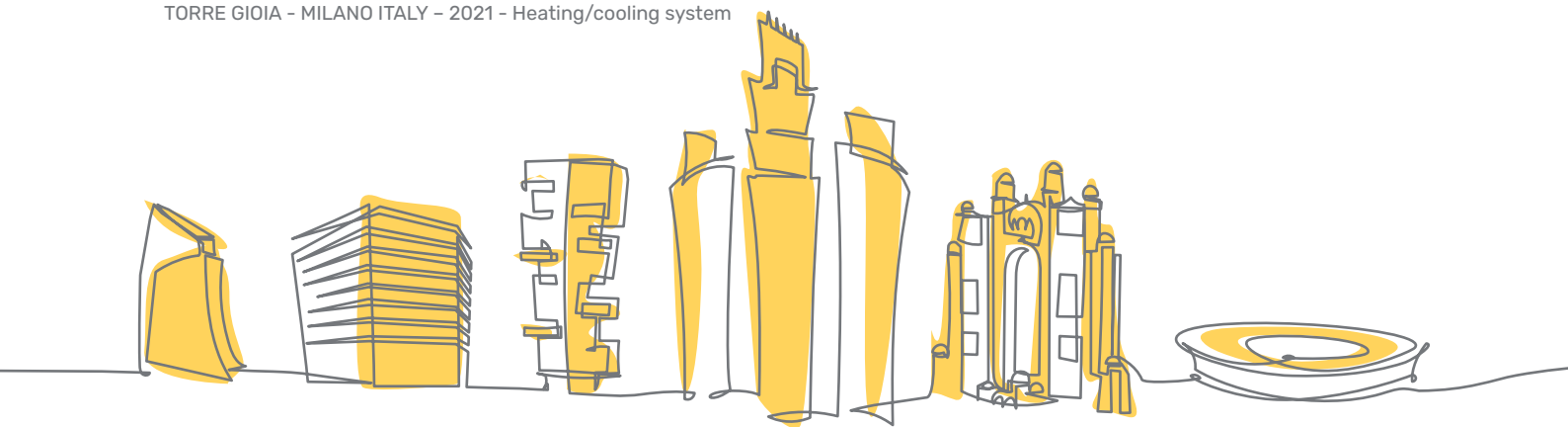
# References

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TORRE GIOIA - MILANO ITALY - 2021 - Heating/cooling system

FERRARI - MARANELLO ITALY - 2020 - Heating/cooling system





CAMPUS HUMANITAS - ROZZANO ITALY 2021 - Heating/cooling system



TORRE UNIPOLSAI - MILANO ITALY - 2023 - Central heating/cooling

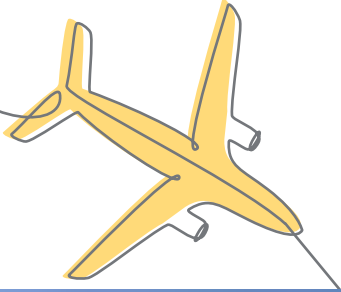
WATERFRONT DI LEVANTE - GENOVA ITALY - ongoing - Heating/cooling system



LEONARDO - BOLOGNA  
ITALY - 2022  
Heating/cooling system







KULA TOWER - BELGRADE SERBIA - 2022 - Heating/cooling system



KOWLOON EAST REGIONAL POLICE HQ1 - HONG KONG CHINA - 2022 - Heating/cooling system

OZO RESORT - KUDAKURUTHU MALDIVES - 2021 - Water supply system



NEW KOTELNIKI RESIDENCES - MOSCOW RUSSIA - 2022 - Heating system





DIFENCE HEADQUARTERS – AKUREGODA COLOMBO – 2021  
Heating/cooling system



GRAND BLEU TOWER – DUBAI UAE – 2022 - Heating/cooling system



DIOR BOUTIQUE - HO CHI MINH CITY VIETNAM – 2021  
Heating/cooling system

KAOSIUNG MARITIME CULTURAL AND POPULAR MUSIC CENTER  
TAIWAN – 2022 - Central heating/cooling + distribution



## Water and Energy

We, at VIR, believe that the involvement in the process of providing these two essential services above all implies an ethical commitment to the environment and the people.

Because in a world that is constantly and rapidly changing, our sense of responsibility requires us to act concretely and positively for the protection of climate and health, by working every day to contribute to the creation of a safer, fairer and more resourceful world.



**LEAD FREE VALVE RANGE**



**PTFE COATED BALLS**



**EDP CERTIFICATION**



**WIDE RANGE OF BALANCING VALVES**

**WITH US THE FUTURE FLOWS TOWARDS SUSTAINABILITY**

# More energy towards sustainability

## HYDRONC BALANCING

Energy saving is the global challenge that we, as a company, are required to cope with: in fact, HVAC systems are amongst the most responsible for energy consumption around the world.

This is why we cultivate and promote synergies with the main industry players such as installers, designers, wholesalers, contractors and buyers, to encourage them to make virtuous choices, aimed at reaching comfortable temperatures in buildings, while minimizing the consumption of energy and operating costs, when choosing to use our balancing valves.

### THE BENEFITS OF A BALANCED HYDRAULIC SYSTEM:



**THERMAL COMFORT**



**MOISTURE ACCUMULATION**



**ECOLOGICAL IMPACT ON CONSUMPTION**

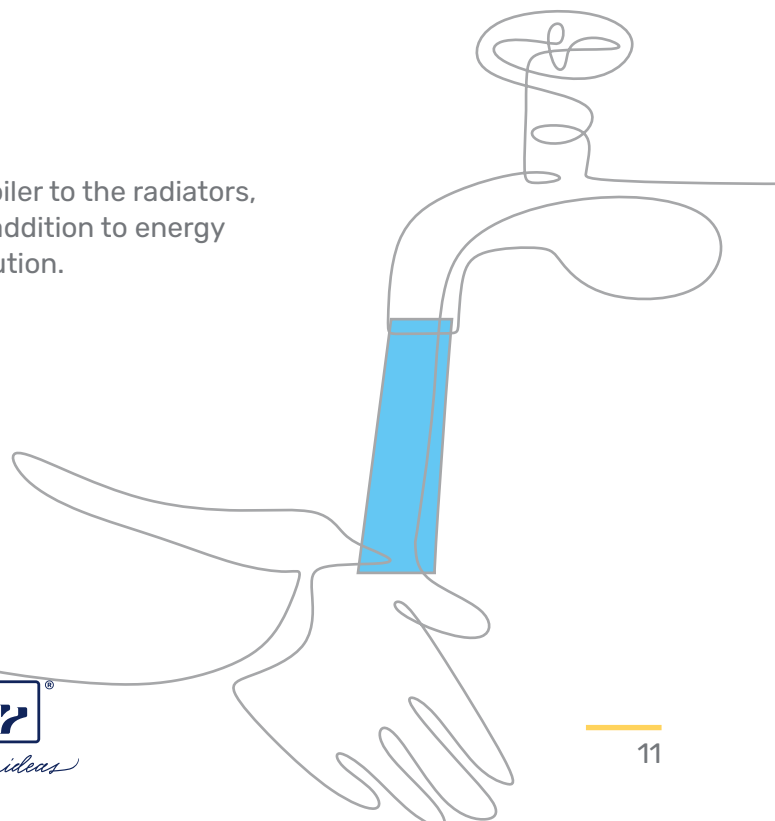


**ENERGY SAVING**

HOW TO OBTAIN THESE BENEFITS?

WITH OUR **BALANCING VALVES!**

They correctly distribute the flow of water from the boiler to the radiators, optimizing the yield and efficiency of the systems. In addition to energy consumption, they reduce noise, wear, costs and pollution.



*flowing ideas*



## BALANCING

### Static Balancing p.16

9505 - 9515 - 9585 - 9525 - Vaurien - 9535 - 9555P - 9555H  
9555J - 9595 - 9594 - 9400 - 9450

### Dynamic Balancing p.21

9900P - 9905V - 9955 - Cartucce - 9700 - 9705 - 9703  
Vaurien - VaurienM - 9705B - VaurienB - 9755 - 9605 - 9655  
9610 - 9610DR - 9660 - T650 - Accessories - Shells



## EZCONNECT

### Connection Kit for terminal units p.32

91BY 9703 - 92HS - Ezconn Shell



## SHUT-OFF

### Ball valves p.36

340 - 343 - 348 - 342 - 340DR - 340J - 340GS - 340 Solar  
340LN - 350TAB - 33FF - 33MF - 330 - 333 - 380 - 380LN  
380I Solar - 360 - 365 - 5020DR - 5020 - 5020LN - 5021  
5024 - 5028 - 390 - 39BVO - 322 - 323/324 - 310N - 293LK  
328 - 3WL - Accessories

### Butterfly valves p.52

4020 - 4320 - 4029 - 4329 - 4025 - 4325 - 402W - 432W  
4520 - 4620 - 4820L - Actuators - Accessories



## REGULATING and CONTROL

### Regulating ball valves p.68

980S - 980T - 988S - 988T - AM980 - AM980L

### Ball valves for actuators p.70

325 - 32T - SLOOP II - 39BVF - CUTTERAQ - HOVERCRAFT  
325 ENO - CUTTER ENO - 980F - 980FT - 980FL - 988F  
988FT - 988FL - AM980 - AM980L



## **GATE and CHECK**

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**Gate valves** p.78

40 - 56 - 90/90LK - 100/100LK - 110 - 120 - 914

**Check valves** p.82

771 - 775 - 776 - 776H - 777 - 830 - 835 - 890/890E - 806  
815V - 765S - 765K - 765 - 790



## **STRAINERS**

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**Strainers** p.92

899I - 899H - 899S - 900 - 89DV - 91F - 895 - 895H - 895J



## **FLEXIBLE JOINTS and AIR VENTS**

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**Flexible joints** p.98

KGTT - KGTF HD - KGTP - KGTF

**Air vents** p.100

9390 - 9393 - 9380



## **GAS**

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**Valves for gas** p.104

340G - 343G - 390G - 4321

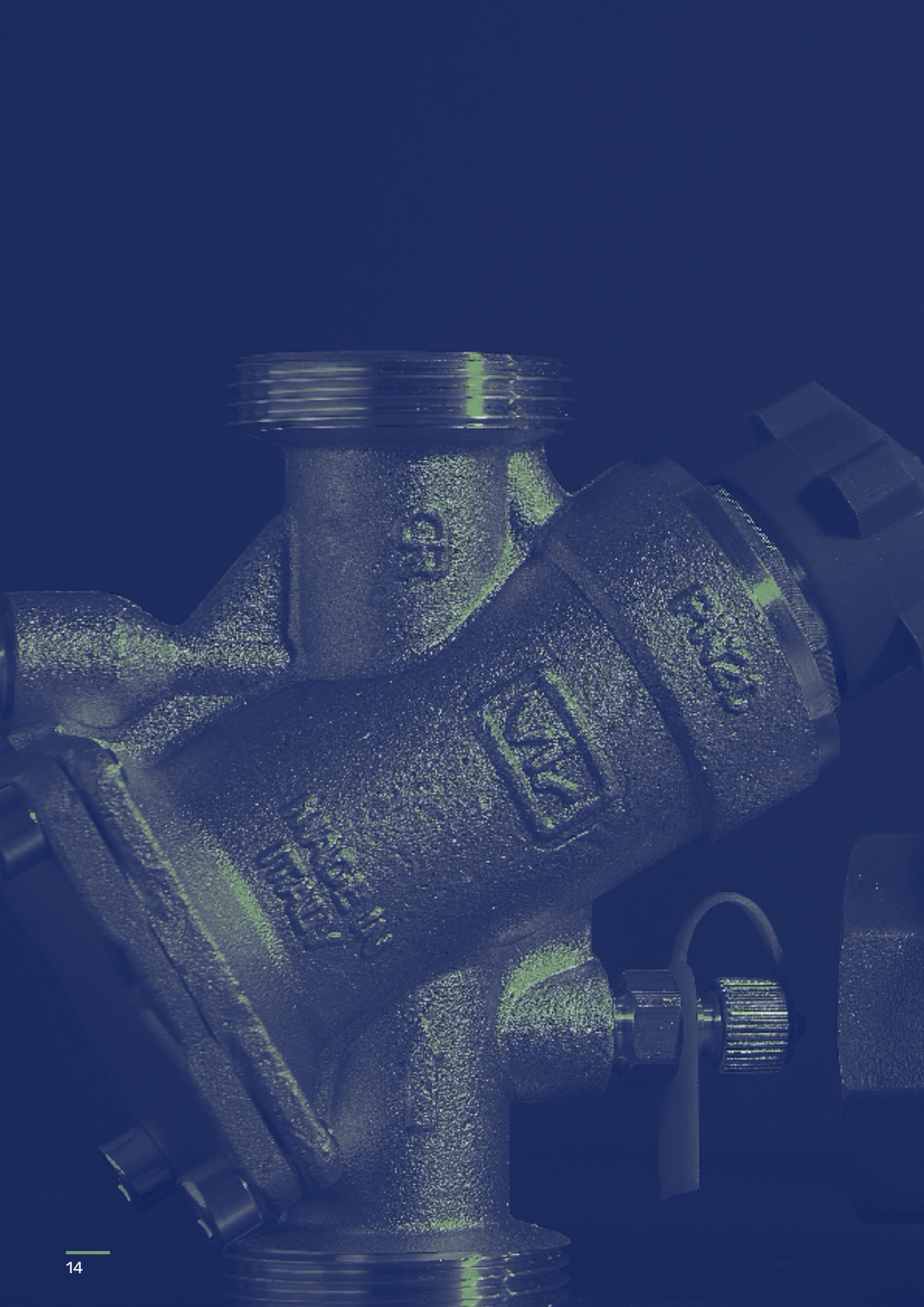


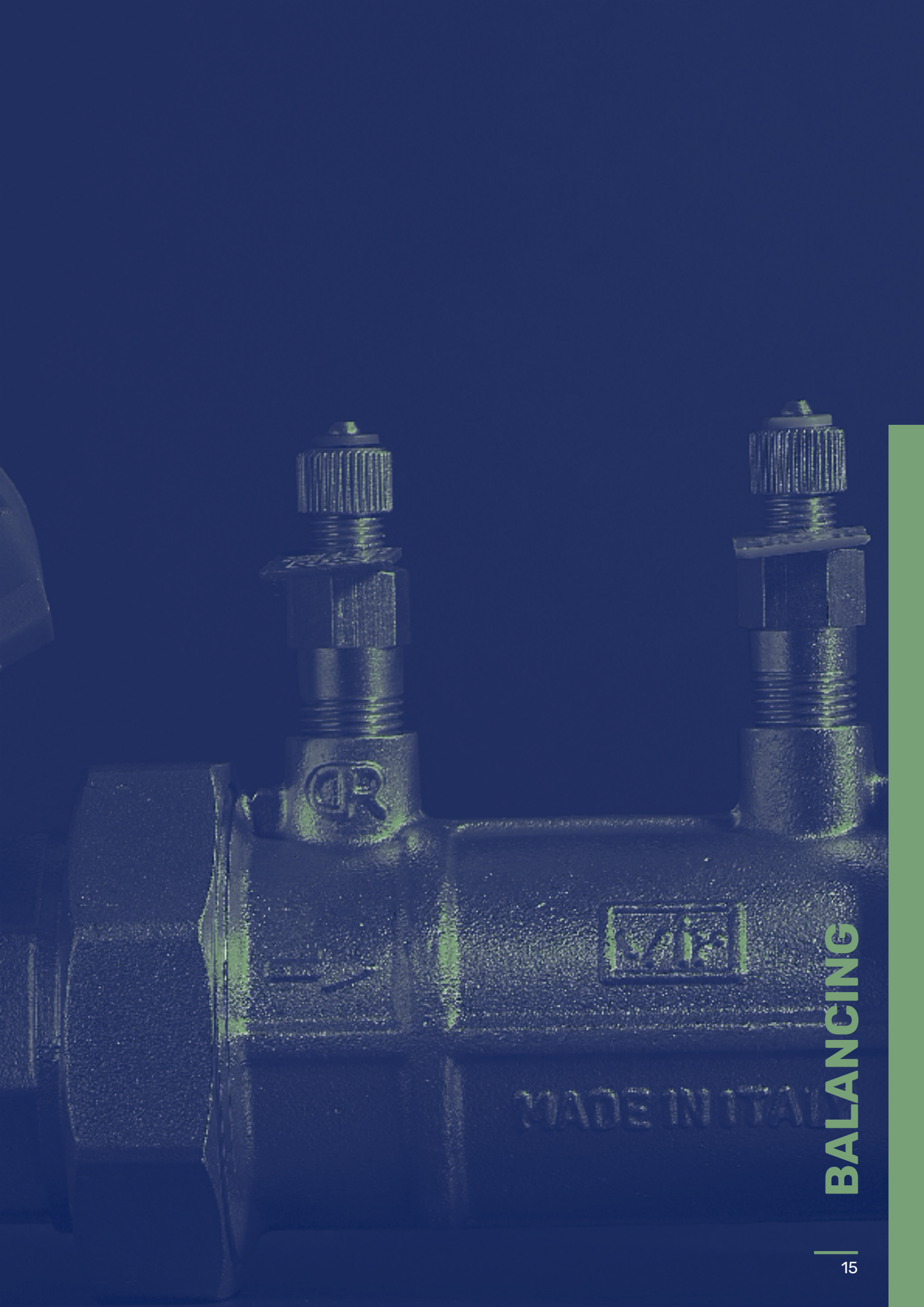
## **POLYPROPYLENE**

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**PP and PP-R valves** p.108

220 - 228 - 210 - 218 - 500 - 500I - Accessories





# BALANCING



# STATIC BALANCING VALVES

9505

Variable orifice bronze double reg. valve

PN25



Threaded F/F (ISO 228/1)  
Bronze body, inner components and test points in DZR brass  
PTFE disc gasket, EPDM Perox O-rings  
ABS handwheel, supplied with allen key for setting  
Working conditions: Water, -10°C to +130°C  
Max 25bar up to 110°C, max 20bar above



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F9505B010.946 | 010 - 3/8"     | 15       | 482      | 7,2      |
| F9505B015.946 | 015 - 1/2"     | 15       | 544      | 8,2      |
| F9505B020.946 | 020 - 3/4"     | 15       | 586      | 8,8      |
| F9505B025.946 | 025 - 1"       | 10       | 722      | 7,2      |
| F9505B032.946 | 032 - 1 1/4"   | 10       | 1105     | 11,1     |
| F9505B040.946 | 040 - 1 1/2"   | 8        | 1493     | 11,9     |
| F9505B050.946 | 050 - 2"       | 5        | 2030     | 10,2     |

ERC



STF

Spare handwheel available (KXV950015.3402) for DN10 - DN50

STF version available on request

9515

Fixed orifice DZR brass double reg. valve

PN25



Threaded F/F (ISO 228/1 for DN15/20, ISO7/1 Rp above)  
Body, inner components and test points in DZR brass  
PTFE disc gasket, EPDM Perox O-rings  
ABS handwheel, supplied with allen key for setting  
DN15 also for low (L), very low (U) and ultra low flows (X)  
Working conditions: Water, -10°C to +130°C  
Max 25bar up to 110°C, max 20bar above



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F95V04015.1094 | X 015 - X 1/2" | 15       | 585      | 8,8      |
| F95V03015.1094 | U 015 - U 1/2" | 15       | 585      | 8,8      |
| F95V02015.1094 | L 015 - L 1/2" | 15       | 585      | 8,8      |
| F95V01015.1094 | 015 - 1/2"     | 15       | 582      | 8,7      |
| F95V01020.1094 | 020 - 3/4"     | 10       | 644      | 6,4      |
| F95V01025.870  | 025 - 1"       | 10       | 766      | 7,7      |
| F95V01032.870  | 032 - 1 1/4"   | 8        | 1265     | 10,1     |
| F95V01040.870  | 040 - 1 1/2"   | 6        | 1583     | 9,5      |
| F95V01050.870  | 050 - 2"       | 5        | 2172     | 10,9     |

ERC



Spare handwheel available (KXV950015.3402) for DN10 - DN50

Version with copper pipe adaptors on request

9585

Fixed orifice bronze double reg. valve

PN25



Threaded F/F (ISO 228/1 for DN15/20, ISO7/1 Rp above)  
Bronze body, inner components and test points in DZR brass  
PTFE disc gasket, EPDM Perox O-rings  
ABS handwheel, supplied with allen key for setting  
DN15 also for low (L) and very low flows (U)  
Working conditions: Water, -10°C to +130°C  
Max 25bar up to 110°C, max 20bar above



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F95Z03015.2039 | U 015 - U 1/2" | 15       | 573      | 8,6      |
| F95Z02015.2039 | L 015 - L 1/2" | 15       | 571      | 8,6      |
| F95Z01015.2039 | 015 - 1/2"     | 15       | 566      | 8,5      |
| F95Z01020.2039 | 020 - 3/4"     | 10       | 630      | 6,3      |
| F95Z01025.2033 | 025 - 1"       | 10       | 801      | 8,0      |
| F95Z01032.2033 | 032 - 1 1/4"   | 8        | 1317     | 10,5     |
| F95Z01040.2033 | 040 - 1 1/2"   | 6        | 1683     | 10,1     |
| F95Z01050.2033 | 050 - 2"       | 5        | 2274     | 11,4     |

ERC



Spare handwheel available (KXV950015.3402) for DN10 - DN50

Version with copper pipe adaptors on request

9525

DZR Brass ON/OFF terminal balancing valve

PN20



Threaded F/F (ISO 228/1 for DN15/20, ISO7/1 Rp above)  
 Body, inner components and test points in DZR brass  
 Disc gasket and O-rings in EPDM Perox  
 ABS ON/OFF cap, may be used with Vaurien actuator  
 DN15 also in low flow version (L)  
 Working conditions: Water, -10°C to +130°C  
 Max 20bar up to 80°C, max 10bar at 130°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F95E0L015.1934 | L 015 - L 1/2" | 20       | 360      | 7,2      |
| F95E00015.1934 | 015 - 1/2"     | 20       | 340      | 6,8      |
| F95E00020.1934 | 020 - 3/4"     | 20       | 520      | 10,4     |
| F95E00025.1934 | 025 - 1"       | 20       | 640      | 12,8     |

Vaurien 100N only for L-DN15, DN15 and DN20, Vaurien 125N for all DN's



VAURIEN

Linear thermoelectric actuator



Supply voltage: 24V AC/DC or 230VAC  
 M30x1,5mm threaded nut with fast connection  
 Enclosure protection: IP54  
 2 points control  
 Stroke time: about 3 to 5 minutes  
 Normally closed (NC)  
 Normally open (NO) version available on request



| Vir Code                 | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--------------------------|----------------|----------|----------|----------|
| <b>230VAC version</b>    |                |          |          |          |
| KA952AT50.800            | 100N           | 1        | 115      | 0,1      |
| KA952AT05.800            | 125N           | 1        | 110      | 0,1      |
| <b>24V AC/DC version</b> |                |          |          |          |
| KA952AT52.800            | 100N           | 1        | 115      | 0,1      |
| KA952AT07.800            | 125N           | 1        | 110      | 0,1      |



Vaurien montabile solo su fig. 9525

9535

Variable orifice DZR brass double reg. valve

PN20



Threaded F/F (ISO 228/1 for DN15/20, ISO7/1 Rp above)  
 Body, inner components and test points in DZR brass  
 Disc gasket and O-rings in EPDM Perox  
 ABS handwheel, supplied with allen key for setting  
 DN15 also in low flow version (L)  
 Working conditions: Water, -10°C to +130°C  
 Max 20bar up to 80°C, max 10bar at 130°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F95EBL015.2028 | L 015 - L 1/2" | 20       | 350      | 7,0      |
| F95EB0015.2028 | 015 - 1/2"     | 20       | 390      | 7,8      |
| F95EB0020.2028 | 020 - 3/4"     | 20       | 510      | 10,2     |
| F95EB0025.2028 | 025 - 1"       | 20       | 650      | 13,0     |



# STATIC BALANCING VALVES

**9555P**

Cast iron double reg. valve with test points

**PN16**



Flanged PN16 (EN1092-2)  
Cast iron body  
Brass inner components, EPDM O-ring gaskets  
Composite material regulating disc  
Polyamid handwheel  
Supplied with 2 test points in DZR brass (unmounted)  
Working conditions: Water, -10°C to +110°C



ERC CE

| Vir Code               | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|------------------------|----------------|----------|----------|----------|
| F9500I040.1959         | 040 - 1 1/2"   | 1        | 6100     | 6,1      |
| F9500I050.1959         | 050 - 2"       | 1        | 8300     | 8,3      |
| F9500I065.1959         | 065 - 2 1/2"   | 1        | 13400    | 13,4     |
| F9500I080.1959         | 080 - 3"       | 1        | 17500    | 17,5     |
| F9500I100.1959         | 100 - 4"       | 1        | 24000    | 24,0     |
| F9500I125.1959         | 125 - 5"       | 1        | 34000    | 34,0     |
| F9500I150.1959         | 150 - 6"       | 1        | 48500    | 48,5     |
| F9500I200.1959         | 200 - 8"       | 1        | 114500   | 114,5    |
| F9500I250.1959         | 250 - 10"      | 1        | 159000   | 159,0    |
| F9500I300.1959         | 300 - 12"      | 1        | 210500   | 210,5    |
| F9500I350.3161         | 350 - 14"      | 1        | 375000   | 375,0    |
| F9500I400.3161         | 400 - 16"      | 1        | 510000   | 510,0    |
| <b>Spare handwheel</b> |                |          |          |          |
| KXV955040.2220         | 40-50          | 1        | 40       | 0,0      |
| KXV955065.2220         | 65-150         | 1        | 118      | 0,1      |
| KXV955200.2220         | 200-300        | 1        | 1000     | 1,0      |
| KXV955350.2220         | 350-400        | 1        | 1850     | 1,9      |

**9555H**

Ductile iron double reg. valve with variable orifice

**PN25**



Flanged PN25 (EN1092-2)  
Ductile iron body  
EPDM gasket  
Ductile iron handwheel  
Supplied with 2 test points in brass  
Working conditions: Water, 0°C to +110°C



CE

| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F9555H065.3312 | 065 - 2 1/2"   | 1        | 14700    | 14,7     |
| F9555H080.3312 | 080 - 3"       | 1        | 17000    | 17,0     |
| F9555H100.3312 | 100 - 4"       | 1        | 24300    | 24,3     |
| F9555H125.3312 | 125 - 5"       | 1        | 32700    | 32,7     |
| F9555H150.3312 | 150 - 6"       | 1        | 44800    | 44,8     |
| F9555H200.3312 | 200 - 8"       | 1        | 83000    | 83,0     |
| F9555H250.3312 | 250 - 10"      | 1        | 123000   | 123,0    |
| F9555H300.3312 | 300 - 12"      | 1        | 168000   | 168,0    |

## 9555J

### Variable orifice cast iron double regulating valve grooved **PN16**



Grooved (ANSI/AWWA C606 / Metric)  
Cast iron body  
EPDM O-ring gaskets  
Balancing cone in Ductile Iron  
Supplied with 2 test points in DZR brass  
Working conditions: Water, -10°C to +110°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F9555J040.3210 | 48,0           | 1        | 5800     | 5,8      |
| F9555J050.3210 | 60,3           | 1        | 9000     | 9,0      |
| F9555J065.3210 | 76,1 *         | 1        | 10800    | 10,8     |
| F9555J080.3210 | 88,9           | 1        | 26800    | 26,8     |
| F9555J100.3210 | 114,3          | 1        | 27400    | 27,4     |
| F9555J125.3210 | 139,7 *        | 1        | 52750    | 52,8     |
| F9555J150.3210 | 165,1 *        | 1        | 63800    | 63,8     |
| F9555J200.3210 | 219,1          | 1        | 161000   | 161,0    |
| F9555J250.3210 | 273,0          | 1        | 252000   | 252,0    |
| F9555J300.3210 | 323,9          | 1        | 310000   | 310,0    |

\* Metric groove standard

**EAC**

## 9595

### Stainless steel balancing ball valve

**PN40**



Flanged PN40 for DN≤50, PN16 above (EN1092-1)  
Body and ball in stainless steel SS316  
FPM stem seal, PTFE seats  
PN16 for DN≥65  
Working conditions: Water, -30°C to 200°C  
DN≤50, max 40bar up to 90°C, max 0bar at 200°C  
DN≥65, max 16bar up to 156°C, max 0bar at 200°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F95950015.1775 | 015 - 1/2"     | 1        | 2200     | 2,2      |
| F95950020.1775 | 020 - 3/4"     | 1        | 2600     | 2,6      |
| F95950025.1775 | 025 - 1"       | 1        | 3100     | 3,1      |
| F95950032.1775 | 032 - 1 1/4"   | 1        | 4700     | 4,7      |
| F95950040.1775 | 040 - 1 1/2"   | 1        | 5900     | 5,9      |
| F95950050.1775 | 050 - 2"       | 1        | 7600     | 7,6      |
| F95950065.1775 | 065 - 2 1/2"   | 1        | 9800     | 9,8      |
| F95950080.1775 | 080 - 3"       | 1        | 11300    | 11,3     |
| F95950100.1775 | 100 - 4"       | 1        | 15000    | 15,0     |
| F95950125.1775 | 125 - 5"       | 1        | 22000    | 22,0     |
| F95950150.1775 | 150 - 6"       | 1        | 30400    | 30,4     |
| F95950200.1775 | 200 - 8"       | 1        | 51000    | 51,0     |
| F95950250.1775 | 250 - 10"      | 1        | 100000   | 100,0    |

**EAC CE**

## 9594

### Stainless steel balancing ball valve

**PN40**



Welding ends  
Body and ball in stainless steel SS316  
FPM stem seal, PTFE seats  
PN25 for DN≥65  
Working conditions: Water, -30°C to 200°C  
DN≤50, max 40bar up to 90°C, max 0bar at 200°C  
DN≥65, max 25bar up to 131°C, max 0bar at 200°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F95940015.1215 | 015 - 1/2"     | 1        | 900      | 0,9      |
| F95940020.1215 | 020 - 3/4"     | 1        | 900      | 0,9      |
| F95940025.1215 | 025 - 1"       | 1        | 1100     | 1,1      |
| F95940032.1215 | 032 - 1 1/4"   | 1        | 1300     | 1,3      |
| F95940040.1215 | 040 - 1 1/2"   | 1        | 2100     | 2,1      |
| F95940050.1215 | 050 - 2"       | 1        | 2600     | 2,6      |
| F95940065.1215 | 065 - 2 1/2"   | 1        | 4300     | 4,3      |
| F95940080.1215 | 080 - 3"       | 1        | 5200     | 5,2      |
| F95940100.1215 | 100 - 4"       | 1        | 7200     | 7,2      |
| F95940125.1215 | 125 - 5"       | 1        | 11500    | 11,5     |
| F95940150.1215 | 150 - 6"       | 1        | 16400    | 16,4     |
| F95940200.1215 | 200 - 8"       | 1        | 36000    | 36,0     |
| F95940250.1215 | 250 - 10"      | 1        | 71000    | 71,0     |

**EAC CE**

# STATIC BALANCING VALVES

9400

DZR brass metering station

PN25



Threaded M/F ISO7/1 Rp (F side ISO 228/1 on DN15 and DN20)  
 Body and Venturi insert in DZR brass  
 EPDM/NBR test point gaskets  
 DN15 also for low (L), very low (U) and ultra low flows (X)  
 Working conditions: Water, -10°C to +130°C  
 Max 25bar up to 110°C, max 20bar above



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F95MS4015.1096 | X 015 - X 1/2" | 25       | 218      | 5,5      |
| F95MS3015.1096 | U 015 - U 1/2" | 25       | 218      | 5,5      |
| F95MS2015.1096 | L 015 - L 1/2" | 25       | 216      | 5,4      |
| F95MS1015.1096 | 015 - 1/2"     | 25       | 213      | 5,3      |
| F95MS1020.1096 | 020 - 3/4"     | 25       | 254      | 6,4      |
| F95MS1025.707  | 025 - 1"       | 15       | 353      | 5,3      |
| F95MS1032.707  | 032 - 1 1/4"   | 15       | 463      | 6,9      |
| F95MS1040.707  | 040 - 1 1/2"   | 10       | 531      | 5,3      |
| F95MS1050.707  | 050 - 2"       | 10       | 755      | 7,6      |

Version with copper pipe adaptors on request

ERC

9450

Stainless steel orifice plate

PN16



Wafer type suitable for EN1092 PN16 flanges  
 SS316 stainless steel body (SS304 for DN≥450)  
 Supplied with extensions and test points  
 PN10 for DN≥350  
 Working conditions: Water, -10°C to +110°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F94500040.1073 | 040 - 1 1/2"   | 1        | 972      | 1,0      |
| F94500050.1073 | 050 - 2"       | 1        | 1142     | 1,1      |
| F94500065.1073 | 065 - 2 1/2"   | 1        | 1468     | 1,5      |
| F94500080.1073 | 080 - 3"       | 1        | 1762     | 1,8      |
| F94500100.1073 | 100 - 4"       | 1        | 1967     | 2,0      |
| F94500125.1073 | 125 - 5"       | 1        | 2560     | 2,6      |
| F94500150.1073 | 150 - 6"       | 1        | 2950     | 3,0      |
| F94500200.1073 | 200 - 8"       | 1        | 4140     | 4,1      |
| F94500250.1073 | 250 - 10"      | 1        | 5350     | 5,4      |
| F94500300.1073 | 300 - 12"      | 1        | 6830     | 6,8      |
| F94500350.1073 | 350 - 14"      | 1        | 12400    | 12,4     |
| F94500400.1073 | 400 - 16"      | 1        | 14500    | 14,5     |
| F94500450.2383 | 450 - 18"      | 1        | 17000    | 17,0     |
| F94500500.2383 | 500 - 20"      | 1        | 21000    | 21,0     |
| F94500600.2383 | 600 - 24"      | 1        | 35000    | 35,0     |

ERC

# DYNAMIC BALANCING VALVES

## 9900P

DZR brass automatic balancing valve

PN25



Threaded F/F union ends (ISO 7/1 Rp)  
 With metal cartridges from 0,02l/s to 2,6l/s  
 2 available  $\Delta P$  ranges (up to max 440kPa depending on DN)  
 DZR brass body and cartridge  
 Working conditions: Water, -10°C to +130°C  
 Max 25bar up to 110°C, max 20bar above



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F990P0015.2281 | 015 - 1/2"     | 25       | 293      | 7,3      |
| F990P0H15.2281 | H 015 - H 1/2" | 25       | 443      | 11,1     |
| F990POL20.2281 | L 020 - L 3/4" | 25       | 365      | 9,1      |
| F990P0020.2281 | 020 - 3/4"     | 25       | 401      | 10,0     |
| F990P0025.2281 | 025 - 1"       | 25       | 588      | 14,7     |
| F990P0032.2281 | 032 - 1 1/4"   | 10       | 1342     | 13,4     |
| F990P0040.2281 | 040 - 1 1/2"   | 10       | 1493     | 14,9     |
| F990P0050.2281 | 050 - 2"       | 10       | 2027     | 20,3     |

ERC

## 9905V

DZR brass automatic bal. valve with test points

PN25



Threaded F/F union ends (ISO 7/1 Rp)  
 With metal cartridges from 0,02l/s to 9,7l/s  
 2 available  $\Delta P$  ranges (up to max 440kPa depending on DN)  
 DZR brass body, test points and cartridge  
 Working conditions: Water, -10°C to +130°C (110°C for DN $\geq$ 65)  
 Max 25bar up to 110°C, max 20bar above



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F990V5015.1904 | 015 - 1/2"     | 25       | 375      | 9,4      |
| F990V5H15.1904 | H 015 - H 1/2" | 25       | 523      | 13,1     |
| F990V5L20.1904 | L 020 - L 3/4" | 25       | 460      | 11,5     |
| F990V5020.1904 | 020 - 3/4"     | 25       | 534      | 13,4     |
| F990V5025.1904 | 025 - 1"       | 25       | 656      | 16,4     |
| F990V5032.1904 | 032 - 1 1/4"   | 10       | 1554     | 15,5     |
| F990V5040.1904 | 040 - 1 1/2"   | 10       | 1530     | 15,3     |
| F990V5050.1904 | 050 - 2"       | 10       | 2064     | 20,6     |
| F990V5H50.1904 | H 050 - H 2"   | 2        | 3650     | 7,3      |
| F990V5065.1904 | 065 - 2 1/2"   | 2        | 3872     | 7,7      |

ERC

Ver. with plugs available (for subsequent mounting of test points): F990V0mis.1903

