

Praher Plastics Austria GmbH

PumpTech Ipari Szivattyútechnika Kft., Schwertberg

History



| 971 | • Company founded by Mr. Ludwig Praher | | |
|-----|--|--|--|
| 73 | The first building is constructed at the current site in Schwertberg | | |
| 80 | First exporting activities to neighboring countries. | | |
| 85 | Production start of industrial ball valve series S4 and expansion of the company | | |
| 36 | A separate production site in Canada is established to meet rising demand | | |
| | • Continuous Growth | | |
| 15 | Reorganisation: Praher Plastics AUSTRIA GmbH | | |
| | | | |

The company today

- Family owned business
- More than 300 employees worldwide
 - Around 200 in Austria
- More than 50.000 product parts
 - 5.000 available from stock
 - Turnover worldwide around 25 Mio.
 - 50 Mio. The total Praher Group
- Export rate over 50%



Partnership With Our Customers

International Certifications and Accreditations



Serial and Individual

Value Added

Propositions



Highly Qualified Manpower



Core competences

Our product range

- High quality valve-product-lines for:
 - Water / Wastewater treatment
 - Desalination
 - Chemical Industry
 - Mining
- High quality PVC-fittings

Taylor made manufacturing

- Development and engineering
- Own laboratory facilities for testing and certifications
- Special mold-manufacturing and maintenance
- Process engineering and automation
- Serial production
- Logistic solutions

Production

- Separated production areas for PVC, PVDF, PP etc.
- Clean-room capabilities
- All machines fully automated with handlings and robots
- Central material supply
- In-line leak-testing and quality-check program





Machining- & Assembling lines

- 24h assembling
- High educated, trained and loyal specialists
- Automated and manual assembly stations for different industrial valves and products

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- 100 % in-line inspection on industrial valves
- ESD assembly-line for automation products

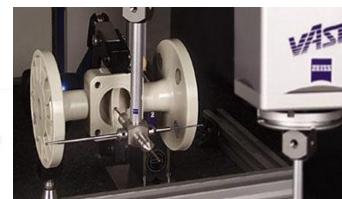
Quality control

Precision inspection instruments and sensitive testing facilities are necessary for the production of high quality plastics. The most modern 3D measurement devices guarantee quality during all phases of the production.

ISO9001:2015 certified







Development

- Development team with plastics
 - simulation capabilities
- Own in-house test-laboratory for pressure, material and HALT testing
 - Own process automation team for developing and optimizing production processes



Field of applications



- Water treatment
- Wastewater treatment
- Reverse osmosis / Desalination
- Agriculture / Irrigation
- Chemical industry
- Mining
- Tank construction
- Machine building

- Semiconductor applications
- Laboratories
- Food- and drug industry
- Textile industry
- Pulp and paper plants
- Steel factories
- Etc....



Our products

Valves and fittings





Product range

2W Ball Valve M1

M1

M1 adapter manual set

M1 manual with position feeback

M1 pneumatic

M1 electric



Product range





Product range

Cone Check Valve

- o Steel spring
- Spring PTFEcoated

Foot Valve Cone with iron core Line Strainerplastic screenSteel screen

Aerating valve • Floating cone





PVC-U PVC-C PP-H PVDF PVC-U PP-H PVC-U PP-H PVC-U PP-H

Material: Seal material: Ball seating joint: Dimensions: Operating pressure: Various models:

PVC-U / PP-H / PVDF EPDM / FPM PTFE DN10/d16 - DN80/d110 PN16 PVC-U/PVDF PN10 PP-H manual manual with position feedback electric or pneumatic



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2W Ball Valve M1



Integrated Fixations In valve body intergrated fixations for the adapter set



Adapter Set Adapter set for electric, pneumatic actuation or for manual valve with position feedback. Flange pattern acc. to EN ISO 5211 – F04, F05 or F07



Position Feedback

Electical position feedback for manual ball valves with mechanic or inductive limit switches





Buttress thread

For increased strenght and secure fit of the union nut

Integrated bracket

For fix point mounting. Optionally with clamping element for socket or spigot or with spacing element for flange connetion









Adapter Set

position

feedback

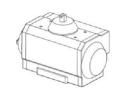
Modular design

adapter/p

BV



manual









pneumatic

electric



Automation



Manual ball valve with mechanical or inductive limit switches for position feedback. Easily retrofittabel for every M1 version.



ER Premier tested and adjusted to the M1 ball valve. As an option also ER POSI for individual adjustable positioning or ER FAILSAFE with integrated battery in case of power failure.



Single or double acting pneumtic actuator tested and adjusted to the M1 ball valve. As an option with position feedback and/or solenoid valve



Safety handle with Labelling Plate With integrated eyelet to prevent unintentional opening A sudden closing ist possible without pulling the handle Element

Accessories: an appropriate safety element for the handle and a cover with an eyelet for the integrated fixation

Metal-free Ball Valve

For applications in highly corrosive environments, the manual ball valve as well as the ball valve with adapter set are available with glass-fiber-reinforced plastic screws.