# DYNAMIC BALANCING VALVES

9955

Ductile iron dynamic balancing valve

PN16



Wafer type suitable for EN1092 PN16 flanges  
 With metal cartridges from 1,6l/s to 6,6l/s  
 Multi cartridge system for valves DN100 and above  
 With DZR brass extended test points  
 Working conditions: Water, -10°C to +110°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F9955V065.2448 | 065 - 2 1/2"   | 1        | 4100     | 4,1      |
| F9955V080.2448 | 080 - 3"       | 1        | 5600     | 5,6      |
| F9955V100.2448 | 100 - 4"       | 1        | 8400     | 8,4      |
| F9955V125.2448 | 125 - 5"       | 1        | 10600    | 10,6     |
| F9955V150.2448 | 150 - 6"       | 1        | 12500    | 12,5     |
| F9955V200.2448 | 200 - 8"       | 1        | 15800    | 15,8     |
| F9955V250.2448 | 250 - 10"      | 1        | 22300    | 22,3     |
| F9955V300.2448 | 300 - 12"      | 1        | 27700    | 27,7     |

ERC

Version PN25 available on request (.2449)

9955 series valves have 1 to 14 cartridge slots (depending on DN)

|                      |                      |
|----------------------|----------------------|
| DN65, 1 cartridge    | DN80, 1 cartridge    |
| DN100, 2 cartridges  | DN125, 3 cartridges  |
| DN150, 4 cartridges  | DN200, 7 cartridges  |
| DN250, 10 cartridges | DN300, 14 cartridges |

## Cartridges

Cartridges for automatic balancing valves



Cartridges for 9900P, 9900V/9905V and 9955  
 DZR brass body  
 Spring in stainless steel  
 Wide range of flows available  
 For Fig. 9955 blind caps must be used to blind off unused slots

| Vir Code       | DN mm - inches  | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|-----------------|----------|----------|----------|
| KRR991rge.1880 | 015, L 020      | 50       | 54       | 2,7      |
| KRR992rge.1880 | H 015, 020, 025 | 50       | 107      | 5,4      |
| KRR994rge.1880 | 032, 040, 050   | 15       | 271      | 4,1      |
| KRR996rge.1880 | H 050 - 300     | 3        | 1420     | 4,3      |
| KTT995000.2468 | Cap             | 1        | 205      | 0,2      |

ERC

9700

Pressure independent control valve (PICV)

PN20



Threaded M/M for unions (ISO 228/1)  
 With integral regulation cartridge for ΔP up to 400kPa  
 Full stroke modulation independently from the presetting  
 Suitable for Vaurien (on/off) or Vaurien-M (modulating) actuators  
 Body and inner components in DZR brass  
 Stainless steel spring, diaphragm and O-rings in EPDM  
 Working conditions: Water, -10°C to +130°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F97000L15.2436 | L 015 - L 1/2" | 16       | 380      | 6,1      |
| F97000015.2436 | 015 - 1/2"     | 16       | 380      | 6,1      |
| F97000020.2436 | 020 - 3/4"     | 12       | 583      | 7,0      |
| F97000025.2436 | 025 - 1"       | 9        | 1041     | 8,3      |
| F97000032.2436 | 032 - 1 1/4"   | 6        | 1971     | 7,9      |

| Optional unions and nuts |              |   |     |     |
|--------------------------|--------------|---|-----|-----|
| KBC9MI015.2517           | 015 - 1/2"   | 1 | 128 | 0,1 |
| KBC9MI020.2517           | 020 - 3/4"   | 1 | 215 | 0,2 |
| KBC9MI025.2517           | 025 - 1"     | 1 | 357 | 0,4 |
| KBC9MI032.2517           | 032 - 1 1/4" | 1 | 460 | 0,5 |

Vaurien 100N for DN≤20, Vaurien 125N and Vaurien-M 130N for all DN's



9705

Pressure independent control valve (PICV)

PN20



Threaded M/M for unions (ISO 228/1)  
 With integral regulation cartridge for ΔP up to 400kPa  
 Full stroke modulation independently from the presetting  
 Suitable for Vaurien (on/off) or Vaurien-M (modulating) actuators  
 Body, inner components and test points in DZR brass  
 Stainless steel spring, diaphragm and O-rings in EPDM  
 Working conditions: Water, -10°C to +130°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F97050L15.2437 | L 015 - L 1/2" | 16       | 414      | 6,6      |
| F97050015.2437 | 015 - 1/2"     | 16       | 414      | 6,6      |
| F97050020.2437 | 020 - 3/4"     | 12       | 617      | 7,4      |
| F97050025.2437 | 025 - 1"       | 9        | 1075     | 8,6      |
| F97050032.2437 | 032 - 1 1/4"   | 6        | 2019     | 8,1      |

| Optional unions and nuts |              |   |     |     |
|--------------------------|--------------|---|-----|-----|
| KBC9MI015.2517           | 015 - 1/2"   | 1 | 128 | 0,1 |
| KBC9MI020.2517           | 020 - 3/4"   | 1 | 215 | 0,2 |
| KBC9MI025.2517           | 025 - 1"     | 1 | 357 | 0,4 |
| KBC9MI032.2517           | 032 - 1 1/4" | 1 | 460 | 0,5 |

Vaurien 100N for DN≤20, Vaurien 125N and Vaurien-M 130N for all DN's



9703

Pressure independent control valve (PICV)

PN20



Threaded F/F (ISO 7/1 Rp)  
 With integral regulation cartridge for ΔP up to 400kPa  
 Full stroke modulation independently from the presetting  
 Suitable for Vaurien (on/off) or Vaurien-M (modulating) actuators  
 Body, inner components and test points in DZR brass  
 Stainless steel spring, diaphragm and O-rings in EPDM  
 Working conditions: Water, -10°C to +130°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F97030L15.3055 | L 015 - L 1/2" | 16       | 409      | 6,5      |
| F97030015.3055 | 015 - 1/2"     | 16       | 409      | 6,5      |
| F97030020.3055 | 020 - 3/4"     | 12       | 605      | 7,3      |
| F97030025.3055 | 025 - 1"       | 9        | 1059     | 8,5      |
| F97030032.3055 | 032 - 1 1/4"   | 6        | 2125     | 8,5      |

Vaurien 100N for DN≤20, Vaurien 125N and Vaurien-M 130N for all DN's





# DYNAMIC BALANCING VALVES

## VAURIEN

Linear thermoelectric actuator



Supply voltage: 24V AC/DC or 230VAC  
 M30x1,5mm threaded nut with fast connection  
 Enclosure protection: IP54  
 2 points control  
 Stroke time: about 3 to 5 minutes  
 Normally closed (NC)  
 Normally open (NO) version available on request



| Vir Code   | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--|----------------|----------|----------|----------|
| <b>230VAC version</b>                                      |                |          |          |          |
| KA952AT50.800  | 100N           | 1        | 115      | 0,1      |
| KA952AT05.800  | 125N           | 1        | 110      | 0,1      |
| <b>24V AC/DC version</b>                                   |                |          |          |          |
| KA952AT52.800  | 100N           | 1        | 115      | 0,1      |
| KA952AT07.800  | 125N           | 1        | 110      | 0,1      |
| <b>24VAC, 0-10V version (only for Fig. 9700/9705/9703)</b> |                |          |          |          |
| KA952AT09.800  | DN15-DN20      | 1        | 111      | 0,1      |
| KA952AT10.800  | DN25-DN32      | 1        | 111      | 0,1      |
| KA952AT11.800  | DN15-DN32      | 1        | 111      | 0,1      |



## VAURIEN-M

Modulating electric actuator



Supply voltage: 24V AC/DC  
 M30x1,5 threaded connection  
 Enclosure protection: IP54  
 0-10V control signal, position feedback  
 (adjustable for 0-5VDC, 5-10VDC, 2-10VDC, 0-20mA o 4-20mA)  
 Max stroke 6,3mm, stroke time 8sec./mm  
 Linear characteristic (adjustable for equal-percentage characteristic)



| Vir Code                                 | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--|----------------|----------|----------|----------|
| KA9700001.800                            | 130N           | 1        | 285      | 0,3      |
| <b>Version with electrical fail safe</b> |                |          |          |          |
| KA9700002.800                            | 130N           | 1        | 200      | 0,2      |
| <b>KA9700002.800 configurator</b>        |                |          |          |          |
| KA970CON2.800                            | 130N           | 1        | 265      | 0,2      |



## 9705B

Pressure independent control valve (PICV)

PN20



Threaded F/F (ISO 7/1 Rp)  
 With differential pressure regulator for ΔP range 30-400kPa  
 Full stroke modulation independently from the presetting  
 Suitable for Vaurien-B actuators (ON/OFF or modulating)  
 Body and test points in DZR brass, ΔP regulator in PPS  
 Stainless steel spring, diaphragm and O-rings in EPDM  
 Working conditions: Water, -20 °C to 120 °C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F9705B040.2717 | 040 - 1 1/2"   | 1        | 3490     | 3,5      |
| F9705B050.2717 | 050 - 2"       | 1        | 4020     | 4,0      |

Vaurien-B 300N for all DN's



## VAURIEN-B

Electric actuator



Supply voltage: 24VAC or 230VAC  
M30x1,5 threaded connection  
Enclosure protection: IP43  
3 points control or 0-10VDC control (adjustable for other signals)  
Stroke time: 2 to 3 minutes (depending on models)  
Linear characteristic



| Vir Code                               | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--|----------------|----------|----------|----------|
| <b>230VAC version, 3-point control</b> |                |          |          |          |
| KA9705B03.800                          | 300N           | 1        | 250      | 0,3      |
| <b>24VAC version, 3-point control</b>  |                |          |          |          |
| KA9705B04.800                          | 300N           | 1        | 250      | 0,3      |
| <b>24VAC version, 0-10V control</b>    |                |          |          |          |
| KA9705B05.800                          | 300N           | 1        | 250      | 0,3      |

CE

## 9755

Pressure independent control valve (PICV)

PN16



Flanged PN16 (EN1092-2)  
With differential pressure regulator for  $\Delta P$  up to 400kPa  
With 0-10VDC modulating actuator, power supply 24V AC/DC  
Actuator enclosure protection: IP54  
Cast iron body, aluminum regulator, brass disc  
Stainless steel springs, diaphragm and O-rings in EPDM  
Working conditions: Water, -10°C to +110°C  
Max 16bar up to +90°C, max 13bar at +110°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F97550065.2712 | 065 - 2 1/2"   | 1        | 25000    | 25,0     |
| F97550080.2712 | 080 - 3"       | 1        | 27900    | 27,9     |
| F97550100.2712 | 100 - 4"       | 1        | 35300    | 35,3     |
| F97550125.2712 | 125 - 5"       | 1        | 48100    | 48,1     |
| F97550150.2712 | 150 - 6"       | 1        | 77100    | 77,1     |

ERC

# DYNAMIC BALANCING VALVES

9605

Differential pressure control valve (DPCV)

PN25



Threaded F/F (ISO 7/1Rp)  
 DN15-DN32: Δp range 20-40kPa, 5-25kPa (L) or 20-65kPa (H)  
 DN40: Δp range 20-40kPa, 5-25kPa (L) or 35-75kPa (H)  
 DN50: Δp range 35-75kPa, 5-25kPa (U), 20-40kPa (L) or 60-100kPa (H)  
 DZR brass body (cast iron for DN40 and DN50) and shutter  
 Stainless steel spring, diaphragm and O-rings in EPDM  
 Working conditions: Water, -20°C to +120°C



ERC

| Vir Code                        | DN mm - inches   | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------------------------|------------------|----------|----------|----------|
| FBB00L015.2434                  | L 015 - L 1/2"   | 1        | 772      | 0,8      |
| FBB000015.2434                  | 015 - 1/2"       | 1        | 772      | 0,8      |
| FBB00H015.2434                  | H 015 - H 1/2"   | 1        | 772      | 0,8      |
| FBB00L020.2434                  | L 020 - L 3/4"   | 1        | 822      | 0,8      |
| FBB000020.2434                  | 020 - 3/4"       | 1        | 822      | 0,8      |
| FBB00H020.2434                  | H 020 - H 3/4"   | 1        | 822      | 0,8      |
| FBB00L025.2434                  | L 025 - L 1"     | 1        | 1772     | 1,8      |
| FBB000025.2434                  | 025 - 1"         | 1        | 1772     | 1,8      |
| FBB00H025.2434                  | H 025 - H 1"     | 1        | 1772     | 1,8      |
| FBB00L032.2434                  | L 032 - L 1 1/4" | 1        | 1972     | 2,0      |
| FBB000032.2434                  | 032 - 1 1/4"     | 1        | 1972     | 2,0      |
| FBB00H032.2434                  | H 032 - H 1 1/4" | 1        | 1972     | 2,0      |
| FBB00L040.2434                  | L 040 - L 1 1/2" | 1        | 3272     | 3,3      |
| FBB000040.2434                  | 040 - 1 1/2"     | 1        | 3522     | 3,5      |
| FBB00H040.2434                  | H 040 - H 1 1/2" | 1        | 3622     | 3,6      |
| FBB00U050.2434                  | U 050 - U 2"     | 1        | 4122     | 4,1      |
| FBB00L050.2434                  | L 050 - L 2"     | 1        | 4322     | 4,3      |
| FBB000050.2434                  | 050 - 2"         | 1        | 4522     | 4,5      |
| FBB00H050.2434                  | H 050 - H 2"     | 1        | 4822     | 4,8      |
| <b>Spare capillary tube kit</b> |                  |          |          |          |
| KCN960008.3212                  |                  | 1        | 112      | 0,1      |

9655

Differential pressure control valve (DPCV)

PN16



Flanged PN16 (EN1092-2)  
 DN65-DN100: Δp range 20-80kPa, 80-160kPa (H)  
 DN125-DN150: Δp range 20-80kPa  
 Cast iron body, alluminum shutter  
 Stainless steel springs, diaphragm and O-rings in EPDM  
 Working conditions: Water, -10°C to +110°C  
 Max 16bar up to 90°C, max 13bar at 110°C



ERC

| Vir Code                        | DN mm - inches   | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------------------------|------------------|----------|----------|----------|
| F96550065.2499                  | L 065 - L 2 1/2" | 1        | 21600    | 21,6     |
| F9655H065.2499                  | H 065 - H 2 1/2" | 1        | 21600    | 21,6     |
| F96550080.2499                  | L 080 - L 3"     | 1        | 28100    | 28,1     |
| F9655H080.2499                  | H 080 - H 3"     | 1        | 28100    | 28,1     |
| F96550100.2499                  | L 100 - L 4"     | 1        | 33600    | 33,6     |
| F9655H100.2499                  | H 100 - H 4"     | 1        | 33600    | 33,6     |
| F96550125.2499                  | 125 - 5"         | 1        | 46400    | 46,4     |
| F96550150.2499                  | 150 - 6"         | 1        | 75400    | 75,4     |
| <b>Spare capillary tube kit</b> |                  |          |          |          |
| KCN965508.3212                  |                  | 1        | 240      | 0,2      |

9610

Direct-acting brass pressure reducing valve

PN25



Threaded F/F (ISO 228/1)  
 Max pressure reduction ratio 10:1  
 Downstream setting press. range from 0,5bar (1,5bar for DN≥32) to 6bar  
 Brass metal parts, stainless steel spring, NBR/Fasit gaskets  
 Piston type, pressure compensation system  
 With threaded F (¼" ISO 228/1) pressure gauge connection  
 Working conditions: Water, 0°C a +80°C; Air, 0°C to +80°C  
 PN16 when used with air



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F96100015.3016 | 015 - 1/2"     | 30       | 790      | 23,7     |
| F96100020.3016 | 020 - 3/4"     | 20       | 860      | 17,2     |
| F96100025.3016 | 025 - 1"       | 15       | 1340     | 20,1     |
| F96100032.3016 | 032 - 1 1/4"   | 6        | 2090     | 12,6     |
| F96100040.3016 | 040 - 1 1/2"   | 6        | 2180     | 13,1     |
| F96100050.3016 | 050 - 2"       | 4        | 3100     | 12,4     |
| F96100065.3016 | 065 - 2 1/2"   | 4        | 4100     | 16,4     |
| F96100080.3016 | 080 - 3"       | 4        | 5520     | 22,1     |
| F96100100.3016 | 100 - 4"       | 2        | 6970     | 13,9     |



9610DR

Direct-acting DZR brass pressure reducing valve

PN25



Threaded F/F (ISO 228/1)  
 Max pressure reduction ratio 10:1  
 Downstream setting press. range from 0,5bar (1,5bar for DN≥32) to 6bar  
 DZR brass metal parts, stainless steel spring, NBR/Fasit gaskets  
 Piston type, pressure compensation system  
 With threaded F (¼" ISO 228/1) pressure gauge connection  
 Working conditions: Water, 0°C a +80°C; Air, 0°C to +80°C  
 PN16 when used with air



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F96100015.2718 | 015 - 1/2"     | 30       | 790      | 23,7     |
| F96100020.2718 | 020 - 3/4"     | 20       | 860      | 17,2     |
| F96100025.2718 | 025 - 1"       | 15       | 1340     | 20,1     |
| F96100032.2718 | 032 - 1 1/4"   | 6        | 2090     | 12,5     |
| F96100040.2718 | 040 - 1 1/2"   | 6        | 2180     | 13,1     |
| F96100050.2718 | 050 - 2"       | 3        | 3100     | 9,3      |
| F96100065.2718 | 065 - 2 1/2"   | 4        | 4100     | 16,4     |
| F96100080.2718 | 080 - 3"       | 2        | 5520     | 11,1     |
| F96100100.2718 | 100 - 4"       | 2        | 6970     | 13,9     |



9660

Pilot operated ductile iron pressure reducing valve

PN16



Flanged PN16  
 Body in ductile iron  
 Downstream setting pressure range from 1,0 bar to 12,0 bar  
 Operation with pilot valve to stabilize the pressure  
 Independent from the flow rate



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F9660i050.3070 | 050 - 2"       | 1        | 13500    | 13,5     |
| F9660i065.3070 | 065 - 2 1/2"   | 1        | 18600    | 18,6     |
| F9660i080.3070 | 080 - 3"       | 1        | 21200    | 21,2     |
| F9660i100.3070 | 100 - 4"       | 1        | 30700    | 30,7     |
| F9660i125.3070 | 125 - 5"       | 1        | 45000    | 45,0     |
| F9660i150.3070 | 150 - 6"       | 1        | 65000    | 65,0     |
| F9660i200.3070 | 200 - 8"       | 1        | 138000   | 138,0    |
| F9660i250.3070 | 250 - 10"      | 1        | 271000   | 271,0    |
| F9660i300.3070 | 300 - 12"      | 1        | 409000   | 409,0    |

# ACCESSORIES FOR BALANCING VALVES

## 95TP

Pressure test points



Threaded M 1/4" ISO 7/1 R  
Body and cap in DZR brass  
Gaskets in NBR/EPDM, polypropylene tie



| Vir Code | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------|----------------|----------|----------|----------|
|----------|----------------|----------|----------|----------|

**Fig. 95TP, short version**

|               |          |    |    |     |
|---------------|----------|----|----|-----|
| KC95TP008.710 | Blue tie | 10 | 32 | 0,3 |
| KC95TP008.711 | Red tie  | 10 | 32 | 0,3 |

**Fig. 95TP, long version with extension**

|                |          |    |    |     |
|----------------|----------|----|----|-----|
| KPR95TP08.2282 | Blue tie | 10 | 93 | 0,9 |
| KPR95TP08.2283 | Red tie  | 10 | 93 | 0,9 |

ERC

## 9315

Pressure test point with drain



Threaded M 1/4" ISO 7/1 R  
Threaded M 1/2" ISO 228/1 drain  
Body and cap in DZR brass  
Gaskets in NBR/EPDM, polypropylene tie  
Safety spring in plastic material



| Vir Code | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------|----------------|----------|----------|----------|
|----------|----------------|----------|----------|----------|

|                |         |    |     |     |
|----------------|---------|----|-----|-----|
| KDV950008.1151 | Red tie | 40 | 160 | 6,4 |
|----------------|---------|----|-----|-----|

ERC



## T650

Diff. pressure manometer with flow calculation



Battery powered  
With flow calculation App running on smartphone (NOT included)  
App requires at least Android 7.0 or iOS 10.3  
Enclosure protection: IP65  
1000 kPa pressure range  
Working conditions: -5°C to 90°C (fluid), -5°C to 50° (ambient)

| Vir Code | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------|----------------|----------|----------|----------|
|----------|----------------|----------|----------|----------|

|               |   |   |      |     |
|---------------|---|---|------|-----|
| KMMMAND04.720 | - | 1 | 1800 | 1,8 |
|---------------|---|---|------|-----|

**Spare measuring needles for VIR test points**

|                |   |   |     |     |
|----------------|---|---|-----|-----|
| KMM2AG000.1451 | - | 1 | 300 | 0,3 |
|----------------|---|---|-----|-----|

**Spare hoses for differential manometer**

|                |   |   |     |     |
|----------------|---|---|-----|-----|
| KMMCAVIBR.1452 | - | 1 | 150 | 0,2 |
|----------------|---|---|-----|-----|

CE

## Shells

### Shells for balancing valves



Polyethylene cross linked foam  
 Thickness 30mm  
 Thermal conductivity (Lambda factor, kcal/mh°C):  
 0,0298 at 0°C, 0,0303 at 10°C, 0,0326 at 40°C  
 Working conditions: -60°C to +90°C

| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| KSHfig015.1976 | 015 - 1/2"     | 1        | 30       | 0,0      |
| KSHfig020.1976 | 020 - 3/4"     | 1        | 30       | 0,0      |
| KSHfig025.1976 | 025 - 1"       | 1        | 30       | 0,0      |
| KSHfig032.1976 | 032 - 1 1/4"   | 1        | 80       | 0,1      |
| KSHfig040.1976 | 040 - 1 1/2"   | 1        | 80       | 0,1      |
| KSHfig050.1976 | 050 - 2"       | 1        | 80       | 0,1      |
| KSHfig065.1976 | 065 - 2 1/2"   | 1        | 130      | 0,1      |
| KSHfig080.1976 | 080 - 3"       | 1        | 200      | 0,2      |
| KSHfig100.1976 | 100 - 4"       | 1        | 320      | 0,3      |
| KSHfig125.1976 | 125 - 5"       | 1        | 500      | 0,5      |
| KSHfig150.1976 | 150 - 6"       | 1        | 700      | 0,7      |
| KSHfig200.1976 | 200 - 8"       | 1        | 1200     | 1,2      |
| KSHfig250.1976 | 250 - 10"      | 1        | 2000     | 2,0      |
| KSHfig300.1976 | 300 - 12"      | 1        | 2800     | 2,8      |

Ordering code for Fig.9505: KSH950mis.1976  
 Ordering code for Fig.9555P: KSH950mis.1976  
 Ordering code for Fig. 9515: KSH95Vmis.1976  
 Shells for other VIR balancing valves available on request





**EZCONNECT**



# CONNECTION KIT FOR TERMINAL UNITS

91BY-9703

EzConnect kit for terminal units

PN20



- Fig. 91BY valve for HVAC terminal units mounting
  - Fig. 91F DZR strainer
  - Fig. 9703 pressure independent control valve (PICV)
- Working conditions: Water, -10°C to +130°C  
Max 20bar up to 100°C, max 10bar at 130°C



| Vir Code    | DN mm - inches* | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------|-----------------|----------|----------|----------|
| JLQ2A5030.3 | 1/2" - 1/2"     | 1        | 1704     | 1,7      |
| JLQ2A5034.3 | 3/4" - 1/2"     | 1        | 1915     | 1,9      |
| JLQ3A5032.3 | 3/4" - 3/4"     | 1        | 2020     | 2,0      |
| JLQ3B5030.3 | 3/4" - 3/4"     | 1        | 2383     | 2,4      |
| JLQ3B5034.3 | 1" - 3/4"       | 1        | 3105     | 3,1      |
| JLQ4B5032.3 | 1" - 1"         | 1        | 3820     | 3,8      |

\* Pipe connection - Nominal size  
(Flexible hoses of different sizes can be connected using dedicated nipples)

92HS

Connection flexible hose

PN25



Threaded connection with swivel nut ISO 7/1R  
EPDM Perox hoses with stainless steel braided sleeve  
DZR brass fitting with EPDM Perox gasket for one side  
Length 12" (300 mm)  
Working conditions: Water, up to +90°C  
27,5 bar up to DN25, 20,5 bar for DN32



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| KCN9H0015.2801 | 015 - 1/2"     | 1        | 250      | 0,3      |
| KCN9H0020.2801 | 020 - 3/4"     | 1        | 440      | 0,4      |
| KCN9H0025.2801 | 025 - 1"       | 1        | 700      | 0,7      |
| KCN9H0032.2801 | 032 - 1 1/4"   | 1        | 1167     | 1,2      |
| KCN9H0040.2801 | 040 - 1 1/2"   | 1        | 1577     | 1,6      |
| KCN9H0050.2801 | 032 - 1 1/4"   | 1        | 2332     | 2,3      |

Available version with length of 600mm (KCN9H2mis.2801) on request

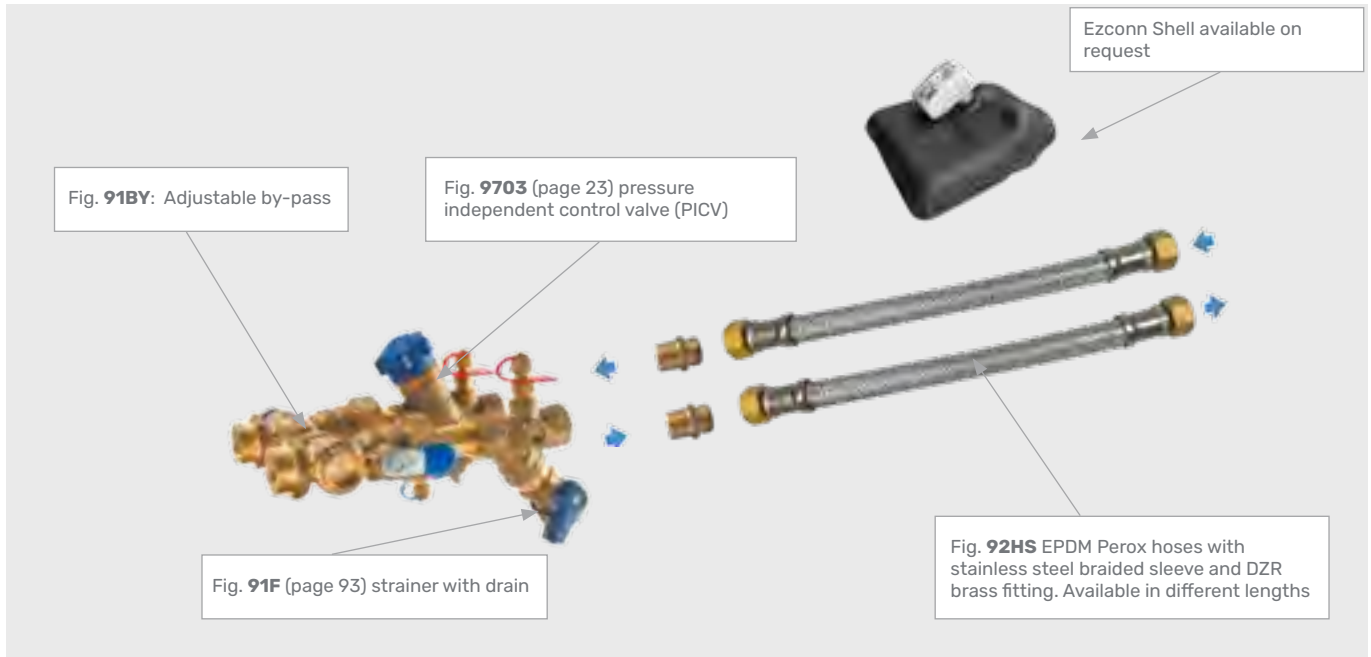
EZCONN-Shell Shell for fancoil kit



Polyethylene cross linked foam  
Thickness 30mm  
Thermal conductivity (Lambda factor, kcal/mh°C):  
0,0298 at 0°C, 0,0303 at 10°C, 0,0326 at 40°C  
Working conditions: -60°C to +90°C

| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| KSHJLQ200.2882 | DN015/DN020*   | 1        | 65       | 0,0      |
| KSHJLQ300.2882 | DN25**         | 1        | 100      | 0,0      |

\* Shell suitable for fig. JLQ2A5030.3 - JLQ2A5034.3 - JLQ3A5032.3  
\*\* Shell suitable for fig. JLQ4B5032.3



Connection kits can be configured as needed and supplied shrink wrapped. Example of possible configurations as per above figure.



## EZCONNECT 2.0 BROCHURE (ENG) - DOWNLOAD



- Description & benefits
- Main features
- Codes & configurations
- Functional schemes
- Accessories





20-46  
FIG. 340  
MADE IN ITALY  
vir  
P N40  
ACS  
EHL  
12/11/2008  
ON OFF



# SHUT-OFF

# BALL VALVES

**340**

Full port brass ball valve

**PN40**



Threaded F/F (ISO 228/1)  
 Chrome-plated ball and body, blow-out proof stem  
 PTFE seats and packing, adjustable brass packing nut  
 Working conditions: Water, 0°C to +150°C; Air, -10°C to +150°C  
 PN40 for DN≤50 (Max 40bar up to 95°C, max 25bar at 150°C)  
 PN25 for DN≥65 (Max 25bar up to 95°C, max 16bar at 150°C)



| Vir Code                    | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-----------------------------|----------------|----------|----------|----------|
| <b>Lever handle version</b> |                |          |          |          |
| F3400V008.1596              | 008 - 1/4"     | 125      | 107      | 13,4     |
| F3400V010.1596              | 010 - 3/8"     | 125      | 117      | 14,6     |
| F3400V015.1596              | 015 - 1/2"     | 90       | 214      | 19,3     |
| F3400V020.1596              | 020 - 3/4"     | 60       | 305      | 18,3     |
| F3400V025.1596              | 025 - 1"       | 35       | 514      | 18,0     |
| F3400V032.1596              | 032 - 1 1/4"   | 25       | 823      | 20,6     |
| F3400V040.1596              | 040 - 1 1/2"   | 16       | 1219     | 19,5     |
| F3400V050.1596              | 050 - 2"       | 8        | 1848     | 14,8     |
| F3400V065.1596              | 065 - 2 1/2"   | 6        | 3308     | 19,8     |
| F3400V080.1596              | 080 - 3"       | 4        | 5292     | 21,2     |
| F3400V100.1596              | 100 - 4"       | 2        | 8360     | 16,7     |

Version with red lever handle (F3400Vmis.153) and NPT threaded (F3400Vmis.163) available

| Vir Code                        | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------------------------|----------------|----------|----------|----------|
| <b>Butterfly handle version</b> |                |          |          |          |
| F3400V008.1665                  | 008 - 1/4"     | 125      | 88       | 11,0     |
| F3400V010.1665                  | 010 - 3/8"     | 125      | 98       | 12,3     |
| F3400V015.1665                  | 015 - 1/2"     | 90       | 186      | 16,7     |
| F3400V020.1665                  | 020 - 3/4"     | 60       | 276      | 16,6     |
| F3400V025.1665                  | 025 - 1"       | 35       | 467      | 16,3     |
| F3400V032.1665                  | 032 - 1 1/4"   | 25       | 774      | 19,4     |
| F3400V040.1665                  | 040 - 1 1/2"   | 16       | 1150     | 18,4     |
| F3400V050.1665                  | 050 - 2"       | 8        | 1740     | 13,9     |

Version with red butterfly handle available on request (F3400Vmis.157)

**343**

Brass ball valve full bore

**PN40**



Threaded M/F (ISO 228/1)  
 Chrome-plated ball and body, blow-out proof stem  
 PTFE seats and packing, adjustable brass packing nut  
 Working conditions: Water, 0°C to +150°C; Air, -10°C to +150°C  
 Max 40bar up to 95°C, max 25bar at 150°C



| Vir Code                        | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------------------------|----------------|----------|----------|----------|
| <b>Lever handle version</b>     |                |          |          |          |
| F3430V008.1597                  | 008 - 1/4"     | 125      | 113      | 14,1     |
| F3430V010.1597                  | 010 - 3/8"     | 125      | 120      | 15,0     |
| F3430V015.1597                  | 015 - 1/2"     | 75       | 213      | 16,0     |
| F3430V020.1597                  | 020 - 3/4"     | 50       | 313      | 15,7     |
| F3430V025.1597                  | 025 - 1"       | 30       | 519      | 15,6     |
| F3430V032.1597                  | 032 - 1 1/4"   | 20       | 832      | 16,6     |
| F3430V040.1597                  | 040 - 1 1/2"   | 12       | 1220     | 14,6     |
| F3430V050.1597                  | 050 - 2"       | 8        | 1915     | 15,3     |
| <b>Butterfly handle version</b> |                |          |          |          |
| F3430V008.1665                  | 008 - 1/4"     | 125      | 96       | 12,0     |
| F3430V010.1665                  | 010 - 3/8"     | 125      | 99       | 12,4     |
| F3430V015.1665                  | 015 - 1/2"     | 75       | 192      | 14,4     |
| F3430V020.1665                  | 020 - 3/4"     | 50       | 287      | 14,4     |
| F3430V025.1665                  | 025 - 1"       | 30       | 490      | 14,7     |
| F3430V032.1665                  | 032 - 1 1/4"   | 20       | 775      | 15,5     |
| F3430V040.1665                  | 040 - 1 1/2"   | 12       | 1210     | 19,4     |
| F3430V050.1665                  | 050 - 2"       | 8        | 1910     | 15,3     |

Version with red butterfly handle available on request (F3430Vmis.157)

**348**

Brass ball valve full bore

**PN40**



Threaded M/M (ISO 228/1)  
 Chrome-plated ball and body, blow-out proof stem  
 PTFE seats and packing, adjustable brass packing nut  
 Working conditions: Water, 0°C to +150°C; Air, -10°C to +150°C  
 Max 40bar up to 95°C, max 25bar at 150°C



| Vir Code                    | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-----------------------------|----------------|----------|----------|----------|
| <b>Lever handle version</b> |                |          |          |          |
| F3480V010.153               | 010 - 3/8"     | 125      | 121      | 15,1     |
| F3480V015.153               | 015 - 1/2"     | 75       | 214      | 16,5     |
| F3480V020.153               | 020 - 3/4"     | 50       | 323      | 16,3     |
| F3480V025.153               | 025 - 1"       | 30       | 553      | 16,6     |
| F3480V032.153               | 032 - 1 1/4"   | 20       | 858      | 17,2     |
| F3480V040.153               | 040 - 1 1/2"   | 12       | 1203     | 14,4     |
| F3480V050.153               | 050 - 2"       | 8        | 1927     | 15,4     |

|                                 |              |     |      |      |
|---------------------------------|--------------|-----|------|------|
| <b>Butterfly handle version</b> |              |     |      |      |
| F3480V010.157                   | 010 - 3/8"   | 125 | 101  | 12,6 |
| F3480V015.157                   | 015 - 1/2"   | 75  | 195  | 14,6 |
| F3480V020.157                   | 020 - 3/4"   | 50  | 297  | 14,9 |
| F3480V025.157                   | 025 - 1"     | 30  | 502  | 15,1 |
| F3480V032.157                   | 032 - 1 1/4" | 20  | 780  | 15,6 |
| F3480V040.157                   | 040 - 1 1/2" | 12  | 1118 | 13,4 |
| F3480V050.157                   | 050 - 2"     | 8   | 1970 | 15,8 |

**342**

Brass ball valve with plug and drain

**PN40**



Threaded F/F (ISO 228/1)  
 Chrome-plated ball and body, blow-out proof stem  
 PTFE seats and packing, adjustable brass packing nut  
 Working conditions: Water, 0°C to +150°C; Air, -10°C to +150°C  
 Max 40bar up to 95°C, max 25bar at 150°C



| Vir Code                    | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-----------------------------|----------------|----------|----------|----------|
| <b>Lever handle version</b> |                |          |          |          |
| F3420A015.131               | 015 - 1/2"     | 80       | 293      | 23,4     |
| F3420A020.131               | 020 - 3/4"     | 40       | 377      | 15,1     |
| F3420A025.131               | 025 - 1"       | 40       | 590      | 23,6     |
| F3420A032.131               | 032 - 1 1/4"   | 20       | 880      | 17,6     |
| F3420A040.131               | 040 - 1 1/2"   | 16       | 1295     | 20,7     |
| F3420A050.131               | 050 - 2"       | 8        | 1927     | 15,4     |

|                                 |              |    |      |      |
|---------------------------------|--------------|----|------|------|
| <b>Butterfly handle version</b> |              |    |      |      |
| F3420A015.133                   | 015 - 1/2"   | 80 | 269  | 21,5 |
| F3420A020.133                   | 020 - 3/4"   | 40 | 357  | 14,3 |
| F3420A025.133                   | 025 - 1"     | 40 | 551  | 22,0 |
| F3420A032.133                   | 032 - 1 1/4" | 20 | 800  | 16,0 |
| F3420A040.133                   | 040 - 1 1/2" | 16 | 1300 | 20,8 |
| F3420A050.133                   | 050 - 2"     | 8  | 1880 | 15,0 |