Silicone-free

Use of silicone-free grease for the assembly of industrial valves series:

- M1 ball valve
- S4 ball valve, sampling valve, cone check, foot and aerating valve, line strainer
- K4 / K6 wafer check valve
- T4 diaphragm valve
- high functionality combined with a long service life
- o reduce friction and abrasion of static and dynamic sealing elements
- o increases the lifetime of the complete valve
- o Silicone-free grease suitable for drinking water applications



Connector types:



solvent socket metric PVC-U



solvent spigot metric PVC-U

threaded socket BSP, NPT PVC-U, PP-H, PVDF

fusion socket PP-H, PVDF, PE100



fusion spigot PP-H, PVDF, PE100

backing flange PVC-U, PP-GFK



fix flange PVC-U

all interchangeable for M1, S4 und S6 series



Material:

PVC-U

Sealing material:

EPDM / FPM

Ball seating joint: PTFE visible by red handle

PEvisible by orange handleDimension:DN10 d16 - DN80 d110

Operating pressure: PN16



2W Ball Valve M1 / S6

Difference M1: S6

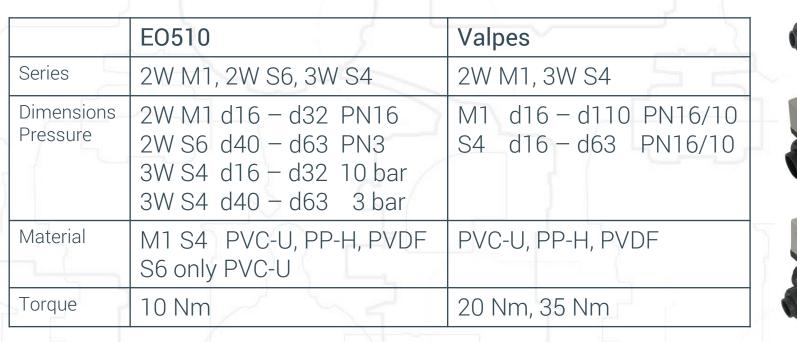
- o only PVC-U
- o S6 without safety handle and labeling plate
- o S6 without integrated bracked
- limited possibility to automation

Similarities M1 : S6

- inner structure of ball valve
- o Extension for handle

2W Ball Valve M1 / S6





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ΕO

Series



2W Ball Valve M1 / S6

Difference of EO510 and Valpes

| | EO510 | Valpes |
|---------|-------------------------------------|--|
| Types | E0510 Standard | ER Premier Standard ER PLUS POSI ER PLUS Failsafe ER PLUS GF3 / GF4 → 3W BV |
| Voltage | Industrie 12 V AC 12- 24 V DC | ER PREMIER90 - 240V (90 - 350V DC)24V (24V DC)ER PLUS90 - 240V (90 - 350V DC)15 - 30 V (24 - 48V DC) |



Material:

Ball:

Seal material:

Ball seating joint:

Dimension:

Operating Pressure:

PVC-U / PP-H / PVDF

EPDM / FPM

PTFE DN10/d16 – DN50/d63 PN16 PVC-U / PVDF PN10 PP T- or L-Bore



Manual:

- o Manual T- or L-ball
- Manual T-ball 90° oder 180° limited
- Electric T- or L-ball
 15- 30 VAC and 90-240 VAC
- Pneumatic T- or L-ball
 spring return normally open or close
 double acting
 - Accessories position feedback and / or solenoid valve

3W KH limited



3W electric

Cone Check Valve S4

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Material:

Sealing material:

Dimension:

Operating pressure:

Spring:

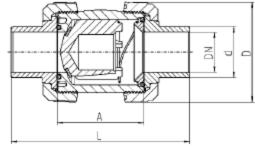
Opening pressure:

PVC-U / PVC-C / PP-H / PVDF EPDM / FPM DN10 d16 - DN80 d110 PN16 / PN6 PVC-U / PVDF PN10 / PN6 PP-H

Steel spring 1.4401 PTFE coated

0,06 bar







Line Strainer S4

Material:

Sealing material:

Dimension:

Operating pressure:

Cone:

PP-Screen:

Steel Screen:

PVC-U / PP-H EPDM / FPM DN10 d16 - DN80 d110 PN16/PN6 PVC-U PN10/PN6 PP-H floating cone 1,8 mm 0,5 mm / 0,75 mm / 1 mm



Foot Valve S4

Material:

Sealing material:

Dimension:

Operating pressure:

Cone:

Opening pressure:

PVC-U / PP-H

EPDM / FPM

DN10 d16 – DN80 d110 PN16 / PN6 PVC-U PN10 / PN6 PP-H with iron core 0,025 bar



Strainer in PP



Aerating Valve S4

Material:

Sealing material:

Dimension:

Operating pressure:

PVC-U / PP-H

EPDM / FPM

DN10 d16 – DN80 d110 PN16 / PN6 PVC-U PN10 / PN6 PP-H floating cone

Cone:



Sampling ball valve S4

Material:

Seal material:

Ball seating joint:

Dimensions: Operating pressure:

Accessories:

PVC-U / PVDF

EPDM / FPM

PTFE

DN6 PN10 hose nozzle double nipple Blind plug

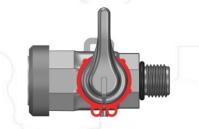
Sampling ball valve S4

Additional functions:

flap for lock and metering ring



Locking ring for fixation "open"



Locking ring for fixation "closed"



installation with SW22 or SW24



Metering marks



Butterfly valve K4

Materials

Seals

Dimensions

Flange standars

Operating pressure

Operation

PVC-U, PVC-C, PP-H and PVDF EPDM and FPM DN65 - DN200 d50 - d225 2 1/2" - 8" DIN 2501 - PN10 ANSI - class 150 JIS 10 K (for DN200 with special solution) BS Table D&E PN10 Handlever Handgear elektrical or pneumatical actuator





Assortment BFV K4

Wafer Type

pneum. actuator

> electr. Actuator

hand operated

🚧 with Pl

without

PP

PVDF

PVC-U DN65 - DN200

PVC-C DN65 - DN100

DN65 - DN200

DN65 - DN200



Butterfly valve K4 - PI

Handle - changed

Cover plate - changed

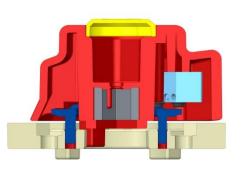
Control plate - NEW

Butterfly valve K4 - PI



Function mode:

- 1. mech. Limit switch mounted in handle
- 2. Control plate additionally installed via Cover plate
- Elevation at Control plate leads to actuation of limit switch
 Feedback OPEN / CLOSED





Butterfly valve K4 - Lug Type PLASTICS

Thread insert - NEW

a (

Dowel pin - NEW

Body - machined

Diaphragm valve T4

Materials

Diaphragm

Dimensions

Connections

Operation

Operating pressure

PVC-U, PP-H and PVDF EPDM, FPM and PTFE-coated DN15 - DN125 d20 - d140 1/2" - 5"

Spigot Union / Socket Flange handwheel direct pneum. actuated pneum. actuator handwheel / pneum. actuator: PN10 direct pneum. actuated:

PN6



Wafer check valve K6

Materials

Seals

Dimensions

Flange standards

Operating pressure

Standard version

Optional

PVC-U EPDM and FPM (O-Rings) DN40 - DN300 d50 - d315 1 1/2" - 12" DIN 2501 - PN10 ANSI - class 150 DN40 - DN200: MOP10 bar DN250 / DN300: MOP 8bar with spring mat. 1.4401 / AISI 316 without spring with spring mat. Hastelloy C-4



Wafer check valve K4

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Materials

Seals

Dimensions

Flange standards

Operating pressure

optional

PVC-U, PP, PP-GF and PVDF EPDM and FPM (X-Rings) DN65 - DN250 d75 - d280 2 1/2" - 10" DIN 2501 - PN10 ANSI - class 150 **JIS - 10K** BS10 table E (only DN100 to DN250) PVC-U, PVDF: PN10 PN10 to DN200; PN8 = DN250 PP-GF: PP: PN6 without spring



Comparison K6 and S4

K6

MOP Flow Installation length Exit aid Spring

Connections Dimensions Materials 10 or 8 bar + optimized without also upgradeable 1.4401 (AISI316) + Hastelloy DIN and ANSI DN40 - DN300

PVC-U

equal

recommended <u>not</u> upgradeable 1.4571 + Hastelloy DIN DN32 - DN300 (DN500) PVC-U, PP-H and PVDF

S4

0

5-6 bar



Comparison K6 and K4

K6

MOP10 or 8 barFlow+Installation lengthshortExit aidoptimized vSpringalso upgrade

Connections Dimensions Materials + short optimized without also upgradeable 1.4401 (AISI316) + Hastelloy DIN and ANSI DN40 - DN300 PN10 ++ long intecrated Standard no fluid contact

К4

DIN, ANSI, JIS, BS (DN100 to DN250) DN32 - DN250 PVC-U, PP, PP-GF and PVDF



Comparison CV-values

each l/min ∆p = 1 bar



- DN65
- DN80
- DN100
- DN150
- DN200
- DN250

867* 1.517* 2.067*

6.583*

15.533*

25.000*

1.050 1.750 3.633 8.217 15.733 25.833

1.300 2.200 5.700 12.500 21.200 28.000

Measurements implemented as per EN 60534-2-3. Values at max. opening angle with PVC-U PN10 pipes and flow medium water at 20°C.