# BALL VALVES

## 340DR

Full port DZR brass ball valve

PN40



Threaded F/F (ISO 228/1)  
 Chrome-plated ball, blow-out proof stem  
 PTFE seats and packing, adjustable brass packing nut  
 Working conditions: Water, 0°C to +150°C; Air, -10°C to +150°C  
 Max 40bar up to 95°C, max 25bar at 150°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F340LL010.2936 | 010 - 3/8"     | 125      | 117      | 14,6     |
| F340LL015.2936 | 015 - 1/2"     | 90       | 222      | 20,0     |
| F340LL020.2936 | 020 - 3/4"     | 60       | 305      | 18,3     |
| F340LL025.2936 | 025 - 1"       | 35       | 510      | 17,9     |
| F340LL032.2936 | 032 - 1 1/4"   | 25       | 811      | 20,3     |
| F340LL040.2936 | 040 - 1 1/2"   | 16       | 1430     | 22,9     |
| F340LL050.2936 | 050 - 2"       | 8        | 2200     | 17,6     |



## 340J

Full port grooved brass ball valve

PN40



Grooved (ANSI/ AWWA C606/ Metric)  
 Chrome-plated ball, blow-out proof stem  
 PTFE seats and packing, adjustable brass packing nut  
 Working conditions: Water, 0°C to +150°C; Air, -10°C to +150°C  
 PN40 for DN≤50 (Max 40bar up to 95°C, max 25bar at +150°C)  
 PN25 for DN≤65 (Max 25bar up to 95°C, max 16bar at +150°C)



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F3400J032.2816 | 42,2           | 25       | 931      | 23,3     |
| F3400J040.2816 | 48,3           | 16       | 1330     | 21,3     |
| F3400J050.2816 | 60,4           | 8        | 2009     | 16,1     |
| F3400J065.2816 | 76,1*          | 6        | 3442     | 20,6     |
| F3400J080.2816 | 88,9           | 8        | 5512     | 44,1     |

\*Metric groove standard



## 340GS

Full port brass ball valve with sealable square top

PN25



Fig. 340GS threaded F/F (ISO 7/1 Rc)  
 Fig. 343GS, threaded M/F (ISO 7/1 R / ISO 7/1 Rc)  
 Chrome-plated ball, Blow-out proof stem  
 PTFE Seats, FKM O-ring. With sealable square handle  
 Working conditions: Water, 0°C to +110°C  
 Max 25bar up to 95°C, max 20bar at 110°C



| Vir Code          | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------|----------------|----------|----------|----------|
| <b>Fig. 340GS</b> |                |          |          |          |
| F340GS015.2047    | 015 - 1/2"     | 80       | 196      | 15,7     |
| F340GS020.2047    | 020 - 3/4"     | 60       | 273      | 16,4     |
| F340GS025.2047    | 025 - 1"       | 40       | 421      | 16,8     |
| F340GS032.2047    | 032 - 1 1/4"   | 25       | 591      | 14,8     |
| F340GS040.2047    | 040 - 1 1/2"   | 16       | 1005     | 16,1     |
| F340GS050.2047    | 050 - 2"       | 8        | 1466     | 11,7     |
| <b>Fig. 343GS</b> |                |          |          |          |
| F343GS015.2048    | 015 - 1/2"     | 80       | 198      | 15,8     |
| F343GS020.2048    | 020 - 3/4"     | 60       | 281      | 16,9     |
| F343GS025.2048    | 025 - 1"       | 40       | 441      | 17,6     |
| F343GS032.2048    | 032 - 1 1/4"   | 25       | 618      | 15,5     |
| F343GS040.2048    | 040 - 1 1/2"   | 16       | 1015     | 16,2     |
| F343GS050.2048    | 050 - 2"       | 8        | 1570     | 12,6     |



## 340 Solar

Brass ball valve for high temperatures

PN25



Threaded F/F (ISO 228/1)  
 Chrome-plated ball, blow-out proof stem  
 PTFE + graphite seats and grafoil packing  
 Adjustable brass packing nut  
 Working conditions: Water, -30°C to +180°C  
 Max 25bar up to 100°C (75°C for DN50), max 10bar at 180°C



| Vir Code                        | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------------------------|----------------|----------|----------|----------|
| <b>Lever handle version</b>     |                |          |          |          |
| F340H0010.1937                  | 010 - 3/8"     | 125      | 117      | 14,6     |
| F340H0015.1937                  | 015 - 1/2"     | 90       | 214      | 19,3     |
| F340H0020.1937                  | 020 - 3/4"     | 60       | 305      | 18,3     |
| F340H0025.1937                  | 025 - 1"       | 35       | 514      | 18,0     |
| F340H0032.1937                  | 032 - 1 1/4"   | 25       | 823      | 20,6     |
| F340H0040.1937                  | 040 - 1 1/2"   | 16       | 1219     | 19,5     |
| F340H0050.1937                  | 050 - 2"       | 8        | 1848     | 14,8     |
| <b>Butterfly handle version</b> |                |          |          |          |
| F340H0010.1938                  | 010 - 3/8"     | 125      | 117      | 14,6     |
| F340H0015.1938                  | 015 - 1/2"     | 90       | 214      | 19,3     |
| F340H0020.1938                  | 020 - 3/4"     | 60       | 305      | 18,3     |
| F340H0025.1938                  | 025 - 1"       | 35       | 514      | 18,0     |

## 340LN

Full port "long neck" brass ball valve

PN25



Threaded F/F (ISO 228/1)  
 Chrome-plated ball and body  
 PTFE seats, adjustable brass packing nut  
 Working conditions: Water, 0°C to +150°C; Air, -10°C to +150°C  
 Max 25bar up to 110°C, max 16bar above  
 Max 20bar up to 110°C, max 16bar above when used with air



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F34L0F010.145 | 010 - 3/8"     | 50       | 213      | 10,7     |
| F34L0F015.145 | 015 - 1/2"     | 50       | 289      | 14,5     |
| F34L0F020.145 | 020 - 3/4"     | 40       | 379      | 15,2     |
| F34L0F025.145 | 025 - 1"       | 25       | 620      | 15,5     |
| F34L0F032.145 | 032 - 1 1/4"   | 15       | 920      | 13,8     |
| F34L0F040.145 | 040 - 1 1/2"   | 8        | 1352     | 10,8     |
| F34L0F050.145 | 050 - 2"       | 6        | 1930     | 11,6     |

## 350TAB

Full port brass ball valve

600WOG



Threaded F/F (NPT)  
 Chrome-plated ball, blow-out proof stem  
 PTFE seats and packing, adjustable brass packing nut  
 Working conditions: Water, 0°C to +150°C; Air, -10°C to +150°C  
 Valve for American market



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F340ET008.1657 | 008 - 1/4"     | 80       | 153      | 12,2     |
| F340ET010.1657 | 010 - 3/8"     | 80       | 140      | 11,2     |
| F340ET015.1657 | 015 - 1/2"     | 80       | 257      | 20,6     |
| F340ET020.1657 | 020 - 3/4"     | 60       | 381      | 22,9     |
| F340ET025.1657 | 025 - 1"       | 35       | 621      | 21,7     |
| F340ET032.1657 | 032 - 1 1/4"   | 20       | 980      | 19,6     |
| F340ET040.1657 | 040 - 1 1/2"   | 15       | 1418     | 21,3     |
| F340ET050.1657 | 050 - 2"       | 10       | 2224     | 22,2     |
| F340ET065.1657 | 065 - 2 1/2"   | 6        | 4487     | 26,9     |
| F340ET080.1657 | 080 - 3"       | 4        | 6611     | 26,4     |
| F340ET100.1657 | 100 - 4"       | 2        | 9391     | 18,8     |



# BALL VALVES

## 33FF

Full port brass ball valve

## PN32



ERC



Threaded F/F (ISO 228/1)  
 Chrome-plated ball, nickel plated body, blow-out proof stem  
 Threads and internal parts not plated  
 PTFE seats, FKM+NBR stem O-ring. Reversible handle  
 Working conditions: Water, 0°C to +130°C; Air, -10°C to +130°C  
 PN20 when used with air



| Vir Code                        | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------------------------|----------------|----------|----------|----------|
| <b>Lever handle version</b>     |                |          |          |          |
| F33FF0015.2572                  | 015 - 1/2"     | 100      | 165      | 16,5     |
| F33FF0020.2572                  | 020 - 3/4"     | 70       | 240      | 16,8     |
| F33FF0025.2572                  | 025 - 1"       | 40       | 400      | 16,0     |
| F33FF0032.2572                  | 032 - 1 1/4"   | 25       | 565      | 14,1     |
| F33FF0040.2572                  | 040 - 1 1/2"   | 20       | 835      | 16,7     |
| F33FF0050.2572                  | 050 - 2"       | 10       | 1325     | 13,3     |
| <b>Butterfly handle version</b> |                |          |          |          |
| F33FFF015.2578                  | 015 - 1/2"     | 100      | 154      | 15,4     |
| F33FFF020.2578                  | 020 - 3/4"     | 70       | 229      | 17,2     |
| F33FFF025.2578                  | 025 - 1"       | 40       | 381      | 15,2     |
| F33FFF032.2578                  | 032 - 1 1/4"   | 25       | 546      | 13,7     |

## 33MF

Full port brass ball valve

## PN32



ERC



Threaded M/F (ISO 228/1)  
 Chrome-plated ball, nickel plated body, blow-out proof stem  
 Threads and internal parts not plated  
 PTFE seats, FKM+NBR stem O-ring. Reversible handle  
 Working conditions: Water, 0°C to +130°C; Air, -10°C to +130°C  
 PN20 when used with air.



| Vir Code                        | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------------------------|----------------|----------|----------|----------|
| <b>Lever handle version</b>     |                |          |          |          |
| F33MF0015.2574                  | 015 - 1/2"     | 75       | 170      | 12,8     |
| F33MF0020.2574                  | 020 - 3/4"     | 50       | 260      | 13,0     |
| F33MF0025.2574                  | 025 - 1"       | 30       | 425      | 12,8     |
| F33MF0032.2574                  | 032 - 1 1/4"   | 20       | 600      | 12,0     |
| F33MF0040.2574                  | 040 - 1 1/2"   | 12       | 845      | 10,1     |
| F33MF0050.2574                  | 050 - 2"       | 8        | 1380     | 11,0     |
| <b>Butterfly handle version</b> |                |          |          |          |
| F33MFF015.2580                  | 015 - 1/2"     | 75       | 170      | 12,8     |
| F33MFF020.2580                  | 020 - 3/4"     | 50       | 260      | 13,0     |
| F33MFF025.2580                  | 025 - 1"       | 30       | 425      | 12,8     |
| F33MFF032.2580                  | 032 - 1 1/4"   | 20       | 600      | 12,0     |

330

Full port brass ball valve

PN25



Threaded F/F (ISO 228/1)  
 Chrome-plated ball, nickel-plated body, blow-out proof stem  
 Threads and internal parts not plated  
 PTFE seats, NBR stem O-ring + PTFE packing  
 Working conditions: Water, 0°C to +95°C; Air, -10°C to +110°C  
 PN16 (or PN10 for DN≥65) when used with air



ERC



| Vir Code                        | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------------------------|----------------|----------|----------|----------|
| <b>Lever handle version</b>     |                |          |          |          |
| F330K0008.1670                  | 008 - 1/4"     | 36       | 120      | 4,3      |
| F330K0010.1670                  | 010 - 3/8"     | 36       | 120      | 4,3      |
| F330K0015.1670                  | 015 - 1/2"     | 24       | 178      | 4,3      |
| F330K0020.1670                  | 020 - 3/4"     | 16       | 240      | 3,8      |
| F330K0025.1670                  | 025 - 1"       | 10       | 420      | 4,2      |
| F330K0032.1670                  | 032 - 1 1/4"   | 36       | 590      | 21,2     |
| F330K0040.1670                  | 040 - 1 1/2"   | 24       | 850      | 20,4     |
| F330K0050.1670                  | 050 - 2"       | 12       | 1330     | 16,0     |
| F330K0065.1670                  | 065 - 2 1/2"   | 6        | 2963     | 17,8     |
| F330K0080.1670                  | 080 - 3"       | 4        | 3747     | 15,0     |
| F330K0100.1670                  | 100 - 4"       | 2        | 5841     | 11,7     |
| <b>Butterfly handle version</b> |                |          |          |          |
| F330K0008.1672                  | 008 - 1/4"     | 36       | 100      | 3,6      |
| F330K0010.1672                  | 010 - 3/8"     | 36       | 100      | 3,6      |
| F330K0015.1672                  | 015 - 1/2"     | 24       | 143      | 3,4      |
| F330K0020.1672                  | 020 - 3/4"     | 16       | 210      | 3,4      |
| F330K0025.1672                  | 025 - 1"       | 10       | 360      | 3,6      |
| F330K0032.1672                  | 032 - 1 1/4"   | 10       | 535      | 4,2      |

ACS Version for DN10 - DN50

333

Full port brass ball valve

PN25



Threaded M/F (ISO 228/1).  
 Chrome-plated ball, nickel-plated body, blow-out proof stem.  
 Threads and internal parts not plated  
 PTFE seats, NBR stem O-ring + PTFE packing  
 Working conditions: Water, 0°C to +95°C; Air, -10°C to +110°C  
 PN16 when used with air



ERC



| Vir Code                        | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------------------------|----------------|----------|----------|----------|
| <b>Lever handle version</b>     |                |          |          |          |
| F333K0008.1673                  | 008 - 1/4"     | 36       | 125      | 4,5      |
| F333K0010.1673                  | 010 - 3/8"     | 36       | 128      | 4,6      |
| F333K0015.1673                  | 015 - 1/2"     | 24       | 194      | 4,7      |
| F333K0020.1673                  | 020 - 3/4"     | 16       | 262      | 4,2      |
| F333K0025.1673                  | 025 - 1"       | 10       | 445      | 4,5      |
| F333K0032.1673                  | 032 - 1 1/4"   | 36       | 635      | 22,9     |
| F333K0040.1673                  | 040 - 1 1/2"   | 24       | 900      | 21,6     |
| F333K0050.1673                  | 050 - 2"       | 12       | 1448     | 17,4     |
| <b>Butterfly handle version</b> |                |          |          |          |
| F333K0008.1687                  | 008 - 1/4"     | 36       | 125      | 4,5      |
| F333K0010.1687                  | 010 - 3/8"     | 36       | 128      | 4,6      |
| F333K0015.1687                  | 015 - 1/2"     | 24       | 194      | 4,7      |
| F333K0020.1687                  | 020 - 3/4"     | 16       | 262      | 4,2      |
| F333K0025.1687                  | 025 - 1"       | 10       | 445      | 4,5      |
| F333K0032.1687                  | 032 - 1 1/4"   | 10       | 635      | 6,4      |

ACS Version for DN10 - DN50

# BALL VALVES

**380**

Full port bronze ball valve

**PN40**



Threaded F/F (ISO 228/1)  
 Chrome-plated ball, blow-out proof stem  
 PTFE seats and packing, adjustable brass packing nut  
 Working conditions: Water and Air, -10°C to +185°C;  
 PN40 for DN≤50 (Max 40bar up to 95°C, max 10bar at 185°C)  
 PN25 for DN≥65 (Max 25bar up to 95°C, max 10bar at 185°C)



| Vir Code   | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--|----------------|----------|----------|----------|
| <b>Lever handle version</b>  |                |          |          |          |
| F3800B008.916  | 008 - 1/4"     | 100      | 142      | 14,2     |
| F3800B010.916  | 010 - 3/8"     | 100      | 139      | 13,9     |
| F3800B015.916  | 015 - 1/2"     | 50       | 259      | 13,0     |
| F3800B020.916  | 020 - 3/4"     | 50       | 364      | 18,2     |
| F3800B025.916  | 025 - 1"       | 25       | 630      | 15,8     |
| F3800B032.916  | 032 - 1 1/4"   | 20       | 970      | 19,4     |
| F3800B040.916  | 040 - 1 1/2"   | 12       | 1440     | 17,3     |
| F3800B050.916  | 050 - 2"       | 8        | 2160     | 17,3     |
| F3800B065.916  | 065 - 2 1/2"   | 6        | 4660     | 28,0     |
| F3800B080.916  | 080 - 3"       | 2        | 6600     | 13,2     |
| Version with NPT thread and red lever handle (F3800Bmis.915) available |                |          |          |          |
| <b>Butterfly handle version</b>  |                |          |          |          |
| F3800B015.1391   | 015 - 1/2"     | 100      | 268      | 26,8     |
| F3800B020.1391   | 020 - 3/4"     | 100      | 368      | 36,8     |
| F3800B025.1391   | 025 - 1"       | 50       | 639      | 32,0     |

Version with lockable handle available up to DN50 (.3201)

Available GDV version

**380LN**

Full port long neck bronze ball valve

**PN25**



Threaded F/F (ISO 228/1)  
 Chrome-plated ball  
 PTFE seats and packing, adjustable brass packing nut  
 Working conditions: Water, 0°C to +150°C; Air, -10°C to +150°C  
 Max 25bar up to 110°C, max 16bar above  
 PN16 when used with air



| Vir Code                        | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------------------------|----------------|----------|----------|----------|
| <b>Lever handle version</b>     |                |          |          |          |
| F38LN0015.2859                  | 015 - 1/2"     | 50       | 346      | 17,3     |
| F38LN0020.2859                  | 020 - 3/4"     | 40       | 454      | 18,2     |
| F38LN0025.2859                  | 025 - 1"       | 25       | 715      | 17,9     |
| F38LN0032.2859                  | 032 - 1 1/4"   | 15       | 1069     | 16,0     |
| F38LN0040.2859                  | 040 - 1 1/2"   | 10       | 1698     | 17,0     |
| F38LN0050.2859                  | 050 - 2"       | 6        | 2500     | 15,0     |
| <b>Butterfly handle version</b> |                |          |          |          |
| F38LN0015.2860                  | 015 - 1/2"     | 50       | 333      | 16,7     |
| F38LN0020.2860                  | 020 - 3/4"     | 40       | 441      | 17,6     |
| F38LN0025.2860                  | 025 - 1"       | 25       | 691      | 17,3     |
| F38LN0032.2860                  | 032 - 1 1/4"   | 15       | 1045     | 15,7     |
| F38LN0040.2860                  | 040 - 1 1/2"   | 10       | 1670     | 16,7     |
| F38LN0050.2860                  | 050 - 2"       | 6        | 2472     | 14,8     |

Available GDV and SINTEF version

## 380I Solar

Bronze ball valve for high temperatures

PN40



Threaded F/F (ISO 228/1)  
Stainless steel ball and stem, blow-out proof stem  
PTFE + graphite seats and grafoil packing  
Adjustable brass packing nut  
Working conditions: Water, -30°C to +200°C  
Max 40bar up to 100°C, max 10bar at 200°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F380HI015.2141 | 015 - 1/2"     | 50       | 249      | 12,5     |
| F380HI020.2141 | 020 - 3/4"     | 50       | 357      | 17,9     |
| F380HI025.2141 | 025 - 1"       | 25       | 584      | 14,6     |
| F380HI032.2141 | 032 - 1 1/4"   | 20       | 923      | 18,5     |
| F380HI040.2141 | 040 - 1 1/2"   | 12       | 1597     | 19,2     |
| F380HI050.2141 | 050 - 2"       | 8        | 2526     | 20,2     |

ERC



CE

## 360

Full port DZR brass ball valve

PN25



Threaded F/F (ISO 228/1)  
Chrome-plated ball, blow-out proof stem  
PTFE seats and packing, adjustable brass packing nut  
Working conditions: Water, 0°C to +150°C; Air, -10°C to +150°C  
Max 25bar up to 95°C, max 16bar at 150°C  
PN16 when used with air



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F3600Y008.213 | 008 - 1/4"     | 100      | 157      | 15,7     |
| F3600Y010.213 | 010 - 3/8"     | 100      | 140      | 14,0     |
| F3600Y015.213 | 015 - 1/2"     | 50       | 248      | 12,4     |
| F3600Y020.213 | 020 - 3/4"     | 40       | 366      | 14,6     |
| F3600Y025.213 | 025 - 1"       | 25       | 633      | 15,8     |
| F3600Y032.213 | 032 - 1 1/4"   | 16       | 906      | 14,5     |
| F3600Y040.213 | 040 - 1 1/2"   | 10       | 1505     | 15,1     |
| F3600Y050.213 | 050 - 2"       | 8        | 2486     | 19,9     |



STF

VO

## 365

Full port DZR brass ball valve

PN25



Olive and nut (O/N) for European copper tubing (EN1057)  
Chrome-plated ball, blow-out proof stem  
PTFE seats and packing, adjustable brass packing nut  
Working conditions: Water, 0°C to +150°C; Air, -10°C to +150°C  
Max 25bar up to 95°C, max 16bar at 150°C  
PN16 when used with air



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F3650Y012.1649 | 012            | 100      | 168      | 16,8     |
| F3650Y015.1649 | 015            | 50       | 286      | 14,3     |
| F3650Y018.1649 | 018            | 40       | 298      | 11,9     |
| F3650Y022.1649 | 022            | 40       | 424      | 17,0     |
| F3650Y028.1649 | 028            | 25       | 708      | 17,7     |
| F3650Y035.1649 | 035            | 10       | 1092     | 10,9     |
| F3650Y042.1649 | 042            | 8        | 1839     | 14,7     |
| F3650Y054.1649 | 054            | 8        | 3134     | 25,1     |

STF

# BALL VALVES

## 5020DR

Full port DZR brass EzPress ball valve

PN16



EzPress/EzPress ends (European copper/steel tubing)  
DZR brass body, chrome-plated brass ball  
PTFE seats and packing, adjustable brass packing nut  
Blow-out proof brass stem  
Working conditions: Water, 0°C to +120°C; Air, -10°C to +120°C  
Max 16bar up to 85°C, max 10bar at 120°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F68G00015.3121 | 015            | 50       | 247      | 12,4     |
| F68G00022.3121 | 022            | 40       | 347      | 13,9     |
| F68G00028.3121 | 028            | 30       | 591      | 17,7     |
| F68G00035.3121 | 035            | 20       | 886      | 17,7     |
| F68G00042.3121 | 042            | 10       | 1567     | 15,7     |
| F68G00054.3121 | 054            | 6        | 2502     | 15,0     |

## 5020

Full port bronze EzPress ball valve

PN16



EzPress/EzPress ends (European copper/steel tubing)  
Bronze body, chrome-plated brass ball  
PTFE seats and packing, adjustable brass packing nut  
Blow-out proof brass stem  
Working conditions: Water, 0°C to +120°C; Air, -10°C to +120°C  
Max 16bar up to 85°C, max 10bar at 120°C



| Vir Code         | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|------------------|----------------|----------|----------|----------|
| <b>V Profile</b> |                |          |          |          |
| F68P00012.1472   | 012            | 80       | 146      | 11,7     |
| F68P00015.1472   | 015            | 50       | 240      | 12,0     |
| F68P00018.1472   | 018            | 50       | 271      | 13,6     |
| F68P00022.1472   | 022            | 40       | 365      | 14,6     |
| F68P00028.1472   | 028            | 30       | 590      | 17,7     |
| F68P00035.1472   | 035            | 20       | 896      | 17,9     |
| F68P00042.1472   | 042            | 10       | 1389     | 13,9     |
| F68P00054.1472   | 054            | 6        | 2079     | 12,5     |
| <b>M Profile</b> |                |          |          |          |
| F68M00042.3116   | 042            | 10       | 1535     | 15,4     |
| F68M00054.3116   | 054            | 6        | 2809     | 16,9     |

Available GDV version

## 5020LN

Full port bronze EzPress ball valve

PN16



EzPress/EzPress ends (European copper/steel tubing)  
Bronze body, chrome-plated brass ball  
PTFE seats and packing, adjustable brass packing nut  
Brass stem and packing nut extension  
Working conditions: Water, 0°C to +120°C; Air, -10°C to +120°C  
Max 16bar up to 85°C, max 10bar at 120°C



| Vir Code         | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|------------------|----------------|----------|----------|----------|
| <b>V Profile</b> |                |          |          |          |
| F68LN0012.1638   | 012            | 50       | 277      | 13,9     |
| F68LN0015.1638   | 015            | 30       | 343      | 10,3     |
| F68LN0018.1638   | 018            | 30       | 361      | 10,8     |
| F68LN0022.1638   | 022            | 30       | 473      | 14,2     |
| F68LN0028.1638   | 028            | 25       | 735      | 18,4     |
| F68LN0035.1638   | 035            | 20       | 1057     | 21,1     |
| F68LN0042.1638   | 042            | 10       | 1870     | 18,7     |
| F68LN0054.1638   | 054            | 8        | 2834     | 22,7     |
| <b>M Profile</b> |                |          |          |          |
| F68MLN042.3127   | 042            | 10       | 1830     | 18,3     |
| F68MLN054.3127   | 054            | 8        | 2809     | 22,5     |

Available GDV version



*flowing ideas*

**5021**

Full port bronze EzPress ball valve

**PN16**



EzPress/M ends (European copper/steel tubing - ISO228/1)  
 Bronze body, chrome-plated brass ball  
 PTFE seats and packing, adjustable brass packing nut  
 Blow-out proof brass stem  
 Working conditions: Water, 0°C to +120°C; Air, -10°C to +120°C  
 Max 16bar up to 85°C, max 10bar at 120°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F688P0015.1472 | 015-1/2"       | 50       | 250      | 12,5     |
| F688P0018.1472 | 018-1/2"       | 50       | 260      | 13,0     |
| F688P0022.1472 | 022-3/4"       | 40       | 370      | 14,8     |
| F688P0028.1472 | 028-1"         | 30       | 580      | 17,4     |
| F688P0035.1472 | 035-1 1/4"     | 20       | 900      | 18,0     |
| F688P0042.1472 | 042-1 1/2"     | 10       | 1570     | 15,7     |
| F688P0054.1472 | 054-2"         | 6        | 2490     | 14,9     |



Available GDV version

**5024**

Full port bronze EzPress ball valve

**PN16**



EzPress/F ends (European copper/steel tubing - ISO228/1)  
 Bronze body, chrome-plated brass ball  
 PTFE seats and packing, adjustable brass packing nut  
 Blow-out proof brass stem  
 Working conditions: Water, 0°C to +120°C; Air, -10°C to +120°C  
 Max 16bar up to 85°C, max 10bar at 120°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F683P0015.2030 | 015-1/2"       | 50       | 245      | 12,3     |
| F683P0018.2030 | 018-1/2"       | 50       | 266      | 13,3     |
| F683P0022.2030 | 022-3/4"       | 40       | 359      | 14,4     |
| F683P0028.2030 | 028-1"         | 30       | 593      | 17,8     |
| F683P0035.2030 | 035-1 1/4"     | 20       | 926      | 18,5     |
| F683P0042.2030 | 042-1 1/2"     | 10       | 1587     | 15,9     |
| F683P0054.2030 | 054-2"         | 6        | 2484     | 14,9     |



Available GDV version

**5028**

Full port bronze EzPress ball valve

**PN16**



EzPress/F ends (European copper/steel tubing - ISO228/1)  
 Female threaded end with tail piece  
 Bronze body, chrome-plated brass ball  
 PTFE seats and packing, adjustable brass packing nut  
 Blow-out proof brass stem  
 Working conditions: Water, 0°C to +120°C; Air, -10°C to +120°C  
 Max 16bar up to 85°C, max 10bar at 120°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F687P0015.1472 | 015-3/4"       | 50       | 322      | 16,1     |
| F687P0018.1472 | 018-3/4"       | 50       | 332      | 16,6     |
| F687P0022.1472 | 022-3/4"       | 50       | 428      | 21,4     |



Available GDV version

# BALL VALVES

**390**

Ductile iron ball valve full bore

**PN16**



Flanged Ends (Lengths according to EN1092-2 PN16)  
 Lengths according EN558-1 series 14 (ex DIN3202 F4)  
 (EN558-1 series 15, ex DIN3202 F5, for DN200)  
 Handle in steel, chrome-plated brass ball  
 Certified version for GAS also available  
 Working conditions: Water: 0°C to +90°C



ERC



CE

| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F3900I025.868 | 025 - 1"       | 1        | 3200     | 3,2      |
| F3900I032.868 | 032 - 1 1/4"   | 1        | 4400     | 4,4      |
| F3900I040.868 | 040 - 1 1/2"   | 1        | 5500     | 5,5      |
| F3900I050.868 | 050 - 2"       | 1        | 8500     | 8,5      |
| F3900I065.868 | 065 - 2 1/2"   | 1        | 11500    | 11,5     |
| F3900I080.868 | 080 - 3"       | 1        | 15500    | 15,5     |
| F3900I100.868 | 100 - 4"       | 1        | 20000    | 20,0     |
| F3900I125.868 | 125 - 5"       | 1        | 30000    | 30,0     |
| F3900I150.868 | 150 - 6"       | 1        | 36000    | 36,0     |
| F3900I200.868 | 200 - 8"       | 1        | 93000    | 93,0     |

Versions with actuator, locking device or gearbox on request

**39BV0**

Stainless steel ball valve

**PN64**



Threaded F/F (ISO 7/1 Rp)  
 SS316 stainless steel ball and stem, blow-out proof stem  
 PTFE seats and packing  
 Stainless steel handle  
 Working conditions: Water, -20°C to +180°C  
 PN64 for DN≤50 (max 64bar up to 85°C, max 20bar above)  
 PN50 for DN≥65 (max 50bar up to 85°C, max 10bar above)



ERC

| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F39BV0008.1237 | 008 - 1/4"     | 1        | 250      | 0,3      |
| F39BV0010.1237 | 010 - 3/8"     | 1        | 250      | 0,3      |
| F39BV0015.1237 | 015 - 1/2"     | 1        | 400      | 0,4      |
| F39BV0020.1237 | 020 - 3/4"     | 1        | 500      | 0,5      |
| F39BV0025.1237 | 025 - 1"       | 1        | 900      | 0,9      |
| F39BV0032.1237 | 032 - 1 1/4"   | 1        | 1600     | 1,6      |
| F39BV0040.1237 | 040 - 1 1/2"   | 1        | 2300     | 2,3      |
| F39BV0050.1237 | 050 - 2"       | 1        | 3600     | 3,6      |
| F39BV0065.1237 | 065 - 2 1/2"   | 1        | 7200     | 7,2      |
| F39BV0080.1237 | 080 - 3"       | 1        | 10800    | 10,8     |
| F39BV0100.1237 | 100 - 4"       | 1        | 25180    | 25,2     |

**322**

Boiler drain ball valve

**PN25**



Threaded M (ISO 7/1 R) + hose union  
 ChromE-plated ball, blow-out proof stem  
 PTFE seats, NBR stem O-ring + PTFE packing  
 Working conditions: Water, -10°C to +100C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F242X0015.2877 | 015 - 1/2"     | 100      | 165      | 16,5     |
| F242X0020.2877 | 020 - 3/4"     | 65       | 255      | 16,6     |

**ERC**

**323, 324**

Brass mini ball valve

**PN10**



Fig.323 thrd M/F (ISO 228/1), Fig.323 thrd F/F (ISO 228/1)  
 Chrome-plated ball, blow-out proof stem  
 PTFE Seats, NBR O-ring  
 Aluminum handle  
 Working conditions: Water, 5°C to +90°C



| Vir Code        | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-----------------|----------------|----------|----------|----------|
| <b>Fig. 323</b> |                |          |          |          |
| F3230A008.917   | 008 - 1/4"     | 50       | 90       | 4,5      |
| F3230A010.917   | 010 - 3/8"     | 50       | 85       | 4,3      |
| F3230A015.917   | 015 - 1/2"     | 50       | 100      | 5,0      |
| F3230A020.917   | 020 - 3/4"     | 25       | 150      | 3,8      |
| <b>Fig. 324</b> |                |          |          |          |
| F3240A008.917   | 008 - 1/4"     | 50       | 90       | 4,5      |
| F3240A010.917   | 010 - 3/8"     | 50       | 85       | 4,3      |
| F3240A015.917   | 015 - 1/2"     | 50       | 100      | 5,0      |
| F3240A020.917   | 020 - 3/4"     | 25       | 150      | 3,8      |

**ERC**

**310N**

Brass ball bib cock

**PN16**



Threaded M (ISO 228/1) + hose union  
 Ring and hose union in brass  
 Chrome-plated ball, nickel-plated body, blow-out proof stem  
 PTFE seats, NBR stem O-ring  
 Also available with POM check valve embedded on thread  
 Working conditions: Water, 0°C to +95°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F310K0015.1779 | 015 - 1/2"     | 14       | 180      | 2,5      |
| F310K0020.1779 | 020 - 3/4"     | 8        | 295      | 2,4      |
| F310K0025.1779 | 025 - 1"       | 5        | 450      | 2,3      |

**ERC** (ACS)



# BALL VALVES

**293LK**

Brass bib cock with lockshield

**PN16**



Threaded M (ISO 228/1) + hose union  
 Ring and hose union in brass  
 Brass lockshield, NBR seal  
 PTFE packing, brass packing nut  
 Lockshield key included  
 Working conditions: Water, 0°C to +100°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F293LK015.3063 | 015 - 1/2"     | 14       | 255      | 3,6      |

**328**

Brass ball valve with union

**PN20**



Threaded F/M with union (ISO 228/1)  
 Chrome-plated ball, nickel-plated body, blow-out proof stem  
 PTFE seats and packing, NBR union O-ring  
 Aluminum handle  
 Working conditions: Water, 0°C to +80°C  
 PN16 when used with air or for DN≥25

| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F3280A015.133 | 015 - 1/2"     | 20       | 200      | 4,0      |
| F3280A020.133 | 020 - 3/4"     | 10       | 335      | 3,4      |
| F3280A025.133 | 025 - 1"       | 10       | 530      | 5,3      |
| F3280A032.133 | 032 - 1 1/4"   | 6        | 800      | 4,8      |

**ERC**

**3WL**

3 way "L" port brass ball valve

**PN25**



Threaded F/F/F (ISO 228/1)  
 Reduced bore valve  
 Chrome-plated ball, two PTFE seats sealing, FKM+NBR O-rings  
 2 threaded bosses for mounting of accessories  
 Working conditions: Water: 0°C to +150°C; Air: -10°C to +150°C  
 DN≤50, max 25bar up to 95°C, max 16bar with air or above 95°C  
 DN≥65, max 25bar up to 95°C, max 10bar with air or above 95°C



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F3TL00010.847 | 010 - 3/8"     | 50       | 167      | 8,4      |
| F3TL00015.847 | 015 - 1/2"     | 50       | 214      | 10,7     |
| F3TL00020.847 | 020 - 3/4"     | 25       | 391      | 9,8      |
| F3TL00025.847 | 025 - 1"       | 25       | 599      | 15,0     |
| F3TL00032.847 | 032 - 1 1/4"   | 15       | 909      | 13,6     |
| F3TL00040.847 | 040 - 1 1/2"   | 10       | 1325     | 13,3     |
| F3TL00050.847 | 050 - 2"       | 6        | 2219     | 13,3     |
| F3TL00065.847 | 065 - 2 1/2"   | 3        | 3776     | 11,3     |
| F3TL00080.847 | 080 - 3"       | 2        | 5896     | 11,8     |

**ERC**

# ACCESSORIES & SPARE PARTS FOR BALL VALVES

## Flat levers and butterflies



Flat spare handles  
Fig. 340T, 340G, 343G, 380, 380LN, 380I Solar, 5020, 5021, 5024, 5028

| Vir Code                            | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------------------|----------------|----------|----------|----------|
| <b>SS304 stainless steel levers</b> |                |          |          |          |
| KXM301008.1196                      | 008 - 010      | 500      | 22       | 11,0     |
| KXM301015.1196                      | 015 - 020      | 250      | 40       | 10,0     |
| KXM301025.1196                      | 025 - 032      | 150      | 65       | 9,8      |
| KXM301040.1196                      | 040 - 050      | 100      | 116      | 11,6     |
| <b>Dacromet steel butterflies</b>   |                |          |          |          |
| KXF300008.379                       | 008 - 010      | 500      | 16       | 8,0      |
| KXF300015.379                       | 015 - 020      | 500      | 28       | 14,0     |
| KXF300025.379                       | 025 - 032      | 250      | 44       | 11,0     |
| KXF300040.379                       | 040 - 050      | 250      | 86       | 21,5     |

## Bent levers and butterflies

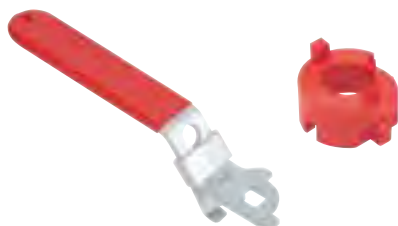


Bent spare handles  
Fig. 340, 343, 348, 342, 340 Solar, 340J

| Vir Code   | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--|----------------|----------|----------|----------|
| <b>SS304 stainless steel levers</b>                                      |                |          |          |          |
| KXM300008.354  | 008 - 010      | 500      | 25       | 12,5     |
| KXM300015.354  | 015 - 020      | 250      | 50       | 12,5     |
| KXM300025.354  | 025 - 032      | 150      | 77       | 11,6     |
| KXM300040.354  | 040 - 050      | 100      | 128      | 12,8     |
| Available black Geomet steel lever handle (KXM300mis.3347) for DN08-DN50 |                |          |          |          |
| <b>Aluminum butterflies</b>  |                |          |          |          |
| KXF300008.359  | 008 - 010      | 500      | 7        | 3,5      |
| KXF300015.359  | 015 - 020      | 500      | 20       | 10,0     |
| KXF300025.359  | 025 - 032      | 250      | 30       | 7,5      |
| KXF300040.359  | 040 - 050      | 200      | 44       | 8,8      |

# ACCESSORIES & SPARE PARTS FOR BALL VALVES

## Lock 99



Lockable flat steel lever  
Supplied with polyamide adaptor  
Fig. 340, 343, 348, 342, 340 Solar, 340J

| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| KXM303008.998 | 008 - 010      | 500      | 32       | 16,0     |
| KXM303015.998 | 015 - 020      | 400      | 59       | 23,6     |
| KXM303025.998 | 025 - 032      | 200      | 87       | 17,4     |
| KXM303040.998 | 040 - 050      | 200      | 146      | 29,2     |

## Lock One



Device to allow padlocking  
Fig. 340G e 343G

| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| K3000N008.279 | 008 - 010      | 100      | 3        | 0,3      |
| K3000N015.279 | 015 - 020      | 100      | 6        | 0,6      |
| K3000N025.279 | 025 - 032      | 100      | 8        | 0,8      |
| K3000N040.279 | 040 - 050      | 50       | 13       | 0,7      |
| K3000N065.279 | 065 - 100      | 6        | 36       | 0,2      |

## Lock One with adaptor



Device to allow padlocking and change from bent to flat lever  
Supplied with polyamide adaptor and flat lever  
Fig. 340, 343, 348, 342, 340 Solar, 340J

| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| K300NK008.656 | 008 - 010      | 100      | 59       | 5,9      |
| K300NK015.656 | 015 - 020      | 100      | 90       | 9,0      |
| K300NK025.656 | 025 - 032      | 100      | 117      | 11,7     |
| K300NK040.656 | 040 - 050      | 50       | 190      | 9,5      |
| K300NK065.656 | 065 - 100      | 6        | 665      | 4,0      |

## Stem extensions



Aluminum extension with brass rod  
(Steel for 390 and 390G models)

| Vir Code  | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---|----------------|----------|----------|----------|
| <b>Fig. 340, 343, 348, 342, 340 Solar, 340J</b> |                |          |          |          |
| K3000X008.277                                   | 008 - 010      | 250      | 30       | 7,5      |
| K3000X015.277                                   | 015 - 020      | 250      | 59       | 14,8     |
| K3000X025.277                                   | 025 - 032      | 100      | 78       | 7,8      |
| K3000X040.277                                   | 040 - 050      | 50       | 90       | 4,5      |
| KPR303065.2159                                  | 065 - 100      | 25       | 282      | 7,1      |
| <b>Fig. 330, 333</b>                            |                |          |          |          |
| KPR5C0015.2131                                  | 015 - 020      | 400      | 50       | 20,0     |
| KPR5C0025.2131                                  | 025 - 032      | 200      | 83       | 16,6     |
| KPR5C0040.2131                                  | 040 - 050      | 100      | 117      | 11,7     |
| <b>Fig. 390, 390G</b>                           |                |          |          |          |
| KPR390040.266                                   | 040 - 050      | 1        | 500      | 0,5      |
| KPR390065.266                                   | 065 - 100      | 1        | 550      | 0,6      |
| KPR390125.266                                   | 125 - 150      | 1        | 600      | 0,6      |
| <b>Fig. 33FF, 33MF</b>                          |                |          |          |          |
| KPR33X015.2810                                  | 015 - 020      | 250      | 59       | 14,8     |
| KPR33X025.2810                                  | 025 - 032      | 250      | 78       | 7,8      |
| KPR33X040.2810                                  | 040 - 050      | 100      | 90       | 4,5      |
| <b>Fig. 380</b>                                 |                |          |          |          |
| K3000X008.278                                   | 008 - 010      | 250      | 30       | 7,5      |
| K3000X015.278                                   | 015 - 020      | 250      | 59       | 14,8     |
| K3000X025.278                                   | 025 - 032      | 100      | 78       | 7,8      |
| K3000X040.278                                   | 040 - 050      | 50       | 90       | 4,5      |

# BUTTERFLY VALVES

**4020L, 4020G** Ductile iron wafer butterfly valve

**PN16**



Body in epoxy coated ductile iron GGG40  
 Disc in nickel pl. duct. iron GGG40, stem in SS416 stainless steel  
 EPDM seat, EPDM O-rings, PTFE bushings  
 With lockable lever (Fig. 4020L) or gear (4020G)  
 Max differential pressure 10bar for DN≥350  
 Working conditions: Water, -10°C a +110°C  
 Can be equipped with actuator (see pages 61-62)



ERC CE

| Vir Code                            | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------------------|----------------|----------|----------|----------|
| <b>Fig. 4020L - Aluminium lever</b> |                |          |          |          |
| F4020L032.2301                      | 032 - 1 1/4"   | 1        | 2300     | 2,3      |
| F4020L040.2301                      | 040 - 1 1/2"   | 1        | 2600     | 2,6      |
| F4020L050.2301                      | 050 - 2"       | 1        | 3270     | 3,3      |
| F4020L065.2301                      | 065 - 2 1/2"   | 1        | 3970     | 4,0      |
| F4020L080.2301                      | 080 - 3"       | 1        | 4470     | 4,5      |
| F4020L100.2301                      | 100 - 4"       | 1        | 6070     | 6,1      |
| F4020L125.2301                      | 125 - 5"       | 1        | 7370     | 7,4      |
| F4020L150.2301                      | 150 - 6"       | 1        | 8770     | 8,8      |
| F4020L200.2301                      | 200 - 8"       | 1        | 13300    | 13,3     |
| F4020L250.2301                      | 250 - 10"      | 1        | 19800    | 19,8     |
| F4020L300.2301                      | 300 - 12"      | 1        | 31600    | 31,6     |

|                                     |              |   |       |      |
|-------------------------------------|--------------|---|-------|------|
| <b>Fig. 4020L - Cast iron lever</b> |              |   |       |      |
| F4020L032.927                       | 032 - 1 1/4" | 1 | 2600  | 2,6  |
| F4020L040.927                       | 040 - 1 1/2" | 1 | 2800  | 2,8  |
| F4020L050.927                       | 050 - 2"     | 1 | 3650  | 3,7  |
| F4020L065.927                       | 065 - 2 1/2" | 1 | 4700  | 4,7  |
| F4020L080.927                       | 080 - 3"     | 1 | 4500  | 4,5  |
| F4020L100.927                       | 100 - 4"     | 1 | 6250  | 6,3  |
| F4020L125.927                       | 125 - 5"     | 1 | 7700  | 7,7  |
| F4020L150.927                       | 150 - 6"     | 1 | 9100  | 9,1  |
| F4020L200.927                       | 200 - 8"     | 1 | 13600 | 13,6 |
| F4020L250.927                       | 250 - 10"    | 1 | 21700 | 21,7 |
| F4020L300.927                       | 300 - 12"    | 1 | 32000 | 32,0 |

|                   |              |   |        |       |
|-------------------|--------------|---|--------|-------|
| <b>Fig. 4020G</b> |              |   |        |       |
| F4020G032.928     | 032 - 1 1/4" | 1 | 7300   | 7,3   |
| F4020G040.928     | 040 - 1 1/2" | 1 | 7600   | 7,6   |
| F4020G050.928     | 050 - 2"     | 1 | 8100   | 8,1   |
| F4020G065.928     | 065 - 2 1/2" | 1 | 8900   | 8,9   |
| F4020G080.928     | 080 - 3"     | 1 | 9200   | 9,2   |
| F4020G100.928     | 100 - 4"     | 1 | 11000  | 11,0  |
| F4020G125.928     | 125 - 5"     | 1 | 13000  | 13,0  |
| F4020G150.928     | 150 - 6"     | 1 | 12000  | 12,0  |
| F4020G200.928     | 200 - 8"     | 1 | 21900  | 21,9  |
| F4020G250.928     | 250 - 10"    | 1 | 27400  | 27,4  |
| F4020G300.928     | 300 - 12"    | 1 | 39500  | 39,5  |
| F4020G350.928     | 350 - 14"    | 1 | 49000  | 49,0  |
| F4020G400.928     | 400 - 16"    | 1 | 85000  | 85,0  |
| F4020G450.928     | 450 - 18"    | 1 | 117700 | 117,7 |
| F4020G500.928     | 500 - 20"    | 1 | 160100 | 160,1 |
| F4020G600.928     | 600 - 24"    | 1 | 257500 | 257,5 |



Body in epoxy coated ductile iron GGG40  
 Disc in nickel pl. duct. iron GGG40, stem in SS416 stainless steel  
 EPDM seat, EPDM O-rings, PTFE bushings  
 With lockable lever (Fig. 4320L) or gear (4320G)  
 Max differential pressure 10bar for DN≥350  
 Working conditions: Water, -10°C a +110°C  
 Can be equipped with actuator (see pages 61-62)



**ERC CE**

| Vir Code                            | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------------------|----------------|----------|----------|----------|
| <b>Fig. 4320L - Aluminium lever</b> |                |          |          |          |
| F4320L032.2301                      | 032 - 1 1/4"   | 1        | 2980     | 3,0      |
| F4320L040.2301                      | 040 - 1 1/2"   | 1        | 3300     | 3,3      |
| F4320L050.2301                      | 050 - 2"       | 1        | 4670     | 4,7      |
| F4320L065.2301                      | 065 - 2 1/2"   | 1        | 4970     | 5,0      |
| F4320L080.2301                      | 080 - 3"       | 1        | 5370     | 5,4      |
| F4320L100.2301                      | 100 - 4"       | 1        | 8770     | 8,8      |
| F4320L125.2301                      | 125 - 5"       | 1        | 12370    | 12,4     |
| F4320L150.2301                      | 150 - 6"       | 1        | 13170    | 13,2     |
| F4320L200.2301                      | 200 - 8"       | 1        | 18100    | 18,1     |
| F4320L250.2301                      | 250 - 10"      | 1        | 28300    | 28,3     |
| F4320L300.2301                      | 300 - 12"      | 1        | 43800    | 43,8     |

|                                     |              |   |       |      |
|-------------------------------------|--------------|---|-------|------|
| <b>Fig. 4320L - Cast iron lever</b> |              |   |       |      |
| F4320L032.927                       | 032 - 1 1/4" | 1 | 3400  | 3,4  |
| F4320L040.927                       | 040 - 1 1/2" | 1 | 3400  | 3,4  |
| F4320L050.927                       | 050 - 2"     | 1 | 4200  | 4,2  |
| F4320L065.927                       | 065 - 2 1/2" | 1 | 5000  | 5,0  |
| F4320L080.927                       | 080 - 3"     | 1 | 5800  | 5,8  |
| F4320L100.927                       | 100 - 4"     | 1 | 7500  | 7,5  |
| F4320L125.927                       | 125 - 5"     | 1 | 10300 | 10,3 |
| F4320L150.927                       | 150 - 6"     | 1 | 11500 | 11,5 |
| F4320L200.927                       | 200 - 8"     | 1 | 19200 | 19,2 |
| F4320L250.927                       | 250 - 10"    | 1 | 27100 | 27,1 |
| F4320L300.927                       | 300 - 12"    | 1 | 50200 | 50,2 |

Version for PN10 flanges (F4320Lmis.2987) available for DN200-DN300

|                   |              |   |        |       |
|-------------------|--------------|---|--------|-------|
| <b>Fig. 4320G</b> |              |   |        |       |
| F4320G032.928     | 032 - 1 1/4" | 1 | 6300   | 6,3   |
| F4320G040.928     | 040 - 1 1/2" | 1 | 6300   | 6,3   |
| F4320G050.928     | 050 - 2"     | 1 | 7100   | 7,1   |
| F4320G065.928     | 065 - 2 1/2" | 1 | 7900   | 7,9   |
| F4320G080.928     | 080 - 3"     | 1 | 8600   | 8,6   |
| F4320G100.928     | 100 - 4"     | 1 | 10400  | 10,4  |
| F4320G125.928     | 125 - 5"     | 1 | 13200  | 13,2  |
| F4320G150.928     | 150 - 6"     | 1 | 14400  | 14,4  |
| F4320G200.928     | 200 - 8"     | 1 | 26300  | 26,3  |
| F4320G250.928     | 250 - 10"    | 1 | 32800  | 32,8  |
| F4320G300.928     | 300 - 12"    | 1 | 59900  | 59,9  |
| F4320G350.928     | 350 - 14"    | 1 | 77400  | 77,4  |
| F4320G400.928     | 400 - 16"    | 1 | 121830 | 121,8 |
| F4320G450.928     | 450 - 18"    | 1 | 158700 | 158,7 |
| F4320G500.928     | 500 - 20"    | 1 | 226600 | 226,6 |
| F4320G600.928     | 600 - 24"    | 1 | 315500 | 315,5 |

Version for PN10 flanges (F4320Gmis.2988) available for DN200-DN300

# BUTTERFLY VALVES

**4029L, 4029G** Ductile iron wafer butterfly valve

**PN16**



Body in epoxy coated ductile iron GGG40  
 Disc in SS316 stainless steel, stem in SS416 stainless steel  
 NBR seat, FKM O-rings, PTFE bushings  
 With lockable lever (Fig. 4029L) or gear (4029G)  
 Max differential pressure 10bar for DN≥350  
 Working conditions: Water, -10°C a +90°C  
 Can be equipped with actuator (see pages 61-62)



ERC CE

| Vir Code                            | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------------------|----------------|----------|----------|----------|
| <b>Fig. 4029L - Aluminium lever</b> |                |          |          |          |
| F4029L032.2302                      | 032 - 1 1/4"   | 1        | 2300     | 2,3      |
| F4029L040.2302                      | 040 - 1 1/2"   | 1        | 3000     | 3,0      |
| F4029L050.2302                      | 050 - 2"       | 1        | 3270     | 3,3      |
| F4029L065.2302                      | 065 - 2 1/2"   | 1        | 3970     | 4,0      |
| F4029L080.2302                      | 080 - 3"       | 1        | 4470     | 4,5      |
| F4029L100.2302                      | 100 - 4"       | 1        | 6070     | 6,1      |
| F4029L125.2302                      | 125 - 5"       | 1        | 7370     | 7,4      |
| F4029L150.2302                      | 150 - 6"       | 1        | 8770     | 8,8      |
| F4029L200.2302                      | 200 - 8"       | 1        | 13300    | 13,3     |
| F4029L250.2302                      | 250 - 10"      | 1        | 19800    | 19,8     |
| F4029L300.2302                      | 300 - 12"      | 1        | 31600    | 31,6     |

|                   |              |   |        |       |
|-------------------|--------------|---|--------|-------|
| <b>Fig. 4029G</b> |              |   |        |       |
| F4029G032.1009    | 032 - 1 1/4" | 1 | 7300   | 7,3   |
| F4029G040.1009    | 040 - 1 1/2" | 1 | 7600   | 7,6   |
| F4029G050.1009    | 050 - 2"     | 1 | 8100   | 8,1   |
| F4029G065.1009    | 065 - 2 1/2" | 1 | 8900   | 8,9   |
| F4029G080.1009    | 080 - 3"     | 1 | 9200   | 9,2   |
| F4029G100.1009    | 100 - 4"     | 1 | 11000  | 11,0  |
| F4029G125.1009    | 125 - 5"     | 1 | 13000  | 13,0  |
| F4029G150.1009    | 150 - 6"     | 1 | 13370  | 13,4  |
| F4029G200.1009    | 200 - 8"     | 1 | 25700  | 25,7  |
| F4029G250.1009    | 250 - 10"    | 1 | 32200  | 32,2  |
| F4029G300.1009    | 300 - 12"    | 1 | 46500  | 46,5  |
| F4029G350.1009    | 350 - 14"    | 1 | 60000  | 60,0  |
| F4029G400.1009    | 400 - 16"    | 1 | 103000 | 103,0 |
| F4029G450.1009    | 450 - 18"    | 1 | 119000 | 119,0 |
| F4029G500.1009    | 500 - 20"    | 1 | 162000 | 162,0 |
| F4029G600.1009    | 600 - 24"    | 1 | 259000 | 259,0 |



Body in epoxy coated ductile iron GGG40  
 Disc in **SS316 stainless steel**, stem in SS416 stainless steel  
 NBR seat, FKM O-rings, PTFE bushings  
 With lockable lever (Fig. 4329L) or gear (4329G)  
 Max differential pressure 10bar for DN≥350  
 Working conditions: Water, -10°C a +90°C  
 Can be equipped with actuator (see pages 61-62)



**ERC** **CE**

| Vir Code                            | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------------------|----------------|----------|----------|----------|
| <b>Fig. 4329L - Aluminium lever</b> |                |          |          |          |
| F4329L032.2302                      | 032 - 1 1/4"   | 1        | 4400     | 4,4      |
| F4329L040.2302                      | 040 - 1 1/2"   | 1        | 4600     | 4,6      |
| F4329L050.2302                      | 050 - 2"       | 1        | 5100     | 5,1      |
| F4329L065.2302                      | 065 - 2 1/2"   | 1        | 5000     | 5,0      |
| F4329L080.2302                      | 080 - 3"       | 1        | 5800     | 5,8      |
| F4329L100.2302                      | 100 - 4"       | 1        | 9200     | 9,2      |
| F4329L125.2302                      | 125 - 5"       | 1        | 10400    | 10,4     |
| F4329L150.2302                      | 150 - 6"       | 1        | 13600    | 13,6     |
| F4329L200.2302                      | 200 - 8"       | 1        | 19500    | 19,5     |
| F4329L250.2302                      | 250 - 10"      | 1        | 29700    | 29,7     |
| F4329L300.2302                      | 300 - 12"      | 1        | 45200    | 45,2     |

|                   |              |   |        |       |
|-------------------|--------------|---|--------|-------|
| <b>Fig. 4329G</b> |              |   |        |       |
| F4329G032.1009    | 032 - 1 1/4" | 1 | 7600   | 7,6   |
| F4329G040.1009    | 040 - 1 1/2" | 1 | 8900   | 8,9   |
| F4329G050.1009    | 050 - 2"     | 1 | 9500   | 9,5   |
| F4329G065.1009    | 065 - 2 1/2" | 1 | 11000  | 11,0  |
| F4329G080.1009    | 080 - 3"     | 1 | 11600  | 11,6  |
| F4329G100.1009    | 100 - 4"     | 1 | 13700  | 13,7  |
| F4329G125.1009    | 125 - 5"     | 1 | 18000  | 18,0  |
| F4329G150.1009    | 150 - 6"     | 1 | 19000  | 19,0  |
| F4329G200.1009    | 200 - 8"     | 1 | 32000  | 32,0  |
| F4329G250.1009    | 250 - 10"    | 1 | 42000  | 42,0  |
| F4329G300.1009    | 300 - 12"    | 1 | 60000  | 60,0  |
| F4329G350.1009    | 350 - 14"    | 1 | 85000  | 85,0  |
| F4329G400.1009    | 400 - 16"    | 1 | 141000 | 141,0 |
| F4329G450.1009    | 450 - 18"    | 1 | 168000 | 168,0 |
| F4329G500.1009    | 500 - 20"    | 1 | 229000 | 229,0 |
| F4329G600.1009    | 600 - 24"    | 1 | 312000 | 312,0 |



# BUTTERFLY VALVES

**4025L, 4025G** Ductile iron wafer butterfly valve

**PN16**



Body in epoxy coated ductile iron GGG40  
 Disc in **SS316** stainless steel, stem in SS416 stainless steel  
 EPDM seat, EPDM O-rings, PTFE bushings  
 With lockable lever (Fig. 4025L) or gear (4025G)  
 Max differential pressure 10bar for DN≥350  
 Working conditions: Water, -10°C a +110°C  
 Can be equipped with actuator (see pages 61-62)



| Vir Code                            | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------------------|----------------|----------|----------|----------|
| <b>Fig. 4025L - Aluminium lever</b> |                |          |          |          |
| F4025L032.2302                      | 032 - 1 1/4"   | 1        | 2300     | 2,3      |
| F4025L040.2302                      | 040 - 1 1/2"   | 1        | 2600     | 2,6      |
| F4025L050.2302                      | 050 - 2"       | 1        | 3270     | 3,3      |
| F4025L065.2302                      | 065 - 2 1/2"   | 1        | 3970     | 4,0      |
| F4025L080.2302                      | 080 - 3"       | 1        | 4470     | 4,5      |
| F4025L100.2302                      | 100 - 4"       | 1        | 6070     | 6,1      |
| F4025L125.2302                      | 125 - 5"       | 1        | 7370     | 7,4      |
| F4025L150.2302                      | 150 - 6"       | 1        | 8770     | 8,8      |
| F4025L200.2302                      | 200 - 8"       | 1        | 13300    | 13,3     |
| F4025L250.2302                      | 250 - 10"      | 1        | 19800    | 19,8     |
| F4025L300.2302                      | 300 - 12"      | 1        | 31600    | 31,6     |

|                                     |              |   |       |      |
|-------------------------------------|--------------|---|-------|------|
| <b>Fig. 4025L - Cast iron lever</b> |              |   |       |      |
| F4025L032.929                       | 032 - 1 1/4" | 1 | 2600  | 2,6  |
| F4025L040.929                       | 040 - 1 1/2" | 1 | 2800  | 2,8  |
| F4025L050.929                       | 050 - 2"     | 1 | 3650  | 3,7  |
| F4025L065.929                       | 065 - 2 1/2" | 1 | 4700  | 4,7  |
| F4025L080.929                       | 080 - 3"     | 1 | 4500  | 4,5  |
| F4025L100.929                       | 100 - 4"     | 1 | 6250  | 6,3  |
| F4025L125.929                       | 125 - 5"     | 1 | 7700  | 7,7  |
| F4025L150.929                       | 150 - 6"     | 1 | 9100  | 9,1  |
| F4025L200.929                       | 200 - 8"     | 1 | 13600 | 13,6 |
| F4025L250.929                       | 250 - 10"    | 1 | 21700 | 21,7 |
| F4025L300.929                       | 300 - 12"    | 1 | 32000 | 32,0 |

|                   |              |   |        |       |
|-------------------|--------------|---|--------|-------|
| <b>Fig. 4025G</b> |              |   |        |       |
| F4025G032.1009    | 032 - 1 1/4" | 1 | 7300   | 7,3   |
| F4025G040.1009    | 040 - 1 1/2" | 1 | 7600   | 7,6   |
| F4025G050.1009    | 050 - 2"     | 1 | 6700   | 6,7   |
| F4025G065.1009    | 065 - 2 1/2" | 1 | 7600   | 7,6   |
| F4025G080.1009    | 080 - 3"     | 1 | 8300   | 8,3   |
| F4025G100.1009    | 100 - 4"     | 1 | 9150   | 9,2   |
| F4025G125.1009    | 125 - 5"     | 1 | 10900  | 10,9  |
| F4025G150.1009    | 150 - 6"     | 1 | 12000  | 12,0  |
| F4025G200.1009    | 200 - 8"     | 1 | 21900  | 21,9  |
| F4025G250.1009    | 250 - 10"    | 1 | 28000  | 28,0  |
| F4025G300.1009    | 300 - 12"    | 1 | 46500  | 46,5  |
| F4025G350.1009    | 350 - 14"    | 1 | 49480  | 49,5  |
| F4025G400.1009    | 400 - 16"    | 1 | 92160  | 92,2  |
| F4025G450.1009    | 450 - 18"    | 1 | 119000 | 119,0 |
| F4025G500.1009    | 500 - 20"    | 1 | 162000 | 162,0 |
| F4025G600.1009    | 600 - 24"    | 1 | 259000 | 259,0 |

## 4325L, 4325G Ductile iron lug butterfly valve

PN16



Body in epoxy coated ductile iron GGG40  
 Disc in SS316 stainless steel, stem in SS416 stainless steel  
 EPDM seat, EPDM O-rings, PTFE bushings  
 With lockable lever (Fig. 4325L) or gear (4325G)  
 Max differential pressure 10bar for DN≥350  
 Working conditions: Water, -10°C a +110°C  
 Can be equipped with actuator (see pages 61-62)



ERC



CE



| Vir Code                            | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------------------|----------------|----------|----------|----------|
| <b>Fig. 4325L - Aluminium lever</b> |                |          |          |          |
| F4325L032.2302                      | 032 - 1 1/4"   | 1        | 2980     | 3,0      |
| F4325L040.2302                      | 040 - 1 1/2"   | 1        | 3300     | 3,3      |
| F4325L050.2302                      | 050 - 2"       | 1        | 4670     | 4,7      |
| F4325L065.2302                      | 065 - 2 1/2"   | 1        | 4970     | 5,0      |
| F4325L080.2302                      | 080 - 3"       | 1        | 5370     | 5,4      |
| F4325L100.2302                      | 100 - 4"       | 1        | 8770     | 8,8      |
| F4325L125.2302                      | 125 - 5"       | 1        | 12370    | 12,4     |
| F4325L150.2302                      | 150 - 6"       | 1        | 13170    | 13,2     |
| F4325L200.2302                      | 200 - 8"       | 1        | 18100    | 18,1     |
| F4325L250.2302                      | 250 - 10"      | 1        | 28300    | 28,3     |
| F4325L300.2302                      | 300 - 12"      | 1        | 43800    | 43,8     |

### Fig. 4325L - Cast iron lever

|               |              |   |       |      |
|---------------|--------------|---|-------|------|
| F4325L032.929 | 032 - 1 1/4" | 1 | 3400  | 3,4  |
| F4325L040.929 | 040 - 1 1/2" | 1 | 3400  | 3,4  |
| F4325L050.929 | 050 - 2"     | 1 | 4200  | 4,2  |
| F4325L065.929 | 065 - 2 1/2" | 1 | 5000  | 5,0  |
| F4325L080.929 | 080 - 3"     | 1 | 5800  | 5,8  |
| F4325L100.929 | 100 - 4"     | 1 | 7500  | 7,5  |
| F4325L125.929 | 125 - 5"     | 1 | 10300 | 10,3 |
| F4325L150.929 | 150 - 6"     | 1 | 11500 | 11,5 |
| F4325L200.929 | 200 - 8"     | 1 | 19200 | 19,2 |
| F4325L250.929 | 250 - 10"    | 1 | 27100 | 27,1 |
| F4325L300.929 | 300 - 12"    | 1 | 50200 | 50,2 |

Version for PN10 flanges (F4325Lmis.2989) available for DN200-DN300

### Fig. 4325G

|                |              |   |        |       |
|----------------|--------------|---|--------|-------|
| F4325G032.1009 | 032 - 1 1/4" | 1 | 7980   | 8,0   |
| F4325G040.1009 | 040 - 1 1/2" | 1 | 8900   | 8,9   |
| F4325G050.1009 | 050 - 2"     | 1 | 9500   | 9,5   |
| F4325G065.1009 | 065 - 2 1/2" | 1 | 7900   | 7,9   |
| F4325G080.1009 | 080 - 3"     | 1 | 8600   | 8,6   |
| F4325G100.1009 | 100 - 4"     | 1 | 10400  | 10,4  |
| F4325G125.1009 | 125 - 5"     | 1 | 13200  | 13,2  |
| F4325G150.1009 | 150 - 6"     | 1 | 14400  | 14,4  |
| F4325G200.1009 | 200 - 8"     | 1 | 26300  | 26,3  |
| F4325G250.1009 | 250 - 10"    | 1 | 32800  | 32,8  |
| F4325G300.1009 | 300 - 12"    | 1 | 59900  | 59,9  |
| F4325G350.1009 | 350 - 14"    | 1 | 77400  | 77,4  |
| F4325G400.1009 | 400 - 16"    | 1 | 121830 | 121,8 |
| F4325G450.1009 | 450 - 18"    | 1 | 143000 | 143,0 |
| F4325G500.1009 | 500 - 20"    | 1 | 252000 | 252,0 |
| F4325G600.1009 | 600 - 24"    | 1 | 312000 | 315,5 |

Version for PN10 flanges (F4325Gmis.2990) available for DN200-DN300

# BUTTERFLY VALVES

## 402WL, 402WG Ductile iron wafer butterfly valve

PN16



Body in epoxy coated ductile iron GGG40  
 Disc in epoxy coated duct. iron, stem in SS416 stainless steel  
 EPDM seat, EPDM O-rings, PTFE bushings  
 With lockable lever (Fig. 402WL) or gear (402WG)  
 Working conditions: Water, -10°C a +110°C  
 Can be equipped with actuator (see pages 61-62)



ERC



CE

ACS

| Vir Code                            | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------------------|----------------|----------|----------|----------|
| <b>Fig. 402WL - Aluminium lever</b> |                |          |          |          |
| F402WL032.2904                      | 032 - 1 1/4"   | 1        | 2900     | 2,9      |
| F402WL040.2904                      | 040 - 1 1/2"   | 1        | 3000     | 3,0      |
| F402WL050.2904                      | 050 - 2"       | 1        | 3650     | 3,7      |
| F402WL065.2904                      | 065 - 2 1/2"   | 1        | 4700     | 4,7      |
| F402WL080.2904                      | 080 - 3"       | 1        | 4500     | 4,5      |
| F402WL100.2904                      | 100 - 4"       | 1        | 6200     | 6,2      |
| F402WL125.2904                      | 125 - 5"       | 1        | 7300     | 7,3      |
| F402WL150.2904                      | 150 - 6"       | 1        | 8700     | 8,7      |
| F402WL200.2904                      | 200 - 8"       | 1        | 13300    | 13,3     |
| F402WL250.2904                      | 250 - 10"      | 1        | 19800    | 19,8     |
| F402WL300.2904                      | 300 - 12"      | 1        | 31600    | 31,6     |
| <b>Fig. 402WG</b>                   |                |          |          |          |
| F402WG032.928                       | 032 - 1 1/4"   | 1        | 7900     | 7,9      |
| F402WG040.928                       | 040 - 1 1/2"   | 1        | 8000     | 8,0      |
| F402WG050.928                       | 050 - 2"       | 1        | 8650     | 8,7      |
| F402WG065.928                       | 065 - 2 1/2"   | 1        | 9700     | 9,7      |
| F402WG080.928                       | 080 - 3"       | 1        | 9500     | 9,5      |
| F402WG100.928                       | 100 - 4"       | 1        | 11200    | 11,2     |
| F402WG125.928                       | 125 - 5"       | 1        | 12300    | 12,3     |
| F402WG150.928                       | 150 - 6"       | 1        | 13700    | 13,7     |
| F402WG200.928                       | 200 - 8"       | 1        | 26300    | 26,3     |
| F402WG250.928                       | 250 - 10"      | 1        | 32800    | 32,8     |
| F402WG300.928                       | 300 - 12"      | 1        | 44600    | 44,6     |

## 432WL, 432WG Ductile iron lug butterfly valve

PN16



Body in epoxy coated ductile iron GGG40  
 Disc in epoxy coated duct. iron, stem in SS416 stainless steel  
 EPDM seat, EPDM O-rings, PTFE bushings  
 With lockable lever (Fig. 432WL) or gear (432WG)  
 Working conditions: Water, -10°C a +110°C  
 Can be equipped with actuator (see pages 61-62)



ERC



CE

ACS

| Vir Code                            | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------------------|----------------|----------|----------|----------|
| <b>Fig. 432WL - Aluminium lever</b> |                |          |          |          |
| F432WL032.2904                      | 032 - 1 1/4"   | 1        | 3500     | 3,5      |
| F432WL040.2904                      | 040 - 1 1/2"   | 1        | 3800     | 3,8      |
| F432WL050.2904                      | 050 - 2"       | 1        | 5200     | 5,2      |
| F432WL065.2904                      | 065 - 2 1/2"   | 1        | 5500     | 5,5      |
| F432WL080.2904                      | 080 - 3"       | 1        | 5900     | 5,9      |
| F432WL100.2904                      | 100 - 4"       | 1        | 9300     | 9,3      |
| F432WL125.2904                      | 125 - 5"       | 1        | 12900    | 12,9     |
| F432WL150.2904                      | 150 - 6"       | 1        | 13700    | 13,7     |
| F432WL200.2904                      | 200 - 8"       | 1        | 19500    | 19,5     |
| F432WL250.2904                      | 250 - 10"      | 1        | 29700    | 29,7     |
| F432WL300.2904                      | 300 - 12"      | 1        | 45200    | 45,2     |
| <b>Fig. 432WG</b>                   |                |          |          |          |
| F432WG032.928                       | 032 - 1 1/4"   | 1        | 9100     | 9,1      |
| F432WG040.928                       | 040 - 1 1/2"   | 1        | 9400     | 9,4      |
| F432WG050.928                       | 050 - 2"       | 1        | 10800    | 10,8     |
| F432WG065.928                       | 065 - 2 1/2"   | 1        | 11100    | 11,1     |
| F432WG080.928                       | 080 - 3"       | 1        | 11500    | 11,5     |
| F432WG100.928                       | 100 - 4"       | 1        | 14900    | 14,9     |
| F432WG125.928                       | 125 - 5"       | 1        | 18500    | 18,5     |
| F432WG150.928                       | 150 - 6"       | 1        | 19300    | 19,3     |
| F432WG200.928                       | 200 - 8"       | 1        | 28300    | 28,3     |
| F432WG250.928                       | 250 - 10"      | 1        | 38500    | 38,5     |
| F432WG300.928                       | 300 - 12"      | 1        | 54000    | 54,0     |

## 4520L, 4520G Ductile iron wafer butterfly valve

PN25



Body in epoxy coated ductile iron GGG40  
Disc in nickel pl. duct. iron GGG40, stem in SS416 stainless steel  
EPDM seat, EPDM O-rings, PTFE bushings  
With lockable lever (Fig. 4520L) or gear (4520G)  
Working conditions: Water, -10°C a +110°C  
Can be equipped with actuator (see pages 61-62)



ERC CE

| Vir Code          | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------|----------------|----------|----------|----------|
| <b>Fig. 4520L</b> |                |          |          |          |
| F4520L050.927     | 050 - 2"       | 1        | 4300     | 4,3      |
| F4520L065.927     | 065 - 2 1/2"   | 1        | 4700     | 4,7      |
| F4520L080.927     | 080 - 3"       | 1        | 5100     | 5,1      |
| F4520L100.927     | 100 - 4"       | 1        | 6100     | 6,1      |
| F4520L125.927     | 125 - 5"       | 1        | 7900     | 7,9      |
| F4520L150.927     | 150 - 6"       | 1        | 9600     | 9,6      |
| <b>Fig. 4520G</b> |                |          |          |          |
| F4520G050.928     | 050 - 2"       | 1        | 8400     | 8,4      |
| F4520G065.928     | 065 - 2 1/2"   | 1        | 8800     | 8,8      |
| F4520G080.928     | 080 - 3"       | 1        | 9200     | 9,2      |
| F4520G100.928     | 100 - 4"       | 1        | 10200    | 10,2     |
| F4520G125.928     | 125 - 5"       | 1        | 12000    | 12,0     |
| F4520G150.928     | 150 - 6"       | 1        | 13700    | 13,7     |
| F4520G200.928     | 200 - 8"       | 1        | 33900    | 33,0     |
| F4520G250.928     | 250 - 10"      | 1        | 48000    | 48,0     |
| F4520G300.928     | 300 - 12"      | 1        | 60000    | 60,0     |
| F4520G350.928     | 350 - 14"      | 1        | 72000    | 72,0     |
| F4520G400.928     | 400 - 16"      | 1        | 156000   | 156,0    |
| F4520G450.928     | 450 - 18"      | 1        | 182000   | 182,0    |
| F4520G500.928     | 500 - 20"      | 1        | 242000   | 242,0    |
| F4520G600.928     | 600 - 24"      | 1        | 365000   | 365,0    |