* to achieve the maximum opening angle special exit aids are necessary



Flowmeter M123 | M335 | M350 PLAS

- PVC, PP
- Floats: PVDF or PVDF magnetic
- DN10 DN65
- Measuring range: 1,5 60.000 l/h
- Double scale for water in percent and I/h
- Special adhersive scales for liquid and gaseous media



64

IBG[®] - Fittings

Standard Material: Standard color: Operating Pressure: Dimensions: Standards:

PVC-U PVC grey (special color black and white) PN6 / PN10 / PN16 DN10 to DN300 (different per variant) DIN / ASTM / JIS / BS (different per variant)

- Straight connections Socket / hexagon nipple on both sides, dimensionally constant connection element
- Change of direction Elbow 45° / 90° Solvent Elbow with male or female thread [also reinforced] Pipe elbow 45° / 90° Solvent



So if (%)

IBG[®] - Fittings

- Diameter change Reduction as short or long model Solvent, female or male thread as connection transitions
- Branch connection
 Tee / cross
 45° / 90° / also as reduction, solvent and thread connection
 - Closing-off Cap / plug / blind flange
- Connections to components
 FlexFit / Union / flange adapter in combination with flanges
- Connection of varius pipe materials Metal-plastic-union



IBG[®] - Fittings

Pipe Material:PVC-UStandard Color:PVC grey (special color white and transparent)Operating Pressure:PN6 / PN10 / PN16

Operating pressure depends on wall thickness (d x s), eg d50 x 1,6 -> PN6 d50 x 2,4 -> PN10 d50 x 3,7 -> PN16

Dimensions: Standard: Types: DN15 to DN300 DIN pipe with socket / without socket





IBG[®] - Pipe Clips

for PVC - PP - PVDF and PE pipes

Material: PP black

<u>Type A</u> – pipe clip as clip version

<u>Type B</u> - pipe clip with closure plate Only applicable for different pipe standards (ASTM, DIN, JIS, ...)

<u>Type C and D</u> – pipe clip with clossure bow



Typ A

Ribs for opening of brackets (diagonally slidable)

Tongue and groove ends for interlocking several clamps

For metric and imperial ri lastic pressure pipino

Markings for drilling mounting holes (template)

Attached spacer with living hinge

Pocket for square nut





FlexFit[®] - General

PVC-U

Materials Seals Dimensions Operating pressure

Pipe Connection

EPDM DN40 / DN50 PVC-hose: DN40 / DN50: PN4 PE- pipe: MOP8 DN40: DN50: MOP6 PVC-pipe: DN40: MOP8 DN50: MOP6 clamp - clamp clamp - solvent socket clamp - solvent spigot clamp - male thread clamp - female thread



Mounting PVC-U hose and PE pipe

6

- 1. Pipe (PE), hose (PVC)
- 2. Union nut (PVC)

2

3

- 3. Compression bush (PVC)
- 4. Clamping ring (POM)
- 5. O-Ring (EPDM)
- 6. Adapter (PVC)



Mounting PVC-U pipe

6

1. Pipe (PVC)

3

4

- 2. Union nut (PVC)
- 3. Compression bush (PVC)
- 4. Brass ring (Messing)
- 5. Clamping ring (POM)
- 6. O-Ring (EPDM)
- 7. Adapter (PVC)



FlexFit® - detail

| Definition: ✓ available | | | Product description | PVC | PVC-hose | | 極 PE-pipe | | 極 PVC-pipe | |
|----------------------------|------|------|--------------------------|------|----------|------|-----------|------|------------|--|
| - not necessary | | sary | | DN40 | DN50 | DN40 | DN50 | DN40 | DN50 | |
| Finished parts | 1. | | Double Union | ~ | ~ | ~ | ✓ | ~ | ~ | |
| | 2. | 3 | Adaptor Tee | ~ | ~ | ~ | ~ | ~ | ~ | |
| | 3. | 0 | Adaptor Union | ~ | ~ | ~ | ~ | ~ | ~ | |
| | 4. | | Adaptor Elbow 45° | ~ | ~ | ~ | ~ | ~ | ~ | |
| | 5. | | Adaptor Elbow 90° | ~ | ~ | ~ | ~ | ~ | ~ | |
| | 6. | N | Elbow | ~ | ~ | ~ | ~ | ~ | ~ | |
| Equip- ment | | × | Assembly Key | ~ | ~ | ~ | ~ | ~ | ~ | |
| | NEU! | | Brass Ring single packed | - | - | - | - | ~ | ✓ | |



- OEM
- Custom-made products according to individual wishes
- 50 years of experience
- Handshake quality and confidentiality