## 4620L, 4620G Ductile iron lug butterfly valve

PN25



Body in epoxy coated ductile iron GGG40  
Disc in nickel pl. duct. iron GGG40, stem in SS416 stainless steel  
EPDM seat, EPDM O-rings, PTFE bushings  
With lockable lever (Fig. 4620L) or gear (4620G)  
Working conditions: Water, -10°C a +110°C  
Can be equipped with actuator (see pages 61-62)



ERC CE

| Vir Code          | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------|----------------|----------|----------|----------|
| <b>Fig. 4620L</b> |                |          |          |          |
| F4620L050.927     | 050 - 2"       | 1        | 5100     | 5,1      |
| F4620L065.927     | 065 - 2 1/2"   | 1        | 5000     | 5,0      |
| F4620L080.927     | 080 - 3"       | 1        | 6000     | 6,0      |
| F4620L100.927     | 100 - 4"       | 1        | 9200     | 9,2      |
| F4620L125.927     | 125 - 5"       | 1        | 10400    | 10,4     |
| F4620L150.927     | 150 - 6"       | 1        | 13600    | 13,6     |
| <b>Fig. 4620G</b> |                |          |          |          |
| F4620G050.928     | 050 - 2"       | 1        | 9500     | 9,5      |
| F4620G065.928     | 065 - 2 1/2"   | 1        | 11000    | 11,0     |
| F4620G080.928     | 080 - 3"       | 1        | 11600    | 11,6     |
| F4620G100.928     | 100 - 4"       | 1        | 13700    | 13,7     |
| F4620G125.928     | 125 - 5"       | 1        | 18000    | 18,0     |
| F4620G150.928     | 150 - 6"       | 1        | 19000    | 19,0     |
| F4620G200.928     | 200 - 8"       | 1        | 27500    | 27,5     |
| F4620G250.928     | 250 - 10"      | 1        | 32800    | 32,8     |
| F4620G300.928     | 300 - 12"      | 1        | 60000    | 60,0     |

# BUTTERFLY VALVES

**4820L**

Grooved ductile iron butterfly valve

**PN25**



ERC CE

Body in ductile iron GGG50 epoxy coating  
Disc in ductile iron GGG50 coated in EPDM  
Stem in SS420 stainless steel  
EPDM O-rings, PTFE bushing  
PN10 for DN250 and DN300  
Working conditions: Water, 0°C a +110°C  
Can be equipped with actuator (see pages 61-62)



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F482BL050.1944 | 60,3           | 1        | 3400     | 3,4      |
| F482BL065.1944 | 76,1*          | 1        | 3300     | 4,3      |
| F482BL080.1944 | 88,9           | 1        | 4800     | 4,8      |
| F482BL100.1944 | 114,3          | 1        | 7000     | 7,0      |
| F482BL125.1944 | 139,7*         | 1        | 9000     | 8,5      |
| F482BL150.1944 | 168,3          | 1        | 11500    | 11,5     |
| F482BL200.1944 | 219,1          | 1        | 15600    | 15,6     |
| F482BL250.1944 | 273            | 1        | 29000    | 29,0     |
| F482BL300.1944 | 323,9          | 1        | 36000    | 36,0     |

\*Metric groove standard

# ACTUATORS FOR BUTTERFLY VALVES

## CUTTER-AQ

Electric actuator



Supply voltage: 85-260VAC/24VDC, 230VAC or 24VDC  
 ISO 5211 connection  
 Enclosure protection: IP68  
 Travel time for 90°: 12" to 80" (depending on model)  
 Auxiliary microswitches: 2  
 3 point control  
 Manual override



CE

| Vir Code                          | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-----------------------------------|----------------|----------|----------|----------|
| <b>85-260VAC or 24VDC version</b> |                |          |          |          |
| KACUTAQ00.800                     | -              | 1        | 2500     | 2,5      |
| KACUTAQ01.800                     | -              | 1        | 2500     | 2,5      |
| KACUTAQ02.800                     | -              | 1        | 3000     | 3,0      |
| <b>230VAC version</b>             |                |          |          |          |
| KACUTAQ03.800                     | -              | 1        | 10000    | 10,0     |
| KACUTAQ04.800                     | -              | 1        | 10000    | 10,0     |
| KACUTAQ06.800                     | -              | 1        | 15000    | 15,0     |
| KACUTAQ07.800                     | -              | 1        | 15000    | 15,0     |
| KACUTAQ11.800                     | -              | 1        | 18000    | 18,0     |
| KACUTAQ12.800                     | -              | 1        | 48000    | 48,0     |
| KACUTAQ13.800                     | -              | 1        | 58000    | 58,0     |
| <b>24VDC version</b>              |                |          |          |          |
| KACUTAQ08.800                     | -              | 1        | 10000    | 10,0     |
| KACUTAQ09.800                     | -              | 1        | 10000    | 10,0     |
| KACUTAQ10.800                     | -              | 1        | 15000    | 15,0     |

Modulating version with 4-20mA control and 4-20mA position transmitter on request

| Vir code                          | Fig. 4020, 4025, 4029, 402W<br>Fig. 4320, 4325, 4329, 432W | Fig. 4520<br>Fig. 4620 |
|-----------------------------------|--|------------------------|
| <b>85-260VAC or 24VDC version</b> |  |                        |
| KACUTAQ00.800                     | DN032/DN040  | -                      |
| KACUTAQ01.800                     | DN050/DN080  | -                      |
| KACUTAQ02.800                     | DN100  | DN050/DN080            |
| <b>230VAC version</b>             |  |                        |
| KACUTAQ03.800                     | DN125  | DN100                  |
| KACUTAQ04.800                     | DN150  | DN125                  |
| KACUTAQ06.800                     | DN200  | DN150                  |
| KACUTAQ07.800                     | DN250  | DN200                  |
| KACUTAQ11.800                     | DN300/DN350  | -                      |
| KACUTAQ12.800                     | DN400/DN450  | -                      |
| KACUTAQ13.800                     | DN500/DN600  | -                      |
| <b>24VDC version</b>              |  |                        |
| KACUTAQ08.800                     | DN125  | DN100                  |
| KACUTAQ09.800                     | DN150  | DN125                  |
| KACUTAQ10.800                     | DN200  | DN150                  |

# ACTUATORS FOR BUTTERFLY VALVES

## HOVERCRAFT Aluminum pneumatic actuator



Anodized aluminum body  
 ISO 5211 connection  
 Nickel plated steel pinion  
 Flange, end cap and pistons in die cast aluminum  
 Air supply: 1 to 10 bar  
 Double acting or spring return versions available



| Vir Code                     | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|------------------------------|----------------|----------|----------|----------|
| <b>Double acting version</b> |                |          |          |          |
| KAHOVER15.801                | -              | 1        | 1830     | 1,8      |
| KAHOVER16.801                | -              | 1        | 2350     | 2,4      |
| KAHOVER17.801                | -              | 1        | 2870     | 2,9      |
| KAHOVER18.801                | -              | 1        | 4000     | 4,0      |
| KAHOVER19.801                | -              | 1        | 4840     | 4,8      |
| KAHOVER21.801                | -              | 1        | 9030     | 9,0      |
| KAHOVER22.801                | -              | 1        | 12460    | 12,5     |
| KAHOVER23.801                | -              | 1        | 17800    | 17,8     |
| KAHOVER24.801                | -              | 1        | 22180    | 22,2     |
| KAHOVER25.801                | -              | 1        | 36300    | 36,3     |
| KAHOVER26.801                | -              | 1        | 42800    | 42,8     |
| KAHOVER27.801                | -              | 1        | 66800    | 66,8     |

|                              |   |   |       |      |
|------------------------------|---|---|-------|------|
| <b>Spring return version</b> |   |   |       |      |
| KAHOVER29.801                | - | 1 | 2590  | 2,6  |
| KAHOVER30.801                | - | 1 | 3250  | 3,3  |
| KAHOVER31.801                | - | 1 | 4520  | 4,5  |
| KAHOVER32.801                | - | 1 | 5570  | 5,6  |
| KAHOVER34.801                | - | 1 | 10710 | 10,7 |
| KAHOVER35.801                | - | 1 | 15020 | 15,0 |
| KAHOVER36.801                | - | 1 | 22630 | 22,6 |
| KAHOVER37.801                | - | 1 | 27000 | 27,0 |
| KAHOVER38.801                | - | 1 | 45900 | 45,9 |
| KAHOVER39.801                | - | 1 | 52400 | 52,4 |
| KAHOVER40.801                | - | 1 | 82960 | 83,0 |

| Vir code                     | Fig. 4020, 4025, 4029, 402W<br>Fig. 4320, 4325, 4329, 432W | Fig. 4520<br>Fig. 4620 |
|------------------------------|--|------------------------|
| <b>Double acting version</b> |  |                        |
| KAHOVER15.801                | DN032/DN080  | DN050                  |
| KAHOVER16.801                | -  | DN065                  |
| KAHOVER17.801                | DN100  | DN080                  |
| KAHOVER18.801                | DN125  | DN100                  |
| KAHOVER19.801                | DN150  | DN125                  |
| KAHOVER21.801                | DN200  | DN150                  |
| KAHOVER22.801                | -  | DN200                  |
| KAHOVER23.801                | DN250  | -                      |
| KAHOVER24.801                | DN300/DN350  | DN250                  |
| KAHOVER25.801                | DN400  | DN300                  |
| KAHOVER26.801                | DN450  | -                      |
| KAHOVER27.801                | DN500  | -                      |
| <b>Spring return version</b> |  |                        |
| KAHOVER29.801                | DN032/DN050  | -                      |
| KAHOVER30.801                | DN065  | -                      |
| KAHOVER31.801                | DN080  | DN050                  |
| KAHOVER32.801                | DN100  | DN065/DN080            |
| KAHOVER34.801                | DN125  | DN100                  |
| KAHOVER35.801                | DN150  | DN125                  |
| KAHOVER36.801                | DN200  | -                      |
| KAHOVER37.801                | -  | DN150                  |
| KAHOVER38.801                | DN250  | DN200                  |
| KAHOVER39.801                | DN300  | -                      |
| KAHOVER40.801                | DN350/DN400  | -                      |



*flowing ideas*

# ACCESSORIES FOR PNEUMATIC ACTUATOR

## Limit switch box for pneumatic actuator



NAMUR connection for actuator  
Body in technopolymer  
Enclosure protection: IP65  
1NO/1NC open switch + 1NO/1NC close switch



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| KA0FX00A2.801 | -              | 1        | 230      | 0,2      |

For all Hovercraft actuators

CE

## Solenoid valve for pneumatic actuator



NAMUR connection for actuator  
Body in technopolymer  
Enclosure protection: IP65  
Convertible monostable  
Supply fluid pressures: 2,5bar to 10bar



| Vir Code              | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-----------------------|----------------|----------|----------|----------|
| <b>230VAC version</b> |                |          |          |          |
| KA0010ZB2.801         | -              | 1        | 170      | 0,2      |
| <b>24VAC version</b>  |                |          |          |          |
| KA0080ZB2.801         | -              | 1        | 170      | 0,2      |
| <b>24VDC version</b>  |                |          |          |          |
| KA0030ZB2.801         | -              | 1        | 170      | 0,2      |
| <b>10VAC version</b>  |                |          |          |          |
| KA0020ZB2.801         | -              | 1        | 170      | 0,2      |

For all Hovercraft actuators

CE

## Electro pneumatic positioner for pneumatic actuator



NAMUR connection for actuator  
Cast aluminum body  
Enclosure protection IP66  
Supply voltage 10-30 VDC  
Input and output control signal: 4-20 mA  
Allowable supply fluid pressures from 1,4bar to 7bar



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| KAPEY0100.2553 | -              | 1        | 2100     | 2,1      |



# ACCESSORIES & SPARE PARTS FOR BUTTERFLY VALVES

## Levers for butterfly valves



Cast iron version



Aluminum version

Available in cast iron or aluminium  
ISO 5211 connection  
Available with black coating

| Vir Code         | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|------------------|----------------|----------|----------|----------|
| <b>Cast iron</b> |                |          |          |          |
| KXM4PAA00.932    | 032 / 080      | 1        | 900      | 0,9      |
| KXM4PAB00.932    | 100            | 1        | 900      | 0,9      |
| KXM4PAC00.932    | 125 / 150      | 1        | 900      | 0,9      |
| KXM4PAD00.932    | 200            | 1        | 2000     | 2,0      |
| KXM4PAE00.932    | 250            | 1        | 2000     | 2,0      |
| KXM4PAF00.932    | 300            | 1        | 2000     | 2,0      |
| <b>Aluminium</b> |                |          |          |          |
| KXM4PCA00.1525   | 032 / 080      | 1        | 400      | 0,4      |
| KXM4PCB00.1525   | 100            | 1        | 400      | 0,4      |
| KXM4PCC00.1525   | 125 / 150      | 1        | 400      | 0,4      |
| KXM4PCD00.1525   | 200            | 1        | 400      | 0,4      |
| KXM4PCE00.1525   | 250            | 1        | 600      | 0,6      |
| KXM4PCF00.1525   | 300            | 1        | 600      | 0,6      |

For all items except 4820L

## Gears for butterfly valves



Cast iron gears  
ISO 5211 connection

| Vir Code                | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------|----------------|----------|----------|----------|
| KXV4PAA00.932           | 032 / 080      | 1        | 3800     | 3,8      |
| KXV4PAB00.932           | 100            | 1        | 5000     | 5,0      |
| KXV4PAC00.932           | 125 / 150      | 1        | 3800     | 3,8      |
| KXV4PAD00.932           | 200            | 1        | 9900     | 9,9      |
| KXV4PAE00.932           | 250            | 1        | 8800     | 8,8      |
| KXV4PAF00.932           | 300 / 350      | 1        | 15000    | 15,0     |
| KXV4PAG00.932           | 400 / 450      | 1        | 36000    | 36,0     |
| <b>Chain drive gear</b> |                |          |          |          |
| KXV4PHA00.3321          | 032 / 150      | 1        | 5800     | 5,8      |
| KXV4PHB00.3321          | 200 / 250      | 1        | 10500    | 10,5     |
| KXV4PHC00.3321          | 300 / 350      | 1        | 12300    | 12,3     |
| KXV4PHD00.3321          | 400 / 600      | 1        | 29100    | 29,1     |

Spare pin for handwheel-stem connection:  
KVR4PGA00.3320 - DN32 / DN150  
KVR4PGD00.3320 - DN200 / DN350

For all items except 4820L

## Gear with limit switches



Aluminum gear with limit switches  
 Connection for valve according ISO 5211  
 1 open and 1 close limit switch  
 Enclosure protection: IP65



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| KXV4PEA00.2933 | 032 / 080      | 1        | 5500     | 5,5      |
| KXV4PEB00.2933 | 100            | 1        | 5500     | 5,5      |
| KXV4PEC00.2933 | 125 / 150      | 1        | 5500     | 5,5      |
| KXV4PED00.2933 | 200            | 1        | 8000     | 8,0      |
| KXV4PEE00.2933 | 250            | 1        | 8000     | 8,0      |
| KXV4PEF00.2933 | 300 / 350      | 1        | 10500    | 10,5     |

CE

For all items except 4820L

## Limit switch for butterfly valves with lever



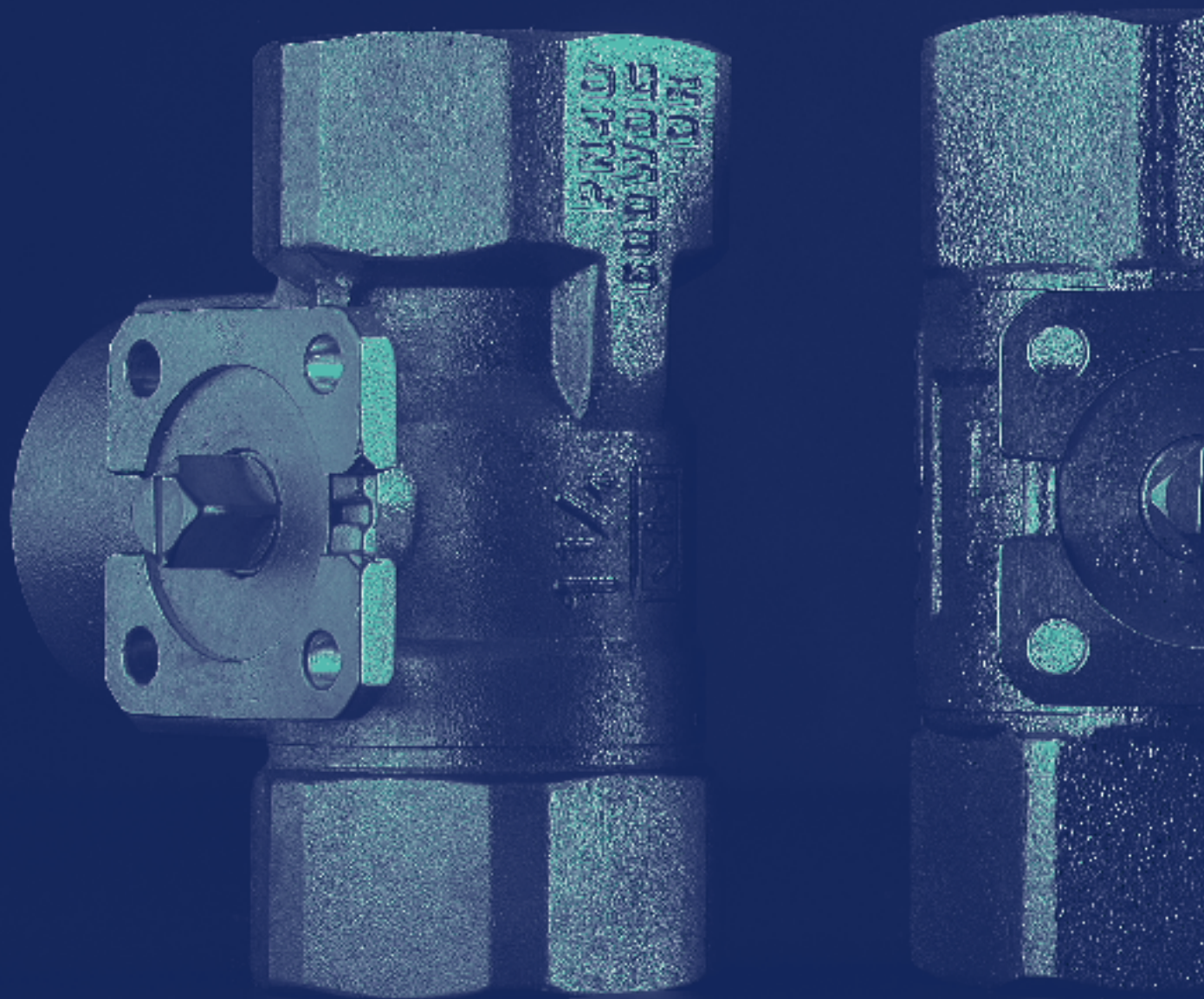
Limit switch for butterfly valves with lever  
 Enclosure protection: IP65  
 Supplied with mounting pad for flange ISO 5211 F05/F07  
 Suitable for mounting on open or closed position  
 Mounting screws included

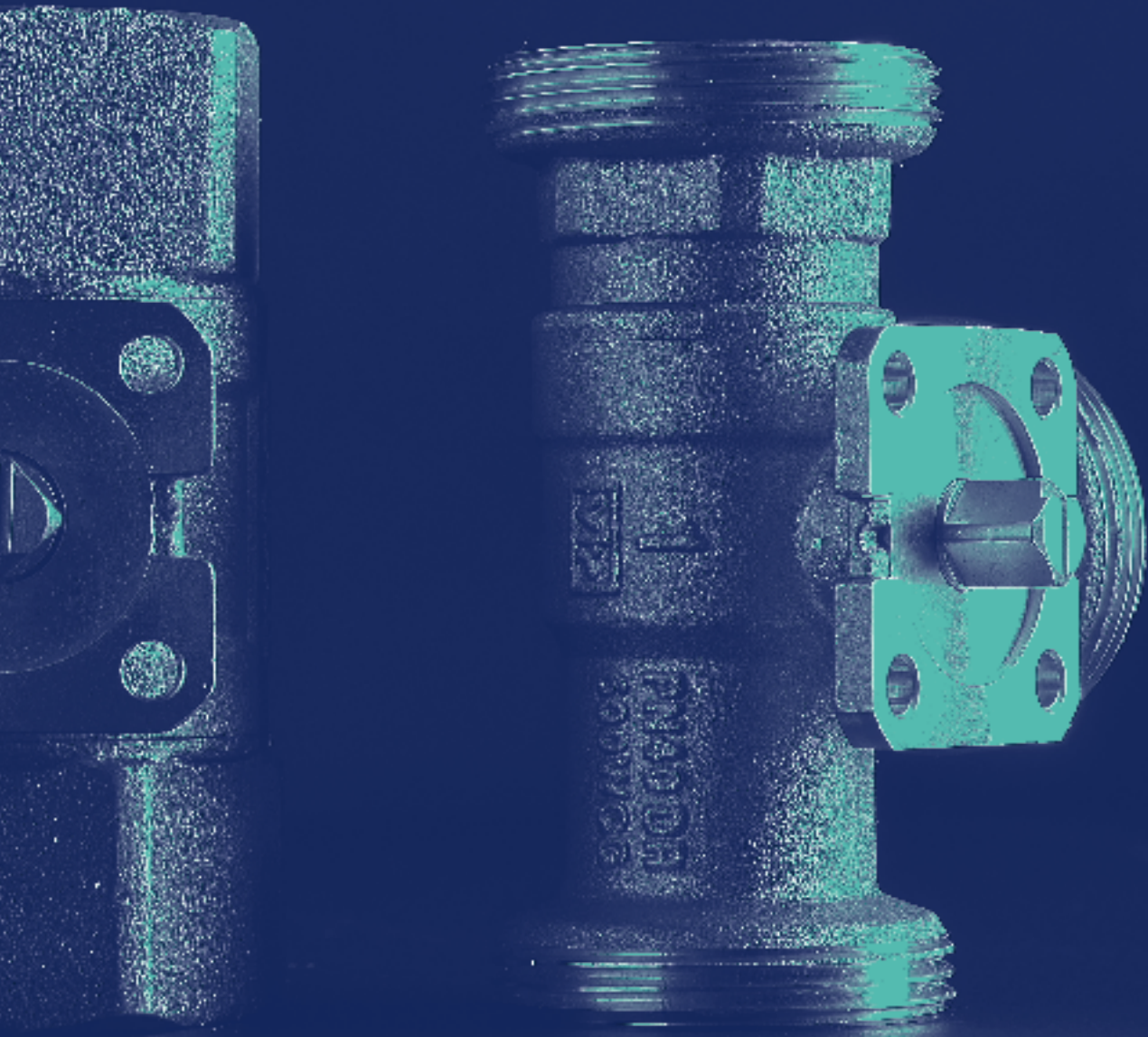


| Vir Code                           | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|------------------------------------|----------------|----------|----------|----------|
| <b>Version for cast iron lever</b> |                |          |          |          |
| KSC4PEA00.1612                     | 032 - 150      | 1        | 132      | 0,1      |
| <b>Version for aluminium lever</b> |                |          |          |          |
| KSC4PEA01.1612                     | 032 - 300      | 1        | 80       | 0,1      |

CE

For all items except 4820L





## REGULATING and CONTROL

# REGULATING BALL VALVES

**980S**

DZR brass 2-way regulation valve

**PN16**



Threaded F/F  
DZR brass body, flange, ball and stem  
Chrome-plated ball, blow-out proof stem, equal percentage char.  
PTFE Seats, EPDM Perox O-rings  
Actuator connection according ISO 5211 F04- □9mm  
Working conditions: Water, -10°C to +130°C  
Shell PN40, max differential pressure 3,5bar



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F980Ss015.1861 | 015 - 1/2"     | 36       | 272      | 9,8      |
| F980Ss020.1861 | 020 - 3/4"     | 36       | 303      | 10,9     |
| F980Ss025.1861 | 025 - 1"       | 18       | 452      | 8,1      |
| F980Ss032.1861 | 032 - 1 1/4"   | 18       | 689      | 12,4     |
| F980Ss040.1861 | 040 - 1 1/2"   | 13       | 1114     | 14,5     |
| F980Ss050.1861 | 050 - 2"       | 13       | 1748     | 22,7     |

Kv100%, DN15: 10 (s=0), 6,3 (s=1), 4,0 (s=2), 2,5 (s=3), 1,6 (s=4), 1,0 (s=5), 0,63 (s=6), 0,4 (s=7), 0,25 (s=8)  
Kv100%, DN20: 10 (s=0), 6,3 (s=1), 4,0 (s=2)  
Kv100%, DN25: 16 (s=0), 10 (s=1), 6,3 (s=2)  
Kv100%, DN32: 25 (s=0), 16 (s=1), 10 (s=2)  
Kv100%, DN40: 40 (s=0), 25 (s=1), 16 (s=2)  
Kv100%, DN50: 63 (s=0), 40 (s=1), 25 (s=2)



**980T**

DZR brass 3-way regulation valve

**PN16**



Threaded F/F/F (ISO 7/1 Rp)  
DZR brass body, flange, ball and stem  
Chrome-plated ball, blow-out proof stem, equal percentage char.  
PTFE Seats, EPDM Perox O-rings  
Actuator connection according ISO 5211 F04- □9mm  
Working conditions: Water, -10°C to +130°C  
Shell PN40, max differential pressure 3,5bar



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F980Ts015.1861 | 015 - 1/2"     | 36       | 306      | 11,1     |
| F980Ts020.1861 | 020 - 3/4"     | 36       | 375      | 13,5     |
| F980Ts025.1861 | 025 - 1"       | 18       | 604      | 10,9     |
| F980Ts032.1861 | 032 - 1 1/4"   | 13       | 971      | 12,6     |
| F980Ts040.1861 | 040 - 1 1/2"   | 13       | 1364     | 17,7     |
| F980Ts050.1861 | 050 - 2"       | 3        | 2266     | 6,8      |

Kv100%, DN15: 6,3 (s=1), 4,0 (s=2), 2,5 (s=3), 1,6 (s=4)  
Kv100%, DN20: 6,3 (s=1), 4,0 (s=2)  
Kv100%, DN25: 10 (s=1)  
Kv100%, DN32: 16 (s=1)  
Kv100%, DN40: 25 (s=1)  
Kv100%, DN50: 63 (s=0), 40 (s=1)



**988S**

DZR brass 2-way regulation valve

**PN16**



Threaded M/M (ISO 228/1 for unions)  
DZR brass body, flange, ball and stem  
Chrome-plated ball, blow-out proof stem, equal percentage char.  
PTFE Seats, EPDM Perox O-rings  
Actuator connection according ISO 5211 F04- □9mm  
Working conditions: Water, -10°C to +130°C  
Shell PN40, max differential pressure 3,5bar



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F988Ss015.2599 | 015 - 1/2"     | 18       | 358      | 6,4      |
| F988Ss020.2599 | 020 - 3/4"     | 18       | 438      | 7,9      |
| F988Ss025.2599 | 025 - 1"       | 18       | 524      | 9,4      |
| F988Ss032.2599 | 032 - 1 1/4"   | 13       | 839      | 10,9     |
| F988Ss040.2599 | 040 - 1 1/2"   | 13       | 1307     | 17,0     |
| F988Ss050.2599 | 050 - 2"       | 6        | 2025     | 12,2     |

Kv100%, DN15: 6,3 (s=0), 4,0 (s=2), 2,5 (s=3), 1,6 (s=4), 1,0 (s=5)  
Kv100%, DN20: 10 (s=0), 6,3 (s=1), 4,0 (s=2)  
Kv100%, DN25: 16 (s=0), 10 (s=1), 6,3 (s=2)  
Kv100%, DN32: 25 (s=0), 16 (s=1), 10 (s=2)  
Kv100%, DN40: 40 (s=0), 25 (s=1), 16 (s=2)  
Kv100%, DN50: 63 (s=0), 40 (s=1), 25 (s=2)



988T

DZR brass 3-way regulation valve

PN16



Threaded M/M/M (ISO 228/1 for unions)  
 DZR brass body, flange, ball and stem  
 Chrome-plated ball, blow-out proof stem, equal percentage char.  
 PTFE Seats, EPDM Perox O-rings  
 Actuator connection according ISO 5211 F04- □9mm  
 Working conditions: Water, -10°C to +130°C  
 Shell PN40, max differential pressure 3,5bar



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F988Ts015.2599 | 015 - 1/2"     | 18       | 438      | 7,9      |
| F988Ts020.2599 | 020 - 3/4"     | 18       | 528      | 9,5      |
| F988Ts025.2599 | 025 - 1"       | 13       | 748      | 9,7      |
| F988Ts032.2599 | 032 - 1 1/4"   | 6        | 1206     | 7,2      |
| F988Ts040.2599 | 040 - 1 1/2"   | 6        | 1867     | 11,2     |
| F988Ts050.2599 | 050 - 2"       | 3        | 2792     | 8,4      |

Kv100%, DN15: 6,3 (s=0), 4,0 (s=2), 2,5 (s=3), 1,6 (s=4)  
 Kv100%, DN20: 6,3 (s=1), 4,0 (s=2)  
 Kv100%, DN25: 10 (s=1)  
 Kv100%, DN32: 16 (s=1)  
 Kv100%, DN40: 25 (s=1)  
 Kv100%, DN50: 40 (s=1)



AM-980

Electric actuator



Supply voltage: 24V AC/DC or 230VAC  
 ISO 5211 F04- □9mm connection  
 Enclosure protection: IP54  
 Travel time for 90°: 30" to 120"  
 2/3 points control versions or 0-10V versions  
 Manual override



| Vir Code  | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---|----------------|----------|----------|----------|
| <b>230VAC version, travel 120", 2/3 points control</b>            |                |          |          |          |
| KAM15F120.800   | 015 - 050      | 1        | 700      | 0,7      |
| <b>24VAC version, travel 120", 2/3 points control</b>             |                |          |          |          |
| KAM15F122.800   | 015 - 050      | 1        | 700      | 0,7      |
| <b>24V AC/DC version, adj. travel 35"/60"/120", 0-10V control</b> |                |          |          |          |
| KAM15S132.800   | 015 - 050      | 1        | 700      | 0,7      |



AM-980L

Electric actuator



Supply voltage: 24V AC/DC or 230VAC  
 ISO 5211 F04 - □9mm fast connection  
 Enclosure protection: da IP44 a IP54  
 Travel time for 90°: 5" to 30"  
 2 points, 3 points or 0-10V control versions  
 Integrated manual override



| Vir Code  | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---|----------------|----------|----------|----------|
| <b>230VAC version, travel 30", 2 points control</b>                       |                |          |          |          |
| KAM980L00.800   | 015 - 050      | 1        | 505      | 0,5      |
| <b>230VAC version, travel 30", 2 points control, 1 auxiliary switch</b>   |                |          |          |          |
| KAM980L01.800   | 015 - 050      | 1        | 505      | 0,5      |
| <b>24VAC version , travel 30", 2 points control</b>                       |                |          |          |          |
| KAM980L02.800   | 015 - 050      | 1        | 505      | 0,5      |
| <b>24VAC version , travel 30", 2 points control, 1 auxiliary switch</b>   |                |          |          |          |
| KAM980L03.800   | 015 - 050      | 1        | 505      | 0,5      |
| <b>24VDC version , travel 30", 2/3 points control, 1 auxiliary switch</b> |                |          |          |          |
| KAM980L04.800   | 015 - 050      | 1        | 505      | 0,5      |
| <b>24V AC/DC version, 0-10V control, 1 auxiliary switch</b>               |                |          |          |          |
| KAM980L05.800   | 015 - 050      | 1        | 505      | 0,5      |

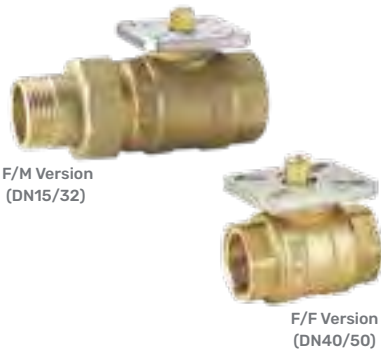


# BALL VALVES FOR ACTUATORS

325

2-way brass valve with flange for actuator

PN16



Threaded F/M with union (ISO 228/1) up to DN32 included  
 Threaded F/F (ISO 228/1) for DN40 and DN50  
 Chrome-plated ball, blow-out proof stem  
 Ball and stem in brass, ISO 5211 F03-F05 adapter in aluminum  
 PTFE Seats, EPDM Perox O-rings  
 Working conditions: Water, -15°C to +110°C  
 Shell PN40, max differential pressure 3,5bar



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F325I0015.829 | 015 - 1/2"     | 18       | 384      | 6,9      |
| F325I0020.829 | 020 - 3/4"     | 18       | 536      | 9,6      |
| F325I0025.829 | 025 - 1"       | 8        | 804      | 6,4      |
| F325I0032.829 | 032 - 1 1/4"   | 8        | 1202     | 9,6      |
| F325I0040.828 | 040 - 1 1/2"   | 4        | 1297     | 5,2      |
| F325I0050.828 | 050 - 2"       | 4        | 2098     | 8,4      |

Available F/F version (F325I0mis.3166) for DN15 - DN32

ERC

32T

3-way brass valve with flange for actuator

PN16

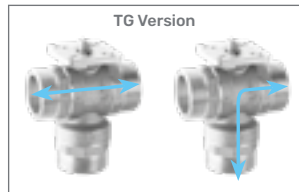
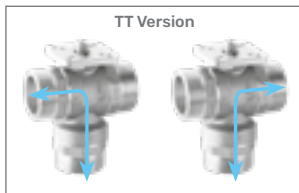


Threaded M/M/M (ISO 228/1) up to DN32 included  
 Threaded F/F/F (ISO 228/1) for DN40 and DN50  
 Chrome-plated ball, blow-out proof stem  
 Ball and stem in brass, ISO 5211 F03-F05 adapter in aluminum  
 PTFE Seats, EPDM Perox O-rings  
 Working conditions: Water, -15°C to +110°C  
 Shell PN40, max differential pressure 3,5bar



| Vir Code  | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---|----------------|----------|----------|----------|
| <b>Fig. 32TT</b>                                    |                |          |          |          |
| F32TTI020.831                                       | 020 - 3/4"     | 8        | 570      | 4,6      |
| F32TTI025.831                                       | 025 - 1"       | 8        | 862      | 6,9      |
| F32TTI032.831                                       | 032 - 1 1/4"   | 8        | 1312     | 10,5     |
| F32TTI040.911                                       | 040 - 1 1/2"   | 4        | 1834     | 7,3      |
| F32TTI050.911                                       | 050 - 2"       | 4        | 3099     | 12,4     |
| <b>Fig. 32TG</b>                                    |                |          |          |          |
| F32TGI020.831                                       | 020 - 3/4"     | 8        | 550      | 4,4      |
| F32TGI025.831                                       | 025 - 1"       | 8        | 819      | 6,6      |
| F32TGI032.831                                       | 032 - 1 1/4"   | 8        | 1236     | 9,9      |
| F32TGI040.911                                       | 040 - 1 1/2"   | 4        | 1758     | 7,0      |
| F32TGI050.911                                       | 050 - 2"       | 4        | 2892     | 11,6     |
| <b>Kit of unions and nuts (provided separately)</b> |                |          |          |          |
| KBC34B020.2897*                                     | 020 - 3/4"     | 1        | 324      | 0,3      |
| KBC34B025.2897                                      | 025 - 1"       | 1        | 549      | 0,5      |
| KBC34B032.2897                                      | 032 - 1 1/4"   | 1        | 705      | 0,7      |

\* version available with reduced 1/2" union, threaded M ISO 7/1 R (KBC91V015.3400)



ERC

## SLOOP II

Electric actuator 15Nm



Supply voltage: 230 VAC or 24 VAC  
 F05 flange, □9mm or □11mm stem connections  
 Enclosure protection: IP65  
 Travel time for 90°: 60"  
 2 or 3 points control  
 With aux. open switch or open/close switches connected to supply  
 Manual override



CE

| Vir Code  | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---|----------------|----------|----------|----------|
| <b>230VAC version, 2 points control, 1 auxiliary switch</b>                         |                |          |          |          |
| KASLOOP24.800   | up to DN050    | 5        | 800      | 4,0      |
| <b>230VAC version, 2 points control, open/close switches connected to supply</b>    |                |          |          |          |
| KASLOOP32.800   | up to DN050    | 5        | 610      | 3,1      |
| <b>230VAC version, 3 points control, 1 auxiliary switch</b>                         |                |          |          |          |
| KASLOOP28.800   | un to DN050    | 5        | 800      | 4,0      |
| KASLOOP35.800 (variant of KASLOOP24.800) 10" and 6Nm (up to DN32) alternative       |                |          |          |          |
| <b>24VAC version, 2 points control, 1 auxiliary switch</b>                          |                |          |          |          |
| KASLOOP22.800   | up to DN050    | 5        | 800      | 4,0      |
| <b>24VAC version, 2 points control, open/close switches connected to supply</b>     |                |          |          |          |
| KASLOOP33.800   | up to DN050    | 5        | 610      | 3,1      |
| <b>24VAC version, 3 points control, 1 auxiliary switch</b>                          |                |          |          |          |
| KASLOOP25.800   | up to DN050    | 5        | 800      | 4,0      |
| <b>230VAC version, 2 points control, 1 auxiliary switch + thermal break on stem</b> |                |          |          |          |
| KASLOOP34.800   | up to DN050    | 5        | 800      | 4,0      |

Suitable for 325, 32TT and 32TG valves

## 39BVF

Stainless steel ball valve with flange

PN40



Threaded F/F (ISO 7/1 Rp)  
 SS316 stainless steel body and ball, blow-out proof stem  
 PTFE seat rings and gaskets  
 Actuator connection according to ISO 5211  
 Working conditions: Water, -20°C to +180°C  
 PN64 for DN≤50 (max 64bar up to 85°C, max 20bar above)  
 PN50 for DN≥65 (max 50bar up to 85°C, max 10bar above)



EAC

| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F39BVF008.1677 | 008 - 1/4"     | 1        | 300      | 0,3      |
| F39BVF010.1677 | 010 - 3/8"     | 1        | 300      | 0,3      |
| F39BVF015.1677 | 015 - 1/2"     | 1        | 400      | 0,4      |
| F39BVF020.1677 | 020 - 3/4"     | 1        | 600      | 0,6      |
| F39BVF025.1677 | 025 - 1"       | 1        | 900      | 0,9      |
| F39BVF032.1677 | 032 - 1 1/4"   | 1        | 1400     | 1,4      |
| F39BVF040.1677 | 040 - 1 1/2"   | 1        | 2200     | 2,2      |
| F39BVF050.1677 | 050 - 2"       | 1        | 3500     | 3,5      |
| F39BVF065.1677 | 065 - 2 1/2"   | 1        | 6900     | 6,9      |
| F39BVF080.1677 | 080 - 3"       | 1        | 10900    | 10,9     |
| F39BVF100.1677 | 100 - 4"       | 1        | 23000    | 23,0     |



# BALL VALVES FOR ACTUATORS

## CUTTER-AQ

Electric actuator



Supply voltage: 85-260VAC/24VDC, 230VAC or 24VDC  
 ISO 5211 connection  
 Enclosure protection: IP68  
 Travel time for 90°: from 12" to 80" (depending on model)  
 Auxiliary switches: 2  
 3 points control  
 Manual override



| Vir Code                         | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------------------------|----------------|----------|----------|----------|
| <b>85-260VAC / 24VDC version</b> |                |          |          |          |
| KACUTAQ00.800                    | up to 025      | 1        | 2500     | 2,5      |
| KACUTAQ01.800                    | 032 - 050      | 1        | 2500     | 2,5      |
| <b>230VAC version</b>            |                |          |          |          |
| KACUTAQ03.800                    | 065 - 080      | 1        | 10000    | 10,0     |
| <b>24VDC version</b>             |                |          |          |          |
| KACUTAQ08.800                    | 065 - 080      | 1        | 10000    | 10,0     |

Suitable for ball valves 39BVF, sized at max dP 6Bar  
 KACUTTR03.800 and KACUTTR00.800 also suitable for 325, 32TT and 32TG



## HOVERCRAFT

Aluminum pneumatic actuator



Anodized aluminum body  
 ISO 5211 connection  
 Nickel plated steel pinion  
 Flange, end cap and pistons in die cast aluminum  
 Air supply: 1 to 10 bar  
 Double acting or spring return versions available



| Vir Code                     | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|------------------------------|----------------|----------|----------|----------|
| <b>Double acting version</b> |                |          |          |          |
| KAHOVER15.801                | up to 050      | 1        | 1830     | 1,8      |
| KAHOVER18.801                | 065 - 080      | 1        | 4000     | 4,0      |
| <b>Spring return version</b> |                |          |          |          |
| KAHOVER29.801                | up to 032      | 1        | 2590     | 2,6      |
| KAHOVER31.801                | 040 - 050      | 1        | 4520     | 4,5      |
| KAHOVER34.801                | 065 - 080      | 1        | 10710    | 10,7     |

Suitable for ball valves 39BVF, sized at max dP 6bar  
 KAHOVER15.800 and KAHOVER29.800 also suitable for 325, 32TT and 32TG

## 325-ENO

2-way brass valve with flange for oenology

PN16



Threaded ends M/M with unions (ISO 228/1) up to DN32 included  
 Threaded ends F/F (ISO 228/1) for DN40 and DN50  
 Chrome-plated ball, nickel-plated body, blow-out proof stem  
 Ball and stem in brass  
 ISO 5211 F03-F05 adapter in coated aluminum  
 PTFE Seats, PEROX EPDM O-ring  
 Working conditions: Water, -15°C to +110°C  
 Shell PN40, max differential pressure 3,5bar



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F325I0015.2565 | 015 - 1/2"     | 18       | 468      | 8,4      |
| F325I0020.2565 | 020 - 3/4"     | 18       | 670      | 12,1     |
| F325I0025.2565 | 025 - 1"       | 8        | 924      | 7,4      |
| F325I0032.2565 | 032 - 1 1/4"   | 8        | 1467     | 11,7     |
| F325I0040.2354 | 040 - 1 1/2"   | 4        | 1297     | 5,2      |
| F325I0050.2354 | 050 - 2"       | 4        | 2098     | 8,4      |



## CUTTER-ENO Electric actuator for oenology



Supply voltage: 24 VAC  
 F05 flange,  $\varnothing$ 9mm stem connection  
 Enclosure protection: IP67  
 Travel time for 90°: 50"  
 2 or 3 points control  
 With auxiliary open and close limit switches  
 Manual override



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| KACUTEN00.800 | DN15-DN50      | 1        | 1160     | 1,2      |

### Stainless steel stem extension kit, length 40mm

|                |           |   |     |     |
|----------------|-----------|---|-----|-----|
| KPR3MV015.2634 | DN15-DN50 | 1 | 288 | 0,3 |
|----------------|-----------|---|-----|-----|

### Stainless steel stem extension kit, length 70mm

|                |           |   |     |     |
|----------------|-----------|---|-----|-----|
| KPR3MV015.2823 | DN15-DN50 | 1 | 482 | 0,5 |
|----------------|-----------|---|-----|-----|

CE

Suitable for 325-ENO valves

## 980F DZR brass 2-way ON/OFF valve

PN16



Threaded F/F (ISO 7/1 Rp)  
 DZR brass body, flange, ball and stem  
 Chrome-plated ball, blow-out proof stem  
 PTFE Seats, EPDM Perox O-rings  
 Actuator connection according ISO 5211 F04-  $\varnothing$ 9mm  
 Working conditions: Water, -10°C to +130°C  
 Shell PN40, max differential pressure 3,5bar



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F980F0015.2390 | 015 - 1/2"     | 36       | 275      | 9,9      |
| F980F0020.2390 | 020 - 3/4"     | 36       | 360      | 13,0     |
| F980F0025.2390 | 025 - 1"       | 18       | 465      | 8,4      |
| F980F0032.2390 | 032 - 1 1/4"   | 18       | 690      | 12,4     |
| F980F0040.2390 | 040 - 1 1/2"   | 13       | 1120     | 14,6     |
| F980F0050.2390 | 050 - 2"       | 13       | 1750     | 22,8     |

EAC

## 980FT, 980FL DZR brass 3-way ON/OFF valve

PN16



Threaded F/F/F (ISO 7/1 Rp)  
 DZR brass body, flange, ball and stem  
 Chrome-plated ball, blow-out proof stem  
 PTFE Seats, EPDM Perox O-rings  
 Actuator connection according ISO 5211 F04-  $\varnothing$ 9mm  
 Working conditions: Water, -10°C to +130°C  
 Shell PN40, max differential pressure 3,5bar



| Vir Code          | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------|----------------|----------|----------|----------|
| <b>Fig. 980FT</b> |                |          |          |          |
| F980FT015.2390    | 015 - 1/2"     | 36       | 310      | 11,2     |
| F980FT020.2390    | 020 - 3/4"     | 18       | 730      | 13,1     |
| F980FT025.2390    | 025 - 1"       | 18       | 640      | 11,5     |
| F980FT032.2390    | 032 - 1 1/4"   | 13       | 960      | 12,5     |
| F980FT040.2390    | 040 - 1 1/2"   | 13       | 1390     | 18,1     |
| F980FT050.2390    | 050 - 2"       | 3        | 2280     | 6,8      |
| <b>Fig. 980FL</b> |                |          |          |          |
| F980FL015.2390    | 015 - 1/2"     | 36       | 320      | 11,5     |
| F980FL020.2390    | 020 - 3/4"     | 18       | 745      | 13,4     |
| F980FL025.2390    | 025 - 1"       | 18       | 650      | 11,7     |
| F980FL032.2390    | 032 - 1 1/4"   | 13       | 985      | 12,8     |
| F980FL040.2390    | 040 - 1 1/2"   | 13       | 1425     | 18,5     |
| F980FL050.2390    | 050 - 2"       | 3        | 2360     | 7,1      |

EAC

# BALL VALVES FOR ACTUATORS

**988F**

DZR brass 2-way ON/OFF valve

**PN16**



Threaded M/M (ISO 228/1 for union)  
DZR brass body, flange, ball and stem  
Chrome-plated ball, blow-out proof stem  
PTFE Seats, EPDM Perox O-rings  
Actuator connection according ISO 5211 F04- □9mm  
Working conditions: Water, -10°C to +130°C  
Shell PN40, max differential pressure 3,5bar



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F988F0015.2596 | 015 - 1/2"     | 18       | 362      | 6,5      |
| F988F0020.2596 | 020 - 3/4"     | 18       | 471      | 8,5      |
| F988F0025.2596 | 025 - 1"       | 18       | 529      | 9,5      |
| F988F0032.2596 | 032 - 1 1/4"   | 13       | 198      | 2,6      |
| F988F0040.2596 | 040 - 1 1/2"   | 13       | 1306     | 17,0     |
| F988F0050.2596 | 050 - 2"       | 6        | 2020     | 12,1     |

**ERC**

**988FT, 988FL** DZR brass 3-way ON/OFF valve

**PN16**



Threaded M/M/M (ISO 228/1 for union)  
DZR brass body, flange, ball and stem  
Chrome-plated ball, blow-out proof stem  
PTFE Seats, EPDM Perox O-rings  
Actuator connection according ISO 5211 F04- □9mm  
Working conditions: Water, -10°C to +130°C  
Shell PN40, max differential pressure 3,5bar



| Vir Code          | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------|----------------|----------|----------|----------|
| <b>Fig. 988FT</b> |                |          |          |          |
| F988FT015.2596    | 015 - 1/2"     | 18       | 436      | 7,8      |
| F988FT020.2596    | 020 - 3/4"     | 13       | 670      | 8,7      |
| F988FT025.2596    | 025 - 1"       | 13       | 756      | 9,8      |
| F988FT032.2596    | 032 - 1 1/4"   | 6        | 1250     | 7,5      |
| F988FT040.2596    | 040 - 1 1/2"   | 6        | 1900     | 11,4     |
| F988FT050.2596    | 050 - 2"       | 3        | 2870     | 8,6      |
| <b>Fig. 988FL</b> |                |          |          |          |
| F988FL015.2596    | 015 - 1/2"     | 18       | 445      | 8,0      |
| F988FL020.2596    | 020 - 3/4"     | 13       | 700      | 9,1      |
| F988FL025.2596    | 025 - 1"       | 13       | 770      | 10,0     |
| F988FL032.2596    | 032 - 1 1/4"   | 6        | 1270     | 7,6      |
| F988FL040.2596    | 040 - 1 1/2"   | 6        | 1945     | 11,7     |
| F988FL050.2596    | 050 - 2"       | 3        | 2960     | 8,9      |

**ERC**

## AM-980

Electric actuator



Supply voltage: 24V AC/DC or 230VAC  
ISO 5211 F04 -  $\square$ 9mm connection  
Enclosure protection: IP54  
Travel time for 90°: 120°  
2 or 3 points control  
Manual override



| Vir Code   | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--|----------------|----------|----------|----------|
| <b>230VAC version, travel 120°, 2/3 points control</b> |                |          |          |          |
| KAM15F120.800  | 015 - 050      | 1        | 700      | 0,7      |
| <b>24VAC version, travel 120°, 2/3 points control</b>  |                |          |          |          |
| KAM15F122.800  | 015 - 050      | 1        | 700      | 0,7      |

Suitable for 980F, 980FT, 980FL, 988F, and 988FT (Max dP 3,5Bar) valves



## AM-980L

Electric actuator

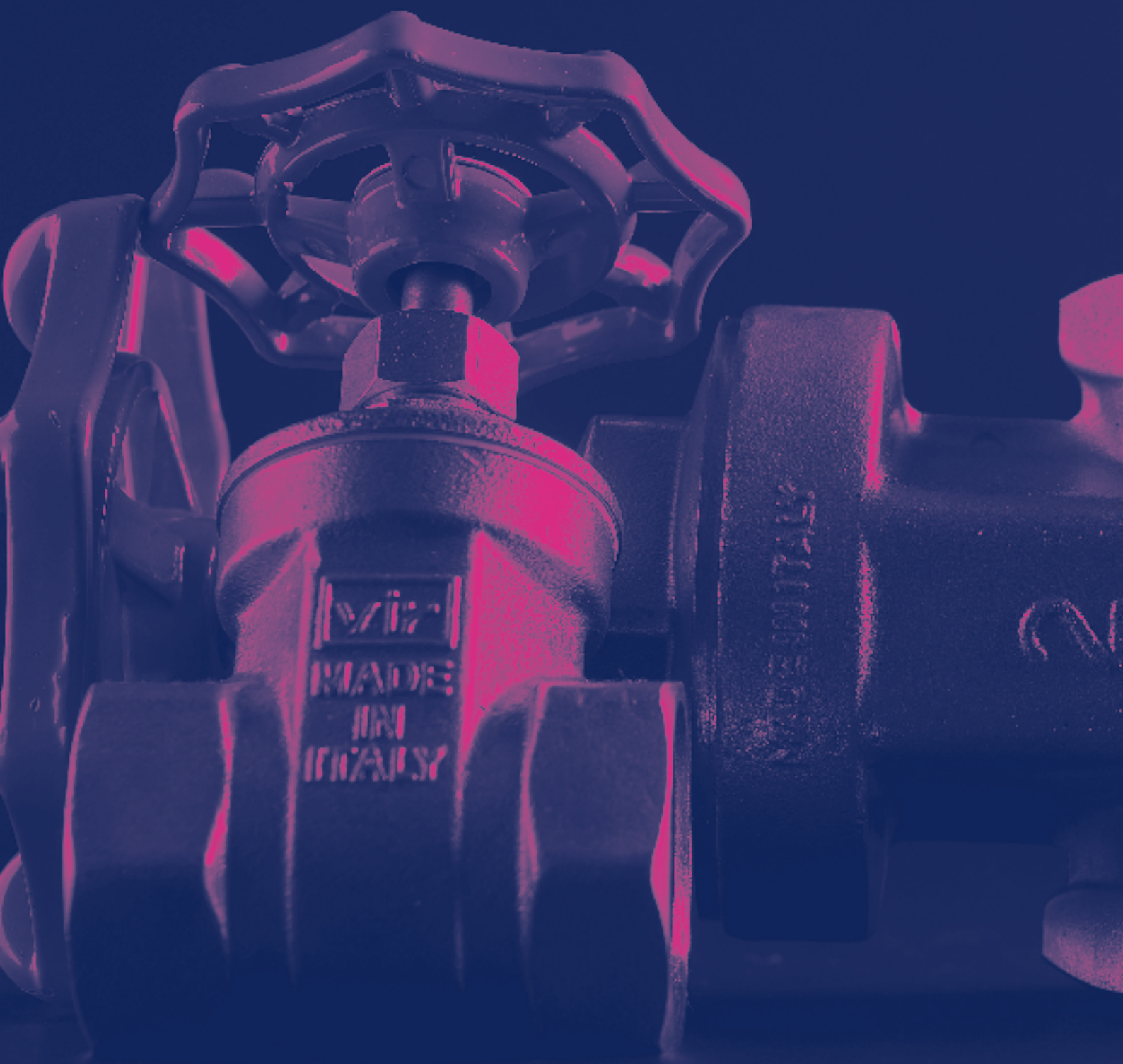


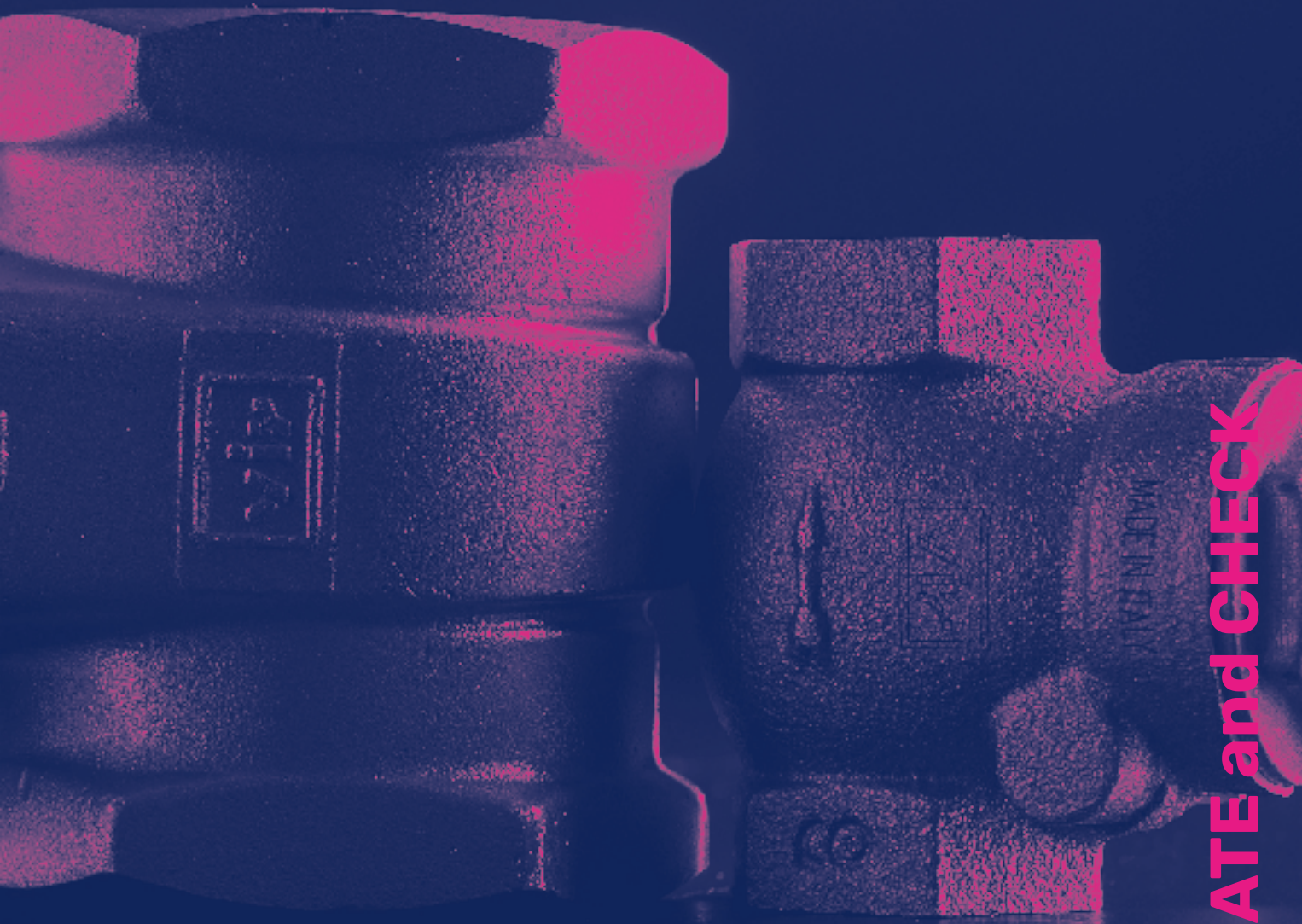
Supply voltage: 24V AC/DC or 230VAC  
ISO 5211 F04 -  $\square$ 9mm fast connection  
Enclosure protection: da IP44 a IP54  
Travel time for 90°: 5° to 30°  
2 points, 3 points or 0-10V control versions  
Integrated manual override



| Vir Code  | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---|----------------|----------|----------|----------|
| <b>230VAC version, travel 30°, 2 points control</b>                       |                |          |          |          |
| KAM980L00.800   | 015 - 050      | 1        | 505      | 0,5      |
| <b>230VAC version, travel 30°, 2 points control, 1 auxiliary switch</b>   |                |          |          |          |
| KAM980L01.800   | 015 - 050      | 1        | 505      | 0,5      |
| <b>24VAC version , travel 30°, 2 points control</b>                       |                |          |          |          |
| KAM980L02.800   | 015 - 050      | 1        | 505      | 0,5      |
| <b>24VAC version , travel 30°, 2 points control, 1 auxiliary switch</b>   |                |          |          |          |
| KAM980L03.800   | 015 - 050      | 1        | 505      | 0,5      |
| <b>24VDC version , travel 30°, 2/3 points control, 1 auxiliary switch</b> |                |          |          |          |
| KAM980L04.800   | 015 - 050      | 1        | 505      | 0,5      |







## | GATE and CHECK

# GATE VALVES

40

Brass gate valve

PN16



Threaded F/F (ISO 228/1)  
 Non rising blow-out proof stem  
 Steel handwheel  
 Stem and wedge in brass  
 Stem gasket in fiber, adjustable packing  
 Working conditions: Water, 0°C to +80°C



ERC



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F040K0015.1872 | 015 - 1/2"     | 48       | 177      | 8,5      |
| F040K0020.1872 | 020 - 3/4"     | 39       | 248      | 9,7      |
| F040K0025.1872 | 025 - 1"       | 36       | 359      | 12,9     |
| F040K0032.1872 | 032 - 1 1/4"   | 27       | 567      | 15,3     |
| F040K0040.1872 | 040 - 1 1/2"   | 10       | 750      | 7,5      |
| F040K0050.1872 | 050 - 2"       | 10       | 1025     | 10,3     |
| F040K0065.1872 | 065 - 2 1/2"   | 10       | 1620     | 16,2     |
| F040K0080.1872 | 080 - 3"       | 8        | 2197     | 17,6     |
| F040K0100.1872 | 100 - 4"       | 4        | 3939     | 15,8     |

56

Brass gate valve

PN20



Threaded F/F (ISO 228/1)  
 Non rising blow-out proof stem  
 Aluminum handwheel  
 Stem and wedge in brass  
 Stem gasket in fiber, adjustable packing  
 Working conditions: Water, 0°C to +150°C (110°C for DN≥65)  
 DN≤50, max 20bar up to 100°C, max 13bar at 150°C  
 DN≥65, max 20bar up to 100°C, max 18bar at 110°C



ERC

| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F056G0015.945 | 015 - 1/2"     | 100      | 248      | 24,8     |
| F056G0020.945 | 020 - 3/4"     | 70       | 364      | 25,5     |
| F056G0025.945 | 025 - 1"       | 50       | 542      | 27,1     |
| F056G0032.945 | 032 - 1 1/4"   | 30       | 770      | 23,1     |
| F056G0040.945 | 040 - 1 1/2"   | 20       | 1071     | 21,4     |
| F056G0050.945 | 050 - 2"       | 10       | 1796     | 18,0     |
| F056G0065.945 | 065 - 2 1/2"   | 6        | 2865     | 17,2     |
| F056G0080.945 | 080 - 3"       | 4        | 3839     | 15,4     |
| F056G0100.945 | 100 - 4"       | 2        | 6960     | 13,9     |

## 90, 90LK

Bronze gate valve

PN16



Threaded F/F (ISO 228/1)  
 Non rising blow-out proof stem  
 With aluminum handwheel (Fig. 90) or lockshield (Fig. 90LK)  
 Bronze bonnet, DZR brass stem and wedge  
 Body-bonnet PTFE gasket  
 Stem gasket in graphite, adjustable packing  
 Working conditions: Water, -10°C to +170°C  
 Max 16bar up to 100°C, max 7bar at 170°C



ERC



| Vir Code         | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|------------------|----------------|----------|----------|----------|
| <b>Fig. 90</b>   |                |          |          |          |
| F0900B015.2683   | 015 - 1/2"     | 60       | 235      | 14,1     |
| F0900B020.2683   | 020 - 3/4"     | 50       | 310      | 15,5     |
| F0900B025.2683   | 025 - 1"       | 25       | 470      | 11,8     |
| F0900B032.2683   | 032 - 1 1/4"   | 15       | 740      | 11,1     |
| F0900B040.2683   | 040 - 1 1/2"   | 10       | 920      | 9,2      |
| F0900B050.2683   | 050 - 2"       | 6        | 1580     | 9,5      |
| <b>Fig. 90LK</b> |                |          |          |          |
| F090LB015.2714   | 015 - 1/2"     | 60       | 221      | 13,3     |
| F090LB020.2714   | 020 - 3/4"     | 50       | 298      | 14,9     |
| F090LB025.2714   | 025 - 1"       | 25       | 459      | 11,5     |
| F090LB032.2714   | 032 - 1 1/4"   | 15       | 707      | 10,6     |
| F090LB040.2714   | 040 - 1 1/2"   | 10       | 937      | 9,4      |
| F090LB050.2714   | 050 - 2"       | 6        | 1536     | 9,2      |

Lockshield key for Fig. 90LK (KUT090010.2800) available on request

## 100, 100LK

Bronze gate valve

PN20



Threaded F/F (ISO 228/1)  
 Non rising blow-out proof stem  
 With aluminum handwheel (Fig. 100) or lockshield (Fig. 100LK)  
 Bronze bonnet, DZR brass stem and wedge  
 Body-bonnet PTFE gasket  
 Stem gasket in graphite, adjustable packing  
 Working conditions: Water, -10°C to +170°C  
 Max 20bar up to 100°C, max 10bar at 170°C



ERC



| Vir Code          | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------|----------------|----------|----------|----------|
| <b>Fig. 100</b>   |                |          |          |          |
| F1000B015.3000    | 015 - 1/2"     | 60       | 235      | 14,1     |
| F1000B020.3000    | 020 - 3/4"     | 50       | 310      | 15,5     |
| F1000B025.3000    | 025 - 1"       | 25       | 470      | 11,8     |
| F1000B032.3000    | 032 - 1 1/4"   | 15       | 740      | 11,1     |
| F1000B040.3000    | 040 - 1 1/2"   | 10       | 920      | 9,2      |
| F1000B050.3000    | 050 - 2"       | 6        | 1580     | 9,5      |
| <b>Fig. 100LK</b> |                |          |          |          |
| F100LB015.3001    | 015 - 1/2"     | 60       | 221      | 13,3     |
| F100LB020.3001    | 020 - 3/4"     | 50       | 298      | 14,9     |
| F100LB025.3001    | 025 - 1"       | 25       | 459      | 16,1     |
| F100LB032.3001    | 032 - 1 1/4"   | 15       | 707      | 10,6     |
| F100LB040.3001    | 040 - 1 1/2"   | 10       | 937      | 9,4      |
| F100LB050.3001    | 050 - 2"       | 6        | 1536     | 9,2      |

Lockshield key for Fig. 100LK (KUT090010.2800) available on request



# GATE VALVES

110

Bronze gate valve

PN25



Threaded F/F (ISO 7/1 Rp)  
 Non rising blow-out proof stem  
 Aluminum handwheel  
 Bronze bonnet and wedge, DZR brass stem  
 Stem gasket in graphite, adjustable packing  
 Working conditions: Water, -10°C to +170°C  
 Max 25bar up to 100°C, max 13bar at 170°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F1100B020.2796 | 020 - 3/4"     | 30       | 450      | 13,5     |
| F1100B025.2796 | 025 - 1"       | 15       | 700      | 10,5     |
| F1100B032.2796 | 032 - 1 1/4"   | 12       | 1000     | 12,0     |
| F1100B040.2796 | 040 - 1 1/2"   | 10       | 1390     | 13,9     |
| F1100B050.2796 | 050 - 2"       | 5        | 2120     | 10,6     |

ERC



CE

120

Bronze gate valve union bonnet

PN25



Threaded F/F (ISO 7/1 Rp)  
 Rising stem  
 Aluminum handwheel  
 Bronze bonnet and wedge, DZR brass stem, brass union nut  
 Stem gasket in graphite, adjustable packing  
 Working conditions: Water, -10°C to +170°C  
 Max 25bar up to 100°C, max 13bar at 170°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F1200B020.2799 | 020 - 3/4"     | 20       | 615      | 12,3     |
| F1200B025.2799 | 025 - 1"       | 15       | 940      | 14,1     |
| F1200B032.2799 | 032 - 1 1/4"   | 15       | 1370     | 20,6     |
| F1200B040.2799 | 040 - 1 1/2"   | 10       | 1925     | 19,3     |
| F1200B050.2799 | 050 - 2"       | 5        | 3000     | 15,0     |

ERC CE



Flanged PN16 (EN1092-2)  
 Designed according EN558-1 series 14 (DIN 3202 F4)  
 Ductile iron EN-GJS 450-10 body, bonnet and handwheel  
 Ductile iron EN-GJS 450-10 wedge EPDM coated  
 Stainless steel stem, epoxy coating  
 Working conditions: Water, -10°C to +100°C



ERC



CE

| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F0914I040.1047 | 040 - 1 1/2"   | 1        | 8500     | 8,5      |
| F0914I050.1047 | 050 - 2"       | 1        | 9200     | 9,2      |
| F0914I065.1047 | 065 - 2 1/2"   | 1        | 11160    | 11,2     |
| F0914I080.1047 | 080 - 3"       | 1        | 15000    | 15,0     |
| F0914I100.1047 | 100 - 4"       | 1        | 18500    | 18,5     |
| F0914I125.1047 | 125 - 5"       | 1        | 27500    | 27,5     |
| F0914I150.1047 | 150 - 6"       | 1        | 34000    | 34,0     |
| F0914I200.1047 | 200 - 8"       | 1        | 54000    | 54,0     |
| F0914I250.1047 | 250 - 10"      | 1        | 85000    | 85,0     |
| F0914I300.1047 | 300 - 12"      | 1        | 175000   | 175,0    |
| F0914I350.1047 | 350 - 14"      | 1        | 175000   | 175,0    |
| F0914I400.1047 | 400 - 16"      | 1        | 205000   | 205,0    |

Version for PN10 flanges (F0914Imis.1746) available for DN200-DN300

#### Extension operating devices, length 1m

|               |           |   |      |     |
|---------------|-----------|---|------|-----|
| KPR091040.312 | 040 - 065 | 1 | 3000 | 3,0 |
| KPR091080.312 | 080 - 100 | 1 | 3000 | 3,0 |
| KPR091125.312 | 125 - 200 | 1 | 3000 | 3,0 |
| KPR091250.312 | 250 - 300 | 1 | 3000 | 3,0 |
| KPR091350.312 | 350 - 400 | 1 | 3000 | 3,0 |

#### Optional polyethylene cover for extension operating device

|                |           |   |    |     |
|----------------|-----------|---|----|-----|
| KSH091040.2503 | 040 - 400 | 1 | 30 | 0,0 |
|----------------|-----------|---|----|-----|

#### Spare handwheels

|                |           |   |      |     |
|----------------|-----------|---|------|-----|
| KXV091050.3062 | 050       | 1 | 800  | 0,8 |
| KXV091065.3062 | 065       | 1 | 1200 | 1,2 |
| KXV091080.3062 | 080       | 1 | 1200 | 1,2 |
| KXV091100.3062 | 100       | 1 | 1200 | 1,2 |
| KXV091125.3062 | 125 - 150 | 1 | 2000 | 2,0 |
| KXV091200.3062 | 200       | 1 | 3400 | 3,4 |
| KXV091250.3062 | 250 - 300 | 1 | 4500 | 4,5 |
| KXV091350.3062 | 350 - 400 | 1 | 7200 | 7,2 |

# WAFER CHECK VALVES

771

Brass spring loaded check valve

PN16



Wafer type suitable for EN1092 PN10 or PN16 flanges  
Spring in SS302 stainless steel and disc in SS304 stainless steel  
Body in brass (ductile iron GGG40 beyond DN100)  
Working conditions: Water, -10°C to +110°C



ERC

| Vir Code                 | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--------------------------|----------------|----------|----------|----------|
| <b>Brass version</b>     |                |          |          |          |
| F77100015.1016           | 015 - 1/2"     | 1        | 90       | 0,1      |
| F77100020.1016           | 020 - 3/4"     | 1        | 120      | 0,1      |
| F77100025.1016           | 025 - 1"       | 1        | 190      | 0,2      |
| F77100032.1016           | 032 - 1 1/4"   | 1        | 360      | 0,5      |
| F77100040.1016           | 040 - 1 1/2"   | 1        | 550      | 0,6      |
| F77100050.1016           | 050 - 2"       | 1        | 950      | 1,0      |
| F77100065.1016           | 065 - 2 1/2"   | 1        | 1260     | 1,4      |
| F77100080.1016           | 080 - 3"       | 1        | 2180     | 2,1      |
| F77100100.1016           | 100 - 4"       | 1        | 3260     | 3,3      |
| <b>Cast iron version</b> |                |          |          |          |
| F77100125.1020           | 125 - 5"       | 1        | 6500     | 6,5      |
| F77100150.1020           | 150 - 6"       | 1        | 8300     | 8,3      |
| F77100200.1020           | 200 - 8"       | 1        | 14500    | 14,5     |

775

Stainless steel spring loaded check valve

PN40



Wafer type suitable for EN1092 PN10 or PN16 flanges  
Body, spring and disc in SS316 stainless steel  
Working conditions: Water, -10°C to +220°C  
Max 40bar up to 100°C, max 10bar above



ERC

| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F77500015.1021 | 015 - 1/2"     | 1        | 100      | 0,2      |
| F77500020.1021 | 020 - 3/4"     | 1        | 160      | 0,2      |
| F77500025.1021 | 025 - 1"       | 1        | 280      | 0,3      |
| F77500032.1021 | 032 - 1 1/4"   | 1        | 520      | 0,5      |
| F77500040.1021 | 040 - 1 1/2"   | 1        | 700      | 0,7      |
| F77500050.1021 | 050 - 2"       | 1        | 1100     | 1,0      |
| F77500065.1021 | 065 - 2 1/2"   | 1        | 1500     | 1,5      |
| F77500080.1021 | 080 - 3"       | 1        | 1760     | 1,8      |
| F77500100.1021 | 100 - 4"       | 1        | 3300     | 3,3      |

## 776

### Cast iron dual check valve

## PN16



Suitable for EN1092 PN16 flanges  
 Suitable also for flanges PN10 up to DN≤250  
 GG25 cast iron body, EPDM seal  
 SS316 stainless steel disc  
 Working conditions: Water, -10°C to +110°C



ERC



CE

| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F77600050.1013 | 050 - 2"       | 1        | 1500     | 1,5      |
| F77600065.1013 | 065 - 2 1/2"   | 1        | 2300     | 2,3      |
| F77600080.1013 | 080 - 3"       | 1        | 3600     | 3,6      |
| F77600100.1013 | 100 - 4"       | 1        | 4350     | 4,4      |
| F77600125.1013 | 125 - 5"       | 1        | 6000     | 6,0      |
| F77600150.1013 | 150 - 6"       | 1        | 8600     | 8,6      |
| F77600200.1013 | 200 - 8"       | 1        | 15200    | 15,2     |
| F77600250.1013 | 250 - 10"      | 1        | 24000    | 24,0     |
| F77600300.1013 | 300 - 12"      | 1        | 32000    | 32,0     |
| F77600350.1013 | 350 - 14"      | 1        | 40750    | 40,8     |
| F77600400.1013 | 400 - 16"      | 1        | 62500    | 62,5     |
| F77600450.1013 | 450 - 18"      | 1        | 98000    | 98,0     |
| F77600500.1013 | 500 - 20"      | 1        | 125000   | 125,0    |
| F77600600.1013 | 600 - 24"      | 1        | 170000   | 170,0    |

## 776H

### Cast iron dual check valve

## PN25



Wafer type suitable for EN1092 PN25 flanges  
 Ductile iron GGG40 body, EPDM seal  
 SS316 stainless steel discs  
 Working conditions: Water, 0°C to +110°C



ERC

CE

| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F77600050.2918 | 050 - 2"       | 1        | 1500     | 1,5      |
| F77600065.2918 | 065 - 2 1/2"   | 1        | 2300     | 2,3      |
| F77600080.2918 | 080 - 3"       | 1        | 3600     | 3,6      |
| F77600100.2918 | 100 - 4"       | 1        | 4350     | 4,4      |
| F77600125.2918 | 125 - 5"       | 1        | 6000     | 6,0      |
| F77600150.2918 | 150 - 6"       | 1        | 8600     | 8,6      |
| F77600200.2918 | 200 - 8"       | 1        | 15200    | 15,2     |
| F77600250.2918 | 250 - 10"      | 1        | 22000    | 22,0     |
| F77600300.2918 | 300 - 12"      | 1        | 30000    | 30,0     |
| F77600350.2918 | 350 - 14"      | 1        | 48000    | 48,0     |

# WAFER CHECK VALVES

777

Wafer swing check valve

PN16



Suitable for EN1092 PN10 or PN16 flanges  
Carbon steel body  
Stainless steel disc  
EPDM seal  
Working conditions: Water, 0°C to +100°C



EAC

| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F77700040.1372 | 040 - 1 1/4"   | 1        | 700      | 0,7      |
| F77700050.1372 | 050 - 2"       | 1        | 850      | 0,9      |
| F77700065.1372 | 065 - 2 1/2"   | 1        | 1140     | 1,1      |
| F77700080.1372 | 080 - 3"       | 1        | 1400     | 1,4      |
| F77700100.1372 | 100 - 4"       | 1        | 2250     | 2,3      |
| F77700125.1372 | 125 - 5"       | 1        | 3000     | 3,0      |
| F77700150.1372 | 150 - 6"       | 1        | 4200     | 4,2      |
| F77700200.1372 | 200 - 8"       | 1        | 7000     | 7,0      |
| F77700250.1372 | 250 - 10"      | 1        | 12600    | 12,6     |
| F77700300.1372 | 300 - 12"      | 1        | 20000    | 20,0     |

# CHECK VALVES

830

Brass swing check valve

PN10



Threaded F/F (ISO 228/1)  
Disc in brass  
NBR disc gasket  
Body-bonnet gasket in fiber  
PN6 for DN≥65  
Working conditions: Water, 0°C to +100°C



ERC

| Vir Code     | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--------------|----------------|----------|----------|----------|
| F8300Z015.62 | 015 - 1/2"     | 1        | 145      | 0,1      |
| F8300Z020.62 | 020 - 3/4"     | 1        | 205      | 0,2      |
| F8300Z025.62 | 025 - 1"       | 1        | 380      | 0,4      |
| F8300Z032.62 | 032 - 1 1/4"   | 1        | 500      | 0,5      |
| F8300Z040.62 | 040 - 1 1/2"   | 1        | 660      | 0,7      |
| F8300Z050.62 | 050 - 2"       | 1        | 1000     | 1,0      |
| F8300Z065.62 | 065 - 2 1/2"   | 1        | 1570     | 1,6      |
| F8300Z080.62 | 080 - 3"       | 1        | 2260     | 2,3      |
| F8300Z100.62 | 100 - 4"       | 1        | 3780     | 3,8      |

835

Bronze swing check valve

PN16



Threaded F/F (ISO 228/1)  
Bronze body, brass hinge cap and internal parts  
Metal seal  
Hinge cap O-ring in NBR  
Body-bonnet gasket in NBR (PTFE for DN≥32)  
Working conditions: Water, 0°C to +95°C



ERC

| Vir Code     | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--------------|----------------|----------|----------|----------|
| F8350B010.14 | 010 - 3/8"     | 100      | 180      | 18,0     |
| F8350B015.14 | 015 - 1/2"     | 100      | 210      | 21,0     |
| F8350B020.14 | 020 - 3/4"     | 60       | 340      | 20,4     |
| F8350B025.14 | 025 - 1"       | 40       | 470      | 18,8     |
| F8350B032.14 | 032 - 1 1/4"   | 25       | 699      | 17,5     |
| F8350B040.14 | 040 - 1 1/2"   | 16       | 840      | 13,4     |
| F8350B050.14 | 050 - 2"       | 12       | 1330     | 16,0     |
| F8350B065.14 | 065 - 2 1/2"   | 6        | 1970     | 11,8     |
| F8350B080.14 | 080 - 3"       | 5        | 2900     | 14,5     |
| F8350B100.14 | 100 - 4"       | 4        | 4800     | 19,2     |

# CHECK VALVES

**890, 890E**

Cast iron swing check valve

**PN16**



Flanged PN16 (EN1092-2)  
Body and disc in cast iron GG25  
Metal seat (890) or EPDM seat (890E)  
Body-bonnet gasket in EPDM  
Working conditions: Water, 0°C to +100°C



ERC CE

| Vir Code                     | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|------------------------------|----------------|----------|----------|----------|
| <b>Fig. 890 - Metal seat</b> |                |          |          |          |
| F89051050.1015               | 050 - 2"       | 1        | 12400    | 12,4     |
| F89051065.1015               | 065 - 2 1/2"   | 1        | 15200    | 15,2     |
| F89051080.1015               | 080 - 3"       | 1        | 19500    | 19,5     |
| F89051100.1015               | 100 - 4"       | 1        | 26810    | 26,8     |
| F89051125.1015               | 125 - 5"       | 1        | 42000    | 42,0     |
| F89051150.1015               | 150 - 6"       | 1        | 57720    | 57,7     |
| F89051200.1015               | 200 - 8"       | 1        | 93000    | 93,0     |
| F89051250.1015               | 250 - 10"      | 1        | 145000   | 145,0    |
| F89051300.1015               | 300 - 12"      | 1        | 221000   | 221,0    |
| <b>Fig. 890E - EPDM seat</b> |                |          |          |          |
| F89051050.2837               | 050 - 2"       | 1        | 12400    | 12,4     |
| F89051065.2837               | 065 - 2 1/2"   | 1        | 15200    | 15,2     |
| F89051080.2837               | 080 - 3"       | 1        | 19500    | 19,5     |
| F89051100.2837               | 100 - 4"       | 1        | 26810    | 26,8     |
| F89051125.2837               | 125 - 5"       | 1        | 42000    | 42,0     |
| F89051150.2837               | 150 - 6"       | 1        | 57700    | 57,7     |
| F89051200.2837               | 200 - 8"       | 1        | 93000    | 93,0     |
| F89051250.2837               | 250 - 10"      | 1        | 145000   | 145,0    |
| F89051300.2837               | 300 - 12"      | 1        | 221000   | 221,0    |

**806**

Ball check valve

**PN16**



Threaded F/F (ISO 228/1) or flanged PN16 (EN1092-2)  
Body in cast iron GG25 for flanged version  
Body in ductile iron GGG40 for threaded version  
NBR coated metallic ball  
Body-bonnet gasket in NBR  
Working conditions: Water, 0°C to +80°C



ERC

| Vir Code                | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------|----------------|----------|----------|----------|
| <b>Threaded version</b> |                |          |          |          |
| F80601025.2245          | 025 - 1"       | 1        | 1330     | 1,3      |
| F80601032.2245          | 032 - 1 1/4"   | 1        | 1430     | 1,4      |
| F80601040.2245          | 040 - 1 1/2"   | 1        | 2000     | 2,0      |
| F80601050.2245          | 050 - 2"       | 1        | 3500     | 3,5      |
| <b>Flanged version</b>  |                |          |          |          |
| F80601065.2246          | 065 - 2 1/2"   | 1        | 11500    | 11,5     |
| F80601080.2246          | 080 - 3"       | 1        | 15100    | 15,1     |
| F80601100.2246          | 100 - 4"       | 1        | 21500    | 21,5     |
| F80601125.2246          | 125 - 5"       | 1        | 33500    | 33,5     |
| F80601150.2246          | 150 - 6"       | 1        | 47000    | 47,0     |
| F80601200.2246          | 200 - 8"       | 1        | 85000    | 85,0     |
| F80601250.2246          | 250 - 10"      | 1        | 85000    | 85,0     |
| F80601300.2246          | 300 - 12"      | 1        | 203000   | 203,0    |

Version for PN10 flanges (F80601mis.3263) available for DN200-DN300

## 815V

Brass foot valve

PN10



Threaded F (ISO 228/1)  
Nut, filter and disc in brass  
SBR seal  
Fiber body-strainer gasket  
PN8 for DN≥32, PN6 for DN≥65  
Working conditions: Water, 0°C to +90°C



| Vir Code     | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--------------|----------------|----------|----------|----------|
| F8150Z015.62 | 015 - 1/2"     | 1        | 115      | 0,1      |
| F8150Z020.62 | 020 - 3/4"     | 1        | 213      | 0,2      |
| F8150Z025.62 | 025 - 1"       | 1        | 285      | 0,3      |
| F8150Z032.62 | 032 - 1 1/4"   | 1        | 408      | 0,4      |
| F8150Z040.62 | 040 - 1 1/2"   | 1        | 578      | 0,6      |
| F8150Z050.62 | 050 - 2"       | 1        | 830      | 0,8      |
| F8150Z065.62 | 065 - 2 1/2"   | 1        | 1300     | 1,3      |
| F8150Z080.62 | 080 - 3"       | 1        | 1800     | 1,8      |
| F8150Z100.62 | 100 - 4"       | 1        | 3075     | 3,1      |

ERC

## 765S

Spring-loaded stainless steel valve

PN40



Threaded F/F (ISO 7/1 Rp)  
Stainless steel SS316 body and disc, PTFE gaskets  
Stainless steel SS316 spring  
Working conditions: Water, -20°C to +180°C  
DN≤50: max 40bar up to 85°C, max 16bar above  
DN≥65: max 40bar up to 85°C, max 10bar above



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F76500010.3018 | 010 - 3/8"     | 1        | 120      | 0,2      |
| F76500015.3018 | 015 - 1/2"     | 1        | 163      | 0,2      |
| F76500020.3018 | 020 - 3/4"     | 1        | 286      | 0,3      |
| F76500025.3018 | 025 - 1"       | 1        | 437      | 0,4      |
| F76500032.3018 | 032 - 1 1/4"   | 1        | 725      | 0,7      |
| F76500040.3018 | 040 - 1 1/2"   | 1        | 1014     | 1,0      |
| F76500050.3018 | 050 - 2"       | 1        | 1577     | 1,6      |
| F76500065.3018 | 065 - 2 1/2"   | 1        | 2913     | 2,9      |
| F76500080.3018 | 080 - 3"       | 1        | 4775     | 4,8      |

## 765K

Spring-loaded brass check valve

PN25



Threaded F/F (ISO 7/1 Rp)  
Stainless steel AISI 302 spring  
Brass disc, EPDM Perox gasket  
Stainless steel AISI 304 optional foot strainer (mesh 1000µm)  
Working conditions: Water, 0°C to +100°C  
PN25 for DN≤50  
PN16 for DN≥65



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F765K0010.3195 | 010 - 3/8"     | 1        | 87       | 0,1      |
| F765K0015.3195 | 015 - 1/2"     | 1        | 123      | 0,2      |
| F765K0020.3195 | 020 - 3/4"     | 1        | 192      | 0,2      |
| F765K0025.3195 | 025 - 1"       | 1        | 299      | 0,3      |
| F765K0032.3195 | 032 - 1 1/4"   | 1        | 481      | 0,5      |
| F765K0040.3195 | 040 - 1 1/2"   | 1        | 627      | 0,7      |
| F765K0050.3195 | 050 - 2"       | 1        | 999      | 1,0      |
| F765K0065.3195 | 065 - 2 1/2"   | 1        | 2120     | 2,2      |
| F765K0080.3195 | 080 - 3"       | 1        | 3120     | 3,2      |



# CHECK VALVES

765

Spring-loaded brass check valve

PN16



Threaded F/F (ISO 228/1)  
Stainless steel AISI 302 spring  
Brass disc, NBR gasket  
**PN10 for DN≥65**  
Working conditions: Water, 0°C to +100°C

Optional foot strainer  
Threaded M (ISO 228/1)  
AISI 304 stainless steel body, polyamide end  
Mesh 1000µm



ERC

| Vir Code                      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------------|----------------|----------|----------|----------|
| F76500015.1014                | 015 - 1/2"     | 1        | 170      | 0,2      |
| F76500020.1014                | 020 - 3/4"     | 1        | 155      | 0,2      |
| F76500025.1014                | 025 - 1"       | 1        | 275      | 0,3      |
| F76500032.1014                | 032 - 1 1/4"   | 1        | 350      | 0,4      |
| F76500040.1014                | 040 - 1 1/2"   | 1        | 470      | 0,5      |
| F76500050.1014                | 050 - 2"       | 1        | 710      | 0,7      |
| F76500065.1014                | 065 - 2 1/2"   | 1        | 2830     | 2,8      |
| F76500080.1014                | 080 - 3"       | 1        | 4200     | 4,2      |
| F76500100.1014                | 100 - 4"       | 1        | 6265     | 6,3      |
| <b>Optional foot strainer</b> |                |          |          |          |
| KFF760015.1371                | 015 - 1/2"     | 1        | 7        | 0,1      |
| KFF760020.1371                | 020 - 3/4"     | 1        | 11       | 0,1      |
| KFF760025.1371                | 025 - 1"       | 1        | 20       | 0,1      |
| KFF760032.1371                | 032 - 1 1/4"   | 1        | 25       | 0,1      |
| KFF760040.1371                | 040 - 1 1/2"   | 1        | 35       | 0,1      |
| KFF760050.1371                | 050 - 2"       | 1        | 45       | 0,1      |
| KFF760065.1371                | 065 - 2 1/2"   | 1        | 75       | 0,1      |
| KFF760080.1371                | 080 - 3"       | 1        | 125      | 0,1      |
| KFF760100.1371                | 100 - 4"       | 1        | 175      | 0,2      |

790

Cast iron silent check valve

PN16



Flanged PN16 (EN1092-2)  
Body in cast iron GG25, guide and disc in ductile iron GGG40  
Stainless steel SS316 spring  
EPDM seal  
Working conditions: Water, 0°C to +80°C

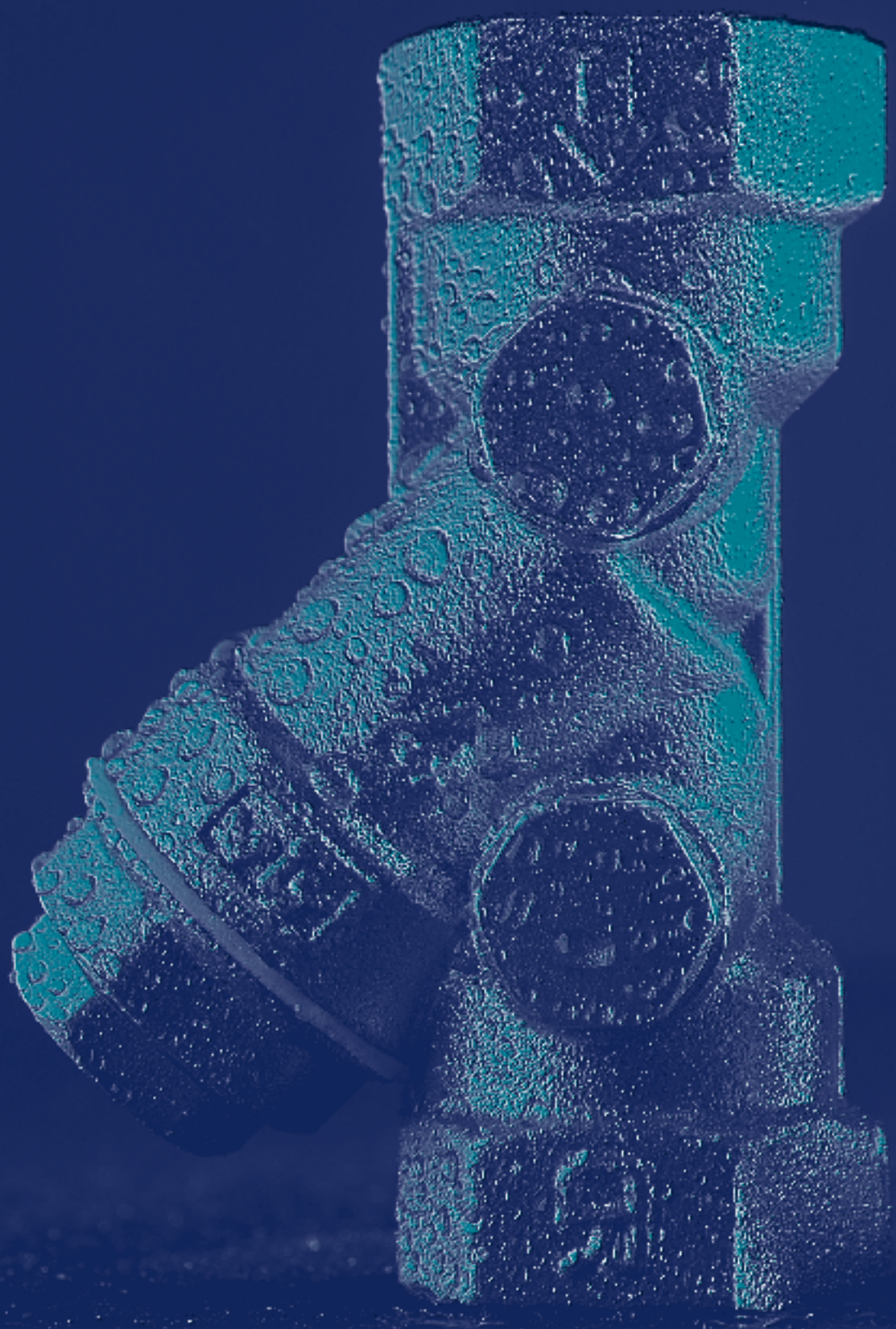
Optional foot strainer  
Flanged PN16 (EN1092-2)  
Zinc plated steel body



ERC

| Vir Code                      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|-------------------------------|----------------|----------|----------|----------|
| F7900I050.695                 | 050 - 2"       | 1        | 5100     | 5,1      |
| F7900I065.695                 | 065 - 2 1/2"   | 1        | 7700     | 7,7      |
| F7900I080.695                 | 080 - 3"       | 1        | 9500     | 9,5      |
| F7900I100.695                 | 100 - 4"       | 1        | 12500    | 12,5     |
| F7900I125.695                 | 125 - 5"       | 1        | 20510    | 20,5     |
| F7900I150.695                 | 150 - 6"       | 1        | 29000    | 29,0     |
| F7900I200.695                 | 200 - 8"       | 1        | 47000    | 47,0     |
| F7900I250.695                 | 250 - 10"      | 1        | 70000    | 70,0     |
| F7900I300.695                 | 300 - 12"      | 1        | 105000   | 105,0    |
| <b>Optional foot strainer</b> |                |          |          |          |
| KFF790050.1582                | 050 - 2"       | 1        | 400      | 0,4      |
| KFF790065.1582                | 065 - 2 1/2"   | 1        | 700      | 0,7      |
| KFF790080.1582                | 080 - 3"       | 1        | 800      | 0,8      |
| KFF790100.1582                | 100 - 4"       | 1        | 1000     | 1,0      |
| KFF790125.1582                | 125 - 5"       | 1        | 1500     | 1,5      |
| KFF790150.1582                | 150 - 6"       | 1        | 2700     | 2,7      |
| KFF790200.1582                | 200 - 8"       | 1        | 3500     | 3,5      |
| KFF790250.1582                | 250 - 10"      | 1        | 4500     | 4,5      |
| KFF790300.1582                | 300 - 12"      | 1        | 5250     | 5,3      |







# STRAINERS

# STRAINERS

**899I**

Brass strainer

**PN20**



Threaded F/F (ISO 228/1)  
Stainless steel AISI 302 filter  
Body-bonnet gasket in fiber  
PN16 for DN100  
Working conditions: Water, 0°C to +80°C



| Vir Code     | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--------------|----------------|----------|----------|----------|
| F8990Z008.62 | 008 - 1/4"     | 1        | 115      | 0,1      |
| F8990Z010.62 | 010 - 3/8"     | 1        | 95       | 0,1      |
| F8990Z015.62 | 015 - 1/2"     | 1        | 135      | 0,1      |
| F8990Z020.62 | 020 - 3/4"     | 1        | 205      | 0,2      |
| F8990Z025.62 | 025 - 1"       | 1        | 300      | 0,3      |
| F8990Z032.62 | 032 - 1 1/4"   | 1        | 580      | 0,6      |
| F8990Z040.62 | 040 - 1 1/2"   | 1        | 800      | 0,9      |
| F8990Z050.62 | 050 - 2"       | 1        | 1350     | 1,4      |
| F8990Z065.62 | 065 - 2 1/2"   | 1        | 2300     | 2,3      |
| F8990Z080.62 | 080 - 3"       | 1        | 3140     | 3,1      |
| F8990Z100.62 | 100 - 4"       | 1        | 4710     | 4,7      |

Spare strainer KFF899mis.2342 from DN10 to DN100 available on request

**899H**

Brass strainer

**PN32**



Threaded F/F (ISO 7/1 Rc)  
Stainless steel AISI 316 filter  
Body-bonnet gasket in modified PTFE  
Working conditions: Water, 0°C to +110°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F899ST015.3368 | 015 - 1/2"     | 1        | 198      | 0,2      |
| F899ST020.3368 | 020 - 3/4"     | 1        | 289      | 0,3      |
| F899ST025.3368 | 025 - 1"       | 1        | 396      | 0,4      |
| F899ST032.3368 | 032 - 1 1/4"   | 1        | 634      | 0,7      |
| F899ST040.3368 | 040 - 1 1/2"   | 1        | 952      | 1,0      |
| F899ST050.3368 | 050 - 2"       | 1        | 1422     | 1,5      |



**899S**

Stainless steel strainer

**PN40**



Threaded F/F (ISO 7/1 Rp)  
Stainless steel SS316 strainer  
Stainless steel SS316 bonnet, body-bonnet gasket in PTFE  
Working conditions: Water, -20°C to +180°C  
DN≤50: max 40bar up to 85°C, max 16bar above  
DN≥65: max 40bar up to 85°C, max 10bar above



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F8990S015.3017 | 015 - 1/2"     | 1        | 134      | 0,1      |
| F8990S020.3017 | 020 - 3/4"     | 1        | 286      | 0,3      |
| F8990S025.3017 | 025 - 1"       | 1        | 350      | 0,4      |
| F8990S032.3017 | 032 - 1 1/4"   | 1        | 533      | 0,5      |
| F8990S040.3017 | 040 - 1 1/2"   | 1        | 707      | 0,7      |
| F8990S050.3017 | 050 - 2"       | 1        | 1018     | 1,0      |
| F8990S065.3017 | 065 - 2 1/2"   | 1        | 2680     | 2,7      |
| F8990S080.3017 | 080 - 3"       | 1        | 5380     | 5,4      |
| F8990S100.3017 | 100 - 4"       | 1        | 5890     | 5,9      |



Threaded F/F (ISO 228/1)  
Bronze body, stainless steel AISI 304 filter  
Brass bonnet, body-bonnet gasket in fiber  
Working conditions: Water, -10° to +150°  
DN≥65, max 20bar up to 110°C, max 10bar above



| Vir Code     | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--------------|----------------|----------|----------|----------|
| F9000B010.19 | 010 - 3/8"     | 100      | 175      | 17,5     |
| F9000B015.19 | 015 - 1/2"     | 100      | 182      | 18,2     |
| F9000B020.19 | 020 - 3/4"     | 50       | 286      | 14,3     |
| F9000B025.19 | 025 - 1"       | 40       | 410      | 16,4     |
| F9000B032.19 | 032 - 1 1/4"   | 20       | 685      | 13,7     |
| F9000B040.19 | 040 - 1 1/2"   | 10       | 893      | 8,9      |
| F9000B050.19 | 050 - 2"       | 10       | 1398     | 14,0     |
| F9000B065.19 | 065 - 2 1/2"   | 8        | 2760     | 22,1     |
| F9000B080.19 | 080 - 3"       | 4        | 3618     | 14,5     |
| F9000B100.19 | 100 - 4"       | 2        | 7000     | 14,0     |

WRAS version with PTFE gasket for DN15-DN50 (F9000Bmis.1553) available on request

89DV

Strainer with drain and probe holders

PN25



Fig. 89DV

Fig. 89DV-241

Threaded F/F (ISO 228/1)  
Stainless steel AISI 304 strainer  
Body-bonnet gasket in PTFE  
With threaded drain (3/8" ISO 7/1Rp)  
With 4 threaded and plugged probe holders (1/4" ISO 7/1Rp)  
Optional accessories available for drain and probe holders  
Working conditions: Water, 0°C to +130°C  
Max 25bar up to 110°C, max 20bar above



| Vir Code                        | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------------------------|----------------|----------|----------|----------|
| F89DV0020.1979                  | 020 - 3/4"     | 1        | 374      | 0,4      |
| <b>89DV-241 valve for drain</b> |                |          |          |          |
| F241X0010.1962                  | 010 - 3/8"     | 1        | 130      | 0,1      |

Can be mounted on drain: Fig. 95TP/ Fig. 9315 test point (pag.28) with drain or thermometer. Other accessories available on request.

91F

DZR brass strainer with optional drain and test point

PN25



Threaded F/F (ISO 228/1)  
Stainless steel AISI 304 strainer with 20 mesh  
Body-bonnet gasket in PTFE  
With threaded drain (3/4" ISO 228/1) as option  
Working conditions: Water, 0°C to +130°C  
Max 25bar up to 110°C, max 20bar above



| Vir Code                                 | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--|----------------|----------|----------|----------|
| <b>Version with drain and test point</b> |                |          |          |          |
| F91F00015.3109                           | 015 - 1/2"     | 40       | 320      | 12,8     |
| F91F00020.3109                           | 020 - 3/4"     | 30       | 413      | 12,4     |
| F91F00025.3109                           | 025 - 1"       | 20       | 549      | 11,0     |
| <b>Version with only strainer</b>        |                |          |          |          |
| F91F00015.3196                           | 015 - 1/2"     | 1        | 190      | 0,2      |
| F91F00020.3196                           | 020 - 3/4"     | 1        | 283      | 0,3      |
| F91F00025.3196                           | 025 - 1"       | 1        | 419      | 0,4      |

# STRAINERS

895

Cast iron strainer

PN16



Flanged PN16 (EN1092-2)  
Cast iron GG25 body  
Stainless steel AISI 304 strainer  
Hole diameter 1,5mm up to DN≤150, 2,0mm above  
Body-bonnet gasket in EPDM  
Working conditions: Water, 0°C to +110°C



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F89511015.842 | 015 - 1/2"     | 1        | 2000     | 2,0      |
| F89511020.842 | 020 - 3/4"     | 1        | 3000     | 3,0      |
| F89511025.842 | 025 - 1"       | 1        | 4000     | 4,0      |
| F89511032.842 | 032 - 1 1/4"   | 1        | 6000     | 6,0      |
| F89511040.842 | 040 - 1 1/2"   | 1        | 7200     | 7,2      |
| F89511050.842 | 050 - 2"       | 1        | 8390     | 8,4      |
| F89511065.842 | 065 - 2 1/2"   | 1        | 12700    | 12,7     |
| F89511080.842 | 080 - 3"       | 1        | 15500    | 15,5     |
| F89511100.842 | 100 - 4"       | 1        | 21800    | 21,8     |
| F89511125.842 | 125 - 5"       | 1        | 30500    | 30,5     |
| F89511150.842 | 150 - 6"       | 1        | 43900    | 43,9     |
| F89511200.842 | 200 - 8"       | 1        | 78000    | 78,0     |
| F89511250.842 | 250 - 10"      | 1        | 126000   | 126,0    |
| F89511300.842 | 300 - 12"      | 1        | 165000   | 165,0    |
| F89511350.842 | 350 - 14"      | 1        | 293500   | 293,5    |
| F89511400.842 | 400 - 16"      | 1        | 389000   | 389,0    |
| F89511450.842 | 450 - 18"      | 1        | 510000   | 510,0    |
| F89511500.842 | 500 - 20"      | 1        | 640000   | 640,0    |
| F89511600.842 | 600 - 24"      | 1        | 1072000  | 1072,0   |

Available spare EPDM gasket (KXG895mis.3167) for DN25 - DN400

#### Spare strainer

|                |              |   |       |      |
|----------------|--------------|---|-------|------|
| KFF895050.2025 | 050 - 2"     | 1 | 2300  | 2,3  |
| KFF895065.2025 | 065 - 2 1/2" | 1 | 3200  | 3,2  |
| KFF895080.2025 | 080 - 3"     | 1 | 4700  | 4,7  |
| KFF895100.2025 | 100 - 4"     | 1 | 6600  | 6,6  |
| KFF895125.2025 | 125 - 5"     | 1 | 9500  | 9,5  |
| KFF895150.2025 | 150 - 6"     | 1 | 13300 | 13,3 |
| KFF895200.2025 | 200 - 8"     | 1 | 21600 | 21,6 |
| KFF895250.2025 | 250 - 10"    | 1 | 31900 | 31,9 |
| KFF895300.2025 | 300 - 12"    | 1 | 44100 | 44,1 |
| KFF895350.2025 | 350 - 14"    | 1 | 60200 | 60,2 |
| KFF895400.2025 | 400 - 16"    | 1 | 81300 | 81,3 |

#### Spare strainer with 1 mm (KFF895mis.3071) and 0,8mm (KFF895mis.3072) hole diameter

|                |              |   |       |      |
|----------------|--------------|---|-------|------|
| KFF895025.307s | 025 - 1"     | 1 | 390   | 0,4  |
| KFF895032.307s | 032 - 1 1/4" | 1 | 450   | 0,5  |
| KFF895040.307s | 040 - 1 1/2" | 1 | 1280  | 1,3  |
| KFF895050.307s | 050 - 2"     | 1 | 2300  | 2,3  |
| KFF895065.307s | 065 - 2 1/2" | 1 | 3200  | 3,2  |
| KFF895080.307s | 080 - 3"     | 1 | 4700  | 4,7  |
| KFF895100.307s | 100 - 4"     | 1 | 6600  | 6,6  |
| KFF895125.307s | 125 - 5"     | 1 | 9500  | 9,5  |
| KFF895150.307s | 150 - 6"     | 1 | 13300 | 13,3 |
| KFF895200.307s | 200 - 8"     | 1 | 21600 | 21,6 |
| KFF895250.307s | 250 - 10"    | 1 | 31900 | 31,9 |
| KFF895300.307s | 300 - 12"    | 1 | 44100 | 44,1 |

**895H**

## Ductile iron strainer

**PN25**

Flanged PN25 (EN1092-2)  
 Ductile iron GGG40 body  
 Stainless steel AISI 304 strainer  
 Body-bonnet gasket in graphite  
 Working conditions: Water, -10°C to +110°C



CE

| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F89511050.2932 | 050 - 2"       | 1        | 10000    | 10,0     |
| F89511065.2932 | 065 - 2 1/2"   | 1        | 15000    | 15,0     |
| F89511080.2932 | 080 - 3"       | 1        | 18000    | 18,0     |
| F89511100.2932 | 100 - 4"       | 1        | 26000    | 26,0     |
| F89511125.2932 | 125 - 5"       | 1        | 39000    | 39,0     |
| F89511150.2932 | 150 - 6"       | 1        | 50000    | 50,0     |
| F89511200.2932 | 200 - 8"       | 1        | 80000    | 80,0     |
| F89511250.2932 | 250 - 10"      | 1        | 130000   | 130,0    |
| F89511300.2932 | 300 - 12"      | 1        | 180000   | 180,0    |
| F89511350.2932 | 350 - 14"      | 1        | 285000   | 285,0    |

**895J**

## Grooved ductile iron strainer

**PN25**

Grooved (ANSI/AWWA C606 / Metric)  
 Ductile iron GGG50 body  
 Stainless steel AISI 304 strainer  
 Working conditions: Water, -10°C to +100°C



CE

| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F89521050.1945 | 60,3           | 1        | 10000    | 10,0     |
| F89521065.1945 | 76,1*          | 1        | 11000    | 11,0     |
| F89521080.1945 | 88,9           | 1        | 13000    | 13,0     |
| F89521100.1945 | 114,3          | 1        | 23000    | 23,0     |
| F89521125.1945 | 139,7*         | 1        | 42000    | 42,0     |
| F89521150.1945 | 168,3          | 1        | 51000    | 51,0     |
| F89521200.1945 | 219,1          | 1        | 100000   | 100,0    |
| F89521250.1945 | 273,0          | 1        | 125000   | 125,0    |
| F89521300.1945 | 323,9          | 1        | 160000   | 160,0    |

\*Metric groove standard





THE HISTORY OF THE  
CITY OF LONDON  
FROM THE FOUNDATION  
TO THE PRESENT  
BY JOHN STOW  
1618



## FLEXIBLE JOINTS and AIR VENTS

# FLEXIBLE JOINTS

## KGTT

Threaded flexible joint

PN16



Threaded union ends (ISO 228/1)  
EPDM body reinforced with polyamide wire  
Galvanized iron ends  
Angular flexion 10° to 30° (depending on size)  
Working conditions: Water, -10°C to +110°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| KGT800020.1163 | 020 - 3/4"     | 1        | 700      | 0,7      |
| KGT800025.1163 | 025 - 1"       | 1        | 1200     | 1,2      |
| KGT800032.1163 | 032 - 1 1/4"   | 1        | 1500     | 1,5      |
| KGT800040.1163 | 040 - 1 1/2"   | 1        | 2000     | 2,0      |
| KGT800050.1163 | 050 - 2"       | 1        | 2600     | 2,6      |
| KGT800065.1163 | 065 - 2 1/2"   | 1        | 4200     | 4,2      |
| KGT800080.1163 | 080 - 3"       | 1        | 5500     | 5,5      |

ERC

## KGTF-HD

Flanged flexible joint for "Heavy Duty"

PN16



Flanged PN16 (EN1092-1)  
EPDM body reinforced with polyamide wire  
Deflection angle from 15° and 35° depending on the sizes  
Allowable movement of 20mm for lateral and axial extension, 30mm for compression  
Working conditions: Water, -35°C to +90°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| KGT800050.3259 | 050 - 2"       | 1        | 4600     | 4,6      |
| KGT800065.3259 | 065 - 2 1/2"   | 1        | 5300     | 5,3      |
| KGT800080.3259 | 080 - 3"       | 1        | 7000     | 7,0      |
| KGT800100.3259 | 100 - 4"       | 1        | 7600     | 7,6      |
| KGT800125.3259 | 125 - 5"       | 1        | 9900     | 9,9      |
| KGT800150.3259 | 150 - 6"       | 1        | 12400    | 12,4     |
| KGT800200.3259 | 200 - 8"       | 1        | 17700    | 17,7     |

ERC

## KGTP

Flexible joint

PN16



Lug type for PN16 (EN1092-1) flanges  
Also suitable for PN10 flange up to DN≤150  
EPDM body, steel threaded inserts  
Working conditions: Water, -20°C to +100°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| KGT800020.2182 | 020 - 3/4"     | 1        | 2000     | 2,0      |
| KGT800025.2182 | 025 - 1"       | 1        | 2400     | 2,4      |
| KGT800032.2182 | 032 - 1 1/4"   | 1        | 3000     | 3,0      |
| KGT800040.2182 | 040 - 1 1/2"   | 1        | 3400     | 3,4      |
| KGT800050.2182 | 050 - 2"       | 1        | 4100     | 4,1      |
| KGT800065.2182 | 065 - 2 1/2"   | 1        | 5000     | 5,0      |
| KGT800080.2182 | 080 - 3"       | 1        | 6000     | 6,0      |
| KGT800100.2182 | 100 - 4"       | 1        | 7000     | 7,0      |
| KGT800125.2182 | 125 - 5"       | 1        | 8000     | 8,0      |
| KGT800150.2182 | 150 - 6"       | 1        | 11100    | 11,1     |
| KGT800200.2183 | 200 - 8"       | 1        | 16200    | 16,2     |

ERC

Version for PN10 flanges (KGT800200.2182) available for DN200



**ERC CE**

Flanged PN16 (EN1092-1)  
 EPDM body reinforced with polyamide wire  
 Deflection angle 15°  
 Working conditions: Water, -10°C to +110°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| KGT800025.1124 | 025 - 1"       | 1        | 2500     | 2,5      |
| KGT800032.1124 | 032 - 1 1/4"   | 1        | 2800     | 2,8      |
| KGT800040.1124 | 040 - 1 1/2"   | 1        | 3600     | 3,6      |
| KGT800050.1124 | 050 - 2"       | 1        | 5200     | 5,2      |
| KGT800065.1124 | 065 - 2 1/2"   | 1        | 6000     | 6,0      |
| KGT800080.1124 | 080 - 3"       | 1        | 7200     | 7,2      |
| KGT800100.1124 | 100 - 4"       | 1        | 8600     | 8,6      |
| KGT800125.1124 | 125 - 5"       | 1        | 11500    | 11,5     |
| KGT800150.1124 | 150 - 6"       | 1        | 14700    | 14,7     |
| KGT800200.1124 | 200 - 8"       | 1        | 20000    | 20,0     |
| KGT800250.1124 | 250 - 10"      | 1        | 28000    | 28,0     |
| KGT800300.1124 | 300 - 12"      | 1        | 32000    | 32,0     |
| KGT800350.1124 | 350 - 14"      | 1        | 65000    | 65,0     |
| KGT800400.1124 | 400 - 16"      | 1        | 88000    | 88,0     |
| KGT800450.1124 | 450 - 18"      | 1        | 71000    | 71,0     |
| KGT800500.1124 | 500 - 20"      | 1        | 105000   | 105,0    |
| KGT800600.1124 | 600 - 24"      | 1        | 130000   | 130,0    |

Version for PN10 flanges (KGT800mis.1836) available for DN200-DN300

**Optional tie rods**

|               |              |   |       |      |
|---------------|--------------|---|-------|------|
| KVR800050.312 | 050 - 2"     | 1 | 2800  | 2,8  |
| KVR800065.312 | 065 - 2 1/2" | 1 | 3500  | 3,5  |
| KVR800080.312 | 080 - 3"     | 1 | 2700  | 2,7  |
| KVR800100.312 | 100 - 4"     | 1 | 3200  | 3,2  |
| KVR800125.312 | 125 - 5"     | 1 | 3600  | 3,6  |
| KVR800150.312 | 150 - 6"     | 1 | 5600  | 5,6  |
| KVR800200.312 | 200 - 8"     | 1 | 6400  | 6,4  |
| KVR800250.312 | 250 - 10"    | 1 | 12600 | 12,6 |
| KVR800300.312 | 300 - 12"    | 1 | 13800 | 13,8 |

# AIR VENTS

## 9390, 9393

Automatic air vent

PN10



Fig. 9390



Fig. 9393

Threaded M (ISO 228/1)  
Brass body, EPDM gaskets  
Floating in polypropylene  
Version with brass check valve available  
Working conditions: Water, 0°C to +110°C



| Vir Code  | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---|----------------|----------|----------|----------|
| <b>9390 - Automatic air vent version</b>                  |                |          |          |          |
| F93900010.1776  | 010 - 3/8"     | 1        | 150      | 0,2      |
| F93900015.1776  | 015 - 1/2"     | 1        | 154      | 0,2      |
| <b>9393 - Automatic air vent with check valve version</b> |                |          |          |          |
| F93930015.2674  | 015 - 1/2"     | 1        | 213      | 0,3      |

ERC

## 9380

Cast iron automatic air vent

PN16



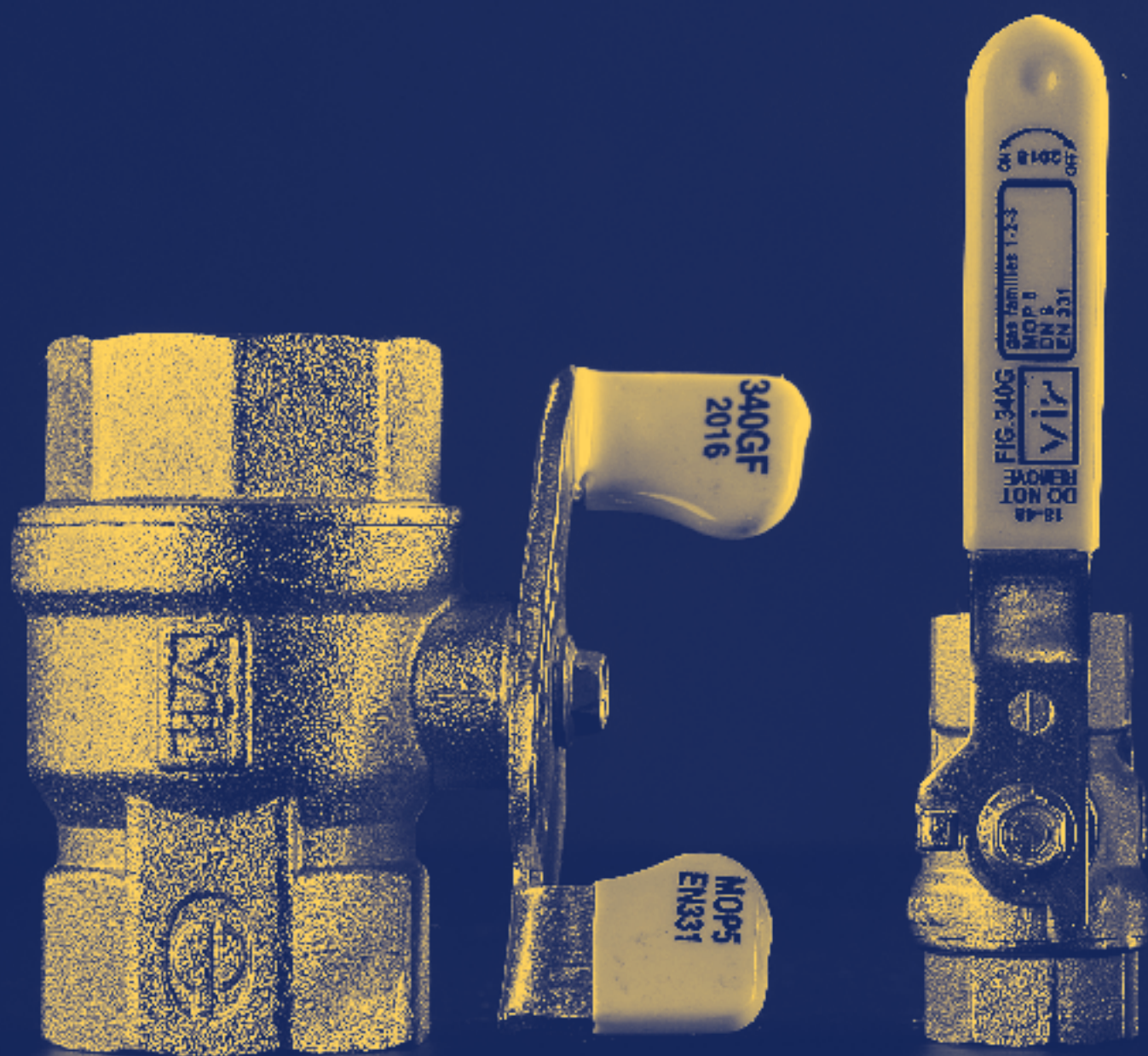
Threaded F (ISO 7/1 Rp)  
Cast iron GG25 body, EPDM gaskets  
Floating ball in polypropylene stainless steel AISI 304  
Working conditions: Water, 0°C to +110°C



| Vir Code       | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|----------------|----------------|----------|----------|----------|
| F93801015.2833 | 015 - 1/2"     | 1        | 3500     | 3,5      |
| F93801020.2833 | 020 - 3/4"     | 1        | 3500     | 3,5      |
| F93801025.2833 | 025 - 1"       | 1        | 3500     | 3,5      |
| F93801032.2833 | 032 - 1 1/4"   | 1        | 4000     | 4,0      |
| F93801040.2833 | 040 - 1 1/2"   | 1        | 4000     | 4,0      |
| F93801050.2833 | 050 - 2"       | 1        | 4000     | 4,0      |

ERC







**GAS**



# VALVES FOR GAS

## 340G

Brass ball valve for gas

PN25



Threaded F/F (ISO 228/1)  
Valve for gas according to EN331, full bore  
Chrome-plated ball, blow-out proof stem  
PTFE Seats, FKM O-ring  
Working conditions: -20°C to +60°C  
Also available with locking device



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F340GM008.792 | 008 - 1/4"     | 125      | 125      | 15,6     |
| F340GM010.792 | 010 - 3/8"     | 125      | 117      | 14,6     |
| F340GM015.792 | 015 - 1/2"     | 80       | 206      | 16,5     |
| F340GM020.792 | 020 - 3/4"     | 60       | 288      | 17,3     |
| F340GM025.792 | 025 - 1"       | 40       | 453      | 18,1     |
| F340GQ032.793 | 032 - 1 1/4"   | 25       | 653      | 16,3     |
| F340GQ040.793 | 040 - 1 1/2"   | 16       | 1174     | 18,8     |
| F340GQ050.793 | 050 - 2"       | 8        | 1589     | 12,7     |



UNI EN 331

Butterfly handle option available  
Code F340GFmis.874 (up to DN32), F340GFmis.871 (above)

## 343G

Brass ball valve for gas

PN25



Threaded M/F (ISO 7/1 Rc)  
Valve for gas according to EN331, full bore  
Chrome-plated ball, blow-out proof stem  
PTFE Seats, FKM O-ring  
Working conditions: -20°C to +60°C  
Also available with locking device



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F343GM008.795 | 008 - 1/4"     | 125      | 125      | 15,6     |
| F343GM010.795 | 010 - 3/8"     | 125      | 120      | 15,0     |
| F343GM015.795 | 015 - 1/2"     | 90       | 212      | 19,1     |
| F343GM020.795 | 020 - 3/4"     | 60       | 302      | 18,1     |
| F343GM025.795 | 025 - 1"       | 35       | 490      | 17,2     |
| F343GQ032.796 | 032 - 1 1/4"   | 25       | 757      | 18,9     |
| F343GQ040.796 | 040 - 1 1/2"   | 12       | 1098     | 13,2     |
| F343GQ050.796 | 050 - 2"       | 8        | 1709     | 13,7     |



UNI EN 331

Butterfly handle option available  
Code F343GFmis.872 (up to DN32), F343GFmis.873 (above)

## 390G

Ductile iron ball valve for gas

PN16



Flanged ends (EN1092-2 PN16)  
Lengths according EN558-1 series 14 (ex DIN3202 F4)  
Handle in steel, chrome-plated brass ball  
Valve for gas according to DVGW 3574-1  
Working conditions: -20°C to +60°C  
Versions with locking device, gearbox or actuator on request



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F3900I025.867 | 025 - 1"       | 1        | 3200     | 3,2      |
| F3900I032.867 | 032 - 1 1/4"   | 1        | 4400     | 4,4      |
| F3900I040.867 | 040 - 1 1/2"   | 1        | 5500     | 5,5      |
| F3900I050.867 | 050 - 2"       | 1        | 8500     | 8,5      |
| F3900I065.867 | 065 - 2 1/2"   | 1        | 11500    | 11,5     |
| F3900I080.867 | 080 - 3"       | 1        | 15500    | 15,5     |
| F3900I100.867 | 100 - 4"       | 1        | 20000    | 20,0     |
| F3900I125.867 | 125 - 5"       | 1        | 30000    | 30,0     |
| F3900I150.867 | 150 - 6"       | 1        | 36000    | 36,0     |
| F3900I200.867 | 200 - 8"       | 1        | 93000    | 93,0     |

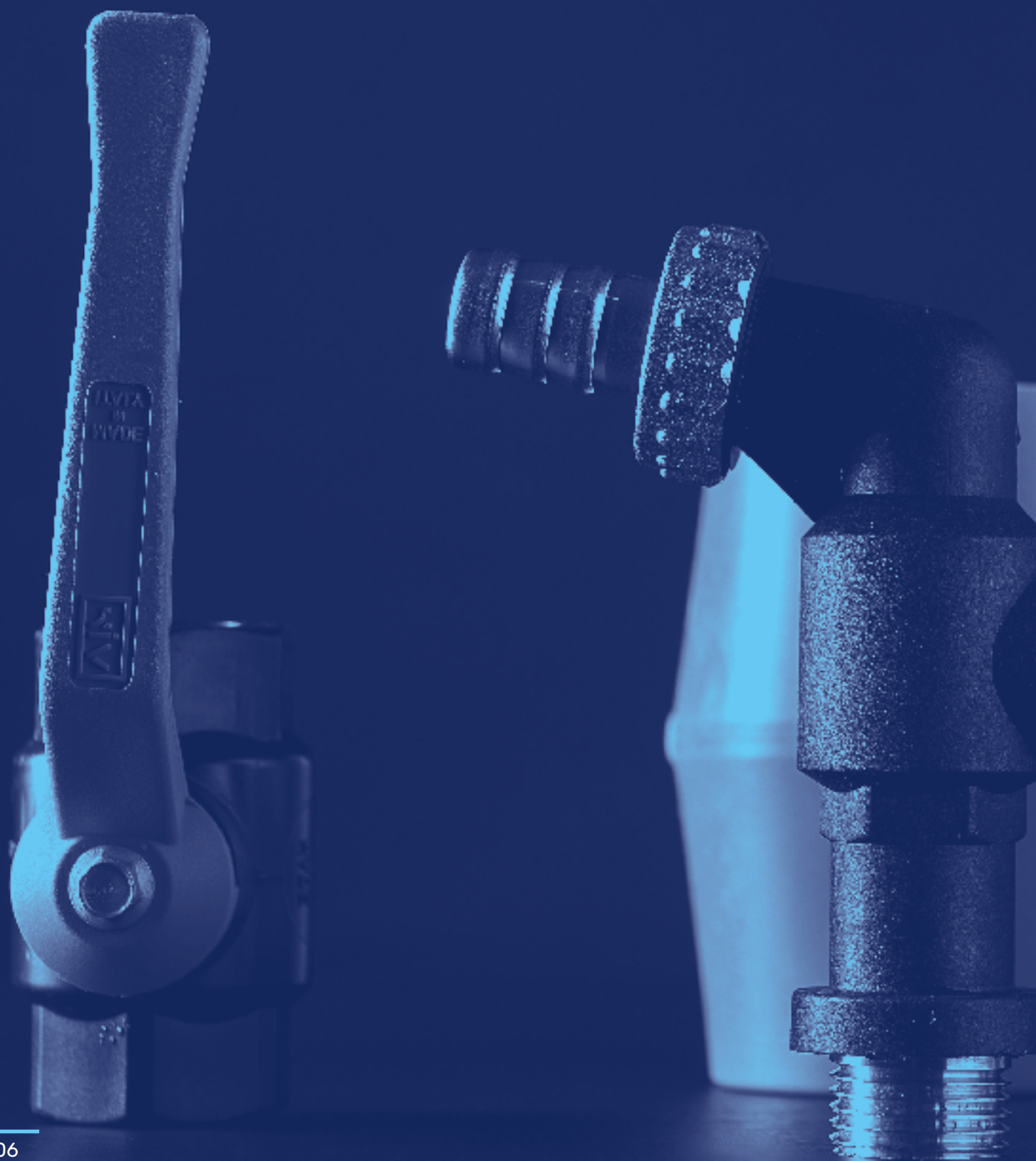




Lug type (suitable for EN1092 PN16 flanges)  
 Body in GGG40, SS420 stainless steel stem  
 Disc in GGG40 RILSAN coated  
 NBR seats, NBR O-ring, PTFE bushings  
 Comply to UNI9245:1988/A1  
 Working conditions: -10°C to +90°C  
 Supplied with lockable lever (gear for DN≥250)



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F4321L032.931 | 032 - 1 1/4"   | 1        | 1400     | 1,4      |
| F4321L040.931 | 040 - 1 1/2"   | 1        | 2000     | 2,0      |
| F4321L050.931 | 050 - 2"       | 1        | 3000     | 3,0      |
| F4321L065.931 | 065 - 2 1/2"   | 1        | 3600     | 3,6      |
| F4321L080.931 | 080 - 3"       | 1        | 4000     | 4,0      |
| F4321L100.931 | 100 - 4"       | 1        | 5500     | 5,5      |
| F4321L125.931 | 125 - 5"       | 1        | 7500     | 7,5      |
| F4321L150.931 | 150 - 6"       | 1        | 8600     | 8,6      |
| F4321L200.931 | 200 - 8"       | 1        | 12700    | 12,7     |
| F4321L250.931 | 250 - 10"      | 1        | 22200    | 22,2     |
| F4321L300.931 | 300 - 12"      | 1        | 30800    | 30,8     |





# POLYPROPYLENE

# POLYPROPYLENE VALVES

220

Polypropylene ball valve

PN16



Threaded F/F (ISO 228/1)  
Glass reinforced polyamide PA6 handle  
Ball and stem in brass  
PTFE seats, NBR O-ring  
Working conditions: Water, 0°C to +75°C



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| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F2200L008.247 | 008 - 1/4"     | 100      | 66       | 6,6      |
| F2200L010.247 | 010 - 3/8"     | 100      | 64       | 6,4      |
| F2200L015.247 | 015 - 1/2"     | 50       | 83       | 4,2      |
| F2200L020.247 | 020 - 3/4"     | 40       | 125      | 5,0      |
| F2200L025.247 | 025 - 1"       | 25       | 256      | 6,4      |
| F2200L032.247 | 032 - 1 1/4"   | 15       | 389      | 5,8      |
| F2200L040.247 | 040 - 1 1/2"   | 10       | 671      | 6,7      |
| F2200L050.247 | 050 - 2"       | 6        | 1009     | 6,1      |

NPT or ISO 7/1 Rp threads on request

Version with butterfly handle (F2200Lmis.246) available (up to DN32)

228

Polypropylene copolymer ball valve

PN16



Threaded F/F (ISO 228/1)  
Glass reinforced polyamide PA6 handle  
Ball and stem in brass  
PTFE seats, NBR O-ring  
Working conditions: Water, -20°C to +75°C  
Ice-damaging resistant



ERC

ARCTIC

| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F2280N015.496 | 015 - 1/2"     | 50       | 88       | 4,3      |
| F2280N020.496 | 020 - 3/4"     | 40       | 126      | 5,1      |
| F2280N025.496 | 025 - 1"       | 25       | 232      | 5,7      |

NPT or ISO 7/1 Rp threads on request

Version with butterfly handle (F2280Nmis.499) available

210

Polypropylene ball bib cock

PN16



Threaded M (ISO 228/1) + hose union  
 Ring, hose union, inlet thread and stem in brass  
 Chrome-plated ball  
 PTFE seats, NBR O-ring  
 Working conditions: Water, 0°C to +75°C



ERC

| Vir Code                                     | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--|----------------|----------|----------|----------|
| <b>Lever version, brass hose union</b>       |                |          |          |          |
| F2100L010.247                                | 010 - 3/8"     | 50       | 149      | 7,2      |
| F2100L015.247                                | 015 - 1/2"     | 40       | 153      | 5,9      |
| F2100L020.247                                | 020 - 3/4"     | 25       | 246      | 6,2      |
| F2100L025.247                                | 025 - 1"       | 15       | 397      | 5,7      |
| <b>Butterfly version, brass hose union</b>   |                |          |          |          |
| F2100L010.246                                | 010 - 3/8"     | 50       | 145      | 7,3      |
| F2100L015.246                                | 015 - 1/2"     | 40       | 149      | 6,0      |
| F2100L020.246                                | 020 - 3/4"     | 25       | 245      | 6,1      |
| F2100L025.246                                | 025 - 1"       | 15       | 396      | 5,9      |
| <b>Lever version, plastic hose union</b>     |                |          |          |          |
| F2100L010.836                                | 010 - 3/8"     | 50       | 129      | 6,5      |
| F2100L015.836                                | 015 - 1/2"     | 40       | 172      | 6,9      |
| F2100L020.2737                               | 020 - 3/4"     | 25       | 263      | 6,6      |
| <b>Butterfly version, plastic hose union</b> |                |          |          |          |
| F2100L010.893                                | 010 - 3/8"     | 50       | 131      | 6,6      |
| F2100L015.893                                | 015 - 1/2"     | 40       | 168      | 6,7      |
| F2100L020.2738                               | 020 - 3/4"     | 25       | 262      | 6,6      |

218

Polypropylene copolymer ball bib cock

PN16



Threaded M (ISO 228/1) + hose union  
 Ring, hose union, inlet thread and stem in brass  
 Chrome-plated ball  
 PTFE seats, NBR O-ring  
 Working conditions: Water, -20°C to +75°C  
 Ice-damaging resistant



ERC



| Vir Code                                     | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--|----------------|----------|----------|----------|
| <b>Lever version, brass hose union</b>       |                |          |          |          |
| F2180N015.528                                | 015 - 1/2"     | 40       | 147      | 5,9      |
| F2180N020.528                                | 020 - 3/4"     | 25       | 243      | 6,1      |
| F2180N025.528                                | 025 - 1"       | 15       | 378      | 5,7      |
| <b>Butterfly version, brass hose union</b>   |                |          |          |          |
| F2180N015.668                                | 015 - 1/2"     | 40       | 142      | 5,7      |
| F2180N020.668                                | 020 - 3/4"     | 25       | 235      | 5,9      |
| F2180N025.668                                | 025 - 1"       | 15       | 377      | 5,7      |
| <b>Lever version, plastic hose union</b>     |                |          |          |          |
| F2180N015.837                                | 015 - 1/2"     | 40       | 125      | 5,0      |
| F2180N020.2739                               | 020 - 3/4"     | 25       | 253      | 6,3      |
| <b>Butterfly version, plastic hose union</b> |                |          |          |          |
| F2180N015.2428                               | 015 - 1/2"     | 40       | 127      | 5,1      |
| F2180N020.2740                               | 020 - 3/4"     | 25       | 249      | 6,2      |

# POLYPROPYLENE VALVES

500

Polypropylene random (PP-R80) ball valve

PN20



Solder ends (DIN 16962)  
 Glass reinforced polyamide PA6 handle  
 Ball and stem in brass  
 Available in different colors  
 PTFE seats, NBR O-ring  
 Working conditions: Water, 0°C to +75°C



| Vir Code      | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|---------------|----------------|----------|----------|----------|
| F5000V020.400 | 020 - 3/4"     | 50       | 123      | 6,2      |
| F5000V025.400 | 025 - 1"       | 25       | 135      | 3,4      |
| F5000V032.400 | 032 - 1 1/4"   | 15       | 192      | 2,9      |
| F5000V040.400 | 040 - 1 1/2"   | 10       | 347      | 3,5      |
| F5000V050.400 | 050 - 2"       | 6        | 571      | 3,4      |
| F5000V063.400 | 063 - 2 1/2"   | 5        | 935      | 4,7      |
| F5000V075.400 | 075 - 3"       | 4        | 1400     | 5,6      |
| F5000V090.400 | 090 - 4"       | 2        | 2482     | 5,0      |

ERC

Version with butterfly handle available (up to DN32)

500I

Polyp. random (PP-R80) under plaster ball val.

PN20



500IM

500IS

Solder ends (DIN 16962)  
 Chrome-plated triangular brass handle  
 Ball and stem in brass  
 PTFE seats, NBR O-ring  
 Available in different colors  
 Working conditions: Water, 0°C to +75°C



| Vir Code                                 | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|--|----------------|----------|----------|----------|
| <b>Fig. 500IM with triangular handle</b> |                |          |          |          |
| F5000V020.448                            | 020 - 3/4"     | 20       | 327      | 6,5      |
| F5000V025.448                            | 025 - 1"       | 15       | 339      | 5,1      |
| F5000V032.448                            | 032 - 1 1/4"   | 10       | 396      | 4,0      |
| <b>Fig. 500IS with cover and plate</b>   |                |          |          |          |
| F5000V020.428                            | 020 - 3/4"     | 20       | 270      | 5,4      |
| F5000V025.428                            | 025 - 1"       | 15       | 282      | 4,2      |
| F5000V032.428                            | 032 - 1 1/4"   | 10       | 339      | 3,4      |

ERC

# ACCESSORIES & SPARE PARTS FOR POLYPROPYLENE VALVES

## Accessories for polypropylene valves



Polyamide handle  
Available for code: 210, 218, 220, 228 and 500

Polyamide stem extension with zinc plated steel rod  
Available for code: 210, 218, 220, 228 and 500

| Vir Code                     | DN mm - inches | Pcs./box | Wgt. [g] | Box [Kg] |
|------------------------------|----------------|----------|----------|----------|
| <b>Red spare levers</b>      |                |          |          |          |
| KXM200008.599                | Mis. 1         | 250      | 16       | 4,0      |
| KXM200015.599                | Mis. 2         | 150      | 16       | 2,4      |
| KXM200025.599                | Mis. 3         | 100      | 28       | 2,8      |
| KXM200040.599                | Mis. 4         | 50       | 48       | 2,4      |
| <b>Red spare butterflies</b> |                |          |          |          |
| KXF200008.669                | Mis. 1         | 500      | 12       | 6,0      |
| KXF200015.669                | Mis. 2         | 500      | 15       | 3,8      |
| KXF200025.669                | Mis. 3         | 200      | 29       | 5,8      |
| <b>Stem extensions</b>       |                |          |          |          |
| KPR500015.918                | Mis. 2         | 250      | 31       | 7,8      |
| KPR500025.918                | Mis. 3         | 100      | 52       | 5,2      |
| KPR500040.918                | Mis. 4         | 100      | 49       | 4,9      |



|              | Fig.220/228 | Fig.210/218 | Fig.500   |
|--------------|-------------|-------------|-----------|
| <b>Mis.1</b> | DN08/DN10   | DN10/DN15   | -         |
| <b>Mis.2</b> | DN10/DN15   | DN20/DN25   | DN20/DN32 |
| <b>Mis.3</b> | DN25/DN32   | -           | DN40/DN50 |
| <b>Mis.4</b> | DN40/DN50   | -           | DN65/DN75 |



# GENERAL CONDITIONS OF SALE

## Art. 1 – GENERAL PROVISIONS

These General Conditions are valid and binding for any business transaction executed by VIR Valvoindustria Ing. Rizzio S.p.A., and shall apply to any and all offers, quotations and confirmations issued by VIR Valvoindustria Ing. Rizzio S.p.A. to the Purchaser, even in the absence of any direct reference to them. Any exceptions to these General Conditions will not have any effect unless expressly agreed upon in writing between VIR Valvoindustria Ing. Rizzio S.p.A. and the Purchaser.

The undersigning of these General Conditions – and in any case the submission of any order and/or any contract to VIR Valvoindustria Ing. Rizzio S.p.A. – will imply the Purchaser expressly waiving the application of his own general contractual conditions, being entirely replaced by these General Conditions.

The invalidity or non-effectiveness of one or more clauses of these General Conditions will not jeopardise the validity, effectiveness and enforceability of the other clauses.

## Art. 2 – ORDER

The Purchaser's order is accepted "SUBJET TO EXPRESS APPROVAL BY THE SELLER" and it is considered irrevocable for the period of one month starting from the date of the order confirmation (art. 1329 of the Italian Civil Code), as well as the request of performance without prior acceptance (art. 1327 of the Italian Civil Code).

Any sum paid as an advance will have the function of a confirmation deposit as set forth in article 1385 of the Italian Civil Code, without prejudice to the right of VIR Valvoindustria Ing. Rizzio S.p.A. to claim further damages in the event of a breach of contractual obligations. The Purchaser, once the order has been submitted, loses the right to cancel it.

## Art. 3 – RETENTION OF TITLE

It is expressly agreed that the seller shall retain title to the goods object of the order, until payment has been carried out for the full amount of the order. Therefore, the Purchaser acquires ownership of the products only with the full payment of the last instalment or of the full price of the goods, including any and all possible accrued interests.

The Purchaser shall, however, assume all the risks related to the goods from the delivery of them by VIR Valvoindustria Ing. Rizzio S.p.A. to the carrier and/or the shipper (art. 1523 of the Italian Civil Code), also in the case that they are appointed and/or paid by VIR Valvoindustria Ing. Rizzio S.p.A., being understood that VIR Valvoindustria Ing. Rizzio S.p.A. is not liable, not even partially for any loss or damage to the goods during the transport and in any case once they have left VIR Valvoindustria Ing. Rizzio S.p.A.'s domicile/plants.

Until full payment of the products has been made, the Purchaser shall not be entitled to sell, give in pledge or give in use the goods, nor remove them from the domicile specified by the Purchaser without prior specific written consent of the seller and without having immediately informed the seller by registered letter.

In case of payment delays, even of a single instalment of the price, VIR Valvoindustria Ing. Rizzio S.p.A. will be entitled, without the need of any formality, including any formal payment reminder, to claim possession of all the goods object of the retention of title, wherever they are, without prejudice to any further remedy available for claiming damages suffered, including the right to withhold the advanced payment as a penalty.

In case of breach of even one of the above clauses, the Purchaser will immediately lose the benefit of the term with reference to the delayed payment and shall immediately pay the outstanding balance, without prejudice to the seller's right to compensation for further damages.

## Art. 4 – PAYMENTS

All payments shall be carried out according to the agreed upon terms and procedures, at the registered office of VIR Valvoindustria Ing. Rizzio S.p.A., through payments made out in favour of VIR Valvoindustria Ing. Rizzio S.p.A. Payments carried out in breach of the agreed upon terms and procedures, or made in favour of any third party or in favour of an agent who has not been expressly and duly authorized in writing to receive payments, will not be considered valid nor effective, and will not represent, not even partially, fulfilment of the Purchaser's obligations.

VIR Valvoindustria Ing. Rizzio S.p.A. reserves the faculty to delay the delivery of the goods, in the event that the Purchaser is in breach of any payment obligation, even with reference to any previous invoice or regarding orders other than the one object of the delivery.

The delayed payment, with respect to the agreed upon payment terms and conditions, implies the Purchaser's obligation to pay VIR Valvoindustria Ing. Rizzio S.p.A., in addition to the amount specified in the invoice, any default interest pursuant to art. 5 D.LGS. n. 231/2002.

Interest shall be fully payable, according to this clause and with no need of any formal notice, from the first calendar day following the invoice due date until the date of actual payment.

The Purchaser will not be entitled, in any case, to any claim, request or demand, by way of action or defence, against VIR Valvoindustria Ing. Rizzio S.p.A., until all the overdue invoices and the relevant interest and/or expenses and costs have been fully paid.

Payments received by VIR Valvoindustria Ing. Rizzio S.p.A. will pay off, in the following order, recovery costs, accrued interests, and eventually the capital.

## Art. 5 – TERMINATION OF THE CONTRACT

The breach of payment obligations by the Purchaser, even of a single instalment provided by the contract, shall determine the loss of the Purchaser's benefit of the instalment term and shall entitle VIR Valvoindustria Ing. Rizzio S.p.A. to claim immediately the payment of the outstanding purchase price, or to consider the contract terminated according to art. 1456 of the Italian Civil Code, and therefore to request the immediate restitution of the goods which can be claimed by the seller also pursuant art. 3 above.

Partial payments shall be definitively retained by VIR Valvoindustria Ing. Rizzio S.p.A. as damages indemnity, without prejudice to the right to compensation for further damages.

## Art. 6 – DELIVERY TERM

The delivery terms are specified with reference to each order.

In any case, they have to be considered as non-binding references and possible delays will not entitle the Purchaser to any compensation for damages, nor to terminate, even partially, the contract.

In any case, VIR Valvoindustria Ing. Rizzio S.p.A. shall not be responsible in the event of:

- Force majeure;
- Railway or other transport delays;
- Request for changes or corrections about the features of the products supplied;
- Partial failure or default of payment, even of a single instalment, by the Purchaser.

After 30 days from the specified date without any possibility to deliver the goods due to causes beyond VIR Valvoindustria Ing. Rizzio S.p.A. control, VIR Valvoindustria Ing. Rizzio S.p.A. will be entitled to consider the order as delivered and to apply the contractual terms of payment of the price.

The Purchaser, upon receipt of the goods and without having checked their status and entity, will not be entitled, in any case, to raise subsequent claims.

## Art. 7 – LIMITATION OF LIABILITY

VIR Valvoindustria Ing. Rizzio S.p.A. will not, in any case, be responsible for any direct or indirect damage suffered by the Purchaser or by any third party, arising from the goods object of the order.

## Art. 8 – CLAIMS

Any claim, except for what herein provided for, shall in any case be received by registered letter within the mandatory term of 10 days starting from the receipt of the goods, and shall contain the specification of the reasons of the claim.

In any case, claims for defects that may have been caused by transportation, because of an inappropriate use or of an inadequate conservation, care or incorrect assembly of the goods, will be rejected, and therefore considered unacceptable.

## Art. 9 – WARRANTY

The warranty is applied to all the products of VIR Valvoindustria Ing. Rizzio S.p.A. for a 12 month period of operation, up to a maximum of 18 months from the date of the relevant invoice, with the mandatory term of notice, by registered letter, of any possible defect within the term of 10 days from its occurrence.

Any return of goods will have to be previously agreed upon in writing between VIR Valvoindustria Ing. Rizzio S.p.A. and the Purchaser.

In the event of returns, VIR Valvoindustria Ing. Rizzio S.p.A. will examine the relevant goods to verify that the defect exists and that it can be attributed to VIR Valvoindustria Ing. Rizzio S.p.A.'s responsibility.

Any other warranty, including the ones provided for by law, shall not apply and shall be considered superseded by these General Conditions.

In particular, it is excluded the right of recourse against VIR Valvoindustria Ing. Rizzio S.p.A. for any warranty issued by the seller vis-a-vis any third parties.

## Art. 10 – AMENDMENTS AND INTEGRATIONS

These General Conditions cancel and supersede the general conditions of sales prior to 2019 and any previous agreement between the Parties having the same object.

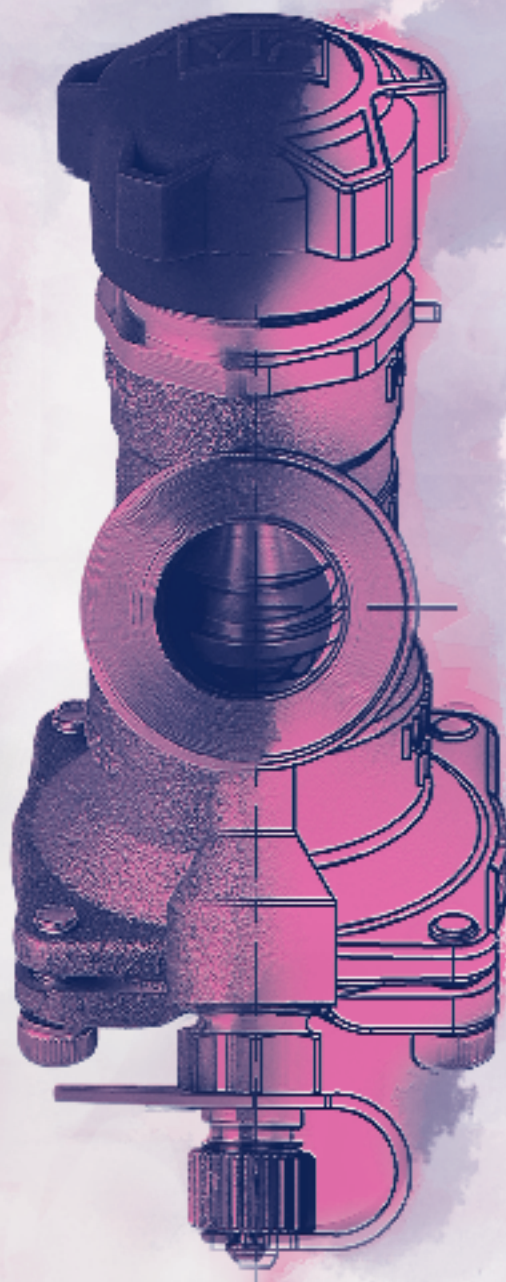
Any amendment or integration of these General Conditions shall have, in order to be valid and enforceable, to result by an agreement in writing duly undersigned by VIR Valvoindustria Ing. Rizzio S.p.A. and the Purchaser.

## Art. 11 – APPLICABLE LAW – JURISDICTION – LANGUAGE

The contractual relationship between VIR Valvoindustria Ing. Rizzio S.p.A. and the Purchaser shall be governed by, and construed and interpreted in accordance with, the laws of Italy.

Any dispute arising from the contract between VIR Valvoindustria Ing. Rizzio S.p.A. and the Purchaser, or in connection with its execution, interpretation, performance and termination, is subject to the exclusive jurisdiction of the Court of Vercelli in Italy, with specific derogation of any alternative jurisdiction set forth in articles 18 et seq. of the Italian Civil Procedure Code.

VIR Valvoindustria Ing. Rizzio S.p.A. and the Purchaser expressly agree that the Italian language shall be applied to any dispute concerning the interpretation, execution and termination of this General Conditions.



**VIR - Valvoindustria Ing. Rizzio S.p.A.**

Via Circonvallazione 10, 13018 Valduggia (VC) - Tel. +39 0163 47891 - Fax +39 0163 47895  
[www.vironline.com](http://www.vironline.com)